AGENDA
President and Board of Trustees
Village of Arlington Heights
Board Room
Arlington Heights Village Hall
33 S. Arlington Heights Road
Arlington Heights, IL 60005
April 2, 2018
8:00 PM

I. CALL TO ORDER

II. PLEDGE OF ALLEGIANCE

III. ROLL CALL OF MEMBERS

IV. APPROVAL OF MINUTES

A. Village Board 03/05/2018 - Amended

B. Village Board 03/19/2018

V. APPROVAL OF ACCOUNTS PAYABLE

A. Warrant Register 03/30/2018

VI. RECOGNITIONS AND PRESENTATIONS

VII. PUBLIC HEARINGS

VIII. CITIZENS TO BE HEARD

Anyone wishing to speak on a subject not on the Agenda should fill out a card, located in the back of the room, and hand it to the Village Clerk. Please limit your comments to three minutes.

IX. OLD BUSINESS

A. Report of the Committee-of-the-Whole Meeting of April 2, 2018

Consideration of recommending to the Liquor Commissioner the issuance of a Class "AA" Liquor License to Harmony Hospitality, LLC, dba Hey Nonny, located at 10 S. Vail Avenue. Liquor License will be issued upon verification that the layout is consistent with the submitted floor plan.

B. Report of the Committee-of-the-Whole Meeting of April 2, 2018

Consideration of recommending to the Liquor Commissioner the issuance of a Class "A" Liquor License to Sky Daily Bread, Inc., dba Nikko Jusarang, located at 282 E. Algonquin Road upon surrender of the current liquor license issued to this address

C. Continued Discussion on Proposed New Liquor Classifications - Breweries

X. CONSENT AGENDA

This Agenda consists of proposals and recommendations that, in the opinion of the Village Manager, will be acceptable to all members of the Board of Trustees. The purpose of this Agenda is to save time by taking only one roll call vote instead of separate votes on each item. Consideration of this Consent Agenda will be governed by the following rules and procedures prior to roll call vote:

1. Any Trustee who wishes to vote "no" or "pass" on any Consent Agenda items should so indicate.
2. Upon the request of any one Trustee, any item will be removed from the Consent Agenda and considered separately after adoption of the Consent Agenda.
3. Citizens in the audience may ask to remove any item on this Consent Agenda.
4. One roll call vote will be taken and will cover all remaining Consent Agenda items.

CONSENT APPROVAL OF BIDS

A. Asphalt Spray Patch Contract Extension 2018

B. Cured In Place Sewer Lining 2018

C. Water System Improvements 2018

D. Arlington Heights Police Station Bradford Lockers

CONSENT LEGAL

A. An Ordinance Amending Planned Unit Development Ordinance Number 17-028 and Granting Variations from Chapter 28 of the Arlington Heights Municipal Code
(Heart's Place, 120-122 E. Boeger Dr.)

XI. APPROVAL OF BIDS

XII. NEW BUSINESS

A. Chapter 28 Text Amendments - Phase 2 - PC#17-005

B. Olympic Park Swim Center - 660 N. Ridge Ave. - PC#18-002 PUD Amendment, Parking Variation

XIII. LEGAL

XIV. REPORT OF THE VILLAGE MANAGER

XV. APPOINTMENTS

XVI. PETITIONS AND COMMUNICATIONS

A. Request for Closed Session per 5 ILCS 120/2(c)(21): Discussion of minutes lawfully closed, whether for purposes of approval of the minutes or the semi-annual review of the minutes

- and -

5 ILCS 120/2(c)(11): Litigation, when an action against, affecting or on behalf of the Village has been filed and is pending before a court or administrative tribunal, or when the Board finds that an action is probable or imminent

XVII. ADJOURNMENT

Persons with disabilities requiring auxiliary aids or services, such as an American Sign Language interpreter or written materials in accessible formats, should contact David Robb, Disability Services Coordinator, at 33 S. Arlington Heights Road, Arlington Heights, Illinois 60005, (847)368-5793 (Voice), (847)368-5980 (Fax) or drobb@vah.com.

Item: vb minutes 03052018

Department: Village Clerk

These amended minutes include the resident comments under Citizens to be Heard which were accidentally omitted from the minutes submitted for approval on March 19, 2018.

Bid Section

Item:

Bid Opening Date:

Account Numbers:

Total Budget for Specific Item:

Bid Amount:

ATTACHMENTS:

Description	Type
vb 03 05 2018	Minutes

MINUTES
President and Board of Trustees
Village of Arlington Heights
Board Room
Arlington Heights Village Hall
33 S. Arlington Heights Road
Arlington Heights, IL 60005
March 5, 2018
8:00 PM

I. CALL TO ORDER

II. PLEDGE OF ALLEGIANCE

A. Presentation of the Colors by Cub Scout Pack #129 from Southminster Presbyterian Church

III. ROLL CALL OF MEMBERS

President Hayes and the following Trustees responded to roll: Scaletta, Glasgow, Blackwood, Tinaglia, Rosenberg, LaBedz, Sidor and Baldino.

Also in attendance were: Randy Recklaus, Tom Kuehne, Jim Massarelli, Diana Mikula, Mark Burkland, Charles Perkins and Becky Hume.

IV. APPROVAL OF MINUTES

A. Committee of the Whole 02/05/2018 Approved

Trustee Carol Blackwood moved to approve. Trustee Robin LaBedz Seconded the Motion.
The Motion: Passed
Ayes: Baldino, Blackwood, Hayes, LaBedz, Rosenberg, Scaletta, Sidor, Tinaglia

Abstain: Glasgow

B. Village Board 02/19/2018 Approved

Trustee Carol Blackwood moved to approve. Trustee Robin LaBedz Seconded the Motion.

The Motion: Passed
Ayes: Baldino, Blackwood, Hayes, LaBedz, Rosenberg, Scaletta, Sidor, Tinaglia

Abstain: Glasgow

V. APPROVAL OF ACCOUNTS PAYABLE

A. Warrant Register 02/28/2018 Approved

Trustee Bert Rosenberg moved to approve Warrant Register in the amount of $2,116,615.94. Trustee Thomas Glasgow Seconded the Motion.
The Motion: Passed
Ayes: Baldino, Blackwood, Glasgow, Hayes, LaBedz, Rosenberg, Scaletta, Sidor, Tinaglia

VI. RECOGNITIONS AND PRESENTATIONS

A. Recognition of Friends of the Library 50th Anniversary

President Hayes said the Library makes many contributions to our great community. Debbie Smart, Library Board President, said the Friends of the Library has donated $2.7 million to Library causes in the past ten years. It represents all that is good about our village. President Hayes read the proclamation from the Village Board in recognition of the 50th Anniversary of the Friends of the Library.

VII. PUBLIC HEARINGS

VIII. CITIZENS TO BE HEARD

Beth Deiter thanked the Board for writing a letter to the State Legislators regarding gun control legislation at the request of the residents. She said it renewed her confidence in the local leadership and she appreciated a proactive response versus a reactive one. The weight of the Board's voice made a significant impact. She said when residents looked for leadership, the Board did not disappoint.

President Hayes said we do need to be proactive. It is more than writing letters, it requires a lot of work internally to make sure we are doing all we can to keep our kids and residents safe.

Keith Moens asked for the record be corrected for factual errors. The minutes are supposed to contain what was done. He would like to correct for what was done, not what was said. The minutes of the February 19th meeting that were approved contained a motion that was not made or

withdrawn, and an action that was required for tonight, but is not on the agenda. He asked the Board to view the tape and then look at the minutes which were unanimously approved. He asked the Board to correct these factual errors that were approved.

President Hayes said he disagreed with Mr. Moens' assertions. The minutes that were approved reflect what occurred that evening. Minutes are a summary of what occurs, not a verbatim account. Roberts' Rules of Order are guides and President Hayes said he believes the Board followed those guidelines.

IX. OLD BUSINESS

X. CONSENT AGENDA

CONSENT OLD BUSINESS

CONSENT APPROVAL OF BIDS

A. Annual Computer Replacement Program Approved

Trustee Thomas Glasgow moved to approve. Trustee Robin LaBedz Seconded the Motion.
The Motion: Passed
Ayes: Baldino, Blackwood, Glasgow, Hayes, LaBedz, Rosenberg, Scaletta, Sidor, Tinaglia

CONSENT NEW BUSINESS

A. 2018 Budget Encumbrance Approved

Trustee Thomas Glasgow moved to approve. Trustee Robin LaBedz Seconded the Motion.
The Motion: Passed
Ayes: Baldino, Blackwood, Glasgow, Hayes, LaBedz, Rosenberg, Scaletta, Sidor, Tinaglia

B. 2017 Year-End Budget Adjustments Approved

Trustee Thomas Glasgow moved to approve. Trustee Robin LaBedz Seconded the Motion.
The Motion: Passed
Ayes: Baldino, Blackwood, Glasgow, Hayes, LaBedz, Rosenberg, Scaletta,

Sidor, Tinaglia

CONSENT LEGAL

A.	A Resolution Accepting a Plat of Easement for Public Sidewalk (Two feet of existing public sidewalk at 218 S. Evergreen Ave.)	Approved

Trustee Thomas Glasgow moved to approve R18-002. Trustee Robin LaBedz Seconded the Motion.
The Motion: Passed
Ayes: Baldino, Blackwood, Glasgow, Hayes, LaBedz, Rosenberg, Scaletta, Sidor, Tinaglia

CONSENT REPORT OF THE VILLAGE MANAGER

CONSENT PETITIONS AND COMMUNICATIONS

A.	Permit Fee Waiver - Arlington Heights Park District	Approved

Trustee Thomas Glasgow moved to approve. Trustee Robin LaBedz Seconded the Motion.
The Motion: Passed
Ayes: Baldino, Blackwood, Glasgow, Hayes, LaBedz, Rosenberg, Scaletta, Sidor, Tinaglia

B.	Bond Waiver - National Ovarian Cancer Coalition	Approved

Trustee Thomas Glasgow moved to approve. Trustee Robin LaBedz Seconded the Motion.
The Motion: Passed
Ayes: Baldino, Blackwood, Glasgow, Hayes, LaBedz, Rosenberg, Scaletta, Sidor, Tinaglia

XI. APPROVAL OF BIDS

XII. NEW BUSINESS

A. Para Residence - 132 W. Northwest Highway - PC#17-015 — Approved
PUD, Variations

Architect Keith Ginnodo said they are proposing a second floor residential addition to an existing commercial building which adds a bedroom and 1.5 bath above the existing building. The Plan Commission unanimously approved the addition. They are also adding a one-story garage. There is a green roof on the corner of the second story terrace. The signage for the first floor business will be illuminated by eternal lights.

Mr. Perkins said the petitioner is seeking a PUD in the B5 Downtown zoning and Variation of Chapter 28 for a rear yard setback.

Trustee Rosenberg asked if the roof is accessible. Mr. Ginnodo said the garage roof is accessible to the apartment, not to the public, and will be supportive enough for habitation and plantings. It is designed to support that function. The balcony supports are also strong enough.

Trustee Scaletta said this is a great design. He asked about the trellis. Mr. Ginnodo said it is mostly for shade on the west side of the building.

Trustee LaBedz liked that the hours are until 7:00 p.m. to capture commuter traffic. Mr. Ginnodo said the sign would face south which is the Northwest Highway side. The current brick will be used, but it will be washed. The top will be a fiber cement siding. They plan to grow hydrangeas on the east side.

Trustee Glasgow said it is a very nice project. He was glad to see this office being used in a productive manner.

Trustee Robin LaBedz moved to approve. Trustee John Scaletta Seconded the Motion.
The Motion: Passed
Ayes: Baldino, Blackwood, Glasgow, Hayes, LaBedz, Rosenberg, Scaletta, Sidor, Tinaglia

B. Sigwalt Apartments/CA Ventures - 45 S. Chestnut Ave. - PC#17-016 — Rescheduled
PUD, Preliminary& Final Plat of Subdivision, Rezoning, Variations

Michael Firsel, attorney for the petitioner, asked for this matter be

continued to the March 19th meeting. Certain issues arose at the Plan Commission meeting last week and they would like more time to address them. Some of their team had already planned to be out of town or could not attend the meeting this evening. He said they are aware there is tremendous amount of opposition and in order to prepare a more complete presentation, they would like more time. He said the Board is entitled to have all their questions answered, and they would like to do that.

President Hayes said he did not have a problem with the request. It is incumbent on the Board to have all the information available before making a decision.

Trustee Glasgow concurred with President Hayes. He said he did not want to make this important decision without all the facts. A petition was received today from some residents.

Trustee Sidor said he was a little disgruntled. He said he thought the petitioner would be ready because this has been going since August. He said he found it a little feeble. He said he was ready to go.

Mr. Firsel said there were questions about traffic and parking that were new. A question regarding the cost of land came up and they would like to have the landowner available.

Trustee Sidor said the land cost was raised at a neighborhood meeting two and a half months ago. He said he did not know how deep the Board should get into profit and loss issues. He said he was opposed to a continuance.

Trustee Tinaglia said he is the designer of a project being proposed on the other part of this lot. Has been on the Board for five years and has voted on many project that were not his. He has recused himself on anything in which his office is involved. He said he has read the letters and witnessed certain public actions and it has gotten nasty regarding this project. He said the community reaction has embarrassed him. He said he does not know if he will recuse himself, but thinks he is capable of make a decision on this project.

Trustee Glasgow said it is such a big step; he did not want to make it without the best information. This decision will last a generation.

President Hayes said he shares the concerns of the Board but it is for everyone's benefit to have all the information.

Resident Matt Scallon said he is not in favor of the proposal. He would like the space to be developed into a historic park with a re-creation of the Union Hotel, saloon and livery stables. They could be operational with carriage rides and an eating establishment. This would be a great draw to the downtown Business District.

Courtney Dirksen said she has not come down on either side of the issue. She suggested that the Village solicit feedback for strategic planning. She would like to hear what other ideas there are. She said she was not opposed to an apartment building, but did not love the idea. She said she was concerned with parking. It is hard to find parking downtown. She also asked how Westgate would deal with an influx of students. There is not enough room for the children there already.

President Hayes said the Village has solicited resident feedback for this block and the entire downtown over the past 20 years including resident surveys and the Downtown Master Task Force.

Bill Slankard said there have been many issues with the Park View Apartment approval process. The developer committed to placing power poles underground. An issue was discovered late last year, and now there is no room for the promised vault and the eyesore will remain. Eastman has become part of the construction site. The 2-hour parking limit has been ignored for contractors and the workers are receiving preferential treatment. Noise starts before 7 a.m. Dirt and dust are flying around. He said he hoped that any new development would be held to the promises made. He said to make sure contractors abide by their agreements. President Hayes said staff will take note of what was brought forward.

Tom Conlin said his concerns were compatibility with the community and the alleged bypassing of variances. He said it sounded like the Board will be considering the variances. He asked the Board to put themselves in the shoes of the residents who live right by the proposed project. The area gets very crowded with traffic.

Jerry King said he was in support of this project based on the Master Plan. The question is if the Master Plan is still relevant. People have made investments in time and money and if is being set aside, then it seems that those who have made financial decisions based on that Plan need to be compensated.

Hank Schneider asked if there could be signs posted on the site regarding the meeting.

Mr. Recklaus said the posting of signs is required for a Public Hearing, like the Plan Commission. This is a regularly scheduled meeting of the Village Board and there is no requirement for signage for a regular meeting. The Agenda is posted on the Village's website for every regular meeting and he was certain it would be covered in the press.

Trustee Thomas Glasgow moved to reschedule the item to the March 19 Village Board Meeting. Trustee John Scaletta Seconded the Motion.
The Motion: Passed
Ayes: Baldino, Blackwood, Glasgow, Hayes, LaBedz, Rosenberg, Scaletta, Tinaglia

Nays: Sidor

XIII. LEGAL

XIV. REPORT OF THE VILLAGE MANAGER

Mr. Recklaus said the Village has been awarded a grant to install permeable pavers on the police station site. Staff is looking for feedback to see if it should move forward and accept the grant. So far, 6 of 7 Trustees are in favor.

Trustee Scaletta said he would like to understand the long-term maintenance costs.

Trustee Rosenberg asked about run-off and water storage. Mr. Massarelli said the overall detention stays the same. Pavers take water which then goes through the stone, whatever doesn't go into the ground will get picked up by under drains and then go to the underground detention. The amount of water going into the basin will be reduced. This is another way to reduce storm water going into the sewer system. Anytime you can eliminate clean water from a combined sewer system it is a benefit. Trustee Rosenberg asked if other pavements be redirected. Mr. Massarelli said the site is so tight; it would be hard to change the grading. Everything was draining that direction anyway.

XV. APPOINTMENTS

XVI. PETITIONS AND COMMUNICATIONS

XVII. ADJOURNMENT

Trustee Jim Tinaglia moved to adjourn at 9:03. Trustee Bert Rosenberg Seconded the Motion.
The Motion: Passed
Ayes: Baldino, Blackwood, Glasgow, Hayes, LaBedz, Rosenberg, Scaletta, Sidor, Tinaglia

Item: vb 03 19 2018

Department: Village Clerk

Bid Section

Item:
Bid Opening Date:
Account Numbers:
Total Budget for Specific Item:
Bid Amount:

ATTACHMENTS:

Description	**Type**
3 19 18 minutes	Minutes

MINUTES
President and Board of Trustees
Village of Arlington Heights
Board Room
Arlington Heights Village Hall
33 S. Arlington Heights Road
Arlington Heights, IL 60005
March 19, 2018
8:00 PM

I. CALL TO ORDER

II. PLEDGE OF ALLEGIANCE

III. ROLL CALL OF MEMBERS

President Hayes and the following Trustees responded to roll: Glasgow, LaBedz, Tinaglia, Rosenberg, Scaletta, Sidor, Blackwood, Baldino.

Also present were: Randy Recklaus, Robin Ward, Mark Burkland, Charles Perkins, Scott Shirley, Tom Kuehne, Ken Koeppen and Becky Hume.

IV. APPROVAL OF MINUTES

A. Joint Village & Library 01/13/2018 Approved

Trustee Carol Blackwood moved to approve. Trustee Mike Sidor Seconded the Motion.
The Motion: Passed
Ayes: Baldino, Blackwood, Hayes, LaBedz, Rosenberg, Scaletta, Sidor

Abstain: Glasgow, Tinaglia

B. Joint Village and Park District 02/17/2018 Approved

Trustee Robin LaBedz moved to approve. Trustee Mike Sidor Seconded the Motion.
The Motion: Passed
Ayes: Baldino, Blackwood, Hayes, LaBedz, Scaletta, Sidor, Tinaglia

Abstain: Glasgow, Rosenberg

C. Committee of the Whole 02/19/2018 Approved

Trustee John Scaletta moved to approve. Trustee Robin LaBedz Seconded the Motion.
The Motion: Passed
Ayes: Baldino, Blackwood, Hayes, LaBedz, Rosenberg, Scaletta, Sidor, Tinaglia

Abstain: Glasgow

D. Village Board 03/05/2018 Approved

Trustee Thomas Glasgow moved to approve. Trustee Bert Rosenberg Seconded the Motion.
The Motion: Passed
Ayes: Baldino, Blackwood, Glasgow, Hayes, LaBedz, Rosenberg, Scaletta, Sidor, Tinaglia

V. APPROVAL OF ACCOUNTS PAYABLE

A. Warrant Register 03/15/2018 Approved

Trustee Bert Rosenberg moved to approve Warrant Register in the amount of $936,575.27. Trustee Thomas Glasgow Seconded the Motion.
The Motion: Passed
Ayes: Baldino, Blackwood, Glasgow, Hayes, LaBedz, Rosenberg, Scaletta, Sidor, Tinaglia

VI. RECOGNITIONS AND PRESENTATIONS

A. Swearing in of Ronald Fraider as Fire Battalion Chief

President Hayes administered the Oath of Office to Mr. Fraider.

B. Swearing in of John Carpenter as Fire Battalion Chief

President Hayes administered the Oath of Office to Mr. Carpenter.

C. Swearing in of Matthew Yegge as Fire Lieutenant

President Hayes administered the Oath of Office to Mr. Yegge.

D. Swearing in of Andrew Benkert as Fire Lieutenant

President Hayes administered the Oath of Office to Mr. Benkert.

VII. PUBLIC HEARINGS

VIII. CITIZENS TO BE HEARD

Keith Moens said there were comments made by two citizens at the March 5th Board meeting that were not included in the minutes which were just approved. One thanked the Board for their response to Gun Legislation, the other commented on the factual errors in the minutes regarding the Favia Dental Sign motions from the February 19th meeting. If it was an oversight he would accept that. Otherwise, it appears that you may have blocked out the comments you don't want in the record. It appears that way. Why would you want to do that? He asked if his comments would be blocked out next month. He said resident comments under Citizens to be Heard should all be included in the legal record. He asked for the resident comments to be reinstated from the March 5th meeting.

President Hayes questioned that with all the stuff going on in the world these days, Mr. Moens is bothering the Board about Roberts Rules of order? He said he responded to Mr. Moens many many times about this and he has had it. He said Mr. Moens' time was up.

Kevin Ford said he appreciated the Village/Resident meeting in January regarding the teen center. There is a strong desire that a pro community organization take over the teen center. He said he might have found such an organization, the Buddhist Dharma Drum Association. They have outgrown their current space and are looking for new space near a Metra station. They teach meditation and yoga classes. He took an unofficial poll and received positive comments from the neighborhood.

President Hayes said he appreciated the information and the neighborhood being active in the process.

IX. OLD BUSINESS

Trustee John Scaletta moved to move the Consent Agenda forward and discuss Old Business after the Consent Agenda is voted upon. Trustee Robin LaBedz Seconded the Motion.
The Motion: Passed
Ayes: Baldino, Blackwood, Glasgow, Hayes, LaBedz, Rosenberg, Scaletta, Sidor, Tinaglia

X. CONSENT AGENDA

CONSENT OLD BUSINESS

CONSENT APPROVAL OF BIDS

A. ParkwayTree Removal and Emergency Tree Work 2018 — Approved

Trustee Thomas Glasgow moved to approve. Trustee Jim Tinaglia Seconded the Motion.
The Motion: Passed
Ayes: Baldino, Blackwood, Glasgow, Hayes, LaBedz, Rosenberg, Scaletta, Sidor, Tinaglia

B. Parkway Tree Stump Removal and Landscape Restoration 2018 — Approved

Trustee Thomas Glasgow moved to approve. Trustee Jim Tinaglia Seconded the Motion.
The Motion: Passed
Ayes: Baldino, Blackwood, Glasgow, Hayes, LaBedz, Rosenberg, Scaletta, Sidor, Tinaglia

C. Pavement Crack Sealing Program 2018 — Approved

Trustee Thomas Glasgow moved to approve. Trustee Jim Tinaglia Seconded the Motion.
The Motion: Passed
Ayes: Baldino, Blackwood, Glasgow, Hayes, LaBedz, Rosenberg, Scaletta, Sidor, Tinaglia

D. Thermoplastic Lane Markings 2018 — Approved

Trustee Thomas Glasgow moved to approve. Trustee Jim Tinaglia Seconded the Motion.
The Motion: Passed
Ayes: Baldino, Blackwood, Glasgow, Hayes, LaBedz, Rosenberg, Scaletta, Sidor, Tinaglia

E. Downtown Parking Study — Approved

Trustee Thomas Glasgow moved to approve. Trustee Jim Tinaglia Seconded the Motion.
The Motion: Passed
Ayes: Baldino, Blackwood, Glasgow, Hayes, LaBedz, Rosenberg, Scaletta, Sidor, Tinaglia

CONSENT LEGAL

A. An Ordinance Approving a Planned Unit Development and a Variation from the Arlington Heights Municipal Code (Para Residence, 132 W. Northwest Highway) — Approved

Trustee Thomas Glasgow moved to approve 18-006. Trustee Jim Tinaglia Seconded the Motion.
The Motion: Passed
Ayes: Baldino, Blackwood, Glasgow, Hayes, LaBedz, Rosenberg, Scaletta, Sidor, Tinaglia

CONSENT REPORT OF THE VILLAGE MANAGER

CONSENT PETITIONS AND COMMUNICATIONS

A. Bond Waiver - Northwest Suburban Genealogy Society — Approved

Trustee Thomas Glasgow moved to approve. Trustee Jim Tinaglia Seconded the Motion.
The Motion: Passed
Ayes: Baldino, Blackwood, Glasgow, Hayes, LaBedz, Rosenberg, Scaletta, Sidor, Tinaglia

B. Bond Waiver - Elmhurst Rotary — Approved

Trustee Thomas Glasgow moved to approve. Trustee Jim Tinaglia Seconded the Motion.
The Motion: Passed
Ayes: Baldino, Blackwood, Glasgow, Hayes, LaBedz, Rosenberg, Scaletta,

Sidor, Tinaglia

C. Sigwalt Apartments/CA Ventures - 45 S. Chestnut Ave. -
PC#17-016
PUD, Preliminary& Final Plat of Subdivision, Rezoning, Variations

Trustee Tinaglia said he was recusing himself from voting on the Sigwalt Ventures project and the Heart's Place project as his firm is a client of the developer of Heart's Place and is involved in a different project for the Sigwalt block. He wanted to remove any doubt or appearance of impropriety. He left the room at 8:31 p.m.

Mr. Frisel, attorney for the C/A Ventures, introduced the Sigwalt Apartment project. Frisel stated there have been very significant changes to the project since it was originally proposed. The project is compliant with code for parking. The number of units has been decreased from 88 to 80 units and the height of the building to 60 feet. On Chestnut, the building is 57' 6". The side and front yard setbacks were increased.C/A Ventures has redesigned the exterior architecture to fit with surrounding neighborhood. The fifth floor is recessed and minimized so sometimes cannot be seen from the street. The size of the building has been reduced. The project provides five parking stalls along Sigwalt and has a dedicated loading zone for short term drop offs. A separate move in/move out location is in front of the garage. The variances requested are a result of the Master Plan and the zoning dictated by Code. The Village's vision for high density residential was a 4-6 story building. This building is five stories. Frisel stated that if C/A Ventures were to observe every set back and the 45% ground coverage requirement, the most number of units they could develop would be 45, which is economically not feasible. The lot to the north is zoned B-5 so can be taller and more dense with fewer variations. To comply with the Master Plan, Frisel stated these variations are essential. This project will have no impact on the surrounding residences. The building could be moved further north if the other part of the lot is developed. The ramp in the garage is 20 feet. C/A Ventures is requesting to allow certain balconies to extend 3.5' into the side yards. This variance, along with several of the others, are very consistent with other variances given previously. No moving vans will be parked on Sigwalt and these trucks will have a limit of two hours.

Architect Mark Hopkins described the evolution of the elevations. C/A Ventures removed the dark brick, added traditional windows and added a decorative cornice. Michael Worthman, traffic engineer, said this is a transit oriented development, given its proximity to the train and downtown. There is sufficient capacity for parking. He said the ramp inside the garage has

low volume and 20’ is common in residential parking garages. The delivery space in front of the building will able to accommodate UPS trucks, pizza deliveries and is similar to other buildings in the area. The space for moving vans is sufficient to accommodate a 30’ truck.

Mr. Frisel said even the building is reduced to four stories, it would still require 10 of the 11 variances. The economic impact of removing 16 units, would make the project not feasible as C/A Ventures would still have to pay for the underground sewer system, the storm water storage area, the elevators, and the land. Frisel stated this is the very least that can be built and it is an A+ project. They are already at the bottom of their financial threshold, this is what the Master Plan contemplated.

Village Manager Randy Recklaus stated that blocks like this are always a challenge. Residents, who live adjacent, want it to be as close to single family development as possible and developers will look to maximize their investment. Looking at the history and the discussions regarding this space, the conflict between these perspectives has always been clear. In recent years, Recklaus stated, staff has fielded a number of proposals on this block, and all of them, except for this one, were discouraged because what was proposed was out of step with the Board’s goals for the site. Recklaus explained the Master and Comprehensive Plans reflect the will of the Board and are subject to change per the will of the Board. Staff uses them as guidelines when working with developers. The Plan and Design Commissions use them when evaluating projects. Recklaus pointed out that the Village Board is the final decision making body. The developer has changed their plan subsequent to the denial in October and staff has had a lot of input for the project with the goal of arriving at a project the Board could support. The project requires six yes votes because a petition was signed by 20% of the adjacent property owners.

Planning and Community Development Director Charles Perkins said the plan for this space was for mixed-use (B-5) prior to 1997, and was changed to high density residential R-7. In 2016 there was a proposal by another developer for 105 units, staff told them it was too dense, and they walked. The Comprehensive Plan calls for high density as the area is close to train, shopping and restaurants. All the other high-density multi-family buildings are south of Sigwalt, this is the only one north. There were requests for a lower density when the Downtown Master Plan was adopted, but the Board decided to stay with high density. This proposal of five stories fits in with the Master Plan goal of having a 4-6 story building. The Village’s garage goes over Highland on the north part of the parcel and the adjacent space on the lot is zoned B-5. The site, which is the edge of downtown, has been vacant since 2009.

Mr. Perkins showed examples of other variations given for R-7 parcels in the neighborhood. Very few projects in the downtown area can be built and comply with Code. This project has variations, but there are many projects with lots of variations. The current property pays $9,000 in property taxes; the school districts get just under $6,000 a year from the lot. Staff projects

it would generate $258,000 in property taxes and the education portion would be $171,000. Perkins stated the school district uses a projection formula for estimated enrollments. In this case, it shows five elementary aged children living there and 2-3 in high school.

Mr. Perkins explained the PUD variation criteria, which looks at the surrounding neighborhood and if there is any detrimental impact. The project has an underground water detention vault, so will not affect drainage. Each variation needs to comply with three variation criteria too. The first is that the property cannot yield a reasonable return; the second is that there are unique circumstances; the third is if granted the variations will not be detrimental to the character of the neighborhood. Most of the other R-7 buildings are adjacent to single-family homes; a street of single-family homes separates this site. Secondly, the Comprehensive Plan does call for attached single family on the west and south. The project is asking for three setback variations and meets Code on height. C/A Ventures is being required to dedicate 8 feet on Chestnut and Highland for potential road widening. The developer is providing an additional 20' setback. This location is unique because of the three street frontages, so more than a third of the lot would be in setbacks, which seems excessive. The façade was upgraded; additional landscaping and upgraded ornamental trees were added. Parking on Sigwalt was added.

Local residents spoke regarding the development.

Keith Allen said it is odd that the petitioner claimed that they are forced to buy a parcel that is half as big as what is required to support R-7. They could buy enough land to meet the requirements. It is a self-imposed hardship. Allen commented that this is essentially the same building that was denied in October with a 3% reduction. The footprint is the same; it just has different wrapping paper. It is still too big, too dense and too tall. It is not compatible with the surrounding neighborhood. Allen stated the residents have been engaged and involved and voiced their opinions, those voices count and hopefully they carry weight in your decision. Allen urged the Board to consider the 453 opposition signatures filed with the Clerk.

Shawn Collins said the proposed building is in conflict with the Master Plan. It can be developed into high density only in conjunction with the development of Chestnut. It may never come to fruition that any multi-family structure would be built on the west side of Chestnut. Therefore, this would be in direct conflict with the Village plan, stated Collins. It has been vacant because of the recession. The industry is finally getting back. There will be other builders who come forward now that the economy is coming back. As a 25-year resident, Collins urged the Board to vote no, as it is in conflict with the Village Plan of true transition. Your vote will have material and substantive impact for generations to come.

Matt Scallon invited people and organizations to brainstorm the idea of a re-creation of "Village of Dunton" historical park and vintage saloon on this site. Contact him at Scallon63@msn.com.

Brad Doty said some people are missing big picture. Prior to purchasing his home, he lived in an apartment in the Village. He and his wife used to take walks around the neighborhoods thinking about which one they liked best. This is a normal function of an apartment in downtown. Right now, there are only two apartment buildings. This kind of building attracts people who will take the train to the loop and do not really drive. The Village needs more demand from people who do not need a parking space. Once tenants can buy a house, they will be bidding up prices in the neighborhoods. Property values will get upward pressure. Doty stated no single family houses will be built on this parcel. It has been empty and not providing revenue for two decades. It is a dog poop park and needs to change. There needs to be more demand for down town shops and restaurants and more money for the Park District and schools.

Jim Henegan said he is a commercial real estate attorney and a local resident, who supports the project. It is a good use of what has been a problem, vacant parcel. Henegan stated single family will not go there; no town home developer will buy it because it is next to a parking garage. There are already a couple of three and four story buildings on the other side of Sigwalt. Henegan commented that the new elevations look nice, and it is probably the best the Village will get.

Steve Sarussi said the Board should to pay attention to Chapter 28 5.1-7. The purpose of R-7 is to provide a buffer, this will not provide a buffer. There this seems to be a piecemeal dismantling of the Code as it applies to zoning commented Sarussi. Individual parcels have been changed from R-3 to R-7 over the years. Sarussi stated in some of the other building's cases only residents in a small perimeter were invited to speak on those changes. If there is going to be a change to R-7, do not do it piecemeal. Saurssi urged the entire Village should have input on those kind of changes.

Jerry King said prior to purchasing his home on Chestnut, he did look at the Master Plan and understood the intention of this property. The decision should be based on the spirit of whether this meets the Master Plan. King suggested that not everyone who signed this petition understood that there is a Master Plan, and that it took two years and 31 meetings. Those meetings included local community leaders, residents, officials and select Trustees. The Village review and community input process has been completed, and now the question is how be true to R-7 and have a less dense property. This is probably the best we are going to do. King questioned, if you don't do R-7, what are you going to do? If you move away from high density, have you engaged in a taking? Whoever invested in this thought it was R-7. King stated all of that will have the net effect of putting up a big sign that says Arlington Heights is closed for business, it cannot even deliver on the Master Plan.

Kimberly deJonckheere asked why the urgency in approving something that sets a dangerous precedent. Ms. deJonckheere stated there is no information saying there is a high need for apartments in downtown. There

are 45 new units coming at Parkview. This development has no pool, no door attendant, and no onsite management and so is not luxury. Three bedroom apartments will likely attract children and the additional taxes do not sound they will cover the cost to cover the overcrowding schools. She commented that Parking is an issue. What about their guests? She said she did not want people going to other communities to shop and eat because they cannot find parking. She suggested that the parking study be completed beforehand. Ms. deJonckheere stated there needs to be better traffic control to better protect children from the traffic. Not enough has been done to prove it will not have a detrimental impact on the character, stated deJonckheere, and she called on the Board to uphold the high standards and deny the petition.

President Hayes said that in the interest of fairness, the Village received a few petitions. One had 230 signatures which favored the project. He wanted to make sure the audience present and at home was aware that there had been petitions submitted on both sides.

Trustee Scaletta said the efforts of the residents have made the project better. There is a lot of misinformation out there. People are using scare tactics to get people to agree with them and if you do not agree with them, people have been bullied. He said he met with the Superintendent of District 25 and they are not concerned with overcrowding after studying the statistics. The School District worked with the Park District and found a way to accommodate the CAP program if more children come. It was not a school issue; it was a Park District staffing issue. He said he was glad to see street and delivery parking. He liked that move in/move out was not on Sigwalt. Scaletta agreed with consulting Engineering to better control the intersections in area. He said he would prefer non-protruding balconies on Chestnut. After discussion, Mr. Frisel said the developer could accommodate a reduced balcony.

Trustee Scaletta said he would want strict controls over construction staging and worker parking. They must not affect the neighborhood negatively and cannot park on the streets. He does not want Sigwalt closed. Mike Parker, Construction Manager, manages these sites frequently and gave assurances that they would be good neighbors. Mr. Recklaus said there are many options.

Trustee Scaletta said the idea is this is a transition before you get to a 10 story building on the other side. He worked on the Downtown Master Plan Taskforce, which spent a lot of time discussing how the downtown would look. It was a 20-30 year plan. This is a better plan than what came before and which he voted against because of parking. He said he did not believe there would be 120 extra cars on Highland on any given day. The neighborhood is protected from not having enough parking.

President Hayes agreed with Trustee Scaletta but said he liked the balconies on the Chestnut side, as it is more aesthetically pleasing to see a break in the wall versus a flat wall. He said he was in favor of leaving it as

designed.

Trustee Rosenberg asked if the project meets the Master Plan. Mr. Perkins said the building meets the intent of the Master Plan, which calls for 4-6 stories. This is five. The Comprehensive Plan calls for high density residential (R-7). The building height has been reduced to 60'. It compies with parking. The main variations requested are setbacks and density. These are variations from the Zoning Code, which is a different document, not from Master Plan or the Comprehensive Plan.

Trustee Rosenberg asked how the loading zones would work. Mr. Perkins said a few spaces would be cordoned off for moving trucks on Highland. On a moving day, management works with the Police Department, which already does this for other buildings in the area. Most moves occur on weekends and the Public Service Officers monitor it. The bump outs on Sigwalt allow for tree preservation and existing utility boxes, which are not feasible to relocate.Trustee Rosenberg asked if the 20' ramp is sufficient. Mr. Perkins said there are number of developments where this has been approved, and he is not aware of any concerns. Trustee Rosenberg said he was also concerned with construction staging. Mr. Frisel said they would pursue using the AT&T site. Mr. Parker said they would be extremely careful and attentive. There is no intention of closing off Sigwalt.

Mr. Perkins said construction staging complaints about another project is a different situation, as that building has a zero setback. Staff must approve a detailed construction document. No construction traffic can go in the neighborhood. Trustee Rosenberg wanted to make sure workers are not parking in the residential neighborhood. He said he appreciated the comments from the residents and the accommodations from the developer. He said he believes it is the best use for the property and he will vote in favor.

Trustee Blackwood said there was a lot of negativity in the mid-90s regarding downtown development. There was a group called the Shadow Group who claimed no one would see the light of day because of the large buildings were going to be in excess of 10-12 stories. She asked about the two lots directly to the north of this project. Mr. Perkins said they are zoned B-5 and R-3. The Comprehensive Plan designation is mixed-use. B-5 can be up to 140' or 13 stories. Trustee Blackwood said she agreed with Mr. Henegan that it is unlikely townhomes would be built adjacent to a parking garage. She said she loved the idea of a historical site, but that requires a lot of money, coordination and investment that has not been seen since the mid-90s. On practically every issue raised, CA/Ventures made significant efforts; changing the façade, providing underground storm water detention, and addressing everything they could without negative impacts. Blackwood stated there were a number of projects that tried to go in at this location, and if you consider what could have gone in, this is a strong project. Blackwood said she supported it.

Trustee LaBedz said she has struggled with this project since the

beginning. She said she would prefer the height be four stories. When the zoning was discussed in the 80s/90s, multi-family zoning originally went to Ridge. A lot has changed because of the improvements that people have made to their properties close to downtown. LaBedz said she did not know how she would vote.

President Hayes said he was in favor of the proposal and because of the neighbors input; it is now an A+ project. It is a high quality, first-rate development going into the community. The number of units decreased 96 to 80 with a whole bunch of practical and aesthetic improvements. Hayes said it is not perfect, and the Village will never get a project that will satisfy everyone. Hayes stated it was the highest and best use of the property. He said he was glad of the involvement of the community to help bring forward the improved project.

Trustee Glasgow commented that he did not like the position of the moving van space because of the potential bottleneck on Highland. Mr. Frisel stated there will be move-in hours on Saturday/Sunday mornings but Highland would not be blocked both ways. The space is depressed so a moving truck would not block traffic if the truck is fully pulled over. The trucks would have restricted hours. Mr. Frisel said it is not known what will to happen with the AT&T building, which is for sale.

Trustee Glasgow asked about the potential building on the north side of the block. Mr. Perkins said a north side development could take a few parking spots closer to Campbell on Highland for access. There could be 360 units on the north site and buildings could range between 6 and 27 stories but staff does not have a plan yet. There is a property owner working on something and it could be in the 6-10 story range. The property to the north would have to provide some setbacks in the rear of the building/s. Trustee Glasgow said the property owner knew what he was getting into and tried to cover the hardship with the variances. However, there is a neighborhood of homes that face it. He said he realized a vote against this would stop downtown development. Glasgow said a vote for it directly affects a neighborhood. He said it does not meet the character and locality, so he will vote no.

President Hayes said it would change the neighborhood, from a dog poop park to high-density multifamily. He disagreed that it will alter the essential character. There are other 4-5 story buildings nearby that are not imposing. Hayes stated this is a first class development that will not change how residents live their daily lives. Traffic and safety issues will be addressed going forward.

President Hayes said it is incumbent on the Board to explain their votes. He said he was disappointed from the members of the Board who chose not to explain their votes.

Trustee Bert Rosenberg moved to approve. Trustee Carol Blackwood

Seconded the Motion.
The Motion: Failed
Ayes: Blackwood, Hayes, Rosenberg, Scaletta
Nays: Baldino, Glasgow, LaBedz, Sidor

Absent: Tinaglia

XI. APPROVAL OF BIDS

XII. NEW BUSINESS

A. Hearts Place - 120-122 E. Boeger Dr. - PC#17-014 — Approved
PUD Amendment, Variations

Richard Koenig of the Housing Opportunities Development Corporation said the Illinois Housing Development Authority, which has asked them to make a modification to the interior, has approved them for financing. HODC and IHDA would like some one-bedroom units to make the financing work better. It decreases the potential number of people in the development. The exterior does not change. The top units change from two bedrooms into one bedrooms. The rental income stays the same.

Mr. Perkins said they are seeking two variations; one for density and one to reduce the required parking from 37 spaces to 33.

President Hayes said it is a reasonable request, and makes the project less dense.

Trustee Scaletta asked why the change. Mr. Koenig said there is a need for one bedrooms and the unit cost goes down. Trustee Scaletta said he understood not everyone wants a roommate. He said he was supportive of the changes.

Trustee Rosenberg said if this is not approved, would funding still be approved. Mr. Koenig said yes, but IHDA asked if they were willing to go back to the Board to update it. Trustee Rosenberg said he was in favor of the change.

Trustee Labedz said she was supportive and did not see parking as a material issue.

Trustee Glasgow said he liked it better now.

Trustee Baldino said he was supportive, and asked about a potential gun free zone. Mr. Koenig said it is drug free and smoke free, but unless there is a local ordinance that designates a gun free zone, they are not able to make that restriction. There may be other Federal laws that prevent a person to have a gun, which would apply.

Trustee Sidor said he was still for it.

Linda Waycie of the Arlington Heights Faith in Action team, said her organization recommends Board approval.

Hugh Brady of the Housing Task Force Corporation said there is a need for one bedrooms, so this is a better mix. Experience says that about 1/3 of the residents will have cars. At Meier's Place there are 39 apartments and 13 cars.

Craig Horwitz of Buffalo Grove said the organization is getting another 2 units so they get another $57,000 from Illinois tax payers. He said there are 30 cars at Philhaven. He said he was not sure about the parking survey. He questioned if the units meet code for minimum square footage. He said Sam Hubbard of the Planning Department said that it did but did not have the numbers at the Plan Commission meeting. He asked for the project to go back to the Plan Commission to make sure project is under Code.

Mr. Perkins said staff reached out to IHDA and it is true the change would provide additional income. Staff received the exhibit from the architect regarding the square footage and each unit meets or exceeds the square footage per code.

Bruce Everding's mother owns the property adjacent to the site. He said that his mother requested that a super majority vote be required. Mr. Perkins said it is on the agenda that there is a requirement for a super majority vote. The initial project was approved by super-majority.

Trustee Scaletta asked in the event that the certified plans from architect do not show the appropriate square footage, what would happen. Mr. Recklaus said Building Permits would not be issued without receiving certified architect plans that conformed. Mr. Recklaus assured Trustee Scaletta that the project will receive a very thorough review.

Trustee John Scaletta moved to approve. Trustee Mike Sidor Seconded the Motion.
The Motion: Passed
Ayes: Baldino, Blackwood, Glasgow, Hayes, LaBedz, Rosenberg, Scaletta, Sidor

Absent: Tinaglia

XIII. LEGAL

XIV. REPORT OF THE VILLAGE MANAGER

XV. APPOINTMENTS

XVI. PETITIONS AND COMMUNICATIONS

XVII. ADJOURNMENT

Trustee Thomas Glasgow moved to adjourn at 11:23 p.m. Trustee Robin LaBedz Seconded the Motion.
The Motion: Passed
Ayes: Baldino, Blackwood, Glasgow, Hayes, LaBedz, Rosenberg, Scaletta, Sidor

Absent: Tinaglia

Item: warrant register 03/30/2018

Department: Village Clerk

Bid Section

Item:
Bid Opening Date:
Account Numbers:
Total Budget for Specific Item:
Bid Amount:

ATTACHMENTS:

Description	Type
warrant register 3 30 18	Warrant Register

VILLAGE OF ARLINGTON HEIGHTS

WARRANT REGISTER FOR

CHECK DATE: 3-30-2018

Fund	Fund Description	Total Transaction Amount
101	General Fund	$171,669.91
215	CDBG Fund	$575.00
227	Foreign Fire Ins Tax Fund	$350.00
231	Criminal Investigation Fd	$875.07
235	Municipal Parkg Opr Fund	$22,109.72
263	TIF IV	$2,277.00
401	Capital Projects Fund	$94,060.79
426	Storm Water Control Fund	$65,832.25
431	Public Building Fund	$873,050.21
505	Water and Sewer Fund	$27,375.65
511	Solid Waste Fund SWANCC	$144,571.51
515	Arts,Entert & Events Fund	$4,434.11
605	Health Insurance Fund	$9,308.65
611	General Liability Ins Fnd	$11,597.35
615	Workers Compensation Ins	$70,126.35
621	Fleet Operations Fund	$32,718.00
625	Technology Fund	$58,739.68
715	Guaranty Deposits Fund	$6,650.00
TOTAL ALL FUNDS		**$1,596,321.25**

WARRANT REGISTER - GM0002

Department: 0

Division: 0

Check #	Account Number	Payee	Description 1	Transaction Amount	Total Trans Amount
211612	505-0000-140.10-00	AMERICAN PRINTING TECHNOLOGIES	POSTAGE REIMBURSEMENT	$2,171.56	$2,171.56
211618	101-0000-489.85-00	ARMOR SYSTEMS	COLLECTION SERVICES	$75.00	$75.00
211623	101-0000-421.05-00	VAMSI BAHADUR	REFUND VEHICLE STICKER	$10.00	$10.00
211625	101-0000-421.05-00	DOROTHY BEHLS	REFUND VEHICLE STICKER	$18.00	$18.00
211627	101-0000-433.14-00	BLUE CROSS/BLUE SHIELD	REFUND AMBULANCE CLAIM	$400.00	$400.00
211628	101-0000-433.14-00	BLUE CROSS BLUE SHIELD	REFUND AMBULANCE CLAIM	$273.28	$273.28
211630	101-0000-421.05-00	BETTY CABY	REFUND VEHICLE STICKER	$10.00	$10.00
211632	101-0000-140.51-00	CANON SOLUTIONS AMERICA	COPIER MAINTENANCE	$38.98	$38.98
211649	715-0000-220.93-00	DEMTRA RASCHILLO 18 19	BOND REFUND	$200.00	$200.00
211662	715-0000-220.93-00	GRAHAM ENTERPRISE INC 12258	BOND REFUND	$6,250.00	$6,250.00
211672	101-0000-433.14-00	HUPY AND ABRAHAM SC	REFUND AMBULANCE CLAIM	$120.00	$120.00
211673	101-0000-433.14-00	MARY HURD	REFUND AMBULANCE CLAIM	$80.00	$80.00
211682	615-0000-489.90-00	INTERGOVERNMENTAL RISK MGMT AGENCY	RESTITUTION OWED	$711.94	$711.94
211687	101-0000-433.14-00	DORIS JOHNSON	REFUND AMBULANCE CLAIM	$100.00	$100.00
211690	101-0000-421.05-00	KALYAN KALAGOTLA	REFUND VEHICLE STICKER	$10.00	$10.00
211695	505-0000-452.42-00	BILL LAMPERT	REFUND FINAL WATERBILL	$27.90	$27.90
211699	101-0000-441.35-00	LEXUS OF ARLINGTON	REFUND CITATION	$35.00	$35.00
211706	101-0000-421.99-00	MARCUS	OL REFUNDS	$190.00	$190.00
211707	401-0000-200.15-00	MARTAM CONSTRUCTION INC	BRICK PAVER MAINTENANCE	$20,222.56	$20,222.56
211716	101-0000-433.14-00	JAMES MURRAY R	REFUND AMBULANCE CLAIM	$50.00	$50.00

WARRANT REGISTER - GM0002

Check #	Account Number	Payee	Description 1	Transaction Amount	Total Trans Amount
211725	101-0000-421.99-00	NORTHSCAPE ENT	OL REFUNDS	$130.00	$130.00
211730	235-0000-435.65-02	DEBORAH O'DONOVAN	REFUND PARKING PERMITS	$120.00	$120.00
211736	101-0000-433.14-00	MELODINA PANTANELLA	REFUND AMBULANCE CLAIM	$74.38	$74.38
211748	101-0000-421.05-00	COLLEEN ROGERS	REFUND VEHICLE STICKER	$40.00	$40.00
211750	101-0000-433.14-00	RUSSELL ROWLEY	REFUND AMBULANCE CLAIM	$50.00	$50.00
211768	715-0000-220.93-00	SUSAN PUETZ 17 857	BOND REFUND	$200.00	$200.00
211772	101-0000-433.14-00	PAT TREFELNER	REFUND CLAIM DATE 8/26/17	$80.00	$397.09
			REFUND CLAIM DATE 9/1/17	$74.38	
			REFUND CLAIM DATE 9/2/17	$80.00	
			REFUND CLAIM DATE 9/3/17	$74.38	
			REFUND CLAIM DATE 9/8/17	$88.33	
211775	101-0000-433.14-00	UNITED HEALTHCARE	REFUND AMBULANCE CLAIM	$110.03	$110.03
211776	101-0000-433.14-00	MATTHEW UNTERFENGER	REFUND AMBULANCE CLAIM	$80.00	$80.00
211783	505-0000-452.42-00	JUSTIN WALSH	WATER BILL REFUND	$778.78	$778.78
211787	101-0000-433.14-00	EVELYN WORM	REFUND AMBULANCE CLAIM	$40.00	$40.00
801710	101-0000-210.95-00	RTA/CTA BENEFIT PROGRAM	RTA/CTA BENEFIT PROGRAM	$312.00	$312.00
901328	101-0000-210.91-00	EMPLOYEE BENEFITS CORP	FSA CLAIMS 3/12/2018	$11,266.67	$11,266.67
901330	101-0000-210.91-00	EMPLOYEE BENEFITS CORP	FEES MARCH 2018	$812.00	$812.00
				Division 0 Total	$45,405.17
				Department 0 Total	$45,405.17

WARRANT REGISTER - GM0002

Department: 1 Board of Trustees

Division: 1

Check #	Account Number	Payee	Description 1	Transaction Amount	Total Trans Amount
211702	101-0101-501.21-65	LORELLE COMMUNICATIONS INC	SERVICE MISCELLANEOUS	$4,500.00	$4,500.00
				Division 1 Total	$4,500.00
				Department 1 Total	$4,500.00

WARRANT REGISTER - GM0002

Department: 2 Integrated Services

Division: 1

Check #	Account Number	Payee	Description 1	Transaction Amount	Total Trans Amount
211633	101-0201-502.30-05	CANON SOLUTIONS AMERICA	COPIER MAINTENANCE	$1,305.00	$1,305.00
211666	515-0201-525.40-55	HARRIS TRUST & SAVINGS BANK	SESAC INC	$1,377.36	$1,377.36
211732	101-0201-502.30-05	OFFICE DEPOT	OFFICE SUPPLIES	$19.43	$138.16
			OFFICE SUPPLIES	$118.73	
				Division 1 Total	$2,820.52
				Department 2 Total	$2,820.52

WARRANT REGISTER - GM0002

Department: 3 Human Resources

Division: 1

Check #	Account Number	Payee	Description 1	Transaction Amount	Total Trans Amount
211660	615-0301-552.42-75	GALLAGHER BASSETT SERVICES INC	CLAIMS - MEDICAL LOSS	$7,426.05	$7,426.05
	615-0301-552.42-80	GALLAGHER BASSETT SERVICES INC	CLAIMS - W/C	$11,735.10	$11,735.10
211666	101-0301-503.22-02	HARRIS TRUST & SAVINGS BANK	SOCIETY FOR HUMAN RESO	$209.00	$209.00
	605-0301-552.22-02	HARRIS TRUST & SAVINGS BANK	SHRM CERTIFICATION	$100.00	$100.00
	615-0301-552.22-02	HARRIS TRUST & SAVINGS BANK	SHRM*MEMBER600815847	$209.00	$209.00
211674	101-0301-503.22-01	IL CITY/COUNTY MGMT ASSOC	FEE FOR JOB POSTING	$50.00	$50.00
211683	615-0301-552.42-81	INTERGOVERNMENTAL RISK MGMT AGENCY	WORKERS COMP	$50,044.26	$50,044.26
211726	605-0301-552.20-50	NORTHWEST COMMUNITY HOSPITAL	SERVICE HEALTH TESTING	$2,309.00	$6,589.00
			SERVICE HEALTH TESTING	$3,057.00	
			SERVICE HEALTH TESTING	$1,187.00	
			SERVICE HEALTH TESTING	$36.00	
211732	101-0301-503.30-05	OFFICE DEPOT	OFFICE SUPPLIES	$242.25	$308.82
			OFFICE SUPPLIES	$66.57	
211781	605-0301-552.20-58	VISION SERVICE PLAN	PREMIER VISION PREMIUM	$2,619.65	$2,619.65
				Division 1 Total	$79,290.88
				Department 3 Total	$79,290.88

WARRANT REGISTER - GM0002

Department: 4 Legal Department

Division: 1

Check #	Account Number	Payee	Description 1	Transaction Amount	Total Trans Amount
211626	101-0401-503.22-15	BHFX LLC	SERVICE PRINTING	$7.50	$7.50
211642	101-0401-503.20-20	CLARK BAIRD SMITH LLP	LEGAL SERVICES	$837.50	$837.50
211671	101-0401-503.20-10	HOLLAND & KNIGHT LLP	RETAINER	$3,000.00	$3,000.00
211749	101-0401-503.21-65	ROSE MARY JURINEK	COURT REPORTER	$1,081.50	$1,081.50
211761	101-0401-503.20-20	SOTOS LAW FIRM PC	LEGAL SERVICES	$926.49	$1,876.98
			LEGAL SERVICES	$950.49	
211770	101-0401-503.33-05	THOMSON REUTERS-WEST	INFORMATION CHARGES	$298.06	$298.06
				Division 1 Total	$7,101.54
				Department 4 Total	$7,101.54

WARRANT REGISTER - GM0002

Department: 5 Finance

Division: 1

Check #	Account Number	Payee	Description 1	Transaction Amount	Total Trans Amount
211614	101-0501-503.21-65	ANDRES MEDICAL BILLING LTD	SERVICE FINANCIAL	$3,567.77	$3,567.77
211656	101-0501-503.22-05	FEDERAL EXPRESS	SHIPPING/DELIVERY SERVICE	$22.70	$22.70
211660	611-0501-552.42-60	GALLAGHER BASSETT SERVICES INC	CLAIMS - LIABILITY LOSS	$7,955.45	$7,955.45
211666	101-0501-503.22-02	HARRIS TRUST & SAVINGS BANK	GOVERNMENT FINANCE OFF	$940.00	$940.00
	101-0501-503.30-01	HARRIS TRUST & SAVINGS BANK	KWE*KIPLINGER EDITORS	$89.00	$89.00
211669	101-0501-503.21-65	HELPSYSTEMS	AP SOFTWARE UPGRADE	$3,150.00	$3,150.00
211683	611-0501-552.42-61	INTERGOVERNMENTAL RISK MGMT AGENCY	UNDERGROUND STORAGE TANKS	$2,446.65	$3,641.90
			GENERAL LIABILITY	$1,195.25	
211732	101-0501-503.30-05	OFFICE DEPOT	OFFICE SUPPLIES	$107.01	$733.58
			OFFICE SUPPLIES	$267.06	
			OFFICE SUPPLIES	$70.85	
			OFFICE SUPPLIES	$288.66	
211734	101-0501-503.22-01	PADDOCK PUBLICATIONS INC	ADVERTISING	$68.85	$233.55
			ADVERTISING	$164.70	
211771	101-0501-503.21-65	TRACKER	SERVICE MISCELLANEOUS	$5,000.00	$5,000.00
				Division 1 Total	$25,333.95
				Department 5 Total	$25,333.95

WARRANT REGISTER - GM0002

Department: 6 Information Technology

Division: 1

Check #	Account Number	Payee	Description 1	Transaction Amount	Total Trans Amount
211636	625-0601-572.50-10	CDS OFFICE TECHNOLOGIES	COMPUTERS,DP & WORD PROC.	$9,043.00	$9,043.00
211648	625-0601-572.50-10	DELL MARKETING LP	COMPUTERS,DP & WORD PROC.	$45,534.75	$45,534.75
211656	625-0601-553.22-05	FEDERAL EXPRESS	SHIPPING/DELIVERY SERVICE	$109.79	$109.79
211666	625-0601-553.33-05	HARRIS TRUST & SAVINGS BANK	CBI*CLEVERBRIDGE INC	$39.95	$2,074.95
			SOLARWINDS	$620.00	
			ZOHO CORPORATION	$1,415.00	
	625-0601-572.50-10	HARRIS TRUST & SAVINGS BANK	DIGITAL LOGGERS	$1,037.85	$1,559.57
			DMI* DELL HLTHCR/PTR	$455.88	
			AMAZON MKTPLACE PMTS	$29.88	
			AMAZON MKTPLACE PMTS W	$35.96	
211679	625-0601-553.21-02	IMAGE SYSTEMS & BUSINESS SOLUTIONS	PRINTER SERVICE	$305.65	$305.65
211788	625-0601-553.21-65	WOW BUSINESS	ACCT 014753641	$111.97	$111.97
				Division 1 Total	$58,739.68
				Department 6 Total	$58,739.68

WARRANT REGISTER - GM0002

Department: 10 Boards & Commissions

Division: 8

Check #	Account Number	Payee	Description 1	Transaction Amount	Total Trans Amount
211766	101-1008-502.20-75	STEPHEN LASER & ASSOCIATES	INDIVIDUAL ASSESSMENTS	$1,650.00	$1,650.00
				Division 8 Total	$1,650.00

Division: 18

Check #	Account Number	Payee	Description 1	Transaction Amount	Total Trans Amount
211659	515-1018-525.40-55	STEVEN FROMM	REMAINING PAYMENT OF HOG	$1,008.40	$1,008.40
211712	515-1018-525.40-55	LAURIE MITCHELL	NAMETAGS FOR HEARTS OF GOLD	$70.55	$70.55
				Division 18 Total	$1,078.95
				Department 10 Total	$2,728.95

WARRANT REGISTER - GM0002

Department: 20 Special Events

Division: 5

Check #	Account Number	Payee	Description 1	Transaction Amount	Total Trans Amount
211664	515-2005-525.50-55	GRAND STAGE LIGHTING	LIGHTING SUPPLIES	$456.70	$456.70
211666	515-2005-525.50-55	HARRIS TRUST & SAVINGS BANK	AMAZON.COM AMZN.COM/BI	$259.98	$1,521.10
			DMI* DELL HLTHCR/PTR	$1,261.12	
				Division 5 Total	$1,977.80
				Department 20 Total	$1,977.80

WARRANT REGISTER - GM0002

Department: 30 Police Department

Division: 1

Check #	Account Number	Payee	Description 1	Transaction Amount	Total Trans Amount
211618	101-3001-511.21-65	ARMOR SYSTEMS	COLLECTION FEE	$660.88	$660.88
211631	101-3001-511.21-65	CAMIC JOHNSON LTD	SERVICE PROFESSIONAL	$525.00	$525.00
211646	101-3001-511.22-03	COOK COUNTY ANIMAL & RABIES CONTROL	REGISTRATION	$50.00	$50.00
211647	101-3001-511.22-02	COWSERT MICHAEL	REIMBURSEMENT	$300.00	$300.00
211658	101-3001-511.22-03	ANDREW FLENTGE	REIMBURSEMENT	$90.00	$90.00
211666	101-3001-511.22-03	HARRIS TRUST & SAVINGS BANK	CCNJOBFAIRSERVICES	$100.00	$2,178.97
			EXPEDIA 7335060716060	$1,753.97	
			PAYPAL *FINALDEFENS	$325.00	
	101-3001-511.22-05	HARRIS TRUST & SAVINGS BANK	UPS (800) 811-1648	$81.29	$81.29
	101-3001-511.30-01	HARRIS TRUST & SAVINGS BANK	DAILY HERALD/REFLEJOS	$429.00	$429.00
	101-3001-511.30-05	HARRIS TRUST & SAVINGS BANK	AMAZON MKTPLACE PMTS	$64.95	$64.95
	101-3001-511.33-05	HARRIS TRUST & SAVINGS BANK	TLF*AMLINGS FLOWERLAND	$29.95	$3,664.32
			MIKE DITKAS RESTAURANT	$1,817.18	
			MIKE DITKAS RESTAURANT	$1,817.19	
	101-3001-511.33-25	HARRIS TRUST & SAVINGS BANK	AMAZON.COM	$80.05	$197.30
			AMAZON.COM AMZN.COM/BI	$117.25	
211675	101-3001-511.22-03	IL CRISIS NEGOTIATORS ASSOC	REGISTRATION	$235.00	$235.00
211677	101-3001-511.22-03	IL SCHOOL RESOURCE OFFICERS ASSOC	REGISTRATION	$199.00	$199.00
211685	101-3001-511.30-35	JG UNIFORMS	CLOTHING	$22.00	$289.50
			CLOTHING	$22.00	

WARRANT REGISTER - GM0002

Check #	Account Number	Payee	Description 1	Transaction Amount	Total Trans Amount
211685	101-3001-511.30-35	JG UNIFORMS	CLOTHING	$173.00	$289.50
			CLOTHING	$72.50	
211696	101-3001-511.22-03	LAW ENFORCEMENT TRAINING ASSOC INC	REGISTRATION	$920.00	$920.00
211704	101-3001-511.30-35	MANDEL, RUSSELL	REIMBURSEMENT	$54.00	$54.00
211709	101-3001-511.21-65	METRO-WESTERN COOK CREDIT	SERVICE MISCELLANEOUS	$72.00	$72.00
211717	101-3001-511.22-02	NATL ASSOC OF SCHOOL RESOURCE	DUES	$40.00	$40.00
211719	101-3001-511.22-03	NE MULTI REGIONAL TRAINING INC	REGISTRATION	$125.00	$125.00
211723	101-3001-511.22-03	NORTHERN IL CRISIS INCIDENT	REGISTRATION	$200.00	$200.00
211724	101-3001-511.21-65	NORTHERN IL FUNERAL SERVICES INC	SERVICE MISCELLANEOUS	$425.00	$425.00
211728	101-3001-511.22-03	NORTHWEST POLICE ACADEMY	REGISTRATION	$75.00	$150.00
			REGISTRATION	$75.00	
211732	101-3001-511.30-05	OFFICE DEPOT	OFFICE SUPPLIES	$1,539.84	$1,626.62
			OFFICE SUPPLIES	$86.78	
211739	101-3001-511.30-05	PETTY CASH/POLICE	COMPUTER SUPPLIES	$19.28	$19.28
	101-3001-511.33-25	PETTY CASH/POLICE	MEETING SUPPLIES	$23.25	$92.01
			POLICE CAPTAINS ASSOCN	$60.00	
			TRAINING	$4.38	
211741	101-3001-511.22-03	POLICE TECHNICAL	REGISTRATION	$450.00	$450.00
211743	101-3001-511.30-35	RAY O'HERRON	CLOTHING	$113.65	$730.35
			CLOTHING	$232.00	
			CLOTHING	($27.00)	
			CLOTHING	$206.00	
			CLOTHING	$199.75	

WARRANT REGISTER - GM0002

Check #	Account Number	Payee	Description 1	Transaction Amount	Total Trans Amount
211743	101-3001-511.30-35	RAY O'HERRON	CLOTHING	($234.00)	$730.35
			CLOTHING	$11.95	
			CLOTHING	$228.00	
211757	101-3001-511.33-25	SHERWIN ACE HARDWARE	HARDWARE SUPPLIES	$14.38	$14.38
211759	101-3001-511.30-35	SJODIN ALF	REIMBURSEMENT	$63.96	$63.96
211774	401-3001-572.50-15	ULTRA STROBE COMMUNICATIONS INC	VEHICLE EQUIPMENT	$6,540.60	$6,540.60
211779	101-3001-511.21-65	VERIZON WIRELESS	ACCT 68682493000001	$2,410.54	$2,410.54
				Division 1 Total	$22,898.95

Division: 3

Check #	Account Number	Payee	Description 1	Transaction Amount	Total Trans Amount
211643	231-3003-511.40-11	CMS ACCOUNTING	SERVICE PROFESSIONAL	$132.81	$132.81
211666	231-3003-511.40-01	HARRIS TRUST & SAVINGS BANK	ELITE K9 INC 2	$49.93	$330.93
			RUFF LIFE K-9 TACTICAL	$281.00	
	231-3003-511.40-11	HARRIS TRUST & SAVINGS BANK	AMAZON.COM	$78.95	$362.84
			AMAZON.COM AMZN.COM/BI	$125.99	
			AMAZON.COM AMZN.COM/BI	$157.90	
211755	231-3003-511.40-01	SCIENTIFIC ANIMAL FEEDS AND NEEDS	CANINE UNIT PROGRAM	$48.49	$48.49
				Division 3 Total	$875.07
				Department 30 Total	$23,774.02

WARRANT REGISTER - GM0002

Department: 35 Fire

Division: 1

Check #	Account Number	Payee	Description 1	Transaction Amount	Total Trans Amount
211609	101-3501-512.21-02	AIR ONE EQUIPMENT	REPAIR SERVICE EQUIPMENT	$693.00	$693.00
	101-3501-512.30-35	AIR ONE EQUIPMENT	REPAIR SERVICE EQUIPMENT	$118.05	$118.05
211655	101-3501-512.31-65	ELKHART BRASS MFG CO	OFFICE SUPPLIES	$175.14	$175.14
211676	101-3501-512.22-02	IL FIRE CHIEFS ASSOC FOUNDATION	2018 DUES	$650.00	$650.00
	101-3501-512.22-03	IL FIRE CHIEFS ASSOC FOUNDATION	TRAINING	$300.00	$300.00
211678	101-3501-512.22-03	IL SOCIETY OF FIRE SERV INSTR	TRAINING	$350.00	$350.00
211685	101-3501-512.30-35	JG UNIFORMS	CLOTHING	$283.35	$2,092.50
			CLOTHING	$360.65	
			CLOTHING	$55.90	
			CLOTHING	$180.00	
			CLOTHING	$35.00	
			CLOTHING	$70.00	
			CLOTHING	$55.90	
			CLOTHING	$19.95	
			CLOTHING	$399.00	
			CLOTHING	$224.25	
			CLOTHING	$149.50	
			CLOTHING	$224.25	
			CLOTHING	$6.95	
			CLOTHING	$13.90	
			CLOTHING	$13.90	

WARRANT REGISTER - GM0002

Check #	Account Number	Payee	Description 1	Transaction Amount	Total Trans Amount
211692	101-3501-512.21-65	KRONOS INCORPORATED	COMPUTERS,DP & WORD PROC	$7,448.40	$7,448.40
211709	101-3501-512.21-65	METRO-WESTERN COOK CREDIT	CREDIT CHECK	$36.00	$36.00
211731	101-3501-512.31-65	O'REILLY AUTO PARTS	VEH MAINTENANCE SUPPLY	$9.06	$9.06
211732	101-3501-512.30-05	OFFICE DEPOT	OFFICE SUPPLIES	$101.30	$1,706.79
			OFFICE SUPPLIES	$64.99	
			OFFICE SUPPLIES	$108.22	
			OFFICE SUPPLIES	$802.31	
			OFFICE SUPPLIES	$629.97	
211735	101-3501-512.30-01	PADDOCK PUBLICATIONS INC	SUBSCRIPTION RENEWAL	$430.00	$430.00
211738	401-3501-572.50-15	PAUL CONWAY SHIELDS	OFFICE MACHINES & ACCESS	$536.50	$536.50
211740	101-3501-512.33-50	PHYSIO CONTROL INC	MEDICAL SUPPLIES	$120.76	$120.76
	401-3501-572.50-15	PHYSIO CONTROL INC	MEDICAL SUPPLIES	$53,403.20	$53,588.20
			SHIPPING/DELIVERY SERVICE	$185.00	
211757	101-3501-512.31-65	SHERWIN ACE HARDWARE	HARDWARE SUPPLIES	$14.34	$43.48
			HARDWARE SUPPLIES	$29.14	
				Division 1 Total	$68,297.88
				Department 35 Total	$68,297.88

WARRANT REGISTER - GM0002

Department: 37 Foreign Fire Insurance

Division: 1

Check #	Account Number	Payee	Description 1	Transaction Amount	Total Trans Amount
211686	227-3701-512.22-03	DAVID JOHNSON	TUITION REIMBURSEMENT	$350.00	$350.00
				Division 1 Total	$350.00
				Department 37 Total	$350.00

WARRANT REGISTER - GM0002

Department: 40 Planning

Division: 1

Check #	Account Number	Payee	Description 1	Transaction Amount	Total Trans Amount
211626	101-4001-521.22-15	BHFX LLC	PRINTING SERVICES	$27.22	$27.22
211671	263-4001-571.20-05	HOLLAND & KNIGHT LLP	PROFESSIONAL SERVICES	$2,277.00	$2,277.00
211705	101-4001-521.40-40	MANUFACTURERS NEWS INC	ADVERTISING	$454.72	$454.72
211734	101-4001-521.22-01	PADDOCK PUBLICATIONS INC	ADVERTISING	$78.30	$696.60
			ADVERTISING	$76.95	
			ADVERTISING	$87.75	
			ADVERTISING	$71.55	
			ADVERTISING	$118.80	
			ADVERTISING	$78.30	
			ADVERTISING	$98.55	
			ADVERTISING	$86.40	
	101-4001-521.30-01	PADDOCK PUBLICATIONS INC	ADVERTISING	$429.00	$429.00
	101-4001-521.40-41	PADDOCK PUBLICATIONS INC	ADVERTISING	$3,333.00	$8,197.00
			ADVERTISING	$3,334.00	
			ADVERTISING	$765.00	
			ADVERTISING	$765.00	
211758	101-4001-521.40-40	SITE SELECTION	ADVERTISING	$1,700.00	$1,700.00
211780	101-4001-521.21-65	VERIZON WIRELESS	ACCT 9802367824	$102.02	$102.02
				Division 1 Total	$13,883.56
				Department 40 Total	$13,883.56

WARRANT REGISTER - GM0002

Department: 41 Community Devl Block Grnt

Division: 1

Check #	Account Number	Payee	Description 1	Transaction Amount	Total Trans Amount
211744	215-4101-522.41-02	RECORD INFORMATION SERVICES INC	REAL ESTATE INFO	$575.00	$575.00
				Division 1 Total	$575.00
				Department 41 Total	$575.00

WARRANT REGISTER - GM0002

Department: 45 Building

Division: 1

Check #	Account Number	Payee	Description 1	Transaction Amount	Total Trans Amount
211661	101-4501-523.20-05	GOVTEMPSUSA LLC	SERVICE PROFESSIONAL	$2,366.70	$2,366.70
211666	101-4501-523.30-05	HARRIS TRUST & SAVINGS BANK	AMAZON MKTPLACE PMTS	$189.94	$189.94
	101-4501-523.33-05	HARRIS TRUST & SAVINGS BANK	AMAZON.COM	$16.95	$16.95
211732	101-4501-523.30-05	OFFICE DEPOT	OFFICE SUPPLIES	$248.97	$444.32
			OFFICE SUPPLIES	$71.91	
			OFFICE SUPPLIES	$53.41	
			OFFICE SUPPLIES	$59.98	
			OFFICE SUPPLIES	$10.05	
211769	101-4501-523.21-65	THOMPSON ELEVATOR INSPECTION	SERVICE BLDG MAINT	$38.00	$6,668.00
			SERVICE BLDG MAINT	$38.00	
			SERVICE BLDG MAINT	$6,554.00	
			SERVICE BLDG MAINT	$38.00	
				Division 1 Total	$9,685.91

Division: 2

Check #	Account Number	Payee	Description 1	Transaction Amount	Total Trans Amount
211689	101-4502-523.20-25	JOURNEYS COUNSELING CENTER LLC	COUNSELING	$163.20	$571.20
			COUNSELING	$408.00	
211708	101-4502-523.33-10	MC KESSON MEDICAL SURGICAL	CLINIC SUPPLIES	$434.56	$733.70
			CLINIC SUPPLIES	$299.14	
211718	101-4502-523.22-02	NATL ENVIRONMENTAL HEALTH	J.MCCALISTER MEMBERSHIP	$95.00	$95.00
211732	101-4502-523.30-05	OFFICE DEPOT	OFFICE SUPPLIES	$115.19	$207.08

WARRANT REGISTER - GM0002

Check #	Account Number	Payee	Description 1	Transaction Amount	Total Trans Amount
211732	101-4502-523.30-05	OFFICE DEPOT	OFFICE SUPPLIES	$91.89	$207.08
				Division 2 Total	$1,606.98

Division: 3

Check #	Account Number	Payee	Description 1	Transaction Amount	Total Trans Amount
211665	101-4503-523.21-65	HARPER COLLEGE	PROGRAM INSTRUCTIONAL FEE	$80.00	$80.00
211666	101-4503-523.21-65	HARRIS TRUST & SAVINGS BANK	AMAZON MKTPLACE PMTS	$9.49	$9.49
	101-4503-523.30-05	HARRIS TRUST & SAVINGS BANK	ACCO BRANDS DIRECT	$44.40	$44.40
	101-4503-523.31-65	HARRIS TRUST & SAVINGS BANK	JEWEL #3461	$61.35	$436.51
			AMAZON MKTPLACE PMTS	($48.21)	
			JEWEL #3478	$89.02	
			SAMSCLUB.COM	$334.35	
211732	101-4503-523.21-02	OFFICE DEPOT	OFFICE SUPPLIES	$391.47	$391.47
	101-4503-523.30-05	OFFICE DEPOT	OFFICE SUPPLIES	$315.69	$315.69
				Division 3 Total	$1,277.56
				Department 45 Total	$12,570.45

WARRANT REGISTER - GM0002

Department: 50 Engineering

Division: 1

Check #	Account Number	Payee	Description 1	Transaction Amount	Total Trans Amount
211656	101-5001-524.22-05	FEDERAL EXPRESS	SHIPPING/DELIVERY SERVICE	$36.31	$36.31
211745	426-5001-571.50-25	RILEY CONSTRUCTION	SERVICE CONSTRUCTION	$51,657.25	$51,657.25
				Division 1 Total	$51,693.56
				Department 50 Total	$51,693.56

WARRANT REGISTER - GM0002

Department: 71 Public Works

Division: 1

Check #	Account Number	Payee	Description 1	Transaction Amount	Total Trans Amount
211607	401-7101-571.50-20	ABT ELECTRONICS	HARDWARE SUPPLIES	$88.00	$255.22
			HARDWARE SUPPLIES	$167.22	
211608	101-7101-531.31-55	ACTIVE ELECTRICAL SUPPLY CO	ELECTRICAL SUPPLIES	$83.53	$83.53
	101-7101-531.31-75	ACTIVE ELECTRICAL SUPPLY CO	ELECTRICAL SUPPLIES	$454.00	$454.00
211611	401-7101-571.50-20	AMERICAN DOOR & DOCK	SERVICE BLDG MAINTENANCE	$3,796.74	$3,796.74
211615	101-7101-531.22-03	APWA CHICAGO METRO CHAPTER	EVENT REGISTRATION	$60.00	$150.00
			EVENT REGISTRATION	$90.00	
211617	101-7101-531.33-05	ARLINGTON SIGNS & BANNERS	OFFICE SUPPLIES	$85.00	$85.00
211619	101-7101-531.22-70	AT & T	ACCT 217S667106106	$1,926.51	$1,926.51
211620	101-7101-531.21-50	AT & T LONG DISTANCE	BAN 861613339-2	$2.49	$2.49
211621	101-7101-531.21-50	AT & T LONG DISTANCE	CORP ID 2147713	$403.80	$403.80
211629	101-7101-531.21-15	BRINATI ROBERT	CURB REIMBURSEMENT	$490.00	$490.00
211640	101-7101-531.21-55	CHRISTOPHER B BURKE LTD	SERVICE PROFESSIONAL	$1,216.00	$1,216.00
211641	101-7101-531.21-11	CINTAS CORP	MATS	$30.99	$136.26
			MATS	$33.01	
			MATS	$72.26	
211644	101-7101-531.21-50	COMMONWEALTH EDISON COMPANY	ACCT 0297144471	$503.06	$503.06
211645	101-7101-531.31-90	COMPASS MINERALS AMERICA	STREET/SIDEWALK SUPPLIES	$11,955.67	$11,955.67
211652	101-7101-531.21-02	DYNAMIC HEATING & PIPING CO	HVAC QUARTERLY MAINT	$2,561.00	$2,561.00
211653	401-7101-571.50-30	ECOLOGY AND VISION LLC	SERVICE CONSULTING	$3,142.07	$4,717.65
			SERVICE CONSULTING	$888.60	

WARRANT REGISTER - GM0002

Check #	Account Number	Payee	Description 1	Transaction Amount	Total Trans Amount
211653	401-7101-571.50-30	ECOLOGY AND VISION LLC	SERVICE CONSULTING	$275.18	$4,717.65
			SERVICE CONSULTING	$411.80	
211663	101-7101-531.33-05	GRAINGER W W INC	STREET/SIDEWALK SUPPLIES	$31.91	$31.91
211666	101-7101-531.21-02	HARRIS TRUST & SAVINGS BANK	VENDINGWORK	$154.91	$154.91
	101-7101-531.21-65	HARRIS TRUST & SAVINGS BANK	ACT*AH PARK DISTRICT	$100.00	$100.00
	101-7101-531.22-02	HARRIS TRUST & SAVINGS BANK	AWWA.ORG	$211.00	$1,432.00
			INTERNATIONAL MUNICIPA	$680.00	
			INTL SOC ARBORICULTURE	$180.00	
			SOC. OF MCPL. ARBORIST	$150.00	
	101-7101-531.30-01	HARRIS TRUST & SAVINGS BANK	BNP*ENR/AR/NEWS/PS	($29.95)	$29.95
			BNP*ENR/AR/NEWS/PS	$29.95	
	101-7101-531.30-35	HARRIS TRUST & SAVINGS BANK	AMAZON.COM	$131.96	$177.27
			INT*IN *REFLECTIVE APP	$45.31	
	101-7101-531.31-55	HARRIS TRUST & SAVINGS BANK	WILDLIFE SUPPLIES	$30.99	$30.99
	101-7101-531.31-65	HARRIS TRUST & SAVINGS BANK	AMAZON MKTPLACE PMTS	$12.99	$137.41
			AMAZON MKTPLACE PMTS	$61.06	
			APL* ITUNES.COM/BILL	$0.99	
			LENZ	$62.37	
	101-7101-531.31-75	HARRIS TRUST & SAVINGS BANK	JSG OCEANA	$239.70	$239.70
211667	101-7101-531.31-55	HAYES MECHANICAL	SERVICE BLDG MAINTENANCE	$780.00	$780.00
211670	101-7101-531.21-55	HENDRICKSEN ROBERT W COMPANY	LANDSCAPING	$18,872.00	$18,872.00
211680	101-7101-531.22-15	IMPACT NETWORKING LLC	COPIER MAINTENANCE	$696.60	$696.60
211681	101-7101-531.31-90	INDUSTRIAL SYSTEMS LTD	STREET/SIDEWALK SUPPLIES	$3,007.34	$3,007.34

WARRANT REGISTER - GM0002

Check #	Account Number	Payee	Description 1	Transaction Amount	Total Trans Amount
211684	101-7101-531.21-11	INTL EXTERMINATORS INC	PEST CONTROL	$59.00	$179.00
			PEST CONTROL	$60.00	
			PEST CONTROL	$60.00	
211691	101-7101-531.21-02	KOOL TECHNOLOGIES INC	SERVICE BLDG MAINTENANCE	$266.00	$266.00
211693	426-7101-571.50-25	ANDREW KULAS	ENHANCED SEWER REBATE	$8,175.00	$8,175.00
211703	101-7101-531.31-55	LOWES COMMERCIAL SERVICES	ELECTRICAL SUPPLIES	$8.62	$375.98
			HARDWARE SUPPLIES	($2.38)	
			HARDWARE SUPPLIES	$56.99	
			PLUMBING EQUIP/SUPPLY	$282.85	
			HARDWARE SUPPLIES	$29.90	
	101-7101-531.31-65	LOWES COMMERCIAL SERVICES	HARDWARE SUPPLIES	$27.44	$964.02
			STREET/SIDEWALK SUPPLIES	$27.44	
			STREET/SIDEWALK SUPPLIES	$24.96	
			STREET/SIDEWALK SUPPLIES	$884.18	
211711	101-7101-531.21-02	MID AMERICAN ELEVATOR CO INC	SERVICE BLDG MAINTENANCE	$1,298.00	$1,298.00
211720	101-7101-531.21-50	NICOR	ACCT 01701843946	$1,305.69	$1,305.69
211721	101-7101-531.21-50	NICOR	ACCT 71251169620	$483.04	$483.04
211722	101-7101-531.22-03	NOLAN JOHN	TRAVEL ADVANCE	$396.70	$396.70
211727	101-7101-531.31-55	NORTHWEST ELECTRICAL SUPPLY CO	ELECTRICAL SUPPLIES	$13.71	$100.24
			ELECTRICAL SUPPLIES	$86.53	
	101-7101-531.31-85	NORTHWEST ELECTRICAL SUPPLY CO	ELECTRICAL SUPPLIES	$226.10	$226.10
211729	401-7101-571.50-30	NUTOYS LEISURE PRODUCTS	HARDWARE SUPPLIES	$3,081.00	$3,081.00
211733	101-7101-531.22-70	PACIFIC TELEMANAGEMENT SERVICES	TELECOMMUNICATIONS	$153.00	$153.00

WARRANT REGISTER - GM0002

Check #	Account Number	Payee	Description 1	Transaction Amount	Total Trans Amount
211746	426-7101-571.50-25	RJN GROUP INC	SERVICE CONSULTING	$6,000.00	$6,000.00
211747	101-7101-531.30-39	RKA PETROLEUM COMPANIES INC	FUEL,OIL,GREASE, & LUBES	$15,952.24	$15,952.24
211753	401-7101-572.50-15	SALSBURY INDUSTRIES	HARDWARE SUPPLIES	$1,322.32	$1,322.32
211757	101-7101-531.31-55	SHERWIN ACE HARDWARE	HARDWARE SUPPLIES	$23.96	$67.86
			HARDWARE SUPPLIES	$8.99	
			HARDWARE SUPPLIES	$23.95	
			HARDWARE SUPPLIES	$10.96	
	101-7101-531.31-65	SHERWIN ACE HARDWARE	HARDWARE SUPPLIES	$7.99	$7.99
	101-7101-531.31-85	SHERWIN ACE HARDWARE	HARDWARE SUPPLIES	$9.48	$9.48
211762	101-7101-531.22-70	SOUND INCORPORATED	TELECOMMUNICATIONS	$72.73	$72.73
211763	101-7101-531.31-55	SOUTH SIDE CONTROL SUPPLY CO.	SERVICE BLDG MAINTENANCE	$123.14	$235.58
			SERVICE BLDG MAINTENANCE	$112.44	
211773	101-7101-531.21-65	TYCO INTEGRATED SECURITY	SERVICE BLDG MAINTENANCE	$106.43	$428.19
			SERVICE BLDG MAINTENANCE	$106.43	
			SERVICE BLDG MAINTENANCE	$108.90	
			SERVICE BLDG MAINTENANCE	$106.43	
211782	235-7101-571.50-25	WALKER PARKING CONSULTANTS	SERVICE CONSTRUCTION	$3,420.00	$3,420.00
801713	101-7101-531.21-50	COMMONWEALTH EDISON COMPANY	ACCT 2985063029	$117.23	$1,124.04
			ACCT 4103039009	$811.25	
			ACCT 5492508009	$139.23	
			ACCT 8572043011	$56.33	
801714	101-7101-531.22-70	AT & T	ACCT 84725961248940	$42.12	$3,900.23
			ACCT 84743978686650	$84.86	

WARRANT REGISTER - GM0002

Check #	Account Number	Payee	Description 1	Transaction Amount	Total Trans Amount
801714	101-7101-531.22-70	AT & T	ACCT 84757754536603	$143.53	$3,900.23
			ACCT 84757757951551	$246.32	
			ACCT 847R1605198974	$2,070.97	
			ACCT 847Z9727849771	$1,312.43	
				Division 1 Total	$103,971.44
				Department 71 Total	$103,971.44

WARRANT REGISTER - GM0002

Department: 72 Water and Sewer

Division: 1

Check #	Account Number	Payee	Description 1	Transaction Amount	Total Trans Amount
211624	505-7201-561.31-65	BATTERIES PLUS LLC	HARDWARE SUPPLIES	$1,108.60	$1,108.60
211651	505-7201-561.31-65	DREISILKER ELECTRIC MOTORS INC	VEH MAINTENANCE SUPPLY	$340.60	$340.60
211654	505-7201-561.21-02	EDEN BROTHERS	WATER SEWER SYSTEM SUPPLY	$1,220.98	$1,220.98
211663	505-7201-561.31-07	GRAINGER W W INC	WATER SEWER SYSTEM SUPPLY	$75.00	$75.00
211666	505-7201-561.22-02	HARRIS TRUST & SAVINGS BANK	AWWA.ORG	$83.00	$705.00
			AWWA.ORG	$211.00	
			WEF MAIN	$200.00	
	505-7201-561.22-03	HARRIS TRUST & SAVINGS BANK	AMERICAN WATER WORKS A	$150.00	$825.00
			AMERICAN WATER WORKS A	$225.00	
			AZTECA SYSTEMS INC	$450.00	
	505-7201-561.30-35	HARRIS TRUST & SAVINGS BANK	AMAZON.COM	$79.98	$79.98
	505-7201-561.31-65	HARRIS TRUST & SAVINGS BANK	AMAZON MKTPLACE PMTS	$7.99	$94.57
			AMAZON MKTPLACE PMTS	$86.58	
211668	505-7201-561.21-35	HBK WATER METER SERVICE INC	SERVICE METER	$6,149.52	$6,149.52
	505-7201-561.31-02	HBK WATER METER SERVICE INC	SERVICE METER	$498.87	$498.87
211688	505-7201-561.31-07	JON-DON INC	SEWER FLOOR PROJECT	$110.90	$110.90
211703	505-7201-561.31-01	LOWES COMMERCIAL SERVICES	HARDWARE SUPPLIES	$29.40	$43.80
			HARDWARE SUPPLIES	$14.40	
	505-7201-561.31-05	LOWES COMMERCIAL SERVICES	HARDWARE SUPPLIES	$9.46	$9.46
	505-7201-561.31-07	LOWES COMMERCIAL SERVICES	WATER SEWER SYSTEM SUPPLY	$41.92	$229.89

WARRANT REGISTER - GM0002

Check #	Account Number	Payee	Description 1	Transaction Amount	Total Trans Amount
211703	505-7201-561.31-07	LOWES COMMERCIAL SERVICES	WATER SEWER SYSTEM SUPPLY	$67.40	$229.89
			WATER SEWER SYSTEM SUPPLY	$96.83	
			WATER SEWER SYSTEM SUPPLY	$23.74	
211710	505-7201-561.50-15	METROPOLITAN PUMP COMPANY	HARDWARE SUPPLIES	$4,748.00	$4,748.00
211715	505-7201-561.31-07	MULTIPLE CONCRETE ACCESSORIES	SEWER FLOORING PROJECT	$286.20	$1,134.39
			SEWER FLOORING PROJECT	$420.99	
			SEWER FLOORING PROJECT	$427.20	
211727	505-7201-561.31-65	NORTHWEST ELECTRICAL SUPPLY CO	MOBILE GENERATOR REPAIR	$7.47	$236.09
			MOBILE GENERATOR REPAIR	$66.31	
			MOBILE GENERATOR REPAIR	($7.47)	
			MOBILE GENERATOR REPAIR	$169.78	
211757	505-7201-561.30-05	SHERWIN ACE HARDWARE	HARDWARE SUPPLIES	$16.04	$16.04
	505-7201-561.31-65	SHERWIN ACE HARDWARE	HARDWARE SUPPLIES	$19.98	$19.98
211765	505-7201-561.31-07	STANDARD PIPE & SUPPLY INC	WATER SEWER SYSTEM SUPPLY	$24.00	$866.36
			WATER SEWER SYSTEM SUPPLY	$842.36	$399.00
211784	505-7201-561.31-01	WATER PRODUCTS CO	WATER SEWER SYSTEM SUPPLY	$399.00	
	505-7201-561.31-07	WATER PRODUCTS CO	WATER SEWER SYSTEM SUPPLY	$656.80	$656.80
211790	505-7201-561.31-01	ZIEBELL WATER SERVICE PRODUCTS	WATER SEWER SYSTEM SUPPLY	$1,776.42	$2,251.42
			WATER SEWER SYSTEM SUPPLY	$475.00	$45.00
	505-7201-561.31-85	ZIEBELL WATER SERVICE PRODUCTS	WATER SEWER SYSTEM SUPPLY	$45.00	

801711	505-7201-561.22-70	AMERICAN MESSAGING	ACCT U1-109311	$99.67	$99.67

WARRANT REGISTER - GM0002

Check #	Account Number	Payee	Description 1	Transaction Amount	Total Trans Amount
801712	505-7201-561.21-50	NICOR	ACCT 42567835683	$26.61	$26.61
801713	505-7201-561.21-50	COMMONWEALTH EDISON COMPANY	ACCT 0087155164	$621.66	$2,182.92
			ACCT 0645171017	$84.30	
			ACCT 0831076049	$146.06	
			ACCT 1257044037	$1,330.90	
801714	505-7201-561.22-70	AT & T	ACCT 84743746842777	$42.12	$84.24
			ACCT 84743746858567	$42.12	
				Division 1 Total	$24,258.69
				Department 72 Total	$24,258.69

WARRANT REGISTER - GM0002

Department: 73 Parking

Division: 1

Check #	Account Number	Payee	Description 1	Transaction Amount	Total Trans Amount
211754	235-7301-532.31-90	SCHOENBERG SALT INC	SERVICE CONSTRUCTION	$2,089.80	$2,089.80
				Division 1 Total	$2,089.80

Division: 2

Check #	Account Number	Payee	Description 1	Transaction Amount	Total Trans Amount
211703	235-7302-532.31-65	LOWES COMMERCIAL SERVICES	ELECTRICAL EQUIP & SUPPLY	$5.70	$5.70
211727	235-7302-532.31-65	NORTHWEST ELECTRICAL SUPPLY CO	ELECTRICAL EQUIP & SUPPLY	$104.45	$104.45
211754	235-7302-532.31-90	SCHOENBERG SALT INC	SERVICE CONSTRUCTION	$4,702.05	$4,702.05
				Division 2 Total	$4,812.20

Division: 3

Check #	Account Number	Payee	Description 1	Transaction Amount	Total Trans Amount
211754	235-7303-532.31-90	SCHOENBERG SALT INC	SERVICE CONSTRUCTION	$3,657.15	$3,657.15
801714	235-7303-532.21-50	AT & T	ACCT 84763200281737	$1,226.57	$1,226.57
				Division 3 Total	$4,883.72

Division: 4

Check #	Account Number	Payee	Description 1	Transaction Amount	Total Trans Amount
211778	235-7304-532.21-02	VALLEY FIRE PROTECTION	FIRE PROTECTION EQUIP/SUP	$4,588.00	$6,784.00
			FIRE PROTECTION EQUIP/SUP	$2,196.00	
				Division 4 Total	$6,784.00
				Department 73 Total	$18,569.72

WARRANT REGISTER - GM0002

Department: 74 Solid Waste Dispsl SWANCC

Division: 1

Check #	Account Number	Payee	Description 1	Transaction Amount	Total Trans Amount
901329	511-7401-562.21-54	SOLID WASTE AGENCY	O&M TRUE UP	$54,307.52	$144,571.51
			TIPPING FEES	$90,263.99	
				Division 1 Total	$144,571.51
				Department 74 Total	$144,571.51

WARRANT REGISTER - GM0002

Department: 75 Municipal Fleet Services

Division: 1

Check #	Account Number	Payee	Description 1	Transaction Amount	Total Trans Amount
211610	621-7501-551.21-07	WINDSHIELD CENTERS LLC	VEH MAINTENANCE SUPPLY	$342.70	$342.70
211613	621-7501-551.21-36	AMERIGAS-PALATINE	VEH MAINTENANCE SUPPLY	$55.55	$55.55
211616	621-7501-551.21-07	ARLINGTON HTS FORD INC	VEH MAINTENANCE SUPPLY	$789.13	$789.13
	621-7501-551.31-51	ARLINGTON HTS FORD INC	VEH MAINTENANCE SUPPLY	$372.90	$372.90
211617	621-7501-551.31-51	ARLINGTON SIGNS & BANNERS	VEH MAINTENANCE SUPPLY	$390.00	$390.00
211622	621-7501-551.31-51	AUTO TECH CENTERS INC	VEH MAINTENANCE SUPPLY	($571.00)	$546.48
			VEH MAINTENANCE SUPPLY	$1,117.48	
211624	621-7501-551.31-51	BATTERIES PLUS LLC	VEH MAINTENANCE SUPPLY	$241.37	$241.37
211634	621-7501-551.21-07	CAR PRETTY	VEH MAINTENANCE SUPPLY	$100.00	$100.00
211635	621-7501-551.31-51	CAR QUEST	VEH MAINTENANCE SUPPLY	($7.19)	$699.07
			VEH MAINTENANCE SUPPLY	$10.48	
			VEH MAINTENANCE SUPPLY	$211.19	
			VEH MAINTENANCE SUPPLY	$198.60	
			VEH MAINTENANCE SUPPLY	$107.90	
			VEH MAINTENANCE SUPPLY	$61.20	
			VEH MAINTENANCE SUPPLY	$9.80	
			VEH MAINTENANCE SUPPLY	$103.95	
			VEH MAINTENANCE SUPPLY	$3.14	
211637	621-7501-551.21-07	CERTIFIED FLEET SERVICES INC	VEH MAINTENANCE SUPPLY	$3,559.10	$3,559.10
211638	621-7501-551.31-65	CERTIFIED LABORATORIES	VEH MAINTENANCE SUPPLY	$972.05	$972.05
211639	621-7501-551.31-51	CHICAGO PARTS AND SOUND LLC	VEH MAINTENANCE SUPPLY	($35.00)	$130.20

WARRANT REGISTER - GM0002

Check #	Account Number	Payee	Description 1	Transaction Amount	Total Trans Amount
211639	621-7501-551.31-51	CHICAGO PARTS AND SOUND LLC	VEH MAINTENANCE SUPPLY	($125.96)	$130.20
			VEH MAINTENANCE SUPPLY	$65.04	
			VEH MAINTENANCE SUPPLY	$144.86	
			VEH MAINTENANCE SUPPLY	$81.26	
211650	621-7501-551.31-51	DOUGLAS TRUCK PARTS INC	VEH MAINTENANCE SUPPLY	$267.84	$267.84
211663	621-7501-551.31-51	GRAINGER W W INC	HARDWARE SUPPLIES	$124.60	$124.60
211666	621-7501-551.21-65	HARRIS TRUST & SAVINGS BANK	IL TOLLWAY AUTO REPLEN	$40.00	$120.00
	621-7501-551.22-02	HARRIS TRUST & SAVINGS BANK	ASE	$65.00	$65.00
	621-7501-551.31-51	HARRIS TRUST & SAVINGS BANK	AMAZON.COM AMZN.COM/BI	$116.03	$116.03
	621-7501-551.31-65	HARRIS TRUST & SAVINGS BANK	AMAZON MKTPLACE PMTS	($10.97)	($10.97)
211694	621-7501-551.21-07	KUSSMAUL ELECTRONICS CO INC	VEH MAINTENANCE SUPPLY	$333.13	$333.13
211697	621-7501-551.31-51	LEACH ENTERPRISES INC	VEH MAINTENANCE SUPPLY	$148.21	$594.89
			VEH MAINTENANCE SUPPLY	$446.68	
211700	621-7501-551.21-07	LIBERTY GLASS TECHS INC	VEH MAINTENANCE SUPPLY	$654.40	$654.40
211701	621-7501-551.21-62	LIBERTY TIRE RECYCLING	VEH MAINTENANCE SUPPLY	$158.55	$158.55
211713	621-7501-551.21-07	MONROE TRUCK EQUIPMENT	VEH MAINTENANCE SUPPLY	$2,382.00	$2,382.00
	621-7501-551.31-51	MONROE TRUCK EQUIPMENT	VEH MAINTENANCE SUPPLY	$62.20	$114.97
			VEH MAINTENANCE SUPPLY	($31.10)	
			VEH MAINTENANCE SUPPLY	$480.34	
			VEH MAINTENANCE SUPPLY	$159.58	
			VEH MAINTENANCE SUPPLY	($1,332.63)	
			VEH MAINTENANCE SUPPLY	$31.60	
			VEH MAINTENANCE SUPPLY	$115.90	

WARRANT REGISTER - GM0002

Check #	Account Number	Payee	Description 1	Transaction Amount	Total Trans Amount
211713	621-7501-551.31-51	MONROE TRUCK EQUIPMENT	VEH MAINTENANCE SUPPLY	$214.96	$114.97
			VEH MAINTENANCE SUPPLY	$22.48	
			VEH MAINTENANCE SUPPLY	$10.00	
			VEH MAINTENANCE SUPPLY	$381.64	
211714	621-7501-551.31-51	MORTON GROVE AUTOMOTIVE WEST	VEH MAINTENANCE SUPPLY	$75.00	$75.00
211737	621-7501-551.21-07	PATTEN INDUSTRIES INC	VEH MAINTENANCE SUPPLY	$4,634.45	$4,634.45
211742	621-7501-551.31-51	R A ADAMS ENTERPRISES INC	VEH MAINTENANCE SUPPLY	$556.96	$556.96
211751	621-7501-551.31-51	INTERSTATE BILLING SERVICE INC	VEH MAINTENANCE SUPPLY	($266.00)	$1,243.37
			VEH MAINTENANCE SUPPLY	$799.77	
			VEH MAINTENANCE SUPPLY	$178.58	
			VEH MAINTENANCE SUPPLY	$22.84	
			VEH MAINTENANCE SUPPLY	$21.84	
			VEH MAINTENANCE SUPPLY	$273.82	
			VEH MAINTENANCE SUPPLY	$182.22	
			VEH MAINTENANCE SUPPLY	$191.48	
			VEH MAINTENANCE SUPPLY	($92.84)	
			VEH MAINTENANCE SUPPLY	($92.84)	
			VEH MAINTENANCE SUPPLY	$24.50	
211752	621-7501-551.21-08	S & J AUTO BODY LTD	VEH MAINTENANCE SUPPLY	$6,206.85	$6,206.85
211756	621-7501-551.31-51	SCRUBBER CITY INC	VEH MAINTENANCE SUPPLY	$23.39	$23.39
211757	621-7501-551.31-65	SHERWIN ACE HARDWARE	HARDWARE SUPPLIES	$18.99	$28.98
			HARDWARE SUPPLIES	$9.99	
211764	621-7501-551.31-51	STANDARD EQUIPMENT CO	VEH MAINTENANCE SUPPLY	$253.31	$253.31

WARRANT REGISTER - GM0002

Check #	Account Number	Payee	Description 1	Transaction Amount	Total Trans Amount
211767	621-7501-551.21-02	STERTIL ALM CORP	VEH MAINTENANCE SUPPLY	$336.58	$336.58
211774	621-7501-551.21-07	ULTRA STROBE COMMUNICATIONS INC	VEH MAINTENANCE SUPPLY	$2,150.00	$2,150.00
211777	621-7501-551.22-05	UPS STORE #4073	SHIPPING/DELIVERY SERVICE	$33.81	$77.82
			SHIPPING/DELIVERY SERVICE	$44.01	
211785	621-7501-551.31-51	WENTWORTH TIRE SERVICE	VEH MAINTENANCE SUPPLY	$1,467.72	$1,467.72
211786	621-7501-551.31-51	WINTER EQUIPMENT CO INC	VEH MAINTENANCE SUPPLY	$2,544.58	$2,544.58
				Division 1 Total	$32,718.00
				Department 75 Total	$32,718.00

WARRANT REGISTER - GM0002

Department: 90 Capital

Division: 1

Check #	Account Number	Payee	Description 1	Transaction Amount	Total Trans Amount
211626	505-9001-571.50-25	BHFX LLC	PRINTING SERVICE	$138.72	$138.72
				Division 1 Total	$138.72

Division: 13

Check #	Account Number	Payee	Description 1	Transaction Amount	Total Trans Amount
211657	431-9013-571.50-25	FIRST COMMUNICATIONS	TELECOMMUNICATIONS	$114.24	$114.24
211698	431-9013-571.20-05	LEGAT ARCHITECTS	SERVICE CONSULTING	$11,931.25	$11,931.25
211745	431-9013-571.50-25	RILEY CONSTRUCTION	SERVICE CONSTRUCTION	$835,155.34	$835,155.34
211760	431-9013-571.50-25	SOIL & MATERIAL CONSULTANTS	MATERIAL TESTING	$3,952.50	$3,952.50
211789	431-9013-571.50-25	YPI ARLINGTON LLC	RENTAL/LEASE EQUIPMENT	$21,896.88	$21,896.88
				Division 13 Total	$873,050.21
				Department 90 Total	$873,188.93
TOTAL ALL FUNDS:					$1,596,321.25

Item: Report of the Committee-of-the-Whole Meeting of April 2, 2018- Consideration of a Liquor License - Hey Nonny

Department: Manager's Office

Report of the Committee-of-the-Whole Meeting of April 2, 2018

Consideration of recommending to the Liquor Commissioner the issuance of a Class "AA" Liquor License to Harmony Hospitality, LLC, dba Hey Nonny, located at 10 S. Vail Avenue. Liquor License will be issued upon verification that the layout is consistent with the submitted floor plan.

Bid Section

Item:

Bid Opening Date:

Account Numbers:

Total Budget for Specific Item:

Bid Amount:

Item: Report of the Committee-of-the-Whole Meeting of April 2, 2018 - Consideration of a Liquor License - Nikko Jusarang

Department: Manager's Office

Report of the Committee-of-the-Whole Meeting of April 2, 2018

Consideration of recommending to the Liquor Commissioner the issuance of a Class "A" Liquor License to Sky Daily Bread, Inc., dba Nikko Jusarang, located at 282 E. Algonquin Road upon surrender of the current liquor license issued to this address

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Bid Section

Item:

Bid Opening Date:

Account Numbers:

Total Budget for Specific Item:

Bid Amount:

Item: Proposed New Liquor Classifications - Breweries

Department: Legal and Integrated Services

At the February 23, 2018 Village Board meeting, the Board directed Staff to draft liquor regulations related to brew pubs, microbreweries and breweries. Set forth below are proposed amendments to the Liquor Code. If the Board decides to move forward with these proposed changes, proposed amendments to the Zoning Code will be submitted through the required public hearing process. Any approved changes to the Liquor Code will not be submitted for Board approval as an ordinance until the amendments to the Zoning Code have also been reviewed and approved by the Board. (All of the proposed new language is shown in ***italics*** and ***purple***.)

1. Section 13-101 Definitions – For consistency purposes, these definitions will also be added to the Zoning Code.

Brewery. A place that manufactures beer and is licensed as such by the State of Illinois.

Brew pub. A restaurant that includes a brewery as an accessory use and is licensed as a brew pub by the State of Illinois.

Microbrewery. An independently owned brewery that produces no more than 930,000 gallons of beer per year, generally characterized by an emphasis on quality, flavor and brewing technique, and often selling its products only locally, and which is licensed as a Class 1 brewer by the State of Illinois.

2. Section 13-204 Training Requirements for Beverage Alcohol Sellers and Servers Education and Training Program (BASSET). This change just adds the proposed new Class "M", which is for what are commonly referred to as tap rooms to the BASSET requirements.

b. All persons employed by an establishment holding a class "A", "AA", "B", "BB", "C", "DD", "E", "G" or "H", "I", J", "K" ~~or~~ "L", ***or "M"*** liquor license who serves or sells alcoholic beverages shall, upon demand, show a valid State-certified BASSET card or its equivalent, meeting the minimum curriculum requirements of the Illinois Department of Alcoholism and Substance Abuse (DASA), Title 77, Chapter X, Rule 2056.

3. Section 13-501 Classifications. Restaurants with Class "A" licenses

were already permitted to brew small amounts of beer if they had a supplemental liquor license. The proposed changes set forth below make it clear that brew pubs will continue to be treated like restaurants, whether they hold a Class "A", "AA", or "E" license. The number of gallons of beer permitted to be brewed at a brew pub is consistent with how the State of Illinois defines a brew pub.

a. Class "A" licenses, which shall authorize the retail sale in restaurants ***and brew pubs*** of alcoholic beverages for consumption on the premises. . .

4. A holder of a Class "A" license may apply for a supplemental liquor license, which shall authorize the retail sale of beer brewed on the premises ~~only, in growlers or kegs,~~ for consumption off of the licensed premises. The following limitations shall apply:

a) the licensed premises must also have a valid brew pub license from the State of Illinois, and

b) the licensee shall not manufacture more than ~~500 barrels (equivalent to 15,000 gallons)~~ ***155,000 gallons*** per year~~, and~~

~~c) the licensed premises must have a designated off-street loading area, and~~

~~d) any advertising for the growlers and/or kegs shall be on table tents in the restaurant or as part of regular ads for the restaurant.~~

b. Class "AA" licenses which shall authorize the retail sale in restaurants ~~only~~ ***and brew pubs*** of alcoholic liquor for consumption on the premises where sold. . .

5.~~A holder of a Class "AA" license may apply for a supplemental liquor license, which shall authorize the retail sale of wine and brandy only, in original packages, unopened, for consumption off the licensed premises; provided that such sales shall be made only in conjunction with the service of a full-course luncheon or dinner to the purchaser, and further provided that such sales shall be made solely in response to customer requests, with no advertisement of the package sale policy and no oral or written communication to customers by the licensee or its employees to solicit requests for such a purchase.~~ ***A holder of a Class "AA" license may apply for a supplemental liquor license, which shall authorize the retail sale of beer brewed on the premises for consumption off of the licensed premises. The following limitations shall apply:***

a) the licensed premises must also have a valid brew pub license from the State of Illinois, and

b) the licensee shall not manufacture more than 155,000 gallons per year.

i. Class "E" licenses shall authorize the retail sale in restaurants ***and brew pubs***~~only~~ of beer and wine only, for consumption on the premises where sold. . .

3. A holder of a Class "E" license may apply for a supplemental liquor license, which shall authorize the retail

sale of beer brewed on the premises only for consumption off of the licensed premises. The following limitations shall apply:

a) the licensed premises must also have a valid brew pub license from the State of Illinois, and

b) the licensee shall not manufacture more than 155,000 gallons per year.

4. ***Section 13-501p*** **This is a proposed new liquor license classification for what are commonly referred to as tap rooms. If the Board approves this new class, proposed amendments to the Zoning Code will include limitations on size and location for these types of uses.**

Class "M" license which shall permit the onsite consumption of the beer brewed onsite at a microbrewery or brewery. Class "M" licenses are subject to the following conditions:

1. On-premises consumption shall be limited to the retail portion of the microbrewery or brewery, except during supervised tours and private events.

2. Beer for onsite consumption shall be dispensed only in containers provided by the licensee.

3. No more than a total of 48 ounces of beer shall be served for the purpose of onsite consumption to any customer in one day.

4. The retail sale of beer produced off premises shall be permitted.

5. Section 13-502 Fees and Number of Licenses. Set forth below are the proposed fees for the new classifications. Staff is still looking into what an appropriate fee would be for the Class "M".

Class of License	Annual License Fee	Number of Licenses Authorized
AA Supplemental	~~$200~~ ***$800***	
E Supplemental	***$650***	
M	***$$$$$$***	

6. Section 13-503 Hours of Operation. The proposed hours set forth below for the Class M are similar to hours that are in place in some other communities.

Class of License	Monday through Thursday	Friday	Saturday	Sunday
M	***3:00 PM-10:00 PM***	***11:00 AM-11:00 PM***	***11:00 AM-11:00 PM***	***11:00 AM-7:00 PM***

RECOMMENDATION

It is recommended that the Village Board approve the recommended changes to

the Liquor Code and direct Staff to move forward with proposed changes to the Zoning Code.

Bid Section

Item:

Bid Opening Date:

Account Numbers:

Total Budget for Specific Item:

Bid Amount:

Item: Asphalt Spray Patch Contract Extension 2018

Department: Public Works

Asphalt Maintenance is one of the key responsibilities of the Public Works Department. Every year crews perform pothole repairs, patching, and crack sealing. Over the years, Staff has been satisfied with contractual spray patching as a tool for asphalt maintenance. Spray patching is a unique process where emulsion and stone are sprayed into a pothole. The process is controlled safely from inside a truck and usually takes a one-person crew to complete. The result is a pothole repair that far outlasts the "throw and go" process that uses cold mix asphalt that has to be repeatedly placed into potholes. Public Works has been contracting spray patching for six years and has not seen a single failure to date.

The Village has an existing one-year contract with Pothole Pros for Spray Patching, which was originally authorized by the Board on April 4, 2017. Staff is requesting Village Board approval to extend the existing contract for spray patching to Pothole Pros for one additional year. Pothole Pros is willing to extend the contract for one additional year with no price increase to the hourly rate. This rate includes all labor, equipment, and materials needed to complete pothole patching. The proposed contract will not exceed the budgeted amount of $90,000 from account 101-7101-531-2115.

RECOMMENDATION

Staff recommends that the Village Board award a one-year contract extension to Pothole Pros of Elgin, Illinois, for Asphalt Spray Patch, at an hourly rate of $253/hour, up to a maximum of $90,000 and authorize Staff to execute the necessary documents.

Bid Section

Item:

Bid Opening Date:

Account Numbers:

Total Budget for Specific Item:

Bid Amount:

Item: Cured In Place Sewer Lining 2018

Department: Public Works

The 2018 Water & Sewer CIP Budget includes $375,000 for lining sanitary sewers. Bids were duly advertised and publicly opened by the Village of Mount Prospect, on behalf of the Municipal Partnering Initiative (MPI) on March 19, 2018. The MPI is a working group of sixteen Chicagoland suburban municipalities which have been working together on group bids since the fall of 2010. Combining multiple municipal bids allows for lower pricing through greater quantities. The Village of Mount Prospect led a group of municipalities this year on a bid for "Cured in Place" (CIPP) Sewer Lining.

CIPP lining is a non-destructive method of rehabilitating older sewers. This process "sleeves" the inside of older clay sewers with a new epoxy fiberglass resin. This method of rehabilitation is normally applied to sewers with cracking or a history of cave-ins at locations where open excavation repair is either too expensive, inaccessible or both. In this case we have several rear yard sanitary sewers that have visible cracks and are inaccessible. This work also includes reinstating the service connections to each home. The Village has been rehabilitating sanitary sewers through CIPP lining for six years. This program is part of a multi-year program to rehabilitate our aging sewer system.

This MPI bid was jointly collected for the Villages of Lincolnshire, Rolling Meadows, Mount Prospect and Arlington Heights. The contract will hold the unit prices for two years. The total bid price for Arlington Heights is listed below for the 2018 MPI contract.

Tabulation of Bids:

BIDDER	TOTAL
Hoerr Construction, Peoria, IL	$368,765.60
Insituform Technologies, Chesterfield, MO	$409,418.10
Michels Corporation, Brownsville, WI	$418,357.00
Visu-Sewer, Bridgeview, IL	$428,039.50
Kenny Construction, Northbrook, IL	$483,630.00

The Village has successfully worked with Hoerr Construction for the last three years and Public Works recommends approval. The bidder has been determined to be responsible and the bid meets specifications.

RECOMMENDATION

It is recommended that the Village Board accept the competitive bid from the low responsible bidder, Hoerr Construction of Peoria, Illinois, and approve the two-year contract for the 2018 CIP Sewer Lining Program at the bid prices, with a limit up to the budgeted amount.

Bid Section

Item:	Cured In Place Sewer Lining 2018
Bid Opening Date:	March 19, 2018 - Municipal Partnering Initiative (MPI)
Account Numbers:	505-9001-571.50-25 (SW 9001) Water and Sewer
Total Budget for Specific Item:	$375,000
Bid Amount:	$375,000

Item: Water System Improvements 2018

Department: Public Works

The approved FY18 Capital Improvement Program (CIP) includes $2,000,000 for the funding of Water System Improvements. This project is part of the Village's ongoing program to replace aging water mains throughout the Village. The Public Works Department evaluates and prioritizes water main replacement based on defect severity, occurrence interval of failures, service reliability and other related parameters. This year's project includes the replacement of over 8000 linear feet of water main in Ivy Hill and Knob Hill Subdivisions.

Bids for the 2018 Water System Improvements were duly advertised and publicly opened on March 26, 2018. Concept Plumbing submitted the lowest responsible bid. The Village's design engineer, McClure Engineering, recommends that Concept Plumbing be awarded the contract for the 2018 Water System Improvements. Staff checked references for Concept Plumbing and found them to be favorable. Therefore, Staff concurs with McClure's recommendation and recommends the bid be awarded to Concept Plumbing. Their bid is $500,000 under the engineer's estimate which was based upon last years awarded unit prices. The bidder has been determined to be responsible and the bid meets specifications.

BIDDER	TOTAL
Concept Plumbing, Palatine, IL	$1,575,000.00
Aqua Contractors, Villa Park, IL	$1,650,000.00
Vian Construction, Elk Grove, IL	$1,695,299.00
Gerardi Sewer & Water, Addison, IL	$1,826,795.00
Mauro Sewer, Des Plaines, IL	$1,849,192.00
R.A. Mancini Inc., Lakmoor, IL	$1,865,985.00
Trine Construction, West Chicago, IL	$1,940,218.20
Performance Construction, Yorkville, IL	$1,958,000.00
Lampignano & Sons, Arlington Heights, IL	$1,961,861.00
Lenny Hoffman, Wilmette, IL	$2,015,279.00
Sheridan Plumbing, Bedford Park, IL	$2,076,570.00
Martam Construction, Elgin, IL	$2,245,419.00
Copenhaver Construction, Gilberts, IL	$2,417,450.30

RECOMMENDATION

It is recommended that the Village Board award a contract for the 2018 Water System Improvements to the lowest responsible bidder, Concept Plumbing of Palatine Illinois, in the amount of $1,575,000 and authorize execution of the necessary documents.

Bid Section

Item:	Water System Improvements 2018
Bid Opening Date:	March 28, 2018
Account Numbers:	505-9001-571-50.25 (WA 9001)
Total Budget for Specific Item:	$2,000,000
Bid Amount:	$1,575,000

Item: Arlington Heights Police Station Bradford Lockers

Department: Planning & Community Development

Storage solutions for the new Police Station need to be purchased from the FF&E/Security/Telephone budget account. Specialized equipment and personnel lockers, shelving & storage systems for the building are required to enhance security, efficiency and maximize space needs. Architectural drawings were issued to Bradford Systems, who provided their bid based on existing plans and written specifications. Bradford Systems provided pricing using the National Intergovernmental Purchasing Association (NIPA).

NIPA is a joint purchasing cooperative that is similar to the Northwest Municipal Conference and offers joint purchasing services/products to local agencies. The Village is a member of the NIPA. The NIPA price provided by Bradford Systems is $474,660.

The Police Department currently utilize numerous Spacesaver storage products sold and serviced by Bradford Systems, some of which will be re-purposed in the new Police Station. The Village also utilizes Bradford High Density Spacesaver storage systems. Utilizing this vendor allows for ease of maintenance and proven durability.

Public Building Fund

FF&E/Security/Telephone
Account Number: 431-9013-571-5015 EQ 16-10

Budget: $1,965,000
Available: $957,002.76

Bradford Systems: $ 474,660

Recommendation
It is recommended that the Village Board authorize the Village Manager to enter into an agreement and approve the purchase from Bradford Systems Corporation, Bensenville, IL. for Police Station storage solutions in the amount of $ 474,660 from the Public Building Fund, FF&E/Security/Telephone account.

Bid Section

Item:
Bid Opening Date:
Account Numbers:
Total Budget for Specific Item:
Bid Amount:

Item: Ordinance - Planned Unit Development - Heart's Place

Department: Planning/Legal

An Ordinance Amending Planned Unit Development Ordinance Number 17-028 and Granting Variations from Chapter 28 of the Arlington Heights Municipal Code (Heart's Place, 120-122 E. Boeger Dr.)

Bid Section

Item:

Bid Opening Date:

Account Numbers:

Total Budget for Specific Item:

Bid Amount:

ATTACHMENTS:

Description	Type
Heart's Place PUD	Ordinance

A ORDINANCE AMENDING PLANNED UNIT DEVELOPMENT ORDINANCE NUMBER 17-028 AND GRANTING VARIATIONS CHAPTER 28 OF THE ARLINGTON HEIGHTS MUNICIPAL CODE

WHEREAS, the President and Board of Trustees of the Village of Arlington Heights have approved Ordinance Number 17-028, preliminarily approving a planned unit development for the property located at 120-122 E. Boeger Dr., Arlington Heights, Illinois, commonly known as Heart's Place; and

WHEREAS, on February 28, 2018, in Petition Number 17-014, the Plan Commission of the Village of Arlington Heights conducted a public hearing on a request to amend Planned Unit Development Ordinance Number 17-028 to allow construction of a two story 18 unit supportive housing development which amendment would constitute final planned unit development approval and for certain variations from Chapter 28 of the Arlington Heights Municipal Code; and

WHEREAS, the President and Board of Trustees of the Village of Arlington Heights have considered the report and recommendation of the Plan Commission and have determined that authorizing and granting said request, subject to certain conditions hereinafter described, is in the best interest of the Village,

NOW, THEREFORE, BE IT ORDAINED BY THE PRESIDENT AND BOARD OF TRUSTEES OF THE VILLAGE OF ARLINGTON HEIGHTS:

SECTION ONE: The Planned Unit Development for Heart's Place, preliminarily approved by Ordinance Number 17-028, is hereby amended and granted final approval to allow construction of a two story, 18 unit supportive housing development, for the following property legally described as:

> Lots 2 and 3 in Hardee's Dundee Road Resubdivision, being a subdivision of part of the Northwest quarter of the Northwest quarter and the North half of the Southwest quarter of the Northwest quarter of Section 8, Township 42 North, Range 11, East of the Third Principal according to the plat thereof recorded September 26, 1986 as Document 86439262, in Cook County, Illinois.
>
> P.I.N. 03-08-100-053, -054

commonly described as 120-122 E. Boeger Dr., Arlington Heights, Illinois, which shall be in substantial compliance with the following plans submitted by the Petitioner:

The following plans dated March 15, 2018, have been prepared by Cordogan, Clark & Associates, Inc.:
Cover Sheet & Accessibility Matrix, consisting of sheet T1.0;
Architectural Site Plan, consisting of sheet A0.1;
First Floor Plan, consisting of sheet A2.1;
Second Floor Plan, consisting of sheet A2.2;
Partition Types and Details, consisting of sheet A2.3;
First Floor Reflected Ceiling Plans, consisting of sheet A3.1;
Second Floor Reflected Ceiling Plan, consisting of sheet A3.2;
Roof Plans, consisting of sheet A4.1;
Building Elevations, consisting of sheet A5.1;
Building Section, consisting of sheet A6.1;
Wall Sections, consisting of sheet A6.2;
Unit Plans – Unit 1, consisting of sheet A7.1;
Unit Plans – Unit 1A, consisting of sheet A7.1A;
Unit Plan – Unit 2, consisting of sheet A7.2;
Unit Plans - Unit 3, consisting of sheet A7.3;
Unit Plans – Unit 4, consisting of sheet A7.4;
Unit Plans – Unit 5, consisting of sheet A7.5;
Unit Plans – Unit 6, consisting of sheet A7.6;
Unit Plans – Unit 7, consisting of sheet A7.7;
Unit Plans – Unit 8, consisting of sheet A7.8;
Unit Plans – Unit 9, consisting of sheet A7.9;
Unit Plans – Unit 10, consisting of sheet A7.10;
Stair Plans, Sections & Details, consisting of sheet A7.20;
Door & Room Finish Schedules & Details, consisting of sheet A8.2;
Rendering, dated December 18, 2017, consisting of one sheet;

The following plans dated January 13, 2017 with revisions through February 20, 2018, have been prepared by Eriksson Engineering Associates, Ltd.:
Civil Engineering Cover Sheet, consisting of sheet C0.0;
Site Demolition Plan, consisting of sheet C1.0;
Site Geometry Plan, consisting of sheet C2.0;
Site Utility Plan, consisting of sheet C3.0;
Site Grading and Paving Plan, consisting of sheet C4.0;
Site Soil Erosion and Sediment Control Plan, consisting of sheet C5.0;
Site Work Details, consisting of sheets C6.0, C6.1, C6.2, C6.3;
Sanitary Sewer Relocation & Building Service Plan & Profile, consisting of sheet CX1.0;
Watermain Plan and Profile, consisting of sheet CX1.1;
Detention Exhibit, consisting of sheet CX2.0;
Exhibit R, consisting of sheet CX2.1;
Exhibit A, consisting of sheet CX2.2;
Fire Truck Exhibit, consisting of sheet CX3.0;
Landscape Plan, consisting of sheet L1.0;
Landscape Details, consisting of sheet L1.1;

Tree Preservation Plan, consisting of sheet TP1.0;

Photometric Plan, prepared by UP Development, LLC, dated March 15, 2018, consisting of one sheet;

copies of which are on file with the Village Clerk and available for public inspection.

SECTION TWO: That the following variations from Chapter 28, Zoning Regulations, of the Arlington Heights Municipal Code are hereby granted so as to permit development of the property in accordance with the plans submitted by the Petitioner, which variations are as follows:

1. A variation from Section 5.1-8.4, Minimum Lot Size, to allow a reduction to the minimum required lot size from 43,200 square feet to 40,435 square feet.

3. A variation from Section 11.4-1, Schedule of Parking Requirements-Residential Uses, to allow a reduction in the number of off street parking space requirements from 37 parking spaces to 33 parking spaces.

SECTION THREE: That amendment of Planned Unit Development Ordinance Number 17-028 and variations from Chapter 28 of the Arlington Heights Municipal Code granted by this Ordinance are subject to the following conditions, to which the Petitioner has agreed:

1. Final Plat of Subdivision approval shall be required.

2. The fire lane connection from the subject property to the parking lot located on the Popeye's property at 7 W. Dundee Rd. must be completed prior to final certificate occupancy of the subject property.

3. The air conditioning units placed in the side yard near the front façade shall be relocated behind the building (if feasible), and at a minimum, must be pushed back so that they are behind the gazebo and screened with additional landscaping.

4. The final landscape plan will be subject to staff review and approval. Additional modifications and/or plantings may be required to achieve compliance with Code.

5. The Petitioner shall comply with all applicable Federal, State and Village codes, regulations, and policies.

SECTION FOUR: Except as amended by this Ordinance, the provisions in Ordinance Number 17-028 shall remain in full force and effect.

SECTION FIVE: That the amendment and final approval of the Planned Unit Development granted in SECTION ONE of this Ordinance shall be effective for a period no longer than 24 months from the date of this Ordinance, unless construction has begun or such approval has been extended by the President and Board of Trustees during that period.

SECTION SIX: The Director of Building is hereby authorized to issue a permit upon proper application, in accordance with the provisions of this Ordinance and all applicable ordinances of the Village of Arlington Heights.

SECTION SEVEN: This Ordinance shall be in full force and effect from and after its passage and approval in the manner provided by law and shall be recorded by the Village Clerk in the Office of the Recorder of Cook County, Illinois.

AYES:

NAYS:

PASSED AND APPROVED this 2nd day of April, 2018.

_____
Village President

ATTEST:

_____
Village Clerk

PUD:Hearts Place Amendment and Final

Item: Chapter 28 Text Amendments - Phase 2 - PC#17-005

Department: Planning & Community Development

Phase One of the Chapter 28 text amendments included amendments to Planned Unit Developments, the Permitted Use Table, Special Use Waivers, Definitions and several other minor clarifications.

Phase Two includes proposed amendments to various sections of the code, some of which are related to formatting to eliminate repetitive text within Chapter 28 and/or eliminates text which is already covered in other Chapters of the Municipal Code.

In addition, staff is recommending amendments to various code requirements which impact the development standards. The following includes summaries of the significant changes in each section. The attachments reflect the proposed code amendments for each Section of Chapter 28. These amendments were recommended for approval by the Ordinance Review Committee in October, 2017.

Additionally, staff met with residents who live adjacent to downtown and staff recommends two revisions to the Plan Commission recommendation regarding the R-6 zoning district development standards: first, current code height for R-6 is 40 feet. The Plan Commission recommended 50 feet, however staff suggests 45 feet height. In addition, the Plan Commission recommends a side yard setback of 10% of lot width, staff proposes a modification to require 20 foot setbacks for R-6.

<u>Recommendation</u>

A public hearing was held by the Plan Commission on January 10, 2018 where Commissioner Drost moved and Commissioner Sigalos seconded:

A motion to recommend to the Village Board of Trustees approval of PC#17-005, amendments to Chapter 28, Sections 3, 5, 6, 7, 10, 11, 12, 13, and 14 as follows:

<u>Section 28-3 Definitions</u>
Revise an existing definition regarding amusement facilities. The current definition is outdated and does not address new types of amusement businesses.

Section 28-5 Use Districts

Various amendments to zoning district standards specifically setback and height standards in the multi family districts. Staff proposes that the code amendments related to the R-7 District are not acted upon at this time given that CA Ventures is currently going through the approval process in an R-7 District. Increase to density standards for the Hickory Kensington Overlay Zone. Amend the spacing between multi family buildings to simplify. Delete repetitive sections of code related to Community Residences and Christmas tree sales. Allows for 49 foot wide lots to be buildable versus current 50 foot minimum and allows lots to be buildable if there is already a house on the lot. Delete lengthy industrial performance standards as those are already in the other sections of the Municipal Code and thus not necessary in Chapter 28.

Section 28-6 General Provisions

Amendments to increase fence height from 5 to 6 feet for side and rear yards. This responds to complaints about height limit. Also allows for solid fences. Many prefab fences are solid and decorative. Many homeowners want solid fences. Also changes setback for exterior side yard fences to five feet to allow more rear yard for corner lots to be enclosed/private.

Section 28-7 Non Conforming Use and Buildings

Clarifications in language and formatting. No substantive changes.

Section 28-10 Signs

This one sentence section merely refers to Chapter 30 for signage and is not needed in Chapter 28.

Section 28-11 Off Street Parking and Loading

Staff will evaluate the Collective Provision requirement for parking but will require more research to determine how to assess parking for multi purpose uses such as places of worship, community centers, etc. Add a new 'Substantial Compliance' section to allow for smaller parking deficits to be analyzed by staff without having to apply for a Zoning Board variance. A new parking ratio for elementary schools to more closely match actual parking needs for these schools. Clarification of verbiage and delete unnecessary / unclear text. Delete parking accessibility table as this is a State Law, however staff will continue to review for compliance.

Section 28-12 Zoning Board of Appeals

Delete text that is repetitive regarding responsibilities of the ZBA as these standards are included in another section of the Municipal Code (Chapter 6). Also, the Hardship Criteria applies to ZBA as well as the Plan Commission.

Section 28-13 Plan Commission

Staff has evaluated the hardship criteria for granting variations. The current three standards are difficult to analyze and assess. New standards would apply to both the ZBA and Plan Commission. One of the packet attachments "Hardship Criteria" list our current criteria and examples of other communities. Also included are the LaSalle factors from a State of Illinois Supreme Court ruling from the 1950's that set forth factors to consider and base decisions regarding

land use variations. Court cases to this day utilize these factors as set forth in this ruling. It does not mean local Ordinances have to follow these factors verbatim, but they should serve as a guide for local Ordinances. Four criteria are recommended and are included later in this packet.

Section 28-14 Design Commission
Clarifications in language; delete duplicative sections that exist in Chapter 6 of the Municipal Code.

Roll Call Vote: Commissioners Drost, Green, Lorenzini, Sigalos, Warskow and Chair Ennes voted in favor. Motion carried.

Bid Section

Item:

Bid Opening Date:

Account Numbers:

Total Budget for Specific Item:

Bid Amount:

ATTACHMENTS:

Description	**Type**
Staff Memo	Memorandum
PC Minutes 1-10-18	Minutes
ORC Minutes 10-25-17	Minutes
Section 28-3 Definitions Amusement Facility	Exhibits
Section 28-5 Use Districts	Exhibits
Section 28-6 General Provision	Exhibits
Section 28-7 Non Conforming Use Buildings	Exhibits
Section 28-10 Signs & Section 28-11 Parking	Exhibits
Section 28-12 Zoning Board of Appeals	Exhibits
Section 28-13 Plan Commission	Exhibits
Section 28-14 Design Commission	Exhibits
Hardship Criteria	Exhibits
Building Height Data	Exhibits
School Parking Data	Exhibits
Fence Height Data	Exhibits
Zoning Board of Appeals Parking Variances	Exhibits

Memorandum

TO: *Plan Commission*

FROM: *Bill Enright, Deputy Director of Planning and Community Development*

DATE: *January 3, 2018*

Subject: *Chapter 28 Text Amendments - Phase 2; Wednesday, January 10, 2018, 7.30 PM*

Phase One of the Chapter 28 text amendments included amendments to Planned Unit Developments, the Permitted Use table, Special Use waivers, definitions and several other minor clarifications. Phase Two includes proposed amendments to various sections of the code, some of which are related to formatting to eliminate repetitive text within Chapter 28 and/or eliminates text which is already covered in other Chapters of the Municipal Code.

In addition, staff is recommending amendments to various code requirements which impact the development standards. The following includes summaries of the significant changes in each section. The attachments reflect the proposed code amendments for each Section of Chapter 28. These amendments were recommended for approval by the Ordinance Review Committee in October, 2017.

Section 28-3 Definitions

Summary: Staff recommends revising an existing definition regarding amusement facilities. The current definition is outdated and does not address new types of amusement businesses.

Section 28-5 Use Districts

Summary: Various amendments to zoning district standards specifically setback and height standards in the multi family districts. ***Staff proposes that the code amendments related to the R-7 District are not acted upon at this time given that CA Ventures is currently going through the approval process in an R-7 District.*** *Proposed increase to density standards for the Hickory Kensington Overlay Zone. Also propose amending the spacing between multi family buildings to simplify. Delete repetitive sections of code related to Community Residences and Christmas tree sales. Allows for 49 foot wide lots to be buildable versus current 50 foot minimum and allows lots to be buildable if there is already a house on the lot. Deletes lengthy industrial performance standards as those are already in the other sections of the Municipal Code and thus not necessary in Chapter 28.*

Section 28-6 General Provisions

Summary: Proposed amendments to increase fence height from 5 to 6 feet for side and rear yards. This responds to complaints about height limit. Also allows for solid fences. Many prefab fences are solid and decorative. Many homeowners want solid fences. Also changes setback for

exterior side yard fences to five feet to allow more rear yard for corner lots to be enclosed/private.

Section 28-7 Non Conforming Use and Buildings

Summary: Clarifications in language and formatting. No substantive changes.

Section 28-10 Signs

Summary: This one sentence section merely refers to Chapter 30 for signage and is not needed in Chapter 28.

Section 28-11 Off Street Parking and Loading

Summary: Staff will evaluate the Collective Provision requirement for parking but will require more research to determine how to assess parking for multi purpose uses such as places of worship, community centers, etc. It is recommended to add a new 'Substantial Compliance' section to allow for smaller parking deficits to be analyzed by staff without having to apply for a Zoning Board variance. Also staff recommends a new parking ratio for elementary schools to more closely match actual parking needs for these schools. Clarification of verbiage and delete unnecessary / unclear text. Delete parking accessibility table as this is a State Law, however staff will continue to review for compliance.

Section 28-12 Zoning Board of Appeals

Summary: Delete text that is repetitive regarding responsibilities of the ZBA as these standards are included in another section of the Municipal Code (Chapter 6). Also, the Hardship Criteria applies to ZBA as well as the Plan Commission (see below).

Section 28-13 Plan Commission

Summary: Staff has evaluated the hardship criteria for granting variations. The current three standards are difficult to analyze and assess. New standards are recommended and would apply to both the ZBA and Plan Commission. One of the packet attachments "Hardship Criteria" list our current criteria and examples of other communities. Also included are the LaSalle factors from a State of Illinois Supreme Court ruling from the 1950's that set forth factors to consider and base decisions regarding land use variations. Court cases to this day utilize these factors as set forth in this ruling. It does not mean local Ordinances have to follow these factors verbatim, but they should serve as a guide for local Ordinances. Four criteria are recommended and are included later in this packet.

Section 28-14 Design Commission

Summary: Clarifications in language; delete duplicative sections that exist in Chapter 6 of the Municipal Code.

Attachments

Also included as attachments are research data regarding school parking, fences, building height, and examples of hardship criteria from other municipalities.

APPROVED

PLAN
_____
_____
_____

COMMISSION

REPORT OF THE PROCEEDINGS OF A PUBLIC HEARING
BEFORE THE VILLAGE OF ARLINGTON HEIGHTS
PLAN COMMISSION

RE: CHAPTER 28 TEXT AMENDMENTS - PHASE 2 - PC#17-005

REPORT OF PROCEEDINGS had before the Village of Arlington Heights Plan Commission Meeting taken at the Arlington Heights Village Hall, 33 South Arlington Heights Road, 3rd Floor Board Room, Arlington Heights, Illinois on the 10th day of January, 2018 at the hour of 7:30 p.m.

MEMBERS PRESENT:

TERRY ENNES, Chairman
MARY JO WARSKOW
JOE LORENZINI
BRUCE GREEN
GEORGE DROST
JOHN SIGALOS

ALSO PRESENT:

BILL ENRIGHT, Planning Deputy Director

CHAIRMAN ENNES: I'd like to call this meeting of the Plan Commission to order. Would you please all rise and join us in the pledge of allegiance?

(Pledge of allegiance recited.)

CHAIRMAN ENNES: I think the first item is approval of the St. James meeting minutes from our last meeting.

COMMISSIONER DROST: I'll make that motion.

CHAIRMAN ENNES: All in favor?

COMMISSIONER GREEN: I'll second it first.

CHAIRMAN ENNES: All in favor?

(Chorus of ayes.)

CHAIRMAN ENNES: Any opposed?

(No response.)

CHAIRMAN ENNES: Okay. We will move on to our first item of business and ask Bill to present the changes.

MR. ENRIGHT: Well, first, do the roll call. Commissioner Dawson.

(No response.)

MR. ENRIGHT: Commissioner Drost.

COMMISSIONER DROST: Here.

MR. ENRIGHT: Commissioner Green.

COMMISSIONER GREEN: Here.

MR. ENRIGHT: Commissioner Lorenzini.

COMMISSIONER LORENZINI: Here.

MR. ENRIGHT: Commissioner Sigalos.

COMMISSIONER SIGALOS: Here.

MR. ENRIGHT: Commissioner Warskow.

COMMISSIONER WARSKOW: Here.

MR. ENRIGHT: Chairman Ennes.

CHAIRMAN ENNES: Here.

MR. ENRIGHT: Public notice was provided in the Daily Herald.

Well, as you are well aware, the Ordinance Review Committee reviewed this project on October 25th. Phase one of the text amendments were recommended for approval by the Village Board, adopted by the Plan Commission and approved by the Village Board earlier this year, or rather 2017.

Phase two now gets into various other sections of the code, some of which is just, you know, shortening the code on its length, redundant sections that aren't necessary to show up in multiple locations. Many of the zoning districts have the Christmas tree regulations which we're just going to have once in the code, it's still there but only once, as well as the community residence standards. Rather than having it show up multiple times in the code, it will just be at the end of the use district section and appear just once. So, that will be good to just shorten the code because any user of the code flipping through its numerous pages, shortening it is certainly beneficial to the users.

Regarding some of the actual textual changes that have a little more impact, one definition that we wanted to update for sometime and kind of overlooked as part of phase one was our definition of amusement facilities. It's a very archaic definition that refers to

computer internet places where, remember back in the day when you'd have storefronts opening up with 20 or 30 computer monitors when the internet first came out and that's where people would go to get hooked up to the internet. Well, you know, that's kind of gone to the side now with the advent of the smart phones and laptops and so forth. So, and it didn't really reflect some of the things that we are seeing with respect to amusement facilities.

So, we have a new definition that caters to real uses that we're seeing in today's world and the business world, a facility that provides indoor activities for kids or adults including video arcades, games, or other recreational type of amusement such as play equipment, trampolines, laser tag, et cetera. We're recommending that larger facilities of 5,000 square feet or greater are special uses, and smaller facilities less than 5,000 would be permitted as of right. So, that was something that we wanted to add in to the recommended changes.

Chairman, would you like me to pause for any questions as we go along? Or do you want me to just move through all of these?

CHAIRMAN ENNES: I would just as soon that you went through since we've reviewed them. But if anybody has questions, do you want to --

COMMISSIONER GREEN: I just have one quick question. How many lots do we have that are actually 49 feet?

MR. ENRIGHT: Well, when we get, do you want me to, I'll address that --

COMMISSIONER GREEN: No, I'm just reading it here.

MR. ENRIGHT: Yes, I'll address that when we get to it. That's coming up shortly.

COMMISSIONER GREEN: Okay, okay.

MR. ENRIGHT: So, regarding amusement facilities, I'll take it that nobody has any concerns about that additional definition or revision.

Regarding the next section in the code, the use district sections, we're looking at the 50 to 49 feet minimum lot width. Right now, the code permits you to build on a 50-foot lot, and that's width, if a majority of the houses on your street between two intersection streets on either side of the block are less than the standard 70 feet. There are quite a few that are 50 in the center of town, the older part of town. Obviously, as you get north and south, the standard 70 with all the subdivisions in the 60's and 70's and 80's were built to the current standards.

49 footers though, we do have a couple of locations. There is one neighborhood that's south of Central and east of Arlington Heights Road where there's quite a few 49 footers. I don't quite understand it looking at the plat maps, but that's how they were platted for some reason, and these go way back, you know, 100 years. We have found in some instances where people want to either do an addition or build a new house or a tear-down, or again just an addition to an existing house because they don't meet that minimum of 50 feet, they have to go to the Zoning Board. So, we have a few of these go through the Zoning Board, you know, maybe a couple, two to three a year. So, we're recommending just altering that section just slightly to incorporate those odd locations, there's a few other small neighborhoods where this occurs kind of happenstance. So, that would be, you know, we think that's a pro-citizen or pro-resident change because it will, you know, allow people to not have to go to the Zoning Board.

In addition, as part of that, right now if you have a 50-foot lot but the majority of the houses on your block are not less than 70 feet, it's not a buildable lot. You have

to go to the ZBA to get a variation to build on it. That also includes, if there is an existing house there, so if someone wants to build an addition which is largely a nonconforming use or do a tear-down, they would have to go to the Zoning Board. We think it's illogical that someone can't build on a lot where there already is a house established there, and onerous on the citizens who own lots like this to have to go to the Zoning Board. So, we've added language or recommending language to basically in effect exempt those types of properties that already have a house on them, even if it's a tear-down. If there's a house established, then it's buildable. So, we're recommending that change because there are a handful, you know, two or three a year that go to the ZBA, they get the approved variation because it's illogical to not allow someone to build an addition where you have a house there already, as long as they meet, they still have to meet all the setback, FAR standards and impervious coverage.

So, I don't know if that, Commissioner Green, if that --

COMMISSIONER GREEN: I just was curious how many there were. But that kind of answers it.

MR. ENRIGHT: Well, I don't have a count but there's, I would say there's probably a couple of hundred.

COMMISSIONER GREEN: Okay, that's a lot.

MR. ENRIGHT: Yes.

CHAIRMAN ENNES: Are there any that might be 48 feet?

MR. ENRIGHT: No, we don't see 48 feet. We see like 48.9 but we --

CHAIRMAN ENNES: So, 49 is the exception.

COMMISSIONER DROST: So, you round them up?

MR. ENRIGHT: We round them up, yes, if it's close like that.

Moving forward with the R-4, R-5, R-6, R-7 and B-5 development standards, some of the things that we're looking at include, well, I'll just go to the next slide. Also, M-1, M-2 and P-L industrial performance standards, those are the existing Chapter 23. That's another thing we wanted to do is if there are things in other chapters, like with the Plan Commission and the Zoning Board of Appeals, the enabling language that creates those commissions is already in Chapter 6, that's where it should be. It is also in Chapter 28 where it shouldn't be, so we've eliminated that. Same thing with these industrial performance standards, they're in Chapter 23 of the building code, we don't need them to show up in the zoning code as well. Then Hickory-Kensington Overlay, we're recommending a modification of the density standards for just a small area which I'll get to.

Regarding the development standards, in R-4, we don't have much R-4 zoning in town, so this isn't a big change. But right now we're requiring 15 percent of the lot width for a side yard. We're recommending 10 percent which is the standard. The reason for that is most R-4 developments are actually single family homes, which is fine. You could do duplexes, but we just don't see people doing duplexes anymore, building duplexes. But the 10 percent is more consistent because we do see single family homes in R-4, and then they have to comply with 15 percent whereas most single family homes are just 10 percent. So, we think that's just a positive change although it's very minimal in terms of its overall impact considering there aren't many lots zoned R-4.

With respect to R-5, we're recommending the increase to the height. R-5's typically, you know, are either row homes or townhouses. 25 feet is a very old standard. Keep in mind that a lot of these standards were established in 1959, and there's been

amendments to the code up until '85, I know we've had smaller amendments. But a lot of these are pretty archaic in terms of contemporary development standards. So, the Ordinance Review Committee agreed to bump it up 10 feet.

We also have these very archaic spacing standards and this affects both the R-5 and R-6 and R-7 zoning districts where if you have a complex of multifamily townhouses like the Old Arlington Heights Road development by Lexington, the spacing of those buildings varies drastically from several feet to 50 feet, depending upon the windows type, what room is there. Well, we think that just doesn't make a whole lot of sense. If it's a bedroom facing a bedroom, it's a greater distance or less, different if it's a kitchen facing the bedroom. So, we think we should, you know, and we're finding that most of these types of developments, a 25-foot space in between the buildings is adequate. A lot of these are, well, they are PUDs anyway because they're multiple buildings, so you can always, you know, require greater setback. But we think 25 is more than adequate especially given the heights of these districts.

The height in the R-6 we're recommending going from 40 to 50 feet. Some of our R-6 developments that are less than 10-12 years have needed variations just to 40 feet. You know, the floor plates as you all know are just a little greater now. People want nine-foot ceilings instead of 7.5 like 50 years ago or 40 years ago. So, the 50 feet will accommodate four to five stories in the R-6 district, probably closer to four but you could probably get five in. Then again, the setbacks, we're looking at just 25 feet in the front, side 10 percent of lot width, rear 30 feet. Right now in R-6, for every foot of building height above 25 feet, you have to add an extra foot of setback, and we're seeing developers having to seek variations, not just about a recent development that we'll get to in a second, but these types of R-6 developments. We think that the standards put forth here are more than adequate to address, you know, required setbacks.

The R-7, we're not recommending that change in height, we think 60 is fine. Again, there's a 25-foot space in between buildings although very rarely do you see multiple buildings in R-7. I don't know if we have, we might have one older development northwest of the Jewel. But again, it's away from this, you know, what type of windows are facing, it just comes up with a standard 25 feet. Again with setbacks, you know, again R-7 requires when you're above 40 feet you have to add a foot of setback to the front and side. We're saying standard 25 feet, 10 percent of lot width for the sides, also a slight increase to the building lot coverage, 45 to 55 percent because it's more downtown urban. However, we are not recommending any action on this at this time.

The reason for that is of course we have the CA Ventures development that was recently denied by the Village Board. They have resubmitted with a modified plan and we did not want to put this forward at this point in time and have different standards set up which would, you know, change the variations, lessen them quite significantly. So, we just didn't feel at the administration level that it was appropriate, and we talked a little bit about this at the Ordinance Review, to move forward with those changes at this time because we have an active project that's controversial in the neighborhood and we didn't want to recommend these changes right now, although we would want to revisit those down the road.

Then B-5, we're looking at more rational setbacks in the B-5 Downtown District. Right now, you know, one size doesn't fit all. In the B-5 district, we basically want zero lot line in the front, and if it's an infill development on the sides, too. Right now we are different requirements for that depending upon the situation of the property. So, what we're

recommending in the B-5 is that we have public street frontages as one standard, and then interior lot lines as the other standard.

So, public street frontages, so let's take for instance the development that's going up right now, the Park View Apartments, that is completely surrounded by commercial property on all sides, and it has public street frontages on two streets, on Dunton and on Eastman. So, you know, that would be zero lot line, that's all that would be required which makes sense. The only time we'd require a setback is if that public street frontage is actually across the street from residential property. So, for instance, the block where, well, the CA development but that's R-7, north of that is --

COMMISSIONER DROST: The old Paddock property.

MR. ENRIGHT: Yes, the old Paddock property owned by Mr. Adriani. If you look at this downtown zoning map on my cursor here, this is the B-5 part. Part of it's across from R-6, but part of it's across from R-3. So, even though it's a public street frontage, because it's across from residential R-3, we would recommend a 25-foot setback. But up here, up north along Campbell Street or along Highland, since it's across from B-5, it would be zero lot line in terms of code. Then to the south, you know, you have interior lot lines, you have to have 25 feet abutting residential. So, at the south of this property, since it would be abutting R-3, at the south end of the block you would have to have a 25-foot setback.

So, we think this is just more reasonable and fits to the downtown. We think that some of the restrictions previously just didn't make sense in a lot of cases. One good example is 13 East Miner, Mr. Panzarino got the preliminary PUD up on Miner. It's basically zero lot line up front and on the side. He's going to put some windows in on one side, so that has to be five feet back pursuant to building code, but you need a big variation for that. So, you know, those types of infill developments are going to be built building to building more or less and up to the sidewalk. That's kind of the form that we want downtown.

So, we think that these new setbacks are a lot more applicable to the reality of downtown and what we want to see without having to grant all these variations. Then going back to the Hickory-Kensington Overlay, we're recommending an increase to the density. The overlay zone for Hickory kind of involves not this whole blue area but that's the Hickory redevelopment area, we're really just talking about two block faces. As you know, Campbell Street we want to come through, so it's, you know, two lots on either side of the spur line, one lot is that development that's proposed for 74 units. Because of the streets coming through, it's chopped that property by about a third. So, the building they're proposing is five stories, it's meeting all the setbacks and the height for the overlay zone. But because of losing that property to the north for the street and the excess land, they would have to seek variations.

The same would be the case if the Ladoff property where the Mariano's employee parking is, same thing there, with the street coming through, the density doesn't quite fit for what's left over. So, we're just trying to match it with our other development standards for the Hickory overlay zone. It does not affect, you know, the Heller site because that's R-7, or anything north of what will be Campbell Street because that remains R-7. Then the only other portion of the B-2 site, this is where the new daycare is going, so that's going to be there we're presuming for quite some time, is this other block where you have the little strip center here, Kensington and Hickory, and there's, you know, a couple of abandoned buildings. You have the bowling alley here and a couple of service type businesses.

So, it's just the smaller area in red that would be affected by this

overlay, but it does allow for increased density, but the form still looks the same. It's the same height, it's the same building without the penalty of losing that extra land. If this one developer didn't lose all that extra land, they would have been close because I think they were like two or three over. But given that this overlay zone was intended to be form based, what I mean by form based is this is what we want to see, the shape and the setbacks. We don't want 30-foot setbacks, we want it kind of zero lot line to five feet, on Kensington, 10 to 15 feet. So, it meets all those standards. So, that's kind of the gist behind amending that overlay zone just for these two block faces.

General provisions. Height of fences. We used to allow six-foot fences in town and we changed it about 25 years ago maybe, something like that. We're finding a lot of people, we haven't done surveys, but we're finding a lot of people over the years, you know, complaining about not being able to do a six-foot fence. They don't think five is private enough. We do allow six feet when you're adjacent to commercial property. We do allow it if you're adjacent to a major road, as well as solid fences in those cases. But it's five feet otherwise. We're recommending increasing it to six feet. We're also recommending allowing solid fences.

In addition, because we're getting a lot of these prefab fences now with the hard core plastic, they look nice but most of them are solid. Some of them have tiny little gaps in it, but most of them are solid. We think they look fine. People can still choose to do a semi-open fence if they want. Certainly this just affects the sides and the rear, not the front yard. They're still limited to three feet and open in the front.

Then the corner setbacks, corner lot setback, if you have a corner lot and your backyard fronts on a street, you have to set back your fence half the distance between your house and the property line or a minimum of five feet. You know, let's say a house is set back 30 feet, then they'd have to set back their fence 15 feet. That carves out a big chunk of their backyard. We're saying just set it back five feet no matter what the circumstances. On the outside of that, you still have to landscape it like you do now. But we think it's a little onerous to have people having to set back the fence quite a bit, and we get a lot of complaints on that. That's probably one of our biggest fence complaints, because people are basically losing a portion of their backyard if they fence it in because a big portion is on the outside of the fence which no longer really becomes usable.

So, that's a change that, you know, doesn't come up a lot but there's quite a few corner lots. Most houses aren't set back 30 feet. They're, you know, more like, you know, 20 or 15, so most setbacks would be 7.5 to 10 feet. We're saying five for these corner lots.

In addition, our table of permitted obstructions, we want to update it and add things that are more common now. I mean, I don't know why generators -- done before but we'd like to add that. Fire pits are becoming more common although it's not in the permitted obstructions table which is, these are things that are allowed in backyards. Outdoor living kitchen areas, we're getting a lot of those. The sport courts as well, although all of these still have to meet the impervious surface coverage in the rear yard which cannot exceed 40 percent.

Then also in the front, the entryways, we don't allow porches unfortunately unless you meet the setback. So, they can't be a permitted obstruction. We do allow little entryways to be a permitted obstruction into your setback, but it can only be four feet deep and then eight feet wide, which is kind of small. We see a lot of people would want to do a

nice little entryway that's a little more proportional, five feet extended out from the front door, and then 10 feet wide. That allows a little more architecture and, you know, a little more work done with any columns or posts, but nothing huge. We think we're just adopting to, you know, current development standards, things people want to see with their homes and proportion the front entryway to the rest of the house.

We're also recommending eliminating the detached garage 10-foot setback from the house. It's already in our building codes. You can get an exemption from that by building a fire-proof garage, which means the building code does allow less than 10, but our zoning code doesn't. So, people would have to come to the Zoning Board to get a variance. It's strictly a building code issue and that's where we want to leave it, so we're recommending getting rid of that out of the zoning.

Are there any questions on anything --

CHAIRMAN ENNES: With these permitted obstructions, these have to be set back, generators, fire pits, outdoor living kitchen?

MR. ENRIGHT: Yes.

CHAIRMAN ENNES: They have to be set back from the lot line?

MR. ENRIGHT: Yes, they do.

CHAIRMAN ENNES: Are there also restrictions?

MR. ENRIGHT: Yes. Most permitted obstructions in the rear yards have to be set back three feet from the side and five feet from the rear. That's consistent, for instance, a detached garage which could be 720 square feet in size, 15 feet height to the peak, those are required to be three feet and five off the rear. So, that would be the minimum. Pools have to be a little more.

CHAIRMAN ENNES: Do they also have to be separated from the house?

MR. ENRIGHT: Generally not. There may be some code requirements for fire pits, but generally no. I mean, you know, a generator, they're often right up against the house or a couple of feet away for circulation.

COMMISSIONER DROST: Yes, have we, you're aware of what Des Plaines is doing right now? They're creating a little bit more massing, more density in their community.

MR. ENRIGHT: Right.

COMMISSIONER DROST: Reading between the lines, it appears that they're trying to become more developer-friendly and they're trying to reinvent or to make some, well, let's say improvements from what, you know, originally evolved in the downtown area. Are some of these little pieces, you know, kind of going in that direction, too, helping developers out, you know, making our standards more contemporary with the marketplace and some of the competing areas in the northwest suburbs or west suburbs?

MR. ENRIGHT: I think yes. What I like about this phase two is that it's not just, you know, developers building, you know, midsize to large projects depending upon the location, but it's also making I think positive changes for single family homeowners in town. You know, these issues come up a lot. Homeowners are always asking about fences and setbacks for fences and putting fire pits or outdoor living kitchens, things of that nature. So, I think a lot of these changes are positive for homeowners in town, and often we kind of overlook them, we focus on the big stuff. So, I think it's a combination of both.

I do think that the development standards purely with these, a little

bit with the changes in the height, I think, you know, certainly make some more contemporary developments that have been approved. So, these height changes aren't things that are out of whack with the intent. It just eliminates the need for a few variations. Most of those variations get granted anyway. So, I think the Plan Commission and the Village Board recognize that our code is a little out of whack on some of these things.

I think the setback changes, or I think the setbacks now in some of these districts are a little punitive. The higher you go, the bigger the setback. But then, you know, then it becomes harder and harder to even build on the property. So, I think those are definitely positive changes.

COMMISSIONER DROST: Yes, and there's just one horrible example here of the setbacks, you know, on the south end, or just south of us on Arlington Heights Road, that building that always gets, you know, it's almost in the street. So, there is a balance here on we're not going to be afraid of any of those monstrosities coming out of the woodwork.

The second piece, too, is when we're thinking about these changes, do we think about them in a holistic sense from the standpoint of, okay, here are some of the trends? But the trends also bring a certain type of resident and we're looking at sort of the economics, the demographics, the sustainability. How does this add to the, let's say the entertainment piece of the Village? How does it, that's the restaurants and some of the services, particularly in the more vertical downtown area.

MR. ENRIGHT: Well, I think regarding, you know, how is this pro-business, I think really phase one when the Plan Commission recommended and the Board adopted the change to the special use waiver for restaurants, increasing it from 1,500 square feet to 4,000, I think that was a real positive step for those types of businesses. We want to see that all throughout town, not just downtown.

COMMISSIONER DROST: Right.

MR. ENRIGHT: So, that's been beneficial I think in terms of being pro-business and then stimulating the market at least for that category of use. I think that some of these changes, I mean we're doing pretty well, I mean you know.

COMMISSIONER DROST: Yes, and that's sort of the dialogue, I mean not that we're going to change it here, but you know, to put it in to sort of the perspective of again a macro look, you know, what we're doing to make our, and again, the downtown area might be the canary in the coalmine, but you know, 20 years ago we didn't allow for outdoor dining, al fresco dining.

MR. ENRIGHT: Right.

COMMISSIONER DROST: Now, you know, with windows and with rollups and, you know, sort of what the expectation level is now from the marketplace to respond to that.

MR. ENRIGHT: Our Village Board is going to be looking at evaluating some of the liquor code changes which may or may not happen. But if they do, you know, it could open up some new types of businesses in town, and we're looking at where those would be appropriate from the zoning standpoint.

COMMISSIONER DROST: Good, just for the record.

MR. ENRIGHT: Okay. Moving on to parking, one of the big issues that the Plan Commission has rightfully had as well as the Village Board is, you know, the parking requirements for elementary schools being kind of out of touch, and we think they are. We're recommending that with the new code, that elementary schools are parked at one space per

employee plus one space for every five classrooms. We did a survey of a bunch of communities around us, and we found out that a lot of them do kind of this hybrid, it's a mix of employee and number of classrooms, you know. An elementary school is adding, you know, five or six classrooms and they're expecting enrollment to go up, then, you know, we've seen that recently with several elementary schools where they may need 90 to 100 spaces but our code requires 320.

So, we're recognizing that our code, and I think every, you know, I don't want to speak for the Plan Commission but that's the feedback that we've gotten from the Plan Commission and Village Board is some of these things seem a little out of whack given the magnitude of variations, and also given the data that the schools have provided to us with actual counts. So, we've tested this new standard and it fits in. It doesn't mean that every elementary school would not have sought a variation. Olive had very little parking space, they would have needed a variation. Some of the other schools that have come through recently would not have needed a variation, or at least wouldn't have been nearly the extent. So, we feel that it's a good standard to make it more fair for the schools.

We haven't found a problem with the high schools in terms of the standards working. You know, the only issue we've had historically is really St. Viater with spillover into streets, but when they built their additional parking lot in the front, that helped a lot.

One other thing we're looking at is the collector provision requirement. We talked about this at the Ordinance Review Committee. The collector provision requirement can sometimes be a bit onerous for community centers or places of worship where we're, or even like Ivy Hotel, where we're looking at the different components within that use and applying the different standards rather than just, okay, this is a place of worship, you need one space for every five seats in the sanctuary. It's kind of grown into more of a map where, you know, you've got the sanctuary and then you've got a meeting space over here and another space over here, and you look at all of them and add it up and you need 600 spaces. Well, the reality is you don't necessarily use all those spaces at the same time, very rarely. So, we want to look at that a little closer.

Certainly, the collector provision works for shopping centers. I mean a shopping center is going to have different types of uses that each have different parking requirements. So, we adopt to that and use the collector provision portion of the code where a restaurant is at one to 45, retail is at one to 300, furniture store is one to 600. So, that's the collector provision. But we also apply it to these bigger uses and we're seeing these huge variations being requested because of the collector provision. So, we want to do a lot more research on that and then report back to the Plan Commission, first to the Ordinance Review Committee probably in, you know, in the next couple of months once we get more data on that. So, we didn't want to push that through at this point.

Accessible spaces, we have the number of accessible spaces in our zoning code; however, it's regulated in the state code which we follow as required. Sometimes the state code can be modified a little bit, and then we don't modify it in our code. So, our attorney is recommending just deleting it from our zoning code, since it's in the state code and we still have to follow it. We as planners all have the chart that says what you need in terms of parking, and when developers ask we can hand that out to them or put it on our website, but it's not something that would be in our code because it's again getting back to being somewhat repetitive.

Then the other thing we're looking at that I think is a real positive for small businesses and smaller uses is the substantial compliance section. We're recommending that Staff can approve a variance, or not even approve a variance, I should rephrase that, it's determining that parking is in substantial compliance with the code if their deficit is less than 10 spaces or it's less than a five percent deficit. So, if you have 100 spaces required and you have 96, that would be a less than a five percent deficit. Or if you're required to have, you know, 100 and you have 91, then that's less than 10 spaces. So, what would have to happen there is a developer or landowner, and usually this comes into play with small, older developments in town, if this is a brand new development, you can't invoke this clause, you have to meet code or get a variation. But if it's an existing building, an older building in town that don't quite have enough parking but they want to bring it in use, if they can demonstrate to us that they have adequate parking through parking counts and data, then Staff can make a determination, as we do everyday with our zoning code, that there is enough parking there so they don't have to go to the Zoning Board of Appeals.

We probably have, you know, five or six of these types of variations that go to the Zoning Board every year. By and large, I think most of them have all been approved, which is fine because they've demonstrated that they have enough parking. So, we think with the smaller type, and they're typically smaller, although it could affect a large location as well, but if it was a big shopping center, you've got 700 parking spaces, you know, if they could demonstrate that, you know, if they're less than five percent short, they've got plenty of parking, why make them go through either Plan Commission or the ZBA. So, we think this is again, you know, small business friendly and avoiding having to go through a somewhat arduous process and leaving it up to Staff to make some of these determinations.

Hardship criteria. We've of course talked about that on many occasions. The Zoning Board, or I'm sorry, this affects the Zoning Board as well, and we did provide this to the Zoning Board on Monday for their information. But we have several, and I included them in the packet, several different types of requirements that different communities have as well as the LaSalle factors which was a 1950's court case in Illinois that kind of established some standards for evaluating variations. What we've come up with, one thing we heard at Ordinance Review is, you know, liking the idea of simplification. We've heard that from the Plan Commission and the Village Board for years now that, you know, some of these things are hard to understand, or not necessarily hard to understand but hard to really evaluate, and hard for developers to really address.

So, we've kind of morphed our existing standards and incorporated a couple of new ones. But we think these four standards really address the issues that come up on variations. The way they're written, they can really be for, you know, a variation for density or height, or it can be a variation for a business that wants to go in that's not allowed in the M-2 District, if it's only 2,000 square feet in size, you know, something of that nature. So, they're really, we wrote them carefully so they can really be applied to either of those types of situations because they're different.

But basically, the proposed use will not alter the essential character of the locality and be compatible with existing uses and zoning of nearby property. That's a pretty fundamental thing that the Plan Commission looks at and rightfully so.

The plight of the owner is due to unique circumstances, may include the length of time the property has been vacant for instance. That's something we look at, too.

So, developers are still going to have to, big and small, are going to have to demonstrate that they meet these criteria. But we think these are a little more crisp and a little easier to understand. We still need to coach them sometimes at the Staff level but that's fine.

The proposed variation is in harmony with the spirit and intent of this chapter. I think what that means is, you know, let's take, you know, a parking garage in a building where they, you know, because of the columns, they can only do 22-foot drive aisles instead of the required 24. Well, that variation, it's meeting the intent of the code. They have a demonstrated reason for that, a unique circumstance, you know, because it is unique, Bruce Green understands that as an architect. So, those types of things where it's still meeting the intent of the code in its totality.

Then, the variance requested is the minimum variance necessary to allow reasonable use of the property. That's kind of reined people in so they just don't come in and say we want 5,000 units when we allow 50, you know, things like that. So, it has to be reasonable.

They have to meet, you know, they have to provide the findings for that and what the justification is. When they're granted, too, it's important for the Plan Commission and the Zoning Board to, you know, state why they think it's okay. You do that kind of during comments. I don't think it necessarily has to become more formalized. The Zoning Board actually issues findings of fact where they'll go one, two, three four. But usually they're looking at like one variation or maybe two for a single family house, a little more straightforward, yours can get a little more complex depending on the scope of the project.

So, you know, we think these are more clear. We used to have that, you know, the economic part of it which was tough to understand, just the basic hardship of our code. You know, in particular, that the property cannot yield a reasonable return. Well, that's always been a tough one for anybody to try and justify, you know, what a reasonable return is. I know Commissioner Jensen brings this up a lot about, you know, how do you do that like for not-for-profit schools? I mean they're not in the business of reasonable return unless it's, you know, good grades.

So, we think these are better and more clear. I think, Commissioner Warskow, this addresses, well, you weren't at the ZBA, I'm sorry, that was, Commission Dawson was there and Commissioner Jensen were the only two there that night. But these are the types of things that they brought up and hopefully that was reflected in the minutes of the Ordinance Review Committee.

So, at this point, you know, there is a nonconforming use section, a Design Commission section. That's just kind of clarifying things, getting rid of duplication with the Design Commission stuff that exists in the enabling ordinance in Section 6 of the code. Nonconforming use, I don't think anything is changing the gist of that, we're just making it a little more clear in the way it's written hopefully.

So, with that, we're recommending approval of the amendments to the various sections listed except for the R-7 standards which we'd like to visit at a later date. Are there any questions?

COMMISSIONER DROST: Good job.

MR. ENRIGHT: Thank you.

CHAIRMAN ENNES: Do those proposed changes for the R-7, would they impact the proposed development that's out there for Campbell?

MR. ENRIGHT: They would.
CHAIRMAN ENNES: They would.
MR. ENRIGHT: They would greatly lessen the setback variations. I still think they would need some setback variations, but it wouldn't be nearly as large. We don't want to, you know, although Staff supported that development and supported the setback variations because in our opinion, as I'm stating today, the R-7 standards and the R-6 and the R-5 with those graduated increases based on height, we think, you know, are a bit antiquated. So, but we're not recommending those changes because we just feel that it's inappropriate, bad form to be putting forth these changes while development is going through the process which would potentially benefit them.
CHAIRMAN ENNES: Is that primarily because of the neighbor complaints?
MR. ENRIGHT: Pardon me?
CHAIRMAN ENNES: Because of the issues the neighbors are having with it?
MR. ENRIGHT: Yes, it's certainly part of that. But I think it's just, even if we didn't have concerns from the residents, I still think that when you have a project that's active going through the process, you don't want to change the code that's going to directly impact that for better or for worse.
COMMISSIONER DROST: Yes, it's the appearance of --
CHAIRMAN ENNES: But is it fair to the developer? I mean if we're talking about doing this anyway --
COMMISSIONER DROST: That's going to be up to the Village Board of Trustees to decide. I mean I think that's, they can, they've got that power to do it.
MR. ENRIGHT: Irrespective of the CA Ventures, I think it's the right thing to do just looking at the zoning ordinance. But again, as Commissioner Drost just briefly stated, you know, there is the appearance, too. We don't want it to look like we're doing this for a developer.
CHAIRMAN ENNES: All right, yes. I understand.
COMMISSIONER DROST: Right. We want to help positive development. There was good article, too, on apartments and the development of apartments in the area. We were not, we're sort of deficient with other communities. We're also talking about the crescendo, you know --
MR. ENRIGHT: Yes, we haven't seen as many. Yes.
COMMISSIONER DROST: Sort of the, again, the economic issue. If you don't mind, I'll make the motion to approve. Is that okay?
COMMISSIONER SIGALOS: I just have one question. You touched on it, when I was reviewing this here tonight. I started, we're eliminating all the different fees. Is that elsewhere in the code or are you eliminating the fees?
MR. ENRIGHT: That's, no, we're not eliminating the fees. Those fees are in other sections of the municipal code, so they don't need to be in the zoning code because they're not zoning issues.
COMMISSIONER SIGALOS: That's what I assumed. Okay, thank you.
COMMISSIONER DROST: If it's okay, I'd like to propose a motion.
CHAIRMAN ENNES: Please do.

A motion to recommend to the Village Board of Trustees approval of PC#17-005, Amendments to Chapter 28, Sections 3, 5, 6, 7, 10, 11, 12, 13, and 14 as outlined in the Staff memo dated January 3, 2018.

COMMISSIONER SIGALOS: I'll second that.
CHAIRMAN ENNES: All in favor?
MR. ENRIGHT: No. Typically, we'll do roll call.
CHAIRMAN ENNES: I don't think we need one though.
MR. ENRIGHT: Well, we might as well.
CHAIRMAN ENNES: But we can, yes. Okay.
MR. ENRIGHT: Let's see. Commissioner Drost.
COMMISSIONER DROST: Aye.
MR. ENRIGHT: Commissioner Green.
COMMISSIONER GREEN: Yes.
MR. ENRIGHT: Commissioner Lorenzini.
COMMISSIONER LORENZINI: Yes.
MR. ENRIGHT: Commissioner Sigalos.
COMMISSIONER SIGALOS: Yes.
MR. ENRIGHT: Commissioner Warskow.
COMMISSIONER WARSKOW: Yes.
MR. ENRIGHT: Chairman Ennes.
CHAIRMAN ENNES: Yes. So, you've got a unanimous approval.
COMMISSIONER DROST: Yes, but there's no guarantee. We're just here to advise.

(Whereupon, the above-petition was concluded at 8:20 p.m.)

REPORT OF THE PROCEEDINGS OF

The ORDINANCE REVIEW COMMITTEE

OF THE VILLAGE OF ARLINGTON HEIGHTS PLAN COMMISSION

HELD AT VILLAGE HALL ON: **October 25, 2017**

Project Title: Chapter 28 Amendments

Petitioner: Village of Arlington Heights
33 S. Arlington Heights Road
Arlington Heights, Il

Requested Action:

- Chapter 28 Text Amendments / Zoning: Phase 2

Attendees: Susan Dawson, Plan Commissioner
Lynn Jensen, Plan Commissioner
Robin Ward, In House Counsel
Bill Enright, Deputy Director Planning

In late 2016 the Village Board established strategic priorities for the Village in 2017. Staff from the Planning and Community Development Department and Legal Department have internally discussed updating various aspects of the Zoning code to modernize the code to make it more user friendly and provide clarity. In addition, staff has reviewed areas of the code to streamline the processes for residents and for developers. The end product will be much more inviting visually and better organized. Staff has divided recommended amendments to the code into two phases as follows:

Meeting Discussion:

B. Enright summarized the proposed amendments for phase 2. The code in many respects is outdated, therefore these amendments will both streamline the process, but also modernize the code and make it more user friendly. Amendments to the use districts include eliminating repetition for Christmas tree sales and Community Residences. Each residential zone includes these sections therefore to make the code more concise, these regulations will appear once at the back of the use district section. This will eliminate about 15 pages of text from the code. Regulations for outdoor cafes in the B district will also be condensed into one section therefore reducing repetitive text by 5 pages.

Currently there is language regarding special uses for schools that contradicts practice. Special Uses are granted for specific types of schools, ie elementary versus high school. Current language allows for special uses to transfer even if the school type changes. This should be deleted as a change in school type should typically require an amendment to the Special Use.

Another code change is to allow 49 foot lots to be buildable. Currently the minimum is 50 feet, however there are several areas where platted lots are 49 feet, thus requiring a variation. In addition, if a lot is less than code requirements, unless a majority of lots on the block are also less than code, then a variation is require to be buildable. This code amendment would allow lots to be buildable if there is a house already on the lot.

B. Enright went over the proposed changes to the R-5, R-6 and R-7 district standards for setbacks, heights, Spacing between multi family buildings. These amendments are in line with contemporary construction standards.

Commissioner Jensen asked if in the R-6 district does the suggested 50 foot height work or should it be 55 feet?

B. Enright indicated that 50 feet allows for 4 floors and maybe 5 floors. Also B-5 setbacks are simplified and tied to street frontages where buildings are zero lot line and adjacent to the sidewalk unless across from and R district where setbacks are required.

Also recommended is an amendment to the Hickory Kensington Overlay Zone to allow for an increase in density just the B-2 zoned property as part of the Overlay Zone. Developers will have to build a new street which reduces the land and thus unit counts. The Overlay Zone didn't account for loss of land for the new Campbell Street.

Regarding fences, staff recommends an increase in height from 5 to 6 feet in response to feedback from residents. Other communities surveyed allow 6 feet in height as standard. Also recommended are solid fences to reflect on new fence styles and prefabricated fences.

Robin Ward indicated that the changes to the Non conforming section are for clarification as the language is vague in some areas. This language is more clear but does not change the intent.

B. Enright indicated that staff is still reviewing the parking section related to the collective provision for parking as a separate item after more research is conducted; recommended now are school parking revisions to reflect actual demand as most schools seek large paring variations. The proposed code more accurately reflects the real demand.

Commissioner Jensen stated that the school parking requirement proposal was a great change to code for school parking. Ivy Hill Hotel was an example where the collective provision was not realistic. Our code should not double count space within a building. If a building can be utilized simultaneously for various uses then it makes sense to use the collective provision.

B. Enright indicated that he and Robin are refining the hardship criteria for variations. We provided the LaSalle case factors and examples from other communities.

Commissioner Jensen applauded staff for looking at this as the standards are vague. One example is establishing a reasonable return on the use of property. This is a very difficult provision to demonstrate, especially for non profit entities like schools. He is hopful that we can write sensible standards to evaluate variations.

B. Enright indicated that one criteria is the length of time property is vacant.

Commissioner Dawson agreed that this is a standard the Plan Commission often reviews as part of a variation. It is a clear standard and east to evaluate.

R. Ward indicated that the LaSalle factors are pretty clear so we will use those as a guide but simplify.

Commissioner Dawson has concerns with standards regarding impacts on home values. We often hear from homeowners that their values will be impacted. Any standard regarding values need to be clear.

Commissioner Jensen stated that we evaluate the impact of a use on surrounding properties, but the LaSalle case looks at the impact of the Ordinance on the use of land as well.

Commissioner Dawson liked the example from one community where it provided the criteria and then guidance was provided. She found this example to be the most flexible.

The Ordinance Review Committee concurred with the recommendations and agreed that the amendments should move forward to Plan Commission for a public hearing.

The meeting adjourned at 7.25pm.

Ordinance Review Committee
Bill Enright, Recorder

Summary: *The current definition is outdated and does not address new types of amusement facilities. A new definition below addresses these uses as either a Special Use (5,000 sf and over) or permitted if less than 5,000 sf.*

Section 3.1 Definitions

~~**Arcade,**~~ **Amusement** ~~**/Internet Computer**~~ Facility. ~~An establishment devoted to the use of amusement devices or internet computers. An arcade is considered Large is there are more than ten amusement devices or internet computers. An arcade is considered Small is there are ten or less amusement devices or internet computers~~ A facility that provides indoor activities for kids or adults including video arcades, games, or other recreational type amusements such as play equipment, trapolines, laser tag, etc. Large facilities are 5,000 square feet or larger; Small facilities are less than 5,000 square feet

Section 5.5-1 Permitted Use Table.	B-2	B-3
~~Arcade,~~ Amusement ~~/Internet Computer~~ Facility, Large	s	s
~~Arcade,~~ Amusement ~~/Internet Computer~~ Facility, Small	p	p

Section 28-5 Use Districts

Summary: *Currently all 8 residential zoning districts and the Institutional district include regulations for Administrative Occupancy Requirements for Community Residences. Staff recommends condensing this in one section so that these requirements are not listed for each district. Therefore the standards are still in code but only once at the end of Section 5 Use Districts. The consolidated section will include a listing of which zoning districts are applicable.*

In addition the sale of Christmas tress are regulated in the 4 single family districts. Again listing these same requirements 4 times in code is repetitive and therefore will be listed once at the end of Section 5.

The commercial B districts each list requirements for outdoor eating cafes. This too will be consolidated into one section at the end of Section 5.

****

Summary: *Staff recommends deleting the following from the 7 residential zoning districts and Institutional district "Permitted Uses: Additional Requirements" section as this section could potentially contradict an approved Special Use for a school. The verbiage below allows for example a high school (or even a middle or elementary school) to convert to a school for adults or a college without amending the Special Use so long as parking requirements are met.*

"A special use permit for any type of school shall be restricted to the specific category of school to be established. No change in the type or category of school shall be permitted without granting of an amendment to the special use permit of a new special use in accordance with the procedures set forth in Section 8. Nothing herein contained shall prohibit a school building from being used, for continuing education for adults, university and college courses, staff development programs and unemployed adult training programs provided that its primary function shall be for that category of school designated for special use purposes, and furthermore that the special uses shall not exceed the parking facilities of the institution."

****

Summary: *There are numerous lots that were platted at 49 feet wide and therefore require a variation per the section below. This amendment will allow for lots 49 feet wide to be buildable if the other conditions of this section are met. Also, the new section "b" will allow smaller lots to be buildable if there is an existing principal residence already on the lot. Currently if a lot has a home but does not meet the conditions in "a" then they need a variation to build and addition or a teardown for a new home.*

Section 28-5.1-3 One Family Dwelling District (R-3)

5.1-3.4 Minimum Lot Size.

a. In an R-3 District, the Director of Building may issue a building permit for the erection of a single family residence on any parcel of land which does not meet the minimum lot requirements of width or area or both of the district, if such parcel fronts on a street which has a majority of the developed lots that both front on said street and are contained between two adjacent streets which intersect with said street (or in lieu of a second intersecting street, a public park, cemetery, railroad right of way, cul de sac, waterway or a corporate boundary line of the Village) that are either less than the minimum area or width, or both required by the district, provided that no permit shall be issued pursuant hereto for any parcel containing less than 6,250 square feet and a frontage less than ~~50~~ 49 feet.

b. If there is an existing principal residence on a parcel, Section "a" above is not applicable and the parcel shall be buildable and permits may be issued for either a new residence or additions to the existing residence.

****

Summary: *This district allows attached dwellings such as duplexes and single family as well. The code for side yards should reflect the standard for other single family districts, which is 10% of lot width.*

Section 28-5.1-4 Two Family Dwelling District (R-4)

5.1-4.5 Required Minimum Yard: Side Yard ~~15%~~ 10% of lot width.

****

Summary: *Increases height from 25 feet to 35 feet to reflect current construction preferences. This zoning district is primarily townhome type development. Also, the code requires various spacing between buildings based on the type of rooms for which there are window openings. This is antiquated and a simple 25 foot spacing standard between buildings is recommended.*

5.1-5 Multiple Family Dwelling District (R-5)

5.1-5.7 Maximum Building Height: ~~25~~ 35 ft. exclusive of stair heads and mechanical equipment facilities ~~with overall height not to exceed 30 ft. above the natural grade~~.

5.1-5.3 Minimum Lot Size (Density);

5.1-5.9 Spacing Between Multi Family Buildings~~, Including Court Standards. The following standards shall apply for~~: shall be no less than 25 feet for principal buildings.

~~a. Between the opposing walls of outer and inner courts. Inner courts are not permitted.~~

~~b. When two or more buildings which contain attached dwelling units or multi family dwelling units are located on the same zoning lot.~~

~~c. When the windows of a living unit in a multi family or attached single family building are opposite an accessory building.~~

~~5.1-5.10 Spacing Standards~~

~~Conditions~~	~~Minimum Distance between Opposing Walls~~
~~a. If either or both walls contains a living room window~~	~~50 feet~~

b. If either or both walls contains a bedroom window 30 feet
c. Both walls contain windows of other rooms 24 feet
d. When there are no windows in either of opposing walls 12 feet
e. If either or both walls contains windows of other rooms 15 feet

5.1 5.11 Additional Court Standards projections in Outer Courts. Projections in outer courts shall not exceed five feet.

****

Summary: *Increases height from 40 feet to 50 feet to reflect current construction preferences. This zoning district is primarily townhome or multi floor type development. Also, the code requires various spacing between buildings based on the type of rooms for which there are window openings. This is antiquated and a simple 25 foot spacing standard between buildings is recommended. New setback standards are recommended as well that establish the setback irregardless of height.*

5.1-6 Multiple Family Dwelling District (R-6)

5.1-6.6 Maximum Building Height: 40 50 ft. exclusive of elevators, penthouses, stair heads and mechanical equipment.

5.1-6.3 Minimum Lot Size (Density);

5.1-6.8 Spacing Between Multi Family Buildings, Including Court Standards. The following standards shall apply for: shall be no less than 25 feet for principal buildings.

a. Between the opposing walls of outer and inner courts. Inner courts are not permitted.

b. When two or more buildings which contain attached dwelling units or multi family dwelling units are located on the same zoning lot.

c. When the windows of a living unit in a multi family or attached single family building are opposite an accessory building.

5.1-6.9 Spacing Standards

Conditions Minimum Distance between Opposing Walls

f. If either or both walls contains a living room window 50 feet
g. If either or both walls contains a bedroom window 30 feet
h. Both walls contain windows of other rooms 24 feet
i. When there are no windows in either of opposing walls 12 feet
j. If either or both walls contains windows of other rooms 15 feet

5.1-6.10 Additional Court Standards projections in Outer Courts. Projections in outer courts shall not exceed five feet.

5.1-6.4.1 Required Minimum Yards:

Front Yard: 25 feet plus 1 foot for each foot or fraction thereof by which building height exceeds 25 feet.

Side Yard: 10% of lot width ~~plus 1 foot for each foot or fraction thereof which exceeds a building height of 25 feet~~. Subdivisions created after January 1, 2003 shall provide a minimum side yard of seven feet.

Exterior Side Yard: On corner lots, there shall be maintained a side yard of not less than 20 feet on the side adjacent to the street which intersects the street upon which the building maintains frontage, and in the case of a reversed corner lot, there shall be maintained a setback from the side street of not less than 50% of the front yard required on the lots in the rear of such corner lots, but such yard need not exceed 20 feet. No accessory building on said reversed corner lot shall project beyond the front yard required on the adjacent lot to the rear, nor be located nearer than 5 feet to the side lot line of said adjacent.

Rear Yard: 30 feet ~~plus 1 foot for each foot or fraction thereof which exceeds a building height of 25 feet.~~

****

Summary: *Maintains height at 60 feet (however the height requirement needs to be added into the code section as it only appears in section 5.3 Table of Height). This zoning district is primarily multi floor type development. Also, the code requires various spacing between buildings based on the type of rooms for which there are window openings. This is antiquated and a simple 25 foot spacing standard between buildings is recommended. New setback standards are recommended as well that establish the setback irregardless of height. Density will need to be further evaluated in order to determine if any changes are recommended.*

5.1-7 Multiple Family Dwelling District (R-7)

5.1-7.8 Maximum Building Height: 60 ft. exclusive of elevators, penthouses, stair heads and mechanical equipment.

5.1-7.4 Minimum Lot Size (Density):

Multiple Family:

2 bedroom or more: 900 sq ft per dwelling unit

1 bedroom or less: 600 sq ft per dwelling unit

5.1-7.9 Spacing Between Multi Family Buildings~~, Including Court Standards. The following standards shall apply for~~: shall be no less than 25 feet for principal buildings.

~~a. Between the opposing walls of outer and inner courts. Inner courts are not permitted.~~

~~b. When two or more buildings which contain attached dwelling units or multi family dwelling units are located on the same zoning lot.~~

~~c. When the windows of a living unit in a multi family or attached single family building are opposite an accessory building.~~

~~5.1-7.10 Spacing Standards~~

~~Conditions Minimum Distance between Opposing Walls~~

~~k. If either or both walls contains a living room window 50 feet~~
~~l. If either or both walls contains a bedroom window 30 feet~~
~~m. Both walls contain windows of other rooms 24 feet~~
~~n. When there are no windows in either of opposing walls 12 feet~~
~~o. If either or both walls contains windows of other rooms 15 feet~~

~~5.1-7.11 Additional Court Standards projections in Outer Courts. Projections in outer courts shall not exceed five feet~~.

5.1-7.6 Required Minimum Yards:

Front Yard: 25 feet ~~plus 1 foot for each foot or fraction thereof by which building height exceeds 40 feet~~.

Side Yard: 10% of lot width ~~plus 1 foot for each foot or fraction thereof which exceeds a building height of 40 feet~~.

Exterior Side Yard: On corner lots, there shall be maintained a side yard of not less than 20 feet on the side adjacent to the street which intersects the street upon which the building maintains frontage, and in the case of a reversed corner lot, there shall be maintained a setback from the side street of not less than 50% of the front yard required on the lots in the rear of such corner lots, but such yard need not exceed 20 feet. No accessory building on said reversed corner lot shall project beyond the front yard required on the adjacent lot to the rear, nor be located nearer than 5 ft to side lot line of adjacent lots.

5.1-7.7 Maximum Building Lot Coverage: ~~45%~~ 55% for new construction.

****

Summary: *Clarifies but does not change density. Current code is poorly written.*

5.1-8 Institutional District. The Institutional District shall be reserved for institutional non residential and institutional residential uses as ~~described in Definition Section 3.2-111 and 3.2-112 and~~ specified in Permitted Use Table Section 5.~~4~~5-1. Any development in Institutional "I" District shall be considered in accordance with Planned Unit Development requirements as set forth in Section 9.

5.1-8.4 Minimum Lot Size (Density):

~~Efficiency 18 units per Dwelling Unit – 2,400 sq ft~~

One Bedroom and less ~~18 units per Dwelling Unit –~~ 2,400 sq ft per dwelling unit

Two Bedroom ~~18 units per Dwelling Unit –~~ 2,400 sq ft per dwelling unit

Three Bedroom ~~16 units per Dwelling Unit –~~ 2,700 sq ft per dwelling unit

~~*3 bedroom dwellings cannot exceed 10% of total number of dwellings~~.

****

Summary: *Amends setbacks for the downtown district to reflect desired building forms. Allows for zero lot line for all street frontages unless that frontage is across from R-3 One Family. Also allows for zero lot line along the sides and rear of buildings except if those lot lines are abutting a residential district such as R-3, R-6, R-7. Thus the building codes will dictate separation requirements along lot lines where buildings*

abut. This is often determined by whether or not there are windows. Also each B-5 development is subject to a Planned Unit Development, in which case additional setbacks can be required depending on the parcel and its location.

5.1-14 Downtown (B-5) District

5.1-14.6 Required Minimum Yards

~~Front Yard: None~~

~~Side Yard: For buildings with dwelling units, open space shall be provided as either:~~

1. ~~One side yard or two side yards;~~
2. ~~Outer Court;~~
3. ~~Combination of side yards and court.~~

~~The total width of all open space shall not be less than 30 feet or less than 30% of the average width of the lot whichever is greater.~~

~~In the case of walls having window openings, there shall be a minimum of 25 feet of open space adjacent to a lot line of another building on the same zoning lot. An additional one half foot of open space shall be provided for each foot or fraction thereof for which building height exceeds 90 feet.~~

~~In the case of courts, the area of courts shall not be less than the area which would otherwise be required for the side yards, provided that in no case shall the depth of the court be less than the required width of the court.~~

~~Rear Yard: A rear yard shall be provided for residential uses located above the first floor, such yard shall not be less than 30 feet depth~~.

Public Street Frontages: None, except where 50% or more of property directly across the street frontage is zoned R-3, a 20 foot setback is required along that frontage.

Interior Yards / Lot Lines: 25 feet if abutting residential zoning districts. Additional setbacks may be required subject to the Planned Unit Development and building code requirements.

****

Summary: *The M1, M-2, and PL Public Land Zoning districts all include industrial performance standards which address noise, smoke, odors, vibrations, etc. These standards are also included in Building Codes of the Village. Staff recommends deleting these standards from the zoning code as they are regulated in the Building Code and there is no need for repetition.*

5.1-17.2 M-1 District Industrial Performance Standards

5.1-18.2 M-2 District Industrial Performance Standards

5.1-19.2 PL District Industrial Performance Standards

****

Summary: *Modify density to better align with Overlay Zone standards. Allows for density reflecting bulk standards for the B-2 zoned properties within this Overlay zone only. This impacts development of two blocks along the north side of Kensington between Douglas and Beverly.*

5.1-23 Overlay Zoning District – Hickory Kensington Area.

e. Minimum Lot Size – Multiple Family	B-2	1 bedroom or less	~~600~~ 450 sq ft per unit
		2 bedroom	~~900~~ 750 sq ft per unit

****

Summary: *Correction to misprint.*

Section 28-5.1-17 Research, Development and Light Manufacturing District (M-1).

5.1-17.10 Maximum Building Lot Coverage: ~~200%~~ None

****

Summary: *Staff recommends deleting the Table of Development Standards as they are repetitive as these standards are listed within each zoning district.*

Section 28-5.3 Development Standards

~~**5.3-1.1 Table of Minimum Lot Size and Minimum Lot Width**~~

****

Summary: *This section has a regulation for signage which is already regulated in Chapter 30 Signs.*

Section 5.1-9 Office Transitional (OT)

5.1-9.2 Conditions of Use

~~c. Only one freestanding sign shall be permitted for each Planned Unit Development. The size of the sign shall be maximum twenty four square feet and not higher than seven feet above the grade as indicated in the Planned Unit Development. Signs must comply with chapter 30 of the Municipal Code. One nameplate per establishment shall also be permitted~~.

Section 28-6 General Provisions

Summary: *This amendment responds to comments from homeowners who prefer 6 foot tall privacy fences rather than 5 feet. More fences are prefabricated composit fences, which are often solid fences with no openings. This amendment would allow solid fences. These amendments would apply to the side and rear yards only.*

Also, on corner lots the setback for fences in the rear yard abutting the street is half the distance between the house and property line or 5 feet, whichever is greater. If a house is setback 20 feet, then the fence is setback 10 feet, which impacts the rear yard size. This amendment would simply require a five foot setback for all corner lots.

Section 28-6.13 Fence Permit Required

6.13-3 Location of Fences.

a. Front Yard. Fences shall not exceed a height of 36 inches and shall not contain any sharp points and must be an open fence; and,

b. Side and Rear Yards. Fences ~~must~~ can be solid, open or semi open and shall not exceed a height of ~~five~~ six feet ~~with~~ subject to the following ~~exceptions~~:

~~1. When parallel to a major or secondary arterial road, fences shall not exceed a height of six feet and may be a solid fence;~~

~~2. When between certain zoning districts and where otherwise specified in Chapter 28;~~

~~3~~ 1. Through Lots. On through lots that are adjacent to non through lots, fences in yards with road frontages may not exceed 36 inches and shall not contain any sharp points and must be an open fence.

~~4~~ 2. Corner Lot. That portion of the side and rear yard with street frontages may have solid, open or semi open fences erected no closer than five feet ~~or half the distance from the building~~ to the perimeter of the lot~~, whichever is greater~~. Landscaping, a minimum of three foot high and spaced a maximum of 48 inches on center, must be provided along the street side of the fence. The perimeter of the lot is defined as the lot line, sidewalk or street pavement, whichever is closest to the building. In each instance where the building is closer than five feet to the perimeter of the lot, no fence shall extend beyond the line of the principal building. An open fence not exceeding a height of 36 inches, shall be allowed anywhere within the rear yard and shall not contain any sharp points; and,

~~5~~ 3. Visibilty. Within 12 feet of intersecting property lines at streets, walks, driveways, bike paths, or walking paths, fences shall not exceed 36 inches and shall not contain any sharp points and must be an open fence.

c. Exterior Side Yards. Fences shall be allowed in an Exterior Side Yard with the following limitations:

1. An solid, open or semi open fence, not exceeding a height of ~~five~~ six feet shall be allowed no closer than five feet ~~or half the distance from the building~~ to the perimeter of the lot~~, whichever is greater~~. Landscaping, a minimum of three feet high and spaced a maximum of 48 inches on center, must be provided along the street side of the fence. The perimeter of the lot is defined as the lot line, sidewalk or

street pavement, whichever is closest to the building. In each instance where the building is closer than five feet to the perimeter of the lot, no fence shall extend beyond the line of the principal building; and,

2. An open fence, not exceeding a height of 36 inches shall be allowed within the Exterior Side Yard and shall not contain any sharp points.

~~3. When an Exterior Side Yard is parallel to a major or secondary arterial road, a solid fence not exceeding a height of six feet, shall be allowed.~~

****

Summary: *These items are common and adding to the permitted obstructions table will clarify how they are evaluated in terms of where allowed. Also trends are for a slightly larger front entryway to homes as the current 4 feet by 8 feet is tight.*

Section 28-6.6-5.1 Table of Permitted Obstructions

Add "Generators", "Outdoor living/kitchen space", "Fire Pits", "Sport Courts (fences for Sport Courts to comply with fence regulations)" to list as permitted in Rear Yards only.

"Entryway/Portico" increase size allowed from ~~4 feet by 8 feet~~ to 5 feet by 10 feet.

****

Summary*: Item "a" in this section establishes a setback for detached garages that is already in the building code. Depending on material used this separation can be less via the building code but there is no flexibility in zoning. This should simply be eliminated from zoning and let the building code regulate*.

Section 28-6.5-7 Maximum Size of Accessory Structures.

~~a.~~ ~~iv. A detached garage shall be at least ten feet from the principal structure.~~

Section 28-7 - Non-Conforming Use And Buildings.

7.1 Continuation of Non-Conforming Uses and Building. A lawfully established use, building or structure which becomes non-conforming with respect to this Code on the effective date thereof or as a result of any subsequent amendment ~~thereto,~~ may be continued except as otherwise provided in this Section.

~~A use illegal at the time of the adoption of the ordinance shall not become a non-conforming use by reason of such adoption, but shall remain an illegal use, except where such illegal use is in a zoning district permitting such use.~~

7.2 Change of Non-Conforming Use. The non-conforming use of any building, structure, or portion thereof, which is designed or intended for a use not permitted in the district in which it is located, may not be changed to another non-conforming use.

7.3 Discontinuance of Non-Conforming Use.

~~**7.3-1 Use of Non-Conforming Building.**~~ When the non-conforming use of a building, structure, or portion thereof, which is designed or intended for a use not permitted in the district in which it is located, is discontinued for a continuous period of one year, such building structure, or portion thereof shall thereafter be occupied only by a use which conforms to the use regulations of the district in which it is located.

~~**7.3-2 Other Non-Conforming Uses.** Except for those uses classified and regulated in Subsection 7.3-1 of this Section 7.3, a~~Any non-conforming use which is discontinued for a continuous period of one year shall not thereafter be resumed, and the premises shall thereafter be resumed, and the premises shall thereafter be occupied only by a use which conforms to the use regulations of the district in which it is located.

7.4 Enlargements of Non-Conforming Uses and Buildings.

~~**7.4-1 Non-Conforming Uses.**~~ There shall be no ~~extension or~~ enlargement of a non-conforming use.

~~**7.4-2 Non-Conforming Buildings.**~~ When a building, structure, or portion thereof, is designed or intended for a use not permitted in the district in which it is located, it shall not be enlarged, added to, or structurally altered in any manner except as may be required by law, unless the ~~said~~ building or structure and use thereof shall be made to conform to the use regulations of the district in which it is located.

7.5 Repairs and Alterations of Non-Conforming Buildings and Structures. Repairs and alterations necessary in the ordinary course and operation of a building or structure may be made to a non-conforming building or structure, except that no structural alterations shall be permitted, unless such structural change is for the purpose of conforming with the use district. Alterations designed to increase the intensity of a non-conforming uses are prohibited.

7.6 Damage or Destruction. A building or structure which contains a non-conforming use or is designed or intended for a use not permitted in the district in which it is located and which is damaged or destroyed by any means to the extent of 50% of its replacement value shall not ~~thereafter~~ be restored unless ~~said~~ the building or structure and the use thereof shall conform to all the regulations of the district in which it is located.

7.7 Moving. No non-conforming building or structure shall be moved in whole or in part to any other location on the lot, except as required by law, unless every portion of such building or structure which is moved has the use thereof made to conform to all the regulations of the district in which it is located.

7.8 Termination of Non-Conforming Uses, Buildings, and Structure.

7.8-1 Non-Conforming Buildings or Structures. Any non-conforming building, structure, or portion thereof shall be demolished, removed or remodeled and converted for a use permitted in the zoning district after the termination of the respective periods of time set out hereinafter, which periods are hereby established as a reasonable amortization of the normal, useful life of each class of building and type of construction above the foundation walls or piers.

7.8-1.1 Fireproof construction of non-combustible materials consisting of exterior walls of solid brick, stone, reinforced concrete, or insulated metal panels between fireproofed steel and with interior structural members of reinforced concrete or fireproofed steel - 30 years from the date the building, structure, or portion thereof, became non-conforming with respect to this code as hereinbefore indicated, or 40 years from the date of issuance of the building permit for the construction of either the whole structure or the initial building or initial part thereof, whichever period shall terminate last.

7.8-1.2 Fire resistant shell construction consisting of exterior walls of solid brick, stone, reinforced concrete or other masonry units with structural members of unprotected steel, timber or wood joist construction 20 years from the date the building, structure, or portion thereof, became non-conforming with respect to this code as hereinbefore indicated, or 30 years from the date of issuance of the building permit for the construction of either the whole structure or the initial building or initial part thereof, whichever period shall terminate last.

7.8-1.3 Frame type construction of exterior walls of wood or timber frame construction irrespective of the type of exterior surfaces and all other structures not qualifying under paragraphs 7.8-1.1 or 7.8-1.2 and all physical improvements to land, all or substantially all of which are below or at ground level ten years from the date of the building, structure, or portion thereof became non-conforming with respect to this code as hereinbefore indicated, or 20 years from the date of issuance of the building permit for the construction of either the whole structure or the initial building or initial part thereof, whichever period shall terminate last.

If, prior to the adoption of this ~~code~~ Section, substantially all of a non-conforming building has been reconstructed, rebuilt, or structurally altered, or if an addition at least equal in size or valuation has been structurally attached thereto, then for the purposes of determining the normal useful life of such building, the date of issuance of the building permit therefore shall be taken to

be the date of issuance of the building permit for such reconstruction, alteration, or addition.

7.8-2 Non-Conforming Use of Conforming Building. In a Residence District, the non-conforming business or manufacturing use of a building or portion thereof which is designed or intended for a residential purpose, or for a residential accessory purpose, shall be entirely discontinued ~~and shall thereafter cease operatio~~n on or before five years from the date the use became non-conforming with respect to this ~~code~~ Section and not be reestablished.

7.8-3 Non-Conforming Use of Land.

7.8-3.1 The non-conforming use of land in a Residence District shall be terminated not later than two years from the date the use became non-conforming with respect to this ~~code~~ Section in each of the following instances:

a. Where no buildings or structures are employed in connection with such use or where the only buildings, structures, or other physical improvements employed are accessory or incidental to such use or have an assessed valuation of less than $5,000 or

b. Where such use is maintained in connection with a conforming building or structure; except that inadequate off-street parking facilities accessory to a building or structure located in the Residence District and occupied by a use conforming with the requirements of the district may be continued for as long a time as the premises are used for a permitted use.

7.8-3.2 A non-conforming use of land which is accessory to the non-conforming use of a building or structure shall be discontinued on the same date the non-conforming use of the building or structure is discontinued.

~~**7.8 3.3** The sale of merchandise in the open, when not permitted by the provisions of this ordinance shall be discontinued immediately.~~

7.8-3.4~~**3**~~ A non-conforming use of land which has in connection therewith physical improvements all or substantially all of which are underground or at ground level shall be deemed to be a non-conforming structure, and shall be subject to the applicable provisions of ~~Sub-section~~ Section 7.8.

7.8-4 Exempted Buildings, Structures and Uses.

7.8-4.1 No lawfully established building, structure, or use shall be subject to the termination provisions of this ~~subsection 7.8~~ Section solely for reasons of being non-conforming with respect to the standards prescribed in this ~~Code~~ Chapter for any of the following: Floor Area Ratio, Yards - Front, Side, Rear, or Transitional; Off-Street Parking or Loading; Lot Area, Building Height and Gross Floor Area.

7.8-4.2 No non-conforming residential use or building lawfully established in a residential district shall be subject to the termination provisions of this ~~subsection 7.8~~Section.

~~**Section 28-10 – Signs.**~~

~~**For information on Signs see Chapter 30 of the Municipal Code of the Village of Arlington Heights.**~~

Section 28-~~11~~10 - Off Street Parking and Loading.

~~**11.1 General Provisions - Parking and Loading.**~~

~~**11.1-1 Scope of Regulations.**~~ The off-street parking and loading provisions of this ~~Code~~ Section shall apply as follows:

~~**11.1-1.1**~~**10.1** For all buildings and structures erected and all uses of land established after the effective date of this ~~Ordinance~~ Section, accessory parking and loading facilities shall be provided as required by the regulations of the districts in which such buildings or uses are located. However, where a building permit has been issued prior to the effective date of this ~~Ordinance~~Section, and provided that construction is begun within six months of such effective date and diligently ~~prosecuted~~ pursued to completion, parking and loading facilities as required hereinafter need not be provided.

11.1-1.2 When the intensity of use of any building, structure, or premises ~~shall~~ is planned to be increased through addition of units, gross floor area, seating capacity, or other units of measurement specified herein for required parking or loading facilities, parking and loading facilities as required herein shall be provided for such increase in intensity of use.

11.1-1.3 Whenever the existing use of a building or structure ~~shall hereafter be~~ is changed to a new use, parking or loading facilities shall be provided as required for such new use. However, if ~~said~~ the building or structure was erected prior to the effective date of this ~~Ordinance~~Section, additional parking or loading facilities are ~~mandatory~~ required only in the amount by which the requirements for the new use would exceed those for the existing use if the latter were subject to the parking and loading provisions of this ~~Ordinance~~Section.

~~**11.1-2 Existing Parking and Loading Facilities.** Accessory off-street parking or loading facilities which are located on the same lot as the building or use served and which were in existence on the effective date of this Ordinance or were provided voluntarily after such effective date, shall not hereafter be reduced below, or if already less than, shall not further be reduced below the requirements of this ordinance for a similar new building or use~~.

~~**11.1-3 Permissive Parking and Loading Facilities.** Nothing in this ordinance shall be deemed to prevent the voluntary establishment of off-street parking or loading facilities to serve any existing use of land or buildings provided that all regulations herein governing the location, design, improvement, and operation of such facilities are adhered to.~~

~~**11.1-4 Damage or Destruction.** For any conforming building or use which is in existence on the effective date of this ordinance, which subsequently thereto is damaged or destroyed by fire, collapse, explosion, or other cause, and which is re-constructed, re-established or repaired, off-street parking or loading facilities need not be provided, except that parking or loading facilities equivalent to any maintained at the time of such damage or destruction shall be restored or continued in operation. However, in no case shall it be necessary to restore or maintain parking or loading facilities in excess of those required by this ordinance for equivalent new uses or~~

~~construction.~~

11.1-5 Control of Off-Site Parking Facilities. ~~Where required parking facilities are provided on land other than the zoning lot on which the building or use served by such facilities is located, they shall be and remain in the same possession or ownership as to the zoning lot occupied by the building or use to which the parking facilities are accessory~~. In a residential district, no zoning certificate for ~~such~~ off-site facilities shall be issued until the Plan Commission has conducted a hearing for a special use in accordance with Section 8. No off-site parking shall be located in a residential zoning district unless accessory to a use permitted in that district.

11.1-6 Submission of ~~Plot~~ Parking Plan. Any application for a building permit, or for a certificate of occupancy where no building permit is required, shall include a ~~plot~~ parking plan drawn to scale and fully dimensioned showing any parking or loading facilities to be provided in compliance with this ~~Ordinance~~Section.

11.2 Additional Regulations – Parking.

11.2-1 Except as otherwise indicated, required accessory off-street parking facilities provided for uses listed hereinafter shall be solely for the parking of ~~passenger automobiles~~ vehicles of patrons, occupants (or their guest), or employees of such uses.

11.2-2 Floor Area. See Section ~~3.2-90~~ 28-3(48) for floor area measurement requirements.

11.2-3 Employees. Parking spaces required on an employee basis shall be based on the maximum number of full or part-time employees on duty or residing, or both on the premises at any one time.

11.2-4 Capacity. Parking spaces required on the basis of capacity shall be based on the capacity as determined by current Village Building and Fire Codes.

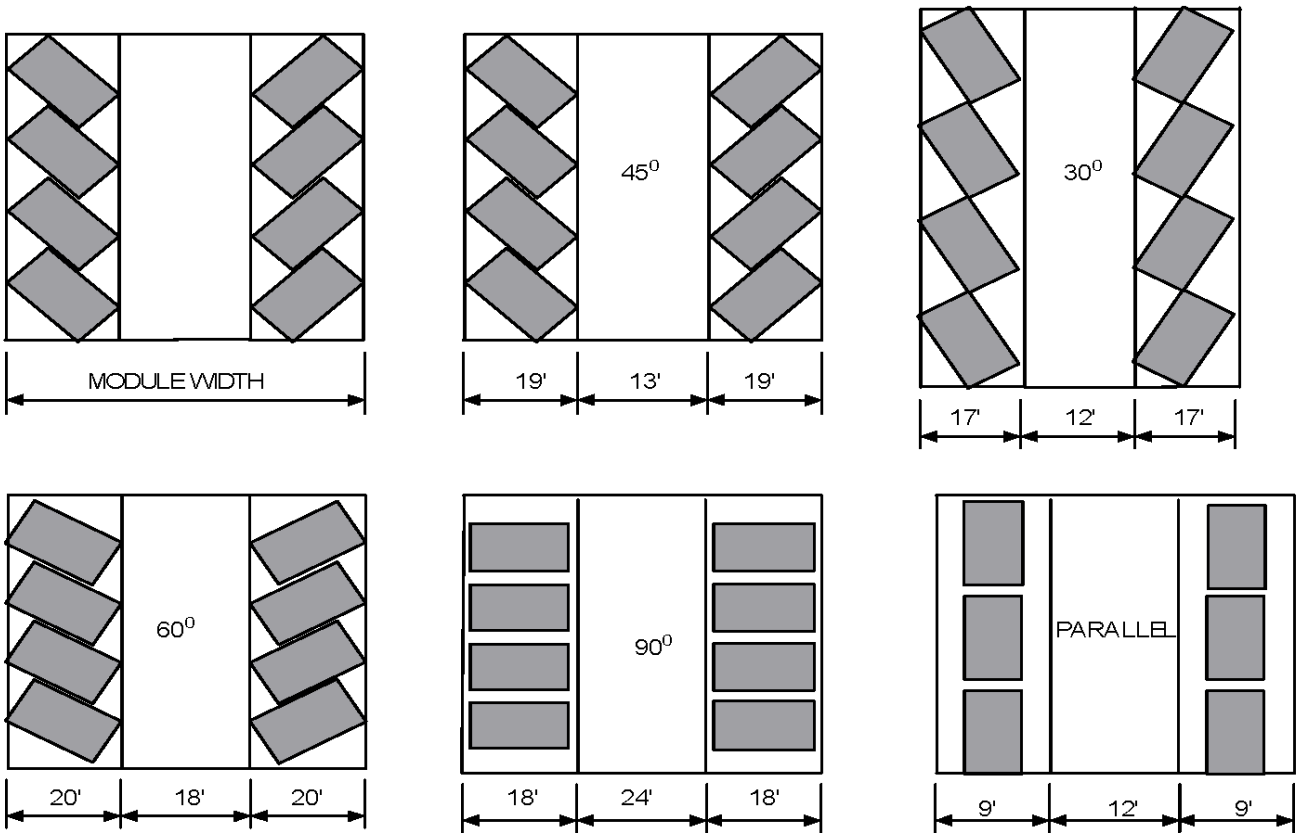
11.2-5 Computation. When determination of the number of off-street parking spaces required by this ~~Ordinance~~Section results in a requirement of a fractional space, any fraction of one-half or less may be disregarded, while a fraction in excess of one-half shall be counted as one parking space.

11.2-6 Collective Provision. Off-street parking facilities for separate uses may be provided collectively if the total number of spaces so provided collectively is not less than the sum of the separate requirements for each such use and provided that all regulations governing location of accessory parking spaces in relation to the use served are adhered to. Further, no parking space or portion thereof shall serve as a required space for more than one use unless otherwise authorized by the Plan Commission in accordance with Section 11.1-5.

11.2-7 Size. A required off-street parking space shall be at least nine feet in width and at least eighteen feet in length, exclusive of access drives or aisles, ramps, columns, or office or work areas. The length of a parking space can be reduced to sixteen and one half feet including wheel stop if additional space of one and one half feet in length is provided for car overhang. At least three feet, excluding any car overhang space, must be provided for any planting screen. The parking shall have a vertical clearance of at least seven feet.

11.2-8 Horizontal widths for parking rows, aisles, and modules shall be provided at widths no less than listed in the following table:

	Parallel	30	One Way 45	60	Two Way 90
Single Row Parking	**9'**	**17'**	**19'**	**20'**	**18'**
Driving aisle	**12'**	**12'**	**13'**	**18'**	**24'**
Minimum width of module	**21'**	**29'**	**32'**	**38'**	**42'**
Two row parking	**18'**	**34'**	**38'**	**40'**	**36'**
Driving aisle	**12'**	**12'**	**13'**	**18'**	**24'**
Minimum width of module	**30'**	**46'**	**51'**	**58'**	**60'**



Certain required off-street parking spaces mandated by this Section may be satisfied by spaces eight and one-half feet in width by 18 feet in length if the Petitioner provides an analysis that justifies the narrower spaces to the satisfaction of ~~under all the following conditions as determined by~~ the Director of Engineering. Spaces predominantly patronized by rapid-turnover parkers do not quality for the narrower width.

~~a. The narrower spaces must be justified by an analysis provided at petitioner's expense.~~

~~b. Spaces predominantly patronized by rapid-turnover parkers do not quality for the narrower width.~~

11.2-9 Access. Each required off-street space shall open directly upon an aisle or driveway of such width and design as to provide safe and efficient means of vehicular access to such parking

space. All off-street parking facilities shall be designed with appropriate means of vehicular access to a street or alley in a manner which will least interfere with traffic movement.

No driveway across public property or requiring a curb cut shall exceed a width of 25 feet, except when, in the opinion of the Director of Engineering, safe and efficient design principals require an increase, in which case the Director of Engineering may authorize a maximum driveway width of 36 feet. Furthermore, no access from a street or alley to off-street parking facilities shall be located less than 35 feet from the intersection of the right-of-way of two intersecting streets.

11.2-10 Handicapped Parking. Parking for the handicapped shall be provided at a size, number and location, as specified by the current Illinois Accessibility Code.

~~**11.2-10.1 Number of Required Spaces***~~

~~TOTAL OFF-STREET PARKING SPACES REQUIRED~~	~~REQUIRED MINIMUM NUMBER OF ACCESSIBLE PARKING SPACES~~
~~1 to 20~~	~~1~~
~~21 to 50~~	~~2~~
~~51 to 75~~	~~3~~
~~76 to 100~~	~~4~~
~~101 to 150~~	~~5~~

~~TOTAL OFF-STREET PARKING SPACES REQUIRED~~	~~REQUIRED MINIMUM NUMBER OF ACCESSIBLE PARKING SPACES~~
~~151 to 200~~	~~6~~
~~201 to 300~~	~~7~~
~~301 to 400~~	~~8~~
~~401 to 500~~	~~9~~
~~501 to 1000~~	~~2 percent of total number~~
~~over 1000~~	~~20 plus 1 for each 100 over 1000~~

~~*All medical facilities shall meet the applicable provisions of the current State of Illinois Accessibility Standards.~~

~~**11.2-10.2 Dimensions of Handicapped Spaces and Access Aisle.** Each parking space shall be at least 16 feet wide and stripped in conformance with the current State of Illinois Accessibility Standards. Adjacent parking spaces shall not share a common access aisle. All access aisles shall blend to a common level with an accessible route and shall be diagonally striped.~~

~~**11.2-10.3 Signage.** Each parking space designated for handicapped persons shall comply with the current Illinois State Statue as amended and meet the requirements of the current U. S. Department of Transportation Standard for the required sign. Signs shall be vertically mounted on a post or a wall at the front of the parking space, no more than 5'-0" from the front of the parking space, and set a minimum of 4'-0", maximum 6'-0" from grade level to the bottom of the sign. In parking structures, handicapped parking signs may be mounted below the tops of spandrels or parapet walls, even though that mounting may be below 4'-0". In addition, each sign designating a parking facility for persons with disabilities shall also exhibit sign specifying the fine, with the amount to be consistent with the Arlington Heights Municipal Code.~~

~~**11.2-10.4** All off-street parking areas in existence on the date of adoption of this ordinance shall install the required identification signs on or before one year from adoption of this ordinance.~~

~~**11.2-10.5 Maintenance of Parking Spaces.** Each handicapped parking space must be kept clear of snow after two inches or more of snowfall. Each space should be kept clear of ice and shall not be used for storage of snow.~~

11.2-11 In Yards.

11.2-11.1 In R-E, R-1, R-2, and R-3 Districts, off-street parking spaces shall be allowed based on the following:

a. Off-street parking spaces may be located in any yards ~~provided that said parking shall be permitted~~ but only on concrete or asphalt surfaces.

b. Except as set forth in subsection c. below, no driveway and/or parking area shall exceed a width of 22 feet.

c. For three car garages, a driveway and/or parking area shall be allowed to be a maximum of 32 feet in width, within 18 feet of the garage's front elevation when, in the opinion of the Director of Engineering, the installation of such driveway will not be detrimental to drainage or alter the character of the area.

d. When the garage is located to the rear of the residence, the side drive shall be a minimum of nine feet wide. Projections (chimneys, awnings, etc.) shall not be allowed to overhang within this measurement.

e. For a zoning lot with a lot width of 70 feet or greater, all driveway pavement must be setback at least three feet from the side or rear lot line (whichever lot line applies).

f. For side-loaded garages (when the garage door(s) face a side lot line), the driveway pavement dimension shall be a minimum of 22 feet from the face of the garage to the edge of the driveway pavement along the side lot line.

Nothing contained herein, however, shall permit ~~that~~ the parking of any vehicle in a portion of yard where such parking would otherwise be prohibited by any provision of ~~this chapter or other section of the~~ Arlington Heights Village Code, nor shall this section be construed to eliminate any requirements for the installation of driveways otherwise imposed by the ~~Arlington Heights Village~~ Code, including specifications for the construction and character of such driveways. Parking upon grass, dirt or other non-hard surface of any vehicle except towed vehicles is prohibited.

11.2-11.2 In "R-4", "R-5", "R-6" and "R-7" and "M-1" off-street parking spaces may be located in any yard except required front yards.

In O-T Office Transitional Districts off-street parking spaces may be located in any required yard.

In Business and M-2 Districts, off-street parking spaces may be located in any required yard.

11.2-12 Design and Maintenance.

11.2-12.1 Open and Enclosed Parking Spaces. Accessory parking spaces located on the same lot occupied by the use served, may be open to the sky or enclosed in a building. Accessory parking spaces located in an "R-5" or "R-7" District elsewhere than on the same lot occupied by the use served shall be open to the sky except when otherwise allowed as a Special Use by the Village.

11.2-12.2 Surfacing and Drainage. All off-street parking areas except those accessory to one-family dwellings, shall be improved with a compacted base, surfaced with asphaltic concrete or some comparable all- weather dustless material of a design and thickness in accordance with prescribed engineering standards, and shall be so graded and drained as to dispose of surface water accumulation by means of a positive storm water drainage system connected directly or indirectly to a public drainage way.

~~**11.2-12.3 Signs.** Accessory signs are permitted in parking areas in accordance with the provisions of Chapter 30 of the Municipal Code.~~

~~**11.2-12.4 Repair and Service.** No motor vehicle repair work of any kind shall be permitted in conjunction with accessory off-street parking facilities provided in a Residence or Business District.~~

11.2-12.5 Lighting.

a. All lighting used to illuminate off-street parking areas shall be shielded or otherwise optically controlled so as to provide glareless illumination in such a manner as not to create a nuisance on adjacent property.

b. All off-street parking areas with lighting shall limit spillage onto adjacent property. Maximum horizontal foot candles as given off by the neighboring property as measured in the following districts shall not exceed:

	Foot Candles	Lux
Single-Family Residential Districts	.1	1.0
Multiple Family Residential Districts	.2	2.0
Business Districts	2.0	21.5
Light Industrial Districts	5.0	53.8
Park, School & Institutional Districts	5.0	53.8

c. All ~~luminaries~~ light poles erected 20-feet to 40-feet above ground level:

1. Shall be flat bottom optically controlled sharp cut-offs, as approved by ~~Village~~ the Director of Engineering;

2. Shall not be installed with diffusing refractors; and

3. Shall maintain a ratio of 3:1 or less of luminaire spacing to luminaire mounting heights.

d. All ~~luminaries~~ light poles erected 0-feet to 20-feet above ground level:

1. Shall be of translucent materials and not transparent materials, as approved by the ~~Village~~ Director of Engineering; and

2. Shall not be installed with diffusing refractors.

e. ~~Luminaries~~ Light Poles shall not be erected higher than 40-feet above ground level.

f. Parking installed for the public benefit by Park Districts, educational and religious institutions shall be exempt from the requirements of (c) (3) of this Section.

g. All present non-conforming off-street parking areas shall be equipped with the lighting required by this section upon the obsolescence or replacement of the existing lighting.

h. Definitions and Terms used in this Section shall be defined by the Illumination Engineering Societies in the current edition of the IES Lighting Handbook.

i. Lighting standards in side and rear yard(s) in districts other than R-E through R-7 are exempt from the requirements of (d) of this Section when said side or rear yard(s) are not adjacent to a residential district or roadway and the lighting standards do not cause glare to vehicular traffic.

11.2-12.6 Curbing. The perimeter of all parking areas providing space for parking five or more vehicles shall be protected in accordance with prescribed engineering standards.

11.2-13 Maximum Number of Spaces. The total number of accessory parking spaces provided for a two-family or multiple-family dwelling or hotel shall not exceed that required by this ~~Ordinance~~Section for such use or for an equivalent new use by more than 50%. The total number of accessory parking spaces for a single-family residential zoning lot shall be six.

11.2-14 Parking of Certain Vehicles in Residential Zoning Districts. The purpose and intent of this Section is to restrict the parking of certain vehicles in residential zoning districts as defined below. No vehicles, other than private passenger vehicles or commercial vehicles subject to the provisions of Section 11.2-14.2, may be parked between the front line of any portion of the building and the street in a residential area for a greater length of time than is required for loading or unloading or for performing services associated with the equipment or materials hauled in commercial vehicles. In no case shall a vehicle, other than a private passenger vehicle or commercial vehicles subject to the provisions of Section 11.2-14.2, be parked between the front line of any portion of the building and the street in a residential area overnight, except as authorized by the Chief of Police as provided elsewhere in this Section.

11.2-14.1 Parking of Recreational Vehicles. Recreational Vehicles (RV) may be parked on a residential zoning lot subject to the following:

a. Front Yard.

1. RVs shall not be parked between the front line of any portion of the building and the street, unless otherwise specifically provided for in this Chapter.

b. Side Yard.

1. No more than two RVs may be parked in a side yard.

2. A single RV may not exceed 20 feet in length and two RVs, if parked-end to-end, may not exceed a total combined length of 20 feet.

3. A single RV may not exceed a height of four feet in height~~, and two RVs stacked shall not exceed a total combined height of four feet~~.

4. Any RV located in an interior side yard shall be parked a minimum of three feet from the side lot line.

5. Any RV located in an interior side yard shall be screened on all sides with a single row of evergreens a minimum of five feet high at time of planting or a semi-open wood fence five feet high.

c. Rear Yard.

1. No more than two RVs shall be parked in a rear yard.

2. A single RV shall not exceed 32 feet in length and two RVs, if parked end-to-end, shall not exceed a total combined length of 32 feet.

3. A single RV shall not exceed a height of 12 feet in height~~ and two RVs stacked shall not exceed a total combined height of 12 feet~~.

4. Any RV located in a rear yard shall be parked a minimum of five feet from the rear lot line and a minimum of three feet from any interior lot line.

5. Any RV located in a rear yard shall be screened on all sides with a single row of evergreens a minimum of five feet high at time of planting or semi-open wood fence five feet high.

d. Exterior Side Yards and Rear Yards Adjacent to a Street or Roadway.

1. No RVs shall be located in an exterior side yard or that portion of a rear yard that is between an adjacent street or roadway and a line extended from the building.

e. Additional Requirements.

1. Not more than two RVs may be parked on any residential zoning lot.

2. At no time shall a parked RV be used for living, sleeping or other purposes. No RV shall be connected to gas, water or sanitary sewer service.

3. Any RV may be parked in a fully enclosed garage unless such parking is specifically prohibited elsewhere in the Code.

4. The owner of an RV shall not park the RV in a manner so as to create a dangerous

or unsafe condition on the lot where parked or to adjacent property. Parking in such fashion that the RV may readily tip or roll shall be considered a dangerous or unsafe condition.

5. The parking surface of an RV in any permitted area shall be a hard surface such as concrete, asphalt or crushed stone.

6. RVs shall not have their wheels removed or be affixed to the ground so as to prevent ready removal of the vehicle.

7. RVs shall not be used as accessory structures in any zoning district.

8. No major automobile repairs, as defined in Section 3 of the Zoning Ordinance, shall be performed on any RV except within a garage or other structure.

9. Temporary parking of RVs for the purpose of loading or unloading shall be permitted for no more than two days within any period of four consecutive days.

11.2-14.2 Parking of Commercial Vehicles. Commercial vehicles may be parked on a residential zoning lot subject to the following:

a. Size/Weight Limitation. No commercial vehicle having a license class designation greater than "B" under the Illinois Vehicle Code shall be parked on a residential zoning lot. This limitation shall not apply to a pick-up style commercial vehicle with the license class designation of "D." All other Class "D" vehicles are prohibited.

b. Location. No commercial vehicle shall be parked on a residential zoning lot unless parked within a private garage. However, a commercial vehicle that meets one of the following criteria is not required to be parked within a private garage:

1. The vehicle has no signage;

2. The vehicle's signage is limited to the identification of the owner or operator affixed, by name or logo, and shall be no larger than 25% of the area of the front door, including glass, on the driver's side. Such identification may appear on not more than two separate portions of the vehicle.

c. Number. Generally, only one commercial vehicle shall be parked on a residential lot. A second commercial vehicle may be parked on a residential lot only if it meets all of the following criteria:

1. The vehicle shall not have a license class designation of "B" or greater under the provisions of the Illinois Vehicle Code; and

2. The vehicle's signage is limited to the identification of the owner or operator affixed, by name or logo, and shall be no larger than 25% of the area of the front door, including glass, on the driver's side. Such identification may appear on not more than two separate portions of the vehicle.

d. Nothing in the provisions of this ~~Ordinance~~Section shall be construed to prohibit trucks

and other service vehicles from being parked on the premises temporarily for purposes of making deliveries or rendering service to the property.

e. The Police Chief, or duly appointed representative, may authorize the parking of commercial vehicles designed for providing emergency services applying the same procedures and restrictions as used for RVs.

11.2-14.3 No inoperable or unlicensed vehicle shall be permitted on any residential property for more than 48 hours unless it is in an enclosed garage.

11.3 Location of Accessory Off-Street Parking Facilities. The location of off-street parking spaces in relation to the use served shall be as prescribed hereinafter. All distances specified shall be walking distances between such parking spaces and a main entrance to the use served.

11.3-1 For Uses in an R-E, R-1, R-2, R-3, or R-4 District. Parking spaces accessory to dwellings shall be located on the same zoning lot as the use served.

11.3-2 For Uses in an R-5, R-6 or R-7 District. All parking spaces shall be within 500 feet of the use served, except that spaces accessory to a multiple-family dwelling or apartment-hotel shall be within 300 feet of the use served. However, no parking spaces accessory to a use in an R-5 or R-7 District shall be located in an R-E, R-1, R-2, R-3 or R-4 District.

11.3-3 For Uses in Business and Manufacturing Districts. All required parking spaces shall be within 1,000 feet of the use served, except for spaces accessory to dwelling units (other than those located in a transient hotel), which shall be within 300 feet of the use served. However, no parking spaces accessory to a use in a Business or Manufacturing District shall be located in a Residence District.

11.4 Schedule of Parking Requirements. Accessory off-street parking spaces for the following uses shall be provided as required herein.

USE	**REQUIREMENTS**
Housing for Elderly	One space for each multi-family dwelling unit. Single family detached and attached dwelling units require two parking spaces per unit.
Dormitories	Two spaces per three residents, plus one space for each staff member.

11.4-1 RESIDENTIAL USES

USE	**REQUIREMENTS**
Multiple Family Dwellings in the R-5 and R-6 Zoning Districts	Two spaces for each dwelling unit
Multiple Family Dwellings in the R-7 Zoning District	One and one-half spaces for each dwelling unit

One & Two Family Dwellings	Two spaces for each dwelling unit

11.4-2 RETAIL - COMMERCIAL AND SERVICES USES

USE	**REQUIREMENTS**
Amusement Device Arcades	One space for each 300 square feet of floor area
Automobile Service Stations	One space for each employee plus three spaces for each service bay
Banks	One space for each 300 square feet of floor area
Beauty Shop	One space for each 250 square feet of floor area
Bowling Alleys	Three spaces for each alley plus the required spaces for restaurants that are provided
Dance Studio	One space for each 250 square feet of floor area
Furniture and Appliance Stores,	One space for each 600 square feet of floor area
Health Clubs	One space for each 200 and fifty square feet of floor area
Motor Vehicle Sales and Sales	One space for each 600 square Machinery of floor area
Offices - Business, Professional & Governmental	One space for each 300 square feet of floor area
Offices - Medical or Dental Clinics,	One space for every 200 square feet of floor area
Medical Center	(Refer to State of Illinois Accessibility Standards for additional requirements.)
Personal Trainer	One space for each 250 square feet of floor space
Restaurant - Carry-Out	One space for each 300 square feet of floor space
Restaurant - Sit-Down	One space for each 45 square feet of seating

	area
Retail Stores - Not Otherwise Specified	One space for each 300 square feet of floor area
Theaters (Indoor)	One space for each four seats
Undertaking Establishments, Funeral Parlors	25 spaces for each chapel or parlor

11.4-3 WHOLESALE, STORAGE & PRODUCTION

USE	**REQUIREMENTS**
Establishments Engaged in Production, Processing, Cleaning, Servicing, or Repair of Materials, Goods or Products, or Engaged in Research and Development	One space for each two employees plus one space for each vehicle used in the Testing the conduct of the enterprise.
Warehouses and Storage	One space for each two employees plus one space for each vehicle used in the conduct of the enterprise
Wholesale Establishments	One space for each two employees plus one space for each vehicle used in the conduct of the enterprise

11.4-4 COMMUNITY SERVICE USES

USE	**REQUIREMENTS**
Colleges & Universities	One space for every five students at maximum enrollment
Community Centers	Spaces equal in number to 30% of capacity
Church	One space for each five seats
Day Care Centers and Schools	Three spaces for each two employees
Hospital	Three spaces for each hospital bed
Libraries, Art Galleries Museums- Public	One space for each 1000 feet & of gross floor space
Places of Assembly as follows: Stadiums, Arenas, Auditoriums (other than Church, College or Institutional School), Convention Halls, Skating Rinks,	Parking equal in number to 30% of the capacity in persons

and other similar places of assembly	
Public Utility and Public Service Uses	Spaces as required for similar office, retail uses or industrial
Recreational Facilities	Spaces equal in number to 30% of capacity
Schools, Commercial	One space for each employee plus spaces equal in number to one half of the maximum number of students projected to be in attendance at any one time
Schools, Elementary	~~Two spaces~~ One space per ~~each~~ employee ~~plus one space per classroom~~plus one space per every five classrooms
Schools, High	Two spaces per each employee plus one space per ten students at maximum

11.4-5 MISCELLANEOUS USES

USE	**REQUIREMENTS**
Fraternities, Sororities, & Dormitories	One space for each three active member plus one space for the manager thereof
Hotels & Motels	One space for each lodging room plus spaces as required for any restaurant that is included
Nursing Homes	One space for each two beds
Private Clubs and Lodges	One space for each lodging room plus parking spaces equal in number to 30% of the capacity in persons (exclusive of lodging room capacity)
Crematories, Mausoleums	Parking spaces shall be as determined by Plan Commission Fraternal and Religious institutions to serve persons employed or residing on the premises, as well as the visiting public
Other Uses	For uses not listed heretofore in this schedule of parking requirements, parking spaces shall be provided on the same basis as required for the most similar listed uses

11.5 PARKING IN THE ~~CENTRAL~~ DOWNTOWN BUSINESS DISTRICT

11.5-1 Furniture and Appliance Store (B-5)

USE	REQUIREMENTS
First Floor	One space for each 1000 square feet of floor area
Other than First Floor	One space for each 1500 square feet of floor area

11.5-2 Multiple Family Dwellings (B-5) (Including Apartment Hotels)

USE	REQUIREMENTS
Efficiency and One Bedroom Apartments	One space for each unit
Two Bedroom Apartments	One and one-fourth spaces for each unit
Three Bedroom Apartments	One and one-half spaces for each unit

11.5-3 Office - Business, Professional, and Governmental (B-5)

USE	REQUIREMENTS
First Floor	One space for each 600 square feet in excess of 1500 square feet of floor area
Second Floor or Basement	One space for each 750 square feet in excess of 2000 square feet of floor area
Above the Second Floor	One space for each 1250 square feet in excess of 2500 square feet of floor area.

11.5-4 Offices-Medical or Dental and Medical Centers (B-5)

USE	REQUIREMENTS
First Floor	Three spaces for each examination room
Other Than the First Floor	Two spaces for each examination room

11.5-5 Retail Stores and Banks (B-5)

USE	REQUIREMENTS
First Floor	One space for each 500 square feet in excess of 1500 square feet of floor space
Second Floor or Basement	One space for each 700 and fifty square feet in excess of 2000 square feet of floor area

Above the Second Floor	One space for each 1000 square feet in excess of 2500 square feet of floor area

11.5-6 Restaurant - Sit-Down (B-5)

USE	**REQUIREMENTS**
First Floor or Basement	One space for each two hundred square feet of public seating area
Above the First Floor	One space for each 250 square feet of public seating area

11.5-6 Restaurant - Sit-Down (B-5)

USE	**REQUIREMENTS**
Other Uses (B-5)	For uses not listed heretofore in the above schedule of parking requirements for the B-5 zoning district, parking spaces shall be provided at 50% in number as required elsewhere

11.5-8 Leasing of Parking Spaces. The off-street parking requirements in the B-5 Downtown District may be met by the leasing of ~~such~~ spaces from the Village. The duration and terms of such lease shall be determined by the President and Board of Trustees. ~~Such lease shall be in a form approved by the Village Attorney and the President and Board of Trustees and shall contain such guarantee of payment or other security as may be required by the President and Board of Trustees.~~ The ~~ancillary~~ parking shall not be separated from the place of business by a major arterial road and shall be within the Downtown District or contiguous to the Downtown District.

11.5-9 Substantal Compliance. If an existing developed parcel does not meet parking requirements but the deficit is either less than ten spaces or no more than five percent less than the number of required parking spaces, the parcel will be deemed to be in substantial compliance with the parking requirements if the property owner can demonstrate to the satisfaction of the Village that there is sufficient parking on-site for the proposed uses.

11.6 Additional Regulations -- Off-Street Loading.

11.6-1 Location. All required loading berths shall be located on the same zoning lot as the use served. No loading berth for vehicles over two ton capacity shall be closer than 50 feet to any property in a Residence District unless completely enclosed by building walls or a uniformly painted solid fence or wall, or any combination thereof, not less than six feet in height. No permitted or required loading berth shall be located within 25 feet of the nearest point of intersection of any two streets. No loading berth shall be located in a required side yard and any loading berth located in a required rear yard shall be open to the sky.

11.6-2 Size. Unless otherwise specified, a required loading berth shall be at least ten feet in width by at least 35 feet in length, exclusive of aisle and maneuvering space, and shall have a vertical clearance of at least 14 feet.

11.6-3 Access. Each required off-street loading berth shall be designed in such a manner that all vehicle maneuvering shall be performed entirely on the property being serviced when the access is from a street designated on the Village Official Map or Village Comprehensive Plan Map as an arterial or collector street.

~~**11.6-4 Surfacing.** All open off-street loading berths shall be improved with a compacted macadam base, not less than seven inches thick, surfaced with not less than two inches of asphaltic concrete or some comparable all-weather dustless materials.~~

11.6-~~5~~4 Repair and Service. No motor vehicle repair work or service of any kind shall be permitted in conjunction with loading facilities provided in any Residence or Business District.

11.6-~~6~~5 Space allocated to any off-street loading berth shall not be used to satisfy the space requirements for any off-street parking facilities or portion thereof.

11.6-~~7~~6 For special uses other than prescribed for hereinafter, loading berths adequate in number and size to serve such use, as determined by the Plan Commission, shall be provided.

11.6-~~8~~7 Uses for which off-street loading facilities are required herein, but which are located in buildings of less floor area than the minimum prescribed for such required facilities, shall be provided with adequate receiving facilities off any adjacent alley, service drive, or open space on the same lot which is accessible by motor vehicle.

11.7 Schedule of Loading Requirements. For the uses listed in the following table, off-street loading berths shall be provided on the basis of gross floor area or building or portions thereof devoted to such uses in the amounts shown ~~here~~below:~~.~~

USE	GROSS FLOOR AREA IN SQUARE FEET	REQUIRED NUMBER AND MINIMUM DIMENSIONS OF BERTH
a. Multiple-Family Dwellings b. Hospitals, sanitariums, and other institutional uses c. Hotels, Clubs and Lodges, except as set for in Item (c)	10,000 to 200,000 For each additional 200,000 or fraction thereof	1-(10 ft. x 35 ft.) 1 additional - (10 ft. x 35 ft.)
d. Hotels, Clubs and Lodges - when containing any of the following: Retail Shops Convention Halls, Auditoriums, Exhibition Halls, or Business or Professional Offices (other than accessory)	10,000 to 20,000 20,000 to 150,000 For each additional 150,000 or fraction thereof	1-(10 ft. x 35 ft.) 1-(10 ft. x 50 ft.) 1 additional - (10 ft. x 50 ft.)
e. Retail Stores f. Restaurants - Sit-down g. Motor Vehicle and Machinery Sales h. Wholesale Establishments	5,000 to 10,000 10,000 to 25,000 25,000 to 40,000 40,000 to 100,000 200,000 or fraction	1-(10 ft. x 35 ft.) 2-(10 ft. x 35 ft. ea.) 2-(10 ft. x 50 ft. ea.) 3-(10 ft. x 50 ft. ea.) 1 additional -

(but not including warehouse and storage buildings other than accessory)	thereof	(10 ft. x 50 ft.)

USE	GROSS FLOOR AREA IN SQUARE FEET	REQUIRED NUMBER AND MINIMUM DIMENSIONS OF BERTH
i. Auditoriums, Convention Halls, Exhibition Halls, Sports Arenas, Stadiums j. Bowling Alleys	10,000 to 20,000 20,000 to 100,000 For each additional 100,000 or fraction thereof	1-(10 ft. x 35 ft.) 1-(10 ft. x 50 ft.) 1 additional - (10 ft. x 50 ft.)
k. Banks and Offices - Business, Professional and Governmental	10,000 to 100,000 for each additional 100,000 or fraction thereof to 500,000 for each additional 500,000 or fraction thereof	1-(10 ft. x 35 ft.) 1 additional - (10 ft. x 35 ft.) 1 additional - (10 ft. x 35 ft.)
l. Establishments Engaged in Production, Processing, Cleaning, Servicing, Testing, or Repair of Materials, Goods or Products m. Warehouses and Storage Buildings	5,000 to 10,000 10,000 to 40,000 40,000 to 100,000 For each additional 100,000 or fraction thereof	1-(10 ft. x 35 ft.) 1-(10 ft. x 50 ft.) 2-(10 ft. x 50 ft. ea.) 1 additional (10 ft. x 50 ft.)
n. Theaters	8,000 to 25,000 For each additional 50,000 or fraction thereof	1-(10 ft. x 35 ft.) 1 additional - (10 ft. x 35 ft.)
o. Undertaking Establishments and Funeral Parlors	8,000 to 100,000 For each additional 100,000 or fraction thereof	1-(10 ft. x 35 ft.) 1 additional - (10 ft. x 35 ft.)

Section 28-12 - Zoning Board of Appeals

12.1 Zoning Board of Appeals. The powers, duties and responsibilities of the Zoning Board of Appeals are set forth in Chapter 6 of the Municipal Code.

~~(Ord. # 04-059)~~

12.2 Land Use Variations

In order to receive a variation, the Petitioner must provide support for each of the following factors:

1. The proposed use will not alter the essential character of the locality and will be compatible with existing uses and zoning of nearby property; and

2. The plight of the owner is due to unique circumstances, which may include the length of time the subject property has been vacant as zoned; and

3. The proposed variation is in harmony with the spirit and intent of this Chapter;

4. The variance requested is the minimum variance necessary to allow reasonable use of the property.

A variation may be granted if the evidence provided sustains each of the factors listed above. Every variation shall be accompanied by findings of fact specifying the reasons for granting the variation by applying the above factors.

The concurring vote of four members of the Zoning Board is necessary to reverse any order, requirement, decision, or determination of the Administrative Officer, or to decide in favor of the applicant in any matter upon which it is required to pass or to effect any variation.

~~**12.3 Zoning Board of Appeals Hearing.** The procedures to be followed for consideration of a variation shall be as follows:~~

(~~Ord. # 04-009~~)

~~**12.3-1 Pre-Application Conference.** Prior to submission of an application for a variance, the owner or authorized agent of the owner shall meet with the Director of Planning and Community Development to obtain information and guidance prior to submission of application. The applicant may request relief from the requirements of Section 12.3-2 to the Director of Planning and Community Development. Such request will be referred to the Zoning Board of Appeals for decision on such request.~~

(Ord. # 04-059)

12.~~3-2~~2 Application. An application for a hearing before the Zoning Board of Appeals ~~verified by the owner of the subject property or their authorized agent~~ shall be filed with the Department of Planning and Community Development upon a form prescribed therefore which shall be accompanied by the application fee and the following:

~~12.3-2.1~~

a. Plat of Survey. Nine copies of the Plat Survey, designating dimensions of proposed

construction spotted thereon.

~~**12.3-2.2 Petition.** Written Petition to the Zoning Board of Appeals, detailing variation requested.~~

~~(Ord. # 04-059)~~
~~**12.3-2.3 b.**~~ **Preliminary Plans.** The Applicant must submit ~~N~~nine copies of detailed preliminary plans relating to the ~~of~~ variation. ~~requested as determined by the Director of Planning and Community Development and Chair of the Zoning Board of Appeals.~~ If the application is for a fence variation, the placement and height of fence ~~to~~ must be designated on the Plat of Survey.

~~**12.3-2.4 c.**~~ **Proof of Ownership**. The applicant shall submit documentation ~~owners Policy of Title insurance and/or Warranty Deed~~ evidencing ownership of property and any lease or rental agreement in effect pertaining to the petition on the subject property. If Title is in Trust, a copy of the Trust Agreement, certified by the Trustee with evidence of all current ownership of beneficial interest together with a letter of authorization from the Trust Company shall be provided.

~~(Ord. # 04-059)~~
12.3~~4~~ Departmental Review. The Planning Department shall circulate the application and plans to the ~~Village of Arlington Heights municipal~~ appropriate departments for review and recommendations. ~~The departments shall reply in writing stating their review and recommendation to the Planning Department within ten days of receipt of said plans.~~ All reviews and recommendations shall be made available to the applicant prior to the public hearing. The applicant may submit revised plans to the Planning Department for review and all revised plans must be submitted 14 ~~fourteen~~ days prior to the public hearing. The revised plans shall be submitted and reviewed ~~as required in Section 12.3-2.3~~. The Planning Department shall transmit all recommendations to the Zoning Board of Appeals for their review ~~at least seven days~~ prior to the date of the public hearing.

12.4~~5~~ Public Hearing Notification Requirements. The applicant shall comply with notification requirements as set forth in ~~of~~ Section 18 of this Chapter.

12.5~~6~~ Determination. The Zoning Board of Appeals ~~and Village Board~~ may require additional plans or studies in order to conduct a thorough investigation of a request before them. The findings and recommendations of the Zoning Board of Appeals shall generally be transmitted to the Village Board of Trustees within ~~thirty~~ 30 days of adjournment of the p~~P~~ublic h~~H~~earing. If the petition also requires a recommendation from the Plan Commission, the findings and recommendations of the Zoning Board of Appeals will generally be transmitted to the Village Board within ~~thirty~~ 30 days of adjournment of the Plan Commission Public Hearing.

~~(Ord. #06-008)~~
~~**12.7 Zoning Board of Appeal Fees.** All applications for zoning amendments submitted to the Zoning Board of Appeals, shall be accompanied by the applicable fee as determined by the following schedule:~~

~~Single Family Residential District~~	~~$200.00~~
~~Multiple Family or Commercial District~~	~~$350.00~~
~~Commercial District~~	~~$500.00~~

~~Institutional District $330.00~~

12.~~6~~8 Limitation on Requests for Variations. No request for a variation shall be considered by the Zoning Board of Appeals for property which has been the subject matter of a previous request for a variation for a period of one year after the Zoning Board of Appeals has made a determination or recommendation for a variation on the same property. The Zoning Board of Appeals shall not consider any petition for rehearing of a variation request after a decision or recommendation on a variation has been made unless substantial changes have been made to the evidence or use to adjacent properties.

Section 28-13 - Plan Commission

13.1 Plan Commission. The powers, duties and responsibilities of the Plan Commission are set forth in Chapter 6 of the Municipal Code.

~~**13.1-1 Zoning Regulations.** The Plan Commission shall upon direction from the Board of Trustees, or at its own initiative, review any part of Chapter 28 (Zoning Regulations), hold appropriate public hearings and made recommendations to the Board of Trustees.~~

~~(Ord. #03-068)~~
~~**13.1-2 Individual Zoning, Subdivision and Development Petitions.** The Plan Commission will conduct appropriate hearings, unless a majority of the Trustees directs that a specific hearing be held in some other manner, and submit recommendations to the Board of Trustees on petitions involving the following matters:~~

~~a. Subdivision, including resubdivision and consolidation.~~

~~b. Special Uses. (See Section 8)~~

~~c. Planned Unit Development. (See Section 9)~~

~~d. Rezoning.~~

~~e. Land Use Variations.~~

~~f. Such other matters as may be referred to the Commission by the President and Board of Trustees.~~

In applications for Planned Unit Development, Subdivisions, Special Use Permits, Rezoning and Land Use Variations, the Plan Commission may recommend and the Village Board may authorize exceptions to the applicable bulk regulations of this ordinance and such other variations from the Zoning Regulations (Chapter 28 and Chapter 29 of the Municipal Code) as may be required within the boundaries of such development without referring the matter to the Zoning Board of Appeals.

Section 13.2 Land Use Variations
In order to receive a variation, the Petitioner must provide support for each of the following factors:

1. The proposed use will not alter the essential character of the locality and will be compatible with existing uses and zoning of nearby property; and

2. The plight of the owner is due to unique circumstances, which may include the length of time the subject property has been vacant as zoned; and

3. The proposed variation is in harmony with the spirit and intent of this Chapter;and
4. The variance requested is the minimum variance necessary to allow reasonable use of the property.

A variation may be granted if the evidence provided sustains each of the factors listed above. Every variation shall be accompanied by findings of fact specifying the reasons for granting the variation by applying the above factors.

~~**Section 13.1-3 Land Use Variations.** The Plan Commission may recommend, and the Village Board authorize upon appeal, whenever a property owner can show that a strict application of the terms of this ordinance relating to the use of a building or structures or the use of land will impose upon him unusual practical difficulties or particular hardship, such variation of the strict application of the terms of this ordinance as are in harmony with its general purposes and intent, but only when the Board is satisfied that a granting of such variation will not merely serve as a convenience to the applicant, but will alleviate some demonstrable and unusual hardship or difficulty so great as to warrant a variation from the comprehensive plan as established by this ordinance, and at the same time the surrounding property will be properly protected.~~

~~In its consideration of the standards of practical difficulties or particular hardship, the Plan Commission shall require evidence that (1) the property in question cannot yield a reasonable return if permitted to be used only under the condition allowed by the regulation in that zone; and (2) the plight of the owner is due to unique circumstances; and (3) the variation, if granted, will not alter the essential character of the locality. A variation shall be permitted only if the evidence, in the judgment of the Plan Commission, sustains each of the three conditions enumerated.~~

~~(Ord. # 04-059)~~
~~In consideration of all appeals and all proposed variations to the ordinance the Plan Commission shall, before recommending any variation from the ordinance in a special case, first shall make a determination that the proposed variation will not impair an adequate supply of light and air to adjacent property, or unreasonably increase the congestion in public streets, or increase the danger of fire or endanger the public safety or unreasonably diminish or impair established property values within the surrounding area, or in any other respect impair the public health, safety, comfort, morals or general welfare of the inhabitants of the Village of Arlington Heights. The concurrence of a majority of the Plan Commission is necessary to reverse any order, requirement, decision or determination of the Administrative Officer, or to decide in favor of the applicant any manner upon which it is required to pass under this ordinance or to effect any variation in this ordinance. Every variation shall be accompanied by findings of fact specifying the reason or reasons for making the variation if required by law.~~

~~Nothing herein contained shall be construed to give or grant the Plan Commission the power or authority to alter or change the Zoning Ordinance or the District Map, such power and authority being reserved to the President and the Board of Trustees of the Village of Arlington Heights in the manner hereinafter provided in Section 18.~~

~~Decisions by the Plan Commission shall not be final but shall be subject to review and final decision by the President and Board of Trustees.~~

13.23 ~~**Plan Commission Hearings.** The procedures to be followed when considering petitions~~

~~for special use permit, amendments and reclassification of property, shall be as follows:~~

~~**13.2-1 Pre-Application Conference.** Prior to submission of an application for a special use permit, amendment, reclassification of property, plat of subdivision or planned unit development the owner or authorized agent of the owner shall appear before the Village of Arlington Heights Plat and Subdivision Committee and appropriate staff to obtain information and guidance prior to submission of application. The applicant may request relief from certain requirements of Section 13.2-2 at the Plat and Subdivision Committee. Such request will be referred to the Plan Commission Committee of the Whole for decision on such request.~~

~~**13.2-2**~~ **Application.** An application verified by the owner of the subject property or their authorized agent shall be filed with the Planning Department upon a form prescribed therefore which shall be accompanied by the application fee and ten complete sets of the following:

~~**13.2-2.1**~~ a. **Plat of Survey.**

~~**13.2-2.2**~~ b. **Preliminary and Final Plat of Subdivision.** If required ~~(refer to~~ pursuant to Chapter 29~~:~~ Subdivision Control Regulations~~)~~.

~~(Ord. #04-013)~~
~~**13.2-2.3**~~ c. Preliminary architectural drawings as set forth below ~~to include~~ (these are not required for zoning changes to R-E, R-1, R-2, R-3 zoning classification):

~~a.~~1) Detailed site plan to include roadways, driveways, parking area and dimensions, all proposed structures, free standing signs, outdoor lighting, trash storage areas, loading areas, and project data to include total land area, building area, floor area ratio and parking computations.

~~b.~~2) Detailed landscaping plan (required for new construction only) including location, quantity, common names, and size of all landscaping materials.

~~c.~~3) Floor Plan.

~~d.~~4) Building Elevations.

~~e.~~5) Building Sections.

~~f.~~ 6) Sign Plans.

~~**13.2-2.4**~~ d. Preliminary engineering plans and engineering feasibility study (required for new construction or increase in building coverage only).

e. **Traffic Study.** If required, (see Section 6.13 of this ordinance)

~~**13.2-2.6**~~ f. **Proof of Ownership.** The applicant shall submit ~~owners Policy of Title insurance and/or Warranty Deed~~ documentation evidencing ownership of property and any lease or rent agreement in effect pertaining to the petition on the subject property. If the title is in a ~~Land t~~Trust,

a copy of the Trust Agreement, certified by the Trustee with evidence of all current ownership of beneficial interest together with a letter of authorization from the t~~T~~rust company shall be provided.

13.3~~4~~ Departmental Review. The Planning Department shall circulate the application and plans to the ~~Village of Arlington Heights municipal~~ appropriate departments for review and recommendations. ~~The departments shall reply in writing stating their review and recommendations to the Planning Department within ten days of receipt of said plans.~~ All reviews and recommendations shall be made available to the applicant prior to the public hearing. The applicant may submit revised plans to the Planning Department for review and all revised plans must be submitted ~~fourteen~~ at least 14 days prior to public hearing. The revised plans shall be resubmitted and reviewed ~~as required in Section 13.2-2 (a) (e)~~. The Planning Department shall transmit all recommendations to the Plan Commission for their review ~~at least seven days~~ prior to the date of the public hearing. If any of the plans have been changed, ~~T~~the applicant ~~also~~ shall submit ten ~~additional~~ new sets of plans ~~as required in Section 12.2-2 (a) (e)~~ to the Planning Department at least seven days prior to date of public hearing for transmittal to the Plan Commission ~~for their review at least seven days prior to date of Public hearing~~. Plans submitted for Plan Commission later than seven days prior to date of public hearing may result in a continuation of the public hearing.

13.4~~5~~ Public Hearing Notification Requirements. The applicant shall comply with notification requirements as set forth in ~~of~~ Section 18 of this Chapter.

13.5~~6~~ Determination. The Plan Commission may require additional plans or studies in order to conduct a thorough investigation of a request before them. The findings and recommendations of the Plan Commission shall be transmitted to the Village Board ~~of Trustees~~ within 30 days of adjournment of the public hearing. ~~If the petition also requires a recommendation from the Zoning Board of Appeals, the findings and recommendations of the Plan Commission will be transmitted to the Village Board within 30 days of adjournment of the Zoning Board of Appeals hearing.~~

~~(Ord. #03-068, #06-008)~~

~~**13.6 Plan Commission Fees.**~~

~~Rezoning to R-E, R-1, R-2 and R-3 District Classification (Subdivision fees below)~~	~~$ 900.00~~
~~Rezoning to all other district classifications~~	
~~0 – 1.99 acres~~	~~$ 900.00~~
~~2 – 4.99 acres~~	~~$ 1,100.00~~
~~5 – 9.99 acres~~	~~$ 1,300.00~~
~~10 – 14.99 acres~~	~~$ 1,500.00~~
~~15 + acres~~	~~$ 1,700.00~~
~~Planned Unit Development~~	
~~0 – 4.99 acres~~	~~$ 1,200.00~~
~~5 – 9.99 acres~~	~~$ 1,400.00~~
~~10 – 14.99 acres~~	~~$ 1,600.00~~
~~15 + acres~~	~~$ 1,800.00~~
~~Planed Unit Development Amendments~~	

~~0 – 4.99 acres~~	~~$ 1,200.00~~
~~5 – 9.99 acres~~	~~$ 1,400.00~~
~~10 – 14.99 acres~~	~~$ 1,600.00~~
~~15 + acres~~	~~$ 1,800.00~~
~~Special Use Permits (and Amendments)~~	
~~Under 3,000 square feet (gross)~~	~~$ 500.00~~
~~3,000 + square feet (gross)~~	~~$ 850.00~~
~~All drive-thoughts~~	~~$ 1,000.00~~
~~Subdivisions, except consolidations~~	~~$ 900.00~~ ~~+ $ 55.00 for each new lot created~~
~~Land Use Variation~~	
~~0 – 1.99 acres~~	~~$ 900.00~~
~~2 – 4.99 acres~~	~~$ 1,100.00~~
~~5 – 9.99 acres~~	~~$ 1,300.00~~
~~10 – 14.99 acres~~	~~$ 1,500.00~~
~~15+ acres~~	~~$ 1,700.00~~
~~Consolidations~~	~~$ 300.00~~

Section 28-14 - Design Commission

14.1 Design Commission. The powers, duties and responsibilities of the Design Commission are set forth in Chapter 6 of the Municipal Code.

~~(Ord. #13-035)~~

14.2 Design ~~Commission Meetings~~Review. The procedures to be followed when ~~considering developments~~ determining when and how design review will occur shall be as follows:

~~(Ord. #05-037, #13-035~~

~~**14.2-1**~~ a. For developments where a public hearing is necessary before the Plan Commission or Zoning Board of Appeals, the design review process should, if feasible, be completed by the time of the public hearing. Development proposals requiring rezoning, PUD or other Plan Commission approvals, shall be reviewed by the Design Commission for building and signage only.

~~(Ord. #13-035)~~

~~**14.2-2**~~ b. For developments where no public hearing is necessary, the applicant for building permit shall be informed ~~of~~ if there is a need for design review and if so, whether that review will be by ~~either~~ the Design Commission or Staff. ~~and the necessity for a public meeting or administrative design review.~~ Developments that do not require a public hearing by the Plan Commission shall be reviewed by the Design Commission or by administrative design review for all elements under the Commission's responsibility.

~~(Ord. #03-067, #05-037, #13-035)~~

c. For demolition in residential zoning districts and all properties in the B-5 zoning district, design review is required ~~and will evaluate the following,~~ prior to a demolition permit being issued. The review will evaluate the following:

~~a~~1. The ~~A~~ development plan; and

2.~~b~~. The ~~An~~ estimated time frame for demolition and subsequent redevelopment plan and timeline,~~:~~ including verifying that:

~~1. Criteria for redevelopment plan and timeline for proceeding with demolition and redevelopment;~~

a) Proposed redevelopment is in character with the neighborhood and meets the criteria in the design guidelines and

b) Proposed redevelopment will not adversely affect the neighborhood,~~.~~

~~c) Submittal of materials needs to comply with Section 14.2-4.~~

~~(Ord. #03-067, #05-037)~~

14.3 Application. An application verified by the owner of the subject property or their authorized agent shall be filed ~~In all cases, either at the time of filing a petition for the Plan Commission or Zoning Board of Appeals or at the time of applying for a building permit, the developer shall provide~~ the Department of Planning & Community Development upon a required form ~~and with~~ eight copies of the following:

~~a. If required, all necessary documentation to determine if a redevelopment is appropriate per~~

~~Section 14.2-3.~~

a. Plat of Survey.

b. Floor Plans

~~b.~~ c existing and proposed elevations of all building facades and roof plans (renderings optional);

~~c.~~d. ~~detailed~~ Proposed site plan ~~including parking lot layout, building locations, driveways, site data, etc.;~~ and photos of adjacent properties

~~d.~~ e landscaping plans - including existing plant material, size and quantity of proposed material;

~~e~~. ~~any storm water control facilities and a site grading plan;~~

~~f.~~ f specifications and rendering of signs, if sign review is required;

~~g.~~g a ~~statement or~~ sample of all color, kind and texture of materials to be used;

~~h.~~h location map with roads, parking, existing buildings and other significant features within approximately 250 feet from proposed building site~~; and~~

~~(Ord. #06-008, #06-078)~~

~~i. a one time fee for review as follows:~~

~~Single Family District (Design Commission Review~~	~~$200.00~~
~~Single Family District (Administrative Approval Design Review~~	~~$200.00~~
~~Multiple Family District~~	~~$350.00~~
~~Commercial District~~	~~$500.00~~
~~Institutional District~~	~~$300.00~~
~~Sign Variation~~	~~$300.00~~
~~Downtown Sign Administrative Approval~~	~~$ 50.00~~

~~(Ord. 13-051)~~

14.2-~~4~~5 Departmental Review. The Department of Planning & Community Development shall be the administrative contact to the Design Commission responsible for reviewing all petitions, making recommendations for changes or modification in design and providing assistance in interpreting the Design Guidelines. The Director or designee may determine that certain projects do not need formal design review, either by the Design Commission or staff. Such projects may include small (approximately 300 square feet or less) one-store additions in the rear of homes, small commercial building changes and similar small projects. The review will ensure the project is in compliance with the design guidelines, as applicable. In cases where the Village has determined that formal design review is not necessary, no design review fee will be charged.

~~(Ord. #05-037)~~

14.2-~~5.1~~ 5 Design Commission Meeting. The Design Commission will schedule a public meeting as soon as practicable after complete submittal and review by the Department of Planning & Community Development of the plans, at which time the developer will make a presentation on the project. A decision of approval, modification or denial will be made immediately upon consideration of the Design Guidelines following the applicant's presentation.

~~(Ord. #05-037)~~

14.~~2 5.2~~ 6 Notice by Sign. For projects in residential districts requiring Design Commission review, a sign providing notice of the public meeting of the Design Commission shall be required to be posted by the applicant in accordance with the requirements set forth in Section 18 of this Chapter. ~~for a period not less than 15 days prior to the date before the public meeting, the applicant shall post a readable sign(s) on the property which is the subject of the public meeting, easily visible from the adjacent roadway. Sign(s) must be removed no later than seven days after completion of the public meeting. Petitioner shall provide proof of the posting of the sign, by photograph and a sworn statement verifying the posting of the sign.~~

~~**SAMPLE SIGN**~~

~~**APPROXIMATE SIZE: 30" HIGH BY 48" WIDE**~~

~~NOTICE OF PUBLIC MEETING*~~

~~**MEETING FOR:** [Fill in current action requested] +~~

~~**MEETING LOCATION: ARLINGTON HEIGHTS MUNICIPAL BUILDING+**~~
~~**33 S. ARLINGTON HEIGHTS ROAD+**~~

~~**DATE:** [Fill in meeting date] **TIME:** [Fill in meeting time]*~~

~~PUBLIC ATTENDANCE AND COMMENTS INVITED~~

~~**FOR DETAILS CALL:**~~
~~[Fill in petitioner's name and phone number] **or Village of Arlington Heights Department of Planning & Community Development at 847-368-5200**~~

~~Sign must be posted no less than 15 days prior to meeting date.~~
~~Sign must be removed by seven days after the first meeting.~~

~~*** MUST BE AT LEAST 1½" HIGH**~~
~~**+ MUST BE AT LEAST 1" HIGH**~~

~~The sign(s) herein required shall contain the current action requested, date, time and place where the meeting shall be held, a statement that further information can be obtained from the petitioner and the Planning Department of the Village of Arlington Heights, and the phone number of the Village of Arlington Heights and the petitioner. The words, "NOTICE OF PUBLIC MEETING" must appear at the top of the sign(s) in letters no smaller than 1.5". The date and time of the meeting shall also be 1.5". The sign(s) shall meet all other requirements set forth by the Village of Arlington Heights. All costs associated with the public meeting sign(s) are to be borne by the petitioners.~~

~~(Ord. #03-067, #05-037)~~

14.~~3~~7 Issuance of a Certificate of Approval. The Design Commission will issue a Certificate of Approval if:

a. The applicant's plans achieve the purpose and intent of the Design Guidelines; and,

b. The proposed design is compatible with the character of neighboring buildings contributing to a favorable environment in the Village.

c. The existing property or structure is determined not to have significant architectural, historical, aesthetic, or cultural value.

If the Commission denies the issuance of a Certificate of Approval, no building permit or demolition permit will be issued on the application except by direction of the Village Board.

~~(Ord. #03-067)~~

14.~~4~~ 8 Enforcement of a Development Schedule. The Certificate of Approval shall be effective for no more than 12 months from the date it was issued. Unless a building permit has been issued and construction commenced within this time period, the C~~c~~ertificate of ~~appropriateness~~ Approval shall be void. An extension of up to 12 months can be obtained by submitting a detailed request to the Planning and Community Development Department.

~~(Ord. #05-037)~~

14.~~95.~~ Amendments. Amendments to a C~~c~~ertificate of Approval ~~will~~ must be obtained through the same process as set forth above.

~~(Ord. # 04-078)~~

14.~~10~~6 Appeal. For all petitioners appearing before the Design Commission who do not need to also appear before the Plan Commission or Zoning Board of Appeals, the petitioner has the right to appeal directly to the Village ~~President and~~ Board ~~of Trustees~~. ~~The written~~ The appeal must be made in writing and submitted~~,~~ to the Village Manager, within 30 days of receipt of the notice of denial by the Design Commission. The Village Board, at a regular meeting, will ~~then~~ either:

a. agree with the Design Commission's decision; or

b. overrule or modify the decision of the Design Commission and direct the issuance of a permit.

For all petitioners appearing before the Design Commission who need to also appear before the Plan Commission or Zoning Board of Appeals, the petitioner has the right to file an appeal to the Village ~~President and~~ Board ~~of Trustees~~. The ~~written~~ appeal must be made in writing and shall be forwarded to the Village Board along with the other documents submitted for their review at the same time as the recommendation from thePlan Commission or Zoning Board of Appeals is submitted to the Village Board.~~along with the other documents submitted for their review~~. The appeal will then be considered by the Village Board at a regular meeting concurrently with the Village Board's review of the recommendation from the Plan Commission or Zoning Board of Appeals. The Village Board will ~~then~~ either:

a. agree with the Design Commission's decision; or

b. overrule or modify the decision of the Design Commission and direct the issuance of a permit.

In all other cases, the Design Commission's decision will be sent to the Plan Commission or Zoning Board of Appeals, so that they are aware of the Design Commission's decision. ~~along with other documents for review and then forwarded to the Board.~~

Summary: The existing variation hardship criteria is difficult to analyze, in particular the first criterion that "the property in question cannot yield a reasonable return if permitted to be used only under the conditions allowed by the regulations in that zone." Staff has reviewed the LaSalle factors, which were guidelines established by the State of Illinois Supreme Court in the late 1950's for evaluating variations, as well as other municipalities criteria and recommends the following:

Recommended New Hardship Criteria

In order to receive a variation, the Petitioner must provide support for each of the following factors:

1. The proposed use will not alter the essential character of the locality and will be compatible with existing uses and zoning of nearby property; and

2. The plight of the owner is due to unique circumstances, which may include the length of time the subject property has been vacant as zoned; and

3. The proposed variation is in harmony with the spirit and intent of this Chapter; and

4. The variance requested is the minimum variance necessary to allow reasonable use of the property.

A variation may be granted if the evidence provided sustains each of the factors listed above. Every variation shall be accompanied by findings of fact specifying the reasons for granting the variation by applying the above factors.

In addition, the following language should be included for the Zoning Board of Appeals:

The concurring vote of four members of the Zoning Board is necessary to reverse any order, requirement, decision, or determination of the Administrative Officer, or to decide in favor of the applicant in any matter upon which it is required to pass or to effect any variation.

From La Salle National Bank of Chicago v. County of Cook (Il Sup Ct. 1957)

Among the facts which may be considered in determining validity of zoning ordinance are:

(1) Existing uses and zoning of nearby property,

(2) Extent to which property values are diminished by particular zoning restrictions,

(3) Extent to which destruction of property values of plaintiff promotes health, safety, morals or general welfare,

(4) Relative gain to public as compared to hardship of individual property owner,

(5) Suitability of property for the zoned purposes, and

(6) Length of time property has been vacant as zoned.

ARLINGTON HEIGHTS

Authorize upon appeal, whenever a property owner can show that a strict application of the terms of the Zoning Ordinance relating to the construction or alteration of building or structures will impose upon the owner unusual practical difficulties or particular hardship, such variation of the strict application of the terms of the Zoning Ordinance as are in harmony with its general purposes and intent, but only when the Board is satisfied that a granting of such variation will not merely serve as a convenience to the applicant, but will alleviate some demonstrable and unusual hardship or difficulty so great as to warrant a variation from the Comprehensive Plan, and at the same time the surrounding property will be properly protected.

In its consideration of the standards of practical difficulties or particular hardship, the Board of Appeals shall require evidence that:

1) the property in question cannot yield a reasonable return if permitted to be used only under the conditions allowed by the regulations in that zone; and

2) the plight of the owner is due to unique circumstances; and

3) the variation, if granted, will not alter the essential character of the locality.

A variation shall be permitted only if the evidence, in the judgment of the Board of Appeals, sustains each of the three conditions enumerated. In consideration of all appeals and all proposed variations to the Zoning Ordinance, the Zoning Board, before granting any variation, shall first determine that the proposed variation will not impair an adequate supply of light and air to adjacent property, unreasonably increase the congestion in public streets, increase the danger of fire, endanger the public safety, unreasonably diminish or impair established property values within the surrounding area or in any other respect impair the public health, safety, comfort, morals or general welfare of the inhabitants of the Village. The concurring vote of four members of the Zoning Board is necessary to reverse any order, requirement, decision, or determination of the Administrative Officer, or to decide in favor of the applicant in any matter upon which it is required to pass or to effect any variation. Every variation shall be accompanied by findings of fact specifying the reasons for making the variation.

SAMPLE 1

1. The plight of the owner is due to unique circumstances and the proposed variation will not merely serve as a convenience to the petitioner, but will alleviate some demonstrable and unusual hardship which will result if the strict letter of the regulations of this chapter were carried out and which particular hardship or practical difficulty is not generally applicable to other comparable properties.

2. The alleged hardship has not been created by any person presently having a proprietary interest in the subject property.

3. The proposed variation will not be materially detrimental to the public welfare or injurious to other property or improvements in the neighborhood.

4. The proposed variation will not impair visibility to the adjacent property, increase the danger of traffic problems or endanger the public safety.

5. The proposed variation will not alter the essential character of the neighborhood; and

6. The proposed variation is in harmony with the spirit and intent of this chapter.

SAMPLE 2

Standards for Variations:

1. Variations shall not be granted except on findings based upon the evidence of each specific case:
   a. That the plight of the owner is due to unique circumstances; and
   b. That the variation, if granted, will not alter the essential character of the locality.

2. For the purposes of supplementing the above standards, the zoning board may take into consideration the extent to which the following facts favorable to the applicant have been established by evidence:
   a. That the particular physical surroundings, shape, or topographical conditions of the specific property involved would bring a hardship upon the owner, as distinguished from a mere inconvenience, if the strict letter of the regulation were called out;
   b. That the conditions upon which the petition for variation is based would not be applicable generally to other property within the same zoning district;
   c. That the purpose of the variation is not based exclusively upon a desire to make more money out of the property;
   d. That the alleged difficulty or hardship has not been created by any person presently having an interest in the property;
   e. That the granting of the variation will not be detrimental to the public welfare or injurious to other property or improvements in the neighborhood in which the property is located;
   f. That the proposed variation will not impair an adequate supply of light and air to adjacent property, or substantially increase the danger of fire or otherwise endanger the public safety, or substantially diminish or impair property values within the neighborhood; or
   g. That the granting of the variation will not confer on the applicant any special privilege that is denied by this chapter to the lands, structures, or buildings of the same district.

SAMPLE 3

Variance review findings of fact. The ZBA is permitted to approve, approve with conditions, or deny a request for variance. Each request for a variance must be consistent with the following findings of fact:

a. Limitation on the use of the property due to physical, topographical, and geologic features.

b. The applicant can demonstrate that without a variance there can be no reasonable use of the property.

c. The grant of the variance is not based solely on economic reasons.

d. The necessity for the variance was not created by the property owner.

e. The variance requested is the minimum variance necessary to allow reasonable use of the property.

f. The grant of the variance will not be injurious to the public health, safety, or welfare.

g. The property subject to the variance request possesses one or more unique characteristics generally not applicable to similarly situated properties.

Building Heights - R4/R6/R7

Existing and Proposed Projects

Prepared by Planning and Community Development

Project Name	***Address***	***Zoning***	***Variation***
Fountains of Arlington	601 W Rand Rd	R6	5.6 ft. (45.6 ft. Proposed, 40 ft. Max Allowed)
	601 W Rand Rd	R6	6.7 ft. (46.7 ft. Proposed, 40 ft. Max Allowed)
Arlington Market	NWC Dryden & Kensington	R6	14 ft. (54 ft. Proposed, 40 ft. Max Allowed)
	NWC Dryden & Kensington	R4	3 ft. (28 ft. Proposed, 25 ft. Max Allowed)
Geimer Property	619-701 E. Dundee Rd.	R6	13.5 ft. (53.5 ft. Proposed, 40 ft. Max Allowed)

Townhomes	***Address***	***Zoning***	***Height***
Brownstones of Arlington	1502-1530 W. Northwest Hwy.	R6	32.75 ft.
Carlyle @ Stonegate	1402-1458 E. Northwest Hwy.	R6	33.25 ft. Max Height, 29 ft. at Midpoint
Arlington Market	Kensington & Dryden	R6	33' 5" from grade (front). 38' 6" from grade (rear)
Arbor Lane	1605-1609 E. Palatine Rd.	R6	30' 4" (to roof midpt.), 39' 3 9/16" to roof midpt. of cupola)

Project Name	***Address***	***Zoning***	***Height***
CA Ventures Sigwalt Apts.	37-45 S. Chestnut St., 36-40 S. Highland St.	R7	62.5 ft. Proposed
Hickory Apts	400-424 & 500-550 NW Hwy.	R7	58' 4" (Both Buildings) Proposed

10/12/17

K-8 School Parking Comparison

Prepared by Planning and Community Development

		Arlington Heights			***Mt. Prospect***	***Wheeling***	***Elk Grove***	***Schaumburg***	***Buffalo Grove***	***ITE***
Ratio Req'd by Code		**Per Code:** 2 spaces per employee + 1 per classroom	Spaces Required **per Variation**	Maximum Parking Demand **per Traffic Study**	1 space per employee + 8 visitor spaces	1 space per every 5 students at max. enrollment + 1 space per employee	2 parking spaces per each classroom	1 for every 10 students at max. capacity	1 space per employee	0.21 spaces per elementary student, 0.1 spaces per middle school student
School and Required Parking	*Greenbriar*	195	75	79 (83)*	94	190	46	52	86	110
	Windsor	222	101	93 (100)*	103	199	64	52	95	109
	Thomas Middle	314	144	107 (116)*	143	341	88	103	135	103
	Ivy Hill	173	72	55	77	198	70	65	69	135
	Olive-Mary Stitt	167	49	63	76	197	62	65	68	135

* Note: Number in parens idicates predicted count after school expansion

School Information

	Number of Staff	***Number of Classrooms***	***Number of Students***
Greenbriar	86	23	520
Windsor	95	32	518
Thomas Middle	135	44	1,030
Ivy Hill	69	35	641
Olive-Mary Stitt	68	31	642

Municipality	*FY Max. Height*	*SY Max. Height*	*RY Max. Height*	*Types Allowed (In Brief)*	*Types Allowed (Detail)*
Palatine	3' if under 20' long	6'	6'	Open or Solid	"All fence types, except barbed wire, electrically charged or other types designed to cause injury, shall be permitted unless otherwise specified"
Mount Prospect	N/A	5' (6' if abutting arterial or non-residential area, 8' abutting railroad ROW)	5' (6' if under 18' long or abutting non-residential area, 8' abutting railroad ROW)	Open or Solid	No barbed wire or electrically charged fences. Fences for screening must be solid. Fences may be open, "except where adjacent to residential property, in which case, the fence must be a solid style."
Rolling Meadows	N/A	6'6" , if multi-family then 8'6"	6'6" , if multi-family then 8'6"	Open or Solid	Any, so long as constructed of approved materials. (Wood panels, boards, pickets; concrete panels; wrought iron or panel metal; brick, tile, stone, or concrete walls)
Elk Grove Village	N/A	6'	6'	Open or Solid	No barbed wire or electrically charged fences. Barbed wire may be used in industrial areas or around public utilities so long as located on top of permitted fence.

Buffalo Grove	N/A	6' if open/semi-open, 6' solid if abutting a major road, non-residential, or railroad ROW, 5' if solid	6' if open/semi-open, 6' solid if abutting a major road, non-residential, or railroad ROW, 5' if solid	Open or Solid	"Open or Solid/Opaque"
Des Plaines	4', 50% see thru visibility	6' (8' if abutting railroad ROW)	6' (8' if abutting railroad ROW)	Open or Solid (Open only in Front Yard)	In residential districts, any except barbed wire or electrically charged fences. Front yard fences must be at least 50% "See-Through"
Prospect Heights	N/A	6' (8' if abutting non-residential or a parking area, or if screening a patio, swimming pool, or dog run)	6' (8' if abutting non-residential or a parking area, or if screening a patio, swimming pool, or dog run)	Open or Solid	Any. In business districts, use of barbed wire may be used "when deemed necessary for public safety by the zoning administrator"
Wheeling	3' solid, 4' open	6'	6'	Open or Solid	Open or Solid

Zoning Board of Appeals

Parking Variations

October 12, 2017

ZBA#	Address	Parking Variance	Outcome
17-018	7-25 E. Golf Road	56 to 54	Approved
17-010	1010-1060 W. Rand Road	82 to 76	Approved
16- 058	3265 N. Arlington Heights Rd	152 to 145	Approved
16-029	531 W. Golf Road	390 to 334	Approved
15-010	307 E. Rand Road	99 to 79	Approved
13-039	1800 E. Northwest Hwy.	20 to 10	Approved
13-026	1046 S. Arlington Hts. Rd.	10 to 8	Approved
13-012	1900 S. Arlington Hts. Rd.	16 to 13	Approved

Item: Olympic Park Swim Center - 660 N. Ridge Ave. - PC#18-002

Department: Planning & Community Development

Requested Action

1. Amendment to Planned Unit Development (PUD) Ordinances 79-19 and 03-036 to allow a building addition and site improvements.

2. Special Use Permit to allow a "Community Center, Recreation Building".

Variations Required

1. Variation to Section 11.4, Schedule of Parking Requirements, to reduce the required amount of off-site parking from 757 spaces to 291 spaces.

2. Variation to Section 6.13-3(b), Side and Rear Yards, to allow a 10' fence in the rear yard where code limits fence heights to 5'.

3. Variation to Section 6.13-3(c), Exterior Side Yards, to allow a 8' tall fence in an exterior rear yard where code limits fence heights to 5'.

Recommendation

A public meeting was held by the Plan Commission on March 14, 2018 where Commissioner Green moved and Commissioner Lorenzini seconded:

A motion to recommend to the Village Board of Trustees, approval of PC#18-002, an amendment to Planned Unit Development Ordinances #79-19 and #03-036, and a Special Use Permit to allow a community center, recreation building, and the following variations from Chapter 28 of the Municipal Code:

- Variation to Section 11.4, Schedule of Parking Requirements, to reduce the required amount of off-site parking from 757 spaces to 291 spaces.

- Variation to Section 6.13-3(b), Side and Rear Yards, to allow a 10' fence in the rear yard where code limits fence heights to 5'.

- Variation to Section 6.13-3(c), Exterior Side Yards, to allow a 8' tall fence in an exterior rear yard where code limits fence heights to 5'.

This approval shall be subject to the following conditions:

Parking Related:
1. The Arlington Heights Park District shall take the following actions if it is determined, at the sole discretion of the Village of Arlington Heights, that there is a shortage of on-site parking spaces on the subject property:

a. The Park District shall work with the Village to adjust scheduling so that major events do not overlap. This may include a reduction in the amount of programming that is allowed on the subject property.

b. The Park District shall construct all landbanked parking stalls, as identified in the plan prepared by Gewalt Hamilton Associates, Inc., within 90 days upon request of the Village.

c. The Park District will explore the ability for a shared parking agreement with the Christian Liberty Academy located to the east of the subject property (or other acceptable location), which agreement shall be subject to review by the Village.

Traffic Related:
1. If it is determined by the Village that future roadway improvements are feasible and necessary to correct traffic congestion at the intersection of Ridge Avenue and Euclid Avenue, the Park District shall dedicate the necessary land to facilitate such improvements.

2. At the request of the Village, the Park District will limit the southern entrance drive to restrict ingress into the subject property from northbound automobiles on Ridge Avenue.

General:
1. The petitioner shall provide three foot tall shrubs in the landscape island at the northeast corner of the site should the landbanked parking be constructed. Additionally, the petitioner shall substitute the Dogwood and Nine Bark shrubs proposed at the north side of the parking lot expansion with six foot tall evergreens, and additional evergreens shall be added to the north of the parking lot expansion to conform with Section 6.15-1.2 of Chapter 28 of the Municipal Code.

2. The petitioner shall comply with all Federal, State, and Village Codes, Regulations, and Policies.

Roll Call Vote: Commissioners Cherwin, Jensen, Sigalos, Green, Lorenzini, and Chair Ennes voted in favor. Motion carried.

Bid Section

Item:

Bid Opening Date:

Account Numbers:

Total Budget for Specific Item:

Bid Amount:

ATTACHMENTS:

Description	Type
Staff Report	Board or Commission Report
PC Minutes 3-14-18	Minutes
Aerial	Exhibits
Conceptual Plan Review Minutes - 11-8-17	Minutes
DC Staff Report 3-13-18	Board or Commission Report
DC Minutes 3-13-18 DRAFT	Minutes
DC Staff Report 2-13-18	Board or Commission Report
DC Minutes 2-13-18	Minutes
Neighborhood Meeting Summary	Correspondence
Project Narrative	Correspondence
Plat of Survey	Exhibits
Elevations	Exhibits
Engineering EOPC	Exhibits
Engineering Plans	Exhibits
Floor Plans	Exhibits
Landscape & Tree Preservation Plan	Exhibits
Lighting Spec Sheets	Exhibits
Photometric Plan	Exhibits
Plat of Easement & Vacation	Exhibits
Renderings	Exhibits
Revised Project Renderings	Exhibits
Stormwater Report	Exhibits
Traffic Study	Exhibits
Department Comments - Round 1	Exhibits
Petitioner Response to Comments - Round 1	Exhibits
Department Comments - Round 2	Exhibits
Petitioner Response to Comments - Round 2	Exhibits
PC TImeline Tracker	Exhibits

VILLAGE OF ARLINGTON HEIGHTS

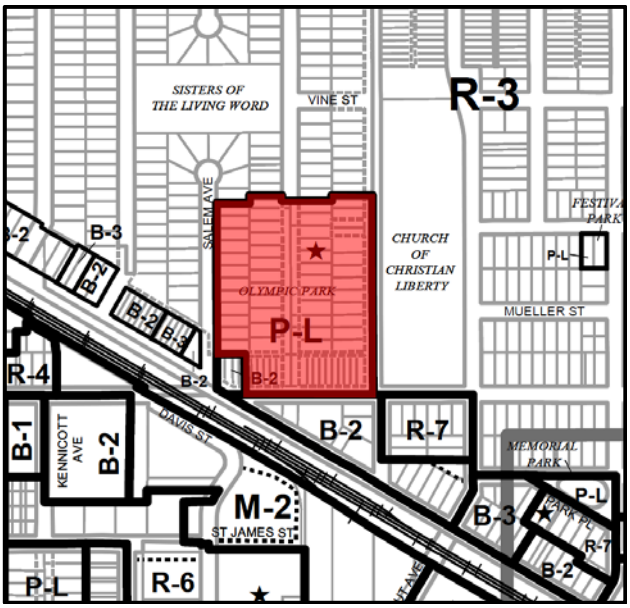
STAFF DEVELOPMENT COMMITTEE REPORT

***Project Number**: PC 18-002*
***Project Title**: Olympic Park PUD Amendment*
***Address**: 660 N. Ridge Street*
***PIN**: Multiple PIN's*

***To**: Plan Commission*
***Prepared By**: Sam Hubbard, Development Planner*
***Meeting Date**: March 14, 2018*
***Date Prepared**: March 9, 2018*

***Petitioner**: Arlington Heights Park District*
***Address**: 410 N. Arlington Heights Road*
Arlington Heights, IL 60004

***Existing Zoning**: P-L, Public Land District*



SURROUNDING LAND USES

Direction	Existing Zoning	Existing Use	Comprehensive Plan
North	R-3, One-Family Dwelling District	Single-Family homes	Mixed-Use
South	B-2, General Business District	Existing restaurant and tire store	Government or Institutional
East	R-3, One-Family Dwelling District	Christian Liberty Academy	Mixed-Use
West	R-3, One-Family Dwelling District, B-2, General Business District	Single-Family homes and office building	Mixed-Use

Requested Action:

1. Amendment to Planned Unit Development (PUD) Ordinances 79-19 and 03-036 to allow a building addition and site improvements.
2. Special Use Permit to allow a "Community Center, Recreation Building".

Variations Required:

1. Variation to Section 11.4, Schedule of Parking Requirements, to reduce the required amount of off-site parking from 757 spaces to 291 spaces.
2. Variation to Section 6.13-3(b), Side and Rear Yards, to allow a 10' fence in the rear yard where code limits fence heights to 5'.
3. Variation to Section 6.13-3(c), Exterior Side Yards, to allow a 8' tall fence in an exterior rear yard where code limits fence heights to 5'.

Project Background:

The subject property is located on the west side of the Village at the intersection of Euclid Avenue and Ridge Avenue. Comprising approximately 6 acres, the property is owned by the Arlington Heights Park District (AHPD) and is currently home to Olympic Park and the Olympic Swim Center facility. The site includes the following outdoor amenities:

- Full size soccer field
- Half size soccer field
- Safety fence for baseball field
- Basketball court
- Skate Park
- Playground area
- Two tennis courts
- Safety Town

The Olympic Swim Center building is approximately 45,200 square feet and includes three pools, locker rooms, a lobby area, a basement, and several small office and storage rooms. The site currently has 191 parking spaces. Access to the site comes from one driveway entrance along Ridge Avenue near the southwest corner of the site.

The proposed action, if approved, would allow the Park District to build a two-story building addition on the north and west elevations of the building. There are two scenario's presented by the petitioner; the "Base Bid", which includes a new gymnasium with one full size basketball court, a 2nd floor running track around the perimeter of the gym, additional office space, remodeled administrative areas and locker rooms, a fitness center, and a fourth pool. The second scenario is the "Alternate Bid", which consists is identical to the base bid, except the gymnasium expansion and 2nd story running track would be larger to accommodate two full sized basketball courts. The only exterior difference between the two bid scenarios is that the base bid includes an outdoor basketball court, and the alternate bid incorporates that outdoor basketball court within the building as the second full sized basketball court.

If bids for the work are favorable, the AHPD will proceed with the larger alternate bid version of the project, however, if bids come back indicating high construction costs, AHPD will proceed with the smaller base bid scenario. The zoning analysis of this project takes a conservative approach and has reviewed the project assuming that the larger alternate bid scenario will be constructed. If the AHPD opts to construct the smaller base bid, alternative bid zoning approval can be applied to the base bid since the scope and intensity of the project will have been reduced (i.e. the zoning approval of the base bid is substantially complaint with zoning approval of the alternate bid).

In order to accommodate for the additional use of the subject property given the proposed building addition, an expansion of the parking lot would occur, increasing the on-site parking to 266 spaces (75 space increase). The skate park, basketball court, tennis courts, and playground would be removed to make space for the new building and parking areas. However, a new playground area would be added to the north of the existing building. The outdoor field space would be reduced in size to where there would be only one full size soccer field (or two half-size soccer fields) as opposed to both a full sized field and a half sized one. Safety Town would remain in its current location. The amount of parking spaces and orientation of the parking areas is identical under both the "base bid" and "alternative bid" scenarios.

The current facility employees 4 full time staff members and 75 part time staff members. As a result of the proposed addition, the facility will have 6 full time staff members and 125 part time staff members. However, the maximum number of staff present at any one time is anticipated to be 35, compared to 25 currently. Hours of operation during the week would be 5:30am to 10:00pm (opening ½ an hour earlier than current operations), and weekend hours would remain the same (6:00am to 9:00pm Saturday and Sunday).

Programming and attendance for the swimming pools is anticipated to remain unchanged. The proposed gym would experience peak usage between 5:00pm and 9:00pm during the week as a result of youth sports events.

Neighborhood Meetings

The petitioner held three open houses/neighborhood meetings in December of 2017 to introduce the project to surrounding neighbors. A record of the comments received at these meetings has been included in the packet for the Plan Commission.

Conceptual Plan Review Committee

On November 8, 2017, the Conceptual Plan Review Committee (CPRC) met to discuss the Olympic Park project. The committee had general questions about traffic, parking, community need for the facility, and the potential for safety fencing/netting around the soccer field. The CPRC was generally supportive of the project and encouraged the petitioner to move forward.

Design Commission

On February 13, 2018, the petitioner appeared before the Design Commission for review of the architecture and aesthetic of the building. The commission had concerns regarding the use of precast concrete on the gymnasium addition and voted for a continuance to allow the petitioner to propose revisions to the design to address their concerns. The project is scheduled to reappear before the Design Commission on March 13th.

Zoning and Comprehensive Plan

The subject property is within the P-L Public Lands zoning district, which is the appropriate district for public uses such as Olympic Park and the Olympic Swim Center. However, all developments within the P-L District are required to obtain Planned Unit Development (PUD) approval, which the property received in 1978. Consequently, an amendment to the previously granted PUD is required to allow the proposed building addition and site changes. Of note, the PUD was most recently amended in 2003 to allow for a small building addition to accommodate the third pool and an expansion to the parking lot.

The proposed use is classified as a "Community Center, Recreation Building" per the Zoning Code, which is designated as a special use within the P-L District. Since the property has never been granted a special use permit, the petitioner is required to obtain one as part of this process. This is consistent with similar approvals granted to the AHPD in 2013 to allow modifications at Camelot Park.

The Comprehensive Plan designates this property as "Parks" and the existing use as Olympic Park is compatible with this classification.

Site and Landscaping

The proposed development conforms to all height, bulk, and setback regulations of the P-L District. There is an existing curb cut along Euclid Avenue, which has been blocked off with four flower pots and was to be removed within five years of the previous PUD amendment from 2003. Since the curb cut was never removed, the petitioner has agreed to its removal as part of the proposed development.

The primary entrance to the facility is currently located at the southeast corner of the building. This entrance will stay, however, the building addition will add a second entrance along the western elevation adjacent to the parking lot addition. The secondary entrance will likely become the primary entrance to the facility as it is more centrally located to parking areas and has been designed to facilitate drop-offs and pick-ups.

As noted above, the petitioner has proposed to reduce the size of the playing field on the western side of the site from one full size and one half-size soccer field, to only one full sized soccer field. This reduction is partly due to the parking lot expansion, but also partly due to stormwater improvements proposed for the site. Specifically, the petitioner will be increasing the size of the at-grade stormwater detention facility located in the southwest corner of the site. The base of this detention facility will be seeded with native plantings to help improve stormwater quality and infiltration, and the perimeter will be screened on the east and west sides with several shrubs and an ornamental tree.

This detention area may be modified slightly from what is shown on the plans that have been provided to the Plan Commission due to last minute efforts to provide additional parking areas. This modification may cause the soccer field to shift slightly to the north. Staff is aware of concerns from the owner of the single-family home abutting the property to the north that soccer balls have occasionally broken windows in their home. Shifting the soccer field to the north may exacerbate this problem, and so staff encourages the Park District to work with this property owner to find a solution, which may include safety netting or additional landscape plantings to help shield the home.

Site landscaping conforms to code requirements with exception to certain areas around the north portion of the parking lot expansion. In these areas, staff has requested additional plantings to conform with code requirements and to provide additional screening for the residential homes abutting the subject property to the north. A condition of approval requiring these landscape improvements has been included in the recommendation at the end of this report.

The petitioner has proposed an 8' tall chainlink fence between the soccer field and the detention basin, and a 10' chainlink fence around the basketball court (assuming the base bid is constructed). If the alternate bid is constructed, the 10' chainlink fence would not be constructed as the exterior basketball court would become an interior court. These fences require the following variations:

- **Variation to Section 6.13-3(b), Side and Rear Yards, to allow a 10' fence in the rear yard where code limits fence heights to 5'.**
- **Variation to Section 6.13-3(c), Exterior Side Yards, to allow a 8' tall fence in an exterior rear yard where code limits fence heights to 5'.**

Staff is supportive of both variation requests since they will facilitate safe and efficient usage of both exterior recreation areas.

Parking

The proposed improvements at Olympic Park will result in 291 on-site parking spaces, with 17 of these spaces being landbanked along the north side of the site. The Zoning Code requires parking spaces be provided as based on the sum of all uses within the building and assumes a worst case scenario that all spaces within the building are used to peak capacity at the same time. Based on Zoning Code requirements, a total of 757 parking spaces are required on the subject property. **Table I** below illustrates this requirement, and **Exhibit I** at the end of this report shows the parking calculation.

Table I: Parking Summary

Total Parking Required	757
TOTAL PARKING PROVIDED	291
Surplus/(Deficit)	**-466**

Therefore, the following variation is needed:

- **Variation to Section 11.4, Schedule of Parking Requirements, to reduce the required amount of off-site parking from 757 spaces to 291 spaces**

The petitioner has submitted a parking study, which surveyed existing usage of the parking lot during two weekdays in November 2017, and one Saturday in November 2017 when a swim meet was taking place at the facility. Peak parking demand occurred at 3:00pm on Saturday where 203 vehicles were observed accessing the site (current parking lot has 191 spaces). Due to a lack of available parking within the on-site parking lot, 14 cars parked along Ridge Avenue. The traffic study used this survey as a baseline to establish parking demand for the existing facility, then used the Institute of Transportation Engineers manual (ITE) to forecast future parking demand to be generated by the proposed addition. When added together, the peak future parking demand was estimated at 309 parking spaces (274 spaces are proposed with an additional 17 spaces landbanked), which results in an anticipated deficit of 35 parking spaces (assuming landbanked parking is not constructed). The study identifies approximately 45 street parking spaces along Ridge Avenue north of Euclid and south of Elm Street. It should be noted that forecasted peak parking demand for AHPD facilities typically exceeds on-site parking provided at those facilities. For example, peak parking demand in 2013 at Camelot Park was estimated at 143 spaces when an addition was proposed at that facility, and only 72 on-site parking spaces were proposed at that time.

In order to balance preservation of greenspace and the ability to provide adequate onsite parking, the petitioner has proposed landbanking 17 parking stalls at the northern side of the site adjacent to Safety Town. This is a last minute change proposed by the petitioner, and these landbanked parking spaces are not reflected on the plans provided to the Plan Commission. Staff will provide updated plans for clarification at the public hearing. If these 17 landbanked spaces are constructed, the forecasted parking deficit at peak usage would decrease from 35 spaces to 18 spaces. A condition of approval has been included that would require landbanked parking to be constructed by the petitioner at the request of the Village should it be determined that a deficit of on-site parking has caused problematic off-site parking spillover.

The parking study also notes that Christian Liberty Academy (located across Ridge Avenue to the east of the subject property) uses the Olympic Park parking lot for student drop-off and pick-up activities at 8:30am, 12:00pm, and 3:30pm during the school week (these are not peak usage times at Olympic Park). There is no agreement, either written or verbal, that allows for this shared used of the subject property parking lot. If parking during peak times on the subject property is overflowing to the street and becoming a problem, the AHPD may wish to approach Christian Liberty to see if shared usage of the Christian Liberty parking lot would be allowed during peak usage times at Olympic Park, which likely fall outside of peak usage times for the Christian Liberty parking lot.

Within their response to first round comments, the petitioner has outlined their rationale for the requested variation and provided the required written justification supporting their request. The Staff Development Committee is supportive of the variation for the following reasons. First, certain aspects of the park operate as a neighborhood park (basketball courts, playground, etc.) where many patrons are grade school and high school age. These patrons come to the park by foot or bicycle, or are dropped off by parents who frequently leave and do not park. To further encourage non-motorized modes of travel, the Park District is providing additional bicycle parking racks on the west side of the building. The total number of bicycle parking spaces is 52, which exceeds the code required amount of 46 spaces.

Second, the Park District will not actually use all spaces within the facility to their peak capacity at the same time. The traffic study provided by the petitioner makes it clear that the Park District is aware of parking capacity constraints and concludes that "parking usage should be monitored closely and programing be scheduled for the expanded facility so that major activities (i.e., indoor basketball games, outdoor soccer games, etc.) do not coincide with peak swim center activities (swim meets)". Additionally, the report notes that usage of the outdoor fields on the subject property has decreased significantly since additional soccer fields and football fields were added in Sunset Meadows Park. However, a condition of approval has been recommended that would require the AHPD to adjust scheduling so that major events don't overlap, and if necessary, reduce scheduling to mitigate parking overflow outside of the subject property.

Finally, the Village Board has approved similar variations for other AHPD facilities, including at Frontier Park, Camelot Park, and Pioneer Park. These variations were approved as follows:

- Frontier Park (2013): 272 parking spaces allowed where 729 spaces are required (457 space deficit)
- Camelot Park (2013): 72 parking spaces allowed where 383 spaces are required (311 space deficit)
- Pioneer Park (2006): 133 parking spaces allowed where 647 spaces are required (514 space deficit)

Staff believes that with appropriate event scheduling, the ability for landbanked parking to be constructed at the request of the Village, the possibility of shared parking with the Christian Liberty Academy, and the existence of street parking along Ridge Avenue, the proposed parking variation will not have a detrimental impact on the surrounding community. Therefore, the necessary criteria for variation approval have been met and staff is supportive of the proposed variation.

Traffic

The petitioner has submitted a traffic study in conjunction with their application, which has analyzed the major intersections adjacent to the development to determine if these intersections have the capacity to handle the projected traffic volume that will result from the proposed addition without creating adverse impacts to their functionality. All intersections are expected to continue functioning with minimal increases in delay, with exception to the intersection of Ridge and Euclid. Specifically, southbound delays at this intersection are expected to increase by over a minute and a half during the weekday morning peak hour and the weekday evening peak hour (graded as Level of Service "F"). This delay is typical for a minor street intersecting a major street with heavy through volumes, such as Euclid Avenue, however, as southbound cars on Ridge begin to stack as they await movement through the intersection, the stacked cars will back up and block ingress to the southern driveway entrance into the subject property.

The traffic study has identified several solutions to address this situation. First, as patrons familiarize themselves with the remodeled site, they may opt to utilize the northern driveway for ingress into the site if the southern driveway entrance is blocked due to stacked cars. If this does not prove effective, the traffic study has recommended "Do Not Block" signage be installed in front of the southern driveway entrance to discourage cars from queuing and blocking ingress into the subject property. Third, the study states that "future consideration should be given to limit the south (existing) site access to egress only should queuing/operations become problematic". Under this scenario, all northbound automobiles on Ridge would be forced to enter within the northern driveway, which would prevent back-ups on northbound Ridge Avenue that would occur when southbound cars are stacked to the point where they block ingress into the southern driveway. Conditions of approval requiring the Park District to implement these solutions, if deemed necessary by the Village, have been included.

Finally, the study also recommends that the Euclid Avenue and Ridge Avenue intersection be evaluated after the addition is complete and the facility is back in operation to determine if future improvements are necessary to Ridge Avenue, i.e. widening the southbound approach to provide a separate shared left-turn/through lane and a right-turn lane. Widening Ridge Avenue at this location would need to be coordinated with the Cook County Department of Transportation, and it is unknown if this widening is actually feasible. The Village will continue to monitor operations at this intersection to determine what, if any, action is necessary to ameliorate traffic congestion.

RECOMMENDATION

The Staff Development Committee recommends approval of the proposed PUD Amendment, Special Use Permit, and the following variations from Chapter 28 of the Municipal Code:

- Variation to Section 11.4, Schedule of Parking Requirements, to reduce the required amount of off-site parking from 757 spaces to 291 spaces.
- Variation to Section 6.13-3(b), Side and Rear Yards, to allow a 10' fence in the rear yard where code limits fence heights to 5'.
- Variation to Section 6.13-3(c), Exterior Side Yards, to allow a 8' tall fence in an exterior rear yard where code limits fence heights to 5'.

This approval shall be subject to the following conditions:

Parking Related:

1. The Arlington Heights Park District shall take the following actions if it is determined, at the sole discretion of the Village of Arlington Heights, that there is a shortage of on-site parking spaces on the subject property:
    a. The Park District shall work with the Village to adjust scheduling so that major events do not overlap. This may include a reduction in the amount of programing that is allowed on the subject property.
    b. The Park District shall construct all landbanked parking stalls, as identified in the plan prepared by Gewalt Hamilton Associates, Inc., within 90 days upon request of the Village.
    c. The Park District will explore the ability for a shared parking agreement with the Christian Liberty Academy located to the east of the subject property (or other acceptable location), which agreement shall be subject to review by the Village.

Traffic Related:

1. If it is determined by the Village that future roadway improvements are feasible and necessary to correct traffic congestion at the intersection of Ridge Avenue and Euclid Avenue, the Park District shall dedicate the necessary land to facilitate such improvements.
2. At the request of the Village, the Park District will limit the southern entrance drive to restrict ingress into the subject property from northbound automobiles on Ridge Avenue.

General:

1. The petitioner shall provide three foot tall shrubs in the landscape island at the northeast corner of the site should the landbanked parking be constructed. Additionally, the petitioner shall substitute the Dogwood and Nine Bark shrubs proposed at the north side of the parking lot expansion with six foot tall evergreens, and additional evergreens shall be added to the north of the parking lot expansion to conform with Section 6.15-1.2 of Chapter 28 of the Municipal Code.
2. The petitioner shall comply with all Federal, State, and Village Codes, Regulations, and Policies.

_____ March 9, 2018

Bill Enright, Deputy Director of Planning and Community Development

Cc: Randy Recklaus, Village Manager
All Department Heads

Exhibit I: Parking Calculations

Use	Parking requirement	Square Footage	Number of Occupants	Number of Employees	Required parking spaces
Lower Level					
Multi-Purpose Rooms	30% of Occupancy	2,105	140	N/A	42
Storage, Mechanical, Bathrooms/Locker rooms, Non-functional Space	N/A	12,696	N/A	N/A	0.00
LOWER LEVEL TOTAL		14,801	140	N/A	42.00
Ground Level					
Multi-Purpose Rooms	30% of Occupancy	2,956	197	N/A	59
Daycare	3 spaces per employee	581	N/A	2	6.00
Offices/Administrative	1 space per 300 sf	1,222	N/A	N/A	4.07
Leisure Pool	30% of Occupancy	6,076	291	N/A	87.30
Lap/Diving Pool	30% of Occupancy	11,040	505	N/A	151.50
Warm Water Pool	30% of Occupancy	3,563	168	N/A	50.40
Bleachers	30% of Occupancy	N/A	412	N/A	123.60
Gym	30% of Occupancy	19,133	382	N/A	114.60
Concessions	1 space per 300 sf	350	N/A	N/A	1.17
Storage, Mechanical, Bathrooms/Locker rooms, Non-functional Space	N/A	14,465	N/A	N/A	48.22
GROUND LEVEL TOTAL		59,386	1,955	2	646
2nd Level					
Control Desk	1 space per 300 sf	107	N/A	N/A	0.36
Fitness Room	30% of Occupancy	5,049	101	N/A	30.294
Assessment Rooms	1 space per 250 sf	271	N/A	N/A	1.08
Track	30% of Occupancy	6,339	126.78	N/A	38.03
Storage, Mechanical, Bathrooms/Locker rooms, Non-functional Space	N/A	3,312	N/A	N/A	0.00
2ND LEVEL TOTAL		15,078	228	N/A	69
FACILITY TOTAL		89,265	2,323	N/A	757
REQUIRED PARKING				Total Parking Required	757
				TOTAL PARKING PROVIDED	266
				Surplus/(Deficit)	-491

APPROVED

PLAN
_____
_____
_____

COMMISSION

REPORT OF THE PROCEEDINGS OF A PUBLIC HEARING
BEFORE THE VILLAGE OF ARLINGTON HEIGHTS
PLAN COMMISSION

RE: OLYMPIC PARK SWIM CENTER - 660 NORTH RIDGE AVENUE - PC#18-002
PUD AMENDMENT, PARKING VARIATION

REPORT OF PROCEEDINGS had before the Village of Arlington Heights Plan Commission Meeting taken at the Arlington Heights Village Hall, 33 South Arlington Heights Road, 3rd Floor Board Room, Arlington Heights, Illinois on the 14th day of March, 2018 at the hour of 7:33 p.m.

MEMBERS PRESENT:

TERRY ENNES, Chairman
LYNN JENSEN
JOE LORENZINI
BRUCE GREEN
JOHN SIGALOS
JAY CHERWIN

ALSO PRESENT:

SAM HUBBARD, Community Development Planner
BILL ENRIGHT, Community Development Deputy Director

CHAIRMAN ENNES: Moving on to our next petition for Olympic Park Swim Center, PC#18-002, is the Petitioner here? Would you please come forward? I would like to swear you in. Will anyone else with your group be testifying or possibly testifying? Let's do this all at once.

(Witnesses sworn.)

CHAIRMAN ENNES: Okay, thank you.

MR. REA: You're welcome. I just want to introduce myself. My name is Ben Rea, I'm the director of Parks and Planning for Arlington Heights Park District.

CHAIRMAN ENNES: Would you spell your name for our court reporter please?

MR. REA: Ben, B-e-n, Rea, R-e-a.

CHAIRMAN ENNES: Okay, please go ahead, Ben.

MR. REA: I want to thank you all for taking the time tonight to review our submittal for the renovations to the Olympic Indoor Swim Center. I'd also like to specifically thank Sam and Steve from the Planning Department for all the assistance they've provided, guiding us through this process.

I'd like to give a little background on how we arrived with the Olympic Swim Center and the potential project for your review. It's always been kind of considered in the last few years as a potential site given its close proximity to the center of town and unique opportunities that it might present to the public for programming opportunities. To further exemplify why we think it's a unique site, for example, in the Recreation Park area, we have 4,842 of our total households in that area within one mile of the Olympic site which comprises about 24 percent of our total households. The Pioneer Park area also consists of 4,782 households which is about 23 percent of our total households, also within one mile of the Olympic Indoor Swim Center. Then the Frontier Park area consists of 3,607 households within 1.8 miles of the Olympic Indoor Swim Center which comprises about 18 percent of our total households that we represent. So, in total between those three sites, we have 65 percent of our households within less than two miles of the Olympic Indoor Swim Center.

So, to better understand if this would be an appropriate project for the community, in 2017 in September, the Park District enlisted the services of Ron Vine and Associates to conduct a random sample survey, a statistically valid survey of our residents to determine what their needs would be. When we conducted that survey, we were hoping to get back a minimum of 700 surveys to make sure it was a valid survey. We actually received near 1,200 back from the residents, so we had a really good return rate and at 95 percent accurate level. So, we're very satisfied with the responses that we got from the public.

Some of the things that were shared with us was that the public has an additional need for indoor walking and jogging spaces. They have a desire to see a fitness center be developed in the community. They are also looking for some additional opportunities for indoor swimming as well as indoor court space, whether that be for volleyball or basketball. They are also looking for increased amenities for our active aging adults, that was very clear from the survey. It was also very clear that Olympic was a site that they had a lot of interest. It was rated as our top site to have some attention take place to it in the very near or short term.

So, once we had that information, we decided it was appropriate to

start the process where we had our community meetings with the public. We held three in December at the Olympic site with residents. We had one on December 3rd, 5th, and 6th, and we also had one regularly scheduled board meeting on December 22nd where we did our best to address the concerns and the needs of the community that came to those meetings. We took from those meetings their input, they were all very positive meetings with the public, and took that information that they provided us and we put it into the plan that you see before you tonight.

We are very excited to have this proposal before you. We think it does provide a unique opportunity in the community. It's very centrally located and we're very excited to have this.

So, at this time, I'm going to present Dave Yandel with FGM Architects. He's going to take through the PowerPoint that's been provided for you tonight.

MR. YANDEL: Thanks, Ben. Again, my name is Dave Yandel, Y-a-n-d-e-l. I'm a principal with FGM Architects. So, we've put together just a brief presentation, some supplementary information to the package that you guys have received and reviewed to date.

First off, an overall aerial. Olympic located, again as Ben mentioned, near the center of town, directly north of Euclid bounded by Ridge and Salem. We're looking to expand the building to the north.

We've done a little bit of 3D modeling and sketch of it, we just took a couple of snapshots of kind of some contextual images. This is looking north and east, kind of across Euclid and Northwest Highway back at the main site. This is showing the addition to the north, the existing play fields ready for soccer, the adjacent buildings including commercial along Northwest Highway and Euclid, the Christian Liberty Academy kind of to the east of the existing building, residential neighborhood, the Montessori School a little bit to the north.

As you kind of zoom around the site, now we're kind of looking north and west past Christian Liberty towards the front, the current kind of front door of Olympic. As we move on, we're kind of flying around, now we're looking back to the southeast, kind of across the Montessori School, across Fernandez, across Salem, kind of looking at the new west elevation which is proposed to be the new front door to the facility fronting the park.

Kind of a closer look as we're coming over the top of Christian Liberty and the running track and the football field. A little view of what is, again the addition to the north, it's pretty much taking up the space of the existing skate park and tennis courts that are on the site now.

Finally, we're starting to zoom in a little bit closer. Here again, coming across Euclid, the new west elevation, the existing building kind of to the right of the addition, the white roof to the left. Another view a little bit closer as we come in off of Euclid. You know, one more shot again across from Christian Liberty, just kind of showing the massing and scale of the building not only in relation to the neighborhood but the adjacent school and commercial properties that are located nearby.

New west elevation as we start to get closer, what you're seeing in front of the building is new parking, and to the north of the addition is a new access road. This provides 363 access to the building not only for visitors but to our Fire Department, and it about doubles the size of the current parking capacity for the new facility.

Looking closer, this is the new addition. In the forefront is the new warm water pool, an activity pool, a therapy pool used for all ages from swim lessons all the way to seniors. The middle block is the new main entrance, it's for locker rooms, fully accessible

locker rooms, and a second-story fitness center that's going to overlook the park and green space, and then the gymnasium addition to the north.

This is kind of the overall site plan, north is to the right. The original Olympic Swim Center kind of located to the left half of the addition wraps around the west and then again to the north with the front entrance being right in the main center of the building. Again, surrounded by new parking, an expanded detention area to the southwest corner of the site. Basically, the other perimeter areas, the large green play space, the Safety Town, and the buffer to the neighborhood to the north stays fairly in tact. Right now, the north edge of the parking lot goes up to the existing sidewalk where the north edge of the tennis courts are. So, really the very north edge of the site remains pretty much in tact.

From our recommendation, today's variations that we're looking for, the biggest one being number one is reduction of code-required parking from 757 spaces to 291 spaces. Then the other two variations are with respect to fencing, one is number two, the 10-foot fence would only come into play if we stayed with the base bid which would be a single gym and a 10-foot tall fence would be requested around the basketball court that's shown on the north side of the site. Number three, allows up to an eight-foot tall fence. I believe the tallest fence we have outside of the tennis court is actually being shown as six feet tall right now, and that would be around a sundeck located on the west side of the site.

With respect to parking, this is the most recent parking plan or site plan that we've shown. It shows the total of 291 parking spots. It shows 274 initial parking spots with 17 spots landbanked on the very north, the area that we just talked about directly south of Safety Town. So, for those in the audience, these are 17 spots that would be landbanked, not necessarily built on day one, but then this is a little bit different than the initial site plan where we're maintaining more of the existing parking lot that happens on the southwest corner of the site. Then the shape of detention needs to be finalized but would draw a little bit to the north, still allowing for the large green play space you see striped in here as the size of a full size soccer pitch. A full-size soccer game is occasional on the site, mostly it's used for youth soccer games.

So, the questions and the comments that we've gotten from Staff to date really are parking related. Number one is working with the Park District, or the Park District will continue to work to make sure that major events such as a swim meet, a basketball tournament or something would not happen at the same time. Those are the two kind of big high demand activities, a swim meet and anything that might occupy the double gymnasium. So, scheduling would be key to make sure that those didn't happen at the same time, putting a high stress or demand on the parking lot. If the Village at any time determines that the additional 274 parking spots are not adequate, we agree to construct the 17 additional landbank parking spots as soon as possible. Then lastly, looking at any possible shared parking arrangements maybe with the neighbors including Christian Liberty Academy, there is not currently any formal agreement between any other groups located nearby, but the Park District is wide open to initiate those conversations and looking for opportunities to share parking with the neighbors.

With respect to traffic, long term, there is potential for increased traffic at the intersection of Euclid and Ridge. So, at the request of the Village, the Park District would either donate land or continue to work with them to resolve that conflict that may include an additional turn lane or other measures to reduce potential conflict at that intersection.

Then lastly, we had some comments with respect to landscaping and

the landscape buffer to the residents to the north. It was really clarifying the species of trees and plants on the north side and locating some additional trees that weren't shown on the initial submittal on the area north of Safety Town. In this sketch, that is these additional plantings here along the property line to help screen this residence directly north, these two residences directly north of Safety Town. These are mature trees, mature plantings that are here; adding evergreens directly north of parking or even in this buffer would probably restrictive. But adding these additional plants at the property line and changing these plants to evergreens was something that we've made for tonight's presentation.

This is just a quick snapshot view of that area currently that's looking west, residents to the north, and then this is that existing sidewalk that is going to be the north edge of the new parking or new drive aisle.

Lastly, we just put together a couple of before and after images. These are fresh off our meeting with the Design Commission last night. This is an existing view from Euclid looking at what is currently the main entrance in the south elevation. In this rendering, you can see the addition to the building rolling to the north or the right-hand side of the image. We're looking at a consistent color palette using similar bricks, similar colored for any precast concrete that might be painted to match both the dark brown brick color or the buff split-face block colors, as well as any accents with the aluminum metal panel. That's consistent through all these images.

Here now is a view halfway up Ridge at the current service entrance to the north part of the existing building. This is kind of where the addition begins, and we're showing landscape screening around the new transformer, a screen wall that enclose a generator and trash recycling. This will continue to be a service entrance to the building but cleaned up a little bit more in terms of landscaping.

This is a view looking back south and east, or I'm sorry, south and west pretty much from the steps of the gymnasium of the Christian Liberty Academy. This is a similar view from the same vantage point of the new gymnasium addition. The height of this gym is significantly lower than the neighboring gym, predominantly because that gym sits up about two flights of stairs, so about 15 feet higher than ours.

Walking around the building, this is starting to look at the new west elevation. This is again the gym addition, the playground space, and the foreground, it's bounded by the building and some fencing along the parking lot. To the right of this image is a new brick masonry mass that will be the new locker room, some new restrooms, and offices. Then to the right of that is the new main entrance.

Lastly, this is a view looking, kind of from Euclid looking back to the east. This is kind of the main view a lot of people see when they come across Northwest Highway across the train tracks, when they get past the little law building, this is kind of the first snapshot of the building. So, this is the new addition; in the center of the picture is the new warm water pool addition, and then to the left side is the new main entrance. Then kind of in the background you'll see the tail end of the gymnasium addition.

This is the existing west elevation now. It has some windows that look into the main lap pool. Otherwise, it's a large brick facade, and there's a sundeck which is used sometimes for storage.

This is the new west elevation, again with the therapy pool up front, the main entrance to the center, and second floor fitness again looking out over to those large

windows across the park. Then this is the new main entrance to the facility looking due east at the west elevation. Large two-story space, light bright, bringing hopefully lots of natural light into the facility, really trying to welcome new visitors to the facility.

With that, any questions?

CHAIRMAN ENNES: Does that conclude your presentation?

MR. YANDEL: That concludes my presentation, thank you.

CHAIRMAN ENNES: Great. We're going to go to the Staff report, so if you want to have a seat? Thank you for your report. Sam, would you like to provide the Staff report?

MR. HUBBARD: Good evening to Chairman Ennes and the Plan Commission. I'll go through my Staff report this evening. As you've heard, the subject property is located at the intersection of Euclid and Ridge Avenue, address is 616 North Ridge Avenue. The current zoning of the property is P-L, that's Public Lands, that's the appropriate zoning district for this type of facility.

The Petitioner is before you this evening because they are requesting an amendment to a previously granted PUD. Originally, the PUD was granted in 1979 and was amended most recently in 2003 to allow a building addition and some changes to the parking lot. At that time, they were also granted a variation to reduce the parking requirement on the site. Based on the uses back then, there were 318 parking spaces required, and they were providing only 190 spaces.

Additionally, the Petitioner is before you this evening to request the issuance of a special use permit to allow a community center and recreation building. This use is classified as a special use in the P-L District. A formal special use permit was never granted for this. So, that's the reason for the request. There is no change in programming really or use here, it's going to remain as the Olympic Park and Swim Center. It's just going to formally add the special use permit if approved. Additionally, as you've heard, the Petitioner is requesting three variations, one to parking and two for fences on an exterior side yard and one in the rear yard.

So, there have been a number of actions that have led the Petitioner to the point this evening before the Plan Commission. First, on November 8th, 2017, the Petitioner appeared before the Conceptual Plan Review Committee. They were asked some general questions on traffic, parking, and potential for safety netting and fencing. The Conceptual Plan Review Committee encouraged the Petitioner to hold a neighborhood meeting to make nearby residents aware of the forthcoming project. So, on December 3rd, 5th, and 6th, the Petitioner held three neighborhood meetings with residents nearby. They sent out letters in the mail to nearby residents to inform them of this meeting, and a summary of the meeting was included in the packet to the Plan Commission.

Additionally, the Petitioner published info on the project on their website. They posted informational boards in the Olympic Park facility outlining some basic information on the project. They put out a press release to local press notifying them of what they were planning. They put Facebook and Twitter posts to keep residents informed of what was going on. Finally, they also discussed the project at the Arlington Heights Park District board meetings on December 12th and January 9th which are public meetings open to the public and just to try and help get the word out, get the blessing from the Park Board.

On February 13th, the Petitioner appeared before the Design

Commission and that resulted in a continuance. I think there were some general concerns on the Design Commission's part relative to the use of precast concrete in the gymnasium addition. The Petitioner explored some alternatives and then reappeared last evening before the Design Commission and received a favorable vote of approval. There were some minor stipulations on some of the colors for the precast concrete on the gym, but overall it did result in a recommendation of approval from the Design Commission.

So, I just want to outline a few things for the Plan Commission. First of all, there's two aspects or there are two items that relate to this project that were included in the packet. That was the base bid versus the alternative bid. So, the base bid scenario includes this area as an exterior basketball court. The alternative bid, if bids are favorable, there will be a double gym addition. So, this is the single gym, and then this area here, the exterior basketball court, would basically be incorporated into the building under the alternative bid scenario.

Our analysis on the Village's end was under the alternative bid scenario which included the double gym. The site will remain essentially the same under both bids, but obviously the additional space within the building for the interior gym could result in a little bit more traffic and parking as there would be year-round ability to use that second gym. Our analysis was conservative in that approach so that if only the single gym was built, we still have analyzed the larger scenario and the zoning approval would still apply in both situations.

The other change I want to highlight for the Plan Commissioners is this is the plan that was submitted by the Petitioner and provided to the Plan Commission for your review. But due to some last minute concerns over the provided parking and whether or not there was enough parking on site and efforts by the Park District to incorporate additional parking areas, there were some last minute changes to the plans. So, I'm going to highlight those for you briefly.

First, you'll see here, this is, currently in that red box is where the existing parking lot for the facility exists. That parking lot was going to be removed to accommodate for the extension of the detention basin as you can see here. But the Park District has modified that a little bit and they are now proposing to keep the parking here which is going to shift the location of the detention basin a little bit. It's going to look, you know, more like this. That of course is going to shift the soccer field a little bit farther to the north. But what it does is it provides a little bit more parking and allows the Park District to landbank parking in this area here. So, this is 17 parking spaces originally proposed to be paved over, but now these spaces are going to be landbanked for future parking if necessary.

So, the original plans provided to the Plan Commission showed 266 parking spaces. This revision which includes the spaces here results in 274 spaces with an additional 17 landbank parking spaces on the north for a total of 291 parking spaces. So, if you watch the screen here, it's going to be a slow transition into the plan as currently proposed. If you keep your eye on both of the red aerials, you'll see the change specifically. So, you can see here now the parking lot is expanded, the detention basin is a little bit reconfigured, and the soccer field has shifted a little bit to the north. Then down here, these formerly paved parking spaces will remain as open space and will be created as parking if necessary.

So, I want to touch on, first of all, the fence variations. The first variation relates to fencing in what's called the exterior side yard. That's this fence here as proposed as an eight-foot tall chainlink fence with black vinyl coating. It's in between the soccer field and the detention basin primarily to keep soccer balls and sports equipment from going into

that detention area. Code requires or limits fences here to five feet in height; at eight feet, a variation is necessary.

The other variation is for the fence around the exterior basketball court. That fence is the same style fence, a black vinyl coated chainlink fence. This one would be 10 feet in height; again, code requires or limits fence heights to a maximum of five feet in the rear yard, and so a variation is needed. The second fence around the basketball court of course would only be built if the base bid moves forward. Obviously if the alternative bid is selected, the gym would be interior and there would be no more need for that fence or variation.

So, the Staff Development Committee analyzed it and is supportive of both variations. We believe the site to be unique and the public uses echo on here with the playing fields, with the balls going back and forth, with the youths and young children that could be using the site. The fences are really necessary and will facilitate public safety here. Obviously, it will prevent balls from going into the drive aisle from the basketball court, interfering with car traffic, and it will help prevent balls from going into the detention basin as well. So, we're supportive of both variations for the fences.

Relative to parking, as I mentioned earlier, there are 274 spaces proposed to be constructed with 17 additional landbank spaces resulting in 291 onsite spaces. Code requires a total of 757 parking spaces. As the Plan Commission is aware, the parking code as it's, you know, currently applied assumes pretty much a worst case scenario where all spaces in the facility are used to their maximum potential at the same time. So, in reality, we don't expect that to happen, but that's what our code requires. So, that results in a 466 space parking deficit.

The Petitioner submitted a parking study in conjunction with their application to try and forecast a realistic parking demand for the site. What they did was they surveyed the existing parking lot usage to establish a baseline for the demand of the current facility, and then they used parking forecasting methods to estimate the parking demand for just the additional new construction spaces, adding them both together. They estimated the peak parking demand to be 309 parking spaces at peak times. So, that peak time was estimated at 6:00 p.m. on weekdays, that's when the fitness facilities are going to be at peak use for people coming back from work and wanting to exercise as well as programming for practices in the gymnasium areas for youth sporting events.

So, with a peak demand of 309 spaces, 274 spaces provided on site, that results in a 35-space potential parking deficit at peak times. With the 17 landbank parking spaces that could be constructed at the request of the Village, that would reduce this peak deficit to about 18 spaces. Do note that, and the Petitioner has also noted, that there is available street parking on Ridge Avenue, so I just want to show you where this parking is.

Here is an aerial of the site. The subject property is outlined in red. Street parking on Ridge is available at two locations primarily. The first one is on the east side of Ridge, north of the Christian Liberty Academy facility. That allows two-hour parking. Then there is a small portion along the west side of Ridge which allows unlimited parking. In sum and total, there's about 45 spaces in these areas that could accommodate for the peak parking demand.

Parking south on -- I guess, here we go. Parking in this area is restricted. There is no parking allowed here. Parking is also restricted on the east side of Ridge adjacent to Christian Liberty. There is parking allowed for drop-off during school days, but the yellow areas are really the only street parking available on Ridge. Two-hour parking does exist

on the west side of Salem, and four-hour parking exists on both sides of Ridge south of Euclid.

The Christian Liberty Academy does use the existing parking lot for drop-off and pickup operations during the school day, primarily in the morning and afternoon, and then dismissal times during the afternoon. There is no formal agreement between Christian Liberty and the Park District to do this, but the Park District has been gracious in allowing Christian Liberty to utilize their parking lot for these functions. There is a parking lot located in the Christian Liberty area outlined here in orange. So, we have requested the Petitioner reach out to Christian Liberty if necessary to coordinate, you know, if there can be some shared parking between the two users during peak times. If there are major events that could cause a large parking overflow, we suggest that the Park District work with Christian Liberty to see if they can get access to that parking lot if there are no corresponding events at the Christian Liberty facility.

So, Staff is supportive of the parking variation for several reasons, one of which being that the park will really function as a neighborhood park for those instances. A lot of the traffic will be foot or bicycle traffic, or will be parents dropping their children off there and leaving without parking. So, the parking demand may not be quite as projected due to the neighborhood characteristic of the park facility here. Additionally, the Petitioner is providing a substantial amount of additional bike parking racks. There will be a total of 52 bicycle parking spaces that will encourage non-motorized access to the site and reduce parking and automobile traffic. Additionally, the Park District has acknowledged that major events should not overlap and they will make a conscious effort to make sure that doesn't occur so that parking doesn't create a crunch and overflow significantly into the surrounding neighborhood.

Compliance with the parking regulations, providing 727 spaces would basically eliminate all of the green space on the site, so we don't think complying with the strict requirements of the code are really practical in this instance. Finally, I'd note that the variation is similar in extent to other facilities. In 2013, both Frontier Park and Camelot Park received parking variations to a similar extent, and in 2006, Pioneer Park also received a substantial parking variation. So, the parking code requirements just don't really capture the adequate demand for the parking on the site.

So, there were also some traffic issues I want to highlight in relation to this project. The Petitioner did submit a traffic study, and Staff did analyze that. One of the things that we noted in the study is that there are some issues with the intersection of Ridge and Euclid. So, this is looking at the southeast corner of the site. Here is the intersection of Ridge and Euclid. The intersection currently operates at a level of service E on the southbound approach, meaning that traffic frequently waits between 30 seconds and a minute to clear through that intersection during peak times. As a result of the addition, the southbound movements to this intersection are downgraded to a level of service F with a delay that will increase during peak times to over two minutes.

So, what that means is that as cars start to stack up at the intersection, they'll begin to block access into the site. So, cars that are going northbound on Ridge Road trying to take a left into the facility won't be able to get in if cars are stacked up. Eventually, what could happen is additional cars will start backing up here and then potentially be backing up onto Euclid Avenue creating a hazardous condition. This stacking and level of delay isn't necessarily atypical for a local street that intersects with a secondary arterial like Euclid Avenue that's only under stop sign control. But it is a problem that we have identified and

that the Petitioner needed to address.

So, there were several solutions proposed by the Petitioner. First is kind of a best case scenario in that incoming traffic would utilize the new northbound entrance into the site. So, here is the stacked up cars, and if the intersection into the Olympic facility site is blocked, cars could continue northbound on Ridge Road and access the site through the northbound entrance. This is kind of assuming a fix-yourself scenario where traffic just automatically organizes itself to avoid this problem. But if that's not good enough, the Park District and the Village of Arlington Heights will have to work to coordinate a Do Not Block Driveway sign here. Hopefully, that would keep cars from stacking up and blocking the driveway. Additionally, pavement markings could be put on the pavement that would identify that this is an area where cars should stack. But finally, if that doesn't work, the Village may ask that the Park District restrict the southern entrance to an exit only so cars would only be able to exit from the southern entrance and all cars would have to enter through the northern entrance.

Staff believes that these restrictions and solutions to the traffic problem are suitable, and we do recommend approval of the application subject to several conditions. I'll just go through those briefly.

The first one relates to parking, and as you've heard, you know, the Village wants a little oversight in working with the Park District to adjust scheduling so that major events don't overlap which could potentially include a reduction in some programming if it's determined that, you know, that a parking problem can't be avoided. Additionally, we're asking the Park District to agree to install the 17 landbank parking spaces within 90 days upon the request of the Village. We also ask that they explore a shared parking agreement with Christian Liberty.

Relative to traffic, the first condition addresses kind of a worst case scenario where future roadway improvements are needed to the Ridge Avenue and Euclid Avenue intersection. This would be a much larger project and would take coordination with the Village, the Park District, Christian Liberty, and the Cook County Department of Highways. So, if we continue to monitor traffic at that intersection and it's determined that some sort of larger scale improvement is needed and a right-of-way is needed for that, we just ask the Park District to agree to dedicate that right-of-way.

The second condition relates to the restrictions on the southbound entrance, it's restricted to exit only. Then as you've heard, there are some minor conditions on some changes to the landscape plan, and then our kind of boilerplate condition on complying with all codes. So, that concludes my presentation and I'm happy to answer any questions.

CHAIRMAN ENNES: Sam, thank you. Have all notices been sent out for this petition?

MR. HUBBARD: They have.

CHAIRMAN ENNES: They have. Thank you very much. Can we have a motion to approve the Staff report?

COMMISSIONER SIGALOS: I'll make that motion to approve the Staff report.

CHAIRMAN ENNES: And a second?

COMMISSIONER CHERWIN: I'll second.

CHAIRMAN ENNES: All in favor?

(Chorus of ayes.)

CHAIRMAN ENNES: Any opposed?

(No response.)

CHAIRMAN ENNES: Okay, thank you. So, I would like to ask the Petitioner to come back up and allow the Commissioners to ask any questions they may have. Also, Mr. Rea, are you aware of the conditions that were just referenced?

MR. REA: We are aware.

CHAIRMAN ENNES: You're aware, and those are, and you're agreeable to those?

MR. REA: We are agreeable.

CHAIRMAN ENNES: Okay, thank you.

MR. REA: You're welcome.

CHAIRMAN ENNES: Commissioner Jensen, any questions?

COMMISSIONER JENSEN: Well, I was in Conceptual Plan Review Committee, and you've done a good job of filling out the things that you discussed tonight. So, I don't have too many questions.

I was going to ask you if you thought you had addressed all of the neighbors' concerns, but since we've got a full audience here I'm going to let them speak for themselves. So, I won't ask you that.

Just a couple of minor things. Did you consider any netting like you have in Sunset Park between the soccer field and your detention pond? Do you feel it might be needed? Eight-foot doesn't really seem like, it might not catch all of the balls that come out of the soccer field.

MR. REA: We did have discussions and there was, you know, talk with the neighborhoods trying to reduce the amount of fencing that we had around the park. For example, there was fencing originally proposed on the west side of the park. Through those discussions with the public, they felt that that wasn't necessary to have that fencing. We still have an existing backstop to the north side of the property in the northwest corner which will help capture some of the soccer balls that are in close proximity to that home that is there. So, that was a major point before with one of the residents that lives over there, that that remain in place just to protect their home.

We did talk about, you know, soccer balls ending up in the detention space. It didn't seem to be a large issue. There was not a lot of concern either about soccer balls ending on Salem as well. So, could it be possible in the future? Possibly. If it's something that after we start using the site, if there is a determination that we need it, we would definitely at that point in time consider it and take the appropriate steps to begin that process.

COMMISSIONER JENSEN: Great, and I assume, I'll ask Sam, there's no need for them to come back to anybody if they need to put netting up if it turns out that the eight-foot fence isn't really doing what it needs to do?

MR. HUBBARD: If they want to put up safety netting, they would be required to come back, that would comply with code requirements unless it's, you know, within the variances granted this evening.

COMMISSIONER JENSEN: So, would it make sense to try to incorporate something in here so they don't have to come back through this whole process again if they did decide to put netting in?

MR. HUBBARD: Well, I think it's tough to really know what that netting

would look like, where it would go, and how tall it would be. You know, I'd be a little bit hesitant to grant a blanket approval for something that we don't really know what it's going to look like.

COMMISSIONER JENSEN: My other question was even your traffic engineer's report showed that you could hit a level where you would be exceeding the peak, the numbers, the spaces that you have for parking. What are the circumstances that would generate that? How frequently do you think you might have a situation where the peak demand exceeds even by a few regards, you know, the number of spaces you have there?

MR. MEYER: I'll introduce myself. I'm Brian Meyer, B-r-i-a-n M-e-y-e-r. I'm the director of Recreation and Facilities. To answer your question, mostly that peak time would be most likely be evening if we have, you know, basketball practices going on, the fitness center is full. It could also come into play Saturday afternoons if we have a swim meet which could usually draw about 250 people. We also have some people in the fitness center, possibly some things in the gym. So, those would probably be the peak times.

But as we stated earlier, we would definitely make sure we're not having a basketball tournament while we're having a swim meet. So, we would be very conscious of what is going on in the facility.

COMMISSIONER JENSEN: Thank you. The only other suggestion I would make, your traffic engineer's report is quite interesting, 153 pages, although most of them is technical appendices. I would recommend before you go to the Board that you actually have an executive summary of a couple of pages. Because you had 16 pages, no executive summary, it's a little hard to get down to the bottom line of what the finding was. So, that's something you might want to do before you go to the Board. That's all I have at this point.

MR. REA: Just for the record, our traffic engineer is here today if there are any specific questions.

COMMISSIONER JENSEN: It's a good report, I just think it needs an executive summary.

MR. REA: Sure.

CHAIRMAN ENNES: Commissioner Lorenzini?

COMMISSIONER LORENZINI: Sam, what leverage would the Village have if swim meets and basketball tournaments became a regular thing that's happening?

MR. HUBBARD: Well, there's a condition of approval that gives us kind of a little bit of authority over some of the programming. We would be able to work with the Park District to help restrict programming if it becomes problematic relative to parking.

COMMISSIONER LORENZINI: Okay, and on the aerial, can you show me how far north is --

MR. HUBBARD: How far north what building?

COMMISSIONER LORENZINI: The new building that was shown.

MR. HUBBARD: The new building? Let's see.

COMMISSIONER LORENZINI: Yes, right there.

MR. HUBBARD: So, essentially, I believe it would go up to here. If the double gym is built, probably somewhere down here, just --

COMMISSIONER LORENZINI: Even if the single gym wasn't built, you'd still have that area as a basketball court to the north.

MR. HUBBARD: Right, this area would be basketball, exterior basketball courts.

COMMISSIONER LORENZINI: All right. When do you expect to go out to bid for this project?

MR. REA: We're all going to be out to bid by the end of next month. So, April.

COMMISSIONER LORENZINI: And how long to build?

MR. REA: We're projecting it to actually be finished in September 2019.

COMMISSIONER LORENZINI: I know you have to competitively bid this, correct?

MR. REA: Correct.

COMMISSIONER LORENZINI: So, you don't want to give out the estimate?

MR. REA: The estimate for the project right now?

COMMISSIONER LORENZINI: Yes, for the project.

MR. REA: Well, the project was originally estimated in September at $16 million. Right now, if we were to construct the double gym, we're looking at closer to 18.

COMMISSIONER LORENZINI: All right, that's all I have. Thank you.

MR. REA: You're welcome.

CHAIRMAN ENNES: Commissioner Green?

COMMISSIONER GREEN: I just have a question for you, Sam, I think. The 17 landbank parking spaces, did I hear that correct, is an existing parking lot?

MR. HUBBARD: No. It was under the plans that were shown to the Plan Commission, they were shown as to be constructed. But in the last minute revisions that the Park District made, they're actually going to landbank those parking spots.

COMMISSIONER GREEN: Okay, because I just have a question about the landbank because you're coming up short on the peak demand. I'm going to hold off any other questions until I hear from the audience.

CHAIRMAN ENNES: Commissioner Cherwin?

COMMISSIONER CHERWIN: Thank you. Yes, I was in the Conceptual Review Committee as well. I think it's a great project overall. My major concerns, you know, to the extent I have concerns, Sam, I think the biggest one you addressed. You know, you guys also obviously recognized in the Euclid-Ridge intersection, you know, the stacking issue, the potential traffic. You know, left-in, potentially a left-out there I guess, you know, my thought was would you have to go to almost a one-way entrance only to the north? It looks like you guys were looking at all of that. That would be probably my biggest concern in this whole thing is that traffic congestion.

The other thing though related to that is circulation within. The parking lot, because obviously we're going to have a lot of kids here, we'll have a lot of cars going every which way and, you know, these peak load timeframes are going to be really, you know, I could see a lot of cars going a lot of different directions in this lot. That concerns me a little bit. So, you know, I would like probably some thought into maybe some circulation control within the lot that, you know, some thought around that, you know, because we do have kind of a funnel. We're going to be adding a lot of parking and it really does funnel into several different directions and different layers.

So, it's not, you know, probably my worst nightmare is AllState Arena, it's like the most terrible parking situation, and then I realized I don't think we're going to

get to that one. But you know, this on a smaller scale, because we've got so many different directions, I would hope you can put some thought into circulation and be mindful about that. Certainly, you know, I guess you guys, I did hear tonight, the entrance limitations and the exit limitations and that makes a lot of sense.

The other thing that Commissioner Jensen brought up was at the top of my list, too, which is the fencing. I seem to spend half my life in these soccer games when I'm not in youth football games, and you know, you're going to have a lot of balls in the detention. That's just, it's going to happen. An eight-foot fence isn't going to stop a lot of them.

The nature of the retention area, is it dry bottom? Is it going to be sort of a wild, you know, plants and everything? Or how is it going to look? Or is it going to be just grass?

MR. REA: It will be a dry bottom but we'll have some natural plantings in it so it will be more naturalized.

COMMISSIONER CHERWIN: There's going to be a lot of youth soccer players going there to get balls. So, whatever you're, you know, putting up there, you know, I kind of agree with Commissioner Jensen, given the experience we had at Sunset Meadows, I would have thought that we would at least have the option here to put something up that would prevent that. If we don't put up, if we don't have an approval now, you know, we don't have a safety issue that we had at Sunset Meadows, right, where balls are going to the street, but there's going to be a lot of traversing so we just have to keep that in mind, whether it's a gate in there or whatever. Just going to be a lot of kids going in there and get soccer balls.

There are as well on Salem, I mean I go to a lot of games in this area, that's not a very dangerous area because there's no one on Salem, but balls do go onto the streets quite a bit. I'm not concerned obviously about the north, that's really not an issue.

Then the other issue I guess I was thinking about was Ridge Avenue. Is there any flexibility on the Village's part to help support, if we do have, you know, not only that we, when you talk about in the reality maybe a deficit of about 35 spaces, some of that being addressed with the landbanking if we need it, but also allowing some of the on-street parking more southerly here on Ridge Avenue, say on the east side of Ridge Avenue by Christian Liberty, even if it's, you know, say after 4:00 o'clock or something, after the school day is over. Is that realistic? Is that something that, Sam, I'd ask you, that the Village would maybe consider to help alleviate some of the parking?

MR. HUBBARD: We can certainly explore it. I don't know the rationale for that parking restriction currently, you know, but it's something we can explore with our traffic engineer. I mean there could be a good reason why parking is restricted there, I just don't know.

COMMISSIONER CHERWIN: Yes, and if we do have stacking, you know, if there is heavier traffic here, it might even be less feasible to do that. But I think it would be at least something to think about. Those are my issues. Thank you.

CHAIRMAN ENNES: Thank you. Commissioner Sigalos?

COMMISSIONER SIGALOS: Well, Commissioner Cherwin just stated a couple of my questions. Again, on Ridge Avenue, I'm concerned with the traffic there and the stacking that's going to occur at that entry into the parking lot. Christian Liberty School, do they typically have activities on the weekends or not?

MR. HUBBARD: I don't know. I would imagine that occasionally they do. Maybe the Park District can respond to that.

MR. MEYER: If we do, one thing, sometimes we've had some soccer practices over there, most recently you might remember District 214 had basketball games on a Friday night at Christian Liberty, and what they did, they communicated with the Park District. We worked with them, the park in our lot to ease congestion around Christian Liberty.

COMMISSIONER SIGALOS: Just to pick up on what Commissioner Cherwin's point, on the east side of Ridge, right now there is no parking allowed on the east side of Ridge as I understood it, but if let's say after 4:00 o'clock or after 5:00 o'clock on the weekends, if parking was allowed on that east side of Ridge just immediately east of Olympic Park, that would help ease traffic and parking that may occur farther north on Ridge. Again, it's not a question to you, but if the Village would consider some type of parking signage there that would allow evening parking on the east side of Ridge and weekend parking on the east side of Ridge, that may help the situation.

My other thought was I thought I saw somewhere in the report that there was an existing curb cut on Euclid Avenue and IDOT wanted that removed. Could that, is there any consideration to an entrance off of Euclid Avenue into the parking lot and not have that eastern entrance, the southeast corner into the parking lot on Ridge? Where you could just have entry into Euclid or at the very northeast entry into the parking lot?

CHAIRMAN ENNES: Euclid is a state route, right? Euclid is a state route.

COMMISSIONER SIGALOS: Is that a consideration?

MR. HUBBARD: That's something they'd have to work with the Cook County Department of Highways on.

COMMISSIONER SIGALOS: I understand that.

MR. HUBBARD: Euclid Avenue is under their jurisdiction. I don't know if there would be concerns on the Cook County Department's part relative to proximity to Northwest Highway. I believe that would be only right-in/right-out type of entrance.

COMMISSIONER SIGALOS: It probably would be, but I would assume that most of the people that come from Arlington Heights to use Olympic Park come from the east, so they would be traveling westbound on Euclid, I'm guessing. That would allow an entry into the parking lot off of Euclid and avoid or not even have that entrance at the southeast corner of Ridge and Euclid. Just a thought if that would help alleviate, I could see a problem in stacking in front of that entrance on southbound Ridge. That's my major concern.

The other thing, can we go to a site plan that showed where that landbank area was proposed? Okay, that area there where you're marking it now, that's going to be paved anyhow, is that correct?

MR. HUBBARD: On their landbank scenario, it would be left as green space.

COMMISSIONER SIGALOS: Why don't we just build those right now? I mean I get it, I'm not in favor of losing a lot of green space, but that's not a significant amount of green space there. Why don't we build those 17 parking spaces now? Because I just always, everybody have landbank parking, I don't recall if the Village ever comes back and requires the owners to construct the parking necessary. Being that it's right there adjacent to the drive, I would suggest that those be constructed now.

MR. HUBBARD: I think it's a balance between trying to preserve green space and paving over with parking.

COMMISSIONER SIGALOS: I understand that.

MR. HUBBARD: I think the thought is you can always see what the actual demand is generated here, and if demand exceeds supply, then we have the option for 17 other spaces. But if we pave them and demand doesn't get there, then we've paved over a green space that is now going to be --

COMMISSIONER SIGALOS: Well, again it sounds like the demand is going to be there and it's going to alleviate people parking on Ridge which I would be concerned about. Anyway, that's my comment.

COMMISSIONER CHERWIN: I would just add to that, John, besides, you know, green space, you may also have traffic flow issues from those spaces, you know, where you have cars pulling in and out.

COMMISSIONER SIGALOS: I understand.

COMMISSIONER CHERWIN: Where it's going to affect more stacking potentially on Ridge. So, if we can avoid spaces there, I think, I mean I don't know, maybe that's not true but --

COMMISSIONER SIGALOS: No, I certainly see that. My last question, you mentioned your budgets that you have or estimates for this, that's prepared by your construction manager?

MR. REA: Yes.

COMMISSIONER SIGALOS: How likely are you, knowing what he prepared for you and the funds you have on hand, how likely are you to go with the base bid versus the alternate with the additional gymnasium?

MR. REA: The direction of our board is to try and, if we can afford it, to go for the second gym, that is the desired option at this point in time.

COMMISSIONER SIGALOS: So, knowing what the preliminary estimate is, you think that that's the more likely scenario, that you'll go with the double gymnasium?

MR. REA: Right now, yes. I mean obviously it all depends on how the bids come back maybe next month once we see them to make that final decision and the board will have to weigh in at that point in time.

COMMISSIONER SIGALOS: Okay, thank you. That's all I have.

MR. REA: You're welcome.

CHAIRMAN ENNES: Thank you, John. I have a couple of questions. On that same line of questioning, have you done an estimate of what it would cost to put in this 17 landbank parking spots now?

MR. REA: We haven't done an estimate. This was, as Sam mentioned, this is kind of a late development. Generally speaking, it may be fairly cost effective because they're directly adjacent to the drive aisle or next to. But there would be a cost to it.

CHAIRMAN ENNES: But wasn't part of the parking going to be up where the detention pond was?

MR. REA: Correct. The original scheme was to actually cut the existing parking lot back, kind of lose that last double row. Correct, thanks, Sam. In an effort to get the large detention area as far south as we can. There are some cost savings --

CHAIRMAN ENNES: As far north?

MR. REA: That's right. There are some cost savings to maintaining that area of existing parking, so there's a cost positive. The negative would be that it pushes the detention area a little bit farther north slightly reducing the amount of green space, play green

space.

CHAIRMAN ENNES: Why it would be nice to see an estimate would be because the negative is if you find out you need more parking and have to do it later, the cost is going to be higher I would anticipate. But that's your internal issue I think, that if it's 17 spaces with the deficiency, and I realize we have approved some huge deficiencies with some of the Park District properties in the past, but I would rather see the parking in just to minimize the amount that overflows onto the neighborhood streets.

Sam, were you in Staff when a couple of years ago, actually probably more than a couple of years ago, we approved the restaurant across Euclid from the park? Big Ange?

MR. HUBBARD: I was not, but I am aware that there is some shared parking agreement between that facility and the Park District taking, it's for like six spaces.

CHAIRMAN ENNES: Okay, I may have misunderstood. I thought you said there were no parking agreements, and I know one of the concerns we had with that restaurant was they don't have adequate parking. They had indicated, or at least it was my understanding that they had indicated to us that they had an agreement with the Park District to use some parking.

MR. REA: To clarify, with Christian Liberty Academy we have no parking agreements. That's to clarify that statement.

CHAIRMAN ENNES: Okay, but do you have -- wait, I'm sorry. So, there is an agreement with Christian Liberty Academy?

MR. REA: No, there isn't. That's why I'm saying there is no parking agreement with the Christian Liberty Academy. That's where I think the confusion --

CHAIRMAN ENNES: Oh, okay. But there is something with the restaurant?

MR. REA: Yes.

CHAIRMAN ENNES: Okay, okay. So, is that a written agreement or is that verbal?

MR. REA: It is a written agreement.

CHAIRMAN ENNES: Oh, it is, okay. I did think that. The air conditioning and heating equipment that will be on the roof?

MR. REA: Yes.

CHAIRMAN ENNES: Is that near any residential property?

MR. REA: No, it's quite a distance away.

CHAIRMAN ENNES: So, that's up against the school, Christian Liberty Academy?

MR. REA: Yes, and then we'll have --

CHAIRMAN ENNES: It's on that side of this?

MR. REA: Same type of screening that we presently have on the building to hide it and to --

CHAIRMAN ENNES: To block that?

MR. REA: Yes.

CHAIRMAN ENNES: Okay, that is all I have. So, if you want to be seated?

Can I see a show of hands for the number of people in the audience that might want to make a comment? Okay, so we have a few. I'm going to ask you each to

come up, we'll start in the back row and we'll move from the outside in, and then move up to the next row. I'm going to ask just to conserve time, if somebody else has also brought up the issue that you're going to address or is one of the issues you want to address, if you could just say I agree with that, unless there's another point you want to bring up? But just so that we can move this hearing along. We want to hear from all of you, want to hear all your concerns. But if we could proceed from that basis, that will help us.

We'll go through everybody that wants to speak. We'll hear what you have to say. When we're done, we'll close the public hearing and then the Commissioners will do their final deliberation. So, if we can start in that back row on the outside, was there anybody in that row who would like to come forward? Sorry to put you up first. But again, when you come up, would you please state your name and spell it? You're not required to tell us where you live but it can help us to understand what your concerns are.

QUESTIONS FROM AUDIENCE

MS. BYRON: My name is Linda Byron, B-y-r-o-n. I live on Salem Avenue across the street from the park. I have a number of concerns, one of which is I don't see a playground on the plans and it looks like you eliminated the playground. So, do I pause or do I just list all --

CHAIRMAN ENNES: No, make your statement and we can address that later.

MS. BYRON: Okay. The other one is we are concerned about the losing of green space and outdoor activities. So, I would definitely prefer having the basketball court an outdoor basketball court, because then it's more for the neighborhood kids so that they have some place to play.

My third question was is the baseball back lot, I'm not sure what to call it, still going to be there in the northwest corner of the park? Because it looks like it is going to eliminated from the plans here, and that's a really nice area for kids to play when there's no soccer games going on. It is definitely used.

CHAIRMAN ENNES: Okay.

MS. BYRON: Those are my comments. So, now do I sit down?

CHAIRMAN ENNES: Please. She raised a couple of questions. Mr. Rea, would you like to comment on those?

MR. REA: Sure. There is a playground and Sam had highlighted the area where the playground will be established. We'll have a four-foot fence around it for safety for the children that use it. The backstop --

CHAIRMAN ENNES: So, that will still be there?

MR. REA: Yes, it will be there. The backstop that was referenced is actually still in this depiction up there, and the plans are to leave that on the site.

CHAIRMAN ENNES: Okay. Who is next? Anybody else in the back row? Second to the back row? Thank you.

MR. LOCH: My name is Tom Loch, L-o-c-h. I live on the northwest corner of Olympic Park in the brick house that's two feet 10 inches away from --

CHAIRMAN ENNES: Did you say Sam?

MR. LOCH: Tom.

CHAIRMAN ENNES: Tom, oh, I'm sorry.

MR. LOCH: Yes, Tom Loch. My concern is also with the loss of green space. Right now, Olympic Park is a hybrid of a community park for the entire town, but it's also the only neighborhood park in the area that has a field to play in. The next closest field to play in for our kids would be all the way over in Virginia Terrace up by Thomas and Wilke and Yale, whatever, and the other one is Hasbrook. So, we're giving up a lot of green space and we'd like to try and keep as much as possible.

So, from that respect, I kind of support the idea of as little parking as possible because it's really consuming, we're paving paradise and putting up a parking lot. Because there's so much green space there, that's getting eaten up by this parking lot and there's no other green space of that magnitude and size anywhere in your lot. Kids aren't going to cross Euclid and the train tracks to go to Volz Park, that's just not a neighborhood park for us to use on the north side of the tracks. Let's see.

CHAIRMAN ENNES: So, what I'm hearing you say, you'd rather have some periodic parking on the streets as opposed to giving up more green space for parking?

MR. LOCH: Well, the apartments do it all the time for soccer games. So, I would support the reduced parking concept only because it's eating up a lot of green space.

In terms of the backstop, I'm glad they're keeping it up. In terms of the concern of, I am someone who lives on Salem and I coach soccer, I was a soccer referee in the youth program. Four of my sons play soccer. In watching all the games that go on over there which I enjoy to watch, there's a big set of trees all along on the east side of Salem Avenue that act as a pretty good buffer for balls that go up in the air. It's been my experience driving down Salem whenever a ball bounces onto Salem Avenue, it's usually because of little siblings playing on the side, they're kicking balls around the side, that's why it rolls into the street. It's not the stuff that comes around from the games.

CHAIRMAN ENNES: So, there is traffic on Salem?

MR. LOCH: There is, well, people live there and we drive on the street.

CHAIRMAN ENNES: I'm just teasing.

MR. LOCH: Well, he mentioned there was no one on Salem, I want you to know there's a whole bunch of people on Salem. I'm one of them.

CHAIRMAN ENNES: You didn't notice their smiles on the back when you said that.

MR. LOCH: Let's see. If there is a double gym, I think there should be a place for outdoor basketball because, like I said, a lot of the neighborhood amenities that are there right now are going to be reduced or eliminated. We want to try and keep as much of that as possible. People use that park for other things, kite flying, people go out there and shoot off rockets. They play drones and things like that. That's a big space for people to use and it's not going to be there anymore if you turn it into a parking lot.

I support the idea of, in fact I suggested because I attended two of the meetings when we had them at the park, and I also attended two of the board meetings and wrote letters to the board, and they've listened to a lot of things that I've said. They've been good about that. My big concern is about, I told them I'd come and support the idea of reduced parking because I think it helps with the green space so I'm good to do that.

Also, for the entrance on Euclid, I think that would be something, there's a curb cut already there. They used to allow traffic there. I know there's a median in

there to keep you from making a left turn. But right turn in and a right turn out I think would be a way to reduce some of the traffic backup on Ridge.

I've lived in the area for 32 years. I've lived in that spot for 32 years, I've lived in Arlington Heights for 55 years. I'm very familiar with the area. I've had several kids who went to Arlington High School. I've been driving around here for a long time. I think that would help if you have a right turn in and right turn out on Euclid. I think that would help reduce the traffic on Ridge.

Oh, one other thing. Is there a possibility perhaps to increase parking closer to Euclid and get some other spaces that are not eating up as much green space if the retention pond was made deeper? Because that's a pretty high area, it's about 720 feet above sea level at that point. If you made the retention area deeper so it would have the same capacity, it would have a smaller footprint and allow for more parking. That's a pretty high part of the town still over there. I think you might be able to consider getting more parking space by making the retention area deeper. Just a thought.

CHAIRMAN ENNES: Thank you, Mr. Loch. Anybody else in that row? We're going to go from this. Ma'am, before you come up, does the Park District want to reply to that question?

MR. REA: Just real quick. Just with respect to basketball, one of the things that we have been talking about is having basketball hoops within the parking area. That could be striped off, what park is this? Yes, like Rec Park, yes, similar to what's occurring at Rec Park. Kind of the less used parking areas, just having outdoor basketball hoops to supplement the courts that are being lost.

Then with respect to the detention pond, we do have challenges with making it any deeper because of the existing outfalls and where it ties into downstream. Correct. So, that's one of the challenges we have is that the pipes that we're going to be tying into are fairly shallow.

CHAIRMAN ENNES: Okay, thank you.

COMMISSIONER JENSEN: Terry, a follow-up question on that point, on the hoops and so forth. How many months can you use that outdoor basketball court as opposed to if you had it indoors? What's the split between the outdoors versus indoors?

MR. REA: I'd say the second snow is out, you can use the outdoor courts very easily. So, any time maybe from mid to late March through December at some point in time when snowfall starts.

COMMISSIONER JENSEN: Really six months of the year.

MR. REA: Yes, there's some pretty dedicated people that would play anytime.

MS. SELESKI: That's my concern, so I'll say hi, I'm Maureen Seleski. I'm on Salem Avenue, another person who lives there. I'm just going to --

CHAIRMAN ENNES: Maureen, if you'd spell your last name please?

MS. SELESKI: S-e-l-e-s-k-i. You asked us not to be repetitive but I strongly encourage the basketball hoops outside. We don't want the kids to have to be inside all the time. That place is used all year-round unless there is snow on the ground, and you're already taking away other space for middle age kids and teenagers. We need to have an outside space. So, the hoops are important. Thank you.

CHAIRMAN ENNES: Okay.

COMMISSIONER CHERWIN: Terry, I just want to correct the record. I am not an enemy of Salem. I should have qualified there's no through traffic on Salem. It's a beautiful street with lovely homes and awesome neighbors.

CHAIRMAN ENNES: My only point and I think our residents understood that is when you said that --

COMMISSIONER CHERWIN: I just want to make sure I'm not creating --

CHAIRMAN ENNES: He and I assume his wife were smiling in the background talking about they live on Salem.

COMMISSIONER CHERWIN: Okay, I love Salem. Thank you.

CHAIRMAN ENNES: Yes, the next person there. Good evening.

MS. HAAKER: Good evening. Thanks for the opportunity to speak.

CHAIRMAN ENNES: Sure.

MS. HAAKER: Cathy Haaker, H-a-a-k-e-r, Salem Avenue resident. Actually I'm in the last house that you would be looking at behind the retention pond. The conversations about the net, with the changes in the line of that retention pond, that net would be very, very unsightly and it would kind of run right in front of our home. I do agree with all of the other comments made by my neighbors. One exception though, if there is parking increased in that retention area, also that would end up in front of my home.

CHAIRMAN ENNES: Okay, thank you. Any, yes? Yes, sir. The gentleman behind you, yes. Good evening.

MR. LEWIS: Good evening. My name is John Lewis, last name L-e-w-i-s. I do not live on Salem so I'll break the streak. I live on Fremont across from Memorial Park. So, I use this facility quite a bit. Actually, I guess before I start, can I ask a question of Sam?

CHAIRMAN ENNES: No, direct it to us and we'll deal with that.

MR. LEWIS: Then my second question is could he go back to the slide where he showed the different parks with the deficiencies with the parking? Specifically Pioneer, I thought that would be instructive.

CHAIRMAN ENNES: Is that the one?

MR. LEWIS: My point was going to be, you know what, I use this facility probably 150-160 times a year to swim since 2004 after the last renovation. The parking is never full, and unless I'm missing something today, from what the Park District has said, there's really going to be no overlap between the events that are scheduled. I don't know if anybody has ever been to a swim meet, but there are hundreds of kids multiplied by two times the number of parents, basically take that and figure out the number of cars, and you're there the whole time, right? The facility is not filled with parking spots, at least I've never seen it in 14 years, 15 years, whenever it's going on.

So, I guess what I would say, I echo the concerns from the people on Salem that I think you're giving away a lot of green space. The code is the code, I'm a civil engineer by training and this required parking is absurd. I mean I understand that we're trying to argue and make justifications for why we should go down below, but if we're talking here proposed 62, Pioneer is 79, I've been to plenty events at Pioneer, sure, you have to search a little bit for space but I've never not been able to get a space at Pioneer either.

So, my comment would be I think you are, the comment about the landbank parking, absolutely not, don't build that parking. You don't need that. I would say that you could go at least to the percentage that you have for Pioneer and it looks like -- because

these spots are never used. I mean this is an urban desert as it is right now, and unless I'm missing something, you're not going to have a basketball tournament at the same time as a swim meet. I'm sure the parking study people can comment on this, but that's going to be the driving event for your parking demand.

If you're not going to schedule anything else with that, you don't need any more parking than what you have. If you want to add more to make yourself better relative to what's required with the code, go ahead. But I think you're overshooting it and I think you're going to regret it because that's just way too much parking. You don't need that in my opinion.

CHAIRMAN ENNES: Mr. Lewis, thank you. Anybody else in that row? Ma'am?

MS. BARAN: Hi.

CHAIRMAN ENNES: Hi.

MS. BARAN: My name is Lorie Baran, B-a-r-a-n. If you bring up the other picture that had the full park, I am on Fernandez. So, I'm on the forgotten street in the middle of the park that kind of leads into it where, I don't know if you can see the little circle where the cul de sac is.

CHAIRMAN ENNES: Okay.

MS. BARAN: Back to the picture we had, so we're on the cul de sac there. I guess I'm going to reiterate what everybody else has reiterated already today is the taking away of the green space that we have as a neighbor now. I have lived there for 30 plus years, have had a view of large, open green space. My concern right now is my view is going to be of a parking lot.

I know they've made some comments about some additional landscaping that is going to be put over there on the east side of the cul de sac. What about the circular and the west side of the cul de sac? Are we going to address the fact that our view right now is green, our view is going to be parking lot?

Then number two is the parking pattern on Ridge. Right now, with Christian Liberty using it in the morning, using it in the afternoon, using it in the evening, sometimes we wait on Euclid a minute, minute and a half to even be able to make a left-hand turn onto Ridge. We're kind of landlocked on our street, so that's pretty much our only way of getting to Fernandez.

CHAIRMAN ENNES: Okay.

MS. BARAN: So, I think that, I don't think we should gloss over the fact that we are going to have some real major traffic issues there. That's all I have to say.

CHAIRMAN ENNES: Okay, thank you. Mr. Rea, can you comment on --

MR. REA: The landscape issue?

CHAIRMAN ENNES: The landscape down by the cul de sac?

MR. REA: Yes, I mean if we need to provide some additional screening to the cul de sac, we would definitely consider that as part of the project.

CHAIRMAN ENNES: All right. Yes, ma'am. Good evening.

MS. DAPPER: Hi, Carmella Dapper, D-a-p-p-e-r. I also live on Fernandez. Can you put it back to the plain? I want to see the cul de sac where the playground is going to be. Our house is right on, my garden window is right off of the, I could see the playground right now. So, you're going to be putting the playground and taking it farther going towards Salem?

MR. REA: No.

MS. DAPPER: You're going to go back to the tennis courts. So, the cul de sac is to that circular area right there?

MR. REA: Correct.

MS. DAPPER: So, how close then, so you're not going to be, from my understanding in the past is that it was going to be going closer to the cul de sac. So, am I incorrect?

MR. YANDEL: We moved it farther away from the cul de sac.

MS. DAPPER: Okay, so the children playing on the playground won't be by the cul de sac.

CHAIRMAN ENNES: Ms. Dapper, would you address your questions to us?

MS. DAPPER: So, they won't be closer to the cul de sac, they will be closer to the basketball courts. So, the children wouldn't be closer to the street. As well as when you're talking about the landscape, how much is that closer to where the Safety Town is right now or where the gravel is for this? Is the landscape going to be, again they're going to be coming closer to my house? Because I'm like, four feet off of my house is where the Park District playground starts. So, I would like to know how close --

CHAIRMAN ENNES: Four feet from your house?

MS. DAPPER: From where our fence is, four feet out back towards the Olympic Park is where my house still has space. So, how much closer would that landscape be to myself?

CHAIRMAN ENNES: Okay, did you have anything else?

MS. DAPPER: No.

CHAIRMAN ENNES: Okay, can someone address that?

MR. REA: So, the playground again is going to be on the west elevation of the proposed addition, and the landscaping would occur only on Park District property. So, it would be offset from the property line.

MR. YANDEL: Just as a kind of follow-up on that, so from the north edge of the new parking lot, basically the line that's there, the sidewalk that's directly north of the new parking is the existing sidewalk that's there on the west side of, I'm sorry, the south side of Safety Town. So, in essence, everything north of the existing sidewalk in that whole buffer zone remains unchanged from how it is today. So, we're trying to keep this large, fresh green space with the mature trees kind of, and I mentioned it earlier, intact, maintain that buffer between the new development and the residential neighborhood.

The existing playground happened about in the kind of northwest corner of the new parking area, so just to the north and west of where it's moving now. So, we're trying to get everything kind of closer and tucked to the building to maintain that large buffer between the neighborhood.

CHAIRMAN ENNES: So, Mr. Yandel?

MR. YANDEL: Yes?

CHAIRMAN ENNES: From the Park District's lot line by the cul de sac to the northern edge of the parking lot, about how far is that? I think that's what she was getting at.

MR. YANDEL: This dimension here is about 80 feet.

CHAIRMAN ENNES: About 80 feet, okay. Thank you. Yes, sir.

MR. HOUGHTON: My name is Allen Houghton, H-o-u-g-h-t-o-n.

CHAIRMAN ENNES: Welcome.

MR. HOUGHTON: Hi. One question no one has said anything is the high school site. They use that for a lot of events. I mean, it's the band, dances, drop-offs, I mean, and then when there's games at the football field. I mean Ridge is completely full, and then with the added, you'll see the mess.

CHAIRMAN ENNES: I know, I go over there. Thank you. I think we're to your row.

MR. COATES: Good evening. John Coates, C-o-a-t-e-s. Could I ask you to put up the slide that says Aerial at the top? It's the photograph versus the plans. I have just two points to make. There we go, there we go.

With respect to what's offered, two proposals, one as was mentioned earlier, right turn in, right turn out off of Euclid, it seems to be a way to relieve the chokepoint right over here to a substantial degree possibly, but to a moderate degree absolutely. Number two, Christian Liberty has a parking lot right here, and I'm going to guess you can get 80 cars in there. It would be my recommendation that the Plan Commission and the Park District engage with Christian Liberty in order to come to an agreement where when we have a spillover demand, that's probably not the right legal term, but when capacity for a swim event and a basketball event or whatever it happens to be and there's a requirement for additional parking, that people park right here.

I can say from experience over the years raising two kids, that's basically what we did when this parking lot was full. So, I would encourage the Park District to come to an agreement. It wouldn't have to be for a 30-year lease with X dollars per year. It could be to improve that parking lot from a structural standpoint, pave it, you know. It's, I don't want to say it's tired but it's seen better days. Maybe if the Park District improves the structure a lot, organizes it, and it exchange for that for 30 years we get the opportunity to park there if we had a need for additional spaces.

CHAIRMAN ENNES: They did indicate that they were going to talk to Christian Liberty about sharing.

MR. COATES: Exactly. I just want to reinforce that point, that I think that is truly the, in my opinion, the solution point that would bring compromise to all parties.

CHAIRMAN ENNES: Thank you. Anyone else on this side of the room? Okay, we'll move over to your right side, my left side. Anybody in the back row? Anybody on the left side that wants to make a comment? Okay, anybody else in the room that would like to make a comment?

Okay, we're going to close the public portion of our meeting and go back to our Commissioners. Commissioner Jensen?

COMMISSIONER JENSEN: Yes, I'd actually like to have the traffic engineer speak to the issue of parking versus green space. If you didn't have to deal with the Village Code, and it looks like we kind of dealt directly with it anyway because we didn't have large variances in the area, in the zone. But if you didn't have to be worried about that, what level of parking would you need and how much green space did you actually save?

CHAIRMAN ENNES: Can we ask you to identify yourself? And were you up in the original group to be sworn in?

MS. BYRON: Yes, I was sworn in. For the record, my name is Lyn Means, last name is M-e-a-n-s.

CHAIRMAN ENNES: Hi, Ms. Means.

MS. BYRON: I am a senior transportation engineer at Gewalt Hamilton. Related to the balance of parking versus green space, based on our current observations, as we noted, we did parking counts during typical weekday events and saw a minimal use of the current parking lot during those timeframes. There was I believe about 36 percent of the existing spaces occupied and well over 120 spaces unoccupied during typical observations of the existing facility. We did, however, observe a swim meet where all the parking spaces were occupied and there was minimal spillover on the adjacent street.

So, during those events, as we understand, they are infrequent and they only happen I believe 10 times a year. So, in general, we don't recommend design for those worst case scenarios. We typically like to accommodate your typical peak timeframes, and that's where the critical aspect is that everybody was talking about earlier within the Staff report as well as during the presentation. It's finding that balance of programming, and they don't like to schedule programming where you have that Armageddon of basketball-meet happens, et cetera. Obviously, they need to try to schedule things so you don't have the, you have a good turnover in between events as well, too, because sometimes you may get an overlap of events where they may not occur concurrently but you may have some overlap in between those things.

So, we feel that the number that's presented as right now without the landbanking can adequately accommodate regularly programmed scheduled events without the, and can accommodate the adjacent street, that minimal spillover during those peak events. So, we feel that parking demand that they have at 274 spaces to be adequate to accommodate regularly scheduled program as well as can accommodate a peak event that would occur, not obviously the whole building, but that would occur during your swim meet or basketball games, et cetera.

COMMISSIONER JENSEN: So, you wouldn't actually though reduce the amount of parking below what is recommended in the report?

MS. BYRON: I would, based on the information that we currently have from standards, would be to keep the parking as proposed.

COMMISSIONER JENSEN: And you've scaled that with the new activities?

MS. BYRON: Yes.

COMMISSIONER JENSEN: So, this report does meet the best balance that you, as you see it?

MS. BYRON: It is my opinion that it does meet the best balance.

COMMISSIONER JENSEN: Great.

CHAIRMAN ENNES: That's at the 274 spots?

MS. BYRON: That's 274 spaces, that's correct. Thank you.

COMMISSIONER JENSEN: I would ask Staff one question. It seems like we keep bumping up against this issue on Public Lands where we have, the code requirements are so far out of line with what we end up approving that it's really a little bit unnerving not only to the Commissioners but to the people, you know, in the audience. So, is there, you know, I'm not saying we'll do anything about it tonight, but I think we really need to take a look at how the code is set for those kinds of zones because the variances are so huge. So, that's just something I think that we need to take up in another forum. That's all I have.

CHAIRMAN ENNES: Mr. Lorenzini?

COMMISSIONER LORENZINI: Thank you. Sam, on that aerial again, could you, you pointed out this before how far north the building essentially is going to go. But can you kind of outline how much green space is going to be taken up to the west with the new parking lot? So, out there.

MR. HUBBARD: So, it will approximately come like this, and then go down like that.

COMMISSIONER LORENZINI: Okay, and then you're going to have the playground just west of the new addition, and you're going to have the soccer field. Is there any other green space that will be left over after all this is done?

MR. HUBBARD: That's the major changes to the green space.

COMMISSIONER LORENZINI: So, the soccer field is going to, right now this drawing or the aerial, I find the soccer field on the west side. Is that going to be moved farther north?

MR. HUBBARD: Yes, the detention area will be expanded like this, and some of the soccer field will be pushed a little bit to the north.

COMMISSIONER LORENZINI: So, other than the soccer field and the playgrounds, really not much of a green space now.

MR. HUBBARD: Well, there's, yes, Safety Town, and then there's an open area here, and then there's the soccer field and then the detention pond.

COMMISSIONER LORENZINI: Okay, that seems reasonable. Maybe Ms. Means or whoever can explain, what rationale went into closing the entrance on Euclid?

MS. BYRON: That question was related to closing the entrance on Euclid?

COMMISSIONER LORENZINI: Yes.

MS. BYRON: I believe that was relative to safety aspect and to keep that area, I believe, as more of a pedestrian way along Euclid in itself. Just given the volume of traffic that goes through that multi-lane intersection along with the railroad crossing at that point there, that there is often queuing and blocking through there, or in the westbound direction as well, that even with it being a right-in/right-out, you still may have difficulties turning right in and right out to that access. There is also the possibility of folks wanting to turn right out that want to then get over into one of the farther lanes as well. So, there is a distance there within the weave.

So, that was, I believe, one of the premises for maintaining the closure of that access. As we did talk about before, we do acknowledge that there is the benefit of providing that additional pavement circulating around the building. It's to provide just a secondary access to relieve the pressure off of that existing access in such close proximity on Ridge to Euclid. So, getting that extra pavement in and the circulation around the building is a benefit in itself to safety at that location.

We did note that, you know, there's possibilities that if these alternatives with signing aren't successful, that the traffic can be managed adequately if that southern access were to be restricted to a right-in/right-out. You would have acceptable operations both at the north and the south access.

COMMISSIONER LORENZINI: Okay, so, yes, it seems kind of intuitive that it would make sense to close the entrance on a busy street because then you have fast cars slowing down that end. So, I guess that just needs some reinforcement on that.

But then also the entrance off of Ridge Avenue that is close to

Euclid, there was talk about putting a sign there and maybe striping the pavement. I would assume that should just be done.

MS. BYRON: The sign, yes.

COMMISSIONER LORENZINI: Yes, okay. All right, thank you. That's all I have.

CHAIRMAN ENNES: Commissioner Green?

COMMISSIONER GREEN: Well, the Park District must be doing an exceptionally great job here because this is the first time in a long time I've heard the neighbors want to keep the parking down to a minimum on the site. So, I would say leave the landbank parking for the future and go with what you have. Ms. Means, you just reinforced that for me. So, on top of being a great facility that you're going to build here, I think there's going to be plenty of parking. That's it.

CHAIRMAN ENNES: That's it?

COMMISSIONER GREEN: That's it.

CHAIRMAN ENNES: Mr. Green, you're kidding, that's it?

COMMISSIONER GREEN: That's it.

CHAIRMAN ENNES: Mr. Cherwin?

COMMISSIONER CHERWIN: I would just say real quick, if we could bring up the landscape plan, Sam? The reason I just say that is because, you know, we did have some comments from the public about the, you know, increased parking area from Fernandez. You know, I guess, is there anything more based on the comments, meaning Mr. Rea, the comments along the northern boundary there? We talked about screening. I mean is that feasible? It looks like there's probably some additional landscape screening that you could provide up there, and is that a reasonable request? I think it might be given, you know, some of the concerns with the increased pavement.

MR. REA: Yes, we want to be a good neighbor. If there is a request that we can fill with landscaping, we would definitely consider that.

MR. HUBBARD: I would add that that's what the Staff's condition of approval relative to landscaping relates to, the landscaping addition on the north property line.

COMMISSIONER CHERWIN: Oh, that specific, okay. Oh, yes, okay, good. All right, excellent.

Then, yes, then I would just say, you know, my final thought, too, would be if you're putting up that fence by the stormwater, just make it accessible so that when you go over there, like I said, there's not really a safety issue that would justify, you know, where you'd need a big, tall screen. But I do know that there will be balls going over there, so just make sure that it's, I guess, accessible to some extent for the kids going down there. That's it.

CHAIRMAN ENNES: That's it?

COMMISSIONER CHERWIN: That's it.

CHAIRMAN ENNES: Thank you, Jay. Mr. Sigalos?

COMMISSIONER SIGALOS: I would just like to reiterate that I am very much in favor of green space. So, after hearing the neighbors not being concerned of parking on the street and so forth, I'll take back my comments and suggest that the landbank spaces be just kept as landbank and not be constructed now as we have proposed.

The last question I had was working with the Christian Liberty School, I know I was at the Conceptual Plan Review Committee meeting, and at that time we

suggested that to you. Have you had any dialogue with them regarding some type of agreement to use their parking on the weekends or what have you when the school is not in session?

MR. REA: Up to this point, no. But it's definitely something, as Sam had mentioned, it would be a suggestion and more or less a requirement from the Village for us to approach Christian Liberty Academy to set some sort of a, you know, an agreement in place, a written agreement, so that if there is off-hour activities for the Park District that don't coincide with Christian Liberty Activities, we would seek to establish an agreement with them to use some of their parking space.

COMMISSIONER SIGALOS: I would suggest before you go to the full Board, the Village Board meeting, that maybe you do have that. That's what we suggested at the Conceptual Plan, even if you come to the- Plan Commission and say you didn't have any dialogue with them, I think it would be in your best interest if you do have some dialogue before you went to the Village Board.

MR. REA: Understood, we'll do so.

COMMISSIONER SIGALOS: Thank you.

COMMISSIONER CHERWIN: Could I, I'm sorry, while we have you, on that same topic, sorry to interrupt John, but is it my understanding that they're already using, I mean so there's already some informal relationship where they've been using the Park District property for some of their --

MR. REA: It's very informal. We don't have any verbal or written agreements. It's typically used by parents dropping off their children right now.

COMMISSIONER CHERWIN: So, I would, you know, I would hope that as a good neighbor, you know, in light of the benefit that you've been providing them, they would be receptive to reciprocity in terms of parking.

MR. REA: I'm sure we can come to some sort of agreement.

CHAIRMAN ENNES: John, were you done?

COMMISSIONER SIGALOS: That's all I have.

CHAIRMAN ENNES: Okay, I have nothing further. Can we have a motion?

COMMISSIONER JENSEN: There is one topic that we, that I meant to address, I can't read my own handwriting, which is the outdoor basketball court. It seems like you could go either way because you brought two plans before us. You heard some comment from the neighbors that the neighborhood kids would use the outdoor court, you said they could use it up to six months or so. What would swing the balance here so that you would keep it as an outdoor court, giving you a little bit more green space I suppose, and also making it more accessible to the kids who want to just use it informally? What would it take for you to swing in that direction I guess?

MR. REA: So, are you asking versus, one addition versus two?

COMMISSIONER JENSEN: Yes, because I mean that's what they're asking, that you would --

MR. REA: I understand that. I would think we would try and find a compromise in some way, that we had already talked about possibly creating a space like we had at Recreation Park to provide a couple of hoops for kids, maybe a stripe that's half court so I could picture it being on the north side of that parking lot, potentially having a pole or two where the kids will still have an opportunity to go out there and play and have a basketball opportunity outside, not inside in the proposed facility.

COMMISSIONER JENSEN: Good. So, I think you've heard the neighbors that if you do go with the one where both courts are enclosed, you should make some accommodation.

MR. REA: We will try our best to do so.

CHAIRMAN ENNES: Okay. Is there a motion?

COMMISSIONER GREEN: Sure. I'd like to make a motion.

A motion to recommend to the Village Board of Trustees <u>approval</u> of PC#18-002, an amendment to Planned Unit Development (PUD) Ordinances #79-19 and #03-036, and a Special Use Permit to allow a community center, recreation building, and the following variations from Chapter 28 of the Municipal Code:

- **Variation to Section 11.4, *Schedule of Parking Requirements*, to reduce the required amount of off-site parking from 757 spaces to 291 spaces;**
- **Variation to Section 6.13-3(B), *Side and Rear Yards*, to allow a 10-foot fence in the rear yard where code limits fence heights to five feet; and**
- **Variation to Section 6.13-3(C), *Exterior Side Yards*, to allow an eight-foot tall fence in an exterior rear yard where code limits fence heights to five feet.**

This approval shall be subject to the following conditions:

<u>Parking Related</u>:

1. **The Arlington Heights Park District shall take the following actions if it is determined, at the sole discretion of the Village of Arlington Heights, that there is a shortage of onsite parking spaces on the subject property:**
   - **A. The Park District shall work with the Village to adjust scheduling so that major events do not overlap. This may include a reduction in the amount of programming that is allowed on the subject property.**
   - **B. The Park District shall construct all landbanked parking stalls, as identified in the plan prepared by Gewalt Hamilton Associates, Inc., within 90 days upon request of the Village.**
   - **C. The Park District will explore the ability for a shared parking agreement with the Christian Liberty Academy located to the east of the subject property (or other acceptable location), which agreement shall be subject to review by the Village.**

<u>Traffic Related</u>:

1. **If it is determined by the Village that future roadway improvements are feasible and necessary to connect traffic congestion at the intersection of Ridge Avenue and Euclid Avenue, the Park District shall dedicate the necessary land to facilitate such improvements.**
2. **At the request of the Village, the Park District will limit the southern entrance drive to restrict ingress into the subject property from northbound automobiles on Ridge Avenue.**

<u>General</u>:

1. **The Petitioner shall provide three-foot tall shrubs in the landscape island at the northeast corner of the site should the landbanked parking be**

constructed. Additionally, the Petitioner shall substitute the dogwood and nine bark shrubs proposed at the north side of the parking lot expansion with six-foot tall evergreens, and additional evergreens shall be added to the north of the parking lot expansion to conform with Section 6.15-1.2 of Chapter 28 of the Municipal Code.

2. The Petitioner shall comply with all federal, state, and Village codes, regulations and policies.

COMMISSIONER LORENZINI: I'll second that.
CHAIRMAN ENNES: Is there a second?
COMMISSIONER LORENZINI: Second.
CHAIRMAN ENNES: Can we have a roll call vote? Is there any discussion? Can we have a roll call vote, Sam?
MR. HUBBARD: Commissioner Cherwin.
COMMISSIONER CHERWIN: Yes.
MR. HUBBARD: Commissioner Jensen.
COMMISSIONER JENSEN: Yes.
MR. HUBBARD: Commissioner Sigalos.
COMMISSIONER SIGALOS: Yes.
MR. HUBBARD: Chairman Ennes.
CHAIRMAN ENNES: Yes.
MR. HUBBARD: Commissioner Lorenzini.
COMMISSIONER LORENZINI: Yes, with comment.
MR. HUBBARD: Commissioner Green.
COMMISSIONER GREEN: Yes.
CHAIRMAN ENNES: And your comment?
COMMISSIONER LORENZINI: My comment is, Sam, I think the Village should look at getting some evening and maybe weekend parking but no overnight parking on Ridge Avenue by Christian Liberty, so if there is any overflow, they can do that without having to build those landbank spots sometime in the future. That's all I have.
CHAIRMAN ENNES: Okay, you have a unanimous approval from the Plan Commission. Sam, is there a date for them to go before the Village Board?
MR. HUBBARD: They have a tentative date of April 2nd but subject to availability, so we will be in touch about that.
CHAIRMAN ENNES: Congratulations for a very well-documented plan. You gave us a lot of work to do.
MR. REA: Thank you.
CHAIRMAN ENNES: Thank you.

(Whereupon, the above-mentioned petition was adjourned at 9:15 p.m.)

Olympic Park - Aerial

November 3, 2017

1:4,514

0 0.0375 0.075 0.15 mi

0 0.05 0.1 0.2 km

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REPORT OF THE PROCEEDINGS OF

THE CONCEPTUAL PLAN REVIEW COMMITTEE

OF THE VILLAGE OF ARLINGTON HEIGHTS PLAN COMMISSION

HELD AT VILLAGE HALL ON: **November 8, 2017**

Project Title: Olympic Park PUD Amendment

Address: 660 N. Ridge Avenue

Petitioner: Arlington Heights Park District
410 N. Arlington Heights Road
Arlington Heights, IL 60004

Requested Action:

- Amendment to Planned Unit Development (PUD) Ordinances 79-19 and 03-036 to allow a building addition.

Variations Required:

- A Variation from Chapter 28, Section 11.4, to reduce the required off-street parking (extent of variation is unknown at this time).

Attendees: Benjamin Rea, Arlington Heights Park District
Rick Hanetho, Arlington Heights Park District
John Dzarnowski, FGM Architects
Dave Yandel, FGM Architects
Jay Cherwin, Plan Commissioner
Bruce Green, Plan Commissioner
Lynn Jensen, Plan Commissioner
John Sigalos, Plan Commissioner
Sam Hubbard, Village of Arlington Heights

Project Summary:

The Olympic Swim Center building is approximately 45,200 square feet and includes three pools, locker rooms, a lobby area, a basement, and several small office and storage rooms. The site currently has 185 parking spaces. Access to the site comes from one driveway entrance along Ridge Avenue near the southwest corner of the site.

The proposed action, if approved, would allow the Park District to build a two-story building addition on the north and west elevations of the building, which would house a new gymnasium with two full size basketball courts, a 2nd floor running track around the perimeter of the gym, additional office space, two multi-purpose rooms, a fitness center, a fourth pool, and remodeled locker rooms. Depending on construction costs, the project would all be completed in one phase, or split into two phases with the first phase encompassing just one basketball court in the new gym and the second phase entailing an addition to the gym for the second basketball court.

Meeting Discussion:

Mr. Hanetho thanked the Conceptual Plan Commission for the opportunity to discuss the Park District project, which he was very excited to be taking on. He explained that the Park District had been contemplating a renovation and expansion of the Olympic Park facility for several years. The goal of the Park District was to make Olympic Park the primary location for activities around the center of Arlington Heights, with Camelot Park catering to residents in the north, and Pioneer Park catering to residents in south Arlington Heights. Their vision for this facility has been to include a gym with a 2nd story walking track, fitness spaces, multi-purpose spaces, and the possibility of a warm water pool. This facility would function as a "one-stop shop" for families and residents of all ages, from young children up to seniors. Based on a recently conducted community preference survey, the community has identified the renovation and expansion of the Olympic Park facility as a top priority.

Mr. Dzarnowski outlined the proposed project, which includes a northern addition to the building. Certain outdoor amenities would be removed to make space for the addition, but Safety Town would remain and the existing playground would be relocated to the western side of the building addition. There would be a new access drive around the building to meet fire lane requirements, which would also provide a new ingress/egress point to Ridge Avenue since the existing driveway is close to the intersection of Ridge Avenue and Euclid Avenue. He explained that they were considering two options for the addition, which would be based on the project budget; the first option would be for a single gym addition, the second would be for a larger double gym addition. They would be removing a small portion of the existing parking lot to expand the existing retention basin. The Park District has decided that they only need one soccer field on the site, so the parking expansion would eliminate a portion of the field area but would leave enough space for at least one full sized soccer field, which could also be divided into multiple tot-sized fields if needed.

Mr. Hubbard stated that the property was within the P-L Public Land District, which was the appropriate zoning district for a facility such as Olympic Park. In 1978 the subject property was approved for a PUD to allow the Olympic Park Swim Center, In 2003 the PUD was amended to allow a small expansion of the facility. The proposed changes require another PUD amendment, which will need to be reviewed by the Plan Commission and ultimately approved or denied by the Village Board. Staff has suggested that the Park District reach out to surrounding neighbors and hold a neighborhood meeting prior to appearing before the Plan Commission.

He explained that a full zoning review of the project had not yet been completed since the plans were still very preliminary at this point, however, a cursory analysis indicated that the project would likely conform to all setback, height, and bulk/mass zoning requirements. Staff is requesting that the existing curb cut along Euclid, which is currently unused, be removed as part of this project. Additionally, staff was asking the Park District to consider a pedestrian connection to Salem Avenue located west of the site. A Design Commission application would be required for the proposed building addition.

The major points to review with this project will be with traffic and parking, and so the petitioner will need to provide a traffic and parking study from a qualified traffic engineer as part of their Plan Commission application. It is very likely that a parking variation will be needed, which is typical of all Park District facilities. The Plan Commission application will need to contain a significant amount of details on all aspects of the development to allow staff to conduct a thorough review. Staff was supportive of this project

Commissioner Jensen said it was a good project and he had a few questions. He asked how the 2nd gymnasium would alter the building footprint from what was shown on the plans.

Mr. Dzarnowski responded that the plans shown this evening reflected the 2nd gymnasium, and the plans in the packet that was provided to the Conceptual Plan Review Committee showed both alternatives.

Commissioner Jensen asked if there was a parking problem on the site as it currently existed today.

Mr. Hanetho replied that he was not aware of any significant parking problems at the site.

Unidentified Park District Representative From the Audience stated that generally things ran pretty smooth. Sometimes they needed to coordinate with the Christian Liberty Academy located next door when both facilities had events planned for the same day.

Commissioner Cherwin said he was at the facility almost every weekend and had not witnessed a parking problem.

Commissioner Jensen summarized that the existing parking deficit relative to code requirements had therefore not been a problem. He asked if the proposed changes were expected to significantly alter the existing traffic compared to current levels.

Mr. Yandel explained that their initial thought was that the changes would generate some additional traffic, but not substantially more traffic. They would have a fitness facility that would have people coming in and out all day, but much of

that traffic would be earlier in the day so that it would not overlap with event programing that occurred later in the day. The traffic study would be analyzing traffic generation to help forecast expected traffic volumes based on the peak usage of the facility.

Mr. Hanetho explained that from a programming perspective they would not be scheduling major events to overlap, for example they would not be looking to schedule a major swim meet while the fitness center was open and there were also soccer games occurring on the field. This was something that the Park District would need to manage internally, but that everywhere he had worked they had been able to successfully manage events.

Commissioner Siglaos stated that he didn't have too much to add. His primary concern had been parking, but from what was said this evening, parking did not appear to be a major issue. He was going to suggest working with the Christian Liberty Academy to coordinate parking, but it sounded like the Park District was already doing this.

Commissioner Cherwin asked about the community preference survey conducted by the Park District

Mr. Hanetho explained that the survey asked about a number of the facilities owned and operated by the Park District. One of the current focuses within the industry was for facilities that catered to aging active adults. This was something that was somewhat limited within the current Park District facilities, and the Olympic Pool expansion project would add this element but also include something for all ages, such as the indoor gym and exterior playground.

Commissioner Cherwin asked if the double gym scenario could include indoor field space.

Mr. Hanetho responded that one of the questions on the preference survey was about indoor field spaces. However, staff and the Park District board had not yet determined what the level of demand was for indoor field space. If the double gym scenario was within the parameters of the project budget, and if there is significant demand for indoor turf, it was something that they would look at.

Commissioner Cherwin said he thought it was a great project.

Mr. Green said he also thought it was a good project and he hoped that the parking would work out. He asked if there would be any nets around the soccer field. If there were, he recommended that the plans show the netting as opposed to having the Park District come back after the fact to petition for the netting.

Discussion ensued relative to safety netting at Sunset Meadows Park.

RECOMMENDATION

The Conceptual Plan Review Committee was supportive of the proposal and advised the petitioner to move forward.

Bruce Green, Chair
CONCEPTUAL PLAN REVIEW COMMITTEE
Sam Hubbard, Recorder

S T A F F D E S I G N C O M M I S S I O N R E P O R T
R E - R E V I E W

PROJECT INFORMATION:		PETITION INFORMATION:	
Project Name:	Olympic Park Indoor Swim Center Addition	DC Number:	18-006
Project Address:	660 N. Ridge Avenue	Petitioner Name:	Ben Rea
Prepared By:	Steve Hautzinger	Petitioner Address:	Arlington Heights Park District 410 N. Arlington Heights Rd. Arlington Heights, IL 60004
Date Prepared:	February 2, 2018	Meeting Date:	February 13, 2018
Date Revised:	March 7, 2018	Re-Review Meeting Date:	March 13, 2018

Requested Action(s):
Approval of the proposed architectural design for an addition to the existing Olympic Park Indoor Swim Center.

Design Commission Responsibility for Projects Being Reviewed by Plan Commission:
The subject design is being forwarded to the Design Commission for review pursuant to Chapter 6 of the Municipal Code.

This project requires Plan Commission review and Village Board approval to amend the existing Planned Unit Development (PUD). Because this project is going to the Plan Commission, the role of the Design Commission is limited. The Design Commission's responsibility is as outlined in Chapter 28 of the Municipal Code, Section 14.2-1, which states:

"*For developments where a public hearing is necessary before the Plan Commission or Zoning Board of Appeals, the design review process should, if feasible, be completed by the time of the public hearing. Development proposals requiring rezoning, PUD or other Plan Commission approvals, shall be reviewed by the Design Commission* ***for building and signage only.***"

Summary:
The petitioner is proposing a two-story addition to the existing Olympic Park Indoor Swim Center. The addition will be located on the north and west sides of the existing building, and will include a new warm-water pool, a new gymnasium, an elevated indoor running track, fitness center, and new fully accessible locker rooms. The project includes an alternate to possibly double the size of the gymnasium addition.

Previous Review Comments:
This project was previously reviewed by the Design Commission on February 13, 2018, at which time the project was CONTINUED to allow design concerns to be addressed. The primary concern with the design was the amount of painted precast concrete on the gymnasium. The following is a summary of some of the comments and suggestions from the Design Commission:

- It was commented that the precast concrete gymnasium may look too industrial, like a warehouse.
- The east wall of the building will be highly visible from the residential street and it needed further design development.
- There were concerns regarding the blank north wall.
- It was encouraged to add brick to the gymnasium.
- There were mixed feelings regarding adding split-face concrete block to the design.
- The possibility of using a brick pattern form liner for the precast concrete walls was discussed.
- Landscaping was encouraged to soften the gymnasium walls.

Project Update:
In response to the comments from February 13, the petitioner has made changes to the design and provided multiple new perspective rendering views for review. A summary of the changes is as follows:

- Partial height brick was added to the north, east, and west gymnasium walls.
- The gymnasium window sizes were adjusted.
- Windows have been added to the north wall.
- The east stairwell tower has been changed from precast concrete to brick.

Overall, the addition of brick to the gymnasium walls is a huge improvement to the design. Staff's only comment regarding the design is regarding the metal panels between the gymnasium windows which look out of place with the rest of the building design. For a more cohesive appearance, it is recommended that the metal panels between the windows be omitted, and instead provide a continuous metal awning feature above the gymnasium windows on all three walls. A metal awning would be a nice way to break up the flatness of the wall, and it could provide shading for the east and west gym walls. A metal awning would tie in well with the existing details on the south wall of the building, as well as with the new canopy at the warm water pool addition.

Equipment Screening:
All rooftop mechanical equipment is proposed to be screened with silver metal panels to match the mechanical screens on the existing building.

Signage:
The proposed "OLYMPIC RECREATION CENTER" wall sign is not allowed by code. Only ground signs are allowed in the Public Land (P-L) Zoning District. The proposed wall sign either needs to be removed from the design, or an application for a sign variation can be submitted for review. Another option would be a tablet style sign, which is allowed to have the name of the building cut into any masonry surface or cast in bronze or other incombustible material.

RECOMMENDATION:
It is recommended that the Design Commission approve the design of the proposed addition to the existing Olympic Park Indoor Swim Center building located at 600 N. Ridge Avenue. This recommendation is subject to compliance with the plans received 1/9/18, revised renderings dated and received 3/5/18, Design Commission recommendations, compliance with all applicable Federal, State, and Village codes regulations and policies, the issuance of all required permits, and the following:

1. A recommendation to omit the metal panels between the gymnasium windows, and instead provide a continuous metal awning feature above the gymnasium windows on all three exterior gym walls.
2. The petitioner is required to meet the Sign code, Chapter 30 or obtain a sign variation(s).
3. This review deals with architectural design only and should not be construed to be an approval of, or to have any other impact on, any other zoning and/or land use issues or decisions that stem from zoning, sign code or building or any other reviews. In addition to the normal technical review, permit drawings will be reviewed for consistency with the Design Commission and any other Commission or Board approval conditions. It is the architect/owner/builder's responsibility to comply with the Design Commission approval and ensure that building permit plans and sign permit plans comply with all zoning code, building code and sign code requirements.

_____ March 7, 2018

Steve Hautzinger AIA, Design Planner
Department of Planning & Community Development

Cc: Charles Witherington Perkins, Director of Planning and Community Development, Bill Enright, Deputy Director of Planning and Community Development, Sam Hubbard, Development Planner, Petitioner, DC File 18-006

DRAFT

MINUTES OF
THE VILLAGE OF ARLINGTON HEIGHTS
DESIGN COMMISSION MEETING
HELD AT THE ARLINGTON HEIGHTS MUNICIPAL BUILDING
33 S. ARLINGTON HEIGHTS RD.
MARCH 13, 2018

Chair Fitzgerald called the meeting to order at 6:30 p.m.

Members Present:	John Fitzgerald, Chair Aaron Coon Ted Eckhardt Jonathan Kubow
Members Absent:	Kirsten Kingsley
Also Present:	Thomas Cloherty, TPC Construction for *407 E. Mayfair Rd.* Joe Muran, Muran Architects for *407 E. Mayfair Rd.* Benjamin Rea, Arlington Heights Park District for *Olympic Park* David Yandel, FGM Architects for *Olympic Park* Louise Kowalczyk, FGM Architects for *Olympic Park* Tom Abbatemarco, Prestigious Home Builders for *1714 N. Chestnut Ave.* Steve Hautzinger, Staff Liaison

REVIEW OF MEETING MINUTES FROM FEBRUARY 27, 2018

A MOTION WAS MADE BY COMMISSIONER KUBOW, SECONDED BY COMMISSIONER ECKHARDT, TO APPROVE THE MEETING MINUTES OF FEBRUARY 27, 2018. ALL WERE IN FAVOR. MOTION CARRIED.

ITEM 2. PUBLIC LAND RE-REVIEW

DC#18-006 – Olympic Park Swim Center – 660 N. Ridge Ave.

Benjamin Rea, representing the *Arlington Heights Park District*, and David Yandel and Louise Kowalczyk, representing *FGM Architects,* were present on behalf of the project.

Chair Fitzgerald asked if there was any public comment on the project and there was no response from the audience.

Mr. Hautzinger said that the petitioner submitted some new revisions today, which Staff has not yet reviewed. The comments from Staff tonight are based on the plans that were provided in the commissioner's packets.

Mr. Hautzinger presented Staff comments. The petitioner is proposing a two-story addition to the existing Olympic Park Indoor Swim Center. The addition will be located on the north and west sides of the existing building, and will include a new warm-water pool, a new gymnasium, an elevated indoor running track, fitness center, and new fully accessible locker rooms. The project includes an alternate to possibly double the size of the gymnasium addition. This project requires Plan Commission review and Village Board approval to amend the existing Planned Unit Development (PUD); therefore, the role of the Design Commission is limited to building and signage only.

This project was previously reviewed by the Design Commission on February 13, 2018, at which time the project was continued to allow design concerns to be addressed. The primary concern with the design was the amount of painted precast concrete on the gymnasium. The following is a summary of some of the comments and suggestions from the Design Commission:

- It was commented that the precast concrete gymnasium may look too industrial, like a warehouse.
- The east wall of the building will be highly visible from the residential street and it needed further design development.
- There were concerns regarding the blank north wall.
- It was encouraged to add brick to the gymnasium.
- There were mixed feelings regarding adding split-face concrete block to the design.
- The possibility of using a brick pattern form liner for the precast concrete walls was discussed.
- Landscaping was encouraged to soften the gymnasium walls.

In response to the comments from February 13, the petitioner has made changes to the design and provided multiple new perspective rendering views for review. A summary of the changes is as follows:

- Partial height brick was added to the north, east, and west gymnasium walls.
- The gymnasium window sizes were adjusted.
- Windows have been added to the north wall.
- The east stairwell tower has been changed from precast concrete to brick.

Overall, Staff feels that the addition of brick to the gymnasium walls is a huge improvement to the design. Staff's only comment regarding the design is that the metal panels between the gymnasium windows look out of place with the rest of the building design. For a more cohesive appearance, it is recommended that the metal panels between the windows be omitted, and instead provide a continuous metal awning feature above the gymnasium windows on all three walls. A metal awning would be a nice way to break up the flatness of the wall, and it could provide shading for the east and west gym walls. A metal awning would tie in well with the existing details on the south wall of the building, as well as with the new canopy at the warm water pool addition.

Staff recommends approval of the design to the proposed addition to the existing swim center, based on the drawings that were included in the packet, with the one comment previously mentioned. He pointed out that Commissioners

Kubow and Eckhardt were not at the previous review of the project, and the petitioner will present the most recent changes that were submitted today.

Mr. Rea said that they met last week with their construction team to discuss budget at this time. The Park District is trying to maximize the use of the resources available for this project, and there are some changes as mentioned by Staff; however, they are still proposing to move forward with a painted pre-cast to match the color of the existing brick on the building.

Mr. Yandel said that they appreciated the feedback received at the last review, and they worked with Staff over the past month to try to incorporate many of those items. The updated renderings submitted tonight are for final approval. Taking in the context of the site and the surrounding neighborhood, they feel the scale of the building is an appropriately sized facility for the park. The layout of the windows was revised on the east and west elevations to bring in more light and rhythm to those elevations. Windows were added to the north elevation as well. From a cost standpoint, they are proposing painted pre-cast wall panels. The metal panels between the windows have been eliminated to create more rhythm between the brick and the pre-cast, and the metal coping detail was revised around the perimeter of the building to be the same dimension and profile used along each of the buildings to help tie the entire facility together. Landscaping was added to the east elevation, as well as signage added to the stair tower. Mr. Yandel reviewed the updated renderings that included these changes.

Trying to understand the color palette, Commissioner Kubow asked if the samples provided were an accurate representation of what the color palette would be, and Mr. Yandel said that they were. Mr. Yandel added that looking at the existing photograph of the building, the paint would match the buff colored split-face concrete block, and the dark brown color would match the dark iron spot brick. The revised elevation shows the three colors being proposed; brown, tan/buff, and the aluminum curtain wall system. Ms. Kowalczyk said that the existing building has actual brick and split-face, and the gymnasium addition is trying to simulate those materials with paint on the precast concrete. The metal panels between the windows have been eliminated because of cost; however, a silver metallic paint is being considered to simulate that; although right now it is shown as the buff color coming down between the windows. Mr. Yandel added that the utility screen wall on the east side of the building will be actual brick.

Mr. Hautzinger asked if the painted dark color on the brick was with or without a brick patterned form liner, and Mr. Yandel replied that they are asking for approval without a form liner; it will be smooth, pre-cast concrete with horizontal reveals similar to the upper portion of the wall, although the renderings do not quite show this. He added that the focus of the pre-cast elements are only at the gymnasium. Elements from the existing building are being used on the other portions of the addition, such as the tall, thin windows adjacent to the new entry that help light up a corridor that feeds into the new locker rooms. The existing south and east elevations remain pretty much intact, but the west elevation gets a whole new facade with certain setbacks and different volumes playing off each other.

Mr. Yandel explained that the pre-cast panels are a durable low maintenance material, very cost efficient, allowing for year round construction, well insulated, and an energy efficient way to get this large volume done quickly. He showed an example of a project they are doing with painted pre-cast, which is currently under construction for the Lombard Park District and has a very similar program with a double gymnasium and second-story fitness and offices. Ms. Kowalczyk added that this project uses painted pre-cast panels with reveals, having the appearance of metal panels, with the gymnasium having some reveal lines and painted; it can still be an attractive building. Mr. Yandel added that the depth of the reveals are about 1-1/2" deep and about 3" wide so they read at a distance. This building is in a residential neighborhood, and although the park itself is a little bit larger than Olympic Park and it sits off the street further, it is in the heart of a residential neighborhood directly across from homes very similar to those in Arlington Heights.

Mr. Yandel reiterated that what they are looking for approval of the current floor plans and elevations as shown, approval of the painted pre-cast wall panels on the gymnasium in lieu of a form liner or traditional brick masonry, and a request for the commissions' support for signage at the east and west elevations, although they understand a

variance would be required under a separate review. The two locations for the proposed wall signage were reviewed; on the west elevation, north of the entrance, and on the east elevation at the stair tower.

In response to the signage, Commissioner Kubow said that in general, he liked what is being proposed; it is very clean and the font is very simple. He questioned what the variations would be and Mr. Hautzinger replied that only ground signage is allowed for a permitted non-residential use in a public land zoning district; therefore any wall signage requires a variation for this project; however, Staff is currently studying the possibility of amending the sign code to allow for wall signage on buildings such as this.

Commissioner Kubow gave preliminary approval of the wall signage being shown tonight. Chair Fitzgerald liked the design of the wall signage as well, but had concerns about the sign on the west elevation not being visible in the proposed recessed location when viewed from the south. Commissioner Eckhardt was okay with the sign designs as shown, but felt that wayfinding in general needed to be studied, and he had concerns about the visibility of signage for the front entrance when coming from Ridge Avenue. Chair Fitzgerald suggested signage on the metal over the main entrance door, similar to the signage on the east side of the Arlington Heights Library.

Commissioner Coon said that he preferred the design that was included in the packet tonight and reviewed by Staff, as opposed to the revisions that were just submitted tonight. He appreciated the changes that were made and would much rather have the residents benefit from a quality facility like this, rather than nitpick over that amount of brick. Breaking the larger walls into thirds helps tie in with the existing, and matching the color is enough of a relationship to link them together; it is great that brick is being used at the entries on the west elevation. He felt there became a language between the gymnasium and the metal features over the entries by creating the second pre-cast color that goes over the windows; it starts to relate those larger elements to the right. Mr. Yandel said that they are open to further discussions on what is being presented tonight.

Commissioner Coon liked the gymnasium walls broken into thirds, as opposed to two halves; it fits better with the scale of the other elements and the buildings. He felt this was a great improvement and the petitioner did a great job in addressing the commissioner's previous comments. He reiterated his preference for the three color scheme, and the painted panel look between the windows.

Commissioner Eckhardt had no issues with the massing, which was very interesting, and felt the elevation facing the field was just as important as the other elevation. He liked the horizontals and verticals that are broken down in small modules, and he encouraged a similar breakdown of the gymnasium with more reveals. He was not in favor of big, flat pre-cast sections on the building; it should have detail. He had no other issues with the building and hoped the petitioner gets both gymnasiums.

Commissioner Kubow absolutely loved the contemporary architecture of the west elevation and wished that the Ridge Avenue elevation could get some of the same treatment. He liked what is being proposed, and agreed with Commissioner Coon's preference for the three-color scheme concept. He also reiterated his preliminary approval for the signage being shown tonight.

Chair Fitzgerald agreed with the comments already made.

A MOTION WAS MADE BY COMMISSIONER COON, SECONDED BY COMMISSIONER ECKHARDT, TO APPROVE THE DESIGN OF THE PROPOSED ADDITION TO THE EXISTING *OLYMPIC PARK INDOOR SWIM* CENTER BUILDING LOCATED AT *600 N. RIDGE AVENUE*. THIS APPROVAL IS SUBJECT TO COMPLIANCE WITH THE PLANS RECEIVED 1/9/18, REVISED RENDERINGS DATED AND RECEVIED 3/5/18, DESIGN COMMISSION RECOMMENDATIONS, COMPLIANCE WITH ALL APPLICABLE FEDERAL, STATE, AND VILLAGE CODES, REGULATIONS, AND POLICIES, THE ISSUANCE OF ALL REQUIRED PERMITS, AND THE FOLLOWING:

1. A RECOMMENDATION TO ADD A CONTINUOUS HORIZONTAL METAL AWNING FEATURE ABOVE THE GYMANSIUM WINDOWS ON ALL THREE EXTERIOR GYM WALLS, OR ADD HORIZONTAL REVEALS TO FURTHER ARTICULATE THE PRE-CAST WALL.
2. A REQUIREMENT FOR THE THREE COLOR PAINT SCHEME ON THE GYMANSIUM, TO BREAK DOWN THE WALL INTO THIRDS.
3. THE PETITIONER IS REQUIRED TO MEET THE SIGN CODE, CHAPTER 30, OR OBTAIN A SIGN VARIATION(S).
4. THIS REVIEW DEALS WITH ARCHITECTURAL DESIGN ONLY AND SHOULD NOT BE CONSTRUED TO BE AN APPROVAL OF, OR TO HAVE ANY OTHER IMPACT ON, NOR REPRESENT ANY TACIT APPROVAL OR SUPPORT FOR THE PROPOSED LAND USE OR ANY OTHER ZONING AND/OR LAND USE ISSUES OR DECISIONS THAT STEM FROM ZONING, BUILDING, SIGNAGE OR ANY OTHER REVIEWS. IN ADDITION TO THE NORMAL TECHNICAL REVIEW, PERMIT DRAWINGS WILL BE REVIEWED FOR CONSISTENCY WITH THE DESIGN COMMISSION AND ANY OTHER COMMISSION OR BOARD APPROVAL CONDITIONS. IT IS THE PETITIONER'S RESPONSIBILTY TO INCORPORATE ALL REQUIREMENTS LISTED ON THE CERTIFICATE OF APPROPRIATENESS INTO THE PERMIT DRAWINGS, AND TO ENSURE THAT BUILDING PERMIT PLANS AND SIGN PERMIT PLANS COMPLY WITH ALL ZONING CODE, BUILDING CODE AND SIGN CODE REQUIREMENTS.

Mr. Hautzinger asked for clarification if the third paint color will be a metallic silver color. Commissioner Coon was okay with the third color being a flat color that complements the metal panel, because having one color as metallic would be odd. Commissioner Eckhardt asked if there will be any metal panels on the gymnasium, and the petitioner responded that there will be a metal coping on the gymnasium which will tie into the metal panel around the entry. Commissioner Eckhardt was in favor of painting the panels between the windows to match the clear anodized aluminum of the top fascia. Mr, Yandel summarized that the bottom of the gymnasium wall will be painted dark brown to match the existing brick, the space between the windows will be painted metallic silver to match anodized aluminum, and the top of the wall will be painted a buff color to match the split-face block.

A MOTION WAS MADE BY COMMISSIONER COON, SECONDED BY COMMISSIONER ECKHARDT, TO AMEND THE MOTION AS FOLLOWS:

2. A REQUIREMENT FOR THE THREE COLOR PAINT SCHEME ON THE GYMANSIUM, TO BREAK DOWN THE WALL INTO THIRDS, WITH THE MIDDLE COLOR BETWEEN THE WINDOWS TO BE A METALLIC SILVER COLOR SELECTED TO MATCH ANODIZED ALUMINUM.

COON, AYE; KUBOW, AYE; ECKHARDT, AYE; FITZGERALD, AYE.
ALL WERE IN FAVOR. MOTION CARRIED.

S T A F F D E S I G N C O M M I S S I O N R E P O R T

PROJECT INFORMATION:		**PETITION INFORMATION**:	
Project Name:	Olympic Park Indoor Swim Center Addition	**DC Number:**	18-006
Project Address:	660 N. Ridge Avenue	**Petitioner Name:**	Ben Rea
Prepared By:	Steve Hautzinger	**Petitioner Address:**	Arlington Heights Park District 410 N. Arlington Heights Rd. Arlington Heights, IL 60004
Date Prepared:	February 2, 2018	**Meeting Date:**	February 13, 2018

Requested Action(s):
Approval of the proposed architectural design for an addition to the existing Olympic Park Indoor Swim Center.

Design Commission Responsibility for Projects Being Reviewed by Plan Commission:
The subject design is being forwarded to the Design Commission for review pursuant to Chapter 6 of the Municipal Code.

This project requires Plan Commission review and Village Board approval to amend the existing Planned Unit Development (PUD). Because this project is going to the Plan Commission, the role of the Design Commission is limited. The Design Commission's responsibility is as outlined in Chapter 28 of the Municipal Code, Section 14.2-1, which states:

"*For developments where a public hearing is necessary before the Plan Commission or Zoning Board of Appeals, the design review process should, if feasible, be completed by the time of the public hearing. Development proposals requiring rezoning, PUD or other Plan Commission approvals, shall be reviewed by the Design Commission* ***for building and signage only****."*

Summary:
The petitioner is proposing a two-story addition to the existing Olympic Park Indoor Swim Center. The addition will be located on the north and west sides of the existing building, and will include a new warm-water pool, a new gymnasium, an elevated indoor running track, fitness center, and new fully accessible locker rooms. The project includes an alternate to possibly double the size of the gymnasium addition.

Architectural Design:
The existing building design has a modern aesthetic with the primary exterior materials being a dark ironspot brick, buff colored split-faced concrete masonry units, silver window mullions, and silver metal panel accents. The proposed addition is designed to match the existing building materials, colors, and style. The only new material is the precast concrete panels for the gymnasium walls, which are proposed to be painted to match the buff colored concrete masonry units on the existing building. Overall, the proposed addition is very nicely designed as a seamless addition to the existing building. The only comment is that the double-sized gymnasium creates a relatively large precast box, and it should be considered to incorporate some of the dark brick material to break up the large amount of painted precast.

Equipment Screening:
All rooftop mechanical equipment is proposed to be screened with silver metal panels to match the mechanical screens on the existing building.

Signage:
The proposed "OLYMPIC RECREATION CENTER" wall sign is not allowed by code. Only ground signs are allowed in the Public Land (P-L) Zoning District. The proposed wall sign either needs to be removed from the design, or an application for a sign variation can be submitted for review. Another option would be a tablet style sign, which is allowed to have the name of the building cut into any masonry surface or cast in bronze or other incombustible material.

RECOMMENDATION:

It is recommended that the Design Commission **approve** the design of the proposed addition to the existing Olympic Park Indoor Swim Center building located at 600 N. Ridge Avenue. This recommendation is subject to compliance with the plans received 1/9/18, Design Commission recommendations, compliance with all applicable Federal, State, and Village codes regulations and policies, the issuance of all required permits, and the following:

1. Consider incorporating the dark brick material to break up the amount of painted precast concrete on the double-sized gymnasium.
2. The petitioner is required to meet the Sign code, Chapter 30 or obtain a sign variation(s).
3. This review deals with architectural design only and should not be construed to be an approval of, or to have any other impact on, any other zoning and/or land use issues or decisions that stem from zoning, sign code or building or any other reviews. In addition to the normal technical review, permit drawings will be reviewed for consistency with the Design Commission and any other Commission or Board approval conditions. It is the architect/owner/builder's responsibility to comply with the Design Commission approval and ensure that building permit plans and sign permit plans comply with all zoning code, building code and sign code requirements.

_____ February 2, 2018

Steve Hautzinger AIA, Design Planner
Department of Planning & Community Development

Cc: Charles Witherington Perkins, Director of Planning and Community Development, Bill Enright, Deputy Director of Planning and Community Development, Sam Hubbard, Development Planner, Petitioner, DC File 18-006

APPROVED

MINUTES OF
THE VILLAGE OF ARLINGTON HEIGHTS
DESIGN COMMISSION MEETING
HELD AT THE ARLINGTON HEIGHTS MUNICIPAL BUILDING
33 S. ARLINGTON HEIGHTS RD.
FEBRUARY 13, 2018

Chair Fitzgerald called the meeting to order at 6:30 p.m.

Members Present:	John Fitzgerald, Chair Aaron Coon Kirsten Kingsley
Members Absent:	Ted Eckhardt Jonathan Kubow
Also Present:	Scott Nielsen, Fairfield Homes for *412 W. Campbell St.* Jack Boryszewski, MJ&B Contractors for *116 S. Gibbons Ave.* Peter Theodore, Camburas & Theodore Ltd. for *Marshalls* Josh Conroy, Camburas & Theodore Ltd. for *Marshalls* Jessica Wiebesiek, Camburas & Theodore Ltd. for *Marshalls* Benjamin Rea, Arlington Heights Park District for *Olympic Park* David Yandel, FGM Architects for *Olympic Park* Louise Kowalczyk, FGM Architects for *Olympic Park* Steve Hautzinger, Staff Liaison

REVIEW OF MEETING MINUTES FROM JANUARY 23, 2018

A MOTION WAS MADE BY COMMISSIONER KINGSLEY, SECONDED BY COMMISSIONER COON, TO APPROVE THE MEETING MINUTES OF JANUARY 23, 2018. ALL WERE IN FAVOR. MOTION CARRIED.

ITEM 4. PUBLIC LAND REVIEW

DC#18-006 – Olympic Park Indoor Swim Center – 660 N. Ridge Ave.

Benjamin Rea, representing the *Arlington Heights Park District*, and David Yandel and Louise Kowalczyk, representing *FGM Architects,* were present on behalf of the project.

Mr. Hautzinger presented Staff comments. The subject design is being forwarded to the Design Commission for review pursuant to Chapter 6 of the Municipal Code. This project requires Plan Commission review and Village Board approval to amend the existing Planned Unit Development (PUD). Because this project is going to the Plan Commission, the role of the Design Commission is limited to building and signage only as outlined in Chapter 28 of the Municipal Code, Section 14.2-1.

The petitioner is proposing a two-story addition to the existing Olympic Park Indoor Swim Center. The addition will be located on the north and west sides of the existing building, and will include a new warm-water pool, a new gymnasium, an elevated indoor running track, fitness center, and new fully accessible locker rooms. The project includes an alternate to possibly double the size of the gymnasium addition. The existing building design has a modern aesthetic with the primary exterior materials being a dark iron spot brick, buff colored split-faced concrete masonry units, silver window mullions, and silver metal panel accents.

The proposed addition is designed to match the existing building materials, colors, and style. The only new material is the precast concrete panels for the gymnasium walls, which are proposed to be painted to match the buff colored concrete masonry units on the existing building. Overall, the proposed addition is very nicely designed as a seamless addition to the existing building. The only comment is that the double-sized gymnasium creates a relatively large precast box, and it should be considered to incorporate some of the dark brick material to break up the large amount of painted precast.

All rooftop mechanical equipment is proposed to be screened with silver metal panels to match the mechanical screens on the existing building. The proposed "OLYMPIC RECREATION CENTER" wall sign is not allowed by code. Only ground signs are allowed in the Public Land (P-L) Zoning District. The proposed wall sign either needs to be removed from the design, or an application for a sign variation can be submitted for review. Another option would be a tablet style sign, which is allowed to have the name of the building cut into any masonry surface or cast in bronze or other incombustible material.

Staff recommends approval of the proposed design with the two previously stated comments for the commissioners to review.

Mr. Rea, the Director of Parks and Planning, thanked the commissioners for the opportunity to present their project, which they feel is a very good design and plan; they are happy to hear any comments from the commissioners. Mr. Yandel said that with regards to signage, they would most likely pursue a variance. The existing wall signage on the addition that was done in 2004 faces Euclid, and will most likely be removed because they are proposing to re-identify the building as a recreation center and not a swim center. The building is also being re-orientated to the west, with a new main entrance at the center of the facility, because the facility is predominantly visited by car or from the neighborhood to the west, with new parking as a full perimeter roadway feeing into the building from the west. They share Staff's concerns about the large amount of precast on the alternate double size gymnasium; however, the Park District prefers the larger gymnasium because it will support the large amount of programs, allow for 2 full size high school basketball courts, as well as a larger indoor walking/running track that is one of the predominant and most requested features within the Park District. In order to potentially afford the larger gymnasium, the painted precast concrete is predominantly cost driven more so than design driven; however, there are opportunities to introduce a different color to the painted scheme being proposed.

Commissioner Kingsley asked if there would be any split face block on the addition, and Mr. Yandel replied that only the existing building has split face block; no additional split face block is being added. He added that there will only be 3 colors; the iron spot brick that will match identically to the existing, the buff masonry or precast to be painted, and the clear anodized aluminum that is all the doors, windows and new screening and coping.

Commissioner Coon felt it was a really nice design and he liked that a lot of the elements from the previous improvements were taken into the current proposal, but he is adamantly opposed to the idea of precast on this project. He felt there were a lot of materials already on the building, and precast would tilt this in a direction of not being cohesive with the rest of the development. He felt the petitioner should look at ways of doing the addition out of the split-face block; even more so to try to find ways to bring in more of the brick. He referenced the split-face block used at the Rec Center at Pioneer Park, which he felt was awful; it is a bad fit in a residential neighborhood, and he was concerned about precast panels being a bad fit here as well; it has so much of an industrial feel in a residential neighborhood. He felt the brick and the block were a nice palette to work with, and he preferred to see the petitioner stick with those 2 materials. He was not opposed to the massing of the expansion itself, and he liked the idea of additional basketball courts that his sons could use. He said there was a lot to like about the design, with the exception of the precast material that would be too jarring for him; he could not support it.

Commissioner Kingsley felt it was a really nice building and she was glad that the petitioner took elements from the existing building. She liked the black dark brick and the panels; however, she did not like split-face block and felt that it should not be repeated, which it was not, and she thanked the petitioner for that. She had a hesitation with having so much precast, and she would rather see it in panels. She liked the proportion of the Base Bid, without the alternate, because it relates to the existing building so well; she liked the double window placed there, and when the building is elongated, the windows become narrower like slits. Commissioner Kingsley also felt that the east elevation would be viewed as the main elevation when driving past the building, and it was hard for her to tell much about what was happening on that elevation, or the materials. She asked about any entrances on the east elevation, and Mr. Yandel replied that only emergency exits will be on the east elevation, to be used for special occasions like a swim meet. He reiterated that the main entrance will be located in the center of the facility, which is predominantly for control of visitors.

Commissioner Kingsley asked how visitors will know that the east elevation is not the front of the building. Mr. Yandel explained that the existing bike racks, flag pole, bench, and plantings will be reconfigured and simplified to diminish and de-emphasize that as the entrance and move the traditional entry elements to the new main entrance. Additionally, moving the main entrance to the center of the facility allows parking to be much safer. Commissioner Kingsley felt that because the east elevation is still the face of the building, the stairwell should be clad in something other than precast. She also felt strongly that the ground sign for the facility should be individual letters, and not just a sign plaque, and she had concerns about the lack of sunlight on the existing lap pool after the new pool is added. Mr. Rea pointed out that the existing glass that goes out to a sun deck will be filled in with the addition, and the west wall of the new warm water pool will be all glass. There will also be glass between the two pools, to the greatest extent possible. He added that they have heard this same concern from patrons of the facility. Commissioner Kingsley felt the petitioner should consider putting something else in that area, something to provide diffused light; it is going to be a very dark pool, and she suggested the petitioner look at other pools that have west-facing natural light, such as Prospect High School that has a similar east-facing window.

Commissioner Kingsley reiterated her concerns about the precast, and Mr. Yandel asked if breaking up the precast with a brick face on a portion of it would be acceptable. Commissioner Coon felt this would help, and asked if the petitioner considered form liners. Ms. Kowalczyk replied that they used a brick form liner at Camelot Park, and she asked if that would be acceptable in this application. She added that from a construction standpoint, it was most economical to use precast panels; however, it did not mean that another material could not be applied to the panels, or the panels decorated in some way. Commissioner Coon objected to introducing more than 3 materials; he felt the brick, the split face block and the metal are prominent on the building and introducing a fourth material would upset things. Mr. Rea said that they agreed, and that with the precast, they are trying to re-create the look of the mass of the split-face on the south elevation that contrasts with the dark. He added that the precast never touches the split face block, there is always a brick portion between the two, and Ms. Kowalczyk added that a good portion of the main

facade of the gymnasium will be broken up by the playground that will be located there. Commissioner Kingsley pointed out that the north side of the new gymnasium will be a complete wall of precast, and she felt there should be some fenestration there. Commissioner Coon agreed, especially with there being homes adjacent to the site.

Chair Fitzgerald liked the proposed design and felt it was a beautiful building, and he liked the idea of doing something different to the stairway on the east elevation to break up the facade of the panels. He was not as opposed to the pre-cast panels, and he was open to darkening them. He also suggested adding a hedge along the west elevation, approximately 6-feet below the window, which did not need to be evergreen, just something narrow with height, as well as on the north elevation if there is room. He felt that plants could solve this issue, as they do many issues.

Chair Fitzgerald questioned whether a motion could be made tonight, considering the issues that the commissioners have. Commissioner Coon wanted to see more design put into the gymnasium portion of the project; the walls are set back from the main facade and the stair bump out on the east elevation was a nice place to introduce an iron spot brick wall that picks up on the brick to the south. He also suggested letting the precast recede behind the brick in an architectural way that is pleasing, and felt something should be done to the north elevation. He felt the gymnasium would look like a warehouse attached to a very nice park complex; he was concerned about the way the precast is articulated as currently shown. Ms. Kowalczyk asked if some of the precast could remain if it were diminished, and Commissioner Coon was okay with that if the precast was more in the background; bring more of the original materials back into the design.

The commissioners discussed options on whether or not to vote on the project at this time, and how it would affect the Plan Commission and Village Board process. Mr. Rea said that they are not opposed to revisiting certain components of the design, based on the comments made tonight; however, the project is scheduled for Plan Commission review on March 14. Mr. Hautzinger said that if feasible, the Design Commission process should be completed before advancing to the Plan Commission; however, if this is not possible, the Design Commission process can run parallel with the Plan Commission review. There is a Design Commission meeting on March 13, which is one night before the Plan Commission review. The petitioner said he would work with Staff to revise the design and return to a future date with the Design Commission.

A MOTION WAS MADE BY COMMISSIONER COON, SECONDED BY COMMISSIONER KINGSLEY, TO CONTINUE THE PROJECT FOR THE OLYMPIC PARK INDOOR SWIM CENTER (DC#18-006), TO A FUTURE DESIGN COMMISSION MEETING DATE.

KINGSLEY, AYE; COON, AYE; FITZGERALD, AYE.
ALL WERE IN FAVOR. MOTION CARRIED.

Summary of Open Houses Held on December 3rd, 5th, and 6th

A brief summary of the open houses held on December 3rd, 5th, and 6th is provided below:

- **December 3rd.** The open house was held from 10 – 11:30 a.m. and was attended by approximately 30 residents. Overall, comments about the project were very positive. A few comments/concerns shared with staff and FGM were: the loss of existing site amenities, traffic concerns on Euclid and Ridge, the need for more natural landscaping, would like an outdoor walking track, concern about locker room sizes, reduced natural light to the lap pool, lap pool too small, not happy with the pool closed during the summer, and the proposed location of the playground in relation to adjacent (near Fernandez) homes. A total of 16 comment cards were received
- **December 5th-** The open house was held from 7 – 8:45 p.m. and was attended by approximately 20 residents. Comments about the project were again very positive. A few comments/concerns shared with staff and FGM were: the proposed location of the playground (near Fernandez), loss of site amenities, line of site to the parking lot, providing landscaping/berms to screen the parking lot, traffic congestion on Ridge, noise concerns, improve pool ventilation, provide a safe drop-off/pick-up area, no improvements to the dive well, have other pools open during the proposed closure, and the removal of the existing fencing/backstop. A total of 14 comment cards were received
- **December 6th-** The open house was held from 10 – 11:30 a.m. and was attended by approximately 20 residents. Comments about the project remained very positive. A few comments/concerns shared with staff and FGM were: the loss of existing site amenities, need a clock in the family activity area, provide a safe drop-off/pick-up area, provide a kitchen in one of the multi-purpose rooms, would like a larger indoor track, limit pool closure during construction, add swimsuit dryers to the locker rooms, traffic congestion on Ridge, and improving locker room heat. A total of 11 comment cards were received
- A copy of all comments received at the 3 open houses has been attached

To best communicate the open houses to the public, staff took the following measures:

- News article about the project was published to the Park District's main website
- Letters (see attached copy) were mailed via USPS to the residents and businesses (93 in total) surrounding the Olympic Indoor Swim Center facility (see attached mailing list)
- Informational boards about the project and open houses were placed at Olympic
- Posters were given to staff at Olympic to place in strategic locations for patrons to see
- Press release was distributed to the local Media

- We featured the Open Houses in weekly E-blast to the community – 15,000 subscription
- We published a large web banner on ahpd.org website that is linked to more information about the open houses
- We posted information about and encouraged attendance to the Open House via our social media channels: Facebook and Twitter

FGM ARCHITECTS

January 8, 2018

Sam Hubbard
Development Planner
Department of Planning and Community Development
Village of Arlington Heights
33 S. Arlington Heights Road
Arlington Heights, IL 60005

RE: Arlington Heights Park District
Olympic Indoor Swim Center – Addition & Renovation
660 North Ridge Avenue, Arlington Heights, Illinois

Dear Mr. Hubbard:

The Arlington Heights Park District (AHPD) intends to renovate the Olympic Indoor Swim Center located at Olympic Park. The site is bounded by Euclid Avenue to the south, North Salem Avenue to the west, North Ridge Avenue to the east, and a residential neighborhood to the north along Fernandez Avenue. The area south of Euclid Avenue and along Northwest Highway is commercial and Christian Liberty Academy is located across North Ridge Avenue to the east.

The existing park is comprised of the existing indoor swim center and the following outdoor site amenities: on-site parking, large playfield used primarily for soccer and similar activities, basketball court, two tennis courts, playground, and skate park. The existing building includes a 6-lane lap pool, diving well, and activity pool, locker rooms, offices, and lower level multi-purpose rooms.

AHPD recently completed a facility needs assessment for the district and renovation and expansion of the Olympic Indoor Swim Center to include a gymnasium with indoor running / walking track and fitness space was one of the two highest priorities identified. The central location of Olympic Park makes this location ideal to support the residents of Arlington Heights.

Olympic Park will be improved with the following site and building amenities: additional on-site parking and drive aisles to provide additional site access from North Ridge Avenue and full perimeter fire department access to the building; expansion of the stormwater detention basin to accommodate the proposed improvements; two-story addition to the north of the existing building with new main entrance on the west side of the building; new lobby with control desk for visitors and staff offices; new locker rooms for the pool and separate locker rooms for fitness; new second floor fitness area accessible from a new stairway and elevator; and new gymnasium with second level running / walking track. The gymnasium will be sized to accommodate a regulation high school sized basketball court and if funds are available, sized to accommodate two regulation high school sized basketball courts.

1211 West 22nd Street, Suite 700
Oak Brook, Illinois 60606
630.574.8300 **PHONE**
630.574.9292 **FAX**
fgmarchitects.com

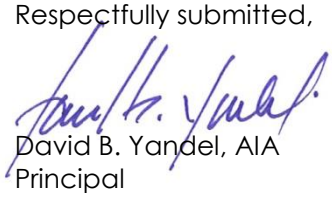
Due to the expansion of the existing facility, the existing skate park, basketball court, and tennis courts will be removed and considered for relocation on-site or elsewhere. The existing playground will be removed and a new playground with new equipment will be constructed adjacent to the addition. The existing play field will be reduced in size but will still be large enough to accommodate a full-sized soccer field.

The design intent for the new addition is to match the material and color palette of the existing building constructed in 1969 with a major addition completed in 2004. The primary elements are face brick, precast concrete, split-faced concrete masonry units, aluminum and glass windows, and matching metal panels and trim.

Pending review and approval by the Village of Arlington Heights, the project is scheduled to start construction early summer of 2018 and be constructed in phases to be completed by fall of 2019. The goal is to keep the existing facility open during the majority of the construction period, with the exception of summer 2018 and summer 2019 when maintenance and repair work to the existing pools and related systems can be completed.

FGM Architects is pleased to be partnered with AHPD on this exciting project. Please review the enclosed documents and if any additional information is required, do not hesitate to contact me directly at 312-948-8436 or davidy@fgmarchitects.com

Respectfully submitted,



David B. Yandel, AIA
Principal

Cc: John Dzarnowski, FGM
Rick Hanetho, APHD
Ben Rea, AHPD
Brian Meyer, AHPD

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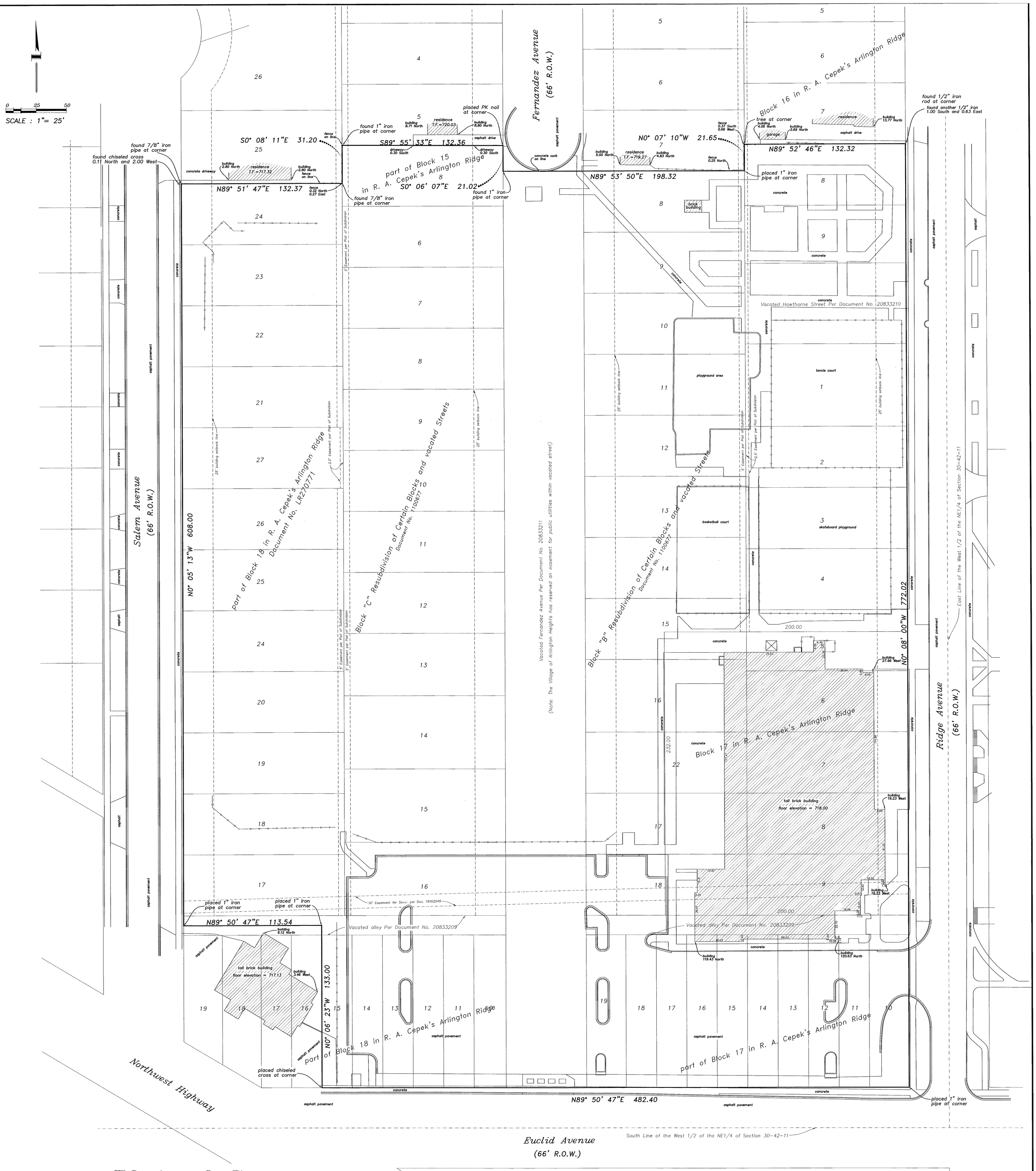


Plat of Survey

of

LOTS 8 AND 9 IN BLOCK 16; LOTS 1 THROUGH 19, BOTH INCLUSIVE, AND LOT 22 IN BLOCK 17; LOT 8 IN BLOCK 15, LOTS 10 THROUGH 15, BOTH INCUSIVE, AND LOTS 24 THROUGH 27, BOTH INCLUSIVE, IN BLOCK 18; ALL THAT PART OF VACATED HAWTHORNE STREET AS SHOWN ON THE PLAT OF VACATION THEREOF HERETOFORE RECORDED IN THE OFFICE OF THE RECORDER OF DEEDS OF COOK COUNTY, ILLINOIS AS DOCUMENT NO. 20833210, ALL THAT PART OF THE VACATED EAST AND WEST PUBIC ALLEY IN BLOCK 17 AS SHOWN ON THE PLAT OF VACATION THEREOF HERETOFORE RECORDED IN THE OFFICE OF THE RECORDER OF DEEDS OF COOK COUNTY, ILLINOIS, AS DOCUMNET NO. 20833209; ALL THAT PART OF VACATED FERNANDEZ AVENUE AS SHOWN ON THE PLAT OF VACATION THEREOF HERETOFORE RECORDED IN THE OFFICE OF THE RECORDER OF DEEDS OF COOK COUNTY, ILLINOIS AS DOCUMENT NO. 20833211; ALL THAT PART OF THE VACATED EAST AND WEST PUBLIC ALLEY IN BLOCK 18 AS SHOWN ON THE PLAT OF VACATION THEREOF HERETOFORE RECORDED IN THE OFFICE OF THE RECORDER OF DEEDS OF COOK COUNTY, ILLINOIS, AS DOCUMENT NO. 20833209, EXCEPTING THEREFROM THAT PART OF THE SOUTH HALF OF SAID VACATED PUBLIC ALLEY LYING NORTH OF AND ADJOINING LOTS 16 THROUGH 19, BOTH INCLUSIVE, IN SAID BLOCK 18; ALL AS SHOWN ON THE PLAT OF R.A. CEPEK'S ARLINGTON RIDGE, BEING A SUABDIVISION OF THAT PART OF THE WEST HALF (EXCEPT THE EAST 33.0 FEET THEREOF) OF THE NORTHEAST QUARTER AND OF THE SOUTH HALF OF THE NORTHWEST QUARTER OF SECTION 30, TOWNSHIP 42 NORTH, RANGE 11, EAST OF THE THIRD PRINCIPAL MERIDIAN LYING NORTH OF THE NORTHEASTERLY LINE OF THE NORTHWEST HIGHWAY, SAID NORTHEASTERLY LINE OF HIGHWAY BEING 66.0 FEET NORTHEASTERLY OF AND PARALLEL WITH THE NORTHEASTERLY LINE OF THE CHICAGO & NORTHWESTERN RAILWAY RIGHT-OF-WAY, ACCORDING TO THE PLAT OF SAID SUBDIVISION REGISTERED IN THE OFFICE OF THE REGISTRAR OF TITLES OF COOK COUNTY, ILLINOIS ON SEPTEMBER 2, 1925, AS DOCUMENT No.LR 270771.

ALSO

LOTS 8 THROUGH 16, BOTH INCLUSIVE AND LOTS 17 AND 18 IN BLOCK B; LOTS 6 THROUGH 24, BOTH INCLUSIVE, IN BLOCK C, ALL IN THE RESUBDIVISION OF CERTAIN BLOCKS AND PARTS OF BLOCKS AND VACATED STREETS IN R.A. CEPEK'S ARLINGTON RIDGE, BEING A SUBDIVISION OF THAT PART OF THE WEST HALF (EXCEPT THE EAST 33.0 FEET THEREOF) OF THE NORTHEAST QUARTER AND OF THE SOUTH HALF OF THE NORTHWEST QUARTER OF SECTION 30, TOWNSHIP 42 NORTH, RANGE 11, EAST OF THE THIRD PRINCIPAL MERIDIAN LYING NORTH OF THE NORTHEASTERLY LINE OF THE NORTHWEST HIGHWAY, SAID NORTHEASTERLY LINE OF HIGHWAY BEING 66.0 FEET NORTHEASTERLY OF AND PARALLEL WITH THE NORTHEASTERLY LINE OF THE CHICAGO & NORTHWESTERN RAILWAY RIGHT-OF-WAY, ACCORDING TO THE PLAT OF SAID RESUBDIVSION REGISTERED IN THE OFFICE OF THE REGISTRAR OF COOK COUNTY, ON MAY 27, 1946, AS DOCUMENT No.LR 1100677

State of Illinois } SS.
County of Cook }

I, David Bycroft, an Illinois Professional Land Surveyor, do hereby certify that I have surveyed the property described in the caption of this plat and that this plat is a correct representation of said survey.

dated at Arlington Heights, Illinois, this 8th day of October, 2017

by _____
as Illinois Professional Land Surveyor No. 2846

PROFESSIONAL LAND SURVEYOR
35-2846
DAVID R. BYCROFT
ARLINGTON HEIGHTS
STATE OF ILLINOIS
EXPIRES 11-30-2018

This professional service conforms to the current Illinois minimum standards for a boundary survey.

Field work completed on October 6, 2017.

All dimensions hereon shown unless it is otherwise noted are given in feet and decimal parts thereof.

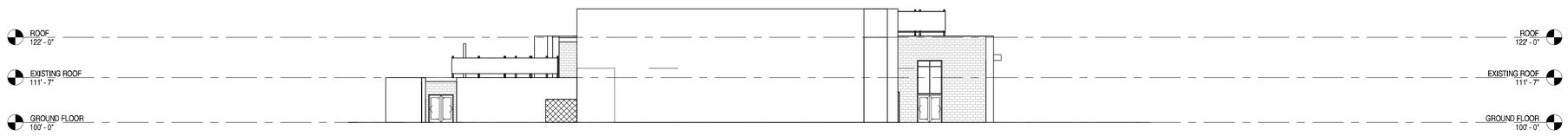
The area of the property surveyed equals 436,374 square feet which equals 10.018 acres.

Design Firm #184-005910
Expires April 30, 2019

FILE NO. 17-6751

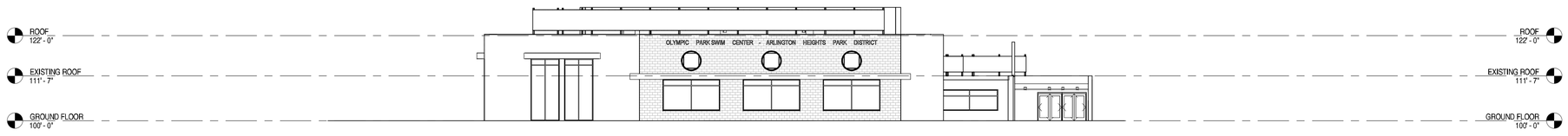
for:
Arlington Heights Park District
410 North Arlington Heights Road
Arlington Heights, Illinois

from the office of:
Norman J. Toberman and Associates
115 South Wilke Road
Suite 301
Arlington Heights, Illinois
847-439-8225



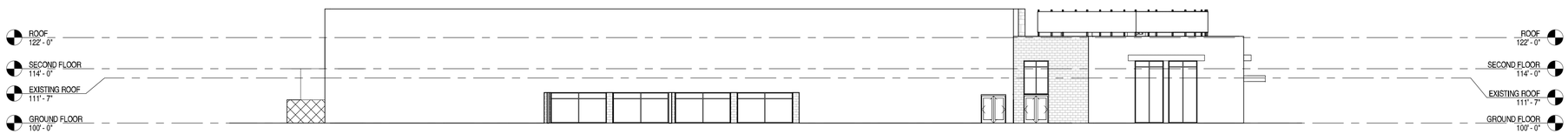
K1 EXISTING ELEVATION - NORTH

1/16" = 1'-0"



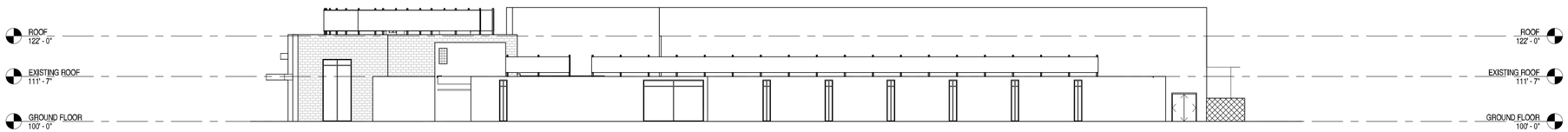
G1 EXISTING ELEVATION - SOUTH

1/16" = 1'-0"



D1 EXISTING ELEVATION - WEST

1/16" = 1'-0"



A1 EXISTING ELEVATION - EAST

1/16" = 1'-0"

NO.	DATE	DESCRIPTION
00	01/08/18	PLAN COMMISSION REVIEW
01	02/09/18	PLAN COMMISSION REVIEW - REVISIONS

ISSUANCE

FGM ARCHITECTS
CHICAGO OAK BROOK O'FALLON ST. LOUIS

DATE:

PROFESSIONAL SEAL

EXPIRATION DATE:

DATE	02/09/18
DRAWN	PWH, EJS
CHECKED	DBY
APPROVED	JCD

PROFESSIONAL DESIGN FIRM IL # 184-000350

OLYMPIC SWIM ADDITION AND RENOVATION
ARLINGTON HEIGHTS PARK DISTRICT
650 Ridge Ave
Arlington Heights, IL 60004

EXISTING ELEVATIONS

SHEET NO.

A310

JOB NO. 17-2408.01

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2/13/2018 9:45:57 AM
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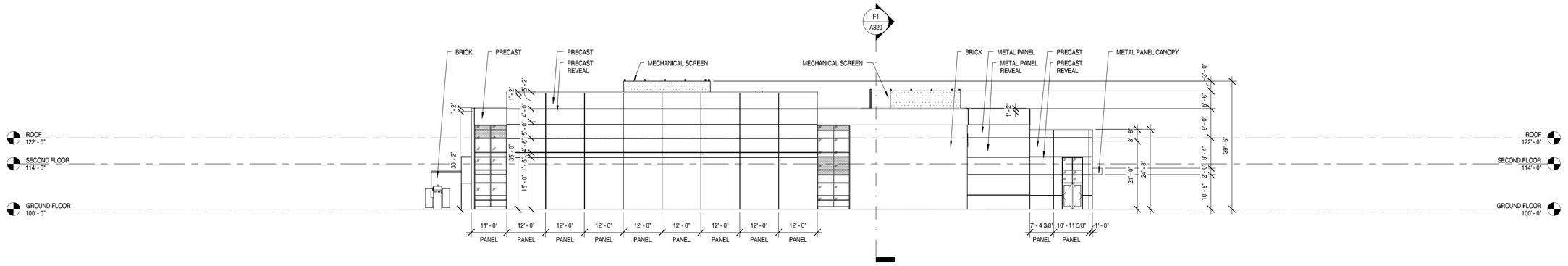
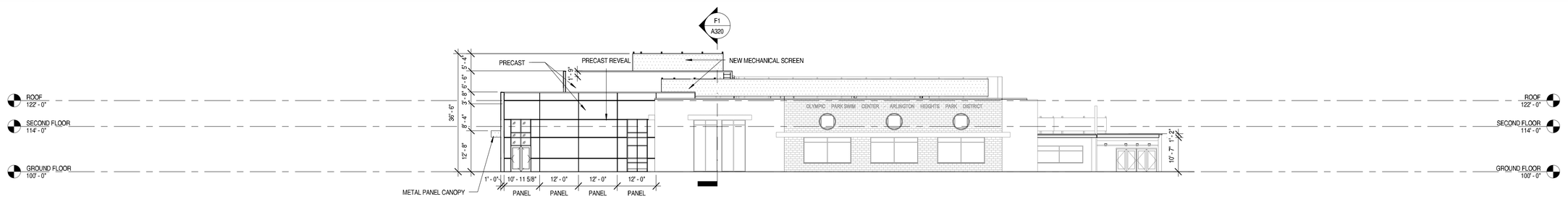


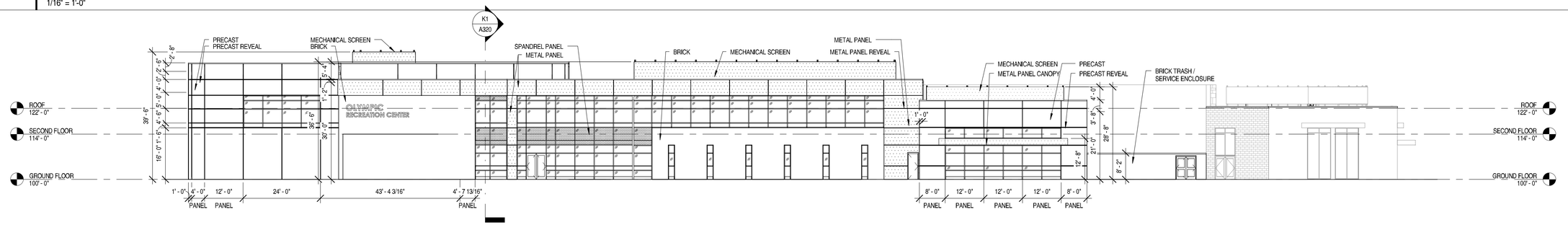
K1 OVERALL EXTERIOR ELEVATION - NORTH

1/16" = 1'-0"



G1 OVERALL EXTERIOR ELEVATION - SOUTH

1/16" = 1'-0"



D1 OVERALL EXTERIOR ELEVATION - WEST

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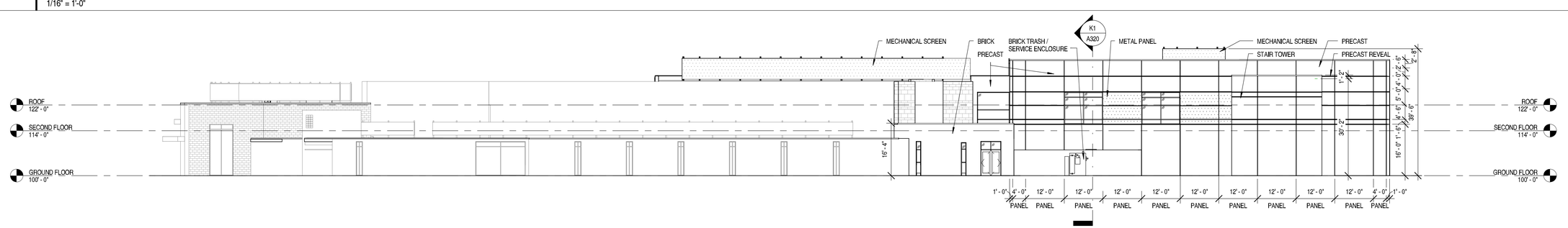

A1 OVERALL EXTERIOR ELEVATION - EAST

1/16" = 1'-0"

ISSUANCE

NO.	DATE	DESCRIPTION
00	01/08/18	PLAN COMMISSION REVIEW
01	02/09/18	PLAN COMMISSION REVIEW - REVISIONS

FGM ARCHITECTS
CHICAGO OAK BROOK O'FALLON ST. LOUIS

DATE:

PROFESSIONAL SEAL

EXPIRATION DATE:

DATE	02/09/18
DRAWN	PWH, EJS
CHECKED	DBY
APPROVED	JCD

PROFESSIONAL DESIGN FIRM
IL # 184-000350

OLYMPIC SWIM ADDITION AND RENOVATION
ARLINGTON HEIGHTS PARK DISTRICT
660 Ridge Ave
Arlington Heights, IL 60004

PROPOSED ELEVATIONS - BASE BID

SHEET NO.
A311

JOB NO. 17-2408.01

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2/13/2018 9:46:05 AM
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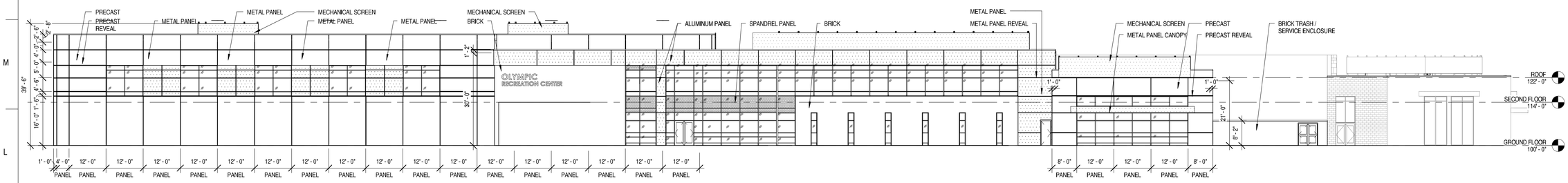
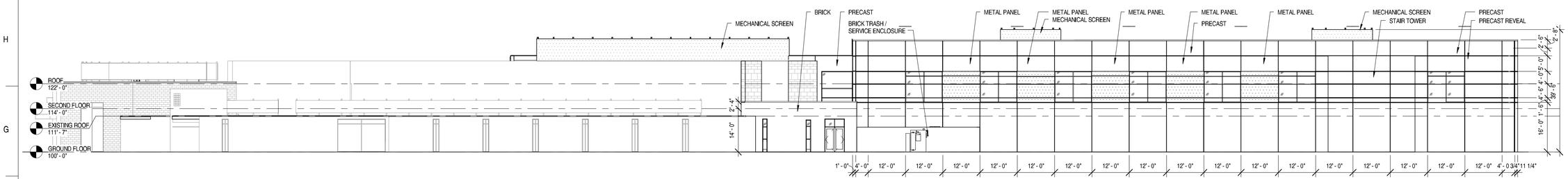


K1 OVERALL EXTERIOR ELEVATION - WEST - ALTERNATE BID #1

1/16" = 1'-0"



F1 OVERALL EXTERIOR ELEVATION - EAST - ALTERNATE BID #1

1/16" = 1'-0"

ISSUANCE

NO.	DATE	DESCRIPTION
00	01/08/18	PLAN COMMISSION REVIEW
01	02/09/18	PLAN COMMISSION REVIEW - REVISIONS

FGM ARCHITECTS
CHICAGO OAK BROOK O'FALLON ST. LOUIS

DATE:

PROFESSIONAL SEAL

EXPIRATION DATE:

DATE	02/09/18
DRAWN	PWH, EJS
CHECKED	DBY
APPROVED	JCD

PROFESSIONAL DESIGN FIRM IL # 184-000350

OLYMPIC SWIM ADDITION AND RENOVATION
ARLINGTON HEIGHTS PARK DISTRICT
660 Ridge Ave
Arlington Heights, IL 60004

PROPOSED ELEVATIONS - ALTERNATE BID #1

SHEET NO.

A312

JOB NO. 17-2408.01

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ENGINEER'S OPINION OF PROBABLE COST

Olympic Swim Addition and Renovation
Arlington Heights, Illinois
Arlington Heights Park District
5313.000

Prepared by: David Guerrero, Jr
Date: February 9, 2018

Checked by: Walter E. Graft
Date: February 9, 2018

GHA GEWALT HAMILTON ASSOCIATES, INC.
CONSULTING ENGINEERS
625 Forest Edge Drive, Vernon Hills, IL 60061
TEL 847.478.9700 ■ FAX 847.478.9701
www.gha-engineers.com

Base Bid

Pay Item	Description	Quantity	Unit	Unit Price	Value
1	Earth Excavation - Haul Off	6,361.0	CY	$45.00	$286,245.00
2	Tree Removal and Root Excavation & Disposal	40.0	EA	$500.00	$20,000.00
3	6" Topsoil and Sodding (Import and Placement)	2,370.0	SY	$18.00	$42,660.00
4	6" Topsoil, Seed, Fertilizer, and Blanket (Import and Placement	7,315.0	SY	$10.00	$73,150.00
5	Concrete Post and Base Removal	6.0	EA	$125.00	$750.00
6	Pavement Removal (Full Depth)	6,285.0	SY	$10.00	$62,850.00
7	Sawcut	890.0	LF	$1.00	$890.00
8	Undercut - Excavation and Haul Off, Import, Compaction	200.0	CY	$70.00	$14,000.00
9	Sidewalk Removal	23,380.0	SF	$1.00	$23,380.00
10	Concrete Curb Removal	1,370.0	LF	$6.00	$8,220.00
11	Sign Panel Assembly Removal	6.0	EA	$125.00	$750.00
12	Fence, Posts, and Foundation Removal	1,730.0	LF	$10.00	$17,300.00
13	Planters Removal	1.0	LSUM	$2,500.00	$2,500.00
14	Water Service Pipe Removal	225.0	LF	$20.00	$4,500.00
15	Water Service Disconnect	2.0	EA	$500.00	$1,000.00
16	Fire Hydrant Removal	2.0	EA	$1,000.00	$2,000.00
17	Water Structure Removal	1.0	EA	$750.00	$750.00
18	Storm Sewer Pipe Removal	445.0	LF	$20.00	$8,900.00
19	Storm Structure Removal	4.0	EA	$700.00	$2,800.00
20	Lightpole and Foundation Removal	2.0	EA	$2,000.00	$4,000.00
21	Power Pole Removal and Relocation	2.0	EA	$15,000.00	$30,000.00
22	Skate Park Equipment Removal/Salvage	1.0	LSUM	$5,000.00	$5,000.00
23	Basketball Hoop Assembly and Foundations Removal/Salvage	2.0	EA	$500.00	$1,000.00
24	Playground Equipment Removal	1.0	LSUM	$3,500.00	$3,500.00
25	Subbase Granular Material, CA-6, 4"	1,190.0	SY	$8.00	$9,520.00
26	Playground Subbase Granular Material, CA-7, 6"	970.0	SY	$10.00	$9,700.00
27	Geotextile Fabric	968.0	SY	$1.50	$1,452.00
28	Normal Duty Pavement	5,160.0	SY	$40.00	$206,400.00
29	Heavy Duty Pavement	2,190.0	SY	$90.00	$197,100.00
30	Class D Patch, 4"	25.0	SY	$30.00	$750.00
31	Class D Patch, Village	50.0	SY	$70.00	$3,500.00
32	Portland Cement Concrete Sidewalk, 5"	11,633.0	SF	$8.00	$93,064.00
33	Portland Cement Concrete Pavement, 8"	160.0	SY	$110.00	$17,600.00
34	Detectable Warnings	314.0	SF	$45.00	$14,130.00
35	Combination Concrete Curb & Gutter, B6.12	2,880.0	LF	$30.00	$86,400.00
36	12" Ribbon Curb	530.0	LF	$25.00	$13,250.00
37	Storm Manhole, Type A, 5' Diameter, Frame & Grate/Lid	2.0	EA	$4,500.00	$9,000.00
38	Storm Manhole, Type A, 4' Diameter, Frame & Grate/Lid	1.0	EA	$3,500.00	$3,500.00
39	Catch Basins, Type A, 5' Diameter, Frame & Grate	2.0	EA	$5,000.00	$10,000.00
40	Catch Basins, Type A, 4' Diameter, Frame & Grate	3.0	EA	$4,000.00	$12,000.00
41	Inlet, Type A, 2' Diameter, Frame & Grate	3.0	EA	$1,500.00	$4,500.00
42	Flared End Section, 24" Diameter, w/ Grate	1.0	EA	$4,500.00	$4,500.00
43	Sanitary Manhole, 4' Diameter, Frame & Lid	1.0	EA	$4,000.00	$4,000.00
44	Clean Out	4.0	EA	$500.00	$2,000.00
45	Fire Hydrant Assembly, Complete	2.0	EA	$5,000.00	$10,000.00
46	Valve Box	1.0	EA	$3,500.00	$3,500.00
47	Watermain Fitting & Couplings	2.0	EA	$950.00	$1,900.00
48	Sanitary WYE Fitting & Couplings	1.0	EA	$750.00	$750.00
49	Vortex Plate	1.0	EA	$1,000.00	$1,000.00
50	Vortex Restrictor	1.0	EA	$3,500.00	$3,500.00
51	Drainage Strucuture to be Adjusted	5.0	EA	$400.00	$2,000.00
52	Perf. PVC Storm Sewers Underdrains, 4"	363.0	LF	$35.00	$12,705.00
53	PVC Storm Sewers, 10"	281.0	LF	$50.00	$14,050.00
54	PVC Storm Sewers, 12"	52.0	LF	$60.00	$3,120.00
55	RCP Storm Sewers, 12"	186.0	LF	$60.00	$11,160.00
56	RCP Storm Sewers, 15"	167.0	LF	$70.00	$11,690.00
57	RCP Storm Sewers, 24"	454.0	LF	$90.00	$40,860.00
58	PVC Sanitary Sewers, 8"	126.0	LF	$50.00	$6,300.00
59	Water, Ductile Iron Pipe, 6"	100.0	LF	$70.00	$7,000.00
60	Trench Backfill	660.0	CY	$30.00	$19,800.00
61	Inlet and Pipe Protection	19.0	EA	$200.00	$3,800.00
62	Perimeter Erosion Barrier	1,572.0	LF	$4.00	$6,288.00
63	Tree Protection	7.0	EA	$20.00	$140.00
64	Stabalized Construction Entrance	160.0	SY	$15.00	$2,400.00
65	Paint Pavement Markings	1.0	LSUM	$10,000.00	$10,000.00
66	Sign Panel Assembly, Type A Galavanized Steel Pole	14.0	EA	$300.00	$4,200.00
67	Lightpole and Foundation Reinstallation, Complete	2.0	EA	$7,500.00	$15,000.00
68	Bike Rack	1.0	EA	$1,000.00	$1,000.00
69	Playground Fence, 4' Ameristar Aluminum Fence	215.0	LF	$45.00	$9,675.00
70	Basketball Fence, 10'	310.0	LF	$55.00	$17,050.00
71	Soccer Field Fence, 8'	265.0	LF	$45.00	$11,925.00
72	Basketball Pavement Paint and Playing Lines, Complete	1.0	LSUM	$6,000.00	$6,000.00
73	Basketball Hoop & Foundation Reinstallation, Complete	2.0	EA	$1,000.00	$2,000.00
74	Playground Synthetic Turf & Shock Pad	8,300.0	SF	$10.00	$83,000.00
				Construction:	$1,640,324.00
				Total:	**$1,640,324.00**

Detailed Description:

*Since Gewalt-Hamilton Associates Inc. Has No Control Over the Cost of Labor, Materials, or Equipment, or Over the Contractor's Methods of Determining Prices, or Over Competitive Bidding of Market Conditions, Opinions of Probable Costs, as Provided for Herein, Are to be Made on the Basis of Experience and Qualifications and Represent the Best Judgement as a Design Professional Familiar with the Construction Industry. Gewalt-Hamilton Associates, Inc., Cannot and Does Not Guarantee That Proposals, Bids, or The Construction Costs Will Not Vary From Opinions of Probable Cost Prepared for the Owner.

WALTER E. GRAFT 062-048837 LICENSED PROFESSIONAL ENGINEER OF ILLINOIS

OLYMPIC SWIM ADDITION AND RENOVATION

ARLINGTON HEIGHTS PARK DISTRICT

660 NORTH RIDGE AVENUE

ARLINGTON HEIGHTS, ILLINOIS 60004

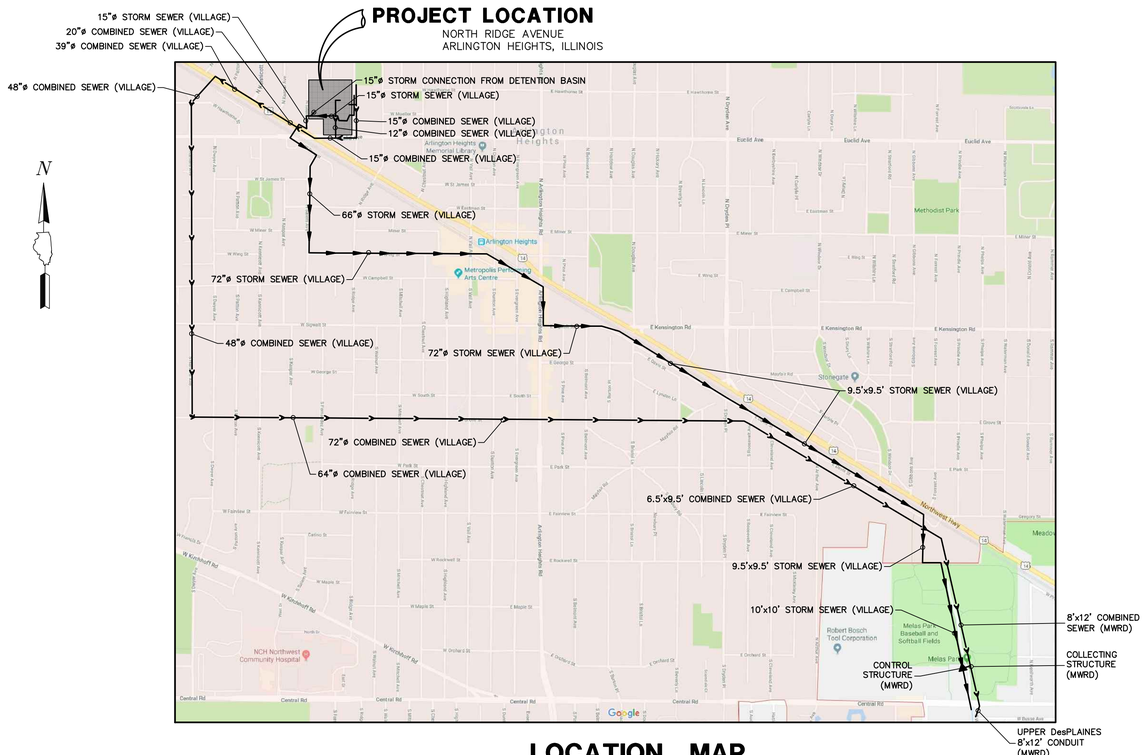
STANDARD SYMBOLS

FEATURE	EXISTING	PROPOSED
BUFFALO BOX	⊕	◑
BUSH/SHRUB		
CATCH BASIN		●
CLEANOUT	CO	C.O.
COMBINE SEWER LINE		
CONTOUR	708	708
CULVERT		
DITCH/SWALE		
ELECTRIC LINE	E	E
ELECTRIC MANHOLE	Ⓔ	Ⓔ
FENCE	X X X X	X X X X
FIRE HYDRANT		
FLARED END SECTION		
GAS LINE	G	G
GAS MANHOLE	Ⓖ	Ⓖ
GAS VALVE		
INLET		
LIGHT POLE		
OVERHEAD WIRES	A	A
POWER POLE		
R.O.W LINE		
R.O.W MARKER		
SANITARY FORCEMAIN LINE		
SANITARY SEWER LINE		
SANITARY SEWER MANHOLE		
SIGN		
SPOT ELEVATION	×850.00	×850.0
STORM SEWER LINE		
STORM SEWER MANHOLE		
TELEPHONE LINE	T	T
TELEPHONE MANHOLE	Ⓣ	Ⓣ
TELEPHONE BOX/PEDESTAL		
TREE-CONIFEROUS (SIZE/TAG#)	345	345
TREE-DECIDUOUS (SIZE/TAG#)	12"	12"
VALVE BOX	⊗	
VALVE VAULT		
WATER VALVE		
WATERMAIN LINE	W	W

0 10' 20' 30' 100' — 1"= 100'
0 50' 100' — 1"= 50'
0 50' 100' — 1"= 40'
0 50' 100' — 1"= 30'
0 50' 100' — 1"= 20'

FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

NOTE: CONSTRUCTION MEANS, METHODS AND JOB SITE SAFETY IS THE SOLE AND EXCLUSIVE RESPONSIBILITY OF THE CONTRACTOR



LOCATION MAP
(Not to Scale)

J.U.L.I.E
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
CALL 811
811 Know what's below. Call before you dig.

BENCHMARK:
REFERENCE DATUM: NORTH AMERICAN VERTICAL DATUM OF 1988 DERIVED BY GPS MEASUREMENTS. (NAVD 1988)

SITE BENCHMARK:
"ARROW" ON UPPER FLANGE OF FIRE HYDRANT SPINDLE AS LABELED ON TOPOGRAPHIC SURVEY
ELEVATION = 718.08

SHEET INDEX

C1. TITLE SHEET
C2. DEMOLITION PLAN
C3. GEOMETRIC PLAN
C4. UTILITY PLAN
C5. GRADING PLAN
C6. EROSION CONTROL DETAILS
C7. MWRD GENERAL NOTES
C8. DRAINAGE EXHIBIT
C9. GENERAL NOTES / DETAILS
C10. DETAILS
C11. DETAILS
1 C12. AUTOTURN EXHIBIT

TOPOGRAPHIC SURVEY BY:
NORMAN J. TOBERMAN & ASSOCIATES
115 SOUTH WILKE ROAD SUITE 301
ARLINGTON HEIGHTS, ILLINOIS 60004
TELEPHONE: 847-439-8225

PLANS PREPARED FOR:
ARLINGTON HEIGHTS PARK DISTRICT
410 N. ARLINGTON HEIGHTS ROAD
ARLINGTON HEIGHTS, IL 60004
TELEPHONE: 847-577-3000

TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE FOLLOWING SITE IS LOCATED IN AN AREA OF MINIMAL FLOOD HAZARD. THE SITE IS NOT LOCATED WITHIN A FLOODWAY OR FLOODPLAIN, THEREFORE, IT IS NOT PART OF A FLOOD PROTECTION AREA. BASED ON PANEL #17031C0203J EFFECTIVE 8/19/2008.

TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE DRAINAGE OF SURFACE WATERS WILL NOT BE CHANGED BY THE PROPOSED DEVELOPMENT. IF ANY DRAINAGE PATTERNS WILL BE CHANGED, REASONABLE PROVISIONS HAVE BEEN MADE FOR THE COLLECTION AND DIVERSION OF SUCH WATERS IN TO THE PUBLIC AREA, OR DRAINS APPROVED FOR THE USE BY MUNICIPAL ENGINEER, AND THAT SUCH SURFACE WATERS ARE PLANNED FOR IN ACCORDANCE WITH GENERALLY ACCEPTED ENGINEERING PRACTICES SO AS TO REDUCE THE LIKELIHOOD OF DAMAGES TO ADJOINING PROPERTIES.

SIGNED: _____ P.E.
WALTER E. GRAFT

DATE: _____

ILLINOIS LICENSE NO.: 062-048837

EXPIRATION DATE: NOVEMBER 30, 2019

NOT FOR CONSTRUCTION

ISSUANCE NO.	DATE	DESCRIPTION
00	01/08/18	PLAN COMMISSION REVIEW
01	02/09/18	PLAN COMMISSION REVIEW - REVISIONS

FGM ARCHITECTS
CHICAGO OAK BROOK O'FALLON ST. LOUIS
GHA GEWALT HAMILTON ASSOCIATES, INC.
625 Forest Edge Drive ▪ Vernon Hills, IL 60061
TEL: 847.478.9700 ▪ FAX: 847.478.9701
GHA JOB # 5313.000

DATE:

WALTER E. GRAFT 062-048837 LICENSED PROFESSIONAL ENGINEER STATE OF ILLINOIS

PROFESSIONAL SEAL

EXPIRATION DATE: 11/30/19

DATE	01/08/17
DRAWN	DG
CHECKED	WEG
APPROVED	WEG

PROFESSIONAL DESIGN FIRM IL # 184.000922

OLYMPIC SWIM ADDITION AND RENOVATION
ARLINGTON HEIGHTS PARK DISTRICT
660 Ridge Ave
Arlington Heights, IL 60004

TITLE SHEET

SHEET NO.
C1

JOB NO. 17-2408.01

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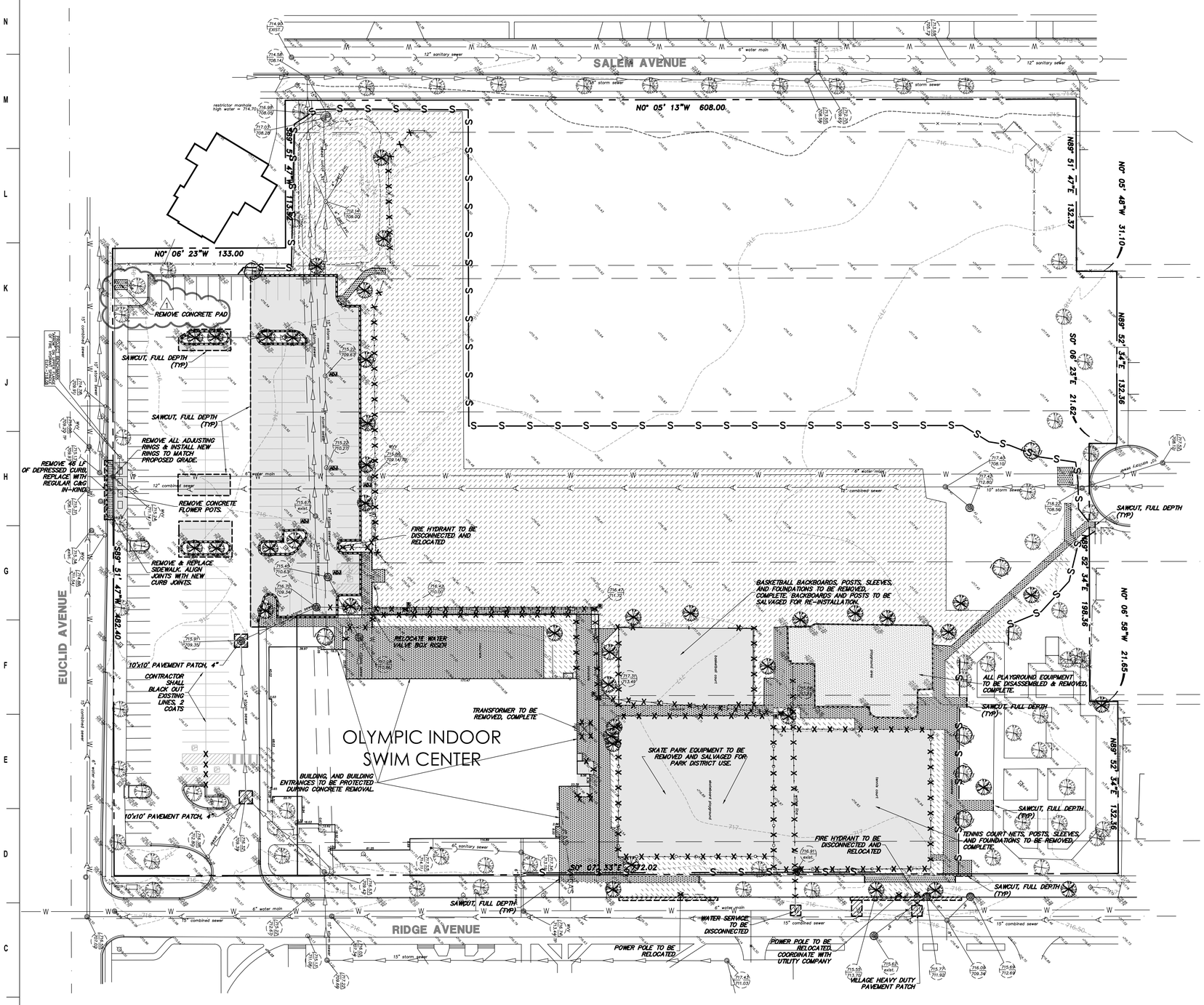

REMOVAL LEGEND

- PLAYGROUND REMOVAL
- PAVEMENT REMOVAL FULL DEPTH
- CLASS D PATCH
- EARTH/GRAVEL REMOVAL
- SIDEWALK REMOVAL
- ADJ — STRUCTURE TO BE ADJUSTED
- R — STRUCTURE TO BE REMOVED
- SIGN REMOVAL
- TREE/SHRUB REMOVAL
- PERIMETER EROSION BARRIER
- TREE TRUNK PROTECTION FENCE
- COMBINATION CURB AND GUTTER REMOVAL
- UTILITY TO BE REMOVED
- TREE ROOT PRUNING
- PAVEMENT SAWCUT
- A — STRUCTURE TO BE ABANDONED
- STRUCTURE REMOVAL
- CF — CONSTRUCTION FENCE
- B-110 — SOIL BORING

EXISTING CONDITION AND DEMOLITION NOTES

1. Prior to starting any construction, provide soil erosion and sediment control devices as shown on the plans and as required per IEPA NPDES guidelines. Refer to notes and details throughout the entire plan set.
2. Prior to starting any excavation work, provide tree protection, preservation and root pruning as shown on the plans and notes throughout the entire plan set.
3. Contractor shall refer to subsurface soil exploration report.
4. Ridge Avenue is under the jurisdiction of the Village of Arlington Heights. Euclid Avenue is under the jurisdiction of the Cook County Highway Department. All work within the right of way will require a permit from the respective agency.
5. The contractor shall be responsible for fencing the active work zone from the public and protecting the public from any construction related hazards. At a minimum, all excavation, demolition areas and other areas potentially hazardous to pedestrians and vehicles must be protected.
6. At all times, main drive, loading docks, and dumpster areas shall remain open and unobstructed. Temporary shut down of one traffic lane at a time will be permitted for short term periods and shall be coordinated with appointed Property Owner construction staff. Short term closings shall be completed within the work day and restored to unobstructed access by the close of the work day.
7. Temporary stone or asphalt pathways shall be provided as needed throughout the course of construction to facilitate safe pedestrian and vehicular movement. The longitudinal slope of such paths shall not exceed 5% and cross slopes shall not exceed 2%. Provide 6" CA-6 base and 2" surface asphalt.
8. The existing facilities will remain open and actively used. Contractor shall refer to mechanical, electrical and architectural plans and coordinate with utility companies to ensure continuous utility services during demolition and transitioning of services.
9. The contractor is responsible for the demolition and disposal of all existing improvements onsite necessary to complete the job. These improvements include, but are not limited to, existing pavements, curbs, sidewalks, utilities, lighting, light bases, manholes, fences, foundations, and other structures within the work area. Excavate and grade to proposed pavement and building subbase grades. (Refer to foundation plans for proposed building subbase grades.) These items shall be completely removed and legally disposed of offsite.
10. Remove or abandon existing utilities as shown. Utilities that are removed, unless otherwise noted, shall be backfilled with CA-6 crushed stone in lifts of 8" or less and compacted to 95% Modified Proctor density. Utilities to be abandoned shall be plugged at both ends with a minimum of 2 feet long non-shrink concrete/mortar plugs. Manhole structures to be abandoned shall have the top section removed, sewers bulkheaded with concrete and backfilled with CA-6 crushed stone.
11. Temporarily remove, store and protect sign and posts within affected work zone for reinstallation. Coordinate onsite storage with Property Owner.
12. The Contractor shall include all associated costs with the removal, transport, disposal, testing and certification of "Uncontaminated Soil" as defined under 415 ILCS 5/3.160 including any fees, taxes, or surcharges charged by or through the operator(s) of Clean Construction or Demolition Debris Fill Operations or Uncontaminated Soil Fill Operations for the acceptance of Uncontaminated Soil.
13. Skate park equipment to be removed and salvaged for future use. Coordinate delivery of disassembled equipment to Park District.
14. Playground equipment to be removed complete and disposed of.
15. Basketball backboards and posts to be removed and salvaged for future use.
16. Tennis court nets, posts, sleeves, and foundations to be removed complete and disposed of.
17. Coordinate utility pole relocation within Ridge Avenue.
18. Existing fire hydrant to be removed. Fire hydrant lead to be disconnected from the main per Village of Arlington Heights Public Works (VAHPW) requirements. This will require shutdown and removal of existing tee, installation of makeup piece with MJ fittings. Coordinate relocation with VAHPW Water Distribution Unit at 847-368-5800.
19. Ex. copper water service lead to be disconnected at Village main. Shut off corporation valve, cut copper service and plug end per VAHPW requirements.

GRAPHIC SCALE
40 0 20 40
(IN FEET)
1 inch = 40 ft.

NO.	DATE	ISSUANCE DESCRIPTION
00	01/08/18	PLAN COMMISSION REVIEW
01	02/09/18	PLAN COMMISSION REVIEW - REVISIONS

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OLYMPIC SWIM ADDITION AND RENOVATION
ARLINGTON HEIGHTS PARK DISTRICT
660 Ridge Ave
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DEMOLITION PLAN

SHEET NO.
C2

JOB NO. 17-2408.01

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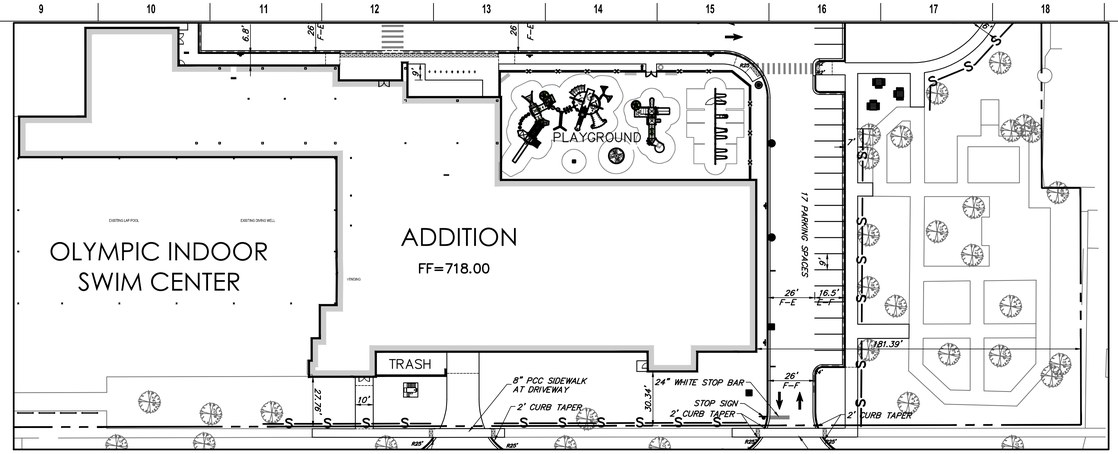
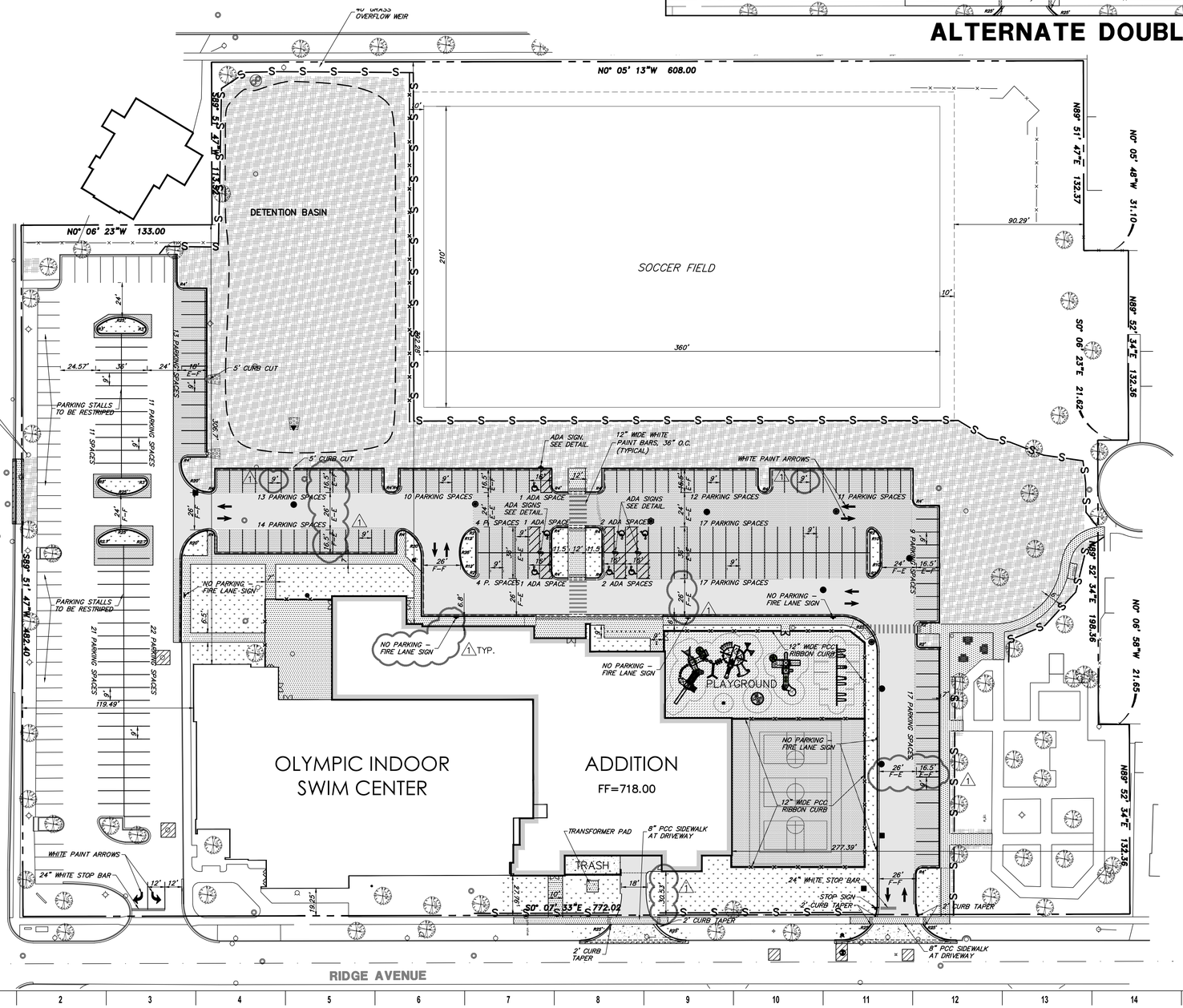
Zoning matrix				
	Existing	Proposed - Base Bid	Proposed - alternate Bid	P-L District Required
Lot Size (sq. ft.)	436,374	436,374	436,374	No Limit
Lot Width (ft)	482.4	482.4	482.4	No Limit
Set Backs				
North (rear)	405.93'	277.39'	181.39'	30'
South (front)	119.43'	119.43'	119.43'	15'
East (exterior side)	19.23'	19.23'/27.71'	19.23'/27.71'	10'
West (exterior side)	306.70' at S notch	306.7' / 372.79'	306.7' / 372.79'	10'
F.A.R.	8.24%	17.93%	20.67%	250%
Building Lot Coverage	6.76%	13.19%	15.40%	No Limit
Impervious Surface Coverage (sq. ft.)	157,052	189,352	188,875	No Limit
Building Height	36'	36'	36'	No Limit
Off-street Parking Spaces	191	266	266	TBD
Bicycle Parking Spaces	34	52	52	
Total Building Square Footage	35,972	78,244	90,218	N/A
Building Foundation (sq.ft)	29,479	57,571	67,218	N/A



ALTERNATE DOUBLE GYM



PROPOSED LEGEND

- HEAVY DUTY PAVEMENT — 2.0" HMA SURFACE, N50 / 2.25" HMA BINDER, N50 / 8" HMA BINDER, N50 / 4" CA-6 STONE BASE / GEOTEXTILE FABRIC
- NORMAL DUTY PAVEMENT — 2.0" HMA SURFACE, N50 / 2.25" HMA BINDER, N50 / 10" CA-6 STONE BASE / GEOTEXTILE FABRIC
- PCC PAVEMENT — 6" PCC CONCRETE / 4" CA-6 BASE
- PCC SIDEWALK — 5" PCC CONCRETE / 4" CA-6 BASE
- ARTIFICIAL TURF — SEE DETAIL
- CLASS D PATCH — MATCH EX. PAVEMENT SECTION
- 6" TOPSOIL PLACEMENT & SOD RESTORATION — SEE LANDSCAPE PLANS AND SPECIFICATIONS FOR RESTORATION DETAILS
- 6" TOPSOIL PLACEMENT AND SEED & BLANKET — SEE LANDSCAPE PLANS AND SPECIFICATIONS FOR RESTORATION DETAILS
- STONE RIP RAP, CLASS A1
- DETECTABLE WARNINGS
- B6.12 CURB & GUTTER (REGULAR)
- B6.12 CURB & GUTTER (DEPRESSED)
- B6.12 CURB & GUTTER (REVERSE PITCH)
- BARRIER CURB
- BARRIER CURB (DEPRESSED)
- INTEGRATED SIDEWALK/CONCRETE CURB
- FENCE
- TREE TRUNK PROTECTION FENCE
- PERIMETER EROSION BARRIER
- CONSTRUCTION FENCE
- RETAINING WALLS
- SUMMITS
- SLOPES
- SWALES
- OVERLAND FLOW ROUTE
- PROPOSED TREE

GEOMETRIC AND PAVING PLAN

1. All pavement dimensions are to edge of pavement, unless otherwise noted. E=edge of pavement, B=back of curb, F=face of curb. Radii dimensions are to back of curb.
2. Install all curb and sidewalk as shown. Note some curbs require reverse pitch gutter. Dowel new sidewalk and curb to existing and proposed curbs per general notes. When constructing a carriage walk, the proposed sidewalk contraction and expansion joints shall align with existing curb joints.
3. Provide 1.90% cross slope and 4.5% maximum longitudinal slope on all sidewalks and pedestrian path ways unless otherwise indicated. Illinois accessibility code requires a maximum constructed cross slope of 2.00% and longitudinal slope of 5.00%.
4. Install bituminous pavement as shown. Refer to detail sheet for specific pavement sections and general note sheet for construction, testing and compaction requirements.
5. Install PCC pavement as shown. Refer to detail sheet for specific pavement section and general notes for construction, testing and compaction requirements.
6. All parking lot stall markings shall be 4" Yellow paint and all other parking lot pavement markings shall be paint, color as noted, in accordance with Section 780 of the IDOT Standard Specifications. (Two single applications, 16 mils each required). Site pavement marking shall be coordinated with Site engineer. Contractor shall notify site engineer 48 hrs prior to installing pavement marking. Re-striping of entire existing parking lot is required.
7. For handicapped stall markings, refer to Handicapped Parking Stall and Sign Dimensioning Detail.
8. Install new signs and handicapped parking signs using 2" galvanized square tube post and telescoping post sleeve per IDOT standard. If posts are within pavement, core pavement accordingly.
9. Install transformer pad as shown. Pad shall be set 6" above finished grade. Refer to MEP plans for final pad size and design requirements.
10. Contractor shall install temporary erosion control seed and blanket as necessary to meet soil erosion and sediment control requirements. Refer to notes and details throughout the plan set for specific material requirements.
11. For final restoration, the contractor shall be responsible for restoring all disturbed turf areas and proposed turf areas as follows:
    a. Refer to Landscape plans and specifications for plant and tree material and installation requirements.
    b. Refer to Landscape plans for topsoil, seed and sod material and restoration requirements.
    c. Prior to placement of topsoil restoration area subgrade material shall be rototilled and re-compacted to a maximum of 80% standard proctor to a depth of 6".
    d. Spread a minimum of 6" of existing site salvaged screened topsoil or new pulverized topsoil on all disturbed areas. Compact to 80% standard proctor.
13. Once restoration has been completed, the contractor shall remove erosion control devices. Silt fence trenches shall be backfilled and restored in kind. Storm structures shall be cleaned of debris.
14. Coordinate Playground Equipment installation with underdrain and infill material.

ISSUANCE		
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PROFESSIONAL DESIGN FIRM IL # 184-000922

OLYMPIC SWIM ADDITION AND RENOVATION
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Arlington Heights, IL 60004

GEOMETRIC PLAN

SHEET NO.

C3

JOB NO. 17-2408.01

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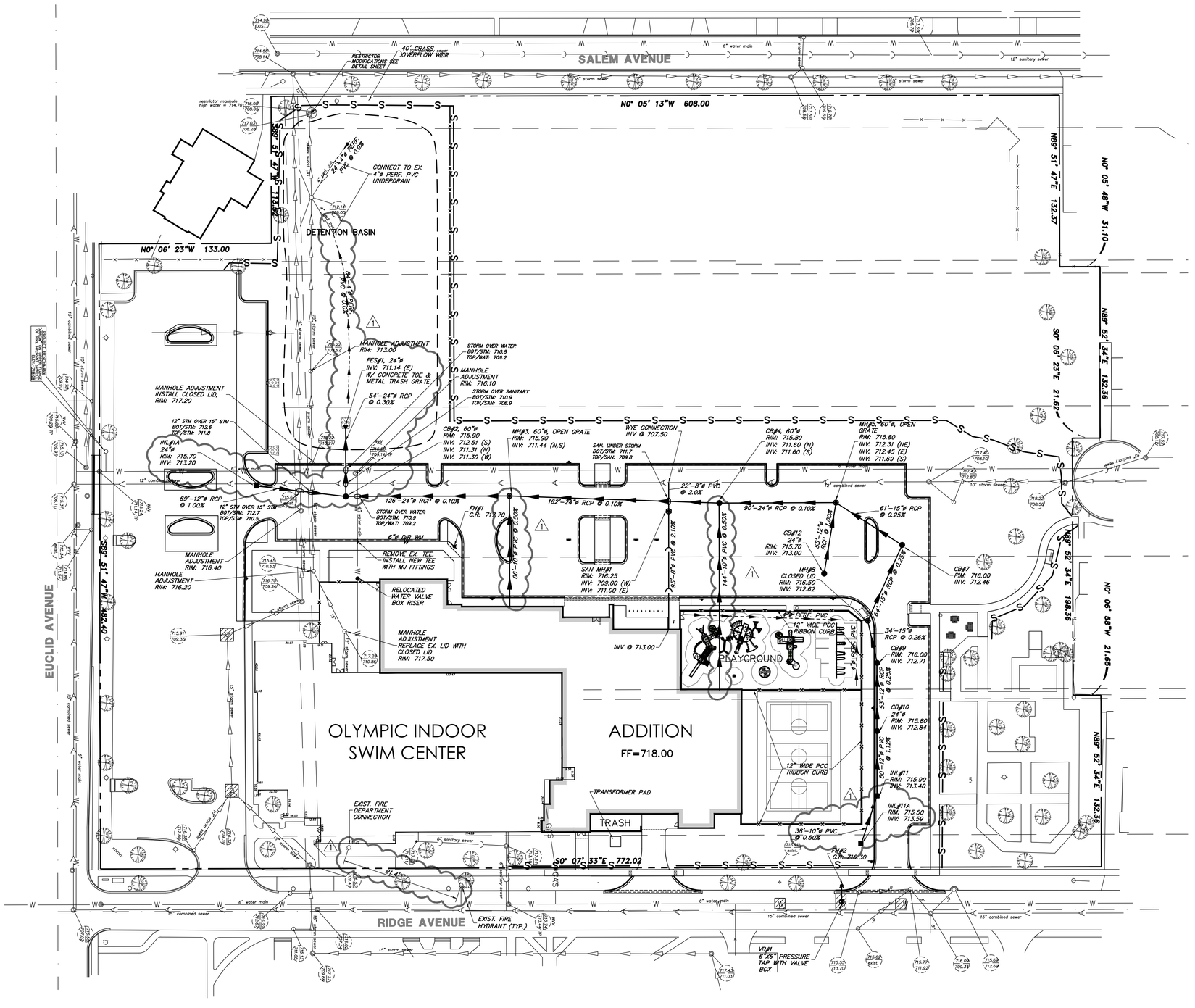

GRAPHIC SCALE

40 0 20 40

(IN FEET)
1 inch = 40 ft.

DRAINAGE & UTILITY LEGEND

- EXISTING STORM SEWER
- EXISTING SANITARY SEWER
- EXISTING WATERMAIN
- PROPOSED STORM SEWER
- PROPOSED SANITARY SEWER
- PROPOSED WATERMAIN

EXISTING	PROPOSED	
◎	◉	STORM MANHOLE
○	●	STORM CATCHBASIN
□	■	STORM INLET
▱	▶	FLARED END SECTION
◎	◉	SANITARY MANHOLE
⊠	⊞	VALVE VAULT
⊗	⊕	VALVE BOX
♉	♉	FIRE HYDRANT
⌀	⌀	BUFFALO BOX
☼	✦	STREET LIGHT
○	●	POWER POLE
⚲	⚲	SIGN

UTILITY PLAN NOTES

1. The contractor shall verify the exact location and elevation of existing utilities prior to initiating work. Any discrepancies found between the information noted on the plans and actual field conditions, or any conflicts with proposed improvements shall be reported to the engineer immediately. The contractor shall not proceed any further until given written clarification on how to proceed.
2. Install storm sewer as shown. Refer to Storm Sewer requirement table on General Notes Sheet for pipe material, joint, frame and grate, stone bedding and testing requirements. Note that project site is in a combined sewer service area. Storm sewer requires ASTM C-923 rubber boot connections.
3. Install sanitary sewer as shown. Refer to Sanitary Sewer requirement table on General Notes Sheet for pipe material, joint, frame and grate, stone bedding and testing requirements.
4. Install watermain as shown. Refer to Water Main requirement table on General Notes Sheet for pipe material, joint, frame and grate, valves, fire hydrant, stone bedding and testing requirements.
5. Contractor shall provide the following as-constructed documents at the conclusion of the project:
   a. Water Main
      - As-constructed location of all bends, tees, valves, copper unions, etc. (measured dimension from two fixed above grade objects are required for buried objects)
      - Rim and top of pipe elevations for all structures
      - Provide all testing documentation.
   b. Sanitary Sewer
      - As-constructed locations of structures, service connections, cleanouts.
      - Rim and invert elevations.
      - Color video with transcript required for new sewer lines installed.
   c. Storm Sewer
      - As-constructed locations of structures, service connections, cleanouts.
      - Rim and invert elevations.
      - Color video with transcript required for new sewer lines installed.
6. Refer to MEP plans for site lighting, post foundation and wire routing.
7. Manhole Adjustment: remove frame, grate, flat top or cone section and remove first barrel section. Replace barrel section with new correct height section and reinstall existing cone & frame. Replace adjusting rings in-kind.
8. Rim Adjustment: remove frame & adjusting rings. Replace with new rings and existing frame. Maximum 12" of adjusting rings.

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UTILITY PLAN

SHEET NO.
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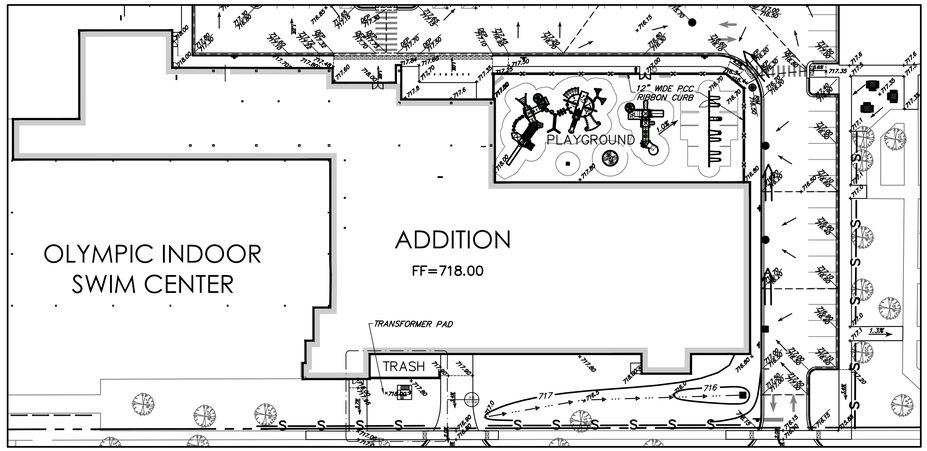

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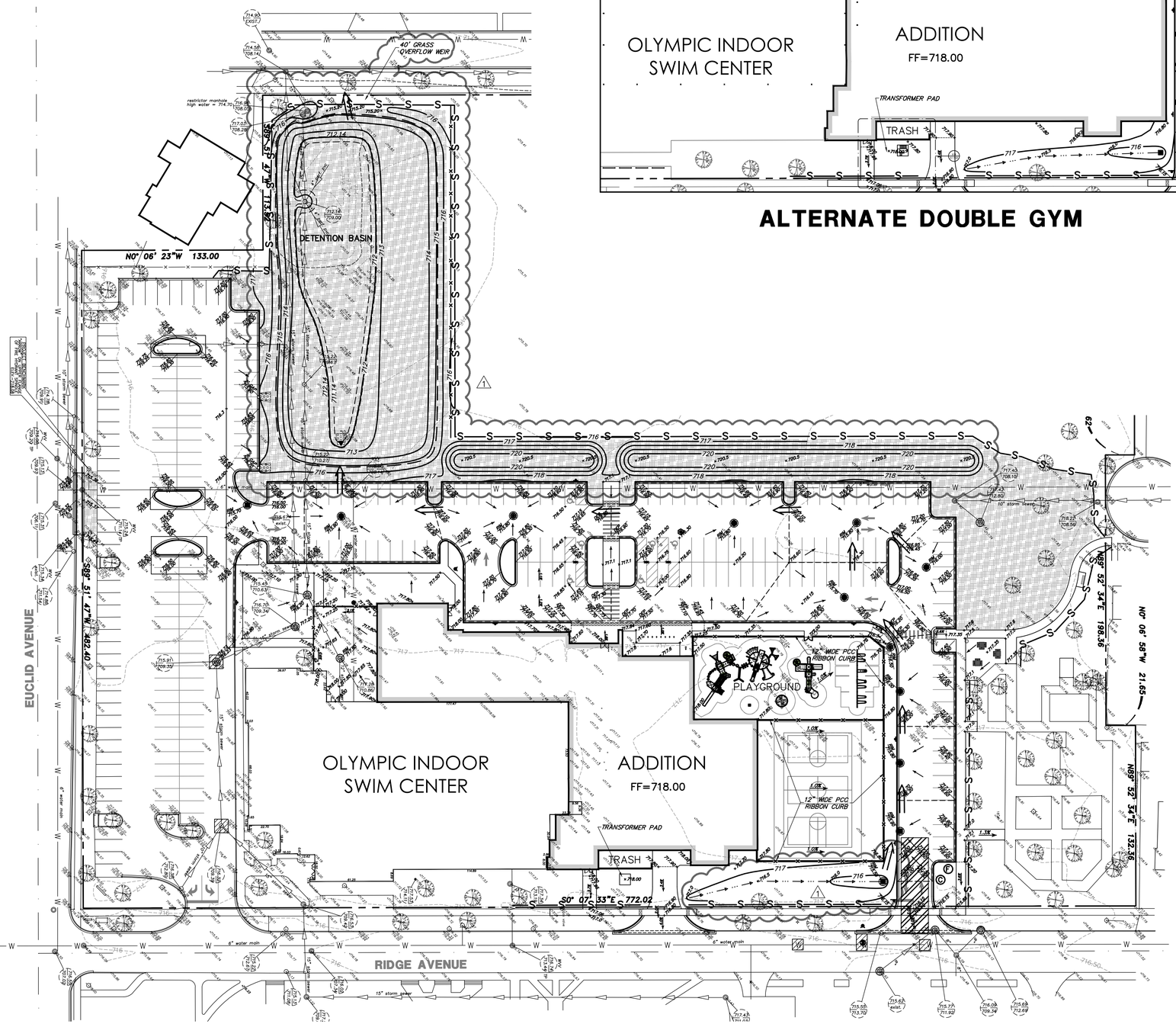

GRAPHIC SCALE

30 0 15 30

(IN FEET)
1 inch = 30 ft.

EROSION LEGEND

- TOPSOIL FURNISH AND PLACE, VARIABLE DEPTH SEEDING, SEE LANDSCAPE MULCH, MACHINE APPLICATION METHOD 3A
- STONE RIP-RAP
- CONSTRUCTION ENTRANCE
- INLET FILTERS
- PERIMETER EROSION BARRIER
- TEMPORARY FENCE
- TREE TRUNK PROTECTION FENCE
- DITCH CHECK
- COIR LOG
- (S) SEDIMENT BASIN/TRAP
- (R) TEMPORARY PERFORATED RISER
- (C) CONCRETE WASHOUT
- (F) PORTABLE RESTROOM FACILITY
- SRC SEDIMENT REMOVAL CHANNEL

GRADING PLAN NOTES

1. Prior to starting any construction, provide soil erosion and sediment control devices as shown on the plans and as required per IEPA NPDES guidelines. Refer to notes and details throughout the entire plan set.
2. Prior to starting any excavation work, provide tree protection, preservation and root pruning as shown on the plans and notes throughout the entire plan set.
3. Contractor shall refer to subsurface soil exploration report.
4. Refer to General Notes for grading, compaction and proof roll requirements.
5. Handicap accessible parking spaces shall be constructed between 1.0% and 1.90% maximum slopes in any one direction. Illinois accessibility code permits a maximum constructed slope of 2.00%.
6. Crushed concrete meeting IDOT certifications for the design plan gradations for non-porous pavement and sidewalk stone base, structural fill, and trench backfill will be permitted.
7. Crushed concrete may not be used for underdrain trench or porous fill conditions.
8. The contractor shall import or export soil as necessary to construct the site to specified plan grades. Such work is considered incidental to the contract and no additional compensation shall be allowed for such work. Minor adjustments to grades can be accommodated with Project Engineer approval.
9. The Contractor shall include all associated costs with the removal, transport, disposal, testing and certification of "Uncontaminated Soil" as defined under 415 ILCS 5/3.160 including any fees, taxes, or surcharges charged by or through the operator(s) of Clean Construction or Demolition Debris Fill Operations or Uncontaminated Soil Fill Operations for the acceptance of Uncontaminated Soil.
10. All structures shall be adjusted to meet finished turf and pavement grades.
11. Refer to soil erosion and sediment control notes and details for seed and blanket requirements for temporary stabilization.
12. Refer to geometric plan or landscape plan for final restoration requirements.
13. Contractor shall provide the following as-constructed documents at the conclusion of the project:
    a. Stormwater Basins and swales impounding water
       - Top of berm, overflow, and bottom of basin elevations
       - Structure and flared end sections elevations within basin
       - Control structure restrictor size and elevation.
       - As-constructed volumes within respective basins up to overflow elevation.
    b. Lawn or open space areas
       - Spot elevations at a maximum 50 foot grid.
       - Spot elevation top and bottom of berms or swales
       - Spot elevations and ridge / high and low points.
    c. Parking lot and hard surfaces.
       - Top of curb and flowline elevations at similar locations to proposed grading.
       - Spot elevations at summit / high and low points.
    d. ADA parking stalls, sidewalk ramps, and ADA Routes
       - Provide 6 spot elevations within the parking stall 3 along the front and rear of the stall at 8 foot spacing along the stall pavement markings.
       - Provide 4 spot grades per square at landings and any tampers or ramps.
       - Provide spot elevations along route at maximum 10 foot spacing on both sides of the path to confirm cross and longitudinal slopes requirements have been met.
    e. Buildings
       - Top of foundation elevations.
       - Finished floor elevations at doorways.

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GRADING PLAN

SHEET NO.

C5

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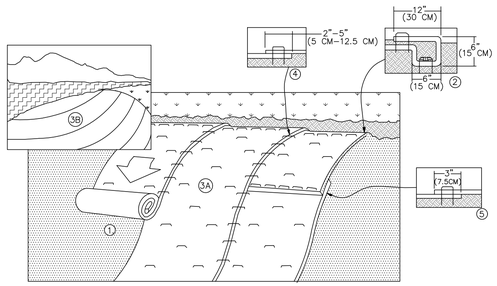
EROSION CONTROL BLANKET SLOPE INSTALLATION

NOTES:

1. PREPARE SOIL BEFORE INSTALLING ROLLED EROSION CONTROL PRODUCTS (RECP'S), INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE RECP'S IN A 6" (15 CM) WIDE TRENCH WITH APPROXIMATELY 12" (30 CM) APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" (30 CM) PORTION OF RECP'S BACK OVER SEED AND COMPACTED SOIL. SECURE RECP'S OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" (30 CM) APART ACROSS THE WIDTH OF THE RECP'S.
3. ROLL THE RECP'S (A.) DOWN OR (B.) HORIZONTALLY ACROSS THE SLOPE. RECP'S WILL UNROLL WITH APPROPRIATE SIDE AGAINST SOIL SURFACE. ALL RECP'S MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING THE DOT SYSTEM, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
4. THE EDGES OF PARALLEL RECP'S MUST BE STAPLED WITH APPROXIMATELY 2"-5" (5 CM – 12.5 CM) OVERLAP DEPENDING ON RECP'S TYPE.
5. CONSECUTIVE RECP'S SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" (7.5 CM) OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" (30 CM) APART ACROSS ENTIRE RECP'S WIDTH.

NOTE:

*IN LOOSE SOIL, CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15 CM) MAY BE NECESSARY TO PROPERLY SECURE THE RECP'S.



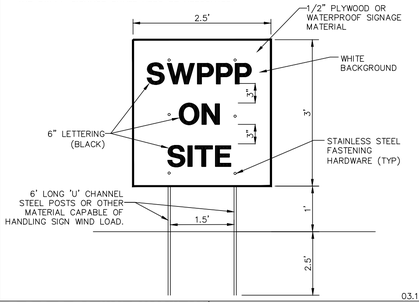
STAPLE PLACEMENTS SHOWN FOR ILLUSTRATIVE PURPOSES ONLY. SEE STAPLE PATTERN GUIDES FOR ACTUAL RECOMMENDED PLACEMENTS.

03.15.2016

SWPPP SIGNAGE

NOTES:

1. WORDING IS TO BE PLACED ON WATERPROOF MATERIAL OR ENCLOSED WITHIN A WATERPROOF ENCASEMENT.
2. THE SIGN SHALL BE FASTENED TO THE POSTS AT A MINIMUM OF SIX (6) LOCATIONS WITH STAINLEESS STEEL HARDWARE.
3. THE SIGN SHALL BE POSTED AT THE MAIN ENTRANCE TO THE CONSTRUCTION SITE. IF THE ENTRANCE LOCATION IS RELOCATED, THE SWPPP SIGNAGE SHALL ALSO BE RELOCATED.



03.15.2016

SEDIMENT CONTAINMENT FILTER BAG

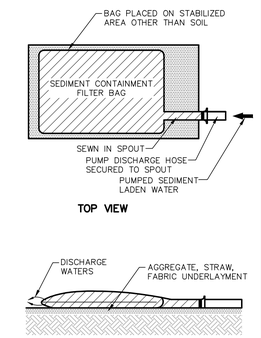
NOTES:

1. DISCHARGE WATER ONTO A STABILIZED AREA (i.e. GRASS LINE SWALE, GRASS FIELD, PAVED AREA, AGGREGATE) OR INTO A SECONDARY SEDIMENT CONTAINMENT SYSTEM.
2. DISCHARGE WATER MUST FLOW AWAY FROM THE CONSTRUCTION AREA.
3. SEDIMENT CAPTURED BY THE FILTER BAG MUST BE PROPERLY DISPOSED OF.
4. FABRIC TYPE MAY NEED TO BE CHANGED BASED ON SEDIMENT TYPES.

MAINTENANCE
1. CHANGE FILTER BAG WHEN NEEDED
2. REMOVE SEDIMENT FROM BAG
3. DISPOSE OF BAG

SPECIFICATIONS
FABRIC = LING OR ERO-TEX225EX (NEEDLEPUNCHED NONWOVEN) OR APPROVED EQUAL

SIZES
- 10' x 15' FOR 2" DISCHARGE HOSE
- 20' x 15' FOR 3" DISCHARGE HOSE
- 25' x 15' FOR 4" DISCHARGE HOSE
- 35' x 15' FOR 6" DISCHARGE HOSE

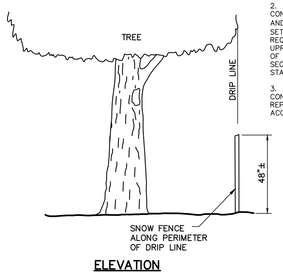


03.15.2016

TREE PROTECTION FENCING DETAIL

NOTES:

1. EXISTING TREES TO BE PROTECTED SHALL HAVE SNOW FENCE INSTALLED AT THE DRIP LINE OF THE TREE TO PREVENT THE STOCKPILING OF EXCAVATED OR CONSTRUCTION MATERIALS UNDER THE TREE, AND PROHIBIT VEHICULAR TRAFFIC OR EXCESSIVE FOOT TRAFFIC WITHIN THE DRIP LINE.
2. SNOW FENCE SHALL BE WEBBED HDPE CONSTRUCTION FENCING, COLORED ORANGE AND SUPPORTED WITH STEEL "TEE" POSTS SET AT MAX. 15' INTERVALS, OR AS REQUIRED TO MAINTAIN THE FENCE IN AN UPRIGHT POSITION THROUGHOUT THE TERM OF CONSTRUCTION, IN CONFORMANCE WITH SECTION 201.05a OF THE HIGHWAY STANDARDS.
3. TREES THAT MAY BE DAMAGED BY CONSTRUCTION OPERATIONS SHALL BE REPAIRED OR REPLACED IN A MANNER ACCEPTABLE TO THE VILLAGE.



ELEVATION

03.15.2016

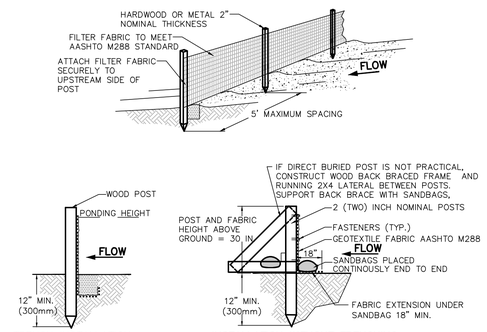
SILT FENCE INSTALLATION DETAIL

NOTES:

1. SILT FENCE SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY.
2. INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN NECESSARY. 9" (225mm) MAXIMUM RECOMMENDED STORAGE HEIGHT.
3. REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.
4. FABRIC AND INSTALLATION SHALL MEET THE REQUIREMENTS OF ASSHTO STANDARD SPECIFICATION M-288-00.
5. SLICING METHOD IS PREFERRED.

PROPERTY	TEST PROCEDURE	
Grab Elongation		
Machine Direction	ASTM D-4533	123 lbs
X-Machine Direction	ASTM D-4833	101 lbs
Permittivity	ASTM D-4491	0.05 sec^{-1}
A.S.O.	ASTM D-4751	30 u.s. Sieve
UV Stability	ASTM D-4355	70%

1. SET POSTS AND EXCAVATE OR SLIT-TRENCH A 6-INCH DEEP TRENCH UPSLOPE ALONG THE LINE OF THE POST
2. ATTACH AASHTO GEOTEXTILE FILTER FABRIC TO EACH POST WITH A MINIMUM OF 3(THREE) FASTENERS PER POST AND EXTEND TO THE BOTTOM OF THE TRENCH. ACCEPTABLE FASTENERS INCLUDE STAPLES, ZIP-TIES, OR WIRE TIES.
3. BACKFILL AND COMPACT THE EXCAVATED SPOIL MATERIALS



03.15.2016

TYPICAL SOIL PROTECTION CHART

Stabilization Type:	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Permanent Seeding			A			X	X	X	X	X		
Dormant Seeding	B											
Temporary Seeding			C			X	X	X	X	X		
Sodding			E	X	X							
Mulching	F											

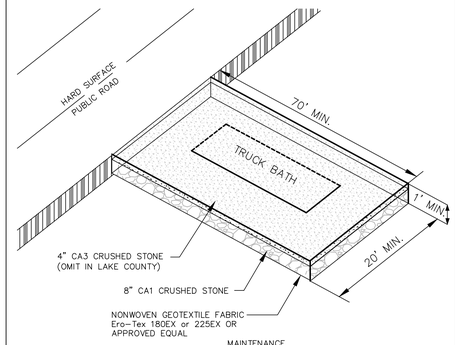
A = KENTUCKY BLUEGRASS @ 90 LBS/AC. MIXED WITH PERENNIAL RYEGRASS @ 30 LBS/AC.
B = KENTUCKY BLUEGRASS @ 135 LBS/AC. MIXED WITH PERENNIAL RYEGRASS @ 45 LBS/AC.
C = SPRING OATS @ 100 LBS/AC.
D = WHEAT OR CEREAL RYE @ 150 LBS/AC.
E = SOD
F = STRAW MULCH (HYDROMULCH OR USE STRAW BLANKET) @ 2 TONS/AC.
XXX = IRRIGATION NEEDED

IRRIGATION SHOULD BE PROVIDED AS NECESSARY TO THOROUGHLY ESTABLISH INTENDED GROWTH.

NOTE:
SPRAYED ON PRODUCTS CANNOT BE USED NOV.-FEB.

03.15.2016

TEMPORARY CONSTRUCTION ENTRANCE



MAINTENANCE
1. STREET CLEANING
2. ENTRANCE CLEANING
3. TRUCK BATH CLEANOUT
4. TRUCK BATH WATER MUST BE SEDIMENT FREE BEFORE DISCHARGE.

03.15.2016

TREE PRESERVATION NOTES

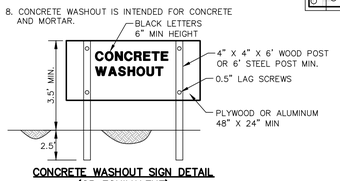
TREE PRESERVATION NOTES

1. Prior to construction and with the coordination of the Village Arborist, the contractor shall install tree protection fencing. In conjunction with the installation of the fence, root pruning will be done adjacent to the fence. Root pruning shall be done with a "Ditch Witch" or other mechanical device approved by the Village Arborist which cleanly cuts the roots to a minimum depth of two feet.
2. Existing vegetation which is to remain, shall be protected against un- neccessary cutting, breaking, or skinning of roots, skinning and brushing of bark, smothering by stockpiling of construction materials or excavated materials within the drip line, excessive foot or vehicular traffic, or parking of vehicles within the drip line.
3. Existing vegetation which is to remain, shall be watered as required to maintain its health during the course of the construction operations and is the contractor's responsibility. Soil moisture shall be monitored weekly. Any necessary watering shall be coordinated with the Village Arborist.
4. Vegetation that becomes damaged by construction operations shall be repaired/replaced, in a manner acceptable to the Village Arborist.
5. All fence shall be bright orange plastic mesh with metal posts driven into the ground at a minimum of 8 foot on centers. At the discretion of the contractor, chain link fence may be substituted in lieu of the plastic mesh fence and used in conjunction with the project perimeter fencing. The contractor shall maintain the fence and immediately repair damaged sections.

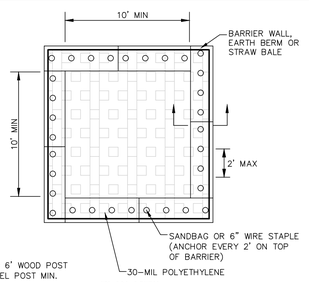
CONCRETE WASHOUT

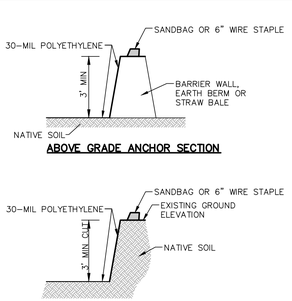
NOTES

1. ACTUAL LAYOUT DETERMINED IN FIELD.
2. THE CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 30 FT. OF THE TEMPORARY CONCRETE WASHOUT FACILITY.
3. CONCRETE WASHOUT SHOULD NOT BE ALLOWED IN STREET OR TO REACH A STORM WATER DRAINAGE SYSTEM OR WATERCOURSE.
4. CONCRETE WASHOUT AREA TO BE LOCATED AT LEAST 10' BEHIND CURB IF ADJACENT TO A PAVED ROAD.
5. IF USING STRAW BALES, STAKE IN PLACE USING (2) 2"X2"X4' WOODEN STAKES.
6. STRAW BALES SHALL BE TRENCHED IN 3".
7. CONCRETE WASHOUT DUMPSTER MAY BE USED IN LIEU OF CONSTRUCTION ONE AS DETAILED.
8. CONCRETE WASHOUT IS INTENDED FOR CONCRETE AND MORTAR.



CONCRETE WASHOUT SIGN DETAIL (OR EQUIVALENT)





MAINTENANCE:

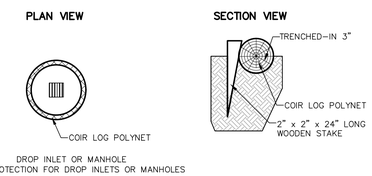
1. DRIED CONCRETE WASTE SHALL BE PICKED UP AND DISPOSED OF PROPERLY WHEN 75% OF CAPACITY IS REACHED.
2. HARDENED CONCRETE CAN BE PROPERLY RECYCLED AND REUSED ONSITE OR HAULED OFF-SITE TO AN APPROPRIATE FACILITY.

03.15.2016

COIR ROLL DETAIL INLET PROTECTION

NOTES:

1. DO NOT SCALE DRAWING.
2. REFER TO MANUFACTURER'S PRODUCT SPECIFICATIONS TO ENSURE QUALITY OF THE PRODUCTS

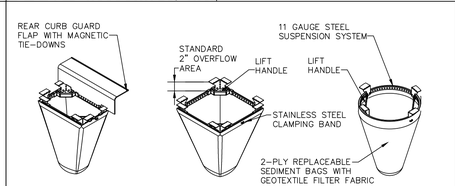


* USE 9LB DENSITY 12" DIAMETER, 20' LONG COIR LOG POLYNET FOR STANDARD CIRCULAR DRAINAGE STRUCTURES. PLACE THE COIR LOG AROUND THE STRUCTURE AND JOIN THE ENDS TOGETHER WITH COIR TWINE. USE 2"x2"x24" WOODEN STAKES SPACED 3' APART TO HOLD DOWN LOG POLYNET.

MAINTENANCE
1. CLEAN OUT SEDIMENT BEHIND LOG WHEN ½ FULL
2. RESECURE LOOSE LOGS
3. REPLACE LOGS AS NEEDED
4. REMOVE WHEN NOT NEEDED

03.15.2016

INLET FILTER BASKET DETAIL



Material Property	Test Method	Value (min. ave.)	
> Inner Filter Bag Specs (ft^3/min vol)		Non-Woven	Woven Mono
Grab Tensile	ASTM D 4632	100 lbs	200 lbs
Puncture Strength	ASTM D 4833	65 lbs	90 lbs
Trapezoidal Tear	ASTM D 4535	45 lbs	75 lbs
UV Resistance	ASTM D 4355	70% at 500 hrs	90%
App Open Size (AOS)	ASTM D 4751	70 sieve (.212 mm)	40 sieve (.425 mm)
Premittivity	ASTM D 4491	2.0/sec.	2.1/sec
Water Flow Rate	ASTM D 4491	140 gpm/sqft.	145gpm/sqft
> Polyester Outer Reinforcement Bag Specifications			
Weight	ASTM D 3776	4.55 oz/sqyd +/-15%	
Thickness	ASTM D 1777	.040 +/- .005	
> Frame Construction			
A36 Structural Steel; 11 Gauge, Zinc Plated	ASTM A 576	Tensile Strength > 58,000 psi Yield Strength > 36,000 psi	

MAINTENANCE
1. CLEAN OUT AFTER EVERY RAIN EVENT

ACCEPTABLE MANUFACTURER'S AS LISTED BELOW:

1. INLET & PIPE PROTECTION, INC. Naperville, IL 60564 847 722-0690
2. MARATHON MATERIALS, INC. Plainfield, IL 60544 800-983-9493

03.15.2016

NO.	DATE	DESCRIPTION
00	01/08/18	PLAN COMMISSION REVIEW
01	02/09/18	PLAN COMMISSION REVIEW - REVISIONS

ISSUANCE

FGM ARCHITECTS
CHICAGO OAK BROOK O'FALLON ST. LOUIS
GHA GEWALT HAMILTON ASSOCIATES, INC.
625 Forest Edge Drive ■ Vernon Hills, IL 60061
TEL: 847.478.9700 ■ FAX: 847.478.9701
GHA JOB # 5313.000

DATE:

WALTER R. GRAEF 062-048837 LICENSED PROFESSIONAL ENGINEER OF ILLINOIS

PROFESSIONAL SEAL

EXPIRATION DATE: 11/30/19

DATE	01/08/17
DRAWN	DG
CHECKED	WEG
APPROVED	WEG

PROFESSIONAL DESIGN FIRM IL # 184.000922

OLYMPIC SWIM ADDITION AND RENOVATION
ARLINGTON HEIGHTS PARK DISTRICT
660 Ridge Ave
Arlington Heights, IL 60004

DEMOLITION PLAN

SHEET NO.

C6

JOB NO. 17-2408.01

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A. REFERENCED SPECIFICATIONS

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE APPLICABLE SECTIONS OF THE FOLLOWING, EXCEPT AS MODIFIED HEREIN OR ON THE PLANS:
   * STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (LATEST EDITION), BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION (IDOT SS) FOR ALL IMPROVEMENTS EXCEPT SANITARY SEWER AND WATER MAIN CONSTRUCTION;
   * STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS, LATEST EDITION (SSWS) FOR SANITARY SEWER AND WATER MAIN CONSTRUCTION;
   * VILLAGE OF ARLINGTON HEIGHTS MUNICIPAL CODE;
   * THE METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO (MWRD) WATERSHED MANAGEMENT ORDINANCE AND TECHNICAL GUIDANCE MANUAL;
   * IN CASE OF CONFLICT BETWEEN THE APPLICABLE ORDINANCES NOTED, THE MORE STRINGENT SHALL TAKE PRECEDENCE AND SHALL CONTROL ALL CONSTRUCTION.

B. NOTIFICATIONS

1. THE MWRD LOCAL SEWER SYSTEMS SECTION FIELD OFFICE MUST BE NOTIFIED AT LEAST TWO (2) WORKING DAYS PRIOR TO THE COMMENCEMENT OF ANY WORK (CALL 708-588-4055).

2. THE VILLAGE OF ARLINGTON HEIGHTS ENGINEERING DEPARTMENT AND PUBLIC MUST BE NOTIFIED AT LEAST 24 HOURS PRIOR TO THE START OF CONSTRUCTION AND PRIOR TO EACH PHASE OF WORK. CONTRACTOR SHALL DETERMINE ITEMS REQUIRING INSPECTION PRIOR TO START OF CONSTRUCTION OR EACH WORK PHASE.

3. THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES PRIOR TO BEGINNING CONSTRUCTION FOR THE EXACT LOCATIONS OF UTILITIES AND FOR THEIR PROTECTION DURING CONSTRUCTION. IF EXISTING UTILITIES ARE ENCOUNTERED THAT CONFLICT IN LOCATION WITH NEW CONSTRUCTION, IMMEDIATELY NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED. CALL J.U.L.I.E. AT 1-800-892-0123.

C. GENERAL NOTES

1. ALL ELEVATIONS SHOWN ON PLANS REFERENCE THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88). CONVERSION FACTOR IS _____ FT.

2. MWRD, THE MUNICIPALITY AND THE OWNER OR OWNER'S REPRESENTATIVE SHALL HAVE THE AUTHORITY TO INSPECT, APPROVE, AND REJECT THE CONSTRUCTION IMPROVEMENTS.

3. THE CONTRACTOR(S) SHALL INDEMNIFY THE OWNER, ENGINEER, MUNICIPALITY, MWRD, AND THEIR AGENTS, ETC., FROM ALL LIABILITY INVOLVED WITH THE CONSTRUCTION, INSTALLATION, OR TESTING OF THIS WORK ON THE PROJECT.

4. THE PROPOSED IMPROVEMENTS MUST BE CONSTRUCTED IN ACCORDANCE WITH THE ENGINEERING PLANS AS APPROVED BY MWRD AND THE MUNICIPALITY UNLESS CHANGES ARE APPROVED BY MWRD, THE MUNICIPALITY, OR AUTHORIZED AGENT. THE CONSTRUCTION DETAILS, AS PRESENTED ON THE PLANS, MUST BE FOLLOWED. PROPER CONSTRUCTION TECHNIQUES MUST BE FOLLOWED ON THE IMPROVEMENTS INDICATED ON THE PLANS.

5. THE LOCATION OF VARIOUS UNDERGROUND UTILITIES WHICH ARE SHOWN ON THE PLANS ARE FOR INFORMATION ONLY AND REPRESENT THE BEST KNOWLEDGE OF THE ENGINEER. VERIFY LOCATIONS AND ELEVATIONS PRIOR TO BEGINNING THE CONSTRUCTION OPERATIONS.

6. ANY EXISTING PAVEMENT, SIDEWALK, DRIVEWAY, ETC., DAMAGED DURING CONSTRUCTION OPERATIONS AND NOT CALLED FOR TO BE REMOVED SHALL BE REPLACED AT THE EXPENSE OF THE CONTRACTOR.

7. MATERIAL AND COMPACTION TESTING SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THE MUNICIPALITY, MWRD, AND OWNER.

8. THE UNDERGROUND CONTRACTOR SHALL MAKE ALL NECESSARY ARRANGEMENTS TO NOTIFY ALL INSPECTION AGENCIES.

9. ALL NEW AND EXISTING UTILITY STRUCTURES ON SITE AND IN AREAS DISTURBED DURING CONSTRUCTION SHALL BE ADJUSTED TO FINISH GRADE PRIOR TO FINAL INSPECTION.

10. RECORD DRAWINGS SHALL BE KEPT BY THE CONTRACTOR AND SUBMITTED TO THE ENGINEER AS SOON AS UNDERGROUND IMPROVEMENTS ARE COMPLETED. FINAL PAYMENTS TO THE CONTRACTOR SHALL BE HELD UNTIL THEY ARE RECEIVED. ANY CHANGES IN LENGTH, LOCATION OR ALIGNMENT SHALL BE SHOWN IN RED. ALL WYES OR BENDS SHALL BE LOCATED FROM THE DOWNSTREAM MANHOLE. ALL VALVES, B-BOXES, TEES OR BENDS SHALL BE TIED TO A FIRE HYDRANT.

D. SANITARY SEWER

1. THE CONTRACTOR SHALL TAKE MEASURES TO PREVENT ANY POLLUTED WATER, SUCH AS GROUND AND SURFACE WATER, FROM ENTERING THE EXISTING SANITARY SEWERS.

2. A WATER-TIGHT PLUG SHALL BE INSTALLED IN THE DOWNSTREAM SEWER PIPE AT THE POINT OF SEWER CONNECTION PRIOR TO COMMENCING ANY SEWER CONSTRUCTION. THE PLUG SHALL REMAIN IN PLACE UNTIL REMOVAL IS AUTHORIZED BY THE MUNICIPALITY AND/OR MWRD AFTER THE SEWERS HAVE BEEN TESTED AND ACCEPTED.

3. DISCHARGING ANY UNPOLLUTED WATER INTO THE SANITARY SEWER SYSTEM FOR THE PURPOSE OF SEWER FLUSHING OF LINES FOR THE DEFLECTION TEST SHALL BE PROHIBITED WITHOUT PRIOR APPROVAL FROM THE MUNICIPALITY OR MWRD.

4. ALL SANITARY SEWER CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS (LATEST EDITION).

5. ALL FLOOR DRAINS SHALL DISCHARGE TO THE SANITARY SEWER SYSTEM.

6. ALL DOWNSPOUTS AND FOOTING DRAINS SHALL DISCHARGE TO THE STORM SEWER SYSTEM.

7. ALL SANITARY SEWER PIPE MATERIALS AND JOINTS (AND STORM SEWER PIPE MATERIALS AND JOINTS IN A COMBINED SEWER AREA) SHALL CONFORM TO THE FOLLOWING:

PIPE MATERIAL	PIPE SPECIFICATIONS	JOINT SPECIFICATIONS
VITRIFIED CLAY PIPE	ASTM C-700	ASTM C-425
REINFORCED CONCRETE SEWER PIPE	ASTM C-76	ASTM C-443
CAST IRON SOIL PIPE	ASTM A-74	ASTM C-564
DUCTILE IRON PIPE	ANSI A21.51	ANSI A21.11
POLYVINYL CHLORIDE (PVC) PIPE		
6-INCH TO 15-INCH DIAMETER SDR 26	ASTM D-3034	ASTM D-3212
18-INCH TO 27-INCH DIAMETER F/DY=46	ASTM F-679	ASTM D-3212
HIGH DENSITY POLYETHYLENE (HDPE)	ASTM D-3350 ASTM D-3035	ASTM D-3261,F-2620 (HEAT FUSION) ASTM D-3212,F-477 (GASKETED)
WATER MAIN QUALITY PVC		
4-INCH TO 36-INCH	ASTM D-2241	ASTM D-3139
4-INCH TO 12-INCH	AWWA C900	ASTM D-3139
14-INCH TO 48-INCH	AWWA C905	ASTM D-3139

THE FOLLOWING MATERIALS ARE ALLOWED ON A QUALIFIED BASIS SUBJECT TO DISTRICT REVIEW AND APPROVAL PRIOR TO PERMIT ISSUANCE. A SPECIAL CONDITION WILL BE ADDED TO THE PERMIT WHEN THE PIPE MATERIAL BELOW IS USED FOR SEWER CONSTRUCTION OR A CONNECTION IS MADE.

PIPE MATERIAL	PIPE SPECIFICATIONS	JOINT SPECIFICATIONS
POLYPROPYLENE (PP) PIPE		
12-INCH TO 24-INCH DOUBLE WALL	ASTM F-2736	D-3212, F-477
30-INCH TO 60-INCH TRIPLE WALL	ASTM F-2764	D3212, F-477

8. ALL SANITARY SEWER CONSTRUCTION (AND STORM SEWER CONSTRUCTION IN COMBINED SEWER AREAS), REQUIRES STONE BEDDING WITH STONE ¼ " TO 1" IN SIZE, WITH MINIMUM BEDDING THICKNESS EQUAL TO ¼ THE OUTSIDE DIAMETER OF THE SEWER PIPE, BUT NOT LESS THAN FOUR (4) INCHES NOR MORE THAN EIGHT (8) INCHES. MATERIAL SHALL BE CA-7, CA-11 OR CA-13 AND SHALL BE EXTENDED AT LEAST 12" ABOVE THE TOP OF THE PIPE WHEN USING PVC.

9. NON-SHEAR FLEXIBLE-TYPE COUPLINGS SHALL BE USED IN THE CONNECTION OF SEWER PIPES OF DISSIMILAR PIPE MATERIALS.

10. ALL MANHOLES SHALL BE PROVIDED WITH BOLTED, WATERTIGHT COVERS. SANITARY LIDS SHALL BE CONSTRUCTED WITH A CONCEALED PICKHOLE AND WATERTIGHT GASKET WITH THE WORD "SANITARY" CAST INTO THE LID.

11. WHEN CONNECTING TO AN EXISTING SEWER MAIN BY MEANS OTHER THAN AN EXISTING WYE, TEE, OR AN EXISTING MANHOLE, ONE OF THE FOLLOWING METHODS SHALL BE USED:
   a) A CIRCULAR SAW-CUT OF SEWER MAIN BY PROPER TOOLS ("SHEWER-TAP" MACHINE OR SIMILAR) AND PROPER INSTALLATION OF HUBWYE SADDLE OR HUB-TEE SADDLE.
   b) REMOVE AN ENTIRE SECTION OF PIPE (BREAKING ONLY THE TOP OF ONE BELL) AND REPLACE WITH A WYE OR TEE BRANCH SECTION.
   c) WITH PIPE CUTTER, NEATLY AND ACCURATELY CUT OUT DESIRED LENGTH OF PIPE FOR INSERTION OF PROPER FITTING, USING "BAND SEAL" OR SIMILAR COUPLINGS TO HOLD IT FIRMLY IN PLACE.

12. WHENEVER A SANITARY/COMBINED SEWER CROSSES UNDER A WATERMAIN, THE MINIMUM VERTICAL DISTANCE FROM THE TOP OF THE SEWER TO THE BOTTOM OF THE WATERMAIN SHALL BE 18 INCHES. FURTHERMORE, A MINIMUM HORIZONTAL DISTANCE OF 10 FEET BETWEEN SANITARY/COMBINED SEWERS AND WATERMAINS SHALL BE MAINTAINED UNLESS: THE SEWER IS LAID IN A SEPARATE TRENCH, KEEPING A MINIMUM 18" VERTICAL SEPARATION; OR THE SEWER IS LAID IN THE SAME TRENCH WITH THE WATERMAIN LOCATED AT THE OPPOSITE SIDE ON A BENCH OF UNDISTURBED EARTH, KEEPING A MINIMUM 18" VERTICAL SEPARATION. IF EITHER THE VERTICAL OR HORIZONTAL DISTANCES DESCRIBED CANNOT BE MAINTAINED, OR THE SEWER CROSSES ABOVE THE WATER MAIN, THE SEWER SHALL BE CONSTRUCTED TO WATER MAIN STANDARDS OR IT SHALL BE ENCASED WITH A WATER MAIN QUALITY CARRIER PIPE WITH THE ENDS SEALED.

13. ALL EXISTING SEPTIC SYSTEMS SHALL BE ABANDONED. ABANDONED TANKS SHALL BE FILLED WITH GRANULAR MATERIAL OR REMOVED.

14. ALL SANITARY MANHOLES, (AND STORM MANHOLES IN COMBINED SEWER AREAS), SHALL HAVE A MINIMUM INSIDE DIAMETER OF 48 INCHES, AND SHALL BE CAST IN PLACE OR PRE-CAST REINFORCED CONCRETE.

15. ALL SANITARY MANHOLES, (AND STORM MANHOLES IN COMBINED SEWER AREAS), SHALL HAVE PRECAST "RUBBER BOOTS" THAT CONFORM TO ASTM C-923 FOR ALL PIPE CONNECTIONS. PRECAST SECTIONS SHALL CONSIST OF MODIFIED GROOVE TONGUE AND RUBBER GASKET TYPE JOINTS.

16. ALL ABANDONED SANITARY SEWERS SHALL BE PLUGGED AT BOTH ENDS WITH AT LEAST 2 FEET LONG NON-SHRINK CONCRETE OR MORTAR PLUG.

17. EXCEPT FOR FOUNDATION/FOOTING DRAINS PROVIDED TO PROTECT BUILDINGS, OR PERFORATED PIPES ASSOCIATED WITH VOLUME CONTROL FACILITIES, DRAIN TILES/FIELD TILES/UNDERDRAINS/PERFORATED PIPES ARE NOT ALLOWED TO BE CONNECTED TO OR TRIBUTARY TO COMBINED SEWERS, SANITARY SEWERS, OR STORM SEWERS TRIBUTARY TO COMBINED SEWERS IN COMBINED SEWER AREAS. CONSTRUCTION OF NEW FACILITIES OF THIS TYPE IS PROHIBITED; AND ALL EXISTING DRAIN TILES AND PERFORATED PIPES ENCOUNTERED WITHIN THE PROJECT AREA SHALL BE PLUGGED OR REMOVED, AND SHALL NOT BE CONNECTED TO COMBINED SEWERS, SANITARY SEWERS, OR STORM SEWERS TRIBUTARY TO COMBINED SEWERS.

18. A BACKFLOW PREVENTER IS REQUIRED FOR ALL DETENTION BASINS TRIBUTARY TO COMBINED SEWERS. REQUIRED BACKFLOW PREVENTERS SHALL BE INSPECTED AND EXERCISED ANNUALLY BY THE PROPERTY OWNER TO ENSURE PROPER OPERATION, AND ANY NECESSARY MAINTENANCES SHALL BE PERFORMED TO ENSURE FUNCTIONALITY. IN THE EVENT OF A SEWER SURCHARGE INTO AN OPEN DETENTION BASIN TRIBUTARY TO COMBINED SEWERS, THE PERMITTEE SHALL ENSURE THAT CLEAN UP AND WASH OUT OF SEWAGE TAKES PLACE WITHIN 48 HOURS OF THE STORM EVENT.

E. EROSION AND SEDIMENT CONTROL

1. THE CONTRACTOR SHALL INSTALL THE EROSION AND SEDIMENT CONTROL DEVICES AS SHOWN ON THE APPROVED EROSION AND SEDIMENT CONTROL PLAN.

2. EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE FUNCTIONAL PRIOR TO HYDROLOGIC DISTURBANCE OF THE SITE.

3. ALL DESIGN CRITERIA, SPECIFICATIONS, AND INSTALLATION OF EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE IN ACCORDANCE WITH THE ILLINOIS URBAN MANUAL.

4. A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.

5. INSPECTIONS AND DOCUMENTATION SHALL BE PERFORMED, AT A MINIMUM:
   a) UPON COMPLETION OF INITIAL EROSION AND SEDIMENT CONTROL MEASURES, PRIOR TO ANY SOIL DISTURBANCE.
   b) ONCE EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM EVENT WITH GREATER THAN 0.5 INCH OF RAINFALL OR LIQUID EQUIVALENT PRECIPITATION.

6. SOIL DISTURBANCE SHALL BE CONDUCTED IN SUCH A MANNER AS TO MINIMIZE EROSION. IF STRIPPING, CLEARING, GRADING, OR LANDSCAPING ARE TO BE DONE IN PHASES, THE CO-PERMITTEE SHALL PLAN FOR APPROPRIATE SOIL EROSION AND SEDIMENT CONTROL MEASURES.

7. A STABILIZED MAT OF CRUSHED STONE MEETING THE STANDARDS OF THE ILLINOIS URBAN MANUAL SHALL BE INSTALLED AT ANY POINT WHERE TRAFFIC WILL BE ENTERING OR LEAVING A CONSTRUCTION SITE. SEDIMENT OR SOIL REACHING AN IMPROVED PUBLIC RIGHT-OF-WAY, STREET, ALLEY OR PARKING AREA SHALL BE REMOVED BY SCRAPING OR STREET CLEANING AS ACCUMULATIONS WARRANT AND TRANSPORTED TO A CONTROLLED SEDIMENT DISPOSAL AREA.

8. CONCRETE WASHOUT FACILITIES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE ILLINOIS URBAN MANUAL AND SHALL BE INSTALLED PRIOR TO ANY ON SITE CONSTRUCTION ACTIVITIES INVOLVING CONCRETE.

9. MORTAR WASHOUT FACILITIES SHALL BE CONSTRUCTED IN ADDITION TO CONCRETE WASHOUT FACILITIES FOR ANY BRICK AND MORTAR BUILDING ENVELOPE CONSTRUCTION ACTIVITIES.

10. TEMPORARY DIVERSIONS SHALL BE CONSTRUCTED AS NECESSARY TO DIRECT ALL RUNOFF FROM HYDROLOGICALLY DISTURBED AREAS TO AN APPROPRIATE SEDIMENT TRAP OR BASIN. VOLUME CONTROL FACILITIES SHALL NOT BE USED AS TEMPORARY SEDIMENT BASINS.

12. DISTURBED AREAS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED SHALL BE STABILIZED WITH TEMPORARY OR PERMANENT MEASURES WITHIN SEVEN (7) DAYS.

13. ALL FLOOD PROTECTION AREAS AND VOLUME CONTROL FACILITIES SHALL, AT A MINIMUM, BE PROTECTED WITH A DOUBLE-ROW OF SILT FENCE (OR EQUIVALENT).

14. VOLUME CONTROL FACILITIES SHALL NOT BE CONSTRUCTED UNTIL ALL OF THE CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED.

15. SOIL STOCKPILES SHALL, AT A MINIMUM, BE PROTECTED WITH PERIMETER SEDIMENT CONTROLS. SOIL STOCKPILES SHALL NOT BE PLACED IN FLOOD PROTECTION AREAS OR THEIR BUFFERS.

16. EARTHEN EMBANKMENT SIDE SLOPES SHALL BE STABILIZED WITH APPROPRIATE EROSION CONTROL BLANKET.

17. STORM SEWERS THAT ARE OR WILL BE FUNCTIONING DURING CONSTRUCTION SHALL BE PROTECTED BY APPROPRIATE SEDIMENT CONTROL MEASURES.

18. THE CONTRACTOR SHALL EITHER REMOVE OR REPLACE ANY EXISTING DRAIN TILES AND INCORPORATE THEM INTO THE DRAINAGE PLAN FOR THE DEVELOPMENT. DRAIN TILES CANNOT BE TRIBUTARY TO A SANITARY OR COMBINED SEWER. DRAIN TILES ALLOWED IN COMBINED SEWER AREA FOR GREEN INFRASTRUCTURE PRACTICES.

19. IF DEWATERING SERVICES ARE USED, ADJOINING PROPERTIES AND DISCHARGE LOCATIONS SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION. DEWATERING SYSTEMS SHOULD BE INSPECTED DAILY DURING OPERATIONAL PERIODS. THE SITE INSPECTOR MUST BE PRESENT AT THE COMMENCEMENT OF DEWATERING ACTIVITIES.

20. THE CONTRCTOR SHALL BE RESPONSIBLE FOR TRENCH DEWATERING AND EXCAVATION FOR THE INSTALLATION OF SANITARY SEWERS, STORM SEWERS, WATERMAINS AS WELL AS THEIR SERVICES AND OTHER APPURTENANCES. ANY TRENCH DEWATERING, WHICH CONTAINS SEDIMENT SHALL PASS THROUGH A SEDIMENT SETTLING POND OR EQUALLY EFFECTIVE SEDIMENT CONTROL DEVICE. ALTERNATIVES MAY INCLUDE DEWATERING INTO A SUMP PIT, FILTER BAG OR EXISTING VEGETATED UPSLOPE AREA. SEDIMENT LADEN WATERS SHALL NOT BE DISCHARGE TO WATERWAYS, FLOOD PROTECTION AREAS OR THE COMBINED SEWER SYSTEM.

21. ALL PERMANENT EROSION CONTROL PRACTICES SHALL BE INITIATED WITHIN SEVEN (7) DAYS FOLLOWING THE COMPLETION OF SOIL DISTURBING ACTIVITIES.

22. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED AND REPAIRED AS NEEDED ON A YEAR-ROUND BASIS DURING CONSTRUCTION AND ANY PERIODS OF CONSTRUCTION SHUTDOWN UNTIL PERMANENT STABILIZATION IS ACHIEVED.

23. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN THIRTY (30) DAYS AFTER PERMANENT SITE STABILIZATION.

24. THE EROSION AND SEDIMENT CONTROL MEASURES SHOWN ON THE PLANS ARE THE MINIMUM REQUIREMENTS. ADDITIONAL MEASURES MAY BE REQUIRED, AS DIRECTED BY THE ENGINEER, SITE INSPECTOR, OR MWRD.

TECHNICAL GUIDANCE MANUAL

MWRD GENERAL NOTES

07/12/2016

STD. DWG. NO.18

PAGE NO. 19

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ISSUANCE

NO.	DATE	DESCRIPTION
00	01/08/18	PLAN COMMISSION REVIEW
01	02/09/18	PLAN COMMISSION REVIEW - REVISIONS

FGM ARCHITECTS
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GHA JOB # 5313.000

DATE:

WALTER R. GRAEF 062-048837 LICENSED PROFESSIONAL ENGINEER OF ILLINOIS

PROFESSIONAL SEAL

EXPIRATION DATE: 11/30/19

DATE	01/08/17
DRAWN	DG
CHECKED	WEG
APPROVED	WEG

PROFESSIONAL DESIGN FIRM IL # 184-000922

OLYMPIC SWIM ADDITION AND RENOVATION
ARLINGTON HEIGHTS PARK DISTRICT
660 Ridge Ave
Arlington Heights, IL 60004

MWRD GENERAL NOTES

SHEET NO.
C7

JOB NO. 17-2408.01

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GRAPHIC SCALE

40 0 20 40

(IN FEET)
1 inch = 40 ft.

PROJECT AREA SUMMARY

EXISTING CONDITIONS

PROJECT AREA	4.48 AC
IMPERVIOUS	1.58 AC
PERVIOUS	2.90 AC
VILLAGE COMPOSITE 'C'	0.66
MWRD COMPOSITE 'C'	0.61

PROPOSED CONDITIONS

PROJECT AREA	4.48 AC
IMPERVIOUS	2.35 AC
SYNTHETIC TURF	0.19 AC
PERVIOUS	1.94 AC
VILLAGE COMPOSITE 'C'	0.75
MWRD COMPOSITE 'C'	0.70

MAINTENANCE AREA

TOTAL	0.17 AC

DETENTION SUMMARY

VILLAGE REQUIREMENTS

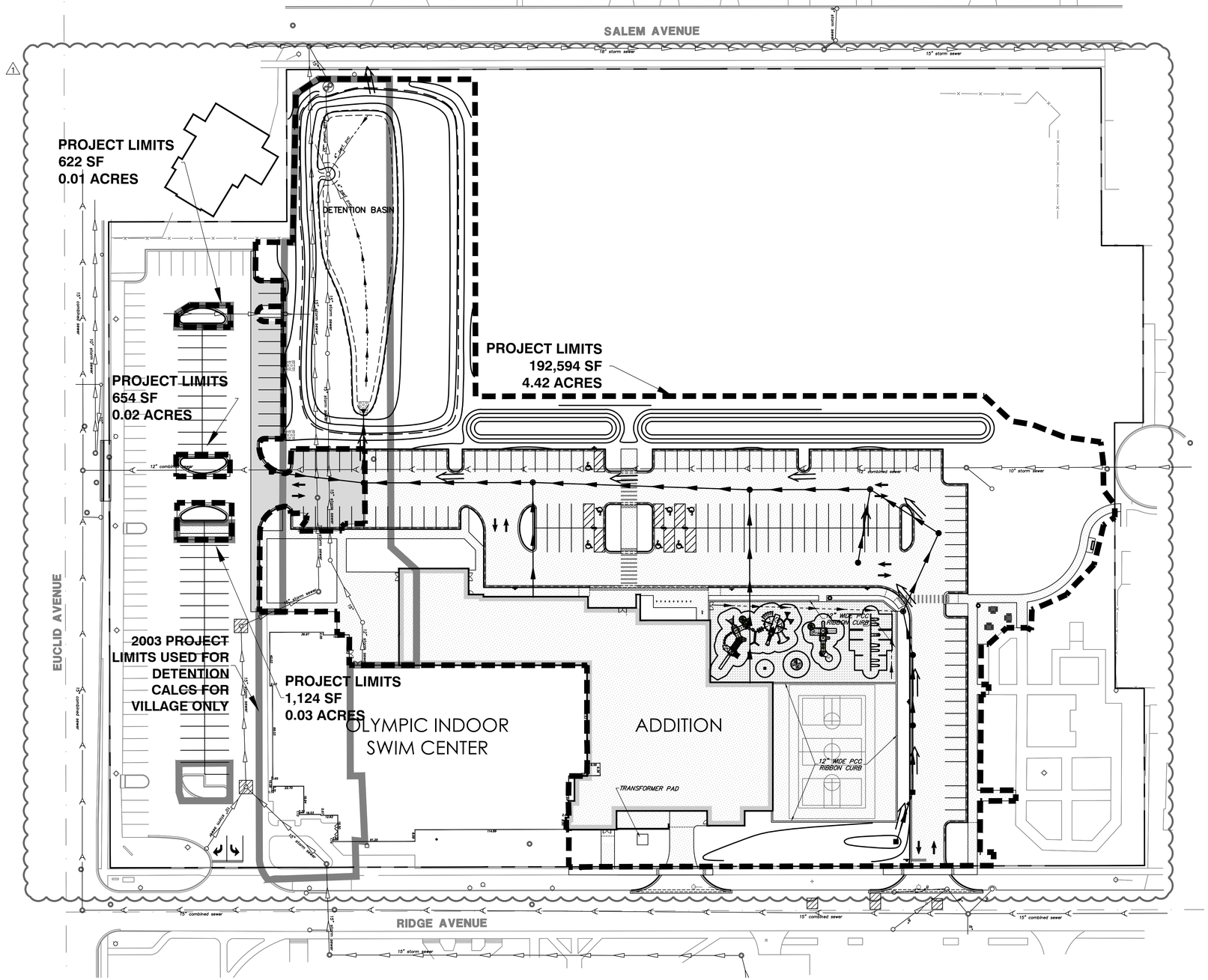
COMBINED 2003 & 2018 PROJECT AREAS	4.90 AC
VILLAGE ALLOWABLE RELEASE RATE	0.18 CFS/AC
0.18 CFS/AC x 4.90 AC	0.88 CFS
TOTAL DETENTION REQUIRED	1.33 AC-FT
PROPOSED DETENTION PROVIDED IN DETENTION BASIN @ HWL = 714.70	1.34 AC-FT

MWRD REQUIREMENTS

MWRD ALLOWABLE RELEASE RATE	0.30 CFS/AC
0.18 CFS/AC x 4.48 AC PROJECT AREA	1.34 CFS
TOTAL DETENTION VOLUME REQUIRED	1.02 AC-FT
PROPOSED DETENTION PROVIDED IN DETENTION BASIN @ HWL = 714.51	1.02 AC-FT
VOLUME CONTROL REQUIRED	0.20 AC-FT
VOLUME CONTROL PROVIDED IN DETENTION BASIN	0.21 AC-FT

LEGEND

- 2003 PROJECT LIMITS
- 2018 PROJECT LIMITS
- IMPERVIOUS AREA
- SYNTHETIC TURF
- PERVIOUS AREA
- MAINTENANCE AREA
- OVERLAND FLOW ROUTE



MAINTENANCE PLAN

Arlington Heights Park District shall assume responsibility for the following perpetual maintenance activities:

1. General

Regular inspections and routine maintenance of general areas shall be performed on a quarterly or as-needed basis. Specific items of concern include:

- Litter and debris shall be controlled
- Landscaped areas shall be maintained with regular mowing and restored with appropriate seeding/vegetation as necessary
- Accumulated sediment shall be disposed of properly, along with any wastes generated during maintenance operations
- Riprap areas shall be repaired with the addition of new riprap, as necessary, of similar size and shape
- Roads shall be swept, vacuumed and/or washed on a regular basis

2. Stormwater Management Facilities

All components of the stormwater management facilities shall be checked quarterly between March and November and maintained as necessary to ensure proper performance. It is critical that all inflows and outflows to the detention facility are clean and performing as designed. In addition, the design volume of the detention facility shall also be maintained. Inspections for the following specific items would be conducted quarterly between March and November.

Vegetated Areas

- Regular mowing to control vegetation, no cutting of native vegetation
- Need for planting, reseeding or sodding. Supplement alternative native vegetation if a significant portion has not established (50% of the surface area). Reseed with alternative grass species if original grass cover has not successfully established
- Evidence of grazing, motorbikes or other vehicles, repair
- Check for invasive vegetation, remove where possible
- All vegetation must be maintained per the approved planting plan

Outlet Control Structure

- Inspect restrictor and remove debris if clogged or discharge reduced
- Remove accumulated sediment at outlet
- Any ice damage to outlet of pipe, repair if necessary

Detention Volume

- Inspect all stormwater detention facilities to ensure that the constructed volume for detention is maintained. No sediment, topsoil, or other dumping into the facility shall be allowed. Specific locations in the stormwater management system, designed to accumulate sediment, shall be dredged as necessary to prevent sediment from reaching the invert of any gravity outlet pipe.

3. Volume Control Facility

Routine inspections and maintenance of volume control facilities shall be performed by the Owner on a yearly or as-needed basis. Specific items of concern include:

- Facility shall be inspected yearly to verify the system is functioning properly.

4. Stormwater Collection System

The Owner shall perform two inspections per year of all components of the stormwater collection system. The inspections shall occur in the spring and fall of each year and include the following specific areas of concern.

Storm Inlets/Manholes

- Remove accumulated leaves and other debris from grates
- Reset covers/lids on as-needed basis
- Remove accumulated sediment from manhole bottom when 50% of sump is filled

Storm Sewers

- Visually inspect pipes by removing manhole lids, make repairs as necessary
- Storm sewers shall be checked for siltation deposits at inlets, outlets, and within the conduit, clean out as necessary
- Restore riprap at outfalls

5. Vegetated Areas

- Need for planting, reseeding, or sodding. Supplement alternative native vegetation if a significant portion has not established (50% of the surface area after second growing season). Reseed with alternative native grass species if original grass cover has not successfully established.
- Evidence of grazing, motorbikes, or other vehicles, repair
- Check for invasive vegetation, remove when possible
- Regular mowing to control vegetation; it is recommended that native vegetation remain uncut
- Dead or damaged non-native grassy areas - repair with seeding with fertilization or seeding with mulch

6. Qualified Sewer Construction

- Perform manhole inspections once every five years, make repairs as necessary
- Perform sewer inspections once every five years, make repairs as necessary
- Perform regular cleaning so that each sewer segment is cleaned once every 5 years

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DRAINAGE EXHIBIT

SHEET NO.

C8

JOB NO. 17-2408.01

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GENERAL NOTES

1. ALL CONSTRUCTION SHALL BE PERFORMED ACCORDING TO THE ILLINOIS DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" LATEST EDITION, THE "SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS" LATEST EDITION, THE "STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS" LATEST EDITION, THE DETAILS IN THESE PLANS, THE CONTRACT DOCUMENTS, ALL APPLICABLE REQUIREMENTS OF THE ILLINOIS DEPARTMENT OF TRANSPORTATION, THE IEPA AND ORDINANCES OF AUTHORITIES HAVING JURISDICTION AND ALL ADDENDA THERETO.
2. EASEMENTS FOR THE EXISTING UTILITIES, BOTH PUBLIC AND PRIVATE AND UTILITIES WITHIN PUBLIC RIGHTS-OF-WAY ARE SHOWN ON THE PLANS ACCORDING TO AVAILABLE RECORDS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION IN THE FIELD OF THESE UTILITY LINES AND THEIR PROTECTION FROM DAMAGE DUE TO CONSTRUCTION OPERATIONS. IF EXISTING UTILITY LINES OF ANY NATURE ARE ENCOUNTERED WHICH CONFLICT WITH NEW CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY SO THAT THE CONFLICT MAY BE RESOLVED.
3. WHENEVER, DURING CONSTRUCTION OPERATIONS, ANY LOOSE MATERIAL IS DEPOSITED IN THE FLOW LINE OF GUTTERS, DRAINAGE STRUCTURES, DITCHES, ETC. SUCH THAT THE NATURAL FLOW LINE OF WATER IS OBSTRUCTED, THE LOOSE MATERIAL WILL BE REMOVED AT THE CLOSE OF EACH WORKING DAY. AT THE CONCLUSION OF CONSTRUCTION OPERATIONS, ALL DRAINAGE STRUCTURES AND FLOW LINES SHALL BE FREE FROM DIRT AND DEBRIS. THIS WORK SHALL BE CONSIDERED INCLUDED IN THE CONTRACT. THE CONTRACTOR'S FAILURE TO PROVIDE THE ABOVE WILL PRECLUDE ANY POSSIBLE ADDED COMPENSATION REQUESTED DUE TO DELAYS OR UNSUITABLE MATERIALS CREATED AS A RESULT THEREOF.
4. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS AFFECTING THEIR WORK WITH THE ACTUAL CONDITIONS AT THE JOB SITE PRIOR TO ORDERING MATERIALS. IN ADDITION, THE CONTRACTOR MUST VERIFY THE LINE AND GRADES. IF THERE ARE ANY DISCREPANCIES FROM WHAT IS SHOWN ON THE CONSTRUCTION PLANS, STANDARD SPECIFICATIONS AND/OR SPECIAL DETAILS, THE CONTRACTOR SHALL SECURE WRITTEN INSTRUCTION FROM THE ENGINEER PRIOR TO PROCEEDING WITH ANY PART OF THE WORK AFFECTED BY OMISSION OR DISCREPANCIES. FAILING TO SECURE SUCH INSTRUCTION, THE CONTRACTOR WILL BE CONSIDERED TO HAVE PROCEEDED AT HIS/HER OWN RISK AND EXPENSE AND NO ADDITIONAL COMPENSATION WILL BE PROVIDED FOR ANY COSTS INCURRED..
5. ALL PAVEMENT DIMENSIONS ARE SHOWN TO EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.
6. WHERE SECTION OR SUBSECTION MONUMENTS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE THE MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL CAREFULLY PRESERVE ALL PROPERTY MARKS AND MONUMENTS UNTIL THE OWNER, AUTHORIZED SURVEYOR OR AGENT HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION.
7. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AT LEAST 72 HOURS PRIOR TO BEGINNING WORK.
8. IF DURING CONSTRUCTION THE CONTRACTOR ENCOUNTERS OR OTHERWISE BECOMES AWARE OF ANY SEWERS OR UNDERDRAINS OTHER THAN THOSE SHOWN ON THE PLANS, HE/SHE SHALL INFORM THE ENGINEER, WHO SHALL DIRECT THE WORK NECESSARY TO MAINTAIN OR REPLACE THE FACILITIES IN SERVICE AND TO PROTECT THEM FROM DAMAGE DURING CONSTRUCTION IF MAINTAINED. EXISTING FACILITIES TO BE MAINTAINED THAT ARE DAMAGED BECAUSE OF NON-COMPLIANCE WITH THIS PROVISION SHALL BE REPLACED AT THE CONTRACTOR'S OWN EXPENSE.
9. THE CONTRACTOR SHALL PROVIDE TEMPORARY TOILET FACILITIES AND HAND SANITIZING STATIONS FOR THE USE OF ALL THE CONTRACTORS PERSONNEL EMPLOYED ON THE WORK SITE. THE FACILITIES SHALL BE MAINTAINED IN PROPER SANITARY CONDITION THROUGHOUT THE PROJECT. THE LOCATION OF THE TEMPORARY FACILITIES SHALL BE APPROVED BY THE ENGINEER.
10. THE CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH THE NPDES PERMIT AND SWPPP MANUAL. IF NO NPDES PERMIT OR SWPPP MANUAL IS NEEDED FOR THE PROJECT THE CONTRACTOR SHALL PERFORM SOIL EROSION SEDIMENT CONTROL BEST PRACTICES OR AS DIRECTED BY THE OWNER TO PREVENT ILLICIT DISCHARGES FROM THE SITE.

UTILITY NOTES

1. UNDERGROUND WORK SHALL INCLUDE TRENCHING, DISPOSAL OF EXCESS MATERIAL, DEWATERING, INSTALLATION OF PIPE, CASTINGS, STRUCTURES, BACKFILLING OF TRENCHES AND COMPACTION, AND TESTING AS SHOWN ON THE CONSTRUCTION PLANS. FITTINGS AND ACCESSORIES NECESSARY TO COMPLETE THE WORK MAY NOT BE SPECIFIED BUT SHALL BE CONSIDERED AS INCLUDED TO THE COST OF THE CONTRACT. ALL SEWER SHALL BE INSTALLED USING A LASER AND BEGIN AT THE DOWNSTREAM END.
2. MACHINE CORE ALL CONNECTIONS TO EXISTING STRUCTURES USING A CORE DRILL. HAMMERING OR SAWING OF STRUCTURES WILL NOT BE ALLOWED.
3. SANITARY SERVICE CONNECTIONS TO NEW SEWERS SHALL BE MADE WITH WYE BRANCHES. WYE BRANCHES SHALL BE FACTORY MANUFACTURED PERMANENTLY AFFIXED TO THE MAIN SEWER. TEE BRANCHES ARE NOT ALLOWED.
4. ALL CONNECTIONS TO EXISTING SANITARY MANHOLES SHALL BE INSTALLED WITH A NEOPRENE BOOT SECURED WITH DOUBLE STAINLESS STEEL STRAPS MEETING THE REQUIREMENTS OF ASTM C-923.
5. ALL CONNECTIONS TO EXISTING OR DISSIMILAR STORM/SANITARY LINES SHALL BE DONE WITH STAINLESS STEEL NON-SHEAR COUPLINGS.
6. STONE BEDDING AND BACKFILL SHALL BE OMITTED FOR A DISTANCE OF 15 FEET UP AND DOWNSTREAM OF SEWERS DRAINING TO OR FROM PONDS OR STREAMS. THE REPLACED BEDDING SHALL BE SILTY CLAY SOIL MECHANICALLY COMPACTED TO 90% MODIFIED PROCTOR DENSITY. THE USE OF PERMEABLE SOILS WILL NOT BE PERMITTED.
7. ALL WATER MAIN SHALL HAVE MECHANICAL RESTRAINED TYPE JOINTS AT ALL CONNECTIONS AND FITTINGS. IN ADDITION, ALL HARDWARE SHALL BE STAINLESS STEEL.
8. THRUST BLOCKING SHALL BE PROVIDED ON WATER MAIN AT ALL BENDS, TEES, ELBOWS, ETC. INDIVIDUAL INSPECTION FOR ALL THRUST BLOCKING IS REQUIRED. THRUST BLOCKING SHALL BE POURED IN PLACE CONCRETE. PRECAST BLOCKS MAY BE USED AS APPROVED BY THE ENGINEER IN THE FIELD.
9. ALL FLOOR DRAINS SHALL DISCHARGE TO THE SANITARY SEWER. ALL DOWNSPOUTS, SIDE YARD DRAINS, AND OUTSIDE DRAINS SHALL DISCHARGE TO THE STORM SEWER SYSTEM. FOOTING DRAINS SHALL FIRST DRAIN TO A SUMP PIT.
10. BUILDING STORM SEWER SERVICE PIPE SHALL NOT BE LESS THAN THE DIAMETER OF THE PLUMBING PIPE FROM THE BUILDING, BUT NOT LESS THAN 6 INCHES. THE PIPE SHALL HAVE A MINIMUM SLOPE OF 1/8-INCH PER FOOT, BUT NOT MORE THAN 1/2-INCH PER FOOT. CHANGES OF DIRECTION OF SERVICE PIPE SHALL BE MADE WITH COMBINATIONS OF 22-1/2 DEGREE BENDS WHEREVER PRACTICABLE, WITH NOT LESS THAN 2 FEET OF STRAIGHT PIPE BETWEEN SUCH BENDS. RIGHT ANGLE (90 DEGREE) BENDS WILL NOT BE ALLOWED. WHEN A SERVICE LINE-EXCEEDS 100 FEET IN LENGTH, A CLEANOUT SHALL BE PROVIDED AT A LOCATION DESIGNATED BY THE ENGINEER. THE CLEANOUT SHALL BE PROPERLY SEALED, WITH THE TOP OF THE PLUGGED RISER FLUSH WITH FINISHED GRADE.

PROJECT SPECIFIC NOTES

1. ALL WORK PERFORMED UNDER THIS CONTRACT SHALL BE GUARANTEED BY THE CONTRACTOR AND HIS SURETY FOR A PERIOD OF 12 MONTHS FROM THE DATE OF INITIAL ACCEPTANCE OF THE WORK BY THE OWNER AGAINST ALL DEFECTS IN MATERIALS AND WORKMANSHIP OF WHATEVER NATURE.
2. ALL CONSTRUCTION WILL BE INSPECTED BY THE OWNER'S REPRESENTATIVE. ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE MUNICIPALITY AS WELL AS THE STANDARD SPECIFICATIONS.
3. ALL PUBLIC WATER MAINS AND SANITARY SEWER MAINS MUST BE ACCEPTED BY THE VILLAGE OF ARLINGTON HEIGHTS.
4. THE SEWER AND WATER CONTRACTOR SHALL BE REQUIRED TO BE LICENSED AND BONDED WITH THE VILLAGE OF ARLINGTON HEIGHTS BEFORE WORK IS STARTED.
5. CONTRACTOR SHALL NOTIFY THE VILLAGE OF ARLINGTON HEIGHTS (847-368-5250) AND THE PROJECT ENGINEER (847-478-9700) AT LEAST 72 HOURS PRIOR TO BEGINNING ANY WORK ON THIS PROJECT.
6. THE CONTRACTOR SHALL INDEMNIFY THE OWNER, ENGINEER, THE MUNICIPALITY AND THEIR AGENTS, FROM ALL LIABILITY INVOLVED IN CONSTRUCTION, INSTALLATION AND TESTING OF THE WORK ON THIS PROJECT.
7. THE CONTRACTOR MUST CARRY INSURANCE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS. ALL OFFICIALS, EMPLOYEES AND AGENTS OF GEWALT HAMILTON ASSOCIATES MUST BE LISTED AS ADDITIONAL INSURED.
8. ALL ELEVATIONS ARE ON NAVD 88 VERTICAL DATUM.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ALL TRAFFIC CONTROL TO ADEQUATELY INFORM AND PROTECT THE PUBLIC OF ALL CONSTRUCTION OPERATIONS.
10. STOCKPILING MATERIAL WITHIN THE 100 YEAR FLOOD PLAIN AND OR THE FLOODWAY IS STRICTLY PROHIBITED
11. ALL PAVEMENT AND BUILDING SUBGRADE SHALL BE COMPACTED TO 95% MODIFIED PROCTOR DENSITY (ASTM D-1557). ALL SUBGRADE IN LAWN AREAS SHALL BE COMPACTED TO 90% MODIFIED PROCTOR DENSITY (ASTM D-1557). TOPSOIL AND SUBGRADE 6" BELOW TOPSOIL SHALL BE COMPACTED TO 80% STANDARD PROCTOR DENSITY (ASTM D-698).
12. PRIOR TO PLACEMENT OF FABRIC AND STONE, THE SUBGRADE SHALL BE PROOF-ROLLED IN THE PRESENCE OF THE ENGINEER. PROOF-ROLLING SHALL BE DONE USING A THREE AXLE DUMP TRUCK TOGETHER WITH LOAD WEIGHING AT LEAST TWENTY-FIVE (25) TONS. THE LOAD SHALL BE UNIFORMLY PLACED IN THE DUMP BODY. ALL DEFICIENCIES SHALL BE REPAIRED AND RE-PROOF-ROLLED UNTIL FOUND ACCEPTABLE TO THE ENGINEER.
13. ALL STONE USED ON THE PROJECT SHALL BE CRUSHED UNLESS SPECIFICALLY NOTED OTHERWISE.
14. ALL CONNECTIONS TO EXISTING STORM MANHOLES SHALL BE INSTALLED WITH A NEOPRENE BOOT SECURED WITH DOUBLE STAINLESS STEEL STRAPS MEETING THE REQUIREMENTS OF ASTM C-923.
15. ALL CONCRETE SHALL HAVE A LIGHT BROOM FINISH APPLIED WITHIN 1 HOUR OF FINAL STRIKING.
16. ALL CONCRETE SHALL CONSIST OF PORTLAND CEMENT CONCRETE, 4" SLUMP, 6.1 BAG MIX AND AIR ENTRAINMENT OF NOT LESS THAN FIVE (5%) OR MORE THAN EIGHT (8%). CONCRETE SHALL BE A MINIMUM COMPRESSIVE STRENGTH (4000PSI) AT TWENTY EIGHT (28) DAYS. FLYASH MAY BE USED IN THE CONCRETE MIX.
17. ALL CONCRETE SHALL HAVE A WHITE, IDOT TYPE 3 CURING COMPOUND APPLIED TO THE SURFACE WITHIN 1 HOUR OF FINAL STRIKING AT THE MANUFACTURER RECOMMENDED APPLICATION RATE.
18. 3/4" THICK PRE-MOLDED FIBER EXPANSION JOINTS WITH 2, 3/4" x 18" PLAIN ROUND, STEEL DOWEL BARS SHALL BE INSTALLED IN ALL CURBS AT (45') FORTY FIVE FOOT INTERVALS AND AT ALL P.C.'S, P.T.'S AND CURB RETURNS. ALTERNATE ENDS OF THE DOWEL BARS SHALL BE GREASED AND FITTED WITH METAL EXPANSION TUBES. ALL EXPANSION JOINTS MUST BE FREE OF CONCRETE FOR FULL DEPTH. CONTRACTION JOINTS SHALL BE TOOLED AT 15' INTERVALS.
19. UNLESS OTHERWISE NOTED ON THE PLANS WHENEVER NEW FLATWORK CONCRETE ABUTS EXISTING/OR NEW CONCRETE SET A 1/2" THICK PRE-MOLDED FIBER EXPANSION JOINT AND DOWEL WITH SMOOTH 12" #4 BARS @ 24" O.C. THIS INCLUDES CONCRETE POURED ADJACENT TO EXISTING SIDEWALKS, CURBS AND BUILDING. THE DOWEL BARS SHOULD BE 4" INTO EXISTING CONCRETE WITH 8" EXTENDING INTO NEW CONCRETE.
20. ALL DOWEL BARS AND TIE BARS SHALL BE EPOXY COATED UNLESS NOTED OTHERWISE.

STORM SEWERS	MODEL/SPECIFICATION	STANDARDS/REQUIREMENTS
UNDERDRAINS	PVC SDR 26	PIPE:ASTM D-3034 JOINT:ASTM D-3212
	RCP CL IV	PIPE:ASTM C-76 JOINT:ASTM C-443
	PVC SDR 26	PIPE:ASTM D-3034 JOINT:ASTM D-3212
	PERFORATIONS	HOLE PATTERN:ASTM D-2729
FRAME & GRATE/LID	PAVED AREAS	OPEN LID:NEENAH R-1713 TYPE "D" CLOSED LID:NEENAH R-1713 EMBOSS "STORM"
	CURB STRUCTURES	OPEN LID:NEENAH R-1713 TYPE "D" CLOSED LID:N/A
	GRASS AREAS	OPEN LID:NEENAH R-1713 TYPE "D" CLOSED LID:NEENAH R-1713 EMBOSS "STORM"
ADJUSTMENT RINGS	CONCRETE	4" MINIMUM, 12" MAXIMUM
	PLASTIC	LESS THAN 4"
PIPE BEDDING MATERIAL	CA-11	
TRENCH BACKFILL	CA-6	
TRENCH BACKFILL UNDERDRAIN	CA7/CA-11	CRUSHED CONCRETE NOT ALLOWED, ALL STONE MUST BE WASHED
MANHOLE CONNECTIONS		ASTM: C-923

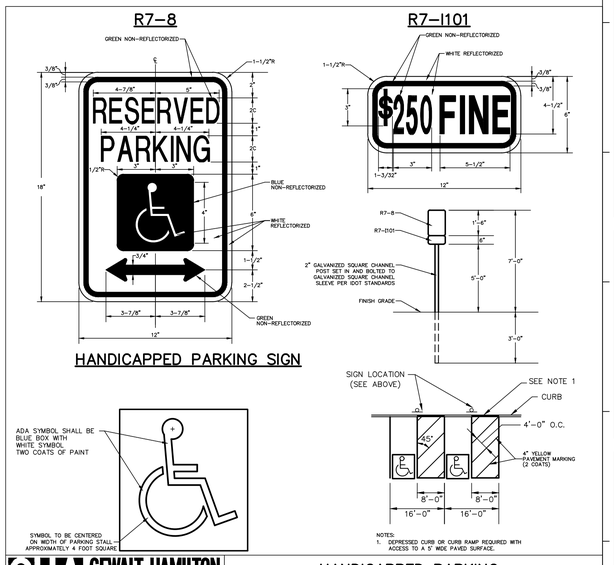
WATER MAIN	MODEL/SPECIFICATION	STANDARDS/REQUIREMENTS
	DIP CL 52	PIPE ANSI/AWWA A21.51/C-151 JOINT:ANSI/AWWA A21.11/C-111 LINING:ANSI/AWWA C104/A21.4
FRAME & GRATE/LID		CLOSED LID:NEENAH R-1713 EMBOSSED "WATER"
ADJUSTMENT RINGS	CONCRETE	2 RINGS, 12" MAXIMUM
PIPE BEDDING MATERIAL	CA-6	
TRENCH BACKFILL	CA-6	
POLYWRAP	8 MIL BLACK POLY	WRAP:ANSI/AWWA C105/A21.5 INSTALLATION:ASTM A-674 METHOD A
CURB STOP	NO LEAD BRASS	MUELLER BRONZE BODY, GROUND-KEY PLUG OR BALL AND WIDE TEE HEAD, WITH INLET AND OUTLET TO MATCH SERVICE PIPING MATERIALS. VERIFY WITH VILLAGE PRIOR TO FINAL ORDER.
CURB BOX		CAST-IRON BOX WITH TELESOCPING TOP SECTION OF LENGTH REQUIRED FOR DEPTH OF BURY OF VALVE. INCLUDE COVER WITH LETTERING "WATER" AND BOTTOM SECTION WITH BASE OF SIZE TO FIT OVER CURB-STOP AND BARREL APPROXIMATELY 3" IN DIAMETER. VERIFY WITH VILLAGE PRIOR TO FINAL ORDER.
CORPORATION VALVE	NO LEAD BRASS	VERIFY WITH VILLAGE PRIOR TO FINAL ORDER.
SERVICE SADDLE	DOUBLE STRAP SADDLE	MUELLER SS SERIES SS DBLE STRAP, VERIFY WITH VILLAGE PRIOR TO FINAL ORDER.
FIRE HYDRANT	EJIW MODEL BR250	AWWA C502, 5.25" BARREL HYDRANTS WITH BREAKAWAY FLANGE, NST, A 4.5" STEAMER PORT AND TWO 2.5" HOSE PORT, STAINLESS STEEL HARDWARE. TRAFFIC TYPE, PAINTED RED, 250 PSI OPERATING PRESSURE. VERIFY WITH VILLAGE PRIOR TO FINAL ORDER
VALVES	MUELLER OR EJIW	RESILIENT WEDGE GATE VALVES WITH NON-RISING STEM AND MECHANICAL JOINT. VERIFY WITH VILLAGE PRIOR TO FINAL ORDER.
VALVE BOX	MUELLER OR EJIW	VERIFY WITH VILLAGE PRIOR TO FINAL ORDER.
FITTINGS		SAME MATERIAL AS PIPE MOLDED OR FORMED TO SUIT PIPE SIZE AND END DESIGN, IN REQUIRED TEE, BENDS, PLUGS, ELBOWS, CLEANOUTS, REDUCERS, TRAPS, AND OTHER CONFIGURATIONS REQUIRED
BOLTS		ALL BOLTS SHALL BE STAINLESS STEEL CONFORMING TO ASTM A-193. TYPE 304 NUTS ARE TO BE SERIES 300 STAINLESS STEEL OTHER THAN SERIES 304, CONFORMING TO ASTM-194.
WATER SERVICE PIPE	TYPE K COPPER	PIPE:ASTM B-88

SANITARY SEWERS	MODEL/SPECIFICATION	STANDARDS/REQUIREMENTS
	PVC C900 DR18	PIPE:AWWA C900 JOINT:ASTM D-3139 GASKET:ASTM F-477
FRAME & GRATE/LID		CLOSED LID:NEENAH R-1916-C BOLT DOWN LID, TYPE F CONCEALED PICKHOLE EMBOSSED "SANITARY"
ADJUSTMENT RINGS	CONCRETE	4" MINIMUM, 12" MAXIMUM
	PLASTIC	LESS THAN 4"
PIPE BEDDING MATERIAL	CA-11	
TRENCH BACKFILL	CA-6	
CHIMNEY SEAL	CRETEX	ASTM: C-923
MANHOLE CONNECTIONS		ASTM: C-923
JOINT WRAP	MAC WRAP	ASTM: C-877 TYPE II

TESTING REQUIREMENTS	
WATER MAIN	ALL WATER MAIN SHALL HAVE A PRESSURE AND LEAKAGE TEST PERFORMED IN ACCORDANCE WITH SECTION 41-2.14 OF STANDARD SPECIFICATIONS FOR WATER AND SEWER CONSTRUCTION IN ILLINOIS ACCEPT THE PRESSURE DURING THE TESTS SHALL BE EQUAL TO 150PSI
SANITARY SEWER	ALL SANITARY SEWER SHALL BE TESTED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR WATER AND SEWER CONSTRUCTION IN ILLINOIS. ALL RIGID SANITARY SEWER PIPE SHALL BE TESTED BY EITHER METHOD A B OR C AS OUTLINED IN SECTION 31-1 12. ALL FLEXIBLE SANITARY SEWER PIPE SHALL BE TESTED BY METHOD D AND EITHER METHOD A B OR C ALL SANITARY SEWER MUST BE TESTED BY METHOD E. THE CONTRACTOR SHALL PROVIDE THE ENGINEER A COPY OF THE VIDEO ON A DIGITAL VIDEO DISC. THE VIDEO MUST BE IN COLOR AND PROCEED NO FASTER THAN 1 FOOT PER SECOND.
SEWER WATER MAIN CROSSINGS	ALL SEWERS THAT CROSS OR RUN PARALLEL TO WATER MAINS SUBJECT TO IEPA REQUIREMENTS FOR WATER MAIN QUALITY PIPE MUST BE PRESSURE TESTED ACCORDING TO 41-2 14 OF THE STANDARD SPECIFICATIONS FOR WATER AND SEWER CONSTRUCTION IN ILLINOIS
SANITARY MANHOLES	ALL SANITARY MANHOLES SHALL BE TESTED BY EITHER ASTM C-969 OR ASTM C-1244

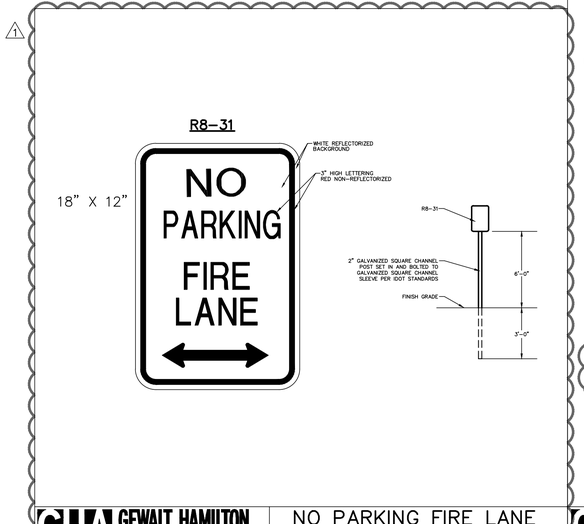
NON-WOVEN	STYLE DESCRIPTION	STANDARDS/REQUIREMENTS
LIGHT DUTY	UNDERDRAIN FABRIC	3.5 oz
		MINIMUM GRAD TENSILE ASTM D4632 = 90 LBS
		MINIMUM TRAPEZOID TEAR ASTM D4533 = 40 LBS
		MINIMUM FLOW RATE ASTM D4491 = 150 GAL/MIN/SQFT
MEDIUM DUTY	UNDERDRAIN FABRIC	6 oz
		MINIMUM GRAD TENSILE ASTM D4632 = 160 LBS
		MINIMUM TRAPEZOID TEAR ASTM D4533 = 60 LBS
		MINIMUM FLOW RATE ASTM D4491 = 110 GAL/MIN/SQFT
HEAVY DUTY	SUBGRADE/SUBBASE SEPARATION	10 oz
		MINIMUM GRAD TENSILE ASTM D4632 = 250 LBS
		MINIMUM TRAPEZOID TEAR ASTM D4533 = 100 LBS
		MINIMUM FLOW RATE ASTM D4491 = 75 GAL/MIN/SQFT

WOVEN	STYLE DESCRIPTION	STANDARDS/REQUIREMENTS
HEAVY DUTY	SUBGRADE/SUBBASE SEPARATION	6 oz
		MINIMUM GRAD TENSILE ASTM D4632 = 315 LBS
		MINIMUM TRAPEZOID TEAR ASTM D4533 = 113 LBS
		MINIMUM FLOW RATE ASTM D4491 = 4 GAL/MIN/SQFT

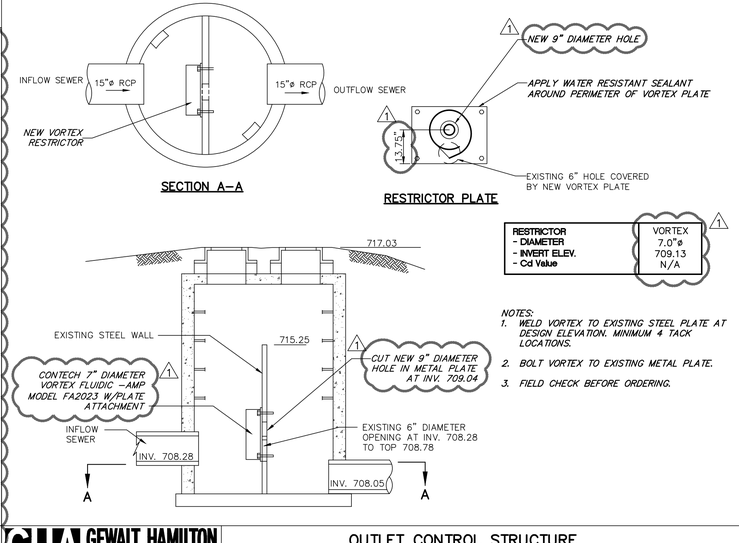


HANDICAPPED PARKING SIGN

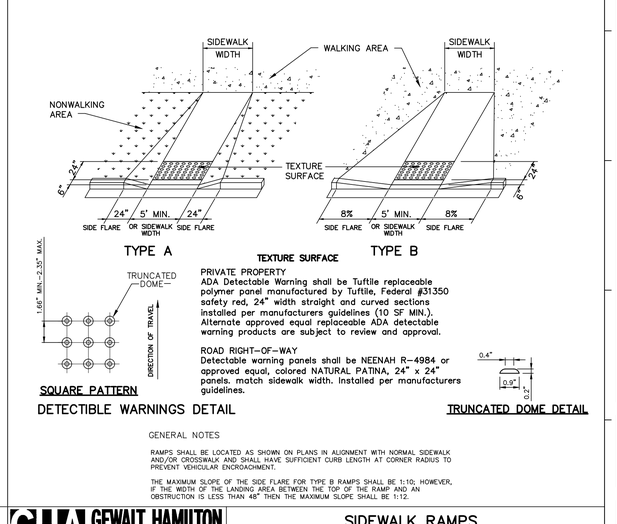
HANDICAPPED PARKING
STALL AND SIGN DIMENSIONS



NO PARKING FIRE LANE
SIGN DETAIL



OUTLET CONTROL STRUCTURE
MODIFICATION DETAIL



DETECTIBLE WARNINGS DETAIL

GENERAL NOTES

RAMPS SHALL BE LOCATED AS SHOWN ON PLANS IN ALIGNMENT WITH NORMAL SIDEWALK AND/OR CROSSWALK AND SHALL HAVE SUFFICIENT CURB LENGTH AT CORNER RADIUS TO PREVENT VEHICULAR ENCROACHMENT.

THE MAXIMUM SLOPE OF THE SIDE FLARE FOR TYPE B RAMPS SHALL BE 1:10; HOWEVER, IF THE WIDTH OF THE LANDING AREA BETWEEN THE TOP OF THE RAMP AND AN OBSTRUCTION IS LESS THAN 48" THEN THE MAXIMUM SLOPE SHALL BE 1:12.

SIDEWALK RAMPS
FOR THE HANDICAPPED

NO.	DATE	DESCRIPTION
00	01/08/18	PLAN COMMISSION REVIEW
01	02/09/18	PLAN COMMISSION REVIEW - REVISIONS

ISSUANCE

FGM ARCHITECTS
CHICAGO OAK BROOK ST. LOUIS O'FALLON
GHA GEWALT HAMILTON ASSOCIATES, INC.
625 Forest Edge Drive ▪ Vernon Hills, IL 60061
TEL: 847.478.9700 ▪ FAX: 847.478.9701
GHA JOB # 5313.000

DATE:

WALTER H. GRAEF 062-040837 LICENSED PROFESSIONAL ENGINEER OF ILLINOIS

PROFESSIONAL SEAL

EXPIRATION DATE: 11/30/19

DATE	01/08/17
DRAWN	DG
CHECKED	WEG
APPROVED	WEG

PROFESSIONAL DESIGN FIRM IL # 184-000922

OLYMPIC SWIM ADDITION AND RENOVATION
ARLINGTON HEIGHTS PARK DISTRICT
660 Ridge Ave
Arlington Heights, IL 60004

GENERAL NOTES / DETAILS

SHEET NO.
C9

JOB NO. 17-2408.01

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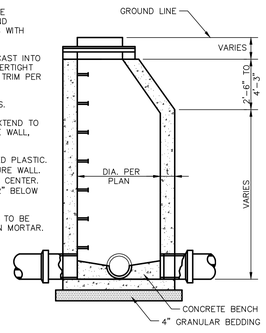
STORM MANHOLE TYPE A COMBINED SEWER

NOTES:

1. SEE STORM TABLE FOR FURTHER REQUIREMENTS.
2. PRECAST REINFORCED CONCRETE SECTIONS PER ASTM C-478 AND PREFORMED BITUMINOUS JOINTS WITH INTEGRAL PRECAST BOTTOMS.
3. PIPE OPENINGS SHALL BE PRECAST INTO WALLS. CAST IN RESILIENT WATERTIGHT SLEEVE WITH STAINLESS STEEL TRIM PER ASTM C-923.
4. I.D.O.T #602601 FOR FLAT TOPS.
5. PRECAST PCC BENCH SHALL EXTEND TO CROWN AND SLOPE TO OUTSIDE WALL, SMOOTH FINISH.
6. STEPS TO BE STEEL REINFORCED PLASTIC.
   A. IMBEDDED 3" INTO STRUCTURE WALL.
   B. SPACED AT 16" CENTER TO CENTER.
   C. FIRST STEP LOCATED 8"-12" BELOW FRAME.
7. FINAL ADJUSTMENT TO FRAMES TO BE DONE WITH STEEL SHIMS SET IN MORTAR.



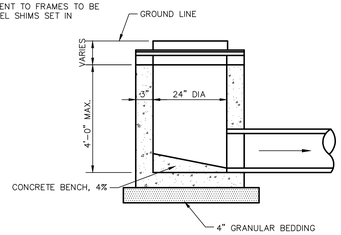
DIA	MIN. THICKNESS (t)
48"	4"
60"	5"
72"	6"

03.15.2016

INLET TYPE A COMBINED SEWER

NOTES:

1. SEE STORM TABLE FOR FURTHER REQUIREMENTS.
2. PRECAST REINFORCED CONCRETE SECTIONS PER ASTM C-478 AND PREFORMED BITUMINOUS JOINTS WITH INTEGRAL PRECAST BOTTOMS.
3. PIPE OPENINGS SHALL BE PRECAST INTO WALLS. CAST IN RESILIENT WATERTIGHT SLEEVE WITH STAINLESS STEEL TRIM PER ASTM C-923.
4. FINAL ADJUSTMENT TO FRAMES TO BE DONE WITH STEEL SHIMS SET IN MORTAR.

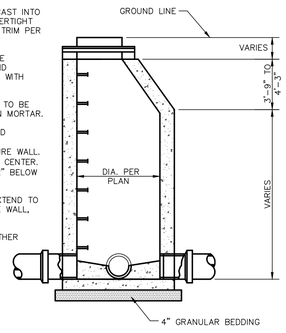


03.15.2016

SANITARY MANHOLE

NOTES:

1. EXTERIOR NEOPRENE CHIMNEY SEAL STAINLESS STEEL TRIM PER ASTM C-923.
2. PIPE OPENINGS SHALL BE PRECAST INTO WALLS. CAST IN RESILIENT WATERTIGHT SLEEVE WITH STAINLESS STEEL TRIM PER ASTM C-923.
3. PRECAST REINFORCED CONCRETE SECTIONS PER ASTM C-478 AND PREFORMED BITUMINOUS JOINTS WITH INTEGRAL PRECAST BOTTOMS.
4. FINAL ADJUSTMENT TO FRAMES TO BE DONE WITH STEEL SHIMS SET IN MORTAR.
5. STEPS TO BE STEEL REINFORCED PLASTIC.
   A. IMBEDDED 3" INTO STRUCTURE WALL.
   B. SPACED AT 16" CENTER TO CENTER.
   C. FIRST STEP LOCATED 8"-12" BELOW FRAME.
6. PRECAST PCC BENCH SHALL EXTEND TO CROWN AND SLOPE TO OUTSIDE WALL, SMOOTH FINISH.
7. SEE SANITARY TABLE FOR FURTHER REQUIREMENTS.



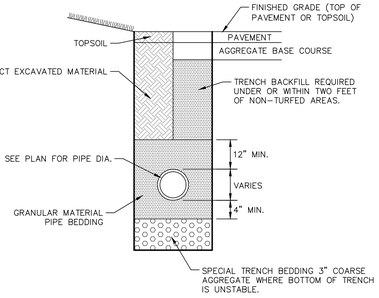
DIM	MIN. THICKNESS
48"	4"
60"	5"
72"	6"

03.15.2016

SANITARY TRENCH DETAIL

NOTE:
SEE SANITARY TABLE FOR MATERIAL REQUIREMENTS.

TRENCH WIDTH
WIDTH (MAX.) = 9" + OD + 9" WHEN TRENCH ≤ 5 FT.
WIDTH (MAX.) = 18" + OD + 18" WHEN TRENCH > 5 FT.



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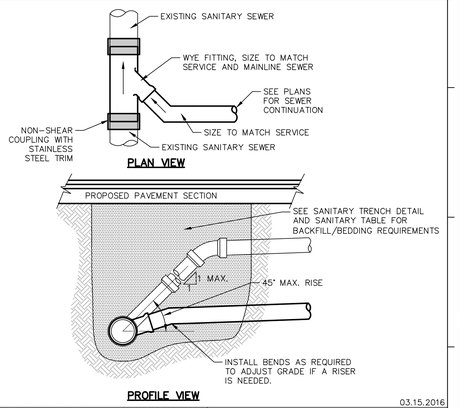
SANITARY SERVICE CONNECTION DETAIL

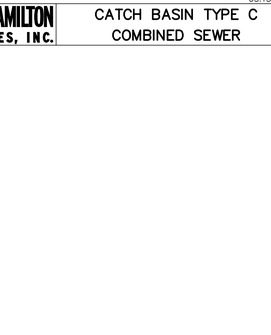


03.15.2016

CATCH BASIN TYPE A COMBINED SEWER

NOTES:

1. SEE STORM TABLE FOR FURTHER REQUIREMENTS.
2. PRECAST REINFORCED CONCRETE SECTIONS PER ASTM C-478 AND PREFORMED BITUMINOUS JOINTS WITH INTEGRAL PRECAST BOTTOMS.
3. PIPE OPENINGS SHALL BE PRECAST INTO WALLS. CAST IN RESILIENT WATERTIGHT SLEEVE WITH STAINLESS STEEL TRIM PER ASTM C-923.
4. I.D.O.T #602601 FOR FLAT TOPS.
5. PRECAST PCC BENCH SHALL EXTEND TO CROWN AND SLOPE TO OUTSIDE WALL, SMOOTH FINISH.
6. STEPS TO BE STEEL REINFORCED PLASTIC.
   A. IMBEDDED 3" INTO STRUCTURE WALL.
   B. SPACED AT 16" CENTER TO CENTER.
   C. FIRST STEP LOCATED 8"-12" BELOW FRAME.
7. FINAL ADJUSTMENT TO FRAMES TO BE DONE WITH STEEL SHIMS SET IN MORTAR.



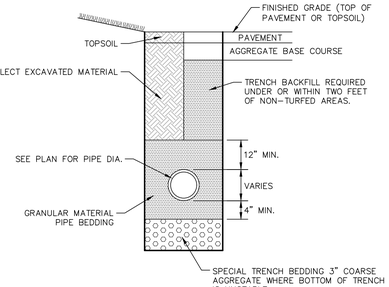
DIA	MIN. THICKNESS (t)
48"	4"
60"	5"
72"	6"

03.15.2016

STORM SEWER UNDERDRAIN CLEANOUT

NOTE:
SEE STORM TABLE FOR MATERIAL REQUIREMENTS.

TRENCH WIDTH
WIDTH (MAX.) = 9" + OD + 9" WHEN TRENCH ≤ 5 FT.
WIDTH (MAX.) = 18" + OD + 18" WHEN TRENCH > 5 FT.



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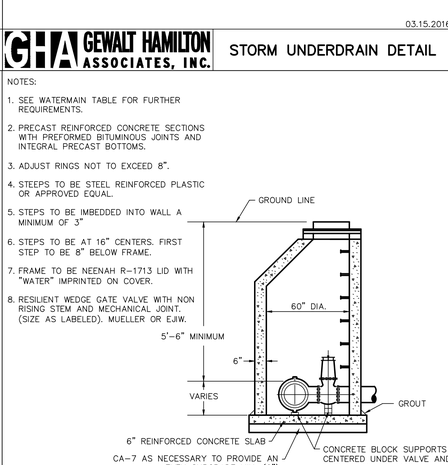
STORM UNDERDRAIN DETAIL



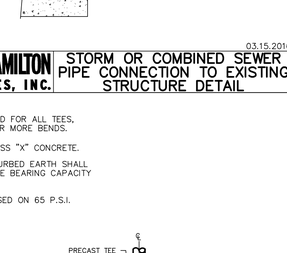
03.15.2016

STORM OR COMBINED SEWER PIPE CONNECTION TO EXISTING STRUCTURE DETAIL

NOTE:
SEE STORM TABLE FOR MATERIAL REQUIREMENTS.

TRENCH WIDTH
WIDTH (MAX.) = 9" + OD + 9" WHEN TRENCH ≤ 5 FT.
WIDTH (MAX.) = 18" + OD + 18" WHEN TRENCH > 5 FT.

1. MACHINE CORE CIRCULAR OPENING IN STRUCTURE WALL OF DIAMETER TO FIT THE REQUIRED BOOT SIZE PER MANUFACTURERS RECOMMENDATION.
2. CUT SHAPE AND SLOPE NEW INVERT CHANNEL IN THE EXISTING CONCRETE BENCH FOR SMOOTH FLOW FROM/TO NEW CONNECTION.
3. CLEAN EXISTING STRUCTURE AND SEWER PIPE OF ANY DIRT CONCRETE OR DEBRIS WHICH MAY ACCUMULATE DURING THE CONSTRUCTION PROCESS.
4. RESILIENT WATERTIGHT SLEEVE WITH STAINLESS STEEL TRIM PER ASTM C-923.



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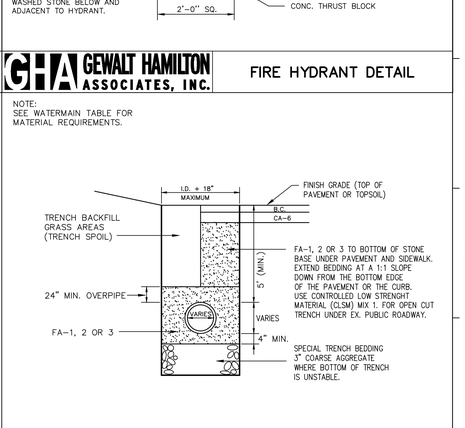
FIRE HYDRANT DETAIL

NOTES:

1. ALL MAINS TO HAVE MINIMUM 5'-6" COVER.
2. ALL HYDRANTS TO FACE STREET AND LOCATED MINIMUM 3'-0" FROM BACK OF CURB TO CENTER LINE OF HYDRANT.

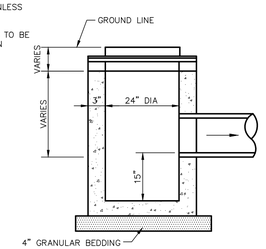


03.15.2016

CATCH BASIN TYPE C COMBINED SEWER

NOTES:

1. SEE STORM TABLE FOR FURTHER REQUIREMENTS.
2. PRECAST REINFORCED CONCRETE SECTIONS PER ASTM C-478 AND PREFORMED BITUMINOUS JOINTS WITH INTEGRAL PRECAST BOTTOMS.
3. PIPE OPENINGS SHALL BE PRECAST INTO WALLS. CAST IN RESILIENT WATERTIGHT SLEEVE WITH STAINLESS STEEL TRIM PER ASTM C-923.
4. FINAL ADJUSTMENT TO FRAMES TO BE DONE WITH STEEL SHIMS SET IN MORTAR.



03.15.2016

STORM TRENCH DETAIL

NOTES:

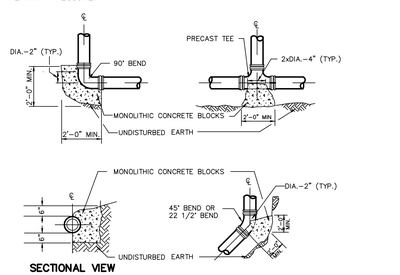
1. SEE WATERMAIN TABLE FOR FURTHER REQUIREMENTS.
2. PRECAST REINFORCED CONCRETE SECTIONS WITH PREFORMED BITUMINOUS JOINTS AND INTEGRAL PRECAST BOTTOMS.
3. ADJUST RINGS NOT TO EXCEED 8".
4. STEEPS TO BE STEEL REINFORCED PLASTIC OR APPROVED EQUAL.
5. STEPS TO BE IMBEDDED INTO WALL A MINIMUM OF 3"
6. STEPS TO BE AT 16" CENTERS. FIRST STEP TO BE 8" BELOW FRAME.
7. FRAME TO BE NEENAH R-1713 LID WITH "WATER" IMPRINTED ON COVER.
8. RESILIENT WEDGE GATE VALVE WITH NON RISING STEM AND MECHANICAL JOINT. (SIZE AS LABELED). MUELLER OR EJW.

03.15.2016

TAPPING VALVE AND VAULT

NOTES:

1. BLOCKING SHALL BE APPLIED FOR ALL TEES, PLUGS, CAPS, & 22 1/2° OR MORE BENDS.
2. THRUST BLOCKS TO BE CLASS "X" CONCRETE.
3. BEARING AREAS OF UNDISTURBED EARTH SHALL HAVE A MINIMUM ALLOWABLE BEARING CAPACITY OF 2000 P.S.F.
4. BEARING AREA OF SOIL BASED ON 65 P.S.I. WATERMAIN PRESSURE.



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THRUST BLOCKING DETAIL

NOTE:
SEE WATERMAIN TABLE FOR MATERIAL REQUIREMENTS.

03.15.2016

WATERMAIN TRENCH DETAIL

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ISSUANCE

NO.	DATE	DESCRIPTION
00	01/08/18	PLAN COMMISSION REVIEW
01	02/09/18	PLAN COMMISSION REVIEW - REVISIONS

FGM ARCHITECTS
CHICAGO OAK BROOK O'FALLON ST. LOUIS
GHA GEWALT HAMILTON ASSOCIATES, INC.
625 Forest Edge Drive ▪ Vernon Hills, IL 60061
TEL: 847.478.9700 ▪ FAX: 847.478.9701

GHA JOB # 5313.000

DATE:

PROFESSIONAL SEAL

EXPIRATION DATE: 11/30/19

DATE	01/08/17
DRAWN	DG
CHECKED	WEG
APPROVED	WEG

PROFESSIONAL DESIGN FIRM IL # 184.000922

OLYMPIC SWIM ADDITION AND RENOVATION
ARLINGTON HEIGHTS PARK DISTRICT
660 Ridge Ave
Arlington Heights, IL 60004

DETAILS

SHEET NO.
C10

JOB NO. 17-2408.01

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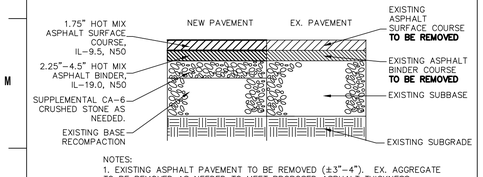
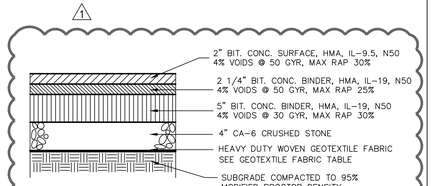
4"–6.5" PAVEMENT PATCH DETAIL



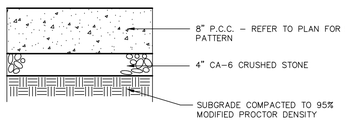
NOTES:
1. EXISTING ASPHALT PAVEMENT TO BE REMOVED (±3"–4"). EX. AGGREGATE TO BE REMOVED AS NEEDED TO MEET PROPOSED ASPHALT THICKNESS.
2. SUPPLEMENTAL AGGREGATE THICKNESS TO MEET PROPOSED PLAN ELEVATIONS OR ASPHALT PATCH THICKNESS.
3. SUPPLEMENTAL AGGREGATE TO BE CA–6 CRUSHED LIMESTONE OR CRUSHED GRAVEL. NO CRUSHED CONCRETE.

03.15.2016

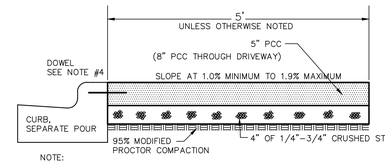
HEAVY DUTY PAVEMENT DETAIL



P.C.C. PAVEMENT DETAIL



PCC SIDEWALK

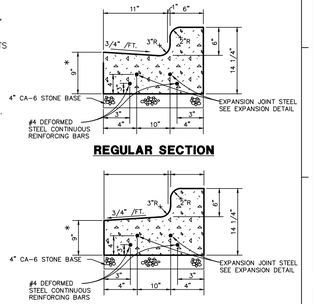


NOTE:
1. SET 1/2" EXPANSION JOINTS AT POINTS ABUTTING CURB OR PAVEMENT AND AT 60' MAX. INTERVALS.
2. CONTROL JOINTS SHALL BE SAWCUT 1/8" TO 1/4" WIDE AND 1/4 OF THE SIDEWALK THICKNESS DEEP. THE EDGE OF THE CONTROL JOINTS SHALL BE GIVEN A 1/4" RADIUS. JOINTS TO BE LOCATED AT 5' MAX. INTERVALS.
3. THREE #4 DEFORMED STEEL BARS SHALL BE INSTALLED IN THE SIDEWALK CENTERED OVER ALL TRENCH CROSSINGS. THEY SHALL EXTEND 10 FEET BEYOND THE EDGES OF THE TRENCH.
4. SIDEWALK ADJACENT TO NEW OR EXISTING CURB, OR EXISTING SIDEWALK SHALL BE DOWELED TO CURB OR EXISTING SIDEWALK WITH SMOOTH 12" EPOXY COATED #5 BARS AT 30" O.C.
5. SIDEWALK CONTRACTION AND EXPANSION JOINTS SHALL ALIGN WITH WITH NEW CURB JOINTS RESPECTIVELY.

03.15.2016

B6.12 CURB & GUTTER

NOTES:
1. SET EXPANSION JOINTS AT ALL PC'S,PT'S, FIVE FEET ON EITHER SIDE OF ANY FRAMES, AND AT 60' MAX. INTERVALS.
2. SAW CUT CONTRACTION JOINTS FULL FACE AND TOP, AT LEAST 2 INCHES IN DEPTH AND AT 15' MAXIMUM INTERVALS WITHIN 24 HOURS OF POURING.
3. CURING COMPOUND REQUIRED.

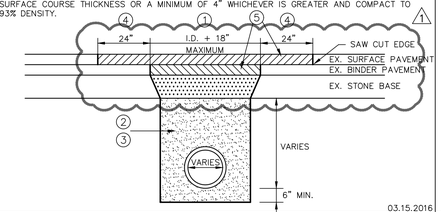


03.15.2016

UTILITY TRENCH PAVEMENT REPAIR DETAIL

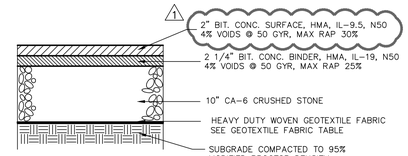
NOTES:
1. PRIOR TO EXCAVATION, SAWCUT PAVEMENT FULL DEPTH.
2. EXCAVATE THE STONE BASE AND SUBBASE.
3. INSTALL THE UTILITY PIPE AND BACKFILL WITH CA–6 CRUSHED STONE. COMPACT MECHANICALLY TO 95% STANDARD PROCTOR DENSITY.
4. SAWCUT STRAIGHT AND PARALLEL AND REMOVE AN ADDITIONAL 24" OF HMA SURFACE (1) PAVEMENT ON BOTH SIDES OF THE TRENCH.
5. FOR PARKING LOTS – INSTALL TEN INCHES (10") OF CA–6 CRUSHED STONE BASE AND COMPACT WITH A VIBRATORY COMPACTOR TO 95% MODIFIED PROCTOR DENSITY. INSTALL FOUR INCHES (4") HMA SURFACE COURSE. MATCH EXISTING PAVEMENT THICKNESS OR A MINIMUM OF 4" WHICHEVER IS GREATER AND COMPACT TO 93% DENSITY.

FOR HEAVY DUTY PAVEMENT – INSTALL FOUR INCHES (4") OF CA–6 CRUSHED STONE BASE AND COMPACT WITH VIBRATORY COMPACTOR TO 95% MODIFIED PROCTOR DENSITY. INSTALL SIX INCHES (6") OF HMA BINDER. INSTALL FOUR INCHES (4") HMA SURFACE COURSE. MATCH EXISTING SURFACE COURSE THICKNESS OR A MINIMUM OF 4" WHICHEVER IS GREATER AND COMPACT TO 93% DENSITY.

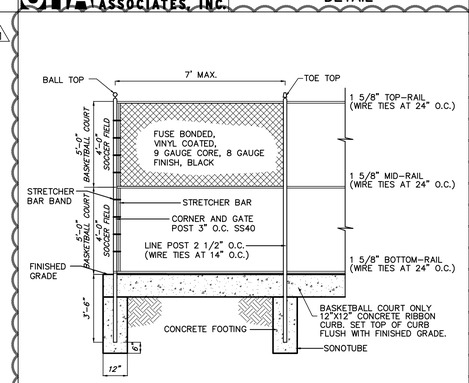


03.15.2016

NORMAL DUTY PAVEMENT DETAIL

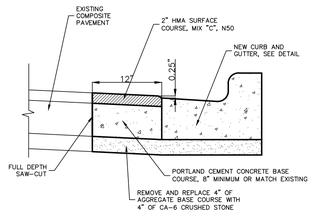


BASKETBALL/SOCCER FENCE DETAIL



BASKETBALL COURT FENCE HEIGHT = 10'–0"
SOCCER FIELD FENCE HEIGHT = 8'–0"

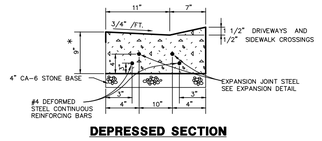
PAVEMENT PATCH FOR NEW CURB INSTALLATION



03.15.2016

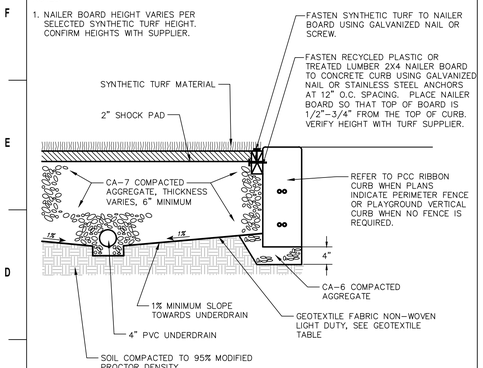
DEPRESSED B6.12 CURB & GUTTER

NOTES:
1. SET EXPANSION JOINTS AT ALL PC'S,PT'S, FIVE FEET ON EITHER SIDE OF ANY FRAMES, AND AT 60' MAX. INTERVALS.
2. SAW CUT CONTRACTION JOINTS FULL FACE AND TOP, AT LEAST 2 INCHES IN DEPTH AND AT 15' MAXIMUM INTERVALS WITHIN 24 HOURS OF POURING.
3. CURING COMPOUND REQUIRED.

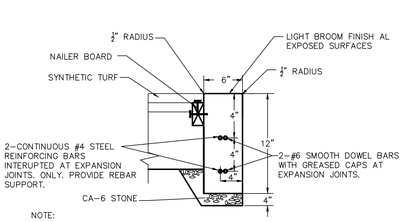


SYNTHETIC TURF PLAYGROUND DETAIL

NOTES:
1. NAILER BOARD HEIGHT VARIES PER SELECTED SYNTHETIC TURF HEIGHT. CONFIRM HEIGHTS WITH SUPPLIER.

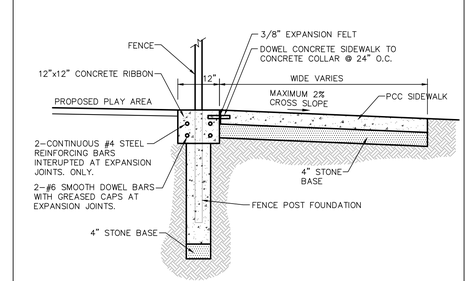


PLAYGROUND VERTICAL CURB DETAIL



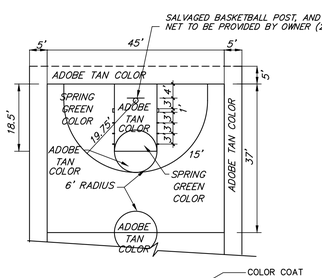
NOTE:
1. SET EXPANSION JOINTS AT ALL PC'S, PT'S, FIVE FEET ON EITHER SIDE OF ANY FRAMES, AND AT 200' MAX. INTERVALS.
2. SAW CUT CONTRACTION JOINTS FULL FACE AND TOP, AT LEAST 2 INCHES IN DEPTH AND AT 20' MAXIMUM INTERVALS WITHIN 24 HOURS OF POURING.
3. CURING COMPOUND REQUIRED.

CONCRETE RIBBON CURB WITH FENCE POST SECTION

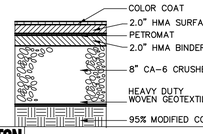


NOTE:
1. SET EXPANSION JOINTS AT 150' MAXIMUM INTERVALS.
2. CONTRACTION JOINTS TO BE TOOLED AT FENCE POST LOCATIONS, ±8'.
3. SIDEWALK EXPANSION/CONTRACTION JOINTS TO MATCH CONCRETE JOINT LOCATIONS INSTALLED.

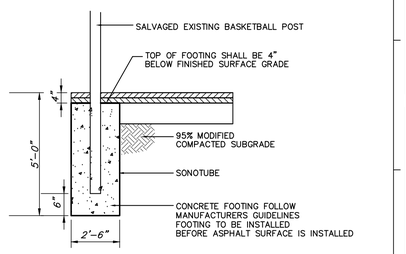
BASKETBALL COURT LAYOUT



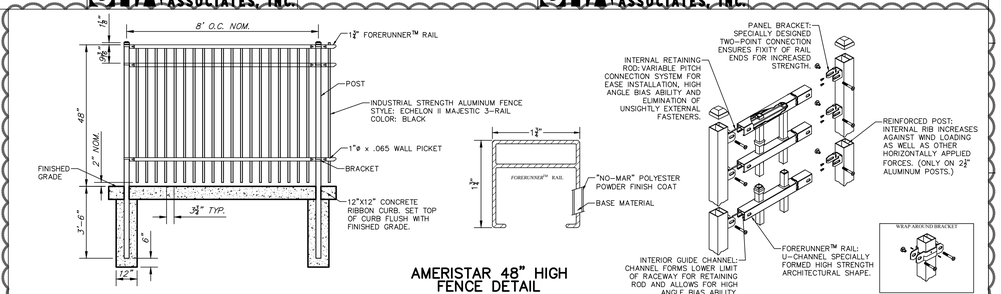
NOTES
1. INSTALL BASKETBALL POSTS PER MANUFACTURER SPECIFICATIONS AND INSTRUCTIONS.
2. REFER TO SPECIFICATIONS FOR COLOR COAT REQUIREMENTS, MINIMUM TWO BLACK AND TWO COLOR COATS.
3. STRIPE FOLLOWING NFSHSA GUIDE FOR BASKETBALL COURTS.



BASKETBALL POST FOUNDATION



AMERISTAR 48" HIGH FENCE DETAIL



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NO.	DATE	DESCRIPTION
00	01/08/18	PLAN COMMISSION REVIEW
01	02/09/18	PLAN COMMISSION REVIEW - REVISIONS

ISSUANCE

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CHICAGO OAK BROOK O'FALLON ST. LOUIS
GHA GEWALT HAMILTON ASSOCIATES, INC.
625 Forest Edge Drive ■ Vernon Hills, IL 60061
TEL: 847.478.9700 ■ FAX: 847.478.9701
GHA JOB # 5313.000

DATE:

WALTER R. GRAEF 062-048837 LICENSED PROFESSIONAL ENGINEER OF ILLINOIS

PROFESSIONAL SEAL

EXPIRATION DATE: 11/30/19

DATE	01/08/17
DRAWN	DG
CHECKED	WEG
APPROVED	WEG

PROFESSIONAL DESIGN FIRM IL # 184-000922

OLYMPIC SWIM ADDITION AND RENOVATION
ARLINGTON HEIGHTS PARK DISTRICT
660 Ridge Ave
Arlington Heights, IL 60004

DETAILS

SHEET NO.
C11

JOB NO. 17-2408.01

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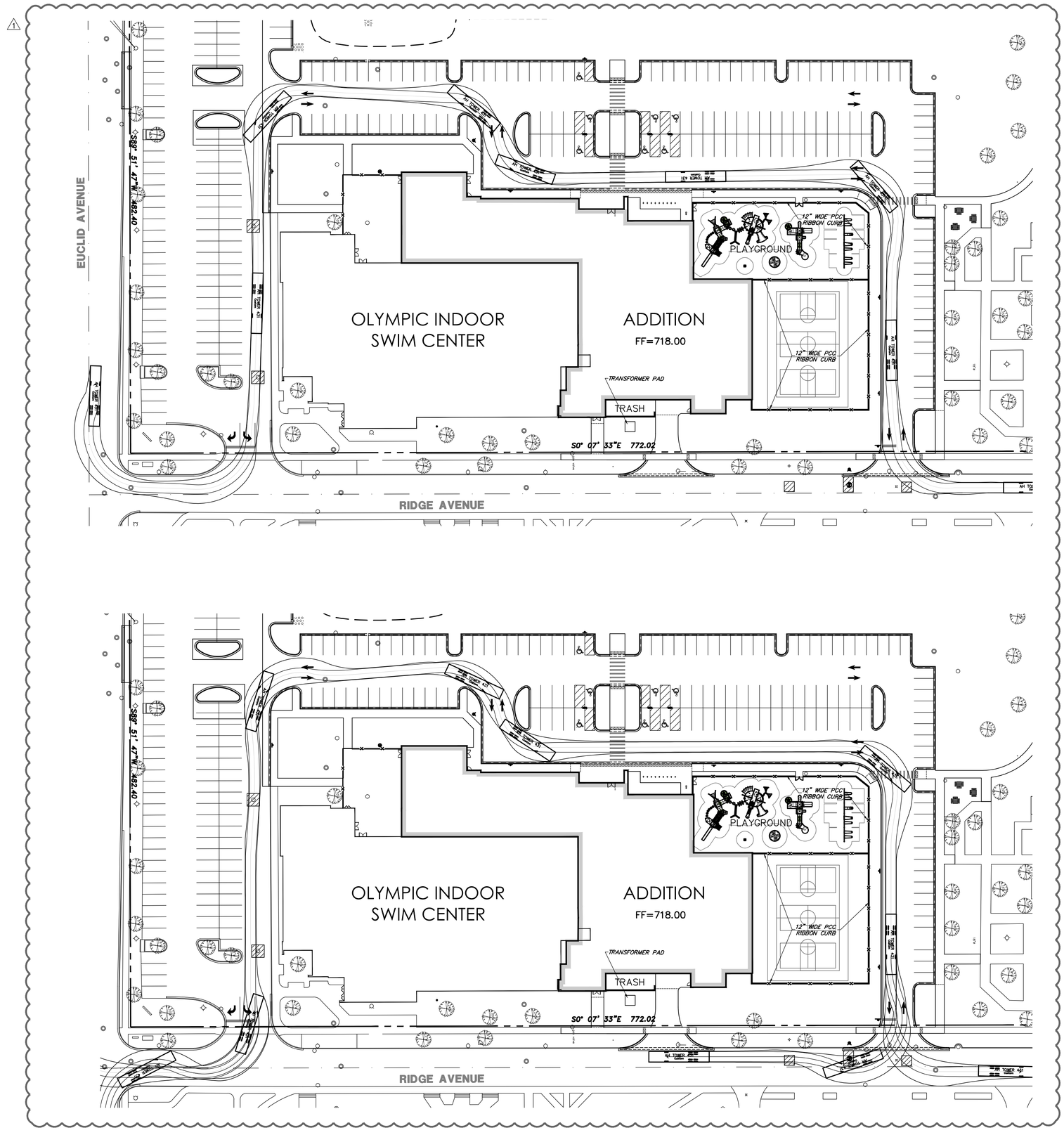

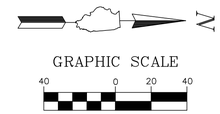

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CHICAGO OAK BROOK O'FALLON ST. LOUIS
GHA GEWALT HAMILTON ASSOCIATES, INC.
625 Forest Edge Drive ■ Vernon Hills, IL 60061
TEL: 847.478.9700 ■ FAX: 847.478.9701
GHA JOB # 5313.000

DATE:

PROFESSIONAL SEAL

EXPIRATION DATE:

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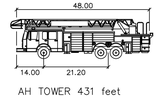
APPROVED	WEG	

OLYMPIC SWIM ADDITION AND RENOVATION

ARLINGTON HEIGHTS PARK DISTRICT

660 Ridge Ave
Arlington Heights, IL 60004

AUTOTURN EXHIBIT



AH TOWER 431 feet

	feet
Width	: 8.50
Track	: 8.00
Lock to Lock Time	: 6.0
Steering Angle	: 40.0

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C12

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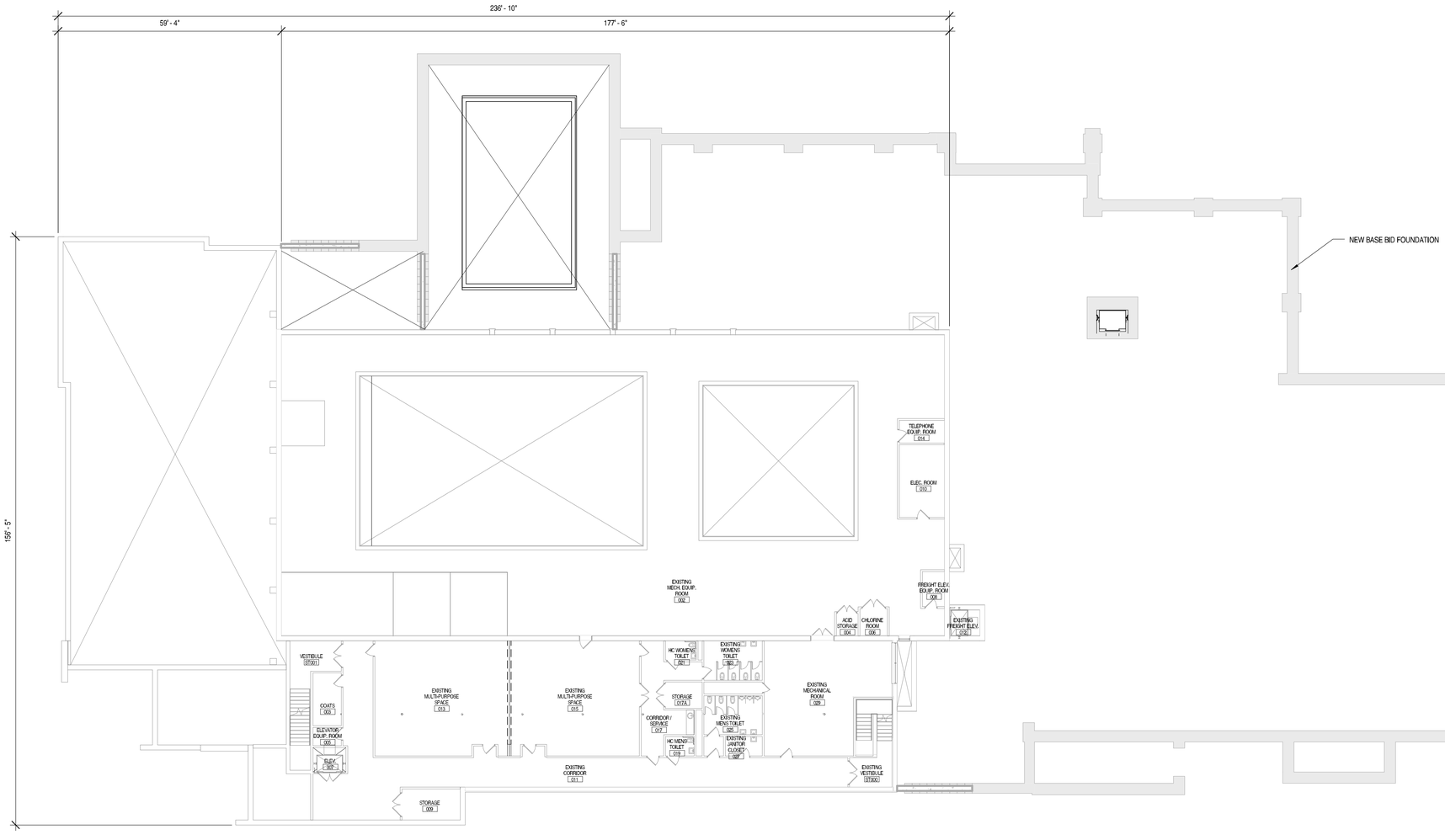

A1 BASEMENT FLOOR PLAN - EXISTING

1/16" = 1'-0"

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BASEMENT FLOOR PLAN - EXISTING

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A100

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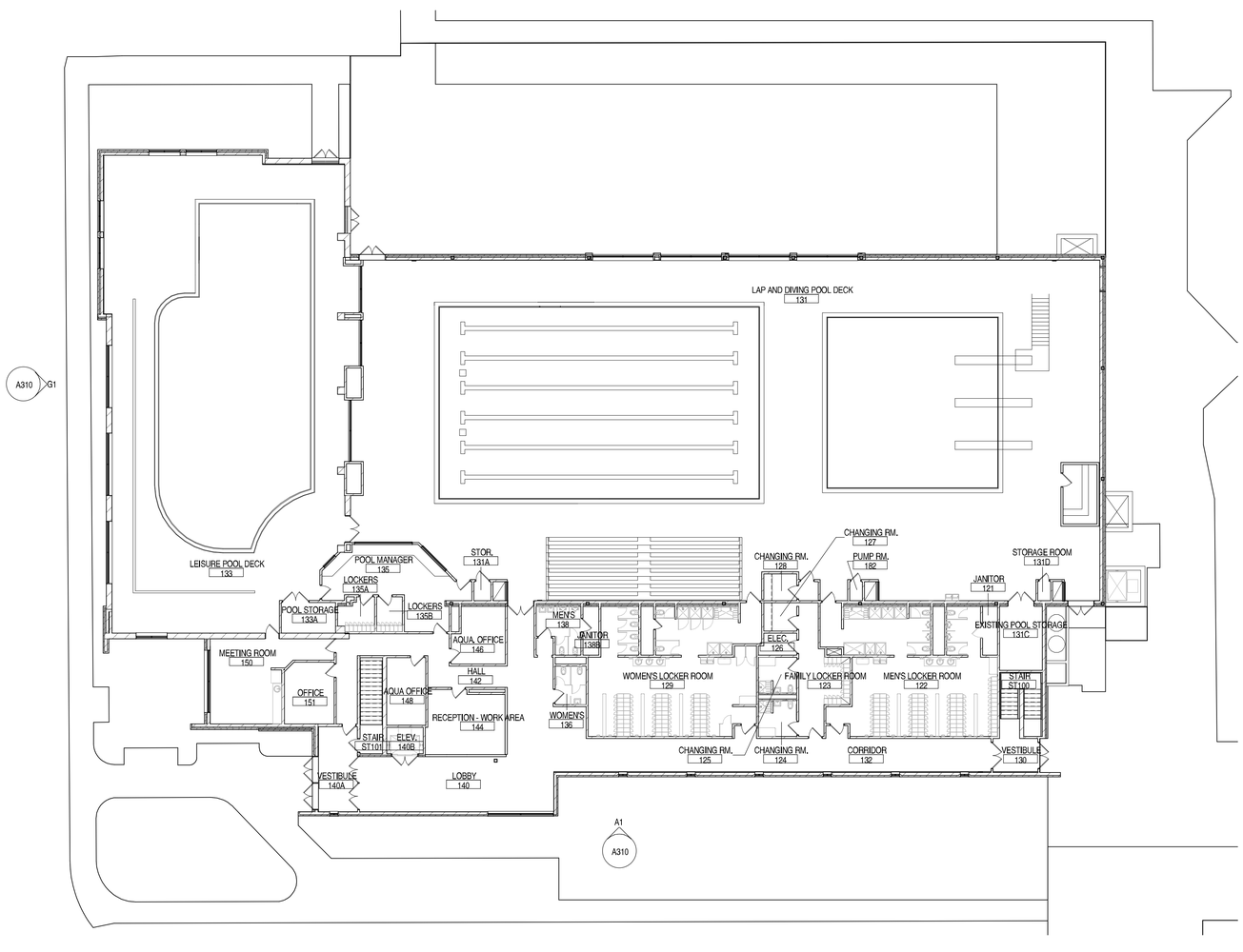

A1 **FIRST FLOOR PLAN - EXISTING**

1/16" = 1'-0"

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OLYMPIC SWIM ADDITION AND RENOVATION

ARLINGTON HEIGHTS PARK DISTRICT

660 Ridge Ave

Arlington Heights, IL 60004

FIRST FLOOR PLAN - EXISTING

SHEET NO.

A110

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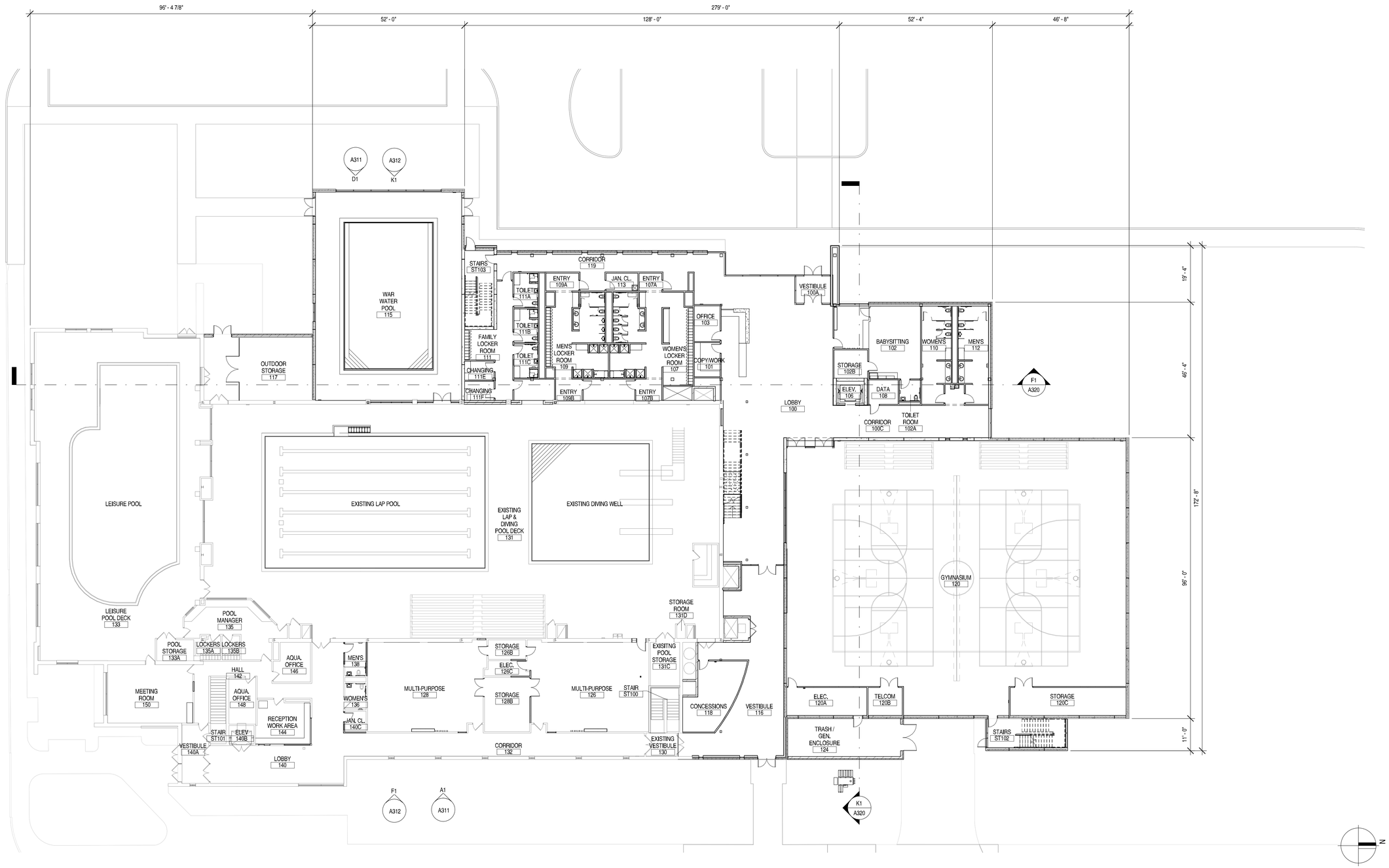

A1 PROPOSED FIRST FLOOR - BASE BID

1/16" = 1'-0"

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ARLINGTON HEIGHTS PARK DISTRICT
660 Ridge Ave
Arlington Heights, IL 60004

PROPOSED FIRST FLOOR PLAN- BASE BID

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A110A

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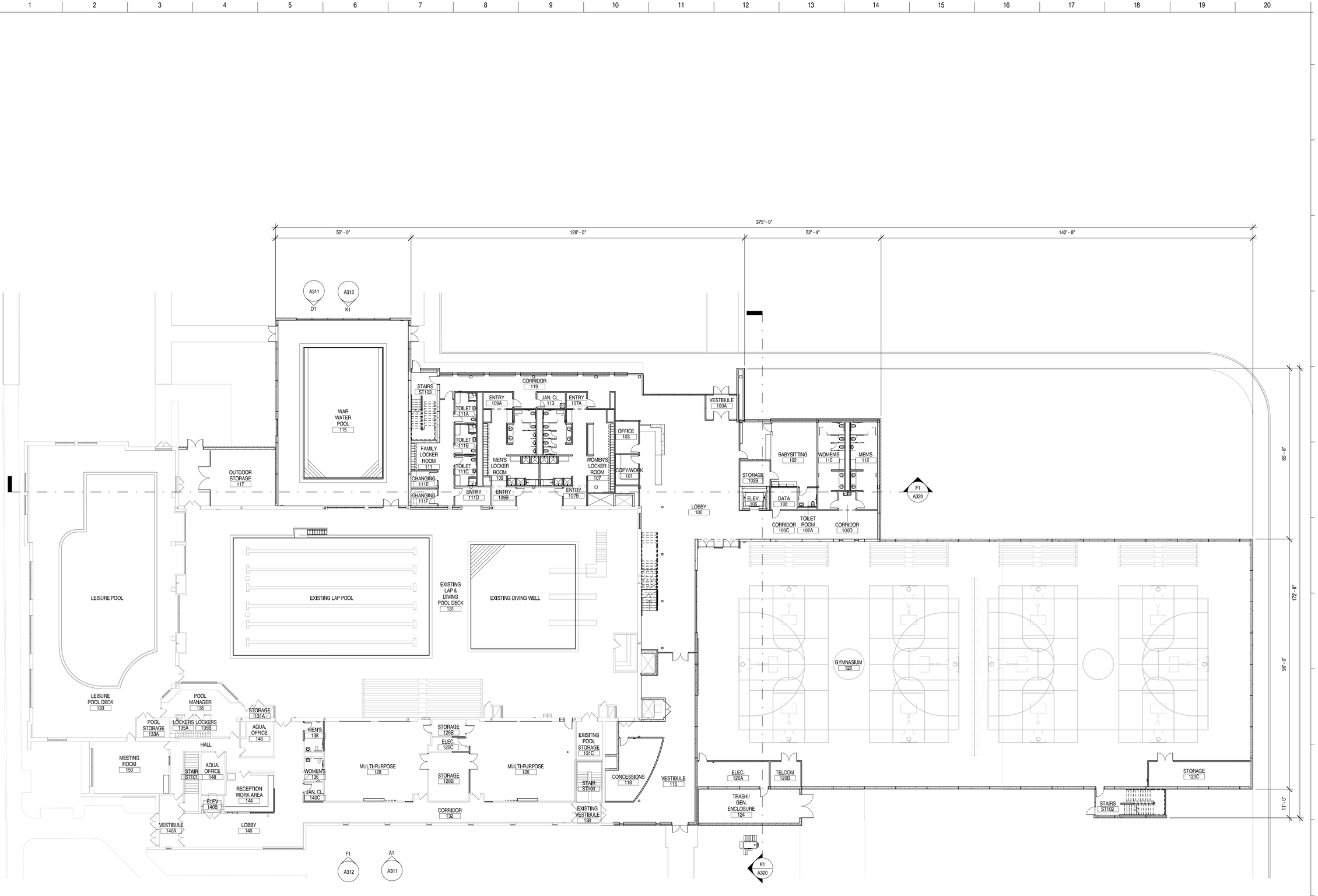

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PROPOSED FIRST FLOOR PLAN - ALTERNATE BID #1

SHEET NO.

A110B

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A1 **PROPOSED FIRST FLOOR PLAN - ALTERNATE BID #1**

1/16" = 1'-0"

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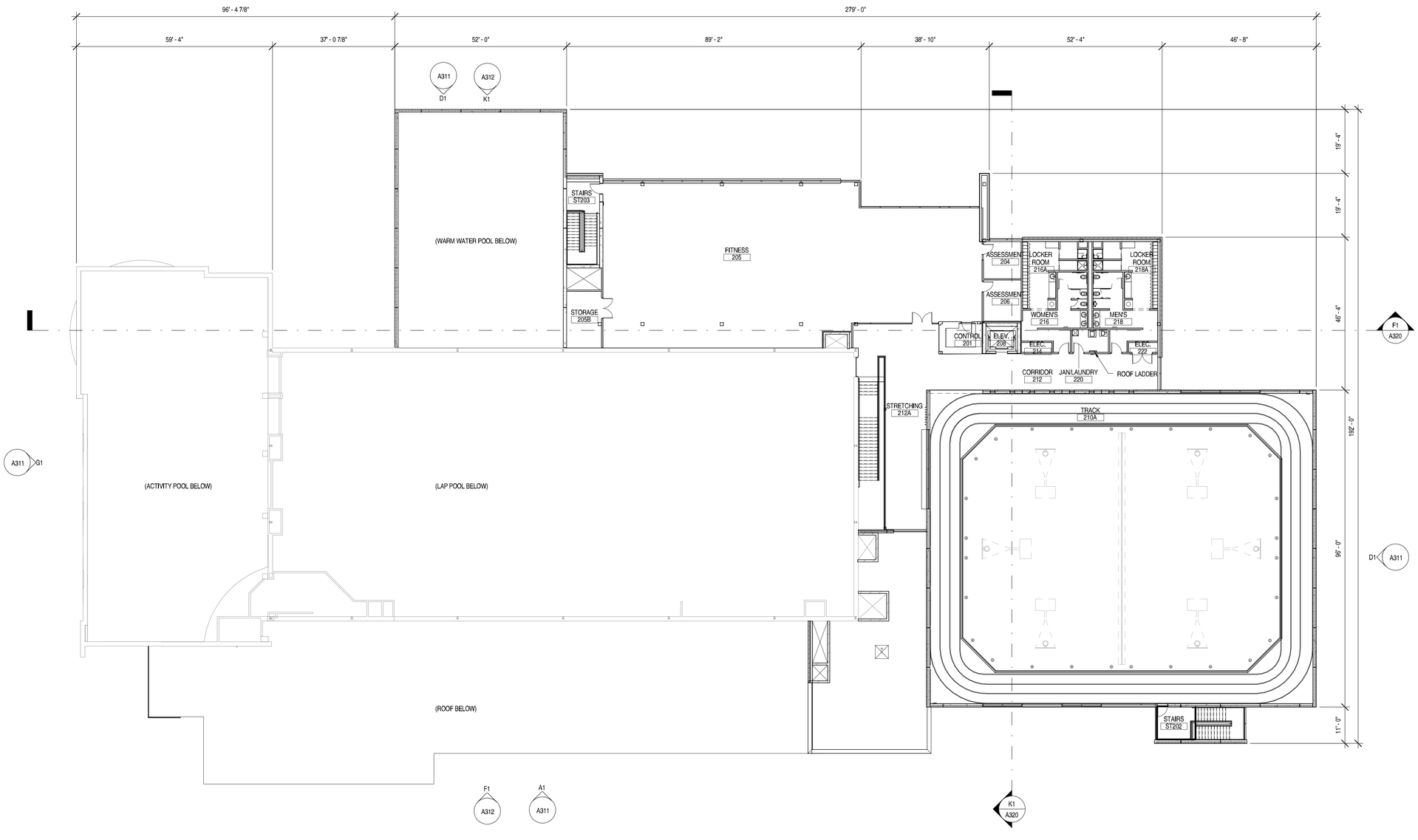

A1 PROPOSED SECOND FLOOR - BASE BID

1/16" = 1'-0"

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PROPOSED SECOND FLOOR PLAN - BASE BID

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A120A

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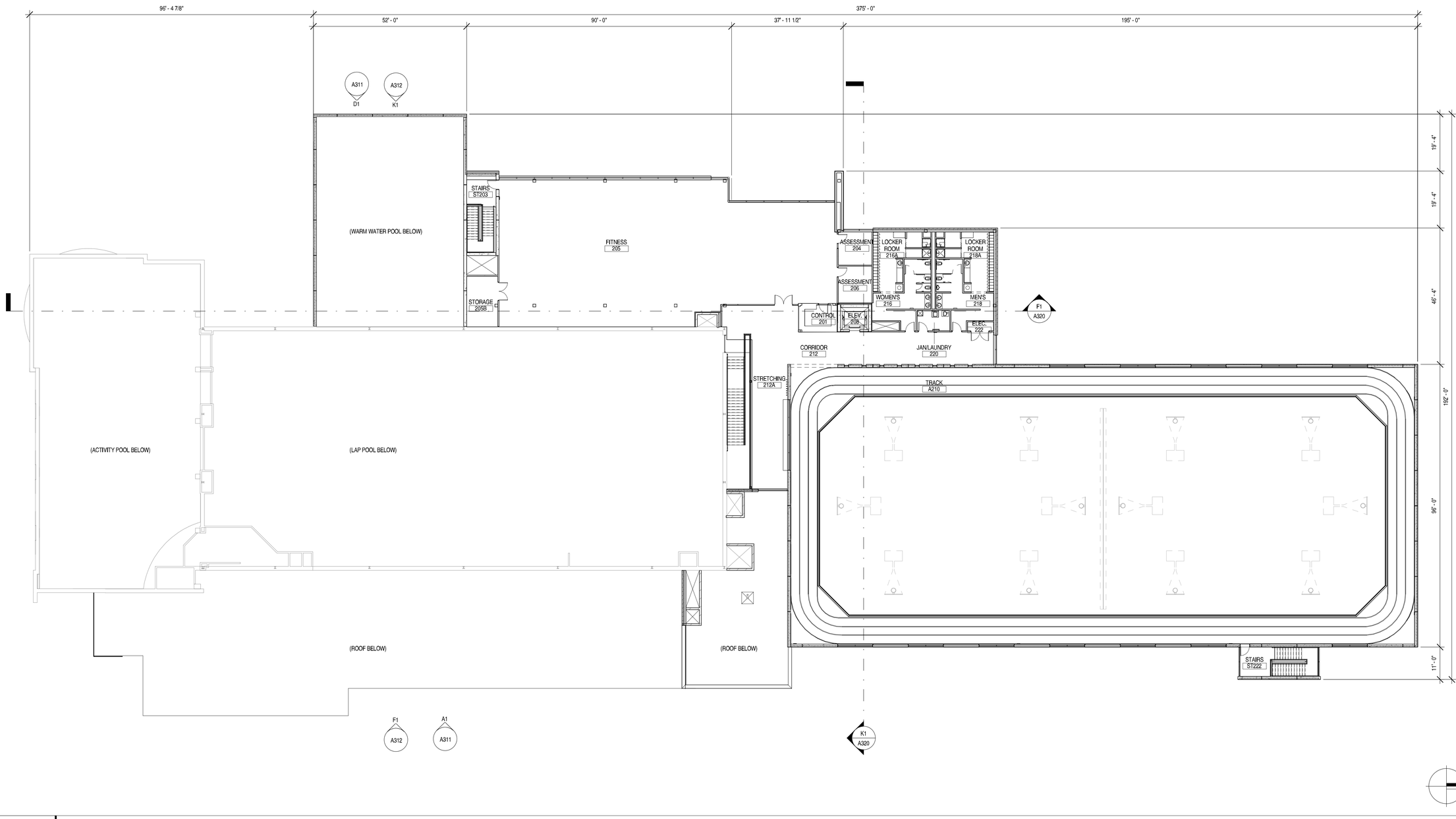

A1 **PROPOSED SECOND FLOOR PLAN - ALTERNATE BID #1**

1/16" = 1'-0"

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PROPOSED SECOND FLOOR PLAN - ALTERNATE BID #1

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A120B

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K1 NOT USED

K15 OCCUPANCY SCHEDULE

ROOM SCHEDULE - CODE INFORMATION - BASEMENT

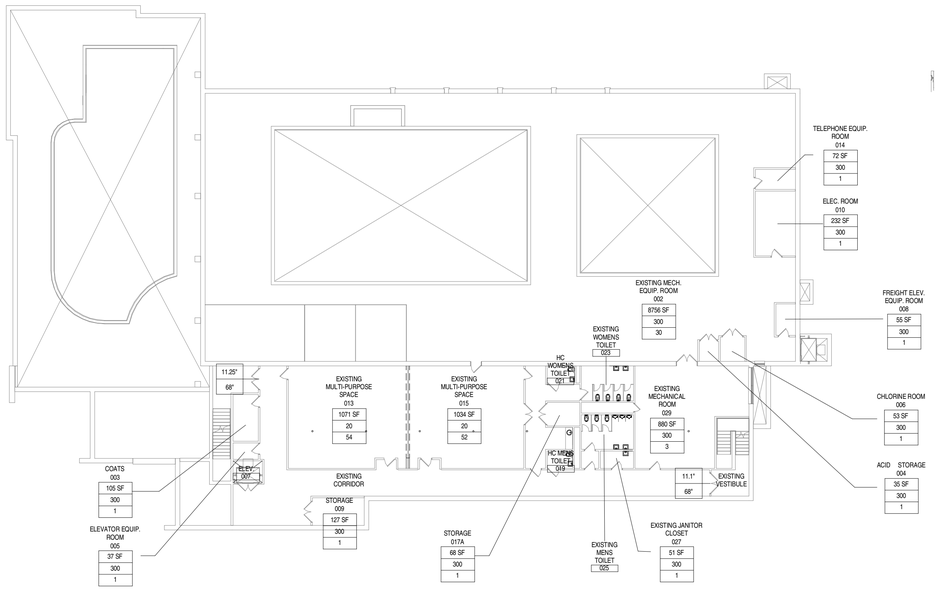
vg	ROOM NAME	OCCUPANCY GROUP	OCCUPANCY FUNCTION	ROOM AREA	S.F. PER OCCUPANT	OCCUPANCY LOAD
002	EXISTING MECH. EQUIP. ROOM	A-3	MECHANICAL	8756 SF	300	30
003	COATS	A-3	STORAGE	105 SF	300	1
004	ACID STORAGE	A-3	STORAGE	35 SF	300	1
005	ELEVATOR EQUIP. ROOM	A-3	MECHANICAL	37 SF	300	1
006	CHLORINE ROOM	A-3	MECHANICAL	53 SF	300	1
007	ELEV.	A-3	-	57 SF	0	0
008	FREIGHT ELEV. EQUIP. ROOM	A-3	MECHANICAL	55 SF	300	1
009	STORAGE	A-3	STORAGE	127 SF	300	1
010	ELEC. ROOM	A-3	MECHANICAL	232 SF	300	1
011	EXISTING CORRIDOR	A-3	-	1559 SF	0	0
012	EXISTING FREIGHT ELEV.	A-3	-	56 SF	0	0
013	EXISTING MULTI-PURPOSE SPACE	A-3	CLASSROOM	1071 SF	20	54
014	TELEPHONE EQUIP. ROOM	A-3	MECHANICAL	72 SF	300	1
015	EXISTING MULTI-PURPOSE SPACE	A-3	CLASSROOM	1034 SF	20	52
017	CORRIDOR / SERVICE	A-3	-	286 SF	0	0
017A	STORAGE	A-3	STORAGE	68 SF	300	1
019	HC MENS TOILET	A-3	-	39 SF	0	0
021	HC WOMENS TOILET	A-3	-	42 SF	0	0
023	EXISTING WOMENS TOILET	A-3	-	162 SF	0	0
025	EXISTING MENS TOILET	A-3	-	161 SF	0	0
027	EXISTING JANITOR CLOSET	A-3	STORAGE	51 SF	300	1
029	EXISTING MECHANICAL ROOM	A-3	MECHANICAL	880 SF	300	3
Grand total				14939 SF		149

TOTAL OCCUPANCY - BASE BID

BASEMENT	149
FIRST FLOOR	1020
SECOND FLOOR	147
TOTAL	1316

TOTAL OCCUPANCY - ALTERNATE

BASEMENT	149
FIRST FLOOR	1199
SECOND FLOOR	186
TOTAL	1534



A1 CODE COMPLIANCE PLAN - BASEMENT

1/16" = 1'-0"

A20 CODE LEGEND

VILLAGE OF ARLINGTON HEIGHTS APPLICABLE CODES:

1. 2009 INTERNATIONAL BUILDING CODE
2. CURRENT ILLINOIS PLUMBING CODE (77 ILL. ADM. CODE 890)
3. CURRENT INTERNATIONAL ENERGY CONSERVATION CODE
4. 2010 ILLINOIS ACCESSIBILITY CODE (71 ILL. ADM. CODE 400)
5. 2009 INTERNATIONAL FUEL GAS CODE
6. 2009 INTERNATIONAL MECHANICAL CODE
7. 2001 NFPA LIFE SAFETY CODE
8. 2011 NATIONAL ELECTRICAL CODE
9. CURRENT ILLINOIS DEPARTMENT OF PUBLIC HEALTH POOL CODE
10. CURRENT ILLINOIS ELEVATORE SAFETY AND REGULATION ACT

BUILDING AREAS:

SEE SHEETS G1.0.3 -G1.0.6 FOR BUILDING AREAS

CODE COMPLIANCE NOTES:

1. BUILDING USES : ASSEMBLY A-3 (Section 303.1), SINGLE OCCUPANCY

   BUILDING TYPE : 2B (TABLE 601)
   FIRE PROTECTION SYSTEMS: AUTOMATIC SPRINKLER SYSTEM
   OCCUPANCY CLASSIFICATIONS: (SECTIONS 302-312, 408)
   1. ACCESSORY OCCUPANCIES (SECTION 508.3.1): N/A
   2. INCIDENTAL USE AREAS (TABLE 508.2): N/A
   3. MIXED OCCUPANCY AND FIRE AREA SEPARATIONS (TABLE 508.4), FOR SPRINKLERED BUILDING:
      a. N/A

2. HEIGHT CALCULATIONS (MIXED USE SEPARATED BY USE GROUPS)

USE GROUP	A-3
ALLOWABLE HEIGHT = # STORIES / HEIGHT (FT)	2 STORIES / 55 FT
INCREASE FOR AUTOMATIC SPRINKLERS (504.2)	1 STORY / 20 FT
ADJUSTED ALLOW. HEIGHT = # STORIES / HEIGHT (FT)	3 STORIES / 75 FT
ACTUAL HEIGHT = # STORIES / HEIGHT (FT)	2 STORY / 36 FT

3. AREA CALCULATIONS (NON-SEPARATED MIXED USE GROUPS)

   SEE SHEETS G1.0.3 -G1.0.6 FOR AREA CALCULATIONS

4. FIRE-RESISTANCE LEGEND:

   1-HR. FIRE SEPARATION ASSEMBLY

   2-HR. FIRE SEPARATION ASSEMBLY

5. OCCUPANCY LEGEND:

   OCCUPANT LOAD: CALCULATED BY ROOM SQUARE FOOTAGE (IBC 2009 TABLE 1004.1.1) OR ACTUAL OCCUPANT LOAD ("0" INDICATES THAT THE ACTUAL OCCUPANT WAS USED)

   OFFICE
   7120 — ROOM NAME
   504 — ROOM NUMBER
   100 — AREA OF ROOM (S.F.)
   9 — S.F. / OCCUPANT (TABLE 1004.1.1)
   OCCUPANT LOAD

6. EXITING LEGEND:

   11 — DIRECTION OF TRAVEL
   OCCUPANT LOAD (TABLE 1004.1.1 OR ACTUAL)
   31" — EXIT CAPACITY REQUIRED (IBC 2009 TABLE 1005.1)
   68" — EXIT CAPACITY PROVIDED (OPENING CLEAR WIDTH)

   * NOTE: EXIT CAPACITY: DOORS: 0.15 IN / PERSON

7. MAXIMUM TRAVEL DISTANCE

   TD (TRAVEL DISTANCE TO EXIT) = 250'
   CD (COMMON PATH OF TRAVEL DISTANCE) = 75'

   DISTANCE TO EXIT (TABLE 1016.1) : ASSEMBLY A-3: 250 FEET

   COMMON PATH OF TRAVEL: 75 FEET

   MIN. # OF EXITS FOR OCCUPANT LOAD:

TABLE 1015.1	
OCCUPANT LOAD (PER STORY)	MIN. NO. OF EXITS (PER STORY)
1 - 500	2
500 - 1000	3
MORE THAN 1000	4

   DEAD END: MAX. 20 FEET (SECTION 1018.4)

8. F.E.C. FIRE EXTINGUISHER CABINET (1 PER 3,000 SF & 75 FT. MAX. TRAVEL)
   RECESSED - U.N.O.

   F.E. SURFACE-MOUNTED FIRE EXTINGUISHER (SECTION 906)

   S.P.V.C. STAND PIPE VALVE CABINET - STAGE ONLY (SECTION 410.7) (SECTION 905)

FIRE-RESISTIVE REQUIREMENTS:

FOR TYPE 2B CONSTRUCTION

RATINGS FOR BUILDING ELEMENTS (IN HOURS):

FIRE RESISTANCE RATING REQUIREMENTS FOR BUILING ELEMENTS (TABLE 601) :

1. a. STRUCTURAL FRAME: 0 HR
   (COLUMNS, GIRDERS, BEAMS, JOISTS, SPANDRELS AND BRACING)
   b. EXTERIOR BEARING WALLS: N/A
   c. INTERIOR BEARING WALLS: 0 HR
   d. NON-BEARING WALLS AND PARTITIONS - EXTERIOR: 0 HR
   e. NON-BEARING WALLS AND PARTITIONS - INTERIOR: 0 HR
   f. FLOOR CONSTRUCTION, INCLUDING SUPPORTING BEAMS AND JOISTS: 0 HR
   g. ROOF CONSTRUCTION, INCLUDING SUPPORTING BEAMS AND JOISTS: 0 HR

   FIRE WALLS AND PARTY WALLS: 2 HR

   FIRE SEPARATION ASSEMBLIES:
   a. EXIT (STAIR) ENCLOSURES 1 hr.
   b. SHAFT ENCLOSURES/ELEVATOR HOISTWAYS 1 hr. (Section 708)
   c. MIXED USE/FIRE SEPARATION ASSEMBLIES N/A
   d. OTHER SEPARATION ASSEMBLIES N/A
   e. SHAFTS N/A

   FIRE PARTITIONS:
   a. EXIT ACCESS CORRIDORS: 0 HR. (TABLE 1017.1)
   b. COMBUSTIBILITY (SECTIONS 602.2, 602.3, 602.4, 602.5, 603)
      1. EXTERIOR WALLS: NON-COMBUSTIBLE
      2. INTERIOR ELEMENTS: NON-COMBUSTIBLE
      3. ROOF: NON-COMBUSTIBLE

ISSUANCE	NO.	DATE	DESCRIPTION
	00	01/08/18	PLAN COMMISSION REVIEW
	01	02/09/18	PLAN COMMISSION REVIEW - REVISIONS

FGM ARCHITECTS
OAK BROOK
CHICAGO
O'FALLON
ST. LOUIS

PROFESSIONAL SEAL

EXPIRATION DATE:

DRAWN FMH, EJS
CHECKED DBV
APPROVED JCD
PROFESSIONAL DESIGN FIRM ILN. 184.005505

OLYMPIC SWIM ADDITION AND RENOVATION
ARLINGTON HEIGHTS PARK DISTRICT
660 Ridge Ave
Arlington Heights, IL 60004

CODE COMPLIANCE PLAN BASEMENT FLOOR

SHEET NO.
G1.0.2

JOB NO. 17-2408.01

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ROOM SCHEDULE - CODE INFORMATION - FIRST FLOOR

vg	ROOM NAME	OCCUPANCY GROUP	OCCUPANCY FUNCTION	ROOM AREA	S.F. PER OCCUPANT	OCCUPANC Y LOAD
100	LOBBY	A-3	BUSINESS	2095 SF	100	21
100A	VESTIBULE	A-3	--	116 SF	0	0
100B	VIEWING AREA	A-3	BUSINESS	891 SF	100	9
100C	CORRIDOR	A-3	-	577 SF	0	0
100D	CORRIDOR	A-3	--	44 SF	0	0
100D	CORRIDOR	A-3	--	36 SF	0	0
101	COPY/WORK	A-3	OFFICE	104 SF	100	2
102	BABYSITTING	A-3	CLASSROOM	610 SF	35	18
102A	TOILET ROOM	A-3	--	51 SF	0	0
102B	STORAGE	A-3	MECHANICAL	111 SF	300	1
103	OFFICE	A-3	OFFICE	108 SF	100	2
106	ELEV.	A-3	-	73 SF	0	0
107	WOMEN'S LOCKER ROOM	A-3	EXERCISE	791 SF	50	16
107A	ENTRY	A-3	--	47 SF	0	0
107B	ENTRY	A-3	--	64 SF	0	0
108	DATA	A-3	MECHANICAL	83 SF	300	1
109	MEN'S LOCKER ROOM	A-3	EXERCISE	552 SF	50	12
109A	ENTRY	A-3	--	68 SF	0	0
109B	ENTRY	A-3	--	65 SF	0	0
110	WOMEN'S	A-3	--	318 SF	0	0
111	FAMILY LOCKER ROOM	A-3	EXERCISE	343 SF	50	7
111A	TOILET	A-3	--	95 SF	0	0
111B	TOILET	A-3	--	93 SF	0	0
111C	TOILET	A-3	--	94 SF	0	0
111D	ENTRY	A-3	-	100 SF	0	0
111E	CHANGING	A-3	EXERCISE	65 SF	50	2
111F	CHANGING	A-3	EXERCISE	65 SF	50	2
112	MEN'S	A-3	-	307 SF	0	0
113	JAN. CL.	A-3	STORAGE	66 SF	300	1
115	WAR WATER POOL	A-3	EXERCISE	3563 SF	0	136
116	VESTIBULE	A-3	--	1274 SF	0	0
117	OUTDOOR STORAGE	A-3	STORAGE	542 SF	300	2
118	CONCESSIONS	A-3	OFFICE	363 SF	100	4
119	CORRIDOR	A-3	-	596 SF	0	0
120	GYMNASIUM	A-4	EXERCISE	10067 SF	50	202
120A	ELEC.	A-3	MECHANICAL	263 SF	300	1
120B	TELCOM	A-3	MECHANICAL	112 SF	300	1
120C	STORAGE	S1	STORAGE	380 SF	300	2
121	Room			Redundant Room		
122	FREIGHT ELEVATOR	A-3	--	67 SF	0	0
124	TRASH / GEN. ENCLOSURE	A-3	STORAGE	502 SF	300	2
126	MULTI-PURPOSE	A-3	CLASSROOM	1233 SF	20	62
126B	STORAGE	A-3	STORAGE	86 SF	300	1
126C	ELEC.	A-3	STORAGE	72 SF	300	1
128	MULTI-PURPOSE	A-3	CLASSROOM	1207 SF	20	61
128B	STORAGE	A-3	STORAGE	287 SF	300	1
130	EXISTING VESTIBULE	A-3	--	84 SF	0	0
131	EXISTING LAP & DIVING POOL DECK	A-3	EXERCISE	8101 SF	50	422
131A	STORAGE	A-3	STORAGE	18 SF	300	1
131B	PUMP ROOM	A-3	MECHANICAL	14 SF	300	1
131C	EXISTING POOL STORAGE	A-3	STORAGE	151 SF	300	1
131D	STORAGE ROOM	A-3	STORAGE	14 SF	300	1
132	CORRIDOR	A-3	-	769 SF	0	0
133	LESURE POOL DECK	A-3	EXERCISE	3361 SF		

ROOM SCHEDULE - CODE INFORMATION - FIRST FLOOR

vg	ROOM NAME	OCCUPANCY GROUP	OCCUPANCY FUNCTION	ROOM AREA	S.F. PER OCCUPANT	OCCUPANC Y LOAD
133A	POOL STORAGE	A-3	STORAGE	92 SF	300	1
135	POOL MANAGER	A-3	OFFICE	427 SF	100	5
135A	LOCKERS	A-3	EXERCISE	61 SF	50	2
136	WOMEN'S	A-3	--	66 SF	0	0
138	MEN'S	A-3	--	83 SF	0	0
140	LOBBY	A-3	--	779 SF	0	0
140A	VESTIBULE	A-3	--	186 SF	0	0
140B	ELEV.	A-3	--	53 SF	0	0
140C	JAN. CL.	A-3	STORAGE	52 SF	300	1
142	HALL	A-3	--	573 SF	0	0
144	RECEPTION WORK AREA	A-3	OFFICE	271 SF	100	3
146	AQUA. OFFICE	A-3	OFFICE	157 SF	100	2
148	AQUA. OFFICE	A-3	OFFICE	146 SF	100	2
150	MEETING ROOM	A-3	OFFICE	583 SF	100	6
Grand total				44792 SF		1020

TOTAL OCCUPANCY - BASE BID

BASEMENT	149
FIRST FLOOR	1020
SECOND FLOOR	147
TOTAL	1316

TOTAL OCCUPANCY - ALTERNATE

BASEMENT	149
FIRST FLOOR	1199
SECOND FLOOR	186
TOTAL	1534

K1 OCCUPANCY SCHEDULE

A1 CODE COMPLIANCE PLAN - FIRST FLOOR - BASE

1/16" = 1'-0"

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GENERAL NOTES

1. PROVIDE FIRE WALLS, FIRE AND SMOKE PARTITIONS AT LOCATIONS INDICATED ON THESE G-Series DRAWINGS. PROVIDE CONSTRUCTION IN ACCORDANCE WITH UL-TEST NUMBERS FOR RATINGS INDICATED.

   UNLESS OTHERWISE NOTED PROVIDE THE FOLLOWING UL-TEST DESIGNS:
   2HR RATED CMU: UL-U905; UL-U906;
   3HR RATED CMU: UL-U904;
   1HR RATED GYPSUM BOARD: UL-U419; UL-U448;
   1-1/2HR RATED GYPSUM BOARD: UL-U419;
   2HR RATED GYPSUM BOARD: UL-U411; UL-U412; UL-U419;
   3HR RATED GYPSUM BOARD: UL-U419;UL-U435;
   1HR RATED SHAFTWALL: UL-U465;
   2HR RATED SHAFTWALL: UL-U-467

2. FIRE RATED WALLS AND PARTITIONS SHALL BE CONTINUOUS, WITHOUT GAPS IN HORIZONTAL AND VERTICAL DIRECTIONS. SEAL ALL PENETRATIONS ACCORDING TO SPECIFIED OR SELECTED UL TESTS.

3. IN ADDITION TO SIGNS REQUIRED BY THE SPECIFICATIONS FOR EACH PENETRATION, PROVIDE STENCILLED SIGNS AT ALL ACCESSIBLE CONCEALED FLOOR, CEILING OR ATTIC SPACE WHICH INCORPORATES THE WORDS: "FIRE AND/OR SMOKE BARRIER - PROTECT ALL OPENINGS". PROVIDE AT LEASTE ONE OR MORE SIGNS ON BOTH SIDES OF EACH WALL SEGMENT SPACED AT LEAST 15' APART. LETTERING SHALL BE AT LEAST 2" IN HEIGHT.

4. BOTTOM FLANGE PROTECTION. PROVIDE INTUMESCENT COATING FIRE PROTECTION AT THE BOTTOM FLANGE OF LINTELS, SHELF ANGLES AND PLATES, IN WALLS THAT ARE PART OF THE PRIMARY STRUCTURAL FRAME, WHICH SPAN MORE THAN 6 FEET AND WHICH ARE EXPOSED TO VIEW. ALL OTHER LINTEL SURFACES IN WALL THAT ARE PART OF THE PRIMARY STRUCTURAL FRAME, SPAN MORE THAN 6 FEET BUT WHICH ARE NOT EXPOSED TO VIEW AND NOT ENCASED BY CMU OR CONCRETE, MAY BE FIRE PROOFED WITH SPRAY FIREPROOFING OR INTUMESCENT COATINGS.

5. STRUCTURAL FRAME SUPPORTING FIRE RATED WALLS: ALL STRUCTURAL COMPONENTS, INCLUDING COLUMNS, GIRDERS, BEAMS, JOISTS AND DECKS, SUPPORTING FIRE RATED SHAFT CONSTRUCTION SHALL BE FIRE RATED TO THE SAME LEVEL OF PROTECTION OF THE SHAFT. PROTECTION OF INDIVIDUAL BEAMS SHALL EXTEND TO THE ENTIRE SPAN OF THE STRUCTURE AND TO COLUMNS ALL THE WAY DOWN TO THE GROUND.

PLUMBING FIXTURES - BASE

1316 TOTAL ANTICIPATED OCCUPANTS: 658 MALE & 658 FEMALE

FIXTURE	REQUIRED		PROVIDED		
	MALE	FEMALE	MALE	FEMALE	UNISEX
WATER CLOSETS	4	9	12	18	2
URINAL	5	-	8	-	-
LAVATORY	4	4	13	13	2
SHOWER	6	6	8	8	1
DRINKING FOUNTAIN OR WATER COOLER	1 SET FOR EACH SET OF MEN/WOMEN TOILETS		2		
SERVICE SINK	1 PER FLOOR		2		

K15 PLUMBING FIXTURE SCHEDULE

VILLAGE OF ARLINGTON HEIGHTS APPLICABLE CODES:

1. 2009 INTERNATIONAL BUILDING CODE
2. CURRENT ILLINOIS PLUMBING CODE (77 ILL. ADM. CODE 890)
3. CURRENT INTERNATIONAL ENERGY CONSERVATION CODE
4. 2010 ILLINOIS ACCESSIBILITY CODE (71 ILL. ADM. CODE 400)
5. 2009 INTERNATIONAL FUEL GAS CODE
6. 2009 INTERNATIONAL MECHANICAL CODE
7. 2001 NFPA LIFE SAFETY CODE
8. 2011 NATIONAL ELECTRICAL CODE
9. CURRENT ILLINOIS DEPARTMENT OF PUBLIC HEALTH POOL CODE
10. CURRENT ILLINOIS ELEVATORE SAFETY AND REGULATION ACT

BUILDING AREAS:

	EXISTING	BASE BID	TOTAL
BASEMENT GROSS ENCLOSED AREA:	6,493 SF	0 SF	6,493 SF
FIRST FLOOR GROSS ENCLOSED AREA:	29,479 SF	28,092 SF	57,571 SF
SECOND FLOOR GROSS ENCLOSED AREA:	0 SF	14,180 SF	14,180 SF
TOTAL EXISTING:	35,972 SF	42,272 SF	78,244 SF

	BUILDING 1	BUILDING 2
BASEMENT GROSS ENCLOSED AREA:	6,493 SF	0 SF
FIRST FLOOR GROSS ENCLOSED AREA:	32,042 SF	22,529 SF
SECOND FLOOR GROSS ENCLOSED AREA:	0 SF	14,180 SF
TOTAL EXISTING:	38,535 SF	36,709 SF

CODE COMPLIANCE NOTES:

1. BUILDING USES : ASSEMBLY A-3 (Section 303.1), SINGLE OCCUPANCY

   BUILDING TYPE : 2B (TABLE 601)
   FIRE PROTECTION SYSTEMS: AUTOMATIC SPRINKLER SYSTEM
   OCCUPANCY CLASSIFICATIONS: (SECTIONS 302-312, 408)
   1. ACCESSORY OCCUPANCIES (SECTION 508.3.1): N/A
   2. INCIDENTAL USE AREAS (TABLE 508.2): N/A
   3. MIXED OCCUPANCY AND FIRE AREA SEPARATIONS (TABLE 508.4), FOR SPRINKLERED BUILDING:
      a. N/A

2. HEIGHT CALCULATIONS (MIXED USE SEPARATED BY USE GROUPS)

USE GROUP	A-3
ALLOWABLE HEIGHT = # STORIES / HEIGHT (FT)	2 STORIES / 55 FT
INCREASE FOR AUTOMATIC SPRINKLERS (504.2)	1 STORY / 20 FT
ADJUSTED ALLOW. HEIGHT = # STORIES / HEIGHT (FT)	3 STORIES / 75 FT
ACTUAL HEIGHT = # STORIES / HEIGHT (FT)	2 STORY / 36 FT

3. AREA CALCULATIONS (NON-SEPARATED MIXED USE GROUPS)

ITEM	% FACTOR	AREA (SF)
ALLOWABLE TABULAR AREA	100	9,500
REDUCTION FOR HEIGHT	0	0
INCREASE FOR OPEN PERIMETER	75	7,125
INCREASE FOR AUTOMATIC SPRINKLER	200	19,000
TOTAL ALLOWABLE AREA	375%	35,625 SF

FRONTAGE (Section 506.2)	N - 204' E - 373' W - 373' S - 204'
TOTAL FRONTAGE	1,154 FT
PERIMETER	1,154 FT
WIDTH OF OPEN SPACE	30 FT
AREA INCREASE - FRONTAGE I = [(F/P)-0.25]xW/30	75%

4. FIRE-RESISTANCE LEGEND:
   - 1-HR. FIRE SEPARATION ASSEMBLY
   - 2-HR. FIRE SEPARATION ASSEMBLY

5. OCCUPANCY LEGEND:
   OCCUPANT LOAD: CALCULATED BY ROOM SQUARE FOOTAGE (IBC 2009 TABLE 1004.1.1) OR ACTUAL OCCUPANT LOAD ('0' INDICATES THAT THE ACTUAL OCCUPANT WAS USED)

   OFFICE
   7120
   504
   100
   9
   - ROOM NAME
   - ROOM NUMBER
   - AREA OF ROOM (S.F.)
   - S.F. / OCCUPANT (TABLE 1004.1.1)
   - OCCUPANT LOAD

6. EXITING LEGEND:
   - 11 — DIRECTION OF TRAVEL
   - OCCUPANT LOAD (TABLE 1004.1.1 OR ACTUAL)
   - 51" / 66" — EXIT CAPACITY REQUIRED (IBC 2009 TABLE 1005.1)
   - EXIT CAPACITY PROVIDED (OPENING CLEAR WIDTH)

   * NOTE: EXIT CAPACITY: DOORS: 0.15 IN / PERSON

7. MAXIMUM TRAVEL DISTANCE
   TD (TRAVEL DISTANCE TO EXIT) = 250'
   CD (COMMON PATH OF TRAVEL DISTANCE) = 75'
   DISTANCE TO EXIT (TABLE 1016.1) : ASSEMBLY A-3: 250 FEET
   COMMON PATH OF TRAVEL: 75 FEET
   MIN. # OF EXITS FOR OCCUPANT LOAD:

TABLE 1015.1	
OCCUPANT LOAD (PER STORY)	MIN. NO. OF EXITS (PER STORY)
1 - 500	2
500 - 1000	3
MORE THAN 1000	4

   DEAD END: MAX. 20 FEET (SECTION 1018.4)

8. F.E.C. FIRE EXTINGUISHER CABINET (1 PER 3,000 SF & 75 FT. MAX. TRAVEL)
   RECESSED - U.N.O.
   F.E. SURFACE-MOUNTED FIRE EXTINGUISHER (SECTION 906)
   S.P.V.C. STAND PIPE VALVE CABINET - STAGE ONLY (SECTION 410.7) (SECTION 905)

FIRE-RESISTIVE REQUIREMENTS:

FOR TYPE 2B CONSTRUCTION
RATINGS FOR BUILDING ELEMENTS (IN HOURS):
FIRE RESISTANCE RATING REQUIREMENTS FOR BUILING ELEMENTS (TABLE 601) :

1. a. STRUCTURAL FRAME: (COLUMNS, GIRDERS, BEAMS, JOISTS, SPANDRELS AND BRACING) 0 HR
   b. EXTERIOR BEARING WALLS: N/A
   c. INTERIOR BEARING WALLS: 0 HR
   d. NON-BEARING WALLS AND PARTITIONS - EXTERIOR: 0 HR
   e. NON-BEARING WALLS AND PARTITIONS - INTERIOR: 0 HR
   f. FLOOR CONSTRUCTION, INCLUDING SUPPORTING BEAMS AND JOISTS: 0 HR
   g. ROOF CONSTRUCTION, INCLUDING SUPPORTING BEAMS AND JOISTS: 0 HR

   FIRE WALLS AND PARTY WALLS: 2 HR

   FIRE SEPARATION ASSEMBLIES:
   a. EXIT (STAIR) ENCLOSURES: 1 hr.
   b. SHAFT ENCLOSURES/ELEVATOR HOISTWAYS 1 hr. (Section 708)
   c. MIXED USE/FIRE SEPARATION ASSEMBLIES N/A
   d. OTHER SEPARATION ASSEMBLIES N/A
   e. SHAFTS N/A

   FIRE PARTITIONS:
   a. EXIT ACCESS CORRIDORS: 0 HR. (TABLE 1017.1)
   b. COMBUSTIBILITY (SECTIONS 602.2, 602.3, 602.4, 602.5, 603)
      1. EXTERIOR WALLS: NON-COMBUSTIBLE
      2. INTERIOR ELEMENTS: NON-COMBUSTIBLE
      3. ROOF: NON-COMBUSTIBLE

2. OTHER REQUIREMENTS: INCIDENTAL USE AREAS (TABLE 508.2) / (TABLE 715.4):
   a. MECHANICAL/ELECTRICAL/PUMP 1 HR. / 60 MIN. DOORS

NO.	DATE	DESCRIPTION
ISSUANCE		
00	01/08/18	PLAN COMMISSION REVIEW
01	02/09/18	PLAN COMMISSION REVIEW - REVISIONS

FGM ARCHITECTS
CHICAGO OAKBROOK O'FALLON ST. LOUIS

PROFESSIONAL SEAL

EXPIRATION DATE:

DRAWN EMM, E-S
CHECKED DBY
APPROVED JCD
PROFESSIONAL DESIGN FIRM IL # 184.005393

OLYMPIC SWIM ADDITION AND RENOVATION
ARLINGTON HEIGHTS PARK DISTRICT
660 Ridge Ave
Arlington Heights, IL 60004

CODE COMPLIANCE PLAN FIRST FLOOR - BASE

SHEET NO.
G1.0.3

JOB NO. 17-2408.01

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K1 NOT USED

K10 OCCUPANCY SCHEDULE

ROOM SCHEDULE - CODE INFORMATION - SECOND FLOOR

ROOM NUMBER	ROOM NAME	OCCUPANCY GROUP	OCCUPANCY FUNCTION	ROOM AREA	S.F. PER OCCUPANT	OCCUPANCY LOAD
201	CONTROL	A-3	OFFICE	99 SF	100	1
204	ASSESSMENT	A-3	OFFICE	129 SF	100	2
205	FITNESS	A-3	EXERCISE	5143 SF	50	35
205B	STORAGE	A-3	STORAGE	182 SF	300	1
206	ASSESSMENT	A-3	OFFICE	142 SF	100	2
208	ELEV.	A-3	--	72 SF	0	0
210A	TRACK	A-3	EXERCISE	4010 SF	50	81
212	CORRIDOR	A-3	--	1203 SF	0	0
212A	STRETCHING	A-3	EXERCISE	537 SF	50	10
214	ELEC.	A-3	MECHANICAL	28 SF	300	1
216	WOMEN'S	A-3	--	280 SF	0	0
216A	LOCKER ROOM	A-3	EXERCISE	274 SF	50	6
218	MEN'S	A-3	--	278 SF	0	0
218A	LOCKER ROOM	A-3	EXERCISE	274 SF	50	6
220	JAN/LAUNDRY	A-3	MECHANICAL	77 SF	300	1
222	ELEC.	A-3	MECHANICAL	27 SF	300	1
Grand total				12755 SF		147

TOTAL OCCUPANCY - BASE BID

BASEMENT	149
FIRST FLOOR	1020
SECOND FLOOR	147
TOTAL	1316

TOTAL OCCUPANCY - ALTERNATE

BASEMENT	149
FIRST FLOOR	1199
SECOND FLOOR	186
TOTAL	1534

K15 PLUMBING FIXTURE SCHEDULE

PLUMBING FIXTURES - BASE

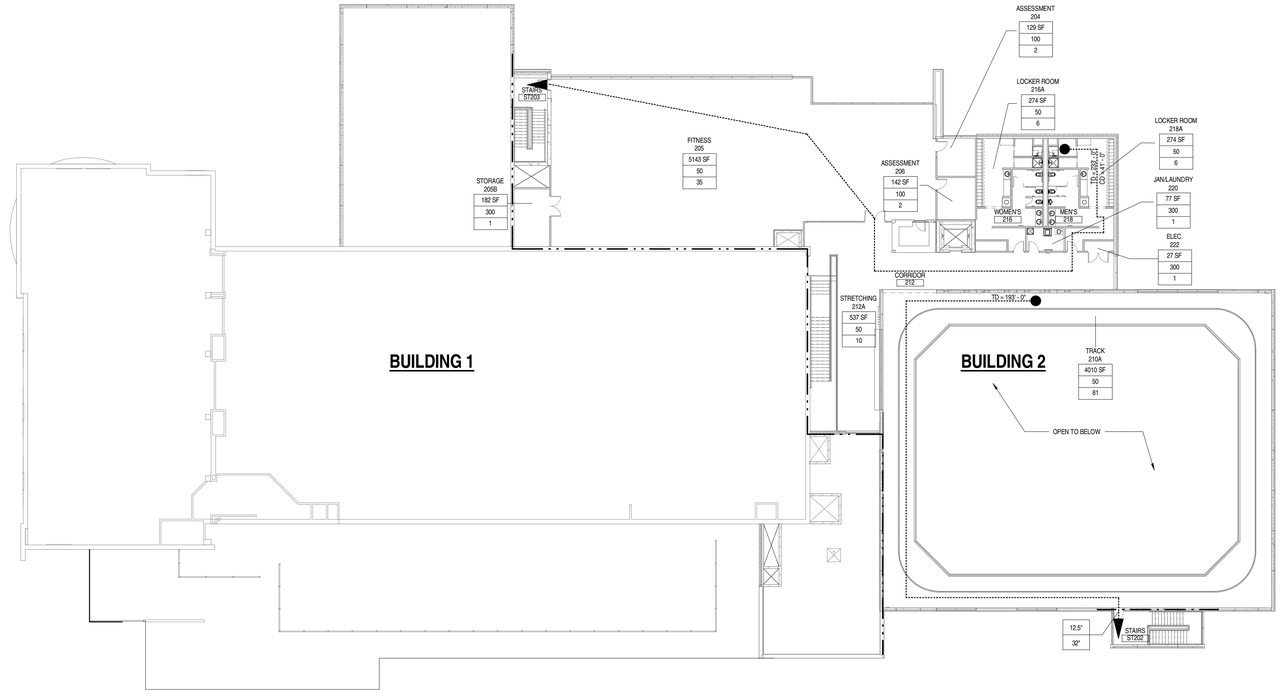
1316 TOTAL ANTICIPATED OCCUPANTS: 658 MALE & 658 FEMALE

FIXTURE	REQUIRED		PROVIDED		
	MALE	FEMALE	MALE	FEMALE	UNISEX
WATER CLOSETS	4	9	12	18	2
URINAL	5	-	8	-	-
LAVATORY	4	4	13	13	2
SHOWER	6	6	8	8	1
DRINKING FOUNTAIN OR WATER COOLER	1 SET FOR EACH SET OF MEN/WOMEN TOILETS		2		
SERVICE SINK	1 PER FLOOR		2		

GENERAL NOTES

1. PROVIDE FIRE WALLS, FIRE AND SMOKE PARTITIONS AT LOCATIONS INDICATED ON THESE G-Series DRAWINGS. PROVIDE CONSTRUCTION IN ACCORDANCE WITH UL-TEST NUMBERS FOR RATINGS INDICATED.

   UNLESS OTHERWISE NOTED PROVIDE THE FOLLOWING UL-TEST DESIGNS:
   2HR RATED CMU: UL-U905; UL-U906;
   3HR RATED CMU: UL-U904;
   1HR RATED GYPSUM BOARD: UL-U419; UL-U448;
   1-1/2HR RATED GYPSUM BOARD: UL-U449
   2HR RATED GYPSUM BOARD: UL-U411; UL-U412; UL-U419;
   3HR RATED GYPSUM BOARD: UL-U419;UL-U430;
   1HR RATED SHAFTWALL: UL-U465;
   2HR RATED SHAFTWALL: UL-U-467
2. FIRE RATED WALLS AND PARTITIONS SHALL BE CONTINUOUS, WITHOUT GAPS IN HORIZONTAL AND VERTICAL DIRECTIONS. SEAL ALL PENETRATIONS ACCORDING TO SPECIFIED OR SELECTED UL TESTS.
3. IN ADDITION TO SIGNS REQUIRED BY THE SPECIFICATIONS FOR EACH PENETRATION, PROVIDE STENCILLED SIGNS AT ALL ACCESSIBLE CONCEALED FLOOR, CEILING OR ATTIC SPACE WHICH INCORPORATES THE WORDS: "FIRE AND/OR SMOKE BARRIER - PROTECT ALL OPENINGS". PROVIDE AT LEASTE ONE OR MORE SIGNS ON BOTH SIDES OF EACH WALL SEGMENT SPACED AT LEAST 15' APART. LETTERING SHALL BE AT LEAST 2" IN HEIGHT.
4. BOTTOM FLANGE PROTECTION. PROVIDE INTUMESCENT COATING FIRE PROTECTION AT THE BOTTOM FLANGE OF LINTELS, SHELF ANGLES AND PLATES, IN WALLS THAT ARE PART OF THE PRIMARY STRUCTURAL FRAME, WHICH SPAN MORE THAN 6 FEET AND WHICH ARE EXPOSED TO VIEW. ALL OTHER LINTEL SURFACES IN WALL THAT ARE PART OF THE PRIMARY STRUCTURAL FRAME, SPAN MORE THAN 6 FEET BUT WHICH ARE NOT EXPOSED TO VIEW AND NOT ENCASED BY CMU OR CONCRETE, MAY BE FIRE PROOFED WITH SPRAY FIREPROOFING OR INTUMESCENT COATINGS.
5. STRUCTURAL FRAME SUPPORTING FIRE RATED WALLS: ALL STRUCTURAL COMPONENTS, INCLUDING COLUMNS, GIRDERS, BEAMS, JOISTS AND DECKS, SUPPORTING FIRE RATED SHAFT CONSTRUCTION SHALL BE FIRE RATED TO THE SAME LEVEL OF PROTECTION OF THE SHAFT. PROTECTION OF INDIVIDUAL BEAMS SHALL EXTEND TO THE ENTIRE SPAN OF THE STRUCTURE AND TO COLUMNS ALL THE WAY DOWN TO THE GROUND.



A1 CODE COMPLIANCE PLAN - SECOND FLOOR - BASE

1/16" = 1'-0"

VILLAGE OF ARLINGTON HEIGHTS APPLICABLE CODES:

1.	2009	INTERNATIONAL BUILDING CODE
2.	CURRENT	ILLINOIS PLUMBING CODE (77 ILL. ADM. CODE 890)
3.	CURRENT	INTERNATIONAL ENERGY CONSERVATION CODE
4.	2010	ILLINOIS ACCESSIBILITY CODE (71 ILL. ADM. CODE 400)
5.	2009	INTERNATIONAL FUEL GAS CODE
6.	2009	INTERNATIONAL MECHANICAL CODE
7.	2001	NFPA LIFE SAFETY CODE
8.	2011	NATIONAL ELECTRICAL CODE
9.	CURRENT	ILLINOIS DEPARTMENT OF PUBLIC HEALTH POOL CODE
10.	CURRENT	ILLINOIS ELEVATORE SAFETY AND REGULATION ACT

BUILDING AREAS:

	EXISTING	BASE BID	TOTAL
BASEMENT GROSS ENCLOSED AREA:	6,493 SF	0 SF	6,493 SF
FIRST FLOOR GROSS ENCLOSED AREA:	29,479 SF	28,092 SF	57,571 SF
SECOND FLOOR GROSS ENCLOSED AREA:	0 SF	14,180 SF	14,180 SF
TOTAL EXISTING:	35,972 SF	42,272 SF	78,244 SF

	BUILDING 1	BUILDING 2
BASEMENT GROSS ENCLOSED AREA:	6,493 SF	0 SF
FIRST FLOOR GROSS ENCLOSED AREA:	32,042 SF	22,529 SF
SECOND FLOOR GROSS ENCLOSED AREA:	0 SF	14,180 SF
TOTAL EXISTING:	38,535 SF	36,705 SF

CODE COMPLIANCE NOTES:

1. BUILDING USES : ASSEMBLY A-3 (Section 303.1), SINGLE OCCUPANCY

   BUILDING TYPE : 2B (TABLE 601)
   FIRE PROTECTION SYSTEMS: AUTOMATIC SPRINKLER SYSTEM
   OCCUPANCY CLASSIFICATIONS: (SECTIONS 302-312, 408)
   1. ACCESSORY OCCUPANCIES (SECTION 508.3.1): N/A
   2. INCIDENTAL USE AREAS (TABLE 508.2): N/A
   3. MIXED OCCUPANCY AND FIRE AREA SEPARATIONS (TABLE 508.4), FOR SPRINKLERED BUILDING:
      a. N/A
2. HEIGHT CALCULATIONS (MIXED USE SEPARATED BY USE GROUPS)

USE GROUP	A-3
ALLOWABLE HEIGHT = # STORIES / HEIGHT (FT)	2 STORIES / 55 FT
INCREASE FOR AUTOMATIC SPRINKLERS (504.2)	1 STORY / 20 FT
ADJUSTED ALLOW. HEIGHT = # STORIES / HEIGHT (FT)	3 STORIES / 75 FT
ACTUAL HEIGHT = # STORIES / HEIGHT (FT)	2 STORY / 36 FT

3. AREA CALCULATIONS (NON-SEPARATED MIXED USE GROUPS)

ITEM	% FACTOR	AREA (SF)
ALLOWABLE TABULAR AREA	100	9,500
REDUCTION FOR HEIGHT	0	0
INCREASE FOR OPEN PERIMETER	75	7,125
INCREASE FOR AUTOMATIC SPRINKLER	200	19,000
TOTAL ALLOWABLE AREA	375%	35,625 SF

FRONTAGE (Section 506.2)	N - 204' E - 373' W - 372' S - 204'
TOTAL FRONTAGE	1,154 FT
PERIMETER	1,154 FT
WIDTH OF OPEN SPACE	30 FT
AREA INCREASE - FRONTAGE I = [(F/P)-0.25]W/30	75%

4. FIRE-RESISTANCE LEGEND:
   - 1-HR. FIRE SEPARATION ASSEMBLY
   - 2-HR. FIRE SEPARATION ASSEMBLY
5. OCCUPANCY LEGEND:

   OCCUPANT LOAD: CALCULATED BY ROOM SQUARE FOOTAGE (IBC 2009 TABLE 1004.1.1) OR ACTUAL OCCUPANT LOAD ("5" INDICATES THAT THE ACTUAL OCCUPANT WAS USED)

   OFFICE — ROOM NAME
   7120 — ROOM NUMBER
   504 — AREA OF ROOM (S.F.)
   100 — S.F. / OCCUPANT (TABLE 1004.1.1)
   5 — OCCUPANT LOAD
6. EXITING LEGEND:
   - 71 — DIRECTION OF TRAVEL
   - OCCUPANT LOAD (TABLE 1004.1.1 OR ACTUAL)
   - 31" / 68" — EXIT CAPACITY REQUIRED (IBC 2009 TABLE 1005.1)
   - EXIT CAPACITY PROVIDED (OPENING CLEAR WIDTH)

   * NOTE: EXIT CAPACITY: DOORS: 0.15 IN / PERSON
7. MAXIMUM TRAVEL DISTANCE

   TD (TRAVEL DISTANCE TO EXIT) = 250'
   CD (COMMON PATH OF TRAVEL DISTANCE) = 75'

   DISTANCE TO EXIT (TABLE 1016.1) : ASSEMBLY A-3: 250 FEET
   COMMON PATH OF TRAVEL: 75 FEET
   MIN. # OF EXITS FOR OCCUPANT LOAD:

TABLE 1015.1	
OCCUPANT LOAD (PER STORY)	MIN. NO. OF EXITS (PER STORY)
1 - 500	2
500 - 1000	3
MORE THAN 1000	4

   DEAD END: MAX. 20 FEET (SECTION 1018.4)
8. F.E.C. FIRE EXTINGUISHER CABINET (1 PER 3,000 SF & 75 FT. MAX. TRAVEL) RECESSED - U.N.O.

   F.E. SURFACE-MOUNTED FIRE EXTINGUISHER (SECTION 906)

   S.P.V.C. STAND PIPE VALVE CABINET - STAGE ONLY (SECTION 410.7) (SECTION 905)

FIRE-RESISTIVE REQUIREMENTS:

FOR TYPE 2B CONSTRUCTION
RATINGS FOR BUILDING ELEMENTS (IN HOURS):
FIRE RESISTANCE RATING REQUIREMENTS FOR BUILING ELEMENTS (TABLE 601) :

1. a. STRUCTURAL FRAME: (COLUMNS, GIRDERS, BEAMS, JOISTS, SPANDRELS AND BRACING) 0 HR
   b. EXTERIOR BEARING WALLS: N/A
   c. INTERIOR BEARING WALLS: 0 HR
   d. NON-BEARING WALLS AND PARTITIONS - EXTERIOR: 0 HR
   e. NON-BEARING WALLS AND PARTITIONS - INTERIOR: 0 HR
   f. FLOOR CONSTRUCTION, INCLUDING SUPPORTING BEAMS AND JOISTS: 0 HR
   g. ROOF CONSTRUCTION, INCLUDING SUPPORTING BEAMS AND JOISTS: 0 HR

   FIRE WALLS AND PARTY WALLS: 2 HR

   FIRE SEPARATION ASSEMBLIES:
   a. EXIT (STAIR) ENCLOSURES 1 hr.
   b. SHAFT ENCLOSURES/ELEVATOR HOISTWAYS 1 hr. (Section 708)
   c. MIXED USE/FIRE SEPARATION ASSEMBLIES N/A
   d. OTHER SEPARATION ASSEMBLIES N/A
   e. SHAFTS N/A

   FIRE PARTITIONS:
   a. EXIT ACCESS CORRIDORS: 0 HR. (TABLE 1017.1)
   b. COMBUSTIBILITY (SECTIONS 602.2, 602.3, 602.4, 602.5, 603)
      1. EXTERIOR WALLS: NON-COMBUSTIBLE
      2. INTERIOR ELEMENTS: NON-COMBUSTIBLE
      3. ROOF: NON-COMBUSTIBLE
2. OTHER REQUIREMENTS: INCIDENTAL USE AREAS (TABLE 508.2) / (TABLE 715.4):
   a. MECHANICAL/ELECTRICAL/PUMP 1 HR. / 60 MIN. DOORS

NO.	DATE	ISSUANCE / DESCRIPTION
1	04.06.2017	ISSUED FOR CONSTRUCTION

FGM ARCHITECTS
CHICAGO OAKBROOK O'FALLON

PROFESSIONAL SEAL

EXPIRATION DATE:

DATE	02/09/18
DRAWN	Author
CHECKED	Checker
APPROVED	Approver
PROFESSIONAL DESIGN FIRM IL # 184.003350	

OLYMPIC SWIM ADDITION AND RENOVATION
ARLINGTON HEIGHTS PARK DISTRICT
660 Ridge Ave
Arlington Heights, IL 60004

CODE COMPLIANCE PLAN - SECOND FLOOR - BASE

SHEET NO.
G1.0.4

JOB NO. 17-2408.01

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ROOM SCHEDULE - CODE INFORMATION - FIRST FLOOR						
vg	ROOM NAME	OCCUPANCY GROUP	OCCUPANCY FUNCTION	ROOM AREA	S.F. PER OCCUPANT	OCCUPANC Y LOAD
100	LOBBY	A-3	BUSINESS	2095 SF	100	21
100A	VESTIBULE	A-3	--	116 SF	0	0
100B	VIEWING AREA	A-3	BUSINESS	891 SF	100	9
100C	CORRIDOR	A-3	--	577 SF	0	0
100D	CORRIDOR	A-3	--	44 SF	0	0
100D	CORRIDOR	A-3	--	36 SF	0	0
101	COPY/WORK	A-3	OFFICE	104 SF	100	2
102	BABYSITTING	A-3	CLASSROOM	610 SF	35	18
102A	TOILET ROOM	A-3	--	51 SF	0	0
102B	STORAGE	A-3	MECHANICAL	111 SF	300	1
103	OFFICE	A-3	OFFICE	108 SF	100	2
106	ELEV	A-3	-	73 SF	0	0
107	WOMEN'S LOCKER ROOM	A-3	EXERCISE	791 SF	50	16
107A	ENTRY	A-3	--	47 SF	0	0
107B	ENTRY	A-3	--	64 SF	0	0
108	DATA	A-3	MECHANICAL	83 SF	300	1
109	MEN'S LOCKER ROOM	A-3	EXERCISE	552 SF	50	12
109A	ENTRY	A-3	--	68 SF	0	0
109B	ENTRY	A-3	--	65 SF	0	0
110	WOMEN'S	A-3	--	318 SF	0	0
111	FAMILY LOCKER ROOM	A-3	EXERCISE	343 SF	50	7
111A	TOILET	A-3	--	95 SF	0	0
111B	TOILET	A-3	--	93 SF	0	0
111C	TOILET	A-3	--	94 SF	0	0
111D	ENTRY	A-3	--	100 SF	0	0
111E	CHANGING	A-3	EXERCISE	65 SF	50	2
111F	CHANGING	A-3	EXERCISE	65 SF	50	2
112	MEN'S	A-3	--	327 SF	0	0
113	JAN. CL.	A-3	STORAGE	66 SF	300	1
115	WAR WATER POOL	A-3	EXERCISE	3563 SF	ACTUAL	136
116	VESTIBULE	A-3	--	1274 SF	0	0
117	OUTDOOR STORAGE	A-3	STORAGE	542 SF	300	2
118	CONCESSIONS	A-3	OFFICE	363 SF	100	4
119	CORRIDOR	A-3	--	596 SF	0	0
120	GYMNASIUM	A-4	EXERCISE	19097 SF	50	381
120A	ELEC.	A-3	MECHANICAL	263 SF	300	1
120B	TELCOM	A-3	MECHANICAL	112 SF	300	1
120C	STORAGE	S1	STORAGE	380 SF	300	2
121	Room			Redundant Room		
122	FREIGHT ELEVATOR	A-3	--	67 SF	0	0
124	TRASH / GEN. ENCLOSURE	A-3	STORAGE	502 SF	300	2
126	MULTI-PURPOSE	A-3	CLASSROOM	1233 SF	20	62
126B	STORAGE	A-3	STORAGE	86 SF	300	1
126C	ELEC.	A-3	STORAGE	72 SF	300	1
128	MULTI-PURPOSE	A-3	CLASSROOM	1207 SF	20	61
128B	STORAGE	A-3	STORAGE	287 SF	ACTUAL	1
130	EXISTING VESTIBULE	A-3	--	84 SF	0	0
131	EXISTING LAP & DIVING POOL DECK	A-3	EXERCISE	8101 SF	50	422
131A	STORAGE	A-3	STORAGE	18 SF	300	1
131B	PUMP ROOM	A-3	MECHANICAL	14 SF	300	1
131C	EXISTING POOL STORAGE	A-3	STORAGE	151 SF	300	1
131D	STORAGE ROOM	A-3	STORAGE	14 SF	ACTUAL	SEE LAP POOL
132	CORRIDOR	A-3	--	793 SF	0	0
133	LEISURE POOL DECK	A-3	EXERCISE	3361 SF		

ROOM SCHEDULE - CODE INFORMATION - FIRST FLOOR						
vg	ROOM NAME	OCCUPANCY GROUP	OCCUPANCY FUNCTION	ROOM AREA	S.F. PER OCCUPANT	OCCUPANC Y LOAD
133A	POOL STORAGE	A-3	STORAGE	92 SF	300	1
135	POOL MANAGER	A-3	OFFICE	427 SF	100	5
135A	LOCKERS	A-3	EXERCISE	61 SF	50	2
135B	LOCKERS	A-3	EXERCISE	50 SF	50	1
135C	DATA CL.	A-3	MECHANICAL	11 SF	300	1
136	WOMEN'S	A-3	--	66 SF	0	0
138	MEN'S	A-3	--	83 SF	0	0
140	LOBBY	A-3	--	779 SF	0	0
140A	VESTIBULE	A-3	--	186 SF	0	0
140B	ELEV	A-3	--	53 SF	0	0
140C	JAN. CL.	A-3	STORAGE	52 SF	300	1
142	HALL	A-3	--	573 SF	0	0
144	RECEPTION WORK AREA	A-3	OFFICE	271 SF	100	3
146	AQUA. OFFICE	A-3	OFFICE	157 SF	100	2
148	AQUA. OFFICE	A-3	OFFICE	146 SF	100	2
150	MEETING ROOM	A-3	OFFICE	583 SF	100	6
Grand total				57520 SF		1199

TOTAL OCCUPANCY - BASE BID

BASEMENT	149
FIRST FLOOR	1020
SECOND FLOOR	147
TOTAL	1316

TOTAL OCCUPANCY - ALTERNATE

BASEMENT	149
FIRST FLOOR	1199
SECOND FLOOR	186
TOTAL	1534

K1 OCCUPANCY SCHEDULE

PLUMBING FIXTURES - ALTERNATE

1510 TOTAL ANTICIPATED OCCUPANTS: 755 MALE & 755 FEMALE

FIXTURE	REQUIRED		PROVIDED		
	MALE	FEMALE	MALE	FEMALE	UNISEX
WATER CLOSETS	4	9	12	18	2
URINAL	5	-	8	-	-
LAVATORY	4	4	13	13	2
SHOWER	6	6	8	8	1
DRINKING FOUNTAIN OR WATER COOLER	1 SET FOR EACH SET OF MEN/WOMEN TOILETS		2		
SERVICE SINK	1 PER FLOOR		2		

K8 PLUMBING FIXTURE SCHEDULE

VILLAGE OF ARLINGTON HEIGHTS APPLICABLE CODES:

1. 2009 INTERNATIONAL BUILDING CODE
2. CURRENT ILLINOIS PLUMBING CODE (77 ILL. ADM. CODE 890)
3. CURRENT INTERNATIONAL ENERGY CONSERVATION CODE
4. 2010 ILLINOIS ACCESSIBILITY CODE (71 ILL. ADM. CODE 400)
5. 2009 INTERNATIONAL FUEL GAS CODE
6. 2009 INTERNATIONAL MECHANICAL CODE
7. 2001 NFPA LIFE SAFETY CODE
8. 2011 NATIONAL ELECTRICAL CODE
9. CURRENT ILLINOIS DEPARTMENT OF PUBLIC HEALTH POOL CODE
10. CURRENT ILLINOIS ELEVATORE SAFETY AND REGULATION ACT

BUILDING AREAS:

	EXISTING	BASE W/ ALTERNATE	TOTAL
BASEMENT GROSS ENCLOSED AREA:	6,493 SF	0 SF	6,493 SF
FIRST FLOOR GROSS ENCLOSED AREA:	29,479 SF	37,739 SF	67,218 SF
SECOND FLOOR GROSS ENCLOSED AREA:	0 SF	16,507 SF	16,507 SF
TOTAL EXISTING:	35,972 SF	54,246 SF	90,218 SF

	BUILDING 1	BUILDING 2
BASEMENT GROSS ENCLOSED AREA:	6,493 SF	0 SF
FIRST FLOOR GROSS ENCLOSED AREA:	35,042 SF	32,176 SF
SECOND FLOOR GROSS ENCLOSED AREA:	0 SF	16,507 SF
TOTAL EXISTING:	41,535 SF	48,683 SF

CODE COMPLIANCE NOTES:

1. BUILDING USES : ASSEMBLY A-3 (Section 303.1), SINGLE OCCUPANCY

   BUILDING TYPE : 2B (TABLE 601)
   FIRE PROTECTION SYSTEMS: AUTOMATIC SPRINKLER SYSTEM
   OCCUPANCY CLASSIFICATIONS : (SECTIONS 302-312, 408)
   1. ACCESSORY OCCUPANCIES (SECTION 508.3.1): N/A
   2. INCIDENTAL USE AREAS (TABLE 508.2): N/A
   3. MIXED OCCUPANCY AND FIRE AREA SEPARATIONS (TABLE 508.4), FOR SPRINKLERED BUILDING: N/A

2. HEIGHT CALCULATIONS (MIXED USE SEPARATED BY USE GROUPS)

USE GROUP	A-3
ALLOWABLE HEIGHT = # STORIES / HEIGHT (FT)	2 STORIES / 55 FT
INCREASE FOR AUTOMATIC SPRINKLERS (504.2)	1 STORY / 20 FT
ADJUSTED ALLOW. HEIGHT = # STORIES / HEIGHT (FT)	3 STORIES / 75 FT
ACTUAL HEIGHT = # STORIES / HEIGHT (FT)	2 STORY / 36 FT

3. AREA CALCULATIONS (NON-SEPARATED MIXED USE GROUPS)

ITEM	% FACTOR	AREA (SF)
ALLOWABLE TABULAR AREA	100	9,500
REDUCTION FOR HEIGHT	0	0
INCREASE FOR OPEN PERIMETER	75	7,125
INCREASE FOR AUTOMATIC SPRINKLER	200	19,000
TOTAL ALLOWABLE AREA	375%	35,625 SF

FRONTAGE (Section 506.2)	N - 204' E - 471' W - 471' S - 204'
TOTAL FRONTAGE	1,350 FT
PERIMETER	1,1350 FT
WIDTH OF OPEN SPACE	30 FT
AREA INCREASE - FRONTAGE I = ((F/P)-0.25)W/30	75%

4. FIRE-RESISTANCE LEGEND:
   - 1-HR. FIRE SEPARATION ASSEMBLY
   - 2-HR. FIRE SEPARATION ASSEMBLY

5. OCCUPANCY LEGEND:

   OCCUPANT LOAD: CALCULATED BY ROOM SQUARE FOOTAGE (IBC 2009 TABLE 1004.1.1) OR ACTUAL OCCUPANT LOAD ("0" INDICATES THAT THE ACTUAL OCCUPANT WAS USED)

   OFFICE / 7120 / 504 / 100 / 9
   - ROOM NAME
   - ROOM NUMBER
   - AREA OF ROOM (S.F.)
   - S.F. / OCCUPANT (TABLE 1004.1.1)
   - OCCUPANT LOAD

6. EXITING LEGEND:
   - 11 — DIRECTION OF TRAVEL
   - OCCUPANT LOAD (TABLE 1004.1.1 OR ACTUAL)
   - 31 / 66 — EXIT CAPACITY REQUIRED (IBC 2009 TABLE 1005.1)
   - EXIT CAPACITY PROVIDED (OPENING CLEAR WIDTH)

   * NOTE: EXIT CAPACITY: DOORS: 0.15 IN / PERSON

7. MAXIMUM TRAVEL DISTANCE

   TD (TRAVEL DISTANCE TO EXIT) = 250'
   CD (COMMON PATH OF TRAVEL DISTANCE) = 75'

   DISTANCE TO EXIT (TABLE 1016.1) : ASSEMBLY A-3: 250 FEET
   COMMON PATH OF TRAVEL: 75 FEET
   MIN. # OF EXITS FOR OCCUPANT LOAD:

TABLE 1015.1	
OCCUPANT LOAD (PER STORY)	MIN. NO. OF EXITS (PER STORY)
1 - 500	2
500 - 1000	3
MORE THAN 1000	4

   DEAD END: MAX. 20 FEET (SECTION 1018.4)

8. F.E.C. FIRE EXTINGUISHER CABINET RECESSED - U.N.O. (1 PER 3,000 SF & 75 FT. MAX. TRAVEL)
   F.E. SURFACE-MOUNTED FIRE EXTINGUISHER (SECTION 906)
   S.P.V.C. STAND PIPE VALVE CABINET - STAGE ONLY (SECTION 410.7) (SECTION 905)

FIRE-RESISTIVE REQUIREMENTS:

FOR TYPE 2B CONSTRUCTION

RATINGS FOR BUILDING ELEMENTS (IN HOURS):

FIRE RESISTANCE RATING REQUIREMENTS FOR BUILING ELEMENTS (TABLE 601) :

1. a. STRUCTURAL FRAME: 0 HR
   (COLUMNS, GIRDERS, BEAMS, JOISTS, SPANDRELS AND BRACING)
   b. EXTERIOR BEARING WALLS: N/A
   c. INTERIOR BEARING WALLS: 0 HR
   d. NON-BEARING WALLS AND PARTITIONS - EXTERIOR: 0 HR
   e. NON-BEARING WALLS AND PARTITIONS - INTERIOR: 0 HR
   f. FLOOR CONSTRUCTION, INCLUDING SUPPORTING BEAMS AND JOISTS: 0 HR
   g. ROOF CONSTRUCTION, INCLUDING SUPPORTING BEAMS AND JOISTS: 0 HR

   FIRE WALLS AND PARTY WALLS: 2 HR

   FIRE SEPARATION ASSEMBLIES:
   a. EXIT (STAIR) ENCLOSURES 1 hr.
   b. SHAFT ENCLOSURES/ELEVATOR HOISTWAYS 1 hr. (Section 708)
   c. MIXED USE/FIRE SEPARATION ASSEMBLIES N/A
   d. OTHER SEPARATION ASSEMBLIES N/A
   e. SHAFTS N/A

   FIRE PARTITIONS:
   a. EXIT ACCESS CORRIDORS: 0 HR. (TABLE 1017.1)
   b. COMBUSTIBILITY (SECTIONS 602.2, 602.3, 602.4, 602.5, 603)
      1. EXTERIOR WALLS: NON-COMBUSTIBLE
      2. INTERIOR ELEMENTS: NON-COMBUSTIBLE
      3. ROOF: NON-COMBUSTIBLE

2. OTHER REQUIREMENTS: INCIDENTAL USE AREAS (TABLE 508.2) / (TABLE 715.4):
   a. MECHANICAL/ELECTRICAL/PUMP 1 HR. / 60 MIN. DOORS

GENERAL NOTES

1. PROVIDE FIRE WALLS, FIRE AND SMOKE PARTITIONS AT LOCATIONS INDICATED ON THESE G-Series DRAWINGS. PROVIDE CONSTRUCTION IN ACCORDANCE WITH UL-TEST NUMBERS FOR RATINGS INDICATED.

   UNLESS OTHERWISE NOTED PROVIDE THE FOLLOWING UL-TEST DESIGNS:
   2HR RATED CMU: UL-U905; UL-U906;
   3HR RATED CMU: UL-U904;
   1HR RATED GYPSUM BOARD: UL-U419; UL-U448;
   1-1/2HR RATED GYPSUM BOARD: UL-U449
   2HR RATED GYPSUM BOARD: UL-U411; UL-U412; UL-U419;
   3HR RATED GYPSUM BOARD: UL-U419;UL-U435;
   1HR RATED SHAFTWALL: UL-U465
   2HR RATED SHAFTWALL: UL-U-467

2. FIRE RATED WALLS AND PARTITIONS SHALL BE CONTINUOUS, WITHOUT GAPS IN HORIZONTAL AND VERTICAL DIRECTIONS. SEAL ALL PENETRATIONS ACCORDING TO SPECIFIED OR SELECTED UL TESTS.

3. IN ADDITION TO SIGNS REQUIRED BY THE SPECIFICATIONS FOR EACH PENETRATION, PROVIDE STENCILLED SIGNS AT ALL ACCESSIBLE CONCEALED FLOOR, CEILING OR ATTIC SPACE WHICH INCORPORATES THE WORDS: "FIRE AND/OR SMOKE BARRIER - PROTECT ALL OPENINGS". PROVIDE AT LEASTE ONE OR MORE SIGNS ON BOTH SIDES OF EACH WALL SEGMENT SPACED AT LEAST 15' APART. LETTERING SHALL BE AT LEAST 2" IN HEIGHT.

4. BOTTOM FLANGE PROTECTION: PROVIDE INTUMESCENT COATING FIRE PROTECTION AT THE BOTTOM FLANGE OF LINTELS, SHELF ANGLES AND PLATES, IN WALLS THAT ARE PART OF THE PRIMARY STRUCTURAL FRAME, WHICH SPAN MORE THAN 6 FEET AND WHICH ARE EXPOSED TO VIEW. ALL OTHER LINTEL SURFACES IN WALL THAT ARE PART OF THE PRIMARY STRUCTURAL FRAME, SPAN MORE THAN 6 FEET BUT WHICH ARE NOT EXPOSED TO VIEW AND NOT ENCASED BY CMU OR CONCRETE, MAY BE FIRE PROOFED WITH SPRAY FIREPROOFING OR INTUMESCENT COATINGS.

5. STRUCTURAL FRAME SUPPORTING FIRE RATED WALLS: ALL STRUCTURAL COMPONENTS, INCLUDING COLUMNS, GIRDERS, BEAMS, JOISTS AND DECKS, SUPPORTING FIRE RATED SHAFT CONSTRUCTION SHALL BE FIRE RATED TO THE SAME LEVEL OF PROTECTION OF THE SHAFT. PROTECTION OF INDIVIDUAL BEAMS SHALL EXTEND TO THE ENTIRE SPAN OF THE STRUCTURE AND TO COLUMNS ALL THE WAY DOWN TO THE GROUND.

K13 CODE LEGEND AND NOTES

A1 CODE COMPLIANCE PLAN - FIRST FLOOR - ALTERNATE

1/16" = 1'-0"

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NO.	DATE	DESCRIPTION
00	01/08/18	PLAN COMMISSION REVIEW
01	02/09/18	PLAN COMMISSION REVIEW - REVISIONS

ISSUANCE

FGM ARCHITECTS
CHICAGO OAKBROOK O'FALLON ST. LOUIS

PROFESSIONAL SEAL

EXPIRATION DATE:

DRAWN FMH, EJS
CHECKED DBV
APPROVED JCD

PROFESSIONAL DESIGN FIRM
ILA. No. 184.005505

OLYMPIC SWIM ADDITION AND RENOVATION
ARLINGTON HEIGHTS PARK DISTRICT
660 Ridge Ave
Arlington Heights, IL 60004

CODE COMPLIANCE PLAN - FIRST FLOOR - ALTERNATE

SHEET NO.
G1.0.5

JOB NO. 17-2408.01

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ROOM SCHEDULE - CODE INFORMATION - SECOND FLOOR						
ROOM NUMBER	ROOM NAME	OCCUPANCY GROUP	OCCUPANCY FUNCTION	ROOM AREA	S.F. PER OCCUPANT	OCCUPANCY LOAD
201	CONTROL	A-3	OFFICE	99 SF	100	1
204	ASSESSMENT	A-3	OFFICE	129 SF	100	2
205	FITNESS	A-3	EXERCISE	5143 SF	50	35
205B	STORAGE	A-3	STORAGE	182 SF	300	1
206	ASSESSMENT	A-3	OFFICE	142 SF	100	2
208	ELEV.	A-3	--	72 SF	0	0
210A	TRACK	A-3	EXERCISE	5983 SF	50	120
212	CORRIDOR	A-3	--	1203 SF	0	0
212A	STRETCHING	A-3	EXERCISE	537 SF	50	10
214	ELEC.	A-3	MECHANICAL	28 SF	300	1
216	WOMEN'S	A-3	--	280 SF	0	0
216A	LOCKER ROOM	A-3	EXERCISE	274 SF	50	6
218	MEN'S	A-3	--	278 SF	0	0
218A	LOCKER ROOM	A-3	EXERCISE	274 SF	50	6
220	JAN/LAUNDRY	A-3	MECHANICAL	77 SF	300	1
222	ELEC.	A-3	MECHANICAL	27 SF	300	1
Grand total				14728 SF		186

TOTAL OCCUPANCY - BASE BID

BASEMENT	149
FIRST FLOOR	1020
SECOND FLOOR	147
TOTAL	1316

TOTAL OCCUPANCY - ALTERNATE

BASEMENT	149
FIRST FLOOR	1199
SECOND FLOOR	186
TOTAL	1534

K1 OCCUPANCY SCHEDULE

PLUMBING FIXTURES - ALTERNATE					
1510 TOTAL ANTICIPATED OCCUPANTS: 755 MALE & 755 FEMALE					
FIXTURE	REQUIRED		PROVIDED		
	MALE	FEMALE	MALE	FEMALE	UNISEX
WATER CLOSETS	4	9	12	18	2
URINAL	5	-	8	-	-
LAVATORY	4	4	13	13	2
SHOWER	6	6	8	8	1
DRINKING FOUNTAIN OR WATER COOLER	1 SET FOR EACH SET OF MEN/WOMEN TOILETS		2		
SERVICE SINK	1 PER FLOOR		2		

K8 PLUMBING FIXTURE SCHEDULE

VILLAGE OF ARLINGTON HEIGHTS APPLICABLE CODES:

1.	2009	INTERNATIONAL BUILDING CODE	
2.	CURRENT	ILLINOIS PLUMBING CODE (77 ILL. ADM. CODE 890)	
3.	CURRENT	INTERNATIONAL ENERGY CONSERVATION CODE	
4.	2010	ILLINOIS ACCESSIBILITY CODE (71 ILL. ADM. CODE 400)	
5.	2009	INTERNATIONAL FUEL GAS CODE	
6.	2009	INTERNATIONAL MECHANICAL CODE	
7.	2001	NFPA LIFE SAFETY CODE	
8.	2011	NATIONAL ELECTRICAL CODE	
9.	CURRENT	ILLINOIS DEPARTMENT OF PUBLIC HEALTH POOL CODE	
10.	CURRENT	ILLINOIS ELEVATORE SAFETY AND REGULATION ACT	

BUILDING AREAS:

	EXISTING	BASE W/ ALTERNATE	TOTAL
BASEMENT GROSS ENCLOSED AREA:	6,493 SF	0 SF	6,493 SF
FIRST FLOOR GROSS ENCLOSED AREA:	29,479 SF	37,739 SF	67,218 SF
SECOND FLOOR GROSS ENCLOSED AREA:	0 SF	16,507 SF	16,507 SF
TOTAL EXISTING:	35,972 SF	54,246 SF	90,218 SF

	BUILDING 1	BUILDING 2
BASEMENT GROSS ENCLOSED AREA:	6,493 SF	0 SF
FIRST FLOOR GROSS ENCLOSED AREA:	35,042 SF	32,176 SF
SECOND FLOOR GROSS ENCLOSED AREA:	0 SF	16,507 SF
TOTAL EXISTING:	41,535 SF	48,683 SF

CODE COMPLIANCE NOTES:

1. BUILDING USES : ASSEMBLY A-3 (Section 303.1), SINGLE OCCUPANCY

   BUILDING TYPE : 2B (TABLE 601)
   FIRE PROTECTION SYSTEMS: AUTOMATIC SPRINKLER SYSTEM
   OCCUPANCY CLASSIFICATIONS: (SECTIONS 302-312, 406)
   1. ACCESSORY OCCUPANCIES (SECTION 508.3.1): N/A
   2. INCIDENTAL USE AREAS (TABLE 508.2): N/A
   3. MIXED OCCUPANCY AND FIRE AREA SEPARATIONS (TABLE 508.4), FOR SPRINKLERED BUILDING: N/A

2. HEIGHT CALCULATIONS (MIXED USE SEPARATED BY USE GROUPS)

USE GROUP	A-3
ALLOWABLE HEIGHT = # STORIES / HEIGHT (FT)	2 STORIES / 55 FT
INCREASE FOR AUTOMATIC SPRINKLERS (504.2)	1 STORY / 20 FT
ADJUSTED ALLOW. HEIGHT = # STORIES / HEIGHT (FT)	3 STORIES / 75 FT
ACTUAL HEIGHT = # STORIES / HEIGHT (FT)	2 STORY / 36 FT

3. AREA CALCULATIONS (NON-SEPARATED MIXED USE GROUPS)

ITEM	% FACTOR	AREA (SF)
ALLOWABLE TABULAR AREA	100	9,500
REDUCTION FOR HEIGHT	0	0
INCREASE FOR OPEN PERIMETER	75	7,125
INCREASE FOR AUTOMATIC SPRINKLER	200	19,000
TOTAL ALLOWABLE AREA	375%	35,625 SF

FRONTAGE (Section 506.2)	N - 20ft E - 47ft W - 47ft S - 20ft
TOTAL FRONTAGE	1,350 FT
PERIMETER	1,1350 FT
WIDTH OF OPEN SPACE	30 FT
AREA INCREASE - FRONTAGE I = [(F/P)-0.25]/W/30	75%

4. FIRE-RESISTANCE LEGEND:
   - 1-HR. FIRE SEPARATION ASSEMBLY
   - 2-HR. FIRE SEPARATION ASSEMBLY

5. OCCUPANCY LEGEND:

   OCCUPANT LOAD: CALCULATED BY ROOM SQUARE FOOTAGE (IBC 2009 TABLE 1004.1.1) OR ACTUAL OCCUPANT LOAD ('0' INDICATES THAT THE ACTUAL OCCUPANT WAS USED)

   OFFICE — ROOM NAME
   7120 — ROOM NUMBER
   504 — AREA OF ROOM (S.F.)
   100 — S.F. / OCCUPANT (TABLE 1004.1.1)
   9 — OCCUPANT LOAD

6. EXITING LEGEND:
   - 11 — DIRECTION OF TRAVEL
   - OCCUPANT LOAD (TABLE 1004.1.1 OR ACTUAL)
   - 31 / 68 — EXIT CAPACITY REQUIRED (IBC 2009 TABLE 1005.1)
   - EXIT CAPACITY PROVIDED (OPENING CLEAR WIDTH)

   * NOTE: EXIT CAPACITY: DOORS: 0.15 IN / PERSON

7. MAXIMUM TRAVEL DISTANCE

   TD (TRAVEL DISTANCE TO EXIT) = 250'
   CD (COMMON PATH OF TRAVEL DISTANCE) = 75'

   DISTANCE TO EXIT (TABLE 1016.1) : ASSEMBLY A-3: 250 FEET

   COMMON PATH OF TRAVEL: 75 FEET

   MIN. # OF EXITS FOR OCCUPANT LOAD:

TABLE 1015.1	
OCCUPANT LOAD (PER STORY)	MIN. NO. OF EXITS (PER STORY)
1 - 500	2
500 - 1000	3
MORE THAN 1000	4

   DEAD END: MAX. 20 FEET (SECTION 1018.4)

8. F.E.C. FIRE EXTINGUISHER CABINET RECESSED - U.N.O. (1 PER 3,000 SF & 75 FT. MAX. TRAVEL)

   F.E. SURFACE-MOUNTED FIRE EXTINGUISHER (SECTION 906)

   S.P.V.C. STAND PIPE VALVE CABINET - STAGE ONLY (SECTION 410.7) (SECTION 905)

FIRE-RESISTIVE REQUIREMENTS:

FOR TYPE 2B CONSTRUCTION

RATINGS FOR BUILDING ELEMENTS (IN HOURS):

FIRE RESISTANCE RATING REQUIREMENTS FOR BUILING ELEMENTS (TABLE 601) :

1. a. STRUCTURAL FRAME: (COLUMNS, GIRDERS, BEAMS, JOISTS, SPANDRELS AND BRACING): 0 HR
   b. EXTERIOR BEARING WALLS: N/A
   c. INTERIOR BEARING WALLS: 0 HR
   d. NON-BEARING WALLS AND PARTITIONS - EXTERIOR: 0 HR
   e. NON-BEARING WALLS AND PARTITIONS - INTERIOR: 0 HR
   f. FLOOR CONSTRUCTION, INCLUDING SUPPORTING BEAMS AND JOISTS: 0 HR
   g. ROOF CONSTRUCTION, INCLUDING SUPPORTING BEAMS AND JOISTS: 0 HR

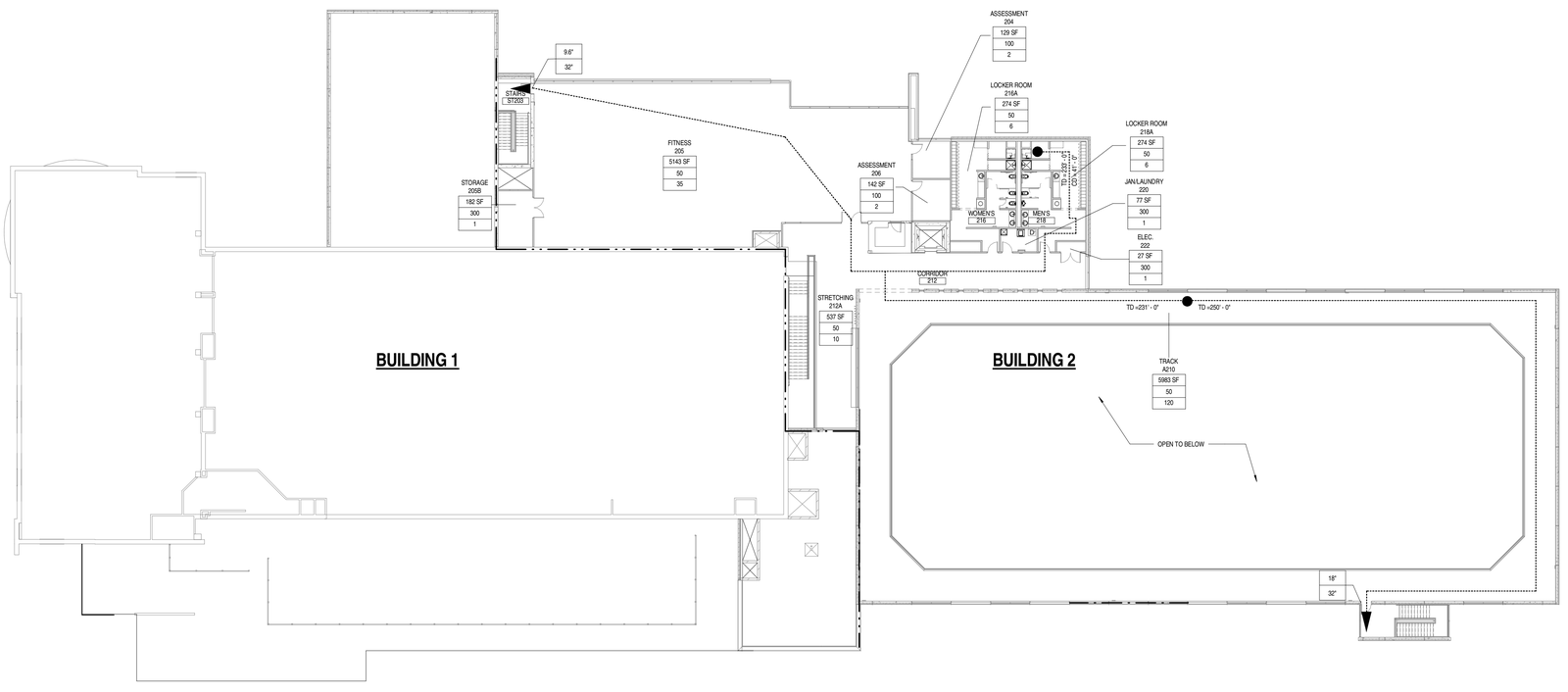
   FIRE WALLS AND PARTY WALLS: 2 HR

   FIRE SEPARATION ASSEMBLIES:
   a. EXIT (STAIR) ENCLOSURES 1 hr.
   b. SHAFT ENCLOSURES/ELEVATOR HOISTWAYS 1 hr. (Section 708)
   c. MIXED USE/FIRE SEPARATION ASSEMBLIES N/A
   d. OTHER SEPARATION ASSEMBLIES N/A
   e. SHAFTS N/A

   FIRE PARTITIONS:
   a. EXIT ACCESS CORRIDORS: 0 HR. (TABLE 1017.1)
   b. COMBUSTIBILITY (SECTIONS 602.2, 602.3, 602.4, 602.5, 603)
      1. EXTERIOR WALLS: NON-COMBUSTIBLE
      2. INTERIOR ELEMENTS: NON-COMBUSTIBLE
      3. ROOF: NON-COMBUSTIBLE

2. OTHER REQUIREMENTS: INCIDENTAL USE AREAS (TABLE 508.2) / (TABLE 715.4):
   a. MECHANICAL/ELECTRICAL/PUMP 1 HR. / 60 MIN. DOORS

K13 CODE LEGEND AND NOTES



NO.	DATE	ISSUANCE DESCRIPTION
00	01/08/18	PLAN COMMISSION REVIEW
01	02/09/18	PLAN COMMISSION REVIEW - REVISIONS

FGM ARCHITECTS
CHICAGO OAKBROOK O'FALLON ST. LOUIS

PROFESSIONAL SEAL

EXPIRATION DATE:

DRAWN PWM, EAS
CHECKED DBY
APPROVED JCD
PROFESSIONAL DESIGN FIRM # 184.003393

OLYMPIC SWIM ADDITION AND RENOVATION
ARLINGTON HEIGHTS PARK DISTRICT
660 Ridge Ave
Arlington Heights, IL 60004

CODE COMPLIANCE PLAN - SECOND FLOOR - ALTERNATE

SHEET NO.
G1.0.6

JOB NO. 17-2408.01

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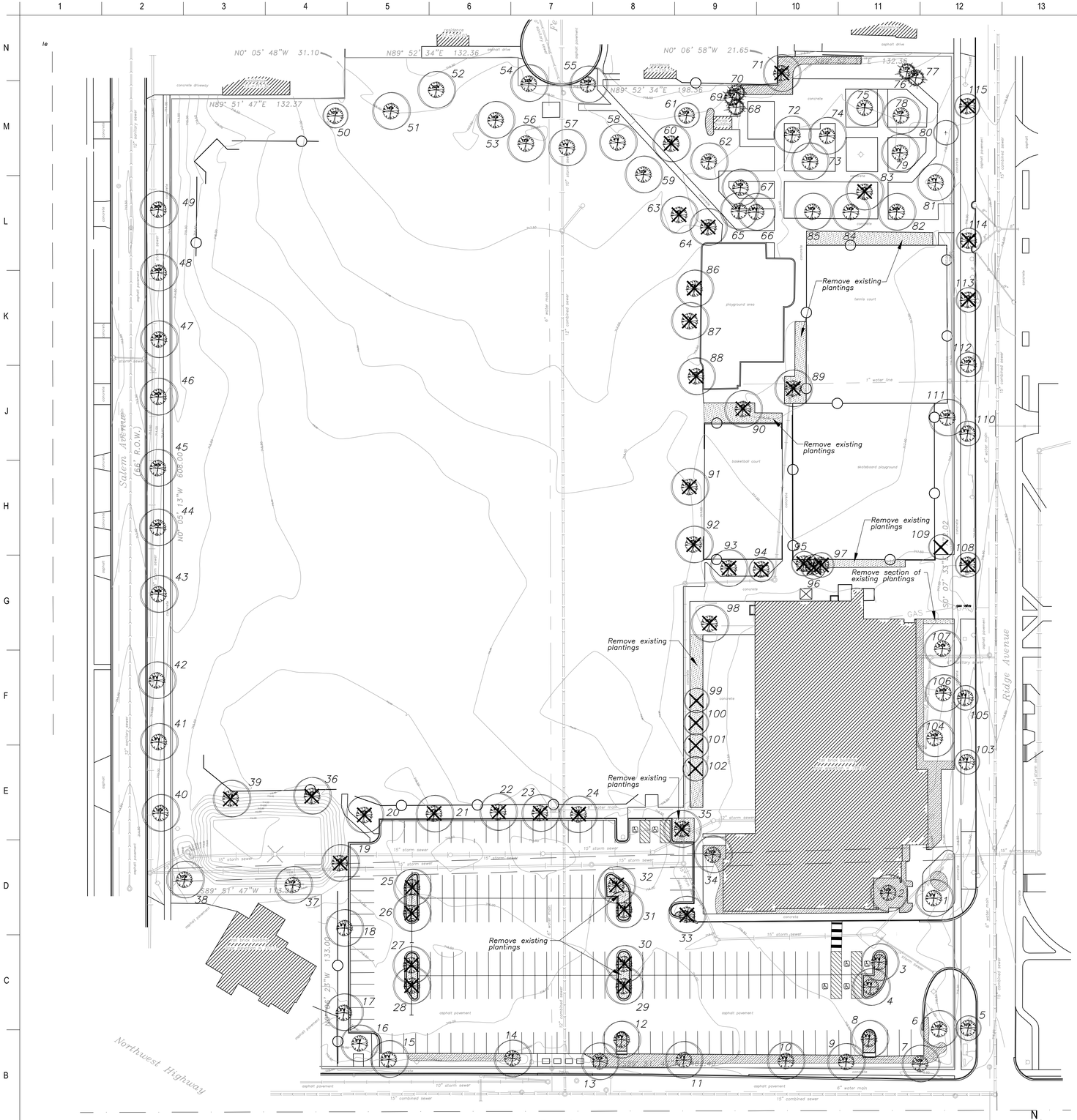
A1 CODE COMPLIANCE PLAN - SECOND FLOOR - ALTERNATE

1/16" = 1'-0"



A1 TREE INVENTORY PLAN

1" = 40'

LEGEND

- EXISTING DECIDUOUS TREE TO REMAIN
- EXISTING EVERGREEN TREE TO REMAIN
- EXISTING TREES TO BE REMOVED
- EXISTING PLANTINGS TO REMAIN (SHRUBS, GROUNDCOVERS AND PERENNIALS)
- EXISTING PLANTINGS TO BE REMOVED (SHRUBS, GROUNDCOVERS AND PERENNIALS)

TREE INVENTORY NOTES

1. LOCATIONS OF EXISTING TREES ARE APPROXIMATE. CONTRACTOR TO CONFIRM ACTUAL LOCATIONS PRIOR TO CONSTRUCTION ACTIVITIES.
2. REFER TO CIVIL DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL TREE PRESERVATION INFORMATION.
3. REFER TO LANDSCAPE PLAN FOR EXISTING PLANTINGS TO REMAIN. CONFIRM ALL REMOVALS WITH OWNER PRIOR TO CONSTRUCTION ACTIVITIES.
4. CONDITION RATING IS BASED ON THE FOLLOWING CRITERIA:
   - 1–EXCELLENT
   - 2–VERY GOOD CONDITION
   - 3–GOOD CONDITION
   - 4–BELOW AVERAGE CONDITION
   - 5–POOR CONDITION
   - 6–DEAD
5. TREE INVENTORY PREPARED IN CONJUNCTION WITH OSAGE, INC. (WWW.OSAGEGROUP.COM)

L14 LEGEND AND NOTES

N.T.S.

A14 TREE INVENTORY LIST

N.T.S.

ID #	SPECIES	SIZE	CONDITION	STATUS	NOTES
1	OHIO BUCKEYE	6"	2	REMAIN	
2	RED MAPLE	9"	4	REMAIN	
3	HONEYLOCUST	6"	3	REMAIN	
4	HONEYLOCUST	8"	2	REMAIN	
5	CRABAPPLE	11"	3	REMAIN	
6	KENTUCKY COFFEETREE	11"	2	REMAIN	
7	NORWAY MAPLE	8"	3	REMAIN	
8	KENTUCKY COFFEETREE	6"	2	REMAIN	
9	HONEYLOCUST	13"	2	REMAIN	
10	CATALPA	5"	2	REMAIN	
11	GINKGO	2"	4	REMAIN	TRUNK SCAR
12	KENTUCKY COFFEETREE	5"	4	REMAIN	TRUNK SCAR
13	HONEYLOCUST	10"	2	REMAIN	
14	RED MAPLE	4"	3	REMAIN	
15	NORWAY MAPLE	5"	4	REMAIN	
16	KENTUCKY COFFEETREE	6"	2	REMAIN	
17	KENTUCKY COFFEETREE	7"	3	REMAIN	
18	KENTUCKY COFFEETREE	6"	2	REMAIN	
19	FREEMAN MAPLE	8"	3	REMOVE	
20	KENTUCKY COFFEETREE	9"	2	REMOVE	TRUNK SCARS
21	KENTUCKY COFFEETREE	11"	1	REMOVE	
22	SUGAR MAPLE	5"	4	REMOVE	TRUNK SCARS
23	CATALPA	5"	3	REMOVE	TRUNK SCARS
24	KENTUCKY COFFEETREE	4"	3	REMOVE	TRUNK SCARS
25	HONEYLOCUST	7"	4	REMOVE	
26	HONEYLOCUST	6"	4	REMOVE	
27	HONEYLOCUST	7"	3	REMOVE	
28	HONEYLOCUST	6"	3	REMOVE	
29	HONEYLOCUST	7"	2	REMOVE	TRUNK SCARS
30	HONEYLOCUST	6"	5	REMOVE	LEADER REMOVED
31	HONEYLOCUST	7"	2	REMOVE	
32	HONEYLOCUST	7"	4	REMOVE	TREE IS STRESSED
33	HONEYLOCUST	5"	4	REMOVE	TRUNK SCARS
34	AUTUMN BLAZE MAPLE	9"	1	REMAIN	
35	HONEYLOCUST	12"	2	REMAIN	
36	AUTUMN BLAZE MAPLE	13"	1	REMOVE	
37	AUTUMN BLAZE MAPLE	11"	1	REMAIN	
38	AUTUMN BLAZE MAPLE	10"	1	REMAIN	
39	AUTUMN BLAZE MAPLE	14"	2	REMOVE	GIRDLING ROOTS
40	LITTLELEAF LINDEN	10"	3	REMAIN	GIRDLING ROOTS
41	LITTLELEAF LINDEN	10"	2	REMAIN	GIRDLING ROOTS
42	ELM HYBRID	7"	2	REMAIN	
43	HONEYLOCUST	34"	3	REMAIN	
44	HONEYLOCUST	34"	2	REMAIN	
45	HONEYLOCUST	30"	4	REMAIN	
46	HONEYLOCUST	27"	4	REMAIN	
47	HONEYLOCUST	29"	2	REMAIN	EXPOSED ROOTS
48	HONEYLOCUST	27"	4	REMAIN	
49	HONEYLOCUST	29"	3	REMAIN	
50	CRABAPPLE	11"	4	REMAIN	BASAL SCARS
51	WHITE ASH	17"	2	REMAIN	GIRDLING ROOTS
52	HONEYLOCUST	20"	2	REMAIN	
53	HONEYLOCUST	19"	2	REMAIN	
54	NORWAY MAPLE	21"	4	REMAIN	GIRDLING ROOTS
55	CRIMSON KING MAPLE	20"	4	REMAIN	GIRDLING ROOTS
56	LITTLELEAF LINDEN	10"	1	REMAIN	
57	CATALPA	6"	2	REMAIN	
58	HYBRID ELM	4"	2	REMAIN	
59	HONEYLOCUST	12"	2	REMAIN	
60	KATSURA TREE	5"	5	REMOVE	
61	CRABAPPLE	12"	4	REMAIN	DECAY
62	HONEYLOCUST	10"	2	REMAIN	
63	WHITE ASH	16"	3	REMOVE	BEING TREATED
64	NORWAY MAPLE	18"	3	REMOVE	GIRDLING ROOTS
65	KATSURA TREE	7",6",6",4"	4	REMAIN	DECAY
66	KATSURA TREE	8",7",6",6"	3	REMAIN	
67	RED MAPLE	9"	4	REMAIN	BASAL DECAY
68	WHITE PINE HYBRID	8"	4	REMAIN	
69	WHITE PINE HYBRID	9"	3	REMAIN	
70	WHITE PINE HYBRID	9"	3	REMAIN	
71	SIBERIAN ELM	30"	5	REMOVE	DECAY
72	LITTLELEAF LINDEN	14"	4	REMAIN	GIRDLING ROOTS
73	LITTLELEAF LINDEN	16"	2	REMAIN	
74	LITTLELEAF LINDEN	13"	4	REMAIN	GIRDLING ROOTS
75	SHINGLE OAK	4"	2	REMAIN	
76	SCOTCH PINE	11",14"	3	REMAIN	
77	SCOTCH PINE	19"	3	REMAIN	
78	OHIO BUCKEYE	10"	2	REMAIN	
79	OHIO BUCKEYE	8"	2	REMAIN	
80	SERVICEBERRY	9"	1	REMAIN	
81	RED OAK	3"	2	REMAIN	
82	HONEYLOCUST	19"	2	REMAIN	
83	WHITE ASH	18"	5	REMOVE	ASH BORER
84	HONEYLOCUST	15"	4	REMAIN	
85	HONEYLOCUST	16"	3	REMAIN	
86	SUGAR MAPLE	8"	2	REMOVE	
87	KENTUCKY COFFEETREE	4"	1	REMOVE	
88	NORWAY MAPLE	21"	2	REMOVE	
89	HONEYLOCUST	19"	5	REMOVE	TRUNK SCAR
90	HONEYLOCUST	15"	4	REMOVE	
91	SUGAR MAPLE	5"	1	REMOVE	
92	HONEYLOCUST	16"	2	REMOVE	
93	NORWAY MAPLE	15"	4	REMOVE	GIRDLING ROOTS
94	AMUR MAPLE	8",8",7"	5	REMOVE	
95	AMUR MAPLE	4",4",3"	4	REMOVE	
96	AMUR MAPLE	5",5"	4	REMOVE	DECAY
97	AMUR MAPLE	6",5",5"	4	REMOVE	GIRDLING ROOTS
98	WHITE ASH	17"	3	REMOVE	
99	SERVICEBERRY	8'	2	REMOVE	
100	SERVICEBERRY	8'	2	REMOVE	
101	SERVICEBERRY	8'	2	REMOVE	
102	SERVICEBERRY	8'	2	REMOVE	
103	CRABAPPLE	4"	3	REMAIN	BASAL DECAY
104	HONEYLOCUST	21"	2	REMAIN	
105	CRABAPPLE	11"	3	REMAIN	TRUNK SCAR
106	HONEYLOCUST	18"	4	REMAIN	
107	HONEYLOCUST	20"	3	REMAIN	
108	CRABAPPLE	8",6",6"	4	REMAIN	DECAY
109	SERVICEBERRY	15"	5	REMOVE	
110	CRABAPPLE	6"	3	REMAIN	GIRDLING ROOTS
111	LITTLELEAF LINDEN	16"	3	REMAIN	GIRDLING ROOTS
112	CRABAPPLE	10",7",7",5"	4	REMAIN	BASAL DECAY
113	CRABAPPLE	8",6",5"	4	REMOVE	BASAL DECAY
114	CRABAPPLE	14"	3	REMOVE	BASAL DECAY
115	CRABAPPLE	12"	5	REMOVE	BASAL DECAY

ISSUANCE

NO.	DATE	DESCRIPTION
00	01.08.18	PLAN COMMISSION REVIEW
01	02.09.18	PLAN COMMISSION REVIEW-REVISIONS

FGM ARCHITECTS
CHICAGO OAK BROOK O'FALLON ST. LOUIS

DATE:

PROFESSIONAL SEAL

EXPIRATION DATE:

DATE	02/09/18
DRAWN	SWW
CHECKED	DBY
APPROVED	JCD

PROFESSIONAL DESIGN FIRM IL # 184-000350

OLYMPIC SWIM ADDITION AND RENOVATION
ARLINGTON HEIGHTS PARK DISTRICT
660 Ridge Ave
Arlington Heights, IL 60004

TREE INVENTORY PLAN

SHEET NO.
L0.0.1

JOB NO. 17-2408.01

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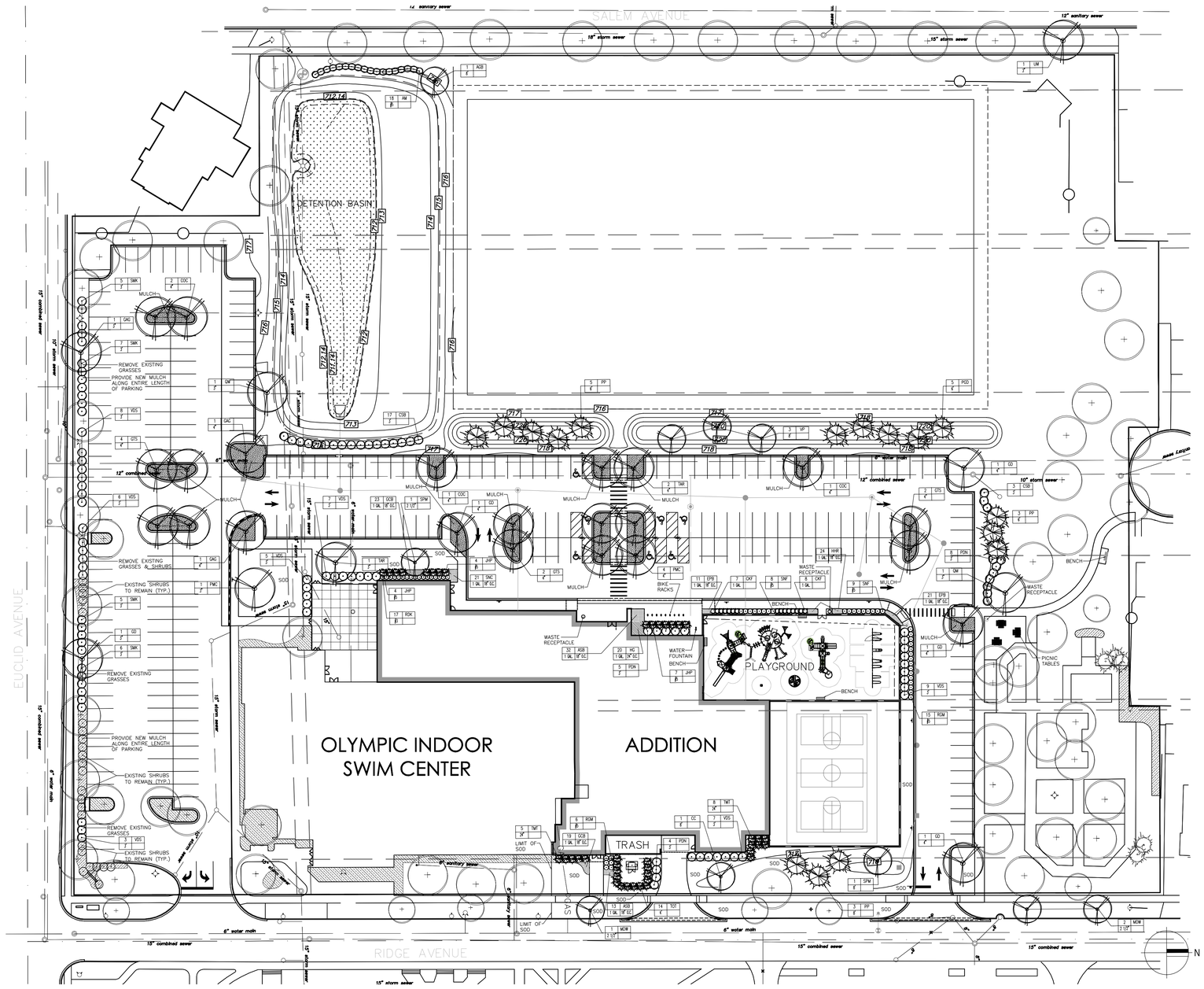
LEGEND

- EXISTING DECIDUOUS TREE TO REMAIN
- EXISTING EVERGREEN TREE TO REMAIN
- EXISTING PLANTINGS TO REMAIN
- EXISTING SHRUBS TO REMAIN
- PROPOSED SHADE TREE
- PROPOSED ORNAMENTAL TREE
- PROPOSED EVERGREEN TREE
- PROPOSED DECIDUOUS SHRUB
- PROPOSED EVERGREEN SHRUB
- PROPOSED ORNAMENTAL GRASS
- PROPOSED PERENNIALS & GROUNDCOVERS
- DETENTION AREA SEEDING



PLANT LIST–BASE BID

KEY	QUANTITY	BOTANIC NAME	COMMON NAME	SIZE	REMARKS
DECIDUOUS SHADE TREES					
COC	4	CELTIS O. 'CHICAGOLAND'	CHICAGOLAND HACKBERRY	4"	BB (4)
GAG	1	GINKGO B. 'AUTUMN GOLD'	AUTUMN GOLD MAIDENHAIR TREE	3"	BB (3)
GAG	2	GINKGO B. 'AUTUMN GOLD'	AUTUMN GOLD MAIDENHAIR TREE	4"	BB (3) (4)
GTS	8	GLEDITSIA T.I. 'SKYLINE'	SKYLINE HONEYLOCUST	4"	BB (4)
GD	1	GYMNOCLADUS DIOICUS 'ESPRESSO–JFS'	ESPRESSO KENTUCKY COFFEETREE	3"	BB
GD	4	GYMNOCLADUS DIOICUS 'ESPRESSO–JFS'	ESPRESSO KENTUCKY COFFEETREE	4"	BB (4)
PMC	1	PLATANUS X. ACERIFOLIA 'MORTON CIRCLE'	EXCLAMATION LONDON PLANETREE	3"	BB
PMC	4	PLATANUS X. ACERIFOLIA 'MORTON CIRCLE'	EXCLAMATION LONDON PLANETREE	4"	BB (4)
QM	2	QUERCUS MACROCARPA	BUR OAK	3"	BB
TAR	1	TILIA A. 'MCKSENTRY'	SENTRY AMERICAN LINDEN	3"	BB
TAR	2	TILIA A. 'MCKSENTRY'	SENTRY AMERICAN LINDEN	4"	BB (4)
UM	1	ULMUS 'MORTON'	ACCOLADE ELM	3"	BB
DECIDUOUS ORNAMENTAL TREES					
AGB	1	AMELANCHIER G. 'AUTUMN BRILLIANCE'	AUTUMN BRILLIANCE APPLE SERVICEBERRY	8'	BB (1)
CC	1	CARPINUS CAROLINIANA	AMERICAN HORNBEAM	8'	BB (1)
MDW	3	MALUS 'DONALD WYMAN'	DONALD WYMAN CRABAPPLE	2 1/2"	BB (4)
SPM	1	SYRINGA P. 'MORTON'	CHINA SNOW PEKING LILAC	2 1/2"	BB
SPM	1	SYRINGA P. 'MORTON'	CHINA SNOW PEKING LILAC	8'	BB (1)
VP	3	VIBURNUM PRUNIFOLIUM	BLACKHAW VIBURNUM	8'	BB (1) (4)
EVERGREEN TREES					
PGD	5	PICEA G. DENSATA	BLACK HILLS SPRUCE	6'	BB (2) (4)
PP	8	PICEA PUNGENS	COLORADO SPRUCE	6'	BB (2) (4)
PP	3	PICEA PUNGENS	COLORADO SPRUCE	8'	BB (2) (4)
LARGE DECIDUOUS SHRUBS					
AM	18	ARONIA M. 'MORTON'	IROQUOIS BEAUTY BLACK CHOKEBERRY	#5	CONTAINER
CSB	17	CORNUS S. 'BAILEY'	BAILEY'S RED DOGWOOD	3'	BB
PDN	17	PHYSOCARPUS O. 'MONLO'	DIABLO NINEBARK	3'	BB
SMK	23	SYRINGA P. 'MISS KIM'	MISS KIM LILAC	3'	BB
VDS	45	VIBURNUM D. 'SYNNESTVEDT'	CHICAGO LUSTRE ARROWWOOD VIBURNUM	3'	BB
DWARF DECIDUOUS SHRUBS					
RGM	21	RIBES A. 'GREEN MOUND'	GREEN MOUND ALPINE CURRANT	#5	CONTAINER
SNF	17	SPIRAEA J. 'NEON FLASH'	NEON FLASH SPIREA	#5	CONTAINER
EVERGREEN SHRUBS					
JHP	15	JUNIPERUS H. 'PLUMOSA COMPACTA YOUNGSTOWN'	YOUNGSTOWN ANDORRA COMPACT JUNIPER	#5	CONTAINER
TMT	13	TAXUS M. 'TAUNTONII'	TAUNTON YEW	24"	BB
TOT	14	THUJA O. 'TECHNEYI'	MISSION ARBORVITAE	4'	BB
PERENNIALS, SHRUB ROSES & ORNAMENTAL GRASSES					
ASB	45	ALLIUM T. 'SUMMER BEAUTY'	SUMMER BEAUTY ALLIUM	1 GAL.	18" O.C.
CKF	15	CALAMAGROSTIS A. 'KARL FOERSTER'	KARL FOERSTER FEATHER REED GRASS	1 GAL.	
EPB	32	ECHINACEA P. 'PICA BELLA'	PICA BELLA CONEFLOWER	1 GAL.	18" O.C.
GCB	42	GERANIUM C. 'BIOKOVO'	BIOKOVO CRANESBILL	1 GAL.	18" O.C.
HHR	24	HEMEROCALLIS 'HAPPY RETURNS'	HAPPY RETURNS DAYLILY	1 GAL.	18" O.C.
HG	20	HOSTA 'GUACAMOLE'	GUACAMOLE HOSTA	1 GAL.	24" O.C.
ROK	17	ROSA 'RADTKO'	DOUBLE KNOCK OUT SHRUB ROSE	#3	CONTAINER
SNC	21	SALVIA N. 'CARADONNA'	CARADONNA SALVIA	1 GAL.	18" O.C.

REMARKS

1. MULTI–STEM, CLUMP FORM
2. FULL SPECIMENS, BRANCHED TO THE GROUND
3. MALE ONLY PLANTS
4. MATCHED SPECIMENS

MATERIAL SCHEDULE–BASE BID

KEY	QUANTITY	MATERIAL	REMARKS
--	– C.Y.	MULCH	SHREDDED HARDWOOD
--	– C.Y.	COMPOST	MUSHROOM COMPOST
--	AS REQ.	SEED – KENTUCKY BLUEGRASS, PERENNIAL RYEGRASS & FINE FESCUE MIX	SEE TECH. SPECIFICATION
--	– S.Y.	SOD – KENTUCKY BLUEGRASS BLEND	SEE TECH. SPECIFICATION
--	9,975 S.F.	NATIVE SEEDING	SEE NOTE 12 & TECH. SPEC.
--	4	BENCHES	SEE GENERAL NOTE 8
--	3	PICNIC TABLES	SEE GENERAL NOTE 9
--	3	WASTE RECEPTACLES	SEE GENERAL NOTE 10
--	9	BIKE RACKS	SEE GENERAL NOTE 11

PLANT LIST – ALTERNATE BID

KEY	QUANTITY	BOTANIC NAME	COMMON NAME	SIZE	REMARKS
DECIDUOUS SHADE TREE					
AFM	ADD 1	ACER F. 'MARMO'	MARMO FREEMAN MAPLE	3"	BB
DECIDUOUS ORNAMENTAL TREE					
CC	DEDUCT 1	CARPINUS CAROLINIANA	AMERICAN HORNBEAM	8'	BB (1)
EVERGREEN TREES					
PP	ADD 2	PICEA PUNGENS	COLORADO SPRUCE	8'	BB (2) (4)
LARGE DECIDUOUS SHRUBS					
ISB	ADD 17	ITEA V. 'MORTON'	SCARLET BEAUTY VIRGINIA SWEETSPIRE	#5	CONTAINER
EVERGREEN SHRUBS					
TMT	ADD 2	TAXUS M. 'TAUNTONII'	TAUNTON YEW	24"	BB

MATERIAL SCHEDULE–BASE BID

KEY	QUANTITY	MATERIAL	REMARKS
--	– C.Y.	MULCH	SHREDDED HARDWOOD
--	– C.Y.	COMPOST	MUSHROOM COMPOST

NO.	DATE	ISSUANCE DESCRIPTION
00	01.08.18	PLAN COMMISSION REVIEW
01	02.09.18	PLAN COMMISSION REVIEW-REVISIONS

FGM ARCHITECTS
CHICAGO OAK BROOK O'FALLON ST. LOUIS

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EXPIRATION DATE:

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APPROVED	JCD	

OLYMPIC SWIM ADDITION AND RENOVATION
ARLINGTON HEIGHTS PARK DISTRICT
660 Ridge Ave
Arlington Heights, IL 60004

LANDSCAPE PLAN - BASE BID

SHEET NO.
L0.0.2

JOB NO. 17-2408.01

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A1 LANDSCAPE PLAN - BASE BID
1" = 40'

A15 MATERIAL SCHEDULES
N.T.S.

OLYMPIC INDOOR SWIM CENTER

ADDITION

REMOVE EXISTING GRASSES

PROVIDE NEW MULCH ALONG ENTIRE LENGTH OF PARKING

REMOVE EXISTING GRASSES & SHRUBS

EXISTING SHRUBS TO REMAIN (TYP.)

REMOVE EXISTING GRASSES

PROVIDE NEW MULCH ALONG ENTIRE LENGTH OF PARKING

EXISTING SHRUBS TO REMAIN (TYP.)

REMOVE EXISTING GRASSES

EXISTING SHRUBS TO REMAIN (TYP.)

MULCH

SOD

BENCH

WASTE RECEPTACLE

BIKE RACKS

WATER FOUNTAIN

PLAYGROUND

TRASH

LIMIT OF SOD

12" combined sewer

6" water main

15" storm sewer

6" sanitary sewer

10" storm sewer

1	GAG	3"
7	SMK	3"
1	QM	3"
1	GAG	4"
8	VDS	3"
4	GTS	4"
6	VDS	3"
1	GAG	4"
1	PMC	3"
5	SMK	3"
1	GD	3"
6	SMK	3"
3	VDS	3"
5	VDS	3"
1	TAR	3"
4	JHP	#5
17	RDK	#3
17	CSB	3"
5	PP	6"
3	VP	8"
2	TAR	4"
1	COC	4"
1	GD	4"
7	VDS	3"
23	GCB	1 GAL. 18" O.C.
1	SPM	2 1/2"
21	SNC	1 GAL. 18" O.C.
2	GTS	4"
4	PMC	4"
11	EPB	1 GAL. 18" O.C.
7	CKF	1 GAL.
8	SNF	#5
24	HHR	1 GAL. 18" O.C.
8	CKF	1 GAL.
9	SNF	#5
32	ASB	1 GAL. 18" O.C.
20	HG	1 GAL. 24" O.C.
5	PDN	3"
7	JHP	#5
6	RGM	#5
19	GCB	1 GAL. 18" O.C.
5	TMT	24"
4	PDN	3"
8	TMT	24"
7	VDS	3"
1	CC	8'
13	ASB	
14	TOT	
3	PP	
1	SPM	8'

716 715 712 712.14 711.14 713 717 718 720

A1 ENLARGED LANDSCAPE PLAN - BASE BID

1" = 20'

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CHICAGO OAK BROOK O'FALLON ST. LOUIS

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APPROVED	JCD

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ARLINGTON HEIGHTS PARK DISTRICT
660 Ridge Ave
Arlington Heights, IL 60004

ENLARGED LANDSCAPE PLAN - BASE BID

SHEET NO.

L0.0.3

JOB NO. 17-2408.01

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GENERAL NOTES

1. QUANTITY LISTS ARE SUPPLIED AS A CONVENIENCE. CONTRACTOR SHALL VERIFY ALL QUANTITIES.

2. CONTRACTOR SHALL VERIFY LOCATIONS OF ALL UNDERGROUND UTILITIES PRIOR TO DIGGING. CONTACT "J.U.L.I.E" (JOINT UTILITY LOCATING FOR EXCAVATORS) 1-800-892-0123.

3. PLANTING BEDS SHALL BE ELEVATED SLIGHTLY TO PROVIDE FOR PROPER DRAINAGE. ROOTBALLS OF TREES SHALL BE ELEVATED ABOVE FINISHED GRADE AS ILLUSTRATED ON INSTALLATION DETAILS. ALL GRADING SHALL PROVIDE SLOPES WHICH ARE SMOOTH, CONTINUOUS AND HAVE POSITIVE DRAINAGE IN ALL AREAS. SHOULD THE LANDSCAPE CONTRACTOR ENCOUNTER DRAINAGE PROBLEMS WHICH MAY BE DETRIMENTAL TO THE GROWTH OF THE SPECIFIED PLANT MATERIALS, THE OWNER SHALL BE NOTIFIED ACCORDINGLY, PRIOR TO INSTALLATION.

4. PLANT MATERIAL SHALL BE NURSERY GROWN AND BE EITHER BALL AND BURLAPPED OR CONTAINER GROWN. SIZES INDICATED ON PLANT LIST REPRESENT MINIMUM REQUIREMENTS. THE REQUIREMENTS FOR MEASUREMENT, BRANCHING AND BALL SIZE SHALL CONFORM TO THE "AMERICAN STANDARD FOR NURSERY STOCK" (LATEST EDITION) BY THE AMERICAN NURSERY AND LANDSCAPE ASSOCIATION. PLANT MATERIALS FOR GROUPINGS OR WHERE SYMMETRY IS CRITICAL, SHALL BE MATCHED AS NEARLY AS POSSIBLE.

5. CONTRACTOR SHALL OBTAIN ONE (1) COMPLETE SOIL EVALUATION PERFORMED BY A CERTIFIED SOIL TESTING LABORATORY, INCLUDING RECOMMENDATIONS FOR SPECIFIC SOIL AMENDMENTS. SAMPLES ARE TO BE TAKEN PRIOR TO INSTALLATION OF PLANT MATERIALS AND ANY ADDITION OF SOIL AMENDMENTS.

6. CONTRACTOR SHALL RESTORE ALL AREAS IMPACTED BY CONSTRUCTION ACTIVITIES ON AND OFF-SITE. UNLESS NOTED OTHERWISE, ALL RESTORATION AREAS SHALL BE SEEDED.

7. CONTRACTOR TO CONFIRM PRESERVATION AND REMOVAL OF ALL TREES AND PLANT MATERIALS WITH AHPD PRIOR TO CONSTRUCTION ACTIVITIES. REFER TO TECHNICAL SPECIFICATION SECTION 015639-TREE PROTECTION AND SHEET L0.0.1 FOR ADDITIONAL INFORMATION.

8. BENCHES SHALL BE DUMOR #185-60PL SUPPLIED BY NUTOYS LEISURE PRODUCTS (708) 579-9055 OR APPROVED EQ. MOUNT ON CONCRETE FOOTINGS PER MANUFACTURER'S SPECIFICATIONS. RECYCLED SLATS TO BE CEDAR COLOR AND CAST IRON SUPPORT TO BE BLACK. ONE SLAT OF BENCH SHALL HAVE A 2" X 10" SLOT IN IT FOR A MEMORIAL PLAQUE. PROVIDE CENTER ARMREST. INSTALL PER MANUFACTURER'S SPECIFICATIONS.

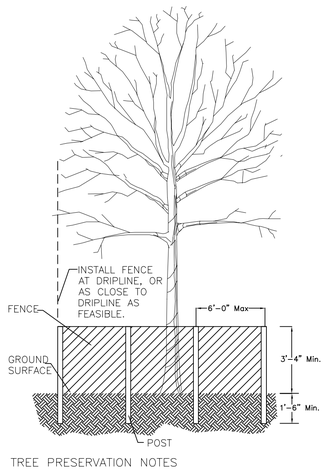
9. PICNIC TABLES SHALL BE DUMOR #76 WITH THREE SEATS (ADA) SUPPLIED BY NUTOYS LEISURE PRODUCTS (708) 579-9055 OR APPROVED EQ. MOUNT ON CONCRETE PAD FOR ACCESSIBILITY AND PER MANUFACTURER'S SPECIFICATIONS. RECYCLED SLATS TO BE CEDAR COLOR AND CAST IRON SUPPORT TO BE BLACK.

10. WASTE RECEPTACLES SHALL BE DUMOR #157 SUPPLIED BY NUTOYS LEISURE PRODUCTS (708) 579-9055 OR APPROVED EQ. MOUNT ON CONCRETE PAD FOR ACCESSIBILITY AND PER MANUFACTURER'S SPECIFICATIONS. COLOR TO BE BLACK.

11. BIKE RACKS SHALL BE GAMETIME DOUBLE LOOP BICYCLE BOLLARD MODEL #8356 SUPPLIED BY CUNNINGHAM RECREATION (815) 355-9225 OR APPROVED EQ. MOUNT ON CONCRETE PAD FOR ACCESSIBILITY AND PER MANUFACTURER'S SPECIFICATIONS. COLOR TO BE BLACK.

12. SEEDING FOR BOTTOM OF DETENTION AREA SHALL BE STANDARD "STORMWATER" NATIVE SEED MIX AS SUPPLIED BY CARDNO NATIVE PLANT NURSERY OR APPROVED EQUAL (WWW.CARDNONATIVEPLANTNURSERY.COM). INSTALL AT 32.81 PLS POUNDS PER ACRE. REFER TO TECHNICAL SPECIFICATIONS FOR SPECIFIC SPECIES, QUANTITIES, INSTALLATION AND MAINTENANCE REQUIREMENTS.

G1 GENERAL NOTES
N.T.S.



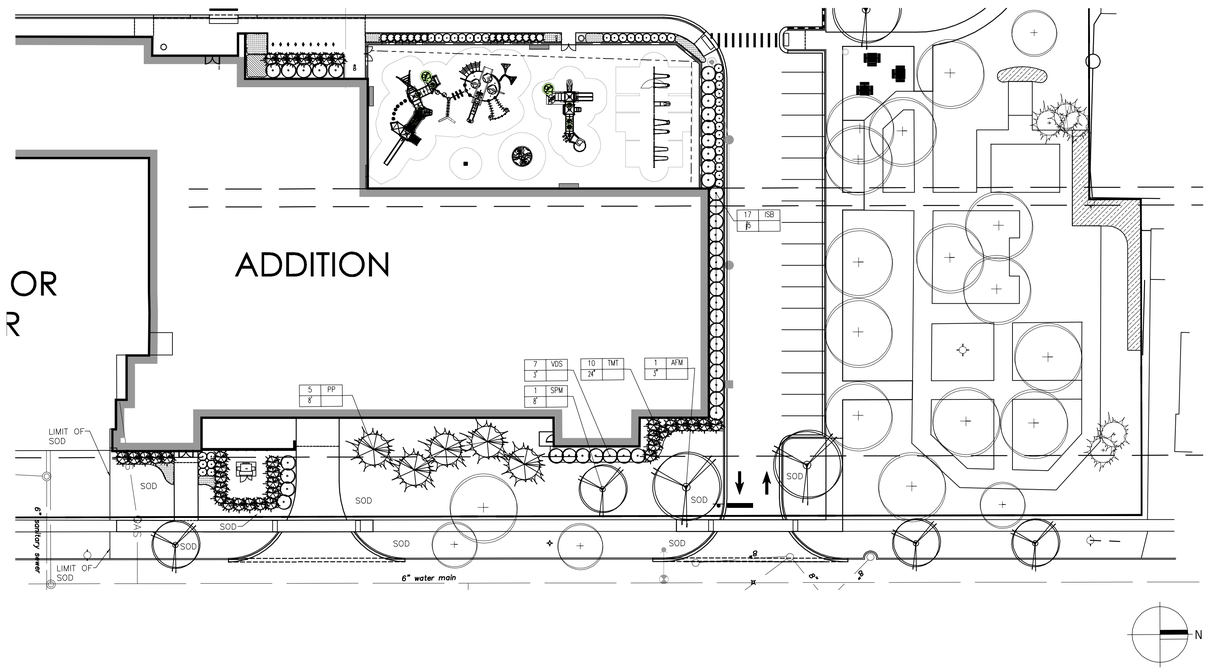
TREE PRESERVATION NOTES

1. FENCE POSTS SHALL BE EITHER STANDARD STEEL POSTS OR WOOD POSTS. FENCE SHALL BE 40" HIGH SNOW FENCE, PLASTIC WEB FENCING OR ANY OTHER APPROVED MATERIAL. REFER TO TECHNICAL SPECIFICATION SECTION 015639 (TEMPORARY TREE AND PLANT PROTECTION) FOR ADDITIONAL INFORMATION. REMOVE PROTECTIVE FENCE ONLY AFTER ALL CONSTRUCTION WORK HAS BEEN FINISHED.

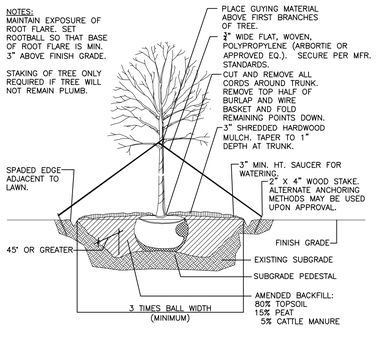
2. EXISTING TREES TO BE PRESERVED SHALL BE BARRICADED IN A MANNER THAT WILL EFFECTIVELY PROTECT THEM DURING CONSTRUCTION OPERATIONS. PRIOR TO ANY ONSITE CONSTRUCTION, PROTECT EXISTING TREES DESIGNATED TO REMAIN AGAINST UNNECESSARY CUTTING, BREAKING, SKINNING OF ROOTS, SKINNING OR BRUISING OF BARK, SMOTHERING OF TREES BY STOCKPILING CONSTRUCTION MATERIALS OR EXCAVATED MATERIALS WITHIN THE DRIP LINE, EXCESS FOOT OR VEHICULAR TRAFFIC, OR PARKING OF VEHICLES WITHIN THE DRIP LINE. PROVIDE TEMPORARY GUARDS TO PROTECT TREES TO BE LEFT STANDING. PROTECTIVE FENCING SHALL BE INSTALLED. CONFIRM REMOVALS OF ANY VEGETATION WITH OWNER PRIOR TO CONSTRUCTION ACTIVITIES.

3. LOCATIONS OF EXISTING TREES ARE APPROXIMATE. CONTRACTOR TO CONFIRM ACTUAL LOCATIONS PRIOR TO CONSTRUCTION ACTIVITIES.

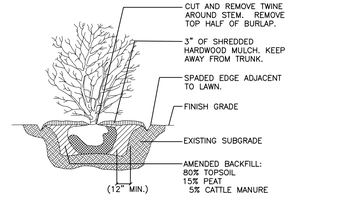
A1 TREE PRESERVATION DETAIL
N.T.S.



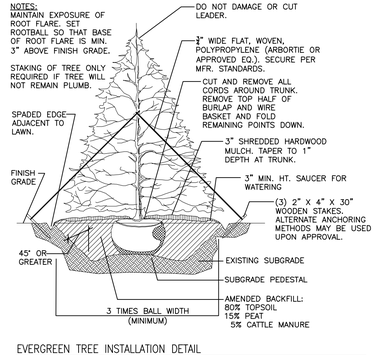
H9 LANDSCAPE PLAN - ALTERNATE BID
1"=30'



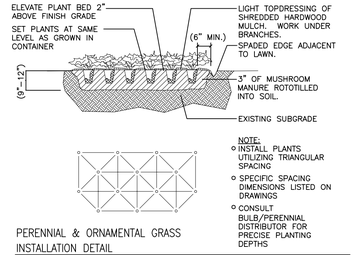
DECIDUOUS TREE INSTALLATION DETAIL
N.T.S.



SHRUB INSTALLATION DETAIL
N.T.S.



EVERGREEN TREE INSTALLATION DETAIL
N.T.S.



PERENNIAL & ORNAMENTAL GRASS INSTALLATION DETAIL
N.T.S.

A9 INSTALLATION DETAILS
N.T.S.

NO.	DATE	DESCRIPTION
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ISSUANCE

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CHICAGO OAK BROOK OFALLON ST. LOUIS

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APPROVED	JCD	

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Arlington Heights, IL 60004

GENERAL NOTES AND DETAILS

SHEET NO.
L0.0.4

JOB NO. 17-2408.01

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D-Series Size 0
LED Area Luminaire

Catalog Number

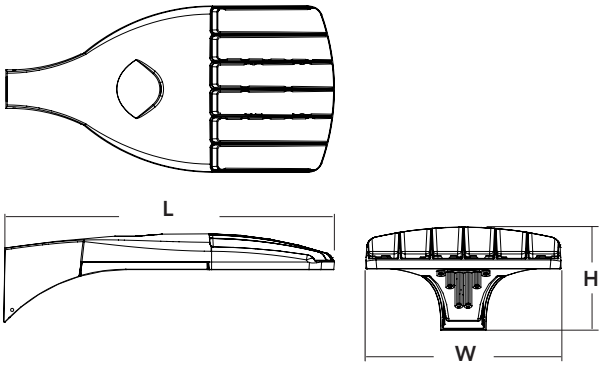
Notes

Type

Hit the Tab key or mouse over the page to see all interactive elements.

Specifications

EPA:	0.95 ft² (.09 m²)
Length:	26" (66.0 cm)
Width:	13" (33.0 cm)
Height:	7" (17.8 cm)
Weight (max):	16 lbs (7.25 kg)



A+ Capable Luminaire

This item is an A+ capable luminaire, which has been designed and tested to provide consistent color appearance and system-level interoperability.

- All configurations of this luminaire meet the Acuity Brands' specification for chromatic consistency
- This luminaire is A+ Certified when ordered with DTL® controls marked by a shaded background. DTL DLL equipped luminaires meet the A+ specification for luminaire to photocontrol interoperability1
- This luminaire is part of an A+ Certified solution for ROAM® or XPoint™ Wireless control networks, providing out-of-the-box control compatibility with simple commissioning, when ordered with drivers and control options marked by a shaded background[1]

To learn more about A+, visit www.acuitybrands.com/aplus.

1. See ordering tree for details.
2. A+ Certified Solutions for ROAM require the order of one ROAM node per luminaire. Sold Separately: Link to Roam; Link to DTL DLL

A+ Capable options indicated by this color background.

Ordering Information

EXAMPLE: DSX0 LED P6 40K T3M MVOLT SPA DDBXD

DSX0 LED

Series	LEDs	Color temperature	Distribution	Voltage	Mounting
DSX0 LED	**Forward optics** P1 P4 P7 P2 P5 P3 P6 **Rotated optics** P10[1] P12[1] P11[1] P13[1]	30K 3000 K 40K 4000 K 50K 5000 K AMBPC Amber phosphor converted[2]	T1S Type I short T2S Type II short T2M Type II medium T3S Type III short T3M Type III medium T4M Type IV medium TFTM Forward throw medium T5VS Type V very short T5S Type V short T5M Type V medium T5W Type V wide BLC Backlight control[2,3] LCCO Left corner cutoff[2,3] RCCO Right corner cutoff[2,3]	MVOLT[4] 120[5] 208[5] 240[5] 277[5] 347[5,6] 480[5,6]	**Shipped included** SPA Square pole mounting RPA Round pole mounting WBA Wall bracket SPUMBA Square pole universal mounting adaptor[7] RPUMBA Round pole universal mounting adaptor[7] **Shipped separately** KMA8 DDBXD U Mast arm mounting bracket adaptor (specify finish)[8]

Control options

Shipped installed

PER	NEMA twist-lock receptacle only (control ordered separate)[9]
PER5	Five-wire receptacle only (control ordered separate)[9,10]
PER7	Seven-wire receptacle only (control ordered separate)[9,10]
DMG	0-10V dimming extend out back of housing for external control (control ordered separate)
PIR	Bi-level, motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 5fc[11,12]
PIRH	Bi-level, motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 5fc[11,12]
PIR1FC3V	Bi-level, motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 1fc[11,12]
PIRH1FC3V	Bi-level, motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 1fc[11,12]
BL30	Bi-level switched dimming, 30%[13,14]
BL50	Bi-level switched dimming, 50%[13,14]
PNMTDD3	Part night, dim till dawn[15]
PNMT5D3	Part night, dim 5 hrs[15]
PNMT6D3	Part night, dim 6 hrs[15]
PNMT7D3	Part night, dim 7 hrs[15]
FAO	Field adjustable output[16]

Other options

Shipped installed

HS	House-side shield[17]
SF	Single fuse (120, 277, 347V)[5]
DF	Double fuse (208, 240, 480V)[5]
L90	Left rotated optics[1]
R90	Right rotated optics[1]
DDL	Diffused drop lens[17]

Order separately

BS	Bird spikes
EGS	External glare shield

Finish *(required)*

DDBXD	Dark bronze
DBLXD	Black
DNAXD	Natural aluminum
DWHXD	White
DDBTXD	Textured dark bronze
DBLBXD	Textured black
DNATXD	Textured natural aluminum
DWHGXD	Textured white

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Ordering Information

Accessories

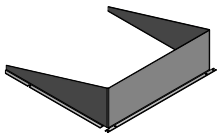
Ordered and shipped separately.

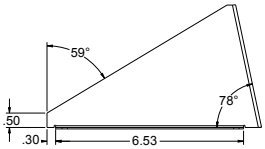
DLL127F 1.5 JU	Photocell - SSL twist-lock (120-277V) [18]
DLL347F 1.5 CUL JU	Photocell - SSL twist-lock (347V) [18]
DLL480F 1.5 CUL JU	Photocell - SSL twist-lock (480V) [18]
DSHORT SBK U	Shorting cap [18]
DSX0HS 20C U	House-side shield for 20 LED unit [17]
DSX0HS 30C U	House-side shield for 30 LED unit [17]
DSX0HS 40C U	House-side shield for 40 LED unit [17]
DSX0DDL U	Diffused drop lens (polycarbonate) [17]
PUMBA DDBXD U*	Square and round pole universal mounting bracket adaptor (specify finish)[19]
KMA8 DDBXD U	Mast arm mounting bracket adaptor (specify finish) [7]

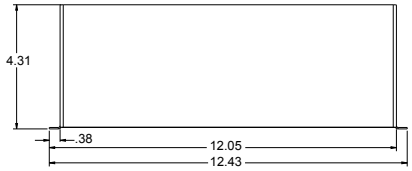
For more control options, visit DTL and ROAM online.

NOTES
1 P10, P11, P12 and P13 and rotated options (L90 or R90) only available together.
2 AMBPC is not available with BLC, LCCO, RCCO, P4, P7 or P13.
3 Not available with HS or DDL.
4 MVOLT driver operates on any line voltage from 120-277V (50/60 Hz).
5 Single fuse (SF) requires 120V, 277V or 347V. Double fuse (DF) requires 208V, 240V or 480V.
6 Not available in P4, P7 or P13. Not available with BL30, BL50 or PNMT options.
7 Existing drilled pole only. Available as a separate combination accessory; for retrofit use only: PUMBA (finish) U; 1.5 G vibration load rating per ANCI C136.31.
8 Must order fixture with SPA mounting. Must be ordered as a separate accessory; see Accessories information. For use with 2-3/8" mast arm (not included).
9 Photocell ordered and shipped as a separate line item from Acuity Brands Controls. See accessories. Shorting Cap included.
10 If ROAM® node required, it must be ordered and shipped as a separate line item from Acuity Brands Controls. Shorting Cap included.
11 Reference Motion Sensor table on page 3.
12 Reference PER Table on page 3 to see functionality.
13 Requires (2) separately switched circuits.
14 Not available with 347V, 480V or PNMT. For PER5 or PER7 see PER Table on page 3.
15 Not available with 347V, 480V, BL30 and BL50. For PER5 or PER7 see PER Table on page 3. Separate Dusk to Dawn required.
16 Not available with other dimming controls options.
17 Not available with BLC, LCCO and RCCO distribution. Also available as a separate accessory; see Accessories information.
18 Requires luminaire to be specified with PER, PER5 or PER7 option. See PER Table on page 3.
19 For retrofit use only.

External Glare Shield

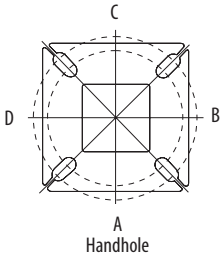




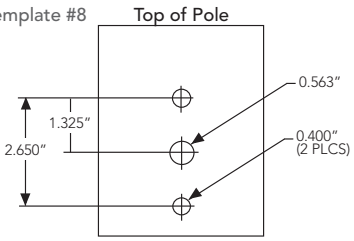


Drilling

HANDHOLE ORIENTATION



Template #8



Tenon Mounting Slipfitter **

Tenon O.D.	Single Unit	2 at 180°	2 at 90°	3 at 120°	3 at 90°	4 at 90°
2-3/8"	AST20-190	AST20-280	AST20-290	AST20-320	AST20-390	AST20-490
2-7/8"	AST25-190	AST25-280	AST25-290	AST25-320	AST25-390	AST25-490
4"	AST35-190	AST35-280	AST35-290	AST35-320	AST35-390	AST35-490

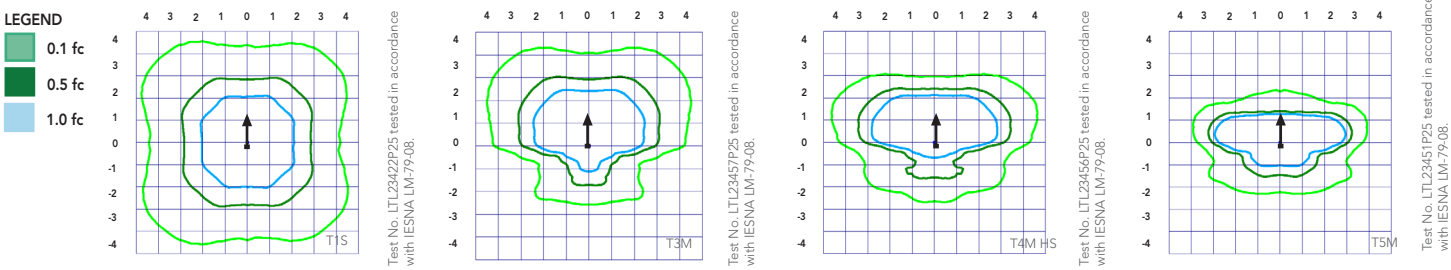
Pole drilling nomenclature: # of heads at degree from handhole (default side A)					
DM19AS	DM28AS	DM29AS	DM32AS	DM39AS	DM49AS
1 @ 90°	2 @ 280°	2 @ 90°	3 @ 120°	3 @ 90°	4 @ 90°
Side B	Side B & D	Side B & C	Round pole only	Side B, C, & D	Sides A, B, C, D
Note: Review luminaire spec sheet for specific nomenclature					

Pole top or tenon O.D.	4.5" @ 90°	4" @ 90°	3.5" @ 90°	3" @ 90°	4.5" @ 120°	4" @ 120°	3.5" @ 120°	3" @ 120°
DSX SPA	Y	Y	Y	N	-	-	-	-
DSX RPA	Y	Y	N	N	Y	Y	Y	Y
DSX SPUMBA	Y	N	N	N	-	-	-	-
DSX RPUMBA	N	N	N	N	Y	Y	Y	N
					*3 fixtures @120 require round pole top/tenon.			

Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit Lithonia Lighting's D-Series Area Size 0 homepage.

Isofootcandle plots for the DSX0 LED 40C 1000 40K. Distances are in units of mounting height (20').



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Performance Data

Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-40°C (32-104°F).

Ambient		Lumen Multiplier
0°C	32°F	1.04
5°C	41°F	1.04
10°C	50°F	1.03
15°C	50°F	1.02
20°C	68°F	1.01
25°C	**77°F**	**1.00**
30°C	86°F	0.99
35°C	95°F	0.98
40°C	104°F	0.97

Projected LED Lumen Maintenance

Data references the extrapolated performance projections for the platforms noted in a **25°C ambient**, based on 10,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11).

To calculate LLF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

Operating Hours	25000	50000	100000
Lumen Maintenance Factor	0.96	0.92	0.85

Electrical Load

					Current (A)					
	Performance Package	LED Count	Drive Current	Wattage	120	208	240	277	347	480
Forward Optics (Non-Rotated)	P1	20	530	38	0.32	0.18	0.15	0.15	0.10	0.08
	P2	20	700	49	0.41	0.23	0.20	0.19	0.14	0.11
	P3	20	1050	71	0.60	0.37	0.32	0.27	0.21	0.15
	P4	20	1400	92	0.77	0.45	0.39	0.35	0.28	0.20
	P5	40	700	89	0.74	0.43	0.38	0.34	0.26	0.20
	P6	40	1050	134	1.13	0.65	0.55	0.48	0.39	0.29
	P7	40	1300	166	1.38	0.80	0.69	0.60	0.50	0.37
Rotated Optics (Requires L90 or R90)	P10	30	530	53	0.45	0.26	0.23	0.21	0.16	0.12
	P11	30	700	72	0.60	0.35	0.30	0.27	0.20	0.16
	P12	30	1050	104	0.88	0.50	0.44	0.39	0.31	0.23
	P13	30	1300	128	1.08	0.62	0.54	0.48	0.37	0.27

Motion Sensor Default Settings						
Option	Dimmed State	High Level (when triggered)	Photocell Operation	Dwell Time	Ramp-up Time	Ramp-down Time
PIR or PIRH	3V (37%) Output	10V (100%) Output	Enabled @ 5FC	5 min	3 sec	5 min
*PIR1FC3V or PIRH1FC3V	3V (37%) Output	10V (100%) Output	Enabled @ 1FC	5 min	3 sec	5 min
*for use with Inline Dusk to Dawn or timer.						

PER Table						
Control	PER (3 wire)	PER5 (5 wire)		PER7 (7 wire)		
			Wire 4/Wire5		Wire 4/Wire5	Wire 6/Wire7
Photocontrol Only (On/Off)	✔	⚠	Wired to dimming leads on driver	⚠	Wired to dimming leads on driver	Wires Capped inside fixture
ROAM	⊘	✔	Wired to dimming leads on driver	⚠	Wired to dimming leads on driver	Wires Capped inside fixture
ROAM with Motion (ROAM on/off only)	⊘	⚠	Wires Capped inside fixture	⚠	Wires Capped inside fixture	Wires Capped inside fixture
Future-proof*	⊘	⚠	Wired to dimming leads on driver	✔	Wired to dimming leads on driver	Wires Capped inside fixture
Future-proof* with Motion	⊘	⚠	Wires Capped inside fixture	✔	Wires Capped inside fixture	Wires Capped inside fixture

✔ Recommended
⊘ Will not work
⚠ Alternate

*Future-proof means: Ability to change controls in the future.

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Performance Data

Lumen Output

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Forward Optics

LED Count	Drive Current	Power Package	System Watts	Dist. Type	30K (3000 K, 70 CRI)					40K (4000 K, 70 CRI)					50K (5000 K, 70 CRI)					AMBPC (Amber Phosphor Converted)				
					Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
20	530	**P1**	38W	T1S	4,369	1	0	1	115	4,706	1	0	1	124	4,766	1	0	1	125	2,541	1	0	1	73
				T2S	4,364	1	0	1	115	4,701	1	0	1	124	4,761	1	0	1	125	2,589	1	0	1	74
				T2M	4,387	1	0	1	115	4,726	1	0	1	124	4,785	1	0	1	126	2,539	1	0	1	73
				T3S	4,248	1	0	1	112	4,577	1	0	1	120	4,634	1	0	1	122	2,558	1	0	1	73
				T3M	4,376	1	0	1	115	4,714	1	0	1	124	4,774	1	0	1	126	2,583	1	0	1	74
				T4M	4,281	1	0	1	113	4,612	1	0	2	121	4,670	1	0	2	123	2,570	1	0	1	73
				TFTM	4,373	1	0	1	115	4,711	1	0	2	124	4,771	1	0	2	126	2,540	1	0	1	73
				T5VS	4,548	2	0	0	120	4,900	2	0	0	129	4,962	2	0	0	131	2,650	1	0	0	76
				T5S	4,552	2	0	0	120	4,904	2	0	0	129	4,966	2	0	0	131	2,690	1	0	0	77
				T5M	4,541	3	0	1	120	4,891	3	0	1	129	4,953	3	0	1	130	2,658	2	0	0	76
				T5W	4,576	3	0	2	120	4,929	3	0	2	130	4,992	3	0	2	131	2,663	2	0	1	73
				BLC	3,586	1	0	1	94	3,863	1	0	1	102	3,912	1	0	1	103					
				LCCO	2,668	1	0	1	70	2,874	1	0	2	76	2,911	1	0	2	77					
				RCCO	2,668	1	0	1	70	2,874	1	0	2	76	2,911	1	0	2	77					
20	700	**P2**	49W	T1S	5,570	1	0	1	114	6,001	1	0	1	122	6,077	2	0	2	124	3,144	1	0	1	70
				T2S	5,564	1	0	2	114	5,994	1	0	2	122	6,070	2	0	2	124	3,203	1	0	1	71
				T2M	5,593	1	0	1	114	6,025	1	0	1	123	6,102	1	0	1	125	3,141	1	0	1	70
				T3S	5,417	1	0	2	111	5,835	1	0	2	119	5,909	2	0	2	121	3,165	1	0	1	70
				T3M	5,580	1	0	2	114	6,011	1	0	2	123	6,087	1	0	2	124	3,196	1	0	1	71
				T4M	5,458	1	0	2	111	5,880	1	0	2	120	5,955	1	0	2	122	3,179	1	0	1	71
				TFTM	5,576	1	0	2	114	6,007	1	0	2	123	6,083	1	0	2	124	3,143	1	0	1	70
				T5VS	5,799	2	0	0	118	6,247	2	0	0	127	6,327	2	0	0	129	3,278	2	0	0	73
				T5S	5,804	2	0	0	118	6,252	2	0	0	128	6,332	2	0	1	129	3,328	2	0	0	74
				T5M	5,789	3	0	1	118	6,237	3	0	1	127	6,316	3	0	1	129	3,288	2	0	1	73
				T5W	5,834	3	0	2	119	6,285	3	0	2	128	6,364	3	0	2	130	3,295	2	0	1	73
				BLC	4,572	1	0	1	93	4,925	1	0	1	101	4,987	1	0	1	102					
				LCCO	3,402	1	0	2	69	3,665	1	0	2	75	3,711	1	0	2	76					
				RCCO	3,402	1	0	2	69	3,665	1	0	2	75	3,711	1	0	2	76					
20	1050	**P3**	71W	T1S	7,833	2	0	2	110	8,438	2	0	2	119	8,545	2	0	2	120					
				T2S	7,825	2	0	2	110	8,429	2	0	2	119	8,536	2	0	2	120					
				T2M	7,865	2	0	2	111	8,473	2	0	2	119	8,580	2	0	2	121					
				T3S	7,617	2	0	2	107	8,205	2	0	2	116	8,309	2	0	2	117					
				T3M	7,846	2	0	2	111	8,452	2	0	2	119	8,559	2	0	2	121					
				T4M	7,675	2	0	2	108	8,269	2	0	2	116	8,373	2	0	2	118					
				TFTM	7,841	2	0	2	110	8,447	2	0	2	119	8,554	2	0	2	120					
				T5VS	8,155	3	0	0	115	8,785	3	0	0	124	8,896	3	0	0	125					
				T5S	8,162	3	0	1	115	8,792	3	0	1	124	8,904	3	0	1	125					
				T5M	8,141	3	0	2	115	8,770	3	0	2	124	8,881	3	0	2	125					
				T5W	8,204	3	0	2	116	8,838	4	0	2	124	8,950	4	0	2	126					
				BLC	6,429	1	0	2	91	6,926	1	0	2	98	7,013	1	0	2	99					
				LCCO	4,784	1	0	2	67	5,153	1	0	2	73	5,218	1	0	2	73					
				RCCO	4,784	1	0	2	67	5,153	1	0	2	73	5,218	1	0	2	73					
20	1400	**P4**	92W	T1S	9,791	2	0	2	106	10,547	2	0	2	115	10,681	2	0	2	116					
				T2S	9,780	2	0	2	106	10,536	2	0	2	115	10,669	2	0	2	116					
				T2M	9,831	2	0	2	107	10,590	2	0	2	115	10,724	2	0	2	117					
				T3S	9,521	2	0	2	103	10,256	2	0	2	111	10,386	2	0	2	113					
				T3M	9,807	2	0	2	107	10,565	2	0	2	115	10,698	2	0	2	116					
				T4M	9,594	2	0	2	104	10,335	2	0	3	112	10,466	2	0	3	114					
				TFTM	9,801	2	0	2	107	10,558	2	0	2	115	10,692	2	0	2	116					
				T5VS	10,193	3	0	1	111	10,981	3	0	1	119	11,120	3	0	1	121					
				T5S	10,201	3	0	1	111	10,990	3	0	1	119	11,129	3	0	1	121					
				T5M	10,176	4	0	2	111	10,962	4	0	2	119	11,101	4	0	2	121					
				T5W	10,254	4	0	3	111	11,047	4	0	3	120	11,186	4	0	3	122					
				BLC	8,036	1	0	2	87	8,656	1	0	2	94	8,766	1	0	2	95					
				LCCO	5,979	1	0	2	65	6,441	1	0	2	70	6,523	1	0	3	71					
					5,979	1	0	2	65	6,441	1	0	2	70	6,523	1	0	3	71					

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Performance Data

Lumen Output

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Forward Optics

LED Count	Drive Current	Power Package	System Watts	Dist. Type	30K (3000 K, 70 CRI)					40K (4000 K, 70 CRI)					50K (5000 K, 70 CRI)					AMBPC (Amber Phosphor Converted)				
					Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
40	700	**P5**	89W	T1S	10,831	2	0	2	122	11,668	2	0	2	131	11,816	2	0	2	133					
				T2S	10,820	2	0	2	122	11,656	2	0	2	131	11,803	2	0	2	133					
				T2M	10,876	2	0	2	122	11,716	2	0	2	132	11,864	2	0	2	133					
				T3S	10,532	2	0	2	118	11,346	2	0	2	127	11,490	2	0	2	129					
				T3M	10,849	2	0	2	122	11,687	2	0	2	131	11,835	2	0	2	133					
				T4M	10,613	2	0	3	119	11,434	2	0	3	128	11,578	2	0	3	130					
				TFTM	10,842	2	0	2	122	11,680	2	0	2	131	11,828	2	0	2	133					
				T5VS	11,276	3	0	1	127	12,148	3	0	1	136	12,302	3	0	1	138					
				T5S	11,286	3	0	1	127	12,158	3	0	1	137	12,312	3	0	1	138					
				T5M	11,257	4	0	2	126	12,127	4	0	2	136	12,280	4	0	2	138					
				T5W	11,344	4	0	3	127	12,221	4	0	3	137	12,375	4	0	3	139					
				BLC	8,890	1	0	2	100	9,576	1	0	2	108	9,698	1	0	2	109					
				LCCO	6,615	1	0	3	74	7,126	1	0	3	80	7,216	1	0	3	81					
				RCCO	6,615	1	0	3	74	7,126	1	0	3	80	7,216	1	0	3	81					
40	1050	**P6**	134W	T1S	14,805	3	0	3	110	15,949	3	0	3	119	16,151	3	0	3	121	6,206	2	0	2	68
				T2S	14,789	3	0	3	110	15,932	3	0	3	119	16,134	3	0	3	120	6,322	2	0	2	69
				T2M	14,865	3	0	3	111	16,014	3	0	3	120	16,217	3	0	3	121	6,201	2	0	2	68
				T3S	14,396	3	0	3	107	15,509	3	0	3	116	15,705	3	0	3	117	6,247	1	0	2	69
				T3M	14,829	2	0	3	111	15,975	3	0	3	119	16,177	3	0	3	121	6,308	2	0	2	69
				T4M	14,507	2	0	3	108	15,628	3	0	3	117	15,826	3	0	3	118	6,275	1	0	2	69
				TFTM	14,820	2	0	3	111	15,965	3	0	3	119	16,167	3	0	3	121	6,203	1	0	2	68
				T5VS	15,413	4	0	1	115	16,604	4	0	1	124	16,815	4	0	1	125	6,671	2	0	0	73
				T5S	15,426	3	0	1	115	16,618	4	0	1	124	16,828	4	0	1	126	6,569	2	0	0	72
				T5M	15,387	4	0	2	115	16,576	4	0	2	124	16,786	4	0	2	125	6,491	3	0	1	71
				T5W	15,506	4	0	3	116	16,704	4	0	3	125	16,915	4	0	3	126	6,504	3	0	2	71
				BLC	12,151	1	0	2	91	13,090	1	0	2	98	13,255	1	0	2	99					
				LCCO	9,041	1	0	3	67	9,740	1	0	3	73	9,863	1	0	3	74					
				RCCO	9,041	1	0	3	67	9,740	1	0	3	73	9,863	1	0	3	74					
40	1300	**P7**	166W	T1S	17,023	3	0	3	103	18,338	3	0	3	110	18,570	3	0	3	112					
				T2S	17,005	3	0	3	102	18,319	3	0	3	110	18,551	3	0	3	112					
				T2M	17,092	3	0	3	103	18,413	3	0	3	111	18,646	3	0	3	112					
				T3S	16,553	3	0	3	100	17,832	3	0	3	107	18,058	3	0	3	109					
				T3M	17,051	3	0	3	103	18,369	3	0	3	111	18,601	3	0	3	112					
				T4M	16,681	3	0	3	100	17,969	3	0	3	108	18,197	3	0	3	110					
				TFTM	17,040	3	0	3	103	18,357	3	0	4	111	18,590	3	0	4	112					
				T5VS	17,723	4	0	1	107	19,092	4	0	1	115	19,334	4	0	1	116					
				T5S	17,737	4	0	2	107	19,108	4	0	2	115	19,349	4	0	2	117					
				T5M	17,692	4	0	2	107	19,059	4	0	2	115	19,301	4	0	2	116					
				T5W	17,829	5	0	3	107	19,207	5	0	3	116	19,450	5	0	3	117					
				BLC	13,971	2	0	2	84	15,051	2	0	2	91	15,241	2	0	2	92					
				LCCO	10,396	1	0	3	63	11,199	1	0	3	67	11,341	1	0	3	68					
					10,396	1	0	3	63	11,199	1	0	3	67	11,341	1	0	3	68					

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Performance Data

Lumen Output

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Rotated Optics

LED Count	Drive Current	Power Package	System Watts	Dist. Type	30K (3000 K, 70 CRI)					40K (4000 K, 70 CRI)					50K (5000 K, 70 CRI)					AMBPC (Amber Phosphor Converted)				
					Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
30	530	**P10**	53W	T1S	6,727	2	0	2	127	7,247	3	0	3	137	7,339	3	0	3	138					
				T2S	6,689	3	0	3	126	7,205	3	0	3	136	7,297	3	0	3	138					
				T2M	6,809	3	0	3	128	7,336	3	0	3	138	7,428	3	0	3	140					
				T3S	6,585	3	0	3	124	7,094	3	0	3	134	7,183	3	0	3	136					
				T3M	6,805	3	0	3	128	7,331	3	0	3	138	7,424	3	0	3	140					
				T4M	6,677	3	0	3	126	7,193	3	0	3	136	7,284	3	0	3	137					
				TFTM	6,850	3	0	3	129	7,379	3	0	3	139	7,472	3	0	3	141					
				T5VS	6,898	3	0	0	130	7,431	3	0	0	140	7,525	3	0	0	142					
				T5S	6,840	2	0	1	129	7,368	2	0	1	139	7,461	2	0	1	141					
				T5M	6,838	3	0	1	129	7,366	3	0	2	139	7,460	3	0	2	141					
				T5W	6,777	3	0	2	128	7,300	3	0	2	138	7,393	3	0	2	139					
				BLC	5,626	2	0	2	106	6,060	2	0	2	114	6,137	2	0	2	116					
				LCCO	4,018	1	0	2	76	4,328	1	0	2	82	4,383	1	0	2	83					
				RCCO	4,013	3	0	3	76	4,323	3	0	3	82	4,377	3	0	3	83					
30	700	**P11**	72W	T1S	8,594	3	0	3	119	9,258	3	0	3	129	9,376	3	0	3	130					
				T2S	8,545	3	0	3	119	9,205	3	0	3	128	9,322	3	0	3	129					
				T2M	8,699	3	0	3	121	9,371	3	0	3	130	9,490	3	0	3	132					
				T3S	8,412	3	0	3	117	9,062	3	0	3	126	9,177	3	0	3	127					
				T3M	8,694	3	0	3	121	9,366	3	0	3	130	9,484	3	0	3	132					
				T4M	8,530	3	0	3	118	9,189	3	0	3	128	9,305	3	0	3	129					
				TFTM	8,750	3	0	3	122	9,427	3	0	3	131	9,546	3	0	3	133					
				T5VS	8,812	3	0	0	122	9,493	3	0	0	132	9,613	3	0	0	134					
				T5S	8,738	3	0	1	121	9,413	3	0	1	131	9,532	3	0	1	132					
				T5M	8,736	3	0	2	121	9,411	3	0	2	131	9,530	3	0	2	132					
				T5W	8,657	4	0	2	120	9,326	4	0	2	130	9,444	4	0	2	131					
				BLC	7,187	3	0	3	100	7,742	3	0	3	108	7,840	3	0	3	109					
				LCCO	5,133	1	0	2	71	5,529	1	0	2	77	5,599	1	0	2	78					
				RCCO	5,126	3	0	3	71	5,522	3	0	3	77	5,592	3	0	3	78					
30	1050	**P12**	104W	T1S	12,149	3	0	3	117	13,088	3	0	3	126	13,253	3	0	3	127					
				T2S	12,079	4	0	4	116	13,012	4	0	4	125	13,177	4	0	4	127					
				T2M	12,297	3	0	3	118	13,247	3	0	3	127	13,415	3	0	3	129					
				T3S	11,891	4	0	4	114	12,810	4	0	4	123	12,972	4	0	4	125					
				T3M	12,290	3	0	3	118	13,239	4	0	4	127	13,407	4	0	4	129					
				T4M	12,058	4	0	4	116	12,990	4	0	4	125	13,154	4	0	4	126					
				TFTM	12,369	4	0	4	119	13,325	4	0	4	128	13,494	4	0	4	130					
				T5VS	12,456	3	0	1	120	13,419	3	0	1	129	13,589	4	0	1	131					
				T5S	12,351	3	0	1	119	13,306	3	0	1	128	13,474	3	0	1	130					
				T5M	12,349	4	0	2	119	13,303	4	0	2	128	13,471	4	0	2	130					
				T5W	12,238	4	0	3	118	13,183	4	0	3	127	13,350	4	0	3	128					
				BLC	10,159	3	0	3	98	10,944	3	0	3	105	11,083	3	0	3	107					
				LCCO	7,256	1	0	3	70	7,816	1	0	3	75	7,915	1	0	3	76					
				RCCO	7,246	3	0	3	70	7,806	4	0	4	75	7,905	4	0	4	76					
30	1300	**P13**	128W	T1S	14,438	3	0	3	113	15,554	3	0	3	122	15,751	3	0	3	123					
				T2S	14,355	4	0	4	112	15,465	4	0	4	121	15,660	4	0	4	122					
				T2M	14,614	3	0	3	114	15,744	4	0	4	123	15,943	4	0	4	125					
				T3S	14,132	4	0	4	110	15,224	4	0	4	119	15,417	4	0	4	120					
				T3M	14,606	4	0	4	114	15,735	4	0	4	123	15,934	4	0	4	124					
				T4M	14,330	4	0	4	112	15,438	4	0	4	121	15,633	4	0	4	122					
				TFTM	14,701	4	0	4	115	15,836	4	0	4	124	16,037	4	0	4	125					
				T5VS	14,804	4	0	1	116	15,948	4	0	1	125	16,150	4	0	1	126					
				T5S	14,679	3	0	1	115	15,814	3	0	1	124	16,014	3	0	1	125					
				T5M	14,676	4	0	2	115	15,810	4	0	2	124	16,010	4	0	2	125					
				T5W	14,544	4	0	3	114	15,668	4	0	3	122	15,866	4	0	3	124					
				BLC	7919	3	0	3	62	8531	3	0	3	67	8639	3	0	3	67					
				LCCO	5145	1	0	2	40	5543	1	0	2	43	5613	1	0	2	44					
					5139	3	0	3	40	5536	3	0	3	43	5606	3	0	3	44					

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FEATURES & SPECIFICATIONS

INTENDED USE
The sleek design of the D-Series Size 0 reflects the embedded high performance LED technology. It is ideal for many commercial and municipal applications, such as parking lots, plazas, campuses, and pedestrian areas.

CONSTRUCTION
Single-piece die-cast aluminum housing has integral heat sink fins to optimize thermal management through conductive and convective cooling. Modular design allows for ease of maintenance and future light engine upgrades. The LED driver is mounted in direct contact with the casting to promote low operating temperature and long life. Housing is completely sealed against moisture and environmental contaminants (IP65). Low EPA (0.95 ft^2) for optimized pole wind loading.

FINISH
Exterior parts are protected by a zinc-infused Super Durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering. A tightly controlled multi-stage process ensures a minimum 3 mils thickness for a finish that can withstand extreme climate changes without cracking or peeling. Available in both textured and non-textured finishes.

OPTICS
Precision-molded proprietary acrylic lenses are engineered for superior area lighting distribution, uniformity, and pole spacing. Light engines are available in 3000 K, 4000 K or 5000 K (70 CRI) configurations. The D-Series Size 0 has zero uplight and qualifies as a Nighttime Friendly™ product, meaning it is consistent with the LEED® and Green Globes™ criteria for eliminating wasteful uplight.

ELECTRICAL
Light engine(s) configurations consist of high-efficacy LEDs mounted to metal-core circuit boards to maximize heat dissipation and promote long life (up to L85/100,000 hours at 25°C). Class 1 electronic drivers are designed to have a power factor >90%, THD <20%, and an expected life of 100,000 hours with <1% failure rate. Easily serviceable 10kV surge protection device meets a minimum Category C Low operation (per ANSI/IEEE C62.41.2).

INSTALLATION
Included mounting block and integral arm facilitate quick and easy installation. Stainless steel bolts fasten the mounting block securely to poles and walls, enabling the D-Series Size 0 to withstand up to a 3.0 G vibration load rating per ANSI C136.31. The D-Series Size 0 utilizes the AERIS™ series pole drilling pattern (template #8). Optional terminal block and NEMA photocontrol receptacle are also available.

LISTINGS
UL Listed for wet locations. Light engines are IP66 rated; luminaire is IP65 rated. Rated for -40°C minimum ambient. U.S. Patent No. D672,492 S. International patent pending.

DesignLights Consortium® (DLC) Premium qualified product and DLC qualified product. Not all versions of this product may be DLC Premium qualified or DLC qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified.

WARRANTY
5-year limited warranty. Complete warranty terms located at:
www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx

Note: Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.

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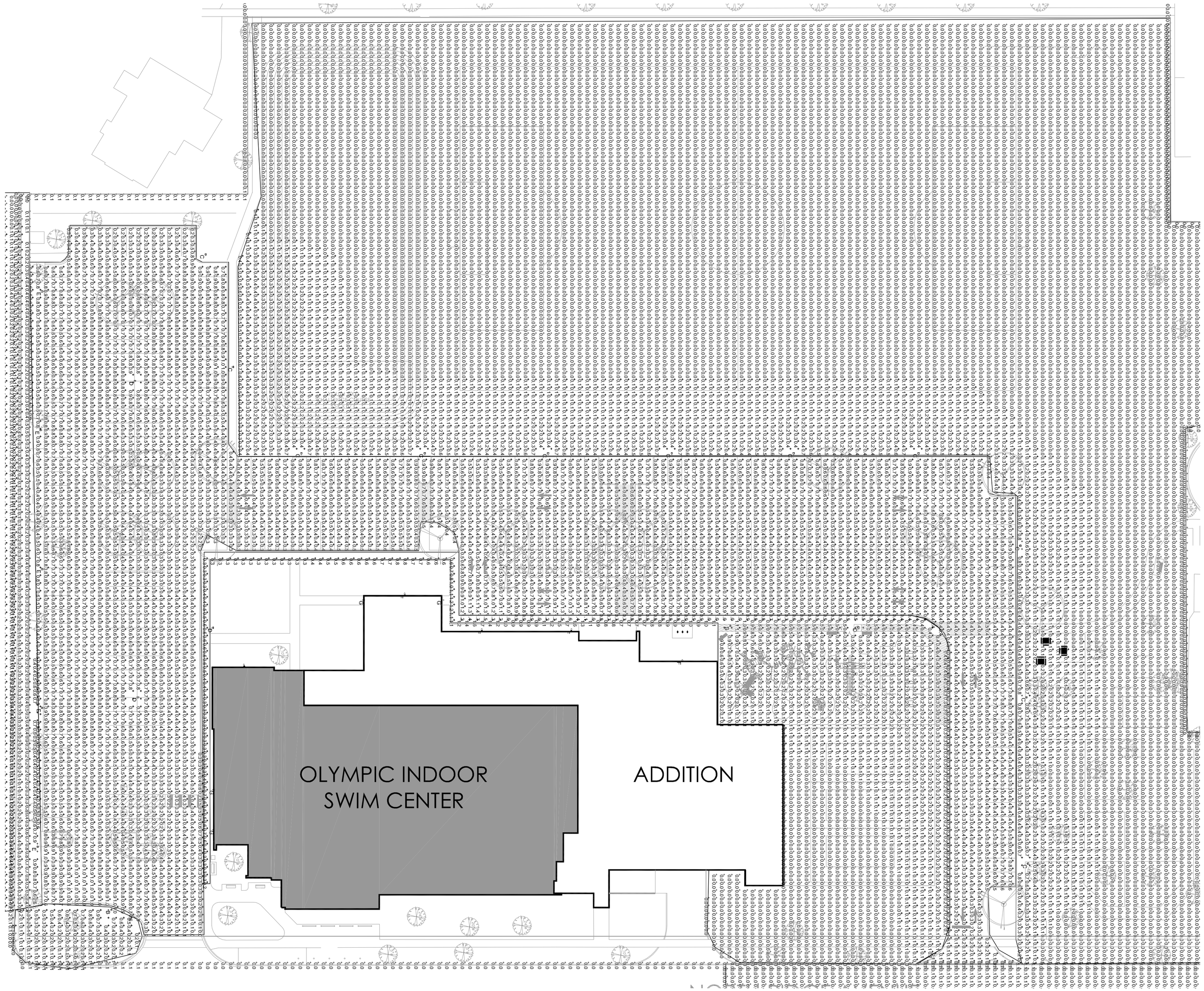

Schedule									
Symbol	Label	QTY	Catalog Number	Description	Lamp	Number Lamps	Lumens Per Lamp	LLF	Wattage
	A	9	GSAS LED P1 40K 10M MVOLT	GSAS LED P1 40K 10M MVOLT	4000	1	4000	0.9	36
	B	2	GSAS LED P1 40K 7M MVOLT	GSAS LED P1 40K 7M MVOLT	4000	1	4578	0.9	36
	C	11	GSAS LED P1 40K 5M MVOLT	GSAS LED P1 40K 5M MVOLT	4000	1	4611	0.9	36
	D	4	GSAS LED P1 40K 10R MVOLT	GSAS LED P1 40K 10R MVOLT	4000	1	4656	0.9	36
	E	3	GSAS LED P1 40K 5FT M MVOLT	GSAS LED P1 40K 5FT M MVOLT	4000	1	4711	0.9	36
	F	4	RSXE LED 08P1 1 040 DCLS SL 30 DDTA CRI70 FINISH TBD	RSXE LED 08P1 1 040 DCLS SL 30 DDTA, FINISH, CRI 70, 4000K COLOR TEMPERATURE, TYPE SLS30B	Custom Wall Pack Lumileds SLM3 1A 150 DE, Lumileds SLM3 1A 150 DE, Lumileds OUTPUT: 4040 Lms	1	4067	0.9	41
	G	5	RSXE LED 08P1 1 060 DCLS SL 30 DDTA CRI70 FINISH TBD	RSXE LED 08P1 1 060 DCLS SL 30 DDTA, FINISH, CRI 70, 4000K COLOR TEMPERATURE, TYPE SLS30B		1	2512	0.9	26

Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Busness Line	+	0.1 fc	0.1 fc	0.0 fc	N/A	N/A
EUCLID AVENUE	+	0.2 fc	1.0 fc	0.0 fc	N/A	N/A
FEILD	+	0.0 fc	0.9 fc	0.0 fc	N/A	N/A
Green Space	+	0.3 fc	1.0 fc	0.0 fc	N/A	N/A
PARKING LOT	+	0.5 fc	1.7 fc	0.0 fc	N/A	N/A
PLAYGROUND	+	0.2 fc	1.7 fc	0.0 fc	N/A	N/A
Residentall Line	+	0.0 fc	0.1 fc	0.0 fc	N/A	N/A
ROAD	+	0.0 fc	0.1 fc	0.0 fc	N/A	N/A
Road Line	+	0.2 fc	0.4 fc	0.0 fc	N/A	N/A

ISSUANCE		
NO.	DATE	DESCRIPTION
00	01.08.18	PLAN COMMISSION REVIEW
01	02.09.18	PLAN COMMISSION REVIEW-REVISIONS

FGM ARCHITECTS
CHICAGO OAK BROOK O'FALLON ST. LOUIS

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IL # 184-000350

OLYMPIC SWIM ADDITION AND RENOVATION
ARLINGTON HEIGHTS PARK DISTRICT
660 Ridge Ave
Arlington Heights, IL 60004

SITE PHOTOMETRICS - BASE BID

SHEET NO.
ESP-1

JOB NO. 17-2408.01

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ESP-1 **SITE PHOTOMETRICS - BASE BID**
1" = 1/32" = 1'- 0"

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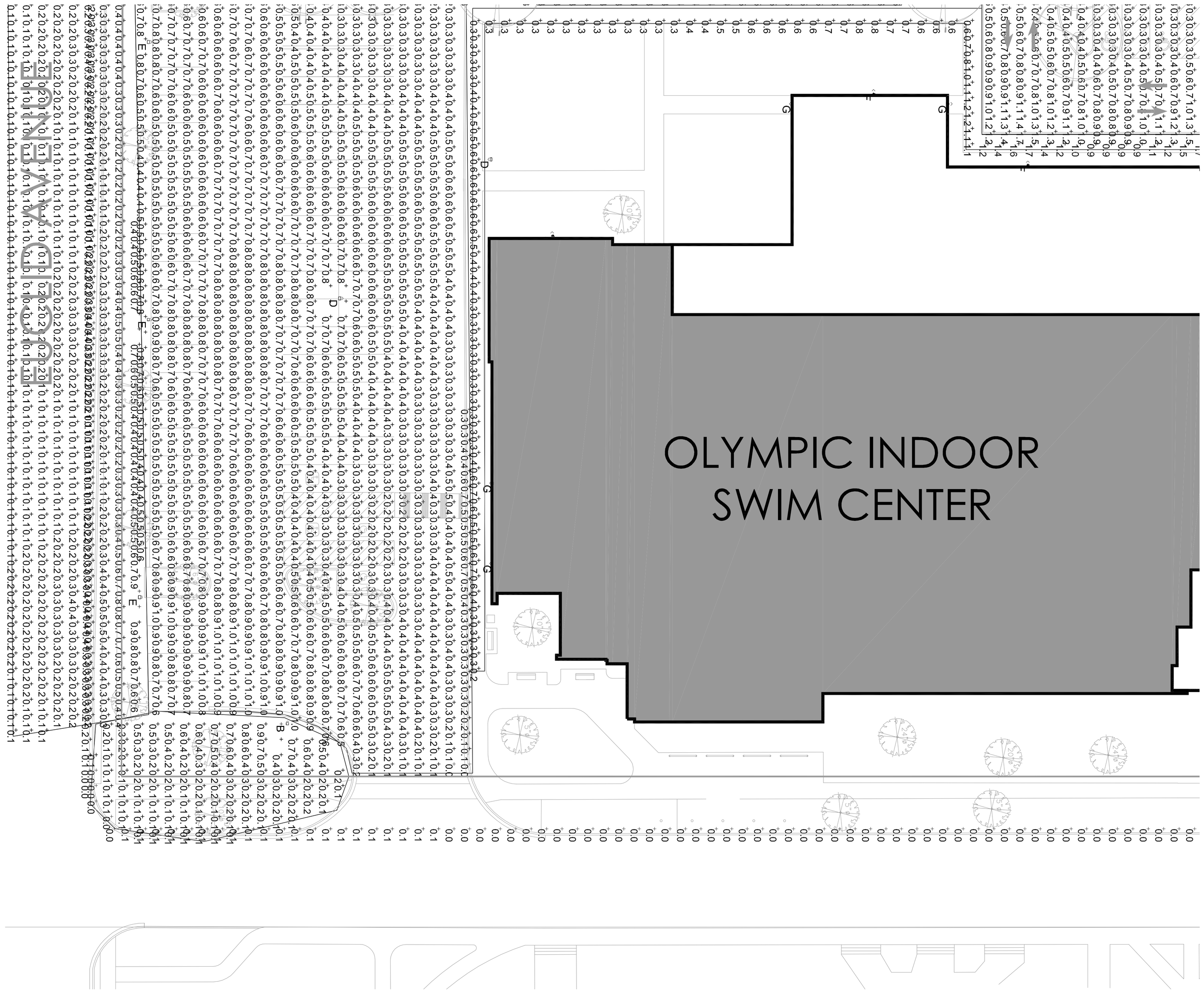

Schedule									
Symbol	Label	QTY	Catalog Number	Description	Lamp	Number Lamps	Lumens Per Lamp	LLF	Wattage
⊐◫⊐	A	9	GSAS LED P1 40K 10M MVOLT	GSAS LED P1 40K 10M MVOLT	LED	1	4000	0.8	36
⊐◫⊐	B	2	GSAS LED P1 40K T5M MVOLT	GSAS LED P1 40K T5M MVOLT	LED	1	4000	0.8	36
⊐◫⊐	C	11	GSAS LED P1 40K 1M4 MVOLT	GSAS LED P1 40K 1M4 MVOLT	LED	1	4811	0.8	36
⊐◫⊐	D	4	GSAS LED P1 40K 10R MVOLT	GSAS LED P1 40K 10R MVOLT	LED	1	4956	0.8	36
⊐◫⊐	E	1	GSAS LED P1 40K 1F1M MVOLT	GSAS LED P1 40K 1F1M MVOLT	LED	1	4171	0.8	36
⊃◖	F	4	WDGE LED 2 1000WDM WH MVOLT	WDGE LED GEN 2 1 MEDIUM OPTIC, 50 LEDS, 700mA, CRI 80+, 4000K COLOR TEMPERATURE, TYPE 3 LENS	Custom Wall Pack Luminaire 6,800 to 10,100 - Lumen/Watt OUTPUT, 4000 Color	1	8067	0.8	44
⊃◖	G	5	WDGE LED 2 1000WDM WH MVOLT	WDGE LED GEN 2 1 MEDIUM OPTIC, 50 LEDS, 700mA, CRI 80+, 4000K COLOR TEMPERATURE, TYPE 3 LENS	LED	1	2512	0.2	24

Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Busness Line	+	0.1 fc	0.1 fc	0.0 fc	N/A	N/A
EUCLID AVENUE	+	0.2 fc	1.0 fc	0.0 fc	N/A	N/A
FEILD	+	0.0 fc	0.9 fc	0.0 fc	N/A	N/A
Green Space	+	0.3 fc	1.0 fc	0.0 fc	N/A	N/A
PARKING LOT	+	0.5 fc	1.7 fc	0.0 fc	N/A	N/A
PLAYGROUND	+	0.2 fc	1.7 fc	0.0 fc	N/A	N/A
Residentall Line	+	0.0 fc	0.1 fc	0.0 fc	N/A	N/A
ROAD	+	0.0 fc	0.1 fc	0.0 fc	N/A	N/A
Road Line	+	0.2 fc	0.4 fc	0.0 fc	N/A	N/A

ISSUANCE

NO.	DATE	DESCRIPTION
00	01.08.18	PLAN COMMISSION REVIEW
01	02.09.18	PLAN COMMISSION REVIEW-REVISIONS

FGM ARCHITECTS
CHICAGO OAK BROOK O'FALLON ST. LOUIS

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IL # 184-000350

OLYMPIC SWIM ADDITION AND RENOVATION
ARLINGTON HEIGHTS PARK DISTRICT
660 Ridge Ave
Arlington Heights, IL 60004

SITE PHOTOMETRICS - BASE BID

SHEET NO.
ESP-2

JOB NO. 17-2408.01

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ESP-2 **SITE PHOTOMETRICS - BASE BID**
1" = 1/16" = 1'- 0"

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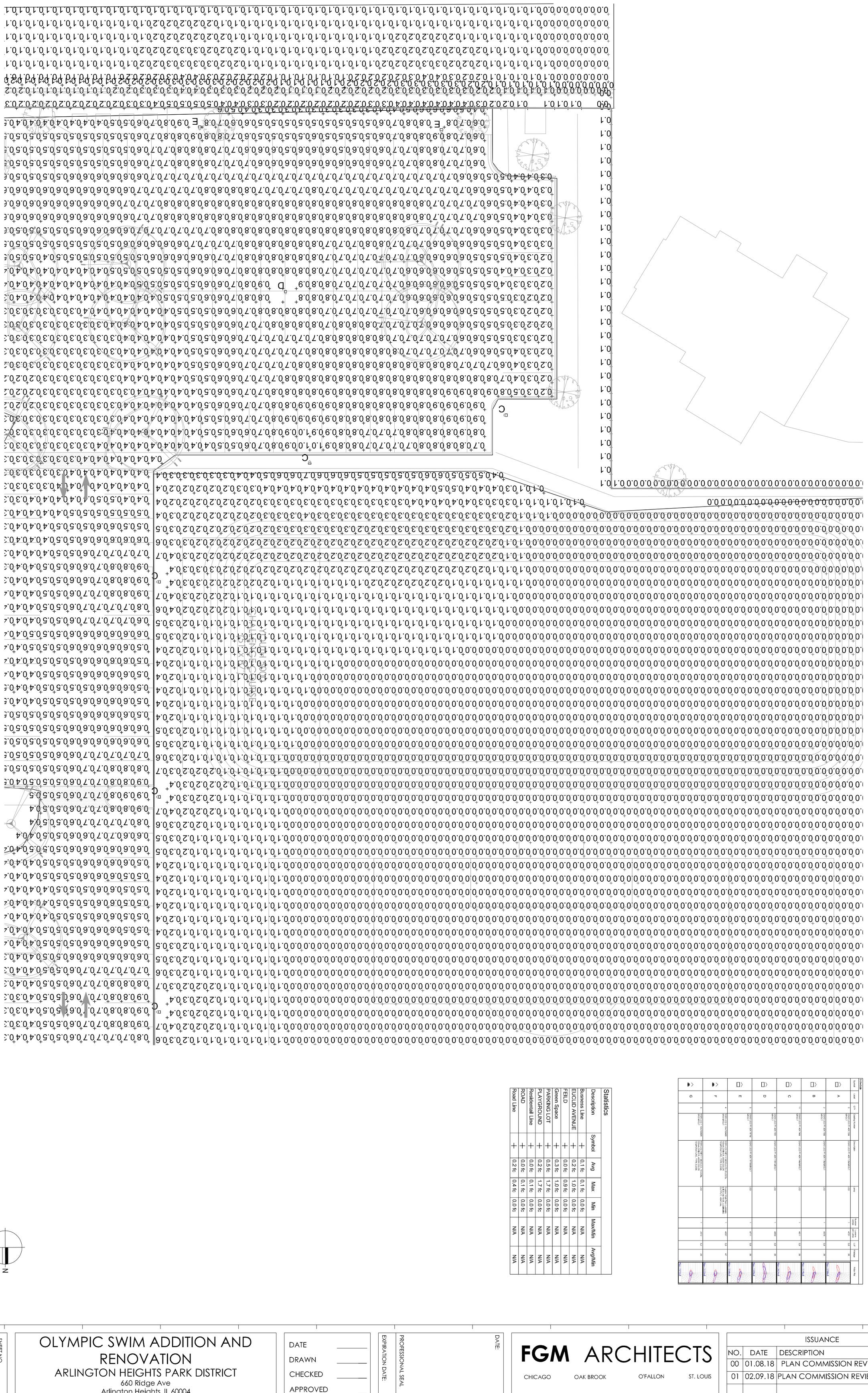
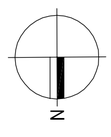


Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Busness Line	+	0.1 fc	0.1 fc	0.0 fc	N/A	N/A
EUCLID AVENUE	+	0.2 fc	1.0 fc	0.0 fc	N/A	N/A
FEILD	+	0.0 fc	0.9 fc	0.0 fc	N/A	N/A
Green Space	+	0.3 fc	1.0 fc	0.0 fc	N/A	N/A
PARKING LOT	+	0.5 fc	1.7 fc	0.0 fc	N/A	N/A
PLAYGROUND	+	0.2 fc	1.7 fc	0.0 fc	N/A	N/A
Residentail Line	+	0.0 fc	0.1 fc	0.0 fc	N/A	N/A
ROAD	+	0.0 fc	0.1 fc	0.0 fc	N/A	N/A
Road Line	+	0.2 fc	0.4 fc	0.0 fc	N/A	N/A

Schedule									
Symbol	Label	QTY	Catalog Number	Description	Lamp	Lamp Number	Lumens per Lamp	LLF	Wattage	Polar Plot
□›	A	3	GSX51-LED-P1-40K-T5M-MVOLT	GSX51-LED-P1-40K-T5M	LED	1	4576	0.9	38	Plane: 1.50mcd
□›	B	11	GSX51-LED-P1-40K-T4M-MVOLT	GSX51-LED-P1-40K-T4M	LED	1	4611	0.9	38	Plane: 1.50mcd
□›	C	4	GSX51-LED-P1-40K-T3M-MVOLT	GSX51-LED-P1-40K-T3M	LED	1	4689	0.9	38	Plane: 1.50mcd
□›	D	5	GSX51-LED-P1-40K-T2M-MVOLT	GSX51-LED-P1-40K-T2M	LED	1	4711	0.9	38	Plane: 1.50mcd
◗›	E	5	GSX51-LED-P1-40K-T1M-MVOLT	GSX51-LED-P1-40K-T1M	LED	1	4787	0.9	38	Plane: 1.50mcd
◗›	F	4	WSR-LED-S-TA/HOUSE-MVOLT-SHIELD	WSR-LED-S-TA/HOUSE-MVOLT-SHIELD	LED	1	2019	0.9	47	Plane: 1.50mcd
◗›	G	5	WSR-LED-S-TA/HOUSE-MVOLT-SHIELD	WSR-LED-S-TA/HOUSE-MVOLT-SHIELD	LED	1	2019	0.9	47	Plane: 1.50mcd



ESP-3

SITE PHOTOMETRICS - BASE BID

1" = 1/16" = 1'-0"

OLYMPIC SWIM ADDITION AND RENOVATION

ARLINGTON HEIGHTS PARK DISTRICT
660 Ridge Ave
Arlington Heights, IL 60004

SITE PHOTOMETRICS - BASE BID

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CHICAGO OAK BROOK O'FALLON ST. LOUIS

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01	02.09.18	PLAN COMMISSION REVIEW-REVISIONS

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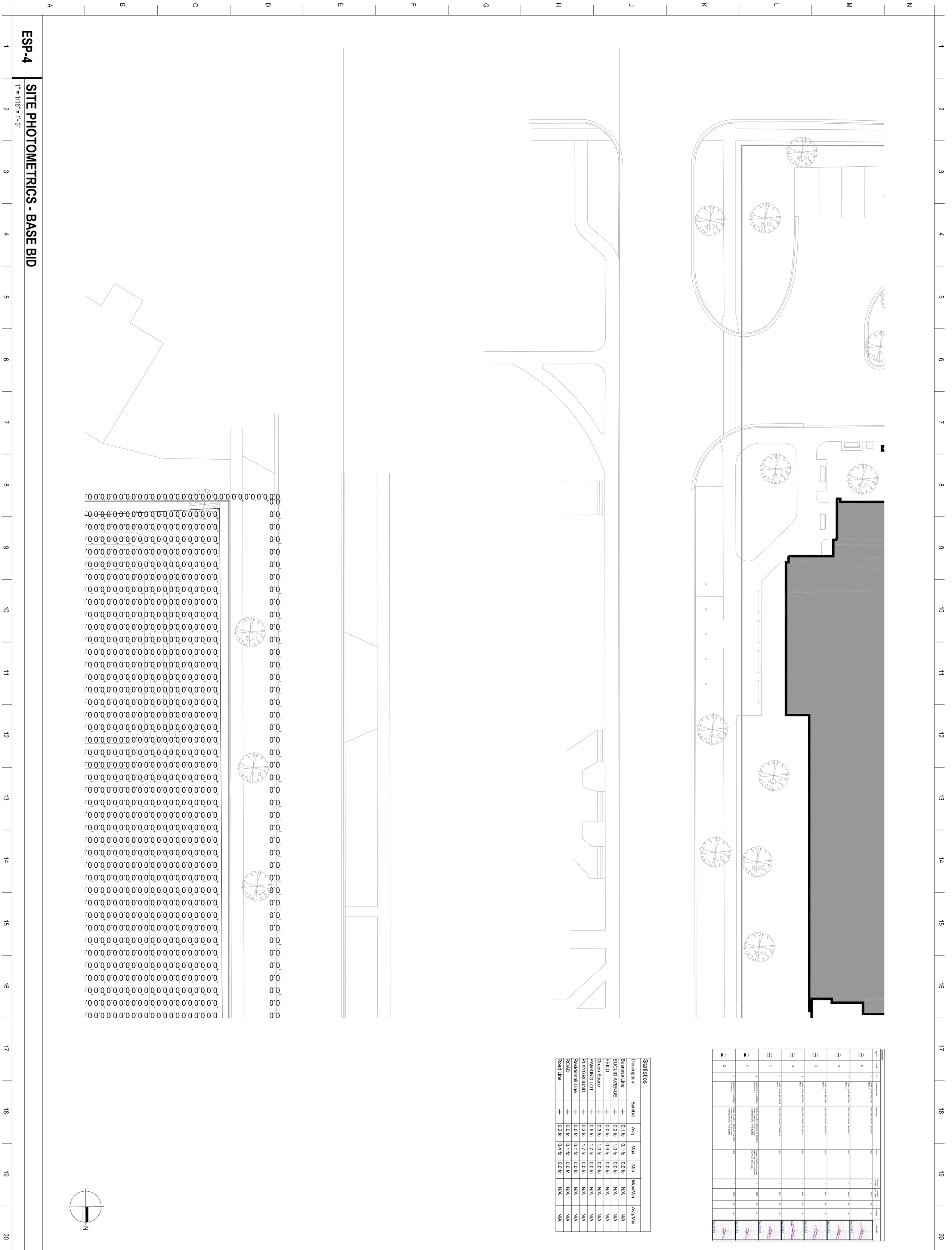

SITE PHOTOMETRICS - BASE BID

1" = 1/16" = 1'-0"

N

Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Busness Line	+	0.1 fc	0.1 fc	0.0 fc	N/A	N/A
EUCLID AVENUE	+	0.2 fc	1.0 fc	0.0 fc	N/A	N/A
FEILD	+	0.0 fc	0.9 fc	0.0 fc	N/A	N/A
Green Space	+	0.3 fc	1.0 fc	0.0 fc	N/A	N/A
PARKING LOT	+	0.5 fc	1.7 fc	0.0 fc	N/A	N/A
PLAYGROUND	+	0.2 fc	1.7 fc	0.0 fc	N/A	N/A
Residentail Line	+	0.0 fc	0.1 fc	0.0 fc	N/A	N/A
ROAD	+	0.0 fc	0.1 fc	0.0 fc	N/A	N/A
Road Line	+	0.2 fc	0.4 fc	0.0 fc	N/A	N/A

Schedule										
Symbol	Label	QTY	Catalog Number	Description	Lamp	Lamp Number	Lamps per Luminaire	Lamp Lumens	LLF	Wattage	Plan Plot
A		2	GSX51-LED-P1-40K-T4M	GSX51-LED-P1-40K-T4M	LED	1	1	4576	0.9	38	Plan 1:10Plot
B		11	GSX51-LED-P1-40K-T4M2	GSX51-LED-P1-40K-T4M2	LED	1	1	4611	0.9	38	Plan 1:10Plot
C		4	GSX51-LED-P1-40K-T4W	GSX51-LED-P1-40K-T4W	LED	1	1	4689	0.9	38	Plan 1:10Plot
D		5	GSX51-LED-P1-40K-T4W2	GSX51-LED-P1-40K-T4W2	LED	1	1	4711	0.9	38	Plan 1:10Plot
E		5	GSX51-LED-P1-40K-T5W	GSX51-LED-P1-40K-T5W	LED	1	1	4707	0.9	38	Plan 1:10Plot
F		4	GSX51-LED-P1-40K-T5W2	GSX51-LED-P1-40K-T5W2	LED	1	1	4707	0.9	47	Plan 1:10Plot
G		5	WSR-LED-1.5A700MA-P	POWER LED WSR1 1.5A/700MA, SELECTAL TEMPERATURE, TYPE 3 LENS	LED	1	1	2019	0.9	34	Plan 1:10Plot

OLYMPIC SWIM ADDITION AND RENOVATION
ARLINGTON HEIGHTS PARK DISTRICT
660 Ridge Ave
Arlington Heights, IL 60004

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ISSUANCE		
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01	02.09.18	PLAN COMMISSION REVIEW-REVISIONS

JOB NO. 17-2408.01
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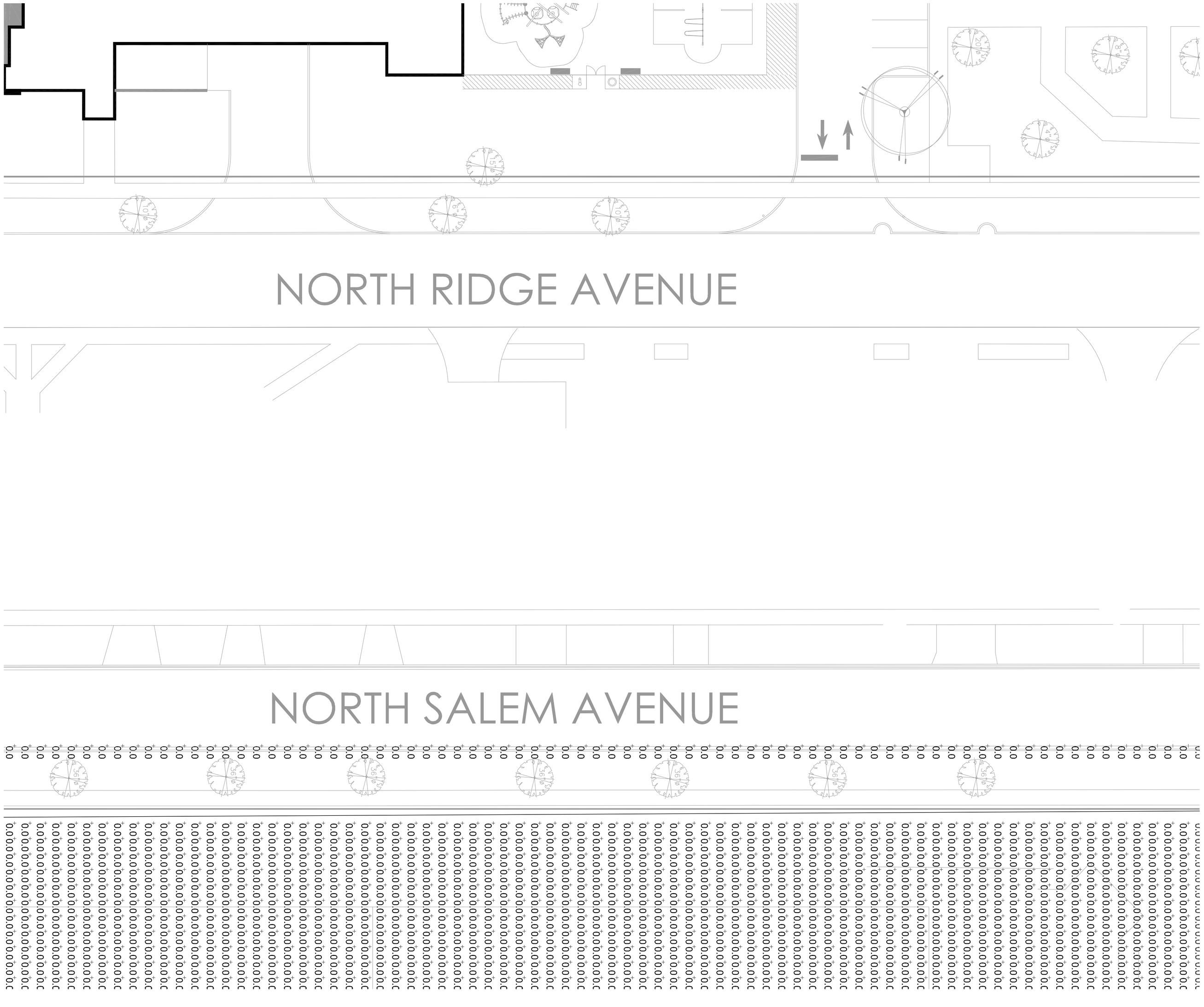

Schedule

Symbol	Label	QTY	Catalog Number	Description	Lamp	Number Lamps	Lumens per Lamp	LLF	Wattage	Polar Plot
	A	9	GWS-LED-P1-40K-T2M-MVOLT	GWS-LED-P1-40K-T2M-MVOLT	LED	1	4051	0.8	35	
	B	2	GWS-LED-P1-40K-T4M-MVOLT	GWS-LED-P1-40K-T4M-MVOLT	LED	1	4076	0.8	35	
	C	11	GWS-LED-P1-40K-T4M-MVOLT	GWS-LED-P1-40K-T4M-MVOLT	LED	1	4011	0.8	35	
	D	4	GWS-LED-P1-40K-T5W-MVOLT	GWS-LED-P1-40K-T5W-MVOLT	LED	1	4956	0.8	35	
	E	3	GWS-LED-P1-40K-T5W-MVOLT	GWS-LED-P1-40K-T5W-MVOLT	LED	1	4011	0.8	35	
	F	4	RWM-LED-SMT-1-MDO-CC-E-35-CCTA-HSKA-CMB-CYL-40SR-COLOR-TEMPERATURE_TYPE_FLD-MB	Duplex Wall Pack Luminaire, 0.83 x 16 Inch, Lumens Output, 40K/Color	LED	1	4057	0.8	41	
	G	5	RWM-LED-SMT-1-MDO-CC-E-70-CCTA-HSKA-CMB-CYL-40SR-COLOR-TEMPERATURE_TYPE_FLD-MB		LED	1	2012	0.8	24	

Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Busness Line	+	0.1 fc	0.1 fc	0.0 fc	N/A	N/A
EUCLID AVENUE	+	0.2 fc	1.0 fc	0.0 fc	N/A	N/A
FEILD	+	0.0 fc	0.9 fc	0.0 fc	N/A	N/A
Green Space	+	0.3 fc	1.0 fc	0.0 fc	N/A	N/A
PARKING LOT	+	0.5 fc	1.7 fc	0.0 fc	N/A	N/A
PLAYGROUND	+	0.2 fc	1.7 fc	0.0 fc	N/A	N/A
Residentall Line	+	0.0 fc	0.1 fc	0.0 fc	N/A	N/A
ROAD	+	0.0 fc	0.1 fc	0.0 fc	N/A	N/A
Road Line	+	0.2 fc	0.4 fc	0.0 fc	N/A	N/A

N

ISSUANCE

NO.	DATE	DESCRIPTION
00	01.08.18	PLAN COMMISSION REVIEW
01	02.09.18	PLAN COMMISSION REVIEW-REVISIONS

FGM ARCHITECTS
CHICAGO OAKBROOK O'FALLON ST. LOUIS

DATE:

PROFESSIONAL SEAL

EXPIRATION DATE:

DATE
DRAWN
CHECKED
APPROVED

PROFESSIONAL DESIGN FIRM
IL # 184-003350

OLYMPIC SWIM ADDITION AND RENOVATION
ARLINGTON HEIGHTS PARK DISTRICT
660 Ridge Ave
Arlington Heights, IL 60004

SITE PHOTOMETRICS - BASE BID

SHEET NO.
ESP-5

JOB NO. 17-2408.01

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ESP-5 **SITE PHOTOMETRICS - BASE BID**

1" = 1/16" = 1'- 0"

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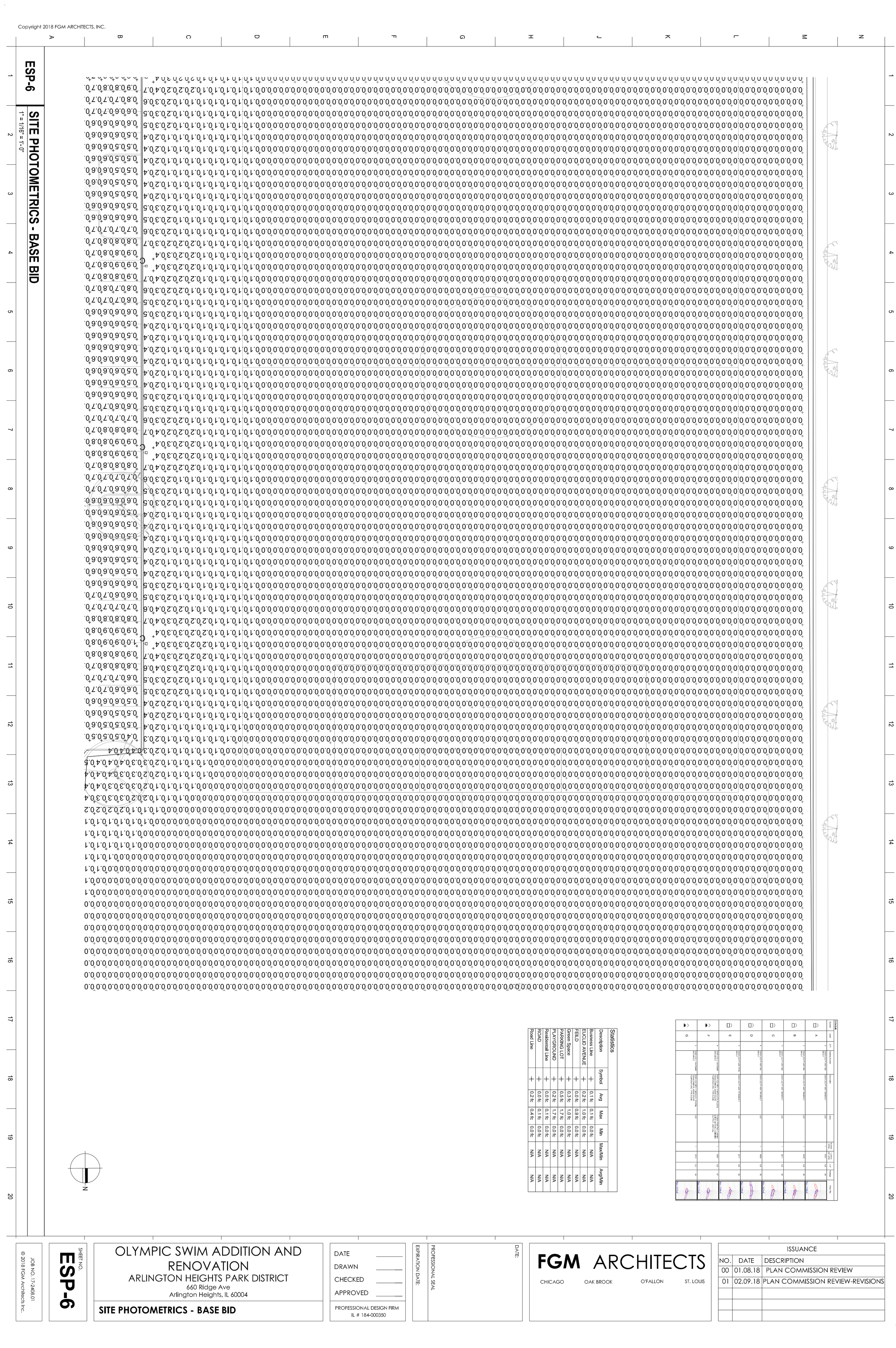

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FEILD	+	0.0 fc	0.9 fc	0.0 fc	N/A	N/A
Green Space	+	0.3 fc	1.0 fc	0.0 fc	N/A	N/A
PARKING LOT	+	0.5 fc	1.7 fc	0.0 fc	N/A	N/A
PLAYGROUND	+	0.2 fc	1.7 fc	0.0 fc	N/A	N/A
Residentail Line	+	0.0 fc	0.1 fc	0.0 fc	N/A	N/A
ROAD	+	0.0 fc	0.1 fc	0.0 fc	N/A	N/A
Road Line	+	0.2 fc	0.4 fc	0.0 fc	N/A	N/A

Schedule									
Symbol	Label	QTY	Catalog Number	Description	Lamp	Lamp Number	Lumens per Lamp	LLF	Wattage	Polar Plot
□›	A	3	GSX51-LED-P1-40K-T3M-MVOLT	GSX51-LED-P1-40K-T3M	LED	1	4576	0.9	38	Peak: 1.7cfm
□›	B	11	GSX51-LED-P1-40K-T4M-MVOLT	GSX51-LED-P1-40K-T4M	LED	1	4611	0.9	38	Peak: 1.7cfm
□›	C	4	GSX51-LED-P1-40K-T3M-MVOLT	GSX51-LED-P1-40K-SWARCS	LED	1	4589	0.9	38	Peak: 1.7cfm
□›	D	5	GSX51-LED-P1-40K-T4M-MVOLT	GSX51-LED-P1-40K-T4MARCS	LED	1	4589	0.9	38	Peak: 1.7cfm
□›	E	5	GSX51-LED-P1-40K-T4M-MVOLT	GSX51-LED-P1-40K-T4MARCS	LED	1	4311	0.9	38	Peak: 1.7cfm
◗›	F	4	SSP1-LED-1-T4-NSP4-40K-T4M-MVOLT-HS	SSP1-LED-1-T4-NSP4-40K-T4M-MVOLT-HS	LED	1	4267	0.9	47	Peak: 1.7cfm
◗›	G	5	SSP1-LED-1-T4-NSP4-40K-T4M-MVOLT-HS	SSP1-LED-1-T4-NSP4-40K-T4M-MVOLT-HS	LED	1	4267	0.9	47	Peak: 1.7cfm

ESP-6

SITE PHOTOMETRICS - BASE BID

1" = 1/16" = 1'-0"

SHEET NO. **ESP-6**

JOB NO. 17-2408.01

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OLYMPIC SWIM ADDITION AND RENOVATION

ARLINGTON HEIGHTS PARK DISTRICT

660 Ridge Ave

Arlington Heights, IL 60004

SITE PHOTOMETRICS - BASE BID

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IL # 184-000350

EXPIRATION DATE:

PROFESSIONAL SEAL

DATE:

FGM ARCHITECTS

CHICAGO OAK BROOK O'FALLON ST. LOUIS

ISSUANCE		
NO.	DATE	DESCRIPTION
00	01.08.18	PLAN COMMISSION REVIEW
01	02.09.18	PLAN COMMISSION REVIEW-REVISIONS

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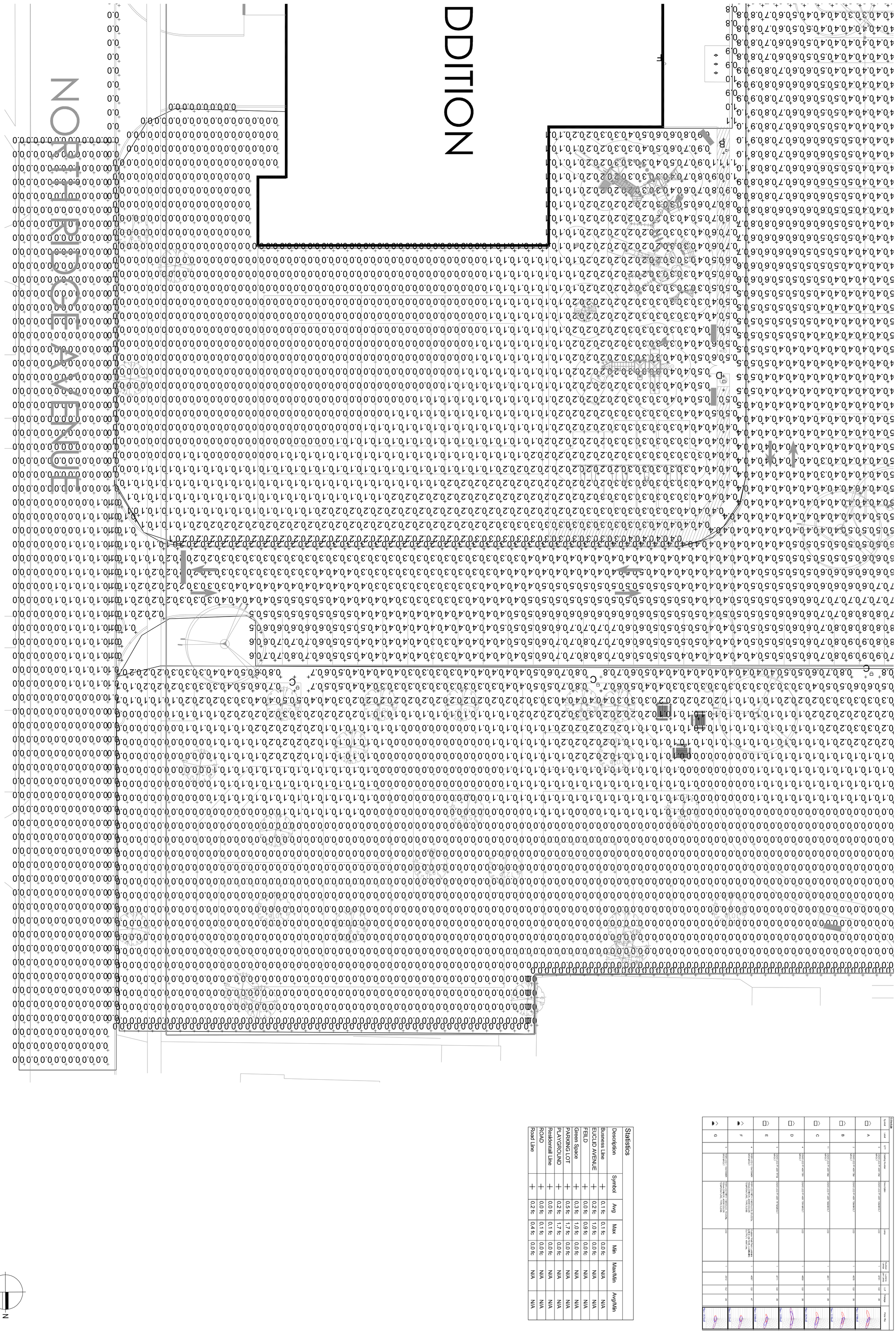

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EUCLID AVENUE	+	0.2 fc	1.0 fc	0.0 fc	N/A	N/A
FEILD	+	0.0 fc	0.9 fc	0.0 fc	N/A	N/A
Green Space	+	0.3 fc	1.0 fc	0.0 fc	N/A	N/A
PARKING LOT	+	0.5 fc	1.7 fc	0.0 fc	N/A	N/A
PLAYGROUND	+	0.2 fc	1.7 fc	0.0 fc	N/A	N/A
Residentail Line	+	0.0 fc	0.1 fc	0.0 fc	N/A	N/A
ROAD	+	0.0 fc	0.1 fc	0.0 fc	N/A	N/A
Road Line	+	0.2 fc	0.4 fc	0.0 fc	N/A	N/A

Schedule									
Symbol	Label	QTY	Catalog Number	Description	Lamp	Lamp Number	Lumens per Lamp	LLF	Wattage	Plan View
▷	A	3	GSX51157-P-40K-TBM-MVOLT	GSX51157-P-40K-TBM-MVOLT	LED	1	4576	0.9	38	Plan View
▷	B	11	GSX51157-P-40K-T4M-MVOLT	GSX51157-P-40K-T4M-MVOLT	LED	1	4611	0.9	39	Plan View
▷	C	4	GSX51157-P-40K-T3M-MVOLT	GSX51157-P-40K-T3M-MVOLT	LED	1	4689	0.9	39	Plan View
▷	D	5	GSX51157-P-40K-RTM-MVOLT	GSX51157-P-40K-RTM-MVOLT	LED	1	4711	0.9	39	Plan View
▷	E	5	GSX51157-P-40K-T2M-MVOLT	GSX51157-P-40K-T2M-MVOLT	LED	1	4711	0.9	39	Plan View
▷	F	4	WSR-LED-1-TAN-SQNDP WSR-LED-1-TAN-SQNDP	GSX51157-P-40K-T4M-MVOLT	LED	1	4267	0.9	47	Plan View
▷	G	5	WSR-LED-1-TAN-SQNDP WSR-LED-1-TAN-SQNDP	GSX51157-P-40K-T4M-MVOLT	LED	1	2019	0.9	34	Plan View

N

ISSUANCE		
NO.	DATE	DESCRIPTION
00	01.08.18	PLAN COMMISSION REVIEW
01	02.09.18	PLAN COMMISSION REVIEW-REVISIONS

FGM ARCHITECTS

CHICAGO OAK BROOK O'FALLON ST. LOUIS

DATE:

PROFESSIONAL SEAL

EXPIRATION DATE:

DATE _____

DRAWN _____

CHECKED _____

APPROVED _____

PROFESSIONAL DESIGN FIRM
IL # 184-000350

OLYMPIC SWIM ADDITION AND RENOVATION

ARLINGTON HEIGHTS PARK DISTRICT
660 Ridge Ave
Arlington Heights, IL 60004

SITE PHOTOMETRICS - BASE BID

SHEET NO. **ESP-7**

JOB NO. 17-2408.01

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ESP-7 SITE PHOTOMETRICS - BASE BID
1" = 1/16" = 1'-0"

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ESP-8

SITE PHOTOMETRICS - BASE BID

1" = 1/16" = 1'-0"

N

Statistics

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
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EUCLID AVENUE	+	0.2 fc	1.0 fc	0.0 fc	N/A	N/A
FEILD	+	0.0 fc	0.9 fc	0.0 fc	N/A	N/A
Green Space	+	0.3 fc	1.0 fc	0.0 fc	N/A	N/A
PARKING LOT	+	0.5 fc	1.7 fc	0.0 fc	N/A	N/A
PLAYGROUND	+	0.2 fc	1.7 fc	0.0 fc	N/A	N/A
Residentail Line	+	0.0 fc	0.1 fc	0.0 fc	N/A	N/A
ROAD	+	0.0 fc	0.1 fc	0.0 fc	N/A	N/A
Road Line	+	0.2 fc	0.4 fc	0.0 fc	N/A	N/A

Schedule										
Symbol	Label	QTY	Catalog Number	Description	Lamp	Lamp Number	Lumens per Lamp	LLF	Wattage	Polar Plot
▮›	A	3	GSX51153-P1-40K1-TBM	GSX51153-P1-40K1-TBM	LED	-	4576	0.9	38	Max: 1.7cfm
▮›	B	11	GSX51153-P1-40K1-R4M	GSX51153-P1-40K1-R4M	LED	-	4611	0.9	38	Max: 1.7cfm
□›	C	4	GSX51153-P1-40K1-T4W	GSX51153-P1-40K1-T4W	LED	-	4589	0.9	38	Max: 1.7cfm
□›	D	5	GSX51153-P1-40K1-R1M4	GSX51153-P1-40K1-R1M4MOUNT	LED	-	4171	0.9	38	Max: 1.7cfm
□›	E	5	GSX51153-P1-40K1-SWMOUNT	GSX51153-P1-40K1-SWMOUNT	LED	-	4171	0.9	38	Max: 1.7cfm
▮›	F	4	GSX51153-P1-40K1-RAMOUNT	GSX51153-P1-40K1-RAMOUNT	LED	-	4267	0.9	47	Max: 1.7cfm
▮›	G	5	GSX51153-P1-40K1-SWMOUNT	GSX51153-P1-40K1-SWMOUNT	LED	-	2019	0.9	34	Max: 1.7cfm

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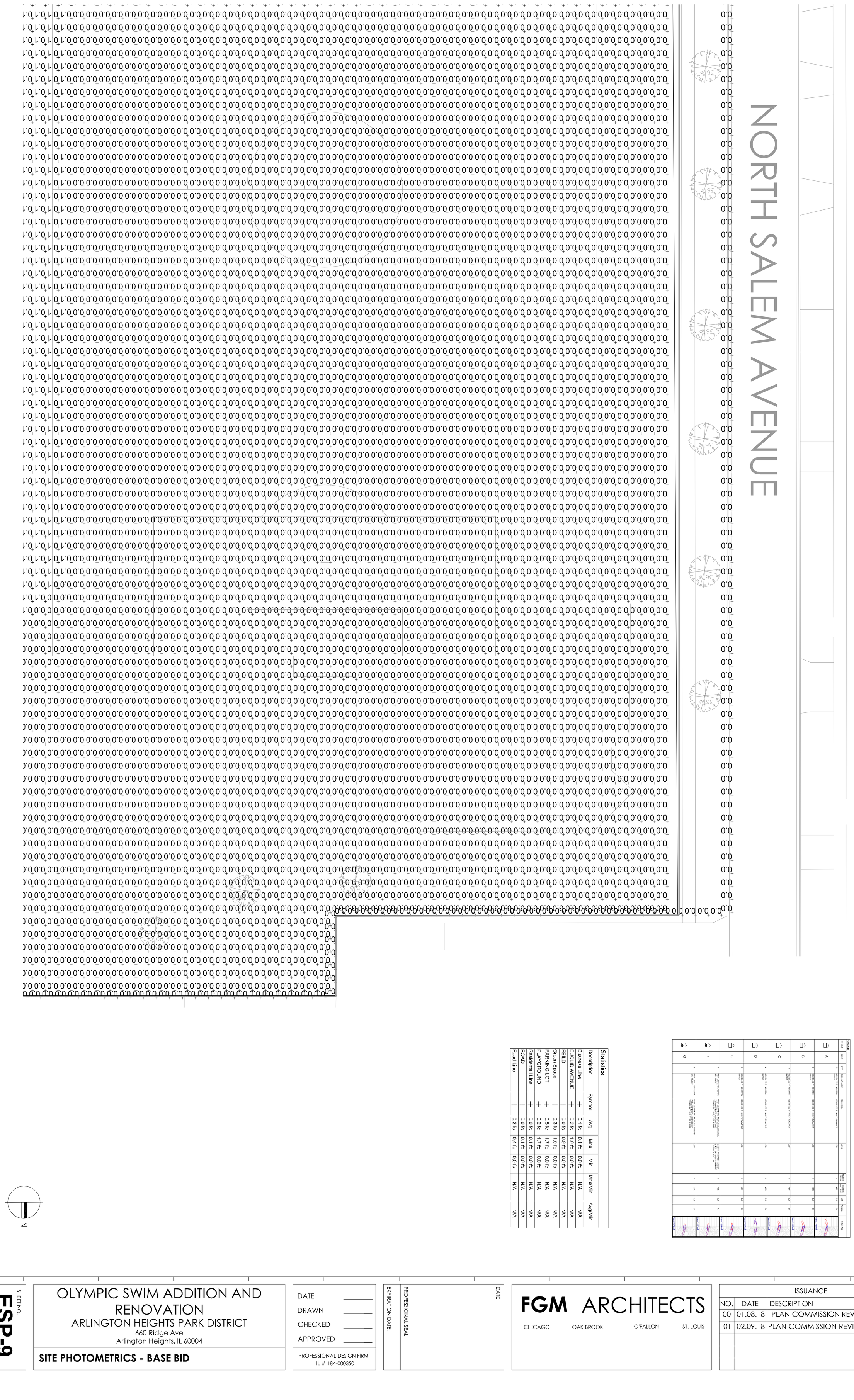

Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
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EUCLID AVENUE	+	0.2 fc	1.0 fc	0.0 fc	N/A	N/A
FEILD	+	0.0 fc	0.9 fc	0.0 fc	N/A	N/A
Green Space	+	0.3 fc	1.0 fc	0.0 fc	N/A	N/A
PARKING LOT	+	0.5 fc	1.7 fc	0.0 fc	N/A	N/A
PLAYGROUND	+	0.2 fc	1.7 fc	0.0 fc	N/A	N/A
Residentail Line	+	0.0 fc	0.1 fc	0.0 fc	N/A	N/A
ROAD	+	0.0 fc	0.1 fc	0.0 fc	N/A	N/A
Road Line	+	0.2 fc	0.4 fc	0.0 fc	N/A	N/A

Schedule										
Symbol	Label	QTY	Catalog Number	Description	Lamp	Lamps per Luminaire	Lumens per Lamp	LLF	Wattage	Polar Plot
▷	A	2	DSX0 LED P1 40K T5M MVOLT	DSX0 LED P1 40K T5M	LED	1	4576	0.9	38	Max: 1.7cfm
▷	B	11	DSX0 LED P1 40K T4M MVOLT	DSX0 LED P1 40K T4M	LED	1	4611	0.9	38	Max: 1.7cfm
▷	C	4	DSX0 LED P1 40K T3M MVOLT	DSX0 LED P1 40K T3M	LED	1	4689	0.9	38	Max: 1.7cfm
▷	D	5	DSX0 LED P1 40K RPA4 MVOLT	DSX0 LED P1 40K RPA4	LED	1	4711	0.9	38	Max: 1.7cfm
▷	E	5	DSX0 LED P1 40K T5W MVOLT	DSX0 LED P1 40K T5W	LED	1	4711	0.9	38	Max: 1.7cfm
▷	F	4	WDGE1 LED 1 SWGWM WDGE1 LED 1 SWGWM	WDGE1 LED 1 SWGWM	LED	1	4267	0.9	47	Max: 1.7cfm
▷	G	5	WDGE1 LED 1 SWGWM WDGE1 LED 1 SWGWM	WDGE1 LED 1 SWGWM	LED	1	2019	0.9	24	Max: 1.7cfm

ISSUANCE		
NO.	DATE	DESCRIPTION
00	01.08.18	PLAN COMMISSION REVIEW
01	02.09.18	PLAN COMMISSION REVIEW-REVISIONS

FGM ARCHITECTS

CHICAGO OAK BROOK O'FALLON ST. LOUIS

DATE:

PROFESSIONAL SEAL

EXPIRATION DATE:

DATE _____

DRAWN _____

CHECKED _____

APPROVED _____

PROFESSIONAL DESIGN FIRM
IL # 184-000350

OLYMPIC SWIM ADDITION AND RENOVATION

ARLINGTON HEIGHTS PARK DISTRICT
660 Ridge Ave
Arlington Heights, IL 60004

SITE PHOTOMETRICS - BASE BID

SHEET NO. **ESP-9**

JOB NO. 17-2408.01

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ESP-9 SITE PHOTOMETRICS - BASE BID 1" = 1/16" = 1'-0"

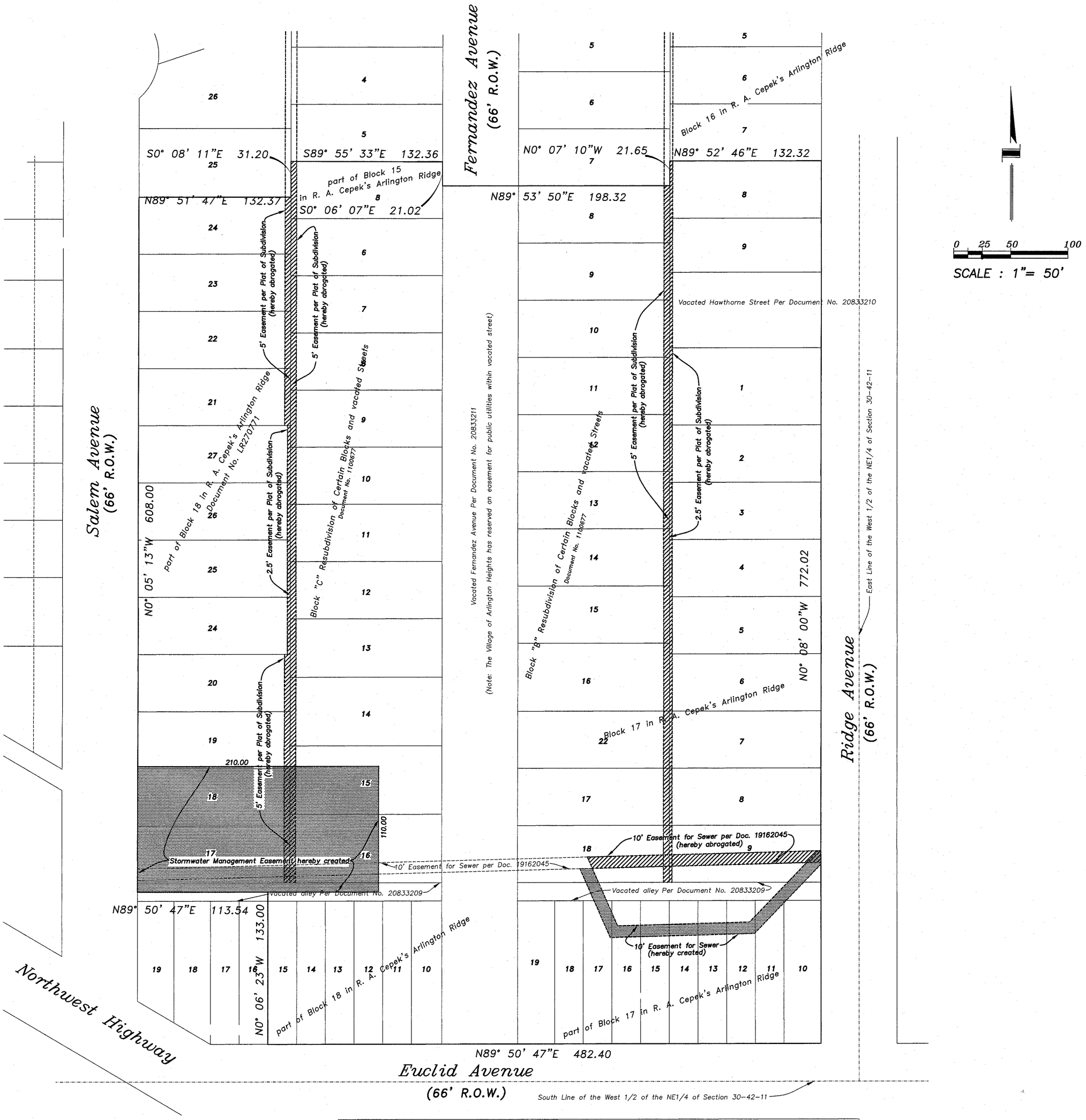
Plat of Easement and Plat of Abrogation

of part of

LOTS 8 AND 9 IN BLOCK 16; LOTS 1 THROUGH 19, BOTH INCLUSIVE, AND LOT 22 IN BLOCK 17; LOT 8 IN BLOCK 15, LOTS 10 THROUGH 15, BOTH INCUSIVE, AND LOTS 24 THROUGH 27, BOTH INCLUSIVE, IN BLOCK 18; ALL THAT PART OF VACATED HAWTHORNE STREET AS SHOWN ON THE PLAT OF VACATION THEREOF HERETOFORE RECORDED IN THE OFFICE OF THE RECORDER OF DEEDS OF COOK COUNTY, ILLINOIS AS DOCUMENT NO. 20833210, ALL THAT PART OF THE VACATED EAST AND WEST PUBIC ALLEY IN BLOCK 17 AS SHOWN ON THE PLAT OF VACATION THEREOF HERETOFORE RECORDED IN THE OFFICE OF THE RECORDER OF DEEDS OF COOK COUNTY, ILLINOIS, AS DOCUMNET NO. 20833209; ALL THAT PART OF VACATED FERNANDEZ AVENUE AS SHOWN ON THE PLAT OF VACATION THEREOF HERETOFORE RECORDED IN THE OFFICE OF THE RECORDER OF DEEDS OF COOK COUNTY, ILLINOIS AS DOCUMENT NO. 20833211; ALL THAT PART OF THE VACATED EAST AND WEST PUBLIC ALLEY IN BLOCK 18 AS SHOWN ON THE PLAT OF VACATION THEREOF HERETOFORE RECORDED IN THE OFFICE OF THE RECORDER OF DEEDS OF COOK COUNTY, ILLINOIS, AS DOCUMENT NO. 20833209, EXCEPTING THEREFROM THAT PART OF THE SOUTH HALF OF SAID VACATED PUBLIC ALLEY LYING NORTH OF AND ADJOINING LOTS 16 THROUGH 19, BOTH INCLUSIVE, IN SAID BLOCK 18; ALL AS SHOWN ON THE PLAT OF R.A. CEPEK'S ARLINGTON RIDGE, BEING A SUABDIVISION OF THAT PART OF THE WEST HALF (EXCEPT THE EAST 33.0 FEET THEREOF) OF THE NORTHEAST QUARTER AND OF THE SOUTH HALF OF THE NORTHWEST QUARTER OF SECTION 30, TOWNSHIP 42 NORTH, RANGE 11, EAST OF THE THIRD PRINCIPAL MERIDIAN LYING NORTH OF THE NORTHEASTERLY LINE OF THE NORTHWEST HIGHWAY, SAID NORTHEASTERLY LINE OF HIGHWAY BEING 66.0 FEET NORTHEASTERLY OF AND PARALLEL WITH THE NORTHEASTERLY LINE OF THE CHICAGO & NORTHWESTERN RAILWAY RIGHT-OF-WAY, ACCORDING TO THE PLAT OF SAID SUBDIVISION REGISTERED IN THE OFFICE OF THE REGISTRAR OF TITLES OF COOK COUNTY, ILLINOIS ON SEPTEMBER 2, 1925, AS DOCUMENT No.LR 270771.

ALSO

LOTS 8 THROUGH 16, BOTH INCLUSIVE AND LOTS 17 AND 18 IN BLOCK B; LOTS 6 THROUGH 24, BOTH INCLUSIVE, IN BLOCK C, ALL IN THE RESUBDIVISION OF CERTAIN BLOCKS AND PARTS OF BLOCKS AND VACATED STREETS IN R.A. CEPEK'S ARLINGTON RIDGE, BEING A SUBDIVISION OF THAT PART OF THE WEST HALF (EXCEPT THE EAST 33.0 FEET THEREOF) OF THE NORTHEAST QUARTER AND OF THE SOUTH HALF OF THE NORTHWEST QUARTER OF SECTION 30, TOWNSHIP 42 NORTH, RANGE 11, EAST OF THE THIRD PRINCIPAL MERIDIAN LYING NORTH OF THE NORTHEASTERLY LINE OF THE NORTHWEST HIGHWAY, SAID NORTHEASTERLY LINE OF HIGHWAY BEING 66.0 FEET NORTHEASTERLY OF AND PARALLEL WITH THE NORTHEASTERLY LINE OF THE CHICAGO & NORTHWESTERN RAILWAY RIGHT-OF-WAY, ACCORDING TO THE PLAT OF SAID RESUBDIVSION REGISTERED IN THE OFFICE OF THE REGISTRAR OF COOK COUNTY, ON MAY 27, 1946, AS DOCUMENT No.LR 1100677



Indicates easement area to be abrogated

Indicates easement area to be created

PRELIMINARY

ARLINGTON HEIGHTS PARK DISTRICT

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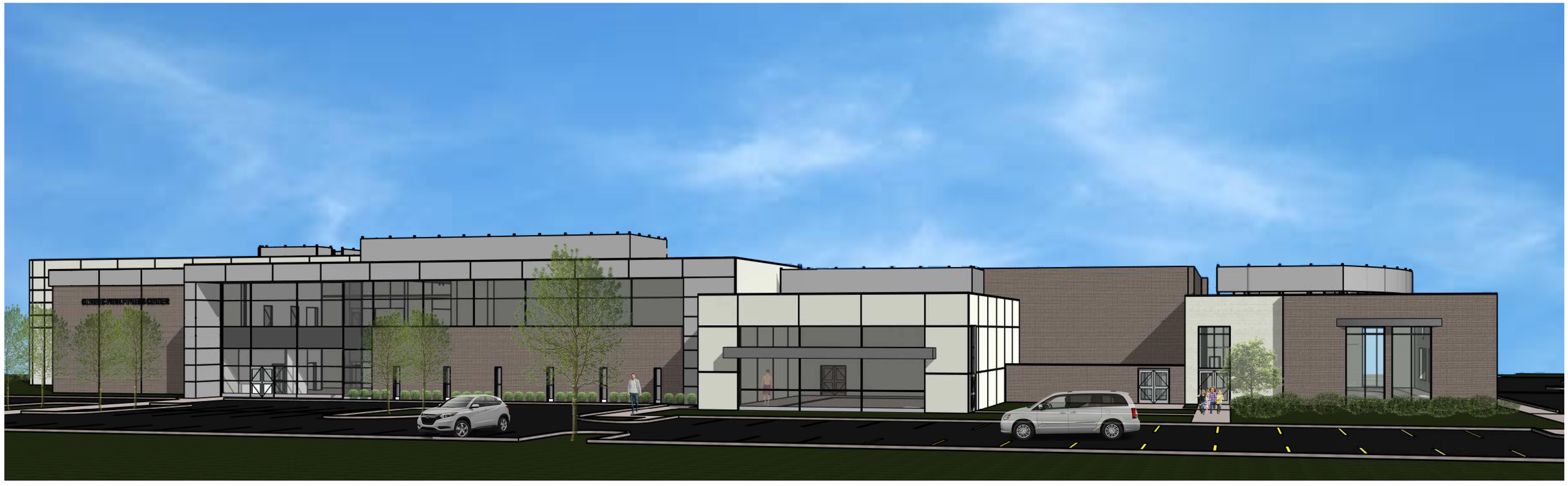
VIEW TO NORTHWEST - BASE BID

ARLINGTON HEIGHTS PARK DISTRICT



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VIEW TO NORTHEAST - BASE BID

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ARLINGTON HEIGHTS PARK DISTRICT

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VIEW TO SOUTHEAST - BASE BID

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VIEW TO SOUTHEAST - ALTERNATE BID #1

ARLINGTON HEIGHTS PARK DISTRICT

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FRONT ENTRY

Exterior Rendering

FGM ARCHITECTS

View Looking Northwest from Euclid

Exterior Rendering

FGM ARCHITECTS

View Looking Northwest along Ridge

Exterior Rendering

FGM ARCHITECTS

View Looking Southwest along Ridge

Exterior Rendering

FGM ARCHITECTS

View Looking Southeast from Park

Exterior Rendering

FGM ARCHITECTS

View Looking Northeast from Park

Exterior Rendering

FGM ARCHITECTS

View Looking Northeast (West Elevation)

Exterior Rendering

FGM ARCHITECTS

View of New Main Entrance (West Elevation)

GHA GEWALT HAMILTON ASSOCIATES, INC.
CONSULTING ENGINEERS
625 Forest Edge Drive, Vernon Hills, IL 60061
TEL 847.478.9700 ■ FAX 847.478.9701
www.gha-engineers.com

Olympic Indoor Swim Center
Arlington Heights Park District
Arlington Heights, Illinois
February 9, 2018
GHA Project #5313.100

Stormwater Management Report

1. Introduction

The Olympic Indoor Swim Center is an existing Park District site in a combined sewer area within the Village of Arlington Heights. The parcel is 10.02 acres bounded by residential properties to the north, Ridge Avenue to the east, Euclid Avenue to the south and Salem Avenue to the west. The Arlington Heights Park District (AHPD) is looking to expand the existing building to the north into the basketball, tennis court and skate board park area. A new driveway with parking will be provided along the west side of the building and return to Ridge Avenue to provide a second entrance into the site. The existing detention facility will be expanded to provide detention for the respective improvements. The proposed improvements will disturb approximately 4.65 acres, where 4.48 acres consist of the project area and 0.17 acres consist of the maintenance area. Maintenance areas include parking lot areas that will be removed and replaced. There is one new sanitary sewer connection coming from the expanded building.

2. Existing Conditions

The site consists of an indoor pool facility with exterior grass soccer fields, two tennis courts, one basketball court, skate board park, playground equipment, safety town and support parking facility. Within the project area of 4.48 acres, the existing impervious areas are approximately 1.58 acres, as shown in the Existing Impervious Exhibit.

There is no regulatory floodplain, wetlands and riparian environments on or within 100 feet of the site.

The existing relief storm sewer is tributary to the combined sewer system.

There is an existing detention on the southwest side of the grass playfield, which was constructed for the 2003-2004 building expansion where the detention was required by the Village. The Village required volume was 0.30 acre-feet at allowable release rate of 0.18 cfs/acre. The provided volume was 0.32 acre-feet. Required detention calculations from the 2003-2004 project are included in Appendix A.

3. Proposed Improvements and Stormwater Design

In the proposed conditions, the 4.48-acre project area consists of 2.35 acres of impervious area, 0.19 acre of synthetic turf playground, and 1.94 acres of pervious areas, as shown in the Proposed Impervious Exhibit. The proposed improvements intend to expand this existing basin by extending eastward through the existing parking lot and northward. The newly expanded detention basin will provide detention in addition to the volume control requirement. A Drainage Exhibit is included.

3.1 Village Detention Requirements

The Village of Arlington Heights required detention number are calculated in two scenarios: using net increase of detention required between the proposed and existing conditions and using the detention required for the proposed conditions when combining project areas from the 2003 project and the current project.

For the first scenario, the additional required detention volume is calculated to be 0.18 acre-feet, which is the difference of 1.33 acre-feet for the proposed and 1.15 acre-feet for the existing conditions. Since there was 0.30 acre-feet of detention required from the 2003 project, the basin will need to be expanded to accommodate a total of 0.48 acre-feet of detention.

For the second scenario, the required detention volume for the proposed development, not using the net increase method, is 1.33 acre-feet of detention. The combined project areas from the 2003 project and the current project were considered in the detention calculations. The combined project area is 4.90 acres, which includes an additional 0.42 acre from the 2003 project that is not included in the current 4.48-acre project area.

The proposed detention basin is designed to satisfy both scenarios, using 1.33 acre-feet as the minimum amount of detention. The detention basin will provide a total volume of 1.34 acre-feet at the HWL of 714.70. Required detention calculations are included in Appendix B. Provided detention storage calculations are included in Appendix D.

The Village of Arlington Heights also requires detention volume to be provided at an allowable release rate of 0.18 cfs/acre. For the 4.90-acre combined project area, the Village allowable release is 0.88 cfs. To satisfy the allowable release rate, a 3.76” diameter restrictor will be required. Due to clogging potential and the MWRD’s requirement for a minimum of 4” restrictor, a 7” Vortex Valve will be used, where the design head is 5.57’ with a discharge rate of 0.79 cfs, which stays below the maximum allowable discharge of 0.88 cfs. Rating curve for the Vortex restrictor and Vortex Valve detail are included in Appendix D.

3.2 WMO Detention Requirements

The required detention volume for MWRD is 1.02 acre-feet for the 4.48-acre project area. The detention basin will provide 1.02 acre-feet at the HWL of 714.51.

The allowable release rate is 0.30 cfs/acre for MWRD. For the 4.48-acre project area, the allowable release is 1.34 cfs. To satisfy the allowable release rate, a 4.69” diameter regular restrictor will be required. However, a 7” Vortex Valve will be used instead to satisfy Village requirements, where the design head is 5.38’ with a discharge rate of 0.79 cfs.

3.3 WMO Volume Control Requirements

A requirement within the WMO is a volume control component, which requires that one (1) inch of stormwater runoff from all impervious surfaces of the development be treated using volume control practices. According to the WMO Technical Guidance Manual, synthetic turf fields are not considered impervious surfaces for the purposes of volume control requirements.

For the proposed impervious area of 2.35 acres, the required volume control volume is 0.20 ac-ft. The bottom one foot of the detention basin will provide 0.21 ac-ft of volume control storage.

Based on the soils report, the seasonally high groundwater table is at elevation 704. The bottom of the volume control facility is at 711.14, which is greater than 3.5’ depth requirement between the bottom of the volume

control facility and the seasonally high ground water table in combined sewer areas. The soils report is included in Appendix E.

3.4 Overflow Weir

The 40-feet overflow weir located west of the detention basin is at elevation 715.20. The weir is 6" above the Village HWL at 714.70. Based on the weir sizing calculations enclosed in Appendix D, the 100-year peak flowrate is 31.36 cfs. This overflow will safely pass the critical flow rate at 715.60. There is a 1.3-foot freeboard between the Village HWL at 714.70 and the top of the berm of the detention basin at 716.

3.5 Soil Erosion and Sediment Control

As shown in the engineering plan set, soil erosion and sediment control measures are proposed, including silt fence, seed and erosion control blanket, sod, inlet protection, and construction entrance. Since the site is tributary to a combined sewer, an IEPA NPDES permit is not required, but erosion control practices are in place as described above.

4. Conclusion

The proposed improvements at Olympic Indoor Swim Center were designed to conform with the requirements of both the Village of Arlington Heights and the MWRD. The attached plans, exhibits and calculations provide supporting documentation that the requirements of both agencies have been met.

This report prepared by:
Gewalt Hamilton Associates, Inc.

Monica Hue, P.E.I.
Staff Engineer

Walter E. Graft, P.E.
Senior Engineer

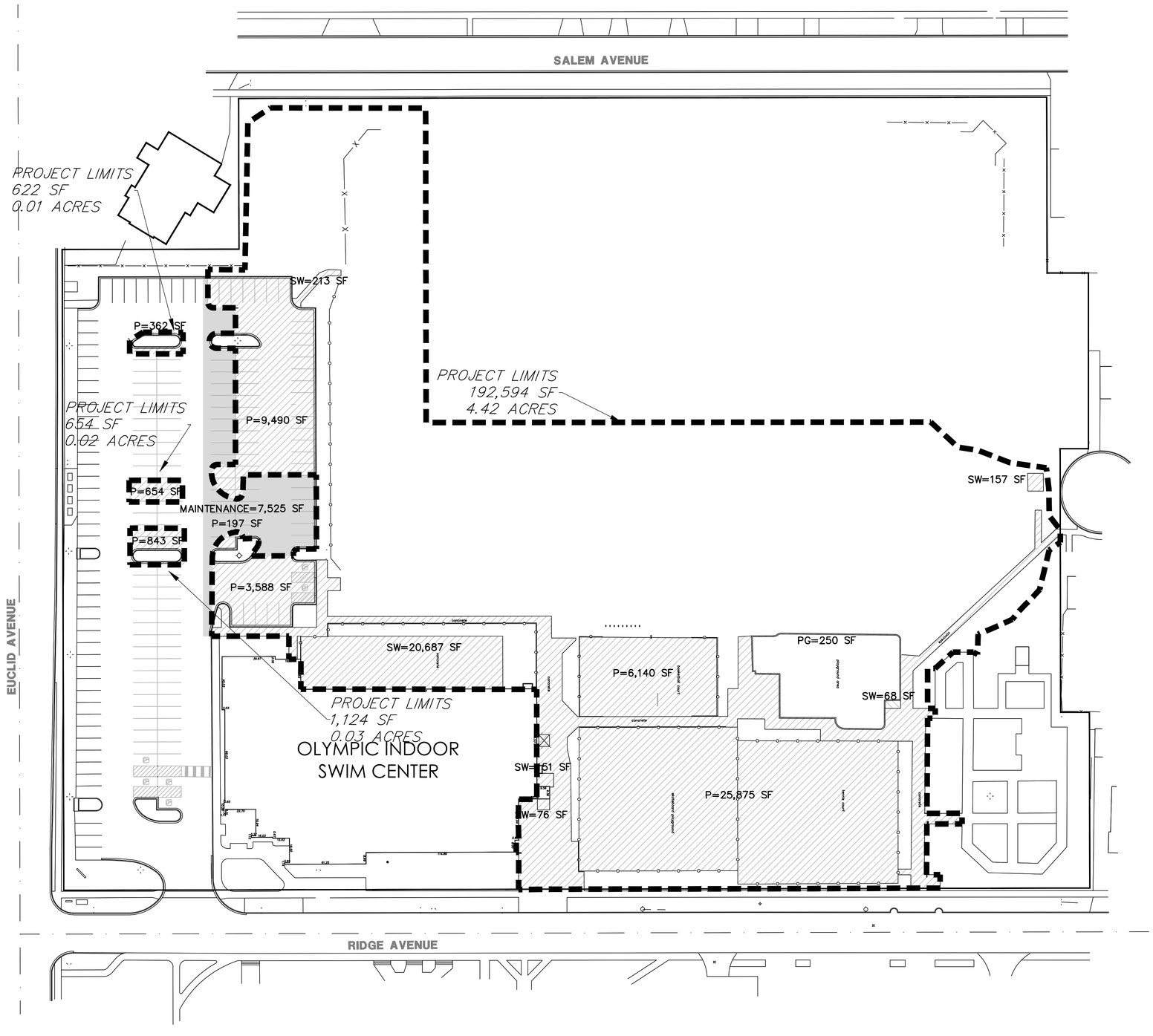
Exhibits:

Existing Impervious Exhibit
Proposed Impervious Exhibit
Drainage Exhibit

Appendices:

Appendix A – Detention Calculations from 2003-2004 Building Expansion Project
Appendix B - Village of Arlington Heights Detention Calculations
Appendix C – MWRD Detention Calculations
Appendix D – Detention Storage Calculation, Orifice Design, and Overflow Weir Calculations
Appendix E – Geotechnical Report

Exhibits



PROJECT AREA

TOTAL	195,014 SF 4.48 ACRES

EXISTING IMPERVIOUS AREA

TOTAL AREA	68,751 SF 1.58 ACRES

EXISTING PERVIOUS AREA

TOTAL	126,263 SF 2.90 ACRES

MAINTENANCE AREA

TOTAL	7525 SF 0.17 ACRES

LEGEND

- IMPERVIOUS AREA
- MAINTENANCE AREA

N

GRAPHIC SCALE

40 0 20 40

(IN FEET)
1 inch = 40 ft.

ISSUANCE

NO.	DATE	DESCRIPTION
00	01/08/18	PLAN COMMISSION REVIEW
01	02/09/18	PLAN COMMISSION REVIEW - REVISIONS

FGM ARCHITECTS
CHICAGO OAK BROOK O'FALLON ST. LOUIS
GHA GEWALT HAMILTON ASSOCIATES, INC.
625 Forest Edge Drive ■ Vernon Hills, IL 60061
TEL: 847.478.9700 ■ FAX: 847.478.9701
GHA JOB # 5313.000

DATE:

WALTER E. GRAEF 062-048837 LICENSED PROFESSIONAL ENGINEER OF ILLINOIS

PROFESSIONAL SEAL

EXPIRATION DATE: 11/30/19

DATE	01/08/17
DRAWN	DG
CHECKED	WEG
APPROVED	WEG

PROFESSIONAL DESIGN FIRM IL # 184-000350

OLYMPIC SWIM ADDITION AND RENOVATION

ARLINGTON HEIGHTS PARK DISTRICT
660 Ridge Ave
Arlington Heights, IL 60004

EXISTING IMPERVIOUS

SHEET NO.
1

JOB NO. 17-2408.01

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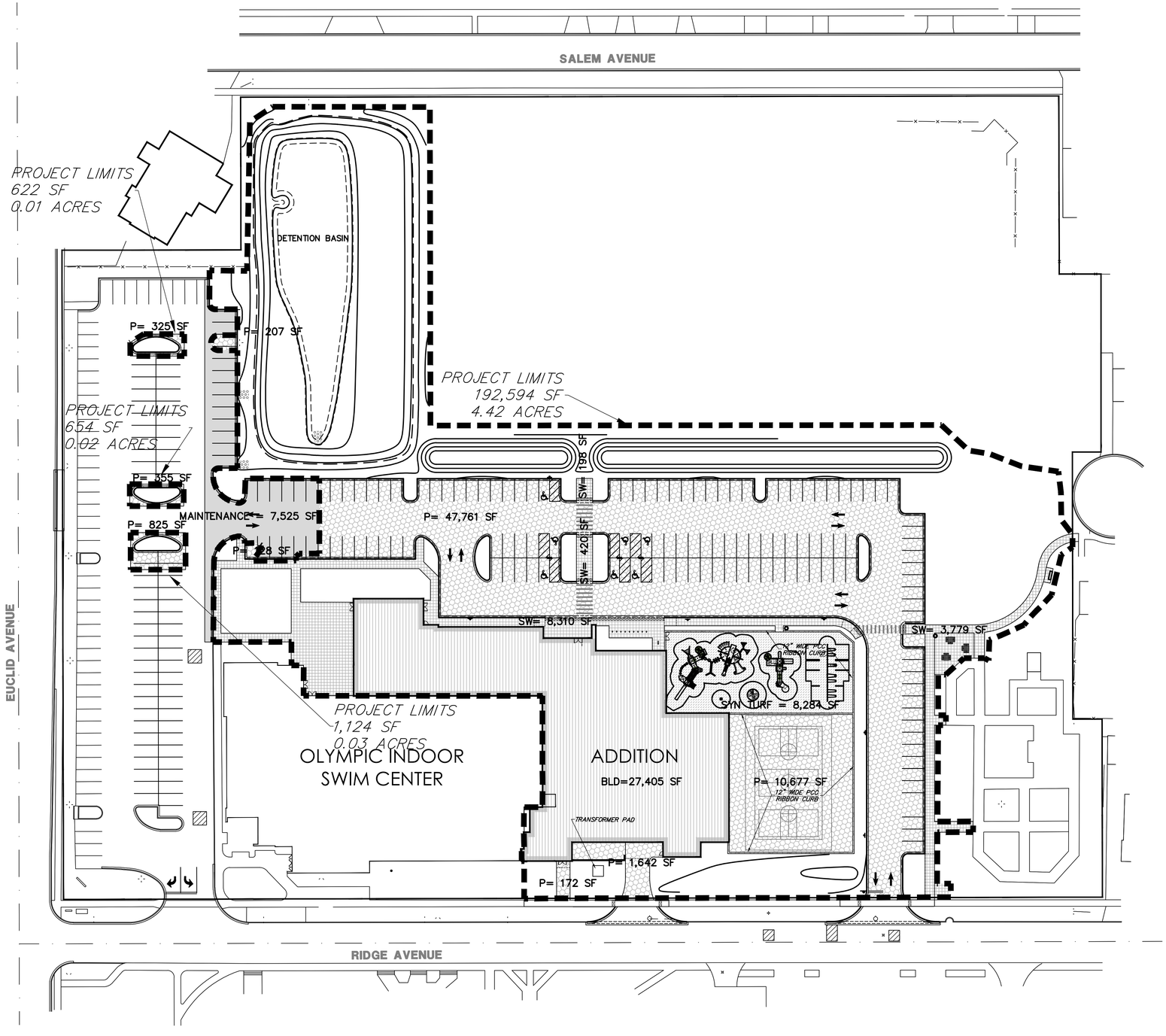

PROJECT AREA

TOTAL	195,014 SF 4.48 ACRES

EXISTING IMPERVIOUS AREA

TOTAL AREA	68,751 SF 1.58 ACRES

EXISTING PERVIOUS AREA

TOTAL	126,263 SF 2.90 ACRES

PROPOSED IMPERVIOUS AREA

BUILDING	27,405 SF
SIDEWALK	12,707 SF
PAVEMENT	62,092 SF
TOTAL AREA	102,204 SF 2.35 ACRES

PROPOSED SYNTHETIC TURF AREA

TOTAL	8,284 SF 0.19 ACRES

PROPOSED PERVIOUS AREA

TOTAL	84,526 SF 1.94 ACRES

MAINTENANCE AREA

TOTAL	7,525 SF 0.17 ACRES

LEGEND

- IMPERVIOUS BUILDING
- IMPERVIOUS PAVEMENT AREA
- IMPERVIOUS SIDEWALK AREA
- SYNTHETIC TURF
- MAINTENANCE AREA

N

GRAPHIC SCALE

40 0 20 40

(IN FEET)
1 inch = 40 ft.

ISSUANCE			
NO.	DATE	DESCRIPTION	
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01	02/09/18	PLAN COMMISSION REVIEW - REVISIONS	

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GHA JOB # 5313.000

DATE:

WALTER E. GRAEF 082-048837 LICENSED PROFESSIONAL ENGINEER OF ILLINOIS

PROFESSIONAL SEAL

EXPIRATION DATE: 11/30/19

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CHECKED	WEG		
APPROVED	WEG		

OLYMPIC SWIM ADDITION AND RENOVATION

ARLINGTON HEIGHTS PARK DISTRICT
660 Ridge Ave
Arlington Heights, IL 60004

PROPOSED IMPERVIOUS

SHEET NO. **2**

JOB NO. 17-2408.01

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GRAPHIC SCALE

40 0 20 40

(IN FEET)
1 inch = 40 ft.

PROJECT AREA SUMMARY

EXISTING CONDITIONS

PROJECT AREA	4.48 AC
IMPERVIOUS	1.58 AC
PERVIOUS	2.90 AC
VILLAGE COMPOSITE 'C'	0.66
MWRD COMPOSITE 'C'	0.61

PROPOSED CONDITIONS

PROJECT AREA	4.48 AC
IMPERVIOUS	2.35 AC
SYNTHETIC TURF	0.19 AC
PERVIOUS	1.94 AC
VILLAGE COMPOSITE 'C'	0.75
MWRD COMPOSITE 'C'	0.70

MAINTENANCE AREA

TOTAL	0.17 AC

DETENTION SUMMARY

VILLAGE REQUIREMENTS

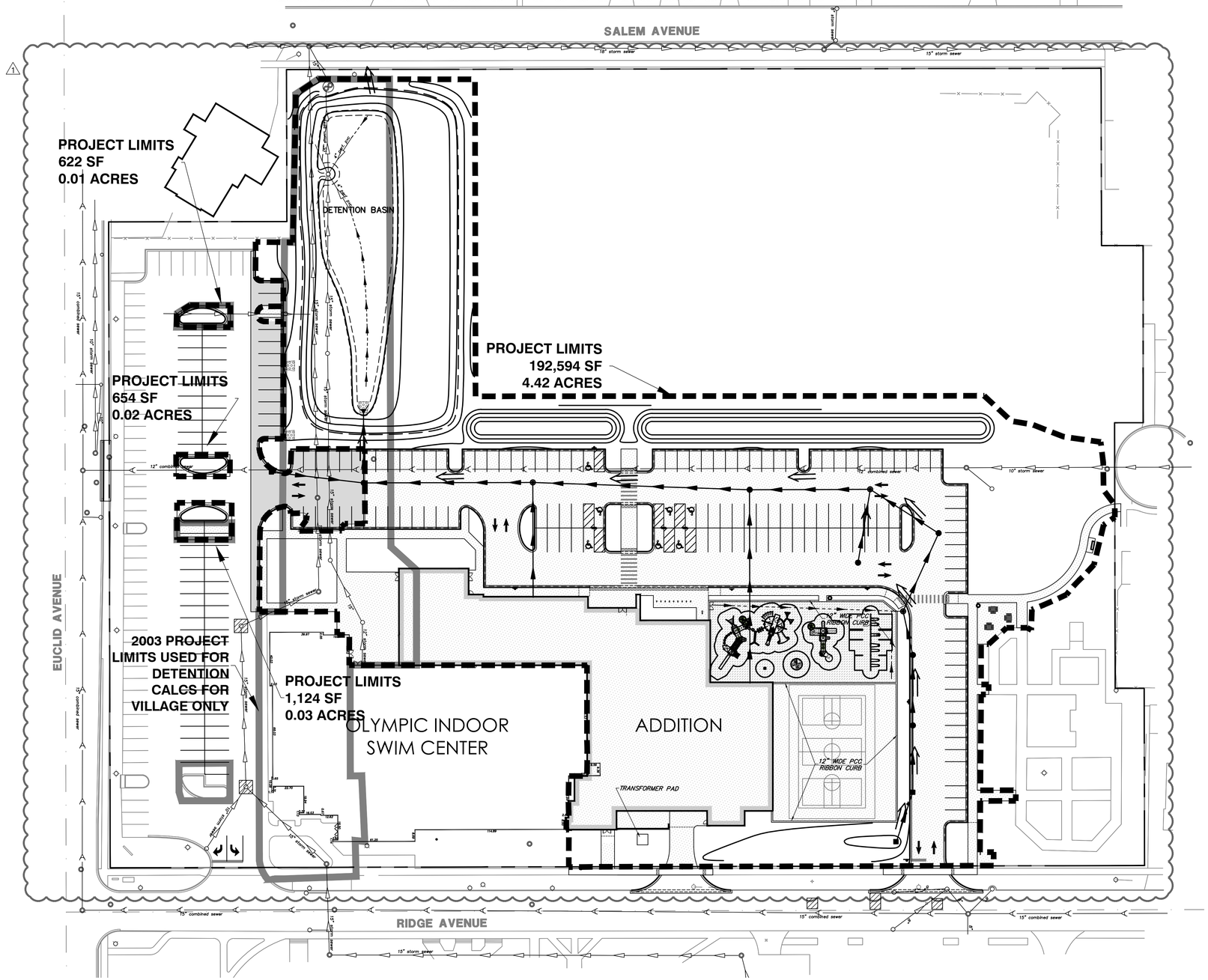
COMBINED 2003 & 2018 PROJECT AREAS	4.90 AC
VILLAGE ALLOWABLE RELEASE RATE	0.18 CFS/AC
0.18 CFS/AC x 4.90 AC	0.88 CFS
TOTAL DETENTION REQUIRED	1.33 AC-FT
PROPOSED DETENTION PROVIDED IN DETENTION BASIN @ HWL = 714.70	1.34 AC-FT

MWRD REQUIREMENTS

MWRD ALLOWABLE RELEASE RATE	0.30 CFS/AC
0.30 CFS/AC x 4.48 AC PROJECT AREA	1.34 CFS
TOTAL DETENTION VOLUME REQUIRED	1.02 AC-FT
PROPOSED DETENTION PROVIDED IN DETENTION BASIN @ HWL = 714.51	1.02 AC-FT
VOLUME CONTROL REQUIRED	0.20 AC-FT
VOLUME CONTROL PROVIDED IN DETENTION BASIN	0.21 AC-FT

LEGEND

- 2003 PROJECT LIMITS
- 2018 PROJECT LIMITS
- IMPERVIOUS AREA
- SYNTHETIC TURF
- PERVIOUS AREA
- MAINTENANCE AREA
- OVERLAND FLOW ROUTE



MAINTENANCE PLAN

Arlington Heights Park District shall assume responsibility for the following perpetual maintenance activities:

1. General

Regular inspections and routine maintenance of general areas shall be performed on a quarterly or as-needed basis. Specific items of concern include:

- Litter and debris shall be controlled
- Landscaped areas shall be maintained with regular mowing and restored with appropriate seeding/vegetation as necessary
- Accumulated sediment shall be disposed of properly, along with any wastes generated during maintenance operations
- Riprap areas shall be repaired with the addition of new riprap, as necessary, of similar size and shape
- Roads shall be swept, vacuumed and/or washed on a regular basis

2. Stormwater Management Facilities

All components of the stormwater management facilities shall be checked quarterly between March and November and maintained as necessary to ensure proper performance. It is critical that all inflows and outflows to the detention facility are clean and performing as designed. In addition, the design volume of the detention facility shall also be maintained. Inspections for the following specific items would be conducted quarterly between March and November.

Vegetated Areas

- Regular mowing to control vegetation, no cutting of native vegetation
- Need for planting, reseeding or sodding. Supplement alternative native vegetation if a significant portion has not established (50% of the surface area). Reseed with alternative grass species if original grass cover has not successfully established
- Evidence of grazing, motorbikes or other vehicles, repair
- Check for invasive vegetation, remove where possible
- All vegetation must be maintained per the approved planting plan

Outlet Control Structure

- Inspect restrictor and remove debris if clogged or discharge reduced
- Remove accumulated sediment at outlet
- Any ice damage to outlet of pipe, repair if necessary

Detention Volume

- Inspect all stormwater detention facilities to ensure that the constructed volume for detention is maintained. No sediment, topsoil, or other dumping into the facility shall be allowed. Specific locations in the stormwater management system, designed to accumulate sediment, shall be dredged as necessary to prevent sediment from reaching the invert of any gravity outlet pipe.

3. Volume Control Facility

Routine inspections and maintenance of volume control facilities shall be performed by the Owner on a yearly or as-needed basis. Specific items of concern include:

- Facility shall be inspected yearly to verify the system is functioning properly.

4. Stormwater Collection System

The Owner shall perform two inspections per year of all components of the stormwater collection system. The inspections shall occur in the spring and fall of each year and include the following specific areas of concern.

Storm Inlets/Manholes

- Remove accumulated leaves and other debris from grates
- Reset covers/lids on as-needed basis
- Remove accumulated sediment from manhole bottom when 50% of sump is filled

Storm Sewers

- Visually inspect pipes by removing manhole lids, make repairs as necessary
- Storm sewers shall be checked for siltation deposits at inlets, outlets, and within the conduit, clean out as necessary
- Restore riprap at outfalls

5. Vegetated Areas

- Need for planting, reseeding, or sodding. Supplement alternative native vegetation if a significant portion has not established (50% of the surface area after second growing season). Reseed with alternative native grass species if original grass cover has not successfully established.
- Evidence of grazing, motorbikes, or other vehicles, repair
- Check for invasive vegetation, remove when possible
- Regular mowing to control vegetation; it is recommended that native vegetation remain uncut
- Dead or damaged non-native grassy areas - repair with seeding with fertilization or seeding with mulch

6. Qualified Sewer Construction

- Perform manhole inspections once every five years, make repairs as necessary
- Perform sewer inspections once every five years, make repairs as necessary
- Perform regular cleaning so that each sewer segment is cleaned once every 5 years

ISSUANCE NO.	DATE	DESCRIPTION
00	01/08/18	PLAN COMMISSION REVIEW
01	02/09/18	PLAN COMMISSION REVIEW - REVISIONS

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DATE:

WALTER E. GRAEF 062-048837 LICENSED PROFESSIONAL ENGINEER OF ILLINOIS

PROFESSIONAL SEAL

EXPIRATION DATE: 11/30/19

DATE	01/08/17	PROFESSIONAL DESIGN FIRM IL # 184-000922
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CHECKED	WEG	
APPROVED	WEG	

OLYMPIC SWIM ADDITION AND RENOVATION
ARLINGTON HEIGHTS PARK DISTRICT
660 Ridge Ave
Arlington Heights, IL 60004

DRAINAGE EXHIBIT

SHEET NO.

C8

JOB NO. 17-2408.01

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Appendix A

Detention Calculations from 2003-2004 Building Expansion Project

OLYMPIC PARK | DETENTION CALC. | 8 OCT 02

2002-4319 (1 of 5)

DETENTION WILL BE PROVIDED FOR ALL NEW IMPERIOUS AND DISTURBED AREAS

RELEASE RATE 0.18 CFS/AC

C - IMPERVIOUS 0.95

C - PERVIOUS 0.50

USE BULLETIN 70 RAINFALL

NEW IMPERVIOUS AREA

BLDG	40 (57)	=	2280
	75 (55)	=	4125
	22 (33)	=	726
	22 (13)	=	286
DECK	25 (40)	=	1000
			8417 SF

NEW PAVING/WALK

26 (40)	1040
26 (12)	312
182 (62)	11284
- 9 (17)	- 153
22 (9)	207
58 (69)	4002
17 (16)	272
35 (8)	280
	17,244 SF

RECONSTRUCTED PAVEMENT

TO BASIN	31 (22)	682	
	10 (3)	30	
	20 (152)	3040	
	20 (40)	800	4552 SF
	32 (20)	640	
	30 (131)	3930	
	55 (30)	1650	
	44 (38)	1672	
	25 (13)	325	8217 SF

NORMAN J. TOBERMAN 19325 REGISTERED PROFESSIONAL ENGINEER OF ILLINOIS

EXPIRES 11/30/03

STAEDTLER No. 937 811E Engineer's Computation Pad

OLYMPIC PARK | DETENTION CALC. | OCT. 8, 2002

2002-1319

EXISTING BLDG (TO DRAIN TO DETENTION BASIN (Zone 5)

109 (8)	=	872
82 (12)	=	984
126 (122)	=	15372
9 (42)	=	378
		17,606 SF

DETERMINE REQUIRED DETENTION BASED ON NEW IMPERVIOUS AREA

BLDG / DECK	3417
NEW PAVING / WALK	17,244
RECONST. PAVT	4552
	39213 SF

GRASS	110 (72)	=	6930
	25 (25)	=	625
	5 (180)	=	900
	20 (8)	=	160
	70 (9)	=	630
	100 (16)	=	1600
			10,845 SF

TOTAL BASIN (NEW)	30,213	=	0.694 AC IMP
	11,945	=	0.274 AC GRASS
	42158 SF	=	0.968 AC

$$C = \frac{\overset{0.659}{0.694}(0.95) + \overset{0.137}{0.274}(0.50)}{0.968} = \frac{0.796}{0.968} = 0.823$$

STAEDTLER No. 937 811E Engineer's Computation Pad

OLYMPIC PARK | DETENTION CALC. | OCT. 8, 2002

2002-4319

(3 of 5)

DETENTION (REQUIRED)

T	I_{100}	x 0.823	-0.18	ΔT	
30	5.60	3.79	3.61	1.80	
40	4.50	3.70	3.52	2.35	
50	4.08	3.36	3.18	2.65	
1	3.56	2.93	2.75	2.75	
15	2.76	2.27	2.09	3.15	
2	2.24	1.84	1.66	3.32	
3	1.60	1.32	1.14	3.42	
4	1.30	1.07	0.89	3.56	
5	1.10	0.91	0.73	3.65	
6	0.97	0.80	0.62	3.72	← PEAK
7	0.86	0.71	0.53	3.71	
8	0.78	0.64	0.46	3.68	

DETENTION (REQD) = $3.72 \times \frac{0.968}{12}$ = 0.3000 AC-FT

= 13,071 CF

STAEDTLER® No. 937 611E Engineer's Computation Pad

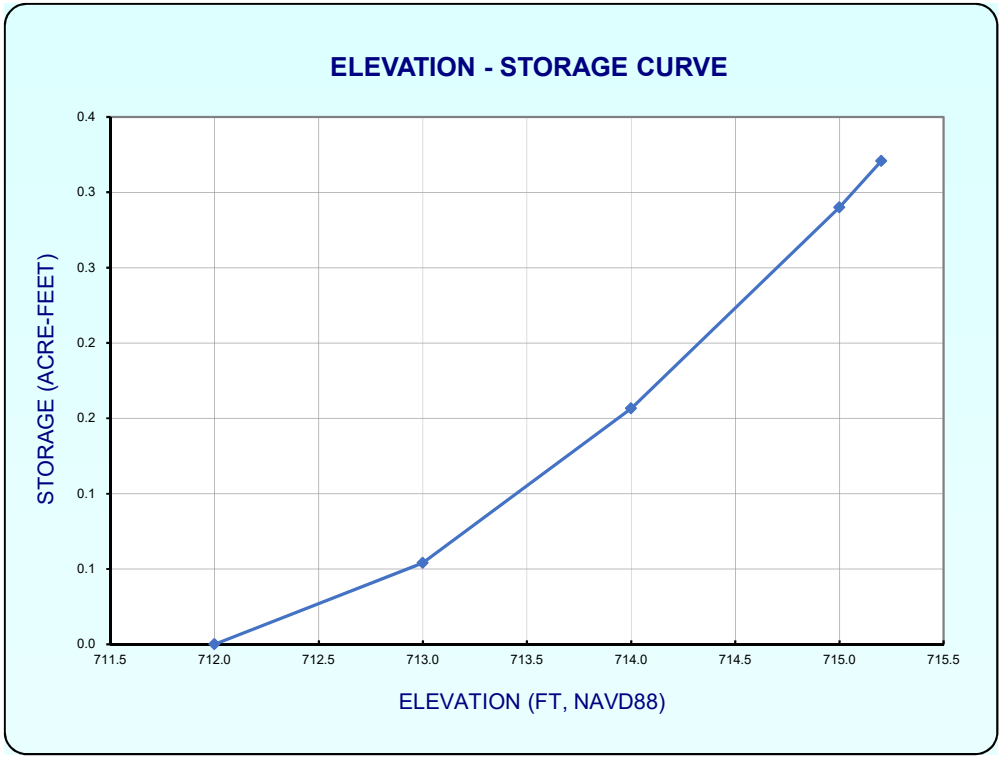
GEWALT HAMILTON ASSOCIATES, INC.

Project Name: AHPD Olympic Swim
GHA Project #: 5313.100

Calculated by: THP
Checked by:

Detention Storage Calculations - Existing

Elevation (ft)	Area (ft^2)	Area (ac)	Average Area (ac)	Incremental Storage (ac-ft)	Cummulative Storage (ac-ft)
712.00	885	0.020			0.00
			0.054	0.05	
713.00	3,826	0.088			0.05
			0.103	0.10	
714.00	5,113	0.117			0.16
			0.133	0.13	
715.00	6,511	0.149			0.29
			0.153	0.03	
715.20	6,859	0.157			0.32



	Elevation (ft, NAVD88)	Storage (ac-ft)
Detention	712.00	0.00
	713.00	0.05
	714.00	0.16
	715.00	0.29
	715.20	0.32

Appendix B

Village of Arlington Heights Detention Calculations

GEWALT HAMILTON ASSOCIATES, INC.
DETENTION CALCULATIONS

Village Required Volume - EXISTING CONDITION

AHPD Olympic Swim
Arlington Heights, IL

Criteria Modified Rational Method Using Village's Allowabe Release (0.18 cfs/ac)
100 year Rainfall Intensity Source: ISWS State Bulletin 70

DESCRIPTION	User Input		Program Output	
BASIN AREA	**4.90**	ACRES		
ALLOWABLE RELEASE			0.88	CFS
AREA @ 0.50	2.98	ACRES		
AREA @ 0.75	0.00	ACRES		
AREA @ 0.95	1.92	ACRES		
AREA @ 1.00	0.00	ACRES		
DEV. C FACTOR			0.68	FACTOR

TIME (HR.)	100 YR RATE (IN./HR.)	FLOW IN (CFS)	STORAGE RATE (CFS)	STORAGE VOLUME (AC-FT.)
0.17	10.02	33.183	32.302	0.458
0.33	7.30	24.175	23.294	0.641
0.5	5.60	18.545	17.664	0.736
0.67	4.65	15.399	14.518	0.811
0.83	4.00	13.247	12.365	0.855
1	3.56	11.790	10.908	0.909
1.5	2.70	8.942	8.060	1.008
2	2.24	7.418	6.537	1.089
3	1.62	5.365	4.483	1.121
4	1.30	4.305	3.424	1.141
5	1.10	3.643	2.761	1.151
6	0.95	3.146	2.265	1.132
7	0.84	2.782	1.900	1.109
8	0.76	2.517	1.635	1.090
9	0.69	2.285	1.404	1.053
10	0.64	2.119	1.238	1.032
11	0.60	1.987	1.106	1.013
12	0.55	1.821	0.940	0.940
13	0.51	1.689	0.808	0.875
14	0.48	1.590	0.708	0.826
15	0.45	1.490	0.609	0.761
16	0.43	1.424	0.543	0.723
17	0.41	1.358	0.476	0.675
18	0.39	1.292	0.410	0.615
19	0.38	1.258	0.377	0.597
20	0.36	1.192	0.311	0.518
21	0.35	1.159	0.278	0.486
22	0.34	1.126	0.245	0.448
23	0.33	1.093	0.211	0.405
24	0.32	1.060	0.178	0.357

MAXIMUM DETENTION VOLUME **1.151 AC-FT**
50120 CF

GEWALT HAMILTON ASSOCIATES, INC.
DETENTION CALCULATIONS

Village Required Volume - PROPOSED CONDITION

AHPD Olympic Swim
Arlington Heights, IL

Criteria Modified Rational Method Using Village's Allowabe Release (0.18 cfs/ac)
100 year Rainfall Intensity Source: ISWS State Bulletin 70

DESCRIPTION	User Input		Program Output	
BASIN AREA	**4.90**	ACRES		
ALLOWABLE RELEASE			0.88	CFS
AREA @ 0.50	2.02	ACRES		
AREA @ 0.75	0.19	ACRES		
AREA @ 0.95	2.69	ACRES		
AREA @ 1.00	0.00	ACRES		
DEV. C FACTOR			0.76	FACTOR

TIME (HR.)	100 YR RATE (IN./HR.)	FLOW IN (CFS)	STORAGE RATE (CFS)	STORAGE VOLUME (AC-FT.)
0.17	10.02	37.155	36.274	0.514
0.33	7.30	27.069	26.188	0.720
0.5	5.60	20.766	19.884	0.829
0.67	4.65	17.243	16.361	0.914
0.83	4.00	14.833	13.951	0.965
1	3.56	13.201	12.320	1.027
1.5	2.70	10.012	9.131	1.141
2	2.24	8.306	7.425	1.237
3	1.62	6.007	5.126	1.281
4	1.30	4.821	3.939	1.313
5	1.10	4.079	3.198	1.332
6	0.95	3.523	2.641	1.321
7	0.84	3.115	2.233	1.303
8	0.76	2.818	1.937	1.291
9	0.69	2.559	1.677	1.258
10	0.64	2.373	1.492	1.243
11	0.60	2.225	1.343	1.231
12	0.55	2.039	1.158	1.158
13	0.51	1.891	1.010	1.094
14	0.48	1.780	0.898	1.048
15	0.45	1.669	0.787	0.984
16	0.43	1.594	0.713	0.951
17	0.41	1.520	0.639	0.905
18	0.39	1.446	0.565	0.847
19	0.38	1.409	0.528	0.835
20	0.36	1.335	0.453	0.756
21	0.35	1.298	0.416	0.729
22	0.34	1.261	0.379	0.695
23	0.33	1.224	0.342	0.656
24	0.32	1.187	0.305	0.610

MAXIMUM DETENTION VOLUME **1.332 AC-FT**
58035 CF

Appendix C

MWRD Detention Calculations

GHA GEWALT HAMILTON ASSOCIATES, INC.

Project Name: AHPD Olympic Swim
GHA Project #: 5313.100

Calculated by: MXH
Checked by:

Runoff Curve Number

Circle One: Present (Developed) Description: **Project Area**

Soil Name and Hydrologic Group	Cover Description	Curve Number	Area [X] acres [ ] sq. mi. [ ] %	Product of Curve Number and Area
D	Pervious Area - Grass	80	1.62	129.60
D	Impervious Area	98	2.35	230.30
D	Synthetic Turf	91	0.19	17.31
D	Native Plantings	77	0.32	24.64
		Totals =	4.48	401.85

CN (weighted) = $\frac{\text{total product}}{\text{total area}} = \frac{402}{4.48} =$ 90

Use CN = **90**

GEWALT HAMILTON ASSOCIATES, INC.

Project Name:
GHA Project #:

Calculated by: MXH
Checked by:

RUNOFF CURVE NUMBER ADJUSTMENT CALCULATOR

Site Information:

Total Site Area, A_w (ac) =	4.48	**Total Impervious Area, A_I (ac) =**	2.35
Runoff, R (in) =	6.36		
P = rainfall depth (in) =	7.58		
CN =	89.69		
S =	1.15		
Runoff Volume Over Watershed, V_w (ac-ft) =	**2.37**		

Volume of GI Provided:

Volume Control Storage, V_R =	**0.20**	**ac-ft**	1" of volume over impervious area
Additional Volume, V_{GI} =	**0.01**	**ac-ft**	Additional volume over the required 1"

Adjusted Volume Over Watershed, $V_{ADJ} = V_W - V_R - V_{GI}$

V_{ADJ} (ac-ft) =	**2.17**

Adjusted Runoff Over Watershed, $R_{ADJ} = \frac{V_{ADJ}}{A_W}$

R_{ADJ} (in) =	**5.81**
S_{ADJ} =	**1.76**
Adjusted CN for detention calcs, CN_{ADJ} =	**85.01**

*Blue values are entered by user

GEWALT HAMILTON ASSOCIATES, INC.

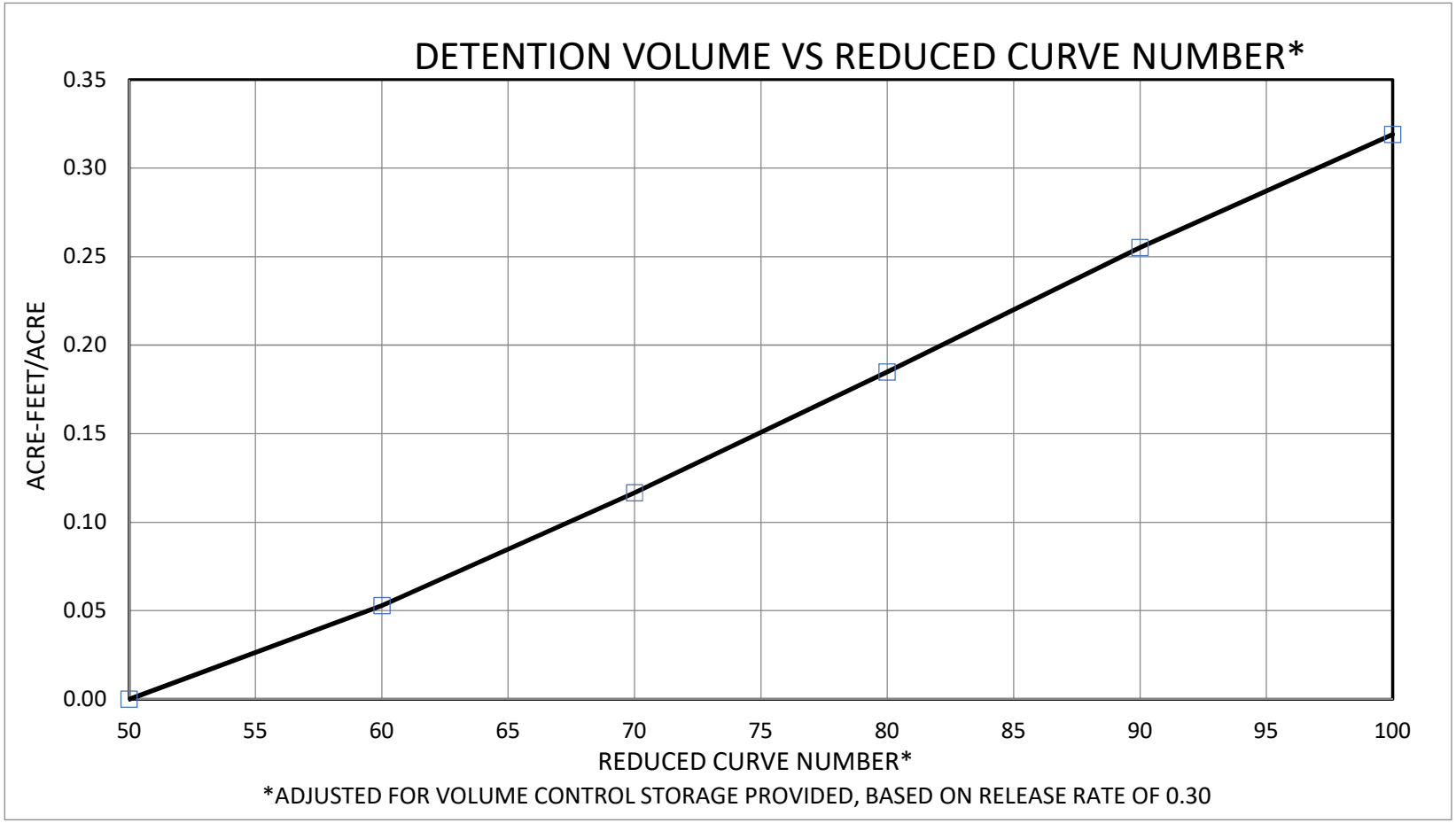
Project Name: East Leyden HS Improvements
GHA Project #: 5201.050

Calculated by: MXH
Checked by:

Detention Volume Vs Reduced Curve Number

Enter Site Area:	4.48	acres
Enter Reduced Curve Number for Site:	85.01	
Estimated Required Detention Volume:	**1.02**	acre-feet

* Blue Values are entered by user



Appendix D

Detention Storage Calculation, Orifice Design, and Overflow Weir Calculations

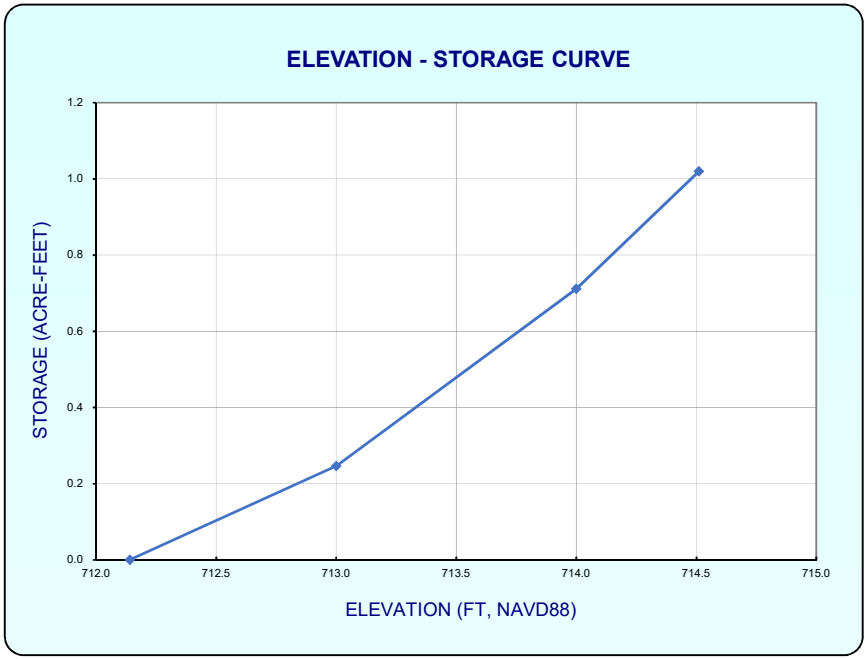
GHA GEWALT HAMILTON ASSOCIATES, INC.

Project Name: AHPD Olympic Swim
GHA Project #: 5313.100

Calculated by: MXH
Checked by:

Detention Storage Calculations - Proposed

Elevation (ft)	Area (ft^2)	Area (ac)	Average Area (ac)	Incremental Storage (ac-ft)	Cummulative Storage (ac-ft)
711.14	7,888	0.181			0.00
			0.202	0.17	
712.00	9,702	0.223			0.17
			0.226	0.03	
712.14	9,972	0.229			0.21
			0.287	0.25	
713.00	15,000	0.344			0.45
			0.465	0.46	
714.00	25,500	0.585			0.92
			0.604	0.31	
714.51	27,147	0.623			1.22
			0.630	0.12	
714.70	27,761	0.637			1.34
	at 715		0.648	0.19	
715.00	28,730	0.660			1.54



	Elevation (ft, NAVD88)	Storage (ac-ft)	
Volume Control Provided for MWRD	711.14	0.00	
	712.00	0.17	
	712.14	0.21	
Detention Provided for MWRD	712.14	0.00	
	713.00	0.25	
	714.00	0.71	
	714.51	1.02	100-year HWL
Detention Provided for Village	711.14	0.00	
	712.00	0.17	
	712.14	0.21	
	713.00	0.45	
	714.00	0.92	
	714.51	1.22	
	714.70	1.34	100-year HWL

THEORETICAL RESTRICTOR DESIGN - VILLAGE

AHPD Olympic Swim
February 6, 2018

Criteria DESIGN AN ORIFICE AS A RESTRICTOR
MWRD BASED C'd FACTORS

	User Input	Program Output	
HI WATER ELEV	**714.68**	FEET	
INVERT/LWL	**709.13**	FEET	
C'd SEE BELOW	**0.61**	FACTOR	
RESTRICT. DIA	**3.76**	INCHES	
Q ALLOWABLE		0.88	CFS FOR SITE
SYSTEM HEAD		5.39	VERTICAL FEET
ORIFICE AREA		0.077	SQ. FT.
		11.147	SQ. IN.
ORIFICE DIA.		3.767	IN. DIA.
SELECTED DIAMETER	3.76	IN. DIA.	
ACTUAL RELEASE	0.88	CFS RELEASE	

FACTORS FOR C'd RELEASE RATES
BASED ON MWRD CRITERIA
Q = C'd * A * (64.4 * Head)^0.5

Square Edged	0.79-0.82
Round Edged	0.93-0.98
Sharp Edged	0.58-0.64
Projecting Edge	0.52

THEORETICAL RESTRICTOR DESIGN - MWRD

AHPD Olympic Swim
February 6, 2018

Criteria DESIGN AN ORIFICE AS A RESTRICTOR
MWRD BASED C'd FACTORS

	User Input	Program Output	
HI WATER ELEV	**714.51**	FEET	
INVERT/LWL	**709.13**	FEET	
C'd SEE BELOW	**0.61**	FACTOR	
RESTRICT. DIA	**4.69**	INCHES	
Q ALLOWABLE		1.34	CFS FOR SITE
SYSTEM HEAD		5.18	VERTICAL FEET
ORIFICE AREA		0.120	SQ. FT.
		17.312	SQ. IN.
ORIFICE DIA.		4.695	IN. DIA.
SELECTED DIAMETER	4.69	IN. DIA.	
ACTUAL RELEASE	1.34	CFS RELEASE	

FACTORS FOR C'd RELEASE RATES
BASED ON MWRD CRITERIA
Q = C'd * A * (64.4 * Head)^0.5

Square Edged	0.79-0.82
Round Edged	0.93-0.98
Sharp Edged	0.58-0.64
Projecting Edge	0.52

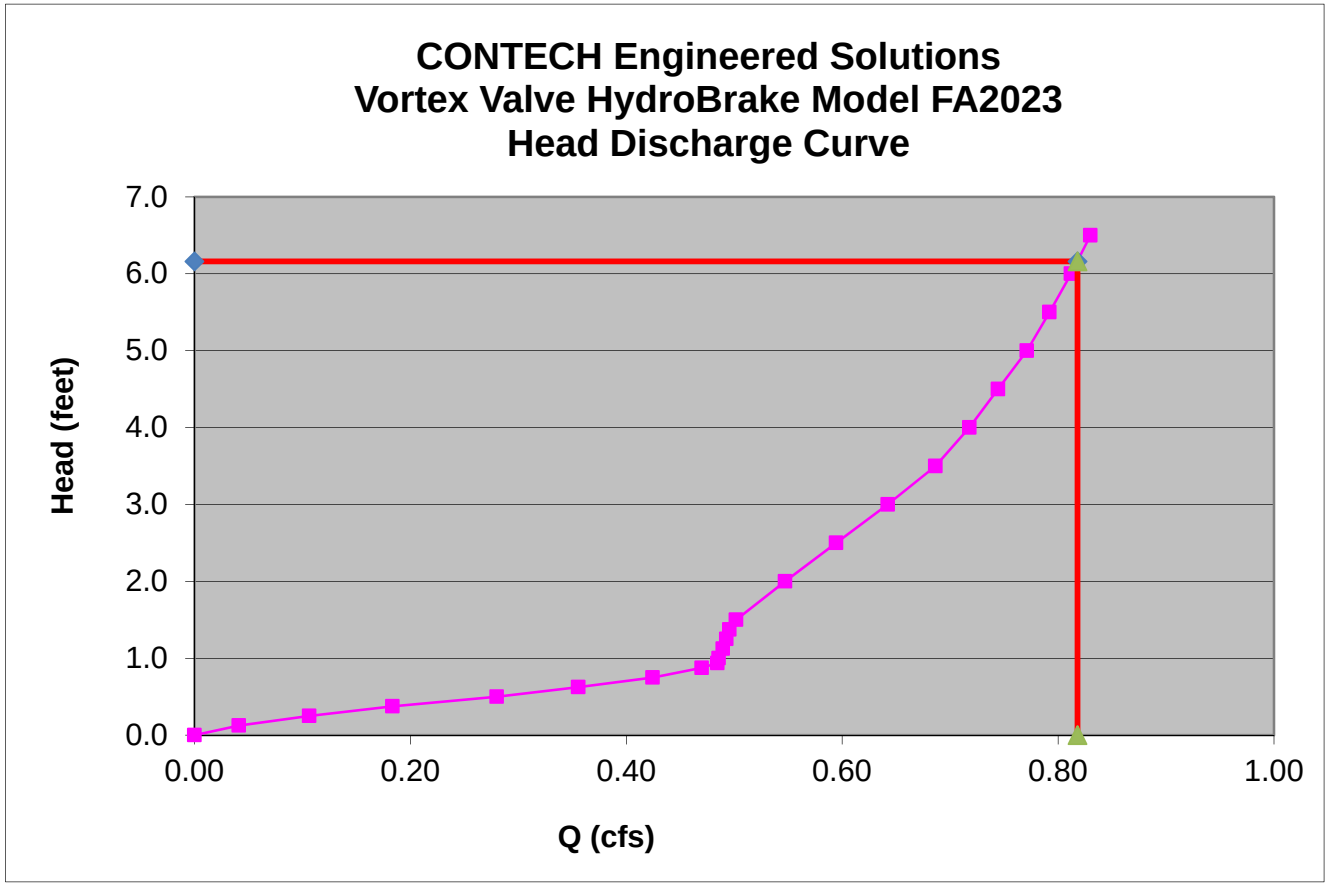
CONTECH ENGINEERED SOLUTIONS

Vortex Valve FA2023 with 7" Opening

Head (ft)	Flow (cfs)
0	0.000
0.125	0.041
0.25	0.106
0.375	0.183
0.5	0.280
0.625	0.356
0.75	0.424
0.875	0.470
0.9375	0.484
1	0.486
1.125	0.489
1.25	0.493
1.375	0.496
1.5	0.502
2	0.547
2.5	0.594
3	0.642
3.5	0.686
4	0.718
4.5	0.744
5	0.771
5.5	0.792
6	0.812
6.5	0.830

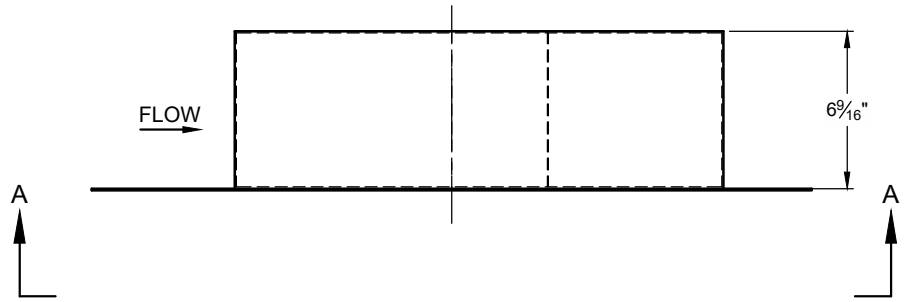
Village:
Allowable release = 0.88 cfs
Head = 714.70 (HWL) - 709.13 (restrictor invert) = 5.57'
Actual Q = 0.795 cfs

MWRD:
Allowable release = 1.34 cfs
Head = 714.51 (HWL) - 709.13 (restrictor invert) = 5.38'
Actual Q = 0.787 cfs

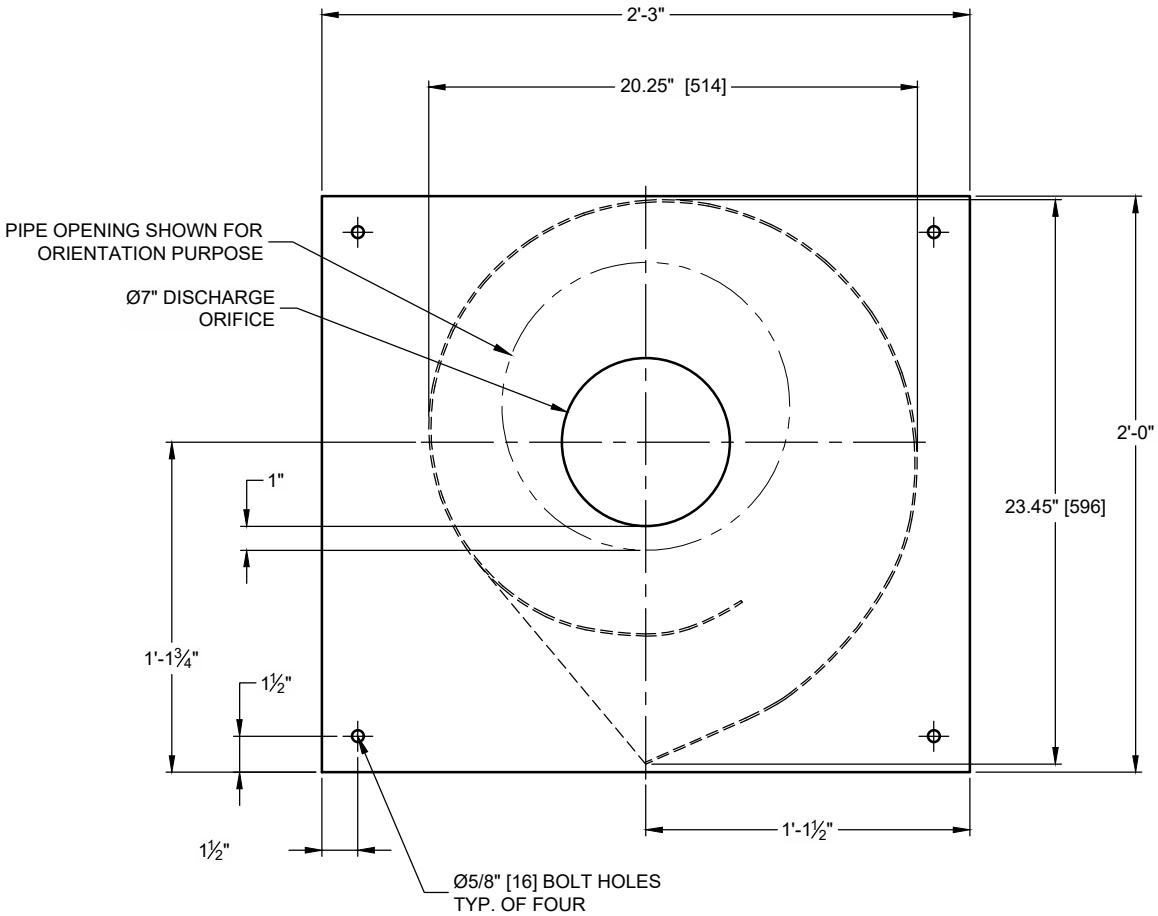


NOTES

1. ALL WELDS CONTINUOUS, UNLESS OTHERWISE NOTED
2. MATERIALS:
   - 1/8" ALUMINUM 5052
   - (1) 5/8" AND (1) 9/16" BUNA N, 50 DUROMETER O-RINGS



TOP VIEW



REAR VIEW

This CADD file is for the purpose of specifying stormwater flow control equipment to be furnished by Contech Engineered Solutions LLC and may only be transferred to other documents exactly as provided by Contech Engineered Solutions LLC. Title block information, **excluding** the Contech Engineered Solutions LLC logo and the Fluidic-Amp or Fluidic-Cone designation and patent number, may be deleted if necessary. Revisions to any part of this CADD file without prior coordination with Contech Engineered Solutions LLC shall be considered unauthorized use of proprietary information.

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FABRICATION DRAWING FOR FLUIDIC-AMP VORTEX VALVE
MODEL FA2023 WITH PLATE ATTACHMENT
ARLINGTON HEIGHTS SWIM CENTER
ARLINGTON HEIGHTS, IL

DATE: 2/7/2018	SCALE: 1 1/2"= 1'-0"	FILE NAME: FA2023-FAB-PANDS	DRAWN: DRA	CHECKED: ----

C:\USERS\DADAMS\ONEDRIVE - CONTECH ENGINEERED SOLUTIONS\CONTECH STORMWATER SOLUTIONS\PRODUCTS\VORTEX VALVE HYDROBRAKE\DRAWINGS\FA2023-FAB-PANDS.DWG 2/7/2018 2:49 PM

Overflow Weir Calculations

AHPD Olympic Swim
Project No. 5313.100
Date: 2-6-18

Design Requirements / Assumptions
100 year storm frequency

Overflow Weir West of Detention Basin

Tributary Area		4.82	Acres
Runoff Coefficient		0.76	
Time of Concentration		14	min.
100 year rainfall intensity		8.56	in/hr
100 yr peak inflow	Q=CiA	**31.36**	**cfs**
Weir bottom elevation		715.20	ft
Weir top elevation		715.60	ft
Length of bottom of weir (at elev.715.2)		40.0	ft
Length of top of weir (at elev.715.6)		46.0	ft
Weir coefficient	(C)	3.0	
Head over weir	(H)	0.40	ft
Area	(A)	17.20	ft^2
Discharge $Q = CAH^{1/2}$		**32.6**	**cfs**

Appendix E

Geotechnical Report

SOIL AND MATERIAL CONSULTANTS, INC.

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us@soilandmaterialconsultants.com
www.soilandmaterialconsultants.com

December 29, 2017
File No. 23694

Benjamin Rea
Arlington Heights Park District
401 North Arlington Heights Road
Arlington Heights, IL, 60004

Re: Geotechnical Investigation
Olympic Indoor Swim Center
Addition & Renovation
Arlington Heights, IL

Dear Mr. Rea:

The following is our report of findings for the geotechnical investigation completed for Olympic Indoor Swim Center Addition and Renovation in the Village of Arlington Heights, Illinois.

The investigation was requested to determine current subsurface soil and water conditions at select boring locations. The findings of the field investigation and the results of laboratory testing are intended to assist in the planning, design and construction of proposed site improvements.

PROPOSED IMPROVEMENTS

We understand it is proposed to construct a new addition to the north and west sides of the existing building. The addition is expected to be supported on shallow depth foundations and include two full length basketball courts, locker rooms, multi-purpose rooms, and a warm pool. The interior is expected to have at-grade slabs supported on prepared subgrade soils. Improvements exterior to the building are expected to include a new parking lot, sidewalks, extension of the existing detention pond, and related underground improvements.

SCOPE OF THE INVESTIGATION

The field investigation included obtaining 21 borings at the locations requested and as indicated on the enclosed location sketch. The boring locations were established using field taping methods and accuracy. Surface elevations were determined using the data presented on the topographic survey rounded to the nearest 0.5 ft.

We auger drilled the 15 structure and 2 detention area borings to depths of 15 feet to 25 feet below existing surface elevations. Soil samples were obtained using a split barrel sampler advanced utilizing an automatic SPT hammer. The 4 pavement area borings were drilled and sampled in a similar manner to depths of 15 feet. Soil profiles were determined in the field and soil samples returned to our laboratory for additional testing including determination of moisture content. Cohesive soils obtained by split barrel sampling were tested further to determine dry unit weight and unconfined compressive strength.

The results of all field determinations and laboratory testing are included in summary with this report.

RESULTS OF THE INVESTIGATION

Enclosed are boring logs indicating the soil conditions encountered at each location. Site surface conditions include the existing building, pavement materials, vegetation, topsoil and fill soil conditions. The topsoil is classified as dark brown to black silt/clay mixtures with traces of roots usually present.

Fill soil conditions were encountered at borings D-1, D-2, P-1, P-4, B-1, B-3, B-5, B-7, B-8, B-9, B-10, B-11, B-12, B-13, B-14, and B-15. Composition of the fill includes the presence of silt/clay, clay/silt, sand/silt, pea gravel, and topsoil mixtures extending to depths of 3.0 feet to 13.5 feet at these boring locations. The limits of fill placement were not determined within the scope of this investigation. Larger debris may also be present within the fill but was not encountered during the investigation. The fill soil conditions are found to overlie the apparent natural topsoil at boring B-7 and reached a depth of 3.5 feet. The deep fill encountered at borings B-8, B-9, B-10, B-12, and B-15 is likely the result of existing foundation wall backfill.

Underlying natural soil conditions consist primarily of cohesive soils. These are classified as soft to very hard clay/silt mixtures with lesser portions of sand and gravel. Portions of these soils are sometimes high in moisture content with values in excess of 24% determined.

Thinner layers of non-cohesive soils were also encountered as indicated. These include very loose to medium dense silt/clay, sand, sand/silt, and silt mixtures often found in a very damp to saturated condition. Cobbles and boulders may be present within the site soils at any elevation, although none were encountered while drilling.

The following table summarizes depth ranges below existing grade, the magnitude of soil strength within these ranges and other information:

Boring	Surface Elevation (feet)	Depth Range Below Existing Surface (feet)	Soil Strength (lbs./sq.ft.)	Recorded Water Levels, W.D./A.D. (feet)
Proposed Addition Area				
B-1	716.5	2.0 to 6.5	*500	4.0 / Dry
		6.5 to 9.0	3,000	
		9.0 to 12.0	4,000	
B-2	717.0	2.0 to 6.5	*NONE	6.0 / 6.0
		6.5 to 9.0	*500	
		9.0 to 12.0	4,000	
B-3	716.5	1.5 to 4.0	*3,000	8.5 / 13.5
		4.0 to 12.0	4,000	
B-4	717.0	2.0 to 4.0	3,000	Dry / Dry
		4.0 to 9.0	8,000	
		9.0 to 12.0	5,000	
B-5	717.0	1.5 to 3.5	*NONE	Dry / Dry
		3.5 to 8.5	3,000	
		8.5 to 12.0	5,000	
B-6	717.0	2.0 to 3.5	*NONE	7.0 / 9.5
		3.5 to 9.0	*500	
		9.0 to 12.0	3,000	
B-7	716.5	1.5 to 4.0	*NONE	9.0 / Dry
		4.0 to 4.5	1,500	
		4.5 to 11.0	*500	
		11.0 to 12.0	5,000	
B-8	717.5	2.0 to 7.5	*500	Dry / Dry
		7.5 to 12.0	8,000	
B-9	717.5	2.0 to 13.5	*1,000	Dry / Dry
		13.5 to 17.0	5,000	
B-10	717.5	1.5 to 4.0	*1,000	9.0 / Dry
		4.0 to 11.5	*500	
		11.5 to 13.5	3,000	
		13.5 to 15.5	4,000	
		15.5 to 22.0	3,000	

Boring	Surface Elevation (feet)	Depth Range Below Existing Surface (feet)	Soil Strength (lbs./sq.ft.)	Recorded Water Levels, W.D./A.D. (feet)
B-11	717.0	2.0 to 7.0	*1,000	Dry / Dry
		7.0 to 9.0	4,000	
		9.0 to 22.0	3,000	
B-12	718.0	0.5 to 3.0	*1,000	Dry / Dry
		3.0 to 8.5	*500	
		8.5 to 22.0	6,000	
B-13	716.0	2.0 to 4.0	*3,000	22.0 / 22.0
		4.0 to 8.5	3,000	
		8.5 to 18.0	6,000	
		18.0 to 22.0	4,000	
B-14	716.0	2.0 to 3.0	*3,000	Dry / Dry
		3.0 to 8.5	*1,000	
		8.5 to 16.0	6,000	
		16.0 to 22.0	4,000	
B-15	718.0	0.5 to 14.0	*500	13.0 / Dry
		14.0 to 22.0	4,000	
Pavement Areas				
P-1	717.0	1.5 to 4.5	*2,000	Dry / Dry
		4.5 to 6.5	4,000	
		6.5 to 9.0	8,000	
		9.0 to 12.0	5,000	
P-2	716.5	2.0 to 7.0	3,000	Dry / Dry
		7.0 to 9.0	8,000	
		9.0 to 12.0	5,000	
P-3		2.0 to 4.0	6,000	Dry / Dry
		4.0 to 8.5	8,000	
		8.5 to 12.0	4,000	
P-4	716.0	2.0 to 4.5	*3,000	Dry / Dry
		4.5 to 9.5	4,000	
		9.5 to 12.0	6,000	

* Not recommended for support of foundations.

It is expected that foundations can be supported on undisturbed natural soils located at any elevation within the depth ranges indicated in the above table, except as noted. Above these depth ranges the soils are not considered able to support foundations, even at reduced design bearing values, due to long-term settlement considerations.

SUBSURFACE WATER

The boring logs and the above table indicate the depth at which subsurface water was encountered in the bore holes at the time of the drilling operations and during the period of these readings. It is expected that fluctuations from the water levels recorded will occur over a period of time due to variations in rainfall, temperature, subsurface soil conditions, soil permeability and other factors not evident at the time of the water level measurements.

The levels recorded at borings D-1, B-1, B-2, B-3, B-6, B-7, B-10, and B-15 indicate a perched water condition. Perched water is primarily surface precipitation falling on this site or adjacent properties and which becomes trapped in pervious soil that is underlaid by relatively impervious soil. This water often flows laterally along a path of least resistance such as non-cohesive soil strata or other permeable medium. This water will also drain from the embankments of open excavations. The actual ground water condition is expected to be present in well defined granular soil layers located at deeper elevations.

BUILDING PAD

Prior to foundation excavation, a building pad should be constructed to provide adequate support of the floor slabs. The building pad construction should consist of removing unsuitable surface conditions including pavement materials, unsuitable fill, vegetation, topsoil, significant debris, weak or unstable soils, and other deleterious conditions which may be encountered. Exposed subgrade soils should be leveled, compacted and proof-rolled in the presence of the Soil Engineer. Proof-rolling may reveal remaining areas of weak and unstable soil conditions requiring additional removal.

The below table shows anticipated removal elevations prior to fill placement for support of the floor slabs. The exact removal depths should be determined in the field by the soil engineer.

Location	Existing Elevation (ft.)	Estimated Removal Elevation (ft.)	Estimated Depth of Removal (ft.)
B-1	716.5	715.0	1.5
B-2	717.0	710.5	6.5
B-3	716.5	715.5	1.0
B-4	717.0	715.0	2.0
B-5	717.0	713.5	3.5
B-6	717.0	713.5	3.5
B-7	716.5	715.0	1.5
B-8	717.5	716.5	1.0
B-9	717.5	716.5	1.0
B-10	717.5	716.0	1.5
B-11	717.0	715.0	2.0
B-12	718.0	717.5	0.5
B-13	716.0	714.5	1.5
B-14	716.0	715.0	1.0
B-15	718.0	717.5	0.5

Structural fill would then be placed on the prepared subgrade and in lifts not to exceed 8.0 inches when uncompacted. Each lift should exceed the minimum compaction requirement prior to placement of the next lift. We recommend a minimum of 95% compaction based on the modified proctor test, ASTM D-1557. If high soil moisture content prevents achieving minimum compaction requirements then it will be necessary to disc and aerate the soil.

FOUNDATIONS

Foundation excavation can begin following completion of the building pad. Based on the results of this investigation, it is our opinion that continuous and isolated footing foundations may be considered for support of building loads. These foundations can be supported on structural fill and/or undisturbed natural soils located below all topsoil, debris, unsuitable fill soils, low strength soils and other unsuitable conditions which may be encountered. Soil strength values and the depths at which they are expected to be encountered at these boring locations are indicated in the above table. A net allowable bearing value of 3,000 lbs./sq.ft. is available for design. This value can be used to size foundations for support of structure dead and live loads.

We understand the entire building will be supported on shallow depth foundations. Weak soil conditions should be anticipated at design foundation elevations and will require removal of the weak soil followed by replacement with properly compacted coarse crushed granular fill (CA01). When removal is approved by the Soil Engineer, the removal of the weak soil should also extend beyond the face of footings and/or piers to a distance at least equal to the depth of fill that will be present beneath the footings and/or piers. A capping layer of finer crushed granular fill (CA06) can be utilized to establish a working surface.

The following table contains estimated undercut depths at each boring location based on the assumed bottom of footing elevation of 714.0 feet.

Location	Existing Elevation (ft.)	Estimated Foundation Depth (ft.)	Estimated Depth of Suitable Soils (ft.)	Estimated Depth of Undercut (ft.)
B-1	716.5	714.0	710.0	4.0
B-2	717.0	714.0	708.0	6.0
B-3	716.5	714.0	712.5	1.5
B-4	717.0	714.0	715.5	0.0
B-5	717.0	714.0	713.5	0.5
B-6	717.0	714.0	708.0	6.0
B-7	716.5	714.0	713.0	1.0
B-8	717.5	714.0	710.0	4.0
B-9	717.5	714.0	704.0	10.0
B-10	717.5	714.0	706.0	8.0
B-11	717.0	714.0	710.0	4.0
B-12	718.0	714.0	709.5	4.5
B-13	716.0	714.0	712.0	2.0
B-14	716.0	714.0	712.5	1.5
B-15	718.0	714.0	704.0	10.0

Some of the deepest potential undercuts fall within the existing foundation wall backfill (B-8, B-9, B-10, B-11, B-12, and B-15) and are necessary due to the presence of poorly compacted fill soils. The designer could potentially consider using the existing foundations for support of the proposed expansion in an effort to minimize the extent of deep undercuts.

All exterior building foundations should extend at least 42.0 inches below exposed surface elevations to provide adequate protection against uplift due to freezing of the supporting soils. Foundations for unprotected improvements should extend at least 48.0 inches below exposed surface elevations. We recommend providing adequate reinforcing steel in foundation walls and piers to minimize the effects of long-term differential settlement.

FLOOR SLABS

Floor slabs planned for support on the existing soil conditions are expected to undergo some degree of long-term settlement as the soils consolidate under loading and as they shrink due to desiccation. Slabs may be considered for support on suitable natural soils or on properly placed and compacted fill soils. This is feasible when the soils supporting the slabs are prepared in accordance with the recommendations in the Building Pad section above. A subgrade modulus of 125 psi/in can be used for design of the slab on properly prepared subgrade.

We understand a warm pool is currently planned to be constructed in the west building addition. Special attention should be given to this area due to presence of deep uncontrolled backfill encountered in the area which could result in differential settlement. Future plans for a pool in this area should be reviewed by the Soil Engineer to determine if any additional measures should be taken.

DEWATERING

Excavations may require dewatering due to subsurface water seepage and/or surface precipitation. This water can likely be removed by standard sump and pump operations. Soils exposed at foundation, slab or undercut elevations should not be permitted to become saturated. Loss of bearing strength and stability may occur, requiring additional soil excavation.

Fill soils, cohesive soils and others can be unstable when saturated. These soils tend to cave or run when submerged or disturbed. The stability of exposed embankments is minimal to non-existent as confining soil pressures are removed. Proper drainage within excavations is necessary at all times, particularly when excavations extend below anticipated water levels and below saturated soils.

The contractor should be made responsible for designing and constructing stable temporary excavations. Also, the contractor should shore, slope, bench or restrain the sides of the excavations as required to maintain stability of both the excavation sides and bottom. In no case, should the slope, slope heights, or excavation depth exceed those in the local, state, and federal safety regulations.

SUBGRADE SOIL PREPARATION

The procedure in all areas of subgrade supported improvements should include the removal of unsuitable surface conditions including vegetation, topsoil, unsuitable fill soils, significant debris, weak or unstable soils, and other deleterious conditions which may be encountered. Above grade areas should be cut to design subgrade elevations. Exposed subgrade soils should be leveled, compacted and proof-rolled in the presence of the Soil Engineer.

Proof-rolling may reveal areas of unstable soil conditions. Discing and aeration of high moisture content soils can be effective to depths of up to 1.0 foot, depending upon the equipment utilized. Removal of unstable soils may be necessary if high moisture content conditions extend to depths greater than the effective depth of discing. If the depth of undercut appears to be significant, it may be economical to limit the depth of undercut to that needed to establish adequate support of slabs and remediate weak soil conditions at foundation elevations at the time of foundation construction.

Soft or unstable soil conditions in pavement areas can often be bridged by use of an effective depth of crushed granular material. The placement of the crushed granular bridging material, possibly in conjunction with the use of an appropriate geotextile fabric, should only proceed after review of the proof-roll conditions by the Soil Engineer. Long-term settlement of pavement surfaces may occur locally as the bridged soils desiccate.

Structural fill can be placed on soils prepared to the satisfaction of the Soil Engineer. The fill should be placed in lifts not to exceed 8.0 inches when uncompacted. Each lift should exceed minimum compaction requirements prior to placement of the next lift. We recommend a minimum of 95% compaction based on the modified Proctor test, ASTM D-1557, be achieved within building areas. A minimum of 90% compaction should be achieved beneath exterior

improvements such as pavements and sidewalks. Compaction requirements also apply to backfill placement around foundations and within trench excavations located below subgrade supported improvements.

FILL SOURCES

The onsite non-organic soils are generally suitable for reuse as fill. Offsite sources may also be used provided they are approved in advance by the Soil Engineer. Aeration may be necessary to reduce soil moisture content prior to compaction. Soil borrowed from near the surface where seasonal fluctuations in soil moisture content occur may require particular attention. The moisture content of fill soils should be within approximately 3.0% of optimum moisture content as determined by the modified Proctor test for the soils to meet or exceed minimum compaction requirements.

SEISMIC DESIGN CONSIDERATIONS

By definition, Site Class is based on the average properties of subsurface materials to a depth of 100 feet below the ground surface. Since a 100-foot-deep test boring was not performed on the project, it was necessary to estimate the subsurface conditions below the exploration depths. Based on the borings performed and our experience with the soils in this area we would recommend a soil Site Class D be used for seismic design.

SETTLEMENT CONSIDERATIONS

The magnitude of settlement is dependent upon a combination of factors which include design foundation elevation, magnitude of load applied to the soil at that elevation, underlying soil type, soil strength and condition, subsurface water condition and other considerations.

In the absence of specific design factors the magnitude of total and differential settlement cannot be determined at this time. A preliminary estimate based upon initial design information suggests that post-construction total and differential settlement of foundations could be in the range of 0.75 inches and 0.50 inches respectively. Variations in supporting soil strength will likely increase the magnitude of total and differential settlement

DESIGN VALUES

Where applicable, the following average values can be utilized for design of the retaining walls:

Fill Soils

Unit Wet Weight (lbs./cu.ft.)	=	125.0
Angle of Internal Friction	=	20°
Active Stress Coefficient, K_a	=	0.49
Passive Stress Coefficient, K_p	=	2.03
At-Rest Stress Coefficient, K_o	=	0.66

Cohesive Soils

Unit Wet Weight (lbs./cu.ft.)	=	135.0
Angle of Internal Friction	=	28°
Active Stress Coefficient, K_a	=	.36
Passive Stress Coefficient, K_p	=	2.77
At-Rest Stress Coefficient, K_o	=	0.53

Factors of Safety are not applied to the above values. All backfill materials placed behind walls are presumed to be drained. Passive pressures within 4.0 feet of the surface should be omitted due to seasonal weather conditions.

INFILTRATION

Borings D-1, D-2, P-1 P-2, P-3, and P-4 were performed in the proposed detention and parking areas. We understand a detention pond water management system is being considered to assist in drainage of the site. Based on the gray color changes encountered at the detention and parking lot borings we would estimate the seasonal high ground water elevation to be at EL. 704.

Grain-size analysis testing was performed on selected samples from borings D-1, D-2, P-2, and P-4. Using the USDA soil classification system, the underlying soils were determined to be Silty Clay, Silty Clay Loam, and Clay Loam. These soils have very low infiltration rates of approximately 0.07 in./hr., 0.19 in./hr., and 0.03 in./hr. respectively, due to the high percentage of clay and silt.

CONCLUSION

The information within this report is intended to provide initial information concerning subsurface soil and water conditions on the site. Variations in subsurface conditions are expected to be present between boring locations due to naturally changing and filled soil conditions.

Our understanding of the proposed improvements is based on limited information available to us at the writing of this report. The findings of the investigation and the recommendations presented are not considered applicable to significant changes in the scope of the improvements or applicable to alternate site uses. We recommend that proposed foundation, pavement and grading plans be reviewed by our office to determine if additional considerations are necessary to address anticipated subsurface conditions.

The soils exposed in soil undercut areas should be evaluated for suitability prior to placement of structural fill, as previously indicated in this report. Soils and aggregates placed as structural fill should be tested as the work progresses to verify that minimum compaction requirements have been met. We recommend that soil conditions encountered at foundation elevations be tested to verify the presence of design soil strength prior to concrete placement.

If you have any questions concerning the findings or recommendations presented in this report, please let me know.

Very truly yours,

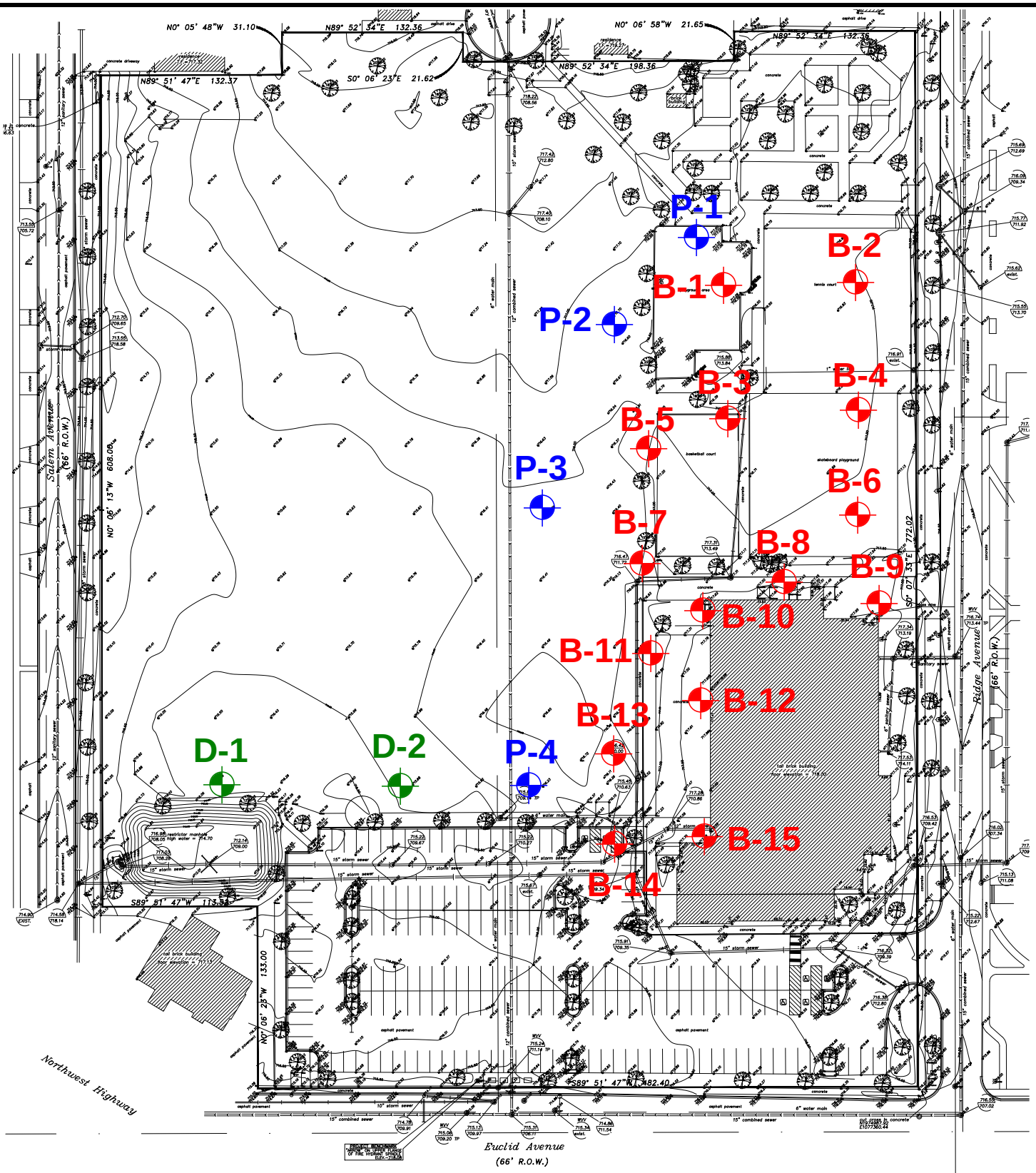
SOIL AND MATERIAL CONSULTANTS, INC.

Reid T. Steinbach, E.I.T.
Project Engineer

Thomas P. Johnson, P.E.
President

RTS/TPJ:ek
Enc.

Cc: David Yandel – FGM Architects
Colleen McCarty – Arlington Heights Park District



B-1 TO B-9 (15')
B-10 TO B-15 (25')
P-1 TO P-4 (15')
D-1 TO D-2 (25')

N

SMC	SOIL AND MATERIAL CONSULTANTS, INC.	LOCATION SKETCH
Client:	ARLINGTON HEIGHTS PARK DISTRICT	
Project:	OLYMPIC INDOOR SWIM CENTER ADDITION & RENOVATION	
Location:	ARLINGTON HEIGHTS, ILLINOIS	
File No. 23694	Date: 12-20-17	Scale: 1" ≈ 100'

SOIL AND MATERIAL CONSULTANTS, INC.
8 W. COLLEGE DR. • SUITE C • ARLINGTON HEIGHTS, IL 60004

SOIL BORING LOG D-1

Logged By: DA Page: 1 of 1

Client: Arlington Heights Park District

File No. 23694 Date Drilled: 12/18/17

Reference: Olympic Indoor Swim Center
Addition & Renovation
Arlington Heights, IL

Comments:

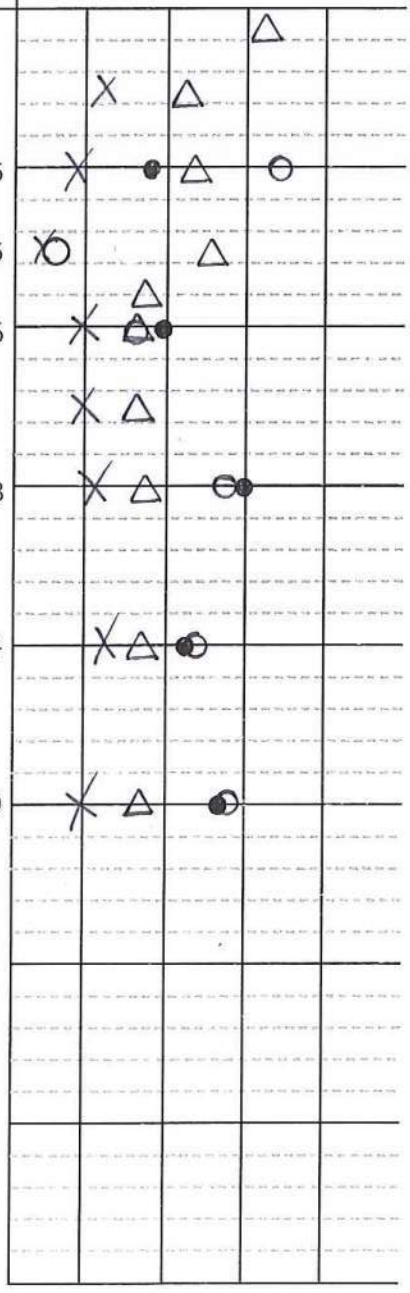
Equipment: ☒CME 45B ☐CME 55 ☐Hand Auger ☐Other

Elevation 716.0' Existing Surface

depth, ft.	CLASSIFICATION	standard penetration ×	moisture content △	dry unit weight lbs./cu.ft. ɣ	unconfined compressive strength ○
	Black-dark brown silt,some clay,trace sand & roots,damp,medium dense (topsoil)		31.9		
	Fill	13	21.7		
5	Brown-gray clay,some silt,trace sand & gravel,damp-very damp,very tough to stiff	9	23.4	101.1	3.5
	(a) see below ▽	4	25.4	95.2	0.5
	Brown clay,some silt,trace sand & gravel,		17.7		
10	damp,tough	10	15.7	118.3	1.6
	Gray silt,some clay,trace fine sand,damp medium dense	10	15.8		
15	Gray clay,some silt,trace sand & gravel, damp,very tough	11	18.1	114.6	2.8
20		13	16.9	122.6	2.4
25		10	17.3	114.3	2.9
	End of Boring				
	(a) Brown silt,some clay & sand,trace gravel,very damp				
30					
35					
40					

○ unconfined compressive strength, tons/sq. ft.
● penetrometer reading, tons/sq. ft.
1.0 2.0 3.0 4.0

× standard penetration "N", blows/ft.
△ moisture content, %
10 20 30 40



Water encountered at 7.5 feet during drilling operations (W.D.)
Water recorded at 23.0 feet on completion of drilling operations (A.D.)
Water recorded at feet hours after completion of drilling operations (A.D.)

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SOIL BORING LOG D-2

Logged By: DA Page: 1 of 1

Client: Arlington Heights Park District

File No. 23694 Date Drilled: 12/20/17

Reference: Olympic Indoor Swim Center
Addition & Renovation
Arlington Heights, IL

Comments:

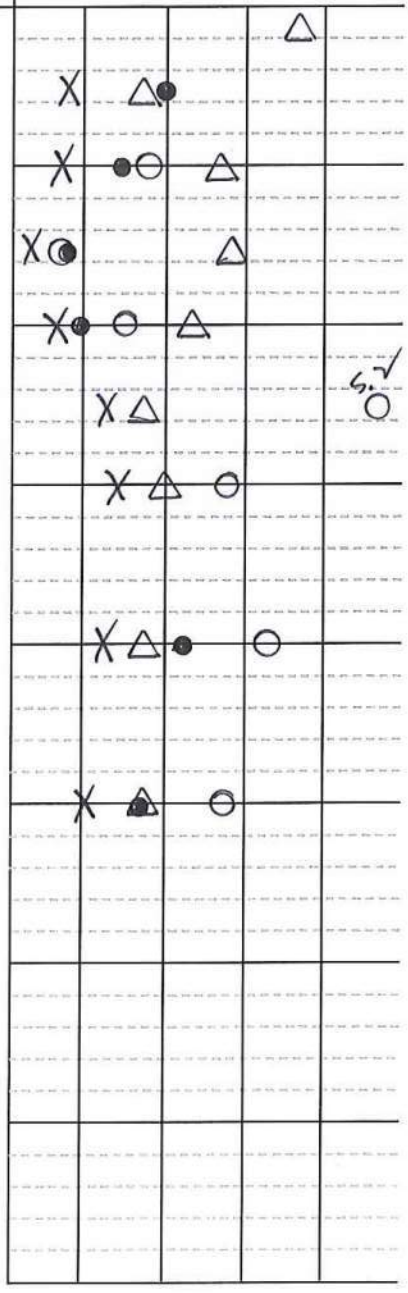
Equipment: ☒CME 45B ☐CME 55 ☐Hand Auger ☐Other

Elevation 716.0' Existing Surface

depth, ft.	CLASSIFICATION	standard penetration X	moisture content Δ	dry unit weight lbs./cu.ft. ϒ	unconfined compressive strength ○
	(a) see below		37.3		
	Brown-dark brown-black clay & silt, trace sand & gravel, damp, very tough-Fill	8	18.0		
5	Dark gray-brown-black clay, some silt, trace sand, damp, tough - Fill	7	27.4	91.2	1.8
	Brown-gray clay, some silt, trace sand & gravel, very damp, stiff to tough	3	28.8	90.7	0.7
10		6	22.7	102.3	1.5
	Brown clay, some silt, trace sand & gravel, damp, hard	13	17.5	112.9	5.2
15	Gray clay, some silt, trace sand & gravel, damp, very tough ▽	14	19.7	110.0	2.9
20		13	19.2	109.6	3.3
25		11	17.5	115.4	2.8
	End of Boring				
	(a) Black silt, some clay, trace sand & roots, damp (topsoil) - Fill - 15.0"				
30					
35					
40					

○ unconfined compressive strength, tons/sq. ft.
● penetrometer reading, tons/sq. ft.
1.0 2.0 3.0 4.0

× standard penetration "N", blows/ft.
△ moisture content, %
10 20 30 40



Water encountered at 17.0 feet during drilling operations (W.D.)
Water recorded at dry feet on completion of drilling operations (A.D.)
Water recorded at feet hours after completion of drilling operations (A.D.)

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8 W. COLLEGE DR. • SUITE C • ARLINGTON HEIGHTS, IL 60004

SOIL BORING LOG P-1

Logged By: DA Page: 1 of 1

Client: Arlington Heights Park District

File No. 23694 Date Drilled: 12/18/17

Reference: Olympic Indoor Swim Center
Addition & Renovation
Arlington Heights, IL

Comments:

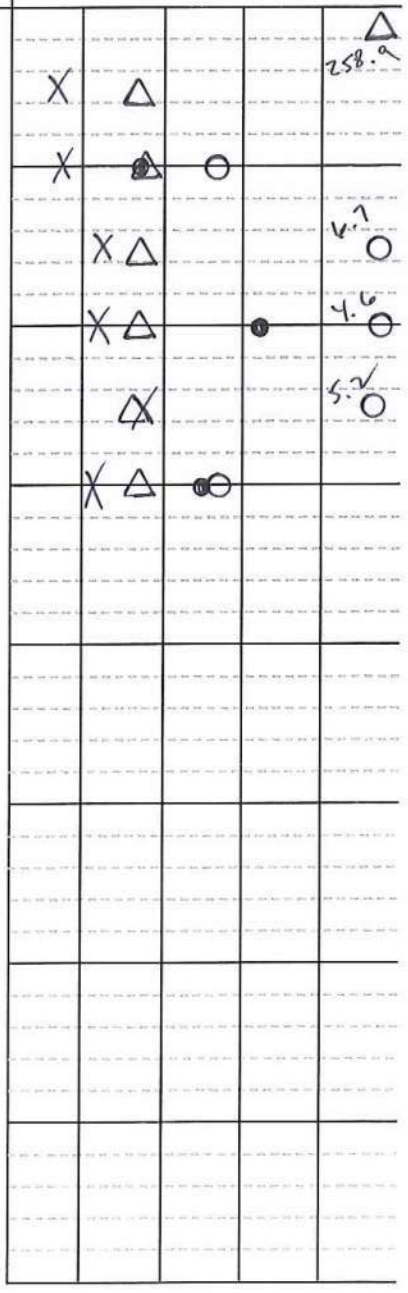
Equipment: ☒CME 45B ☐CME 55 ☐Hand Auger ☐Other

Elevation 717.0' Existing Surface

depth, ft.	CLASSIFICATION	standard penetration ×	moisture content Δ	dry unit weight lbs./cu.ft. ϑ	unconfined compressive strength ○
	(a) see below		258.9		
	Black silt,some clay & limestone,trace sand,damp,loose - Fill	7	16.8		
5	Brown-gray clay,some silt,trace sand & gravel,damp,very tough	7	18.9	106.8	2.7
	Brown clay,some silt,trace sand & gravel, damp,hard	13	17.6	110.7	6.7
10		12	18.4	109.2	4.6
		17	16.1	113.3	5.2
	Gray clay,some silt,trace sand & gravel, damp,very tough				
15		12	16.7	117.1	2.8
	End of Boring				
	(a) Black silt & wood mulch,damp (playground) - Fill				
20					
25					
30					
35					
40					

○ unconfined compressive strength, tons/sq. ft.
● penetrometer reading, tons/sq. ft.
1.0 2.0 3.0 4.0

× standard penetration "N", blows/ft.
Δ moisture content, %
10 20 30 40



Water encountered at dry feet during drilling operations (W.D.)
Water recorded at dry feet on completion of drilling operations (A.D.)
Water recorded at feet hours after completion of drilling operations (A.D.)

SOIL AND MATERIAL CONSULTANTS, INC.

8 W. COLLEGE DR. • SUITE C • ARLINGTON HEIGHTS, IL 60004

SOIL BORING LOG P-2

Logged By: DA Page: 1 of 1

Client: Arlington Heights Park District

File No. 23694 Date Drilled: 12/18/17

Reference: Olympic Indoor Swim Center
Addition & Renovation
Arlington Heights, IL

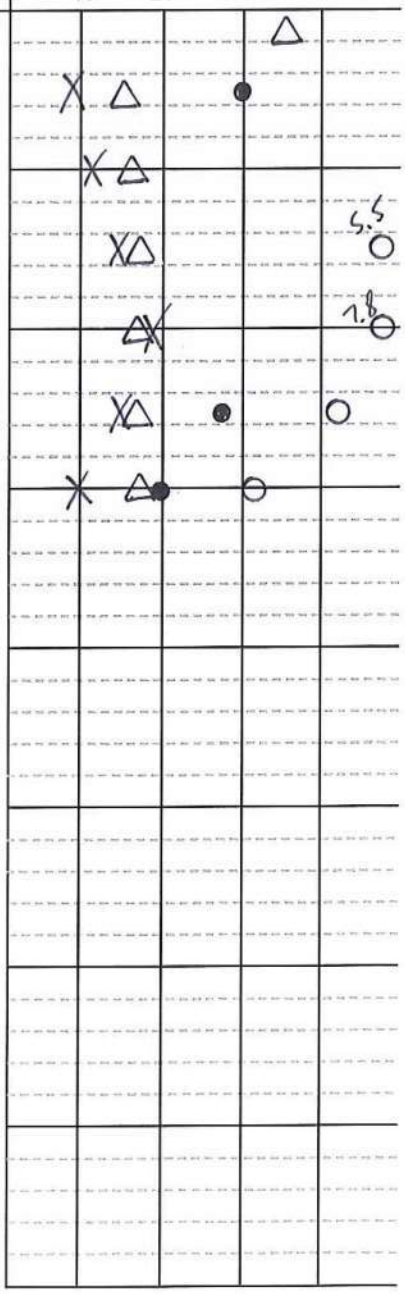
Comments:

Equipment: ☒CME 45B ☐CME 55 ☐Hand Auger ☐Other

depth, ft.	CLASSIFICATION Elevation 716.5' Existing Surface	standard penetration ×	moisture content Δ	dry unit weight lbs./cu.ft. ɣ	unconfined compressive strengh ○
	Black silt,some clay,trace sand & roots, damp (topsoil)		34.6		
	Brown-gray clay,some silt,trace sand & gravel,damp,very tough	9	15.2		
5	Brown silt,some clay,trace fine sand, damp,medium dense	12	15.6		
	Brown clay,some silt,trace sand & gravel, damp,hard	15	18.0	109.8	5.5
10		19	17.1	114.0	7.8
	Gray clay,some silt,trace sand & gravel, damp,hard	15	16.6	114.8	4.2
	Gray clay,some silt,trace sand & gravel, damp,very tough	10	17.6	113.4	3.1
15	End of Boring				
20					
25					
30					
35					
40					

○ unconfined compressive strength, tons/sq. ft.
● penetrometer reading, tons/sq. ft.
1.0 2.0 3.0 4.0

× standard penetration "N", blows/ft.
Δ moisture content, %
10 20 30 40



Water encountered at dry feet during drilling operations (W.D.)
Water recorded at dry feet on completion of drilling operations (A.D.)
Water recorded at feet hours after completion of drilling operations (A.D.)

SOIL AND MATERIAL CONSULTANTS, INC.

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SOIL BORING LOG P-3

Logged By: DA Page: 1 of 1

Client: Arlington Heights Park District

File No. 23694 Date Drilled: 12/18/17

Reference: Olympic Indoor Swim Center
Addition & Renovation
Arlington Heights, IL

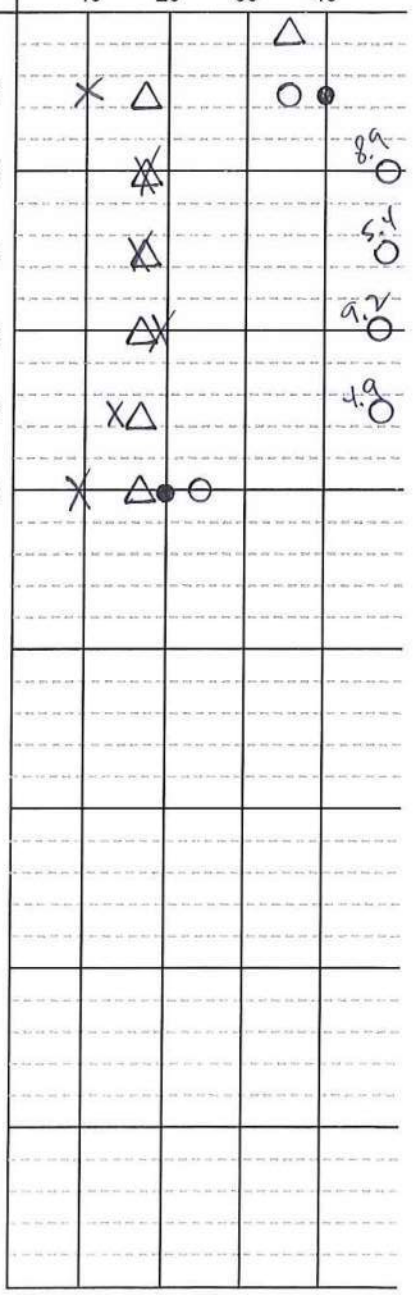
Comments:

Equipment: ☒CME 45B ☐CME 55 ☐Hand Auger ☐Other

depth, ft.	CLASSIFICATION Elevation 716.5' Existing Surface	standard penetration ×	moisture content Δ	dry unit weight lbs./cu.ft. ɣ	unconfined compressive strength ○
	(a) see below		34.8		
	Brown clay,some silt,trace sand & gravel, damp,very tough to very hard	10	17.5	108.8	3.5
5		17	17.7	110.4	8.9
		16	17.7	109.4	5.4
10		19	17.0	111.9	9.2
	Brown clay,some silt,trace sand & gravel, damp,hard	14	16.5	114.1	4.9
15	Gray clay,some silt,trace sand & gravel, damp,very tough	9	16.8	112.1	2.4
	End of Boring				
	(a) Black silt,some clay,trace sand & roots,damp (topsoil) - 15.0"				
20					
25					
30					
35					
40					

○ unconfined compressive strength, tons/sq. ft.
● penetrometer reading, tons/sq. ft.
1.0 2.0 3.0 4.0

× standard penetration "N", blows/ft.
Δ moisture content, %
10 20 30 40



Water encountered at dry feet during drilling operations (W.D.)
Water recorded at dry feet on completion of drilling operations (A.D.)
Water recorded at feet hours after completion of drilling operations (A.D.)

SOIL AND MATERIAL CONSULTANTS, INC.

8 W. COLLEGE DR. • SUITE C • ARLINGTON HEIGHTS, IL 60004

SOIL BORING LOG P-4

Logged By: DA **Page:** 1 of 1

Client: Arlington Heights Park District

File No. 23694 **Date Drilled:** 12/20/17

Reference: Olympic Indoor Swim Center
Addition & Removation
Arlington Heights, IL

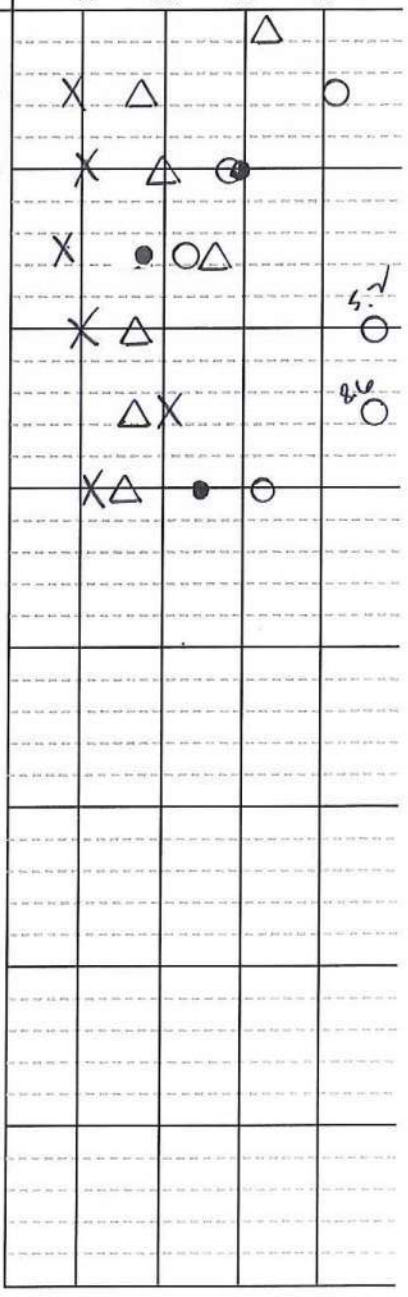
Comments:

Equipment: ☒CME 45B ☐CME 55 ☐Hand Auger ☐Other

depth, ft.	CLASSIFICATION Elevation 716.0' Existing Surface	standard penetration ×	moisture content Δ	dry unit weight lbs./cu.ft. ɣ	unconfined compressive strengh ○
	(a) see below		33.3		
	Brown-dark brown-black clay & silt,trace sand & gravel,damp,hard - Fill	9	17.9	107.4	4.1
5	Brown-gray clay,some silt,trace sand & gravel,damp,very tough	11	20.1	105.7	2.9
		7	26.8	95.8	2.3
10	Brown clay,some silt,trace sand & gravel, damp,hard to very hard	10	17.2	111.7	5.2
	Gray clay,some silt,trace sand & gravel, damp,very tough	21	16.0	115.3	8.6
15	End of Boring	12	15.3	116.7	3.3
	(a) Black silt,some clay,trace sand & roots,damp (topsoil) - Fill - 15.0"				
20					
25					
30					
35					
40					

○ unconfined compressive strength, tons/sq. ft.
● penetrometer reading, tons/sq. ft.
1.0 2.0 3.0 4.0

× standard penetration "N", blows/ft.
Δ moisture content, %
10 20 30 40



Water encountered at dry feet during drilling operations (W.D.)
Water recorded at dry feet on completion of drilling operations (A.D.)
Water recorded at feet hours after completion of drilling operations (A.D.)

SOIL AND MATERIAL CONSULTANTS, INC.

8 W. COLLEGE DR. • SUITE C • ARLINGTON HEIGHTS, IL 60004

SOIL BORING LOG B-1

Logged By: DA Page: 1 of 1

Client: Arlington Heights Park District

File No. 23694 Date Drilled: 12/18/17

Reference: Olympic Indoor Swim Center
Addition & Renovation
Arlington Heights, IL

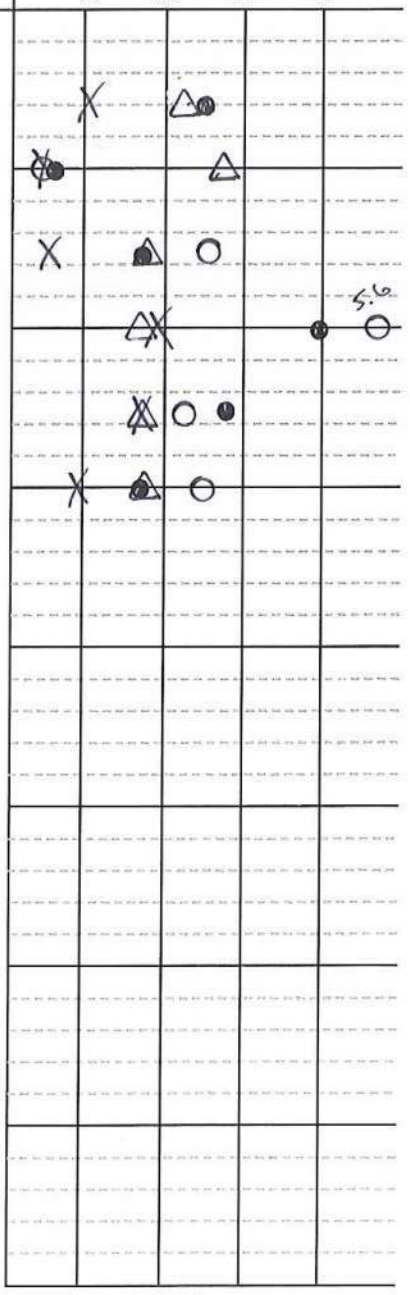
Comments:

Equipment: ☒CME 45B ☐CME 55 ☐Hand Auger ☐Other

depth, ft.	CLASSIFICATION Elevation 716.5' Existing Surface	standard penetration ×	moisture content Δ	dry unit weight lbs./cu.ft. ɣ	unconfined compressive strengh ○
	(a & b) see below				
	(c) see below				
	Brown-gray clay,some silt,trace sand & gravel,damp-very damp,soft ▽	11	21.9		
5		4	29.2	90.0	0.4
	Brown clay & silt,trace sand & gravel, very damp,very tough	6	18.7	113.4	2.5
10	Brown clay,some silt,trace sand & gravel, damp,hard	19	16.5	121.5	5.6
	Gray clay,some silt,trace sand & gravel, damp,very tough	17	17.5	113.1	2.3
15		9	18.9	109.7	2.5
	End of Boring				
	(a) Wood Chips (playground) - 10.0"				
	(b) Concrete - 6.0"				
20	(c) Black-dark brown-gray clay,some silt, trace sand & gravel,damp,very tough - Fill				
25					
30					
35					
40					

○ unconfined compressive strength, tons/sq. ft.
● penetrometer reading, tons/sq. ft.
1.0 2.0 3.0 4.0

× standard penetration "N", blows/ft.
Δ moisture content, %
10 20 30 40



Water encountered at 4.0 feet during drilling operations (W.D.)
Water recorded at dry feet on completion of drilling operations (A.D.)
Water recorded at feet hours after completion of drilling operations (A.D.)

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8 W. COLLEGE DR. • SUITE C • ARLINGTON HEIGHTS, IL 60004

SOIL BORING LOG B-2

Logged By: DA Page: 1 of 1

Client: Arlington Heights Park District

File No. 23694 Date Drilled: 12/20/17

Reference: Olympic Indoor Swim Center
Addition & Renovation
Arlington Heights, IL

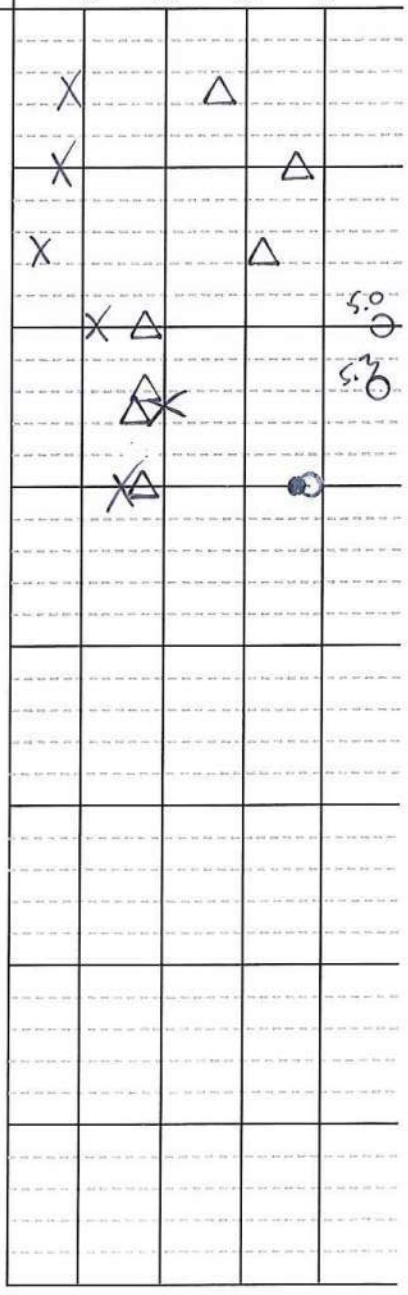
Comments:

Equipment: ☒CME 45B ☐CME 55 ☐Hand Auger ☐Other

depth, ft.	CLASSIFICATION Elevation 717.0' Existing Surface	standard penetration ×	moisture content Δ	dry unit weight lbs./cu.ft. ɣ	unconfined compressive strengh ○
	(a & b) see below				
	Black silt,some clay,trace sand,damp, loose (topsoil)	8	26.0		
5		▽ 7	35.6		
	Dark gray to gray-brown silt,some clay, trace sand & gravel,very damp-saturated, very loose	4	31.9		
10	Brown clay,some silt,trace sand & gravel, damp,hard	12	18.8	118.6	5.0
	(c) see below	20	19.1	117.0	5.3
	Gray clay,some silt,trace sand & gravel, damp,very tough		15.9		
15		15	16.6	117.8	3.9
	End of Boring				
	(a) Bituminous concrete - 3.0"				
	(b) Limestone & crushed concrete,damp - 12.0"				
20	(c) Brown fine sand,trace medium-coarse sand,gravel & silt,damp,medium dense				
25					
30					
35					
40					

○ unconfined compressive strength, tons/sq. ft.
● penetrometer reading, tons/sq. ft.
1.0 2.0 3.0 4.0

× standard penetration "N", blows/ft.
Δ moisture content, %
10 20 30 40



Water encountered at 6.0 feet during drilling operations (W.D.)
Water recorded at 6.0 feet on completion of drilling operations (A.D.)
Water recorded at feet hours after completion of drilling operations (A.D.)

SOIL AND MATERIAL CONSULTANTS, INC.

8 W. COLLEGE DR. • SUITE C • ARLINGTON HEIGHTS, IL 60004

SOIL BORING LOG B-3

Logged By: DA Page: 1 of 1

Client: Arlington Heights Park District

File No. 23694 Date Drilled: 12/18/17

Reference: Olympic Indoor Swim Center
Addition & Renovation
Arlington Heights, IL

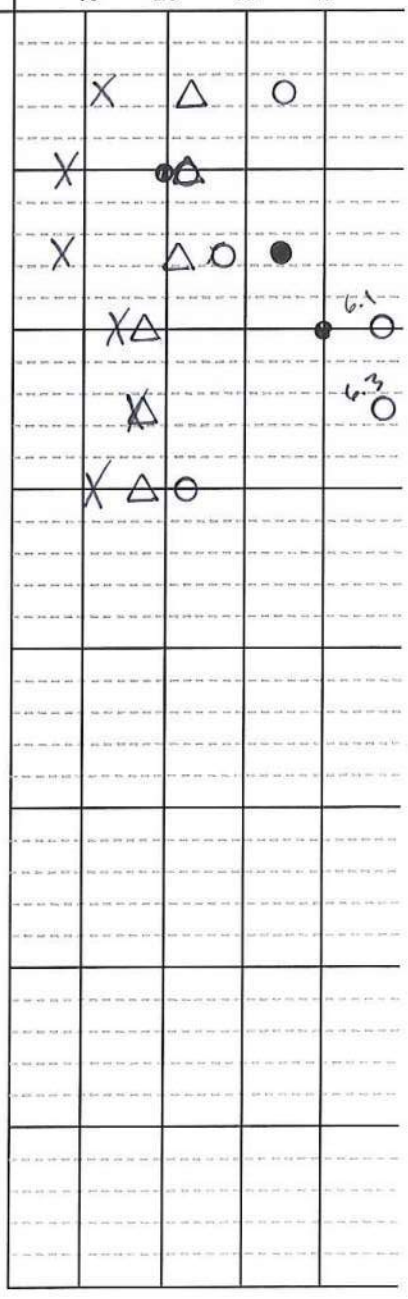
Comments:

Equipment: ☒CME 45B ☐CME 55 ☐Hand Auger ☐Other

depth, ft.	CLASSIFICATION Elevation 716.5' Existing Surface	standard penetration ×	moisture content △	dry unit weight lbs./cu.ft. ɣ	unconfined compressive strengh ○
	(a & b) see below				
	Black-dark gray-brown clay & silt,trace sand & gravel,damp,very tough - Fill	12	23.2	98.2	3.5
5	Dark gray to brown-gray clay,some silt, trace sand & gravel,damp,very tough	7	22.7	98.4	2.3
	▽	7	20.7	101.4	2.8
10	Brown clay,some silt,trace sand & gravel, damp,hard	14	18.1	115.0	6.1
		17	18.0	114.9	6.3
	Gray clay,some silt,trace sand & gravel, damp,very tough				
15		12	18.4	111.9	2.3
	End of Boring				
	(a) Bituminous concrete - 4.5"				
	(b) Limestone,damp - 5.5"				
20					
25					
30					
35					
40					

○ unconfined compressive strength, tons/sq. ft.
● penetrometer reading, tons/sq. ft.
1.0 2.0 3.0 4.0

× standard penetration "N", blows/ft.
△ moisture content, %
10 20 30 40



Water encountered at 8.5 feet during drilling operations (W.D.)
Water recorded at 13.5 feet on completion of drilling operations (A.D.)
Water recorded at feet hours after completion of drilling operations (A.D.)

SOIL AND MATERIAL CONSULTANTS, INC.
8 W. COLLEGE DR. • SUITE C • ARLINGTON HEIGHTS, IL 60004

SOIL BORING LOG B-4

Logged By: DA Page: 1 of 1

Client: Arlington Heights Park District

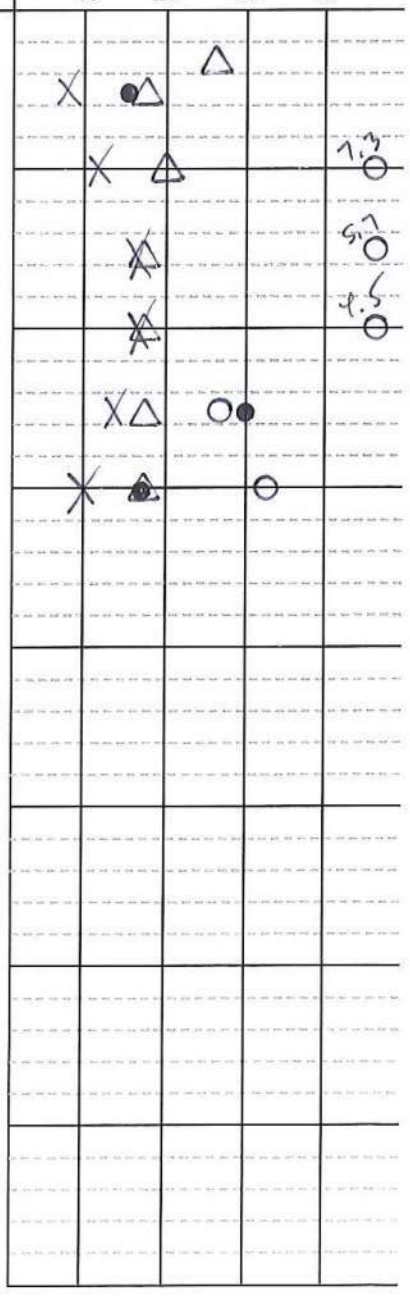
File No. 23694 Date Drilled: 12/20/17

Reference: Olympic Indoor Swim Center
Addition & Renovation
Arlington Heights, IL

Comments:

Equipment: ☒CME 45B ☐CME 55 ☐Hand Auger ☐Other

depth, ft.	CLASSIFICATION Elevation 717.0' Existing Surface	standard penetration ×	moisture content Δ	dry unit weight lbs./cu.ft. ϑ	unconfined compressive strengh ○
	(a,b & c) see below		25.6		
	Brown clay & silt,trace sand,damp,tough	8	18.2		
5	Brown clay,some silt,trace sand & gravel, damp,hard	12	19.5	108.9	7.3
		17	18.4	108.7	5.7
10		17	18.2	109.6	4.5
	Gray clay,some silt,trace sand & gravel, damp,very tough	14	18.3	110.2	2.7
15		10	18.1	110.5	3.3
	End of Boring				
	(a) Bituminous concrete - 3.0"				
	(b) Limestone,damp - 11.0"				
20	(c) Black silt,some clay,trace sand,damp, very loose (topsoil)				
25					
30					
35					
40					



Water encountered at dry feet during drilling operations (W.D.)
Water recorded at dry feet on completion of drilling operations (A.D.)
Water recorded at feet hours after completion of drilling operations (A.D.)

SOIL AND MATERIAL CONSULTANTS, INC.
8 W. COLLEGE DR. • SUITE C • ARLINGTON HEIGHTS, IL 60004

SOIL BORING LOG B-5

Logged By: DA Page: 1 of 1

Client: Arlington Heights Park District

File No. 23694 Date Drilled: 12/18/17

Reference: Olympic Indoor Swim Center
Addition & Renovation
Arlington Heights, IL

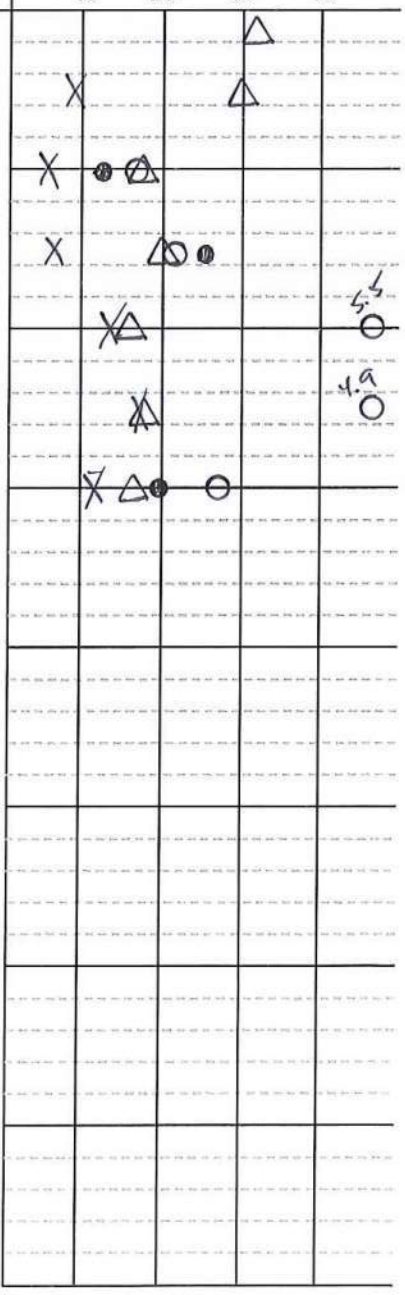
Comments:

Equipment: ☒CME 45B ☐CME 55 ☐Hand Auger ☐Other

depth, ft.	CLASSIFICATION Elevation 717.0' Existing Surface	standard penetration ×	moisture content Δ	dry unit weight lbs./cu.ft. ɣ	unconfined compressive strengh ○
	Black-dark brown silt,some clay,trace sand & roots,damp,loose (topsoil)-Fill		30.6		
		9	30.4		
5	Brown-gray clay,some silt,trace sand & gravel,damp,tough to very tough	5	19.1	110.2	1.8
		6	20.4	105.9	2.1
10	Brown clay,some silt,trace sand & gravel, damp,hard	14	15.7	116.8	5.5
		17	19.0	109.6	4.9
15	Gray clay,some silt,trace sand & gravel, damp,very tough	12	17.4	115.1	2.8
	End of Boring				
20					
25					
30					
35					
40					

○ unconfined compressive strength, tons/sq. ft.
● penetrometer reading, tons/sq. ft.
1.0 2.0 3.0 4.0

× standard penetration "N", blows/ft.
Δ moisture content, %
10 20 30 40



Water encountered at dry feet during drilling operations (W.D.)
Water recorded at dry feet on completion of drilling operations (A.D.)
Water recorded at feet hours after completion of drilling operations (A.D.)

SOIL AND MATERIAL CONSULTANTS, INC.
8 W. COLLEGE DR. • SUITE C • ARLINGTON HEIGHTS, IL 60004

SOIL BORING LOG B-6

Logged By: DA Page: 1 of 1

Client: Arlington Heights Park District

File No. 23694 Date Drilled: 12/20/17

Reference: Olympic Indoor Swim Center
Addition & Renovation
Arlington Heights, IL

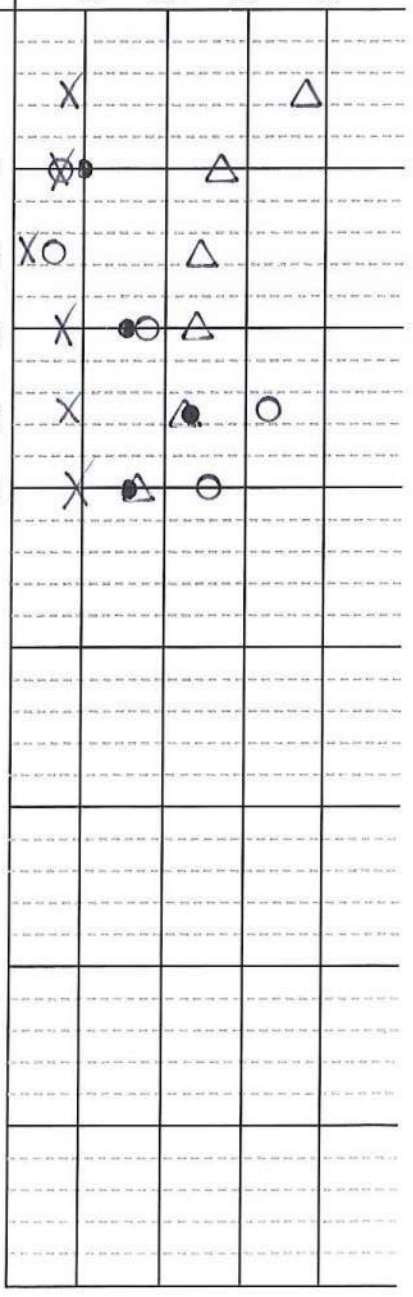
Comments:

Equipment: ☒CME 45B ☐CME 55 ☐Hand Auger ☐Other

depth, ft.	CLASSIFICATION Elevation 717.0' Existing Surface	standard penetration ×	moisture content Δ	dry unit weight lbs./cu.ft. ɣ	unconfined compressive strengh ○
	(a & b) see below				
	Black silt,some clay,trace sand,damp, loose (topsoil)	8	38.1		
5	Brown-gray clay,some silt,trace sand & gravel,damp-very damp,stiff to very tough ▽	7	27.2	95.7	0.7
		3	24.4	103.2	0.5
10		7	23.7	107.7	1.8
		8	21.6	112.8	3.3
15	Gray clay,some silt,trace sand & gravel, damp,very tough	9	16.9	116.8	2.5
	End of Boring				
20	(a) Bituminous concrete - 3.5" (b) Limestone,damp - 9.5"				
25					
30					
35					
40					

○ unconfined compressive strength, tons/sq. ft.
● penetrometer reading, tons/sq. ft.
1.0 2.0 3.0 4.0

× standard penetration "N", blows/ft.
Δ moisture content, %
10 20 30 40



Water encountered at 7.0 feet during drilling operations (W.D.)
Water recorded at 9.5 feet on completion of drilling operations (A.D.)
Water recorded at ____ feet ____ hours after completion of drilling operations (A.D.)

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8 W. COLLEGE DR. • SUITE C • ARLINGTON HEIGHTS, IL 60004

SOIL BORING LOG B-7

Logged By: DA Page: 1 of 1

Client: Arlington Heights Park District

File No. 23694 Date Drilled: 12/18/17

Reference: Olympic Indoor Swim Center
Addition & Renovation
Arlington Heights, IL

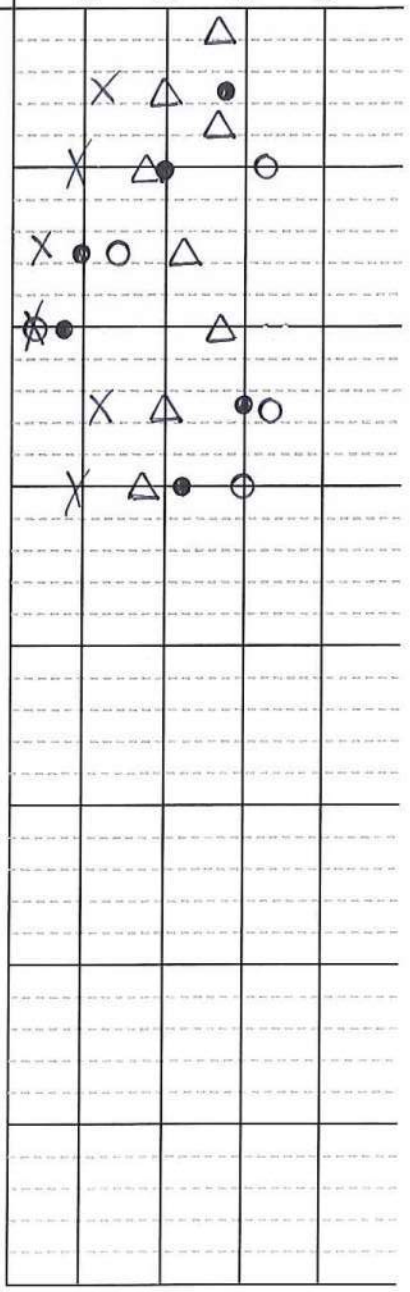
Comments:

Equipment: ☒CME 45B ☐CME 55 ☐Hand Auger ☐Other

depth, ft.	CLASSIFICATION Elevation 716.5' Existing Surface	standard penetration ×	moisture content Δ	dry unit weight lbs./cu.ft. ɣ	unconfined compressive strengh ○
	(a) see below		25.9		
	Brown-dark brown clay & silt,trace sand & gravel,damp,very tough - Fill	12	19.6		
	(b) see below		27.1		
5	Brown-gray clay,some silt,trace sand & gravel,damp-very damp,very tough	9	18.8	105.7	3.3
	Brown-gray clay,some silt,trace sand & gravel,damp-very damp,tough to soft ▽	4	22.0	106.0	1.4
10		3	27.5	103.3	0.3
	Brown clay,some silt,trace sand & gravel, damp,very tough	12	20.2	107.3	3.4
	Gray clay,some silt,trace sand & gravel, damp,very tough				
15		9	17.5	114.0	3.0
	End of Boring				
	(a) Black silt,some clay,trace sand & roots,damp (topsoil) - Fill				
20	(b) Black silt,some clay,trace sand,damp (topsoil)				
25					
30					
35					
40					

○ unconfined compressive strength, tons/sq. ft.
● penetrometer reading, tons/sq. ft.
1.0 2.0 3.0 4.0

× standard penetration "N", blows/ft.
Δ moisture content, %
10 20 30 40



Water encountered at 9.0 feet during drilling operations (W.D.)
Water recorded at dry feet on completion of drilling operations (A.D.)
Water recorded at feet hours after completion of drilling operations (A.D.)

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8 W. COLLEGE DR. • SUITE C • ARLINGTON HEIGHTS, IL 60004

SOIL BORING LOG B-8

Logged By: DA Page: 1 of 1

Client: Arlington Heights Park District

File No. 23694 Date Drilled: 12/20/17

Reference: Olympic Indoor Swim Center
Addition & Renovation
Arlington Heights, IL

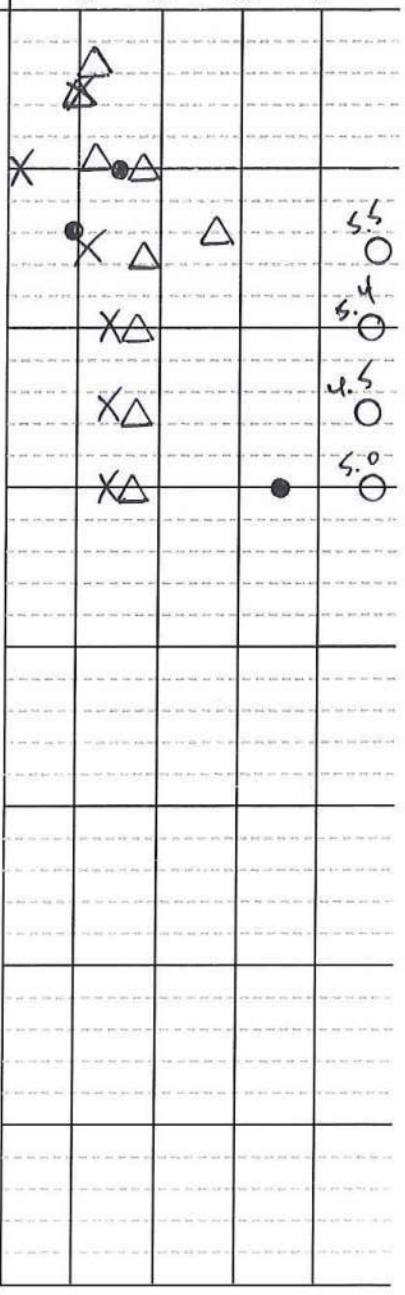
Comments:

Equipment: ☒CME 45B ☐CME 55 ☐Hand Auger ☐Other

depth, ft.	CLASSIFICATION Elevation 717.5' Existing Surface	standard penetration ×	moisture content Δ	dry unit weight lbs./cu.ft. ɣ	unconfined compressive strengh ○
	(a,b & c) see below		10.7		
	Brown-dark brown fine-medium sand,some gravel,trace coarse sand,damp,medium dense to very loose - Fill	10	9.5		
5	Brown-dark brown clay & silt,trace sand & gravel,very damp,stiff to tough - Fill	2	12.3 19.2		
	Brown-gray clay,some silt,trace sand & gravel,damp,hard	11	27.9 18.5	111.3	5.5
10		14	18.1	108.9	5.4
	Brown clay,some silt,trace sand & gravel, damp,hard	14	17.9	111.1	4.5
	Gray clay,some silt,trace sand & gravel, damp,hard	14	17.0	114.5	5.0
15	End of Boring				
	(a) Bituminous concrete - 5.0"				
	(b) Brown sand & gravel,damp - 7.0"				
20	(c) Brown-gray silt & clay,some sand & gravel,damp,loose - Fill				
25					
30					
35					
40					

○ unconfined compressive strength, tons/sq. ft.
● penetrometer reading, tons/sq. ft.
1.0 2.0 3.0 4.0

× standard penetration "N", blows/ft.
Δ moisture content, %
10 20 30 40



Water encountered at dry feet during drilling operations (W.D.)
Water recorded at dry feet on completion of drilling operations (A.D.)
Water recorded at feet hours after completion of drilling operations (A.D.)

SOIL AND MATERIAL CONSULTANTS, INC.

8 W. COLLEGE DR. • SUITE C • ARLINGTON HEIGHTS, IL 60004

SOIL BORING LOG B-9

Logged By: DA Page: 1 of 1

Client: Arlington Heights Park District

File No. 23694 Date Drilled: 12/20/17

Reference: Olympic Indoor Swim Center
Addition & Renovation
Arlington Heights, IL

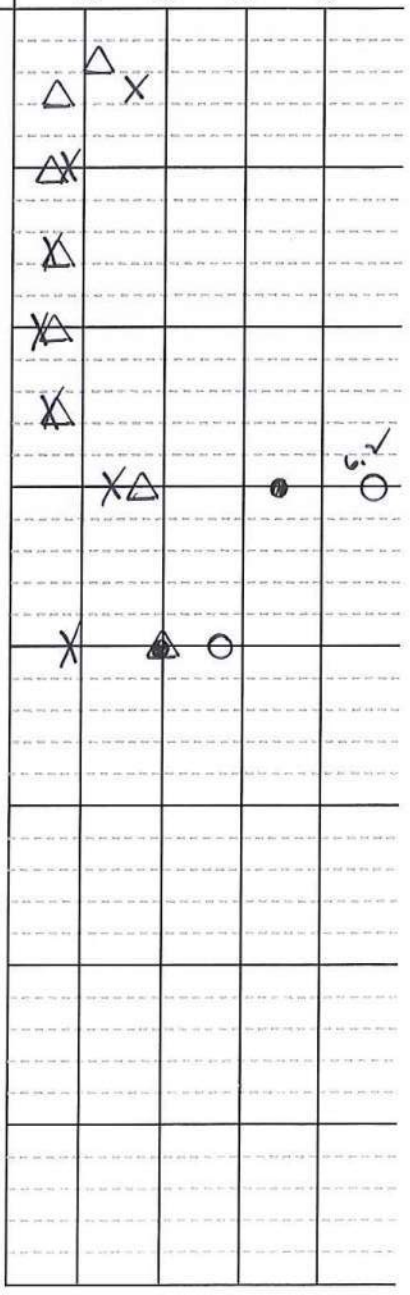
Comments:

Equipment: ☒CME 45B ☐CME 55 ☐Hand Auger ☐Other

depth, ft.	CLASSIFICATION Elevation 717.5' Existing Surface	standard penetration ×	moisture content △	dry unit weight lbs./cu.ft. ɣ	unconfined compressive strengh ○
	(a,b & c) see below		10.8		
	Brown fine-medium sand,some gravel,trace coarse sand,damp,med. dense-Fill	16	6.1		
5	Brown fine-medium sand,some gravel,trace coarse sand,damp,loose - Fill	7	5.2		
		5	5.6		
10	Brown fine-medium sand,some gravel,trace coarse sand,damp,very loose to loose-Fill	4	6.0		
		5	7.1		
15	Brown clay,some silt,trace sand & gravel, damp,hard	14	19.3	109.9	6.2
	Gray clay,some silt,trace sand & gravel, damp,very tough				
20	End of Boring	8	20.0	110.6	2.8
	(a) Bituminous concrete - 5.0"				
	(b) Brown sand & gravel,damp - 7.0"				
25	(c) Brown-dark brown silt & clay,some sand & gravel,damp,medium dense - Fill				
30					
35					
40					

○ unconfined compressive strength, tons/sq. ft.
● penetrometer reading, tons/sq. ft.
1.0 2.0 3.0 4.0

× standard penetration "N", blows/ft.
△ moisture content, %
10 20 30 40



Water encountered at dry feet during drilling operations (W.D.)
Water recorded at dry feet on completion of drilling operations (A.D.)
Water recorded at feet hours after completion of drilling operations (A.D.)

SOIL AND MATERIAL CONSULTANTS, INC.

8 W. COLLEGE DR. • SUITE C • ARLINGTON HEIGHTS, IL 60004

SOIL BORING LOG B-10

Logged By: DA Page: 1 of 1

Client: Arlington Heights Park District

File No. 23694 Date Drilled: 12/19/17

Reference: Olympic Indoor Swim Center
Addition & Renovation
Arlington Heights, IL

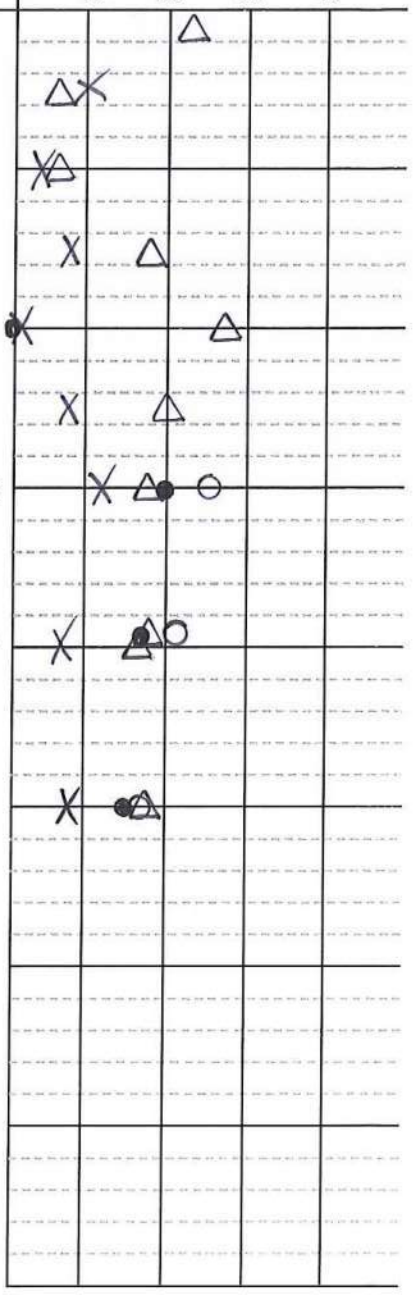
Comments:

Equipment: ☒CME 45B ☐CME 55 ☐Hand Auger ☐Other

depth, ft.	CLASSIFICATION Elevation 717.5' Existing Surface	standard penetration ×	moisture content Δ	dry unit weight lbs./cu.ft. ϑ	unconfined compressive strengh ○
	(a) see below		22.6		
	Brown-dark brown fine-medium sand,some gravel,trace coarse sand,damp,medium dense to very loose - Fill	10	5.6		
5	Dark brown-black silt,some clay,trace sand & gravel,damp,loose - Fill	4	6.0		
	Brown-gray-black clay,some silt,trace sand & gravel,very damp,very soft - Fill	8	18.5		
10		1	27.3		
	Brown silt,some clay,trace fine sand, damp,loose	8	20.0		
15	Brown-gray clay,some silt,trace sand & gravel,damp,very tough	12	19.1	112.3	2.5
	Gray clay,some silt,trace sand & gravel, damp,very tough				
20	(b) see below	7	19.3 15.8	107.9	2.1
	Gray clay,some silt,trace sand & gravel, damp,tough				
25	End of Boring	8	18.6	109.4	1.7
	(a) Black silt,some sand,trace clay, gravel & roots,damp (topsoil) - Fill				
30	(b) Gray fine sand & silt,very damp, loose				
35					
40					

○ unconfined compressive strength, tons/sq. ft.
● penetrometer reading, tons/sq. ft.
1.0 2.0 3.0 4.0

× standard penetration "N", blows/ft.
Δ moisture content, %
10 20 30 40



Water encountered at 9.0 feet during drilling operations (W.D.)
Water recorded at dry feet on completion of drilling operations (A.D.)
Water recorded at feet hours after completion of drilling operations (A.D.)

SOIL AND MATERIAL CONSULTANTS, INC.

8 W. COLLEGE DR. • SUITE C • ARLINGTON HEIGHTS, IL 60004

SOIL BORING LOG B-11

Logged By: DA Page: 1 of 1

Client: Arlington Heights Park District

File No. 23694 Date Drilled: 12/19/17

Reference: Olympic Indoor Swim Center
Addition & Renovation
Arlington Heights, IL

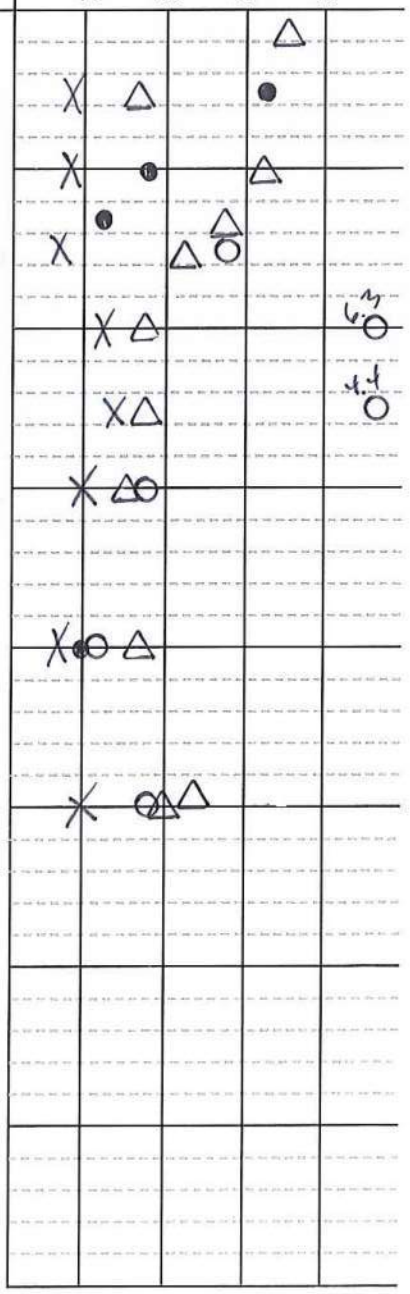
Comments:

Equipment: ☒CME 45B ☐CME 55 ☐Hand Auger ☐Other

depth, ft.	CLASSIFICATION Elevation 717.0' Existing Surface	standard penetration ×	moisture content △	dry unit weight lbs./cu.ft. ɣ	unconfined compressive strengh ○
	(a) see below		35.3		
	Brown-dark brown-black clay & silt,trace sand & gravel,damp,very tough to tough - Fill	9	16.7		
5	Black clay & silt,trace sand & gravel, damp,tough - Fill	8	31.8		
	Brown-gray clay,some silt,trace sand & gravel,damp,very tough	7	28.7 22.2	99.2	2.8
10	Brown clay,some silt,trace sand & gravel, damp,hard	13	18.1	109.1	6.3
		14	19.4	105.3	4.4
15	Gray clay,some silt,trace sand & gravel, damp-very damp,tough	10	15.1	123.1	1.8
20		7	15.8	125.2	1.2
	Gray clay,some silt,trace sand & gravel, damp,tough				
25	(b) see below (c) see below	10	24.1 19.7	110.7	1.8
	End of Boring				
	(a) Black silt,some clay,trace sand & roots,damp (topsoil) - Fill				
30	(b) Gray silt,trace fine sand & clay, damp,medium dense				
	(c) Gray clay,some silt,trace sand & gravel,damp,tough				
35					
40					

○ unconfined compressive strength, tons/sq. ft.
● penetrometer reading, tons/sq. ft.
1.0 2.0 3.0 4.0

× standard penetration "N", blows/ft.
△ moisture content, %
10 20 30 40



Water encountered at dry feet during drilling operations (W.D.)
Water recorded at dry feet on completion of drilling operations (A.D.)
Water recorded at feet hours after completion of drilling operations (A.D.)

SOIL AND MATERIAL CONSULTANTS, INC.

8 W. COLLEGE DR. • SUITE C • ARLINGTON HEIGHTS, IL 60004

SOIL BORING LOG B-12

Logged By: DA Page: 1 of 1

Client: Arlington Heights Park District

File No. 23694 Date Drilled: 12/19/17

Reference: Olympic Indoor Swim Center
Addition & Renovation
Arlington Heights, IL

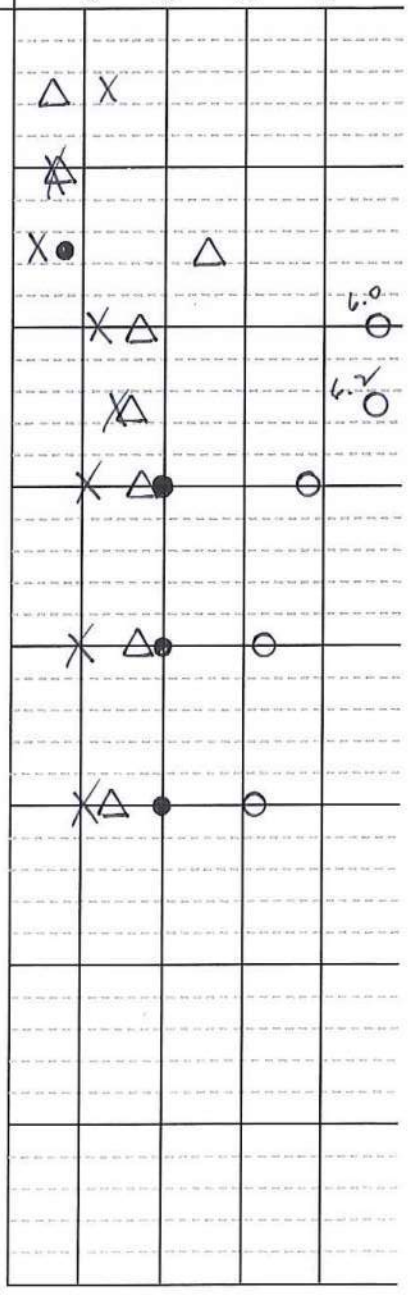
Comments:

Equipment: ☒CME 45B ☐CME 55 ☐Hand Auger ☐Other

depth, ft.	CLASSIFICATION Elevation 718.0' Existing Surface	standard penetration ×	moisture content Δ	dry unit weight lbs./cu.ft. ɣ	unconfined compressive strengh ○
	(a) see below				
	Brown-dark brown fine-medium sand,some gravel,trace coarse sand,damp,medium dense to loose - Fill	13	5.9		
5		6	7.3		
	Brown-gray-black clay & silt,trace sand & gravel,very damp,stiff - Fill	4	24.9		
10	Brown clay,some silt,trace sand & gravel, damp,hard	12	18.3	111.3	6.0
		15	16.4	113.9	6.2
15	Gray clay,some silt,taace sand & gravel, damp,very tough	11	17.2	117.1	3.9
20		10	17.2	115.0	3.3
25		11	13.7	126.1	3.1
	End of Boring				
	(a) Concrete - 4.0"				
30					
35					
40					

○ unconfined compressive strength, tons/sq. ft.
● penetrometer reading, tons/sq. ft.
1.0 2.0 3.0 4.0

× standard penetration "N", blows/ft.
Δ moisture content, %
10 20 30 40



Water encountered at dry feet during drilling operations (W.D.)
Water recorded at dry feet on completion of drilling operations (A.D.)
Water recorded at feet hours after completion of drilling operations (A.D.)

SOIL AND MATERIAL CONSULTANTS, INC.

8 W. COLLEGE DR. • SUITE C • ARLINGTON HEIGHTS, IL 60004

SOIL BORING LOG B-13

Logged By: DA Page: 1 of 1

Client: Arlington Heights Park District

File No. 23694 Date Drilled: 12/19/17

Reference: Olympic Indoor Swim Center
Addition & Renovation
Arlington Heights, IL

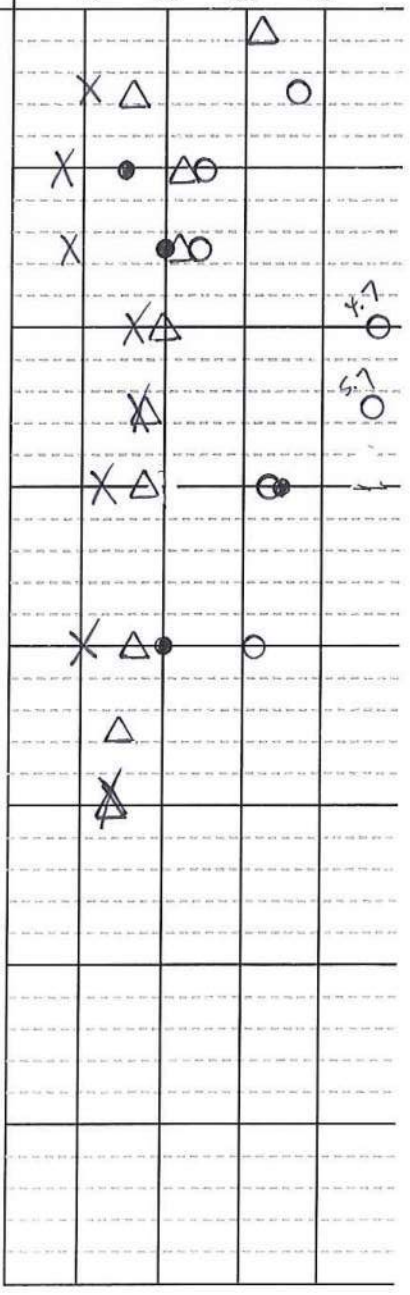
Comments:

Equipment: ☒CME 45B ☐CME 55 ☐Hand Auger ☐Other

depth, ft.	CLASSIFICATION Elevation 716.0' Existing Surface	standard penetration ×	moisture content Δ	dry unit weight lbs./cu.ft. ɣ	unconfined compressive strengh ○
	(a) see below		30.5		
	Brown-dark brown clay,some silt,trace sand & gravel,damp,very tough-Fill	11	16.4	111.3	3.7
5	Brown-gray clay,some silt,trace sand & gravel,damp,very tough	7	21.6	102.2	2.5
		8	20.9	104.0	2.5
10	Brown clay,some silt,trace sand & gravel, damp,hard	16	19.9	107.7	4.7
		17	19.3	108.6	5.7
15	Gray clay,some silt,trace sand & gravel, damp,very tough	12	18.8	112.7	3.4
20		10	16.8	115.4	3.1
	(b) see below		15.2		
25	Gray silt,some clay,trace fine sand,damp medium dense	14	14.0		
	End of Boring				
30	(a) Black silt,some clay,trace sand & roots,damp (topsoil) - Fill - 15.0" (b) Gray fine sand,trace medium-coarse sand & silt,very damp-saturated				
35					
40					

○ unconfined compressive strength, tons/sq. ft.
● penetrometer reading, tons/sq. ft.
1.0 2.0 3.0 4.0

× standard penetration "N", blows/ft.
Δ moisture content, %
10 20 30 40



Water encountered at 22.0 feet during drilling operations (W.D.)
Water recorded at 22.0 feet on completion of drilling operations (A.D.)
Water recorded at feet hours after completion of drilling operations (A.D.)

SOIL AND MATERIAL CONSULTANTS, INC.

8 W. COLLEGE DR. • SUITE C • ARLINGTON HEIGHTS, IL 60004

SOIL BORING LOG B-14

Logged By: DA Page: 1 of 1

Client: Arlington Heights Park District

File No. 23694 Date Drilled: 12/19/17

Reference: Olympic Indoor Swim Center
Addition & Renovation
Arlington Heights, IL

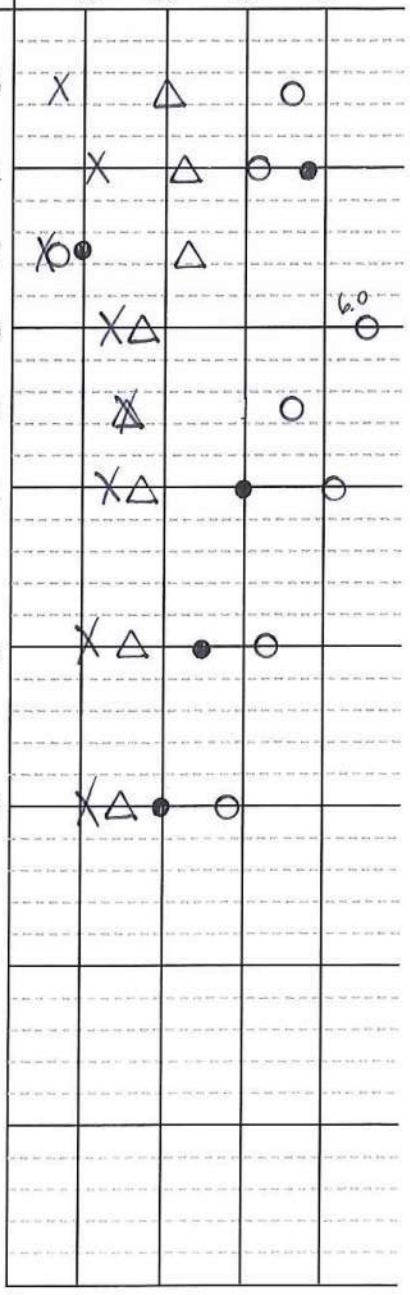
Comments:

Equipment: ☒CME 45B ☐CME 55 ☐Hand Auger ☐Other

depth, ft.	CLASSIFICATION Elevation 716.0' Existing Surface	standard penetration ×	moisture content Δ	dry unit weight lbs./cu.ft. ɣ	unconfined compressive strengh ○
	(a & b) see below				
	(c) see below	7	20.0	104.0	3.5
5	Brown-gray clay,some silt,trace sand & gravel,damp-very damp,very tough	12	22.4	101.0	3.1
	Brown-gray clay,some silt,trace sand & gravel,damp-very damp,stiff	5	23.0	102.1	0.7
10	Brown clay,some silt,trace sand & gravel damp,hard to very tough	14	18.2	111.2	6.0
		16	15.5	115.8	3.7
15	Gray clay,some silt,trace sand & gravel, damp,hard	14	16.9	115.3	4.1
20	Gray clay,some silt,trace sand & gravel, damp,very tough	11	16.3	117.9	3.3
25		11	14.5	120.5	2.9
	End of Boring				
30	(a) Bituminous concrete - 5.0" (b) Crushed gravel,damp - 9.5" (c) Brown-dark brown-black clay & silt, trace sand & gravel,damp,very tough Fill				
35					
40					

○ unconfined compressive strength, tons/sq. ft.
● penetrometer reading, tons/sq. ft.
1.0 2.0 3.0 4.0

× standard penetration "N", blows/ft.
Δ moisture content, %
10 20 30 40



Water encountered at dry feet during drilling operations (W.D.)
Water recorded at dry feet on completion of drilling operations (A.D.)
Water recorded at feet hours after completion of drilling operations (A.D.)

SOIL AND MATERIAL CONSULTANTS, INC.
8 W. COLLEGE DR. • SUITE C • ARLINGTON HEIGHTS, IL 60004

SOIL BORING LOG B-15

Logged By: DA Page: 1 of 1

Client: Arlington Heights Park District

File No. 23694 Date Drilled: 12/19/17

Reference: Olympic Indoor Swim Center
Addition & Renovation
Arlington Heights, IL

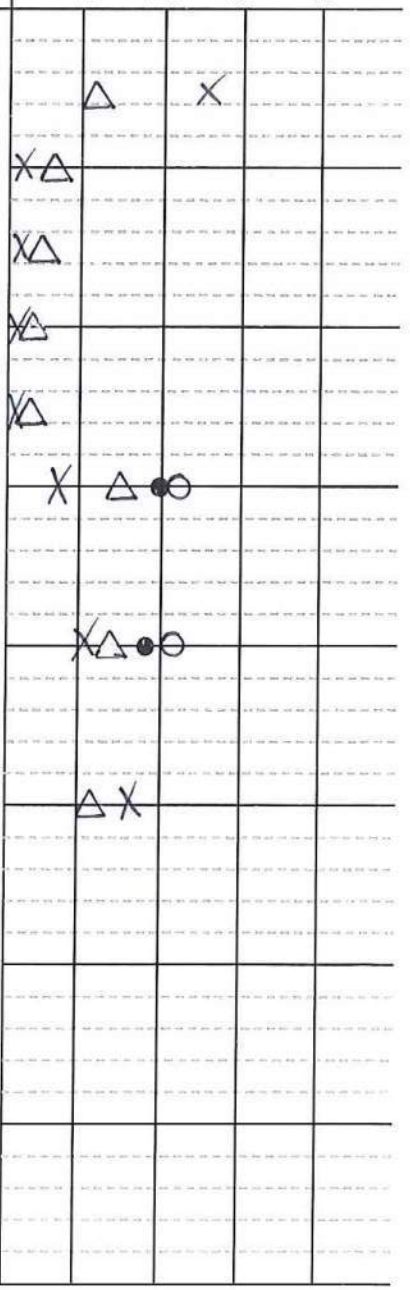
Comments:

Equipment: ☒CME 45B ☐CME 55 ☐Hand Auger ☐Other

depth, ft.	CLASSIFICATION Elevation 718.0' Existing Surface	standard penetration ×	moisture content Δ	dry unit weight lbs./cu.ft. ϒ	unconfined compressive strengh ○
	(a) see below				
	Brown fine-medium sand,some gravel,trace coarse sand,damp,medium dense - Fill	26	10.8		
5	Brown pea gravel,some sand,damp,very loose - Fill	2	6.8		
		2	3.7		
10		2	3.2		
	▽	2	3.3		
15	Gray clay,some silt,trace sand & gravel, very damp-damp,very tough	7	16.4	120.3	2.2
20		11	14.1	127.4	2.1
	Gray clay,some silt,trace sand & gravel, damp,very tough				
	Gray silt,some clay,trace sand & gravel,				
25	damp,medium dense	16	11.2		
	End of Boring				
	(a) Concrete - 5.0"				
30					
35					
40					

○ unconfined compressive strength, tons/sq. ft.
● penetrometer reading, tons/sq. ft.
1.0 2.0 3.0 4.0

× standard penetration "N", blows/ft.
Δ moisture content, %
10 20 30 40



Water encountered at 13.0 feet during drilling operations (W.D.)
Water recorded at dry feet on completion of drilling operations (A.D.)
Water recorded at feet hours after completion of drilling operations (A.D.)

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GENERAL NOTES

SAMPLE CLASSIFICATION

Soil sample classification is based on the Unified Soil Classification System, the Standard Practice for Description and Identification Soils (Visual-Manual Procedure), ASTM D-2488, the Standard Test Method for Classification of Soils for Engineering Purposes, ASTM D-2487 (when applicable), and the modifiers noted below.

CONSISTENCY OF COHESIVE SOILS

Term	Qu-tons.sq.ft.	N (unreliable)
Very soft	0.00 – 0.25	0 – 2
Soft	0.26 – 0.49	3 – 4
Stiff	0.50 – 0.99	5 – 8
Tough	1.00 – 1.99	9 –15
Very Tough	2.00 – 3.99	16 – 30
Hard	4.00 – 7.99	30 +
Very Hard	8.00 +	

RELATIVE DENSITY OF GRANULAR SOILS

Term	N – blows/foot
Very Loose	0 – 4
Loose	5 – 9
Medium Dense	10 – 29
Dense	30 – 49
Very Dense	50 +

IDENTIFICATION AND TERMINOLOGY

Term	Size Range
Boulder	over 8 in.
Cobble	3 in. to 8 in.
Gravel - coarse	1 in. to 3 in.
- medium	3/8 in. to 1 in.
- fine	#4 sieve to 3/8 in.
Sand - coarse	#10 sieve to #4 sieve
- medium	#40 sieve to #10 sieve
- fine	#200 sieve to #40 sieve
Silt	0.002 mm to #200 sieve
Clay	smaller than 0.002mm

Modifying Term	Percent by Weight
Trace	1 – 10
Little	11 – 20
Some	21 – 35
And	36 – 50

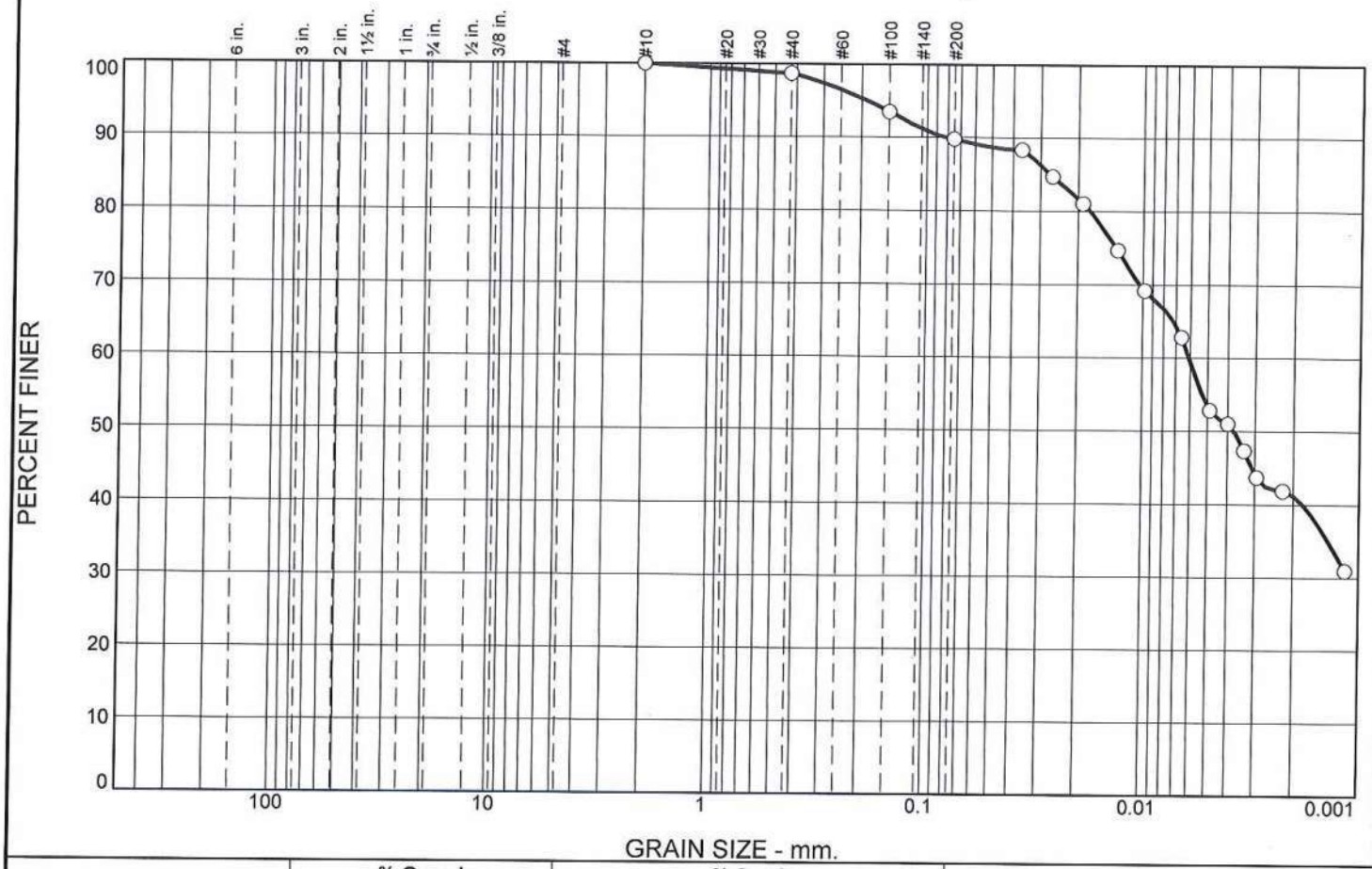
Moisture Content

Dry
Damp
Very Damp
Saturated

DRILLING, SAMPLING & SOIL PROPERY SYMBOLS

CF	-	Continuous Flight Auger
HS	-	Hollow Stem Auger
HA	-	Hand Auger
RD	-	Rotary Drilling
AX	-	Rock Core, 1-3/16 in. diameter
BX	-	Rock Core, 1-5/8 in. diameter
NX	-	Rock Core, 2-1/8 in. diameter
S	-	Sample Number
T	-	Type of Sample
J	-	Jar
AS	-	Auger Sample
SS	-	Split Spoon (2 in. O.D. with 1-3/8 in. I.D.)
ST	-	Shelby Tube (2 in. O.D. w/ith1-7/8 in. I. D.)
R	-	Recovery Length, in.
B	-	Blows/6 in. interval, Standard Penetration Test (SPT)
N	-	Blows/foot to drive 2 in. O.D. split-spoon sampler with 140 lb. hammer falling 30 in., (STP)
Pen.	-	Pocket Penetrometer readings, tons/sq.ft.
W	-	Water Content, % dry weight
Uw	-	Dry Unit Weight of soil, lbs./cu.ft.
Qu	-	Unconfined Compressive Strength, tons/sq.ft.
Str	-	% Strain at Qu.
WL	-	Water Level
WD	-	While Drilling
AD	-	After Drilling
DCI	-	Dry Cave-in.
WCI	-	Wet Cave-in.
LL	-	Liquid Limit, %
PL	-	Plastic Limit, %
PI	-	Plasticity Index (LL-PL)
LI	-	Liquidity Index [(W-PL)/PI]

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.0	1.3	8.9	48.6	41.2

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#10	100.0		
#40	98.7		
#100	93.5		
#200	89.8		

* (no specification provided)

Material Description

Silty Clay

Atterberg Limits

PL= 20 LL= 34 PI= 14

Coefficients

D_{90}= 0.0813 D_{85}= 0.0271 D_{60}= 0.0061
D_{50}= 0.0038 D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= CL AASHTO= A-6(12)

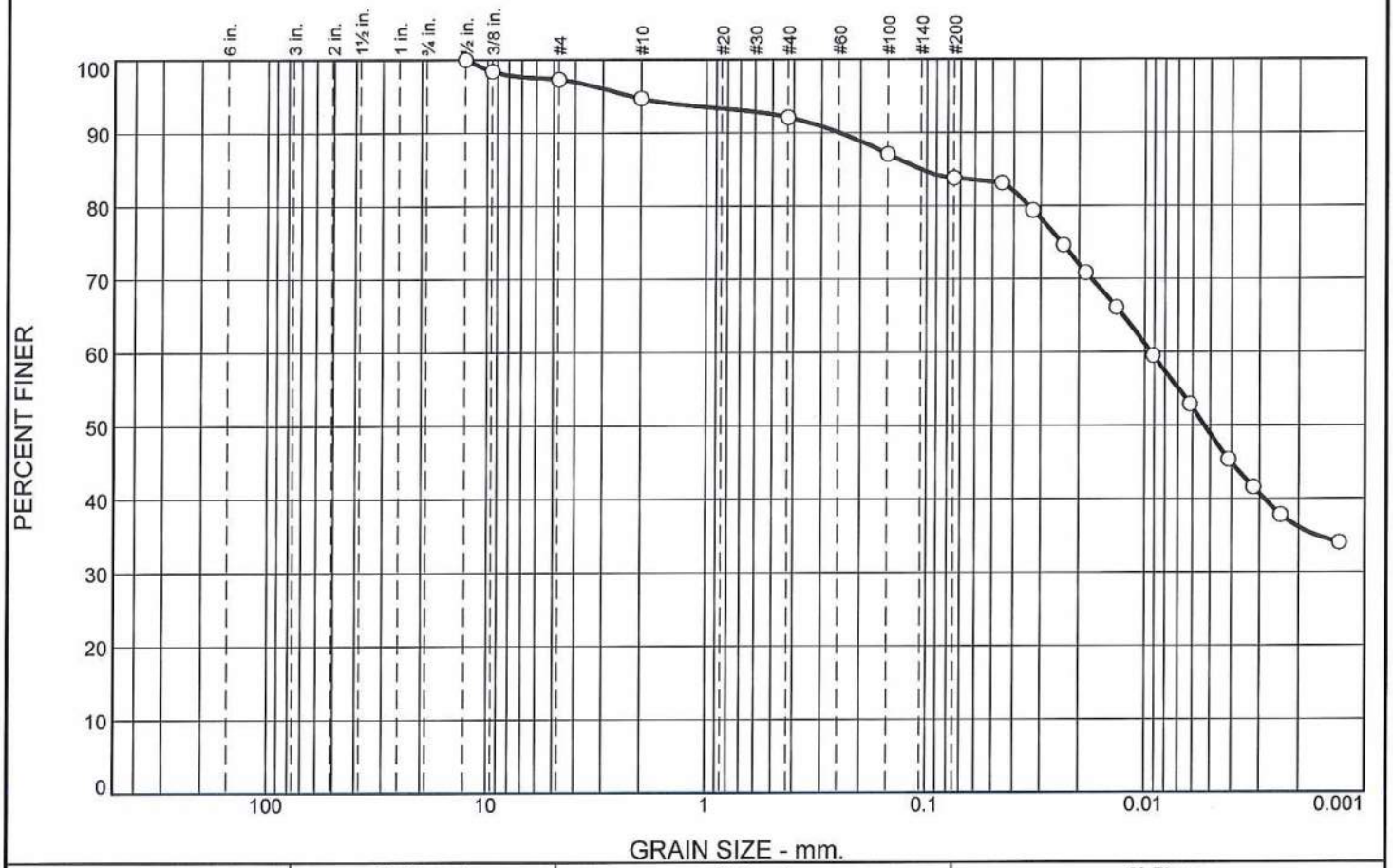
Remarks

Location: D-1
Sample Number: 3 **Depth:** 3.5' to 5.0' **Date:**

SOIL AND MATERIAL CONSULTANTS, INC.

Client: Arlington Heigths Park District
Project: Olympic Indoor Swim Center
Addition and Renovation ARlington Heights, IL
Project No: 23694 **Figure**

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	2.7	2.6	2.6	8.3	47.7	36.1

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1/2	100.0		
3/8	98.4		
#4	97.3		
#10	94.7		
#40	92.1		
#100	87.1		
#200	83.8		

* (no specification provided)

Material Description

Silty Clay Loam

Atterberg Limits

PL= 18 LL= 33 PI= 15

Coefficients

D_{90}= 0.2497 D_{85}= 0.1066 D_{60}= 0.0094
D_{50}= 0.0053 D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= CL AASHTO= A-6(12)

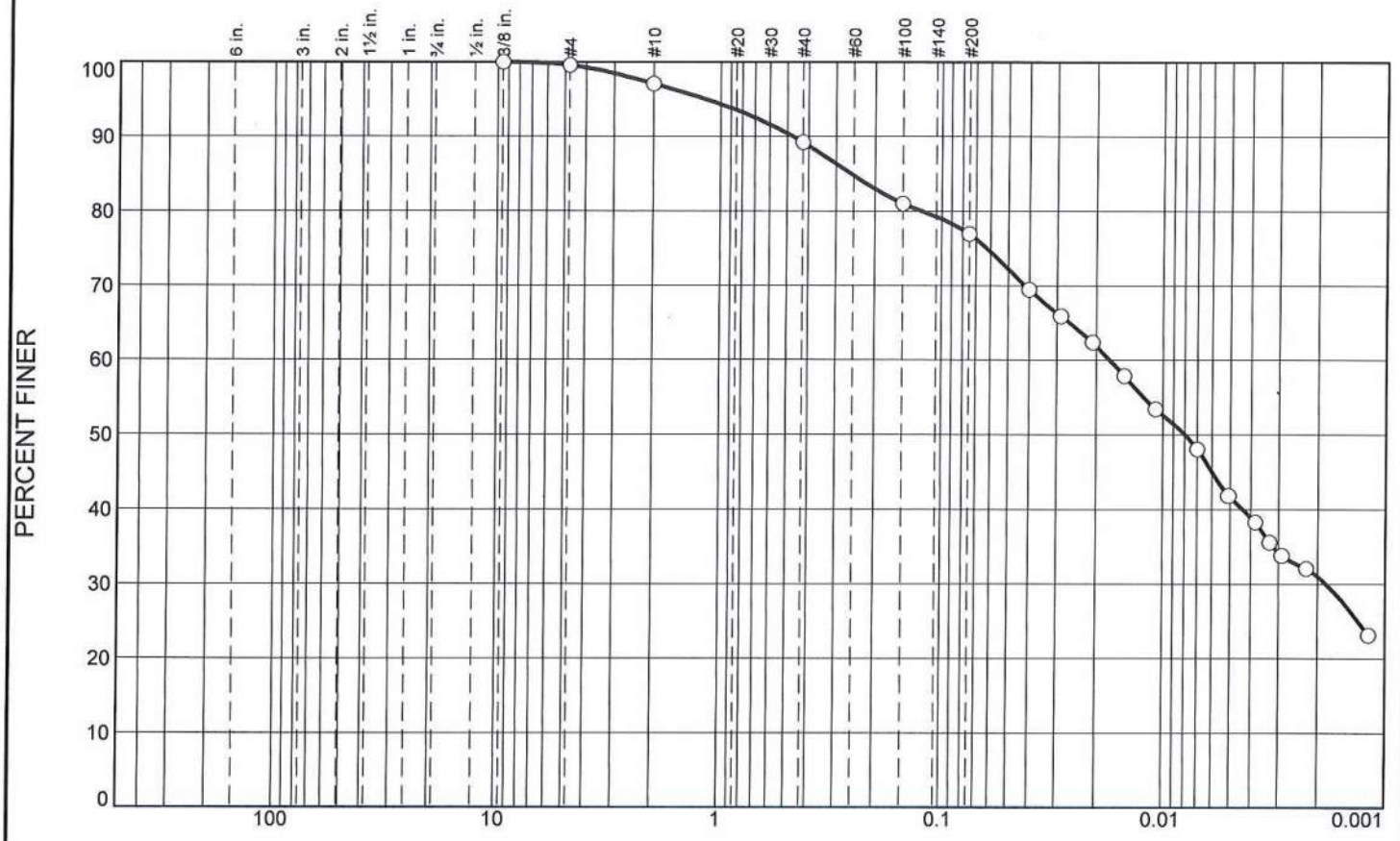
Remarks

Location: D-2
Sample Number: 4 **Depth:** 6.0' to 7.0' **Date:**

SOIL AND MATERIAL CONSULTANTS, INC.

Client: Arlington Heigths Park District
Project: Olympic Indoor Swim Center
Addition and Renovation ARlington Heights, IL
Project No: 23694 **Figure**

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.4	2.5	7.9	12.3	45.9	31.0

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3/8	100.0		
#4	99.6		
#10	97.1		
#40	89.2		
#100	81.0		
#200	76.9		

* (no specification provided)

Material Description

Clay Loam

Atterberg Limits

PL= 16 LL= 30 PI= 14

Coefficients

D_{90}= 0.4733 D_{85}= 0.2569 D_{60}= 0.0174
D_{50}= 0.0079 D_{30}= 0.0018 D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= CL AASHTO= A-6(9)

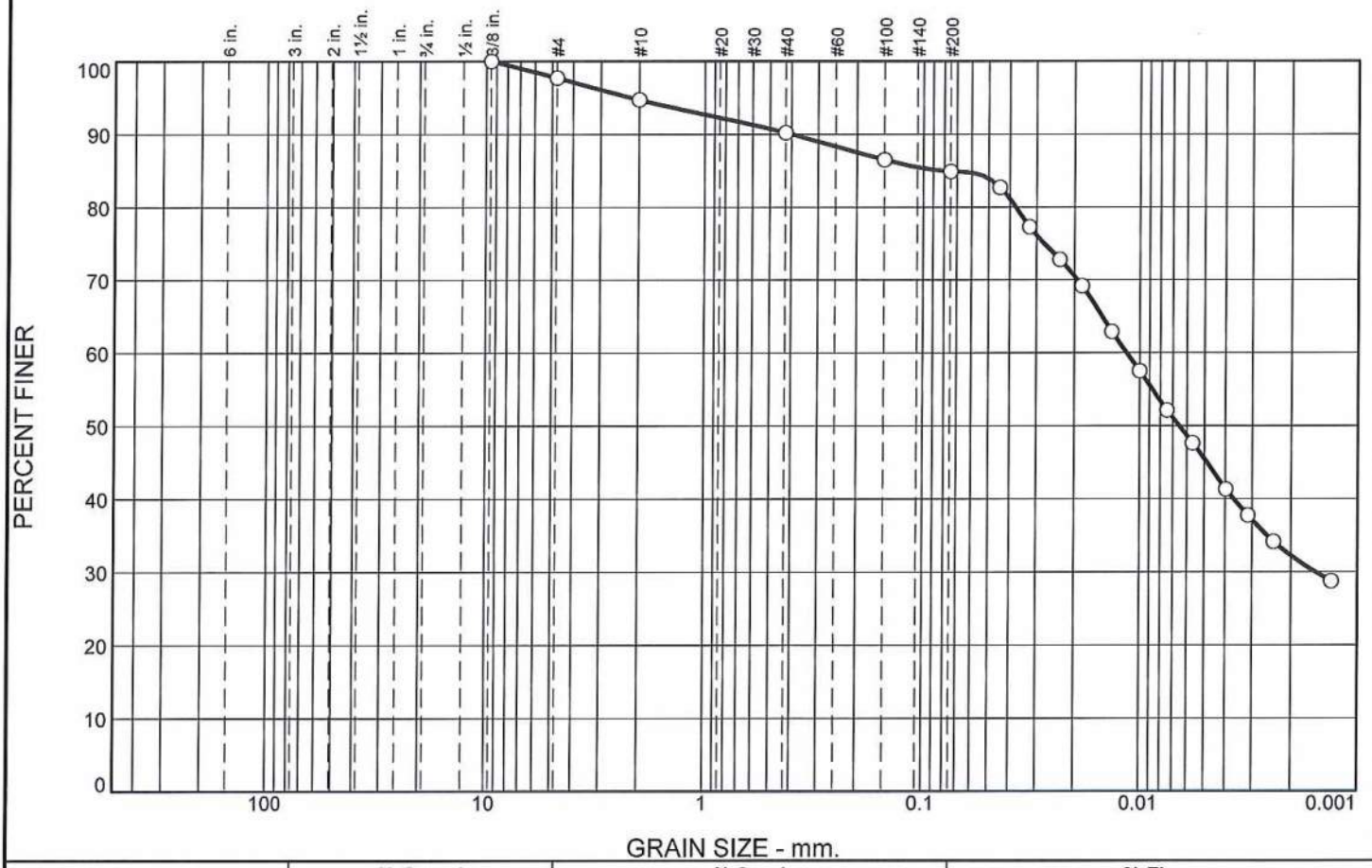
Remarks

Location: P-2
Sample Number: 2 **Depth:** 1.5' to 2.5' **Date:**

SOIL AND MATERIAL CONSULTANTS, INC.

Client: Arlington Heigths Park District
Project: Olympic Indoor Swim Center
Addition and Renovation ARlington Heights, IL
Project No: 23694 **Figure**

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	2.3	3.0	4.5	5.3	52.7	32.2

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3/8	100.0		
#4	97.7		
#10	94.7		
#40	90.2		
#100	86.5		
#200	84.9		

* (no specification provided)

Material Description

Silty Clay Loam

Atterberg Limits

PL= 18 LL= 33 PI= 15

Coefficients

D_{90}= 0.4003 D_{85}= 0.0830 D_{60}= 0.0115
D_{50}= 0.0065 D_{30}= 0.0015 D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= CL AASHTO= A-6(12)

Remarks

Location: P-4
Sample Number: 2 **Depth:** 15" to 2.5' **Date:**

SOIL AND MATERIAL CONSULTANTS, INC.

Client: Arlington Heigths Park District
Project: Olympic Indoor Swim Center
Addition and Renovation ARlington Heights, IL
Project No: 23694 **Figure**

Traffic Impact and Parking Study

GHA GEWALT HAMILTON ASSOCIATES, INC.
CONSULTING ENGINEERS
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To: Mr. John Dzarnowski, AIA - FGM Architects

Copy: Walter E. Graft, P.E. - GHA

From: Lynn M. Means, P.E., PTOE
Senior Transportation Engineer

Date: January 8, 2018
Updated February 15, 2018

Subject: Olympic Indoor Swim Center Addition and Renovation
Arlington Heights Park District
Arlington Heights, Illinois

Part I. Introduction and Project Context

Gewalt Hamilton Associates, Inc. (GHA) has conducted a Traffic Impact and Parking Study for the proposed addition and renovation of the Arlington Heights Park District (AHPD) Olympic Indoor Swim Center and Olympic Park. The site is located on the north side of Euclid Avenue between Ridge Avenue and Salem Avenue in Arlington Heights, Illinois.

The site currently contains the approximately 45,200 square-foot, Olympic Indoor Swim Center (aquatic complex with three pools and classes) and outdoor amenities (basketball court, skate park, playground, tennis court, playground area and soccer fields), along with Safety Town (miniature town) in the northeast area of the site. Access to the site is currently provided via one full access driveway on Ridge Avenue, approximately 100 feet north of Euclid Avenue. The site is served by 191 parking spaces, including six (6) accessible spaces. Parking for 34 bicycles is also provided on the east side of the building.

As currently proposed, the project includes an approximately 32,000 square-foot fitness center addition on the north and west sides of the existing building, in the location of the existing tennis and basketball courts and skate park. The expansion will include a gymnasium, indoor walking track, warm water pool, fitness components, locker rooms and multi-purpose rooms. It will also include outdoor amenities, including the relocation of the playground and basketball court, modified soccer fields (one full size). In addition, the project will incorporate building upgrades, including the relocation of the main building entrance from the south to the west side of the expanded building. Safety Town will remain in its current location and the skate park will be eliminated. *It should be noted, there is a potential to add another gymnasium on the north side of the expanded facility, resulting in an approximately 52,600 square-foot addition (this would eliminate the relocated outdoor basketball court).*

Access to the expanded and renovated facility (under both the single or double gymnasium options) will be maintained via the existing access driveway on Ridge Avenue, as well as an additional access is proposed on Ridge Avenue. The on-site parking supply will be increased to provide an additional 75 parking spaces (including one additional accessible space), for a total of 266 parking spaces. Parking for an additional 18 bicycles will also be provided on-site, for a total of 52 bicycle spaces.

The following provides a summary of existing conditions, site traffic and parking characteristics, future conditions and an analysis of the development's impact on the surrounding roadway network and site access. *Exhibits* and *Appendices* referenced are located in the Technical Addendum at the end of this document.

Part II. Background Information

Existing Site Characteristics, Site Location Map and Roadway Inventory

Exhibit 1 provides a location map of the site vicinity. *Exhibit 2* provides a photo inventory of current operations. Pertinent comments to the site, surrounding land uses, adjacent roadways, pedestrian / bicycle facilities and public transportation include:

Site Characteristics

The AHPD Olympic Indoor Swim Center (Center) and±6-acre Olympic Park (Park) site is located on the north side of Euclid Avenue between Salem Avenue and Ridge Avenue. The Center is approximately 42,500 square-feet and includes three (3) pools, locker rooms and several small office and storage rooms. It employs four (4) full time and 75-part time staff, with a maximum of 25 staff present during peak hours of operation. Hours of operation are 6:00 AM to 10:00 PM, Monday through Friday and 6:00 AM to 9:00 PM on Saturday and Sunday. Typical programming and attendance is as follows:

Programming

- Swimming Pools
  - Weekday
    - Lap Swim – 6:00 to 8:00 AM, 11:00 AM to 3:00 PM and 9:00 to 10:00 PM
    - Water Exercise and Swim Lessons – 8:00 to 11:00 AM
    - Swim Lessons, Swim Teams or Open Swim – 4:00 to 9:00 PM
  - Weekend
    - Lap Swim – 6:00 to 7:00 AM
    - Water Exercise – 7:00 to 8:00 AM
    - Swim Lessons – 8:00 AM to 12:00 PM
    - Open Swim – 12:00 to 5:00 PM
    - Swim Teams – 5:00 to 9:00 PM
- Multi-Purpose Rooms
  - Weekday
    - Variable / Minimal Activity – one to two classes per day
  - Saturday
    - Parties and Rentals – 12:00 to 5:00 PM (coinciding with Open Swim)

Attendance

- Weekday – 300 persons per day, most for scheduled activities (i.e., swim lessons, practice)
- Weekend – 600 persons per day, again most for scheduled activities. Open swim is less than 100 persons per day on the weekend.

The Park includes the following outdoor amenities: soccer fields (one full size and one half size), basketball court, skate park, playground area, two tennis courts and Safety Town. The outdoor fields and activities are seasonal / weather permitting. The soccer fields are used on weekdays for team practices, with a typical attendance of 20 persons. Weekend games are scheduled for the fields, as needed, with a typical attendance of

50 persons. It should be noted, with the addition of Sunset Meadows soccer and football fields, games are infrequently scheduled at the Park. There are no large outdoor events scheduled at Olympic Park.

The site is served by a total of 191 parking spaces, including 6 accessible spaces. A two (2) year license agreement is in place (6/1/17 to 5/31/18) for Big Ange's use of 6 of these spaces. The agreement auto renews, unless notified by either party in advance.

It should be noted, Christian Liberty Academy (CLA) uses the parking facility at 8:30 AM, 12:00 PM and 3:30 PM on weekdays, corresponding with student drop-off and pick-up activities at the school. As noted above, there is minimal activity occurring at the Center during these timeframes. *There is no agreement, written or verbal, between CLA and the AHPD that permits this activity.*

Area Land Use

Land uses surrounding the site are predominately residential to the north and west. Christian Liberty Academy (CLA) is located to the east of the site, across Ridge Avenue. Commercial uses are located to the south of the site, across Euclid Avenue, including Big Ange's Eatery and Firestone Complete Auto Care center.

Euclid Avenue

- Euclid Avenue is an east-west minor arterial that expands from a three (one-travel lane in each direction and a center lane for left-turns) to four-lane cross-section (two travel lanes in each direction) from east to west in the site vicinity.
- At its signalized intersection with Northwest Highway (US Route 14) and Salem Avenue, Euclid Avenue provides a shared through/left-turn and a shared through/right-turn lane in the east bound direction and a through and shared through/right-turn lane in the eastbound direction. Westbound left-turns from Euclid Avenue onto southeast bound Northwest Highway are prohibited, as well as the eastbound and westbound approaches are also both signed No Turn on Red.
- At its unsignalized intersection with Ridge Avenue, Euclid Avenue provides a left-turn lane and a shared through/right-turn lane in both the eastbound and westbound directions.
- Euclid Avenue is under the jurisdiction of the Cook County Department of Transportation and Highways adjacent to the site, easterly to Walnut Avenue, where jurisdiction transitions to the Village of Arlington Heights.
- The posted speed limit is 30 miles per hour (mph).
- The Annual Average Daily Traffic (AADT) on Euclid Avenue is 12,550 vehicles per day (vpd) west of Northwest Highway and 12,200 vpd east of Northwest Highway, year 2014.

Northwest Highway (US Route 14)

- Northwest Highway (US Route 14) is a northwest-southeast four-lane roadway (two travel lanes in each direction) within the study area. It is classified as minor arterial roadway.
- At its signalized intersection with Euclid Avenue and Salem Avenue, a left-turn lane, a through lane and a shared through/right-turn lane are provided in both directions.
- Northwest Highway has a posted speed limit of 35 mph north of Euclid Avenue and 30 mph to the south. It is under the Illinois Department of Transportation (IDOT) jurisdiction.
- The AADT on Northwest Highway is 16,700, year 2015.

Salem Avenue

- Salem Avenue is a north-south, two-lane local street that terminates approximately 850 feet north of Euclid Avenue at a cul-de-sac.

- At its signalized intersection with Euclid Avenue and Northwest Highway, Salem Avenue provides a single approach lane with shared turning movements.
- Parking along the west side is restricted to 2-hour parking; parking is prohibited along the east side of the street.

Ridge Avenue

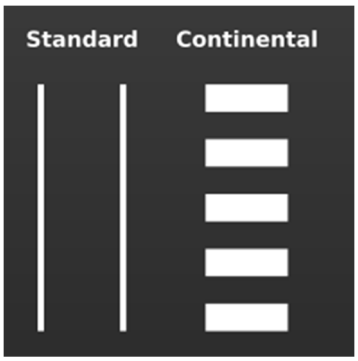
- Ridge Avenue is a north-south, two-lane local street.
- At its unsignalized intersections with Euclid Avenue and Elm Street, Ridge Avenue provides a single approach lane, operating under Stop sign control. It should be noted, the Ridge Avenue northbound approach to its intersection with Euclid Avenue provides a wide pavement section that permits separation of left- and right-turn movements.
- North of Euclid Avenue, the west side of Ridge Avenue is signed No Parking. On the east side it is signed adjacent to CLA No Parking Except Student Drop-Off and Pick-Up Zone 8AM to 4PM school days and 2-hour parking to the north of CLA. To the south of Euclid Avenue, Ridge Avenue is signed 4-hour parking on both sides of the roadway.
- Ridge Avenue has a posted speed limit of 20 mph on school days when kids are present in the site vicinity.

Elm Street

- Elm Street is an east-west, two-lane, local street.
- At its unsignalized intersection with Ridge Avenue, Elm Street provides a single approach lane with shared turn movements (Elm Street is free-flow condition).
- There are no parking restrictions along Elm Street in the site area.

Pedestrian / Bicycle Facilities

- Sidewalks are provided along both sides of all study area roadways.
- Pedestrian crosswalks are maintained at the following locations in the study area (see graphic illustrating crosswalk styles):
  - Standard-style pedestrian crosswalks are provided on the north (Salem Avenue) and northwest and southeast (Northwest Highway) legs of the Euclid Avenue at Northwest Highway and Salem Avenue signalized intersection. A continental-style crosswalk is striped across the east leg (Euclid Avenue).
  - Continental-style crosswalks are provided on the east, north and south legs of the Euclid Avenue and Ridge Avenue intersection.
  - Continental-style crosswalks are also striped on all four approaches of the Ridge Avenue and Elm Street intersection.
  - On the north leg of the Ridge Avenue and Site Access intersection, a continental-style crosswalk is provided (paint is very faded), as well as at a mid-block crossing of Ridge Avenue approximately 200-feet to the north, connecting CLA with the Olympic Park / Center.



- A crossing guard is stationed at the Site Access crosswalk during peak weekday morning and afternoon drop-off and pick-up activities to facilitate pedestrian activity between CLA and parents parking at the Center.
- Pedestrian signals are in place at the signalized intersection of Euclid Avenue at Northwest Highway and Salem Avenue.
- There are no signed bicycle routes along the study area roadways. Ridge Avenue from north of the Olympic Park to Elm Street and the Elm Street east to Walnut Avenue have been identified by the Village of Arlington Heights as a planned bicycle route, connecting to the existing bikeway along Walnut Avenue.

Public Transportation

The site is also well served by public transportation. Pace operates bus route 696 – Randhurst/Woodfield/Harper College in the site vicinity. Metra provides commuter rail service along the Union Pacific Northwest Line that begins in Harvard and ends at the Ogilvie Transportation Center in Chicago. The Arlington Heights Station is located on Northwest Highway, approximately 0.5-mile southeast of the site.

Existing Traffic

Peak period traffic turning movement, bicycle and pedestrian counts were conducted by GHA on Saturday, November 4, 2017 from 10:00 AM to 2:00 PM and on Tuesday, November 7 from 6:00 AM to 9:00 AM and 3:00 to 7:00 PM. Theses timeframes coincide with the peak hours of operation of existing and proposed site uses, the adjacent CLA start (8:25 AM) and dismissal (3:35 PM), along with the adjacent street system peak hours.

Note: The counts were performed when area schools were in session, including CLA. They were also performed coinciding with typical weekday programming and attendance at the Center. The Saturday counts also included a swim meet (1:00 to 5:00 PM) in addition to the typically programming. The Center typically hosts 10 swim meets during the school year. Weather during the counts was generally partly cloudy with periods of light rain and temperatures in the mid to upper 40s.

Exhibit 3A summarizes the existing weekday morning, afternoon school and evening, as well as Saturday midday peak hour traffic volumes. The observed weekday morning, weekday afternoon school, weekday evening and Saturday midday peak hours, in general, occurred from 7:30 to 8:30 AM, 3:15 to 4:15 PM, 4:30 to 5:30 PM and 12:30 to 1:30 PM, respectively; however, the peak hour for each individual intersection was used in the analysis to provide a conservative analysis scenario and intersection volumes were balanced, where appropriate.

Exhibit 3A also provides the AADT (24-hour volume) along Euclid Avenue (year 2014) and Northwest Highway (year 2015) as published by IDOT on their website www.gettingaroundillinois.com. *Exhibit 3B* illustrates the pedestrian and bicycle count data, coinciding with the same aforementioned four peak hours.

No unusual activities (e.g. roadway construction, or inclement weather) were observed during our counts that would be expected to impact traffic volumes or travel patterns in the vicinity. Summaries of the existing traffic counts can be found in *Appendix A*.

Existing Parking

Parking Survey

Exhibit 4 shows an aerial photo of the study area and the parking areas surveyed. GHA conducted an inventory of the parking spaces available in each area shown. GHA surveyed the on-site parking spaces, as well as monitored the on-street parking along Salem Avenue and Ridge Avenue for Olympic Indoor Swim Center and Park usage. *Note, the on-street parking spaces along Salem Avenue and Ridge Avenue are not delineated. Based on a field review (including observations and curb length), Salem Avenue (west side) was assumed to accommodate 15 vehicles and Ridge Avenue between Euclid Avenue and Elm Street, excluding the CLA drop-off/pick-up loading area, can accommodate 45 vehicles (12 west side and 33 east side), for a total of 60 on-street spaces located within close proximity of the site.* A detailed breakdown of the areas surveyed is tabulated on *Exhibits 5A and 5B.*

Parking Occupancy

In order to determine the existing parking demand in the study area, GHA conducted parking occupancy surveys of each of the parking areas identified above. The parking surveys were conducted hourly on Tuesday, November 7, 2017 between 8:00 AM and 12:00 PM and Wednesday, November 8, 2017 between 3:00 and 9:00 PM and on Saturday, November 4, 2017 between 9:00 AM and 5:00 PM. These times were chosen as they represent the peak hours of occupancy based on predicted usage during the day for the existing and proposed uses, as well as the nearby Christian Liberty Academy.

Exhibits 5A and 5B show the results of the weekday and Saturday parking surveys, respectively. The results of the survey indicate the following key findings and observations:

- The peak parking demand in the area occurred at 3:00 PM on Saturday, when the parking demand (203 spaces, including 4 accessible spaces) exceeded the available on-site supply (191 spaces, including 6 accessible spaces). This peak demand included 14 vehicles that were observed to park along Ridge Avenue. As previously noted, this parking demand occurred coinciding with one of ten scheduled Saturday swim meets held at the facility during the school year.
- There was ample on-street parking available along both Salem Avenue and Ridge Avenue coinciding with peak Center activities. At its peak, only approximately 23 percent of the combined on-street supply (14 of 60) was occupied.
- Prior to the start of the swim meet on Saturday, the on-site parking demand did not exceed 55 percent, with a minimum of 90 spaces available.
- During the week, the peak parking demand occurred at 6:00 PM, with a demand of 68 spaces (approximately 36 percent of the available supply), which included 3 vehicles parked on Ridge Avenue. A minimum of 123 parking spaces were observed available during the weekday observations.
- The parking demand observed included the use of a minimum of 20 parking spaces by CLA parents for drop-off and pick up activities during weekday morning and afternoon school peaks. As shown on *Exhibit 5A*, there is ample surplus of parking to accommodate the CLA use of the Center parking lot.
- The afternoon and evening peak periods also included the use of a maximum of 5 to 6 parking spaces along the south side of the Center parking lot by Big Ange's restaurant patrons/employees.
- Bicycle parking is provided on the east side of the building (34 spaces). There is ample supply provided, with a maximum of two parked bicycles observed during both the weekday and Saturday surveys. *Note: the parking surveys were performed in November, when bicycle activity is lower than peak late spring and summer seasons.*

Bicycle Parking on the East Side of the Olympic Center

Existing Operational Observations

Observations were conducted of the area during the four peak hours studied. *Exhibits 6A and 6B* also summarize the pedestrian activities on the fields, coinciding with the parking surveys. Some of these observations include the following:

- There was minimal activity pedestrian activity observed at the outdoor park facilities (soccer fields, basketball court, skate park, playground, tennis courts and Safety Town). A maximum of 18 persons (2 adults and 16 children) were observed during the weekday at 11:00 AM and a maximum of 5 persons (3 adults and 2 kids) were observed on a Saturday.
- Majority of passenger vehicle, as well as bus, drop-off and pick-up activity for the Center occurs at the main entrance located on the south side of the building. Given its close proximity to Ridge Avenue, during peak

activity, back-ups occur for short durations that extend to Ridge Avenue, which blocks traffic from entering the site.

- Pedestrians were frequently observed to cross Ridge Avenue adjacent to the site not within the marked crosswalks.
- It is our understanding, during peak outdoor (soccer) field usage, Salem Avenue's on-street 2-hour parking (west side) is often occupied by parents, given its close proximity to the field. During inclement weather, the east side (where parking is restricted) is often occupied by parents watching their kids on the field.
- The signalized intersection of Euclid Avenue at Northwest Highway and Salem Avenue frequently experiences capacity constraints (back-ups) due to the unique geometry (5 legged-intersection), along with close proximity to the at-grade railroad crossing on the west leg (Euclid Avenue).
- During peak CLA weekday morning and evening drop-off and pick up activities, the east side of Ridge Avenue is heavily parked, as well as previously noted, the Center parking lot is used for these activities. However, it is only for a short duration, approximately 20-30 minutes during each timeframe, and the programming / attendance at the Center is minimal.
- The site access driveway is often used as a "turn around" for vehicles parked on the east side of Ridge Avenue for drop-off / pick-up at CLA that are destined to the south.
- During the weekday evening observations, the Center parking lot was observed to be used for private driver education practice. As shown in the photo, the parking lot had a surplus of parking during this timeframe.

Private Driver Education Vehicle Use of Center Parking Lot

Crash Analysis

In order to evaluate and address potential safety issues at the study area intersections, crash data was obtained from the IDOT Division of Transportation Safety for the last three calendar years available, 2013 through 2015[i]. A summary of the crash data is provided in *Table 1.* It should be noted, there were no reported crashes at the site access intersection with Ridge Avenue over the three-year analysis period.

Table 1: Crash Summary (2013 – 2015) [A]

Location	No. of Crashes	Severity [B]					Crash Type [D]						Percent During Wet/Icy Conditions	Percent During Adjacent Street Peak Hours
		PD	PI [C]			K	CM	RE	HO	FO	Ped	Bike		
			A	B	C									
Euclid Ave at NW Hwy and Salem Ave	28	23	1	2	2	-	8	14	1	4	-	1	29%	32%
Euclid Ave at Ridge Ave	2	2	-	-	-	-	1	1	-	1	-	-	100%	50%

[A] Source: IDOT Division of Transportation Safety for the 2013-2015 calendar years.
[B] PD = property damage only; PI = personal injury; K = fatality.
[C] Type A (incapacitating injury); Type B (non-incapacitating injury); Type C (possible injury).
[D] CM = cross movement/angle; RE = rear end; HO = head on; FO = fixed object; Ped = pedestrian.

As shown in Table 1, the intersection of Euclid Avenue at Northwest Highway and Salem Avenue experienced the highest amount of crashes within the study area over the three-year analyses period. There was an average of nine (9) crashes per year at this location. Majority, approximately 82 percent (23 of 28), involved property

[i] Complete year 2016 and 2017 crash data was not available from IDOT at the time of this study.

damage only and half, 50 percent (14 of 28) were rear-end collisions. There was one crash at this intersection that involved a bicycle.

2024 No-Build (Non-Site) Traffic

Exhibit 7 summarizes the 2024 No-Build weekday morning, weekday afternoon school, weekday evening and Saturday midday peak hour traffic volumes. This identifies background, or ambient, projected growth in traffic conditions without the site traffic. Future traffic volume conditions were developed for the anticipated opening year of the development (year 2019) plus five years. For the purpose of this study and based on a review of historical traffic volumes, the Chicago Metropolitan Agency for Planning (CMAP) 2040 projections (see *Appendix B*), and recent studies performed in the area, traffic volumes along the roadways surrounding the site are assumed to experience an overall annual, compounded growth rate of approximately one-half (0.5) percent per year along the study area roadways. Accordingly, the 2024 No-Build peak hour traffic volumes were developed by applying a 0.5 percent compounded annual growth rate to the existing traffic (*Exhibit 3)*.

Part III. Traffic Evaluation

Proposed Site Plan

Exhibit 8 presents the conceptual site plan prepared by FGM Architects / GHA dated January 8, 2018, which includes both single and double gymnasium options. As proposed, the development consists of razing the existing tennis and basketball courts, skate park and playground and constructing an approximately 32,000 square-foot fitness center addition on the north and west sides of the existing Olympic Indoor Swim Center building. The expansion will include a gymnasium, indoor walking track, warm water pool, fitness components, locker rooms and multi-purpose rooms. It will also include outdoor amenities, including the relocation of the playground and basketball court, modified soccer fields. In addition, the project will incorporate building upgrades, including the relocation of the main building entrance from the south to the west side of the expanded building, which will enhance on-site circulation and safety by moving this activity further from Ridge Avenue.

Additional pedestrian enhancements are also proposed on-site/within the parking facility, including new and eliminated crosswalks, ADA curb ramps and sidewalks/paths. Safety Town will remain in its current location and the skate park will be eliminated. *As previously noted, there is also the potential to add another gymnasium on the north side of the expanded facility, resulting in an approximately 52,600 square-foot addition (this would eliminate the relocated outdoor basketball court).*

With the proposed expansion and renovation, the facility's hours of operation are anticipated to be increased to open a ½-hour earlier during the week (5:30 AM to 10:00 PM Monday through Friday); weekend hours would remain as existing (6:00 AM to 9:00 PM Saturday and Sunday). Programming and attendance for the swimming pools are anticipated to remain unchanged. The multi-purpose rooms are anticipated to experience increased usage, due to additional fitness group exercise programming, with steady attendance throughout the weekdays, as well as weekend mornings. Attendance for the multi-purpose rooms is expected at 200 persons per day (8 classes per day and 25 people per class). The proposed gymnasium is anticipated to experience peak activity during the evenings, with youth sports occurring from 5:00 to 9:00 PM. The daily attendance for the gyms is at 100 persons per day (evenings between 5:00 and 9:00 PM are anticipated at 20 people per hour, coinciding with the anticipated youth programming). *The double gymnasium option would double the aforementioned gym attendance projections.* The proposed fitness center is anticipated to experience steady use throughout the day, with higher activity experienced at 6:00 AM and 5:00 PM. The expected attendance for the fitness center is 700 persons per day, averaging 43 to 44 persons per hour (based on a 16-hour day).

Access to the expanded and renovated facility (under both the single or double gymnasium options) will be maintained via the existing access driveway on Ridge Avenue, as well as an additional access is proposed on Ridge Avenue The on-site parking supply will be increased to provide an additional 75 parking spaces (including one additional accessible space), for a total of 266 parking spaces. Parking for an additional 18 bicycles will also be provided on-site, for a total of 52 bicycle spaces.

Trip Generation and Directional Distribution

Exhibits 9A and 9B – Part A tabulates the traffic generation calculations for the proposed development, as well as the existing site traffic under the single (32,000 square-foot expansion) and double (52,600 square foot expansion) gymnasium alternatives. Trip generation rates published by the Institute of Transportation Engineers (ITE) in the 10th Edition of the Manual *Trip Generation* were used to determine the anticipated traffic from the proposed fitness center expansion. ITE Land Use Code (LUC) 495, Recreational Community Center, was referenced for the proposed use.

Existing site traffic for the Indoor Swim Center summarized on Exhibit 9 was based on the traffic count data collected at the existing facility by GHA in November 2017, which represented typical or above average conditions and is accounted for within the existing and no-build traffic networks. However, as previously described, the outdoor soccer fields experienced minimal use at the time this study was performed. Although as previously described, these field have experienced a decline in usage along with occupancy at peak timeframes that don't coincide with other site activities, in order to provide a conservative analysis scenario, full occupancy of the soccer field was assumed in this study. ITE LUC 488, Soccer Complex, was referenced for this use. *Note, the remaining outdoor activities (basketball court, safety town, playground, etc.) are ancillary to the existing and proposed site uses and not a significant generator of vehicular traffic.*

Exhibit 9 – Part B provides the anticipated trip distribution. This was based on existing travel patterns, site access and the operational characteristics of the street system.

Site and Total Traffic Assignments

Exhibits 10A1 and 10A2 illustrate the additional site traffic assignment during the weekday morning, afternoon school and evening peak hours and the Saturday midday peak hour for the fitness center expansion under the single and double gymnasium alternatives, respectively. *Exhibit 10B* illustrates the traffic assignment associated with the occupancy of the existing soccer field use. These assignments are based on the traffic characteristics summarized on *Exhibits 9A and 9B* (traffic generation and trip distribution) and assigned to the area roadways. *Exhibit 10C* illustrates the reassignment of existing site traffic (Exhibit 3A) with the additional access on Ridge Avenue.

Site traffic, reassigned existing site traffic and 2024 No-Build (see *Exhibits 10A1 /10B, 10C* and *7,* respectively) were combined resulting in the 2024 Total Traffic for the Single Gymnasium option, which is illustrated on *Exhibit 11A.* Similarly, the 2024 Total Traffic for the Double Gymnasium option was developed by combining *Exhibits 10A2, 10B, 10C and 7* (see *Exhibit 11B*).

Capacity and Queue Analyses

Capacity analyses are a standard measurement in the industry that identifies how an intersection operates. *Exhibit 12* – Part A lists the analysis parameters, as published in the Transportation Research Board's (TRB) Highway Capacity Manual (HCM), 6th Edition, 2016. They are measured in terms of level of service (LOS). The concept of LOS is defined as a qualitative measure describing operational conditions within a traffic stream and their perception by motorists and/or passengers. A level-of-service definition provides an index to quality of traffic flow in terms of such factors as speed, travel time, freedom to maneuver, traffic interruptions, comfort, convenience, and safety.

Six levels of service are defined for each type of facility. They are given letter designations from A to F, with LOS A representing the best operating conditions and LOS F the worst. LOS C is often considered acceptable for design purposes and LOS D is usually considered as providing the lower threshold of acceptable operations. LOS E and F are usually considered unacceptable.

Capacity analyses were performed for the following scenarios:

- *Existing Traffic* - Existing traffic (November 2017).
- *Total Traffic, Single Gymnasium* – No-Build traffic volumes (non-site, year 2024, with background growth, assumed at 0.5 percent per year) plus the addition of site generated traffic (proposed fitness center expansion, single gym, and occupancy of existing soccer fields), along with the re-distribution of existing site traffic with the new site access on Ridge Avenue.
- *Total Traffic, Double Gymnasium* – No-Build traffic volumes (non-site, year 2024, with background growth, assumed at 0.5 percent per year) plus the addition of site generated traffic (proposed fitness center expansion, double gym, and occupancy of existing soccer fields), along with the re-distribution of existing site traffic with the new site access on Ridge Avenue.

Due to the existing, non-standard traffic control at the signalized intersection of Euclid Avenue at Northwest Highway and Salem Avenue (five-legged intersection), which is not supported by HCS7 software, the capacity analyses were modeled using Synchro v10 software. *Exhibit 12 - Part B* summarizes the intersection capacity and queue analysis results. Capacity analysis summary printouts are provided in *Appendix C*.

As shown on *Exhibit 12*, under both existing and future conditions (both single and double gymnasium options), all study intersections and approaches are anticipated to operate at acceptable levels of service (at LOS D or better), except the Salem Avenue southbound approach at its signalized intersection with Euclid Avenue and Northwest Highway and the Ridge Avenue northbound and southbound approaches at its unsignalized intersection with Euclid Avenue.

As shown, under both existing and future conditions, during the Saturday midday peak hours, the Salem Avenue southbound approach at its intersection with Euclid Avenue and Northwest Highway operates with capacity constraints, at a LOS E. This can be attributed to the unique geometrics of this intersection (5-leg intersection), long pedestrian clearance intervals, as well as the close proximity to the at-grade railroad crossing on the west leg (Euclid Avenue) of the intersection. This intersection experiences minimal increases in delay as a result of the proposed development. No changes to the existing signal timing and phasing are required to accommodate the development traffic.

Under existing conditions during the weekday morning and evening peak periods, the Ridge Avenue northbound and southbound movements at Euclid Avenue operate at LOS E/F. Under future conditions, these movements will continue to operate with capacity constraints during these timeframes, as well as during the Saturday midday peak hour. The delay experienced by these movements is typical for a minor street intersecting a major street with heavy through volumes, such as Euclid Avenue.

In addition, under future conditions, with the proposed site addition and renovation, the 95th-percentile vehicle queues (stacking) on southbound Ridge Avenue at Euclid Avenue are estimated at six (6) to seven (7) vehicles during the weekday morning, weekday evening and Saturday midday peak periods under the single gymnasium option and 7 to eight (8) vehicles under the double gymnasium option. These queue lengths would exceed the available storage on Ridge Avenue between Euclid Avenue and the existing site access, which could block northbound traffic from entering the site and/or traffic from exiting the site.

It should be noted, to provide a conservative analysis scenario, the traffic assignments favored the use of the existing (south) site access on Ridge Avenue, given its proximity to access to Euclid Avenue and location of on-site parking. The multiple site access alternatives (via the existing and new site access to the north on Ridge Avenue) maximizes site access flexibility – i.e., should motorist experience long queues / delay exiting the site via the existing access onto Ridge Avenue, they have the option to exit the site via the new access further north on Ridge Avenue, which is similar for entering operations, as well.

However, in order to facilitate traffic movements to and from Ridge Avenue, as well as the existing site access driveway, it is recommended that consideration be given to installing "Do Not Block Intersection" signs on southbound Ridge Avenue in advance of the south (existing) access drive. These could also be supplemented with optional pavement markings, in accordance with the MUTCD (see graphic – Figure 3B-18 MUTCD, contained in Appendix D). Future considerations would be to limit the south access to exit only, should future operations become problematic. In addition, the Euclid Avenue and Ridge Avenue intersection should be evaluated after the opening of the expansion to determine if future improvements are necessary, i.e., widening of the Ridge Avenue southbound approach to provide a separate shared left-turn/through lane and right-turn lane and/or "Do Not Block Intersection" signage on Euclid Avenue.

Future Parking Analyses

Analyses were conducted to determine the number of parking spaces required to accommodate the planned development and identify the adequacy of the proposed parking supply.

Parking Requirements

Based on parking requirements outlined in the Village of Arlington Heights Code of Ordinances, 128 and 210 off-street parking spaces are required for the proposed single and double gymnasium alternatives, respectively. The Village's parking requirements for the entire site (existing and proposed uses) are summarized in *Table 2*.

As shown in Table 2, per Village Code, the site requires 319 and 401 off-street parking spaces for the single and double gymnasium alternatives, respectively, which includes the previously approved variance for the existing site use. A total of 266 parking spaces is proposed to serve both the existing and proposed site uses; therefore, a variance of 53 and 135 spaces is necessary for peak operations under the single and double gymnasium options, respectively.

Table 2: Parking Requirements – Village Zoning Ordinance

Use	Existing Requirement		Additional Requirement– Village Code (spaces)		Total Parking Requirement (spaces)		Future Supply (spaces)	Parking Differential (spaces)	
	Spaces	Rate	Single Gym	Double Gym	Single Gym	Double Gym		Single Gym	Double Gym
Indoor Swim Center	191 [A]	4.23 [B]	--		319	401	266	*-53*	*-135*
Soccer Field			--						
Fitness Center	--	--	128 [C]	210 [D]					

[A] Site previously approved for 191 parking spaces; a variance of 127 spaces from Village Code requirement of 318 spaces. As previously described, during peak activities similar to those observed during this study (swim meet), the parking demand is at or slightly exceeds the available on-site supply.

[B] Spaces per 1,000 Square-Feet Floor Area (45,200 SF).

[C] One (1) space per 250 Square-Feet Floor Area (health/fitness club use); proposed 32,000 SF, which includes the warm water pool.

[D] One (1) space per 250 Square-Feet Floor Area (health/fitness club use); proposed 52,600 SF, which includes the warm water pool.

Parking Demand Projections

The ITE manual Parking Generation, 4th Edition is a compilation of parking demand surveys from across the country for a wide variety of uses. *Tables 3* presents a summary of the projected peak parking demand for the proposed single and double gymnasium alternatives (expanded use only) based on the ITE peak (85th-percentile) data.

Table 3: Projected Peak (85th-Percentile) Parking Demand – ITE – Parking Generation

Use / Timeframe	Additional Demand – ITE				Additional Parking Supply	Parking Differential	
	Single Gym (32,000 SF)		Double Gym (52,600 SF)			Single Gym	Double Gym
	Rate / 1,000 SF	Spaces	Rate / 1,000 SF	Spaces			
Recreational Center (ITE LUC 495)							
Weekday	5.03	161	5.03	265	75	*-85*	*-190*
Saturday	2.01[A]	64	2.01[A]	106		*+11*	*+31*
Village Code Requirements [B]	--	*128*	--	*210*			

[A] Saturday peak parking demand data unavailable; therefore, estimated by interpolation between similar ITE LUC Codes, LUC 495 and LUC 492 (Health/Fitness Club).

[B] From Table 2.

As shown in Table 3, based on the ITE data, the peak parking demand for proposed expanded use (not including existing Center use) is 161 spaces on a weekday and 64 spaces on a Saturday for the single gymnasium alternative and 265 spaces on a weekday and 106 spaces on a Saturday for the double gymnasium alternative. The ITE parking demand projections are approximately 25 percent higher than required by Village Code during the weekday and approximately 50 percent less than required by Village Code on a Saturday.

Shared Parking Analysis

Based on the anticipated programming information for fitness center expansion, the peak parking demand for the different types of uses do not coincide, both within the existing and proposed facility. Therefore, additional

analyses were conducted based on parking generation and time-of-day distribution data provided in the ITE Parking Generation, 4th Edition and existing parking data collected at the existing site by GHA in November 2017.

Exhibits 13A and 13B summarize the anticipated parking demand for each use on a weekday and weekend, respectively, under the single gymnasium option, while *Exhibits 14A and 14B summarize the anticipated usage under the double gymnasium alternative.*

- As shown in the shared parking calculations, the peak parking demand for the existing and proposed uses for the single gymnasium alternative (*see Exhibits13A and 13B*) is expected to occur at 3:00 PM on Saturday, with a peak parking demand of 250 spaces. The proposed parking supply of 266 spaces can readily accommodate the projected demand; a minimum of 16 spaces is expected to be available at all timeframes.
- During the weekday, under the single gymnasium option, the peak parking demand is expected to occur at 6:00 PM, with approximately 81 percent (215 of 266 spaces). A minimum of 51 spaces is anticipated to be available at all timeframes.
- Under the double gymnasium alternative, the peak parking demand for the existing and proposed uses is expected to occur at 7:00 PM on a weekday, with a peak parking demand of 315, exhibiting a shortfall of 49 spaces. As previously noted, 60 parking spaces are available along Salem Avenue and Ridge Avenue within close proximity of the site, which could readily accommodate overflow parking, if needed.
- On a Saturday, under the double gymnasium option, the peak parking demand is expected to occur at 3:00 PM, with a peak parking demand of 280 spaces, exhibiting a shortfall of 14 spaces. Again, the on-street parking supply in close proximity to the site can readily accommodate the overflow, if needed.

Accordingly, it is recommended that parking usage be monitored closely and programming scheduled for the expanded facility, so that major activities (i.e., indoor basketball games, outdoor soccer games, etc.) do not coincide with peak swim center activities (swim meets) and/or consideration be given to constructing additional off-street parking facilities / shared parking agreement with nearby underutilized parking facilities, if necessary, should the on-street parking demand become excessive and/or problematic.

Programming for both existing and proposed uses should be continued to not be scheduled corresponding with CLA peak weekday morning and afternoon drop-off and pick-up activities and/or enforcement measures be implement to ensure the use of the site's parking facilities during these timeframes discontinued by CLA.

Measures could also be implemented to reduce future parking demand including providing adequate bicycle parking on-site that is easily accessible, along with programs/education to encourage the use of non-auto modes (walking and biking). Increasing times between scheduled events to allow for parking lot turnover between swim meets, games or matches.

Part IV. Conclusions

A traffic and parking study was performed for the proposed addition and renovation of the Arlington Heights Park District (AHPD) Olympic Indoor Swim Center and Olympic Park. Existing and future conditions in the study area have been described, analyzed and evaluated with respect to traffic and parking operations and the impact of the planned development. Conclusions of this effort and recommendations are presented below:

- The proposed development includes an approximately 32,000 square-foot fitness center addition on the north and west sides of the existing building, in the area currently occupied by the tennis and basketball courts and skate park. It will also include outdoor amenities, including the relocation of the playground and basketball court, modified soccer fields; Safety Town will remain in its current location and the skate park will be eliminated.

- There is a potential to add another gymnasium on the north side of the expanded facility, resulting in an approximately 52,600 square-foot total addition (this will eliminate the relocated outdoor basketball court).
- Trip generation for the proposed expansions, as well as a conservative analysis that assumes peak period occupancy of the soccer field for the design year (2019) plus five years (2024) was quantified for the weekday morning, afternoon school and evening periods, as well as Saturday midday peak using ITE Trip generation rates under both the single and double gymnasium options.
- Analyses have been conducted for all study intersections to determine the impact from the planned development under both gymnasium options, along with general growth within the study area (assumed at 0.5 percent compounded per year) to the 2024 design year.
- Improvements were identified and/or proposed both on- and off-site to mitigate the impacts associated with existing and future traffic conditions in the study area and include a relocation of the main building entrance (drop-off/pick-up area to the west side of the building), pedestrian enhancements (crosswalks/sidewalks/paths on-site), as well as recommendations for striping and/or signing along Ridge Avenue adjacent to the site. Future consideration should be given to limit the south (existing) site access to egress only should queuing/operations become problematic, and/or additional improvements to the Ridge Avenue southbound approach at Euclid Avenue (separate shared left-turn/through lane and right-turn lane) or signage on Euclid Avenue.
- Based on the analyses contained herein, the peak hour parking demand for the future fitness center can be accommodated within the proposed parking supply under the single gymnasium alternative under both weekday and Saturday conditions.
- Under the double gymnasium alternative, a shortfall of parking is anticipated; however, it is anticipated to be readily accommodated within the available adjacent roadway network (Salem Avenue and Ridge Avenue) parking supply. Accordingly, scheduling of activities for the expanded facility (under both gymnasium options) should be closely monitored to ensure the peak demand can be accommodated within the proposed parking supply. Consideration should also be given to constructing additional off-street parking facilities or exploring a shared parking agreement with nearby underutilized parking facilities, if necessary.

Part V. Technical Addendum

The following *Exhibits* and *Appendices* were previously referenced. They provide technical support for our observations, findings and recommendations discussed in the text.

Exhibits

1. Location Map
2. Photo Inventory
3. Existing Traffic
   A. Vehicular
   B. Pedestrians and Bicycles
4. Parking Survey Map
5. Parking Occupancy Survey
   A. Weekday
   B. Saturday
6. Olympic Park Outdoor Fields / Activities Occupancy
   A. Weekday
   B. Saturday
7. 2024 No-Build Traffic
8. Site Plan
9. Traffic Characteristics
   A. Single Gymnasium
   B. Double Gymnasium
10. Site Traffic
    A. Addition and Renovations
       1. Single Gymnasium
       2. Double Gymnasium
    B. Soccer Field Occupancy
    C. Reassignment of Existing Traffic with New Site Access
11. 2024 Total Traffic
    A. Single Gymnasium
    B. Double Gymnasium
12. Capacity and Queue Analysis
13. Future Parking Projections – Single Gymnasium
14. Future Parking Projections – Double Gymnasium

Appendices

A. Traffic Count Summaries
B. CMAP Projections
C. Capacity Analysis Worksheets
D. MUTCD – Do Not Block Intersection Exhibit

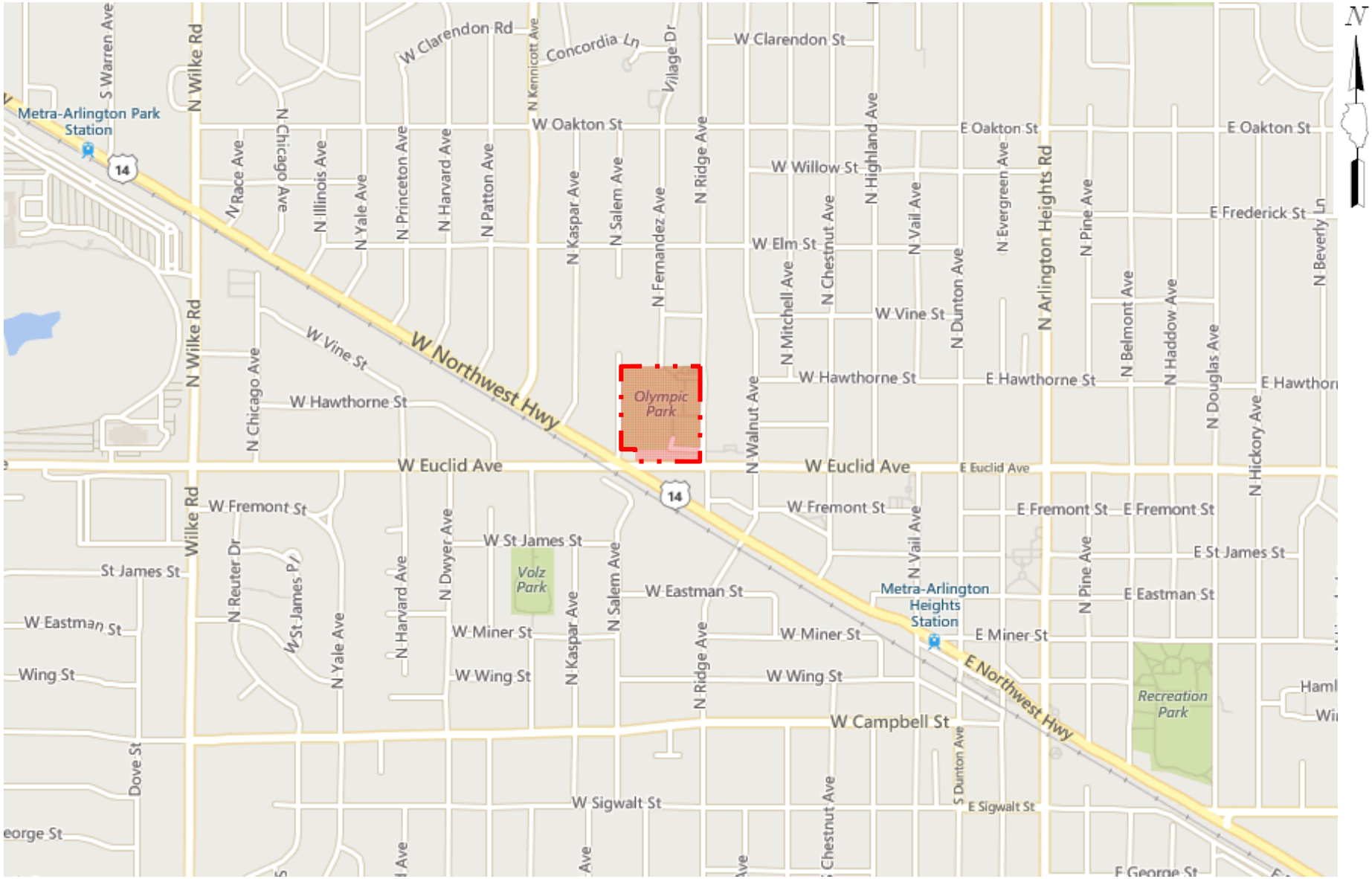
5313.900_AHPD Olympic_TIS_2.15.18.docx

Technical Addendum

GEWALT HAMILTON ASSOCIATES, INC.

Exhibits

GHA GEWALT HAMILTON ASSOCIATES, INC.



Proposed Olympic Indoor Swim Center Additions & Renovations – Arlington Heights, Illinois

GEWALT HAMILTON ASSOCIATES, INC.

Exhibit 1
Location Map

Looking east along Olympic Park Access Dr at Ridge Ave

Looking south along Ridge Ave at Olympic Park Access Dr

Looking west across Ridge Ave at Olympic Park Access Dr

Looking north along Ridge Ave at Olympic Park Access Dr

Looking south along Ridge Ave at Euclid Ave

Looking west along Euclid Ave at Ridge Ave

Looking east along Euclid Ave at Ridge Ave

Looking north across Euclid Ave at Ridge Ave

Looking west along Euclid Ave at Northwest Hwy/Salem Ave

Looking south along Salem Ave at Northwest Hwy/Euclid Ave

Looking southeast along Northwest Hwy at Euclid/Salem Ave

Looking northwest along Northwest Hwy at Euclid/Salem Ave

Looking east along Euclid Ave at Northwest Hwy/Salem Ave

Looking north along Ridge Ave at Elm St

Looking west along Elm St at Ridge Ave

Looking south along Ridge Ave at Elm St

Looking east along Elm St at Ridge Ave

Looking north along Ridge Ave at school drop-off/pick-up

Legend:

- XX – Weekday AM Peak Hour (7:30 AM – 8:30 AM)
- [XX] – Weekday PM School Peak Hour (3:15 PM – 4:15 PM)
- (XX) – Weekday PM Peak Hour (4:30 PM – 5:30 PM)
- [XX] – Saturday Midday Peak Hour (12:30 PM – 1:30 PM)
- XX – Annual Average Daily Traffic
- Existing Traffic Signal

N

Not to Scale

Elm St

Salem Ave

Ridge Ave

Site

Euclid Ave

Northwest Highway

16,700

12,550

12,200

7 [3] (5) [1]
67 [43] (53) [48]
6 [3] (3) [1]

4 [9] (5) [5]
28 [37] (34) [16]
0 [2] (4) [4]

[1] (1) [4] 2
[29] (41) [31] 46
[14] (14) [10] 7

[16] (11) [13] 7
[59] (60) [62] 97
[5] (23) [11] 28

15 [22] (25) [36]
59 [33] (46) [30]

[51] (31) [17] 15
[86] (41) [20] 18

21 [35] (54) [143]
117 [69] (63) [29]

[1] (0) [0] 1
[82] (22) [68] 91
[372] (378) [412] 421
[45] (37) [42] 50

2 [4] (3) [0]
1 [2] (2) [1]
7 [3] (2) [6]
0 [3] (0) [1]

2 [0] (2) [0]
57 [81] (72) [68]
499 [510] (578) [398]

44 [38] (41) [43]
10 [5] (10) [12]
23 [10] (36) [61]

52 [56] (55) [114]
513 [551] (610) [421]
3 [6] (1) [2]

[30] (29) [35] 13
[0] (3) [2] 0
[368] (540) [429] 559
[160] (219) [20] 193

1 [0] (2) [9]
2 [1] (2) [0]
428 [596] (617) [461]
207 [229] (242) [217]

[46] (51) [45] 81
[410] (512) [454] 569
[4] (1) [1] 1

1 [2] (1) 2
5 [3] (11) [12]
1 [7] (12) [10]

14

GHA GEWALT HAMILTON ASSOCIATES, INC.

Exhibit 3A
Existing Vehicular Traffic
Source: 1) GHA Nov 2017
2) IDOT AADT

Legend:

- XX — Weekday AM Peak Hour Bikes (7:30 AM – 8:30 AM)
- [XX] — Weekday PM School Peak Hour Bikes (3:15 PM – 4:15 PM)
- (XX) — Weekday PM Peak Hour Bikes (4:30 PM – 5:30 PM)
- [XX] — Saturday Midday Peak Hour Bikes (12:30 PM – 1:30 PM)
- XX — Weekday AM Peak Hour Pedestrian (7:30 AM – 8:30 AM)
- [XX] — Weekday PM School Peak Hour Pedestrian (3:15 PM – 4:15 PM)
- (XX) — Weekday PM Peak Hour Pedestrian (4:30 PM – 5:30 PM)
- [XX] — Saturday Midday Peak Hour Pedestrian (12:30 PM – 1:30 PM)
- — Existing Traffic Signal

N

Not to Scale

Site

Elm St

Ridge Ave

Salem Ave

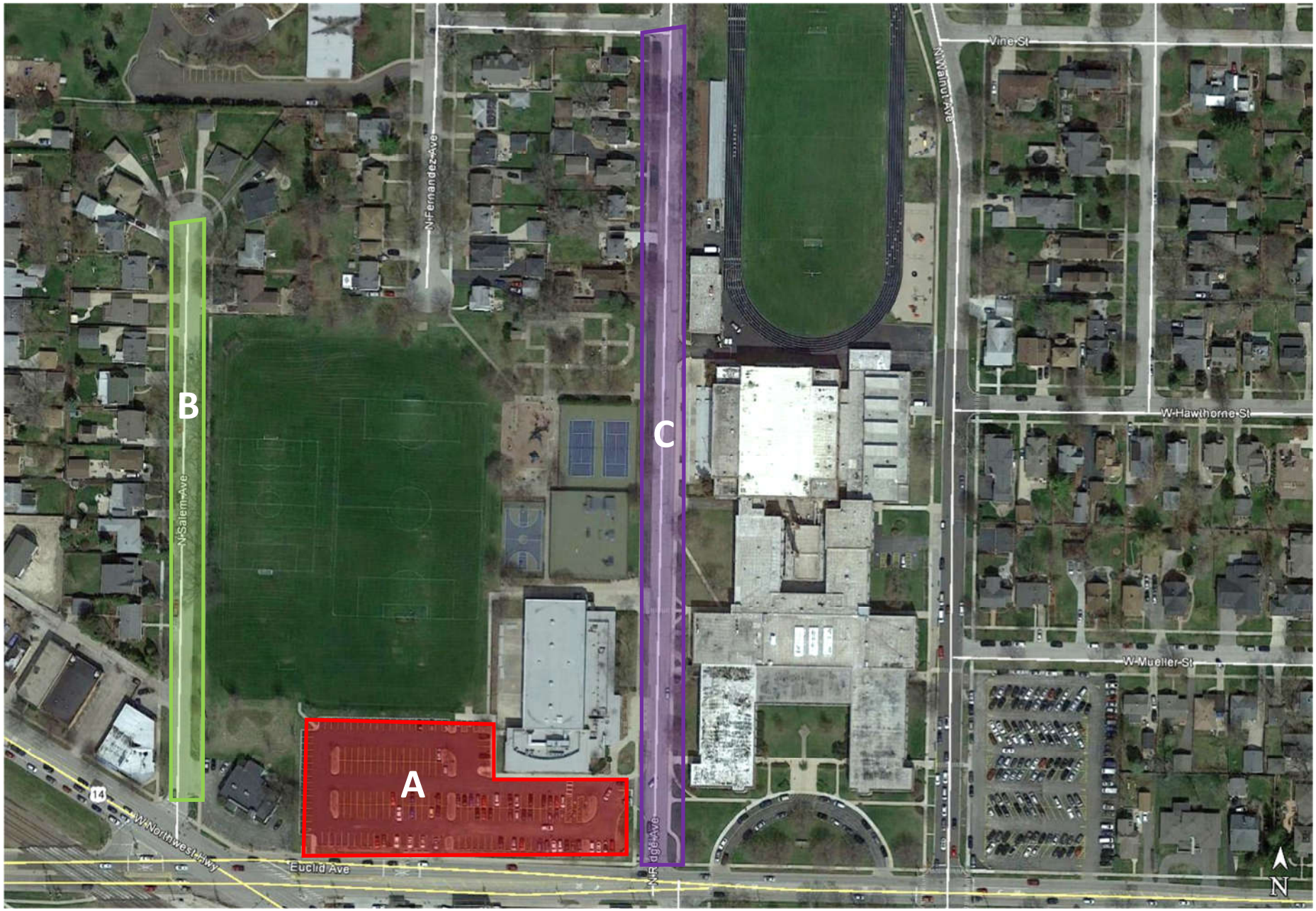
Euclid Ave

Northwest Highway

14

Exhibit 3B
Existing Pedestrian/Bicycle Traffic
Source: 1) GHA Nov 2017

GHA GEWALT HAMILTON ASSOCIATES, INC.



GEWALT HAMILTON ASSOCIATES, INC.

Exhibit 4
Parking Survey Map

Exhibit 5A
Parking Occupancy Survey
Olympic Indoor Swim Center Additions & Renovations
Arlington Heights, Illinois
Tuesday, November 7, 2017; 8:00 AM to 12:00 PM and Wednesday, November 8, 2017 3:00 to 9:00 PM

Parking Description		Parking Type	Parking Supply	November 7				November 8					
				8:00 AM	9:00 AM	10:00 AM	11:00 AM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM
Cars													
Main Parking Lot													
A	Parking Lot	Regular	185	35	26*	21	28	55	27	35	63	45	23
		Handicap	6	0	0	1	2	0	0	0	2	3	0
Salem Avenue (On-Street)													
B	Monitored for Park Use Only	--	--	0	0	0	0	0	0	0	0	0	0
Ridge Avenue (On-Street)													
C	Monitored for Park Use Only	--	--	0	0	0	0	0	1	0	3	2	0
TOTAL			191	35	26	22	30	55	28	35	68	50	23
Percent Occupied			100%	18.3%	13.6%	11.5%	15.7%	28.8%	14.7%	18.3%	35.6%	26.2%	12.0%
Bicycles													
Parked On Site		--	--	0	0	0	0	2	2	2	2	2	2

Notes: * Includes One (1) Bus.

Key
- 100%-85% Occupied
- 85%-60% Occupied
- 60%-0% Occupied

GEWALT HAMILTON ASSOCIATES, INC.

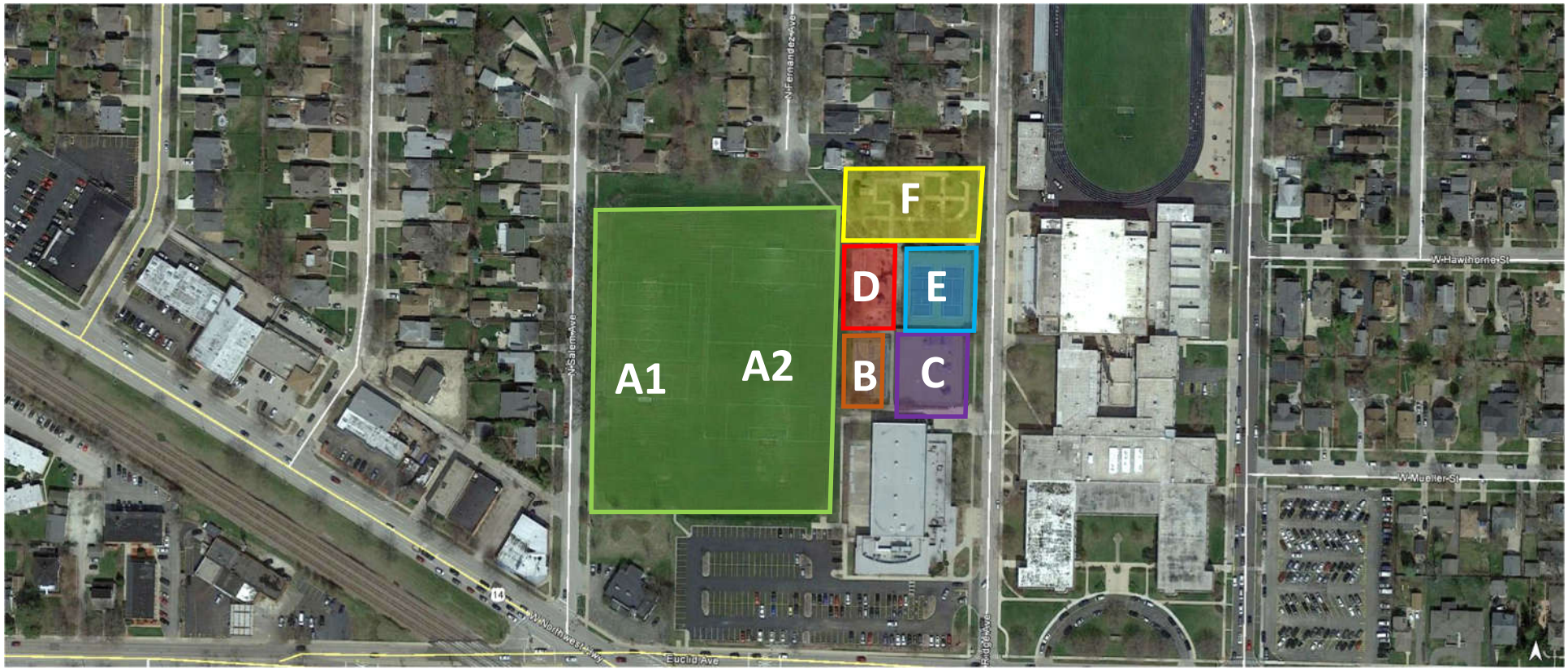
Exhibit 5B
Parking Occupancy Survey
Olympic Indoor Swim Center Additions & Renovations
Arlington Heights, Illinois
Saturday, November 4, 2017; 9:00 AM to 5:00 PM

Parking Description		Parking Type	Parking Supply	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM
Cars											
Main Parking Lot											
A	Parking Lot	Regular	185	35	60	53	99	134	173	185	165
		Handicap	6	0	0	0	0	3	4	4	3
Salem Avenue (On-Street)											
B	Monitored for Park Use Only	--	--	0	0	0	0	0	0	0	0
Ridge Avenue (On-Street)											
C	Monitored for Park Use Only	--	--	0	0	0	2	1	3	14	12
TOTAL			191	35	60	53	101	138	180	203	180
Percent Occupied			100%	18.3%	31.4%	27.7%	52.9%	72.3%	94.2%	106.3%	94.2%
Bicycles											
Parked On Site		--	--	2	2	2	2	1	0	0	0

Key

- 100%-85% Occupied
- 85%-60% Occupied
- 60%-0% Occupied

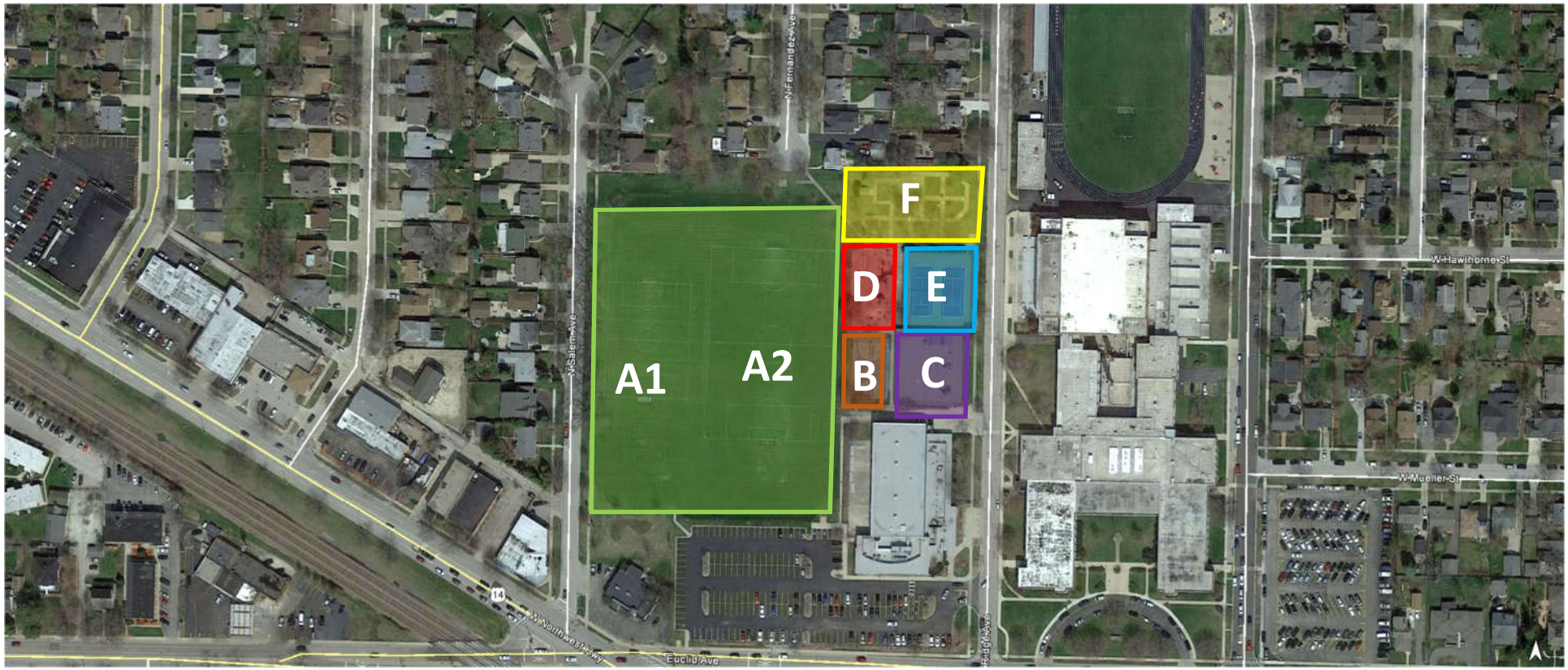
GHA GEWALT HAMILTON ASSOCIATES, INC.



		Tuesday, November 11, 2017																			
		8 / 9 AM		10 AM		11AM		3PM		4 PM		5PM		6PM		7PM		8PM			
Activity/Use		Kids	Adults	Kids	Adults	Kids	Adults	Kids	Adults	Kids	Adults	Kids	Adults	Kids	Adults	Kids	Adults	Kids	Adults		
A1	Sm Soccer Field	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
A2	Lg Soccer Field	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
B	Basketball Court	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
C	Skate Park	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0		
D	Playground	0	0	0	0	16	2	0	0	0	0	0	0	0	0	0	0	0	0		
E	Tennis Courts	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
F	Safety Town	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		

GHA GEWALT HAMILTON ASSOCIATES, INC.

Exhibit 6A
Olympic Park Field / Activity Use
Weekday Observations



		9 AM		10 AM		11AM		12 PM		1PM		2PM		3PM		4PM	
Activity/Use		Kids	Adults	Kids	Adults	Kids	Adults	Kids	Adults	Kids	Adults	Kids	Adults	Kids	Adults	Kids	Adults
A1	Sm Soccer Field	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A2	Lg Soccer Field	0	0	0	0	0	0	0	0	0	0	0	0	0	2&dog	0	0
B	Basketball Court	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C	Skate Park	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D	Playground	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
E	Tennis Courts	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
F	Safety Town	0	0	0	1&dog	0	0	0	0	0	0	0	0	2	1	0	0

GEWALT HAMILTON ASSOCIATES, INC.

Exhibit 6B
Olympic Park Field / Activity Use
Saturday Observations

Legend:

XX – Weekday AM Peak Hour (7:30 AM – 8:30 AM)

[XX] – Weekday PM School Peak Hour (3:15 PM – 4:15 PM)

(XX) – Weekday PM Peak Hour (4:30 PM – 5:30 PM)

[XX] – Saturday Midday Peak Hour (12:30 PM – 1:30 PM)

– Existing Traffic Signal

N

Not to Scale

Elm St

Salem Ave

Ridge Ave

Site

Euclid Ave

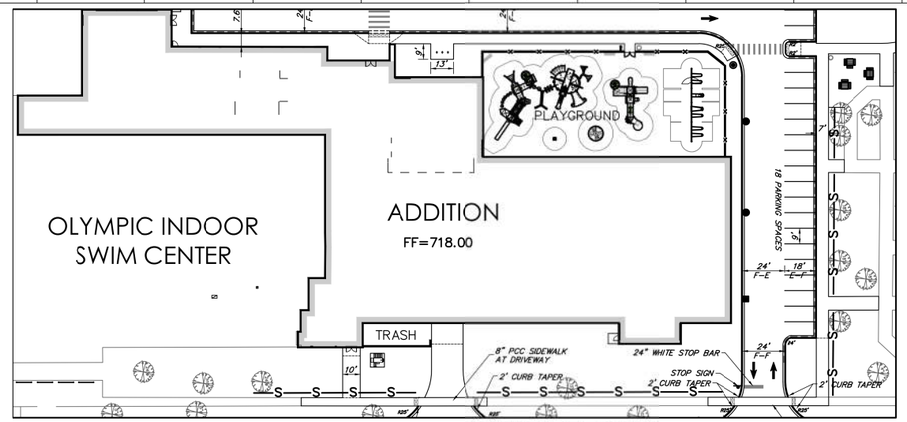
Northwest Highway

Ridge Ave

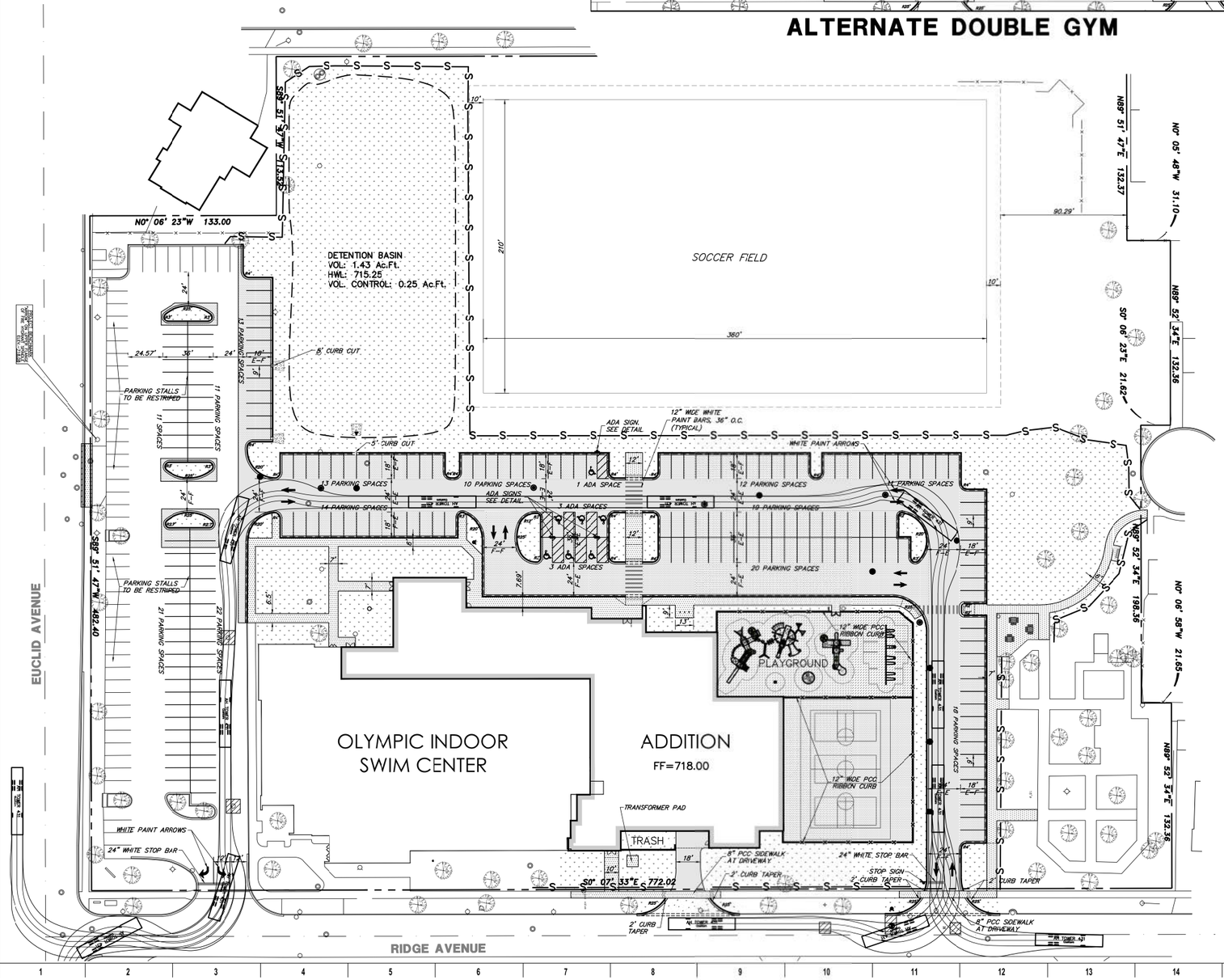
14

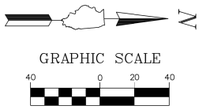
GEWALT HAMILTON ASSOCIATES, INC.

Exhibit 7
2024 No-Build Traffic



ALTERNATE DOUBLE GYM



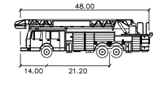


PROPOSED LEGEND

- HEAVY DUTY PAVEMENT — 1.75" HMA SURFACE, N50; 4.25" HMA BINDER, N50; 6" CA-6 STONE BASE; GEOTEXTILE FABRIC
- NORMAL DUTY PAVEMENT — 1.75" HMA SURFACE, N50; 2.25" HMA BINDER, N50; 10" CA-6 STONE BASE; GEOTEXTILE FABRIC
- PCC PAVEMENT — 8" PCC CONCRETE; 4" CA-6 BASE
- PCC SIDEWALK — 5" PCC CONCRETE; 4" CA-6 BASE
- ARTIFICIAL TURF — SEE DETAIL
- CLASS D PATCH — MATCH EX. PAVEMENT SECTION
- 6" TOPSOIL PLACEMENT & RESTORATION — SEE LANDSCAPE PLANS AND SPECIFICATIONS FOR RESTORATION DETAILS
- STONE RIP RAP, CLASS A1
- DETECTABLE WARNINGS
- B6.12 CURB & GUTTER (REGULAR)
- B6.12 CURB & GUTTER (DEPRESSED)
- B6.12 CURB & GUTTER (REVERSE PITCH)
- BARRIER CURB
- BARRIER CURB (DEPRESSED)
- INTEGRATED SIDEWALK/CONCRETE CURB
- FENCE
- TREE TRUNK PROTECTION FENCE
- PERIMETER EROSION BARRIER
- CONSTRUCTION FENCE
- RETAINING WALLS
- SUMMITS
- SLOPES
- SWALES
- OVERLAND FLOW ROUTE
- PROPOSED TREE

GEOMETRIC AND PAVING PLAN

1. All pavement dimensions are to edge of pavement, unless otherwise noted. E=edge of pavement, B=back of curb, F=face of curb. Radii dimensions are to back of curb.
2. Install all curb and sidewalk as shown. Note some curbs require reverse pitch gutter. Dowel new sidewalk and curb to existing and proposed curbs per general notes. When constructing a carriage walk, tre proposed sicewalk contraction and expansion joints shall align with existing curb joints.
3. Provide 1.90% cross slope and 4.5% maximum longitudinal slope on all sidewalks and pedestrian path ways unless otherwise indicated. Illinois accessitility code requires a maximum constructed cross slope of 2.00% and longitudinal slope of 5.00%.
4. Install bituminous pavement as shown. Refer to detail sheet for specific pavement sections and general note sheet for construction, testing and compaction requirements.
5. Install PCC pavement as shown. Refer to detail sheet for specific pavement section and general notes for construction, testing and compaction requirements.
6. All parking lot stall markings shall be 4" Yellow paint and all other parking lot pavement markings shall be paint, color as noted, in accordance with Section 780 of the IDOT Standard Specifications. (Two single applications, 16 mils each required). Site pavement marking shall be coordinated with Site engineer. Contractor shall notify site engineer 48 hrs prior to installing pavement marking. Re-striping of entire existing parking lot is required.
7. For handicapped stall markings, refer to Handicapped Parking Stall and Sign Dimensioning Detail.
8. Install new signs and handicapped parking signs using 2" galvanized square tube post and telescoping post sleeve per IDOT standard. If posts are within pavement, core pavement accordingly.
9. Install transformer pad as shown. Pad shall be set 6" above finished grade. Refer to MEP plans for final pad size and design requirements.
10. Contractor shall install temporary erosion control seed and blanket as necessary to meet soil erosion and sediment control requirements. Refer to notes and details throughout the plan set for specific material requirements.
11. For final restoration, the contractor shall be responsible for restoring all disturbed turf areas and proposed turf areas as follows:
    a. Refer to Landscape plans and specifications for plant and tree material and installation requirements.
    b. Refer to Landscape plans for topsoil, seed and sod material and restoration requirements.
    c. Prior to placement of topsoil restoration area subgrade material shall be rotatilled and re-compacted to a maximum of 80% standard proctor to a depth of 6".
    d. Spread a minimum of 6" of existing site salvaged screened topsoil or new pulverized topsoil on all disturbed areas. Compact to 80% standard proctor.
13. Once restoration has been completed, the contractor shall remove erosion control devices. Silt fence trenchss shall be backfilled and restored in kind. Storm structures shall be cleaned of debris.
14. Coordinate Playground Equipment installation with underdrain and infill material.



AH TOWER 431 feet

	feet
Width	: 8.50
Track	: 8.00
Lock to Lock Time	: 6.0
Steering Angle	: 40.0

Exhibit 8

NO.	DATE	DESCRIPTION
		ISSUANCE

FGM ARCHITECTS
OAKBROOK ST. LOUIS
CHICAGO O'FALLON
GHA GEWALT HAMILTON ASSOCIATES, INC.
625 Forest Edge Drive • Vernon Hills, IL 60061
Tel: 847.478.9700 • Fax: 847.478.9701
GHA JOB # 5313.000

DATE:
WALTER E. GRAEF 062-048837 LICENSED PROFESSIONAL ENGINEER OF ILLINOIS
PROFESSIONAL SEAL
EXPIRATION DATE:

DATE	01/08/17
DRAWN	PH, ES
CHECKED	DBY
APPROVED	JCD

PROFESSIONAL DESIGN FIRM: IL # 184-000350

OLYMPIC SWIM ADDITION AND RENOVATION
ARLINGTON HEIGHTS PARK DISTRICT
660 Ridge Ave
Arlington Heights, IL 60004

GEOMETRIC PLAN

SHEET NO.
C3

JOB NO. 17-2408.01

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Exhibit 9A
Project Traffic Characteristics - Single Gym
Olympic Indoor Swim Center Addition and Renovations – Arlington Heights, Illinois

Part A. Traffic Generation Calculations

	ITE Code	Units		Morning Peak Hour In	Morning Peak Hour Out	Morning Peak Hour Sum	Afternoon School Peak In	Afternoon School Peak Out	Afternoon School Peak Sum	Evening Peak Hour In	Evening Peak Hour Out	Evening Peak Hour Sum	Saturday Midday Peak Hour In	Saturday Midday Peak Hour Out	Saturday Midday Peak Hour Sum	Daily Sum
1. Indoor Swim Center																
A. Existing[1]	Local	45.2	KSF	36	33	69	57	37	94	79	72	151	179	137	316	1,440
B. Proposed Expansion[2] Single Gym	495	32	KSF	66	34	100	22	15	37	48	55	103	49	41	90	912
2. Soccer Fields[3]	488	1	Fields	1	0	1	11	7	18	32	17	49	20	21	41	72
Total Development (Existing and Proposed)				*103*	*67*	*170*	*90*	*59*	*149*	*159*	*144*	*303*	*248*	*199*	*447*	*2,424*

Notes:

[1] Peak hour volumes obtained from GHA intersection turning movement counts, November 2017. Daily trips estimated by interpolating between local data and ITE LUC 495 (Recreation Center) data.

Note: the weekday morning and afternoon school peaks also includes CLA traffic - observed at a minimum of 40 vehicles (20 in and 20 out) during these timeframes.

[2] ITE Trip Generation Manual, 10th Edition, 2017. Note: weekday afternoon school peak unavailable; therefore estimated by interpolation between local rates at ITE LUC 495 data (there is no ITE available data during this timeframe). Also, the Saturday midday peak hour estimates using the ITE LUC 495 rates appeared low due to low sample size. Therefore, Saturday midday peak hour volumes were estimated by interpolation between similar ITE LUC Codes, LUC 495 and LUC 492 (Health/Fitness Club).

[3] ITE Trip Generation Manual, 10th Edition, 2017. Note: weekday afternoon school peak unavailable; therefore estimated by interpolation between local rates at ITE LUC 488 data (there is no ITE available data during this timeframe).

Part B. Trip Distribution

Route & Direction	Arrive From/Depart To
Euclid Avenue	
- West of Northwest Highway	35%
- East of Ridge Avenue	25%
Northwest Highway	
- Northwest of Salem Avenue	10%
Salem Avenue	
- North of Euclid Avenue	--
Ridge Avenue	
- South of Euclid Avenue	5%
-North of Elm Street	20%
Elm Street	
- West of Ridge Avenue	5%
- East of Ridge Avenue	--
Totals =	100%

GHA GEWALT HAMILTON ASSOCIATES, INC.

Exhibit 9B
Project Traffic Characteristics - Double Gym
Olympic Indoor Swim Center Addition and Renovations – Arlington Heights, Illinois

Part A. Traffic Generation Calculations

	ITE Code	Units		Morning Peak Hour In	Morning Peak Hour Out	Morning Peak Hour Sum	Afternoon School Peak In	Afternoon School Peak Out	Afternoon School Peak Sum	Evening Peak Hour In	Evening Peak Hour Out	Evening Peak Hour Sum	Saturday Midday Peak Hour In	Saturday Midday Peak Hour Out	Saturday Midday Peak Hour Sum	Daily Sum
1. Indoor Swim Center																
A. Existing[1]	Local	45.2	KSF	36	33	69	57	37	94	79	72	151	179	137	316	1,440
B. Proposed Expansion[2] Double Gym	495	52.6	KSF	86	44	130	33	21	54	71	79	150	84	71	155	1,486
2. Soccer Fields[3]	488	1	Fields	1	0	1	11	7	18	32	17	49	20	21	41	72
Total Development (Existing and Proposed)				***123***	***77***	***200***	***101***	***65***	***166***	***182***	***168***	***350***	***283***	***229***	***512***	***2,998***

Notes:

[1] Peak hour volumes obtained from GHA intersection turning movement counts, November 2017. Daily trips estimated by interpolating between local data and ITE LUC 495 (Recreation Center) data.

Note: the weekday morning and afternoon school peaks also includes CLA traffic - observed at a minimum of 40 vehicles (20 in and 20 out) during these timeframes.

[2] ITE Trip Generation Manual, 10th Edition, 2017. Note: weekday afternoon school peak unavailable; therefore estimated by interpolation between local rates and ITE LUC 495 data (there is no ITE available data during this timeframe). Also, the Saturday midday peak hour estimates using the ITE LUC 495 rates appeared low due to low sample size. Therefore, Saturday midday peak hour volumes were estimated by interpolation between similar ITE LUC Codes, LUC 495 and LUC 492 (Health/Fitness Club).

[3] ITE Trip Generation Manual, 10th Edition, 2017. Note: weekday afternoon school peak unavailable; therefore estimated by interpolation between local rates at ITE LUC 488 data (there is no ITE available data during this timeframe).

Part B. Trip Distribution

Route & Direction	Arrive From/Depart To
Euclid Avenue	
- West of Northwest Highway	35%
- East of Ridge Avenue	25%
Northwest Highway	
- Northwest of Salem Avenue	10%
Salem Avenue	
- North of Euclid Avenue	--
Ridge Avenue	
- South of Euclid Avenue	5%
-North of Elm Street	20%
Elm Street	
- West of Ridge Avenue	5%
- East of Ridge Avenue	--
Totals =	100%

GHA GEWALT HAMILTON ASSOCIATES, INC.

Legend:

XX – Weekday AM Peak Hour (7:30 AM – 8:30 AM)

[XX] – Weekday PM School Peak Hour (3:15 PM – 4:15 PM)

(XX) – Weekday PM Peak Hour (4:30 PM – 5:30 PM)

[XX] – Saturday Midday Peak Hour (12:30 PM – 1:30 PM)

– Existing Traffic Signal

N

Not to Scale

Ridge Ave

Elm St

Salem Ave

Site

Euclid Ave

Northwest Highway

Ridge Ave

14

13 [4] (10) [10]

[3] (2) [1] 3

14 [5] (11) [12]
2 [0] (1) [1]

2 [1] (3) [2]
7 [3] (11) [8]

[9] (13) [4] 8
[6] (8) [2] 5

5 [2] (4) [4]
1 [0] (1) [1]

2 [0] (1) [1]
5 [2] (8) [6]

[1] (1) [0] 1
[25] (33) [9] 20

45 [15] (32) [32]
5 [2] (4) [4]

[19] [10]
[24] [3] (14) [4]
[2] 8
[6] [1] 2
15

[5] (5) [2] 7

3 [1] (5) [4]
12 [5] (19) [15]

[17] (17) [8] 23

17 [6] (12) [12]

[22] (22) [10] 30

3 [1] (2) [2]

Exhibit 10A.1
Site Traffic
Center Addition
Single Gym

GHA GEWALT HAMILTON ASSOCIATES, INC.

Legend:

XX – Weekday AM Peak Hour (7:30 AM – 8:30 AM)

[XX] – Weekday PM School Peak Hour (3:15 PM – 4:15 PM)

(XX) – Weekday PM Peak Hour (4:30 PM – 5:30 PM)

[XX] – Saturday Midday Peak Hour (12:30 PM – 1:30 PM)

– Existing Traffic Signal

N

Not to Scale

Ridge Ave

Elm St

Salem Ave

Site

Euclid Ave

Northwest Highway

Ridge Ave

14

17 [7] (14) [17]

[4] (4) [2] 4

19 [8] (16) [19]

2 [1] (2) [2]

2 [1] (4) [4]

[4] (4) [1] 2

[14] (16) [4] 9

[16] (18) [5] 10

[11] (12) [3] 7

[6] (5) [2] 9

[2] (2) [0] 1

2 [1] (2) [2]

7 [3] (12) [11]

[2] (2) [0] 1

[42] (47) [13] 26

59 [22] (48) [57]

6 [2] (5) [6]

[32] [18] (20) [5] 11

(35) [3] (4) [1] 2

[10] 20

5 [2] (8) [7]

15 [8] (27) [25]

22 [8] (18) [21]

[9] (7) [3] 9

[29] (25) [11] 30

[38] (32) [14] 39

4 [2] (3) [4]

GHA GEWALT HAMILTON ASSOCIATES, INC.

Exhibit 10A.2
Site Traffic
Center Addition
Double Gym

Legend:

XX – Weekday AM Peak Hour (7:30 AM – 8:30 AM)

[XX] – Weekday PM School Peak Hour (3:15 PM – 4:15 PM)

(XX) – Weekday PM Peak Hour (4:30 PM – 5:30 PM)

[XX] – Saturday Midday Peak Hour (12:30 PM – 1:30 PM)

– Existing Traffic Signal

N

Not to Scale

Ridge Ave

Elm St

Salem Ave

Site

Euclid Ave

Northwest Highway

Ridge Ave

14

GEWALT HAMILTON ASSOCIATES, INC.

Exhibit 10B
Site Traffic
Soccer Fields

Legend:

XX – Weekday AM Peak Hour (7:30 AM – 8:30 AM)

[XX] – Weekday PM School Peak Hour (3:15 PM – 4:15 PM)

(XX) – Weekday PM Peak Hour (4:30 PM – 5:30 PM)

[XX] – Saturday Midday Peak Hour (12:30 PM – 1:30 PM)

– Existing Traffic Signal

N

Not to Scale

Ridge Ave

Elm St

Salem Ave

Site

9 [13] (23) [32]
-9 [-13] (-23) [-32]

[46] (28) [10] 9
[17] (8) [14] 4

[14] (5) [2] 1
[-46] (-28) [-10] -9

9 [13] (23) [32]
-9 [-13] (-23) [-32]

4 [4] (8) [17]

[-46] (-28) [-10] -9
[-17] (-8) [-4] -4

-1 [-2] (-5) [-14]
1 [2] (5) [14]

Euclid Ave

Northwest Highway

Ridge Ave

14

GHA GEWALT HAMILTON ASSOCIATES, INC.

Exhibit 10C
Re-Assignment
Existing (Exhibit 3A)
Traffic

Legend:

XX – Weekday AM Peak Hour (7:30 AM – 8:30 AM)

[XX] – Weekday PM School Peak Hour (3:15 PM – 4:15 PM)

(XX) – Weekday PM Peak Hour (4:30 PM – 5:30 PM)

[XX] – Saturday Midday Peak Hour (12:30 PM – 1:30 PM)

– Existing Traffic Signal

N

Not to Scale

Elm St

Salem Ave

Site

Euclid Ave

Northwest Highway

Ridge Ave

14

GEWALT HAMILTON ASSOCIATES, INC.

Exhibit 11A
2024 Total Traffic
Single Gym

Legend:

XX – Weekday AM Peak Hour (7:30 AM – 8:30 AM)

[XX] – Weekday PM School Peak Hour (3:15 PM – 4:15 PM)

(XX) – Weekday PM Peak Hour (4:30 PM – 5:30 PM)

[XX] – Saturday Midday Peak Hour (12:30 PM – 1:30 PM)

– Existing Traffic Signal

N

Not to Scale

Elm St

Salem Ave

Site

Euclid Ave

Northwest Highway

Ridge Ave

14

GEWALT HAMILTON ASSOCIATES, INC.

Exhibit 11B
2024 Total Traffic
Double Gym

Exhibit 12
Intersection Capacity and Queue Analyses
Olympic Indoor Swim Center Addition and Renovations – Arlington Heights, Illinois

Part A. Parameters - Type of Traffic Control *(Source: Highway Capacity Manual 6th Edition)*

I. Traffic Signals

LOS	Delay (sec / veh)	Description
A	<10	All signal phases clear waiting vehicles without delay
B	>10 and < 20	Minimal delay experienced on select signal phases
C	>20 and < 35	Some delay experienced on several phases; often used as design criteria
D	>35 and < 55	Usually considered as the acceptable delay standard
E	>55 and < 80	Very long delays experienced during the peak hours
F	>80	Unacceptable delays experienced throughout the peak hours

II. Stop Sign

LOS	Delay (sec / veh)
A	< 10
B	>10 and < 15
C	>15 and < 25
D	>25 and < 35
E	>35 and < 50
F	>50

Part B. Results

Roadway Conditions	LOS Per Movement By Approach (> = Shared Lane; - = Non Critical or not Allowed Movement)																		Intersection / Approach	
	Eastbound			Westbound			Northbound			Southbound			Southeastbound			Northwestbound			Delay	
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT	(sec / veh)	LOS
1. Euclid Ave at NW Hwy/Salem Ave	**Signalized**																		**Intersection Delay**	
A. Weekday Morning Peak Hour																				
Existing Traffic (See *Exhibit 3*)	• Current	>	D	<	>	C	<	-	-	-	>	A	<	B	C	<	C	C	<	29.7	C
	• 95th Queue Length (ft)	-	380	-	-	265	-	-	-	-	-	-	-	87	231	-	181	215	-	-	-
Total Traffic (See *Exhibit 11A*)	• Current	>	D	<	>	C	<	-	-	-	>	A	<	B	C	<	C	C	<	30.6	C
Single Gym	• 95th Queue Length (ft)	-	415	-	-	284	-	-	-	-	-	-	-	94	240	-	186	222	-	-	-
Total Traffic (See *Exhibit 11B*)	• Current	>	D	<	>	C	<	-	-	-	>	A	<	B	C	<	C	C	<	30.7	C
Double Gym	• 95th Queue Length (ft)	-	420	-	-	286	-	-	-	-	-	-	-	95	240	-	186	222	-	-	-
B. Weekday School Peak Hour																				
Existing Traffic (See Exhibit 3)	• Current	>	D	<	>	D	<	-	-	-	>	A	<	B	C	<	B	C	<	29.8	C
	• 95th Queue Length (ft)	-	254	-	-	290	-	-	-	-	-	-	-	56	195	-	169	264	-	-	-
Total Traffic (See Exhibit 11A)	• Current	>	D	<	>	D	<	-	-	-	>	A	<	B	C	<	B	C	<	30.4	C
Single Gym	• 95th Queue Length (ft)	-	270	-	-	305	-	-	-	-	-	-	-	64	212	-	185	287	-	-	-
Total Traffic (See *Exhibit 11B*)	• Current	>	D	<	>	D	<	-	-	-	>	A	<	B	C	<	B	C	<	30.5	C
Double Gym	• 95th Queue Length (ft)	-	272	-	-	307	-	-	-	-	-	-	-	65	213	-	186	289	-	-	-
C. Weekday Evening Peak Hour																				
Existing Traffic (See Exhibit 3)	• Current	>	D	<	>	C	<	-	-	-	>	A	<	B	C	<	C	C	<	30.4	C
	• 95th Queue Length (ft)	-	398	-	-	307	-	-	-	-	-	-	-	29	198	-	206	298	-	-	-
Total Traffic (See Exhibit 11A)	• Current	>	D	<	>	C	<	-	-	-	>	A	<	B	C	<	C	C	<	31.6	C
Single Gym	• 95th Queue Length (ft)	-	441	-	-	339	-	-	-	-	-	-	-	36	204	-	215	313	-	-	-
Total Traffic (See *Exhibit 11B*)	• Current	>	D	<	>	C	<	-	-	-	>	A	<	B	C	<	C	C	<	31.8	C
Double Gym	• 95th Queue Length (ft)	-	447	-	-	345	-	-	-	-	-	-	-	38	204	-	215	313	-	-	-
D. Saturday Midday Peak Hour																				
Existing Traffic (See Exhibit 3)	• Current	>	D	<	>	C	<	-	-	-	>	E	<	B	C	<	B	B	<	25.1	C
	• 95th Queue Length (ft)	-	256	-	-	218	-	-	-	-	-	25	-	69	179	-	162	150	-	-	-
Total Traffic (See Exhibit 11A)	• Current	>	D	<	>	C	<	-	-	-	>	E	<	B	C	<	B	B	<	26.1	C
Single Gym	• 95th Queue Length (ft)	-	280	-	-	240	-	-	-	-	-	26	-	82	199	-	185	170	-	-	-
Total Traffic (See Exhibit 11B)	• Current	>	D	<	>	C	<	-	-	-	>	E	<	B	C	<	B	B	<	26.4	C
Double Gym	• 95th Queue Length (ft)	-	288	-	-	245	-	-	-	-	-	26	-	87	202	-	188	173	-	-	-
2. Euclid Ave at Ridge Ave	**TWSC - NB/SB Stops**																		**SB Approach Delay**	
A. Weekday Morning Peak Hour																				
Existing Traffic (See Exhibit 3)	• Current	A	-	-	A	-	-	>	F	B	>	E	<	-	-	-	-	-	-	47.6	E
	• 95th Queue Length (ft)	8	-	-	-	-	-	-	8	-	-	68	-	-	-	-	-	-	-	-	-
Total Traffic (See Exhibit 11A)	• Current	A	-	-	A	-	-	>	F	B	>	F	<	-	-	-	-	-	-	112.9	F
Single Gym	• 95th Queue Length (ft)	8	-	-	-	-	-	-	8	-	-	145	-	-	-	-	-	-	-	-	-
Total Traffic (See Exhibit 11B)	• Current	A	-	-	A	-	-	>	F	B	>	F	<	-	-	-	-	-	-	154.7	F
Double Gym	• 95th Queue Length (ft)	15	-	-	-	-	-	-	18	-	-	180	-	-	-	-	-	-	-	-	-
B. Weekday School Peak Hour																				
Existing Traffic (See Exhibit 3)	• Current	A	-	-	A	-	-	>	D	B	>	C	<	-	-	-	-	-	-	18.6	C
	• 95th Queue Length (ft)	5	-	-	-	-	-	-	3	-	-	15	-	-	-	-	-	-	-	-	-
Total Traffic (See Exhibit 11A)	• Current	A	-	-	A	-	-	>	D	B	>	C	<	-	-	-	-	-	-	18.6	C
Single Gym	• 95th Queue Length (ft)	5	-	-	-	-	-	-	5	-	-	25	-	-	-	-	-	-	-	-	-
Total Traffic (See Exhibit 11B)	• Current	A	-	-	A	-	-	>	D	B	>	C	<	-	-	-	-	-	-	23.1	C
Double Gym	• 95th Queue Length (ft)	5	-	-	-	-	-	-	5	-	-	28	-	-	-	-	-	-	-	-	-
C. Weekday Evening Peak Hour																				
Existing Traffic (See Exhibit 3)	• Current	A	-	-	A	-	-	>	D	B	>	E	<	-	-	-	-	-	-	37.2	E
	• 95th Queue Length (ft)	5	-	-	-	-	-	-	8	3	-	53	-	-	-	-	-	-	-	-	-
Total Traffic (See Exhibit 11A)	• Current	A	-	-	A	-	-	>	E	B	>	F	<	-	-	-	-	-	-	94.9	F
Single Gym	• 95th Queue Length (ft)	5	-	-	-	-	-	-	13	3	-	153	-	-	-	-	-	-	-	-	-
Total Traffic (See Exhibit 11B)	• Current	A	-	-	A	-	-	>	E	B	>	F	<	-	-	-	-	-	-	134.3	F
Double Gym	• 95th Queue Length (ft)	10	-	-	-	-	-	-	15	3	-	200	-	-	-	-	-	-	-	-	-
D. Saturday Midday Peak Hour																				
Existing Traffic (See Exhibit 3)	• Current	A	-	-	A	-	-	>	C	B	>	D	<	-	-	-	-	-	-	32.0	D
	• 95th Queue Length (ft)	5	-	-	-	-	-	-	5	3	-	63	-	-	-	-	-	-	-	-	-
Total Traffic (See Exhibit 11A)	• Current	A	-	-	A	-	-	>	D	B	>	F	<	-	-	-	-	-	-	60.3	F
Single Gym	• 95th Queue Length (ft)	8	-	-	-	-	-	-	10	3	-	135	-	-	-	-	-	-	-	-	-
Total Traffic (See Exhibit 11B)	• Current	A	-	-	A	-	-	>	D	B	>	F	<	-	-	-	-	-	-	90.7	F
Double Gym	• 95th Queue Length (ft)	8	-	-	-	-	-	-	13	3	-	190	-	-	-	-	-	-	-	-	-

Part B. Results (cont.)

Roadway Conditions	LOS Per Movement By Approach (> = Shared Lane; - = Non Critical or not Allowed Movement)																		Intersection / Approach	
	Eastbound			Westbound			Northbound			Southbound			Southeastbound			Northwestbound			Delay	
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT	(sec / veh)	LOS
3. Ridge Ave at Site Access	**TWSC - EB Stops**																		**EB Approach Delay**	
A. Weekday Morning Peak Hour																				
Existing Traffic (See Exhibit 3)	• Current	B	-	A	-	-	-	A	-	-	-	-	-	-	-	-	-	-	10.3	B
	• 95th Queue Length (ft)	5	-	3	-	-	-	3	-	-	-	-	-	-	-	-	-	-	-	-
Total Traffic (See Exhibit 11A)	• Current	B	-	A	-	-	-	A	-	-	-	-	-	-	-	-	-	-	10.1	B
Single Gym	• 95th Queue Length (ft)	3	-	5	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Total Traffic (See Exhibit 11B)	• Current	C	-	A	-	-	-	A	-	-	-	-	-	-	-	-	-	-	10.2	B
Double Gym	• 95th Queue Length (ft)	3	-	8	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-
B. Weekday School Peak Hour																				
Existing Traffic (See Exhibit 3)	• Current	B	-	A	-	-	-	A	-	-	-	-	-	-	-	-	-	-	9.9	A
	• 95th Queue Length (ft)	3	-	3	-	-	-	3	-	-	-	-	-	-	-	-	-	-	-	-
Total Traffic (See Exhibit 11A)	• Current	B	-	A	-	-	-	A	-	-	-	-	-	-	-	-	-	-	9.4	A
Single Gym	• 95th Queue Length (ft)	3	-	3	-	-	-	5	-	-	-	-	-	-	-	-	-	-	-	-
Total Traffic (See Exhibit 11B)	• Current	B	-	A	-	-	-	A	-	-	-	-	-	-	-	-	-	-	9.4	A
Double Gym	• 95th Queue Length (ft)	3	-	5	-	-	-	5	-	-	-	-	-	-	-	-	-	-	-	-
C. Weekday Evening Peak Hour																				
Existing Traffic (See Exhibit 3)	• Current	B	-	A	-	-	-	A	-	-	-	-	-	-	-	-	-	-	9.7	A
	• 95th Queue Length (ft)	5	-	5	-	-	-	3	-	-	-	-	-	-	-	-	-	-	-	-
Total Traffic (See Exhibit 11A)	• Current	B	-	A	-	-	-	A	-	-	-	-	-	-	-	-	-	-	9.3	A
Single Gym	• 95th Queue Length (ft)	-	-	8	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Total Traffic (See Exhibit 11B)	• Current	B	-	A	-	-	-	A	-	-	-	-	-	-	-	-	-	-	9.5	A
Double Gym	• 95th Queue Length (ft)	-	-	10	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-
D. Saturday Midday Peak Hour																				
Existing Traffic (See Exhibit 3)	• Current	B	-	A	-	-	-	A	-	-	-	-	-	-	-	-	-	-	10.4	B
	• 95th Queue Length (ft)	10	-	8	-	-	-	10	-	-	-	-	-	-	-	-	-	-	-	-
Total Traffic (See Exhibit 11A)	• Current	B	-	A	-	-	-	A	-	-	-	-	-	-	-	-	-	-	9.4	A
Single Gym	• 95th Queue Length (ft)	-	-	10	-	-	-	13	-	-	-	-	-	-	-	-	-	-	-	-
Total Traffic (See Exhibit 11B)	• Current	B	-	A	-	-	-	A	-	-	-	-	-	-	-	-	-	-	9.6	A
Double Gym	• 95th Queue Length (ft)	3	-	13	-	-	-	13	-	-	-	-	-	-	-	-	-	-	-	-
4. Ridge Ave at Elm St	**TWSC - NB/SB Stops**																		**NB Approach Delay**	
A. Weekday Morning Peak Hour																				
Existing Traffic (See Exhibit 3)	• Current	A	-	-	A	-	-	>	B	<	>	B	<	-	-	-	-	-	-	10.7	B
	• 95th Queue Length (ft)	-	-	-	-	-	-	-	20	-	-	13	-	-	-	-	-	-	-	-	-
Total Traffic (See Exhibit 11A)	• Current	A	-	-	A	-	-	>	B	<	>	B	<	-	-	-	-	-	-	10.9	B
Single Gym	• 95th Queue Length (ft)	-	-	-	-	-	-	-	23	-	-	15	-	-	-	-	-	-	-	-	-
Total Traffic (See Exhibit 11B)	• Current	A	-	-	A	-	-	>	B	<	>	B	<	-	-	-	-	-	-	10.9	B
Double Gym	• 95th Queue Length (ft)	-	-	-	-	-	-	-	23	-	-	15	-	-	-	-	-	-	-	-	-
B. Weekday School Peak Hour																				
Existing Traffic (See Exhibit 3)	• Current	A	-	-	A	-	-	>	B	<	>	B	<	-	-	-	-	-	-	10.2	B
	• 95th Queue Length (ft)	-	-	-	-	-	-	-	13	-	-	5	-	-	-	-	-	-	-	-	-
Total Traffic (See Exhibit 11A)	• Current	A	-	-	A	-	-	>	B	<	>	B	<	-	-	-	-	-	-	10.3	B
Single Gym	• 95th Queue Length (ft)	-	-	-	-	-	-	-	13	-	-	8	-	-	-	-	-	-	-	-	-
Total Traffic (See Exhibit 11B)	• Current	A	-	-	A	-	-	>	B	<	>	B	<	-	-	-	-	-	-	10.3	B
Double Gym	• 95th Queue Length (ft)	-	-	-	-	-	-	-	13	-	-	8	-	-	-	-	-	-	-	-	-
C. Weekday Evening Peak Hour																				
Existing Traffic (See Exhibit 3)	• Current	A	-	-	A	-	-	>	B	<	>	B	<	-	-	-	-	-	-	10.0	B
	• 95th Queue Length (ft)	-	-	-	-	-	-	-	10	-	-	8	-	-	-	-	-	-	-	-	-
Total Traffic (See Exhibit 11A)	• Current	A	-	-	A	-	-	>	B	<	>	B	<	-	-	-	-	-	-	10.2	B
Single Gym	• 95th Queue Length (ft)	-	-	-	-	-	-	-	13	-	-	10	-	-	-	-	-	-	-	-	-
Total Traffic (See Exhibit 11B)	• Current	A	-	-	A	-	-	>	B	<	>	B	<	-	-	-	-	-	-	10.3	B
Double Gym	• 95th Queue Length (ft)	-	-	-	-	-	-	-	15	-	-	10	-	-	-	-	-	-	-	-	-
D. Saturday Midday Peak Hour																				
Existing Traffic (See Exhibit 3)	• Current	A	-	-	A	-	-	>	A	<	>	A	<	-	-	-	-	-	-	9.8	A
	• 95th Queue Length (ft)	-	-	-	-	-	-	-	8	-	-	5	-	-	-	-	-	-	-	-	-
Total Traffic (See Exhibit 11A)	• Current	A	-	-	A	-	-	>	B	<	>	A	<	-	-	-	-	-	-	10.0	B
Single Gym	• 95th Queue Length (ft)	-	-	-	-	-	-	-	10	-	-	8	-	-	-	-	-	-	-	-	-
Total Traffic (See Exhibit 11B)	• Current	A	-	-	A	-	-	>	B	<	>	A	<	-	-	-	-	-	-	10.1	B
Double Gym	• 95th Queue Length (ft)	-	-	-	-	-	-	-	13	-	-	8	-	-	-	-	-	-	-	-	-
5. Ridge Ave at New Site Access	**TWSC - EB Stops**																		**EB Approach Delay**	
A. Weekday Morning Peak Hour																				
Total Traffic (See Exhibit 11A)	• Planned	>	B	<	-	-	-	A	-	-	-	-	-	-	-	-	-	-	10.6	B
Single Gym	• 95th Queue Length (ft)	-	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Traffic (See Exhibit 11B)	• Planned	>	B	<	-	-	-	A	-	-	-	-	-	-	-	-	-	-	10.7	B
Double Gym	• 95th Queue Length (ft)	-	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B. Weekday School Peak Hour																				
Total Traffic (See Exhibit 11A)	• Planned	>	A	<	-	-	-	A	-	-	-	-	-	-	-	-	-	-	9.5	A
Single Gym	• 95th Queue Length (ft)	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Traffic (See Exhibit 11B)	• Planned	>	A	<	-	-	-	A	-	-	-	-	-	-	-	-	-	-	9.5	A
Double Gym	• 95th Queue Length (ft)	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C. Weekday Evening Peak Hour																				
Total Traffic (See Exhibit 11A)	• Planned	>	A	<	-	-	-	A	-	-	-	-	-	-	-	-	-	-	9.9	A
Single Gym	• 95th Queue Length (ft)	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Traffic (See Exhibit 11B)	• Planned	>	B	<	-	-	-	A	-	-	-	-	-	-	-	-	-	-	10.0	B
Double Gym	• 95th Queue Length (ft)	-	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
D. Saturday Midday Peak Hour																				
Total Traffic (See Exhibit 11A)	• Planned	>	A	<	-	-	-	A	-	-	-	-	-	-	-	-	-	-	9.7	A
Single Gym	• 95th Queue Length (ft)	-	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Traffic (See Exhibit 11B)	• Planned	>	A	<	-	-	-	A	-	-	-	-	-	-	-	-	-	-	9.8	A
Double Gym	• 95th Queue Length (ft)	-	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Exhibit 13A
Future Parking Demand - Single Gymnasium
Olympic Indoor Swim Center Additions & Renovations
Arlington Heights, Illinois
Weekday

Parking Description		Parking Type	Parking Supply	8:00 AM	9:00 AM	10:00 AM	11:00 AM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM
Existing Conditions													
Main Parking Lot													
A	Parking Lot	Regular	185	35	26*	21	28	55	27	35	63	45	23
		Handicap	6	0	0	1	2	0	0	0	2	3	0
Salem Avenue (On-Street)													
B	Monitored for Park Use Only	--	--	0	0	0	0	0	0	0	0	0	0
Ridge Avenue (On-Street)													
C	Monitored for Park Use Only	--	--	0	0	0	0	0	1	0	3	2	0
TOTAL			191	35	26	22	30	55	28	35	68	50	23
Percent Occupied			100%	18.3%	13.6%	11.5%	15.7%	28.8%	14.7%	18.3%	35.6%	26.2%	12.0%
Proposed Fitness Center													
ITE LUC 495 Projected Demand - 161 Spaces		--	75	32	42	82	77	66	98	135	147	161	81
Time of Day Distribution per ITE Parking Generation, 4th Edition, LUC 492				*20%*	*26%*	*51%*	*48%*	*41%*	*61%*	*84%*	*91%*	*100%*	*50%*
Percent Occupied			100%	42.7%	56.0%	109.3%	102.7%	88.0%	130.7%	180.0%	196.0%	214.7%	108.0%
Total (Existing and Proposed)			266	67	68	104	107	121	126	170	215	211	104
Percent Occupied			100%	25.2%	25.6%	39.1%	40.2%	45.5%	47.4%	63.9%	80.8%	79.3%	39.1%
Total Available			-	199	198	162	159	145	140	96	51	55	162

Notes: * Includes One (1) Bus.

Key

- 100%-85% Occupied
- 85%-60% Occupied
- 60%-0% Occupied

Note: An additional 60 parking spaces are available on-street (15 on Salem Avenue and 45 on Ridge Avenue) in close proximity of the site, which could readily accommodate overflow parking, if needed.

GHA GEWALT HAMILTON ASSOCIATES, INC.

Exhibit 13B
Future Parking Demand - Single Gymnasium
Olympic Indoor Swim Center Additions & Renovations
Arlington Heights, Illinois
Saturday

Parking Description		Parking Type	Parking Supply	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM
Existing Conditions											
Main Parking Lot											
A	Parking Lot	Regular	185	35	60	53	99	134	173	185	165
		Handicap	6	0	0	0	0	3	4	4	3
Salem Avenue (On-Street)											
B	Monitored for Park Use Only	--	--	0	0	0	0	0	0	0	0
Ridge Avenue (On-Street)											
C	Monitored for Park Use Only	--	--	0	0	0	2	1	3	14	12
TOTAL			191	35	60	53	101	138	180	203	180
Percent Occupied			100%	18.3%	31.4%	27.7%	52.9%	72.3%	94.2%	106.3%	94.2%
Proposed Fitness Center											
ITE Projected Demand - 64 Spaces		--	75	60	61	64	56	52	50	47	49
Time of Day Distribution per ITE Parking Generation, 4th Edition, LUC 492				*94%*	*95%*	*100%*	*87%*	*82%*	*78%*	*73%*	*77%*
Percent Occupied			100%	80.0%	81.3%	85.3%	74.7%	69.3%	66.7%	62.7%	65.3%
Total (Existing and Proposed)			266	95	121	117	157	190	230	250	229
Percent Occupied			100%	35.7%	45.5%	44.0%	59.0%	71.4%	86.5%	94.0%	86.1%
Total Available			-	171	145	149	109	76	36	16	37

Key

- 100%-85% Occupied
- 85%-60% Occupied
- 60%-0% Occupied

Note: An additional 60 parking spaces are available on-street (15 on Salem Avenue and 45 on Ridge Avenue) in close proximity of the site, which could readily accommodate overflow parking, if needed.

GHA GEWALT HAMILTON ASSOCIATES, INC.

Exhibit 14A
Future Parking Demand - Double Gymnasium
Olympic Indoor Swim Center Additions & Renovations
Arlington Heights, Illinois
Weekday

Parking Description		Parking Type	Parking Supply	8:00 AM	9:00 AM	10:00 AM	11:00 AM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM
Existing Conditions													
Main Parking Lot													
A	Parking Lot	Regular	185	35	26*	21	28	55	27	35	63	45	23
		Handicap	6	0	0	1	2	0	0	0	2	3	0
Salem Avenue (On-Street)													
B	Monitored for Park Use Only	--	--	0	0	0	0	0	0	0	0	0	0
Ridge Avenue (On-Street)													
C	Monitored for Park Use Only	--	--	0	0	0	0	0	1	0	3	2	0
TOTAL			191	35	26	22	30	55	28	35	68	50	23
Percent Occupied			100%	18.3%	13.6%	11.5%	15.7%	28.8%	14.7%	18.3%	35.6%	26.2%	12.0%
Proposed Fitness Center													
ITE LUC 495 Projected Demand - 265 Spaces		--	75	53	69	135	127	109	162	223	241	265	133
Time of Day Distribution per ITE Parking Generation, 4th Edition, LUC 492				*20%*	*26%*	*51%*	*48%*	*41%*	*61%*	*84%*	*91%*	*100%*	*50%*
Percent Occupied			100%	70.7%	92.0%	180.0%	169.3%	145.3%	216.0%	297.3%	321.3%	353.3%	177.3%
Total (Existing and Proposed)			266	88	95	157	157	164	190	258	309	315	156
Percent Occupied			100%	33.1%	35.7%	59.0%	59.0%	61.7%	71.4%	97.0%	116.2%	118.4%	58.6%
Total Available			-	178	171	109	109	102	76	8	-43	-49	110

Notes: * Includes One (1) Bus.

Key

- 100%-85% Occupied
- 85%-60% Occupied
- 60%-0% Occupied

Note: An additional 60 parking spaces are available on-street (15 on Salem Avenue and 45 on Ridge Avenue) in close proximity of the site, which could readily accommodate overflow parking, if needed.

GHA GEWALT HAMILTON ASSOCIATES, INC.

Exhibit 14B
Future Parking Demand - Double Gymnasium
Olympic Indoor Swim Center Additions & Renovations
Arlington Heights, Illinois
Saturday

Parking Description		Parking Type	Parking Supply	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM
Existing Conditions											
Main Parking Lot											
A	Parking Lot	Regular	185	35	60	53	99	134	173	185	165
		Handicap	6	0	0	0	0	3	4	4	3
Salem Avenue (On-Street)											
B	Monitored for Park Use Only	--	--	0	0	0	0	0	0	0	0
Ridge Avenue (On-Street)											
C	Monitored for Park Use Only	--	--	0	0	0	2	1	3	14	12
TOTAL			191	35	60	53	101	138	180	203	180
Percent Occupied			100%	18.3%	31.4%	27.7%	52.9%	72.3%	94.2%	106.3%	94.2%
Proposed Fitness Center											
ITE Projected Demand - 106 Spaces		--	75	100	101	106	92	87	83	77	82
Time of Day Distribution per ITE Parking Generation, 4th Edition, LUC 492				*94%*	*95%*	*100%*	*87%*	*82%*	*78%*	*73%*	*77%*
Percent Occupied			100%	133.3%	134.7%	141.3%	122.7%	116.0%	110.7%	102.7%	109.3%
Total (Existing and Proposed)			266	135	161	159	193	225	263	280	262
Percent Occupied			100%	50.8%	60.5%	59.8%	72.6%	84.6%	98.9%	105.3%	98.5%
Total Available			-	131	105	107	73	41	3	-14	4

Key

- 100%-85% Occupied
- 85%-60% Occupied
- 60%-0% Occupied

Note: An additional 60 parking spaces are available on-street (15 on Salem Avenue and 45 on Ridge Avenue) in close proximity of the site, which could readily accommodate overflow parking, if needed.

GHA GEWALT HAMILTON ASSOCIATES, INC.

Appendices

GHA GEWALT HAMILTON ASSOCIATES, INC.

Appendix A
Existing Traffic Count Summaries

GHA GEWALT HAMILTON ASSOCIATES, INC.

Euclid Avenue at Northwest Highway & Salem Ave (5-legged intersection) - TMC

Tue Nov 7, 2017
Full Length (6AM-9AM, 3PM-7PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 468354, Location: 42.088386, -87.992568

GEWALT HAMILTON ASSOCIATES, INC.

Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive,
Vernon Hills, IL, 60061, US

Leg	Euclid Ave							Euclid Ave							Salem Ave						
Direction	Eastbound							Westbound							Southbound						
Time	HL	L	T	BR	U	App	Ped*	HL	T	BR	R	U	App	Ped*	L	BL	R	HR	U	App	Ped*
2017-11-07 6:00AM	1	0	48	17	0	**66**	0	0	31	3	0	0	**34**	0	0	0	0	1	0	**1**	0
6:15AM	5	0	65	32	0	**102**	0	0	55	7	0	0	**62**	1	0	0	0	0	0	**0**	1
6:30AM	4	0	98	25	0	**127**	0	0	56	12	0	0	**68**	1	0	0	0	0	0	**0**	3
6:45AM	8	0	94	36	0	**138**	0	0	82	7	0	0	**89**	0	0	0	0	2	0	**2**	1
Hourly Total	18	0	305	110	0	**433**	0	0	224	29	0	0	**253**	2	0	0	0	3	0	**3**	5
7:00AM	3	0	146	56	0	**205**	0	0	63	5	0	0	**68**	0	1	0	0	1	0	**2**	1
7:15AM	4	0	171	57	0	**232**	0	0	111	8	0	0	**119**	0	0	0	0	0	0	**0**	0
7:30AM	2	0	172	42	0	**216**	0	0	124	9	0	0	**133**	0	0	3	0	0	0	**3**	0
7:45AM	5	0	111	56	0	**172**	0	0	118	11	1	0	**130**	0	0	3	1	0	0	**4**	0
Hourly Total	14	0	600	211	0	**825**	0	0	416	33	1	0	**450**	0	1	6	1	1	0	**9**	1
8:00AM	3	0	141	47	0	**191**	0	0	104	11	1	0	**116**	1	0	0	0	1	0	**1**	1
8:15AM	3	0	132	48	0	**183**	0	0	138	24	0	0	**162**	0	0	1	0	1	0	**2**	0
8:30AM	4	0	95	45	0	**144**	0	0	93	10	0	0	**103**	0	0	0	0	0	0	**0**	1
8:45AM	8	0	120	50	0	**178**	0	0	116	12	0	0	**128**	0	0	1	0	2	0	**3**	2
Hourly Total	18	0	488	190	0	**696**	0	0	451	57	1	0	**509**	1	0	2	0	4	0	**6**	4
3:00PM	6	0	103	40	0	**149**	0	0	111	11	0	0	**122**	0	1	0	1	0	0	**2**	0
3:15PM	4	0	111	60	0	**175**	0	0	104	21	0	0	**125**	0	0	1	0	0	0	**1**	0
3:30PM	9	2	121	48	0	**180**	0	0	137	20	0	0	**157**	1	1	2	1	0	0	**4**	2
3:45PM	15	0	97	46	0	**158**	0	0	98	21	0	0	**119**	1	0	1	1	1	0	**3**	1
Hourly Total	34	2	432	194	0	**662**	0	0	450	73	0	0	**523**	2	2	4	3	1	0	**10**	3
4:00PM	7	0	100	49	0	**156**	0	0	171	19	0	0	**190**	1	1	0	1	2	0	**4**	2
4:15PM	8	0	117	63	0	**188**	0	0	97	16	0	0	**113**	1	1	0	0	0	0	**1**	2
4:30PM	10	3	128	52	0	**193**	0	0	159	25	1	0	**185**	0	0	0	0	1	0	**1**	0
4:45PM	6	0	135	62	0	**203**	0	0	117	21	1	0	**139**	1	0	1	0	1	0	**2**	3
Hourly Total	31	3	480	226	0	**740**	0	0	544	81	2	0	**627**	3	2	1	1	4	0	**8**	7
5:00PM	4	0	114	39	0	**157**	0	0	147	11	0	0	**158**	2	0	1	1	1	0	**3**	1
5:15PM	9	0	120	66	0	**195**	0	0	155	15	0	0	**170**	0	0	0	1	0	0	**1**	0
5:30PM	7	0	109	47	0	**163**	0	0	123	21	0	0	**144**	1	0	1	0	0	0	**1**	0
5:45PM	3	1	105	58	0	**167**	0	1	111	12	0	0	**124**	1	0	0	0	0	0	**0**	0
Hourly Total	23	1	448	210	0	**682**	0	1	536	59	0	0	**596**	4	0	2	2	1	0	**5**	1
6:00PM	5	5	97	41	0	**148**	0	0	98	16	0	0	**114**	3	0	0	0	0	0	**0**	1
6:15PM	8	8	93	31	0	**140**	0	0	104	14	0	0	**118**	0	0	0	0	0	0	**0**	0
6:30PM	5	6	89	34	0	**134**	0	0	81	11	0	0	**92**	2	0	0	0	1	0	**1**	0
6:45PM	4	4	79	35	0	**122**	0	0	68	15	1	0	**84**	0	0	0	0	1	0	**1**	0
Hourly Total	22	23	358	141	0	**544**	0	0	351	56	1	0	**408**	5	0	0	0	2	0	**2**	1
Total	160	29	3111	1282	0	**4582**	0	1	2972	388	5	0	**3366**	17	5	15	7	16	0	**43**	22
% Approach	3.5%	0.6%	67.9%	28.0%	0%	**-**	-	0%	88.3%	11.5%	0.1%	0%	**-**	-	11.6%	34.9%	16.3%	37.2%	0%	**-**	-
% Total	1.0%	0.2%	19.4%	8.0%	0%	**28.6%**	-	0%	18.6%	2.4%	0%	0%	**21.0%**	-	0%	0.1%	0%	0.1%	0%	**0.3%**	-
Lights	153	28	3059	1225	0	**4465**	-	1	2929	367	5	0	**3302**	-	4	15	7	14	0	**40**	-
% Lights	95.6%	96.6%	98.3%	95.6%	0%	**97.4%**	-	100%	98.6%	94.6%	100%	0%	**98.1%**	-	80.0%	100%	100%	87.5%	0%	**93.0%**	-
Articulated Trucks	2	1	15	9	0	**27**	-	0	11	11	0	0	**22**	-	0	0	0	0	0	**0**	-
% Articulated Trucks	1.3%	3.4%	0.5%	0.7%	0%	**0.6%**	-	0%	0.4%	2.8%	0%	0%	**0.7%**	-	0%	0%	0%	0%	0%	**0%**	-
Buses and Single-Unit Trucks	5	0	37	40	0	**82**	-	0	32	10	0	0	**42**	-	0	0	0	1	0	**1**	-
% Buses and Single-Unit Trucks	3.1%	0%	1.2%	3.1%	0%	**1.8%**	-	0%	1.1%	2.6%	0%	0%	**1.2%**	-	0%	0%	0%	6.3%	0%	**2.3%**	-
Bicycles on Road	0	0	0	8	0	**8**	-	0	0	0	0	0	**0**	-	1	0	0	1	0	**2**	-
% Bicycles on Road	0%	0%	0%	0.6%	0%	**0.2%**	-	0%	0%	0%	0%	0%	**0%**	-	20.0%	0%	0%	6.3%	0%	**4.7%**	-
Pedestrians	-	-	-	-	-	-	0	-	-	-	-	-	-	13	-	-	-	-	-	-	18
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	76.5%	-	-	-	-	-	-	81.8%
Bicycles on Crosswalk	-	-	-	-	-	-	0	-	-	-	-	-	-	4	-	-	-	-	-	-	4
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	23.5%	-	-	-	-	-	-	18.2%

*Pedestrians and Bicycles on Crosswalk. BL: Bear left, BR: Bear right, HL: Hard left, HR: Hard right, L: Left, R: Right, T: Thru, U: U-Turn

Euclid Avenue at Northwest Highway & Salem Ave (5-legged intersection) - TMC

Tue Nov 7, 2017
Full Length (6AM-9AM, 3PM-7PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 468354, Location: 42.088386, -87.992568

GEWALT HAMILTON ASSOCIATES, INC.

Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive,
Vernon Hills, IL, 60061, US

Leg	US-14							US-14							
Direction	Southeastbound							Northwestbound							
Time	HL	BL	T	HR	U	App	Ped*	BL	T	BR	HR	U	App	Ped*	Int
2017-11-07 6:00AM	0	9	75	2	0	**86**	0	11	32	0	0	0	**43**	0	**230**
6:15AM	0	10	77	4	0	**91**	0	22	42	0	0	0	**64**	0	**319**
6:30AM	0	14	85	3	0	**102**	0	33	63	1	0	0	**97**	0	**394**
6:45AM	1	14	88	10	0	**113**	0	39	63	0	0	0	**102**	0	**444**
Hourly Total	1	47	325	19	0	**392**	0	105	200	1	0	0	**306**	0	**1387**
7:00AM	0	22	120	10	0	**152**	0	41	86	0	1	0	**128**	0	**555**
7:15AM	0	15	102	8	0	**125**	0	51	81	0	0	0	**132**	0	**608**
7:30AM	0	18	106	13	0	**137**	0	59	92	0	0	0	**151**	0	**640**
7:45AM	0	22	122	13	0	**157**	0	43	113	0	0	0	**156**	0	**619**
Hourly Total	0	77	450	44	0	**571**	0	194	372	0	1	0	**567**	0	**2422**
8:00AM	1	24	91	8	0	**124**	0	54	106	1	0	0	**161**	0	**593**
8:15AM	0	26	102	16	0	**144**	0	51	117	1	1	0	**170**	0	**661**
8:30AM	0	11	128	19	0	**158**	0	52	112	1	0	0	**165**	0	**570**
8:45AM	1	13	97	5	0	**116**	1	49	96	1	1	0	**147**	0	**572**
Hourly Total	2	74	418	48	0	**542**	1	206	431	4	2	0	**643**	0	**2396**
3:00PM	0	12	84	8	0	**104**	2	54	138	4	0	0	**196**	1	**573**
3:15PM	0	19	75	15	0	**109**	0	55	125	1	0	1	**182**	0	**592**
3:30PM	0	9	109	4	0	**122**	0	54	180	0	0	0	**234**	1	**697**
3:45PM	0	25	113	15	0	**153**	0	70	142	0	0	0	**212**	1	**645**
Hourly Total	0	65	381	42	0	**488**	2	233	585	5	0	1	**824**	3	**2507**
4:00PM	0	15	115	8	0	**138**	0	50	149	0	0	0	**199**	1	**687**
4:15PM	0	19	122	9	0	**150**	0	55	164	2	0	0	**221**	2	**673**
4:30PM	0	13	93	9	0	**115**	0	64	149	0	1	0	**214**	0	**708**
4:45PM	0	13	108	11	0	**132**	0	57	135	0	0	0	**192**	1	**668**
Hourly Total	0	60	438	37	0	**535**	0	226	597	2	1	0	**826**	4	**2736**
5:00PM	0	10	91	9	0	**110**	1	62	175	0	1	0	**238**	2	**666**
5:15PM	0	20	86	8	0	**114**	0	59	158	2	0	0	**219**	1	**699**
5:30PM	0	23	75	6	0	**104**	0	62	125	1	1	0	**189**	1	**601**
5:45PM	1	16	87	8	0	**112**	0	39	140	0	2	0	**181**	0	**584**
Hourly Total	1	69	339	31	0	**440**	1	222	598	3	4	0	**827**	4	**2550**
6:00PM	0	12	91	6	0	**109**	0	36	126	3	1	0	**166**	1	**537**
6:15PM	0	13	81	6	0	**100**	0	63	137	1	3	0	**204**	0	**562**
6:30PM	0	16	82	2	0	**100**	0	24	115	0	0	0	**139**	0	**466**
6:45PM	0	12	80	7	0	**99**	0	35	99	0	5	0	**139**	0	**445**
Hourly Total	0	53	334	21	0	**408**	0	158	477	4	9	0	**648**	1	**2010**
Total	4	445	2685	242	0	**3376**	4	1344	3260	19	17	1	**4641**	12	**16008**
% Approach	0.1%	13.2%	79.5%	7.2%	0%	-	-	29.0%	70.2%	0.4%	0.4%	0%	-	-	-
% Total	0%	2.8%	16.8%	1.5%	0%	**21.1%**	-	8.4%	20.4%	0.1%	0.1%	0%	**29.0%**	-	-
Lights	4	427	2609	237	0	**3277**	-	1316	3175	18	17	1	**4527**	-	15611
% Lights	100%	96.0%	97.2%	97.9%	0%	**97.1%**	-	97.9%	97.4%	94.7%	100%	100%	**97.5%**	-	97.5%
Articulated Trucks	0	10	24	1	0	**35**	-	4	26	0	0	0	**30**	-	114
% Articulated Trucks	0%	2.2%	0.9%	0.4%	0%	**1.0%**	-	0.3%	0.8%	0%	0%	0%	**0.6%**	-	0.7%
Buses and Single-Unit Trucks	0	8	47	3	0	**58**	-	24	59	1	0	0	**84**	-	267
% Buses and Single-Unit Trucks	0%	1.8%	1.8%	1.2%	0%	**1.7%**	-	1.8%	1.8%	5.3%	0%	0%	**1.8%**	-	1.7%
Bicycles on Road	0	0	5	1	0	**6**	-	0	0	0	0	0	**0**	-	16
% Bicycles on Road	0%	0%	0.2%	0.4%	0%	**0.2%**	-	0%	0%	0%	0%	0%	**0%**	-	0.1%
Pedestrians	-	-	-	-	-	-	4	-	-	-	-	-	-	7	
% Pedestrians	-	-	-	-	-	-	100%	-	-	-	-	-	-	58.3%	-
Bicycles on Crosswalk	-	-	-	-	-	-	0	-	-	-	-	-	-	5	
% Bicycles on Crosswalk	-	-	-	-	-	-	0%	-	-	-	-	-	-	41.7%	-

*Pedestrians and Bicycles on Crosswalk. BL: Bear left, BR: Bear right, HL: Hard left, HR: Hard right, L: Left, R: Right, T: Thru, U:

Euclid/Northwest Hwy/SalemAve (5-legged intersection) - TMC

Sat Nov 4, 2017
Full Length (10AM-2PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 468367, Location: 42.088376, -87.992538

GEWALT HAMILTON ASSOCIATES, INC.

Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive,
Vernon Hills, IL, 60061, US

Leg	Euclid Ave							Euclid Ave							Salem Ave						
Direction	Eastbound							Westbound							Southbound						
Time	HL	L	T	BR	U	App	Ped*	HL	T	BR	R	U	App	Ped*	L	BL	R	HR	U	App	Ped*
2017-11-04 10:00AM	5	0	70	41	0	**116**	0	0	72	14	0	0	**86**	0	0	1	0	2	0	**3**	0
10:15AM	11	0	84	46	0	**141**	0	0	67	13	0	0	**80**	0	0	2	0	0	0	**2**	0
10:30AM	4	0	94	34	0	**132**	0	0	83	18	1	0	**102**	0	0	0	0	0	0	**0**	0
10:45AM	3	0	64	40	0	**107**	0	0	79	19	0	0	**98**	0	0	0	0	0	0	**0**	0
Hourly Total	23	0	312	161	0	**496**	0	0	301	64	1	0	**366**	0	0	3	0	2	0	**5**	0
11:00AM	7	0	73	27	0	**107**	0	0	69	10	0	0	**79**	0	1	0	0	1	0	**2**	0
11:15AM	12	0	92	31	0	**135**	0	0	103	15	0	0	**118**	1	0	1	1	0	0	**2**	1
11:30AM	10	0	91	37	0	**138**	0	0	75	11	0	0	**86**	3	0	1	0	0	0	**1**	2
11:45AM	5	0	103	52	0	**160**	0	0	90	11	0	0	**101**	0	1	3	0	0	0	**4**	0
Hourly Total	34	0	359	147	0	**540**	0	0	337	47	0	0	**384**	4	2	5	1	1	0	**9**	3
12:00PM	3	0	82	40	0	**125**	0	0	99	26	0	0	**125**	0	0	1	0	0	0	**1**	1
12:15PM	8	0	89	47	0	**144**	0	0	81	9	0	0	**90**	0	0	0	0	0	0	**0**	0
12:30PM	3	0	86	43	0	**132**	0	0	74	17	0	0	**91**	0	1	1	0	0	0	**2**	2
12:45PM	7	0	71	37	0	**115**	0	0	92	20	2	0	**114**	0	1	1	1	1	0	**4**	1
Hourly Total	21	0	328	167	0	**516**	0	0	346	72	2	0	**420**	0	2	3	1	1	0	**7**	4
1:00PM	4	0	78	42	0	**124**	0	0	101	21	0	0	**122**	0	1	0	1	0	0	**2**	0
1:15PM	6	0	72	41	0	**119**	0	2	99	26	0	0	**127**	0	0	0	0	3	0	**3**	0
1:30PM	4	0	107	49	0	**160**	0	0	81	12	1	0	**94**	0	0	2	0	0	0	**2**	0
1:45PM	5	1	87	21	0	**114**	0	0	78	11	0	0	**89**	2	0	0	0	0	0	**0**	2
Hourly Total	19	1	344	153	0	**517**	0	2	359	70	1	0	**432**	2	1	2	1	3	0	**7**	2
Total	97	1	1343	628	0	**2069**	0	2	1343	253	4	0	**1602**	6	5	13	3	7	0	**28**	9
% Approach	4.7%	0%	64.9%	30.4%	0%	**-**	-	0.1%	83.8%	15.8%	0.2%	0%	**-**	-	17.9%	46.4%	10.7%	25.0%	0%	**-**	-
% Total	1.2%	0%	16.7%	7.8%	0%	**25.8%**	-	0%	16.7%	3.2%	0%	0%	**20.0%**	-	0.1%	0.2%	0%	0.1%	0%	**0.3%**	-
Lights	96	1	1337	623	0	**2057**	-	2	1336	250	4	0	**1592**	-	5	13	3	7	0	**28**	-
% Lights	99.0%	100%	99.6%	99.2%	0%	**99.4%**	-	100%	99.5%	98.8%	100%	0%	**99.4%**	-	100%	100%	100%	100%	0%	**100%**	-
Articulated Trucks	0	0	0	0	0	**0**	-	0	1	1	0	0	**2**	-	0	0	0	0	0	**0**	-
% Articulated Trucks	0%	0%	0%	0%	0%	**0%**	-	0%	0.1%	0.4%	0%	0%	**0.1%**	-	0%	0%	0%	0%	0%	**0%**	-
Buses and Single-Unit Trucks	1	0	6	5	0	**12**	-	0	6	2	0	0	**8**	-	0	0	0	0	0	**0**	-
% Buses and Single-Unit Trucks	1.0%	0%	0.4%	0.8%	0%	**0.6%**	-	0%	0.4%	0.8%	0%	0%	**0.5%**	-	0%	0%	0%	0%	0%	**0%**	-
Bicycles on Road	0	0	0	0	0	**0**	-	0	0	0	0	0	**0**	-	0	0	0	0	0	**0**	-
% Bicycles on Road	0%	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	0%	**0%**	-
Pedestrians	-	-	-	-	-	-	0	-	-	-	-	-	-	5	-	-	-	-	-	-	8
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	83.3%	-	-	-	-	-	-	88.9%
Bicycles on Crosswalk	-	-	-	-	-	-	0	-	-	-	-	-	-	1	-	-	-	-	-	-	1
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	16.7%	-	-	-	-	-	-	11.1%

*Pedestrians and Bicycles on Crosswalk. BL: Bear left, BR: Bear right, HL: Hard left, HR: Hard right, L: Left, R: Right, T: Thru, U: U-Turn

Euclid/Northwest Hwy/SalemAve (5-legged intersection) - TMC

Sat Nov 4, 2017
Full Length (10AM-2PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 468367, Location: 42.088376, -87.992538

GEWALT HAMILTON ASSOCIATES, INC.

Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive,
Vernon Hills, IL, 60061, US

Leg	US-14							US-14							
Direction	Southeastbound							Northwestbound							
Time	HL	BL	T	HR	U	App	Ped*	BL	T	BR	HR	U	App	Ped*	Int
2017-11-04 10:00AM	1	16	76	6	0	**99**	0	38	82	0	1	0	**121**	0	**425**
10:15AM	0	18	96	10	0	**124**	0	32	118	0	2	0	**152**	0	**499**
10:30AM	0	10	89	4	0	**103**	0	44	101	0	1	0	**146**	0	**483**
10:45AM	0	13	126	7	0	**146**	0	53	107	1	1	0	**162**	0	**513**
Hourly Total	1	57	387	27	0	**472**	0	167	408	1	5	0	**581**	0	**1920**
11:00AM	2	14	112	7	0	**135**	0	30	119	0	2	0	**151**	2	**474**
11:15AM	0	19	92	13	0	**124**	0	44	121	0	3	0	**168**	1	**547**
11:30AM	0	22	101	14	0	**137**	0	48	126	0	1	0	**175**	0	**537**
11:45AM	1	21	88	6	0	**116**	1	60	115	0	2	0	**177**	0	**558**
Hourly Total	3	76	393	40	0	**512**	1	182	481	0	8	0	**671**	3	**2116**
12:00PM	0	20	91	12	0	**123**	0	65	99	0	3	0	**167**	0	**541**
12:15PM	1	25	71	2	0	**99**	0	47	80	0	2	0	**129**	0	**462**
12:30PM	0	8	104	6	0	**118**	0	41	95	0	0	0	**136**	0	**479**
12:45PM	0	17	97	4	0	**118**	2	57	84	0	3	0	**144**	0	**495**
Hourly Total	1	70	363	24	0	**458**	2	210	358	0	8	0	**576**	0	**1977**
1:00PM	0	27	87	7	0	**121**	0	49	103	0	1	0	**153**	0	**522**
1:15PM	1	11	88	3	0	**103**	0	33	103	0	7	0	**143**	1	**495**
1:30PM	0	14	96	4	0	**114**	0	50	91	1	1	0	**143**	0	**513**
1:45PM	0	19	94	7	0	**120**	0	34	121	0	4	0	**159**	0	**482**
Hourly Total	1	71	365	21	0	**458**	0	166	418	1	13	0	**598**	1	**2012**
Total	6	274	1508	112	0	**1900**	3	725	1665	2	34	0	**2426**	4	**8025**
% Approach	0.3%	14.4%	79.4%	5.9%	0%	-	-	29.9%	68.6%	0.1%	1.4%	0%	-	-	-
% Total	0.1%	3.4%	18.8%	1.4%	0%	**23.7%**	-	9.0%	20.7%	0%	0.4%	0%	**30.2%**	-	-
Lights	6	267	1491	110	0	**1874**	-	722	1649	2	34	0	**2407**	-	7958
% Lights	100%	97.4%	98.9%	98.2%	0%	**98.6%**	-	99.6%	99.0%	100%	100%	0%	**99.2%**	-	99.2%
Articulated Trucks	0	4	3	0	0	**7**	-	1	1	0	0	0	**2**	-	11
% Articulated Trucks	0%	1.5%	0.2%	0%	0%	**0.4%**	-	0.1%	0.1%	0%	0%	0%	**0.1%**	-	0.1%
Buses and Single-Unit Trucks	0	2	14	2	0	**18**	-	2	15	0	0	0	**17**	-	55
% Buses and Single-Unit Trucks	0%	0.7%	0.9%	1.8%	0%	**0.9%**	-	0.3%	0.9%	0%	0%	0%	**0.7%**	-	0.7%
Bicycles on Road	0	1	0	0	0	**1**	-	0	0	0	0	0	**0**	-	1
% Bicycles on Road	0%	0.4%	0%	0%	0%	**0.1%**	-	0%	0%	0%	0%	0%	**0%**	-	0%
Pedestrians	-	-	-	-	-	-	3	-	-	-	-	-	-	4	
% Pedestrians	-	-	-	-	-	-	100%	-	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	-	0	-	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	0%	-	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. BL: Bear left, BR: Bear right, HL: Hard left, HR: Hard right, L: Left, R: Right, T: Thru, U: U-Turn

Euclid Ave & Ridge Ave (both north & south legs) - TMC
Tue Nov 7, 2017
Full Length (6AM-9AM, 3PM-7PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 468346, Location: 42.088316, -87.990149

GEWALT HAMILTON ASSOCIATES, INC.

Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive,
Vernon Hills, IL, 60061, US

Leg	Euclid Ave						Euclid Ave						Ridge Ave						Ridge Ave						
Direction	Eastbound						Westbound						Northbound						Southbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2017-11-07 6:00AM	1	53	0	0	**54**	0	0	36	1	0	**37**	0	0	0	0	0	**0**	0	1	3	3	0	**7**	0	**98**
6:15AM	2	80	0	0	**82**	0	1	57	4	0	**62**	0	0	0	0	0	**0**	0	1	4	0	0	**5**	0	**149**
6:30AM	2	104	0	0	**106**	0	0	73	2	0	**75**	0	0	0	0	0	**0**	0	4	1	0	0	**5**	1	**186**
6:45AM	4	109	1	0	**114**	0	1	75	4	0	**80**	0	1	0	0	0	**1**	0	2	2	0	0	**4**	1	**199**
Hourly Total	9	346	1	0	**356**	0	2	241	11	0	**254**	0	1	0	0	0	**1**	0	8	10	3	0	**21**	2	**632**
7:00AM	9	144	1	0	**154**	0	1	64	2	0	**67**	0	0	0	0	0	**0**	0	6	2	1	0	**9**	1	**230**
7:15AM	9	156	0	0	**165**	0	0	111	2	0	**113**	0	0	1	0	0	**1**	0	4	4	3	0	**11**	0	**290**
7:30AM	18	161	0	0	**179**	0	0	124	6	0	**130**	0	0	0	0	0	**0**	0	5	2	5	0	**12**	0	**321**
7:45AM	18	136	0	0	**154**	0	0	143	3	0	**146**	1	0	1	0	0	**1**	0	1	2	0	0	**3**	0	**304**
Hourly Total	54	597	1	0	**652**	0	1	442	13	0	**456**	1	0	2	0	0	**2**	0	16	10	9	0	**35**	1	**1145**
8:00AM	18	133	1	0	**152**	0	1	106	8	0	**115**	0	1	1	0	0	**2**	0	3	0	5	0	**8**	2	**277**
8:15AM	27	139	0	0	**166**	0	2	140	35	0	**177**	0	0	3	1	0	**4**	1	6	3	20	0	**29**	0	**376**
8:30AM	6	107	1	0	**114**	0	1	103	11	0	**115**	0	0	2	0	0	**2**	0	15	4	13	0	**32**	1	**263**
8:45AM	13	106	1	0	**120**	0	1	121	3	0	**125**	0	1	1	2	0	**4**	1	5	3	3	0	**11**	1	**260**
Hourly Total	64	485	3	0	**552**	0	5	470	57	0	**532**	0	2	7	3	0	**12**	2	29	10	41	0	**80**	4	**1176**
3:00PM	5	112	1	0	**118**	0	0	127	3	0	**130**	0	0	1	1	0	**2**	2	6	1	6	0	**13**	0	**263**
3:15PM	19	113	0	0	**132**	1	2	122	15	0	**139**	0	1	1	1	0	**3**	0	1	1	8	0	**10**	0	**284**
3:30PM	13	118	0	0	**131**	0	1	129	20	0	**150**	0	1	1	2	0	**4**	3	2	2	12	0	**16**	1	**301**
3:45PM	8	112	0	0	**120**	0	2	138	14	0	**154**	0	0	1	1	0	**2**	0	4	1	9	0	**14**	0	**290**
Hourly Total	45	455	1	0	**501**	1	5	516	52	0	**573**	0	2	4	5	0	**11**	5	13	5	35	0	**53**	1	**1138**
4:00PM	5	106	1	0	**112**	0	1	153	7	0	**161**	0	0	0	3	0	**3**	2	3	1	8	0	**12**	0	**288**
4:15PM	8	121	0	0	**129**	0	1	140	6	0	**147**	0	0	0	1	0	**1**	2	4	1	8	0	**13**	0	**290**
4:30PM	11	148	0	0	**159**	0	1	149	11	0	**161**	0	0	0	2	0	**2**	0	3	1	5	0	**9**	0	**331**
4:45PM	18	135	0	0	**153**	0	0	131	24	0	**155**	0	0	2	1	0	**3**	0	13	1	9	0	**23**	1	**334**
Hourly Total	42	510	1	0	**553**	0	3	573	48	0	**624**	0	0	2	7	0	**9**	4	23	4	30	0	**57**	1	**1243**
5:00PM	8	103	0	0	**111**	0	0	152	12	0	**164**	0	0	6	8	0	**14**	0	7	3	8	0	**18**	0	**307**
5:15PM	14	126	1	0	**141**	0	0	161	8	0	**169**	0	1	3	1	0	**5**	0	5	3	10	0	**18**	0	**333**
5:30PM	7	132	2	1	**142**	0	1	138	13	0	**152**	0	0	1	3	0	**4**	0	1	4	5	0	**10**	0	**308**
5:45PM	13	126	1	0	**140**	0	1	109	22	0	**132**	0	0	2	0	0	**2**	0	10	0	13	0	**23**	1	**297**
Hourly Total	42	487	4	1	**534**	0	2	560	55	0	**617**	0	1	12	12	0	**25**	0	23	10	36	0	**69**	1	**1245**
6:00PM	9	95	0	0	**104**	0	0	105	9	0	**114**	0	0	3	2	0	**5**	1	21	1	10	0	**32**	0	**255**
6:15PM	7	105	0	0	**112**	0	1	103	5	0	**109**	0	0	0	2	0	**2**	0	4	4	6	0	**14**	0	**237**
6:30PM	6	104	1	0	**111**	0	0	99	7	0	**106**	0	0	2	0	0	**2**	0	4	0	3	0	**7**	0	**226**
6:45PM	7	88	0	0	**95**	0	0	80	7	0	**87**	0	0	0	9	0	**9**	0	2	1	1	0	**4**	1	**195**
Hourly Total	29	392	1	0	**422**	0	1	387	28	0	**416**	0	0	5	13	0	**18**	1	31	6	20	0	**57**	1	**913**
Total	285	3272	12	1	**3570**	1	19	3189	264	0	**3472**	1	6	32	40	0	**78**	12	143	55	174	0	**372**	11	**7492**
% Approach	8.0%	91.7%	0.3%	0%	**-**	-	0.5%	91.8%	7.6%	0%	**-**	-	7.7%	41.0%	51.3%	0%	**-**	-	38.4%	14.8%	46.8%	0%	**-**	-	**-**
% Total	3.8%	43.7%	0.2%	0%	**47.7%**	-	0.3%	42.6%	3.5%	0%	**46.3%**	-	0.1%	0.4%	0.5%	0%	**1.0%**	-	1.9%	0.7%	2.3%	0%	**5.0%**	-	**-**
Lights	283	3192	12	1	**3488**	-	19	3126	263	0	**3408**	-	6	28	39	0	**73**	-	140	53	173	0	**366**	-	7335
% Lights	99.3%	97.6%	100%	100%	**97.7%**	-	100%	98.0%	99.6%	0%	**98.2%**	-	100%	87.5%	97.5%	0%	**93.6%**	-	97.9%	96.4%	99.4%	0%	**98.4%**	-	97.9%
Articulated Trucks	0	27	0	0	**27**	-	0	20	0	0	**20**	-	0	1	1	0	**2**	-	1	0	1	0	**2**	-	51
% Articulated Trucks	0%	0.8%	0%	0%	**0.8%**	-	0%	0.6%	0%	0%	**0.6%**	-	0%	3.1%	2.5%	0%	**2.6%**	-	0.7%	0%	0.6%	0%	**0.5%**	-	0.7%
Buses and Single-Unit Trucks	2	53	0	0	**55**	-	0	43	1	0	**44**	-	0	3	0	0	**3**	-	2	1	0	0	**3**	-	105
% Buses and Single-Unit Trucks	0.7%	1.6%	0%	0%	**1.5%**	-	0%	1.3%	0.4%	0%	**1.3%**	-	0%	9.4%	0%	0%	**3.8%**	-	1.4%	1.8%	0%	0%	**0.8%**	-	1.4%
Bicycles on Road	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	1	0	0	**1**	-	1
% Bicycles on Road	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	1.8%	0%	0%	**0.3%**	-	0%
Pedestrians	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	9	-	-	-	-	-	10	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	75.0%	-	-	-	-	-	90.9%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	3	-	-	-	-	-	1	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	25.0%	-	-	-	-	-	9.1%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Euclid Ave & Ridge Ave (both north & south legs) - TMC
Sat Nov 4, 2017
Full Length (10AM-2PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 468364, Location: 42.088304, -87.990149

GEWALT HAMILTON ASSOCIATES, INC.

Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive,
Vernon Hills, IL, 60061, US

Leg	Euclid Ave						Euclid Ave						Ridge Ave						Ridge Ave						
Direction	Eastbound						Westbound						Northbound						Southbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2017-11-04 10:00AM	1	83	0	0	**84**	0	1	86	9	0	**96**	0	0	0	3	0	**3**	0	8	1	4	0	**13**	0	**196**
10:15AM	7	99	0	0	**106**	0	0	73	11	0	**84**	0	0	1	4	0	**5**	0	8	0	2	0	**10**	0	**205**
10:30AM	7	93	0	0	**100**	0	1	92	5	0	**98**	0	0	0	3	0	**3**	0	3	3	10	0	**16**	0	**217**
10:45AM	7	72	2	0	**81**	0	0	93	7	0	**100**	0	1	0	0	0	**1**	0	9	1	9	0	**19**	0	**201**
Hourly Total	22	347	2	0	**371**	0	2	344	32	0	**378**	0	1	1	10	0	**12**	0	28	5	25	0	**58**	0	**819**
11:00AM	6	79	0	0	**85**	0	0	86	17	0	**103**	0	0	0	5	0	**5**	0	7	1	6	0	**14**	0	**207**
11:15AM	6	109	1	0	**116**	0	1	101	11	0	**113**	0	0	1	5	0	**6**	0	8	1	9	0	**18**	0	**253**
11:30AM	6	109	0	0	**115**	0	0	94	5	0	**99**	0	1	2	2	0	**5**	0	7	1	3	0	**11**	0	**230**
11:45AM	15	105	4	0	**124**	0	0	94	34	0	**128**	0	0	1	2	0	**3**	0	6	0	9	0	**15**	0	**270**
Hourly Total	33	402	5	0	**440**	0	1	375	67	0	**443**	0	1	4	14	0	**19**	0	28	3	27	0	**58**	0	**960**
12:00PM	10	97	0	0	**107**	1	0	107	10	0	**117**	0	0	1	3	0	**4**	2	17	3	8	0	**28**	3	**256**
12:15PM	9	103	2	0	**114**	0	0	87	8	0	**95**	0	0	1	4	0	**5**	0	6	2	10	0	**18**	1	**232**
12:30PM	9	93	0	0	**102**	0	0	98	25	0	**123**	0	0	6	4	0	**10**	0	9	2	8	0	**19**	1	**254**
12:45PM	7	91	3	0	**101**	0	2	107	35	0	**144**	0	1	2	5	0	**8**	0	14	4	6	0	**24**	1	**277**
Hourly Total	35	384	5	0	**424**	1	2	399	78	0	**479**	0	1	10	16	0	**27**	2	46	11	32	0	**89**	6	**1019**
1:00PM	16	85	0	0	**101**	0	0	115	32	0	**147**	0	0	3	1	0	**4**	0	19	3	9	0	**31**	0	**283**
1:15PM	8	85	0	0	**93**	0	0	101	22	0	**123**	0	1	1	0	0	**2**	0	19	3	20	0	**42**	2	**260**
1:30PM	9	104	0	0	**113**	0	0	89	16	0	**105**	0	0	2	3	0	**5**	0	6	4	8	0	**18**	0	**241**
1:45PM	16	102	1	0	**119**	0	1	103	22	0	**126**	1	0	3	2	0	**5**	0	1	2	3	0	**6**	0	**256**
Hourly Total	49	376	1	0	**426**	0	1	408	92	0	**501**	1	1	9	6	0	**16**	0	45	12	40	0	**97**	2	**1040**
Total	139	1509	13	0	**1661**	1	6	1526	269	0	**1801**	1	4	24	46	0	**74**	2	147	31	124	0	**302**	8	**3838**
% Approach	8.4%	90.8%	0.8%	0%	**-**	-	0.3%	84.7%	14.9%	0%	**-**	-	5.4%	32.4%	62.2%	0%	**-**	-	48.7%	10.3%	41.1%	0%	**-**	-	**-**
% Total	3.6%	39.3%	0.3%	0%	**43.3%**	-	0.2%	39.8%	7.0%	0%	**46.9%**	-	0.1%	0.6%	1.2%	0%	**1.9%**	-	3.8%	0.8%	3.2%	0%	**7.9%**	-	**-**
Lights	139	1496	13	0	**1648**	-	6	1513	269	0	**1788**	-	4	24	45	0	**73**	-	147	31	122	0	**300**	-	3809
% Lights	100%	99.1%	100%	0%	**99.2%**	-	100%	99.1%	100%	0%	**99.3%**	-	100%	100%	97.8%	0%	**98.6%**	-	100%	100%	98.4%	0%	**99.3%**	-	99.2%
Articulated Trucks	0	4	0	0	**4**	-	0	2	0	0	**2**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	6
% Articulated Trucks	0%	0.3%	0%	0%	**0.2%**	-	0%	0.1%	0%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.2%
Buses and Single-Unit Trucks	0	9	0	0	**9**	-	0	11	0	0	**11**	-	0	0	1	0	**1**	-	0	0	1	0	**1**	-	22
% Buses and Single-Unit Trucks	0%	0.6%	0%	0%	**0.5%**	-	0%	0.7%	0%	0%	**0.6%**	-	0%	0%	2.2%	0%	**1.4%**	-	0%	0%	0.8%	0%	**0.3%**	-	0.6%
Bicycles on Road	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	1	0	**1**	-	1
% Bicycles on Road	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0.8%	0%	**0.3%**	-	0%
Pedestrians	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	2	-	-	-	-	-	6	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	75.0%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	2	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	25.0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Ridge Ave & Olympic Indoor Swim Center Access - TMC

Tue Nov 7, 2017
Full Length (6AM-9AM, 3PM-7PM)
All Classes (Lights, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 468352, Location: 42.088662, -87.990205

GEWALT HAMILTON ASSOCIATES, INC.

Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive,
Vernon Hills, IL, 60061, US

Leg	Olympic Indoor Swim					Ridge Ave					Ridge Ave					
Direction	Eastbound					Northbound					Southbound					
Time	L	R	U	App	Ped*	L	T	U	App	Ped*	T	R	U	App	Ped*	Int
2017-11-07 6:00AM	0	0	0	**0**	0	1	1	0	**2**	0	7	0	0	**7**	0	**9**
6:15AM	0	0	0	**0**	0	3	3	0	**6**	0	6	0	0	**6**	0	**12**
6:30AM	1	2	0	**3**	0	1	3	0	**4**	0	6	1	0	**7**	0	**14**
6:45AM	2	2	0	**4**	2	3	5	0	**8**	1	6	4	0	**10**	1	**22**
Hourly Total	3	4	0	**7**	2	8	12	0	**20**	1	25	5	0	**30**	1	**57**
7:00AM	0	2	0	**2**	1	1	12	0	**13**	0	10	3	0	**13**	0	**28**
7:15AM	0	2	0	**2**	0	0	12	0	**12**	0	9	1	0	**10**	1	**24**
7:30AM	2	3	0	**5**	0	6	19	0	**25**	0	9	1	0	**10**	0	**40**
7:45AM	1	1	0	**2**	0	6	17	0	**23**	0	10	4	0	**14**	1	**39**
Hourly Total	3	8	0	**11**	1	13	60	0	**73**	0	38	9	0	**47**	2	**131**
8:00AM	1	3	0	**4**	1	4	24	0	**28**	0	4	3	0	**7**	9	**39**
8:15AM	11	13	0	**24**	1	10	49	1	**60**	0	17	7	0	**24**	29	**108**
8:30AM	2	1	0	**3**	0	0	19	0	**19**	0	28	1	0	**29**	1	**51**
8:45AM	1	0	0	**1**	0	0	17	0	**17**	0	12	3	0	**15**	2	**33**
Hourly Total	15	17	0	**32**	2	14	109	1	**124**	0	61	14	0	**75**	41	**231**
3:00PM	0	6	0	**6**	0	1	6	0	**7**	0	7	0	0	**7**	0	**20**
3:15PM	3	3	0	**6**	1	10	23	0	**33**	2	9	4	0	**13**	9	**52**
3:30PM	9	10	0	**19**	9	12	26	1	**39**	0	8	7	0	**15**	50	**73**
3:45PM	4	4	0	**8**	0	10	11	0	**21**	0	7	10	0	**17**	8	**46**
Hourly Total	16	23	0	**39**	10	33	66	1	**100**	2	31	21	0	**52**	67	**191**
4:00PM	1	3	0	**4**	0	3	9	0	**12**	0	9	1	0	**10**	0	**26**
4:15PM	0	0	0	**0**	0	1	12	0	**13**	0	13	1	0	**14**	2	**27**
4:30PM	2	4	0	**6**	1	6	16	0	**22**	0	7	2	0	**9**	0	**37**
4:45PM	12	13	0	**25**	0	25	20	0	**45**	0	11	17	0	**28**	1	**98**
Hourly Total	15	20	0	**35**	1	35	57	0	**92**	0	40	21	0	**61**	3	**188**
5:00PM	8	8	0	**16**	0	6	18	0	**24**	0	11	2	0	**13**	0	**53**
5:15PM	3	3	0	**6**	0	7	19	0	**26**	0	13	4	0	**17**	0	**49**
5:30PM	1	2	0	**3**	0	10	11	0	**21**	0	8	3	0	**11**	0	**35**
5:45PM	5	13	0	**18**	0	26	10	0	**36**	0	14	13	1	**28**	0	**82**
Hourly Total	17	26	0	**43**	0	49	58	0	**107**	0	46	22	1	**69**	0	**219**
6:00PM	22	23	0	**45**	1	11	10	0	**21**	0	11	5	0	**16**	0	**82**
6:15PM	7	7	0	**14**	1	5	8	0	**13**	0	5	0	0	**5**	0	**32**
6:30PM	1	1	0	**2**	0	6	9	0	**15**	0	7	0	0	**7**	0	**24**
6:45PM	2	2	0	**4**	0	8	5	0	**13**	0	2	2	0	**4**	0	**21**
Hourly Total	32	33	0	**65**	2	30	32	0	**62**	0	25	7	0	**32**	0	**159**
Total	101	131	0	**232**	18	182	394	2	**578**	3	266	99	1	**366**	114	**1176**
% Approach	43.5%	56.5%	0%	-	-	31.5%	68.2%	0.3%	-	-	72.7%	27.0%	0.3%	-	-	-
% Total	8.6%	11.1%	0%	**19.7%**	-	15.5%	33.5%	0.2%	**49.1%**	-	22.6%	8.4%	0.1%	**31.1%**	-	-
Lights	100	129	0	**229**	-	181	386	2	**569**	-	263	98	1	**362**	-	1160
% Lights	99.0%	98.5%	0%	**98.7%**	-	99.5%	98.0%	100%	**98.4%**	-	98.9%	99.0%	100%	**98.9%**	-	98.6%
Buses and Single-Unit Trucks	0	2	0	**2**	-	1	8	0	**9**	-	2	1	0	**3**	-	14
% Buses and Single-Unit Trucks	0%	1.5%	0%	**0.9%**	-	0.5%	2.0%	0%	**1.6%**	-	0.8%	1.0%	0%	**0.8%**	-	1.2%
Bicycles on Road	1	0	0	**1**	-	0	0	0	**0**	-	1	0	0	**1**	-	2
% Bicycles on Road	1.0%	0%	0%	**0.4%**	-	0%	0%	0%	**0%**	-	0.4%	0%	0%	**0.3%**	-	0.2%
Pedestrians	-	-	-	-	17	-	-	-	-	3	-	-	-	-	114	
% Pedestrians	-	-	-	-	94.4%	-	-	-	-	100%	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	1	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	5.6%	-	-	-	-	0%	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Ridge Ave & Olympic Indoor Swim Center Access - TMC

Sat Nov 4, 2017
Full Length (10AM-2PM)
All Classes (Lights, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 468363, Location: 42.088647, -87.990196

GEWALT HAMILTON ASSOCIATES, INC.

Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive,
Vernon Hills, IL, 60061, US

Leg	Olympic Indoor Swim					Ridge Ave					Ridge Ave					
Direction	Eastbound					Northbound					Southbound					
Time	L	R	U	App	Ped*	L	T	U	App	Ped*	T	R	U	App	Ped*	Int
2017-11-04 10:00AM	8	9	0	**17**	0	7	3	0	**10**	0	2	5	0	**7**	0	**34**
10:15AM	2	5	0	**7**	0	12	7	0	**19**	0	5	2	0	**7**	0	**33**
10:30AM	3	7	0	**10**	0	8	4	0	**12**	0	10	2	0	**12**	0	**34**
10:45AM	5	14	0	**19**	0	8	6	0	**14**	0	4	2	0	**6**	0	**39**
Hourly Total	18	35	0	**53**	0	35	20	0	**55**	0	21	11	0	**32**	0	**140**
11:00AM	3	6	1	**10**	0	18	4	0	**22**	0	9	2	0	**11**	0	**43**
11:15AM	5	10	0	**15**	0	10	8	1	**19**	0	6	4	1	**11**	0	**45**
11:30AM	4	7	0	**11**	0	4	9	0	**13**	0	5	2	0	**7**	2	**31**
11:45AM	1	7	0	**8**	0	44	6	1	**51**	0	8	18	0	**26**	1	**85**
Hourly Total	13	30	1	**44**	0	76	27	2	**105**	0	28	26	1	**55**	3	**204**
12:00PM	13	22	0	**35**	6	13	8	0	**21**	0	7	3	0	**10**	1	**66**
12:15PM	6	11	0	**17**	0	8	10	0	**18**	0	6	3	0	**9**	2	**44**
12:30PM	5	12	0	**17**	0	28	12	0	**40**	0	7	11	0	**18**	2	**75**
12:45PM	12	15	0	**27**	1	39	3	1	**43**	0	8	19	1	**28**	0	**98**
Hourly Total	36	60	0	**96**	7	88	33	1	**122**	0	28	36	1	**65**	5	**283**
1:00PM	16	29	0	**45**	0	39	11	0	**50**	0	6	8	0	**14**	1	**109**
1:15PM	18	30	0	**48**	1	30	2	0	**32**	0	10	6	0	**16**	5	**96**
1:30PM	3	10	0	**13**	0	22	5	0	**27**	0	7	6	0	**13**	0	**53**
1:45PM	4	1	0	**5**	0	31	9	0	**40**	0	5	9	0	**14**	3	**59**
Hourly Total	41	70	0	**111**	1	122	27	0	**149**	0	28	29	0	**57**	9	**317**
Total	108	195	1	**304**	8	321	107	3	**431**	0	105	102	2	**209**	17	**944**
% Approach	35.5%	64.1%	0.3%	**-**	-	74.5%	24.8%	0.7%	**-**	-	50.2%	48.8%	1.0%	**-**	-	**-**
% Total	11.4%	20.7%	0.1%	**32.2%**	-	34.0%	11.3%	0.3%	**45.7%**	-	11.1%	10.8%	0.2%	**22.1%**	-	**-**
Lights	108	195	1	**304**	-	321	107	3	**431**	-	104	102	2	**208**	-	943
% Lights	100%	100%	100%	**100%**	-	100%	100%	100%	**100%**	-	99.0%	100%	100%	**99.5%**	-	99.9%
Bicycles on Road	0	0	0	**0**	-	0	0	0	**0**	-	1	0	0	**1**	-	1
% Bicycles on Road	0%	0%	0%	**0%**	-	0%	0%	0%	**0%**	-	1.0%	0%	0%	**0.5%**	-	0.1%
Pedestrians	-	-	-	-	7	-	-	-	-	0	-	-	-	-	17	
% Pedestrians	-	-	-	-	87.5%	-	-	-	-	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	1	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	12.5%	-	-	-	-	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Elm Street at Ridge Avenue - TMC

Tue Nov 7, 2017
Full Length (6AM-9AM, 3PM-7PM)
All Classes (Lights, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road)
All Movements
ID: 468359, Location: 42.093006, -87.990189

GEWALT HAMILTON ASSOCIATES, INC.

Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg	Elm St						Elm St						Ridge Ave						Ridge Ave						
Direction	Eastbound						Westbound						Northbound						Southbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2017-11-07 6:00AM	0	2	0	0	**2**	1	2	0	1	0	**3**	0	0	1	0	0	**1**	0	0	3	0	0	**3**	0	**9**
6:15AM	0	4	0	0	**4**	0	0	1	0	0	**1**	0	0	3	0	0	**3**	0	0	3	0	0	**3**	0	**11**
6:30AM	0	5	0	0	**5**	0	1	0	0	0	**1**	0	0	2	0	0	**2**	0	1	4	0	0	**5**	0	**13**
6:45AM	0	13	1	0	**14**	0	1	2	1	0	**4**	0	1	4	1	0	**6**	0	1	5	0	0	**6**	1	**30**
Hourly Total	0	24	1	0	**25**	1	4	3	2	0	**9**	0	1	10	1	0	**12**	0	2	15	0	0	**17**	1	**63**
7:00AM	0	8	2	0	**10**	1	1	4	0	0	**5**	0	0	6	0	0	**6**	0	0	9	0	0	**9**	0	**30**
7:15AM	0	8	0	0	**8**	1	1	2	0	0	**3**	0	1	3	3	0	**7**	1	0	6	1	0	**7**	1	**25**
7:30AM	1	11	0	0	**12**	0	1	3	1	0	**5**	0	0	12	6	0	**18**	0	3	6	0	0	**9**	0	**44**
7:45AM	0	15	3	0	**18**	0	0	3	2	0	**5**	0	0	16	3	0	**19**	0	4	13	0	0	**17**	1	**59**
Hourly Total	1	42	5	0	**48**	2	3	12	3	0	**18**	0	1	37	12	0	**50**	1	7	34	1	0	**42**	2	**158**
8:00AM	1	8	0	0	**9**	0	0	7	0	0	**7**	0	0	8	5	0	**13**	0	0	15	4	0	**19**	0	**48**
8:15AM	0	12	1	0	**13**	2	0	9	1	0	**10**	0	3	28	9	0	**40**	1	2	11	0	0	**13**	3	**76**
8:30AM	1	11	1	0	**13**	0	0	9	1	0	**10**	1	2	16	3	0	**21**	0	0	7	1	0	**8**	0	**52**
8:45AM	0	12	3	0	**15**	0	0	3	0	0	**3**	0	1	11	1	0	**13**	2	0	4	0	0	**4**	4	**35**
Hourly Total	2	43	5	0	**50**	2	0	28	2	0	**30**	1	6	63	18	0	**87**	3	2	37	5	0	**44**	7	**211**
3:00PM	1	9	0	0	**10**	1	1	6	0	0	**7**	1	0	4	1	0	**5**	0	3	4	2	0	**9**	2	**31**
3:15PM	1	7	3	0	**11**	0	1	9	4	0	**14**	0	0	9	2	0	**11**	1	0	11	1	0	**12**	0	**48**
3:30PM	1	7	1	0	**9**	0	0	7	3	0	**10**	1	5	19	2	0	**26**	0	0	9	1	0	**10**	1	**55**
3:45PM	1	8	3	0	**12**	0	1	13	2	0	**16**	0	4	15	1	0	**20**	2	1	11	1	0	**13**	0	**61**
Hourly Total	4	31	7	0	**42**	1	3	35	9	0	**47**	2	9	47	6	0	**62**	3	4	35	5	0	**44**	3	**195**
4:00PM	1	9	1	0	**11**	0	0	8	0	0	**8**	0	1	4	3	0	**8**	0	2	6	0	0	**8**	0	**35**
4:15PM	0	9	2	0	**11**	0	1	11	0	0	**12**	1	0	7	3	0	**10**	0	1	6	1	0	**8**	4	**41**
4:30PM	1	6	1	0	**8**	0	2	10	0	0	**12**	0	2	8	3	0	**13**	1	1	5	2	0	**8**	1	**41**
4:45PM	1	10	4	0	**15**	0	2	5	1	0	**8**	0	5	16	2	0	**23**	0	2	14	0	0	**16**	0	**62**
Hourly Total	3	34	8	0	**45**	0	5	34	1	0	**40**	1	8	35	11	0	**54**	1	6	31	3	0	**40**	5	**179**
5:00PM	0	7	2	0	**9**	0	2	12	0	0	**14**	0	2	17	8	0	**27**	0	0	5	0	0	**5**	0	**55**
5:15PM	0	9	5	0	**14**	0	0	4	1	0	**5**	0	1	13	3	0	**17**	0	1	11	0	0	**12**	0	**48**
5:30PM	1	12	1	0	**14**	0	2	9	1	0	**12**	1	2	8	3	0	**13**	0	1	9	3	0	**13**	0	**52**
5:45PM	0	10	4	0	**14**	0	1	10	2	0	**13**	0	2	10	2	0	**14**	0	1	18	2	0	**21**	0	**62**
Hourly Total	1	38	12	0	**51**	0	5	35	4	0	**44**	1	7	48	16	0	**71**	0	3	43	5	0	**51**	0	**217**
6:00PM	0	10	2	0	**12**	0	1	11	1	0	**13**	0	3	14	9	0	**26**	0	0	9	0	0	**9**	0	**60**
6:15PM	0	7	1	0	**8**	0	0	9	1	0	**10**	0	6	10	0	0	**16**	0	0	3	0	0	**3**	0	**37**
6:30PM	0	9	0	0	**9**	0	1	13	1	0	**15**	0	3	4	0	0	**7**	0	1	2	0	0	**3**	0	**34**
6:45PM	0	3	0	0	**3**	0	0	6	0	0	**6**	0	1	4	1	0	**6**	0	2	4	0	0	**6**	1	**21**
Hourly Total	0	29	3	0	**32**	0	2	39	3	0	**44**	0	13	32	10	0	**55**	0	3	18	0	0	**21**	1	**152**
Total	11	241	41	0	**293**	6	22	186	24	0	**232**	5	45	272	74	0	**391**	8	27	213	19	0	**259**	19	**1175**
% Approach	3.8%	82.3%	14.0%	0%	**-**	-	9.5%	80.2%	10.3%	0%	**-**	-	11.5%	69.6%	18.9%	0%	**-**	-	10.4%	82.2%	7.3%	0%	**-**	-	**-**
% Total	0.9%	20.5%	3.5%	0%	**24.9%**	-	1.9%	15.8%	2.0%	0%	**19.7%**	-	3.8%	23.1%	6.3%	0%	**33.3%**	-	2.3%	18.1%	1.6%	0%	**22.0%**	-	**-**
Lights	10	230	40	0	**280**	-	22	178	21	0	**221**	-	45	268	73	0	**386**	-	26	209	18	0	**253**	-	1140
% Lights	90.9%	95.4%	97.6%	0%	**95.6%**	-	100%	95.7%	87.5%	0%	**95.3%**	-	100%	98.5%	98.6%	0%	**98.7%**	-	96.3%	98.1%	94.7%	0%	**97.7%**	-	97.0%
Buses and Single-Unit Trucks	1	7	1	0	**9**	-	0	4	2	0	**6**	-	0	2	1	0	**3**	-	1	2	1	0	**4**	-	22
% Buses and Single-Unit Trucks	9.1%	2.9%	2.4%	0%	**3.1%**	-	0%	2.2%	8.3%	0%	**2.6%**	-	0%	0.7%	1.4%	0%	**0.8%**	-	3.7%	0.9%	5.3%	0%	**1.5%**	-	1.9%
Bicycles on Road	0	4	0	0	**4**	-	0	4	1	0	**5**	-	0	2	0	0	**2**	-	0	2	0	0	**2**	-	13
% Bicycles on Road	0%	1.7%	0%	0%	**1.4%**	-	0%	2.2%	4.2%	0%	**2.2%**	-	0%	0.7%	0%	0%	**0.5%**	-	0%	0.9%	0%	0%	**0.8%**	-	1.1%
Pedestrians	-	-	-	-	-	6	-	-	-	-	-	5	-	-	-	-	-	8	-	-	-	-	-	19	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Elm Street at Ridge Avenue - TMC
Sat Nov 4, 2017
Full Length (10AM-2PM)
All Classes (Lights, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 468369, Location: 42.093039, -87.99021

GEWALT HAMILTON ASSOCIATES, INC.

Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive,
Vernon Hills, IL, 60061, US

Leg	Elm St						Elm St						Ridge Ave						Ridge Ave						
Direction	Eastbound						Westbound						Northbound						Southbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2017-11-04 10:00AM	2	8	2	0	**12**	0	0	6	0	0	**6**	0	3	6	2	0	**11**	0	1	4	1	0	**6**	0	**35**
10:15AM	0	8	0	0	**8**	0	0	1	0	0	**1**	0	0	5	2	0	**7**	0	0	4	1	0	**5**	0	**21**
10:30AM	0	4	1	0	**5**	0	0	7	1	0	**8**	0	0	2	1	0	**3**	0	2	7	0	0	**9**	2	**25**
10:45AM	1	6	2	0	**9**	0	0	4	1	0	**5**	0	0	10	3	0	**13**	2	0	4	1	0	**5**	0	**32**
Hourly Total	3	26	5	0	**34**	0	0	18	2	0	**20**	0	3	23	8	0	**34**	2	3	19	3	0	**25**	2	**113**
11:00AM	0	3	2	0	**5**	0	1	6	0	0	**7**	0	2	4	1	0	**7**	2	0	7	1	0	**8**	2	**27**
11:15AM	1	6	1	0	**8**	1	0	3	0	0	**3**	0	1	7	3	0	**11**	0	1	8	1	0	**10**	0	**32**
11:30AM	0	3	2	0	**5**	1	1	5	0	0	**6**	0	3	8	1	0	**12**	0	0	0	0	0	**0**	0	**23**
11:45AM	1	5	4	0	**10**	0	1	10	2	0	**13**	0	0	4	0	0	**4**	0	3	18	2	0	**23**	0	**50**
Hourly Total	2	17	9	0	**28**	2	3	24	2	0	**29**	0	6	23	5	0	**34**	2	4	33	4	0	**41**	2	**132**
12:00PM	1	5	2	0	**8**	0	0	7	1	0	**8**	0	2	13	3	0	**18**	0	1	6	1	0	**8**	0	**42**
12:15PM	0	9	0	0	**9**	0	2	8	1	0	**11**	0	1	11	1	0	**13**	0	2	3	1	0	**6**	1	**39**
12:30PM	1	7	3	0	**11**	0	1	5	2	0	**8**	0	3	6	0	0	**9**	0	1	12	0	0	**13**	0	**41**
12:45PM	0	7	4	0	**11**	0	1	1	2	0	**4**	0	3	13	1	0	**17**	0	0	16	0	0	**16**	0	**48**
Hourly Total	2	28	9	0	**39**	0	4	21	6	0	**31**	0	9	43	5	0	**57**	0	4	37	2	0	**43**	1	**170**
1:00PM	0	10	4	0	**14**	0	1	7	0	0	**8**	0	3	13	0	0	**16**	0	0	7	0	0	**7**	0	**45**
1:15PM	0	5	3	0	**8**	2	1	3	1	0	**5**	0	3	13	3	0	**19**	0	0	13	1	0	**14**	0	**46**
1:30PM	0	4	2	0	**6**	0	0	10	0	0	**10**	0	1	7	2	0	**10**	1	1	8	1	0	**10**	0	**36**
1:45PM	0	9	2	0	**11**	0	2	3	0	0	**5**	0	1	8	0	0	**9**	0	0	7	0	0	**7**	0	**32**
Hourly Total	0	28	11	0	**39**	2	4	23	1	0	**28**	0	8	41	5	0	**54**	1	1	35	2	0	**38**	0	**159**
Total	7	99	34	0	**140**	4	11	86	11	0	**108**	0	26	130	23	0	**179**	5	12	124	11	0	**147**	5	**574**
% Approach	5.0%	70.7%	24.3%	0%	**-**	-	10.2%	79.6%	10.2%	0%	**-**	-	14.5%	72.6%	12.8%	0%	**-**	-	8.2%	84.4%	7.5%	0%	**-**	-	**-**
% Total	1.2%	17.2%	5.9%	0%	**24.4%**	-	1.9%	15.0%	1.9%	0%	**18.8%**	-	4.5%	22.6%	4.0%	0%	**31.2%**	-	2.1%	21.6%	1.9%	0%	**25.6%**	-	**-**
Lights	7	96	34	0	**137**	-	11	86	11	0	**108**	-	26	130	22	0	**178**	-	12	124	11	0	**147**	-	570
% Lights	100%	97.0%	100%	0%	**97.9%**	-	100%	100%	100%	0%	**100%**	-	100%	100%	95.7%	0%	**99.4%**	-	100%	100%	100%	0%	**100%**	-	99.3%
Buses and Single-Unit Trucks	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	1	0	**1**	-	0	0	0	0	**0**	-	1
% Buses and Single-Unit Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	4.3%	0%	**0.6%**	-	0%	0%	0%	0%	**0%**	-	0.2%
Bicycles on Road	0	3	0	0	**3**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	3
% Bicycles on Road	0%	3.0%	0%	0%	**2.1%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.5%
Pedestrians	-	-	-	-	-	3	-	-	-	-	-	0	-	-	-	-	-	5	-	-	-	-	-	5	
% Pedestrians	-	-	-	-	-	75.0%	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	25.0%	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Appendix B
CMAP Projections

GHA GEWALT HAMILTON ASSOCIATES, INC.

Chicago Metropolitan
Agency for Planning

233 South Wacker Drive
Suite 800
Chicago, Illinois 60606

312 454 0400
www.cmap.illinois.gov

November 2, 2017

Lynn M. Means, P.E., PTOE
Senior Transportation Engineer
Gewalt Hamilton Associates
625 Forest Edge Drive
Vernon Hills, IL 60061

Subject: ***Euclid Avenue @ Northwest Highway***
IDOT

Dear Ms. Means:

In response to a request made on your behalf and dated November 2, 2017, we have developed year 2040 average daily traffic (ADT) projections for the subject location.

ROAD SEGMENT	Current ADT	Year 2040 ADT
Euclid Ave West of NW Highway	12,550	13,700
Euclid Ave East of NW Highway	12,200	13,500
NW Highway from Wilke Rd to Arlington Hts Rd	16,700	18,400

Traffic projections are developed using existing ADT data provided in the request letter and the results from the October 2017 CMAP Travel Demand Analysis. The regional travel model uses CMAP 2040 socioeconomic projections and assumes the implementation of the GO TO 2040 Comprehensive Regional Plan for the Northeastern Illinois area.

If you have any questions, please call me at (312) 386-8806.

Sincerely,

Jose Rodriguez, PTP, AICP
Senior Planner, Research & Analysis

cc: Quigley (IDOT)
S:\AdminGroups\ResearchAnalysis\TrafficForecasts_CY2017\ArlingtonHeights\ck-98-17\ck-98-17.docx

Appendix C
Capacity Analysis Worksheets

GHA GEWALT HAMILTON ASSOCIATES, INC.

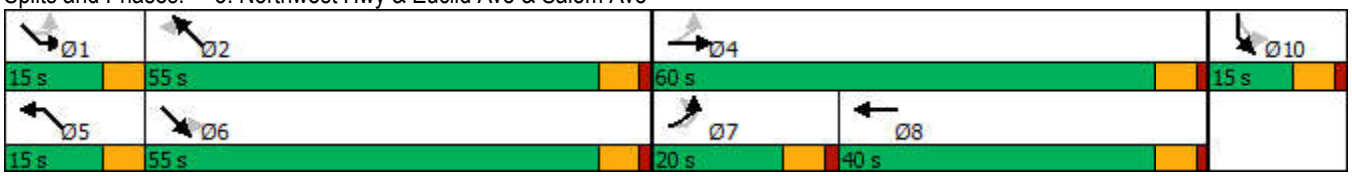
Lane Group	EBL2	EBT	EBR	WBT	WBR	WBR2	SBL	SBR	SBR2	SEL2	SEL	SET
Lane Configurations												
Traffic Volume (vph)	13	559	193	499	57	2	7	1	2	1	91	421
Future Volume (vph)	13	559	193	499	57	2	7	1	2	1	91	421
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)			0		0		0	0			210	
Storage Lanes			0		0		1	0			1	
Taper Length (ft)							25				145	
Satd. Flow (prot)	0	3357	0	3465	0	0	1760	0	0	0	1704	3452
Flt Permitted		0.938					0.966				0.454	
Satd. Flow (perm)	0	3152	0	3465	0	0	1760	0	0	0	814	3452
Right Turn on Red			Yes			Yes			Yes			
Satd. Flow (RTOR)		36					147					10
Link Speed (mph)		30		30			30					30
Link Distance (ft)		1259		341			382					755
Travel Time (s)		28.6		7.8			8.7					17.2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	7%	2%	7%	2%	7%	0%	0%	0%	0%	0%	6%	3%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	805	0	587	0	0	10	0	0	0	97	496
Turn Type	custom	NA		NA			Prot			custom	pm+pt	NA
Protected Phases		4		8			10				1	6
Permitted Phases	7									1	6	
Detector Phase	7	4		8			10			1	1	6
Switch Phase												
Minimum Initial (s)	8.0	8.0		8.0			3.0			3.0	3.0	15.0
Minimum Split (s)	14.0	14.0		14.0			9.0			8.5	8.5	21.0
Total Split (s)	20.0	60.0		40.0			15.0			15.0	15.0	55.0
Total Split (%)	13.8%	41.4%		27.6%			10.3%			10.3%	10.3%	37.9%
Yellow Time (s)	4.5	4.5		4.5			4.5			4.5	4.5	4.5
All-Red Time (s)	1.5	1.5		1.5			1.5			0.0	0.0	1.5
Lost Time Adjust (s)		0.0		0.0			0.0				0.0	0.0
Total Lost Time (s)		6.0		6.0			6.0				4.5	6.0
Lead/Lag	Lead			Lag						Lead	Lead	Lag
Lead-Lag Optimize?	Yes			Yes						Yes	Yes	Yes
Recall Mode	None	None		None			None			None	None	Max
Act Effct Green (s)		41.1		41.1			5.6				59.7	49.5
Actuated g/C Ratio		0.34		0.34			0.05				0.50	0.41
v/c Ratio		0.73		0.49			0.05				0.21	0.35
Control Delay		36.9		32.4			0.4				16.8	26.2
Queue Delay		0.0		0.0			0.0				0.0	0.0
Total Delay		36.9		32.4			0.4				16.8	26.2
LOS		D		C			A				B	C
Approach Delay		36.9		32.4			0.4					24.6
Approach LOS		D		C			A					C
Queue Length 50th (ft)		263		181			0				33	128
Queue Length 95th (ft)		380		265			0				87	231
Internal Link Dist (ft)		1179		261			302					675
Turn Bay Length (ft)											210	
Base Capacity (vph)		1458		1219			269				498	1435

Lane Group	SER	NWL	NWT	NWR	NWR2
Lane Configurations					
Traffic Volume (vph)	50	207	428	2	1
Future Volume (vph)	50	207	428	2	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900
Storage Length (ft)	0	225		0	
Storage Lanes	0	1		0	
Taper Length (ft)		145			
Satd. Flow (prot)	0	1770	3436	0	0
Flt Permitted		0.394			
Satd. Flow (perm)	0	734	3436	0	0
Right Turn on Red	Yes				Yes
Satd. Flow (RTOR)					
Link Speed (mph)			30		
Link Distance (ft)			699		
Travel Time (s)			15.9		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	2%	5%	0%	0%
Shared Lane Traffic (%)					
Lane Group Flow (vph)	0	218	454	0	0
Turn Type		pm+pt	NA		
Protected Phases		5	2		
Permitted Phases		2			
Detector Phase		5	2		
Switch Phase					
Minimum Initial (s)		3.0	15.0		
Minimum Split (s)		8.5	21.0		
Total Split (s)		15.0	55.0		
Total Split (%)		10.3%	37.9%		
Yellow Time (s)		4.5	4.5		
All-Red Time (s)		0.0	1.5		
Lost Time Adjust (s)		0.0	0.0		
Total Lost Time (s)		4.5	6.0		
Lead/Lag		Lead	Lag		
Lead-Lag Optimize?		Yes	Yes		
Recall Mode		None	Max		
Act Effct Green (s)		62.8	51.0		
Actuated g/C Ratio		0.53	0.43		
v/c Ratio		0.46	0.31		
Control Delay		20.3	25.6		
Queue Delay		0.0	0.0		
Total Delay		20.3	25.6		
LOS		C	C		
Approach Delay			23.9		
Approach LOS			C		
Queue Length 50th (ft)		79	115		
Queue Length 95th (ft)		181	215		
Internal Link Dist (ft)			619		
Turn Bay Length (ft)		225			
Base Capacity (vph)		480	1467		

Lane Group	EBL2	EBT	EBR	WBT	WBR	WBR2	SBL	SBR	SBR2	SEL2	SEL	SET
Starvation Cap Reductn		0		0			0				0	0
Spillback Cap Reductn		0		0			0				0	0
Storage Cap Reductn		0		0			0				0	0
Reduced v/c Ratio		0.55		0.48			0.04				0.19	0.35

Intersection Summary			
Area Type:	Other		
Cycle Length: 145			
Actuated Cycle Length: 119.5			
Natural Cycle: 75			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.73			
Intersection Signal Delay: 29.7		Intersection LOS: C	
Intersection Capacity Utilization 78.0%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 3: Northwest Hwy & Euclid Ave & Salem Ave



Lane Group	SER	NWL	NWT	NWR	NWR2
Starvation Cap Reductn		0	0		
Spillback Cap Reductn		0	0		
Storage Cap Reductn		0	0		
Reduced v/c Ratio		0.45	0.31		

Intersection Summary

Intersection	
Int Delay, s/veh	2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	15	18	21	117	59	15
Future Vol, veh/h	15	18	21	117	59	15
Conflicting Peds, #/hr	40	0	2	0	0	2
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	55	55	55	55	55	55
Heavy Vehicles, %	0	0	0	4	2	0
Mvmt Flow	27	33	38	213	107	27

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	452	123	136	0	-	0
Stage 1	123	-	-	-	-	-
Stage 2	329	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	569	933	1461	-	-	-
Stage 1	907	-	-	-	-	-
Stage 2	734	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	550	931	1458	-	-	-
Mov Cap-2 Maneuver	550	-	-	-	-	-
Stage 1	878	-	-	-	-	-
Stage 2	733	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.3	1.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1458	-	550	931	-	-
HCM Lane V/C Ratio	0.026	-	0.05	0.035	-	-
HCM Control Delay (s)	7.5	0	11.9	9	-	-
HCM Lane LOS	A	A	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	0.1	-	-

Intersection	
Int Delay, s/veh	3.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	81	569	1	3	513	52	1	5	1	23	10	44
Future Vol, veh/h	81	569	1	3	513	52	1	5	1	23	10	44
Conflicting Peds, #/hr	0	0	1	1	0	0	0	0	1	1	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	115	-	-	110	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	1	4	0	0	2	0	0	60	0	0	0	0
Mvmt Flow	95	669	1	4	604	61	1	6	1	27	12	52

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	665	0	0	671	0	0	1536	1534	672	1507	1504	635
Stage 1	-	-	-	-	-	-	861	861	-	643	643	-
Stage 2	-	-	-	-	-	-	675	673	-	864	861	-
Critical Hdwy	4.11	-	-	4.1	-	-	7.1	7.1	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	6.1	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	6.1	-	6.1	5.5	-
Follow-up Hdwy	2.209	-	-	2.2	-	-	3.5	4.54	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	929	-	-	929	-	-	96	87	459	100	123	482
Stage 1	-	-	-	-	-	-	353	302	-	465	472	-
Stage 2	-	-	-	-	-	-	447	376	-	352	375	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	929	-	-	928	-	-	72	78	458	86	110	482
Mov Cap-2 Maneuver	-	-	-	-	-	-	72	78	-	86	110	-
Stage 1	-	-	-	-	-	-	317	271	-	418	470	-
Stage 2	-	-	-	-	-	-	387	374	-	308	336	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.2	0	50.2	47.6
HCM LOS			F	E

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	77	458	929	-	-	928	-	-	171
HCM Lane V/C Ratio	0.092	0.003	0.103	-	-	0.004	-	-	0.53
HCM Control Delay (s)	56.4	12.9	9.3	-	-	8.9	-	-	47.6
HCM Lane LOS	F	B	A	-	-	A	-	-	E
HCM 95th %tile Q(veh)	0.3	0	0.3	-	-	0	-	-	2.7

Intersection	
Int Delay, s/veh	7.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	2	46	7	0	28	4	7	97	28	6	67	7
Future Vol, veh/h	2	46	7	0	28	4	7	97	28	6	67	7
Conflicting Peds, #/hr	4	0	1	1	0	4	2	0	1	1	0	2
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	77	77	77	77	77	77	77	77	77	77	77	77
Heavy Vehicles, %	0	2	0	0	7	0	0	3	0	0	2	0
Mvmt Flow	3	60	9	0	36	5	9	126	36	8	87	9

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	45	0	0	70	0	0	161	117	67	196	119	45
Stage 1	-	-	-	-	-	-	72	72	-	43	43	-
Stage 2	-	-	-	-	-	-	89	45	-	153	76	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.53	6.2	7.1	6.52	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.53	-	6.1	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.53	-	6.1	5.52	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4.027	3.3	3.5	4.018	3.3
Pot Cap-1 Maneuver	1576	-	-	1544	-	-	809	771	1002	767	771	1031
Stage 1	-	-	-	-	-	-	943	833	-	976	859	-
Stage 2	-	-	-	-	-	-	923	855	-	854	832	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1570	-	-	1543	-	-	729	766	1000	642	766	1025
Mov Cap-2 Maneuver	-	-	-	-	-	-	729	766	-	642	766	-
Stage 1	-	-	-	-	-	-	940	831	-	970	856	-
Stage 2	-	-	-	-	-	-	820	852	-	696	830	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	0	10.7	10.4
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	804	1570	-	-	1543	-	-	772
HCM Lane V/C Ratio	0.213	0.002	-	-	-	-	-	0.135
HCM Control Delay (s)	10.7	7.3	0	-	0	-	-	10.4
HCM Lane LOS	B	A	A	-	A	-	-	B
HCM 95th %tile Q(veh)	0.8	0	-	-	0	-	-	0.5

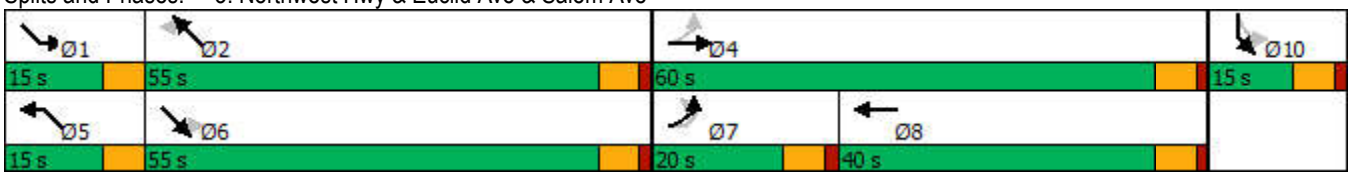
Lane Group	EBL2	EBL	EBT	EBR	WBT	WBR	SBL2	SBL	SBR	SBR2	SEL	SET
Lane Configurations												
Traffic Volume (vph)	35	2	429	20	510	81	3	3	2	4	68	412
Future Volume (vph)	35	2	429	20	510	81	3	3	2	4	68	412
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0		0		0		0	0		210	
Storage Lanes		0		0		0		1	0		1	
Taper Length (ft)		25						25			145	
Satd. Flow (prot)	0	0	3512	0	3504	0	0	1728	0	0	1805	3496
Flt Permitted			0.727					0.976			0.383	
Satd. Flow (perm)	0	0	2563	0	3504	0	0	1728	0	0	728	3496
Right Turn on Red				Yes						Yes		
Satd. Flow (RTOR)			3					147				8
Link Speed (mph)			30		30			30				30
Link Distance (ft)			1259		341			382				755
Travel Time (s)			28.6		7.8			8.7				17.2
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	2%	0%	1%	0%	0%	0%	0%	0%	0%	2%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	516	0	629	0	0	12	0	0	72	483
Turn Type	custom	pm+pt	NA		NA		Perm	Prot			pm+pt	NA
Protected Phases		7	4		8			10			1	6
Permitted Phases	7	4					10				6	
Detector Phase	7	7	4		8		10	10			1	6
Switch Phase												
Minimum Initial (s)	8.0	8.0	8.0		8.0		3.0	3.0			3.0	15.0
Minimum Split (s)	14.0	14.0	14.0		14.0		9.0	9.0			8.5	21.0
Total Split (s)	20.0	20.0	60.0		40.0		15.0	15.0			15.0	55.0
Total Split (%)	13.8%	13.8%	41.4%		27.6%		10.3%	10.3%			10.3%	37.9%
Yellow Time (s)	4.5	4.5	4.5		4.5		4.5	4.5			4.5	4.5
All-Red Time (s)	1.5	1.5	1.5		1.5		1.5	1.5			0.0	1.5
Lost Time Adjust (s)			0.0		0.0			0.0			0.0	0.0
Total Lost Time (s)			6.0		6.0			6.0			4.5	6.0
Lead/Lag	Lead	Lead			Lag						Lead	Lag
Lead-Lag Optimize?	Yes	Yes			Yes						Yes	Yes
Recall Mode	None	None	None		None		None	None			None	Max
Act Effct Green (s)			29.2		29.2			5.6			58.9	49.7
Actuated g/C Ratio			0.26		0.26			0.05			0.53	0.45
v/c Ratio			0.76		0.68			0.05			0.16	0.31
Control Delay			44.9		40.2			0.5			13.4	21.7
Queue Delay			0.0		0.0			0.0			0.0	0.0
Total Delay			44.9		40.2			0.5			13.4	21.7
LOS			D		D			A			B	C
Approach Delay			44.9		40.2			0.5				20.6
Approach LOS			D		D			A				C
Queue Length 50th (ft)			164		196			0			17	97
Queue Length 95th (ft)			254		290			0			56	195
Internal Link Dist (ft)			1179		261			302				675
Turn Bay Length (ft)											210	
Base Capacity (vph)			1275		1141			278			512	1580

Lane Group	SER	NWL	NWT	NWR
Lane Configurations				
Traffic Volume (vph)	42	229	596	1
Future Volume (vph)	42	229	596	1
Ideal Flow (vphpl)	1900	1900	1900	1900
Storage Length (ft)	0	225		0
Storage Lanes	0	1		0
Taper Length (ft)		145		
Satd. Flow (prot)	0	1770	3539	0
Flt Permitted		0.401		
Satd. Flow (perm)	0	747	3539	0
Right Turn on Red	Yes			
Satd. Flow (RTOR)				
Link Speed (mph)			30	
Link Distance (ft)			699	
Travel Time (s)			15.9	
Peak Hour Factor	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	2%	2%	0%
Shared Lane Traffic (%)				
Lane Group Flow (vph)	0	244	635	0
Turn Type		pm+pt	NA	
Protected Phases		5	2	
Permitted Phases		2		
Detector Phase		5	2	
Switch Phase				
Minimum Initial (s)		3.0	15.0	
Minimum Split (s)		8.5	21.0	
Total Split (s)		15.0	55.0	
Total Split (%)		10.3%	37.9%	
Yellow Time (s)		4.5	4.5	
All-Red Time (s)		0.0	1.5	
Lost Time Adjust (s)		0.0	0.0	
Total Lost Time (s)		4.5	6.0	
Lead/Lag		Lead	Lag	
Lead-Lag Optimize?		Yes	Yes	
Recall Mode		None	Max	
Act Effct Green (s)		64.7	54.9	
Actuated g/C Ratio		0.59	0.50	
v/c Ratio		0.46	0.36	
Control Delay		16.3	21.0	
Queue Delay		0.0	0.0	
Total Delay		16.3	21.0	
LOS		B	C	
Approach Delay			19.7	
Approach LOS			B	
Queue Length 50th (ft)		63	128	
Queue Length 95th (ft)		169	264	
Internal Link Dist (ft)			619	
Turn Bay Length (ft)		225		
Base Capacity (vph)		537	1764	

Lane Group	EBL2	EBL	EBT	EBR	WBT	WBR	SBL2	SBL	SBR	SBR2	SEL	SET
Starvation Cap Reductn			0		0			0			0	0
Spillback Cap Reductn			0		0			0			0	0
Storage Cap Reductn			0		0			0			0	0
Reduced v/c Ratio			0.40		0.55			0.04			0.14	0.31

Intersection Summary			
Area Type:	Other		
Cycle Length: 145			
Actuated Cycle Length: 110.2			
Natural Cycle: 80			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.76			
Intersection Signal Delay: 29.8		Intersection LOS: C	
Intersection Capacity Utilization 82.7%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 3: Northwest Hwy & Euclid Ave & Salem Ave



Lane Group	SER	NWL	NWT	NWR
Starvation Cap Reductn		0	0	
Spillback Cap Reductn		0	0	
Storage Cap Reductn		0	0	
Reduced v/c Ratio		0.45	0.36	

Intersection Summary

Intersection	
Int Delay, s/veh	3.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	17	20	35	69	33	22
Future Vol, veh/h	17	20	35	69	33	22
Conflicting Peds, #/hr	67	2	10	0	0	10
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	68	68	68	68	68	68
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	25	29	51	101	49	32

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	345	77	91	0	-	0
Stage 1	75	-	-	-	-	-
Stage 2	270	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	656	990	1517	-	-	-
Stage 1	953	-	-	-	-	-
Stage 2	780	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	620	979	1503	-	-	-
Mov Cap-2 Maneuver	620	-	-	-	-	-
Stage 1	909	-	-	-	-	-
Stage 2	772	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.9	2.5	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1503	-	620	979	-	-
HCM Lane V/C Ratio	0.034	-	0.04	0.03	-	-
HCM Control Delay (s)	7.5	0	11.1	8.8	-	-
HCM Lane LOS	A	A	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	0.1	-	-

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	45	454	1	6	551	56	2	3	7	10	5	38
Future Vol, veh/h	45	454	1	6	551	56	2	3	7	10	5	38
Conflicting Peds, #/hr	1	0	5	5	0	1	1	0	0	0	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	115	-	-	110	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	0	2	0	0	1	0	0	0	14	0	0	0
Mvmt Flow	46	468	1	6	568	58	2	3	7	10	5	39

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	627	0	0	474	0	0	1198	1205	474	1176	1176	599
Stage 1	-	-	-	-	-	-	566	566	-	610	610	-
Stage 2	-	-	-	-	-	-	632	639	-	566	566	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.34	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.426	3.5	4	3.3
Pot Cap-1 Maneuver	965	-	-	1099	-	-	164	185	567	170	193	505
Stage 1	-	-	-	-	-	-	513	511	-	485	488	-
Stage 2	-	-	-	-	-	-	472	474	-	513	511	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	964	-	-	1094	-	-	141	174	564	159	182	504
Mov Cap-2 Maneuver	-	-	-	-	-	-	141	174	-	159	182	-
Stage 1	-	-	-	-	-	-	486	484	-	461	485	-
Stage 2	-	-	-	-	-	-	428	471	-	479	484	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.8	0.1	18.5	18.6
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	159	564	964	-	-	1094	-	-	320
HCM Lane V/C Ratio	0.032	0.013	0.048	-	-	0.006	-	-	0.171
HCM Control Delay (s)	28.4	11.5	8.9	-	-	8.3	-	-	18.6
HCM Lane LOS	D	B	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.1	0	0.2	-	-	0	-	-	0.6

Intersection	
Int Delay, s/veh	6.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	4	31	10	2	37	9	13	62	11	3	43	3
Future Vol, veh/h	4	31	10	2	37	9	13	62	11	3	43	3
Conflicting Peds, #/hr	1	0	3	3	0	1	0	0	1	1	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	25	16	0	0	3	0	0	0	0	0	0	0
Mvmt Flow	5	38	12	2	45	11	16	76	13	4	52	4

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	57	0	0	53	0	0	140	118	48	156	119	52
Stage 1	-	-	-	-	-	-	57	57	-	56	56	-
Stage 2	-	-	-	-	-	-	83	61	-	100	63	-
Critical Hdwy	4.35	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.425	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1413	-	-	1566	-	-	835	776	1027	815	775	1021
Stage 1	-	-	-	-	-	-	960	851	-	961	852	-
Stage 2	-	-	-	-	-	-	930	848	-	911	846	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1412	-	-	1562	-	-	783	769	1023	739	768	1020
Mov Cap-2 Maneuver	-	-	-	-	-	-	783	769	-	739	768	-
Stage 1	-	-	-	-	-	-	953	845	-	956	850	-
Stage 2	-	-	-	-	-	-	869	846	-	815	840	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.7	0.3	10.2	10
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	796	1412	-	-	1562	-	-	778
HCM Lane V/C Ratio	0.132	0.003	-	-	0.002	-	-	0.077
HCM Control Delay (s)	10.2	7.6	0	-	7.3	0	-	10
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.5	0	-	-	0	-	-	0.2

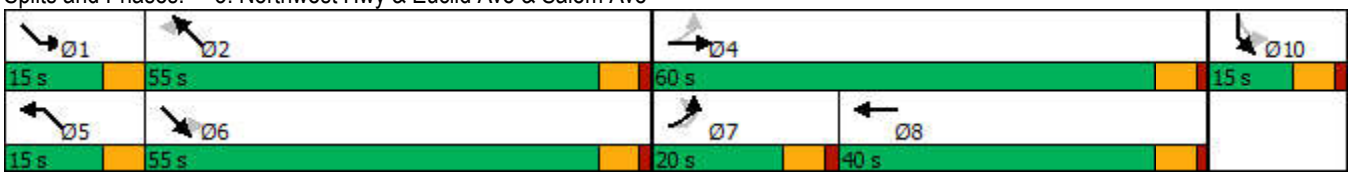
Lane Group	EBL2	EBL	EBT	EBR	WBT	WBR	WBR2	SBL	SBR	SBR2	SEL	SET
Lane Configurations												
Traffic Volume (vph)	29	3	540	219	578	72	2	2	2	3	22	378
Future Volume (vph)	29	3	540	219	578	72	2	2	2	3	22	378
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0		0		0		0	0		210	
Storage Lanes		0		0		0		1	0		1	
Taper Length (ft)		25						25			145	
Satd. Flow (prot)	0	0	3419	0	3495	0	0	1694	0	0	1719	3531
Flt Permitted			0.848					0.986			0.377	
Satd. Flow (perm)	0	0	2905	0	3495	0	0	1694	0	0	682	3531
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)			44					147				8
Link Speed (mph)			30		30			30				30
Link Distance (ft)			1259		341			382				755
Travel Time (s)			28.6		7.8			8.7				17.2
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	0%	0%	1%	1%	1%	6%	0%	0%	0%	0%	5%	1%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	816	0	672	0	0	7	0	0	23	428
Turn Type	custom	pm+pt	NA		NA			Prot			pm+pt	NA
Protected Phases		7	4		8			10			1	6
Permitted Phases	7	4									6	
Detector Phase	7	7	4		8			10			1	6
Switch Phase												
Minimum Initial (s)	8.0	8.0	8.0		8.0			3.0			3.0	15.0
Minimum Split (s)	14.0	14.0	14.0		14.0			9.0			8.5	21.0
Total Split (s)	20.0	20.0	60.0		40.0			15.0			15.0	55.0
Total Split (%)	13.8%	13.8%	41.4%		27.6%			10.3%			10.3%	37.9%
Yellow Time (s)	4.5	4.5	4.5		4.5			4.5			4.5	4.5
All-Red Time (s)	1.5	1.5	1.5		1.5			1.5			0.0	1.5
Lost Time Adjust (s)			0.0		0.0			0.0			0.0	0.0
Total Lost Time (s)			6.0		6.0			6.0			4.5	6.0
Lead/Lag	Lead	Lead			Lag						Lead	Lag
Lead-Lag Optimize?	Yes	Yes			Yes						Yes	Yes
Recall Mode	None	None	None		None			None			None	Max
Act Effct Green (s)			44.5		44.5			5.5			57.3	49.4
Actuated g/C Ratio			0.36		0.36			0.04			0.47	0.40
v/c Ratio			0.76		0.53			0.03			0.06	0.30
Control Delay			37.7		32.7			0.3			17.7	27.0
Queue Delay			0.0		0.0			0.0			0.0	0.0
Total Delay			37.7		32.7			0.3			17.7	27.0
LOS			D		C			A			B	C
Approach Delay			37.7		32.7			0.3				26.5
Approach LOS			D		C			A				C
Queue Length 50th (ft)			273		212			0			8	116
Queue Length 95th (ft)			398		307			0			29	198
Internal Link Dist (ft)			1179		261			302				675
Turn Bay Length (ft)											210	
Base Capacity (vph)			1308		1271			260			429	1421

Lane Group	SER	NWL	NWT	NWR	NWR2
Lane Configurations					
Traffic Volume (vph)	37	242	617	2	2
Future Volume (vph)	37	242	617	2	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900
Storage Length (ft)	0	225		0	
Storage Lanes	0	1		0	
Taper Length (ft)		145			
Satd. Flow (prot)	0	1770	3571	0	0
Flt Permitted		0.415			
Satd. Flow (perm)	0	773	3571	0	0
Right Turn on Red	Yes				Yes
Satd. Flow (RTOR)					
Link Speed (mph)			30		
Link Distance (ft)			699		
Travel Time (s)			15.9		
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	0%	2%	1%	0%	0%
Shared Lane Traffic (%)					
Lane Group Flow (vph)	0	249	640	0	0
Turn Type		pm+pt	NA		
Protected Phases		5	2		
Permitted Phases		2			
Detector Phase		5	2		
Switch Phase					
Minimum Initial (s)		3.0	15.0		
Minimum Split (s)		8.5	21.0		
Total Split (s)		15.0	55.0		
Total Split (%)		10.3%	37.9%		
Yellow Time (s)		4.5	4.5		
All-Red Time (s)		0.0	1.5		
Lost Time Adjust (s)		0.0	0.0		
Total Lost Time (s)		4.5	6.0		
Lead/Lag		Lead	Lag		
Lead-Lag Optimize?		Yes	Yes		
Recall Mode		None	Max		
Act Effct Green (s)		65.5	58.0		
Actuated g/C Ratio		0.53	0.47		
v/c Ratio		0.50	0.38		
Control Delay		22.3	24.8		
Queue Delay		0.0	0.0		
Total Delay		22.3	24.8		
LOS		C	C		
Approach Delay			24.1		
Approach LOS			C		
Queue Length 50th (ft)		101	177		
Queue Length 95th (ft)		206	298		
Internal Link Dist (ft)			619		
Turn Bay Length (ft)		225			
Base Capacity (vph)		496	1681		

Lane Group	EBL2	EBL	EBT	EBR	WBT	WBR	WBR2	SBL	SBR	SBR2	SEL	SET
Starvation Cap Reductn			0		0			0			0	0
Spillback Cap Reductn			0		0			0			0	0
Storage Cap Reductn			0		0			0			0	0
Reduced v/c Ratio			0.62		0.53			0.03			0.05	0.30

Intersection Summary			
Area Type:	Other		
Cycle Length: 145			
Actuated Cycle Length: 123.1			
Natural Cycle: 80			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.76			
Intersection Signal Delay: 30.4		Intersection LOS: C	
Intersection Capacity Utilization 94.2%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 3: Northwest Hwy & Euclid Ave & Salem Ave



Lane Group	SER	NWL	NWT	NWR	NWR2
Starvation Cap Reductn		0	0		
Spillback Cap Reductn		0	0		
Storage Cap Reductn		0	0		
Reduced v/c Ratio		0.50	0.38		

Intersection Summary

Intersection	
Int Delay, s/veh	4.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	31	41	54	63	46	25
Future Vol, veh/h	31	41	54	63	46	25
Conflicting Peds, #/hr	0	0	1	0	0	1
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	76	76	76	76	76	76
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	41	54	71	83	61	33

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	304	79	95	0	-	0
Stage 1	79	-	-	-	-	-
Stage 2	225	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	692	987	1512	-	-	-
Stage 1	949	-	-	-	-	-
Stage 2	817	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	657	986	1511	-	-	-
Mov Cap-2 Maneuver	657	-	-	-	-	-
Stage 1	902	-	-	-	-	-
Stage 2	816	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.7	3.5	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1511	-	657	986	-	-
HCM Lane V/C Ratio	0.047	-	0.062	0.055	-	-
HCM Control Delay (s)	7.5	0	10.8	8.9	-	-
HCM Lane LOS	A	A	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	0.2	-	-

Intersection	
Int Delay, s/veh	3.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	51	512	1	1	610	55	1	11	12	36	10	41
Future Vol, veh/h	51	512	1	1	610	55	1	11	12	36	10	41
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	115	-	-	110	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	0	1	0	0	1	0	0	10	0	0	0	0
Mvmt Flow	52	522	1	1	622	56	1	11	12	37	10	42

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	678	0	0	523	0	0	1305	1307	523	1290	1279	650
Stage 1	-	-	-	-	-	-	627	627	-	652	652	-
Stage 2	-	-	-	-	-	-	678	680	-	638	627	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.6	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.6	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.6	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4.09	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	923	-	-	1054	-	-	138	154	558	142	167	473
Stage 1	-	-	-	-	-	-	475	464	-	460	467	-
Stage 2	-	-	-	-	-	-	445	439	-	468	479	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	923	-	-	1054	-	-	114	145	558	125	157	473
Mov Cap-2 Maneuver	-	-	-	-	-	-	114	145	-	125	157	-
Stage 1	-	-	-	-	-	-	448	438	-	434	467	-
Stage 2	-	-	-	-	-	-	396	439	-	421	452	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.8	0	22.2	37.2
HCM LOS			C	E

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	142	558	923	-	-	1054	-	-	198
HCM Lane V/C Ratio	0.086	0.022	0.056	-	-	0.001	-	-	0.448
HCM Control Delay (s)	32.7	11.6	9.1	-	-	8.4	-	-	37.2
HCM Lane LOS	D	B	A	-	-	A	-	-	E
HCM 95th %tile Q(veh)	0.3	0.1	0.2	-	-	0	-	-	2.1

Intersection	
Int Delay, s/veh	6.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	1	41	14	4	34	5	11	60	23	3	53	5
Future Vol, veh/h	1	41	14	4	34	5	11	60	23	3	53	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	1	1	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	25	16	0	0	3	0	0	0	0	0	0	0
Mvmt Flow	1	46	16	4	38	6	12	67	26	3	59	6

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	44	0	0	62	0	0	138	108	55	153	113	41
Stage 1	-	-	-	-	-	-	56	56	-	49	49	-
Stage 2	-	-	-	-	-	-	82	52	-	104	64	-
Critical Hdwy	4.35	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.425	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1429	-	-	1554	-	-	837	786	1018	819	781	1036
Stage 1	-	-	-	-	-	-	961	852	-	969	858	-
Stage 2	-	-	-	-	-	-	931	856	-	907	846	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1429	-	-	1554	-	-	782	783	1017	744	778	1036
Mov Cap-2 Maneuver	-	-	-	-	-	-	782	783	-	744	778	-
Stage 1	-	-	-	-	-	-	960	851	-	968	855	-
Stage 2	-	-	-	-	-	-	860	853	-	813	845	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.7	10	10
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	830	1429	-	-	1554	-	-	792
HCM Lane V/C Ratio	0.126	0.001	-	-	0.003	-	-	0.086
HCM Control Delay (s)	10	7.5	0	-	7.3	0	-	10
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.4	0	-	-	0	-	-	0.3

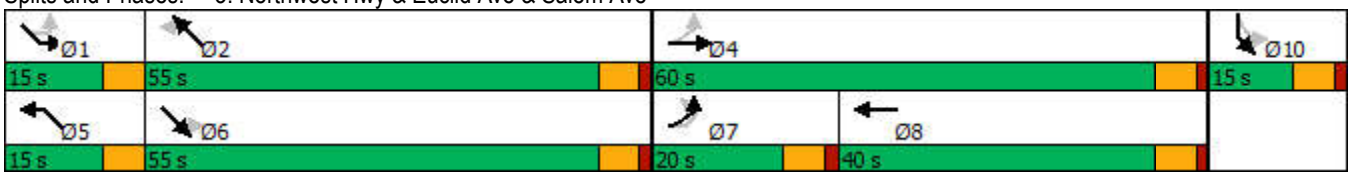
Lane Group	EBL2	EBT	EBR	WBT	WBR	SBL2	SBL	SBR	SEL2	SEL	SET	SER
Lane Configurations												
Traffic Volume (vph)	30	368	160	398	68	1	6	1	1	82	372	45
Future Volume (vph)	30	368	160	398	68	1	6	1	1	82	372	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)			0		0		0	0		210		0
Storage Lanes			0		0		1	0		1		0
Taper Length (ft)							25			145		
Satd. Flow (prot)	0	3397	0	3491	0	0	1789	0	0	1770	3506	0
Flt Permitted		0.880					0.958			0.478		
Satd. Flow (perm)	0	2998	0	3491	0	0	1789	0	0	891	3506	0
Right Turn on Red			Yes									Yes
Satd. Flow (RTOR)		47									10	
Link Speed (mph)		30		30			30				30	
Link Distance (ft)		1259		341			382				755	
Travel Time (s)		28.6		7.8			8.7				17.2	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	3%	1%	2%	1%	2%	0%	0%	0%	0%	2%	1%	4%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	570	0	475	0	0	8	0	0	85	426	0
Turn Type	custom	NA		NA		Perm	Prot		custom	pm+pt	NA	
Protected Phases		4		8			10			1	6	
Permitted Phases	7					10			1	6		
Detector Phase	7	4		8		10	10		1	1	6	
Switch Phase												
Minimum Initial (s)	8.0	8.0		8.0		3.0	3.0		3.0	3.0	15.0	
Minimum Split (s)	14.0	14.0		14.0		9.0	9.0		8.5	8.5	21.0	
Total Split (s)	20.0	60.0		40.0		15.0	15.0		15.0	15.0	55.0	
Total Split (%)	13.8%	41.4%		27.6%		10.3%	10.3%		10.3%	10.3%	37.9%	
Yellow Time (s)	4.5	4.5		4.5		4.5	4.5		4.5	4.5	4.5	
All-Red Time (s)	1.5	1.5		1.5		1.5	1.5		0.0	0.0	1.5	
Lost Time Adjust (s)		0.0		0.0			0.0			0.0	0.0	
Total Lost Time (s)		6.0		6.0			6.0			4.5	6.0	
Lead/Lag	Lead			Lag					Lead	Lead	Lag	
Lead-Lag Optimize?	Yes			Yes					Yes	Yes	Yes	
Recall Mode	None	None		None		None	None		None	None	Max	
Act Effct Green (s)		29.9		29.9			6.1			59.0	49.6	
Actuated g/C Ratio		0.28		0.28			0.06			0.54	0.46	
v/c Ratio		0.66		0.49			0.08			0.16	0.27	
Control Delay		35.9		34.8			55.9			12.6	20.3	
Queue Delay		0.0		0.0			0.0			0.0	0.0	
Total Delay		35.9		34.8			55.9			12.6	20.3	
LOS		D		C			E			B	C	
Approach Delay		35.9		34.8			55.9				19.0	
Approach LOS		D		C			E				B	
Queue Length 50th (ft)		164		140			5			21	86	
Queue Length 95th (ft)		256		218			25			69	179	
Internal Link Dist (ft)		1179		261			302				675	
Turn Bay Length (ft)										210		
Base Capacity (vph)		1531		1156			150			592	1605	

Lane Group	NWL	NWT	NWR2
Lane Configurations			
Traffic Volume (vph)	217	461	9
Future Volume (vph)	217	461	9
Ideal Flow (vphpl)	1900	1900	1900
Storage Length (ft)	225		
Storage Lanes	1		
Taper Length (ft)	145		
Satd. Flow (prot)	1787	3564	0
Flt Permitted	0.440		
Satd. Flow (perm)	828	3564	0
Right Turn on Red			Yes
Satd. Flow (RTOR)		147	
Link Speed (mph)		30	
Link Distance (ft)		699	
Travel Time (s)		15.9	
Peak Hour Factor	0.98	0.98	0.98
Heavy Vehicles (%)	1%	1%	0%
Shared Lane Traffic (%)			
Lane Group Flow (vph)	221	479	0
Turn Type	pm+pt	NA	
Protected Phases	5	2	
Permitted Phases	2		
Detector Phase	5	2	
Switch Phase			
Minimum Initial (s)	3.0	15.0	
Minimum Split (s)	8.5	21.0	
Total Split (s)	15.0	55.0	
Total Split (%)	10.3%	37.9%	
Yellow Time (s)	4.5	4.5	
All-Red Time (s)	0.0	1.5	
Lost Time Adjust (s)	0.0	0.0	
Total Lost Time (s)	4.5	6.0	
Lead/Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	
Recall Mode	None	Max	
Act Effct Green (s)	64.2	54.4	
Actuated g/C Ratio	0.59	0.50	
v/c Ratio	0.38	0.26	
Control Delay	14.4	13.4	
Queue Delay	0.0	0.0	
Total Delay	14.4	13.4	
LOS	B	B	
Approach Delay		13.7	
Approach LOS		B	
Queue Length 50th (ft)	59	63	
Queue Length 95th (ft)	162	150	
Internal Link Dist (ft)		619	
Turn Bay Length (ft)	225		
Base Capacity (vph)	582	1858	

Lane Group	EBL2	EBT	EBR	WBT	WBR	SBL2	SBL	SBR	SEL2	SEL	SET	SER
Starvation Cap Reductn		0		0			0			0	0	
Spillback Cap Reductn		0		0			0			0	0	
Storage Cap Reductn		0		0			0			0	0	
Reduced v/c Ratio		0.37		0.41			0.05			0.14	0.27	

Intersection Summary			
Area Type:	Other		
Cycle Length: 145			
Actuated Cycle Length: 108.7			
Natural Cycle: 70			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.66			
Intersection Signal Delay: 25.1		Intersection LOS: C	
Intersection Capacity Utilization 80.9%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 3: Northwest Hwy & Euclid Ave & Salem Ave



Lane Group	NWL	NWT	NWR2
Starvation Cap Reductn	0	0	
Spillback Cap Reductn	0	0	
Storage Cap Reductn	0	0	
Reduced v/c Ratio	0.38	0.26	

Intersection Summary

Intersection	
Int Delay, s/veh	6.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	51	86	143	29	30	36
Future Vol, veh/h	51	86	143	29	30	36
Conflicting Peds, #/hr	8	4	2	0	0	2
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	59	99	164	33	34	41

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	426	61	77	0	-	0
Stage 1	57	-	-	-	-	-
Stage 2	369	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	589	1010	1535	-	-	-
Stage 1	971	-	-	-	-	-
Stage 2	704	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	522	1004	1532	-	-	-
Mov Cap-2 Maneuver	522	-	-	-	-	-
Stage 1	863	-	-	-	-	-
Stage 2	703	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.4	6.3	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1532	-	522	1004	-	-
HCM Lane V/C Ratio	0.107	-	0.112	0.098	-	-
HCM Control Delay (s)	7.6	0	12.8	9	-	-
HCM Lane LOS	A	A	B	A	-	-
HCM 95th %tile Q(veh)	0.4	-	0.4	0.3	-	-

Intersection	
Int Delay, s/veh	4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	46	410	4	2	421	114	2	12	10	61	12	43
Future Vol, veh/h	46	410	4	2	421	114	2	12	10	61	12	43
Conflicting Peds, #/hr	4	0	0	0	0	4	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	115	-	-	110	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	1	0	0	1	0	0	0	0	0	0	0
Mvmt Flow	48	432	4	2	443	120	2	13	11	64	13	45

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	567	0	0	436	0	0	1066	1101	434	1053	1043	507
Stage 1	-	-	-	-	-	-	530	530	-	511	511	-
Stage 2	-	-	-	-	-	-	536	571	-	542	532	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1015	-	-	1134	-	-	202	214	626	206	231	570
Stage 1	-	-	-	-	-	-	536	530	-	549	540	-
Stage 2	-	-	-	-	-	-	532	508	-	528	529	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1011	-	-	1134	-	-	171	203	626	185	219	568
Mov Cap-2 Maneuver	-	-	-	-	-	-	171	203	-	185	219	-
Stage 1	-	-	-	-	-	-	511	505	-	521	537	-
Stage 2	-	-	-	-	-	-	477	505	-	482	504	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.9	0	18.9	32
HCM LOS			C	D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	198	626	1011	-	-	1134	-	-	252
HCM Lane V/C Ratio	0.074	0.017	0.048	-	-	0.002	-	-	0.485
HCM Control Delay (s)	24.6	10.8	8.7	-	-	8.2	-	-	32
HCM Lane LOS	C	B	A	-	-	A	-	-	D
HCM 95th %tile Q(veh)	0.2	0.1	0.2	-	-	0	-	-	2.5

Intersection	
Int Delay, s/veh	6.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	29	14	4	16	5	16	59	5	1	48	1
Future Vol, veh/h	1	29	14	4	16	5	16	59	5	1	48	1
Conflicting Peds, #/hr	0	0	0	0	0	0	2	0	0	0	0	2
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	25	16	0	0	3	0	0	0	0	0	0	0
Mvmt Flow	1	31	15	4	17	5	17	63	5	1	51	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	22	0	0	46	0	0	97	71	39	103	76	22
Stage 1	-	-	-	-	-	-	41	41	-	28	28	-
Stage 2	-	-	-	-	-	-	56	30	-	75	48	-
Critical Hdwy	4.35	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.425	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1456	-	-	1575	-	-	890	823	1038	882	818	1061
Stage 1	-	-	-	-	-	-	979	865	-	994	876	-
Stage 2	-	-	-	-	-	-	961	874	-	939	859	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1456	-	-	1575	-	-	842	820	1038	824	815	1059
Mov Cap-2 Maneuver	-	-	-	-	-	-	842	820	-	824	815	-
Stage 1	-	-	-	-	-	-	978	864	-	993	873	-
Stage 2	-	-	-	-	-	-	899	871	-	865	858	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	1.2	9.8	9.7
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	835	1456	-	-	1575	-	-	819
HCM Lane V/C Ratio	0.102	0.001	-	-	0.003	-	-	0.065
HCM Control Delay (s)	9.8	7.5	0	-	7.3	0	-	9.7
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.3	0	-	-	0	-	-	0.2

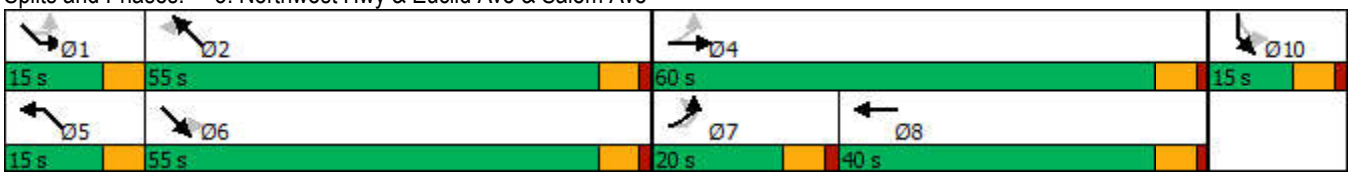
Lane Group	EBL2	EBT	EBR	WBT	WBR	WBR2	SBL	SBR	SBR2	SEL2	SEL	SET
Lane Configurations												
Traffic Volume (vph)	13	603	200	529	62	2	7	1	2	1	101	436
Future Volume (vph)	13	603	200	529	62	2	7	1	2	1	101	436
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)			0		0		0	0			210	
Storage Lanes			0		0		1	0			1	
Taper Length (ft)							25				145	
Satd. Flow (prot)	0	3362	0	3465	0	0	1760	0	0	0	1704	3452
Flt Permitted		0.939					0.966				0.433	
Satd. Flow (perm)	0	3160	0	3465	0	0	1760	0	0	0	777	3452
Right Turn on Red			Yes			Yes			Yes			
Satd. Flow (RTOR)		34					147					10
Link Speed (mph)		30		30			30					30
Link Distance (ft)		1259		341			382					755
Travel Time (s)		28.6		7.8			8.7					17.2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	7%	2%	7%	2%	7%	0%	0%	0%	0%	0%	6%	3%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	860	0	624	0	0	10	0	0	0	107	514
Turn Type	custom	NA		NA			Prot			custom	pm+pt	NA
Protected Phases		4		8			10				1	6
Permitted Phases	7									1	6	
Detector Phase	7	4		8			10			1	1	6
Switch Phase												
Minimum Initial (s)	8.0	8.0		8.0			3.0			3.0	3.0	15.0
Minimum Split (s)	14.0	14.0		14.0			9.0			8.5	8.5	21.0
Total Split (s)	20.0	60.0		40.0			15.0			15.0	15.0	55.0
Total Split (%)	13.8%	41.4%		27.6%			10.3%			10.3%	10.3%	37.9%
Yellow Time (s)	4.5	4.5		4.5			4.5			4.5	4.5	4.5
All-Red Time (s)	1.5	1.5		1.5			1.5			0.0	0.0	1.5
Lost Time Adjust (s)		0.0		0.0			0.0				0.0	0.0
Total Lost Time (s)		6.0		6.0			6.0				4.5	6.0
Lead/Lag	Lead			Lag						Lead	Lead	Lag
Lead-Lag Optimize?	Yes			Yes						Yes	Yes	Yes
Recall Mode	None	None		None			None			None	None	Max
Act Effct Green (s)		45.3		45.3			5.5				60.0	49.4
Actuated g/C Ratio		0.37		0.37			0.04				0.49	0.40
v/c Ratio		0.73		0.49			0.05				0.24	0.37
Control Delay		36.7		31.8			0.4				18.4	28.2
Queue Delay		0.0		0.0			0.0				0.0	0.0
Total Delay		36.7		31.8			0.4				18.4	28.2
LOS		D		C			A				B	C
Approach Delay		36.7		31.8			0.4					26.5
Approach LOS		D		C			A					C
Queue Length 50th (ft)		289		194			0				40	145
Queue Length 95th (ft)		415		284			0				94	240
Internal Link Dist (ft)		1179		261			302					675
Turn Bay Length (ft)											210	
Base Capacity (vph)		1409		1268			265				465	1384

Lane Group	SER	NWL	NWT	NWR	NWR2
Lane Configurations					
Traffic Volume (vph)	52	214	443	2	1
Future Volume (vph)	52	214	443	2	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900
Storage Length (ft)	0	225		0	
Storage Lanes	0	1		0	
Taper Length (ft)		145			
Satd. Flow (prot)	0	1770	3436	0	0
Flt Permitted		0.377			
Satd. Flow (perm)	0	702	3436	0	0
Right Turn on Red	Yes				Yes
Satd. Flow (RTOR)					
Link Speed (mph)			30		
Link Distance (ft)			699		
Travel Time (s)			15.9		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	2%	5%	0%	0%
Shared Lane Traffic (%)					
Lane Group Flow (vph)	0	225	469	0	0
Turn Type		pm+pt	NA		
Protected Phases		5	2		
Permitted Phases		2			
Detector Phase		5	2		
Switch Phase					
Minimum Initial (s)		3.0	15.0		
Minimum Split (s)		8.5	21.0		
Total Split (s)		15.0	55.0		
Total Split (%)		10.3%	37.9%		
Yellow Time (s)		4.5	4.5		
All-Red Time (s)		0.0	1.5		
Lost Time Adjust (s)		0.0	0.0		
Total Lost Time (s)		4.5	6.0		
Lead/Lag		Lead	Lag		
Lead-Lag Optimize?		Yes	Yes		
Recall Mode		None	Max		
Act Effct Green (s)		62.6	50.7		
Actuated g/C Ratio		0.51	0.41		
v/c Ratio		0.51	0.33		
Control Delay		23.0	27.8		
Queue Delay		0.0	0.0		
Total Delay		23.0	27.8		
LOS		C	C		
Approach Delay			26.2		
Approach LOS			C		
Queue Length 50th (ft)		91	132		
Queue Length 95th (ft)		186	222		
Internal Link Dist (ft)			619		
Turn Bay Length (ft)		225			
Base Capacity (vph)		447	1407		

Lane Group	EBL2	EBT	EBR	WBT	WBR	WBR2	SBL	SBR	SBR2	SEL2	SEL	SET
Starvation Cap Reductn		0		0			0				0	0
Spillback Cap Reductn		0		0			0				0	0
Storage Cap Reductn		0		0			0				0	0
Reduced v/c Ratio		0.61		0.49			0.04				0.23	0.37

Intersection Summary			
Area Type:	Other		
Cycle Length: 145			
Actuated Cycle Length: 123.7			
Natural Cycle: 75			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.73			
Intersection Signal Delay: 30.6		Intersection LOS: C	
Intersection Capacity Utilization 80.3%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 3: Northwest Hwy & Euclid Ave & Salem Ave



Lane Group	SER	NWL	NWT	NWR	NWR2
Starvation Cap Reductn		0	0		
Spillback Cap Reductn		0	0		
Storage Cap Reductn		0	0		
Reduced v/c Ratio		0.50	0.33		

Intersection Summary

Intersection	
Int Delay, s/veh	3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	7	34	66	123	68	8
Future Vol, veh/h	7	34	66	123	68	8
Conflicting Peds, #/hr	40	0	2	0	0	2
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	55	55	55	55	55	55
Heavy Vehicles, %	0	0	0	4	2	0
Mvmt Flow	13	62	120	224	124	15

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	638	134	141	0	-	0
Stage 1	134	-	-	-	-	-
Stage 2	504	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	444	920	1455	-	-	-
Stage 1	897	-	-	-	-	-
Stage 2	611	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	400	918	1452	-	-	-
Mov Cap-2 Maneuver	400	-	-	-	-	-
Stage 1	811	-	-	-	-	-
Stage 2	610	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.1	2.7	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1452	-	400	918	-	-
HCM Lane V/C Ratio	0.083	-	0.032	0.067	-	-
HCM Control Delay (s)	7.7	0	14.3	9.2	-	-
HCM Lane LOS	A	A	B	A	-	-
HCM 95th %tile Q(veh)	0.3	-	0.1	0.2	-	-

Intersection	
Int Delay, s/veh	9.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	112	592	1	3	533	69	1	8	1	31	12	59
Future Vol, veh/h	112	592	1	3	533	69	1	8	1	31	12	59
Conflicting Peds, #/hr	0	0	1	1	0	0	0	0	1	1	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	115	-	-	110	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	1	4	0	0	2	0	0	60	0	0	0	0
Mvmt Flow	132	696	1	4	627	81	1	9	1	36	14	69

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	708	0	0	698	0	0	1679	1678	699	1643	1638	668
Stage 1	-	-	-	-	-	-	962	962	-	676	676	-
Stage 2	-	-	-	-	-	-	717	716	-	967	962	-
Critical Hdwy	4.11	-	-	4.1	-	-	7.1	7.1	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	6.1	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	6.1	-	6.1	5.5	-
Follow-up Hdwy	2.209	-	-	2.2	-	-	3.5	4.54	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	895	-	-	908	-	-	76	70	443	81	102	462
Stage 1	-	-	-	-	-	-	310	268	-	446	456	-
Stage 2	-	-	-	-	-	-	424	358	-	308	337	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	895	-	-	907	-	-	50	59	442	63	87	462
Mov Cap-2 Maneuver	-	-	-	-	-	-	50	59	-	63	87	-
Stage 1	-	-	-	-	-	-	264	228	-	380	454	-
Stage 2	-	-	-	-	-	-	348	357	-	251	287	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.5	0	73.7	112.9
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	58	442	895	-	-	907	-	-	135
HCM Lane V/C Ratio	0.183	0.003	0.147	-	-	0.004	-	-	0.889
HCM Control Delay (s)	80.4	13.2	9.7	-	-	9	-	-	112.9
HCM Lane LOS	F	B	A	-	-	A	-	-	F
HCM 95th %tile Q(veh)	0.6	0	0.5	-	-	0	-	-	5.8

Intersection	
Int Delay, s/veh	7.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	2	48	10	0	29	4	9	104	28	6	80	7
Future Vol, veh/h	2	48	10	0	29	4	9	104	28	6	80	7
Conflicting Peds, #/hr	4	0	1	1	0	4	2	0	1	1	0	2
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	77	77	77	77	77	77	77	77	77	77	77	77
Heavy Vehicles, %	0	2	0	0	7	0	0	3	0	0	2	0
Mvmt Flow	3	62	13	0	38	5	12	135	36	8	104	9

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	47	0	0	76	0	0	175	123	71	206	127	47
Stage 1	-	-	-	-	-	-	76	76	-	45	45	-
Stage 2	-	-	-	-	-	-	99	47	-	161	82	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.53	6.2	7.1	6.52	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.53	-	6.1	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.53	-	6.1	5.52	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4.027	3.3	3.5	4.018	3.3
Pot Cap-1 Maneuver	1573	-	-	1536	-	-	792	766	997	756	764	1028
Stage 1	-	-	-	-	-	-	938	830	-	974	857	-
Stage 2	-	-	-	-	-	-	912	854	-	846	827	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1567	-	-	1535	-	-	699	761	995	625	759	1022
Mov Cap-2 Maneuver	-	-	-	-	-	-	699	761	-	625	759	-
Stage 1	-	-	-	-	-	-	935	828	-	968	854	-
Stage 2	-	-	-	-	-	-	792	851	-	680	825	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0	10.9	10.6
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	794	1567	-	-	1535	-	-	763
HCM Lane V/C Ratio	0.231	0.002	-	-	-	-	-	0.158
HCM Control Delay (s)	10.9	7.3	0	-	0	-	-	10.6
HCM Lane LOS	B	A	A	-	A	-	-	B
HCM 95th %tile Q(veh)	0.9	0	-	-	0	-	-	0.6

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	17	9	6	124	67	23
Future Vol, veh/h	17	9	6	124	67	23
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	55	55	55	55	55	55
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	31	16	11	225	122	42

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	390	143	164	0	-	0
Stage 1	143	-	-	-	-	-
Stage 2	247	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	614	905	1414	-	-	-
Stage 1	884	-	-	-	-	-
Stage 2	794	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	608	905	1414	-	-	-
Mov Cap-2 Maneuver	608	-	-	-	-	-
Stage 1	876	-	-	-	-	-
Stage 2	794	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.6	0.3	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1414	-	686	-	-
HCM Lane V/C Ratio	0.008	-	0.069	-	-
HCM Control Delay (s)	7.6	0	10.6	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

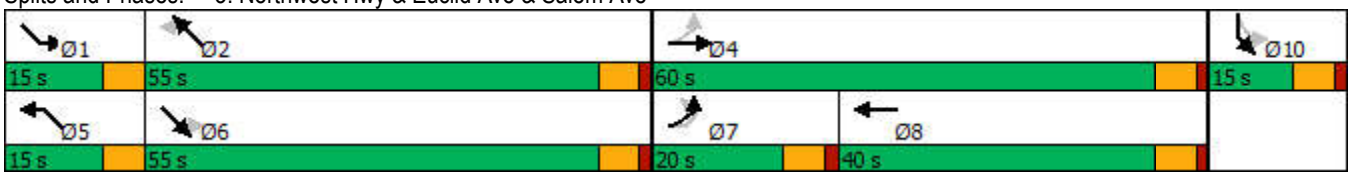
Lane Group	EBL2	EBL	EBT	EBR	WBT	WBR	SBL2	SBL	SBR	SBR2	SEL	SET
Lane Configurations												
Traffic Volume (vph)	36	2	456	21	536	86	3	3	2	4	73	427
Future Volume (vph)	36	2	456	21	536	86	3	3	2	4	73	427
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0		0		0		0	0		210	
Storage Lanes		0		0		0		1	0		1	
Taper Length (ft)		25						25			145	
Satd. Flow (prot)	0	0	3512	0	3504	0	0	1728	0	0	1805	3496
Flt Permitted			0.729					0.976			0.363	
Satd. Flow (perm)	0	0	2570	0	3504	0	0	1728	0	0	690	3496
Right Turn on Red				Yes						Yes		
Satd. Flow (RTOR)			3					147				8
Link Speed (mph)			30		30			30				30
Link Distance (ft)			1259		341			382				755
Travel Time (s)			28.6		7.8			8.7				17.2
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	2%	0%	1%	0%	0%	0%	0%	0%	0%	2%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	547	0	661	0	0	12	0	0	78	500
Turn Type	custom	pm+pt	NA		NA		Perm	Prot			pm+pt	NA
Protected Phases		7	4		8			10			1	6
Permitted Phases	7	4					10				6	
Detector Phase	7	7	4		8		10	10			1	6
Switch Phase												
Minimum Initial (s)	8.0	8.0	8.0		8.0		3.0	3.0			3.0	15.0
Minimum Split (s)	14.0	14.0	14.0		14.0		9.0	9.0			8.5	21.0
Total Split (s)	20.0	20.0	60.0		40.0		15.0	15.0			15.0	55.0
Total Split (%)	13.8%	13.8%	41.4%		27.6%		10.3%	10.3%			10.3%	37.9%
Yellow Time (s)	4.5	4.5	4.5		4.5		4.5	4.5			4.5	4.5
All-Red Time (s)	1.5	1.5	1.5		1.5		1.5	1.5			0.0	1.5
Lost Time Adjust (s)			0.0		0.0			0.0			0.0	0.0
Total Lost Time (s)			6.0		6.0			6.0			4.5	6.0
Lead/Lag	Lead	Lead			Lag						Lead	Lag
Lead-Lag Optimize?	Yes	Yes			Yes						Yes	Yes
Recall Mode	None	None	None		None		None	None			None	Max
Act Effct Green (s)			32.2		32.2			5.6			59.1	49.7
Actuated g/C Ratio			0.28		0.28			0.05			0.52	0.44
v/c Ratio			0.75		0.66			0.05			0.18	0.33
Control Delay			43.6		39.2			0.5			14.7	23.3
Queue Delay			0.0		0.0			0.0			0.0	0.0
Total Delay			43.6		39.2			0.5			14.7	23.3
LOS			D		D			A			B	C
Approach Delay			43.6		39.2			0.5				22.1
Approach LOS			D		D			A				C
Queue Length 50th (ft)			176		208			0			20	108
Queue Length 95th (ft)			270		305			0			64	212
Internal Link Dist (ft)			1179		261			302				675
Turn Bay Length (ft)											210	
Base Capacity (vph)			1243		1147			274			481	1537

Lane Group	SER	NWL	NWT	NWR
Lane Configurations				
Traffic Volume (vph)	43	237	617	1
Future Volume (vph)	43	237	617	1
Ideal Flow (vphpl)	1900	1900	1900	1900
Storage Length (ft)	0	225		0
Storage Lanes	0	1		0
Taper Length (ft)		145		
Satd. Flow (prot)	0	1770	3539	0
Flt Permitted		0.386		
Satd. Flow (perm)	0	719	3539	0
Right Turn on Red	Yes			
Satd. Flow (RTOR)				
Link Speed (mph)			30	
Link Distance (ft)			699	
Travel Time (s)			15.9	
Peak Hour Factor	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	2%	2%	0%
Shared Lane Traffic (%)				
Lane Group Flow (vph)	0	252	657	0
Turn Type		pm+pt	NA	
Protected Phases		5	2	
Permitted Phases		2		
Detector Phase		5	2	
Switch Phase				
Minimum Initial (s)		3.0	15.0	
Minimum Split (s)		8.5	21.0	
Total Split (s)		15.0	55.0	
Total Split (%)		10.3%	37.9%	
Yellow Time (s)		4.5	4.5	
All-Red Time (s)		0.0	1.5	
Lost Time Adjust (s)		0.0	0.0	
Total Lost Time (s)		4.5	6.0	
Lead/Lag		Lead	Lag	
Lead-Lag Optimize?		Yes	Yes	
Recall Mode		None	Max	
Act Effct Green (s)		64.5	54.8	
Actuated g/C Ratio		0.57	0.48	
v/c Ratio		0.50	0.38	
Control Delay		18.7	22.9	
Queue Delay		0.0	0.0	
Total Delay		18.7	22.9	
LOS		B	C	
Approach Delay			21.7	
Approach LOS			C	
Queue Length 50th (ft)		72	144	
Queue Length 95th (ft)		185	287	
Internal Link Dist (ft)			619	
Turn Bay Length (ft)		225		
Base Capacity (vph)		508	1711	

Lane Group	EBL2	EBL	EBT	EBR	WBT	WBR	SBL2	SBL	SBR	SBR2	SEL	SET
Starvation Cap Reductn			0		0			0			0	0
Spillback Cap Reductn			0		0			0			0	0
Storage Cap Reductn			0		0			0			0	0
Reduced v/c Ratio			0.44		0.58			0.04			0.16	0.33

Intersection Summary			
Area Type:	Other		
Cycle Length: 145			
Actuated Cycle Length: 113.3			
Natural Cycle: 80			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.75			
Intersection Signal Delay: 30.4		Intersection LOS: C	
Intersection Capacity Utilization 85.3%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 3: Northwest Hwy & Euclid Ave & Salem Ave



Lane Group	SER	NWL	NWT	NWR
Starvation Cap Reductn		0	0	
Spillback Cap Reductn		0	0	
Storage Cap Reductn		0	0	
Reduced v/c Ratio		0.50	0.38	

Intersection Summary

Intersection	
Int Delay, s/veh	3.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	7	30	55	74	40	9
Future Vol, veh/h	7	30	55	74	40	9
Conflicting Peds, #/hr	67	2	10	0	0	10
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	68	68	68	68	68	68
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	10	44	81	109	59	13

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	414	78	82	0	-	0
Stage 1	76	-	-	-	-	-
Stage 2	338	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	599	988	1528	-	-	-
Stage 1	952	-	-	-	-	-
Stage 2	727	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	553	977	1513	-	-	-
Mov Cap-2 Maneuver	553	-	-	-	-	-
Stage 1	889	-	-	-	-	-
Stage 2	720	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.4	3.2	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1513	-	553	977	-	-
HCM Lane V/C Ratio	0.053	-	0.019	0.045	-	-
HCM Control Delay (s)	7.5	0	11.6	8.9	-	-
HCM Lane LOS	A	A	B	A	-	-
HCM 95th %tile Q(veh)	0.2	-	0.1	0.1	-	-

Intersection	
Int Delay, s/veh	2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	60	471	1	6	572	64	2	5	7	16	6	48
Future Vol, veh/h	60	471	1	6	572	64	2	5	7	16	6	48
Conflicting Peds, #/hr	1	0	5	5	0	1	1	0	0	0	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	115	-	-	110	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	0	2	0	0	1	0	0	0	14	0	0	0
Mvmt Flow	62	486	1	6	590	66	2	5	7	16	6	49

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	657	0	0	492	0	0	1280	1285	492	1253	1252	625
Stage 1	-	-	-	-	-	-	616	616	-	636	636	-
Stage 2	-	-	-	-	-	-	664	669	-	617	616	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.34	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.426	3.5	4	3.3
Pot Cap-1 Maneuver	940	-	-	1082	-	-	144	166	553	150	174	488
Stage 1	-	-	-	-	-	-	481	485	-	469	475	-
Stage 2	-	-	-	-	-	-	453	459	-	481	485	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	939	-	-	1077	-	-	118	153	550	136	161	487
Mov Cap-2 Maneuver	-	-	-	-	-	-	118	153	-	136	161	-
Stage 1	-	-	-	-	-	-	447	451	-	438	472	-
Stage 2	-	-	-	-	-	-	399	456	-	438	451	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1	0.1	21.8	22.6
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	141	550	939	-	-	1077	-	-	276
HCM Lane V/C Ratio	0.051	0.013	0.066	-	-	0.006	-	-	0.261
HCM Control Delay (s)	31.9	11.6	9.1	-	-	8.4	-	-	22.6
HCM Lane LOS	D	B	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.2	0	0.2	-	-	0	-	-	1

Intersection	
Int Delay, s/veh	6.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	4	32	12	2	38	9	14	66	11	3	49	3
Future Vol, veh/h	4	32	12	2	38	9	14	66	11	3	49	3
Conflicting Peds, #/hr	1	0	3	3	0	1	0	0	1	1	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	25	16	0	0	3	0	0	0	0	0	0	0
Mvmt Flow	5	39	15	2	46	11	17	80	13	4	60	4

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	58	0	0	57	0	0	148	122	51	161	124	53
Stage 1	-	-	-	-	-	-	60	60	-	57	57	-
Stage 2	-	-	-	-	-	-	88	62	-	104	67	-
Critical Hdwy	4.35	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.425	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1411	-	-	1560	-	-	825	772	1023	809	770	1020
Stage 1	-	-	-	-	-	-	957	849	-	960	851	-
Stage 2	-	-	-	-	-	-	925	847	-	907	843	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1410	-	-	1556	-	-	768	765	1019	730	763	1019
Mov Cap-2 Maneuver	-	-	-	-	-	-	768	765	-	730	763	-
Stage 1	-	-	-	-	-	-	950	843	-	955	849	-
Stage 2	-	-	-	-	-	-	856	845	-	806	837	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.6	0.3	10.3	10.1
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	789	1410	-	-	1556	-	-	772
HCM Lane V/C Ratio	0.141	0.003	-	-	0.002	-	-	0.087
HCM Control Delay (s)	10.3	7.6	0	-	7.3	0	-	10.1
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.5	0	-	-	0	-	-	0.3

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	15	7	5	76	42	21
Future Vol, veh/h	15	7	5	76	42	21
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	68	68	68	68	68	68
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	22	10	7	112	62	31

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	204	78	93	0	-	0
Stage 1	78	-	-	-	-	-
Stage 2	126	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	784	983	1501	-	-	-
Stage 1	945	-	-	-	-	-
Stage 2	900	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	780	983	1501	-	-	-
Mov Cap-2 Maneuver	780	-	-	-	-	-
Stage 1	940	-	-	-	-	-
Stage 2	900	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.5	0.5	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1501	-	835	-	-
HCM Lane V/C Ratio	0.005	-	0.039	-	-
HCM Control Delay (s)	7.4	0	9.5	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

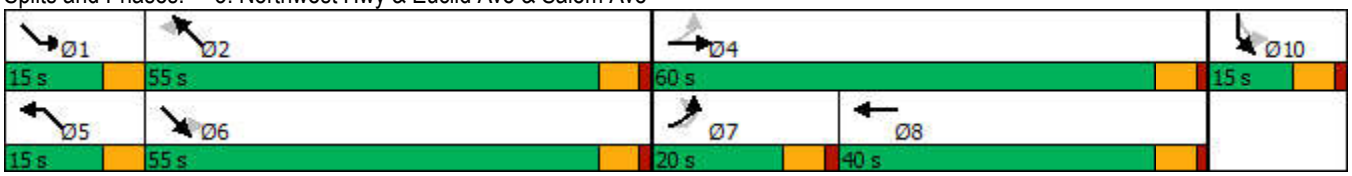
Lane Group	EBL2	EBL	EBT	EBR	WBT	WBR	WBR2	SBL	SBR	SBR2	SEL	SET
Lane Configurations												
Traffic Volume (vph)	30	3	587	227	624	82	2	2	2	3	31	391
Future Volume (vph)	30	3	587	227	624	82	2	2	2	3	31	391
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0		0		0		0	0		210	
Storage Lanes		0		0		0		1	0		1	
Taper Length (ft)		25						25			145	
Satd. Flow (prot)	0	0	3426	0	3490	0	0	1694	0	0	1719	3531
Flt Permitted			0.838					0.986			0.349	
Satd. Flow (perm)	0	0	2877	0	3490	0	0	1694	0	0	632	3531
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)			41					147				8
Link Speed (mph)			30		30			30				30
Link Distance (ft)			1259		341			382				755
Travel Time (s)			28.6		7.8			8.7				17.2
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	0%	0%	1%	1%	1%	6%	0%	0%	0%	0%	5%	1%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	873	0	730	0	0	7	0	0	32	442
Turn Type	custom	pm+pt	NA		NA			Prot			pm+pt	NA
Protected Phases		7	4		8			10			1	6
Permitted Phases	7	4									6	
Detector Phase	7	7	4		8			10			1	6
Switch Phase												
Minimum Initial (s)	8.0	8.0	8.0		8.0			3.0			3.0	15.0
Minimum Split (s)	14.0	14.0	14.0		14.0			9.0			8.5	21.0
Total Split (s)	20.0	20.0	60.0		40.0			15.0			15.0	55.0
Total Split (%)	13.8%	13.8%	41.4%		27.6%			10.3%			10.3%	37.9%
Yellow Time (s)	4.5	4.5	4.5		4.5			4.5			4.5	4.5
All-Red Time (s)	1.5	1.5	1.5		1.5			1.5			0.0	1.5
Lost Time Adjust (s)			0.0		0.0			0.0			0.0	0.0
Total Lost Time (s)			6.0		6.0			6.0			4.5	6.0
Lead/Lag	Lead	Lead			Lag						Lead	Lag
Lead-Lag Optimize?	Yes	Yes			Yes						Yes	Yes
Recall Mode	None	None	None		None			None			None	Max
Act Effct Green (s)			49.8		49.8			5.5			57.5	49.2
Actuated g/C Ratio			0.39		0.39			0.04			0.45	0.38
v/c Ratio			0.76		0.54			0.03			0.09	0.33
Control Delay			37.8		32.2			0.3			18.9	29.3
Queue Delay			0.0		0.0			0.0			0.0	0.0
Total Delay			37.8		32.2			0.3			18.9	29.3
LOS			D		C			A			B	C
Approach Delay			37.8		32.2			0.3				28.6
Approach LOS			D		C			A				C
Queue Length 50th (ft)			304		236			0			13	135
Queue Length 95th (ft)			441		339			0			36	204
Internal Link Dist (ft)			1179		261			302				675
Turn Bay Length (ft)											210	
Base Capacity (vph)			1241		1354			256			391	1360

Lane Group	SER	NWL	NWT	NWR	NWR2
Lane Configurations					
Traffic Volume (vph)	38	251	639	2	2
Future Volume (vph)	38	251	639	2	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900
Storage Length (ft)	0	225		0	
Storage Lanes	0	1		0	
Taper Length (ft)		145			
Satd. Flow (prot)	0	1770	3571	0	0
Flt Permitted		0.398			
Satd. Flow (perm)	0	741	3571	0	0
Right Turn on Red	Yes				Yes
Satd. Flow (RTOR)					
Link Speed (mph)			30		
Link Distance (ft)			699		
Travel Time (s)			15.9		
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	0%	2%	1%	0%	0%
Shared Lane Traffic (%)					
Lane Group Flow (vph)	0	259	663	0	0
Turn Type		pm+pt	NA		
Protected Phases		5	2		
Permitted Phases		2			
Detector Phase		5	2		
Switch Phase					
Minimum Initial (s)		3.0	15.0		
Minimum Split (s)		8.5	21.0		
Total Split (s)		15.0	55.0		
Total Split (%)		10.3%	37.9%		
Yellow Time (s)		4.5	4.5		
All-Red Time (s)		0.0	1.5		
Lost Time Adjust (s)		0.0	0.0		
Total Lost Time (s)		4.5	6.0		
Lead/Lag		Lead	Lag		
Lead-Lag Optimize?		Yes	Yes		
Recall Mode		None	Max		
Act Effct Green (s)		64.9	57.4		
Actuated g/C Ratio		0.51	0.45		
v/c Ratio		0.56	0.41		
Control Delay		25.9	27.5		
Queue Delay		0.0	0.0		
Total Delay		25.9	27.5		
LOS		C	C		
Approach Delay			27.1		
Approach LOS			C		
Queue Length 50th (ft)		123	212		
Queue Length 95th (ft)		215	313		
Internal Link Dist (ft)			619		
Turn Bay Length (ft)		225			
Base Capacity (vph)		459	1598		

Lane Group	EBL2	EBL	EBT	EBR	WBT	WBR	WBR2	SBL	SBR	SBR2	SEL	SET
Starvation Cap Reductn			0		0			0			0	0
Spillback Cap Reductn			0		0			0			0	0
Storage Cap Reductn			0		0			0			0	0
Reduced v/c Ratio			0.70		0.54			0.03			0.08	0.33

Intersection Summary			
Area Type:	Other		
Cycle Length: 145			
Actuated Cycle Length: 128.2			
Natural Cycle: 80			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.76			
Intersection Signal Delay: 31.6		Intersection LOS: C	
Intersection Capacity Utilization 97.1%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 3: Northwest Hwy & Euclid Ave & Salem Ave



Lane Group	SER	NWL	NWT	NWR	NWR2
Starvation Cap Reductn		0	0		
Spillback Cap Reductn		0	0		
Storage Cap Reductn		0	0		
Reduced v/c Ratio		0.56	0.41		

Intersection Summary

Intersection	
Int Delay, s/veh	4.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	4	76	103	74	65	4
Future Vol, veh/h	4	76	103	74	65	4
Conflicting Peds, #/hr	0	0	1	0	0	1
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	76	76	76	76	76	76
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	5	100	136	97	86	5

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	459	90	92	0	-	0
Stage 1	90	-	-	-	-	-
Stage 2	369	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	564	973	1515	-	-	-
Stage 1	939	-	-	-	-	-
Stage 2	704	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	509	972	1514	-	-	-
Mov Cap-2 Maneuver	509	-	-	-	-	-
Stage 1	849	-	-	-	-	-
Stage 2	703	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.3	4.4	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1514	-	509	972	-	-
HCM Lane V/C Ratio	0.09	-	0.01	0.103	-	-
HCM Control Delay (s)	7.6	0	12.1	9.1	-	-
HCM Lane LOS	A	A	B	A	-	-
HCM 95th %tile Q(veh)	0.3	-	0	0.3	-	-

Intersection	
Int Delay, s/veh	10

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	87	532	1	1	634	75	1	15	12	54	14	73
Future Vol, veh/h	87	532	1	1	634	75	1	15	12	54	14	73
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	115	-	-	110	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	0	1	0	0	1	0	0	10	0	0	0	0
Mvmt Flow	89	543	1	1	647	77	1	15	12	55	14	74

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	724	0	0	544	0	0	1454	1448	544	1423	1410	686
Stage 1	-	-	-	-	-	-	722	722	-	688	688	-
Stage 2	-	-	-	-	-	-	732	726	-	735	722	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.6	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.6	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.6	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4.09	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	888	-	-	1035	-	-	109	126	543	115	140	451
Stage 1	-	-	-	-	-	-	421	420	-	440	450	-
Stage 2	-	-	-	-	-	-	416	418	-	414	434	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	888	-	-	1035	-	-	77	113	543	93	126	451
Mov Cap-2 Maneuver	-	-	-	-	-	-	77	113	-	93	126	-
Stage 1	-	-	-	-	-	-	379	378	-	396	450	-
Stage 2	-	-	-	-	-	-	336	418	-	349	391	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.3	0	29.8	94.9
HCM LOS			D	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	110	543	888	-	-	1035	-	-	165
HCM Lane V/C Ratio	0.148	0.023	0.1	-	-	0.001	-	-	0.872
HCM Control Delay (s)	43.3	11.8	9.5	-	-	8.5	-	-	94.9
HCM Lane LOS	E	B	A	-	-	A	-	-	F
HCM 95th %tile Q(veh)	0.5	0.1	0.3	-	-	0	-	-	6.1

Intersection	
Int Delay, s/veh	6.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	42	18	4	35	5	15	74	23	3	69	5
Future Vol, veh/h	1	42	18	4	35	5	15	74	23	3	69	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	1	1	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	25	16	0	0	3	0	0	0	0	0	0	0
Mvmt Flow	1	47	20	4	39	6	17	82	26	3	77	6

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	45	0	0	67	0	0	151	112	58	164	119	42
Stage 1	-	-	-	-	-	-	59	59	-	50	50	-
Stage 2	-	-	-	-	-	-	92	53	-	114	69	-
Critical Hdwy	4.35	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.425	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1427	-	-	1547	-	-	821	782	1014	805	775	1034
Stage 1	-	-	-	-	-	-	958	850	-	968	857	-
Stage 2	-	-	-	-	-	-	920	855	-	896	841	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1427	-	-	1547	-	-	752	779	1013	718	772	1034
Mov Cap-2 Maneuver	-	-	-	-	-	-	752	779	-	718	772	-
Stage 1	-	-	-	-	-	-	957	849	-	967	854	-
Stage 2	-	-	-	-	-	-	830	852	-	787	840	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.7	10.2	10.2
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	814	1427	-	-	1547	-	-	783
HCM Lane V/C Ratio	0.153	0.001	-	-	0.003	-	-	0.109
HCM Control Delay (s)	10.2	7.5	0	-	7.3	0	-	10.2
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.5	0	-	-	0	-	-	0.4

Intersection	
Int Delay, s/veh	3.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	45	19	11	67	50	41
Future Vol, veh/h	45	19	11	67	50	41
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	76	76	76	76	76	76
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	59	25	14	88	66	54

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	209	93	120	0	-	0
Stage 1	93	-	-	-	-	-
Stage 2	116	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	779	964	1468	-	-	-
Stage 1	931	-	-	-	-	-
Stage 2	909	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	771	964	1468	-	-	-
Mov Cap-2 Maneuver	771	-	-	-	-	-
Stage 1	922	-	-	-	-	-
Stage 2	909	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.9	1.1	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1468	-	820	-	-
HCM Lane V/C Ratio	0.01	-	0.103	-	-
HCM Control Delay (s)	7.5	0	9.9	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.3	-	-

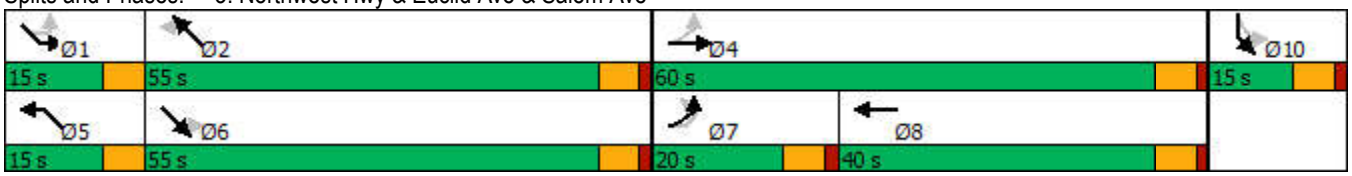
Lane Group	EBL2	EBT	EBR	WBT	WBR	SBL2	SBL	SBR	SEL2	SEL	SET	SER
Lane Configurations												
Traffic Volume (vph)	31	405	166	435	76	1	6	1	1	92	385	47
Future Volume (vph)	31	405	166	435	76	1	6	1	1	92	385	47
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)			0		0		0	0		210		0
Storage Lanes			0		0		1	0		1		0
Taper Length (ft)							25			145		
Satd. Flow (prot)	0	3405	0	3490	0	0	1789	0	0	1770	3506	0
Flt Permitted		0.877					0.958			0.441		
Satd. Flow (perm)	0	2995	0	3490	0	0	1789	0	0	822	3506	0
Right Turn on Red			Yes									Yes
Satd. Flow (RTOR)		43									10	
Link Speed (mph)		30		30			30				30	
Link Distance (ft)		1259		341			382				755	
Travel Time (s)		28.6		7.8			8.7				17.2	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	3%	1%	2%	1%	2%	0%	0%	0%	0%	2%	1%	4%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	614	0	522	0	0	8	0	0	95	441	0
Turn Type	custom	NA		NA		Perm	Prot		custom	pm+pt	NA	
Protected Phases		4		8			10			1	6	
Permitted Phases	7					10			1	6		
Detector Phase	7	4		8		10	10		1	1	6	
Switch Phase												
Minimum Initial (s)	8.0	8.0		8.0		3.0	3.0		3.0	3.0	15.0	
Minimum Split (s)	14.0	14.0		14.0		9.0	9.0		8.5	8.5	21.0	
Total Split (s)	20.0	60.0		40.0		15.0	15.0		15.0	15.0	55.0	
Total Split (%)	13.8%	41.4%		27.6%		10.3%	10.3%		10.3%	10.3%	37.9%	
Yellow Time (s)	4.5	4.5		4.5		4.5	4.5		4.5	4.5	4.5	
All-Red Time (s)	1.5	1.5		1.5		1.5	1.5		0.0	0.0	1.5	
Lost Time Adjust (s)		0.0		0.0			0.0			0.0	0.0	
Total Lost Time (s)		6.0		6.0			6.0			4.5	6.0	
Lead/Lag	Lead			Lag					Lead	Lead	Lag	
Lead-Lag Optimize?	Yes			Yes					Yes	Yes	Yes	
Recall Mode	None	None		None		None	None		None	None	Max	
Act Effct Green (s)		34.0		34.0			6.2			59.5	49.7	
Actuated g/C Ratio		0.30		0.30			0.05			0.53	0.44	
v/c Ratio		0.66		0.50			0.08			0.19	0.28	
Control Delay		35.4		33.9			58.8			14.5	22.5	
Queue Delay		0.0		0.0			0.0			0.0	0.0	
Total Delay		35.4		33.9			58.8			14.5	22.5	
LOS		D		C			E			B	C	
Approach Delay		35.4		33.9			58.8				21.1	
Approach LOS		D		C			E				C	
Queue Length 50th (ft)		182		157			5			26	96	
Queue Length 95th (ft)		280		240			26			82	199	
Internal Link Dist (ft)		1179		261			302				675	
Turn Bay Length (ft)										210		
Base Capacity (vph)		1475		1166			144			540	1549	

Lane Group	NWL	NWT	NWR2
Lane Configurations			
Traffic Volume (vph)	225	477	9
Future Volume (vph)	225	477	9
Ideal Flow (vphpl)	1900	1900	1900
Storage Length (ft)	225		
Storage Lanes	1		
Taper Length (ft)	145		
Satd. Flow (prot)	1787	3564	0
Flt Permitted	0.437		
Satd. Flow (perm)	822	3564	0
Right Turn on Red			Yes
Satd. Flow (RTOR)		147	
Link Speed (mph)		30	
Link Distance (ft)		699	
Travel Time (s)		15.9	
Peak Hour Factor	0.98	0.98	0.98
Heavy Vehicles (%)	1%	1%	0%
Shared Lane Traffic (%)			
Lane Group Flow (vph)	230	496	0
Turn Type	pm+pt	NA	
Protected Phases	5	2	
Permitted Phases	2		
Detector Phase	5	2	
Switch Phase			
Minimum Initial (s)	3.0	15.0	
Minimum Split (s)	8.5	21.0	
Total Split (s)	15.0	55.0	
Total Split (%)	10.3%	37.9%	
Yellow Time (s)	4.5	4.5	
All-Red Time (s)	0.0	1.5	
Lost Time Adjust (s)	0.0	0.0	
Total Lost Time (s)	4.5	6.0	
Lead/Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	
Recall Mode	None	Max	
Act Effct Green (s)	63.5	51.7	
Actuated g/C Ratio	0.56	0.46	
v/c Ratio	0.42	0.29	
Control Delay	17.0	15.6	
Queue Delay	0.0	0.0	
Total Delay	17.0	15.6	
LOS	B	B	
Approach Delay		16.1	
Approach LOS		B	
Queue Length 50th (ft)	68	72	
Queue Length 95th (ft)	185	170	
Internal Link Dist (ft)		619	
Turn Bay Length (ft)	225		
Base Capacity (vph)	556	1713	

Lane Group	EBL2	EBT	EBR	WBT	WBR	SBL2	SBL	SBR	SEL2	SEL	SET	SER
Starvation Cap Reductn		0		0			0			0	0	
Spillback Cap Reductn		0		0			0			0	0	
Storage Cap Reductn		0		0			0			0	0	
Reduced v/c Ratio		0.42		0.45			0.06			0.18	0.28	

Intersection Summary			
Area Type:	Other		
Cycle Length: 145			
Actuated Cycle Length: 112.9			
Natural Cycle: 70			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.66			
Intersection Signal Delay: 26.1		Intersection LOS: C	
Intersection Capacity Utilization 83.9%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 3: Northwest Hwy & Euclid Ave & Salem Ave



Lane Group	NWL	NWT	NWR2
Starvation Cap Reductn	0	0	
Spillback Cap Reductn	0	0	
Storage Cap Reductn	0	0	
Reduced v/c Ratio	0.41	0.29	

Intersection Summary

Intersection	
Int Delay, s/veh	6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	6	107	175	48	56	5
Future Vol, veh/h	6	107	175	48	56	5
Conflicting Peds, #/hr	8	4	2	0	0	2
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	7	123	201	55	64	6

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	534	73	72	0	-	0
Stage 1	69	-	-	-	-	-
Stage 2	465	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	510	995	1541	-	-	-
Stage 1	959	-	-	-	-	-
Stage 2	636	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	440	989	1538	-	-	-
Mov Cap-2 Maneuver	440	-	-	-	-	-
Stage 1	828	-	-	-	-	-
Stage 2	635	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.4	6	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1538	-	440	989	-	-
HCM Lane V/C Ratio	0.131	-	0.016	0.124	-	-
HCM Control Delay (s)	7.7	0	13.3	9.2	-	-
HCM Lane LOS	A	A	B	A	-	-
HCM 95th %tile Q(veh)	0.5	-	0	0.4	-	-

Intersection	
Int Delay, s/veh	8.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	77	426	4	2	437	131	2	15	10	76	15	72
Future Vol, veh/h	77	426	4	2	437	131	2	15	10	76	15	72
Conflicting Peds, #/hr	4	0	0	0	0	4	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	115	-	-	110	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	1	0	0	1	0	0	0	0	0	0	0
Mvmt Flow	81	448	4	2	460	138	2	16	11	80	16	76

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	602	0	0	452	0	0	1191	1218	450	1163	1151	533
Stage 1	-	-	-	-	-	-	612	612	-	537	537	-
Stage 2	-	-	-	-	-	-	579	606	-	626	614	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	985	-	-	1119	-	-	166	182	613	173	200	551
Stage 1	-	-	-	-	-	-	484	487	-	532	526	-
Stage 2	-	-	-	-	-	-	504	490	-	475	486	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	981	-	-	1119	-	-	125	166	613	147	182	549
Mov Cap-2 Maneuver	-	-	-	-	-	-	125	166	-	147	182	-
Stage 1	-	-	-	-	-	-	444	447	-	486	523	-
Stage 2	-	-	-	-	-	-	421	487	-	413	446	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.4	0	23.2	60.3
HCM LOS			C	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	160	613	981	-	-	1119	-	-	223
HCM Lane V/C Ratio	0.112	0.017	0.083	-	-	0.002	-	-	0.769
HCM Control Delay (s)	30.3	11	9	-	-	8.2	-	-	60.3
HCM Lane LOS	D	B	A	-	-	A	-	-	F
HCM 95th %tile Q(veh)	0.4	0.1	0.3	-	-	0	-	-	5.4

Intersection	
Int Delay, s/veh	6.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	1	30	18	4	17	5	19	71	5	1	62	1
Future Vol, veh/h	1	30	18	4	17	5	19	71	5	1	62	1
Conflicting Peds, #/hr	0	0	0	0	0	0	2	0	0	0	0	2
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	25	16	0	0	3	0	0	0	0	0	0	0
Mvmt Flow	1	32	19	4	18	5	20	76	5	1	66	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	23	0	0	51	0	0	108	75	42	113	82	23
Stage 1	-	-	-	-	-	-	44	44	-	29	29	-
Stage 2	-	-	-	-	-	-	64	31	-	84	53	-
Critical Hdwy	4.35	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.425	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1455	-	-	1568	-	-	876	819	1034	869	812	1060
Stage 1	-	-	-	-	-	-	975	862	-	993	875	-
Stage 2	-	-	-	-	-	-	952	873	-	929	855	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1455	-	-	1568	-	-	816	816	1034	801	809	1058
Mov Cap-2 Maneuver	-	-	-	-	-	-	816	816	-	801	809	-
Stage 1	-	-	-	-	-	-	974	861	-	992	872	-
Stage 2	-	-	-	-	-	-	875	870	-	842	854	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	1.1	10	9.8
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	825	1455	-	-	1568	-	-	812
HCM Lane V/C Ratio	0.123	0.001	-	-	0.003	-	-	0.084
HCM Control Delay (s)	10	7.5	0	-	7.3	0	-	9.8
HCM Lane LOS	B	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.4	0	-	-	0	-	-	0.3

Intersection	
Int Delay, s/veh	4.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	60	26	19	35	35	49
Future Vol, veh/h	60	26	19	35	35	49
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	69	30	22	40	40	56

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	152	68	96	0	-	0
Stage 1	68	-	-	-	-	-
Stage 2	84	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	840	995	1498	-	-	-
Stage 1	955	-	-	-	-	-
Stage 2	939	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	827	995	1498	-	-	-
Mov Cap-2 Maneuver	827	-	-	-	-	-
Stage 1	941	-	-	-	-	-
Stage 2	939	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.7	2.6	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1498	-	871	-	-
HCM Lane V/C Ratio	0.015	-	0.113	-	-
HCM Control Delay (s)	7.4	0	9.7	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.4	-	-

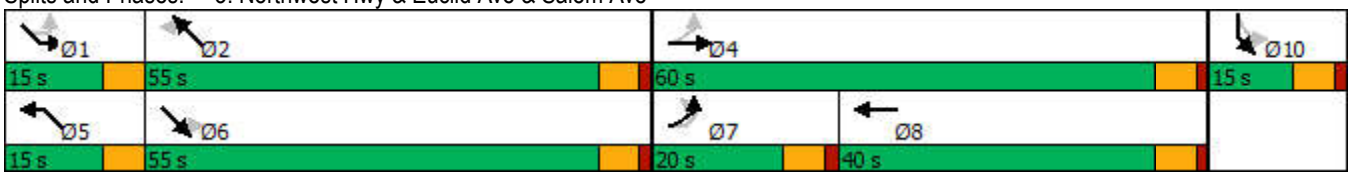
Lane Group	EBL2	EBT	EBR	WBT	WBR	WBR2	SBL	SBR	SBR2	SEL2	SEL	SET
Lane Configurations												
Traffic Volume (vph)	13	610	200	532	64	2	7	1	2	1	103	436
Future Volume (vph)	13	610	200	532	64	2	7	1	2	1	103	436
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)			0		0		0	0			210	
Storage Lanes			0		0		1	0			1	
Taper Length (ft)							25				145	
Satd. Flow (prot)	0	3362	0	3465	0	0	1760	0	0	0	1704	3452
Flt Permitted		0.939					0.966				0.431	
Satd. Flow (perm)	0	3160	0	3465	0	0	1760	0	0	0	773	3452
Right Turn on Red			Yes			Yes			Yes			
Satd. Flow (RTOR)		34					147					10
Link Speed (mph)		30		30			30					30
Link Distance (ft)		1259		341			382					755
Travel Time (s)		28.6		7.8			8.7					17.2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	7%	2%	7%	2%	7%	0%	0%	0%	0%	0%	6%	3%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	867	0	629	0	0	10	0	0	0	109	514
Turn Type	custom	NA		NA			Prot			custom	pm+pt	NA
Protected Phases		4		8			10				1	6
Permitted Phases	7									1	6	
Detector Phase	7	4		8			10			1	1	6
Switch Phase												
Minimum Initial (s)	8.0	8.0		8.0			3.0			3.0	3.0	15.0
Minimum Split (s)	14.0	14.0		14.0			9.0			8.5	8.5	21.0
Total Split (s)	20.0	60.0		40.0			15.0			15.0	15.0	55.0
Total Split (%)	13.8%	41.4%		27.6%			10.3%			10.3%	10.3%	37.9%
Yellow Time (s)	4.5	4.5		4.5			4.5			4.5	4.5	4.5
All-Red Time (s)	1.5	1.5		1.5			1.5			0.0	0.0	1.5
Lost Time Adjust (s)		0.0		0.0			0.0				0.0	0.0
Total Lost Time (s)		6.0		6.0			6.0				4.5	6.0
Lead/Lag	Lead			Lag						Lead	Lead	Lag
Lead-Lag Optimize?	Yes			Yes						Yes	Yes	Yes
Recall Mode	None	None		None			None			None	None	Max
Act Effct Green (s)		45.9		45.9			5.5				60.0	49.4
Actuated g/C Ratio		0.37		0.37			0.04				0.48	0.40
v/c Ratio		0.73		0.49			0.05				0.25	0.37
Control Delay		36.6		31.7			0.4				18.7	28.5
Queue Delay		0.0		0.0			0.0				0.0	0.0
Total Delay		36.6		31.7			0.4				18.7	28.5
LOS		D		C			A				B	C
Approach Delay		36.6		31.7			0.4					26.8
Approach LOS		D		C			A					C
Queue Length 50th (ft)		293		196			0				42	147
Queue Length 95th (ft)		420		286			0				95	240
Internal Link Dist (ft)		1179		261			302					675
Turn Bay Length (ft)											210	
Base Capacity (vph)		1402		1279			264				461	1377

Lane Group	SER	NWL	NWT	NWR	NWR2
Lane Configurations					
Traffic Volume (vph)	52	214	443	2	1
Future Volume (vph)	52	214	443	2	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900
Storage Length (ft)	0	225		0	
Storage Lanes	0	1		0	
Taper Length (ft)		145			
Satd. Flow (prot)	0	1770	3436	0	0
Flt Permitted		0.377			
Satd. Flow (perm)	0	702	3436	0	0
Right Turn on Red	Yes				Yes
Satd. Flow (RTOR)					
Link Speed (mph)			30		
Link Distance (ft)			699		
Travel Time (s)			15.9		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	2%	5%	0%	0%
Shared Lane Traffic (%)					
Lane Group Flow (vph)	0	225	469	0	0
Turn Type		pm+pt	NA		
Protected Phases		5	2		
Permitted Phases		2			
Detector Phase		5	2		
Switch Phase					
Minimum Initial (s)		3.0	15.0		
Minimum Split (s)		8.5	21.0		
Total Split (s)		15.0	55.0		
Total Split (%)		10.3%	37.9%		
Yellow Time (s)		4.5	4.5		
All-Red Time (s)		0.0	1.5		
Lost Time Adjust (s)		0.0	0.0		
Total Lost Time (s)		4.5	6.0		
Lead/Lag		Lead	Lag		
Lead-Lag Optimize?		Yes	Yes		
Recall Mode		None	Max		
Act Effct Green (s)		62.5	50.6		
Actuated g/C Ratio		0.50	0.41		
v/c Ratio		0.51	0.34		
Control Delay		23.3	28.1		
Queue Delay		0.0	0.0		
Total Delay		23.3	28.1		
LOS		C	C		
Approach Delay			26.5		
Approach LOS			C		
Queue Length 50th (ft)		93	134		
Queue Length 95th (ft)		186	222		
Internal Link Dist (ft)			619		
Turn Bay Length (ft)		225			
Base Capacity (vph)		445	1399		

Lane Group	EBL2	EBT	EBR	WBT	WBR	WBR2	SBL	SBR	SBR2	SEL2	SEL	SET
Starvation Cap Reductn		0		0			0				0	0
Spillback Cap Reductn		0		0			0				0	0
Storage Cap Reductn		0		0			0				0	0
Reduced v/c Ratio		0.62		0.49			0.04				0.24	0.37

Intersection Summary			
Area Type:	Other		
Cycle Length: 145			
Actuated Cycle Length: 124.3			
Natural Cycle: 75			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.73			
Intersection Signal Delay: 30.7		Intersection LOS: C	
Intersection Capacity Utilization 80.4%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 3: Northwest Hwy & Euclid Ave & Salem Ave



Lane Group	SER	NWL	NWT	NWR	NWR2
Starvation Cap Reductn		0	0		
Spillback Cap Reductn		0	0		
Storage Cap Reductn		0	0		
Reduced v/c Ratio		0.51	0.34		

Intersection Summary

Intersection	
Int Delay, s/veh	3.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	7	40	80	124	70	8
Future Vol, veh/h	7	40	80	124	70	8
Conflicting Peds, #/hr	40	0	2	0	0	2
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	55	55	55	55	55	55
Heavy Vehicles, %	0	0	0	4	2	0
Mvmt Flow	13	73	145	225	127	15

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	692	137	144	0	-	0
Stage 1	137	-	-	-	-	-
Stage 2	555	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	413	917	1451	-	-	-
Stage 1	895	-	-	-	-	-
Stage 2	579	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	364	915	1448	-	-	-
Mov Cap-2 Maneuver	364	-	-	-	-	-
Stage 1	791	-	-	-	-	-
Stage 2	578	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.2	3	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1448	-	364	915	-	-
HCM Lane V/C Ratio	0.1	-	0.035	0.079	-	-
HCM Control Delay (s)	7.8	0	15.2	9.3	-	-
HCM Lane LOS	A	A	C	A	-	-
HCM 95th %tile Q(veh)	0.3	-	0.1	0.3	-	-

Intersection	
Int Delay, s/veh	13.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	121	592	1	3	533	74	1	9	1	34	12	64
Future Vol, veh/h	121	592	1	3	533	74	1	9	1	34	12	64
Conflicting Peds, #/hr	0	0	1	1	0	0	0	0	1	1	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	115	-	-	110	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	1	4	0	0	2	0	0	60	0	0	0	0
Mvmt Flow	142	696	1	4	627	87	1	11	1	40	14	75

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	714	0	0	698	0	0	1705	1704	699	1667	1661	671
Stage 1	-	-	-	-	-	-	982	982	-	679	679	-
Stage 2	-	-	-	-	-	-	723	722	-	988	982	-
Critical Hdwy	4.11	-	-	4.1	-	-	7.1	7.1	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	6.1	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	6.1	-	6.1	5.5	-
Follow-up Hdwy	2.209	-	-	2.2	-	-	3.5	4.54	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	891	-	-	908	-	-	73	67	443	78	98	460
Stage 1	-	-	-	-	-	-	302	262	-	445	454	-
Stage 2	-	-	-	-	-	-	421	355	-	300	330	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	891	-	-	907	-	-	47	56	442	58	82	460
Mov Cap-2 Maneuver	-	-	-	-	-	-	47	56	-	58	82	-
Stage 1	-	-	-	-	-	-	254	220	-	374	452	-
Stage 2	-	-	-	-	-	-	340	354	-	239	277	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.7	0	80.7	154.7
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	55	442	891	-	-	907	-	-	126
HCM Lane V/C Ratio	0.214	0.003	0.16	-	-	0.004	-	-	1.027
HCM Control Delay (s)	87.4	13.2	9.8	-	-	9	-	-	154.7
HCM Lane LOS	F	B	A	-	-	A	-	-	F
HCM 95th %tile Q(veh)	0.7	0	0.6	-	-	0	-	-	7.2

Intersection	
Int Delay, s/veh	7.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	2	48	11	0	29	4	9	106	28	6	84	7
Future Vol, veh/h	2	48	11	0	29	4	9	106	28	6	84	7
Conflicting Peds, #/hr	4	0	1	1	0	4	2	0	1	1	0	2
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	77	77	77	77	77	77	77	77	77	77	77	77
Heavy Vehicles, %	0	2	0	0	7	0	0	3	0	0	2	0
Mvmt Flow	3	62	14	0	38	5	12	138	36	8	109	9

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	47	0	0	77	0	0	178	123	71	208	128	47
Stage 1	-	-	-	-	-	-	76	76	-	45	45	-
Stage 2	-	-	-	-	-	-	102	47	-	163	83	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.53	6.2	7.1	6.52	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.53	-	6.1	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.53	-	6.1	5.52	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4.027	3.3	3.5	4.018	3.3
Pot Cap-1 Maneuver	1573	-	-	1535	-	-	789	766	997	754	763	1028
Stage 1	-	-	-	-	-	-	938	830	-	974	857	-
Stage 2	-	-	-	-	-	-	909	854	-	844	826	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1567	-	-	1534	-	-	693	761	995	621	758	1022
Mov Cap-2 Maneuver	-	-	-	-	-	-	693	761	-	621	758	-
Stage 1	-	-	-	-	-	-	935	828	-	968	854	-
Stage 2	-	-	-	-	-	-	784	851	-	676	824	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0	10.9	10.7
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	793	1567	-	-	1534	-	-	762
HCM Lane V/C Ratio	0.234	0.002	-	-	-	-	-	0.165
HCM Control Delay (s)	10.9	7.3	0	-	0	-	-	10.7
HCM Lane LOS	B	A	A	-	A	-	-	B
HCM 95th %tile Q(veh)	0.9	0	-	-	0	-	-	0.6

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	19	11	7	124	67	28
Future Vol, veh/h	19	11	7	124	67	28
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	55	55	55	55	55	55
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	35	20	13	225	122	51

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	399	148	173	0	-	0
Stage 1	148	-	-	-	-	-
Stage 2	251	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	607	899	1404	-	-	-
Stage 1	880	-	-	-	-	-
Stage 2	791	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	600	899	1404	-	-	-
Mov Cap-2 Maneuver	600	-	-	-	-	-
Stage 1	870	-	-	-	-	-
Stage 2	791	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.7	0.4	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1404	-	683	-	-
HCM Lane V/C Ratio	0.009	-	0.08	-	-
HCM Control Delay (s)	7.6	0	10.7	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.3	-	-

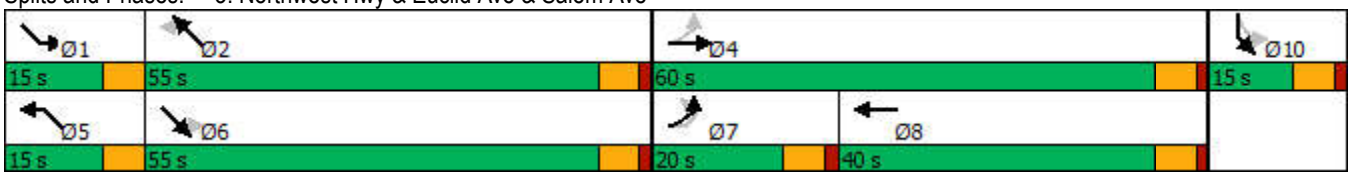
Lane Group	EBL2	EBL	EBT	EBR	WBT	WBR	SBL2	SBL	SBR	SBR2	SEL	SET
Lane Configurations												
Traffic Volume (vph)	36	2	459	21	539	87	3	3	2	4	74	427
Future Volume (vph)	36	2	459	21	539	87	3	3	2	4	74	427
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0		0		0		0	0		210	
Storage Lanes		0		0		0		1	0		1	
Taper Length (ft)		25						25			145	
Satd. Flow (prot)	0	0	3512	0	3504	0	0	1728	0	0	1805	3496
Flt Permitted			0.729					0.976			0.363	
Satd. Flow (perm)	0	0	2570	0	3504	0	0	1728	0	0	690	3496
Right Turn on Red				Yes						Yes		
Satd. Flow (RTOR)			3					147				8
Link Speed (mph)			30		30			30				30
Link Distance (ft)			1259		341			382				755
Travel Time (s)			28.6		7.8			8.7				17.2
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	2%	0%	1%	0%	0%	0%	0%	0%	0%	2%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	550	0	666	0	0	12	0	0	79	500
Turn Type	custom	pm+pt	NA		NA		Perm	Prot			pm+pt	NA
Protected Phases		7	4		8			10			1	6
Permitted Phases	7	4					10				6	
Detector Phase	7	7	4		8		10	10			1	6
Switch Phase												
Minimum Initial (s)	8.0	8.0	8.0		8.0		3.0	3.0			3.0	15.0
Minimum Split (s)	14.0	14.0	14.0		14.0		9.0	9.0			8.5	21.0
Total Split (s)	20.0	20.0	60.0		40.0		15.0	15.0			15.0	55.0
Total Split (%)	13.8%	13.8%	41.4%		27.6%		10.3%	10.3%			10.3%	37.9%
Yellow Time (s)	4.5	4.5	4.5		4.5		4.5	4.5			4.5	4.5
All-Red Time (s)	1.5	1.5	1.5		1.5		1.5	1.5			0.0	1.5
Lost Time Adjust (s)			0.0		0.0			0.0			0.0	0.0
Total Lost Time (s)			6.0		6.0			6.0			4.5	6.0
Lead/Lag	Lead	Lead			Lag						Lead	Lag
Lead-Lag Optimize?	Yes	Yes			Yes						Yes	Yes
Recall Mode	None	None	None		None		None	None			None	Max
Act Effct Green (s)			32.5		32.5			5.6			59.1	49.7
Actuated g/C Ratio			0.29		0.29			0.05			0.52	0.44
v/c Ratio			0.75		0.66			0.05			0.18	0.33
Control Delay			43.5		39.2			0.5			14.8	23.5
Queue Delay			0.0		0.0			0.0			0.0	0.0
Total Delay			43.5		39.2			0.5			14.8	23.5
LOS			D		D			A			B	C
Approach Delay			43.5		39.2			0.5				22.3
Approach LOS			D		D			A				C
Queue Length 50th (ft)			177		210			0			21	109
Queue Length 95th (ft)			272		307			0			65	213
Internal Link Dist (ft)			1179		261			302				675
Turn Bay Length (ft)											210	
Base Capacity (vph)			1240		1149			274			480	1533

Lane Group	SER	NWL	NWT	NWR
Lane Configurations				
Traffic Volume (vph)	43	237	617	1
Future Volume (vph)	43	237	617	1
Ideal Flow (vphpl)	1900	1900	1900	1900
Storage Length (ft)	0	225		0
Storage Lanes	0	1		0
Taper Length (ft)		145		
Satd. Flow (prot)	0	1770	3539	0
Flt Permitted		0.386		
Satd. Flow (perm)	0	719	3539	0
Right Turn on Red	Yes			
Satd. Flow (RTOR)				
Link Speed (mph)			30	
Link Distance (ft)			699	
Travel Time (s)			15.9	
Peak Hour Factor	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	2%	2%	0%
Shared Lane Traffic (%)				
Lane Group Flow (vph)	0	252	657	0
Turn Type		pm+pt	NA	
Protected Phases		5	2	
Permitted Phases		2		
Detector Phase		5	2	
Switch Phase				
Minimum Initial (s)		3.0	15.0	
Minimum Split (s)		8.5	21.0	
Total Split (s)		15.0	55.0	
Total Split (%)		10.3%	37.9%	
Yellow Time (s)		4.5	4.5	
All-Red Time (s)		0.0	1.5	
Lost Time Adjust (s)		0.0	0.0	
Total Lost Time (s)		4.5	6.0	
Lead/Lag		Lead	Lag	
Lead-Lag Optimize?		Yes	Yes	
Recall Mode		None	Max	
Act Effct Green (s)		64.5	54.8	
Actuated g/C Ratio		0.57	0.48	
v/c Ratio		0.50	0.39	
Control Delay		18.9	23.0	
Queue Delay		0.0	0.0	
Total Delay		18.9	23.0	
LOS		B	C	
Approach Delay			21.9	
Approach LOS			C	
Queue Length 50th (ft)		73	145	
Queue Length 95th (ft)		186	289	
Internal Link Dist (ft)			619	
Turn Bay Length (ft)		225		
Base Capacity (vph)		507	1706	

Lane Group	EBL2	EBL	EBT	EBR	WBT	WBR	SBL2	SBL	SBR	SBR2	SEL	SET
Starvation Cap Reductn			0		0			0			0	0
Spillback Cap Reductn			0		0			0			0	0
Storage Cap Reductn			0		0			0			0	0
Reduced v/c Ratio			0.44		0.58			0.04			0.16	0.33

Intersection Summary			
Area Type:	Other		
Cycle Length: 145			
Actuated Cycle Length: 113.6			
Natural Cycle: 80			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.75			
Intersection Signal Delay: 30.5		Intersection LOS: C	
Intersection Capacity Utilization 85.5%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 3: Northwest Hwy & Euclid Ave & Salem Ave



Lane Group	SER	NWL	NWT	NWR
Starvation Cap Reductn		0	0	
Spillback Cap Reductn		0	0	
Storage Cap Reductn		0	0	
Reduced v/c Ratio		0.50	0.39	

Intersection Summary

Intersection	
Int Delay, s/veh	3.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	7	34	62	74	41	10
Future Vol, veh/h	7	34	62	74	41	10
Conflicting Peds, #/hr	67	2	10	0	0	10
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	68	68	68	68	68	68
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	10	50	91	109	60	15

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	436	80	85	0	-	0
Stage 1	78	-	-	-	-	-
Stage 2	358	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	581	986	1524	-	-	-
Stage 1	950	-	-	-	-	-
Stage 2	712	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	533	975	1509	-	-	-
Mov Cap-2 Maneuver	533	-	-	-	-	-
Stage 1	881	-	-	-	-	-
Stage 2	705	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.4	3.4	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1509	-	533	975	-	-
HCM Lane V/C Ratio	0.06	-	0.019	0.051	-	-
HCM Control Delay (s)	7.5	0	11.9	8.9	-	-
HCM Lane LOS	A	A	B	A	-	-
HCM 95th %tile Q(veh)	0.2	-	0.1	0.2	-	-

Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	64	471	1	6	572	66	2	6	7	17	6	52
Future Vol, veh/h	64	471	1	6	572	66	2	6	7	17	6	52
Conflicting Peds, #/hr	1	0	5	5	0	1	1	0	0	0	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	115	-	-	110	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	0	2	0	0	1	0	0	0	14	0	0	0
Mvmt Flow	66	486	1	6	590	68	2	6	7	18	6	54

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	659	0	0	492	0	0	1291	1295	492	1262	1261	626
Stage 1	-	-	-	-	-	-	624	624	-	637	637	-
Stage 2	-	-	-	-	-	-	667	671	-	625	624	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.34	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.426	3.5	4	3.3
Pot Cap-1 Maneuver	939	-	-	1082	-	-	142	164	553	148	172	488
Stage 1	-	-	-	-	-	-	477	481	-	469	475	-
Stage 2	-	-	-	-	-	-	451	458	-	476	481	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	938	-	-	1077	-	-	115	151	550	133	158	487
Mov Cap-2 Maneuver	-	-	-	-	-	-	115	151	-	133	158	-
Stage 1	-	-	-	-	-	-	441	445	-	436	472	-
Stage 2	-	-	-	-	-	-	394	455	-	431	445	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.1	0.1	22.6	23.1
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	140	550	938	-	-	1077	-	-	275
HCM Lane V/C Ratio	0.059	0.013	0.07	-	-	0.006	-	-	0.281
HCM Control Delay (s)	32.3	11.6	9.1	-	-	8.4	-	-	23.1
HCM Lane LOS	D	B	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.2	0	0.2	-	-	0	-	-	1.1

Intersection	
Int Delay, s/veh	6.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	4	32	13	2	38	9	14	67	11	3	52	3
Future Vol, veh/h	4	32	13	2	38	9	14	67	11	3	52	3
Conflicting Peds, #/hr	1	0	3	3	0	1	0	0	1	1	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	25	16	0	0	3	0	0	0	0	0	0	0
Mvmt Flow	5	39	16	2	46	11	17	82	13	4	63	4

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	58	0	0	58	0	0	149	122	51	163	125	53
Stage 1	-	-	-	-	-	-	60	60	-	57	57	-
Stage 2	-	-	-	-	-	-	89	62	-	106	68	-
Critical Hdwy	4.35	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.425	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1411	-	-	1559	-	-	824	772	1023	806	769	1020
Stage 1	-	-	-	-	-	-	957	849	-	960	851	-
Stage 2	-	-	-	-	-	-	923	847	-	905	842	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1410	-	-	1555	-	-	764	765	1019	726	762	1019
Mov Cap-2 Maneuver	-	-	-	-	-	-	764	765	-	726	762	-
Stage 1	-	-	-	-	-	-	950	843	-	955	849	-
Stage 2	-	-	-	-	-	-	850	845	-	803	836	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.6	0.3	10.3	10.1
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	788	1410	-	-	1555	-	-	770
HCM Lane V/C Ratio	0.142	0.003	-	-	0.002	-	-	0.092
HCM Control Delay (s)	10.3	7.6	0	-	7.3	0	-	10.1
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.5	0	-	-	0	-	-	0.3

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	16	8	5	76	43	24
Future Vol, veh/h	16	8	5	76	43	24
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	68	68	68	68	68	68
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	24	12	7	112	63	35

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	207	81	98	0	-	0
Stage 1	81	-	-	-	-	-
Stage 2	126	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	781	979	1495	-	-	-
Stage 1	942	-	-	-	-	-
Stage 2	900	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	777	979	1495	-	-	-
Mov Cap-2 Maneuver	777	-	-	-	-	-
Stage 1	937	-	-	-	-	-
Stage 2	900	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.5	0.5	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1495	-	834	-	-
HCM Lane V/C Ratio	0.005	-	0.042	-	-
HCM Control Delay (s)	7.4	0	9.5	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

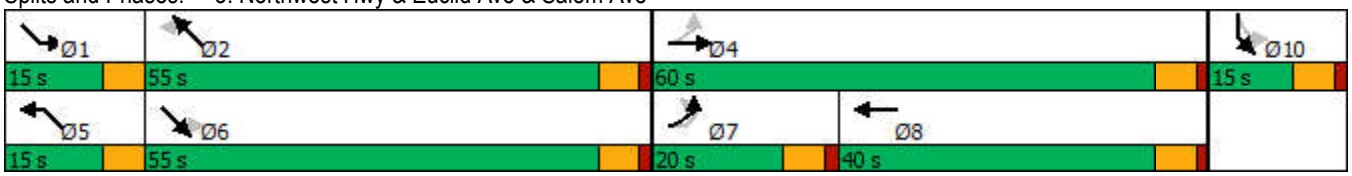
Lane Group	EBL2	EBL	EBT	EBR	WBT	WBR	WBR2	SBL	SBR	SBR2	SEL	SET
Lane Configurations												
Traffic Volume (vph)	30	3	595	227	632	85	2	2	2	3	33	391
Future Volume (vph)	30	3	595	227	632	85	2	2	2	3	33	391
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0		0		0		0	0		210	
Storage Lanes		0		0		0		1	0		1	
Taper Length (ft)		25						25			145	
Satd. Flow (prot)	0	0	3426	0	3490	0	0	1694	0	0	1719	3531
Flt Permitted			0.835					0.986			0.347	
Satd. Flow (perm)	0	0	2866	0	3490	0	0	1694	0	0	628	3531
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)			40					147				8
Link Speed (mph)			30		30			30				30
Link Distance (ft)			1259		341			382				755
Travel Time (s)			28.6		7.8			8.7				17.2
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	0%	0%	1%	1%	1%	6%	0%	0%	0%	0%	5%	1%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	881	0	742	0	0	7	0	0	34	442
Turn Type	custom	pm+pt	NA		NA			Prot			pm+pt	NA
Protected Phases		7	4		8			10			1	6
Permitted Phases	7	4									6	
Detector Phase	7	7	4		8			10			1	6
Switch Phase												
Minimum Initial (s)	8.0	8.0	8.0		8.0			3.0			3.0	15.0
Minimum Split (s)	14.0	14.0	14.0		14.0			9.0			8.5	21.0
Total Split (s)	20.0	20.0	60.0		40.0			15.0			15.0	55.0
Total Split (%)	13.8%	13.8%	41.4%		27.6%			10.3%			10.3%	37.9%
Yellow Time (s)	4.5	4.5	4.5		4.5			4.5			4.5	4.5
All-Red Time (s)	1.5	1.5	1.5		1.5			1.5			0.0	1.5
Lost Time Adjust (s)			0.0		0.0			0.0			0.0	0.0
Total Lost Time (s)			6.0		6.0			6.0			4.5	6.0
Lead/Lag	Lead	Lead			Lag						Lead	Lag
Lead-Lag Optimize?	Yes	Yes			Yes						Yes	Yes
Recall Mode	None	None	None		None			None			None	Max
Act Effct Green (s)			50.3		50.3			5.5			57.6	49.2
Actuated g/C Ratio			0.39		0.39			0.04			0.45	0.38
v/c Ratio			0.77		0.54			0.03			0.10	0.33
Control Delay			38.1		32.3			0.3			19.1	29.5
Queue Delay			0.0		0.0			0.0			0.0	0.0
Total Delay			38.1		32.3			0.3			19.1	29.5
LOS			D		C			A			B	C
Approach Delay			38.1		32.3			0.3				28.7
Approach LOS			D		C			A				C
Queue Length 50th (ft)			309		241			0			14	135
Queue Length 95th (ft)			447		345			0			38	204
Internal Link Dist (ft)			1179		261			302				675
Turn Bay Length (ft)											210	
Base Capacity (vph)			1230		1364			255			387	1354

Lane Group	SER	NWL	NWT	NWR	NWR2
Lane Configurations					
Traffic Volume (vph)	38	251	639	2	2
Future Volume (vph)	38	251	639	2	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900
Storage Length (ft)	0	225		0	
Storage Lanes	0	1		0	
Taper Length (ft)		145			
Satd. Flow (prot)	0	1770	3571	0	0
Flt Permitted		0.398			
Satd. Flow (perm)	0	741	3571	0	0
Right Turn on Red	Yes				Yes
Satd. Flow (RTOR)					
Link Speed (mph)			30		
Link Distance (ft)			699		
Travel Time (s)			15.9		
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	0%	2%	1%	0%	0%
Shared Lane Traffic (%)					
Lane Group Flow (vph)	0	259	663	0	0
Turn Type		pm+pt	NA		
Protected Phases		5	2		
Permitted Phases		2			
Detector Phase		5	2		
Switch Phase					
Minimum Initial (s)		3.0	15.0		
Minimum Split (s)		8.5	21.0		
Total Split (s)		15.0	55.0		
Total Split (%)		10.3%	37.9%		
Yellow Time (s)		4.5	4.5		
All-Red Time (s)		0.0	1.5		
Lost Time Adjust (s)		0.0	0.0		
Total Lost Time (s)		4.5	6.0		
Lead/Lag		Lead	Lag		
Lead-Lag Optimize?		Yes	Yes		
Recall Mode		None	Max		
Act Effct Green (s)		64.9	57.3		
Actuated g/C Ratio		0.50	0.45		
v/c Ratio		0.57	0.42		
Control Delay		26.1	27.7		
Queue Delay		0.0	0.0		
Total Delay		26.1	27.7		
LOS		C	C		
Approach Delay			27.3		
Approach LOS			C		
Queue Length 50th (ft)		123	212		
Queue Length 95th (ft)		215	313		
Internal Link Dist (ft)			619		
Turn Bay Length (ft)		225			
Base Capacity (vph)		457	1589		

Lane Group	EBL2	EBL	EBT	EBR	WBT	WBR	WBR2	SBL	SBR	SBR2	SEL	SET
Starvation Cap Reductn			0		0			0			0	0
Spillback Cap Reductn			0		0			0			0	0
Storage Cap Reductn			0		0			0			0	0
Reduced v/c Ratio			0.72		0.54			0.03			0.09	0.33

Intersection Summary			
Area Type:	Other		
Cycle Length: 145			
Actuated Cycle Length: 128.7			
Natural Cycle: 80			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.77			
Intersection Signal Delay: 31.8		Intersection LOS: C	
Intersection Capacity Utilization 97.3%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 3: Northwest Hwy & Euclid Ave & Salem Ave



Lane Group	SER	NWL	NWT	NWR	NWR2
Starvation Cap Reductn		0	0		
Spillback Cap Reductn		0	0		
Storage Cap Reductn		0	0		
Reduced v/c Ratio		0.57	0.42		

Intersection Summary

Intersection	
Int Delay, s/veh	5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	5	90	119	75	69	5
Future Vol, veh/h	5	90	119	75	69	5
Conflicting Peds, #/hr	0	0	1	0	0	1
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	76	76	76	76	76	76
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	7	118	157	99	91	7

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	509	96	99	0	-	0
Stage 1	96	-	-	-	-	-
Stage 2	413	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	528	966	1507	-	-	-
Stage 1	933	-	-	-	-	-
Stage 2	672	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	469	965	1506	-	-	-
Mov Cap-2 Maneuver	469	-	-	-	-	-
Stage 1	829	-	-	-	-	-
Stage 2	671	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.5	4.7	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1506	-	469	965	-	-
HCM Lane V/C Ratio	0.104	-	0.014	0.123	-	-
HCM Control Delay (s)	7.7	0	12.8	9.3	-	-
HCM Lane LOS	A	A	B	A	-	-
HCM 95th %tile Q(veh)	0.3	-	0	0.4	-	-

Intersection	
Int Delay, s/veh	15.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	97	532	1	1	634	81	1	16	12	60	15	84
Future Vol, veh/h	97	532	1	1	634	81	1	16	12	60	15	84
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	115	-	-	110	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	0	1	0	0	1	0	0	10	0	0	0	0
Mvmt Flow	99	543	1	1	647	83	1	16	12	61	15	86

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	730	0	0	544	0	0	1483	1474	544	1447	1433	689
Stage 1	-	-	-	-	-	-	742	742	-	691	691	-
Stage 2	-	-	-	-	-	-	741	732	-	756	742	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.6	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.6	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.6	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4.09	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	883	-	-	1035	-	-	104	122	543	110	135	449
Stage 1	-	-	-	-	-	-	411	411	-	438	449	-
Stage 2	-	-	-	-	-	-	411	415	-	403	425	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	883	-	-	1035	-	-	69	108	543	87	120	449
Mov Cap-2 Maneuver	-	-	-	-	-	-	69	108	-	87	120	-
Stage 1	-	-	-	-	-	-	365	365	-	389	449	-
Stage 2	-	-	-	-	-	-	321	415	-	334	377	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.5	0	31.8	134.3
HCM LOS			D	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	105	543	883	-	-	1035	-	-	159
HCM Lane V/C Ratio	0.165	0.023	0.112	-	-	0.001	-	-	1.02
HCM Control Delay (s)	46	11.8	9.6	-	-	8.5	-	-	134.3
HCM Lane LOS	E	B	A	-	-	A	-	-	F
HCM 95th %tile Q(veh)	0.6	0.1	0.4	-	-	0	-	-	8

Intersection	
Int Delay, s/veh	6.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	42	20	4	35	5	16	79	23	3	73	5
Future Vol, veh/h	1	42	20	4	35	5	16	79	23	3	73	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	1	1	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	25	16	0	0	3	0	0	0	0	0	0	0
Mvmt Flow	1	47	22	4	39	6	18	88	26	3	81	6

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	45	0	0	69	0	0	154	113	59	168	121	42
Stage 1	-	-	-	-	-	-	60	60	-	50	50	-
Stage 2	-	-	-	-	-	-	94	53	-	118	71	-
Critical Hdwy	4.35	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.425	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1427	-	-	1545	-	-	817	781	1012	800	773	1034
Stage 1	-	-	-	-	-	-	957	849	-	968	857	-
Stage 2	-	-	-	-	-	-	918	855	-	891	840	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1427	-	-	1545	-	-	745	778	1011	710	770	1034
Mov Cap-2 Maneuver	-	-	-	-	-	-	745	778	-	710	770	-
Stage 1	-	-	-	-	-	-	956	848	-	967	854	-
Stage 2	-	-	-	-	-	-	824	852	-	777	839	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.7	10.3	10.2
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	810	1427	-	-	1545	-	-	780
HCM Lane V/C Ratio	0.162	0.001	-	-	0.003	-	-	0.115
HCM Control Delay (s)	10.3	7.5	0	-	7.3	0	-	10.2
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.6	0	-	-	0	-	-	0.4

Intersection	
Int Delay, s/veh	3.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	50	23	12	68	51	46
Future Vol, veh/h	50	23	12	68	51	46
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	76	76	76	76	76	76
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	66	30	16	89	67	61

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	219	98	128	0	-	0
Stage 1	98	-	-	-	-	-
Stage 2	121	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	769	958	1458	-	-	-
Stage 1	926	-	-	-	-	-
Stage 2	904	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	760	958	1458	-	-	-
Mov Cap-2 Maneuver	760	-	-	-	-	-
Stage 1	915	-	-	-	-	-
Stage 2	904	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10	1.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1458	-	813	-	-
HCM Lane V/C Ratio	0.011	-	0.118	-	-
HCM Control Delay (s)	7.5	0	10	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.4	-	-

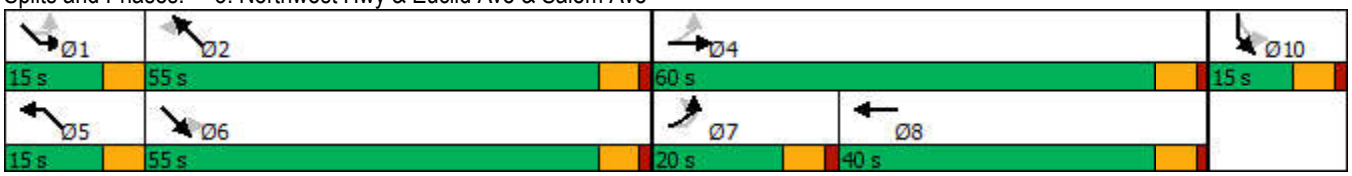
Lane Group	EBL2	EBT	EBR	WBT	WBR	SBL2	SBL	SBR	SEL2	SEL	SET	SER
Lane Configurations												
Traffic Volume (vph)	31	417	166	445	79	1	6	1	1	96	385	47
Future Volume (vph)	31	417	166	445	79	1	6	1	1	96	385	47
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)			0		0		0	0		210		0
Storage Lanes			0		0		1	0		1		0
Taper Length (ft)							25			145		
Satd. Flow (prot)	0	3408	0	3487	0	0	1789	0	0	1770	3506	0
Flt Permitted		0.876					0.958			0.438		
Satd. Flow (perm)	0	2995	0	3487	0	0	1789	0	0	816	3506	0
Right Turn on Red			Yes									Yes
Satd. Flow (RTOR)		42									10	
Link Speed (mph)		30		30			30				30	
Link Distance (ft)		1259		341			382				755	
Travel Time (s)		28.6		7.8			8.7				17.2	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	3%	1%	2%	1%	2%	0%	0%	0%	0%	2%	1%	4%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	627	0	535	0	0	8	0	0	99	441	0
Turn Type	custom	NA		NA		Perm	Prot		custom	pm+pt	NA	
Protected Phases		4		8			10			1	6	
Permitted Phases	7					10			1	6		
Detector Phase	7	4		8		10	10		1	1	6	
Switch Phase												
Minimum Initial (s)	8.0	8.0		8.0		3.0	3.0		3.0	3.0	15.0	
Minimum Split (s)	14.0	14.0		14.0		9.0	9.0		8.5	8.5	21.0	
Total Split (s)	20.0	60.0		40.0		15.0	15.0		15.0	15.0	55.0	
Total Split (%)	13.8%	41.4%		27.6%		10.3%	10.3%		10.3%	10.3%	37.9%	
Yellow Time (s)	4.5	4.5		4.5		4.5	4.5		4.5	4.5	4.5	
All-Red Time (s)	1.5	1.5		1.5		1.5	1.5		0.0	0.0	1.5	
Lost Time Adjust (s)		0.0		0.0			0.0			0.0	0.0	
Total Lost Time (s)		6.0		6.0			6.0			4.5	6.0	
Lead/Lag	Lead			Lag					Lead	Lead	Lag	
Lead-Lag Optimize?	Yes			Yes					Yes	Yes	Yes	
Recall Mode	None	None		None		None	None		None	None	Max	
Act Effct Green (s)		35.0		35.0			6.2			59.6	49.7	
Actuated g/C Ratio		0.31		0.31			0.05			0.52	0.44	
v/c Ratio		0.66		0.50			0.08			0.20	0.29	
Control Delay		35.4		33.8			59.4			15.0	23.0	
Queue Delay		0.0		0.0			0.0			0.0	0.0	
Total Delay		35.4		33.8			59.4			15.0	23.0	
LOS		D		C			E			B	C	
Approach Delay		35.4		33.8			59.4				21.6	
Approach LOS		D		C			E				C	
Queue Length 50th (ft)		187		161			5			28	97	
Queue Length 95th (ft)		288		245			26			87	202	
Internal Link Dist (ft)		1179		261			302				675	
Turn Bay Length (ft)										210		
Base Capacity (vph)		1462		1169			143			533	1536	

Lane Group	NWL	NWT	NWR2
Lane Configurations			
Traffic Volume (vph)	225	477	9
Future Volume (vph)	225	477	9
Ideal Flow (vphpl)	1900	1900	1900
Storage Length (ft)	225		
Storage Lanes	1		
Taper Length (ft)	145		
Satd. Flow (prot)	1787	3564	0
Flt Permitted	0.437		
Satd. Flow (perm)	822	3564	0
Right Turn on Red			Yes
Satd. Flow (RTOR)		147	
Link Speed (mph)		30	
Link Distance (ft)		699	
Travel Time (s)		15.9	
Peak Hour Factor	0.98	0.98	0.98
Heavy Vehicles (%)	1%	1%	0%
Shared Lane Traffic (%)			
Lane Group Flow (vph)	230	496	0
Turn Type	pm+pt	NA	
Protected Phases	5	2	
Permitted Phases	2		
Detector Phase	5	2	
Switch Phase			
Minimum Initial (s)	3.0	15.0	
Minimum Split (s)	8.5	21.0	
Total Split (s)	15.0	55.0	
Total Split (%)	10.3%	37.9%	
Yellow Time (s)	4.5	4.5	
All-Red Time (s)	0.0	1.5	
Lost Time Adjust (s)	0.0	0.0	
Total Lost Time (s)	4.5	6.0	
Lead/Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	
Recall Mode	None	Max	
Act Effct Green (s)	63.4	51.6	
Actuated g/C Ratio	0.56	0.45	
v/c Ratio	0.42	0.29	
Control Delay	17.6	16.0	
Queue Delay	0.0	0.0	
Total Delay	17.6	16.0	
LOS	B	B	
Approach Delay		16.5	
Approach LOS		B	
Queue Length 50th (ft)	70	74	
Queue Length 95th (ft)	188	173	
Internal Link Dist (ft)		619	
Turn Bay Length (ft)	225		
Base Capacity (vph)	550	1696	

Lane Group	EBL2	EBT	EBR	WBT	WBR	SBL2	SBL	SBR	SEL2	SEL	SET	SER
Starvation Cap Reductn		0		0			0			0	0	
Spillback Cap Reductn		0		0			0			0	0	
Storage Cap Reductn		0		0			0			0	0	
Reduced v/c Ratio		0.43		0.46			0.06			0.19	0.29	

Intersection Summary			
Area Type:	Other		
Cycle Length: 145			
Actuated Cycle Length: 113.9			
Natural Cycle: 70			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.66			
Intersection Signal Delay: 26.4		Intersection LOS: C	
Intersection Capacity Utilization 84.6%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 3: Northwest Hwy & Euclid Ave & Salem Ave



Lane Group	NWL	NWT	NWR2
Starvation Cap Reductn	0	0	
Spillback Cap Reductn	0	0	
Storage Cap Reductn	0	0	
Reduced v/c Ratio	0.42	0.29	

Intersection Summary

Intersection	
Int Delay, s/veh	6.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	7	124	200	50	61	6
Future Vol, veh/h	7	124	200	50	61	6
Conflicting Peds, #/hr	8	4	2	0	0	2
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	8	143	230	57	70	7

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	601	80	79	0	-	0
Stage 1	76	-	-	-	-	-
Stage 2	525	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	467	986	1532	-	-	-
Stage 1	952	-	-	-	-	-
Stage 2	598	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	393	980	1529	-	-	-
Mov Cap-2 Maneuver	393	-	-	-	-	-
Stage 1	803	-	-	-	-	-
Stage 2	597	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.6	6.2	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1529	-	393	980	-	-
HCM Lane V/C Ratio	0.15	-	0.02	0.145	-	-
HCM Control Delay (s)	7.8	0	14.4	9.3	-	-
HCM Lane LOS	A	A	B	A	-	-
HCM 95th %tile Q(veh)	0.5	-	0.1	0.5	-	-

Intersection	
Int Delay, s/veh	13.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	93	426	4	2	437	140	2	17	10	84	16	85
Future Vol, veh/h	93	426	4	2	437	140	2	17	10	84	16	85
Conflicting Peds, #/hr	4	0	0	0	0	4	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	115	-	-	110	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	1	0	0	1	0	0	0	0	0	0	0
Mvmt Flow	98	448	4	2	460	147	2	18	11	88	17	89

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	611	0	0	452	0	0	1237	1261	450	1203	1190	538
Stage 1	-	-	-	-	-	-	646	646	-	542	542	-
Stage 2	-	-	-	-	-	-	591	615	-	661	648	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	978	-	-	1119	-	-	154	172	613	163	189	547
Stage 1	-	-	-	-	-	-	464	470	-	528	523	-
Stage 2	-	-	-	-	-	-	497	485	-	455	469	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	974	-	-	1119	-	-	110	154	613	134	169	545
Mov Cap-2 Maneuver	-	-	-	-	-	-	110	154	-	134	169	-
Stage 1	-	-	-	-	-	-	417	423	-	473	520	-
Stage 2	-	-	-	-	-	-	401	482	-	385	422	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.6	0	25.5	90.7
HCM LOS			D	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	148	613	974	-	-	1119	-	-	211
HCM Lane V/C Ratio	0.135	0.017	0.101	-	-	0.002	-	-	0.923
HCM Control Delay (s)	33.1	11	9.1	-	-	8.2	-	-	90.7
HCM Lane LOS	D	B	A	-	-	A	-	-	F
HCM 95th %tile Q(veh)	0.5	0.1	0.3	-	-	0	-	-	7.6

Intersection	
Int Delay, s/veh	7.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	1	30	19	4	17	5	21	77	5	1	69	1
Future Vol, veh/h	1	30	19	4	17	5	21	77	5	1	69	1
Conflicting Peds, #/hr	0	0	0	0	0	0	2	0	0	0	0	2
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	25	16	0	0	3	0	0	0	0	0	0	0
Mvmt Flow	1	32	20	4	18	5	22	82	5	1	73	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	23	0	0	52	0	0	112	75	42	117	83	23
Stage 1	-	-	-	-	-	-	44	44	-	29	29	-
Stage 2	-	-	-	-	-	-	68	31	-	88	54	-
Critical Hdwy	4.35	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.425	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1455	-	-	1567	-	-	870	819	1034	864	811	1060
Stage 1	-	-	-	-	-	-	975	862	-	993	875	-
Stage 2	-	-	-	-	-	-	947	873	-	925	854	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1455	-	-	1567	-	-	805	816	1034	791	808	1058
Mov Cap-2 Maneuver	-	-	-	-	-	-	805	816	-	791	808	-
Stage 1	-	-	-	-	-	-	974	861	-	992	872	-
Stage 2	-	-	-	-	-	-	862	870	-	832	853	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	1.1	10.1	9.9
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	822	1455	-	-	1567	-	-	810
HCM Lane V/C Ratio	0.133	0.001	-	-	0.003	-	-	0.093
HCM Control Delay (s)	10.1	7.5	0	-	7.3	0	-	9.9
HCM Lane LOS	B	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.5	0	-	-	0	-	-	0.3

Intersection	
Int Delay, s/veh	4.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	67	31	21	36	36	56
Future Vol, veh/h	67	31	21	36	36	56
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	77	36	24	41	41	64

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	162	73	105	0	-	0
Stage 1	73	-	-	-	-	-
Stage 2	89	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	829	989	1486	-	-	-
Stage 1	950	-	-	-	-	-
Stage 2	934	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	815	989	1486	-	-	-
Mov Cap-2 Maneuver	815	-	-	-	-	-
Stage 1	934	-	-	-	-	-
Stage 2	934	-	-	-	-	-

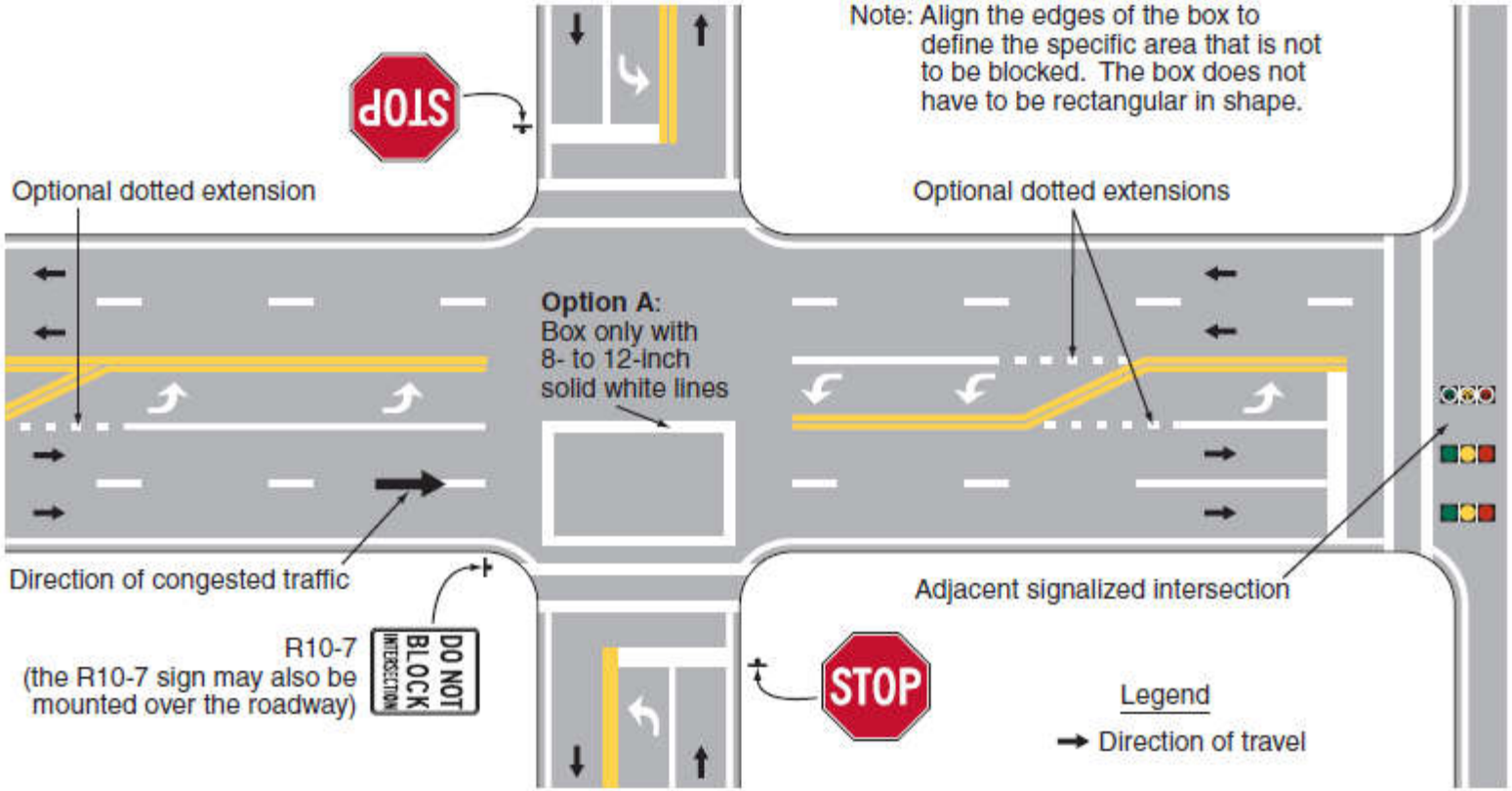
Approach	EB	NB	SB
HCM Control Delay, s	9.8	2.7	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1486	-	863	-	-
HCM Lane V/C Ratio	0.016	-	0.131	-	-
HCM Control Delay (s)	7.5	0	9.8	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.4	-	-

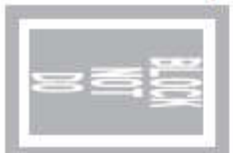
Appendix D
MUTCD – Do Not Block Intersection Exhibit

GHA GEWALT HAMILTON ASSOCIATES, INC.

Figure 3B-18. Do Not Block Intersection Markings

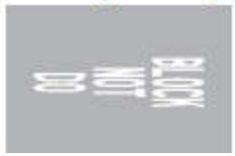


Option B:
Box with "DO NOT BLOCK," "KEEP CLEAR," or similar text only message



Option C:
Box with 4- to 6-inch solid white crosshatch lines

Option D:
"DO NOT BLOCK," "KEEP CLEAR," or similar text only message (no box)



Village of Arlington Heights
Building & Life Safety Department

Interoffice Memorandum

To: **Sam Hubbard, Development Planner, Planning and Community Development**

From: **Deb Pierce, Plan Reviewer, Building & Life Safety Department**

Subject: **660 N Ridge Ave – PUD Amendment, Parking Variation**

PC#: **18-002**

Date: **January 22, 2018**

Sam:

I have reviewed the documents submitted for the above referenced project and offer the following comments:

1. Show the gymnasium addition on Sheet A100.
2. Provide a Site Plan showing the location of the additions and the distances to the lot lines.
3. What is the proposed construction type for the additions?
4. Provide a height and area calculation for the building including all allowable increases. IBC Section 503
5. Provide an occupant load calculation per floor. Include a calculation to show the provided egress width at each exit.
6. Based on the height of the roof, permanent access to the RTU's is required to be provided.

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JAN 22 2018
PLANNING & COMMUNITY
DEVELOPMENT DEPARTMENT

Village of Arlington Heights, IL
Department of Building & Life Safety

Fire Safety Division

Date: 1/19/2018 P.C. Number: 18-002 Round 1

Project Name: Arlington Heights Park District

Project Location: 660 N Ridge

Planning Department Contact: Sam Hubbard, Planning and Community Development

General Comments:

The information provided is conceptual only and subject to a formal plan review.

1. All currently adopted codes are required to be followed.

2. Fire department connections shall be fully visible and located at the main front entrance of the building and within a maximum travel distance of 100 feet to the nearest fire hydrant.

3. Buildings or facilities having a gross building area of more than 62,000 square feet shall be provided with two separate and approved fire apparatus access roads.

4. A complete NFPA compliant fire suppression system is required. Supervised indicating control valves shall be provided at the point of connection to the riser on each floor.

5. An approved water supply capable of supplying the required fire flow for fire protection shall be provided.

6. Fire protection equipment and service rooms shall be identified in an approved manner.

7. Approved access shall be provided and maintained for all fire protection equipment to permit immediate safe operation and maintenance of such equipment.

8. Buildings shall have approved radio coverage for emergency responders within the building based upon the existing coverage levels of the public safety communication systems of the jurisdiction at the exterior of the building.

9. In buildings and structures where standby power is required or furnished to operate an elevator the operation shall comply with current code requirements.

10. A fully functional fire alarm shall be installed per NFPA 72. The alarm annunciator panel shall be located at the front entrance.

11. Shop drawings for fire alarm systems shall be submitted for review and approval prior to system installation.

12. Visible alarm notification appliances shall be provided in public areas and common areas. A visible exterior weatherproof alarm notification device shall be located within closest proximity to the front main entrance of the building or tenant space.

13. A zoning indicator panel and the associated controls, or, fire alarm control panel shall be located within the closest proximity to the front main entrance.

14. A key box (Know Box) shall be provided and contain keys to gain necessary access as required by the fire code official.

15. Each location of a fire department communication device shall be an independent zone from the control panel in the fire command room.

16. Fire pumps, if provided, shall be installed in accordance with the Fire Code and NFPA 20 and shall comply with all current code requirements including a minimum of two water mains located in different streets.

17. Exit signs shall be illuminated at all times and have emergency power backup.

18. In order to be considered part of an accessible means of egress, an elevator shall comply with the emergency operation and signaling device requirements.

19. Aerial fire apparatus access roads shall have a minimum unobstructed width of 26 feet exclusive of shoulders, in the immediate vicinity of any building or portion of building more than 30 feet in height.

20. Buildings shall have approved address numbers.

21. Fire department connections shall be installed in accordance with the NFPA standard applicable to the system design. The location of fire department connections shall be approved.

22. Fire department connections shall be located on the street side of buildings, fully visible and recognizable from the street or nearest point of fire department vehicle access or as otherwise approved a visible Location.

23. Signs shall be posted on both sides of an approach of any fire lane stating NO PARKING – FIRE LANE". Signs shall have arrows indicating the area of parking restriction.

24. Fire lane signs shall be white with red three-inch letters. The dimensions of the sign shall be 12 inches horizontally and 18 inches vertically. These signs shall be installed so that the top of the sign is no less than 6 feet nor more than 6 feet above grade.

25. Material Safety Data Sheets (MSDS) for all hazardous materials shall be either readily available on the premises as a paper copy, or where *approved,* shall be permitted to be readily retrievable by electronic access.

26. Individual containers of hazardous materials, cartons or packages shall be marked or labeled in accordance with applicable federal regulations. Buildings, rooms and spaces containing hazardous materials shall be identified by hazard warning signs in accordance with Section 2703.5.44

27. *Persons* responsible for the operation of areas in which hazardous materials are stored, dispensed, handled or used shall be familiar with the chemical nature of the materials and the appropriate mitigating actions necessary in the event of a fire, leak or spill. Responsible *persons* shall be designated and trained to be liaison personnel for the fire department.

Date January 19, 2018

Reviewed By: _____

Fire Safety Supervisor

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JAN 19 2018
PLANNING & COMMUNITY
DEVELOPMENT DEPARTMENT

Village of Arlington Heights
Public Works Department

Memorandum

To: Sam Hubbard, Planning and Community Development

From: Cris Papierniak, Assistant Director of Public Works

Date: January 26, 2018

Subject: 660 N Ridge Ave, P.C. #18-002 Round 1

Regarding the proposed PUD Amendment, PW has the following comments:

1. Coordinate the relocation of the existing hydrant (removal & relocation) with the VAHPW Water Distribution Unit at 847-368-5800.
2. There should be no spacer between the hydrant and auxiliary valve, change the "Fire Hydrant Detail" on C10 to reflect this change.
3. Replace the existing 4" domestic backflow device. It is obsolete.
4. Replace the existing 6" fire backflow device. It is obsolete.
5. Verify the condition of all existing utility structures that we reconnected to, to ensure they don't need replacement.
6. Verify the condition of the public sidewalk abutting the project. Correct any structural or ponding water problems.
7. All roadway patches shall be 2' wider than the utility excavations for surface course only.

VAHPW has no further comments at this time.

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FEB 01 2018
PLANNING & COMMUNITY
DEVELOPMENT DEPARTMENT

C: File

ENGINEERING DEPARTMENT

3

PETITIONER'S APPLICATION - ARLINGTON HEIGHTS PLAN COMMISSION

Petition #: P.C. 18-002
Petitioner: Arlington Heights Park District
410 N. Arlington Heights Rd.
Arlington Heights, IL 60004
Owner: Arlington Heights Park District
410 N. Arlington Heights Rd.
Arlington Heights, IL 60004
Contact Person: Ben Rea, Director of Parks
Address: 410 N. Arlington Heights Rd.
Arlington Heights, IL 60004
Phone #: (847) 506-7145
Fax #: (847) 577-3050
E-Mail: brea@ahpd.org

P.I.N.# 0330229039
Location: 660 North Ridge Avenue
Rezoning: _____ Current: P-L Proposed: P-L
Subdivision: _____
# of Lots: _____ Current: _____ Proposed: _____
PUD: _____ For: _____
Special Use: _____ For: _____
Land Use Variation: _____ For: _____

Land Use: P-L Current: P-L
Proposed: P-L
Site Gross Area: _____
# of Units Total: _____
1BR: 2BR: 3BR: 4BR:

(Petitioner: Please do not write below this line.)

	YES	NO	COMMENTS
1. PUBLIC IMPROVEMENTS REQUIRED:			
a. Underground Utilities			
Water		X	
Sanitary Sewer		X	
Storm Sewer		X	
b. Surface Improvement			
Pavement		X	
Curb & Gutter		X	
Sidewalks		X	
Street Lighting		X	
c. Easements			
Utility & Drainage	X		
Access		X	

2. PERMITS REQUIRED OTHER THAN VILLAGE:
a. MWRDGC X b. IDOT ____
c. ARMY CORP ____ d. IEPA ____
e. CCHD X

	YES	NO	COMMENTS
3. R.O.W. DEDICATIONS?		X	
4. SITE PLAN ACCEPTABLE?		X	
5. PRELIMINARY PLAT ACCEPTABLE?			N/A
6. TRAFFIC STUDY ACCEPTABLE?			
7. STORM WATER DETENTION REQUIRED?	X		
8. CONTRIBUTION ORDINANCE EXISTING?		X	
9. FLOOD PLAIN OR FLOODWAY EXISTING?		X	
10. WETLAND EXISTING?		X	

GENERAL COMMENTS ATTACHED

PLANS PREPARED BY: G.H.A.
DATE OF PLANS: 01-08-2017

Director 2/1/18
Date

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FEB 01 2018
PLANNING & COMMUNITY
DEVELOPMENT DEPARTMENT

PLAN COMMISSION PC #18-002
Arlington Heights Park District - Olympic Park Redevelopment
660 N. Ridge Ave.
PUD Amendment, Parking Variation
Round 1

1. The petitioner is notified that these comments are being provided to ensure that the project meets the requirements for submittal to the Plan Commission. Approval by the Plan Commission is not an endorsement or approval of these documents to obtain the required building permits, engineering approval, or permits required by other government or permitting agencies for construction. Detailed plan review with associated comments will be provided upon submittal of plans for a building permit. The petitioner shall acknowledge that they accept this understanding.

2. Provide an engineer's estimate of construction cost for full site improvements to complete the calculation for plan review, inspection, and other fees.

3. Final engineering plans shall be georeferenced by using State Plane Coordinate System – Illinois East. Below are details about projection:

    i. Projected Coordinate System: NAD_1983_StatePlane_Illinois_East_FIPS_1201_Feet
        a. Projection: Transverse_Mercator
        b. False_Easting: 984250.00000000
    2. False_Northing:0.00000000
    3. Central_Meridian: -88.33333333
        a. Scale_Factor: 0.99997500
    4. Latitude_Of_Origin: 36.66666667
        a. Linear Unit: Foot_US

    b. Geographic Coordinate System: GCS_North_American_1983
        a. Datum: D_North_American_1983
    2. Prime Meridian: Greenwich
        a. Angular Unit: Degree

4. The proposed detention facility will be a private system and as such will not be the Village's responsibility to maintain. The basin requires a 1-foot freeboard with an overflow weir at the 6" line. Provide calculations for sizing the weir.

5. An Onsite Utility Maintenance Agreement must be provided prior to final engineering approval.

6. According to the Stormwater Management Report, the basin, at 1.43 ac-ft of storage, is sized to meet Village detention requirements for the newly disturbed 3.79 acres (1.07 ac-ft of storage) as well as the previously permitted work from 2003 (0.30 ac-ft of storage). Modify the Drainage Exhibit to show the 1.77 ac of tributary area as described in the last paragraph of 2. Existing Conditions from the Report. Delineate the area as described in the report. Since the volume for the 2003 project is also included in the new basin, the release rate can be calculated including that area also. Any flow from disturbed area not tributary to the new basin, such as the area east of the new building addition(?), should be considered offsite flow and incorporated into the ultimate release rate calculations.

7. The MWRD release rate being used (0.36 cfs) is much lower than the Village's allowable release rate of 0.18 cfs/acre, which comes to 0.68 cfs for the proposed 3.79 acre project area. Using this low of a release

rate will require a larger basin to accommodate the 100-yr storm. Re-run Village detention volume calculations using the lower release rate.

8. The storm sewer design does not allow for the first flush to enter the volume control facility. Re-design.

9. Modify the fire truck movement exhibit on Sheet C3 to have the vehicle use the drive aisle closest to the building along the west side. Add an exhibit showing the same track going counter-clockwise around the building.

10. Fire lanes adjacent to buildings must have a minimum pavement width as directed by the Fire Department to accommodate the tower truck's outriggers. Fire lanes require a heavy duty pavement section. Asphalt pavement section to consist of: 2" Surface, 2-1/4" N-50 Binder, 5" N-30 Binder, and 4" CA-6 Stone Subbase.

11. The Plat of Survey provided does not show a new public utility easement for the storm sewer that was relocated for the 2003 building expansion. Provide a Plat of Easement that vacates the portion of the existing easement that now goes through the building and dedicates a new easement following the path of the new (2003) storm sewer main around the south side of the building.

12. The building addition will encroach upon existing public utility easements north of the existing building. Include required vacations of public easements for the building addition in the Plat of Easement.

13. Sheet C3: The parking spaces can be reduced to 16.5' in depth to the face of curb, allowing for 1.5' of overhang, along curbs adjacent to grass. Where curbs are adjacent to sidewalks, the same can be done as long as the sidewalk is correspondingly widened 1.5'.

14. Sheet C3: The proposed work within the Euclid Avenue ROW will require a permit review from the Cook County Department of Transportation and Highways.

15. Sheet C4: The note for the water main 'tee' says "...install tee with stainless steel mission couplings." Mission couplings cannot be used for water main work. Revise note.

16. The site development introducing the additional uses besides predominately swimming activity for this site needs to provide a proposed schedule of programed and unplanned activities for the building. In the traffic report introductory remarks related to existing attendance to this facility, cited 300 weekday patrons, and 600 weekend visitors to the building were referenced. The projected volumes increasing to 2424 to 2998 attendees based upon the base or alternate build proposal is increasing the patronage by 5 to 10 fold. If known programs, classes, activities, leagues, special events, swim meets etc. could be identified into a theoretical schedule, along with a projected pool usage based upon seasonal fluctuation history, this would clarify building usage and associated traffic demand.

17. Are the traffic count values provided in the report reflecting the traffic generated from the cross access the Christian Liberty Academy is doing on Park District property, for their morning, lunch, and afternoon pick-up and drop-off functions? What provisions for accident management or liability exists between the two parcels?
18. With the introduction of an additional site driveway north of the proposed building expansion, what does this opening align with on the opposite side of the street? How will the continuing encroachment of Christian Liberty traffic affect this new driveway operation?

19. It is unclear in the report on Exhibit #9 how the breakout for and AADT is being represented in the column 'Daily Sum' for clear values representing both weekday and weekend Daily AADT. The tally indicated on the Daily sum line for existing traffic counts of 1440/day differs from the tallies stated in #1 above that were provided on page one of the report.

20. While the report indicates the counts were adjusted for a 0.5 % annual growth factor per year, and these adjustments are shown at the major intersections, no revisions to the counts into and out of the site seem to have been made.

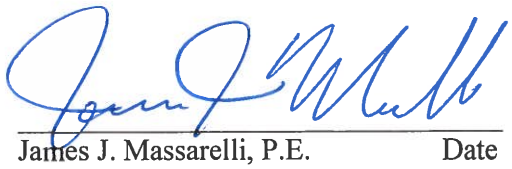
21. Is the use of the soccer field open to the general public anytime, or must the field be reserved to be used, or is it just allowed for league or youth soccer games.

22. The traffic report indicates the existing parking supply is increasing from 191 existing parking stalls to 264 proposed parking spaces, a gain of 73 additional stalls. How many stalls are required based upon Village Code, and is a proposed variation being requested?

23. The identification of the intersection levels of service for the intersection of Ridge Avenue at Euclid Avenue suggesting an increase in back-up from 50-60 ft, to 180-200 ft in length is not acceptable. Review of the geometric alignment of the north leg to provide a separate right and left /through orientation should be considered, along with signage on Euclid Avenue for not blocking Ridge Avenue.

24. The parking stall analysis that concludes that the required on-site parking demand for Saturdays is anticipated to be lower than weekday demand for fitness center use by up to 40% needs to be explained and sourced for reference to defend this statement. There is no basis upon which a reduction for not only the gymnasium, but proposed classes, multipurpose rooms, walking track, that has been provided.

25. The site lighting photometric site lighting plan must be provided at a larger scale that is legible, along with catalog cuts of all exterior lighting fixtures pole mounted in the parking lot, or mounted onto the building. Fixtures should be 'Dark Sky' compliant.



2/1/18

James J. Massarelli, P.E. Date
Director of Engineering

Arlington Heights Fire Department
Plan Review Sheet

P. C. Number 18-002

Project Name Olympic Park Redelevopment

Project Location 660 N. Ridge Ave

Planning Department Contact Sam Hubbard

General Comments

Round 1

1. The building is to be sprinkled.

2. The Fire Department Connection (FDC) is to be clearly visible, easily accessed and located at the main front entrance.

3. A fire hydrant is to be located within 100' of the Fire Department Connection.

4. A Knox Box is to be located the main front entrance.

5. A fully operational annunciator panel or alarm panel is to be located at the front door.

6. Reference 2009 International Fire Code - sections 503 and Appendix D for fire lane expectations.

NOTE: PLAN IS CONCEPTUAL ONLY SUBJECT TO DETAILED PLAN REVIEW

Date January 26, 2018 Reviewed By: LT. Mark Aleckson

Arlington Heights Fire Department

ARLINGTON HEIGHTS POLICE DEPARTMENT

Community Services Bureau

RECEIVED
FEB 01 2018
PLANNING & COMMUNITY DEVELOPMENT DEPARTMENT

DEPARTMENT PLAN REVIEW SUMMARY

Olympic Park Redevelopment
660 N Ridge Ave.
PC #18-002

Round 1 Review Comments **01/31/2018**

1. **Character of use:**
   The character of use is consistent with the area.

2. **Are lighting requirements adequate?**
   Lighting should be up to Village of Arlington Heights Code. Special attention should be given to those outside common areas- playground and surrounding area, parking lot, areas around the building- especially entries/exits. These areas should be illuminated specifically during hours of darkness for safety, to deter criminal activity and increase surveillance/visibility- potentially reducing theft, trespassing, vandalism, and other criminal activity. Landscaping should provide open sightlines to increase natural surveillance and avoid creating ambush locations and havens for illegal activities- theft, trespassing, vandalism, underage drinking, drug use, etc.

3. **Present traffic problems?**
   The additional of a driveway around the exterior of the building should alleviate traffic issues.

4. **Traffic accidents at particular location?**
   This is not a problem area in relation to traffic accidents.

5. **Traffic problems that may be created by the development.**
   This development should not create any additional traffic problems.

6. **General comments:**
   -Please ensure that there is an emergency information/contact card on file with the Arlington Heights Police Department and that it is up-to-date. Agent contact information must be provided to the Arlington Heights Police Department during all construction phases. The form is attached. Please complete and return. This allows police department personnel to contact an agent during emergency situations or for suspicious/criminal activity on the property during all hours.
   -It appears there is a fence around the playground. If this area is for park district patron use only during business hours- any access gates to this area should be locked/secured nightly to reduce unauthorized access- i.e. theft, trespassing, vandalism, underage drinking etc.- to the area after hours. Consider installing a fence higher than 4 feet, one that allows natural surveillance of the property but limits access to unauthorized persons.
   -Access control to the building and/or classroom areas must be considered. Consider numbering the exterior doors.

-The desks adjacent to the two vestibule entrances to the facility should be staffed during business hours to monitor people entering and leaving the building, if both doors are to remain used as facility entrances.

- The babysitting area doorway is immediately adjacent to an entrance into the facility, consider moving that area (around the corner) or moving the doorway so it is not so close to the entrance.

- The addition of Trespass signage is recommended. Consider posting no trespassing / loitering/ no un-authorized use signage. The Arlington Heights Police Dept. has and utilizes trespass warning forms under qualifying circumstances when requested by property management.

#272

Brandi Romag, Crime Prevention Officer
Community Services Bureau

Approved by:

Supervisor's Signature

PETITIONER'S APPLICATION - ARLINGTON HEIGHTS PLAN COMMISSION

Petition #: P.C. 18-002
Petitioner: Arlington Heights Park District
410 N. Arlington Heights Rd.
Arlington Heights, IL 60004
Owner: Arlington Heights Park District
410 N. Arlington Heights Rd.
Arlington Heights, IL 60004
Contact Person: Ben Rea, Director of Parks
Address: 410 N. Arlington Heights Rd.
Arlington Heights, IL 60004
Phone #: (847) 506-7145
Fax #: (847) 577-3050
E-Mail: brea@ahpd.org

P.I.N.# 0330229039
Location: 660 North Ridge Avenue
Rezoning: _____ Current: P-L Proposed: P-L
Subdivision: _____
# of Lots: _____ Current: _____ Proposed: _____
PUD: _____ For: _____
Special Use: _____ For: _____
Land Use Variation: _____ For: _____

Land Use: P-L Current: P-L
Proposed: P-L
Site Gross Area: _____
# of Units Total: _____
1BR: 2BR: 3BR: 4BR:

(Petitioner: Please do not write below this line.)

1. GENERAL COMMENTS:

- See the attached accessibility comments.
- Building permit plans must comply with the attached Food Service Plan Review Requirements.

Sean Freres, LEHP 1/26/18
Environmental Health Officer Date

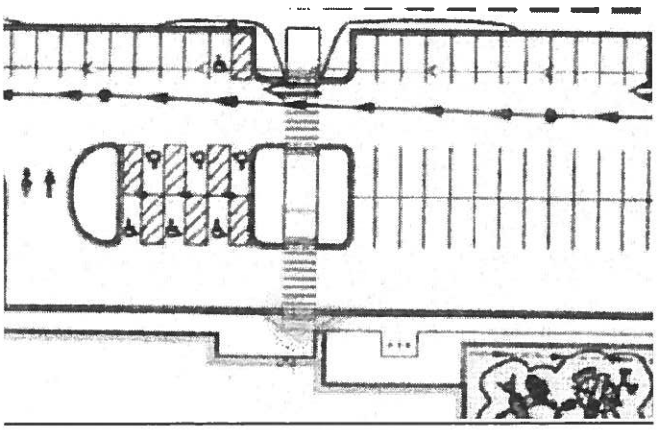
James McCalister 1/26/18 Director
Date

Plan Review for Accessibility

Address:	Arlington Heights Park District Olympic Park Redevelopment 660 N. Ridge Avenue PUD Amendment, Parking Variation P.C. #18-002 Round 1
Submitted to:	Sam Hubbard, Planning & Community Development
Submitted by:	David Robb, Disability Services Coordinator (847) 368-5793
Date:	January 24, 2018
Re:	Illinois Accessibility Code (IAC)

Sheet C3

1. Relocate those ADA Reserved Parking Spaces furthest away from the designated accessible route and curb ramp to those parking spaces that are closest to the designated accessible route and curb ramp. Per IAC Sections 400.310(c)(2) and (a)(1)(A).



Village of Arlington Heights
Health & Human Services Department
33 S. Arlington Heights Rd.
Arlington Heights, IL 60005
(847) 368-5760

Food Service Plan Review Requirements

The Village of Arlington Heights has adopted the Illinois Department of Public Health Food Service Sanitation Code. Copies may be obtained by visiting www.idph.state.il.us or calling 630/293-6800.

For a complete plan review, drawings to scale must be submitted containing the information noted below. This list, while not necessarily complete, highlights areas of concern and common reasons for plan rejection.

1. Floor Plan for Operation. Designation of various areas (service areas, food preparation, dry storage, numbers and locations of seats, restrooms, break areas, etc).

2. General Layout. Location of equipment fixtures (cross-reference to an equipment schedule) including distances above the floor, between other pieces of equipment, whether on legs or casters, etc.

3. Food Service Equipment. All equipment must be commercial and listed with NSF or equivalent in both construction and installation. Used equipment must be inspected for approval prior to installation. Equipment schedules must contain manufacturer and model numbers for each piece of food service equipment. Equipment spec sheets are required for all new equipment.

4. Plumbing fixtures. Location and type must be shown in overhead and schematic design. Include provisions for drainage from condensate for refrigerators and freezers, ice machines, soda or water stations, steam tables, etc. The location of all floor drains and sinks must also be shown. All 3 compartment sinks, dish machines, prep sinks, ice machines, steam tables, and condensate lines must have an air-gap (open-site drain) on the waste line. All hub drains, floor sinks, and floor drains must be located on the toe-edge of, or adjacent to, the equipment to facilitate cleaning. Facilities cooking or performing food prep must have a grease trap. Newly constructed facilities having cooking that produces grease or vapors, or where 3 compartment sinks or food prep sinks are located in two or more areas are required to have an exterior grease trap. Dish machines and garbage grinders may not drain through the grease trap. All ice machines must be air cooled.

5. Sinks. Sinks that are mandatory to be installed include:

- three compartment sink with integral drain boards
- mop/utility sink
- hand sink in preparation areas (including bars) and dish areas (more than one may be required)
- food prep sink (depending on type of operation)

Hot and cold running water are required at all sinks. The water must be tempered by means of a mixing valve. A metering faucet must provide at least 10 seconds of running water.

6. Ventilation Requirements. Adequate ventilation must be provided throughout the facility to remove excessive heat, steam, vapors, smoke, fumes, and noxious odors. Submit specifics on ventilation hoods for Fire Code review.

7. Floors, Walls, and Ceilings. The surfaces in all food preparation, dishwashing rooms, and toilet rooms must be smooth, light colored, non-porous, and easily cleanable. Ceiling tiles may not contain fissures, and must be vinyl coated above food prep areas. Cove base must be provided at all floor/wall junctures. Grouting for all floor tiles must be sealed to be non-porous. Non-slip finishes may only be installed in traffic areas, not under equipment.

8. Lighting. Artificial light sources must be installed to provide at least 20 footcandles of light in all food prep areas, dish areas, and wash rooms. All walk-in refrigeration/freezer units, dry storage areas, dining rooms during cleaning, and other areas must be provided with at least 10 footcandles of light. All light fixtures over, near, or within food preparation, display, or service areas, and dish areas, must be shielded to prevent broken glass from falling onto food. This includes heat lamps.

9. Dry Storage Areas. A minimum of 25% of the food preparation area must be set aside for dry storage. Provide calculations showing how the dry storage requirement is met. Show dimensions and numbers of tiers for each shelving unit. All shelving must be at least 6 inches above the floor, and 18 inches below the ceiling. Remember that carry-out operations require more storage space for disposable containers.

10. Other Storage Areas. Provide storage for the following and indicate their locations: refrigerated and frozen storage, both clean and dirty dish storage, kitchen utensils, employee belongings and coats, and all cleaning supplies and toxic chemicals. Provide a mop and broom storage rack over the mop/utility sink.

11. Garbage and Refuse Disposal. An adequately sized solid waste storage site must be provided. The area must be paved, curbed, and graded to the front to prevent the accumulation of liquids. Visual screening for the area must be provided.

12. Outer Openings. No doors or windows may be left open and unscreened. All doors must be self-closing and tight-fitting. Provide screening of at least 16 mesh per inch for any windows to be opened. Air curtains and self-closing automatic windows must be installed on drive-through windows. Doors to outdoor dining areas must have operable air curtains installed above if outdoor wait staff are provided.

13. Other Concerns. All conduits and plumbing pipes must be installed inside the walls. If this is not possible, they must be at least 1 inch from the wall and 6 inches above the floor to facilitate cleaning.

14. Menu. A copy of the proposed menu must be submitted.

15. Smoking. No smoking is allowed in any enclosed space, including bars, private offices, or outdoor dining areas. Smoking is not allowed within 15 feet of any door, and ashtrays and other smoking materials may not be within 15 feet of the doors.

16. Certified Food Service Manager. At least one IDPH certified Food Service Manager must be present at all times foods are handled in high-risk establishments. Medium risk establishments need at least one certified Manager on staff.

Installation Standards for Food Service Equipment

Equipment must be mounted with a minimum of 6 inches of clear space underneath. In lieu of the clear space, equipment may be equipped with casters or placed on a raised solid masonry or sealed metal platform. The platform must be at least 2 inches high, sealed at all edges, and sealed to the floor. Necessary space for air intake must be provided for any units that need ventilation. If fresh air if provided, any air intake openings must be screened with a minimum of 16 mesh per inch screening.

Equipment that is not easily moveable must also be sealed to the wall, or meet the following minimum clearances to facilitate cleaning:

- When the distance to be cleaned is less than 2 feet in length, the width of the clear unobstructed space must not be less than 5 inches.
- When the distance to be cleaned is between 2 and 4 feet, the width of the clear unobstructed space must not be less than 8 inches.
- When the distance to be cleaned is greater than 4 feet, the width of the clear unobstructed space must not be less than 12 inches.

Other Considerations

A valid Business License is required to operate a food service facility in the Village of Arlington Heights. Contact the Licensing Coordinator in the Building Department at 847/368-5560.

A special use permit may be required for your location. Contact the Planning & Community Development Department at 847/368-5200 to inquire about the requirements.

No alcoholic beverages may be sold without first obtaining a Village Liquor License. Contact the Liquor License Officer at 847/368-5100.

Other licenses may be required as well. It is up to the owner and/or operator of each facility to obtain all of the required State and Local licenses prior to opening.

An early consultation between the Health & Human Services Department and the persons planning to build and/or operate a food service establishment can be beneficial. We may also be able to answer any questions you may have during the process. Contact the Health & Human Services Department at 847/368-5760 or by fax at 847/368-5980.

PLANNING & COMMUNITY DEVELOPMENT DEPARTMENT

PETITIONER'S APPLICATION - ARLINGTON HEIGHTS PLAN COMMISSION

Petition #: P.C. 18-002
Petitioner: Arlington Heights Park District
410 N. Arlington Heights Rd.
Arlington Heights, IL 60004
Owner: Arlington Heights Park District
410 N. Arlington Heights Rd.
Arlington Heights, IL 60004
Contact Person: Ben Rea, Director of Parks
Address: 410 N. Arlington Heights Rd.
Arlington Heights, IL 60004
Phone #: (847) 506-7145
Fax #: (847) 577-3050
E-Mail: brea@ahpd.org

P.I.N.# 0330229039
Location: 660 North Ridge Avenue
Rezoning: _____ Current: P-L Proposed: P-L
Subdivision: _____
# of Lots: _____ Current: _____ Proposed: _____
PUD: _____ For: _____
Special Use: _____ For: _____
Land Use Variation: _____ For: _____

Land Use: P-L Current: P-L
Proposed: P-L
Site Gross Area: _____
# of Units Total: _____
1BR: 2BR: 3BR: 4BR:

(Petitioner: Please do not write below this line.)

	YES	NO	
1.	X		COMPLIES WITH COMPREHENSIVE PLAN?
2.	X		COMPLIES WITH THOROUGHFARE PLAN?
3.	X		VARIATIONS NEEDED FROM ZONING REGULATIONS? (See below.)
4.		X	VARIATIONS NEEDED FROM SUBDIVISION REGULATIONS? (See below.)
5.		X	SUBDIVISION REQUIRED?
6.		X	SCHOOL/PARK DISTRICT CONTRIBUTIONS REQUIRED? (See below.)

Comments:

PLEASE SEE ATTACHED COMMENTS.

Sam Hubbard 2.1.18
Date

Planning & Community Development Dept. Review

January 31, 2018

REVIEW ROUND 1

Project: Olympic Park PUD Amendment – 660 N. Ridge Ave.

Case Number: PC 18-001

General:

7. The following approvals are needed:
    - **Amendment to PUD Ordinances #78-19 and #03-036 to allow a building addition and site changes on the subject property.**
    - **Special Use Permit to allow a "Community Center, Recreation Building".**

8. Please provide a written justification for the required Special Use Permit addressing each of the approval criteria outlined below:
    - **That said special use is deemed necessary for the public convenience at this location.**
    - **That such case will not, under the circumstances of the particular case, be detrimental to the health, safety, morals or general welfare of persons residing or working in the vicinity.**
    - **That the proposed use will comply with the regulations and conditions specified in this ordinance for such use, and with the stipulations and conditions made a part of the authorization granted by the Village Board of Trustees.**

9. The following variations have been identified:
    - **Variation to Section 11.4, Schedule of Parking Requirements, to reduce the required amount of off-site parking from ___ spaces to 264 spaces. The extent of this variation will be determined once detailed information on the size of the interior spaces has been provided.**

10. Please provide a written justification for the required variation addressing each of the hardship criteria outlined below:
    - **That the property in question cannot yield a reasonable return if permitted to be used only under the conditions allowed by the regulations in that zone.**
    - **The plight of the owner is due to unique circumstances.**
    - **The variation, if granted, will not alter the essential character of the locality.**

11. Has a meeting with the surrounding neighborhood been held? If so, please provide a summary of the meeting. If not, a neighborhood meeting will be required prior to appearing before the Plan Commission and a summary of the meeting (attendance, date/time/location, record of topics discussed and concerns raised by the residents) must be provided for staff.

12. Please provide catalog cut sheets for all proposed light fixtures within the parking area, as well as all proposed building mounted light fixtures.

13. Please outline the total number of future employees in both the base bid and alternate bid scenario (only current number of employees was provided).

14. Please outline the maximum number of staff that will be working within the proposed nursery at any one time.

15. The Wheeling Township Assessor's office has been provided with information on the proposed development and has complied a list of all PIN #'s of property within 250' of the subject property. Please obtain the list from the Assessor's office and prior to looking up the addresses associated with each PIN, please provide the list to me so that I can double check to ensure that all necessary PIN's have been included on the list. In addition, please note that when the mailing is sent out, it must go to the **taxpayer of record of each PIN**, and not to the actual property address of the PIN.

16. Please ensure that all plans and/or studies to be resubmitted as a result of the Round 1 Department review comments include a revision date.

Site Plan:

17. Please revise Sheet C3 of the civil plans to include the below Zoning Matrix table and fill in all data that is missing and verify that the data included on the chart is accurate:

Zoning Matrix

	Existing	Proposed - Base Bid	Proposed - Alternate Bid	P-L District Required
Lot Size	436,374 sq. ft.	436,374 sq. ft.	436,374 sq. ft.	No Limit
Lot Width	482.4'	482.4'	482.4'	No Limit
Setbacks				
North (rear)				30'
South (front)				15'
East (exterior side)				10'
West (exterior side)				10'
F.A.R.				250%
Building Lot Coverage				No Limit
Impervious Surface Coverage				No Limit
Building Height				No Limit
Off-street Parking Spaces	191	264	264	TBD
Bicycle Parking Spaces	34			
Total Building Square Footage				N/A
Building Foundation (sq. ft.)				N/A

18. Please provide details for all proposed fences.

19. Provide parking space width dimensions within all proposed parking rows.

20. Within the northernmost parking row, it appears a variations is needed for a landscape island that does not contain a shade tree (where pedestrian path leads from the building to safety town). Please find a way to add the required shade tree to the parking lot island or clarify if a variation is requested (and provide the necessary response to the hardship criteria).

21. There is a small existing 8' x 10' concreate area adjacent to the sidewalk in the southwest corner of the site. It is unclear why this concrete area is necessary. Please remove this area and replace it with greenspace. Additionally, the outline of the former asphalt driveway entrance along Euclid, although proposed for removal, still appears on all site plans. Please add a note to the demolition plan that clarifies this area will be returned to greenspace and remove the outline from all other plans (both civil and landscaping).

22. Other than the transformer proposed on the east side of the building and the rooftop mechanical units, are any above ground utility or mechanical units proposed on the site (HVAC equipment, generators, utility pedestals, transformers, etc.)?

Building:

23. A Design Commission appearance is required for the proposed improvements. Appearance before the Design Commission has been tentatively scheduled for February 13th.

24. Will the building addition incorporate any new basement areas? If so, a proposed basement plan shall be provided.

25. Please revise the floor plans to assign room numbers to each space/room within the existing and proposed building. For all rooms/spaces (both existing and proposed), provide a separate table with the square footage of each space and the corresponding occupancy calculation and maximum occupant load per building code standards.

26. Provide the square footage and maximum bather load for each existing and proposed pool per IPHD standards.

27. Are there any bleachers within the facility? Please provide occupancy calculations for all bleacher areas.

28. Please revise the elevations to provide a value for the areas labeled "EQ" so that overall height can be determined. The elevations should include a height dimension for the overall height of the building as measured at its tallest point, including measurements to both the roofline and top of parapet wall (if applicable).

29. Where will the electric and gas meters be located on the building? Has landscaping been incorporated to screen these elements?

Traffic/Parking:

30. How will the dump truck access the proposed trash enclosure area along the eastern elevation? It appears that the dump truck will need to utilize the public street for turning movements to back up into the trash enclosure space.

31. The traffic study has a gap within the programing/swimming pool usage between 3:00pm-4:00pm. How are the pools used during this time?

32. Per the recently adopted bicycle parking ordinance, 2% of the overall building occupancy shall be used to determine the required number of bicycle parking spaces. Please provide the overall building occupancy to calculate the required bicycle parking spaces. Additionally, please note on the site plan how many bicycle parking spaces exist along the eastern side of the building (1 post = 2 spaces) and clarify how many are proposed along the western side of the building.

33. Please revise the projected future parking demand to be based on the ITE parking generation rates per the proposed uses and not per the Village parking requirement. Additionally, the future parking demand did not factor in the proposed warm water pool.

34. If a parking deficit is projected during peak times, please provide a strategy for where these cars will park (assuming that scheduling conflicts for major events cannot be avoided). No analysis was included outlining how many spaces are available within the surrounding street network.

Prepared by:

Olympic Swim Addition
660 N. Ridge Avenue
PC 18-002
January 31, 2018

Landscape Comments

1) The ends of all parking rows and every twenty spaces must include a landscape island which contains a 4" caliper shade tree. (Chapter 28, section 6.15-1.2b). Increase the size of the proposed trees from 3.5 inch to 4 inch caliper. In addition, provide trees in islands where the trees are absent.

2) Per Chapter 28, Section 6.15 a three foot high screen must be provided adjacent to parking areas along the public right of way. Infill or provide the code required screen where it is absent. The landscaping should not obstruct site lines.

3) Provide additional landscaping adjacent to the parking lot expansion on the west and the north in order to buffer parking area from the residential district.

4) Per Chapter 28, Section 6.15-3 landscaping is required along the perimeter of the detention basin. Provide landscaping along Salem Avenue. In addition, indicate the proposed seed mix for the floor of the basin.

5) Any utility meters or mechanical units must be screened with landscaping or another appropriate method of screening. Identify the size and species of the proposed landscaping adjacent to the trash area along Ridge Avenue.

6) Please provide a detailed planting plan and indicate the proposed species.

FGM ARCHITECTS

February 14, 2018

Sam Hubbard
Development Planner
Village of Arlington Heights
33 S. Arlington Heights Road
Arlington Heights, IL 60005

RE: Arlington Heights Park District
Olympic Indoor Swim Center Addition and Renovations
660 North Ridge Avenue
Arlington Heights, IL 60005
PC# 18-002

Dear Mr. Hubbard,

Please find attached a copy of the comments and initial responses from the Arlington Heights Park District (AHPD) and FGM Architects for the project referenced above. In addition, we are resubmitting ten (10) copies of the following items for review:

- Item 4: Revised Plat of Survey
- Items 11a-b: Revised Engineering Plans
- Item 11c: Revised Floor Plans and Code Compliance Plans
- Items 11d-f: Revised Elevations and Sections
- Items 11g-i: Revised Landscape Plans
- Item 11h: Revised Site Lighting Photometric Plans and Catalog Cut Sheets
- Item 13: Engineer's Opinion of Probable Costs for Site Work
- Item 14: Revised Stormwater Report

We are continuing to refine and update Item 12: Traffic Study and will submit under separate cover as soon as possible.

If there are any questions, or if additional information is required, please do not hesitate to contact me at directly at (312) 948-8436 or davidy@fgmarchitects.com.

Respectfully Submitted,

David B. Yandel, AIA
Principal

XC: Ben Rea, AHPD

Arlington Heights Park District
Olympic Indoor Swim Center Addition and Renovations
660 North Ridge Avenue
Arlington Heights, IL 60005
PC# 18-002

Building & Life Safety Department – Deb Pierce, Plan Reviewer

1. Show the gymnasium addition on Sheet A100.
    a. Petitioner Response: Sheet A100 has been revised to show the gymnasium addition.
2. Provide a Site Plan showing the location of the additions and the distances to the lot lines.
    a. Petitioner Response: Sheet C3 has been revised. The addition footprint edge has been shaded and dimensions have been added.
3. What is the proposed construction type for the additions?
    a. Petitioner Response: Type IIB
4. Provide a height and area calculation for the building including all allowable increases. IBC Section 503.
    a. Petitioner Response: Additional information provided on Sheets G1.0.2 – G1.0.6.
5. Provide an occupant load calculation per floor. Include a calculation to show the provided egress width at each exit.
    a. Petitioner Response: Sheets G1.0.2 – G1.0.6 have been updated to include an occupant load calculation per floor. Egress width at each exit has been indicated.
6. Based on the height of the roof, permanent access to the RTU's is required to be provided.
    a. Petitioner Response: A ladder to the roof has been provided with access through a roof hatch. Please confirm if any additional access is required.

Fire Safety Division, Fire Safety Supervisor

1. All currently adopted codes are required to be followed.
    a. Petitioner Response: Will comply.
2. Fire department connections shall be fully visible and located at the main front entrance of the building and within a minimum travel distance of 100 feet to the nearest fire hydrant.
    a. Petitioner Response: The existing fire department connection has been labeled on sheet C4 and is located on Ridge Avenue just north of the existing entrance behind the bicycle racks. The fire department connection is 91.4 feet from an existing fire hydrant on Ridge Avenue.
3. Buildings or facilities having a gross building area of more than 62,000 square feet shall be provided with two separate and approved fire apparatus access roads.
    a. Petitioner Response: Please clarify comment. Fire apparatus access is available from two locations from Ridge Avenue.
4. A complete NFPA compliant fire suppression system is required. Supervised indicating control valves shall be provided at the point of connection to the riser on each floor.
    a. Petitioner Response: Will comply.

5. An approved water supply capable of supplying the required fire flow for fire protection shall be provided.
    a. Petitioner Response: Will comply.
6. Fire protection equipment and service rooms shall be identified in an approved manner.
    a. Petitioner Response: Will comply.
7. Approved access shall be provided and maintained for all fire protection equipment to permit immediate safe operation and maintenance of such equipment.
    a. Petitioner Response: Will comply.
8. Buildings shall have approved radio coverage for emergency responders within the building based upon the existing coverage levels of the public safety communication systems of the jurisdiction at the exterior of the building.
    a. Petitioner Response: Will comply.
9. In buildings and structures where standby power is required or furnished to operate an elevator, the operation shall comply with current code requirements.
    a. Petitioner Response: Will comply.
10. A fully functional fire alarm shall be installed per NFPA 72. The alarm annunciator panel shall be located at the front entrance.
    a. Petitioner Response: Will comply.
11. Shop drawings for fire alarm systems shall be submitted for review and approval prior to system installation.
    a. Petitioner Response: Will comply.
12. Visible alarm notification appliances shall be provided in public areas and common areas. A visible exterior weatherproof alarm notification device shall be located within closest proximity to the front main entrance of the building or tenant spaces.
    a. Petitioner Response: Will comply.
13. A zoning indicator panel and the associated controls, or fire alarm control panel shall be located within closest proximity to the front main entrance.
    a. Petitioner Response: Will comply.
14. A key box (Knox Box) shall be provided and contain keys to gain necessary access as required by the fire code official.
    a. Petitioner Response: Will comply.
15. Each location of a fire department communication device shall be an independent zone from the control panel in the fire command room.
    a. Petitioner Response: Will comply.
16. Fire pumps, if provided, shall be installed in accordance with the Fire Code and NFPA 20 and shall comply with all current code requirements including a minimum of two water mains located in different streets.
    a. Petitioner Response: Not applicable.
17. Exit signs shall be illuminated at all times and have emergency power backup.
    a. Petitioner Response: Will comply.

18. In order to be considered part of an accessible means of egress, an elevator shall comply with the emergency operation and signaling device requirements
    a. Petitioner Response: Not applicable
19. Aerial fire apparatus access roads shall have a minimum unobstructed width of 26 feet exclusive of shoulders, in the immediate vicinity of any building or portion of building more than 30 feet in height.
    a. Petitioner Response: The site plan has been updated to provide a 26-foot wide fire lane access road along the west and north side of the proposed building.
20. Buildings shall have approved address numbers.
    a. Petitioner Response: Will comply. Sizes, types, and locations will be reviewed prior to installation.
21. Fire department connections shall be installed in accordance with the NFPA standard applicable to the system design. The location of the fire department connections shall be approved.
    a. Petitioner Response: Will comply. Types and locations will be reviewed prior to installation.
22. Fire department connections shall be located on the street side of buildings, fully visible, and recognizable from the street or nearest point of fire department vehicle access or as otherwise approved a visible location.
    a. Petitioner Response: The existing fire department connection has been labeled on sheet C4 and is located on Ridge Avenue just north of the existing entrance behind the bicycle racks. The fire department connection is 91.4 feet from an existing fire hydrant on Ridge Avenue
23. Signs shall be posted on both sides of an approach of any fire lane stating "NO PARKING – FIRE LANE". Signs shall have arrows indicating the area of parking restriction.
    a. Petitioner Response: Signs have been shown on Sheet C3.
24. Fire lane signs shall be white with red three-inch letters. The dimensions of the sign shall be 12 inches horizontally and 18 inches vertically. These signs shall be installed so that the top of the sign is no less than 6 feet nor more than 6 feet above grade.
    a. Petitioner Response: A detail has been provided on sheet C9.
25. Material Safety Data Sheets (MSDS) for all hazardous materials shall be either readily available on the premises as a paper copy, or where approved, shall be permitted to be readily retrievable by electronic access.
    a. Petitioner Response: Will comply.
26. Individual containers of hazardous materials, cartons or packages shall be marked or labeled in accordance with applicable federal regulations. Buildings, rooms, and spaces containing hazardous materials shall be identified by hazard warning signs in accordance with Section 2703.5.44.
    a. Petitioner Response: Will comply.
27. Persons responsible for the operations of areas in which hazardous materials are stored, dispensed, handled, or used shall be familiar with the chemical nature of the materials and the appropriate mitigating actions necessary in the event of a fire, leak, or spill. Responsible persons shall be designated and trained to be liaison personnel for the fire department.
    a. Petitioner Response: Will comply.

Public Works Department

1. Coordinate the relocation of the existing hydrant (removal and relocation) with the VAHPW Water Distribution Unit at 847-368-5800.
    a. Petitioner Response: Note 18 on sheet C2 has been updated.
2. There should be no spacer between the hydrant and auxiliary valve, change the Fire Hydrant Detail on C10 to reflect this change.
    a. Petitioner Response: Detail on Sheet C10 revised.
3. Replace the existing 4" domestic backflow device. It is obsolete.
    a. Petitioner Response: Will comply.
4. Replace the existing 6" domestic backflow device. It is obsolete.
    a. Petitioner Response: Will comply.
5. Verify the condition of all existing utility structures that we reconnected to, to ensure they don't need replacement.
    a. Petitioner Response: Will comply.
6. Verify the condition of the public sidewalk abutting the project. Correct any structural or ponding water problems.
    a. Petitioner Response: Will comply.
7. All roadway patches shall be 2' wider than the utility excavations for surface course only.
    a. Petitioner Response: The utility trench pavement repair detail on sheet C11 has been updated.

Engineering Department

1. The petitioner is notified that these comments are being provided to ensure that the project meets the requirements for submittal to the Plan Commission. Approval by the Plan Commission is not an endorsement or approval of these documents to obtain the required building permits, engineering approval, or permits required by other government or permitting agencies for construction. Detailed plan review with associated comments will be provided upon submittal of plans for a building permit. The petitioner shall acknowledge that they accept this understanding.
    a. Petitioner Response: Acknowledged.
2. Provide an engineer's estimate of construction cost for full site improvements to complete the calculation for plan review, inspection, and other fees.
    a. Petitioner Response: An engineer's opinion of probable cost for the base bid project has been completed and issued separately.
3. Final engineering pans shall be georeferenced by using State Plane Coordinate System – Illinois East.
    a. Petitioner Response: Will comply.
4. The proposed detention facility will be a private system and as such will not be the Village's responsibility to maintain. The basin requires a 1-foot freeboard with an overflow weir at the 6" line. Provide calculations for the weir.
    a. Petitioner Response: The detention calculations have been updated and include a Village HWL = 714.70, 40-foot wide grass overflow weir at 715.20, and a perimeter protection level to 716.00. Please refer to the updated drainage report issued separately.

5. The Onsite Utility Maintenance Agreement must be provided prior to the final engineering approval.
    a. Petitioner Response: Please refer to Maintenance Plan listed on sheet C8.
6. According to the Stormwater Management Report, the basin at 1.43 ac-ft of storage, is sized to meet Village detention requirements for the newly disturbed 3.79 acres (1.07 ac-ft of storage) as well as the previously permitted work from 2003 (0.30 ac-ft of storage). Modify the Drainage Exhibit to show the 1.77 ac of tributary area as described in the report. Since the volume for the 2003 project is also included in the new basin, the release rate can be calculated including that area also. Any flow from disturbed area not tributary to the new basin, such as the area east of the new building addition(?), should be considered offsite flow and incorporated into the ultimate release rate calculations.
    a. Petitioner Response: Sheet C8 drainage exhibit and stormwater report have been updated to incorporate the 2003 improvements within the new detention calculations eliminating some of the overlaps of areas. A swale has been added along the east side of the building to collect potential off-site flows.
7. The MWRD release rate being used (0.36 cfs) is much lower than the Village's allowable release rate of 0.18 cfs/acre, which comes to 0.68 cfs for the proposed 3.79-acre project area. Using this low of a release rate will require a larger basin to accommodate the 100-yr storm. Re-run Village detention volume calculations using the lower release rate.
    a. Petitioner Response: We have opted not to use the MWRD Legacy method and have recalculated both the Village and MWRD requirements. Please refer to the updated stormwater management report, issued separately.
8. The storm sewer design does not allow for the first flush to enter the volume control facility. Re-design.
    a. Petitioner Response: The proposed storm sewer system has been disconnected from the existing storm system and the detention basin has been revised to provide for the new improvements to be routed through a pretreatment basin. A portion of the previous detention catchment still uses the existing storm sewer system and bypasses the pretreatment.
9. Modify the fire truck movement exhibit on Sheet C3 to have the vehicle use the drive aisle closest to the building along the west side. Add an exhibit showing the same track going counter-clockwise around the building.
    a. Petitioner Response: An auto-turn exhibit sheet C12 has been added to the plan set to show the requested vehicle movements.
10. Fire lanes adjacent to the building must have a minimum pavement width as directed by the Fire Department to accommodate the tower truck's outriggers. Fire lanes require a heavy-duty pavement section. Asphalt pavement section to consist of: 2" Surface, 2-1/4" N-50 Binder, 5" N-30 Binder, and 4" CA-6 Stone Subbase.
    a. Petitioner Response: The heavy-duty pavement section has been revised to increase the surface course to 2", but per discussions with the Village the binder course can remain as N-50.
11. The Plat of Survey provided does not show a new public utility easement for the storm sewer that was relocated for the 2003 building expansion. Provide a Plat of Easement that vacates the portion of the existing easement that now goes through the building and dedicates a new easement following the path of the new (2003) storm sewer main around the south side of the building.
    a. Petitioner Response: Will comply.

12. The building addition will encroach upon existing public utility easements north of the existing building. Include required vacations of public easements for the building addition in the Plat of Easement.
    a. Petitioner Response: Will comply.
13. Sheet C3: The parking spaces can be reduced to 16.5' in depth to the face of the curb, allowing for 1.5' of overhang, along curbs adjacent to the grass. Where curbs are adjacent to sidewalks, the same can be done as long as the sidewalk is correspondingly widened 1.5'.
    a. Petitioner Response: Thank you, we have incorporated this into the revised plans as we increased the fire lane aisle.
14. Sheet C3: The proposed work within the Euclid Avenue ROW will require a permit review from the Cook County Department of Transportation and Highways.
    a. Petitioner Response: We concur.
15. Sheet C4: The note for the water main 'tee' says "…install tee with stainless steel mission couplings." Mission couplings cannot be used for water main work. Revise note.
    a. Petitioner Response: Note 18 on sheet C2 and call out note on sheet C4 have been updated.
16. The site development introducing the additional uses besides predominantly swimming activity for this site needs to provide a proposed schedule of programmed and unplanned activities for the building. In the traffic report introductory remarks related to existing attendance to this facility, cited 300 weekday patrons, and 600 weekend visitors to the building were referenced. The projected volumes increasing to 2,424 to 2,998 attendees based upon that base or alternate build proposal is increasing the patronage by 5 to 10 fold. If known programs, classes, activities, leagues, special events, swim meets, etc. could be identified into a theoretical schedule, along with a projected pool usage based upon seasonal fluctuation history, this would clarify building usage and associated traffic demand.
    a. Petitioner Response: To provide clarification, the referenced daily traffic volumes presented in the Traffic Impact and Parking Study represent both entering and exiting vehicles for patrons, staff and drop-off/pick-up operations and are <u>not</u> a direct representation of attendance. For example, for the Single Gym option, there are projected to be 2,424 trips (1,212 entering and 1,212 exiting), which also includes existing traffic at 1,440 on a daily basis (720 entering and 720 exiting).
17. Are the traffic count values provided in the report reflecting the traffic generated from the cross access the Christian Liberty Academy is doing on Park District property, for their morning, lunch, and afternoon pick-up and drop-off functions? What provisions for accident management or liability exists between the two parcels.
    a. Petitioner's Response: Yes, the traffic volumes as presented in the Traffic Impact and Parking Study, include the Christian Liberty Academy (CLA) traffic using the Park District property (turns entering and exiting), as well as through volumes on Ridge Avenue.
18. With the introduction of an additional site driveway north of the proposed building expansion, what does this opening align with on the opposite side of the street? How will the continuing encroachment of Christian Liberty traffic affect this new driveway operation?
    a. Petitioner Response: The new opening north of the building expansion aligns with the north edge of the entry plaza to the CLA gymnasium. There is an access road to the CLA track and athletic field approximately 50 feet north of the new opening.
    b. Petitioner Response: As summarized in the Traffic Impact and Parking Study, both access driveways will operate at acceptable levels of service under future conditions and both

gym options evaluated. As previously noted, the future traffic volumes (to be conservative) assumed continued use of the Park District property by CLA.

19. It is unclear in the report on Exhibit #9 how the breakout for and AADT is being represented in the column "Daily Sum" for clear values representing both weekday and weekend Daily AADT. The tally indicated on the Daily Sum line for existing traffic counts of 1,440/day differs from the tallies stated in #1 above that were provided on page one of the report.

    a. Petitioner's Response: As previously noted, the attendance information differs from the daily trip generations estimates presented in the study. The 1,440 trips per day including both entering and exiting traffic (720 in and 720 out). It includes all staff, patrons, as well as drop-off/pick-up trips. So, if a person in attendance was dropped-off and picked-up, they would represent 4 trips on a daily basis (1 entering and 1 exiting for the drop-off and then 1 entering and 1 exiting for the pick-up).

20. While the report indicates the counts were adjusted for a 0.5% annual growth factor per year and these adjustments are shown at the major intersections, no revisions to the counts into and out of the site seem to have been made.

    a. Petitioner's Response: That is correct. The 0.5% annual compounded growth rate was used to develop background, or ambient, growth in traffic conditions within the study area without the site traffic. Therefore, no adjustments for turning volumes into and out of the site access driveways are performed to develop the No-Build (future traffic volumes without site traffic). The site specific traffic volumes related to the proposed development are then added separately to directly evaluate the impacts associated with the development.

21. Is the use of the soccer field open to the general public anytime or must the field be reserved to be used, or is it just allowed for league or youth soccer games?

    a. Petitioner Response: The field is available for use by the general public outside of reserved times for youth soccer games.

22. The traffic report indicates the existing parking supply is increasing from 191 existing parking stalls to 264 proposed parking spaces, a gain of 73 additional stalls. How many stalls are required based upon Village Code, and is a proposed variation being requested?

    a. Petitioner's Response: Based on Village Code, 128 parking stalls are required for the single gym alternative (32,000 square-foot addition) and 210 stalls are required for the double gym alterative (52,600 square-foot addition). Seventy-five (75) additional stalls are provided; therefore, a variation is being requested.

23. The identification of the intersection levels of service for the intersection of Ridge Avenue at Euclid Avenue suggesting an increase in back-up from 50-60 ft to 180-200 ft in length is not acceptable. Review of the geometric alignment of the north leg to provide a separate right and left/through orientation should be considered, along with signage on Euclid Avenue for not blocking Ridge Avenue.

    a. Petitioner Response: As stated in the Traffic Impact and Parking Study, the future traffic volume projections and corresponding capacity analyses were based on a conservative analysis scenario, as they assumed the continued heavy use of the southern access, as well as heavy distribution to Ridge Avenue to/from Euclid Avenue. The multiple site access alternatives, as well as the adjacent roadway network, i.e., connection of Ridge Avenue to Elm Street which provides connections to Northwest Highway to the west (via Kasper Avenue, Kennicott Avenue, etc.) as well as to Euclid Avenue to the east (via Walnut Avenue, Chestnut Avenue, etc.), offer site flexibility. It is anticipated that should there be significant queuing on Ridge Avenue, vehicles will choose to use the adjacent roadway network to find the quickest, most direct route to/from their origin/destination.

b. Accordingly, it is recommended that the traffic be evaluated after construction/opening of the expanded facility to determine if the additional mitigation measures (widening for turn lane separation on Ridge Avenue southbound at Euclid Avenue and/or signing on Euclid Avenue) is warranted.

24. The parking stall analysis that concludes that the required on-site parking demand for Saturdays is anticipated to be lower than weekday demand for fitness center use by up to 40% needs to be explained and sourced for reference to defend this statement. There is no basis upon which a reduction for not only the gymnasium, but proposed classes, multipurpose rooms, walking track, that has been provided.

    a. Petitioner's Response: The Traffic Impact and Parking Study has been updated to provide additional clarification and estimates using the ITE Parking Generation rates for the proposed expansion.

25. The site lighting photometric plan must be presented at a larger scale that is legible, along with catalog cuts of all exterior lighting fixtures pole mounted in the parking lot, or mounted onto the building. Fixtures shall be 'Dark Sky' compliant.

    a. Petitioner's Response: See revised site lighting photometric plan and attached copy of catalog cut sheets for the exterior pole mounted light fixtures.

Fire Department – Lt. Mark Aleckson

1. The building is to be sprinklered.

    a. Petitioner Response: Will comply.

2. The Fire Department Connections (FCD) is to be clearly visible, easily accessed, and located at the main front entrance.

    a. Petitioner Response: Per Fire safety notes 2 and 22 above, the intent is to use the existing fire department connection located on Ridge Avenue.

3. A fire hydrant is to be located within 100' of the Fire Department Connection.

    a. Petitioner Response: Will comply. The existing fire hydrant is 91.4 feet from the existing fire connection.

4. A Knox Box is to be located at the main front entrance.

    a. Petitioner Response: Will comply. Final location to be reviewed.

5. A fully operational annunciator panel or alarm panel is to be located at the front door.

    a. Petitioner Response: Will comply. Final location to be reviewed.

6. Reference 2009 International Fire Code – Section 503 and Appendix D for fire lane expectations.

    a. Petitioner Response: Will review.

Community Services Bureau – Brandi Romag, Crime Prevention Officer

1. Character of Use: The character of use is consistent with the area.
    a. Petitioner Response: Acknowledged.
2. Are lighting requirements adequate? Lighting should be up to the Village of Arlington Heights Code. Special attention should be given to those outside common areas, playgrounds, and surrounding areas, parking lots, areas around the building – especially entries/exits. These areas should be illuminated specifically during hours of darkness for safety, to deter criminal activity, and increase surveillance/visibility – potentially reducing theft, trespassing, vandalism, and other criminal activity. Landscaping should provide open sightlines to increase natural surveillance and avoid creating ambush locations and havens for illegal activities – theft, trespassing, vandalism, underage drinking, drug use, etc.
    a. Petitioner Response: Acknowledged.
3. Present traffic problems? The addition of a driveway around the exterior of the building should alleviate traffic issues.
    a. Petitioner Response: Acknowledged.
4. Traffic accidents at particular location? This is not a problem area in relation to traffic accidents.
    a. Petitioner Response: Acknowledged.
5. Traffic problems that may be created by the development. This development should not create any additional traffic problems.
    a. Petitioner Response: Acknowledged.
6. General Comments:
    a. Please ensure that there is an emergency information / contact card on file with the Arlington Heights Police Department and that is up to date. Agent contact information must be provided to the Arlington Heights Police Department during all construction phases. The form is attached. Please complete and return. This allows police department personnel to contact an agent during emergency situations or for suspicious/criminal activity on the property during all hours.
        i. Petitioner Response: Will complete and return form.
    b. It appears there is a fence around the playground. If this area is for park district patron use only during business hours – any access gates to this area should be locked, secured nightly to reduce unauthorized access – i.e. theft, trespassing, vandalism, underage drinking, etc. – to the area after hours. Consider installing a fence higher than 4 feet, one that allows natural surveillance of the property but limits access to unauthorized patrons.
        i. Petitioner Response: The park and playground is open to all residents during normal hours. The fence is primarily to prevent children from entering the adjacent parking areas.
    c. Access control to the building and/or classroom areas must be considered. Consider numbering the exterior doors.
        i. Petitioner Response: Access control is under consideration. Exterior doors can be numbered.

d. The desks adjacent to the two vestibule entrances to the facility should be staffed during business hours to monitor people entering and leaving the building, if both doors are to remain used as facility entrances.

    i. Petitioner Response: The new main entrance to the facility is located on the west side of the building and this desk will be staffed during normal business hours. The existing entrance will be used on a limited basis for special events and this desk is being renovated as part of the staff offices.

e. The babysitting area doorway is immediately adjacent to an entrance into the facility, consider moving that area (around the corner) or moving the doorway so that is not so close to the entrance.

    i. Petitioner Response: Will review. Doorway is currently located directly across from the main desk to maintain line of sight.

f. The addition of Trespass signage is recommended. Consider posting no trespassing / loitering / no un-authorized use signage. The Arlington Heights Police Dept. has and utilizes trespass warning forms under qualifying circumstances when requested by property management.

    i. Petitioner Response: Will consider.

Health Services Department – Sean Freres, LEHP, Environmental Health Officer and James McCalister, Director

1. See attached accessibility comments.
    a. Petitioner Response: See responses.
2. Building permit plans must comply with the attached Food Service Plan Review Requirements.
    a. Petitioner Response: No food service is being proposed for this facility.

Accessibility – David Robb, Disability Services Coordinator

1. Relocate these ADA Reserved Parking Spaces furthest away from the designated accessible route and curb ramp to those parking spaces that are closest to the designated accessible route and curb ramp. Per IAC Sections 400.310(c)(2) and (a)(1)(A).
    a. Petitioner Response: The parking stall locations have been updated. It is proposed to keep the one space closest to the athletic fields, as originally shown.

Planning & Community Development Department – Sam Hubbard

1. Complies with Comprehensive Plan – Yes.
2. Complies with Thoroughfare Plan – Yes
3. Variations Needed from Zoning Regulations – Yes
4. Variations Need from Subdivision Regulations – No
5. Subdivision Required? – No
6. School / Park District Contribution Required? – No

General:

7. The following approvals are needed:
    a. Amendment to PUD Ordinances #78-19 and #03-036 to allow a building addition and site changes on the subject property.
    b. Special Use Permit to allow a "Community Center, Recreation Building".
8. Please provide a written justification for the required Special Use Permit addressing each of the approval criteria outlined below:
    a. That said special use is deemed necessary for the public convenience at this location.
        i. Petitioner's Response: The proposed renovations to the Olympic Indoor Recreation Center present a unique opportunity for the Park District to provide the residents of Arlington Heights with a one stop fitness experience located in the center of town. The proposed facility enhancements provide additional aquatic opportunities, an indoor walking/running track, fitness center, and two additional programming spaces, all providing residents a means to improve their health.
    b. That such case will not, under the circumstances of the particular case, be detrimental to the health, safety, morals or general welfare of persons residing or working in the vicinity.
        i. Petitioner's Response: The proposed renovations will not be a detriment to residents living adjacent or near the center. The park district held three public meetings and is proposing a design that best meets the needs of not only the immediate residents, but the entire community.
    c. That the proposed use will comply with the regulations and conditions specified in this ordinance for such use, and with the stipulations and conditions made a part of the authorization granted by the Village Board of Trustees.
        i. Petitioner's Response: The proposed improvements and use of the Olympic Recreation Center will comply with the regulations, conditions, and stipulations set forth by the Village Board of Trustees upon project authorization.
9. The following variations have been identified:
    a. Variation to Section 11.4, Schedule of Parking Requirements, to reduce the required amount of off-site parking from __ spaces to 264 spaces. The extent of this variation will be determined once detailed information on the size of the interior spaces has been provided.
10. Please provide a written justification for the required variation addressing each of the hardship criteria outlined below:
    a. That the property in question cannot yield a reasonable return if permitted to be used only under the conditions allowed by the regulations in that zone.
        i. Petitioner's Response: The Park District desires to maintain as much green space as possible. The additional parking spaces required per Village ordinance would restrict the park district's ability to maintain green space and further impact the present use of the park site. In addition, the Park District will coordinate facility programming to prevent multiple large participant events from occurring at the same time.
    b. The plight of the owner is due to unique circumstances.
        i. Petitioner's Response: The Park District is striving to meet the needs of the adjacent residents as voiced in the public meetings. The requirement of additional parking spaces would place parking closer to adjacent homes and would negatively impact their views or experience in relation to the park site.

c. The variation, if granted, will not alter the essential character of the locality.

i. Petitioner's Response: If granted, the variation will improve the character and appearance of the site by allowing additional greenspace to be maintained.

11. Has a meeting with the surrounding neighborhood been held? If so, please provide a summary of the meeting. If not, a neighborhood meeting will be required prior to appearing before the Plan Commission and a summary of the meeting (attendance, date/time/location, record of topics discussed and concerns raised by the residents) must be provided for staff.

a. Petitioner's Response: Meetings / Open Houses were held with the community on three separate dates and times, to get a broad overview of patrons and to provide neighbors and opportunity to attend. Meetings / Open Houses were held on 12/3/17, 12/5/17 and 12/6/17. In addition, this project was discussed and open comments received at the Arlington Heights Park District Board Meetings on 12/12/17 and 1/9/18. Copies of the comments received are attached for information and reference.

12. Please provide catalog cut sheets for all proposed light fixtures within the parking area, as well as all proposed building mounted light fixtures.

a. Petitioner's Response: Will comply.

13. Please outline the total number of future employees in both the base bid and alternate bid scenario (only current number of employees was provided).

a. Petitioner's Response: For both the base bid (single gym) and alternate bid (double gym), there will be 2 additional full-time employees. The total number of full-time and part-time employees is summarized as follows.

i. Full Time:

1. Current – 4
2. Future – 6

ii. Part Time:

1. Current – 75
2. Future – 125

iii. Maximum present at one time:

1. Current – 25
2. Future – 35

14. Please outline the maximum number of staff that will be working within the proposed nursery at any one time.

a. Petitioner's Response: The maximum number of staff in the babysitting area will be two (2).

15. The Wheeling Township Assessor's office has been provided with information on the proposed development and has compiled a list of all PIN #'s of property within 250' of the subject property. Please obtain the list from the Assessor's office and prior to looking up the addresses associated with each PIN, please provide the list to me so that I can double check to ensure that all necessary PIN's have been included on the list. In addition, please note that when the mailing is sent out, it must go to the taxpayer of record of each PIN, and not to the actual property address of the PIN.

a. Petitioner's Response: Will comply.

16. Please ensure that all plans and/or studies to be resubmitted as a result of the Round 1 Department review comments include a revision date.

a. Petitioner's Response: Will comply.

Site Plan:

17. Please revise Sheet C3 of the civil plans to include the below Zoning Matrix table and fill in all data that is missing and verify that the data included on the chart is accurate.
    a. Petitioner's Response: The zoning matrix has been added to the plans.
18. Please provide details for all proposed fences.
    a. Petitioner's Response: Please refer to sheet C11 for the respective fence details.
19. Provide parking space width dimensions within all proposed parking rows.
    a. Petitioner's Response: Will comply.
20. Within the northernmost parking row, it appears a variation is needed for a landscape island that does not contain a shade tree (where pedestrian path leads from the building to safety town). Please find a way to add the required shade tree to the parking lot island or clarify if a variation is requested (and provide the necessary response to the hardship criteria).
    a. Petitioner's Response: See revised plan. The island has been enlarged and a shade tree has been added.
21. There is a small existing 8' x 10' concreate area adjacent to the sidewalk in the southwest corner of the site. It is unclear why this concrete area is necessary. Please remove this area and replace it with greenspace. Additionally, the outline of the former asphalt driveway entrance along Euclid, although proposed for removal, still appears on all site plans. Please add a note to the demolition plan that clarifies this area will be returned to greenspace and remove the outline from all other plans (both civil and landscaping).
    a. Petitioner's Response: It appears that this was an old portion of the original sidewalk into the project site that was not removed during a past project. The plans have been updated to remove this portion of the sidewalk since we are pursuing a permit with CCHD for the driveway removal.
22. Other than the transformer proposed on the east side of the building and the rooftop mechanical units, are any above ground utility or mechanical units proposed on the site (HVAC equipment, generators, utility pedestals, transformers, etc.)?
    a. Petitioner's Response: A temporary electrical transformer will be required during the construction phase of the project and will be located near the northeast corner of the existing building. The gas meter is proposed to be relocated from the north side of the existing building to the northeast corner of the existing building. An emergency generator will be located within the enclosure on the east side of the building. No additional above ground utility or mechanical units are proposed.

Building:

23. A Design Commission appearance is required for the proposed improvements. Appearance before the Design Commission has been tentatively scheduled for February 13th.
    a. Petitioner's Response: Understood.
24. Will the building addition incorporate any new basement areas? If so, a proposed basement plan shall be provided.
    a. Petitioner's Response: There is no new basement area as part of the addition. The existing basement plan has been provided for reference.
25. Please revise the floor plans to assign room numbers to each space/room within the existing and proposed building. For all rooms/spaces (both existing and proposed), provide a separate table with the square footage of each space and the corresponding occupancy calculation and maximum occupant load per building code standards.

a. Petitioner's Response: Additional information provided on Sheets G1.0.2 – G1.0.6.

26. Provide the square footage and maximum bather load for each existing and proposed pool per IPHD standards.

    a. Petitioner's Response: Additional information provided on Sheets G1.0.2 – G1.0.6.

27. Are there any bleachers within the facility? Please provide occupancy calculations for all bleacher areas.

    a. Petitioner's Response: There are existing bleachers in the main pool area that will remain unchanged. There are bleachers planned for the gymnasium(s). The occupancy count for the facility, including existing the pool, gymnasium, and associated bleachers, will be provided based on final selections.

28. Please revise the elevations to provide a value for the areas labeled "EQ" so that overall height can be determined. The elevations should include a height dimension for the overall height of the building as measured at its tallest point, including measurements to both the roofline and top of parapet wall (if applicable).

    a. Petitioner's Response: Will comply.

29. Where will the electric and gas meters be located on the building? Has landscaping been incorporated to screen these elements?

    a. Petitioner's Response: See above and responses to landscape comments below. Above ground equipment will be screened in accordance with requirements.

Traffic/Parking:

30. How will the dump truck access the proposed trash enclosure area along the eastern elevation? It appears that the dump truck will need to utilize the public street for turning movements to back up into the trash enclosure space.

    a. Petitioner's Response: The current understanding is that garbage and recycling trucks will pull forward into the driveway, roll out trash and recycling containers to the front of the truck, complete the disposal, and then back out of the driveway.

31. The traffic study has a gap within the programing/swimming pool usage between 3:00pm-4:00pm. How are the pools used during this time?

    a. Petitioner's Response: There is currently no formal programming or future plans for programming during that timeframe, other than drop in use for the pools, fitness center or gym. Parents are typically picking-up kids at that timeframe, so it is scheduled as "down time".

32. Per the recently adopted bicycle parking ordinance, 2% of the overall building occupancy shall be used to determine the required number of bicycle parking spaces. Please provide the overall building occupancy to calculate the required bicycle parking spaces. Additionally, please note on the site plan how many bicycle parking spaces exist along the eastern side of the building (1 post = 2 spaces) and clarify how many are proposed along the western side of the building.

    a. Petitioner's Response: The current occupancy count and bicycle parking counts are as follows:

        i. Base Bid: 1,316 occupants x 0.02 = 26.32 (27 bicycle parking spaces required)

        ii. Alternate Bid: 1,534 occupants x 0.02 = 30.68 (31 bicycle parking spaces required)

    b. There is a total of 26 bicycle parking posts proposed, including 17 existing and 9 new. This provides a total of 52 bicycle parking spaces.

33. Please revise the projected future parking demand to be based on the ITE parking generation rates per the proposed uses and not per the Village parking requirement. Additionally, the future parking demand did not factor in the proposed warm water pool.

    a. Petitioner's Response: The Traffic Impact and Parking Study has been revised to project future parking demand for the proposed uses based on the ITE Parking Generation rates, including the Warm Water Pool demand.

34. If a parking deficit is projected during peak times, please provide a strategy for where these cars will park (assuming that scheduling conflicts for major events cannot be avoided). No analysis was included outlining how many spaces are available within the surrounding street network.

    a. Petitioner's Response: Overflow parking is anticipated to occur within the adjacent roadway network on-street parking supply, should it be necessary. There are currently no viable options (via existing agreements) or public parking lots within an acceptable walking distance to accommodate overflow parking. The Traffic Impact and Parking Study has been updated to include an estimate of the available parking supply within the surrounding street network.

Landscape Comments

1. The ends of all parking rows and every twenty spaces must include a landscape island which contains a 4" caliper shade tree. (Chapter 28, section 6.15-1.2b). Increase the size of the proposed trees from 3.5 inch to 4- inch caliper. In addition, provide trees in islands where the trees are absent.

    a. Petitioner Response: Sizes of trees revised to 4-inches. Request variance for existing row of parking that was originally 20 spaces and is now 21 and 22 spaces as a result of the reconfigured parking lot and drive aisles. The parking to the west is less than 20 spaces and the overall layout meets the intent of the ordinance.

2. Per Chapter 28, section 6.15 a three foot high screen must be provided adjacent to parking areas along the public right of way. Infill or provide the code required screen where it is absent. The landscaping should not obstruct site lines.

    a. Petitioner Response: See revised landscape plan.

3. Provide additional landscaping adjacent to the parking lot expansion on the west and north in order to buffer parking area from the residential district.

    a. Petitioner Response: See revised landscape plan. A berm with landscaping is provided on the west of the parking lot and additional landscaping is provided on the north.

4. Per Chapter 28, Section 6.15-3 landscaping is required along the perimeter of the detention basin. Provide landscaping along Salem Avenue. In addition, indicate the proposed seed mix for the floor of the basin.

    a. Petitioner Response: See revised landscape plan, including proposed seed mix.

5. Any utility meters or mechanical units must be screened with landscaping or another appropriate method of screening. Identify the size and species of the proposed landscaping adjacent to the trash area along Ridge Avenue.

    a. Petitioner Response: See revised landscape plan.

6. Please provide a detailed planting plan and indicate the proposed species.

    a. Petitioner Response: See revised landscape plan.

END OF COMMENTS

Village of Arlington Heights
Building & Life Safety Department

Interoffice Memorandum

To: Sam Hubbard, Development Planner, Planning and Community Development

From: Deb Pierce, Plan Reviewer, Building & Life Safety Department

Subject: 660 N Ridge Ave – PUD Amendment, Parking Variation

PC#: 18-002 - Round 2

Date: February 22, 2018

Sam:

I have reviewed the documents submitted for the above referenced project and offer the following comment:

1. The elevator in the new addition shall be provided for fire department emergency access to all floors. The elevator car shall be of such a size and arrangement to accommodate an ambulance stretcher in its horizontal, open position, provided the cab size shall be not less than **60 inches by 85 inches**, to accommodate an ambulance stretcher in its horizontal, open position; and shall be identified by the International Symbol for emergency medical services (Star of Life). The Symbol shall be not less than 3 inches high and shall be placed inside on both sides of the hoist way door frame.

RECEIVED
FEB 22 2018
PLANNING & COMMUNITY
DEVELOPMENT DEPARTMENT

Village of Arlington Heights, IL
Department of Building & Life Safety

Fire Safety Division

Date: 2/19/2018 P.C. Number: 18-002 Round 2

Project Name: Arlington Heights Park District

Project Location: 660 N Ridge

Planning Department Contact: Sam Hubbard, Planning and Community Development

General Comments:

The information provided is conceptual only and subject to a formal plan review.

1. No additional comments.

Date February 19, 2018 Reviewed By: _____

Fire Safety Supervisor

Village of Arlington Heights
Public Works Department

Memorandum

To: Sam Hubbard, Planning and Community Development

From: Cris Papierniak, Assistant Director of Public Works

Date: February 21, 2018

Subject: 660 N Ridge Ave, P.C. #18-002 Round 2

Regarding the proposed PUD Amendment, PW has the following comments:

1. The proposed construction is acceptable.

   VAHPW has no further comments at this time.

VAHPW has no further comments at this time.

C: File

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DEVELOPMENT DEPARTMENT

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MAR 05 2018
PLANNING & COMMUNITY DEVELOPMENT DEPARTMENT

PLAN COMMISSION PC #18-002
Arlington Heights Park District - Olympic Park Redevelopment
660 N. Ridge Ave.
PUD Amendment, Parking Variation
Round 2 (Amended)

These amended comments include comments about the Traffic Impact and Parking Study, which was provided for review after the original Round 2 comments were completed:

26. The response by the petitioner to comments #1-4, 6-10, 12-15, 17, 18, 21 & 25 are acceptable.

27. The response provided by the petitioner to Comment #5 is not acceptable. An Onsite Utility Maintenance Agreement must be provided prior to final engineering approval. The Maintenance Plan on Sheet C8 only covers the items associated with the stormwater management facilities. The Park District has provided OUMA's for multiple previous projects.

28. The response provided by the petitioner to Comment #11 is noted. Attached for reference is the Plat of Easement Checklist. A Plat of Easement and Abrogation showing everything on one plat is acceptable.

29. The response provided by the petitioner to Comment #16 is not satisfactory. The reply provided is confusing and does not give a clear demarcation of site generated traffic. From the response, the ADT volumes in the traffic report only represent actual manual or traffic counter data for arrivals and depatures of visitors, staff, and drop off and pick up activity into the property, is that correct? Please address the following comments:

    a.) The report originally indicated 300 weekday attendees and patrons, what ADT does this result in for trip generation? For the 600 weekend attendees and patrons what ADT does the current site generate? What would be the calculated ITE daily traffic from this facility for both weekday and weekend ADT's based upon just the total 42,500 square footage of the existing building today?
    b.) Based upon the proposed new build out, what would the proposed trip generation for this facility for both weekday and weekend ADT's be based upon the ITE values, for just the proposed gross square footage of the facility, (for the one gym and two gym alternates)?
    c.) The response to the previous comment indicates that based upon the statement above, for the single gym option there are projected to be 2,424 daily trips (1212 in and 1212 out). The way the sentence is worded, my understanding of the numbers is; 2,424 total trips, 1,440 partial trips generated from other portions of the facility, (i.e. the trips generated by the 300 weekday attendees, employees, & patrons 'plus' the drop-off and pick-up's occurring, is this correct?). The resulting 984 partial trips are the remaining trips generated by the gym use, is this correct? Although the report says the value doubles if both gyms, (i.e. other basketball floor) are added. However reducing the total ADT of 2,998, by the 1,440 trips, (existing weekday patron traffic) leaves 1558 trips generate for the two gym proposal rather than 1968, (984 X 2)? Are there any values being projected based upon performance at another facility, (i.e. Pioneer Park, or Camelot Park gym), or are they based solely upon ITE projections?
    d.) Is this projection of adding these additional gyms, not formally allotted for within the ITE Recreational Community Center, (495) land use code?
    e.) The last time a comment was made we specifically requested a table of scheduled events, projected staff counts and programed activities, or special use areas, to help assess a more refined trip generation value for this sports complex.

30. The response provided by the petitioner to Comment #19 is not satisfactory. A breakout for both weekday and weekend AADT must be provided for site generated traffic. However, if more events, basketball youth leagues, or nightly men's leagues will escalate the ITE projections, or other data available based

upon other AHPD facilities that augments or gives more detailed values based upon facility use that may be provided as well. If possible, the distinction between 'attendee' and 'generated trips', (i.e. employees, patrons driving themselves/family and staying, and a value of drop-off & pick-up double counting should be provided.) If there is information that could help define this from other facilities in the district, such a Pioneer or Camelot Park for this drop-off and pick-up trip generation verses cars that just come in and out once, that would be helpful.

31. The response provided by the petitioner to Comment #20 is not satisfactory. The count data provided in Exhibit 7 showing a 0.5% per year growth rate has been indicated for 'through' traffic volumes. However, it does not appear to have been applied to turning movements at the Ridge and Euclid Avenues intersection. The data at the Ridge and Elm intersection, is similarly affected on three legs at that location, and the counts in into the site driveway show a reduction in the 2024 'No Build' condition.

32. The response provided by the petitioner to Comment #22 is not satisfactory. It is unclear if the evaluation of the parking count total that builds upon the previous variation that permitted the required parking to be reduced by 127 parking stalls should be the starting point since the capacity of the lot is being exceeded. Based upon the total site Village code required parking with no variation would be 446 stalls for the one gym alternative, and 528 stalls for the double gym proposal. The 246 parking stalls proposed only provides 59% of the parking for a one gym design, and 50% of the parking for the 2 gym proposal.

33. The response provided by the petitioner to Comment #23 is not satisfactory. The suggestion that southbound traffic has the alternative to circulate northerly out of this site to Elm Street to gain access to Northwest Highway or Euclid Avenue is unacceptable. These neighborhoods north, west, and east should not have to be negatively impacted by site generated traffic that detours because one of the routes traffic distributes to has capacity limitations. The other more poignant topic is that the anticipated backup for southbound Ridge Avenue traffic at Euclid Avenue is going to block both inbound and outbound traffic with a 3-4 car queue. The provision in the ordinance for evaluation once the facility is open and fully functioning, and based upon a lower level of service at the Ridge Avenue and Euclid Avenue intersection, and measures to improve capacity should include participation by the Park District.

34. The response provided by the petitioner to Comment #24 is not satisfactory. Table 3 in the Traffic Impact and Parking Study indicates a severe shortfall for weekday required parking, and interpolates a Saturday parking rate, that seems too low, especially based upon the existing observed parking occupancy in the lot currently. Does this Saturday rate make allowances for the influx of the parking resulting from swim meet events? The magnitude of the parking variation requested provides no concrete contingency plan to manage overflow, should the proposed number of stalls being provided prove to be inadequate. Areas of the site that could support land-banked parking to expand into should be identified, or other parking concepts proposed to compensate for future deficiencies. Do not include the 15 parking stalls along Salem Avenue. The west side of Ridge Avenue between Euclid Avenue and Vine Street has an existing ordinance restricting Parking, and the 12 stalls between Vine and Elm Streets should also not be identified for spillover parking to offset the on-site parking lot parking deficiencies.

3/2/18

James J. Massarelli, P.E. Date
Director of Engineering

Attachments: Plat of Easement Checklist (2 pages)

Plat of Easement Checklist

- Legal description of proposed easement area
- Owner's Certificate
- Notary signature block
- Surveyor's Certificate
- Village Board signature block
- Village Collector signature block
- Director of Engineering signature block
- Utility signature blocks
- Easement Provisions

Sample Village signature blocks:

Under the authority provided by 65 ILCS 5/11-12 as amended by the State Legislature of the State of Illinois and Ordinance adopted by the Village Board of the Village of Arlington Heights, Illinois, this plat was given approval by the Village of Arlington Heights AND MUST BE RECORDED WITHIN SIX MONTHS OF THE DATE OF APPROVAL BY THE VILLAGE BOARD, OTHERWISE IT IS NULL AND VOID.

APPROVED by the Village Board of Trustees at a meeting held

_____ , 20__

By: _____
Village President

Attest:_____
Village Clerk

APPROVED by the Village Collector on _____, 20__

_____

APPROVED by the Director of Engineering on _____, 20__

_____

Sample utility signature blocks:

COMMONWEALTH EDISON COMPANY
EASEMENT APPROVED AND ACCEPTED

BY: _____ DATE: _____, 20__

TITLE: _____

AMERITECH/SBC
EASEMENT APPROVED AND ACCEPTED

BY: _____ DATE: _____, 20__

TITLE: _____

NICOR GAS
EASEMENT APPROVED AND ACCEPTED
BY: _____ DATE: _____, 20__

TITLE: _____

COMCAST CABLE
EASEMENT APPROVED AND ACCEPTED

BY: _____ DATE: _____, 20__

TITLE: _____

WIDE OPEN WEST, LLC
EASEMENT APPROVED AND ACCEPTED

BY: _____ DATE: _____, 20__

TITLE: _____

Arlington Heights Fire Department
Plan Review Sheet

P. C. Number 18-002

Project Name Olympic Park Redelevopment

Project Location 660 N. Ridge Ave

Planning Department Contact Sam Hubbard

General Comments

Round 2

The Fire Department as no additional comments at this time.

NOTE: PLAN IS CONCEPTUAL ONLY SUBJECT TO DETAILED PLAN REVIEW

Date February 19, 2018 Reviewed By: LT. Mark Aleckson

Arlington Heights Fire Department

ARLINGTON HEIGHTS POLICE DEPARTMENT

Community Services Bureau

DEPARTMENT PLAN REVIEW SUMMARY

Olympic Park Redevelopment
660 N Ridge Ave.
PC #18-002

Round 2 Review Comments **02/22/2018**

1. **Character of use:**
   Nothing Further.

2. **Are lighting requirements adequate?**
   Nothing Further.

3. **Present traffic problems?**
   Nothing Further.

4. **Traffic accidents at particular location?**
   Nothing Further.

5. **Traffic problems that may be created by the development.**
   Nothing Further.

6. **General comments:**
   Nothing Further.

#272

Brandi Romag, Crime Prevention Officer
Community Services Bureau

Approved by:

#557

Supervisor's Signature

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FEB 23 2018
PLANNING & COMMUNITY
DEVELOPMENT DEPARTMENT

Village of Arlington Heights
Health & Human Services Department

Memorandum

To: Sam Hubbard, Development Planner

From: Sean Freres, Environmental Health Officer

Date: February 20, 2018

Re: PC# 18-002. AHPD Olympic Park, 660 N. Ridge Ave. Round 2

- No comments from Health & Human Services at this time.

Planning & Community Development Dept. Review

March 6, 2018

REVIEW ROUND 2

Project: Olympic Park PUD Amendment – 660 N. Ridge Ave.

Case Number: PC 18-001

General:

35. The responses to comments #7, #8, #10, #12-#17, #19-#21, #23-#28, and #30-#32 are acceptable.

36. The response to comment #9 is noted. Based on the floor plan data, the parking variation has been clarified as outlined below:
    - **Variation to Section 11.4, Schedule of Parking Requirements, to reduce the required amount of off-site parking from 757 spaces to 266 spaces.**

37. The response to comment #11 is noted, however, no summary of the issues brought up at each neighborhood meeting was provided. In addition, please outline how the public was made aware of these meetings (individual invitations sent?). Also, please clarify who was invited (i.e. were all property owners within 250' of Olympic Park sent and invitation for the neighborhood meetings?).

38. The response to comment #18 is noted. However, there are inconsistencies between the civil plans, landscape plans, and floor plans/elevations relative to the outdoor storage area at the southwest corner of the building. The civil plans show this area as entirely paved with normal heavy duty pavement and a fence around the perimeter (will this fence be the same as the 48" tall fence around the playground?). The landscape plan appears to show some sort of specialty paving in this area. The architectural plans show an 8' tall wall with a door that encloses a portion of this area, which wall and door is not reflected on either the civil or landscape plans. Please clarify what is proposed in this area. Additionally, please confirm what is stored in this area and whether the items stored (which items I assume would be inside of the 8' tall solid walls as opposed to the 48" tall fence) will be completely screened by the 8' tall walls.

39. The response to comment #29 is noted. Will landscaping screen the utility meters on the northeast side of the building? If not, additional landscape plantings should be added.

40. The response to #33 is noted. Staff notes that under the "alternate bid" (double gym) scenario, the projected parking demand exceeds supply and relies on street parking to meet demand. Please identify areas on site where landbanked parking could be constructed, and provide a plan showing how this parking would be constructed. A condition of approval may be recommended to the Plan Commission that would require landbanked parking (as indicated on the plan that you will prepare) be constructed at the request of the Village should it be determined that a parking shortage exists on the property.

41. Based on the traffic study, queued cars are expected to block access into the southern driveway entrance during peak times. One solution proposed in the traffic study was that automobile traffic may opt to use the northern access point for ingress/egress to the site if the southern access point is blocked, another solution was to post "Do Not Block" signage by the southern driveway. Please evaluate the possibility for a Right-in/Right-out only orientation for the southern driveway, which would eliminate the potential for inbound stacking at this location.

42. The traffic study also contemplates the potential widening of southbound Ridge Avenue at Euclid from one lane to two lanes, with a shared through/left turn lane, and a separate right turn lane. If traffic still opts to use the southern driveway entrance, and if a "Do Not Block" sign is ineffective, the Park District will be required to propose and implement a solution, for review and approval by the Village. Such solution could be through a right-in/right-out re-orientation of the southern driveway entrance, or potentially, the Village may require the widening of Ridge Ave., at the cost of the Park District, to address the problem.

Prepared by:

Olympic Swim Addition
660 N. Ridge Avenue
PC 18-002
March 5, 2018

Landscape Comments

1) Provide three foot high shrubs in the northeast corner within the landscape island in order to buffer the parking area. Pursuant to Chapter 28, Section 6.15, a three foot high screen is required adjacent to parking areas along the public right of way.

2) Adjacent to the parking lot expansion on the north side please substitute the proposed Dogwood and Nine Bark shrubs with a six foot high evergreen. In addition, extend the screen to the east towards Ridge Avenue. Per Chapter 28, Section 6.15 such screening for a parking area shall be six feet high if adjoining a residential district and the screen shall provide year round opacity.

FGM ARCHITECTS

March 9, 2018

Sam Hubbard
Development Planner
Village of Arlington Heights
33 S. Arlington Heights Road
Arlington Heights, IL 60005

RE: Arlington Heights Park District
Olympic Indoor Swim Center Addition and Renovations
660 North Ridge Avenue
Arlington Heights, IL 60005
PC# 18-002

Dear Mr. Hubbard,

Please find attached a copy of the comments and initial responses from the Arlington Heights Park District (AHPD) and FGM Architects for the project referenced above. We are continuing to refine and update Item 12: Traffic Study and will submit under separate cover as soon as possible.

If there are any questions, or if additional information is required, please do not hesitate to contact me at directly at (312) 948-8436 or davidy@fgmarchitects.com.

Respectfully Submitted,

David B. Yandel, AIA
Principal

XC: Ben Rea, AHPD

Arlington Heights Park District
Olympic Indoor Swim Center Addition and Renovations
660 North Ridge Avenue
Arlington Heights, IL 60005
PC# 18-002
March 9, 2018

Building & Life Safety Department – Deb Pierce, Plan Reviewer

1. The elevator in the new addition shall be provided for fire department emergency access to all floors. The elevator car shall be of such as size and arrangement to accommodate an ambulance stretcher in its horizontal, open position, provided the cab size shall be not less than 60 inches by 85 inches, to accommodate an ambulance stretcher in its horizontal, open position; and shall be identified by the International Symbol for Emergency Medical Services (Star of Life). The symbol shall be not less than 3 inches high and shall be placed on both sides of the hoistway door frame.

    a. **Round 2 Petitioner Response: There are currently two (2) elevators in the existing building that serve the First Floor and Basement Level. The passenger elevator does not currently comply with the size requirements above and a variance will be requested. The freight elevator is sized accordingly but is not in full compliance with the requirements above and is not intended for everyday use. The new passenger elevator will serve the First Floor and Second Floor and will be in compliance with the requirements outlined above.**

Fire Safety Division, Fire Safety Supervisor

1. No additional comments.

    a. **Round 2 Petitioner Response: Acknowledged.**

Public Works Department

1. The proposed construction is acceptable. VAHPW has no further comments at this time.

    a. **Round 2 Petitioner Response: Acknowledged.**

Engineering Department

1. The petitioner is notified that these comments are being provided to ensure that the project meets the requirements for submittal to the Plan Commission. Approval by the Plan Commission is not an endorsement or approval of these documents to obtain the required building permits, engineering approval, or permits required by other government or permitting agencies for construction. Detailed plan review with associated comments will be provided upon submittal of plans for a building permit. The petitioner shall acknowledge that they accept this understanding.

    a. Round 1 Petitioner Response: Acknowledged.

    b. **Round 2 Petitioner Response: Response above is acceptable to VAH.**

2. Provide an engineer's estimate of construction cost for full site improvements to complete the calculation for plan review, inspection, and other fees.

    a. Petitioner Response: An engineer's opinion of probable cost for the base bid project has been completed and issued separately.

    b. **Round 2 Petitioner Response: Response above is acceptable to VAH.**

3. Final engineering pans shall be georeferenced by using State Plane Coordinate System – Illinois East.

a. Petitioner Response: Will comply.

b. Round 2 Petitioner Response: Response above is acceptable to VAH.

4. The proposed detention facility will be a private system and as such will not be the Village's responsibility to maintain. The basin requires a 1-foot freeboard with an overflow weir at the 6" line. Provide calculations for the weir.

    a. Petitioner Response: The detention calculations have been updated and include a Village HWL = 714.70, 40-foot wide grass overflow weir at 715.20, and a perimeter protection level to 716.00. Please refer to the updated drainage report issued separately.

    b. Round 2 Petitioner Response: Response above is acceptable to VAH.

5. The Onsite Utility Maintenance Agreement must be provided prior to the final engineering approval.

    a. Petitioner Response: Please refer to Maintenance Plan listed on sheet C8.

    b. Round 2 Petitioner Response: The Onsite Utility Maintenance Agreement (OUMA) will be provided to VAH under separate cover. A sample has been provided to the Petitioner by VAH.

6. According to the Stormwater Management Report, the basin at 1.43 ac-ft of storage, is sized to meet Village detention requirements for the newly disturbed 3.79 acres (1.07 ac-ft of storage) as well as the previously permitted work from 2003 (0.30 ac-ft of storage). Modify the Drainage Exhibit to show the 1.77 ac of tributary area as described in the report. Since the volume for the 2003 project is also included in the new basin, the release rate can be calculated including that area also. Any flow from disturbed area not tributary to the new basin, such as the area east of the new building addition(?), should be considered offsite flow and incorporated into the ultimate release rate calculations.

    a. Petitioner Response: Sheet C8 drainage exhibit and stormwater report have been updated to incorporate the 2003 improvements within the new detention calculations eliminating some of the overlaps of areas. A swale has been added along the east side of the building to collect potential off-site flows.

    b. Round 2 Petitioner Response: Response above is acceptable to VAH.

7. The MWRD release rate being used (0.36 cfs) is much lower than the Village's allowable release rate of 0.18 cfs/acre, which comes to 0.68 cfs for the proposed 3.79-acre project area. Using this low of a release rate will require a larger basin to accommodate the 100-yr storm. Re-run Village detention volume calculations using the lower release rate.

    a. Petitioner Response: We have opted not to use the MWRD Legacy method and have recalculated both the Village and MWRD requirements. Please refer to the updated stormwater management report, issued separately.

    b. Round 2 Petitioner Response: Response above is acceptable to VAH.

8. The storm sewer design does not allow for the first flush to enter the volume control facility. Re-design.

    a. Petitioner Response: The proposed storm sewer system has been disconnected from the existing storm system and the detention basin has been revised to provide for the new improvements to be routed through a pretreatment basin. A portion of the previous detention catchment still uses the existing storm sewer system and bypasses the pretreatment.

    b. Round 2 Petitioner Response: Response above is acceptable to VAH.

9. Modify the fire truck movement exhibit on Sheet C3 to have the vehicle use the drive aisle closest to the building along the west side. Add an exhibit showing the same track going counter-clockwise around the building.
    a. Petitioner Response: An auto-turn exhibit sheet C12 has been added to the plan set to show the requested vehicle movements.
    b. Round 2 Petitioner Response: Response above is acceptable to VAH.
10. Fire lanes adjacent to the building must have a minimum pavement width as directed by the Fire Department to accommodate the tower truck's outriggers. Fire lanes require a heavy-duty pavement section. Asphalt pavement section to consist of: 2" Surface, 2-1/4" N-50 Binder, 5" N-30 Binder, and 4" CA-6 Stone Subbase.
    a. Petitioner Response: The heavy-duty pavement section has been revised to increase the surface course to 2", but per discussions with the Village the binder course can remain as N-50.
    b. Round 2 Petitioner Response: Response above is acceptable to VAH.
11. The Plat of Survey provided does not show a new public utility easement for the storm sewer that was relocated for the 2003 building expansion. Provide a Plat of Easement that vacates the portion of the existing easement that now goes through the building and dedicates a new easement following the path of the new (2003) storm sewer main around the south side of the building.
    a. Petitioner Response: Will comply.
    b. Round 2 Petitioner Response: The Petitioner has provided an updated Plat of Survey with Plat of Easement. VAH has provided a Plat of Easement Checklist and the Petitioner will submit a revised copy for record.
12. The building addition will encroach upon existing public utility easements north of the existing building. Include required vacations of public easements for the building addition in the Plat of Easement.
    a. Petitioner Response: Will comply.
    b. Round 2 Petitioner Response: Response above is acceptable to VAH.
13. Sheet C3: The parking spaces can be reduced to 16.5' in depth to the face of the curb, allowing for 1.5' of overhang, along curbs adjacent to the grass. Where curbs are adjacent to sidewalks, the same can be done as long as the sidewalk is correspondingly widened 1.5'.
    a. Petitioner Response: Thank you, we have incorporated this into the revised plans as we increased the fire lane aisle.
    b. Round 2 Petitioner Response: Response above is acceptable to VAH.
14. Sheet C3: The proposed work within the Euclid Avenue ROW will require a permit review from the Cook County Department of Transportation and Highways.
    a. Petitioner Response: We concur.
    b. Round 2 Petitioner Response: Response above is acceptable to VAH.
15. Sheet C4: The note for the water main 'tee' says "…install tee with stainless steel mission couplings." Mission couplings cannot be used for water main work. Revise note.
    a. Petitioner Response: Note 18 on sheet C2 and call out note on sheet C4 have been updated.
    b. Round 2 Petitioner Response: Response above is acceptable to VAH.

16. The site development introducing the additional uses besides predominantly swimming activity for this site needs to provide a proposed schedule of programmed and unplanned activities for the building. In the traffic report introductory remarks related to existing attendance to this facility, cited 300 weekday patrons, and 600 weekend visitors to the building were referenced. The projected volumes increasing to 2,424 to 2,998 attendees based upon that base or alternate build proposal is increasing the patronage by 5 to 10 fold. If known programs, classes, activities, leagues, special events, swim meets, etc. could be identified into a theoretical schedule, along with a projected pool usage based upon seasonal fluctuation history, this would clarify building usage and associated traffic demand.

    a. Round 1 Petitioner Response: To provide clarification, the referenced daily traffic volumes presented in the Traffic Impact and Parking Study represent both entering and exiting vehicles for patrons, staff and drop-off/pick-up operations and are not a direct representation of attendance. For example, for the Single Gym option, there are projected to be 2,424 trips (1,212 entering and 1,212 exiting), which also includes existing traffic at 1,440 on a daily basis (720 entering and 720 exiting).

    b. Round 2 Comment: The above response is unsatisfactory…

        i. Round 2 Petitioner Response: Petitioner will, accordingly, update the Traffic Impact and Parking Study to provide additional information and clarification related to the weekday and Saturday ADT calculations. The revised study will be provided under separate cover prior to the Plan Commission meeting scheduled for March 14, 2018. Petitioner will provide the requested table of scheduled events.

17. Are the traffic count values provided in the report reflecting the traffic generated from the cross access the Christian Liberty Academy is doing on Park District property, for their morning, lunch, and afternoon pick-up and drop-off functions? What provisions for accident management or liability exists between the two parcels.

    a. Petitioner's Response: Yes, the traffic volumes as presented in the Traffic Impact and Parking Study, include the Christian Liberty Academy (CLA) traffic using the Park District property (turns entering and exiting), as well as through volumes on Ridge Avenue.

    b. Round 2 Petitioner Response: Response above is acceptable to VAH.

18. With the introduction of an additional site driveway north of the proposed building expansion, what does this opening align with on the opposite side of the street? How will the continuing encroachment of Christian Liberty traffic affect this new driveway operation?

    a. Petitioner Response: The new opening north of the building expansion aligns with the north edge of the entry plaza to the CLA gymnasium. There is an access road to the CLA track and athletic field approximately 50 feet north of the new opening.

    b. Petitioner Response: As summarized in the Traffic Impact and Parking Study, both access driveways will operate at acceptable levels of service under future conditions and both gym options evaluated. As previously noted, the future traffic volumes (to be conservative) assumed continued use of the Park District property by CLA.

    c. Round 2 Petitioner Response: Responses above are acceptable to VAH.

19. It is unclear in the report on Exhibit #9 how the breakout for and AADT is being represented in the column "Daily Sum" for clear values representing both weekday and weekend Daily AADT. The tally indicated on the Daily Sum line for existing traffic counts of 1,440/day differs from the tallies stated in #1 above that were provided on page one of the report.

    a. Round 1 Petitioner's Response: As previously noted, the attendance information differs from the daily trip generations estimates presented in the study. The 1,440 trips per day including both entering and exiting traffic (720 in and 720 out). It includes all staff, patrons, as well as drop-off/pick-up trips. So, if a person in attendance was dropped-off and

picked-up, they would represent 4 trips on a daily basis (1 entering and 1 exiting for the drop-off and then 1 entering and 1 exiting for the pick-up).

b. Round 2 Comment: The above response is unsatisfactory…

i. Round 2 Petitioner Response: As previously noted, Petitioner will update the Traffic Impact and Parking study to provide additional information and clarification related to the weekday and Saturday ADT calculations.

20. While the report indicates the counts were adjusted for a 0.5% annual growth factor per year and these adjustments are shown at the major intersections, no revisions to the counts into and out of the site seem to have been made.

a. Round 1 Petitioner's Response: That is correct. The 0.5% annual compounded growth rate was used to develop background, or ambient, growth in traffic conditions within the study area without the site traffic. Therefore, no adjustments for turning volumes into and out of the site access driveways are performed to develop the No-Build (future traffic volumes without site traffic). The site-specific traffic volumes related to the proposed development are then added separately to directly evaluate the impacts associated with the development.

b. Round 2 Comment: The above response is unsatisfactory…

i. Round 2 Petitioner Response: Petitioner will, accordingly, update the Traffic Impact and Parking Study to reflect a 0.5% compounded annual growth rate to the local (non-school and park district) traffic using Ridge Avenue. This increase is anticipated to be less than 5 vehicles per direction during the peak hours and will not materially impact the findings or recommendations contained within the study.

21. Is the use of the soccer field open to the general public anytime or must the field be reserved to be used, or is it just allowed for league or youth soccer games?

a. Petitioner Response: The field is available for use by the general public outside of reserved times for youth soccer games.

b. Round 2 Petitioner Response: Response above is acceptable to VAH.

22. The traffic report indicates the existing parking supply is increasing from 191 existing parking stalls to 264 proposed parking spaces, a gain of 73 additional stalls. How many stalls are required based upon Village Code, and is a proposed variation being requested?

a. Round 1 Petitioner's Response: Based on Village Code, 128 parking stalls are required for the single gym alternative (32,000 square-foot addition) and 210 stalls are required for the double gym alterative (52,600 square-foot addition). Seventy-five (75) additional stalls are provided; therefore, a variation is being requested.

b. Round 2 Comment: The above response is unsatisfactory…

i. Round 2 Petitioner Response: Petitioner will, accordingly, update the Traffic Impact and Parking Study to reflect the total parking demand required per Village Code, not considering the previously approved variance.

23. The identification of the intersection levels of service for the intersection of Ridge Avenue at Euclid Avenue suggesting an increase in back-up from 50-60 ft to 180-200 ft in length is not acceptable. Review of the geometric alignment of the north leg to provide a separate right and left/through orientation should be considered, along with signage on Euclid Avenue for not blocking Ridge Avenue.

a. Round 1 Petitioner Response: As stated in the Traffic Impact and Parking Study, the future traffic volume projections and corresponding capacity analyses were based on a conservative analysis scenario, as they assumed the continued heavy use of the southern access, as well as heavy distribution to Ridge Avenue to/from Euclid Avenue. The multiple

site access alternatives, as well as the adjacent roadway network, i.e., connection of Ridge Avenue to Elm Street which provides connections to Northwest Highway to the west (via Kasper Avenue, Kennicott Avenue, etc.) as well as to Euclid Avenue to the east (via Walnut Avenue, Chestnut Avenue, etc.), offer site flexibility. It is anticipated that should there be significant queuing on Ridge Avenue, vehicles will choose to use the adjacent roadway network to find the quickest, most direct route to/from their origin/destination.

b. Round 1 Petitioner's Response: Accordingly, it is recommended that the traffic be evaluated after construction/opening of the expanded facility to determine if the additional mitigation measures (widening for turn lane separation on Ridge Avenue southbound at Euclid Avenue and/or signing on Euclid Avenue) is warranted.

c. Round 2 Comment: The above response is unsatisfactory…

i. Round 2 Petitioner Response: The Traffic Impact and Parking Study will be updated to include additional analyses, considering the southbound entrance as a right-in/right-out only access. The Petitioner would propose a phased implementation, with signage and supplemental striping as the first step. Future improvements could include modifications at the Euclid Avenue and Ridge Avenue intersection, which would be subject to participation with an agreement between the AHPD, CLA and the Village.

24. The parking stall analysis that concludes that the required on-site parking demand for Saturdays is anticipated to be lower than weekday demand for fitness center use by up to 40% needs to be explained and sourced for reference to defend this statement. There is no basis upon which a reduction for not only the gymnasium, but proposed classes, multipurpose rooms, walking track, that has been provided.

a. Round 1 Petitioner's Response: The Traffic Impact and Parking Study has been updated to provide additional clarification and estimates using the ITE Parking Generation rates for the proposed expansion.

b. Round 2 Comment: The above response is unsatisfactory…

i. Round 2 Petitioner Response: Petitioner will, accordingly, update the Traffic and Parking Study to include a more conservative projection for Saturday parking demand, since specific data for Land Use Code (LUC) 495, Recreational Community Center is not available for a Saturday. The higher weekday numbers will be used in the calculations.

25. The site lighting photometric plan must be presented at a larger scale that is legible, along with catalog cuts of all exterior lighting fixtures pole mounted in the parking lot, or mounted onto the building. Fixtures shall be 'Dark Sky' compliant.

a. Petitioner's Response: See revised site lighting photometric plan and attached copy of catalog cut sheets for the exterior pole mounted light fixtures.

b. Round 2 Petitioner Response: Response above is acceptable to VAH.

Fire Department – Lt. Mark Aleckson

1. The Fire Department has no additional comments at this time.

a. Round 2 Petitioner Response: Acknowledged.

Community Services Bureau – Brandi Romag, Crime Prevention Officer

1. Character of Use: Nothing further

a. Round 2 Petitioner Response: Acknowledged.

2. Are lighting requirements adequate? Nothing further
    a. **Round 2 Petitioner Response: Acknowledged.**
3. Present traffic problems? Nothing further
    a. **Round 2 Petitioner Response: Acknowledged.**
4. Traffic accidents at particular location? Nothing further
    a. **Round 2 Petitioner Response: Acknowledged.**
5. Traffic problems that may be created by the development. Nothing further
    a. **Round 2 Petitioner Response: Acknowledged.**
6. General Comments: Nothing further
    a. **Round 2 Petitioner Response: Acknowledged.**

Health Services Department – Sean Freres, LEHP, Environmental Health Officer and James McCalister, Director

1. No comments from Health & Human Services at this time.
    a. **Round 2 Petitioner Response: Acknowledged.**

Accessibility – David Robb, Disability Services Coordinator

1. No additional comments received.
    a. **Round 2 Petitioner Response: Acknowledged.**

Planning & Community Development Department – Sam Hubbard

1. Complies with Comprehensive Plan – Yes.
2. Complies with Thoroughfare Plan – Yes
3. Variations Needed from Zoning Regulations – Yes
4. Variations Need from Subdivision Regulations – No
5. Subdivision Required? – No
6. School / Park District Contribution Required? – No

General:

7. The following approvals are needed:
    a. Amendment to PUD Ordinances #78-19 and #03-036 to allow a building addition and site changes on the subject property.
    b. Special Use Permit to allow a "Community Center, Recreation Building".
    c. **Round 2 Petitioner Response: Response above is acceptable to VAH.**
8. Please provide a written justification for the required Special Use Permit addressing each of the approval criteria outlined below:
    a. That said special use is deemed necessary for the public convenience at this location.
        i. Petitioner's Response: The proposed renovations to the Olympic Indoor Recreation Center present a unique opportunity for the Park District to provide the

residents of Arlington Heights with a one stop fitness experience located in the center of town. The proposed facility enhancements provide additional aquatic opportunities, an indoor walking/running track, fitness center, and two additional programming spaces, all providing residents a means to improve their health.

b. That such case will not, under the circumstances of the particular case, be detrimental to the health, safety, morals or general welfare of persons residing or working in the vicinity.

   i. Petitioner's Response: The proposed renovations will not be a detriment to residents living adjacent or near the center. The park district held three public meetings and is proposing a design that best meets the needs of not only the immediate residents, but the entire community.

c. That the proposed use will comply with the regulations and conditions specified in this ordinance for such use, and with the stipulations and conditions made a part of the authorization granted by the Village Board of Trustees.

   i. Petitioner's Response: The proposed improvements and use of the Olympic Recreation Center will comply with the regulations, conditions, and stipulations set forth by the Village Board of Trustees upon project authorization.

d. Round 2 Petitioner Response: Responses above are acceptable to VAH.

9. The following variations have been identified:

   a. Variation to Section 11.4, Schedule of Parking Requirements, to reduce the required amount of off-site parking from __ spaces to 264 spaces. The extent of this variation will be determined once detailed information on the size of the interior spaces has been provided.

   b. Round 2 Comment: The response to comment #9 is noted. Based on the floor plan data, the parking variation has been clarified as outlined below: **"Variation to Section 11.4, Schedule of Parking Requirements, to reduce the required amount of off-site parking from 757 spaces to 266 spaces."**

      i. Round 2 Petitioner Response: Acknowledged.

10. Please provide a written justification for the required variation addressing each of the hardship criteria outlined below:

   a. That the property in question cannot yield a reasonable return if permitted to be used only under the conditions allowed by the regulations in that zone.

      i. Petitioner's Response: The Park District desires to maintain as much green space as possible. The additional parking spaces required per Village ordinance would restrict the park district's ability to maintain green space and further impact the present use of the park site. In addition, the Park District will coordinate facility programming to prevent multiple large participant events from occurring at the same time.

   b. The plight of the owner is due to unique circumstances.

      i. Petitioner's Response: The Park District is striving to meet the needs of the adjacent residents as voiced in the public meetings. The requirement of additional parking spaces would place parking closer to adjacent homes and would negatively impact their views or experience in relation to the park site.

   c. The variation, if granted, will not alter the essential character of the locality.

      i. Petitioner's Response: If granted, the variation will improve the character and appearance of the site by allowing additional greenspace to be maintained.

   d. Round 2 Petitioner Response: Responses above are acceptable to VAH.

11. Has a meeting with the surrounding neighborhood been held? If so, please provide a summary of the meeting. If not, a neighborhood meeting will be required prior to appearing before the Plan Commission and a summary of the meeting (attendance, date/time/location, record of topics discussed and concerns raised by the residents) must be provided for staff.

    a. Petitioner's Response: Meetings / Open Houses were held with the community on three separate dates and times, to get a broad overview of patrons and to provide neighbors and opportunity to attend. Meetings / Open Houses were held on 12/3/17, 12/5/17 and 12/6/17. In addition, this project was discussed and open comments received at the Arlington Heights Park District Board Meetings on 12/12/17 and 1/9/18. Copies of the comments received are attached for information and reference.

    b. Round 2 Comment: The response to comment #11 is noted, however, no summary of the issues brought up at each neighborhood meeting was provided. In addition, please outline how the public was made aware of these meetings (individual invitations sent?). Also, please clarify who was invited (i.e. were all property owners within 250' of Olympic Park sent and invitation for the neighborhood meetings?).

        i. Round 2 Petitioner Response: See attached Documents from AHPD that include a copy of the invitation list and summary of issues discussed.

12. Please provide catalog cut sheets for all proposed light fixtures within the parking area, as well as all proposed building mounted light fixtures.

    a. Petitioner's Response: Will comply.

    b. Round 2 Petitioner Response: Response above is acceptable to VAH.

13. Please outline the total number of future employees in both the base bid and alternate bid scenario (only current number of employees was provided).

    a. Petitioner's Response: For both the base bid (single gym) and alternate bid (double gym), there will be 2 additional full-time employees. The total number of full-time and part-time employees is summarized as follows.

        i. Full Time:

            1. Current – 4
            2. Future – 6

        ii. Part Time:

            1. Current – 75
            2. Future – 125

        iii. Maximum present at one time:

            1. Current – 25
            2. Future – 35

    b. Round 2 Petitioner Response: Response above is acceptable to VAH.

14. Please outline the maximum number of staff that will be working within the proposed nursery at any one time.

    a. Petitioner's Response: The maximum number of staff in the babysitting area will be two (2).

    b. Round 2 Petitioner Response: Response above is acceptable to VAH.

15. The Wheeling Township Assessor's office has been provided with information on the proposed development and has compiled a list of all PIN #'s of property within 250' of the subject property. Please obtain the list from the Assessor's office and prior to looking up the addresses associated

with each PIN, please provide the list to me so that I can double check to ensure that all necessary PIN's have been included on the list. In addition, please note that when the mailing is sent out, it must go to the taxpayer of record of each PIN, and not to the actual property address of the PIN.

a. Petitioner's Response: Will comply.

b. Round 2 Petitioner Response: Response above is acceptable to VAH. This step is currently in process.

16. Please ensure that all plans and/or studies to be resubmitted as a result of the Round 1 Department review comments include a revision date.

a. Petitioner's Response: Will comply.

b. Round 2 Petitioner Response: Response above is acceptable to VAH.

Site Plan:

17. Please revise Sheet C3 of the civil plans to include the below Zoning Matrix table and fill in all data that is missing and verify that the data included on the chart is accurate.

a. Petitioner's Response: The zoning matrix has been added to the plans.

b. Round 2 Petitioner Response: Response above is acceptable to VAH.

18. Please provide details for all proposed fences.

a. Petitioner's Response: Please refer to sheet C11 for the respective fence details.

b. Round 2 Comments: The response to comment #18 is noted. However, there are inconsistencies between the civil plans, landscape plans, and floor plans/elevations relative to the outdoor storage area at the southwest corner of the building. The civil plans show this area as entirely paved with normal heavy-duty pavement and a fence around the perimeter (will this fence be the same as the 48" tall fence around the playground?). The landscape plan appears to show some sort of specialty paving in this area. The architectural plans show an 8' tall wall with a door that encloses a portion of this area, which wall and door is not reflected on either the civil or landscape plans. Please clarify what is proposed in this area. Additionally, please confirm what is stored in this area and whether the items stored (which items I assume would be inside of the 8' tall solid walls as opposed to the 48" tall fence) will be completely screened by the 8' tall walls.

i. Round 2 Petitioner Response: This area of the site has been in development based on project requirements. The current design includes a concrete paved sun deck enclosed by a six-foot-high decorative metal fence and landscape screening. There may be times when the 3-tier portable bleachers (approximately 30-inches high) will be temporarily stored in this area when not in use. The area previously labeled as outdoor storage has been enclosed as a pool equipment room and will be part of the building addition. These revisions are in progress and copies of the drawings can be provided upon request.

19. Provide parking space width dimensions within all proposed parking rows.

a. Petitioner's Response: Will comply.

b. Round 2 Petitioner Response: Response above is acceptable to VAH.

20. Within the northernmost parking row, it appears a variation is needed for a landscape island that does not contain a shade tree (where pedestrian path leads from the building to safety town). Please find a way to add the required shade tree to the parking lot island or clarify if a variation is requested (and provide the necessary response to the hardship criteria).

    a. Petitioner's Response: See revised plan. The island has been enlarged and a shade tree has been added.

    b. Round 2 Petitioner Response: Response above is acceptable to VAH.

21. There is a small existing 8' x 10' concreate area adjacent to the sidewalk in the southwest corner of the site. It is unclear why this concrete area is necessary. Please remove this area and replace it with greenspace. Additionally, the outline of the former asphalt driveway entrance along Euclid, although proposed for removal, still appears on all site plans. Please add a note to the demolition plan that clarifies this area will be returned to greenspace and remove the outline from all other plans (both civil and landscaping).

    a. Petitioner's Response: It appears that this was an old portion of the original sidewalk into the project site that was not removed during a past project. The plans have been updated to remove this portion of the sidewalk since we are pursuing a permit with CCHD for the driveway removal.

    b. Round 2 Petitioner Response: Response above is acceptable to VAH.

22. Other than the transformer proposed on the east side of the building and the rooftop mechanical units, are any above ground utility or mechanical units proposed on the site (HVAC equipment, generators, utility pedestals, transformers, etc.)?

    a. Petitioner's Response: A temporary electrical transformer will be required during the construction phase of the project and will be located near the northeast corner of the existing building. The gas meter is proposed to be relocated from the north side of the existing building to the northeast corner of the existing building. An emergency generator will be located within the enclosure on the east side of the building. No additional above ground utility or mechanical units are proposed.

    b. Round 2 Petitioner Response: Response above is acceptable to VAH.

Building:

23. A Design Commission appearance is required for the proposed improvements. Appearance before the Design Commission has been tentatively scheduled for February 13th.

    a. Petitioner's Response: Understood.

    b. Round 2 Petitioner Response: The meeting with the Design Commission was held on February 13, 2018 and a follow-up meeting is scheduled for March 13, 2018.

24. Will the building addition incorporate any new basement areas? If so, a proposed basement plan shall be provided.

    a. Petitioner's Response: There is no new basement area as part of the addition. The existing basement plan has been provided for reference.

    b. **Round 2 Petitioner Response: Response above is acceptable to VAH.**

25. Please revise the floor plans to assign room numbers to each space/room within the existing and proposed building. For all rooms/spaces (both existing and proposed), provide a separate table with the square footage of each space and the corresponding occupancy calculation and maximum occupant load per building code standards.

    a. Petitioner's Response: Additional information provided on Sheets G1.0.2 – G1.0.6.

    b. Round 2 Petitioner Response: Response above is acceptable to VAH.

26. Provide the square footage and maximum bather load for each existing and proposed pool per IPHD standards.
    a. Petitioner's Response: Additional information provided on Sheets G1.0.2 – G1.0.6.
    b. Round 2 Petitioner Response: Response above is acceptable to VAH.
27. Are there any bleachers within the facility? Please provide occupancy calculations for all bleacher areas.
    a. Petitioner's Response: There are existing bleachers in the main pool area that will remain unchanged. There are bleachers planned for the gymnasium(s). The occupancy count for the facility, including existing the pool, gymnasium, and associated bleachers, will be provided based on final selections.
    b. Round 2 Petitioner Response: Response above is acceptable to VAH.
28. Please revise the elevations to provide a value for the areas labeled "EQ" so that overall height can be determined. The elevations should include a height dimension for the overall height of the building as measured at its tallest point, including measurements to both the roofline and top of parapet wall (if applicable).
    a. Petitioner's Response: Will comply.
    b. Round 2 Petitioner Response: Drawings have been updated and response above is acceptable to VAH.
29. Where will the electric and gas meters be located on the building? Has landscaping been incorporated to screen these elements?
    a. Petitioner's Response: See above and responses to landscape comments below. Above ground equipment will be screened in accordance with requirements.
    b. Round 2 Comments: Will landscaping screen the utility meters on the northeast side of the building? If not, additional landscape plantings should be added.
        i. Round 2 Petitioner Response: Yes. Landscaping and plantings will be included to screen utilities, meters, etc. on the east side of the building.

Traffic/Parking:

30. How will the dump truck access the proposed trash enclosure area along the eastern elevation? It appears that the dump truck will need to utilize the public street for turning movements to back up into the trash enclosure space.
    a. Petitioner's Response: The current understanding is that garbage and recycling trucks will pull forward into the driveway, roll out trash and recycling containers to the front of the truck, complete the disposal, and then back out of the driveway.
    b. Round 2 Petitioner Response: Response above is acceptable to VAH.
31. The traffic study has a gap within the programing/swimming pool usage between 3:00pm-4:00pm. How are the pools used during this time?
    a. Petitioner's Response: There is currently no formal programming or future plans for programming during that timeframe, other than drop in use for the pools, fitness center or gym. Parents are typically picking-up kids at that timeframe, so it is scheduled as "down time".
    b. Round 2 Petitioner Response: Response above is acceptable to VAH.
32. Per the recently adopted bicycle parking ordinance, 2% of the overall building occupancy shall be used to determine the required number of bicycle parking spaces. Please provide the overall building occupancy to calculate the required bicycle parking spaces. Additionally, please note on

the site plan how many bicycle parking spaces exist along the eastern side of the building (1 post = 2 spaces) and clarify how many are proposed along the western side of the building.

a. Petitioner's Response: The current occupancy count and bicycle parking counts are as follows:

i. Base Bid: 1,316 occupants x 0.02 = 26.32 (27 bicycle parking spaces required)

ii. Alternate Bid: 1,534 occupants x 0.02 = 30.68 (31 bicycle parking spaces required)

b. There is a total of 26 bicycle parking posts proposed, including 17 existing and 9 new. This provides a total of 52 bicycle parking spaces.

c. Round 2 Petitioner Response: Responses above are acceptable to VAH.

33. Please revise the projected future parking demand to be based on the ITE parking generation rates per the proposed uses and not per the Village parking requirement. Additionally, the future parking demand did not factor in the proposed warm water pool.

a. Petitioner's Response: The Traffic Impact and Parking Study has been revised to project future parking demand for the proposed uses based on the ITE Parking Generation rates, including the Warm Water Pool demand.

b. Round 2 Comments: Staff notes that under the "alternate bid" (double gym) scenario, the projected parking demand exceeds supply and relies on street parking to meet demand. Please identify areas on site where land banked parking could be constructed, and provide a plan showing how this parking would be constructed. A condition of approval may be recommended to the Plan Commission that would require land banked parking (as indicated on the plan that you will prepare) be constructed at the request of the Village should it be determined that a parking shortage exists on the property.

i. Round 2 Petitioner Response: The Petitioner is open to including land banked parking but please note that this may reduce the amount of greenspace and/or reduce the size of buffer zones on the north side of the property between the new facility and the residential neighborhood. Options for land banked parking will be provided under separate cover prior to the Plan Commission meeting scheduled for March 14, 2018.

34. If a parking deficit is projected during peak times, please provide a strategy for where these cars will park (assuming that scheduling conflicts for major events cannot be avoided). No analysis was included outlining how many spaces are available within the surrounding street network.

a. Petitioner's Response: Overflow parking is anticipated to occur within the adjacent roadway network on-street parking supply, should it be necessary. There are currently no viable options (via existing agreements) or public parking lots within an acceptable walking distance to accommodate overflow parking. The Traffic Impact and Parking Study has been updated to include an estimate of the available parking supply within the surrounding street network.

b. Round 2 Petitioner Response: Responses above are acceptable to VAH.

35. Round 2 Comment 41. Based on the traffic study, queued cars are expected to block access into the southern driveway entrance during peak times. One solution proposed in the traffic study was that automobile traffic may opt to use the northern access point for ingress/egress to the site if the southern access point is blocked, another solution was to post "Do Not Block" signage by the southern driveway. Please evaluate the possibility for a Right-in/Right-out only orientation for the southern driveway, which would eliminate the potential for inbound stacking at this location.

a. **Round 2 Petitioner Response: Additional review and study will be conducted. The Petitioner would propose a phased implementation with signage and striping as the first**

step. Future improvements could be associated with the reconfiguration of the Euclid and Ridge intersection as noted below.

36. Round 2 Comment 42. The traffic study also contemplates the potential widening of southbound Ridge Avenue at Euclid from one lane to two lanes, with a shared through/left turn lane, and a separate right turn lane. If traffic still opts to use the southern driveway entrance, and if a "Do Not Block" sign is ineffective, the Park District will be required to propose and implement a solution, for review and approval by the Village. Such solution could be through a right-in/right-out re-orientation of the southern driveway entrance, or potentially, the Village may require the widening of Ridge Ave., at the cost of the Park District, to address the problem.

    a. **Round 2 Petitioner Response: The Petitioner is in general agreement with this approach and would want to ensure that all parties impacted by any revisions to the Euclid and Ridge intersection are involved in the solution. This includes VAH, AHPD, and CLA.**

Landscape Comments

1. Provide three-foot-high shrubs in the northeast corner within the landscape island in order to buffer the parking area. Pursuant to Chapter 28, Section 6.15, a three-foot-high screen is required adjacent to parking areas along the public right of way.

    a. **Round 2 Petitioner Response: Will comply.**

2. Adjacent to the parking lot expansion on the north side, please substitute the proposed Dogwood and Nine Bark shrubs with six-foot-high evergreen. In addition, extend the screen to the east towards Ridge Avenue. Per Chapter 28, Section 6.15 such screening for a parking area shall be six feet high if adjoining a residential district and the screen shall provide year-round opacity.

    a. **Round 2 Petitioner Response: The Petitioner will revised the proposed landscape plantings as indicated but would like to further review the area directly north of the new parking and drive aisle as this area (Safety Town) has many mature trees that would not work well with the proposed landscape screen.**

END OF ROUND 2 COMMENTS AND RESPONSES

PLAN COMMISSION PROJECT TIMELINE

Project Name: Olympic Park PUD Amendment
PC Number: 17-014
Location: 120-122 E. Boeger Dr.
Requested Action:

1. Amendment to Planned Unit Development (PUD) Ordinances 79-19 and 03-036 to allow a building addition and site improvements.
2. Special Use Permit to allow a "Community Center, Recreation Building".
3. Variation to Section 11.4, Schedule of Parking Requirements, to reduce the required amount of off-site parking from 757 spaces to 291 spaces.
4. Variation to Section 6.13-3(b), Side and Rear Yards, to allow a 10' fence in the rear yard where code limits fence heights to 5'.
5. Variation to Section 6.13-3(c), Exterior Side Yards, to allow a 8' tall fence in an exterior rear yard where code limits fence heights to 5'.

	Date	# of Business Days
Petitioner Provides Plans needed for CPRC	11/01/17	-
Conceptual Plan Review Meeting (CPRC)	11/08/17	5
Awaiting Petitioner PC Application	1/16/18	42
PC Application Submittal Date	1/16/18	-
1st Round Department Comments	2/1/18	12
Petitioner's Response – 1st Round	2/15/18	10
2nd Round Department Comments	3/6/18	12
PC Hearing	3/14/18	41 days from application date
Village Board	4/2/18	13
Anticipated Village Board Ord. Adoption	4/16/18	10

Item: Closed Session

Department: Village Manager's Office

Request for Closed Session per 5 ILCS 120/2(c)(21): Discussion of minutes lawfully closed, whether for purposes of approval of the minutes or the semi-annual review of the minutes

- and -

5 ILCS 120/2(c)(11): Litigation, when an action against, affecting or on behalf of the Village has been filed and is pending before a court or administrative tribunal, or when the Board finds that an action is probable or imminent

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Bid Section

Item:

Bid Opening Date:

Account Numbers:

Total Budget for Specific Item:

Bid Amount: