



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
September 5, 2017

8:00 PM

I. CALL TO ORDER

II. PLEDGE OF ALLEGIANCE

III. ROLL CALL OF MEMBERS

IV. APPROVAL OF MINUTES

- A. Committee of the Whole 8/14/2017
- B. Village Board 08/21/2017

V. APPROVAL OF ACCOUNTS PAYABLE

- A. Warrant Register 08/30/2017

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 August 14, 2017

Bicycle & Pedestrian Plan

Consideration of a motion by the Committee-of-the-Whole recommending that the Village Board adopt the Village of Arlington Heights' Bicycle & Pedestrian Plan.

- B. Report of the Committee-of-the-Whole Meeting of August 14, 2017

Bike Parking Ordinance

Consideration of a motion by the Committee-of-the-Whole recommending that the Village Board approve Code Amendments to Chapter 28, Section 11, Bike Parking Ordinance as amended.

- C. Report of the Committee-of-the-Whole Meeting of September 5, 2017

Consideration of recommending to the Liquor Commissioner the issuance of a Class "A" Liquor License to Passero, LLC, dba Passero, located at 5 West Campbell

- D. Report of the Committee-of-the-Whole Meeting of September 5, 2017

Interview of John Schroeder for Appointment to the Arts Commission - Term Ending: 4/30/20

- E. Report of the Committee-of-the-Whole Meeting of September 5, 2017

Interview of Brandon Lawrence for Appointment to the Youth Commission - Term Ending: 4/30/18

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. Cisco Network Switches

CONSENT LEGAL

- A. An Ordinance Amending Chapter 13 of the Arlington Heights Municipal Code
(Surrender of a "B," "E" and "T" liquor license)
- B. A Resolution Accepting a Temporary Construction Easement
(1551 E. Central Road)

XI. APPROVAL OF BIDS

XII. NEW BUSINESS

- A. Proposed variance request from Chapter 23, Section 9
- B. Greenbrier School Addition - 2330 N. Verde Dr. - PC#17-007
Special Use for Elementary School

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: Committee of the Whole 8/14/2017

Department: Finance

Bid Section

Item:

Bid Opening Date:

Account Numbers:

Total Budget for Specific Item:

Bid Amount:

ATTACHMENTS:

Description	Type
Committee-of-the Whole Minutes 8-14-17	Minutes



MINUTES

President and Board of Trustees
Village of Arlington Heights
Committee-of-the-Whole
Community Room
Arlington Heights Village Hall
33 S. Arlington Heights Road
Arlington Heights, IL 60005
August 14, 2017
7:30 PM

I. CALL TO ORDER

President Hayes called the meeting to order at 7:30 PM.

II. PLEDGE OF ALLEGIANCE

III. ROLL CALL

BOARD MEMBERS PRESENT:

Mayor Thomas Hayes, Trustees Baldino, Glasgow, LaBedz, Rosenberg, Sidor, & Tinaglia

BOARD MEMBERS ABSENT:

Trustees Blackwood & Scaletta

STAFF MEMBERS PRESENT:

R. Recklaus, R. Ward, J. Massarelli, B. Schwab, P. Wilkiel

OTHERS PRESENT:

Juergen Juffa, Chair of BPAC, John O'Neal, CMAP

IV. NEW BUSINESS

A. Bicycle & Pedestrian Plan - PC#17-006

Mr. Recklaus explained that the Bicycle & Pedestrian plan is a statement of Village policy. He said that because of the amount of work and time put into it and its volume of contents it was brought to the Board so that they would have an opportunity to review and understand the plan prior to a formal vote to adopt it. Mr. Recklaus explained that in adopting the plan, it would go through the normal budgeting process before any funds would be expended. He added that the plan would be used as a guiding principal for staff to determine what will and will not be funded and with making

recommendations to the Board. Mr. Recklaus finished by saying that the Bike Parking Ordinance reflects the values that are in the Bike Plan.

Ms. Schwab stated that the Bike & Pedestrian Plan has been worked on for a number of years and started with a grant from the Local Technical Assistance (LTA) Grant. She said that the Chicago Metropolitan Agency for Planning (CMAP) and the Bicycle and Pedestrian Advisory Committee (BPAC) has done a considerable amount of work on it and that it could not have been done without their assistance. Ms. Schwab stated that the approximate cost of this plan if done by a consultant would have been between \$150,000 and \$180,000, adding that the Village paid nothing for it.

Mayor Hayes thanked both BPAC and CMAP members for all their work on this, saying that it was a great working document.

Mr. Juffa, BPAC Chair, stated that the bike plan fits into the Village's Comprehensive Plan and gave a presentation which highlighted key elements of the plan. Some of what the plan includes is;

- Provide for bicycle traffic to establish safe bicycle path systems,
- Create a quality pedestrian environment
- Provide protection of the environment by minimizing autos,
- Promote adequate, efficient, convenience, aesthetics, and safety of traffic and transportation
- Implement traffic calming measures in residential areas.

Mr. Juffa stated that the vision statement is to make Arlington Heights a place where you can travel safely on foot or by bicycle to all destinations in the Village with comfort and convenience. He went on to say that there was significant community input which included feedback from a website survey, interviews, a walking audit, a communitywide vision workshop, and a focus group workshop. He continued by going over some of the different areas where improvements are necessary and areas that need to be focused on in order to become a bicycle friendly community which include engineering upgrades and infrastructure. Mr. Juffa stated that the plan identifies the most suitable solution for every part of the identified framework including marked shared lanes, bicycle lanes, bicycle parking, and intersection improvements. Mr. Juffa stated that this plan also includes a pedestrian plan with sidewalk improvements.

Discussion took place regarding some of the terms and infrastructure plans that are in the plan. Mr. O'Neal talked about width of roads and sidewalks in regards to calmer traffic, smoother traffic flow, and with addition of space for bicycles and pedestrians. He also said that the Village has the foundation, basis, and the thinking to push bicycle and pedestrian improvements to the next level.

Trustee Tinaglia felt that this plan is a great thing to promote for health reasons. He asked what should the Village be planning for and what it would

mean budget wise over the next five to ten years. Mr. Recklaus stated that this plan can strongly influence design and infrastructure choices over the next several years, but added that it being policy, it would need to be determined what priority level it would be among the choices that are made. He said that it can be actively discussed over the next few months and years as preparation takes place during the budgeting processes.

Trustee Glasgow felt that this plan is the kind of blueprint that the Board is looking for in the future, to look at infrastructure so that Arlington Heights can be a much more walkable and bicycle friendly area.

Trustee Rosenberg asked about the Downtown being a priority and if some of the things that need to be done can be done at the same time as other street or flooding improvements. Mr. Recklaus said that we want to minimize the impact on Downtown as much as possible and that when allowable things can be done so that there is not constant disruption Downtown. Trustee Rosenberg also asked if any there was any costing out and prioritizing done. Ms. Schwab said that a lot of these ideas will need a feasibility or phase I study prior to costing out. She said that the plan has a lot of options, and said that some engineering will have to be done prior to going to design. Discussion took place regarding road improvements and maintenance on paths.

Trustee Rosenberg felt that the BPAC should spearhead education of drivers when changes are made to roads. Mayor Hayes agreed with having education efforts. Trustee Rosenberg also felt that more efficient bike racks with new features should be looked at in the future if the cost is not much higher. Ms. Schwab stated that she has spoken with public works about buying inverted bike racks when racks need to be purchased.

Trustee Sidor asked if there were grants available for these types of improvements. Ms. Schwab stated that there has been in the past and that they will continue to go after them when they are available.

Mayor Hayes felt that it was important to prioritize some of the improvements in the plan. He said that one of the things he would like to see at the top of the list is the intersection improvements at Windsor and Palatine Roads because it's a key access point to Lake Arlington. Discussion took place regarding some of the proposed improvements at that intersection.

The Board members all agreed that this is a great plan and look forward to its implementation. Because it is such a large plan, implementing it will be a long-term process. The Board thanked everyone for all their efforts and hard work on this plan.

TRUSTEE TINAGLIA MOVED, SECONDED BY TRUSTEE LABEDZ, THAT THE COMMITTEE-OF-THE-WHOLE RECOMMEND TO THE VILLAGE BOARD APPROVAL OF THE VILLAGE OF THE ARLINGTON

HEIGHTS BICYCLE & PEDESTRIAN PLAN. The motion passed unanimously.

B. Bike Parking Ordinance - PC#13-011

Mr. Recklaus explained that an ordinance that would be put into effect will reflect the values of these bike plans. He said that this ordinance creates a requirement for bike racks and bike parking for different types of uses, but only when there is a change in use or new construction. He went on to say that Planning Department staff is given the discretion to allow for a lower number of bicycle parking spaces or no parking at all based on circumstances presented during the approval process of a new project.

Mr. Juffa gave a presentation regarding the bicycle parking ordinance. He said that this ordinance compliments the Village's streets policy and focuses on the portion of the transportation network that is private property, typically retail businesses and places of employment. He went on to say that there is a shortage of bike parking in the Village and that the majority of the 40 shopping centers in the Village completely lack bike parking, and that many places of employment do not offer bike parking to their employees.

Some information in Mr. Juffa's presentation included;

- The Downtown area is exempt from the bike parking ordinance
- The cost of two bike parking spaces will be between \$540 & \$660
- Property owners would have the right to remove abandoned bikes from their property and set rules for the usage of the bike racks installed on their property
- The ordinance is one tool to advance bike parking in the Village
- The ordinance uses an incremental approach to increase the degree of accommodating bicycles
- Determining the amount of bike parking is accomplished the same as for automobiles
- The majority of automobile parking in the Village is provided by private entities. The same financing rule should apply for both automobiles and bike parking
- The ordinance helps advance a goal of Village policy; a transportation network that accommodates various modes of transportation, and it implements regulation for parts of the transportation network that is on private property

Trustee Baldino asked if there should be more criteria for a variance being granted by this ordinance. Ms. Ward stated that the intention of the ordinance is to ensure that the bike parking is not overly burdensome on any particular development. She added that it is not intended to go to a hearing for a variance, but designed to be more positive and make it easier for a petitioner. Ms. Ward went on to say that this ordinance is drafted and contains language that says that if the petitioner shows staff that there is not enough room or is not feasible, then staff will have the ability to reduce the number of spaces required by the ordinance.

Trustee Sidor asked for clarification when the Board gets a plan presented to them that has an administrative variance granted if they will be informed why it was granted. Mr. Recklaus answered yes saying that it would be included in the staff report of the projects.

Trustee Tinaglia asked if a commercial project has no variation requests other than for bicycle parking if they would still only need staff approval for the bicycle parking variance. Mr. Recklaus stated yes if the Planning Director agreed with their variance request. Ms. Ward said it is not intended for anyone to have to get a formal variance if they can't provide the spaces because they are not available or feasible. She added that because it is a code requirement and they just don't want to install them and the Planning Director states that they must, then they would have to have a hearing for a formal variation.

Trustee Tinaglia said that that bike racks are needed Downtown probably more than anywhere else, and felt that there should be a way to find spots for them other than in the parking garages. Trustee Glasgow agreed and asked if more can be added near the parking garages and to possibly work with Union Pacific to put more at the train stations. Discussion continued regarding Downtown bike parking and streetscape. Mr. Recklaus stated that this ordinance regulates private property.

Discussion took place regarding abandoned bikes both on public and private property and with the difficulty in having them removed. Ms. Ward stated that she can look further into State statute regarding the removal of them.

Trustee Rosenberg said that this ordinance is for projects going forward and asked if something could be added to the ordinance in the future that would be retroactive if more spaces are needed. Ms. Ward stated that it would be somewhat challenging to make someone who is already established to do that, but said that you can broaden the ordinance to include a timeline for when someone has to meet the new standards.

Mayor Hayes thought it was important that the language in the ordinance should include both "space is **not available or feasible** on a site". He asked that the words "or feasible" be added after the word available in the last sentence of Section 11.8-5 of the Bike Parking Ordinance.

TRUSTEE TINAGLIA MOVED, SECONDED BY TRUSTEE BALDINO, THAT THE COMMITTEE-OF-THE-WHOLE RECOMMEND TO THE VILLAGE BOARD APPROVAL OF THE CODE AMENDMENTS TO CHAPTER 28, SECTION 11, BIKE PARKING ORDINANCE AS AMENDED. The motion passed unanimously.

C. Village Statements of Economic Interest

Mr. Recklaus started by saying that the Village's ethical standards are not changing in anyway nor who the ethical standard of policies apply to. He

said that the only thing being discussed tonight are the forms that are currently in place that are required to be filed. Mr. Recklaus stated that Article VI of Chapter 1 of Village code relates to disclosure and ethics. He said that the Village has not changed the requirement for Village Statement of Economic Disclosure since 1983 which at that time was directed towards employees earning in excess of \$35,000 a year (Village Manager and Department Directors at that time). He went on to say that last year, 432 of 437 Village employees had to fill out one of these forms.

Mr. Recklaus went on to say that current State Statute requires counties have all elected and appointed officials, and some employees of municipalities file a County ethics form. He explained the criteria for what employees would need to fill out County form, saying that currently 34 Village employees need to do so.

Mr. Recklaus believes the Village process is somewhat outdated and redundant with the County's own process, and has gone on beyond its original intent. He thought that the County form generally covers all of the same material and is accessible online, and felt that it was time to re-evaluate this and default to the County form. In addition to the County form there are other measures the Village has in effect for employees in the personnel manual and with administrative oversight of employees. Mr. Recklaus stated that there are additional forms employees have to fill out for outside employment.

Mr. Recklaus stated that if the Board would like to keep a local form, it is recommended to get off a salary threshold and have it relate more to job function and the threshold laid out in State statute. A marked up Article VI was provided the Board for review and discussion so that staff can get some direction from the Board prior to drafting legislation to make these changes.

Trustee Glasgow was concerned with a sentence that was crossed out in Section 1-605 of Article VI that says "if you or your spouse or employer have any dealings with any Village Departments regarding licenses, reviews or approval necessary to conduct business in the Village, a statement to that effect shall be included in the filings". He explained that that sentence was added by previous Village Manager Bill Dixon after there were discussions on conflicts in the Village. He stated that this is not on the County form and felt it was important to have when employees or members of boards and commissions are dealing with and working in the Village, saying that it allows full disclosure to the people of the Village. He felt that it would not be onerous for anyone to fill out both these forms and asked if this same information could be in staff's proposal. Mr. Recklaus said that if the Board wishes, a modified Village form could be retained that could include whatever information the Board would like, and that the number of employees to fill it out could be reduced.

Trustee LaBedz had similar comments saying that there is nothing in the County form that talks about outside employment and felt that disclosure is

necessary. She said that the salary threshold and having that many employees fill out the form does not make sense and should be based on position. Other Board members agreed that the number of employees filling out this form should be reduced, and that it be filled out by all elected officials, and employees and members of boards and commissions in decision making roles. Mr. Recklaus stated that after receiving feedback from the Board, something will be drafted that reflects their wishes.

Trustee Sidor questioned the Filing of Complaints for this section in regards to having them go to the Village Manager instead of the Village Clerk. Mr. Recklaus stated that it was a practice that has never gone to the Village Clerk, and that any complaint of this type would be handled formally, that there would be some type of investigation, and a response would be generated.

Trustee Rosenberg asked if the proviso of your children being in the form. Ms. Ward stated that the form has stayed pretty much the same since 1983, and said that children can be removed from it. Mayor Hayes said that there was enough of a connection of an immediate family member, like a child, for a potential problem and felt that there would be an obligation to report that. Mr. Recklaus stated that the intent was to be aware of immediate family member doing business with the Village and being open for everyone to see.

Mr. Recklaus stated that based on the feedback given this evening that the Village form be streamlined to focus on the areas that are not redundant. Mr. Recklaus asked the Board for clarification on who they felt should be filling out a Village form, and if they want it to mirror the County form requirements or a different group of people. Discussion took place on who and what Boards & Commissions the Board felt should fill out the form.

It was agreed that all appointed Boards & Commission members, all elected officials, and Village staff where County rules are applicable to would be required to fill out the Village form.

V. OTHER BUSINESS

VI. ADJOURNMENT

Trustee LABEDZ moved, seconded by Trustee TINAGLIA to adjourn the meeting at 9:15 P.M. The motion carried unanimously.



Item: VB minutes 8 21 17

Department: Village Clerk

Bid Section

Item:

Bid Opening Date:

Account Numbers:

Total Budget for Specific Item:

Bid Amount:

ATTACHMENTS:

Description	Type
vb minutes 8 21 17	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

August 21, 2017

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: Blackwood, LaBedz, Scaletta, Sidor, Baldino and Rosenberg.

Trustees Tinaglia and Glasgow were absent.

Also present were: Randy Recklaus, Mark Burkland, Robin Ward, Cris Papierniak, Diana Mikula, Charles Perkins and Becky Hume

IV. APPROVAL OF MINUTES

A. Committee of the Whole 02/13/2017 Approved

Trustee Carol Blackwood moved to approve. Trustee John Scaletta
Seconded the Motion.

The Motion: Passed

Ayes: Blackwood, Hayes, LaBedz, Rosenberg, Scaletta, Sidor

Abstain: Baldino

Absent: Glasgow, Tinaglia

B. Village Board 08/07/2017 Approved

Trustee Carol Blackwood moved to approve. Trustee Richard Baldino
Seconded the Motion.

The Motion: Passed

Ayes: Baldino, Blackwood, Hayes, LaBedz, Sidor

Abstain: Rosenberg, Scaletta

Absent: Glasgow, Tinaglia

V. APPROVAL OF ACCOUNTS PAYABLE

A. Warrant Register 08/15/2017

Approved

Trustee Bert Rosenberg moved to approve the Warrant Register dated 08/15/2017 in the amount of \$4,918,756.64. Trustee John Scaletta Seconded the Motion.

The Motion: Passed

Ayes: Baldino, Blackwood, Hayes, LaBedz, Rosenberg, Scaletta, Sidor

Absent: Glasgow, Tinaglia

VI. RECOGNITIONS AND PRESENTATIONS

A. Swearing in of Mark Recker as Deputy Police Chief

President Hayes administered the Oath of Office to Mark Recker.

B. Swearing in of Joseph Pinnello as Police Commander

President Hayes administered the Oath of Office to Joseph Pinnello.

C. Swearing in of Alexandra Nelson as Police Sergeant

President Hayes administered the Oath of Office to Alexandra Kitty Nelson.

D. 2017 Alan F. Bombick Design Award

Alan F. Bombick was a founding member of the Design Commission and served for 21 years. After his passing in June of 2016, the annual Alan F. Bombick Award for Excellence in Design was established. Design Commissioner Ted Eckhardt presented the awards to: 1216 E. Mayfair (Residential) and 1808 S. Arlington Heights Road (Commercial).

VII. PUBLIC HEARINGS

VIII. CITIZENS TO BE HEARD

Melissa Cayer asked how the public is notified of special Board Meetings. Mr. Recklaus said all meetings are posted on the Village's website, on the bulletin boards in Village Hall and on social media. The Village gives 48 hours advance notice of all meetings.

Ron Precht said he represented the Baha'i faith in the Village. They are

celebrating the birth of their founder and are participating in a Shine the Light Together Interfaith Vigil in North School Park. He encouraged the Board to focus on fostering a sense of community. He said divisive issues in the country could spill over and arise here. Well being is unattainable until unity and peace are established. He said the Board and community are invited to their celebration in late October.

IX. OLD BUSINESS

X. CONSENT AGENDA

CONSENT OLD BUSINESS

CONSENT APPROVAL OF BIDS

- A. Fuel Purchase Contract Extension 2017 Approved

Trustee John Scaletta moved to approve. Trustee Robin LaBedz Seconded the Motion.

The Motion: Passed

Ayes: Baldino, Blackwood, Hayes, LaBedz, Rosenberg, Scaletta, Sidor

Absent: Glasgow, Tinaglia

CONSENT LEGAL

- A. A Resolution Approving an Intergovernmental Agreement with the Arlington Heights Park District
(Nickol Knoll, 3800 N. Kennicott Avenue) Approved

Trustee John Scaletta moved to approve R17-051/A17-048. Trustee Robin LaBedz Seconded the Motion.

The Motion: Passed

Ayes: Baldino, Blackwood, Hayes, LaBedz, Rosenberg, Scaletta, Sidor

Absent: Glasgow, Tinaglia

- B. An Ordinance Amending Chapter 7 of the Arlington Heights Municipal Code
(Section added - 7-1113, Storm Water Utility Fee) Approved

Trustee John Scaletta moved to approve 17-033. Trustee Robin LaBedz Seconded the Motion.

The Motion: Passed

Ayes: Baldino, Blackwood, Hayes, LaBedz, Rosenberg, Scaletta, Sidor

Absent: Glasgow, Tinaglia

- C. A Resolution Accepting a Grant of Easement for Approved Landscaping Purposes (2.5 feet of University Drive right-of-way adjacent to 825-905 W. University Drive)

Trustee John Scaletta moved to approve R17-052. Trustee Robin LaBedz Seconded the Motion.

The Motion: Passed

Ayes: Baldino, Blackwood, Hayes, LaBedz, Rosenberg, Scaletta, Sidor

Absent: Glasgow, Tinaglia

- D. A Resolution Approving Renewal of Industrial Real Estate Tax Incentive for Certain Real Estate in the Village of Arlington Heights, Cook County, Illinois (Drew Enterprises LLC, 2636-2638 S. Clearbrook Drive)

Trustee John Scaletta moved to approve R17-053. Trustee Robin LaBedz Seconded the Motion.

The Motion: Passed

Ayes: Baldino, Blackwood, Hayes, LaBedz, Rosenberg, Scaletta, Sidor

Absent: Glasgow, Tinaglia

CONSENT REPORT OF THE VILLAGE MANAGER

CONSENT PETITIONS AND COMMUNICATIONS

- A. Bond Waiver - St. James Catholic School - Parents' Club Approved

Trustee John Scaletta moved to approve. Trustee Robin LaBedz Seconded the Motion.

The Motion: Passed

Ayes: Baldino, Blackwood, Hayes, LaBedz, Rosenberg, Scaletta, Sidor

Absent: Glasgow, Tinaglia

XI. APPROVAL OF BIDS

A. TIF 4 - RFP Award for Market Analysis and Consulting Services Tabled

Trustee Rosenberg asked for this item to be pulled from the Consent Agenda for further clarification on the purpose of the consultant. He said it has been 15 years and there have multiple studies. The main property owner has refused to consider reasonable offers. Until there is some indication from the owner, this seems like a waste of funds.

Mr. Recklaus said since the TIF was established, the market has changed dramatically. The Board gave staff direction to be more proactive on this site. Staff cannot be proactive unless the market is better understood for today's commercial environment. There has been no study of this kind since the TIF's establishment. Staff believes this is the best course of action to determine what can and should go there.

Trustee Rosenberg asked how this study will differ from what Steve Leonard is doing. Mr. Perkins said Mr. Leonard's team has tried unsuccessfully to secure or identify tenants that would be an economic engine. As a result, the Village sold the corner lot and for development of two fast food projects. This study would be a market assessment to see what uses would make sense. There is \$1.7 million in the TIF fund available for use.

Trustee Rosenberg said it seems a continuation of the same thing. The real issue is if the owner will sell the property. Mr. Perkins said staff is trying to engage the property owner in this process and they have indicated they are willing to participate. Nothing can happen unless they are a willing partner. It used to be that a big box retailer on this corner made sense, that isn't going to happen anymore.

Mr. Recklaus said the market has changed since the TIF began. Retail is not expanding. There may be other types of uses that should be considered but this is not a conversation that has been had. He said staff would like to see what the data indicates about what this site would support. If the owner is not willing to participate or sell, the data is not lost, and can be used it to attract other properties to the corridor which is ripe for development.

Trustee Scaletta said unless it is known that the large parcel owner is willing to sell or bring their property up to Code, this is just another study that will sit on a shelf and puts the cart before the horse. Mr. Recklaus said it would be good to meet with the owner with some new data to help them come to a different conclusion. The hoteliers in the area would like to see more redevelopment and want the Village to play a more active role. Trustee Scaletta said he needs to know there is some willingness on the other side. Mr. Perkins said there is limited time and plenty of funds for a good market analysis. The study would see what that site can sustain for a market development, develop 2-3 concept site plans and identify new developers.

President Hayes said the Village needs to do something to get this project off center. He said the monies would be well spent.

Trustee Blackwood asked about the geography of the area. Mr. Perkins said analysis could be large or small depending on the use. For an additional hotel, the area would be smaller, for an entertainment or institutional use; the market area would be larger. Trustee Blackwood said this area has changed from an economic perspective and the information available is not concise.

Trustee Sidor asked about implementation. Mr. Perkins said the market analysis report would be presented in 6-8 weeks. After that, the concept plans and project findings would be presented to the Board and implementation would follow Board recommendations. Mr. Recklaus said based on the direction of the Board staff would take data, and lay out range of options. He said he did not believe a complete conversation can be had about where to go unless it is known what the market indicates. Trustee Sidor said this can be postponed, until after a meeting with the property owner occurs, to see if they are truly willing to look at a reasonable number.

Trustee John Scaletta moved to table. Trustee Mike Sidor Seconded the Motion.

The Motion: Passed

Ayes: Baldino, Blackwood, Hayes, LaBedz, Rosenberg, Scaletta, Sidor

Absent: Glasgow, Tinaglia

XII. NEW BUSINESS

- | | | |
|----|---|----------|
| A. | DC#17-086 - Popeye's Restaurant - 7 W.
Dundee Rd. - Sign Variation | Approved |
|----|---|----------|

Trustee John Scaletta moved to approve. Trustee Bert Rosenberg Seconded the Motion.

The Motion: Passed

Ayes: Baldino, Blackwood, Hayes, LaBedz, Rosenberg, Scaletta, Sidor

Absent: Glasgow, Tinaglia

XIII. LEGAL

XIV. REPORT OF THE VILLAGE MANAGER

- | | |
|----|--|
| A. | Early Review - 400 & 500 Block of West
Northwest Highway at Walnut Avenue |
|----|--|

Mr. Recklaus explained that Early Review does not commit the Village to

approve or deny the development. The proposal is for a two building apartment complex on Walnut and Northwest Highway with 106 rental units shared between two properties.

Mr. Perkins said after a neighborhood meeting, the developer modified plans to address some of the concerns. The property would need to be rezoned to R 7, high density residential. The Comprehensive Plan would need to be changed. Staff has concerns about the, so the developer pushed the buildings underground ½ a floor to reduce the massing.

Mark Toljanic, attorney for Brian Properties, outlined the proposal. After meetings with the homeowners association and the neighbors, they have reduced the height of the buildings and removed some of the units closest to the neighborhood. They also modified the traffic plan, so the east property exits only on to Walnut. The plan is now for 56 units in the west building and 50 in the east building. The apartments are one and two bedroom units with some common amenities. There is land banked parking in the Arlington Garden Apartments so their parking exceeds the Code requirement. Without the land banked parking, the number of stalls to units 1.45.

President Hayes asked about the details of the units. Mark Meskauskas of Brian Properties said they are all rental units with 34 one-bedroom/16 two-bedroom units in the east building and 38 one-bedroom/18 two-bedroom in the west building. Rents will be approximately \$1,350-\$2,500 per month. The target tenants are singles or couples without children. There is no landscaping plan yet but they would like to have taller bushes or grasses and are not opposed to putting a fence up if it is requested. The 1.5 parking spaces per unit takes into account guest parking. If there are deficiencies, the land banked parking could be used.

Trustee LaBedz said this is her neighborhood. She thinks that even though changes were made, the summary did not quite do justice to the real concerns, especially when it comes to parking. The height of the building at the edge of this area is too much. She asked if the 1.5 per unit parking spaces only accommodates residents. Mr. Perkins said there is no additional requirement for guest parking in the Code, it is assumed that guest parking was included in the 1.5. Staff has asked for a full study so it can be evaluated. Trustee LaBedz said the neighborhood is landlocked and not all sides of street can be parked. She asked if there was a loading space. Mr. Meskauskas said this is a preliminary plan and they would be happy to accommodate what is necessary.

Trustee LaBedz asked what the parking situation was for Arlington Gardens. Mr. Meskauskas said there are 78 units, with 81/82 spaces. There have been no tenant complaints. Trustee LaBedz worried that this project will alter the essential nature of the locality because of the height of the buildings.

Trustee Blackwood asked if the east side building is now three levels. Mr. Meskaukas said it is 3.5 stories closest to Fremont and 4.5 stories along Northwest Highway. The north portion of the east building steps down one full story. She said she had no concern about the west building. Trustee Blackwood asked about traffic on Fremont. Mr. Toljanic said they removed all ingress/egress from Fremont. All traffic will flow to Walnut. Trustee Blackwood asked about the façade. Kelle Bruckbauer, the architect, said it is a grey brick with white stone accents. The top floor will have Aztec material for additional interest. Trustee Blackwood asked about affordable housing. Mr. Toljanic said Arlington Gardens provides ample low income housing for the site and is excess of the Village requirements. This idea was to create upscale housing. Trustee Blackwood said the loading area is an issue. Mr. Toljanic said they will restrict loading and they see this as a property management issue. Other developments do not have loading areas. Trustee Blackwood said this was a vast improvement from what is there now and she was sure there can be some agreement on how to move forward.

Trustee Scaletta said he had concerns about loading. He asked about overnight parking. Mr. Meskaukas said they will figure it out. The Arlington Gardens parking is maxed out. They may talk to Christian Liberty about using some of their excess parking. Trustee Scaletta said he agreed that this is a vast improvement, but there are still concerns. He said he wants to keep a little of the historical nature of the neighborhood intact.

President Hayes said the Early Review process is an opportunity for the Board to give feedback and there are many more steps to be taken. No vote will occur tonight. Staff and the Board will try to achieve the goal of making the best use of the property.

Resident Tom Gaynor said the auto complex and strip mall are tired and need to be redeveloped in keeping with the neighborhood. The proposed buildings are too tall, and there will be increased traffic flow and parking pressures. Overall, the proposal is not in keeping with the neighborhood. These buildings in the neighborhood seem out of character. He would like them to be three stories.

Vivian Menzies said three stories is the limit that would fit the neighborhood. It would also reduce the density and make the project work. It is a very small area and there is a park taking up a lot of space. There are 30 single family homes and one small apartment building, to add 106 units shoe horns a big development into a small area. From Vail to Wilke on Northwest Highway is one story. Five stories seems like a piecemeal approach to development. The map that shows the homes on Park Place zoned as high density is wrong. The R-7 zoning shouldn't have happened as it is separated from the other R-7 areas.

David Honore said he has seen a lot of improvements in the last 21 years that they have lived on Park Place. He said he had a concern regarding

density and he is concerned with traffic. He suggested speed bumps on Park Place and Fremont would deter people travelling quickly. He asked if it was possible to reduce the height or density on the east side and increase the density to the west so that the east neighborhood is less impacted. He asked if the beauty of the buildings could be increased. He said he wants improvement of that area, but also wants work together to agree on what can be done. He said he thinks the project can be better than what is proposed.

President Hayes said the Village cannot put in speed bumps because of public safety vehicles, but there are other things that can be done.

Michelle Lewis said she is supportive of redevelopment of the parcels. She said the property is too dense, and the developer only made a four foot height change. She said this area is not part of the CBD, it's a historic neighborhood, with century old homes. This project will overwhelm the essential character of the area. Parking is already restricted. They often have cars parked overnight in front of their home. This building will overwhelm the area with parking and 150 new cars will not help. Traffic is already challenging.

Pat Eitz said she wants to preserve the historical nature of neighborhood. She said she was concerned with safety as the streets Fremont and Park are used for cut throughs and are very narrow. She said she wants to be careful of having any more traffic coming through. The new stop sign on Fremont and Chestnut has helped. HANNA was developed in order to preserve the neighborhood integrity. Because the neighborhood is outside of the CBD, it should not have high rises. This is a new precedent being proposed.

Bob Baratta said the project looks like 15 lbs. of potatoes in a 10 lb. bag. The Metrolofts has 55 units and 7 floors stepping down to 3 floors. This proposal would put two of those sized buildings into a small residential district. There is no guest parking. Will visitors park on Fremont or on Walnut? All the parking they have and it is land locked. The community rooms will be used often; where are those people going to park? Even now when neighbors have an event, parking is hard. This project has to be self-contained; it cannot flow out into the neighborhood. If you take the density down, those issues go away.

Joe Luna lives next door to the proposed property. He said he would like to talk to developers regarding boarder property issues like fencing and sight lines.

Trustee Sidor asked where deliveries would occur. Mr. Meskauskas said they will look at loading zones, they don't have a solution today. Trustee Sidor asked how many overnight parking stickers are sold to Metro Lofts and Metropolis Place Lofts, as this might inform the overnight parking situation. He said the land banked parking was creative. He said he was

glad the brick is lighter than the renderings. He said his concern was with density and parking.

Trustee Baldino said the density is too high. He noted that at Arlington Gardens some people are parking a block away from their apartments. He said he was encouraged that development might occur there.

President Hayes said he appreciated the willingness to listen to residents and the Board. He said he was concerned about overflow parking and said to look at reducing density. This would make the project more palatable to the Board and residents.

Trustee Rosenberg asked if the height of the east building were lowered and the west building added to, would the numbers still work. Mr. Meskauskas said if the building is sunk a whole floor you lose more parking than you gain. He said they were concerned that the Design Commission might not like buildings that were not the same height. If the Design Commission was willing to allow different building heights, they would be willing to explore this idea. The general idea is to taper buildings from downtown out, and this suggestion would reverse that. There is more parking here than other places that have gotten approval. They think the parking seems reasonable, no matter how many spaces that are in the area, people will park on the streets.

XV. APPOINTMENTS

XVI. PETITIONS AND COMMUNICATIONS

XVII. ADJOURNMENT

Trustee Bert Rosenberg moved to adjourn at 10:13 p.m. Trustee Robin LaBedz Seconded the Motion.

The Motion: Passed

Ayes: Baldino, Blackwood, Hayes, LaBedz, Rosenberg, Scaletta, Sidor

Absent: Glasgow, Tinaglia



Item: Warrant Register 08/30/2017

Department: Village Clerk

Bid Section

Item:

Bid Opening Date:

Account Numbers:

Total Budget for Specific Item:

Bid Amount:

ATTACHMENTS:

Description

Warrant Register 8/30/2017

Type

Warrant Register



**VILLAGE OF ARLINGTON
HEIGHTS**

WARRANT REGISTER FOR

CHECK DATE: 8-30-2017

Fund	Fund Description	Total Transaction Amount
101	General Fund	\$268,734.35
215	CDBG Fund	\$5,911.40
227	Foreign Fire Ins Tax Fund	\$4,115.94
231	Criminal Investigation Fd	\$1,854.63
235	Municipal Parkg Opr Fund	\$7,134.73
263	TIF IV	\$6,795.00
301	Debt Service Fund	\$802.50
401	Capital Projects Fund	\$837,181.23
426	Storm Water Control Fund	\$218,959.25
435	EAB Fund	\$18,097.70
505	Water and Sewer Fund	\$427,856.46
515	Arts,Entert & Events Fund	\$11,445.03
611	General Liability Ins Fnd	\$7,906.82
615	Workers Compensation Ins	\$128,322.67
621	Fleet Operations Fund	\$16,919.06
625	Technology Fund	\$23,220.05
715	Guaranty Deposits Fund	\$7,900.00
TOTAL ALL FUNDS		\$1,993,156.82

WARRANT REGISTER - GM0002**Department: 0****Division: 0**

Check #	Account Number	Payee	Description 1	Transaction Amount	Total Trans Amount
207878	101-0000-421.99-00	AARTEEN, INC.	OL REFUNDS	\$130.00	\$130.00
207888	101-0000-433.14-00	ALLIANT HEALTH PLUS	REFUND AMBULANCE CLAIM	\$74.38	\$74.38
207913	715-0000-220.93-00	BAKAL, MARK 172741	BOND REFUND	\$200.00	\$200.00
207915	505-0000-452.42-00	TARA BARASHA	REFUND FINAL WATERBILL	\$35.01	\$35.01
207919	101-0000-441.35-00	VIJAY/REKHA BHATT	REFUND VOIDED TICKET	\$25.00	\$25.00
207920	101-0000-433.14-00	BLUE CROSS BLUE SHIELD	REFUND AMBULANCE CLAIM	\$480.00	\$800.00
			REFUND AMBULANCE CLAIM	\$320.00	
207921	101-0000-433.14-00	BLUE CROSS BLUE SHIELD OF AL	REFUND AMBULANCE CLAIM	\$80.00	\$80.00
207922	101-0000-421.99-00	BODY BEAUTIFUL	OL REFUNDS	\$44.00	\$44.00
207923	715-0000-220.93-00	BOEHLEN, ERIKA 172550	BOND REFUND	\$200.00	\$200.00
207925	715-0000-220.93-00	BRASCO INC 17 2036	BOND REFUND	\$200.00	\$200.00
207926	715-0000-220.93-00	JACK BUTTACABOLI	BOND REFUND	\$2,950.00	\$2,950.00
207929	101-0000-140.51-00	CANON SOLUTIONS AMERICA	COPIER MAINTENANCE	\$10.62	\$10.62
207951	715-0000-220.93-00	CRUZ LEON	BOND REFUND	\$100.00	\$100.00
207966	715-0000-220.93-00	FORTIS CONCRETE 171903	BOND REFUND	\$150.00	\$150.00
207968	715-0000-220.93-00	GANNON, NANCY M 164325	BOND REFUND	\$600.00	\$600.00
207983	101-0000-433.14-00	HINES VA	REFUND AMBULANCE CLAIM	\$385.68	\$385.68
207989	101-0000-421.99-00	I VAR SOLUTIONS INC	OL REFUNDS	\$130.00	\$130.00
207990	101-0000-421.99-00	I VAR SOLUTIONS INC	OL REFUNDS	\$190.00	\$190.00
207995	715-0000-220.93-00	J M IRRIGATION 172449	BOND REFUND	\$200.00	\$200.00
207996	715-0000-220.93-00	JAMES WAHOUT 17 2088	BOND REFUND	\$200.00	\$200.00

WARRANT REGISTER - GM0002

Check #	Account Number	Payee	Description 1	Transaction Amount	Total Trans Amount
207998	715-0000-220.93-00	JOHN HERSEY H S 163583	BOND REFUND	\$1,000.00	\$1,000.00
208023	715-0000-220.93-00	MYRIAK, MACIEJ 172570	BOND REFUND	\$200.00	\$200.00
208024	715-0000-220.93-00	NEMEROW, JASON 172099	BOND REFUND	\$150.00	\$150.00
208032	715-0000-220.93-00	OUR SAVIOURS 171911	BOND REFUND	\$200.00	\$200.00
208037	715-0000-220.93-00	PAVEMENT SOLUTIONS 171861	BOND REFUND	\$150.00	\$150.00
208045	715-0000-220.93-00	PETTY, KATHLEEN 172341	BOND REFUND	\$200.00	\$200.00
208050	715-0000-220.93-00	QUALITY BLACKTOP 17 2706	BOND REFUND	\$200.00	\$200.00
208053	505-0000-452.42-00	THOMAS RIZZO	REFUND FINAL WATERBILL	\$92.80	\$92.80
208054	235-0000-435.65-02	MELISSA ROBERTS	REFUND PARKING PERMITS	\$90.00	\$90.00
208057	101-0000-433.14-00	ADAN ROURA	REFUND AMBULANCE CLAIM	\$40.00	\$40.00
208066	101-0000-421.05-00	KENNETH SHOBERG	REFUND VEHICLE STICKER	\$5.00	\$5.00
208073	715-0000-220.93-00	ST SIMON'S EPISCOPAL 172554	BOND REFUND	\$200.00	\$200.00
208077	101-0000-433.14-00	STATE AUTO INSURANCE CO INC	REFUND AMBULANCE CLAIM	\$294.62	\$294.62
208078	715-0000-220.93-00	STEHMAN, JOE 171557	BOND REFUND	\$200.00	\$200.00
208086	101-0000-433.14-00	DELORIS THOMAS	REFUND AMBULANCE CLAIM	\$80.00	\$80.00
208096	505-0000-452.42-00	CHRISTINA VOCOS	REFUND FINAL WATERBILL	\$56.30	\$56.30
208097	715-0000-220.93-00	WACHOWSKI, MARGARET 17902	BOND REFUND	\$200.00	\$200.00
208102	101-0000-433.14-00	AMY WHITCOMB	REFUND AMBULANCE CLAIM	\$100.00	\$100.00
208105	715-0000-220.93-00	ZALESKI, PHILIP 171376	BOND REFUND	\$200.00	\$200.00
208107	715-0000-220.93-00	1640 N PARTNERSHIP LP 17563	BOND REFUND	\$200.00	\$200.00
801660	101-0000-210.95-00	RTA/CTA BENEFIT PROGRAM	SEPTEMBER 2017	\$453.00	\$453.00
				Division 0 Total	\$11,016.41
				Department 0 Total	\$11,016.41

WARRANT REGISTER - GM0002**Department: 1 Board of Trustees****Division: 1**

Check #	Account Number	Payee	Description 1	Transaction Amount	Total Trans Amount
207930	101-0101-501.21-65	CAPTION FIRST INC	CLOSED CAPTIONING JULY	\$1,350.00	\$1,350.00
208007	101-0101-501.21-65	LORELLE COMMUNICATIONS INC	SERVICE MISCELLANEOUS	\$4,500.00	\$4,500.00
208028	101-0101-501.22-03	NORTHWEST MUNICIPAL CONFERENCE	TRAINING	\$75.00	\$75.00
208082	101-0101-501.30-05	SUMMIT PRINT SOLUTIONS	PRINTING SERVICE	\$48.00	\$48.00
				Division 1 Total	\$5,973.00
				Department 1 Total	\$5,973.00

WARRANT REGISTER - GM0002

Department: 2 Integrated Services

Division: 1

Check #	Account Number	Payee	Description 1	Transaction Amount	Total Trans Amount
208001	101-0201-502.30-01	JOURNAL & TOPICS NEWSPAPERS	SUBSCRIPTION	\$33.00	\$33.00
				Division 1 Total	\$33.00
				Department 2 Total	\$33.00

WARRANT REGISTER - GM0002**Department: 3 Human Resources****Division: 1**

Check #	Account Number	Payee	Description 1	Transaction Amount	Total Trans Amount
207967	615-0301-552.42-75	GALLAGHER BASSETT SERVICES INC	CLAIMS - MEDICAL LOSS	\$7,018.98	\$7,018.98
	615-0301-552.42-80	GALLAGHER BASSETT SERVICES INC	CLAIMS - W/C	\$112,114.66	\$112,114.66
207991	615-0301-552.20-70	IL WORKERS COMPENSATION COMMISSION	IL RATE ADJUSTMENT	\$9,169.03	\$9,169.03
208031	101-0301-503.30-05	OFFICE DEPOT	OFFICE SUPPLIES	\$154.33	\$154.33
208043	615-0301-552.20-50	PETTY CASH	EILEEN HELLSTROM	\$20.00	\$20.00
208093	101-0301-503.21-65	VERIZON WIRELESS	ACCT 28544404900001	\$124.45	\$124.45
Division 1 Total					\$128,601.45
Department 3 Total					\$128,601.45

WARRANT REGISTER - GM0002**Department: 4 Legal Department****Division: 1**

Check #	Account Number	Payee	Description 1	Transaction Amount	Total Trans Amount
207962	101-0401-503.20-15	ERNEST R BLOMQUIST PC	RETAINER	\$4,170.00	\$4,170.00
208056	101-0401-503.21-65	ROSE MARY JURINEK	COURT REPORTER	\$910.00	\$910.00
208082	101-0401-503.33-05	SUMMIT PRINT SOLUTIONS	BUSINESS CARDS	\$48.00	\$48.00
208087	101-0401-503.33-05	THOMSON REUTERS-WEST	INFORMATION CHARGES	\$292.22	\$292.22
				Division 1 Total	\$5,420.22
				Department 4 Total	\$5,420.22

WARRANT REGISTER - GM0002**Department: 5 Finance****Division: 1**

Check #	Account Number	Payee	Description 1	Transaction Amount	Total Trans Amount
207912	505-0501-503.40-87	DANIEL BAIRD	50/50 SEWER REBATE	\$7,500.00	\$7,500.00
207967	611-0501-552.42-60	GALLAGHER BASSETT SERVICES INC	CLAIMS - LIABILITY LOSS	\$7,906.82	\$7,906.82
208031	101-0501-503.30-05	OFFICE DEPOT	OFFICE SUPPLIES	\$164.13	\$176.92
			OFFICE SUPPLIES	\$12.79	
208034	101-0501-503.22-01	PADDOCK PUBLICATIONS INC	ADVERTISING	\$54.00	\$54.00
208072	101-0501-503.30-05	SOUTHERN COMPUTER WAREHOUSE	OFFICE SUPPLIES	\$336.66	\$706.54
			OFFICE SUPPLIES	\$369.88	
208083	101-0501-503.21-65	SUPERION LLC	SERVICE DATA PROC, SFTWR	\$520.00	\$4,195.00
			SERVICE DATA PROC, SFTWR	\$3,675.00	
208101	505-0501-503.40-87	OWEN WEST	50/50 SEWER REBATE	\$7,500.00	\$7,500.00
Division 1 Total					\$28,039.28
Department 5 Total					\$28,039.28

WARRANT REGISTER - GM0002**Department: 6 Information Technology****Division: 1**

Check #	Account Number	Payee	Description 1	Transaction Amount	Total Trans Amount
207893	625-0601-553.20-39	AMERICANEAGLE INC	WEBSITE HOSTING FEES	\$180.00	\$180.00
207934	625-0601-572.50-10	CDS OFFICE TECHNOLOGIES	COMPUTER SUPPLIES	\$5,415.00	\$5,415.00
207941	625-0601-553.21-65	COMCAST PROCESSING CENTER	ACCT 907065060	\$800.32	\$800.32
207969	625-0601-553.33-05	GOVCONNECTION INC	COMPUTER SUPPLIES	\$10,978.89	\$10,978.89
207992	625-0601-553.21-02	IMAGE SYSTEMS & BUSINESS SOLUTIONS	PRINTING SERVICE	\$104.50	\$209.00
			PRINTING SERVICE	\$104.50	
207993	625-0601-553.33-05	INSIGHT PUBLIC SECTOR	COMPUTER SUPPLIES	\$5,250.00	\$5,250.00
208092	625-0601-553.21-65	VERIZON WIRELESS	ACCT 78036610800001	\$386.84	\$386.84
				Division 1 Total	\$23,220.05
				Department 6 Total	\$23,220.05

WARRANT REGISTER - GM0002**Department: 10 Boards & Commissions****Division: 15**

Check #	Account Number	Payee	Description 1	Transaction Amount	Total Trans Amount
207879	101-1015-502.30-05	ACADEMY ENGRAVING CO	SERVICE MISCELLANEOUS	\$300.00	\$300.00
				Division 15 Total	\$300.00

Division: 18

Check #	Account Number	Payee	Description 1	Transaction Amount	Total Trans Amount
207890	515-1018-525.40-55	ALPHAGRAPHS	MANE EVENT	\$122.00	\$122.00
207898	515-1018-525.40-55	ARLINGTON RENTAL INC	MANE EVENT	\$1,816.18	\$1,816.18
208039	515-1018-525.40-55	PDS SECURITY SERVICES	MANE EVENT	\$625.00	\$625.00
208068	515-1018-525.40-55	SIGNS BY TOMORROW	MANE EVENT	\$505.00	\$505.00
				Division 18 Total	\$3,068.18

Division: 21

Check #	Account Number	Payee	Description 1	Transaction Amount	Total Trans Amount
208043	101-1021-502.40-40	PETTY CASH	MICHAEL MERTES	\$29.48	\$29.48
				Division 21 Total	\$29.48

Division: 22

Check #	Account Number	Payee	Description 1	Transaction Amount	Total Trans Amount
207892	515-1022-525.40-55	AMERICAN PRINT INC	PRINTING SERVICE	\$155.00	\$155.00
				Division 22 Total	\$155.00
				Department 10 Total	\$3,552.66

WARRANT REGISTER - GM0002**Department: 30 Police Department****Division: 1**

Check #	Account Number	Payee	Description 1	Transaction Amount	Total Trans Amount
207899	101-3001-511.21-02	ARLINGTON SECURITY CO LLC	SERVICE EQUIPMENT	\$152.50	\$152.50
207928	101-3001-511.21-65	CAMIC JOHNSON LTD	PROFESSIONAL SERVICES	\$350.00	\$350.00
207948	101-3001-511.21-65	CONVERGENCE TECHNOLOGIES INC	POLICE EQUIPMENT & SUPPLY	\$934.29	\$5,944.29
			POLICE EQUIPMENT & SUPPLY	\$5,010.00	
207972	101-3001-511.33-25	GRAINGER W W INC	HARDWARE SUPPLIES	\$63.80	\$63.80
207985	101-3001-511.33-25	HOME DEPOT CREDIT SERVICES	HARDWARE SUPPLIES	\$31.94	\$31.94
207997	101-3001-511.30-35	JG UNIFORMS	CLOTHING	\$18.50	\$1,226.76
			CLOTHING	\$54.00	
			CLOTHING	\$269.85	
			CLOTHING	\$11.00	
			CLOTHING	\$220.00	
			CLOTHING	\$223.50	
			CLOTHING	\$105.91	
			CLOTHING	\$194.00	
			CLOTHING	\$130.00	
208012	101-3001-511.21-65	MB FINANCIAL BANK NA	PROCESSING FEE	\$57.00	\$57.00
208025	101-3001-511.21-65	NORTHERN IL FUNERAL SERVICES INC	SERVICE MISCELLANEOUS	\$425.00	\$1,810.00
			SERVICE MISCELLANEOUS	\$425.00	
			SERVICE MISCELLANEOUS	\$480.00	
			SERVICE MISCELLANEOUS	\$480.00	
208029	101-3001-511.22-02	NORTHWEST POLICE ACADEMY	DUES	\$50.00	\$50.00

WARRANT REGISTER - GM0002

Check #	Account Number	Payee	Description 1	Transaction Amount	Total Trans Amount
208029	101-3001-511.22-03	NORTHWEST POLICE ACADEMY	REGISTRATION	\$75.00	\$75.00
208031	101-3001-511.30-05	OFFICE DEPOT	OFFICE SUPPLIES	\$90.52	\$1,979.15
			OFFICE SUPPLIES	\$58.11	
			OFFICE SUPPLIES	\$1,513.58	
			OFFICE SUPPLIES	\$199.99	
			OFFICE SUPPLIES	\$100.33	
			OFFICE SUPPLIES	\$16.62	
208044	101-3001-511.22-03	PETTY CASH/POLICE	GERALD MOURNING	\$5.01	\$65.01
			KRISTIN EBY	\$60.00	
	101-3001-511.33-25	PETTY CASH/POLICE	GREG CZERNECKI	\$71.09	\$132.14
			KIM PETERSON	\$26.95	
			KIM PETERSON	\$34.10	
208051	101-3001-511.30-35	RAY O'HERRON	CLOTHING	\$134.95	\$405.95
			CLOTHING	\$271.00	
208062	101-3001-511.21-65	SECRETARY OF STATE	LICENSE PLATE RENEWAL	\$101.00	
208082	101-3001-511.22-10	SUMMIT PRINT SOLUTIONS	PRINTING SERVICE	\$48.00	\$48.00
208087	101-3001-511.21-65	THOMSON REUTERS-WEST	SERVICE PROFESSIONAL	\$331.25	\$331.25
				Division 1 Total	\$12,823.79

Division: 3

Check #	Account Number	Payee	Description 1	Transaction Amount	Total Trans Amount
207895	231-3003-511.40-01	ARLINGTON HEIGHTS ANIMAL HOSPITAL	VETERINARY SERVICES	\$216.50	\$216.50
207965	231-3003-511.40-01	FM K9	CANINE UNIT PROGRAM	\$300.00	\$300.00
208014	231-3003-511.40-01	MC GRATH JAMES	TRAVEL REQUEST	\$631.19	\$631.19

WARRANT REGISTER - GM0002

Check #	Account Number	Payee	Description 1	Transaction Amount	Total Trans Amount
208061	231-3003-511.40-01	SCIENTIFIC ANIMAL FEEDS AND NEEDS	CANINE UNIT PROGRAM	\$31.49	\$31.49
208085	231-3003-511.40-01	JEFFREY TEGTMEYER	TRAVEL REQUEST	\$675.45	\$675.45
				Division 3 Total	\$1,854.63
				Department 30 Total	\$14,678.42

WARRANT REGISTER - GM0002**Department: 35 Fire****Division: 1**

Check #	Account Number	Payee	Description 1	Transaction Amount	Total Trans Amount
207884	101-3501-512.22-10	ADMIRAL GRAPHICS	PRINTING SERVICE	\$311.06	\$311.06
207885	101-3501-512.21-02	AIR ONE EQUIPMENT	SERVICE EQUIPMENT	\$186.00	\$186.00
	101-3501-512.31-85	AIR ONE EQUIPMENT	FIRE SUPPLIES	\$260.75	\$260.75
207924	101-3501-512.33-50	BOUND TREE MEDICAL LLC	MEDICAL SUPPLIES	\$357.42	\$357.42
207933	101-3501-512.31-85	CDS OFFICE TECHNOLOGIES	COMPUTER SUPPLIES	\$759.00	\$759.00
207957	101-3501-512.21-02	DJS SCUBA LOCKER INC	EQUIPMENT MAINTENANCE	\$537.81	\$6,779.29
			SUPPLIES	\$4,210.00	
			EQUIPMENT MAINTENANCE	\$2,031.48	
207963	101-3501-512.30-01	FIRE ENGINEERING	SUBSCRIPTION RENEWAL	\$26.00	\$26.00
207997	101-3501-512.30-35	JG UNIFORMS	CLOTHING	\$49.95	\$49.95
208026	101-3501-512.22-03	NORTHWEST COMMUNITY HOSP	TRAINING	\$1,948.00	\$1,948.00
208030	101-3501-512.22-03	MATTHEW OATES	PM LICENSE FEE	\$41.00	\$41.00
208035	101-3501-512.21-02	PAUL CONWAY SHIELDS	EQUIPMENT MAINTENANCE	\$2,588.50	\$2,588.50
208036	101-3501-512.30-35	PAUL FAWLEY	OFFICE SUPPLIES	\$16.00	\$16.00
208080	101-3501-512.21-02	STEVE VACUUMS	VACUUM REPAIR	\$71.90	\$71.90
208084	101-3501-512.33-05	SYLVIA'S FLOWERS INC	FUNERAL FLOWERS	\$77.95	\$77.95
208088	101-3501-512.31-65	ULINE INC	MAINTENANCE SUPPLIES	\$264.66	\$264.66
				Division 1 Total	\$13,737.48
				Department 35 Total	\$13,737.48

WARRANT REGISTER - GM0002**Department: 37 Foreign Fire Insurance****Division: 1**

Check #	Account Number	Payee	Description 1	Transaction Amount	Total Trans Amount
207885	227-3701-512.30-35	AIR ONE EQUIPMENT	SAFETY SUPPLIES	\$4,115.94	\$4,115.94
				Division 1 Total	\$4,115.94
				Department 37 Total	\$4,115.94

WARRANT REGISTER - GM0002**Department: 40 Planning****Division: 1**

Check #	Account Number	Payee	Description 1	Transaction Amount	Total Trans Amount
207896	101-4001-521.40-40	ARLINGTON HTS CHAMBER OF COM	DUES	\$12,812.50	\$12,812.50
207950	101-4001-521.40-41	CREEKSIDE PRINTING	PRINTING SERVICE	\$732.08	\$732.08
207970	101-4001-521.20-05	GOVTEMPSUSA LLC	SERVICE PROFESSIONAL	\$1,792.00	\$1,792.00
207984	263-4001-571.20-05	HOLLAND & KNIGHT LLP	SERVICE PROFESSIONAL	\$4,930.00	\$4,930.00
208006	101-4001-521.22-15	LEGRAND REPORTING & VIDEO SERVICES	TRANSCRIPTS	\$291.45	\$291.45
208031	101-4001-521.30-05	OFFICE DEPOT	OFFICE SUPPLIES	\$57.54	\$633.56
			OFFICE SUPPLIES	\$10.44	
			OFFICE SUPPLIES	\$565.58	
208034	101-4001-521.22-01	PADDOCK PUBLICATIONS INC	ADVERTISING	\$189.00	\$189.00
	101-4001-521.40-41	PADDOCK PUBLICATIONS INC	ADVERTISING	\$3,987.00	\$3,987.00
208046	263-4001-571.20-05	PIONEER ENGINEERING & ENVIRONMENTAL	SERVICE CONSULTING	\$1,365.00	\$1,365.00
208071	263-4001-571.50-25	SOUND STRUCTURES INC	SERVICE ENGINEERING	\$500.00	\$500.00
208089	101-4001-521.22-02	URBAN LAND INSTITUTE - ULI	DUES	\$220.00	\$220.00
208095	101-4001-521.40-40	VISUAL EDGE CREATIVE SERVICES	ADVERTISEMENT	\$500.00	\$500.00
Division 1 Total					\$27,952.59
Department 40 Total					\$27,952.59

WARRANT REGISTER - GM0002**Department: 41 Community Devl Block Grnt****Division: 1**

Check #	Account Number	Payee	Description 1	Transaction Amount	Total Trans Amount
2117	215-4101-522.41-01	THREE D CONCRETE DESIGN INC	CASE 17-01	\$4,908.00	\$4,908.00
208005	215-4101-522.41-01	LEAD INSPECTORS INC	SF-R HUD	\$350.00	\$350.00
208034	215-4101-522.41-02	PADDOCK PUBLICATIONS INC	ADVERTISING	\$113.40	\$653.40
			ADVERTISING	\$157.95	
			ADVERTISING	\$198.45	
			ADVERTISING	\$183.60	
Division 1 Total					\$5,911.40
Department 41 Total					\$5,911.40

WARRANT REGISTER - GM0002**Department: 45 Building****Division: 1**

Check #	Account Number	Payee	Description 1	Transaction Amount	Total Trans Amount
208031	101-4501-523.30-05	OFFICE DEPOT	OFFICE SUPPLIES	\$106.59	\$121.62
			OFFICE SUPPLIES	\$7.82	
			OFFICE SUPPLIES	\$7.21	
208043	101-4501-523.22-03	PETTY CASH	BRIAN ALLEN	\$15.00	\$35.00
			LOU SOEST	\$20.00	
	101-4501-523.30-05	PETTY CASH	PATTY LEEVE	\$40.66	\$40.66
Division 1 Total					\$197.28

Division: 2

Check #	Account Number	Payee	Description 1	Transaction Amount	Total Trans Amount
207936	101-4502-523.21-65	CHICAGO TITLE COMPANY LLC	SERVICE PROFESSIONAL	\$60.00	\$60.00
207964	101-4502-523.21-10	FLECKS LANDSCAPING	PROPERTY MAINTENANCE	\$85.00	\$85.00
207980	101-4502-523.30-01	HEALTH SPECIAL REPORT	SUBSCRIPTIONS	\$28.90	\$28.90
208002	101-4502-523.20-25	JOURNEYS COUNSELING CENTER LLC	COUNSELING	\$925.00	\$925.00
208043	101-4502-523.33-10	PETTY CASH	PATTI KOZLOWSKI	\$33.36	\$33.36
208076	101-4502-523.21-65	STACY SHEIN STAPLETON	INTERPRETING SERVICES	\$90.00	\$90.00
Division 2 Total					\$1,222.26

Division: 3

Check #	Account Number	Payee	Description 1	Transaction Amount	Total Trans Amount
207976	101-4503-523.31-65	HARRIS TRUST & SAVINGS BANK	AMAZON MKTPLACE PMTS	\$115.14	\$245.29
			WAYFAIR*WAYFAIR	\$130.15	
208031	101-4503-523.31-65	OFFICE DEPOT	OFFICE SUPPLIES	\$81.87	\$81.87

Check Date: 8-30-2017

Wednesday, August 30, 2017

WARRANT REGISTER - GM0002

Check #	Account Number	Payee	Description 1	Transaction Amount	Total Trans Amount
				Division 3 Total	\$327.16
				Department 45 Total	\$1,746.70

WARRANT REGISTER - GM0002**Department: 50 Engineering****Division: 1**

Check #	Account Number	Payee	Description 1	Transaction Amount	Total Trans Amount
2118	401-5001-571.50-30	JAMES MYZIA	DRIVEWAY REIMBURSEMENT	\$448.80	\$448.80
207886	401-5001-571.50-30	LUBNA ALASEDI	SIDEWALK REIMBURSEMENT	\$431.25	\$431.25
207900	401-5001-571.50-30	ARROW ROAD CONSTRUCTION CO	SERVICE CONSTRUCTION	\$381,582.02	\$381,582.02
207918	401-5001-571.50-30	ALEXANDRIA BAZAROVA	DRIVEWAY REIMBURSEMENT	\$1,111.20	\$1,111.20
207939	101-5001-524.30-20	CLIFFORD WALD	PLOTTER PRINthead	\$197.50	\$197.50
207949	101-5001-524.30-35	CORPORATE IMAGING CONCEPTS INC	CLOTHING	\$194.10	\$194.10
207955	426-5001-571.50-25	DIMEO BROTHERS INC	SERVICE CONSULTING	\$41,884.31	\$41,884.31
207970	101-5001-524.20-05	GOVTEMPSUSA LLC	TEMP PLAN REVIEWER	\$2,394.00	\$2,394.00
207973	401-5001-571.50-30	ADAM GRUBBA	DRIVEWAY REIMBURSEMENT	\$773.21	\$773.21
207974	401-5001-571.50-45	HAEGER ENGINEERING LLC	SERVICE CONSULTING	\$1,000.00	\$1,000.00
207975	101-5001-524.20-05	HAMPTON LENZINI & RENWICK INC	SERVICE PROFESSIONAL	\$25,374.90	\$25,374.90
	401-5001-571.50-30	HAMPTON LENZINI & RENWICK INC	SERVICE PROFESSIONAL	\$1,853.86	\$1,853.86
208000	401-5001-571.50-30	JOHNSON PAVING CO	SERVICE CONSTRUCTION	\$431,799.00	\$431,799.00
208011	426-5001-571.50-25	MAURO SEWER CONSTRUCTION	SERVICE CONSULTING	\$2,000.00	\$2,000.00
208031	101-5001-524.30-05	OFFICE DEPOT	OFFICE SUPPLIES	\$59.80	\$59.80
208041	401-5001-571.50-30	DAN PERRY	DRIVEWAY REIMBURSEMENT	\$391.98	\$391.98
208052	426-5001-571.50-25	RILEY CONSTRUCTION	SERVICE CONSTRUCTION	\$160,629.42	\$160,629.42
208060	401-5001-571.50-30	CAROL SCHLEKER	DRIVEWAY REIMBURSEMENT	\$1,736.25	\$1,736.25
208094	101-5001-524.21-65	VERIZON WIRELESS	ACCT 98547850100002	\$555.57	\$555.57
Division 1 Total					\$1,054,417.17
Department 50 Total					\$1,054,417.17

WARRANT REGISTER - GM0002**Department: 71 Public Works****Division: 1**

Check #	Account Number	Payee	Description 1	Transaction Amount	Total Trans Amount
207880	101-7101-531.31-75	ACTIVE ELECTRICAL SUPPLY CO	STREET LIGHTING	\$163.90	\$4,124.09
			STREET LIGHTING	\$632.34	
			STREET LIGHTING	\$992.65	
			STREET LIGHTING	\$2,335.20	
207881	101-7101-531.31-55	ACTIVE LOCK AND KEY LTD	HARDWARE SUPPLIES	\$193.99	\$193.99
207882	515-7101-525.33-05	ACUTRAK SOLUTIONS	LIGHTING SUPPLIES	\$2,865.85	\$2,865.85
207883	101-7101-531.31-80	ADDISON BUILDING MATERIAL CO	HARDWARE SUPPLIES	\$16.92	\$16.92
207887	101-7101-531.31-85	ALEXANDER EQUIPMENT CO INC	FORESTRY SUPPLIES	\$209.95	\$399.95
			FORESTRY SUPPLIES	\$190.00	
207889	101-7101-531.21-11	ALPHA BUILDING MAINTENANCE SRVS	SERVICE BLDG MAINT	\$3,987.50	\$3,987.50
207891	101-7101-531.21-02	AMERICAN DOOR & DOCK	DOOR REPAIR	\$201.15	\$1,561.05
			DOOR REPAIR	\$545.85	
			DOOR REPAIR	\$268.20	
			DOOR REPAIR	\$545.85	
	401-7101-571.50-20	AMERICAN DOOR & DOCK	DOOR REPAIR	\$1,177.11	\$1,177.11
207901	101-7101-531.22-70	AT & T	ACCT 84725961248940	\$41.87	\$41.87
207902	101-7101-531.22-70	AT & T	ACCT 84743978686650	\$83.76	\$83.76
207903	101-7101-531.22-70	AT & T	ACCT 847R1605198974	\$2,081.36	\$2,081.36
207904	101-7101-531.22-70	AT & T	ACCT 847Z9727849771	\$650.57	\$650.57
207907	101-7101-531.22-70	AT & T	ACCT 84725331209504	\$7,943.31	\$7,943.31
207908	101-7101-531.22-70	AT & T	ACCT 84739893361501	\$200.95	\$200.95

WARRANT REGISTER - GM0002

Check #	Account Number	Payee	Description 1	Transaction Amount	Total Trans Amount
207909	101-7101-531.22-70	AT & T	ACCT 84725334382001	\$89.88	\$89.88
207911	101-7101-531.22-70	AT & T LONG DISTANCE	CORP ID 2147713	\$576.03	\$576.03
207917	101-7101-531.31-65	BAUDVILLE DESKTOP PUBLISHING	POLICE ID CARDS	\$345.78	\$345.78
207927	101-7101-531.21-62	C C CARTAGE INC	SERVICE DISPOSAL	\$3,640.00	\$3,640.00
207937	101-7101-531.21-11	CINTAS CORP	MATS	\$102.87	\$226.54
			MATS	\$27.59	
			MATS	\$30.99	
			MATS	\$65.09	
	101-7101-531.30-35	CINTAS CORP	UNIFORMS	\$60.07	\$180.21
			UNIFORMS	\$60.07	
			UNIFORMS	\$60.07	
207938	101-7101-531.21-55	CITY ESCAPE GARDEN CENTER & DESIGN	SERVICE MISCELLANEOUS	\$594.90	\$6,652.10
			SERVICE MISCELLANEOUS	\$2,855.17	
			SERVICE MISCELLANEOUS	\$2,855.17	
			SERVICE MISCELLANEOUS	\$346.86	
207943	101-7101-531.21-50	COMMONWEALTH EDISON COMPANY	ACCT 0282382003	\$21.53	\$21.53
207947	101-7101-531.21-50	COMMONWEALTH EDISON COMPANY	ACCT 3291084013	\$2,748.99	\$2,748.99
207952	101-7101-531.21-11	CRYSTAL MAINTENANCE & MGMT SRVS	BUILDING MAINTENANCE	\$7,645.00	\$7,645.00
207958	101-7101-531.21-02	DYNAMIC HEATING & PIPING CO	MAINTENANCE SUPPLIES	\$834.00	\$3,395.00
			MAINTENANCE SUPPLIES	\$2,561.00	
207960	101-7101-531.21-50	DYNEGY ENERGY SERVICES	ACCT 1627055057	\$1,350.26	\$1,350.26
207964	101-7101-531.21-55	FLECKS LANDSCAPING	PROPERTY MAINTENANCE	\$2,555.00	\$3,455.00
			PROPERTY MAINTENANCE	\$900.00	

WARRANT REGISTER - GM0002

Check #	Account Number	Payee	Description 1	Transaction Amount	Total Trans Amount
207964	435-7101-571.50-55	FLECKS LANDSCAPING	PROPERTY MAINTENANCE	\$18,097.70	\$18,097.70
207971	101-7101-531.31-65	GPM SYSTEMS	MAINTENANCE SUPPLIES	\$367.00	\$367.00
207972	101-7101-531.31-55	GRAINGER W W INC	ELECTRICAL SUPPLIES	\$427.12	\$504.72
			MAINTENANCE SUPPLIES	\$77.60	
207974	401-7101-571.50-30	HAEGER ENGINEERING LLC	SERVICE CONSTRUCTION	\$2,600.00	\$2,600.00
207977	101-7101-531.21-02	HASTINGS AIR ENERGY CONTROL	BUILDING MAINTENANCE	\$1,220.51	\$1,220.51
207978	101-7101-531.21-02	HAYES MECHANICAL	MAINTENANCE	\$279.00	\$7,425.11
			MAINTENANCE	\$842.00	
			MAINTENANCE	\$505.00	
			MAINTENANCE	\$793.00	
			MAINTENANCE	\$273.00	
			MAINTENANCE	\$435.00	
			MAINTENANCE	\$951.00	
			MAINTENANCE	\$499.11	
			MAINTENANCE	\$842.00	
			MAINTENANCE	\$505.00	
			MAINTENANCE	\$793.00	
			MAINTENANCE	\$273.00	
			MAINTENANCE	\$435.00	
207982	101-7101-531.21-55	HENDRICKSEN ROBERT W COMPANY	PROPERTY MAINTENANCE	\$9,711.00	\$42,285.75
			PROPERTY MAINTENANCE	\$12,316.00	
			PROPERTY MAINTENANCE	\$20,258.75	
207988	101-7101-531.21-50	HOMEFIELD ENERGY	ACCT 3291084013	\$8,547.84	

WARRANT REGISTER - GM0002

Check #	Account Number	Payee	Description 1	Transaction Amount	Total Trans Amount
207994	101-7101-531.21-11	INTL EXTERMINATORS INC	PEST CONTROL	\$60.00	\$552.00
			PEST CONTROL	\$60.00	
			PEST CONTROL	\$432.00	
207999	101-7101-531.31-55	JOHNSON CONTROLS	MAINTENANCE SUPPLIES	\$67.79	\$67.79
208003	101-7101-531.31-55	JUST FAUCETS	MAINTENANCE SUPPLIES	\$164.05	\$250.68
			MAINTENANCE SUPPLIES	\$86.63	
208008	101-7101-531.31-55	LOWES COMMERCIAL SERVICES	ELECTRICAL SUPPLIES	\$39.69	\$269.47
			ELECTRICAL SUPPLIES	\$45.48	
			HARDWARE SUPPLIES	\$184.30	
	101-7101-531.31-65	LOWES COMMERCIAL SERVICES	HARDWARE SUPPLIES	\$23.90	\$153.15
			HARDWARE SUPPLIES	\$22.98	
			BATTERIES	\$106.27	
	101-7101-531.31-85	LOWES COMMERCIAL SERVICES	MAINTENANCE SUPPLIES	\$22.25	\$22.25
	401-7101-572.50-15	LOWES COMMERCIAL SERVICES	HARDWARE SUPPLIES	\$332.50	\$332.50
208009	101-7101-531.31-85	MAC TOOLS	HARDWARE SUPPLIES	\$87.99	\$87.99
208010	101-7101-531.30-39	MANSFIELD OIL COMPANY	HARDWARE SUPPLIES	\$12,748.98	\$26,748.27
			HARDWARE SUPPLIES	\$13,999.29	
208015	101-7101-531.31-55	MCM ELECTRONICS	ELECTRICAL SUPPLIES	\$197.11	\$197.11
208016	101-7101-531.31-55	MECOR INC	ELECTRICAL SUPPLIES	\$901.25	\$901.25
208017	101-7101-531.31-65	MENARDS-LONG GROVE	HARDWARE SUPPLIES	\$109.94	\$252.07
			HARDWARE SUPPLIES	\$54.97	
			MAINTENANCE SUPPLIES	\$87.16	

WARRANT REGISTER - GM0002

Check #	Account Number	Payee	Description 1	Transaction Amount	Total Trans Amount
208018	101-7101-531.21-02	METROPOLITAN INDUSTRIES	MAINTENANCE	\$1,615.00	\$1,615.00
208020	101-7101-531.21-55	MILIEU DESIGN LLC	SERVICE MISCELLANEOUS	\$2,254.89	\$8,858.73
			SERVICE MISCELLANEOUS	\$2,254.89	
			SERVICE MISCELLANEOUS	\$2,094.06	
			SERVICE MISCELLANEOUS	\$2,254.89	
208027	101-7101-531.31-55	NORTHWEST ELECTRICAL SUPPLY CO	LIGHTING SUPPLIES	\$318.95	\$318.95
	101-7101-531.31-75	NORTHWEST ELECTRICAL SUPPLY CO	LIGHTING SUPPLIES	\$138.72	\$138.72
208033	101-7101-531.22-70	PACIFIC TELEMAGEMENT SERVICES	TELEPHONE	\$153.00	\$153.00
208040	426-7101-571.50-25	PERFORMANCE CONSTRUCTION & ENG LLC	SERVICE CONSTRUCTION	\$14,445.52	\$14,445.52
208042	101-7101-531.31-40	PESCHES FLOWER SHOP	FLOWERS	\$805.82	\$886.55
			FLOWERS	\$41.57	
			FLOWERS	\$39.16	
208043	101-7101-531.22-03	PETTY CASH	JEREMY MEYER	\$35.00	\$70.00
			ROB BONIFAZI	\$35.00	
	101-7101-531.31-65	PETTY CASH	GLENN ADAMS	\$44.87	\$44.87
208047	101-7101-531.21-55	POWELL TREE CARE INC	SERVICE TREES	\$8,927.10	\$8,927.10
208049	101-7101-531.30-35	PRO SAFETY INC	SAFETY SUPPLIES	\$587.37	\$587.37
	101-7101-531.33-05	PRO SAFETY INC	SAFETY SUPPLIES	\$224.87	\$259.37
			SAFETY SUPPLIES	\$34.50	
208058	101-7101-531.30-35	SAF T GUARD INTL INC	SAFETY SUPPLIES	\$196.51	\$196.51
208059	101-7101-531.21-55	SANDY'S LAWN AND TREE CARE	SERVICE MISCELLANEOUS	\$1,718.00	\$1,718.00
208063	401-7101-571.50-20	SECURITY EQUIPMENT SUPPLY	EQUIPMENT, NON OFFICE	\$4,149.09	\$4,149.09
208064	515-7101-525.33-05	SERVICE SANITATION	EQUIPMENT, NON OFFICE	\$2,678.00	\$5,356.00

WARRANT REGISTER - GM0002

Check #	Account Number	Payee	Description 1	Transaction Amount	Total Trans Amount
208065	101-7101-531.31-55	SHERWIN ACE HARDWARE	PLUMBING SUPPLIES	\$5.98	\$5.98
	101-7101-531.31-65	SHERWIN ACE HARDWARE	HARDWARE SUPPLIES	\$3.99	\$3.99
	101-7101-531.31-85	SHERWIN ACE HARDWARE	HARDWARE SUPPLIES	\$6.99	\$32.57
			AGRICULTURAL SUPPLIES	\$25.58	
208067	401-7101-572.50-15	SIGN OUTLET	EQUIPMENT, NON OFFICE	\$7,794.96	\$7,794.96
208069	101-7101-531.21-02	SIMPLEX GRINNELL	HARDWARE SUPPLIES	\$475.74	\$1,189.33
			HARDWARE SUPPLIES	\$713.59	
208070	101-7101-531.22-70	SOUND INCORPORATED	TELEPHONE	\$72.73	\$145.46
			TELEPHONE	\$72.73	
208075	101-7101-531.31-55	STANDARD PIPE & SUPPLY INC	MAINTENANCE SUPPLIES	\$168.03	\$416.72
			MAINTENANCE SUPPLIES	\$199.10	
			MAINTENANCE SUPPLIES	\$49.59	
208081	101-7101-531.31-55	SUBURBAN TRIM & GLASS	BUILDING MAINTENANCE	\$169.50	\$339.00
			BUILDING MAINTENANCE	\$169.50	
208091	101-7101-531.21-02	VALLEY FIRE PROTECTION	MAINTENANCE SUPPLIES	\$899.00	\$2,549.00
			MAINTENANCE SUPPLIES	\$689.00	
			MAINTENANCE SUPPLIES	\$549.00	
			MAINTENANCE SUPPLIES	\$412.00	
208098	235-7101-571.50-25	WALKER PARKING CONSULTANTS	SERVICE CONSTRUCTION	\$1,694.52	
208106	101-7101-531.31-55	1000BULBS.COM	LIGHTING SUPPLIES	\$80.67	\$80.67
801658	101-7101-531.21-50	NICOR	ACCT 94830700004	\$343.83	\$343.83
801659	101-7101-531.21-50	COMMONWEALTH EDISON COMPANY	ACCT 0002031003	\$31.55	\$138.36

WARRANT REGISTER - GM0002

Check #	Account Number	Payee	Description 1	Transaction Amount	Total Trans Amount
801659	101-7101-531.21-50	COMMONWEALTH EDISON COMPANY	ACCT 2278061084	\$106.81	\$138.36
				Division 1 Total	\$228,996.93
				Department 71 Total	\$228,996.93

WARRANT REGISTER - GM0002**Department: 72 Water and Sewer****Division: 1**

Check #	Account Number	Payee	Description 1	Transaction Amount	Total Trans Amount
207883	505-7201-561.31-05	ADDISON BUILDING MATERIAL CO	MAINTENANCE SUPPLIES	\$23.32	\$23.32
207910	505-7201-561.22-70	AT & T	ACCT 84725301748135	\$44.13	\$44.13
207927	505-7201-561.21-36	C C CARTAGE INC	RENTAL/LEASE EQUIPMENT	\$14,091.28	\$14,091.28
	505-7201-561.31-90	C C CARTAGE INC	PROPERTY MAINTENANCE	\$9,678.30	\$9,678.30
207938	505-7201-561.21-30	CITY ESCAPE GARDEN CENTER & DESIGN	SERVICE MISCELLANEOUS	\$127.50	\$201.84
			SERVICE MISCELLANEOUS	\$74.34	
207940	505-7201-561.22-70	COMCAST CABLE	INTERNET	\$184.85	\$184.85
207942	505-7201-561.21-50	COMMONWEALTH EDISON COMPANY	ACCT 0528113037	\$1,331.86	\$1,331.86
207944	505-7201-561.21-50	COMMONWEALTH EDISON COMPANY	ACCT 0081080033	\$1,844.66	\$1,844.66
207945	505-7201-561.21-50	COMMONWEALTH EDISON COMPANY	ACCT 0441087047	\$1,869.56	\$1,869.56
207959	505-7201-561.21-50	DYNEGY ENERGY SERVICES	ACCT 0297160055	\$237.25	\$237.25
207961	505-7201-561.31-07	EJ EQUIPMENT INCORPORATED	MAINTENANCE SUPPLIES	\$411.16	\$411.16
207979	505-7201-561.21-35	HBK WATER METER SERVICE INC	METER MAINTENANCE	\$2,069.00	\$2,069.00
	505-7201-561.31-02	HBK WATER METER SERVICE INC	METER MAINTENANCE	\$456.25	\$456.25
207981	505-7201-561.31-05	HELLER LUMBER CO	HARDWARE SUPPLIES	\$34.46	\$34.46
	505-7201-561.31-07	HELLER LUMBER CO	HARDWARE SUPPLIES	\$81.27	\$81.27
207987	505-7201-561.21-50	HOMEFIELD ENERGY	ACCT 0081080033	\$428.32	\$428.32
208008	505-7201-561.31-07	LOWES COMMERCIAL SERVICES	WATER SEWER SYSTEM SUPPLY	\$126.24	\$126.24
	505-7201-561.31-85	LOWES COMMERCIAL SERVICES	HARDWARE SUPPLIES	\$28.96	\$28.96
208022	505-7201-561.31-65	JEFF MUSINSKI	EVENT SUPPLY REIMBURSE	\$99.77	\$99.77

WARRANT REGISTER - GM0002

Check #	Account Number	Payee	Description 1	Transaction Amount	Total Trans Amount
208038	505-7201-561.20-05	PDC LABORATORIES INC	WATER SAMPLES	\$1,185.00	\$1,185.00
208043	505-7201-561.22-03	PETTY CASH	SCOTT SHIRLEY	\$10.00	\$10.00
	505-7201-561.31-65	PETTY CASH	RON COOKE	\$6.58	\$6.58
208048	505-7201-561.21-02	PREMIER FALL PROTECTION	RECERTIFICATION	\$850.00	\$850.00
208049	505-7201-561.30-35	PRO SAFETY INC	SAFETY SUPPLIES	\$587.38	\$587.38
	505-7201-561.33-05	PRO SAFETY INC	SAFETY SUPPLIES	\$224.88	\$259.38
			SAFETY SUPPLIES	\$34.50	
208058	505-7201-561.30-35	SAF T GUARD INTL INC	SAFETY SUPPLIES	\$196.51	\$196.51
208063	505-7201-561.31-55	SECURITY EQUIPMENT SUPPLY	SAFETY SUPPLIES	\$445.00	\$445.00
208065	505-7201-561.31-02	SHERWIN ACE HARDWARE	PUMPING SYSTEM SUPPLIES	\$5.97	\$5.97
	505-7201-561.31-05	SHERWIN ACE HARDWARE	PUMPING SYSTEM SUPPLIES	\$7.98	\$13.12
			PUMPING SYSTEM SUPPLIES	\$5.14	
208075	505-7201-561.31-02	STANDARD PIPE & SUPPLY INC	MAINTENANCE SUPPLIES	\$87.74	\$87.74
208099	505-7201-561.31-01	WATER PRODUCTS CO	HARDWARE SUPPLIES	\$2,034.00	\$2,034.00
801658	505-7201-561.21-50	NICOR	ACCT 05850400002	\$49.23	\$407.55
			ACCT 16797600000	\$87.62	
			ACCT 76830700001	\$270.70	
801659	505-7201-561.21-50	COMMONWEALTH EDISON COMPANY	ACCT 1092085063	\$127.34	\$127.34
				Division 1 Total	\$39,458.05
				Department 72 Total	\$39,458.05

WARRANT REGISTER - GM0002**Department: 73 Parking****Division: 2**

Check #	Account Number	Payee	Description 1	Transaction Amount	Total Trans Amount
207906	235-7302-532.21-50	AT & T	ACCT 84725309782425	\$138.83	\$138.83
208019	235-7302-532.21-02	MID AMERICAN ELEVATOR CO INC	VAIL ST GARAGE REPAIR	\$737.50	\$1,089.50
			VAIL ST GARAGE REPAIR	\$352.00	
208063	235-7302-532.31-65	SECURITY EQUIPMENT SUPPLY	ELECTRICAL SUPPLIES	\$210.24	\$210.24
Division 2 Total					\$1,438.57

Division: 3

Check #	Account Number	Payee	Description 1	Transaction Amount	Total Trans Amount
207905	235-7303-532.21-50	AT & T	ACCT 84763200281737	\$1,219.16	\$1,219.16
207946	235-7303-532.21-50	COMMONWEALTH EDISON COMPANY	ACCT 4643395004	\$623.64	\$623.64
207986	235-7303-532.21-50	HOMEFIELD ENERGY	ACCT 4643395004	\$2,068.84	\$2,068.84
Division 3 Total					\$3,911.64
Department 73 Total					\$5,350.21

WARRANT REGISTER - GM0002**Department: 75 Municipal Fleet Services****Division: 1**

Check #	Account Number	Payee	Description 1	Transaction Amount	Total Trans Amount
207887	621-7501-551.21-07	ALEXANDER EQUIPMENT CO INC	MAINTENANCE SUPPLIES	\$159.60	\$159.60
207894	621-7501-551.21-36	AMERIGAS-PALATINE	PROPANE	\$28.18	\$28.18
207897	621-7501-551.21-07	ARLINGTON HTS FORD INC	VEH MAINTENANCE SUPPLY	\$1,495.55	\$1,495.55
207916	621-7501-551.31-51	BATTERIES PLUS LLC	VEH MAINTENANCE SUPPLY	\$322.73	\$566.81
			VEH MAINTENANCE SUPPLY	\$244.08	
207931	621-7501-551.31-51	CAR QUEST	VEH MAINTENANCE SUPPLY	\$64.40	\$79.87
			VEH MAINTENANCE SUPPLY	\$15.47	
207932	621-7501-551.21-07	CATCHING FLUID POWER INC	VEH MAINTENANCE SUPPLY	\$428.11	\$428.11
207935	621-7501-551.31-51	CHICAGO PARTS AND SOUND LLC	VEH MAINTENANCE SUPPLY	(\$142.12)	\$1,022.09
			VEH MAINTENANCE SUPPLY	\$134.21	
			VEH MAINTENANCE SUPPLY	\$179.30	
			VEH MAINTENANCE SUPPLY	\$205.73	
			VEH MAINTENANCE SUPPLY	\$56.83	
			VEH MAINTENANCE SUPPLY	\$112.26	
			VEH MAINTENANCE SUPPLY	\$122.84	
			VEH MAINTENANCE SUPPLY	\$353.04	
207937	621-7501-551.30-35	CINTAS CORP	UNIFORMS	\$60.08	\$180.24
			UNIFORMS	\$60.08	
			UNIFORMS	\$60.08	
207953	621-7501-551.21-07	CUMBERLAND SERVICENTER INC	DOT INSPECT COUPONS	\$1,150.00	\$1,150.00
207954	621-7501-551.31-65	DGI SUPPLY A DOALL COMPANY	WELDING SUPPLIES	\$60.19	\$60.19

WARRANT REGISTER - GM0002

Check #	Account Number	Payee	Description 1	Transaction Amount	Total Trans Amount
208004	621-7501-551.21-07	KARDS INC	REPAIR DAMAGE TO TOWER	\$7,010.25	\$7,010.25
208021	621-7501-551.31-51	MPC COMMUNICATIONS & LIGHTING INC	VEH MAINTENANCE SUPPLY	\$1,500.00	\$1,500.00
208074	621-7501-551.31-51	STANDARD EQUIPMENT CO	VEH MAINTENANCE SUPPLY	\$120.69	\$120.69
208079	621-7501-551.21-02	STERIG HYDRAULIC JACK REPAIRS	VEH MAINTENANCE SUPPLY	\$1,660.00	\$1,660.00
208090	621-7501-551.33-05	US AUTO FORCE	VEH MAINTENANCE SUPPLY	\$24.75	\$24.75
208100	621-7501-551.31-51	WENTWORTH TIRE SERVICE	VEH MAINTENANCE SUPPLY	\$255.32	\$869.28
			VEH MAINTENANCE SUPPLY	\$613.96	
208103	621-7501-551.31-51	WHOLESALE DIRECT INC	VEH MAINTENANCE SUPPLY	\$295.45	\$295.45
208104	621-7501-551.31-51	WIRFS INDUSTRIES INC	VEH MAINTENANCE SUPPLY	\$268.00	\$268.00
Division 1 Total					\$16,919.06
Department 75 Total					\$16,919.06

WARRANT REGISTER - GM0002**Department: 90 Capital****Division: 1**

Check #	Account Number	Payee	Description 1	Transaction Amount	Total Trans Amount
207956	505-9001-571.50-25	DIXON ENGINEERING INC	SERVICE MISCELLANEOUS	\$675.00	\$675.00
208013	505-9001-571.50-25	MC CLURE ENGINEERING ASSOCIATES	SERVICE CONSULTING	\$27,402.19	\$27,402.19
208040	505-9001-571.50-25	PERFORMANCE CONSTRUCTION & ENG LLC	SERVICE CONSTRUCTION	\$340,481.36	\$340,481.36
208055	505-9001-571.50-25	ROBINSON ENGINEERING LTD	SERVICE CONSULTING	\$4,655.75	\$4,655.75
				Division 1 Total	\$373,214.30
				Department 90 Total	\$373,214.30

WARRANT REGISTER - GM0002

Department: 95 Debt Service

Division: 50

Check #	Account Number	Payee	Description 1	Transaction Amount	Total Trans Amount
207914	301-9550-582.60-20	BANK OF NEW YORK MELLON	PAYING AGENT FEE	\$802.50	\$802.50
Division 50 Total					\$802.50
Department 95 Total					\$802.50
TOTAL ALL FUNDS:					\$1,993,156.82



Item: Bicycle & Pedestrian Plan

Department: Planning & Community Development

Report of the Committee-of-the-Whole Meeting of August 14, 2017

Bicycle & Pedestrian Plan

Trustee Tinaglia moved, seconded by Trustee LaBedz, that the Committee-of-the-Whole recommend to the Village Board approval of the Village of Arlington Heights' Bicycle & Pedestrian Plan. The motion passed unanimously.

Bid Section

Item:

Bid Opening Date:

Account Numbers:

Total Budget for Specific Item:

Bid Amount:

ATTACHMENTS:

Description	Type
PC Minutes 7/26/17	Minutes
Memo from Bicycle Pedestrian Committee	Memorandum
DRAFT Bicycle & Pedestrian Plan - April 2017	Exhibits
Bicycle & Pedestrian Appendices - March 2017	Exhibits
DRAFT Minutes - Bicycle & Pedestrian Committee 4-20-17	Minutes
Comp Plan Subcommittee Minutes 5-10-17	Minutes

PLAN

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

RE: BICYCLE & PEDESTRIAN PLAN - PC #17-006

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 26th day of July, 2017 at the hour of 7:30 p.m.

MEMBERS PRESENT:

TERRY ENNES, Chairman
LYNN JENSEN
MARY JO WARSKOW
JOE LORENZINI
BRUCE GREEN
SUSAN DAWSON

ALSO PRESENT:

BILL ENRIGHT, Deputy Director

CHAIRMAN ENNES: I will call this meeting of the Plan Commission to order. I would ask you all to please stand and join us in the pledge of allegiance.

(Pledge of allegiance.)

CHAIRMAN ENNES: Thank you. Bill, will you take the roll?

MR. ENRIGHT: Absolutely. Commissioner Cherwin.

(No response.)

MR. ENRIGHT: Commissioner Dawson.

COMMISSIONER DAWSON: Here.

MR. ENRIGHT: Commissioner Drost.

(No response.)

MR. ENRIGHT: Commissioner Green.

COMMISSIONER GREEN: Here.

MR. ENRIGHT: Commissioner Jensen.

COMMISSIONER JENSEN: Here.

MR. ENRIGHT: Commissioner Lorenzini.

COMMISSIONER LORENZINI: Here.

MR. ENRIGHT: Commissioner Sigalos.

(No response.)

MR. ENRIGHT: Commissioner Warskow.

COMMISSIONER WARSKOW: Here.

MR. ENRIGHT: Chairman Ennes.

CHAIRMAN ENNES: Yes, present. Do we have the minutes from the last meeting?

Could I ask the Petitioner to come forward? I should say have all the notices been given?

MR. ENRIGHT: Yes, the Petitioner is the Village of Arlington Heights, and the public notice was published in the Daily Herald.

CHAIRMAN ENNES: Can I ask the Petitioner to come? We're going to hear first the PC #17-006, the Bicycle and Pedestrian Plan.

MR. ENRIGHT: Staff would like to do an introductory comment or two, and then the members of the Bicycle & Pedestrian Advisory Committee would like to make a presentation.

CHAIRMAN ENNES: Okay.

MR. ENRIGHT: This has been a project that the Bicycle & Pedestrian Advisory Committee had been working on with the Chicago Metropolitan Agency for Planning, as well as Briget Schwab is here, she's an engineer with the Engineering Department. Briget is the liaison to the Bicycle & Pedestrian Advisory Commission. The Commission and the Department of Engineering were able to secure a grant from CMAP, a local technical assistance grant to do this project. It's a very comprehensive, thorough project. We'll explain a little bit about the methodology.

One point of interest that was mentioned at the Comprehensive Plan Subcommittee is typically a plan like this could cost a municipality anywhere from \$125,000 to \$180,000 to conduct, that's how thorough it was. But the Village did not have to match any of the funds, so it did not cost the Village anything other than a lot of time and effort obviously. But that just gives you kind of an idea of the magnitude of this project and how thorough the plan is and how Staff really supports that. I don't know if, Bridget, if you wanted to add anything to it?

MS. SCHWAB: No, just that we're very thankful for the Commission and all the effort that they've put forward as well as CMAP. They both did an excellent job and we can certainly not get this through without all of their help.

CHAIRMAN ENNES: Bill, are you done?

MR. ENRIGHT: Yes, so we'll turn it over to the Commission.

MR. JUFFA: Good evening. First of all, I want to return the gratitude to the Village Staff and everybody involved, CMAP, for all the work done on the draft of the Bicycle and Pedestrian Plan.

CHAIRMAN ENNES: Can I interrupt you? Just, can you give your names?

MR. JUFFA: My name is Juergen Juffa, J-u-e-r-g-e-n J-u-f-f-a. I'm the Chair of the Bicycle & Pedestrian Advisory Commission.

CHAIRMAN ENNES: And anybody else who is going to also present?

MR. SZABO: Sure, I'll also present. My name is Peter Szabo, former Chair of the Bicycle & Pedestrian Advisory Commission. For the majority of the time, we developed the plan.

CHAIRMAN ENNES: Thank you.

MR. JUFFA: The framework for the Bicycle and Pedestrian Plan, obviously the Bicycle and Pedestrian Plan fits right at the Village Comprehensive Plan. What does the Village Comprehensive Plan say about things that relate to the bicycle plan? The Comprehensive Plan says that the Village wants to provide for bicycle traffic and establish safe bicycle path systems. They want to create a quality pedestrian environment, minimize conflict between the vehicular and pedestrian traffic. Protecting the environment is an overarching theme. Of course we want to promote the adequacy and efficiency of the traffic and transportation system. Lastly, the plan talks specifically about implementing traffic calming measures in residential areas.

MR. SZABO: All those goals were laid forth in the plan as well, the Bicycle and Pedestrian Plan. But we began by setting forward with our vision statement and setting forth two main goals which we feel are very well represented in the plan. Those are to improve safety for all pedestrians, cyclists and motorists in the Village, and to increase the comfort and convenience of cycling and walking in the Village of Arlington Heights.

MR. JUFFA: Back in 2013, the BPAC and the Village asked for feedback by the League of American Bicyclists about becoming a bicycle-friendly community, and the data say four things. In order to get there, you need to update the Bicycle Policy Plan which is obviously the subject tonight. We need to expand the bicycle network. We need to overcome physical barriers. One barrier that is specifically mentioned is the access to Lake Arlington from the south. We need to increase overall efforts for encouragement, education, and evaluation.

MR. SZABO: So, beginning with the development of the plan, we're pretty enthused to see the community involvement. You can see the first point here is the great community response we received on our survey the team had put together and we had online for a period of one month. We got a lot of great feedback from that, and that largely informed how we approached the development of the plan. Then we also held stakeholder interviews of residents and Staff. We conducted an expansive walking and bicycling audit, held a visioning workshop, and then also met with the Arlington Heights Bicycle Club to get their input as well.

MR. JUFFA: I want to briefly talk about the survey results from the over 1,000 people who actually contributed in the survey, left over 2,000 markers on an online map to specifically identify issues, opportunities and challenges. Briefly speaking, what you see in dark red is where people see issues. What you see in dark blue is where people would like to go.

Then specifically on the next slide, Lake Arlington, identified as a major destination, and you see the intersection of Windsor and Palatine probably as one of the major obstacles as seen by the participants in the online survey.

Another area, the triangle area, so the area of Arlington Heights Road, Rand, and Palatine, seen as a major destination for walking and bicycling seen with one of the highest concentration of obstacles for doing just that, cycling and walking there.

MR. SZABO: So, the plan, like I said before, took all of those markers that were placed on the map into account and proposed a comprehensive approach to addressing as many of those issues as we could through planning level, proposals. What that looks like is a sort of a re-vision of what the existing bikeways network would look like on the street to the road user, whether it's a cyclist, motor vehicle operator, or a pedestrian.

So, we developed the framework routes which is what's highlighted on this map. You can see the key in the corner. But it accentuates the framework routes and then fills in connections and gaps where people, as shown on the previous slide, would like to go by bicycle or on foot but currently have trouble reaching. Those gaps are filled with several types of engineering treatments such as multi-use trails and side paths as shown here. The ComEd right of way proposed trail, that would be an off-street trail, and that's a suggestion that's been in previous bike and pedestrian plans for the Village, and then side paths which would allow easier access to the triangle area and Busse Woods.

Then here is a slide that shows some images that can be found in the plan, seen in the plan that show different types of treatments and provide examples of where they would be best suited throughout the Village. Treatments like road diets, multi-use paths and side paths, shared roads, bike lanes, and buffered bike lanes. Then the maps which indicate where in the Village these sites, or these treatments would be seen.

MR. JUFFA: The bike plan not only talks about cycling, it also talks about improvement for pedestrian. Obviously we have a very, very good network to start out with, so there is less discussion for pedestrian improvements. Basically, the plan proposes filling in sidewalks as infills on short stretches. Then listed here are a few areas where more extensive sidewalks extensions would have to be added.

Then in summary, the plan supports obviously the goals of the Comprehensive Plan that the Village adopted in 2015. It builds on to the 1996 Bicycle Policy Plan. The key is establishing framework routes, and then for these framework routes it proposes bicycle infrastructure upgrades. Lastly, it lists a variety of sidewalk improvements that are proposed. That ends our presentation.

MR. ENRIGHT: Chairman, if I could just mention one other thing. This was reviewed by the Comprehensive Plan Subcommittee on May 10th of this year which yourself and other members of the Commission saw along with Trustee Tinaglia. The Subcommittee recommended full support of this Comprehensive Plan amendment at that time.

CHAIRMAN ENNES: I ask the Commissioners if they have any questions. Sue, let me start with you.

COMMISSIONER DAWSON: It's a lot. You know what, I was kind of expecting Lynn to go first because this is his favorite topic.

COMMISSIONER JENSEN: I don't have really much to say. First of all, I commend the Commission, Staff, and the consultants. I think it's one of the best consulting reports I've ever seen and I've seen quite a few of them. So, I think you all did a wonderful job at the Commission, and the Village Staff did a wonderful job, and I think you are an excellent

resource for the Village. I'm hoping the Village will take every opportunity to start implementing what you propose here because it makes a lot of sense to me.

So, I'm very, very supportive of this effort and I think the sooner the Village starts implementing part of that and hopefully the rest of that plan the better. So, I really don't have anything very specific to ask about that. Later on when we get into the next topic, I have a few more things to say.

CHAIRMAN ENNES: Mary Jo?

COMMISSIONER WARSKOW: I, too, am very supportive. I'm a commuter bicyclist, and I very much enjoy having the ability to do that and having somewhere to park at the Metra Station. I would like to see our ability enhanced throughout the entire Village for everybody to be able to have more access to bicycling to places. I do think you concentrated on the right areas of Lake Arlington's connection to Busse Woods. I used to live right behind North Point Shopping Center and, gosh, there was no way as a young teenager I was going to bicycle to the other two shopping centers in the area.

So, I think you concentrated on the right areas. I think the plan is great. I really thank CMAP for providing all of its guidance on creating the plan. I do hope that the Village does come up with a plan for implementing these.

Is there something that has been discussed about priorities or first steps in terms of implementation?

MS. SCHWAB: In the plan, there is already, it identifies priority projects in the plan. We have actually already gone and applied for some grant funding for one of the key locations which is at Lake Cook Crossing. I don't know if we've received funding yet, if Cook County has made their decision. We do, we are actually actively applying for funding for some of these projects. There's a couple of other options coming up for us, but we will --

COMMISSIONER WARSKOW: That's wonderful.

MS. SCHWAB: Some of the things discussed in the plan have already been implemented while the plan was in progress.

COMMISSIONER WARSKOW: Okay. Well, are we relying solely on grant funding to implement these?

MR. JUFFA: With the present condition of funding for other projects, the most efficient way of getting some of these done is absolutely to go after grant funding. Some of the costs are fairly large and the grant funding can afford us the ability to do some of these and kind of demonstrate the improvements and what they do. We are hoping from that we can kind of build on it. So, yes, in the first few years, there is no question, we're going to be looking for grant funding as a major component of getting this built.

COMMISSIONER WARSKOW: Okay, and I'll be very interested to see your outreach plan, to hear how we're communicating this to Village residents and how we're getting them on board with all of these projects. That's it for me.

CHAIRMAN ENNES: Joe?

COMMISSIONER LORENZINI: Yes. I, too, think the report was excellent. Very, very, very detailed. Very easy to follow.

I do have one question about cut-throughs. Could somebody describe a little more when they're going to be used? Is there any issue with privacy? Because I've seen some paths like in Rolling Meadows that seem to go between people's houses. I'm just concerned about if there may be an issue with that, if there's some concern with privacy of the residences they're going next to.

MR. SZABO: I could speak to that, but maybe John would also like to add something. I believe that the majority of the cut-throughs that are mentioned in this here, specifically in mind are really improving upon existing cut-throughs. So, if there's already a sidewalk that connects maybe a cul de sac to another street, widening that to minimum recommended width for a side path or multi-use trail specifications.

COMMISSIONER LORENZINI: Like I say, I just, there's one in Rolling Meadows and it just seems like it goes between two houses along somebody's backyard. You're not talking about something like that, are you?

MR. SZABO: No. Certainly, I mean we wouldn't be taking on any, gaining any easements to my knowledge. Maybe John?

MR. O'NEAL: Yes, I can speak somewhat. Hi, my name is John O'Neal and I'm a planner at CMAP. I helped produce this plan along with other team members. But the cut-throughs are a concept that already exist in the Village. We noticed around the Village various places where a sidewalk basically connected to subdivisions that were built at different times and didn't have a connection, however, there were destinations on both sides. So, the Village has either worked with the property owners to gain an easement or already owns the property. In some cases, they were rights of way that were never utilized as streets, so they were able to build a sidewalk there. In other cases, they probably got an easement.

We didn't research, do that legal research to find out what the ownership was. But we're assuming that's usually what it is, an easement or the Village owns it outright. But, yes, most of the improvements that we, there are relatively few cut-throughs and most of those were improvements of existing sidewalks to bikeway standards. So, basically widening it, maybe putting signage in and making sure that a cyclist that approached that cut-through would have the right sort of angle of approach and have a smooth transition.

So, those were the concerns that we were looking at with the cut-throughs.

COMMISSIONER LORENZINI: Okay, thank you.

MR. O'NEAL: You're welcome.

CHAIRMAN ENNES: Bruce?

COMMISSIONER GREEN: I think it was a great plan, the way it's laid out. It does hit the trouble spots. It's scary enough crossing some of these intersections in a car, let alone trying to walk across the street. So, I think they are zeroing in on the right areas to start off with here. But I think it was a great report.

CHAIRMAN ENNES: I'm a total proponent of it. I wish we could have done it 15-20 years ago from now. But glad to see it is where it is.

We have a couple of people in the audience. Do any of you have questions or comments?

QUESTIONS FROM AUDIENCE

MR. EASLEY: No. I'm actually --

MR. DANKO: We're all Bike Commissioners.

MR. EASLEY: Yes, we're all Bike Commission. I'm David Easley. I think, I'm very excited to have been a part of this development of the plan, and I really, really hope that it gets --

CHAIRMAN ENNES: David, why don't you come up and identify yourself?

Give us your name.

MR. EASLEY: Sorry about that.

CHAIRMAN ENNES: That's okay.

MR. EASLEY: I'm David Easley. I'm a Commissioner on the Bike & Pedestrian Advisory Commission. I just wanted to say that I'm very, very proud of this report and I'm glad that I could play a small role in the development of it. I really hope that you give it the proper consideration and that the Village ultimately approves it. I think it's something that will be really good for our community to make it a safer and a more prosperous place to live.

CHAIRMAN ENNES: I think we will see a lot of its good.

MR. EASLEY: Yes.

CHAIRMAN ENNES: Thank you.

MR. EASLEY: We're very excited about it.

CHAIRMAN ENNES: Anyone else? Okay, your name please?

MR. DANKO: I'm Paul Danko, I'm also on the Bicycle & Pedestrian Advisory Commission and live on the north end of town. I don't really have anything to add beyond what David has already said. But pleased to be here and pleased to have you take a look at the plan.

CHAIRMAN ENNES: Any of the Commissioners have any other comments?

COMMISSIONER DAWSON: I didn't get a chance to say that I'm also, I'm glad about the plan, but I agree with Commissioner Warskow. I'd like to know, I'd like to see this be more than just a plan because I don't currently ride my bike too much around the town because of safety concerns. I have young children, I'm concerned that they'll be injured. They don't ride a bike to Lake Arlington and other places for safety reasons. So, I'd really love to see this implemented.

CHAIRMAN ENNES: Sooner rather than later?

COMMISSIONER DAWSON: Sooner rather than later, yes. There are many places that are priority as noted, but there's a lot of high priority, so it doesn't really clarify for us what would be like a starting point or a priority. So, it will be interesting to see when we narrow down the priorities where we would really be starting. That's it.

CHAIRMAN ENNES: Do we have a motion?

COMMISSIONER LORENZINI: I'd like to make a motion.

A motion to the Village Board of Trustees approval of PC #17-006, the Village of Arlington Heights Bicycle and Pedestrian Plan.

CHAIRMAN ENNES: Is there a second?

COMMISSIONER DAWSON: Second.

CHAIRMAN ENNES: We have a second. All in favor?

COMMISSIONER GREEN: No, roll call.

CHAIRMAN ENNES: Roll call, okay.

MR. ENRIGHT: Commissioner Dawson.

COMMISSIONER DAWSON: Yes.

MR. ENRIGHT: Commissioner Green.

COMMISSIONER GREEN: Yes.

MR. ENRIGHT: Commissioner Jensen.

COMMISSIONER JENSEN: Yes.

MR. ENRIGHT: Commissioner Lorenzini.

COMMISSIONER LORENZINI: Yes.

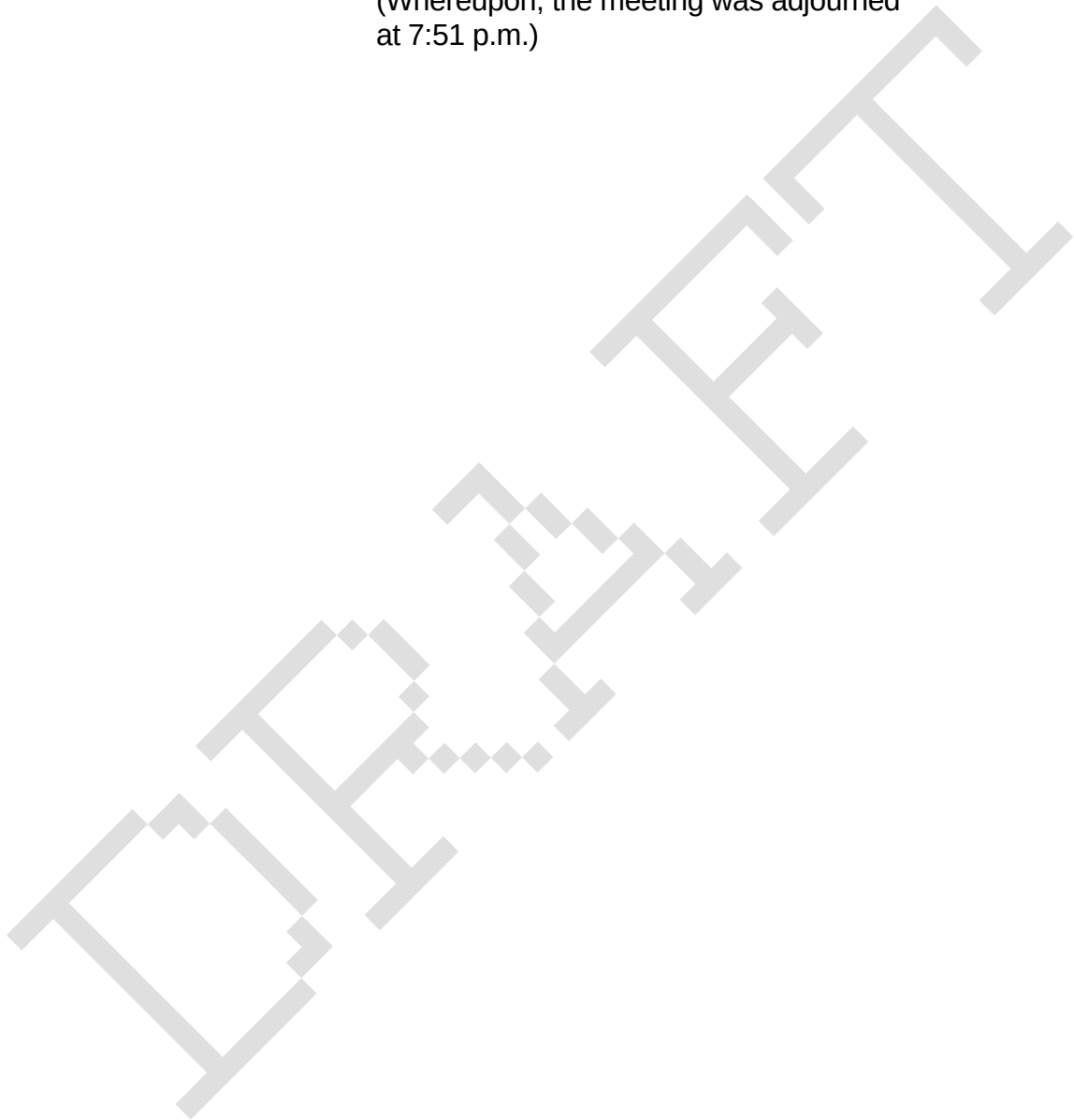
MR. ENRIGHT: Commissioner Warskow.

COMMISSIONER WARSKOW: Yes.

MR. ENRIGHT: Chairman Ennes.

CHAIRMAN ENNES: Yes. So, we have 100 percent approval and good luck going to the Village Board.

(Whereupon, the meeting was adjourned
at 7:51 p.m.)



MEMORANDUM

TO: Briget Schwab, P.E.
FROM: Bicycle & Pedestrian Advisory Commission
SUBJECT: Bicycle and Pedestrian Plan
DATE: April 20, 2017

The attached Bicycle and Pedestrian Plan is the result of intensive planning efforts undertaken by CMAP with extensive public input from residents and guidance from Village Staff. This planning effort was funded through a Sustainable Communities Regional Planning grant by the US Department of Housing and Urban Development, allocated by the CMAP Local Technical Assistance program. The plan was unanimously approved by the BPAC on April 20, 2017.

The Plan will serve as a valuable vehicle to accomplish the following goals laid forth in the Village's Comprehensive Plan as updated in 2015:

- To provide for bicycle traffic and to establish safe bicycle path systems
- Create a quality pedestrian environment and minimize conflict between vehicular and pedestrian traffic.
- To protect the environment by minimizing the need for the operation of individual automobiles within the Village
- To promote the adequacy, efficiency, convenience, aesthetics and safety of traffic and transportation.
- Implement traffic calming measures in residential areas.

The plan describes ways to improve access to important recreational destinations in the community and beyond as well as for providing an overall network to travel safely and conveniently to all destinations in the community by walking and bicycling. It proposes state of the art facilities that are best suited to promoting active transportation throughout the village. It applies innovative solutions to the most pressing issues raised by Village resident respondents to the community survey in 2014.

The document also provides an actionable framework for the further implementation of the Complete Streets policy adopted by the Village Board in 2013. In addition, the Plan will serve as a conduit for the Village to earn designation of Bicycle Friendly Community. This credential will ultimately raise the profile of the Village for prospective residents and businesses, stimulating sustained economic growth and make the Village a more attractive place to live. The Plan recommends building on the strength of Arlington Heights' history of the successes of the Village regarding transit oriented development nature.

We recommend approval of the Plan by the Planning Commission.

ATTACHED: VAH Bicycle and Pedestrian Plan



Village of Arlington Heights Draft Bicycle and Pedestrian Plan

April 2017



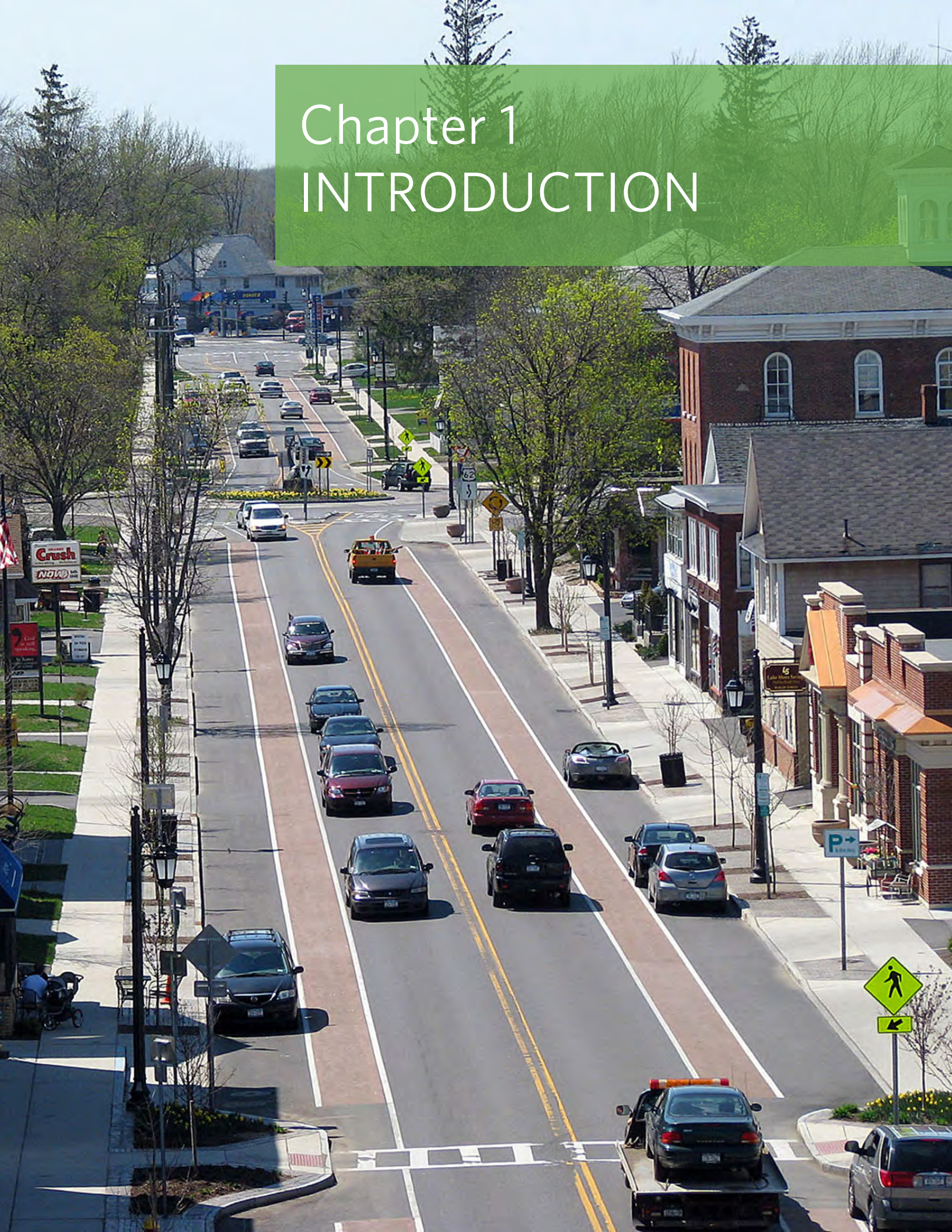


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Chapter 1

INTRODUCTION



This Bicycle and Pedestrian Plan builds upon and advances successful efforts already completed or underway by the Village of Arlington Heights to cultivate a vibrant, lively downtown and safe, attractive, and livable neighborhoods where walking and bicycling are convenient ways to travel. It provides detailed recommendations for specific locations in Arlington Heights where bicycle and pedestrian infrastructure improvements are needed to achieve key, Village-wide goals related to access, mobility, health, and sustainability and identifies actions that the Village can take to improve and enhance its active transportation network, create safe and enjoyable bicycle and pedestrian routes, and encourage sustainable local transportation. While offering detailed, planning-level recommendations for particular locations, the ultimate purpose of this plan is to provide a vision – and guide to achieving that vision – of a Village-wide Complete Streets network that safely accommodates all users and connects to neighboring communities. The plan aims to improve conditions for bicycling and walking, improve traffic safety, enhance local businesses, and foster a healthier, more environmentally friendly community.

The creation of this plan was identified as a high priority for the Arlington Heights Bicycle and Pedestrian Advisory Commission (AH BPAC), Village staff, and Village Board. The Village considers it to be a crucial element in ongoing efforts to encourage bicycling and walking as transportation and recreation and to increase the safety and convenience of travel by these modes. The AH BPAC and the Village Board also recognize the important role that a comprehensive, up-to-date bicycle and pedestrian plan can play in helping to implement the Village's Complete Streets policy (adopted in 2013) and also in helping to achieve Bicycle Friendly Community status through the League of American Bicyclists.

As part of the planning process, the following vision statement was developed to guide both the development and implementation of the plan:

“The Village of Arlington Heights is a bicycle- and pedestrian-friendly community that strives through its policies, plans, and programs and in the design, construction, and operations of its roadways and related infrastructure, to ensure that residents and visitors of all ages and abilities are able to travel safely and conveniently to community destinations by walking and bicycling.”

Bicycle and Pedestrian Advisory Commission

In 1985, the Village established a Bicycle Commission to help reduce congestion through the promotion of bicycle use. In 2009, this commission's scope was broadened to include pedestrian travel and it was renamed the Bicycle and Pedestrian Advisory Commission (AH BPAC). The Commission's purpose is, "to assist the Village in the development of comprehensive plans for bicycling and walking within Arlington Heights." The Commission consists of seven members, all residents of Arlington Heights, appointed by the Village President, with consent of the Village Board, to three-year terms.¹

Arlington Heights' Engineering Department appoints an Administrative Liaison for AH BPAC. AH BPAC has been instrumental in advancing cycling and walking interests and developing and promoting activities to increase bicycling and walking in Arlington Heights. Their work has included publication of a bikeways map (first published in 1988), the installation of the Village's first and, at present, only on-street bike lane on Davis Street (in the mid-1990s), and organization of the Village's first community bike ride (June 2014).

¹ See Commission webpage for current members and other information, at http://www.vah.com/government/commissions/bicycle_commission.aspx.

Guidance from Previous Plans

The Village of Arlington Heights has a history of creating long-range planning documents that have been used successfully to help guide growth and development. This Bicycle and Pedestrian Plan builds – and expands – upon many of the Village’s current planning documents and policies, including the Village’s 1988 Bicycle Plan, which was updated in 1996. Another key document that the plan builds upon is the Village’s Bikeways map (2014). The map includes existing routes, planned routes, potential routes, Village roads, key destinations, and bicycle safety rules. The map is updated approximately every one to three years by the Village and AH BPAC.

In addition to the Village, a number of neighboring communities have created bicycle and trail plans. Moreover, the Northwest Municipal Conference and Chicago Metropolitan Agency for Planning (CMAP) have completed larger regional bikeway plans that include bikeway facilities or corridors that traverse the Village.

Guidance for this plan was also provided by CMAP’s GO TO 2040 Comprehensive Regional Plan, which promotes investment in public transportation, walking, and biking as a key strategy to achieve the goals of livable communities and improved regional mobility. The plan recognizes that improvements to walking and biking are necessary to help improve safety, increase access and mobility, reduce air pollution, and decrease congestion on the region’s roadways.

² Largest in terms of population - see <http://chicagolandcommercial.com/arlington-heights-office-space>.

³ <http://www.ahpd.org/about-ahpd>.

⁴ <http://www.neighborhoodscout.com/neighborhoods/crime-rates/top100safest>.

Regional Context

As the largest community in Chicago's northwestern suburban corridor, Arlington Heights is currently home to approximately 76,000 residents.² The Village was recognized by Newsweek Magazine as one of the "Top 100 U.S. Cities."³ In addition, Arlington Heights was recognized in 2014 by Neighborhood Scout as one of the 100 safest cities in the country.⁴ It is widely known as an attractive, relatively affluent, well-educated community with a lively downtown, whose population grew very rapidly after World War I and has remained relatively stable since 1990.

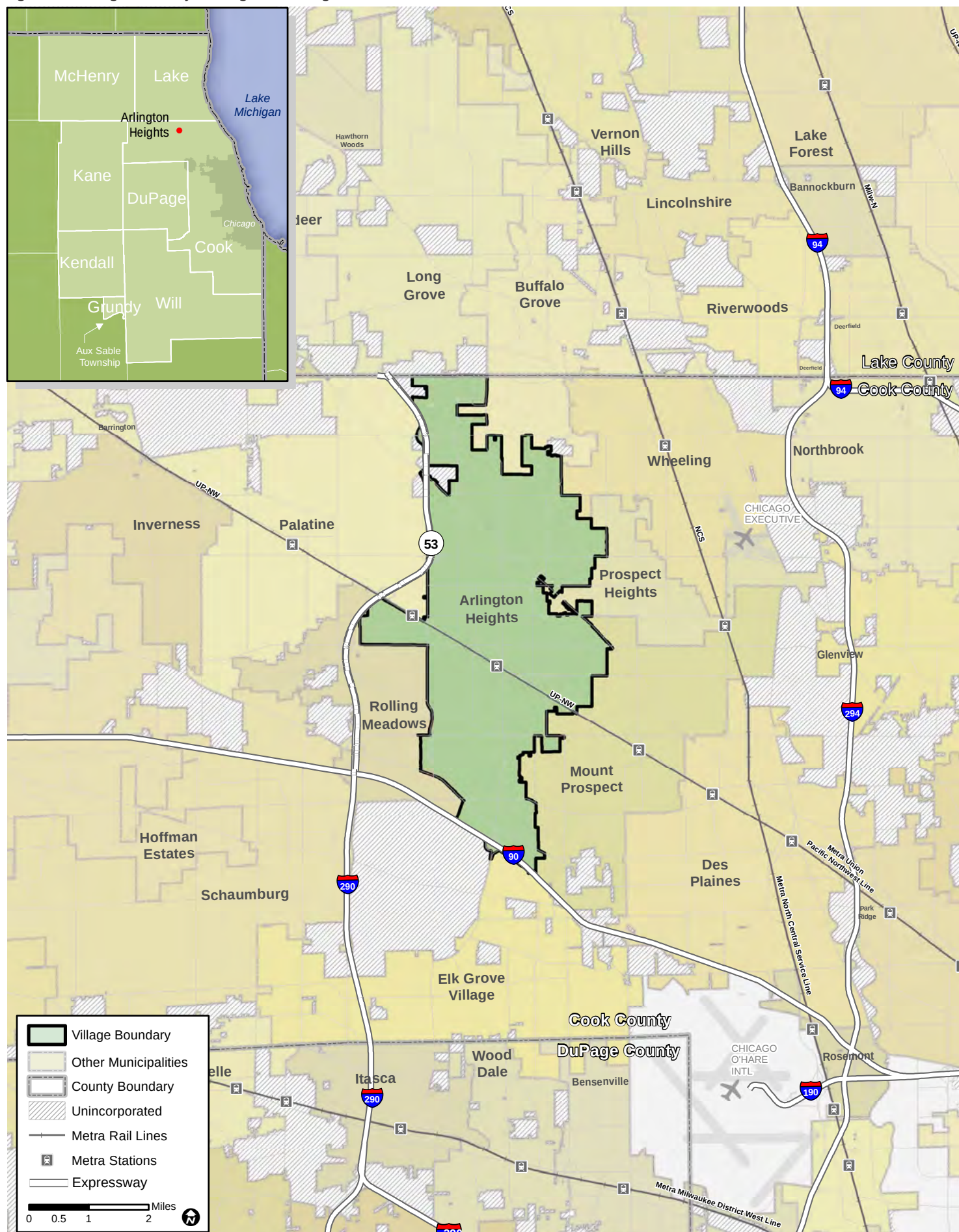
Arlington Heights is located in northern Cook County, adjacent to the border of Lake County, approximately 24 miles northwest of downtown Chicago and 8 miles from O'Hare International Airport. Like its neighbors, Arlington Heights is almost completely built-out, with very little unincorporated land left within its boundaries (*Figure 1.1*).

Arlington Heights has excellent access to many transportation amenities. Interstate 90 provides access to Elgin, O'Hare International Airport, and downtown Chicago. Illinois Route 53, which is planned to extend north into Lake County, provides easy motor vehicle access to Schaumburg and to communities further south (Interstate 290), as well as to the Elgin-O'Hare Expressway (Illinois Route 390), which is currently being extended east to O'Hare. Arlington Heights is also directly connected with other northwestern suburbs and downtown Chicago via Metra's Union Pacific Northwest (UP NW) rail line. There are two Metra stations in the Village – the Arlington Heights station, located downtown, and the Arlington Park station, which is on the western border of the Village at the Arlington Park International Race Course. Together, these stations see an average daily ridership of approximately 4,500 riders.

The Village abuts two Forest Preserve properties at its northern and southern borders. The Cook County Forest Preserve Ned Brown/Busse Woods Preserve lies southwest of the Village. This 3,558-acre preserve includes a very popular 10.8-mile paved trail, which can be accessed from Rolling Meadows and Arlington Heights at only one entry point: along Golf Road (at Wilke Road). At the northern border of the Village, across Lake Cook Road, is the Lake County Forest Preserve's Buffalo Creek Preserve. The 408-acre preserve has a network of four miles of crushed-gravel trails. Access is at the northwest corner of the intersection of Arlington Heights and Lake Cook Road, and also at the at-grade trail crossing over Schaeffer Road (north of Lake Cook Road).

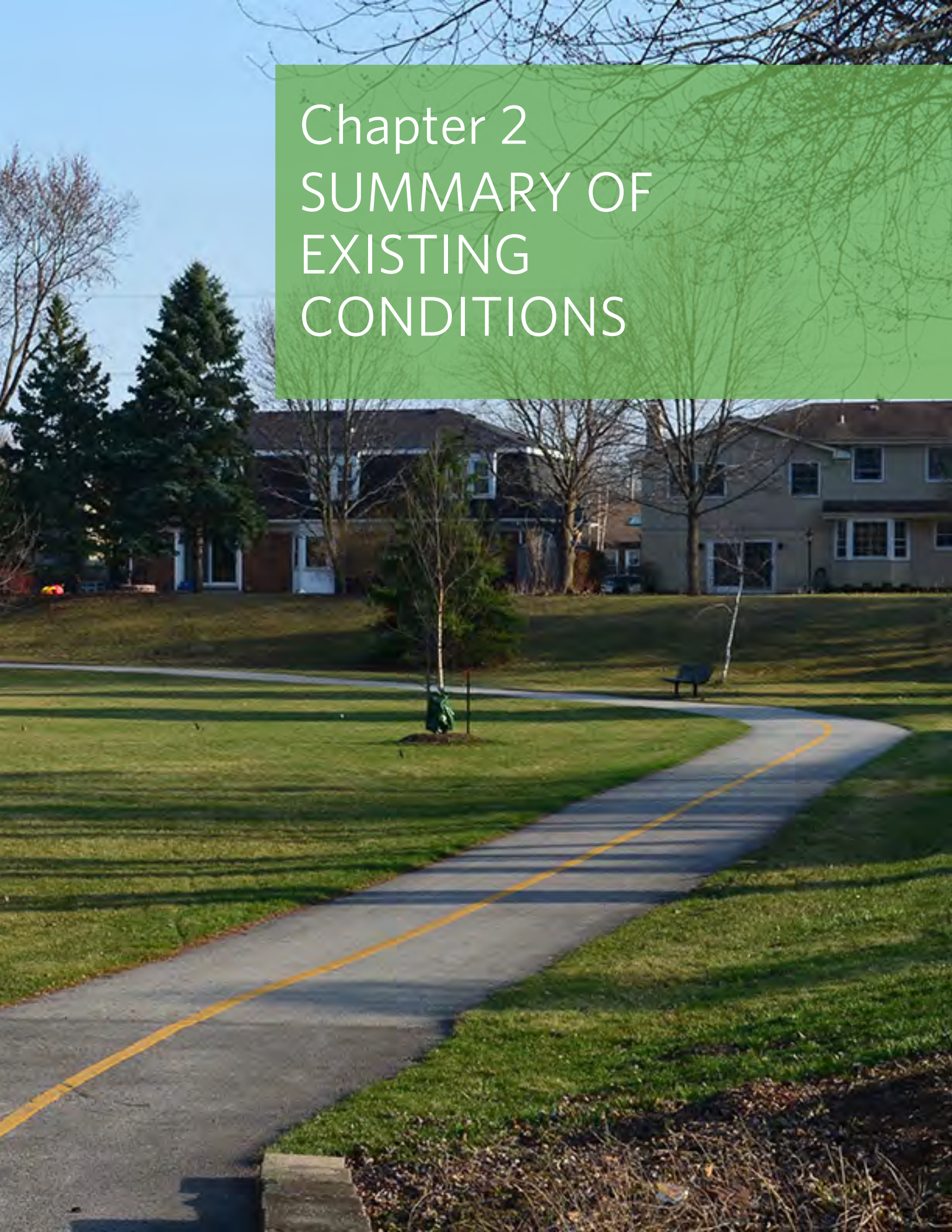
In addition to the downtown civic, commercial, and entertainment core, Arlington Heights has large areas of retail and commercial development along Rand Road, and in the southern part of the Village, near Golf and Algonquin Roads. The areas were designed for easy access by automobile and are difficult to reach and traverse on foot or by bicycle. Active modes of transportation are discouraged in these areas due to their automobile-focused site designs and busy arterial roads, which may create a sense of unease for individuals who choose to walk or bike to these spaces.

Figure 1.1 - Village Boundary and Regional Setting



Chapter 2

SUMMARY OF EXISTING CONDITIONS



This chapter summarizes the existing conditions relating to demographics, land use, transportation, employment, and infrastructure within Arlington Heights, which serves as a basis for the plan's recommendations. For a more detailed overview of existing conditions, please refer to the stand-alone Existing Conditions Report that was created as part of this planning process.

⁵ Data discussed in this section is drawn from the 2000 U.S. Census, 2010 U.S. Census, and the 2008-2012 American Community Survey.

⁶ In this chapter, where demographic data and statistics are presented, "region" means the seven counties comprising the CMAP planning area (Cook, DuPage, Lake, McHenry, Kane, Kendall, and Will).

Demographics

To gain insight into the market and demographic dynamics that impact the Arlington Heights community, data from the U.S. Census Bureau was gathered for analysis.⁵ The Village can be characterized generally as an affluent community that is older and more educated compared to both the County and the region.⁶ Arlington Heights' housing stock consists primarily of single-family detached homes and large multifamily structures. Analysis of census data resulted in the following findings:

- Arlington Heights' population remained relatively constant in the last decade (1.2 percent decline vs. 3.4 percent decline for Cook County and 3.5 percent growth for the region). Arlington Heights' households are slightly smaller than regional averages (2.41 persons per household vs. 2.60 for Cook County and 2.73 for the region).
- Arlington Heights has an older age profile compared to the County and Chicago region (17.2 percent of residents are over 65 vs. 11.9 percent for Cook County and 11.3 percent for the region). The median age in the Village is 42.7 vs. 35.3 for Cook County.
- Arlington Heights experienced little change in its racial and ethnic makeup in the last decade. Currently, white residents are the majority of Arlington Heights' population (84.6 percent), followed by Asian residents (7.1 percent) and Hispanic or Latino residents (5.7 percent).
- Arlington Heights' median income is above the County and regional averages (\$77,121, vs. \$54,648 for Cook County and \$71,198 for the region).

Land Use

Land use refers to the designation of land for various uses, including residential, commercial, industrial, office, and open space. **Figure 2.1** illustrates the distribution of land uses in the Village. Calculations of acreage are based on data in CMAP's 2010 Land Use Inventory, which is parcel-based and therefore excludes roads and public rights-of-way from calculations.

Residential

Residential areas account for the majority of land area in the Village, with single-family and multi-family residences making up nearly 41.3 percent and 5.7 percent of the land area, respectively. Single-family homes in the Village are typically detached homes of one to two stories tall. Over 55 percent of the homes in the Village are single-family detached, which is slightly higher than the regional average (50 percent).

Transportation/Communications/Utilities/ROW

This category represents 24 percent of the land use in Arlington Heights (2,606 acres). The majority of the acreage is dedicated public right-of-way owned by the Village, the County, or the State. In addition to street rights-of-way, other uses in this category include rail lines, cell towers, and other utilities.

Commercial and Mixed Use

There are various scales of commercial development within Arlington Heights, including small commercial nodes within neighborhoods, downtown shops, and larger, auto-oriented commercial developments along major thoroughfares. Commercial properties account for 8.6 percent of total land use, falling generally into two categories: mixed-use and automobile-oriented. Although Downtown Arlington Heights includes a number of multi-family developments, the majority of its area is a pedestrian-oriented mixed-use shopping and entertainment district. Arlington Park Race Track is also included within the commercial land use classification.

Open Space

Nearly 5 percent of Arlington Heights is classified as public open space. The majority of the open space is owned and maintained by the Arlington Heights Park District. Most of the parks in the community have sidewalks and/or wider multi-use trails (typically of relatively short length and trails that form loops).

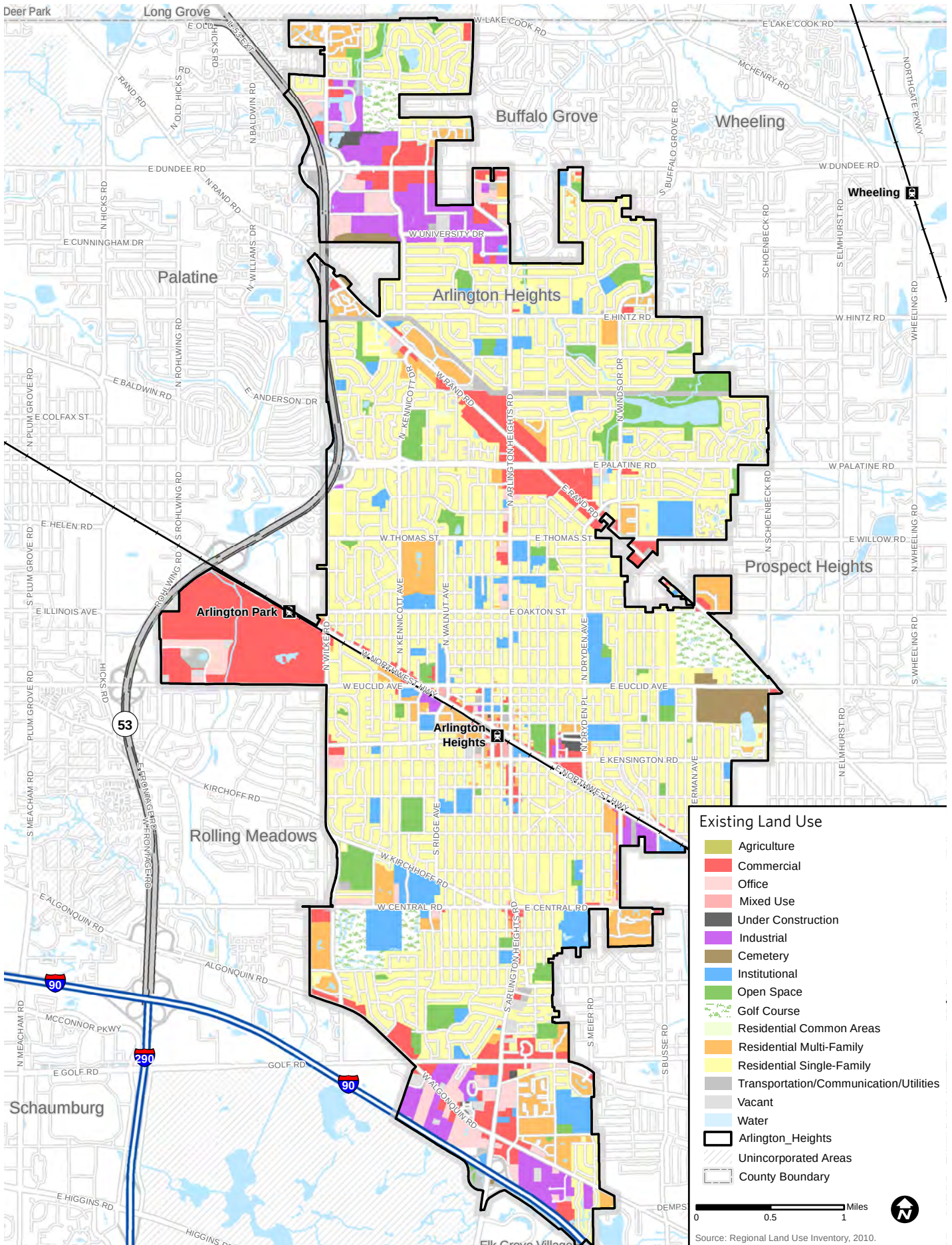
Institutional

Institutional uses, such as churches, schools, social services, and government, also make up nearly 5 percent of land use. Arlington Heights is home to public and private schools in three school districts, including Arlington Heights School District 25, Community School District 59, and Township High School District 214. Civic uses, including Village Hall and Recreation Park, are concentrated in the downtown area.

Industrial

Industrial development makes up 3.4 percent of Arlington Heights' land uses, and is concentrated in the southern and northern segments of the Village along I-90 and near Dundee Road and Illinois Route 53, respectively.

Figure 2.1 - Existing Land Use



Employment

Employment and Residential Locations

Arlington Heights residents are employed throughout the metropolitan region, with 87.3 percent of its residents working outside the Village. However, approximately 24 percent (7,934) of Arlington Heights commuters (32,804) work in adjacent or nearby municipalities. When combined with the Village residents who commute to work within Arlington Heights (1,874), the percentage of residents who work within relatively easy cycling distance (that is, within the Village or neighboring communities) is approximately 29.8 percent (9,808).

Persons employed in Arlington Heights (approximately 43,449) come from all parts of the seven-county Chicago metropolitan region. Just over 10 percent of the Arlington Heights workforce lives in the Village itself. As noted above, almost 30 percent of Arlington Heights workers reside in adjacent or nearby municipalities, including Palatine, Mount Prospect, Schaumburg, Hoffman Estates, Rolling Meadows, Des Plaines, Buffalo Grove, and Elk Grove Village. This presents an opportunity to increase the active transportation mode shares by improving, expanding, and connecting municipal bikeway networks, sidewalks, and public transportation routes.

Transportation and Affordability

Mode Share

Compared to Cook County and the region, a higher percentage of Arlington Heights residents drive alone to work (86.2 percent vs. 65.2 and 72.5 percent, respectively), while fewer walk or bike (2.1 percent vs. 5.5 percent for Cook County and 4.1 percent for the region). Compared to Cook County, Arlington Heights has a significantly lower proportion of transit users (6.2 vs. 18.4 percent).

Housing + Transportation Affordability Index

Residents with long commutes, particularly by automobile, often face high transportation costs that offset the gains of moving to communities with less expensive housing. **Table 2.1** shows the percentage of total income a household earning the region's Average Median Income would spend on housing plus transportation if that household lived in the average home in Arlington Heights, Cook County, or the Chicago metropolitan region. At 53.2 percent, Arlington Heights' combined housing and transportation cost is higher than both the County and the region, and it is above the 45 percent target that characterizes "affordability."

Table 2.1 - Housing and Transportation Costs, 2010

	ARLINGTON HEIGHTS	COOK COUNTY	CHICAGO REGION (MSA)
Housing Costs as percent of income	32.0%	30%	30%
Average Monthly Housing Cost per month	\$1,679	\$1,534	\$1,534
Transportation Costs as percent of income	20%	18%	20%
Annual Transportation Cost per year	\$11,340	\$11,046	\$12,273
"H+T" Costs as percent of income	52%	48%	50%

Source: HUD "H+T Affordability Index": <http://www.locationaffordability.info/lai.aspx>

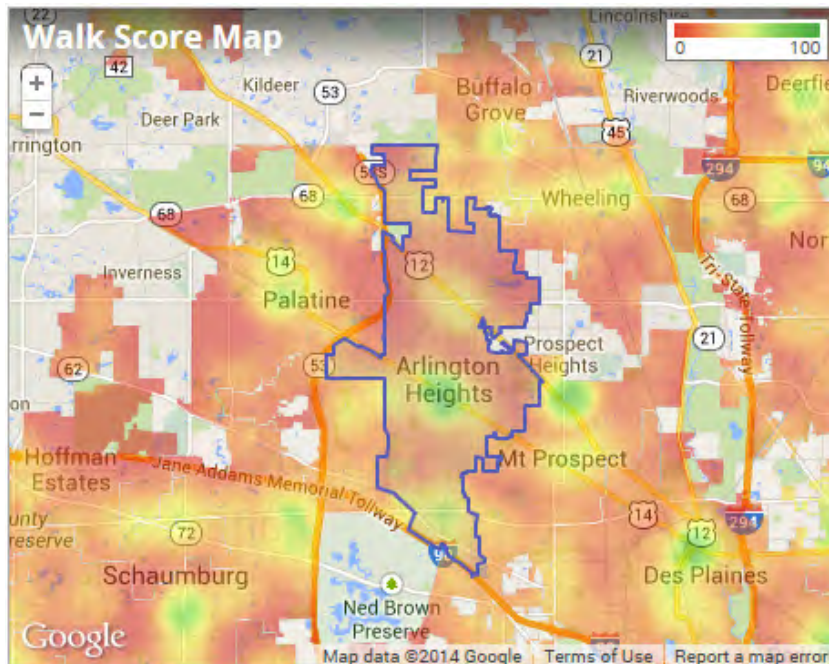
Note: Red text if the percentage exceeds the standard threshold of affordability: 30% for housing costs and 45% for housing and transportation costs combined.

Walking and Walkability

Walkability is an important factor in the health and vitality of our communities. Elements of a walkable neighborhood include: a central attraction; a main street, or public space; buildings close to the street; and “complete streets,” designed for safe travel for all modes. Higher housing density and access to amenities, stores, parks, and places of work are also important. Planners refer to the “D’s” of walkability: density, diversity, design, destination access, and distance to transit.

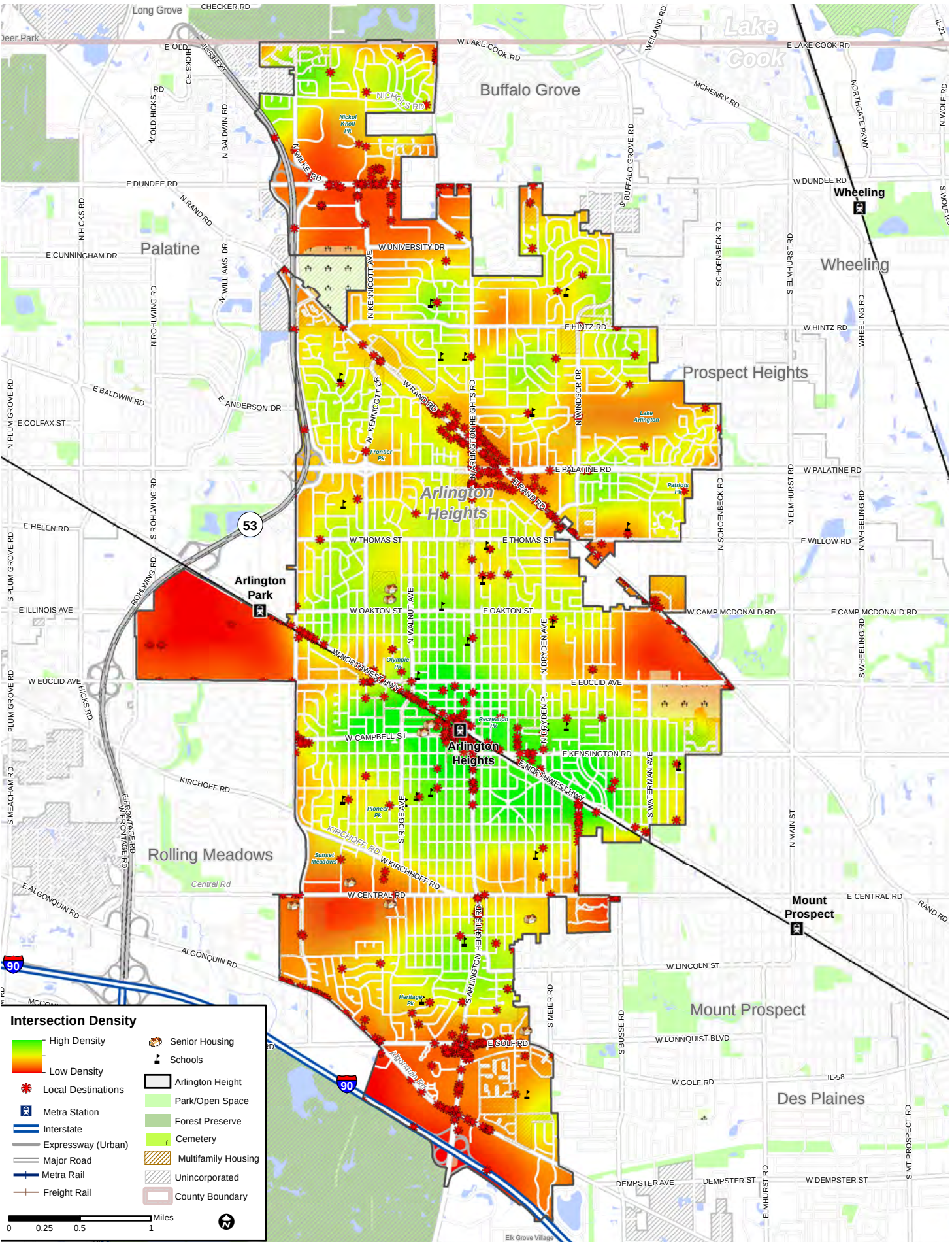
The average Walkscore for Arlington Heights is 45 / 100, classifying it as a “Car-Dependent City” or a place where “most errands require a car.” However, Arlington Heights’ downtown area scores 80-90 / 100, which places it in the range of “Very Walkable” to “Walker’s Paradise.” These high scores represent one of the many positive outcomes of Village efforts over the last three decades to revitalize and preserve the downtown through transit-oriented development.

Figure 2.2 - Walkscore



Source: www.walkscore.com

Figure 2.3 - Pedestrian Amenities



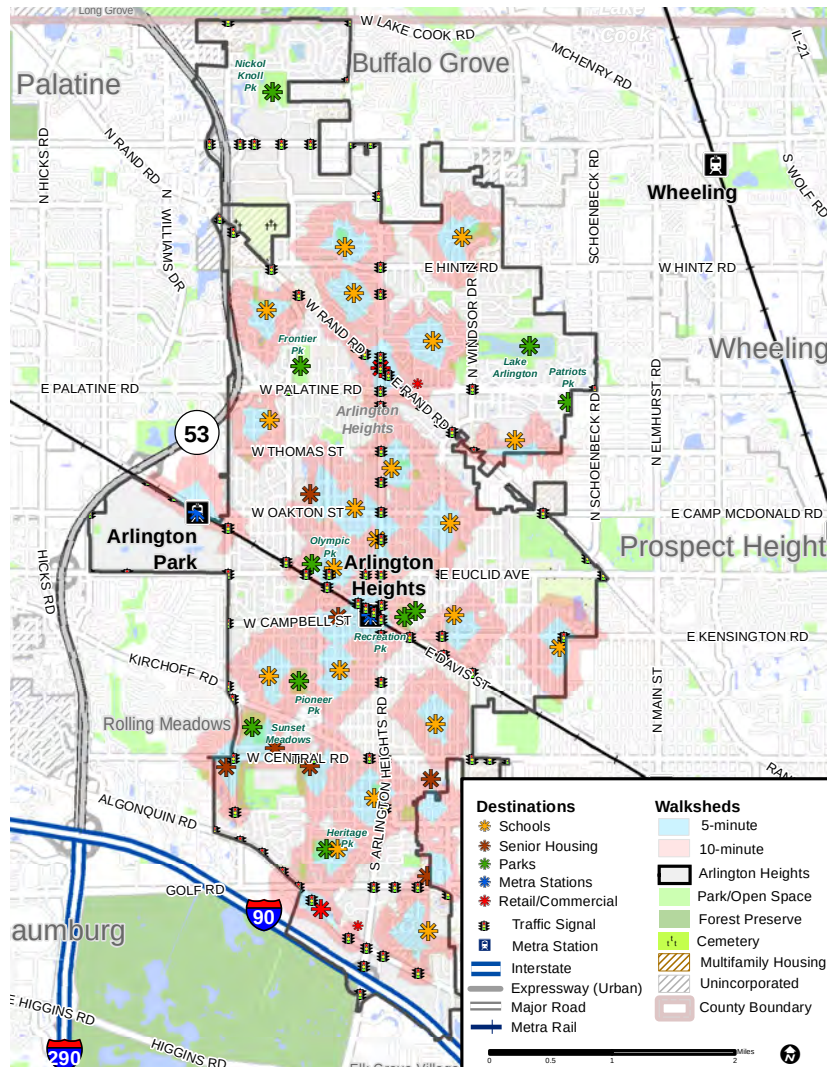
Sidewalks and Paths

There are approximately 393 miles of sidewalk throughout Arlington Heights, which cover most of the Village and support a high level of walkability. However, some issues and concerns about the sidewalks were raised by residents regarding: the maintenance and condition of sidewalks; the encroachment of vegetation; the presence of obstacles such as light poles or sign posts in the sidewalk; the absence of curb ramps and other accessibility features; and the difficulties encountered where sidewalks cross train tracks. Residents also expressed concerns with sidewalks located directly adjacent to travel lanes carrying high-speed and high-volume traffic.

To help visualize and assess overall walkability in the Village, **Figure 2.3** illustrates the relative density of intersections across the Village as a whole. In addition, to further assess walkability, **Figure 2.4** illustrates the five- and ten-minute “walk-sheds” to a selection of major, high-priority destinations for pedestrians, including schools, Metra stations, senior housing, and clusters of retail and commercial establishments.

The walkshed map, which is intended to give a general idea of walkability in different parts of the Village, reinforces the need to develop safe crossings of major arterials. Areas that lack pedestrian connectivity are located in the southern part of the Village; the “triangle” area around Rand, Arlington Heights, and Palatine Roads; and the industrial/commercial areas in the northern part of the Village.

Figure 2.4 - Five- and Ten-Minute Walkshed



Intersections and Streetscaping

While most of Arlington Heights' intersections are controlled by stop signs, there are approximately 80 signalized intersections in the Village, mostly along major arterial roads and in the downtown area. Pedestrian safety treatments at signalized intersections vary throughout the Village. Examples of existing pedestrian crossing features include enhanced crosswalk designs, longitudinally-striped crosswalks, pedestrian countdown signals, accessible curb cuts, advance stop bars, warning signage, and crossings marked by two parallel lines.

Intersections involving one or more of the large arterial roads present particular challenges. Long crossing distances, large traffic volumes (including trucks), high operating speeds, and complicated vehicular movements (double turn lanes, skewed intersections, etc.) all present difficulties for pedestrians. Especially challenging are intersections where two major arterials cross at a skewed angle. Crossing distances at such intersections, which exist at several locations in the Village, can extend to 200 feet or more.

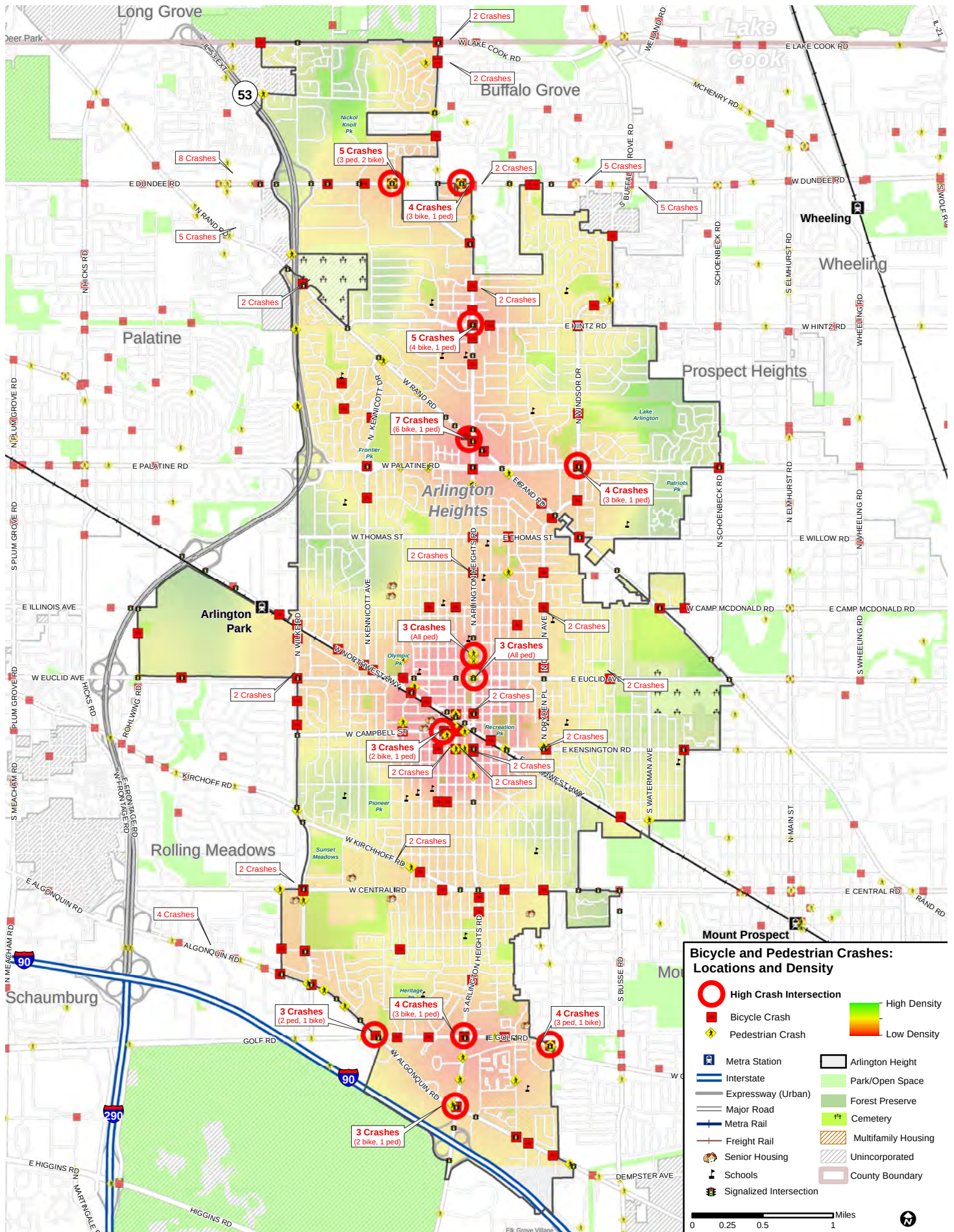
Major arterial roads in the Village carry average daily traffic volumes as high as 46,000 automobiles (Lake Cook Road). Many also carry significant truck traffic and, typically, have very large curb radii and/or slip lanes at intersections to accommodate such vehicles. These intersections can be particularly difficult for pedestrians and bicyclists to traverse.

Sections of Wilke Road, Rand Road, and Central Road are missing sidewalk segments on at least one side. In addition, sections of large arterial roads have the sidewalks directly adjacent to the parallel roadway (i.e. 'back-of-curb'), without a buffer, which creates an uncomfortable pedestrian environment. **Figure 2.5** shows locations of both pedestrian and bicyclist crashes, and highlights the intersections where three or more crashes took place during the years 2008 to 2012.

Pedestrian Safety

Large and busy arterial roads present the greatest potential dangers to pedestrians in Arlington Heights. According to a CMAP analysis of IDOT crash data, from 2008 to 2012, all fatal and incapacitating injury crashes (Types K and A, respectively) occurred along these large, high-volume, high-speed roads. Moreover, the majority of the other, less severe pedestrian crashes also occurred along these roads. Out of 65 pedestrian crashes for these five years, 47 (72 percent) occurred along major arterials. It should be noted that the concentration of pedestrian crashes in the downtown area – which is visible as red shading in **Figure 2.5** – reflects the high number of persons walking in the downtown area rather than high danger or risk.

Figure 2.5 - High Crash Locations



Bicycling

Routes and Trails

The Village's bikeway network consists of designated (both signed and unsigned) on-street bike routes throughout the Village, as well as planned and potential routes (**Figure 2.6**). Bikeway signage consists almost exclusively of guide signs (and plaques) but is incomplete, in some instances in poor condition, and does not generally represent current best practice in bikeway signage. The bikeway network includes one on-street bike lane along Davis/Sigwalt Streets between Pine Avenue (near Village Hall) and Cleveland Avenue. On the south side of the street, this facility becomes a shared bicycle-parking lane between Bristol Lane and Cleveland Avenue. The bikeway network also makes use of several multiuse paths (often in parks) and sidepaths.

Some issues and difficulties encountered by cyclists in Arlington Heights – as expressed in the surveys, interviews, and other public outreach activities undertaken as part of this planning process – echo concerns raised relating to pedestrian travel. Others, relating to the roadways and traffic control devices, are specific to bicycling.

Examples of issues and difficulties raised by cyclists include:

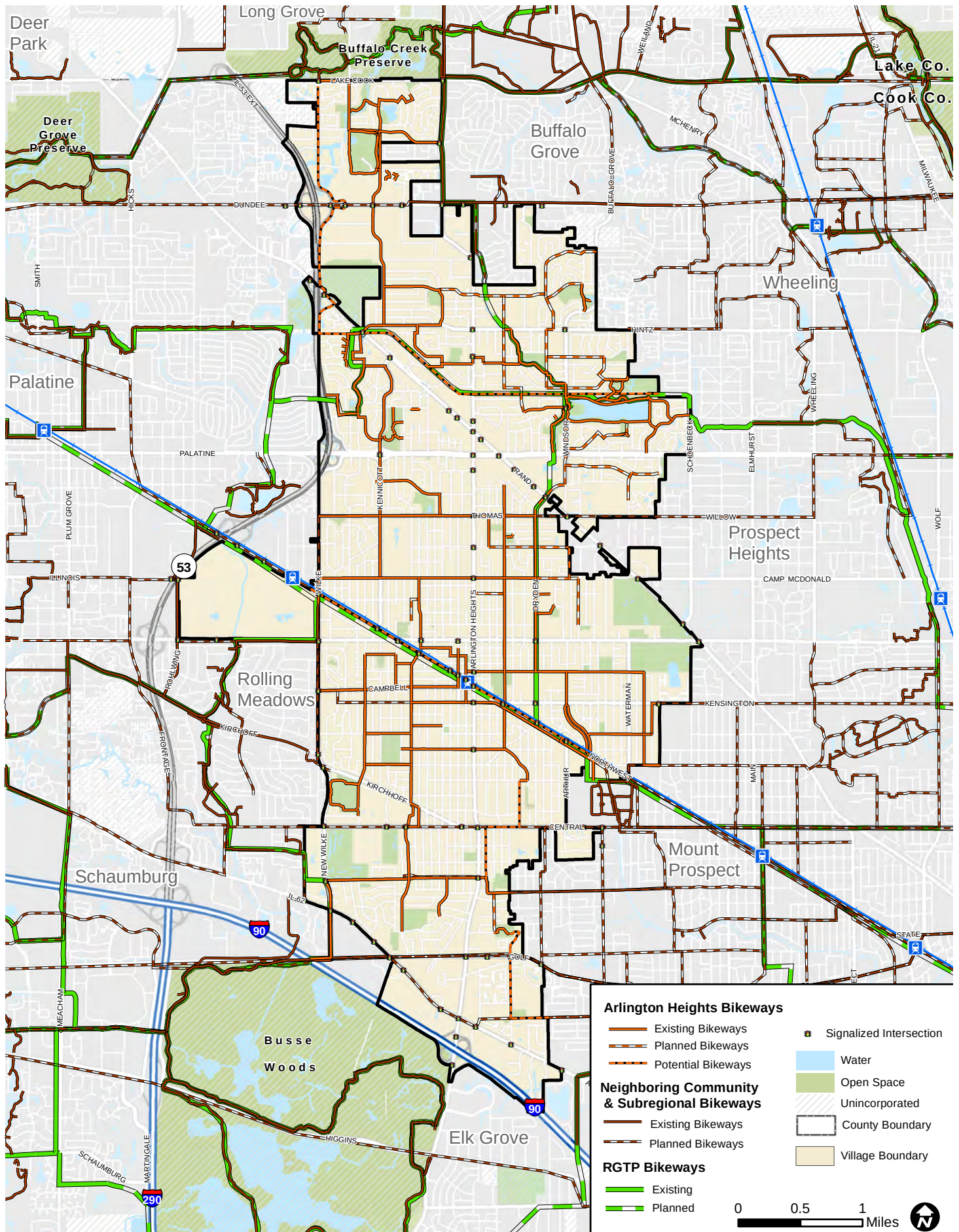
- Difficulties encountered in crossing large, arterial roads with high-speed, high-volume traffic;
- Difficulties encountered in crossing railroad tracks along Northwest Highway;
- Traffic signals that are not activated by bicycles waiting at the stop bar;
- Poor roadway surface conditions on some roads;
- Incomplete and poorly maintained bikeway signage along bicycle routes;
- Lack of on-street markings to indicate bicycle routes, presence of bicyclists, and bicyclist position in the roadway; and
- insufficient secure (lockable) bike parking provided in the downtown area.

In total, the Village bikeway network currently consists of approximately 44.5 miles of existing routes and trails, with another 2.2 miles of short paths and cut-throughs (mostly in parks and multi-family residential developments). There are another 10.1 miles of planned routes and 10.5 miles of potential routes. Several regional bikeway corridors – identified in the Northwest Municipal Conference Bicycle Plan – pass through Arlington Heights. These include the Northwest Highway corridor, the Dundee Road corridor, the Willow Road corridor (which utilizes Thomas Street and Wilke Road, in addition to Northwest Highway), the Glenview/Central/Algonquin Roads corridor (which utilizes Central Road), the Golf Road corridor, and Howard/Sibley corridor (which utilizes Falcon Dr., Tonne Dr., and Algonquin Rd.). Just north of the Village, the Deerfield Road bikeway corridor utilizes the path system in Buffalo Creek Forest Preserve.

CMAP's Regional Greenways and Trails Plan (RGTP) also includes planned (and existing) bikeways that traverse the Village, as shown in **Figure 2.6**. These consist of:

- a trail/bikeway along Northwest Highway;
- a trail within the Commonwealth Edison right-of-way;
- a trail/bikeway along Wilke Road (from the Busse Woods trailhead, north through Rolling Meadows); and
- a north-south trail/bikeway, primarily in the eastern half of the Village, connecting the Northwest Highway trail/bikeway to the Buffalo Creek Forest Preserve.

Figure 2.6 - Existing and Planned Bicycle Network



Bicycle Parking

There are currently bike racks at locations throughout the Village, including high-quality covered bike parking at the downtown Metra station, and basic racks at the Arlington Park Metra station, schools, parks, the Public Library, Village Hall, inside the parking garages, and at other locations. Some racks are provided by the Village or the Park District, while others are provided by schools and other public and private entities. The approximate number of bike parking spots in the Village is estimated to be 2,500.

The quality of available bike parking varies from the high-quality covered parking at the downtown Metra station and the relatively secure parking in the downtown parking garage to sub-standard racks placed in poor locations. An example of sub-standard bicycle parking is “fence” or “ladder” style racks, consisting of vertical bars between two horizontal bars. Another example is the low “wheel-bender” style racks. These racks do not allow both the wheel and the frame to be locked, which increases the potential for bicycle theft. Poor placement could include locations at distances that are too far from the destination served, locations that are not visible, and locations that are not easily accessible (areas of grass or dirt, or that require climbing or descending stairs, etc.).

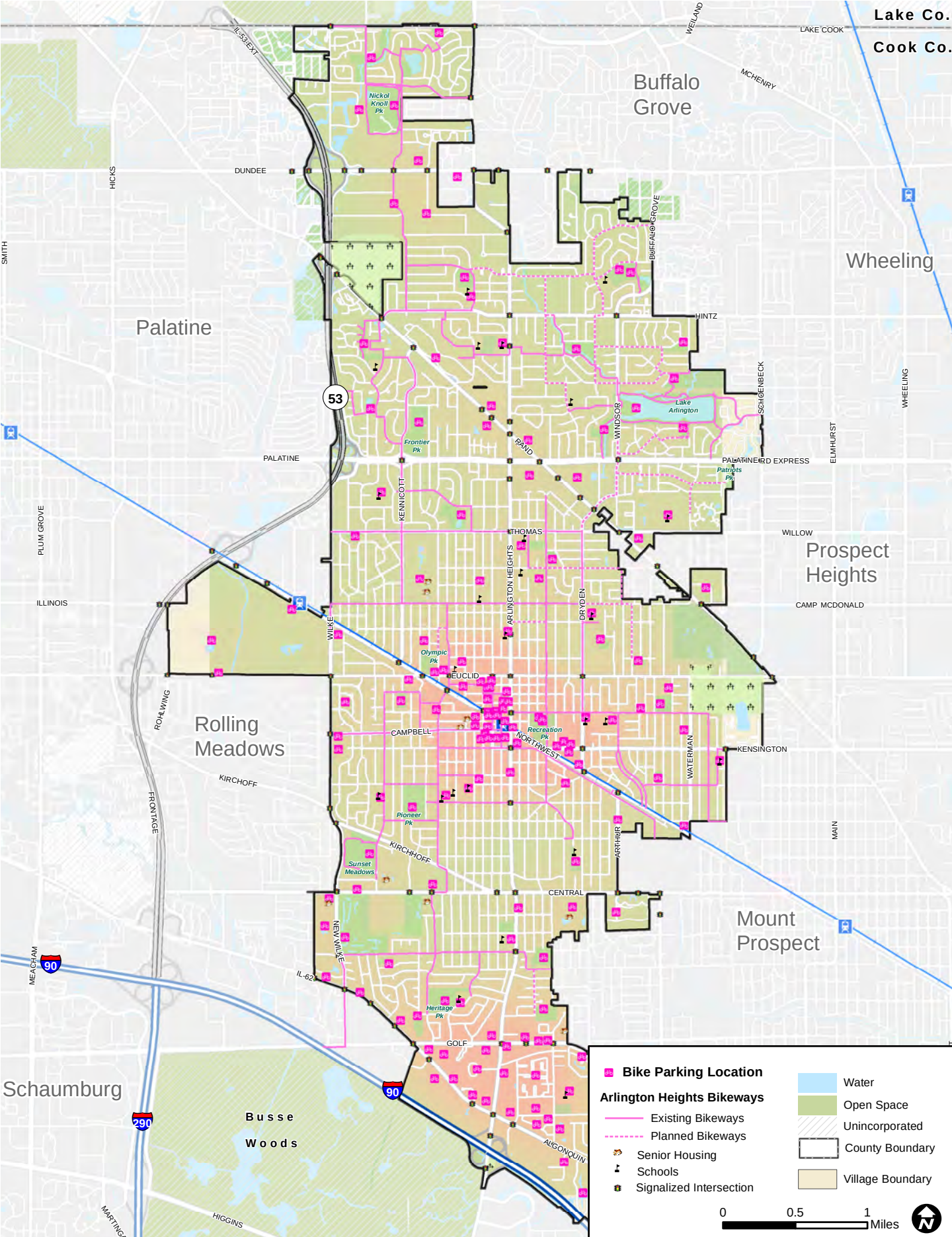
Bike Safety

When bicyclists and motor vehicle drivers share the road, many factors affect safety, including the speed and volume of traffic, width of the road, vehicle types, visibility, and vehicle operator expectations and education. The perception of safety is very important to developing a robust cycling community; most people will not ride a bicycle if they don’t think that doing so – or riding a specific route – is safe. And the mere presence of bicyclists on the roadway, as a regular, ordinary feature of the road, can significantly increase overall safety, as drivers come to expect and anticipate bicyclists. When it is not feasible to create off-street paths, certain roadway designs and treatments can help to improve the safety of the road for cyclists and other users.

As was the case for pedestrians, the large and busy arterial roads present the greatest issues for cyclists. From 2008 to 2012, 10 out of 13 fatal and incapacitating injury bicycle crashes (Types K and A, respectively) occurred along arterial roads. The majority of the other, less severe bicycle crashes also occurred along arterials.

Figure 2.5 shows the locations and density of bicycle crashes in the Village of Arlington Heights. As was pointed out with the pedestrian crash map, the relative concentration of bicycle crashes in the downtown area – visible as red shading in *Figure 2.5* – reflects a higher number of persons bicycling in this area rather than the relative danger or risk.

Figure 2.7 - Bicycle Parking Locations

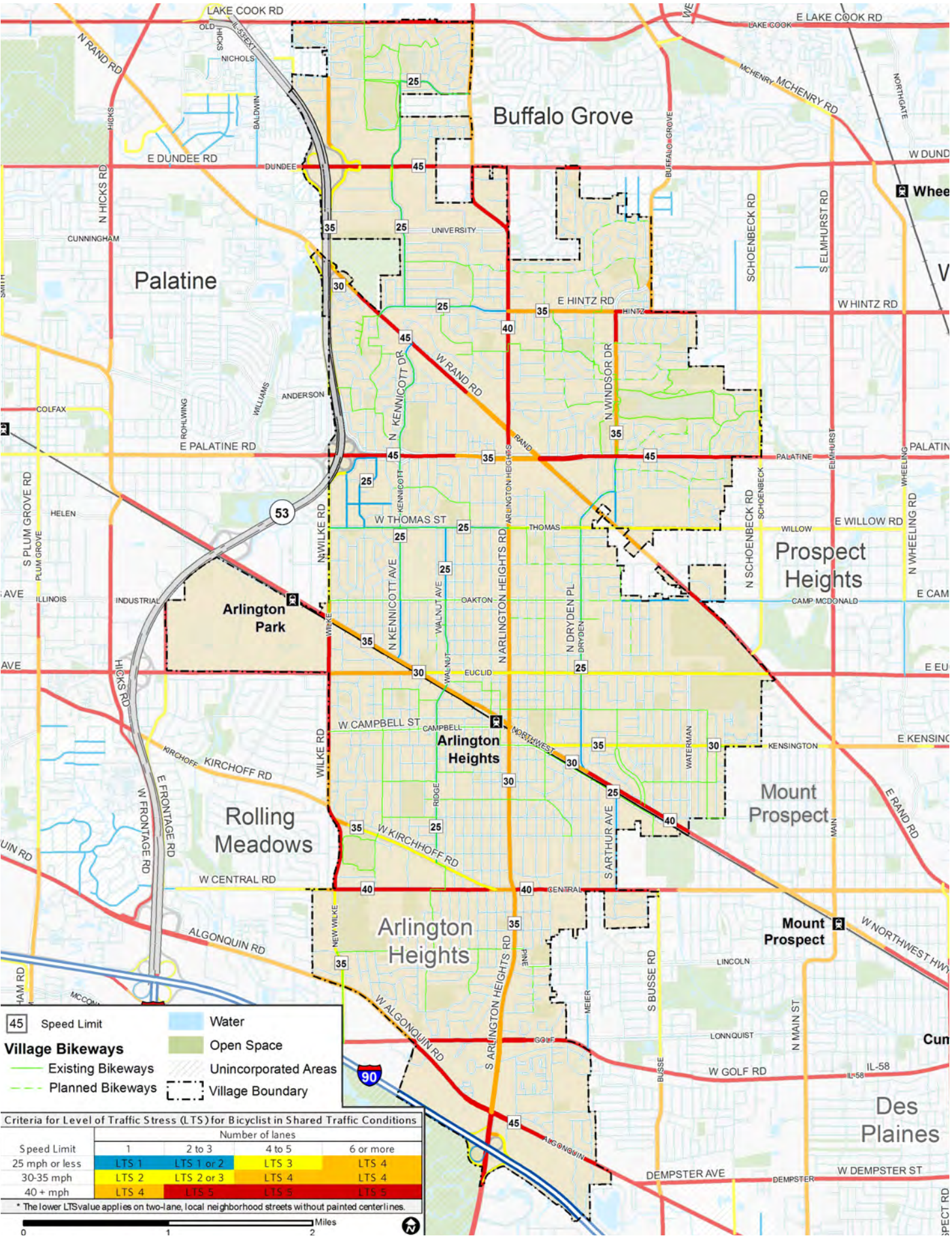


Level of Traffic Stress

According to a recent report from the Mineta Transportation Institute, a highly connected, low-stress network is fundamental to attract the highest numbers of bicyclists to the network. The method developed to measure traffic stress considers a number of factors, including the average daily traffic (ADT), the number of travel lanes, posted speed limits, and location of the center line. For streets where bicyclists and cars share the road, street width and speed limit are the primary factors affecting traffic stress. These ratings aim to estimate the level of stress that a bicyclist would feel while riding along different routes, without the need to survey every road in the study area. Using available data, **Figure 2.8** indicates the Level of Traffic Stress (LTS) on the roadways in Arlington Heights.

Most of the roads in Arlington Heights are low-stress (LTS 1 or 2), with exceptions being major arterial roadways and some collectors. For instance, Euclid Avenue between Rand Road and Northwest Highway is perceived by many residents as uncomfortable and unsafe for cycling even though it registers as LTS 3. This is likely due to a constrained ROW along various segments and motor vehicles traveling at speeds that are perceived to exceed the 25 mph posted speed limit (as well as high traffic volumes).

Figure 2.8 - Level of Traffic Stress



Transit

Regional public transportation options that serve the Village include Metra commuter train service and Pace suburban bus service (see **Figure 2.9**). Pace provides both fixed route and demand-responsive service. Wheeling Township also provides senior and disabled service within a defined area that includes much of Arlington Heights.

Metra

Metra's Union Pacific Northwest line serves the Village of Arlington Heights at two stations: downtown Arlington Heights and the Arlington Park International Racecourse. The North Central Service line runs through communities to the east of Arlington Heights and has stations in Prospect Heights, Wheeling, and Buffalo Grove. The Metra UP-NW rail line connects Arlington Heights to downtown Chicago and to other suburbs along its 70.5 mile length.

The Arlington Park Metra station is less accessible (by pedestrians and bicyclists) due to the presence of Illinois Route 53, Northwest Highway, and Wilke Road. Enhanced pedestrian accommodations are lacking (at the time of this writing) at the intersection of Wilke Road and Northwest Highway, which is important given its function as the main entry-point to the Arlington Park Metra station. However, this intersection is scheduled to be improved (TIP ID 03-13-0003). IDOT has completed engineering and design and the project is expected to go out to bid for construction this year. According to the Village, improvements will include signal modernization (including pedestrian countdown signals), geometric modifications, new striping, and signage.

Pace Bus

As shown in **Figure 2.9**, six Pace suburban bus routes (696, 208, 234, 606, 694, and 757) directly serve and have stops within Arlington Heights – though some just graze the borders of the Village. Overall, relatively little of the Village is within 0.25-mile of a (fixed route) Pace bus stop. The northern half of the Village in particular lacks transit service. The entire Pace vehicle fleet is Americans with Disabilities Act (ADA) compliant, and all full-size, fixed route buses are equipped with front-loading bike carriers so that Pace users can access the bus via bicycle.

Demand-Responsive Services

In addition to fixed route bus service, Pace provides a Call-n-Ride service – the Arlington Heights-Rolling Meadows Call-n-Ride – which offers reservation-based, curb-to-curb service in the designated service area (bounded by Euclid Avenue, Arlington Heights Road, I-90, Golf Road, and Highway 53). Pace also offers ADA Paratransit Services, Ride Share, and Vanpool service. Wheeling Township offers Call-a-Ride service for seniors and the disabled in an area that includes much of Arlington Heights, bounded by Central on the south, Lake Cook Road on the north, Wilke Road on the west and the Des Plaines River on the east.

This map illustrates the Pace Bus network in the Arlington Heights area, highlighting its integration with Metra services. Key features include:

- Pace Bus Routes:** Shown as blue lines with circular stop markers. Major routes include 208, 234, 237, 282, 290, 554, 600, 606, 610, 616, 694, 696, 757, 895, and 905.
- Metra Stations:** Indicated by black squares with station names: Arlington Heights, Arlington Park, Schaumburg, Wheeling, and Prospect Heights.
- Service Areas:**
 - Call-n-Ride Service Area:** A red dashed rectangular boundary.
 - Area within 1/4 mile of Pace bus stop:** Light blue shaded regions.
 - Area within 1/2 mile of Metra station:** Yellow shaded regions.
 - Area with access to both Metra and Pace:** Pink shaded regions.
- Geographic Features:** Water bodies (blue), ForestPres_Lake (green), and unincorporated areas (grey).
- Boundaries:** Village boundaries (dashed black lines) and county boundaries (solid black lines).
- Infrastructure:** Major roads like I-90, I-290, and I-55 are shown as thick grey lines.
- Legend:** Located in the bottom right corner, defining the symbols for Pace Bus routes, Metra stations, and various shaded areas.
- Scale and Orientation:** A scale bar (0 to 2 miles) and a north arrow are provided at the bottom right.

Roadways

Functional Classification

Roads provide space for vital functions within a community – mobility, access, commerce, and civic life. Arlington Heights’ street network, shown in **Figure 2.10**, consists largely of local roadways that accommodate the Village’s residential character. However, Arlington Heights does have a relatively high number of major arterial roads, which provide good access to community amenities but are often barriers to walking and bicycling because of high-speed, high-volume traffic and large roadway widths. East-west arterials occur approximately every mile. The Village is divided down the middle (north-south) by Arlington Heights Road. In addition, Arlington Heights is crossed by four diagonal arterials: Algonquin Road, Kirchhoff Road, Northwest Highway, and Rand Road. The Village is also bounded on its south and west sides by limited access freeways: Interstate 90 and Illinois Route 53, respectively.

Roadway Safety

Figure 2.11 illustrates the locations and severity of all automobile crashes that occurred in Arlington Heights between 2010 and 2012. It highlights intersections that have the highest numbers of crashes, according to the police and other sources. **Figure 2.11** was made by the Arlington Heights Police and show locations and density (per Village data) of motor vehicle crashes for January-June 2013 and 2014, respectively.

Figure 2.11 also shows the areas within the Village with the highest overall density of crashes, weighted by severity. As can be seen, major roadways – and above all, the intersections of major roadways – exhibit the highest concentrations of crashes. The “triangle” area, formed by the intersections of Arlington Heights, Palatine, and Rand Roads, consistently has the greatest number of crashes. According to the Arlington Heights police, these three intersections were among the top four crash locations in 2013 and 2012, as well as earlier years. The roads that the Police consider generally most dangerous and most difficult for pedestrians and bicyclists to cross are, in order: Palatine Road, Rand Road, Golf Road, Algonquin Road, and Dundee Road, all of which have sections consisting of six or more travel lanes. They also point to Lake Cook Road as presenting significant hazards for bicyclists and pedestrians, due to the high speed travel speeds (the posted limit is 45 mph) and the wide spacing of traffic controlled (signalized) intersections. Arlington Heights Road, which has high traffic volumes during rush hour periods, was also recognized as presenting safety issues and crossing difficulties for pedestrians and cyclists.

Figure 2.10 - Functional Road Classifications and AADT

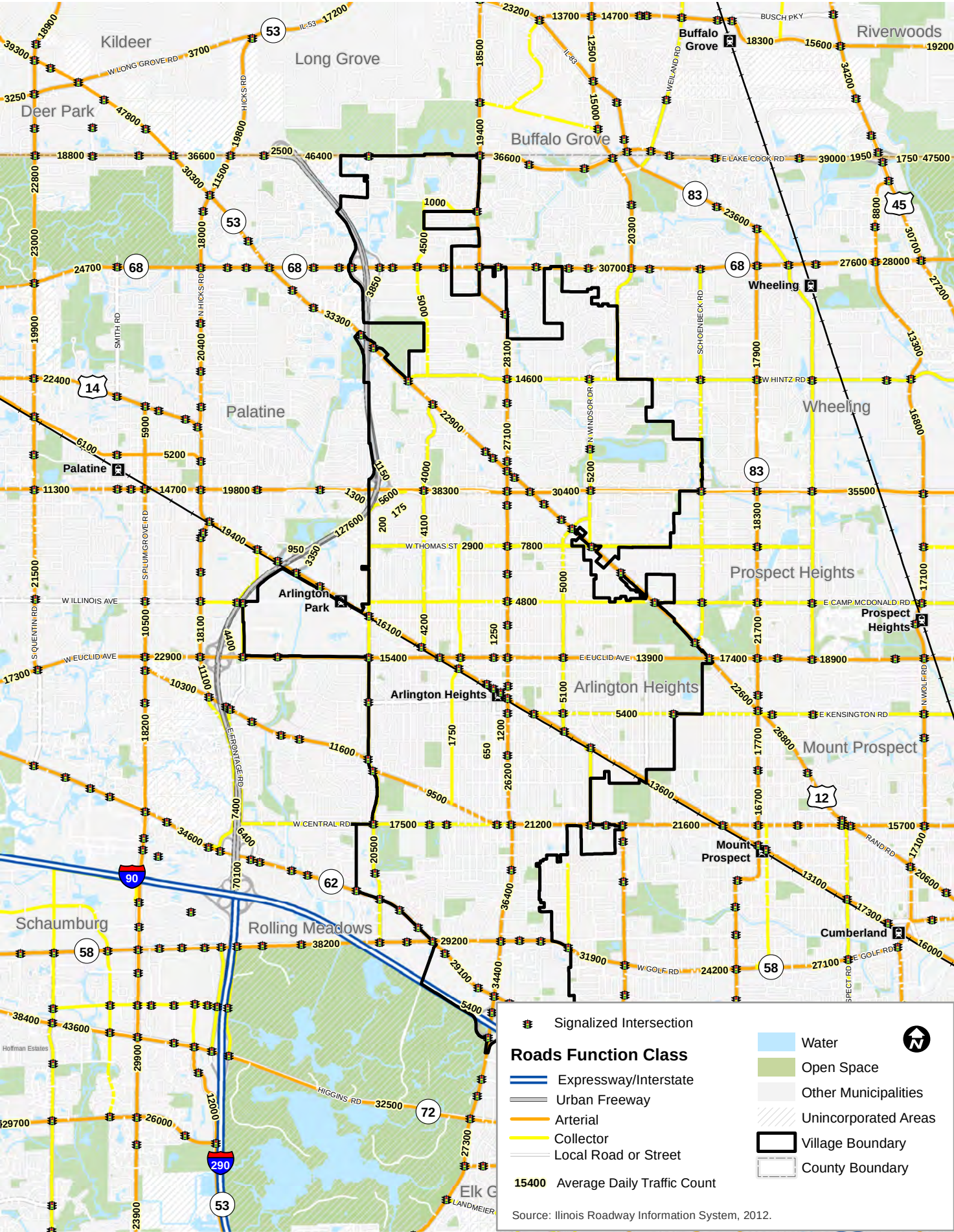
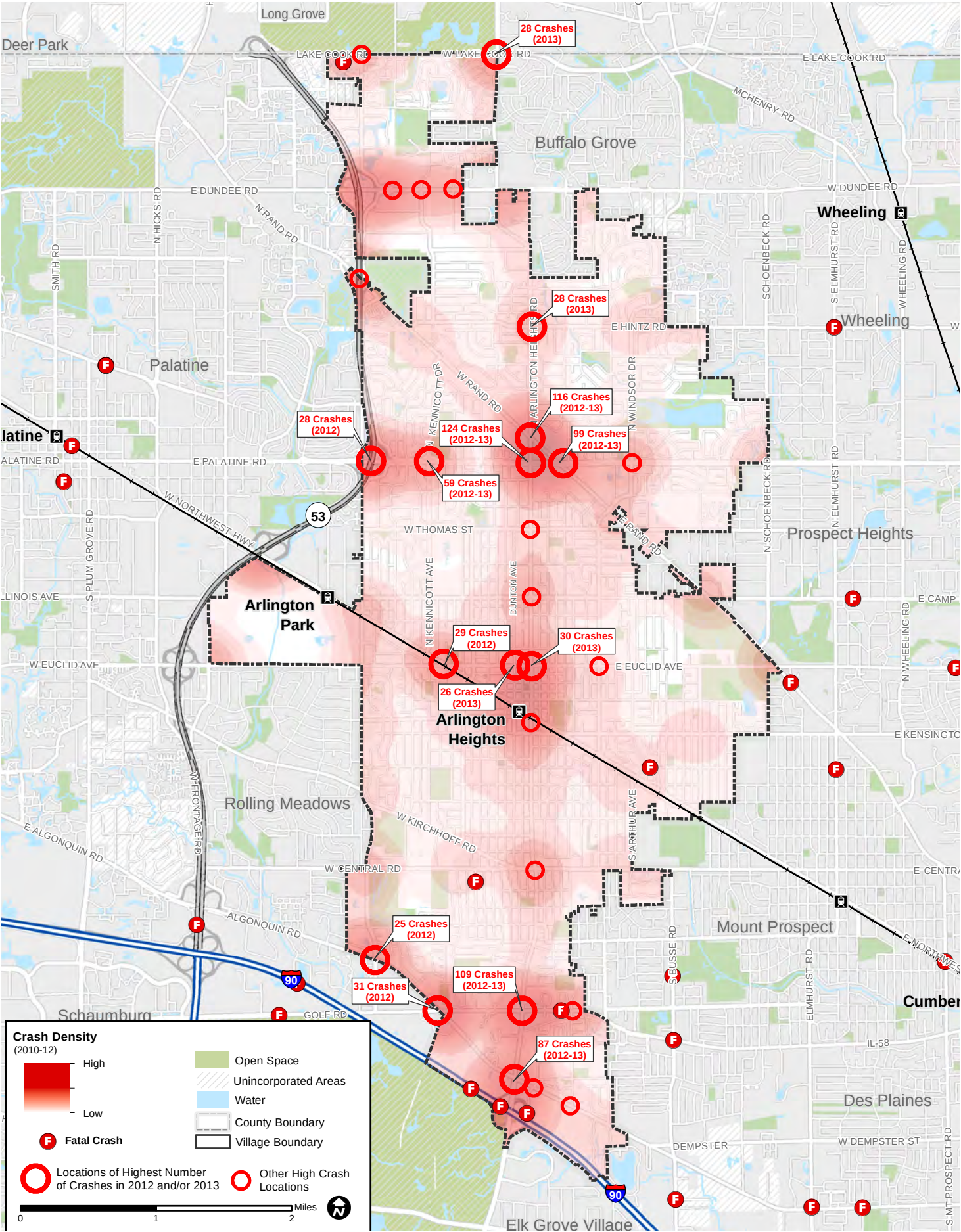


Figure 2.11 - Automobile Crashes





Chapter 3 COMMUNITY OUTREACH



A key goal and component in the development of the Arlington Heights Bicycle and Pedestrian Plan was to encourage comprehensive community engagement and participation throughout the entire plan-making process. Public outreach and engagement was undertaken to better understand community needs, challenges, and opportunities related to bicycling and walking, and to review and evaluate potential recommendations. Public outreach and input were crucial aspects of the planning process and fed directly into the structure and the content of the plan. Input and insights obtained through public outreach and engagement activities can also help the Village and the Bicycle and Pedestrian Advisory Commission to advance and implement proposed projects.

Public Engagement Activities

The development of the plan included broad community engagement with numerous opportunities for public input. Specific activities included an interactive online survey that included mapping input, small group workshops, key stakeholder interviews, and a community-wide workshop and charrette. Public engagement activities occurred throughout the planning process, targeting local residents and stakeholders and documenting the Village's unique strengths, challenges, and opportunities. An extensive review of the input received from outreach activities conducted during the early phase of the planning process is available in the stand-alone Existing Conditions Report.

Outreach activities were aimed broadly at helping answer the following four questions:

1. What are Arlington Heights' strengths as they relate to non-motorized transportation?
2. What are the main challenges to being a pedestrian and/or cyclist in Arlington Heights?
3. Aside from the work already planned, what projects or actions should the Village pursue to make Arlington Heights more bicycle- and pedestrian-friendly?
4. What is your vision for Arlington Heights' bicycle and pedestrian network?

Project Steering Committee Meeting

Kickoff Steering Committee Meeting

On June 16, 2014, the first steering committee meeting was held at Village Hall. The Project steering committee was responsible for providing guidance and feedback on existing issues and opportunities, revising project goals, reviewing plan documents, and identifying stakeholders who should be involved in the planning process. The committee was composed of the Village's established Bicycle and Pedestrian Advisory Committee.

The first meeting objective was to introduce the committee to the project and begin to catalog issues and opportunities in the Village as they relate to walking and biking. Participants were given a questionnaire asking them to identify the main challenges to bicyclists and pedestrians in Arlington Heights, specific projects that could address these challenges, and the general strengths of the community's bicycling and pedestrian environment.

Second Steering Committee Meeting

The second steering committee meeting was held on February 4, 2015 to review initial findings of the existing conditions report and draft a vision statement to guide the plan and plan implementation. After much discussion, the steering committee agreed on a draft vision statement that expresses the community's aspirations and future intentions around walking and bicycling. The final vision statement is provided in **Chapter 1: Introduction**.

Third Steering Committee Meeting

The third steering committee was held on July 7, 2015 at Village Hall. The purpose of this meeting was to review preliminary ideas involving key corridors for biking and walking throughout the Village. At the meeting, steering committee members reviewed larger aerial maps of the Village by north, central, and south subareas. For each subarea, members identified and discussed important issues and opportunities. Because of the amount of discussion and input that arose from the meeting, the committee decided to continue to meet on their own to continue the activity. After a number of months working together, the steering committee provided CMAP staff a very detailed and thorough list of potential projects to improve walking and biking in each subarea. Many of the recommendations found in **Chapter 4** are based upon the thorough analysis and potential projects that were created by the steering committee in this step of the process.

Other Outreach Activities

Village-Wide Bicycling and Walking Audit

On September 8, 2014, CMAP staff along with several steering committee members and Village staff conducted a bicycle and walking audit of the existing conditions in Arlington Heights. The audit reviewed the existing trail and road bike network and the areas identified for improvement from prior meetings. Staff also visited a number of additional assets in the community — the downtown core, various shopping districts, Metra stations and station areas, and major parks.

Key Person Interviews

On September 9 and September 29, 2014, CMAP staff completed interviews with several key stakeholders. The list of key persons was compiled by Village staff and members of the steering committee. Through key person interviews, CMAP staff gathered a stronger and more nuanced understanding of the community and issues and opportunities related to bicycling and walking.

Bicycle Club Workshop

A meeting was held with the Village of Arlington Heights Bicycle Club on September 17, 2014 at the Recreation Center during a regularly held monthly meeting. Attendees included CMAP staff, members of the BPAC, and the Bicycle Club. The meeting allowed CMAP staff to describe the planning process as well as to solicit input from the Club regarding perceived issues, desired projects, and the current strengths/assets of the Village regarding bicycling and walking.

Figure 3.1 - Arlington Heights Bicycling and Walking Audit



Figure 3.2 - Arlington Heights Bicycle Club Workshop



Senior Citizens Commission Workshop

On October 20, 2014, CMAP staff introduced the project to members of the Senior Citizens Commission and engaged them in the planning process during their regularly scheduled monthly meeting. Attendees were given a one-page questionnaire and were asked to indicate their top issues and challenges for walking and biking in the Village of Arlington Heights. Eight questionnaires were collected, with two surveys submitted indicating there were no major problems with bicycle and pedestrian travel in the Village.

Online Survey

CMAP developed an interactive online survey to engage a broad audience, particularly people who are harder to reach or people who are not able to attend the workshops. This online tool served to educate the community about the purpose of the project and identify community priorities to address in the bicycle and pedestrian plan. The online survey was launched on October 1, 2014 and remained active until December 3, 2014. During this time, 2,131 people visited the site and 1,091 people gave feedback on top priorities and areas for improvement. For a full summary of the feedback received, see the Existing Conditions Report.

Community-wide Visioning Workshop

A community-wide public visioning workshop was held on Thursday, March 12, 2015 at the Public Works Department. There were approximately 55 residents, business leaders, government representatives, and elected and appointed officials in attendance. At the workshop, attendees learned about the project and the existing conditions in the Village through a brief presentation by CMAP staff which highlighted key issues and opportunities.

Next, participants were divided into smaller working groups to work with maps of the Village and its surrounding area to discuss how they would improve walking and biking throughout Arlington Heights. The following is a comprehensive summary of the group's ideas and recommendations per topic. A more detailed summary including images of each smaller group's maps can be found in **Appendix A**.

Destinations

The larger group identified several key pedestrian destinations in Arlington Heights, such as Arlington Park, Lake Arlington, Recreation Park, Busse Woods, the Metra Station, downtown Arlington Heights, the various schools in town, and Arlington Heights Memorial Library, among many others.

Safety

There was a general consensus among participants on several key issues regarding bicycle and pedestrian safety. Workshop participants expressed the need for increased traffic control by reducing traffic speed, better signage, more designated and better-marked bicycle lanes and paths, and increased non-motorist features such as crosswalk buttons.

Figure 3.3 - Visioning Workshop



Barriers

The meeting attendees were asked to think about any barriers that might prevent them from biking or walking in the community. The majority of workshop participants identified the lack of crosswalks and crosswalk markings, in addition to missing sidewalks as major barriers. Further, the lack of snow plowing and snow build up along major routes was a concern to many residents.

Missing Gaps or Links

The group identified poor, or lack of, connections to Busse Woods, Lake Arlington, and Des Plaines River Trail. Additionally, residents would like to see increased sidewalks along major streets such as Palatine Road and Arlington Heights Road to increase connectivity and access to major destinations in and around town.

Bicycle Parking

Attendees were asked to share where they would like to see increased bicycle parking. The majority of the comments denoted that additional parking racks and facilities should be installed in the downtown area, library, Arlington Park, schools, and shopping areas. A suggestion made was to develop a map of available bicycle parking in the community.

Education, Encouragement, and Enforcement Programs

There was an overall consensus among community stakeholders for increased education and awareness for bicycle and pedestrian safety among all road users. Specifically, workshop attendees expressed support for informational workshops to learn about the rules of the road, non-motorist safety, and educational campaigns about the benefits of biking and walking.

Big Ideas

After working in smaller groups to create their unique vision for how to improve walking and biking in Arlington Heights, each group presented their key ideas and recommendations to the larger group. Then the larger group was asked to vote (using electronic, real time key pad polling) for their top three ideas (in order of importance) from each of the smaller groups. The following table summarizes the results of the voting.

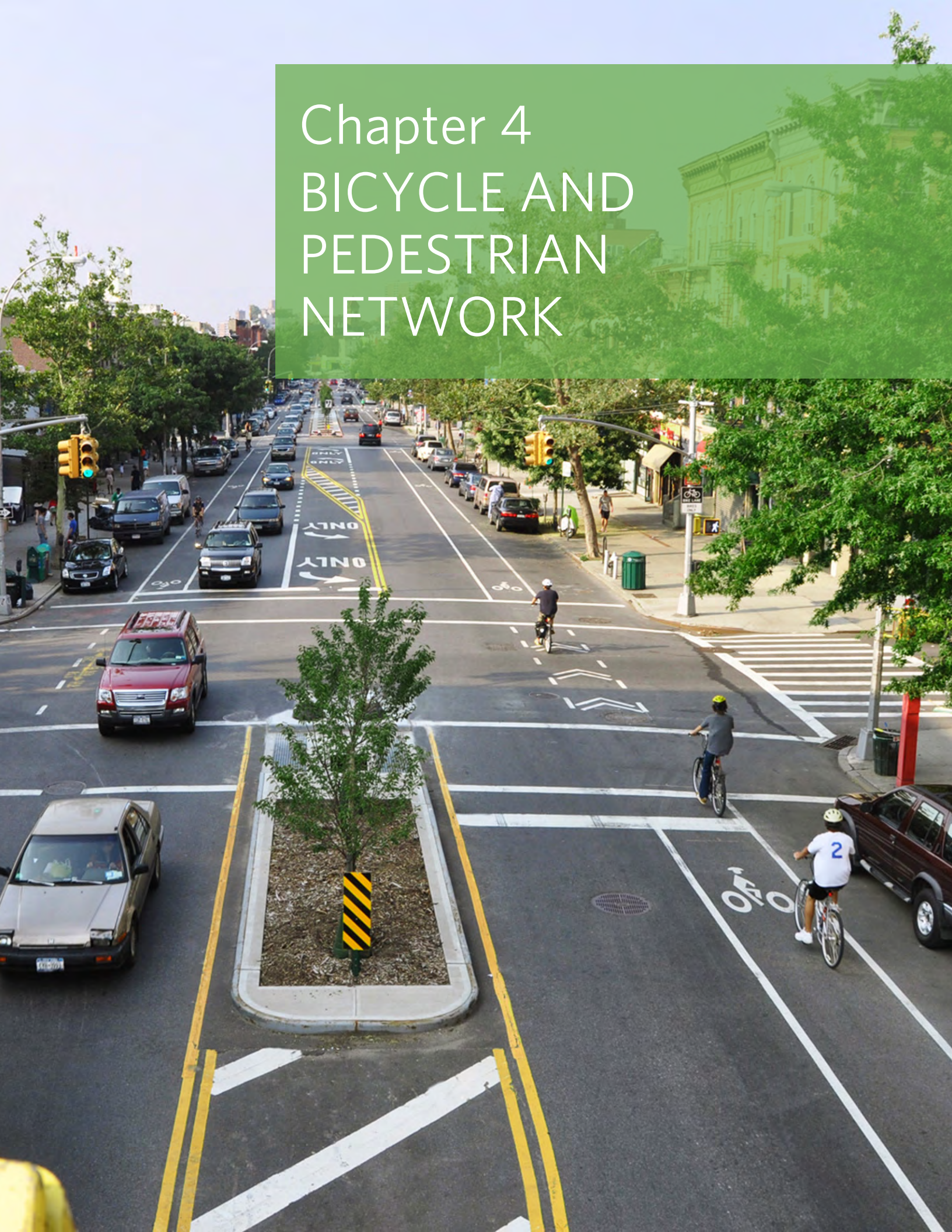
Table 3.1 - Visioning Workshop

BIG IDEA	PERCENT	COUNT
Network connectivity and linkages to open space (parks, Forest Preserves, Des Plaines River Trail)	23.9%	168
Improved signage and on-street bikeway markings/stripping (visible)	23.5%	165
Major barriers - UP overpass/underpass (Northwest Highway/"Triangle District," I-90)	15.4%	108
Education and enforcement (online, workshops)	11.9%	84
Linkages to important destinations (home, work) throughout Village	11.1%	78
Intersection improvements (countdown signals, bicycle detection, markings, beacons, etc.)	9.4%	66
Improved/increased bike parking and bike parking phone app (portable bicycle racks)	2.7%	18
Safety programming (sale/donation of bike lights, helmets, etc.)	2.1%	15
Totals	100%	702

The most popular "big idea" among workshop attendees – approximately 24 percent – indicated that their most preferred idea was to improve the bikeway network connectivity and expand linkages to open space, including neighborhood parks, Forest Preserves, and the Des Plaines River Trail. The next popular big idea, which came in very close to the first idea with 23 percent of the votes, was the need for increased signage and visible bicycle striping throughout the Village. As the third top big idea, approximately 15 percent of the participants voted for the need of overpasses and underpasses along Northwest Highway, Palatine Road, Rand Road, and Arlington Heights Road commonly referred to as the "Rand-Palatine-Arlington Heights Road Triangle," and Interstate 90.

Chapter 4

BICYCLE AND PEDESTRIAN NETWORK



This chapter focuses on ways to build upon and enhance the Village of Arlington Heights' existing bicycle and pedestrian network and related infrastructure to create a more complete, interconnected, and robust system, which provides access to important destinations, neighboring communities, and bikeways. The chapter provides examples of potential bicycle and pedestrian facilities and treatments to help achieve a complete, connected system of bikeways and pedestrian routes. Village planners, engineers, public works and other staff, as well as elected officials, should reference this chapter to address gaps and inadequacies in the proposed active transportation network and at other locations throughout the Village, using the described or similar facilities and treatments. The recommended network and infrastructure modifications presented here consist of a variety of facility types and corresponding improvements to enhance circulation and safety for bicyclists and pedestrians, as well as motorists.

Recommendations Framework

Infrastructure and engineering improvements – combined with educational, encouragement, and enforcement policies and programs to promote bicycling and walking (see *Chapter 5*) – are a necessary part of any comprehensive strategy to become more bicycle- and walk-friendly. Specific network recommendations for new and enhanced facilities and associated infrastructure are aimed at upgrading and expanding the existing system of signed on-street bike routes and existing bike parking. Recommendations are also made for adding new pedestrian and bicycle connections and for improving difficult crossings, to provide better access and mobility and to increase the safety, comfort, and convenience of people walking and bicycling. Another important goal for the network is to improve conditions for bicycling and walking within and between Village neighborhoods and key destinations, which include schools, Village services, shopping, employment, public transit, residential neighborhoods, parks and forest preserves, neighboring communities, and regional trails. Those linkages are reflected in the proposed network, which will aid the Village in directing infrastructure investments.

Together, these recommendations will help the Village increase bicycling and walking both for transportation and for recreation, obtain Bicycle Friendly Community status (in the League of American Bicyclists program), and achieve key municipal goals related to sustainability, equity, safety, health, community character, and economic development. It should be noted that all of the infrastructure recommendations presented here are planning-level and conceptual in nature and will require further engineering study in order to determine potential constraints, feasibility, design details, and full traffic impacts, as well as the costs associated with engineering, construction, and maintenance.

Overarching Goals

Two overarching goals and associated objectives have been identified for the recommendations of this chapter. These goals are intended to guide the Village in making modifications and improvements to the transportation system and are highlighted here to ensure that changes made at specific locations reflect and advance the purpose and vision of the plan.

Goal 1: Improve safety for all pedestrians, cyclists, and motorists within the Village.

- Increase motorists' awareness of designated bicycle and pedestrian routes, crossing locations, and conflict points through improved visibility and enhanced traffic control devices.
- Provide and clearly mark adequate space for bicyclists and pedestrians.
- Slow traffic in locations where higher speeds can endanger cyclists and pedestrians.

Goal 2: Increase the convenience, comfort, and ease of cycling and walking in the Village.

- Improve existing and add new bicycle parking facilities.
- Improve signalized intersections with bicycle and pedestrian detection / signals.
- Improve wayfinding and signage for bicyclists and pedestrians.
- Ensure that bicycle and pedestrian routes that are safe for all users connect all parts of the Village.

Past Plans and Studies

The goals and supporting recommendations were created based upon public input received during the planning process, analysis of existing conditions, and previous planning and policy documents including the Village of Arlington Heights':

- Bikeways Map (last updated, 2014);
- Bicycle Policy Plan (1996);
- Thoroughfare and Transportation Policy Plan (2012);
- Comprehensive Plan (1997)
- Future Land Use Map Update (2013)
- Complete Streets Policy (2013); and
- Capital Improvement Program (2016-2020).

Proposed Bicycle and Pedestrian Network

The proposed bicycle and pedestrian network (**Figure 4.1**) aims to create a safe and efficient system that connects residents with key community destinations. It consists of existing, planned, and potential bicycle routes as indicated in the Village Bikeways Map, as well as new or altered routes and connections to improve access to important destinations. The proposed bikeways consist of both on-street and off-street facilities. Proposed pedestrian facilities consist of new sidewalks at select locations. Improvements at intersections and other “spot” locations are also proposed and discussed below.

Using steering committee and focus group input, feedback received through the plan’s public outreach and engagement process, Existing Conditions Report analysis, and Strava data, **Figure 4.1** also identifies a network of “framework” routes intended to serve as the core, or “backbone,” of the larger bikeway network. The framework routes, which make important connections to neighboring communities and key bikeways outside Arlington Heights, also link shorter, more localized routes. There are two north-south framework routes (the “Kennicott Route” and the “Dryden/Douglas Route,”) and nine east-west framework routes. The framework routes should be seen as priorities for investment and intensified efforts to improve conditions for cycling (and walking). In a few instances, potential alternate framework routes are provided. Final routing, as well as facility type, will be determined by Village and the BPAC through further engineering studies and by the implementation of associated improvements.

One way to think of the proposed framework routes is as a network of bicycle boulevards or neighborhood greenways⁷, which are relatively low-speed, low-volume streets that are designed to calm traffic, discourage cut-through motor-vehicle traffic, and prioritize bicycling. Bicycle boulevards are typically signed and branded, and include a variety of traffic calming treatments such as speed humps, medians, diverters, in-street stop-for-pedestrians signs, and/or lower speed limits. They also include crossing improvements to increase the safety, comfort, and convenience of cyclists and pedestrians at intersections, including bicyclist detection technology at signal-controlled locations. The framework routes should be prioritized for

⁷ More information on bicycle boulevards can be found in NACTO’s Urban Bikeway Design Guide, at <http://nacto.org/publication/urban-bikeway-design-guide/bicycle-boulevards/>. See also the City of Berkeley, CA Bicycle Boulevard program webpage, at <https://www.cityofberkeley.info/bicycleboulevards/>. Portland State University’s Initiative for Bicycle and Pedestrian Innovation has produced a Bicycle Boulevard Planning & Design Guidebook, at <https://www.pdx.edu/ibpi/bicycle-boulevard-planning-design-guidebook>.

Facility Types

The recommended bicycle and pedestrian network includes a variety of facility types, including both on-street and off-street facilities, as illustrated on *Figure 4.1*.

Off-street facilities include:

- multi-use paths (trails, sidepaths, and short cut-throughs or connectors); and
- sidewalks.

On-street facility types include:

- bike lanes (traditional, buffered/protected, advisory);
- marked shared lanes (sharrows);
- combination bicycle-parking lanes; and
- signed bicycle routes.

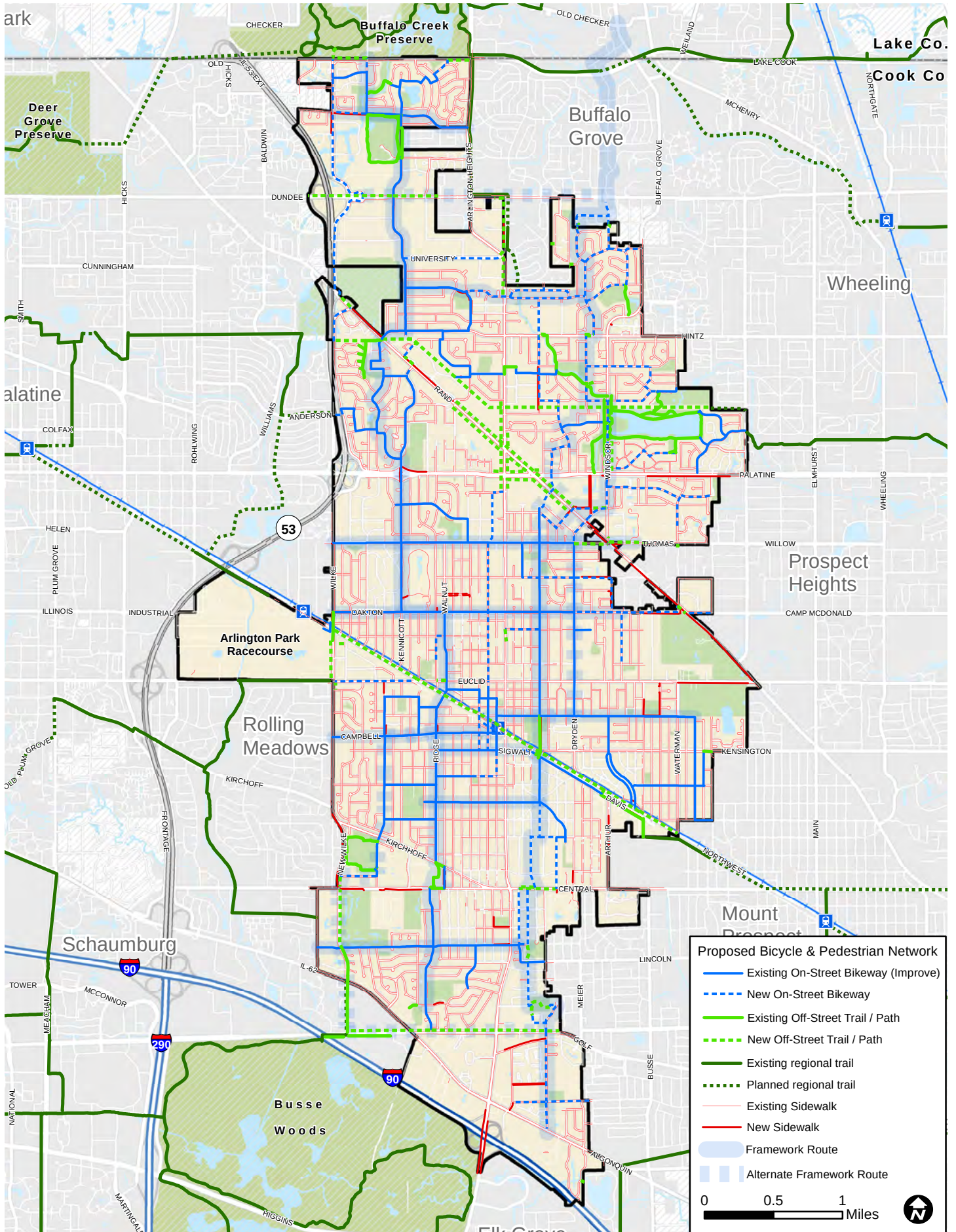
In addition to (linear) bicycle, walking, and multi-use facilities, spot improvements (primarily at intersections), as well as traffic calming treatments are recommended for locations along the proposed network routes.

In the pages that follow, information and recommendations for these three main facility types – on- and off-street bicycle and pedestrian facilities, and intersection improvements and traffic calming treatments – are described in greater detail, sub-divided when necessary, with definitions, design guidelines, typical cross sections, illustrations, examples, and maps of recommended potential locations provided. Facility recommendations will require engineering studies to determine feasibility.

Typical cross-sections and illustrations

Cross-sections provided throughout this plan are intended as general guidance for creating new or retrofitting existing facilities to more fully accommodate bicyclists and pedestrians. Whenever possible, locations of specific plan recommendations are used.

Figure 4.1 - Proposed Bicycle and Pedestrian Network (On-street and Off-street) and Framework Routes



Multi-use Path Definitions and Design Guidelines

Multi-use paths are off-street facilities that are shared by multiple users. For bicyclists, multi-use paths can enhance network connectivity, filling in gaps where the street network is not complete or cannot accommodate bike facilities. For pedestrians, bicyclists, and other users, multi-use paths serve both recreational and transportation purposes.

Trails

Trails are typically associated with open space and recreational use, and are intended to bring users into contact with nature, while sidepaths are strongly connected with the adjacent roadway and are, in essence, a kind of a hybrid between a sidewalk and a trail. Sidepaths, as well as short trail segments, often serve as both local access routes and as links in a larger trail network.

Design Guidelines

Trails should be at least ten feet wide and include a two foot graded area (on each side) for clearance from lateral obstructions such as vegetation and poles. Trails and sidepaths should be paved asphalt or smooth concrete to accommodate a variety of users. Multi-use trails and sidepaths should be designed to accommodate two-way travel. Depending on path usage and volumes, a painted center stripe may be used to demark two-way travel.

Cross-sections

Figure 4.2 offers typical cross-sections (existing and recommended) for multi-use trails. **Figures 4.3-4.4** show examples of existing trails in Arlington Heights and illustrate typical issues and opportunities for recommended trail improvements.

- o **Existing Conditions:** This cross-section illustrates the current multi-use trails that exist in various locations in the Village. The trails vary in width from six to eight feet. The asphalt trails, in some cases, are in poor condition.
- o **Recommendation:** The existing trails owned by the Village should be widened, whenever possible, to a minimum of ten feet with two foot clearance zones on each side.

Figure 4.2 - Trail cross-sections

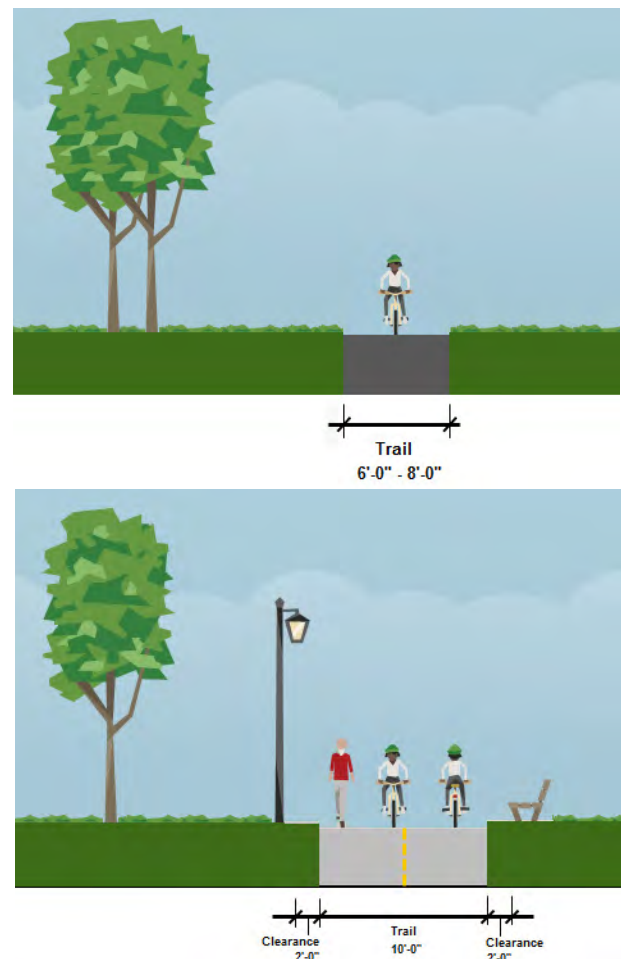


Figure 4.3 - Existing Willow Park trails



Figure 4.4 - Existing Centennial Park trail



Sidepaths

Sidepaths, generally, are a good option along high-speed, high-volume corridors with wide block/driveway spacing. Here, they provide access for pedestrians and for bicyclists who are not comfortable riding in heavy traffic. Whenever possible, sidepaths (like sidewalks) should be separated from the roadway by a vegetated buffer strip.

Sidepaths are most successfully implemented as part of new development, where access management can be implemented at the same time that development occurs. In mature, built-out communities like Arlington Heights, constructing sidepaths (or widening sidewalks) can be difficult, due to right-of-way constraints, the presence of utilities, and high number of driveways. In such contexts, sidepaths typically work best as short segments along and at crossings of busy streets, which connect to lower-stress bike routes along local streets. A number of short sidepaths that function in this manner are recommended, including at locations at which proposed bikeways cross Hintz and Central Roads.

Design Guidelines

Sidepaths should be a minimum of eight feet wide; however, ten feet or wider is recommended. A minimum planted buffer strip of five feet between path and roadway is recommended. If this buffer space is not available, then a striped shoulder or parking lane can provide separation from traffic. In constrained contexts, a barrier wall, may be necessary. If a shared-use path is on one side of the street only, safe, adequate, and adequately-spaced crossing accommodations must be provided to access land uses on the other side of the roadway. Special care should be taken to design driveway and intersection crossings – and to minimize their number, to the extent possible – in order to reduce potential conflicts.

Sidepaths should be utilized and promoted as bikeways only where the volume and speeds on the adjacent roadway would discourage the majority of bicyclists from riding in traffic, and where there are no practical alternatives for either improving the adjacent roadway or accommodating bicyclists on nearby parallel streets. In addition, it is important that sidepaths functioning as designated bikeways lead cyclists directly to streets that safely accommodate bicyclists, to another multi-use path, and/or to an intersection or other crossing locations where bicyclists crossings, queuing requirements, and detection are provided.

Cross-sections

Figures 4.5-4.6 provide examples of two existing cross-sections along Rand Road, which are typical of large arterials throughout Arlington Heights, as well as potential reconfigurations that include sidepaths and buffered parkways. In the first proposed reconfiguration, minimal-width sidepaths and planted buffer strips would be achieved by narrowing travel lanes.

In the second, a potential road diet provides space for sidepaths and buffer areas, as well as other amenities. The latter would improve livability and safety, and provide opportunities for place-making along Rand Road. It is provided here merely as an example of such a treatment.

Figure 4.5 (a) - Existing Cross-section: Typical Large Arterial (Arlington Heights Rd. near Golf Rd.)

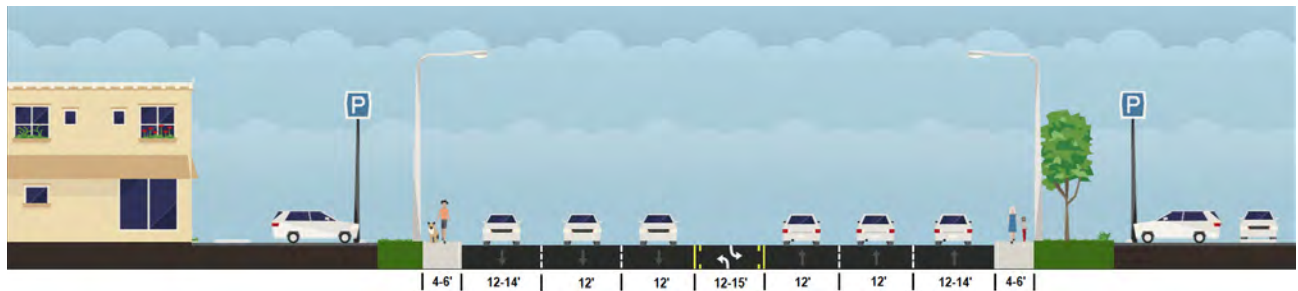


Figure 4.5 (b) - Existing Cross-section: Typical Large Arterial (Rand Rd. near "Triangle District")

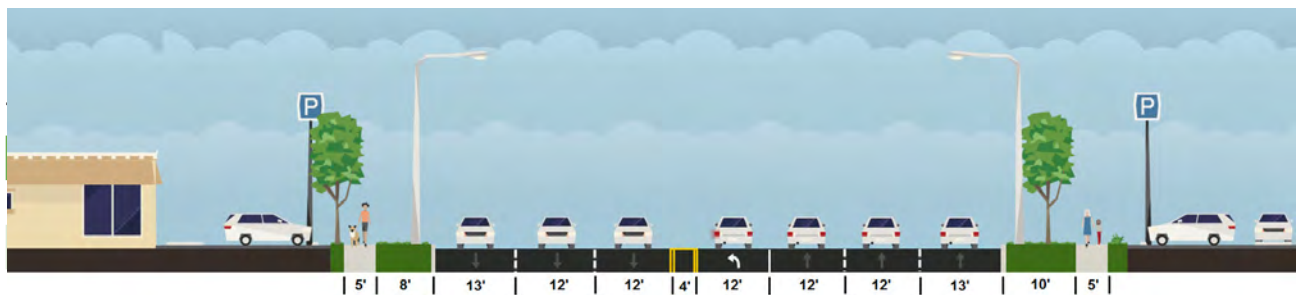


Figure 4.6 (a) - Proposed Cross-section: Arterial Buffered Sidepath (Rand Rd.)

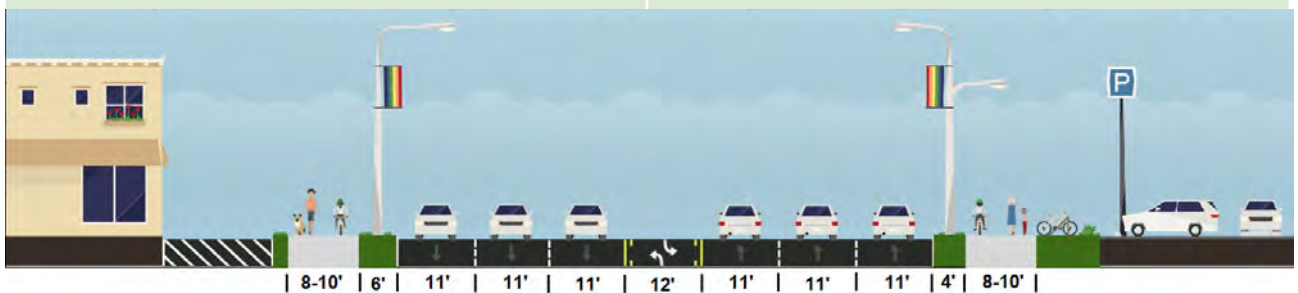


Figure 4.6 (b) - Proposed Cross-section: Arterial Buffered Sidepath and Road Diet (Rand Rd.)

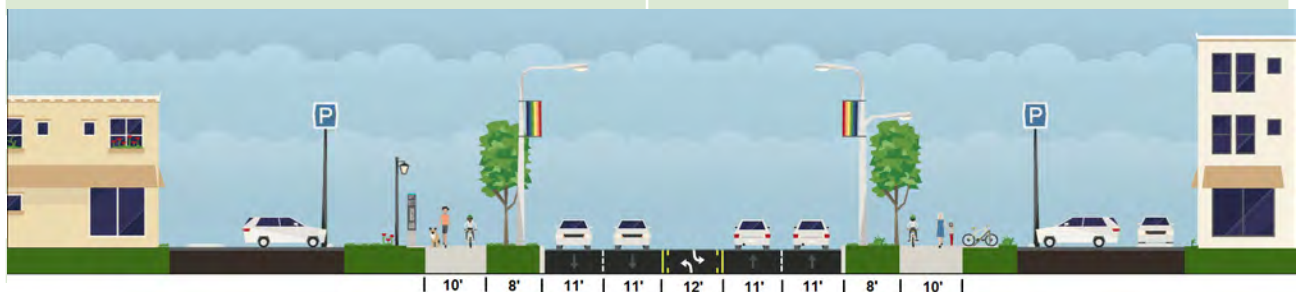


Figure 4.7 shows existing and proposed cross-sections for a sidepath (upgraded from the existing sidewalk) on one side of Hintz Road, where a raised center median and other improvements are recommended. This sidepath provides a short, safe connection along a proposed bikeway at the crossing of a busy arterial.

Figure 4.7 (a) - Existing Cross-section: Hintz Rd.

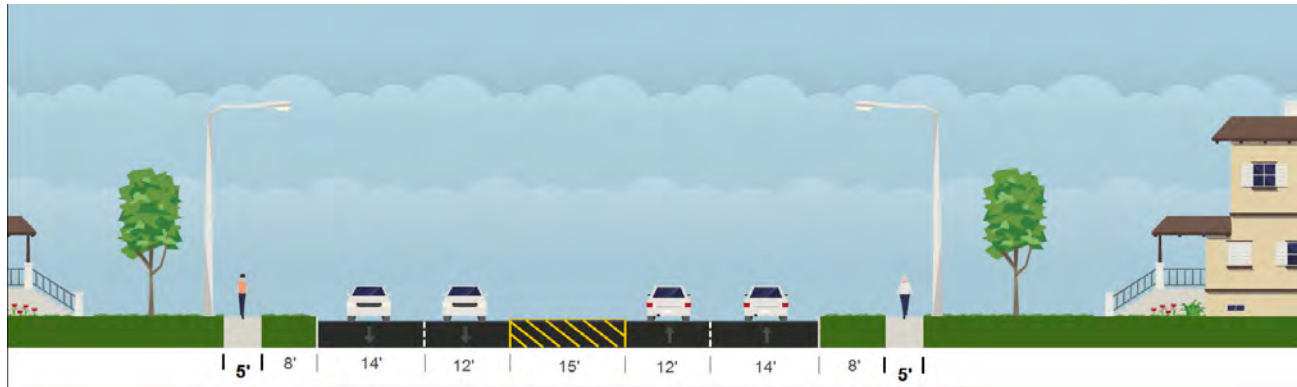
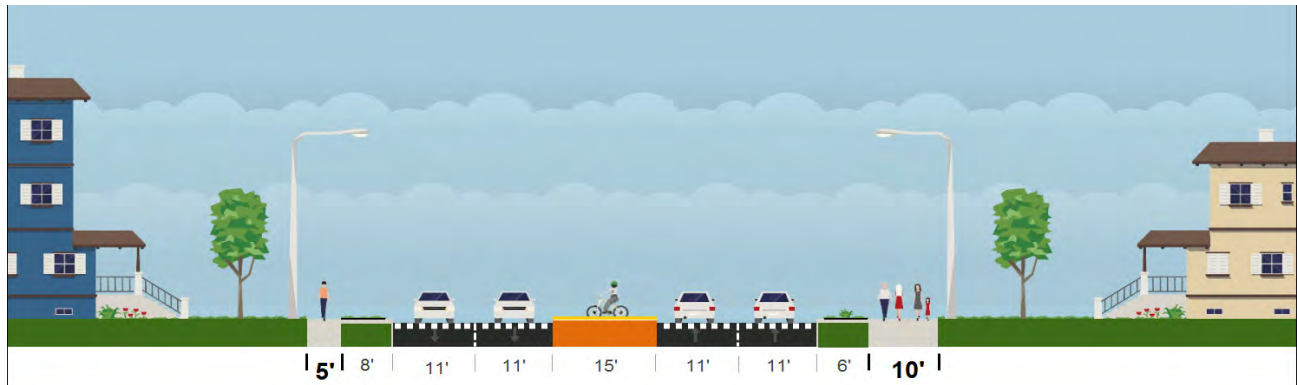


Figure 4.7 (b) - Proposed Cross-section: Hintz Rd. with Sidepath and Median Refuge Island



Cut-throughs

Cut-throughs are relatively short multi-use paths between roadways, utilizing easements between homes, utility ROW, small parks, and other available spaces and/or infrastructure. Connectors are short links between a roadway and an adjacent or nearby path. Existing cut-throughs and connectors range from formal (essentially, part of the Village sidewalk network) to informal (e.g. open gates or walkways between private properties). Some run between two residential streets or subdivisions; others connect to community destinations or retail areas. Cut-throughs are maintained by various entities, including the Village, the Park District, homeowners associations, and private businesses. Several existing and proposed cut-throughs and connectors are located on the border of Arlington Heights and neighboring communities. More formal cut-throughs include the underpass at Douglas and the Union Pacific rail line, as well as the bridge between Brookwood Drive and Camelot Park.

Examples of less formal cut-throughs include:

- o Sidewalk off of Dorothy Ave./Charles St., leading to a shopping center along Rand Road
- o Gate/pathway from the end of Grindel Drive to the Central Park East apartments
- o Driveway along N. Harvard Avenue, at Thurston Pl., which leads to a path in Creekside Park.

Design Guidelines

Existing **cut-throughs** typically consist of four to five-foot wide concrete sidewalks, often within wider easements; when functioning solely as sidewalks, cut-throughs should be a minimum of five feet wide. Cut-throughs that form part of the bikeway network should be renovated and upgraded to eight to ten-foot wide asphalt or concrete pathways. In some cases, such as at the Douglas Ave/UP-NW rail line underpass or along Kennicott Avenue at Nichol Knoll Park, broader intersection and roadway reconfiguration, including the addition of new crossings, queuing areas, curb ramps and other design treatments may be necessary. At all cut-through, connector, or transition locations that are part of designated bike routes, bike route signage should be included to provide clear, convenient wayfinding and navigation.

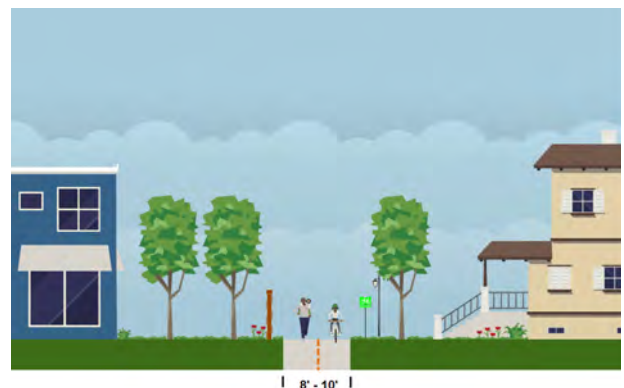
Cross-sections

Although there is substantial variation in the nature, function, and design of cut-throughs, **Figure 4.8** offers typical cross-sections (existing and proposed) for cut-throughs between two residential properties.

Figure 4.8 (a) - Existing Cross-section: Cut-through Sidewalk



Figure 4.8 (b) - Proposed Cross-section: Cut-through Bikeway

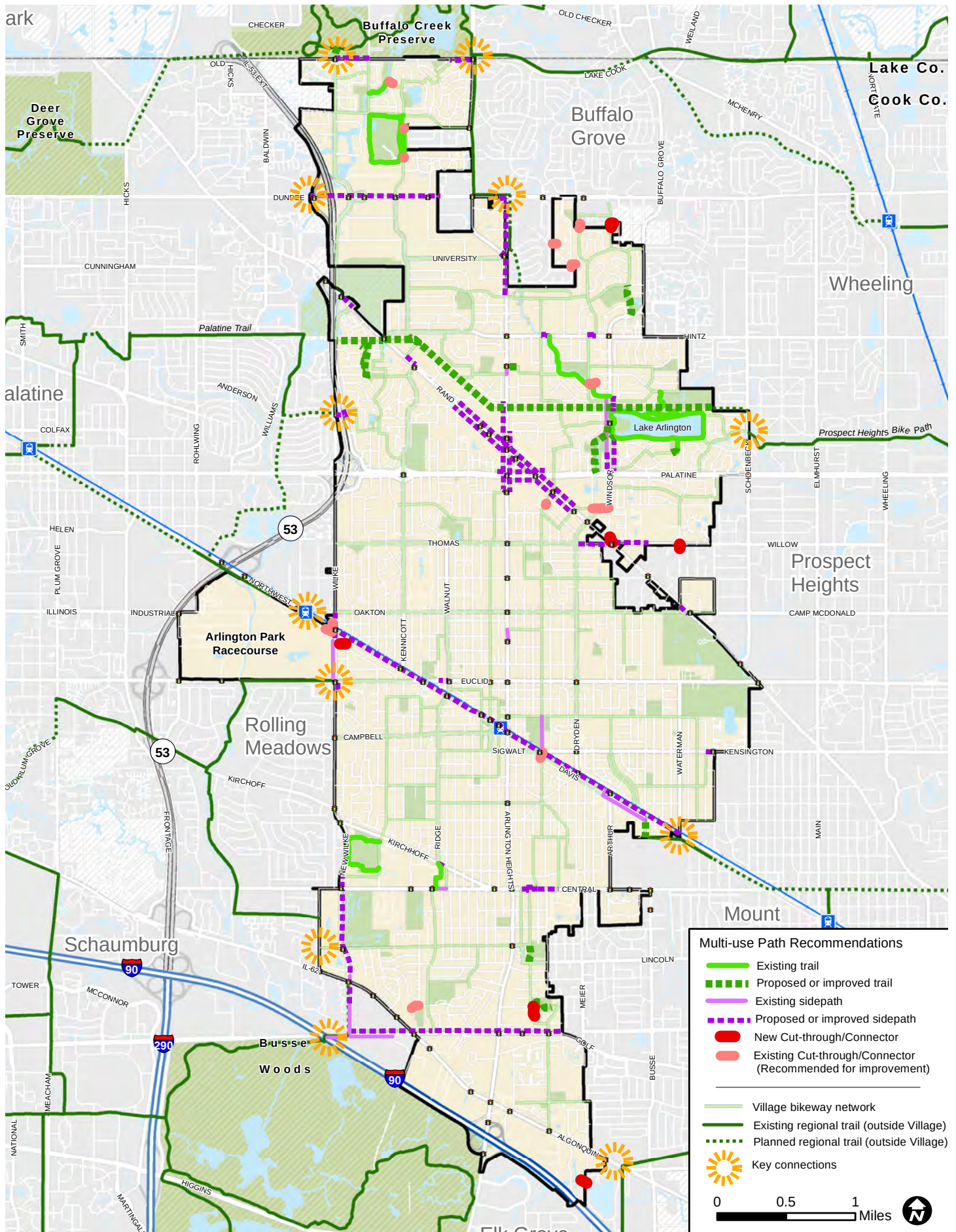


Multi-use Path Recommendations

Figure 4.9 shows all multi-use path recommendations – including trails, sidepaths, and cut-throughs and connectors. As is shown on the map, a number of these facility types already exist throughout the Village. While some of the existing paths may adhere to recommended design guidelines for each facility type, many do not. A medium- to long-term goal for the Village and the Park District, therefore, should be to improve and widen existing paths and sidewalks that form part of the bikeway network or that provide key access to it. Improved – as well as new – multi-use paths should be designed and constructed to meet the design standards provided for each facility type in order to safely and comfortably accommodate all users, including bicyclists. Reconstruction also provides the opportunity to ensure that shared-use paths comply with ADA requirements.

In addition to widening and related improvements, a commitment to path maintenance (crack-sealing, resurfacing, sweeping, plowing, vegetation control) is important. Off-street multi-use paths that serve as bicycle routes and connect to on-street facilities should include ramps at all access or transition points, which can accommodate the typical speeds, volumes, and angles of approach used by cyclists. In addition, bikeway signage should be installed, especially at points where off-street paths connect to on-street facilities and/or to regional trails at the Village border.

Figure 4.9 - Multi-use path recommendations



Trails

The plan identifies three high priority multi-use trail projects. One entails construction of a new trail in the ComEd ROW (north of Rand Road), while the remaining two involve access to existing, popular regional trails (Buffalo Creek and Busse Woods). These projects are recommended for mid- to long-term implementation. All involve roadway crossings that would include intersection improvements requiring more detailed engineering studies to implement.

Trail in ComEd ROW

We recommend that the Village pursue construction of a trail in the ComEd right-of-way, north of Rand Road, between Schoenbeck Road and Hintz/Rand Road. This trail was identified as a high priority by AH BPAC and other stakeholders. The trail is indicated on Arlington Heights 2014 Bikeways Map as a “Potential Bikeway” and also identified as a regional trail corridor in CMAP’s Regional Greenways and Trails Plan. This trail, while conceptually straight-forward and clearly of high value for regional connectivity, would entail significant investment on the part of the Village and should therefore be thought of as long-term in nature.

While the project would be eligible for funding under federal programs such as Transportation Alternative Program (TAP), Congestion Mitigation & Air Quality Improvement Program (CMAQ), Surface Transportation Program (STP), and Illinois Transportation Enhancement Program (ITEP), the Village would likely need fund for Phase 1 engineering and/or the 20 percent local match for construction costs, as well as obtain a lease or easement from ComEd. The state ITEP program could be a potential source of funding for Phase 1.

The eastern end of the proposed trail would connect to the Lake Arlington (loop) Trail and to the Prospect Heights Bike Path. At its western end, it would connect to the Palatine Trail. Both the Prospect Heights Bike Path and the Palatine Trail utilize the same ComEd ROW as is proposed for the Arlington Heights trail. These existing facilities constitute major regional trails that provide access to multiple communities, destinations, and other regional bikeways, and serve both recreational and transportation purposes. The proposed ComEd trail in Arlington Heights would, therefore, fill a major “gap” in the regional network. Within the boundaries of Arlington Heights itself, the proposed trail would provide a cross-Village route linking numerous parks, schools, neighborhoods, commercial areas (along and near Rand Road), as well as other existing and proposed bikeways.

As illustrated in **Figure 4.10**, the ComEd trail will involve crossings (either at-grade or separated) of several major and minor roads; each crossing will need to be carefully analyzed and engineered to ensure the safety and comfort of all trail users.

Figure 4.10 - Trail in ComEd ROW



Buffalo Creek Preserve Trail Access

There is currently no safe and convenient crossing of Lake Cook Road for cyclists utilizing the popular Kennicott (framework) bike route to access the Buffalo Creek Forest Preserve, its trail, and/or points further north and west. This route is very popular with cyclists and was identified as a high priority project by the Arlington Heights Bicycle Club and other bicycling (and pedestrian) stakeholders. Existing conditions are illustrated in **Figure 4.11**.

We recommend that the Village work with the Cook County Department of Transportation and Highways (DOT), which has jurisdiction over Lake Cook Road in this area, and the Lake County Forest Preserve District, in order to identify and implement a safe crossing and connection to the Buffalo Creek Preserve, either at the existing signalized intersection (Wilke and Lake Cook Road) or at Schaefer Road, where many cyclists currently, and with substantial risk, cross Lake Cook Road in order to access Buffalo Creek Preserve and points beyond.

The simplest, preferred option for achieving this connection would be to relocate the signal from Wilke to Schaefer Road, installing bicycle-friendly actuation and other related safety treatments at the new signalized intersection. This option would require approval and programming by Cook County DOT and IDOT, with input from Lake County DOT and surrounding municipalities.

Other options for creating this connection include:

- Installation of a Pedestrian Hybrid Beacon (PHB) at Schaefer Road. Note that additional associated safety treatments should be included as part of PHB installation, including, if feasible, a raised center median.
- Creation of a multi-use path connection at the existing signalized intersection (at Wilke). This connection could take the form of a trail running from the north side of the intersection to the existing Buffalo Creek Trail, or of a sidepath, on the north side of Lake Cook Road, running from the the intersection back to the Schaefer Road bikeway.
- Installation of a new signal at Schaefer Road, while maintaining the existing signal at Wilke. This, and other options, would require an engineering study to determine impacts and feasibility. The distance between Wilke and Schaefer Raods is approximately 0.25 miles. Nearby signals, approximately 2 miles east along Lake Cook Road at McHenry and Buffalo Grove Roads, are spaced 0.14 miles apart.

Conceptual illustrations of these options are provided in **Appendix C**.

Figure 4.11 - Existing conditions at Wilke/Schaefer and Lake-Cook Roads



Busse Woods Trail Access

A safe and convenient bicycle route from the Village of Arlington Heights to the Busse Woods Trail was identified by the BPAC, the Arlington Heights Bicycle Club, other stakeholders, and the public at large as a high priority. The trail's regional importance as both a recreational amenity and a transportation facility, the access it provides to key destinations, and its popularity with Arlington Heights residents and bicyclists emerged clearly during the existing conditions analysis and public engagement processes. The primary trailhead serving Arlington Heights residents is located just outside the Village, in Rolling Meadows, at the southwest corner of Golf and Wilke Roads. The plan recommends, therefore, that the Village work with the City of Rolling Meadows – as well as IDOT, who has jurisdiction over both Golf and Algonquin Roads – to create this connection, which would increase safe access to shopping and dining destinations.

The preferred option for this connection entails extending the existing signed on-street bike route along Fernandez Avenue south to Golf Road.

From there, the existing sidewalk along the north side of Golf would be widened and improved to bikeway standards (eight to ten foot wide sidepath) to the intersection of Golf and Wilke, where the Busse Woods Trail begins. Several crossings of major roads (Algonquin, Golf, and Wilke) and shopping center entrance drives would need to be improved in order to increase safety, visibility, and wayfinding for cyclists (and pedestrians). Information on design guidance and best practices for the accommodation of shared use paths at signalized intersections can be found in **Appendix D**. Examples/photographs of bicycle and pedestrian accommodation at intersections of large, multi-lane, high-speed, high-volume roads are provided in **Appendix E**. **Figure 4.12** illustrates the proposed route and improvements. An alternative route (also shown in **Figure 4.12**) would entail construction of a new trail in the Kingsbridge Arboretum.

Other potential options for providing bicycle access to the Busse Woods trailhead at Golf and Wilke are discussed in **Appendix F**. All options – including the preferred option presented above – will require study by engineers in order to determine potential trade-offs (in traffic flows), safety concerns, and costs. Planning-level analysis indicates that the preferred option may be the least costly and most feasible of alternatives.

Figure 4.12 - Proposed bike route to Busse Woods trailhead



Sidepaths

Sidepaths are recommended along several arterial corridors, including Golf Road, Northwest Highway, and Dundee Road (indicated in the Northwest Municipal Conference “2010 Bicycle Plan”), as well as for segments of Windsor, Wilke, Rand, and Arlington Heights Roads in the “Triangle District”. Relatively short segments of sidepath, that provide a connection (at crossing locations of larger, high-volume roads along framework bicycle routes) or a spur route to important destinations that can otherwise be reached by bicyclists only by riding on sidewalks are also recommended. **Appendix G** provides detailed information on additional sidepath recommendations not illustrated here.

The majority of proposed sidepaths are located along IDOT and Cook County roads. At least two – Windsor Drive and Wilke Road – are under local jurisdiction, while Kirchhoff and Old Arlington Heights Roads are under joint state/local jurisdiction. Prioritizing and advancing sidepath construction along roadways under IDOT and Cook County jurisdiction is a challenge since these agencies control the right-of-way and the programming of projects on their facilities. It should be noted, however, that both the state and Cook County have adopted Complete Streets policies, which express a commitment to designing and constructing roads and associated rights-of-way to accommodate all roadway users in all projects they undertake.

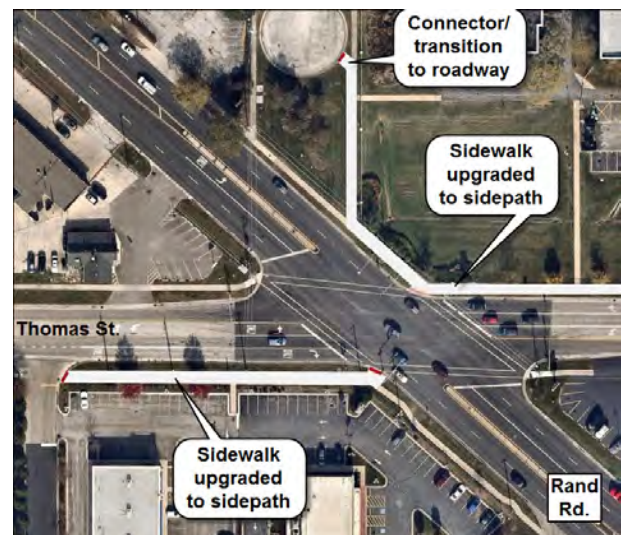
Because most of the roads, along which sidepaths are recommended, are under IDOT or Cook County jurisdiction, the Village should actively monitor these agencies’ multi-year programs and, when projects are being planned or advanced, the Village should work closely with these agencies’ staff to ensure that sidepaths are included in project scoping and design. The Village should initiate discussions with IDOT and Cook County regarding state and county roads along which sidepaths are prioritized. That discussion should include the identification of locations where there is need for safer, more visible pedestrian and bicycle crossings, as well as what potential treatments

and designs would be most effective for achieving pedestrian and bicycle safety, mobility, and access (at signalized, stop-controlled, and uncontrolled intersections). It should be noted that when reconstruction of a roadway corridor is programmed, sidepaths of suitable width with protective buffers may be achieved by narrowing travel lanes or by a reduction in the number of lanes.

Beyond issues related to roadway jurisdiction, the feasibility and the cost of upgrading sidewalks to sidepaths or of constructing new sidepaths can be significantly influenced by the need for right-of-way acquisition, utility relocation, removal of trees and other vegetation, stormwater management, and environmental mitigation. For this reason, feasibility studies or preliminary engineering, as well as public outreach and engagement targeted at affected property owners, must be carried out for each project in order to determine all constraints, trade-offs, and costs.

Figure 4.13 illustrates the recommendation for upgrading sidewalks along Thomas Street at Rand Road to sidepaths, as well as creating a new cut-through connection from an existing cul-de-sac (to improve bicycle and pedestrian access to John Hersey High School, located just east of the intersection).

Figure 4.13 - Sidepaths and connector at Thomas and Rand (in Arlington Heights and Prospect Heights)



Sidepaths at Uncontrolled Crossings

A significant number of proposed sidepaths consist of fairly short segments located along framework bicycle routes. These sidepaths can be achieved by upgrading existing standard sidewalks and are designed, in most cases, to provide safe access from an (improved) bicycle and pedestrian crossing location (over multilane, high-volume, high-speed roads) to the low-volume neighborhood streets along which the framework bicycle route continues. Some of the proposed sidepaths lead cyclists to signalized intersections in order to safely cross a busy road; others lead to uncontrolled crossings. In cases of the latter, short sidepath installations are typically combined with the construction of a raised center median to increase the safety of the crossing. At such locations, additional safety treatments, including the installation of a pedestrian hybrid or rectangular rapid flashing beacon, enhanced crosswalk markings, and appropriate warning, regulatory, and wayfinding signage are typically required. Conceptual illustrations of recommendations for two locations, along Hintz Road and one along Central Road, are provided below (*Figures 4.14 to 4.16*).

Figure 4.14 - Sidepath (and center refuge island) on Hintz at Brighton/Windsor



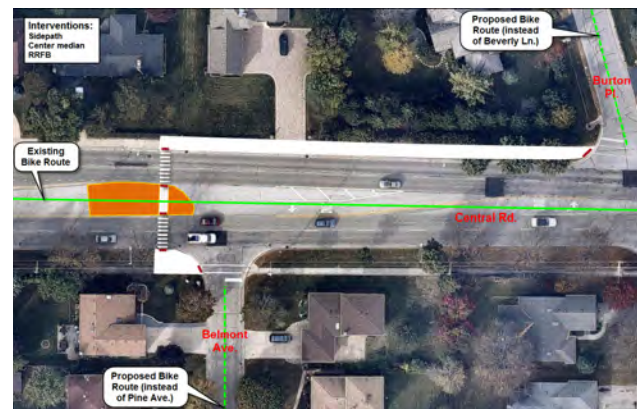
Hintz at Brighton-Windsor - Sidepath on south side, with raised center median (Note: See Appendix H for illustration of alternate design concept, with sidepath along north side of Hintz).

Figure 4.15 - Sidepaths (and center refuge island) on Hintz at Bradford/Vista



Hintz crossing at Vista-Bradford

Figure 4.16 - Sidepath (and center refuge island) on Central at Belmont/Burton



Central at Burton-Belmont - Sidepath on north side, with raised center median (Note: See Appendix H for illustration of alternate design concept, with sidepath along south side of Central).

Triangle District

A number of sidepaths are proposed in the Triangle District (the area formed by the intersections of Arlington Heights, Palatine, and Rand Roads). All proposed sidepaths would be created by widening existing standard-width sidewalks. ADA-compliance should be adhered to in all new construction and in retrofits. Triangle District improvements (sidepaths and associated intersection improvements) were identified by the BPAC as a high priority, with a goal of creating safer, more convenient bicyclist and pedestrian access to this busy commercial area.

The challenges that the Triangle District presents to bicyclists and pedestrians are the result of development patterns (large, auto-oriented “strip style” shopping centers) and the nexus of wide, high-speed, high-volume roads (conditions similar to those found in the southern part of the Village where Golf, Algonquin, and Arlington Heights Roads converge). For pedestrians, the main issues are safe crossings of arterial roads and ADA accessibility. For cyclists, the main issue is lack of comfortable routes to, from, and within the Triangle area (which do not utilize the existing standard-width sidewalks). While the construction of accessible sidepaths and improved crossings will address these key issues, wayfinding signage and bicycle detection technology at signalized intersections along bicycle routes leading to the Triangle area are also important. For more information on bicycle detection technology, see *Appendix I*.

The locations of proposed sidepaths are determined by the need to connect existing or planned bikeways on lower volume, lower speed local streets to the retail area bounded by large, busy arterials that are not suitable for on-street cycling. The installation of sidepaths should be accompanied by bicycle- and pedestrian-friendly intersection improvements and by new or improved wayfinding signage. (For additional information on typical intersection improvements, see the section on intersection improvements, below, as well as *Appendix A*. More information on bikeway signage is provided in the section on signed bike routes).

Taken together, the proposed sidepaths and associated intersection improvements in the Triangle District represent a substantial, long-term investment. Engineering analysis would need to be undertaken to determine the feasibility and cost of widening the sidewalks to sidepaths. Existing landscaping, trees, signage, property encroachments, utilities, drainage infrastructure, and other roadside infrastructure and appurtenances may need to be moved, removed, or may in some other way be affected by the construction of sidepaths. *Figure 4.17* schematically illustrates the suggested improvements in the Triangle District.

Figure 4.17 - Triangle District improvements



Kennicott and Palatine

Sidepaths (new and upgraded existing sidewalks), together with associated intersection improvements, are also recommended along Kennicott Avenue at Palatine Road. This intersection is on the popular segment of the Kennicott bicycle framework route and is currently signed as a bike route (although signage is lacking in places, in poor condition in others, and does not consistently provide destination or distance information). This crossing was identified as a major barrier by the BPAC. The challenges to creating a safe crossing here are compounded by the width of Palatine Road, signal timing, lack of sidewalks (and signal actuation) on the west side of Kennicott, and the presence of service roads and ramps.

The proposed design concept calls for sidepaths to be constructed on the east and west sides of Kennicott (at Palatine Road). **Figure 4.18** provides a schematic illustration and **Figure 4.19** provides a more detailed version of this concept, with additional safety treatments (widened center medians on Palatine Rd, raised corner (“pork chop”) islands, additional high-visibility crosswalks on the north and south legs and at the ramps to/from the frontage roads).

Examples of large, arterial intersections where similar design treatments and concepts (aimed at accommodating bicyclists and pedestrians) are provided in **Appendix E**.

Figure 4.18 - Kennicott-Palatine improvements

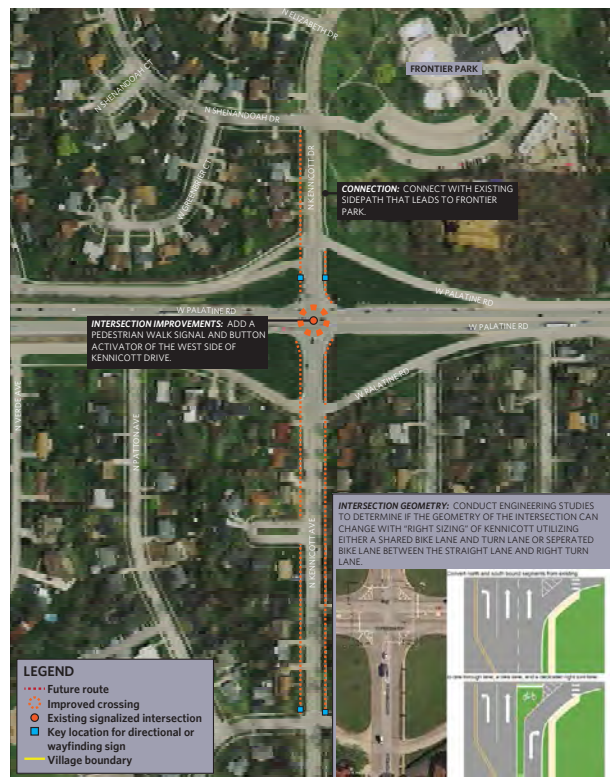


Figure 4.19 - Sidepaths on Kennicott at Palatine



Two alternative design concepts for this intersection, both of which maintain an on-road position for cyclists traveling along Kennicott, are shown in **Figures 4.20 and 4.21**. One concept utilizes green-backed sharrow markings, while the other calls for buffered bike lanes, on approaches, with bike lane markings continuing through the intersection. Room for the buffered bike lanes is created by eliminating one of the two through-lanes in each direction on Kennicott (i.e. through implementation of a road diet on the approaches to Palatine Road).

A road diet at this location appears to be feasible, given the low ADT (2,600 to 3,700) and the fact that Kennicott narrows to a two lane road beyond this intersection, although an engineering study would need to be undertaken to determine feasibility. Both design concepts include installation of sidewalks on the west side of Kennicott, as well as other improvements to increase the safety and comfort of both bicyclists and pedestrians. Both sidepaths and on-street bikeways at this location would help to accommodate cyclists of differing abilities and levels of confidence.

Figure 4.20 - Sharrows at Kennicott and Palatine



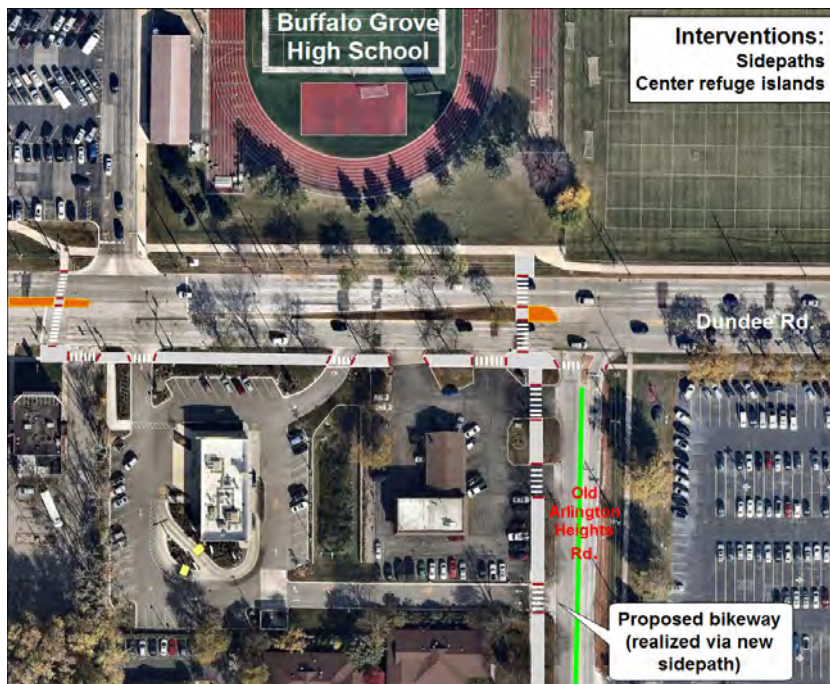
Figure 4.21 - Buffered bike lanes at Kennicott and Palatine



Sidepaths to Key Destinations

Other proposed sidepaths and associated crossing treatments are intended to provide safer bicycle and pedestrian access to important destinations along key bikeways. An example is the recommendation to widen – and fill the gaps in – existing sidewalks on Old Arlington Heights and Dundee Roads (and improve crossings) near Buffalo Grove High School (*Figure 4.22*). *Figure 4.13*, located on page 57, illustrates another such example along Thomas Street, near John Hersey High School.

Figure 4.22 - Proposed sidepaths and crossing islands at Dundee and Old Arlington Heights Road



Cut-throughs and Connectors

Several new cut-throughs and connectors are recommended, as well as improvements to existing connectors located along current or proposed bicycle routes (primarily, along framework routes). The Village should prioritize cut-throughs, connectors, and transitions along the framework bicycle routes.

Clarence to Windsor (at Dryden)

High priority should be given to the improved cut-through at Dryden and Windsor (illustrated to the right, *Figures 4.23 and 4.24*), due to the popularity of this north-south route and the destinations it serves.

A number of proposed improvements would consist primarily of the installation curb ramps designed to accommodate bicyclists (as well as pedestrians) at the transition points between on-street bike routes and off-street multiuse trails and paths. Generally, improvements to existing cut-throughs and connectors will consist of widening, wherever feasible, standard sidewalks to eight to ten feet in width, together with installation of bike-friendly ramps, bike route signage, and (where needed) enhanced pedestrian-scale lighting. Some connectors and cut-throughs may also be part of larger intersection or spot improvements, which are discussed in the following section.

Figure 4.23 - Existing conditions at Dryden and Windsor



Figure 4.24 - Propose bikeway connection at Dryden and Windsor



Nichol Knoll Park Transitions

Another high priority project and one that should be relatively easy and low cost is the improvement of the transitions between Kennicott Avenue and the multi-use path in Nichol Knoll Park (illustrated below, **Figures 4.25 and 4.26**). This location is along a framework route segment and, at present, the transitions between the on-street bikeway and the off-street path are not constructed to bikeway standards and are difficult for cyclists to navigate. The Village reports that a transition ramp at the north end (illustrated to the right) has been constructed.

Arlington Park Metra Station

High priority should also be given to the provision of convenient bicycle access to the Arlington Park Metra station at the southwest corner of Wilke and Northwest Highway. This connection is discussed in Appendix F in relation to multiuse paths and bikeways routed through parking lots. As noted there, the Wilke-Northwest Highway intersection is currently being reconstructed by IDOT. The Village should work with IDOT designers to ensure that this important access point accommodates persons arriving at the station by bicycle, as well as on foot.

Figure 4.25 - Concept for transition at north end of Nichol Knoll Park Path



Figure 4.26 - Concept for transition at south end of Nichol Knoll Park Path



Douglas / UP Underpass

Another high-priority connector project involves improvements to the underpass beneath the UP-NW rail line, between Davis and Northwest Highway at Douglas Avenue. Improvements to this location were identified by the BPAC as one of six high-priority projects. Various – in some cases interdependent – potential treatments for this location are illustrated below. Short-term, the installation of bicycle-friendly curb ramps on both the south and north sides, convex mirrors at the entrances to allow users to see around corners, signs indicating that cyclists should dismount, and other warning, regulatory, and wayfinding signage should be installed. Medium-term, an enlarged queuing area on the north side at the signalized crossing of Northwest Highway / Kensington Road should be constructed.

Figure 4.27 - Proposed improvements at south end of RR underpass

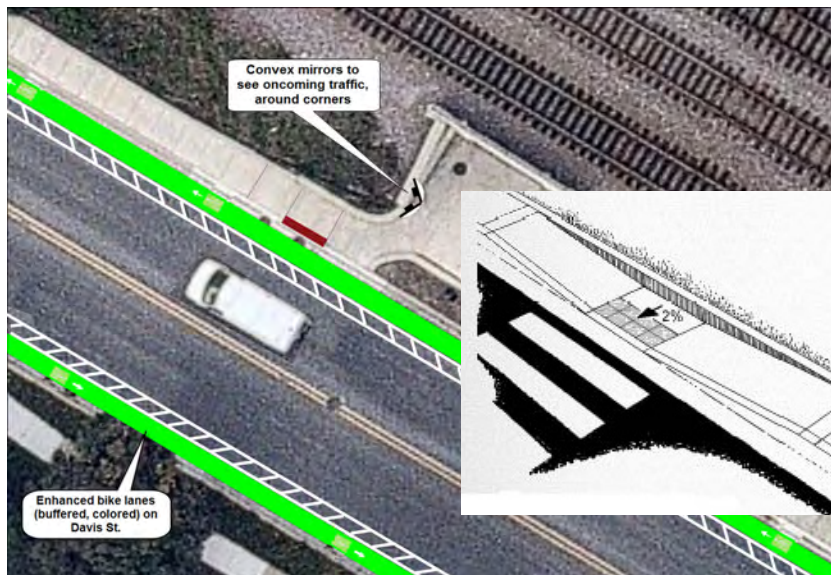
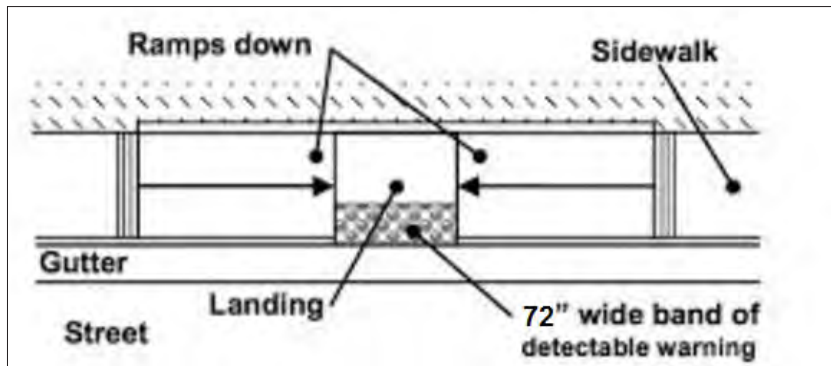


Figure 4.28 - Federal Highway Administration (FHWA) guidance on ADA-compliant parallel curb ramps



Over the long-term, the complex intersection of Northwest Highway, Kensington, and Douglas should be analyzed and improved to provide easier access for bicyclists using the Douglas street sidepath and for the large volumes of pedestrians and bicyclists who are present at rush hours. One potential design concept includes installation of a new bicycle and pedestrian crossing on the west leg, “extending” the existing sidepath along Douglas directly across the intersection to an enlarged landing and queuing area on the north side of the underpass. This concept would likely involve a new signal phase, which would require actuation (either manual or automated). The Village should also consider enlarging the raised medians and other curbside waiting areas at this intersection, along with other treatments, to improve pedestrian and bicycle safety (*Figures 4.29 and 4.30*).

The underpass at Douglas/Davis and the UP-NW rail line is a good example of a situation when a cut-through (and/or associated multi-usepaths) needs to accommodate significant numbers of both pedestrians and bicyclists. Both signage and on-pavement markings can help clarify that the route is used by both cyclists and pedestrians and indicate regulations and/or positioning for different users (when space allows). See *Figure 4.30*. Such treatments are most appropriate for relatively short segments of pathway where no feasible alternative for providing separate facilities exists.

Figure 4.29 - Intersection improvement concept at north end of RR underpass

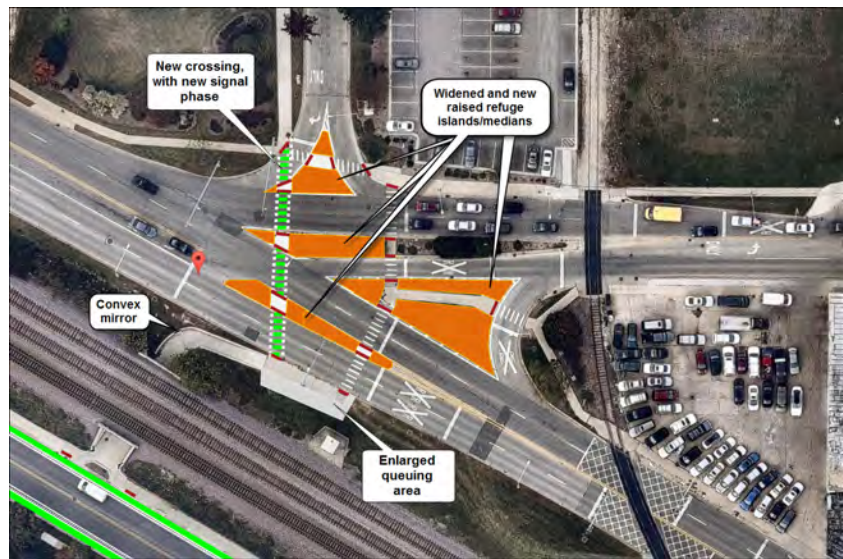


Figure 4.30 - Shared space for bicycles and pedestrians



Other Cut-throughs and Connectors

Figures 4.31 and 4.32 illustrate design concepts for upgrading existing connectors or cut-throughs from Dorothy Ave. / Charles St. to Town & Country Shopping Center and between Harvard Ave. and Creekside Park.

Figure 4.31 - Dorothy Ave. / Charles St.: Existing and proposed



Figure 4.32 - Harvard Ave. / Creekside Park: Existing and proposed



Sidewalk Definitions and Design Guidelines

Sidewalks and crosswalks are the most basic pedestrian facilities. Sidewalks or walkways provide pedestrian access to adjacent areas. Sidewalks of standard width (five feet) should not be considered or designated as bikeways. Arlington Heights has approximately 393 miles of sidewalks, allowing residents and visitors to walk between homes, places of employment, and other amenities. In general, sidewalks have been constructed within the street right-of-way on both sides of the street throughout most of the Village.

Crosswalks are defined as the marked or unmarked extension of the sidewalk or shoulder where pedestrians cross a vehicular way. At intersections, crosswalks may be marked or unmarked but mid-block crosswalks must be marked (for pedestrians to have the right-of-way).

Design Guidelines

Arlington Heights' Municipal Code (Section 20-107) outlines the conditions under which installation of sidewalks is required in order to receive a building permit. Sidewalks are required along all designated thoroughfares and as part of all development, except in cases where 80 percent of all lots within 600 feet are already developed and the general pattern of development in the area does not include sidewalks.

Village code also specifies elements related to sidewalk design. Sidewalks are required, to the extent possible, to be a minimum of four feet from the roadway curb and a minimum of five feet in width. The Code also states that if a development is located in an area where sidewalks are greater in width than five feet, then the new sidewalk shall be constructed to conform with the greater width.

Figure 4.33 - Sidewalk Zone System



1. Frontage Zone, 2. Pedestrian Through Zone, 3. Street Furniture/Curb Zone, 4. Enhancement/Buffer Zone

Source: FHWA

Best practice in sidewalk design calls for an approach referred to as the “sidewalk zone system.” This approach treats the area between the edge of the roadway and edge of the right-of-way as its own “corridor,” dividing it into four zones to ensure that pedestrians have a sufficient amount of clear space to travel (see *Figure 4.33*). For more information on the sidewalk zone system, see *Appendix J*.

Cross-sections

Figure 4.34 shows typical cross-sections (existing and recommended) for sidewalks (on Clarence Avenue). *Figure 4.35* illustrates the existing and recommended cross-section for Wilke Road, between Kirchhoff and Orchard, where a new sidewalk on the west and a sidepath (upgraded from an existing sidewalk) on the east is recommended.

Figure 4.34 (a) - Existing Cross-section: Clarence Ave.



Figure 4.34 (b) - Proposed Cross-section: Clarence Ave.

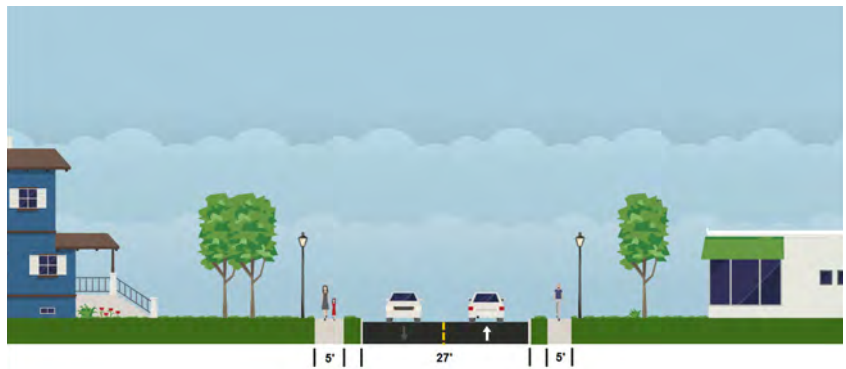


Figure 4.35 (a) - Existing Cross-section: Wilke Rd.

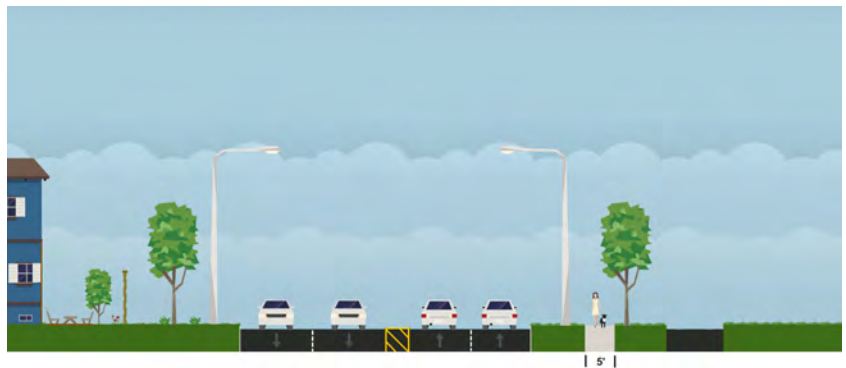


Figure 4.35 (b) - Proposed Cross-section: Wilke Rd.



Sidewalk Recommendations

Overall, the Village has very good sidewalk coverage. The majority of existing sidewalks are of sufficient width and are buffered from moving vehicles by the existence of a planted buffer strip. The main issues uncovered through outreach and field surveys are poor pavement condition and encroachment of vegetation. The Village should undertake a GIS-based survey and inventory of sidewalk pavement conditions and vegetation encroachment in order to address these issues in a systematic way.

Generally, Village areas that lack sidewalks are 1) older, often historic, residential neighborhoods where streets carry low volume, low speed traffic, and sidewalks are not in high demand (according to Village staff); 2) industrial areas (mostly in the far north and far south of the Village); and 3) automobile-oriented “big-box” or “strip” style commercial development, mostly in the south of the Village and along Rand Road. These last two area types not only lack sidewalks, but are also lacking the fine-grained street network that, together with sidewalks, contributes to walkability and bikeability. In these areas, it is recommended that the Village work with private property owners to develop safe, visible bicycle and pedestrian routes through the parking lots that are associated with large retail and industrial buildings in these areas.

High priority for installation of missing segments of sidewalks are along major arterials, roadways near parks, schools, and multi-family residential developments, and, broadly, where surrounding land use and the characteristics of adjacent streets and traffic point to the need for separated pedestrian facilities. In addition, improvements to existing substandard or insufficient sidewalks, and those in poor condition, should be prioritized at similar locations as well as where short segments of sidewalk function as a bikeway.

Examples of high priority locations are:

- Along Arlington Heights Road at Interstate 90, where no pedestrian way exists on either side of Arlington Heights Road;
- On the west leg of the intersection of Palatine Road and Kennicott Boulevard, where existing sidewalks end at the service road ramps;
- Various locations along Rand Road (where sidewalk installation should be combined with access management and improved crossings);
- On Wilke Road, near the Arlington Park Metra station;⁸
- On Olive Street, east of Dryden, where the narrow road provides access to commercial areas along Rand Road; and
- Along Central Road, near the Arlington Lakes Golf Club and the Army Reserve/Defense Contract Management Agency (DCMA).⁹

⁸ Improvements to the intersection of Wilke and Northwest Highway were made in 2015-16. Project scope consisted of intersection reconstruction and widening to add dedicated turning lanes, drainage improvements, sidewalk construction and traffic signal modernization.

⁹ Although we recommend sidewalk, a sidepath along Central would serve to implement a segment along the Northwest Municipal Conference Glenview/Central/Algonquin regional corridor.

Lower priority should be given to “infill” of short stretches of missing sidewalks in neighborhoods that otherwise are equipped with sidewalks, where a sidepath exists on one side of the road, and where adjacent land uses (cemeteries, golf courses, etc.) are not expected to generate significant numbers of pedestrian trips. We have not recommended installing sidewalks in residential neighborhoods that currently lack sidewalks, since the roads serving these areas are typically very low volume and low speed, and because of potential resistance by residents. However, should residents support the installation of sidewalks, we recommend that the Village pursue opportunities in these locations as well.

In places where sidewalks are placed directly adjacent to the curb and/or are of insufficient width, we recommend that the Village pursue strategies to provide a buffer area and/or to widen the sidewalks. The majority of locations where we find these conditions are along roads under IDOT jurisdiction. Many State routes in Arlington Heights have been widened over the years to the maximum extent possible, compromising the pedestrian environment. It is recommended that the Village work with IDOT on developing solutions to this problem as opportunities for reconstruction and/or simple restriping arise. Narrowing travel lanes in these areas – as well as reducing the number of lanes – is one way to acquire more space for buffer areas and/or wider sidewalks. Recent studies¹⁰ have demonstrated that 10-11 foot lanes, even on major arterial roads, are as safe – or even safer – than 12 or 12-plus foot lanes.

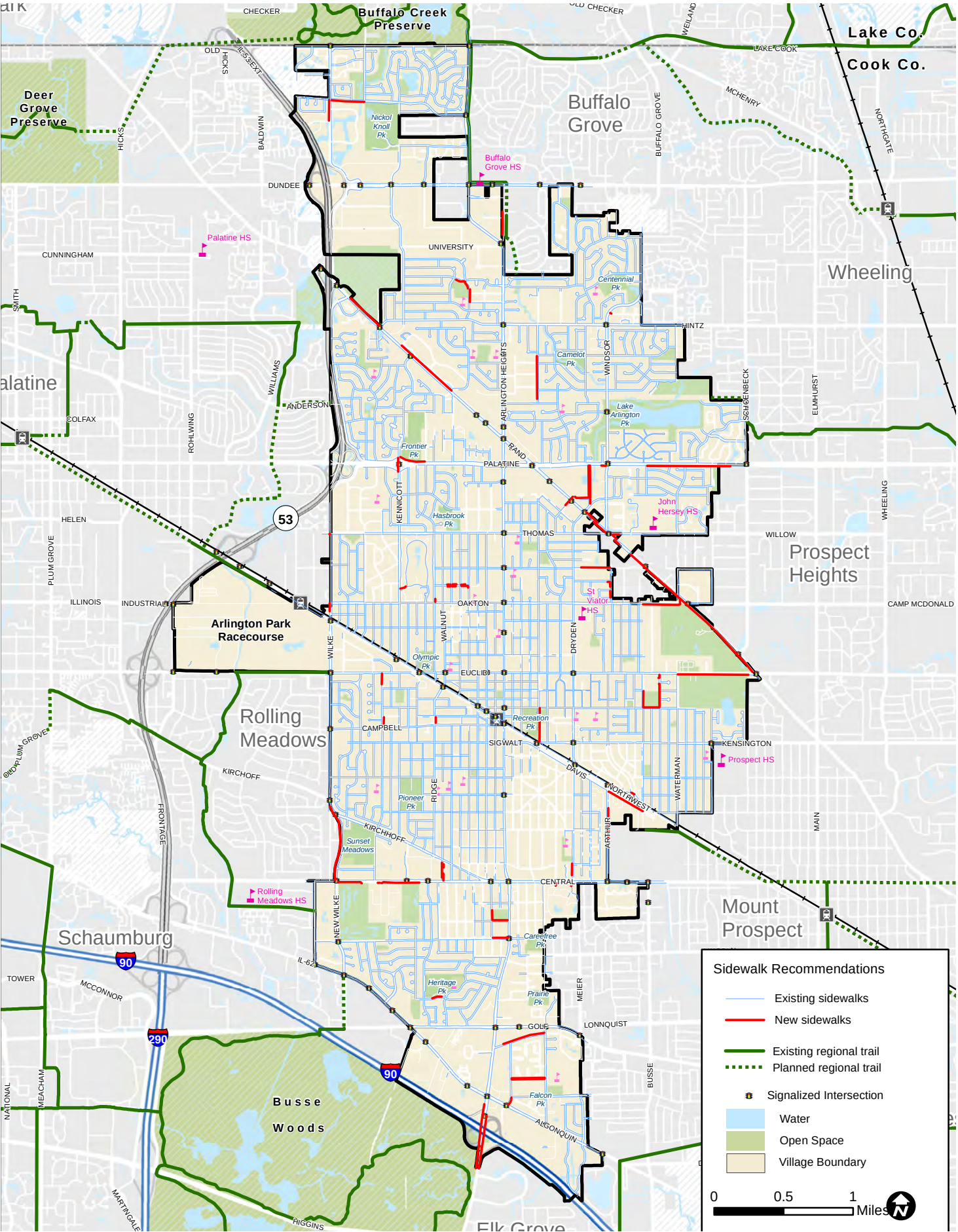
Figure 4.36 illustrates current conditions along Clarence Avenue (without sidewalks), and what it would look like with sidewalks installed. **Figure 4.37** shows priority locations proposed for sidewalk installation.

¹⁰ See Dewan Karim, “Narrower Lanes, Safer Streets” (https://www.academia.edu/12488747/Narrower_Lanes_Safer_Streets_Accepted_Paper_for_CITE_Conference_Regina_June_2015_). See also T. Petritsch, “The Influence of Lane Widths on Safety and Capacity: A Summary of the Latest Findings” (http://nacto.org/docs/usdg/lane_widths_on_safety_and_capacity_petritsch.pdf), and I. Potts, et al., “Relationship of land width to safety for urban and suburban arterials” (<http://www.smartgrowthamerica.org/documents/cs/resources/lanewidth-safety.pdf>). Finally, see Jeff Speck’s article, “Why 12-foot Traffic Lanes are Disastrous for Safety and Must be Replaced Now” (<http://www.citylab.com/design/2014/10/why-12-foot-traffic-lanes-are-disastrous-for-safety-and-must-be-replaced-now/381117/>).

Figure 4.36 - Clarence Ave., Existing and Proposed



Figure 4.37 - Sidewalk Recommendations



Bicycle Lane Definitions and Design Guidelines

Bike lanes – traditional, buffer- and-barrier-protected, and advisory – involve assigning dedicated space along a roadway for the use of cyclists. This fact distinguishes these facilities from other on-street bikeways (in which bicyclists share space with motor vehicles). While ADT, average speeds, parking utilization, and other operational characteristics of roadways proposed for bikeways are important factors for all types of facilities, the width of a roadway – curb-to-curb – is especially crucial for evaluating the feasibility of bike lanes. While planners and engineers can “gain” roadway (or roadside) width in a number of ways – including reducing the number of lanes (road diet), reducing the width of lanes (lane diet), and/or by removing parking – curb-to-curb width remains constant (unless a project includes road reconstruction, which is expensive and therefore rare).

Removing on-street parking is often difficult due to the resistance of residents and businesses. While comprehensive, detailed information on on-street parking regulations for all roads in Arlington Heights was not available, aerial photography (and Google Streetview) were used to identify, to the extent possible, current parking regulations and conditions. This exercise revealed very low utilization rates for on-street parking on the majority of the streets on which existing and proposed bikeways are located. It is recommended, therefore, that the Village consider the removal of on-street parking in a limited number of cases where the impact would be minimal and the importance of a bikeway corridor calls for such measures. A cross-section of a typical residential street in Arlington Heights shown with parking removed on one side – and another with parking removed from the one side on which it is currently allowed – are provided to illustrate the potential for creating space needed for traditional and, in the latter case, buffered bike lanes (*Figures 4.40 and 4.45*). Both streets are key framework bike routes. In addition to the typical cross-sections shown for each facility type, additional cross-sections illustrating potential on-street bikeways can be found in *Appendix K*.

The majority of the roads for which bike lanes (as well as other types of on-street bikeways) are recommended are undivided, two-lane streets (although some add turn lanes at major intersections). In order to assess general feasibility, the following guidelines (*Table 4.1*) on the roadway widths typically needed for different types of bike lanes are provided. Shared lane facilities do not have the same width constraints. Each bike lane type is matched to the widths generally required for roads with 1) no on-street parking, 2) parking on one side, and 3) parking on both sides. As stated above, comprehensive, detailed data on Village parking regulations was not available. It should be noted that widths (or rather ranges of widths) given here are “ideal” or typical. In specific situations, installation may be feasible with one or two feet less – or more – than is indicated.

Table 4.1 - Bicycle Facilities and Curb-to-Curb

BIKE LANE TYPE	TYPICAL WIDTH (CURB-TO-CURB)
Traditional Bike Lanes	
No Parking	30' - 36'
Parking One Side	38' - 44'
Parking Both Sides	46' - 52'
Buffered Bike Lanes	
No Parking	33' - 42'
Parking One Side	40' - 48'
Parking Both Sides	50' - 58'
Advisory Bike Lanes	
No Parking	26' - 29'
Parking One Side	34' - 37'
Parking Both Sides	41' - 44'

Traditional Bike Lanes

Traditional or standard bike lanes are a portion of the roadway designated for preferential use by bicyclists. The bike lane is delineated by a solid striped line or a dashed line (in merging zones). Bike lanes are appropriate on streets with moderate traffic¹⁸ and along major bikeway corridors. Like other on-street bikeway markings, bike lanes reinforce proper roadway etiquette, raise the visibility of bicyclists, and help both bicyclists and drivers behave predictably when sharing road space. Lanes can also increase the sense of safety for less experienced or confident cyclists, encouraging them to bicycle or to bicycle more often. Bike lanes can be enhanced by the use of green pavement, either for the length of the lane or in intersections and other conflict points.

Design Guidelines

The typical minimum width of a bike lane is five feet; six to seven foot lanes (or buffered bike lanes) are recommended for higher speed (and higher volume roads). On streets where the bike lane is adjacent to the curb (i.e. without parking), bike lanes can be as narrow as four feet from the curb face if there is no gutter (i.e. the full four feet is a smooth, rideable surface). Bike lanes are marked by a solid line separating the bike lane from adjacent travel lanes. Various designs and treatments exist for traditional and other bike lane types as they approach an intersection (discussed and illustrated in more detail later in this chapter).

Figure 4.38 - Traditional bike lanes



Cross-sections

Figures 4.39 and 4.40 illustrate current road conditions and potential or conceptual cross-sections for University Drive, Davis Street and other roads for which traditional bike lanes are recommended.

Figure 4.39 (a) - Existing Cross-section: University Drive



Figure 4.39 (b) - Proposed Cross-section: University Drive Bike Lane Concept

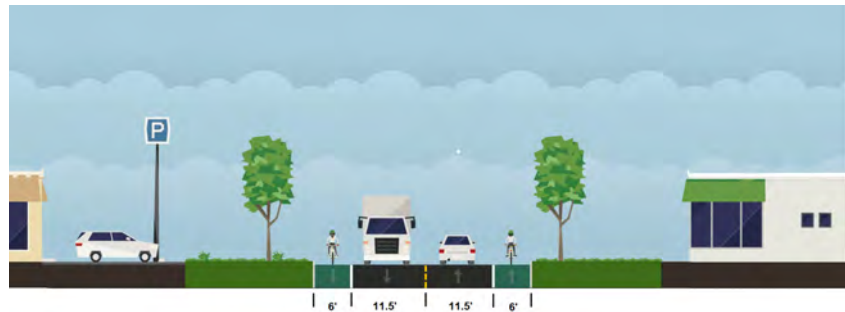


Figure 4.40 (a) - Proposed Cross-section: Davis Street Bike Lane Concept (On-street parking retained)

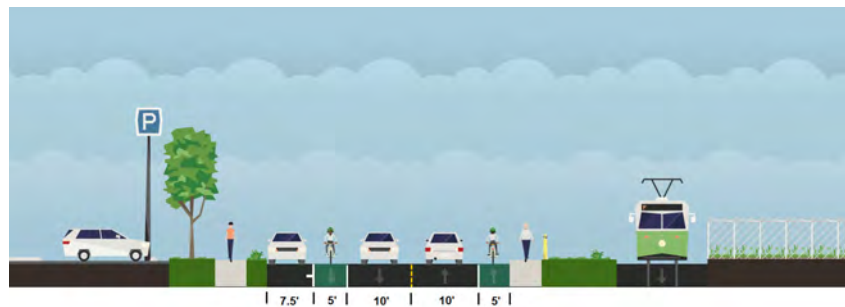
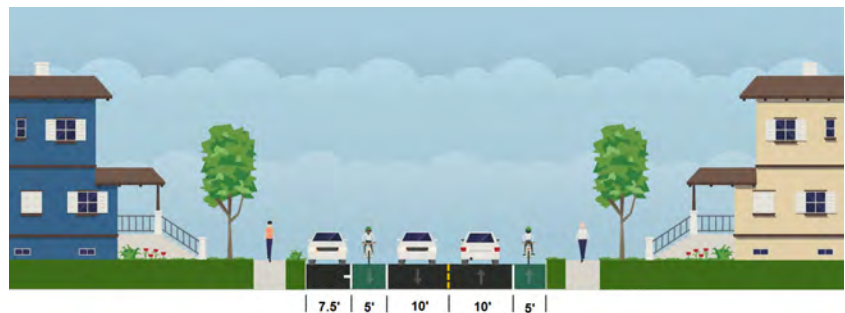


Figure 4.40 (b) - Proposed Cross-section: Thomas Street Bike Lane Concept (On-street parking removed on one side)



Buffer-protected Bike Lanes

Buffer-protected bike lanes use a painted (striped) buffer area to separate the vehicle travel and/or the parking lane from the bike lane. This buffer, typically one and one-half to three feet wide, provides additional separation to improve cyclists' comfort and safety on more heavily traveled arterial corridors. Buffer areas can be painted between the bike lane and the on-street parallel parking – to separate the bike lane from the door zone – and/or between the bike lane and the adjacent travel lane. Buffered bike lanes can also be enhanced by the use of green pavement, either for the length of the lane or at intersections and other conflict points.

Figure 4.41 - Buffered Bike Lane



Source: Active Transportation Alliance

Design guidelines

The combined width of the buffer(s) and bike lane should be considered “bike lane width,” with guidance for traditional bike lanes applying. However, buffered bike lanes are typically wider overall than traditional bike lanes. Where buffers are used, the bike lanes themselves can be narrower because the shy distance function – that is, space required to create a perception of a safe distance between cyclists and the passing cars – is assumed by the buffer. For example, a two-foot buffer and four-foot bike lane next to a curb is considered a six-foot bike lane. If a five-foot buffered lane is installed next to on-street parking, the buffer (two foot) should be between the lane and the parked cars to encourage bicyclists to ride outside of the door zone.

Figure 4.42 - Buffered Bike Lane (Green)



Source: Andrew Boone

Cross-sections

Figures 4.43 to 4.45 illustrate current road conditions and a potential or conceptual cross-section for Goebbert Road and other roads for which buffered bike lanes are recommended. Additional cross sections illustrating buffered bike lanes and other on-street bikeway facility types can be found in *Appendix K*.

Figure 4.43 (a) - Existing Cross-section: South Goebbert Road



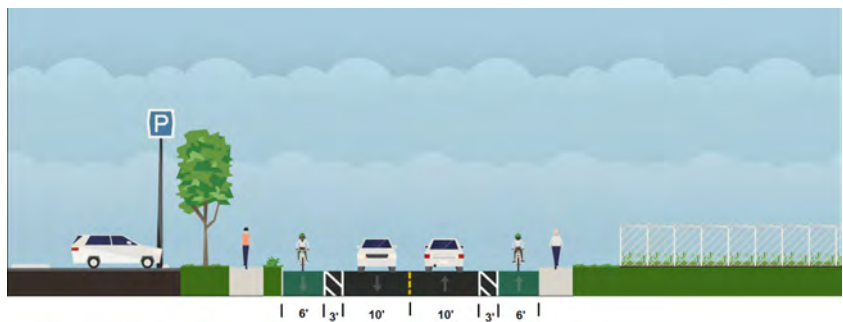
Figure 4.43 (b) - Proposed Cross Section: South Goebbert Road Buffered Bike Lane Concept



Figure 4.44 - Proposed Cross-section: Goebbert Road Buffered Bike Lane Concept (with bikeway signage)



Figure 4.45 - Proposed Cross-section: Davis Street Buffered Bike Lane Concept (on-street parking removed)



Advisory bike lanes

Advisory bike lanes (a.k.a. dashed bicycle lanes) are marked by dashed white lines on both sides of a two-way roadway, creating a single unmarked center lane for motor vehicles traveling in both directions. This unmarked center lane is purposefully designed to be slightly too narrow for cars moving in opposite directions to pass each other without one moving (partially) into the bike lane. When oncoming cars approach each other, one or both motorists move carefully into bike lanes to pass one another. Advisory bike lanes are typically installed on narrower roadways with two-way vehicle traffic, low volume, and very low speeds. They may be installed on roads with or without on-street parking and may include use of colored pavement.¹¹

Design Guidelines

Since advisory bike lanes are still subject to FHWA regulations governing experimentation, no formal design guidance or standards currently exist. However, studies have shown that advisory bicycle lanes appear to function best when the following operational and geometric conditions are present:

- Traffic volume is less than 6,000 ADT.
- Minimum lateral width of 16 feet for the center space between dashed bicycle lanes.
- The street is not a designated truck or bus route, nor would the street be expected to typically be used by these vehicle types.

¹¹ Advisory bike lanes are not included in the current edition of the MUTCD and therefore require a permit for experimentation from FHWA. For more information on advisory bike lanes, see FHWA's website, https://www.fhwa.dot.gov/environment/bicycle_pedestrian/guidance/mutcd/dashed_bike_lanes.cfm. The City of Bloomington, IN has produced a handout describing advisory bike lanes, available at <https://bloomington.in.gov/media/media/application/pdf/16373.pdf>.

¹² More information can be found in FHWA's Separated Bike Lane Planning and Design Guide, at http://www.fhwa.dot.gov/environment/bicycle_pedestrian/publications/separated_bikelane_pdg/, and NACTO's Urban Bikeway Design Guide, at <http://nacto.org/publication/urban-bikeway-design-guide/cycle-tracks/>. See also the Massachusetts DOT "Separated Bike Lane Planning & Design Guide," at <https://www.massdot.state.ma.us/highway/DoingBusinessWithUs/ManualsPublicationsForms/SeparatedBikeLanePlanningDesignGuide.aspx>.

Figure 4.46 - Advisory Bike Lanes



Cross-sections

Figure 4.47 illustrates current road conditions and a potential or conceptual cross-section for Oakton Street and other roads for which advisory bike lanes are proposed. **Figure 4.48** illustrates a concept, in plan view, for advisory bike lanes on Hintz Road, with on-street parking retained. The cross-section would entail two seven-foot parking lanes, two six-foot advisory bike lanes, and a single 15-foot travel lane. Additional cross sections illustrating advisory bike lanes and other on-street bikeway facility types can be found in **Appendix K**.

Separated, or barrier-protected, bike lanes (a.k.a. cycle tracks) are bike lanes that are physically separated from vehicle traffic by a curb, parked cars, a rail, bollards, poles, or other element. Although they are not specifically called for in this plan, they may be feasible and appropriate in some locations, long-term, including those where buffered bike lanes are recommended.¹²

Figure 4.47 (a) - Existing Cross-section: Oakton Street



Figure 4.47 (b) - Proposed Cross-section: Oakton Street Advisory Bike Lane Concept

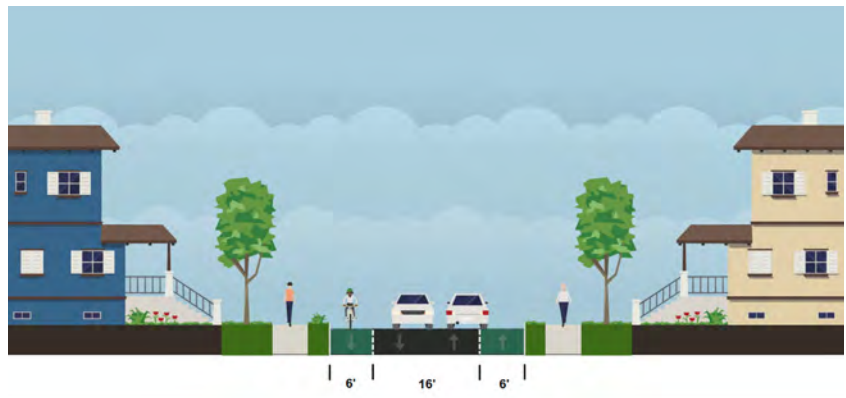
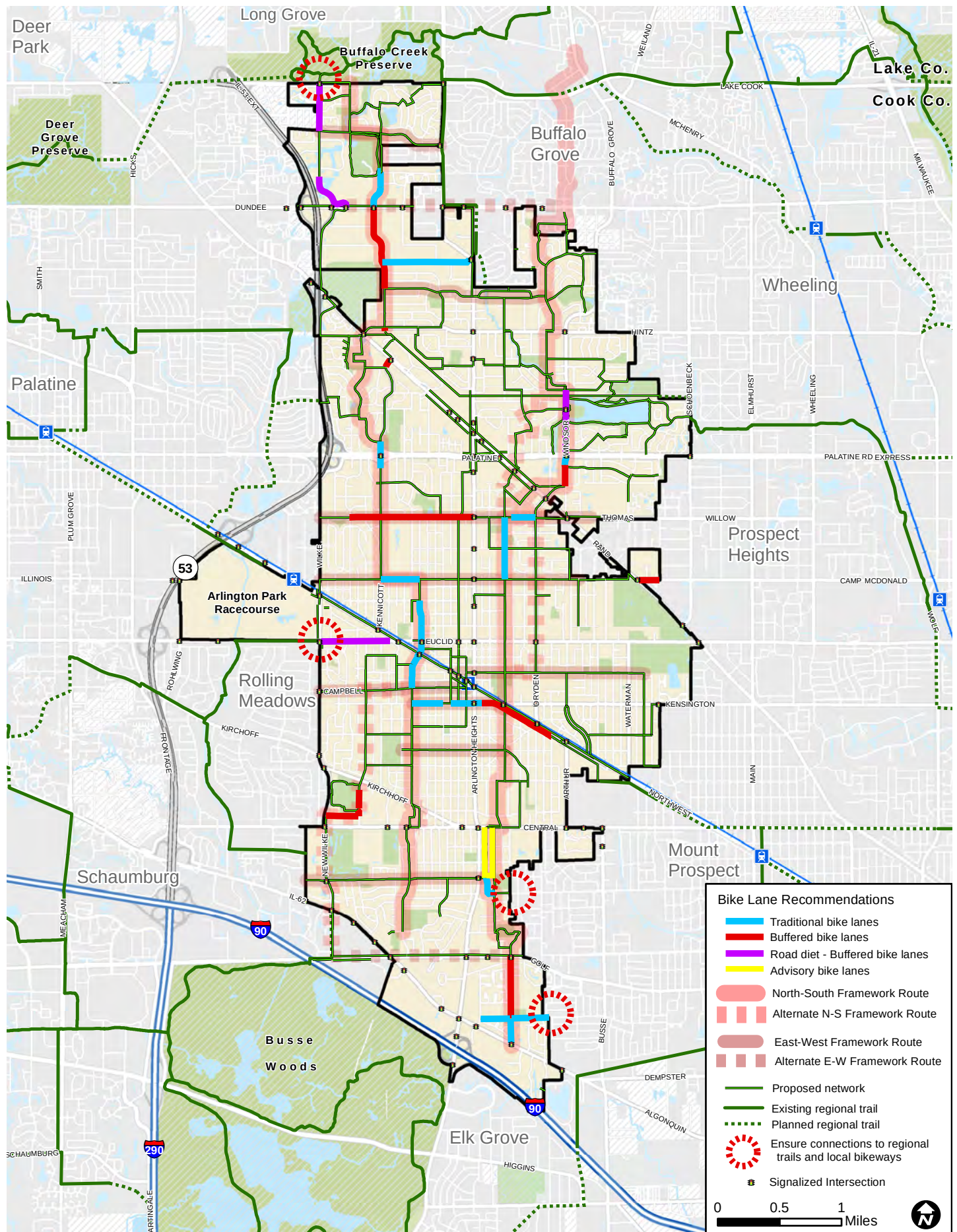


Figure 4.48 - Proposed Cross-section: Hintz Road Advisory Bike Lane Concept



Figure 4.49 - Bike Lane Recommendations and Framework Bicycle Routes



Bicycle Lane Recommendations

Overall Network

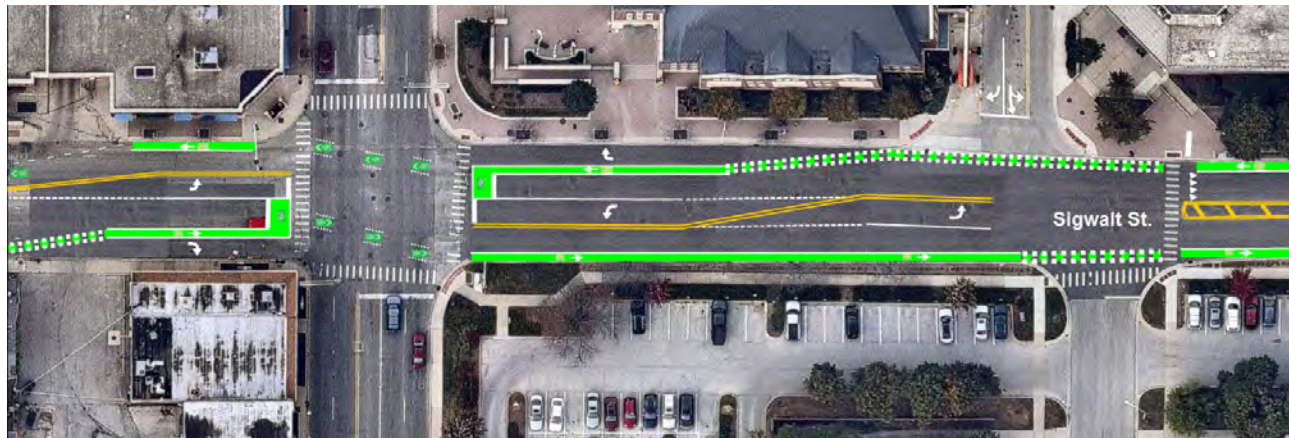
Figure 4.49 shows all bike lane recommendations by facility type, along with the framework routes (highlighted). In general, priority should be given to facilities along the framework bicycle routes. These include traditional and buffered lanes along Kennicott, Windsor, Thomas, Douglas, Oakton/Camp McDonald, Walnut, Ridge, Sigwalt, Belmont (or Pine), and Goebbert Road. In addition, University and Falcon Drives may offer relatively easy-to-achieve bike lane projects, given current roadway characteristics and surrounding land use. Several locations are proposed for road diets, which are discussed in more detail below. Intersection treatments at major crossing locations are an important part of achieving a safe, low-stress bikeway network. Examples of these treatments are discussed and illustrated below in the section on intersection and spot location improvements.

Davis/Sigwalt Bike Lane

Currently, the only existing bike lane in the Village is on Davis/Sigwalt Streets between Belmont and Cleveland Avenues. On the southwest side of Davis, however, between Bristol Lane and Cleveland Avenue, this bike lane becomes a 10.5-11 foot shared bike-parking lane.

Between Pine and Bristol Lane, the existing bike lanes are approximately four feet wide, while the adjacent travel lanes are 14-15 feet or more. This section (Pine to Bristol) should be reconfigured with narrowed travel lanes and wider, buffered bike lanes, roughly as illustrated in a cross-section drawing of Davis (“Davis (& Sigwalt), Pine to Cleveland”) in **Figure 4.45** (five and one-half to six-foot bike lanes; three-foot buffers; ten-foot travel lanes). In the segment from Bristol to Cleveland, buffered bike lanes could be maintained if the on-street parking, which appears to be highly underutilized, is removed. However, if parking remains (on the southwest side of Davis), then the roadway should be reconfigured as shown in **Figure 4.40** (seven and one-half-foot parking lane; five-foot bike lanes; 10’ travel lanes). Bike lanes may continue into the downtown area along Sigwalt to Ridge, with the exception of one block, between Vail and Highland, where existing on-street parking on the north side would entail the implementation of shared lane markings. **Figure 4.50** illustrates the conceptual bike lane treatment for Sigwalt Street between Pine and Arlington Heights Road. Bike lanes are achieved here by narrowing travel lanes and clarifying lane positions. The design includes through-intersection shared lane markings and bike boxes at Arlington Heights Road.

Figure 4.50 - Conceptual design for bike lanes along Sigwalt/Davis at Arlington Heights Road



Goebbert Road

Goebbert Road, from Golf to Falcon Drive, was identified by the BPAC as a high priority corridor for the installation of an on-street bicycle facility. The corridor serves as the southern segment of the Dryden/Douglas north-south framework route and provides unique access to single- and multi-family residential developments, the Forest View Education Center, Robert Morris University Gym and Stadium, the Forest View Racquet & Fitness Club, and other destinations in the southeast part of the Village. It also provides an important connection, via the proposed bikeway on Falcon Drive/Willow Lane, to the Village of Mount Prospect and to the Kopp/High Ridge Knolls Park Trail.

Goebbert Road's current configuration consists of a two-lane roadway, approximately 38 feet wide, with a posted speed of 25 mph and low ADT. On-street parking does not seem to be allowed, or – if it is – it appears to be highly underutilized. Given these characteristics, and its importance as a proposed framework route, it is recommended that the Village study the feasibility of installing buffered bike lanes along Goebbert from Golf to Falcon Drive, and traditional bike lanes from Falcon to Algonquin. Traditional bike lanes are also recommended on Falcon Drive, from Tonne to the Village border at Tamarack Drive. This proposal is illustrated in **Figure 4.51** (and in **Figures 4.43 and 4.44**).

Road Diets

Road diets are recommended as a potential treatment in three key locations. The reconfiguration that is proposed in all three cases is a reduction in the number of travel lanes from four to three (two through-travel lanes and 1 two-way center turn lane), which will allow for the addition of traditional or protected bicycle lanes. In addition to creating space for bicycle and/or pedestrian facilities, benefits of road diets can include lower travel speeds, increased safety, and promotion of a more livable, family-friendly environment.

As with other on-street bicycle facilities, recommendations for road diets and bike lanes should be understood as being dependent upon and in need of coordination with improvements at intersections along proposed routes. For example, the road diet recommended for Windsor Drive should be planned and designed in conjunction with improvements at the Windsor-Palatine and the Windsor-Crabtree intersections (for which conceptual illustrations are given), as well as the other segments of the Dryden/Douglas framework route. Enhanced markings at crossings, warning and regulatory signage, through-intersection bike route markings, bike boxes, narrowed travel lanes, and refuge islands are all typical, potential intersection enhancements and improvements.

Road diets are discussed in greater detail in **Appendix F** in relation to potential bicycle routes to Busse Woods Forest Preserve Trail. Information and links to additional resources on this treatment are provided there.

Wilke Road, from Nichol Road to Lake-Cook Road

This segment is approximately 0.38 miles in length. The width, curb to curb, is approximately 46 feet. ADT is not known, but is likely to be under 10,000. Posted speed limit is 30 mph. Another, lower priority road diet segment on Wilke, runs from Dundee Road to the point at which the road's cross-section changes to include center medians (at the Marriott Courtyard Hotel, 3700 N. Wilke Rd.).

This segment of Wilke Road is indicated as a potential bike route on the 2014 Arlington Heights Bicycle Map. A bikeway here would serve the large multi-family developments in this area. However, as discussed above, the T-intersection at Wilke and Lake-Cook Road (although signalized) currently lacks a connection across Lake-Cook Road (see **Figure 4.11**). Therefore, this road diet/bike lane project depends upon, and should be carried out in coordination with, intersection improvements and the creation of a safe connection to the Buffalo Creek Forest Preserve by one of the options discussed in Appendix C. The connection would entail working with the Lake County Forest Preserve District. **Figure 4.52** illustrates the northern limit of the proposed buffered bike lane resulting from the road diet on Wilke north of Nichols.

Figure 4.51 - Goebbert Road, Bike Lane Concept



Windsor Drive, from Dryden Road to Crabtree Drive

This segment is approximately 0.52 miles in length. The width, curb to curb, is approximately 52 feet; ADT is 9,500 (IDOT, 2014); and the posted speed limit is 35 mph.

This road segment is indicated as a planned bike route on the 2014 Arlington Heights Bicycle Map. It is part of the proposed framework bikeway network (the north-south “Dryden/Douglas Route”), CMAP’s 2009 Regional Greenways and Trails Plan, and is currently (per Strava data) heavily used by cyclists. It is also one of six high-priority projects identified by the BPAC. The route directly serves one of the Village’s most popular parks and multiuse paths (Lake Arlington Park and Trail) and provides, at the signalized intersection at Palatine Road, one of the few relatively safe crossings

of this Palatine Road in this part of the Village. At the northern end of the proposed project, the facility would connect to the McDonald Creek pathway, and at the south, to the point at which the Dryden/Douglas framework bike route crosses Rand Road. Both of these corridors are specified as regional bikeways in the Regional Greenways and Trails Plan.

In addition to providing space for the installation of buffered bike lanes, implementing a road diet along Windsor Drive can help to improve safety and livability around Lake Arlington Park and the nearby existing greenways, which are heavily used by many types of residents, including families with children, youth, and seniors. The proposed reconfiguration would also allow for the installation of a raised center median where a turn lanes are not called for.

Figure 4.52 - Wilke Road (at Lake Cook Road), Road diet / buffered bike lanes concept

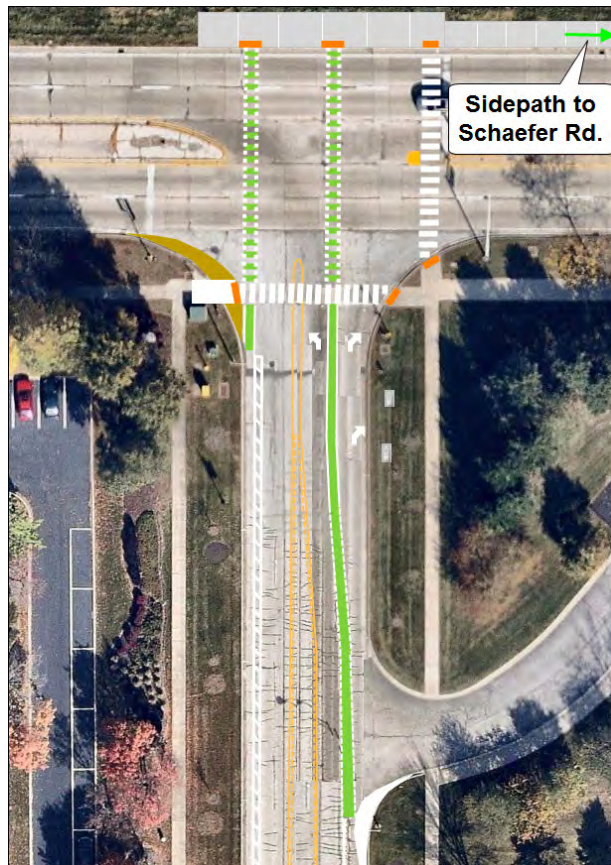
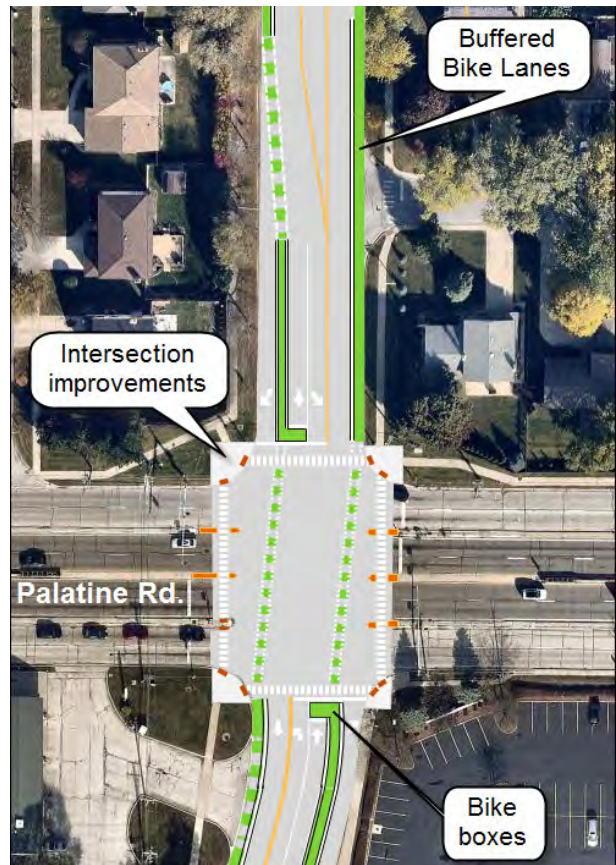


Figure 4.53 - Windsor at Palatine



This median would contribute to the safety and aesthetics of the corridor, at the main entrance to Arlington Heights' most popular park. Both road diets and median islands are, it should be noted, among the FHWA's nine proven safety countermeasures.¹³ **Figures 4.53 and 4.54** illustrate the concept of the Windsor Drive road diet and potential associated intersection improvements at Palatine Road and Crabtree Drive, respectively.

¹³ See <http://safety.fhwa.dot.gov/provencountermeasures/>.

Potential intersection improvements at Palatine Road include improved crossings on all legs, green-colored through-intersection bikeway markings, and bike boxes. The bike lanes are placed to the left of the right-turn lanes in order to minimize conflicts and improve visibility. The illustration of potential improvements at Crabtree Drive include buffered green-colored buffered bike lanes along Windsor Drive (near Lake Arlington Park), a two-stage left-turn bike box, and a raised center median island and high-visibility crosswalk on the north leg (to improve safety for bicyclists and pedestrians). **Figures 4.55 and 4.56** provide conceptual cross-sections at Palatine and for the segment north to Crabtree.

The proposed road diet on Windsor Drive makes up one segment of a larger project identified by the BPAC as a high priority.

Figure 4.54 - Windsor at Crabtree

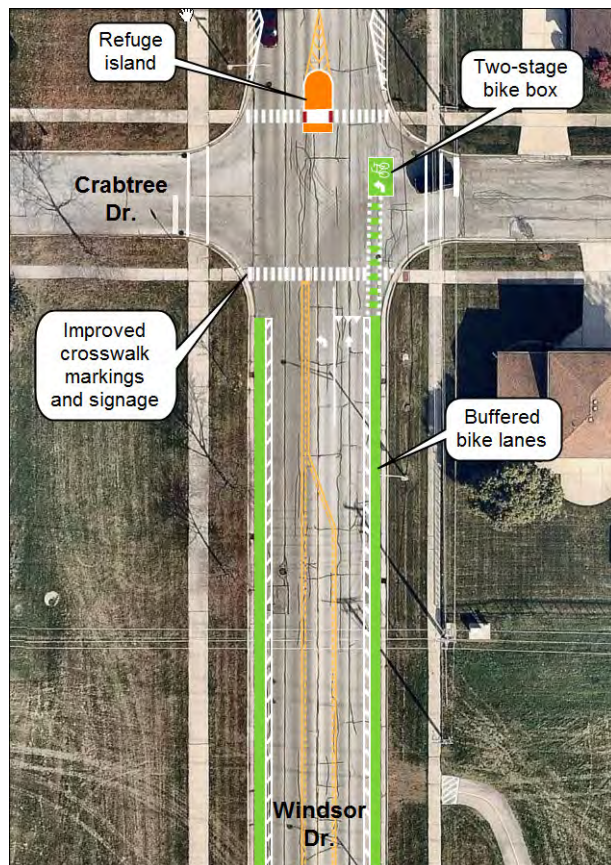
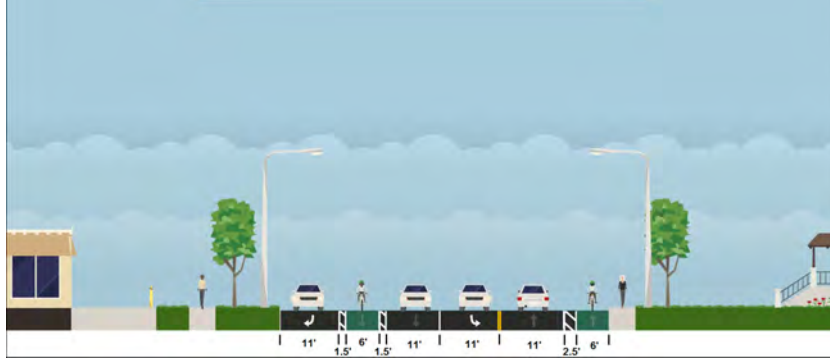
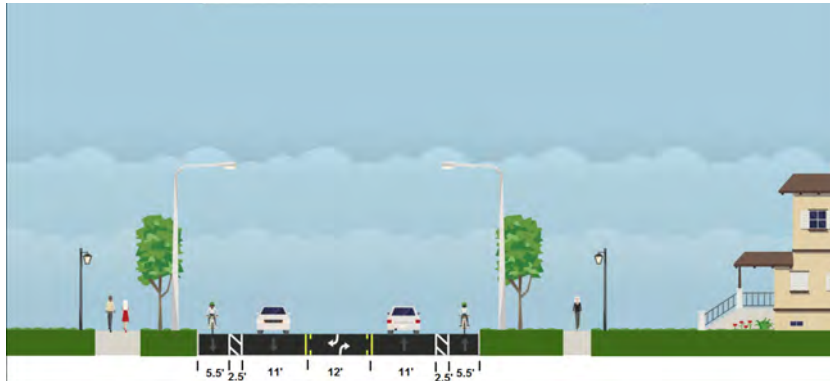


Figure 4.55 - Road Diet / Buffered Bike Lane Concept, Intersection of Windsor Drive and Palatine Road



¹⁴ This new alignment for the “Dryden Framework Route” was preferred by the BPAC, and is referred to throughout this document as the “Dryden/Douglas” route.

Figure 4.56 - Road Diet / Buffered Bike Lane Concept, Windsor Drive, between Palatine and Crabtree Drive

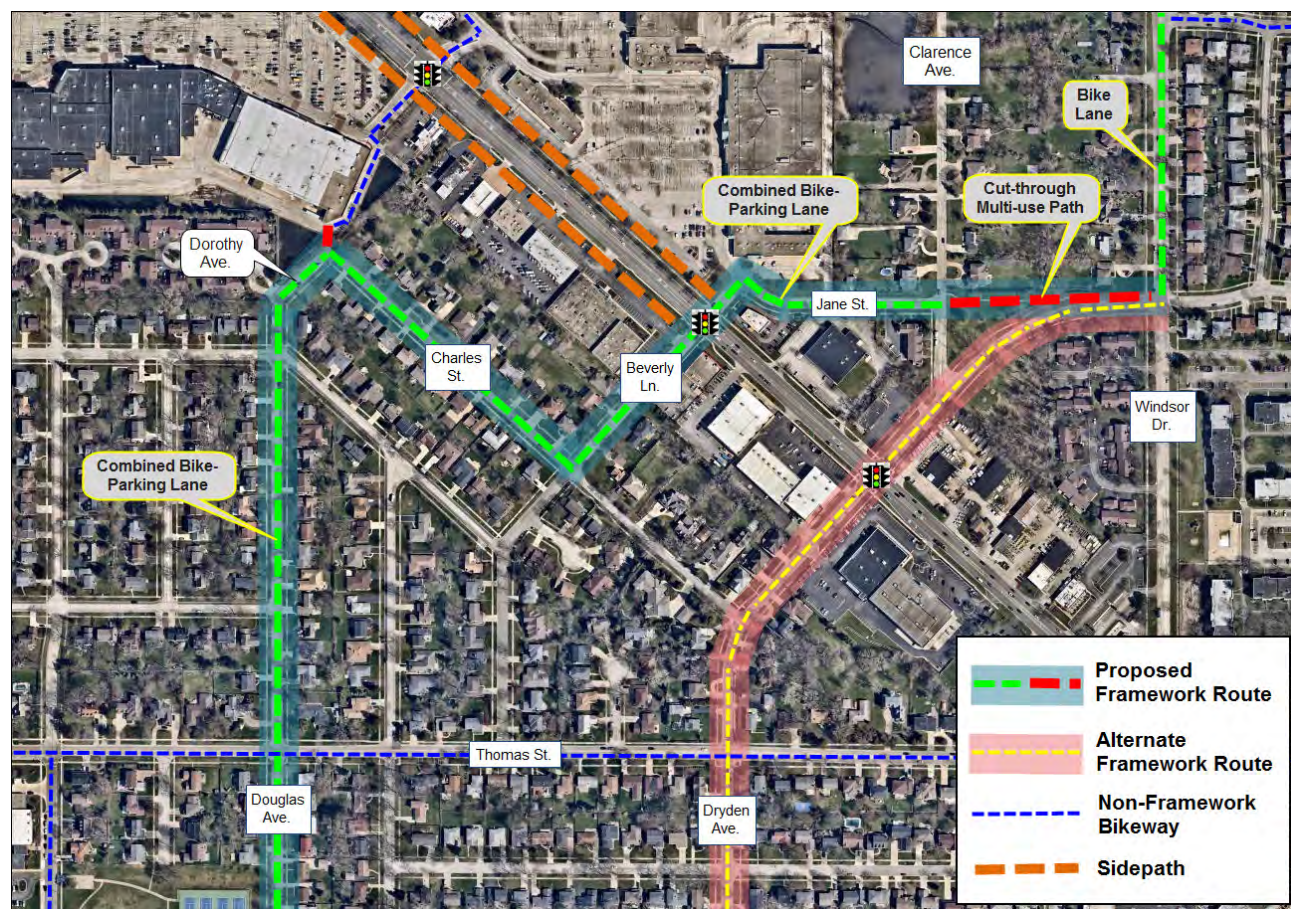


The larger project encompasses improvements to the Dryden/Douglas-Windsor framework route between Thomas Street and Lake Arlington Park. Another segment of this project is the Clarence to Windsor cut-through discussed previously (and illustrated in *Figures 4.23 and 4.24*).

One of the key destinations along the “Dryden/Douglas” framework bike route in the northern part of the Village is Lake Arlington Park. However, reaching the park from points south is challenging due to traffic volumes, speeds, and roadway configurations on Dryden and Windsor, as well as the difficult crossing at Palatine Road. The proposed road diet/ bike lanes on Windsor (from Dryden to Crabtree), the cut-through from Clarence to Windsor, and on-street, signed combined bicycle-parking lanes (discussed below) on Jane, Beverly, Dorothy, and Douglas represent the preferred framework route and facility types through this difficult area.¹⁴ *Figure 4.57* illustrates this routing.

Another alternative for achieving this connection, which moves the framework route to Dryden, entails upgrading existing sidewalks to sidepaths on the south side of Dryden from Thomas to Windsor, and on the west side of Windsor, from Dryden to the existing multi-use path just north of Carlyle Place. This concept is illustrated in *Figure 4.58*.

Figure 4.57 - Proposed Dryden-Douglas Framework Routing across Rand Road

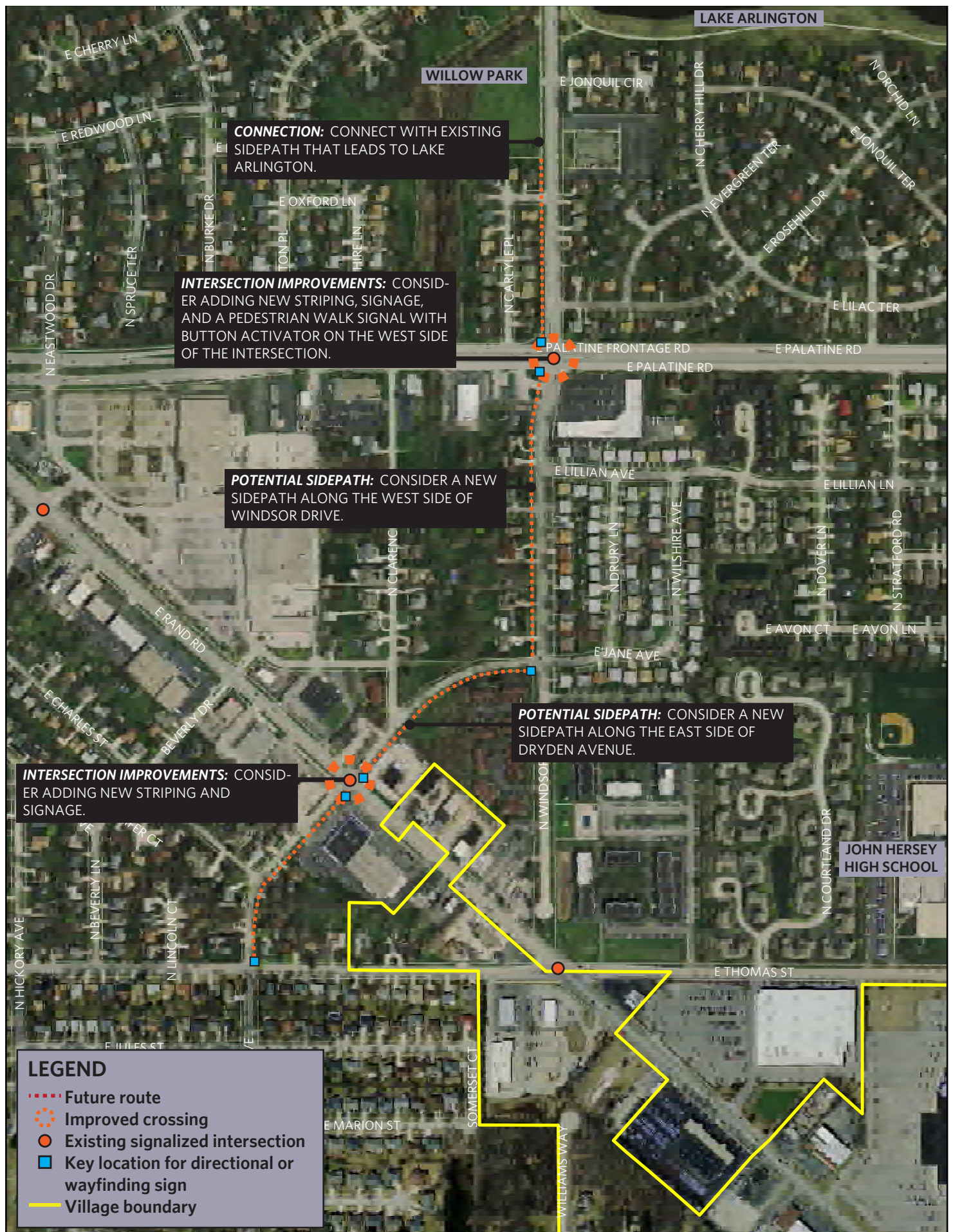


This alternative separates bicyclists from automobiles through the narrow, curved section of Dryden, where the ADT is approximately 5,500 and posted speed limit is 30 mph – conditions which are challenging for the majority of cyclists. However, constrained right-of-way along Dryden between Thomas and Windsor may limit the feasibility of this option.

While a sidepath on Dryden may not be achievable, a combination or hybrid of the on-street (road diet/ bike lane) design option and the off-street (sidepath) option may be possible – and desirable. This hybrid alternative would include on-street bike lanes along Windsor, from Dryden to Crabtree, together with the installation of a sidepath (by widening the existing sidewalk) on the west side of Windsor, between Dryden and the existing sidepath (north of Carlyle Place).

Providing both on-street and off-street facilities along this important bikeway corridor would offer a low-stress route for children and less experienced cyclists, as well as a quicker, more direct, and dedicated on-street facility for more experienced and confident cyclists who want to access Lake Arlington Park and destinations beyond. The BPAC-proposed sidepath along the narrow, curving section of Dryden would not be necessary if the framework route follows Douglas and the local roads as described above (and is well signed). Improved crossings at key intersections – utilizing treatments described above, below in the Intersections and Crossing Locations section, and in **Appendix I** – as well as wayfinding signage, should be included in both the sidepath and/or the on-street bike lane option.

Figure 4.58 - Dryden-Douglas Framework Route, Original Alignment (Alternate)



Euclid Avenue, from Wilke Road to Northwest Highway

The third road diet project would be along Euclid Avenue from Wilke to Northwest Highway. This segment is approximately 0.54 miles in length. The width, curb to curb, is approximately 48 feet; ADT is 12,550 (IDOT, 2014); and the posted speed limit is 30 mph.

This road segment is not indicated as a planned bike route on the 2014 Arlington Heights Bicycle Map. However, it would link residential neighborhoods and destinations south of Euclid to the existing sidepaths along Euclid (west of Wilke) and along Wilke (north of Euclid), which provide access to the Arlington Park Metra station and which are both regional trails (as indicated in the Regional Greenways and Trails Plan).

It would afford more comfortable, convenient, and safe bicycle access to the U.S. Post Office at 909 W. Euclid. The road diet would also provide for a (future) connection to the planned regional bikeway corridor along Northwest Highway. Finally, a road diet on this stretch of Euclid would provide a more appropriate and gradual transition between the differing roadway characteristics of Euclid Avenue, east of Northwest Highway (lower speed, two-lane, more pedestrian- and bicycle-friendly), and those of Euclid, west of Wilke, in Rolling Meadows (higher-speed, high volume, 5 lane road). **Figure 4.59** provides conceptual cross-sections for this segment of Euclid.

Figure 4.59 (a) - Existing Cross-section: Euclid Avenue

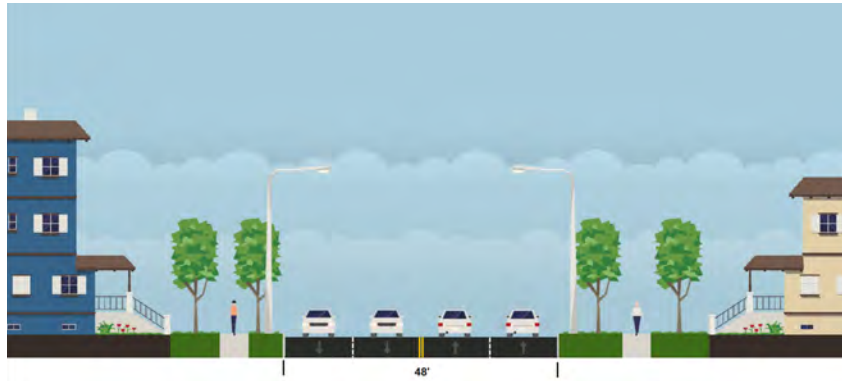
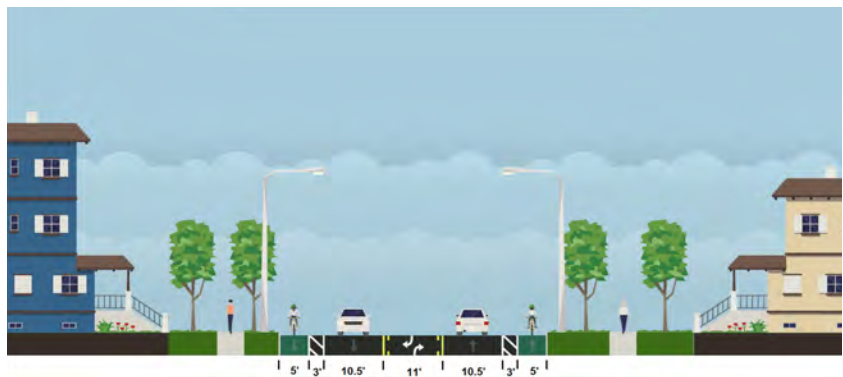


Figure 4.59 (b) - Proposed Cross-section: Euclid Avenue Buffered Bike Lane Concept



Marked Shared Lanes (Sharrow) Definition and Design Guidelines

Marked shared lanes, or “sharrows,” use the Shared Lane Marking (Manual on Uniform Traffic Control Devices (MUTCD), Section 9C.07) in a general-use lane to indicate a context in which bicycles and vehicles share the lane. They are useful in locations where there is insufficient width to provide bicycle lanes. Shared lane markings alert drivers to the presence of bicyclists, reinforce the legitimacy of bicycle use on the street, and provide a general wayfinding function. The markings also direct bicyclists to maintain proper positioning and ride in the safest location within the lane, as well as encourage safer passing by motorists. Shared lane markings may have a green-colored background (*Figure 4.64*).¹⁵ Shared lane markings should not be used on shoulders, in designated bike lanes, or to indicate bicycle detection areas at signalized intersections.¹⁶

¹⁵ See https://www.fhwa.dot.gov/environment/bicycle_pedestrian/guidance/mutcd/gcp_slm.cfm.

¹⁶ A special symbol exists to indicate bicycle detection areas at signalized intersections (see MUTCD, Section 9C.05).

Design Guidelines

Shared lane markings should be placed so that the centers of the markings are at least four feet from the curb on streets without on-street parallel parking and a minimum of 11 feet from the curb on streets with parallel parking. Markings should be placed further into the lane whenever appropriate, such as when the lane is too narrow for safe side-by-side operation of a bicycle and a motor vehicle. Lateral placement is critical to encourage riders to avoid the “door zone” and to encourage safe passing behavior.

Figure 4.60 - Marked shared lanes

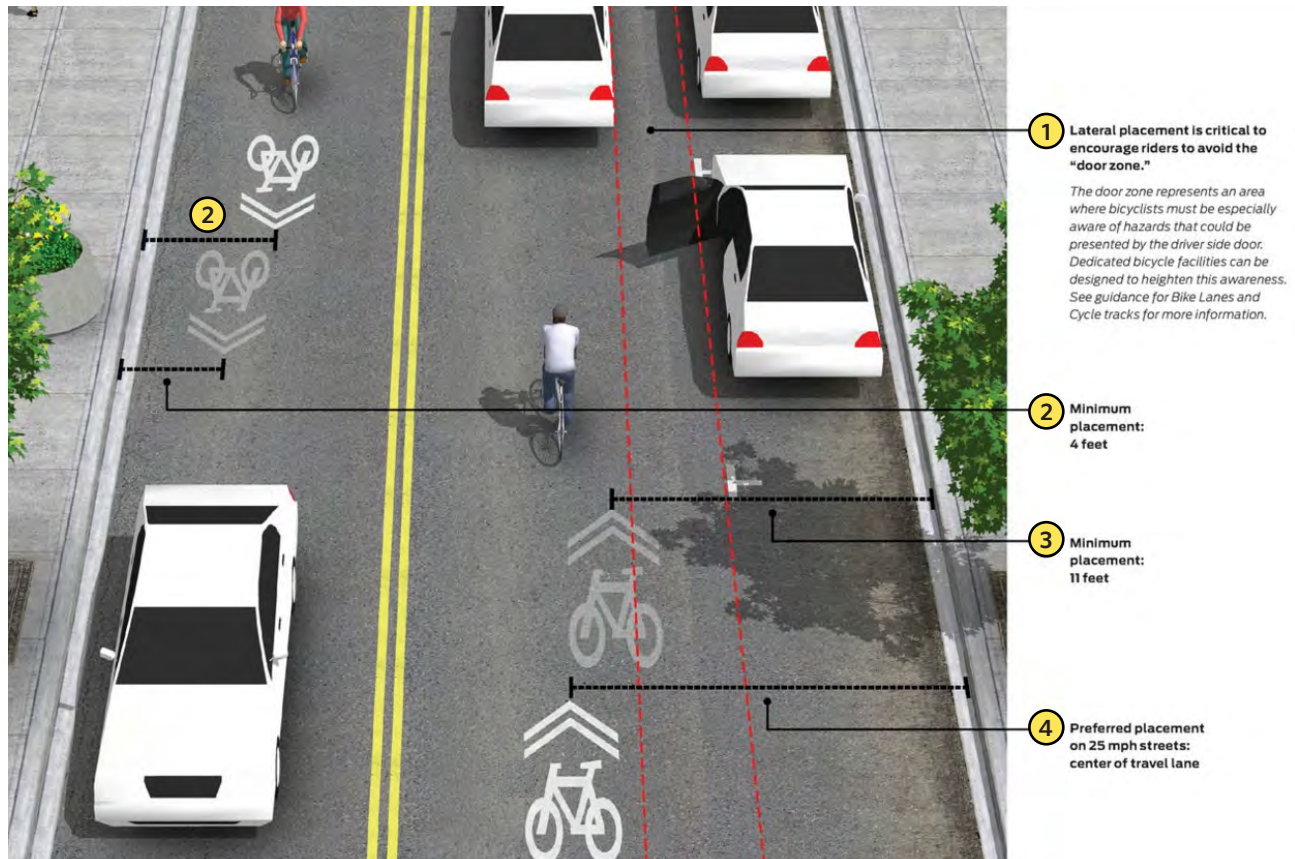


Frequent, visible placement of markings is essential, but varies per roadway characteristics. When used to bridge discontinuous bicycle lanes or paths, at intersections, or along busier streets, sharrows should be placed more frequently (every 50 to 100 feet) than along low traffic bicycle routes (every 200-250 feet or more). Sharrows used along low volume routes can be staggered by direction to provide more frequent markings (albeit in opposite directions).

Sharrows are a relatively low-cost treatment suitable for local roads, collectors, and low-volume, low-speed arterials where constrained ROW will not allow the installation of bike lanes. They are often used at intersections where turn lanes limit right-of-way, as a means of “bridging” segments of bike lanes.

Sharrows are not recommended where posted speed is 35 mph or greater *and* ADT is higher than 3,000, nor should they be used on roads that have a speed limit of 40 mph or greater. On streets with posted speeds of 25 mph or slower, preferred placement is in the center of the travel lane. The addition of bike route signage and of regulatory signage, such “Bicycles May Use Full Lane,” compliments and strengthens the effectiveness of shared lane markings.

Figure 4.61 - Marked shared lane design guidance



Cross-sections

Figures 4.62 and 4.63 provide a typical cross-section (existing and proposed), as well as a conceptual design proposal for marked shared lanes on Park Street. The illustration of the design proposal includes a complementary traffic calming and safety treatments (mini traffic circle and enhanced crosswalks on all legs of the intersection).

Figure 4.62 - Existing Cross-section: Park Street (26 ft.)



Figure 4.62 - Proposed Cross-section: Park Street Sharrows Concept (26 ft.)

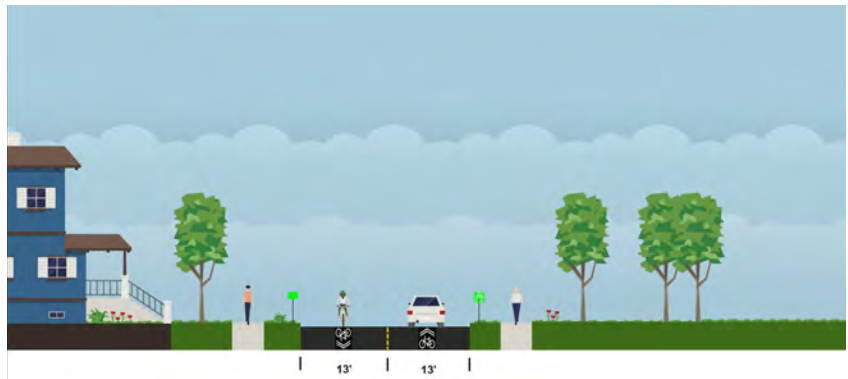


Figure 4.63 - Proposed Cross-section: Park Street at Highland Avenue Sharrows and Traffic Calming Concept



Marked Shared Lane Recommendations

Many of the roadway segments for which marked shared lanes are proposed, are located along framework (or alternative framework) bike routes, on streets that are too narrow to allow bike lanes. These framework routes should be prioritized for implementation (see **Figure 4.65**).

Recommended marked shared lane routes include several streets in Arlington Heights' downtown core – Evergreen, Dunton, Vail, Campbell, and a short segment of Sigwalt – where parking utilization appears to be relatively high and ROW is often constrained. Here, the sharrows markings should be installed in the center of the lanes. While these streets are currently relatively low speed, the Village should consider the implementation of additional traffic calming measures, such as in-street “Stop for Pedestrians” signs, raised intersections, speed tables, additional curb bump-outs, pavement treatments, and landscaping, as well as gateway and “shared streets” concepts, which will help make cycling safer and more comfortable. Lowering the posted speed limit to 20 mph or less in the downtown area should also be considered. See **Appendix I** for additional intersection and traffic calming treatments.

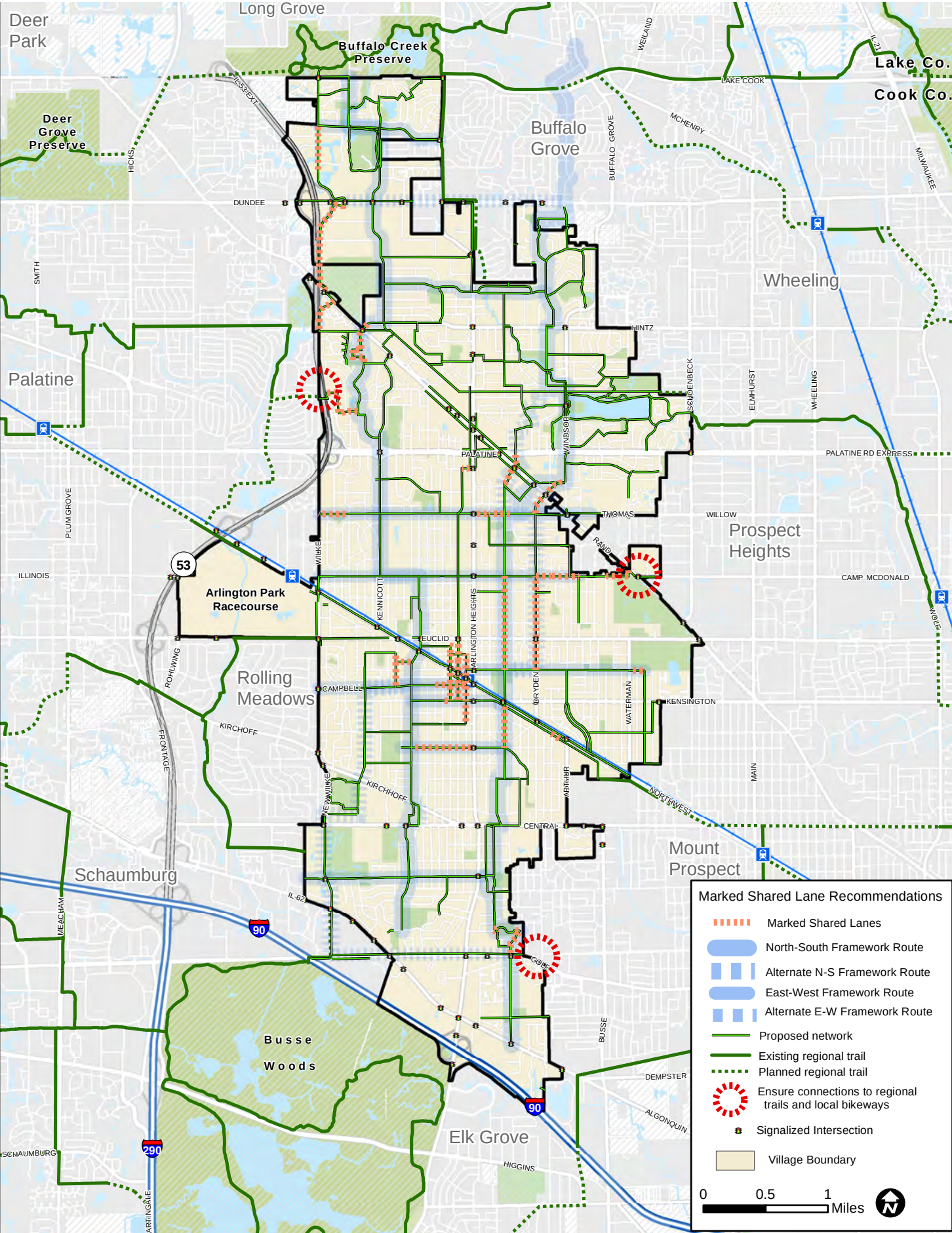
Shorter segments of marked shared lanes are also called for on intersection approaches along key bike routes, where the addition of turn lanes restricts available right-of-way. Examples of these locations include Hintz and Rand, Dryden and Rand, and Davis at Cleveland/Chatham Place/Arthur Avenue. This last intersection presents special difficulties (due to the adjacent rail crossing and the need to access the existing shared use path along the northeast side of Davis). The complex intersection should be further studied for possible solutions to bicycle accommodation and routing.

Finally, a few of the locations for which sharrows are being recommended are short segments through parking lots. As with all of the recommended on-street bikeways, these routes should include bicycle wayfinding signage with directions and distances to key destinations. See **Appendix F** for information and examples of bikeways routed through parking lots.

Figure 4.64 - High-visibility, green-backed sharrows (currently experimental)



Figure 4.65 - Marked Shared Lanes Recommendations and Framework Bicycle Routes



Combined Bicycle-Parking Lanes

Definition and Design Guidelines

Combined bicycle-parking lanes consist of striped on-street parallel parking lanes, paired with MUTCD-compliant bike route wayfinding (as well as warning, and regulatory) signage.¹⁷ This facility type represents an excellent option for relatively wide, low volume (< 6,000 ADT), low speed (< 35 mph) local and collector streets in residential neighborhoods, where on-street parking is allowed but highly underutilized (under 10 percent occupancy under “normal” conditions). The latter condition – very low parking utilization – is crucial to the acceptance, effectiveness, and success of this treatment. Judging from aerial photography, field observations, and community input, low rates of parking utilization are very common in residential neighborhoods throughout the Village and, for this reason, combined bicycle-parking lanes are recommended for a substantial number of the proposed bikeway network routes, especially along framework routes (see *Figure 4.69*).

¹⁷ For the difference between and examples of warning signage, see the MUTCD, Section 2A.01.

Combined bicycle-parking lanes are not dedicated bike lanes. For this reason, it is important that they are supplemented and enhanced with high-quality, well-installed bike route signage and, in areas where on-street parking occurs on a regular basis, with shared lane markings to direct cyclists around parked cars and to increase driver awareness of the presence of cyclists. This hybrid or “compromise” facility type – when used in appropriate locations – provides a viable alternative to the removal of on-street parking, while retaining benefits for cyclists and other roadway users.

Combined bicycle-parking lanes are called for where the use of sharrows might confuse bicyclists and motorists. This can occur when sharrows are placed at the MUTCD-recommended distance of 11 feet from the curb in an area of low parking utilization, as markings may appear to be “in the middle of the road,” defeating the symbol’s purpose of positioning the cyclist in the appropriate and safest position. In these situations (low parking utilization, relatively low-volume, low-speed roads), combined bicycle-parking lanes typically work better than sharrows. However, when parking is able to be removed from one or both sides of the street, traditional, buffered, or advisory bike lanes, or even marked shared lanes with symbols located for correct and expected bicyclist positioning (i.e. 4 feet from the face of curb), would typically be preferred treatments, since they communicate more clearly the legitimacy of on-street cycling. As a general principle – especially along framework routes – the Village should aim for installation of the most protective on-street bicycle facility type that the context and conditions permit.

Design Guidelines

Because this facility type is a hybrid of two different treatments or interventions – marked parking lanes along the curb and installation of bicycle route signage – design guidelines for these two elements should be followed. A solid white stripe, parallel to and seven to eight feet from the curb, should define the parking lane; it can be continuous, dashed, or dropped altogether where it crosses driveways. In addition, appropriate, visible bike route signage should be installed. Combined bicycle-parking lanes may also include signage indicating parking. Installation should not include any dedicated bike lane signage or MUTCD bike lane markings. Occasional sharrows markings are used only along specific stretches where parked cars are regularly present on-street due to adjacent land use.

Cross-sections

Figure 4.67 illustrates typical cross-sections (existing and proposed) for combined bicycle-parking lanes (on Burr Oak Street). These cross-sections can be used as a guide for reconfiguring existing streets in Arlington Heights. **Figure 4.68** offers a photograph of existing conditions on Burr Oak and a perspective rendering of the proposed facility. For additional examples/illustrations, see **Appendix K**.

Figure 4.66 - Combined bicycle-parking lane in Warrenville, IL



Source: Ed Barsotti, Ride Illinois

Figure 4.67 (a) - Existing Cross-section: Burr Oak Street



Figure 4.67 (b) - Proposed Cross-section: Burr Oak Street



Combined Bicycle-Parking Lane Recommendations

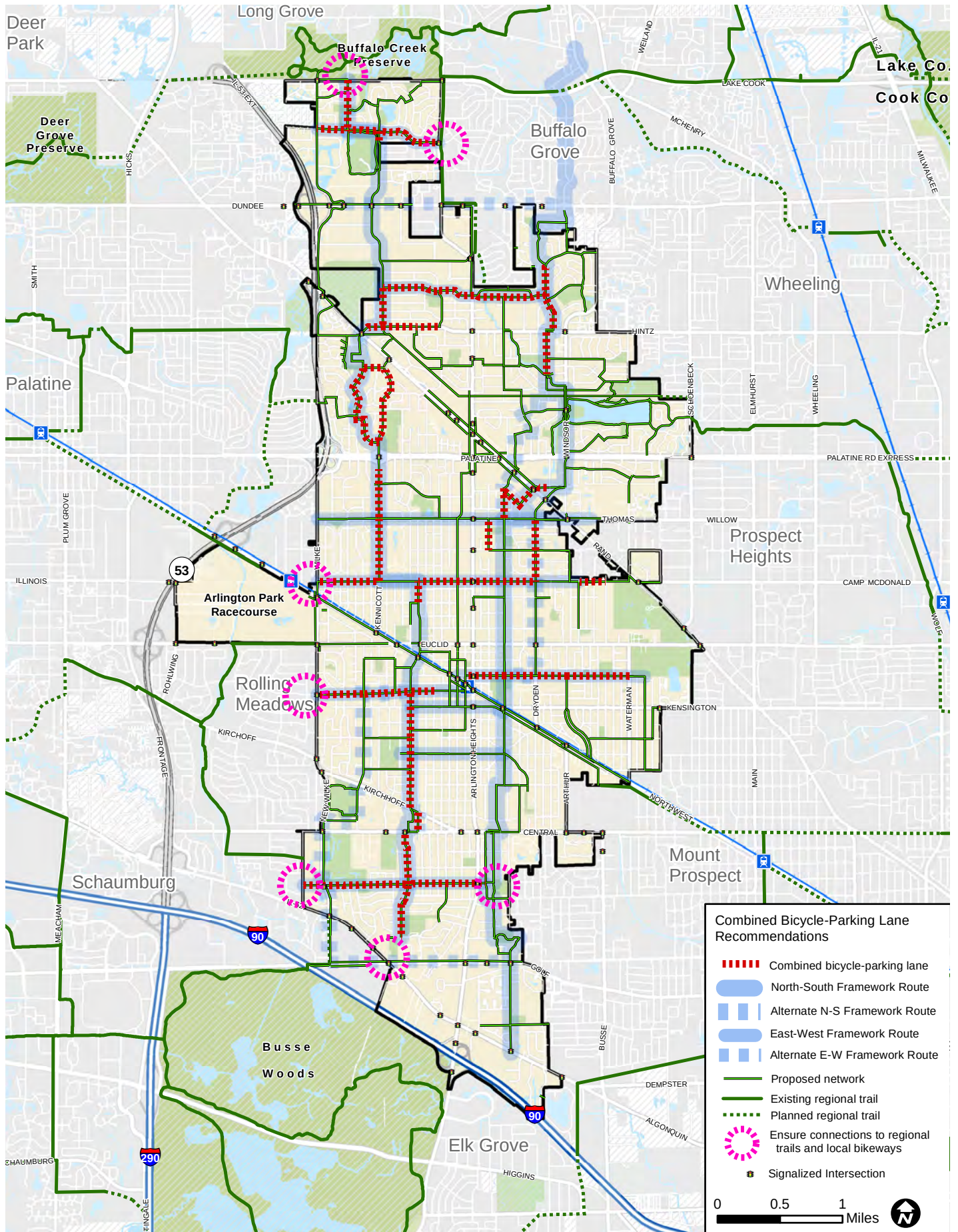
It is recommended that the Village focus on combined bicycle-parking lanes that form key segments in the framework bike route network. The relatively low cost of implementation for these facilities should make them near- to mid-term priorities. Choosing one east-west framework route in the northern part of the Village (such as Burr Oak or Oakton) and one in the central or southern part (such as White Oak or Campbell) to implement would be a logical and feasible way to begin. In addition, segments along the two north-south framework routes should also be prioritized (for example, Kennicott, Ridge, Fernandez, Brighton, Jane/Douglas). It should be noted that recommended bicycle routes, like other bikeway facility types, typically entail intersection improvements in order to maximize the safety and comfort of crossings. Such improvements, when located at intersections with state or county roads, will require coordination and interagency cooperation. Implementation of such crossing improvements may therefore occur incrementally, as reconstruction and repaving projects arise.

¹⁸ See MUTCD, Section 9B.01, at <http://mutcd.fhwa.dot.gov/htm/2009/part9/part9b.htm>.

Figure 4.68 - Burr Oak Street, Proposed and Existing (Perspective)



Figure 4.69 - Combined Bicycle-Parking Lane Recommendations and Framework Routes



Signed Bicycle Routes Definition and Design Guidelines

Signed bicycle routes are streets that are signed for bicycle use (bicyclist wayfinding and safety), but do not have other on-street bicycle-specific markings (such as bike lanes, sharrows, etc.). They are located, typically, along local neighborhood streets that carry relatively low traffic volumes and operate at low speeds. Bicycle guide signs¹⁸ designate the route and help bicyclists navigate to destinations. Warning and regulatory signage is aimed at improving bicyclist safety. Signage not only serves bicyclists and pedestrians, but motorists as well, who use the signs to identify the locations of community destinations and to remain alert to the potential for bicyclists to be present. Signing the bicycle network can encourage more people to bicycle and, more broadly, raises awareness and acceptance of bicycling among all residents.

To maximize the usefulness of route signage, destinations, distances, and directional arrows should be included wherever needed. Bike route signage consists of three main sign types, which can be combined on single posts:

- Confirmation signs – The purpose of confirmation signage is to indicate to cyclists and drivers that the roadway is a designated bikeway. Confirmation signs are usually located mid-block or on the far-side of intersections. Placement should be every block or two, unless another type of sign is used. Often, other types of signs (turn or destination) can serve as confirmation signs in addition to their other functions. Confirmation signs may be as simple as a standard Bike Route Guide Sign (MUTCD, D11-1) or they may include a trail, municipal, or program brand or graphic.
- Action (turn) signs – These signs indicate that a bikeway turns from one street to another. Turn signs are typically located on the near side of intersections, and include a Bike Route Guide Sign (D11-1) and the appropriate directional arrow supplemental sign. Turn signs should not be used at the junction of intersection bikeways.
- Decision signs – These signs mark the junction of two or more bikeways, where a decision is made by the cyclist as to which route they will follow. They are intended to clarify route options for reaching certain destinations and are comprised of a Bicycle Route Guide Sign (D11-1) and plaques with important destinations, directional arrows, and mileage to those destinations. Decision signs are typically located on the nearside of intersections, in advance of the junction with another bikeway(s).

Design guidelines

The Village should follow MUTCD standards when designing and installing directional and wayfinding signage. Signs should be repeated at regular intervals so that bicyclists entering from off-route streets will know that they are on a bicycle route and where it goes. In addition to MUTCD bikeway signs, other supplemental wayfinding and informational signage formats may be considered in the downtown area, including kiosks, customized and decorative signs, and art installations. If kiosks are used, a variety of information (such as maps, rules and regulations, community events, regional trail connections, Pace bus routes, Metra Stations, and local businesses) can be included. Decorative signs and art installations may take a variety of forms, and their broad purpose should be to “brand” or identify the community as being “bicycle-friendly.”

Cross-sections

No typical cross-section is provided since bikeway signage alone is used to create this type of facility. The facility type is dependent not so much on roadway cross-section as on road traffic characteristics (speed, volume) and surrounding land use (residential neighborhoods, low traffic areas). Dunton Avenue (between Thomas and Euclid), shown below with signage drawn in, is an example of a typical street for which the signed bicycle route treatment is proposed. Additional illustrations of this

Signed Bicycle Route Recommendations

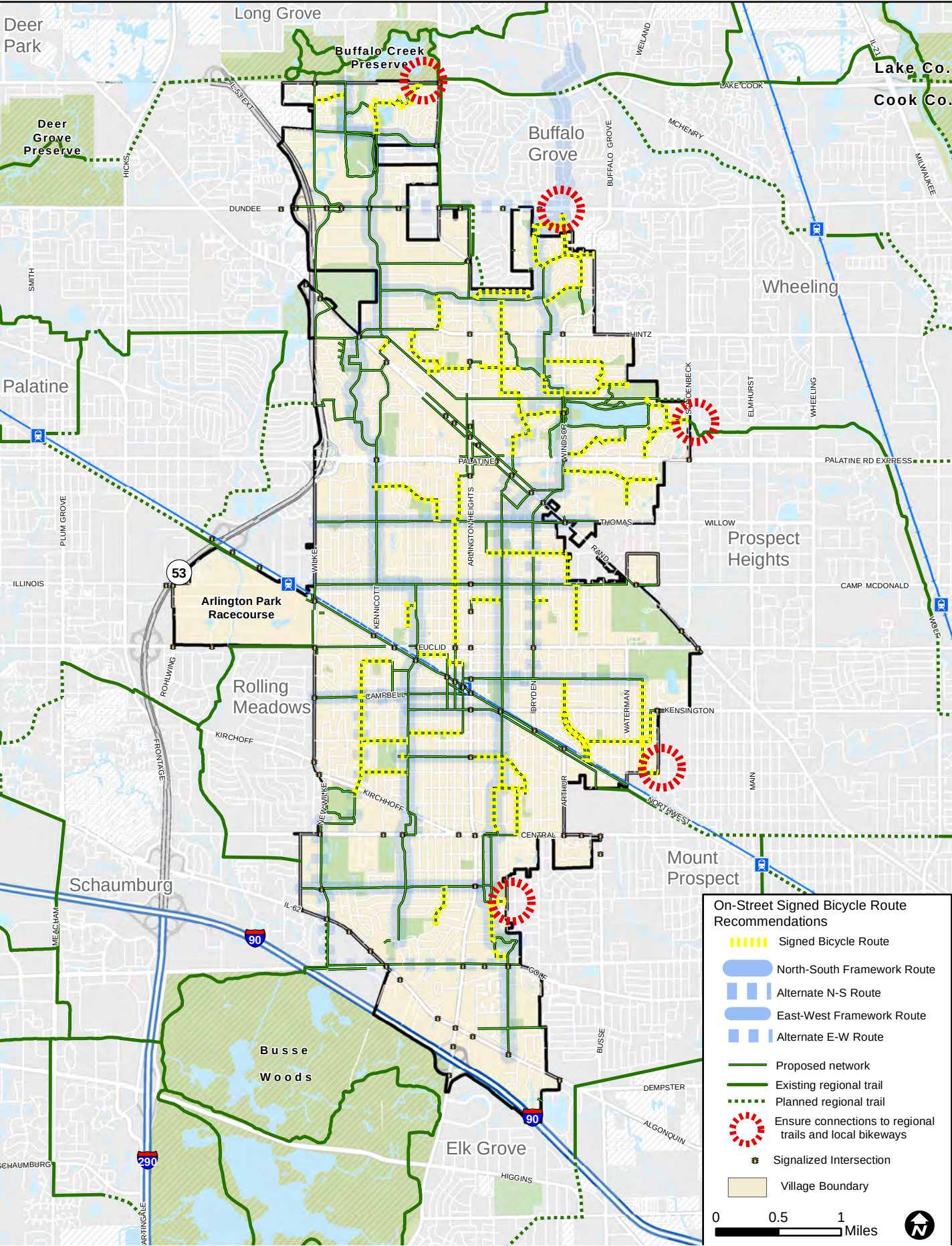
The Village should prioritize on-street signed bike routes that make important network connections or provide links to key community and neighborhood destinations. Although there are relatively few segments of the bicycle framework network that call for route signage without other treatments/facility types, those that do should be a high priority for implementation. On these framework routes, we recommend that the Village consider bicycle boulevard treatments, which typically include enhanced, branded signage and pavement markings, along with traffic calming and traffic diversion.¹⁹ It should be noted that, while proposed signed routes consist of signage alone, signage should be installed and/or improved along all Village bikeways.²⁰

In general, proposed on-street signed bike routes function largely as “spur” routes off of the framework system leading to neighborhood schools, parks, or residential areas or as relatively short links between framework routes. In order to reach destinations, these routes are often combined with short segments of sidepath, cut-throughs, and/or intersection crossing improvements.

¹⁹ See section on “Recommended Network” and Footnote 1, above.

²⁰ More information on bicycle signage and wayfinding can be found in NACTO’s Urban Bikeways Design Guide webpage on bike route wayfinding and signage, at <http://nacto.org/publication/urban-bikeway-design-guide/bikeway-signing-marking/bike-route-wayfinding-signage-and-markings-system>. AASHTO’s Guide for the Development of Bicycle Facilities, 4th Edition, has guide signage and wayfinding information in Section 4.11. The Pedestrian and Bicycle Information Center (PBIC) has information at http://www.pedbikeinfo.org/planning/facilities_bike_wayfinding.cfm. The MUTCD has standards and guidance for directional, regulatory, and warning bicycle signs at <http://mutcd.fhwa.dot.gov/html/2009/part9/part9b.htm#figure9B04>. It should be noted that the NWMC, of which Arlington Heights is a member, had developed the “North and Northwest Cook County Regional Corridor Bicycle Signage Plan” (2012), which illustrated best practices in bicycle route signage and is intended to provide general guidance on signage design. The plan is at <http://www.nwmc-cog.org/Transportation/Documents/BicycleSignagePlan.aspx>. Useful information on bicycle wayfinding can be found in the recently published best practices report produced by Alta Planning + Design for the City of Wichita, KS, available at <https://www.wichita.gov/Government/Departments/Planning/PlanningDocument/Bicycle%20Wayfinding%20System%20Plan%20Technical%20Report%20No1-Best%20Practices.pdf>.

Figure 4.70 - On-Street Signed Bicycle Route Recommendations and Framework Routes



Intersections and Crossing Location Improvement

The majority of locations recommended for spot improvements are intersections. All intersection improvements – like other infrastructure projects in the public ROW – will require further engineering study and analysis. Effects on overall traffic movement and control, safety for all roadway users, drainage and other environmental issues, right-of-way availability, location of utilities and roadside equipment, and costs will all need to be evaluated and potential trade-offs defined and assessed. Intersection improvements may involve different treatments or combinations of treatments depending on context. Key potential intersection and crossing location treatments³¹ aimed at improving conditions for pedestrian and bicycle travel include:

- Traffic signals
- Pedestrian crossing beacons (Rectangular Rapid Flash Beacons and Pedestrian Hybrid Beacons)
- High-visibility crosswalks
- Pedestrian countdown signals
- Accessible pedestrian signals
- Signal adjustments (more walk time, leading pedestrian intervals) or turn restrictions
- Warning, regulatory, and/or wayfinding signage
- Enhanced lighting
- Bicycle detection technology
- Through-intersection, on-pavement bike route markings, and other changes in striping/markings
- Traffic calming treatments, such as mini-traffic circles or in-street “stop-for-pedestrians-in-crosswalk” signs
- Raised medians (pedestrian refuge islands)

Full intersection reconstruction, which in some cases may be desirable, typically involves major changes to the configuration or geometry of the intersection. Reconstruction aimed at improving conditions for pedestrians and bicyclists may include such treatments as curb extensions, raised medians (refuge islands), tightened curb radii, and/or the installation of accessible sidewalks or sidepaths with ADA-compliant curb ramps and landings.

Generally, the design of intersections to accommodate bicyclists and pedestrians should aim at reducing conflicts with motor vehicles by heightening visibility, indicating a clear right-of-way, and facilitating eye contact and awareness among different roadway users. Intersections, through which bike facilities pass, should include treatments to resolve queuing and merging maneuvers for bicyclists, and can be coordinated with specialized signals and/or signal timing or phasing.

Design Guidelines

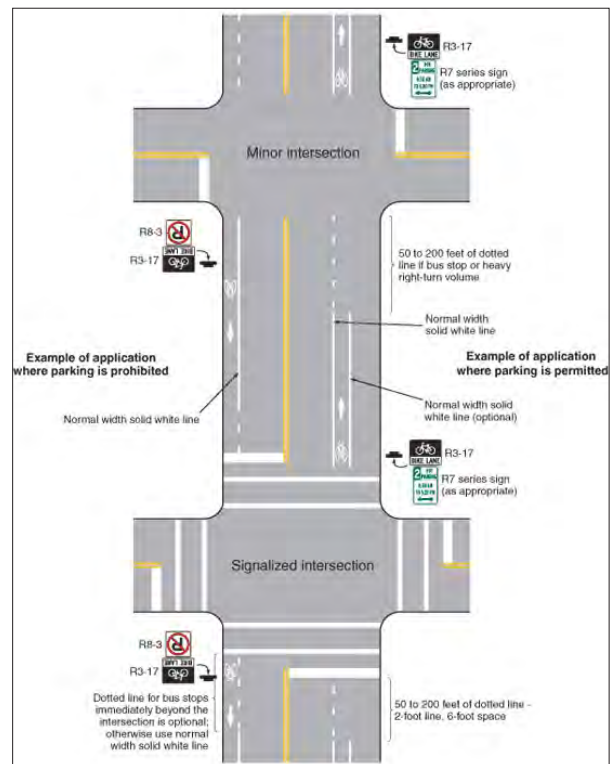
The design of intersections and crossing locations is heavily dependent on the context and the specific characteristics and details of a given site. Broadly, intersection design includes elements such as roadway configuration and geometry, textured materials, pavement markings, signage, signals and beacons, detection technologies, and lighting. The design of intersections and crossings for multiple modes is complex and requires a balance of different goals and objectives. Design must take all existing and anticipated movements into consideration. In such cases, the manner and extent to which vulnerable users (bicyclists and pedestrians) and motor vehicles are intended to mix or be separated is defined by the need to reduce the risk of crashes and to increase bicyclist and pedestrian comfort and convenience. The level and the type of treatment(s) called for at any given intersection depends on the existing or desired facilities (bicycle, pedestrian, motorized) at and near the intersection, the presence and configuration of the intersecting streets and driveways, operational characteristics such as traffic volumes, speeds, turning movements, and adjacent land use.

In general, in multimodal urban and suburban contexts, intersection design and choice of treatment(s) should aim at assisting and ensuring the safety of slower, less experienced, skilled, and/or mobility-challenged pedestrians and bicyclists (children, seniors, persons with disabilities, parents with strollers, etc.) at designated crossing locations. Compliance with the ADA laws and recommended best practices for the design of public rights-of-way, while adhering to a Complete Streets approach, is the best way to achieve this. Treatments and operational techniques that are especially effective at helping vulnerable and mobility-challenged individuals at designated crossing locations include:

- Lengthening the WALK/flashing DON'T WALK signal phase, allowing more time for crossing
- Installing medians/refuge islands, so that slower persons can cross in stages
- Installation of accessible pedestrian signals to assist people with vision impairments
- Adjusting signals to provide leading pedestrian intervals and/or restricting turning movements
- Reducing crossing distances
- Enhancing the visibility of crossing locations through lighting, crosswalk markings, signage, and/or raised crosswalks
- Reducing traffic speed

Treatments and design guidance aimed at improving the safety and comfort of bicyclists at intersections is different from that focused on pedestrians, since bicyclists typically move in and with traffic, while pedestrians are separated from it. In addition, bicyclists typically move at higher speeds than pedestrians. There is, however, substantial overlap and synergy between accommodation and treatments for both modes. We later provide information and select guidance for the design of bike lanes and other bicycle facility types at intersections and also for crosswalks and other treatments intended to improve the safety and comfort of pedestrians.

Figure 4.71 - Typical bike lane markings at intersections



Source: MUTCD

On-Street Bike Lanes at Intersections

While all bicycle facility types (trails, multiuse paths, lanes, sharrows, signed routes) may require special treatments at intersection locations, on-street dedicated bicycle lanes present specific challenges. Various designs and treatments exist for bike lanes as they approach (and pass through) an intersection (where most conflicts with automobiles occur). It is important that bicyclists are provided an opportunity to correctly position themselves to avoid or minimize conflicts, particularly with turning vehicles.

General design principles include: designing the bicycle route through the intersection to be direct, logical, and similar to the path of vehicles; ensuring the visibility of the route by providing pavement markings and lighting; and at signalized intersections, using technology that detects the presence of bicyclists and ensures appropriate signal timing.

Right turns are relatively easy for bicyclists because they usually ride on the right hand side of the road. At intersection approaches that do not have right-turn only lanes, bike lanes should be defined by a dashed line (separating it from the travel lane to the left), beginning 50 to 200 feet in advance of the intersection.

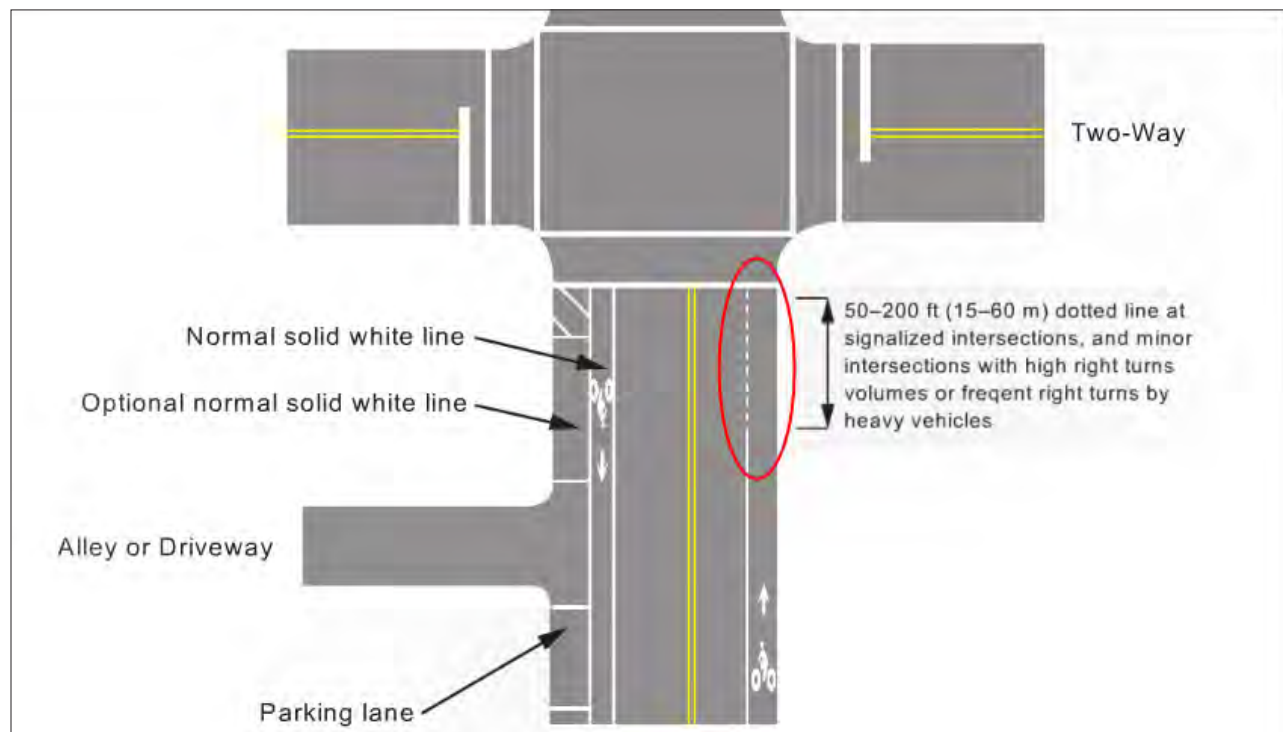
This encourages merging of right-turning vehicles in advance of the intersection and helps avoid “right-hook” crashes.

For streets with right-turn only lanes, bike lanes should cross the right-turning traffic (in a merging or mixing zone) to a position left of the right-turn lane. When there is not enough room for this, the bike lane should be dropped and shared lane markings should be installed on the left-hand side of the right-turn lane (a combined bike/right turn lane). Through bike lanes should be a minimum of four feet wide (five or more feet preferred).

Intersection Treatments: Through-Intersection Bikeway Markings

For bicyclists traveling in a conventional bike lane, the approach to an intersection with vehicular turn lanes presents a significant challenge. It is vital that bicyclists are provided with an opportunity to correctly position themselves to avoid conflicts with turning vehicles. **Figure 4.72** illustrates options for a through bicycle lane (or ‘bicycle pocket’ lane), as well as an MUTCD-compliant design for a combined bicycle-right turn lane.

Figure 4.72 - Intersection Treatments: Bike Lane Pavement Markings for Through Bike Lane without Right Turn Only Lane



Through Bike Lane Option A

For intersections that have sufficient width, separate through lanes for bicycles should be created. Dashed lines are used to signify the merge area. Dashed lines should start a minimum of 50 feet from the intersection. Markings are also used to clarify bicycle positioning. An on-street parking lane becomes the right turn only lane in this example.

Through Bike Lane Option B

This example illustrates a through bicycle lane at an intersection from a street with no on-street parking. Dashed lines are used to signify the merge area, and should start a minimum of 50 feet from the intersection. Markings are also used to clarify bicycle positioning. A right turn only lane is added by throat widening in this example.

Through Bike Lane Option C

In this example, the merging or mixing zone is painted green to increase visibility and awareness. Both the painted area and the dashed lines should start a minimum of 50' from the intersection. An on-street parking lane becomes the right turn only lane in this example.

Figure 4.73 - Through Bike Lane Option A



Figure 4.74 - Through Bike Lane Option B



Through Bike Lane Option D

In this example, the through general-purpose travel lane becomes a right turn only lane. Bicyclists need to move laterally to weave across the travel lane. Therefore, the bike lane along the curb should be dropped, and a bike lane introduced on the left side of the right turn lane. In this situation, the bike lane line should not be striped diagonally across the travel lane, as this inappropriately suggests to bicyclists that they do not need to yield to motorists when moving laterally. This option/scenario, although required in many suburban locations, is the least preferred and should be used only when no other option is practicable.

Through Bike Lane Option E

In this example the through general-purpose travel lane becomes a right turn only lane, but the bicycle lane remains on the right hand side of the right turn lane. This configuration requires the installation of a bicycle signal giving bicyclists an exclusive phase to separate conflicting movements. Like Option D, this option/scenario is not preferred and should be used only if Options A-C are not possible.

Figure 4.75 - Through Bike Lane Option C



Figure 4.76 - Through Bike Lane Option D

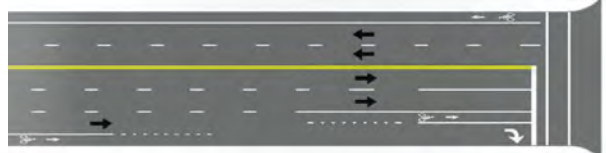
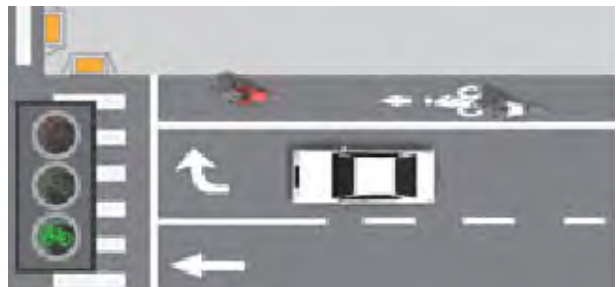


Figure 4.77 - Through Bike Lane Option E



Intersection Treatments: Combined Bike Lane / Right-Turn Lane

A combined bicycle/turn lane (or shared lane) utilizes shared lane markings within the right turn only lane, typically positioned toward the left side of the lane. Shared lane markings help delineate space and indicate the proper positioning for through bicyclists within the shared lane. This treatment may include signage indicating that vehicles in the lane must turn right, except bicycles. In order to indicate a merging/mixing zone, a dashed line is used on the intersection approach, at least 50 feet in advance of the stop line. No on-street parking is shown in this example, though the treatment can also be used when a parking lane transitions to a right turn lane and in other situations as well.

For left turns, bicyclists – moving in the manner of other vehicles – may merge left in advance of the intersection to turn from the same location as other left-turning vehicles. This maneuver requires no special treatment, though in some situations, a standard bike box²¹ can help bicyclists obtain proper positioning for a “vehicular” left turn. However, a “two-stage left turn” offers cyclists an alternative to following vehicular movements for a left turn. This alternative requires that bicyclists proceed straight through the intersection – to the far corner of the cross street – where they then wait to cross in the direction of travel of that cross street. This type of turn is formalized by the installation of a “two-stage left-turn box” and appropriate signage.²² The first option, following vehicular movements, works well on low-volume, low-speed streets, while the latter option (two-stage turn) is preferred on multi-lane, high volume, or high speed roadways.

³² See <http://nacto.org/publication/urban-bikeway-design-guide/intersection-treatments/bike-boxes/>

³³ See <http://nacto.org/publication/urban-bikeway-design-guide/intersection-treatments/two-stage-turn-queue-boxes/>. See also, http://www.fhwa.dot.gov/environment/bicycle_pedestrian/guidance/mutcd/turn_box.cfm.

Figure 4.78 - Intersection Treatments: Combined Bike Lane / Right-Turn Lane



Source: NACTO

Intersection Treatments: Through-Intersection Bikeway Markings

Through-intersection markings should be installed to indicate the intended path of bicyclists. The markings guide bicyclists on a safe and direct path through intersections and increase awareness and visibility. The examples shown in **Figure 4.79** illustrate different types/options for through-intersection markings for typical bicyclist movements.

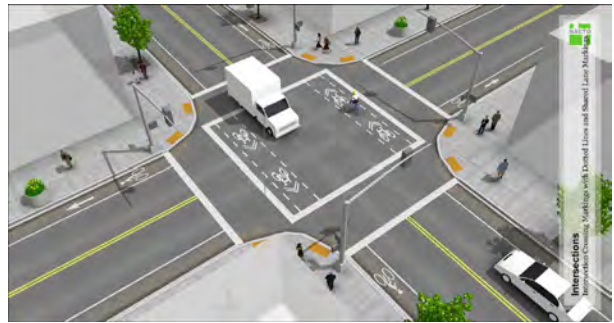
Through-intersection bikeway markings can be combined with the various types of pedestrian crosswalk markings (**Figure 4.79**), based upon unique site characteristics, safety objectives, and community goals/desires.

Figure 4.79 – Intersection Treatments: Through-Intersection Bikeway Markings

Dashed white lines



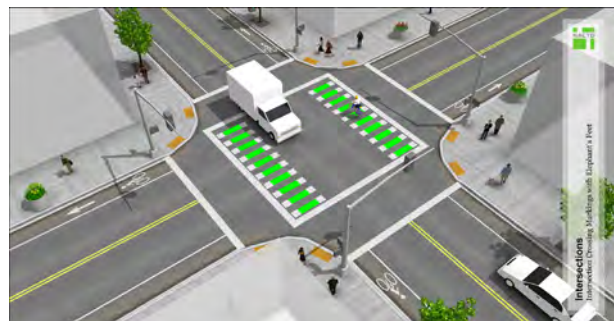
Shared lane markings outlined by continuous dashed white lines



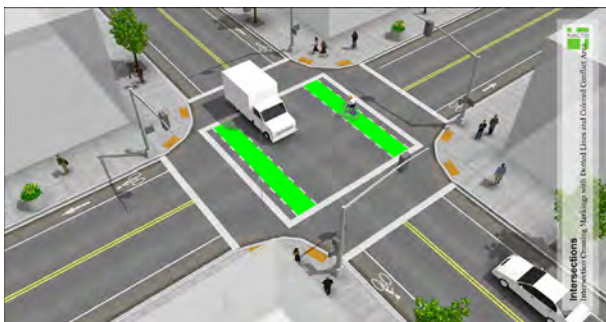
Thick, dotted lines (called “elephant’s feet”)



Green striping outlined by thick, dotted lines (elephant’s feet”)



Continuous, solid colored pavement, outlined with the dashed white lines (or “elephant’s feet”)

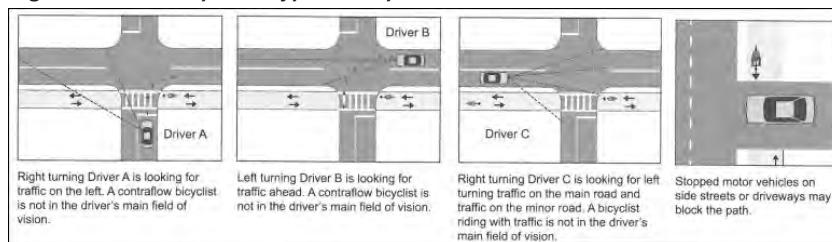


Off-Street Bikeways (Sidepaths/Multiuse paths)

Intersection design and treatments are also important for the safety and success of off-street facilities (sidewalks, sidepaths, and multiuse trails). Once again, designs must address all potential conflicts. In the case of off-street facilities, understanding turning movements and typical cones of vision becomes especially important. Design principles that should be applied when creating off-street facilities include reducing the number of driveway crossings; reducing driver speeds at conflict points; and heightening driver and trail user awareness at intersections and driveways. Strategies to heighten awareness include: installing signage, enhanced lighting, ensuring adequate sight lines, and creating highly visible crossings through the use of pavement color, striping, and/or surface texture.

²³ For more information on crosswalks, see http://www.pedbikeinfo.org/planning/facilities_crossings_crosswalks.cfm.

Figure 4.80 - Examples of typical sidepath conflicts / issues:



Source: FHWA/AASHTO

Intersection and Crossing Treatments for Pedestrians

A pedestrian crossing can be defined as any location where the pedestrian leaves the sidewalk and enters the roadway. However, pedestrians do not have the right-of-way at all such crossings. Pedestrian crossings where the pedestrian does have the right-of-way include (marked) midblock crossings and crossings at intersections. Crosswalks are implied at all intersections whether or not they are marked. Midblock crossings are only created if a marked crosswalk is provided. All marked and unmarked crosswalks and midblock crossings should be designed for the safety and accessibility of all pedestrians.

Crosswalk markings, if provided, are used to define the pedestrian path of travel across the roadway, to increase visibility, and to alert drivers to the presence of the crosswalk. Marked crosswalks should be designed in accordance with the MUTCD, Section 3B.18, and the proposed Public Rights of Way Accessibility Guidelines.²³ The minimum width for a crosswalk, per the MUTCD, is six feet, though eight feet or more is preferred.

In addition to crosswalks, certain traffic calming features – some of which have been mentioned above and for which more information can be found in **Appendix I** – are recommended to assist pedestrians (and bicyclists) at intersections and other crossing locations. See also, CMAP's Complete Streets Toolkit, at <http://www.cmap.illinois.gov/programs-and-resources/local-ordinances-toolkits/complete-streets>.

The following examples illustrate typical intersection treatments that can be used by the Village to create safe and efficient intersections and crossing locations for pedestrians. (All images from CMAP staff.)

Pedestrian Crossing Example A – Parallel Lines Crosswalk

This example illustrates a pedestrian crossing that is identified by two parallel solid white lines through the intersection. Although crosswalks with parallel markings are permitted by the MUTCD, they are less visible to motorists than crosswalks with ladder striping, and are therefore not recommended except for low volume local streets.

Pedestrian Crossing Example B – Continental Crosswalk

This example, called the “continental” or “high visibility” (longitudinally striped) crosswalk design consists of wide striped white lines, parallel to the direction of traffic, that define the pedestrian route. The lines should be 12 to 24 inches wide, separated by gaps of 12 to 60 inches. The design of the lines and gaps should, if possible, be placed so that the lines avoid wheel paths.

Pedestrian Crossing Example C – Texture/Color Crosswalk

Different surface materials, such as brick, concrete pavers, and stamped asphalt, and/or colors can be used to increase awareness and visibility of pedestrian crossings, as well as contribute to the aesthetics of the streetscape. However, care should be taken to ensure that materials do not hinder or cause discomfort for persons using wheelchairs, walkers, strollers, or other mobility-assist devices. In addition, crosswalks should meet visibility, non-slip, and retroreflective – the ability to reflect light back – standards, as specified in the MUTCD.

Figure 4.81 - Example A: Parallel Lines Crosswalk



Figure 4.82 - Example B: Continental Crosswalk



Figure 4.83 - Example C: Texture/Color Crosswalk



Pedestrian Crossing Example D – Pedestrian Refuge Island (Median)

Medians, or refuge islands, assist pedestrians (and bicyclists) in crossing both at intersections and at mid-block locations. On large, multi-lane roads, medians can be designed (in conjunction with signal timing and equipment) to divide a crossing into stages, or they can simply provide a refuge area should a pedestrian need or want a safe place to stop. Whenever possible, medians should be raised to provide a protected space, separated from traffic. Raised medians can also be easier for people with vision impairments who use a cane to detect and should be designed with a cut-through at street level or accessible ramps.

Pedestrian Crossing Example E (Traffic Calming) – In-street Pedestrian Crossing Signs

In addition to crosswalk markings, in-street pedestrian crossing signs may be installed at unsignalized intersections and midblock crossings to remind road users of the law regarding right-of-way at crosswalks and to alert drivers to use caution. In addition, in-street signs function as traffic-calming devices, reducing vehicle speeds by narrowing the travel way.

Pedestrian Crossing Example F (Traffic Calming) – Mini Traffic Circle

Mini traffic circles are raised small circular islands constructed in the center of relatively low-volume, low-speed residential street intersections. They are generally not intended for use where either street is an arterial, although they can be used along collector roads. Mini traffic circles reduce vehicle speeds by forcing drivers to change their travel path to maneuver around the circle, and can also be seen as an aesthetic enhancement, contributing positively to the quality of the streetscape.

Figure 4.84 - Example D: Pedestrian Refuge Island (Median)



Figure 4.85 - Example E: In-street Pedestrian Crossing Signs (Traffic Calming)



Figure 4.86 - Example F: Mini Traffic Circle (Traffic Calming)



Intersection and Crossing Location Recommendations

Currently, major arterials along bikeway corridors are challenging to cross by bicycle or on foot. **Figure 4.88** identifies proposed intersection, crossing, and other spot location improvements. High priority improvements are located, in most cases, along existing and proposed bikeways and at or near the crossings of major arterial roads. A number of priority locations have been discussed above, in relation to multi-use paths and on-street bikeways.

It is recommended that the Village focus initially on short-term, relatively easy improvements (repainting/ restriping, signal adjustments, bike route signage) at the intersections and other locations shown on **Figure 4.88**. Over the long-term, when intersections undergo reconstruction or major upgrades, the Village should incorporate more complex and long-term solutions and treatments to improve pedestrian and bicyclist safety and comfort (see below and **Appendix K**). It should be noted, however, that many of the recommended intersections to be improved are under IDOT (or Cook County's) jurisdiction. The Village should therefore closely and continuously monitor those agencies' annual and multi-year programs and, when projects within the Village are scheduled or indicated, the Village should coordinate with the appropriate entities to ensure that effective, robust pedestrian and bicycle accommodations are included as part of project purpose-and-need, scope, and design.

Walnut-Ridge at Northwest Highway

The north-south “Kennicott” bicycle framework route diverges from Kennicott at Oakton Street in order to utilize Walnut/Ridge Avenue to cross Northwest Highway and the UP tracks. This intersection/crossing was identified by the BPAC as a high priority project, where bicycle improvements are needed. Along the “Kennicott” framework route, the intersection is heavily utilized as one of very few safe (signalized) crossings of Northwest Highway in this part of the Village. Given the importance of this crossing, it is recommended that the Village consider engineering and design treatments to carry the proposed bikeway on Walnut/Ridge (on-street bike lanes from Elm to Campbell) through the intersection of Northwest Highway. Improvements for this intersection are schematically represented in **Figure 4.83**. The proposed bike lanes, as well as potential treatments at the intersection – including bike boxes, route signage, enhanced crosswalk and through-intersection bikeway markings, curb ramps, enlarged queuing areas, etc. – are conceptually illustrated in **Figure 4.87**. Installation of bike lanes may entail the removal of underutilized on-street parking on Walnut and the enforcement of restrictions against sidewalk parking at automobile repair businesses along the route near Northwest Highway.

Figure 4.87 - Walnut/Ridge at Northwest Highway, Intersection / Bikeway Design Concept

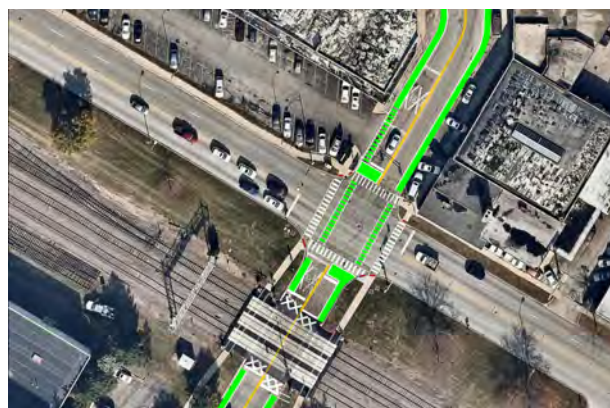


Figure 4.88 - Proposed intersection and spot location improvements

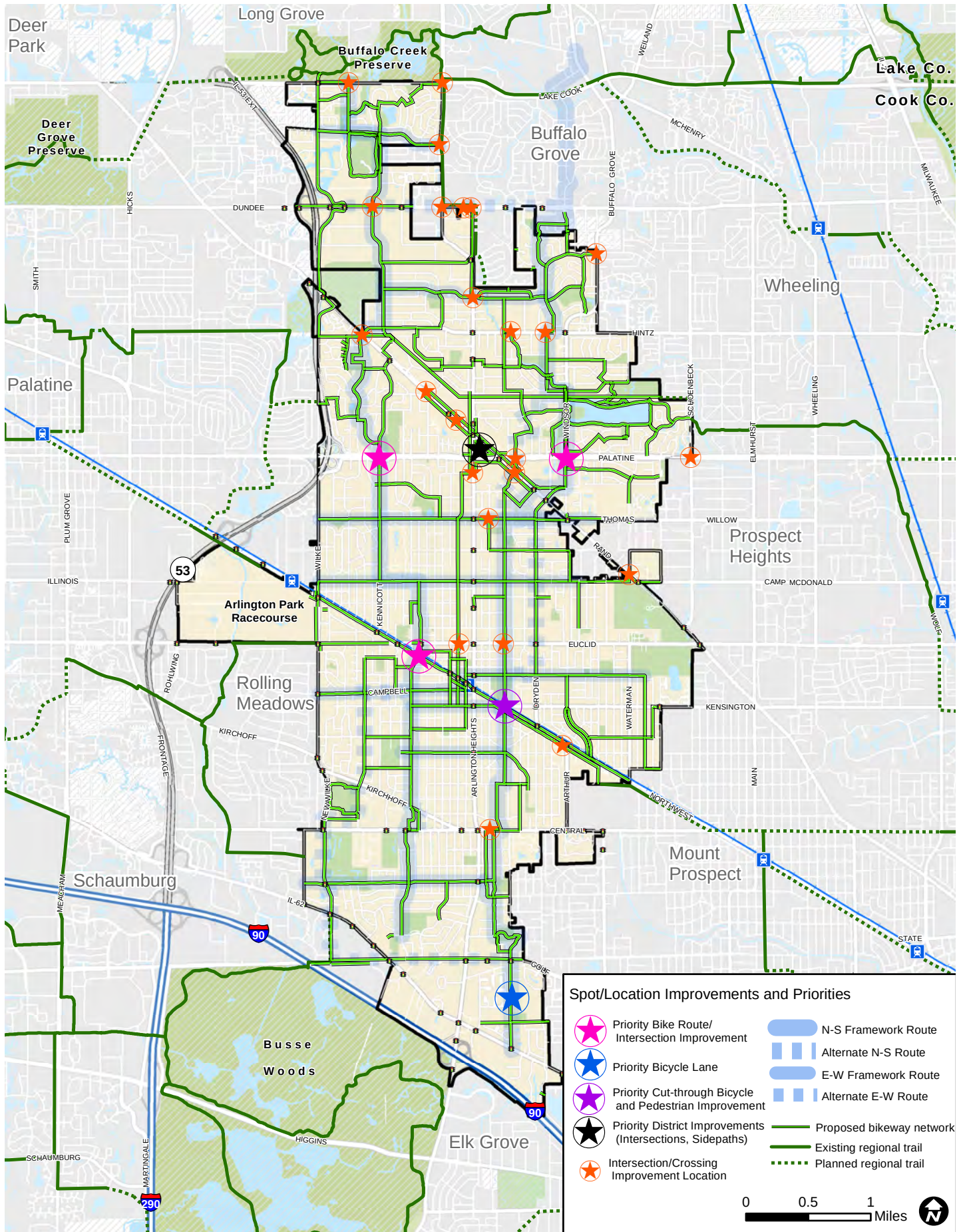
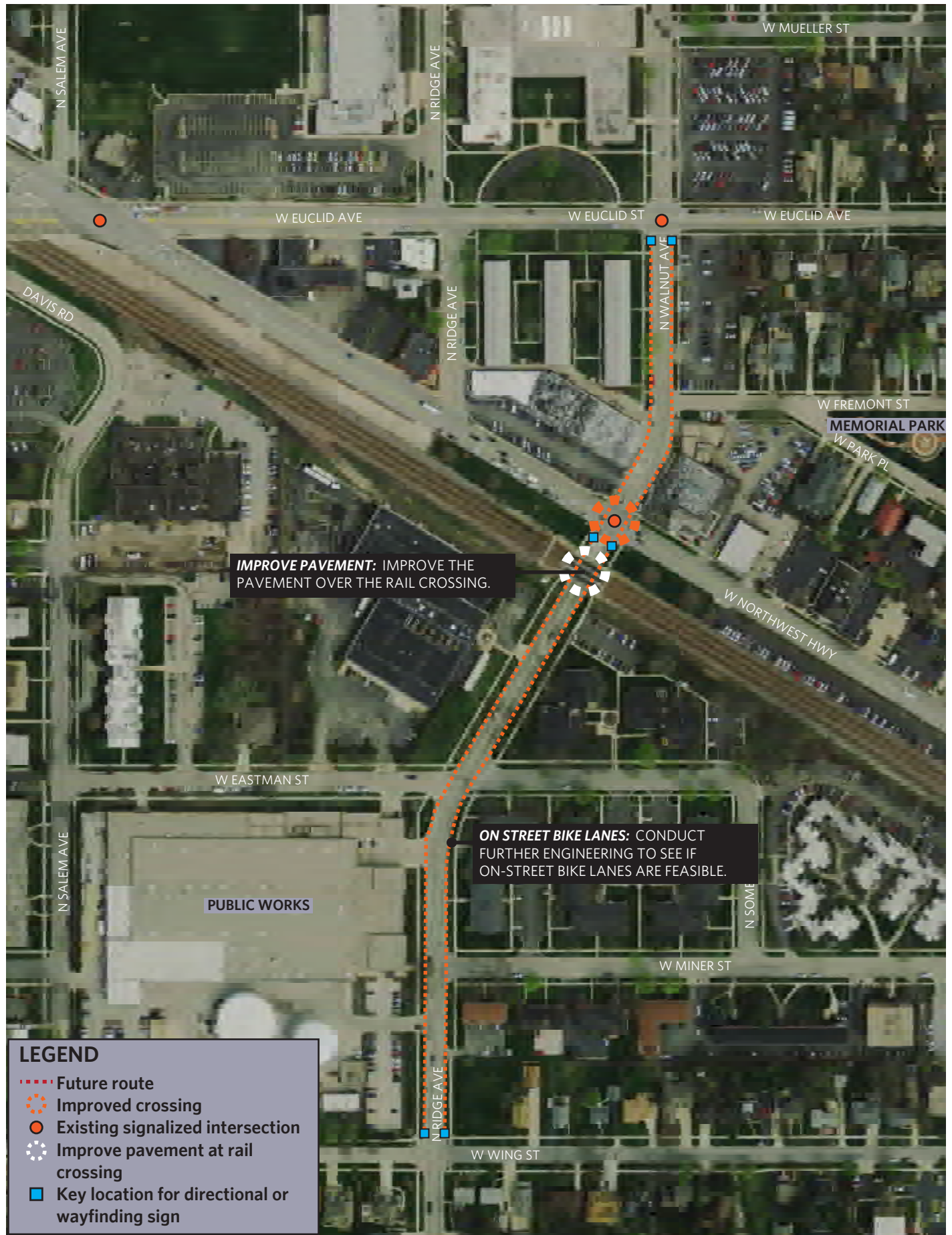


Figure 4.89 - Walnut-Ridge at Northwest Highway, Intersection / Bikeway



Euclid Avenue, traffic calming

Figure 4.86 provides a conceptual design for bicycle and pedestrian enhancements in the form, primarily, of traffic calming (mini traffic circle and high visibility crosswalks) at the intersection of Douglas and Euclid, which is located along the Dryden/Douglas framework route and which was identified by the BPAC and other stakeholders as a difficult crossing for bicyclists. (See *Figure 4.86* and *Appendix K* for more information on mini traffic circles.)

Mini traffic circles function most effectively when deployed along a corridor or throughout a neighborhood. Potential high priority corridors in the Village for this and other traffic calming treatments include Euclid, Thomas, and other two-lane framework bike routes that pass through residential neighborhoods on low-speed, low-volume streets. Segments of Oakton, Park, Sigwalt, and Campbell, White Oak, and other framework routes may also be appropriate locations/corridors.

Figure 4.90 - Mini traffic circle at Euclid and Douglas



Figure 4.91 - Potential corridors / locations for installation of mini traffic circles



Euclid Avenue, between Chestnut and Douglas (top image); Thomas Street, between Yale and Ridge (bottom image)

Additional Intersection and Spot Improvement Location Examples

In addition to spot location improvements identified by the BPAC as high priorities, a number of other important locations have been identified through existing conditions analysis and stakeholder engagement, either as in need of enhancements to increase safety and comfort for pedestrians and bicyclists (especially along popular framework routes), and/or because they offer an appropriate context and unique opportunity to implement and test design treatments that – should they prove useful, effective, and popular – may be utilized on a wider scale in other locations throughout the Village. They are intended, therefore, as examples of “typical” intersection treatments and also of the type of locations where such treatments may be most effective.

Hintz Road at Rand

Figure 4.92 illustrates a conceptual design for the signalized intersection of Hintz and Rand Road (here, five lanes), along the Kennicott framework route. The treatment consists of heightened, enhanced on-street markings through the intersection (and on approaches). These include green-backed shared lane markings (currently requiring FHWA permission to experiment), bike boxes, and through-intersections markings.

Dunton at Euclid

Bike boxes are bicycle-specific intersection treatment that can be used to enhance framework routes and improve bicyclist safety and visibility. Bicycle boxes are a common feature of bicycle boulevards.

Figure 4.93 provides a conceptual illustration of this treatment at the signalized intersection of Dunton and Euclid, which is located along a proposed bike route (on Dunton Avenue) and adjacent to important bicycle destinations (the Arlington Heights Memorial Library and the downtown Metra station).

Figure 4.92 - Hintz Road at Rand Road

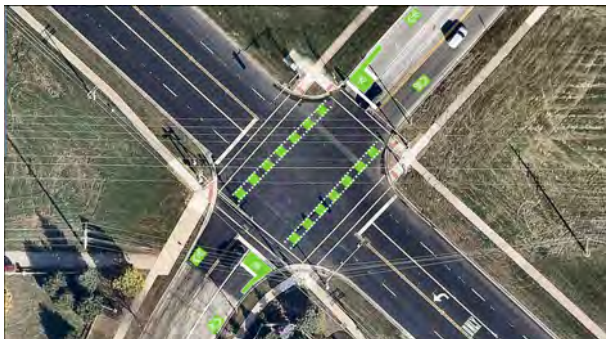


Figure 4.93 - Dunton and Euclid, Bicycle Boxes



Thomas at Belmont

Figure 4.94 offers a conceptual illustration for the installation of raised center medians at the intersection of Belmont and Thomas, which are both bicycle routes, and which was identified by the BPAC and through the plan's public engagement process as a difficult crossing for both pedestrians and bicyclists.

Rand at Waterman

Figure 4.95 provides another example of conceptual design improvements for an uncontrolled crossing location (along a high volume, high speed road), to improve safety. This location, at Rand and Waterman – also along a proposed bikeway providing access to John Hersey High School from the south, includes installation of a raised center median, a pedestrian hybrid beacon, new sidewalk connections and marked crosswalks, and enhanced lighting.

Palatine at Eastwood

Figure 4.96 illustrates potential improvements aimed at increasing safety (primarily through enhanced visibility) for bicyclists and pedestrians at crossings of large, multi-lane roadways (here, Palatine Road) at uncontrolled locations. The intersection/crossing is in the 'Triangle District' and along a proposed bicycle route. The design concept presented here takes advantage of the existing wide raised median, as well as nearby signalized intersections (which help slow and create gaps in traffic). The design should include installation of either a pedestrian hybrid beacon or RRFB to enhance awareness and increase compliance with stopping laws.

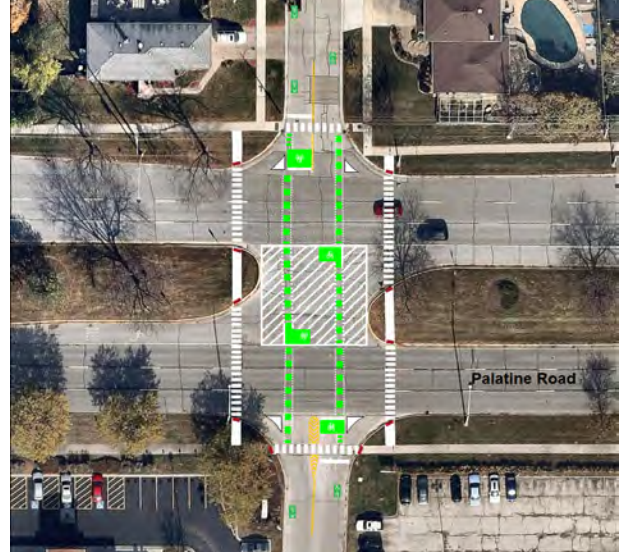
Figure 4.94 - Thomas and Belmont, Center Refuge Islands



Figure 4.95 - Rand at Waterman, Crossing Improvements Concept



Figure 4.96 - Palatine at Eastwood, Crossing Improvements Concept



Chapter 5

POLICIES, PROGRAMS, CULTURE AND IMPLEMENTATION



This chapter supplements the physical improvements recommended in the previous chapter with education, enforcement, and regulatory policies and programs that the Village and others should consider. The chapter ends with prioritized implementation strategies to assist with developing the interconnected bicycle and pedestrian system envisioned in this plan.

Policies

Incorporate Projects into the Village's Capital Improvement Program

Many of the recommendations of the Bicycle and Pedestrian Plan require infrastructure investments that should be added into the Village's Capital Improvement Program (CIP).²⁴ As streets are improved or resurfaced, the Village should implement projects to improve pedestrian and bicyclist safety and circulation, including on-street pavement markings, new or improved signage, and intersection improvements. Funds for the maintenance of facilities should also be budgeted.²⁵

²⁴ A copy of the current CIP is posted on the Village's website at http://www.vah.com/assets/1/finance_department/2016-2020_CIP_Executive_Summary.pdf.

²⁵ U.S. DOT's Federal Highway Administration recently published the workbook, "Incorporating On-Road Bicycle Networks into Resurfacing Projects." The workbook provides step-by-step instructions for how agencies and communities can integrate bicycle facilities into their resurfacing programs. See http://www.fhwa.dot.gov/environment/bicycle_pedestrian/publications/resurfacing/.

Implement the Village's Complete Streets Policy

With the adoption of Arlington Heights' Complete Streets Policy (2013), the Village made a commitment to ensuring that all streets and rights-of-way are designed and operated to enable appropriate and safe access for all users. Improvements to the streets and public rights-of-way should advance the Complete Streets Policy goal of making the street network better and safer for all users. This plan provides specific projects at specific locations, which will help the Village achieve this goal. Although what constitutes a Complete Street varies according to context (surrounding land use, roadway functions and typology, existing and future travel needs, and community desires as expressed in plans and policies), pedestrian and bicycle elements that should be considered in all street improvement projects include: new or improved sidewalks and bicycle facilities; enhanced, safer crossings; and intersection improvements.

Coordinate with the Village's Development and Regulations Processes

Adopt a bicycle parking ordinance

The Village should continue to refine and further develop its proposed bicycle parking ordinance to ensure that it meets the various needs and goals of the community. The Village should require that convenient, functional bicycle parking is incorporated as part of new development projects, particularly for commercial and multi-family residential uses. Not only should the number of bicycle parking spaces required per land use or development type be provided, but the regulations should also include information and requirements on the type(s) of bicycle racks that should be used for different contexts/locations and on the distance(s) from primary entrances. In addition, the ordinance should provide details on how the Village will monitor and enforce the ordinance (i.e. plan review, field audits, etc.).²⁶

Provide adequate bicycle parking

Regardless of adoption of a bicycle parking ordinance, the Village should continue and expand efforts to provide adequate bicycle parking. Currently there are bike racks at locations throughout the Village, including schools, parks, Metra stations, the Public Library, Village Hall, and other downtown locations, as well as outlying commercial districts, installed by various public and private entities. High-quality, covered parking exists at the downtown Metra station and in nearby parking garages. However, not all destinations are equally well-served, nor are all racks of high quality or utility. The Village should install and/or upgrade bicycle parking infrastructure at destinations along bike routes and at important destinations where the existing bike racks are sub-standard or non-existent. In addition to Metra stations, the downtown area, and schools, important destinations include major employment centers, commercial districts, community facilities, multi-family developments, and recreational destinations.

Support walkability through design and development processes

The Village Planning and Community Development department, which oversees and administers development regulations, permitting, site and building plans, signage, and beautification projects, should continue to support walkability and require safe and convenient pedestrian access to buildings and developments through the design and development review process and the encouragement of high-quality, pedestrian- and bicycle-friendly design. The recent Hickory/Kensington Area Design Guidelines (2014) provide an example of the type of document that can help to ensure walkability.

²⁶ The Association of Bicycle and Pedestrian Professionals has produced a very useful guide, *Bicycle parking Guidelines*, 2nd Edition (2010) and the *Essentials of Bike Parking: Selecting and Installing Bike Parking that Works*, both available at <http://www.apbp.org/?page=publications>. In addition, several communities from around the country have adopted robust policies that may serve as models, including Cambridge, MA (http://www.cambridgema.gov/~media/Files/CDD/Transportation/Bike/Bicycle_Parking_Guide_20130926.ashx) and <http://www.cambridgema.gov/CDD/externallinks/zoningordinance/article6>), San Francisco, CA (<http://www.sf-planning.org/index.aspx?page=3470>), Washington DC (<http://ddot.dc.gov/page/bicycle-parking-regulations>), and Meridian Charter Township, MI (<http://ecode360.com/28784097>). See *Appendix M* for some important issues in bicycle parking regulations identified by APBP members in a recent exchange on the Associations Discussion Forum.

Strengthen interdepartmental cooperation and coordination

Coordination between Arlington Heights' Planning and Community Development Department and the Engineering and Public Works Departments is crucial to the successful implementation of this plan and to advancing bicycling and walking as transportation. Coordination on all development projects must begin early, in the concept development stage, and should continue through the financial, budget, cost estimation, design, and construction phases. Design review for architecture, urban design, and beautification projects should be coordinated between departments to achieve outcomes that improve conditions for bicycling and walking.²⁷ In addition, the Village should also continue to work with adjacent communities, County government, regional agencies, IDOT, and other partners/stakeholders to cooperate on planning and implementation efforts.

²⁷ http://www.vah.com/departments/planning_and_community_development/design.aspx

Consider pedestrian access to buildings and developments

To encourage walking by all types of pedestrians, walking must be safe, comfortable, and enjoyable. New developments should be required to include new or improved sidewalks. In addition, consideration of the first 30 feet in front of the building and its relationship to a new or existing sidewalk is important, including materials and textures used, architectural details, window coverage (amount of transparent glass), and amenities such as seating, shade, and landscaping. Street trees planted along parkways, with buildings fronting the street, and parking lots in the rear, give pedestrians a more enjoyable experience. Consolidating and limiting the number of driveways along mixed-use or commercial corridors can help create a safer pedestrian environment by reducing the number of conflict locations.

Pedestrian travel in and through parking lots should also be considered in development regulations and design review. Landscaping and shading, breaks in fencing along parking lots/property lines, curb bumpers along sidewalks, pedestrian-scale lighting, and protected walkways between parking rows should all be considered. Use or so-called "goat-paths" indicate desired routes for pedestrians, and can help the Village retrofit areas to better accommodate pedestrians.

Figure 5.1 - Commercial center at the heart of a walkable neighborhood



Source: Dover Kohl Planners

Encourage pedestrian-friendly land use and development patterns

Mixed-use development – where different land uses are in close proximity (typically vertically mixed) and which generally make use of good urban design principles – encourages walking. Allowing retail establishments within residential districts at “neighborhood centers” helps support walking and walkability. Narrow streets and short blocks also help create a pedestrian-friendly environment. In a community like Arlington Heights, which is largely built-out, narrower streets (or the perception of narrower streets) can be achieved through road diets and/or narrowed lanes and addition of bike lanes. In areas with large blocks or cul-de-sacs, the roadway network can be supplemented with pedestrian and bicycle cut-through paths. For future developments, road connectivity and pedestrian friendly design features should be assessed as part of the development or subdivision review processes.

Arlington Heights has already implemented these practices in the downtown area with great success. A rule of thumb for successful, pedestrian-friendly commercial development is that streets should be “busy with traffic, yet narrow enough that pedestrians on one side of the street can see storefronts on the other side.”²⁸ This is typically achieved by having one travel lane in either direction, on-street parking, and (when along a bikeway) bicycle lanes.

²⁸ Tumlin, Jeffrey, ed., *Sustainable Transportation Planning: Tools for Creating Vibrant, Healthy, and Resilient Communities* (Hoboken, NJ: Wiley & Sons, 2012).

²⁹ For more information on parking, see CMAP’s guide, *Parking Strategies to Support Livable Communities*, at <http://www.cmap.illinois.gov/programs-and-resources/local-ordinances-toolkits/parking>.

Figure 5.2 - Pedestrian access at shopping centers



Source: Human Transit

Allow for reductions in parking requirements

Minimum parking requirements should be evaluated for their efficacy and appropriateness – especially in mixed-use and transit-oriented areas – since there are many factors that affect mode choice and one size may not fit every situation. In addition, private developers are well equipped to determine how much parking is required by the market. Some suburban communities in the Chicago area (such as Glen Ellyn and Elmhurst) have eliminated parking requirements in their downtown areas to promote development of small-parcel businesses and walkability. In cases where a community wants to keep requirements, there will typically still be opportunities for lowering the overall quantity of parking and promoting design that encourages and welcomes other modes of transportation. Some communities create parking maximums to prevent auto-oriented development in pedestrian zones.²⁹

Undertake Bicycle and Pedestrian Counts

The Village should develop a program to count bicyclists and pedestrians at key locations throughout the Village. The information gathered can help the Village determine the need for bicycle and pedestrian accommodations and the types of accommodations that may be most appropriate for the numbers and types of users observed. In addition, agencies and communities who can show clear evidence of use are more likely to receive funding for projects through competitive federal and state grant programs.³⁰

Implement Existing Plans

The Village of Arlington Heights has a number of existing plans and studies that include recommendations for improving pedestrian and bicycle circulation. Examples of key plans include the Comprehensive Plan, Downtown Master Plan, Thoroughfare and Transportation Policy Plan, and the Hickory/Kensington Area Plan. The Village should continue to implement relevant recommendations in these plans whenever feasible.

³⁰ More information on bicycle and pedestrian count program and how to set up a robust program can be found in the online Guide to Bicycle & Pedestrian Count Programs (developed by Portland State University's Initiative for Bicycle & Pedestrian Innovation), at <https://www.pdx.edu/ibpi/count>. See also the recently published white paper by Alta Planning + Design, "Innovation in Bicycle and Pedestrian Counts: A Review of Emerging Technology," at http://altaplanning.com/wp-content/uploads/Innovative-Ped-and-Bike-Counts-White-Paper_Alta-Planning-Design.pdf. Additional information and resources can be obtained through the National Bicycle and Pedestrian Documentation Program (<http://bikepeddocumentation.org/>). TRB's National Cooperative Highway Research Program (NCHRP) Report 797: Guidebook on Pedestrian and Bicycle Volume Data Collection describes methods and technologies for counting pedestrians and bicyclists, offers guidance on developing a non-motorized count program, gives suggestions on selecting appropriate counting methods and technologies, and provides examples of how organizations have used non-motorized count data to fulfill their missions. It is available at <http://www.trb.org/Main/Blurbs/171973.aspx>.

Programs

Create Program and Events that Foster Active Transportation

To help strengthen the culture for bicycle use and walking within Arlington Heights, while continuing to build a safe network of transportation options, the Village and its partners should create and administer the following programs and events: educating residents about rules of the road and how to interact with other modes is essential for safe travel, regardless of which mode is chosen; educational opportunities targeted towards both children and adults can promote safer interactions between road users; and encourage more walking and bicycling.

Encourage students and adults to walk and bike to school and work

The Village should continue to host and participate in special events that encourage walking and biking for all age groups and levels of mobility. Suggestions for encouraging walking and biking in Arlington Heights include special events such as “bike to work week” and “walk/ride to school days.” International Walk to School Day is the first Wednesday in October and Bike to School Day is in early May.³¹

A common action that is often undertaken as part of a Safe Routes to School program – either as a one time or ongoing event – is a “walking school bus.” A walking school bus is essentially a group of children walking to school with one or more adults; some programs include signs, banners, and other accoutrements to make the event more fun and to communicate it to others. The walking school bus can be as simple as two families taking turns accompanying the children as they walk to school or be more structured with designated routes, schedules, and meeting points.³² Similar to a walking school bus is a bicycle train, where a group of interested students ride bikes to school in an organized and safe way.³³

For adults, formal and informal programs organized by employers or groups of employees to encourage walking at work – usually in small groups and at lunchtime – are popular and provide proven health and morale benefits.³⁴ National Walk @ Lunch Day is in late April. These and other special events should be organized and promoted by the Village through collaborations between Village departments (Manager’s and President’s Office, Police, Health Services, etc.), the School and Park Districts, or partnerships with not-for-profit private sector health or active transportation organizations, and for-profit businesses, like bicycle shops, health care providers, sporting goods and outdoor product stores, etc.

³¹ More information about walking and biking to school can be found at <http://www.walkbiketoschool.org/>.

³² Additional resources and a guide to starting a walking school bus program are available: <http://www.walkingschoolbus.org/>.

³³ Maine DOT has published a guide to creating a Bicycle Train: <http://www.maine.gov/tools/whatsnew/attach.php?id=362609&an=1>.

³⁴ See California’s “Guide to Establishing Worksite Walking Clubs,” at <https://www.cdph.ca.gov/programs/cpns/Documents/Network-FV-WP-WalkingClubTool.pdf>.

³⁵ For more information on the Community Bike Rides, see the BPAC website, at http://www.vah.com/government/commissions/bicycle_commission.aspx.

Continue and expand community biking and walking events

³⁶ See <http://openstreetsproject.org/>.

The AH BPAC held three Community Bike Rides in 2015, under the brand name “Bike Arlington Heights,” to explore Village bike routes and neighborhoods.³⁵ However, these events (and others of the type) also help raise awareness of bicycling, introduce cyclists to each other, encourage more people to bicycle (for transportation and recreation), and provide an opportunity for teaching safe cycling techniques. Broadly, they help develop a supportive environment and culture for bicycling (and walking, when that is the focus). Such events are also opportunities for disseminating informational materials that communicate the benefits of walking and bicycling.

The Village should participate in and be supportive of special community events designed to encourage walking and biking for all age groups and levels of mobility. Events may be organized by the Village, BPAC, the Park District, the School District(s), or through a partnership between these and/or other entities. Events should be organized and advertised in such a way as to engage a variety of residents. For example, advertisements can be published in multiple languages to engage immigrant or non-English-speaking residents or communities.

Open Streets Events

Open Streets events, which are known by many different names and take many different forms, are growing in popularity around the country and the world. An Open Streets event typically consists of a temporary closure of a street, a section of a street, or a network of streets to vehicular traffic in order to allow unrestricted walking, bicycling, and other active, recreational activities (dancing, exercise classes, etc.). Open Streets events can be annual events or occur more often, such as once a week. The Village should consider such an event in the downtown area and work with the BPAC and other interested commissions or groups, local businesses, and residents to determine the appropriate location and format for the event.³⁶

Figure 5.2 - Open Streets event



Source: MN Bike Trail Navigator

Support bicycle riding education

Programs aimed at increasing knowledge, visibility, or enthusiasm for riding bicycles can help change the travel behavior of individuals and make active transportation safer. The Village can carry out such programs out on its own or in collaboration with other entities, including police and fire departments, transportation agencies, a local school or university, the Active Transportation Alliance, private companies, non-profit organizations, and other stakeholder groups interested in promoting sustainable and active transportation.³⁷

- The Village, through a partnership with the Township and Park District, currently offers Safety Town education for young children, which includes bicycle and pedestrian safety. In addition, the BPAC and Arlington Heights Cycling Club conduct bicycle safety training for adults. In addition to these activities, the Village should partner with the Police Department and School District(s) to ensure that the driver education curriculum includes material on how to safely share the road with cyclists and pedestrians.
- The Village should also promote and utilize the Ride Illinois' (formerly League of Illinois Bicyclists) online Bike Safety Quizzes for children, adult cyclists, and motorists.³⁸ To encourage taking the quizzes, the Village or other entities publicizing or utilizing the quizzes could offer promotional materials to anyone who completes a quiz and presents the completion certificate (which the website provides), and/or enter the successful quiz takers in a prize drawing.
- The BPAC should consider creating an ambassador program to promote walking and biking safely. Ambassadors could be members of the Commission, members of the Arlington Heights Cycling Club, local members of the Active Transportation Alliance, Police Department officers, or other volunteers. Ambassadors would attend events and visit local schools and community centers to provide information about walking and biking.

³⁷ For more ideas on youth and teen bicycle and pedestrian education programs and curricula, see Walk Bike to School's list of resources at <http://www.walkbiketoschool.org/keep-going/ongoing-activities/classroom-curricula>, as well as page 71 of Wheeling's Active Transportation Plan13, completed by the Active Transportation Alliance in 2013, at <http://www.cmap.illinois.gov/programs-and-resources/ita/wheeling>.

³⁸ See <http://www.bikelib.org/safety-education/online-bike-safety-quizzes/>.

Figure 5.3 - Elk Grove Township Safety Town



Source: Elk Grove Township

Develop and Make Materials Available About Walking and Bicycling in Arlington Heights

The BPAC produces the Village of Arlington Heights Bikeways Map, an online bicycle planning and bicyclist's user map. The Village should consider separate maps for users (navigation) and bikeway planning, as they serve different purposes. Both maps should be made available to the public online, but the user map should also be available as a paper copy and, potentially, as an app. The map should include bike parking locations and bicycle shops, as well as important destinations. It should also be advertised and disseminated widely, through the Village administration, police, Park District, schools (at school assemblies, etc.), and at farmers markets and other community events.

Other materials that the Village should consider to advance safe bicycling and walking include: walking maps, safety pamphlets, tips for commuters, school walking route maps, Arlington Heights-specific information on public transit (including bikes-on-transit rules and procedures), and flyers or brochures covering relevant state and municipal laws, regulations, and policies. For an example of both an effective means of dissemination and of good content for a safety brochure (safe driving and share the road tips), see the City of Chicago Department of Transportation pamphlet, which was mailed to 1.5 million car owners with their annual registration renewal papers.³⁹

Examples of walking maps and other useful resources, materials, and ideas to promote walking are available at Feet First: Promoting Walkable Communities, at <http://www.feetfirst.org/>. A resource for piloting walking and other signage at low costs is Walk Your City, at <https://walkyourcity.org/>.⁴⁰

³⁹ See <http://1.usa.gov/1BmUBDe>.

⁴⁰ Additional resources are available at the Walkable and Livable Communities Institute, at <http://www.walklive.org>



Source: CDOT

Improve enforcement around school zones and at crosswalks

The best way to reduce speed and increase safety is to design streets that calm traffic, rather than searching for and penalizing dangerous roadway users. Nevertheless, enforcement that targets illegal motorist behaviors that especially endanger pedestrians and bicyclists can also be helpful in creating a safer community. The Village should work with the Police Department and local School Districts to ensure that vehicles obey posted speed limits, stop at crosswalks when required (especially near schools and other priority locations), pass bicyclists in a safe manner, and do not use handheld devices while driving. This will not only help to keep students and residents safe, but will also reinforce a safe environment for walking and biking and help create a culture of road safety.

Provide training to police on bicycle and pedestrian safety issues and enforcement activities

In order to maximize the effectiveness of enforcement efforts, we recommend that police officers receive training on typical motorist behaviors that endanger pedestrians and bicyclists. Other training topics that can improve interactions between pedestrians and bicyclists and motorists and increase overall safety include: the common causes of bicycle and pedestrian crashes, dangerous bicycling behavior, how to handle investigations of bike and pedestrian crashes, and the rules of the road for people walking or biking.

In addition to these training programs, continuing and enlarging the Village's bicycle police patrol program will lead to improved officer understanding of local travel conditions and sources of conflicts between modes, as well as more common and friendlier interaction between residents and officers. It also provides officers a healthy form of exercise.

Pursue grants and alternative funding sources

The Village should continue to seek and pursue opportunities for grants and other funding sources to assist with plan implementation. The following are key examples of potential funding sources that should be monitored and pursued accordingly. For a number of programs (TAP, CMAQ, STP), the Village must complete Phase 1 engineering on its own, or obtain a Categorical Exclusion from IDOT, which allows them to conduct a simplified Phase 1 engineering study, or conduct no study at all. On-street projects that do not substantially alter the existing roadway may be eligible for Categorical Exclusion status.

*Illinois Transportation Enhancement Program (ITEP)*⁴¹

ITEP, administered by IDOT and consisting of the state's Transportation Alternatives Program funds (see below), provides funding for community-based projects that expand travel choices and enhance the transportation experience in communities. ITEP is designed to promote bike and pedestrian travel and streetscape projects and may be best used for the implementation of the bicycle and pedestrian infrastructure recommendations for both on-road and off-street facilities. Local match is required at levels that differ depending on the project type, and other federal transportation funds cannot be used as local match. For more information about ITEP, visit <http://1.usa.gov/1Bnxf0o>.

*Transportation Alternatives Program (TAP)*⁴²

TAP is a federal funding program that focuses on non-motorized transportation projects. TAP funds are administered by CMAP, and may be a good fit for Arlington Heights bicycle infrastructure projects. Among the criteria used to evaluate funding applications is a project's ability to either complete a segment or link to one or more (conceptual) trail alignments shown in CMAP's RGTP.⁴³ Phase 1 engineering is not, under most conditions, eligible for funding. Funded projects require a 20 percent local match, and other federal transportation funds cannot be used as local match. For more information about TAP, visit <http://www.cmap.illinois.gov/mobility/strategic-investment/transportation-alternatives> and <http://www.fhwa.dot.gov/map21/guidance/guidetap.cfm>.

Congestion Mitigation & Air Quality Improvement Program (CMAQ)

CMAQ is a federally funded program for surface transportation improvements designed to address air quality improvement and to mitigate congestion. The Village should consider CMAQ funding for multimodal intersection improvements, bicycle facility projects, multimodal/access-to-transit improvements (perhaps in partnership with Metra and/or Pace), bicycle parking, bike share, and other projects that can effectively replace motor vehicle trips and reduce congestion and/or air pollution. As with TAP, Phase 1 engineering is not normally eligible for funding; funded projects require a 20 percent local match, and other federal transportation funds cannot be used as local match. For more information about CMAP, visit <http://www.cmap.illinois.gov/mobility/strategic-investment/cmaq>.

⁴¹ See <http://1.usa.gov/1Bnxf0o>

⁴² See <http://www.cmap.illinois.gov/mobility/strategic-investment/transportation-alternatives> and <http://www.fhwa.dot.gov/map21/guidance/guidetap.cfm>.

⁴³ The RGTP is currently being updated. The plan update is expected to run through fall 2016. The existing plan shows several (conceptual) facilities passing through the Village of Arlington Heights.

Safe Routes to School

The Safe Routes to School Program (SRTS) is administered by IDOT. Illinois SRTS funds both infrastructure improvements to the physical environment as well as non-infrastructure projects, which will improve conditions for students who walk or bike to school (K-8). Eligible project sponsors include schools and school districts, governmental entities, and non-profit organizations. The program is a reimbursement program. Funded projects require a 20 percent local match. For more information about SRTS, visit <http://go.usa.gov/cvkYH>.

Surface Transportation Program (STP)

STP provides flexible funding that may be used for projects to preserve and improve the conditions and performance on any Federal-aid highway (i.e. all public roads except local roads and rural minor collectors, per IDOT's functional classification system⁴⁵). However, it should be noted that certain project types, including pedestrian and bicycle infrastructure projects, bridge and tunnel projects, and transit capital projects (including intercity bus terminals) are not restricted by location. Local agencies that wish to participate in the Local STP (as opposed to State STP) must do so through their designated sub-regional council, according to the methodology of that council.⁴⁶ For more information about STP, visit <https://www.fhwa.dot.gov/specialfunding/stp/>.

Recreational Trails Program and Illinois Bicycle Path Program⁴⁷

The federal Recreational Trails Program is administered through the Illinois Department of Natural Resources to provide funding assistance for acquisition, development, rehabilitation, and maintenance of both motorized and non-motorized recreation trails. The RTP program can provide up to 80 percent federal funding on approved projects and requires a minimum 20 percent non-federal funding match. It is a reimbursement program and has a maximum grant award of \$200,000. No maximum grant award amount is set for acquisition projects and for motorized projects.

The Illinois Bicycle Path Grant Program was created in 1990 to assist in the acquisition, construction, and rehabilitation of public, non-motorized bicycle paths, and directly related support facilities. The program provides financial assistance up to 50 percent of approved project costs. Maximum grant awards for development projects are limited to \$200,000 per annual request; no maximum exists for acquisition projects. The Illinois Bicycle Path Grant Program is, at present, suspended until further notice due to state budget issues.

⁴⁵ For a map showing functional class, see <http://www.dot.illinois.gov/gettingaroundillinois/gai.htm?mt=fc>.

⁴⁶ Information on STP and sub-regional Councils of Mayors methodologies can be found at <http://www.cmap.illinois.gov/about/involvement/committees/advisory-committees/council-of-mayors/surface-transportation-program>.

⁴⁷ See <http://www.dnr.illinois.gov/AEG/Pages/FederalRecreationalTrailsProgram.aspx> and <http://www.dnr.illinois.gov/AEG/Pages/BikePathProgram.aspx>.

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Chicago Metropolitan
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The Chicago Metropolitan Agency for Planning (CMAP) is our region's comprehensive planning organization. The agency and its partners are developing ON TO 2050, a new comprehensive regional plan to help the seven counties and 284 communities of northeastern Illinois implement strategies that address transportation, housing, economic development, open space, the environment, and other quality-of-life issues. See www.cmap.illinois.gov for more information.



Village of Arlington Heights Bicycle and Pedestrian Plan Appendices

March 2017



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Appendix A

Visioning Charette

Notes

Village of Arlington Heights Bicycle and Pedestrian Master Plan Visioning Charrette



To: Village Staff and member of the BPAC

From: CMAP Staff

Re: Summary of the Visioning Charrette

Date: March 17, 2015

The following is a summary of the results of the public visioning charrette that was held on Thursday, March 12 from 6:00 to 8:00 p.m. at the Public Works Department (222 North Ridge Avenue). Approximately 55 residents, business leaders, government representatives, and elected and appointed officials participated in the public visioning workshop. Attendees learned about the existing conditions in the Village through a brief presentation by CMAP staff which highlighted key issues and opportunities. Next, participants were divided into smaller working groups to work with maps of the Village and its surrounding area to discuss how they would improve walking and biking throughout Arlington Heights. The following is a summary of each of the group's ideas and recommendations.

INDIVIDUAL GROUP SUMMARIES

GROUP 1

The following is a summary of the key ideas and comments that were made by group 1 for each category in the instruction booklet.

Safety

- On some streets in town, drivers tend to speed. These streets could benefit from stop signs or traffic control.
- There is no consistency in cross-walk markings.
- There is a lack of protected (and designated) bike lanes or sidepaths.
- Biking improvements should be made:
 - From Golf to Kirchoff on New Wilke Road
 - From Arlington Heights Road and Rand Road and Palatine Road (“the triangle”)
- Walking improvements should be made:
 - At Arlington Heights Road and Rand Road, where no walk signals exist
 - In the Pioneer Park neighborhood, where stop and yield signs are needed

Destinations

- Important destinations include:
 - Arlington Park,
 - Downtown/train station/library,
 - Lake Arlington,
 - Recreation Park,
 - Busse Woods,
 - Twin Lakes,
 - Midtown Shopping from the north,
 - Buffalo Grove High School, and
 - John Hersey High School.

Barriers

- Major barriers along important bicycling or walking routes include:
 - No cross-walks or curb cuts on northbound Wilke,
 - No pedestrian or bicycle accommodation at the interchange of I-90 and Arlington Heights Road, and
 - District 25 crossing guard locations need improved cross walk markings and ramps.

Missing Links/Gaps

- Southwest corner of Palatine Road and Arlington Heights Road sidewalk doesn’t meet road.
- Dunton between Park and Central sidewalk stops in middle of block.
- Would like to see a future bike lane and side path on Davis Street.

Bicycle Parking

- Locations where new or additional bicycle parking is needed:
 - Downtown
 - Library
 - Arlington Town Center
- Locations where existing parking should be improved:
 - Library rack on Dunton
 - Increase capacity and remove bikes that haven’t been moved in some time

Education, Encouragement and Enforcement programs

The following is a list of the programs or activities that were noted:

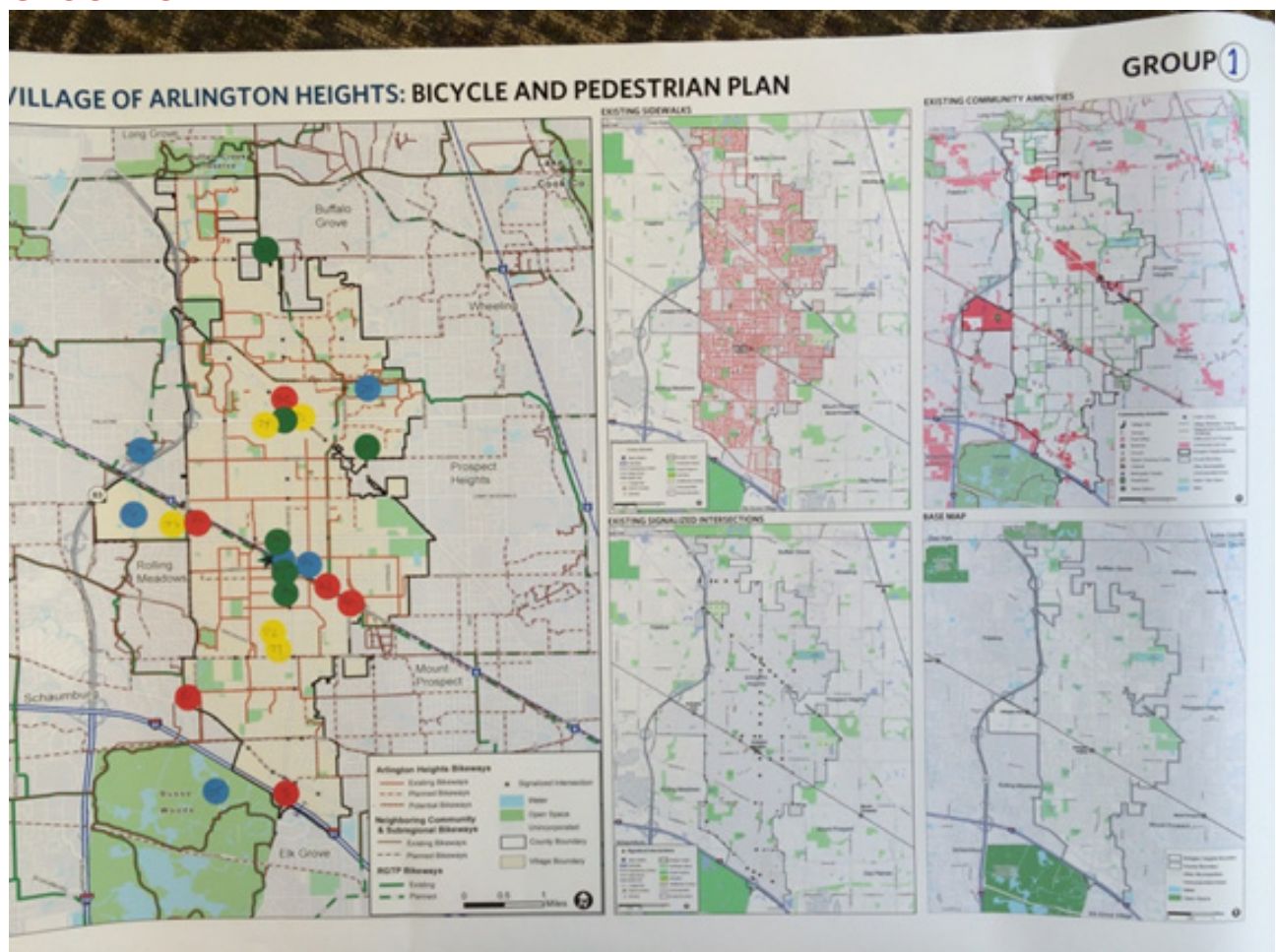
- Traffic skills 101 classes at the Park District
- www.bikewafetyquiz.com
- “Bikes, too” signs below existing stop signs
- Bike maintenance classes
- Pass out basics – lights, water bottles
- Bike Ambassadors

Review of the Draft Vision Statement

Each group was also asked to review the draft vision statement for the Village's Bicycle and Pedestrian Plan. The following is the draft statement with the group's changes marked:

The Village of Arlington Heights is a bicycle- and pedestrian-friendly community that strives in all its policies, plans, and programs and in the construction, reconstruction, maintenance, and operations of all its roadways and related infrastructure, to ensure that residents and visitors of all ages and abilities are able to travel safely and conveniently to all community (in the community and beyond) destinations by walking and bicycling.

GROUP 1's MAP



GROUP 2

The following is a summary of the key ideas and comments that were made by group 2 for each category in the instruction booklet.

Safety

- Pedestrian infrastructure needs improvement.
 - Some neighborhoods have sidewalks that stop and start (gaps).
 - Sidewalks without grass parkway buffers are less safe.
 - Sidewalk shoveling rules should be enforced.
- Bike infrastructure and education could be enhanced.
 - Better signage and markings are needed, such as green-painted lanes.
 - Encourage riders to wear helmets, ride with traffic.
- Specific pedestrian improvements suggested:
 - Walk buttons and pedestrian timers on all major crosswalks,
 - Increased “caution” signage of pedestrian crossings,
 - Improve pedestrian crossings around Metra station, and
 - Wider sidewalks on Wilke.
- General street improvements:
 - Fix potholes on White Oak Rd., Campbell Ave.

Destinations

- Important destinations include:
 - Busse Woods,
 - Frontier,
 - Lake Arlington,
 - Arlington Park,
 - Deer Grove, and
 - Buffalo Creek.

Barriers

- Major barriers along important bicycling or walking routes include:
 - White Oak to Algonquin: snowplows block cul-de-sacs with snow; and
 - Northwest Highway at Arlington Heights Road: not plowed.

Missing Links/Gaps

- Neighborhoods that need sidewalks: Arlington Farms, Hana, Thomas & Maud, Scarsdale, Stonegate, Sherwood
- No sidewalk on Wilke north of White Oak
- No way to get to and from the Des Plaines River Trail
- Poor connections to Busse Woods

Bicycle Parking

- Locations where new or additional bicycle parking is needed:
 - Train station and downtown
 - North side of downtown
 - Pools
 - Town & Country Mall
 - Mitsua Plaza Shopping Center
 - North Point
 - Harmony Park
 - High Schools
 - Arlington Park
- Locations where existing parking should be improved:
 - Library
 - Train stations (both Arlington Heights and Arlington Park)
 - Create a plan for businesses to obtain bike racks

Education, Encouragement and Enforcement programs

The following is a list of the programs or activities that were noted:

- Add more right-of-way signs

- Encourage helmet use (Middle schools)
- Need more Safety Town classes at park district
- Include biking education in high school driver's ed
- Encourage bike lights, helmet and reflector use
- Have a bike safety booth at Frontier Days
 - o Free reflectors, vendor with cool helmets
- Keep walkers and runners on the sidewalk
- Monthly bike safety reminders
- Bike safety program at library
- Safety tips on Facebook, Twitter, and public access TV

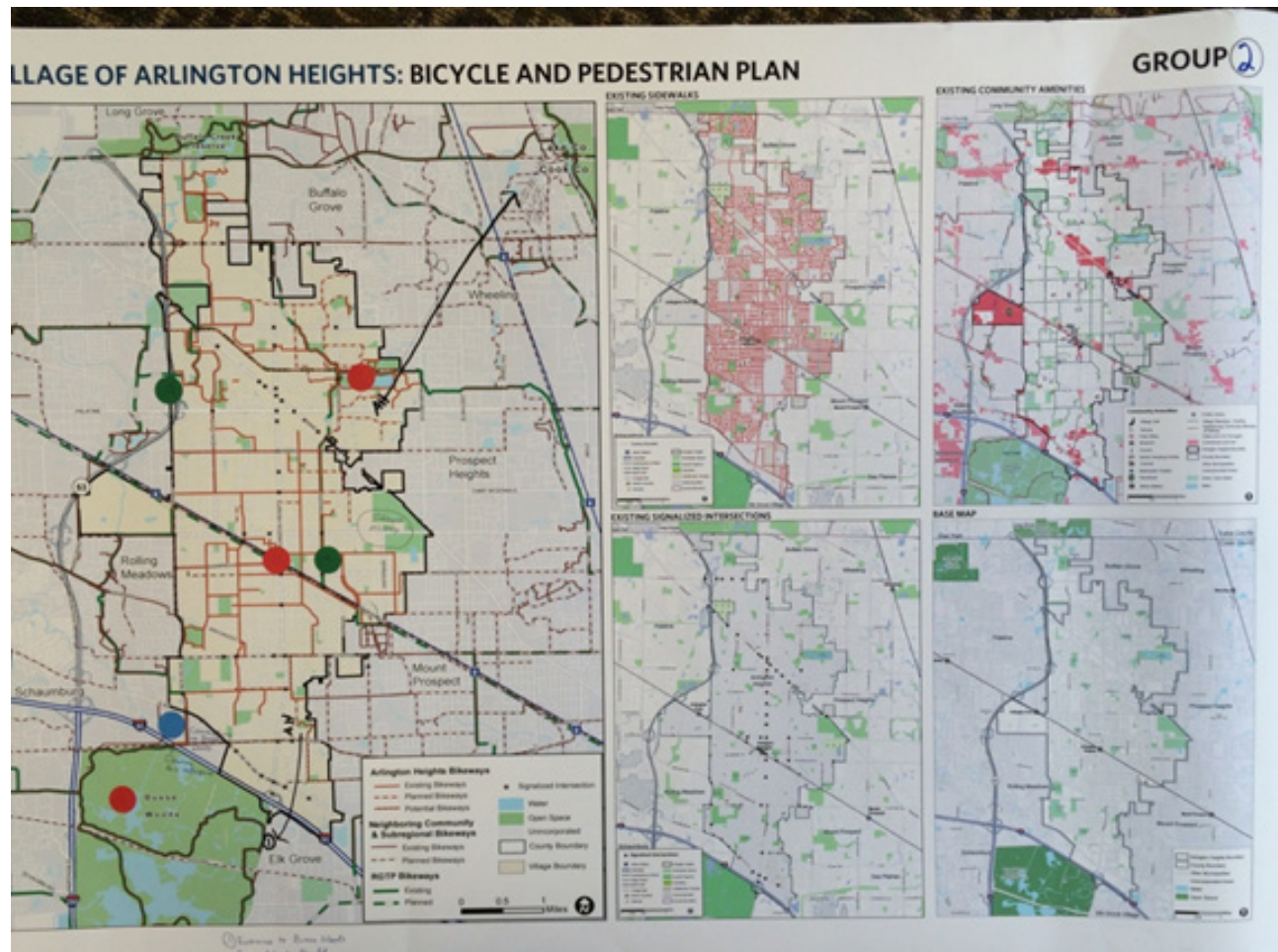
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The Village of Arlington Heights is a bicycle- and pedestrian-friendly community that strives in all its policies, plans, and programs and in the construction, reconstruction, maintenance, and operations of all its roadways and related infrastructure, to ensure that residents and visitors of all ages and abilities are able to travel safely and conveniently to all community destinations by walking and bicycling.

Comment: "Really long. Make bullet points?"

GROUP 2's MAP



GROUP 3

The following is a summary of the key ideas and comments that were made by group 3 for each category in the instruction booklet.

Safety

- Unsafe locations:
 - Rand & Thomas – light is quick, no pedestrian button
 - Windsor & Beverly – no pedestrian button
 - Thomas & Belmont – no stop sign
 - Arlington Heights Rd. & Dryden – no stop sign
 - Bike path on Euclid: ends with no sidewalk/shoulder to continue biking on
 - Windsor & Palatine Rd.: unsafe crossing
 - Kensington & NW Hwy: unsafe crossing
 - Kensington/Rand & 83: unsafe crossing
- Existing rules that need enforcement:
 - Three-feet-to-pass for drivers passing bicyclists
 - Shoveling
 - Speed limits (for pedestrian safety)
 - Enforce rules against parking on sidewalks/in driveways
- Suggested biking improvements:
 - Better bike route signage—need signs leading to destinations
 - Signs should show distance, direction, and destinations
 - Need better signage to Palatine Trail from Frontage Rd.
- Suggested pedestrian improvements:
 - More intersections with pedestrian countdowns

Destinations

- Important destinations include:
 - Deer Grove Preserve – needs better signage

- North Point Shopping Center
- Downtown, Metra
- Trader Joe's
- Lake Arlington
- Recreation Park
- Randhurst

- Difficult-to-reach destinations:
 - Busse Woods (#1 issue)
 - Not enough east-west bicycle routes (a lane on Euclid would be useful)

Barriers

- Major barriers along important bicycling or walking routes include:
 - Rand Road – huge barrier
 - Gobert & Golf – dangerous intersection – needs pedestrian buttons
- Suggested improvements:
 - Pedestrian bridge at Palatine & Windsor, Windsor & Rand
 - Bridges/underpasses/signs to Lake Arlington from south side of town

Missing Links/Gaps

- Rand Road – no sidewalks north of Euclid; not continuous
- Palatine Road west of Kennicott – no sidewalk

- Windsor from Forest View to Lake Arlington
- Bikeway along Northwest Highway would be great

Bicycle Parking

- Bicycle parking, regardless of location, needs to be lit
- Locations where new or additional bicycle parking is needed:
 - Every street parking space next to handicap spaces could hold 10 bikes per space if adequately marked

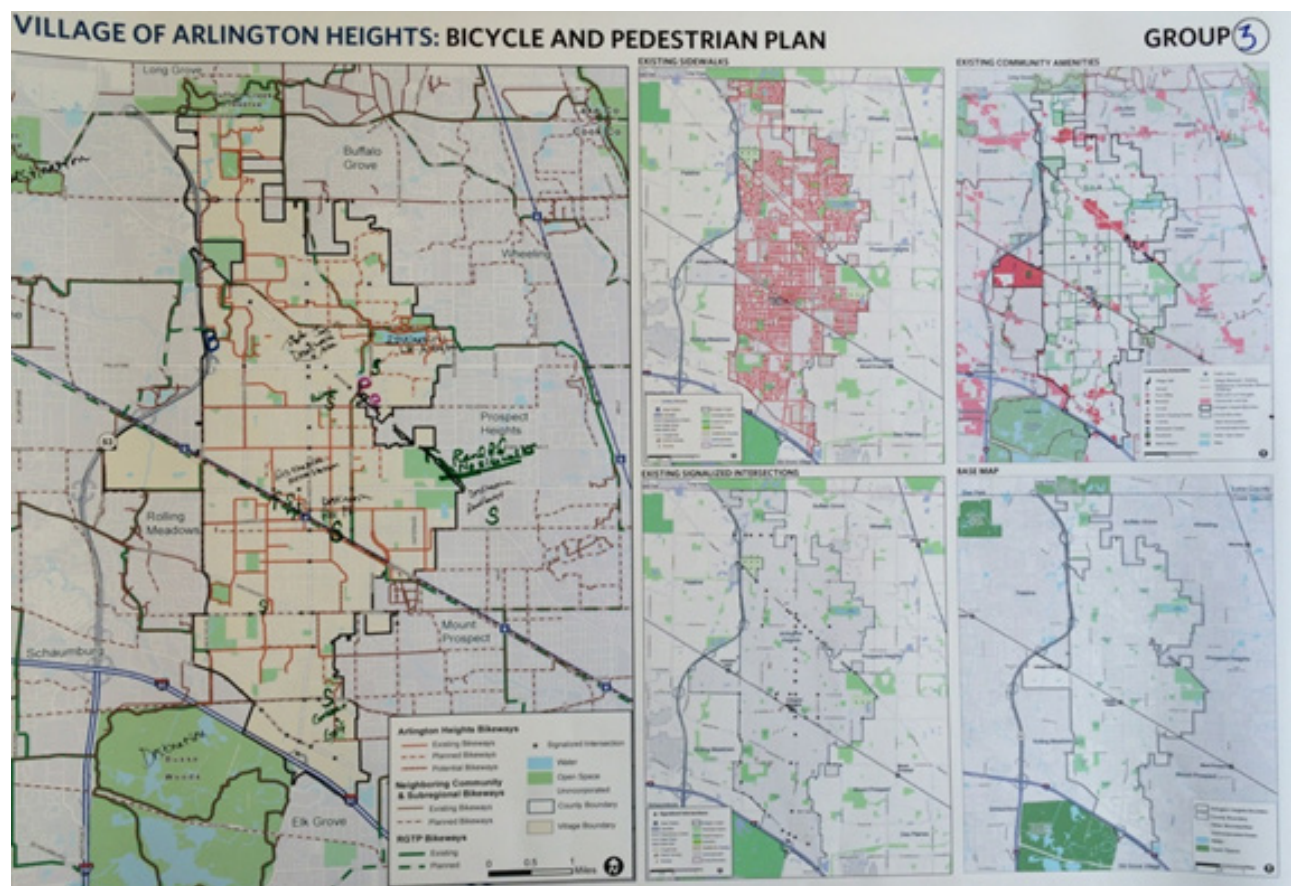
- o Shopping areas – Trader Joe’s, Valley Produce
- Locations where existing parking should be improved:
 - o Fast food restaurants
 - o Downtown – no year-round bike parking exists
 - o Parking garages – should add covered bike racks

Education, Encouragement and Enforcement programs

The following is a list of the programs or activities that were noted:

- Public access TV programming about existing laws, safety
- School programs on SRTS, bike safety
- Education about cars in driveways blocking sidewalks
- Positive tickets: have police give “tickets” for good biking behavior

GROUP 3'S MAP



Review of the Draft Vision Statement

Each group was also asked to review the draft vision statement for the Village’s Bicycle and Pedestrian Plan. The following is the draft statement with the group’s changes marked:

The Village of Arlington Heights is a bicycle- and pedestrian-friendly community that strives in all its policies, plans, and programs and in the construction, reconstruction, maintenance, and operations of all its roadways and related infrastructure, to ensure that residents and visitors of all ages and abilities are able to travel safely and conveniently to all community destinations by walking and bicycling.

Comment: “Pedestrians should come first, cars come last. Good vision, needs to become a reality.”

GROUP 4

The following is a summary of the key ideas and comments that were made by group 4 for each category in the instruction booklet.

Safety

- Concerns:
 - Lack of walk buttons at stoplights
 - No marked biked lanes or continuous paths
 - Riding in traffic/drivers sharing the road
 - “Orange lines” (bike routes) only known to bikers, not drivers – need painted lane markings, at minimum
- Specific locations where biking improvements are needed:
 - Ridge at Northwest Highway
 - Arlington Heights Road at Interstate 90
 - Schaffer at Lake Cook
 - Thomas & Rand (Hersey High School)
- Locations where pedestrian improvements are needed:
 - Thomas & Rand
 - Palatine Road and Arlington Heights Road

Destinations

- Important destinations include:
 - Both Metra stations
 - Library
 - Des Plaines River Trail
 - Buffalo Creek Preserve
 - Busse Woods
 - Lake Arlington

- All these destinations have significant barriers to bicycle/pedestrian access

Barriers

- Major barriers along important bicycling or walking routes include:
 - Traffic (Northwest Highway and all major roads)
 - Missing or broken sidewalks
 - Lack of continuous sidewalks
 - Snow-covered sidewalks
- Suggested improvements:
 - Over/underpass at Northwest Highway and Metra station

Missing Links/Gaps

- Wilke south to Busse Woods
- Northwest Highway from Wilke to IL-53
- Arlington Heights Road

Bicycle Parking

- Locations where new or additional bicycle parking is needed:
 - Both Metra stations
 - Library
 - Downtown Arlington Heights
 - Portable bike racks for events (Frontier Days)
 - Parks
- Locations where existing parking should be improved:
 - All of the above
 - Not enough racks
 - Existing racks are not secure

Education, Encouragement and Enforcement programs

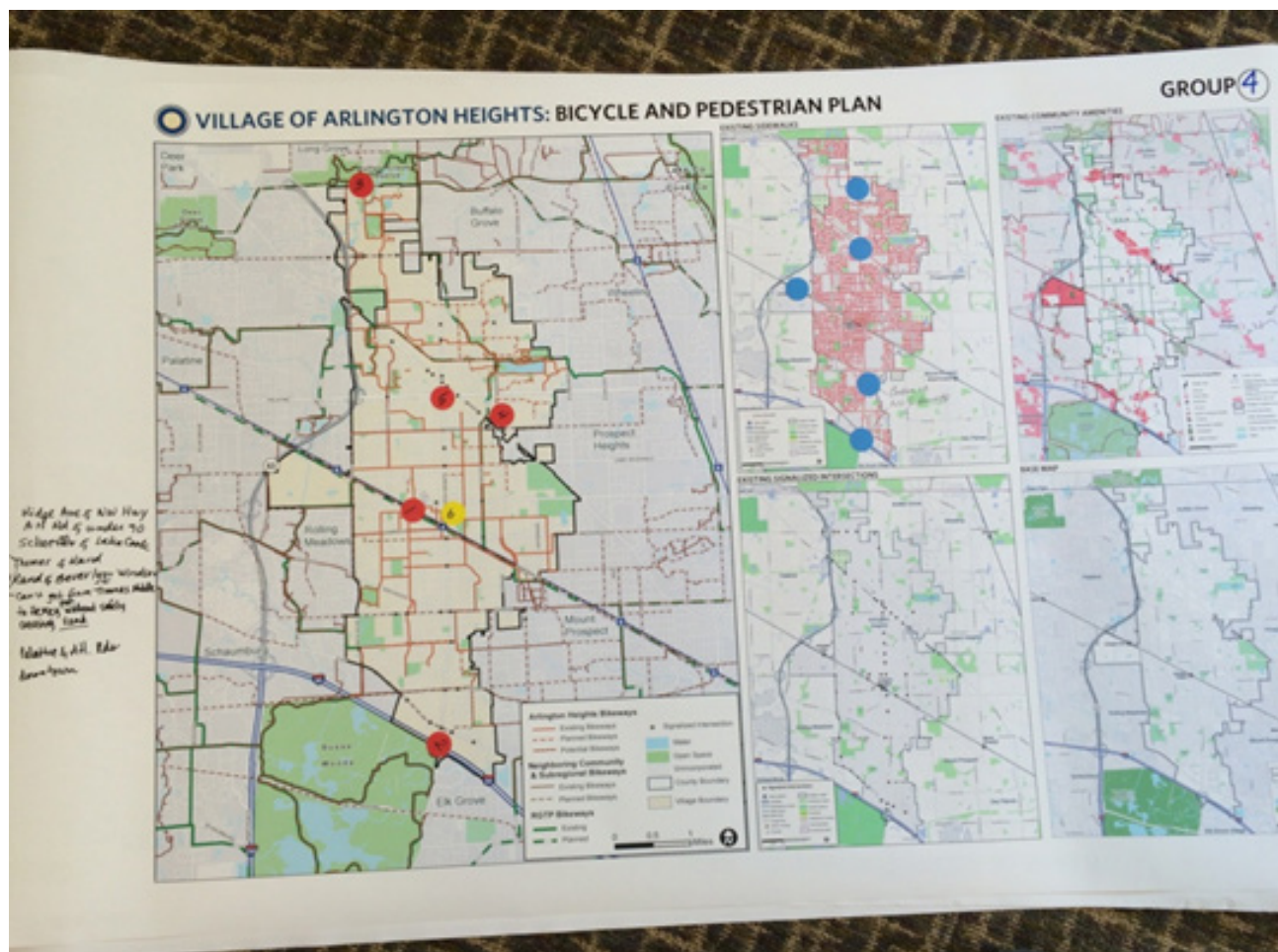
The following is a list of the programs or activities that were noted:

- “Share the Road” signs
- Driver education on bicycling
- “Foot Power” program – encourage to bike/walk instead of driving
- Biking benefits

Review of the Draft Vision Statement

Each group was also asked to review the draft vision statement for the Village’s Bicycle and Pedestrian Plan. This group had no comments or changes.

GROUP 4's MAP



GROUP 5

The following is a summary of the key ideas and comments that were made by group 5 for each category in the instruction booklet.

Safety

- Separate use zones (lanes)
- Enforcement of existing pedestrian/bicycle lanes
- Specific locations:
 - No connection to Busse Woods
 - Arlington Heights Road
 - Prospect, Harper College—for walking commuters
 - Need connections to destinations, including Lake Arlington

Destinations

- Important destinations include:
 - Schools & Harper College
 - Lake Arlington & park district facilities
 - Busse Woods
 - Train station
- Destinations with barriers:
 - Palatine to Deer Grove
 - Getting to Palatine is difficult in general
 - Des Plaines River Trail

Barriers

- Major barriers along important bicycling or walking routes include:
 - Train tracks
 - Interstate 90
 - Palatine Road
 - Cars parked on sidewalks
 - Uneven pavement
 - Lack of crosswalk buttons

- Suggested improvements:
 - Improve crosswalk signals
 - Improve sidewalks
 - “Stop for Pedestrians” signs
 - Speed bumps/traffic calming
 - Enforcement—plowing & clean sidewalks
 - Pavement markers & directions

Missing Links/Gaps

- Scarsdale, Stonegate, and almost all neighborhoods
- Euclid to Rolling Meadows
- Kirchoff Road
- Connections to Busse Woods and Lake Arlington

Bicycle Parking

- Locations where new or additional bicycle parking is needed:
 - Downtown (no place to lock up)
 - Create map of bike parking locations!
- Locations where existing parking should be improved:
 - Improve lighting and security (cameras?)
 - Add more parking

Education, Encouragement and Enforcement programs

The following is a list of the programs or activities that were noted:

- Training/safety programs for high school student
- Public awareness workshops
- Enforcement of runners in the street
- Critical Mass
- Provide online bike maps, including interactive maps that allow users to report potholes/maintenance problems

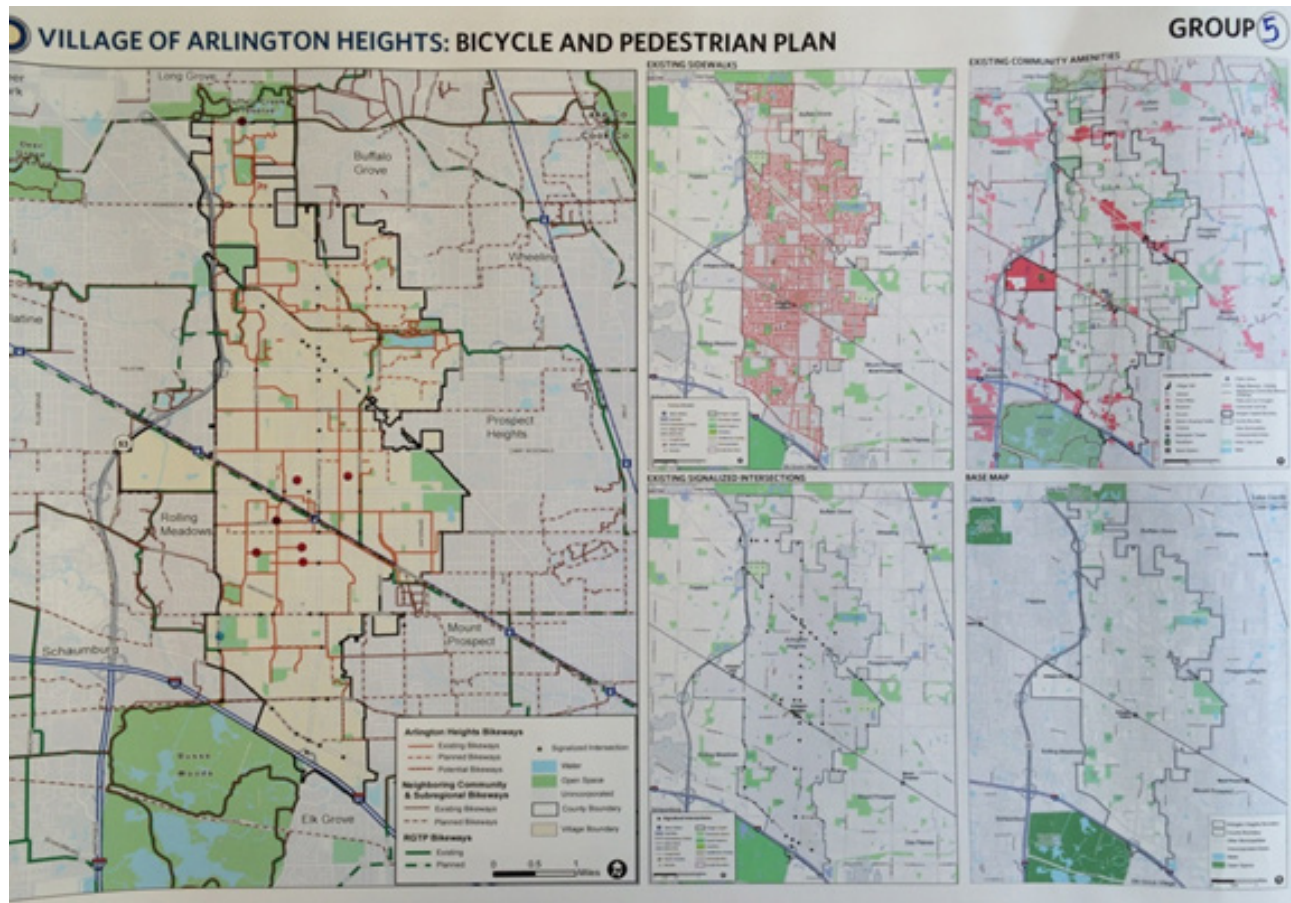
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Comment: Please note linkages to other communities.

GROUP 5's MAP



GROUP 6

The following is a summary of the key ideas and comments that were made by group 6 for each category in the instruction booklet.

Safety

- Motorist interaction on major roads – drivers must give three feet when passing cyclists
- Crossways at railroad tracks
- Specific locations that need bicycling improvements:
 - Arlington Heights Road, Palatine Road, and Rand Road
 - East on Euclid/Rand near cemetery
 - Northwest Highway: no safe crossing
 - Algonquin Road, Golf Road, and Wilke
 - Schaffer at Lake Cook (signal)
 - Douglas at Euclid
 - Rand Road – no shoveling of sidewalk
- Locations that need pedestrian improvements
 - Mariano's

Destinations

- Important destinations include:
 - Mariano's
 - Buffalo Creek Preserve
 - Busse Woods
 - Downtown/train station
 - Deer Park Grove
 - Schools
 - Parks/pools
 - Walmart/Best Buy/Target
 - Rand/Hurst groceries
 - Hersey
- Hard-to-reach destinations:
 - Arlington Park train station
 - Getting to Arlington Park racetrack (Euclid)
 - Northpoint/Southpoint

- Underpass near Arlington Park tracks no longer accessible

Barriers

- Major barriers along important bicycling or walking routes include:
 - Wing & Campbell on Ridge – no sidewalks on east side
 - Palatine Road
 - Highways
 - Train tracks
 - Route 53
 - Residential areas near downtown – no sidewalks
 - Dangerous curve on Wilke between Thomas and Palatine
 - Davis & Arthur
- Suggested improvements:
 - Crossings designed to accommodate bicyclists/ pedestrians, especially at key intersections and major streets
 - Stop signs and pedestrian countdown lights
 - Bike path to Busse Woods would also help with senior center use

Missing Links/Gaps

- Euclid near the cemetery
- Kirchoff (residential area)
- N Vail
- Connect Prospect Trail (ComEd right-of-way) to Palatine Trail
- Bike lane on Northwest Highway – all the way to Chicago
- Better-marked trails in general
- Underpass at Gregory & Northwest Highway

Bicycle Parking

- Locations where new or additional bicycle parking is needed:
 - More and improved bike parking at every covered municipal lot

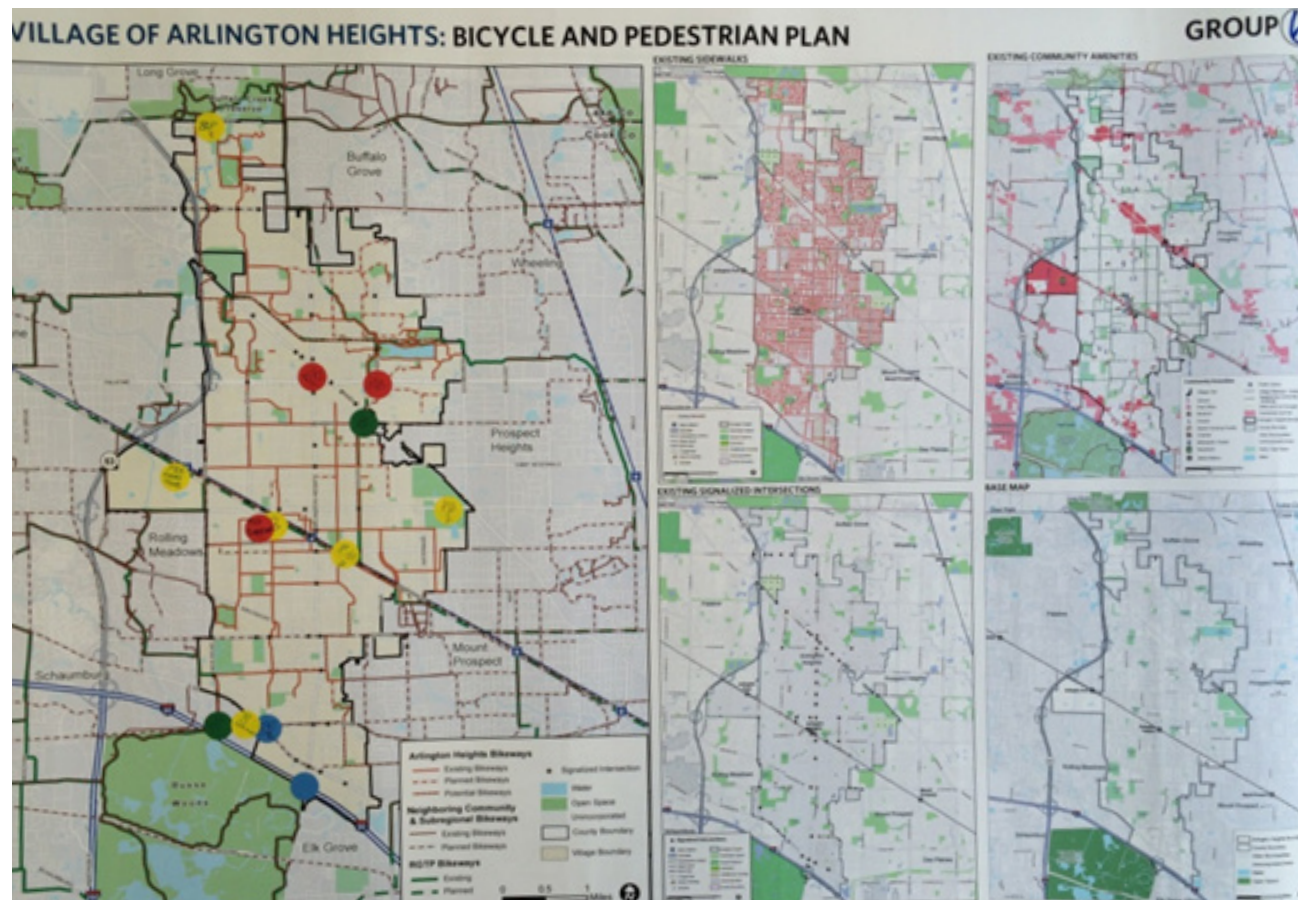
- o Train station – Arlington Park
- o Shopping areas
- Locations where existing parking should be improved:
 - o All of the above

Education, Encouragement and Enforcement programs

The following is a list of the programs or activities that were noted:

- “Share the Road” signs – bicyclists can take full lane
- Biking education in driver’s ed classes
- Signage: Pedestrians and bicyclists have the right of way
- Public access TV programs
- Mirror what is being done in the City of Chicago
- Bicyclists: stop sign = yield sign

GROUP 6's MAP



Review of the Draft Vision Statement

Each group was also asked to review the draft vision statement for the Village’s Bicycle and Pedestrian Plan. The following is the draft statement with the group’s changes marked:

The Village of Arlington Heights is (is working to be) a bicycle- and pedestrian-friendly community that strives in all its policies, plans, and programs and in the construction, reconstruction, maintenance, and operations of all its roadways and related infrastructure, to ensure that residents and visitors of all ages and abilities are able to travel safely and conveniently to all community destinations by walking and bicycling.

Comment: Vision claims that we are already bicycling friendly. Wording should be “Strives to be, is working to be, aspires to be,” not “is.”

BIG IDEA SUMMARY

After working in smaller groups to create their unique vision for how to improve walking and biking in Arlington Heights each group presented their key ideas and recommendations to the larger group. Then the larger group was asked to vote (using key pad polling) for their top three ideas (in order of importance) from each of the smaller groups. The following table summarizes the results of the voting:

Responses		
Big Idea	Percent	Weighted Count
Linkages to open space (Parks, Forest Preserves, Des Plaines River Trail)	23.93%	168
Signage and bike striping (visible)	23.50%	165
Overpass/underpass (Northwest Highway/Triangle of Death, I-90)	15.38%	108
Education and enforcement (online, workshops)	11.97%	84
Linkages to destinations (home, work)	11.11%	78
Intersection improvements (countdown signals)	9.40%	66
Bike parking phone app (portable bicycle racks)	2.56%	18
Safety (sale of lights)	2.14%	15
Totals	100%	702

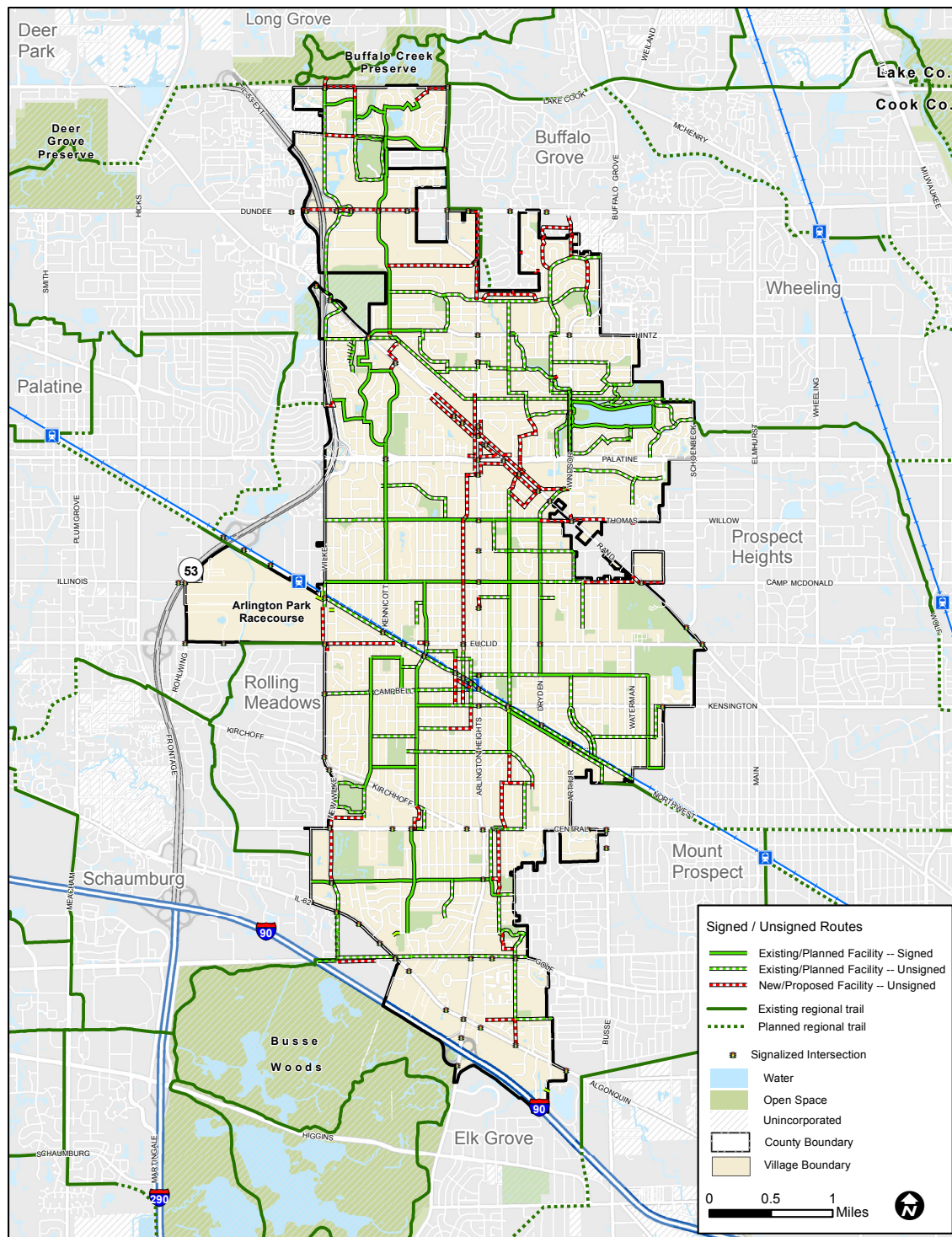
The majority of workshop attendees, or approximately 24%, that voted on their top three big ideas indicated that their most preferred idea was linkages to open space including neighborhood parks, Forest Preserves, and the Des Plaines River Trail. The next popular big idea, which came in very close to the first idea with 23 percent of the votes, was the need for increased signage and visible bicycle striping throughout the Village. Approximately 15 percent of the participants voted for the need of overpasses and underpasses along Northwest Highway, Palatine Road, Rand Road, and Arlington Heights Road commonly referred to as the “Triangle of Death,” and Interstate 90, as the third top big idea.

Appendix B

Map of signed, unsigned, and new (unsigned) routes

It should be noted “existing” here signifies that these routes appear on the 2014 Village of Arlington Heights Bikeways Map. Some of the “existing” routes, therefore, are shown as planned or potential routes on that map.

Figure B1



Chicago Metropolitan Agency for Planning, 2016.

APPENDIX C

Lake-Cook Road at Buffalo Creek Forest Preserve, Alternative design strategies

The plan recommends creating a safe, convenient connection between the popular Kennicott framework bicycle route and the Buffalo Creek Preserve, its trail, and points beyond. This connection could be made by relocating the existing signal from Wilke to Schaefer. However, if engineering studies determine that this is not feasible, other potential solutions exist.

One option would be to install a pedestrian hybrid beacon (PHB) and associated safety treatments at Schaefer Road. The PHB stops traffic on Lake Cook Road when activated. Figure C1 illustrates, in a conceptual manner, this solution.

Figure C1

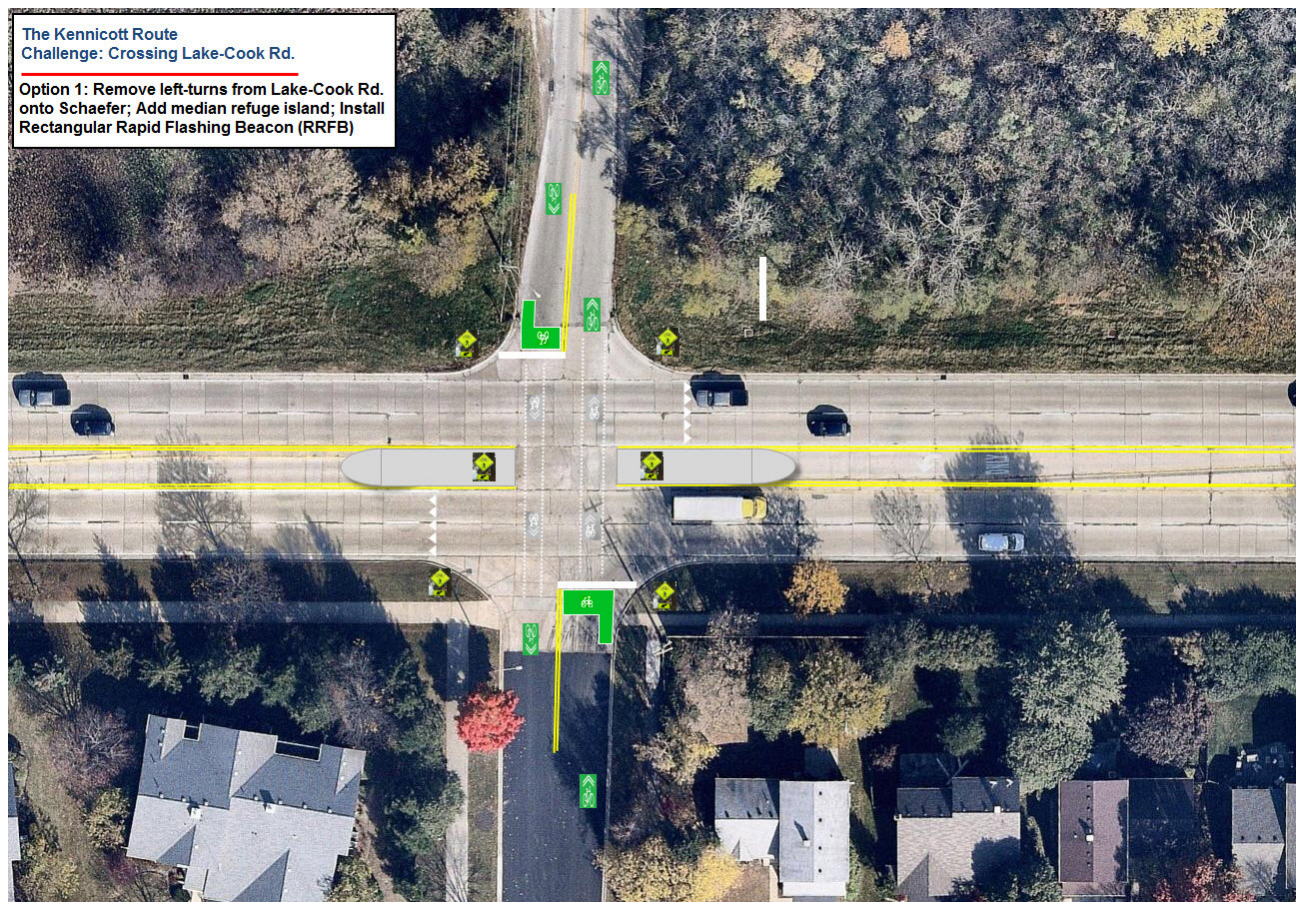


Figure C2 shows a PHB as installed in Phoenix, AZ. Note the marked crosswalk, regulatory and warning signage, and raised center median.

Figure C2



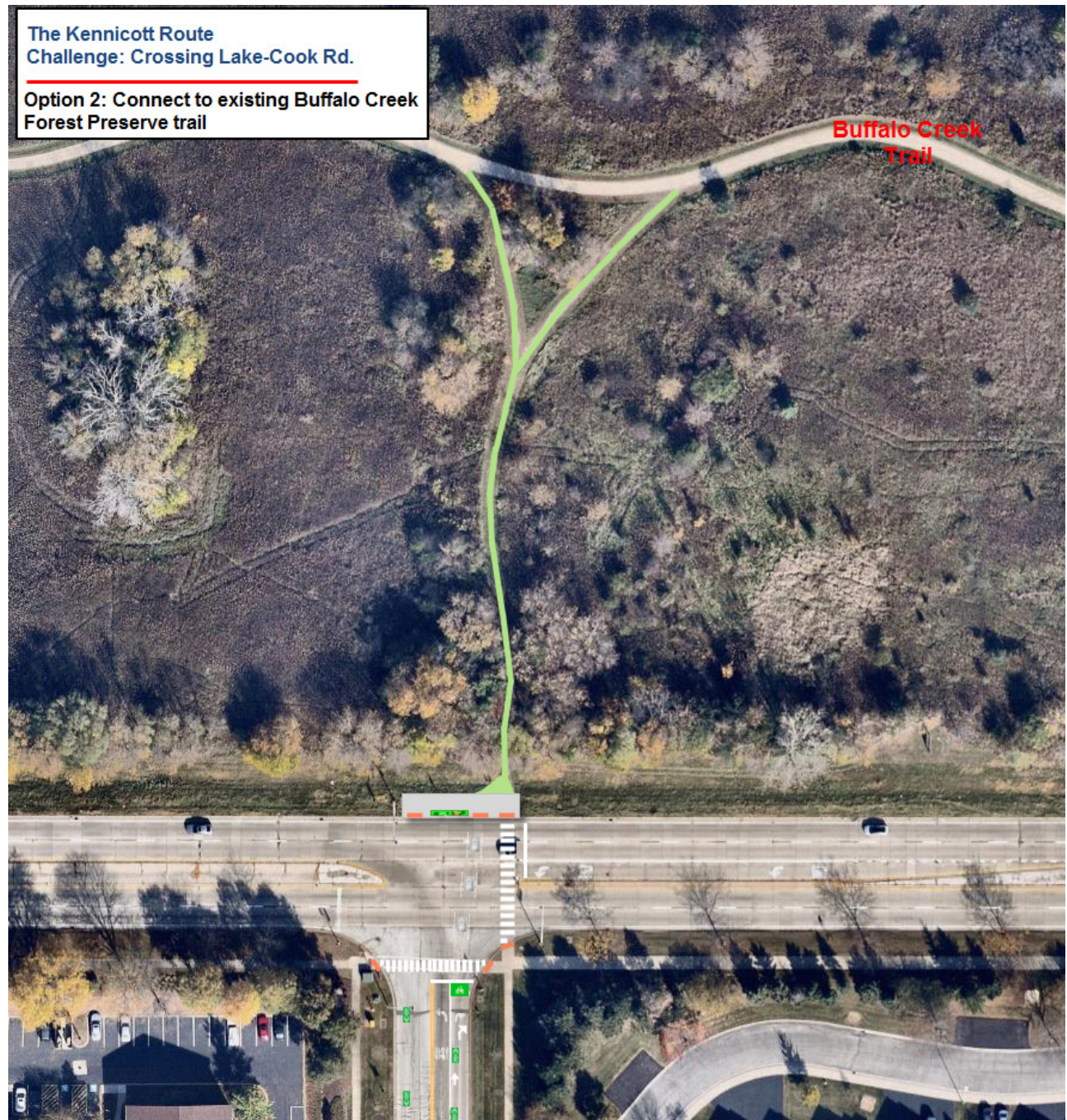
Photo credit: Mike Cynecki (www.pedbikemages.org)

Another option would be to create a multi-use path connection from the existing signalized intersection. This connection could be achieved in one of two ways. The first would be to construct a spur trail from a proposed landing area on the north side of the T-intersection to connect to the existing Buffalo Creek Trail (roughly where the “use trail” is currently visible in aerial photographs). This option is illustrated below in **Figure C3**. In order, however, to function safely and comfortably for all types of cyclists, the spur trail and (at least part of) the Buffalo Creek Trail may need to be reconstructed as a paved trail. Currently, its surface is made of crushed limestone screenings.

A second option for a connection from this intersection (Wilke and Lake-Cook) would be to construct a sidepath on the north side of Lake-Cook Road, running from the proposed landing, east to Schaefer Road, where the bicycle route would continue north on-street (within the Village of Buffalo Grove). This option is shown below in **Figure C4**, with (proposed) buffered bike lanes on Wilke Road (recommended between Nichols and Lake-Cook Roads.)

Both options would entail the installation of an ADA accessible and bicycle-friendly landing or queuing area on the north side of Lake-Cook Road, as well as other safety treatments and enhancements to indicate the presence of cyclists, as well as proper positioning for cyclists when crossing. Narrowing lanes at the intersection may allow for a center refuge island, which would further increase the safety and comfort of the crossing for pedestrians and bicyclists.

Figure C3 - Spur-trail access from Wilke Road to Buffalo Creek Trail



An aerial photograph of a road intersection. A proposed sidepath is highlighted in green, running vertically through the center of the image. The sidepath starts at the top, crosses a horizontal road, and continues down. A callout box with a green arrow points to the sidepath, containing the text "Sidepath to Schaefer Rd.". The horizontal road has a crosswalk with white stripes. The vertical road has a dashed yellow line. The surrounding area includes trees, grass, and a parking lot on the left.

APPENDIX D

Trails and Shared Use Paths at Signalized Intersections

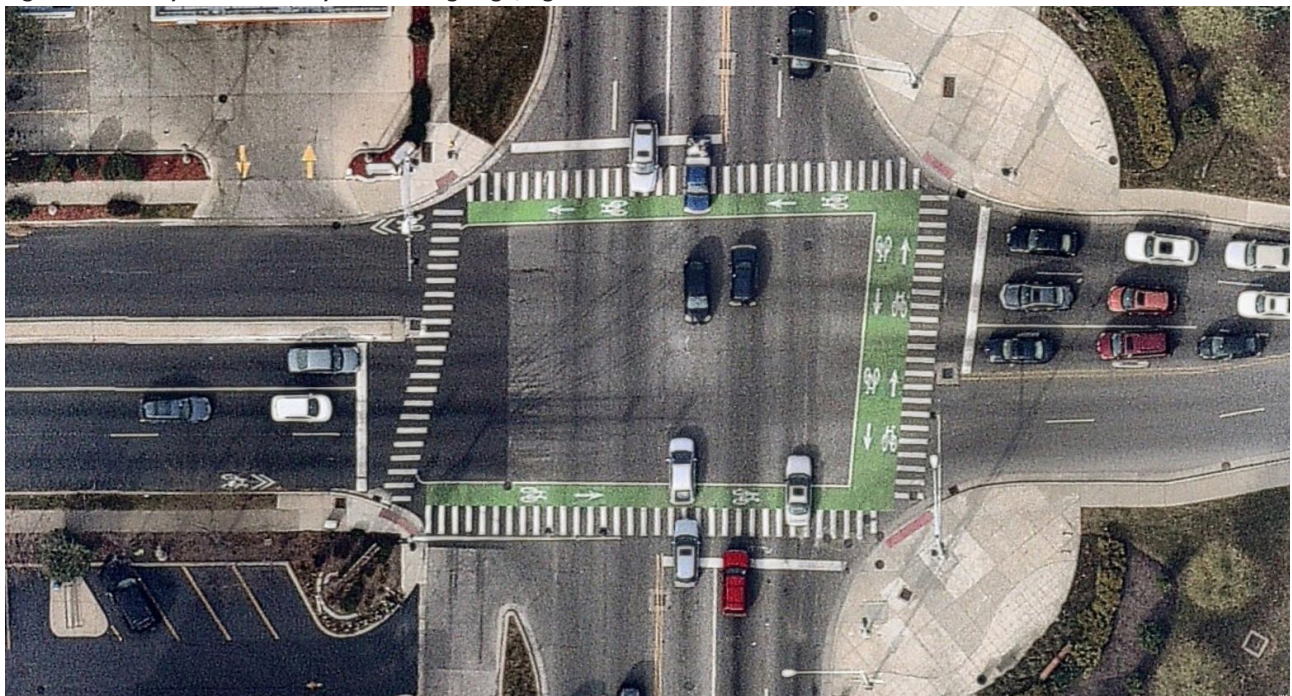
For locations where designated multiuse paths or trails utilize signalized intersections to cross roadways, specific treatments can be used to enhance the visibility and safety of the crossing. Design guidance and treatments for these locations can be found in American Association of State Highway and Transportation Officials' (AASHTO) Guide to the Development of Bicycle Facilities, Fourth Edition (2012), Chapter 5, Section 5.3; in the FHWA publication, Designing Sidewalks and Trails for Access and Guide for the Planning (2001); in AASHTO's Design, and Operation of Pedestrian Facilities (2004, currently being updated); and in the U.S. Access Board's proposed Accessibility Guidelines for Shared Use Paths and proposed Public Rights-of-Way Accessibility Guidelines.

One example of a best practice from Skokie, IL is shown below in **Figure D1**. Note the separation of the pedestrian crosswalks and the bicycle crossings, the application of green color and on-street markings. Signage and bicycle friendly curb ramps and actuation (if installed) are also important treatments. Additional examples of best practices from our region (and beyond) for locations where multiuse paths and/or sidewalks cross large, high-volume, high-speed roads at signalized intersections, are given, in Appendix E.

Best practice for signal operations intended to improve bicyclist and pedestrian safety at locations where multiuse paths (or sidepaths) cross roads at signalized intersections include:

- Fully protected left and right turns from the parallel street across the multiuse path;
- Prohibition of right turns on red from the crossing roadway; and
- Leading pedestrian interval or exclusive pedestrian/ bicyclist phase.

Figure D1 - Example of multiuse path crossing large, signalized intersection



Skokie, IL

APPENDIX E

Large, arterial intersections designed to accommodate bicyclists and pedestrians

Below are examples (aerial photographs) of locations where multiuse paths, sidewalks, and dedicated bicycle facilities cross large, multi-lane, high-volume, high-speed roads at signalized intersections. The best design practices shown here can be applied to many locations in the Village, where existing and planned bicycle and pedestrian ways (of various types) cross such roads (e.g. Lake-Cook, Palatine, Rand, Dundee, Golf, Algonquin, etc.). The images provide examples of various intersection treatments intended to improve bicycle and pedestrian safety, visibility, and convenience at major arterials, which are described in more detail throughout this plan and in Appendix I. For more information on methods to improve large, high-volume intersections, see the article “Improving High-volume Intersections for Pedestrians” at <http://www.humantransport.org/universalaccess/library/wide/wide.htm>.

Figure E1



Source: www.nearmap.com

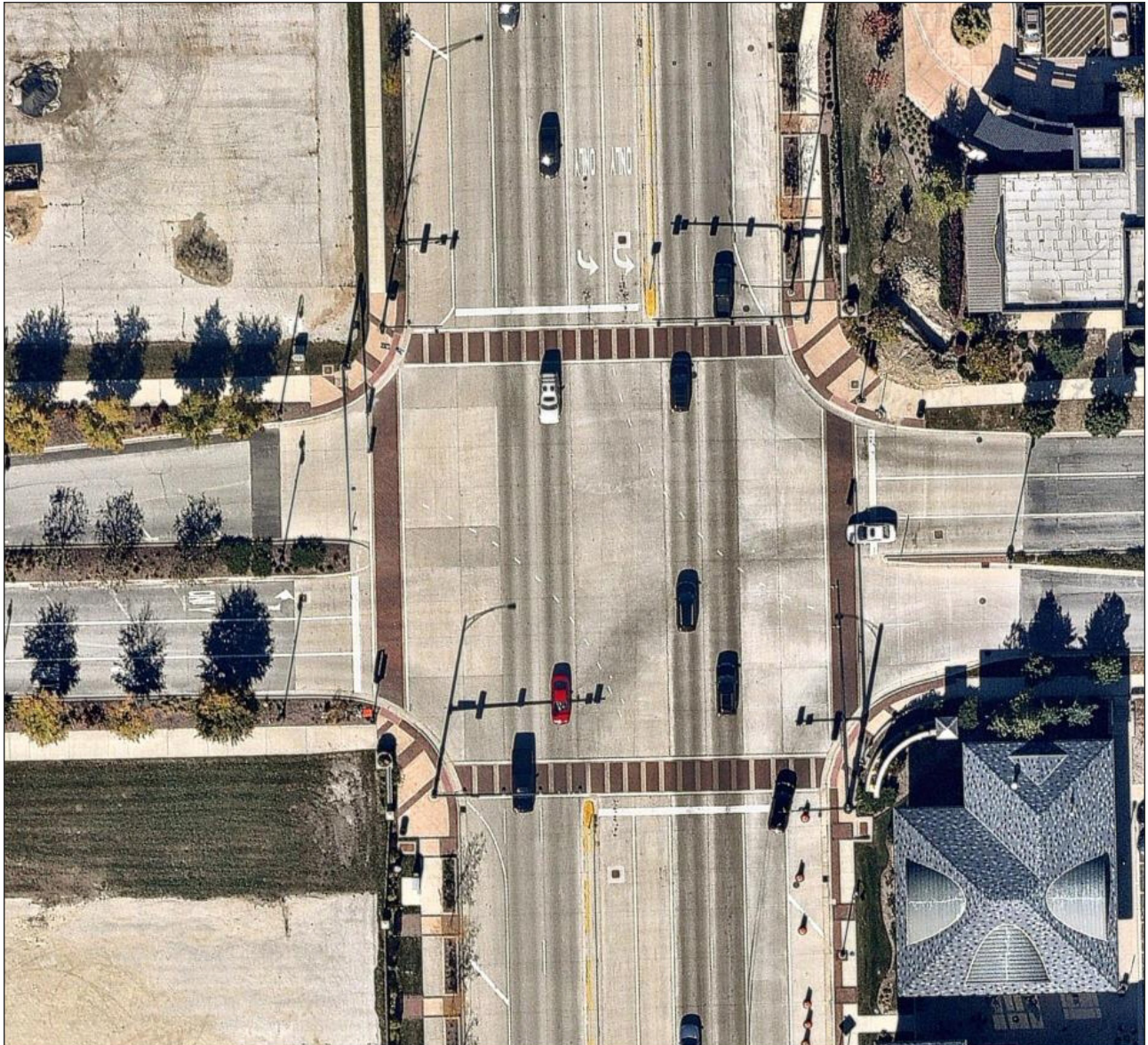
Warrenville, IL

Figure E2



Source: www.nearmap.com
Geneva, IL

Figure E3



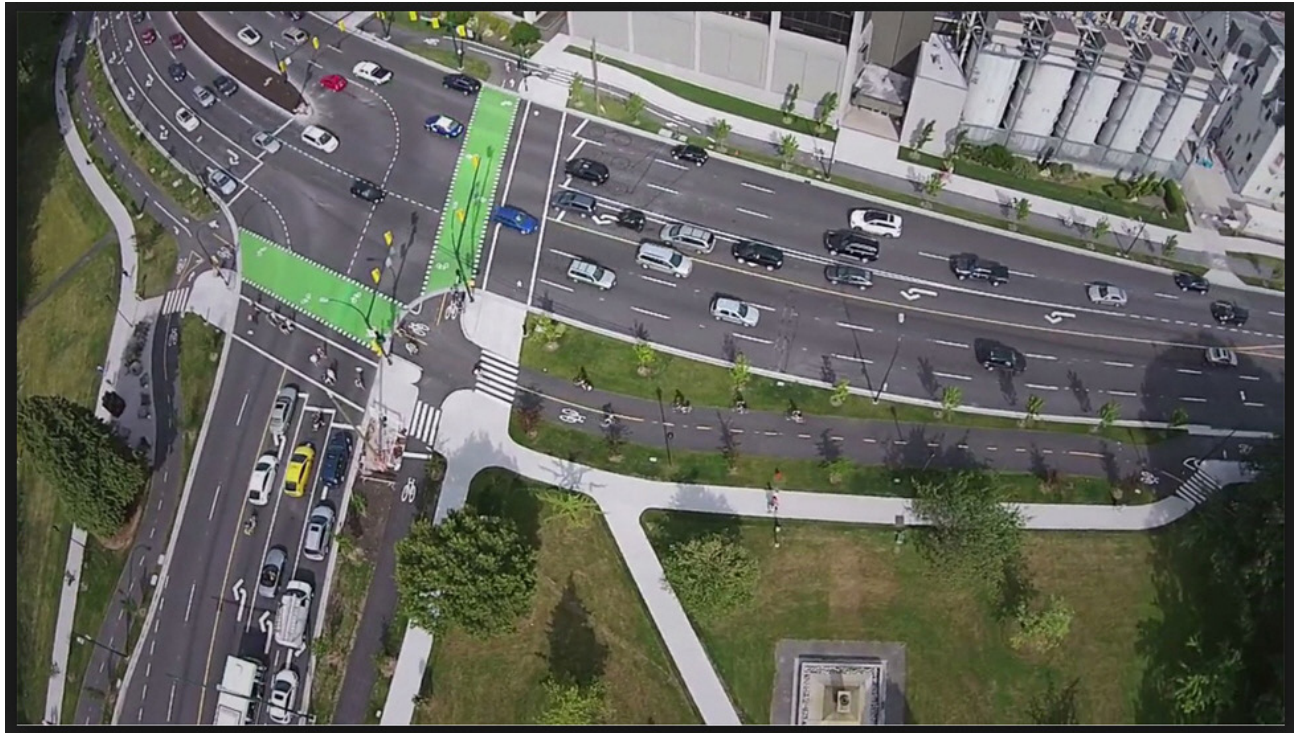
Source: www.nearmap.com
Orland Park, IL

Figure E4



Source: www.nearmap.com
Warrenville, IL

Figure E5



Source: www.nearmap.com
Vancouver, BC (Canada)

Figure E6



Source: www.pedbikeimages.org (Dan Burden)
Boulder, CO

Figure E7



Source: www.nearmap.com

Milwaukee, WI

Figure E8



Source: www.nearmap.com

Wauwatosa, WI

Figure E9



Source: www.nearmap.com
Franklin, WI

Figure E10



Source: Google Streetview
Plainfield, IL

Figure E11- Figure 4.11. View of crosswalks from mounted camera height at the intersection of South Blvd. and Sharon Rd. W. in Charlotte, NC.

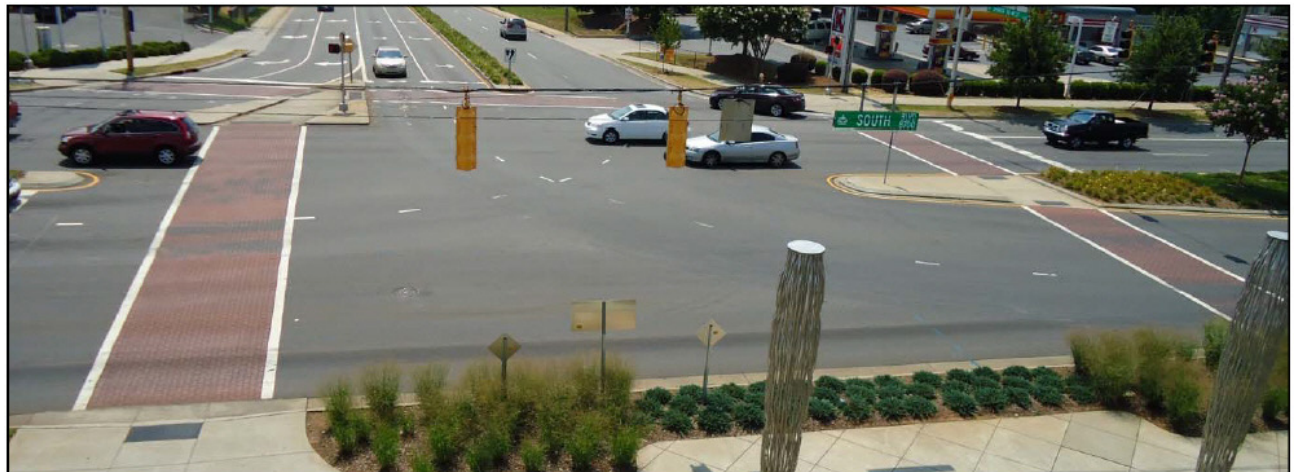


Figure 4.11. View of crosswalks from mounted camera height at the intersection of South Blvd. and Sharon Rd. W. in Charlotte, NC.

Source: "Pedestrian and Bicycle Accommodations on Superstreets" (J.E. Hummer et al., 2014)
Charlotte, NC

APPENDIX F

Busse Woods Trail, Alternative routes

- » Bikeways through parking lots (access to Busse Woods and to the Arlington Park Metra station)
- » Road diets (access to Busse Woods)

Alternative 1 (Figure F1) involves a new, signed, on-street bike route on Kasper and Kennicott south of White Oak, to Algonquin Road. From there, the existing sidewalk along the north side of Algonquin Road would be widened and improved to bikeway standards (10 foot wide sidepath) to the signalized intersection at Algonquin Road and an entrance to the Meadows Shopping Center. This intersection would need to be substantially improved to provide, at a minimum, 1) an accessible queuing area large enough to accommodate cyclists on the north side of Algonquin Road, 2) signal actuation technology for pedestrians and cyclists, and 3) marked crossings for pedestrians and bicyclists.

From this intersection, the route would utilize the (private) roads within the shopping center parking lot to reach Golf Road, approximately 500 feet east of Wilke. Here, once again, the existing sidewalk along the north side of Golf would need to be widened and improved to bikeway standards (10 foot wide sidepath) to the intersection of Golf and Wilke. As discussed above and illustrated in **Figure 35**, crossings at the Golf-Wilke Road intersection should be improved to increase visibility, safety and wayfinding for cyclists (and pedestrians). One option to help achieve this would be to narrow travel lanes at the intersection in order to allow for a widened raised center median that would fully function as a pedestrian/bicyclist refuge island.

This alternative (as well as Alternative 5, discussed below) involves the unusual, though not unprecedented, step of utilizing (and retrofitting) large, big-box parking lot roads as a bikeway. Such a step would entail working with the property owner to install wayfinding and safety elements and treatments. The Manual on Uniform Traffic Control Devices (MUTCD) standards and guidance apply to all roads “open to public travel,” which includes private roads within shopping centers, parking lots, sports arenas, and other similar business and recreation facilities. They do not, however, apply to driving “aisles” within parking lots, which are the vehicular ways limited to providing access to individual parking stalls.¹

The bikeway segment through the shopping mall parking lot(s) would consist primarily of route signage and on-street pavement markings – which were recommended in the Northwest Municipal Conference’s Northwest Highway Bicycle Facility Plan (2012) for the extension of the Commuter Drive sidepath through Metra’s Arlington Park station, to Wilke Road (shown in **Figures F2**, below). Another example of this approach

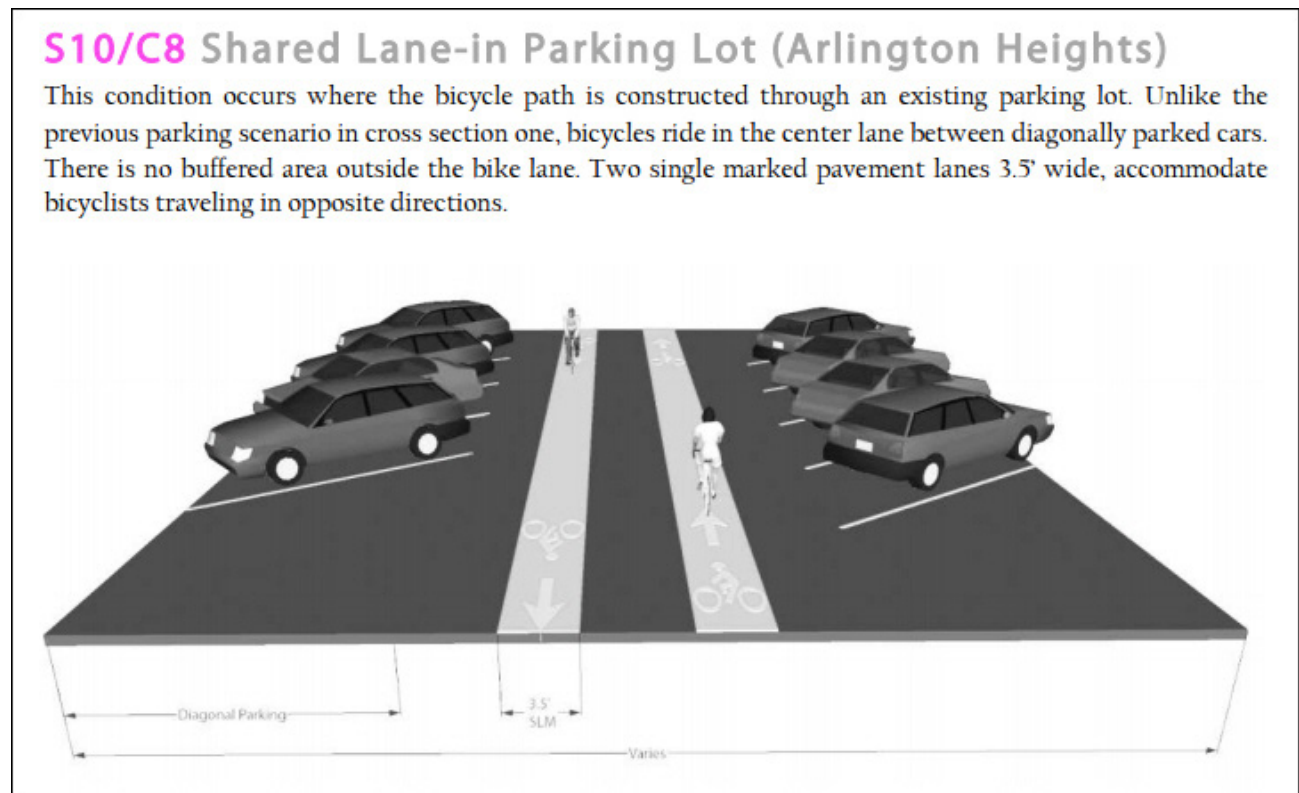
¹ For more information, see the first paragraph of the Introduction to the 2009 MUTCD (<http://mutcd.fhwa.dot.gov/htm/2009r1r2/intro/intro.htm>), the definitions 159 and 161 in Chapter 1A (<http://mutcd.fhwa.dot.gov/htm/2009r1r2/part1/part1a.htm>), and the FAQs at http://mutcd.fhwa.dot.gov/knowledge/faqs/faq_general.htm#pra and at http://mutcd.fhwa.dot.gov/knowledge/faqs/faq_general.htm#genq4.

is the Shining Sea Bike Path in Woods Hole, MA, described and photographed in an article by, John S. Allen, at <http://bikexpert.com/massfacil/capecod/woodshole.htm>. In essence, such a facility would function in a manner akin to a Dutch woonerf or a “shared street.”

Figure F1 - Alternative 1



Figure F2 to F8 - Examples of Bikeway Treatments through Parking Lots



Northwest Municipal Conference *Northwest Highway Bicycle Facility Plan*, p. 16 (available at <http://www.nwmc-cog.org/Transportation/Documents/NWHighwayBikePlan.aspx>.)

Figure F3



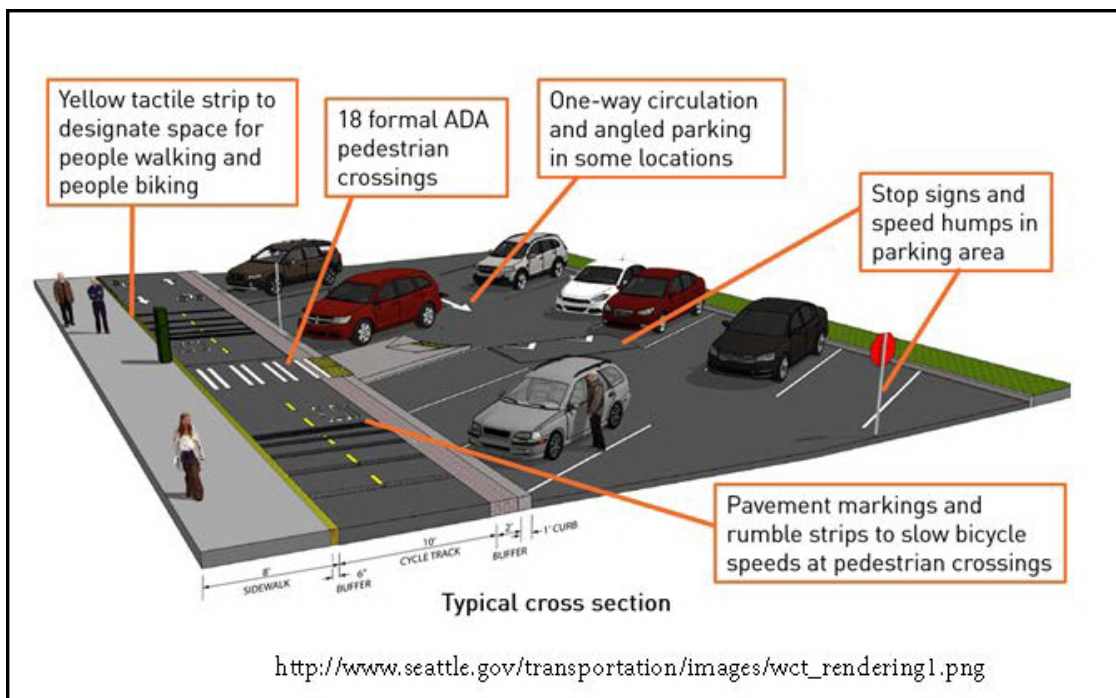
Sanibel Island, FL (courtesy of Jerry Foster)

If engineering studies demonstrate feasibility and agreements with private property owners can be reached, the creation of a separated bike path (or cycle track) through the parking lot may provide significantly improved visibility, clarity, and associated safety benefits. Examples of such facilities can be found in several cities across the United States:

Figure F4



Figure F5



Both images courtesy of Seattle DOT

Figure F6



Los Angeles Zoo (courtesy of Bill King)

Figure F7



Santa Monica Beach State Park (courtesy of Ryan Johnson)

Figure F8



New Westminster Shopping Center, Vancouver, BC (courtesy of Mike Anderson)

Routing a bikeway through the parking lots of big-box shopping centers and districts can be the only feasible means, in built-out suburban communities, of providing a bikeway connection between large arterial roads surrounding big-box shopping districts, and the residential or mixed-use neighborhoods located beyond those arterials. The necessity of such routing is bolstered by the fact that traffic signals along the arterials are placed at the main entrances/exits to the shopping centers, rather than at connecting neighborhood streets (collector and local roads). This placement is due to the fact that the shopping mall entrances/exits have the greater volumes of (turning) vehicles. As a result, the only locations at which bicyclists can safely cross the large arterials are at these signalized entrances/exits. Proximate signalized intersections are, typically, too far away for and do not safely accommodate bicyclists. Public and stakeholder input, as well as guided bike tours of the Village, indicated that many experienced Arlington Heights cyclists already are familiar with and use the ‘unofficial routes’ through parking lots that we recommend as the only feasible way to traverse the sprawling big-box districts and to reach desired destinations on the other side(s). Similar land use and development patterns produce this situation in communities throughout our region. We recommend that the Village explore the option of formalizing these routes to increase safety and provide access.

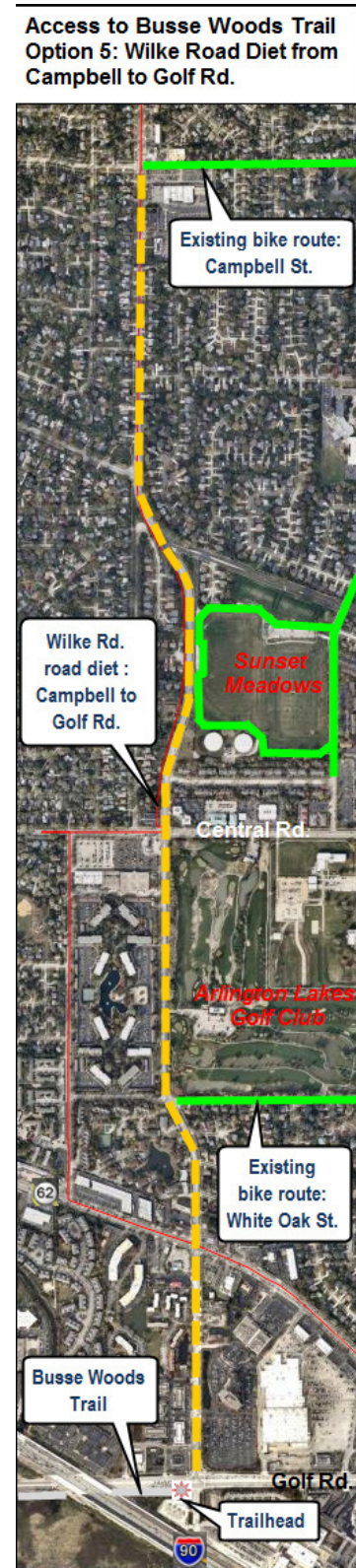
Alternative 2 (Figure F9) is similar to the preferred option (**Figure 35**). This routing involves the widening of the existing sidewalk along the east side of Wilke Road, between White Oak Street, which is an east-west framework bike route, and Golf Road. Currently, the last 1,100 feet of the sidewalk (which is in the Village of Rolling Meadows) has been retrofitted to eight feet in width, by means of simply adding three additional feet of concrete alongside the original five foot wide sidewalk. This same rudimentary type of sidewalk widening exists for another segment along Wilke from Algonquin Road, north for approximately 200 feet. The technique has also been used at other locations within the Village. While such retrofitted facilities provide the minimum width required for a sidepath, they do not offer the recommended width for comfortable passing by cyclists. In addition, the surface quality of these minimal-width sidepaths can be compromised by the different age of the two parts of the path and by the fact that the seam between the three-foot wide segment and the five-foot wide segment may not always be, or remain over time, flush and even. For this alternative, crossings at Algonquin Road and at the Golf-Wilke Road intersection should be improved to increase safety, signal actuation, and wayfinding for cyclists (and pedestrians). Development and implementation of this and all other options will require coordination and collaboration with the Village of Rolling Meadows, as well as with IDOT.

Figure F9 - Alternative 2



Alternative 3 (Figure F10) extends the proposed sidepath along the east side of Wilke Road further north to Orchard Place, just south of Sunset Meadows Park. Here it connects to the existing bike facility on Dwyer Avenue. This extension would involve the construction of a new facility (sidepath) between Central Road and White Oak Street, adjacent to the Arlington Lakes Golf Club property, which is owned and operated by the Arlington Heights Park District. The placement of a sidepath here would benefit from the fact that only one driveway (the entrance to the club) would need to be crossed. The existing sidewalk between Central Road and Orchard Place should be upgraded to a sidepath to accommodate two-way bicycle and pedestrian traffic. Crossings at Central Road, White Oak, Algonquin Road, and at the Golf-Wilke intersection should be improved to ensure the safety of cyclists and pedestrians, and to include bike route and wayfinding signage.

Figure 10 and 11 - Alternatives 3 and 4



Alternative 4 (Figure F11) consists of a roadway reconfiguration, or road diet, on Wilke Road from Campbell Street (an east-west framework bike route), south to Golf Road. The road diet entails reducing the number of travel lanes from four to five lanes to three to four lanes. This reduction in the number travel lanes would allow for the installation of buffered or separated bike lanes. While further engineering study and analysis of traffic flows – including turning movements, traffic diversion, etc. – would need to be undertaken to determine the feasibility of a road diet here, the latest ADT information (2014) indicates that the road volume is within the acceptable limits for road diets.

Additional information on road diets can be found in FHWA's *Road Diet Informational Guide*, at http://safety.fhwa.dot.gov/road_diets/info_guide/ and other FHWA resources at http://safety.fhwa.dot.gov/road_diets/, as well as Section 4.9.2 of AASHTO's *Guide to the Development of Bicycle Facilities: Fourth Edition*, ITE's Professional Development Program supplement, *Road Diet Handbook: Setting Trends for Livable Streets*, at <http://www.seattle.gov/transportation/docs/nickerson/Road%20Diet%20Rosales%20Overview%20.pdf>, and AARP's *Road Diet Factsheet*, at <http://www.aarp.org/content/dam/aarp/livable-communities/documents-2014/Livability%20Fact%20Sheets/Road-Diets-Fact-Sheet.pdf>.

In addition to providing space for on-street bicycle lanes, the potential benefits of road diets include increased safety through reduced vehicle speeds and speed differentials, a reduction in delays through separating left-turn movements and reduced weaving, and improved access and mobility for non-drivers (Complete Streets). Currently, the posted speed limit on Wilke, in this stretch, is 35-40 mph. Should a road diet be implemented, we recommend that the Village lower the speed limit to 30 mph.

Figure F12 - Road Diets



Source: National Complete Streets Coalition (via Flickr)



Source: National Complete Streets Coalition (via Flickr)



Source: National Complete Streets Coalition (via Flickr)



Source: National Complete Streets Coalition (via Flickr)

Figure F13 - Road Diet with Protected Bike Lane



Source: National Complete Streets Coalition (via Flickr)

Alternative 5 proposes a routing similar to **Alternative 1**, utilizing a new on-street bike route along local roads from the existing Fernandez Avenue bikeway to the currently unsignalized intersection of Kennicott and Algonquin. The southwest leg of this intersection forms a left-in, right-out entrance to the Meadows Shopping Center. The route, therefore, would necessitate signalization and reconstruction of this intersection to allow through movements (for bicyclists) from Kennicott to the Meadows Shopping Center drive. The route then utilizes a private road through the shopping center parking lot to Golf Road. Here, at the signalized intersection, crossings to the existing sidepath along the south side of Golf Road should be improved to increase safety and visibility of bicyclists and pedestrians, including installation of bicycle detection technology and pedestrian actuation

travel lanes would allow for a widened center median to function as a pedestrian refuge island. From this point, cyclists would continue west along the Golf Road sidepath to the Busse Woods trailhead. In considering this option, it should be noted that the recently completed sidepath along the south side of Golf Road between Meijer Drive and New Wilke Road, which this route would utilize, is a substandard six and one-half to seven feet in width, as well as being directly adjacent to a high-speed, high-volume travel lane.

Figure F14 - Alternative 5



Access to Arlington Park Metra Station

Bicycle access to Arlington Park Metra station is another important, high-priority project that utilizes routing of an on-street bikeway through a parking lot to access major transit and link to existing multi-use paths and existing, newly installed bike parking. The Arlington Park station is served on the east and south by the multiuse path along Wilke Road, and from the west by the new path along Commuter Drive, which connects to Rolling Meadows trail network (on Rohlwing Road). The nature and location of this proposed project requires the use of treatments and techniques for routing a bikeway through a parking lot (which are described and illustrated in relation to **Alternative 1**). Implementation would require detailed study and analysis by engineering professionals in close coordination with representatives from Metra and Arlington Park International Racecourse.

Figure F15 - Potential bike routes at Arlington Park Metra station

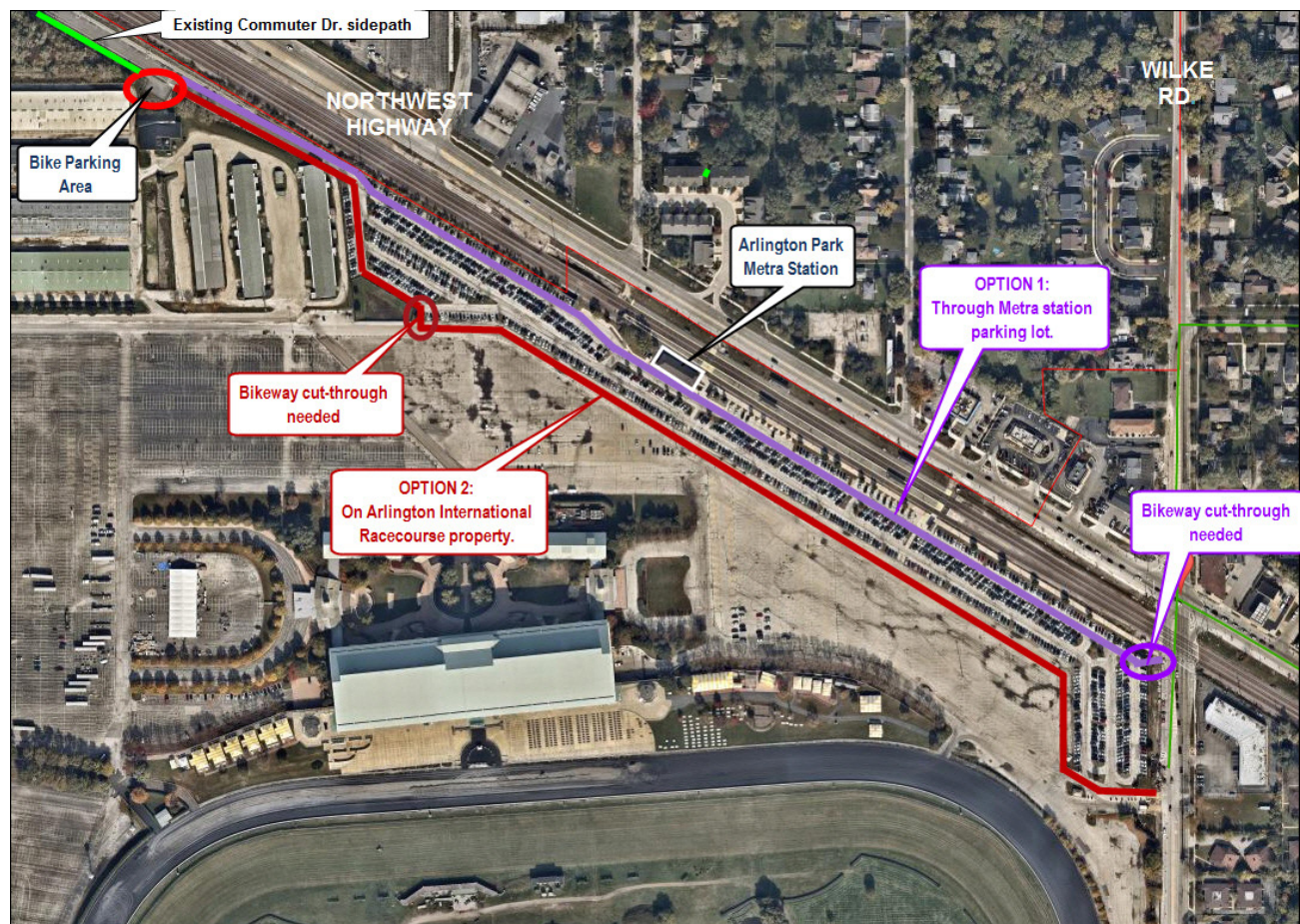


Figure F16 illustrates concepts for providing bicycle access to the Metra station. The project would also help activate and achieve synergy with two bicycle projects that the Village recently completed near the station, as well as an IDOT project currently underway to improve the intersection of Northwest Highway and Wilke Road.

The Village recently constructed a multi-use path along Commuter Drive from Rohlwing Road (where it connects to Rolling Meadows' bikeway network). This path currently ends at a newly constructed bicycle parking area, approximately a quarter mile west of the station depot. Connecting this designated bicycle parking area to the station depot and to Wilke Road – the “entrance” to the station for most Arlington Heights residents, and the point at which Arlington Heights' bikeway network can be accessed – requires routing through the parking lot. Two potential routes have been developed (see **Figure F16**). One utilizes the main drive aisle through the Arlington Park Metra station parking lot. The other would make use of the private drive in the parking lot on Arlington International Racecourse property and would thus require permission and coordination with the Racecourse. Both options would require improvements to, or creation of, at least one cut-through to provide a continuous route – the former, at the entrance to the station along Wilke Road (near the UP rail line); the latter, near the Racecourse stables, passing from Racecourse to Metra property.

An alternative to routing bicyclists through the parking lot would be to designate – and perhaps widen further – the existing 11.5 feet wide path along the tracks, leading from Wilke to the station depot, as a bikeway. Such designation would entail the installation of signage, and perhaps pavement markings, to indicate the path as a bikeway (while still serving pedestrians). Study of pedestrian volumes and usage on the path would need to be undertaken to determine any potential safety issues.

In conjunction with providing bicycle access to the station, the Village should explore options for adding additional high-quality, covered parking near the depot, similar to that found at the downtown Arlington Heights station. A location close to the depot should be favored. The grassy area west of the depot may provide the space needed. If this area does not provide sufficient space or, for some other reason, cannot be utilized, then the Village, in consultation with Metra, should consider removing three to four automobile spaces to provide space for high-quality, protected bicycle parking.

Figure F16 - Downtown Arlington Heights Metra station bicycle parking



APPENDIX G

Additional sidepath recommendations:

1. Along the north side of **Golf Road** within Village boundaries. This facility is called for in the Northwest Municipal Conference *2010 Bicycle Plan*. It is one of sixteen conceptual regional bikeway corridors identified in the plan.

2. Along the east side of **New Wilke Road**, from Orchard Place, south to Village limits. This facility represents one option for reaching the Busse Woods Trail. Coordination with the Village of Rolling Meadows would be necessary since the last 0.36 miles is within their Village limits.

3. Along the north side of **Kirchhof Road** (between Ridge and Walnut Avenues) and along the north side of **Central Road** (between Walnut and Fernandez Avenues). These sidepaths, which are upgrades of existing sidewalk and a reconstruction of a substandard sidepath, are short segments of the key north-south “Kennicott” framework bike route. The crossing of Kirchoff (at Walnut) should include treatments to enhance safety, such as a Rectangular Rapid Flash Beacon or pedestrian hybrid beacon, raised medians, enhanced lighting, warning signage, in-street pedestrian crossing signs, longitudinally striped crosswalks, etc.

4. Along **Northwest Highway** within Village boundaries. This facility is called for in the Northwest Municipal Conference (NWMC) Bicycle Plan. It is one of sixteen conceptual regional bikeway corridors identified in the plan. The entire corridor, from Barrington to Park Ridge, was studied in detail in NWMC’s *Northwest Highway Bicycle Facility Feasibility Study*.

5. Along the east side of **New Wilke Road**, between Fremont and Euclid. This facility connects local, residential neighborhoods and streets to the signalized intersection, at which the Wilke Road sidepath, running north to the Arlington Park Metra station, begins.

6. Along the north side of **Euclid Avenue**, between Walnut and Ridge. This facility provides a direct route for cyclists heading north along the “Kennicott” framework bike route (from points south of Euclid) to Olympic Park and Swim Center.

7. Along the south(west) side of **Rand Road**, between Waterman and East Oakton. This new sidepath would fill a gap in the sidewalk network and would connect the east-west framework bikeway on Oakton to the signalized crossing of Rand Road. Bicyclist/pedestrian actuation or detection technology, along with improvements to enhance crossing safety, would be needed at the intersection

8. Along **Thomas Street**, between Dryden and John Hersey High School. The sidepath could be on either then north or the south side east of Rand, but should be on the north side west of Rand.

9. Along the east side of **Windsor Drive** from Palatine to Crabtree Drive, where the McDonald Creek trail begins. This priority of this sidepath would be lessened if the recommendation for a road diet with bike lanes on Windsor is implemented.

10. Along the north(east) side of **Rand Road**, between Kennicott Avenue and Stonebridge Drive. This segment depends upon a connection across the ComEd ROW to Kennicott Avenue near Hintz Road being made. It would provide a more direct route for the “Kennicott” framework bikeway.

11. Along the north(east) side of **Rand Road**, between the two off-set segments of Wilke Road. This segment provides continuity and connectivity for the N. Wilke Road bike route. Engineering treatments to improve the safety of the crossing of Rand Road would be necessary, such as a pedestrian hybrid beacon or RRFB, a center median, warning signage, high-visibility crosswalk, etc.

12. Along the north side of **Dundee Road** within Village boundaries. This facility would connect to the existing Buffalo Grove sidepath, which runs east to the Des Plaines River Trail, providing regional connectivity. Ideally, this sidepath would continue west, over IL-53, into Palatine.

13. Along the south side of **Lake-Cook Road**, between Highland Lane and Arlington Heights Road. This sidepath will connect bikeways on local streets and the neighborhoods they serve to the signalized intersection at Lake-Cook and Arlington Heights Road, from which the Buffalo Creek Forest Preserve trail and other popular bikeways in the Village of Buffalo Grove can be accessed.

Figure G1 - Current conditions of sidepath (retrofitted from sidewalk) along Central, at Walnut. Although along the framework route, it is not appropriate as a bikeway, due to pavement condition and encroachment of vegetation.

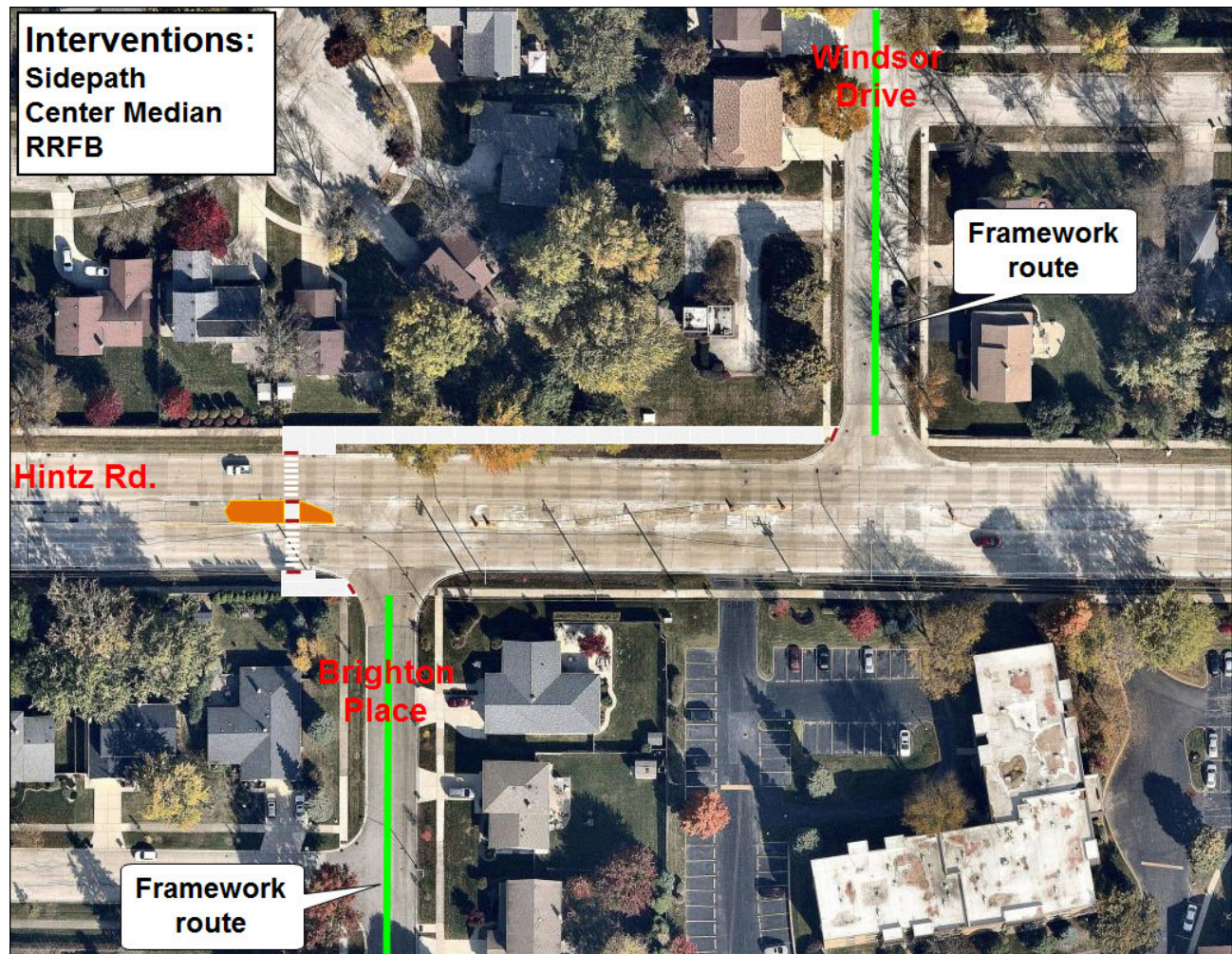


APPENDIX H

Hintz and Central Road crossings Alternative design concepts

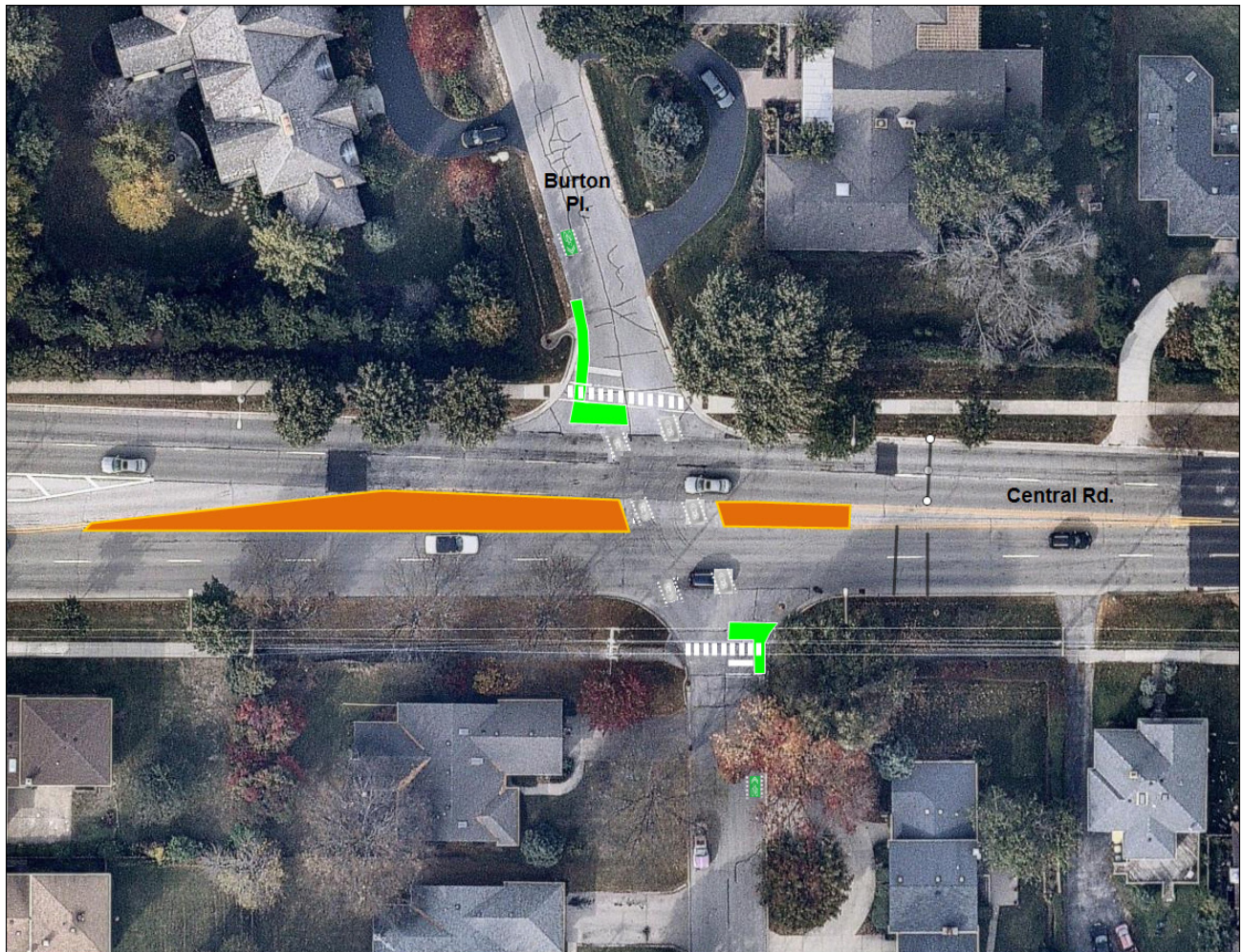
Examples of treatments utilizing short segments of sidepath, raised center medians, RRFBs, enhanced markings, signage, etc.

Figure H1



Crossing of Hintz Road at Brighton-Windsor (Alternative design concept)

Figure H2



Crossing of Central Road at Burton-Haddow (Alternative design concept)

APPENDIX I

Typical treatments for improving Intersections for bicyclists and pedestrians

The following provides basic information on select engineering treatments used at intersections and other crossing locations to improve bicycle and pedestrian safety, access, and mobility. The Village should consider installation/implementation of these treatments whenever feasible. Implementation requires engineering evaluation of specific locations and potential treatments and should be utilized by the Village on a case by case basis – considering such factors as bicycle/pedestrian usage, traffic volumes, traffic speeds, potential safety benefits, adjacent land uses, whether the intersection or crossing is along the recommended bicycle network, costs, timing of intersection investments, and available right-of-way. More information can be found out in CMAP’s Complete Streets Toolkit, at <http://www.cmap.illinois.gov/programs-and-resources/local-ordinances-toolkits/complete-streets>. See especially, the “Select Treatments” section, which is divided into “Intersection and Crossing Locations” and “Traffic Calming and Speed Management.”²

² See also California Department of Transportation’s “Complete Intersections: A Guide to Reconstructing Intersections and Interchanges for Bicyclists and Pedestrians” (<http://www.dot.ca.gov/hq/traffops/engineering/investigations/docs/intersection-guide-bicycles-pedestrians.pdf>), as well as the “Intersection Treatments” chapters of NACTO’s Urban Street Design Guide, (<http://nacto.org/publication/urban-bikeway-design-guide/intersection-treatments/>) and its Urban Bikeway Design Guide (<http://nacto.org/publication/urban-bikeway-design-guide/intersection-treatments/>).

Crosswalk Pavement Markings

A location indicated as an appropriate place for pedestrians to cross a street or vehicular way by marking the crossing location with crosswalk pavement markings. High visibility crosswalks typically make use of longitudinal, “continental,” or “ladder” style pavement markings, which are more visible to approaching traffic.

Figure I1



Pedestrian countdown signals

Pedestrian countdown signals consist of a standard pedestrian signal heads, with an added display showing a countdown of the remaining crossing time. The Manual on Uniform Traffic Control Devices (MUTCD) recommends that the countdown timer start at the onset of the flashing DON'T WALK. The timer continues counting down through the pedestrian clearance interval. Countdown signals are required by the MUTCD to be installed whenever pedestrian signal heads are warranted as part of intersection signalization or reconstruction. Signals may be supplemented with audible or other messages to make crossing information accessible for all pedestrians.

Figure I2



Signal timing adjustments

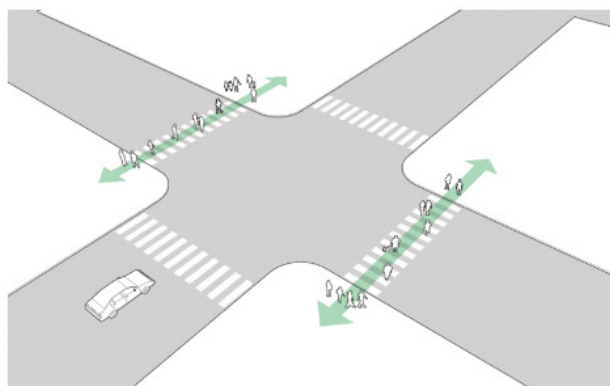
Signal timing adjustments designed to minimize conflicts between pedestrians and motorists.

The five major adjustments are:

- A leading pedestrian interval (LPI) provides pedestrians with a few seconds of lead time prior to the onset of the associated vehicle phase.
- Slower walking rates (two-and-a-half to three-and-a-half feet per second) may be programmed at intersections with or without pedestrian signal heads to account for young children, mobility-impaired, or elderly pedestrians.
- A LPI provides pedestrians with a few seconds of lead time prior to the onset of the associated vehicle phase.
- Lagging left turn provides pedestrian with a few seconds of lead time prior to the onset of a protected left-turn phase.
- Right-turn on red restrictions often improves pedestrian safety

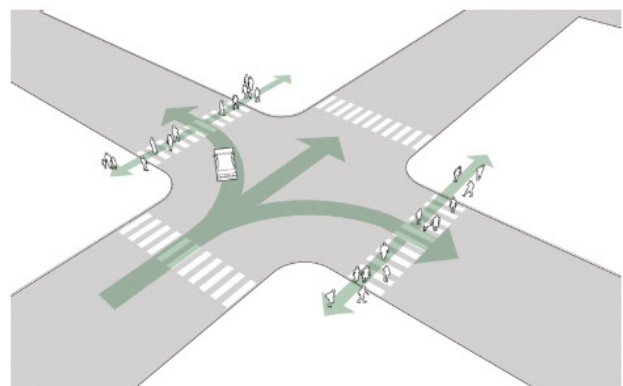
Figure 12

LPIs have been shown to reduce pedestrian-vehicle collisions as much as 60% at treated intersections.



Phase 1: Pedestrians only

Pedestrians are given a minimum 3–7 second head start entering the intersection.



Phase 2: Pedestrians and cars

Through and turning traffic are given the green light. Turning traffic yields to pedestrians already in the crosswalk.

Bicycle detection technology / Signal activation by bicycles

Bicycles (and motorcycles) have difficulty triggering demand-actuated traffic signals, which typically require large metal vehicles placed over in-pavement loop detectors. Cars may not be present to trigger the signal, or cars may be stopped too far back behind a bicyclist who arrived at the intersection ahead of the car. Pedestrian push-button actuation, if present, is often inconveniently located for bicyclist.

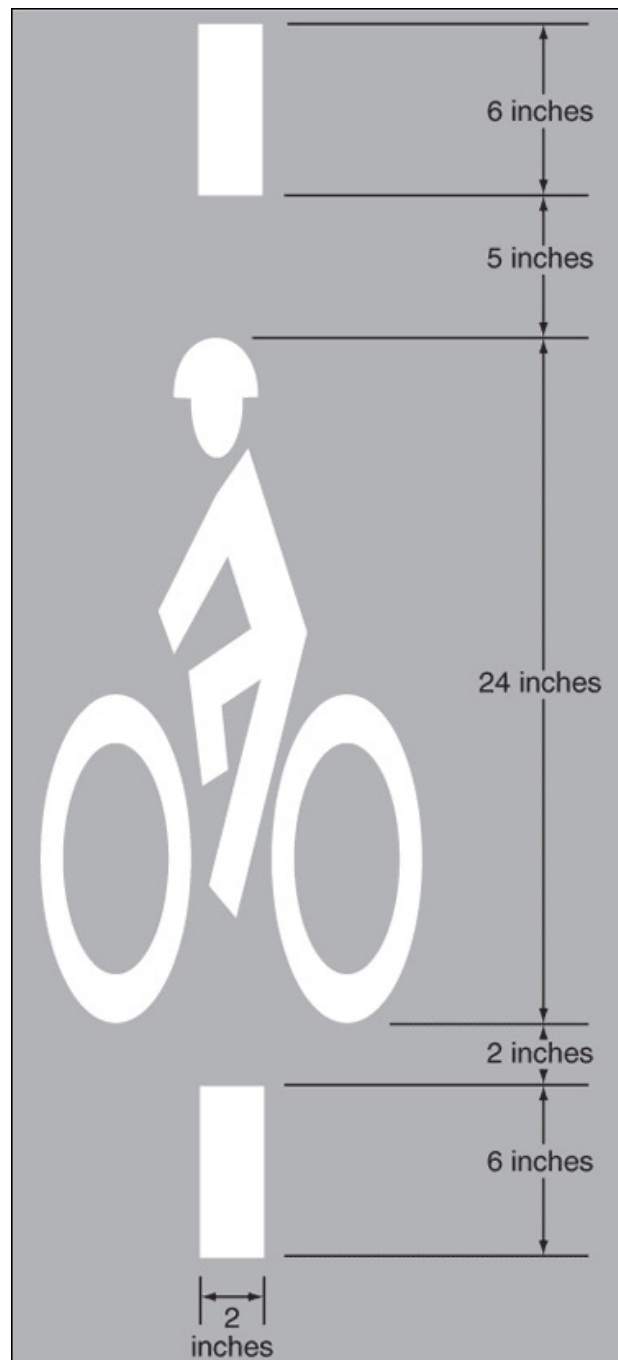
Illinois recently enacted a law, by which bicyclists and motorcyclists may treat stoplights like stop signs, after two minutes of waiting/not being detected. However, engineering solutions are safer and preferred.

For existing intersections, the MUTCD-approved Bicycle Detector Pavement Marking (MUTCD Fig. 9C-7), used together with the R10-22 Bicycle Signal Actuation Sign, to indicate the detector trigger point for actuating the signal. For standard automobile detectors, the detector's perimeter – such as its right edge – is typically more sensitive to bicycles. Correct adjustment of the sensitivity of existing automobile detectors may be needed while the detector pavement marking serves to indicate proper bicycle position at an intersection.

For new intersections, quadrupole loop detectors, or camera detection technology should be used, as they are more sensitive to bikes and motorcycles. The City of Austin, TX recently developed a smartphone app designed to communicate with the existing signal system. The app indicates to the signal that a bicyclist is approaching, which triggers a green light.

Bicycle detection technology should be operationalized at signalized intersections along key (framework) bicycle routes in order to reduce bicyclist wait time and potential confusion and conflict between roadway users.

Figure I4



Advance Stop or Yield lines

Advance stop or yield lines are standard markings that indicate the point behind which vehicles are required to stop or yield (in compliance with the locations traffic control device), but which placed further back on the approach to an intersection or marked crossing. Advance stop/yield lines are typically placed between four and 50 feet in advance of crossing location, and are 12 to 24 inches wide. The objective of this treatment is to encourage motorists to stop farther away from a marked crosswalk in order to improve lines of sight and increase safety at intersections. More information can be found in the MUTCD, Section 3B.16

Medians/Refuge islands

Center median refuge islands are raised barrier areas placed in the center of the roadway, separating opposing lanes of traffic, through which a crosswalk passes. They provide a safe place for pedestrians to wait safely to cross, and can also help manage access / reduce conflict points.

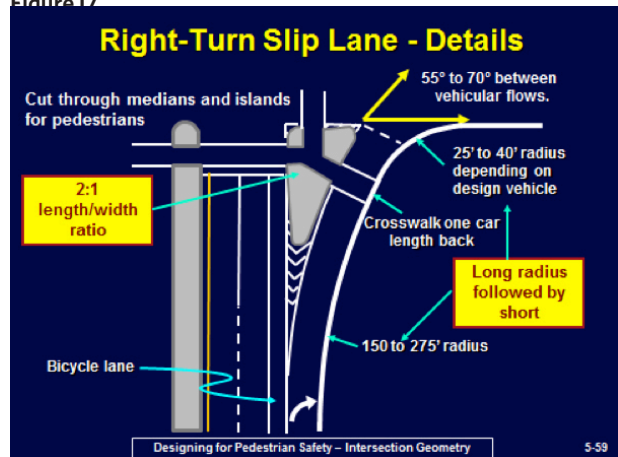
Pork chop islands are triangular raised islands placed between a right-turn slip lane and through-travel lanes. They channelize vehicular traffic and also provide a place where pedestrians (and bicyclists) can wait for a suitable gap in traffic or for the WALK phase of a pedestrian signal. When properly designed, they keep turning speeds low and allow for good sightlines for pedestrians and drivers.

Medians and pedestrian crossing islands are one of FHWA's nine proven safety countermeasures and have been shown to reduce pedestrian crashes by 46 percent and motor vehicle crashes by up to 39 percent. They are recommended in curbed sections of multi-lane roadways in urban and suburban areas, particularly in areas where there are mixtures of significant pedestrian or bicycle and vehicle traffic (more than 12,000 ADT) and intermediate or high travel speeds.

Figure 15



Figure 17



Curb extensions

Curb extensions or ‘bulb outs’ are extensions of the curb line into the street, across the parking lanes to the edge of the travel lane. They are appropriate only where there are on-street parking lanes. Curb extensions have several objectives or benefits, including:

- To improve the visibility of pedestrians waiting to cross the street, and simultaneously improve the pedestrians’ ability to see vehicles traveling in the roadway
- To shorten crossing distance/time
- To calm traffic and slow the speed of turning vehicles
- To provide more sidewalk space (for various purposes).

It should be noted that landscaping may be required in order to guide visually-impaired pedestrians to crossing locations. In addition, curb extensions can affect stormwater flow and should therefore be designed to accommodate drainage.

Raised crosswalks and intersections

Raised crosswalks are elevated above roadway pavement in the form of an elongated speed hump with a flat section in the middle and at-grade with adjacent sidewalks. A raised intersection is a plateau covering the entire intersection, including crosswalks, on level with surrounding sidewalks, with ramps on all vehicular approaches.

They are appropriate at locations with large volumes of pedestrians (and bicyclists) – in downtown areas, near schools, transit, etc. – along relatively low-speed roads. The objective of these treatments is to control and calm traffic speeds at crosswalks and/or intersections, increase visibility, and thereby improve the safety of pedestrians at the crossing. They are often combined with beacons, signage, and enhanced markings.

Figure I8



Figure I9



Pedestrian crossing beacons (Hybrid, RRFB, Overhead)

Pedestrian crossing beacons are used to warn and control traffic at unsignalized marked crossing locations in order to assist pedestrians in the crossing the roadway. They encourage drivers to comply with laws requiring that they stop for pedestrians in crosswalks. Beacons are activated by push buttons, so they should include a locator tone to inform visually impaired pedestrians that activation of the signal is required to cross the street, as well as a tone to indicate onset of the WALK interval.

The pedestrian hybrid beacon is a special type of hybrid beacon intended to stop vehicular traffic at unsignalized intersections or mid-block crossings along relatively large, high volume, high-speed, multi-lane roads, where traffic signals are not warranted.

A RRFB device is a pedestrian-activated beacon system located at the roadside (and sometimes on a median in the middle of a road), which acts as a supplement to pedestrian warning signs at non-signalized intersections or mid-block crosswalks. RRFB devices must be used in conjunction with other treatments, such as warning and regulatory signage, advance stop/yield markings, marked and/or raised crosswalks. They are typically utilized along roads with lower vehicle volumes and speeds than those where hybrid beacons are installed.³

Overhead flashing beacons are similar to RRFBs, but with lower intensity lights. They consist of pedestrian-activated flashing amber beacons installed on traffic signal poles and mast arms at uncontrolled crossing locations, along with regulatory/ warning signage.

³ See Vermont's guidelines for pedestrian crossing treatments at http://vtransengineering.vermont.gov/sites/aot_program_development/files/documents/ltf/Crossing%20Treatment%20Guidelines%20January_2015.pdf. The City of Boulder's Pedestrian Crossing Treatment Installation Guidelines are at <https://www-static.boulder.colorado.gov/docs/pedestrian-crossing-treatment-installation-guidelines-1-201307011719.pdf>. North Carolina DOT's Pedestrian Crossing Guidance is at https://connect.ncdot.gov/resources/safety/TEPPL/TEPPL%20All%20Documents%20Library/Pedestrian_Crossing_Guidance.pdf, with a decision flow-chart at <https://connect.ncdot.gov/resources/safety/TEPPL/TEPPL%20All%20Documents%20Library/FlowChart.pdf>.

Figure I10



Figure I11



In-street pedestrian crossing signs

A regulatory sign mounted in the center of relatively low speed streets at uncontrolled marked crossings, which reminds motorists of the law stating that they must stop for pedestrians in crosswalks. Unless on a median island, the in-street signs must be mounted on support designed to bend over and then bounce back to its normal vertical position when struck by a vehicle.

The in-street pedestrian crossing sign provides additional notice to motorists that they are approaching a pedestrian crossing, and encourages them to slow down and comply with the law to stop for pedestrians in a crosswalk. They calm traffic by visually and literally narrowing the street.

Figure I12



High-visibility signage—Warning and regulatory signs

Florescent, yellow-green signs that visually alert motorists to the potential for pedestrians and bicyclists to be present. The objective is to improve pedestrian safety at crossings and along roadways by increasing the visibility or prominence of crossing locations and other bicycle and pedestrian facilities or activity and to communicate regulations or laws pertaining to the interactions between motor vehicles, pedestrians and bicyclists. The signs encourage motorists to operate their vehicles with caution, to expect pedestrian and bicycle traffic, and to be aware of the legality of their presence. They attract drivers' attention to areas of potential conflict between motorized and non-motorized traffic.

Figure I13



Mini traffic circles

Mini or neighborhood traffic circles are raised circular medians (traffic circles) constructed in the center of intersections of low volume, low speed, primarily residential streets. Vehicles must change their travel path to maneuver around the circle. While the typical application uses traffic circles to replace stop signs, they may also be installed in intersections where stop or yield signs remain in place.

Mini traffic circles are a traffic calming feature and an aesthetic enhancement. As traffic calming device, their purpose is to reduce motor vehicle speeds, manage traffic, and improve safety at intersections in residential areas. As aesthetic elements, they contribute to the quality of the streetscape through landscaping and other enhancements.

Figure I14



APPENDIX J

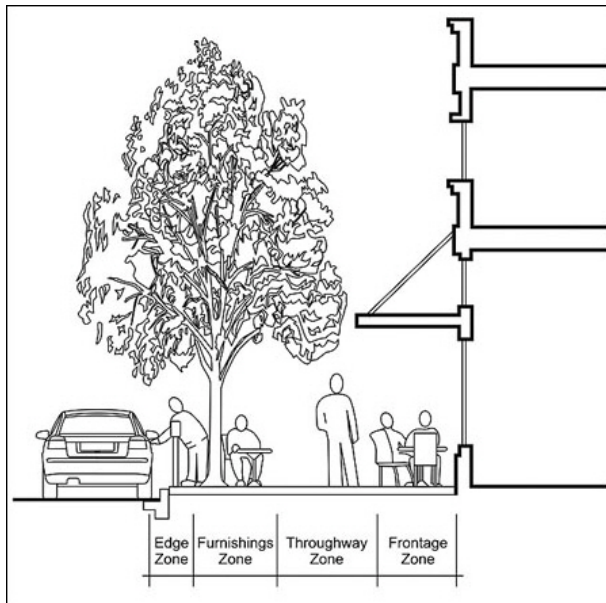
Sidewalk Zone System

The Sidewalk Zone System is a tool that planners use to ensure that pedestrian ways function appropriately and meet basic Americans with Disabilities Act (ADA) requirements for a continuous, smooth and level sidewalk, free of obstructions. Under the system, it is easier to place ramps correctly and keep the sidewalk level across driveways. Following the system also keeps all potential obstructions, such as utility poles, signs, trees, drinking fountains, and benches, in the furniture or frontage zones.

The Sidewalk Zone System consists of four distinct zones:

- Curb zone: curbed area between the sidewalk and the vehicle ways; usually includes drain inlets.
- Furniture zone: Area of the sidewalk where refuse receptacles, benches, utilities, and other objects are best placed.
- Pedestrian zone: Area of the sidewalk that should be clear for walking.
- Frontage zone: Area of the sidewalk that transitions to adjacent land uses; commonly used for quasi-public activities, such as outdoor cafes and sidewalk sales.

Figure J1

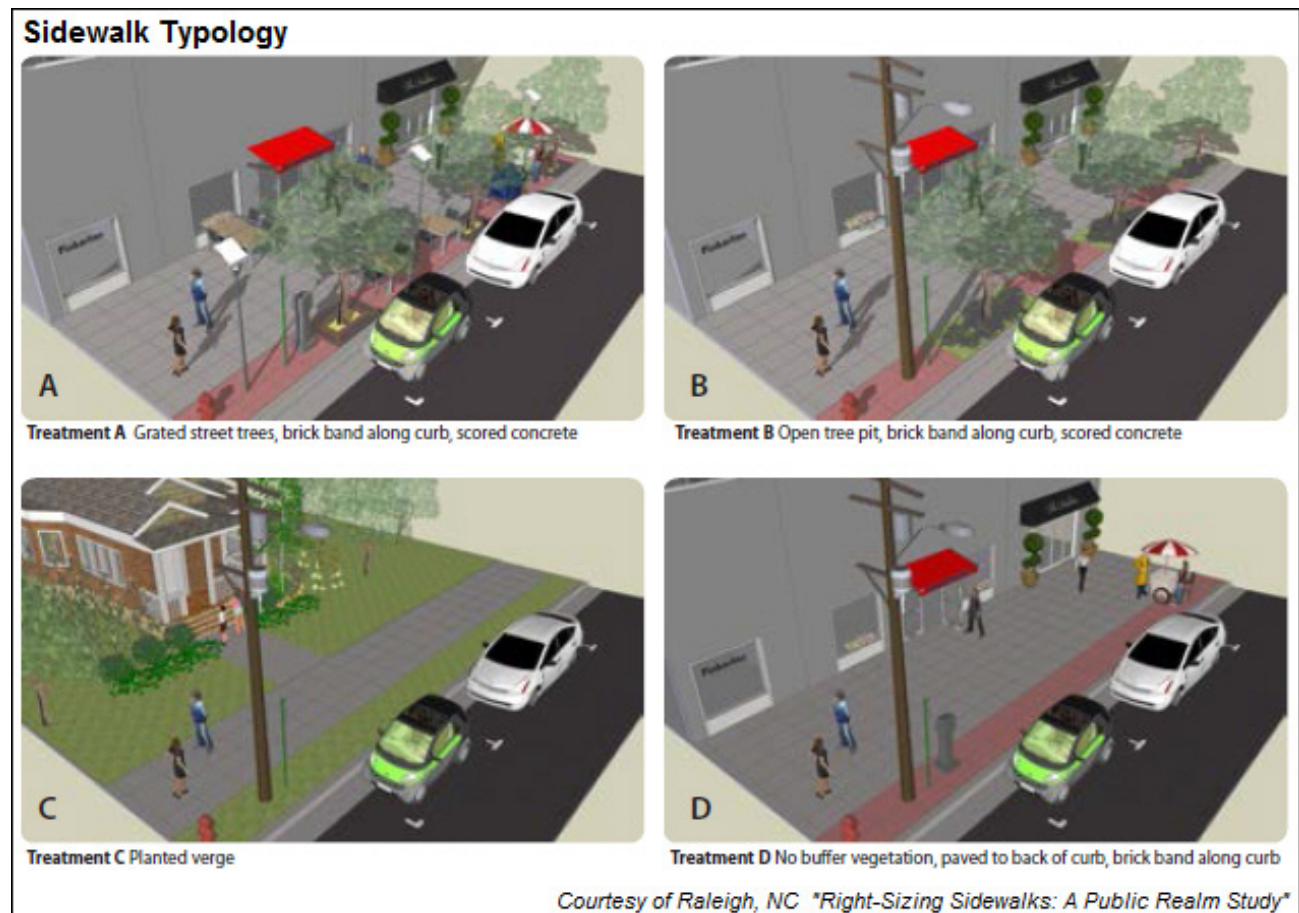


Courtesy of FHWA

⁴ See the U.S. Access Board website, <https://www.access-board.gov/guidelines-and-standards/streets-sidewalks/public-rights-of-way>.

Geometrics for each zone will look different in residential areas versus commercial districts. Guidance on space allocations can be found in Chapter 3 of the Active Transportation Alliance's *Complete Streets Complete Networks* design manual: <http://atpolicy.org/Design>. The *Public Rights-of Way Accessibility Guidelines* (PROWAG) offer information and guidance on best practices for accessibility in and along streets.⁴ These proposed guidelines are expected to become law in the near future. In general, the provision of ADA-compliant accessibility in public rights-of-way advances community walkability. However, true walkability is about more than access in the sense of that word as used in the ADA. Providing an inviting and comfortable environment for persons on foot, including amenities such as street trees and furnishings, as well as a mix of land uses and architectural forms that cooperate and collaborate with the activity of walking, are also important in creating walkable communities.

Figure J2

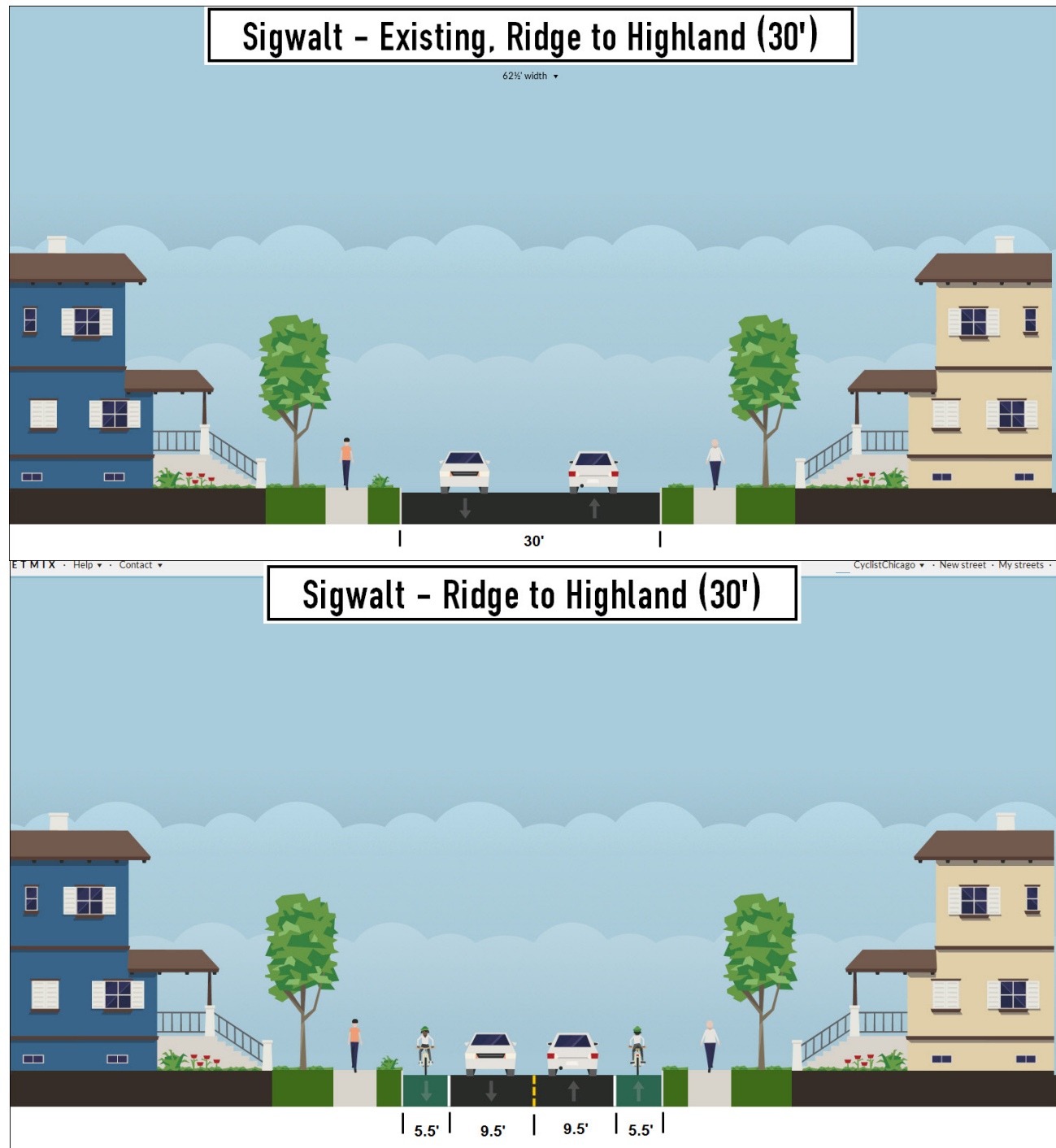


APPENDIX K

Additional facility type cross-sections

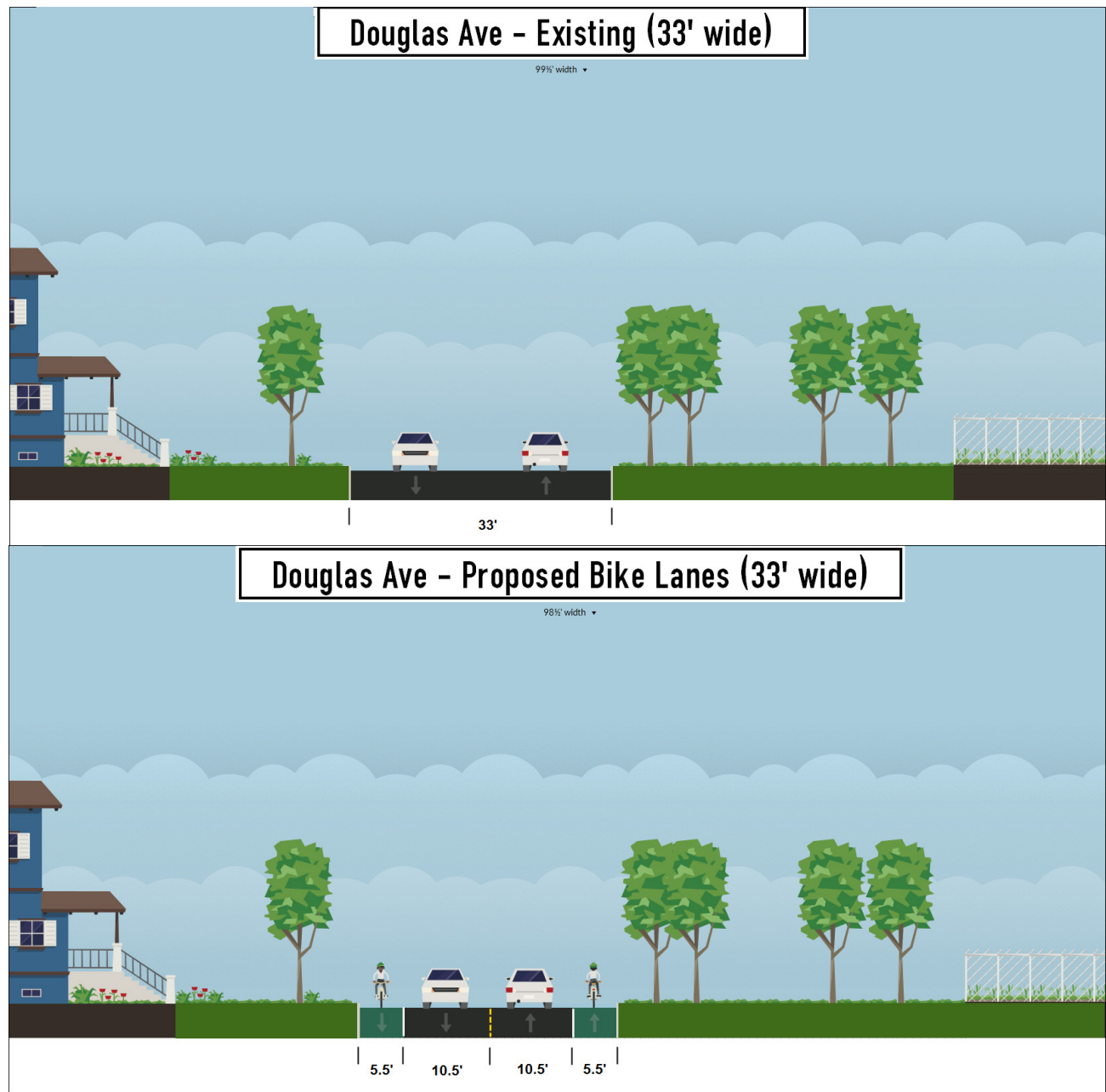
Traditional bike lanes (*Illustrative*)

Figure K1 - Sigwalt, Existing and Proposed



Source: www.streetmix.net

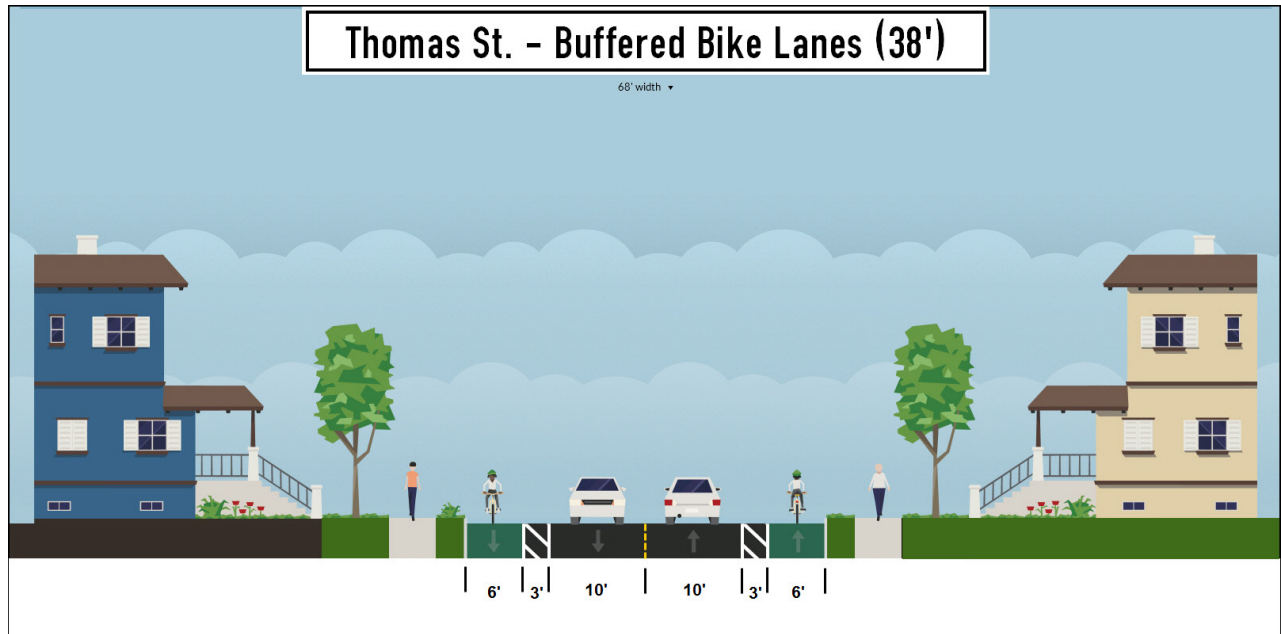
Figure K2 - Douglas, Existing and Proposed



Source: www.streetmix.net

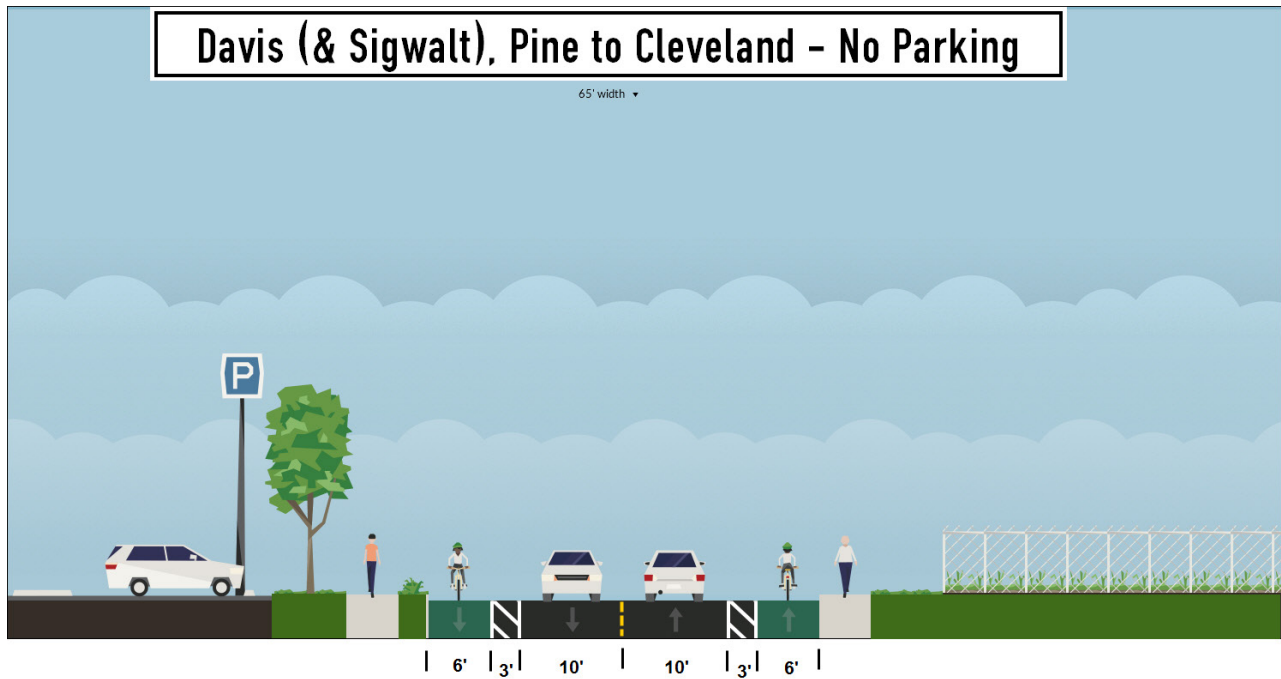
Buffered bike lanes (Illustrative)

Figure K3 - Thomas, Proposed



Source: www.streetmix.net

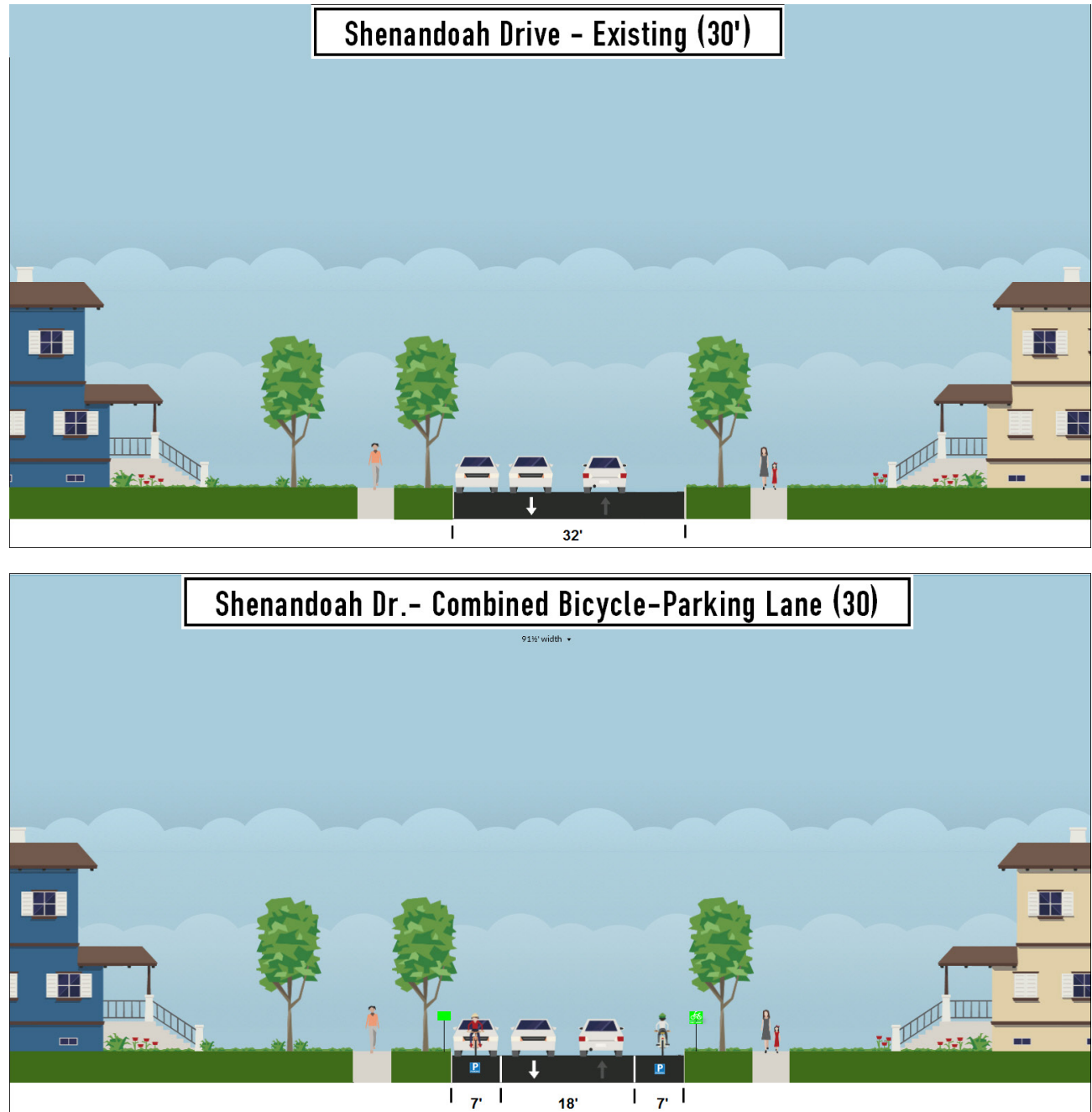
Figure K4 - Davis and Sigwalt (no on-street parking)



Source: www.streetmix.net

Combined bicycle-parking lanes (*Illustrative*)

Figure K5 - Shenandoah, Existing and Proposed



Source: www.streetmix.net

Signed bicycle route (*Illustrative*)

Figure K6 - Hackberry (local street, bike signage only)

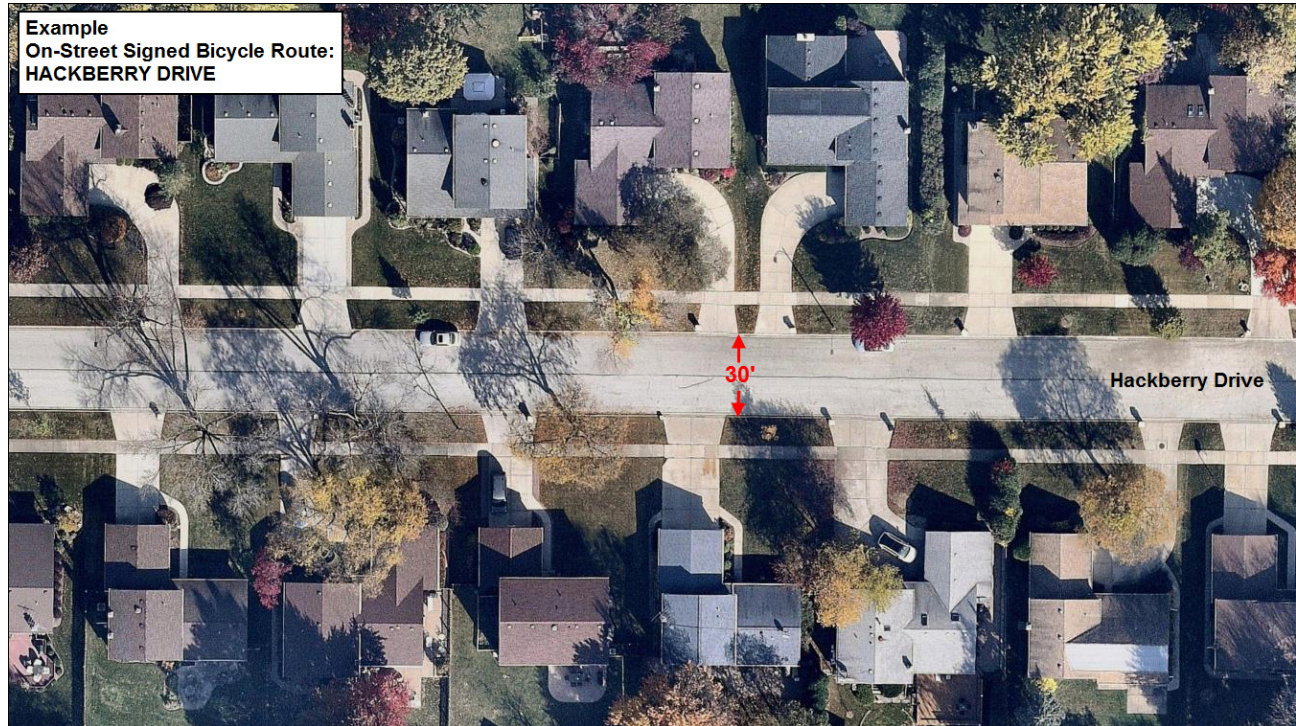
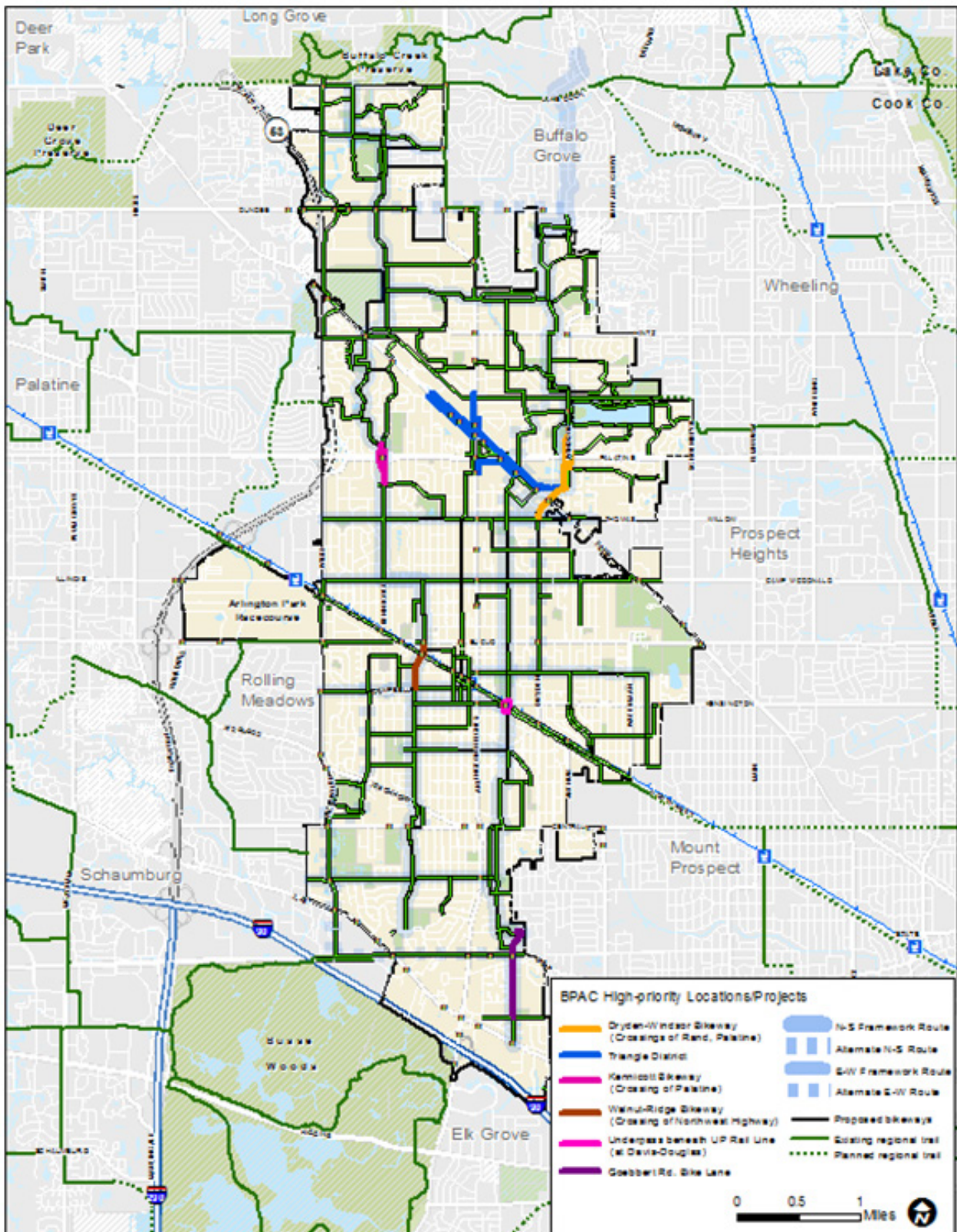


Figure K7 - Hackberry (local street, bike signage only, perspective view)



APPENDIX L

Arlington Heights BPAC - High Priority Locations / Projects



Source: CMAP, 2016

APPENDIX M

Bike Parking Ordinances: A recent exchange on the Association of Bicycle and Pedestrian Professionals Discussion Forum

From: j.f.cinatl@sbcglobal.net [mailto:j.f.cinatl@sbcglobal.net]

Sent: Saturday, December 26, 2015 2:43 PM

To: APBP List Serve; DUNBAR Reed C

Subject: Re: [apbp] Bike Parking Ordinance Examples

Hi Reed (and listserv folks)

I'm finally catching up on some old e-mails - particularly this early December cluster of e-mails in regard to bike parking - one of my favorites subject.

I'd like to add a few additional comments to your excellent list below.

Expand your guidelines/ordinances bike parking pages & diagrams by referencing the APBP *Bicycle Parking Guide 2nd Edition* (or later) which describes many "good" bike rack types and parking scenarios. If you don't detail the type of racks you will get useless rack types being installed (like wave racks) instead of good types - which defeats the whole purpose of a good bike parking guide.

Once these ordinances/guidelines are put in place the Plan Checkers in the jurisdiction's Planning Department must be made aware of these provisions and include bike parking provisions on their Plan Check list. Plan Checkers must be made aware that properly installed racks aren't be located in the alley next to the dumpster - but up front where patrons access them (rear located racks are OK for staff however)

Then, Building Inspectors must be brought on board - when doing building inspections, before signing off for occupancy, they need to check the bike racks, of the correct type and location, are installed.

Anyway, just some additional thought regarding bike parking

John Cinatl

Caltrans - District 6 Bicycle Coordinator - Retired

Clovis (Fresno) & Port Hueneme (Oxnard), CA

From: DUNBAR Reed C
To: Liz Cornish ; Members@lists.apbp.org
Sent: Wednesday, December 09, 2015 9:30 AM
Subject: Re: [apbp] Bike Parking Ordinance Examples

I am currently wading through scores of best practice documents, public input, and staff recommendations in an effort to update our code (I will have a near-final draft to share soon, if interested). Here are a few items that I think belong in a modern bicycle parking code update based on our experiences:

- Provision of Non-Standard bicycle spaces. Cargo bikes, family bikes, and bikes with trailers require more room. Decide on a quantity or percentage of spaces for “big bikes”.
- Access to electrical outlets. eBikes are becoming more popular and any long-term bicycle parking should include (at a minimum) the installation of electrical conduit. When I inquired to this listserv about standards Vancouver, BC responded they require 50% of long-term bicycle spaces to have access to electrical outlets.
- Materials for long-term bicycle parking. Cities should prohibit the use of cyclone (or chain link) enclosures. They are too easily defeated by simple tools. Specify wire mesh or perforated steel (or glass, masonry, etc.). If there is an interior bike room, make sure there is an opportunity to see and be seen before entering the room (windows).
- If you allow bicycle lockers ensure there is an opportunity for visual inspection. Usually, this means specifying some level of transparency (wall materials like perforated steel, or durable clear inserts in the door)
- Minimum height requirements for rack elements. Rack characteristics are important, decide on how you wish to regulate the material composition and size of the standard bicycle racks (in addition to spacing characteristics).
- If you have large developments, decide if you want long-term parking dispersed throughout the site or if you will accept a central secure parking enclosure. We have had issues with disuse of centralized facilities and will write requirements for multiple long-term bicycle parking enclosures into the code.
- Best practice documents do a good job of specifying attachment/mounting options. Be clear about how you want racks to be mounted.
- Percentage of covered bicycle parking (short-term). Important in rainy climates. Having a discussion about lighting is also important.
- Decide if you will accept stacked, hanging, or semi-vertical bicycle parking. We will probably end up with a small percentage of stacked and hanging. These types of parking decrease the footprint of bicycle parking areas but

can challenge users with heavy (or non-standard) bikes.

I have a lot of thoughts on this – if you have specific questions please let me know.

Reed Dunbar, AICP | Transportation Planner

City of Eugene | Public Works Engineering
99 E Broadway, Suite 400 | Eugene OR 97401
Phone 541.682.5727 | Fax 541.682.5032

On Wed, Dec 9, 2015 at 2:31 PM, Jessica Roberts <jessicaroberts@altaplanning.com> wrote:

I agree with Tim that enforcement is the key. Portland has had problems with this, and advocates have taken on the task of monitoring for compliance, which frankly seems ridiculous - that is literally the paid job of city staff, and to have advocates do it out of their personal time....but here we are.

Again to point out Arlington, at least the last time I talked with them about this, the enforcement work they did was outstanding. They had a staff person appointed as the very proactive watchdog, and he took that role really seriously.

Jessica Roberts
Principal
Alta Planning + Design
www.altaplanning.com
Main line: 503-230-9862 | Direct: 503-200-3272 | jessicaroberts@altaplanning.com
Creating active communities

On Wed, Dec 9, 2015 at 11:14 AM, Tim Potter <pottert@msu.edu> wrote:

[The Meridian Charter Township Bicycle Parking Ordinance] was adopted in 2010 and local bike advocates have learned that enforcement is the difficult part. We've played an informal role in monitoring things on the ground for township staff who are pretty tight for staff time, but can't possibly replace a formal process for ensuring that the ordinance is followed by developers/ property owners. So, I'd recommend having some discussion and agreement with staff re: how and when audits are done on developments that require bike parking by your ordinance.

Tim

Tim Potter
Sustainable Transportation Manager
MSU Bikes Service Center
434 Farm Lane, Rm. B10 Bessey Hall | Michigan St. University | E. Lansing,
MI 48824-1033
Direct Ph: 517-432-3414 | Direct Email: pottert@msu.edu

*Minutes of the Arlington Heights Bicycle and Pedestrian Advisory Commission
Thursday, April 20, 2017 in the Hanson Room at Village Hall*

COMMISSION MEMBERS IN ATTENDANCE:

Peter Szabo, Chairman
Dr. Michael Bagby D.C.
Paul Danko
David Easley
Juergen Juffa
Alan Medsker

MEMBERS ABSENT:

Michael Walczak

STAFF PRESENT:

Briget Schwab, Engineering Liaison, VAH

OTHERS PRESENT:

John O'Neal, Chicago Metropolitan Agency for Planning (CMAP)

RESIDENTS IN ATTENDANCE:

CALL TO ORDER:

A quorum being present, P. Szabo called the meeting to order at 7:36 p.m.

APPROVAL OF MINUTES:

J. Juffa moved to approve the Minutes of the Bicycle Advisory Commission Meeting from February 22, 2017. M. Bagby seconded the motion and the motion carried unanimously.

M. Bagby moved to approve the Minutes of the Bicycle Advisory Commission Meeting from March 14, 2017. J. Juffa seconded the motion and the motion carried unanimously.

CHAIRMAN'S REPORT:

- P. Szabo reported that he has been reviewing the 1989 and 1997 editions of the Bike Plan. In addition, he has been reviewing the Plan Commission and Village Board meeting minutes from when these plans were approved, as well as he is reviewing the Board Goals and how they relate to the updated Bike Plan. P. Szabo will share all documents with the BPAC.
- P. Szabo also discussed what goals from the 1989 and 1997 editions have been accomplished and which are still outstanding.

OLD BUSINESS:

- P. Szabo introduced the final draft of the Bicycle and Pedestrian Plan to BPAC. P. Szabo stated the final draft includes the Index and asked for any questions or comments. D. Easley stated that he was really impressed and pleased with the final draft and is proud to have contributed. J. O'Neal stated P. Szabo spent one and a half days in the graphics lab at CMAP to put together the Index and thinks he did a great job.

J. Juffa moved to approved the final draft of the updated Bicycle and Pedestrian Plan.

D. Easley seconded the motion and it carried unanimously.

- J. O'Neal stated that the open house has not been scheduled and is looking to set a date for an open house. He stated an open house is not required by law, but is good practice. He also offered that CMAP has a number of media contacts that would help get the word out for the open house and promote the Plan. J. O'Neal stated that since the document is in a finished form, the open house would be used to introduce and promote the Plan to the public. J. O'Neal proposed having the open house after the Comprehensive Subcommittee of the Plan Commission and before the Plan Commission Meeting. M. Bagby provided that after the public outreach meetings, residents were asking what would come of the information provided, so he likes the idea of informing them through an open house.
- J. O'Neal asked if the Plan Commission approves the Plan, and if that meeting is considered the Public Hearing. He also asked if it was recommended by the Plan Commission for adoption, would it just be on the consent agenda for the Village Board. B. Schwab stated the Plan Commission is the Public Hearing and they make a recommendation to the Village Board for adoption, but the Village Board makes the final decision. B. Schwab further explained that she was told it was project dependent on whether it was recommended for consent agenda, or needed further discussion at a Village Board meeting. B. Schwab said when the Comprehensive Plan was updated, there was a presentation also made to the Village Board and it wasn't just on the consent agenda. B. Schwab said we will know more as the process progresses, and will most likely depend on how many questions the Village receives regarding the Plan. J. O'Neal stated he typically sees a Bike and Pedestrian Plan in this region and around the country generally making people happy and are not seen as controversial. Additionally, he stated this isn't a specific project and it is only a plan, so more public outreach should be done for individual projects that could raise concerns for the public. P. Szabo thinks having the Plan available on the website for the public to review would be helpful. Additionally, P. Szabo is in favor of the idea of notifying the newspaper to promote and advertise the Plan. J. O'Neal stated he could post the final draft to the project website as another way to inform residents that the Plan is complete. B. Schwab stated it should have a disclaimer that it is pending approval from the Village Board. B. Schwab said it would be available on the Village's website as soon as the document is uploaded for the Subcommittee meeting that is scheduled for May 10, 2017. J. O'Neal stated that you typically don't see a lot of changes from an open house or even after the official Village meetings, and he anticipates hardly any on this plan due to the amount of time P. Szabo and the BPAC reviewed and commented throughout the process. P. Szabo agrees that he doesn't anticipate any major changes. J. Juffa stated the BPAC loves the Plan because of the major changes in streetscape and facility changes proposed throughout the plan, but that could be a cause for concern for others, so the BPAC should not attempt to anticipate the tone of any potential feedback.
- P. Szabo asked what is presented at an open house. J. O'Neal offered that there are typically three or four large foam boards that highlight the major images of the Plan and would be placed around the room. P. Szabo stated the open house meeting could make the case on why the Village should adopt this Plan and images chosen are vital in portraying the overall vision of the Plan. He continued that images could show that the vision is attainable, that it would make the Village a nicer and safer place to live. P. Szabo stated that the BPAC could work with CMAP on selecting the images to use. J. O'Neal stated the Plan goals, vision statement and major images would likely be used. The CMAP marketing

coordinator has already picked out what she thinks are interesting points in the Plan and J. O'Neal stated she is not a bicyclist or planner, so she is coming from a different perspective than BPAC. J. O'Neal offered that CMAP will also prepare flyers and postcards to advertise the open house which is similar to what was distributed for the outreach meetings. He also recommended that BPAC have a brochure or handout with highlights from the Plan, like buffered bike lanes, would be helpful.

- J. O'Neal inquired again if having the open house in between the Subcommittee meeting and Plan Commission meeting makes sense. P. Szabo tried to reach out to one member of the Plan Commission to find out what the process would be and what BPAC should do to prepare for the meetings, but has not connected with them yet. J. Juffa recommends knowing the Plan and reviewing the night before, so BPAC is prepared to answer questions. B. Schwab stated she would like to defer to Planning Department on when to hold an open house and will follow-up with everyone on Monday, April 24th. B. Schwab does not know the time frame in between the Subcommittee meeting and the Plan Commission meeting. B. Schwab did state that the open house meeting is not required, and since the public is going to have time to comment at the Plan Commission meeting since it is public hearing, she isn't sure it's necessary. Additionally, she stated that if the intent is to introduce and promote the Plan to the public, she thinks this can be accomplished with the three required Village meetings.
- J. O'Neal recommends that BPAC presents the Plan at the meetings, since this is the Village's Plan. P. Szabo is in favor of presenting. B. Schwab was informed by various Village Staff that the presentation should be kept less than ten minutes. M. Bagby asked who should attend the meetings. B. Schwab said at a minimum P. Szabo needs to be there, but is strongly encouraged to have all of BPAC there to show support for the Plan. J. O'Neal offered that there is a really great informational image of the various public outreach methods that were done during the development of the Plan. J. O'Neal provided a power point that P. Szabo could use to assist with putting together the presentation and offered for him to come to CMAP offices to work on the presentation with him.
- D. Easley thinks that CMAP can really help by sharing what other communities have already implemented with their plans.
- J. O'Neal stated CMAP will share the Plan with various entities which include PACE, IDOT, Forest Preserves, Metra, etc.
- B. Schwab thanked J. O'Neal and CMAP for all of their work on the Plan.
- J. Juffa presented a memo which D. Easley, P. Szabo, and he put together. The memo provides an overview of the Plan and how it ties into the goals of the Village's Comprehensive Plan that was updated in 2015.

D. Easley moved to approve the Memo with the subject "Bicycle and Pedestrian Plan" which introduced the Bicycle and Pedestrian Plan and recommends approval by the Plan Commission. A. Medsker seconded the motion and it carried unanimously.

- D. Easley reported that he has a mailing ready for residents on Evergreen Ave from Miner Street to Euclid Avenue to notify them of the Bike Arlington event and inform them of the road closure between Eastman Street and Saint James Street. D. Easley secured the food truck, "Mother Trucking Food", and there is no food or spending minimum. He also reported that the registration forms are all set up. Arlington Heights Memorial Library is publishing the registration and it is also on the Village website. The Village Cycle Sport will be available to provide mechanical support. D. Easley sent an e-

mail to the Arlington Heights Park District to borrow tables and chairs for day of registration, but P. Szabo stated that he has tables and chairs that BPAC can use. D. Easley inquired if there is money in the budget to make 10 yard signs to place at various parks around town. P. Szabo stated that the library has made posters for BPAC to place around town, and schools have published the event in their newsletters. B. Schwab is not sure if the Park District will allow it and will check the budget to see if there is money for yard signs. P. Szabo offered that his experience with yard signs is that they go missing. J. Juffa volunteered to help with set up the morning of the Bike Ride.

NEW BUSINESS:

- J. O’Neal shared that Rolling Meadows applied to Invest in Cook program for the Algonquin Road and New Wilke Road intersection. Rolling Meadows mentioned the side paths in the application, but had no connection to White Oak, so J. O’Neal provided comments that the connection should be made all the way to White Oak as part of this project.
- J. O’Neal also spoke about a proposed project in Lombard that is a two-mile four-lane road with 13,000 ADT that is proposing a ‘Road Diet’. The new cross section is proposing bike lanes, two traffic lanes, with a center turn lane and mid-block crossing with rectangular flashing beacons. J. O’Neal thinks this is a great project for the Village of Arlington Heights to review, if they consider moving forward with a “Road Diet” on Windsor.
- B. Schwab stated the Village Arlington Heights submitted an Invest in Cook application for the Buffalo Creek crossing at Lake-Cook and Wilke Road. J. O’Neal said it was unclear if the Village was proposing to change out the gravel path within the forest preserve. B. Schwab did not think so because the forest preserve would not allow a paved surface on their property. B. Schwab stated that there would be a landing that is paved to a certain point, and then would turn into the limestone surface. J. O’Neal stated it makes sense to use the existing light at Wilke Road, but road bike riders have hard time riding on the limestone material and he would like to see a sidepath on the north side of Lake-Cook Road that makes a paved connection to Schaefer Road.
- The next meeting is to be determined.

ADJOURNMENT:

- **M. Bagby moved to adjourn the meeting. D. Easley seconded the motion and the meeting adjourned at 9:14 PM.**

APPROVED:

Chairman Date

Secretary Date

REPORT OF THE PROCEEDINGS OF

The COMPREHENSIVE PLAN SUBCOMMITTEE

OF THE VILLAGE OF ARLINGTON HEIGHTS PLAN COMMISSION

HELD AT VILLAGE HALL ON:

May 10, 2017

Project Title: Comprehensive Plan Amendment – Bicycle and Pedestrian Plan

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

Requested Action:

- Amendment to the Comprehensive Plan adopting the Bicycle and Pedestrian Plan

Attendees: George Drost, , Chair, Plan Commissioner
Jim Tinaglia, Trustee
Joe Lorenzini, Plan Commissioner
John Sigalos, Plan Commissioner
Terry Ennes, Plan Commissioner
Bill Enright, Deputy Director Planning
Bridget Schwab, Civil Engineer, Engineering Department

Bicycle and Pedestrian Advisory Commission Members:
Peter Szabo, Chair
Jurgen Juffa, Commissioner
John O’Neil, Chicago Metropolitan Agency for Planning

Presentation

P. Szabo commenced the presentation of the proposed Bicycle and Pedestrian Plan, which was a three year process working with CMAP via a grant obtained through CMAP. The Plan includes a vision statement which is aspirational; improving safety of bikeways and crossings (outlined in Chapter 4 of the plan); and enhancing bicycling opportunities in the Village. A study by the League of American Bicyclists indicates that bicycling for commuting has increased 60% over the past 10 years, so the popularity of bicycling has increased.

J.Juffa indicated that the goals of the bike plan match up well with the goals of the new Village Comprehensive Plan and advances the issues such as safety and increased routes. The last plan was done in 1996 so this plan uses that plan as a starting point and then builds on that plan. This plan expands the bikeways network and provides alternatives for overcoming physical barriers. In particular access to Lake Arlington was reviewed as a priority for residents. The plan also includes expending education and awareness throughout the community.

COMPREHENSIVE PLAN – BICYCLE AND PEDESTRIAN PLAN

P. Szabo indicated that working with CMAP the BPAC conducted extensive community outreach including a 2 month community survey, and workshops and focus groups.

J. Juffa indicated that the plan identifies several destinations where the community indicated that they wanted to bike to, two of which were Lake Arlington and the commercial corridor at Palatine, Arlington Heights and Rand Roads. Also the Windsor/Palatine Roads intersection was identified by the community as a barrier to access Lake Arlington. The proposed plan includes Framework routes, 2 north to south and 6 east to west. These are primary routes to move about the community and represent the core of the proposed network.

P. Szabo added that there are several sidepath routes that include multi use trails. These routes are for recreational and commuting bicyclists. Access to Busse Woods was identified as an area to improve access. In addition there are several areas in the plan where there are gaps in the sidewalk network.

B. Schwab added that some of the recommendations are aggressive engineering solutions that would need further study. One area of focus is the Rand Palatine and Arlington Heights Road corridor to improve access.

G. Drost asked how are these improvements coordinated with infrastructure improvements?

B> Schwab indicated that Engineering already does coordinate bikeways and pedestrian improvements with roadway projects, and that would continue with adoption of this plan. Some recommended improvements are larger in scope and would need to be analyzed and funded separately.

B. Enright added that the Village is currently coordinating with the City of Rolling Meadows and a new bike path along Euclid Avenue.

J. Lorenzini asked if this plan was funded by a grant?

J. O'Neil indicated that this was plan was funded through a grant from CMAP. There was no dollar amount/limit to the grant but typically a plan such as this would cost about \$125,000 to \$180,000 to complete.

J. Sigalos indicated that this was a very nice plan, and asked if more bike racks at destinations would be included?

P. Szabo indicated that the BPAC has drafted a proposed bike parking ordinance that is being reviewed by the Plan Commission.

T. Ennes also complemented the BPAC and the plan and was very impressed with the plan and the efforts into the plan. He asked if there were any cost estimates included in the plan, specifically relating to the three primary areas where improvements are needed?

B. Schwab indicated that costs would be developed during implementation on a year to year basis. A lot depends on which alternatives are selected as the costs would vary.

COMPREHENSIVE PLAN – BICYCLE AND PEDESTRIAN PLAN

P. Szabo added that it is hard to project costs without more site specific data and the timing of when improvements are implemented. Some items could be added into roadway projects as they occur.

J. Tinaglia thought the plan was very good and will help during the CIP budgeting process as we would have a framework for what projects should move forward. These projects identified then be incorporated into other roadway projects as we will have many projects in the near future.

G. Drost asked who would be responsible for implementation of the plan?

B. Schwab indicated that primarily Engineering.

B. Enright indicated that this item would come before the Plan Commission in either June or July.

G. Drost indicated that the Subcommittee was very supportive of the Plan.

Meeting Discussion

The meeting adjourned at 7.05pm.

George Drost, Chair
Comprehensive Plan Subcommittee
Bill Enright, Recorder



Item: Bike Parking Ordinance

Department: Planning & Community Development

Report of the Committee-of-the-Whole Meeting of August 14, 2017

Bike Parking Ordinance

Trustee Tinaglia moved, seconded by Trustee Baldino, that the Committee-of-the-Whole recommend to the Village Board approval of the Code Amendments to Chapter 28, Section 11, Bike Parking Ordinance as amended. The motion passed unanimously.

Bid Section

Item:

Bid Opening Date:

Account Numbers:

Total Budget for Specific Item:

Bid Amount:

ATTACHMENTS:

Description	Type
PC Minutes 7/26/17	Minutes
Engineering Staff Memo 5-18-17	Memorandum
Proposed Bike Parking Ordinance	Exhibits
Bike Racks Ordinance Applied	Exhibits
Bicycle Advisory Committee Minutes 3-14-17	Minutes
Ordinance Review Committee Minutes 5-24-17	Minutes

PLAN

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

COMMISSION

RE: BIKE PARKING ORDINANCE - PC #13-011

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 26th day of July, 2017 at the hour of 7:51 p.m.

MEMBERS PRESENT:

TERRY ENNES, Chairman
LYNN JENSEN
MARY JO WARSKOW
JOE LORENZINI
BRUCE GREEN
SUSAN DAWSON

ALSO PRESENT:

BILL ENRIGHT, Deputy Director

CHAIRMAN ENNES: We have a second action, PC #13-011, the Bike Parking Ordinance. We have the same people presenting. Do you want to give a statement first, Bill?

MR. ENRIGHT: Yes. This has been worked on by Staff, the administration with the Bicycle & Pedestrian Advisory Commission really for a number of years. We first started looking at this in 2013 and it's been modified significantly since that time.

I think a couple of important aspects of the proposed ordinance is there is a provision in there that the Director of Planning can exempt any new business that would be increasing the auto parking requirement because that's how this kicks in, or one of the components of how this kicks in is if a new business comes into a shopping center that's already existing and that new business has a higher auto parking demand, that's when the Bike Ordinance would then apply to that business. If it was a retail business replacing another retail business, there is not an increase in the auto parking demand, therefore it will not kick in. If it does kick in, then the Director of Planning can exempt without having to go through a variation process the business if it's found that it's just not physically feasible to install the required bike racks on the site.

So, we think that's an important compromise from some of the other, you know, codes that were looked at. I know Skokie has a similar provision in theirs. Downtown businesses would be -- I'm sorry?

CHAIRMAN ENNES: Question on that. Is that ability to not require the bicycle parking to be put in place, is it just for that purpose, economic feasibility? Or is it going to also affect --

MR. ENRIGHT: Physical feasibility. Only physical, not economic.

CHAIRMAN ENNES: Can it also be tied to use? I mean if you have a medical site where it needs a wheelchair or something, just using that as an example.

MR. ENRIGHT: The exemption can only be tied to the physical inability to install that the way it's written.

In addition, downtown businesses would be exempt because the Village controls most of the public right of way, well, all public right of way, but the sidewalks. We do provide bike racks throughout the downtown. Sometimes these businesses move around, when we get requests from businesses to the Public Works Department to install that as necessary and feasible.

So, new development, however, in the downtown, new planned unit developments would require the bike racks. You know, we have a residential development proposed on the west end of downtown that they're going to be providing bike racks for instance. That's just something they came in with. It's an amenity that, you know, residential/rental tenants want to have in their building. So, it would apply in that case on any new centers around, shopping centers around town.

So, you know, one other thing that came up at Ordinance Review, the Ordinance Review Committee looked at this in May and did not recommend favorably on it. The minutes are attached. But one of the kind of key elements that came out and suggested by really all the Commissioners in there, you know, Commissioner Green and Commissioner Ennes and Commissioner Jensen, was the Village to try and take a more proactive approach towards the

bike racks, where they're needed in town. Some areas were identified like the triangle area, commercial center, the downtown of course which we do already, and Lake Arlington.

So, Engineering and Planning and Legal and Public Works have all talked about this. Public Works is going to put forth a budget request for I believe \$10,000 for 2018 budget to buy a certain number of bike racks. Then we would go out in outreach to these, particularly the triangle area where we have the shopping centers, and then also Lake Arlington. We control that obviously for Park District.

But in reaching out to the businesses, particularly shopping center owners of the big shopping centers in the triangle area, to work with them on providing these bike racks, ideally it would be on a reimbursement basis. But if the Village buys in bulk, we could probably get a decent price better than just, you know, a shopping center going out and buying a few. The idea would be to approach the shopping centers and, whether this ordinance is approved or not by the Village Board, to still move forward with this and try and provide more racks that would be commensurate with what's suggested in the code amended. So, that's all subject to members of Village Board approving the line item for that. We do want to take that step and see if that could help facilitate because that will certainly a good comment to try and get this going as quick as possible.

Briget, I don't know if you wanted to add to that at all?

MS. SCHWAB: No. Just that we came up with a budget by going through, we already have done an audit of the bike racks that currently exist in town. We showed that at the last meeting. The Commission had gone through and looked at what bike racks are existing, how many parking spaces are already there, and how many are needed. So, we went through and came up with that number similar to what Jensen had suggested was kind of coming up with the bike parking plan, so we did do that logically, coming up with where they're needed, where we can put them. Also, we assessed the survey, where the survey requested. We highlighted the survey request and then the Commission also went through what they thought was the most logical locations that had bikes, where we witnessed a lot of bikes kind of laying at the side or parked somewhere where they shouldn't have been where there's no racks available. So, those will be also included.

The \$10,000 budget item though comes from specifically the survey request. If you add up all the locations, they're at \$20,000.

CHAIRMAN ENNES: If you actually what? I'm sorry, if you actually what?

MS. SCHWAB: If you add up all of the locations outside of the just the survey, you're at mark \$20,000.

MR. ENRIGHT: We do have a presentation prepared by the Bicycle & Pedestrian Advisory Commission.

MR. JUFFA: Thank you again. I want to quickly give a summary of the Bicycle Parking Ordinance without regurgitating too much of what Bill has already said. The Bicycle Parking Ordinance applies to new constructions or where a change in use would induce a change in the required motor vehicle parking. The requirements, if I'm using the same table that automotive parking requirements are used to define, typically same as with the motorist parking, the number of parking spaces is most commonly defined by square footage and number of employees. There is a number of maximum spaces, typically 24 for larger shopping centers. Downtown area is exempt as Bill was already mentioning, the lack of the need for variance approval if the physical space is lacking, and then it incorporates the design guidelines set forth by

the APBP which is basically using U-shaped racks rather than the wave design or the decorative racks that we seldom see around town.

The rest of the presentation is basically in the form of a Q&A summarizing what has already been discussed in the various meetings that have preceded this meeting. Of course, the first question is do we need a Bike Parking Ordinance, and I want to remind everybody of how our transportation network is built where we have a public component that has the streets and roads of the Village, and we have a private component which is most of the bicycle parking. There are some public parking, but most of the parking is provided by private entities. So, in 2013, the Village adopted the Complete Streets Policy which talks about the first component, the public component. The Bicycle Parking Ordinance amends that and complements that by regulating that part of transportation network that is owned by private entities.

Is there a need for a Bicycle Parking Ordinance because there is a shortage of bike parking? Yes, there is a shortage of bike parking in the Village. The majority of our 40 shopping centers have a list of undiscovered Arlington that come, do not have bike parking. Our major school, St. Viater, does not have bike parking. Many places of employment that are easy to reach by bicycle, for example along Kennicott, University Drive, lack bike parking.

What does bike parking cost? A rack, a U-shaped rack with concrete assembly, pouring the concrete and the hardware, costs between \$550 and \$650. That accommodates two bicycles. Downtown area is exempt, Bill already mentioned that.

What is the utilization of bike parking? We don't have a whole lot of data, but we have about 100 observations that were made over the last three years and then a more concentrated effort over the last couple of months. We see that in about 50 percent of the observations, at least one bicycle uses the provided bicycle racks.

There was a question in one of the preceding meetings about liability aspects. This has been discussed with Village Staff and Legal. Our understanding is that the same liability framework applies no matter how a customer or employee accesses private property via by car, bicycle, or as a pedestrian.

Abandoned bicycles and the unsightly view that they sometimes provide were questioned. We are talking about bicycle parking on private property, so if there is something on private property that doesn't belong there and the owner is objecting to, it can be removed and the owner can set rules on how the bicycle parking on private property can be used.

Aesthetics was discussed. Again, we're discussing bike parking on private property, not the aesthetic challenges that we sometimes see on the public parking lots, i.e., the train station. A bike rack itself can look actually somewhere between unobtrusive or decorative. The main concerns are obviously abandoned bicycles, and I have addressed that in the previous question.

Is this an efficient way to create bicycle parking? Well, obviously has Briget and Bill have indicated, what the Bicycle Parking Ordinance is proposing is one way to promote bicycle parking. There are other tools such as the ones discussed, and over time all tools combined will build the sufficient bike parking that this Village needs.

How do I go back? Okay. I'm somehow out of sequence.

Another question was will the Bike Parking Ordinance need to overbuild in areas where there is new development? Generally, we consider all destinations in the Village bike destinations, and that's why overbuilding will not occur. We'll again regulate it to the

same such that there is also a maximum.

Village Staff discretion, we've already discussed that several times.

How long will it take to build a bike parking infrastructure? That depends obviously on what other complementing measures there are. That obviously depends on where and how much development and redevelopment we have.

A question that was pretty intensively discussed in the ORC committee was isn't there an easier way to drive this issue, for example, by having the property owner grant easements to the Village for bike parking? We asked obviously subsequent to the meeting this to Village Staff. However, the answer that we received is that Village Staff believes that actually the concept of easements or the approach with an easement is a much more complex approach, both legally and administratively.

Is this creating unnecessary bureaucracy? We believe not. This uses the same approach that is used for motor vehicle parking. You determine what the usage of the development, what the use of the property is that is under development or under redevelopment or considered for that, and once you have determined that use, it is easy. It uses the same classifications and you can find out what the bicycle parking requirements are.

Also a question that had substantial discussion in the ORC committee, shouldn't bike parking be financed by the public? As I pointed out in the answer to the first question, the transportation network has a public and a private component. The motor vehicle parking is very typically located, co-located with the bike parking on the same property in very close proximity. We cannot see how one thing or one part of this parking, the motor vehicle parking, would have a different financing approach than the bicycle parking.

Will this impede new developments in the Village? We don't know. What we do know is that the Village Staff has in the past requested bike parking for new developments and that it has not experienced any pushback from developers. The Village Staff has also spoken with several municipalities that have a similar ordinance, and those villages and municipalities have not received pushback or a significant number of requests for ordinance variations.

Does this create overregulation in the Village? Shouldn't supply and demand determine the number of bike parking spaces in the Village? The Village has a declared goal to accommodate various modes of transportation. Again, we have approached this partially through public goods like the streets and roads in the Village, and we need to take into account those parts of the transportation network that is in private hands. What this Bike Parking Ordinance does is provide a tailored and focused approach to regulate this part of the transportation network.

How would installation of bike parking in shopping centers work? This is obviously part of the comprehensive development of a shopping center for several future tenants, so it's going to be part of a comprehensive approach at the beginning of the planning process.

Lastly, what does the bike plan that we just talked about say about bike parking? The bike plan explicitly encourages the Villages to adopt such a bike parking ordinance. That is the end of my presentation.

CHAIRMAN ENNES: Thank you. Can I have a motion to accept the Staff and the BPAC report into the record?

COMMISSIONER DAWSON: So moved.

COMMISSIONER WARSKOW: I make such a motion.

CHAIRMAN ENNES: Second?

COMMISSIONER DAWSON: Which one of us got the motion? I'll make the motion and Mary Jo can second. We said it at the same time. We're trying to clarify which one did the motion.

CHAIRMAN ENNES: That's fine. Let's start down at that end. Lynn, would you like to start with any questions you may have?

COMMISSIONER JENSEN: Sure. I do have some questions and then some comments. First of all, I want to say I'm really not at variance with most of the recommendations that you had made about needing a bike parking infrastructure. I think we do and I think that the entire infrastructure for bike paths and parking ought to be built out as rapidly as it can be. I have significant disagreements with how on a couple of issues.

One, should you rely on the vicissitudes of the petitioners who come before the Plan Commission to direct the development of the bike parking infrastructure? Or should we do it in a more thoughtful way which is planning done by the Village Staff? So, that's the first question. Do we let just whatever happens in the Plan Commission drive where we're going to put bike racks? I don't believe that every place in the Village ought to be considered a bicycle destination personally, but I think there are a lot of them, I think they could be put in place at key points, key strategic points eventually determined by the Village Staff.

The other point that we had disagreement on is how do we finance this? I cannot see, I'd love to know the rationale for financing this by shifting a Village burden, a Village cost which is to build a community-wide thing that is beneficial in terms of an alternative mode of transportation which should be a Village responsibility and should be paid for out of tax dollars. What is the rationale possibly for shifting it to the handful of people to bear all of the additional cost of adding to the infrastructure?

Those are the key points that we disagree on. I do have some comments but I'd like to start there and respond --

MR. SZABO: I can respond to that just by referring to what Juergen said in the presentation. Simply, it's that the ordinance that's presented this evening is proposing that, in the same way that the Village requires various business types to provide motor vehicle parking to accommodate the cars that may be stored at say a restaurant or someone's dining, or maybe for the staff who is working there, there would also be a need for those who bike to that restaurant, to have a secure place to leave their vehicle while they're at that establishment. Since that's something that the Village is already requiring for these private businesses in regard to motor vehicles, this ordinance proposes that the same framework be applied to bicycles.

COMMISSIONER JENSEN: Well, I don't completely agree with that because I think that the way the automobile parking works is that the Village maintains the basic infrastructure which is streets, on-street parking, and even built some structures which they charge a fee for if you park. So, the infrastructure itself is paid for by the Village as a public good. When somebody brings an activity before the Plan Commission where they're going to create additional traffic and additional parking needs for their business, we do have some standards that require them to add parking. But it's essentially their parking, it's not public parking.

MR. SZABO: Right.

COMMISSIONER JENSEN: They could basically say, you know, we don't want any other vehicles here other than those who are shopping in our stores, and in fact

everybody should really park where the signs say that. What you're asking for is that the business owner be responsible for creating a public parking rack that anybody could use.

MR. SZABO: No, that's not what it's proposing. It's proposing that in the same way that patrons of a business are provided parking at a shopping mall for their car while they're shopping at that mall, they would also be required to provide bicycle parking for patrons of that mall. So, if someone were to store their bicycle at a shopping mall and not be shopping at that mall, then it would be up to the discretion of that property owner, the business owner, to remove the bicycle, you know, the equivalent of having it towed for unlawful or unpermitted use of that parking structure.

COMMISSIONER JENSEN: So, what you're calling for creates no public parking of the bicycles?

MR. SZABO: That's correct.

COMMISSIONER JENSEN: There's no public part of the infrastructure.

MR. SZABO: That's correct.

COMMISSIONER JENSEN: Then let me ask you about the existing parking. You've got about 2,500 parking in the developed part of Arlington Heights, and from an earlier presentation you indicated that there were about 2,500 additional ones that you thought you'd need over some period of time. You also indicated in this plan that you're going to have additional routes of one type or another, the bike routes and so forth.

Are you planning any parking in any of the, either the developed areas that don't have parking or along the new routes that you're going to be hoping that the Village will now in the ordinance build?

MR. SZABO: So, the reason this ordinance was proposed initially is because it directly ties the requirement for new bike parking with the growth of the Village. So, as a business moves into the Village, we get a new destination maybe on a bike route or off of a bike route. If this is a destination that is listed in the table that we've set forth in the proposed ordinance, then as that destination is built and opened, then there would also be parking for people who are visiting that business. So, rather than forecasting where we might see development, it would just be growing with the Village as it grows.

COMMISSIONER JENSEN: But as I read your ordinances, everything that is not a low density, meaning one-family or two-family structures, basically, the way the Commission is looking at it, becomes to a destination and has to put in a bike rack.

MR. SZABO: So, well, outside of the downtown --

COMMISSIONER JENSEN: You have 40 categories in which you want to add new ordinances, and it's everything with low density residential counting as I read it.

MR. SZABO: What's the question?

COMMISSIONER JENSEN: Well, my question is, first of all, is that correct? That you want everybody, you want to consider everything a destination and you want to --

MR. SZABO: Well, just the uses that are listed.

COMMISSIONER JENSEN: -- coming before the Plan Commission who is not building a one or two-family structure?

MR. SZABO: It's not every type of permitted use for the Village. It's just the uses that are listed in the motor vehicle parking requirement.

COMMISSIONER GREEN: Which is all of them.

COMMISSIONER JENSEN: Well, it's virtually everything.

MR. ENRIGHT: If I could comment on that?

COMMISSIONER JENSEN: Sure.

MR. ENRIGHT: It's not actually how it would be implemented. Auto parking applies to every use, so we do have a lot more line items in the permitted use table although recently that's been, you know, condensed. However, if the permitted use could be fitted in one of these categories, we don't have as many, these are more broad-based categories in the parking section, but in the permitted use table we do find every one of those permitted uses will fit into one of these categories. If not, there is a provision that says, you know, or more similar to --

COMMISSIONER JENSEN: So, it's essentially everything that goes into the residential dwellings is what will attract from the item. I think that is a very, you know, I think it's what people think about when they refer to regulatory overreach and an inappropriate regulatory burden placed on people. The Village wants to do something for the general benefit of the community, and you're going to take these people who have the misfortune of having to come before the Plan Commission and petition before it and you're going to say you're going to bear the cost, whether your business plan suggests a need for parking or not. We're basically going to require them.

Now, if their business plan required, it will have to do with either their employees or their customers, you know, they should want to and we should encourage them to not only put the rack in and pay for it. But now you don't have very good numbers as we do in automobiles to sort of project what kind of use you're going to get.

MR. SZABO: Right, and I think that as our roadways become more accommodating to cyclists, we'll see more cyclists. I think that we already do have a good number of cyclists on the street, it's just that there are inadequate resources to conduct counts on that type of roadway use.

I'd just differ with you on one point. You had said that anyone who had the misfortune of coming before the Plan Commission as a petitioner, I would say that people who want to open up a business in Arlington Heights are actually fortunate because I think that we can provide good patronage and --

COMMISSIONER JENSEN: What I mean is they are unfortunate in the sense that they have to pick up the total cost of the bike rack.

MR. SZABO: Well, but that was --

COMMISSIONER JENSEN: The number that you guys used in the Ordinance Review Committee is about \$625,000 over a ten-year period of time.

MR. SZABO: But it's small for --

COMMISSIONER JENSEN: Now, admittedly for individual businesses it's not huge.

MR. SZABO: Right.

COMMISSIONER JENSEN: You know, it's \$500-\$600 and so forth. But that is a lot of money to ask people who want to come into the community and change the use or to build any construction, to pick up the total cost for from what my point of view as we discussed in Ordinance Review Committee is essentially a public good. In fact, the best way I think I would illustrate this is if we took the position where the Village accepted the responsibility that it was a public good, that they had an obligation to handle in the development of the infrastructure for routes as well as parking, my question would be would they want to require themselves to pay for the biking rack at every one of the destinations that you laid out in the ordinances? And I doubt

that, they would not want to be constrained to have to put a bicycle rack at Village expense in every place that you have, that would be affected by these ordinances.

So, my point, I won't go on any further, I just can't support this kind of extension of ordinances. I think the Village needs to take the responsibility for what it wanted to do. It wanted to create an alternate mode of transportation. It wanted to build the infrastructure which includes routes and parking. I think it ought to do that, I think it ought to be done at public expense. I don't think that cost should be shifted to somebody that would come before the Plan Commission.

But I do want to end this saying I am very much in favor of building out the entire infrastructure. I think the Village ought to do it and it ought to do it on a quicker time frame than what you would do if you waited for the Plan Commission and rely on the 50 or so or 20 or so projects that come before us that would qualify.

MR. SZABO: I just have three points in response to that. One is that, as Juergen said, with the Complete Streets Policy that the Village has adopted, the roadway network should accommodate both cars and cyclists, and we're proposing that that get extended to the end of the mode of travel. The second is that, yes, when you lump together all of the projected potential developments over the next 10 years, it's a large number. But the reason it is proposed in the fashion that it is, it's because it's incremental, and so you just get those \$400 to \$600 chunks. That's the maximum cost because typically petitioners won't need to pour concrete. They won't need as extensive of an installation. If the Village does buy the racks at cost, then rather than buying them individually, they get the hopefully reduced rate that, you know, buying in bulk affords. So, I think that was my three points.

COMMISSIONER JENSEN: I don't have anything further at this point.

CHAIRMAN ENNES: Mary Jo?

COMMISSIONER WARSKOW: Yes. I have a different perspective because I do bicycle and it has been a barrier for me. My son and I just went to the new Subway, relatively new Subway on Arlington Heights Road, that is trying to attract kids with a slushie machine and no bicycle parking.

MR. SZABO: Yes.

CHAIRMAN ENNES: It is a barrier. Every place is a destination. If it is a destination for a car, it is a destination for a bicycle. Why do we require all these accommodations for cars but we don't have any accommodations for bicycles?

I disagree, I think the Village places burdens on new petitioners coming before us with the trees that they have to plant, islands in parking places, bushes they have to put up. Why do we have to stop at bicycle racks? Why?

I think it is important. I would use it. I think it is a barrier to people, and I fully support this ordinance.

MR. SZABO: Thank you.

CHAIRMAN ENNES: Joe?

COMMISSIONER LORENZINI: Question. So, how is this going to be phased in? Everybody is going to have to build right now? Or what's --

MR. SZABO: No. No, it wouldn't apply to existing businesses. In the development of the budget request that Public Works is going to propose for the coming year, we've put together a list of high priority locations that we would maybe recommend to the businesses that they consider putting in bike parking. But it would only be for new businesses as

they come into the Village.

COMMISSIONER LORENZINI: They consider or they have to?

MR. SZABO: The ordinance would require it as adopted, yes.

COMMISSIONER LORENZINI: Right.

MR. SZABO: But not, it would just be for new businesses that they'd be required to.

COMMISSIONER LORENZINI: Right. So, I kind of agree with most of my, with both of my esteemed colleagues. In other words, it's kind of the old saying, you build them they will come, you know. Maybe people would bike more if there were racks, and the Village should be encouraging the use of bikes. But again on the private side, you know, businesses shouldn't be told how to run their business, I agree with that, too. So, what I would recommend is, you know, because if somebody opens up a hospital supply store for wheelchairs, nobody is going to be biking there most likely.

MR. SZABO: I would disagree with that. Employees bike to work all the time.

COMMISSIONER LORENZINI: Okay, but, so what I would recommend is would it be possible to do like a 50-50 split where the owner, where the business who is requesting, they know their business, they know their customers, they know if they need bike racks or not, so they should share in some of the cost but then the Village should be encouraging the use of bikes, too. So, why not do something like a 50-50 split?

MR. SZABO: I can understand where you're coming from, but I think more so we know the Village of Arlington Heights and we know the sort of general layout of the Village, the plans for the Village to grow in the future and how accessible it is, how easily people can reach various regions of the community on foot or on bike. So, not all new businesses will be aware of that as well as we are, and that's why I think we have certain aesthetic requirements that people might not be aware of. I think that avoiding, to take Mary Jo's example of the Subway, avoiding the some might call it unsightly vision of a big pile of bikes in the parkway, or even worse in front of the door where they typically are piled up, if people see an open parking spot, they typically go toward that. By putting a place for these bikes to be stored, we can make it look, make the Village look better and encourage people to bicycle and encourage people to put their bikes where they're safe and out of the way.

COMMISSIONER LORENZINI: That's all I have for right now.

CHAIRMAN ENNES: Thanks, Joe. Bruce?

COMMISSIONER GREEN: Just to spring off of Joe's comment, I think that if a business decides they need a bike rack to make their business, they're going to add it. I've always felt that it's going to be driven by whatever the need is, whether it's for more money or more business, whatever it's going to be. To get enough kids to go to the Subway, whatever it's going to take, I think that the owner of the business will make the investment to make his business grow if that's what he thinks he needs.

I don't, I agree with Lynn Jensen totally. I think it's a well thought out argument. Going back years to the first time you guys came before us, I had the same feeling then, it should be a public good and it should be paid for with public dollars, and it should be controlled as you say for aesthetics by the Village. If the Village thinks it looks good and the Village is in control and they're doing it, they're going to control it and it's a natural because it's Village ownership for a public good, for a public act.

So, I don't think that, also if I can make this statement, and I'm not trying to be mean or anything here, but I really think that part of the error is the thought is if you put a bike rack there people are going to flock there, because you think everybody wants to ride a bike.

MR. SZABO: I don't know that I think that.

COMMISSIONER GREEN: I think that, like you say, if you build it they will come by bike; I don't necessarily agree with that. I think the number of bikers we have is small compared to the number of cars we have here.

MR. SZABO: That's true.

COMMISSIONER GREEN: I'm not saying it's a good thing or a bad thing, but the Village is laid out and it's seven miles from the north to the south. So, I personally do not want to ride a bike seven miles to get to a meeting that I might have on the south end of town when I live on the north end.

MR. SZABO: Sure. Some people don't have a choice. You know, kids don't have driver's licenses.

COMMISSIONER GREEN: I understand that. But there are public streets and that's why I think that an infrastructure controlled and paid for with tax dollars on public lands is a good thing. So, that's where I come from on this.

CHAIRMAN ENNES: Sue?

COMMISSIONER DAWSON: Are you shocked that I personally agree with Commissioner Warskow on this one? I absolutely agree that it is a petitioner's responsibility. I see no difference between this and parking improvements whatsoever.

I sit here for, how many years have I been on this Commission, eight or nine years on this Commission, and I have heard all the Commissioners up here insist that petitioners impose things on their business that they don't want to put in. I hear you have to put in a fence, you have to move this garbage can, you have to put in this parking space. You have to put in this and this and this and this and this. The petitioners say we're not going to use it. We don't need it. It's unnecessary for my business. All the time, almost every meeting that comes up to some degree.

Why are we so upset about a bike rack? I don't get it. It's no different than any other item that we impose on these petitioners. It's not an excessive cost. We're talking about \$500 here. It's not an overreaching burden.

I run a business. People tell me what I have to do all the time. I have restrictions on what I can and can't do in my own business. I don't run around crying because someone imposed a restriction on how I can put in, you know, I can't take recycling, I can't collect recycling, okay, it sucks, I don't have recycling pick up.

This is a business. They need bike racks. We need bike racks. And I am very disappointed that the Commissioners up here would assume the privilege with which they live that allows them to travel by car is enjoyed by every member of this community. It is almost borderline discriminatory to me which is what has me so upset, because we have numerous members of this community who can't drive, who can't always afford gas, who might have one car and someone else needs to get somewhere in an emergency situation.

So, because you sit up here and your family has five cars in the driveway, don't presume that every person who lives in the Village of Arlington Heights who pays taxes and is a contributor to this community can also drive everywhere. Right now, they have

nowhere to park their bikes. They can't enjoy the same places that you can because they can't get there by car.

So, I don't see why this is such a big deal to put in some bike racks. It's very upsetting to me to hear this viewpoint up here that people can't think outside of their own homes, their own, you know, two-car, four-bedroom, nice existence, to see that there's other walks of life in this town.

COMMISSIONER JENSEN: Sue, you didn't hear anybody say we didn't want bike racks.

COMMISSIONER DAWSON: No, but you're saying that we should pick and choose where they go based on what we believe is where these people are going to need to bring their bikes to. We don't know where that is. We don't know what that is. We don't live, we don't walk in their shoes, we don't make these decisions. We need more bike racks.

I do agree, Lynn, with you on one point which is I don't know that we need a bike rack at every corner. I do think that there needs to be some oversight by Staff if we feel that an area is oversaturated for whatever reason in bike racks. There needs to be some allowance by the Village to feel, just like we do with parking, there's times when a new use would have an increase in parking. Oh, we need 15 more spaces, except we do a parking study and you find we really don't need 15 more spaces.

The Staff is well positioned to look at that situation and advise to the Commission we already have spaces for six bikes. We've done a bike study, only two of them are used. There is no additional bike racks needed, we recommended that that requirement be waived. I think that would be a much more appropriate way to reduce an over-implementation of bike racks, to have a waiver policy or some sort of bike rack study along with the traffic use study, rather than simply saying we're not going to impose this burden whatsoever.

So, I completely support the ordinance. I think we need this ordinance. We have to move forward on this issue. I hope more of my fellow Commissioners support it.

CHAIRMAN ENNES: Thank you. I have a comment to that. I don't recall any of the Commissioners say we don't need bike racks. I think that was a disagreement on how we pay for it. But I strongly agree with the whole plan which I think all the Commissioners do, the whole bike plan. I think we do have a disagreement about how the new racks should get paid for. But I would at this point ask if there any comments from the audience. Please give your name and spell it.

QUESTIONS FROM AUDIENCE

MR. MEDSKER: I'm Allen Medsker, I'm a member of the Bike & Ped Commission and a very interested bike commuter that lives in Arlington Heights. I guess what the point I would want to make is we really just want bicyclists to be given the same things that we give to people that use other modes of transportation. So, you know, if you have an organization that comes in and wants to build something out and we tell them you need this amount of car parking, the ordinance is exactly the same thing just for bikes, except that it's an infinitesimal amount of money compared to what they might spend on a parking lot where they have to stripe it and plow it and do everything else.

So, I mean if you don't want to treat bikes the same way, then I guess

that's an opinion that you can have. But I think that as a Village government and as a Village community, I think we do want to support cycling and people that do something besides ride in a motorized vehicle to allow them to get around safely, to be allowed to safely lock their bike up in a lot of cases. You can see a lot of bikes that are, you know, locked on to trees or some other inanimate object. Nobody likes to see that. While a lot of that is downtown, it's other places, too.

You know, we're not, the imposition is tiny, it really is. There's not much that we're "imposing" on a business owner to do this. As has been pointed out, we have not really had pushback at all on either of the other communities that we've talked to that have implemented these types of ordinances. So, I would really encourage you to accept the proposed ordinance as it is and let's move forward.

CHAIRMAN ENNES: Any other public comment? Okay. Any other deliberation from the Commissioners?

COMMISSIONER LORENZINI: So, what other villages have done this? And is it exactly the same?

MS. SCHWAB: They're all, there are variation differences, but we used the most, what closely followed what recommendations we're making. But all of them are pretty close to the recommendations that we have. Schaumburg, Elmhurst, Naperville is another one. Champaign, but I probably would go for other ones. There was a lot of other ones. I had at the previous meeting a list of who I called and who the contacts were, but those are the ones off the top of my head.

COMMISSIONER LORENZINI: Thank you.

COMMISSIONER GREEN: I have a question just before we get into anything. Is there any, Bill, maybe you can answer this. Is there any reason the Village does not want to accept this as a public good for all public to use? Or get involved with this?

MR. ENRIGHT: Well, this is a public good but I mean, you know, Commissioner Jensen talks about the streets which the Village, the Government provides, Village, County, State, as the main component of the infrastructure for automobiles, primarily for automobiles. But also hopefully for bicycles, and that's what the bike plan hopefully gets us towards, to improve that system for bicyclists to share, but also have, you know, additional routes off the street. But when you get to the destination, it's not the government's responsibility to provide the private parking for the private land users.

Downtown is an unusual, it's a different animal. It's not a good comparison for the community as a whole. There are positive reasons why we provide parking downtown, but we also provide the bike racks downtown, at least most of them. So, downtown is a little bit different than the rest of the community.

So, I think it's the government's certain responsibility to enhance the ability for multi-modal transit. It is a stated goal of our elected officials. They have adopted the Complete Streets program. They have stated, the elected officials, that they want us to encourage multi-modal transit. Since we don't have a lot of bus routes, we only have Metra, we don't have other alternate modes, it really comes down to either ride sharing or bicycling, in addition to all those.

So, no, I don't believe that the administration's level, Jim Massarelli is the Director of Engineering, I don't believe it's our responsibility to provide these private racks on private property. But I do believe it's our responsibility to provide the public the means to get from these points via the public right of way.

COMMISSIONER GREEN: Well, if you have public streets with public parking, you're maintaining parking spaces for cars, and the Village owns right of ways up to sidewalks. So, if you put a bike rack next to the parking lane where we provide for the cars, what would the difference be?

MR. ENRIGHT: Well, it's a lot different in the triangle area for instance. There is no on-street parking on those major roads. They're also IDOT's jurisdiction so we don't have the authority to do that without their permission. Is there enough right of way on the edges of the right of way?

COMMISSIONER GREEN: We have sidewalks, so I assume that there would be a spot.

MR. ENRIGHT: We could explore that certainly. But again, you know, these are largely, I mean a lot of these streets are out of our jurisdiction anyway, but we can secure approvals to do that. I mean I don't think IDOT will object. Jim, I don't know if you want to add to that.

MR. MASSARELLI: Actually I'd like to take a step back and just go over the basic logic that we use, that I believe Bike Commission used to come up with the basic concept of what we're talking about. When you look at public infrastructure, roads, sidewalks, bike paths, getting from point A to point B, the government, the public funding gets that completed. That's what we do. But once you get to a business, a private entity, as part of the requirements whenever a new business comes in, we have many requirements for parking lot improvements, sidewalk improvements including ADA. The next step that we have been neglecting is for that next step of transportation, it's for bicycles. What happens, why is a bicycle not given the same private requirements as a pedestrian or a vehicle?

I guess that's where we put our basic concepts together to come up with this, to wrap ourselves around, so we can understand and present to you how we came up with this, not that we're just trying to put an ordinance together to make somebody feel good about something. But there is a purpose to the ordinance and to take it to the next step that we've been made aware of, just like we were made aware of 15 years ago, hey, you know, your ADA ramps need to get improved, and they're not at the level they need to be. We took that and we spent a lot of money to improve it, and we have a community right now that turns accessibility for sidewalks and pedestrians that there are very few areas that people can't get to. We're still working on them, we're not perfect.

But now the next step is to do that with bicycles. The logical process is to follow what we've done before with vehicles, with pedestrians, now bikes. So, once you get to a private business, the parking of that, you have a parking lot, you have bike racks, and then you have ADA accessibility for pedestrians who need that. So, I think that's where our logic comes through in terms of putting this all together to try to focus on complete streets and to get everybody who's trying to get some place the opportunity to get there and to be safe in where they park with their bicycles or cars or how they get there if they're walking or if they need assistance, if they're in wheelchair or a walker.

So, that's, I just want to give you guys our logic that we just didn't come up with this and say, well, Skokie is doing it, Addison is doing it, or Elmhurst is doing it, so we should do it. There's a lot of background, a lot of thought that goes into it. So, I just wanted to present that so you guys understand where we're coming from so maybe you can get a better understanding of our logic to this point.

COMMISSIONER JENSEN: Yes, I really appreciate the explanation, I think it's a good one. I can support many of the elements in that. My concern is the way these ordinances are written, they're so definitive. So, for example, we spend a lot of time talking about parking requirements here. It's deliberated back and forth, it can go all the way up to the Board on parking. I don't see that in these ordinances.

So, what I see is you have one intersection actually pointed out in the report that is the most crash problem in the Village, it's Algonquin and Arlington Heights Road. There were like four, in a short period of time, there have been four bicycle accidents and I forget the number of car accidents, but it was huge. We didn't have ordinances to require it, but we did a lot of -- things to get the BP there which is a carwash convenience store and a gas station to put in a bike rack which nobody uses. I know they don't because I've stopped there a few times and I said have you ever seen anybody park a bike here? They said of course not, it's a dangerous intersection.

These ordinances are written in such a definitive way that there is no, they don't even give the owners the kind of due process we give to people on the parking spaces.

So, I think I would support these if they were written a little less definitive in that sense. I still think much of it should be paid for out of public coffers rather than forcing that, that's just a philosophical thing. I did think everyone should not be forcing people to spend money. It's much easier to spend other people's money.

I do feel that if it were required that the Village were to pick up the cost of these, I think that Staff would be very circumspect on where they want to have these placed. I don't think it would be every place as a destination. But that's just a philosophical issue.

I think that these ordinances would be better if they didn't require more BPs to have it around the Village. So, that's a major sticking point for me.

MR. MASSARELLI: Actually to add to what you're saying, honestly we deal with a lot of those parking studies that you talked about, but on the other side of that, when we went through 15 years ago, when we had a big portion in terms of getting ADA accessibility, I probably dealt with, I want to say close to 100 residents who would say why are you wasting money putting a ramp in there? I've lived here 50 years and I've never seen a person in a wheelchair. Why are you doing this?

So, I guess it's in the same frame of mind in terms of you don't know when that person is going to need this accessibility in terms of a wheelchair. Obviously that's a lot different than a bike parking, but it's in kind of the same thought process that goes through it. So, I guess when there is somebody who is riding a bike and goes to BP and finds a bike rack, and maybe it happens once every three years, I don't know, but it's there so they can use it. I guess it's that same philosophy that we've used for other things. So, just again another frame of mind, another thought process to kind of think about in terms of what we do on our side in terms of improvements.

CHAIRMAN ENNES: Anything else?

COMMISSIONER WARSKOW: I just want to say I appreciate you bringing it down a level of thought. I'm very passionate about this. I do think it's just an inequality. I think that it should be equal access. Some people spend a lot of money on their bicycles, and if they want to get someplace and there is no place good for them to lock up something that may have costed them more than the bike rack, then you know, they're taking a risk. I think we require parking at businesses for vehicles, I just don't see why we can't treat bicycles the same.

CHAIRMAN ENNES: Anything else? Can we have a motion?

COMMISSIONER WARSKOW: I can certainly make a motion, I just don't know if it's going to get voted in the right way.

COMMISSIONER GREEN: You mean your way, your way. I got it.

COMMISSIONER WARSKOW: I mean where the majority is going to go.

COMMISSIONER GREEN: I see.

COMMISSIONER WARSKOW: Motion to recommend.

A motion to recommend to the Village Board of Trustees approval of PC #13-011, Code Amendments to Chapter 28, Section 11, Bike Parking Ordinance.

CHAIRMAN ENNES: And a second?

COMMISSIONER JENSEN: Second.

CHAIRMAN ENNES: Roll call.

MR. ENRIGHT: Commissioner Warskow.

COMMISSIONER WARSKOW: Yes.

MR. ENRIGHT: Commissioner Jensen.

COMMISSIONER JENSEN: No.

MR. ENRIGHT: Commissioner Dawson.

COMMISSIONER DAWSON: Yes.

MR. ENRIGHT: Commissioner Green.

COMMISSIONER GREEN: No.

MR. ENRIGHT: Commissioner Lorenzini.

COMMISSIONER LORENZINI: Yes, with comment.

MR. ENRIGHT: And Chairman Ennes.

CHAIRMAN ENNES: Yes.

MR. ENRIGHT: The motion passes.

COMMISSIONER LORENZINI: My comment is, again I think the idea of a 50-50 split is a good one because on the Village's side, we should encourage bike travel and maybe share the cost. On the owner's side, I think the owner knows the best his customers, if they use bike racks. If he does, he should pay for some of it, too, because I just don't think that just the attitude of the Village knowing everything that every place needs a bike rack. I'd rather leave it up to the owner to request it and the Village to approve it because the Village would have to see if it's reasonable, too, if it's going to be put somewhere. I definitely encourage, I would like the Village to encourage bike travel.

MR. ENRIGHT: We have one other item. We skipped over the minutes approval. If we could have a motion and a voice vote to approve the minutes?

CHAIRMAN ENNES: What meeting was that? I don't have that.

MR. ENRIGHT: It's on your agenda, 2214 East Palatine Road Subdivision, the two-lot subdivision. I just need a motion to approve.

COMMISSIONER LORENZINI: I'll make a motion to approve it.

COMMISSIONER GREEN: I'll second.

CHAIRMAN ENNES: All in favor?

(Chorus of ayes.)

CHAIRMAN ENNES: Any opposed?

(No response.)

CHAIRMAN ENNES: Is there anything else?

MR. ENRIGHT: That concludes this evening's meeting.

CHAIRMAN ENNES: Is there a motion to adjourn?

COMMISSIONER DAWSON: So moved.

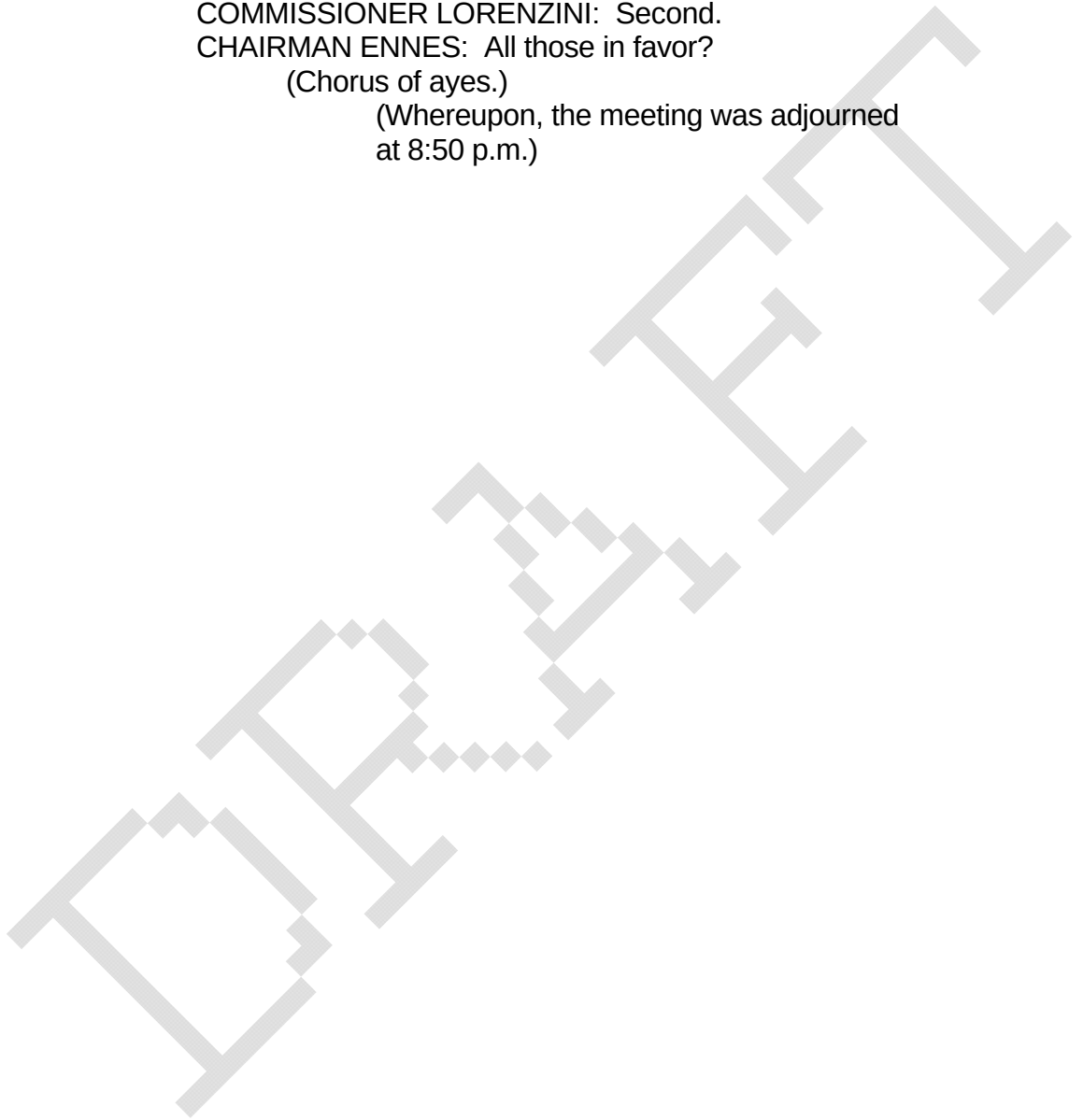
CHAIRMAN ENNES: Is there a second?

COMMISSIONER LORENZINI: Second.

CHAIRMAN ENNES: All those in favor?

(Chorus of ayes.)

(Whereupon, the meeting was adjourned
at 8:50 p.m.)



Memo

To: Ordinance Review Commission
From: Briget Schwab, P.E., Civil Engineer II
Subject: Draft Ordinance Section 28-11.18 Required Number of Bicycle Parking Spaces
Date: May 18, 2017

Since its last appearance in front of the Ordinance Review Commission in May 2013, the Bicycle and Pedestrian Advisory Commission (BPAC) has been working to refine and further research the proposed Code amendment to Chapter 28, Section 11. The proposal is based on national best practices and existing examples from other municipalities in the region, as well as feedback from Village staff.

The following changes have been made to the proposed ordinance:

- BPAC updated the formatting to allow for more specificity and a closer adherence with formatting found in similar Municipal Code.
- BPAC has written this ordinance without direct reference to the motor vehicle parking ordinance to minimize confusion.
- This ordinance will apply when a change in use results in the requirement for additional off-street motor vehicle parking as well as new construction.
- When applicable, a maximum number of bike parking spaces were added to avoid unnecessary requirements.
- The Planning Department is given discretion to allow for a lower number of bicycle parking spaces or no bike parking at all based on circumstances presented during the approval process of a new project.
- The ordinance does not apply to the downtown area.

The BPAC pursued this initiative to promote active transportation in our community, and to bring more people to new and existing Arlington Heights businesses and other community destinations. During the community outreach phase in the development of the proposed Bicycle and Pedestrian Plan, over 70 residents responded that lack of bicycle parking at a destination was a major barrier. Additionally, 56 map markers were placed throughout the Village indicating additional bike parking was needed which is significant given the wide range of topics to choose from. The Village currently has a great network of bikeways and has adopted a Complete Streets Policy requiring all types of

road users to be considered in the planning process; the next step is to provide places for cyclists to leave their bikes while shopping, having dinner, at a theater, etc. Adding bicycle parking is a low-cost and space-efficient way to add parking. The presence of available bike parking also serves as encouragement to bike to or stop at a business. Some destinations, such as the downtown Metra station, have numerous spaces and receive many cyclists. However, there are many destinations that have inadequate or no bicycle parking. A lack of bicycle parking can lead individuals to leave their bikes on the sidewalk, signposts, benches, or trees, creating unappealing and potentially harmful situations.

In our region, numerous villages have adopted similar bicycle parking ordinances. The Village of Skokie's ordinance, which served as a model for this ordinance was adopted in 2005. They have successfully worked with business through the plan review process and consider the ordinance to be working well. The Village of Schaumburg has required bicycle parking in new developments for decades. The Village of Naperville enacted a bicycle parking ordinance in 2006 and has reported successful implementation of their ordinance. The City of Elmhurst recently adopted a Bicycle Parking Ordinance which was strongly encouraged by their new Bike Plan. Schaumburg, Naperville and Elmhurst have all been designated Bicycle Friendly Communities by the League of American Bicyclists. The range of required spaces in all of the above ordinances are in line with the proposed ordinance for the Village of Arlington Heights and, upon adoption, should be enforced as is any other section of the Municipal Code by whichever department deemed appropriate by Village staff.

In addition to interviewing other communities, the BPAC applied the requirements to existing businesses to determine if proposed requirements were feasible. Also, the Engineering Department performed several bike counts at various locations to verify existing usage rates at businesses that currently have racks installed. Unfortunately, usage data in other communities is not collected and they were unable to report numbers.

At the BPAC's previous appearance before the Plan Commission and the Committee of the Whole, there were questions on the applicability of the ordinance to certain types of uses, such as gas stations. The Commission believes that all types of businesses should be subject to the ordinance, similar to motor vehicle parking zoning regulations. Each place of business, no matter how small or auto-oriented, has employees and customers who may choose to bike. Additionally, interior bicycle parking spaces provided for tenants or residents, while beneficial, should not qualify towards the requirements of the ordinance unless they are available to the general public.

It should be noted, that Village staff has supported this initiative and is currently encouraging developers during the plan review process to install bike racks under the original proposed ordinance and the Village has seen all businesses willingly comply, with some businesses exceeding the requirements. A table of these businesses is included with this memo.

11.8 Schedule of Bicycle Parking Requirements

Bicycle Parking (BP) is defined any designated space made publicly available for secure short-term bicycle storage. Designs and dimensions of BP spaces and structures must comply with standards set forth in the Association of Pedestrian and Bicycle Professionals *Bicycle Parking Guidelines* handbook. The minimum number of required off-street BP spaces shall be determined using the guides set forth in this Section. These requirements shall apply in the case of new construction or when a change in use results in the requirement for additional off-street motor vehicle parking. However, if space is not available or feasible on a site to provide the required number of bicycle parking spaces, the Director of Planning may determine that fewer or no spaces be provided.

These requirements are established to ensure adequate parking and access for the following building and development types in the Village of Arlington Heights.

11.8-1 RESIDENTIAL USES

USE

REQUIREMENT

Multiple Family Dwelling in the R-5 and R-6 Zoning Districts

One BP space for every 10 dwelling units

Multiple Family Dwellings in the R-7 Zoning District

One BP space for every 10 dwelling units

11.8-2 RETAIL – COMMERCIAL AND SERVICES

USE

REQUIREMENT

Amusement Device Arcades

One BP space for each 6000 square feet of floor area, minimum of two BP spaces

Automobile Service Stations

One BP for every 40 employees, minimum of two BP spaces

Banks

One BP space for each 6000 square feet of floor area, minimum of two BP spaces

Beauty Shops

One BP space for each 5000 square feet of floor area, minimum of two BP spaces

Bowling Alleys

One BP space for each 5000 square feet of floor area, minimum of two BP spaces, maximum of 12 BP

Dance Studios

One BP for every 2% capacity, minimum of two BP spaces

Furniture and Appliance Stores

One BP space for each 12,000 square feet of floor area, minimum of two BP spaces, maximum 12 BP

Health Clubs	One BP space for each 5000 square feet of floor area, minimum of two BP spaces
Motor Vehicle Sales	One BP space for each 12,000 square feet of floor area, minimum of two BP spaces, maximum of 12 BP spaces
Offices - Business, Professional & Governmental	One BP space for each 6000 square feet of floor, minimum 2 BP spaces, maximum of 36 BP spaces
Offices - Medical or Dental Clinics	One BP space for every 4000 square feet of floor area, minimum 2 BP spaces, maximum of 12 BP spaces
Medical Center	One BP space for every 6000 square feet of floor area, minimum of two BP spaces, maximum of 12 BP spaces
Personal Trainer	One BP space for each 5000 square feet of floor space, minimum two BP spaces
Restaurant- Carry-Out	One BP space for each 6000 square feet of floor space, minimum of two BP spaces
Restaurant- Sit Down	One BP space for each 900 square feet of seating area, minimum of two BP spaces, maximum of 24 BP spaces
Retail Stores- Not Otherwise Specified	One BP space for each 6000 square feet of floor area, minimum of two BP spaces, maximum of 24 BP spaces
Theaters (indoor)	One BP space for each 6000 square feet of floor area, minimum of two BP spaces
Undertaking Establishments, Funeral Parlors	One BP space for each chapel or parlor, minimum of two BP spaces

11.8-3 WHOLESALE, STORAGE, AND PRODUCTION

USE

REQUIREMENT

Establishments Engaged in Production, Cleaning, Servicing, Materials, Goods or Products, or Engaged in Research and Development

One BP space for each 40 employees, minimum of two BP spaces

Warehouses and Storage

One BP space for each 40 employees, minimum of two BP spaces

Wholesale Establishments

One BP space for each 40 employees, minimum of two BP spaces

11.8-4 COMMUNITY SERVICE USES

USE

REQUIREMENT

Colleges & Universities	1 BP for every 20 employees and 2.5% of max enrollment
Community Centers	Spaces equal to 2% of capacity, minimum of two BP spaces
Churches	One BP for each 100 seats, minimum of two BP spaces
Day Care Centers	One space for every 100 children at maximum enrollment plus three spaces per every 40 employees, minimum of two BP spaces
Schools	1 BP for every 20 employees and 2.5% of max enrollment
Hospitals	One BP space for every 80 employees, minimum two BP spaces
Libraries, Art Galleries, Public Museums	One BP space per every 20,000 square feet of gross floor space, with a minimum of two BP spaces
Places of Assembly as follows: Stadiums, Arenas, Auditoriums (other than Church College or Institutional School), Convention Halls, Skating Rinks, and other similar places of assembly	BP equal in number to 1% of the capacity when capacity is >10,000 persons, 2% when capacity is <10,000 persons
Recreational Facilities	BP spaces equal in number to 2% of capacity
Schools, Commercial	One BP space for every 20 employees plus BP spaces equal to 2.5% of the maximum number of students projected to be in attendance at any one time.
Schools, Elementary and High	One BP space for every 20 employees plus BP spaces equal to 2.5% of the maximum number of students projected to be in attendance at any one time.

11.8-5 MISCELLANEOUS USES

<u>USE</u>	<u>REQUIREMENT</u>
Fraternities, Sororities, Dormitories	One space for every 20 lodging rooms plus BP equal to 2% of the capacity in persons (exclusive of lodging room capacity)
Hotels & Motels	One BP space for each forty employees, minimum of two BP spaces, plus BP spaces as required for any restaurant that is included
Nursing Homes	One BP space for every 40 beds
Private Clubs & Lodges	One space for every 20 lodging rooms plus BP equal to 2% of the capacity in persons (exclusive of lodging room capacity)
Crematories, Mausoleums	One BP space for each 40 employees (minimum two BP spaces)

For uses not listed in this schedule of BP requirements, BP spaces shall be provided on the same basis as required for the most similar listed uses. However, BP spaces shall not be required for Construction Yards, Day care Homes, Freight Terminals, Private and Public Utility Facilities and Single Family/Two Family Dwellings.

The required BP spaces for a multi-tenant commercial or industrial development may be combined at one location on the site provided that the total number of spaces is not less than the required sum for the combined square footage of all the tenants, and the location is within 200 feet of each tenant entrance.

If space is not available on a site to provide the required number of bicycle parking spaces, the Village may determine that fewer or no spaces be provided.

11.8-6 BIKE PARKING IN THE DOWNTOWN DISTRICT

Bike parking is not required in the Downtown District except for Planned Unit Developments, in which case the number of BP spaces will be determined as part of the formal review process.

Bicycle Parking Ordinance (if applied to recent developments)			
Development	Address	Bike Parking Required by Proposed Code	Actual Bike Spaces Provided
2020 E. Northwest Hwy Commercial/Culvers	2020 E. NWH	One BP space for each 900 square feet of floor area, minimum of two BP spaces, maximum of 24 BP spaces (4500 SF) = 5	12 spaces (2 racks 6 per rack)
Dunkin Donuts	1818 W Northwest Hwy	One BP space for each 900 square feet of seating area, minimum of two BP spaces (500 SF) = 2	3 spaces (1 rack)
Arbor Lane Townhomes	1605 E Palatine Rd	One BP space for every 10 dwelling units (16 units) = 1	0
BP Gas Station/Convenient Mart/ Car Wash	2250 S AH Road	One BP for every 40 employees, minimum of two BP spaces =2	6 spaces(1 rack 6 per rack)
PNC Bank	1800 N AH Road	One BP space for each 6000 square feet of floor area, minimum of two BP spaces = 2	2 spaces (1 rack)
Medical Office	1051 W Rand Rd	One BP space for every 4000 square feet of floor area, minimum 2 BP spaces, maximum of 12 BP spaces (18,800 SF) = 6	0
Arlington Crossings Townhomes	800-900 E Wing	One BP space for every 10 dwelling units (66 units) = 6	0
Transitional Care (TCM)	1200 N AH Rd	One BP space for every 40 beds (120 beds) = 3	0
Marianos	800 E NWH	One BP space for each 900 square feet of floor area, minimum of two BP spaces, maximum of 24 BP spaces (66,393 SF) = 24	24 spaces (4 racks 6 per rack)
Smashburger/Jersey Mikes	115 W Rand	One BP space for each 900 square feet of floor area, minimum of two BP spaces, maximum of 24 BP spaces (5100) = 6	4 spaces (1 rack)
Esplanade	Euclid/Salt Creek Ln	One BP space for each 900 square feet of floor area, minimum of two BP spaces, maximum of 24 BP spaces (17,700 SF) = 20	10 spaces (5 inverted U racks)

***Minutes of the Arlington Heights Bicycle and Pedestrian Advisory Commission
Tuesday, March 14, 2017 in the Hanson Room at Village Hall***

COMMISSION MEMBERS IN ATTENDANCE:

Peter Szabo, Chairman
Dr. Michael Bagby D.C.
Paul Danko
David Easley
Juergen Juffa
Alan Medsker

MEMBERS ABSENT:

Michael Walczak

STAFF PRESENT:

Briget Schwab, Engineering Liaison, VAH

OTHERS PRESENT:

RESIDENTS IN ATTENDANCE:

CALL TO ORDER:

A quorum being present, P. Szabo called the meeting to order at 7:37 p.m.

APPROVAL OF MINUTES:

J. Juffa moved to approve the Minutes of the Bicycle Advisory Commission Meeting from August 30, 2016. M. Bagby seconded the motion. P. Danko and D. Easley abstained since they were absent from the meeting. The motion carried unanimously.

CHAIRMAN'S REPORT:

- P. Szabo reported that the Arlington Heights Bike Club will hold the Ride of Silence on May 17th, 2017. This year's ride will be in honor of Joni Beaudry, whom was struck and killed on her bicycle last year in Mount Prospect at Central Road and Weller Lane. The route will be slightly altered to include the crash site.
- J. O'Neal updated P. Szabo that the Graphic Design staff will be completed with the main body of the Bike Plan by March 15th.

OLD BUSINESS:

- D. Easley reported he has a meeting with the Special Events Committee meeting with Village Staff on Thursday, March 16th for the May Bike Arlington ride. P. Szabo asked if B. Schwab has heard if the proposed dates have been approved, but B. Schwab did not. The Arlington Heights Memorial Library (AHML) contacted P. Szabo because their publicity deadline is approaching and wanted confirmation of the dates. Additionally, AHML had asked if registration was still being handled the same way and is awaiting confirmation to provide registration information in their newsletter. B. Schwab stated she thought it worked well, but will confirm that the Legal department is OK with the system. P. Szabo plans to use the same forms from

previous years and will handle updating the information and will provide to Legal for them to approve the forms. P. Danko has not heard back from Arlington Heights Park District yet. P. Szabo requested that P Danko follow-up with the Arlington Heights Park District in the morning.

- BPAC finished reviewing and updating the proposed Bike Parking Ordinance. BPAC reviewed each Use by comparing proposed requirements to existing businesses to determine if proposed bike parking requirements were realistic. The following changes were recommended:
 - Bowling Alleys – maximum of 12 Bike Parking (BP)
 - Dance Studios – Minimum of two BP and one BP for every 2% capacity
 - Furniture and Appliances – Max 12 BP
 - Motor Vehicle Sales – Max 12 BP
 - Offices – Business, Professional & Governmental – One BP per 6000 SQ FT with max of 36 BP and min 2 BP
 - Offices – Medical or Dental – One BP per 4000 SQ FT with max 12 BP
 - Medical Center – Max 12 BP
 - Personal Trainer – change to 5000 SQ FT
 - Restaurant – Carry out – change to 900 SQ FT
 - Restaurant – Sit Down – Max 24 BP
 - Retail – Not otherwise specified – Max 24 BP
 - Hospitals – One BP per 80 employees, min of 2 BP
 - Community Centers – Spaces equal to 2% capacity, min of 2 BP
 - Daycare – Change ‘students’ to ‘children’.
 - Public Utility and Public Services Uses – Remove from list
 - Recreational Facilities – BP spaces equal in number to 2% of capacity
 - BPAC agreed to list of Uses that do not require bike storage.
 - BPAC agreed to add language for multi-tenant commercial or industrial developments to combine parking which was in the first version of the proposed bike parking Ordinance.
 - BPAC agreed to add language stating the Director of Planning or designee may determine that fewer or no spaces be provided.
 - BPAC agreed to add language the parking in the downtown is not required except for Planned Unit Developments which will be determined by the Plan Commission.

M. Bagby moved to approve the Bicycle Parking Ordinance. J. Juffa seconded the motion and it carried unanimously.

- B. Schwab reported that the Planning Department is currently in the process of updating the entire Zoning Code and is planning to bring the Bike Parking Ordinance when the updated Parking Regulations section of the Zoning Code is brought forward to the Ordinance Review Commission. The meeting date would likely be in May 2017, but has not been confirmed.
- P. Szabo presented a memo he drafted on behalf of the BPAC to discuss their overall approval of the recommendations made by the Planning Department. BPAC approved the memo after suggested changes were made.
- P. Szabo requested to table the discussion on Bikeways Map until next meeting.
- B. Schwab reported that Walk Arlington project is progressing. B. Schwab put together route maps from various destinations throughout town that would be considered walkable. The Village Manager and B. Schwab selected 12 locations to

launch the project and will be looking for approval from the rest of the committee which consists of representatives from Arlington Heights Library, Arlington Heights Park District, Northwest Community Hospital, Chamber of Commerce, School District 25, and the Village.

NEW BUSINESS:

- The next meeting is tentatively scheduled for April 20, 2017 at 7:30 PM.

ADJOURNMENT:

- **D. Easley moved to adjourn the meeting. M. Bagby seconded the motion and the meeting adjourned at 9:02 PM.**

APPROVED:

_____	_____
Chairman	Date
_____	_____
Secretary	Date

REPORT OF THE PROCEEDINGS OF
The ORDINANCE REVIEW COMMITTEE
OF THE VILLAGE OF ARLINGTON HEIGHTS PLAN COMMISSION
HELD AT VILLAGE HALL ON:

May 24, 2017

Project Title: Chapter 28 Amendments – Bike Parking Ordinance

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

Requested Action:

- Chapter 28 Text Amendments: Bike Parking Ordinance

Attendees: Bruce Green, Plan Commissioner
Lynn Jensen, Plan Commissioner
John Sigalos, Plan Commissioner
Bill Enright, Deputy Director Planning
Bridget Schwab, Civil Engineer, engineering Department

Bicycle and Pedestrian Advisory Commission Members:
Peter Szabo, Chair
Jurgen Juffa, Commissioner
Alan Medsker, Commissioner
Paul Danko, Commissioner

Presentation

J. Juffa presented a power point presentation to the ORC. The BPAC conducted a community survey and three main inputs resulted from the over 1,000 respondents: 1) the lack of bike parking is a major barrier to biking in the Village; 2) 56 locations were identified as areas lacking bike parking; 3) 25% of respondents would like to see more bike parking at shopping and entertainment destinations.

J. Juffa went on to present that bike racks are a low cost alternative to additional auto parking. The BPAC made some estimates on who could potentially benefit from the bike Ordinance. Review demographics, there are 44,000 persons in the Village aged 20 to 65 that are within the age group who could be fit enough to use a bike. A survey from Portland indicated that about 8% of the population would be deemed enthusiastic bike users, those who would use a bike for more than just recreation. So 8% of 44,000 provide an estimate of who could benefit. Add into the numbers a percentage of Junior High and High School aged kids in the Village (4,800 students) and the total increases.

Other communities have a bike parking Ordinance in place and the BPAC reached out to them and obtained positive feedback on how their Ordinances have worked. In addition the BPAC looked at recent Village developments and 7 of 11 voluntarily provided racks at staff request. This indicates general acceptance of providing bike parking.

CHAPTER 28 AMENDMENTS- BIKE PARKING

J. Juffa indicated that the scope of the proposed Ordinance is limited to new developments and to new businesses that would increase the parking requirements for a site. Also the Director of Planning can exempt a business if there is no physical space for a new rack. The framework for the Ordinance is similar to that for auto parking as it uses the same use categories but at a lesser ratio per square foot. There is also a maximum cap on the number of spaces for larger uses. Downtown would be exempt for new businesses but new developments would require racks.

A map was presented that indicates where there is a need for additional bike parking. Two areas were identified through the community survey where the perception is more racks are needed: Downtown and the Rand Road/Palatine Road/ AH Road commercial corridor. The BPAC conducted a utilization study of existing racks and found that 56% were in use and 44% were not in use at the time of the observation. This is an indication that racks are used by the community. Images of various styles of rack were presented.

In addition the BPAC researched the cost of bike parking and if you include the concrete base and rack, each 2 bike rack costs about \$500. It is half that if the concrete pad is already present, which would be typical. Another study found the average cost total at about \$660. A 2013 count of the Village indicated that there are about 2,500 racks in the Village. Assuming a need of another 2,500, then the cost to install the additional racks would be \$625,000. This cost would be spread among the Village, Parks, private property owners/businesses over time.

Meeting Discussion

L. Jensen complemented the BPAC for the study but he thinks that if you double the racks in the Village, this Ordinance would not achieve the desired results. If the uses don't change in an area, then it could take a long time to meet the need.

J. Juffa agreed that it would take time to implement.

T. Ennes asked if the Village could look at ways to encourage adding bike racks in the areas that are needed but that could take a long time to implement. He cited downtown events as an example.

B. Schwab indicated that the BPAC has reached out to Frontier Days festival to have areas for bikes to park during events, and that we do have racks in the downtown garages for those events.

B. Green asked why the downtown is exempted from the Ordinance.

B. Schwab indicated that the Village controls the sidewalks and garages downtown and will place racks downtown where needed. We have a database of all racks downtown and monitor the situation. We don't want to have too many racks spread out downtown due to aesthetics and different users of the sidewalk.

B. Green added that he has an issue with imposing this requirement on private businesses. Also does it raise legal issues for businesses who provide racks for the public? Also if we are getting such a good response from developers now without the Ordinance, why not then keep it voluntary? If a business thinks they need a rack for their customers let them make that determination. Racks should be publically

CHAPTER 28 AMENDMENTS- BIKE PARKING

funded on public property. He also expressed concerns with the safety of autos and bikes on the same roadways and that bicyclists too often don't obey the rules of the road.

P. Szabo indicated that he didn't think this would be a legal issue as it's really no different than businesses providing auto parking for the public.

J. Juffa pointed out that this Ordinance is in consistent with the Complete Streets Policy adopted by the Village Board to encourage alternative modes of transportation. There are engineering solutions to any issues arising from bikes and autos using the same spaces.

B. Green asked how the utilization study was conducted where it was determined that about 50% of the racks were being used and 50% not in use at the time of the study?

B. Schwab indicated that the observations were taken at one point in time and when the BPAC estimated that the usage would be at peak times. Typically the locations were observed for 1 hour.

L. Jensen handed out a summary of his thoughts to the group. He thanked the BPAC for their work and thorough study but had concerns with implementation. He stated that he fully supports good bike infrastructure but that he views this as the responsibility of the Village to provide this important piece of infrastructure and that the Village should aggressively pursue implementation. He sees this as a public good and thus a public financial responsibility. This code amendment does not accomplish the desire to have more racks where they are needed. It would take years to have racks installed when the uses don't change very often. A better approach is for the Village to purchase the racks and work with the property owners to provide the racks where they are needed. This could be accomplished much quicker. This approach is a regulatory burden on businesses. He is supportive of the Village using public funds to implement, but not supportive of the proposed Ordinance.

J. Juffa asked how a public private partnership could work.

L. Jensen stated that the Village could approach the centers where we see a need for more racks per the BPAC study and survey, and the Village could offer to pay for the racks. This approach gets the racks where we need them and not where we don't need them.

B. Enright added that the Village has a Capital Improvement Plan process to seek funding for improvements. This is an item that could be requested for funding if seen as a public purpose.

L. Jensen felt that currently developers may feel coerced by the Village into providing racks.

B. Enright indicated that developers have not raised concerns with providing racks when asked and that they often already have racks in their plans.

J. Juffa added that the proposed Ordinance is a mechanism to implement the Complete Streets Policy.

P. Szabo added that if this was required by code, then it wouldn't be perceived as coercion or pressure from the Village.

J. Juffa asked why the Committee views the bike parking Ordinance different than auto parking?

CHAPTER 28 AMENDMENTS- BIKE PARKING

L. Jensen indicated that we already have the infrastructure in place for autos, whereas that infrastructure for bikes is not fully in place. In addition all uses will require auto parking whereas not all uses require bike parking from a practical standpoint. He reiterated that he supports the infrastructure, but not via more regulations and not via the Plan Commission process.

P. Szabo indicated that the parking ratios for bikes recognizes that the bike parking needs are less than auto parking, and the proposed Ordinance addresses that difference. In addition to bike parking being a public good, it also benefits the private businesses.

B. Green summarized that the three members of the ORC are just a portion of the full Plan Commission, but that the members present are not in support of the proposed Ordinance. All the ORC members complimented the BPAC on the report and efforts.

B. Enright indicated that this would be on the Plan Commission agenda in July with the Bikeways Plan.

The meeting adjourned at 7.45pm.

Bruce Green, Chair
Ordinance Review Committee
Bill Enright, Recorder

Comments on the Proposed Bike Parking Ordinance
Lynn Jensen
Ordinance Review Committee
May 24, 2017

Arlington Heights has embraced the goal of encouraging bicycling as an alternative mode of transportation. To support this objective, the Village has for some time also worked to encourage installation of bicycle racks. These are worthy goals and should be supported. Arlington Heights should have a robust bicycle parking infrastructure that meets current and projected future needs. An important step in achieving these goals is development of the report, the *Village of Arlington Heights Bicycle and Pedestrian Plan*.

The recommended approach in this report for building the parking infrastructure seems to be:

- Develop a comprehensive bicycle parking plan (displayed on a map)
- Do a comprehensive inventory of existing parking spaces (displayed on a map)
- Determine the extent and nature of the parking space shortfall
- Develop an action plan for correcting that shortfall
- *Use the Plan Commission's petitioning process, with the new proposed ordinance changes, to require installation bicycle racks throughout the village*

The first four steps are the essence of a coherent planning and execution process. The final step, however, puts the *Village into a regulatory, command-and-control and enforcement role* that forces private entities to install and pay for the placement of bicycle racks. This approach is reflected in the proposed *Schedule of Bicycle Parking Requirements*.

I am opposed to these text amendments on philosophical as well as pragmatic grounds. Building this parking infrastructure *for the general benefit of the village's residents* turns this endeavor into a straightforward public finance issue that involves a public good or service.¹ Public goods or services are usually provided by a governmental entity and paid for with public funds.

Use of bureaucratic rules, such as those embodied in the proposed *Bike Parking Ordinance*, is the antithesis of sound planning. This approach will inevitably lead to a piecemeal, patchwork bike parking infrastructure that will fail to adequately meet the needs of the village's residents and be built in one of the least cost-effective ways over a long time frame.

On pragmatic grounds, it is inappropriate to use the petitioning process of the Plan Commission as a principal means to implement an action plan for improving the village's bicycle parking infrastructure. There is no obvious connection between the location of proposed new construction and the optimal placement of bike racks.

¹ A public good is an item consumed by society as a whole and not necessarily by an individual consumer. Public goods are financed by tax revenues. All public goods must be consumed without reducing the availability of the good to others, and cannot be withheld from people who do not directly pay for them.

A likely outcome of adopting these ordinances is that the bike parking infrastructure will be:

- Over-built for a relatively small number of users
- Suboptimal in distribution, with too much parking in some areas and too little in other areas
- costlier than need be
- paid for by the equivalent of an arbitrary and capricious tax on a select few individuals as opposed to financed more equitably by the larger Arlington Heights community.

An alternative to the regulatory approach embodied in these proposed ordinances is to treat the building out of our bike rack infrastructure as the public finance issue it is. In this approach, the *Village serves as the active change agent and general contractor* for the benefit of the whole community (see Appendix A). This approach is much more likely to produce a desired outcome: the optimal number and distribution of bike racks to meet the needs of village residents, developed in the most cost-effective manner, with the costs born appropriately by village residents as a whole.

For these reasons, I cannot support these text amendments on bike parking ordinances to the village code.

Appendix A: A Public Finance Approach to Building Out Arlington Heights' Bike Rack Infrastructure

An alternative to the regulatory approach embodied in the proposed Bike Parking Ordinance is for the *Village to serve as the change agent and general contractor* for the benefit of the whole community. The Village should build out the bike parking infrastructure in phases, as the needs and funds permit. The phases would be:

- Improve the bike parking facilities on public property (e.g., governmental facilities, parks, libraries) according to the comprehensive plan.
- Install, consistent with the comprehensive bicycle parking plan, new or improved bike parking facilities on existing private property through a process of negotiation over the placement, with the Village bearing the installation cost.

When biking and bicycle racks are consistent with the business model of a petitioner who comes before the Plan Commission, the racks should be installed at the petitioner's expense. When biking and bike racks are consistent with the comprehensive plan, but not necessarily consistent with a petitioner's business model, the Village should enter in to discussions with the petitioner concerning placement of a bike rack on that private property at the Village's expense.

Appendix B: Clarification on Why the Bike Rack Ordinance Should Not Be Modeled after an Automobile Parking Ordinance

At first glance, it might seem that the type of ordinances governing automobile parking spaces should apply to bicycle parking. This is an invidious comparison. Whenever a structure or facility is built—whether it be residential, commercial or industrial—the activity housed in that facility will, with a very high probability, generate automobile traffic since that is the primary mode of transportation for most people in most cases. The Village builds and maintains the streets and related traffic equipment and pays for them with Village funds. We have enough experience with these kinds of situations that we can determine the most likely amount of additional parking spaces that will be needed. Since the petitioner has the right, in most cases, to treat those parking spaces as private property to be used only by himself and his customers, it is appropriate that a petitioner build and pay for the additional parking his facility generates.

For the most part, bikes racks would not be viewed as private property, but rather would be intended for general public use, unless they are specifically separated from general public access. With bicycle parking, we cannot estimate with much certainty the amount of bike traffic the facility will generate, but we know it will be relatively small. In the case where the racks are for public use, the Village should install and pay for them. In the case where the racks are restricted for private use, the petitioner should install and pay for them.⁰⁹



Item: Report of the Committee-of-the-Whole Meeting of September 5, 2017 - Passero

Department: Village Manager's Office

Report of the Committee-of-the-Whole Meeting of September 5, 2017

Consideration of recommending to the Liquor Commissioner the issuance of a Class "A" Liquor License to Passero, LLC, dba Passero, located at 5 West Campbell

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 September 5, 2017-Interview of JSchroeder

Department: Village Manager's Office

Report of the Committee-of-the-Whole Meeting of September 5, 2017

Interview of John Schroeder for Appointment to the Arts Commission - Term Ending: 4/30/20

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 September 5, 2017

Department: Manager's Office

Report of the Committee-of-the-Whole Meeting of September 5, 2017

Interview of Brandon Lawrence for Appointment to the Youth Commission - Term Ending: 4/30/18

Bid Section

Item:

Bid Opening Date:

Account Numbers:

Total Budget for Specific Item:

Bid Amount:



Item: Cisco Network Switches

Department: Integrated Service Department/I.T. Division

The 2017 budget provides for the purchase of six network switches. The existing access network switches located at Public Works were purchased in 2005 and have reached manufacturers "end-of-life" expectancy. Replacement is needed as it will become impossible to renew maintenance and warranty services through the manufacturer on this hardware equipment after that time. The maintenance contracts are crucial to ensure minimal downtime in the event of equipment failure. These switches connect computers and network peripherals to the network within Public Works.

Bids for the following item were duly advertised and publicly opened:

<u>Vendor</u>	<u>Total Price</u>
Meridian Group Deerfield, IL	\$31,627.54
Zones, Inc. Auburn, WA	\$28,290.29

Twelve bid packets were sent out. One bid came in late and was not accepted. Another bid, from Converged Digital Networks, did not include prices so it should be rejected. Two complete bids were received and we are confident the pricing was very competitive.

RECOMMENDATION

It is recommended that the Village Board reject the bid from Converged Digital Networks as being incomplete and authorize the purchase of six Cisco switches and accessories for a cost of \$28,290.29 from Zones Inc., Auburn, WA. References were checked and Zones Inc. has been determined to be a responsible vendor and the bid met specifications.

Bid Section

Item: Cisco Network Switches

Bid Opening Date:	August 24, 2017
Account Numbers:	401-0601-572-5015 EQ0103
Total Budget for Specific Item:	\$50,000.00
Bid Amount:	\$28,290.29



Item: Ordinance - Chapter 13 - Class "B," "E" and "T" liquor licenses

Department: Manager/Legal

An Ordinance Amending Chapter 13 of the Arlington Heights Municipal Code
(Surrender of a Class "B," "E" and "T" liquor license)

Bid Section

Item:

Bid Opening Date:

Account Numbers:

Total Budget for Specific Item:

Bid Amount:

ATTACHMENTS:

Description	Type
Chapter 13 - Class "B," "E" and "T" liquor license	Ordinance

AN ORDINANCE AMENDING CHAPTER 13 OF THE
ARLINGTON HEIGHTS MUNICIPAL CODE

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

SECTION ONE: That Section 13-502 of the Arlington Heights Municipal Code, pertaining to the number of liquor licenses, is amended to decrease the number of Class "B," "E" and "T" liquor licenses authorized, with the amended entry for Class "B," "E" and "T" liquor licenses to read as follows:

CLASS OF LICENSE	ANNUAL LICENSE FEE	NUMBER OF LICENSES AUTHORIZED
B	\$3,700.00	35
E	\$2,700.00	16
T	N/A	28

SECTION TWO: This Ordinance shall be in full force and effect from and after its passage and approval in the manner provided by law.

AYES:

NAYS:

PASSED AND APPROVED this 5th day of September, 2017.

Village President

ATTEST:

Village Clerk



Item: Resolution - Temporary Construction Easement - 1551 E. Central Road

Department: Engineering/Legal

BACKGROUND

The Illinois Department of Transportation (IDOT) is scheduled to resurface Central Road within the Village of Arlington Heights in 2018. As part of the project, the intersection of Arthur Ave. and Central Road includes improvements related to meeting ADA compliant sidewalk. In order to accommodate the ADA improvements at this intersection, a temporary private property construction easement is needed to provide for required transitions. The owner has authorized the property manager to execute a temporary construction easement. IDOT requires that the Village Board approve the temporary construction easement.

RECOMMENDATION

It is recommended that the Village Board approve the Resolution accepting a temporary construction easement at 1551 E. Central Road.

Bid Section

Item:

Bid Opening Date:

Account Numbers:

Total Budget for Specific Item:

Bid Amount:

ATTACHMENTS:

Description	Type
Easement - 1551 E. Central Road	Resolution

A RESOLUTION ACCEPTING
A TEMPORARY CONSTRUCTION EASEMENT

BE IT RESOLVED BY THE PRESIDENT AND BOARD OF TRUSTEES OF THE VILLAGE OF ARLINGTON HEIGHTS:

SECTION ONE: That a Temporary Construction Easement for the purpose of construction and other highway purposes at the property located at 1551 E. Central Road, Arlington Heights, Illinois, attached hereto and made a part hereof, is approved and accepted.

SECTION TWO: The Village President is hereby authorized and directed to execute said temporary construction easement, which shall be attested by the Village Clerk, on behalf of the Village of Arlington Heights.

SECTION THREE: This Resolution shall be in full force and effect from and after its passage and approval in the manner provided by law and the Resolution and Temporary Construction Easement shall be recorded by the Village Clerk in the Office of the Recorder of Cook County.

AYES:

NAYS:

PASSED AND APPROVED this 5th day of September, 2017.

ATTEST:

Village President

Village Clerk

TEMPORARY CONSTRUCTION EASEMENT

I, Susan Emery (Grantor/s) hereby represents that Grantor owns the fee simple title to and grants and conveys to the Village of Arlington Heights, a municipal corporation, (Grantee), a temporary construction easement for the purpose of construction and other highway purposes, on, over and through the following described real estate:

The north 75 feet, (except the west 350 feet of the North 306 feet, and except the east 150 of the north 469.65 feet, and except the north 50 feet) of "Lot B" in Kirchoff's Subdivision, being a subdivision of the North East quarter of the North East quarter of Section 10; the East half of the North West quarter of the North East quarter of Section 10; the North West quarter of the North West quarter of Section 11 and the North 10 chains of the South West quarter of the North West quarter of Section 11, all in Township 41 North, Range 11 East of the Third Principal Meridian, and the South half of the South West quarter of Section 33; that part of the West half of the North West quarter South of Railroad of Section 33; the North West quarter of the South West quarter of Section 33; that part of the North East quarter of the South West quarter, South of Railroad of Section 33 and the West 14 ½ acres of that part of the West half of the South East quarter South of Railroad of Section 33, all in Township 42 North, Range 11 East of the Third Principal Meridian, according to the plat of said Subdivision recorded May 22, 1917 in Book 152 of Plats, page 15, in Cook County Illinois.

P.I.N. 08-10-200-009-0000, and 08-10-201-023-0000

commonly known as Central Park East; 1551 East Central Road; Arlington Heights, Illinois 60005.

The Grantor hereby grants to Grantee a non-exclusive, temporary construction easement for the purpose of constructing public sidewalk and pavement traffic striping. The right, easement and privilege granted herein shall terminate upon completion of the proposed construction. Within a reasonable time following the completion of construction of the pavement and sidewalk, the Grantee shall restore all disturbed areas caused by construction.

Grantor shall have and retain all rights to use and occupy the premises and access to Grantor's remaining property, except as herein expressly granted; provided, however, that Grantor's use and occupation of the premise may not interfere with Grantee's use of the premises for the purposes herein described.

The Grantee shall indemnify and save harmless the Grantor and their officers and employees, from all claims, litigation and liability asserted against them or any of them and any costs and attorney's fees incidental hereto, on account of injury to or death of any person or persons whomsoever or on account of damage to any property, caused by, connected with or in any way attributable to, the rights herein granted with the understanding that the cost of the placement and construction for the public sidewalk and pavement traffic striping will be borne by the Grantee.

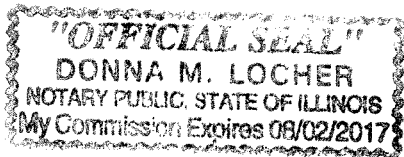
Dated: June 15, 2017

Grantor, *San Luis*
Central Park East

Susan Emery
Print Name

STATE OF ILLINOIS)
) SS.
COUNTY OF COOK)

I, DONNA M. LOCHER, a notary public in
and for the said County, in the State aforesaid, DO HEREBY CERTIFY that
SUSAN EMERY personally known to me to be the same person whose
name is subscribed to the foregoing instrument, appeared before me this
15th day of JUNE, 2017, in person and acknowledged that
he/she signed, sealed and delivered the said instrument as his/her free and
voluntary act, for the uses and purposes therein.



Donna M. Locher
NOTARY PUBLIC

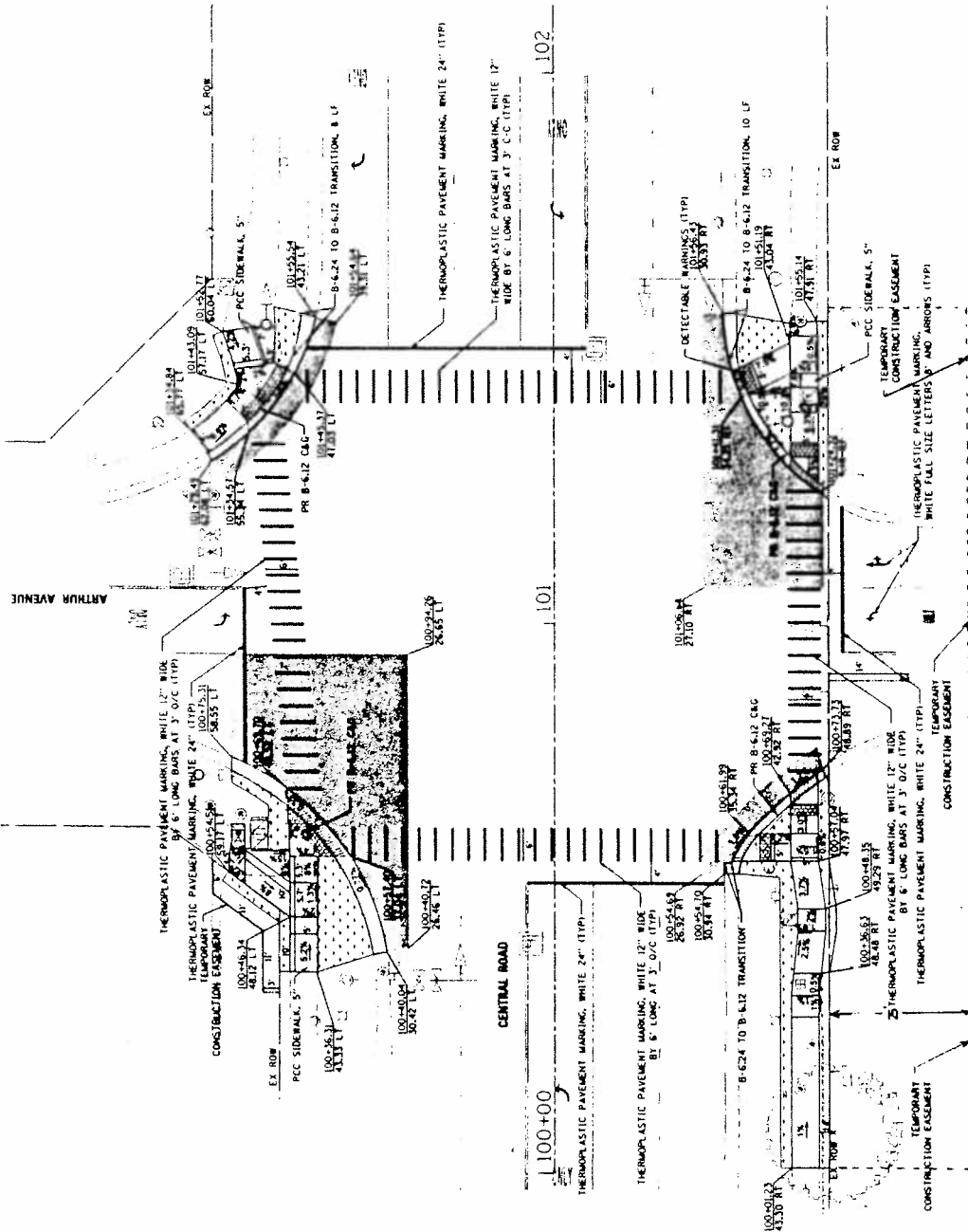
Commission expires 08/02/2017

Approved and accepted by the President and Board of Trustees of the Village of
Arlington Heights, Illinois, this _____ day of _____, 2017.

Village President

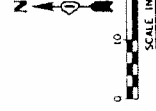
ATTEST:

Village Clerk



LEGEND

- HOT-MIX ASPHALT SURFACE COURSE, MIX 10, MSO 2
- DETECTABLE MARKINGS
- ADA DEPRESSED CURB
- SODIUM, SALT TOLERANT



	VILLAGE OF MOUNT PROSPECT		LAYOUT PLAN	
	CENTRAL ROAD AT ARTHUR AVENUE		SHEET NO. 1 OF 1 SHEETS STA. 100+00 TO STA. 100+60	
DESIGNED BY	DR	REVISED 01-13-15	CITY	100+00
DRAWN BY	DR	REVISED 09-02-15	CODE	20
CHECKED BY	CS	REVISED 02-01-16 ISSUED FOR BUDGET	SHEET NO. 1 OF 1 SHEETS STA. 100+00 TO STA. 100+60	
DATE	04-08-15	REVISED	SHEET NO. 1 OF 1 SHEETS STA. 100+00 TO STA. 100+60	



Item: BCRB - Proposed variance request from Chapter 23, Section 9

Department: Building & Life Safety

Request:

Petitioners, Ghanshyam Patel and Popat Radadia, requested a variance from Chapter 23, Section 9 of the Arlington Heights Municipal Code requiring a sprinkler system for a 14 x 20 storage shed.

Recommendation:

At the meeting on August 3, 2017, the Building Code Review Board made a motion recommending to the Village Board to grant the storage shed to be built without requiring fire sprinklers.

Bid Section

Item:

Bid Opening Date:

Account Numbers:

Total Budget for Specific Item:

Bid Amount:

ATTACHMENTS:

Description	Type
August 3, 2017 Minutes	Minutes

BUILDING CODE REVIEW BOARD

MINUTES OF A MEETING BEFORE THE VILLAGE OF ARLINGTON HEIGHTS BUILDING CODE REVIEW BOARD

August 3, 2017

MEMBERS PRESENT:

John Carrato, Chairman
Carl Baldassarra
Scott Smith

ADMINISTRATION PRESENT:

Seven Touloumis, Director of Building & Life Safety
Charley Craig, Assistant Building Official
Patty LeVee, Recording Secretary

OTHERS PRESENT:

Ghanshyam Patel
Popat Radadia

SUBJECT: Variance request from Section 9 of Chapter 23 of the Arlington Heights Municipal Code requiring a sprinkler system for a 14 x 20 storage shed.

There being a quorum present, the meeting was called to order at 7:00pm.

APPROVAL OF MINUTES

MR. BALDASSARRA MOTIONED TO APPROVE THE MINUTES OF THE MAY 30, 2017 MEETING, SECONDED BY MR. SMITH, THE MOTION PASSED UNANIMOUSLY.

NEW BUSINESS

Chairman Carrato noted that the applicant is asking for a variance from Section 9 of Chapter 23 of the Municipal Code and called for the recommendation from the Building & Life Safety Department.

Mr. Touloumis stated the recommendation is to allow the variance as requested with no sprinklers as stated in the application. It is not believed this was intended when the Code was amended to require sprinklers for this type of structure, but is in fact what is stated in the Code.

Chairman Carrato entertained a motion to approve this variance with discussion after the motion. **Carl Baldassarra** moved to approve the requested variation from the Village Code, seconded for discussion purposes by **Scott Smith**.

Mr. Smith asked what the distance of the shed was to the closest structure. **Mr. Patel** thought it was about 50 ft. to main building, the church. The reading room at the corner is a separate structure.

Mr. Baldassarra asked what the type of construction the shed would be. **Mr. Radadia** responded wood construction on a concrete block foundation.

Mr. Baldassarra asked for comments of the Fire Department. **Mr. Touloumis** stated they had no objections.

Chairman Carrato asked if there was any electrical or conduit in the shed, to which **Mr. Patel** responded no, it is for storage only. It is in the same location as the old shed only larger.

Chairman Carrato called for the motion. All were in favor, the variance was granted.

The meeting adjourned at 7:06pm.



Item: Greenbrier School Addition - 2330 N. Verde Dr. - PC#17-007

Department: Planning & Community Development

Requested Action

1. Special Use Permit to allow an existing Elementary School within the R-3 District.

Variations Required

1. Section 5.1-3.6, to allow an exterior side yard setback of 13.2' for the existing building where code requires a 40' exterior side yard setback.
2. Section 11.4-4, to allow 75 parking spaces where code requires 195 parking spaces.
3. Section 6.5-2, to allow an accessory structure (shed) in the side yard where code requires all accessory structures to be located in a rear yard.
4. Section 6.13-3(a), to allow a 6' tall open fence in the side yard where code restricts fence heights to a maximum of 5' in the side yard.
5. Section 11.2-8, to allow the existing 18' deep 60° degree angled parking rows where code requires a minimum depth of 20' for 60° degree angled parking rows.

Recommendation

A public hearing was held by the Plan Commission on August 23, 2017 where Commissioner Green moved and Commissioner Cherwin seconded:

A motion to recommendation to the Village Board of Trustees approval of PC#17-007, a Special Use Permit to allow an elementary school within the R-3 District; a Variation from Chapter 28, Section 5.1-3.6, to allow an exterior side yard setback of 13.2 feet for the existing building where code requires a 40-foot exterior side yard setback; a Variation from Chapter 28, Section 11.4-4, to allow 75 parking spaces where code requires 195 parking spaces; a Variation from Chapter 28, Section 6.5-2, to allow an accessory structure (shed) in the side yard where code requires all accessory structures to be located in the rear yard;

a Variation from Chapter 28, Section 6.13-3(a), to allow a six-foot tall open fence in the side yard where code restricts fence heights to a maximum of five feet in the side yard; and a Variation from Chapter 28, Section 11.2-8, to allow the existing 18-foot deep 60-degree angled parking rows where code requires a minimum depth of 20 feet for 60-degree angled parking rows.

This approval shall be subject to the following conditions:

1. The school district shall restrict left turn egress movements from the west parking lot during arrival and dismissal. Any changes to this policy will require Village review and approval.
2. The school district shall limit parking within the newly proposed nine parking spaces to teachers only.
3. Compliance with all Design Commission requirements as identified during the August 8, 2017 Design Commission meeting.
4. The Applicant shall comply with all applicable federal, state, and Village codes, regulations and policies.

Roll Call Vote: Commissioners Green, Jensen, Sigalos, Warskow, Cherwin 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 Development Committee Report	Report
PC Minutes 8/23/17 DRAFT	Minutes
Conceptual Plan Review Committee Minutes	Minutes
Aerial	Exhibits
Justification for SUP and Variations	Correspondence
Project Narrative	Correspondence
Plat of Survey	Exhibits
Site Plan	Exhibits
Architectural Plans	Exhibits
Engineering Plans	Exhibits
Landscape & Tree Preservation Plans	Exhibits

Photometric Plan	Exhibits
Traffic & Parking Study	Exhibits
Lighting Cut Sheets	Exhibits
Department Review Comments - Round 1	Exhibits
Petitioner Response to Department Review Comments - Round 1	Exhibits
Department Review Comments - Round 2	Exhibits
Petitioner Response to Department Review Comments - Round 2	Exhibits
PC Timeline Tracker	Exhibits



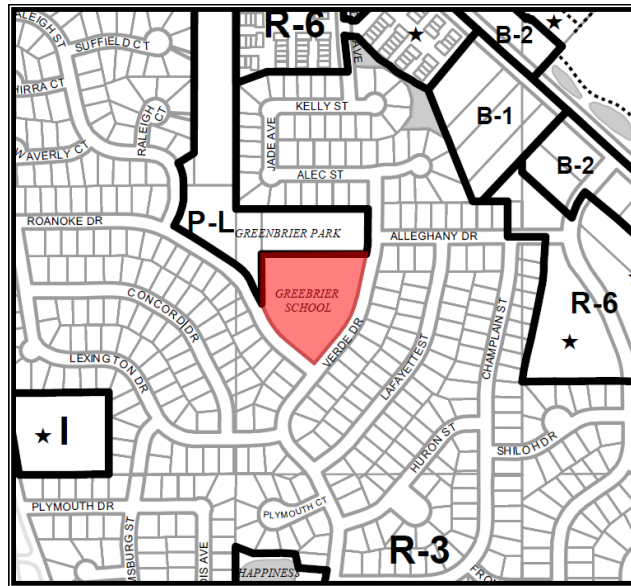
VILLAGE OF ARLINGTON HEIGHTS STAFF DEVELOPMENT COMMITTEE REPORT

PC Project Number: PC 17-007
Project Title: Greenbrier School Addition
Address: 2330 N. Verde Dr.
PIN: 03-18-112-003

To: Plan Commission
Prepared By: Sam Hubbard,
 Development Planner
Meeting Date: August 23, 2017
Date prepared: August 18, 2017

Petitioner: Don Hanson
Address: 350 W. Ontario St. – Suite 200
 Chicago, IL 60654

Existing Zoning: R-3, One-Family Dwelling
 District



SURROUNDING LAND USES

Direction	Existing Zoning	Existing Use	Comprehensive Plan
North	P-L, Public Land District	Greenbrier Park	Parks
South	R-3, One-Family Dwelling District	Single-Family Homes	Single-Family Detached
East	R-3, One-Family Dwelling District	Single-Family Homes	Single-Family Detached
West	P-L, Public Land District, R-3 One-Family Dwelling District	Greenbrier Park and Single-Family Homes	Parks and Single-Family Detached

Requested Action:

1. Special Use Permit to allow an existing Elementary School within the R-3 District.

Variations Required:

1. Section 5.1-3.6, to allow an exterior side yard setback of 13.2' for the existing building where code requires a 40' exterior side yard setback.
2. Section 11.4-4, to allow 75 parking spaces where code requires 195 parking spaces.
3. Section 6.5-2, to allow an accessory structure (shed) in the side yard where code requires all accessory structures to be located in a rear yard.
4. Section 6.13-3(a), to allow a 6' tall open fence in the side yard where code restricts fence heights to a maximum of 5' in the side yard.
5. Section 11.2-8, to allow the existing 18' deep 60° degree angled parking rows where code requires a minimum depth of 20' for 60° degree angled parking rows.

Project Background:

The subject property is approximately 173,000 square feet (3.97 acres) and is bounded by Verde Drive to the east, Roanoke Drive to the west, and Greenbrier Park to the North. The Greenbrier Elementary School occupies the site, which has a current enrollment of 276 students in grades K through 5th. The building is also home to the district-wide Early Childhood program that provides special education and pre-school education for children between the ages of 3 and 5 years old. This program adds an additional 180 children to the school population, for a total enrollment of 456 children within the school. There are currently 82 staff members, 66 parking spaces, and 21 classrooms (including a temporary mobile classroom unit located along Roanoke Drive).

Enrollment at Greenbrier Elementary is projected to increase over the next four years to 320 students in grades K through 5th (16% increase of 44 students) and to 200 children in the Early Childhood program (11% increase of 20 children). In order to provide space for this increase, District 25 has proposed an addition to the southwest side of the school building. The proposed addition will be two floors and each floor will have two classrooms and two offices. The proposed addition will negate the need for the temporary mobile classroom unit and it was subsequently removed at the end of the 2017 school year. The projected increase in enrollment will be accompanied by an increase of four additional staff members, for a total of 86 employees at the school. Finally, ten new parking spaces will be added as part of this project, which will increase the overall parking capacity to 75 cars.

The subject property includes two parking and drop off areas, the primary one being located off of Roanoke Drive and the secondary entrance and auxiliary parking area being located along Verde Drive. Primary drop off occurs in the western parking lot, which is the largest of the two parking lots. Due to the smaller size, the eastern parking lot is restricted to the drop-offs and pick-ups of a limited number of students. It should be noted that the Early Childhood program is a half-day program with two sessions per day (morning and afternoon). Drop-off for the morning session occurs 15 minutes after drop-off for K through 5th grade students, and pick-up for the afternoon session occurs 15 minutes before pick-up for K through 5th grade students. This staggered approach to arrival and dismissal helps to alleviate traffic congestion during these peak times. Additionally, the Early Childhood program is not in session on Fridays.

Zoning and Comprehensive Plan

The subject property is located within the R-3 One-Family Dwelling residential zoning district, which allows schools via the Special Use Permit approval process. Since Greenbrier School was never formally granted a Special Use Permit, it is required to obtain one as part of the proposed building addition. The petitioner has provided written responses justifying compliance with the Special Use Permit approval criteria, as summarized below:

- 1. That said special use is deemed necessary for the public convenience at this location.***
- 2. 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.***
- 3. 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.***

Staff concurs that the necessary criteria for Special Use Permit approval have been met for the following reasons, 1) The need for the school at this location is illustrated by the current growth in enrollment, 2) Staff is not aware of any significant detriments to health or safety that have been created by the existing school in

this location, and 3) The school is regularly inspected by the Illinois State Board of Education (ISBE) for compliance with ISBE health and safety regulations.

As identified above, five Variations have been requested to accommodate the proposed building addition. Variations to the parking row and parking space width, shed, and building setback along Verde Drive are existing conditions of the site. Staff is supportive of these Variations. For each Variation, the petitioner has provided written justification to the Variation approval criteria as listed below, which written justification has been included in the Plan Commission packet.

- ***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.***

The Village's Comprehensive Plan designates the future use of the subject property as "Schools". The proposed Special Use is therefore consistent with the Comprehensive Plan.

Conceptual Plan Review Committee

On June 28, 2017, the applicant appeared before the Conceptual Plan Review Committee (CPRC). The CPRC inquired about the projected population increase, traffic congestion during drop-off and pick-up times, and possible solutions that could be proposed within the Traffic and Parking Study. The minutes from this meeting have been attached.

Neighborhood Meeting

On August 14, 2017, the School District hosted a neighborhood meeting for nearby residents to inform them of the proposed development and to obtain their preliminary feedback. No one from the public attended the meeting.

Design Commission

The Design Commission met on August 8, 2017, to discuss the proposed school addition. The Design Commission voted to approve the project, subject to two requirements, 1) In conjunction with the project, rooftop screening of the existing RTU's and proposed Chiller unit would be required, and 2) Foundation landscape plantings be added on the south end of the building. The minutes from this meeting have been attached.

Site Design and Landscaping

The proposed addition complies with all height, bulk, and setback restrictions. A summary of the requested Variations relative to the site has been included below.

Building Setback Variation

The existing school building is setback only 13.2' from the property line along Verde Drive. The Verde Drive frontage is considered an "exterior side yard", which setback is calculated at 10% of the lot width with a maximum required setback to be no greater than 40'. As the lot width is approximately 410', the 40' maximum exterior side yard is required. The existing building is non-compliant at only 13.2' setback, and the petitioner has requested a Variation to formally allow this existing non-conformity. Staff is supportive of this Variation as it relates to the existing building and to require compliance would not be practical or financially feasible.

Shed Variation

Shed's are defined as accessory structures by the Zoning Code, and as such, are only allowed in the rear yard. The existing shed located just south of the building and adjacent to the auxiliary outdoor play area is not within the rear yard and therefore a Variation is required. Staff supports the proposed Variation as there is no appropriate location in the rear of the building to place this shed (the rear yard is entirely occupied by the primary outdoor play areas).

Fence Variation

The petitioner has proposed a 6' tall fence to enclose the courtyard area that will be created by the building addition. The Zoning Code limits fence heights to 5' in height unless adjacent to a major or secondary arterial road, or if required for landscape buffer purposes. Therefore, a Variation is required to allow the proposed 6' tall fence. Staff supports this Variation as the fence is necessary for security to prevent access to the courtyard area. The Police Department has evaluated the fence and determined this it is necessary to restrict afterhours access to the courtyard area.

Parking Space Size Variation

The requested Variation relates to the existing parking stalls located within the western parking lot. Several of the parking spaces in this lot are just short of the required depth (approx. 1' -2' short). Staff is not aware of any problems that have been caused by the non-conforming depth of these parking stalls, and due to the landlocked and size constraints of the Greenbrier School site, staff is supportive of a Variation to allow these parking stalls to remain at their substandard size.

With regards to landscaping, the petitioner has submitted a revised landscape plan that incorporates the foundation plantings as required by the Design Commission. In addition, as requested by staff, the petitioner has added shade tree's to the parking lot islands where they were missing, and has added additional parking lot landscaping where the parking lot abuts Roanoke Drive. The landscape plan is compliant with all code requirements.

Traffic and Parking

The petitioner has provided a traffic and parking study from a certified traffic engineer, which assess access (location, design, and Level of Service), on-site circulation, trip generation and distribution, parking, pick-up and drop-off operations, and impacts to public streets. Staff notes that, with exception to only four students, bussing is not provided for children at Greenbrier Elementary School. Consequently, most children either walk or are dropped off by parents. Primary drop-offs and pick-ups occur in the western parking lot and stacking of vehicles awaiting entrance into the parking lot leaches out onto Roanoke Drive and occasionally backs up to the intersection of Roanoke and Verde.

With regards to traffic, the study has found that all intersections studied operate at a Level of Service of "A" or "B", which indicates very minimal delays. However, as noted above, during pick-up times cars begin to back-up along westbound Roanoke while waiting to enter into the west parking lot for pick-up. These cars were observed to double stack and block the eastbound lane of Roanoke Drive, resulting in unsafe travel through this area. As a result, the traffic study has recommended that eastbound left turns out of the school parking lot be prohibited during arrival and dismissal, which will help to alleviate vehicular conflicts at the intersection of Roanoke Drive and Verde Drive. In addition, the Village's traffic division has recommended that the school advise staff and teachers that park on the street to park on the north side of Roanoke Drive west of the school and adjacent to the park. A condition of approval requiring these changes has been added.

Relative to parking, Elementary Schools are required to provide two parking spaces per employee plus one parking space per classroom. According to the data provided by the petitioner, the proposed building addition will result in a total of 86 staff members within the school and 23 total classrooms, which translates to a parking requirement of 195 cars. As the site currently provides only 66 parking spaces (with nine additional spaces proposed), a 120-space deficit exists and therefore a Variation is required (see Table I below).

Table I – Parking Calculations

SPACE	PARKING CODE USE	NUMBER OF EMPLOYEES	NUMBER OF CLASSROOMS	PARKING RATIO	PARKING REQUIRED
Existing Greenbrier Elementary School	Elementary School	82	19	1 space per classroom plus 2 spaces per employee	183
Total Parking Required					183
Total Parking Provided					66
Parking Surplus/(Deficit)					117 (64% reduction in required parking)
Proposed Greenbrier Elementary School	Elementary School	86	23	1 space per classroom plus 2 spaces per employee	195
Total Parking Required					195
Total Parking Provided					75
Parking Surplus/(Deficit)					120 (62% reduction in required parking)

Staff has reviewed the parking data provided and notes that the parking lot is currently at capacity. The teacher/visitor parking frequently overflowing onto the surrounding residential street network, parking restrictions are in place to limit this parking to certain areas. During a survey of the parking lot, 19 cars were observed parking on the street due to capacity constraints within the parking lot. The addition of nine new parking spaces within the parking lot will help to bring some of the off-site parking back into the Greenbrier School property, and overflow is estimated to decrease from 19 cars to 12 cars.

Staff notes that several of the new parking stalls are located in close proximity to the driveway entrance, and cars leaving these stalls have the potential for conflict with inbound cars into the site. However, the school is aware of this potential conflict and will limit parking in these new stalls to teachers only. Therefore, the teachers who park here will arrive before the morning drop-offs and will depart after the afternoon pick-ups, meaning that these cars would not be entering or exiting the site during peak congestion periods.

RECOMMENDATION

The Staff Development Committee has reviewed the proposed Special Use Permit and Variations and recommends approval of the project, subject to the following conditions:

1. The School District shall restrict left turn egress movements from the west parking lot during arrival and dismissal. Any changes to this policy will require Village review and approval.
2. The School District shall limit parking within the newly proposed nine parking spaces to teachers only.
3. Compliance with all Design Commission requirements as identified during the August 8, 2017, Design Commission meeting.
4. The applicant shall comply with all applicable Federal, State, and Village Codes, Regulations, and Policies.

_____, August 18, 2017

Bill Enright, Deputy Director of Planning and Community Development

Cc: Randy Recklaus, Village Manager
All Department Heads

PLAN

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

COMMISSION

RE: GREENBRIER SCHOOL ADDITION - 2330 NORTH VERDE DRIVE - PC#17-007
SPECIAL USE FOR ELEMENTARY SCHOOL

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 23rd day of August, 2017 at the hour of 7:30 p.m.

MEMBERS PRESENT:

TERRY ENNES, Acting Chairman
LYNN JENSEN
MARY JO WARSKOW
BRUCE GREEN
JOHN SIGALOS
JAY CHERWIN

ALSO PRESENT:

SAM HUBBARD, Development Planner

CHAIRMAN ENNES: It's 7:30 p.m. We'll call this meeting of the Arlington Heights Plan Commission to order. If you would all rise with me to say the pledge of allegiance?
(Pledge of allegiance.)

CHAIRMAN ENNES: We have two sets of minutes from our prior meeting.

MR. HUBBARD: Call the roll first?

CHAIRMAN ENNES: Roll.

MR. HUBBARD: Commissioner Cherwin.

COMMISSIONER CHERWIN: Present.

MR. HUBBARD: Commissioner Dawson.

(No response.)

MR. HUBBARD: Commissioner Drost.

(No response.)

MR. HUBBARD: Commissioner Green.

COMMISSIONER GREEN: Here.

MR. HUBBARD: Commissioner Jensen.

COMMISSIONER JENSEN: Here.

MR. HUBBARD: Commissioner Lorenzini.

(No response.)

MR. HUBBARD: Commissioner Sigalos.

COMMISSIONER SIGALOS: Here.

MR. HUBBARD: Commissioner Warskow.

COMMISSIONER WARSKOW: Here.

MR. HUBBARD: Chairman Ennes.

CHAIRMAN ENNES: Present. Is anybody else coming that you were aware of?

MR. HUBBARD: Commissioner Lorenzini did respond that he was coming, but we have a quorum.

CHAIRMAN ENNES: So, we have minutes to approve. Can I get a motion for both of those.

COMMISSIONER JENSEN: So moved.

CHAIRMAN ENNES: For both of them?

COMMISSIONER JENSEN: Both of them.

COMMISSIONER GREEN: Second for both.

CHAIRMAN ENNES: All in favor?

(Chorus of ayes.)

CHAIRMAN ENNES: Any opposed?

COMMISSIONER CHERWIN: I abstain, I wasn't present.

CHAIRMAN ENNES: Okay. So, we have all in favor in support.

MR. HUBBARD: Yes.

CHAIRMAN ENNES: We have public hearing PC#17-007, Greenbrier School Addition at 2330 North Verde Drive. Have all the notices been sent out for this?

MR. HUBBARD: They have, yes.

CHAIRMAN ENNES: Can I ask who's going to present for the Petitioner?

DR. BEIN: Several of us.

CHAIRMAN ENNES: I'm sorry?

DR. BEIN: Several of us.

CHAIRMAN ENNES: Oh, okay. Can I ask all of you to come forward who are going to give evidence?

(Witnesses sworn.)

CHAIRMAN ENNES: Who wants to start?

DR. BEIN: I will start.

CHAIRMAN ENNES: If you would give your name and spell it for the reporter?

DR. BEIN: Sure, thank you. I'm Lori Bein, L-o-r-i, last name B-e-i-n. I'm the Superintendent of Arlington Heights School District 25. I just want to do a brief introduction about the proposal you are going to hear this evening.

As many of you know, we've been here four times before. We've just completed four additions to four of our nine schools. Olive-Mary Stitt and Ivy Hill we did about two years ago, just in time for that booming enrollment to hit. Those are now our two largest elementary schools in the district as we had thought they would be. And right about this exact moment, we're completing construction on Windsor Elementary School and Thomas Middle School. So, those projects will be ready for kids to come on Monday.

Now, we're coming to you with our fifth project and what we believe is our final project based on our enrollment projections. We have one other school that we're still watching, but this is the last definite building that needs additional space. Greenbrier hosts a Kindergarten to a fifth grade program as well as a district-wide early childhood program for children ages three to five who are identified with special needs any time throughout the school year. So, both of those programs make up this building.

So, I believe Ryan Schulz is going to start tonight and talk you through the details of this plan.

MR. SCHULZ: Good evening. My name is Ryan Schulz, S-c-h-u-l-z, Director of Facilities Management for District 25. Great to see everybody again. I'm going to present some information about the architectural plans and then get into some of the traffic and pedestrian control issues that are going on at Greenbrier as well. Sam, this works, right?

MR. HUBBARD: Yes, it should work. You have to press it down, it takes maybe a few seconds for the first one to get moving.

MR. SCHULZ: So, tonight we're to seek the variances that are presented in your packet that goes on the first slide here, to allow the interior side setback from 13.2 feet from the required 40-foot exterior side yard setback as required by code. Again, this is for the existing building, mostly on the Verde side of the building. Again, this is the building portion that's been there for several years, again, the property has been there since the 1960's. So, the majority of the building has been there for a long time. So, we're seeking a variance to make sure we're up to Village code and getting that variance for that setback.

The next portion that we're seeking a variance in is the parking. We'll get into that a little bit more on the metrics behind it, but seeking a variance for the parking spaces. Again, the Village code currently requires 195 parking spaces whereas with the addition, we'd be up to 75 parking spaces on site.

To allow an accessory structure, there is a small shed that is currently used for EC playground equipment. It's tucked away, it's very close to the building. Again, it's over 100 some feet from the nearest property, so it's pretty far tucked in there, and again it's not

that visible from the street. So, again that's been there for quite some while, we just want to make sure that we have the ability to maintain that for storage.

Allow a six-foot tall open fence, again this is for a small courtyard, semi-courtyard that we'll be constructing with the addition. So, we want to make sure that the area isn't accessible by pedestrians after hours. So, this fence will be an ornamental black fence to prevent people from going into that area after hours. Again, we'll have cameras in there to help, but again just to mostly help keep people away from there.

Then a variance on the parking aisles, allowing an 18-foot wide aisle instead of a 20-foot wide aisle just because of the current code and how the parking lot is currently constructed. Again, the parking aisle is a little bit narrower than what the current code enables for a 60-degree parking spot. So, that's why we'll be seeking that variance.

I want to go over the existing site a little bit to make you familiar with how the site is set up as well as some of our metrics that we're looking at for enrollment. As Dr. Bein stated, we do see a slight enrollment uptick here at Greenbrier in both the K-5 and the EC program. As you can see, our enrollment increased from 276 to a projected enrollment increase up to 320 for the K-5 population, and in the EC program from 180 up to 205. Again, that's a little bit variable, plus or minus on that for the EC, and an additional portion may be waitlisted a little bit on that in 2021, depending on how many people we have come in.

So, just kind of the metric behind our enrollment projections. Again, these are conservative, kind of middle-of-the-road enrollment projections, so that's what we used to kind of design these. Again, we do put a little bit of a buffering to the building to make sure we do have some space in case these do pop a little bit, but again, these are the numbers that are kind of guiding our addition.

At the existing site, there's a lot of space around the building, but mostly the building is pretty land-locked based on our property lines. On the, kind of the west side of the site, our property line is very close to our parking lot. If you're familiar with the site, that is the approximate location of the property line. And then on the north side, we are also bound pretty tight next to the baseball fields that are there. So, again our property line is there, the Park District is to our north and west.

Right now, we do, up into the upper left, the blue area, is where our stormwater detention is. We have an intergovernmental agreement with the Park District for that area. So, that's where our stormwater discharge for the site goes. We're working with the Park District right now to make sure that we're in compliance with the new site as well, and the MWRD and the Village on those portions.

I also pointed out where the small shed is located kind of where the Greenbrier name is on the slides and then also the school setback variance request location on the kind of the southeast side of the building.

Also, just an existing floor plan of the building to kind of give you the shape of the building. Again, the main gym and commons areas are up in the north. The classroom portions are mostly down to the south. The main entrance is on Verde, again up on the northeast kind of corner of that side of the building where the parking lot is.

Here is the proposed addition. Again, we're kind of looping it in to the existing building on where we're at. Another wing would be coming out to the south, kind of in tandem with the existing wing that's on that portion of the building. Again, we set it up this way because this is kind of the only spot that made the most sense based on our site constraints. We

looked at, I couldn't even tell you, more than probably 15-20 options on where to put this building. And this made the most sense logistically and how it loops together with the current EC program.

So, again, a two-story addition, two classrooms on the first floor, two classrooms on the second floor, with some small office and group spaces as well to help out some of the programs that need some smaller group spaces. We're also proposing to add 10 additional parking spots there along the building, and again those will be for staff only to allow staff to park there, get some more people off the street and give some relief in the future.

Again, just a blowup a little bit further of the first floor addition as well as the second floor addition. They're kind of mirror images of each other. So, again about 4,500 square feet roughly on each floor.

Again, this is the existing site actually with the overlay of the new building and some of the other items. The only other item that we'd really be adding in the addition would be the parking spaces in the red, and then also a small early childhood playground structure in the green there. That would be a rubber surface that we've been putting in at the rest of our buildings in the school district. So, again this is the proposed site plan. Again, not a lot of changes but except for that small area on the south of the building.

Here is a rendering of the proposed addition. Again, the addition is all these portions kind of creeping off down to the south and with the curtain wall system for the stairwell. Some of the majority of the addition is contained within that small triangular area on the south portion of the building.

Next portion is kind of some existing conditions that we're dealing with, mostly for traffic and student population. I'd like to put this on here kind of just to show you the student population, where they are in for Greenbrier. They're pretty constrained by 53, Route 12, Rand Road, and Palatine Road. So, this is mostly our K-5 population. Again, the EC program draws from entire district, but the 220 plus students in our K-5 program are coming from that neighborhood. So, they are pretty locked in between Palatine, Rand and 53. Not a lot of major streets up there, so it's a very residential area. Not a lot of businesses except for on Rand Road, again we're all kind of southwest of Rand Road, there's again mostly residential and school.

Here is our current parking lot and stacking areas. So, currently we have 65 parking spots between the two parking lots. We have 807 feet in the west lot and 343 feet of stacking in the east lot for a total of 1,150 feet of total vehicle stacking on site.

This one is just a satellite image from 2016 of the parking. It's a little bit hard to see, but we just want to show that on site it's taking on the majority of the cars. So, there aren't a lot of vehicles parking on the street for the site. Also an image from this year in April, also showing that the majority of the cars that are parking on the street are parking on Verde up near the main entrance.

Here are some of the metrics behind the existing parking that we used again for Windsor and then what we're using for the project would be the 65 parking spaces on site for the 466 students is .14 parking spaces per student. We've been using the Institute for Traffic Engineers' recommendation of .17, so we're still a little slightly off on that, we're very close. But again, as you can see from some of the satellite images, we really don't have a lot of overflow parking onto the streets. The majority of it is into the lots where it's needed.

Currently, we have existing, last year we had 21 classrooms, and that took into account two modular classrooms and one classroom in the building that I wouldn't say is a full-sized classroom, but it was used as a more typical classroom, but it's undersized and under

available for the needs that we have for the building. Again, the onsite stacking, the street stacking, and the cap numbers, again, that's for an after-school program through the Park District just capped for 90 students in there. So, that's students that are going to be dropped off before normal hours, again, not getting into the regular day-to-day student population traffic.

Drop-off and pickup times, this is one of our most, I would say complicated in the number of times a day we have, but again, we have less students at this building at times. So, we kind of wanted to put it into a chart. I didn't know how else to present this. It was very complicated. It took me some time to sit down with Donna and her staff and try to fully understand how they route this. So, if there's any specific questions on this, we can have Donna help out. But again, with the K-5 population and the EC programs, there's varying times during the day for when students are dropped off. It's a little hard to see in your screen, hopefully you can see it a little bit better on your slides. The numbers in the boxes represent approximately how many students, the potential at each time how many could be dropped off and picked up at that time, and then also the color corresponds to what lot they would be using for the 2016-2017 school year.

So again, first through fifth grade has 228 students. They drop off at about 8:50 and they're out at 3:35. Early childhood a.m. drops off at 9:10 and they're out of there at 11:40. Early childhood p.m. starts at 12:50 and gets out at 3:20. The early childhood program has seven students in the afternoon at 12:50, beginning kindergarten starts again at 8:50 and is out at 11:50, p.m. Kindergarten starts at 12:45 and is out at 3:35. Then also there's 21 students during the week that are just popping in and popping out, they're the students for resource and speech. So, again a very varied drop-off/pickup, it helps alleviate staff disruptions, it allows them to assist a little bit easier and there is not as much traffic for the kids that have special needs for drop-off and pickup.

So, we have a short video on the morning drop-off. We had a video, we filmed it for the afternoon, for some reason it didn't work. We had an issue with the file so we couldn't get it to work. We kept looking for it again today, we just couldn't get it to work. None of our viewers were opening it. So, I wish I have that, that really shows very well the traffic flow, but again we'll start off with the morning, you can kind of see where it is. It's about a two-and-a-half to three-minute video on the morning traffic. Sam, could you click on that?

(Video was started.)

MR. SCHULZ: Again, this is the intersection of Verde. It's on the left side of the screen and Roanoke is kind of the middle right now, kind of T intersection in. Then there is a parking lot where the drop-off/pickup occurs, again, a majority of the students go through that lot. Just trying to show a little bit of that Verde-Roanoke intersection, that there isn't a lot of traffic there and that the students again are able to cross fairly safely there at that intersection based on the student loads and the traffic loads at this time. So, again I'll sort of play it out, if there's any questions then afterwards, please feel free to pass them through, but I'm just trying to show traffic patterns.

CHAIRMAN ENNES: What time of the day is this?

MR. SCHULZ: This is at about 8:35 I believe, is that right? That day that we filmed? Do you remember that day?

MS. BINGAMAN: It might have been a little later.

MR. SCHULZ: A little later than you think? Yes, so 8:40, somewhere in there up to 8:50.

CHAIRMAN ENNES: Classes start at what time?

MS. BINGAMAN: Classes start at 9:05, but students are led into the building at 8:53.

MR. SCHULZ: You can see up over here too, this is a major area where the students are dropped off and where staff help, and then they go into the doors here, and then also I believe you have some of the students who go in at the triangle door in the back. So, after they get help getting out of the vehicles up in here, they're able to loop out and currently they can turn left out of here. We'll propose this later, that's one of our suggestions is to limit this traffic to a right-turn only on the parking lot to help alleviate some traffic up in this area. We understand that this is a little bit of an inconvenience, but we really think it's the best option to help alleviate traffic up here because if you watch it in the morning here, everybody almost, I think it was 90-95 percent of the vehicles on both of them, both drop-off and pickup are going to the lot and again being moved to this intersection. If we can loop them out, we're trying to alleviate that pressure on that intersection a little bit by signing it and then we will work with the Police Department to help enforce that once the school year would start.

COMMISSIONER JENSEN: So, how do they get back to Rand if they don't turn right? I assume they'll want to go to Rand or someplace like that.

MR. SCHULZ: This way is south, so this way they're going to probably go to Palatine. This way would be your out up to Rand. So, this way would be over to the frontage road, if they loop out this way then they can use the frontage road to get to either Rand or down Palatine that way next to 53.

CHAIRMAN ENNES: That parking lot is the parking lot at the front door of the school, right?

MR. SCHULZ: No. This is the back main, we call this the back bigger parking lot. I wouldn't call it the main one, I guess, but we do have a main entrance that students come in here and then there's one just out of the frame here at the bottom, a little bigger entrance that they can use. So, again Greens Park is kind of right over here and our property line is right here. Again, it goes well with the addition. The addition will sit roughly in this area right here.

Yes, it's just going to start fading here a little bit, the battery is sort of dying on it so you'll start seeing it fade out here but it will be over real shortly. But again, just trying to show the way the traffic pattern, the majority of the people are going out to the left. We're going to propose that everybody during the school hours are going on to the right to alleviate traffic out on to the frontage road.

COMMISSIONER GREEN: Do you have any pickup video?

MR. SCHULZ: We don't, that's the one I just said that --

COMMISSIONER GREEN: Okay, that's the one --

MR. SCHULZ: The file was corrupt. We filmed it and it just didn't come off the card. We have the file, we can see the name, the numbering system, it's just not coming off for some reason.

COMMISSIONER JENSEN: This is real time or speeded up, slowed down, what?

MR. SCHULZ: No, that is real time. This is normal speed, it wouldn't speed up at all or anything, so that was normal speed.

So, again that's a typical school day, that was a day when we only had 15 students out. We checked the enrollment for that day, again a pretty normal day. Again, I

wish I had the afternoon. I'll point on this while we have it here since we didn't have the video, our major problems in the afternoon are right here in this section. So, cars start queuing up here to get into the parking lot and then what happens is some people don't know what they're doing, that they're parked, they're stopped or going no matter what, so they try to go around and then they realize, oh, they are in line to get to the parking lot and then they're kind of double parked there for a little bit. So, it just really creates an issue here, and again, I wouldn't say it's a major issue. Commissioner Green I think goes up there so you can probably speak to it better than anybody.

COMMISSIONER GREEN: Yes. When I do it, when I pick up my granddaughter, there's a line of traffic. In other words, in front of the school, that's park solid, okay, and so I used to park when there was a spot, at the very end of it I walk. I don't want to get into that craziness, I just don't want to do that. But that line backs up from the door out all the way and down on --

MR. SCHULZ: Verde.

COMMISSIONER GREEN: -- Verde, let me get the right street and it's solid. And the times that I've managed to get a parking spot at the end there, I have trouble getting out because they're all queued up around me, they think I'm crazy and I'm just going can I please just go now? And so, you have to wait until somebody moves up to get out of the parking spot.

COMMISSIONER CHERWIN: Honestly, Bruce, I was expecting to see a red pickup on this thing --

COMMISSIONER GREEN: Well, usually it's right at the corner there.

COMMISSIONER CHERWIN: Yes. Conveniently it's not on there, huh? That tape is missing.

COMMISSIONER GREEN: There's that light on the top of the school bus going --

MR. SCHULZ: Yes, so again, this is our major area. Again, it's mostly here, again cars queue up again on Verde in front of the school, but it's not that bad there, again there's a lot of frontage there. The problem is mostly right in this area.

COMMISSIONER GREEN: Well, where you get the problem is, and it really has nothing to do with the school or the drop-off or anything, it's the people driving the cars. They block the sidewalks and heaven forbid you want to cross the parking lot and there'll be a, you know, a family minivan sitting there blocking the sidewalk. In the wintertime that's a problem and people get a little upset from time to time. I was happy when I saw the police were there at the beginning of last year and they were educating the drivers on how they should be doing that which helps for a while and then they go back to the old routine.

I've got a question for you only because I use it, can you park, if you continue down the street, can you park along the baseball fields?

MR. SCHULZ: Yes.

COMMISSIONER GREEN: Is that legal over there?

MR. SCHULZ: Let me see if there's a --

COMMISSIONER GREEN: You know what I mean? If you kept going to the right.

MR. SCHULZ: Yes, I'm just trying to pull up the next one because we kind of show that area. Here we go. So, again to reoriented, this is the parking lot we're showing you.

COMMISSIONER GREEN: Right.

MR. SCHULZ: We're kind of looking at it facing this way. Yes, you can park

here.

COMMISSIONER GREEN: But you can park on the right side as you're going --

MR. SCHULZ: Yes, right now as far as I'm aware, you know, to --

MS. BINGAMAN: Yes, all the way to the next block.

MR. SCHULZ: Yes, there's another cross street right up here.

COMMISSIONER GREEN: Okay, but that's legal, because I'm sometimes looking for a spot and I don't know where to go, so --

MR. SCHULZ: Yes. So, this is kind of the existing afternoon staging, I can try to point out some of the trouble areas. Again, mostly I'm just showing the stacking on how cars are going to stack up. They start up here at the intersection and go into our lots. Again, if they're using this lot to pick up, then they're queued up. Again, for the back lot, the queuing starts back here at Verde near the front entrance, comes around and loops back into the lot. So, this whole area is kind of used for queuing up in the parking lots.

Occasionally, we'll have some staff members parking over here, and again later in the presentation you'll see that we're going to propose to shift them onto the more school and Park District sides since there won't be any houses. It just makes more sense to try to get them on the other side of the street. And then you can see here slightly in the satellite image, this is where people, if they're going into the front door, either staff or parents or whoever, a little bit of overflow, that there is kind of a park up here by the parking lot and then enter the front door.

This is the major intersection again that would take all the traffic out from the back parking lot and anybody coming in. So, this is the intersection we're trying to free up a little bit by restricting this traffic to right turn only.

COMMISSIONER JENSEN: So, is that parking that staff does with the dotted line, they're there all day long? They park and they're there all day?

MR. SCHULZ: Yes. I don't have a grasp of how many cars there are, I've never really seen any. Even from the satellite images, that really confirms it, is there's like three. Yes, I don't know if you have better grasp about how many there would be, but again it's not many.

MS. BINGAMAN: It's not a lot.

MR. SCHULZ: Yes.

MS. BINGAMAN: They're more likely to come and park at the front and they park at the back.

MR. SCHULZ: Then again, this is just pointing out that several minutes prior to start, kind of queuing up here.

So, kind of some of the proposed conditions again, talking through the parking on putting staff if they do park on Roanoke to put them up near the park. Again, there's ample sidewalk access to the site and the backdoor of the building. Again, here is our permeable paver parking spots, the 10 parking spaces that would be going in, and then go through a restriction to a right turn only out of the lot during school hours.

MS. BINGAMAN: We are making one more change for this year that we hope to alleviate some of that congestion. That back lot in the previous years had been used for taxis to pick up students as well, as well as parents. We're going to push those taxis off to the front of the building.

COMMISSIONER GREEN: That will help.

MS. BINGAMAN: So the parents will be able to pull all the way up. So, that will be a whole another stretch of area, that should help.

COMMISSIONER GREEN: That will help because there's taxis there all the time and they stop right at the door and that ends it, right there.

MS. BINGAMAN: And there's two, three students having to be, car seats put in and students buckled in.

COMMISSIONER GREEN: Right.

MS. BINGAMAN: So, it takes quite a bit of time to get those kids in and settled. So, I think that 's going to help quite a bit. They practiced that over --

COMMISSIONER WARSKOW: Can you show us what she's talking about?

MR. SCHULZ: Yes, do you want to come up here?

MS. BINGAMAN: All right. So, this is our front lot here and this is where we're going to push all of our taxis for our early childhood children. Last year, they were to line up here and then parents started behind them and then went this way. This year, we'll be able to pull parents all the way up here and then have them exit. Our early childhood students are walked out, they're not dismissed like our K-5 kids are. There is an adult that walks every child out so it takes a little bit longer than our K-5 process, and we think moving those taxis to the front which is a very time-consuming process will allow us to push the parents through quicker.

COMMISSIONER GREEN: Would you do the daycare buses, too? What happens with those?

MS. BINGAMAN: We only have a few of those.

COMMISSIONER GREEN: You've got a few of those, right.

MS. BINGAMAN: And mostly they're Kindergarten.

COMMISSIONER GREEN: Okay.

MS. BINGAMAN: I think we've had one last year, none the year before, and one the year previous that was preschoolers.

COMMISSIONER GREEN: Because that's a whole slew of car seats. They take them out on roll out dollies and I'm going, oh my God.

MS. BINGAMAN: The daycare vans have never been more than one student. There are some big bus, you know, the van taxis that are holding four kids at least.

COMMISSIONER GREEN: Right, where they've got to put the seats in when they --

MS. BINGAMAN: Yes, and that's time consuming to make sure that those seats are placed in there appropriately.

COMMISSIONER GREEN: Do the kids own those seats?

MS. BINGAMAN: Yes.

COMMISSIONER GREEN: Oh, they do.

MS. BINGAMAN: The parents are required to put them in the taxis in the morning, and then our staff takes them out, takes them into school and then we put them back in and the parents are required to take them back out again.

COMMISSIONER GREEN: I always wondered how that worked.

MS. BINGAMAN: Yes, those are all the student's car seats.

COMMISSIONER GREEN: Thank you.

MS. BINGAMAN: Sure.

MR. SCHULZ: Just showing some comparison metrics on what we're

projecting and what we currently have. So, again this chart over here is one of those previously seen using some projections up into the 2021 school year, increasing to 75 spaces, student population up to 525. So, the ratio remains the same as what it is today. Staff, we might see an increase, again this depends on what areas we see the growth in. So, we put a projection on that and four more staff for the students, and then the final classroom kind of 22 with the addition, full size in the existing building with the four additional classrooms in the addition.

Cap again, this is kind of a swag number that we would take at this, but again somewhere in the 95 taking out some more students in the cap as well as the base in the enrollment population.

COMMISSIONER JENSEN: Are the modular rooms going to go away?

MR. SCHULZ: They are away already, yes. In the anticipation of the construction, we've removed them for the school year, and then we took them inside the building as we made some temporary accommodations.

So, here are the proposed solutions to the issues that we present tonight. The first one is implementing 10 additional parking spaces on site. There would be signs for staff only, again that's to prevent parents from parking in those spaces and having to pull in and out during drop-off and pickup. Staff would be there in the morning first thing, they park in these 10 spots and then they'd be able to leave after the student population has left.

Place a right turn only sign at the exit to the west parking lot, again that is the parking lot that was in the video with the majority of the traffic through it, and to try to get people away from that intersection near the site.

Continue to updating traffic plans for families' expectations for drop-off and pickup including the encouragement of car pooling, biking and walking. I'll show you the next couple of slides, Greenbrier does an excellent job of that already with putting traffic plans together, on the expectations for what lot they're going to go in, a very graphical interpretation of where to go. So, it's very clear for students and staff, and Donna and her staff will just keep working on those for any tweaks that need to be made.

Then encourage staff, on Roanoke, to park on the school side of the street near the park, again for anybody that parks over there, and even we can encourage parents to park in that side as well.

For the Village of Arlington Heights, really just looking at enforcement efforts, when the police are available they would come up and continue to enforce this and they can really deal with that at the beginning of the school year at the new sites, coming out to take a look and make sure they're understanding what the traffic flows are like, and then monitoring traffic patterns and properly sign areas that may need require. So, that's something we might look at after construction is done on that side, putting some signage up, no stopping or standing or work with the Village Staff to determine if that's necessary or what other measures we can implement after it's complete. So, again just continue to work with the Village as we done on all our school sites to make sure that we're putting the right things in place so that they can enforce it.

I just want to show you the example that Donna put together for her parents and families up at Greenbrier, just showing, again very specific to a grade level, again drop-off, pickup, what lots they're using, again reminding no cell phones, some other rules of the road type of things. Again, two more for the a.m. Kindergarten and p.m. Kindergarten showing what lots they're using and times of day for pickup.

We put this in Windsor and I think it just kind of relays what the site is

dealing with on things at the site. Again, we want the students to walk and bike and things like that. But this one in particular is a very young student population so it's hard to encourage them for a certain age, to have the parents let them walk and bike to the site. So, again distance to the school, little impact, it's a very consolidated area, it's pretty tight. It's pretty conducive to walking. Student age is the biggest impact I'd say for that building, again EC students, Kindergarten students, a pretty big portion of that population is young in age.

Traffic-related dangers, really pretty low there because they are contained within the major streets, so not a lot of impact to that. Weather conditions as always in all our schools is pretty high especially in the winter months as expected. Crime, we perceive crime very low in Arlington Heights, not a lot of major crimes going on that would prevent people from walking down a certain street or that way. Then student conveniences as always, it's easier to drop your kid off in the morning as you're on your way to work or vice versa in the afternoon, if they've got to go to practice or go to the grocery store or things like that. So, that would be another barrier to why people wouldn't walk or bike to school and why more cars are coming to our site.

The last slide is just showing that, we kind of reviewed this earlier kick-off with Sam and Village Staff, again with our traffic engineers, Dr. Bein has had a traffic meeting with the building itself for parents and staff to kind of get some of their ideas, Village engineer and traffic and then again all the district administration kind of with Stacy Mallory from transportation and all the different entities that are involved for the school. So, that is our proposed addition and if you have any questions I'd be more than happy to answer.

CHAIRMAN ENNES: Thank you. Is there anybody else who is going to testify or just our questions? Okay, Sam, can we have the Staff report?

MR. HUBBARD: Yes. So, as you've heard, the Greenbrier School is in for an addition. The subject property is zoned R-3 which is a Single-Family Residential Zoning District. Schools are allowed in the single-family zoning district, but they do require a special use permit. This school has never been approved for a special use permit, so as part of the proposed addition, they are going through the process to receive a special use permit.

Five variations are required in conjunction with this project; three of these five variations are for existing conditions, and the other two variations, one for the fence and one for the parking, are created by this project or exacerbated by this project.

To date, there have been three meetings that the school district has attended relative to this project. On June 28th, they went to the first ever Conceptual Plan Review Committee meeting and received a positive recommendation to move forward. There weren't any huge issues identified at the meeting at that time. But one of the main things that was asked was that the traffic study propose possible improvements to some of the drop-off and pickup activities which has been done.

On August 8th, the school district appeared before the Design Commission and received a positive recommendation of approval. There were two conditions of approval attached to that recommendation, one to provide screening on a proposed RTU unit and existing chiller unit located on the roof, and secondly, to add in some additional foundation landscape plantings on the south side of the building by the intersection of Roanoke and Verde.

The school district, at the request of Staff, also held a neighborhood meeting on August 14th, and no residents attended that meeting.

So, here is an aerial again of the property. And relative to the first

variation requested, I'll just point that out, you can see here this location of the building is set back only 13 feet from the property line along Verde Drive. The code requires 40 feet and that's based on the lot width. So, this is again an existing condition of the building and Staff felt that it wasn't practical or really most likely financially feasible for the school district to alter this non-conformity. So, as a part of this process, they are requesting a variation to formally grant this existing building setback and Staff is supportive of that variation.

Here we see the site plan again showing the addition to the building here. The current shed is located right here. It's classified by our code as an accessory structure, and accessory structures have to be located in the rear yard which is this area, which is currently occupied by the asphalt playground and rubber play area. So, there's really no practical location that they can locate that shed to conform to code requirements. So, again we're supportive of that variation request as well.

Relative to the parking space depth, there's a small portion of the existing parking lot, right about at a pinch point right here where the depth of the stalls are only 18 feet. Because they're angled parking, at 60 degrees, our code requires that they be 20 feet in depth. Again, this is an existing condition. As you can see, the site is very constrained so there is really no opportunity to practically expand the parking lot to address this. We've made the Petitioner aware of this issue, so they are aware of the substandard nature of the parking stalls. I don't think it's ever created a problem for them, Staff is not aware of any problem relative to the substandard parking stall depth. So, we are supportive again of this variation.

The fourth variation is for the existing fence that's going to be constructed right here. It's to enclose the courtyard area and restrict after-hours access. That fence is proposed at six feet in height. The tallest fence you can construct in Arlington Heights is five feet unless specifically allowed for screening or buffer purposes. Due to the open nature of the fence, Staff is supportive of the variation request. We don't feel like it's going to provide a negative aesthetic. Additionally, the Police Department requested some type of barrier to prohibit after-hours access here, so we think it's a good thing that the fence will be six-foot tall. And we are supportive of the variation.

So, relative to parking, here's a chart that illustrates the existing parking requirements and parking versus the proposed based on the addition. They are adding nine parking spaces, and the parking lot is currently just about capacity. There is minor overflow or street parking at some times during the day, but nothing to where the Village is aware that that's been a significant problem creating concerns and complaints from the neighborhood. Given the unique aspects of the site, again that it's land-locked and some of the unique aspects of our parking code relative to schools, we are supportive of this variation as well. We saw variations in parking to both the Windsor School and the Thomas School. I think our code probably could use somewhat of an update in regards to realistic parking demand and requirements for schools. So, we are again supportive of that variation as well.

This is a zoom-in of the addition area. I just want to again highlight the areas where some congestion occurs. Congestion occurs during pickup, so as cars begin to wait to pick up children in this area and then cars come and start stacking as they're picking up children, it creates a situation where there's double parked cars here. So, if you're coming down the street this way, it's not the most safe situation for vehicular traffic. The traffic study did recommend the restriction for left-bound exiting only from the parking lot here which will help to alleviate the congestion at this intersection and the dangerous situation when cars are double

stacked here and having a car eastbound on Roanoke Drive.

We did have our traffic engineer look at that, and he was supportive of that recommendation. He did point out that it will create, you know, new traffic in the neighborhood this way which is not experienced currently as most of the cars will come down through here, but it will be offset by the benefit of creating a safer intersection here. One of the other things our traffic engineer noted is that these one or two spaces here are in fairly close proximity to the entrance area. So, a car backing up here may come in conflict with a car entering the site.

So, one of the things that he recommended and the school also recommended was that these spaces be limited to teachers only. The teachers would be arriving before primary pickup and drop-off times. So, when these cars are backing out, it's not going to be during the peak travel times for the school, so hopefully that's going to minimize any potential conflicts.

We are recommending approval again of the parking variation on the addition of the nine stalls will help even though there is a potential for conflict although we do note, hopefully with the new technology that a lot of the cars have as far as, you know, backup warning. Hopefully this is not going to be a major problem.

We did include some recommended conditions of approval; one, that the school will implement the restriction of exiting the parking lot; also, that they limit those nine spaces to teachers only; and then of course compliance with the Design Commission approvals; and our boilerplate condition for compliance with all applicable federal, state and Village codes, regulations and policies. So, we do recommend approval of the application subject to those conditions.

CHAIRMAN ENNES: That's your complete report, correct?

MR. HUBBARD: Yes.

CHAIRMAN ENNES: Can I have a motion to add the Staff's report to the minutes?

COMMISSIONER GREEN: I'll make that motion.

CHAIRMAN ENNES: Is there a second?

COMMISSIONER JENSEN: Second.

CHAIRMAN ENNES: All in favor?

(Chorus of ayes.)

CHAIRMAN ENNES: Is anyone opposed?

(No response.)

CHAIRMAN ENNES: So, Mary Jo, would you like to start?

COMMISSIONER WARSKOW: I get to start off?

CHAIRMAN ENNES: Sure.

COMMISSIONER WARSKOW: Sure. Superintendent Bein, I had the pleasure of attending a meeting you held at South Middle School to address parents, staff, neighborhood questions and issues about parking and traffic. Did you hold a similar meeting before the school year ended at Greenbrier?

DR. BEIN: Yes.

COMMISSIONER WARSKOW: Were there any other concerns that were brought to your attention besides the ones that had been addressed?

DR. BEIN: Thank you for asking. We had about five families attend that,

and the concerns were all focused around the Roanoke-Verde intersection, as cars are trying to leave and students are trying to walk. That really was the focus that each of those families expressed concerning it.

COMMISSIONER WARSKOW: When we're talking about double stacking, a lot of people brought this up, is it that there are cars parked where, you know, they're allowed to park against the curb and then there is just traffic backed up? So, it's not that people are trying to pull in to the lot, to the circle both at the same time?

DR. BEIN: Sometimes that does happen.

COMMISSIONER WARSKOW: Sometimes, okay.

DR. BEIN: So, they do wait along Roanoke, and then people get to the intersection at Verde and Roanoke and think that those people are parked there, and then they turn. A little bit is the difference between our EC and our K-5 drop-off times, so the K-5 parents are coming a little earlier than they should. They are asked not to arrive before 3:30, but they sometimes will arrive before that. If they wait until 3:30, we have our EC population cleared out and there isn't that congestion.

I, myself and my assistant principal try to be out there often. We were out there a lot this spring trying to help educate the families about waiting and not pulling up against those drive curbs.

COMMISSIONER WARSKOW: That would be my concern is making sure that parents really understand the safety issue with having kids coming in and out of cars that are double parked. You mentioned staff, how many staff do you have out monitoring before and after school traffic?

DR. BEIN: Sure. During, and know that I'll talk K-5 and EC because they're very different. K-5, we have four staff out in the morning, one at the front, three at the back. EC, we have our entire EC staff on duty as they go out to pick up the children and walk them in individually or in pairs. So, they're grabbing them by the hands and taking them in. So, it's our entire EC staff that's out there for both EC drop-off and pickup. At the end of the day, we have five staff members out for pickup.

COMMISSIONER WARSKOW: Do you have any parent volunteers that help?

DR. BEIN: We do not.

COMMISSIONER WARSKOW: Has that been tried and just not successful or not --

DR. BEIN: We are a smaller community of working families and so it's just not something my PTA is interested in doing as they have enough problems getting volunteers for the things that they're doing.

COMMISSIONER WARSKOW: Those are all my questions at this time.

CHAIRMAN ENNES: Thank you. Bruce?

COMMISSIONER GREEN: I really have no questions. You've heard, you know, I'm right there, so I think that the few changes that you're proposing with the taxis is really going to help. And if you make those people turn right going out of that lot, that's going to be a wonderful thing. They're going to start parking and walking to the door because it's faster and easier, it really is, than waiting in that line. So, anyway I think it's great.

MS. BINGAMAN: It does move quick.

COMMISSIONER GREEN: Oh, no, it moves fast.

MS. BINGAMAN: Both lines, you know, we do, the EC drop/pickup is 3:20 and they're done by 3:30.

COMMISSIONER GREEN: Right.

MS. BINGAMAN: And the K-5 is the same, it starts at 3:35 and they are done by 5:43 on most days.

COMMISSIONER GREEN: Yes, but just because I park and walk, I'm out of there and I'm still looking at people waiting to pull up and I'm just gone.

MS. BINGAMAN: Absolutely.

COMMISSIONER GREEN: So, it works. If more people would realize it, it's just easier to park and walk, and safer. So, anyway, it works, it's great. I love it.

CHAIRMAN ENNES: Lynn?

COMMISSIONER JENSEN: Well, I don't know whether you have fewer problems than the other schools that you brought before us or you did a more ingenious job of solving the problems, but I think you've done a great job and I really don't have any questions. I'm very supportive.

CHAIRMAN ENNES: Jay?

COMMISSIONER CHERWIN: Yes, I echo it. I think you guys did a great job; compliments to your staff for addressing the issues. I sat through the committee meeting before, so I saw most of it. I don't really have any questions. I think you guys put a lot of thought into doing what's best here and I'm sure that if something unforeseen comes up and you need to adjust that, you know, you guys have the thought to do that.

The one question I have with Sam is your condition is that they're going to put in the, they're going to have to come back to the Village to change the left egress. Is that, what is that, like the Staff or the Engineering Department? They don't have to come for a formal hearing or approval, do they?

MR. HUBBARD: Right, no, just that they'll have to, yes, talk to --

COMMISSIONER CHERWIN: So, they can adjust it if they need to, but they're going to have to come to you guys and talk it out, we don't have to have them here then.

MR. HUBBARD: Right.

COMMISSIONER CHERWIN: Okay, I think that's reasonable. Nice job, nice project.

CHAIRMAN ENNES: Thank you.

COMMISSIONER CHERWIN: And I'll reserve further comment for what the public has to say.

CHAIRMAN ENNES: Thank you.

COMMISSIONER CHERWIN: And I'll reserve further comment for what the public has to say.

CHAIRMAN ENNES: John?

COMMISSIONER SIGALOS: I agree, I mean, it's a very good presentation. A lot of thought has been put into this and I have no issues with it. I really don't.

CHAIRMAN ENNES: Well, I feel like the odd man out, but Sam, just to re-confirm, notices were sent out to all the neighbors?

MR. HUBBARD: Yes.

CHAIRMAN ENNES: And that was sent out by the school district?

MS. BINGAMAN: Correct.

CHAIRMAN ENNES: So, all the adjoining property owners, nobody had a problem with street parking?

DR. BEIN: We sent it to homes within 250 feet of the boundary of the property.

CHAIRMAN ENNES: So, you have 82 employees currently and you're projecting maybe four or five --

MS. BINGAMAN: It's about 76 right now.

CHAIRMAN ENNES: 76?

MS. BINGAMAN: That 82 was last year, and we did have a classroom removed from our building over to Windsor with the addition being completed there.

CHAIRMAN ENNES: Oh, okay.

MS. BINGAMAN: Yes, and Fridays --

CHAIRMAN ENNES: So, you were carrying some of their overload?

MS. BINGAMAN: We were carrying some of their overload. And Fridays, we don't have any of our teaching assistants for our early childhood program because we don't have our early childhood students there. So, Friday is much shorter.

CHAIRMAN ENNES: So, that takes you below the 76 or the --

MS. BINGAMAN: Oh, yes, probably like 18 less cars. Then also you have to realize, because we are a smaller building, our K-5 population is smaller, so we do share quite a few staff members with other buildings. So, because we have 75 staff members doesn't mean all 75 of them are there on one day.

CHAIRMAN ENNES: You said you don't have volunteers. I assume, was that really just for the drop-off and pickup? You have volunteers at the school for lunchroom or whatever the PTA does do?

MS. BINGAMAN: Yes.

CHAIRMAN ENNES: About how many people is that? Do you know?

MS. BINGAMAN: It depends on the event.

CHAIRMAN ENNES: Let's say just on a normal day?

MS. BINGAMAN: On a normal day? Oh, people coming into the building to volunteer?

CHAIRMAN ENNES: Yes.

MS. BINGAMAN: Probably five or six.

CHAIRMAN ENNES: Okay, so that relatively, I just have a real concern that the parking requirement is so high and we have such a huge variance. The requirement two spaces per employee, that's a Village requirement based on the use?

MR. HUBBARD: Based on the use, yes.

CHAIRMAN ENNES: Do we have similar variances at the other schools?

MR. HUBBARD: Yes, we did. We granted, not quite to this extent, a variance at Windsor, and a variance was also granted at Thomas as well.

CHAIRMAN ENNES: I just have a concern about approving such a huge variance when we have had other variances even recently where parking was the issue and we haven't approved their projects based on that, but if there has been no complaints and you do have extra parking on the street, I guess that's something you can look at.

COMMISSIONER JENSEN: Terry, I think that the problem is with the requirement.

COMMISSIONER CHERWIN: Yes.

COMMISSIONER JENSEN: I don't know why the Village, when you guys go through and look at this again, you ought to get close to a reasonable requirement because what's there for all the schools that we've looked at has been totally unreasonable. It should be adjusted in a way that we don't have to look like we're approving a variance that's three times the number of spaces we do.

CHAIRMAN ENNES: Or twice, yes.

COMMISSIONER CHERWIN: We talked about that in the committee and I will say, Terry, I think what we're seeing here is while it might be a larger variance, it's not disproportionate to what exists currently. I mean, right, you still have a pretty big delta between what the code would require in the event a teacher drives two cars to school.

CHAIRMAN ENNES: If things are good.

COMMISSIONER CHERWIN: But that's what I think Lynn is making, you know, I think Lynn's point is taken which is, you know, why is it based on two per, you know. So, I guess the comfort level I have with it is it's consistent with what's been done in the past, it doesn't seemingly have a, you know, a real poor impact here. I know we haven't had really any public outcry over it.

CHAIRMAN ENNES: So, if the day-to-day seems to be working fine, when there's an event, probably the biggest event that I have had in my experience with congestion at a school is parent-teacher conferences. And you have one to two parents, one car almost for every student. Is it that high or are those spread out?

MS. BINGAMAN: Parent-teacher conferences are spread out through the day, and so there isn't more --

COMMISSIONER WARSKOW: But you'd have open house.

MS. BINGAMAN: Open house is the more critical.

COMMISSIONER WARSKOW: Yes. You'll have one school night where --

MS. BINGAMAN: We actually have two.

COMMISSIONER WARSKOW: You have two, okay.

MS. BINGAMAN: We split it so that we are helping with some of that congestion. So, we have our EC parent nights or early childhood parent night on a different night than our K-5 parent night.

CHAIRMAN ENNES: So, it's spread over time so that you don't have all the students here.

MS. BINGAMAN: Yes.

CHAIRMAN ENNES: Okay.

MR. HUBBARD: I would add that it is on our radar to look at our school regulations for parking.

CHAIRMAN ENNES: To make it more reasonable?

MR. HUBBARD: So, yes, that's something we've already begun research on. I'm hopeful that once we get to the second round of code changes, we'll have something.

CHAIRMAN ENNES: I think that would be a good idea because anybody who gets that could use that as, you know, granting these huge variances right after us, but okay, are there any other comments? Well, is there anybody from the public who wants to speak? No, seeing none.

COMMISSIONER SIGALOS: If I can just interject, and again we're talking

about, you know, our code and what do we code for parking; when I first read this and I see you have a number of employees current and projected, we don't even have enough parking spaces, one space for each employee, so I mean it just really seems to be some, but apparently it's working there. I mean, if you have no neighbor complaints about that, I guess it's working with the street parking, but that just seems to be too much of an imbalance there aside from what the code requires, that we're not even providing a parking space for each employee.

MS. BINGAMAN: Again, like I said, that includes our night shift employees, that includes --

COMMISSIONER SIGALOS: Oh, so they're not all there at the same time.

MS. BINGAMAN: We've got a PE teacher that's only there three days a week, a music teacher that's only there three days a week.

COMMISSIONER SIGALOS: I got you, okay. All right.

MS. BINGAMAN: All of the teaching, you know, the early childhood teaching assistants aren't there at all on Fridays.

COMMISSIONER SIGALOS: Okay, I didn't understand that when I saw the number. I assumed that those were the number of employees that are there during normal school hours. Okay, all right, I don't have anything further.

CHAIRMAN ENNES: Any other Commissioners have any other further comment?

COMMISSIONER JENSEN: Well, you might want to clarify that when it goes before the Board so that the Board doesn't, you know, read it as John did.

COMMISSIONER SIGALOS: Yes.

COMMISSIONER JENSEN: And it looks like you don't have a parking space for all the people who are usually there; you might qualify it and say this is the number on average that is there during any given peak during a school day.

MS. BINGAMAN: Thank you.

COMMISSIONER JENSEN: It might help with the Board.

COMMISSIONER SIGALOS: That would help, yes.

CHAIRMAN ENNES: Okay, we'll close the public comment and deliberations. Do we have a motion?

COMMISSIONER GREEN: Sure. I'd like to make a motion.

A motion to recommendation to the Village Board of Trustees approval of PC#17-007, a Special Use Permit to allow an elementary school within the R-3 District; a Variation from Chapter 28, Section 5.1-3.6, to allow an exterior side yard setback of 13.2 feet for the existing building where code requires a 40-foot exterior side yard setback; a Variation from Chapter 28, Section 11.4-4, to allow 75 parking spaces where code requires 195 parking spaces; a Variation from Chapter 28, Section 6.5-2, to allow an accessory structure (shed) in the side yard where code requires all accessory structures to be located in the rear yard; a Variation from Chapter 28, Section 6.13-3(a), to allow a six-foot tall open fence in the side yard where code restricts fence heights to a maximum of five feet in the side yard; and a Variation from Chapter 28, Section 11.2-8, to allow the existing 18-foot deep 60-degree angled parking rows where code requires a minimum depth of 20 feet for 60-degree angled parking rows.

This approval shall be subject to the following conditions:

- 1. The school district shall restrict left turn egress movements from the west parking lot during arrival and dismissal. Any changes to this policy will require Village review and approval.**
- 2. The school district shall limit parking within the newly proposed nine parking spaces to teachers only.**
- 3. Compliance with all Design Commission requirements as identified during the August 8, 2017 Design Commission meeting.**
- 4. The Applicant shall comply with all applicable federal, state, and Village codes, regulations and policies.**

CHAIRMAN ENNES: You've seen the conditions and do you agree with them?

MR. SCHULZ: Yes.

COMMISSIONER CHERWIN: Second.

CHAIRMAN ENNES: Take a vote.

MR. HUBBARD: Commissioner Green.

COMMISSIONER GREEN: Yes.

MR. HUBBARD: Commissioner Jensen.

COMMISSIONER JENSEN: Yes.

MR. HUBBARD: Commissioner Sigalos.

COMMISSIONER SIGALOS: Yes.

MR. HUBBARD: Commissioner Warskow.

COMMISSIONER WARSKOW: Yes.

MR. HUBBARD: Commissioner Cherwin.

COMMISSIONER CHERWIN: Yes.

MR. HUBBARD: Chairman Ennes.

CHAIRMAN ENNES: Yes. So, you've received a unanimous approval from the Plan Commission. Has a date been set for them to go before the Village Board?

MR. HUBBARD: Yes. We have a tentative date for maybe September 5th.

CHAIRMAN ENNES: So, congratulations. Thank you for your presentation.

DR. BEIN: Thank you.

MS. BINGAMAN: Thank you.

REPORT OF THE PROCEEDINGS OF
THE CONCEPTUAL PLAN REVIEW COMMITTEE
OF THE VILLAGE OF ARLINGTON HEIGHTS PLAN COMMISSION
HELD AT VILLAGE HALL ON:

June 28, 2017

Project Title: Greenbrier School Addition
Address: 2330 N. Verde Dr.
Petitioner: Don Hanson
STR Partners
350 W. Ontario St. – Suite 200
Chicago, IL 60654

Requested Action:

- Special Use Permit to allow an existing Elementary School within the R-3 District

Variations Required:

- Variation from Section 11.4-4 to reduce the required on-site parking spaces from 195 spaces to 75 spaces.
- Variation from Section 5.1-3.6 to allow a front yard setback of approximately 13' along Verde Drive where code requires a 40' setback (this setback applies to the existing building).
- Additional Variations may be identified once formal plans have been submitted.

Attendees: Ryan Schulz – District 25
Mike Henderson, STR Partners
Bruce Green, Plan Commissioner
Lynn Jensen, Plan Commissioner
Jay Cherwin, Plan Commissioner
John Sigalos, Plan Commissioner
Sam Hubbard, Development Planner

Project Summary:

The subject property is approximately 173,000 square feet (3.97 acres) and is bounded by Verde Drive on the east, Roanoke Drive to the west, and Greenbrier Park to the North. The Greenbrier Elementary School occupies the site, which school has a current enrollment of 276 students in grades K through 5th. The building is also home to the district-wide Early Childhood program that provides special education and pre-school education services for children between the ages of 3 and 5 years old. This program adds an additional 180 children to the school population, for a total enrollment of 456 children within the school. There are currently 82 staff members, 66 parking spaces, and 21 classrooms (including a temporary mobile classroom unit located along Roanoke Drive).

Enrollment at Greenbrier Elementary is projected to increase over the next four years to 320 students in grades K through 5th (16% increase of 44 students) and 200 children in the Early Childhood program (11% increase of 20 children). In order to provide space for this increase, District 25 has proposed an addition to the school building, to be located on the southwestern side of the building. The proposed addition would be two floors, each floor containing two classroom and two offices. With the proposed addition, the need for the temporary mobile classroom unit would be eliminated and therefore the unit would be removed. The projected increase in enrollment would be accompanied by an increase of four additional staff members, for a total of 86 employees at the school. In addition, ten new parking spaces would be added as part of this project, which would increase the overall parking capacity to 75 cars.

Meeting Discussion:

Mr. Henderson introduced himself and stated that they were proposing an addition to the existing Greenbrier School. The

addition would be located on the southern end of the school, which was really the only area that wasn't parkland, a parking lot, or a playground. The addition would include several new classrooms and some new office spaces. The architecture of the proposed building would match the existing building. They would not be altering the existing parking lot or drop-off area, but they did want to add around 9 parking spaces on the east side of the parking lot. These spaces would be reserved for teachers and staff so that they would be filled prior to child drop-off in the morning and the cars there would not need to leave until after parent pick-up of children in the afternoon. In this way the new spaces would not interfere with drop-off and pick-up.

Mr. Hubbard stated that a Special Use Permit was required for the school, similar to the other projects that the school district has undertaken over the last several years. Since the existing school never received a Special Use Permit, as part of the proposed building addition they are required to obtain one now. In addition, a Variation to reduce the parking requirements was needed. The current building does not conform to the parking requirements and even though they were adding some parking spaces, they still fell short of the requirement and so a Variation was needed. The existing building did not conform to the required setback along Verde Drive and so the petitioner was asking for a Variation to formalize this existing non-conformity. Staff did not have any objections to the setback Variation. In sum, staff was generally supportive of the application and acknowledged that the site was small and landlocked so there were not many opportunities to make substantial improvements to the site. The most important items to consider in this project would be the parking and traffic, specifically in relation to the drop-off and pick-up operations. A traffic and parking study will be required within the formal Plan Commission application, and this study analyze and propose recommendations for how to improve traffic flow and parking at the school.

Commissioner Cherwin asked who would be doing the construction.

Mr. Schulz responded that Papanicholas would be the construction manager on the project.

Commissioner Cherwin asked what was driving the population increase at Greenbrier.

Mr. Schulz replied that they were projecting an increase in the K-5 population, as well as the Early Childhood program, over the next five years. He said there was currently a waitlist for the Early Childhood program.

Discussion ensued regarding the boundaries and enrollment trends at District 59

Commissioner Cherwin said he liked the project and thought it was great, and he thought that the parking Variation seemed reasonable pending the outcome of the parking and traffic analysis. He asked about a potential impervious surface Variation.

Mr. Hubbard said that staff was researching the code requirements, but he believed that there may actually be an exception for uses within the R-3 district that were not single-family homes.

Commissioner Cherwin stated that impervious surface could be a concern to him as he would not want to see a situation where the expanded school caused runoff and flooding unto neighboring properties.

Mr. Hubbard stated that even if they don't technically need a Variation from impervious surface requirements via the Zoning Code, they will still have to conform to all MWRD requirements relative to stormwater control.

Commissioner Sigalos asked about the construction schedule.

Mr. Schulz replied that they were looking to start in late October or early November so that the project could be finished for the 2018-2019 school year.

Commissioner Sigalos said that if they had the need for the expansion and if the architecture blended in with the existing building, then the only issue he could see would be with the traffic.

Mr. Schulz said that the School District was aware that the intersection of Roanoke and Verde could get a little congested

during drop-offs and pick-ups, so this intersection would be analyzed as part of the traffic and parking study.

Commissioner Jensen said he thought it was a good project and he thought that he would be supportive. He said that other schools that had come before the Plan Commission had acute traffic related problems, and he asked if this school had similar problems.

Mr. Schulz said that due to the location of this school as being tucked more into the neighborhood, he felt that this school did not experience some of the same congestion issues that Windsor School and Miner School had. Additionally, because the Early Childhood program was staggered during with a morning session and a separate afternoon session, there wasn't as many car all coming to the site at the same time.

Commissioner Jensen asked if when the project comes before the Plan Commission, would they be proposing items that could improve traffic flow and congestion.

Mr. Schulz said that they will look at items that could improve traffic and congestion. He mentioned that he just received the traffic and parking study today and had not yet had a chance to review it. They have already met with the various parent groups to get their feedback on drop-off and pick-up operations.

Commissioner Jensen commented that code required parking minimums seem to frequently depart from actual demand at multiple locations, specifically in relation to schools. He thought that there was a pattern of inconsistency and asked if there was any way that they could change the code to have required parking more in line with actual demand.

Mr. Hubbard replied that he would bring this up with the Planning Department.

Commissioner Jensen stated that no school that he was aware of could meet the parking requirements, yet he was not aware of any parking shortages at any of the schools. He said that he thought this was a good project and was supportive.

Commissioner Green said that his granddaughter attends Greenbrier School and so he frequently picks her up. He said he thought that the 10 additional parking spaces that have been proposed are needed because he has never been able to find parking in the parking lot to pick up his granddaughter. He believed that demand for parking within the existing parking lot was either at or just above capacity. Similar to some of the other schools that the Plan Commission had recently considered, he believed that the success of drop-offs and pick-ups were a partly a function of parents and their ability to follow the rules and procedures. He said that the system is very efficient, but when a parent gets out of their car to pick up their child, it causes back-ups in the queuing line. He says that he never waits in the car line, but he parks on the street and walks up to the school. He said he used to park on Verde, but it has been busy recently and so he's parked in other locations. There are a lot of signs for no parking or no standing, but frequently he sees cars parked or stopped in these locations. He is supportive of the project and was happy that the temporary trailer classrooms will be removed.

Commissioner Jensen asked about the mobile units.

Mr. Schulz said that they housed two classrooms so approximately 40-50 students.

Commissioner Jensen recommended that the narrative justifying the addition include some information about deficit of space that currently exists at the school as illustrated by the trailers.

RECOMMENDATION

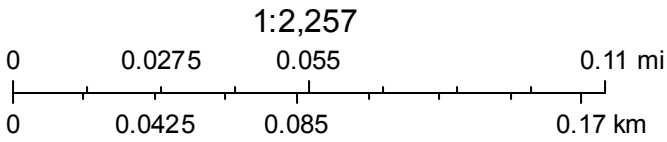
The Plat & Subdivision Committee was supportive of the proposal and advised that the petitioner should move forward.

Bruce Green, Chair
PLAT & SUBDIVISION COMMITTEE
Sam Hubbard, Recorder

Aerial - GreenBrier Elementary



June 21, 2017





STR PARTNERS LLC
350 WEST ONTARIO STREET
SUITE 200
CHICAGO IL 60654
T 312.464.1444
F 312.464.0785
www.strpartners.com

WRITTEN JUSTIFICATION SPECIAL USE PERMIT & VARIATIONS

Petitioner Name: Don Hansen, STR Partners LLC, Architects
Date: July 27, 2017
Project: Greenbrier Elementary School Addition and Renovations
Location: 2330 N. Verde Dr., Arlington Heights, IL 60004

- **A Special Use Permit is requested for a Public Elementary School in the R-3, One-Family Dwelling District, is requested to allow an addition to the existing school.**

That said special use is deemed necessary for the public convenience at this location.

Greenbrier Elementary School provides education to school-age children of the surrounding area and is of benefit to the community. An addition will allow the school to accommodate students now housed in modular trailer classrooms as well as increased enrollment.

That such case will not, under any circumstances of the particular case, be detrimental to the health, safety, morals or general welfare of persons residing or working in the vicinity.

The school is regularly inspected for health/life safety in accordance with Illinois State Board of Education requirements. Proposed additions will comply with current building, life safety and ADA accessibility codes.

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.

The use will not change with the addition. Elementary Schools are a permitted Special Use in an R-3 Use District per Chapter 28, 5.5-1 Permitted Use Table.

- **A Variation is requested from Chapter 28, Section 11.4-4, Schools, Elementary Off Street Parking, from the requirement for 195 spaces (two per each of 86 employees plus one per each of 23 classrooms) to allow 75 spaces. The 75 spaces include 4 accessible spaces.**

The property in question cannot yield a reasonable return if permitted to be used only under the conditions allowed by the regulation zone.

Use of existing facilities is essential to continued school operations and sound financial planning. Maintaining a similar parking count to existing will allow the school to continue use of the property.

The plight of the owner is due to unique circumstances.

Use of existing facilities, including parking similar to existing, is necessary for school operations.

The variation, if granted, will not alter the essential character of the locality.

The planned parking is an increase from 66 to 75 spaces. The additional 9 spaces are added to an existing parking lot.

- **A Variation is requested from Chapter 28, Section 5.1-3.6, Required Minimum Yards, from the requirement of a 40 ft. exterior side yard setback at N. Verde Dr. to allow approximately 13.2 ft.**

The property in question cannot yield a reasonable return if permitted to be used only under the conditions allowed by the regulation zone.

The exterior side yard setback of the existing building is less than required. Use of the existing facility is necessary to accommodate the student population as much as possible within the existing building, and is essential to sound financial planning and school operations.

The plight of the owner is due to unique circumstances.

The condition is existing. The variation allows the school district to continue use of their currently full facility.

The variation, if granted, will not alter the essential character of the locality.

Only the existing building requires the variation. The proposed addition will be within the required setbacks.

- **A Variation is requested from Chapter 28, Section 6.5-2, Accessory Structures shall only be located in a rear yard to allow an Accessory Structure in a side yard.**

The property in question cannot yield a reasonable return if permitted to be used only under the conditions allowed by the regulation zone.

An accessory structure, a shed, is existing and used for play equipment storage adjacent to an existing exterior play area. Use of existing facilities is essential to continued school operations and sound financial planning. The existing facility is fully utilized and this storage is necessary for student play.

The plight of the owner is due to unique circumstances.

Use of existing facilities is necessary for school operations to provide current programming.

The variation, if granted, will not alter the essential character of the locality.

The shed is an existing structure. It is located 121 feet from the nearest property line. The essential character of the property is unchanged.

PROJECT DESCRIPTION

Petitioner Name: Don Hansen, STR Partners LLC, Architects

Date: July 27, 2017

Project: Greenbrier Elementary School Addition and Renovations

Location: 2330 N. Verde Dr., Arlington Heights, IL 60004

The addition to Greenbrier Elementary School is comprised of four classrooms, four office/small group rooms, a new stair, new 2nd floor electrical room and associated circulation spaces. Renovations include a new 1st floor electrical room within the existing building footprint and an extension of an existing corridor to connect to the new addition. The 1st floor electrical room and corridor extension is currently a small group room.

The addition will be two stories and of the same height as the adjacent existing two story portion of the building, around 22'-0". It will be of the same or similar materials of the existing school building. Exterior materials include matching red brick, a cast stone fascia resembling limestone and green color finished aluminum window frames to match the existing building.

Completion of the project is planned for August 2018 at the beginning of the 2018-2019 school year. Construction would begin in fall 2017.

Walls will typically be constructed of brick and concrete block which are long lasting materials. Efficient LED lighting will be used in the addition. Soft surface play areas will be EDPM with a basemat that is partially impervious. The quality of materials are like those of the recent additions in Arlington Heights School District 25.

A summary of the floor area ratio, building lot coverage, impervious surface coverage and height and stories is following.

Maximum Floor Area Ratio

Allowed	Existing	Proposed	Comment
50%	34.0% (58,777/173,115)	38.8% (67,155/173,115)	Complies with Max. Floor Area

Note: 3,962 sq. ft. added at 1st floor

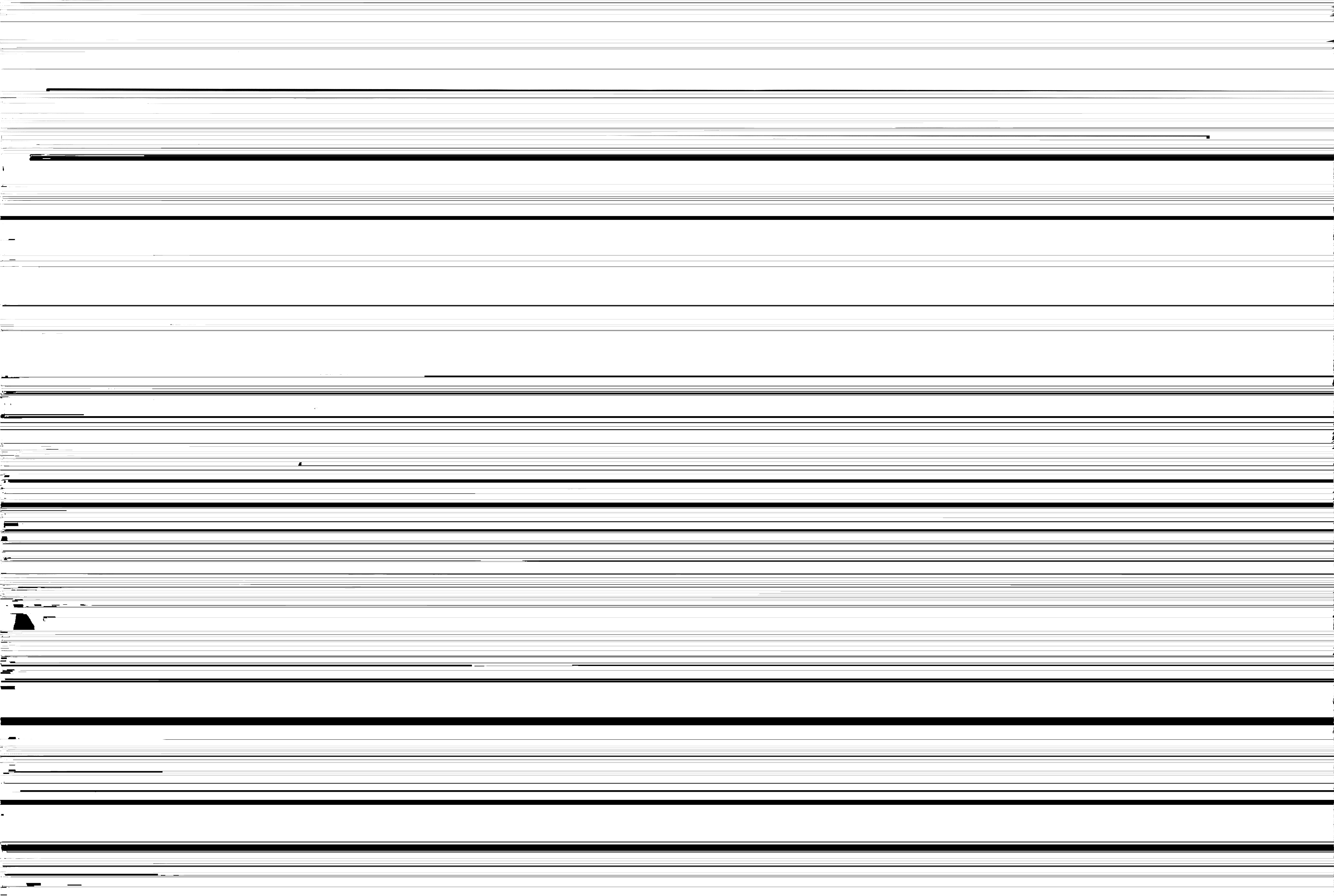
Maximum Building Lot Coverage

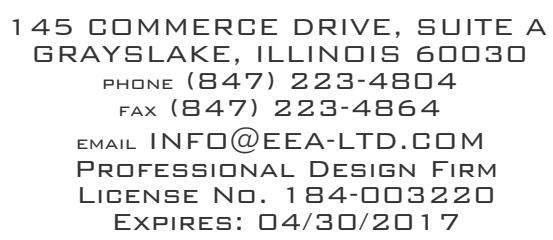
Allowed	Existing	Proposed	Comment
35%	28.8% (49,929/173,115)	31.1% (53,891/173,115)	Complies with Bldg. Lot Coverage

Note: 3,962 sq. ft. added at 1st floor and 4,416 sq. ft. added at 2nd floor

Maximum Height and Stories

Allowed	Existing	Proposed	Comment
25 ft. 2 ½ stories	23'-0" 2 stories	Addition is ±21'-0" 2 stories	Complies with Height & Stories Allowed



[illegible]

GREENBRIER SCHOOL
ADDITION AND RENOVATIONS
2330 N. Verde Dr.
Arlington Heights, Illinois

2330 N. Verde Dr.
Arlington Heights, Illinois

Reserved for Seal:

NOT FOR
CONSTRUCTION

Expiration Date: _____

No.	Date	Description
	08/14/17	ISSUE FOR BID

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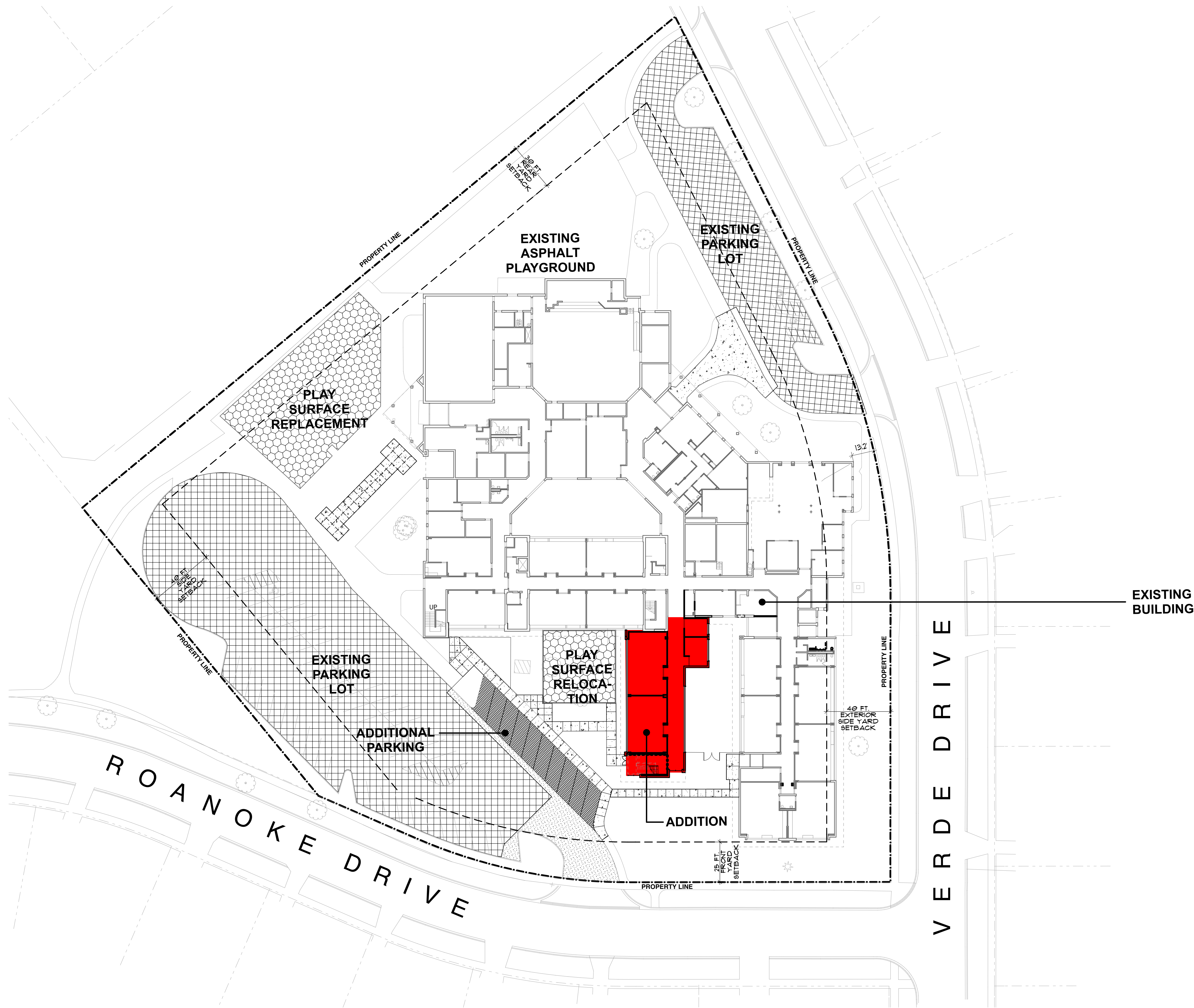
Design By: JC	Date: 05/18/17
Approved By: KC	Project No.

Sheet Title:

SITE GEOMETRY PLAN

Sheet No:

C2.01



SITE PLAN



STR Partners LLC
350 West Ontario Street | Suite 200
Chicago IL 60654
www.strpartners.com

GREENBRIER ELEMENTARY SCHOOL ADDITION AND RENOVATIONS

2330 N. Verde Drive, Arlington Heights, IL 60004

ARLINGTON HEIGHTS SCHOOL DISTRICT 25
7/27/17

PROJECT DATA: GREENBRIER ELEMENTARY SCHOOL

Construction Type

Existing Building: Type 2 (Unprotected)
Addition: Type 2 (Unprotected)

Note: Also complies with 2B 2009 IBC

Automatic Fire Suppression

Existing Building: Yes, throughout building
Addition: Yes, throughout addition

Fire Alarm System

Existing Building: Yes, throughout building
Addition: Yes, throughout addition

Allowable Height per 2015 IBC

Allowable Height (Table 504.3): 75 feet
Allowable Stories (Table 504.4): 3 stories

Note: Allowable height and stories would also be 75 feet, 3 stories under 2009 IBC.

Allowable Building Area per 2015 IBC

Allowable Tabular Area (Table 506.2) 107,880 sq. ft. (53,940 sq. ft. per floor)

Existing 1st Floor Area: 49,929 sq. ft.
Addition 1st Floor Area: 3,262 sq. ft.
TOTAL 1st Floor Area: 53,891 sq. ft.

Existing 2nd Floor Area: 8,848 sq. ft.
Addition 2nd Floor Area: 4,416 sq. ft.
TOTAL 2nd Floor Area: 13,264 sq. ft.

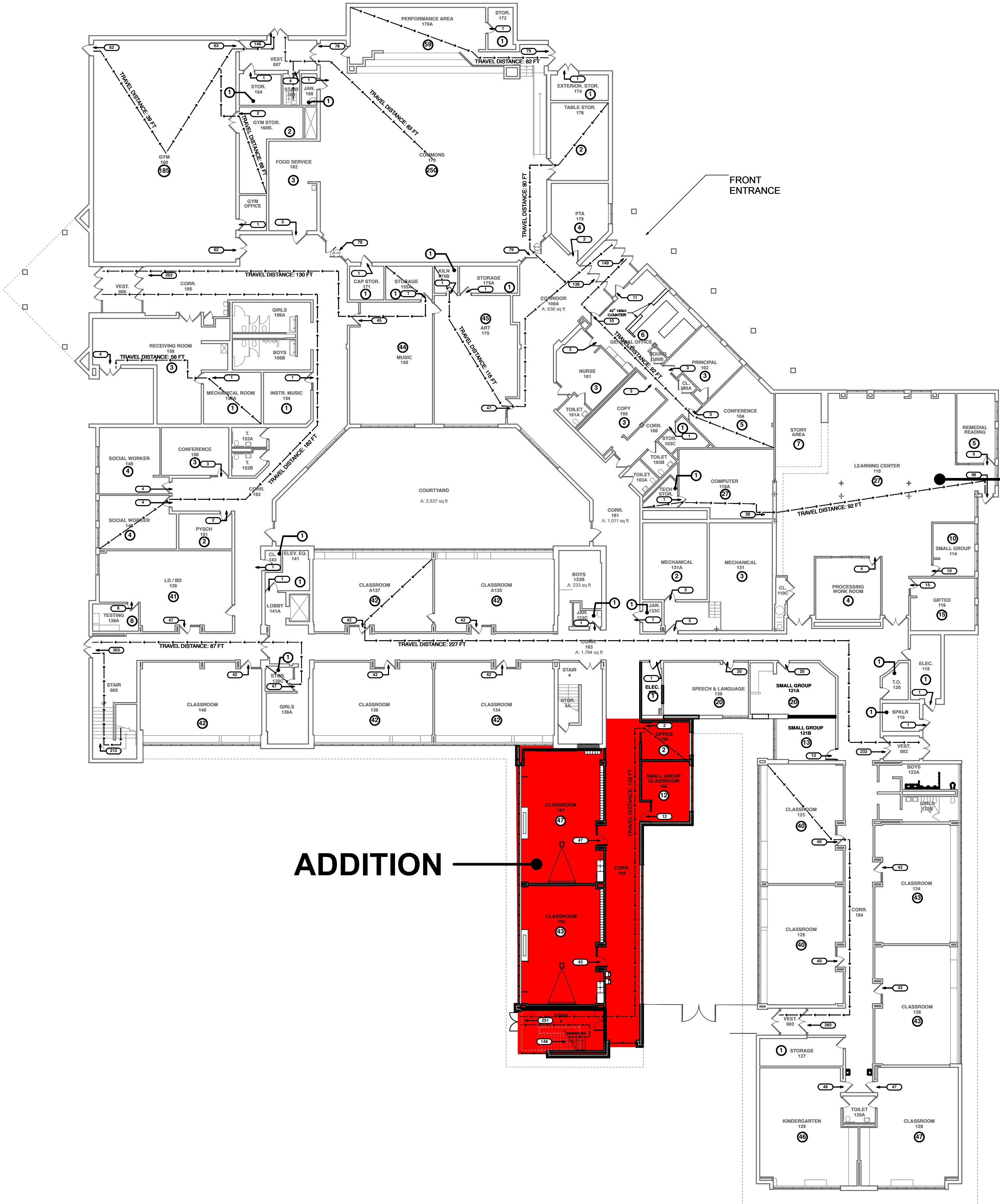
Note: Allowable areas per floor under 2009 IBC are 53,940 sq. ft. also.

$$A_{\text{a}} = [A_1 + (NS \times l)] \times S_a$$
$$A_1 = 43,500 \text{ SF (from Table 506.2)}$$
$$NS = 14,500 \text{ SF (from Table 506.2)}$$
$$l = [F/P - 0.25]W/30 \text{ (See Below)}$$
$$S_a = 2 \text{ Stories}$$

$$l_r = [F/P - 0.25]W/30$$
$$F = 1476' \times 9 \frac{3}{8}" \text{ (Building Perimeter on Public way @ 20')}$$
$$P = 1503' \times 2 \frac{1}{4}" \text{ (Total Building Perimeter)}$$
$$W = 29' \times 5 \frac{11}{16}" \text{ (Average width of public way or open space)}$$
$$l_r = [1476' \times 9 \frac{3}{8}" / 1503' \times 2 \frac{1}{4}" - 0.25]29' \times 5 \frac{11}{16}" / 30$$
$$l_r = 0.71959 = 0.72$$

$$A_{\text{a}} = [A_1 + (NS \times l)] \times S_a$$
$$A_{\text{a}} = 43,500 + (14,500 \times 0.72) \times 2$$
$$A_{\text{a}} = 107,880 \text{ SF (No story over 53,940 sq. ft. each)}$$

Exit Access Distance 250 feet (Table 1017.2) Fully Sprinkled



EXISTING
GREENBRIER
SCHOOL

ADDITION

FIRST FLOOR PLAN

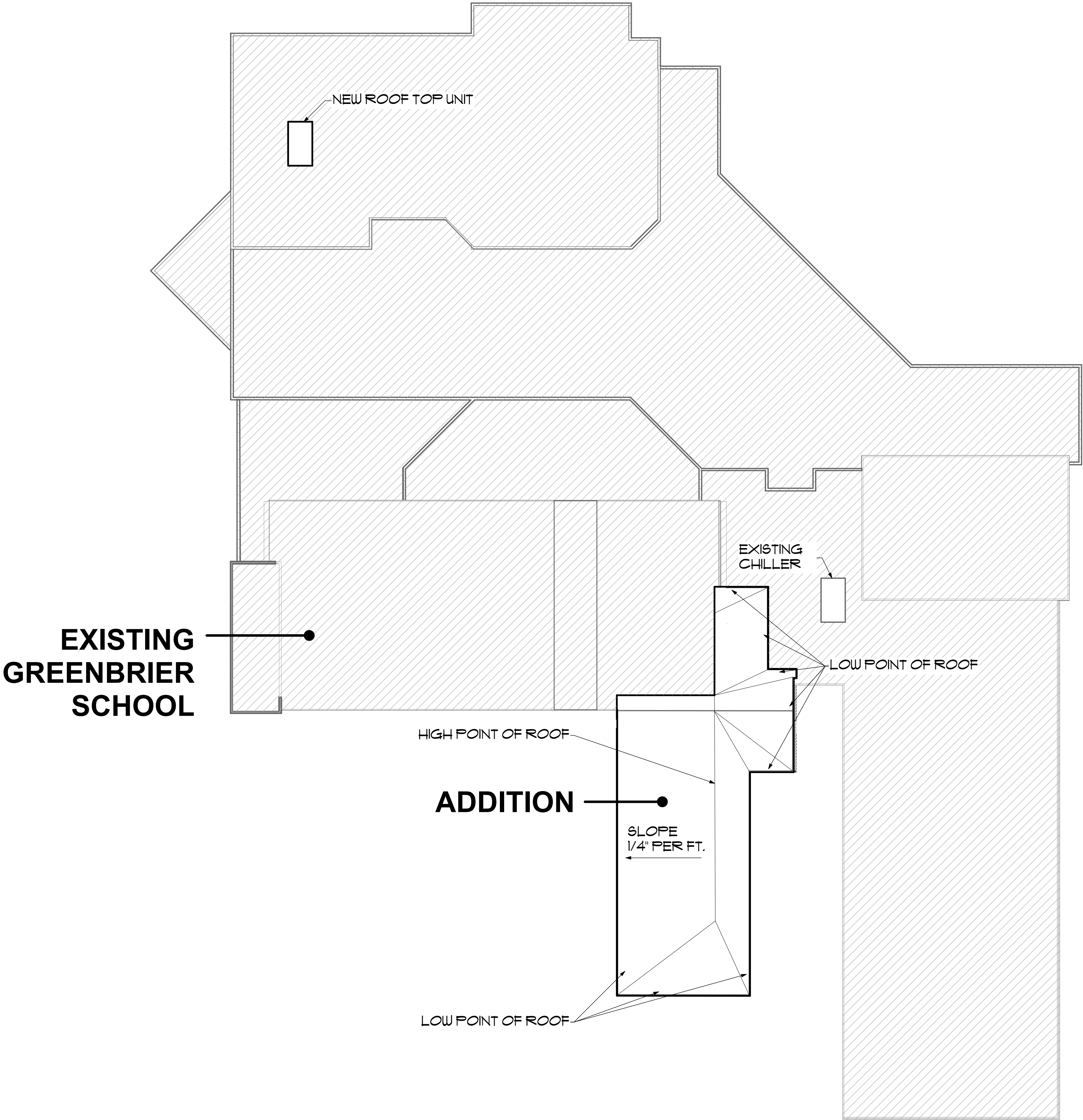
GREENBRIER ELEMENTARY SCHOOL ADDITION AND RENOVATIONS

2330 N. Verde Drive, Arlington Heights, IL 60004

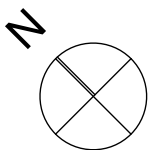
ARLINGTON HEIGHTS SCHOOL DISTRICT 25
7/27/17



ARLINGTON HEIGHTS SCHOOL DISTRICT 25
7/27/17



SCALE: 1" = 20'-0"



ROOF PLAN

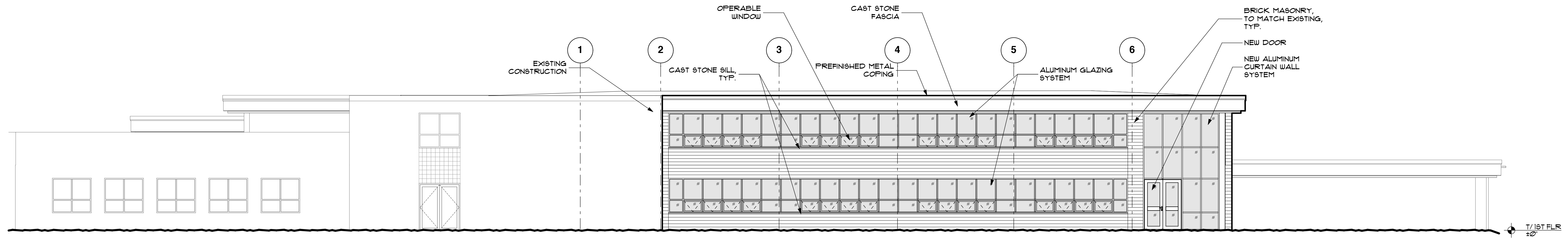
STR

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Chicago IL 60654
www.strpartners.com

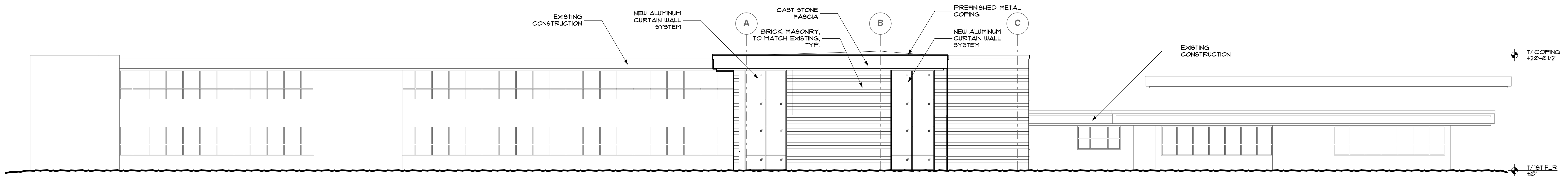
GREENBRIER ELEMENTARY SCHOOL ADDITION AND RENOVATIONS

2330 N. Verde Drive, Arlington Heights, IL 60004

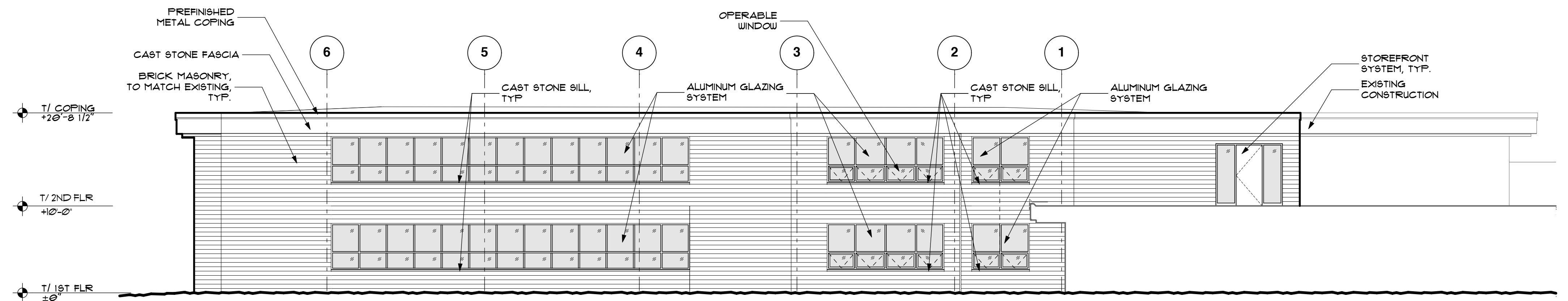
ARLINGTON HEIGHTS SCHOOL DISTRICT 25
6/30/17



1 WEST ELEVATION
SCALE: 1/8" = 1'-0"



2 SOUTH ELEVATION
SCALE: 1/8" = 1'-0"



3 EAST ELEVATION
SCALE: 1/8" = 1'-0"

BUILDING ELEVATIONS

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GREENBRIER ELEMENTARY SCHOOL ADDITION AND RENOVATIONS

2330 N. Verde Drive, Arlington Heights, IL 60004

ARLINGTON HEIGHTS SCHOOL DISTRICT 25
6/30/17



PROPOSED ADDITION SUPERIMPOSED ON EXISTING SITE
NOTE: PROPOSED SITE CHANGES ARE NOT SHOWN IN THIS VIEW

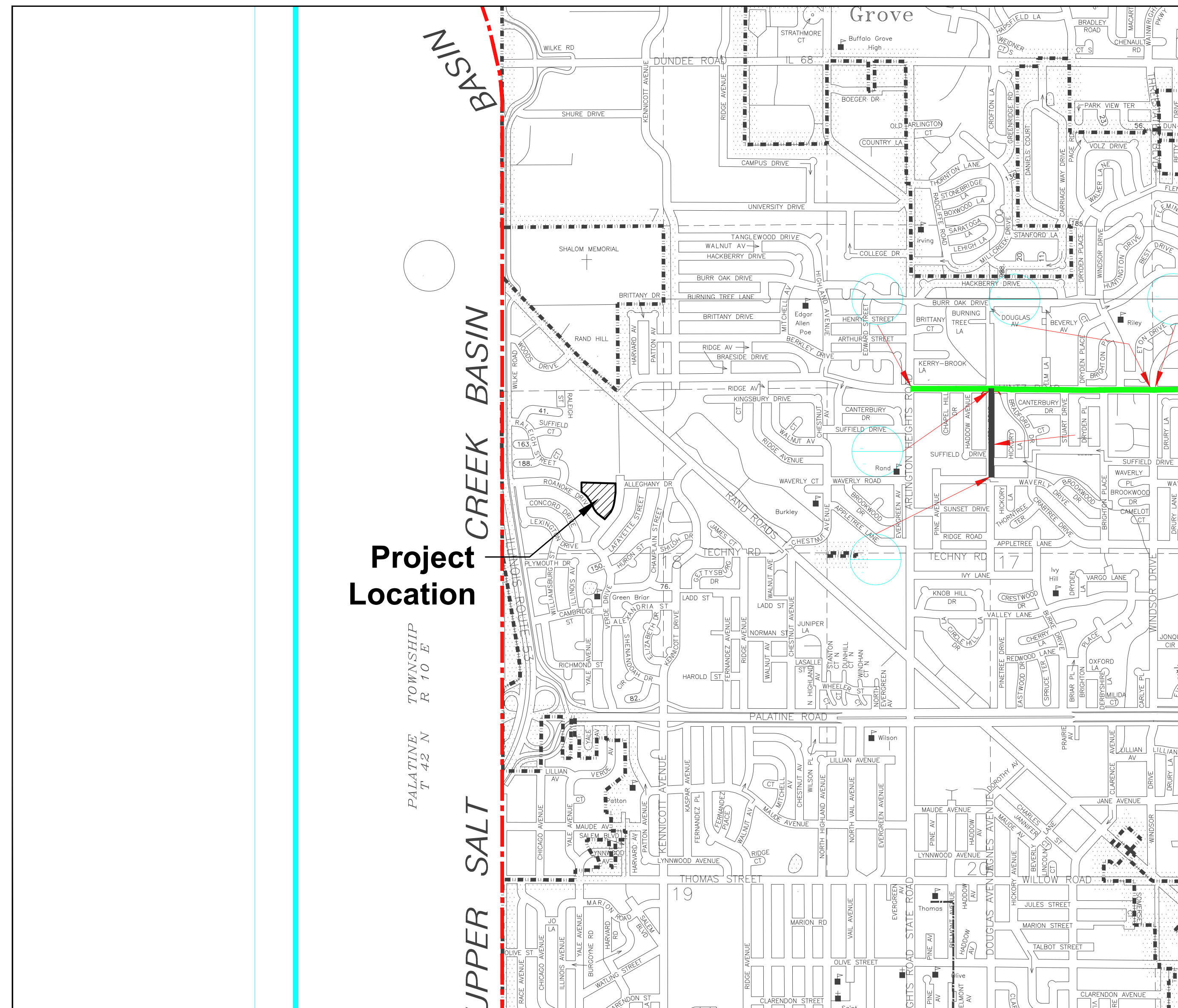
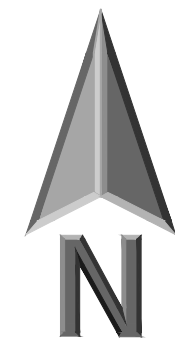
BIRD'S EYE VIEW (COLORED RENDERING) - PROPOSED ADDITION SUPERIMPOSED ON EXISTING SITE

GREENBRIER SCHOOL

ADDITION AND RENOVATIONS

2330 N. Verde Dr.

Arlington Heights, IL 60004



CIVIL SHEET INDEX

C0.00	Cover Sheet
C0.01	Plat of Topographic Survey
C0.02	Site Work Notes
C0.03	MWRD General Notes
C1.01	Site Demolition Plan
C2.01	Site Geometry Plan
C3.01	Site Utility Plan
C3.02	Site Utility Plan
C4.01	Grading and Paving Plan
C4.02	Grading and Paving Plan
C5.01	Soil Erosion and Sediment Control Plan
C5.02	Soil Erosion and Sediment Control Plan
C6.01	Site Work Details
C6.02	Site Work Details
C6.03	Site Work Details

STORMWATER MANAGEMENT EXHIBITS

CX1.01	Existing Site Conditions
CX1.02	Proposed Site Conditions
CX3.01	Approximate Tributary Area To Existing Detention Facility

LANDSCAPE SHEET INDEX

L1.01	Landscape Plan
L1.02	Landscape Details
L2.01	Tree Preservation Plan

DRAINAGE STATEMENT

To The Best Of Our Knowledge And Belief, It Is Our Professional Opinion That The Proposed Improvements On The Property Are Not Within One-Hundred (100) Feet Of A Known Flood Protection Area. The Drainage Of The Surface Waters Will Not Be Changed By The Construction Of This Development Or Any Part Thereof, Or That If Such Surface Water Drainage Will Be Changed, Reasonable Provisions Have Been Made For The Collection And Diversion Of Such Surface Waters Into Public Areas Or Drains Which The Property Owner Has A Right To Use, And That Such Surface Waters Will Be Planned For In Accordance With Generally Accepted Engineering Practices So As To Reduce The Likelihood Of Damage To The Adjoining Property Because Of The Construction Of The Development.



ERIKSSON
ENGINEERING
ASSOCIATES, LTD.

145 COMMERCE DRIVE, SUITE A
GRAYSLAKE, ILLINOIS 60030
PHONE: (847) 223-4804
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EMAIL: INFO@EEA-LTD.COM
PROFESSIONAL DESIGN FIRM
LICENSE NO. 184-003220
EXPIRES: 04/30/2017

GREENBRIER SCHOOL
ADDITION AND RENOVATIONS

2330 N. Verde Dr.
Arlington Heights, Illinois

Reserved for Seal:

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CONSTRUCTION**

Expiration Date: _____

No.	Date	Description
	06/06/17	ISSUE FOR DD
	07/05/17	ISSUE FOR 75% CD
	07/21/17	ISSUE FOR 100% CD
	07/27/17	REVISIONS FOR VILLAGE

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Design By: JC	Date: 05/18/17
Approved By: KC	Project No.:

Sheet Title:

COVER SHEET

Sheet No.:

C0.00

PLAT OF SURVEY
OF
GREENBRIER ELEMENTARY SCHOOL

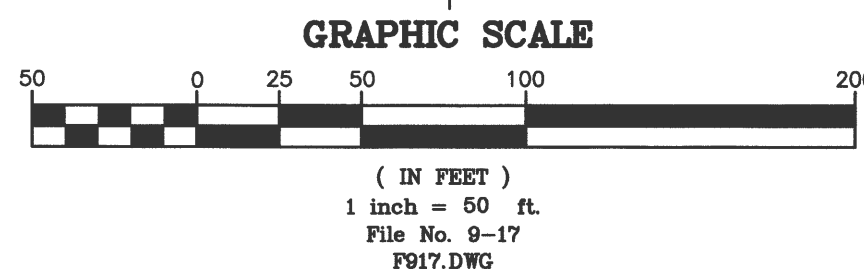
THE PREMISES COMMONLY KNOWN AS:
2330 N VERDE DRIVE, ARLINGTON HEIGHTS, IL. 60005
PARCEL AREA = 284,800 S.F.
PIN: 03-18-112-003

PARCEL 1: THAT PART OF LOT 200 IN GREENBRIER IN THE VILLAGE GREEN, UNIT NO. 5, BEING A SUBDIVISION OF PART OF THE EAST HALF OF THE NORTHWEST QUARTER OF SECTION 18, TOWNSHIP 42 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, AND A RESUBDIVISION OF PART OF LOT 11 IN GEORGE KIRCHHOFF ESTATE SUBDIVISION OF PART OF SECTIONS 12 AND 13, TOWNSHIP 42 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, AND PART OF SECTIONS 7 AND 18, TOWNSHIP 42 NORTH, RANGE 11 EAST OF THE THIRD PRINCIPAL MERIDIAN, IN THE VILLAGE OF ARLINGTON HEIGHTS, WHEELING TOWNSHIP, COOK COUNTY, ILLINOIS, DESCRIBED AS FOLLOWS:
BEGINNING AT THE NORTHWEST CORNER OF SAID LOT 200; THENCE EASTWARD ALONG THE NORTH LINE OF SAID LOT 200, N 89°51'15" E, A DISTANCE OF 489.00 FEET TO THE NORTHEAST CORNER OF SAID LOT 200; THENCE SOUTHWARD ALONG THE EAST LINE OF SAID LOT 200, BEING THE WEST LINE OF VERDE DRIVE, S 00°08'45" E, A DISTANCE OF 163.00 FEET TO A POINT OF CURVATURE; THENCE CONTINUING SOUTHWARD ALONG THE WEST LINE OF VERDE DRIVE, BEING A CURVED LINE, CONVEXED TO THE EAST, OF 334.77 FEET IN RADIUS, FOR AN ARC LENGTH OF 75.16 FEET, THENCE N 89°37'35" W, A DISTANCE OF 481.67 FEET TO A POINT ON THE WEST LINE OF LOT 200 AFORESAID; THENCE NORTHWARD ALONG THE SAID WEST LINE OF LOT 200, N 00°06'50" E, A DISTANCE OF 233.16 FEET TO THE POINT OF BEGINNING.

PARCEL 2: LOT 283 IN GREENBRIER IN THE VILLAGE GREEN, UNIT NO. 7, BEING A SUBDIVISION OF PART OF THE EAST HALF OF THE NORTHWEST QUARTER, PART OF THE NORTHEAST QUARTER, AND PART OF THE SOUTHEAST QUARTER ALL IN SECTION 18, TOWNSHIP 42 NORTH, RANGE 11 EAST OF THE THIRD PRINCIPAL MERIDIAN, AND A RESUBDIVISION OF PARTS OF LOTS 10 AND 11 IN GEORGE KIRCHHOFF ESTATE SUBDIVISION OF PARTS OF SECTIONS 12 AND 13, TOWNSHIP 42 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, AND PART OF SECTIONS 7 AND 18, TOWNSHIP 42 NORTH, RANGE 11 EAST OF THE THIRD PRINCIPAL MERIDIAN, IN THE VILLAGE OF ARLINGTON HEIGHTS, WHEELING TOWNSHIP, COOK COUNTY, ILLINOIS.

Portion Of Arlington Heights Park District Property
PIN: 03-18-115-003

Allegany Drive



BENCHMARK:
SOURCE BENCHMARK:
VILLAGE OF ARLINGTON HEIGHTS BENCHMARK
RECOVERY SHEET
BENCHMARK DESIGNATION: 17
AT VERDE DRIVE AND ALLEGANY DRIVE.
ELEVATION= 726.29 NAVD88

SITE BENCHMARK:
SURVEY CONTROL POINT, CUT CROSS ON THE
SOUTH SIDE OF SIDEWALK.
ELEVATION= 723.13 NAVD88

Arlington Heights School District 25
Greenbrier Elementary School
Property Area = ±3.97 Acres
PIN: 03-18-112-003

STATE OF ILLINOIS
COUNTY OF LAKE S.S.

I, BRYAN J. LEE, AN ILLINOIS PROFESSIONAL LAND SURVEYOR, DO HEREBY CERTIFY THAT I HAVE SURVEYED AND STAKED THE LAND AS DESCRIBED IN THE ABOVE CAPTION. ANY STRUCTURES SHOWN HEREON WERE LOCATED BY ME OR UNDER MY DIRECTION AND THE PLAT DRAWN HEREON IS A CORRECT REPRESENTATION OF SAID SURVEY AND THAT THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A BOUNDARY SURVEY.

DATED AT GRAYSLAKE, ILLINOIS THIS 14TH DAY OF APRIL, A.D. 2017.

ILLINOIS PROFESSIONAL LAND SURVEYOR 35-3616
MY LICENSE EXPIRES 11-30-18
PROFESSIONAL DESIGN FIRM NO. 184-002732



FIELDWORK COMPLETED: 02-28-2017
CLIENT NAME: Arlington Heights School District 25
ADDRESS: 1200 S. Dunton Avenue
Arlington Heights, IL. 60005

NOTES:

PLAT IS VOID if the Impressed Surveyors Seal does not appear.
Only those Building Lines or Easements shown on a Recorded Subdivision Plat or from a Recorded Document are shown hereon; check local ordinances before building.

Compare your description and site markings with this plat and AT ONCE report any discrepancies which you may find.

R.E. ALLEN AND ASSOCIATES, LTD.
PROFESSIONAL LAND SURVEYORS
1015 N. CORPORATE CIRCLE, SUITE C
GRAYSLAKE, ILLINOIS 60030
PHONE: 847-223-0914 FAX: 847-223-0980



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ASSOCIATES, LTD.

145 COMMERCE DRIVE, SUITE A
GRAYSLAKE, ILLINOIS 60030
PHONE: (847) 223-4804
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EMAIL: INFO@EEA-LTD.COM
PROFESSIONAL DESIGN FIRM
LICENSE NO. 184-003220
EXPIRES: 04/30/2017

GREENBRIER SCHOOL
ADDITION AND RENOVATIONS

2330 N. Verde Dr.
Arlington Heights, Illinois

Reserved for Seal:

NOT FOR
CONSTRUCTION

Expiration Date: _____

No.	Date	Description
	06/06/17	ISSUE FOR DD
	07/05/17	ISSUE FOR 75% CD
	07/21/17	ISSUE FOR 100% CD
	07/27/17	REVISIONS FOR VILLAGE

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Design By: JC Date: 05/18/17
Approved By: KC Project No. _____

Sheet Title:

COVER SHEET

Sheet No:

C0.01

GENERAL NOTES

1. The Location of Existing Underground Utilities, Such As Watermains, Sewers, Gas Lines, Etc., As Shown On The Plans, Has Been Determined From The Best Available Information and Is Given For The Convenience of The Contractor. However, The Owner and The Engineer Do Not Assume Responsibility In The Event That During Construction, Utilities Other Than Those Shown May Be Encountered, and That The Actual Location of Those Which Are Shown May Be Different From The Location As Shown On The Drawings. Contact Engineer Immediately If Surface and/or Subsurface Features Are Different Than Shown On The Drawings.
2. Notify The Engineer Without Delay of Any Discrepancies Between the Drawings and Existing Field Conditions.
3. Notify The Owner, Engineer and The Village of Arlington Heights A Minimum of 48 Hours In Advance of Performing Any Work.
4. All Areas, On or Off Site, Disturbed During Construction Operations and Not Part of the Work As Shown Hereon Shall Be Restored To Original Condition to the Satisfaction of the Owner at No Additional Cost to the Owner. It is Incumbent Upon Contractor to Show That Damaged Areas Were Not Disturbed By Construction Operations.
5. These Drawings Assume That The Contractor Will Utilize An Electronic Drawing File (DWG) and Stake All Site Improvements Accordingly.
6. No Person May Utilize The Information Contained Within These Drawings Without Written Approval From Eriksson Engineering Associates, Ltd.
7. The Engineer Is Furnishing These Drawings For Construction Purposes As A Convenience To The Owner, Architect, Surveyor, or Contractor. Prior To The Use Of These Drawings For Construction Purposes, The User Of This Media Shall Verify All Dimensions And Locations Of Buildings With The Foundation Drawings And Architectural Site Plan, and Coordinate All Dimensions and Locations of All Site Items. If Conflicts Exist The User Of This Information Shall Contact The Engineer Immediately.
8. Provide An As-built Survey Prepared By A Licensed Professional Land Surveyor In Accordance With The Authorities Having Jurisdiction Which Shall Include As a Minimum All Detention Basins and Best Management Practices, include All Storm and Sanitary Sewers, Structure Locations, Sizes, Rim and Invert Elevations, Final Detention Volume Calculations For The Basin(s), Watermain and Valve and Appurtenance Locations.
9. The Illinois Department Of Transportation Standard Specifications For Road And Bridge Construction Latest Edition, And All Addenda Thereto, Shall Govern The Earthwork And Paving Work Under This Contract Unless Noted Otherwise.

DEMOLITION NOTES

1. All Signs to Be Removed Shall Be Salvaged and Stored in the Owner's Facility for Future Use as Applicable.
2. Keep All Village of Arlington Heights Streets Free and Clear of Construction Related Dirt/Dust/Debris.
3. Coordinate Existing Utility Removal with Local Authorities and Utility Companies Having Jurisdiction.
4. The Existing Building is to Remain Operational During Construction. Therefore, the Temporary Relocation of All Necessary Utilities Serving the Existing Building Shall Be Coordinated Prior to the Commencement of Construction Operations.
5. All Sawcutting Shall be Full Depth to Provide a Clean Edge to Match New Construction. Match Existing Elevations at Points of Connection for New and Existing Pavement, Curb, Sidewalks, etc. All Sawcut Locations Shown Are Approximate and May Be Field Adjusted to Accommodate Conditions, Joints, Material Type, etc. Remove Minimum Amount Necessary for Installation of Proposed Improvements.
6. Provide and Maintain All Necessary Traffic Control and Safety Measures Required During Demolition and Construction Operations Within or Near the Public Roadway.
7. All Light Poles to Be Removed From Private Property Shall Be Removed in Their Entirety, including Base and All Appurtenances. Coordinate Abandonment of Electrical Lines With Electrical Engineer and Owner Prior to Demolition.
8. Perform Tree Pruning in All Locations Where Proposed Pavement And/or Utility Installation Encroach Within The Existing Drip Line Of Trees To Remain. All Trenching Within The Drip Line Of Existing Trees To Remain Shall Be Done Radially Away From Trunk If Roots In Excess Of 1" Diameter Are Exposed. Roots Must Be Cut By Reputable Tree Pruning Service Prior To Any Transverse Trenching. Obtain Approval Of The Architect Prior To Operations For A Variance From This Procedure.
9. Coordinate Tree Removal with Landscape Architect. All Trees To Be Removed Shall Be Removed in Their Entirety and Stumps Shall Be Ground to Proposed Subgrade. Use As Mulch for Proposed Landscaping Where Applicable and Acceptable to Architect.
10. Provide Tree Protection Fencing Prior To Construction Operations. Maintain Throughout Construction.

GEOMETRY NOTES

1. All Dimensions Contained Herein Reference Back Of Curb, Face Of Retaining Wall, Edge Of Pavement, Center of Structure And Outside Face Of Building Foundation Unless Otherwise Noted.
2. All Pavement Striping Shall Be 4" Wide Yellow Paint Per Specifications. All Cross Hatch Striping Shall Be 45° At 2'-0" Centers.
3. All Accessible Parking Signs (R7-8) Must Be Placed at the Center of the Space and Within 5 Feet of the Space.
4. Refer to Architectural Drawings for Exact Locations of All Buildings.
5. Refer to Architectural Drawings for Locations and Details of All Permanent Site Fencing.
6. Traffic Sign Posts Shall Be Breakaway Green U-Channel Posts, 2-lb/ft, 11 Gauge Steel, Embedded 42" Minimum Into Ground.

UTILITY NOTES

1. Utility Service Lines as Shown Hereon are Approximate. Coordinate The Exact Locations With The Plumbing Drawings. Coordinate The Locations With The Plumbing Contractor and/or the Owner's Construction Representative Prior to Installation of Any New Utilities.
2. Refer to Plumbing Drawings for Continuation of All Utilities Within 5 Feet of Building Face.
3. Field Verify Invert & Locations of Existing Utility Mains Prior to Installing Any On-Site Utilities or Structures. All Elevations and Inverts Referencing Said Utility Shall Be Field Verified Prior To Installation Of Any New Structures Or Utilities, and Adjustments Shall Be Made as Necessary. Contact Engineer Prior to Installation if Discrepancy Exists With These Drawings.
4. Coordinate the Relocation Of Any Utilities Encountered And Replacement Of Any Utilities Damaged Within Influence Zone Of New Construction. Contact Engineer If The Existing Utilities Vary Appreciably From The Plans.
5. All Water Main and Services Shall Be Installed at a Minimum Depth of 5.5' From Top of Finished Ground Elevation to Top of Main.
6. Protection of water supplies shall be as described in Section 370.350 of the Illinois Recommended Standards for Sewage Works or Section 41-2.01 of the Standard Specifications for Water and Sewer Main Construction in Illinois, latest edition.
7. Clean Out All Existing and Proposed Storm Inlets and Catch Basins at the Completion of Construction.
8. Provide Adequate Coupling Device and/or Oversized Concrete Flared-End Section to Accommodate HDPE Storm Sewer.
9. The "Standard Specifications for Water and Sewer Main Construction in Illinois", Current Edition Shall Govern Work Where Applicable.

STRUCTURE NOTES

1. All Catch Basins to Be Installed in Paved Areas Shall Have Neenah R2504-D Frame & Grate or Approved Equal.
2. All Catch Basins to Be Installed in Landscaped Areas Shall Have Neenah R4340-B Frame & Grate or Approved Equal. For Cone Sections Install a Minimum of 4" Grade Rings For Topsoil Respread. For Flat Slab Tops Install the Following Minimum Height of Grade Rings:
4" Diameter Structure- 4"
5' Diameter Structure- 6"
6' Diameter Structure- 8"
3. All Catch Basins to Be Installed Along Curb and Gutter (B-6.12) Shall Have Neenah R3281-A Frame & Grate or Approved Equal.
4. All Catch Basins to Be Installed Along Depressed Curb and Gutter (Dep B-6.12) Shall Have East Jordan Iron Works 5120 Catch Basin Inlet Frame and Grate, or Approved Equal.
5. Where Structures are Shown Along the Curbline, Unless Specifically Stated Otherwise, It Is Intended That the Frame of the Structure is To Fall Within the Flowline Of The Gutter or at the Pavement Edge Where No Gutter Exists.
6. All Manholes Shall Have Neenah R1713-B Frame & Closed Lid or Approved Equal, with "Storm" or "Sanitary" Imprinted as Appropriate.
7. For All Manhole Structures to Be Adjusted, Install or Remove Adjusting Rings, New Cone Section or New Barrel Section As Necessary.
8. All Flared End Sections 12" and Larger Shall Include an IDOT Standard Grate.
9. All Flared End Sections Shall Be Concrete.
10. All Sanitary Manholes Shall include a Chimney Seal.

GRADING NOTES

1. Install And Maintain Silt Fence at the Perimeter of the Construction Zone. Install Hay Bale Erosion Control Around All Proposed and Existing Structures Receiving Drainage From Disturbed Areas. Silt Fabric Under the Lid is Not an Acceptable Alternative in Landscaped Areas.
2. The Grading and Construction of Proposed Improvements Shall Be Done In A Manner Which Will Allow For Positive Drainage, and Not Cause Ponding of Stormwater on the Surface of Proposed Improvements.
3. All Landscaped Areas Disturbed By Construction Shall Be Respread With 6 Inches (Min.) to 12 Inches (Max.) Topsoil and Sod Unless Noted Otherwise On The Landscape Drawings.
4. Refer to Architectural Drawings for Locations and Patterns of Expansion and Control Joints in Concrete Pavement and Sidewalks.
5. Accessible Parking Spaces and Loading Spaces Shall Be Sloped at Maximum 2.0% in Any Direction. Maximum Sidewalk Cross Slopes Shall be 2.0%. Maximum Longitudinal Sidewalk Slope Shall Be 4.9%. Contact Engineer if Conflicts Exist.

SOIL EROSION & SEDIMENTATION CONTROL NOTES

1. Illinois Urban Manual Shall Govern All Soil Erosion and Sediment Control, and Related Work.
2. Contractor Shall Be Responsible for Compliance With IEPA NPDES and ILR10 Permit Requirements for Project.
3. Soil Disturbance Shall Be Conducted in Such a Manner as To Minimize Erosion. Soil Stabilization Measures Shall Consider the Time of Year, Site Conditions, and the Use of Temporary or Permanent Measures.
4. Soil Erosion and Sediment Control Features Shall Be Constructed Prior to the Commencement of Upland Disturbance.
5. Temporary Soil Stabilization Shall Be Applied to Topsoil Stockpiles and Disturbed Areas, Where Construction Activity Will Not Occur For A Period of More Than 14 Calendar Days. Temporary Measures Shall Be Applied Within 7 Calendar Days of the End of Active Hydrologic Disturbance. The Sediment Control Measures Shall Be Maintained On A Continuing Basis Until The Site is Permanently Stabilized And All Inspections Are Complete. Permanent Stabilization Shall Be Completed Within 14 Days after Completion of Final Grading of Soil.
6. All Temporary And Permanent Erosion Control Measures Shall Be Removed Within 30 Days After Final Site Stabilization is Achieved Or After The Temporary Measures Are No Longer Needed. Trapped Sediment And Other Disturbed Soil Areas Shall Be Permanently Stabilized.
7. Final Site Stabilization Is Defined By The EPA General Permit As Meaning That All Soil Disturbing Activities At The Site Have Been Completed, And That A Uniform Perennial Vegetative Cover With A Density Of 70 Percent Of The Cover For Unpaved Areas Not Covered By Permanent Structures Has Been Established Or Equivalent Permanent Stabilization Measures (Such As The Use Of Riprap, Gabions, Or Geotextiles) Have Been Employed.
9. All Storm Sewer Structures That Are, Or Will Be, Functioning During Construction Shall Be Protected, Filtered, Or Otherwise Treated To Remove Sediment. The General Contractor Shall Use and Maintain "Dandy Pop" Inlet Protectors (or equal) and Filter Wattles Around The Grate in Landscaped Areas And "Catch-All" Inlet Protectors (or equal, such as Pork Chop Sediguard) in Paved Areas To Prevent Siltation and Discharge Into Waterways.
10. All Temporary And Permanent Sediment And Erosion Control Measures Must Be Maintained, Repaired, And Inspected in Conformance With All Applicable IEPA-NPDES Phase II And The Metropolitan Water Reclamation District of Greater Chicago.
11. Following The Termination Of Construction Activities And Issuance Of The Required "Notice Of Termination", The Permittees Must Keep A Copy Of The Storm Water Pollution Prevention Plan, Inspection Reports, And Records Of All The Data Used To Complete The Notice Of Intent For A Period Of At Least Three Years Following Final Stabilization.
12. Install And Maintain Silt Fence At The Perimeter Of The Construction Zone And Wetland Areas And As Shown On The Plans. Maintain Silt Fence Throughout Construction And Until Vegetation Has Been Fully Established.
13. Contractor Shall Provide Qualified Soil Erosion and Sediment Control Inspector Services in Accordance with NPDES and Governmental Requirements. Inspections Shall Occur at Every Seven Calendar Days Or Within 24 Hours of a 0.5" or Greater Rainfall Event. Engineer Shall Be Copied on Inspection Logs.
14. The Erosion Control Measures Indicated On The Drawings Are The Minimum Requirements. Additional Measures May Be Required As Directed By The Qualified Soil and Erosion Sediment and Control Inspector Or Governing Agency.
15. Unless Otherwise Indicated on the Drawings, Stabilize All Disturbed Ground Areas Where Slopes Exceed 6:1 or Within Swales with North American Green BioNet SC150BN Erosion Control Blanket, or Approved Equal.
16. Report Releases of Reportable Quantities of Oil or Hazardous Materials If They Occur In Accordance with IEPA NPDES Requirements.
17. All Concrete Washout Shall Conform To The "Temporary Concrete Washout Facility" Standards (Code 954) of the Illinois Urban Manual, Latest Edition.
18. If Necessary, The SWPPP Shall Be Modified To Reflect Changes Required During The Effective Period Of The IEPA NPDES General Permit No ILR10 and Local and County Permits.
19. Dewatering of Excavations Shall be Performed in a Manner Such as Through the use of Filter Bags or Polymer Treated Dewatering Swales, so as to Not Discharge Sediment Laden Water Into Storm Sewers Tributary to Open Water.



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EXPIRES: 04/30/2017

GREENBRIER SCHOOL
ADDITION AND RENOVATIONS
2330 N. Verde Dr.
Arlington Heights, Illinois

Reserved for Seal:

NOT FOR
CONSTRUCTION

Expiration Date: _____

No.	Date	Description
	06/06/17	ISSUE FOR DD
	07/05/17	ISSUE FOR 75% CD
	07/21/17	ISSUE FOR 100% CD
⚠	07/27/17	REVISIONS FOR VILLAGE

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JC	05/18/17
Approved By:	Project No.
KC	

Sheet Title:

SITE WORK
NOTES

Sheet No:

C0.02



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 (DOT 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 _____ 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 _____ 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 VITRIFIED CLAY PIPE REINFORCED CONCRETE SEWER PIPE CAST IRON SOIL PIPE DUCTILE IRON PIPE POLYVINYL CHLORIDE (PVC) PIPE 6-INCH TO 15-INCH DIAMETER SDR 26 18-INCH TO 27-INCH DIAMETER F/DY=46 HIGH DENSITY POLYETHYLENE (HDPE) ASTM D-3350 ASTM D-3035 WATER MAIN QUALITY PVC 4-INCH TO 36-INCH 4-INCH TO 12-INCH 14-INCH TO 48-INCH ASTM D-2241 AWWA C900 AWWA C905 PIPE SPECIFICATIONS ASTM C-700 ASTM C-76 ASTM A-74 ANSI A21.51 ASTM D-3034 ASTM F-679 ASTM D-3212 ASTM D-3212 ASTM D-3261,F-2620 (HEAT FUSION) ASTM D-3212,F-477 (GASKETED) ASTM D-3139 ASTM D-3139 JOINT SPECIFICATIONS ASTM C-425 ASTM C-443 ASTM C-564 ANSI A21.11 ASTM D-3212 ASTM D-3212 ASTM D-3261,F-2620 (HEAT FUSION) ASTM D-3212,F-477 (GASKETED) ASTM D-3139 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 POLYPROPYLENE (PP) PIPE 12-INCH TO 24-INCH DOUBLE WALL 30-INCH TO 60-INCH TRIPLE WALL ASTM F-2736 ASTM F-2764 D-3212, F-477 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 ("SEWER-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 CONTRACTOR 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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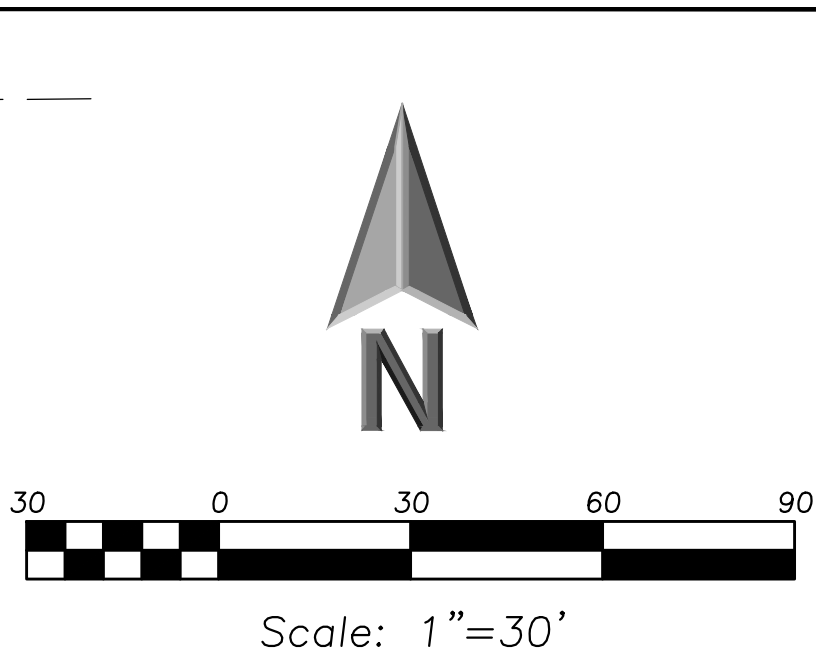
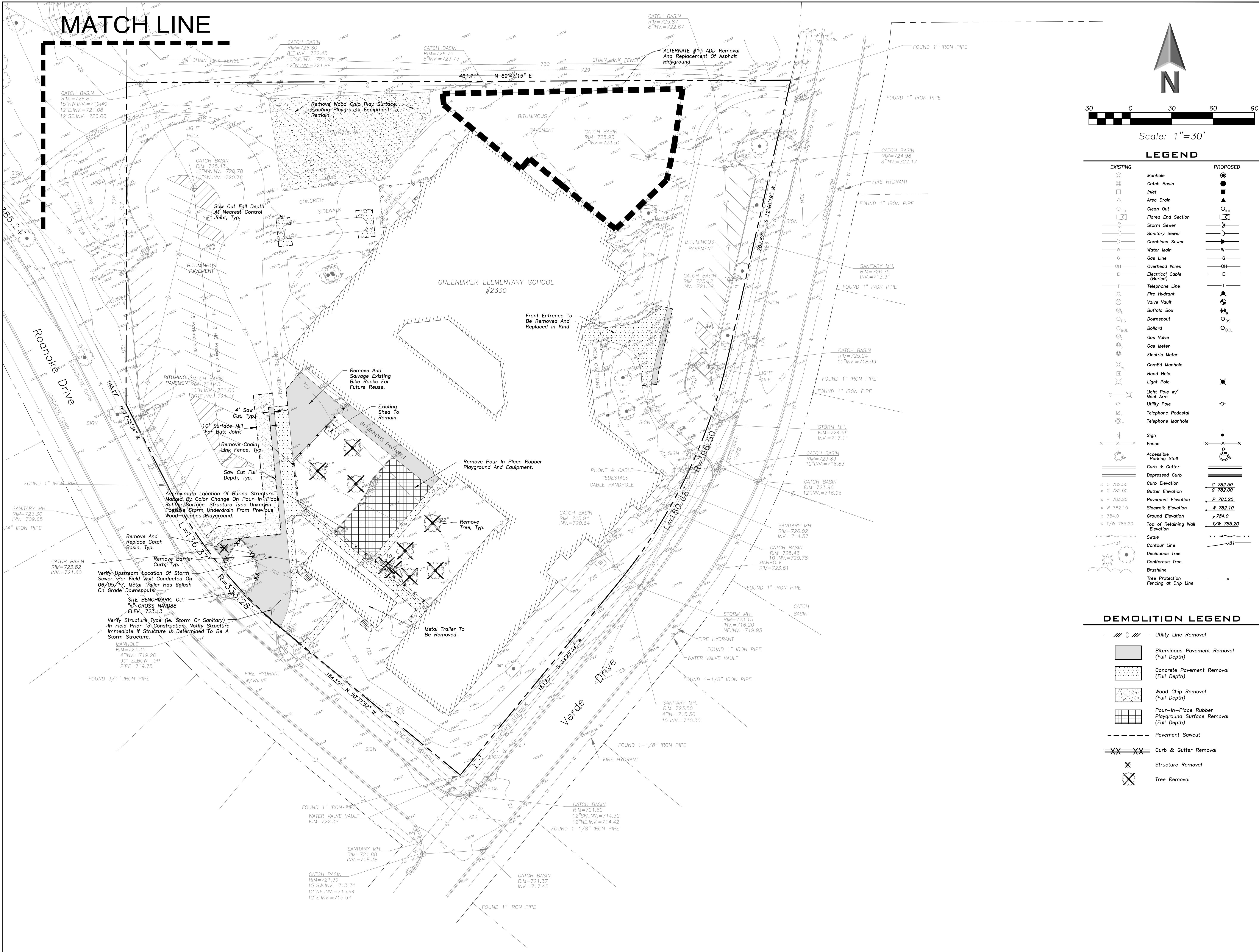
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JC	05/18/17
Approved By:	Project No.
KC	

Sheet Title:

MWRD GENERAL
NOTES

Sheet No.:

C0.03



LEGEND	
EXISTING	PROPOSED

DEMOLITION LEGEND	
	Utility Line Removal
	Bituminous Pavement Removal (Full Depth)
	Concrete Pavement Removal (Full Depth)
	Wood Chip Removal (Full Depth)
	Pour-In-Place Rubber Playground Surface Removal (Full Depth)
	Pavement Sawcut
	Curb & Gutter Removal
	Structure Removal
	Tree Removal



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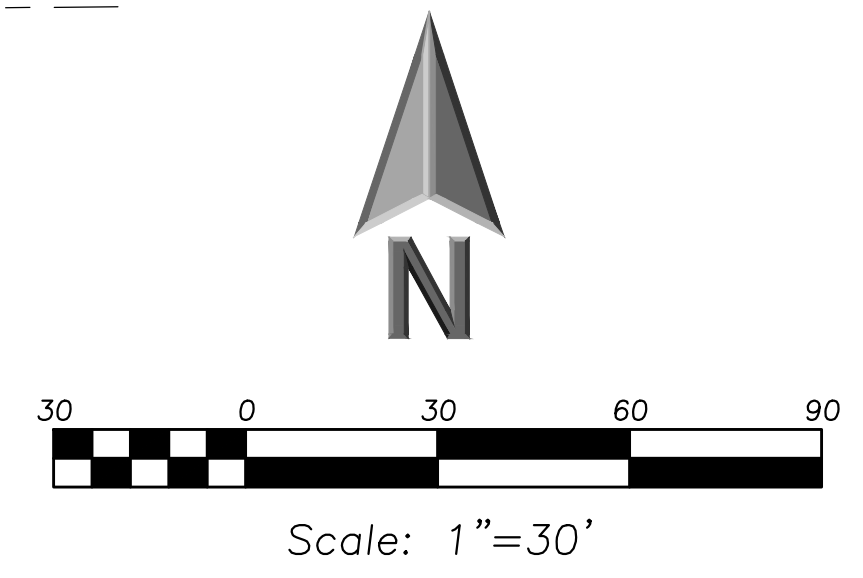
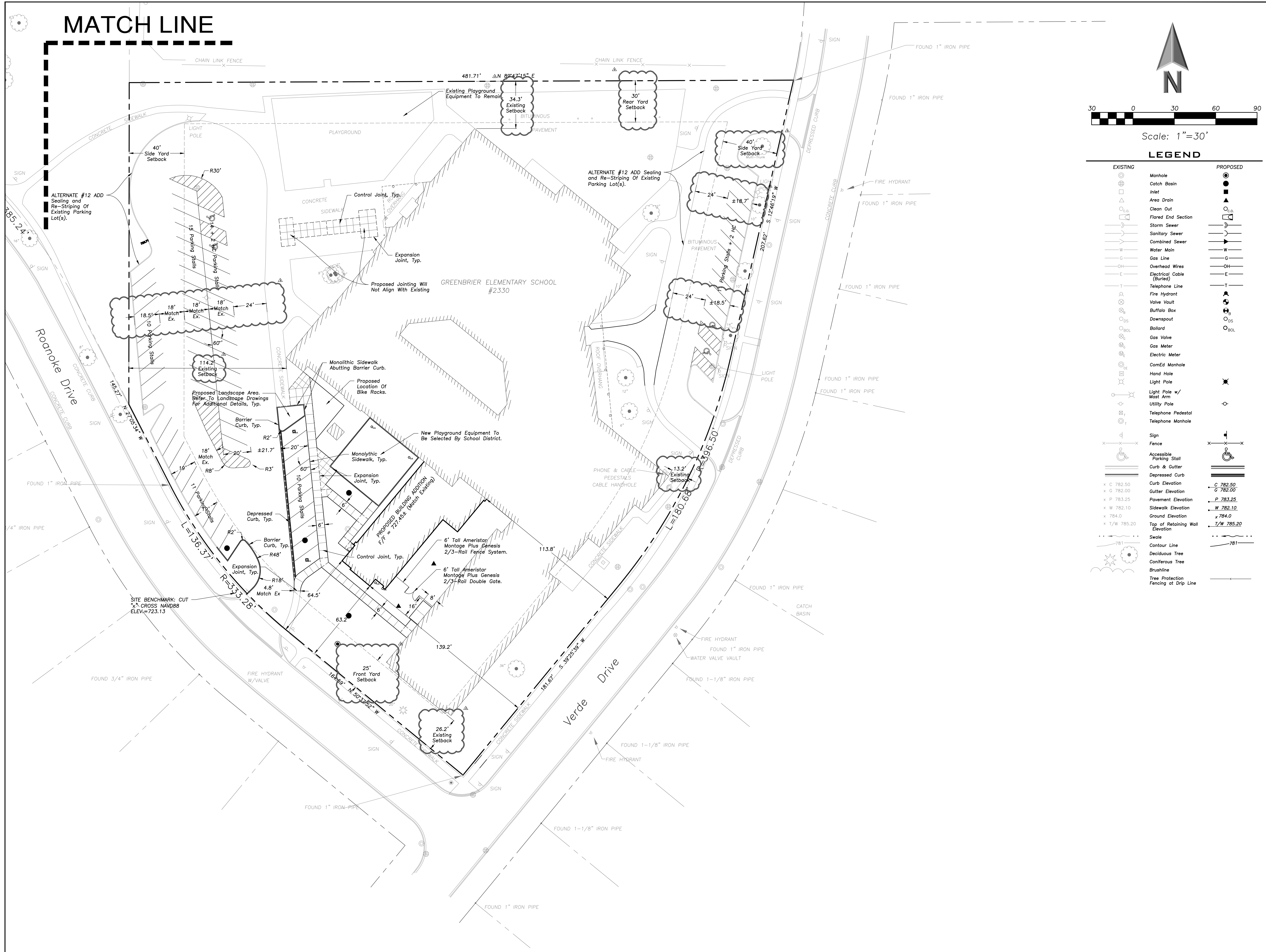
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**SOIL BORINGS /
INFILTRATION
TESTING**

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C1.01

MATCH LINE



LEGEND	
EXISTING	PROPOSED



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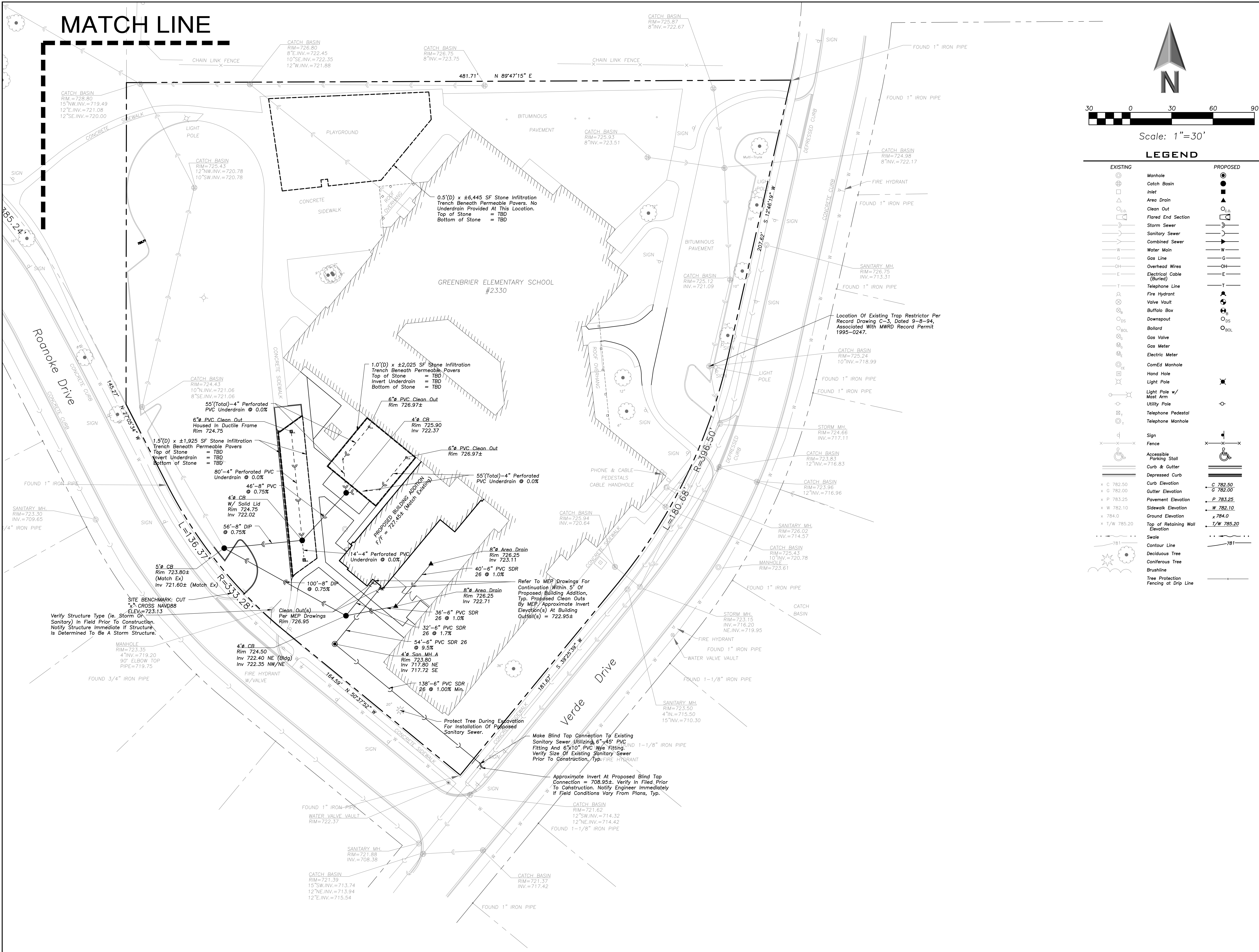
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**SITE GEOMETRY
PLAN**

Sheet No:

C2.01



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Sheet Title:

SITE UTILITY PLAN

Sheet No:

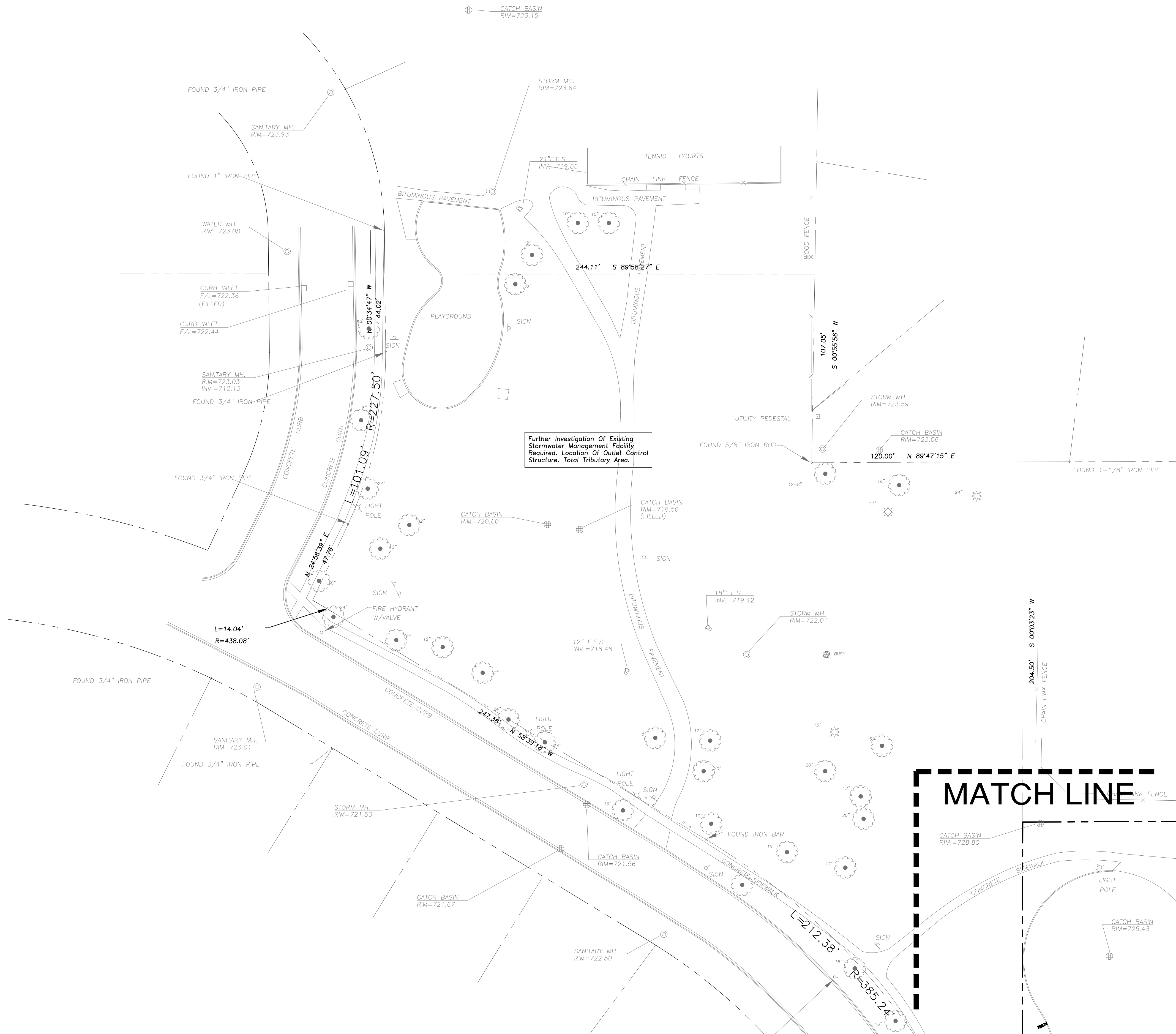
C3.01



Scale: 1"=30'

LEGEND

EXISTING	PROPOSED



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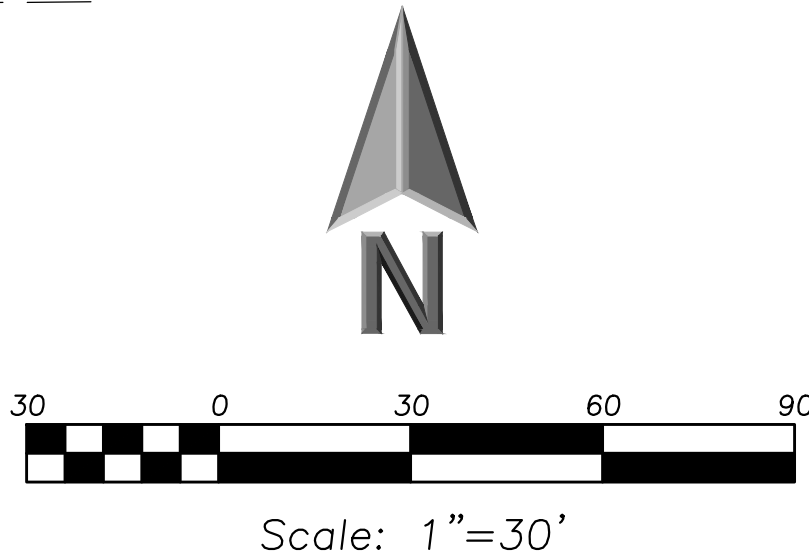
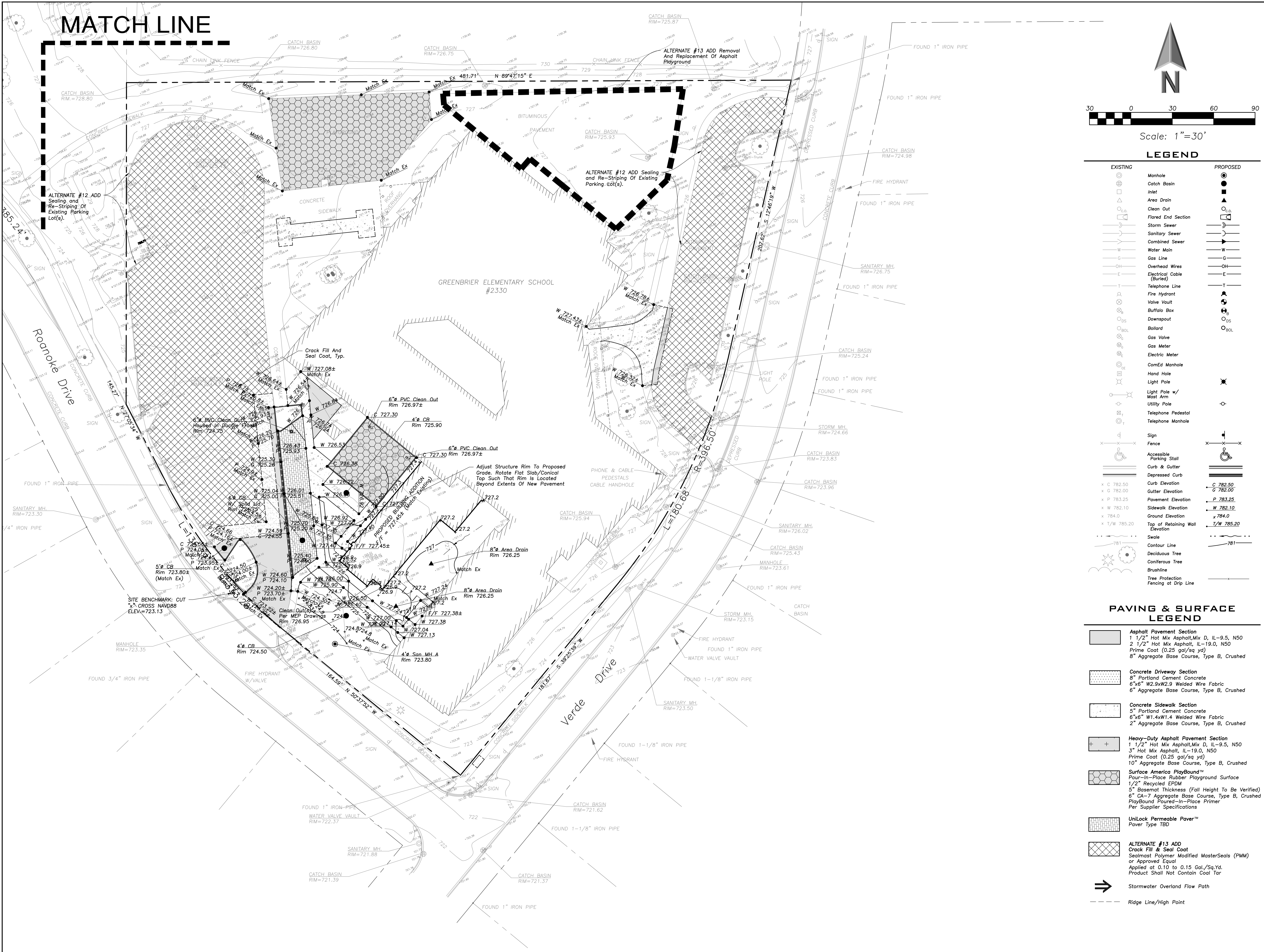
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Sheet Title:

SITE UTILITY PLAN

Sheet No:

C3.02



LEGEND	
EXISTING	PROPOSED

PAVING & SURFACE LEGEND	
	Asphalt Pavement Section 1 1/2" Hot Mix Asphalt, Mix D, IL-9.5, N50 2 1/2" Hot Mix Asphalt, IL-19.0, N50 Prime Coat (0.25 gal/sq yd) 6" Aggregate Base Course, Type B, Crushed
	Concrete Driveway Section 8" Portland Cement Concrete 6"x6" W2.9xW2.9 Welded Wire Fabric 6" Aggregate Base Course, Type B, Crushed
	Concrete Sidewalk Section 5" Portland Cement Concrete 6"x6" W1.4xW1.4 Welded Wire Fabric 2" Aggregate Base Course, Type B, Crushed
	Heavy-Duty Asphalt Pavement Section 1 1/2" Hot Mix Asphalt, Mix D, IL-9.5, N50 3" Hot Mix Asphalt, IL-19.0, N50 Prime Coat (0.25 gal/sq yd) 10" Aggregate Base Course, Type B, Crushed
	Surface America Playground™ Pour-In-Place Rubber Playground Surface 1/2" Recycled EPDM 5" Base Mat Thickness (Fall Height To Be Verified) 6" CA-7 Aggregate Base Course, Type B, Crushed PlayBound Poured-In-Place Primer Per Supplier Specifications
	UniLock Permeable Paver™ Paver Type TBD
	ALTERNATE #13 ADD Crack Fill & Seal Coat Sealmast Polymer Modified MasterSeals (PMM) or Approved Equal Applied at 0.10 to 0.15 Gal./Sq.Yd. Product Shall Not Contain Coal Tar
	Stormwater Overland Flow Path
	Ridge Line/High Point



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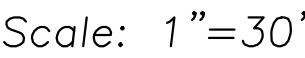
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APPROVED BY: KC		PROJECT NO.:	

Sheet Title:
**SITE GRADING
AND PAVING PLAN**

Sheet No:
C4.01



LEGEND

EXISTING		PROPOSED
	Manhole	
	Catch Basin	
	Inlet	
	Area Drain	
	Clean Out	
	Flared End Section	
	Storm Sewer	
	Sanitary Sewer	
	Combined Sewer	
	Water Main	
	Gas Line	
	Overhead Wires	
	Electrical Cable (Buried)	
	Telephone Line	
	Fire Hydrant	
	Valve Vault	
	Buffalo Box	
	Downspout	
	Bollard	
	Gas Valve	
	Gas Meter	
	Electric Meter	
	ComEd Manhole	
	Hand Hole	
	Light Pole w/ Mast Arm	
	Utility Pole	
	Telephone Pedestal	
	Telephone Manhole	
	Sign	
	Accessible Parking Stall	
	Curb & Gutter	
	Depressed Curb	
	Curb Elevation	
	Curb Elevation	
	Pavement Elevation	
	Sidewalk Elevation	
	Ground Elevation	
	Top of Retaining Wall Elevation	
	Swale	
	Contour Line	
	Deciduous Tree	
	Coniferous Tree	
	Brushline	
	Tree Protection Fencing of Drop Line	

PAVING & SURFACE LEGEND

 **Asphalt Pavement Section**
 1 1/2" Hot Mix Asphalt, Mix D, IL—9.5, N50
 2 1/2" Hot Mix Asphalt, IL—19.0, N50
 Prime Coat (0.25 gal/sq yd)
 6" Aggregate Base Course, Type B, Crushed

 **Concrete Driveway Section**
 6" Portland Cement Concrete
 6"x6" W2.9xw2.9 Welded Wire Fabric
 6" Aggregate Base Course, Type B, Crushed

 **Concrete Sidewalk Section**
 6" Portland Cement Concrete
 6"x6" W1.4xw1.4 Welded Wire Fabric
 2" Aggregate Base Course, Type B, Crushed

 **Heavy-Duty Asphalt Pavement Section**
 1 1/2" Hot Mix Asphalt, Mix D, IL—9.5, N50
 3" Hot Mix Asphalt, IL—19.0, N50
 Prime Coat (0.25 gal/sq yd)
 10" Aggregate Base Course, Type B, Crushed

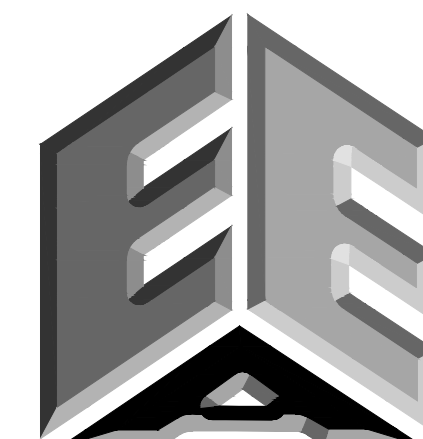
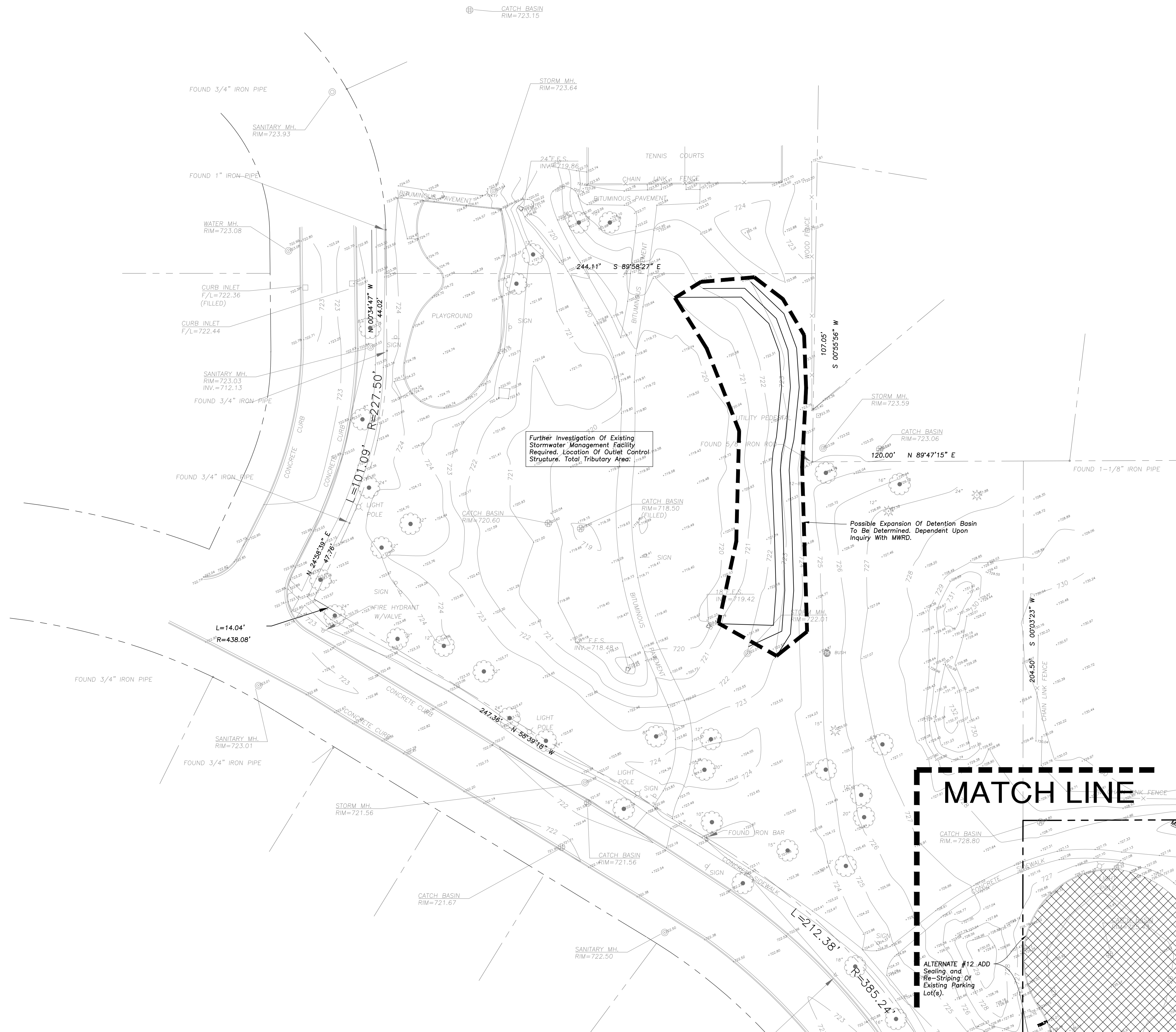
 **Surface America Playground™**
 Pour-In-Place Rubber Playground Surface
 1/2" Recycled EPDM
 5" Base mat Thickness (Foil Height To Be Verified)
 6" G4-7 Aggregate Base Course, Type B, Crushed
 Playground Poured-In-Place Primer
 Per Supplier Specifications

 **Unilock Permeable Paver™**
 Paver Type TBD

 **ALTERNATE #13 ADD**
 Crack Fill & Seal Coat
 Sealcoat Polymer Modified MasterSeals (PMI)
 or Approved Equal
 Applied at 0.10 to 0.15 Gal./Sq.Yd.
 Product Shall Not Contain Coal Tar

 **Stormwater Overland Flow Path**

 **Ridge Line/High Point**



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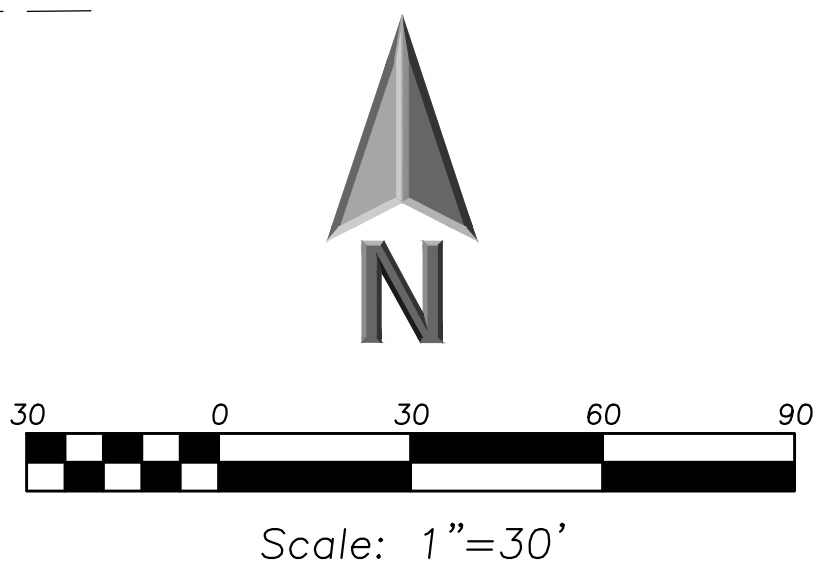
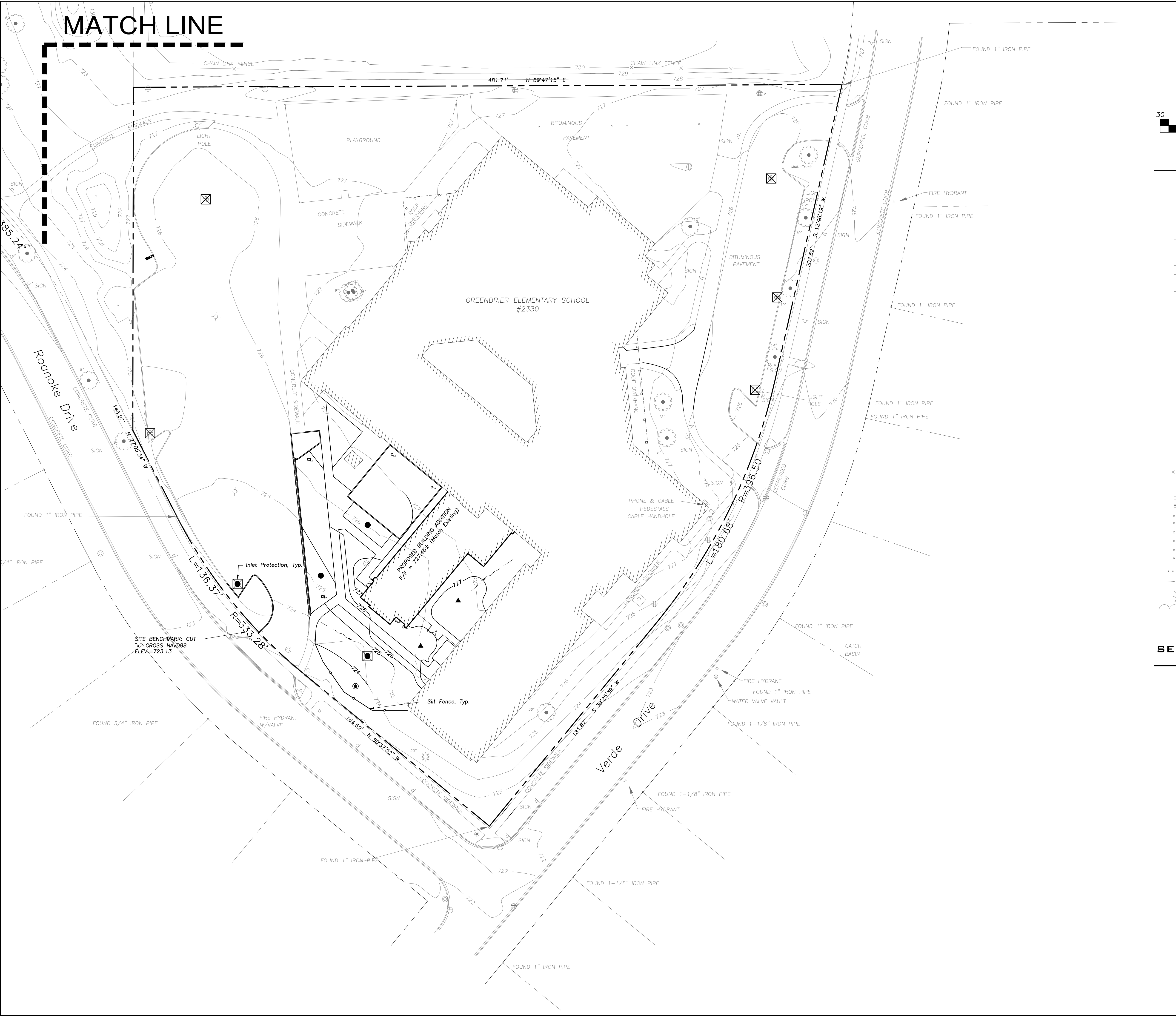
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Sheet Title

SITE GRADING AND PAVING PLAN

Sheet No.

C4.02



LEGEND	
EXISTING	PROPOSED

SOIL EROSION & SEDIMENTATION CONTROL LEGEND	
	Silt Fence
	Erosion Control Blanket North American Green DS75 Or Approved Equal
	Permanent Turf Reinforcement Mat North American Green C350 Or Approved Equal
	Erosion Control Ditch Check
	Catch-All, Park Chop Sediguard (or equal) Paved or Existing Stabilized Areas
	Filter Wattle Inlet Protection with Dandy Pop (or equal) Landscape Areas
	Erosion Eel (Temporary Silt Barrier Paved Areas - Location by Contractor Dependent on Construction Sequencing/Phasing)



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Sheet Title:

**SOIL EROSION
AND SEDIMENT
CONTROL PLAN**

Sheet No:

C5.01



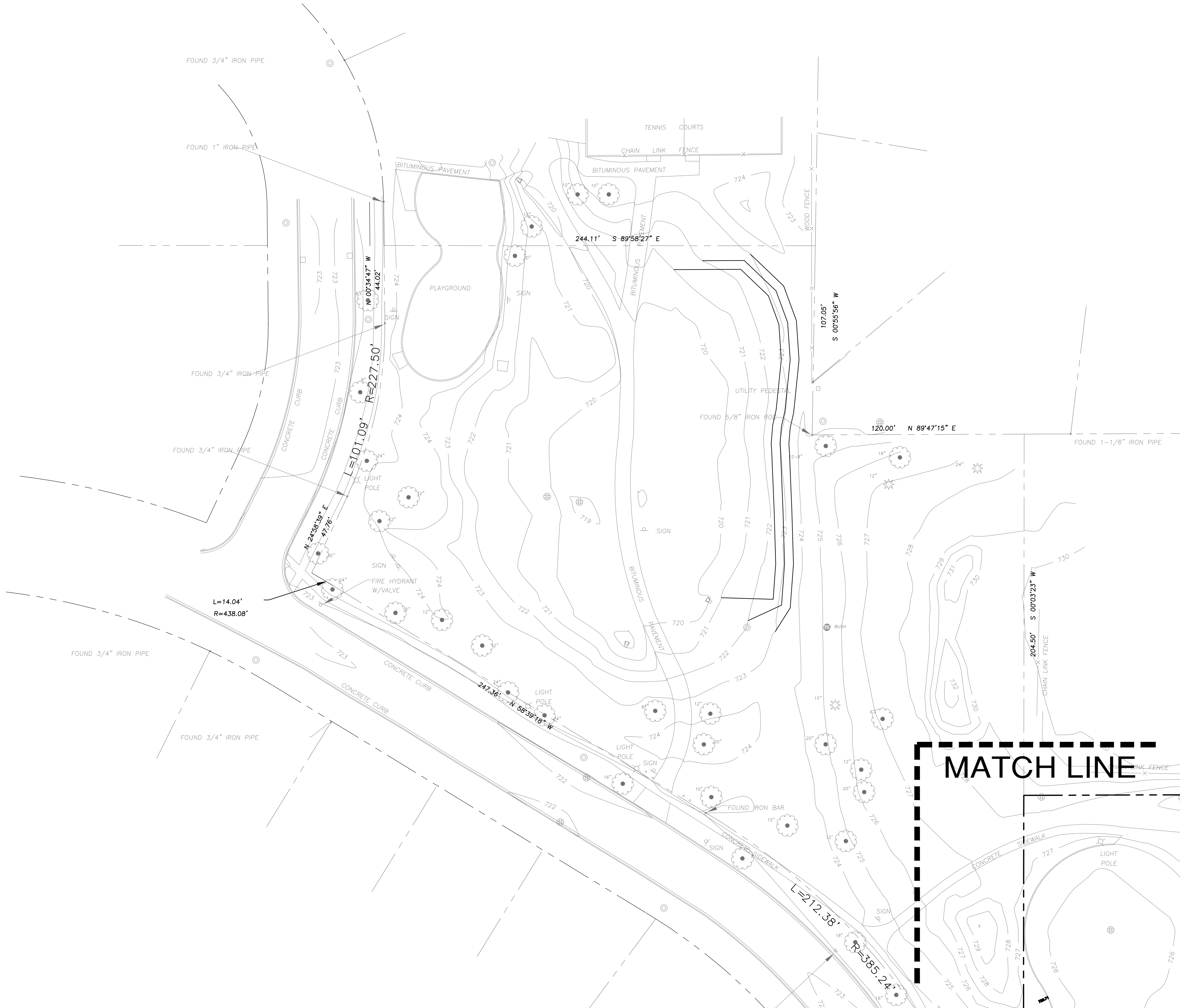
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LEGEND

EXISTING	PROPOSED

SOIL EROSION & SEDIMENTATION CONTROL LEGEND

	Silt Fence
	Erosion Control Blanket North American Green DS75 Or Approved Equal
	Permanant Turf Reinforcement Mat North American Green C350 Or Approved Equal
	Erosion Control Ditch Check
	Catch-All, Park Chop Sediguard (or equal) Paved or Existing Stabilized Areas
	Filter Wattle Inlet Protection with Dandy Pop (or equal) Landscape Areas
	Erosion Eal (Temporary Silt Barrier Paved Areas - Location by Contractor Dependent on Construction Sequencing/Phasing)



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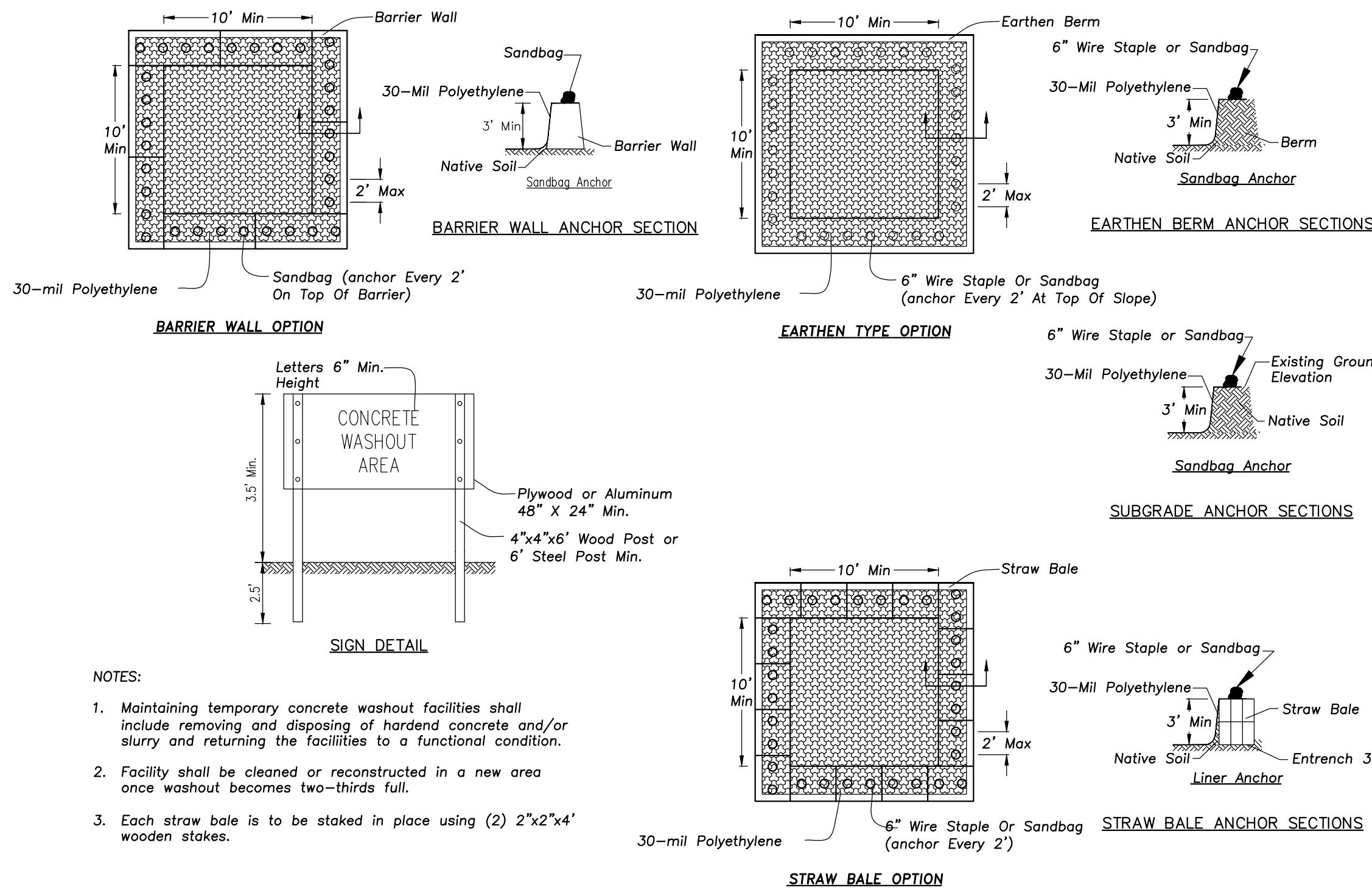
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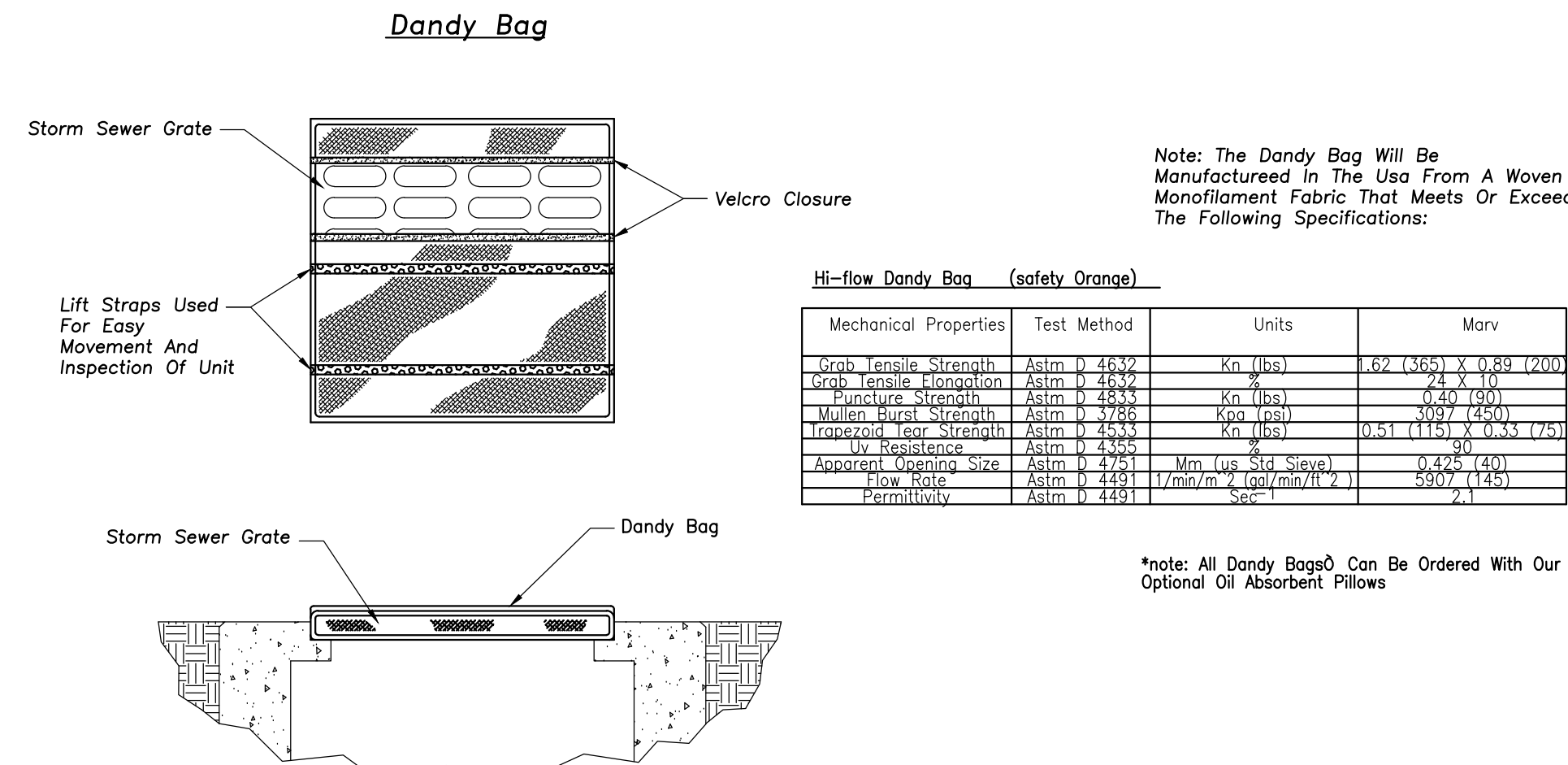
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Sheet Title:
SOIL EROSION
AND SEDIMENT
CONTROL PLAN

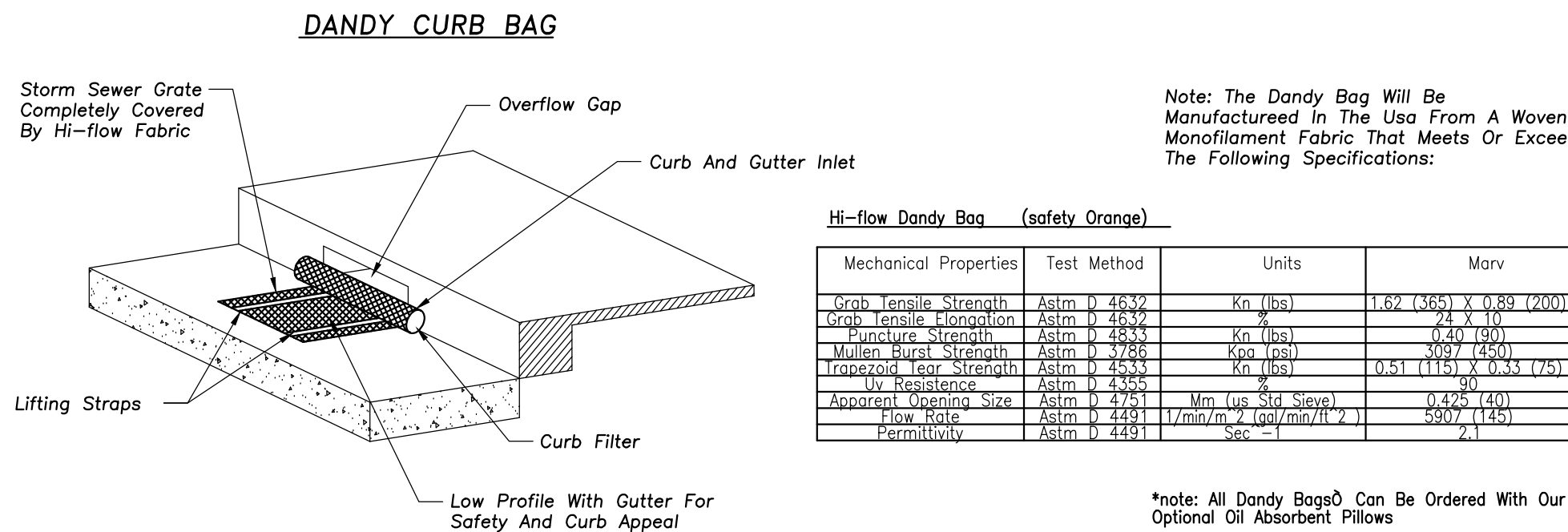
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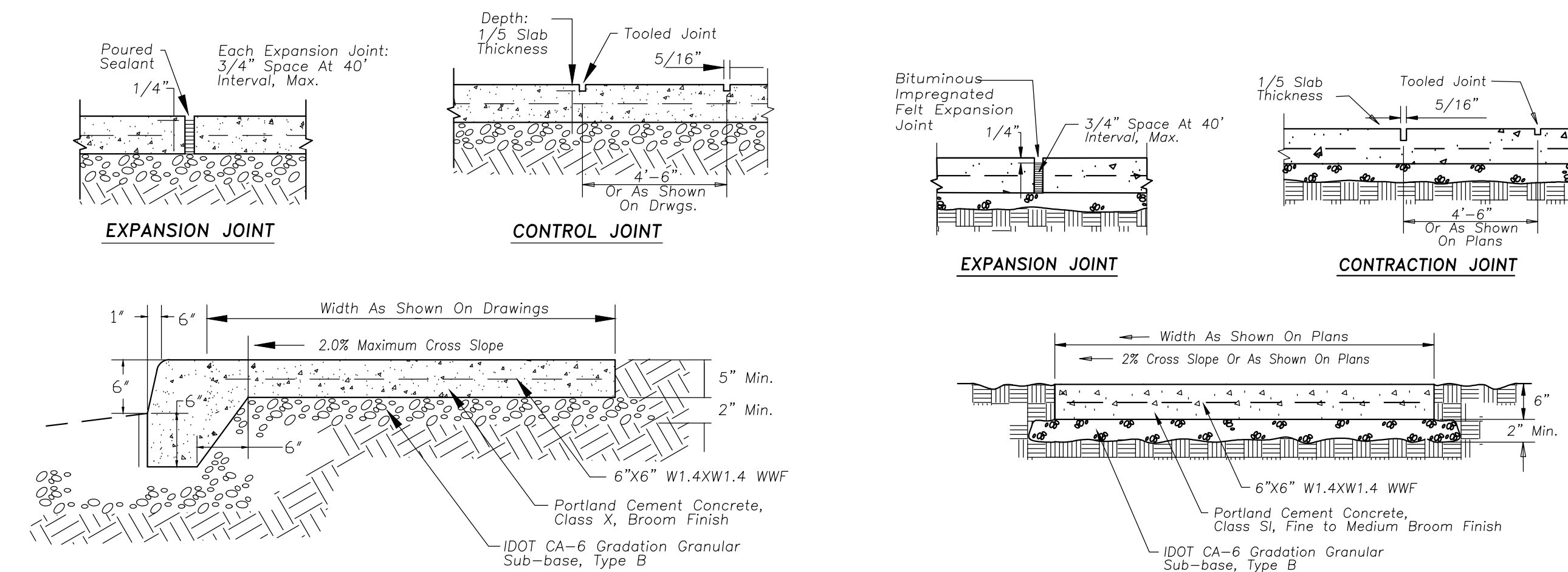
CONCRETE WASHOUT FACILITY



DANDY BAG INLET SEDIMENT CONTROL DEVICE

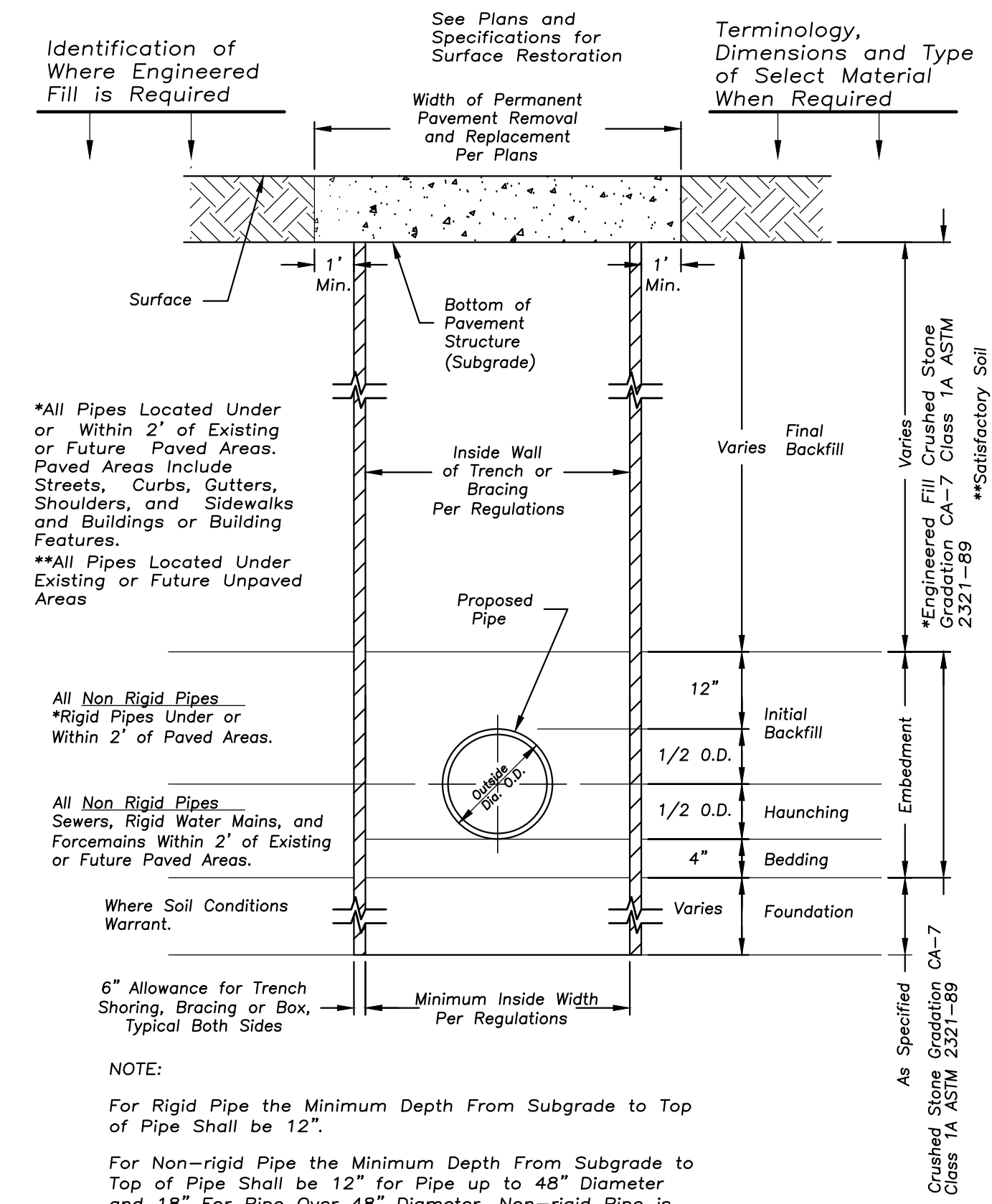
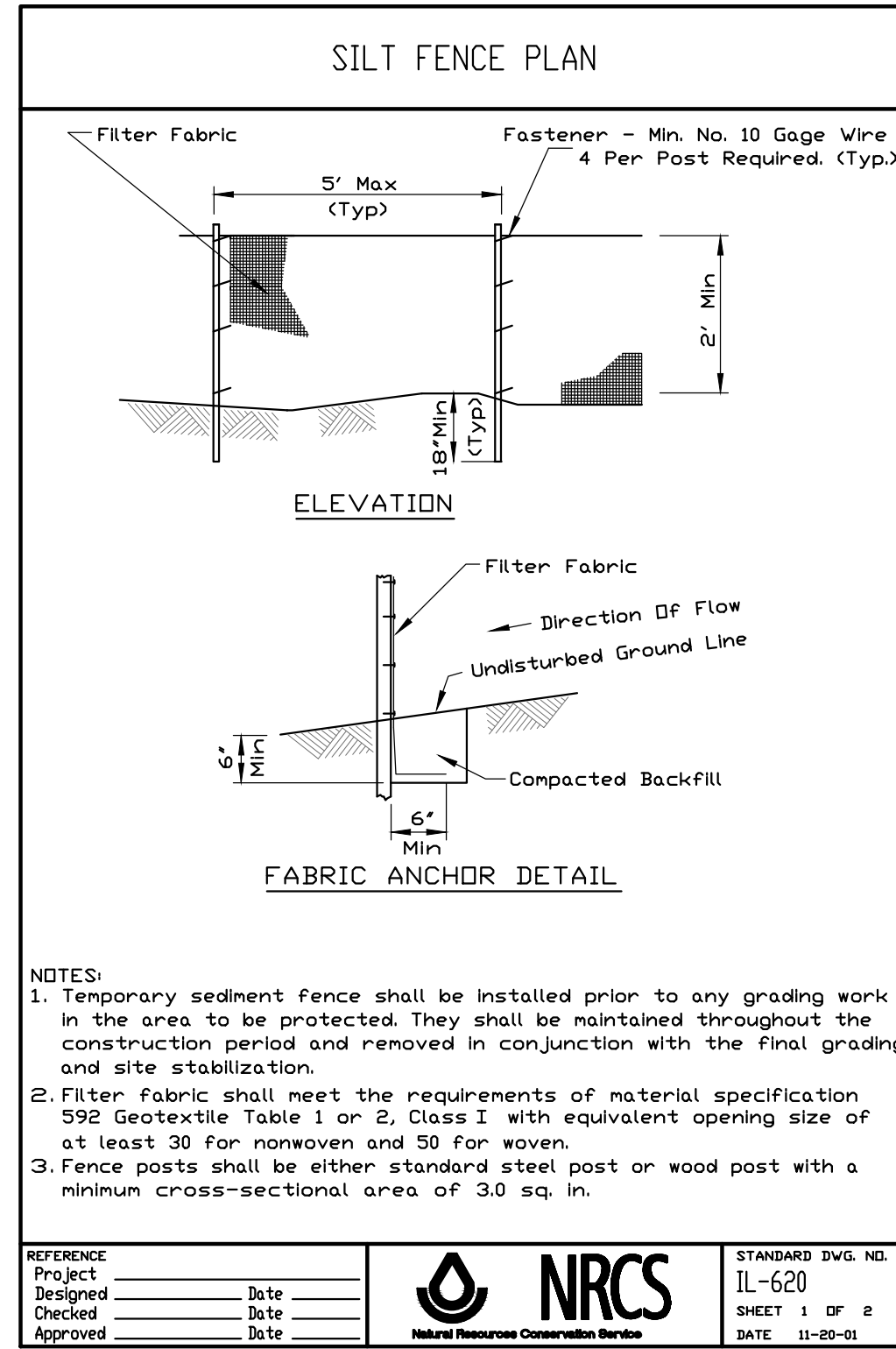


DANDY CURB BAG SEDIMENT CONTROL DEVICE



MONOLITHIC CONC. CURB & SIDEWALK

PORTLAND CEMENT CONC. SIDEWALK



STANDARD SEWER AND WATER TRENCH SECTION

GENERAL NOTES

STONE SIZE - Use IDOT gradation CA-1 aggregate stone.

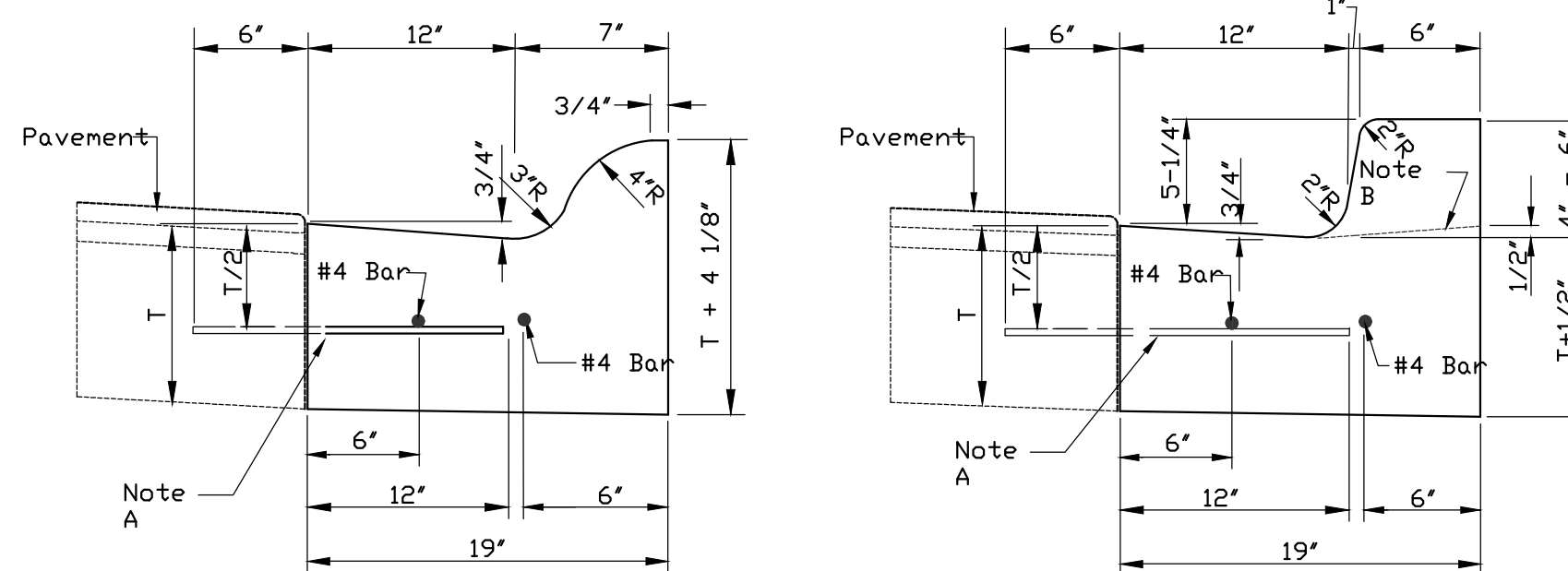
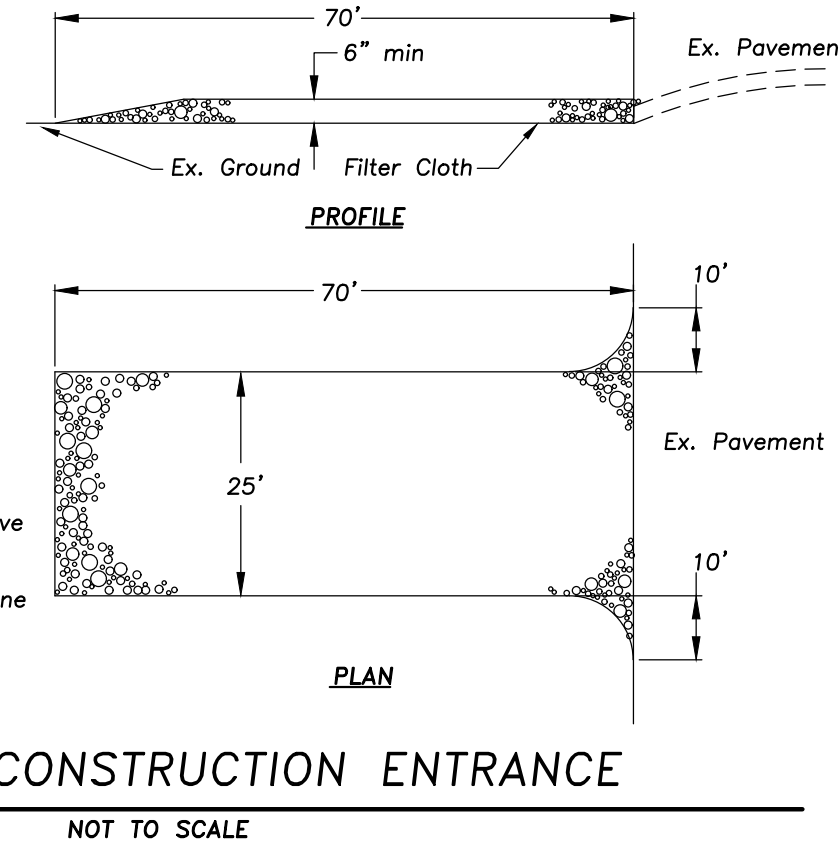
MAINTENANCE - The entrance shall be maintained in a condition which will prevent tracking or flowing of sediment onto public rights-of-way. This may require periodic top dressing with additional stone as conditions demand and repair and/or clean-out of any measures used to trap sediment. All sediment spilled, dropped, washed, or tracked onto public rights-of-way must be removed immediately.

FILTER CLOTH - Will be placed over the entire area prior to placing stone. Conform to Illinois Urban Manual Section 592, Type I, II, or IV.

WASHING - Wheels shall be cleaned to remove sediment prior to entrance onto public rights-of-way. When washing is required it shall be done on an area stabilized with stone and which drains into an approved sediment trapping device.

Periodic inspection and needed maintenance shall be provided after each rain.

STABILIZED CONSTRUCTION ENTRANCE



ROLL TYPE CURB

BARRIER TYPE CURB

- Notes:
- 2-#4 Longitudinal Bars 20 Feet In Length With 12" Overlaps, At 60' Intervals, Except At Expansion Joints.
 - Expansion Joints Shall Be A Minimum Of 3/4" Preformed Expansion Material And Shall Be Provided With A 1" Dia. X 18" Coated Smooth Dowel Bar Fitted With A Cap That Will Allow A Minimum Of 1" Of Expansion.
 - Construction Joints Shall Be Template Formed Or Saw-cut (Within 24 Hours Of Placement Of The Curb) To 1/5th The Depth Of The Gutter Flag At 20ft. Intervals Or At The Joints Depth Of The Gutter Flag At 20ft. Intervals Or At The Joints In An Adjacent Concrete Pavement.

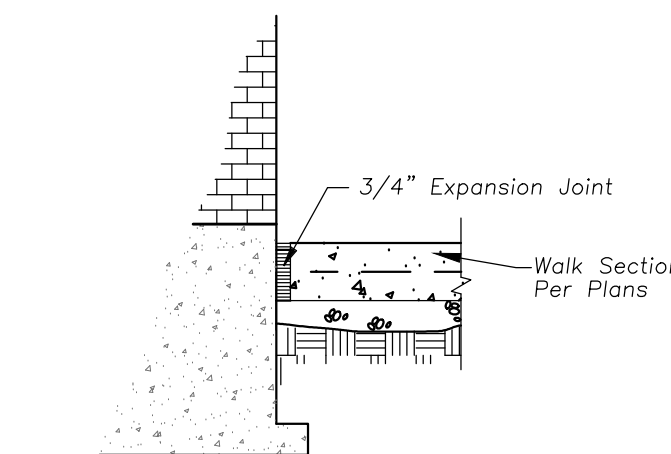
Note "a"

1/2" Dia. Steel Tie Bars @ 2'-6" Centers Grouted In Place @ 5/8" Dia. J-bolts Anchored In Place (omit For Bituminous Base Course)

Note "b"

Profile For Depressed Curb @ Driveways And Ramps

TYPE B CURB



WALK ADJACENT TO BUILDING



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GREENBRIER SCHOOL

ADDITION AND RENOVATIONS

2330 N. Verde Dr.
Arlington Heights, Illinois

Reserved for Seal:

NOT FOR CONSTRUCTION

Expiration Date: _____

No.	Date	Description
	06/06/17	ISSUE FOR DD
	07/05/17	ISSUE FOR 75% CD
	07/21/17	ISSUE FOR 100% CD
	07/27/17	REVISIONS FOR VILLAGE

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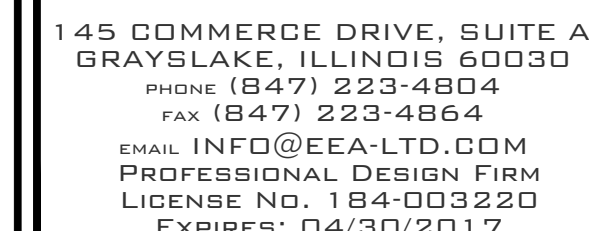
Approved By: KC Project No.

Sheet Title:

SITE WORK DETAILS

Sheet No:

C6.01



GREENBRIER SCHOOL
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SITE WORK DETAILS

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Sheet Title:

EXISTING SITE
CONDITIONS

Sheet No:

CX1.01



Scale: 1"=50'

LEGEND

- Redevelopment Area
0.81 Acres (±0.25 Acres Off-Site)
- Existing Impervious Area Of Redevelopment
±0.15 Acres
- Existing Permeable/Pervious Surface
Of Redevelopment
±0.05 Acres





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JC	05/18/17
Approved By:	Project No.
KC	

Sheet Title:

**PROPOSED SITE
CONDITIONS**

Sheet No:

CX1.02

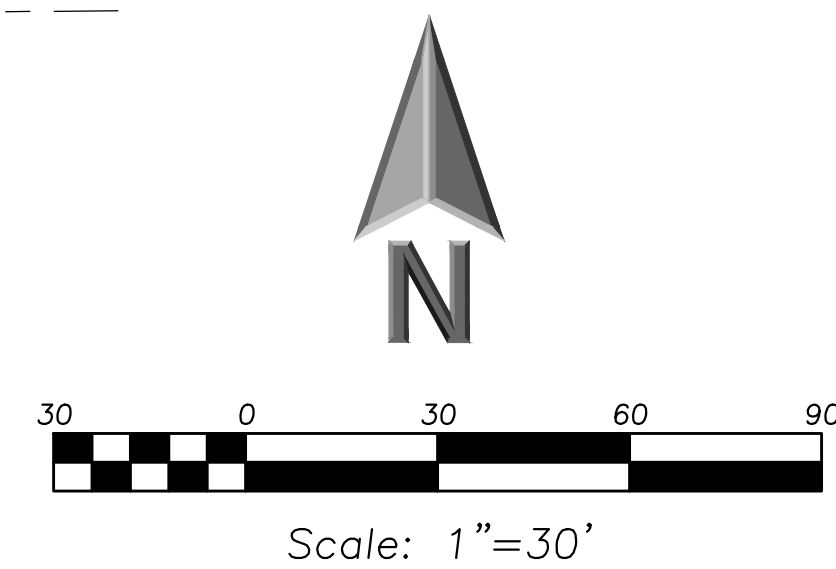


Scale: 1"=50'

LEGEND

- Redevelopment Area
0.81 Acres (±0.25 Acres Off-Site)
- Proposed Impervious Area Of Redevelopment
±0.19 Acres
- Proposed Permeable/Pervious Surface
Of Redevelopment
±0.24 Acres





LEGEND	
EXISTING	PROPOSED

LEGEND	
	Total Contiguous Property Area 3.97 Acres
	Redevelopment Area 0.56 Acres
	Maintenance Area 0.26 Acres



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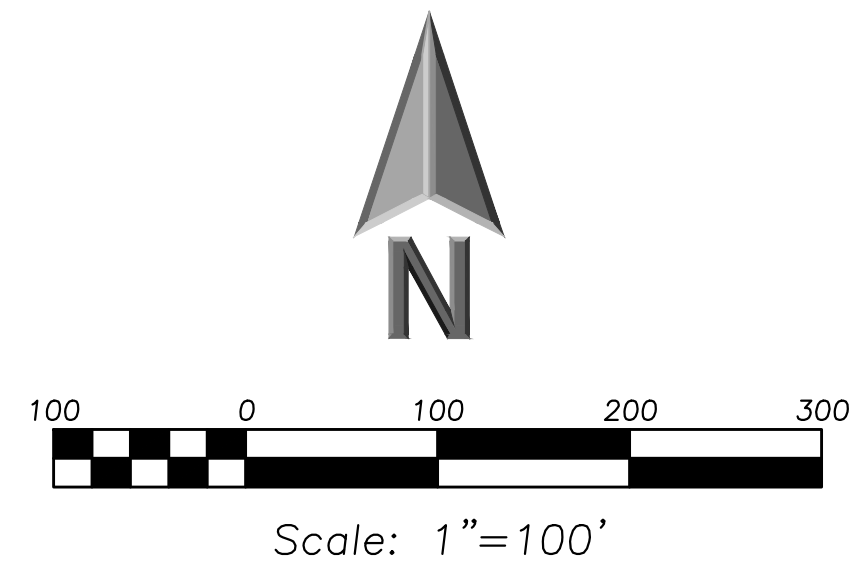
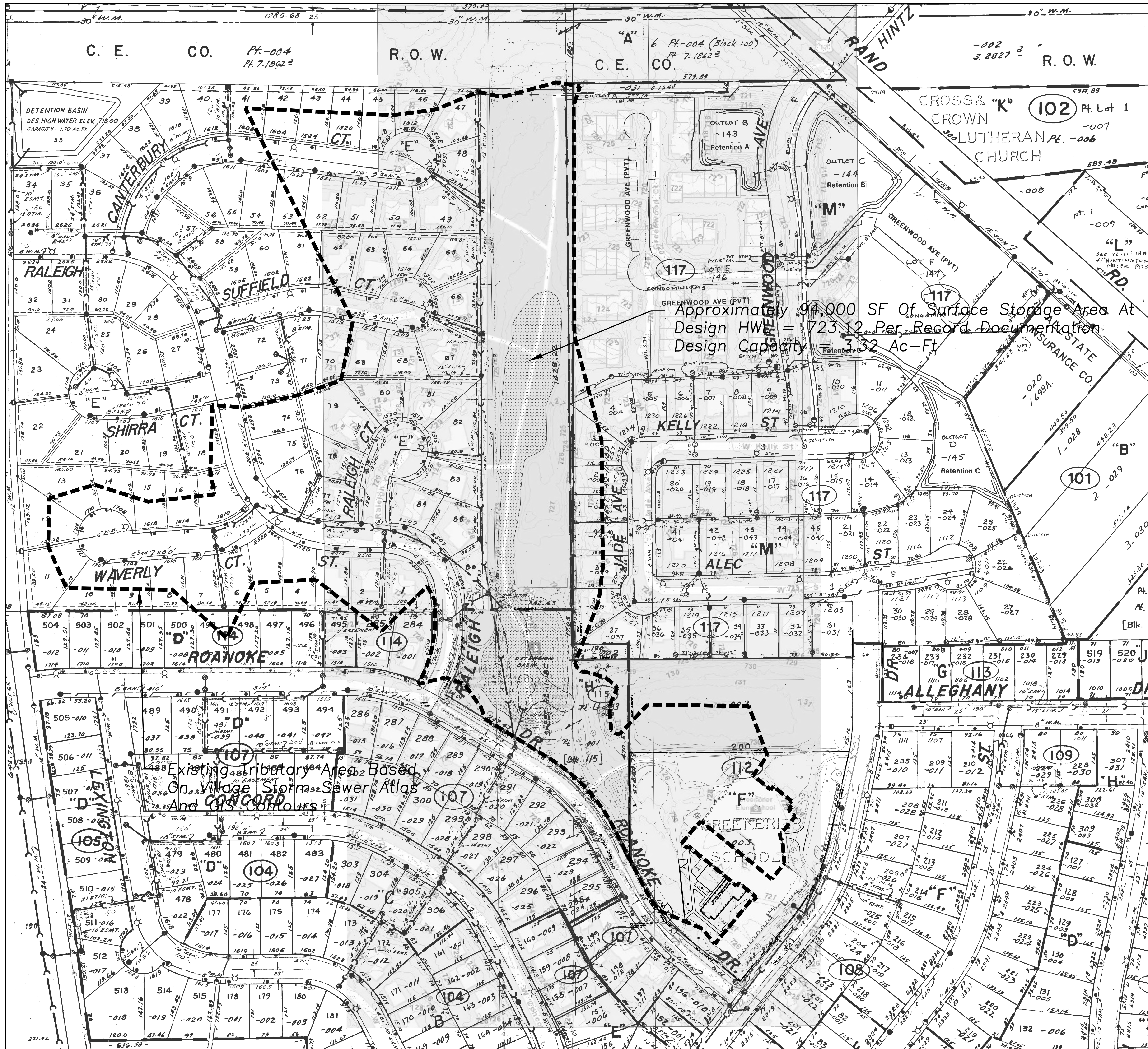
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Approved By:	Project No.
KC	

Sheet Title:

PROPOSED
PROJECT
DISTURBANCE

Sheet No:

CX2.01



LEGEND

--- Approximate Tributary Area
24.85 Acres



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Arlington Heights, Illinois

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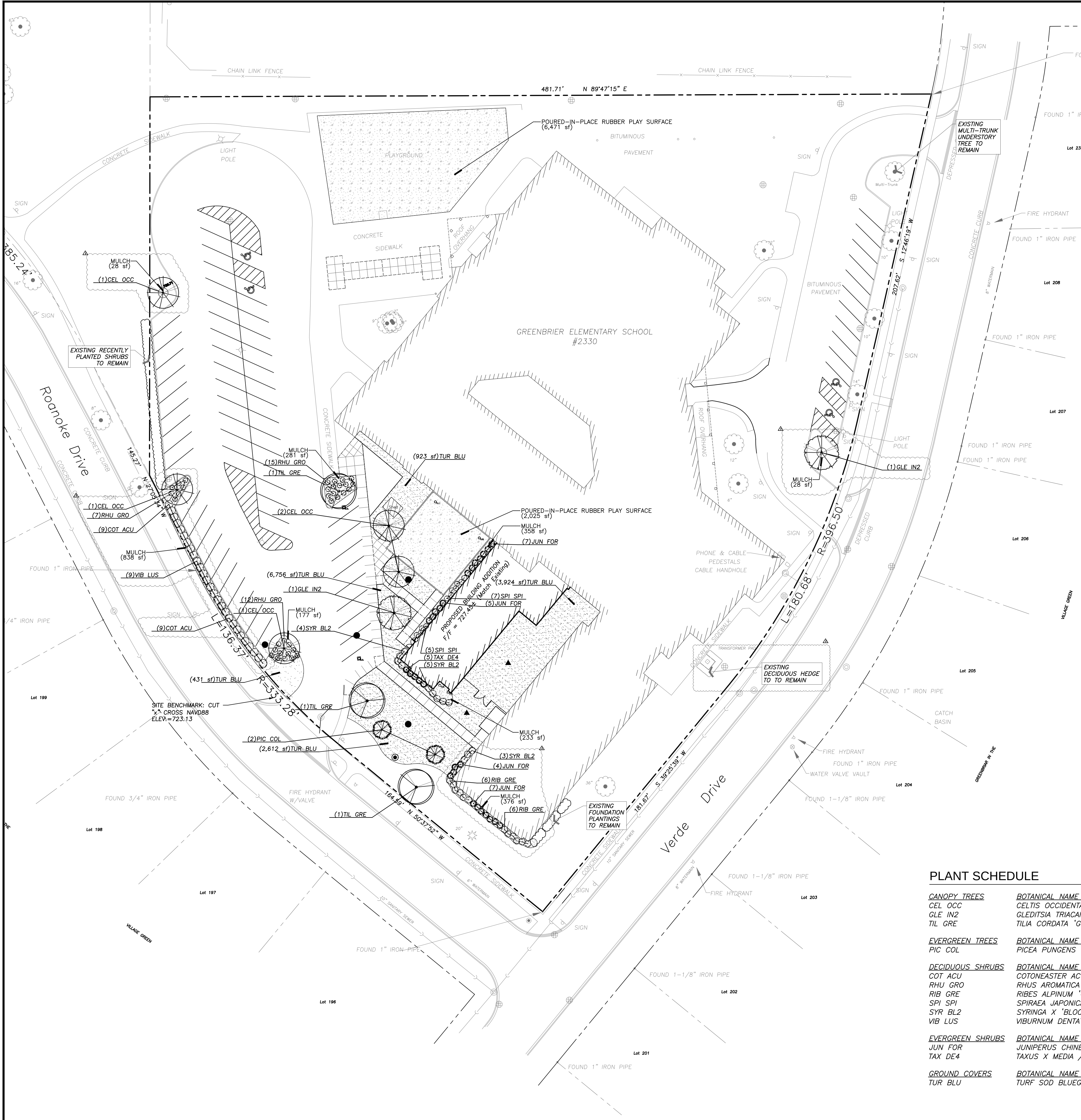
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07/27/17	07/27/17	REVISIONS FOR VILLAGE

DESIGN BY: JC
APPROVED BY: KC
DATE: 05/18/17
PROJECT NO.:

**APPROXIMATE
TRIBUTARY AREA TO
EXISTING DETENTION
FACILITY**

Sheet No:
CX3.01



LANDSCAPE NOTES:

1. PLANT QUALITIES SHOWN IN THE PLANT SCHEDULE ARE FOR CONVENIENCE ONLY. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING AND INSTALLING ALL MATERIALS SHOWN ON THE PLAN AND SHOULD NOT RELY ON THE PLANT SCHEDULE FOR DETERMINING QUALITIES.
2. ALL PLANT MATERIALS SHALL BE NURSERY GROWN STOCK AND SHALL BE FREE FROM ANY DEFORMITIES, DISEASES OR INSECT DAMAGE. ANY MATERIALS WITH DAMAGED OR CROOKED/DISFIGURED LEADERS, BARK ABRASION, SUNSCALD, INSECT DAMAGE, ETC. ARE NOT ACCEPTABLE AND WILL BE REJECTED. TREES WITH MULTIPLE LEADERS WILL BE REJECTED UNLESS CALLED OUT IN THE PLANT SCHEDULE AS MULTI-STEM.
3. ALL LANDSCAPE IMPROVEMENTS SHALL MEET MUNICIPALITY REQUIREMENTS AND GUIDELINES, WHICH SHALL BE VERIFIED BY MUNICIPAL AUTHORITIES.
4. ALL PLANTING OPERATIONS SHALL BE COMPLETED IN ACCORDANCE WITH STANDARD HORTICULTURAL PRACTICES. THIS MAY INCLUDE, BUT NOT BE LIMITED TO, PROPER PLANTING BED AND TREE PIT PREPARATION, PLANTING MIX, PRUNING, STAKING AND GUYING, WRAPPING, SPRAYING, FERTILIZATION, PLANTING AND ADEQUATE MAINTENANCE OF MATERIALS DURING CONSTRUCTION ACTIVITIES.
5. ALL PLANT MATERIALS SHALL BE INSPECTED AND APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION. ANY MATERIALS INSTALLED WITHOUT APPROVAL MAY BE REJECTED.
6. THE CONTRACTOR SHALL GUARANTEE PLANT MATERIALS FOR A PERIOD OF ONE YEAR FROM DATE OF ACCEPTANCE BY OWNER. THE CONTRACTOR SHALL OUTLINE PROPER MAINTENANCE PROCEDURES TO THE OWNER AT THE TIME OF ACCEPTANCE. DURING THE GUARANTEE PERIOD, DEAD OR DISEASED MATERIALS SHALL BE REPLACED AT NO COST TO THE OWNER. AT THE END OF THE GUARANTEE PERIOD THE CONTRACTOR SHALL OBTAIN FINAL ACCEPTANCE FROM THE OWNER.
7. ANY EXISTING TREES TO BE RETAINED SHALL BE PROTECTED FROM SOIL COMPACTION AND OTHER DAMAGES THAT MAY OCCUR DURING CONSTRUCTION ACTIVITIES BY ERECTING FENCING AROUND SUCH MATERIALS AT A DISTANCE OF 8.5' FROM THE TRUNK.
8. ALL GRASS, CLUMPS, OTHER VEGETATION, DEBRIS, STONES, ETC., SHALL BE RAKED OR OTHERWISE REMOVED FROM PLANTING AND LAWN AREAS PRIOR TO INITIATION OF INSTALLATION PROCEDURES.
9. ANY AREAS TO BE LOAMED AND SEEDED WHICH HAVE NOT BEEN DISTURBED BY CONSTRUCTION ACTIVITIES SHALL RECEIVE 1"-2" OF LOAM OVER SCARIFIED EXISTING SOILS. CARE SHOULD BE GIVEN TO NOT PLACE GREATER THEN 1" SOIL OVER EXPOSED ROOTS OF EXISTING TREES IN SUCH AREAS.
10. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL UNDERGROUND UTILITIES PRIOR TO INITIATING PLANTING OPERATIONS. THE CONTRACTOR SHALL REPAIR/ REPLACE AND UTILITY, PAVING, CURBING, ETC., WHICH IS DAMAGED DURING PLANTING OPERATIONS.
11. SIZE AND GRADING STANDARDS OF PLANT MATERIALS SHALL CONFORM TO THE LATEST EDITION OF ANSI Z60.1, AMERICAN STANDARDS FOR NURSERY STOCK, BY THE AMERICAN NURSERY & LANDSCAPE ASSOCIATION.
12. REFER TO PLAT OF SURVEY FOR LEGAL DESCRIPTION, BOUNDARY DIMENSIONS AND EXISTING CONDITIONS.
13. ALL PLANT MATERIAL ON THIS PLANTING PLAN REPRESENTS THE INTENTION AND INTENSITY OF THE PROPOSED LANDSCAPE MATERIAL. THE EXACT SPECIES AND LOCATIONS MAY VARY IN THE FIELD DO TO MODIFICATIONS IN THE SITE IMPROVEMENTS AND THE AVAILABILITY OF PLANT MATERIAL AT THE TIME OF INSTALLATION. ANY SUCH CHANGES MUST FIRST BE APPROVED BY THE VILLAGE IN WRITING.
14. ALL PLANT MATERIAL SHALL BE PLANTED WITH A MINIMUM OF SIX INCHES OF ORGANIC SOIL AND MULCHED WITH A SHREDDED BARK MATERIAL TO A MINIMUM 3" DEPTH.
15. ALL BEDS SHALL BE EDGED, HAVE WEED PREEMERGENTS APPLIED AT THE RECOMMENDED RATE.
16. ALL PARKWAYS AND PARKING LOT ISLANDS SHALL HAVE LAWN AS A GROUNDCOVER, UNLESS OTHERWISE NOTED.
17. ALL LAWN AREAS ON THIS PLAN SHALL BE GRADED SMOOTH AND TOPPED WITH AT LEAST 4" OF TOPSOIL. ALL LAWN AREAS TO BE ESTABLISHED USING SEED UNLESS OTHERWISE NOTED.
18. THIS LANDSCAPE PLAN ASSUMES THE SITE WILL BE PREPARED WITH TOP SOIL SUITABLE FOR THE ESTABLISHMENT OF THE LANDSCAPE MATERIAL PRESENTED ON THIS PLAN. IF ADDITIONAL TOP SOIL IS REQUIRED IT IS UP TO THE LANDSCAPE CONTRACTOR ON THE PROJECT TO PROVIDE, SPREAD AND PREPARE THE SITE AS NEEDED FOR THE IMPLEMENTATION OF THIS LANDSCAPE PLAN.
19. CONTRACTORS MUST VERIFY ALL QUANTITIES AND OBTAIN ALL PROPER PERMITS AND LICENSES FROM THE PROPER AUTHORITIES.
20. ALL MATERIAL MUST MEET INDUSTRY STANDARDS AND THE LANDSCAPE ARCHITECT HAS THE RIGHT TO REFUSE ANY POOR MATERIAL OR WORKMANSHIP.
21. LANDSCAPE ARCHITECT IS NOT RESPONSIBLE FOR UNSEEN SITE CONDITIONS.
22. ALL PLANTINGS SHALL BE SPACED EQUAL DISTANT, BACK FILLED WITH AMENDED SOIL IN A HOLE TWICE THE ROOTBALL DIAMETER, WATERED, FERTILIZED, PRUNED, AND HAVE ALL TAGS AND ROPES REMOVED.
23. TREES SHALL BE STAKED AND GUYED, AND HAVE A WATERING SAUCER AT BASE.
24. ALL BEDS TO BE BERMED 12" TO 24" ABOVE GRADE AND MEET DRAINAGE REQUIREMENTS.
25. LAWN AND BED AREAS SHALL BE ROTOTILLED, RAKED OF CLUMPS AND DEBRIS.
26. REMOVE ALL DEAD AND DISEASED PLANT MATERIAL FROM SITE AND DISPOSE OF PROPERLY.
27. PRUNE AND FERTILIZE ALL EXISTING VEGETATION TO REMAIN ON SITE.

SITE SURFACE SCHEDULE

	POURED-IN-PLACE RUBBER PLAY SURFACE	8,496 SF
	MULCH	2,320 SF

PLANT SCHEDULE

CANOPY TREES	BOTANICAL NAME / COMMON NAME	COND	SIZE	QTY
CEL OCC	CELTIS OCCIDENTALIS / COMMON HACKBERRY	B & B	4" CAL	5
GLE IN2	GLEDITSIA TRIACANTHOS INERMIS 'SUNBURST' / SUNBURST COMMON HONEYLOCUST	B & B	4" CAL	2
TIL GRE	TILIA CORDATA 'GREENSPIRE' / GREENSPIRE LITTLELEAF LINDEN	B & B	4" CAL	3
EVERGREEN TREES	BOTANICAL NAME / COMMON NAME	COND	SIZE	QTY
PIC COL	PICEA PUNGENS 'COLORADO GREEN' / COLORADO GREEN SPRUCE	B & B	8' HT.	2
DECIDUOUS SHRUBS	BOTANICAL NAME / COMMON NAME	COND	SIZE	QTY
COT ACU	COTONEASTER ACUTIFOLIUS / PEKING COTONEASTER	B & B	36" HT.	18
RHU GRO	RHUS AROMATICA 'GRO-LOW' / GRO-LOW FRAGRANT SUMAC	5 GAL	24" SPREAD	34
RIB GRE	RIBES ALPINUM 'GREEN MOUND' / GREEN MOUND ALPINE CURRANT	B & B	30" HT.	12
SPI SPI	SPIRAEA JAPONICA 'LITTLE PRINCESS' / LITTLE PRINCESS JAPANESE SPIREA	B & B	24" HT.	12
SYR BL2	SYRINGA X 'BLOOMERANG' / BLOOMERANG LILAC	B & B	30" HT.	12
VIB LUS	VIBURNUM DENTATUM 'CHICAGO LUSTER' / CHICAGO LUSTER ARROWWOOD	B & B	36" HT.	9
EVERGREEN SHRUBS	BOTANICAL NAME / COMMON NAME	COND	SIZE	QTY
JUN FOR	JUNIPERUS CHINENSIS 'SEA GREEN' / SEA GREEN JUNIPER	B & B	24" SPREAD	23
TAX DE4	TAXUS X MEDIA / DENSE YEW	B & B	24" HT.	5
GROUND COVERS	BOTANICAL NAME / COMMON NAME	COND	SIZE	QTY
TUR BLU	TURF SOD BLUEGRASS / KENTUCKY BLUEGRASS	SOD	S.F.	8,212 SF

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GREENBRIER SCHOOL
ADDITIONS AND RENOVATIONS

2330 N. Verde Dr.
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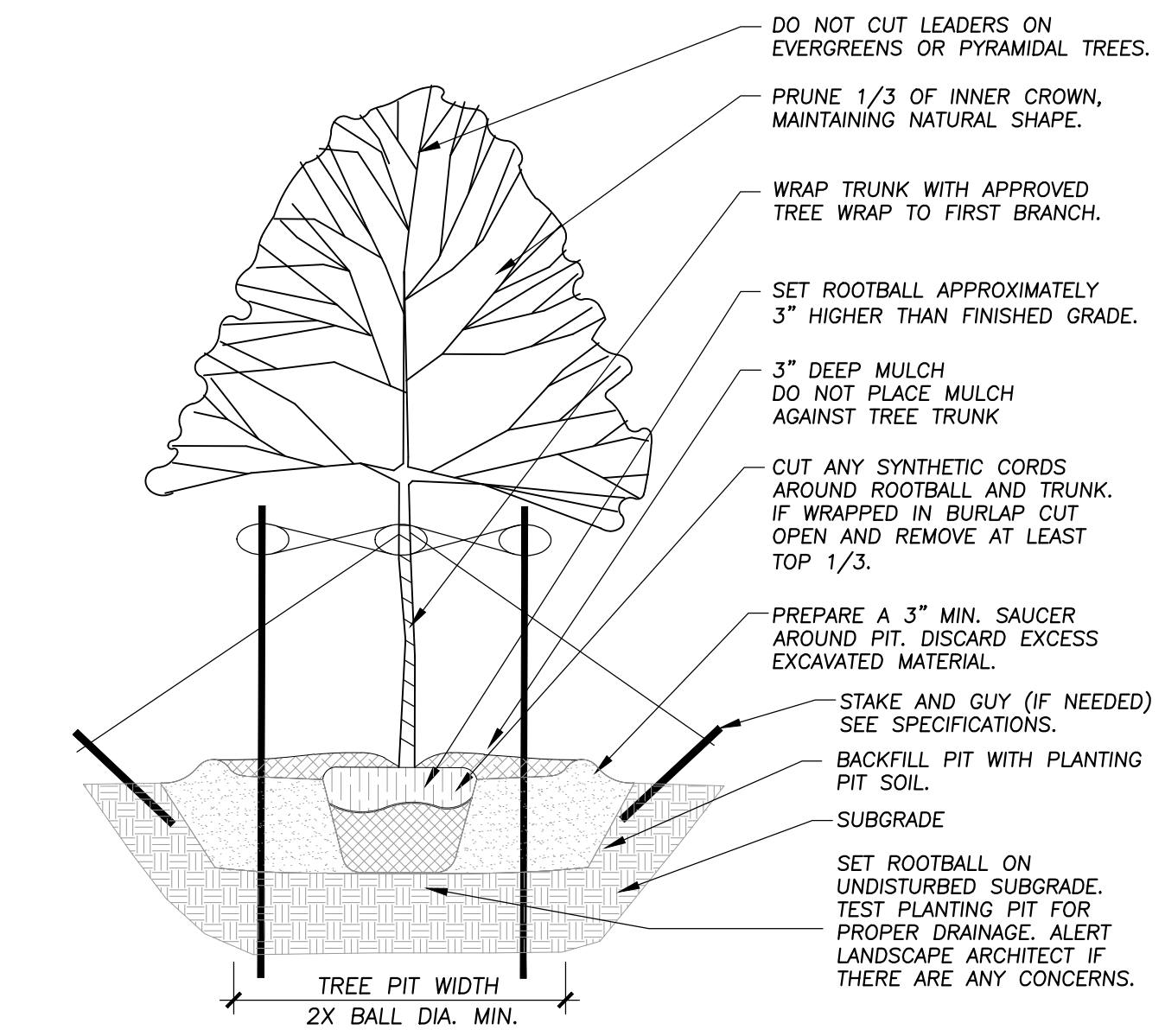
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PLAN

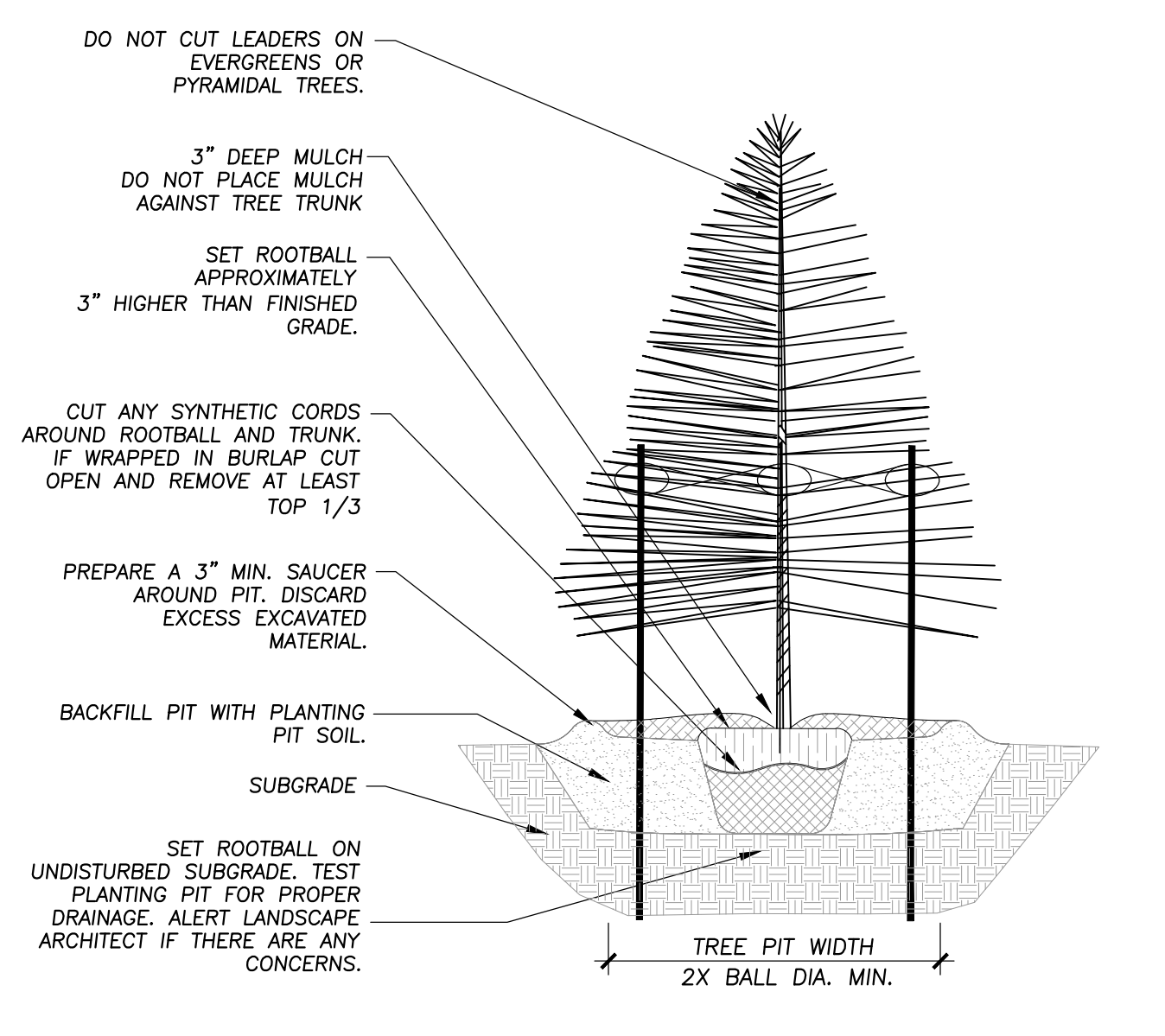
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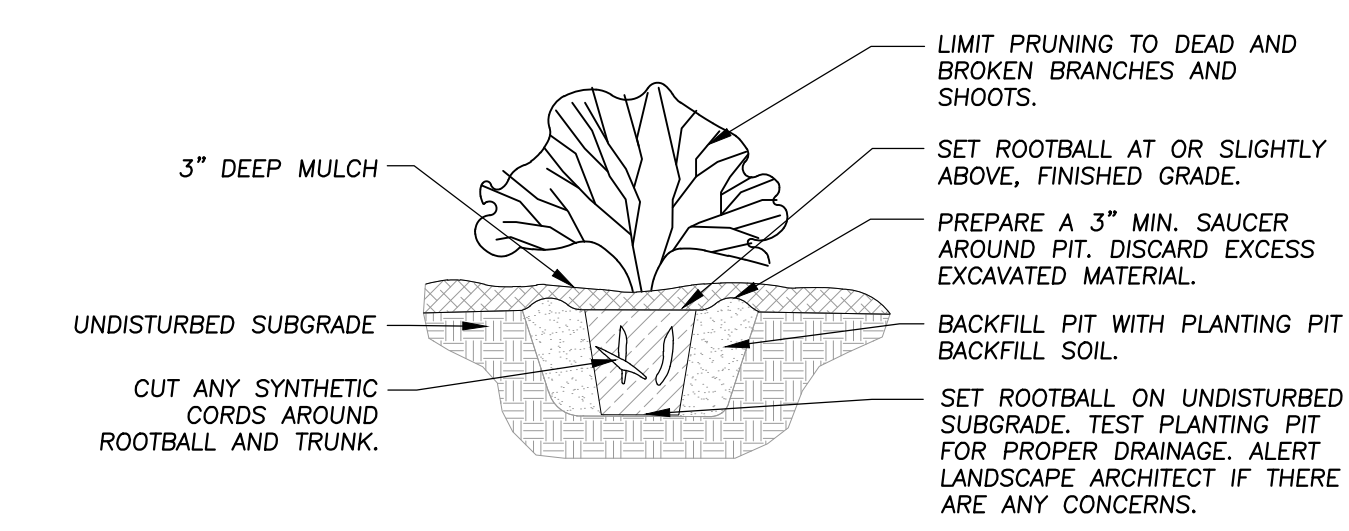
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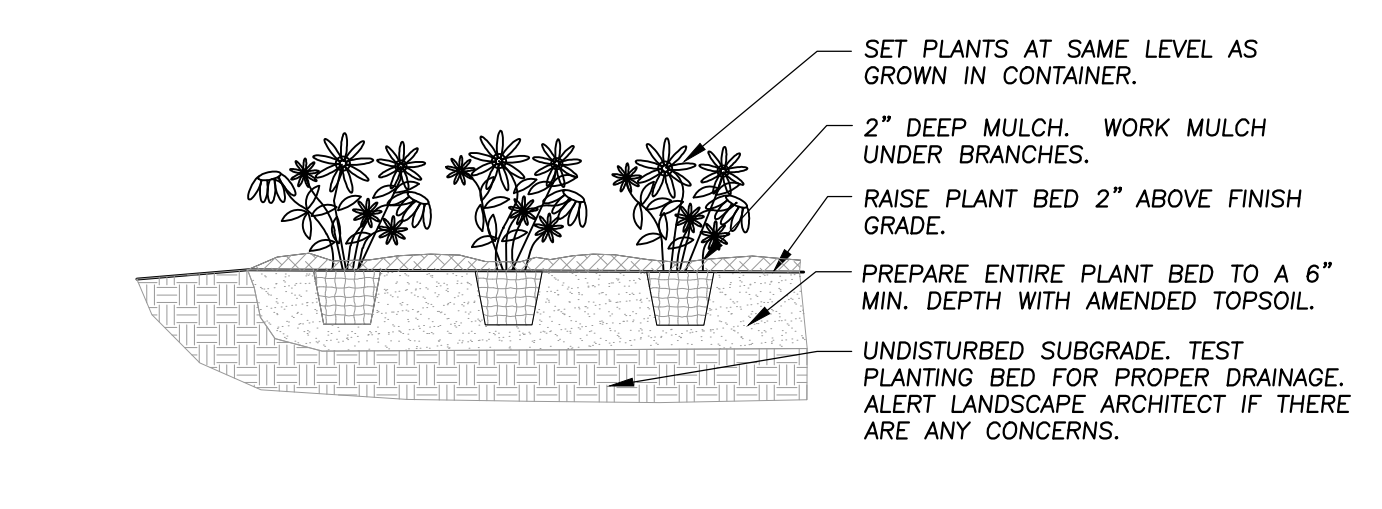
1 TREE PLANTING DETAIL
Not To Scale 329343-01



2 EVERGREEN TREE PLANTING DETAIL
NOT TO SCALE 329343-02



3 SHRUB PLANTING DETAIL
Not To Scale 329333-01



4 ANNUAL, PERENNIAL, & GROUNDCOVER DETAIL
Not To Scale 329301-03



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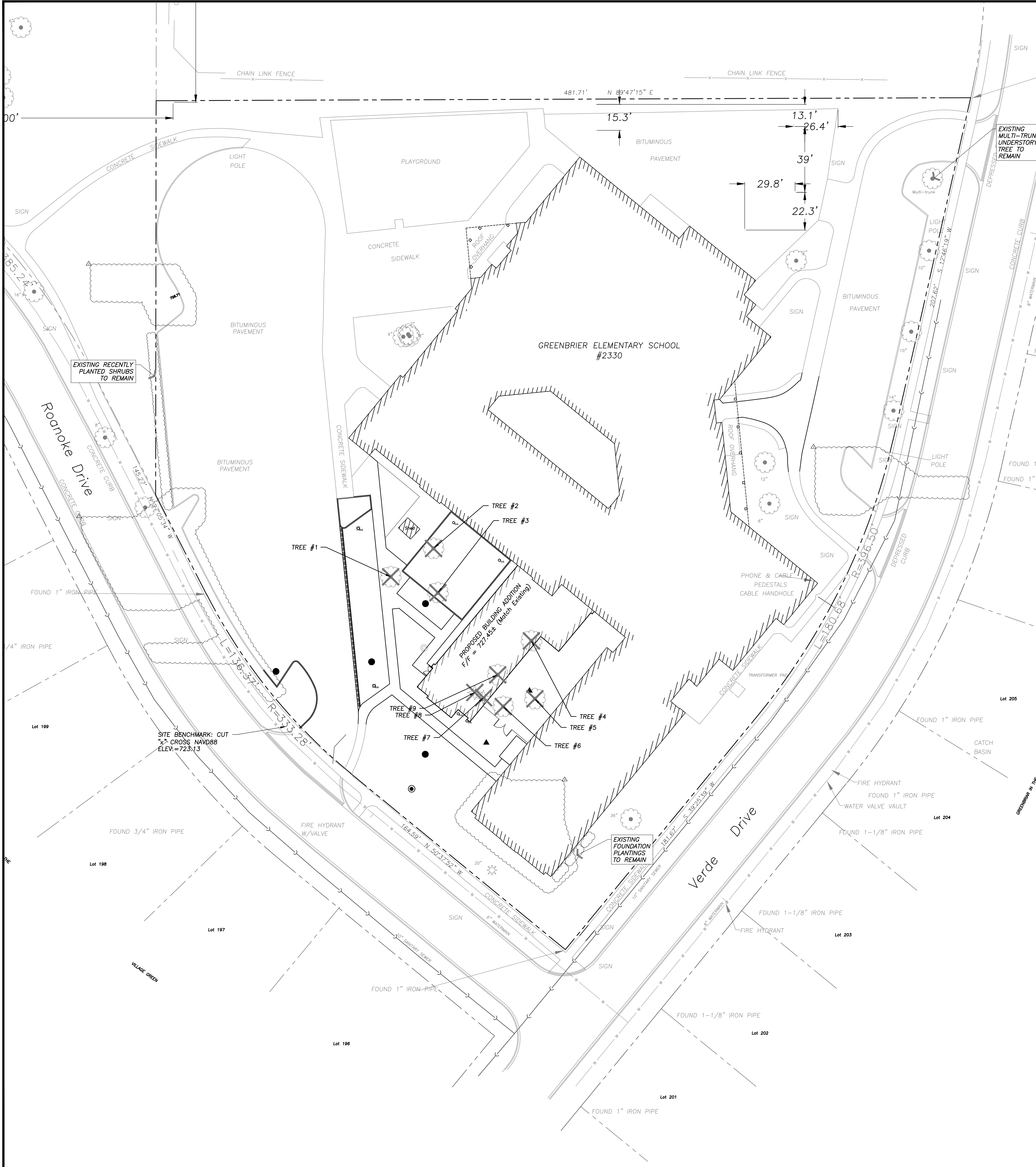
LANDSCAPE
DETAILS

Sheet No:

L1.02

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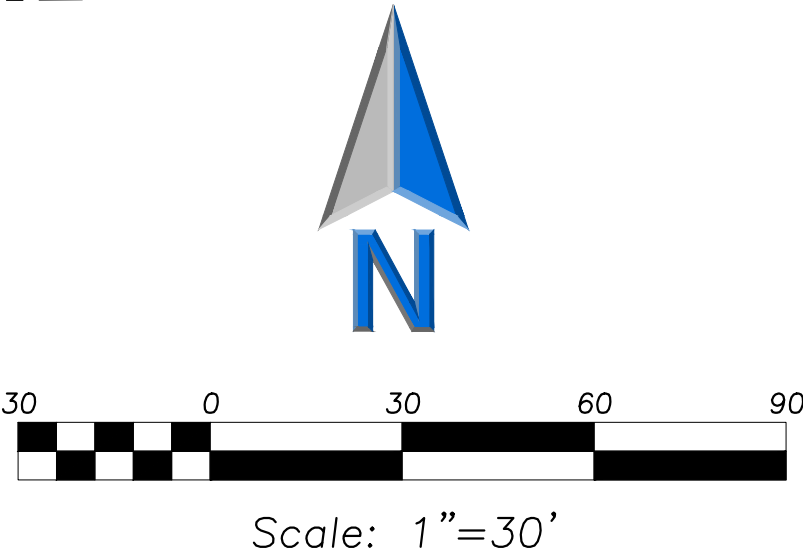


EXISTING TREE INVENTORY

TREE #	BOTANICAL NAME	COMMON NAME	TREE SIZE	CONDITION	COMMENTS
1	Acer platanoides	Norway Maple	12" Cal.	Good	
2	Acer platanoides	Norway Maple	12" Cal.	Good	
3	Acer platanoides	Norway Maple	24" Cal.	Fair	
4	Acer platanoides	Norway Maple	22" Cal.	Good	
5	Malus spp.	Crabapple	6" Cal.	Good	
6	Acer saccharinum	Silver Maple	17" Cal.	Good	
7	Picea pungens	Colorado Blue Spruce	10" Cal.	Good	
8	Picea pungens	Colorado Blue Spruce	10" Cal.	Good	
9	Ulmus americana	American Elm	8" Cal.	Good	

TREE PRESERVATION NOTES

- ANY EXISTING TREES TO BE RETAINED SHALL BE PROTECTED FROM SOIL COMPACTION AND OTHER DAMAGES THAT MAY OCCUR DURING CONSTRUCTION ACTIVITIES BY ERECTING FENCING AROUND SUCH MATERIALS AT A DISTANCE OF 8.5' FROM THE TRUNK.
- THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL UNDERGROUND UTILITIES PRIOR TO INITIATING PLANTING OPERATIONS. THE CONTRACTOR SHALL REPAIR/ REPLACE AND UTILITY, PAVING, CURBING, ETC.. WHICH IS DAMAGED DURING PLANTING AND TREE REMOVAL OPERATIONS.
- REFER TO PLAT OF SURVEY FOR LEGAL DESCRIPTION, BOUNDARY DIMENSIONS AND EXISTING CONDITIONS.
- CONTRACTORS MUST VERIFY ALL QUANTITIES AND OBTAIN ALL PROPER PERMITS AND LICENSES FROM THE PROPER AUTHORITIES.
- LANDSCAPE ARCHITECT IS NOT RESPONSIBLE FOR UNSEEN SITE CONDITIONS.
- REMOVE ALL DEAD AND DISEASED PLANT MATERIAL FROM SITE AND DISPOSE OF PROPERLY.
- PRUNE AND FERTILIZE ALL EXISTING VEGETATION TO REMAIN ON SITE.
- TREE SYMBOL WITH NUMBER INDICATES EXISTING TREE TO REMAIN.
- TREE SYMBOL WITH NUMBER AND AN "X" INDICATES EXISTING TREE TO BE REMOVED.



ERIKSSON
ENGINEERING
ASSOCIATES, LTD.

145 COMMERCE DRIVE, SUITE A
GRAYSLAKE, ILLINOIS 60030
PHONE (847) 223-4804
FAX (847) 223-4864
EMAIL INFO@EEA-LTD.COM
PROFESSIONAL DESIGN FIRM
LICENSE NO. 184-003220
EXPIRES: 04/30/2017

GREENBRIER SCHOOL
ADDITIONS AND RENOVATIONS

2330 N. Verde Dr.
Arlington Heights, Illinois

Reserved for Seal:

NOT FOR
CONSTRUCTION

Expiration Date: _____

No.	Date	Description
	06/06/17	ISSUED FOR DD
	07/05/17	ISSUE FOR 75% CD
	07/21/17	ISSUE FOR 100% CD
	07/27/17	REVISION FOR LABEL ADJUSTMENTS

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Design By: SG	Date: 05/18/17
Approved By: KC	Project No.

Sheet Title:
**TREE
PRESERVATION
PLAN**

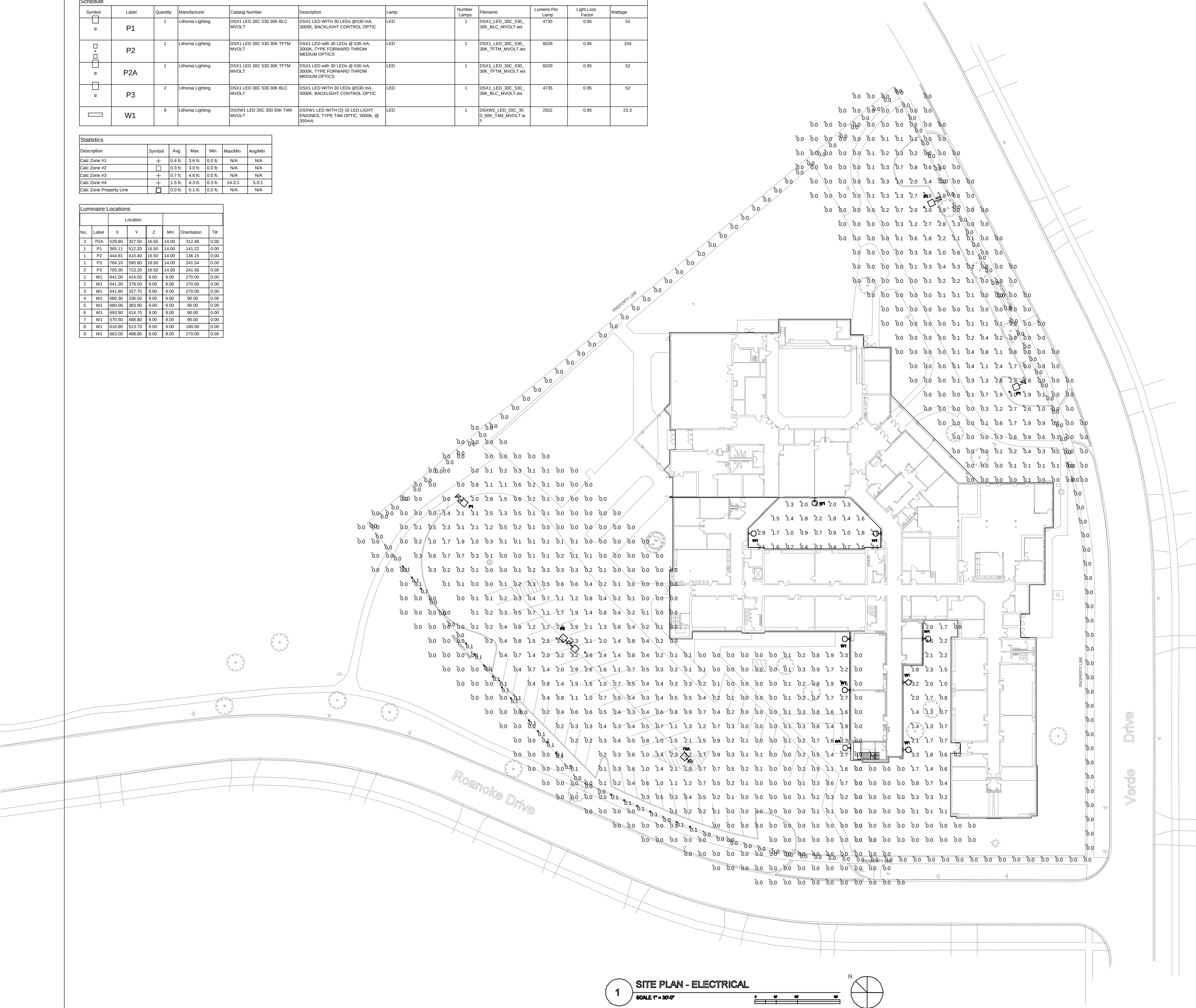
Sheet No:
L2.01

NOT FOR CONSTRUCTION

Schedule											
Symbol	Label	Quantity	Manufacturer	Catalog Number	Description	Lamp	Number Lamps	Filename	Lumens Per Lamp	Light Loss Factor	Wattage
	P1	1	Lithonia Lighting	DSK1 LED 30C 530 30K BLC MVOLT	DSK1 LED WITH 30 LEDs @ 530 mA, 3000K, BACKLIGHT CONTROL OPTIC	LED	1	DSK1_LED_30C_530_30K_BLC_MVOLT.es	4735	0.95	52
	P2	1	Lithonia Lighting	DSK1 LED 30C 530 30K TFTM MVOLT	DSK1 LED WITH 30 LEDs @ 530 mA, 3000K, TYPE FORWARD THROW MEDIUM OPTICS	LED	1	DSK1_LED_30C_530_30K_TFTM_MVOLT.es	6029	0.95	104
	P2A	1	Lithonia Lighting	DSK1 LED 30C 530 30K TFTM MVOLT	DSK1 LED WITH 30 LEDs @ 530 mA, 3000K, TYPE FORWARD THROW MEDIUM OPTICS	LED	1	DSK1_LED_30C_530_30K_TFTM_MVOLT.es	6029	0.95	52
	P3	2	Lithonia Lighting	DSK1 LED 30C 530 30K BLC MVOLT	DSK1 LED WITH 30 LEDs @ 530 mA, 3000K, BACKLIGHT CONTROL OPTIC	LED	1	DSK1_LED_30C_530_30K_BLC_MVOLT.es	4735	0.95	52
	W1	9	Lithonia Lighting	DSKW1 LED 20C 350 50K T4M MVOLT	DSKW1 LED WITH (2) 10 LED LIGHT ENGINES, TYPE T4M OPTIC, 5000K, @ 250mA	LED	1	DSKW1_LED_20C_350_50K_T4M_MVOLT.es	2922	0.95	23.3

Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Calc Zone #1	+	0.4 fc	3.6 fc	0.0 fc	N/A	N/A
Calc Zone #2	□	0.3 fc	3.0 fc	0.0 fc	N/A	N/A
Calc Zone #3	+	0.7 fc	4.6 fc	0.0 fc	N/A	N/A
Calc Zone #4	+	1.5 fc	4.3 fc	0.3 fc	14.3:1	5.0:1
Calc Zone Property Line	□	0.0 fc	0.1 fc	0.0 fc	N/A	N/A

Luminaire Locations						
No.	Label	X	Y	Z	MH	Orientation
3	P2A	529.80	527.50	16.50	14.00	312.46
1	P1	365.11	512.20	16.50	14.00	141.22
1	P2	444.81	410.40	16.50	14.00	136.15
1	P3	704.10	595.00	16.50	14.00	241.54
2	P3	705.00	733.20	16.50	14.00	241.56
1	W1	541.00	414.50	9.00	9.00	270.00
2	W1	641.30	378.50	9.00	9.00	270.00
3	W1	641.80	537.70	9.00	9.00	270.00
4	W1	680.30	536.50	9.00	9.00	90.00
5	W1	680.00	383.90	9.00	9.00	90.00
6	W1	693.90	414.70	9.00	9.00	90.00
7	W1	570.50	488.80	9.00	9.00	90.00
8	W1	616.80	513.70	9.00	9.00	180.00
9	W1	663.00	488.80	9.00	9.00	270.00



1 SITE PLAN - ELECTRICAL
SCALE 1" = 30'-0"

SCOPE DOCUMENT

PROJECT
GREENBRIER ELEMENTARY
SCHOOL ADDITION AND
RENOVATIONS
2330 N. Verde Drive
Arlington Heights, IL 60004

ARLINGTON HEIGHTS
SCHOOL DISTRICT 25
1200 S. Dunton Ave.
Arlington Heights, IL 60005

CLIENT PROJECT NUMBER

ESTR PROJECT NUMBER

DRAWING DATES

NUMBER	DATE	COMMENTS
--------	------	----------

1		
2	JULY 27, 2017	REVISIONS FOR VILLAGE
1	JUNE 30, 2017	ISSUE FOR VILLAGE

DRAWING TITLE

SITE PLAN -
ELECTRICAL

DRAWING NUMBER

ES1.0

Greenbrier School

Traffic and Parking Study

Arlington Heights, Illinois

Prepared For:

Arlington Heights School District 25

Prepared by:

Eriksson Engineering Associates, Ltd.



145 Commerce Drive, Ste A, Grayslake, IL 60030

847.223.8404

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INTRODUCTION

Eriksson Engineering Associates, Ltd. (EEA) was retained by Arlington Heights School District 25 (AHSD 25) to conduct a traffic and parking study for the proposed expansion of Greenbrier School in Arlington Heights, Illinois. The purpose of the study was to observe the existing traffic patterns around the school, determine the traffic characteristics of the existing and expanded school, review the parking needs, and develop roadway and parking recommendations.

EXISTING CONDITIONS

Site Location and Area Land-Uses

Greenbrier School is located at 2330 N. Verde Drive in Arlington Heights, Illinois. The site is bounded by Verde Drive to the east, Greenbrier Park to the north, and Roanoke Drive to the southwest within a single family residential neighborhood. **Figure 1** illustrates the site location and the surrounding land-uses and roads. (Note: all figures are located at the end of the report).

Bicycle and Pedestrian Routes

Verde and Alleghany Drives are designated on-street bike routes. An off street bike route extends north thru Greenbrier Park west of the school. Public sidewalks are located on both sides of the neighborhood streets around the school.

The All-Way Stop Controlled (AWSC) intersection of Verde and Roanoke Drives has crosswalks on the north and west legs. The intersection of Verde and Alleghany Drives has crosswalks on the north, south, and east legs. During the school's arrival and dismissal periods no crossing guards are used by the school.

Roadway Characteristics

The roads surrounding the school are under the jurisdiction of the Village of Arlington Heights. A description of the area roadways accessing the school is provided below:

Verde Drive is a north-south local residential roadway with one travel lane in each direction. It has a 25 mph speed limit with a 20 mph school speed limit approaching the school. All-Way-Stop-Controlled intersections are provided at Alleghany and Roanoke Drives. No Standing, Parking or Stopping is posted on northbound Verde Drive between Roanoke and Alleghany Drives and on southbound Verde Drive from Greenbrier Park to the south side of the east parking area. Parking is permitted on the west side between the east parking area and Roanoke Drive except near the corners. Parking is permitted on both sides of Verde Drive south of Roanoke Drive.

Roanoke Drive is an east-west local residential roadway with one travel lane in each direction. It has a 25 mph speed limit with a 20 mph school speed limit approaching the school. Parking is permitted on both sides of the street.

Alleghany Drive is an east-west local residential roadway with one travel lane in each direction. It has a 25 mph speed limit with a 20 mph school speed limit approaching the school. Parking is permitted on both sides of the street.

Existing Traffic Volumes

Weekday morning arrival (7:30-9:30 AM) and afternoon dismissal (2:30-4:30 PM) manual traffic counts were conducted along Verde and Roanoke Drives. Peak-hours of school traffic occurred from 8:30 to 9:30 AM and 3:00 to 4:00 PM on a school weekday which coincides with the school's 9:05 AM start and 3:35 PM dismissal times. The existing traffic volumes are shown on **Figure 2** and included in the **Appendix**.

School Observations

Greenbrier School's attendance boundaries are Palatine Road to the south, Rand Road to the northeast and IL Route 53 to the west. The majority of the area does not qualify for school bussing except in the southeast corner by Rand and Palatine Roads. As a result, the school only uses one bus for three riders. The bus loads in the east parking lot. A copy of the school boundary map is in the **Appendix**. The school has staggered start and dismissal times as follows:

1. First thru 5th Grade – 9:05 AM to 3:35 PM
2. Half Day Kindergarten
 - a. 9:05 to 11:50 AM
 - b. 12:50 PM to 3:35 PM
3. Earl Childhood Program
 - a. 9:20 AM to 11:40 AM
 - b. 12:50 AM to 3:20 PM

In conjunction with the staggered school times, each class has specific traffic procedures to follow for arrival and dismissal. Copies of the procedures are included in the **Appendix**.

1. First thru Fifth Grade – Use the west lot for arrival and dismissal
2. AM and PM Kindergarten – Use west lot for arrival and the east lot for dismissal
3. Mrs. Belew's Class - Use the east lot for arrival and dismissal
4. Early Childhood – Use the west lot for arrival and dismissal
5. Early Childhood (2 classes) - Use west lot for arrival and the east lot for dismissal

During the morning arrival period, traffic worked smoothly with little congestion. One parent was observed parking on the south side of Roanoke Drive west of the school and bringing their student across at a mid-block location between cars. Other parents used the north side of Roanoke Drive for drop-off. One parent parked half way onto the grass parkway for no apparent reason.

During the afternoon, parents started lining up around 3:07 PM in the west and east parking lots and on street. Parents were observed queueing on the north side of Roanoke Drive and the west side of Verde Drive in anticipation of the 3:35 PM dismissal. Parents arriving for the 3:20 PM early childhood dismissal started queueing in the west lot but eventually queued onto Roanoke Drive and Verde Drive next to the cars waiting for the later dismissal. As a result, cars were stacked side by side and blocking the westbound lane on Roanoke Drive. This left the south curb lane acting as a single lane used for two-way traffic along the south side of the school. This is an undesirable situation that must be addressed.

Both parking lots have left-turn prohibitions into the lots. Only one vehicle violated the turn into the west lot but a number of vehicles ignored left-turn restriction into the east lot (18 to 19 vehicles).

Discussion with Principal

EEA staff contact the school's principal, Ms. Donna Bingaman, to identify her transportation and parking concerns. Her comments confirmed many of EA's observations.

1. Traffic congestion generally occurred on poor weather days (rain, snow, and cold).
2. Parents waiting to pick-up students are blocking existing crosswalks.
3. Vehicles are rolling thru the stop signs instead of coming to a complete stop.
4. She reiterated the Roanoke Drive queuing issues during the afternoon dismissal.

SITE TRAFFIC CHARACTERISTICS

Site Plan

The school currently serves 450 children with 82 staff. A building addition is proposed on the south side of the school to add four classrooms. Total classrooms will increase from 19 to 23. Student population is expected to grow by 50 students to 500 students (+11%) over the next five years. The number of staff is expected to grow from 82 to 86 persons. One school bus will accommodate the existing and projected number of bused students.

School Trip Generation and Distribution

Traffic estimates were made for the additional students using the traffic counts at the current school. The trip generation rates for the school are higher than the data provided by the Institute of Transportation Engineer's Trip Generation, 9th Ed. manual for elementary schools due to a higher percentage of automobile usage and minimal busing. The rate of vehicle trip generation was applied to the proposed increase in students with the results shown in **Table 1**.

Table 1
School Expansion Traffic Volumes

Scenario	Morning Arrival			Afternoon Dismissal		
	In	Out	Total	In	Out	Total
Trip Generation Based on Existing Traffic Volumes						
Existing 450 Students	205	199	404	130	155	285
Total 500 Students	228	221	449	145	171	316
Net Additional Traffic	+23	+22	+45	+15	+16	+31
ITE Trip Generation Comparison⁽¹⁾						
Existing 450 Students	112	91	203	57	69	126
Total 500 Students	124	101	225	63	77	140
Net Additional Traffic⁽²⁾	+12	+10	+22	+6	+8	+14

(1) ITE Trip Generation Manual, 9th Edition – Land Use Code 520 (Elementary School)

(2) For comparison only – Not used for analyses

The directional distribution for school traffic is based on the existing school traffic counts and is shown in **Table 2** and on **Figure 4**.

Table 2
Existing Directional Distribution

Direction	Inbound	Outbound
North on Verde Drive	15%	12%
East on Alleghany Drive	45%	31%
South on Verde Drive	40%	45%
West on Roanoke Drive	0%	12%
Total	100%	100%

Trip Assignment

The future vehicular trips that are generated by the school were distributed to the area roadways based on the site plan, projected school volumes, and the directional distribution analysis. **Figure 5** illustrates the total traffic generated by the school (existing and expansion) and its assignment on the road system. Two changes were made to the school's circulation plan to address current problems. One was a reinforcement of the northbound left-turn restriction on Verde Drive during arrival and dismissal resulting in the reassignment of those volumes to the north to Alleghany Road.

Traffic exiting the west lot will be right-turn only instead of the left- and right-turn movements that are permitted today. The majority of the traffic exiting the west lot turns left toward Verde Drive and exacerbates the traffic conflicts between the west lot drive and Verde Drive and the two deep stacking. By restricting right-turns out, these conflicts will be minimized.

Traffic heading to the south can take Roanoke Drive to Lexington Drive or Wilke Road to reach to their residences. Traffic going north would take Roanoke Drive to the north on Wilke Road to Rand Road to reach their destinations. While this new circulation plan will increase the travel time by two to four minutes for the return trip home, it will significantly reduce traffic conflicts that occur today around the school.

Figure 6 shows the total traffic volumes which a combination of Figure 3C (Non-School traffic) and Figure 5 (Projected School Volumes).

ANALYSES

Intersection Capacity Analyses

An intersection's ability to accommodate traffic flow is based on the average control delay experienced by vehicles passing through the intersection. The intersection and individual traffic movements are assigned a level of service (LOS), ranging from A to F based on the control delay created by a traffic signal or stop sign. Control delay consists of the initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. LOS A has the best traffic flow and least delay. LOS E represents saturated or at capacity conditions. LOS F experiences oversaturated conditions and extensive delays. The Highway Capacity Manual definitions for levels of service and the corresponding control delay for both signalized and unsignalized intersections are shown in **Table 3**.

Table 3
Level of Service Criteria for Intersections

Level of Service	Description	Control Delay (seconds/vehicle)	
		Signals	Stop Signs
A	Minimal delay and few stops	<10	<10
B	Low delay with more stops	>10-20	>10-15
C	Light congestion	>20-35	>15-25
D	Congestion is more noticeable with longer delays	>35-55	>25-35
E	High delays and number of stops	>55-80	>35-50
F	Unacceptable delays and over capacity	>80	>50

Source: Highway Capacity Manual 2010

Capacity analyses were conducted for each intersection using the computer program Highway Capacity Software (HCS) to determine the existing operating conditions of the access system. These analyses were performed for the school's peak arrival and dismissal periods. **Table 4** shows the existing and future level of service results for each intersection. Copies of the capacity analysis summaries are included in the **Appendix**.

Alleghany Drive at Verde Drive

The all-way-stop intersection north of the school will continue to operate at an acceptable level of service and no improvements are needed. With the west lot's exit restriction, there will be less school traffic heading northbound on Verde Drive at this location.

East Parking Lot Entrance and Exit

The East Parking lot will operate well with the additional school traffic. The northbound left-turn prohibition from northbound Verde Drive will need be reinforced with additional communications reminding the parents that the left-turn is prohibited during arrival and dismissal, potential enforcement by staff, and traffic cones placed to restrict the left-turn.

Verde Drive at Roanoke Drive

With the proposed restriction of traffic exiting the west parking lot to right-turns only, this intersection will see a drop in traffic volumes and operate well.

Table 4
Intersection Level of Service and Delay

Intersection	Movement	AM Arrival		PM Dismissal	
		Existing	Future	Existing	Future
Verde Drive at Alleghany Drive (All-Way Stop)	SB Lt/Th	A-8.1	A-8.1	A-7.7	A-7.8
	WB Lt/Rt	A-9.1	A-9.3	A-8.1	A-8.3
	NB Th/Rt	A-8.4	A-7.7	A-7.4	A-7.3
Verde Drive at East Lot Entrance	NB Lt	A-7.7	-	A-7.5	-
Verde Drive at East Lot Exit (Stop Control)	EB Lt/Rt	B-10.2	A-9.8	A-9.5	A-9.3
Verde Drive At Roanoke Drive (All-Way Stop)	SB Th/Rt	A-10.0	A-8.6	A-7.8	A-7.5
	NB Lt/Th	B-11.0	A-9.2	A-8.2	A-7.7
	EB Lt/Rt	B-11.5	A-8.3	A-8.1	A-7.4
Roanoke Drive At West Lot Exit (Stop Control)	SB Lt⁽¹⁾/Rt	B-13.8	B-13.0	B-10.1	A-9.6
	EB Lt	A-8.1	A-8.2	A-7.5	A-7.6

(1) No southbound left-turn under future conditions.

Verde Drive at West Parking Lot

As mentioned previously, this driveway will be restricted to right-out only during the peak arrival and dismissal times. The intersection will require traffic cones, signage, and possible staff monitoring to insure parents are turning right onto Roanoke Drive during the arrival and dismissal periods.

During the afternoon dismissal period, parents must be instructed to not arrive early for the 3:35 PM dismissal and wait on the north side of Roanoke Drive between the west lot and Verde Drive. These early arrivals interfere with parents arriving for the 3:20 PM dismissal period causing the double stacking on Roanoke Drive and forcing eastbound and westbound traffic into the same lane. It is likely that school staff will have to monitor this activity and have parents move so they don't block traffic.

Parking

The existing school on-site parking supply provides a total of 66 parking spaces including three accessible spaces. Staff on-street parking occurs along the south side of Roanoke Drive and the west side of Verde Drive. With the proposed changes to the parking lot, there will be 75 regular spaces including four accessible spaces on-site.

The Village of Arlington Heights Zoning Ordinance requires elementary schools to provide two parking spaces per each employee (86 staff) and one per classroom (23 rooms) for a total of 195 spaces. A parking variation of 120 spaces would be required.

National parking data is available from the Institute of Transportation Engineers (ITE) in their publication *Parking Generation*, 4th Edition for elementary schools (Land Use Code 520). The peak demand in the ITE data was 0.17 spaces per student (500 students) or 85 spaces.

Parking counts were conducted in April, 2017 after the morning arrival period which found only a few open spots on-site for staff and visitors (60 cars or 91% occupied). On-street parking by staff on the south side of Roanoke Drive (12 vehicles) and on the west side of Verde Drive (7 vehicles) was observed. The school currently has 82 staff members but they are not all present on-site at the same time. The total demand was 79 vehicles.

With 86 staff members, the total school demand would be 83 spaces. With the additional spaces in the west parking lot, the majority of the staff parking can be accommodated on-site (85-90%). The remaining 8 to 12 staff vehicles would remain on-street.

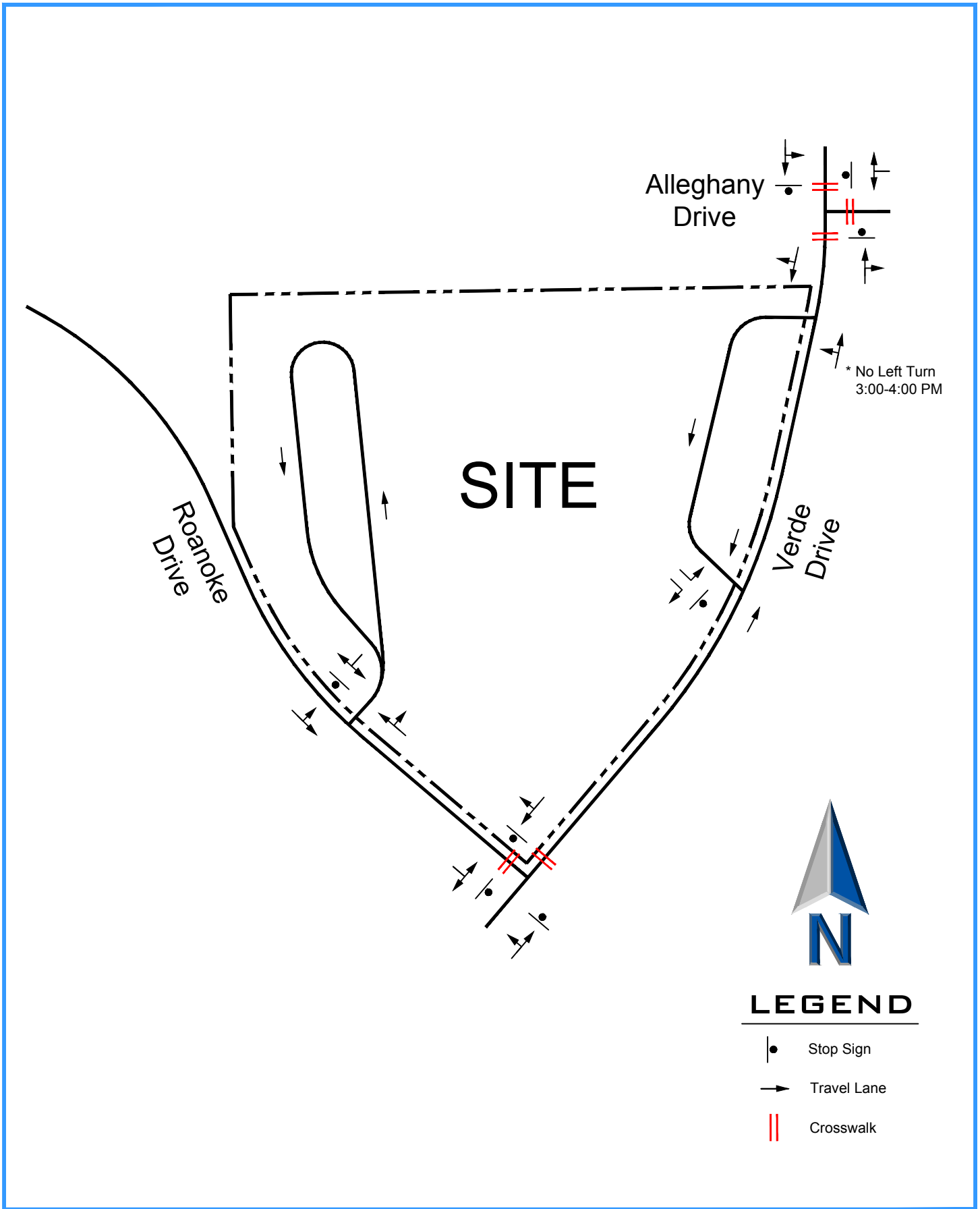
Parking for special events at the school can be accommodated by a combination of the off-street parking and on-street parking by the school.

SUMMARY

This report summarizes the results of traffic and parking study for the expansion of Greenbrier School in Arlington Heights, Illinois. The following recommendations were developed:

1. The proposed expansion of Greenbrier School from 450 to 500 students will add 31 to 45 trips during the peak school hours will not adversely impact the level-of-service of study area intersections.
2. It is recommended that the west parking lot exit be restricted to right-out only during arrival and dismissal periods to reduce vehicular conflicts on Roanoke Drive to the east.
3. The northbound left-turn prohibition from northbound Verde Drive needs to be communicated to parents and reinforce with the use of traffic cones.
4. The north side of Roanoke Drive during the afternoon dismissal periods requires communication and monitoring by the school district so that parents do not arrive before their designated pick-up time and creates traffic congestion by double parking.
5. Parking counts at the school show that the 75 proposed parking spaces will serve the majority of the needs of the expanded school. A parking variation of 120 spaces is needed from the 195 spaces required by code.





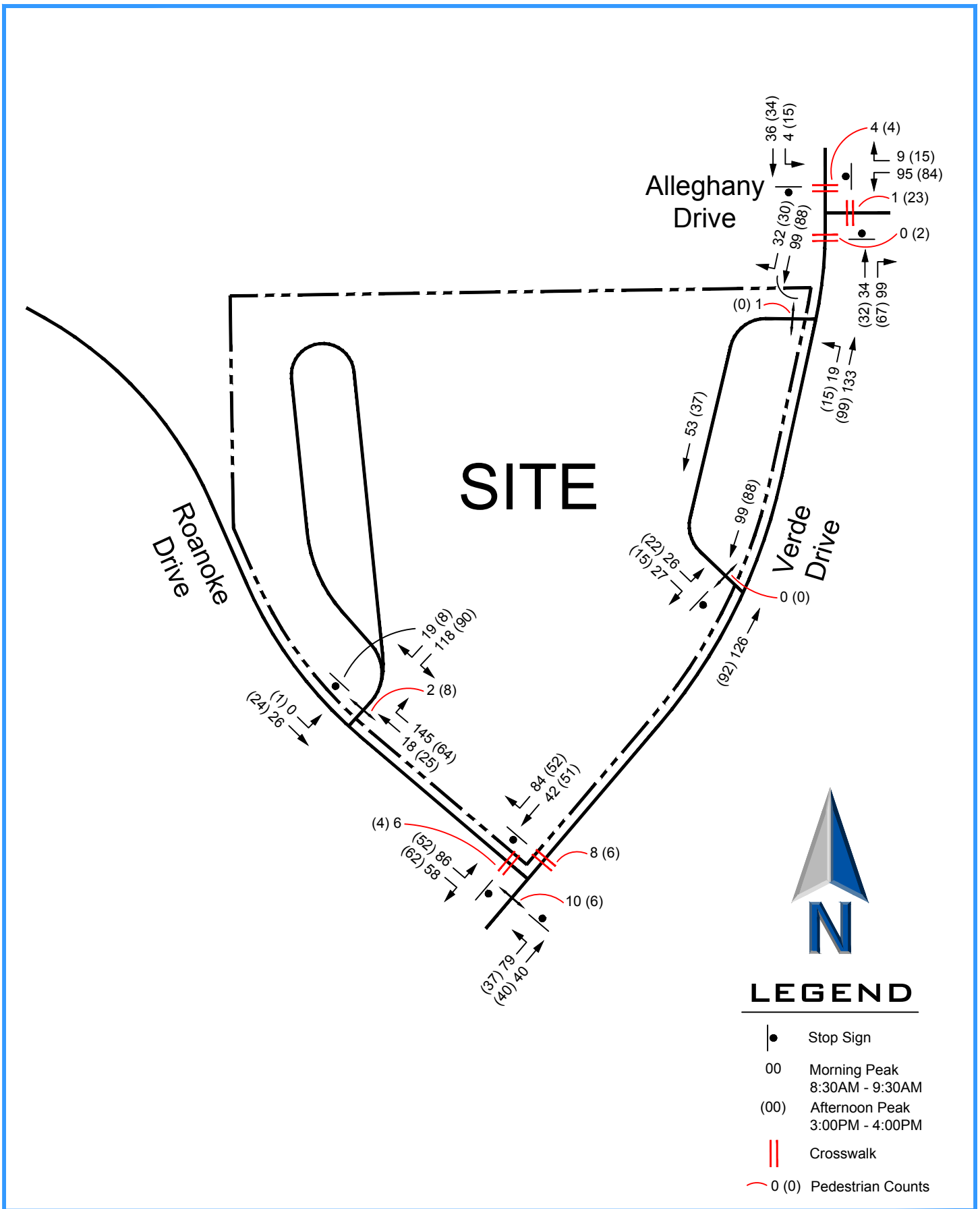
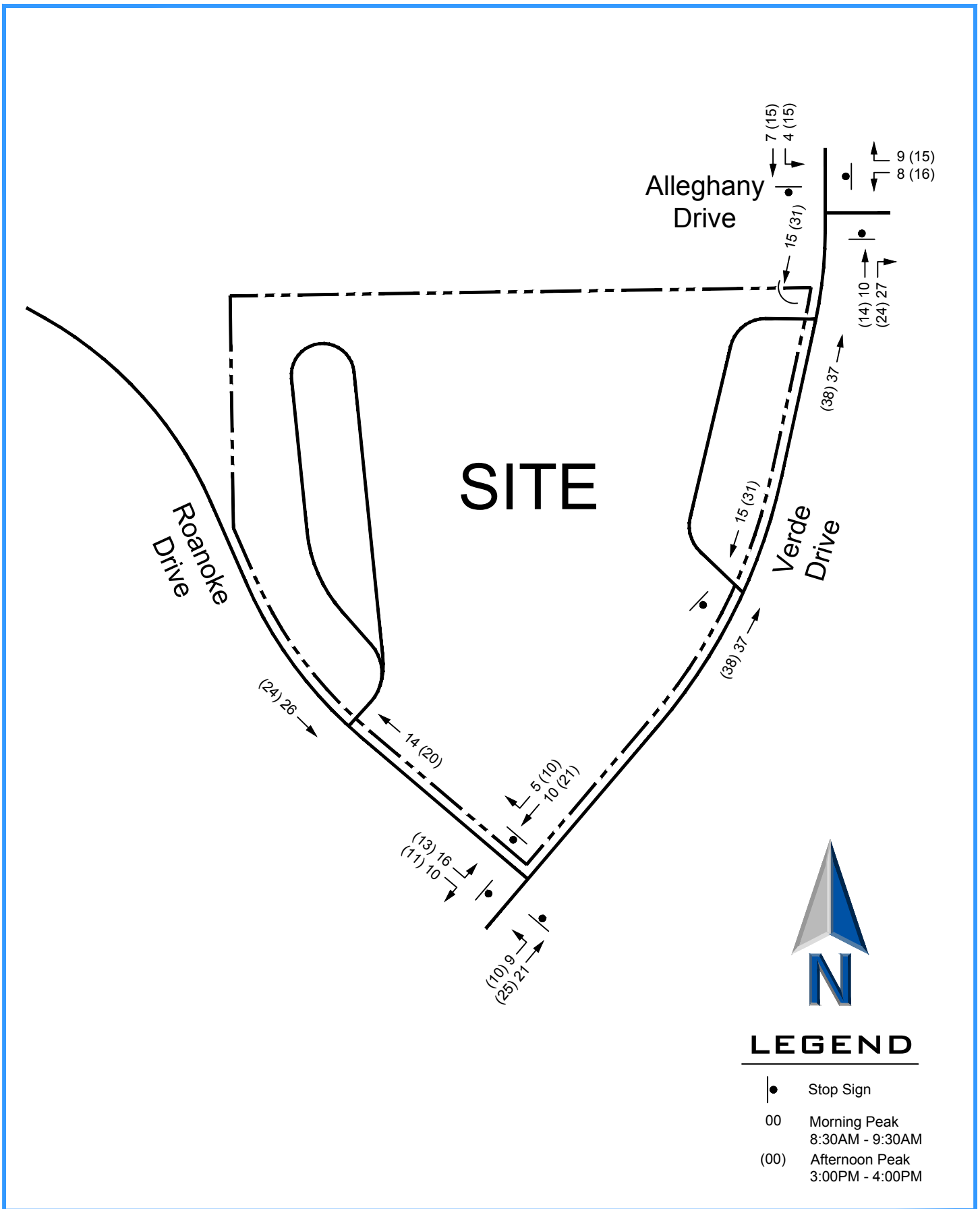
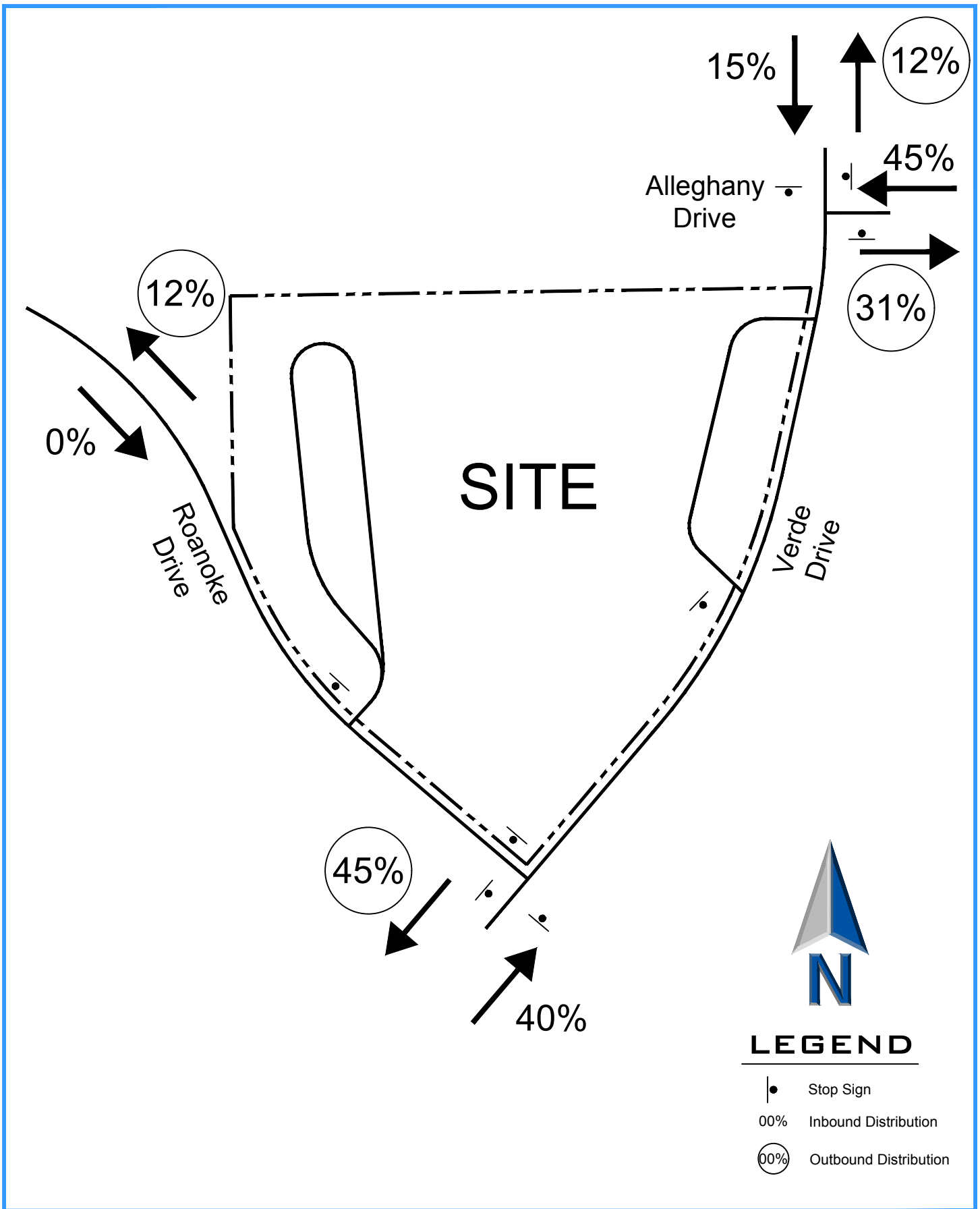




Figure 3B





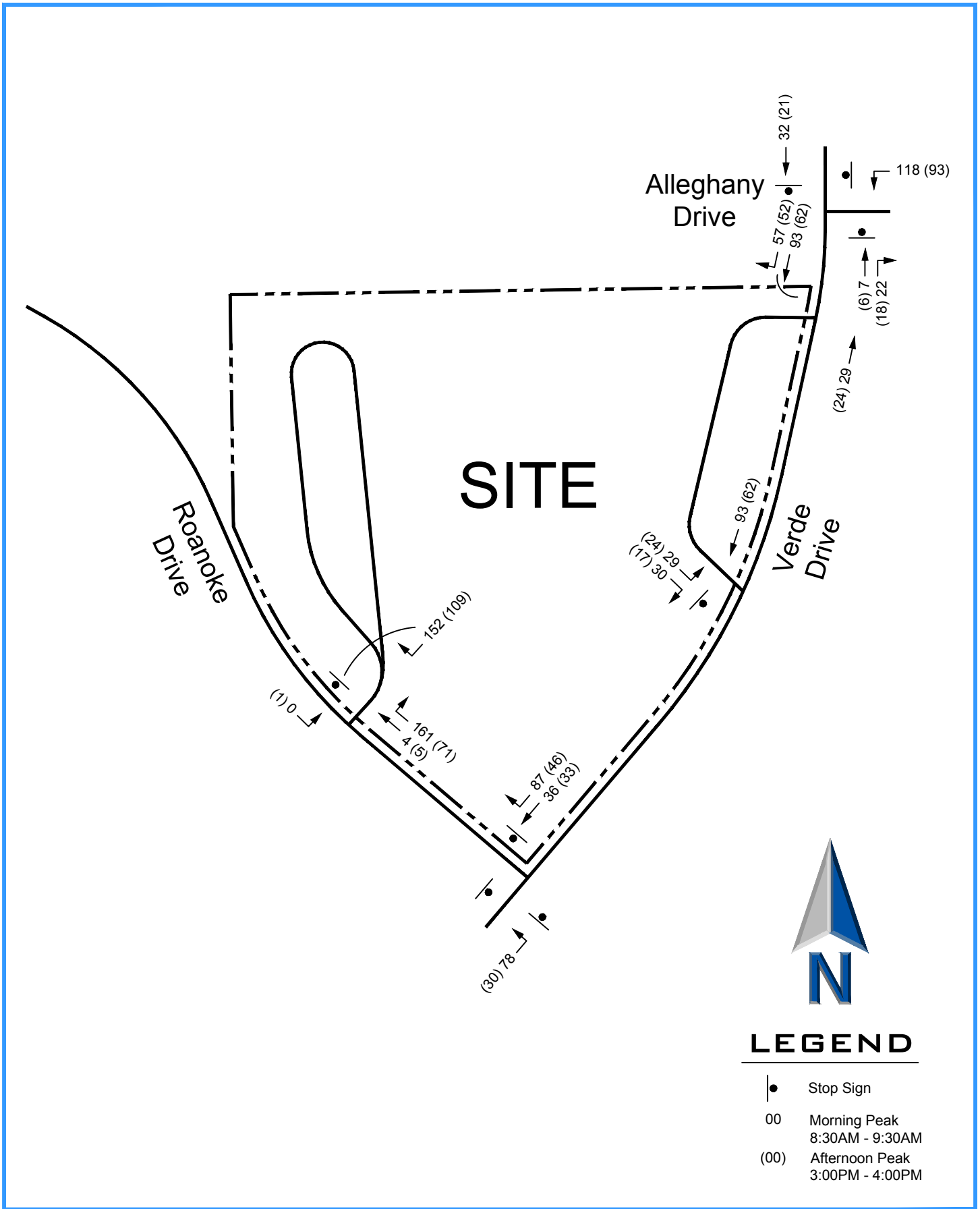




Figure 6

APPENDIX

- Existing Traffic Counts
- School Boundary Map
- Bike Route Map
- Existing Loading Instructions
- Intersection Capacity Analyses

Intersection Counts

Roanoke Drive at Parking Lot Entrance

Arlington Heights, Illinois



Begin Time	Parking Lot Entrance Southbound		Roanoke Drive Westbound		Roanoke Drive Eastbound		15 Minute Totals	60 Minute Totals	Peak Hour Factor	Pedestrian Counts		
	Right Turn	Left Turn	Right Turn	Through	Through	Left Turn				North Leg		
	Thursday March 16, 2017											
7:30 AM	0	0	2	2	8	0	12	76	0.76	0		
7:45 AM	0	0	7	2	8	1	18	95	0.77	0		
8:00 AM	0	1	13	1	5	5	25	268	0.35	0		
8:15 AM	0	1	13	1	4	2	21	316	0.41	1		
8:30 AM	1	6	17	5	2	0	31	326	0.43	0		
8:45 AM	14	73	84	8	12	0	191			1		
9:00 AM	3	24	37	5	4	0	73			0		
9:15 AM	1	15	7	0	8	0	31			1		
Total 8:30-9:30 AM	19 19	120 118	180 145	24 18	51 26	8 0	326			3 2		
	Thursday March 16, 2017											
2:30 PM	0	0	6	0	3	0	9	127	0.42	0		
2:45 PM	0	7	3	5	1	0	16	198	0.62	1		
3:00 PM	0	4	0	20	2	0	26	212	0.66	0		
3:15 PM	2	25	38	0	10	1	76			205	0.64	0
3:30 PM	6	44	22	0	8	0	80			145	0.45	8
3:45 PM	0	17	4	5	4	0	30				0	
4:00 PM	0	6	0	10	3	0	19			0		
4:15 PM	1	4	0	5	6	0	16			1		
Total 3:00-4:00 PM	9 8	107 90	73 64	45 25	37 24	1 1	212			10 8		

Intersection Counts

Verde Drive at Roanoke Drive

Arlington Heights, Illinois



Begin Time	Verde Drive Southbound		Verde Drive Northbound		Roanoke Drive Eastbound		15 Minute Totals	60 Minute Totals	Peak Hour Factor	Pedestrian Counts		
	Right Turn	Through	Through	Left Turn	Right Turn	Left Turn				North Leg	East Leg	South Leg
Thursday March 16, 2017												
7:30 AM	2	8	12	2	4	4	32	154	0.86	0	0	0
7:45 AM	4	6	15	5	2	6	38	171	0.87	0	0	0
8:00 AM	5	10	15	9	4	2	45	330	0.42	0	1	1
8:15 AM	7	7	13	7	4	1	39	381	0.48	0	4	2
8:30 AM	9	10	9	13	5	3	49	389	0.49	0	2	2
8:45 AM	40	9	11	52	36	49	197			8	4	7
9:00 AM	30	17	9	12	11	17	96			0	0	0
9:15 AM	5	6	11	2	6	17	47			0	0	1
Total	102	73	95	102	72	99				8	11	13
8:30-9:30 AM	84	42	40	79	58	86	389			8	6	10
Thursday March 16, 2017												
2:30 PM	4	4	5	2	1	2	18	186	0.48	0	0	1
2:45 PM	6	4	5	2	5	3	25	265	0.68	1	0	0
3:00 PM	13	11	10	7	2	4	47	294	0.76	0	0	0
3:15 PM	19	15	8	19	22	13	96	279	0.72	3	0	3
3:30 PM	12	11	12	10	31	21	97	217	0.56	3	4	3
3:45 PM	8	14	10	1	7	14	54			0	0	0
4:00 PM	6	8	5	4	6	3	32			1	0	0
4:15 PM	4	8	11	1	4	6	34			17	0	0
Total	72	75	66	46	78	66				25	4	7
3:00-4:00 PM	52	51	40	37	62	52	294			6	4	6

Intersection Counts

Verde Drive at East Parking Lot

Arlington Heights, Illinois



Begin Time	Verde Drive Southbound	Verde Drive Northbound	School Access Drive Eastbound		15 Minute Totals	60 Minute Totals	Peak Hour Factor	Pedestrian Counts	
	Right Turn-In	Left Turn-In	Right Turn-Out	Left Turn-Out				Inbound Leg	Outbound Leg
Thursday March 16, 2017									
7:30 AM	5	3	4	1	13	55	0.72	0	0
7:45 AM	5	6	3	5	19	62	0.78	0	0
8:00 AM	0	3	3	1	7	76	0.58	1	0
8:15 AM	6	4	4	2	16	116	0.62	1	2
8:30 AM	7	4	2	7	20	104	0.55	0	0
8:45 AM	10	8	8	7	33			1	0
9:00 AM	13	7	15	12	47			0	0
9:15 AM	2	0	2	0	4			0	0
Total	48	35	41	35				3	2
8:30-9:30 AM	32	19	27	26	104			1	0
Thursday March 16, 2017									
2:30 PM	3	1	3	2	9	60	0.52	1	1
2:45 PM	3	0	0	0	3	74	0.64	0	0
3:00 PM	12	5	0	2	19	82	0.71	0	0
3:15 PM	12	1	8	8	29	70	0.60	0	0
3:30 PM	6	5	5	7	23	48	0.52	0	0
3:45 PM	0	4	2	5	11			0	0
4:00 PM	3	1	2	1	7			0	0
4:15 PM	1	1	3	2	7			0	0
Total	40	18	23	27				1	1
3:00-4:00 PM	30	15	15	22	82			0	0

Intersection Counts

Verde Drive at Alleghany Drive



Begin Time	Verde Drive Southbound		Alleghany Drive Westbound		Verde Drive Northbound		15 Minute Totals	60 Minute Totals	Peak Hour Factor	Pedestrian Counts		
	Through	Left Turn	Right Turn	Left Turn	Right Turn	Through				North Leg	South Leg	West Leg
	Thursday March 16, 2017											
7:30 AM	1	4	1	4	9	-8	11	47	0.78	0	0	1
7:45 AM	-2	0	0	7	8	-3	10	55	0.72	1	0	0
8:00 AM	-7	4	6	7	1	0	11	69	0.72	0	0	0
8:15 AM	-2	6	1	8	6	-4	15	84	0.81	0	0	0
8:30 AM	-10	2	3	17	11	-4	19	71	0.68	0	0	1
8:45 AM	-30	2	5	40	39	-32	24			4	0	0
9:00 AM	-18	0	1	31	24	-12	26			0	0	0
9:15 AM	-5	0	0	7	25	-25	2			0	0	0
Total	-73	18	17	121	123	-88				5	0	2
8:30-9:30 AM	-63	4	9	95	99	-73	71			4	0	1
	Thursday March 16, 2017											
2:30 PM	-5	3	0	8	6	-4	8	57	0.53	0	0	0
2:45 PM	-9	0	0	12	8	-8	3	77	0.69	0	0	1
3:00 PM	-17	4	1	29	6	-4	19	82	0.73	0	0	0
3:15 PM	-16	3	4	28	23	-15	27	71	0.63	0	0	1
3:30 PM	-12	7	8	18	21	-14	28	50	0.45	4	2	22
3:45 PM	-9	1	2	9	17	-12	8			0	0	0
4:00 PM	-1	1	3	4	7	-6	8			0	0	0
4:15 PM	-8	1	2	9	11	-9	6			0	0	1
Total	-77	20	20	117	99	-72				4	2	25
3:00-4:00 PM	-54	15	15	84	67	-45	82			4	2	23

RANDHILL PARK
SHALOM MEMORIAL

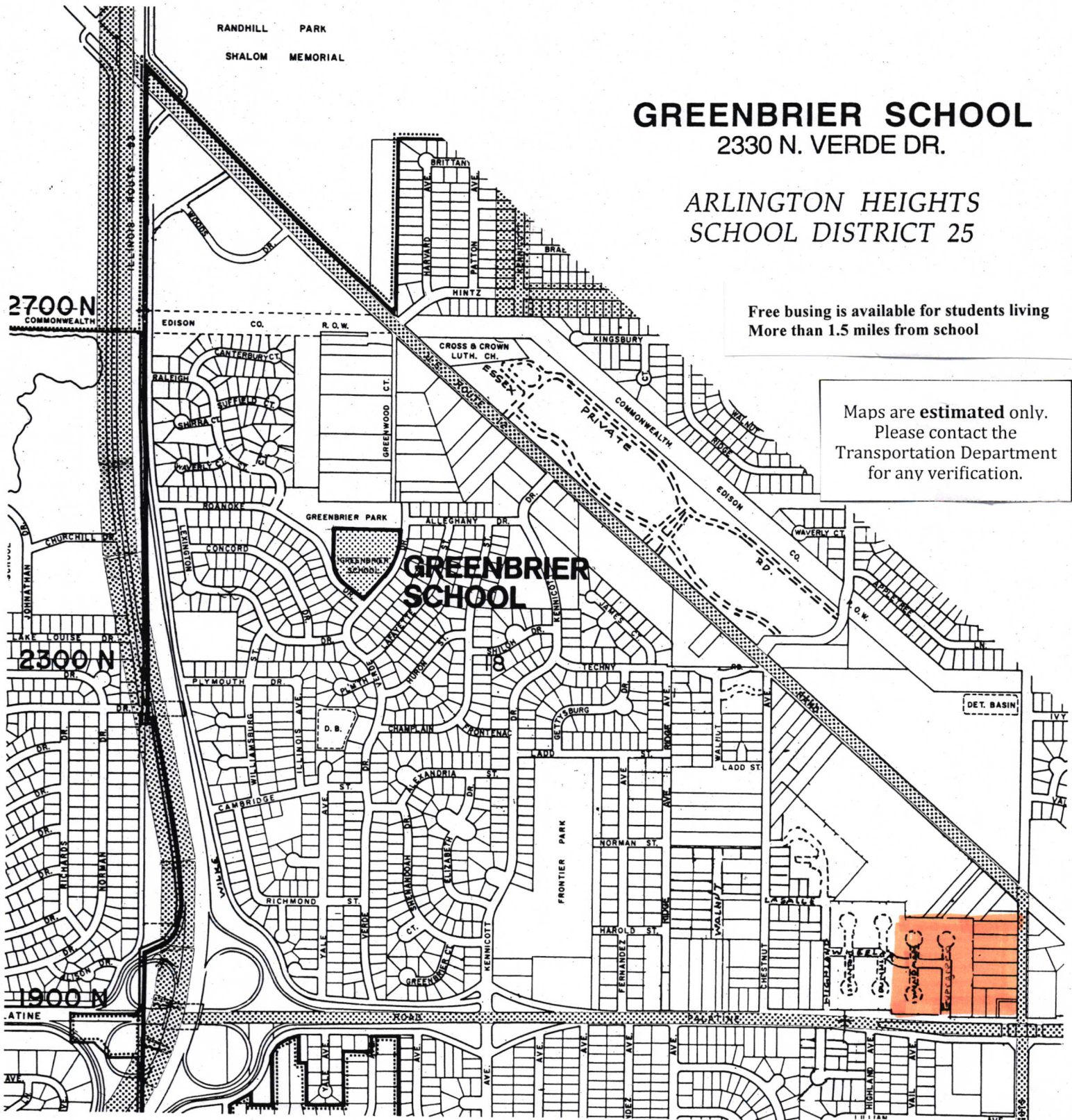
GREENBRIER SCHOOL

2330 N. VERDE DR.

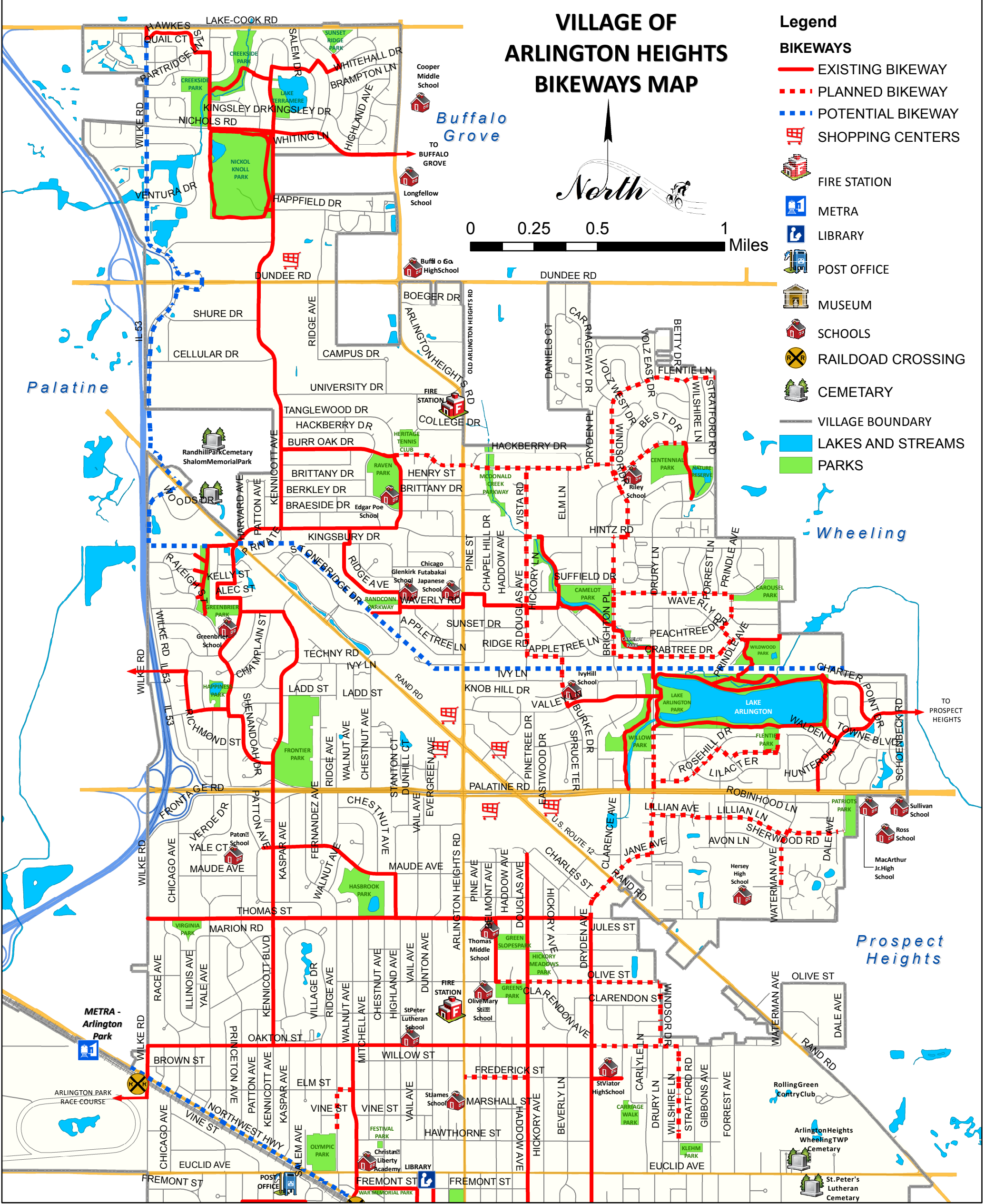
ARLINGTON HEIGHTS
SCHOOL DISTRICT 25

Free busing is available for students living
More than 1.5 miles from school

Maps are **estimated** only.
Please contact the
Transportation Department
for any verification.



>1.5 MILES



BICYCLE SAFETY RULES

1. Always ride your bike in single file, in the same direction as traffic. Stay close to the right edge of the road.

2. Helmets are highly recommended for all bicyclists.

3. Bicycle riders are expected to know and obey all traffic regulations (signs, signals, pavement markings, etc.).

4. Riding on sidewalks is legal except in the Central Business District.

5. Indicate your intention to slow down, stop, turn or change lanes by using arm signals. This will prevent being cutoff.

6. Be extra careful at intersections and railroad crossings and when emerging from driveways, alleys or from behind parked cars. Establish eye contact with motorists who may not be looking for a cyclist.
7. Look out for motorists pulling into traffic. Keep a close watch for car doors opening suddenly in your path causing you to veer into traffic.

8. Maintain your bicycle in safe working order. Check brakes, tires and wheels.

9. Wear bright colored and reflective clothing when riding after dark. Make sure your bike has proper lights and reflectors before riding at night.

10. Stop before reaching a school bus which has stopped to load or unload passengers.

11. Be ready to yield the right-of-way to other moving vehicles.

12. Keep at least one hand on the handlebars at all times for control of the bicycle. Carry books, packages, or other items in a back pack or carrier.

13. Watch for poor road surfaces including drainage grates (tires may fall through grooves), pot holes, loose gravel, and unsafe shoulders.
14. Make sure that the bike you ride is the right size for you.

15. Right turns on red are permissible, after coming to complete stop, except where a sign is posted prohibiting such a turn. You must yield the right-of-way to other traffic lawfully using the intersection and to pedestrians.

16. Only one person should ride on a bicycle except on a tandem bicycle or with an attached child's seat if available.

17. Never hitch a ride with any motorized vehicle.

18. Do not wear headphones when riding a bicycle.
- Source:

Portions of this list were excerpts from **Illinois Bicycle Rules of The Road**. Copies are available from the Arlington Heights Police Department, Village Hall, or Illinois Secretary of State, Woodfield Commons, Schaumburg, IL.

Greenbrier Elementary Traffic Safety Procedures

First - Fifth Grade

Drop Off 8:50 a.m.

Pick Up 3:35 p.m.

Do not line up for arrival or dismissal more than five minutes before the above times.

Options:

1. Children may walk to and from school.
2. Adults may park legally on the street and escort their child or have them walk to and from the building.
3. Adults may use the car line to drop off and pick up in the back circle drive.

Walkers will exit the front doors of the school.

Drop Off/ Pick Up Zone:

- Circle drive behind the school
- NO LEFT TURN into the parking lot from eastbound Roanoke

Car Line Drop Off/ Pick Up Procedures:

- Enter the lot and pull forward as far as possible along the curb to the student DROP OFF/ PICK UP ZONE.
- Students may only exit the car when your car is between the yellow cones.
- Proceed in a single file line of cars. **NO LINE JUMPING.**
- Students should be ready to enter and exit cars at the curb.
- **Parents must remain in the car.**
- To exit the parking lot, remain in line and wait for the car in front of you to move forward. **NO LINE JUMPING.**

Be patient and courteous to other families. Bad weather days will cause the car line to move slower and make it more difficult to find a parking space.



★ Morning line up location.

The safety of your child is our greatest priority. Keep this in your car as a reminder and share it with others who drive your children to and from school.

Greenbrier Elementary Traffic Safety Procedures

Drop Off 8:50 a.m.

Rear Circle

Pick Up 11:50 a.m.

Front Circle

A.M. Kindergarten

Do not line up for arrival or dismissal more than five minutes before the above times.

Options:

1. Children may walk to and from school.
2. Adults may park legally on the street and escort their child or have them walk to and from the building.
3. Adults may use the car line to drop off and pick up in the circle drive.

Students will exit the front doors of the school.

Drop Off Zone:

- Circle drive behind the school
- NO LEFT TURN into the parking lot from eastbound Roanoke

Pick Up Zone:

- Circle drive in front of the school



★ Morning line up location.

Car Line Drop Off/ Pick Up Procedures:

- Enter the lot and pull forward as far as possible along the curb to the student DROP OFF/ PICK UP ZONE.
- Students may only exit the car when your car is between the yellow cones.
- Proceed in a single file line of cars. **NO LINE JUMPING.**
- Students should be ready to enter and exit cars at the curb.
- **Parents must remain in the car.**
- To exit the parking lot, remain in line and wait for the car in front of you to move forward. **NO LINE JUMPING.**

Be patient and courteous to other families. Bad weather days will cause the car line to move slower and make it more difficult to find a parking space.

The safety of your child is our greatest priority. Keep this in your car as a reminder and share it with others who drive your children to and from school.

Greenbrier Elementary Traffic Safety Procedures

Early Childhood - Miss Dunlap

A.M. Drop Off 9:10

Front Circle

A.M. Pick Up 11:40

Front Circle

P.M. Drop Off 12:50

Rear Circle

P.M. Pick Up 3:20

Front Circle

Do not line up for arrival or dismissal more than five minutes before the above times.

Options:

1. Children may walk to and from school.
2. Adults may park legally on the street and escort their child or have them walk to and from the building.
3. Adults may use the car line to drop off and pick up in the circle drive.



Car Line Drop Off/ Pick Up Procedures:

- Display the colored teacher nameplate in the right corner of your windshield.
- Enter the lot and pull forward along the curb to the first yellow cone.
- Proceed in a single file line of cars. **NO LINE JUMPING.**
- Cabs will be pulling around the car line. Please be careful.
- Parents must assist student in and out of the car.
- Do not leave car unattended.
- Students and parents should wait at the car for a staff member.
- To exit the parking lot, remain in line and wait for the car in front of you to move forward. **NO LINE JUMPING.**

Be patient and courteous to other families. Bad weather days will cause the car line to move slower and make it more difficult to find a parking space.

The safety of your child is our greatest priority. Keep this in your car as a reminder and share it with others who drive your children to and from school.

Greenbrier Elementary Traffic Safety Procedures

Early Childhood

A.M. Drop Off 9:10
A.M. Pick Up 11:40
P.M. Drop Off 12:50
P.M. Pick Up 3:20

Do not line up for arrival or dismissal more than five minutes before the above times.

Options:

1. Children may walk to and from school.
2. Adults may park legally on the street and escort their child or have them walk to and from the building.
3. Adults may use the car line to drop off and pick up in the back circle drive.

Drop Off/ Pick Up Zone:

- Circle drive behind the school
- **NO LEFT TURN** into the parking lot from eastbound Roanoke

Car Line Drop Off/ Pick Up Procedures:

- Display the colored teacher nameplate in the right corner of your windshield.
- Enter the lot and pull forward along the curb to the first yellow cone.
- Proceed in a single file line of cars. **NO LINE JUMPING.**
- Cabs will be pulling around the car line. Please be careful.
- Parents must assist student in and out of the car.
- Do not leave car unattended.
- Students and parents should wait at the car for a staff member.
- To exit the parking lot, remain in line and wait for the car in front of you to move forward. **NO LINE JUMPING.**

Be patient and courteous to other families. Bad weather days will cause the car line to move slower and make it more difficult to find a parking space.



The safety of your child is our greatest priority. Keep this in your car as a reminder and share it with others who drive your children to and from school.

Greenbrier Elementary Traffic Safety Procedures

Drop Off 12:45 p.m.

Front Circle

Pick Up 3:35 p.m.

Rear Circle

Do not line up for arrival or dismissal more than five minutes before the above times.

Options:

1. Children may walk to and from school.
2. Adults may park legally on the street and escort their child or have them walk to and from the building.
3. Adults may use the car line to drop off and pick up in the back circle drive.

Walkers will exit the front doors of the school.

Drop Off Zone:

- Circle drive in front of the school

Pick Up Zone:

- Circle drive behind the school
- NO LEFT TURN into the parking lot from eastbound Roanoke

Car Line Drop Off/ Pick Up Procedures:

- Enter the lot and pull forward as far as possible along the curb to the student DROP OFF/ PICK UP ZONE.
- Proceed in a single file line of cars. **NO LINE JUMPING.**
- Students should be ready to enter and exit cars at the curb.
- **Parents must remain in the car.**
- To exit the parking lot, remain in line and wait for the car in front of you to move forward. **NO LINE JUMPING.**

Be patient and courteous to other families. Bad weather days will cause the car line to move slower and make it more difficult to find a parking space.



The safety of your child is our greatest priority. Keep this in your car as a reminder and share it with others who drive your children to and from school.

Greenbrier Elementary Traffic Safety Procedures

Early Childhood - Mrs. Sullivan

A.M. Drop Off 9:10

Rear Circle

A.M. Pick Up 11:40

Rear Circle

P.M. Drop Off 12:50

Rear Circle

P.M. Pick Up 3:20

Front Circle

Do not line up for arrival or dismissal more than five minutes before the above times.

Options:

1. Children may walk to and from school.
2. Adults may park legally on the street and escort their child or have them walk to and from the building.
3. Adults may use the car line to drop off and pick up in the circle drive.



Car Line Drop Off/ Pick Up Procedures:

- Display the colored teacher nameplate in the right corner of your windshield.
- Enter the lot and pull forward along the curb to the first yellow cone.
- Proceed in a single file line of cars. **NO LINE JUMPING.**
- Cabs will be pulling around the car line. Please be careful.
- Parents must assist student in and out of the car.
- Do not leave car unattended.
- Students and parents should wait at the car for a staff member.
- To exit the parking lot, remain in line and wait for the car in front of you to move forward. **NO LINE JUMPING.**

Be patient and courteous to other families. Bad weather days will cause the car line to move slower and make it more difficult to find a parking space.

The safety of your child is our greatest priority. Keep this in your car as a reminder and share it with others who drive your children to and from school.

Greenbrier Elementary Traffic Safety Procedures

Mrs. Belew's Class

Drop Off 8:50 a.m.

Pick Up 3:35 p.m.

Do not line up for arrival or dismissal more than five minutes before the above times.

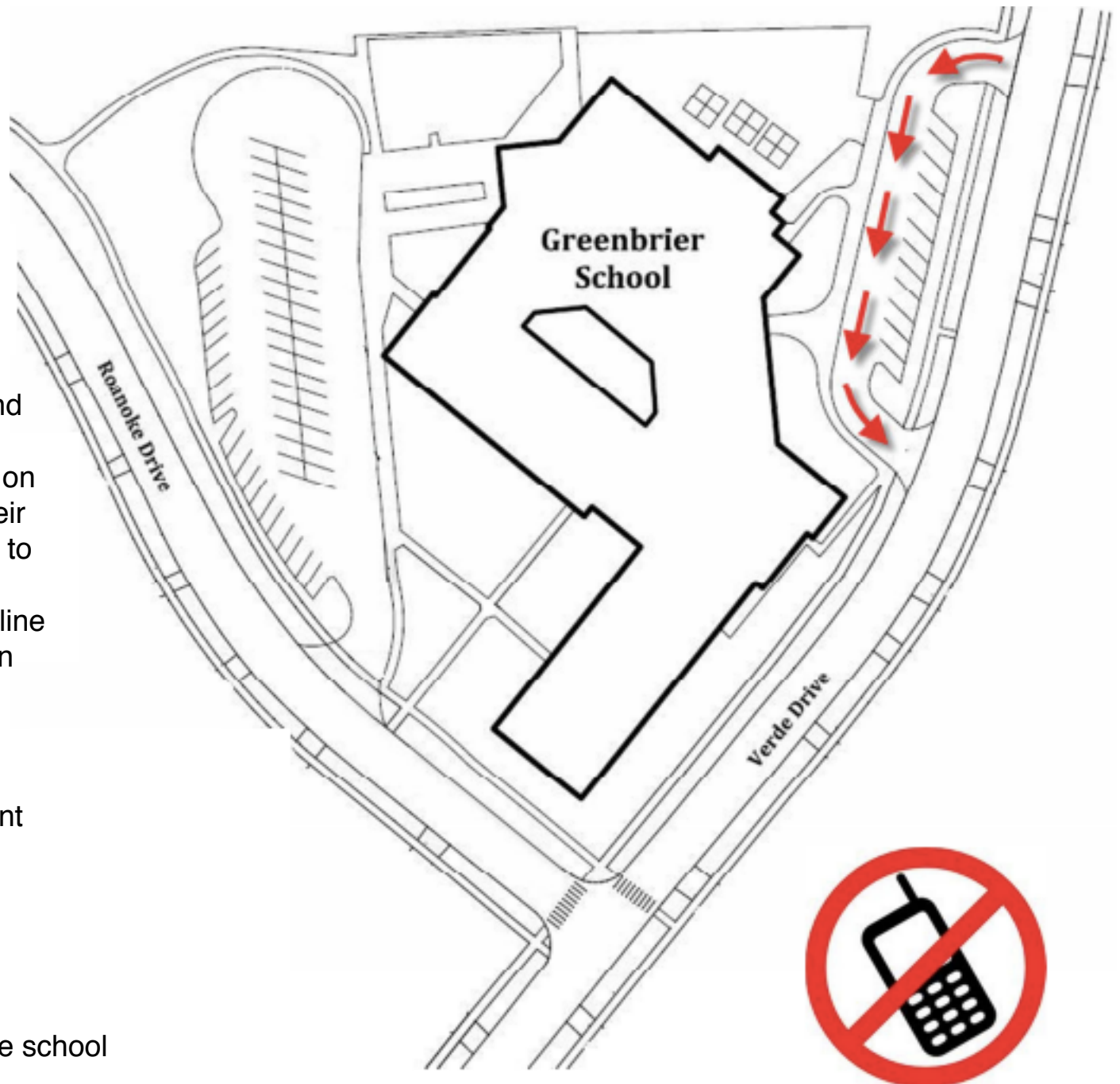
Options:

1. Children may walk to and from school.
2. Adults may park legally on the street and escort their child or have them walk to and from the building.
3. Adults may use the car line to drop off and pick up in the front circle drive.

All students will exit the front doors of the school.

Drop Off/ Pick Up Zone:

- Circle drive bin front of the school



Car Line Drop Off/ Pick Up Procedures:

- Enter the lot and pull forward along the curb to the first yellow cone.
- Proceed in a single file line of cars. **NO LINE JUMPING.**
- Parents may assist student in and out of the car.
- Do not leave car unattended.
- Students and parents should wait at the car for a staff member.
- To exit the parking lot, remain in line and wait for the car in front of you to move forward. **NO LINE JUMPING.**

Be patient and courteous to other families. Bad weather days will cause the car line to move slower and make it more difficult to find a parking space.

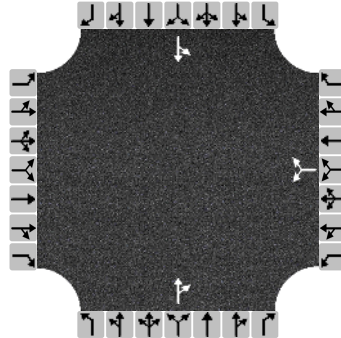
The safety of your child is our greatest priority. Keep this in your car as a reminder and share it with others who drive your children to and from school.

HCS7 All-Way Stop Control Report

General Information

Analyst	AJB	Intersection	Verde - Alleghany
Agency/Co.	EEA	Jurisdiction	Arlington Heights
Date Performed	6/26/2017	East/West Street	Alleghany Drive
Analysis Year	2017	North/South Street	Verde Drive
Analysis Time Period (hrs)	0.25	Peak Hour Factor	0.59
Time Analyzed	8:30 - 9:30 AM		
Project Description	Existing Conditions		

Lanes



Vehicle Volume and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume				95		9		34	99	4	36	
% Thrus in Shared Lane												
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration				LR			TR			LT		
Flow Rate, v (veh/h)				176			225			68		
Percent Heavy Vehicles				2			2			2		

Departure Headway and Service Time

Initial Departure Headway, hd (s)				3.20			3.20			3.20		
Initial Degree of Utilization, x				0.157			0.200			0.060		
Final Departure Headway, hd (s)				4.70			4.02			4.64		
Final Degree of Utilization, x				0.230			0.251			0.087		
Move-Up Time, m (s)				2.0			2.0			2.0		
Service Time, ts (s)				2.70			2.02			2.64		

Capacity, Delay and Level of Service

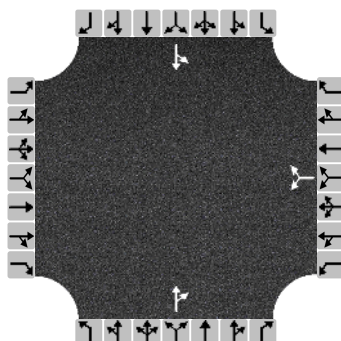
Flow Rate, v (veh/h)				176			225			68		
Capacity				766			896			776		
95% Queue Length, Q ₉₅ (veh)				0.9			1.0			0.3		
Control Delay (s/veh)				9.1			8.4			8.1		
Level of Service, LOS				A			A			A		
Approach Delay (s/veh)				9.1			8.4			8.1		
Approach LOS				A			A			A		
Intersection Delay, s/veh LOS	8.6						A					

HCS7 All-Way Stop Control Report

General Information

Analyst	AJB	Intersection	Verde - Alleghany
Agency/Co.	EEA	Jurisdiction	Arlington Heights
Date Performed	6/26/2017	East/West Street	Alleghany Drive
Analysis Year	2017	North/South Street	Verde Drive
Analysis Time Period (hrs)	0.25	Peak Hour Factor	0.83
Time Analyzed	3:00 - 4:00 PM		
Project Description	Existing Conditions		

Lanes



Vehicle Volume and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume				84		15		32	67	15	34	
% Thrus in Shared Lane												
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration				LR			TR			LT		
Flow Rate, v (veh/h)				119			119			59		
Percent Heavy Vehicles				2			2			2		

Departure Headway and Service Time

Initial Departure Headway, hd (s)				3.20			3.20			3.20		
Initial Degree of Utilization, x				0.106			0.106			0.052		
Final Departure Headway, hd (s)				4.38			3.87			4.39		
Final Degree of Utilization, x				0.145			0.128			0.072		
Move-Up Time, m (s)				2.0			2.0			2.0		
Service Time, ts (s)				2.38			1.87			2.39		

Capacity, Delay and Level of Service

Flow Rate, v (veh/h)				119			119			59		
Capacity				821			930			820		
95% Queue Length, Q ₉₅ (veh)				0.5			0.4			0.2		
Control Delay (s/veh)				8.1			7.4			7.7		
Level of Service, LOS				A			A			A		
Approach Delay (s/veh)				8.1			7.4			7.7		
Approach LOS				A			A			A		
Intersection Delay, s/veh LOS	7.8						A					

HCS7 Two-Way Stop-Control Report

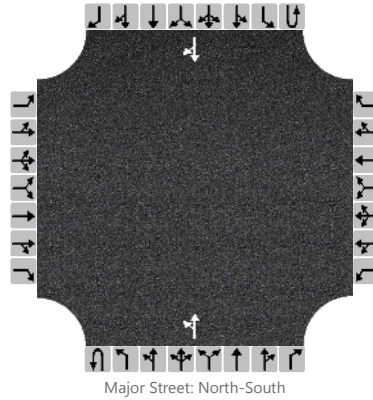
General Information

Analyst	AJB
Agency/Co.	EEA
Date Performed	6/26/2017
Analysis Year	2017
Time Analyzed	8:30 - 9:30 AM
Intersection Orientation	North-South
Project Description	Existing Conditions

Site Information

Intersection	Verde - Inbound Drive
Jurisdiction	Arlington Heights
East/West Street	School Inbound Drive
North/South Street	Verde Drive
Peak Hour Factor	0.62
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	0	0	0	0	1	0	0	0	1	0
Configuration										LT						TR
Volume, V (veh/h)										19	133				99	32
Percent Heavy Vehicles (%)										3						
Proportion Time Blocked																
Percent Grade (%)																
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)										4.1						
Critical Headway (sec)										4.13						
Base Follow-Up Headway (sec)										2.2						
Follow-Up Headway (sec)										2.23						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)										31						
Capacity, c (veh/h)										1351						
v/c Ratio										0.02						
95% Queue Length, Q ₉₅ (veh)										0.1						
Control Delay (s/veh)										7.7						
Level of Service, LOS										A						
Approach Delay (s/veh)									1.1							
Approach LOS																

HCS7 Two-Way Stop-Control Report

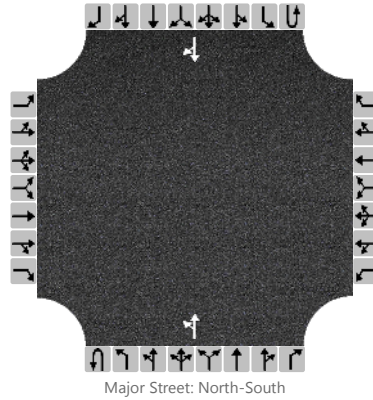
General Information

Analyst	AJB
Agency/Co.	EEA
Date Performed	6/26/2017
Analysis Year	2017
Time Analyzed	3:00 - 4:00 PM
Intersection Orientation	North-South
Project Description	Existing Conditions

Site Information

Intersection	Verde - Inbound Drive
Jurisdiction	Arlington Heights
East/West Street	School Inbound Drive
North/South Street	Verde Drive
Peak Hour Factor	0.82
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	0	0	0	0	1	0	0	0	1	0
Configuration										LT						TR
Volume, V (veh/h)										15	88				88	30
Percent Heavy Vehicles (%)										3						
Proportion Time Blocked																
Percent Grade (%)																
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)										4.1						
Critical Headway (sec)										4.13						
Base Follow-Up Headway (sec)										2.2						
Follow-Up Headway (sec)										2.23						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)										18						
Capacity, c (veh/h)										1431						
v/c Ratio										0.01						
95% Queue Length, Q ₉₅ (veh)										0.0						
Control Delay (s/veh)										7.5						
Level of Service, LOS										A						
Approach Delay (s/veh)									1.2							
Approach LOS																

HCS7 Two-Way Stop-Control Report

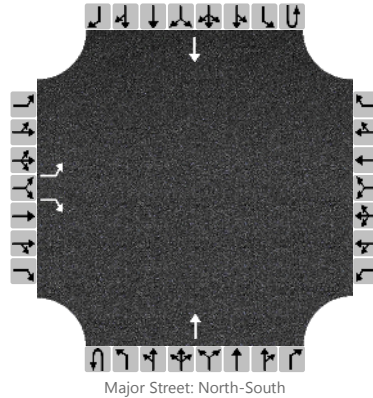
General Information

Analyst	AJB
Agency/Co.	EEA
Date Performed	6/26/2017
Analysis Year	2017
Time Analyzed	8:30 - 9:30 AM
Intersection Orientation	North-South
Project Description	Existing Conditions

Site Information

Intersection	Verde - Outbound Drive
Jurisdiction	Arlington Heights
East/West Street	School Outbound Drive
North/South Street	Verde Drive
Peak Hour Factor	0.62
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		1	0	1		0	0	0	0	0	1	0	0	0	1	0
Configuration		L		R							T				T	
Volume, V (veh/h)		26		27							126				99	
Percent Heavy Vehicles (%)		3		3												
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2												
Critical Headway (sec)		6.43		6.23												
Base Follow-Up Headway (sec)		3.5		3.3												
Follow-Up Headway (sec)		3.53		3.33												

Delay, Queue Length, and Level of Service

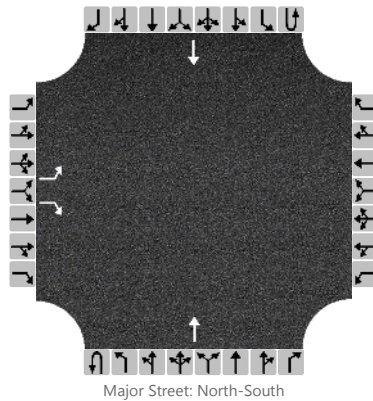
Flow Rate, v (veh/h)		42		44												
Capacity, c (veh/h)		634		882												
v/c Ratio		0.07		0.05												
95% Queue Length, Q ₉₅ (veh)		0.2		0.2												
Control Delay (s/veh)		11.1		9.3												
Level of Service, LOS		B		A												
Approach Delay (s/veh)	10.2															
Approach LOS	B															

HCS7 Two-Way Stop-Control Report

General Information

Analyst	AJB	Intersection	Verde - Outbound Drive
Agency/Co.	EEA	Jurisdiction	Arlington Heights
Date Performed	6/26/2017	East/West Street	School Outbound Drive
Analysis Year	2017	North/South Street	Verde Drive
Time Analyzed	3:00 - 4:00 PM	Peak Hour Factor	0.82
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	Existing Conditions		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		1	0	1		0	0	0	0	0	1	0	0	0	1	0
Configuration		L		R							T				T	
Volume, V (veh/h)		22		15							92				88	
Percent Heavy Vehicles (%)		3		3												
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2												
Critical Headway (sec)		6.43		6.23												
Base Follow-Up Headway (sec)		3.5		3.3												
Follow-Up Headway (sec)		3.53		3.33												

Delay, Queue Length, and Level of Service

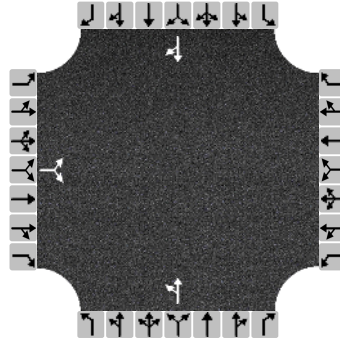
Flow Rate, v (veh/h)		27		18												
Capacity, c (veh/h)		766		944												
v/c Ratio		0.04		0.02												
95% Queue Length, Q ₉₅ (veh)		0.1		0.1												
Control Delay (s/veh)		9.9		8.9												
Level of Service, LOS		A		A												
Approach Delay (s/veh)	9.5															
Approach LOS	A															

HCS7 All-Way Stop Control Report

General Information

Analyst	AJB	Intersection	Verde - Roanoke
Agency/Co.	EEA	Jurisdiction	Arlington Heights
Date Performed	6/26/2017	East/West Street	Roanoke Drive
Analysis Year	2017	North/South Street	Verde Drive
Analysis Time Period (hrs)	0.25	Peak Hour Factor	0.49
Time Analyzed	8:30 - 9:30 AM		
Project Description	Existing Conditions		

Lanes



Vehicle Volume and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume	86		58				79	40			42	84
% Thrus in Shared Lane												
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LR						LT			TR		
Flow Rate, v (veh/h)	294						243			257		
Percent Heavy Vehicles	2						2			2		

Departure Headway and Service Time

Initial Departure Headway, hd (s)	3.20						3.20			3.20		
Initial Degree of Utilization, x	0.261						0.216			0.229		
Final Departure Headway, hd (s)	5.03						5.19			4.67		
Final Degree of Utilization, x	0.411						0.350			0.334		
Move-Up Time, m (s)	2.0						2.0			2.0		
Service Time, ts (s)	3.03						3.19			2.67		

Capacity, Delay and Level of Service

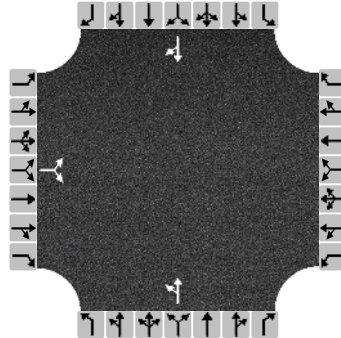
Flow Rate, v (veh/h)	294						243			257		
Capacity	715						693			771		
95% Queue Length, Q ₉₅ (veh)	2.0						1.6			1.5		
Control Delay (s/veh)	11.5						11.0			10.0		
Level of Service, LOS	B						B			A		
Approach Delay (s/veh)	11.5						11.0			10.0		
Approach LOS	B						B			A		
Intersection Delay, s/veh LOS	10.8						B					

HCS7 All-Way Stop Control Report

General Information

Analyst	AJB	Intersection	Verde - Roanoke
Agency/Co.	EEA	Jurisdiction	Arlington Heights
Date Performed	6/26/2017	East/West Street	Roanoke Drive
Analysis Year	2017	North/South Street	Verde Drive
Analysis Time Period (hrs)	0.25	Peak Hour Factor	0.76
Time Analyzed	3:00 - 4:00 PM		
Project Description	Existing Conditions		

Lanes



Vehicle Volume and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume	52		62				37	40			51	52
% Thrus in Shared Lane												
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LR						LT			TR		
Flow Rate, v (veh/h)	150						101			136		
Percent Heavy Vehicles	2						2			2		

Departure Headway and Service Time

Initial Departure Headway, hd (s)	3.20						3.20			3.20		
Initial Degree of Utilization, x	0.133						0.090			0.120		
Final Departure Headway, hd (s)	4.22						4.51			4.09		
Final Degree of Utilization, x	0.176						0.127			0.154		
Move-Up Time, m (s)	2.0						2.0			2.0		
Service Time, ts (s)	2.22						2.51			2.09		

Capacity, Delay and Level of Service

Flow Rate, v (veh/h)	150						101			136		
Capacity	852						798			880		
95% Queue Length, Q ₉₅ (veh)	0.6						0.4			0.5		
Control Delay (s/veh)	8.1						8.2			7.8		
Level of Service, LOS	A						A			A		
Approach Delay (s/veh)	8.1						8.2			7.8		
Approach LOS	A						A			A		
Intersection Delay, s/veh LOS	8.0						A					

HCS7 Two-Way Stop-Control Report

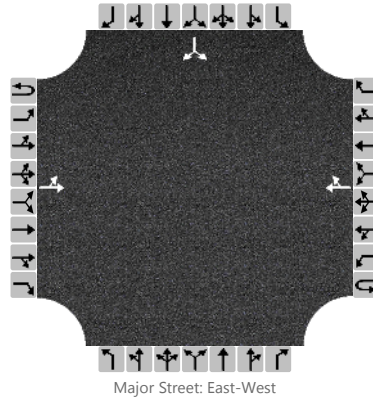
General Information

Analyst	AJB
Agency/Co.	EEA
Date Performed	6/26/2017
Analysis Year	2017
Time Analyzed	8:30 - 9:30 AM
Intersection Orientation	East-West
Project Description	Existing Conditions

Site Information

Intersection	Roanoke - Parking Lot
Jurisdiction	Arlington Heights
East/West Street	Roanoke Drive
North/South Street	Parking Lot Access
Peak Hour Factor	0.43
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume, V (veh/h)		0	26				18	145						118		19
Percent Heavy Vehicles (%)		3												3		3
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.13												6.43		6.23
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.23												3.53		3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		0													318	
Capacity, c (veh/h)		1168													726	
v/c Ratio		0.00													0.44	
95% Queue Length, Q ₉₅ (veh)		0.0													2.2	
Control Delay (s/veh)		8.1													13.8	
Level of Service, LOS		A													B	
Approach Delay (s/veh)	0.0												13.8			
Approach LOS													B			

HCS7 Two-Way Stop-Control Report

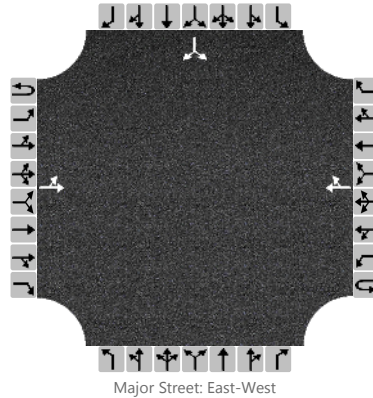
General Information

Analyst	AJB
Agency/Co.	EEA
Date Performed	6/26/2017
Analysis Year	2017
Time Analyzed	3:00 - 4:00 PM
Intersection Orientation	East-West
Project Description	Existing Conditions

Site Information

Intersection	Roanoke - Parking Lot
Jurisdiction	Arlington Heights
East/West Street	Roanoke Drive
North/South Street	Parking Lot Access
Peak Hour Factor	0.66
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume, V (veh/h)		1	24				25	64						90		8
Percent Heavy Vehicles (%)		3												3		3
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.13												6.43		6.23
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.23												3.53		3.33

Delay, Queue Length, and Level of Service

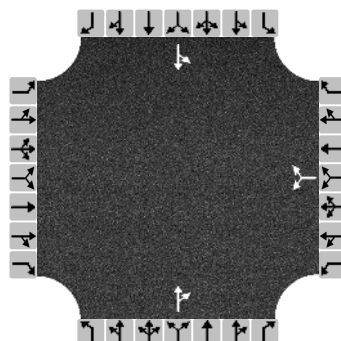
Flow Rate, v (veh/h)		2													148	
Capacity, c (veh/h)		1417													854	
v/c Ratio		0.00													0.17	
95% Queue Length, Q ₉₅ (veh)		0.0													0.6	
Control Delay (s/veh)		7.5													10.1	
Level of Service, LOS		A													B	
Approach Delay (s/veh)	0.4												10.1			
Approach LOS													B			

HCS7 All-Way Stop Control Report

General Information

Analyst	AJB	Intersection	Verde - Alleghany
Agency/Co.	EEA	Jurisdiction	Arlington Heights
Date Performed	6/26/2017	East/West Street	Alleghany Drive
Analysis Year	2017	North/South Street	Verde Drive
Analysis Time Period (hrs)	0.25	Peak Hour Factor	0.59
Time Analyzed	8:30 - 9:30 AM		
Project Description	Proposed Conditions		

Lanes



Vehicle Volume and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume				126		9		17	49	4	39	
% Thrus in Shared Lane												
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration				LR			TR			LT		
Flow Rate, v (veh/h)				229			112			73		
Percent Heavy Vehicles				2			2			2		

Departure Headway and Service Time

Initial Departure Headway, hd (s)				3.20			3.20			3.20		
Initial Degree of Utilization, x				0.203			0.099			0.065		
Final Departure Headway, hd (s)				4.50			4.14			4.64		
Final Degree of Utilization, x				0.286			0.129			0.094		
Move-Up Time, m (s)				2.0			2.0			2.0		
Service Time, ts (s)				2.50			2.14			2.64		

Capacity, Delay and Level of Service

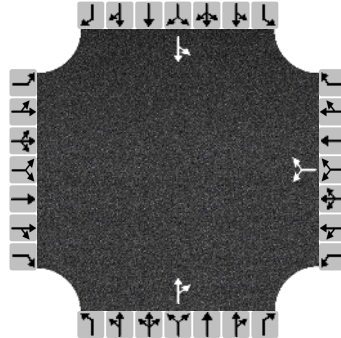
Flow Rate, v (veh/h)				229			112			73		
Capacity				800			870			776		
95% Queue Length, Q ₉₅ (veh)				1.2			0.4			0.3		
Control Delay (s/veh)				9.3			7.7			8.1		
Level of Service, LOS				A			A			A		
Approach Delay (s/veh)				9.3			7.7			8.1		
Approach LOS				A			A			A		
Intersection Delay, s/veh LOS	8.7						A					

HCS7 All-Way Stop Control Report

General Information

Analyst	AJB	Intersection	Verde - Alleghany
Agency/Co.	EEA	Jurisdiction	Arlington Heights
Date Performed	6/26/2017	East/West Street	Alleghany Drive
Analysis Year	2017	North/South Street	Verde Drive
Analysis Time Period (hrs)	0.25	Peak Hour Factor	0.83
Time Analyzed	3:00 - 4:00 PM		
Project Description	Proposed Conditions		

Lanes



Vehicle Volume and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume				109		15		20	42	15	36	
% Thrus in Shared Lane												
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration				LR			TR			LT		
Flow Rate, v (veh/h)				149			75			61		
Percent Heavy Vehicles				2			2			2		

Departure Headway and Service Time

Initial Departure Headway, hd (s)				3.20			3.20			3.20		
Initial Degree of Utilization, x				0.133			0.066			0.055		
Final Departure Headway, hd (s)				4.34			3.94			4.42		
Final Degree of Utilization, x				0.180			0.082			0.075		
Move-Up Time, m (s)				2.0			2.0			2.0		
Service Time, ts (s)				2.34			1.94			2.42		

Capacity, Delay and Level of Service

Flow Rate, v (veh/h)				149			75			61		
Capacity				830			913			815		
95% Queue Length, Q ₉₅ (veh)				0.7			0.3			0.2		
Control Delay (s/veh)				8.3			7.3			7.8		
Level of Service, LOS				A			A			A		
Approach Delay (s/veh)				8.3			7.3			7.8		
Approach LOS				A			A			A		
Intersection Delay, s/veh LOS	7.9						A					

HCS7 Two-Way Stop-Control Report

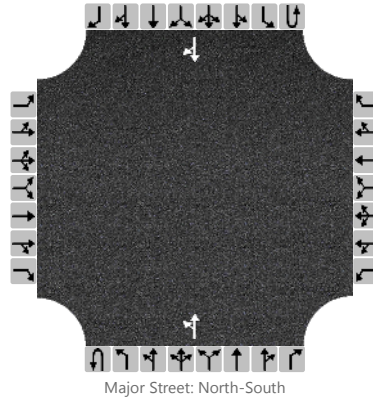
General Information

Analyst	AJB
Agency/Co.	EEA
Date Performed	6/26/2017
Analysis Year	2017
Time Analyzed	8:30 - 9:30 AM
Intersection Orientation	North-South
Project Description	Proposed Conditions

Site Information

Intersection	Verde - Inbound Drive
Jurisdiction	Arlington Heights
East/West Street	School Inbound Drive
North/South Street	Verde Drive
Peak Hour Factor	0.62
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	0	0	0	0	1	0	0	0	1	0
Configuration										LT						TR
Volume, V (veh/h)										0	66				108	57
Percent Heavy Vehicles (%)										3						
Proportion Time Blocked																
Percent Grade (%)																
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)										4.1						
Critical Headway (sec)										4.13						
Base Follow-Up Headway (sec)										2.2						
Follow-Up Headway (sec)										2.23						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)										0						
Capacity, c (veh/h)										1291						
v/c Ratio										0.00						
95% Queue Length, Q ₉₅ (veh)										0.0						
Control Delay (s/veh)										7.8						
Level of Service, LOS										A						
Approach Delay (s/veh)									0.0							
Approach LOS																

HCS7 Two-Way Stop-Control Report

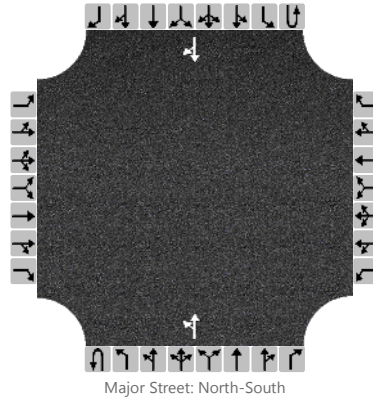
General Information

Analyst	AJB
Agency/Co.	EEA
Date Performed	6/26/2017
Analysis Year	2017
Time Analyzed	3:00 - 4:00 PM
Intersection Orientation	North-South
Project Description	Proposed Conditions

Site Information

Intersection	Verde - Inbound Drive
Jurisdiction	Arlington Heights
East/West Street	School Inbound Drive
North/South Street	Verde Drive
Peak Hour Factor	0.82
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	0	0	0	0	1	0	0	0	1	0
Configuration										LT						TR
Volume, V (veh/h)										0	62				93	52
Percent Heavy Vehicles (%)										3						
Proportion Time Blocked																
Percent Grade (%)																
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)										4.1						
Critical Headway (sec)										4.13						
Base Follow-Up Headway (sec)										2.2						
Follow-Up Headway (sec)										2.23						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)										0						
Capacity, c (veh/h)										1393						
v/c Ratio										0.00						
95% Queue Length, Q ₉₅ (veh)										0.0						
Control Delay (s/veh)										7.6						
Level of Service, LOS										A						
Approach Delay (s/veh)									0.0							
Approach LOS																

HCS7 Two-Way Stop-Control Report

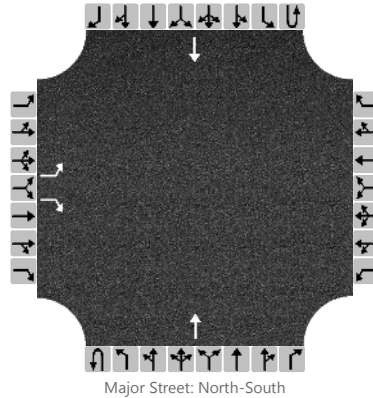
General Information

Analyst	AJB
Agency/Co.	EEA
Date Performed	6/26/2017
Analysis Year	2017
Time Analyzed	8:30 - 9:30 AM
Intersection Orientation	North-South
Project Description	Proposed Conditions

Site Information

Intersection	Verde - Outbound Drive
Jurisdiction	Arlington Heights
East/West Street	School Outbound Drive
North/South Street	Verde Drive
Peak Hour Factor	0.62
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		1	0	1		0	0	0	0	0	1	0	0	0	1	0
Configuration		L		R							T				T	
Volume, V (veh/h)		29		30							37				108	
Percent Heavy Vehicles (%)		3		3												
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2												
Critical Headway (sec)		6.43		6.23												
Base Follow-Up Headway (sec)		3.5		3.3												
Follow-Up Headway (sec)		3.53		3.33												

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		47		48												
Capacity, c (veh/h)		752		866												
v/c Ratio		0.06		0.06												
95% Queue Length, Q ₉₅ (veh)		0.2		0.2												
Control Delay (s/veh)		10.1		9.4												
Level of Service, LOS		B		A												
Approach Delay (s/veh)	9.8															
Approach LOS	A															

HCS7 Two-Way Stop-Control Report

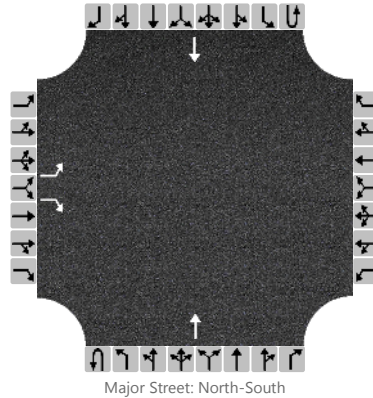
General Information

Analyst	AJB
Agency/Co.	EEA
Date Performed	6/26/2017
Analysis Year	2017
Time Analyzed	3:00 - 4:00 PM
Intersection Orientation	North-South
Project Description	Proposed Conditions

Site Information

Intersection	Verde - Outbound Drive
Jurisdiction	Arlington Heights
East/West Street	School Outbound Drive
North/South Street	Verde Drive
Peak Hour Factor	0.82
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		1	0	1		0	0	0	0	0	1	0	0	0	1	0
Configuration		L		R							T				T	
Volume, V (veh/h)		24		17							38				93	
Percent Heavy Vehicles (%)		3		3												
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2												
Critical Headway (sec)		6.43		6.23												
Base Follow-Up Headway (sec)		3.5		3.3												
Follow-Up Headway (sec)		3.53		3.33												

Delay, Queue Length, and Level of Service

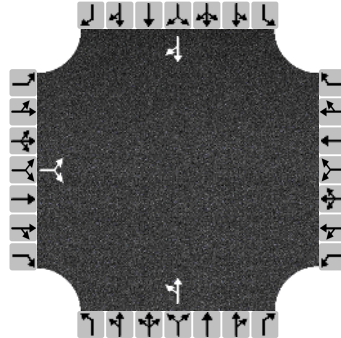
Flow Rate, v (veh/h)		29		21												
Capacity, c (veh/h)		829		936												
v/c Ratio		0.03		0.02												
95% Queue Length, Q ₉₅ (veh)		0.1		0.1												
Control Delay (s/veh)		9.5		8.9												
Level of Service, LOS		A		A												
Approach Delay (s/veh)	9.3															
Approach LOS	A															

HCS7 All-Way Stop Control Report

General Information

Analyst	AJB	Intersection	Verde - Roanoke
Agency/Co.	EEA	Jurisdiction	Arlington Heights
Date Performed	6/26/2017	East/West Street	Roanoke Drive
Analysis Year	2017	North/South Street	Verde Drive
Analysis Time Period (hrs)	0.25	Peak Hour Factor	0.49
Time Analyzed	8:30 - 9:30 AM		
Project Description	Proposed Conditions		

Lanes



Vehicle Volume and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume	16		10				87	21			46	92
% Thrus in Shared Lane												
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LR						LT			TR		
Flow Rate, v (veh/h)	53						220			282		
Percent Heavy Vehicles	2						2			2		

Departure Headway and Service Time

Initial Departure Headway, hd (s)	3.20						3.20			3.20		
Initial Degree of Utilization, x	0.047						0.196			0.250		
Final Departure Headway, hd (s)	4.88						4.50			3.90		
Final Degree of Utilization, x	0.072						0.275			0.305		
Move-Up Time, m (s)	2.0						2.0			2.0		
Service Time, ts (s)	2.88						2.50			1.90		

Capacity, Delay and Level of Service

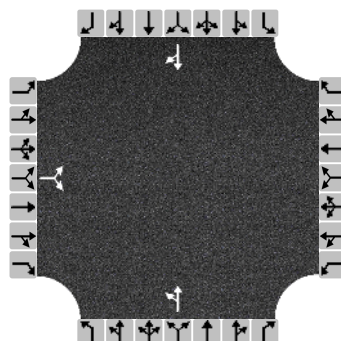
Flow Rate, v (veh/h)	53						220			282		
Capacity	738						800			922		
95% Queue Length, Q ₉₅ (veh)	0.2						1.1			1.3		
Control Delay (s/veh)	8.3						9.2			8.6		
Level of Service, LOS	A						A			A		
Approach Delay (s/veh)	8.3						9.2			8.6		
Approach LOS	A						A			A		
Intersection Delay, s/veh LOS	8.8						A					

HCS7 All-Way Stop Control Report

General Information

Analyst	AJB	Intersection	Verde - Roanoke
Agency/Co.	EEA	Jurisdiction	Arlington Heights
Date Performed	6/26/2017	East/West Street	Roanoke Drive
Analysis Year	2017	North/South Street	Verde Drive
Analysis Time Period (hrs)	0.25	Peak Hour Factor	0.76
Time Analyzed	3:00 - 4:00 PM		
Project Description	Proposed Conditions		

Lanes



Vehicle Volume and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume	13		11				40	25			54	56
% Thrus in Shared Lane												
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LR						LT			TR		
Flow Rate, v (veh/h)	32						86			145		
Percent Heavy Vehicles	2						2			2		

Departure Headway and Service Time

Initial Departure Headway, hd (s)	3.20						3.20			3.20		
Initial Degree of Utilization, x	0.028						0.076			0.129		
Final Departure Headway, hd (s)	4.24						4.26			3.78		
Final Degree of Utilization, x	0.037						0.101			0.152		
Move-Up Time, m (s)	2.0						2.0			2.0		
Service Time, ts (s)	2.24						2.26			1.78		

Capacity, Delay and Level of Service

Flow Rate, v (veh/h)	32						86			145		
Capacity	849						846			951		
95% Queue Length, Q ₉₅ (veh)	0.1						0.3			0.5		
Control Delay (s/veh)	7.4						7.7			7.5		
Level of Service, LOS	A						A			A		
Approach Delay (s/veh)	7.4						7.7			7.5		
Approach LOS	A						A			A		
Intersection Delay, s/veh LOS	7.5						A					

HCS7 Two-Way Stop-Control Report

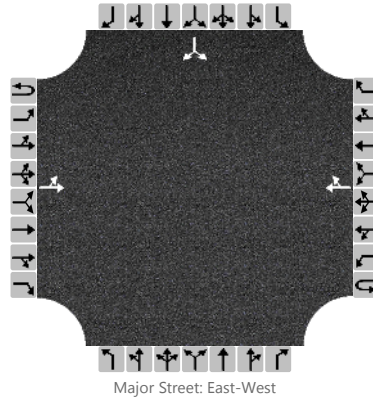
General Information

Analyst	AJB
Agency/Co.	EEA
Date Performed	6/26/2017
Analysis Year	2017
Time Analyzed	8:30 - 9:30 AM
Intersection Orientation	East-West
Project Description	Proposed Conditions

Site Information

Intersection	Roanoke - Parking Lot
Jurisdiction	Arlington Heights
East/West Street	Roanoke Drive
North/South Street	Parking Lot Access
Peak Hour Factor	0.43
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume, V (veh/h)		0	26				18	161						0		152
Percent Heavy Vehicles (%)		3												3		3
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.13												6.43		6.23
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.23												3.53		3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		0													353	
Capacity, c (veh/h)		1132													803	
v/c Ratio		0.00													0.44	
95% Queue Length, Q ₉₅ (veh)		0.0													2.3	
Control Delay (s/veh)		8.2													13.0	
Level of Service, LOS		A													B	
Approach Delay (s/veh)	0.0												13.0			
Approach LOS													B			

HCS7 Two-Way Stop-Control Report

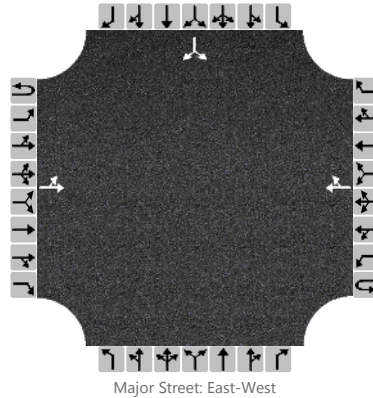
General Information

Analyst	AJB
Agency/Co.	EEA
Date Performed	6/26/2017
Analysis Year	2017
Time Analyzed	3:00 - 4:00 PM
Intersection Orientation	East-West
Project Description	Proposed Conditions

Site Information

Intersection	Roanoke - Parking Lot
Jurisdiction	Arlington Heights
East/West Street	Roanoke Drive
North/South Street	Parking Lot Access
Peak Hour Factor	0.66
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume, V (veh/h)		1	24				25	71						0		109
Percent Heavy Vehicles (%)		3												3		3
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized	No				No				No				No			
Median Type/Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.13												6.43		6.23
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.23												3.53		3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		2													165	
Capacity, c (veh/h)		1404													942	
v/c Ratio		0.00													0.18	
95% Queue Length, Q ₉₅ (veh)		0.0													0.6	
Control Delay (s/veh)		7.6													9.6	
Level of Service, LOS		A													A	
Approach Delay (s/veh)	0.4												9.6			
Approach LOS													A			



D-Series Size 1 LED Wall Luminaire



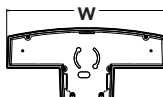
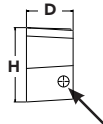
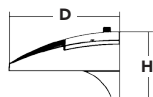
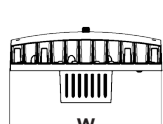
d"series

Specifications Luminaire

Width:	13-3/4" (34.9 cm)	Weight:	12 lbs (5.4 kg)
Depth:	10" (25.4 cm)		
Height:	6-3/8" (16.2 cm)		

Back Box (BBW, ELCW)

Width:	13-3/4" (34.9 cm)	BBW Weight:	5 lbs (2.3 kg)
Depth:	4" (10.2 cm)	ELCW Weight:	10 lbs (4.5 kg)
Height:	6-3/8" (16.2 cm)		



For 3/4" NPT side-entry conduit (BBW only)

Catalog
Number

Notes

Type

Hit the Tab key or mouse over the page to see all interactive elements.

Introduction

The D-Series Wall luminaire is a stylish, fully integrated LED solution for building-mount applications. It features a sleek, modern design and is carefully engineered to provide long-lasting, energy-efficient lighting with a variety of optical and control options for customized performance.

With an expected service life of over 20 years of nighttime use and up to 74% in energy savings over comparable 250W metal halide luminaires, the D-Series Wall is a reliable, low-maintenance lighting solution that produces sites that are exceptionally illuminated.

Ordering Information

EXAMPLE: DSXW1 LED 20C 1000 40K T3M MVOLT DDBTXD

Series	LEDs	Drive Current	Color temperature	Distribution	Voltage	Mounting	Control Options
DSXW1 LED	10C 10 LEDs (one engine) 20C 20 LEDs (two engines)	350 350 mA 530 530 mA 700 700 mA 1000 1000 mA (1 A)	30K 3000 K 40K 4000 K 50K 5000 K AMBPC Amber phosphor converted	T2S Type II Short T2M Type II Medium T3S Type III Short T3M Type III Medium T4M Type IV Medium TFTM Forward Throw Medium ASYDF Asymmetric diffuse	MVOLT ¹ 120 ¹ 208 ¹ 240 ¹ 277 ¹ 347 ² 480 ²	Shipped included (blank) Surface mounting bracket BBW Surface-mounted back box (for conduit entry) ³	Shipped installed PE Photoelectric cell, button type ⁴ DMG 0-10V dimming driver (no controls) PIR 180° motion/ambient light sensor, <15' mtg ht ⁵ PIRH 180° motion/ambient light sensor, 15-30' mtg ht ⁵ PIR1FC3V Motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 1fc ⁵ PIRH1FC3V Motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 1fc ⁵ ELCW Emergency battery backup (includes external component enclosure) ⁶

Other Options

Finish (required)

Shipped installed

SF	Single fuse (120, 277 or 347V) ⁷
DF	Double fuse (208, 240 or 480V) ⁷
HS	House-side shield ⁸
SPD	Separate surge protection ⁹

Shipped separately⁸

BSW	Bird-deterrent spikes
WG	Wire guard
VG	Vandal guard
DDL	Diffused drop lens

DDBXD	Dark bronze
DBLXD	Black
DNAXD	Natural aluminum
DWHXD	White

DSSXD	Sandstone
DDBTXD	Textured dark bronze
DBLBXD	Textured black
DNATXD	Textured natural aluminum

DWHGXD	Textured white
DSSTXD	Textured sandstone

Accessories

Ordered and shipped separately.

DSXWHS U	House-side shield (one per light engine)
DSXWBSW U	Bird-deterrent spikes
DSXW1WG U	Wire guard accessory
DSXW1VG U	Vandal guard accessory

NOTES

- MVOLT driver operates on any line voltage from 120-277V (50/60 Hz). Specify 120, 208, 240 or 277 options only when ordering with fusing (SF, DF options), or photocontrol (PE option).
- Only available with 20C, 700mA or 1000mA. Not available with PIR or PIRH.
- Back box ships installed on fixture. Cannot be field installed. Cannot be ordered as an accessory.
- Photocontrol (PE) requires 120, 208, 240, 277 or 347 voltage option. Not available with motion/ambient light sensors (PIR or PIRH).
- PIR and PIR1FC3V specifies the [Sensor Switch SBGR-10-ODP](#) control; PIRH specifies the [Sensor Switch SBGR-6-ODP](#) control; see [Motion Sensor Guide](#) for details. Includes ambient light sensor. Not available with "PE" option (button type photocell). Dimming driver standard. Not available with 20 LED/1000 mA configuration (DSXW1 LED 20C 1000).
- Cold weather (-20C) rated. Not compatible with conduit entry applications. Not available with BBW mounting option. Not available with fusing. Not available with 347 or 480 voltage options. Emergency components located in back box housing. Emergency mode IES files located on product page at www.lithonia.com
- Single fuse (SF) requires 120, 277 or 347 voltage option. Double fuse (DF) requires 208, 240 or 480 voltage option. Not available with ELCW.
- Also available as a separate accessory; see Accessories information.
- See the electrical section on page 3 for more details.



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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: Greenbriar Elementary School, 2330 N Verde Dr., Special Use Permit to Allow an Addition and Renovations as well as Variances for Parking, Side Yard Setback and Impervious Surface Coverage.

PC #: 17-007 – Round 1

Date: July 17, 2017

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DEVELOPMENT DEPARTMENT

Sam:

I have reviewed the documents submitted for the above referenced project and offer the following comments:

1. Provide construction type of existing building and the proposed addition, based on the 2009 International Building Code, Tables 601 and 602.
2. Indicate if the existing building has fire suppression and fire alarm systems.
3. Provide a height and area calculation based on Table 503 of the 2009 International Building Code.
4. Provide an occupant load calculation for each room of the new addition.
5. Provide details on travel distance in the new addition to the nearest exit, along with an occupant load calculation for each exit.

BUILDING DEPARTMENT

1A

PETITIONER'S APPLICATION - ARLINGTON HEIGHTS PLAN COMMISSION

Petition #: P.C. 17-007
 Petitioner: Don Hansen, STR Partners LLC, Architects
350 W. Ontario St., Suite 200
Chicago, IL 60654
 Owner: Ryan Schulz, Arlington Hts. School Dist. 25
1200 S. Dunton Ave.
Arlington Heights, IL 60005
 Contact Person: Don Hansen
 Address: 350 W. Ontario St., Suite 200
Chicago, IL 60654
 Phone #: 312-464-1444 ext. 168
 Fax #: 312-464-0785
 E-Mail: don@strpartners.com

P.I.N.# 03-18-112-003
 Location: 2330 N. Verde Drive
 Rezoning: Current: Proposed:
 Subdivision:
 # of Lots: Current: Proposed:
 PUD: For:
 Special Use: ✓ For: Elementary School
 Land Use Variation: For:
 Land Use: Current:
Proposed:
 Site Gross Area: 173,000 sq. ft (3.97 acres)
 # of Units Total:
 1BR: 2BR: 3BR: 4BR:

(Petitioner: Please do not write below this line.)

FIRE PREVENTION

Director

Date



Village of Arlington Heights, IL
Department of Building & Life Safety

Fire Safety Division



Date: 7/7/2017

P.C. Number: 17-007

Project Name: Elementary School Setback and Parking Variation for Addition

Project Location: 2330 N. Verde

Planning Department Contact: Sam Hubbard, Planning and Community Development

General Comments:

1. Public schools are exempt from local fire and building code requirements.
2. No further comments – No objections.

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PLANNING & COMMUNITY
DEVELOPMENT DEPARTMENT

NOTE: PLAN IS CONCEPTUAL ONLY SUBJECT TO DETAILED PLAN REVIEW

Date 07-07-16

Reviewed By: 
Fire Safety Supervisor



Arlington Heights Fire Department
Plan Review Sheet

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PLANNING & COMMUNITY
DEVELOPMENT DEPARTMENT

P. C. Number 17-007

Project Name

Greenbrier School Addition

Project Location

2330 N. Verde Drive

Planning Department Contact Sam Hubbard

General Comments

Round 1

The Fire Department has no comments at this time.

**NOTE: PLAN IS CONCEPTUAL ONLY
SUBJECT TO DETAILED PLAN REVIEW**

Date July 11, 2017

Reviewed By: LT. Mark Aleckson

Arlington Heights Fire Department

ARLINGTON HEIGHTS POLICE DEPARTMENT

Community Services Bureau

DEPARTMENT PLAN REVIEW SUMMARY

Greenbrier School – 2330 N. Verde Dr.

PC#17-007

Round 1

Round 1 Review Comments

7/13/2017

1. Character of use:

The character of use should not be problematic.

2. Are lighting requirements adequate?

Lighting should be up to the Village of Arlington Heights code. There are concerns regarding the Southeast side of the building, with lighting being adequate to deter criminal activity, especially the areas where there is new construction. The new construction will create an alcove that will be fenced in according to the plan. A video camera with a posted sign may be an option as well at that location.

3. Present traffic problems?

Currently there are very few reported traffic issues with student drop-off and pick-up at Greenbrier School. Added parking and a no left turn sign onto Roanoke from the west lot should help alleviate some of the minor traffic problems at the school. This plan is in place in the Greenbrier Traffic and Parking Study.

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.

The traffic problems are minimal at Greenbrier.

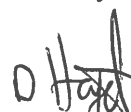
6. General comments:

-The new construction area needs to be sufficiently lighted and measures need to be taken to ensure that the area is not an area that is susceptible to criminal activity. Although the alcove will be enclosed by a fence, there has been an isolated incident at the school with juveniles accessing the rooftop in 2017.

-Agent contact information must be provided to the Arlington Heights Police Department during all construction phases. Emergency contact cards can be filled out at the Village of Arlington Heights website (vah.com). This allows police department personnel to contact an agent during emergency situations or for suspicious/criminal activity on the property during all hours.

 #235
Rick Veenstra, School Resource Officer
Community Services Bureau

Approved by:

 #559

Supervisor's Signature

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PLANNING & COMMUNITY
DEVELOPMENT DEPARTMENT

HEALTH SERVICES DEPARTMENT

6

PETITIONER'S APPLICATION - ARLINGTON HEIGHTS PLAN COMMISSION

Petition #: P.C. 17-007
Petitioner: Don Hansen, STR Partners LLC, Architects
350 W. Ontario St., Suite 200
Chicago, IL 60654
Owner: Ryan Schulz, Arlington Hts. School Dist. 25
1200 S. Dunton Ave.
Arlington Heights, IL 60005
Contact Person: Don Hansen
Address: 350 W. Ontario St., Suite 200
Chicago, IL 60654
Phone #: 312-464-1444 ext. 168
Fax #: 312-464-0785
E-Mail: don@strpartners.com

P.I.N.# 03-18-112-003
Location: 2330 N. Verde Drive
Rezoning: Current: Proposed:
Subdivision:
of Lots: Current: Proposed:
PUD: For:
Special Use: ✓ For: Elementary School
Land Use Variation: For:

Land Use: Current:
 Proposed:
Site Gross Area: 173,000 sq. ft (3.97 acres)
of Units Total:
1BR: 2BR: 3BR: 4BR:

(Petitioner: Please do not write below this line.)

1. GENERAL COMMENTS:

No comments at this time

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DEVELOPMENT DEPARTMENT

Jeff Bohner 7/12/17

Environmental Health Officer

Date

James McCalister 7/12/17 rec
tor Date

PETITIONER'S APPLICATION - ARLINGTON HEIGHTS PLAN COMMISSION

Petition #: P.C. <u>14 - 007</u>	P.I.N.# <u>03-18-112-003</u>
Petitioner: <u>Don Hansen, STR Partners LLC, Architects</u>	Location: <u>2330 N. Verde Drive</u>
<u>350 W. Ontario St., Suite 200</u>	Rezoning: <u> </u> Current: <u> </u> Proposed: <u> </u>
<u>Chicago, IL 60654</u>	Subdivision: <u> </u>
Owner: <u>Ryan Schulz, Arlington Hts. School Dist. 25</u>	# of Lots: <u> </u> Current: <u> </u> Proposed: <u> </u>
<u>1200 S. Dunton Ave.</u>	PUD: <u> </u> For: <u> </u>
<u>Arlington Heights, IL 60005</u>	Special Use: <u>✓</u> For: <u>Elementary School</u>
Contact Person: <u>Don Hansen</u>	Land Use Variation: <u> </u> For: <u> </u>
Address: <u>350 W. Ontario St., Suite 200</u>	Land Use: <u> </u> Current: <u> </u>
<u>Chicago, IL 60654</u>	Proposed: <u> </u>
Phone #: <u>312-464-1444 ext. 168</u>	Site Gross Area: <u>173,000 sq. ft (3.97 acres)</u>
Fax #: <u>312-464-0785</u>	# of Units Total: <u> </u>
E-Mail: <u>don@strpartners.com</u>	1BR: <u> </u> 2BR: <u> </u> 3BR: <u> </u> 4BR: <u> </u>

(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.

Date



Planning & Community Development Dept. Review

July 18, 2017

REVIEW ROUND 1

Project: 2330 N. Verde Drive – School District 25
Greenbrier Elementary School

Case Number: PC 17-007

General:

7. A courtesy meeting with the neighbors is required prior to appearing before the Plan Commission. Has this meeting been scheduled? Please provide a summary of this meeting no less than 1 week prior to the Plan Commission hearing.
8. The Plat of Survey includes a parcel northwest of the Greenbrier School property and it is assumed that this property was included in the survey as there may be alterations needed to the detention there. Please confirm why this property was included on the Plat of Survey. Additionally, it is understood that this property is not part of the Greenbrier School property and is owned by the Park District. Please clarify ownership of this piece of property. Finally, the Plat of Survey lists the PIN for the entire property surveyed (including the area to the northwest) as 03-18-112-003, however, the northwest area property has a separate PIN of 03-18-115-003.
9. In the "Maximum Floor Area Ratio" section of the Project Description narrative it notes that 3,900 sq. ft. will be added to the 1st floor. However, in the "Maximum Building Lot Coverage" section of the same letter it notes that 3,962 sq. ft. will be added to the first floor. Please confirm the actual size of the addition to the first floor and revise the Project Description accordingly.
10. With regards to the Written Justification for Special Use Amendment & Variations narrative, the following changes are needed:
 - a. There is no existing Special Use Permit for Greenbrier School. Please remove all references to an "amendment" to the Special Use Permit. The application will be for the approval of a Special Use Permit not an amendment to an existing Special Use Permit.
 - b. Please refer to the side yard setback Variation as an **exterior** side yard setback Variation. Additionally, a Variation cannot be granted for an approximate setback. Please provide the actual setback distance of the existing school.
 - c. After further research into impervious surface regulations, it has been clarified that non-residential uses within the R-3 District do not have any impervious surface restrictions (see table in Section 5.3-2 of the Zoning Code). Therefore, no impervious surface Variation is required.
 - d. Two additional required Variations have been identified (see "11c" and "11d" below). Please add justifications for these Variations.
11. The following Variations have been identified:
 - a. Section 5.1-3.6 to allow an exterior side yard setback of approx. 13' (please provide the actual distance) where code requires a 40' setback. This setback applies to the existing building.
 - b. Section 11.4-4 to allow 75 parking spaces where code requires 195 parking spaces.
 - c. Section 6.5-2 to allow an accessory structure (shed) in the side yard where code requires all accessory structures to be located in a rear yard.
 - d. Section 6.13-3(a) to allow a 6' tall open fence in the side yard where code restricts fence heights to a maximum of 5' in the side yard.

12. Please clarify if the permeable pavers used in new parking spaces, as well as the material used for the playground areas were considered as "impervious" or "pervious" and if they were considered as impervious surface in the impervious surface calculations.
13. A photometric plan was included within the submittal, however, it appears that no new light poles or lighting has been proposed. Please confirm if the photometric plan represents the existing illumination levels onsite or if changes to the fixtures have been proposed.
14. Please ensure that all plans and/or studies to be resubmitted as a result of the Round 1 Village review comments include a revision date.

Site Plan:

15. The architectural site plan does not match the engineering site plan and landscape plan, specifically with respect to the location of the proposed fence, the location of certain paved areas and sidewalks, the size of the relocated playground area, and the existence of a landscape island to the north of the proposed parking row. Please revise the site plan so that all plans match.
16. Please revise the Site Geometry Plan (sheet C2.01) to show the setbacks of the existing building to the north, south, east, and west at its closest point.
17. Will the same playground equipment be reused or is new equipment proposed? If new equipment will be added, what will the height of this equipment be?
18. Please identify any proposed ground mounted (i.e. not on roof) mechanical equipment (AC units, generators, transformers, etc.) on the site plans and landscape plans.

Parking and Traffic:

19. The Traffic and Parking study indicates that with 75 parking spaces and an estimated parking demand projected at 83 spaces, 8 cars will park on the street. Do the cars that park on the street interfere with queuing for drop-off and pick-up? How does the School District ensure that this overflow, which is a result of staff parking, does not occur in areas that are used by parents during drop-off and pick-up times, which could further exacerbate queuing issues.
20. The parking requirements for the site are shown below:

SPACE	PARKING CODE USE	NUMBER OF EMPLOYEES	NUMBER OF CLASSROOMS	PARKING RATIO	PARKING REQUIRED
Greenbrier Elementary School	Elementary School	86	23	1 space per classroom plus two spaces per employee	195
Total Parking Required					195
Total Parking Provided					75
Parking Surplus/(Deficit)					120 (61.5% reduction in required parking)

As outlined above, a parking variation is required.

Prepared by:



Greenbrier Elementary School
PC 17-007
2330 Verde Drive
July 18, 2017

- 1) Per Chapter 28, Section 6.15, the ends of all parking rows must include a 4" caliper shade trees. Provide a 4" caliper shade tree within existing islands where the trees are absent.
- 2) Per Chapter 28, Section 6.15-1.2a, a three foot high screen must be provided in order to screen the parking/paved areas that are adjacent to the public way. Provide a three foot high screen along Roanoke and Verde where the code required screen is absent.
- 3) It is recommended that foundation planting be provided along the Verde and Roanoke frontage. The landscaping should consist of a mix of shrubs and perennials.
- 4) If there are any utility meters or mechanical units, they must be screened with landscaping or another appropriate method of screening.



STR PARTNERS LLC
350 WEST ONTARIO STREET
SUITE 200
CHICAGO IL 60654
T 312.464.1444
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July 27, 2017

Mr. Sam Hubbard
Development Planner
Planning and Community Development Department
Village of Arlington Heights
33 S. Arlington Heights Road
Arlington Heights, IL 60005

RECEIVED
JUL 31 2017
PLANNING & COMMUNITY
DEVELOPMENT DEPARTMENT

Re: **Round 1 Comments: Responses**
Plan Commission Application

Plan Commission 17-007

Greenbrier Elementary School Addition
2330 N. Verde Dr.
Arlington Heights, IL 60004

Arlington Heights School District 25

STR Project #17036.A0

Dear Mr. Hubbard:

Find enclosed the following documents revised or added in response to Round 1 comments from the Plan Commission Application review:

- 1 copy, revised Project Description, dated July 27, 2017
- 1 copy, revised Written Justification, Special Use Permit & Variations, dated July 27, 2017
- 1 copy, Arlington Heights Police Department emergency contact card
- 6 copies, Domestic Service Backflow Preventer photos
- 6 copies, Exterior Light Fixture 'W1' cut sheet
- (3) full size copies + (3) half size copies, Site Plan, dated July 27, 2017
- (3) full size copies + (3) half size copies, Civil Engineering Plans, dated July 27, 2017
- (3) full size copies + (3) half size copies, Photometric Plan ES1.0, Site Plan - Electrical, dated July 27, 2017
- (3) full size copies + (3) half size copies, First Floor Plan, dated July 27, 2017
- (3) full size copies + (3) half size copies, Second Floor Plan, dated July 27, 2017
- (3) full size copies + (3) half size copies, Landscape Plans L1.01 & L1.02, dated July 27, 2017
- (3) full size copies + (3) half size copies, Tree Preservation Plan, dated July 27, 2017
- CD of above documents

Responses to Round 1 Comments for the Plan Commission application for the proposed addition to Greenbrier Elementary School in Arlington Heights School District 25 are as follows:

Building & Life Safety Department:

1. Provide construction type of existing building and the proposed addition, based on the 2009 International Building Code, Tables 601 and 602.

Response: The construction type is Type 2 Unprotected (2B per 2009 International Building Code). This information has been noted on the revised First Floor Plan sheet.

2. Indicate if the existing building has fire suppression and fire alarm systems.

Response: The existing building has fire suppression and fire alarm systems. This information has been noted on the revised First Floor Plan sheet.

3. Provide a height and area calculation based on Table 503 of the 2009 International Building Code.

Response: Existing and proposed heights and areas comply with 2009 International Building Code. The height and area calculation has been noted on the revised First Floor Plan sheet.

4. Provide an occupant load calculation for each room of the new addition.

Response: Occupant load calculations have been added to the revised First and Second Floor Plan sheets.

5. Provide details on travel distance in the new addition to the nearest exit, along with an occupant load calculation for each exit.

Travel distances and occupant load calculations have been added to the revised First and Second Floor Plan sheets.

Fire Safety Division:

1. Public schools are exempt from local fire and building code requirements.

Response: The comment is acknowledged.

2. No further comments – No objections.

Response: The comment is acknowledged.

Fire Department:

1. The Fire Department has no comments at this time.

Response: The comment is acknowledged.

Community Services Bureau:

1. Character of use: The character of use should not be problematic.

Response: The comment is acknowledged.

2. Are lighting requirements adequate? Lighting should be up to the Village of Arlington Heights code. There are concerns regarding the Southeast side of the building, with lighting being adequate to deter criminal activity, especially the areas where there is new construction. The new construction will create an alcove that will be fenced in according to plan. A video camera with a posted sign may be an option as well at that location.

Response: Exterior light fixtures will be mounted to the exterior walls of the new addition. The photometric plan has been revised to add the fixtures. Additionally, cameras will be included in the project at the exterior alcove area.

3. Present traffic problems? Currently there are very few reported traffic issues with student drop-off and pick-up at Greenbrier School. Added parking and a no left turn sign onto Roanoke from the west lot should help alleviate some of the minor traffic problems at the school. The plan is in place in the Greenbrier Traffic and Parking Study.

Response: The comment is acknowledged.

4. This is not a problem area in relation to traffic accidents.

Response: The comment is acknowledged.

5. Traffic problems that may be created by the development. The traffic problems at minimal at Greenbrier

Response: The comment is acknowledged.

6. General Comments:
 - The new construction area needs to be sufficiently lighted and measures need to be taken to ensure that the area is not an area that is susceptible to criminal activity. Although the alcove will be enclosed by a fence, there has been an isolated incident at the school with juveniles accessing the rooftop in 2017.

Response: Exterior light fixtures will be mounted to the exterior walls of the new addition. The photometric plan has been revised to add the fixtures. Additionally, cameras will be included in the project at the exterior alcove area.

- Agent contact information must be provided to the Arlington Heights Police Department during all construction phases. Emergency contact cards can be filled out at the Village of Arlington Heights website (vah.com). This allows police department personnel to contact an agent during emergency situations or for suspicious/criminal activity on the property during all hours.

Response: An emergency contact card is attached.

Health Services:

1. No comments at this time.

Response: The comment is acknowledged.

Planning & Community Development:

General:

7. A courtesy meeting with the neighbors is required prior to appearing before the Plan Commission. Has this meeting been scheduled? Please provide a summary of this meeting no less than 1 week prior to the Plan Commission hearing.

Response: A meeting with the neighbors has been scheduled for August 14. A summary of this meeting will be provided no later than August 16, 1 week prior to the August 23 Plan Commission hearing.

8. The Plat of Survey includes a parcel northwest of the Greenbrier School property and it is assumed that this property was included in the survey as there may be alterations needed to the detention there. Please confirm why this property was included on the Plat of Survey. Additionally, it is understood that this property is not part of the Greenbrier School property and is owned by the Park District. Please clarify ownership of this piece of property. Finally, the Plat of Survey lists the PIN for the entire property surveyed (including the area to the northwest) as 03-18-112-003, however, the northwest area property has a separate PIN of 03-18-115-003.

Response: The Park District property located northwest of the Greenbrier School property was included in the survey as there may be alterations required to satisfy the detention requirements established by the Village of Arlington Heights and the MWRDGC. We acknowledge and agree that this property is not under the ownership of Arlington Heights School District 25 and is in fact owned by the Arlington Heights Park District. The separate PIN has been noted and shall be included on the survey document.

9. In the "Maximum Floor Area Ratio" section of the Project Description narrative it notes that 3,900 sq. ft. will be added to the 1st floor. However, in the "Maximum Building Lot Coverage" section of the same letter it notes that 3,962 sq. ft. will be added to the first floor. Please confirm the actual size of the addition to the first floor and revise the Description accordingly.

Response: 3,962 sq. ft. will be added to the first floor. The note in the "Maximum Floor Area Ratio" section of the Project Description is revised.

10. With regards to the Written Justification for Special Use Amendment & Variations narrative, the following changes are needed:
- There is no existing Special Use Permit for Greenbrier School. Please remove all references to an "amendment" to the Special Use Permit. The application will be for the approval of a Special Use Permit not an amendment to an existing Special Use Permit.
 - Please refer to the side yard setback Variation as **exterior** side yard setback Variation. Additionally, a Variation cannot be granted for an approximate setback. Please provide the actual setback distance of the existing school.
 - After further research into impervious surface regulations, it has been clarified that non-residential uses within the R-3 District do not have any impervious restrictions (see table in Section 5.3-2 of the Zoning Code). Therefore, no impervious surface Variation is required.
 - Two additional required Variations have been identified (see "11c" and "11d" below). Please add justifications for these Variations.

Response: The Written Justifications for Special Use Permit & Variations is revised to identify the application to be for the approval of a Special Use Permit and not an amendment to an existing Special Use Permit, to refer to the side yard setback Variation as an exterior side yard setback Variation and provide an actual setback distance, to delete the Impervious Surface Variation request and add an accessory structure Variation. The 6' tall open fence is shown on the Plat of Survey but is not on the Greenbrier property, so a Variation is not being requested since it is not on the property.

11. The following Variations have been identified:

- a. Section 5.1-3.6 to allow an exterior side yard setback of approx.. 13' (please provide the actual distance) where code requires a 40' setback. This setback applies to the existing building.
- b. Section 11.4-4 to allow 75 parking spaces where code requires 195 parking spaces.
- c. Section 6.5-2 to allow an accessory structure (shed) in the side yard where code requires all accessory structures to be located in a rear yard.
- d. Section 6.13-3(a) to allow a 6' tall open fence in the side yard where code restricts fence heights to a maximum of 5' in the side yard.

Response: a. The Written Justifications for Special Use Permit & Variations is revised to clarify the side yard setback as an exterior side yard setback and clarify the dimension. b. A request for a Variation for an accessory structure is added to the Written Justifications for Special Use Amendments & Variations. c. The 6' tall open fence is shown on the Plat of Survey but is not on the Greenbrier property. A variation is not being requested since it is not on the property. d. There is no change to the parking space Variation request since June 30.

12. Please clarify if the permeable pavers used in the new parking spaces, as well as the material used for the playground areas were considered as "impervious" or "pervious" and if they were considered as impervious surface in the impervious surface calculations.

Response: In the Impervious Surface Calculations in the Project Description, the permeable pavers and all playground areas were included in the impervious area. Note that the Impervious Surface Calculations have been removed from the Project Description since non-residential uses within the R-3 District do not have any impervious restrictions per Section 5.3-2 of the Zoning Code.

13. A photometric plan was included with the submittal, however, it appears that no new light poles or lighting has been proposed. Please confirm if the photometric plan represents the existing illumination levels onsite or if changes to the fixtures have been proposed.

Response: New light poles are shown. New light poles replace existing light poles except one existing light pole is removed and its replacement is in a nearby location. The photometric plan represents the new light poles. Additionally new exterior light fixtures mounted on the exterior walls of the addition are added to the revised photometric plan.

14. Please ensure that all plans and/or studies to be resubmitted as a result of Round 1 Village review comments include a revision date.

Response: All plans and/or studies that are resubmitted with responses to Round 1 Village review comments include a revision date.

Site Plan:

15. The architectural site plan does not match the engineering site plan and landscape plan, specifically with respect to the location of the proposed fence, the location of certain paved areas and sidewalks, the size of the relocated playground area, and the existence of a landscape island to the north of the proposed parking row. Please revise the site plan so that all plans match.

Response: The architectural site plan is revised and matches the engineering site plan and landscape plan.

16. Please revise the Site Geometry Plan (sheet C2.01) to show the setbacks of the existing building to the north, south, east, and west at its closest points.

Response: The setbacks of the existing building to the north, south, east, and west are added to sheet C2.01.

17. Will the same playground equipment be reused or is new equipment proposed? If new equipment will be added, what will the height of this equipment be?

Response: New equipment will be added. The height is expected to be 16 foot at the high point of a roof that is part of the play equipment.

18. Please identify any proposed ground mounted (i.e. not on roof) mechanical equipment (AC units, generators, transformers, etc.) on the site plans and landscape plans.

Response: There is no ground mounted mechanical equipment in the project.

Parking and Traffic:

19. The Traffic and Parking study indicates that with 75 parking spaces and an estimated parking demand projected at 83 spaces, 8 cars will park on the street. Do the cars that park on the street interfere with queuing for drop-off and pick-up? How does the School District ensure that this overflow, which is a result of staff parking, does not occur in areas that are used by parents during drop-off and pick-up times, which could further exacerbate queuing issues.

Response: Currently staff that park on-street park either on the west side of Verde Drive between the entrance and exit of the east parking lot or the south side of Roanoke Drive west of the west parking lot. With the additional 10 spaces on-site, the number of staff parking on-street decreases to 8 vehicles. Staff, per Engineering's suggestion, will be directed to park on the north side of Roanoke Drive west of the school, adjacent to the park instead of the south side. Parking on Verde Drive would remain. These areas are away from the parent queuing areas.

20. The parking requirements for the site are shown below:

SPACE	PARKING CODE USE	NUMBER OF EMPLOYEES	NUMBER OF CLASSROOMS	PARKING RATIO	PARKING REQUIRED
Greenbrier Elementary School	Elementary School	86	23	1 space per classroom plus 2 spaces per employee	195
Total Parking Required					195
Total Parking Provided					75
Parking Surplus/(Deficit)					120 (61.5% reduction in required parking)

As outlined above, a parking variation is required.

Response: The School District is asking for a parking variation of 120 spaces as calculated above and in the traffic study.

Landscape:

1. Per Chapter 28, Section 6.15, the ends of all parking rows must include 4" caliper shade trees. Provide a 4" caliper shade tree within existing islands where trees are absent.

Response: 4" caliper shade trees are added to Landscape Plan L1.01 where trees are absent.

2. Per chapter 28, Section 6.15-1.2a, a three foot high screen must be provided in order to screen the parking/paved areas that are adjacent to the public way. Provide a three foot high screen along Roanoke and Verde where the code required screen is absent.

Response: A three foot high screen is added to Landscape Plan L1.01 along Roanoke where the parking is adjacent to the street.

3. It is recommended that foundation planting be provided along the Verde and Roanoke frontage. The landscaping should consist of a mix of shrubs and perennials.

Response: Plantings are added at the building foundation at the corner of Roanoke and Verde. The approach is similar to the recent Windsor School project where plantings were added at the building foundation at the corner of Miner and Windsor.

4. If there are any utility meters or mechanical units, they must be screened with landscaping or another appropriate method of screening.

Response: There is an existing transformer where the building fronts Verde Drive. The existing deciduous hedge screening the transformer is to remain.

Public Works:

5. Ensure that all sidewalks are returned to satisfactory condition at the completion of construction.

Response: The plans shall be noted that all sidewalks adjacent to the construction area shall be returned to satisfactory condition, as accepted by the owner, upon completion of construction.

6. The existing RPZ on the Fire Line is obsolete and needs replacement.

The backflow preventer will be replaced in the project.

7. There is currently no RPZ on domestic service. A new RPZ must be installed on domestic service.

A new backflow preventer was installed last summer at Greenbrier School. The backflow preventer is in compliance with Village of Arlington Heights standards, Zurn Wilkins model 375AST. Pictures are enclosed.

8. Ensure proper separation between water, sewer and storm sewer.

There is no new incoming water service as part the addition. The existing water service and existing building sewers appear to be in compliance with the required separation indicated. There is a 6" water service that enters near the north wall of the sprinkler room, and there are existing storm and sanitary sewers that run east-west in corridor 183. There appears to be at least 10 feet of separation between the wall of sprinkler room and the corridor 183.

9. Construction water usage from hydrants is not allowed without opening an account and obtaining proper hydrant meter from Public Works.

There will be no construction water usage from hydrants.

10. Verify condition of curb adjacent to parking lot construction. Repair as necessary.

Eriksson: The condition of the curb adjacent to the parking lot construction shall be verified prior construction. The plans shall be noted such that any curb damaged near the area of asphalt removal and replacement shall be repaired to the satisfaction of the owner at no additional cost to the owner.

Engineering Department:

11. The location of the new proposed 10 diagonal spaces north of the Roanoke Drive driveway along the east side of the drop off/pick up area will pose the following problems:
 - a) Cars entering the lot will immediately be confronted with potential cars trying to back out into two-way traffic both coming into and leaving the parking lot.
 - b) If southbound cars in queue trying to leave the lot, there is not enough room for any vehicles to back out of these stalls in the remaining pavement of this 24' drive aisle.
 - c) The potential exists that cars backing out of these stalls could try to loop wide and orient their cars to aim southbound and pull right out to avoid having to loop around the entire lot.

Response: The School District is aware of the above stated concerns and will limit these parking areas to staff that will arrive before the morning arrival and depart after the afternoon dismissal periods. There are limited areas available on this site to add parking to get additional off-street parking.

12. The existing parking stalls in the far west side of the lot up against the park area are substandard depth according to Village Code.

Response: The west parking lot was built in 1995 with 60 degree parking, 18 foot stall depth, and 18 foot aisles per industry standards at the time when schools were not required to follow the Zoning Code requirements. The Village Zoning Code requires 20 foot stall depths for 60 degree parking and 18 foot aisles. In order to meet the Village Code, the parking lot would have to be widened six feet in the east-west direction. The lot is hemmed in by the existing school building to the east and the property line with the park district to the west.

The School District desires to maintain the existing parking dimensions and will request a parking lot dimension variation in stall depth (20 feet vs 18 feet) in order to not lose on-site parking stalls.

13. The proposal to restrict the exit from the Roanoke driveway to right turn out forces additional daily school traffic into a portion of the neighborhood that has not been affected by the bulk of school activities. Potential for complaints and pushback from those residents is anticipated.

Response: Agreed that the neighbors to the west will see additional school traffic. They will also benefit with the proposed changes to the traffic pattern by being able to go east to Verde Drive which is currently congested. The corresponding safety benefits of eliminating two-way traffic in a single traffic lane will benefit all users (school and neighborhood vehicles, bicyclists, and pedestrians).

14. Please indicate if any exterior light fixtures are going to be mounted to the building, and provide associated catalog cut sheets and photometric lighting diagram data. All exterior fixtures must be "Night Sky" compliant.

Response: New wall mounted exterior light fixtures will be provided at the addition. Also, new wall mounted exterior light fixtures will replace existing light fixtures in the courtyard. The photometric plan, ES1.0 Site Plan – Electrical, is revised and a catalog cut sheet for the fixture, fixture 'W1,' is included with the response.

15. The magnitude of the parking variation is significant but this is a neighborhood school. The school's request to permit some of the teacher parking to occupy the street may not be possible. In fact, the south side of Roanoke Drive from Verde Drive 300' west, currently has a parking restriction. It is advised that any teacher parking be guided to the north side of Roanoke Drive west of the school, adjacent to the park.

Response: There was limited room to add on-site parking without impacting the school's outside play areas. Staff will be directed to park on the north side of Roanoke Drive west of the school, adjacent to the park as suggested.

Please contact me at 312-242-4168 or don@strpartners.com with any questions.

Sincerely,



Don Hansen, AIA, LEED AP
Senior Project Manager

cc: Ryan Schulz, Arlington Heights School District 25



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: Greenbriar Elementary School, 2330 N Verde Dr., Special Use Permit to Allow an Addition and Renovations as well as Variances for Parking, Side Yard Setback and Impervious Surface Coverage.

PC #: 17-007 – Round 2

Date: August 9, 2017

Sam:

I have reviewed the documents submitted for the above referenced project and have no objections.

Memorandum

To: Sam Hubbard, Planning and Community Development
From: Cris Papierniak, Assistant Director of Public Works
Date: August 11, 2017
Subject: 2230 N Verde, P.C. #17-007 Round 2



With regard to the proposed variances, I have the following comments:

VAHPW has no further comments at this time.

If you have any questions, please feel free to contact me.

LF

C. file

PLAN COMMISSION PC #17-007
2230 N. Verde Drive
Special Use Permit for an Elementary School, Setback
Variation, Parking
Round 2

16. The response to Engineering comment #11 is acceptable if the stalls are posted for teacher parking only during school hours.
17. The response to Engineering comment #12 is acceptable if bumper overhang and overlapping stall interlock is applied. The configuration functionally operates although not striped in exact conformance with Code provisions.
18. The response to Engineering comment #13 requires notification and review during the presentation to the neighborhood for their consideration.
19. The response to Engineering comment #14 requires the submittal of catalog cut for all fixtures being mounted in the parking lot or affixed to the building, and can be handled during final engineering.
20. The response to Engineering comment #15 is satisfactory.
21. Please provide feedback from MWRD regarding detention/volume control.

 8/14/17
James J. Massarelli, P.E. Date
Director of Engineering

ARLINGTON HEIGHTS POLICE DEPARTMENT

Community Services Bureau

DEPARTMENT PLAN REVIEW SUMMARY

Greenbrier School – 2330 N. Verde Dr.

PC#17-007

Round 2

Round 1 Review Comments

8/10/2017

1. Character of use:

The character of use should not be problematic.

2. Are lighting requirements adequate?

Lighting should be up to the Village of Arlington Heights code. Per the Administration at District 25, new lighting will be provided in the new construction area. Video cameras will also monitor the area that is currently under construction.

3. Present traffic problems?

Currently there are very few reported traffic issues with student drop-off and pick-up at Greenbrier School. Added parking and a no left turn sign onto Roanoke from the west lot should help alleviate some of the minor traffic problems at the school. This plan is in place in the Greenbrier Traffic and Parking Study.

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.

The traffic problems are minimal at Greenbrier.

6. General comments:

-Potential problem areas were addressed by District 25 Administration.

RECEIVED

AUG 08 2017

**PLANNING & COMMUNITY
DEVELOPMENT DEPARTMENT**

R. Veenstra #235

Rick Veenstra, School Resource Officer
Community Services Bureau

Approved by:

D. Hay #557

Supervisor's Signature

Planning & Community Development Dept. Review

August 9, 2017



REVIEW ROUND 2

Project: 2330 N. Verde Drive – School District 25
Greenbrier Elementary School

Case Number: PC 17-007

General:

21. The response to items #7 - #9 and #12, and #14 - #20 are acceptable.
22. The response to #10 and #11 is noted. However, the proposed 6' tall fence that staff is referring to is located on the subject property. Specifically, it is the fence that encloses the newly created courtyard area. Therefore, the Variation is still required.
23. The response to #13 is noted. Staff notes that the demolition/removal of the light pole is not shown on the Engineering plans, and the placement of the relocated light pole is not reflected on the Engineering plans.
24. Staff has no further comments or objections.

Prepared by: SAM JUREK

**DEPARTMENT REVIEW TRANSMITTAL
FOR PLAN COMMISSION HEARING REVIEW**

**2330 N. Verde Dr.
Special Use Permit for an Elementary School, Setback Variation, Parking
Variation**

PC#17-007

Round 2

**(Please use attached department comment forms or use attached sheets:
REVIEW COMMENTS CANNOT BE WRITTEN ON THIS SHEET.)**

To: Department Heads

1	Building	
1-A	Building – Fire Safety Supervisor	
2	Public Works	
3	Engineering / Traffic	
4	Fire	
5	Police	
6	Health	
7	Planning	
7-A	Planning / Landscaping	X
8	Design	

From: Sam Hubbard, Planning & Community Development
Re: P.C. # 17-007
Project Name: Greenbrier School Addition
Project Location: 2330 N. Verde Dr.
Transmitted On: 7/5/17

NO COMMENTS
8/11/17 @DM

Attached are the petitioner's:

 X Response to your Round 1 review comments and revised plans for a Round 2 review.

**Please review, comment, and return to Sam Hubbard
in the Department of Planning & Community Development by 8/10/17**

**Thank you for your assistance and cooperation!
Call Sam with any questions at extension 5223.**

August 17, 2017



17. The response to Engineering comment #12 is acceptable if bumper overhang and overlapping stall interlock is applied. The configuration functionally operates although not striped in exact conformance with Code provisions.

The striping of the center parking aisle has been revised to a 60° interlock configuration.

21. Please provide feedback from MWRD regarding detention/volume control.

We are currently working with AHSD #25 and the AHPD in order to set precedence for the existing storage volume allotted to the AHSD #25 within the regional facility based on the existing site conditions of the portion of the Greenbrier property that is directly tributary to the regional stormwater management facility via the 1995 stormwater conveyance improvements.

A letter is being drafted for the AHPD that states and acknowledges that a specific volume of stormwater management exists within the regional facility and is allotted to the AHSD #25 Greenbrier property.

The IFB drawings have proposed expanding the volume of the existing regional facility by an additional 0.10 ac-ft of storage, similar to what was done associated during the 1995 site improvements. For our initial MWRD submittal we will be proposing that additional required storage volume is satisfied by the proposed, on-site volume control storage, thus proposing no modifications to the existing AHPD property.

PLAN COMMISSION PROJECT TIMELINE

Project Name: Greenbrier School Addition

PC Number: 17-007

Location: 2330 N. Verde Dr.

Requested Action:

1. Special Use Permit to allow an existing Elementary School within the R-3 District.
2. Section 5.1-3.6, to allow an exterior side yard setback of 13.2' for the existing building where code requires a 40' exterior side yard setback.
3. Section 11.4-4, to allow 75 parking spaces where code requires 195 parking spaces.
4. Section 6.5-2, to allow an accessory structure (shed) in the side yard where code requires all accessory structures to be located in a rear yard.
5. Section 6.13-3(a), to allow a 6' tall open fence in the side yard where code restricts fence heights to a maximum of 5' in the side yard.
6. Section 11.2-8, to allow the existing 18' deep 60° degree angled parking rows where code requires a minimum depth of 20' for 60° degree angled parking rows.

	Date	# of Business Days
Preliminary Meeting with Applicant	06/07/17	-
Conceptual Plan Review Committee Meeting	06/28/17	16
Awaiting Petitioner PC Application	07/05/17	3
PC Application Submittal Date	07/05/17	-
1 st Round Department Comments	07/19/17	11
Petitioner's Response – 1 st Round	07/31/17	8
2 nd Round Department Comments	08/15/17	11
Petitioner's Response – 2 nd Round	08/17/17	2
PC Hearing	08/23/17	36 days from application date
Village Board	09/05/17	8
Anticipated Village Board Ord. Adoption	09/18/17	9



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

Bid Section

Item:

Bid Opening Date:

Account Numbers:

Total Budget for Specific Item:

Bid Amount: