



Village of Arlington Heights
Plan Commission
Board Room, 3rd Floor
Arlington Heights Village Hall
33 S. Arlington Heights Road
Arlington Heights, IL 60005
February 13, 2019
7:30 PM

I. CALL TO ORDER

II. ROLL CALL

III. APPROVAL OF MINUTES

- A. Westgate Park & Shop - 1/23/19

IV. PUBLIC HEARINGS

- A. 7-Eleven Gas Station - 1650 W. Algonquin Rd. - PC#18-026
Special Use Permit for Auto Service (Gas) Station, Variation

V. OTHER BUSINESS

VI. 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: Westgate Park & Shop - 1/23/19

Department: Planning & Community Development

ATTACHMENTS:

Description	Type
Westgate Park & Shop - 1/23/19	Minutes

PLAN

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

COMMISSION

RE: WESTGATE PARK & SHOP - 1531 - 1711 WEST CAMPBELL STREET - PC# 18-027
REZONING FROM B-1 TO B-2 AND VARIATION

REPORT OF PROCEEDINGS had before the Village of
Arlington Heights Plan Commission Meeting taken at the Arlington Heights Village
Hall, 33 South Arlington Heights Road, 3rd Floor Board Room, Arlington Heights,
Illinois on the 23rd day of January, 2019 at the hour of 7:30 p.m.

MEMBERS PRESENT:

TERRY ENNES, Chairman
LYNN JENSEN
MARY JO WARSKOW
JOE LORENZINI
GEORGE DROST
JOHN SIGALOS
JAY CHERWIN

ALSO PRESENT:

SAM HUBBARD, Development Planner
JACOB SCHMIDT, Assistant Planner

CHAIRMAN ENNES: The meeting of the Arlington Heights Plan Commission is called to order. Would you all please rise and join us in the pledge of allegiance?
(Pledge of allegiance recited.)

CHAIRMAN ENNES: Thank you. Please be seated. Can we please have the roll call?

MR. SCHMIDT: Commissioner Cherwin.

COMMISSIONER CHERWIN: Here.

MR. SCHMIDT: Commissioner Dawson.

(No response.)

MR. SCHMIDT: Commissioner Drost.

COMMISSIONER DROST: Here.

MR. SCHMIDT: Commissioner Green.

(No response.)

MR. SCHMIDT: Commissioner Jensen.

COMMISSIONER JENSEN: Here.

MR. SCHMIDT: Commissioner Lorenzini.

COMMISSIONER LORENZINI: Here.

MR. SCHMIDT: Commissioner Sigalos.

COMMISSIONER SIGALOS: Here.

MR. SCHMIDT: Commissioner Warskow.

(No response.)

MR. SCHMIDT: Chairman Ennes.

CHAIRMAN ENNES: Present. Okay, Sam, have all public notices been issued and given?

MR. SCHMIDT: Yes, they have.

CHAIRMAN ENNES: The meeting and the project?

MR. SCHMIDT: Yes, they have.

CHAIRMAN ENNES: I see we have our Petitioner here. Would you please rise and come forward and tell us about your, well, actually before I get that started, we have some minutes we have to approve. And we have another Commissioner walking in, Commissioner Warskow. My apology.

Okay, we have minutes from our last meeting. Is there a motion to approve those?

COMMISSIONER SIGALOS: I'll make that motion.

CHAIRMAN ENNES: Second?

COMMISSIONER WARSKOW: I'll second.

CHAIRMAN ENNES: All in favor?

(Chorus of ayes.)

CHAIRMAN ENNES: Anyone opposed?

(No response.)

CHAIRMAN ENNES: So the motion carries.

COMMISSIONER DROST: And I wasn't at that meeting, so I wasn't voting here.

CHAIRMAN ENNES: Okay, so you abstain?

COMMISSIONER DROST: I could.

CHAIRMAN ENNES: Okay, would our Petitioner please come forward? If I can ask you to please state your name and spell it for our court reporter?

MR. SCHWARTZ: Michael Schwartz from the Westgate Shopping Center, S-c-h-w-a-r-t-z.

CHAIRMAN ENNES: Thank you. I'd like to swear you in.
(Witness sworn.)

CHAIRMAN ENNES: Thank you. Would you please tell us about your project?

MR. SCHWARTZ: We're requesting a rezoning of the center from a B-1 to B-2 General Business District. We're also seeking a variation to waive a parking and traffic study for our expansion of Fitness 19. I think we've been before you with more details on the project, but I'll be glad to fill in on anything that I can.

CHAIRMAN ENNES: Okay, did you want to tell us why you're looking for the parking waiver?

MR. SCHWARTZ: Well, we've gone through this twice before and not too long ago, and I would rather avoid a third one. It just will be redundant I think.

CHAIRMAN ENNES: Okay, that's all you have?

MR. SCHWARTZ: Pretty much, yes.

CHAIRMAN ENNES: So, please be seated then. If we can have the Staff report?

MR. SCHMIDT: Certainly. As the Petitioner stated, he's seeking a rezoning of the Westgate Park & Shop Shopping Center. The address of the subject property is 1531 through 1711 West Campbell Street. The current zoning of the property is B-1 Business District Limited Retail, and the site is designated for commercial uses in the Comprehensive Plan. Both the current and proposed zoning is compatible with this designation. The requested action, more specially put, is a rezoning from B-1 Business District Limited Retail to B-2 General Business District. As part of this petition, one variation has been requested, that being a variation from Chapter 28, Section 6.12-1, to waive the requirement for a traffic and parking study prepared by a qualified professional engineer.

The subject property is located at the southeast corner of Wilke and Campbell Street. It is bordered to the, rather it is accessible via four driveways, two along Campbell Street and two along Wilke Road. It is bordered to the north by an existing B-2 Zoning District which encompasses another shopping center, Wilke Commons, a gas station, a medical office building, and a restaurant. The property is also bordered on the north by a dental office zoned B-1 and single family uses zoned R-3. To the east, the property is bordered by single-family uses also in the R-3 Zoning District. It is bordered to the south by an office park zoned B-1, and across Wilke Road to the west, the property is bordered by single family uses in the city of Rolling Meadows.

The impetus for this project is a proposed expansion of Fitness 19. B-1 zoning does not permit health club facilities by right or via a special use permit; however, Fitness 19 does operate lawfully via a land use variation granted in 2009. This land use variation was amended in 2013 in order to accommodate an expansion, and recently Fitness 19 has proposed another expansion to an adjacent tenant space which is currently vacant. As this expansion is relatively substantial, approximately a 23 percent increase in floor area, another

amendment to the land use variation would be required in order to expand the facility. Rather than amending the land use variation, the Petitioner, the owner Westgate is proposing a rezoning of the entire property to B-2. B-2 does allow health club uses by right which would completely negate the need for a land use variation for Fitness 19.

In addition to allowing Fitness 19 to expand, B-2 zoning does allow 18 additional permitted uses and 14 special uses compared to B-1 zoning, which enables the Petitioner to have greater flexibility in the future with recruiting tenants. B-2 zoning is also consistent with similar shopping centers in other areas of the Village as well as with the properties to the north previously mentioned. Aside from the internal expansion of Fitness 19, no other changes are proposed to the site or overall structure at this time.

With respect to parking, the site does provide code-required parking for all uses within the shopping center. For all uses including the expanded Fitness 19, 208 spaces are required. As the shopping center currently provides 234 spaces on site, there is a 26-space surplus of code-required parking. While a variation is being sought from the provision of a full traffic and parking study, the Petitioner did provide a parking survey conducted by staff members of Fitness 19 showing the occupancy and available spaces for parking at the subject site on eight days in September and October of 2018. While the survey was relatively limited with only one count per day, it did encompass a wide variety of hours, both morning, afternoon and night. So, Staff believes that this paints an adequate picture of what the available parking is at the site at any given time. Peak parking lot utilization was observed to have occurred on Tuesday, October 2nd, 2018, at 10:24 a.m. when 109 vehicles were observed to be accessing the site. This resulted in the availability of 125 parking spaces.

Lastly, as Fitness 19 is expanding, there is an increase in vehicular parking required at the site which does trigger the provision of required bicycle parking. Also, as this petition involves the rezoning of the entire shopping center, provision of required bicycle parking for the entire shopping center is required. The table in the bottom left-hand corner details the required bicycle parking for all uses within the shopping center broken down by gross square footage by use: retail, general office, medical office, restaurant, health club and beauty shop. Adding up the total required bicycle parking for all these uses, a total of 10 bicycle parking spaces is required. Currently, there is a six-space bicycle parking rack just outside of the Fitness 19 tenant space. However, as this does not meet the 10-space bicycle parking requirement, as part of this petition, the Petitioner shall agree to provide adequate bicycle parking for required bicycles at this site.

With respect to the traffic and parking study, code does require with few allowances that any petition coming before the Plan Commission does need to provide a full traffic and parking study. The Petitioner has requested a variation from this requirement and Staff does support this variation. Firstly, because an assessment of parking prepared by a certified traffic engineer has previously been provided for the initial approval of Fitness 19, additionally, no major changes have recently occurred at the site that impact either provided parking or circulation at the site. The site also has immediate access to Wilke Road which has four lanes and designated a secondary arterial per the Village's Thoroughfare Plan. With respect to parking, the site has a surplus of required vehicular parking per code, and the Petitioner did provide a parking survey which demonstrates adequate spaces are provided at the site.

On the note of signage, it should be noted that the subject site did

receive a sign variation in 2015 that granted a three-year window to remove and replace the existing multi-tenant ground sign on Campbell Street. This replaced sign would take the form of either a modified Walgreen's sign which is currently on Wilke Road, this modified sign is detailed in the concept at the top right-hand corner, or it would take the form of a replaced Walgreen's sign as detailed in the bottom right-hand corner. This three-year window did expire on September 8th, 2018, and currently the Building Department is handling enforcement of the allowances granted through the sign variation. The Petitioner has stated that he has been in negotiations with Walgreen's regarding the removal and replacement of both ground signs. However, no action has been taken as of yet.

Bearing all this information in mind, the Staff Development Committee recommends approval of the requested rezoning from B-1 to B-2 and the requested variation. This recommendation is subject to two conditions, those being that 10 bicycle parking spaces shall be provided at the subject site, and the second being that the Petitioner shall comply with all federal, state and Village codes, regulations and policies.

This concludes my presentation. If there are any questions, I'm happy to answer.

CHAIRMAN ENNES: Thank you, Jake. Can we have a motion to approve the Staff report?

COMMISSIONER LORENZINI: I'll make that motion.

CHAIRMAN ENNES: And a second?

COMMISSIONER DROST: I'll second that motion.

CHAIRMAN ENNES: All in favor?

(Chorus of ayes.)

CHAIRMAN ENNES: Anybody opposed?

(No response.)

CHAIRMAN ENNES: Anybody abstaining? Okay, thank you for that report. I do have one other question before we get going with the Commissioners. If I could ask the Petitioner to come back up? I should have asked you when you were up before, you're still under oath obviously, you're aware of the two conditions that the Planning Department has put on their recommendation and approval?

MR. SCHWARTZ: Yes.

CHAIRMAN ENNES: And you're agreeable to both of those?

MR. SCHWARTZ: I believe our bicycle rack holds 10, the one that's existing there. I didn't, I wanted to personally count it before the meeting but I was a little late because of the traffic.

CHAIRMAN ENNES: Bikes from both sides?

MR. SCHWARTZ: I'm told that on both sides it will hold 10, it's a 10-rack that's existing now.

CHAIRMAN ENNES: Okay, I'm sure that will work with them. Okay, thank you. Sorry for that confusion. While he's up here, does anyone have questions for the Petitioner? Let's start down here on the north end.

COMMISSIONER CHERWIN: No, I have none, thank you.

COMMISSIONER SIGALOS: No, I was at, I attended the Comprehensive Plan Review meeting. I'm familiar with the project so I have no further questions.

COMMISSIONER DROST: Yes, what's the secret sauce for Fitness 19?

CHAIRMAN ENNES: Yes, they're doing good there.

COMMISSIONER DROST: Yes.

AUDIENCE MEMBER: Community, I guess. They welcomed us.

COMMISSIONER DROST: Yes, and time for sort of retitling rights on the center? I mean, it's getting pretty close to the size of Walgreen's. My theory was that with Kilwins coming, that Fitness 19 is going to be a beneficiary. No other comments.

CHAIRMAN ENNES: Okay, that's it? I want to start down here on the south side.

COMMISSIONER JENSEN: I don't have any questions.

CHAIRMAN ENNES: Okay.

COMMISSIONER WARSKOW: I just have one request to make. I think there is still a decision whether there are 10 existing or six existing. If we find out there is a need for bike parking --

MR. SCHWARTZ: We'd be happy to add as many as possible.

COMMISSIONER WARSKOW: Okay, because I have to tell you I do live in the Westgate area and I do --

MR. SCHWARTZ: You bike?

COMMISSIONER WARSKOW: I live in the Westgate area and I do regularly bike to Walgreen's and Ace Hardware to do slight small shopping and have ridden my bike there and have not found a place to park it at the other end of the shopping center near Walgreen's.

MR. SCHWARTZ: The bike rack was conveniently located near where we thought the people were exercising, which is at the other end of the center. But you're right, it would be nice to have something in the Walgreen's spot, except that they have less sidewalk area. But I will certainly look into it. I'd like to --

COMMISSIONER WARSKOW: Yes, we have the side at the Red Box.

MR. SCHWARTZ: I'd like to add that perhaps, yes.

COMMISSIONER WARSKOW: Okay, that's all I have for you.

MR. SCHWARTZ: Thank you.

COMMISSIONER WARSKOW: Other than that, I'm very supportive.

CHAIRMAN ENNES: Joe?

COMMISSIONER LORENZINI: Yes. Actually, my question is for Jake. So, in Appendix A, it lists the 18 permitted uses. So, if one of these uses came in, he would not have to come back to this Commission?

MR. SCHMIDT: It depends. There are some uses on that list that would likely require an amendment to the PUD. As an example, theaters are listed on that list; if a major Cineplex were to come in, it would likely require modifications to the site that would trigger a PUD amendment. That would require, of course, Plan Commission review and approval, same as this rezoning does. But other uses on that list, ones that wouldn't require site modifications could move in without any additional approvals aside from a business license.

COMMISSIONER LORENZINI: Okay, so what's the difference between what the Petitioner would have to do for permitted uses and special uses?

MR. SCHMIDT: Special uses do require Plan Commission review and approval.

COMMISSIONER LORENZINI: All of the special uses? Okay.

MR. SCHMIDT: Correct.

COMMISSIONER LORENZINI: All right, that's all I have. Thank you.

CHAIRMAN ENNES: To follow-up on that question, how does the Petitioner know which, because there are a number of intense uses there that could affect residential neighbors to the rear, especially when this property has a relatively narrow buffer behind the building, and I think one of my thoughts was a theater, too. If you had a theater in there, a major one or just, you know, one theater, I don't know that anybody opens those anymore, but the noise from that could be something that could be a problem for neighbors. How does the Petitioner know which, what type of uses they would have to come back to the Village for?

MR. SCHMIDT: Well, special uses would immediately require that, whether we would detect the need for Plan Commission review, either a tenant permit or a tenant business license submittal. So, prior to having any approval to actually move in or build out the space, we'd be able to identify that need, especially if a site plan came in. For example, removing parking and adding multiple theater rooms, that's something we would detect and let the Petitioner know the requirement for. I'm sure the Petitioner would also reach out to us with any major project in advance to make sure he'd be able to approve it and if he needed any additional approval.

CHAIRMAN ENNES: This Petitioner might, but we know other petitioners just do it. Okay, in your report under Zoning and Comprehensive Plan, when you talk about the difference in the other allowable uses which would include health clubs, it says 'and 14 additional special uses.' Does that list categorize those other more intense uses as special uses? Are they broken out in that? Okay.

MR. SCHMIDT: Yes, they are.

CHAIRMAN ENNES: Then I'm fine. So, he has a way of finding out if they would be or they wouldn't be.

MR. SCHMIDT: Yes, and it's also in the Village Code.

CHAIRMAN ENNES: Okay, thanks. So, a question for the Petitioner. The sign issue, it sounds like it's been delayed or not getting resolved. What seems to be the problem that's holding that up? Is this an issue with --

MR. SCHWARTZ: It's a very knotty issue and I don't think it was addressed properly when we were before the Board on it. The sign is, first of all, the sign is 25 years old or more. It's been there for a long, long time. But Walgreen's, in order to close their deal, insisted that they have a corner sign.

CHAIRMAN ENNES: Is this a renewal, a lease renewal?

MR. SCHWARTZ: No, no, this was when they first signed their lease with us about 20 years ago.

CHAIRMAN ENNES: Oh, okay.

MR. SCHWARTZ: In fact, I think it was almost exactly 20 years ago. At any rate, and I wasn't present for any of this and I really wasn't aware of most of it, but apparently, the only way to get their sign was to get a special variation for the other sign because the first sign was too close. We got that variation at that time, but I guess it had a caveat that when the food store left or when it wasn't --

CHAIRMAN ENNES: Were they on that sign also?

MR. SCHWARTZ: It was granted for the food store, at the time it was

Elliott's Dairy, and they let them have the sign. But supposedly when they left, we were supposed to take it down, or I'm not sure what the exact thing was. But we were never, I took over the year after that and we never had any notification from the city of any kind that this was going on until Fitness 19, who had it in their lease to use that sign, went to use it and found out that, oh, it didn't meet code. Gosh, this is kind of a circular argument.

But anyway, the point is that the corner sign is owned by Walgreen's. They built it, they own it, it's their sign. What they do with it, we've been after them for three years since this first happened. I've called them almost every month, and every month I get another somebody stalling me on this, you know. You know what, at the time that we went before the Board, who would have predicted that Walgreen's would become, you know, an international company and suddenly have their stock go to the toilet.

CHAIRMAN ENNES: They're very sensitive to their signs.

MR. SCHWARTZ: Things have changed. They originally asked us, they begged us to get an electronic sign in there and we thought this was going to be slam dunk deal. Well, when I came to them and said now you can have it, they said now we can't afford it. Now we can't do it, now we don't want it anymore. I only got that final, final word in October. That was the last, and this was after, believe me, years of going back and forth with them. Finally they said no, just, you know, keep it the way it is.

CHAIRMAN ENNES: Well, maybe the Village Board can help you if we give them a suggestion through our minutes.

MR. SCHWARTZ: I would love to, you know, to have any, but it's, you know, for us they're an 800-pound gorilla, a 900-pound gorilla.

CHAIRMAN ENNES: But maybe they can make this approval subject to giving you approval for this, what did you say, a digital sign?

MR. SCHWARTZ: They want a digital sign. I mean, they wanted a digital sign.

CHAIRMAN ENNES: But it's now --

MR. SCHWARTZ: Yes, but now they don't seem to. So, I don't know.

CHAIRMAN ENNES: They're pretty sharp, maybe they can think of something to help you along with that. Anyways --

MR. SCHWARTZ: At any rate, I thank you all for your consideration this evening. Thank you.

CHAIRMAN ENNES: I still have to --

MR. SCHWARTZ: Sure.

CHAIRMAN ENNES: So, there's currently a land use variation on the property. If we approve the change in the zoning, do we have to take any official action to terminate that land use variation?

MR. SCHMIDT: No, it's no longer necessary given the zoning of the property.

CHAIRMAN ENNES: So, it would just go away on its own?

MR. SCHMIDT: Yes.

CHAIRMAN ENNES: Let's see. Okay, that's all I have if you want to be seated.

MR. SCHWARTZ: Thank you again.

CHAIRMAN ENNES: I notice we have some people in the audience who

might like to make a comment. Is there anybody that would like to ask a question? Okay, so we don't need a public comment section.

COMMISSIONER DROST: So, I'll recommend a motion then?

CHAIRMAN ENNES: That sounds like a proper thing to do.

COMMISSIONER DROST: Yes, I'll recommend a motion.

A motion to recommend to the Village Board of Trustees approval of PC# 18-027, a Rezoning from B-1, Business District Limited Retail, to B-2, General Business District, and the following variation:

- 1. Chapter 28, Section 6.12-1, to waive the requirement for a traffic and parking study prepared by a qualified professional engineer.**

Approval shall be subject to the following conditions:

- 1. 10 bicycle parking spaces shall be provided on the subject site.**
- 2. The Petitioner shall comply with all federal, state and Village codes, regulations, and policies.**

COMMISSIONER CHERWIN: I'll second.

CHAIRMAN ENNES: So, we have a motion and a second. Any questions, comments? Can we have a roll call vote?

MR. SCHMIDT: Commissioner Dawson.

(No response.)

MR. SCHMIDT: Commissioner Drost.

COMMISSIONER DROST: Aye.

MR. SCHMIDT: Commissioner Green.

(No response.)

MR. SCHMIDT: Commissioner Jensen.

COMMISSIONER JENSEN: Yes.

MR. SCHMIDT: Commissioner Lorenzini.

COMMISSIONER LORENZINI: Yes.

MR. SCHMIDT: Commissioner Sigalos.

COMMISSIONER SIGALOS: Yes.

MR. SCHMIDT: Commissioner Warskow.

COMMISSIONER WARSKOW: Yes.

MR. SCHMIDT: Commissioner Cherwin.

COMMISSIONER CHERWIN: Yes.

MR. SCHMIDT: Chairman Ennes.

CHAIRMAN ENNES: Yes. So, you have a unanimous approval from us and you can move right up on to the Village Board for final approval. Thank you very much for coming in.

We have nothing else on the agenda this evening. No pay raise, although the discussion is out there as it has been for, what, 15-20 years.

COMMISSIONER LORENZINI: To go which way?

CHAIRMAN ENNES: Whether we still exist. If I can have a motion to adjourn? If you guys are so inclined?

COMMISSIONER JENSEN: So moved.

CHAIRMAN ENNES: And a second?

COMMISSIONER CHERWIN: Second.

CHAIRMAN ENNES: All in favor?

(Chorus of ayes.)

CHAIRMAN ENNES: Anybody abstaining or opposed?

(No response.)

CHAIRMAN ENNES: This meeting is adjourned. Thank you very much.

(Whereupon, the above-mentioned petition was adjourned at 7:55 p.m.)



Item: 7-Eleven Gas Station - 1650 W. Algonquin Rd. - PC#18-026

Department: Planning & Community Development

Requested Action

1. Special Use Permit to allow an Automobile Service Station with convenience store.

Variations Required

1. Chapter 28, Section 10.2-9, Access, to allow a 37' wide driveway entrance where code limits driveway entrances to 36' in width.

2. Chapter 28, Section 10.2-8, to reduce the required driveway width from 24' to 23'.

Recommendation

The Staff Development Committee reviewed the proposed special use permit to allow redevelopment of the site with a gas station including a convenience store, as well as the variation to Chapter 28 of the Municipal Code, Section 10.2-9, to allow for driveway entrances that are 37' wide where code restricts maximum driveway widths at 36', and a variation to Chapter 28 of the Municipal Code, Section 10.2-8 to allow a 23' wide drive aisle where code restricts the minimum width of a two-way drive aisle to 24', and recommends approval of the application subject to the following conditions:

1. At the request of the Village, the petitioner shall implement improvements to the ingress/egress along New Wilke Road to restrict full access to and from the subject property along this street.

2. At the request of the Village, the petitioner shall grant, and cause to be recorded, an access easement that provides two-way cross access to the property to the east, which shall only be required if and when the Taco Bell property provides reciprocal access to the subject property.

3. Deliveries and trash collection shall be prohibited between the hours of 10:00pm and 7:00am.

4. Compliance with the January 8, 2019 motion from the Design Commission

shall be required.

5. IDOT review and approval shall be required.

6. The petitioner shall comply with all Federal, State, and Village Codes, Regulations, and Policies.

ATTACHMENTS:

Description	Type
PC Staff Report	Board or Commission Report
Legal Notice	Exhibits
Aerial	Exhibits
Conceptual Plan Review Minutes	Minutes
DC Minutes 1/8/19	Minutes
DC Staff Report 1/8/19	Board or Commission Report
Project Narrative	Correspondence
Justification for Special Use	Correspondence
Plat of Survey	Exhibits
Neighborhood Meeting Summary	Correspondence
Architectural, Landscape, Photometric Plans	Exhibits
Engineering Plans	Exhibits
Lighting Cut Sheets	Exhibits
Traffic Study	Exhibits
Department Comments - Round 1	Exhibits
Department Comments - Round 1 - Petitioner Response	Exhibits
Department Comments - Round 2	Exhibits
Department Comments - Round 2 - Petitioner Response	Exhibits
Department Comments - Round 3	Exhibits



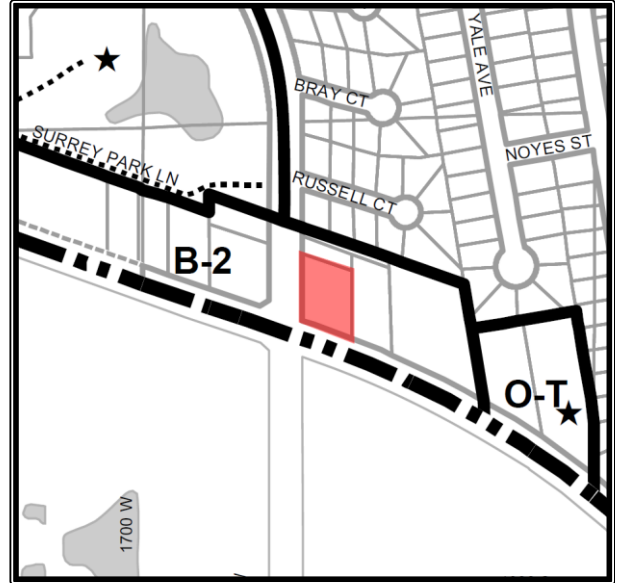
VILLAGE OF ARLINGTON HEIGHTS **STAFF DEVELOPMENT** **COMMITTEE REPORT**

File Number: PC 18-026
Project Title: 7-11 Gas Station
Address: 1650 W. Algonquin Rd.
PIN: 08-08-401-028

To: Plan Commission
Prepared By: Sam Hubbard, Development Planner
Meeting Date: February 13, 2019
Date Prepared: February 8, 2019

Petitioner: Vequity LLC Series XLVII 1650 Algonquin
Address: 400 N. State St. - Suite 400
 Chicago IL 60654

Existing Zoning: B-2: General Business District
Comprehensive Plan: Commercial



SURROUNDING LAND USES

Direction	Existing Zoning	Existing Use	Comprehensive Plan
North	B-2, General Business District	Vacant lot	Commercial
South	- City of Rolling Meadows -		
East	B-2, General Business District	Fast Food Restaurant (Taco Bell)	Commercial
West	B-2, General Business District	Gas Station (Mobil)	Commercial

Requested Action:

1. Special Use Permit to allow an Automobile Service Station with convenience store.

Variations Required:

1. Chapter 28, Section 10.2-9, Access, to allow a 37' wide driveway entrance where code limits driveway entrances to 36' in width.
2. Chapter 28, Section 10.2-8, to reduce the required driveway width from 24' to 23'.

Project Background:

The subject property is located at the northeast corner of West Algonquin Road and South New Wilke Drive and is composed of 29,406 square feet (0.68 acres) of land. Up until the end of 2018, the site was occupied by a Citgo gas station of approximately 2,000 square feet in size that was served by three parking spaces. This gas station has been demolished and the property currently sits as vacant land. Site access comes from two curb cuts along Algonquin Road and two curb cuts along Wilke Road. A raised barrier median is located on the middle of Algonquin Road, which prevents eastbound ingress/egress to and from the site. There is no raised median within New Wilke Drive, so the site currently operates with full access to this street. The property was annexed into the Village in 1977 and was already developed with a gas station at the time of annexation.

The property is currently under contract with Vequity, who is proposing redevelopment of the site with a 7-11 gas station (eight pumps) and a 3,062 square foot convenience store. Vequity is a developer/property manager of retail assets throughout the Midwest and is headquartered in downtown Chicago. The business would be open 24 hours a day, seven days per week. The store would have a total of approximately 7-10 employees, with 3-4 employees working at the site at any one time. The total number of parking spaces would increase to 13. The two access drives closest to the corner (one on New Wilke and one on Algonquin) would be eliminated as part of this redevelopment. Jurisdiction of Algonquin Road is with IDOT, and New Wilke is under the jurisdiction of the Village of Arlington Heights, with Algonquin classified as major arterial and New Wilke as a secondary arterial.

Conceptual Plan Review Committee:

The Conceptual Plan Review Committee (CPRC) met on November 28, 2018, to discuss the proposed development. The CPRC encouraged the petitioner to hold a neighborhood meeting with the nearby residents to understand any concerns about the proposed development, especially from the adjacent single-family homes at the north along Russell Court. The petitioner held this meeting and a summary of the meeting, as prepared by the petitioner, is a part of the Plan Commission packet. The CPRC said it would be important for the petitioner to incorporate a buffer along their northern property line to reduce headlight glare and potential disturbances to the single-family homes to the north. The minutes from the CPRC meeting have also been attached as part of the Plan Commission packet.

Zoning and Comprehensive Plan

The subject property is currently zoned B-2, General Business District, and gas stations (with or without convenience stores) are classified as special uses within the B-2 District. Since the subject property was already developed with a gas station prior to annexation into the Village, no special use permit was granted for the former use. Given the scope of the redevelopment, in combination with that fact that no special use permit has been granted for a gas station use on the subject property, the petitioner is required to obtain special use permit approval to authorize the proposed redevelopment of the site. In order to demonstrate compliance with the three criteria for special use permit approval (summarized below) the petitioner has provide a written response to the criteria, which was included in the information provided to the Plan Commission.

- **That said special use is deemed necessary for the public convenience at this location.**
- **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.**

- **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 with the petitioner that the necessary criteria for special use permit approval has been met for the following reasons: 1) the existence of a gas station on the property for the last thirty years illustrates that this use is necessary for the public convenience at this location, 2) the proposed gas station will close two of the four existing curb cuts to the site, whereby improving the safety of vehicular traffic within the vicinity, and 3) the 24-hour nature of the use is compatible with the surrounding commercial properties (the Mobil gas station across the street is 24-hours and the Burger King across the street is 24-hours) and, 4) the use is separated by a 50-foot wide landscape area and 30-foot wide drive aisle to the north where the site is adjacent to single-family residential homes. The Comprehensive Plan designates this property as “Commercial” and the proposed use is therefore compatible with the Comprehensive Plan.

The petitioner has stated that deliveries typically occur twice a week during standard business hours. These deliveries normally take between 30-45 minutes, and with exception to fuel deliveries, most deliveries are done by small box trucks. The B-2 District contains restrictions on delivery times in situations where a B-2 property abuts a residentially zoned property, but since the subject site is separated by 80’ of commercially zoned property in-between the site and the single-family homes to the north, the restriction does not apply to this property. However, given the proposed 24-hour use, staff recommends a condition of approval that prohibits deliveries and trash collection between the hours of 10:00pm and 7:00am, which is consistent with what would be required if the property directly abut the residential homes to the north.

A market study is not required since the proposal is to replace the recently demolished gas station/convenience store with an updated facility of a similar size, and the existence of the former gas station in this location for over thirty years, along with the desire to redevelop the site with a similar facility, adequately demonstrates a market demand for the use.

Additional Turn Lane

In conjunction with the City of Rolling Meadows and the Illinois Department of Transportation (IDOT), the Arlington Heights Engineering Division is planning for a new dedicated right turn lane on the north side of Algonquin Road abutting the subject property. This proposed turn lane will likely require land acquisition from the subject property, although the project is still in the early design stages and a plan has not been developed to show the configuration of this future improvement. At the request of staff, the petitioner has designed their site with this future improvement in mind and has incorporated a large landscaped buffer area in the southwest corner to accommodate for the right turn lane. Although the final design of this lane has not yet been determined, the buffer area on the site will preserve land for state acquisition and should still provide ample space for the new turn lane, a parkway with sidewalk (if acceptable to IDOT), and at least 3’ of perimeter landscaping along the edge gas station property. As a condition of approval, all proposed curb cut alterations will be subject to IDOT review and approval.

Building, Site, Landscaping:

Based on a comprehensive zoning analysis, the building conforms to all setback, bulk, and height restrictions as outlined within the B-2 district. However, two variations have been identified relative to the drive aisles:

- **Chapter 28, Section 10.2-9, Access, to allow a 37’ wide driveway entrance where code limits driveway entrances to 36’ in width.**

- **Chapter 28, Section 10.2-8, to reduce the required driveway width from 24' to 23'.**

Each variation must be justified as based on the four criteria for variation approval, which is summarized below:

- **The proposed use will not alter the essential character of the locality and will be compatible with existing uses and zoning of nearby property.**
- **The plight of the owner is due to unique circumstances, which may include the length of time the subject property has been vacant as zoned.**
- **The proposed variation is in harmony with the spirit and intent of this Chapter.**
- **The variance requested is the minimum variance necessary to allow reasonable use of the property.**

The driveway entrance width variation applies to both curb cuts (one along Algonquin Road and one along New Wilke Road). Staff believes this variation is acceptable since 1) it enhances the ability for fuel truck ingress and egress to/from the site and facilitates better maneuverability for Fire Department apparatus through the site, 2) the variation is for a one-foot increase above what is allowed by code, which is the minimum necessary to allow reasonable use of the property, and 3) final approval of the Algonquin Road curb cut will be subject to IDOT review and approval.

As requested by staff, the petitioner is providing access to the Taco Bell property to the east, and as part of Plan Commission approval, staff is recommending a condition that requires the petitioner to enter into a Reciprocal Easement Agreement with the owner of the Taco Bell site that will formalize the shared access between the two sites. A similar condition of approval was required of Taco Bell when redevelopment of that site was approved in 2018. Relative to the driveway width variation, staff believes that this variation is warranted for two reasons: 1) a similar driveway width variation was granted to the Taco Bell site and the 23-foot width will allow both driveways to align at the same width, and 2) given the likely land acquisition for the new right turn lane, the reduced width of the drive aisle will allow additional space for perimeter landscaping at the south of the side.

The petitioner has submitted a landscape plan showing the code required perimeter landscaping and parking lot landscape islands. Staff has requested that the petitioner install a 6-foot tall solid fence along a portion of the northern (rear) property line to shield headlight glare and litter from interfering with the residential properties to the north, and the petitioner has incorporated this fence within their plans. In the areas along the northern property line where the fence is not located, the petitioner has proposed a dense row of six-foot tall evergreen trees (Upright Junipers) to complete the screen along the northern property line. Staff notes that the petitioner has worked with staff to make improvements to the landscape islands and perimeter landscaping to create as much greenspace as possible on the site. Furthermore, the petitioner has agreed to remove exterior lighting on the rear of the building to reduce the impact of the development on the single-family homes to the rear of the site.

Parking and Traffic:

Per code requirements, the petitioner has provided a traffic study prepared by a professional traffic engineer. The study has concluded that the majority of traffic patronizing the gas station will be passerby traffic that is already travelling on either Algonquin Road or New Wilke Road. Therefore, new traffic to be generated by the proposed use will be minimal. Furthermore, the reduction of curb cuts on the subject property will improve traffic flow within the vicinity. However, the Engineering Division has expressed concern that the proposed full access driveway on New Wilke could be problematic for southbound ingress and egress to/from

the site. Therefore, the Village is recommending a condition of approval that would require the petitioner to make alterations to the site to restrict full access of along New Wilke (likely to a right-in/right-out only configuration), at the request of the Village. The petitioner has not objected to this potential restriction.

Relative to parking, the site complies with all code requirements and staff believes the proposed on-site parking to be sufficient. **Table I** below shows the parking calculations:

Table I: Parking Calculations

Tenant	Address	Use	Square Feet	Employees	# of Bays	Parking Ratio	Parking Required
7-11 with Gas Station	1650 W. Algonquin Rd	Retail	3,062	N/A	N/A	1 per 300 SF	10
		Auto Service Station	-	4	No service bays	One per employee + three per service bay	4
TOTAL SQUARE FOOTAGE			3,062	PARKING REQUIRED			14
PARKING PROVIDED *							21
SURPLUS / (DEFICIT)							7

* Includes 8 parking spots at gas pumps

Per the Village's recently adopted bicycle parking regulations, two bicycle parking spaces must be provided on the site and the petitioner has included the required onsite bicycle parking spaces.

RECOMMENDATION

The Staff Development Committee reviewed the proposed special use permit to allow redevelopment of the site with a gas station including a convenience store, as well as the variation to Chapter 28 of the Municipal Code, Section 10.2-9, to allow for driveway entrances that are 37' wide where code restricts maximum driveway widths at 36', and a variation to Chapter 28 of the Municipal Code, Section 10.2-8 to allow a 23' wide drive aisle where code restricts the minimum width of a two-way drive aisle to 24', and recommends approval of the application subject to the following conditions:

1. At the request of the Village, the petitioner shall implement improvements to the ingress/egress along New Wilke Road to restrict full access to and from the subject property along this street.
2. At the request of the Village, the petitioner shall grant, and cause to be recorded, an access easement that provides two-way cross access to the property to the east, which shall only be required if and when the Taco Bell property provides reciprocal access to the subject property.
3. Deliveries and trash collection shall be prohibited between the hours of 10:00pm and 7:00am.
4. Compliance with the January 8, 2019 motion from the Design Commission shall be required.
5. IDOT review and approval shall be required.
6. The petitioner shall comply with all Federal, State, and Village Codes, Regulations, and Policies.

February 8, 2019

Bill Enright, Deputy Director of Planning and Community Development

Cc: Randy Recklaus, Village Manager
All Department Heads

NOTICE OF
PUBLIC HEARING
NOTICE IS HEREBY
GIVEN THAT THE PLAN
COMMISSION OF THE
VILLAGE OF ARLINGTON
HEIGHTS WILL CONDUCT
A PUBLIC HEARING ON
FEBRUARY 13, 2019, AT
7:30 P.M. in the Municipal
Building, 33 South Arlington
Heights Road, Arlington
Heights, Illinois to consider
Petition No. 18-026, a Special
Use Permit to allow a auto-
mobile service station with
a convenience store on prop-
erty located at 1650 West Al-
gonquin Road in Arlington
Heights, IL, and legally de-
scribed as follows:
LOT 35 IN CHANTE'
CLAIRE SUBDIVISION,
BEING A SUBDIVISION
OF PART OF SECTION 8,
TOWNSHIP 41 NORTH,
RANGE 11, EAST OF THE
THIRD PRINCIPAL ME-
RIDIAN, ACCORDING TO
THE PLAT OF SAID SUB-
DIVISION RECORDED ON
OCTOBER 20, 1968 AS DOC-
UMENT NO. 20661961, IN
COOK COUNTY, ILLINOIS.
As part of said petition the
applicant is requesting the
following variations from
Chapter 28 of the Municipal
Code:

• Variation to Chapter 28,
Section 10.2-8, to reduce the
required drive aisle width
from 24 feet to 23 feet.

And other variations as de-
termined necessary by the
Plan Commission.

All persons desiring to be
heard shall be given the op-
portunity to be heard.
Should any individual need
auxiliary aid or service,
such as a sign language
interpreter or materials in
alternative formats, please
contact the Health Depart-
ment at 33 South Arlington
Heights Road, Arlington
Heights, Illinois 60005, (847)
368-5760, TDD# (847) 368-
5794.

Terry Ennes, Chairman
ARLINGTON HEIGHTS
PLAN COMMISSION
Published in Daily Herald
January 29, 2019 (4517342)

CERTIFICATE OF PUBLICATION

Paddock Publications, Inc.

Daily Herald

Corporation organized and existing under and by virtue of the laws of the State of Illinois, DOES HEREBY CERTIFY that it is the publisher of the **DAILY HERALD**. That said **DAILY HERALD** is a secular newspaper and has been circulated daily in the Village(s) of Algonquin, Antioch, Arlington Heights, Aurora, North Aurora, Bannockburn, Barrington, Barrington Hills, Lake Barrington, North Barrington, South Barrington, Bartlett, Batavia, Buffalo Grove, Burlington, Campton Hills, Carpentersville, Cary, Crystal Lake, Deerfield, Deer Park, Des Plaines, Elburn, East Dundee, Elgin, South Elgin, Elk Grove Village, Fox Lake, Fox River Grove, Franklin Park, Geneva, Gilberts, Glenview, Grayslake, Green Oaks, Gurnee, Hainesville, Hampshire, Hanover Park, Hawthorn Wood, Highland Park, Highwood, Hoffman Estates, Huntley, Inverness, Island Lake, Kildeer, Lake Bluff, Lake Forest, Lake in the Hills, Lake Villa, Lake Zurich, Libertyville, Lincolnshire, Lindenhurst, Long Grove, Melrose Park, Montgomery, Morton Grove, Mt. Prospect, Mundelein, Niles, Northbrook, Northfield, Nor Palatine, Park Ridge, Prospect Heights, River Grove, Riverwoods, Rolling Meadows, Rosemont, Round Lake, Round Lake Beach, Round Lake Heights, Round Lake Park, Schaumburg, Schiller Park, Sleepy Hollow, St. Charles, Streamwood, Sugar Grove, Third Lake, Tower Lakes, Vernon Hills, Volo, Wadsworth, Wauconda, Waukegan, West Dundee, Wheeling, Wilmette

County(ies) of Cook, Kane, Lake, McHenry

and State of Illinois, continuously for more than one year prior to the date of the first publication of the notice hereinafter referred to and is of general circulation throughout said Village(s), County(ies) and State.

I further certify that the **DAILY HERALD** is a newspaper as defined in "an Act to revise the law in relation to notices" as amended in 1992 Illinois Compiled Statutes, Chapter 715, Act 5, Section 1 and 5. That a notice of which the annexed printed slip is a true copy, was published 29-JAN-19 in said **DAILY HERALD**.

IN WITNESS WHEREOF, the undersigned, the said **PADDOCK PUBLICATIONS, Inc.**, has caused this certificate to be signed by, this authorized agent, at Arlington Heights, Illinois.

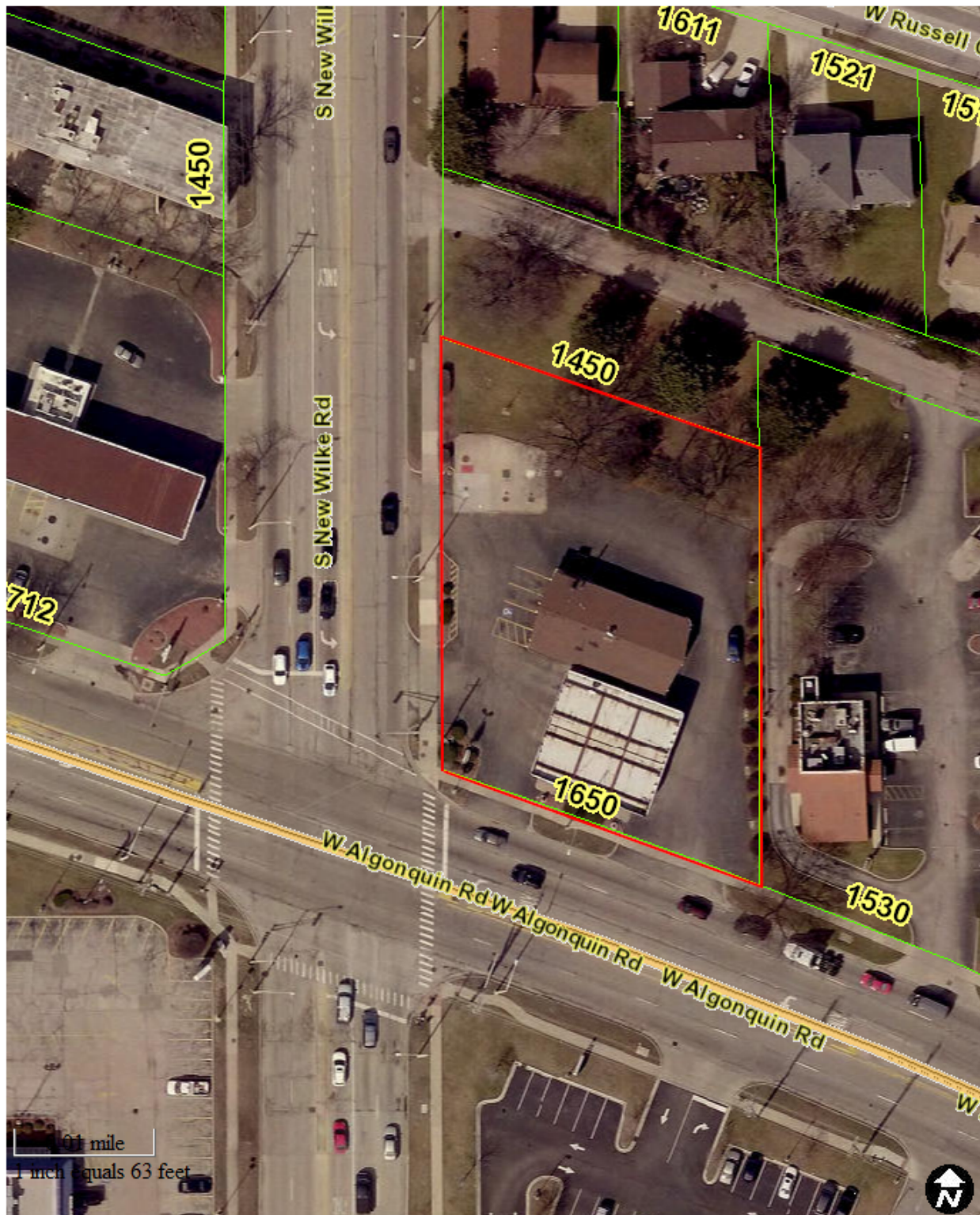
PADDOCK PUBLICATIONS, INC.
DAILY HERALD NEWSPAPERS

BY *Danila Baltz*
Authorized Agent

Control # 4517342

RECEIVED

FEB - 4 2019



Map created on November 20, 2018.

© 2018 GIS Consortium and MGP Inc. All Rights Reserved.

The GIS Consortium and MGP Inc. are not liable for any use, misuse, modification or disclosure of any map provided under applicable law.

Disclaimer: This map is for general information purposes only. Although the information is believed to be generally accurate, errors may exist and the user should independently confirm for accuracy. The map does not constitute a regulatory determination and is not a base for engineering design. A Registered Land Surveyor should be consulted to determine precise location boundaries on the ground.

**REPORT OF THE PROCEEDINGS OF
THE CONCEPTUAL PLAN REVIEW COMMITTEE**

OF THE VILLAGE OF ARLINGTON HEIGHTS PLAN COMMISSION

HELD AT VILLAGE HALL ON:

November 28, 2018

Project Title: 7-11 Gas Station
Address: 1650 W. Algonquin Road
Arlington Heights, IL 60005

Petitioner: Kim Ward
Vequity
400 N. State St. - Suite 400
Chicago IL 60654

Requested Action:

1. Special Use Permit to allow an Automobile Service Station with convenience store.

Variations Required:

1. Chapter 28, Section 10.2-9, Access, to allow a 51.8' wide driveway entrance where code limits driveway entrances to 36' in width.

Attendees: Yousef Ghori, Architect, Ileakis Associates
Scott Preston, Developer, Vequity
Ivan Nockov, Developer, Vequity
Chris Ileakis, Developer, Vequity
Mark Bettenhausen, 7-Eleven
Jay Cherwin, Plan Commissioner
John Sigalos, Plan Commissioner
Bruce Green, Plan Commissioner
Lynn Jensen, Plan Commissioner
Sam Hubbard, Development Planner

Project Summary:

The subject property is located at the northeast corner of West Algonquin Road and South New Wilke Drive and is composed of 29,406 square feet (0.68 acres) of land. The site is currently occupied by vacant gas station (formerly Citgo) of approximately 2,000 square feet in size that is served by three parking spaces. The owner of the site is currently proceeding with demolition of the existing gas station and the removal of the underground gas tanks in anticipation of selling the property for redevelopment. Site access comes from two curb cuts along Algonquin Road and two curb cuts along Wilke Road. A raised barrier median is located on the middle of Algonquin Road, which prevents eastbound ingress/egress to and from the site. There is no raised median within New Wilke Drive, so the site currently operates with full access to this street. The property was annexed into the Village in 1977 and was already developed with a gas station when it was annexed into the Village.

The property is currently under contract with Vequity, who is proposing redevelopment of the site with a 7-11 gas station (eight pumps) and an approximately 3,000 square foot convenience store. Vequity is a developer/property manager of retail assets throughout the Midwest and are headquartered in downtown Chicago. The business would be open 24 hours per day, seven days per week. The store would have a total of approximately 7-10 employees, with no more than three employees working at the site at any one time. The total number of parking spaces would increase to 13. The two access drives closest to the corner (one on New Wilke and one on Algonquin) would be eliminated as part of this development. Jurisdiction of Algonquin Road is with IDOT, and New Wilke is under the jurisdiction of the Village of Arlington Heights.

Meeting Discussion:

Mr. Preston began by stating that he currently has the property at 1650 W. Algonquin Road under contract, and is proposing to construct a freestanding 7-11 gas station with convenience store on the property. The store will be approximately 3,000 square-feet, and would be a prototypical 7-11 store. He provided elevations for reference. He had already preliminarily met with Village Staff regarding the proposal, and has incorporated some of Staffs' comments into the site plan and elevations. He was hoping to meet with the Committee to discuss Staff comments. He believed that he could accommodate most of the comments into the design of the project, though he did have some questions he was hoping could be answered, specifically with relation to any future taking along Algonquin Road and the ongoing Taco Bell project next door. He about the current status of the Taco Bell project.

Mr. Hubbard stated that Taco Bell had already received zoning approval, and had submitted for their building permit.

Mr. Preston stated that he believed the changes would have more of an impact on the Taco Bell property than the subject property. He asked if the Village had been in discussions with Taco Bell regarding a cross-access easement between Taco Bell and subject property, and if they had any issues with said easement.

Commissioner Green stated that inclusion of a cross access easement between the properties had been a requirement of Taco Bell's approval.

Mr. Hubbard added that the requirement for the implementation of a cross-access easement would be triggered by redevelopment of the subject site. As the subject site is now in the process of redevelopment, the easement will now be required to be established and recorded.

Mr. Preston stated that had brought a plan to review. He asked if there was a right turn lane proposed on Algonquin Road.

Commissioner Green stated that it was possible.

Mr. Preston stated that he would want to see what the dimensions of the turn lane would be, and the impact the turn lane would have on the subject property. He asked **Mr. Ghori** if he had been able to find any information on the Village website relative to the proposed improvements on Algonquin Road.

Mr. Ghori stated that he had found some general information on the website relative to roadway improvements, but nothing specific.

Mr. Hubbard stated that **Mr. Ghori** would have reach out to the Engineering Division of the Public Works Department for the specifics on the project. He could provide contact information if needed. **Mr. Hubbard** noted that the roadway improvement project is still under development, so the Engineering Division may not be able to provide any details on the project at this time.

Commissioner Jensen asked what the timing would be on the roadway improvement project.

Mr. Hubbard stated that he did not know what the timing of the project would be.

Mr. Ghori asked if the property lines would change as a result of the proposed roadway improvements.

Mr. Hubbard stated that he believed some acquisition of land would be required.

Commissioner Green believed that some land would need to be dedicated.

Mr. Ilekis asked when the roadway improvements would be implemented.

Mr. Hubbard reiterated that there was no specific timetable, though the project was on the radar.

Commissioner Jensen asked if the subject site and the Taco Bell site used to be under common ownership.

Mr. Preston stated that Taco Bell is currently leasing the property.

Commissioner Jensen asked to confirm that both properties are under common ownership, with Taco Bell leasing their property and the subject site currently being under contract for purchase by the petitioners.

Mr. Preston confirmed that the statement was true.

Commissioner Cherwin asked who owned the drive aisle north of the subject site.

Mr. Ghori stated that the drive aisle was owned by the grocery store to the east of Taco Bell.

Commissioner Jensen asked if the grocery store owned just the drive aisle, or the green space lot along the north of the site.

Mr. Ghori stated that both the green space lot and the drive aisle were owned by the grocery store.

Mr. Preston and **Mr. Ghori** explained the borders of the subject site, Taco Bell site, and grocery store site. **Mr. Preston** stated that he was hoping to have the site re-surveyed for accuracy, but had been unable to because of snow.

Mr. Ghori stated that Lot 1, the green space parcel, was dedicated green space for the grocery store.

Commissioner Cherwin observed that the grocery store had no incentive to maintain the green space parcel.

Commissioner Jensen asked if the Village had any leverage to have the space maintained.

Mr. Hubbard stated that there were property maintenance requirements.

Commissioner Cherwin stated that it was likely the petitioners would receive concerns from residents living north of the drive aisle, relative to noise, screening, and lighting of the subject site. As the petitioners do not have access to the green space, they will need to find ways to address these concerns from residents without relying on the buffer provided by the green space.

Commissioner Jensen stated that it would be helpful to have some type of barrier between the site and residential uses. There had been many resident concerns with the Taco Bell project relative to site lighting, and some of the most concerned residents live directly north of the green space lot.

Mr. Preston asked if it would be beneficial to propose a fence along the property line.

Commissioner Green asked if there was a landscape buffer requirement between the access aisle and the residential district.

Mr. Hubbard stated that, as the property was commercial, there was no buffer required.

Commissioner Cherwin suggested the petitioners consider heavier landscaping on the site.

Mr. Ghori stated that trees and hedges were proposed for the site. He also noted that Taco Bell does not have a buffer similar to the subject site; Taco Bell directly borders the access aisle while the subject site does technically have a landscape buffer via the green space lot.

Lynn Jensen noted that the most concerned residents lived directly north of the green space lot.

Mr. Ilekis stated that they could provide trees along the property line.

Commissioner Cherwin said he drives by the site often, and while they do have several large trees already planted, he would recommend considering additional landscaping.

Mr. Preston circulated the revised site plan incorporating Staff comments. He noted the cross-access easement, and stated he would be open to incorporating a stop sign to help direct drive-thru traffic from Taco Bell.

Mr. Ghori added that it is assumed the drive aisle to and from the Taco Bell site would be two-way. At present, the Taco Bell drive aisle is one-way, with traffic directed away from the subject site.

Mr. Hubbard stated that he should communicate with the landowner regarding the circulation of the drive aisle. Additionally, he could provide the petitioners with access to the approved plans for Taco Bell.

Mr. Ghori noted that the trash enclosure was set back from Algonquin Road and that the main driveway was being evaluated to determine if it could accommodate the turning movements of a fuel truck.

Commissioner Jensen asked if the driveway would be reduced from 51 feet to 36 feet.

Mr. Bettenhausen stated that 36 feet might work, however 51 feet may be needed in order to accommodate fuel truck access.

Commissioner Sigalos asked where the fuel tanks would be located.

Mr. Bettenhausen indicated the location of the tanks on the plan.

Commissioner Jensen asked how concerned the Village would be with the driveway being 51 feet wide as opposed to 36 feet wide.

Mr. Ghori said he would like to know as well. He was not sure if the driveway width restriction was related to the proposed roadway improvements adjacent to the site.

Mr. Hubbard stated that his guess was that if the wider driveway was needed to allow for fuel truck access and maneuverability, there may be some flexibility on the code required width. It is better to maintain compliance with code, however if there is a legitimate reason for a driveway that exceeds the allowance granted by code, a variation could be evaluated.

Commissioner Green asked **Mr. Hubbard** to provide the Staff perspective on the project.

Mr. Hubbard stated that much of the content of the Staff Report had already been discussed. He stated that the site was developed with a gas station prior to annexation into the Village in 1977. All gas stations require a Special Use permit per code, which is why the petitioners were proceeding through the Plan Commission process. Staff has requested information on proposed delivery and trash collection times, due to the close proximity to residential uses north of the subject site. More details will also be needed with respect to the proposed outdoor storage and vacuum stations. A tree preservation and landscape plan will be required. He noted that the Taco Bell drive aisle, into which the subject site will connect via the cross access easement, is likely 23 feet wide, which will need to be evaluated. A traffic and parking study will be required, as well as two on-site bicycle parking spaces.

Commissioner Jensen asked why the petitioner needed to conduct a traffic and parking study if there was already a service station on the site.

Mr. Hubbard stated that the convenience store component will change traffic demand. Additionally, the reconfiguration of the ingress and egress points into the site will impact circulation. A traffic study would illustrate if there are any capacity and circulation issues due to the access points and high-turnover nature of the use. Therefore, a full traffic and parking study is warranted.

Commissioner Jensen stated that he understood. He said he believed that the proposed redevelopment was an improvement, and he welcomed the redevelopment.

Commissioner Sigalos asked if the trash enclosure was still placed in front of the building. The petitioners had indicated that it was moved behind the front façade of the building, however from the plans it still appeared to be in front of the structure.

Mr. Hubbard also noted that the trash enclosure appeared to protrude beyond the façade of the structure. He stated that there was adequate room to move the enclosure back further so as to be flush with the façade of the building.

Mr. Ghori stated that the hardware for the trash enclosure's gate may still be protruding, and that it could be corrected to address Staff comments.

Commissioner Sigalos asked if there was a setback requirement between the enclosure and the building.

Mr. Hubbard stated that there was no setback requirement from the building; however, it did need to be set back 3 feet from any property line.

Commissioner Sigalos stated that he thought the proposal was perfectly fine.

Commissioner Cherwin stated that he thought it was a good use for the site. He would like to see more articulation on the design of the building and site – the building seems stark as proposed. Overall, he is supportive of the project. He asked if the store would be a franchise.

Mr. Bettenhausen stated that the store would ideally be a franchise, operated 24 hours a day.

Commissioner Jensen noted that neighbors north of the site had previously been concerned with lights and music from the Taco Bell site. He asked if noise would be an issue with 24-hour operations.

Mr. Bettenhausen stated that the store would be a low-intensity use late at night. The back of the building would be darker, due to the building blocking light from the gas station canopy. He will provide a photometric plan.

Commissioner Green asked if there were any service bays in the existing gas station.

Mr. Bettenhausen said there was not.

Commissioner Green stated that the petitioner should expect concerns from residents.

Mr. Bettenhausen noted that they would be cleaning up the site, and be sensitive to the neighborhood.

Commissioner Cherwin suggested that the petitioner note that, due to the change in the site layout, less traffic will be moving towards residential properties, and headlights will not be shining directly at those properties. He stated that the petitioner should emphasize any landscaping improvements that they would provide. He asked if there would be any late night deliveries.

Mr. Bettenhausen stated there would not be any late deliveries.

Commissioner Cherwin said that he believed it was a good project, and that it would improve the corner.

Commissioner Green and **Commissioner Jensen** also expressed support for the project.

RECOMMENDATION

The Conceptual Plan Review Committee advised the petitioner to proceed forward with their application.

Bruce Green, Chair
CONCEPTUAL PLAN REVIEW COMMITTEE
Sam Hubbard, Recorder

APPROVED

MINUTES OF
THE VILLAGE OF ARLINGTON HEIGHTS
DESIGN COMMISSION MEETING
HELD AT THE ARLINGTON HEIGHTS MUNICIPAL BUILDING
33 S. ARLINGTON HEIGHTS RD.
JANUARY 8, 2019

Chair Fitzgerald called the meeting to order at 6:30 p.m.

Members Present: John Fitzgerald, Chair
Ted Eckhardt
Kirsten Kingsley
Scott Seyer
Jonathan Kubow

Members Absent: None

Also Present: Jennifer Thorstenson, MRV Architects for *Dunkin/Baskin Robbins*
Ivan Nockov, Vequity for *7-Eleven*
Yousuf Ghorri, ILekis Associates for *7-Eleven*
Mark Bettenhausen for *7-Eleven*
Steve Hautzinger, Staff Liaison

REVIEW OF MEETING MINUTES FROM DECEMBER 11, 2018

A MOTION WAS MADE BY COMMISSIONER ECKHARDT, SECONDED BY COMMISSIONER SEYER, TO APPROVE THE MEETING MINUTES OF DECEMBER 11, 2018. ALL WERE IN FAVOR. MOTION CARRIED.

ITEM 2. COMMERCIAL REVIEW

DC#18-108 – 7-Eleven Gas Station – 1650 W. Algonquin Rd.

Ivan Nockov, representing *Vequity*, Yousuf Ghori, representing *ILekis Associates*, and Mark Bettenhausen, Real Estate for 7-Eleven, were present on behalf of the project.

Mr. Hautzinger presented Staff comments. The petitioner is seeking approval of the proposed architectural design for a new gas station and convenience store. This project requires Plan Commission review and Village Board approval for a Special Use to allow redevelopment of the site with a new gas station and convenience store. Because this project is going to the Plan Commission, the role of the Design Commission is limited to building and signage only.

This site was previously used as a Citgo gas station with convenience store. The property is currently vacant and planned for demolition to allow construction of a new 7-Eleven convenience store and gas station. The scope of the project includes a complete redevelopment of the site including new fuel pumps, fuel pump canopy, convenience store, and signage. The proposed design is based on the current 7-Eleven prototype. The design is simple in form, but it has a clean modern appearance that will be a very nice update for this property. This design will also fit well with the new Taco Bell restaurant that is planned for construction on the adjacent site, which has a similar boxy massing and similar materials.

The proposed gray fiber cement “brick” wall panels have a nice modern appearance that works well with the black storefront, black canopy, black light fixtures, black wall coping, and gray “stone” base. The fuel pump canopy columns and trash enclosure are nicely detailed to match the building. Material samples were presented by the petitioner.

The Design Commission should evaluate the following details:

- The flush transition between the fiber cement “stone” base panels and the upper fiber cement “brick” wall panels looks too flat and has a fake appearance. It is recommended that a projecting sill trim piece be included between the two materials for a more authentic appearance. Consider using an adhered cultured stone sill detail.
- The stone base panels on the trash enclosure and canopy columns have a heavy appearance. Consider omitting the stone panel details on these items, providing an all brick appearance.

The proposed building has multiple rooftop mechanical units which are required to be screened from public view. The building design includes tall parapet walls on all four sides to fully screen the equipment, which is ideal.

The proposed development includes a complete package of new signage based on 7-Eleven’s branding. Overall, the signage package has a nice appearance that enhances the overall appearance of the development. A few details will need adjusting at the time of permit to comply with code, including a three-foot minimum setback for the ground sign and a slight reduction in the size of the west wall sign.

Staff recommends approval of the proposed design for the new gas station and convenience store, to include Staff comments regarding the stone detailing.

Mr. Nockov said that they agree with the suggestion to add separation between the brick and stone; however, they need to confirm with the manufacturer about how it can actually be done.

Chair Fitzgerald asked if there was any public comment on the project and there was no response from the audience.

Commissioner Kubow said the proposed new building was fantastic. He really liked the old-school manufacturing, single-story warehouse appearance, and the gas pump bays that have a cool, modern look. He fully agreed with Staff's comments, especially on the column detail at the pumps; bringing the brick all the way down makes sense. His only question was about the proposed new ground sign that is different than the sign shown in the photo of the store in Wheaton. Mr. Nockov replied that the signage is location based, and would be under a separate permit from the rest of the project. Mr. Hautzinger explained that the building and the signage are subject to Design Commission review, and the proposed ground sign is code compliant as shown tonight; however, Staff does often encourage a lower, more decorative monument style sign. In this case, based on the location and surrounding context, Staff did not raise that issue, but the Design Commission's feedback on changes or enhancements to the ground sign are welcome.

In general, Commissioner Kubow loved the design of the new building and agreed with Staff's comments on the gas pump bays and doing something to transition between the stone and brick on the building. He preferred the monument sign at the Wheaton store, which is clean and consistent with the proposed new building, and he recommended that style sign for this project. Mr. Bettenhausen said they are not opposed to a monument style sign and they like the masonry base and cap; however, they do not want the sign to be as small as the monument sign in Wheaton, but it does not need to be 16 feet tall. Commissioner Kubow reiterated that the design of the sign in Wheaton is consistent with the design of the building being proposed here. Mr. Bettenhausen said they are accepting of any comments, but they really do not want the sign to be less than eight feet in height.

Commissioner Seyer supported the suggestion of a separation between the base material and the wall material, and he also supported Staff's recommendation to eliminate the stone panel detail on the fuel pump canopies as well as the trash enclosure; just being on the building itself has a cleaner appearance. He asked if the metal canopy color was the same dark bronze color as the storefront and the metal above the faux brick within the canopy. The petitioner said that it was the same color. Commissioner Seyer also asked about the color of the fuel canopy itself, and the petitioner stated that the gasoline canopies would be white, but not illuminated, and Mr. Hautzinger clarified that the fuel canopy fascia will have signage and colored striping graphics as shown in the signage package, and he added that the Village does not restrict illumination of the gas station canopy fascia. Commissioner Seyer said that architecturally, the new building looks good, with the comments he previously made; however, he still had some concerns about the signage; 16' is a really big sign when the building is only 18.5' tall, and there are no other big signs in the area. He felt the sign was not only an eyesore as far as its size, but a hazard, and he encouraged a more respectful sign at this particular corner. He was interested in the other commissioners' comments on this.

Commissioner Kingsley agreed with the suggestions made by Staff, and with the concerns that the ground sign is too tall. She was in support of lowering the ground sign, which is located close to a pedestrian walkway where landscaping would typically be. She also felt the wall sign on the front elevation looked a little small. Mr. Hautzinger clarified that the wall sign on the architectural rendering is shown smaller than actually proposed in the signage package. She asked about the wall mounted light fixtures on the front elevation that are important lights to the design of the building because there are only 2 of them, and Mr. Nockov said the fixtures would be down lit. Commissioner Kingsley wanted the lighting cut sheets to be reviewed by Staff because it was important that the lights not look like a wall pack; the light fixtures should be aesthetically

pleasing. She also asked about the details of the fiber cement columns at the ground, and the petitioner said the fiber cement would come within one inch of the ground. The petitioner also commented that as part of the Plan Commission review, Staff has given positive feedback about the lighting cut sheets they have submitted.

Commissioner Eckhardt concurred with all the comments made by the other commissioners, and added that the columns at the pump stations appear unfinished at the bottom and should have some kind of stone pediment detail at the bottom to protect the base of the material, similar to the cap at the top.

Chair Fitzgerald agreed with everything said so far, and he especially agreed with the conversation on the wall lights; the lights need to be special and Staff should review and approve them.

A MOTION WAS MADE BY COMMISSIONER KINGSLEY, SECONDED BY COMMISSIONER SEYER, TO APPROVE THE PROPOSED DESIGN FOR 7-ELEVEN LOCATED AT 1650 W. ALGONQUIN ROAD. THIS APPROVAL IS SUBJECT TO COMPLIANCE WITH THE REVISED PLANS RECEIVED 12/21/18, DESIGN COMMISSION RECOMMENDATIONS, COMPLIANCE WITH ALL APPLICABLE FEDERAL, STATE, AND VILLAGE CODES, REGULATIONS, AND POLICIES, THE ISSUANCE OF ALL REQUIRED PERMITS, AND THE FOLLOWING:

1. A REQUIREMENT TO ELIMINATE THE GRAY STONE BASE PANELS ON THE CANOPY COLUMNS AND ON THE TRASH ENCLOSURE.
2. A REQUIREMENT TO WORK WITH STAFF ON FURTHER DETAILING THE BASE OF THE CANOPY COLUMNS.
3. A REQUIREMENT THAT THE WALL LIGHTING BE REVIEWED BY STAFF AND ADDRESS THE COMMISSION'S COMMENTS THAT THE FIXTURES BE AESTHETICALLY PLEASING TO THE BUILDING AND AVOID GLARE.
4. THE COMMISSIONERS PREFER THAT THE PROPOSED 16' TALL GROUND SIGN BE REDUCED IN HEIGHT, SIMILAR TO THE PHOTO OF THE STORE IN WHEATON.
5. THIS REVIEW DEALS WITH ARCHITECTURAL DESIGN ONLY AND SHOULD NOT BE CONSTRUED TO BE AN APPROVAL OF, OR TO HAVE ANY OTHER IMPACT ON, NOR REPRESENT ANY TACIT APPROVAL OR SUPPORT FOR THE PROPOSED LAND USE OR ANY OTHER ZONING AND/OR LAND USE ISSUES OR DECISIONS THAT STEM FROM ZONING, BUILDING, SIGNAGE OR ANY OTHER REVIEWS. IN ADDITION TO THE NORMAL TECHNICAL REVIEW, PERMIT DRAWINGS WILL BE REVIEWED FOR CONSISTENCY WITH THE DESIGN COMMISSION AND ANY OTHER COMMISSION OR BOARD APPROVAL CONDITIONS. IT IS THE PETITIONER'S RESPONSIBILITY TO INCORPORATE ALL REQUIREMENTS LISTED ON THE CERTIFICATE OF APPROPRIATENESS INTO THE PERMIT DRAWINGS, AND TO ENSURE THAT BUILDING PERMIT PLANS AND SIGN PERMIT PLANS COMPLY WITH ALL ZONING CODE, BUILDING CODE AND SIGN CODE REQUIREMENTS.

Commissioner Eckhardt pointed out that Algonquin Road is a fast moving street and it was important for drivers to see this sign when approaching; he discouraged a low monument sign or anything lower than 14' because it would not help the situation. Mr. Hautzinger asked for clarification about working with the petitioner to further detail the base of the canopy columns, and Commissioner Eckhardt replied that there needs to be something at the base of the columns to protect the brick panels, and a concrete foundation 4 inches above the pavement would be sufficient. Mr. Hautzinger asked for clarification of the motion to reduce the ground sign if it was a recommendation or a requirement. He added that for projects such as this, signage is part of the overall review and the commissioners are encouraged to comment on signage. Commissioner Kingsley felt the ground sign needed to be lowered an undetermined amount, and her intention was that it

be reviewed by Staff; this was a requirement. She also liked the appearance of the sign in Wheaton. Commissioner Eckhardt felt the motion should be amended to clarify that the previous recommendation to lower the ground sign is now a requirement.

A MOTION WAS MADE BY COMMISSIONER KINGSLEY, TO AMEND THE MOTION AS FOLLOWS:

4. A REQUIREMENT THAT THE PROPOSED 16' TALL GROUND SIGN BE LOWERED AND BE MORE IN KEEPING IN THE AESTHETICS TO BE SIMILAR TO THE WHEATON GROUND SIGN, AND BE REVIEWED BY STAFF.

COMMISSIONER KUBOW SECONDED BY THE MOTION.

Chair Fitzgerald felt that referring to the 'Wheaton' sign in the motion made it sound as though the requirement is to lower the sign to that height, low to the ground, whereas the actual intent is to lower the sign just a little bit to be more in keeping with the scale of the building. Commissioner Eckhardt completely agreed and felt that a reference to the "Wheaton" sign should be removed from the motion. Chair Fitzgerald said the requirement should be to lower the ground sign and be approved by Staff.

A MOTION WAS MADE BY COMMISSIONER KINGSLEY, SECONDED BY COMMISSIONER KUBOW, TO AMEND THE MOTION AS FOLLOWS:

4. A REQUIREMENT THAT THE PROPOSED 16' TALL GROUND SIGN BE LOWERED A MINIMUM OF 2', AND REVIEWED BY STAFF.

Mr. Hautzinger asked if the commissioner's previous discussion regarding the introduction of a sill detail on the building between the stone and brick was something to be included in the motion or not. The commissioners responded that they wanted this included in the motion.

A MOTION WAS MADE BY COMMISSIONER KINGSLEY, SECONDED BY COMMISSIONER KUBOW, TO AMEND THE MOTION TO ADD THE FOLLOWING:

6. A REQUIREMENT TO INTRODUCE A SILL DETAIL ON THE BUILDING BETWEEN THE STONE AND THE BRICK.

KINGSLEY, AYE; ECKHARDT, AYE; KUBOW, AYE; SEYER, AYE; FITZGERALD, AYE.
ALL WERE IN FAVOR. MOTION CARRIED.

STAFF DESIGN COMMISSION REPORT

PROJECT INFORMATION:

Project Name: 7-Eleven Gas Station
Project Address: 1650 W. Algonquin Road
Prepared By: Steve Hautzinger

PETITION INFORMATION:

DC Number: 18-108
Petitioner Name: Kim Ward
Petitioner Address: Vequity LLC
400 N. Sate Street, Suite 400
Chicago, IL 60654
Meeting Date: January 8, 2019

Date Prepared: December 19, 2018

Requested Action(s):

Approval of the proposed architectural design for a new gas station and convenience store.

Design Commission Responsibility for Projects Being Reviewed by Plan Commission:

The subject design is being forwarded to the Design Commission for review pursuant to Chapter 6 of the Municipal Code.

This project requires Plan Commission review and Village Board approval for a Special Use to allow redevelopment of the site with a new gas station and convenience store. Because this project is going to the Plan Commission, the role of the Design Commission is limited. The Design Commission's responsibility is as outlined in Chapter 28 of the Municipal Code, Section 14.2-1, which states:

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

Summary:

This site was previously used as a Citgo gas station with convenience store. The property is currently vacant and planned for demolition to allow construction of a new 7-Eleven convenience store and gas station. The scope of the project includes a complete redevelopment of the site including new fuel pumps, fuel pump canopy, convenience store, and signage.

Architectural Design:

The proposed design is based on the current 7-Eleven prototype. The design is simple in form, but it has a clean modern appearance that will be a very nice update for this property. This design will also fit well with the new Taco Bell restaurant that is planned for construction on the adjacent site, which has a similar boxy massing and similar materials.

The proposed gray fiber cement "brick" wall panels have a nice modern appearance that works well with the black storefront, black canopy, black light fixtures, black wall coping, and gray "stone" base. The fuel pump canopy columns and trash enclosure are nicely detailed to match the building.

However, the Design Commission should evaluate the following details:

- The flush transition between the fiber cement "stone" base panels and the upper fiber cement "brick" wall panels looks too flat and has a fake appearance. It is recommended that a projecting sill trim piece be included between the two materials for a more authentic appearance. Consider using an adhered cultured stone sill detail.
- The stone base panels on the trash enclosure and canopy columns have a heavy appearance. Consider omitting the stone panel details on these items, providing an all brick appearance.

Rooftop Mechanical Unit Screening:

The proposed building has multiple rooftop mechanical units which are required to be fully screened from public view. The building design includes tall parapet walls on all four sides to fully screen the equipment, which is ideal.

Signage:

The proposed development includes a complete package of new signage based on 7-Eleven's branding. Overall, the signage package has a nice appearance that enhances the overall appearance of the development. A few details will need adjusting at the time of permit to comply with code, including a three-foot minimum setback for the ground sign and a slight reduction in the size of the west wall sign.

RECOMMENDATION:

It is recommended that the Design Commission approve the proposed design for 7-Eleven located at 1650 W. Algonquin Road. This recommendation is subject to compliance with the revised plans received 12/21/18, Design Commission recommendations, compliance with all applicable Federal, State, and Village codes regulations and policies, the issuance of all required permits, and the following:

1. It is recommended that a projecting sill trim piece be included between the fiber cement "stone" base panels and the upper fiber cement "brick" wall panels for a more authentic appearance.
2. Consider omitting the stone panel detail on the fuel pump canopy columns and trash enclosure, providing an all brick appearance.
3. Signage shall comply with Chapter 30, Sign Code.
4. This review deals with architectural design only and should not be construed to be an approval of, or to have any other impact on, any other zoning and/or land use issues or decisions that stem from zoning, sign code or building or any other reviews. In addition to the normal technical review, permit drawings will be reviewed for consistency with the Design Commission and any other Commission or Board approval conditions. It is the architect/owner/builder's responsibility to comply with the Design Commission approval and ensure that building permit plans and sign permit plans comply with all zoning code, building code and sign code requirements.

December 21, 2018

Steve Hautzinger AIA, Design Planner
Department of Planning & Community Development

Cc: Charles Witherington Perkins, Director of Planning and Community Development, Bill Enright, Deputy Director of Planning and Community Development, Sam Hubbard, Development Planner, Petitioner, DC File 18-108



12/6/2018

VEQUITY
400 N STATE STREET
SUITE 400
CHICAGO, IL 60654

www.vequity.com
312.985.0987

Village of Arlington Heights
Planning & Zoning Commission
33 South Arlington Heights Road
Arlington Heights, IL 60005

RE: Proposed Gas Station and Convenience Store_1650 W. Algonquin Road,
Arlington Heights, IL

Vequity is proposing the development of a new 3,016 SF 7Eleven Gas + Convenience store located at the corner of Algonquin and New Wilke Road in Arlington Heights, IL. This will be a single tenant gas station with a roof height of 18.5'. There will be four gas dispensers on-site. As the developer, we don't have access to operations of the future store but based on our conversations with the Tenant we are happy to share the details we have available.

The proposed building has several green/sustainable features building into the site. The building itself will be built with a high-performance building system known as structural insulated panels (SIPs). SIPs consist of an insulating foam core sandwiched between two structural facings, typically oriented strand board. SIPs are manufactured under factory-controlled conditions and can be fabricated to fit nearly any building design. The result is a building system that is extremely strong and energy efficient. The site will also have LED lighting throughout the site. In addition to the building itself the site is a brown field that Vequity is cleaning and reusing.

This site will be the first Vequity 7Eleven for Arlington Heights so at this time we don't have relative percentage of business from fuel vs. retail sales. However, if all corporate 7Eleven's are considered they tend to be primarily convenience stores with gas as a secondary means of sale. Please keep in mind many factors will go into the split between fuel vs. retail sales at each specific location.

The proposed hours of operation are 24 hours a day and 7 days a week with approximately three to four employees in the store at any given peak period. The franchisee is given all rights to determine how many full-time and part-time employees are employed at each store but based off our real estate representatives experience it is somewhere between seven and ten people.

As for delivery schedules, this is something the store is unable to predict prior to opening. All delivery and vendor schedules are created closer to store opening. On average, stores have two main deliveries per vendor per week.

We expect this project to kick-off construction in Early June 2019, or immediately following building permit issuance. The anticipated construction schedule is 150 days for the Landlord portion of work and an additional 40 days for the Tenant's interior build-out; thus, causing the stores Grand Opening to fall in December 2019.



VEQUITY

400 N STATE STREET
SUITE 400
CHICAGO, IL 60654

www.vequity.com

+ 312.985.0987

12/6/2018

Village of Arlington Heights

Planning & Zoning Commission
33 South Arlington Heights Road
Arlington Heights, IL 60005

RE: Proposed Gas Station and Convenience Store_1650 W. Algonquin Road, Arlington Heights, IL

The previous use of the subject site is a gasoline filling station and convenience store. It previously operated two 10,000 gallon gasoline tanks and one 10,000 gallon diesel fuel Underground Storage Tank system. Our proposal includes building a new 7Eleven convenience store with a new gasoline station. We are replacing an old convenience store and gasoline station with a new convenience store and a new gasoline station, which we believe justifies the issuance of the Special Use permit.

In addition to keeping the use of the site the same, the proposed development will not alter the essential character of the locality and it is compatible with the existing uses. The development is surrounded by B-2 zoned parcels, we will grant reciprocal access to the Taco Bell site as requested by the city. The new development site plan will be also designed to take into account the future roadway improvement along Algonquin road.

1



VEQUITY

400 N STATE STREET
SUITE 400
CHICAGO, IL 60654

www.vequity.com

+ 312.985.0987

1/16/2019

Sam Hubbard
33 S. Arlington Heights Road
Arlington Heights, IL 60005

RE: Neighborhood Meeting - 1/15/2019
1650 W. Algonquin Rd., Arlington Heights, IL

Attendees:

Mark Bettenhaus – 7 Eleven
Ivan Nockov – Vequity
Scott Preston – Vequity

Thomas Daniels – (Neighbor) 1621 W. Russell St. 773-842-2877
James Pawlek – (Neighbor) 1611 W. Russell St. 847-255-3019

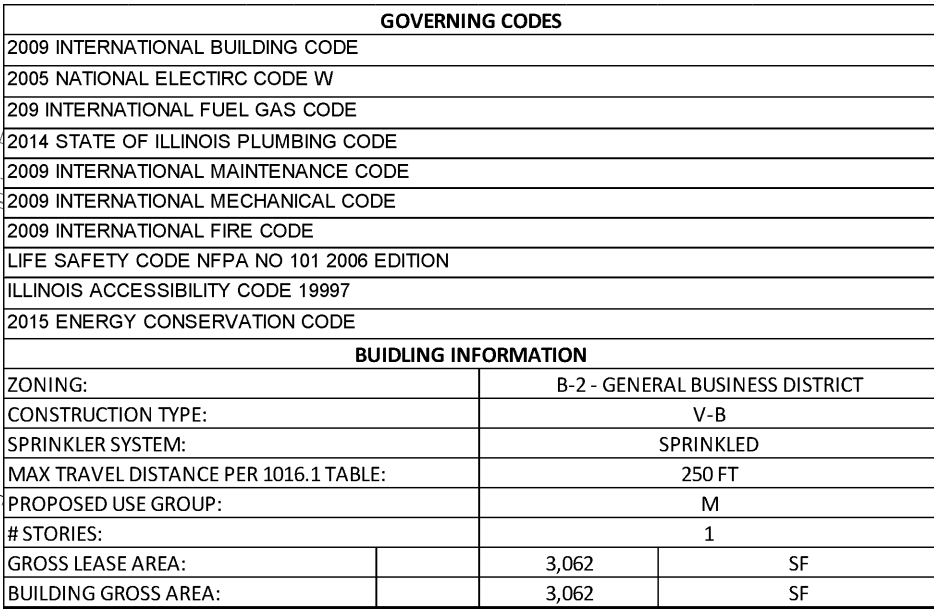
Neighbor comments:

James Pawlek

- Concerned about the truck/car traffic driving down the service drive which is connected to the grocery store and the Taco Bell. This is a major issue for him.
- Concerned about the extended hours of operation.
- Concerned about garbage getting in his yard and on the 7 Eleven site.
- He wants a fence between the 7 Eleven and the green space adjacent to the site.
- He likes the existing landscape buffer.
- Concerned about deliveries
- Concerned about snow removal.
- He questioned the strength of the proposed business because Citgo is closing.
- He didn't believe the zoning and thought it should be zoned for a medical office.
- He wants more notice for public meetings.
- He said that he was going to do his best to make life difficult for the developer
- He said he was going to rally the neighborhood.

Thomas Daniels

- He had questions/concerns about site lighting
- He had safety concerns about people loitering between the building and the fence.
- He had questions about the building construction
- He was supportive of the development project because it would clean up the site



GENERAL NOTES:

- A. SEE CIVIL FOR GRADING PLAN. SEE CIVIL DRAWING FOR SITE DEMOLITION, NEW PAVEMENT, SITE UTILITIES, SIGNAGE AND FINAL SITE DIMENSIONS.
- B. SEE AS.102 FOR ADDITIONAL SITE DETAILS.
- C. VERIFY THE EXISTENCE OF AND PROTECT ALL EXISTING UTILITY LINES. EXCAVATE WITH CARE.
- D. INSTALL ADDRESS ON BUILDING AS REQUIRED BY LOCAL CODE.
- E. PROVIDE KNOX BOX, PER FIRE DEPARTMENT REQUIREMENTS.
- F. SEE CIVIL DRAWINGS FOR ADDITIONAL SITE SIGNAGE REQUIREMENTS.
- G. CLEAN LOT AFTER SITE WORK AND AFTER CONSTRUCTION COMPLETION.
- H. PROTECT ADJACENT PROPERTY. ANY DAMAGE IS TO BE REPAIRED AT CONTRACTOR EXPENSE WITH PERMISSION OF ADJACENT BUILDING OWNER. FOR EXAMPLE, IF SOD IS DAMAGED IT WILL BE REPLACED AND WATERED REGULARLY UNTIL ESTABLISHED.
- I. PROVIDE EXPANSION JOINTS IN CONCRETE PAVING AND CURBS AS REQUIRED BY MFGR SPECS, OR 30FT SPACING WHICHEVER IS LESS. REFER TO CIVIL DRAWINGS FOR MORE INFORMATION AND DETAILS.

2. ADA PARKING SIGN MOUNTED ON POST. SEE CIVIL FOR DETAILS.
3. ADA SIDEWALK RAMP TYP. SEE CIVIL.
4. EXISTING CONCRETE CURB AND GUTTER TO REMAIN.
5. NEW CONCRETE PAVEMENT TYP. SEE CIVIL.
6. PROVIDE ASPHALT PAVEMENT. SEE CIVIL PLANS FOR PAVING AND GRADING DETAILS.
7. CONCRETE SIDEWALK. REFER TO CIVIL DRAWINGS.
8. 1/2" ISOLATION JOINT ALONG PROFILE OF BUILDING AND WHERE INDICATED, USE BITUMINOUS FILLER AND SEALANT ALONG EDGE.
9. CONCEALED LOCKABLE BIEB.
10. FD CONNECTION-SEE CIVIL.
11. RELOCATED FIRE HYDRANT REFER TO CIVIL DRAWINGS.
12. PROVIDE TRASH ENCLOSURE. REFER TO AS1-02 FOR DETAILS.
13. AIR / VAC REFER TO CIVIL SHEETS FOR LOCATION.
14. MAIN DOOR
15. EXIT DOOR
16. PROPOSED FUEL CANOPY. REFER TO CIVIL.
17. PROPOSED UNDERGROUND FUEL TANKS. REFER TO CIVIL.
18. CO2 TANK/ CAGE INSTALLED / ANCHOR PER MANUFACTURER SPECS BY GC.
19. NEW DIRECTIONAL SIGNAGE UNDER SEPARATE PERMIT.
20. NEW PYLON SIGN
21. VISIBILITY TRIANGLE
22. NEW BIKE RACK
23. NEW LIGHT POLE, REFER TO PHOTOMETRIC PLAN.
24. NOT USED.
25. -VENT STACK, REFER TO CIVIL DRAWINGS.
26. N2 TANK/CAGE INSTALLED / ANCHOR PER MANUFACTURER SPECS BY GC.

LEGEND:

NEW CONCRETE

SIGNAGE

FIRE DEPARTMENT CONNECTION

LG Landscape Architecture
Site Planning
Illustration
Workshop, LLC
2324 W. Armitage Ave. Chicago, IL
773.697.4388 www.LGWLA.com

RETAIL BUILDING
PROJECT # 1814-14
1650 W ALGONQUIN RD
ARLINGTON HEIGHTS, IL 60005

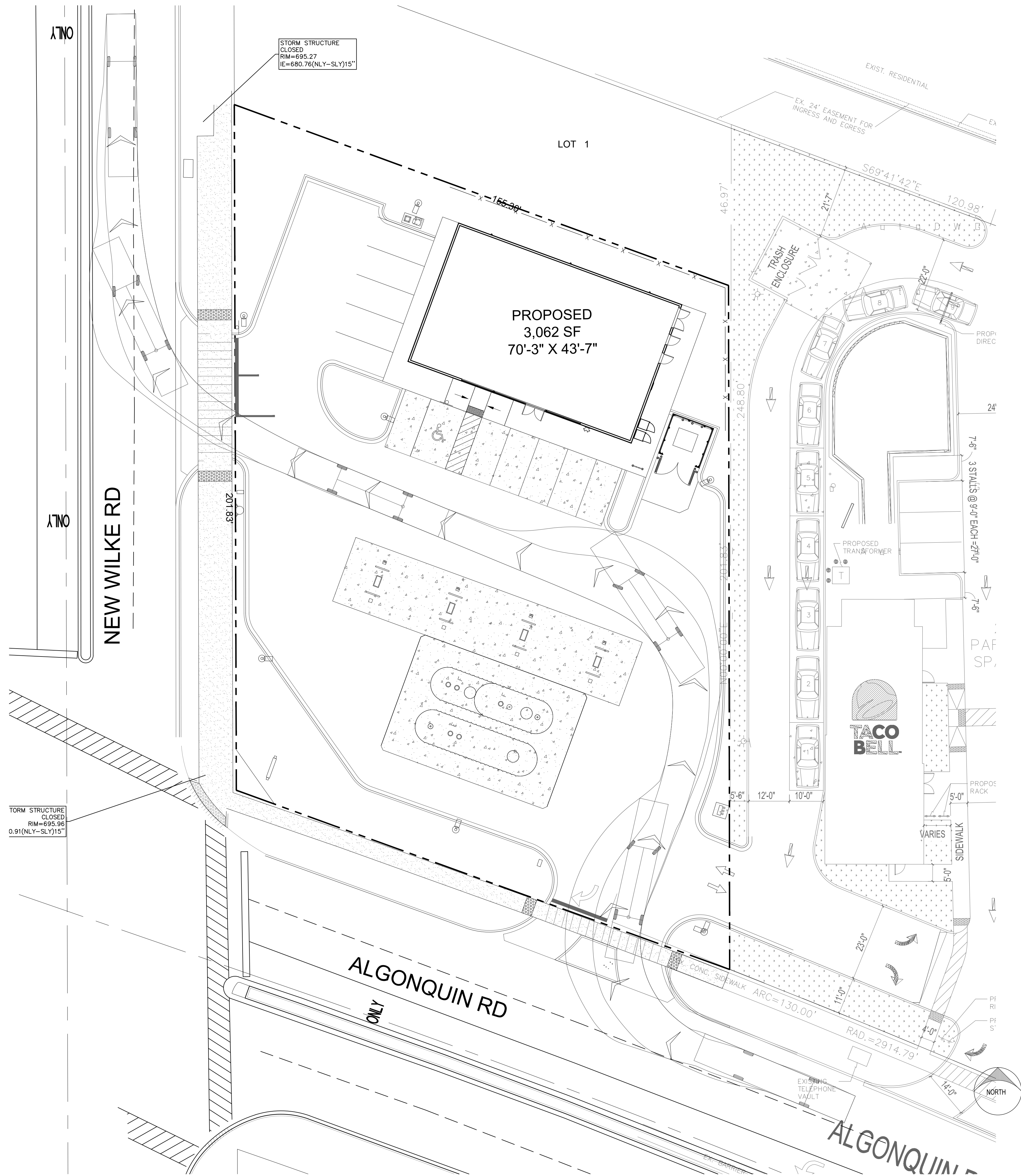
THESE DOCUMENTS WERE PREPARED UNDER MY SUPERVISION AND, TO THE BEST OF MY KNOWLEDGE, COMPLY WITH THE ALL APPLICABLE CODES.

COPYRIGHT 2017 ILEKIS ASSOCIATES. ALL RIGHTS RESERVED

DATE:	ISSUED FOR:
01/30/19	ISSUED PER CITY COMMENTS
01/15/19	ISSUED PER CITY COMMENTS
12/07/18	ISSUED FOR CITY REVIEW

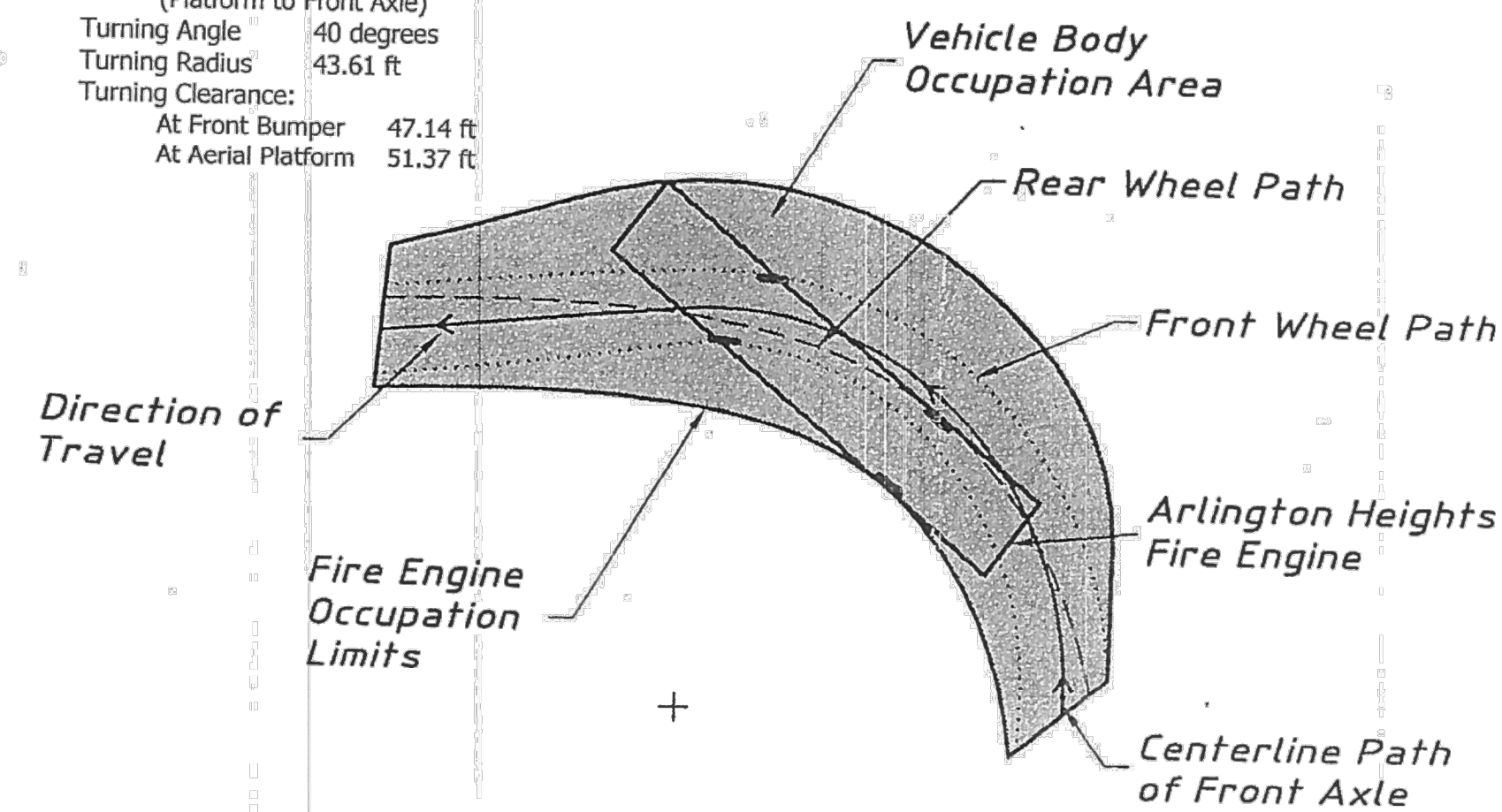
SITE PLAN

AS1.01



Overall Height 11 ft - 8 in
Overall Length 48 ft - 0 in
Overall Width 8 ft - 6 in
Overall Wheelbase 21 ft - 2 in
Front Overhang 14 ft - 0 in
(Platform to Front Axle)
Turning Angle 40 degrees
Turning Radius 43.61 ft
Turning Clearance:
At Front Bumper 47.14 ft
At Aerial Platform 51.37 ft

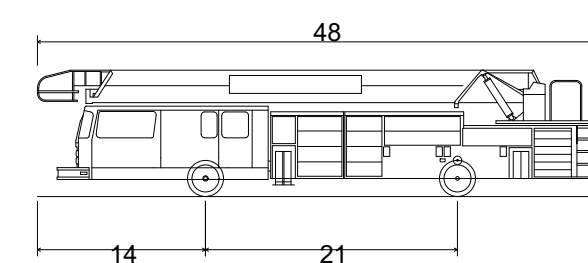
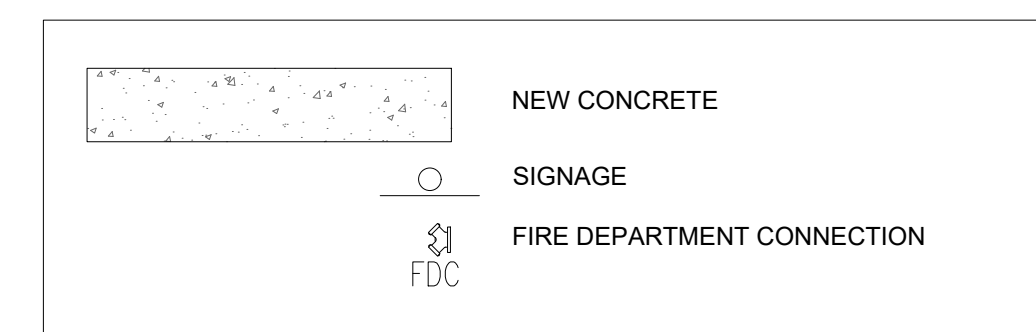
FIRE ENGINE TURNING TEMPLATE
Village of Arlington Heights Tower 131
Scale: 1"=15'



GENERAL NOTES:

- A. SEE CIVIL FOR GRADING PLAN. SEE CIVIL DRAWING FOR SITE DEMOLITION, NEW PAVEMENT, SITE UTILITIES, SIGNAGE AND FINAL SITE DIMENSIONS.
- B. SEE AS1.02 FOR ADDITIONAL SITE DETAILS.
- C. VERIFY THE EXISTENCE OF AND PROTECT ALL EXISTING UTILITY LINES. EXCAVATE WITH CARE.
- D. INSTALL ADDRESS ON BUILDING AS REQUIRED BY LOCAL CODE.
- E. PROVIDE KNOX BOX, PER FIRE DEPARTMENT REQUIREMENTS.
- F. SEE CIVIL DRAWINGS FOR ADDITIONAL SITE SIGNAGE REQUIREMENTS.
- G. CLEAN LOT AFTER SITE WORK AND AFTER CONSTRUCTION COMPLETION.
- H. PROTECT ADJACENT PROPERTY. ANY DAMAGE IS TO BE REPAIRED AT CONTRACTOR EXPENSE WITH PERMISSION OF ADJACENT BUILDING OWNER. FOR EXAMPLE, IF SOD IS DAMAGED IT WILL BE REPLACED AND WATERED REGULARLY UNTIL ESTABLISHED.
- I. PROVIDE EXPANSION JOINTS IN CONCRETE PAVING AND CURBS AS REQUIRED BY MFGR SPECS, OR 30FT SPACING WHICHEVER IS LESS. REFER TO CIVIL DRAWINGS FOR MORE INFORMATION AND DETAILS.

LEGEND:



FIRE TRUCK
Overall Length 48.000ft
Overall Width 8.600ft
Overall Body Height 10.537ft
Min Body Ground Clearance 0.967ft
Track Width 8.600ft
Lock-to-lock time 4.00s
Curb to Curb Turning Radius 43.610ft

1 FIRE TRUCK ROUTE
SCALE: 1/16"=1'-0"

CITY APPROVAL

CLIENT:
vequity real estate. redefined.

Vequity
400 N. State
Suite 400
Chicago, IL 60654
312-985-0997
Email info@vequity.com
www.vequity.com

PROJECT TEAM:

I L E K I S
architects + planners

ILEKIS ASSOCIATES
223 W. JACKSON BLVD.
SUITE 1000
CHICAGO, IL 60606

312-419-0009 www.ILEKIS.com

THESE DOCUMENTS WERE PREPARED UNDER MY SUPERVISION AND, TO THE BEST OF MY KNOWLEDGE, COMPLY WITH THE APPLICABLE CODES AND BUILDING REGULATIONS.
ALPHONSE A. ILEKIS, AIA
© COPYRIGHT 2017 ILEKIS ASSOCIATES-ALL RIGHTS RESERVED

LG Landscape Architecture
Workshop Site Planning
2324 W. Armitage Ave. Chicago, IL
773.697.4388 www.LGWLA.com

NOTE:

RETAIL BUILDING
PROJECT # 1814-14
1650 W ALGONQUIN RD
ARLINGTON HEIGHTS, IL 60005

THESE DOCUMENTS WERE PREPARED UNDER MY SUPERVISION AND, TO THE BEST OF MY KNOWLEDGE, COMPLY WITH THE ALL APPLICABLE CODES.
COPYRIGHT 2017 ILEKIS ASSOCIATES. ALL RIGHTS RESERVED

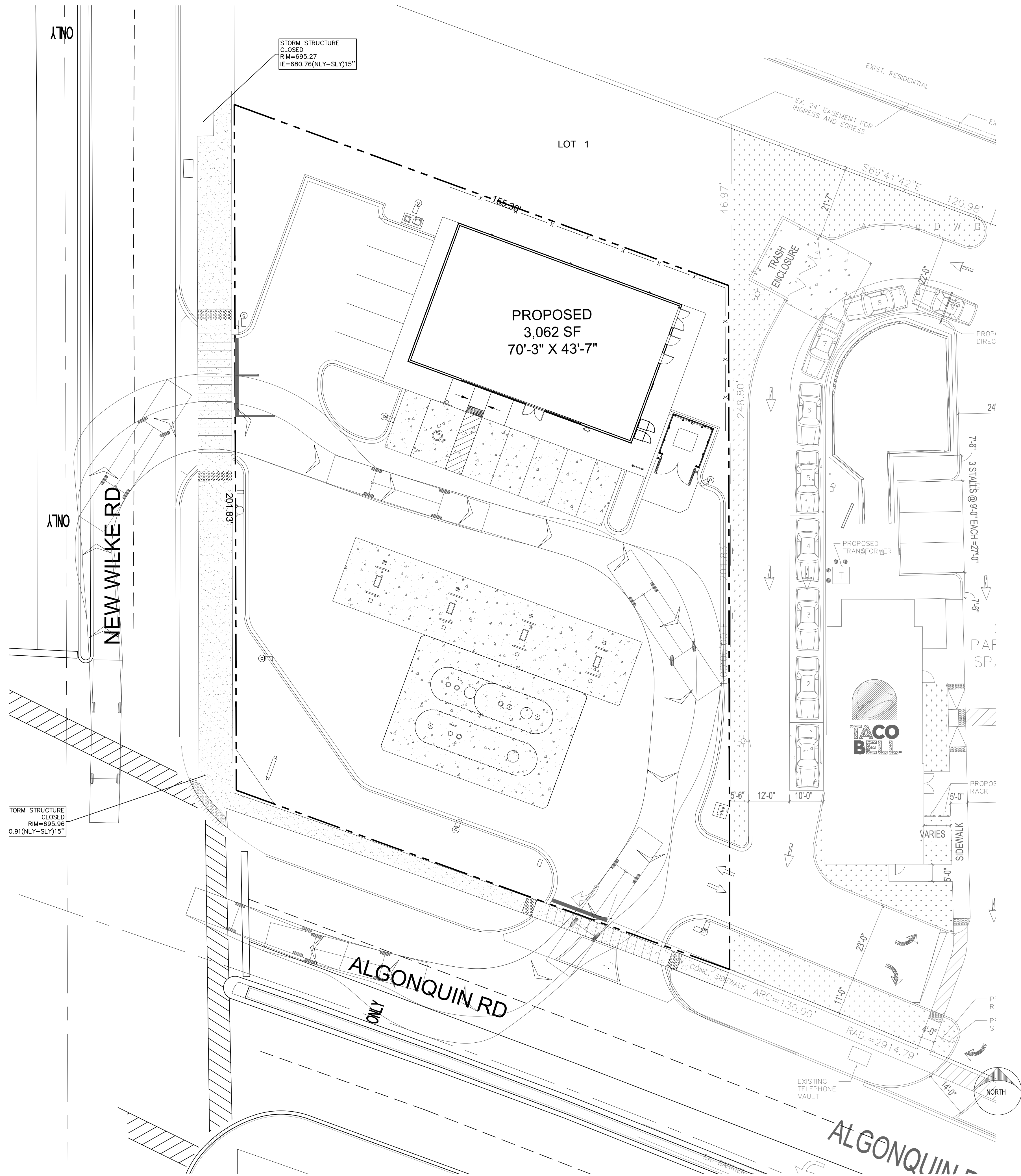
DATE: ISSUED FOR:

01/30/19 ISSUED PER CITY COMMENTS
01/15/19 ISSUED PER CITY COMMENTS
12/07/18 ISSUED FOR CITY REVIEW

**FIRE TRUCK
TRAVEL PATH**

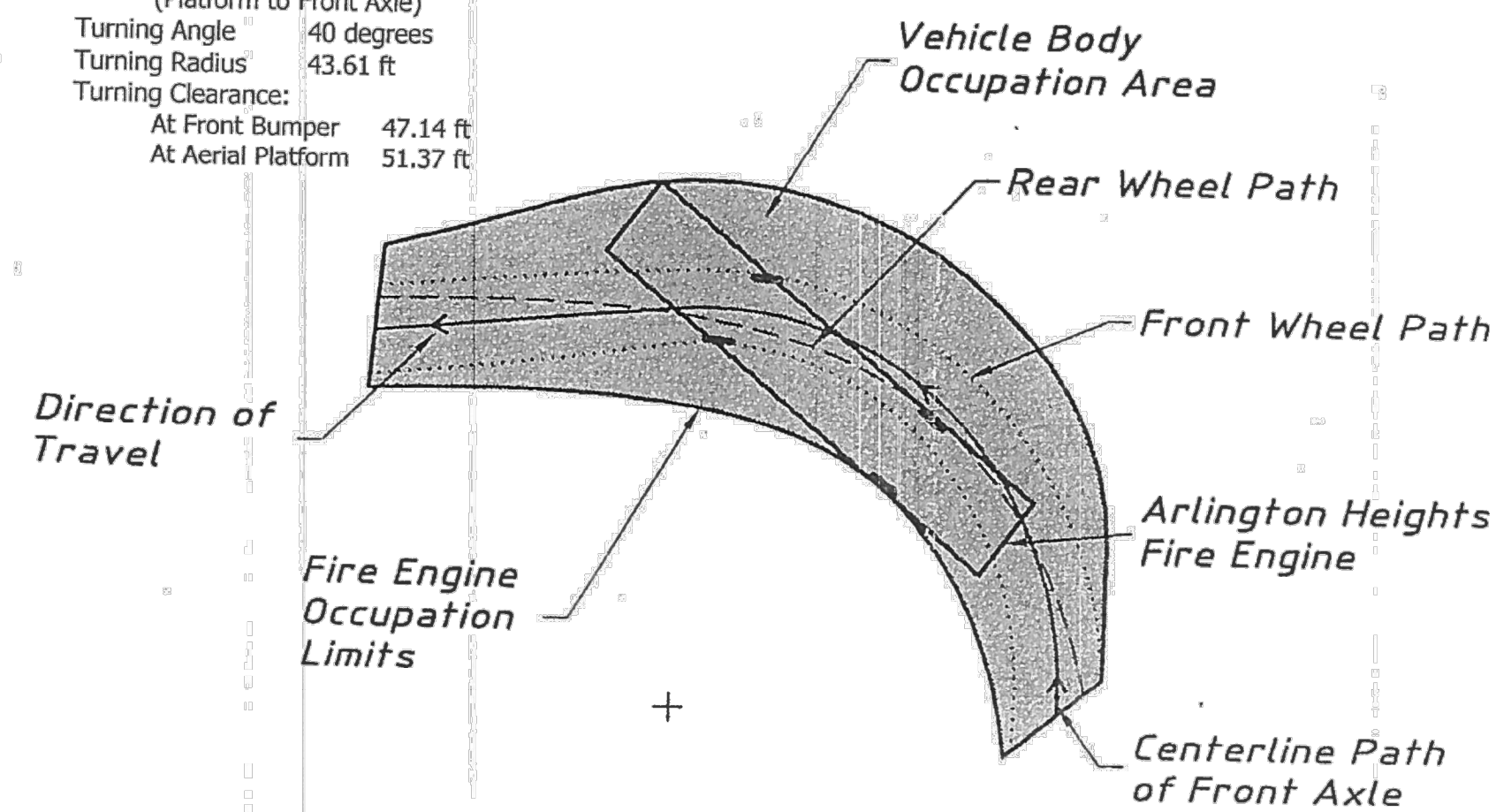
1

AS1.01A



Overall Height 11 ft - 8 in
Overall Length 48 ft - 0 in
Overall Width 8 ft - 6 in
Overall Wheelbase 21 ft - 2 in
Front Overhang 14 ft - 0 in
(Platform to Front Axle)
Turning Angle 40 degrees
Turning Radius 43.61 ft
Turning Clearance:
At Front Bumper 47.14 ft
At Aerial Platform 51.37 ft

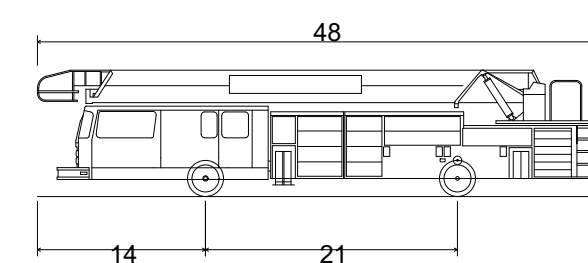
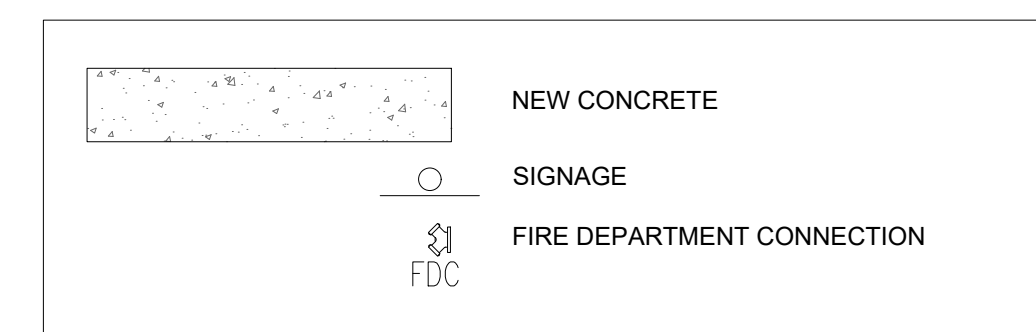
FIRE ENGINE TURNING TEMPLATE
Village of Arlington Heights Tower 131
Scale: 1"=15'



GENERAL NOTES:

- A. SEE CIVIL FOR GRADING PLAN. SEE CIVIL DRAWING FOR SITE DEMOLITION, NEW PAVEMENT, SITE UTILITIES, SIGNAGE AND FINAL SITE DIMENSIONS.
- B. SEE AS1.02 FOR ADDITIONAL SITE DETAILS.
- C. VERIFY THE EXISTENCE OF AND PROTECT ALL EXISTING UTILITY LINES. EXCAVATE WITH CARE.
- D. INSTALL ADDRESS ON BUILDING AS REQUIRED BY LOCAL CODE.
- E. PROVIDE KNOX BOX, PER FIRE DEPARTMENT REQUIREMENTS.
- F. SEE CIVIL DRAWINGS FOR ADDITIONAL SITE SIGNAGE REQUIREMENTS.
- G. CLEAN LOT AFTER SITE WORK AND AFTER CONSTRUCTION COMPLETION.
- H. PROTECT ADJACENT PROPERTY. ANY DAMAGE IS TO BE REPAIRED AT CONTRACTOR EXPENSE WITH PERMISSION OF ADJACENT BUILDING OWNER. FOR EXAMPLE, IF SOD IS DAMAGED IT WILL BE REPLACED AND WATERED REGULARLY UNTIL ESTABLISHED.
- I. PROVIDE EXPANSION JOINTS IN CONCRETE PAVING AND CURBS AS REQUIRED BY MFGR SPECS, OR 30FT SPACING WHICHEVER IS LESS. REFER TO CIVIL DRAWINGS FOR MORE INFORMATION AND DETAILS.

LEGEND:



FIRE TRUCK
Overall Length 48.000ft
Overall Width 8.600ft
Overall Body Height 10.537ft
Min Body Ground Clearance 0.967ft
Track Width 8.600ft
Lock-to-lock time 4.00s
Curb to Curb Turning Radius 43.610ft

1 FIRE TRUCK ROUTE
SCALE: 1/16"=1'-0"



CITY APPROVAL

CLIENT:
vequity real estate. redefined.

Vequity
400 N. State
Suite 400
Chicago, IL 60654
312-985-0997
Email info@vequity.com
www.vequity.com

PROJECT TEAM:

ILEKIS
architects + planners

ILEKIS ASSOCIATES
223 W. JACKSON BLVD.
SUITE 1000
CHICAGO, IL 60606

312-419-0009 www.ILEKIS.com

THESE DOCUMENTS WERE PREPARED UNDER MY SUPERVISION AND, TO THE BEST OF MY KNOWLEDGE, COMPLY WITH THE APPLICABLE CODES AND BUILDING REGULATIONS.
ALPHONSE A. ILEKIS, AIA
© COPYRIGHT 2017 ILEKIS ASSOCIATES-ALL RIGHTS RESERVED

LG Landscape Architecture
Workshop Site Planning
2324 W. Armitage Ave. Chicago, IL
773.697.4388 www.LGWLA.com

NOTE:

RETAIL BUILDING
PROJECT # 1814-14
1650 W ALGONQUIN RD
ARLINGTON HEIGHTS, IL 60005

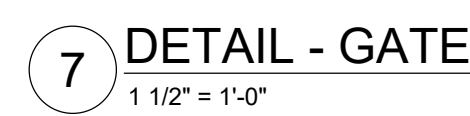
THESE DOCUMENTS WERE PREPARED UNDER MY SUPERVISION AND, TO THE BEST OF MY KNOWLEDGE, COMPLY WITH THE ALL APPLICABLE CODES.
COPYRIGHT 2017 ILEKIS ASSOCIATES. ALL RIGHTS RESERVED

DATE: ISSUED FOR:

01/30/19 ISSUED PER CITY COMMENTS
01/15/19 ISSUED PER CITY COMMENTS
12/07/18 ISSUED FOR CITY REVIEW

**FIRE TRUCK
TRAVEL PATH**

AS1.01B



AS1.02



1. ELECTRICAL NEEDS ARE #10 AMP (30 AMP) WITH GROUND

6'-0"

1'-6"

6"

ELECTRICAL STUB-UP WITH ELECTRICAL WEATHERPROOF BOX

MAX 2% SLOPE

3'-0"

CONC CURB - REF CIVIL DRAWINGS

FRONT

PLAN

4'-1"

3'-0"

6"

TOP OF GRADE

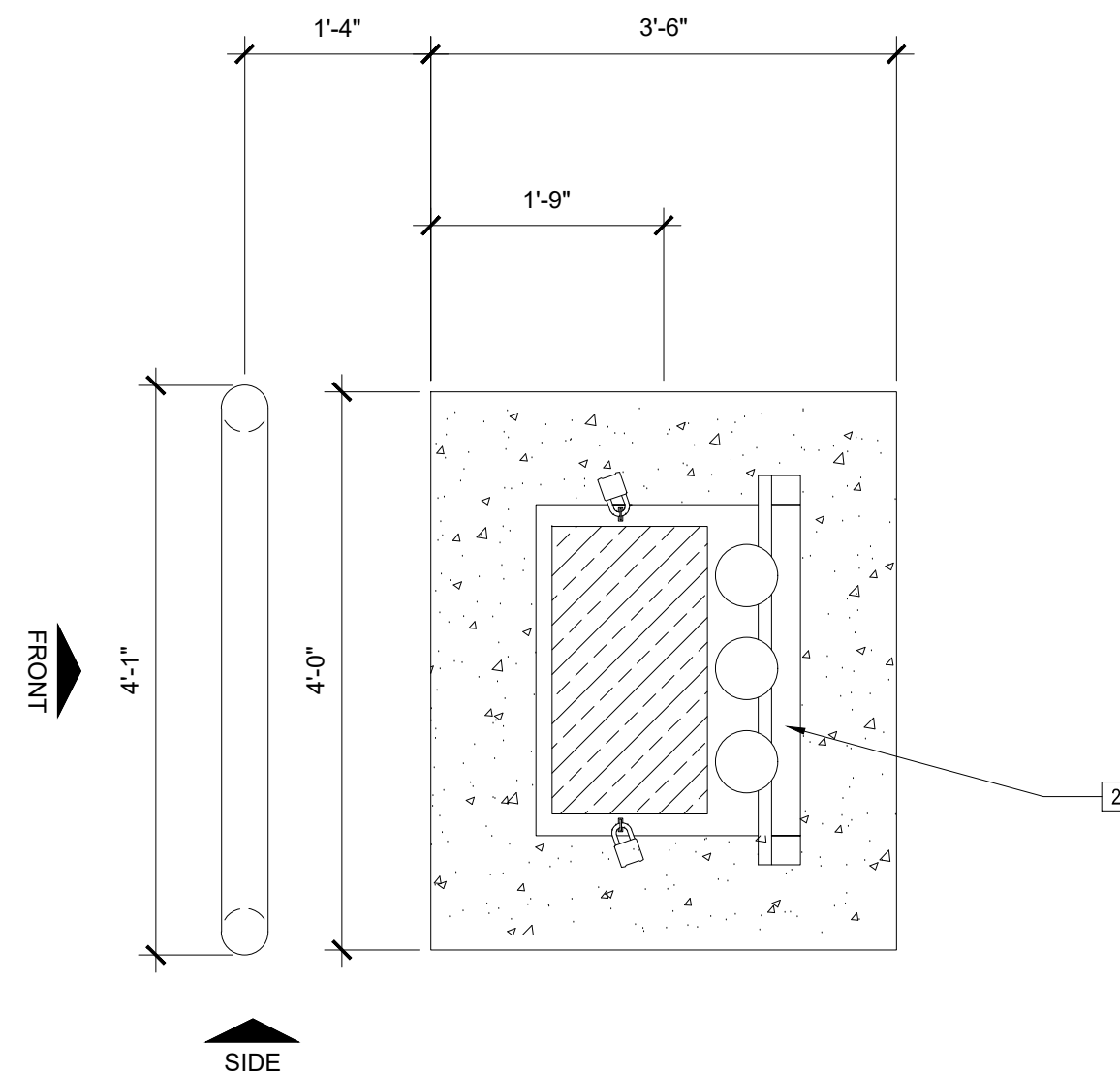
CONCRETE PAVEMENT

CONCRETE FOOTING PER SPECS - 12" DIA SONOTUBE X 36" LONG

12" DIA

6"

SIDE



PLAN



AIR VENT STACK
WILL BE PERMITTED
UNDER SEPARATE
CANOPY SUBMITTAL

CITY APPROVAL

CLIENT: **vequity** | real estate. redefined.

Vequity
400 N. State
Suite 400
Chicago, IL 60654
312-985-0987
Email info@vequity.com
www.vequity.com

PROJECT TEAM

I L E K I S
architects + planners

ILEKIS ASSOCIATES
223 W. JACKSON BLVD.
SUITE 1000
CHICAGO, IL 60606

312-419-0009 www.ILEKIS.com
THESE DOCUMENTS WERE PREPARED UNDER MY
SUPERVISION AND, TO THE BEST OF MY KNOWLEDGE,
COMPLY WITH THE APPLICABLE CODES AND BUILDING
REGULATIONS.
ALPHONSE A. ILEKIS, AIA
© COPYRIGHT 2017 ILEKIS ASSOCIATES-ALL RIGHTS RESERVED

LG Landscape Architecture
Site Planning
Illustration
Workshop, LLC
2324 W. Armitage Ave. Chicago, IL
773.697.4388 www.LGWLA.com

NOTE

RETAIL BUILDING
PROJECT # 1814-14
1650 W ALGONQUIN RD
ARLINGTON HEIGHTS, IL 60005

THESE DOCUMENTS WERE PREPARED UNDER MY SUPERVISION AND, TO THE BEST OF MY KNOWLEDGE, COMPLY WITH THE ALL APPLICABLE CODES.

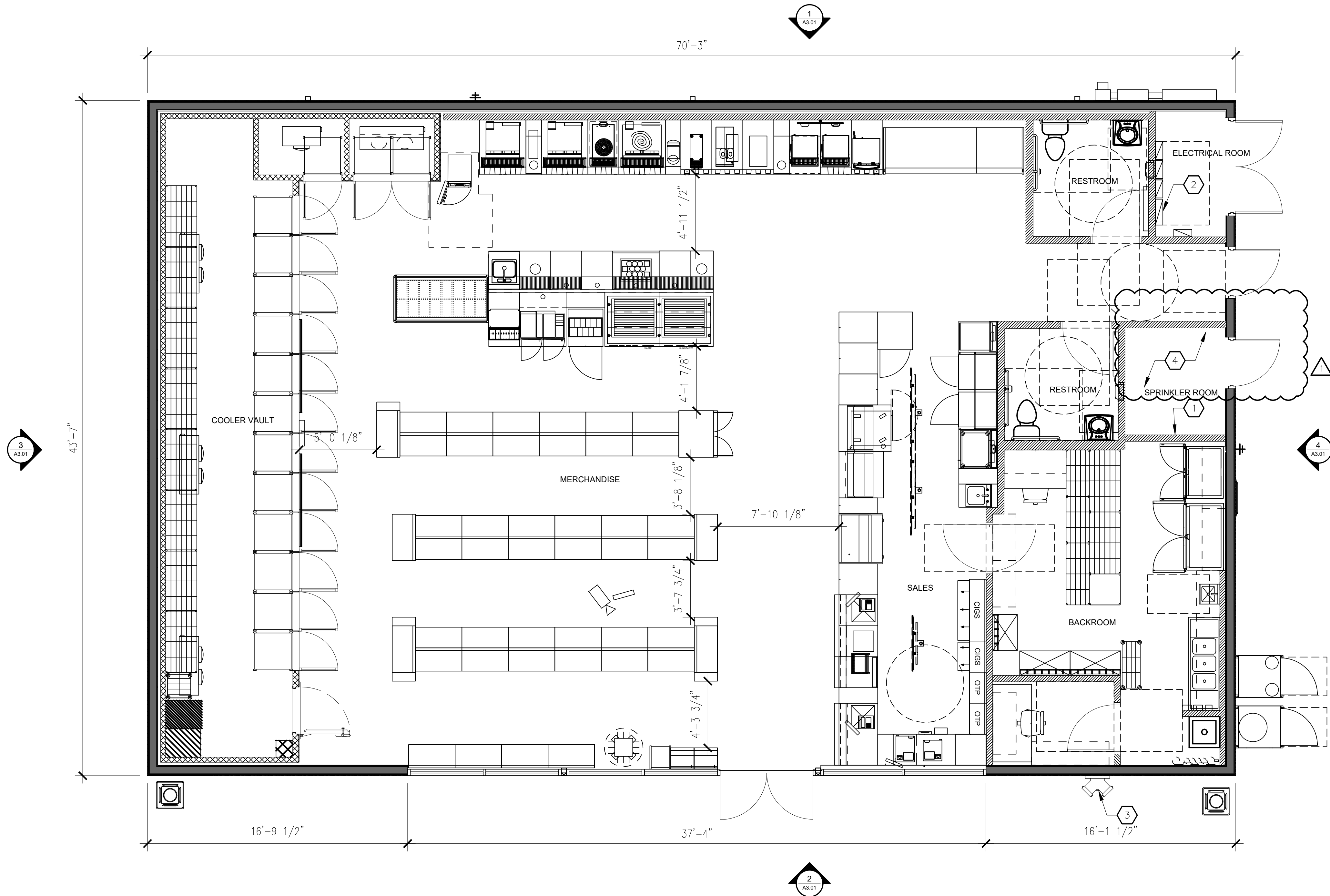
COPYRIGHT 2017 ILEXIS ASSOCIATES. ALL RIGHTS RESERVED

DATE: ISSUED FOR

01/30/19	ISSUED PER CITY COMMENTS
01/15/19	ISSUED PER CITY COMMENTS
12/07/18	ISSUED FOR CITY REVIEW

SITE DETAILS

AS1.03



1 FLOOR PLAN
SCALE: 1/4"=1'-0"
0 1' 2' 4' 8'

GENERAL NOTES

- A. FIRE SAFE ALL PENETRATIONS THRU PARTITIONS.
- B. PROVIDE ACCESSIBLE THRESHOLD AT EACH EXTERIOR DOOR-SEE DOOR SCHEDULE
- C. PRIME INTERIOR WALLS, COLUMNS TRIM AND DOOR FRAMES
- D. SEE STRUCTURAL FOR CONTROL AND ISOLATION JOINTS AT CONCRETE SLAB AND AROUND COLUMNS
- E. CONTACT OWNER REGARDING HOW THEY WANT TO REKEY THE LOCK FOR THE MAIN ENTRY VS THE SERVICE DOOR, LANDLORD ROOM TO HAVE ELECTRONIC KEY PAD KEY LOCK.
- F. ARABIC NUMERALS AT LEAST FOUR INCHES HIGH WITH A MINIMUM STROKE WIDTH OF 0.5 INCHES SHOWING THE ADDRESS OF THE BUILDING SHALL CONTRAST WITH THE BACKGROUND, SHALL BE CONSTRUCTED OF DURABLE MATERIALS, BE PERMANENTLY INSTALLED AND BE READILY VISIBLE. SCRIPT OR WRITTEN NUMBERS ARE NOT PERMITTED. ADDITIONAL NUMBERS SHALL ALSO BE PLACED ON THE SIDE OF THE BUILDINGS STREET ADDRESS.
- G. AT SERVICE DOORS USED AS EXIT/ACCESS FOR FIRE FIGHTING, ARABIC NUMERALS A MINIMUM OF FOUR INCHES IN HEIGHT WITH A MINIMUM STROKE OF 0.5 INCH SHALL BE APPLIED TO THE ADDITIONAL DOOR TO INDICATE THE ADDRESS. THE ADDRESS SHALL BE VISIBLE FROM THE PARKING LOT OR FIRE APPARATUS ACCESS.
- H. THIS IS A SPRINKLERED BUILDING PER REQUIREMENT OF VILLAGE OF ARLINGTON HEIGHTS. SEE FP DRAWINGS FOR LAYOUT.
- I. SEE STRUCTURAL FOR CONTROL JOINTS AND EXPANSION JOINTS.
- J. ALL JOINT SYSTEMS IN RATED WALL ASSEMBLIES SHALL COMPLY WITH UL 2079.
- K. ANY PENETRATIONS THROUGH RATED ASSEMBLIES SHALL COMPLY WITH UL 263.
- L. PROVIDE A KNOX BOX TO ENABLE THE FIRE DISTRICT TO HAVE ACCESS TO THE BUILDING AND THE BUILDING'S FIRE PROTECTION FEATURES.
- M. G.C. TO PROVIDE PORTABLE FIRE EXTINGUISHERS WITHIN THE BUILDING. THE TYPE, SIZE, AND SPACING MUST MATCH THE SPECIFIC HAZARD THEY ARE TO PROTECT. CONTACT THE FIRE DISTRICT FOR APPROVAL OF THE TYPES AND LOCATIONS OF PORTABLE FIRE EXTINGUISHERS TO BE USED PRIOR TO FINAL OCCUPANCY.

KEYED NOTES

- 1. METAL LADDER WITH ROOF HATCH.
- 2. ELECTRICAL PANEL.
- 3. SIAMESE CONNECTION.
- 4. FIRE SPRINKLER RISER .

WALL LEGEND

- NEW SIP WALL SYSTEM
- NEW MTL. STUD WALL
- PROPOSED WORK NOTE

CITY APPROVAL

CLIENT:
vequity real estate. redefined.

Vequity
400 N. State
Suite 400
Chicago, IL 60654
312-985-0987
Email info@vequity.com
www.vequity.com

PROJECT TEAM:

ILEKIS
architects + planners

ILEKIS ASSOCIATES
223 W. JACKSON BLVD.
SUITE 1000
CHICAGO, IL 60606

312-419-0009 www.ILEKIS.com
THESE DOCUMENTS WERE PREPARED UNDER MY SUPERVISION AND, TO THE BEST OF MY KNOWLEDGE, COMPLY WITH THE APPLICABLE CODES AND BUILDING REGULATIONS.
ALPHONSE A. ILEKIS, AIA
© COPYRIGHT 2017 ILEKIS ASSOCIATES-ALL RIGHTS RESERVED

LG Landscape Architecture
Workshop Site Planning
Illustration
2324 W. Armitage Ave. Chicago, IL
773.697.4388 www.LGWLA.com

NOTE:

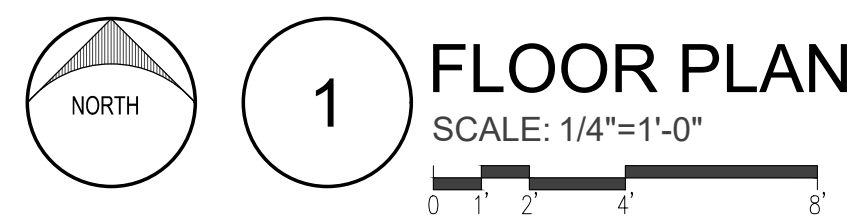
RETAIL BUILDING
PROJECT # 1814-14
1650 W ALGONQUIN RD
ARLINGTON HEIGHTS, IL 60005

THESE DOCUMENTS WERE PREPARED UNDER MY SUPERVISION AND, TO THE BEST OF MY KNOWLEDGE, COMPLY WITH THE ALL APPLICABLE CODES.
COPYRIGHT 2017 ILEKIS ASSOCIATES. ALL RIGHTS RESERVED

DATE:	ISSUED FOR:
01/30/19	ISSUED PER CITY COMMENTS
01/15/19	ISSUED PER CITY COMMENTS
12/07/18	ISSUED FOR CITY REVIEW

FLOOR PLAN

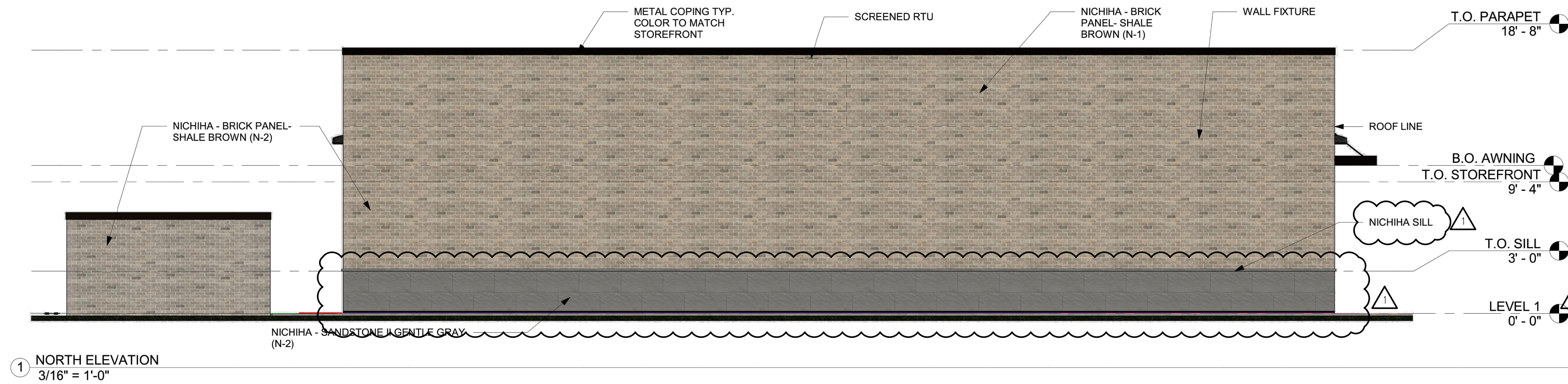
A1.01



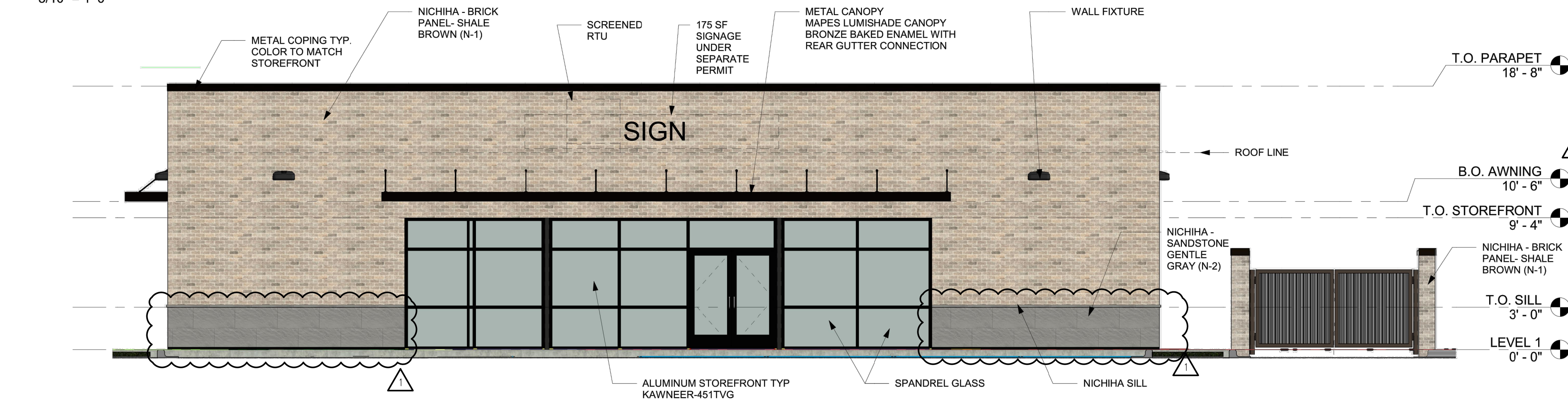
1. CRICKET W/ TAPERED INSULATION TYP.
2. MAPES CANOPY COMES IN 5'-0" SECTIONS AND 24" HANGER ROD HEIGHTS. ALL CUSTOM CANOPY DESIGNS HAVE A LEAD TIME OF 7-8 WEEKS.
3. SUNOPTICS PRISMATIC SKYLIGHT, 4040 SIGNATURE SERIES, TYP.
4. ROOF TOP UNIT.
5. WALKING PAD TO BE A MINIMUM 30" AROUND MECHANICAL UNIT.
6. SIGNAGE BY OTHERS.
7. WALL PACK LIGHTS TYP.
8. PLUMBING VENT; REF PLUMBING SHEETS.
9. PRE-FINISHED METAL CAP FLASHING - DARK BRONZE TYP.
10. EMERGENCY LIGHTING REF: ELECTRICAL
11. ROOF ACCESS HATCH.
12. FLEXPACK REF MECHANICAL SHEETS.
13. REFRIGERANT PIPE PORTAL.
14. EXHAUST DUCT; REF PLUMBING SHEETS.
15. SINGLE PLY ROOFING OVER SIPS PANELS
16. KICKERS TYP.

LG Landscape Architecture
Site Planning
Illustration
Workshop, LLC
2324 W. Armitage Ave. Chicago, IL
773.697.4388 www.LGWLA.com

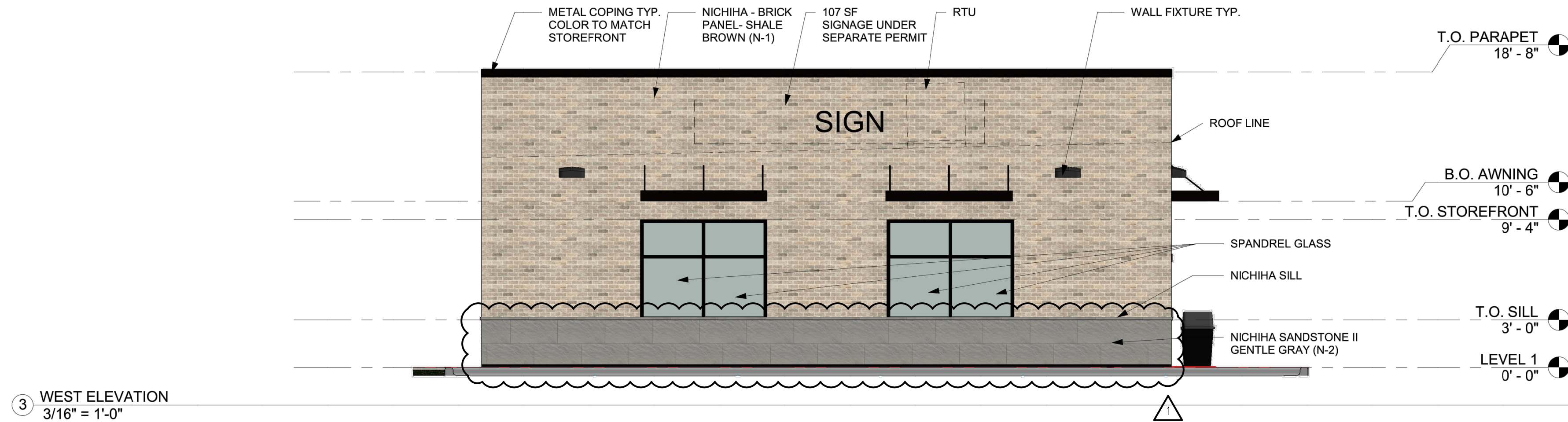
A2.01



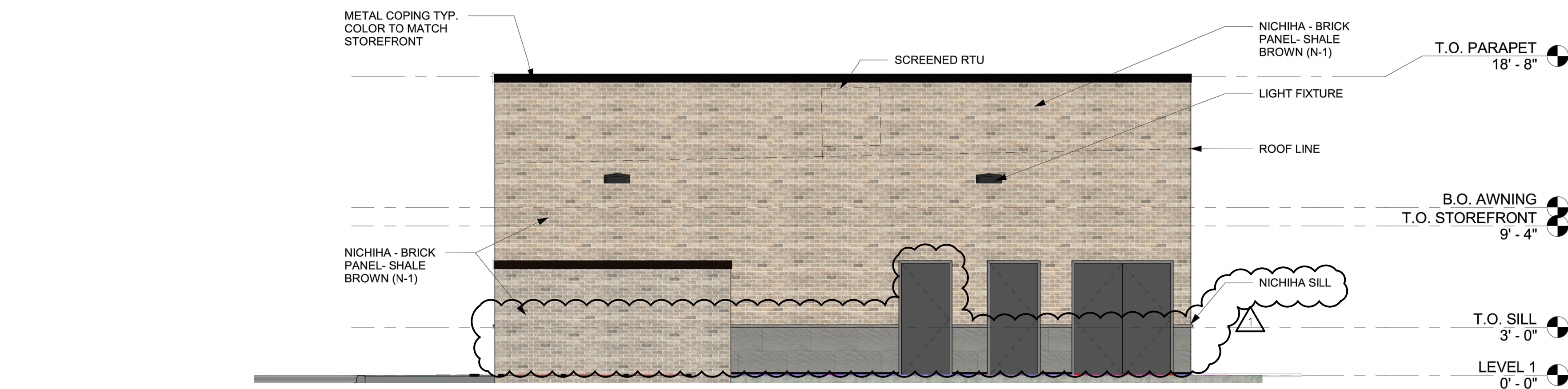
1 NORTH ELEVATION
3/16" = 1'-0"



2 SOUTH ELEVATION
3/16" = 1'-0"



3 WEST ELEVATION
3/16" = 1'-0"



4 EAST ELEVATION
3/16" = 1'-0"

MATERIAL SCHEDULE				
LEGEND	SYMBOL	COLOR	MANUFACTURER	TYPE
	FIBER CEMENT PANEL (N-1)	SHALE BROWN	NICHIHA	
	CONTROL JOINT SEALANT	COLOR: TBD	DOW CORNING	DOW CORNING 790
	METAL COPING	COLOR: TBD	PAC-CLAD PETERSEN	
	FIBER CEMENT PANEL (N-2)	GENTLE GRAY	NICHIHA	
	CONTROL JOINT SEALANT	COLOR: TBD	DOW CORNING	DOW CORNING 790
	METAL COPING	COLOR: TBD	PAC-CLAD PETERSEN	
	METAL CANOPY	DARK BROWN	SUPERSHADE BY MAPES ARCHITECTURAL CANOPIES OR APPROVED EQUAL	4' PROJECTION
	WALL PACK	BROWN	GE	EXTERIOR LED WALL PACK # EWLS01_15AF750
	STOREFRONT	DARK BRONW ANODIZED		CLEAR ANODIZED STOREFRONT WITH 1" INSULATED GLASS
	METAL DOORS AND FRAME	SEALSKIN SW7675	SHERWIN WILLIAMS	

SIGN TABLE ALLOWANCE BUILDING - FOR REFERENCE : SIGNAGE UNDER SEPARATE PERMIT								
TENANT	NORTH	ALLOWABLE (S.F.)	EAST	ALLOWABLE (S.F.)	SOUTH	ALLOWABLE (S.F.)	WEST	ALLOWABLE (S.F.)
	FACADE (SF)	25%	FACADE (SF)	25%	FACADE (SF)	25%	FACADE (SF)	25%
A	1260	NA	774	NA	1260	150 SF MAX	774	150 SF MAX
	Sub-total	0	Sub-total	0	Sub-total	150 SF MAX	Sub-total	150 SF MAX

Single Tenant: Total surface area of signage added together including ground, wall and canopy shall not exceed 320 sf for corner stations.

CITY APPROVAL

CLIENT:
vequity | real estate. redefined.

Vequity
400 N. State
Suite 400
Chicago, IL 60654
312-965-0987
Email info@vequity.com
www.vequity.com

PROJECT TEAM:

ILEKIS
architects + planners

ILEKIS ASSOCIATES
223 W. JACKSON BLVD.
SUITE 1000
CHICAGO, IL 60606

312-419-0009 www.ILEKIS.com

THESE DOCUMENTS WERE PREPARED UNDER MY SUPERVISION AND, TO THE BEST OF MY KNOWLEDGE, COMPLY WITH THE APPLICABLE CODES AND BUILDING REGULATIONS.
ALPHONSE A. ILEKIS, AIA
© COPYRIGHT 2017 ILEKIS ASSOCIATES-ALL RIGHTS RESERVED

LG Landscape Architecture
Workshop LLC Site Planning
2324 W. Armitage Ave. Chicago, IL
773.697.4388 www.LGWLA.com

NOTE:

RETAIL BUILDING
PROJECT # 1814-14
1650 W ALGONQUIN RD
ARLINGTON HEIGHTS, IL 60005

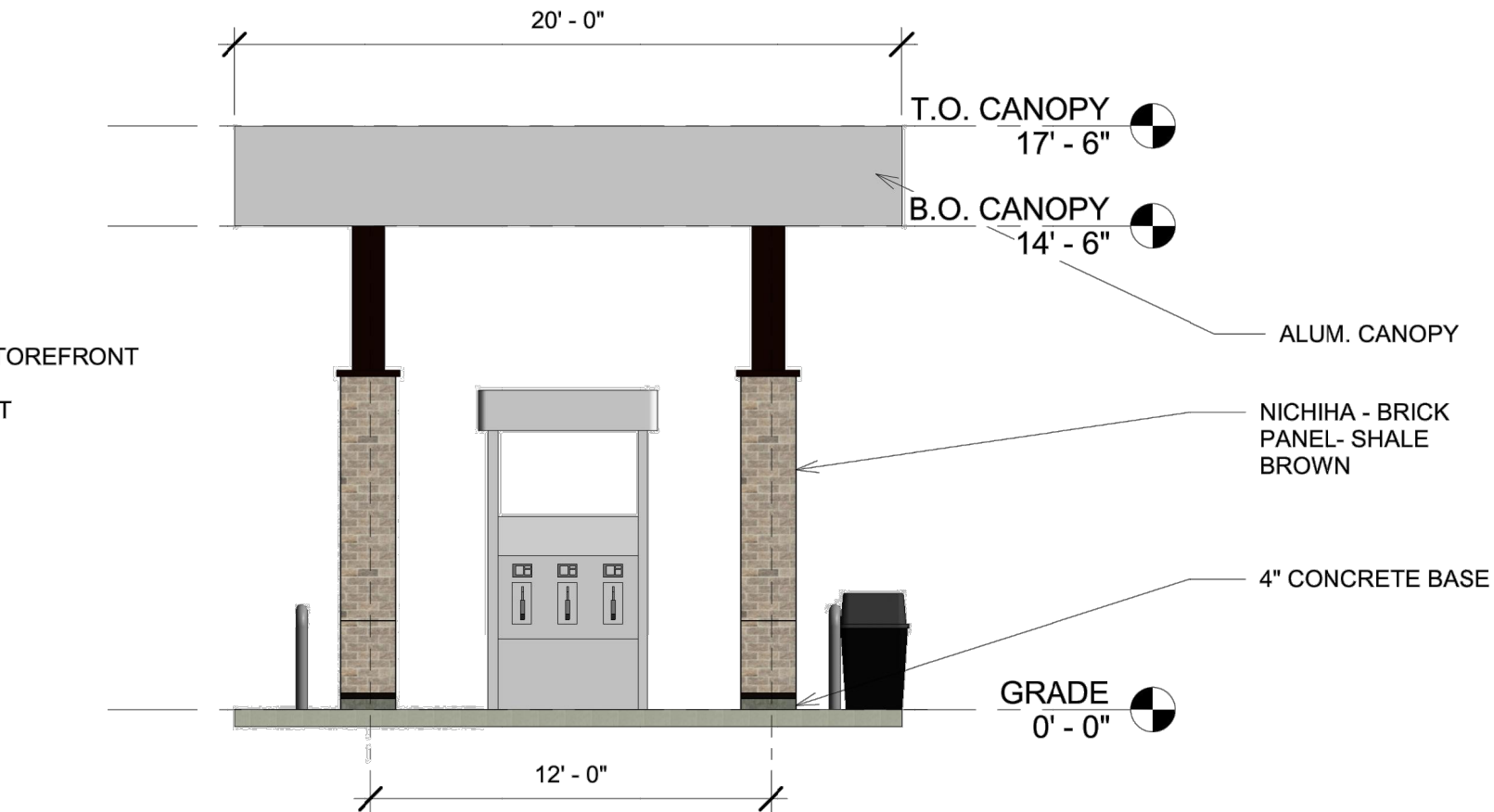
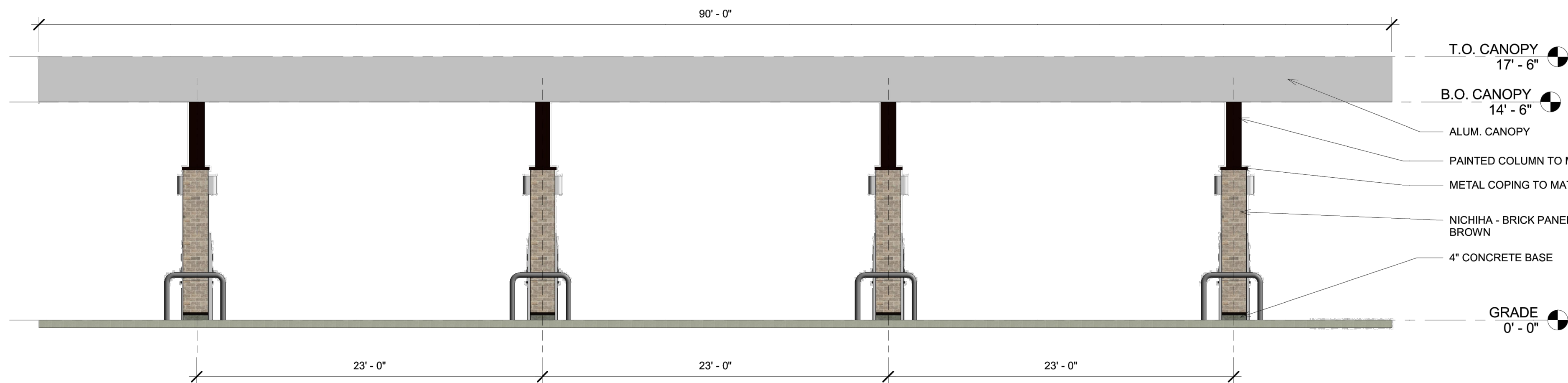
THESE DOCUMENTS WERE PREPARED UNDER MY SUPERVISION AND, TO THE BEST OF MY KNOWLEDGE, COMPLY WITH THE ALL APPLICABLE CODES.
COPYRIGHT 2017 ILEKIS ASSOCIATES. ALL RIGHTS RESERVED

DATE: ISSUED FOR:

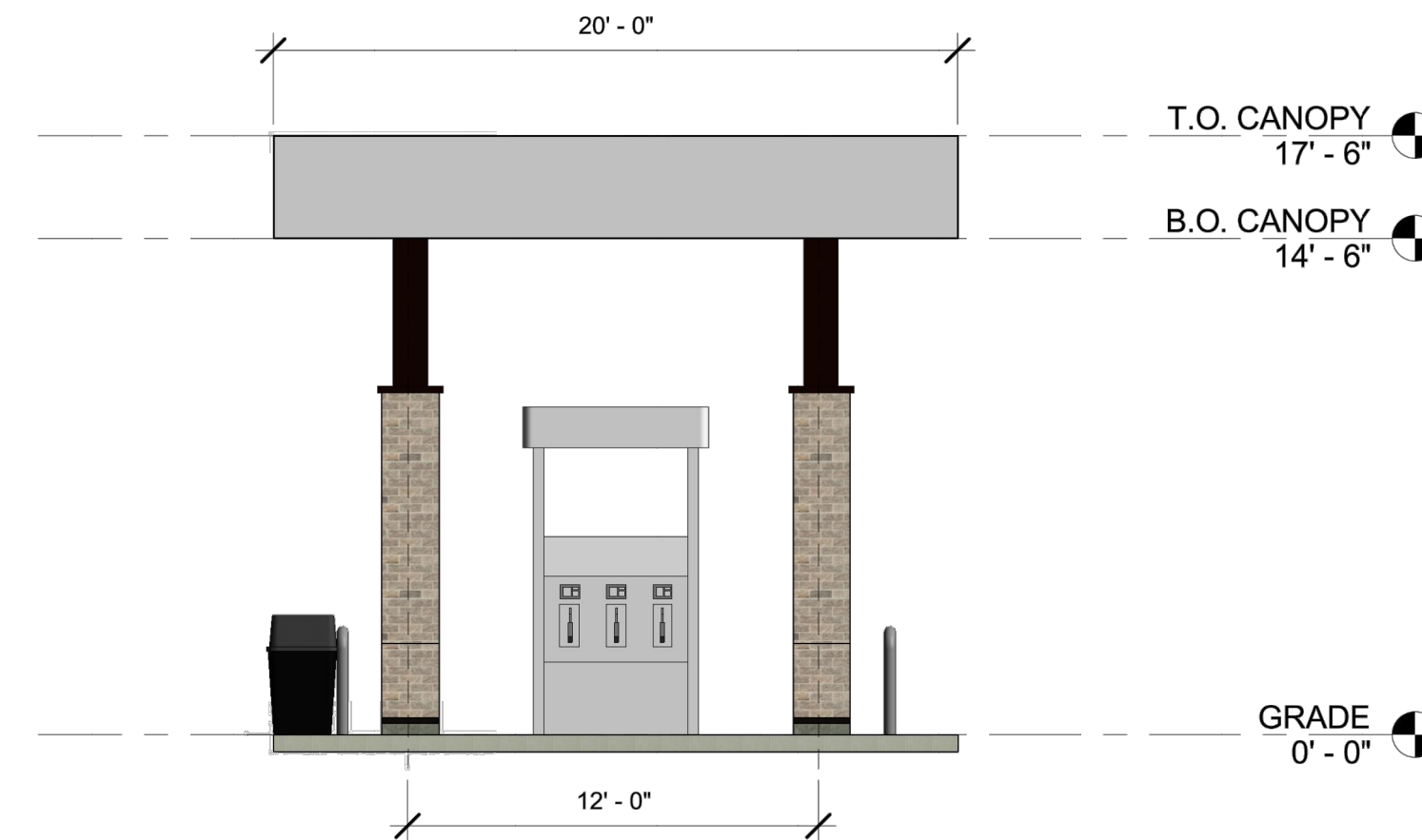
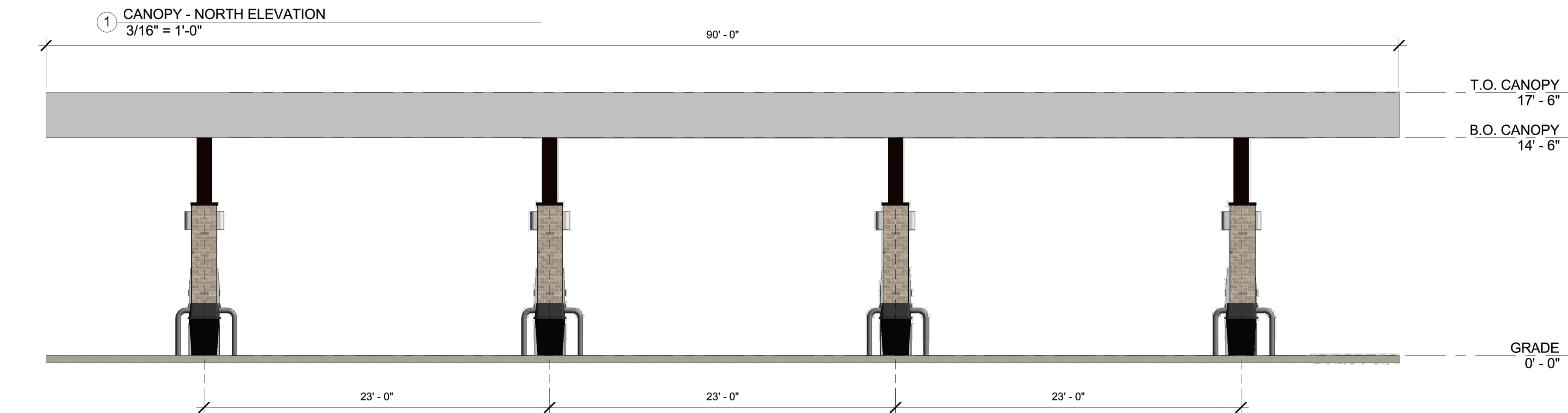
01/30/19 ISSUED PER CITY COMMENTS
01/15/19 ISSUED PER CITY COMMENTS
12/07/18 ISSUED FOR CITY REVIEW

EXTERIOR COLOR
ELEVATIONS AND
SCHEDULE

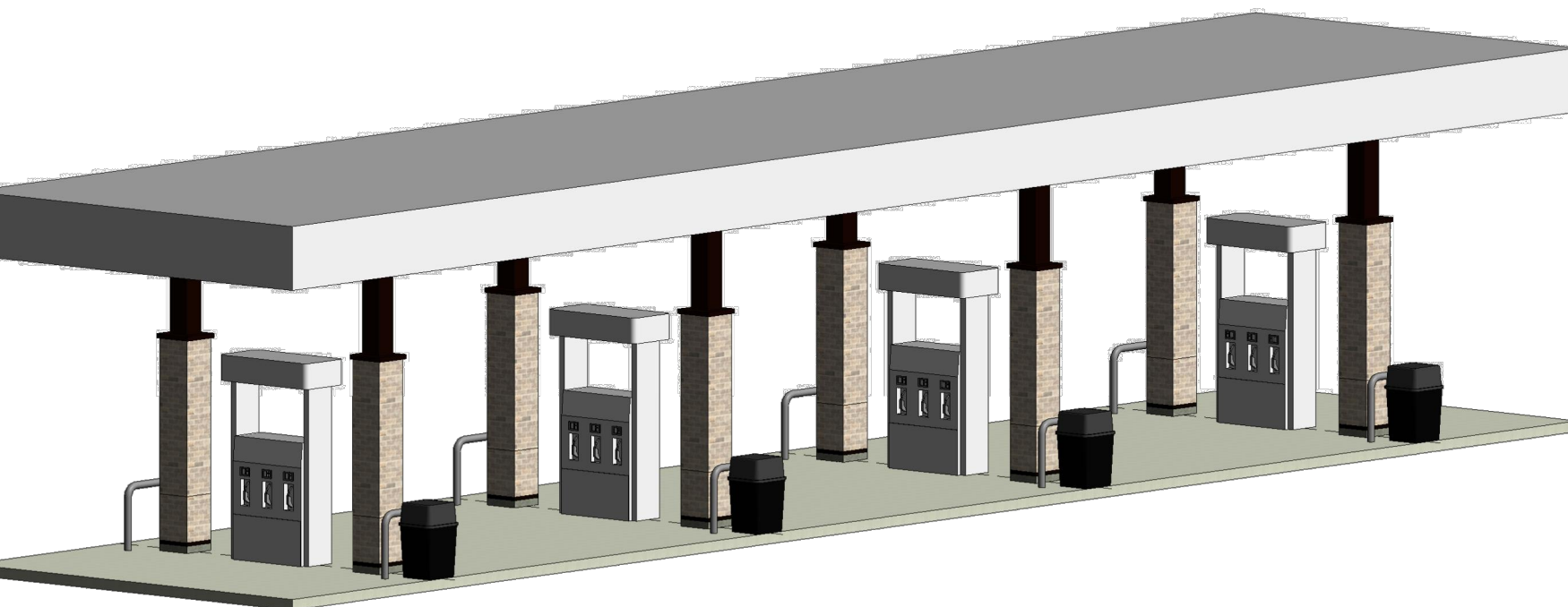
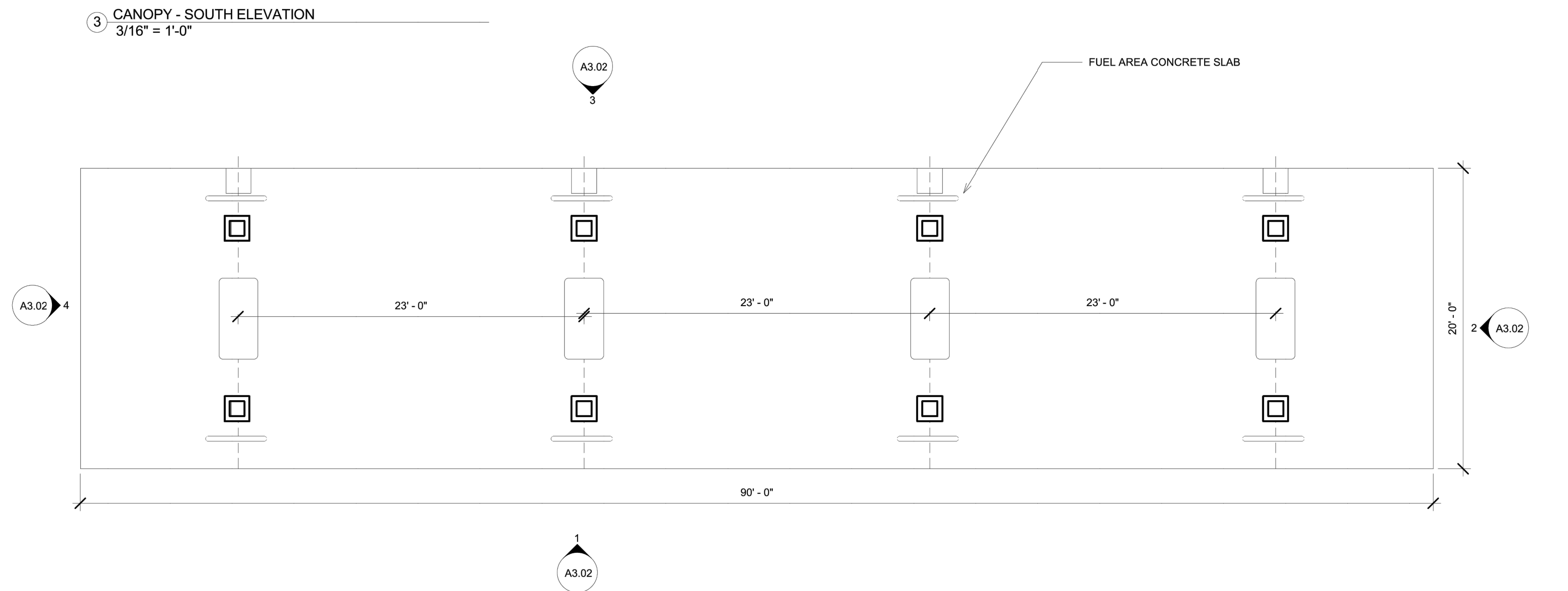
A3.02



2 CANOPY - EAST ELEVATION
3/16" = 1'-0"



4 CANOPY - WEST ELEVATION
3/16" = 1'-0"



6 CANOPY PERSPECTIVE

5 CANOPY FLOOR PLAN
3/16" = 1'-0"

3 CANOPY - SOUTH ELEVATION
3/16" = 1'-0"

NOTE: CANOPY UNDER SEPARATE PERMIT

CITY APPROVAL

CLIENT:
vequity | real estate. redefined.

Vequity
400 N. State
Suite 400
Chicago, IL 60654
312-985-0987
Email info@vequity.com
www.vequity.com

PROJECT TEAM:

ILEKIS
architects + planners

ILEKIS ASSOCIATES
223 W. JACKSON BLVD.
SUITE 1000
CHICAGO, IL 60606

312-419-0009 www.ILEKIS.com
THESE DOCUMENTS WERE PREPARED UNDER MY
SUPERVISION AND, TO THE BEST OF MY KNOWLEDGE,
COMPLY WITH THE APPLICABLE CODES AND BUILDING
REGULATIONS.
ALPHONSE A. ILEKIS, AIA
© COPYRIGHT 2017 ILEKIS ASSOCIATES-ALL RIGHTS RESERVED

LG Landscape Architecture
Workshop Site Planning
Illustration
2324 W. Armitage Ave. Chicago, IL
773.697.4388 www.LGWLA.com

NOTE:

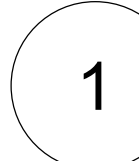
RETAIL BUILDING
PROJECT # 1814-14
1650 W ALGONQUIN RD
ARLINGTON HEIGHTS, IL 60005

THESE DOCUMENTS WERE PREPARED UNDER MY SUPERVISION AND, TO THE BEST
OF MY KNOWLEDGE, COMPLY WITH THE ALL APPLICABLE CODES.
COPYRIGHT 2017 ILEKIS ASSOCIATES, ALL RIGHTS RESERVED

DATE:	ISSUED FOR:
01/30/19	ISSUED PER CITY COMMENTS
01/15/19	ISSUED PER CITY COMMENTS
12/07/18	ISSUED FOR CITY REVIEW

**FUEL CANOPY
ELEVATIONS**

A3.04



SCALE: 1/16"=1'-0"

LG Landscape Architecture
Site Planning
Illustration
Workshop, LLC
2324 W. Armitage Ave. Chicago, IL
773.697.4388 www.LGWLA.com

RETAIL BUILDING
PROJECT # 1814-14
1650 W ALGONQUIN RD
ARLINGTON HEIGHTS, IL 60005

THESE DOCUMENTS WERE PREPARED UNDER MY SUPERVISION AND, TO THE BEST OF MY KNOWLEDGE, COMPLY WITH THE ALL APPLICABLE CODES.

COPYRIGHT 2017 ILEXIS ASSOCIATES, ALL RIGHTS RESERVED

[illegible]

PH1.01

TREE PROTECTION & REMOVAL NOTES

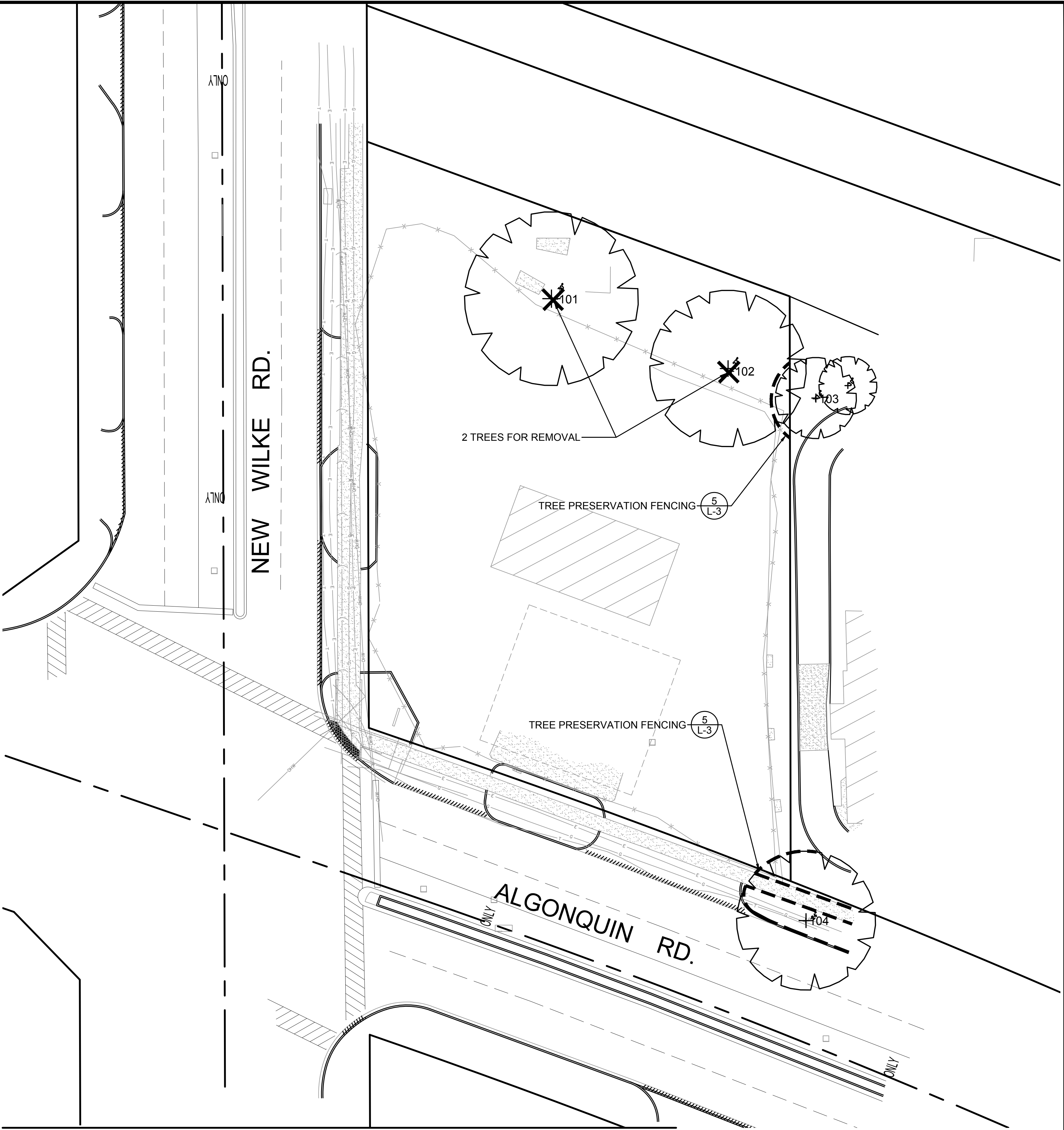
1. CONTRACTOR SHALL OBTAIN ALL NECESSARY STATE AND LOCAL PERMITS AND PERMISSIONS TO PRUNE, REMOVE, AND/OR TRANSPLANT ANY TREES ON SITE.
2. DEAD AND DYING MATERIAL ON THE SITE SHALL BE REMOVED OR PRUNED. MATERIALS NOT LABELED ON THE PROTECTION PLAN SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT FOR REMEDIATION.
3. DURING CONSTRUCTION EXISTING TREES OVER FOUR INCHES IN CALIPER SHALL BE PROTECTED WITH BARRIER FENCING.
4. BARRIER FENCING SHALL BE OF A RIGID MATERIAL SUCH AS WOODEN SNOW FENCING, BRIGHTLY COLORED PLASTIC CONSTRUCTION FENCING, CHAINLINK FENCING, AND SHALL BE INSTALLED AT THE PERIPHERY OF THE DRIP LINE OF THE TREE OR AT A DISTANCE OF ONE FOOT (1') FOR EVERY CALIPER INCH AS MEASURED AT TWELVE INCHES (12") ABOVE THE ESTABLISHED GROUND LEVEL, WHICHEVER IS GREATER. SUCH FENCING SHALL BE SECURELY FASTENED TO METAL FENCE POSTS SPACED A MAXIMUM OF EIGHT FEET (8') APART.
5. BARRIER FENCING SHOWN ON THE PLAN IS APPROXIMATE. CONTRACTOR SHALL ADJUST LOCATION OF BARRIER TO POSITION OUTLINED IN COMMENT 4.
6. NO EXCESS SOIL OR ADDITIONAL FILL, BUILDING MATERIALS OR DEBRIS SHALL BE PLACED WITHIN THE PROTECTIVE BARRIER.
7. NO VEHICLES OR HEAVY MACHINERY SHALL BE ALLOWED TO WORK WITHIN THE BARRIER AREA.
8. NO ATTACHMENTS OR WIRES, OTHER THAN PROTECTIVE GUY WIRES, SHALL BE ATTACHED TO ANY OF THE TREES WHICH ARE WITHIN PROTECTIVE BARRIER.
9. TREES MARKED FOR PRUNING SHALL HAVE OVERGROWTH AND UP TO 30% MAX. OF SECONDARY AND TERTIARY LIMBS REMOVED BY A CERTIFIED ARBORIST, FOR LONG TERM TREE HEALTH, PROPER GROWTH, AND HABIT.
10. STUMPS OR TREE REMAINS NOT TO BE FULLY EXCAVATED SHALL BE REMOVED. A STUMP GRINDER SHALL BE USED TO REMOVE ALL REMAINING ROOTS AND WOODY MATERIAL. WITHIN A 24" RADIUS OF THE TREE TRUNK TO MIN. 6" BELOW GRADE. DISTURBED AREA SHALL BE BACKFILLED WITH COMPACTED TOPSOIL TO MEET SURROUNDING GRADES.
11. IF EXCAVATION ON SITE WILL IMPACT MORE THAN 25% OF THE ROOT SYSTEM OF AN EXISTING TREE, A CERTIFIED ARBORIST SHALL CONDUCT ROOT PRUNING OF THE IMPACTED TREE TO PROMOTE A HEALTHY ROOT SYSTEM.

TREE PROTECTION & REMOVAL LEGEND

- EXISTING TREE TO REMAIN
- EXISTING TREE TO BE REMOVED
- BARRIER FENCING TO BE INSTALLED

SURVEY OF EXISTING TREES

TREE #	SIZE	SCIENTIFIC NAME	COMMON NAME	LOCATION	BEST 5/5	
					COND/FORM	COMMENTS
101	30"	GLEDITSIA TRIAC. INERMIS	HONEYSUCKLE	NORTH	4/3	REMOVE FOR DEVELOPMENT
102	27"	GLEDITSIA TRIAC. INERMIS	HONEYSUCKLE	NORTHEAST	4/4	REMOVE FOR DEVELOPMENT
103	14"	ACER PLATANOIDES	NORWAY MAPLE	NORTHEAST	5/4	PROTECT
104	24"	GLEDITSIA TRIAC. INERMIS	HONEYSUCKLE	SOUTHEAST	4/4	PROTECT



1 TREE REMOVAL & PROTECTION PLAN

CITY APPROVAL

CLIENT:
vequity | real estate. redefined.

Vequity
400 N. State
Suite 400
Chicago, IL 60654
312-985-0987
Email info@vequity.com
www.vequity.com

PROJECT TEAM:

ILEKIS
architects + planners
ILEKIS ASSOCIATES
223 W. JACKSON BLVD.
SUITE 1000
CHICAGO, IL 60606
312-419-0009 www.ILEKIS.com
THESE DOCUMENTS WERE PREPARED UNDER MY SUPERVISION AND, TO THE BEST OF MY KNOWLEDGE, COMPLY WITH THE APPLICABLE CODES AND BUILDING REGULATIONS.
ALPHONSE A. ILEKIS, AIA
© COPYRIGHT 2017 ILEKIS ASSOCIATES. ALL RIGHTS RESERVED.

LANDSCAPE ARCHITECT:

LG Landscape Architecture
Site Planning
Illustration
Workshop.LLC
2324 W. Armitage Avenue
Chicago, IL 60647
ph. 773.697.4388
www.LGWLA.com

SEAL



NOTE:

RETAIL BUILDING
PROJECT # 1814-14
1650 W ALGONQUIN RD
ARLINGTON HEIGHTS, IL 60005

THESE DOCUMENTS WERE PREPARED UNDER MY SUPERVISION AND, TO THE BEST OF MY KNOWLEDGE, COMPLY WITH THE ALL APPLICABLE CODES.
COPYRIGHT 2017 ILEKIS ASSOCIATES. ALL RIGHTS RESERVED.

DATE: ISSUED FOR:

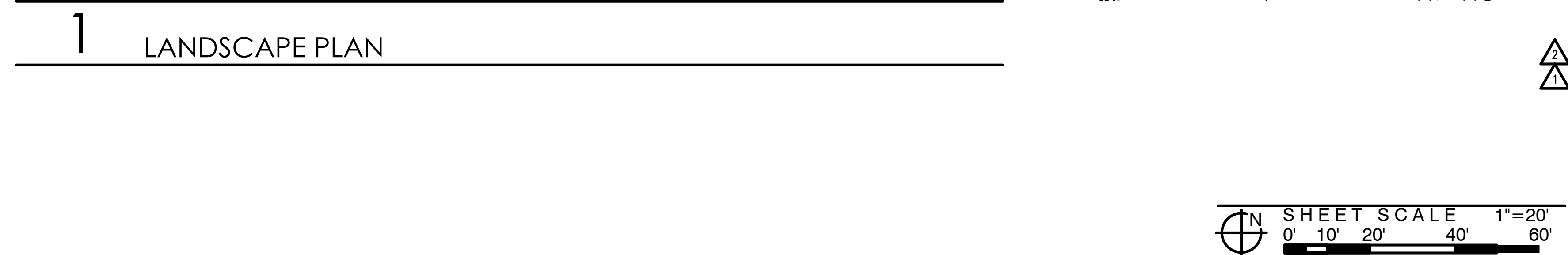
01/30/19	ISSUED PER CITY COMMENTS
01/15/19	ISSUED PER CITY COMMENTS
12/07/18	ISSUED FOR CITY REVIEW

TREE REMOVAL & PROTECTION PLAN

L.1

SYM	SIZE	QTY	BOTANICAL NAME	COMMON NAME	COMMENT
DECIDUOUS SHADE TREES					
AMM	2.5" CAL.	4	ACER MIYABEI 'MORTON'	MIYABE MAPLE	B&B
GDE	4.0" CAL.	3	GYMNOCLADUS DIOIC. 'ESPRESSO'	ESPRESSO KENT. COFFEETREE	B&B ★
GTS	4.0" CAL.	4	GLEDITSIA TRI. 'SHADEMASTER'	SHADEMASTER HONEYLOCUST	B&B ★
PYC	4.0" CAL.	1	PYRUS CALLERYANA 'CHANTICLEAR'	CHANTICLEAR PEAR	B&B
ULH	2.5" CAL.	2	ULMUS 'REGAL'	REGAL ELM	B&B
EVERGREEN TREES					
UCH	6' HT.		JUNIPERUS CHIN. 'HETZII COLUMN.'	HETZII COLUMNAR JUNIPER	B&B ★
DECIDUOUS SHRUBS					
CSI	24" HT.	6	CORNUS SERICEA 'ISANTI'	ISANTI DOGWOOD	B&B
FVB	18" W.	8	FORSYTHIA VIRID. 'BRONXENSIS'	BRONX GREENSTEM FORSYTHIA	B&B
POB	36" HT.	8	PYHSOCARPUS OPUL. 'DIABOLO'	DIABOLO NINEBARK	B&B
VTC	36" HT.	36	VIBURNUM TRILOBUM 'ALFREDO'	ALFREDO AMER.CRANBERRY BUSH	B&B
EVERGREEN SHRUBS					
TMT	36" HT.	8	TAXUS X MEDIA 'TAUNTON'	TAUNTON YEW	B&B
ORNAMENTAL GRASSES					
CAA	#3 CONT.	30	CALAMAGROSTIS ACUT. 'STRICTUS'	STRICTUS FEATHER REED GRASS	
GROUND COVER / PERENNIALS					
ACH	#1 CONT.	67	ACHILLEA MILLE. 'PAPRIKA'	PAPRIKA YARROW	18" O.C.
ALS	#1 CONT.	46	ALLUM TANGUT. 'SUMMER BEAUTY'	SUMMER BEAUTY WILD ONION	18" O.C.
HEM	#1 CONT.	86	HEMEROCALLIS 'STELLA DE ORO'	STELLA DE ORO DAYLILY	15" O.C.
LAV	#1 CONT.	39	LAVENDULA 'MUNSTEAD STRAIN'	MUNSTEAD ENGLISH LAVENDER	24" O.C.
SOD	SQ. YD.	382	SODDED LAWN		
PLANTS MARKED WITH AN ★ SYMBOL ARE USED FOR REPLACEMENT TREES FOR REMOVALS					

	EXISTING TREE		PROPOSED LARGE SHRUB (36" AT PLANTING)
	PROPOSED SHADE TREE		PROPOSED DECIDUOUS SHRUB (24" AT PLANTING)
	PROPOSED LOW CANOPY SHADE TREE - UNDER WIRES		PROPOSED EVERGREEN SHRUB
	PROPOSED EVERGREEN TREE		PROPOSED LOW SHRUB
	PROPOSED ORNAMENTAL TREE		PROPOSED ORNAMENTAL GRASS
			PROPOSED PERENNIAL PLANTING
			SODDED LAWN



EXPIRES 08/2019

LANDSCAPE PLAN

L.2

1. CONTRACTOR SHALL OBTAIN ALL NECESSARY LOCAL PERMITS AND PERMISSIONS TO INSTALL THE PROPOSED IMPROVEMENTS
2. ALL LANDSCAPE MATERIALS SHALL BE INSTALLED IN ACCORDANCE WITH LOCAL LANDSCAPING CODES AND ZONING ORDINANCES.
3. PRIOR TO COMMENCING ANY WORK, CONTRACTOR SHALL HAVE J.U.L.I.E (811) LOCATE AND MARK ALL UNDERGROUND UTILITY FACILITIES AND LINES.
4. LANDSCAPE IMPROVEMENTS WITHIN THE WEBER AND REMINGTON R.O.W. SHALL NOT OCCUR UNTIL AFTER COMPLETION OF IDOT IMPROVEMENTS.
5. ALL PLANT MATERIALS (EXCEPT FOR GROUNDCOVER, ANNUALS, AND PERENNIALS) SHALL BE BALLED AND BURLAPPED STOCK AND MEET CURRENT STANDARDS OF THE AMERICAN ASSOCIATION OF NURSERYMEN'S STANDARD FOR NURSERY STOCK (ANSI 260.1-1986) OR EQUAL. PLANT MATERIALS MUST BE SUPPLIED WITHIN A 150 MILE RADIUS OF PROJECT SITE WITHIN NORTHEAST ILLINOIS. CONTRACTOR MAY SUBSTITUTE CONTAINER STOCK FOR SHRUBS IF SIZES ARE EQUAL TO SPECIFIED B&B STOCK, WITH THE APPROVAL OF THE LANDSCAPE ARCHITECT.
6. IF SPECIFIED PLANTS ARE NOT AVAILABLE AT THE TIME OF ORDERING, PLANTS WITH SIMILAR WHOLESALE VALUE AND LANDSCAPE CHARACTERISTICS MAY BE SUBSTITUTED UPON THE APPROVAL OF THE LANDSCAPE ARCHITECT AND VILLAGE STAFF.
7. SOIL IN GROUNDCOVER AND PERENNIAL BEDS SHALL BE AMENDED USING 2 INCHES OF MUSHROOM COMPOST INCORPORATED INTO THE TOP 4 INCHES OF SOIL.
8. DISTURBED AREAS TO RECEIVE SOD SHALL BE TILLED TO 6" DEPTH AND FINE GRADED TO PROVIDE SMOOTH BASE SURFACE. IF EXISTING SOIL IS A MAJORITY OF CLAY OR UNSUITABLE, 2" OF FINE GRADED TOPSOIL SHALL BE ADDED PRIOR TO TILLING. EXISTING SOD AREAS SHALL HAVE TURF REMOVED WITH AUTOMATED SODCUTTER OR HAND SPACE TO REMOVE ALL BLADES AND ROOTS. 1" OF FINE GRADED TOPSOIL SHALL BE TILLED AND GRADED.
9. TREE AND SHRUB BACKFILL MIXTURE SHALL BE 2 PARTS EXIST. NATIVE TOPSOIL AND 1 PART SPHAGNUM PEAT MOSS W/ DECOMPOSED MANURE.
10. ALL SHRUB BEDS AND INDIVIDUAL TREE PLANTINGS, UNLESS OTHERWISE NOTED, SHALL RECEIVE A 3 INCH LAYER OF SHREDDED HARDWOOD MULCH. ALL GROUNDCOVER, ANNUAL AND PERENNIAL BEDS SHALL RECEIVE A 2 INCH LAYER OF THE SAME MULCH MATERIAL. COSTS FOR MULCH SHALL BE CONSIDERED INCIDENTAL AND SHALL BE INCLUDED IN THE COST OF PLANTINGS.
11. NURSERY TAGS (SPECIES, SIZE) FOR ALL SHADE TREES SHALL REMAIN ATTACHED TO TREES UNTIL FINAL APPROVAL FROM VILLAGE.
12. THE LANDSCAPE CONTRACTOR SHALL PROVIDE THE OWNER A BONDED WRITTEN ONE-YEAR WARRANTY AGREEMENT (BEGINNING ON THE OWNER'S POSSESSION DATE). THIS AGREEMENT SHALL COVER MAINTENANCE, REPAIR, AND REPLACEMENT OF ALL DEAD OR DAMAGED LANDSCAPING TO PRESERVE THE SAME QUANTITY AND QUALITY AS INITIALLY APPROVED.
13. CONTRACTOR SHALL PROVIDE A SEPARATE ESTIMATE FOR AN AUTOMATIC UNDERGROUND IRRIGATION SYSTEM FOR COMPLETE EFFECTIVE COVERAGE OF ALL LAWN AREAS AND SHRUB BEDS. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR APPROVAL AND APPLY FOR ALL NECESSARY PERMITS PRIOR TO COMMENCING WORK. IRRIGATION PLANS SHALL INCLUDE HUNTER PROTECT CONTROLLER, WIRELESS SOLAR SYNC STATION AND HUNTER SPRAYHEADS AND NOZZLES, AND AN RPZ BACKFLOW PREVENTER. IRRIGATION WORK SHALL BE WARRANTY ALL LABOR AND MATERIALS FOR 1 FULL YEAR AFTER INSTALLATION AND TESTING.
14. SEEDED LAWN AREAS SHALL BE BID WITH A BID ALTERNATE FOR HYDROSEEDING LAWN. PRIOR TO SEEDING 2" OF FINE TOPSOIL SHALL BE TILLED INTO EXIST SOIL MIXTURE. A MIX CONSISTING OF ROUGHLY 30 % BLUEGRASS / 30% FINE FESCUES / 40% RYE GRASSES (AND TACKIFIER FOR HYDROSEEDING) SHALL BE APPLIED AT MANUFACTURERS SPECIFIED RATES FOR NEW LAWNS BETWEEN 5 AND 10 LBS PER 1,000 SF.
15. TREES AND LARGE SHRUBS SHALL NOT BE LOCATED CLOSER THAN TEN (10) FEET TO FIRE HYDRANTS, LIGHT AND TELEPHONE POLES, TRANSFORMERS OR OTHER ABOVE GROUND UTILITIES. ANY DISCREPANCY ON THE PLAN RELATED TO THESE PROXIMATE UTILITIES SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT FOR RESOLUTION.



28-6.15.5.4	TREE REPLACEMENT - TREES REMOVED	1 - 30" CAL.	1 - 27" CAL.
	REPLACEMENT TREES REQUIRED	7 - 4" CAL.	6 - 4" CAL.
	PROPOSED REPLACEMENT TREES	6 - 4" SHADE TREE, 15 - 6' EVERGREEN	



2 ORNAMENTAL TREE
PLANTING DETAIL



L.3

PRELIMINARY ENGINEERING PLANS

FOR

PROPOSED FUEL CENTER - ARLINGTON HEIGHTS, IL

AT

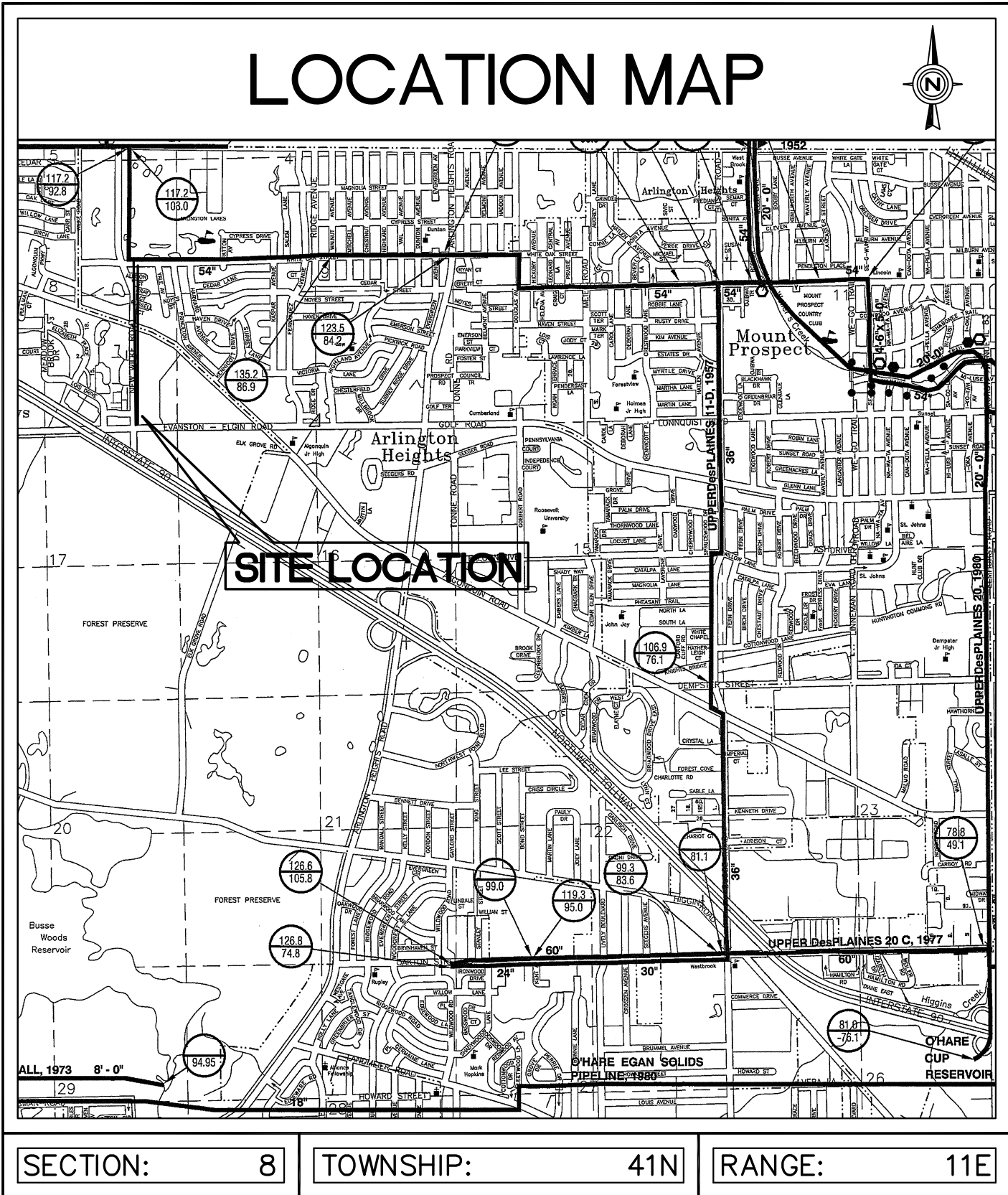
1650 W. ALGONQUIN ROAD

CITY OF ARLINGTON HEIGHTS

COOK COUNTY, ILLINOIS

INDEX		REVISIONS						
CIVIL ENGINEERING PLANS		1	2	3	4	5	6	7
C-1	COVER SHEET	X						
C-2	GEOMETRIC PLAN	X	X					
C-3	GRADING AND UTILITY PLAN	X	X					
C-4	PROJECT DETAILS AND SPECIFICATIONS	X	X					
C-5	MWRD SPECIFICATIONS							
C-6	PROJECT DETAILS		X					
C-7	IDOT DETAILS		X					
SUPPORTING DOCUMENTS		REVISIONS						
1 of 1		1	2	3	4	5	6	7
	ALTA/NSPS LAND TITLE AND TOPOGRAPHIC SURVEY	X						

NOTE: THE DESIGNS CONTAINED IN THE ABOVE PLANS AND SUPPORTING DOCUMENTS WERE PREPARED WITH THE UNDERSTANDING THAT THEY WOULD BE USED AS A WHOLE PLAN SET. EACH CONSTRUCTION DISCIPLINE IS TO USE ALL THE PLANS AND SUPPORTING DOCUMENTS TOGETHER AS A WHOLE AND NOT AS SEPARATE DOCUMENTS. EACH CONTRACTOR IS TO BECOME COMPLETELY FAMILIAR WITH THE WHOLE PLAN SET AND THE EXISTING SITE CONDITIONS. SHOULD ANYTHING WITH ALL THESE PLANS AND SUPPORTING DOCUMENTS BE INCONSISTENT WITH THE SITE CONDITIONS THEN THE CONTRACTOR IS TO CONTACT THE ENGINEER IMMEDIATELY BEFORE ANY CONSTRUCTION IS STARTED.



LEGEND		
EXISTING	DESCRIPTION	PROPOSED
	CATCH BASIN INLET	
	SANITARY MANHOLE	
	VALVE VAULT	
	FIRE HYDRANT	
	FLARED END SECTION	
	ELECTRICAL POWER POLE	
	OVERHEAD TRAFFIC SIGNAL	
	TRAFFIC SIGNAL MANHOLE	
	OVERHEAD ELECTRIC WIRES	
	TRANSFORMER PAD	
	TELEPHONE PEDESTAL	
	TELEPHONE MANHOLE	
	CABLE TELEVISION PEDESTAL	
	COMMONWEALTH EDISON MANHOLE	
	LIGHT POLE	
	SIGN	
	BOLLARD POLE	
	GAS MARKER	
	ELECTRIC MARKER	
	WATER MAIN	
	GAS MAIN	
	ELECTRIC LINE	
	TELEPHONE LINE	
	CABLE TV LINE	
	SANITARY SEWER	
	STORM SEWER	
	GUY POLE	
	CONIFEROUS TREE W/DIAMETER	
	DECIDUOUS TREE W/DIAMETER	
	WOOD FENCE	
	CHAIN LINK FENCE	
	METAL GUARDRAIL	
	CONCRETE SURFACE	
	CONTOUR LINE	
	FINISHED FLOOR ELEVATION	
	PAVEMENT ELEVATION	
	MATCH EXISTING ELEVATION	
	GROUND ELEVATION	
	TOP OF WALK ELEVATION	
	TOP OF RETAINING WALL ELEVATION	
	FLOW LINE ELEVATION	
	TOP OF CURB ELEVATION	
	RIM ELEVATION	
	DOWNSPOUT LOCATION	
	PERVIOUS AREA SLOPE DIRECTION	
	PAVEMENT SLOPE DIRECTION	
	OVERLAND OVERFLOW DIRECTION	
	INLET PROTECTION	
	INLET BASKET FILTER	

BENCHMARK	
REFERENCE BENCHMARK	
NATIONAL GEODETIC SURVEY MONUMENT #DM3900	
DISK LOCATED APPROXIMATELY 3.0 MILES SOUTH-SOUTHWEST OF ARLINGTON HEIGHTS, ON TOP OF THE SOUTH END OF EAST ABUTMENT ON GOLF ROAD BRIDGE OVER SALT CREEK.	
DATUM: NAVD88	ELEVATION = 696.09
SITE BENCHMARK	
1. SITE BENCHMARK #1 - CUT SQUARE ON LIGHT POLE BASE AT NORTHWEST CORNER OF SITE	
ELEVATION = 695.25	
2. SITE BENCHMARK #2 - NORTHEAST BOLT ON FIRE HYDRANT NEAR SOUTHWEST CORNER OF SITE	
ELEVATION = 698.65	

REVISIONS		DATE
1	REVISIONS PER VILLAGE REVIEW COMMENTS	1/15/19
2	REVISIONS PER VILLAGE REVIEW COMMENTS DATED 1/22/19	1/31/19

NO.	1	2
DATE	1/15/19	1/31/19

Prepared For:	Vequity 400 N. State St Chicago, IL 60654 PROPOSED FUEL CENTER 1650 W. Algonquin Road Arlington Heights, Illinois
Prepared By:	Watermark Engineering Resources, Ltd. 2631 Ginger Woods Parkway, Suite 100, Aurora, IL 60502 phone 630-571-5160 fax 630-236-8600 www.watermark-engineering.com

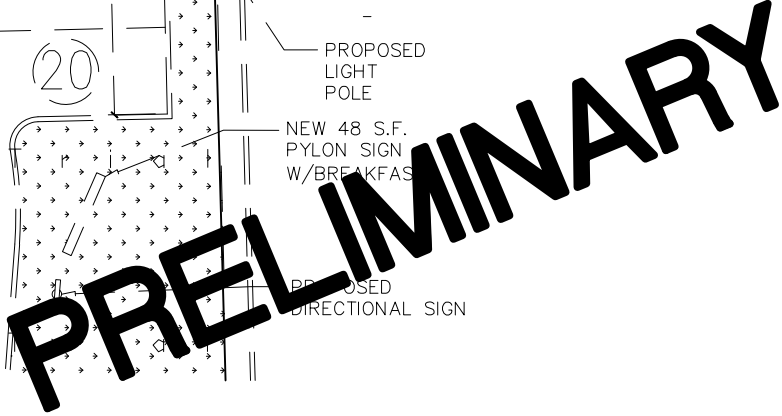
CHECKED BY: B. PERRY	DESIGN BY: S. SIMAK	DRAWN BY: S. SIMAK	DATE: DECEMBER 7, 2018	SCALE: NONE	PROJECT NO.: 18-123
----------------------	---------------------	--------------------	------------------------	-------------	---------------------

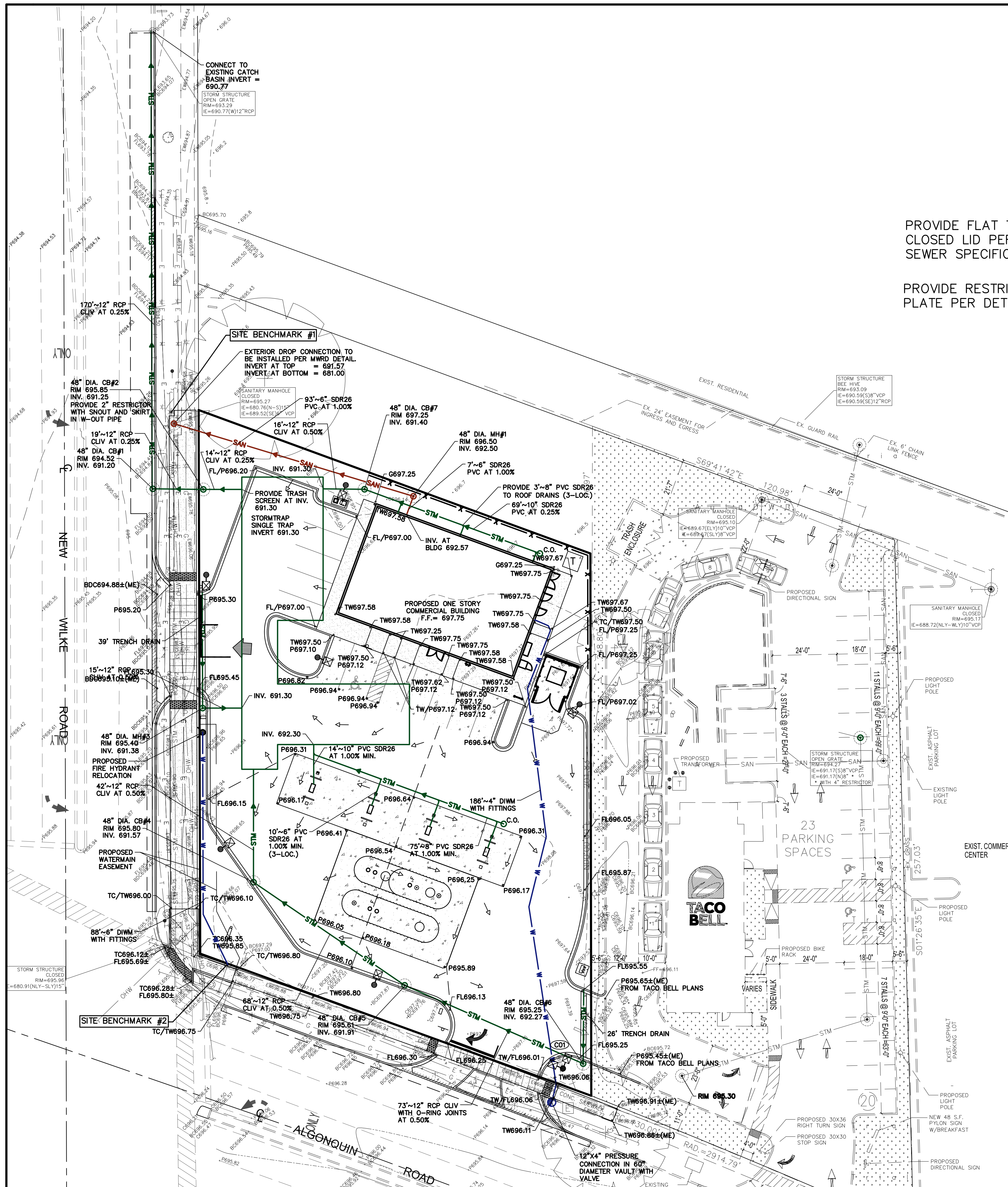
C-1

COVER SHEET



J:\dwgs\18jobs\18123\18123.dwg, 18123





DETENTION CALCULATIONS:
HWL = 695.20
INVERT = 691.30
AREA = .67 ACRES
Cd = 0.86

REQUIRED STORAGE PER CODE (Q=0.18) = 9,311 FT³ (0.21 AC-FT)
REQUIRED STORAGE WITH 2" RESTRICTOR = 7,939 FT³ (0.18 AC-FT)

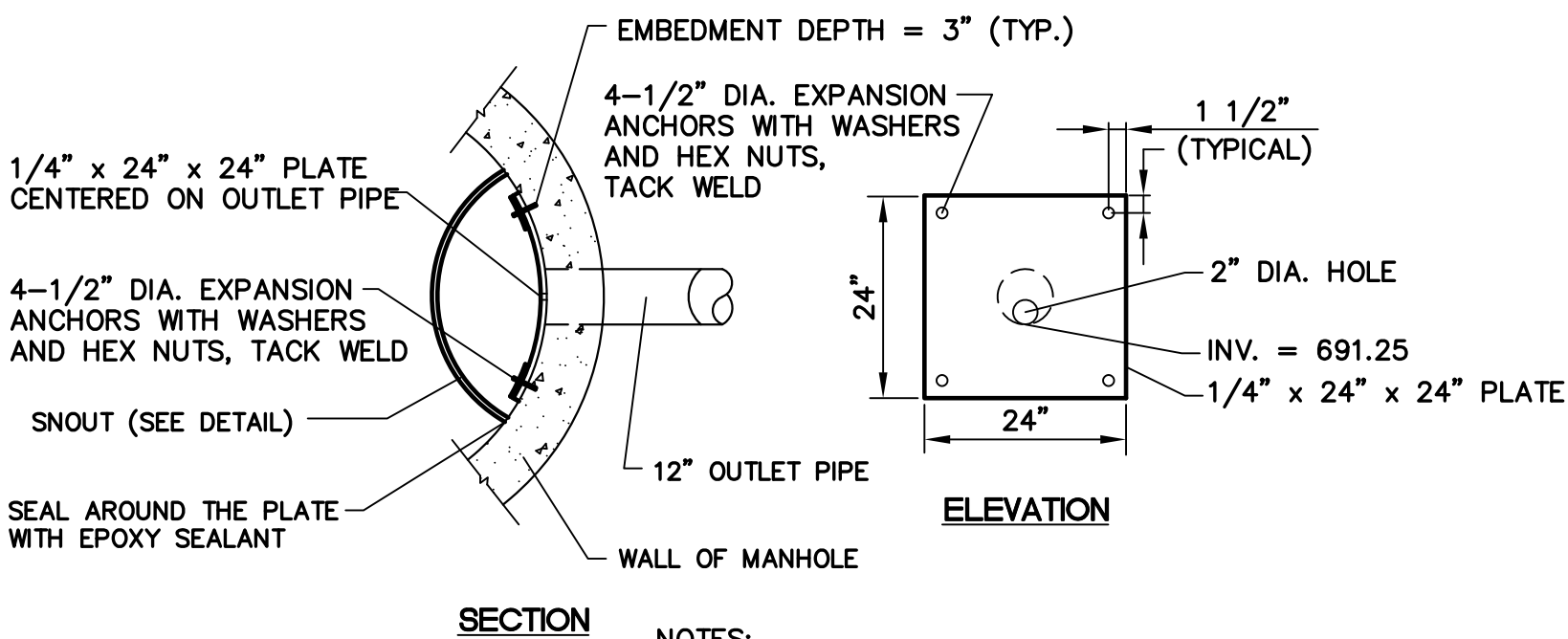
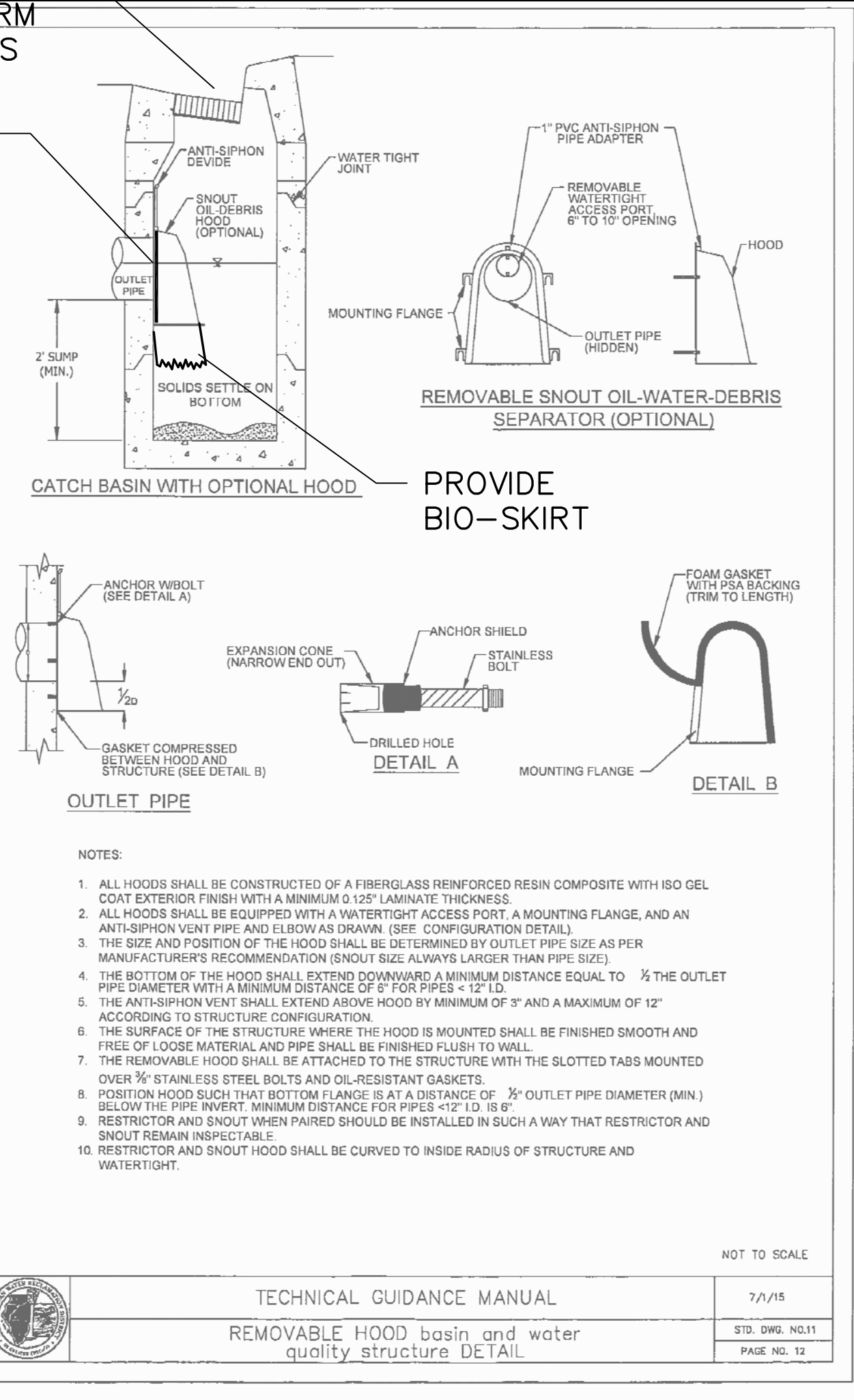
FEE IN LIEU OF STORAGE TO PUT IN A 2" RESTRICTOR
FEE = \$1.00/FT³
VOLUME = 1,372.46 FT³
COST = \$1,372.46

STORAGE PROVIDED IN STORMTRAP UNIT UNDER PAVEMENT

FLOW THROUGH UNIT PROVIDED TO MEET VOLUME CONTROL REQUIREMENTS DUE TO CONTAMINATED SOILS AND FUEL CENTER USE

PROVIDE FLAT TOP WITH
CLOSED LID PER STORM
SEWER SPECIFICATIONS

PROVIDE RESTRICTOR
PLATE PER DETAIL



RESTRICTOR PLATE DETAIL IN CB#2

GENERAL NOTES:
THESE PLANS ARE BASED ON THE ALTA/NSPS LAND TITLE AND TOPOGRAPHIC SURVEY (SURVEY PROJECT #18.0366 DATED 11/5/18)
PREPARED BY: COMPASS SURVEYING LTD
2631 GINGER WOODS PARKWAY, STE 100, AURORA, IL 60502 (630) 820-9100
1. PRIOR TO CONSTRUCTION, CONTRACTOR TO CONTACT THE DESIGN ENGINEER AND ARCHITECT TO VERIFY THAT THEY ARE WORKING FROM THE MOST CURRENT SET OF PLANS AND SPECIFICATIONS.

REFERENCE BENCHMARK
NATIONAL GEODETIC SURVEY MONUMENT #DM3900

DISK LOCATED APPROXIMATELY 3.0 MILES SOUTH-SOUTHWEST OF ARLINGTON HEIGHTS, ON TOP OF THE SOUTH END OF EAST ABUTMENT ON GOLF ROAD BRIDGE OVER SALT CREEK

DATUM: NABD 88 ELEVATION = 696.09

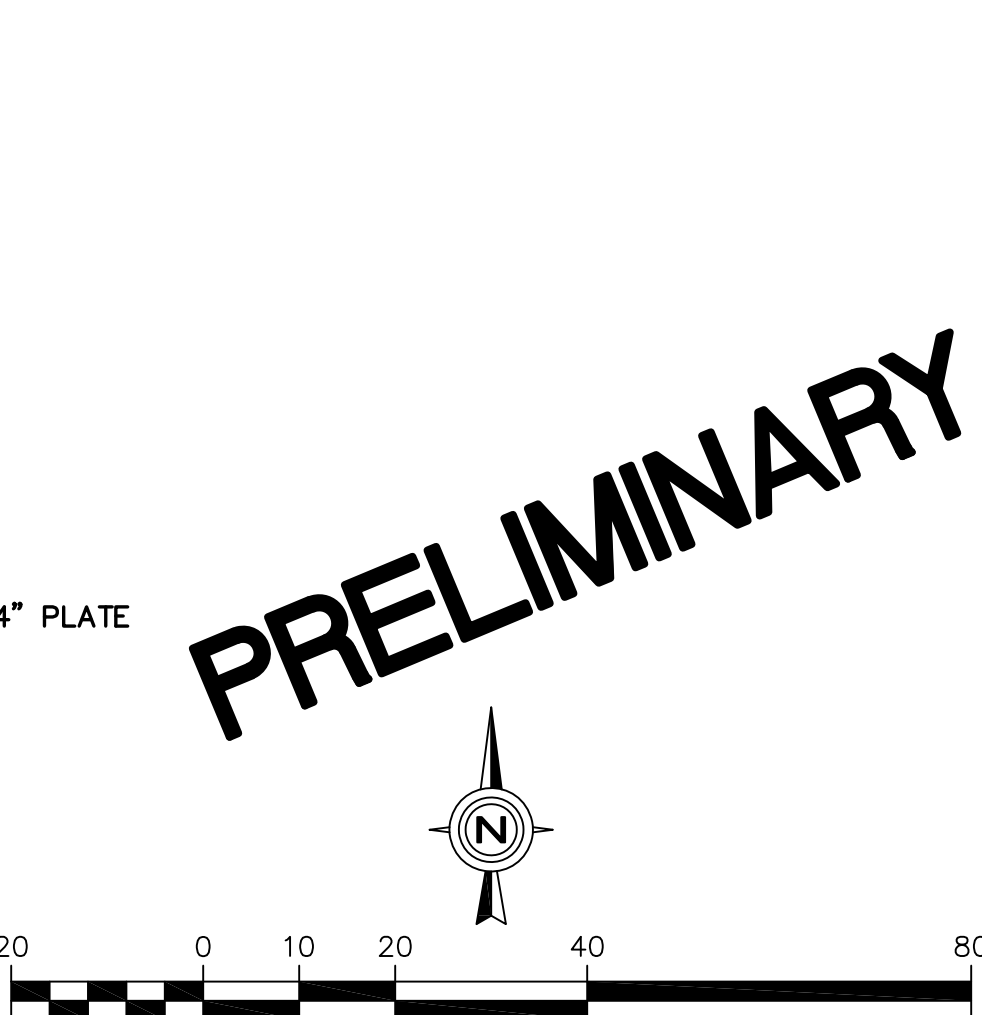
SITE BENCHMARKS
1. SITE BENCHMARK #1 - CUT SQUARE ON LIGHT POLE BASE AT NORTHWEST CORNER OF SITE ELEVATION = 695.25
2. SITE BENCHMARK #2 - NORTHWEST BOLT ON FIRE HYDRANT NEAR SOUTHWEST CORNER OF SITE ELEVATION = 698.65

GRADING PLAN NOTES:
1. UNLESS OTHERWISE SPECIFIED, TOP OF CURB (TC) AND/OR TOP OF WALK ELEVATIONS ARE 0.5' HIGHER THAN THE ADJACENT FLOW LINE (FL) OR PAVEMENT (P) ELEVATIONS.
2. IN ALL LOCATIONS WHERE ELEVATIONS ARE SHOWN AS ±, THE ELEVATION HAS BEEN DETERMINED BASED ON INTERPOLATED GRADES FROM THE SURVEY. CONTRACTOR IS TO VERIFY THESE GRADES PRIOR TO CONSTRUCTION OF ANY IMPROVEMENTS WITHIN THE PROXIMITY OF THESE INTERPOLATED GRADES AND REPORT THEM TO THE DESIGN ENGINEER FOR VERIFICATION OF PROPOSED SLOPES PRIOR TO INSTALLATION OF PROPOSED IMPROVEMENTS. DESIGN ENGINEER IS NOT RESPONSIBLE FOR SLOPES OF PROPOSED IMPROVEMENTS BASED ON THESE ± GRADES WITHOUT CONFIRMATION OF EXISTING ELEVATIONS AT TIME OF CONSTRUCTION.
3. PAVING, SIDEWALK, AND CURBING IS NOT TO BE INSTALLED IN SUCH A WAY THAT IT WILL BLOCK THE FLOW OF WATER AWAY FROM THE BUILDING INCLUDING BUT NOT LIMITED TO WEEP HOLES, WICKS, DRAINAGE SCUPPERS OR PIPES, AND LANDSCAPING.
4. ALL RETAINING AND/OR DECORATIVE LANDSCAPE WALLS OR CURBS SHOWN ON THIS PLAN, INCLUDING DETAILS AND SECTIONS, ARE TO ILLUSTRATE GENERAL LOCATION, LENGTH, AND HEIGHT. STRUCTURAL DESIGN, INCLUDING PROPER DRAINAGE, TIE-BACKS, AND SHORING AS WELL AS CONSTRUCTION MEANS ARE NOT ADDRESSED AS PART OF THESE PLANS. A STRUCTURAL ENGINEER SHOULD BE ENGAGED BY THE GENERAL CONTRACTOR AS THEY DEEM NECESSARY. WATERMARK ENGINEERING RESOURCES ASSUMES NO LIABILITY FOR THE DESIGN OR CONSTRUCTION OF ANY STRUCTURAL ELEMENT.

UTILITY PLAN NOTES:
1. PRIOR TO CONSTRUCTION OF ANY UTILITIES, CONTRACTOR IS TO VERIFY THAT THE PROPOSED UTILITIES SHOWN ON THIS PLAN THAT ENTER THE PROPOSED BUILDING(S) CORRESPOND WITH THE UTILITIES ON THE PLUMBING PLANS AS THEY EXIT THE BUILDING(S). CONTRACTOR TO REPORT IN WRITING ANY DISCREPANCIES IN SIZE, LOCATION, OR INVERT ELEVATION TO THE DESIGN ENGINEER IMMEDIATELY FOR RESOLUTION OF THE CONFLICT IN WRITING.
2. GENERAL CONTRACTOR TO COORDINATE THE INSTALLATION AND PERMITTING OF THE PUBLIC UTILITIES, SUCH AS GAS, ELECTRIC, TELEPHONE, CABLE AND FIBER OPTICS, WITH THE PUBLIC UTILITY COMPANIES AND ARCHITECT PRIOR TO CONSTRUCTION. THE INSTALLATION OF THE PUBLIC UTILITIES AND NECESSARY SLEEVING TO BE INCLUDED AS PART OF GENERAL CONTRACTOR'S SCOPE OF WORK FOR THIS PROJECT.

UTILITY CROSSINGS

CO1 BOTTOM OF 12" STORM = 692.00"
TOP OF 8" WATER = 690.50"
*PROVIDE O-RING JOINTS



GRADING AND
UTILITY PLAN

CHECKED BY: B. PERRY	DATE	1/15/19
	REVISIONS PER VILLAGE REVIEW COMMENTS	1/31/19
DESIGN BY: S. SIMAK	NO.	1
DRAWN BY: S. SIMAK	NO.	2
DATE: DECEMBER 7, 2018	Prepared For:	
SCALE: 1" = 20'	Vequity 400 N. State St Chicago, IL 60654	
PROJECT NO.: 18-123	PROPOSED FUEL CENTER 1650 W. Algonquin Road Arlington Heights, Illinois	
GRADING AND UTILITY PLAN		

PROJECT SPECIFICATIONS

- CONTRACTOR IS TO FOLLOW ALL ORDINANCES AND REQUIREMENTS OF THE STATE, COMMUNITY, LOCAL DISTRICTS AND THE ILLINOIS ACCESSIBILITY CODE (IAC). ALL PROPOSED IMPROVEMENTS ARE TO BE CONSTRUCTED IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" AS WELL AS THE "STANDARD SPECIFICATIONS FOR WATER AND SEWER CONSTRUCTION IN ILLINOIS" CURRENT EDITIONS.
- THE CONTRACTOR SHALL INDEMNIFY WATERMARK ENGINEERING RESOURCES, LTD (THE DESIGN ENGINEER), ARCHITECT AND OWNER, THEIR AGENTS, ETC., FROM ALL LIABILITY INVOLVED WITH THE CONSTRUCTION. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR CONDUCTING WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS, SPECIFICATIONS, AND ALL GOVERNMENTAL AGENCIES HAVING JURISDICTION OVER THIS DEVELOPMENT.
- THE CONTRACTOR IS RESPONSIBLE TO OBTAIN ALL PERMITS THAT ARE REQUIRED BY THE LOCAL AGENCIES.
- PRIOR TO BID AND PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL INSPECT THE SITE TO VERIFY THAT THERE ARE NO DISCREPANCIES BETWEEN THE PLANS AND THE ACTUAL CONDITIONS AT THE SITE. IF ANY DISCREPANCIES ARE FOUND, AT ANY TIME BEFORE OR DURING CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER IMMEDIATELY (BEFORE ANY ADDITIONAL IMPROVEMENTS ARE INSTALLED) IN ORDER TO OBTAIN WRITTEN CONFIRMATION BY THE DESIGN ENGINEER AS TO ANY REVISIONS THAT MAY NEED TO BE MADE TO THE PLANS.
- PRIOR TO CONSTRUCTION THE CONTRACTOR IS TO CONTACT THE DESIGN ENGINEER AND ARCHITECT TO VERIFY THAT THEY ARE WORKING FROM THE MOST CURRENT SET OF PLANS AND SPECIFICATIONS.
- THE CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER, ALL GOVERNMENTAL AGENCIES HAVING JURISDICTION, AND ALL UTILITY COMPANIES THAT MAY BE AFFECTED BY THE PROPOSED CONSTRUCTION 2 WORKING DAYS PRIOR TO THE START OF CONSTRUCTION TO ARRANGE APPROPRIATE CONSTRUCTION INSPECTIONS.
- THE MUNICIPALITY SHALL HAVE THE AUTHORITY TO INSPECT, APPROVE, AND REJECT THE CONSTRUCTION OF THE IMPROVEMENTS.
- PRIOR TO CONSTRUCTION OF ANY IMPROVEMENTS, THE CONTRACTOR MUST CALL J.U.L.I.E. FOR THE LOCATION AND STAKING OF EXISTING UNDERGROUND UTILITIES (GAS, ELECTRIC, TELEPHONE) AT 1-800-892-0123, 48 HOURS PRIOR TO DIGGING. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING RECORD DRAWINGS PER THE MUNICIPALITY AND/OR ANY OTHER AGENCY REQUIREMENTS. ANY CHANGES TO THE DRAWINGS MUST BE REPORTED TO THE DESIGN ENGINEER BEFORE WORK PROGRESSES.
- THE PROPOSED IMPROVEMENTS MUST BE CONSTRUCTED IN ACCORDANCE WITH THE ENGINEERING PLANS AS APPROVED BY THE MUNICIPALITY.
- ALL QUANTITIES ARE THE RESPONSIBILITY OF THE CONTRACTOR AND ARE TO BE VERIFIED PRIOR TO CONSTRUCTION. IF DISCREPANCIES OCCUR, THE CONTRACTOR IS TO CONTACT THE DESIGN ENGINEER IMMEDIATELY AND NO WORK IS TO BE DONE UNTIL APPROVED BY THE DESIGN ENGINEER.
- ANY RESTORATION NEEDED BECAUSE OF CONSTRUCTION SHALL BE PROVIDED BY THE CONTRACTOR AT NO ADDITIONAL COST.
- TRENCH BACKFILL MATERIAL, CRUSHED STONE OR LIMESTONE (CA-6) IS REQUIRED UNDER AND WITHIN TWO FEET (2') OF SIDEWALKS AND PAVED AREAS. THIS BACKFILL SHALL BE IN SIX INCH (6") LIFTS AND COMPACTED TO 95% STANDARD PROCTOR.
- CONTRACTOR IS TO PROVIDE ALL TEMPORARY SIGNAGE AS REQUIRED BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION AND LOCAL MUNICIPALITIES.
- ALL EXISTING DRAIN TILES THAT ARE ENCOUNTERED ARE TO BE RESTORED TO THEIR ORIGINAL CONDITION OR REROUTED TO THE PROPOSED STORM SEWER SYSTEM.
- RESTORATION OF EXISTING RIGHT-OF-WAYS IS TO BE COMPLETED WITH FOUR INCH (4") MINIMUM TOPSOIL AND SALT TOLERANT SOO UNLESS OTHERWISE NOTED.
- THE WATER SYSTEM CANNOT BE SHUT DOWN WITHOUT CONSENT BY THE OWNER OF THE SYSTEM.
- ALL FRAME ADJUSTMENTS SHALL BE MADE WITH PRE-CAST CONCRETE RINGS CONFORMING TO ASTM C-39 AND CANNOT EXCEED TWELVE INCHES (12").
- FRAMES SHALL BE SET WITH EZ STIKR (OR EQUAL) MATERIAL TO PREVENT LEAKAGE.
- THE REINFORCED CONCRETE SECTIONS SHALL BE LAID IN MORTAR, SEALED WITH EXTERNAL SEALING BANDS, OR SEALED USING MASTIC JOINT SEALER. WHEN MASTIC JOINT SEALER IS USED, THE MATERIAL SHALL COMPLETELY FILL THE JOINT AFTER THE UNITS HAVE BEEN BROUGHT TOGETHER.
- STEPS IN STRUCTURES SHALL BE MADE OF COPOLYMER POLYPROPYLENE PLASTIC WITH CONTINUOUS ONE HALF INCH (1/2") GRADE SIXTY (60) STEEL REINFORCEMENT, STEP PSI-PF, AS MANUFACTURED BY M.A. INDUSTRIES, INC., OR APPROVED EQUAL. STEPS TO BE SPACED SIXTEEN INCHES (16") ON CENTER.
- ALL INSTRUMENTS ARE TO BE PROPERLY CALIBRATED PRIOR TO CONSTRUCTION USE.
- ALL PARKING LOT LIGHT POLES ARE TO BE CONSTRUCTED AT THE INTERSECTION OF PARKING LOT STRIPING OR IN LANDSCAPE AREAS WITH A MINIMUM OF 2' CLEARANCE BETWEEN THE BACK OF CURB AND THE EDGE OF THE PARKING LOT LIGHT BASE UNLESS OTHERWISE SPECIFIED.
- GENERAL CONTRACTOR TO BECOME FAMILIAR WITH AND APPLY THE ADA MINIMAL REQUIREMENTS AND REPORT TO ARCHITECT/DESIGN ENGINEER ANY DISCREPANCIES BEFORE CONSTRUCTION. THIS INCLUDES, BUT NOT LIMITED TO, TRANSITIONS TO EXISTING CONDITIONS.
- CONSTRUCTION MEANS, METHODS AND JOB SITE SAFETY IS THE SOLE AND EXCLUSIVE RESPONSIBILITY OF THE CONTRACTOR.
- PAVING, SIDEWALK, AND CURBING IS NOT TO BE INSTALLED IN SUCH A WAY THAT IT WILL BLOCK THE FLOW OF WATER AWAY FROM THE BUILDING INCLUDING BUT NOT LIMITED TO WEEP HOLES, WICKS, DRAINAGE SCUPPERS OR PIPES, AND LANDSCAPE.

PAVEMENT

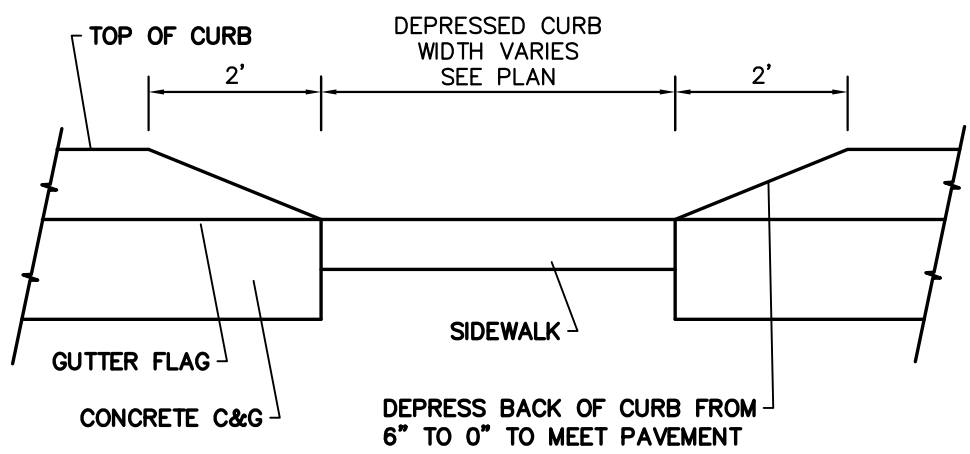
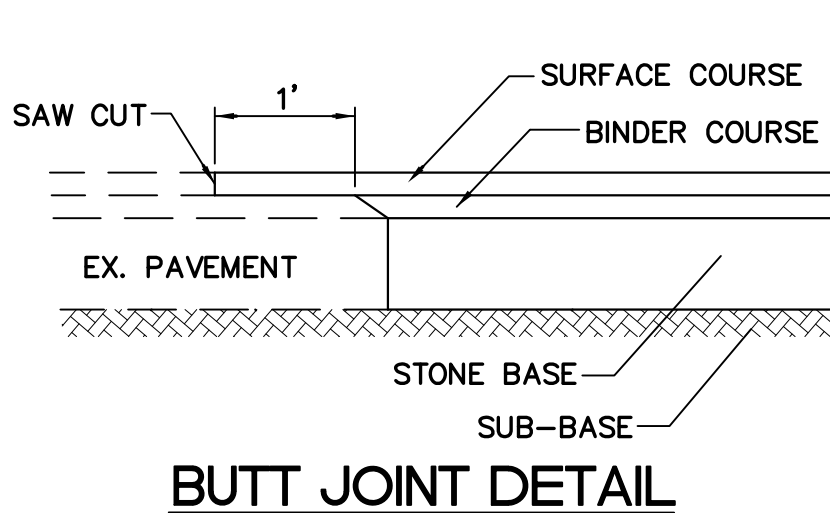
- ALL PAVEMENTS SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH THE FOLLOWING REFERENCES AS THEY APPLY: STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, ILLINOIS DEPARTMENT OF TRANSPORTATION, LATEST EDITION; MANUAL FOR STRUCTURAL DESIGN OF PORTLAND CEMENT CONCRETE PAVEMENT, ILLINOIS DEPARTMENT OF TRANSPORTATION, LATEST EDITION; DESIGN MANUAL, ILLINOIS DEPARTMENT OF TRANSPORTATION, LATEST EDITION.
- ALL BASE COURSE AND SUB-BASE AREAS SHALL BE COMPACTED TO 95% STANDARD LABORATORY DENSITY, PER I.D.O.T. SECTION 301. BEFORE THE BASE COURSE MATERIALS ARE INSTALLED, THE SUB-BASE SHALL BE PROOF-ROLLED TO THE SATISFACTION OF THE ENGINEER, HIS AGENT, AND/OR THE SOILS ENGINEER. COMPACTION AND DENSITY TESTS SHALL BE TAKEN AT THE OWNER'S OPTION. ALL CONCRETE TO BE MINIMUM 3500 PSI, SALT TOLERANT, 6 BAG MIX WITH A SPRAY ON SEALER.
- EXPANSION AND CONTRACTION JOINTS SHALL BE TOOL FINISHED.
- BINDER COURSE TO BE PLACED WHEN TEMPERATURE IS AT LEAST 40°F AND RISING. SURFACE COURSE TO BE PLACED WHEN TEMPERATURE IS AT LEAST 45°F AND RISING.
- ALL PROPOSED PAVEMENT, SIDEWALKS, AND CURBS ARE TO BE CONSTRUCTED TO WITHIN A TOLERANCE OF 0.05' OF THE PROPOSED ELEVATIONS EXCEPT IN THE ACCESSIBLE STALLS OR ACCESSIBLE ROUTES.
- PRIOR TO SEAL COATING, ALL ASPHALT AREAS ARE TO BE CLEAN AND DRY. ALL LOOSE MATERIALS ARE TO BE REMOVED. ALL GREASE TO BE REMOVED. ALL CRACKS ARE TO BE FILLED PER DOT STANDARDS. ALL PAINTED STRIPING TO BE MODIFIED SHALL BE "BLACKED OUT" WITH BLACK PAINT (1 COAT MINIMUM, 2 COATS IF NECESSARY), ALLOWED TO THOROUGHLY DRY PER PAINT MANUFACTURER. PRIOR TO SEAL COATING, ALL AREAS THAT ARE ADJACENT TO THE SEAL COATED AREA ARE TO BE MASKED (I.E. SIDEWALKS, CONCRETE SURFACES, BRICK SURFACES, GUTTERS, CATCHBASINS/INLETS, ETC.) PRIOR TO SEAL COATING TO BE APPLIED. AIR TEMPERATURE TO BE 50°F AND RISING. APPLICATION RATE TO BE SUCH THAT ALL SURFACES OF THE ASPHALT BEING COATED IS THOROUGHLY COVERED IN ONE COAT. SPRAYING IS NOT ALLOWED. ALL SEAL COATING SHOULD BE APPLIED BY SQUEEGEE OR BRUSHES. THE BITUMINOUS SEAL COATING MATERIAL SHOULD NOT BE ALLOWED TO ENTER STORM SEWERS AND SHOULD BE ALLOWED TO DRY AT LEAST 18 HOURS PRIOR TO VEHICULAR USE. CRACK FILLER AND SEAL COATING MATERIALS ARE TO BE FREE OF COAL TAR.

GRADING

- GEOTECHNICAL REPORTS AS PREPARED BY OWNER (OR REPRESENTATIVE) SHALL BE REFERRED TO PRIOR TO EARTH MOVING AND/OR UTILITY CONSTRUCTION.
- UNSTABLE SOIL SHALL BE REMOVED OR STABILIZED.
- CONTRACTOR IS TO MAINTAIN A POSITIVE DRAINAGE PATTERN AT THE END OF EACH DAY. CARE SHOULD BE TAKEN TO INSURE THAT DRAINAGE IS NOT REROUTED OR BLOCKED IN A WAY THAT MAY BE INJURIOUS TO ADJACENT LAND.
- THE SUB-BASE BELOW STRUCTURES, PAVEMENTS OR NEW STRUCTURAL FILL SHALL BE PROOF ROLLED. IF SOIL RUTS, PUMPS, DEFLECTS EXCESSIVELY OR EXHIBITS EXCESSIVE MOVEMENT OR MOISTURE, THEN THE UNSTABLE SOIL SHALL BE UNDERCUT AND REPLACED WITH STRUCTURAL FILL OR DISCING AND DRYING TO NEAR OPTIMUM MOISTURE SO SOIL CAN BE PROPERLY COMPACTED. THIS PROCESS IS TO BE OBSERVED BY A GEOTECHNICAL ENGINEER.
- ALL FILLS SHALL BE PLACED IN 8" LIFTS COMPACTED TO A MINIMUM OF 98% STANDARD LABORATORY DENSITY PER ASTM D698 UNDER AND WITHIN INFLUENCE OF THE BUILDING, A MINIMUM OF 95% STANDARD LABORATORY DENSITY PER ASTM D698 UNDER AND WITHIN THE INFLUENCE OF ALL OTHER IMPERVIOUS AREAS, AND A MINIMUM OF 90% STANDARD LABORATORY DENSITY PER ASTM D698 IN ALL LANDSCAPE AREAS.
- EROSION CONTROL SHALL BE PROVIDED PRIOR TO ANY DISTURBANCES. SEE EROSION CONTROL PLANS FOR ADDITIONAL SPECIFICATIONS AND DETAILS.
- PROVIDE TOPSOIL RESPREAD PER THE FOLLOWING UNLESS OTHERWISE NOTED:
 - 4" MINIMUM IN GRASS OR SOD AREAS.
 - 6" MINIMUM IN PLANTING AREAS.
 - 12" MINIMUM IN LANDSCAPE ISLANDS.
- ALL TOPSOIL TO BE FRIABLE (NOT COHESIVE), WEED FREE, AND FREE OF ROCKS, LARGE ROOTS AND UNNATURAL DEBRIS.
- ALL GRADING IS TO BE CONSTRUCTED TO WITHIN A TOLERANCE OF 0.10' OF THE PROPOSED ELEVATIONS. SEE PAVEMENT SPECIFICATIONS FOR PAVEMENT TOLERANCES.

SANITARY SEWER SPECIFICATIONS

- ALL SANITARY SEWER PIPE SHALL BE EXTRA STRENGTH V.C.P. CONFORMING TO ASTM C-700 SPECIFICATIONS WITH ASTM C-425 JOINTS; OR D.I.P., MIN. CLASS 50, CONFORMING TO ANSI A-21.51 WITH ANSI A-21.11 JOINTS; OR P.V.C. PIPE CONFORMING TO ASTM D-3034 SPECIFICATIONS, SDR26 WALL THICKNESS AND ASTM D-3212 GASKET TYPE JOINTS OR ASTM D-2855 SOLVENT WELDED JOINTS.
- ALL WATERMAIN QUALITY PLASTIC PIPE SHALL BE P.V.C. CONFORMING TO NSF STANDARD 14 AND: ASTM STANDARD D 1784 OR AWWA STANDARD C900 OR C905. JOINTING SHALL BE PRESSURE SLIP JOINTED. ELASTOMERIC SEALS (GASKETS) USED FOR PUSH-ON JOINTS SHALL COMPLY WITH ASTM STANDARD F477, AND SHALL BE PRESSURE RATED IN ACCORDANCE WITH ASTM D3139.
- DEFLECTION OF POLYVINYL CHLORIDE (PVC) PIPE SHALL NOT EXCEED 5.0% OF THE "BASE I.D." (INTERNAL DIAMETER) OF THE PIPE. "BASE I.D." SHALL BE CALCULATED IN ACCORDANCE WITH THE FOLLOWING:
AVG ID = AVG OD - 2(1.06)T
TOLERANCE PACKAGE = (A^2 + B^2 + C^2)^(1/2)
WHERE:
A = OD TOLERANCE (ASTM D-3034)
B = EXCESS WALL THICKNESS TOLERANCE = 0.06T
C = OUT-OF-ROUNDNESS TOLERANCE = 0.015 (AVG OD)
T = MINIMUM WALL THICKNESS (ASTM D-3034)
BASE ID = AVG ID - TOLERANCE PACKAGE
DEFLECTION OF COMPOSITE PIPE ("TRUSS" PIPE) SHALL NOT EXCEED 3.0% OF THE AVERAGE INSIDE DIAMETER (ID) OF THE PIPE IN ACCORDANCE WITH ASTM D-2680. THE PIPE LINE SHALL BE TESTED FOR EXCESS DEFLECTING BY PULLING A "GO - NO GO" MANDREL THROUGH THE PIPE FROM MANHOLE TO MANHOLE. THE MANDREL SHALL BE SIZED IN ACCORDANCE WITH SECTION 31-1.11C (4), AND AS SPECIFIED IN THE SPECIAL PROVISIONS. A "DEFLECTOMETER" MAY ALSO BE USED TO CHECK AND RECORD DEFLECTION. WHENEVER POSSIBLE AND PRACTICAL, THE TESTING SHALL INITIATE AT THE DOWNSTREAM LINES AND PROCEED TOWARDS THE UPSTREAM LINES. WHERE THE DEFLECTION IS FOUND TO BE IN EXCESS OF ALLOWABLE TESTING LIMITS, THE CONTRACTOR SHALL EXCAVATE TO THE POINT OF EXCESS DEFLECTION AND CAREFULLY COMPACT AROUND THE POINT WHERE EXCESS DEFLECTION WAS FOUND. THE LINE SHALL THEN BE RETESTED FOR DEFLECTION. HOWEVER, SHOULD AFTER THE INITIAL TESTING THE DEFLECTED PIPE FAIL TO RETURN TO THE ORIGINAL SIZE (INSIDE DIAMETER) THE LINE SHALL BE REPLACED.
- INFILTRATION OR EXFILTRATION SHALL NOT EXCEED 100 GALLONS PER TWENTY-FOUR (24) HOURS PER MILE PER INCH-DIAMETER OF THE SEWER PIPE, FOR ANY SECTION OF THE SYSTEM AND AT ANY TIME DURING ITS SERVICE LIFE. TESTING IS REQUIRED PER THE "STANDARD SPECIFICATIONS FOR WATER AND SEWER CONSTRUCTION IN ILLINOIS" CURRENT EDITIONS.
- LEAKAGE TESTING FOR MANHOLES FOR WATER TIGHTNESS SHALL BE DONE IN ACCORDANCE WITH ASTM C969-94--"STANDARD PRACTICE FOR INFILTRATION AND EXFILTRATION ACCEPTANCE TESTING OF INSTALLED PRECAST CONCRETE PIPE SEWER LINES", VOL. 04.05, CHEMICAL RESISTANT MATERIALS, VITRIFIED CLAY, CONCRETE, FIBER-CEMENT PRODUCTS; MORTARS; MASONRY (1996)(NO LATER EDITIONS OR AMENDMENTS) OR ASTM C1244-93 "STANDARD TEST METHOD FOR CONCRETE SEWER MANHOLES BY THE NEGATIVE PRESSURE (VACUUM) TEST", VOL. 04.05, CHEMICAL RESISTANT MATERIALS, VITRIFIED CLAY, CONCRETE, FIBER-CEMENT PRODUCTS; MORTARS; MASONRY (1996)(NO LATER EDITIONS OR AMENDMENTS) PRIOR TO PLACING INTO SERVICE.
- ALL STRUCTURE LIDS SHALL BE IMPRINTED "SANITARY".
- ALL WATERTIGHT FRAMES AND LIDS SHALL BE NEENAH R-1916-C. ALL OTHER FRAMES AND LIDS SHALL BE NEENAH R-1550-A WITH A CONCEALED PICK HOLE.
- ALL FRAMES AND LIDS SHALL CONFORM TO ASTM A-48.
- ALL SEWERS ARE TO BE INSTALLED FROM THE DOWNSTREAM END UPSTREAM. IF ANY CONFLICTS ARE ENCOUNTERED, THE DESIGN ENGINEER IS TO BE CONTACTED PRIOR TO THE INSTALLATION OF ANY PIPE.
- FOR A DROP CONNECTION, THE DIAMETER OF THE DROP PIPE SHALL PREFERABLY BE LARGER THAN, OR OF THE SAME DIAMETER AS, THE ENTERING SEWER. THE MINIMUM DIAMETER OF THE DROP PIPE SHALL NOT BE SMALLER THAN THE DIAMETER OF THE ENTERING SEWER BY MORE THAN TWO NOMINAL DIAMETERS, PROVIDED THAT THE MINIMUM DIAMETER OF THE DROP PIPE SHALL NOT BE LESS THAN EIGHT INCHES (8").
- ALL FLOOR DRAINS SHALL DISCHARGE TO THE SANITARY SEWER.
- ALL SANITARY SEWER BEDDING SHALL BE IN ACCORDANCE WITH THE TRENCH DETAIL AS INCLUDED IN THE PLANS.

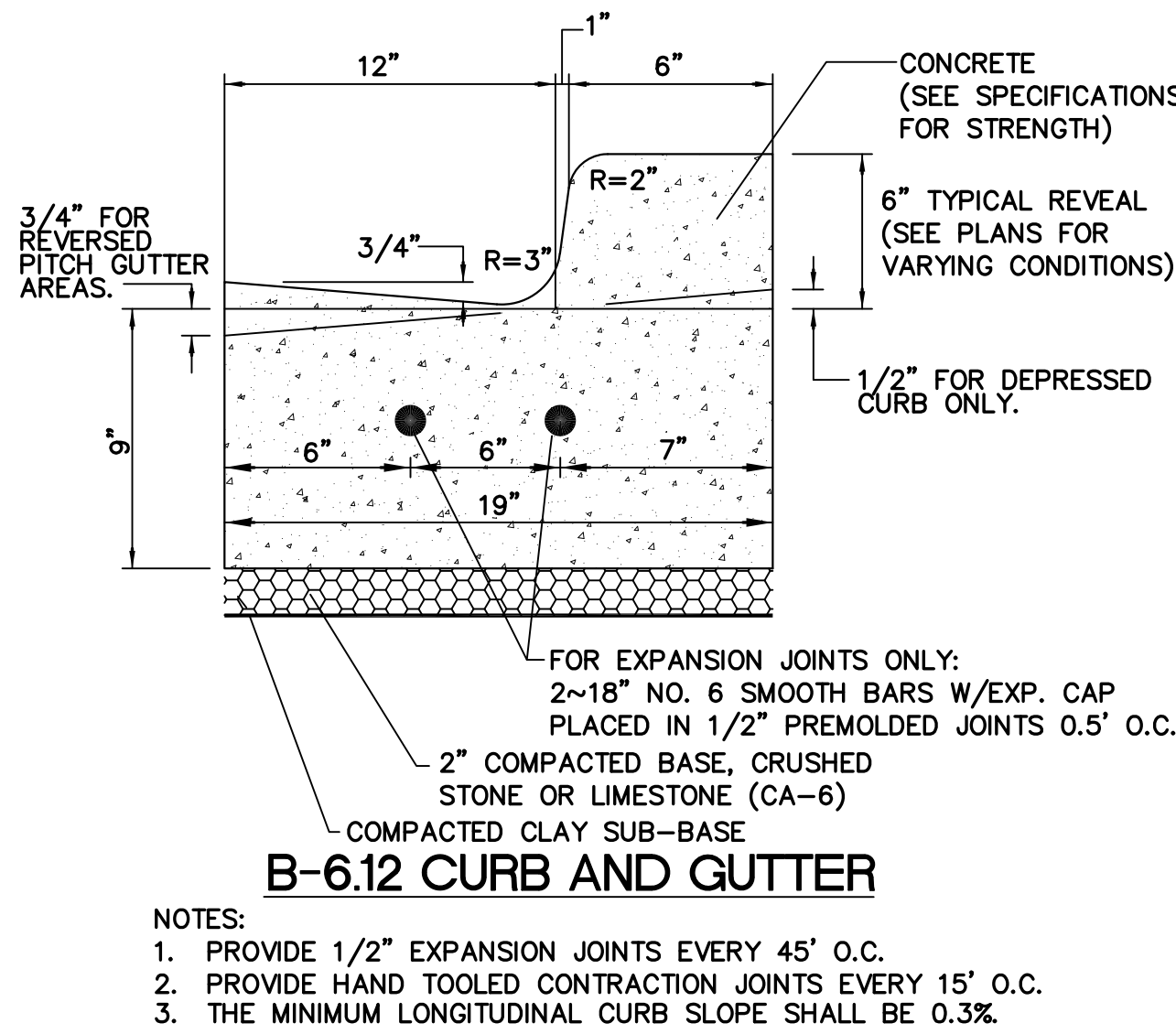
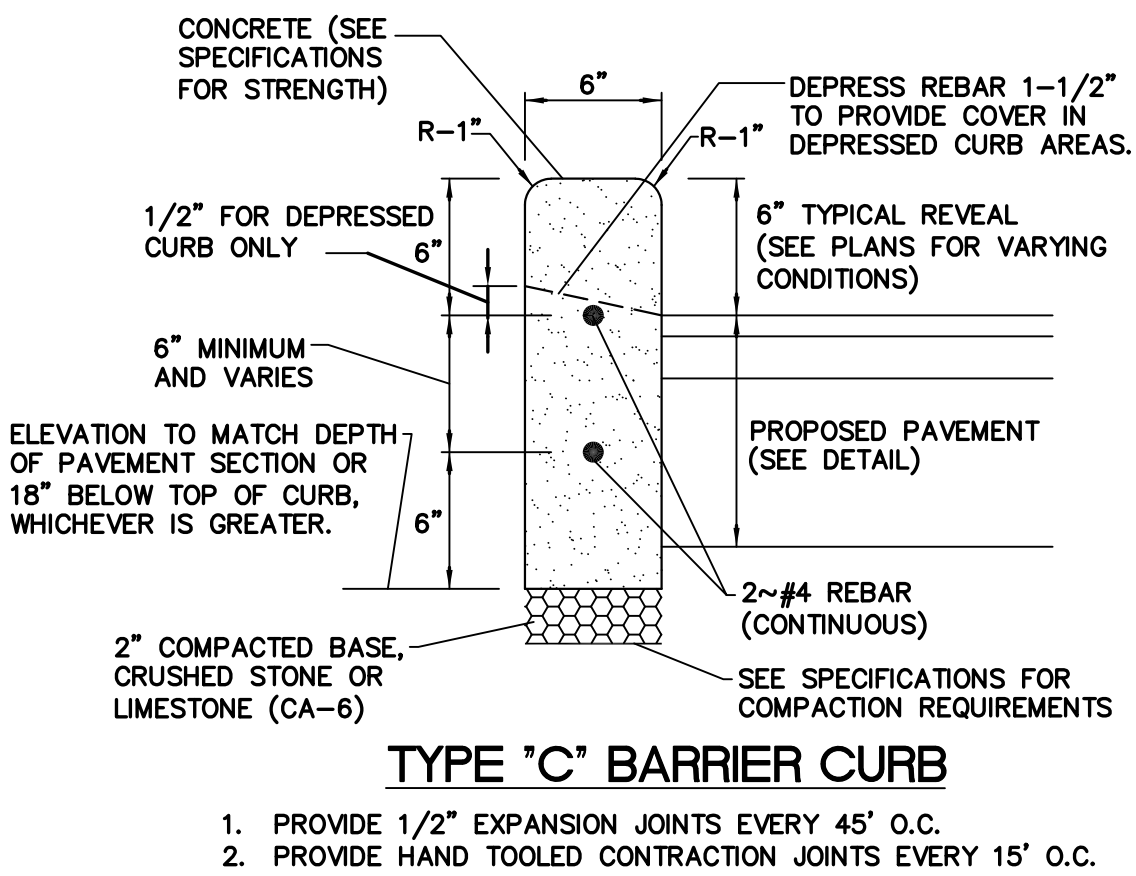


STORM SEWER SPECIFICATIONS

- ALL REINFORCED CONCRETE PIPE SHALL CONFORM TO ASTM C-76 SPECIFICATIONS WITH ASTM C-443 FLAT GASKET JOINTS, OR ASTM C-361 "O-RING" JOINTS WHEN WATER MAIN QUALITY JOINTS ARE REQUIRED.
- ALL PLASTIC PIPE SHALL BE P.V.C. WITH SDR26 WALL THICKNESS AND CONFORM TO D-3034 SPECIFICATIONS WITH ASTM D-3212 GASKET TYPE JOINTS.
- ALL WATERMAIN QUALITY PLASTIC PIPE SHALL BE P.V.C. CONFORMING TO NSF STANDARD 14 AND: ASTM STANDARD B 1784 OR AWWA STANDARD C900 OR C905. JOINTING SHALL BE PRESSURE SLIP JOINTED. ELASTOMERIC SEALS (GASKETS) USED FOR PUSH-ON JOINTS SHALL COMPLY WITH ASTM STANDARD F477, AND SHALL BE PRESSURE RATED IN ACCORDANCE WITH ASTM D3139.
- ALL STRUCTURE LIDS SHALL BE IMPRINTED "STORM".
- ALL FRAMES AND LIDS SHALL CONFORM TO ASTM A-48.
- ALL SEWERS ARE TO BE INSTALLED FROM THE DOWNSTREAM END UPSTREAM. IF ANY CONFLICTS OR INFORMATION INCONSISTENT WITH SITE CONDITIONS ARE ENCOUNTERED, THE DESIGN ENGINEER IS TO BE CONTACTED PRIOR TO THE INSTALLATION OF ANYTHING.
- IN PAVED AREAS, ALL FRAMES AND LIDS SHALL BE: NEENAH R-2050 OR R-2502 WITH TYPE D GRATE AT LOW POINTS; OR NEENAH R-3281-A IN CURB AND GUTTER; OR NEENAH R-1550-A WITH SOLID LID, UNLESS OTHERWISE SPECIFIED.
- IN NON-PAVED AREAS, ALL FRAMES AND LIDS SHALL BE: NEENAH R-2090 OR R-2060 WITH TYPE B GRATE AT LOW POINTS; OR NEENAH R-1550-A WITH SOLID LID, UNLESS OTHERWISE SPECIFIED.
- ALL DOWNSPOUTS AND FOOTING DRAINS SHALL DISCHARGE TO THE STORM SEWER.
- ALL FLARED END SECTIONS (FES) ARE TO BE INSTALLED WITH TRASH GRATES.

WATER MAIN SPECIFICATIONS

- HORIZONTAL SEPARATION
 - A. WATER MAINS AND SEWERS: WATER MAINS SHALL BE LAID AT LEAST TEN FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED DRAIN, STORM SEWER, SANITARY SEWER, COMBINED SEWER OR SEWER SERVICE CONNECTION.
 - B. WATER MAINS MAY BE LAID CLOSER THAN TEN FEET TO A SEWER LINE OR SEWER SERVICE CONNECTION WHEN:
 - LOCAL CONDITIONS PREVENT A LATERAL SEPARATION OF TEN FEET;
 - THE WATER MAIN INVERT IS AT LEAST EIGHTEEN INCHES (18") ABOVE THE CROWN OF THE SEWER; AND
 - THE WATER MAIN IS EITHER IN A SEPARATE TRENCH OR IN THE SAME TRENCH ON AN UNDISTURBED EARTH SHELF LOCATED TO ONE SIDE OF THE SEWER.
 - C. BOTH THE WATER MAIN AND SEWER PIPE SHALL BE CONSTRUCTED OF PUSH JOINT OR MECHANICAL JOINT DUCTILE IRON PIPE, PRESSURE PIPE, OR PRESTRESSED CONCRETE PIPE MEETING THE REQUIREMENTS OF SECTION 653.111 OF THE IEPA'S TITLE 35 SUBTITLE F, WHEN IT IS IMPOSSIBLE TO MEET (A) OR (B) ABOVE. THE DRAIN OR SEWER SHALL BE PRESSURE TESTED TO THE MAXIMUM EXPECTED SURCHARGE HEAD BEFORE BACKFILLING.
- VERTICAL SEPARATION
 - A. A WATER MAIN SHALL BE LAID SO THAT ITS INVERT IS EIGHTEEN INCHES (18") ABOVE THE CROWN OF THE DRAIN OR SEWER WHENEVER WATER MAINS CROSS STORM SEWERS, SANITARY SEWERS OR SEWER SERVICE CONNECTIONS. THE VERTICAL SEPARATION SHALL BE MAINTAINED FOR THAT PORTION OF THE WATER MAIN LOCATED WITHIN TEN FEET HORIZONTALLY OF ANY SEWER OR DRAIN CROSSED. A LENGTH OF WATER MAIN PIPE SHALL BE CENTERED OVER THE SEWER TO BE CROSSED WITH JOINTS EQUIDISTANT FROM THE SEWER OR DRAIN.
 - B. BOTH THE WATER MAIN AND SEWER SHALL BE CONSTRUCTED OF PUSH JOINT OR MECHANICAL JOINT DUCTILE PIPE, PRESTRESSED CONCRETE PIPE, OR PVC PIPE MEETING THE REQUIREMENTS OF SECTION 635.111 OF THE IEPA'S TITLE F, SUBTITLE F, AND CONSTRUCTION SHALL EXTEND ON EACH SIDE OF THE CROSSING UNTIL THE PERPENDICULAR DISTANCE FROM THE WATER MAIN TO THE SEWER DRAIN LINE IS AT LEAST TEN FEET (10') WHEN:
 - IT IS IMPOSSIBLE TO OBTAIN THE PROPER VERTICAL SEPARATION AS DESCRIBED IN (A) ABOVE; OR
 - THE WATER MAIN PASSES UNDER A SEWER OR DRAIN.
 - C. A VERTICAL SEPARATION OF EIGHTEEN INCHES (18") BETWEEN THE INVERT OF THE SEWER OR DRAIN AND THE CROWN OF THE WATER MAIN SHALL BE MAINTAINED WHERE A WATER MAIN CROSSES UNDER A SEWER. SUPPORT THE SEWER OR DRAIN LINES TO PREVENT SETTLING AND BREAKING THE WATER MAIN.
- WATER MAINS AND SERVICES SHALL BE CONSTRUCTED SO THAT THE MINIMUM DEPTH IS FIVE AND ONE HALF FEET (5 1/2') MEASURED FROM FINISHED GRADE TO THE TOP OF THE PIPE, UNLESS OTHERWISE SPECIFIED AND/OR APPROVED BY THE REVIEW ENGINEER.
- ALL WATER MAIN FITTINGS MAY OR MAY NOT BE SHOWN ON THE PLANS AND SHOULD BE INCLUDED IN THE COST OF THE WATER MAIN ITSELF FOR BIDDING PURPOSES. ALL WATER MAIN SHALL BE DUCTILE IRON CLASS 52 CEMENT LINED CONFORMING TO ANSI A-21.51 WITH ANSI A-21.11 JOINTS, OR TYPE "K" COPPER PIPE WITH SWEATED JOINTS.
- FIRE HYDRANTS SHALL MEET AWWA C-502 AND BE EAST JORDAN 5 BR, OR APPROVED EQUAL, WITH FIVE AND ONE QUARTER INCH (5 1/4") VALVE OPENING, TWO TWO AND ONE HALF INCH (2 1/2") HOSE NOZZLES AND ONE FIVE INCH (5") PUMPER NOZZLE. FIRE HYDRANT SHALL BE EQUIPPED WITH AN AUXILIARY RESILIENT SEAL GATE VALVE COMPLETE WITH ROADWAY BOX, TYLER, 6850 SERIES, ITEM 668-S. FIRE HYDRANTS MUST HAVE THEIR DISCHARGE AT LEAST 18 INCHES BUT NOT MORE THAN TWENTY-FOUR INCHES (24") FROM THE SURFACE OF THE ADJACENT GROUND.
- HYDRANTS SHALL BE INSTALLED NO CLOSER THAN THREE FEET (3') NOR FURTHER THAN EIGHT FEET (8') FROM THE BACK OF CURB OR EDGE OF PAVEMENT TO THE FIVE INCH (5") STEAMER NUT. NO BARRIERS, TREES, SHRUBS, WALLS OR OTHER OBSTACLES WHICH MAY HIDE OR IMPEDE THE USE OF A FIRE HYDRANT SHALL BE INSTALLED, MAINTAINED, CONSTRUCTED, OR ENLARGED, WITHIN FORTY-EIGHT INCHES (48") OF A HYDRANT.
- ALL STRUCTURE LIDS SHALL BE IMPRINTED "WATER".
- ALL WATERTIGHT FRAMES AND LIDS SHALL BE NEENAH R-1916-C. ALL OTHER FRAMES AND LIDS SHALL BE NEENAH R-1550-A WITH A CONCEALED PICK HOLE.
- ALL FRAMES AND LIDS SHALL CONFORM TO ASTM A-48.
- BEFORE BEING PLACED INTO SERVICE, ALL NEW MAINS AND REPAIRED PORTIONS OF, OR EXTENSIONS TO EXISTING MAINS SHALL BE CHLORINATED SO THAT THE INITIAL CHLORINE RESIDUAL IS NOT LESS THAN FIFTY (50) mg/L AND THAT A CHLORINE RESIDUAL OF NOT LESS THAN TWENTY-FIVE (25) mg/L REMAINS IN THE WATER AFTER STANDING TWENTY-FOUR (24) HOURS IN THE PIPE.



CHECKED BY: B. PERRY	DESIGN BY: S. SINAK	DRAWN BY: S. SINAK	DATE: DECEMBER 7, 2018	SCALE: NONE	PROJECT NO.: 18-123
PROJECT DETAILS AND SPECIFICATIONS					
C-4					

DATE	1/15/19	1/31/19
REVISIONS	REVISIONS PER VILLAGE REVIEW COMMENTS DATED 1/22/19	REVISIONS PER VILLAGE REVIEW COMMENTS DATED 1/22/19
NO.	1	2

Prepared For:

Vequity
400 N. State St
Chicago, IL 60654

PROPOSED FUEL CENTER
1650 W. Algonquin Road
Arlington Heights, Illinois

Prepared By:

Watermark Engineering Resources, Ltd
2631 Ginger Woods Parkway, Suite 100, Aurora, IL 60502
phone 630-571-6160 fax 630-236-9600 www.watermark-engineering.com

A. REFERENCED SPECIFICATIONS

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE APPLICABLE SECTIONS OF THE FOLLOWING, EXCEPT AS MODIFIED HEREIN OR ON THE PLANS:
- * STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (LATEST EDITION), BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION (IDOT SS) FOR ALL IMPROVEMENTS EXCEPT SANITARY SEWER AND WATER MAIN CONSTRUCTION;
 - * STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS, LATEST EDITION (SSWS) FOR SANITARY SEWER AND WATER MAIN CONSTRUCTION;
 - * VILLAGE OF FRANKLIN PARK 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 FRANKLIN PARK 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).
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

PIPE SPECIFICATIONS

ASTM C-700
ASTM C-76
ASTM A-74
ANSI A21.51

JOINT SPECIFICATIONS

ASTM C-425
ASTM C-443
ASTM C-564
ANSI A21.11

POLYVINYL CHLORIDE (PVC) PIPE
6-INCH TO 15-INCH DIAMETER SDR 26
18-INCH TO 27-INCH DIAMETER F/DY=46

ASTM D-3034
ASTM F-679

ASTM D-3212
ASTM D-3212

HIGH DENSITY POLYETHYLENE (HDPE)

ASTM D-3350
ASTM D-3035

ASTM D-3261,F-2620 (HEAT FUSION)
ASTM D-3212,F-477 (GASKETED)

WATER MAIN QUALITY PVC
4-INCH TO 36-INCH
4-INCH TO 12-INCH
14-INCH TO 48-INCH

ASTM D-2241
AWWA C900
AWWA C905

ASTM D-3139
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

PIPE SPECIFICATIONS

ASTM F-2736
ASTM F-2764

JOINT SPECIFICATIONS

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 EXEROISED ANNUALLY BY THE PROPERTY OWNER TO ENSURE PROPER OPERATION, AND ANY NECESSARY MAINTENANCES SHALL BE PERFORMED TO ENSURE FUNCTIONALITY. IN THE EVENT OF A SEWER SURCHARGE INTO AN OPEN DETENTION BASIN TRIBUTARY TO COMBINED SEWERS, THE PERMITTEE SHALL ENSURE THAT CLEAN UP AND WASH OUT OF SEWAGE TAKES PLACE WITHIN 48 HOURS OF THE STORM EVENT.

E. EROSION AND SEDIMENT CONTROL

1. THE CONTRACTOR SHALL INSTALL THE EROSION AND SEDIMENT CONTROL DEVICES AS SHOWN ON THE APPROVED EROSION AND SEDIMENT CONTROL PLAN.

2. EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE FUNCTIONAL PRIOR TO HYDROLOGIC DISTURBANCE OF THE SITE.

3. ALL DESIGN CRITERIA, SPECIFICATIONS, AND INSTALLATION OF EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE IN ACCORDANCE WITH THE ILLINOIS URBAN MANUAL.

4. A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.

5. INSPECTIONS AND DOCUMENTATION SHALL BE PERFORMED, AT A MINIMUM:

- a) UPON COMPLETION OF INITIAL EROSION AND SEDIMENT CONTROL MEASURES, PRIOR TO ANY SOIL DISTURBANCE.
- b) ONCE EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM EVENT WITH GREATER THAN 0.5 INCH OF RAINFALL OR LIQUID EQUIVALENT PRECIPITATION.

6. SOIL DISTURBANCE SHALL BE CONDUCTED IN SUCH A MANNER AS TO MINIMIZE EROSION. IF STRIPPING, CLEARING, GRADING, OR LANDSCAPING ARE TO BE DONE IN PHASES, THE CO-PERMITTEE SHALL PLAN FOR APPROPRIATE SOIL EROSION AND SEDIMENT CONTROL MEASURES.

7. A STABILIZED MAT OF CRUSHED STONE MEETING THE STANDARDS OF THE ILLINOIS URBAN MANUAL SHALL BE INSTALLED AT ANY POINT WHERE TRAFFIC WILL BE ENTERING OR LEAVING A CONSTRUCTION SITE. SEDIMENT OR SOIL REACHING AN IMPROVED PUBLIC RIGHT-OF-WAY, STREET, ALLEY OR PARKING AREA SHALL BE REMOVED BY SCRAPING OR STREET CLEANING AS ACCUMULATIONS WARRANT AND TRANSPORTED TO A CONTROLLED SEDIMENT DISPOSAL AREA.

8. CONCRETE WASHOUT FACILITIES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE ILLINOIS URBAN MANUAL AND SHALL BE INSTALLED PRIOR TO ANY ON SITE CONSTRUCTION ACTIVITIES INVOLVING CONCRETE.

9. MORTAR WASHOUT FACILITIES SHALL BE CONSTRUCTED IN ADDITION TO CONCRETE WASHOUT FACILITIES FOR ANY BRICK AND MORTAR BUILDING ENVELOPE CONSTRUCTION ACTIVITIES.

10. TEMPORARY DIVERSIONS SHALL BE CONSTRUCTED AS NECESSARY TO DIRECT ALL RUNOFF FROM HYDROLOGICALLY DISTURBED AREAS TO AN APPROPRIATE SEDIMENT TRAP OR BASIN. VOLUME CONTROL FACILITIES SHALL NOT BE USED AS TEMPORARY SEDIMENT BASINS.

12. DISTURBED AREAS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED SHALL BE STABILIZED WITH TEMPORARY OR PERMANENT MEASURES WITHIN SEVEN (7) DAYS.

13. ALL FLOOD PROTECTION AREAS AND VOLUME CONTROL FACILITIES SHALL, AT A MINIMUM, BE PROTECTED WITH A DOUBLE-ROW OF SILT FENCE (OR EQUIVALENT).

14. VOLUME CONTROL FACILITIES SHALL NOT BE CONSTRUCTED UNTIL ALL OF THE CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED.

15. SOIL STOCKPILES SHALL, AT A MINIMUM, BE PROTECTED WITH PERIMETER SEDIMENT CONTROLS. SOIL STOCKPILES SHALL NOT BE PLACED IN FLOOD PROTECTION AREAS OR THEIR BUFFERS.

16. EARTHEN EMBANKMENT SIDE SLOPES SHALL BE STABILIZED WITH APPROPRIATE EROSION CONTROL BLANKET.

17. STORM SEWERS THAT ARE OR WILL BE FUNCTIONING DURING CONSTRUCTION SHALL BE PROTECTED BY APPROPRIATE SEDIMENT CONTROL MEASURES.

18. THE CONTRACTOR SHALL EITHER REMOVE OR REPLACE ANY EXISTING DRAIN TILES AND INCORPORATE THEM INTO THE DRAINAGE PLAN FOR THE DEVELOPMENT. DRAIN TILES CANNOT BE TRIBUTARY TO A SANITARY OR COMBINED SEWER. DRAIN TILES ALLOWED IN COMBINED SEWER AREA FOR GREEN INFRASTRUCTURE PRACTICES.

19. IF DEWATERING SERVICES ARE USED, ADJOINING PROPERTIES AND DISCHARGE LOCATIONS SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION. DEWATERING SYSTEMS SHOULD BE INSPECTED DAILY DURING OPERATIONAL PERIODS. THE SITE INSPECTOR MUST BE PRESENT AT THE COMMENCEMENT OF DEWATERING ACTIVITIES.

20. THE CONTRCTOR SHALL BE RESPONSIBLE FOR TRENCH DEWATERING AND EXCAVATION FOR THE INSTALLATION OF SANITARY SEWERS, STORM SEWERS, WATERMAINS AS WELL AS THEIR SERVICES AND OTHER APPURTENANCES. ANY TRENCH DEWATERING, WHICH CONTAINS SEDIMENT SHALL PASS THROUGH A SEDIMENT SETTLING POND OR EQUALLY EFFECTIVE SEDIMENT CONTROL DEVICE. ALTERNATIVES MAY INCLUDE DEWATERING INTO A SUMP PIT, FILTER BAG OR EXISTING VEGETATED UPSLOPE AREA. SEDIMENT LADEN WATERS SHALL NOT BE DISCHARGE TO WATERWAYS, FLOOD PROTECTION AREAS OR THE COMBINED SEWER SYSTEM.

21. ALL PERMANENT EROSION CONTROL PRACTICES SHALL BE INITIATED WITHIN SEVEN (7) DAYS FOLLOWING THE COMPLETION OF SOIL DISTURBING ACTIVITIES.

22. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED AND REPAIRED AS NEEDED ON A YEAR-ROUND BASIS DURING CONSTRUCTION AND ANY PERIODS OF CONSTRUCTION SHUTDOWN UNTIL PERMANENT STABILIZATION IS ACHIEVED.

23. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN THIRTY (30) DAYS AFTER PERMANENT SITE STABILIZATION.

24. THE EROSION AND SEDIMENT CONTROL MEASURES SHOWN ON THE PLANS ARE THE MINIMUM REQUIREMENTS. ADDITIONAL MEASURES MAY BE REQUIRED, AS DIRECTED BY THE ENGINEER, SITE INSPECTOR, OR MWRD.

DATE		1/15/19		1/31/19	
NO.		1	2		
REVISIONS		NO REVISIONS	NO REVISIONS		

Prepared For:

Vequity 400 N. State St Chicago, IL 60654 PROPOSED FUEL CENTER 1650 W. Algonquin Road Arlington Heights, Illinois
--

Prepared By:

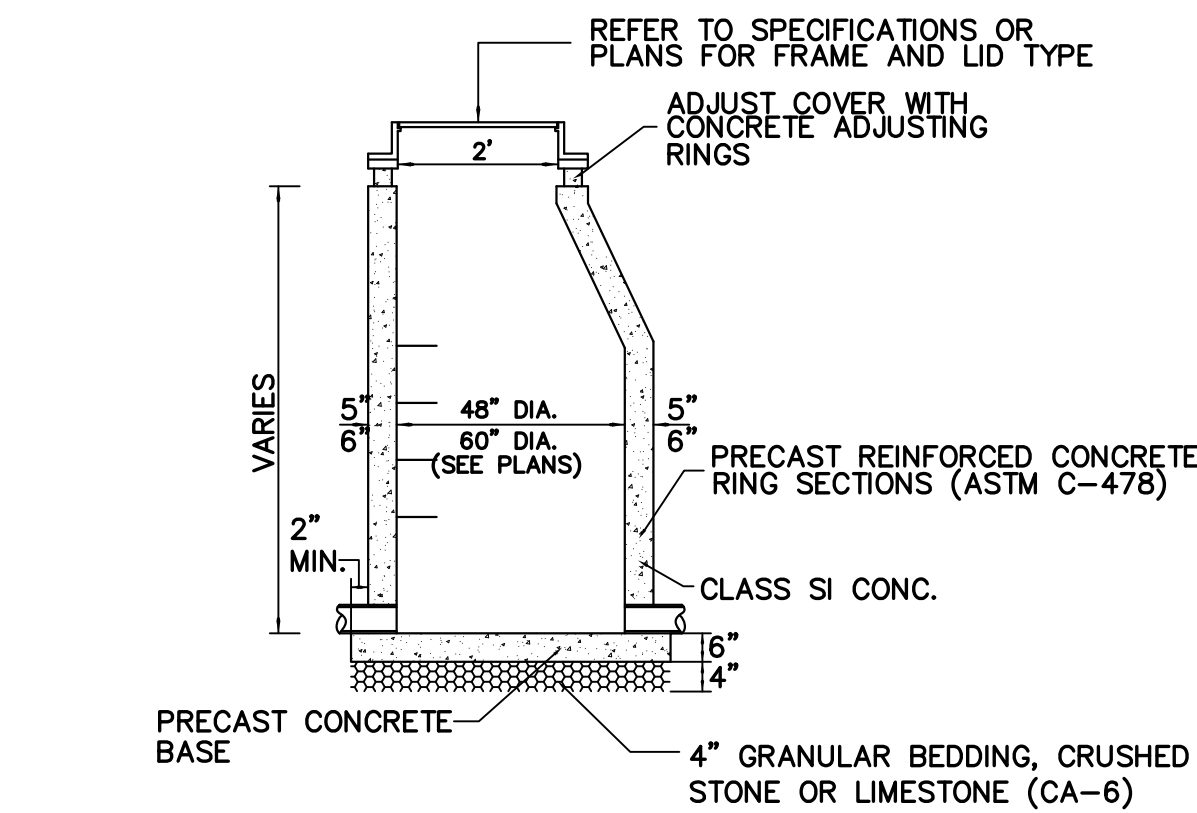
Watermark Engineering RESOURCES, LTD 2631 Ginger Woods Parkway, Suite 100, Aurora, IL 60502 phone 630-571-5160 fax 630-266-9600 www.watermark-engineering.com

CHECKED BY: B. PERRY	DESIGN BY: S. SIMAK	DRAWN BY: S. SIMAK	DATE: DECEMBER 7, 2018	SCALE: NONE	PROJECT NO.: 18-123
----------------------	---------------------	--------------------	------------------------	-------------	---------------------

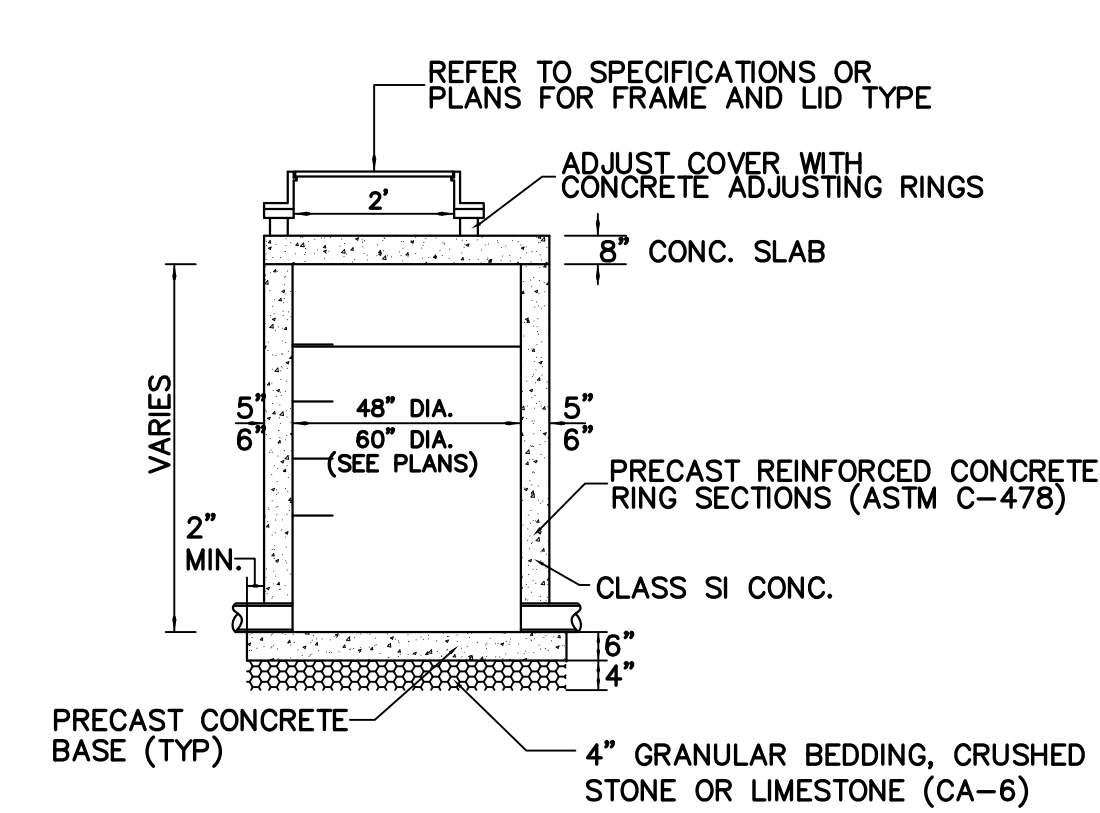
MWRD SPECIFICATIONS

C-5

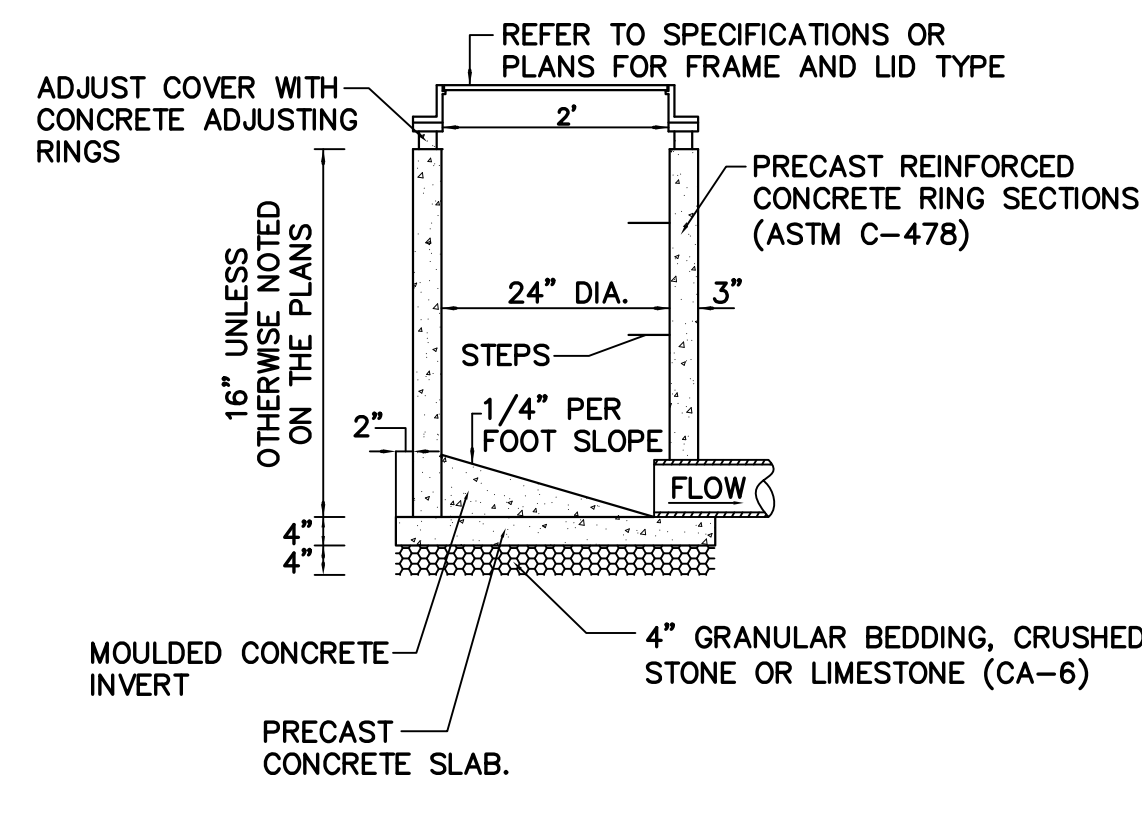
MWRD SPECIFICATIONS



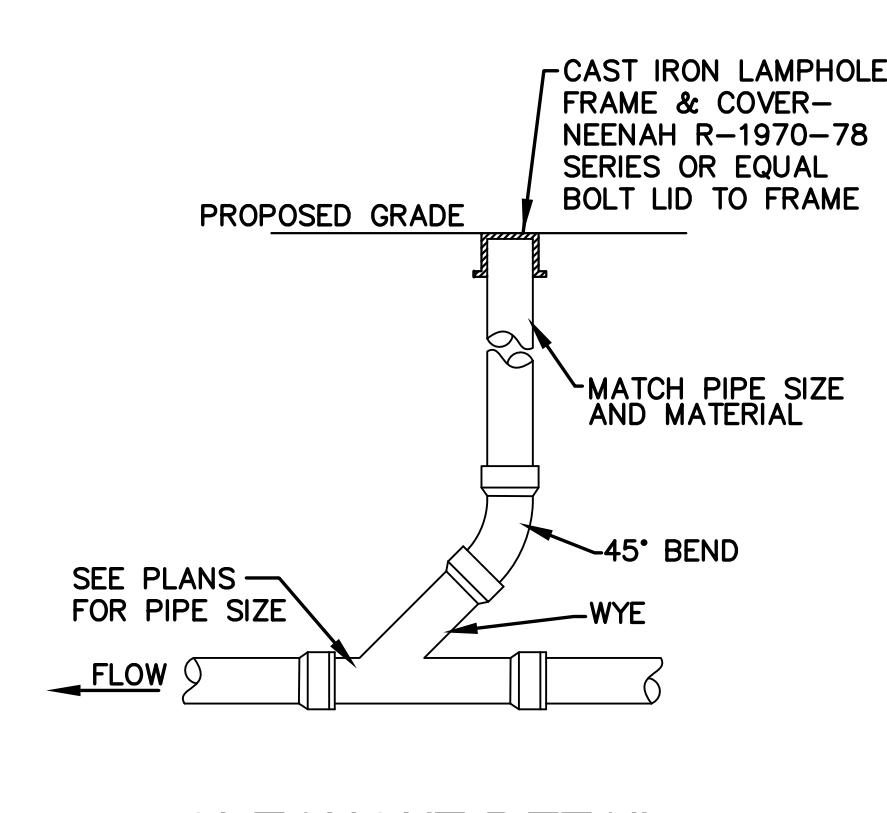
STORM MANHOLE (I.D.O.T TYPE "A")



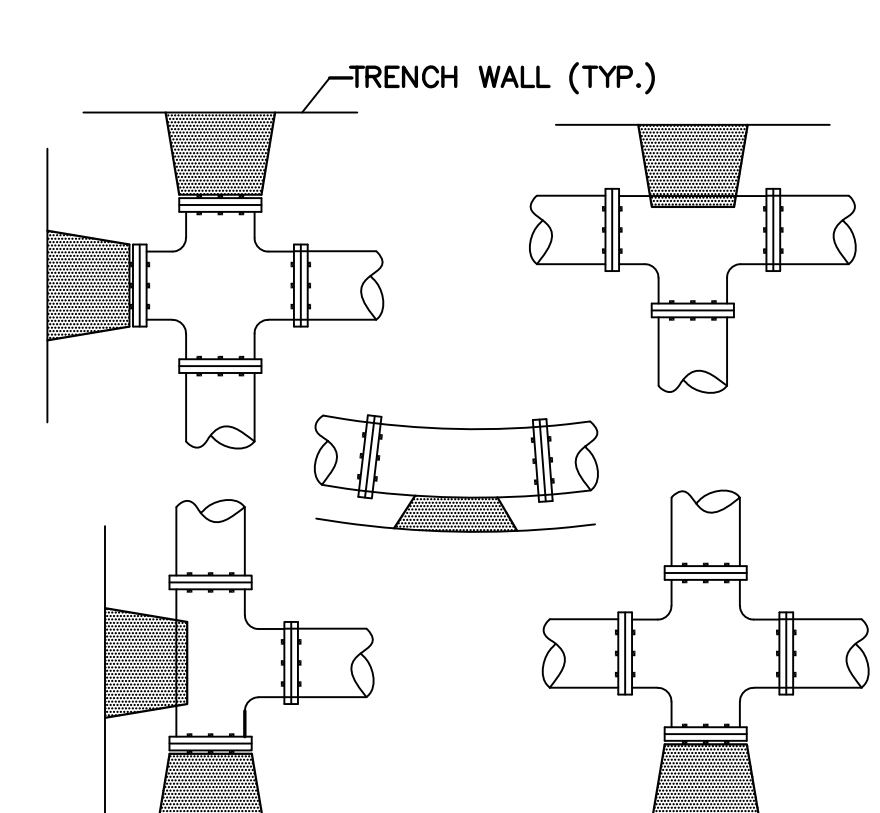
STORM MANHOLE (FLAT TOP)



24" INLET (I.D.O.T TYPE "A")

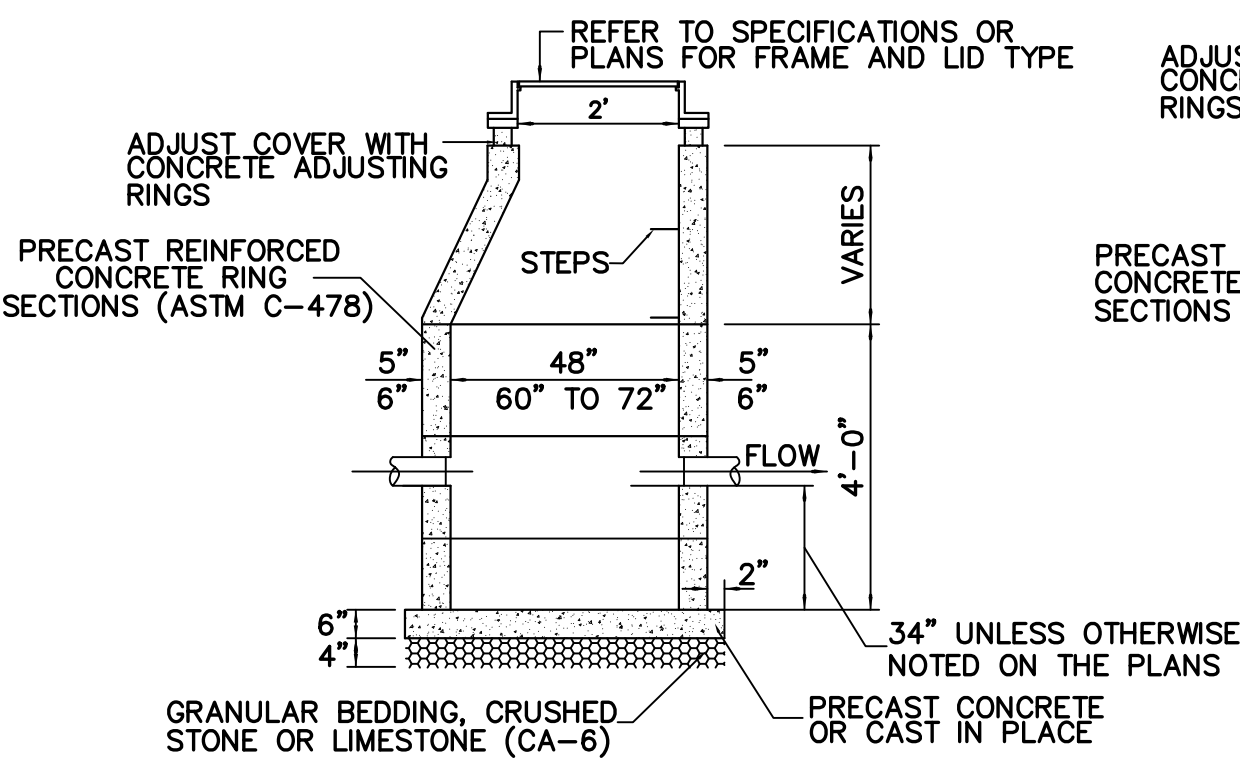


CLEANOUT DETAIL

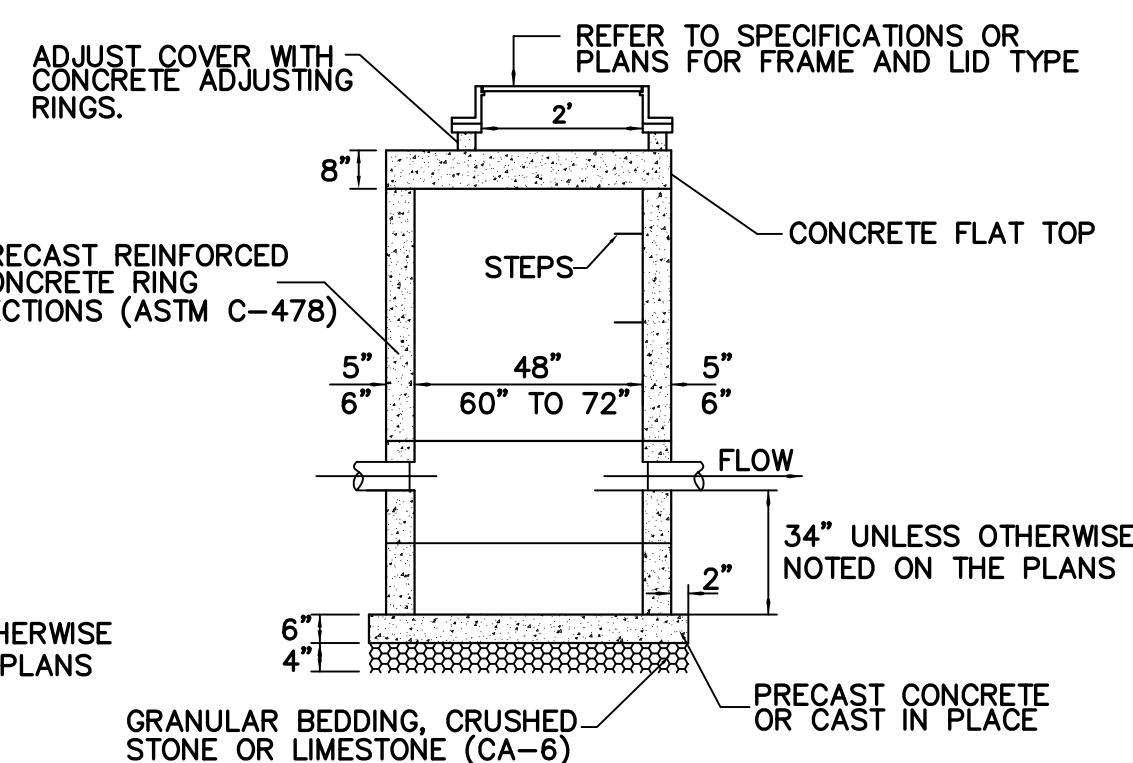


- NOTES:**
1. ALL BLOCKS SHALL BE WITH POURED CONCRETE AGAINST UNDISTURBED EARTH.
 2. AREA OF UNDISTURBED EARTH SHALL CONFORM TO MANUFACTURERS RECOMMENDATIONS AND THE SOILS ENGINEERS INSTRUCTIONS.

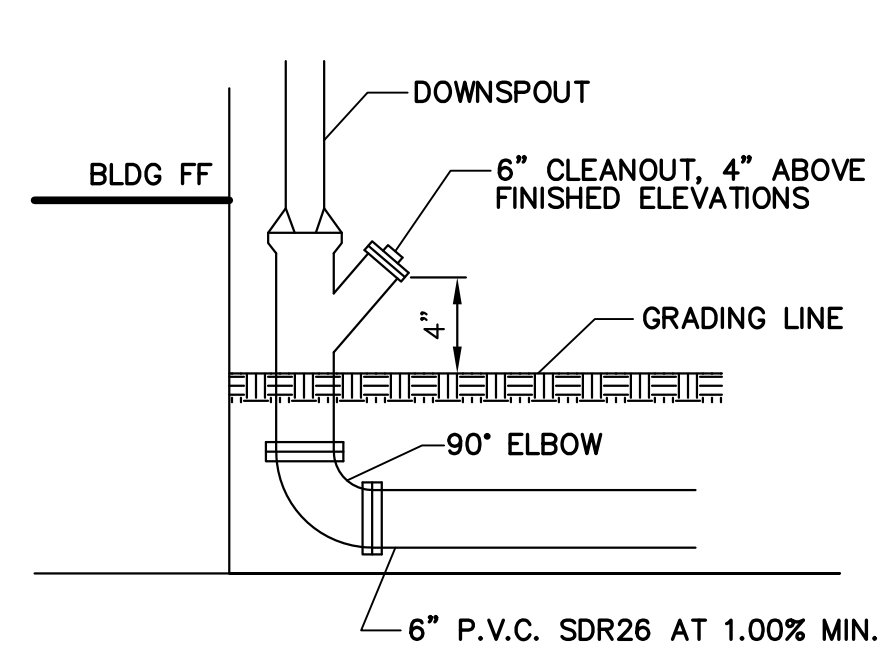
THRUST BLOCK INSTALLATION



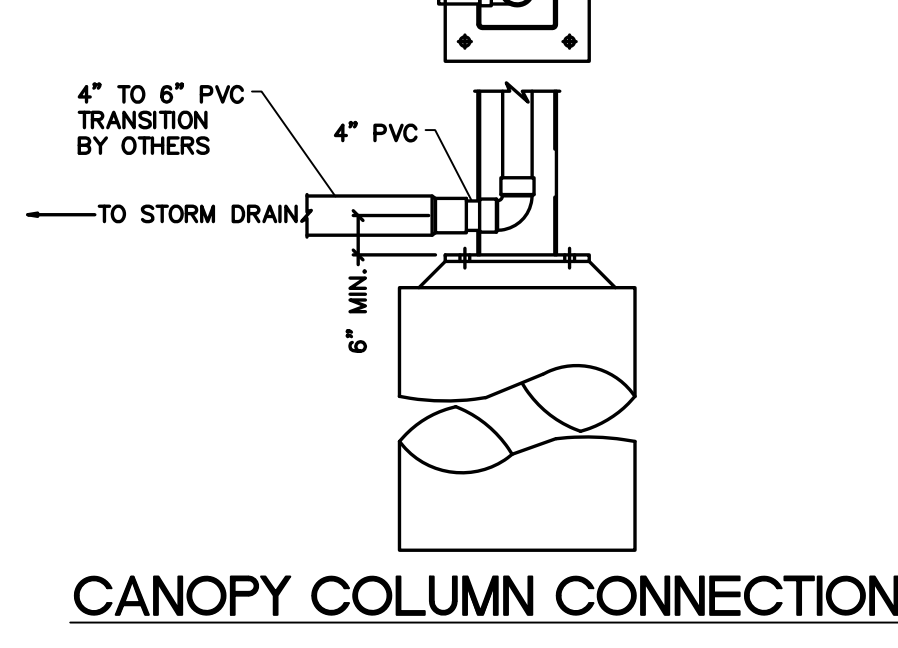
CATCHBASIN 48" TO 72" (I.D.O.T TYPE "A")



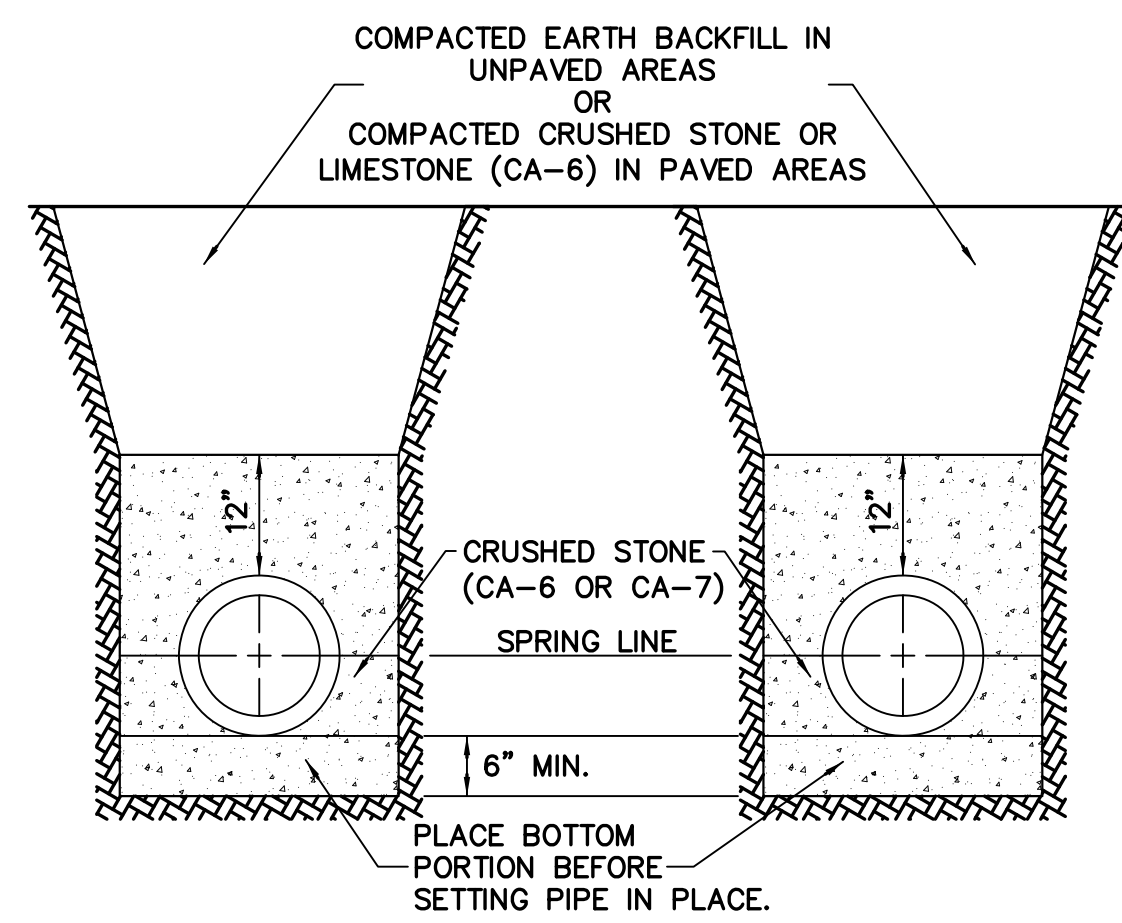
CATCHBASIN 48" TO 72" (FLAT TOP)



DOWNSPOUT CONNECTION DETAIL



CANOPY COLUMN CONNECTION

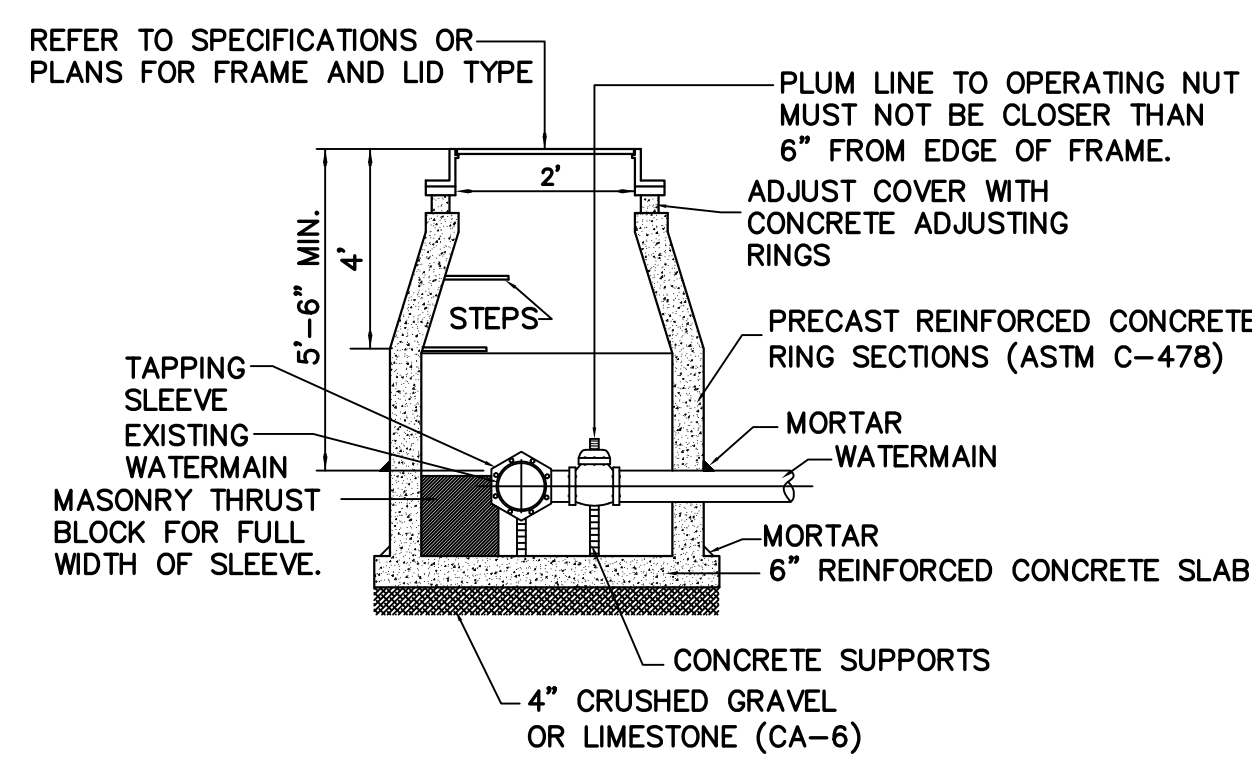


CLASS 1A (FLEXIBLE PIPE, ASTM 2321-89)

TYPE B (RIGID PIPE)

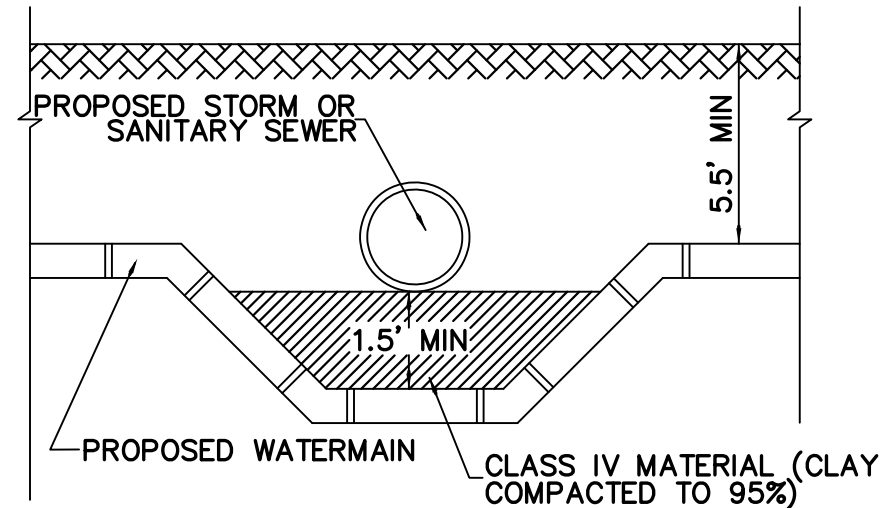
- NOTES:**
1. GRANULAR BEDDING IS NOT REQUIRED FOR WATER MAIN; HOWEVER, SOIL BASE BEDDING MUST BE COMPACTED AND STABLE MATERIAL.
 2. FOUNDATION: WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH A FOUNDATION OF CLASS I OR II MATERIAL AS DEFINED IN ASTM D2321, "STANDARD PRACTICE FOR INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY-FLOW APPLICATIONS," LATEST EDITION.
 3. MAXIMUM WIDTH OF TRENCH AT TOP OF PIPE FOR ALL CLASSES IS TO BE 4/3 INTERNAL DIAMETER PLUS 10" UNLESS SHEETING IS USED.
 4. MINIMUM COVER FOR PVC, HDPE, AND CMP IS 12" FROM THE TOP OF THE PIPE TO THE BOTTOM OF ASPHALT/OR TO BOTTOM OF CONCRETE PAVEMENT, OR TO FINISHED GRADE ELEVATION IN LANDSCAPED AREAS.
 5. TRENCH BACKFILL MUST BE WELL SPADED ON BOTH SIDES OF PIPE.
 6. TRENCH BACKFILL AND BEDDING MATERIALS SHALL BE COMPACTED TO A MINIMUM OF 95% OF STANDARD LABORATORY DENSITY PER ASTM D698.

TRENCH DETAIL



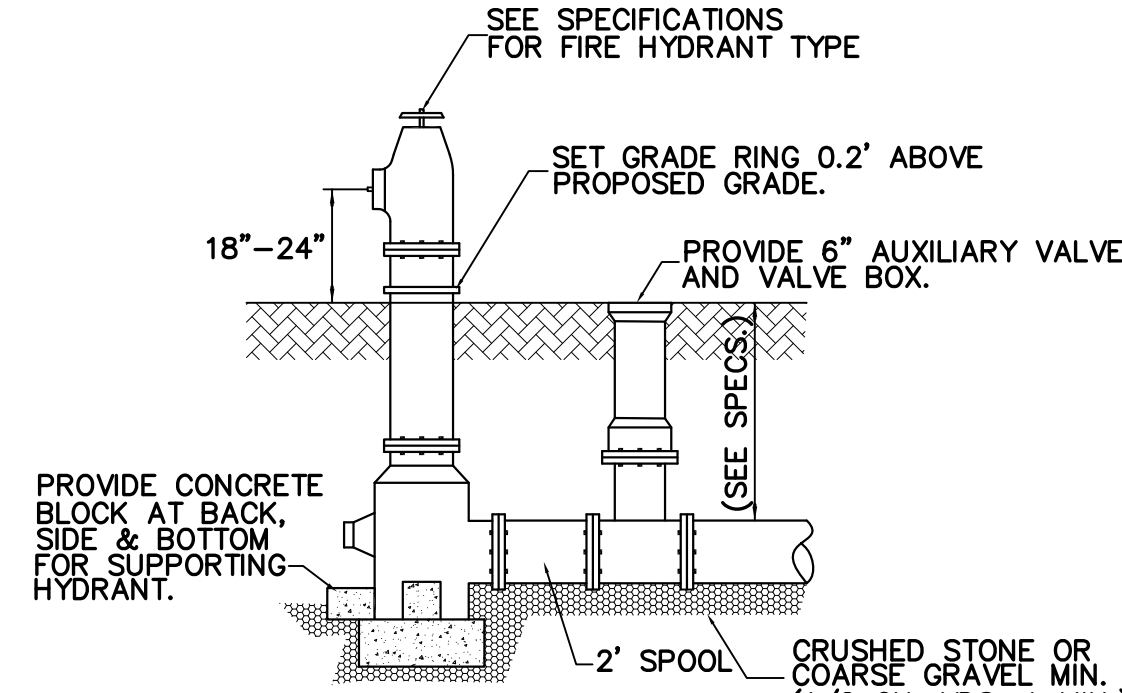
PRESSURE CONNECTION

- NOTES:**
1. 60" MINIMUM DIAMETER FOR ALL PRESSURE CONNECTIONS.
 2. PIPE OPENINGS TO BE CAST INTO WALL.



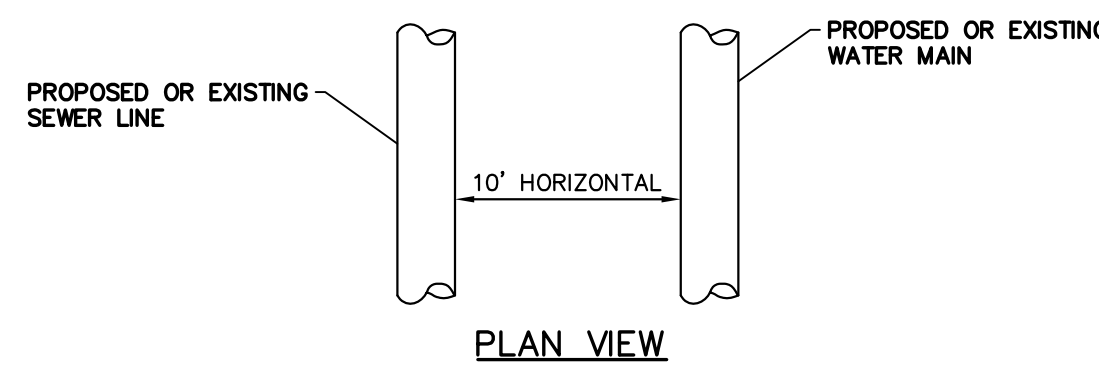
WATER MAIN CROSSING

- NOTE:**
1. USE MIN. 21 L.F. OF WATERMAIN CLASS PIPES (MIN. 10' ON EACH SIDE OF THE CROSSING). SEE SPECIFICATIONS FOR PIPE AND JOINT SPECIFICATIONS.

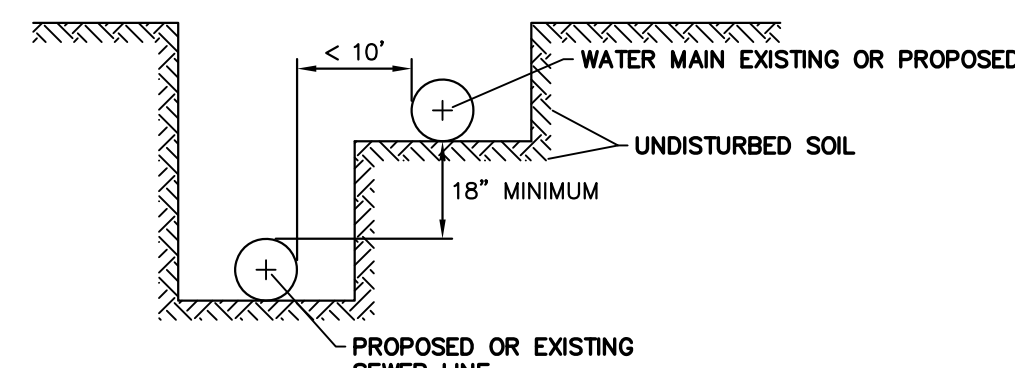


FIRE HYDRANT

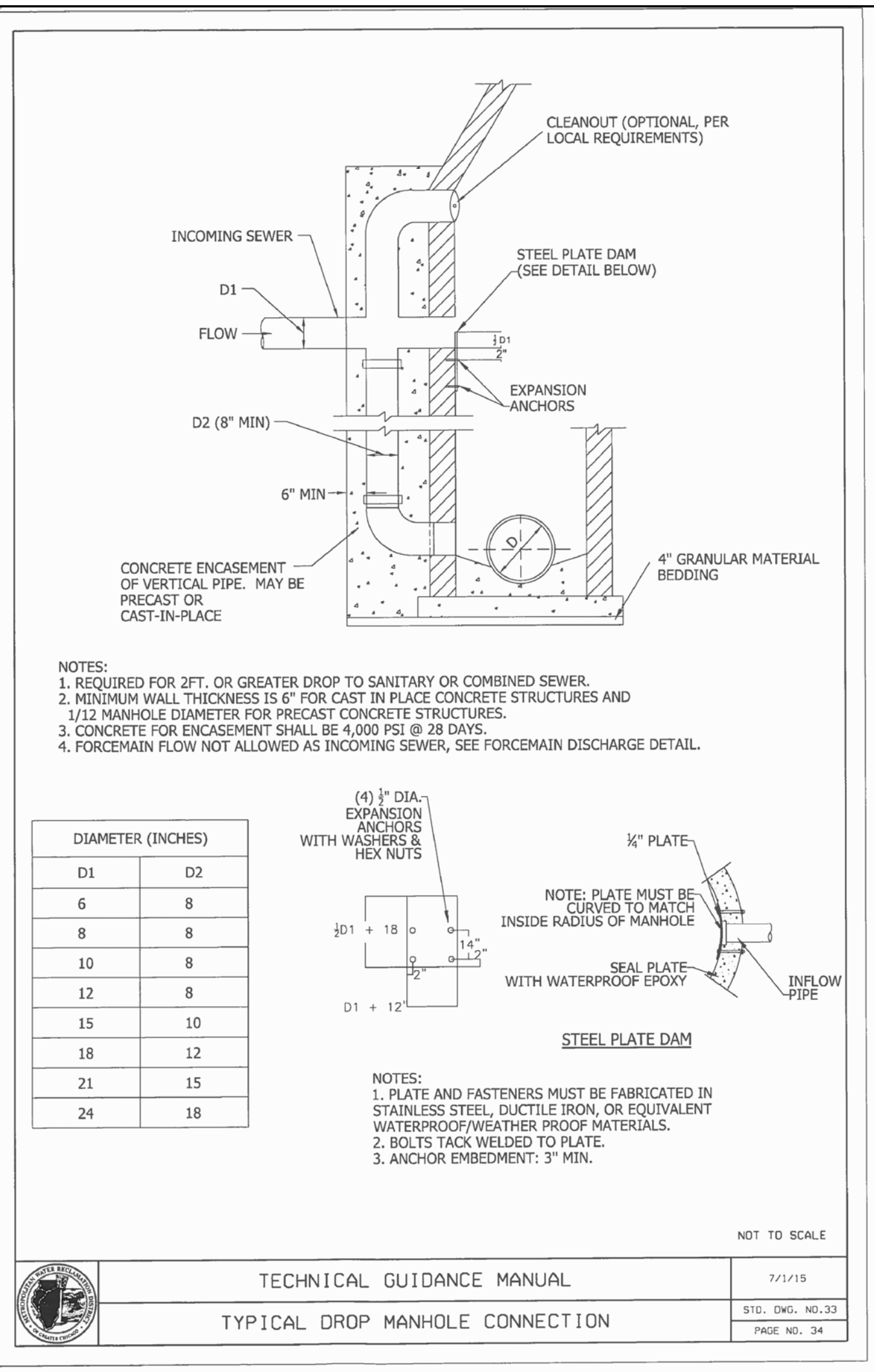
WHEN PROPOSED SEWER (OR WATER) IS LOCATED 10 FEET OR MORE FROM EXISTING WATER (OR SEWER), NO SPECIAL CONSTRUCTION REQUIRED. SEE ARTICLE 41-2.01A (1)



WHEN PROPOSED SEWER (OR WATER) IS LOCATED LESS THAN 10 FEET FROM EXISTING WATER (OR SEWER), DETAILS BELOW SHALL APPLY. SEE ARTICLE 41-2.01B (2)

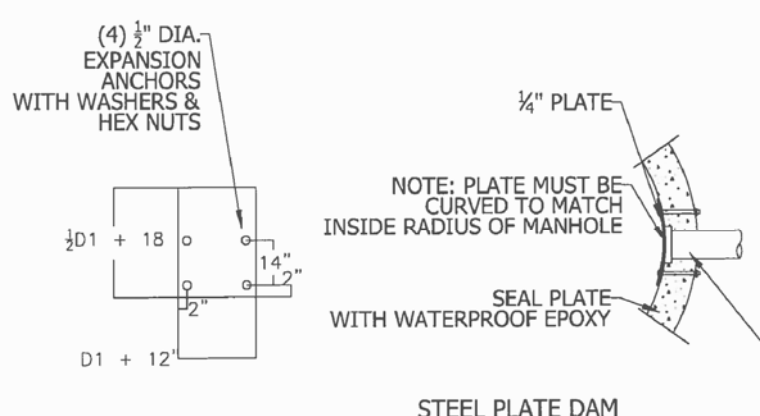


**WATER AND SEWER SEPARATION REQUIREMENTS
HORIZONTAL SEPARATION**



- NOTES:**
1. REQUIRED FOR 2FT. OR GREATER DROP TO SANITARY OR COMBINED SEWER.
 2. MINIMUM WALL THICKNESS IS 6" FOR CAST IN PLACE CONCRETE STRUCTURES AND 1/12 MANHOLE DIAMETER FOR PRECAST CONCRETE STRUCTURES.
 3. CONCRETE FOR ENCASEMENT SHALL BE 4,000 PSI @ 28 DAYS.
 4. FORCEMAIN FLOW NOT ALLOWED AS INCOMING SEWER, SEE FORCEMAIN DISCHARGE DETAIL.

DIAMETER (INCHES)	
D1	D2
6	8
8	8
10	8
12	8
15	10
18	12
21	15
24	18



- NOTES:**
1. PLATE AND FASTENERS MUST BE FABRICATED IN STAINLESS STEEL, DUCTILE IRON, OR EQUIVALENT WATERPROOF/WEATHER PROOF MATERIALS.
 2. BOLTS TACK WELDED TO PLATE.
 3. ANCHOR EMBEDMENT: 3" MIN.



TECHNICAL GUIDANCE MANUAL
TYPICAL DROP MANHOLE CONNECTION

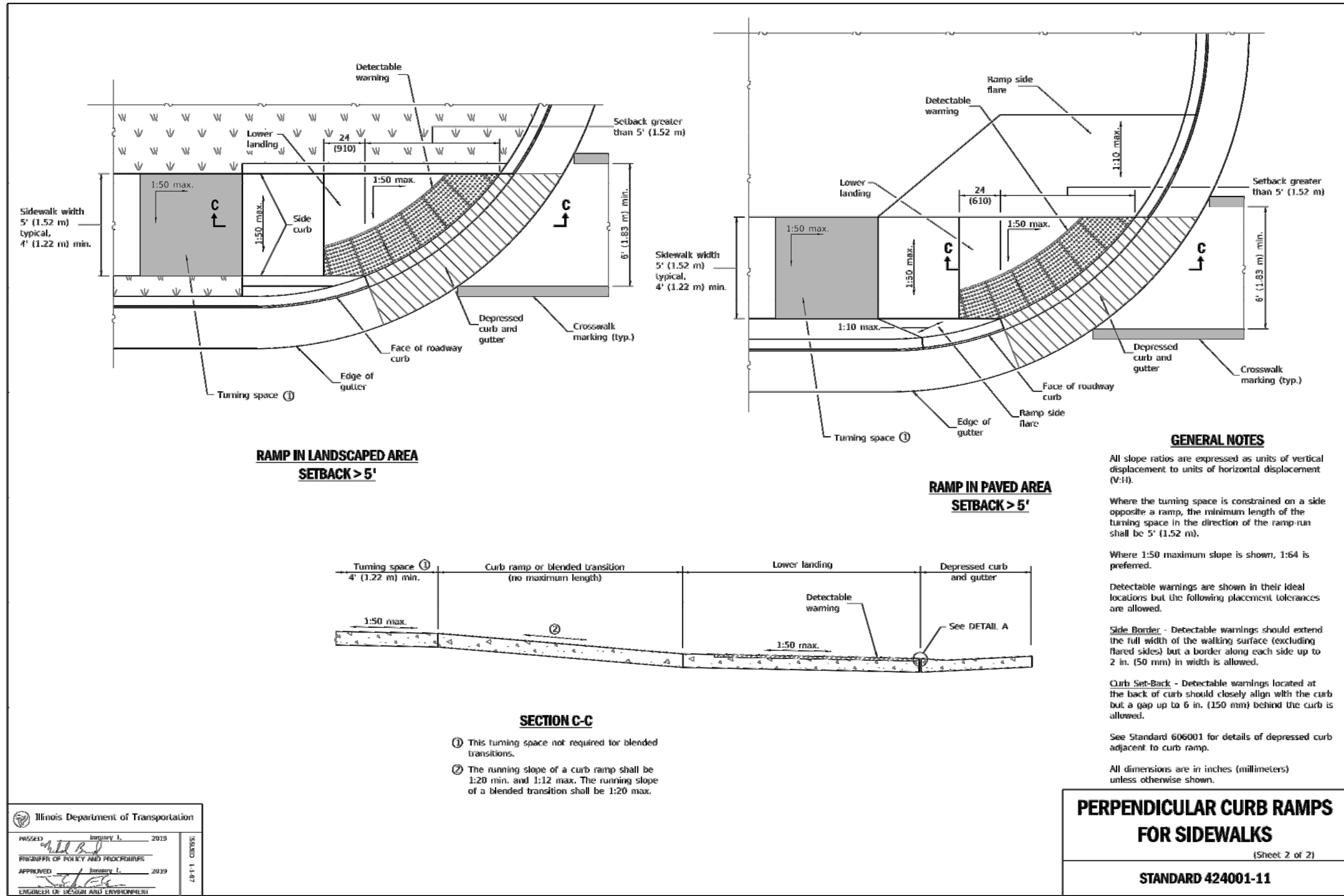
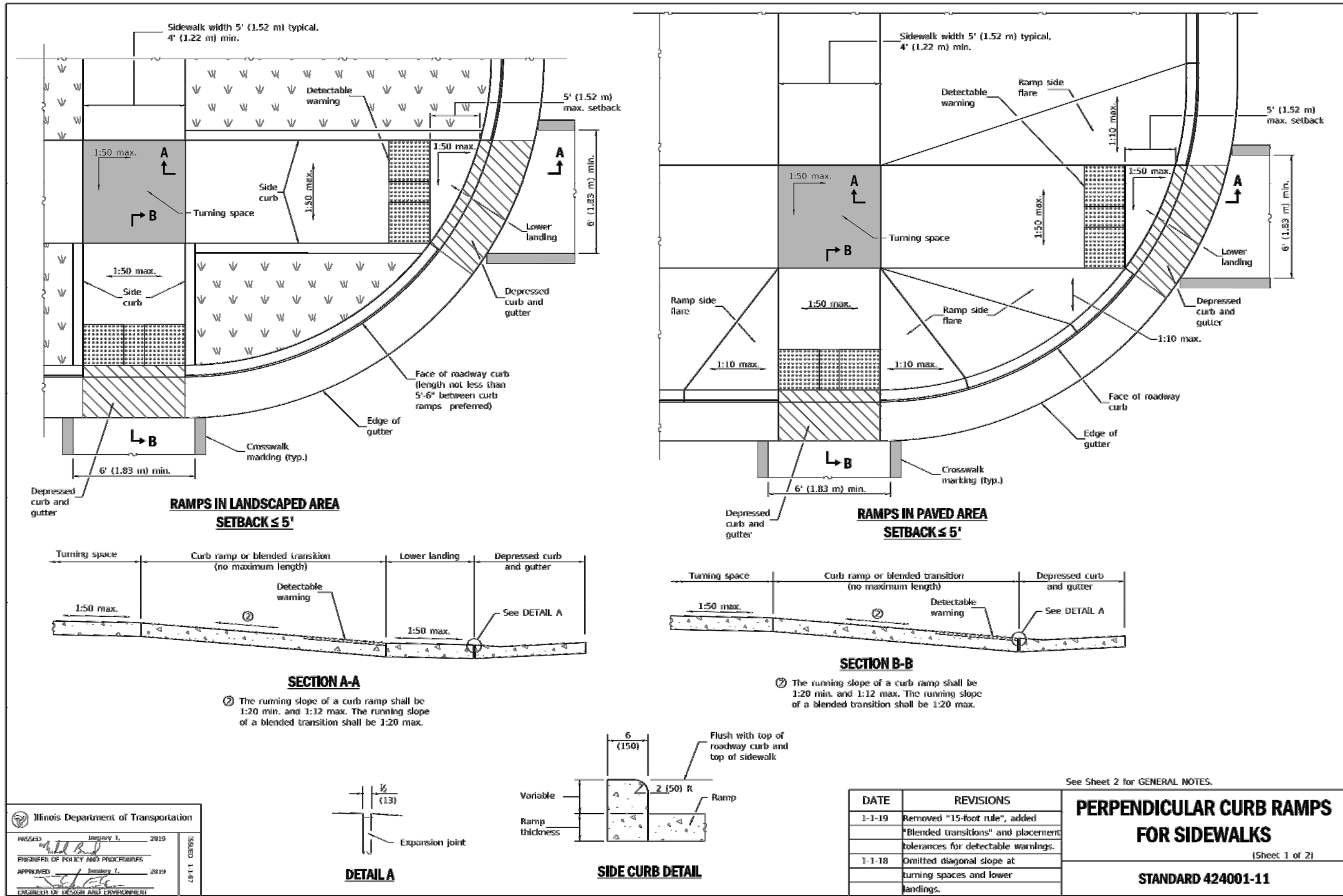
7/1/15
STD. DWG. NO. 23
PAGE NO. 34

DATE	1/15/19	NO.	1	REVISIONS	NO REVISIONS	NO.	2	REVISIONS PER VILLAGE REVIEW COMMENTS DATED 1/22/19
Prepared For: Vequity 400 N. State St Chicago, IL 60654 PROPOSED FUEL CENTER 1650 W. Algonquin Road Arlington Heights, Illinois								
Prepared By: Watermark Engineering Resources, Ltd 2631 Ginger Woods Parkway, Suite 100, Aurora, IL 60502 phone 630-371-5160 fax 630-236-8600 www.watermark-engineering.com								
CHECKED BY: B. PERRY	DESIGN BY: S. SIMAK	DRAWN BY: S. SIMAK	DATE: DECEMBER 7, 2018	SCALE: NONE	PROJECT NO.: 18-123	C-6		

PROJECT DETAILS

C-6

PROJECT DETAILS



IDOT DETAILS

C-7

CHECKED BY: B. PERRY
DESIGN BY: S. SIMAK
DRAWN BY: S. SIMAK
DATE: DECEMBER 7, 2018
SCALE:
PROJECT NO.: 18-123

Watermark Engineering
RESOURCES, LTD.
2631 Ginger Woods Parkway, Suite 100, Aurora, IL 60502
phone 630-575-1800 fax 630-236-8600 www.watermark-engineering.com

Prepared By:

PROPOSED FUEL CENTER
1650 W. Algonquin Road
Arlington Heights, Illinois

Prepared For:

NO.	REVISIONS	DATE
1	NO REVISIONS	1/15/19
2	REVISIONS PER VILLAGE REVIEW COMMENTS DATED 1/22/19	1/31/19

JOB NAME: _____
 TYPE NO.: _____
 CATALOG NO.: _____

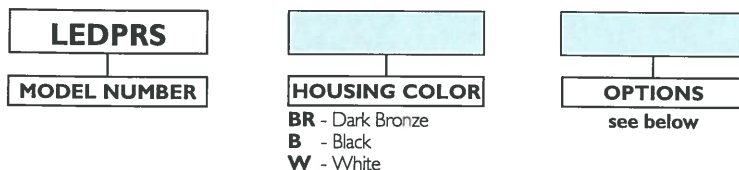


High-Lites

Pluralux Series Wet Location LED Emergency Lighting Units

ORDERING INFORMATION

Catalog Number: Example: LEDPRSWCL



OPTIONS	
CL	Cold Location Operation



Also available in black or white finishes



**Self-Diagnostic
Operation
Plus
High-Output
LED Lamp!**

Standard with dark bronze finish

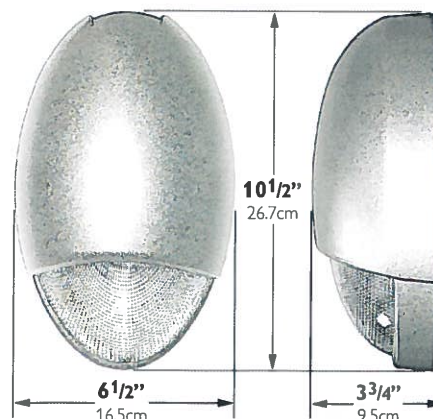
PRODUCT FEATURES

- Attractive, architectural styling
- Low profile design - meets ADA requirements
- Die-cast aluminum housing
- Choice of three decorator color finishes
- Self-diagnostic circuitry standard
- Ultra bright white LED lamps provide superior emergency lighting levels
- Polycarbonate lens and mirrored reflector provide even illumination
- Fast, easy wall mount installation
- Provision for back wiring or surface conduit entry
- Universal 120/277VAC input
- Fully automatic charger standard
- Maintenance-free nickel cadmium battery standard
- 90 minutes of emergency illumination
- Momentary test switch and AC ready indicator
- UL924 and UL Wet Location listed
- Suitable for damp and wet location applications
- Meets NFPA Life Safety Code 101, NEC and OSHA
- UL operating range 32°F to 122°F (0°C to 50°C)
- Cold location option allows operation range of -4°F to 122°F (-20°C to 50°C)

SPECIFICATIONS

Construction	Housings and backplates are constructed of rugged die-cast aluminum finished in scuff resistant, textured powder coat paint standard. All housings are sealed and gasketed for damp and wet location applications. Prismatic Lens: Unit lens is constructed of clear, high impact polycarbonate.
Installation	The housing backplate provides knockouts for mounting the unit to wall surfaces and/or standard 3 1/2" and 4" utility boxes. Wiring: Knockouts in the unit backplate allow rear wiring input from utility boxes. An entry point is also provided on the top of the unit housing to allow connection to rigid surface conduit.
Illumination	Emergency illumination is provided by 4.8V, 5W ultra bright white LED. Prismatic lenses provide bright, even, glare-free operation in a wide pattern across the path of egress.
Electronics	• Dual input 120/277VAC, 60 Hz • AC Lockout protection • AC-On indicator light and test switch • Low voltage battery disconnect • Automatic, constant current charger • Automatic brownout protection
Power Consumption	Input Power: 10W (maximum charge), 3.5W ready state
Battery	4.8V nickel cadmium sealed maintenance free battery. Optimum operating temperature range: 32°F to 122°F (0°C to 50°C). Provides a minimum of 90 minutes of full output emergency illumination.
Code Compliance	Listed to UL924. Meets NFPA Life Safety Code 101. Complies with NEC and OSHA.
Warranty	Limited 3-year warranty, 5-year nickel cadmium pro-rata battery warranty.

DIMENSIONS



NOTE: Dimensions and specifications subject to change without notice.
 Form 1278A 04/12 © 2006 Philips group

Specifications are subject to change without notice. Consult website for latest version of this spec sheet.
 Crescent/Stonco • 200 Franklin Square Drive • Somerset, NJ 08873 • www.crescentlighting.com

Crescent is a Philips company



GE
Lighting



Batten LED Luminaire

Utility Lighting and More.

New **Batten LED Luminaire** gives you more performance in tight, demanding situations where cold and damp conditions along with the outdoor elements come into play. It brings the money-saving benefits of GE LED technology to ATMs, awnings, drive-thru areas... places where dependable utilitarian light is required.



More Lighting Performance

- Maximizes coverage through wide, uniform Lambertian light distribution
- Extruded plastic design protects against moisture, dust and damage
- No decrease of light output in cold settings—as can happen with fluorescent
- Can be used in -40°C to 60°C (-40°F to 140°F)
- Lumen Output: 400 lumens/foot
- 50,000-hour rated life
- Color Temperatures: 7100K, 5000K, 4000K, 3000K
- Sizes: 2ft, 4ft, 8ft

Applications:

- LED Luminaire Fixture
- Awnings
- ATMs
- Drive-thrus

More Savings on Installation and Operation

- Installation is fast and easy with mounting clips
- Integrated power supply eliminates separate drivers
- Easily daisy chain (jumper wire & end-to-end) up to 40 feet of product
- Energy Consumption: 4.5 System watts/ft
- Input Voltage: 90-277 VAC
- Damp Rated
- IP66 Tested
- For use in damp applications



Batten LED Luminaire comes in 3 sizes 2ft, 4ft & 8ft



imagination at work

Components

SKU	Description	Long Description	Package Quantity
94456	GEW102432BAT-SY	GE 24" 3000K LED Fixture Single Unit	1 Fixture per box
94455	GEW102441BAT-SY	GE 24" 4000K LED Fixture Single Unit	1 Fixture per box
94459	GEW104832BAT-SY	GE 48" 3000K LED Fixture Single Unit	1 Fixture per box
94458	GEW104841BAT-SY	GE 48" 4000K LED Fixture Single Unit	1 Fixture per box
94462	GEW109641BAT-SY	GE 96" 3000K LED Fixture Single Unit	1 Fixture per box
94461	GEW109641BAT-SY	GE 96" 4000K LED Fixture Single Unit	1 Fixture per box
64409	GEW102432BAT	GE 24" 3000K LED Fixtures	4 Fixtures per box
64430	GEW102441BAT	GE 24" 4000K LED Fixtures	4 Fixtures per box
64431	GEW102450BAT	GE 24" 5000K LED Fixtures	4 Fixtures per box
94454	GEW102471BAT	GE 24" 7100K LED Fixtures	4 Fixtures per box
64432	GEW104832BAT	GE 48" 3000K LED Fixtures	4 Fixtures per box
64433	GEW104841BAT	GE 48" 4000K LED Fixtures	4 Fixtures per box
64434	GEW104850BAT	GE 48" 5000K LED Fixtures	4 Fixtures per box
94457	GEW104871BAT	GE 48" 7100K LED Fixtures	4 Fixtures per box
64472	GEW109632BAT	GE 96" 3000K LED Fixtures	4 Fixtures per box
64473	GEW109641BAT	GE 96" 4000K LED Fixtures	4 Fixtures per box
65653	GEW109650BAT	GE 96" 5000K LED Fixtures	4 Fixtures per box
94460	GEW109671BAT	GE 96" 7100K LED Fixtures	4 Fixtures per box
96440	GERBL-02FP-10-LC72IN	GE 6ft Leader Cable	1 Leader Cables per bag
96441	GERBL-02MG-10-JC24IN	GE 2ft Jumper Cable	1 Jumper Cables per bag
96442	GEMOUNTCLP	GE Mounting Clips	12 clips per bag

Technical Specifications

Specification Item	Wavelength	Typical Brightness (lumens/fixture)	Energy Consumption (System/Module)	Maximum Run Length	Light Distribution	Dimensions
Batten LED Luminaire 2 Foot	7100K, 5000K 4000K, 3000K	800	9.00	40 ft/12 meters	Lambertian	24.7 in x 1.48 in x 2.02 in
Batten LED Luminaire 4 Foot	7100K, 5000K 4000K, 3000K	1600	16.00	40 ft/12 meters	Lambertian	46.7 in x 1.48 in x 2.02 in
Batten LED Luminaire 8 Foot	7100K, 5000K 4000K, 3000K	3200	32.00	40 ft/12 meters	Lambertian	90.9 in x 1.48 in x 2.02 in

Specification Item

Specification

Applications	Awnings, Drive Thru, ATM
Operating Environment	-40 °C to +60 °C
Voltage	120- 277 VAC
Warranty	GE offers a limited system warranty of up to five (5) years
System Certifications	UL Classified #E320964



**Batten fixtures become cut-off
once mounted under a canopy**



www.gelighting.com

GE and the GE Monogram are trademarks of the General Electric Company. All other trademarks are the property of their respective owners. Information provided is subject to change without notice. All values are design or typical values when measured under laboratory conditions. GE Lighting and GE Lighting Solutions, LLC are businesses of the General Electric Company. © 2014 GE.

SIGN128 (Rev 10/01/14)

GE
Lighting

Evolve™ LED Area Light

Scalable Area Light (EASC)



imagination at work

Product Features

The next evolution of the GE Evolve™ LED Area Light continues to deliver outstanding features, while adding greater flexibility, style and scalability. This latest design offers higher lumen outputs and provides photometric combinations with high efficacy, providing the ability to meet even a wider range of area lighting needs. Additionally, the new EASC Evolve Luminaire comes with a specially designed auto dealership optic for exceptional illuminance on the dealership's front row. Optional programmable motion sensing for Title 24 compliance is available.

Applications

- Site, area, and general lighting applications utilizing advanced LED optical system providing high uniformity, excellent vertical light distribution, reduced offsite visibility, reduced on-site glare and effective security light levels.
- Ideal for small to large retailers, commercial to medical properties, and big box retailers.

Housing

- Die-cast aluminum housing.
- Slim architectural design incorporates an integral heat sink and light engine, ensuring maximum heat transfer, long LED life, and a reduced Effective Projected Area (EPA).
- Meets 3G vibration standards per ANSI C136.31-2010 for Slipfitter and Mounting Arm configurations. Meets 1.5G vibration standards for Knuckle Slipfitter Mounting.

LED & Optical Assembly

- Structured LED arrays for optimized area light photometric distribution.
- Evolve light engine with directional reflectors designed to optimize application efficiency and minimize glare.
- Utilizes high brightness LEDs, 70 CRI at 4000K and 5000K typical.

Lumen Maintenance

- Projected L90>100,000 hours per IES TM-21
- Projected Lxx per IES TM-21 at 25°C for reference:

Optical Code	Lxx (10k) @ Hours*		
	25,000 hr	50,000 hr	100,000 hr
All (up to 398 Watts)	L98	L95	L91

Note:

- *Projected Lxx based on LM80 (10,000 hour testing). **Projected Lxx based on LM80 (6,000 hour testing).
- DOE Lighting Facts Verification Testing Tolerances apply to initial luminous flux and lumen maintenance measurements.

Lumen Ambient Temperature Factors:

Ambient Temperature: (°C)	Initial Flux Factor
10	1.02
20	1.01
25	1.00
30	0.99
40	0.98



DLC Standard qualified models available. Most SKUs of L-Series & V-Series will not meet DLC 4.1. Please refer to <http://www.designlights.org/QPL> for complete information.

Ratings

- listed, suitable for wet locations.
- listed with option code "J" SKUs.
- IP65 rated optical enclosure per ANSI C136.25-2009.
- Temperature rated at -40° to 50°C (-40° to 35°C for fixtures over 390 watts).
- Upward Light Output Ratio (ULOR) = 0. This means full cutoff
- Title 24 compliant with "H" motion sensor option.
- Compliant with the material restriction requirements of RoHS.

Mounting

Option A

- 10-inch (254mm) mounting arm for square pole prewired with 24-inch (610mm) leads.

Option B

- 10-inch (254mm) mounting arm for round pole prewired with 24-inch (610mm) leads.

Option C

- Slipfitter mounting for 2 3/8-inch (60mm) O.D. pipe prewired with 24-inch (610mm) leads.

Option D

- 10-inch (254mm) mounting arm for round or square pole prewired with 24-inch (610mm) leads.

Option S

- Knuckle Slipfitter mounting for 2.3-3" O.D. pipe, pre-wired with 24-inch (610mm) leads.

Finish

- Corrosion resistant polyester powder painted, minimum 2.0 mil. thickness.
- Standard colors: Black & Dark Bronze.
- RAL & custom colors available.

Electrical

- 120-277 volt and 347-480 volt available.
- System power factor is >90% and THD <20%.*
- Class "A" sound rating.
- Photo electric sensors (PE) available for all voltages.
- ANSI C136.41 dimmable PE receptacle is available making the unit "adaptive controls ready."
- Surge Protection Options:
For 120-277VAC and 347-480VAC per IEEE/ANSI C136.2-2015.
 - 6kV/3kA "Basic" surge protection, standard.
 - 10kV/5kA "Enhanced" surge protection available with R option.

* System power factor and THD is tested and specified at 120V input and maximum load conditions.

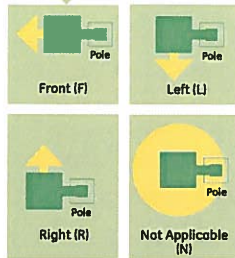
Ordering Number Logic

Evolve™ LED Scalable Area Light (EASC)



E A S C

PROD. ID	PHOTOMETRIC	VOLTAGE	OPTICAL CODE	DISTRIBUTION ORIENTATION	DRIVE CURRENT	LED COLOR TEMP	PE FUNCTION	MOUNTING ARM	COLOR	OPTIONS
E = Evolve A = Area S = Scalable	C = Photometric Series	0 = 120 - 277 1 = 120* 2 = 208* 3 = 240* 4 = 277* 5 = 480* D = 347* H = 347-480 *Specify single voltage if fuse option is selected.		F = Front L = Left R = Right N = Not Applicable	5 = 525mA 7 = 700mA* * Only select for product 395W.	40 = 4000K 50 = 5000K	1 = None A = ANSI C136.41 7-pin dimming PE Receptacle †# D = ANSI C136.41 7-pin dimming PE Receptacle with Shorting Cap †#	A = 10" Arm for Square Pole supplied with leads B = 10" Arm for Round Pole supplied with leads C = EXT Slip-fitter 2" Pipe (2.378 in. OD) supplied with leads D = 10" Arm for round or square poles, supplied with leads and additional hardware S = Knuckle Slipfitter for 2.3 in. - 3.0 in. OD Tenon, supplied with leads. 0-45° vertical aiming angles achievable.	BLCK = Black DKBZ = Dark Bronze GRAY = Gray WHITE = White Contact manufacturer for other colors.	C = IEC D = Dimming (0-10 Volt Input)† F = Fusing H = Motion Sensor** J = cUL/Canada R = 10kV Extra Surge Protection XXX = Special Options † Dimming leads will be provided through the back of the arm, unless specified with A or D PE Function. ** When ordering Motion Sensing Option H - "A" or "B" Mounting Arm must be selected. Fixture power increase of 1W expected with sensor use. # Dimming is standard with H option code. Do not also select D option. Not compatible with PE receptacle options A, or D.

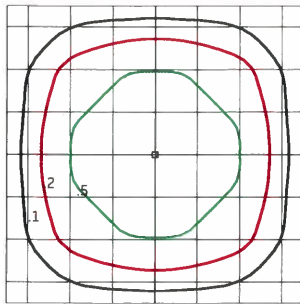


	OPTICAL CODE	TYPE	TYPICAL INITIAL LUMENS	TYPICAL SYSTEM WATTAGE	DISTRIBUTION ORIENTATION AVAILABLE	BUG RATING* 4000K & 5000K			IES FILE NUMBER		
						B	U	G	4000K	5000K	
TYPE V	D5	Symmetric Medium	8300	82	N	3	0	2	EASC_D5N540	.IES	EASC_D5N550 .IES
	E5	Symmetric Medium	12700	119	N	4	0	2	EASC_E5N540	.IES	EASC_E5N550 .IES
	F5	Symmetric Medium	15000	137	N	4	0	2	EASC_F5N540	.IES	EASC_F5N550 .IES
	G5	Symmetric Medium	17100	156	N	4	0	2	EASC_G5N540	.IES	EASC_G5N550 .IES
	H5	Symmetric Medium	21200	199	N	4	0	2	EASC_H5N540	.IES	EASC_H5N550 .IES
	J5	Symmetric Medium	25200	235	N	5	0	3	EASC_J5N540	.IES	EASC_J5N550 .IES
	K5	Symmetric Medium	30000	283	N	5	0	3	EASC_K5N540	.IES	EASC_K5N550 .IES
	L5	Symmetric Medium	38000	395	N	5	0	4	EASC_L5N740	.IES	EASC_L5N750 .IES
	N5	Symmetric Short	9200	82	N	3	0	1	EASC_N5N540	.IES	EASC_N5N550 .IES
	P5	Symmetric Short	13800	119	N	3	0	2	EASC_P5N540	.IES	EASC_P5N550 .IES
TYPE IV	Q5	Symmetric Short	16400	137	N	4	0	2	EASC_Q5N540	.IES	EASC_Q5N550 .IES
	R5	Symmetric Short	18700	156	N	4	0	2	EASC_R5N540	.IES	EASC_R5N550 .IES
	S5	Symmetric Short	23100	199	N	4	0	2	EASC_S5N540	.IES	EASC_S5N550 .IES
	T5	Symmetric Short	27400	235	N	4	0	2	EASC_T5N540	.IES	EASC_T5N550 .IES
	U5	Symmetric Short	33000	283	N	5	0	2	EASC_U5N540	.IES	EASC_U5N550 .IES
	V5	Symmetric Short	41500	395	N	5	0	3	EASC_V5N740	.IES	EASC_V5N750 .IES
	A4	Asymmetric Forward	4200	44	F, L, R	1	0	1	EASC_A4F540	.IES	EASC_A4F550 .IES
	B4	Asymmetric Forward	6500	62	F, L, R	1	0	2	EASC_B4F540	.IES	EASC_B4F550 .IES
	C4	Asymmetric Forward	7600	72	F, L, R	1	0	2	EASC_C4F540	.IES	EASC_C4F550 .IES
	D4	Asymmetric Forward	8700	82	F, L, R	1	0	2	EASC_D4F540	.IES	EASC_D4F550 .IES
TYPE III	E4	Asymmetric Forward	12900	119	F, L, R	2	0	3	EASC_E4F540	.IES	EASC_E4F550 .IES
	F4	Asymmetric Forward	15400	144	F, L, R	2	0	3	EASC_F4F540	.IES	EASC_F4F550 .IES
	G4	Asymmetric Forward	17100	156	F, L, R	2	0	3	EASC_G4F540	.IES	EASC_G4F550 .IES
	H4	Asymmetric Forward	21200	199	F, L, R	3	0	4	EASC_H4F540	.IES	EASC_H4F550 .IES
	J4	Asymmetric Forward	25200	235	F, L, R	3	0	4	EASC_J4F540	.IES	EASC_J4F550 .IES
	K4	Asymmetric Forward	30000	283	F, L, R	3	0	5	EASC_K4F540	.IES	EASC_K4F550 .IES
	L4	Asymmetric Forward	38300	395	F, L, R	3	0	5	EASC_L4F740	.IES	EASC_L4F750 .IES
	A3	Asymmetric Wide	4700	44	F, L, R	1	0	1	EASC_A3F540	.IES	EASC_A3F550 .IES
	B3	Asymmetric Wide	7100	62	F, L, R	1	0	1	EASC_B3F540	.IES	EASC_B3F550 .IES
	C3	Asymmetric Wide	8300	72	F, L, R	1	0	2	EASC_C3F540	.IES	EASC_C3F550 .IES
TYPE II	D3	Asymmetric Wide	9500	82	F, L, R	2	0	2	EASC_D3F540	.IES	EASC_D3F550 .IES
	E3	Asymmetric Wide	13900	119	F, L, R	2	0	2	EASC_E3F540	.IES	EASC_E3F550 .IES
	F3	Asymmetric Wide	16800	144	F, L, R	2	0	2	EASC_F3F540	.IES	EASC_F3F550 .IES
	G3	Asymmetric Wide	18700	156	F, L, R	2	0	2	EASC_G3F540	.IES	EASC_G3F550 .IES
	H3	Asymmetric Wide	23100	199	F, L, R	3	0	3	EASC_H3F540	.IES	EASC_H3F550 .IES
	J3	Asymmetric Wide	27400	235	F, L, R	3	0	3	EASC_J3F540	.IES	EASC_J3F550 .IES
	K3	Asymmetric Wide	33000	283	F, L, R	3	0	4	EASC_K3F540	.IES	EASC_K3F550 .IES
	L3	Asymmetric Wide	41500	395	F, L, R	3	0	4	EASC_L3F740	.IES	EASC_L3F750 .IES
	A2	Asymmetric Narrow	4600	44	F, L, R	1	0	1	EASC_A2F540	.IES	EASC_A2F550 .IES
	B2	Asymmetric Narrow	6800	62	F, L, R	1	0	1	EASC_B2F540	.IES	EASC_B2F550 .IES
TYPE I	C2	Asymmetric Narrow	8000	72	F, L, R	2	0	2	EASC_C2F540	.IES	EASC_C2F550 .IES
	D2	Asymmetric Narrow	9100	82	F, L, R	2	0	2	EASC_D2F540	.IES	EASC_D2F550 .IES
	E2	Asymmetric Narrow	13400	119	F, L, R	2	0	2	EASC_E2F540	.IES	EASC_E2F550 .IES
	F2	Asymmetric Narrow	16200	144	F, L, R	3	0	3	EASC_F2F540	.IES	EASC_F2F550 .IES
	G2	Asymmetric Narrow	18000	156	F, L, R	3	0	3	EASC_G2F540	.IES	EASC_G2F550 .IES
	H2	Asymmetric Narrow	22300	199	F, L, R	3	0	3	EASC_H2F540	.IES	EASC_H2F550 .IES
	J2	Asymmetric Narrow	26500	235	F, L, R	3	0	3	EASC_J2F540	.IES	EASC_J2F550 .IES
	K2	Asymmetric Narrow	31900	283	F, L, R	3	0	4	EASC_K2F540	.IES	EASC_K2F550 .IES
	L2	Asymmetric Narrow	40000	395	F, L, R	4	0	4	EASC_L2F740	.IES	EASC_L2F750 .IES
	KA	Asymmetric 100° Wide Auto	35400	283	F, L, R	4	0	3	EASC_KAF540	.IES	EASC_KAF550 .IES
	LA	Asymmetric 100° Wide Auto	46900	398	F, L, R	5	0	4	EASC_LAF740	.IES	EASC_LAF750 .IES

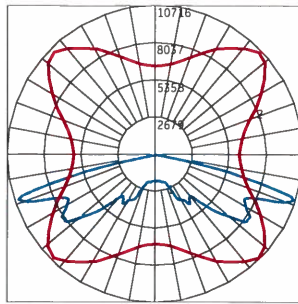
*Rating values for B and G are based on rated lumens and may vary due to flux tolerances.

Photometrics

EASC Type V - Symmetric Medium (K5)
30,000 Lumens, 5000K (EASC_K5N550_.ies)

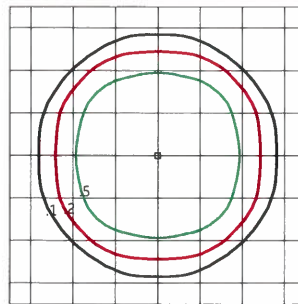


Grid Distance in Units of Mounting Height at 40' Initial Footcandle Values at Grade

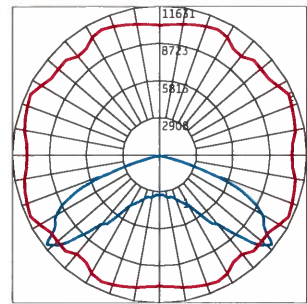


— Vertical plane through horizontal angle of maximum candlepower at 45°
— Vertical plane through horizontal angle of 72°

EASC Type V - Symmetric Short (U5)
33,000 Lumens, 5000K (EASC_USN550_.ies)

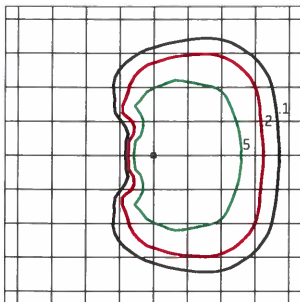


Grid Distance in Units of Mounting Height at 40' Initial Footcandle Values at Grade

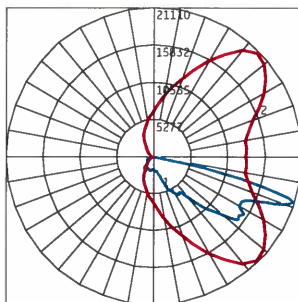


— Vertical plane through horizontal angle of maximum candlepower at 20°
— Vertical plane through horizontal angle of 72°

EASC Type IV - Asymmetric Forward (K4)
30,000 Lumens, 5000K (EASC_K4F550_.ies)

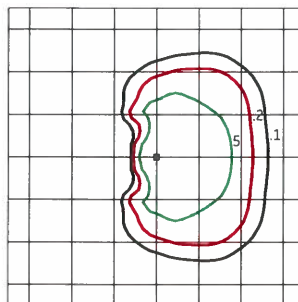


Grid Distance in Units of Mounting Height at 40' Initial Footcandle Values at Grade

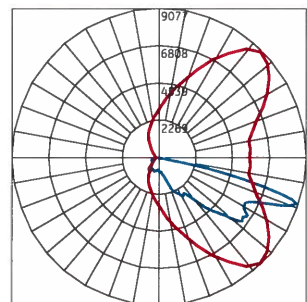


— Vertical plane through horizontal angle of maximum candlepower at 45°
— Vertical plane through horizontal angle of 72°

EASC Type IV - Asymmetric Forward (E4)
12,900 Lumens, 5000K (EASC_E4F550_.ies)

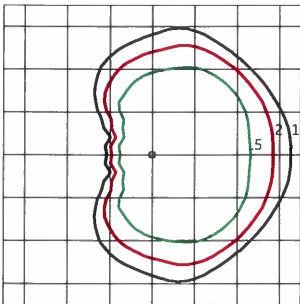


Grid Distance in Units of Mounting Height at 30' Initial Footcandle Values at Grade

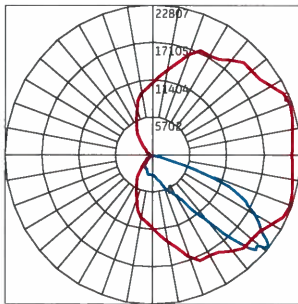


— Vertical plane through horizontal angle of maximum candlepower at 45°
— Vertical plane through horizontal angle of 72°

EASC Type III - Asymmetric Wide (K3)
33,000 Lumens, 5000K (EASC_K3F550_.ies)

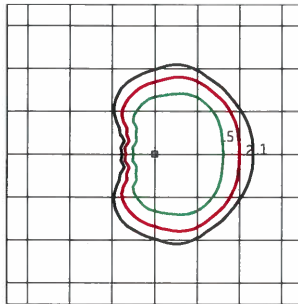


Grid Distance in Units of Mounting Height at 40' Initial Footcandle Values at Grade

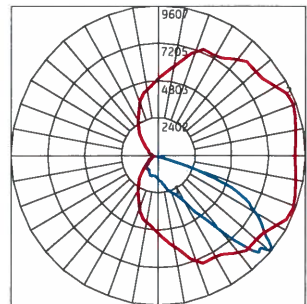


— Vertical plane through horizontal angle of maximum candlepower at 20°
— Vertical plane through horizontal angle of 52°

EASC Type III - Asymmetric Wide (E3)
13,900 Lumens, 5000K (EASC_E3F550_.ies)

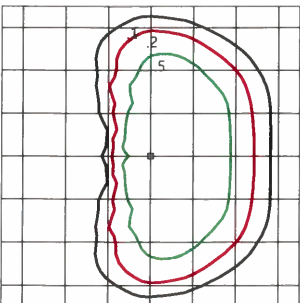


Grid Distance in Units of Mounting Height at 30' Initial Footcandle Values at Grade

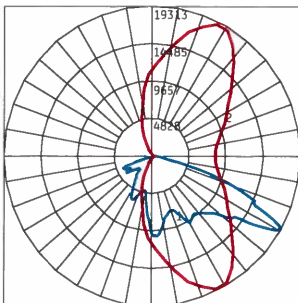


— Vertical plane through horizontal angle of maximum candlepower at 20°
— Vertical plane through horizontal angle of 52°

EASC Type II - Asymmetric Narrow (K2)
31,900 Lumens, 5000K (EASC_K2F550_.ies)

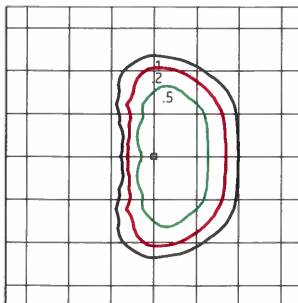


Grid Distance in Units of Mounting Height at 40' Initial Footcandle Values at Grade

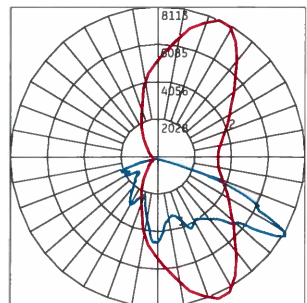


— Vertical plane through horizontal angle of maximum candlepower at 65°
— Vertical plane through horizontal angle of 60°

EASC Type II - Asymmetric Narrow (E2)
13,400 Lumens, 5000K (EASC_E2F550_.ies)



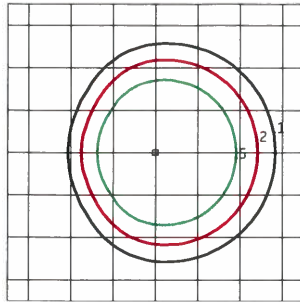
Grid Distance in Units of Mounting Height at 30' Initial Footcandle Values at Grade



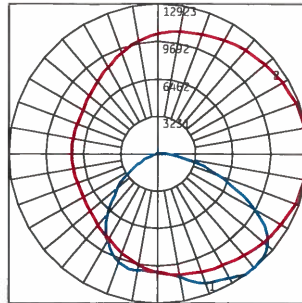
— Vertical plane through horizontal angle of maximum candlepower at 65°
— Vertical plane through horizontal angle of 60°

Photometrics

EASC Type II - Assymetric Auto (KA)
35,400 Lumens, 5000K (EASC_KAF550__ies)

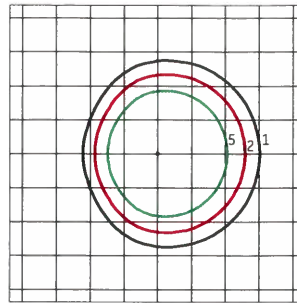


Grid Distance in Units
of Mounting Height at 40' Initial
Footcandle Values at Grade

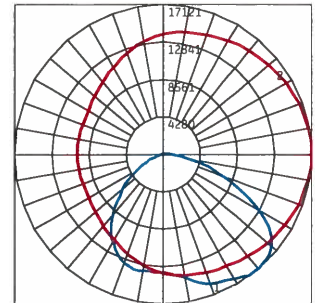


— Vertical plane through horizontal angle
of maximum candlepower at 0°
— Vertical plane through horizontal angle of 37°

EASC Type II - Assymetric Auto (LA)
46,900 Lumens, 5000K (EASC_LAF750__ies)



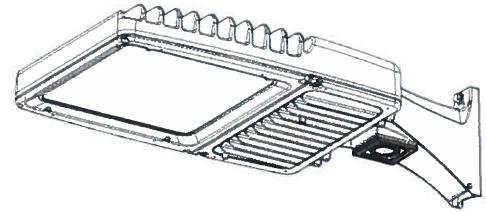
Grid Distance in Units
of Mounting Height at 40' Initial
Footcandle Values at Grade



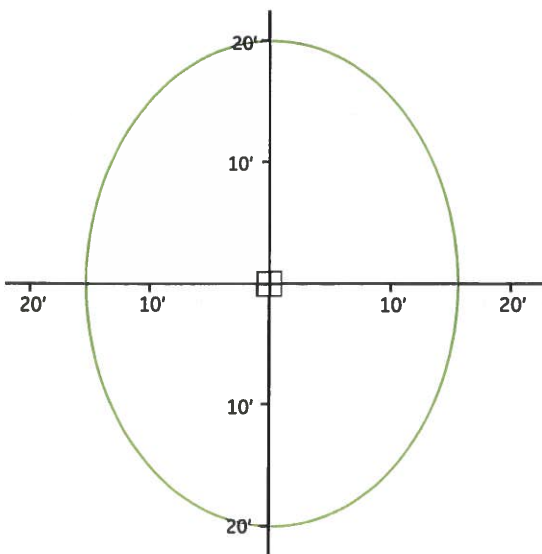
— Vertical plane through horizontal angle
of maximum candlepower at 0°
— Vertical plane through horizontal angle of 37°

H-Motion Sensing Option:

- Intended for high mounting applications, between 15-30ft (4.57-9.14m). For mounting heights exceeding 30ft, pole mounted sensors are recommended.
 - Provides a coverage area radius for walking motion of 15-20ft (4.57-6.10m).
 - Provides 270° of coverage (~90° is blocked by the pole).
 - Comes standard with 50% dimmed light output with no occupancy, and full power at occupancy.
 - Comes standard with photocell function. Note: It is not necessary to also purchase PE receptacle or control.
 - Comes standard with a 5 minute occupancy time delay and a 5 minute ramp-down to the 50% dimmed level.
 - Must order with decorative mounting arm options "A" or "B".
 - Fixture power increase of 1W expected with sensor use.
- Note: Standard options may be reprogrammed in the field. Reprogramming instructions included in product shipment.



Sensor Pattern:



Sensing Pattern Area Fixture
Up to 30 ft.

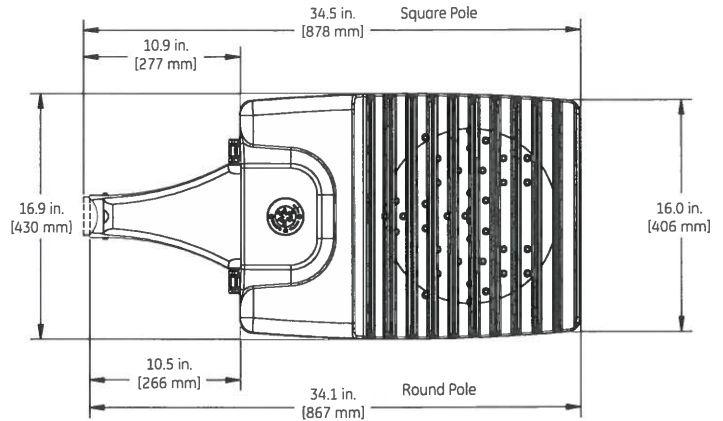
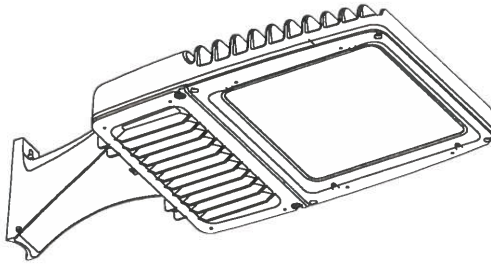
Product Dimensions

(Option A) 10" Arm for Square Pole Mount

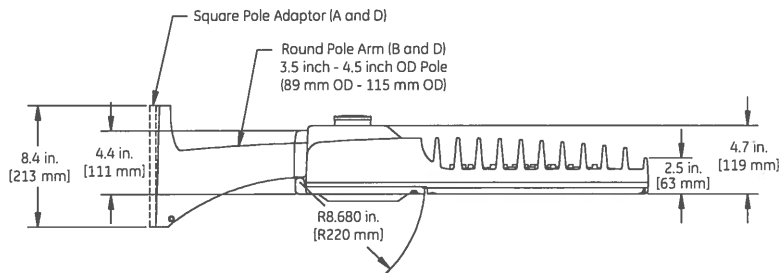
(Option B) 10" Arm for Round Pole Mount

(Option D) 10" Arm for Square Pole Mount or Round Pole Mount

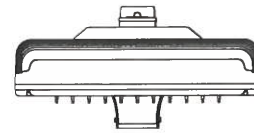
Option D includes all mounting hardware in Option A and Option B



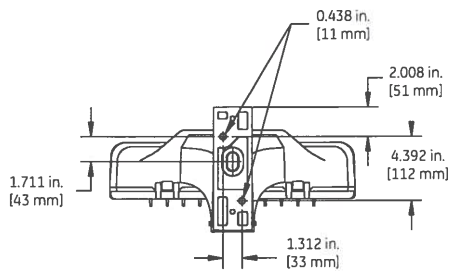
TOP VIEW



SIDE VIEW

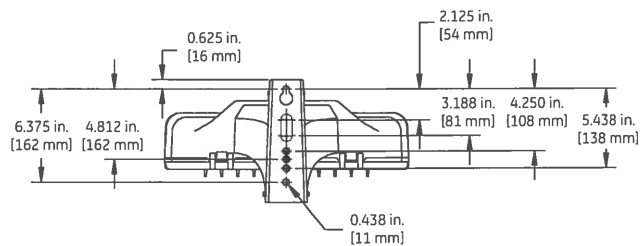


FRONT VIEW



BACK VIEW

Option A and D Square Pole
3.5 inch - 4.5 inch Pole
(89 mm - 115 mm)



BACK VIEW

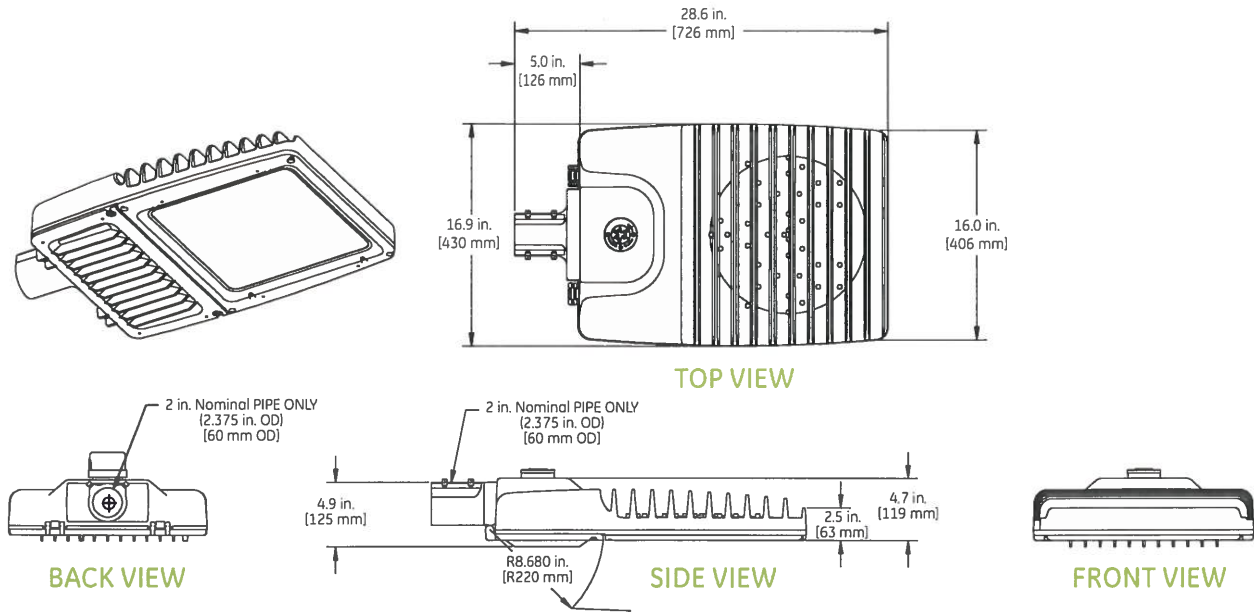
Option B and D Round Pole
3.5 inch - 4.5 inch OD Pole
(89 mm OD - 115 mm OD)

DATA

- Approximate net weight: 43-47 lbs (19.50 - 21.32 kgs)
Contact manufacturer for specific configuration weight.
- Effective Projected Area (EPA) with 10" Mounting Arm: 0.97 sq ft max (0.09 sq m)

Product Dimensions

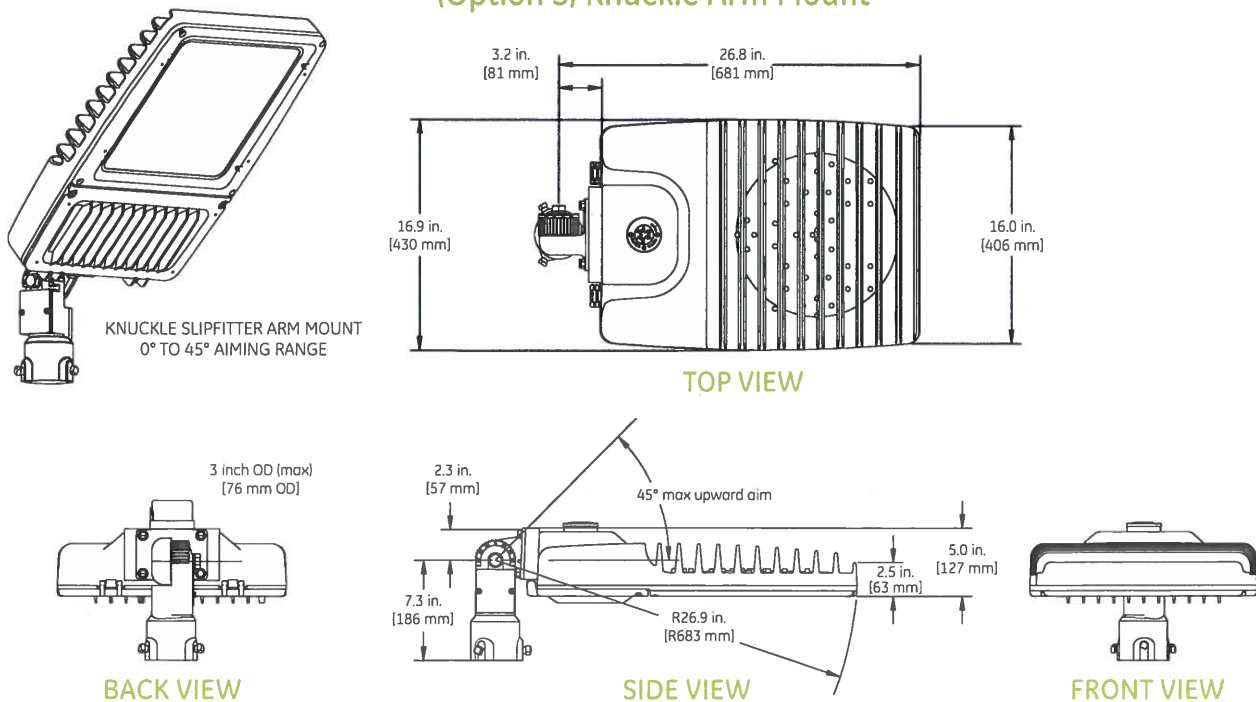
(Option C) Slipfitter Arm Mount



DATA

- Approximate net weight: 41-45 lbs (18.60 - 20.41 kgs)
Contact manufacturer for specific configuration weight.
- Effective Projected Area (EPA) with Slipfitter: 0.47 sq ft max (0.04 sq m)

(Option S) Knuckle Arm Mount



DATA

- Approximate net weight: 41-45 lbs (18.60 - 20.41 kgs)
Contact manufacturer for specific configuration weight.
- Effective Projected Area (EPA) with fixture mounted at 45° upward: 1.97 sq ft max

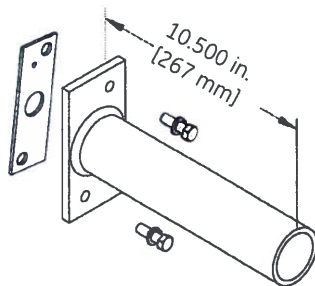
Mounting Information

Mounting Arms for Slipfitter

Order separately with Mounting Option C (External Slipfitter)

SQUARE POLE MOUNTING ARM

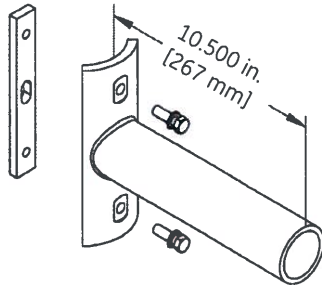
3.5 TO 4.5-inch (89 to 114mm) SQUARE
(WILL ALLOW 4 FIXTURES PER POLE @ 90 DEGREES.)



ORDER SEPARATELY FROM FIXTURE AS CATALOG NUMBER
SPA-EAMT10BLCK "Black"
SPA-EAMT10DKBZ "Dark Bronze"

ROUND POLE MOUNTING ARM

3.5 TO 4.5-inch (89 to 114mm) OD
(WILL ALLOW 4 FIXTURES PER POLE @ 90 DEGREES.)



ORDER SEPARATELY FROM FIXTURE AS CATALOG NUMBER
RPA-EAMT10BLCK "Black"
RPA-EAMT10DKBZ "Dark Bronze"

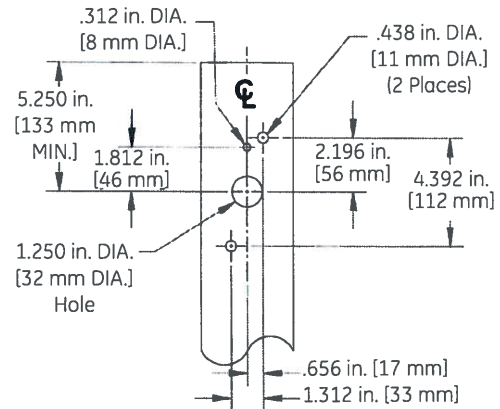
Wall Mounting Bracket Adapter Plate

ORDER SEPARATELY FROM FIXTURE AS CATALOG NUMBER
WMB-EAMT06

***NOTE: For Wall Mounting, order luminaire with mounting arm: C = EXT Slip-fitter 2" Pipe (2.378 in. OD) supplied with leads.**

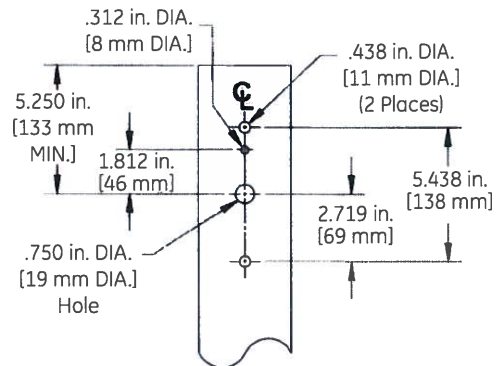
Drilling Templates for Slipfitter Arms & Arm Mount

SQUARE POLE MOUNTING



ROUND POLE MOUNTING

3.5 TO 4.5-inch (89 to 114mm) OD
round pole mounting arm



Other mounting patterns are available for retrofit installations.
Contact manufacturing for other available mounting patterns.



www.gelighting.com

GE and the GE Monogram are trademarks of the General Electric Company. All other trademarks are the property of their respective owners. Information provided is subject to change without notice. All values are design or typical values when measured under laboratory conditions. GE Lighting is a business of the General Electric Company. © 2017 GE.

OLP3090 (Rev 03/29/17) Based on 03/24/16 Revision



GE Evolve™
LED Area Lighting
Canopy Light (ECBB)

current
powered by GE



Product Features

The GE Evolve™ LED Canopy Light family provides an energy-efficient and robust means for lighting areas with canopies, such as gas stations, truck stops and drive-thrus at banks, pharmacies and restaurants. Offering easy installation and maintenance, along with various lumen levels at both 4000K and 5000K color temperatures, this canopy light provides a great LED lighting solution for their outdoor space.

Housing

- Die -cast aluminum housing.
- Integral heat sink for maximum heat transfer.
- Meets 1.5G vibration standards per ANSI C136.31-2010.

LED & Optical Assembly

- Structured LED array for optimized area lighting photometric distributions.
- Evolve™ light engine consisting of reflective technology designed to optimize application efficiency and minimize glare.
- Utilizes high brightness LEDs, 70 CRI at 4000K and 5000K color temperature.
- LM-79 tests and reports are performed in accordance with IESNA standards.

Lumen Maintenance

- Projected L90>50,000 hours per IES TM-21.
- Projected Lxx per IES TM-21 at 25°C for reference:

OPTICAL CODE	Lxx(10K)@hours		
	25,000 hrs	50,000 hrs	100,000 hrs
T5	L96	L95	L91
A5	L96	L92	L86
B5	L95	L92	L85
C5	L94	L90	L82

Notes: 1. Projected Lxx based on LM80 (10,000 hour testing). 2. DOE Lighting Facts Verification Testing Tolerances apply to initial luminous flux and lumen maintenance measurements.

Ratings

- /e/ Listed, suitable for wet locations per UL 1598.
- IP66 rated optical enclosure per ANSI C136.25-2009.
- Temperature rated at -40°C to 50°C (C5 SKUs: -40°C to 40°C).
- Upward Light Output Ratio (ULOR) = 0. **This means full cut-off**
- Compliant with the material restriction requirements of RoHS.

-  DLC Listed.

Please refer to the DLC QPL website for the latest and most complete information.
www.designlights.org/QPL

Finish

- Corrosion resistant polyester powder paint.
- Standard colors: White, Dark Bronze and Black.

Electrical

- 120-277 volt and 347-480 volt (B5 and C5 optical only), 50/60Hz.
- System power factor is >90% and THD<20%.
- Class "A" Sound rating.
- EMI: Title 47 CFR 15 Class A.
- Motion sensor and integral photo electric sensor available.
- Surge Protection Options: For 120-277VAC and 347-480VAC per IEEE/ANSI C136.2-2015.
 - 6kV/3kA "Basic" standard.
 - 10kV/5kA "Enhanced" R option.

Warranty

- Limited 5-Year Warranty for product launch standard.

Accessories

See page 5 for accessories

- 24" Escutcheon Plate
- 32" Escutcheon Plate
- Shoebox Mounting
- Pendant Mounting

GE Evolve™

LED Area Lighting

Canopy Light - ECBB



Project name _____

Date _____

Type _____

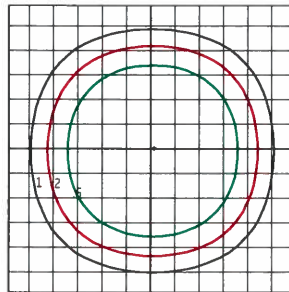
E C B B F 5 A

PRODUCT ID	PRODUCT GENERATION	VOLTAGE	OPTICAL CODE	LENS TYPE	DRIVE CURRENT	LED COLOR TEMP	MOTION SENSOR/ PE FUNCTION	MOUNTING	COLOR	OPTIONS
E = Evolve C = Canopy B = Housing	B = Photometric Series "B"	0 = 120 - 277 V H = 347-480V* * See below table for available options		F = Flat Lens	5 = Less than or equal to 525mA	30 = 3000K<> 40 = 4000K 50 = 5000K <> Select 3000K CCT for IDA approved units	1 = None 4 = Motion Sensor and Integral Photocell* * Not available with 347-480V. Must order with 10kV surge protection Option "R". * Must order with 10kV surge protection Option "R".	A = Surface Mount Other mounting options are available in the ECB accessories datasheet.	WHITE = White BLCK = Black DKBZ = Dark Bronze Contact manufacturer for additional colors.	D = Dimmable (0-10 Volt Input) † 002 = Non-Dimming with Junction Box D01 = Dimming with Junction Box R = 10kV/5kA Surge Protection M = NOM31 † Dimming leads will be provided and terminated with quick-disconnect terminals.

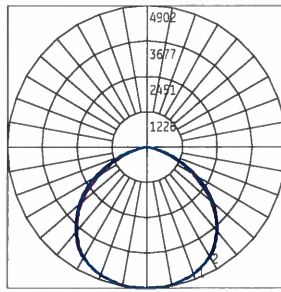
	PHOTOMETRIC TYPE	OPTICAL CODE	LENS TYPE	TYPICAL INITIAL LUMENS			TYPICAL SYSTEM WATTAGE		IES FILE NUMBERS		
				3000K	4000K	5000K	120-277V	347-480V	3000K	4000K	5000K
TYPE V	Symmetric Wide	T5	Flat Lens	3450	3500	3550	29	NA	ECBB_T5F530_120-277V.ies	ECBB_T5F540_120-277V.ies	ECBB_T5F550_120-277V.ies
	Symmetric Wide	A5	Flat Lens	4120	4170	4230	35	NA	ECBB_A5F530_120-277V.ies	ECBB_A5F540_120-277V.ies	ECBB_A5F550_120-277V.ies
	Symmetric Wide	B5	Flat Lens	7740	8010	8110	64	64	ECBB_B5F530_.ies	ECBB_B5F540_.ies	ECBB_B5F550_.ies
	Symmetric Wide	C5	Flat Lens	13410	13410	13550	110	110	ECBB_C5F530_.ies	ECBB_C5F540_.ies	ECBB_C5F550_.ies

Photometrics

ECB Type V - Symmetric Wide - Flat Lens
13,510 Lumens, 5000K (ECBB_C5D550.ies)



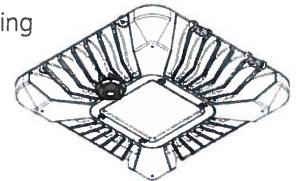
Grid Distance in Units of Mounting Height of 15'
Initial Footcandle Values at Grade



— Vertical plane through horizontal angle of maximum candlepower at 60°
— Horizontal cone through vertical angle of maximum candlepower at 4°

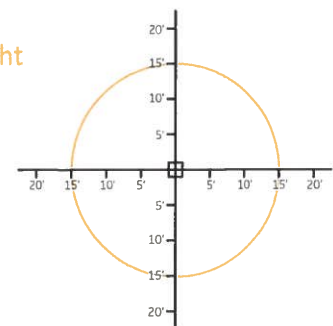
Motion Sensing Option:

- Intended for 8-25ft mounting heights.
- Provides a coverage area radius for walking motion of 15-20ft.
- Provides 360° of coverage.
- Factory pre-set 50% dimmed light output with no occupancy.
- May be reprogrammed using additional remote programmer. Remote Programmer part number: WS FSIR-100 PROGRAMMER (197634)
- Photoelectric control is integrated through the motion sensor, and is offered as standard.



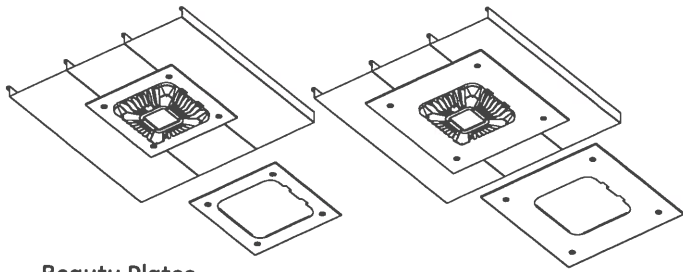
Approximate Sensor Pattern:

Canopy Fixture
15 ft. Mounting Height



Evolve™ Canopy Light Accessories

All accessory product ordered and shipped separate from the luminaire.
Contact manufacturer for more information.

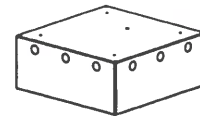
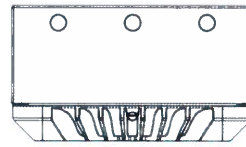


Beauty Plates

24" & 32" Escutcheon plates designed to cover unsightly canopy ceilings.

E C B E
- - - - - - - - -

Product ID	Series	Detail	Color
E = Evolve C = Canopy B = Housing	E = Escutcheon Plate	1 = 24" x 24" Square 2 = 32" x 32" Square	WHITE = White BLCK = Black DKBZ = Dark Bronze RAL custom colors available. Contact Manufacturer.



Box Mount

16 gauge steel (0.060" thickness), 12 electrical knockouts (EKO) for flexibility in wire routing for installation.

E C B M
- - - - - - - - -

Product ID	Series	Detail	Color
E = Evolve C = Canopy B = Housing	M = Square Mounting Box	3 = 3 Wire Leads 5 = 5 Wire Leads, with Dimming	WHITE = White BLCK = Black DKBZ = Dark Bronze RAL custom colors available. Contact Manufacturer.

Pendant Mount

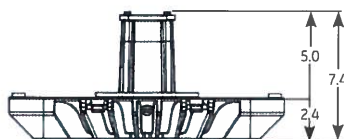
E C B P
- - - - - - - - -

Product ID	Series	Detail	Color
E = Evolve C = Canopy B = Housing	P = Pendant Mount	1 = No Bird Shield 2 = Bird Shield	WHITE = White BLCK = Black DKBZ = Dark Bronze RAL custom colors available. Contact Manufacturer.

Product Dimensions

Evolve™ LED Canopy Light (ECBB)

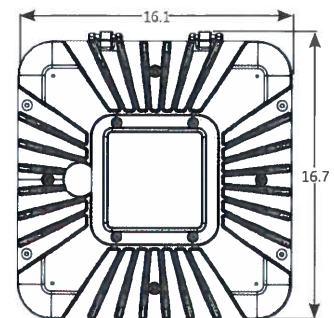
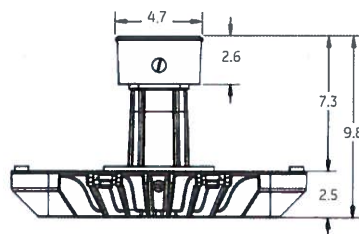
Standard Lens



DATA

- Approximate Net Weight: 20 lbs

With Optional Electrical Junction Box: 002, D01



current
powered by GE

All trademarks are the property of their respective owners. Information provided is subject to change without notice. All values are design or typical values when measured under laboratory conditions. Current, powered by GE is a business of the General Electric Company.
© 2017 GE.

www.currentbyge.com | OLP3100 (Rev 12/04/17)





GE Evolve™

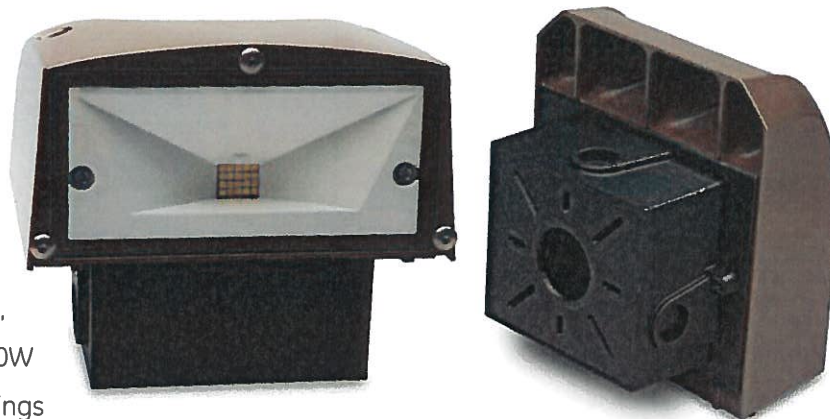
LED L-Series Wall Pack

EWLS

current
powered by GE



GE Evolve™ LED L-Series Wall Pack EWLS



The **Evolve** LED L-Series Wall Pack, **EWLS**, is a designed replacement for 50W to 250W HID, while offering significant energy savings in a long-life LED wall pack. The EWLS's 2-screw housing design enables a fast and simplified installation. The low-watt Egress package (13W) is designed to meet recommended illuminance requirements for egress applications such as side and rear exit doors in commercial buildings and can meet NFPA 101 life safety lighting requirements when used with external battery backup.

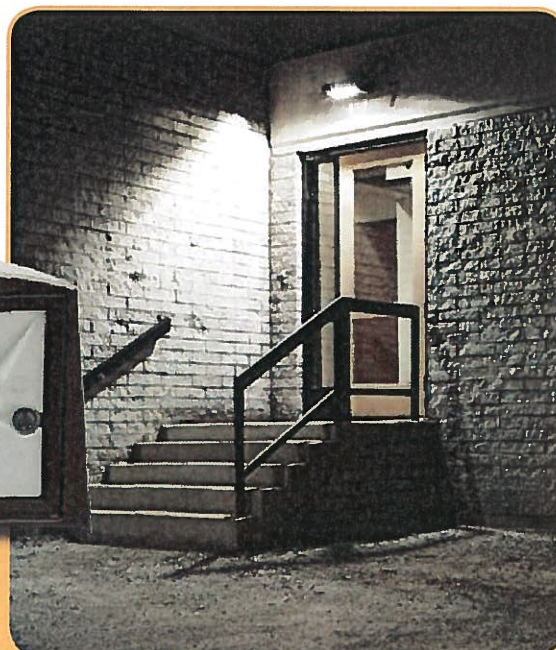
Features:

- 1500 and 4000 lumen output
- High Brightness LEDs
- 70 CRI @ 3000K, 4000K, and 5000K typical
- L90 >100,000 hours (1500lm), L90 >60,000 hours (4000lm)
- Designed to replace 50W to 250W MH wallpacks
- Small Form Factor, <10 lbs
- 0-10V Dimming
- Motion Sensor & Button Photo Electric Sensors available
- Impact resistant tempered glass lens
- Zero up-light construction, full cut-off
- International Dark-Sky Association (IDA) Approved for 3000K CCT



Applications:

- Building entrances & perimeter lighting
- Side and rear exit doors
- Stairways and entry path
- Schools, Apartment Buildings, Hospitals
- Retail & Commercial Buildings
- Loading docks



To learn more about **GE Evolve LED L-Series Wall Pack**, go to: <http://products.currentbyge.com>

GE Evolve™

LED L-Series Wall Pack

EWLS



Project name _____

Date _____

Type _____

Typical Specifications: EWLS

LED & Optical

- **Lumen Packages:** 1500 & 4000
- **System Efficacy:** Up to 125 lpw
- **CCT:** 3000K, 4000K, 5000K; High brightness LEDs.
- **CRI:** 70
- **Upward Light Output Ratio (ULOR) = 0.** This means full cut-off
- Custom engineered reflective optics for optimized photometry.
- High application efficiency and minimal glare.

Electrical

- **Input Voltage:** 120-277 volt and 347 volt
- **Input Frequency:** 50/60Hz
- **Power Factor (PF):** >90%
- **Total Harmonic Distortion (THD):** <20%
- **Surge Protection:** Integral surge protection

Ratings

- **Operating Temperature:** -40° to 50°C
- **Storage Temperature:** -40° to 50°C
- **Location:** Dry or Wet
- **Safety:** UL/cUL Listed. UL 1598 listed, suitable for wet locations.  
- **DLC Premium & Standard** qualified models available. Please refer to <http://www.designlights.org/QPL> for complete information.
- **Environmental:** Compliant with the materials restrictions of RoHS.
- LM-79 testing in accordance with IESNA Standards.
- Optical enclosure IP66 per ANSI C136.25-2009.

Lumen Maintenance

- Projected L90>100,000 hours per IES TM-21 for 15AF optical codes.
- Projected L90>60,000 hours per IES TM-21 for 40AF optical codes.
- Projected Lxx per IES TM-21 at 25°C for reference:

Optical Codes	Lxx (10k) @ Hours**		
	25,000 hr	50,000 hr	100,000 hr
15AF	L96	L95	L91

Optical Codes	Lxx (10k) @ Hours**		
	25,000 hr	50,000 hr	100,000 hr
40AF	L95	L92	L85

Note: *Projected Lxx based on LM80 (10,000 hour testing). DOE Lighting Facts Verification Testing Tolerances apply to initial luminous flux and lumen maintenance measurements.

Construction & Finish

- **Housing:**
 - Die-cast aluminum. Integrated heat sink for maximum heat transfer.
 - Patented aesthetic design to complement your building façade.
- **Lens:** Impact resistant tempered glass lens.
- **Paint:** Corrosion resistant polyester powder painted, minimum 2.0 mil. thickness.
 - Standard Colors: Dark Bronze, Black, White, Gray
 - RAL & custom colors available.
- **Weight:** 8.5lbs (4 kg)

Warranty

- **System Warranty:** 5 Year Standard, 10 Year Optional.

Controls

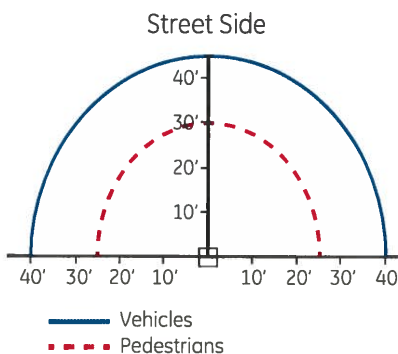
- **Dimming:** Wired Analog 0-10V Dimming.¹
- **Sensors:**
 - Button Photo Electric sensor (PE) available 120-277V & 347V.
 - CA Title 24 Compliant Occupancy Sensor Option.¹

¹ Available with Optic Code 40AF

Mounting

- Mounts to standard 3-1/2" to 4" round and octagonal, 4" square, single gang and masonry junction boxes.
 - **Flush Mount:** Mounts directly to customer supplied junction box.
 - **Conduit Box Mount:** Mounts to walls via separate mounting box with conduit knockouts.

Sensor Pattern:

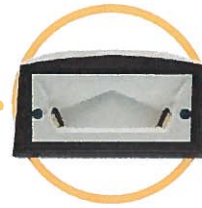


Sensing Pattern Wall Pack Fixture: 8-25 ft.

GE Evolve™

LED L-Series Wall Pack •••••

EWLS



Project name _____
Date _____
Type _____

EWLS 01

7

PRODUCT	GENERATION	VOLTAGE	OPTICAL CODE	CRI	CCT	DIMMING	CONTROLS	MOUNTING	COLOR	OPTIONS
E = Evolve W = Wallpack L = L-series S = Standard	01 = Generation	0 = 120-277V* 1 = 120* 2 = 208* 3 = 240* 4 = 277* D = 347*	15AF = 1500lm, Asymmetric Forward 40AF = 4000lm, Asymmetric Forward	7 = 70 CRI*	30 = 3000K ^o 40 = 4000K* 50 = 5000K ^o Select 3000K CCT for IDA Approved units	N = Non-Dimming D = Dimming* Leads ‡ ‡ Dimming not available at 1500lm	1 = None* 3 = Button PE ^o ^o Must specify discrete voltage	FM = Flush Mount* CB = Conduit Box Mount** **Must be selected when ordering with Button PE, Motion Sensor, or 347V	DKBZ = Dark Bronze* BLCK = Black GRAY = Gray WHITE = White	H = Motion Sensor* ### = Special Options J = cUL/Canada W = Non-Graphical White Box

Claims Table:

*Standard Option
+ = Motion Sensor not available at 1500lm

OPTICAL CODE	DIST.	TYPICAL SYSTEM WATTS		TYPICAL INITIAL LUMENS			TYPICAL INITIAL LPW 120-277V			TYPICAL INITIAL LPW 347V			BUG RATING	
		120-277V	347V	3000K	4000K	5000K	3000K	4000K	5000K	3000K	4000K	5000K	3000K	4000K/5000K
15	AF	12	13	1,450	1,500	1,500	121	125	125	112	112	115	B1-U0-U0	B1-U0-U0
40	AF	37	38	3,880	4,000	4,000	105	108	108	102	105	105	B1-U0-U0	B1-U0-U0

CCT	IES FILE NAME 120-277V		IES FILE NAME 347V	
3000K	EWLS01_15AF730	-120-277V.IES	EWLS01D15AF730	-347V.IES
4000K	EWLS01_15AF740	-120-277V.IES	EWLS01D15AF740	-347V.IES
5000K	EWLS01_15AF750	-120-277V.IES	EWLS01D15AF750	-347V.IES
3000K	EWLS01_40AF730	-120-277V.IES	EWLS01D40AF730	-347V.IES
4000K	EWLS01_40AF740	-120-277V.IES	EWLS01D40AF740	-347V.IES
5000K	EWLS01_40AF750	-120-277V.IES	EWLS01D40AF750	-347V.IES



MODELS AVAILABLE THROUGH QUICKSHIP PROGRAM		
SKU #	CAT LOGIC	DESCRIPTION
93056860	EWLS01015AF740N1FMDKBZ	1500lm, 4000K, Flush Mount
93060201	EWLS01015AF750N1FMDKBZ	1500lm, 5000K, Flush Mount
93059497	EWLS01040AF740N1FMDKBZ	4000lm, 4000K, Flush Mount
93060200	EWLS01040AF750N1FMDKBZ	4000lm, 5000K, Flush Mount
93060202	35-434281R01	Conduit Box Mount (QTY 1)
93060203	35-966640-01	Conduit Box Mount (QTY 5)

Accessories:

PRODUCT ID	DETAIL	FINISH
E = Evolve W = Wallpack L = L-series S = Standard	A = Accessory E = Escutcheon Plate	1 = 10" x 12" 2 = 12" x 16" 3 = 12" x 20" DKBZ = Dark Bronze* BLCK = Black GRAY = Gray WHITE = White RAL customer colors available. Contact Manufacturer

PRODUCT ID	DETAIL
E = Evolve W = Wallpack L = L-series S = Standard	A = Accessory D = Diffuser

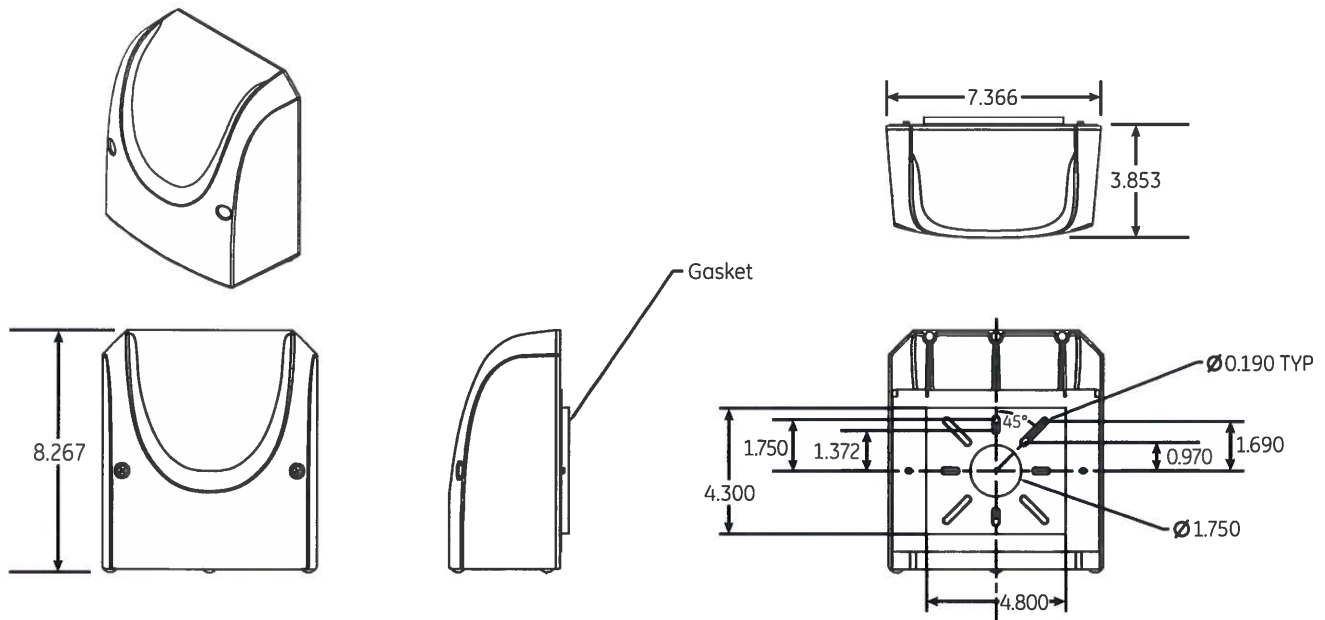
Motion Sensing Option:

- Intended for 8-25 ft. mounting heights.
- Provides a coverage area radius for walking motion of 25-30 ft.
- Provides 180° of coverage (~180° is blocked by the wall).
- Factory preset to 50% dimming with no occupancy.
- May be reprogrammed using additional remote programmer.
 - Remote programmer part number: WS FSIR-100 PROGRAMMER (197634)
- Photoelectric control is integrated through the motion sensor, and is offered as standard.

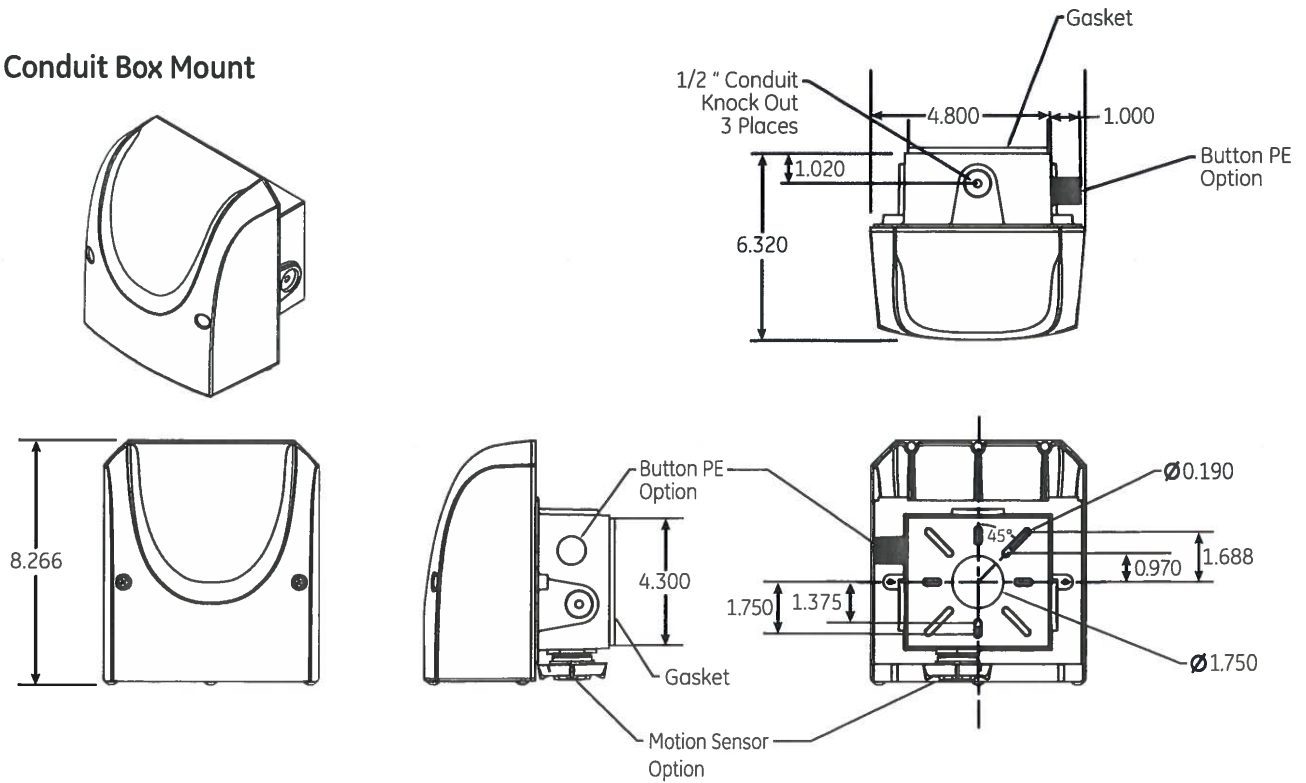
GE Evolve™
LED L-Series Wall Pack
EWLS

Product Dimensions:

Flush Mount



Conduit Box Mount



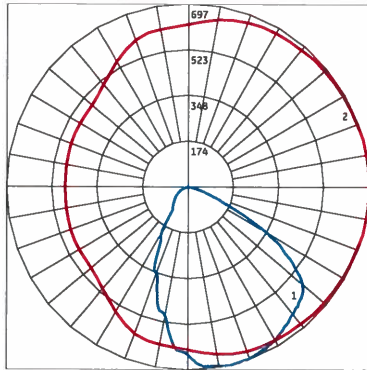
GE Evolve™

LED L-Series Wall Pack

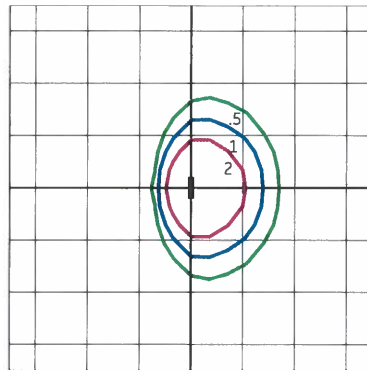
EWLS

Photometrics:

15AF: 1500 LUMEN, ASYMMETRIC FORWARD
EWLS01_15AF750_____-120-277V.ies

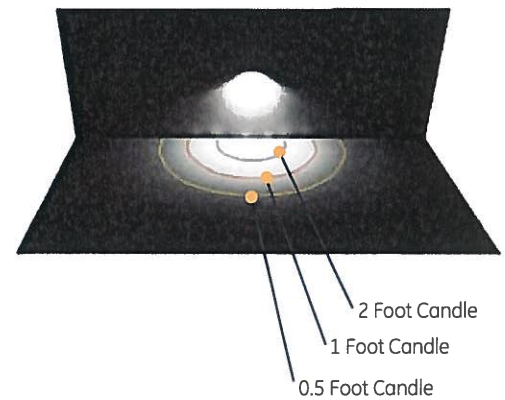


- # 1 - Vertical plane through horizontal angle of maximum candlepower at 0°
2 - Vertical plane through horizontal angle of 14°

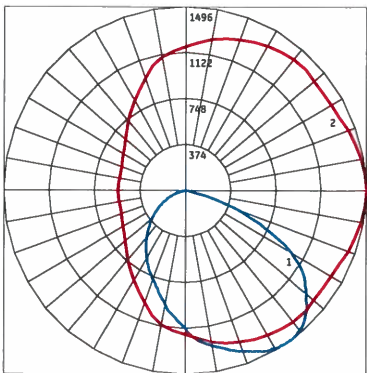


Grid Distance in Units of Mounting Height at 10'
Initial Foot-candle Values at Grade.

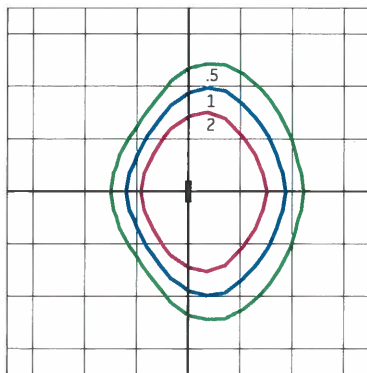
SHOWN AT 10' MOUNTING HEIGHT FOR
DISPLAY PURPOSES ONLY



40AF: 4000 LUMEN, ASYMMETRIC FORWARD
EWLS01_40AF750_____-120-277V.ies

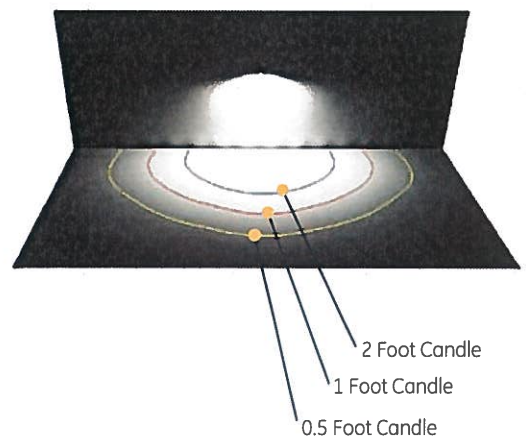


- # 1 - Vertical plane through horizontal angle of maximum candlepower at 0°
2 - Vertical plane through horizontal angle of 36°



Grid Distance in Units of Mounting Height at 10'
Initial Foot-candle Values at Grade.

SHOWN AT 10' MOUNTING HEIGHT FOR
DISPLAY PURPOSES ONLY



GE Evolve™

LED L-Series Wall Pack

EWLS

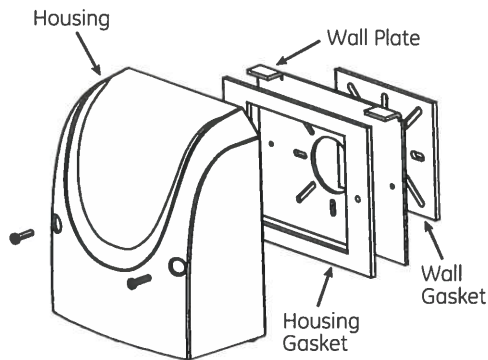


Figure 1: Wall Plate Install

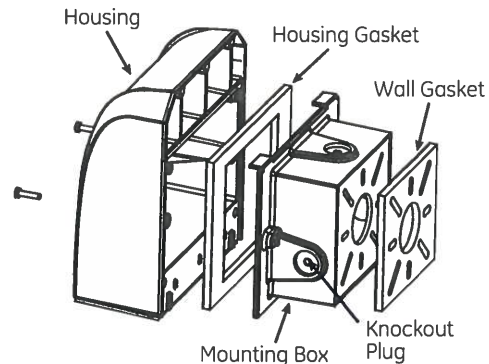


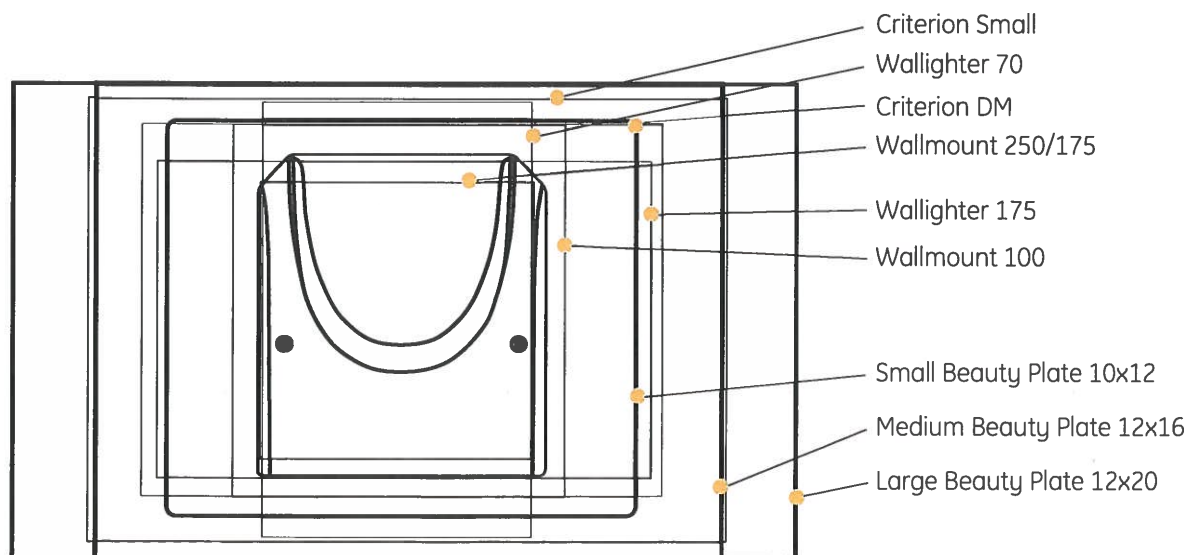
Figure 2: Mounting Box Install

Consult product Installation Instructions (GEH 6060) for detailed installation instructions.

Accessories:

Beauty Plates

Cover the unsightly debris marks on your building façade with color matched wall pack beauty plates. Mounting hole patterns and dimensions are compatible with typical building surface fastening methods.



GE Evolve™

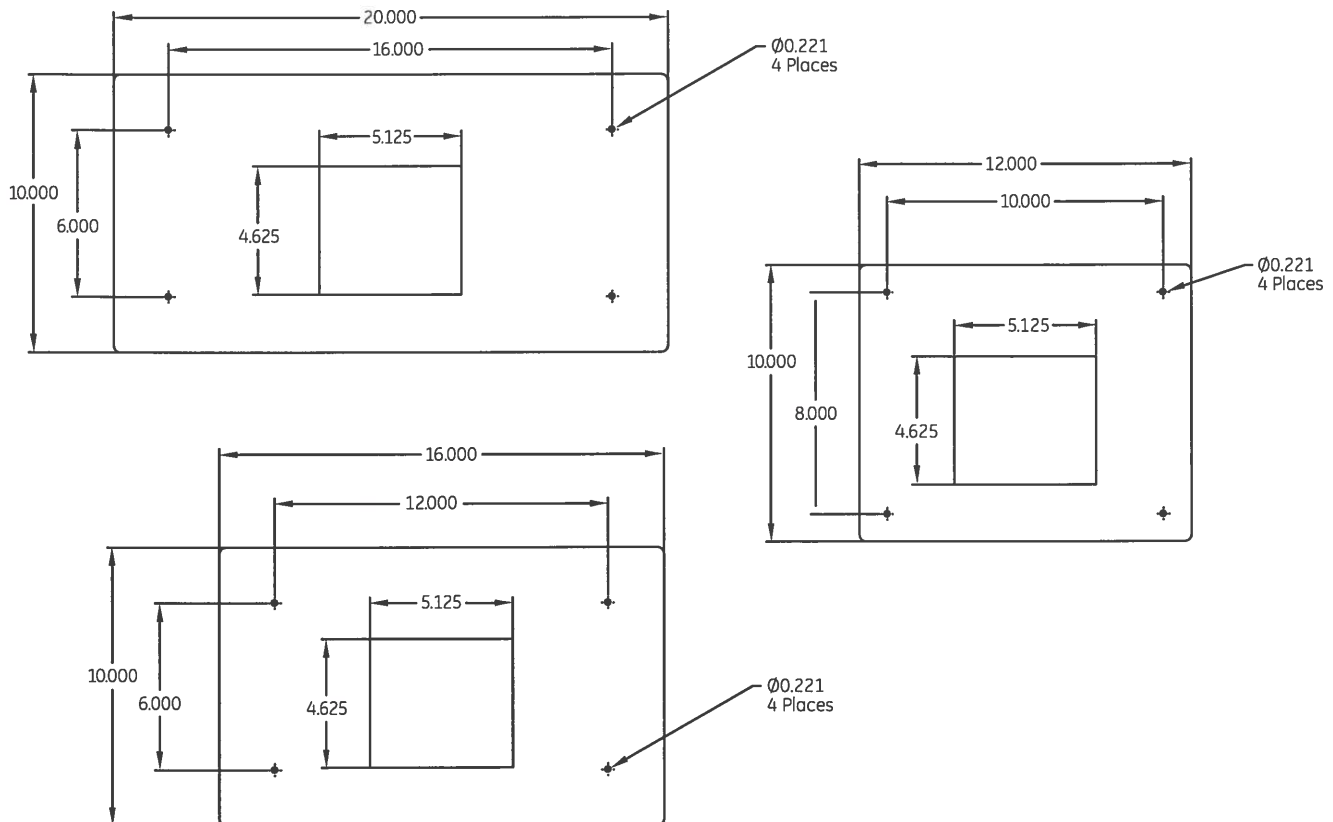
LED L-Series Wall Pack

EWLS

Accessories:

Mounting Holes

Mounting hole patterns and dimensions are compatible with typical building surface fastening methods.



Diffuser

Optional diffuser accessory utilizing ACRYLITE®, an acrylic sheet with an elegant texture which performs double duty with beauty and durability for any environment. This added texture diffuses surface reflections. Transmits 90% of the light through diffuser.

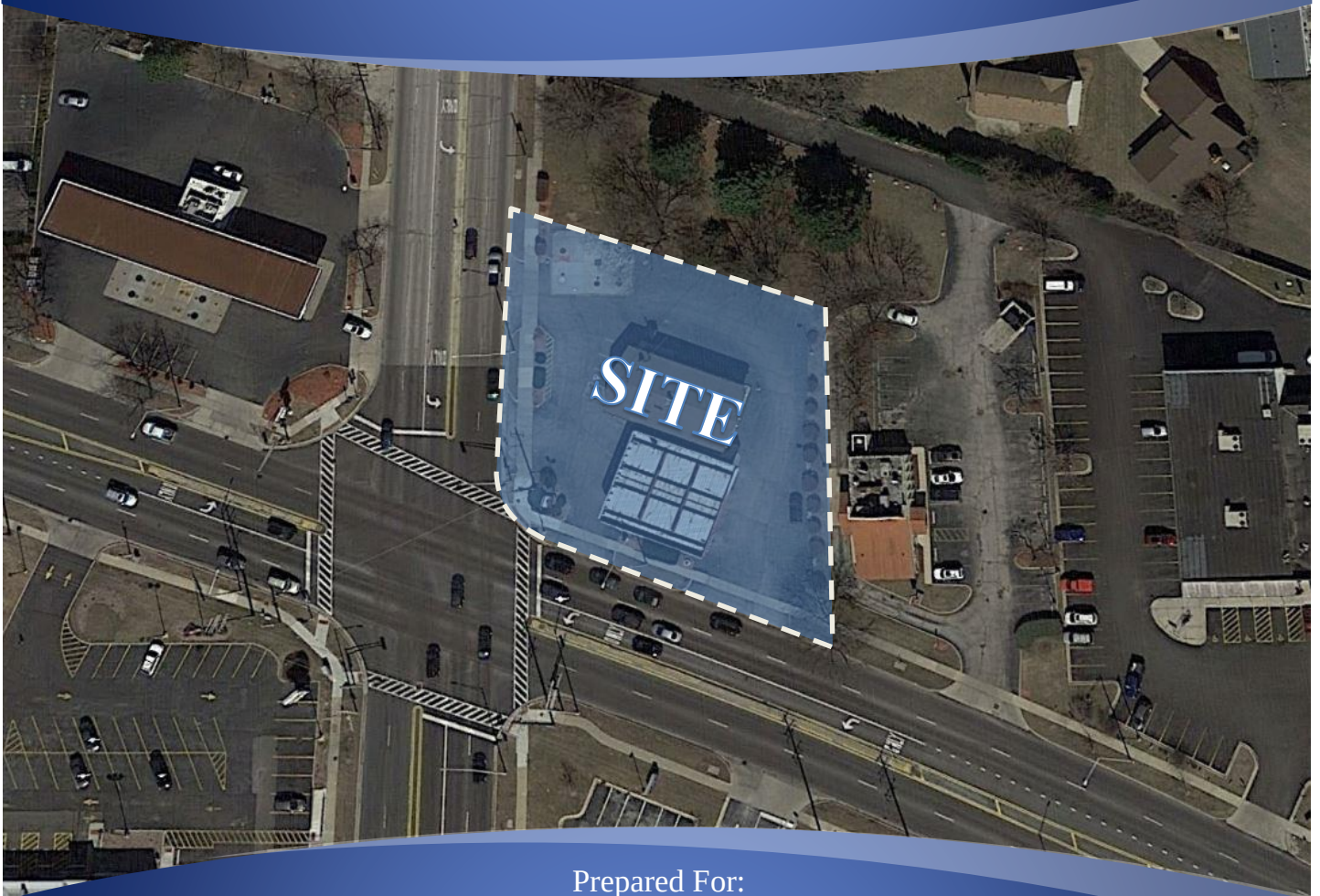
current
powered by GE

All trademarks are the property of their respective owners. Information provided is subject to change without notice. All values are design or typical values when measured under laboratory conditions. Current, powered by GE is a business of the General Electric Company.
© 2017 GE.



Traffic Impact Study Proposed 7-Eleven Gas Station

Arlington Heights, Illinois



Prepared For:

vequity

Prepared By:

KLOA
Kenig, Lindgren, O'Hara, Aboona, Inc.

December 6, 2018

1. Introduction

This report summarizes the methodologies, results, and findings of a traffic impact study conducted by Kenig, Lindgren, O'Hara, Aboona, Inc. (KLOA, Inc.) for a proposed 7-Eleven gas station to be located in Arlington Heights, Illinois. The site, which is currently occupied by a former Citgo 7-Eleven gas station, is located in the northeast quadrant of the intersection of Algonquin Road (IL 62) with New Wilke Road. As proposed, the site will be developed with an approximately 3,000 square-foot 7-Eleven convenience store with eight fueling positions. Access to the 7-Eleven gas station will be provided via the existing easterly right-in/right-out access drive off Algonquin Road and via the existing northerly full access drive off New Willke Road

The purpose of this study was to examine background traffic conditions, assess the impact that the proposed 7-Eleven gas station will have on traffic conditions in the area, and determine if any roadway or access improvements are necessary to accommodate the traffic generated by the proposed 7-Eleven gas station.

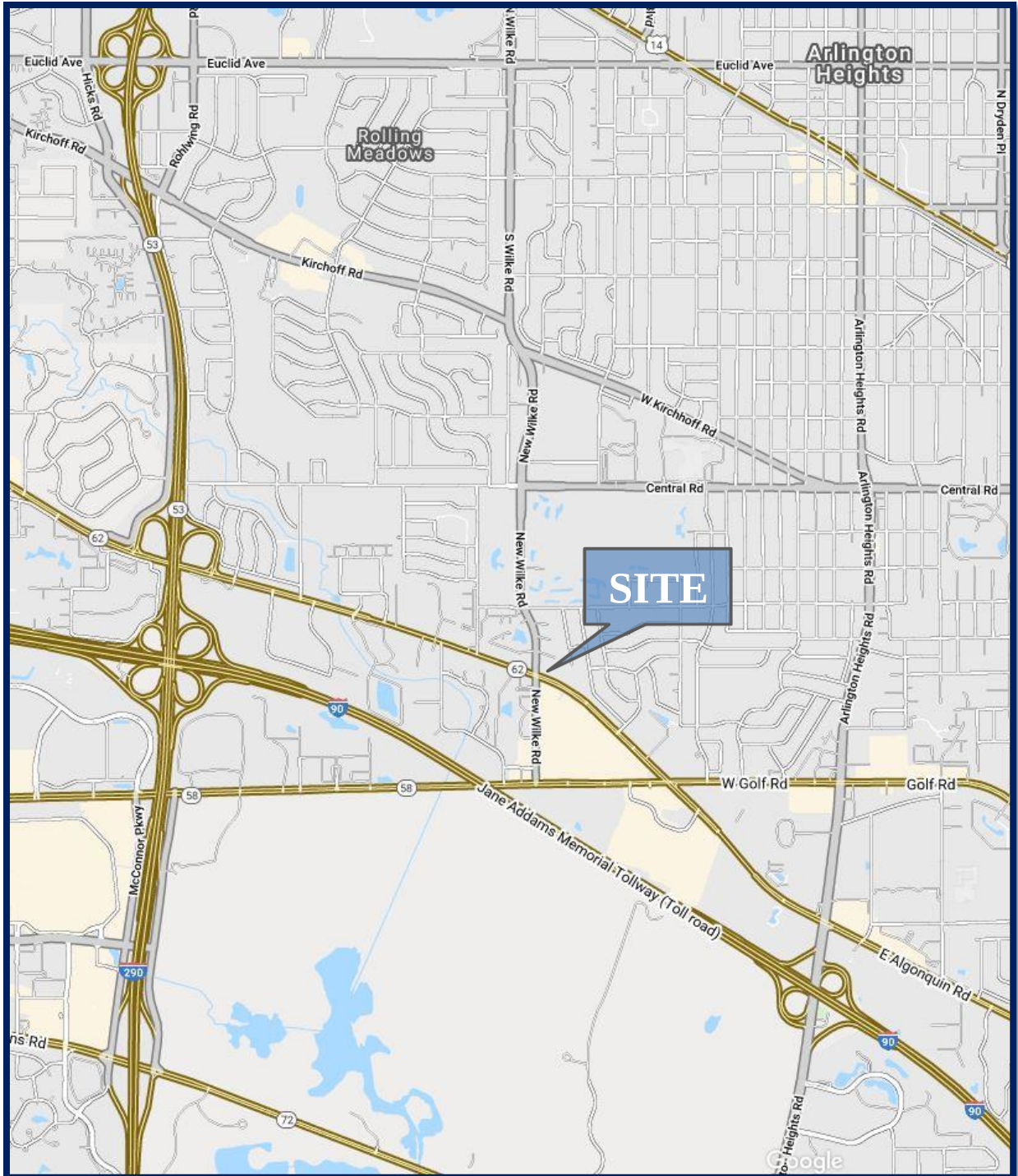
Figure 1 shows the location of the site in relation to the area roadway system. **Figure 2** shows an aerial view of the site.

The sections of this report present the following:

- Existing roadway conditions
- A description of the proposed 7-Eleven gas station
- Directional distribution of the 7-Eleven gas station traffic
- Vehicle trip generation for the 7-Eleven gas station
- Future traffic conditions including access to the 7-Eleven gas station
- Traffic analyses for the weekday morning and weekday evening peak hours
- Recommendations with respect to adequacy of the site access and adjacent roadway system

Traffic capacity analyses were conducted for the weekday morning and evening peak hours for the following conditions:

1. Existing Conditions – Analyze the capacity of the existing roadway system using existing peak hour traffic volumes in the surrounding area.
2. Projected Conditions – Analyze the capacity of the future roadway system using the projected traffic volumes that include the existing traffic volumes, ambient traffic growth, and the traffic estimated to be generated by the full buildout of the proposed 7-Eleven gas station.



Site Location

Figure 1



Aerial View of Site

Figure 2

2. Existing Conditions

Existing transportation conditions in the vicinity of the site were documented based on field visits conducted by KLOA, Inc. in order to obtain a database for projecting future conditions. The following provides a description of the geographical location of the site, physical characteristics of the area roadway system including lane usage and traffic control devices, and existing peak hour traffic volumes.

Site Location

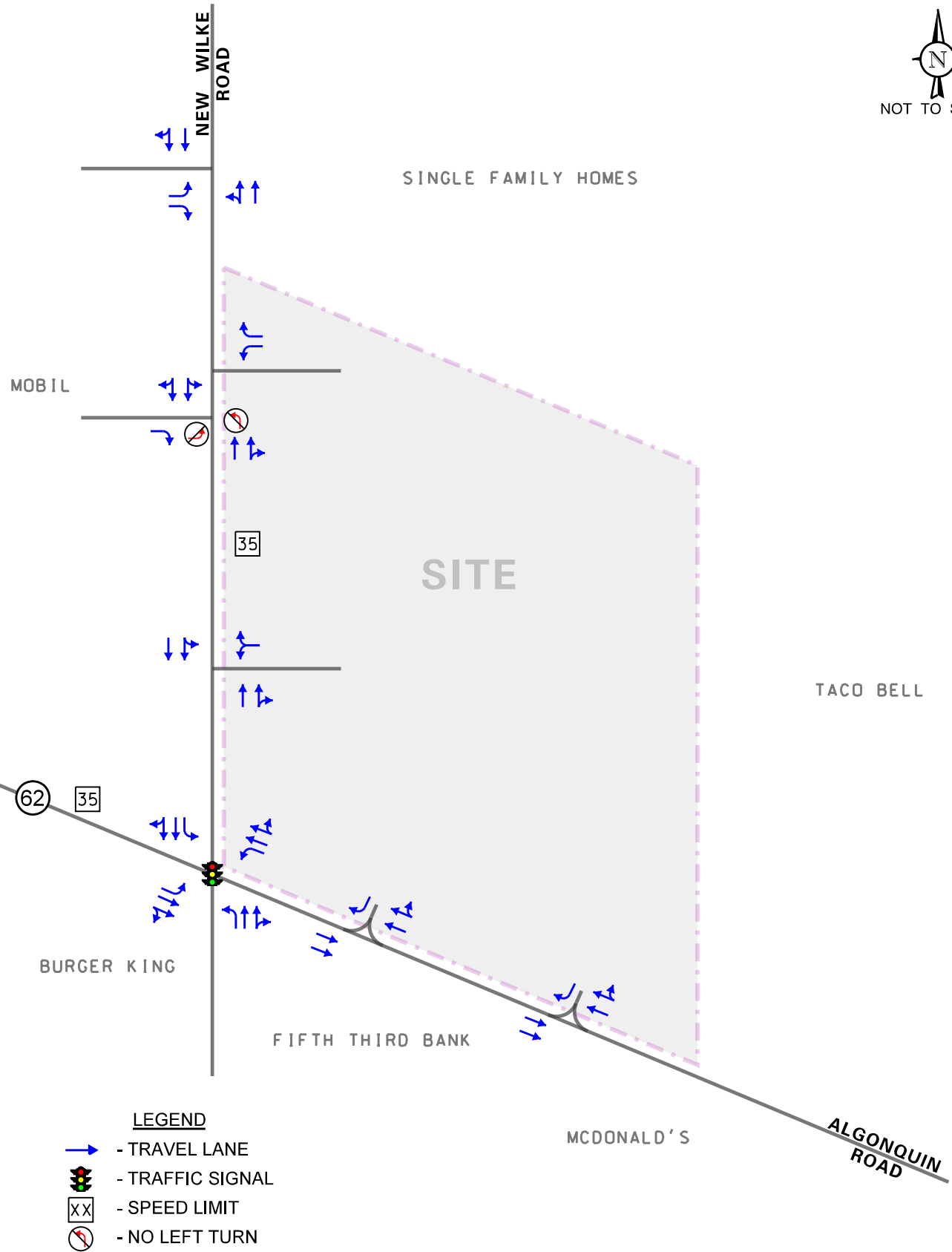
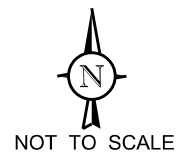
The site, which is currently occupied by a former Citgo 7-Eleven gas station, is located in the northeast quadrant of the intersection of Algonquin Road with New Wilke Road and is bounded by single-family homes to the north and Taco Bell to the east. Land uses in the area include McDonalds and Fifth Third Bank to the south and Burger King and a Mobil 7-Eleven gas station to the west.

Existing Roadway System Characteristics

The characteristics of the existing roadways near the 7-Eleven gas station are described below and illustrated in **Figure 3**.

Algonquin Road (IL 62) is an east-west other principal arterial roadway that provides two lanes in each direction generally divided by a two-way left-turn lane. At its signalized intersection with New Wilke Road, Algonquin Road provides an exclusive left-turn lane, a through lane, and a shared through/right-turn lane on both approaches. Both legs provide high visibility crosswalks with pedestrian countdown signals. Algonquin Road is under the jurisdiction of the Illinois Department of Transportation (IDOT) and is designated as a Strategic Regional Arterial (SRA). Algonquin Road carries an Annual Average Daily Traffic (AADT) volume of 29,400 vehicles (IDOT AADT 2017) west of New Wilke Road and 29,200 vehicles (IDOT AADT 2017) east of New Wilke Road. Algonquin Road has a posted speed limit of 35 mph.

New Wilke Road is a north-south major collector roadway that provides two through lanes in each direction. At its signalized intersection with Algonquin Road, New Wilke Road provides an exclusive left-turn lane, a through lane, and a shared through/right-turn lane on both approaches. Both legs provide high visibility crosswalks with pedestrian countdown signals. New Wilke Road is under the jurisdiction of the Village of Arlington Heights north of Algonquin Road and the City of Rolling Meadows south of Algonquin Road. New Wilke Road avenue carries an AADT volume of 18,600 vehicles (IDOT AADT 2014) and has a posted speed limit of 35 miles per hour.



Proposed 7-Eleven
Gas Station
Arlington Heights, Illinois

Existing Roadway Characteristics

Existing Traffic Volumes

In order to determine current traffic conditions in the vicinity of the site, KLOA, Inc. conducted peak period traffic counts utilizing Miovision Scout Collection Units during the weekday morning (7:00 to 9:00 A.M.) and evening (4:00 to 6:00 P.M.) peak periods at the intersection of Algonquin Road with New Wilke Road and New Wilke Road with the Mobil access drives. The results of the traffic counts indicated that the weekday morning peak hour of traffic occurs from 7:15 A.M. to 8:15 A.M. and the weekday evening peak hour of traffic occurs from 4:30 P.M. to 5:30 P.M. **Figure 4** illustrates the existing peak hour traffic volumes. Copies of the traffic count summary sheets are included in the Appendix.

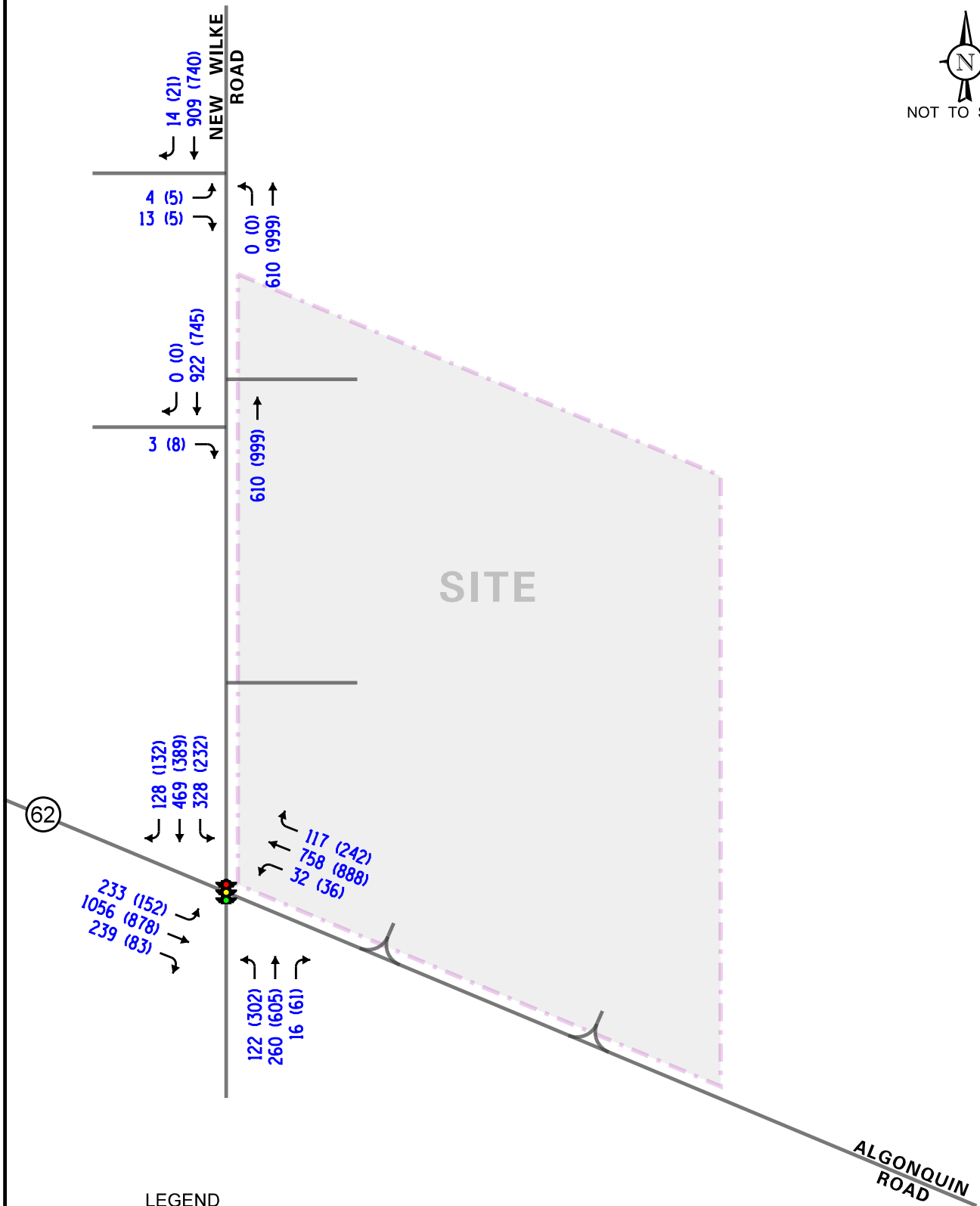
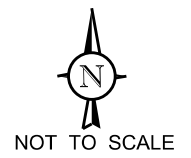
Crash Analysis

KLOA, Inc. obtained crash data¹ for the most recent available past five years (2012 to 2016) for the intersection of Algonquin Road with New Wilke Road as summarized in **Table 1**. A review of the crash data indicated that no fatalities were reported.

Table 1
ALGONQUIN ROAD WITH NEW WILKE ROAD - CRASH SUMMARY

Year	Type of Accident Frequency						Total
	Angle	Object	Rear End	Sideswipe	Turning	Other	
2012	3	0	17	1	3	0	24
2013	2	2	8	4	4	0	20
2014	2	0	10	3	7	2	24
2015	2	1	18	1	14	1	37
2016	3	2	19	1	12	0	37
Total	12	5	72	10	40	3	142
Average/Year	2.3	1.0	14.4	2.0	8.0	<1.0	28.4

¹ IDOT DISCLAIMER: The motor vehicle crash data referenced herein was provided by the Illinois Department of Transportation. The author is responsible for any data analyses and conclusions drawn.



LEGEND

- 00 - AM PEAK HOUR (7:15-8:15 AM)
- (00) - PM PEAK HOUR (4:30-5:30 PM)

Proposed 7-Eleven
Gas Station
Arlington Heights, Illinois

Existing Traffic Volumes

3. Traffic Characteristics of the Proposed 7-Eleven Gas Station

In order to properly evaluate future traffic conditions in the surrounding area, it was necessary to determine the traffic characteristics of the proposed 7-Eleven gas station, including the directional distribution and volumes of traffic that it will generate.

Proposed Site and Development Plan

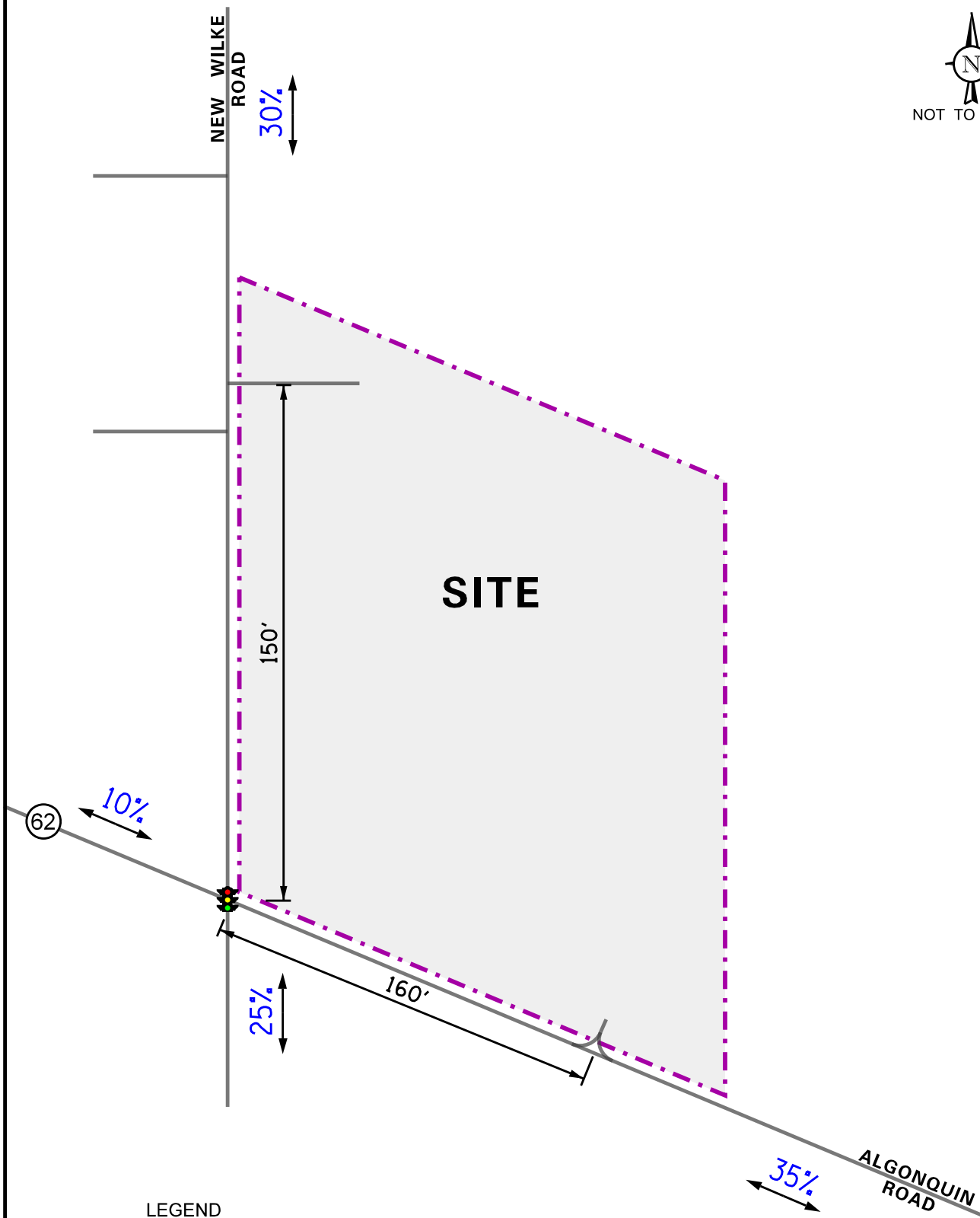
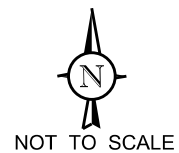
As proposed, the site will be developed with a 7-Eleven gas station with an approximately 3,000 square-foot convenience store and eight fueling positions. Access to the 7-Eleven gas station will be provided via the following existing access drives:

- A right-in/right-out access drive off Algonquin Road approximately at the existing location of the access drive located 160 feet east of New Wilke Road. This access drive will provide one inbound and one outbound lane restricted to right-turning movements only via the raised median along Algonquin Road. Outbound movements will be under stop sign control.
- A full access drive off New Wilke Road at the existing location of the access drive located approximately 150 feet north of Algonquin Road. The access drive will provide one inbound lane and two outbound lanes striped to provide an exclusive left-turn and an exclusive right-turn lane. Outbound movements will be under stop sign control.

It should be noted that both access drives will replace existing access drives that previously served the Citgo 7-Eleven gas station. Further, as part of the development, two existing access drives (one on each roadway) serving the site will be removed. This will improve the traffic flow on Algonquin Road and New Wilke Road and reduce traffic conflicts. A site plan depicting the proposed 7-Eleven gas station layout and access is included in the Appendix.

Directional Distribution

The directions from which patrons and employees will approach and depart the site were estimated based on existing travel patterns, as determined from the traffic counts. **Figure 5** illustrates the directional distribution of the 7-Eleven gas station-generated traffic.



LEGEND

- 00% - PERCENT DISTRIBUTION
- 00' - DISTANCE IN FEET

Proposed 7-Eleven
Gas Station
Arlington Heights, Illinois

Estimated Directional Distribution

KLOA
Kenig, Lindgren, O'Hara, Aboona, Inc.
Job No: 18-269 Figure: 5

Peak Hour Traffic Volumes

The number of peak hour trips estimated to be generated by the proposed 7-Eleven gas station was based on vehicle trip generation rates contained in *Trip Generation Manual*, 10th Edition, published by the Institute of Transportation Engineers (ITE). The “Convenience Market/Gas Station” (Land-Use Code 960) rate was utilized. In addition, it is important to note that surveys conducted by ITE have shown that approximately 60 percent of trips made to gas stations are diverted from the existing traffic on the roadway system. This is particularly true during the weekday morning and evening peak hours when traffic is diverted from the home-to-work and work-to-home trips. Such diverted trips are referred to as pass-by traffic. **Table 2** summarizes the trips projected to be generated by the proposed 7-Eleven gas station.

Table 2
PROJECTED SITE-GENERATED TRAFFIC VOLUMES

ITE Land Use Code	Type/Size	Weekday Morning Peak Hour			Weekday Evening Peak Hour		
		In	Out	Total	In	Out	Total
960	Convenience Market/Gas Station (3,000 s.f.)	124	125	249	104	104	208
	<i>60% Pass-By Reduction</i>	-75	-75	-150	-62	-62	-124
	Total New Trips	49	50	99	42	42	84

4. Projected Traffic Conditions

The total projected traffic volumes include the existing traffic volumes, increase in background traffic due to growth, and the traffic estimated to be generated by the proposed subject 7-Eleven gas station.

Development Traffic Assignment

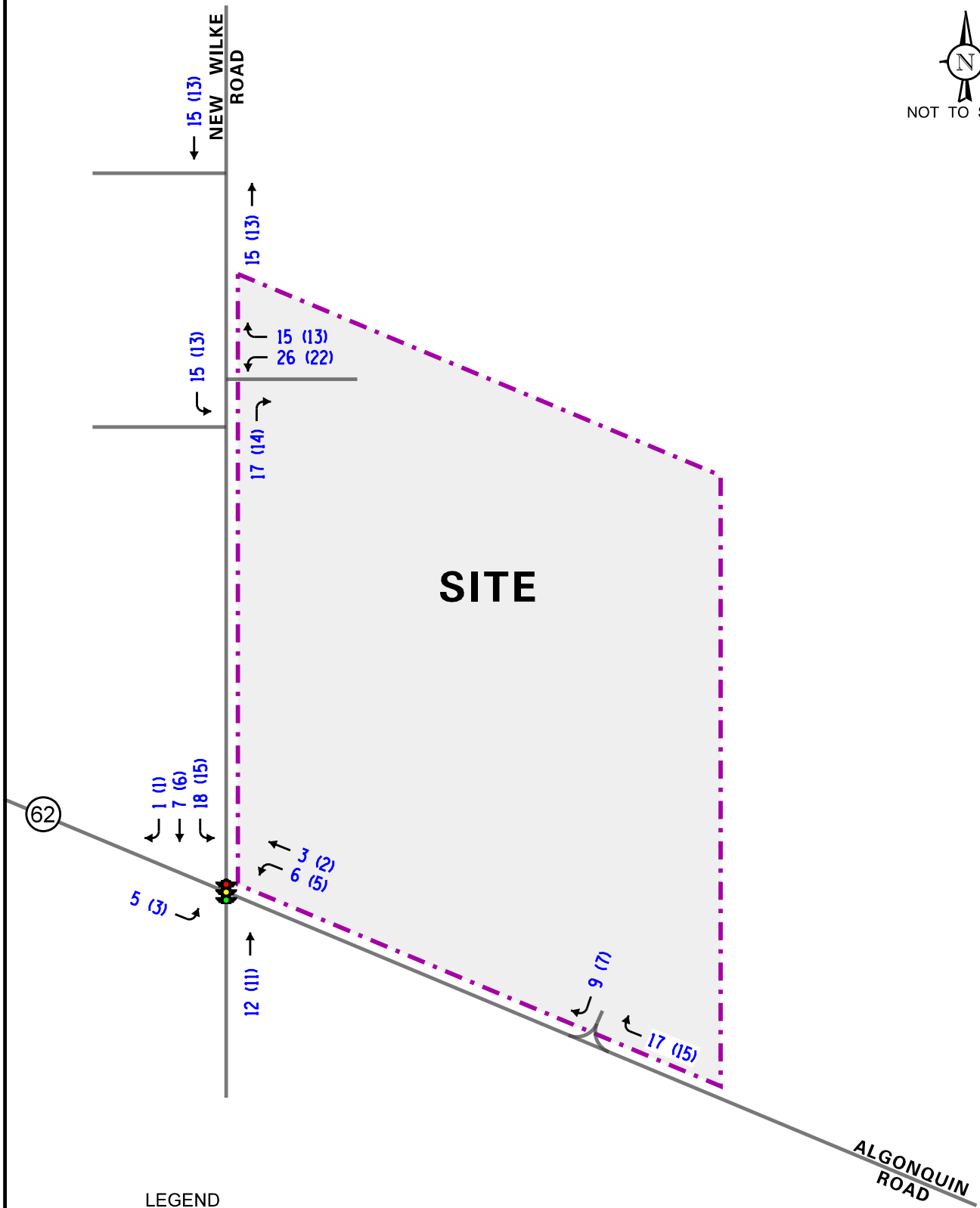
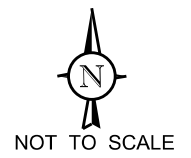
The estimated weekday morning and evening peak hour traffic volumes that will be generated by the proposed 7-Eleven gas station were assigned to the roadway system in accordance with the previously described directional distribution (Figure 5). **Figure 6** illustrates the traffic assignment of the new passenger vehicle trips. As previously indicated, a 60 percent pass-by reduction was applied. **Figure 7** illustrates the traffic assignment of the pass-by trips.

Background Traffic Conditions

The existing traffic volumes (Figure 4) were increased by a regional growth factor to account for the increase in existing traffic related to regional growth in the area (i.e., not attributable to any particular planned development). Based on Average Daily Traffic (ADT) projections provided by the Chicago Metropolitan Agency for Planning (CMAP), the existing traffic volumes are projected to increase by a total of 0.24 percent (compounded annually) to represent Year 2024 total projected conditions (one-year buildout plus five years). A copy of the CMAP projections letter is included in the Appendix.

Total Projected Traffic Volumes

The 7-Eleven gas station-generated traffic (Figures 6 and 7) was added to the existing traffic volumes increased by the regional growth factor to determine the Year 2024 total projected traffic volumes, shown in **Figure 8**.

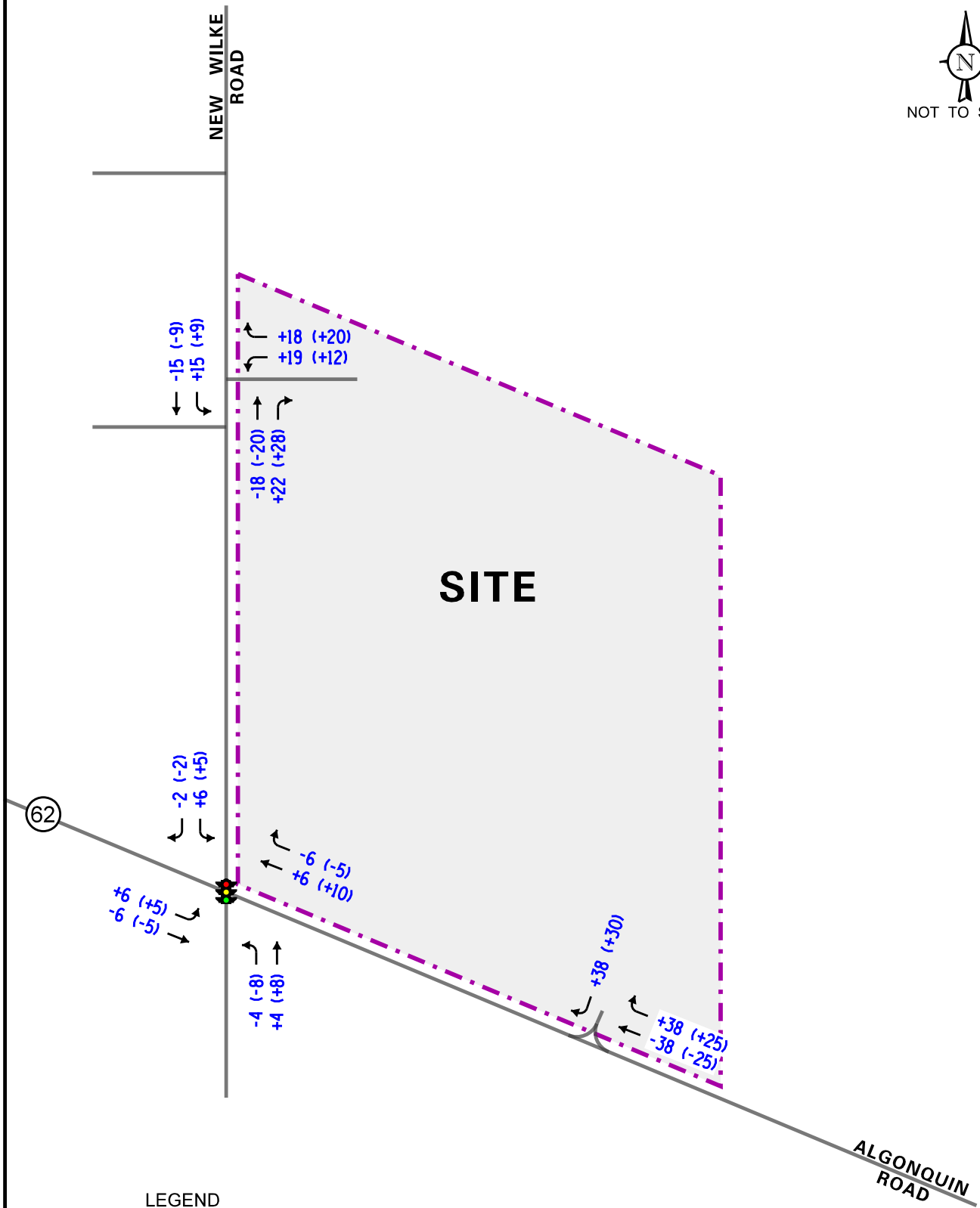
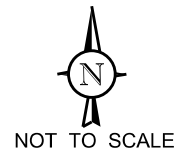


LEGEND

- 00 - AM PEAK HOUR (7:15-8:15 AM)
- (00) - PM PEAK HOUR (4:30-5:30 PM)

Proposed 7-Eleven
Gas Station
Arlington Heights, Illinois

Estimated Site-Generated
Traffic Volumes



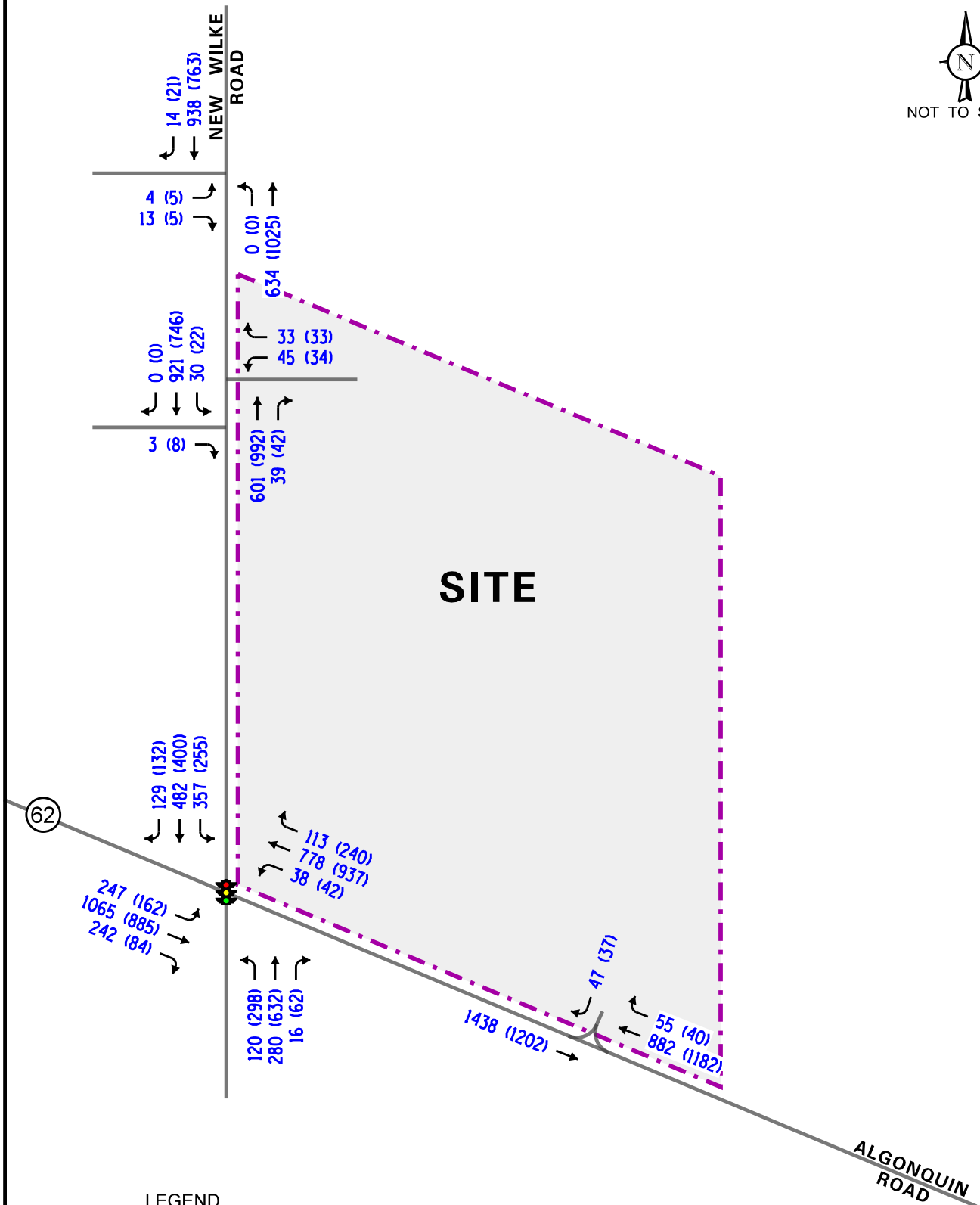
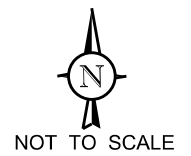
LEGEND

- 00 - AM PEAK HOUR (7:15-8:15 AM)
- (00) - PM PEAK HOUR (4:30-5:30 PM)

Proposed 7-Eleven
Gas Station
Arlington Heights, Illinois

Pass-By Site-Generated
Traffic Volumes

KLOA
Kenig, Lindgren, O'Hara, Aboona, Inc.
Job No: 18-269 Figure: 7



LEGEND

- 00 - AM PEAK HOUR (7:15-8:15 AM)
- (00) - PM PEAK HOUR (4:30-5:30 PM)

Proposed 7-Eleven
Gas Station
Arlington Heights, Illinois

Total Projected Traffic Volumes

KLOA
Kenig, Lindgren, O'Hara, Aboona, Inc.
Job No: 18-269 Figure: 8

5. Traffic Analysis and Recommendations

The following provides an evaluation conducted for the weekday morning and weekday evening peak hours. The analysis includes conducting capacity analyses to determine how well the roadway system and access drives are projected to operate and whether any roadway improvements or modifications are required.

Traffic Analyses

Roadway and adjacent or nearby intersection analyses were performed for the weekday morning and evening peak hours for the existing (Year 2018) and Year 2024 total projected traffic volumes.

The traffic analyses were performed using the methodologies outlined in the Transportation Research Board's *Highway Capacity Manual (HCM)*, 6th Edition and analyzed using the Synchro/SimTraffic 10 software. The analysis for the traffic-signal controlled intersections were accomplished using actual cycle lengths and phasings to determine the average overall vehicle delay and levels of service.

The analyses for the unsignalized intersections determine the average control delay to vehicles at an intersection. Control delay is the elapsed time from a vehicle joining the queue at a stop sign (includes the time required to decelerate to a stop) until its departure from the stop sign and resumption of free flow speed. The methodology analyzes each intersection approach controlled by a stop sign and considers traffic volumes on all approaches and lane characteristics.

The ability of an intersection to accommodate traffic flow is expressed in terms of level of service, which is assigned a letter from A to F based on the average control delay experienced by vehicles passing through the intersection. The *Highway Capacity Manual* definitions for levels of service and the corresponding control delay for signalized intersections and unsignalized intersections are included in the Appendix of this report.

Summaries of the traffic analysis results showing the level of service and overall intersection delay (measured in seconds) for the existing and total projected conditions are presented in **Tables 3** through **5**. A discussion of each intersection follows. Summary sheets for the capacity analyses are included in the Appendix.

Table 3

CAPACITY ANALYSIS RESULTS – ALGONQUIN ROAD WITH NEW WILKE ROAD – SIGNALIZED

Year 2018 Existing Conditions	Peak Hour	Eastbound			Westbound			Northbound		Southbound		Overall		
		L	T	R	L	T	R	L	T/R	L	T/R			
	Weekday Morning Peak Hour	D 38.5	D 37.0		B 19.3	D 38.5		D 50.0	D 54.1		E 77.0	E 62.9	D 46.6	
		D – 37.3			D – 37.8			D – 52.8		E 67.9				
	Weekday Evening Peak Hour	D 47.8	C 32.9		B 18.8	D 47.5		D 52.4	E 60.0		E 60.1	E 60.8	D 48.7	
		C – 35.0			D - 46.6			E – 57.7		E – 60.6				
	Year 2024 Total Projected Conditions	Weekday Morning Peak Hour	D 46.9	D 38.3		C 20.6	D 40.3		D 50.6	D 54.6		F 99+	E 63.8	D 51.0
			D – 39.6			D – 39.5			D – 53.4		E 79.2			
		Weekday Evening Peak Hour	D 49.9	C 34.4		B 19.5	D 55.7		D 49.2	E 61.2		E 73.3	E 58.2	D 52.0
			C – 36.6			D – 54.4			E – 57.6		E – 63.1			
Delay is measured in seconds. L – Left T – Through R – Right														

Table 4

CAPACITY ANALYSIS RESULTS - EXISTING CONDITIONS – UNSIGNALIZED

Intersection	Weekday Morning Peak Hour		Weekday Evening Peak Hour	
	LOS	Delay	LOS	Delay
New Wilke Road with Mobil Northerly Access Drive				
• Eastbound Left Turn	D	34.7	D	26.0
• Eastbound Right Turn	B	13.8	B	12.1
New Wilke Road with Mobil Southerly Access Drive				
• Eastbound Approach	B	13.6	B	12.1
LOS = Level of Service Delay is measured in seconds.				

Table 5

CAPACITY ANALYSIS RESULTS - TOTAL PROJECTED CONDITIONS – UNSIGNALIZED

Intersection	Weekday Morning Peak Hour		Weekday Evening Peak Hour	
	LOS	Delay	LOS	Delay
New Wilke Road with Mobil Northerly Access Drive				
• Eastbound Left Turn	E	36.8	D	27.1
• Eastbound Right Turn	B	14.1	B	12.3
New Wilke Road with Mobil Southerly Access Drive and the Proposed Full Access Drive				
• Eastbound Approach	B	13.6	B	12.1
• Westbound Left Turn	E	41.7	F	54.3
• Westbound Right Turn	B	11.1	B	13.0
• Southbound Left Turn	A	9.3	B	10.8
Algonquin Road with the Proposed Right-in/Right-out Access Drive				
• Southbound Approach	B	12.9	B	14.2
LOS = Level of Service Delay is measured in seconds.				

Discussion and Recommendations

The following summarizes how the intersections are projected to operate and identifies any roadway and traffic control improvements necessary to accommodate the 7-Eleven gas station-generated traffic.

Algonquin Road with New Wilke Road

The results of the capacity analysis indicate that overall this intersection currently operates at Level of Service (LOS) D during the weekday morning and weekday evening peak hours. Under Year 2024 projected conditions, this intersection overall is projected to continue operating at existing levels of service during the peak hours with increases in delay of less than four seconds. Additionally, all of the approaches are projected to continue operating at existing levels of service during the peak hours. It should be noted that the proposed development is only projected to increase the traffic traversing this intersection by less than two percent during the peak hours. As such, this intersection has sufficient reserve capacity to accommodate the traffic projected to be generated by the proposed development and no roadway or traffic control improvements will be required.

New Wilke Road with Mobil Northerly Access Drive

The results of the capacity analysis indicate that the eastbound left-turn movement currently operates at LOS D during the weekday morning and weekday evening peak hours. Under Year 2024 projected conditions, the eastbound left turn is projected to operate at LOS E during the weekday morning peak hour and LOS D during the weekday evening peak hour with an increase in delay of less than two seconds. As such, this intersection has sufficient reserve capacity to accommodate the traffic projected to be generated by the proposed 7-Eleven gas station and no roadway or traffic control improvements will be required.

New Wilke Road with Mobil Southerly Access Drive and the Proposed Full Access Drive

The results of the capacity analysis indicate that the eastbound approach currently operates at LOS B during the weekday morning and weekday evening peak hours. Under Year 2024 projected conditions, the eastbound approach is projected to continue to operate at the same LOS with an increase in delay of less than one second.

The results of the capacity analysis further indicate that the outbound left turn movements from the proposed full access drive serving the site onto New Wilke Road are projected to operate at LOS E during the weekday morning peak hour and at LOS F during the weekday evening peak hour with 95th percentile queues of one to two vehicles. This is typical and expected at the intersection of an access drive with a major collector roadway such as New Wilke Road. It should be noted that southbound queues at the intersection of Algonquin Road with New Wilke Road currently extend past the location of the proposed access drive and are projected to continue to do so. However, observations indicate that the queues clear with every green cycle and are projected to continue to do so. As such, the proposed access drive will be adequate in accommodating the traffic projected to be generated by the proposed 7-Eleven gas station.

Algonquin Road with the Proposed Full Access Drive

The results of the capacity analysis indicate that the access drive is projected to operate at LOS B during the weekday morning and weekday evening peak hours with 95th percentile queues of one to two vehicles. As such, the proposed access drive will be adequate in accommodating the traffic projected to be generated by the proposed 7-Eleven gas station.

6. Conclusion

Based on the preceding analyses and recommendations, the following conclusions have been made:

- The traffic projected to be generated by the proposed 7-Eleven gas station will be reduced due to the volume of pass-by traffic generated by the 7-Eleven gas station.
- The intersection of Algonquin Road with New Wilke Road has sufficient reserve capacity to accommodate the additional traffic to be generated by the proposed 7-Eleven gas station and no roadway or traffic improvements are required.
- The proposed access system will be adequate in accommodating the traffic projected to be generated by the proposed 7-Eleven gas station with limited impact on the external roadway system.
- The proposed 7-Eleven gas station will eliminate the two existing access drives on Algonquin Road and New Wilke Road which will improve traffic flow on both roads.

Appendix

Traffic Count Summary Sheets
Preliminary Site Plan
CMAP Projections Letter
Level of Service Criteria
Capacity Analysis Summary Sheets

Traffic Count Summary Sheets

Study Name Mobil Access Drives
Start Date Thursday, November 15, 2018 7:00 AM
End Date Thursday, November 15, 2018 6:00 PM
Site Code

Report Summary

		Northbound				Southbound				Southeastbound				Northeastbound				Crosswalk							
Time Period	Class.	HL	BL	I	O	BR	HR	I	O	U	HL	BR	R	I	O	U	L	BL	HR	I	O	Total	direction	Total	
Peak 1	Lights	0	0	0	13	0	13	13	3	0	3	10	0	13	13	0	0	0	3	3	0	29	S	0	0
Specified Period	%	0%	0%	0%	81%	0%	93%	93%	75%	0%	75%	77%	0%	76%	93%	0%	0%	0%	100%	100%	0%	85%		0%	
7:15 AM - 8:15 AM	Buses	0	0	0	0	0	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	1	N	0	0
One Hour Peak	%	0%	0%	0%	0%	0%	7%	7%	0%	0%	0%	0%	0%	0%	7%	0%	0%	0%	0%	0%	0%	3%		0%	
7:15 AM - 8:15 AM	Single-Unit Trucks	0	0	0	3	0	0	0	1	0	1	3	0	4	0	0	0	0	0	0	0	4	NW	0	0
	%	0%	0%	0%	19%	0%	0%	0%	25%	0%	25%	23%	0%	24%	0%	0%	0%	0%	0%	0%	0%	12%		0%	
	articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	SW	0	0
	%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		0%	
	bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	
	%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		0	
	Total	0	0	0	16	0	14	14	4	0	4	13	0	17	14	0	0	0	3	3	0	34			
	PHF	0	0	0	0.67	0	0.7	0.7	0.5	0	0.5	0.65	0	0.71	0.7	0	0	0	0.75	0.75	0	0.77			
	Approach %			0%	47%			41%	12%					50%	41%					9%	0%				
Peak 2	Lights	0	0	0	13	0	21	21	5	0	5	5	0	10	21	0	0	0	8	8	0	39	S	0	0
Specified Period	%	0%	0%	0%	100%	0%	100%	100%	100%	0%	100%	100%	0%	100%	100%	0%	0%	0%	100%	100%	0%	100%		0%	
4:30 PM - 5:30 PM	Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N	0	0
One Hour Peak	%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		0%	
4:30 PM - 5:30 PM	Single-Unit Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NW	3	3
	%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		100%	
	articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	SW	3	3
	%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		100%	
	bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		6	6
	%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		6	
	Total	0	0	0	13	0	21	21	5	0	5	5	0	10	21	0	0	0	8	8	0	39			
	PHF	0	0	0	0.65	0	0.75	0.75	0.62	0	0.62	0.62	0	0.83	0.75	0	0	0	0.5	0.5	0	0.75			
	Approach %			0%	33%			54%	13%					26%	54%					21%	0%				

Study Name Mobil Access Drives
Start Date Thursday, November 15, 2018 7:00 AM
End Date Thursday, November 15, 2018 6:00 PM
Site Code

Report Summary

		Northbound				Southbound				Southeastbound				Northeastbound				Crosswalk							
Time Period	Class.	HL	BL	I	O	BR	HR	I	O	U	HL	BR	R	I	O	U	L	BL	HR	I	O	Total	direction	Total	
Peak 1	Lights	0	0	0	13	0	13	13	3	0	3	10	0	13	13	0	0	0	3	3	0	29	S	0	0
Specified Period	%	0%	0%	0%	81%	0%	93%	93%	75%	0%	75%	77%	0%	76%	93%	0%	0%	0%	100%	100%	0%	85%		0%	
7:15 AM - 8:15 AM	Buses	0	0	0	0	0	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	1	N	0	0
One Hour Peak	%	0%	0%	0%	0%	0%	7%	7%	0%	0%	0%	0%	0%	0%	7%	0%	0%	0%	0%	0%	0%	3%		0%	
7:15 AM - 8:15 AM	Single-Unit Trucks	0	0	0	3	0	0	0	1	0	1	3	0	4	0	0	0	0	0	0	0	4	NW	0	0
	%	0%	0%	0%	19%	0%	0%	0%	25%	0%	25%	23%	0%	24%	0%	0%	0%	0%	0%	0%	0%	12%		0%	
	articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	SW	0	0
	%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		0%	
	bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	
	%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		0	
	Total	0	0	0	16	0	14	14	4	0	4	13	0	17	14	0	0	0	3	3	0	34			
	PHF	0	0	0	0.67	0	0.7	0.7	0.5	0	0.5	0.65	0	0.71	0.7	0	0	0	0.75	0.75	0	0.77			
	Approach %			0%	47%			41%	12%					50%	41%					9%	0%				
Peak 2	Lights	0	0	0	13	0	21	21	5	0	5	5	0	10	21	0	0	0	8	8	0	39	S	0	0
Specified Period	%	0%	0%	0%	100%	0%	100%	100%	100%	0%	100%	100%	0%	100%	100%	0%	0%	0%	100%	100%	0%	100%		0%	
4:30 PM - 5:30 PM	Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N	0	0
One Hour Peak	%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		0%	
4:30 PM - 5:30 PM	Single-Unit Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NW	3	3
	%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		100%	
	articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	SW	3	3
	%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		100%	
	bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		6	6
	%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		6	
	Total	0	0	0	13	0	21	21	5	0	5	5	0	10	21	0	0	0	8	8	0	39			
	PHF	0	0	0	0.65	0	0.75	0.75	0.62	0	0.62	0.62	0	0.83	0.75	0	0	0	0.5	0.5	0	0.75			
	Approach %			0%	33%			54%	13%					26%	54%					21%	0%				

Preliminary Site Plan



GENERAL NOTES:

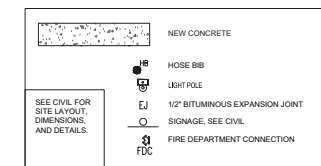
- A. SEE CIVIL FOR GRADING PLAN. SEE CIVIL DRAWING FOR SITE DEMOLITION, NEW PAVEMENT, SITE UTILITIES, SIGNAGE AND FINAL SITE DIMENSIONS.
- B. SEE AS102 FOR DIMENSIONS AND ELEVATION DETAILS.
- C. VERIFY THE EXISTENCE OF AND PROTECT ALL EXISTING UTILITY EXCAVATE WITH CARE.
- D. REINSTALL ON BUILDING AS REQUIRED BY LOCAL CODE.
- E. PROVIDE KNOX BOX. PER FIRE DEPARTMENT REQUIREMENTS.
- F. SEE CIVIL DRAWINGS FOR ADDITIONAL SITE SIGNAGE REQUIREMENTS.
- G. CLEAN LOT AND EXPOSE ALL UTILITIES AND PERFORM REPAIRS TO COMPLETION.
- H. PROTECT ADJACENT PROPERTY. ANY DAMAGE IS TO BE REPAIRED AT CONTRACTOR'S EXPENSE. IF ANY ADJACENT PROPERTY OR CURB OR DRIVEWAY IS DAMAGED IT WILL BE REPLACED AND WATERED REGULARLY UNTIL ESTABLISHED.
- I. PROVIDE EXPANSION JOINTS IN CONCRETE PAVING AND CURBS AS REQUIRED BY MFG. OF CURB. SOFT SPREAD CONCREVEHICER IS LESS. REFER TO CIVIL DRAWINGS FOR MORE INFORMATION AND DETAILS.

 KEY NOTES:

1. ADA PARKING SIGN MOUNTED ON POST. SEE CIVL FOR DETAILS.
2. ADA SIDEWALK RAMP TYP. SEE CIVL
3. EXISTING CONCRETE CURB AND SIDEWALK TO REMAIN.
4. NEW CONCRETE PAVEMENT TYP. SEE CIVL
5. NEW 12" ASPHALT TYP. SEE CIVL FOR PAVING AND GRADING DETAILS.
6. EXISTING CONCRETE SIDEWALK TO REMAIN. GC TO REPAIR AND PATCH.
7. 12" CONC. SIDEWALK TO REMAIN. DETERMINE WHERE INDICATED, USE BITUMINOUS FILL AND SEAL BENT ALONG EDGE.
8. CONCEALED LOCKABLE HOSE BIB
9. F/C CONNECTION. SEE CIVL
10. EXISTING FIRE HYDRANT
11. PROVIDE TRASH ENCLOSURE. REFER TO A51 FOR DETAILS.
12. AIR / VAC REFER TO CIVL SHEETS FOR LOCATION
13. MAIN DRAIN
14. EXIST DRAIN
15. PROPOSED FUEL CANOPY. REFER TO CIVL
16. PROPOSED UNDERGROUND FUEL TANKS. REFER TO CIVL
17. COC TANK CASE INSTALLED / ANCHOR PER MANUFACTURER SPECS BY GC.
18. NEW DIRECTIONAL SIGNAGE. SEE CIVL FOR PERMITS
19. NEW MONUMENT SIGN
20. NEW 1/2" POLYMER RULER TO PHOTOMETRIC SHEET



LEGEND:



CITY APPROVAL

CLIENT:
vequity | 

Vequity
400 N. State
Suite 400
Chicago, IL 60654
312-985-0987
Email info@vequity.com
www.vequity.com

PROJECT TEAM:



ILEKIS ASSOCIATES
223 W. JACKSON BLVD.
SUITE 1000
CHICAGO, IL 60606

312-419-0009 www.ILEKIS.com
THESE DOCUMENTS WERE PREPARED UNDER MY
SUPERVISION AND, TO THE BEST OF MY KNOWLEDGE,
COMPLY WITH THE APPLICABLE CODES AND BUILDING
REGULATIONS.
ALPHONSE A. ILEKIS, AIA
©COPYRIGHT 2011 ILEKIS ASSOCIATES ALL RIGHTS RESERVED

NOTE:

RETAIL BUILDING
PROJECT # 1814-14
1650 ALGONQUIN RD
ARLINGTON HEIGHTS, IL 60005

THESE DOCUMENTS WERE PREPARED UNDER MY SUPERVISION AND, TO THE BEST OF MY KNOWLEDGE, COMPLY WITH THE ALL APPLICABLE CODES.

COPYRIGHT 2017 L&K ASSOCIATES. ALL RIGHTS RESERVED.

DATE:	ISSUED FOR:
-------	-------------

--	--

[illegible]

--	--

--	--	--

[illegible][illegible]

--	--

--	--

--	--

--	--

--	--

--	--

--	--

--	--

11/08/18	ISSUED FOR CIT
----------	----------------

SITE PL

1

1. *Journal of the American Medical Association*, 2000; 284: 2689-2694.

1. *Journal of Management Studies*, 1997, 34, 1, 1-14.

AS10

AS 1.0

CMAP Projections Letter



Chicago Metropolitan
Agency for Planning

233 South Wacker Drive
Suite 800
Chicago, Illinois 60606

312 454 0400
www.cmap.illinois.gov

November 16, 2018

Andrew Bowen
Consultant
Kenig, Lindgren, O'Hara and Aboona, Inc.
9575 West Higgins Road
Suite 400
Rosemont, IL 60018

Subject: *Algonquin Road (IL 62) @ New Wilke Road*
IDOT

Dear Mr. Bowen:

In response to a request made on your behalf and dated November 15, 2018, we have developed year 2040 average daily traffic (ADT) projections for the subject location.

ROAD SEGMENT	Current ADT	Year 2040 ADT
Algonquin Rd (IL 62) east of New Wilke Rd	29,400	30,000
Algonquin Rd (IL 62) east of New Wilke Rd	29,200	30,500
New Wilke Rd, @ Algonquin Rd (IL 62)	18,600	21,000

Traffic projections are developed using existing ADT data provided in the request letter and the results from the October 2018 CMAP Travel Demand Analysis. The regional travel model uses CMAP 2040 socioeconomic projections and assumes the implementation of the ON TO 2050 Comprehensive Regional Plan for the Northeastern Illinois area. The provision of this data in support of your request does not constitute a CMAP endorsement of the proposed development or any subsequent developments.

If you have any questions, please call me at (312) 386-8806.

Sincerely,

Jose Rodriguez, PTP, AICP
Senior Planner, Research & Analysis

cc: Quigley (IDOT)
S:\AdminGroups\ResearchAnalysis\2018cy_TrafficForecasts\ArlingtonHeights\ck-128-18\ck-128-18.docx

Level of Service Criteria

LEVEL OF SERVICE CRITERIA

Signalized Intersections		
Level of Service	Interpretation	Average Control Delay (seconds per vehicle)
A	Favorable progression. Most vehicles arrive during the green indication and travel through the intersection without stopping.	≤10
B	Good progression, with more vehicles stopping than for Level of Service A.	>10 - 20
C	Individual cycle failures (i.e., one or more queued vehicles are not able to depart as a result of insufficient capacity during the cycle) may begin to appear. Number of vehicles stopping is significant, although many vehicles still pass through the intersection without stopping.	>20 - 35
D	The volume-to-capacity ratio is high and either progression is ineffective or the cycle length is too long. Many vehicles stop and individual cycle failures are noticeable.	>35 - 55
E	Progression is unfavorable. The volume-to-capacity ratio is high and the cycle length is long. Individual cycle failures are frequent.	>55 - 80
F	The volume-to-capacity ratio is very high, progression is very poor, and the cycle length is long. Most cycles fail to clear the queue.	>80.0
Unsignalized Intersections		
Level of Service	Average Total Delay (SEC/VEH)	
A	0 - 10	
B	> 10 - 15	
C	> 15 - 25	
D	> 25 - 35	
E	> 35 - 50	
F	> 50	

Source: *Highway Capacity Manual*, 2010.

Capacity Analysis Summary Sheets
Existing Weekday Morning Peak Hour Conditions

Lanes, Volumes, Timings

3: New Wilke Road & Il 62

12/05/2018

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	233	1056	239	32	758	117	122	260	16	328	469	128
Future Volume (vph)	233	1056	239	32	758	117	122	260	16	328	469	128
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	90		0	200		0	100		0	0		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	160			230			230			245		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor												
Frt		0.972			0.980			0.991			0.968	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3440	0	1752	3302	0	1719	3487	0	1752	3404	0
Flt Permitted	0.140			0.067			0.182			0.378		
Satd. Flow (perm)	261	3440	0	124	3302	0	329	3487	0	697	3404	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		405			564			216			136	
Travel Time (s)		6.9			9.6			3.7			2.3	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	3%	7%	8%	5%	2%	12%	3%	2%	5%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	271	1506	0	37	1017	0	142	321	0	381	694	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6			8			4		
Detector Phase	5	2		1	6		3	8		7	4	
Switch Phase												
Minimum Initial (s)	3.0	15.0		3.0	15.0		3.0	8.0		3.0	8.0	
Minimum Split (s)	6.5	21.0		6.5	21.0		6.5	14.0		6.5	14.0	
Total Split (s)	23.8	71.4		12.6	60.2		15.4	33.6		22.4	40.6	
Total Split (%)	17.0%	51.0%		9.0%	43.0%		11.0%	24.0%		16.0%	29.0%	
Yellow Time (s)	3.5	4.5		3.5	4.5		3.5	4.5		3.5	4.5	
All-Red Time (s)	0.0	1.5		0.0	1.5		0.0	1.5		0.0	1.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.5	6.0		3.5	6.0		3.5	6.0		3.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	
Act Effect Green (s)	82.5	71.5		68.6	59.3		39.4	25.6		50.5	33.2	
Actuated g/C Ratio	0.59	0.51		0.49	0.42		0.28	0.18		0.36	0.24	

Lanes, Volumes, Timings

3: New Wilke Road & Il 62

12/05/2018

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.80	0.86		0.27	0.73		0.70	0.50		0.97	0.86	
Control Delay	38.5	37.0		19.3	38.5		50.0	54.1		77.0	62.9	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	38.5	37.0		19.3	38.5		50.0	54.1		77.0	62.9	
LOS	D	D		B	D		D	D		E	E	
Approach Delay		37.3			37.8			52.8			67.9	
Approach LOS		D			D			D			E	
Queue Length 50th (ft)	124	648		14	422		88	137		276	316	
Queue Length 95th (ft)	210	718		30	483		133	177		#441	371	
Internal Link Dist (ft)		325			484			136			56	
Turn Bay Length (ft)	90			200			100					
Base Capacity (vph)	372	1757		168	1399		211	687		393	841	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.73	0.86		0.22	0.73		0.67	0.47		0.97	0.83	

Intersection Summary

Area Type: Other

Cycle Length: 140

Actuated Cycle Length: 140

Offset: 22.5 (16%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.97

Intersection Signal Delay: 46.6

Intersection LOS: D

Intersection Capacity Utilization 82.7%

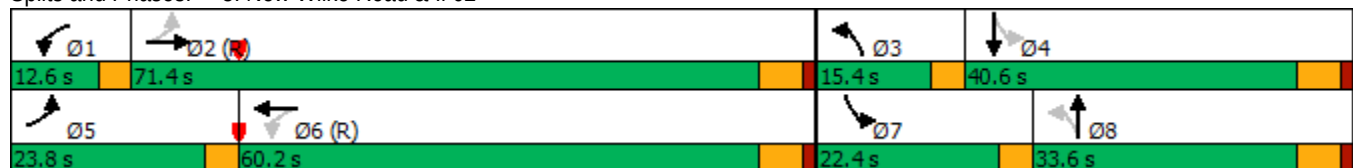
ICU Level of Service E

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 3: New Wilke Road & Il 62



HCM 6th TWSC

1: New Wilke Road & North Mobil Drive

12/05/2018

Intersection

Int Delay, s/veh 0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	4	13	0	610	909	14
Future Vol, veh/h	4	13	0	610	909	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	25	0	0	2	2	7
Mvmt Flow	5	15	0	709	1057	16

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	1420	537	1073
Stage 1	1065	-	-
Stage 2	355	-	-
Critical Hdwy	6.75	7.1	5.3
Critical Hdwy Stg 1	7.1	-	-
Critical Hdwy Stg 2	6.3	-	-
Follow-up Hdwy	3.9	3.9	3.1
Pot Cap-1 Maneuver	126	422	367
Stage 1	190	-	-
Stage 2	597	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	126	422	367
Mov Cap-2 Maneuver	126	-	-
Stage 1	190	-	-
Stage 2	597	-	-

Approach	EB	NB	SB
HCM Control Delay, s	18.7	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	367	-	126	422	-	-
HCM Lane V/C Ratio	-	-	0.037	0.036	-	-
HCM Control Delay (s)	0	-	34.7	13.8	-	-
HCM Lane LOS	A	-	D	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	0.1	-	-

HCM 6th TWSC
2: New Wilke Road & South Mobil Drive

12/05/2018

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↑↑	↑↑↑	
Traffic Vol, veh/h	0	3	0	610	922	0
Future Vol, veh/h	0	3	0	610	922	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	0	0	0	2	2	0
Mvmt Flow	0	3	0	709	1072	0
Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	-	536	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.1	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.9	-	-	-	-
Pot Cap-1 Maneuver	0	423	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	423	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	NB	SB			
HCM Control Delay, s	13.6	0	0			
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR		
Capacity (veh/h)	-	423	-	-		
HCM Lane V/C Ratio	-	0.008	-	-		
HCM Control Delay (s)	-	13.6	-	-		
HCM Lane LOS	-	B	-	-		
HCM 95th %tile Q(veh)	-	0	-	-		

Capacity Analysis Summary Sheets
Existing Weekday Evening Peak Hour Conditions

Lanes, Volumes, Timings

3: New Wilke Road & Il 62

12/05/2018

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	152	878	83	36	888	242	302	605	61	232	389	132
Future Volume (vph)	152	878	83	36	888	242	302	605	61	232	389	132
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	90		0	200		0	100		0	0		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	160			230			230			245		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor		1.00			1.00		1.00	1.00		1.00	0.99	
Frt		0.987			0.968			0.986			0.962	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1787	3432	0	1805	3419	0	1805	3523	0	1770	3412	0
Flt Permitted	0.067			0.185			0.186			0.156		
Satd. Flow (perm)	126	3432	0	352	3419	0	353	3523	0	291	3412	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		405			564			216			136	
Travel Time (s)		6.9			9.6			3.7			2.3	
Confl. Peds. (#/hr)			8			8	6		1	1		6
Confl. Bikes (#/hr)												
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	4%	0%	0%	2%	1%	0%	1%	0%	2%	1%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	162	1022	0	38	1202	0	321	709	0	247	554	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6			8			4		
Detector Phase	5	2		1	6		3	8		7	4	
Switch Phase												
Minimum Initial (s)	3.0	15.0		3.0	15.0		3.0	8.0		3.0	8.0	
Minimum Split (s)	6.5	21.0		6.5	21.0		6.5	14.0		6.5	14.0	
Total Split (s)	22.4	63.0		12.6	53.2		28.0	42.0		22.4	36.4	
Total Split (%)	16.0%	45.0%		9.0%	38.0%		20.0%	30.0%		16.0%	26.0%	
Yellow Time (s)	3.5	4.5		3.5	4.5		3.5	4.5		3.5	4.5	
All-Red Time (s)	0.0	1.5		0.0	1.5		0.0	1.5		0.0	1.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.5	6.0		3.5	6.0		3.5	6.0		3.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	
Act Effect Green (s)	75.6	64.5		65.9	56.5		57.4	33.7		49.3	29.1	
Actuated g/C Ratio	0.54	0.46		0.47	0.40		0.41	0.24		0.35	0.21	

Lanes, Volumes, Timings

3: New Wilke Road & Il 62

12/05/2018

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.73	0.65		0.16	0.87		0.86	0.84		0.85	0.78	
Control Delay	47.8	32.9		18.8	47.5		52.4	60.0		60.1	60.8	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	47.8	32.9		18.8	47.5		52.4	60.0		60.1	60.8	
LOS	D	C		B	D		D	E		E	E	
Approach Delay		35.0			46.6			57.7			60.6	
Approach LOS		C			D			E			E	
Queue Length 50th (ft)	92	395		17	542		200	319		150	248	
Queue Length 95th (ft)	169	489		36	#761		#325	394		#287	318	
Internal Link Dist (ft)		325			484			136			56	
Turn Bay Length (ft)	90			200			100					
Base Capacity (vph)	292	1580		265	1379		398	905		304	743	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.55	0.65		0.14	0.87		0.81	0.78		0.81	0.75	

Intersection Summary

Area Type: Other

Cycle Length: 140

Actuated Cycle Length: 140

Offset: 22.5 (16%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 75

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.87

Intersection Signal Delay: 48.7

Intersection LOS: D

Intersection Capacity Utilization 89.4%

ICU Level of Service E

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 3: New Wilke Road & Il 62

 Ø1	 Ø2 (R)	 Ø3	 Ø4
12.6 s	63 s	28 s	36.4 s
 Ø5	 Ø6 (R)	 Ø7	 Ø8
22.4 s	53.2 s	22.4 s	42 s

HCM 6th TWSC
1: New Wilke Road & North Mobil Drive

12/05/2018

Intersection

Int Delay, s/veh 0.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	5	5	0	999	740	21
Future Vol, veh/h	5	5	0	999	740	21
Conflicting Peds, #/hr	0	0	3	0	0	3
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	1	1	0
Mvmt Flow	5	5	0	1063	787	22

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1333	408	812	0	-	0
Stage 1	801	-	-	-	-	-
Stage 2	532	-	-	-	-	-
Critical Hdwy	6.25	7.1	5.3	-	-	-
Critical Hdwy Stg 1	6.6	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.65	3.9	3.1	-	-	-
Pot Cap-1 Maneuver	178	511	488	-	-	-
Stage 1	332	-	-	-	-	-
Stage 2	542	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	177	510	487	-	-	-
Mov Cap-2 Maneuver	177	-	-	-	-	-
Stage 1	331	-	-	-	-	-
Stage 2	540	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	19.1	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	487	-	177	510	-	-
HCM Lane V/C Ratio	-	-	0.03	0.01	-	-
HCM Control Delay (s)	0	-	26	12.1	-	-
HCM Lane LOS	A	-	D	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	0	-	-

HCM 6th TWSC
2: New Wilke Road & South Mobil Drive

12/05/2018

Intersection						
Int Delay, s/veh	0.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↑↑	↑↑↑	
Traffic Vol, veh/h	0	8	0	999	745	0
Future Vol, veh/h	0	8	0	999	745	0
Conflicting Peds, #/hr	0	0	3	0	0	3
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	1	1	0
Mvmt Flow	0	9	0	1063	793	0
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	-	400	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.1	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.9	-	-	-	-
Pot Cap-1 Maneuver	0	517	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	516	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	12.1	0		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR		
Capacity (veh/h)	-	516	-	-		
HCM Lane V/C Ratio	-	0.016	-	-		
HCM Control Delay (s)	-	12.1	-	-		
HCM Lane LOS	-	B	-	-		
HCM 95th %tile Q(veh)	-	0.1	-	-		

Capacity Analysis Summary Sheets
Projected Weekday Morning Peak Hour Conditions

Lanes, Volumes, Timings

3: New Wilke Road & Il 62

12/05/2018

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	247	1065	242	38	778	113	120	280	16	357	483	129
Future Volume (vph)	247	1065	242	38	778	113	120	280	16	357	483	129
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	90		0	200		0	100		0	0		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	160			230			230			245		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor												
Frt		0.972			0.981			0.992			0.968	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3440	0	1752	3306	0	1719	3492	0	1752	3405	0
Flt Permitted	0.128			0.069			0.169			0.354		
Satd. Flow (perm)	238	3440	0	127	3306	0	306	3492	0	653	3405	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		405			209			216			136	
Travel Time (s)		6.9			3.6			3.7			2.3	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	3%	7%	8%	5%	2%	12%	3%	2%	5%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	287	1519	0	44	1036	0	140	345	0	415	712	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6			8			4		
Detector Phase	5	2		1	6		3	8		7	4	
Switch Phase												
Minimum Initial (s)	3.0	15.0		3.0	15.0		3.0	8.0		3.0	8.0	
Minimum Split (s)	6.5	21.0		6.5	21.0		6.5	14.0		6.5	14.0	
Total Split (s)	23.8	71.4		12.6	60.2		15.4	33.6		22.4	40.6	
Total Split (%)	17.0%	51.0%		9.0%	43.0%		11.0%	24.0%		16.0%	29.0%	
Yellow Time (s)	3.5	4.5		3.5	4.5		3.5	4.5		3.5	4.5	
All-Red Time (s)	0.0	1.5		0.0	1.5		0.0	1.5		0.0	1.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.5	6.0		3.5	6.0		3.5	6.0		3.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	
Act Effect Green (s)	82.2	71.0		67.5	58.0		39.7	25.9		50.8	33.5	
Actuated g/C Ratio	0.59	0.51		0.48	0.41		0.28	0.18		0.36	0.24	

Lanes, Volumes, Timings

3: New Wilke Road & Il 62

12/05/2018

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.85	0.87		0.31	0.76		0.70	0.53		1.08	0.87	
Control Delay	46.9	38.3		20.6	40.3		50.6	54.6		105.6	63.8	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	46.9	38.3		20.6	40.3		50.6	54.6		105.6	63.8	
LOS	D	D		C	D		D	D		F	E	
Approach Delay		39.6			39.5			53.4			79.2	
Approach LOS		D			D			D			E	
Queue Length 50th (ft)	152	661		17	440		86	148		~334	326	
Queue Length 95th (ft)	#257	732		33	495		133	190		#539	382	
Internal Link Dist (ft)		325			129			136			56	
Turn Bay Length (ft)	90			200			100					
Base Capacity (vph)	361	1745		168	1370		207	688		385	841	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.80	0.87		0.26	0.76		0.68	0.50		1.08	0.85	

Intersection Summary

Area Type: Other

Cycle Length: 140

Actuated Cycle Length: 140

Offset: 22.5 (16%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.08

Intersection Signal Delay: 51.0

Intersection LOS: D

Intersection Capacity Utilization 85.2%

ICU Level of Service E

Analysis Period (min) 15

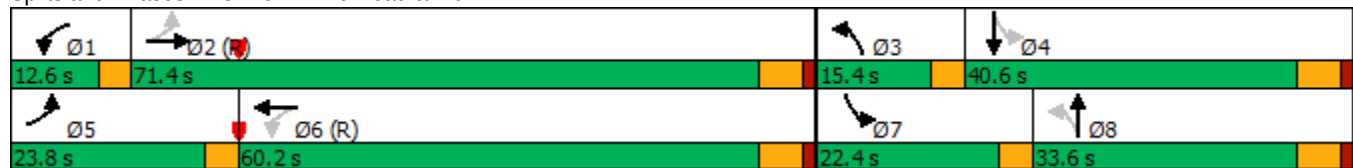
~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 3: New Wilke Road & Il 62



HCM 6th TWSC

1: New Wilke Road & North Mobil Drive

12/06/2018

Intersection

Int Delay, s/veh 0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	4	13	0	634	938	14
Future Vol, veh/h	4	13	0	634	938	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	25	0	0	2	2	7
Mvmt Flow	5	15	0	737	1091	16

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1468	554	1107	0	-	0
Stage 1	1099	-	-	-	-	-
Stage 2	369	-	-	-	-	-
Critical Hdwy	6.75	7.1	5.3	-	-	-
Critical Hdwy Stg 1	7.1	-	-	-	-	-
Critical Hdwy Stg 2	6.3	-	-	-	-	-
Follow-up Hdwy	3.9	3.9	3.1	-	-	-
Pot Cap-1 Maneuver	118	412	353	-	-	-
Stage 1	181	-	-	-	-	-
Stage 2	587	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	118	412	353	-	-	-
Mov Cap-2 Maneuver	118	-	-	-	-	-
Stage 1	181	-	-	-	-	-
Stage 2	587	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	19.4	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	353	-	118	412	-	-
HCM Lane V/C Ratio	-	-	0.039	0.037	-	-
HCM Control Delay (s)	0	-	36.8	14.1	-	-
HCM Lane LOS	A	-	E	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	0.1	-	-

Intersection												
Int Delay, s/veh	1.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations			↗	↖		↗		↕			↕↕↕	
Traffic Vol, veh/h	0	0	3	45	0	33	0	601	39	30	921	0
Future Vol, veh/h	0	0	3	45	0	33	0	601	39	30	921	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	0	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	0	0	0	0	0	0	0	2	0	0	2	0
Mvmt Flow	0	0	3	52	0	38	0	699	45	35	1071	0
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	-	-	536	1220	-	372	-	0	0	744	0	0
Stage 1	-	-	-	722	-	-	-	-	-	-	-	-
Stage 2	-	-	-	498	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	7.1	6.95	-	6.9	-	-	-	4.1	-	-
Critical Hdwy Stg 1	-	-	-	6.5	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	6.7	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.9	3.65	-	3.3	-	-	-	2.2	-	-
Pot Cap-1 Maneuver	0	0	423	163	0	631	0	-	-	873	-	-
Stage 1	0	0	-	378	0	-	0	-	-	-	-	-
Stage 2	0	0	-	497	0	-	0	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	-	423	149	-	631	-	-	-	873	-	-
Mov Cap-2 Maneuver	-	-	-	149	-	-	-	-	-	-	-	-
Stage 1	-	-	-	378	-	-	-	-	-	-	-	-
Stage 2	-	-	-	444	-	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s	13.6		28.8		0		0.6					
HCM LOS	B		D									
Minor Lane/Major Mvmt	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR				
Capacity (veh/h)	-	-	423	149	631	873	-	-				
HCM Lane V/C Ratio	-	-	0.008	0.351	0.061	0.04	-	-				
HCM Control Delay (s)	-	-	13.6	41.7	11.1	9.3	0.3	-				
HCM Lane LOS	-	-	B	E	B	A	A	-				
HCM 95th %tile Q(veh)	-	-	0	1.4	0.2	0.1	-	-				

HCM 6th TWSC
4: II 62 & RI/RO Access

12/06/2018

Intersection

Int Delay, s/veh 0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑			↑
Traffic Vol, veh/h	0	1438	882	55	0	47
Future Vol, veh/h	0	1438	882	55	0	47
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	Free	-	Stop
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	0	2	7	0	0	0
Mvmt Flow	0	1672	1026	64	0	55

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	-	0	- 0 - 513
Stage 1	-	-	- - -
Stage 2	-	-	- - -
Critical Hdwy	-	-	- - 6.9
Critical Hdwy Stg 1	-	-	- - -
Critical Hdwy Stg 2	-	-	- - -
Follow-up Hdwy	-	-	- - 3.3
Pot Cap-1 Maneuver	0	-	0 0 512
Stage 1	0	-	0 0 -
Stage 2	0	-	0 0 -
Platoon blocked, %	-	-	
Mov Cap-1 Maneuver	-	-	- - 512
Mov Cap-2 Maneuver	-	-	- - -
Stage 1	-	-	- - -
Stage 2	-	-	- - -

Approach	EB	WB	SB
HCM Control Delay, s	0	0	12.9
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	SBLn1
Capacity (veh/h)	-	-	512
HCM Lane V/C Ratio	-	-	0.107
HCM Control Delay (s)	-	-	12.9
HCM Lane LOS	-	-	B
HCM 95th %tile Q(veh)	-	-	0.4

Capacity Analysis Summary Sheets
Projected Weekday Evening Peak Hour Conditions

Lanes, Volumes, Timings
3: New Wilke Road & Il 62

12/05/2018

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	162	885	84	42	937	240	298	632	62	255	400	133
Future Volume (vph)	162	885	84	42	937	240	298	632	62	255	400	133
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	90		0	200		0	100		0	0		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	160			230			230			245		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor		1.00			1.00		1.00	1.00		1.00	0.99	
Frt		0.987			0.969			0.987			0.963	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1787	3432	0	1805	3423	0	1805	3527	0	1770	3416	0
Flt Permitted	0.069			0.176			0.196			0.134		
Satd. Flow (perm)	130	3432	0	334	3423	0	372	3527	0	250	3416	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		40			40			40			40	
Link Distance (ft)		405			200			216			136	
Travel Time (s)		6.9			3.4			3.7			2.3	
Confl. Peds. (#/hr)			8			8	6		1	1		6
Confl. Bikes (#/hr)												
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	4%	0%	0%	2%	1%	0%	1%	0%	2%	1%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	172	1030	0	45	1252	0	317	738	0	271	567	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6			8			4		
Detector Phase	5	2		1	6		3	8		7	4	
Switch Phase												
Minimum Initial (s)	3.0	15.0		3.0	15.0		3.0	8.0		3.0	8.0	
Minimum Split (s)	6.5	21.0		6.5	21.0		6.5	14.0		6.5	14.0	
Total Split (s)	22.4	63.0		12.6	53.2		28.0	42.0		22.4	36.4	
Total Split (%)	16.0%	45.0%		9.0%	38.0%		20.0%	30.0%		16.0%	26.0%	
Yellow Time (s)	3.5	4.5		3.5	4.5		3.5	4.5		3.5	4.5	
All-Red Time (s)	0.0	1.5		0.0	1.5		0.0	1.5		0.0	1.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.5	6.0		3.5	6.0		3.5	6.0		3.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	
Act Effect Green (s)	74.2	62.8		64.2	54.5		57.7	34.3		52.0	30.9	
Actuated g/C Ratio	0.53	0.45		0.46	0.39		0.41	0.24		0.37	0.22	

Lanes, Volumes, Timings

3: New Wilke Road & Il 62

12/05/2018

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.75	0.67		0.20	0.94		0.84	0.86		0.92	0.75	
Control Delay	49.9	34.4		19.5	55.7		49.2	61.2		73.3	58.2	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	49.9	34.4		19.5	55.7		49.2	61.2		73.3	58.2	
LOS	D	C		B	E		D	E		E	E	
Approach Delay		36.6			54.4			57.6			63.1	
Approach LOS		D			D			E			E	
Queue Length 50th (ft)	101	403		20	588		195	334		185	253	
Queue Length 95th (ft)	180	497		41	#810		#301	413		#357	326	
Internal Link Dist (ft)		325			120			136			56	
Turn Bay Length (ft)	90			200			100					
Base Capacity (vph)	292	1538		253	1332		407	906		298	759	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.59	0.67		0.18	0.94		0.78	0.81		0.91	0.75	

Intersection Summary

Area Type: Other

Cycle Length: 140

Actuated Cycle Length: 140

Offset: 22.5 (16%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.94

Intersection Signal Delay: 52.0

Intersection LOS: D

Intersection Capacity Utilization 93.0%

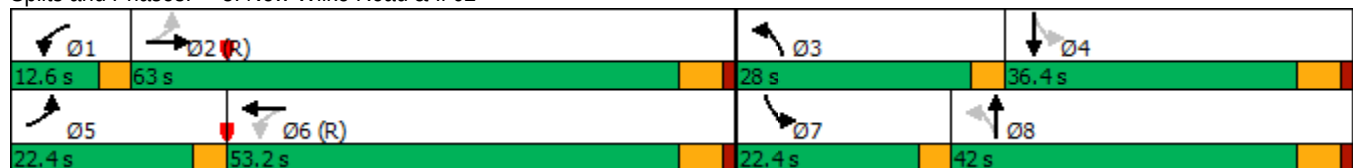
ICU Level of Service F

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 3: New Wilke Road & Il 62



HCM 6th TWSC

1: New Wilke Road & North Mobil Drive

12/06/2018

Intersection

Int Delay, s/veh 0.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	5	5	0	1025	763	21
Future Vol, veh/h	5	5	0	1025	763	21
Conflicting Peds, #/hr	0	0	3	0	0	3
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	1	1	0
Mvmt Flow	5	5	0	1090	812	22

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	1371	420	837
Stage 1	826	-	-
Stage 2	545	-	-
Critical Hdwy	6.25	7.1	5.3
Critical Hdwy Stg 1	6.6	-	-
Critical Hdwy Stg 2	5.8	-	-
Follow-up Hdwy	3.65	3.9	3.1
Pot Cap-1 Maneuver	169	502	475
Stage 1	320	-	-
Stage 2	534	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	168	501	474
Mov Cap-2 Maneuver	168	-	-
Stage 1	319	-	-
Stage 2	532	-	-

Approach	EB	NB	SB
HCM Control Delay, s	19.7	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	474	-	168	501	-	-
HCM Lane V/C Ratio	-	-	0.032	0.011	-	-
HCM Control Delay (s)	0	-	27.1	12.3	-	-
HCM Lane LOS	A	-	D	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	0	-	-

Intersection												
Int Delay, s/veh	1.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	8	34	0	33	0	992	42	22	746	0
Future Vol, veh/h	0	0	8	34	0	33	0	992	42	22	746	0
Conflicting Peds, #/hr	0	0	0	0	0	0	3	0	0	0	0	3
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	0	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0	0	1	0	0	1	0
Mvmt Flow	0	0	9	36	0	35	0	1055	45	23	794	0
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	-	-	400	1442	-	550	-	0	0	1100	0	0
Stage 1	-	-	-	1078	-	-	-	-	-	-	-	-
Stage 2	-	-	-	364	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	7.1	6.95	-	6.9	-	-	-	4.1	-	-
Critical Hdwy Stg 1	-	-	-	6.5	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	6.7	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.9	3.65	-	3.3	-	-	-	2.2	-	-
Pot Cap-1 Maneuver	0	0	517	116	0	484	0	-	-	642	-	-
Stage 1	0	0	-	232	0	-	0	-	-	-	-	-
Stage 2	0	0	-	599	0	-	0	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	-	516	108	-	484	-	-	-	642	-	-
Mov Cap-2 Maneuver	-	-	-	108	-	-	-	-	-	-	-	-
Stage 1	-	-	-	232	-	-	-	-	-	-	-	-
Stage 2	-	-	-	551	-	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s	12.1		34		0		0.5					
HCM LOS	B		D									
Minor Lane/Major Mvmt	NBT		NBR		EBLn1WBLn1WBLn2		SBL	SBT	SBR			
Capacity (veh/h)	-		-		516 108 484		642	-	-			
HCM Lane V/C Ratio	-		-		0.016 0.335 0.073		0.036	-	-			
HCM Control Delay (s)	-		-		12.1 54.3 13		10.8	0.2	-			
HCM Lane LOS	-		-		B F B		B	A	-			
HCM 95th %tile Q(veh)	-		-		0.1 1.3 0.2		0.1	-	-			

HCM 6th TWSC
4: II 62 & RI/RO Access Drive

12/06/2018

Intersection

Int Delay, s/veh 0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑			↑
Traffic Vol, veh/h	0	1202	1182	40	0	37
Future Vol, veh/h	0	1202	1182	40	0	37
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	Free	-	Stop
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	0	4	2	0	0	0
Mvmt Flow	0	1279	1257	43	0	39

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	-	0	- 0 - 629
Stage 1	-	-	- - -
Stage 2	-	-	- - -
Critical Hdwy	-	-	- - 6.9
Critical Hdwy Stg 1	-	-	- - -
Critical Hdwy Stg 2	-	-	- - -
Follow-up Hdwy	-	-	- - 3.3
Pot Cap-1 Maneuver	0	-	- 0 0 430
Stage 1	0	-	- 0 0 -
Stage 2	0	-	- 0 0 -
Platoon blocked, %	-	-	
Mov Cap-1 Maneuver	-	-	- - 430
Mov Cap-2 Maneuver	-	-	- - -
Stage 1	-	-	- - -
Stage 2	-	-	- - -

Approach	EB	WB	SB
HCM Control Delay, s	0	0	14.2
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	SBLn1
Capacity (veh/h)	-	-	430
HCM Lane V/C Ratio	-	-	0.092
HCM Control Delay (s)	-	-	14.2
HCM Lane LOS	-	-	B
HCM 95th %tile Q(veh)	-	-	0.3



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: 1650 W Algonquin Rd – 7-11 Gas Station & Convenience Store – SUP for Gas Station
PC#: 18-026 – Round 1
Date: Dec. 28, 2018

General Comments:

The information provided is conceptual only and subject to a formal plan review.

Sam –

A permit from the Office of the State Fire Marshal is required for the project.



**Village of Arlington Heights, IL
Department of Building & Life Safety**

Fire Safety Division

Date: 12/11/2018

P.C. Number: 18-026

Project Name: SUP for Gas Station

Project Location: 1650 W. Algonquin Rd.

Planning Department Contact: Sam Hubbard, Planning and Community Development

General Comments:

The information provided is conceptual only and subject to a formal plan review.

1. All currently adopted codes shall apply.
2. Fire department connections shall be located on the street side of buildings, fully visible and located at the main front entrance of the building and within a maximum travel distance of 100 feet to the nearest fire hydrant and in accordance with the NFPA standard applicable to the system design. The location of fire department connections shall be approved.
3. A complete NFPA compliant fire suppression system is required. Supervised indicating control valves shall be provided at the point of connection to the riser on each floor.
4. Fire protection equipment and service rooms shall be identified in an approved manner.
5. Approved access shall be provided and maintained for all fire protection equipment to permit immediate safe operation and maintenance of such equipment.
6. A fully functional fire alarm shall be installed per NFPA 72. The alarm annunciator panel shall be located at the front entrance.
7. Shop drawings for fire alarm systems shall be submitted for review and approval prior to system installation.
8. Visible alarm notification appliances shall be provided in public areas and common areas. A visible exterior weatherproof alarm notification device shall be located within closest proximity to the front main entrance of the building or tenant space.
9. A zoning indicator panel and the associated controls, or, fire alarm control panel shall be located within the closest proximity to the front main entrance.
10. A key box (Know Box) shall be provided and contain keys to gain necessary access as required by the fire code official.
11. Exit signs shall be illuminated at all times and have emergency power backup.
12. Buildings shall have approved address numbers.

Date 12-11-18

Reviewed By: _____


Fire Safety Supervisor

Memorandum

To: Sam Hubbard, Planning & Community Development
From: Cris Papierniak, Assistant Director of Public Works
Date: December 13, 2018
Subject: 1650 W Algonquin Rd P.C. #18-026 Round 1



With regard to the proposed SUP for Gas Station, I have the following comment:

- 1) The proposed 4" water line must be metered as it enters the building. It cannot enter on the west side of the building and connect to a meter on the east side.
- 2) An RPZ will be required if an irrigation system is installed. It will need to be installed on the irrigation supply line.
- 3) Water meter(s) and RPZ(s) will be sized once the plumbing plans have been submitted.
- 4) The proposed pressure connection to the existing 12" water main must be encompassed within a 60" vault.
- 5) The storm drain as designed shows collecting storm water from the pump area. You need to provide protection assurances (triple trap with automatic shut offs) that will prevent petroleum products from entering the Village storm system.
- 6) What are the plans for storm detention?
- 7) The southeast corner shows a shared access to adjacent site and leading to grass. How will this be designed with new property use?
- 8) You need to remove and replace any sidewalk serving the property that does not drain properly or is damaged due to construction.

If you have any questions, please feel free to contact me.

C. file

PETITIONER'S APPLICATION - ARLINGTON HEIGHTS PLAN COMMISSION

Petition #: P.C. 18-026
 Petitioner: Vequity LLC 8115 XLVII
 Owner: Michael Graham
 Contact Person: Kim Ward
 Address: 400 N. State Suite 400
Chicago, IL 60654
 Phone #: 312.925.0987
 Fax #: _____
 E-Mail: K.WARD@vequity.com

08
 P.I.N.# 08-08-401-028
 Location: USD W. Algonquin
 Rezoning: _____ Current: B-2 Proposed: B-2
 Subdivision: Lot 35 Section 8
 # of Lots: _____ Current: _____ Proposed: _____
 PUD: _____ For: _____
 Special Use: _____ For: GIAS
 Land Use Variation: _____ For: _____
 Land Use: _____ Current: GIAS
 Proposed: GIAS
 Site Gross Area: 29,313 SF
 # of Units Total: _____
 1BR: _____ 2BR: _____ 3BR: _____ 4BR: _____

(Petitioner: Please do not write below this line.)

1. PUBLIC IMPROVEMENTS

REQUIRED: _____ YES NO COMMENTS

a. Underground Utilities

Water _____ NO

Sanitary Sewer _____ NO

Storm Sewer _____ NO

b. Surface Improvement

Pavement _____ NO

Curb & Gutter _____ NO

Sidewalks _____ NO

Street Lighting _____ NO

c. Easements

Utility & Drainage _____ YES*

Access _____ YES

SEE COMMENTS

2. PERMITS REQUIRED OTHER THAN VILLAGE:

a. MWRDGC _____ X

b. IDOT _____ X

c. ARMY CORP _____

d. IEPA _____

e. CCHD _____

3. R.O.W. DEDICATIONS? _____

4. SITE PLAN ACCEPTABLE? _____

5. PRELIMINARY PLAT ACCEPTABLE? _____

6. TRAFFIC STUDY ACCEPTABLE? _____

7. STORM WATER DETENTION REQUIRED? _____

8. CONTRIBUTION ORDINANCE EXISTING? _____

9. FLOOD PLAIN OR FLOODWAY EXISTING? ...

10. WETLAND EXISTING? _____

YES NO COMMENTS

NO

NO

N/A

NO

YES

NO

NO

NO

GENERAL COMMENTS ATTACHED

PLANS PREPARED BY: WATERMARK ENB.DATE OF PLANS: 12/7/18

Michael L. Page
 Director
 Village Engineer

12/20/18
 Date

PLAN COMMISSION PC #18-026
7-11 Gas Station and Convenience Store
1650 W Algonquin Rd
SUP for Gas Station
Round 1

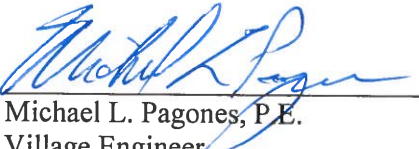
11. The petitioner is notified that these comments are being provided to ensure that the project meets the requirements for submittal to the Plan Commission. Approval by the Plan Commission is not an endorsement or approval of these documents to obtain the required building permits, engineering approval, or permits required by other government or permitting agencies for construction. Detailed plan review with associated comments will be provided upon submittal of plans for a building permit. The petitioner shall acknowledge that they accept this understanding.
12. Final engineering plans shall be georeferenced by using State Plane Coordinate System – Illinois East. Below are details about projection:

Projected Coordinate System:	NAD_1983_StatePlane_Illinois_East_FIPS_1201_Feet
Projection:	Transverse_Mercator
False_Easting:	984250.00000000
False_Northing:	0.00000000
Central_Meridian:	-88.33333333
Scale_Factor:	0.99997500
Latitude_Of_Origin:	36.66666667
Linear Unit:	Foot_US
Geographic Coordinate System:	GCS_North_American_1983
Datum:	D_North_American_1983
Prime Meridian:	Greenwich
Angular Unit:	Degree
13. Detention is required for the site, and an MWRD permit will be required. The proposed detention/retention facility will be a private system and as such will not be the Village's responsibility to maintain. An Onsite Utility Maintenance Agreement must be executed prior to final engineering approval. Please contact the Village for an editable version of the OUMA.
14. Final approval will require final engineering plans including detention calculations showing HWL, storage required, storage provided, and restrictor sizing calculations. Any detention storage system located under pavement must be designed to AASHTO HS-25 loading standard. The Village's allowable release rate is 0.18 cfs/Ac. Use C=0.50 for pervious areas, C=0.95 for impervious areas. Use Bulletin 70 rainfall data. Clearly show the overflow route for the site. Minimum restrictor size allowed, for maintenance reasons, is 2". Restrictors between 2" and 4" must be in a trap in a catch basin. Show the location and size of the restrictor. Provide a detail showing the restrictor catch basin. If the restrictor required to meet the allowable release rate is less than 2", calculate the amount of detention storage provided with a 2" restrictor. Subtract this amount from the required storage based on the allowable release rate to show the storage deficiency. This deficiency can be paid as money in lieu of detention at the rate of \$1.00 per cubic foot.

15. The preliminary plans show the storm sewer connecting to New Wilke Rd and do not provide details of the sanitary sewer connection for the new building. Since the submittal Watermark Engineering has been made aware that the existing sewer along New Wilke Rd is a sanitary sewer, not a storm sewer. The plans must be revised. Provide all rims and inverts for the proposed sanitary and storm sewer. The Public Works Department Superintendent of Utilities will provide additional information as to the ownership of the sanitary sewer on New Wilke Rd. In the event the petitioner will be constructing a storm sewer and/or sanitary sewer across the adjacent vacant parcel to connect to the Village utilities, provide the necessary easements.
16. Provide an exhibit to engineering scale showing the turning path of the Fire Department's responding vehicle, in this case the tower truck. Exhibit must show front and rear wheel paths and the extent of the front and rear overhangs, as provided in an "Autoturn" exhibit. The vehicle shall be shown maneuvering through the site in all possible directions of travel. Attached are the specifications for the tower apparatus.
17. Fire lanes adjacent to buildings must have a minimum pavement width as directed by the Fire Department to accommodate the tower truck's outriggers. Fire lanes require a heavy duty pavement section. Asphalt pavement section to consist of: 2" Surface, 2-1/4" N-50 Binder, 5" N-50 Binder, and 4" CA-6 Stone Subbase. Concrete driveway apron to be 8" thick.
18. All right-of-way improvements along Algonquin Rd shall be reviewed and approved by the Illinois Department of Transportation (IDOT).
19. The sidewalk through the entrances shall be 8" thick. In the event a traffic control device (stop sign) will be installed at the entrance / exit locations, ADA detectable warning panels shall be installed at the crossing. All ADA related items shall meet the requirements of the Public Rights-of-Way Accessibility Guidelines (PROWAG).
20. The existing sidewalk along the east side of New Wilke Rd is 8 ft wide and is currently designated as a bike path. The Village of Arlington Heights Bicycle and Pedestrian Plan calls for this path to be widened to 10 ft. The sidewalk through the New Wilke Rd entrance / exit should be constructed at 10 ft.
21. Provide a pavement patch detail for the New Wilke Rd entrance / exit. The pavement patch detail for the Algonquin Rd entrance / exit must meet IDOT specifications.
22. Coordinate the cross access with Taco Bell and provide the necessary easement documents.
23. Per Chapter 20, Section 20-106 of the Municipal Code, the applicant shall pay a permit fee for the plan inspection and review. The fee shall be equal to 3% of the approved Engineer's Estimate of Cost for the site development (not the building) and shall be collected prior to approval of the final engineering plans. Please provide an Engineer's Estimate for the site development construction cost.

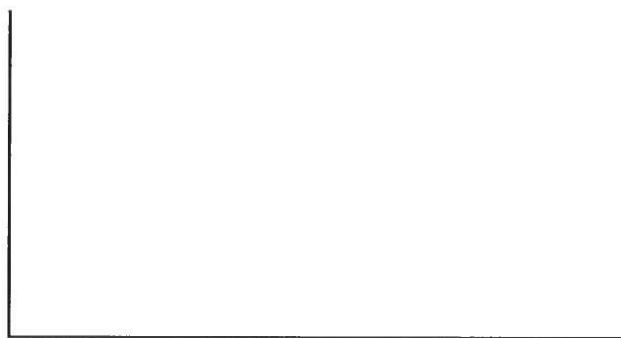
TRAFFIC

24. The petitioner is made aware that there is the possibility of intersection improvements at Algonquin Rd and New Wilke Rd that would involve a new right turn lane for westbound traffic on Algonquin Rd. To construct this right turn lane, right-of-way acquisition and modifications to existing curb, sidewalk, etc. may be needed along the north side of Algonquin Rd that could impact the frontage for 1650 W Algonquin Rd. For the site plan, the petitioner should anticipate the worst case scenario for a new 12' wide lane, 5' wide parkway, 5' wide sidewalk and 1' for the property line to be set form the sidewalk.
 - a. The petitioner should verify with IDOT the minimum setback design criteria for the gas tank.
 - b. The orientation and placement of the canopy and overhand over the gas pumps should account for the potential roadway setback constraints.
25. The traffic report provides the accident history however there is no breakdown about how many collisions might be related to vehicles entering or exiting this site. Has the analysis for the crash reports identified site related accidents?
26. With the current access control along Route 62, the driveway configuration should be constructed to the I.D.O.T. standard for right turn in/out only. Additionally, based upon the turning vehicle volumes in Wilke Road, full access from the Wilke Road driveway may not be assured.
27. The traffic report site generated volumes makes a gross reduction of 60% pass-by trips, but what is this based upon, which study?
28. What is the purpose of the cross access with Taco Bell? The proposed shared access connection to the Taco Bell site immediately adjacent to the Algonquin Road entrance driveway should be evaluated for conflicts.
29. Copies of catalog cuts for all exterior site lighting fixtures must be provided. All pole or building mounted, or under canopy fixtures must be glareless, sharp cut-off, optically controlled fixtures. Diffusing or prismatic lenses may not project below the surface of the fixture to project light laterally, especially on fixtures under the canopy. Based upon the mounting heights of the SA-4, SK3_F5, and EWLS, may also need to be evaluated for glare that may affect homes towards the north.


Michael L. Pagones, P.E. 12/20/18
Village Engineer Date

Attachments:

- Sample OUMA (4 pages)
- Fire Apparatus Tower 131 Specifications (1 page)



ONSITE UTILITY MAINTENANCE AGREEMENT

WHEREAS, _____, an (LLC? Corporation?), or its affiliates, ("RESPONSIBLE ENTITY") is the legal title holder of the following described real estate commonly referred to as _____ (address) _____, Arlington Heights, Illinois, 6000_, containing _____ acres, more or less, situated in the Village of Arlington Heights, Illinois and legally described as follows: (the "PROPERTY"):

*** Insert legal description, or attach as Exhibit A ***

PIN Numbers:

WHEREAS, _____ (print name) _____, ("OWNER") desires to develop the PROPERTY; and

WHEREAS, it is necessary to service said parcel with **sanitary sewers, storm sewers and stormwater management facilities, domestic water mains**; and

WHEREAS, the **sanitary sewers, storm sewers and stormwater management facilities, and domestic water mains** servicing the property are not located within public rights-of-way or dedicated easements; and

WHEREAS, the Village of Arlington Heights ("VILLAGE") does not maintain **sanitary sewers, storm sewers and stormwater management facilities, or domestic water mains** on privately owned property; therefore

1. It is hereby AGREED by the RESPONSIBLE ENTITY, its successors and assigns that at no expense to the VILLAGE, the RESPONSIBLE ENTITY, its successors and assigns shall:

- a. Maintain all sanitary sewers and appurtenances thereunto appertaining located upon said premises, all as shown on the Final Engineering Plans prepared by _____ (Engineering Firm) _____ dated _____, and approved by the VILLAGE, or any amended plans as agreed to and approved by both parties, copies which are on file with the Engineering Department of the VILLAGE.
- b. Maintain the water service line and appurtenances from the valve at the water main to the building.
- c. Maintain all storm sewers and appurtenances, including detention vault, located upon said premises.
- d. Maintain the utilities as itemized above in accordance with the latest edition of the Village of Arlington Heights Municipal Code.
- e. Maintain all private roadways, parking areas, and pavement lighting facilities located on said premises as shown on said Final Engineering Plans in accordance with the latest edition of the Village of Arlington Heights Municipal Code.

2. It is further AGREED that should the RESPONSIBLE ENTITY not properly maintain the aforementioned **sanitary sewers, storm sewers and stormwater management facilities, or domestic water mains** in accordance with the requirements of the VILLAGE, or should they allow a public nuisance to exist, written notification shall be given to the RESPONSIBLE ENTITY advising that after ten (10) days if the RESPONSIBLE ENTITY is not in compliance with the applicable requirements, the VILLAGE is hereby authorized, but not required, to enter upon the property to correct deficiencies and to place a lien against said property until such time that the VILLAGE has been fully reimbursed for its expenses in correcting these deficiencies; and

3. It is further AGREED that, barring a need for immediate action, should the RESPONSIBLE ENTITY not begin corrective action within four (4) hours of notification of an emergency situation where property damage is occurring or is in imminent danger of occurring as a result of dysfunction of the **sanitary sewers, storm sewers and stormwater management facilities, or domestic water mains**, the VILLAGE is hereby authorized, but not required, to enter upon the property to correct deficiencies and to place a lien against said property until such time that the VILLAGE has been fully reimbursed for its expenses in correcting these deficiencies; and

4. It is further AGREED that the RESPONSIBLE ENTITY shall save the VILLAGE harmless from any and all claims for damages resulting from the VILLAGE interrupting service to the property due to the failure of the RESPONSIBLE ENTITY to perpetually maintain the systems as described above and any other claims or damages arising out of this Agreement and the ownership of the facilities described herein.

5. This Agreement shall be binding between all successors and assigns and shall be a covenant running with the land as here and before legally described.

6. This Agreement shall be recorded in Cook County, Illinois.

This Agreement is entered into the _____ day of _____, 20____.

For: _____

Name: _____

Signature: _____

Title: _____

State of Illinois)
) SS
County of Cook)

I, _____, a Notary in and for said County, in the State
aforesaid, CERTIFY that _____ personally known to me to be
the same person whose name is subscribed on the foregoing instrument appeared before me this
day in person and acknowledged that (s)he signed, sealed, and delivered said instrument as their
free and voluntary act, and as the voluntary act of

_____, an (LLC? Corporation?), for the uses and
purposes therein set forth.

GIVEN under my hand and Notarial seal this _____ day of _____, 20____.

Notary Public

For: Village of Arlington Heights,
an Illinois municipal corporation

Name: _____

Signature: _____

Title: _____

State of Illinois)
) SS
County of Cook)

I, _____, a Notary in and for said County, in the State

aforesaid, CERTIFY that _____ personally known to me to be
the same person whose name is subscribed on the foregoing instrument appeared before me this
day in person and acknowledged that (s)he signed, sealed, and delivered said instrument as their
free and voluntary act, and as the voluntary act of the **Village of Arlington Heights, an Illinois
municipal corporation**, for the uses and purposes therein set forth.

GIVEN under my hand and Notarial seal this _____ day of _____, 20____.

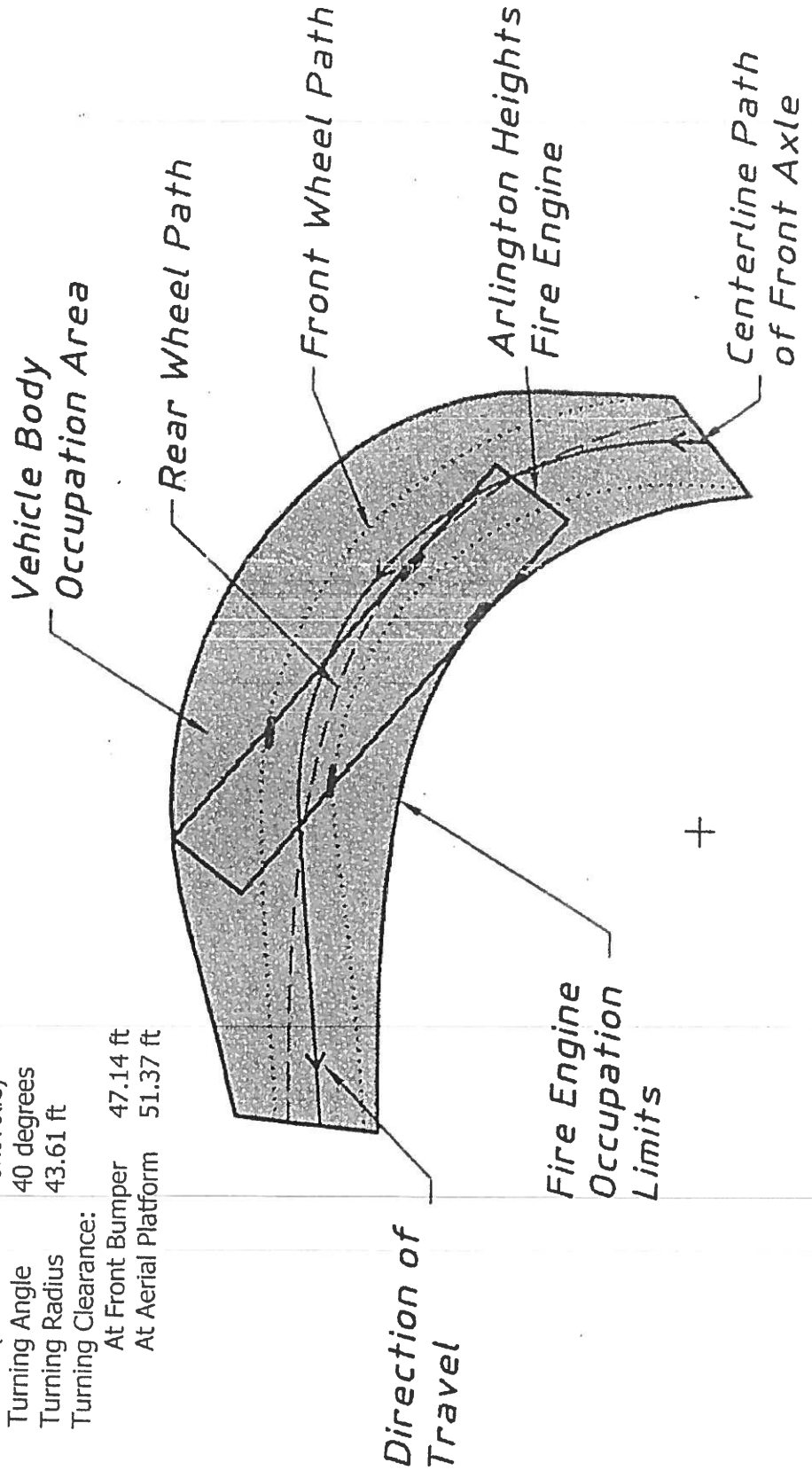
Notary Public

FIRE ENGINE TURNING TEMPLATE

Village of Arlington Heights Tower 131

Scale: 1"=15'

Overall Height	11 ft - 8 in
Overall Length	48 ft - 0 in
Overall Width	8 ft - 6 in
Overall Wheelbase	21 ft - 2 in
Front Overhang	14 ft - 0 in
(Platform to Front Axle)	
Turning Angle	40 degrees
Turning Radius	43.61 ft
Turning Clearance:	
At Front Bumper	47.14 ft
At Aerial Platform	51.37 ft





Arlington Heights Fire Department Plan Review Sheet

P. C. Number 18-026

Project Name

7-11 Gas Station

Project Location

1650 W. Algonquin Road

Planning Department Contact Sam Hubbard

General Comments

Round 1

General Comments:

1) Building is to be sprinkled per code.

2) The Fire Department Connection shall be located at the main front entrance of the building, be fully visible and accessible. It shall be located within a maximum travel distance of 100 feet to the nearest fire hydrant capable of delivering the required fire flows.

3) A Knox Box containing keys to access necessary parts of the building shall be mounted on the main front door of the building.

4) Install a fully operational annunciator panel or alarm panel at the main front entrance door.

**NOTE: PLAN IS CONCEPTUAL ONLY
SUBJECT TO DETAILED PLAN REVIEW**

Date December 13, 2018

Reviewed By:

LT. Mark Aleckson

Arlington Heights Fire Department

ARLINGTON HEIGHTS POLICE DEPARTMENT

Community Services Bureau

DEPARTMENT PLAN REVIEW SUMMARY

7-11 Gas Station/ Convenience Store
1650 W. Algonquin
PC# 18-026
Round 1

Review Comments

12/19/2018

1. Character of use:

The character of use is consistent with the area and is not a concern.

2. Are lighting requirements adequate?

Lighting should be up to Village of Arlington Heights code.

3. Present traffic problems?

There are no apparent traffic problems at this location.

4. Traffic accidents at particular location?

This is not a problem area in relation to traffic accidents.

5. Traffic problems that may be created by the development.

This development should not create any additional traffic problems.

6. General comments:

-Please ensure that there is an emergency information/contact card on file with the Arlington Heights Police Department and that it is up-to-date. Agent contact information must be provided to the Arlington Heights Police Department during all construction phases. The form is attached. Please complete and return. This allows police department personnel to contact an agent during emergency situations or for suspicious/criminal activity on the property during all hours.

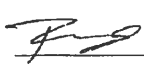
- Landscaping should provide open sightlines to increase natural surveillance and avoid creating ambush locations.

- Consider posting no trespassing / loitering/ no un-authorized use signage. The Arlington Heights Police Dept. has and utilizes trespass warning forms under qualifying circumstances when requested by property management.

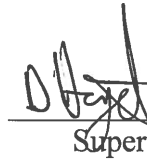
-Recommended to have an alarm system along with signage indicating there is an alarm on premise. Make sure all exterior doors have alarm company security signage clearly displayed.

- Recommended to install cameras (with recording capabilities) on the exterior and interior of store, to include a monitor at the checkout counter so employees have ability to monitor store interior and exterior, specifically by the restrooms. The design around the restroom creates a blind corner. Exterior surveillance should be able to monitor license plates at pumps for drive offs, patrons entering and exiting building, etc.

- Ensure employees have unobstructed views of the aisles- utilizing open floor plan, convex mirrors. Install mirrors in ceiling corners of store to improve visibility within store and down aisles.
- High value merchandise should be kept in secured/locked area behind counter
- Store front windows should be free of large posters and obstructions to increase visibility from outside in and vice versa.
- Recommended to have rear access door (northeast side) relocated so employees can have better view of door to deter theft; or install door buzzer/chimes to alert employee when door is open(ed)
- The exit door adjacent to the restrooms can provide an opportunity for theft. Consider

 #272

Brandi Romag, Crime Prevention Officer
Community Services Bureau

 #557

Supervisor's Signature

Arlington Heights Police Department

Emergency Information Card

1. Fill in all information by tabbing to each field.
2. When completed, save the form and send as an attachment to: policemail@vah.com.

Arlington Heights Police Department
200 E. Sigwalt Street
Arlington Heights, IL 60005-1499
Phone: 847/368-5300

Completed forms may also be printed and submitted in the following manner:

By Mail: Arlington Heights Police Department
200 E. Sigwalt Street, Arlington Heights, IL. 60005
Attention: Police Administration

Print Form (To Mail)

By Fax: (847) 368-5970 - Attention: Police Administration

In Person: Dropped off at the Arlington Heights Police Department's front desk for forwarding to Police Administration.

Name (Firm or Residence)

Address/City

Telephone Number

Date Information Obtained

IN CASE OF EMERGENCY PLEASE CALL:

Contact #1

Name

Address/City

Telephone Number

Cell Number

Contact #2

Name

Address/City

Telephone Number

Cell Number

Alarm System

☐ No

☐ Yes

Phone number:

Alarm Company Name

HEALTH SERVICES DEPARTMENT

6

PETITIONER'S APPLICATION - ARLINGTON HEIGHTS PLAN COMMISSION

Petition #: P.C. 18-026
Petitioner: Vequity LLC 8115 XLVII
Owner: Michael Graham
Contact Person: Kim Ward
Address: 400 N. State St. Suite 410
Chicago, IL 60654
Phone #: 312.985.0987
Fax #:
E-Mail: K.WARD@vequity.com

P.I.N.# 08-08-401-028
Location: 1650 W. Algonquin
Rezoning: Current: B-2 Proposed: B-2
Subdivision: 35
of Lots: Current: Proposed:
PUD: For:
Special Use: For: gas
Land Use Variation: For:
Land Use: Current: gas
Proposed: gas
Site Gross Area: 29,313 sf
of Units Total: 1
1BR: 2BR: 3BR: 4BR:

(Petitioner: Please do not write below this line.)

1. GENERAL COMMENTS:

An exterior grease trap may be required by the Plumbing Inspector. Contact the Building Department for any questions.

Teresa Biline 12-18-18
Environmental Health Officer Date

[Signature] 12/19/18 Direc
tor Date

PETITIONER'S APPLICATION - ARLINGTON HEIGHTS PLAN COMMISSION

Petition #: P.C. 18-026
 Petitioner: Vequity US 8115 XLVII
 Owner: Michael Graham
 Contact Person: Kim Ward
 Address: 400 N. State St. Suite 400
Chicago, IL 60654
 Phone #: 312.935.0907
 Fax #: _____
 E-Mail: K.WARD@vequity.com

P.I.N.# 08-03-401-028
 Location: 1650 W. Algonquin
 Rezoning: _____ Current: B-2 Proposed: B-2
 Subdivision: 35
 # of Lots: _____ Current: _____ Proposed: _____
 PUD: _____ For: _____
 Special Use: _____ For: gas
 Land Use Variation: _____ For: _____
 Land Use: _____ Current: gas
 Proposed: gas
 Site Gross Area: 29,313 sq ft
 # of Units Total: 1
 1BR: _____ 2BR: _____ 3BR: _____ 4BR: _____

(Petitioner: Please do not write below this line.)

- | | YES | NO | |
|----|----------|----------|---|
| 1. | <u>X</u> | _____ | COMPLIES WITH COMPREHENSIVE PLAN? |
| 2. | <u>X</u> | _____ | COMPLIES WITH THOROUGHFARE PLAN? |
| 3. | <u>X</u> | _____ | VARIATIONS NEEDED FROM ZONING REGULATIONS?
(See below.) |
| 4. | _____ | <u>X</u> | VARIATIONS NEEDED FROM SUBDIVISION REGULATIONS?
(See below.) |
| 5. | _____ | <u>X</u> | SUBDIVISION REQUIRED? |
| 6. | _____ | <u>X</u> | SCHOOL/PARK DISTRICT CONTRIBUTIONS REQUIRED?
(See below.) |

Comments:

PLEASE SEE ATTACHED COMMENTS

Sam Auer

12-21-18

Date



Planning & Community Development Dept. Review

December 21, 2018

REVIEW ROUND 1

Project: 7-11 Gas Station
1650 W. Algonquin Rd.

Case Number: PC 18-026

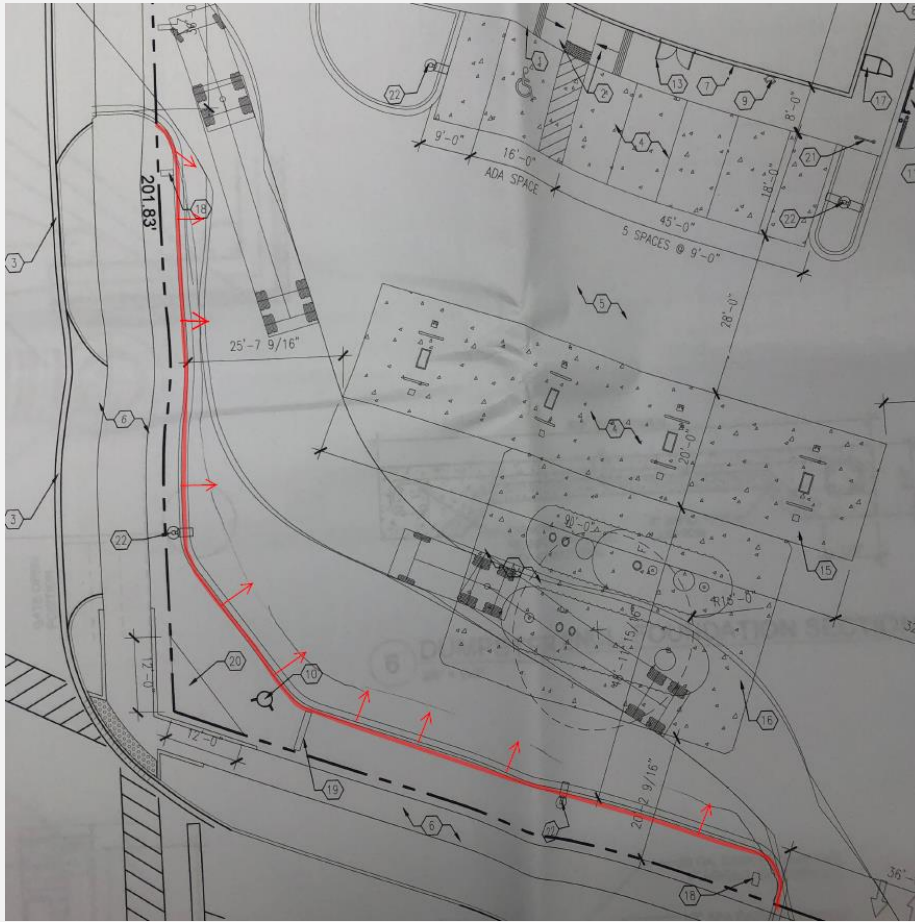
General:

7. The Plan Commission must review and approve the following actions:
 - a. Special Use Permit to allow an "Automobile Service Station".
8. Please note that a meeting with neighboring property owners must take place well in advance of the Plan Commission hearing. Please contact me for details about said meeting.
9. Please revise the project narrative to include information on any proposed green features/sustainable design elements that will be included. If none are proposed, please state such.
10. Are any items proposed for outdoor display/sale (windshield fluid, firewood, ice, propane, salt, etc.)?
11. Please provide additional details on expected deliveries and loading times. While it is understood that, on average, there will be two main deliveries per week, what time do these deliveries typically occur? Please note that deliveries between the hours of 10:00pm and 7:00am shall be prohibited.
12. Please ensure that all plans resubmitted for a second round of review incorporate any changes as required by the Design Commission.
13. On all future revisions, please ensure that all plans and studies include a revision date.

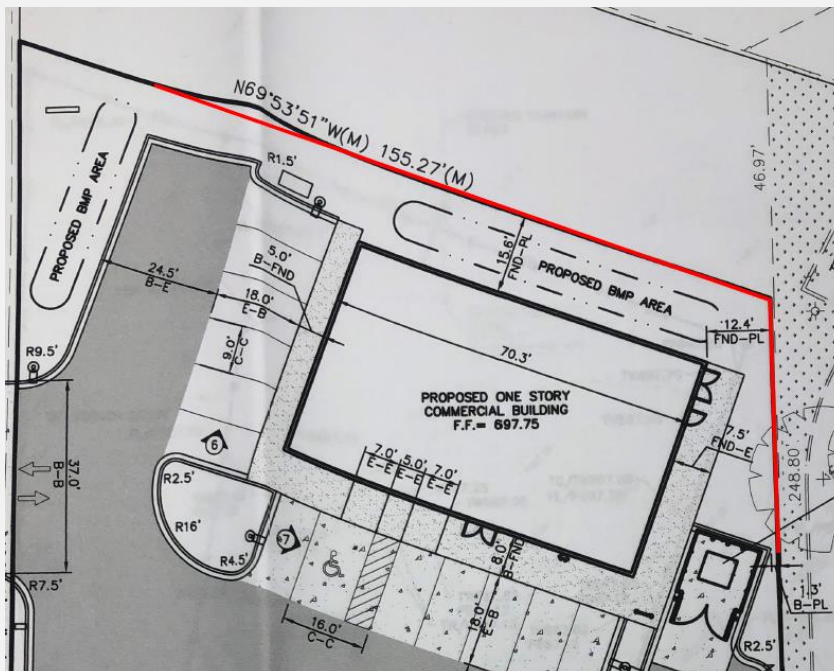
Site/Building Related:

14. Please note that a condition of approval will be required that mandates the property owner enter into and record a shared access agreement with the Taco Bell property owner next door for reciprocal access between the two sites. The recording of this document will be required prior to occupancy on the subject property.
15. Please complete the site analysis table with the proposed building setbacks on sheet AS1.01 as well as the proposed impervious surface coverage and FAR info on the "Site Data" table on sheet C-2.
16. Please confirm the number of bicycle parking spaces within the proposed bicycle parking rack and add a note to the site plan outlining such.
17. The proposed wall pack style lights, as shown on sheet A1.01, are not allowed. Additionally, four such fixtures are proposed on the rear of the building and it is unclear why lighting is necessary along the back of the building. Please note that the elevations do not show these proposed lights. It is recommended that building lights are not provided on this elevation.
18. The dumpster elevation on sheet AS1.02 does not match the elevations as shown on sheet A3.01 and A3.02 relative to the proposed material of the enclosure. Please revise so that both plans are consistent.
19. In anticipation of the future right-turn lane along Algonquin Road, please revise the site plan to push the curb line

along the west, southwest, and south as far in as possible while still preserving adequate space for vehicular access and circulation. Please see the exhibit below for clarification.

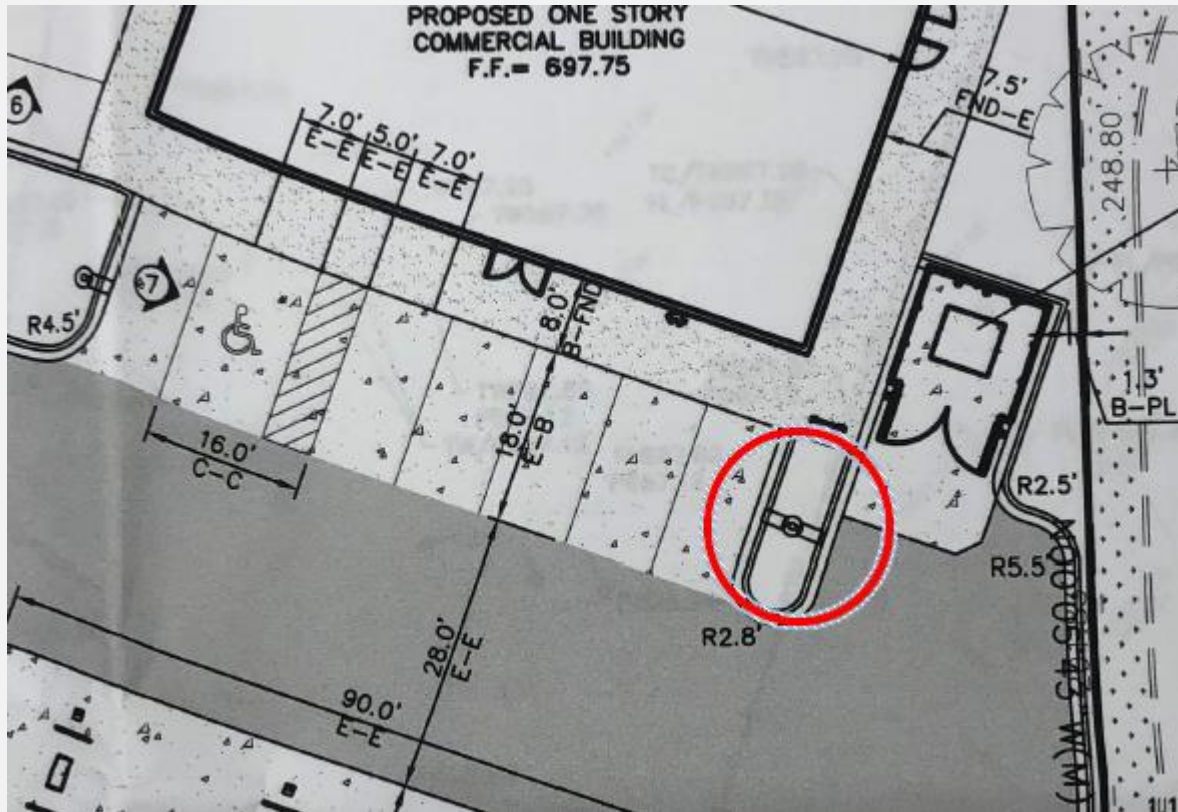


20. Due to concerns from the neighboring residential property owners to the north, combined with the fact that the proposed plan reduces the greenspace/buffer that currently exists at the north of the property, it is recommended that a 6' tall solid fence be provided as indicated below.



Landscaping:

21. A shade tree is required in the landscape island indicated below. Please clarify if a variation is requested, and if so, the necessary justification for a variation must be provided.



22. Please identify any proposed ground mounted mechanical equipment (AC units, generators, transformers, utility pedestals, switchgear, etc.) on the site plans and landscape plans and screen all units appropriately.

Parking/Traffic:

23. The KLOA traffic study states that the Algonquin Road access drive will be a right-in/right-out access drive, however, the site plans show full access to Algonquin Rd. Please clarify and revise the plans accordingly.

Prepared by: Sam J. [Signature]

PLANNING & COMMUNITY DEVELOPMENT DEPARTMENT

7A

PETITIONER'S APPLICATION - ARLINGTON HEIGHTS PLAN COMMISSION

Petition #: P.C. 18-026
 Petitioner: Vequity Series XLVII
1650 W. Algonquin

Owner: Michael Graham

Contact Person: Kim Ward
 Address: 400 N. State St. - Suite 400
Chicago, IL 60654
 Phone #: 312-985-0987
 Fax #: N/A
 E-Mail: k.ward@vequity.com

P.I.N.# 08-08-401-028
 Location: 1650 W. Algonquin Rd.
 Rezoning: — Current: B-2 Proposed: B-2
 Subdivision: —
 # of Lots: — Current: — Proposed: —
 PUD: — For: —
 Special Use: X For: Gas Station
 Land Use Variation: — For: —
 Land Use: — Current: Gas Station
 Proposed: Gas Station
 Site Gross Area: 29,313 sq. ft.
 # of Units Total: —
 1BR: — 2BR: — 3BR: — 4BR: —

(Petitioner: Please do not write below this line.)

LANDSCAPE & TREE PRESERVATION:

1. Complies with Tree Preservation Ordinance
2. Complies with Landscape Plan Ordinance
3. Parkway Tree Fee Required
(See below.)

YES	NO
<u>—</u>	<u>X</u>
<u>—</u>	<u>X</u>
<u>X</u>	<u>—</u>

Comments:

- 1) In order to screen the parking from the residential to the north, provide 6-foot tall upright Junipers along the north property line adjacent to the parking area.
- 2) As part of the landscape plan, please identify the location and quantity for the proposed plant material.
- 3) For the two trees that are proposed for removal, please indicate the size, species and condition.
- 4) If there are any utility meters or mechanical units, they must be screened with landscaping or another appropriate method of screening.
- 5) A landscape compliance bond in the amount of 30% of the landscaping costs will be required at the time of building permit. In addition, a \$4 tree fee is required for each lineal foot of frontage.

[Signature] 12/19/18
 Coordinator Date

ILEKIS ASSOCIATES

Architects + Planners

223 West Jackson Blvd.

Suite 1000

Chicago, Illinois 60606

T 312.419.009

F312.899.0965

www.ilekis.com

January, 15 2019

Village of Arlington Heights

P. C. Number 18-026

RECEIVED
JAN 17 2019
PLANNING & COMMUNITY
DEVELOPMENT DEPARTMENT

FIRE SAFETY DIVISION

1. All currently adopted codes shall apply.

Response: Noted.

2. Fire department connections shall be located on the street side of buildings, fully visible and located at the main front entrance of the building and within a maximum travel distance of 100 feet to the nearest fire hydrant and in accordance with the NFPA standard applicable to the system design. The location of fire department connections shall be approved.

Response: A fire hydrant has been added near the trash enclosure.

3. A complete NFPA compliant fire suppression system is required. Supervised indicating control valves shall be provided at the point of connection to the riser on each floor.

Response: Noted. Fire suppression drawings will be submitted by fire contractor for permit review.

4. Fire protection equipment and service rooms shall be identified in an approved manner.

Response: Noted.

5. Approved access shall be provided and maintained for all fire protection equipment to permit immediate safe operation and maintenance of such equipment.

Response: Noted.

6. A fully functional fire alarm shall be installed per NFPA 72. The alarm annunciator panel shall be located at the front entrance.

Response: Noted. Fire alarm permit drawings will be submitted for permit review at later time.



ILEKIS ASSOCIATES

Architects + Planners

223 West Jackson Blvd.

Suite 1000

Chicago, Illinois 60606

T 312.419.009

F312.899.0965

www.ilekis.com

7. Shop drawings for fire alarm systems shall be submitted for review and approval prior to system installation.

Response: Noted. Will be provided by fire alarm contractor.

8. Visible alarm notification appliances shall be provided in public areas and common areas. A visible exterior weatherproof alarm notification device shall be located within closest proximity to the front main entrance of the building or tenant space.

Response: Noted.

9. A zoning indicator panel and the associated controls, or, fire alarm control panel shall be located within the closest proximity to the front main entrance.

Response: Noted.

10. A key box (Know Box) shall be provided and contain keys to gain necessary access as required by the fire code official.

Response: Noted. Will be provided during permit review process.

11. Exit signs shall be illuminated at all times and have emergency power backup.

Response: Noted. Will be provided during permit review process.

12. Buildings shall have approved address numbers.

Response: Noted.

PUBLIC WORKS DEPARTMENT

- 1) The proposed 4" water line must be metered as it enters the building. It cannot enter on the west side of the building and connect to a meter on the east side.

Response: The water line connection has been moved to the east side of the building as requested.

- 2) An RPZ will be required if an irrigation system is installed. It will need to be installed on the irrigation supply line.

Response: Noted.

ILEKIS ASSOCIATES

Architects + Planners

223 West Jackson Blvd.

Suite 1000

Chicago, Illinois 60606

T 312.419.009

F312.899.0965

www.ilekis.com

- 3) Water meter(s) and RPZ(s) will be sized once the plumbing plans have been submitted.

Response: Noted

- 4) The proposed pressure connection to the existing 12" water main must be encompassed within a 60" vault.

Response: Noted and included

- 5) The storm drain as designed shows collecting storm water from the pump area. You need to provide protection assurances (triple trap with automatic shut offs) that will prevent petroleum products from entering the Village storm system.

Response: A proposed snout with skirt cleaning device has been added to the plan set.

- 6) What are the plans for storm detention?

Response: It will be provided underground

- 7) The southeast corner shows a shared access to adjacent site and leading to grass. How will this be designed with new property use?

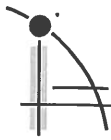
Response: Curb and pavement have been added

- 8) You need to remove and replace any sidewalk serving the property that does not drain properly or is damaged due to construction.

Response: This has been noted and adjusted on the plan set

ENGINEERING DEPARTMENT

11. The petitioner is notified that these comments are being provided to ensure that the project meets the requirements for submittal to the Plan Commission. Approval by the Plan Commission is not an endorsement or approval of these documents to obtain the required building permits, engineering approval, or permits required by other government or permitting agencies for construction. Detailed plan review with associated comments will be provided upon submittal of plans for a building permit.



ILEKIS ASSOCIATES

Architects + Planners

223 West Jackson Blvd.

Suite 1000

Chicago, Illinois 60606

T 312.419.009

F 312.899.0965

www.ilekis.com

The petitioner shall acknowledge that they accept this understanding.

Response: Noted

12. Final engineering plans shall be georeferenced by using State Plane Coordinate System - Illinois East. Below are details about projection:

Projected Coordinate System:

NAD_1983_StatePlane_Illinois_East_FIPS_1201_Feet

Projection: Transverse Mercator

False_Easting: 984250.00000000

False_Northing: 0.00000000

Central Meridian: -88.33333333

Scale Factor: 0.99997500

Latitude_Of_Origin: 36.66666667

Linear Unit: Foot US

Geographic Coordinate System: GCS- North- American- 1983

Datum: D- North- American- 1983

Prime Meridian: Greenwich

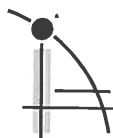
Angular Unit: Degree

Response: Noted

13. Detention is required for the site, and an MWRD permit will be required. The proposed detention/retention facility will be a private system and as such will not be the Village's responsibility to maintain. An Onsite Utility Maintenance Agreement must be executed prior to final engineering approval. Please contact the Village for an editable version of the OUMA.

Response: Noted

14. Final approval will require final engineering plans including detention calculations showing HWL, storage required, storage provided, and restrictor sizing calculations. Any detention storage system located under pavement must be designed to AASHTO HS-25 loading standard. The Village's allowable release rate is 0.18 cfs/Ac. Use C=0.50 for pervious areas, C=0.95 for impervious areas. Use Bulletin 70 rainfall data. Clearly show the overflow route for the site. Minimum restrictor size allowed, for maintenance reasons, is 2". Restrictors between 2" and 4" must be in a trap in a catch basin. Show the location and size of the restrictor. Provide a detail showing the restrictor catch basin. If the restrictor required to meet



ILEKIS ASSOCIATES

Architects + Planners

223 West Jackson Blvd.

Suite 1000

Chicago, Illinois 60606

T 312.419.009

F 312.899.0965

www.ilekis.com

the allowable release rate is less than 2", calculate the amount of detention storage provided with a 2" restrictor. Subtract this amount from the required storage based on the allowable release rate to show the storage deficiency. This deficiency can be paid as money in lieu of detention at the rate of \$1.00 per cubic foot.

Response: This information has been added to the preliminary plan set

15. The preliminary plans show the storm sewer connecting to New Wilke Rd and do not provide details of the sanitary sewer connection for the new building. Since the submittal Watermark Engineering has been made aware that the existing sewer along New Wilke Rd is a sanitary sewer, not a storm sewer. The plans must be revised. Provide all rims and inverts for the proposed sanitary and storm sewer. The Public Works Department Superintendent of Utilities will provide additional information as to the ownership of the sanitary sewer on New Wilke Rd. In the event the petitioner will be constructing a storm sewer and/or sanitary sewer across the adjacent vacant parcel to connect to the Village utilities, provide the necessary easements.

Response: Additional information has been received and rim and invert elevations have been provided

16. Provide an exhibit to engineering scale showing the turning path of the Fire Department's responding vehicle, in this case the tower truck. Exhibit must show front and rear wheel paths and the extent of the front and rear overhangs, as provided in an "Autoturn" exhibit. The vehicle shall be shown maneuvering through the site in all possible directions of travel. Attached are the specifications for the tower apparatus.

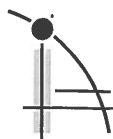
Response: Please refer to sheet AS1.01a for fire truck route.

17. Fire lanes adjacent to buildings must have a minimum pavement width as directed by the Fire Department to accommodate the tower truck's outriggers. Fire lanes require a heavy duty pavement section. Asphalt pavement section to consist of: 2" Surface, 2-1/4" N-50 Binder, 5" N-50 Binder, and 4" CA-6 Stone Subbase. Concrete driveway apron to be 8" thick.

Response: The pavement detail has been updated as requested

18. All right-of-way improvements along Algonquin Rd shall be reviewed and approved by the Illinois Department of Transportation (IDOT).

Response: Noted



ILEKIS ASSOCIATES

Architects + Planners

223 West Jackson Blvd.

Suite 1000

Chicago, Illinois 60606

T 312.419.009

F312.899.0965

www.ilekis.com

19. The sidewalk through the entrances shall be 8" thick. In the event a traffic control device (stop sign) will be installed at the entrance/ exit locations, ADA detectable warning panels shall be installed at the crossing. All ADA related items shall meet the requirements of the Public Rights-of-Way Accessibility Guidelines (PROWAG).

Response: Noted

20. The existing sidewalk along the east side of New Wilke Rd is 8 ft wide and is currently designated as a bike path. The Village of Arlington Heights Bicycle and Pedestrian Plan calls for this path to be widened to 10 ft. The sidewalk through the New Wilke Rd entrance/ exit should be constructed at 10 ft.

Response: Noted and updated

21. Provide a pavement patch detail for the New Wilke Rd entrance / exit. The pavement patch detail for the Algonquin Rd entrance / exit must meet IDOT specifications.

Response: Noted

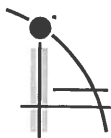
22. Coordinate the cross access with Taco Bell and provide the necessary easement documents.

Response: Noted

23. Per Chapter 20, Section 20-106 of the Municipal Code, the applicant shall pay a permit fee for the plan inspection and review. The fee shall be equal to 3% of the approved Engineer's Estimate of Cost for the site development (not the building) and shall be collected prior to approval of the final engineering plans. Please provide an Engineer's Estimate for the site development construction cost.

Response: Included

24. The petitioner is made aware that there is the possibility of intersection improvements at Algonquin Rd and New Wilke Rd that would involve a new right turn lane for westbound traffic on Algonquin Rd. To construct this right turn lane, right-of-way acquisition and modifications to existing curb, sidewalk, etc. may be needed along the north side of Algonquin Rd



ILEKIS ASSOCIATES

Architects + Planners

223 West Jackson Blvd.

Suite 1000

Chicago, Illinois 60606

T 312.419.009

F312.899.0965

www.ilekis.com

that could impact the frontage for 1650 W Algonquin Rd. For the site plan, the petitioner should anticipate the worst case scenario for a new 12' wide lane, 5' wide parkway, 5' wide sidewalk and 1' for the property line to be set form the sidewalk.

- a. The petitioner should verify with IDOT the minimum setback design criteria for the gas tank.
- b. The orientation and placement of the canopy and overhand over the gas pumps should account for the potential roadway setback constraints.

Response: Noted

25. The traffic report provides the accident history however there is no breakdown about how many collisions might be related to vehicles entering or exiting this site. Has the analysis for the crash reports identified site related accidents?

Response: Due to the close proximity of the access drives to the intersection of Algonquin Road with New Wilke Road, it is difficult to sperate the accidents associated with the intersection from the access drive. It should be noted that the provided accident data numbers include any accident that would have occurred at the access drives in addition to elsewhere at the intersection.

26. With the current access control along Route 62, the driveway configuration should be constructed to the I.D.O.T. standard for right turn in/out only. Additionally, based upon the turning vehicle volumes in Wilke Road, full access from the Wilke Road driveway may not be assured.

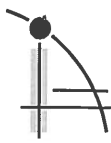
Response: Noted

27. The traffic report site generated volumes makes a gross reduction of 60% pass-by trips, but what is this based upon, which study?

Response: The pass by reduction percent is based on studies performed by ITE as published in the 10th Edition Manual.

28. What is the purpose of the cross access with Taco Bell? The proposed shared access connection to the Taco Bell site immediately adjacent to the Algonquin Road entrance driveway should be evaluated for conflicts.

Response: The City of Arlington Heights had requested the Cross Access with Taco Bell in our preliminary meetings



ILEKIS ASSOCIATES

Architects + Planners

223 West Jackson Blvd.

Suite 1000

Chicago, Illinois 60606

T 312.419.009

F 312.899.0965

www.ilekis.com

29. Copies of catalog cuts for all exterior site lighting fixtures must be provided. All pole or building mounted, or under canopy fixtures must be glareless, sharp cut-off, optically controlled fixtures. Diffusing or prismatic lenses may not project below the surface of the fixture to project light laterally, especially on fixtures under the canopy. Based upon the mounting heights of the SA-4, SK3_FS, and EWLS, may also need to be evaluated for glare that may affect homes towards the north.

Response: Please see attached cut sheets for all exterior lighting.

FIRE DEPARTMENT:

- 1) Building is to be sprinkled per code.

Response: Building will be sprinklered.

- 2) The Fire Department Connection shall be located at the main front entrance of the building, be fully visible and accessible. It shall located within a maximum travel distance of 100 feet to the nearest fire hydrant capable of delivering the required fire flows.

Response: A fire hydrant has been added near the trash enclosure.

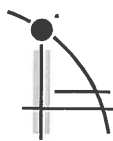
- 3) A Knox Box containing keys to access necessary parts of the building shall be mounted on the main front door of the building.

Response: Noted. Knox box will be provided near main door or as required by fire marshal.

- 4) Install a fully operational annunciator panel or alarm panel at the main front entrance door.

Response: Noted. To be provided by fire alarm contractor for review.

POLICE DEPARTMENT:



ILEKIS ASSOCIATES

Architects + Planners

223 West Jackson Blvd.

Suite 1000

Chicago, Illinois 60606

T 312.419.009

F312.899.0965

www.ilekis.com

1. Character of use:

The character of use is consistent with the area and is not a concern.

2. Are lighting requirements adequate?

Lighting should be up to Village of Arlington Heights code.

3. Present traffic problems?

There are no apparent traffic problems at this location.

4. Traffic accidents at particular location?

This is not a problem area in relation to traffic accidents.

5. Traffic problems that may be created by the development.

This development should not create any additional traffic problems.

6. General comments:

- Please ensure that there is an emergency information/contact card on file with the Arlington Heights Police Department and that it is up-to-date. Agent contact information must be provided to the Arlington Heights Police Department during all construction phases. The form is attached. Please complete and return. This allows police department personnel to contact an agent during emergency situations or for suspicious/criminal activity on the property during all hours.

Response: Noted.

- Landscaping should provide open sightlines to increase natural surveillance and avoid creating ambush locations.

Response: Landscaping in rear of building has been revised to allow sightlines to possible ambush locations.

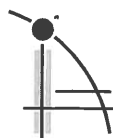
- Consider posting no trespassing / loitering/ no un-authorized use signage. The Arlington Heights Police Dept. has and utilizes trespass warning forms under qualifying circumstances when requested by property management.

Response: Noted.

- -Recommended to have an alarm system along with signage indicating there is an alarm on premise. Make sure all exterior doors have alarm company security signage clearly displayed.

Response: Noted.

- Recommended to install cameras (with recording capabilities) on the exterior and interior of store, to include a monitor at the checkout counter so employees have ability to monitor store interior and exterior, specifically by the restrooms. The design around the restroom



ILEKIS ASSOCIATES

Architects + Planners

223 West Jackson Blvd.

Suite 1000

Chicago, Illinois 60606

T 312.419.009

F312.899.0965

www.ilekis.com

creates a blind corner. Exterior surveillance should be able to monitor license plates at pumps for drive offs, patrons entering and exiting building, etc.

Response: Noted.

- Ensure employees have unobstructed views of the aisles- utilizing open floor plan, convex mirrors. Install mirrors in ceiling corners of store to improve visibility within store and down aisles.

Response: Noted.

- High value merchandise should be kept in secured/locked area behind counter

Response: Noted.

- Store front windows should be free of large posters and obstructions to increase visibility from outside in and vice versa.

Response: Noted.

- Recommended to have rear access door (northeast side) relocated so employees can have better view of door to deter theft; or install door buzzer/chimes to alert employee when door is open(ed)

Response: Noted.

- The exit door adjacent to the restrooms can provide an opportunity for theft. Consider

Response: This exit door will be equipped with alarm.

HEALTH SERVICES DEPARTMENT:

1. An exterior grease trap may be required by the Plumbing Inspector. Contact the Building Department for any questions.

Response: Please see attached cut sheet for grease trap typically used by 7-11.

PLANING & COMMUNITY DEVELOPMENT DEPARTMENT:

General:

7. The Plan Commission must review and approve the following actions:
 - a. Special Use Permit to allow an "Automobile Service Station".

Response: Noted.

ILEKIS ASSOCIATES

Architects + Planners

223 West Jackson Blvd.

Suite 1000

Chicago, Illinois 60606

T 312.419.009

F312.899.0965

www.ilekis.com

8. Please note that a meeting with neighboring property owners must take place well in advance of the Plan Commission hearing. Please contact me for details about said meeting.

Response: Noted.

9. Please revise the project narrative to include information on any proposed green features/sustainable design elements that will be included. If none are proposed, please state such.

Response: Noted & Revised

10. Are any items proposed for outdoor display/sale (windshield fluid, firewood, ice, propane, salt, etc.)?

Response: To be determined by tenant.

11. Please provide additional details on expected deliveries and loading times. While it is understood that, on average, there will be two main deliveries per week, what time do these deliveries typically occur? Please note that deliveries between the hours of 10:00pm and 7:00am shall be prohibited.

Response: Noted.

12. Please ensure that all plans resubmitted for a second round of review incorporate any changes as required by the Design Commission.

Response: All Design Commission comments have been included.

13. On all future revisions, please ensure that all plans and studies include a revision date.

Response: Noted.

Site/Building Related:

14. Please note that a condition of approval will be required that mandates the property owner enter into and record a shared access agreement with the Taco Bell property owner next door for reciprocal access between the two sites. The recording of this document will be required prior to occupancy on the subject property.

Response: Noted.

15. Please complete the site analysis table with the proposed building setbacks on sheet AS1.01 as well as the proposed impervious surface coverage and FAR info on the "Site Data" table on sheet C-2.

ILEKIS ASSOCIATES

Architects + Planners

223 West Jackson Blvd.

Suite 1000

Chicago, Illinois 60606

T 312.419.009

F 312.899.0965

www.ilekis.com

Response: Please refer to sheet AS1.01 for updated table.

16. Please confirm the number of bicycle parking spaces within the proposed bicycle parking rack and add a note to the site plan outlining such.

Response: Please refer to AS1.01 for updated table.

17. The proposed wall pack style lights, as shown on sheet A1.01, are not allowed. Additionally, four such fixtures are proposed on the rear of the building and it is unclear why lighting is necessary along the back of the building. Please note that the elevations do not show these proposed lights. It is recommended that building lights are not provided on this elevation.

Response: Please see attached cut sheets for all light fixtures used on this project. Per email from Sam Hubbard the wall pack fixtures have been reviewed and are approved.

18. The dumpster elevation on sheet AS1.02 does not match the elevations as shown on sheet A3.01 and A3.02 relative to the proposed material of the enclosure. Please revise so that both plans are consistent.

Response: Please see updated sheets.

19. In anticipation of the future right-turn lane along Algonquin Road, please revise the site plan to push the curb line along the west, southwest, and south as far in as possible while still preserving adequate space for vehicular access and circulation. Please see the exhibit below for clarification.

Response: Site plan has been updated in anticipation of the future right turn lane along Algonquin Rd.

20. Due to concerns from the neighboring residential property owners to the north, combined with the fact that the proposed plan reduces the greenspace/buffer that currently exists at the north of the property, it is recommended that a 6' tall solid fence be provided as indicated below.

Response: A 6' tall opaque vinyl fence has been added along the North and part of the East property line.

Landscaping

21. A shade tree is required in the landscape island indicated below. Please clarify if a variation is requested, and if so, the necessary justification for a variation must be provided.

ILEKIS ASSOCIATES

Architects + Planners

223 West Jackson Blvd.

Suite 1000

Chicago, Illinois 60606

T 312.419.009

F312.899.0965

www.ilekis.com

Response: A shade tree has been added to the island.

22. Please identify any proposed ground mounted mechanical equipment (AC units, generators, transformers, utility pedestals, switchgear, etc.) on the site plans and landscape plans and screen all units appropriately.

Response: Plans have been reviewed for any ground mounted equipment and they have been screened.

Parking/Traffic:

23. The KLOA traffic study states that the Algonquin Road access drive will be a right-in/right-out access drive, however, the site plans show full access to Algonquin Rd. Please clarify and revise the plans accordingly.

Response: The plans have been revised to show a right-in/right-out with a 2" high mountable curb to allow for the fuel truck to enter the site.

LANDSCAPE AND TREE PRESERVATION:

1) In order to screen the parking from the residential to the north, provide 6-foot tall upright ::-: Junipers along the north property line adjacent to the parking area.

Response: A 6' Juniper hedge has been added to the North property line. Each evergreen should reach 6' wide x 15' tall.

2) As part of the landscape plan, please identify the location and quantity for the proposed plant material.

Response: As this is a preliminary set of plans for zoning approval, quantity and tags for plant materials are not feasible or typical because of possible changes to the general layout and site plan.

3) For the two trees that are proposed for removal, please indicate the size, species and condition.

Response: Size, condition and identification of the existing trees on-site have been added.

4) If there are any utility meters or mechanical units, they must be screened with landscaping or another appropriate method of screening.

Response: One ground mounted utility pad has been screened.

5) A landscape compliance bond in the amount of 30% of the landscaping costs will be required at the time of building permit. In addition, a \$4 tree

ILEKIS ASSOCIATES

Architects + Planners

223 West Jackson Blvd.

Suite 1000

Chicago, Illinois 60606

T 312.419.009

F312.899.0965

www.ilekis.com

fee is required f ach lineal foot offfrontage.

Response: Noted.



**Village of Arlington Heights, IL
Department of Building & Life Safety**

Fire Safety Division

Date: 1/22/2019

P.C. Number: 18-026 Round 2

Project Name: SUP for Gas Station

Project Location: 1650 W. Algonquin Rd.

Planning Department Contact: Sam Hubbard, Planning and Community Development

General Comments:

The information provided is conceptual only and subject to a formal plan review.

1. Owner should be aware that compliance is required for all requirements regarding the installation of any underground storage tank in addition to those requirements regulating the installation of fuel dispensing equipment by the Village and the State of Illinois Fire Marshal. Response is not required at this time.

Date 01-22-19

Reviewed By:

Fire Safety Supervisor

Memorandum

To: Sam Hubbard, Planning & Community Development
From: Cris Papierniak, Assistant Director of Public Works
Date: January 24, 2019
Subject: 1650 W Algonquin Rd P.C. #18-026 Round 2

With regard to the proposed SUP for Gas Station, I have the following comment:

- 1) The proposed hydrant must be metered. Either feed it from the proposed building (after the water meter) or install a master meter in the Village ROW.
- 2) An RPZ will be required if an irrigation system is installed. Please note this in the landscaping plans calling for a separate irrigation proposal.
- 3) Water meter(s) and RPZ(s) will be sized once the plumbing plans have been submitted. Submit plumbing plans.
- 4) Page C-\$ Water Main Specifications delete the following:
 - a. Comment 1C, delete C-900, PVC is not allowed
 - b. Comment 5, delete Traverse City Hydrant, this company no longer exists
- 5) Provide a detail for the proposed underground detention storage system.
- 6) Provide a maintenance plan for the proposed underground detention storage system.
- 7) The extended drive to Taco Bell must show the proposed asphalt joining their lot with pavement grad details. The plans submitted stops at their landscaping.
- 8) Continue widened bicycle path up to property line including around sanitary structure. This will assure its proper height for shared use path.

If you have any questions, please feel free to contact me.

C. file

Jeff Musinski, Utilities Superintendent

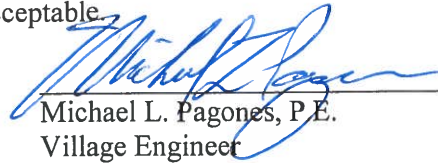
PLAN COMMISSION PC #18-026
7-11 Gas Station and Convenience Store
1650 W Algonquin Rd
SUP for Gas Station
Round 2

30. The petitioner's response to Comments #11, 12 and 13 is acceptable.
31. The petitioner's response to Comment #14 is noted. Regarding the snout oil-grit separator detail shown on sheet C-3 and the restrictor plate detail provided on sheet C-4, a removable hood should be constructed over the outlet pipe. For reference, enclosed is a removal hood detail from the Metropolitan Water Reclamation District (MWRD). If the restrictor is intended to be installed along with the snout oil grit separator, revise the detail accordingly and confirm that it meets the requirements shown in the MWRD detail. Provide the necessary details for the proposed detention storage system located under the pavement, and documentation that it is designed to meet the AASHTO HS-25 loading standard.
32. The petitioner's response to Comment #15 is noted. Since the Round 2 resubmittal, the petitioner has been provided the existing storm and sanitary sewer information along New Wilke Road. At the existing sanitary manhole for the proposed sanitary sewer service connection, show the existing west invert for the 8" clay sanitary sewer. The existing east stub is more than 2 ft above the 15" N/S sanitary sewer and should not be used. Provide a drop manhole service connection. For reference, enclosed is a drop manhole connection detail from the Metropolitan Water Reclamation District. Provide all necessary details for the proposed utilities.
33. The petitioner's response to Comment #16 is not acceptable. Exhibits must be provided showing all possible directions of travel. Provide an additional exhibit showing the vehicle entering the site off of New Wilke Road.
34. The petitioner's response to Comment #17 is acceptable.
35. The petitioner's response to Comment #18 is noted. The Village permit will not be issued until the petitioner obtains the permit from the Illinois Department of Transportation (IDOT) for all work along Algonquin Road.
36. The petitioner's response to Comment #19 is not acceptable. The sidewalk through the entrances shall be 8" thick and shall be carried straight through the driveway with no change of elevation between the driveway and sidewalk. The curb shall stop on either side of the sidewalk. The ADA detectable warning panels at the driveways are required only if there is a traffic control device such as a stop sign. Show proposed signage on the plans. Provide details for all curb ramps and detectable warning panels.
37. The petitioner's response to Comment #20 is acceptable.
38. The petitioner's response to Comment #21 is not acceptable. The pavement patch for New Wilke Road should be revised to reflect the cross section for the heavy duty fire lane cross section. The pavement patch for Algonquin Road must meet IDOT specifications.
39. The petitioner's response to Comment #22 is not acceptable. Coordinate the cross access with Taco Bell and provide the necessary easement documents.

40. The petitioner's response to Comment #23 is not acceptable. Please provide an Engineer's Estimate for the site development construction cost.
41. The proposed water service will be under the proposed storm sewer. Provide a detail of the crossing showing proposed inverts and separation. The storm sewer at the crossing of the water service shall be constructed of water main quality pipe.

TRAFFIC

42. The petitioner's response to Comment #24 noted. To avoid conflicts with the potential new right turn lane for westbound Algonquin Road, the petitioner should verify with IDOT and/or other governing agencies such as IEPA the minimum setback design criteria for the underground gas tank.
43. The petitioner's response to Comment #25 is noted. Although crash data in the Traffic Impact Study dated December 6, 2018 was obtained from the Illinois Department of Transportation for 2012 thru 2016, the petitioner should acquire and analyze the data from the Arlington Heights and Rolling Meadows Police Department to evaluate the past three years.
44. The petitioner's response to Comment #26 is noted. The Traffic Impact Study proposes that the New Wilke Road access drive will provide one inbound lane and two outbound lanes striped to provide an exclusive left-turn and an exclusive right-turn lane under stop control. The Village reserves the right to limit full access for the New Wilke Road access drive, and recommends that there be a stipulation in the final Ordinance for this project. All proposed striping and signage must be shown on the plans.
45. The petitioner's response to Comment #27 is not acceptable. Regarding Table 2, Projected Site-Generated Traffic Volumes, please clarify how the 60% Pass-By Reduction was calculated.
46. The petitioner's response to Comment #28 is noted. Due to the Taco Bell cross access so close to Algonquin Road, the alignment should be reviewed by IDOT for input on signage, striping, etc.
47. The petitioner's response to Comment #29 is acceptable.


Michael L. Pagones, P.E.
Village Engineer

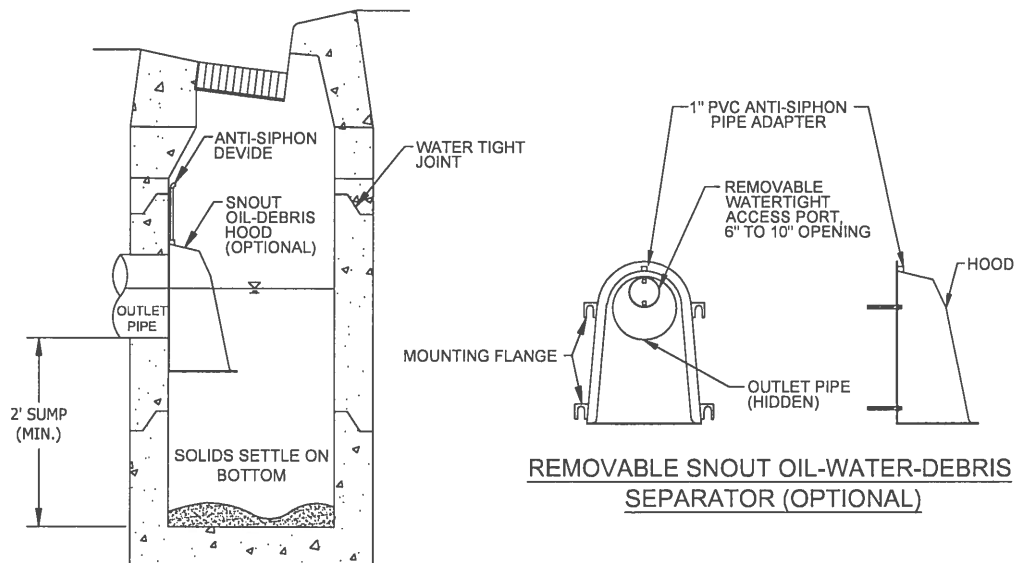
1/25/19
Date

Attachments:

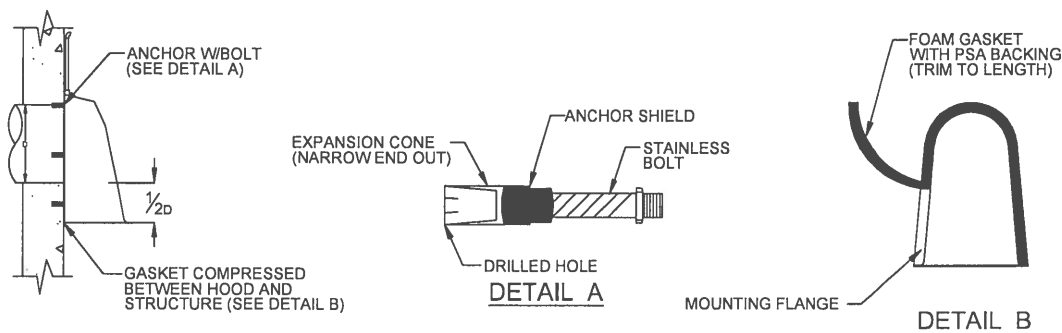
New Wilke at Algonquin Rd Sanitary Sewer atlas
Removable Hood Detail (MWRD)
Typical Drop Manhole Connection (MWRD)

Final Engineering:

\$1,372.46 Fee in Lieu (calculations dated January 15, 2019 Round 2 submittal)



CATCH BASIN WITH OPTIONAL HOOD



OUTLET PIPE

NOTES:

1. ALL HOODS SHALL BE CONSTRUCTED OF A FIBERGLASS REINFORCED RESIN COMPOSITE WITH ISO GEL COAT EXTERIOR FINISH WITH A MINIMUM 0.125" LAMINATE THICKNESS.
2. ALL HOODS SHALL BE EQUIPPED WITH A WATERTIGHT ACCESS PORT, A MOUNTING FLANGE, AND AN ANTI-SIPHON VENT PIPE AND ELBOW AS DRAWN. (SEE CONFIGURATION DETAIL).
3. THE SIZE AND POSITION OF THE HOOD SHALL BE DETERMINED BY OUTLET PIPE SIZE AS PER MANUFACTURER'S RECOMMENDATION (SNOOT SIZE ALWAYS LARGER THAN PIPE SIZE).
4. THE BOTTOM OF THE HOOD SHALL EXTEND DOWNWARD A MINIMUM DISTANCE EQUAL TO $\frac{1}{2}$ THE OUTLET PIPE DIAMETER WITH A MINIMUM DISTANCE OF 6" FOR PIPES < 12" I.D.
5. THE ANTI-SIPHON VENT SHALL EXTEND ABOVE HOOD BY MINIMUM OF 3" AND A MAXIMUM OF 12" ACCORDING TO STRUCTURE CONFIGURATION.
6. THE SURFACE OF THE STRUCTURE WHERE THE HOOD IS MOUNTED SHALL BE FINISHED SMOOTH AND FREE OF LOOSE MATERIAL AND PIPE SHALL BE FINISHED FLUSH TO WALL.
7. THE REMOVABLE HOOD SHALL BE ATTACHED TO THE STRUCTURE WITH THE SLOTTED TABS MOUNTED OVER $\frac{3}{8}$ " STAINLESS STEEL BOLTS AND OIL-RESISTANT GASKETS.
8. POSITION HOOD SUCH THAT BOTTOM FLANGE IS AT A DISTANCE OF $\frac{1}{2}$ " OUTLET PIPE DIAMETER (MIN.) BELOW THE PIPE INVERT. MINIMUM DISTANCE FOR PIPES < 12" I.D. IS 6".
9. RESTRICTOR AND SNOOT WHEN PAIRED SHOULD BE INSTALLED IN SUCH A WAY THAT RESTRICTOR AND SNOOT REMAIN INSPECTABLE.
10. RESTRICTOR AND SNOOT HOOD SHALL BE CURVED TO INSIDE RADIUS OF STRUCTURE AND WATERTIGHT.

NOT TO SCALE



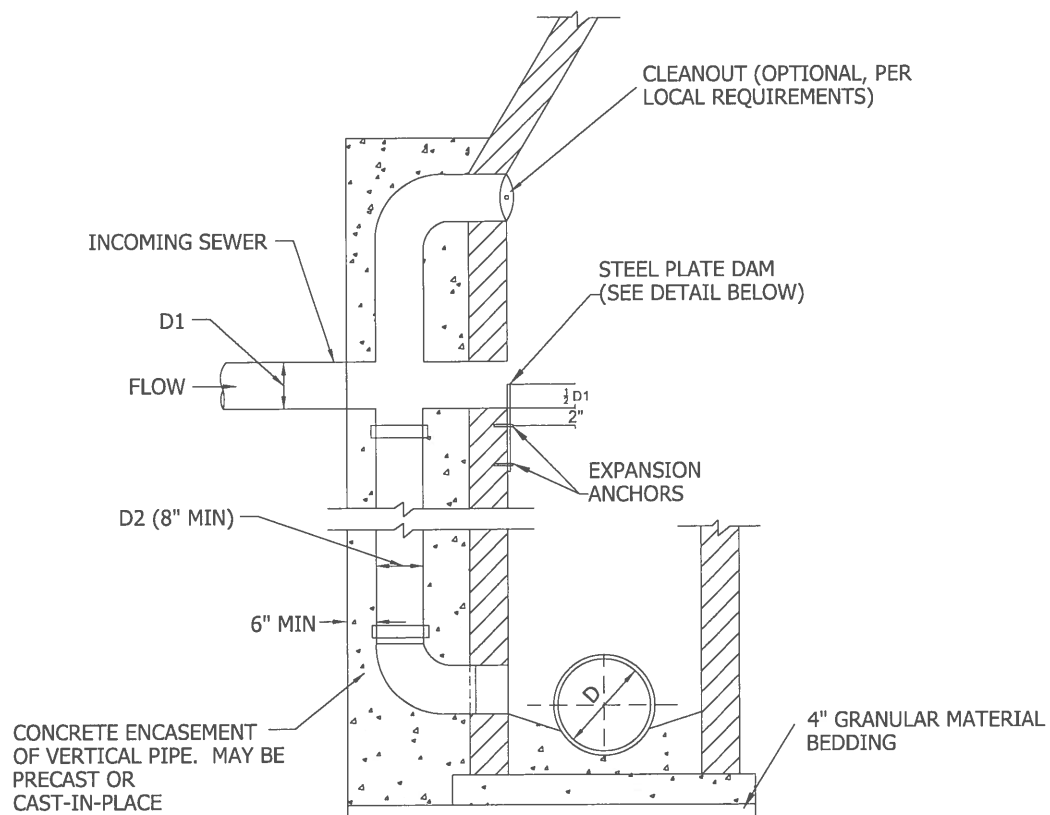
TECHNICAL GUIDANCE MANUAL

REMOVABLE HOOD basin and water
quality structure DETAIL

7/1/15

STD. DWG. NO.11

PAGE NO. 12

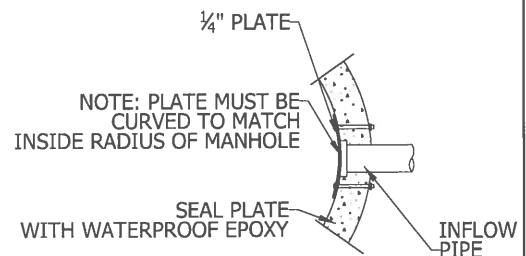
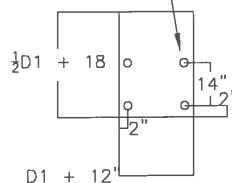


NOTES:

1. REQUIRED FOR 2FT. OR GREATER DROP TO SANITARY OR COMBINED SEWER.
2. MINIMUM WALL THICKNESS IS 6" FOR CAST IN PLACE CONCRETE STRUCTURES AND 1/12 MANHOLE DIAMETER FOR PRECAST CONCRETE STRUCTURES.
3. CONCRETE FOR ENCASEMENT SHALL BE 4,000 PSI @ 28 DAYS.
4. FORCEMAIN FLOW NOT ALLOWED AS INCOMING SEWER, SEE FORCEMAIN DISCHARGE DETAIL.

DIAMETER (INCHES)	
D1	D2
6	8
8	8
10	8
12	8
15	10
18	12
21	15
24	18

(4) 1/2" DIA.
EXPANSION
ANCHORS
WITH WASHERS &
HEX NUTS



STEEL PLATE DAM

NOTES:

1. PLATE AND FASTENERS MUST BE FABRICATED IN STAINLESS STEEL, DUCTILE IRON, OR EQUIVALENT WATERPROOF/WEATHER PROOF MATERIALS.
2. BOLTS TACK WELDED TO PLATE.
3. ANCHOR EMBEDMENT: 3" MIN.

NOT TO SCALE



Arlington Heights Fire Department Plan Review Sheet

ARLINGTON HEIGHTS POLICE DEPARTMENT

Community Services Bureau

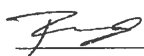
DEPARTMENT PLAN REVIEW SUMMARY

7-11 Gas Station/ Convenience Store
1650 W. Algonquin
PC# 18-026
Round 2

Review Comments

01/31/2019

1. **Character of use:**
Nothing Further.
2. **Are lighting requirements adequate?**
Nothing Further.
3. **Present traffic problems?**
Nothing Further.
4. **Traffic accidents at particular location?**
Nothing Further.
5. **Traffic problems that may be created by the development.**
Nothing Further.
6. **General comments:**
Nothing Further.

 #272

Brandi Romag, Crime Prevention Officer
Community Services Bureau



Planning & Community Development Dept. Review

January 23, 2019

REVIEW ROUND 2

Project: 7-11 Gas Station
1650 W. Algonquin Rd.

Case Number: PC 18-026

24. Your response to comment #8, #9, #12-#18, #20, #23 are acceptable.

25. Your response to comment #7 is noted. Please note that the following approvals will be required:

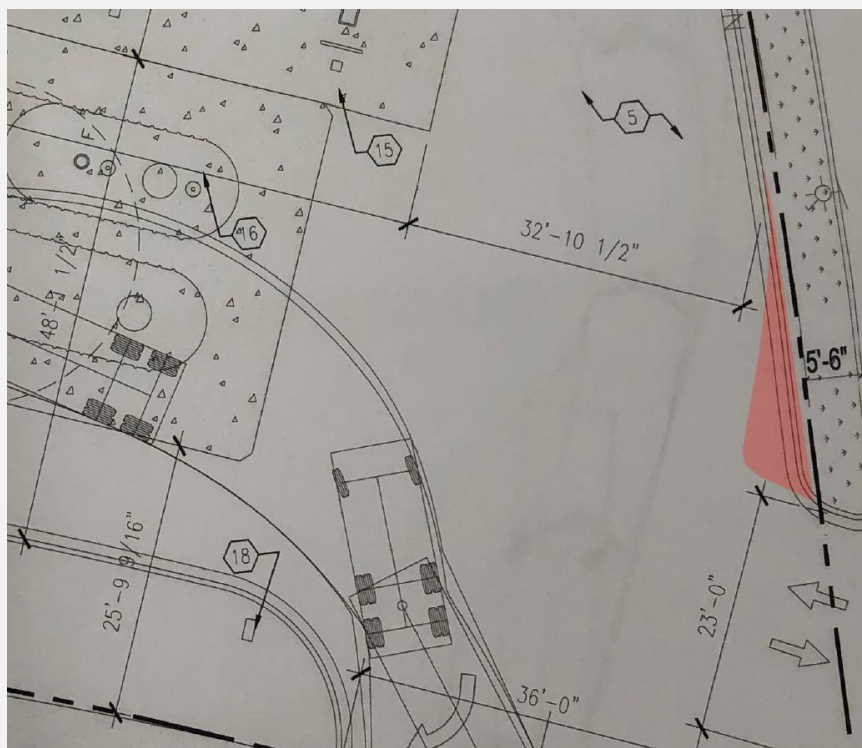
- a. Special Use Permit to allow an "Automobile Service Station with a Convenience Store".
- b. Variation to Chapter 28, Section 10.2-8, to reduce the required driveway width from 24' to 23'.

Please provide the required written justification for the driveway variation as per the four standards within the zoning code, summarized at the end of this review for reference.

26. The response to comment #10 is noted. Please inform your tenant that outdoor storage of merchandise for sale is not allowed per the regulations in Section 5.1-11.4f of the Zoning Code.

27. The response to comment #11 is unacceptable. Communicate with your tenant to understand the typical anticipated delivery times and provide this information.

28. Your response to comment #19 is noted. A condition of approval will be recommended that will require revisions to the site plan to provide additional greenspace and landscaping by bumping out the curb as indicated below:



29. Please provide details on the proposed vent stack shown on sheet C-2. What is this for? How tall will it be? Please provide a cut sheet or a representative example (picture) of how it will look. If this element is taller than 3' in height, it should be routed to a less prominent location on the site.
30. The floor plan includes three boxes on the eastern side of the building (exterior), and the site plan includes two boxes, one labeled CO-2 cage, the other one unlabeled. What will these items be and how many of them will there be? Why is there an exterior CO-2 cage? Will CO-2 be sold?
31. Have there been preliminary discussions with IDOT on the viability of the site design? Please outline any preliminary review comments from IDOT.

Standards for Variation approval:

- **The proposed use will not alter the essential character of the locality and will be compatible with existing uses and zoning of nearby property.**
- **The plight of the owner is due to unique circumstances, which may include the length of time the subject property has been vacant as zoned.**
- **The proposed variation is in harmony with the spirit and intent of this Chapter.**
- **The variance requested is the minimum variance necessary to allow reasonable use of the property.**

Prepared by:



PLANNING & COMMUNITY DEVELOPMENT DEPARTMENT

7A

PETITIONER'S APPLICATION - ARLINGTON HEIGHTS PLAN COMMISSION

Petition #: P.C. 18-026
 Petitioner: Vequity Senes XLVII
1650 W. Algonquin

Owner: Michael Graham

Contact Person: Kim Ward
 Address: 400 N. State St. - Suite 400
Chicago, IL 60654
 Phone #: 312-985-0987
 Fax #: N/A
 E-Mail: k.ward@vequity.com

P.I.N.# 08-08-401-028
 Location: 1650 W. Algonquin Rd.
 Rezoning: — Current: B-2 Proposed: B-2
 Subdivision: —
 # of Lots: — Current: — Proposed: —
 PUD: — For: —
 Special Use: X For: Gas Station
 Land Use Variation: — For: —

Land Use: — Current: Gas Station
 Proposed: Gas Station
 Site Gross Area: 29,313 sq. ft.
 # of Units Total: —
 1BR: — 2BR: — 3BR: — 4BR: —

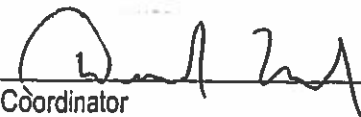
(Petitioner: Please do not write below this line.)

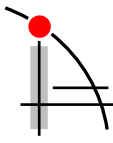
LANDSCAPE & TREE PRESERVATION:

	YES	NO
1. Complies with Tree Preservation Ordinance	<u>X</u>	<u>—</u>
2. Complies with Landscape Plan Ordinance	<u>X</u>	<u>—</u>
3. Parkway Tree Fee Required (See below.)	<u>X</u>	<u>—</u>

Comments:

- 1) As part of the landscape plan, identify the proposed plant material/species and the quantities for all plant material.

 1/25/19
 Coordinator Date



ILEKIS ASSOCIATES

Architects + Planners

223 West Jackson Blvd.

Suite 1000

Chicago, Illinois 60606

T 312.419.009

F312.899.0965

www.ilekis.com

January, 30 2019

Village of Arlington Heights

P. C. Number 18-026

FIRE SAFETY DIVISION

The information provided is conceptual only and subject to a formal plan review.

Response: Noted.

PUBLIC WORKS DEPARTMENT

- 1) The proposed hydrant must be metered. Either feed it from the proposed building (after the water meter) or install a master meter in the Village ROW.

Response: We have relocated the existing fire hydrant to the West side of the site to be behind the new pedestrian walk. This will also help with the relocation in the future Algonquin Road Expansion.

- 2) An RPZ will be required if an irrigation system is installed. Please note this in the landscaping plans calling for a separate irrigation proposal.

Response: Note has been added to L 3 sheet.

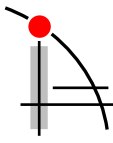
- 3) Water meter(s) and RPZ(s) will be sized once the plumbing plans have been submitted. Submit plumbing plans.

Response: Plumbing plans will be submitted as part of the building permit.

- 4) Page C-4 Water Main Specifications delete the following:

- a. Comment 1C, delete C-900, PVC is not allowed
- b. Comment 5, delete Traverse City Hydrant, this company no longer exists

Response: A. This note has been removed. B. This note has been removed



ILEKIS ASSOCIATES

Architects + Planners

223 West Jackson Blvd.

Suite 1000

Chicago, Illinois 60606

T 312.419.009

F312.899.0965

www.ilekis.com

- 5) Provide a detail for the proposed underground detention storage system.

Response: See attached StormTrap Preliminary Plans with a revision date of 1/31/19

- 6) Provide a maintenance plan for the proposed underground detention storage system.

Response: See attached StormTrap Preliminary Plans with a revision date of 1/31/19

- 7) The extended drive to Taco Bell must show the proposed asphalt joining their lot with pavement grad details. The plans submitted stops at their landscaping.

Response: The asphalt drive has been extended to meet the Taco Bell site as requested

- 8) Continue widened bicycle path up to property line including around sanitary structure. This will assure its proper height for shared use path.

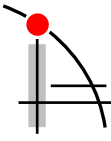
Response: The widened bike path has been continued to the property line, including around the sanitary structure.

ENGINEERING DEPARTMENT

30. The petitioner's response to Comments #11, 12 and 13 is acceptable.

Response: Noted.

31. The petitioner's response to Comment #14 is noted. Regarding the snout oil-grit separator detail shown on sheet C-3 and the restrictor plate detail provided on sheet C-4, a removable hood should be constructed over the outlet pipe. For reference, enclosed is a removal hood detail from the Metropolitan Water Reclamation District (MWRD). If the restrictor is intended to be installed along with the snout oil grit separator, revise the detail accordingly and confirm that it meets the requirements shown in the MWRD detail. Provide the necessary details for the proposed detention storage system located under the



ILEKIS ASSOCIATES

Architects + Planners

223 West Jackson Blvd.

Suite 1000

Chicago, Illinois 60606

T 312.419.009

F312.899.0965

www.ilekis.com

pavement, and documentation that it is designed to meet the AASHTO HS-25 loading standard.

Response: The detail has been added and modified on sheet C-3. The StormTrap plans have been included in this submittal.

32. The petitioner's response to Comment #15 is noted. Since the Round 2 resubmittal, the petitioner has been provided the existing storm and sanitary sewer information along New Wilke Road. At the existing sanitary manhole for the proposed sanitary sewer service connection, show the existing west invert for the 8" clay sanitary sewer. The existing east stub is more than 2 ft above the 15" N/S sanitary sewer and should not be used. Provide a drop manhole service connection. For reference, enclosed is a drop manhole connection detail from the Metropolitan Water Reclamation District. Provide all necessary details for the proposed utilities.

Response: The surveyors were not able to measure a western pipe in the existing manhole. We have shown a new drop connection to the existing manhole.

33. The petitioner's response to Comment #16 is not acceptable. Exhibits must be provided showing all possible directions of travel. Provide an additional exhibit showing the vehicle entering the site off of New Wilke Road.

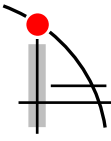
Response: Please refer to AS1.01 B for additional fire truck route off of New Wilkie Road.

34. The petitioner's response to Comment #17 is acceptable.

Response: Noted.

35. The petitioner's response to Comment #18 is noted. The Village permit will not be issued until the petitioner obtains the permit from the Illinois Department of Transportation (IDOT) for all work along Algonquin Road.

Response: Plans have previously been submitted to IDOT for review and permit.



ILEKIS ASSOCIATES

Architects + Planners

223 West Jackson Blvd.

Suite 1000

Chicago, Illinois 60606

T 312.419.009

F312.899.0965

www.ilekis.com

36. The petitioner's response to Comment #19 is not acceptable. The sidewalk through the entrances shall be 8" thick and shall be carried straight through the driveway with no change of elevation between the driveway and sidewalk. The curb shall stop on either side of the sidewalk. The ADA detectable warning panels at the driveways are required only if there is a traffic control device such as a stop sign. Show proposed signage on the plans. Provide details for all curb ramps and detectable warning panels.

Response: The plans have been updated to better designate the sidewalk areas through the driveways. Traffic control devices are shown.

37. The petitioner's response to Comment #20 is acceptable.

Response: Noted.

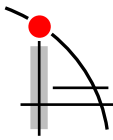
38. The petitioner's response to Comment #21 is not acceptable. The pavement patch for New Wilke Road should be revised to reflect the cross section for the heavy duty fire lane cross section. The pavement patch for Algonquin Road must meet IDOT specifications.

Response: The pavement patch has been updated to reflect the heavy duty fire lane cross section as requested.

39. The petitioner's response to Comment #22 is not acceptable. Coordinate the cross access with Taco Bell and provide the necessary easement documents.

Response: Per discussion with the Village of Arlington Heights and from our village obtained meeting notes on September 27th "The property abutting the subject site on the east (Taco Bell) is currently in the process of receiving zoning entitlements for redevelopment as a new Taco Bell building. As part of that process, the Taco Bell site is required to provide future cross access through their site into the Citgo Gas Station site, and reciprocal access may be required from the Citgo property to the Taco Bell site"

40. The petitioner's response to Comment #23 is not acceptable. Please provide an Engineer's Estimate for the site development construction cost.



ILEKIS ASSOCIATES

Architects + Planners

223 West Jackson Blvd.

Suite 1000

Chicago, Illinois 60606

T 312.419.009

F 312.899.0965

www.ilekis.com

Response: An updated estimate is included.

41. The proposed water service will be under the proposed storm sewer. Provide a detail of the crossing showing proposed inverts and separation. The storm sewer at the crossing of the water service shall be constructed of water main quality pipe.

Response: The storm sewer pipe material has been changed to water quality RCP with O-ring joints to meet this requirement. The crossing information is shown on page C-3. Separation details have been added to sheet C-6 for both the horizontal and vertical directions.

TRAFFIC

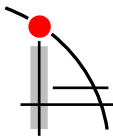
42. The petitioner's response to Comment #24 noted. To avoid conflicts with the potential new right turn lane for westbound Algonquin Road, the petitioner should verify with IDOT and/or other governing agencies such as IEPA the minimum setback design criteria for the underground gas tank.

Response: After further review with IDOT they prefer a 10' setback for all underground tanks but they do not have a set requirement

43. The petitioner's response to Comment #25 is noted. Although crash data in the Traffic Impact Study dated December 6, 2018 was obtained from the Illinois Department of Transportation for 2012 thru 2016, the petitioner should acquire and analyze the data from the Arlington Heights and Rolling Meadows Police Department to evaluate the past three years.

Response: The crash data included in the report is the most recent available data from IDOT. Requests for crash data for the past three years have been submitted to the Village of Arlington Heights and the City of Rolling Meadows, and the requested crash data will be forwarded as soon as it is received.

44. The petitioner's response to Comment #26 is noted. The Traffic Impact Study proposes that the New Wilke Road access drive will provide one inbound lane and two outbound lanes striped to



ILEKIS ASSOCIATES

Architects + Planners

223 West Jackson Blvd.

Suite 1000

Chicago, Illinois 60606

T 312.419.009

F312.899.0965

www.ilekis.com

provide an exclusive left- turn and an exclusive right-tum lane under stop control. The Village reserves the right to limit full access for the New Wilke Road access drive, and recommends that there be a stipulation in the final Ordinance for this project. All proposed striping and signage must be shown on the plans.

Response: So Noted

45. The petitioner's response to Comment #27 is not acceptable. Regarding Table 2, Projected Site-Generated Traffic Volumes, please clarify how the 60% Pass-By Reduction was calculated.

Response: The 60 percent pass-by reduction that was applied to site-generated volumes is based on studies conducted by ITE as shown in their trip generation handbook. The studies indicate that 56 to 62 percent of vehicles generated will be pass-by trips. As such, and in order to be consistent, a 60 percent reduction was applied. A copy of the handbook sheets is included.

46. The petitioner's response to Comment #28 is noted. Due to the Taco Bell cross access so close to Algonquin Road, the alignment should be reviewed by IDOT for input on signage, striping, etc.

Response: Plans have previously been submitted to IDOT for review and permit.

47. The petitioner's response to Comment # 29 is acceptable.

Response: Noted.

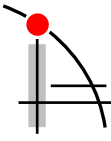
PLANING & COMMUNITY DEVELOPMENT DEPARTMENT:

24. Your response to comment #8, #9, #12-#18, #20,-#23 are acceptable.

Response: Noted.

25. Your response to comment #7 is noted. Please note that the following approvals will be required:

- a. Special Use Permit to allow an "Automobile Service Station



ILEKIS ASSOCIATES

Architects + Planners

223 West Jackson Blvd.

Suite 1000

Chicago, Illinois 60606

T 312.419.009

F312.899.0965

www.ilekis.com

with a Convenience Store".

- b. Variation to Chapter 28, Section 10.2-8, to reduce the required driveway width from 24' to 23'.

Please provide the required written justification for the driveway variation as per the four standards within the zoning code, summarized at the end of this review for reference.

Response: The driveway has been revised to be 24' wide on our property.

26. The response to comment #10 is noted. Please inform your tenant that outdoor storage of merchandise for sale is not allowed per the regulations in Section 5.1-11.4f of the Zoning Code.

Response: Propane cage has been removed from drawings. The only items stored outside in the cages would be CO2 for soda machines and N2 for Nitro coffee. These items are not for sale and are only to support equipment.

27. The response to comment #11 is unacceptable. Communicate with your tenant to understand the typical anticipated delivery times and provide this information.

Response:

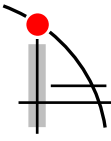
28. Your response to comment #19 is noted. A condition of approval will be recommended that will require revisions to the site plan to provide additional greenspace and landscaping by bumping out the curb as indicated below:

Response: The curbing has been bumped out as requested to allow for additional greenspace.

29. Please provide details on the proposed vent stack shown on sheet C-2. What is this for? How tall will it be? Please provide a cut sheet or a representative example (picture) of how it will look. If this element is taller than 3' in height, it should be routed to a less prominent location on the site.

Response: The vent stack has been relocated to the new greenspace provided in response to comment #28.

30. The floor plan includes three boxes on the eastern side of the building (exterior), and the site plan includes two boxes, one labeled CO-2 cage,



ILEKIS ASSOCIATES

Architects + Planners

223 West Jackson Blvd.

Suite 1000

Chicago, Illinois 60606

T 312.419.009

F312.899.0965

www.ilekis.com

the other one unlabeled. What will these items be and how many of them will there be? Why is there an exterior CO-2 cage? Will CO-2 be sold?

Response: The three boxes as shown on plan show CO2, N2 and propane tanks. CO2 is used only with soda and slurpy machines inside the store. The second cage will hold liquid Nitrogen N2 to be used with new Nitron Cold brew coffee machine used by 7-11. The third cage was a propane cage but it was removed based on comment # 26. Please refer to AS1.01 for more information.

31. Have there been preliminary discussions with IDOT on the viability of the site design? Please outline any preliminary review comments from IDOT.

Response: Plans have previously been submitted to IDOT for review. We will forward review comments as soon as we get them.

LANDSCAPE AND TREE PRESERVATION:

- 1) As part of the landscape plan, identify the proposed plant material/species and the quantities for all plant material.

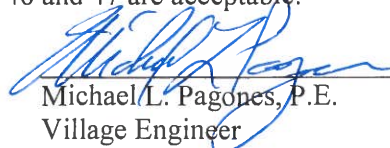
Response: We have updated the plans to include specific proposed plant materials.

PLAN COMMISSION PC #18-026
7-11 Gas Station and Convenience Store
1650 W Algonquin Rd
SUP for Gas Station
Round 3

- 48. The petitioner's response to Comment No. 30 is acceptable.
- 49. The petitioner's response to Comment No. 31 is noted. The preliminary plans provided for the StormTrap show a structural design meeting AASHTO HS-20 highway loading. The system shall meet AASHTO HS-25 loading standard. This can be addressed at final engineering. The revised detail for the restrictor is acceptable.
- 50. The petitioner's response to Comment Nos. 32, 33 and 34 is acceptable.
- 51. The petitioner's response to Comment No. 35 is noted.
- 52. The petitioner's response to Comment Nos. 36, 37 and 38 is acceptable.
- 53. The petitioner's response to Comment No. 39 is noted. The Taco Bell cross access easement documents shall be provided at final engineering.
- 54. The petitioner's response to Comment No. 40 is noted. The Engineering Division is reviewing the cost estimate to complete the calculation for plan review, inspection, and other fees. Upon completion of this review, the fee letter will be prepared for the petitioner to assemble the proper documents.
- 55. The petitioner's response to Comment No. 41 is acceptable.
- 56. In reference to the petitioner's response to the Public Works Department Comment No. 1, provide the necessary easement documents and Plat of Easement for the relocated fire hydrant along New Wilke Road. This can be addressed at final engineering.

TRAFFIC

- 57. The petitioner's response to Comment No. 42 is acceptable.
- 58. The petitioner's response to Comment No. 43 is noted. Evaluation at time of permit could be made regarding driveway operations, turning restrictions, and any channelization or signage requirements that may be supported by analysis of the crash data provided by Arlington Heights and Rolling Meadows.
- 59. The petitioner's response to Comment No. 44 is noted. The Special Use Ordinance should stipulate that "The Village reserves the right to limit full access for the New Wilke Road access driveway". All proposed striping and signage must be shown on the plans, this can be addressed at final engineering.
- 60. The petitioner's response to Comment Nos. 45, 46 and 47 are acceptable.

 2/8/19
Michael L. Pagones, P.E. Date
Village Engineer

Final Engineering:

\$1,372.46 Fee in Lieu (calculations dated January 15, 2019 Round 2 submittal)
IDOT Permit
Cross access easement documents with Taco Bell
Plat of Easement for relocated fire hydrant

Planning & Community Development Dept. Review

February 8, 2019



REVIEW ROUND 3

Project: 7-11 Gas Station
1650 W. Algonquin Rd.

Case Number: PC 18-026

32. Your response to comment #24 and #26-#30 are acceptable.
33. Your response to comment #25 is noted. Below is a list of the zoning approvals that will be required. Please note that your response indicates that the driveway width variation is not required since the plans have been revised to show a 24' wide driveway, however, since the driveway on the Taco Bell property at your shared property line has been designed to be 23' in width, to have your driveway be 24' would misalign the connection between the two properties. Therefore, the variation is still required. Additionally, based on a change to the site plan, the driveway entrances now require a variation.
- a. Special Use Permit to allow an "Automobile Service Station with a Convenience Store".
 - b. Variation to Chapter 28, Section 10.2-9, Access, to allow a 37' wide driveway entrance where code limits driveway entrances to 36' in width.
 - c. Variation to Chapter 28, Section 10.2-8, to reduce the required driveway width from 24' to 23'.
34. The response to comment #31 is noted. Zoning approval will be subject to IDOT review and approval of the proposed curb cuts.
35. Please note that the revised plans now show a small concrete pad at the northeast corner of the site (engineering plan sheet C-2). What is this pad for? This can be addressed at time of permit, however, please note that any mechanical/utility infrastructure in this location would not comply with code.

Prepared by: *Sam H. [Signature]*

PLANNING & COMMUNITY DEVELOPMENT DEPARTMENT

7A

PETITIONER'S APPLICATION - ARLINGTON HEIGHTS PLAN COMMISSION

Petition #: P.C. 18-026
 Petitioner: Vequity Series XLVII
1650 W. Algonquin

Owner: Michael Graham

Contact Person: Kim Ward
 Address: 400 N. State St. - Suite 400
Chicago, IL 60654
 Phone #: 312-985-0987
 Fax #: N/A
 E-Mail: k.ward@vequity.com

P.I.N.# 08-08-401-028
 Location: 1650 W. Algonquin Rd.
 Rezoning: — Current: B-2 Proposed: B-2
 Subdivision: —
 # of Lots: — Current: — Proposed: —
 PUD: — For: —
 Special Use: X For: Gas Station
 Land Use Variation: — For: —

Land Use: — Current: Gas Station
 Proposed: Gas Station
 Site Gross Area: 29,313 sq. ft.
 # of Units Total: —
 1BR: — 2BR: — 3BR: — 4BR: —

(Petitioner: Please do not write below this line.)

LANDSCAPE & TREE PRESERVATION:

1. Complies with Tree Preservation Ordinance
2. Complies with Landscape Plan Ordinance
3. Parkway Tree Fee Required
(See below.)

YES	NO
<u>X</u>	<u>—</u>
<u>X</u>	<u>—</u>
<u>X</u>	<u>—</u>

Comments:

NO COMMENTS

Kim Ward 2/5/19
 Coordinator Date