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Planning Commission Staff Report

Project Type:	Sign Package
Meeting Date:	March 25, 2019
From:	Mike Knight, Planner
Location:	14905 Clayton Rd.
Description:	<u>Mobil on the Run at Clayton and Baxter (Brite Worx) Sign Package:</u> A request for a Sign Package for a 1.72 acre tract of land zoned “PC” Planned Commercial District located on the western corner of the intersection of Clayton Rd. and Baxter Rd.

PROPOSAL SUMMARY

Ziglin Signs, on behalf of Arch Energy L C Z MO LTD LIABILITY, has submitted a request for a Sign Package for the Brite Worx CarWashery. In accordance with the Unified Development Code (UDC), if approved the proposed Sign Package would serve as the site specific regulations pertaining to signage for this development. Any signage not specifically identified in the Comprehensive Sign Package shall conform to Section 31-04-05 of the Unified Development Code. The purpose of a Sign Package is to provide comprehensive and complementary signage throughout a development. The UDC states that “in order to encourage superior design, quality and character, Comprehensive Sign Packages allow for specialized review of signs and flexibility from standard signage requirements.”

This Sign Package is being requested to allow for the following signs as part of the new facility.

- (1) monument sign on Clayton Rd. and (1) on Baxter Rd. frontage.
- (2) wall signs on the north elevation and (2) signs on the south elevation.
- (1) wall sign on the east elevation.
- (4) Canopy Signs
- (2) small directional signs to help traffic flow.

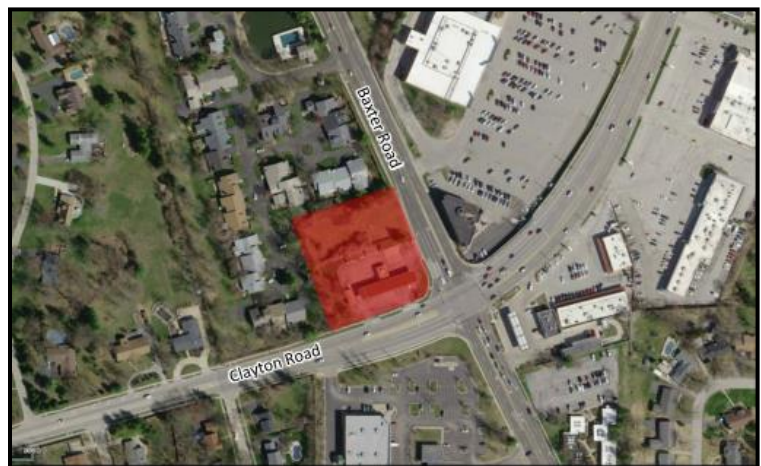


Figure 1: Aerial Image

HISTORY

The subject property was originally zoned “C8” Planned Commercial District. In 1998, Arch Energy petitioned to change the zoning to allow for a filling station, a fast food restaurant, and a vehicle washing facility for automobiles. After initially being denied by the City, the zoning was changed to “PC” Planned Commercial District in June 2001 by Ordinance 1750. Ordinance 1750 underwent two amendments in 2001, ultimately ending with Ordinance 1803. In 2018, the subject site was zoned “PC” Planned Commercial District by City of Chesterfield Ordinance 2977 to establish all new development criteria and uses for the site. The only approved use under this ordinance is a stand-alone car wash. There are several development criteria for this development including screening walls for both acoustic mitigation and aesthetic purposes, stricter lighting standards and restrictive access management standards.

LAND USE AND ZONING OF SURROUNDING PROPERTIES

The predominant land uses and zoning for surrounding properties are described below:

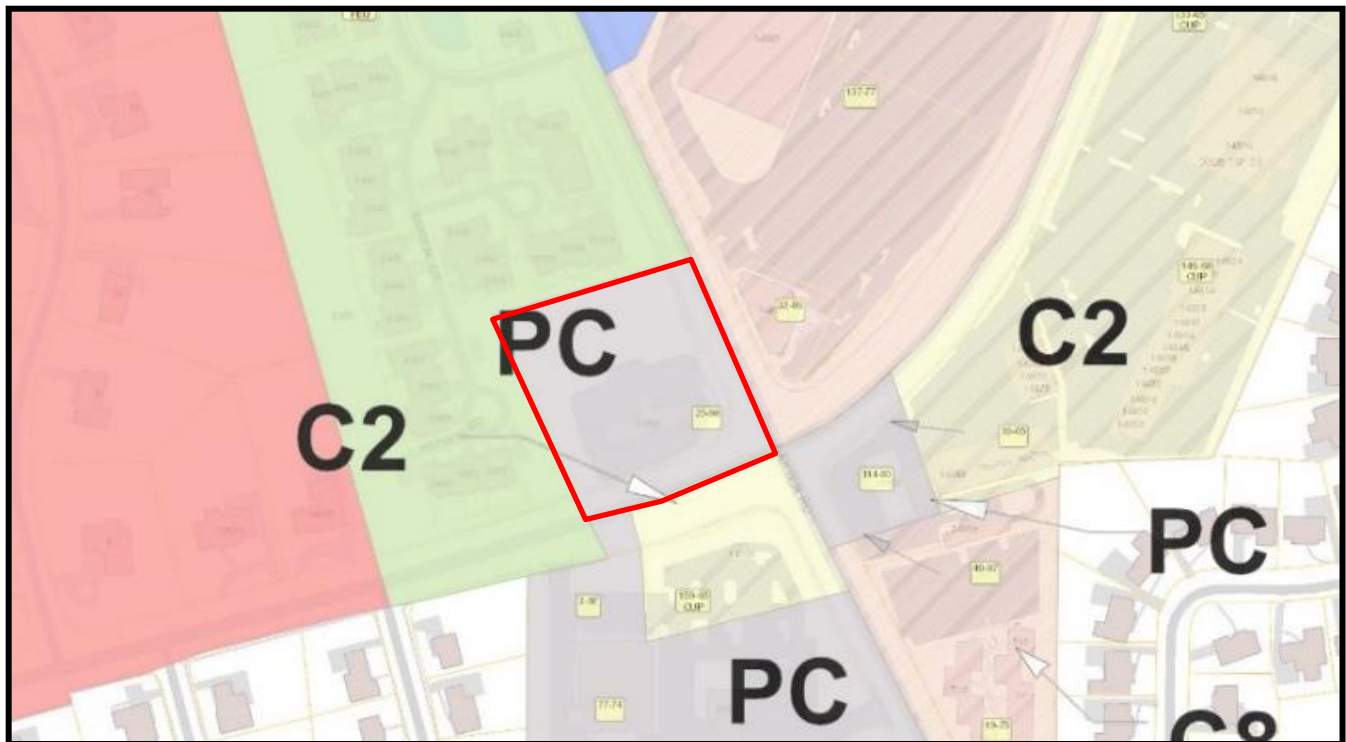


Figure 2: Zoning

Direction	Zoning	Land Use
North & West	“R3” Residence District (10,000 sq. ft.)	Attached single family residences within the Woodfield Subdivision
East	“C8” Planned Commercial District	Commercial properties within the Baxter Center Subdivision
South	“PC” Planned Commercial and “C2” Shopping Districts	Pharmacy and Bank located within the Walgreens at Clayton and Baxter Center

Table 1: Land Use

SUBMITTAL OVERVIEW

Recently a Site Development Plan was approved to construct a 4,020 square foot carwash at 14905 Clayton Road. This submittal details signage being requested by the applicant in conjunction with this development. There are 13 total signs being requested (2 monument signs, 5 attached wall signs, 4 canopy and 2 directional signs). Below in Figure 3 is an image that shows the location of all 13 signs.

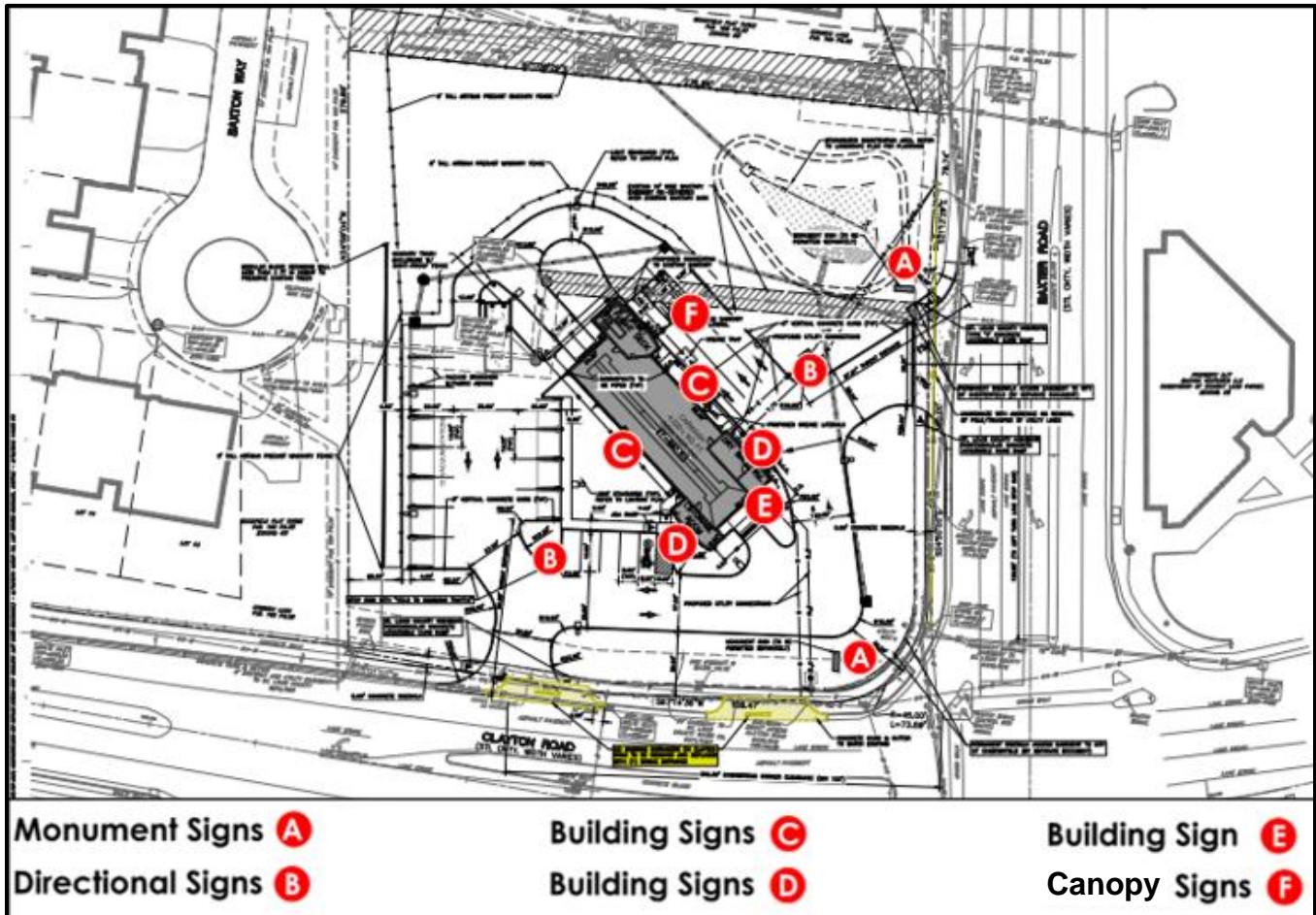


Figure 3: Signage Location

STAFF ANALYSIS

Below is a description of each sign and how the signs correspond to the UDC requirements.

Building Signage:

The applicant is requesting 6 attached wall signs. Section 31-04-05F 3(b)1 of the Unified Development Code states that a business being the sole occupant of a building located on a corner lot or a lot with double frontage, said business may have one (1) attached business sign on any three (3) walls of a building that are exterior walls. The outline area of each sign shall not exceed five percent (5%) of the wall area of the business on which said sign is attached. No business sign shall exceed three hundred (300) square feet in outline area.

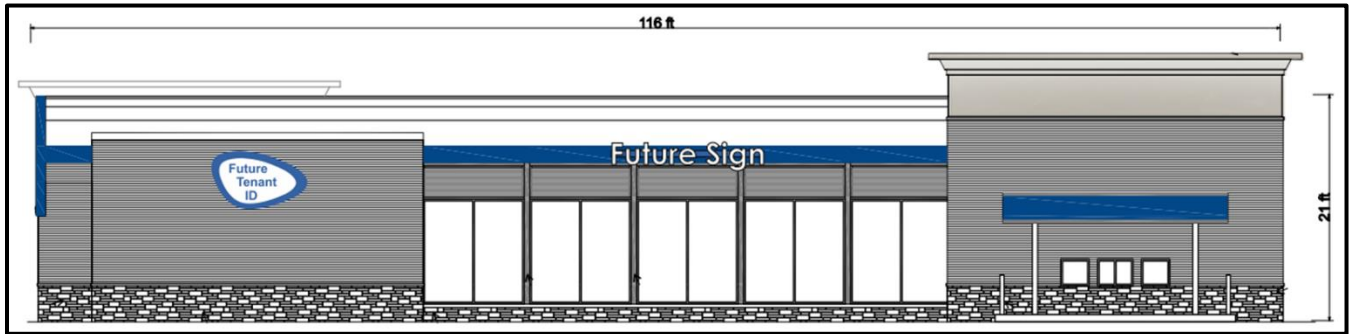


Figure 4: North Elevation Signage

The applicant included signage on 3 separate building elevations, and canopy structure. Above in Figure 4 is the North Elevation. This is the elevation that will be primarily seen from Baxter Road. In accordance to Section 31-04-05F 3(b)1 of the UDC previously stated, the applicant is allowed one attached business sign on this wall up to 121 square feet. The applicant is proposing two attached wall signs. The “Future Tenant ID” sign seen above is 48.75 square feet and the “Future Sign” is 27 square feet totaling 75.75 square feet.

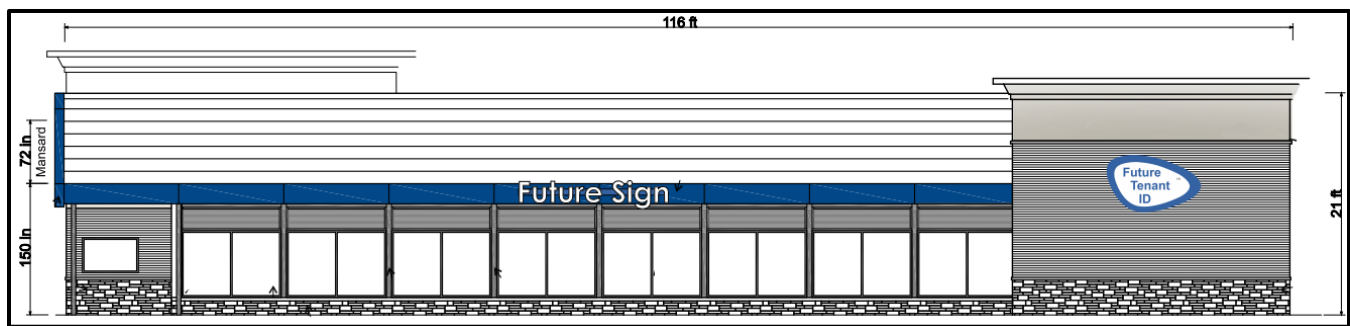


Figure 5: South Elevation Signage

Figure 5 is the South Elevation. This is the elevation that will be primarily seen from viewers heading east on Clayton Road. In accordance to Section 31-04-05F 3(b)1 of the UDC stated above, the applicant is allowed one attached business sign on this wall up to 107 square feet due to the mansard roof. The applicant is proposing the same two signs as the North Elevation totaling 75.75 square feet.

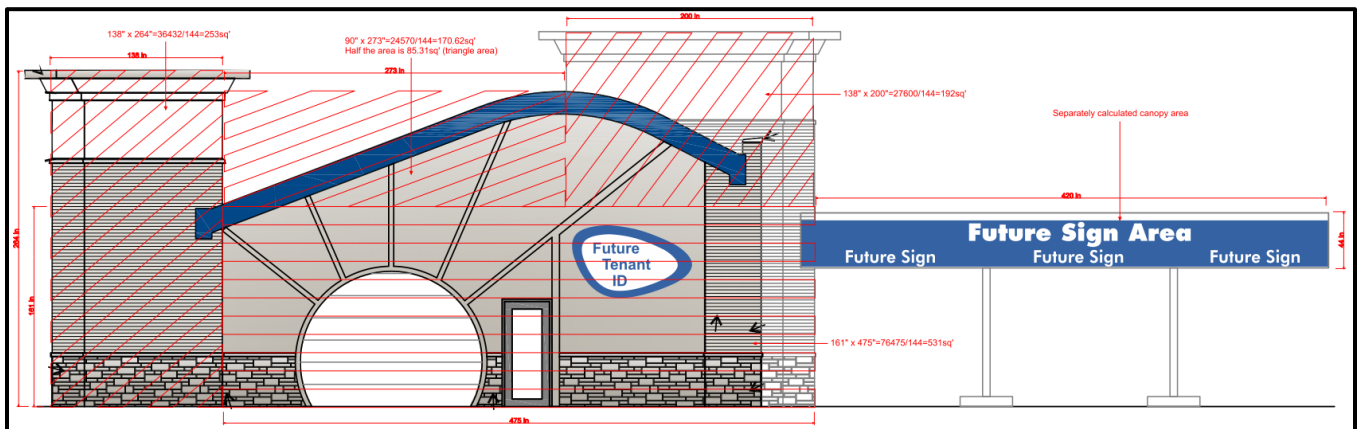


Figure 6: East Elevation Signage

Figure 6 is the East Elevation. This is the elevation that will be primarily seen from viewers heading west on Clayton Road. In accordance to Section 31-04-05F 3(b)1 of the UDC stated above, the applicant is allowed one attached business sign on this wall up to 52 square feet. The applicant is proposing the same "Future Tenant ID" sign as the previous elevations totaling 38.7 square feet.

There is also a canopy attached to this elevation. Section 31-04-05F 8(g) of the Unified Development Code states that a service station with a canopy may have no more than one (1) sign which may include the name and logo of the business and one (1) sign which may include the words "self-service" and "full service" attached on each of any two (2) sides of the vertical face of the canopy, excluding canopy supports. The outline area of each sign shall not exceed ten (10) square feet in outline area. Each sign shall be a flat sign permanently affixed to the vertical face of the canopy and shall not project above or below the vertical face of the canopy more than one (1) foot. No projection shall be permitted from any other side of the vertical face of the canopy. Such signs shall only be illuminated by internal and non-intermittent light sources. For service stations located on corner lots, such signs may be located on each of any three (3) sides of the vertical face of the canopy, excluding canopy supports.

In accordance to Section 31-04-05F 8(g) stated above, the canopy may have 2 signs on 3 different sides, not to exceed 10 square feet in outline area for each sign. The applicant is proposing 4 signs solely on the East Elevation that total 47.3 square feet.

Monument Signage:

Section 31-04-05F 2(a)1 of the Unified Development Code states that each developed lot may have no more than one (1) freestanding business sign facing each roadway on which the lot has frontage, regardless of the number of buildings upon the lot. This section of code also states that a freestanding business sign shall not exceed six (6) feet in height above the average existing finished grade at the base of the sign, or the elevation of the adjacent street, whichever is higher. The total outline area per face shall not exceed fifty (50) square feet or twenty-five one hundredths (0.25) square foot of signage per linear foot of street frontage up to one hundred (100) feet of street frontage and one-tenth (0.1) square foot of signage per linear foot of street frontage thereafter, whichever is less.

The applicant is requesting 2 freestanding business identification signs. They are to be the same sign, seen in Figure 7, and in two locations present on the approved Site Development Plan. One of the signs is facing Baxter Road and one is facing Clayton Road. They are double sided monument signs to be seen from heading in both directions on Baxter and Clayton Roads. The base structure and column of both monument signs will be built using the same stone used at the base of the building, therefore bringing the same design elements to the sign. The required landscaping for the signs has been provided and may be seen on the Landscape Plan within the submitted packet.

The display of the sign is a full color LED message center. Electronic message centers (EMC) are considered "**prohibited signs**" in accordance to Section 31-04-05H 2(c) of the Unified Development Code. The EMC display is intended to have static messages with a hold time of no less than 15 minutes. The applicant stated they will have the Brite Worx image for 15 minutes, then a corporate promotion for 15 minutes, then repeat. The EMC brightness level will be set to a maximum brightness of 6,000 NITS

during daylight hours and 500 NITS during nighttime hours. The EMC comes with a light sensor that automatically dims the brightness levels at dusk. Since electronic message centers are prohibited signs in the UDC, the City has no regulations regarding brightness, frequency or speed in which the messages on boards may change.



Figure 7: Monument Signage

A freestanding business sign shall not exceed six (6) feet in height above the average existing finished grade at the base of the sign, or the elevation of the adjacent street, whichever is higher. The total outline area per face shall not exceed fifty (50) square feet or twenty-five one hundredths (0.25) square foot of signage per linear foot of street frontage up to one hundred (100) feet of street frontage and one-tenth (0.1) square foot of signage per linear foot of street frontage thereafter, whichever is less.

The allowable square footage for each free standing identification sign for this site is 42 square feet. The LED Message Center outline area is 32.3 square feet, which is under the maximum allowed. The height of each sign would be 6 feet tall which is right at the maximum allowed.

Directional Signage:

The applicant is requesting 2 directional signs. Section 31-04-05F 3(b)1 of the Unified Development Code states that directional signs shall not exceed ten (10) square feet in outline area per facing. Freestanding directional signs shall not extend more than six (6) feet above the elevation of the adjacent street or elevation of the average existing finished grade at the base of the sign, whichever is higher.

The proposed directional signs are single-sided with an outline area of 2.46 square feet. The height is 4 feet tall. The requested signs meet all of the sign requirement standards of the Unified Development Code. The location of both signs can be seen on Figure 3.



Figure 8: Directional Signage

Comprehensive Table:

Below is a summary table of the building, canopy and monument signage requested and how they relate to the base limitation for administrative approval.

Building Signage					
Elevation	Base Permitted	Number Requested	Base SF Permitted	Total SF Requested	Prohibited Sign
North	1	2	121	103	No
South	1	2	107	103	No
East	1	1	53	39	No

Canopy Signage					
Elevation	Base Permitted	Number Requested	Base SF Permitted	Total SF Requested	Prohibited Sign
North	2	0	20	0	No
South	2	0	20	0	No
East	2	4	20	47	No

Monument Signage					
Elevation	Base Permitted	Number Requested	Base SF Permitted	Total SF Requested	Prohibited Sign
Baxter	1	1	42	32	Yes
Clayton	1	1	42	32	Yes

Table 1: Summary Table **yellow demarks the base limitations eligible for administrative approval per the UDC**

The UDC includes the following review factors that are to be considered by the Planning Commission when discussing the appropriateness of the requested flexibility in sign criteria:

1. The physical impact of the proposed comprehensive sign package;
2. The quality of the proposed comprehensive sign package; and
3. Mitigation of unfavorable conditions such as excessive signs, light spillover from signs, height, and other related conditions and potentially negative impacts.

The applicant's narrative in conjunction with the stated purpose of the sign regulations, sign package review criteria and policies of the Comprehensive Plan all work together to create the foundation for the Planning Commission's review and consideration of the submittal.

The applicant states within their project narrative that the primary focus of the sign package was to improve wayfinding. Signage not specifically identified in the Comprehensive Sign Package shall conform to Section 04-05 of the Unified Development Code.

RECOMMENDATION

Staff has reviewed the proposed Sign Package for the Mobil on the Run at Clayton and Baxter (Brite Worx) Sign Package and all required items have been included. The UDC provides the Planning Commission discretion in considering this Sign Package as there is not concrete criteria in which to review. As such, Staff recommends that the Planning Commission take action on this request.

MOTION

The following options are provided to the Planning Commission for consideration relative to this application:

- 1) "I move to approve (or deny) the Mobil on the Run at Clayton and Baxter (Brite Worx) Sign Package."
- 2) "I move to approve the Mobil on the Run at Clayton and Baxter (Brite Worx) Sign Package with the following conditions....." (Conditions may be added, eliminated, altered or modified)

Attachments: Sign Package Submittal



NARRATIVE STATEMENT

The Proposed Brite Worx Car Wash will be located at the northeast corner of Clayton & Baxter Roads and will have a 4,020 sq. ft. state of the art facility. The following signs are being requested as part of the new facility: One monument sign to be located on the Clayton Rd. frontage; One monument sign to be located on the Baxter Rd. frontage; Two small directional signs to help traffic flow; Two wall signs on the north elevation; Two wall signs on the south elevation; one wall sign on the east elevation; Directional wall signage on the point of sale canopy.

The proposed sign package has been prepared to successfully brand the new state of the art facility with a superior look and feel that exemplifies that of the building. Signs were created to have an upscale, up to date look.

We believe the overall sign sizes and quantities are within the general spirit of the sign code with a few modifications such as the additional signage on the canopy to direct patrons to the correct point of sale lanes.

The proposed monument signs are designed to incorporate the stone features of the building into the signs. The base structure and column of both monument signs will be built using the same stone used at the base of the building, therefore bringing the same design elements to the sign. The EMC display will only have static (non-animated) messages and each message will have a hold time of no less than 15 minutes. The idea is to have the Brite Worx image hold for 15 minutes, then incorporate a promotion which will hold for 15 minutes, then repeat. The EMC brightness level will also be adjusted lower and set to a maximum brightness of 6,000 NITS during daylight hours and 500 NITS during nighttime hours. The EMC also comes with a light sensor that automatically dims the brightness level at dusk.

No temporary signage will be used at this site with the exception of a Now Open/Grand Opening sign that could be displayed for the first 15 days of the facility opening and which also complies with the Unified Development Code.

All Signage has LED lighting, aluminum construction and is built to UL specifications to ensure durability and very minimal maintenance.

All tenants, businesses, owners within the development shall receive a copy of the Comprehensive Sign Package from the owner at the time of lease/sale.

All signage within the development shall be in conformance with the Comprehensive Sign Package.

Any signage not specifically identified in the Comprehensive Sign Package shall conform to Section 04-05 of the Unified Development Code.

Sign lighting schedule –All building signs and monument signs will only illuminate from dusk until 10pm.

In reference to the north building elevation, we are asking to deviate from section 31-04-05.F.3.a.2 of the Unified Development Code, therefore allowing for two signs per elevation instead of one. Signs will be calculated by drawing a box around each sign with the total square footage of both signs not to exceed 76 sf, far less than the UDC allowance of 5%, or 121 sf.

In reference to the south building elevation, we are asking to deviate from section 31-04-05.F.3.a.2 of the Unified Development Code, therefore allowing for two signs per elevation instead of one. Signs will be calculated by drawing a box around each sign with the total square footage of both signs not to exceed 76 sf, far less than the UDC allowance of 5%, or 107 sf.

All wall signs are internally illuminated with LED lighting - the white faces of all channel letters will be backlit and the face of the custom cabinets will also be backlit.



**Sign Package for Brite Worx Car Wash
14905 Clayton Rd., Chesterfield, MO 63017**

Provided by:



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Customer: Wallis Companies

Job/Est. #: 25245

Contact: Greg Portell

Salesperson: GN

Project: Chesterfield

Drawn By: EA

File Number: 28232

Date: 10-15-2018

Signature Approval

Signed approval of all drawings is required before production begins.

Date of Approval

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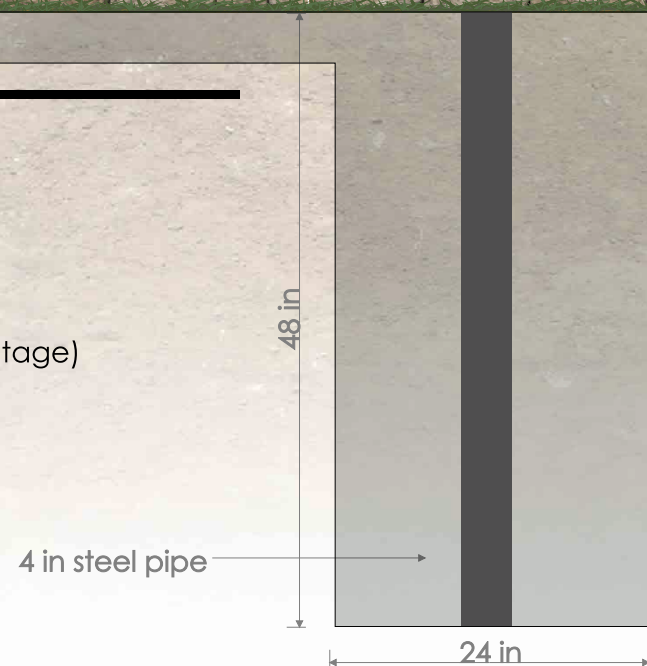
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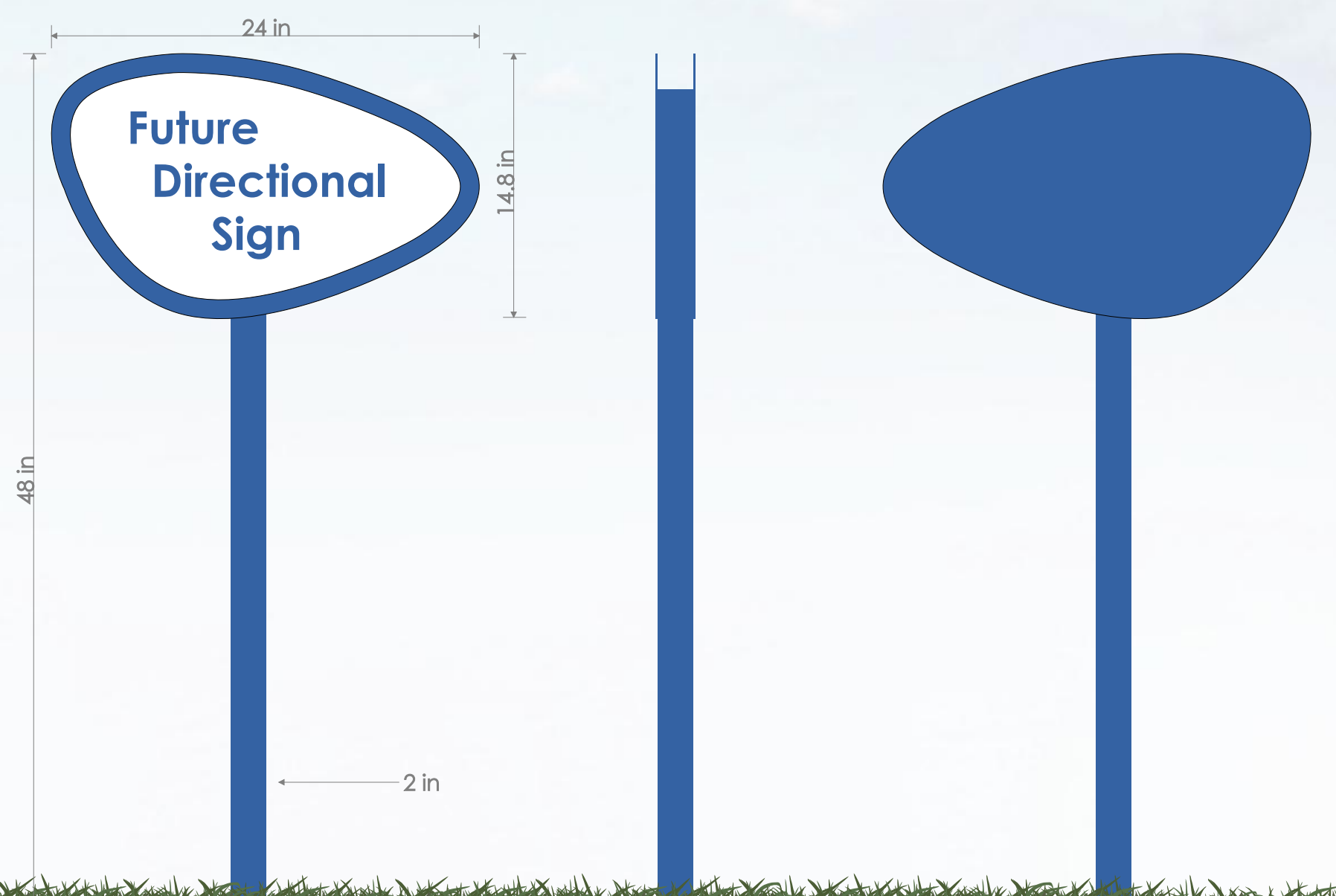


SPECIFICATIONS - SIGN **A**

- Qty: 2 (one on Baxter Rd., one on Clayton Rd.)
- Double-side monument sign
- Stone Base to Match Building
- Full Color LED Message Center
- Landscaping as required

Allowed Square Footage: 42sq' per sign (Based on 240' of frontage)
Proposed Signage: 48" x 97"/144 = 32.34sq' per sign





SPECIFICATIONS - SIGN B

- Qty. 2
- Single-sided
- Non-illuminated
- 2" x 2" aluminum post painted blue
- Sign panels fabricated out of 1/8" aluminum, painted blue to match post, routed to shape with 3M white vinyl graphics applied
- Installed in 8" diameter by 30" deep footing

- Proposed Signage: 24" x 14.8"/144 = 2.46sq'



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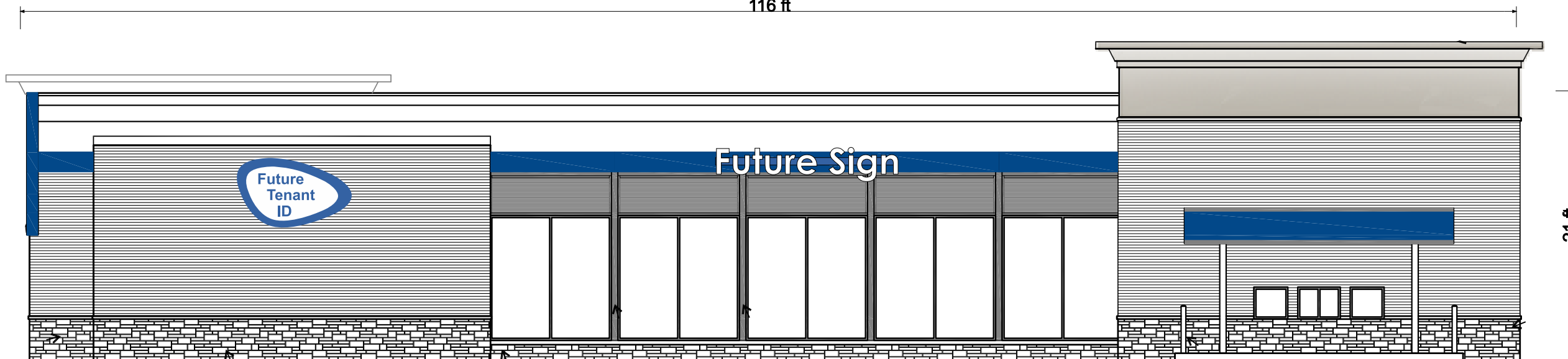
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116 ft



NORTH ELEVATION

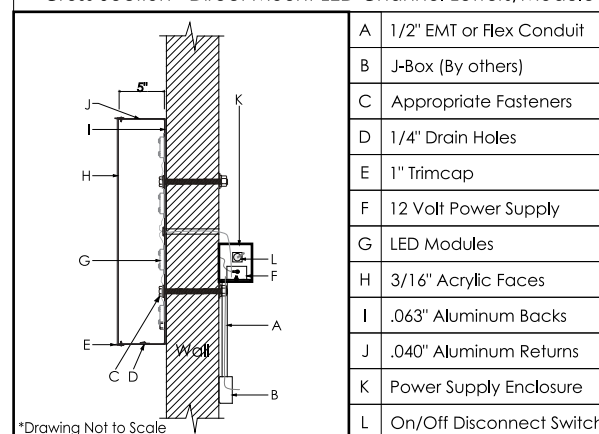
SPECIFICATIONS - SIGN C

- Qty. 1
- Flush mount channel letters
- White acrylic faces
- Black returns
- Black trimcap
- White LED lighting in sign



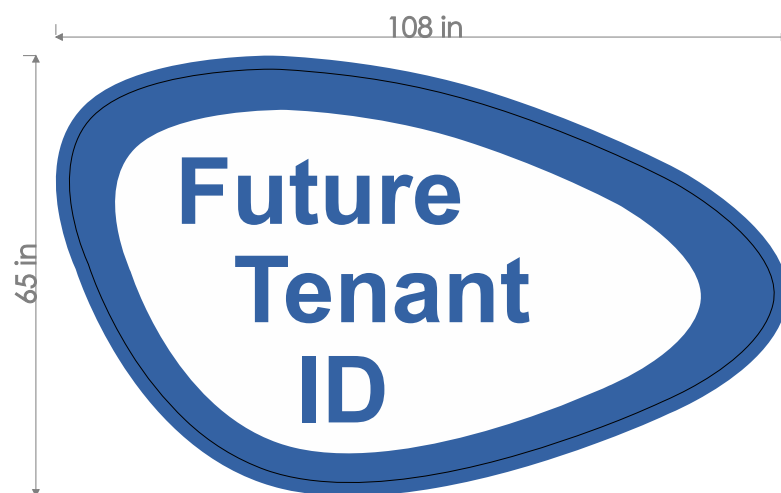
Allowed Square Footage: 121 sq'
 Proposed Sign C: 24" x 162"/144 = 27sq'

Cross Section - Direct Mount LED Channel Letters/Module



SPECIFICATIONS - SIGN D

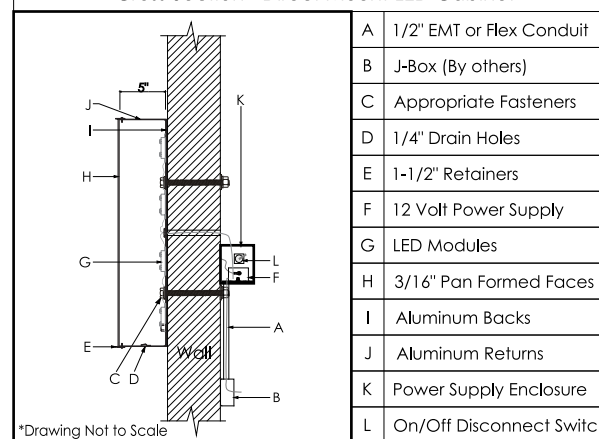
- Qty. 1
- Welded aluminum construction for cabinet
- Cabinet painted blue to color specifications
- Cabinet to have lexan embossed pan face
- White LED lighting in sign



Allowed Square Footage: 121sq'
 Proposed Sign D: 65" x 108"/144 = 48.75sq'

Total sign area proposed on North Elevation = 75.75sq'

Cross Section - Direct Mount LED Cabinet



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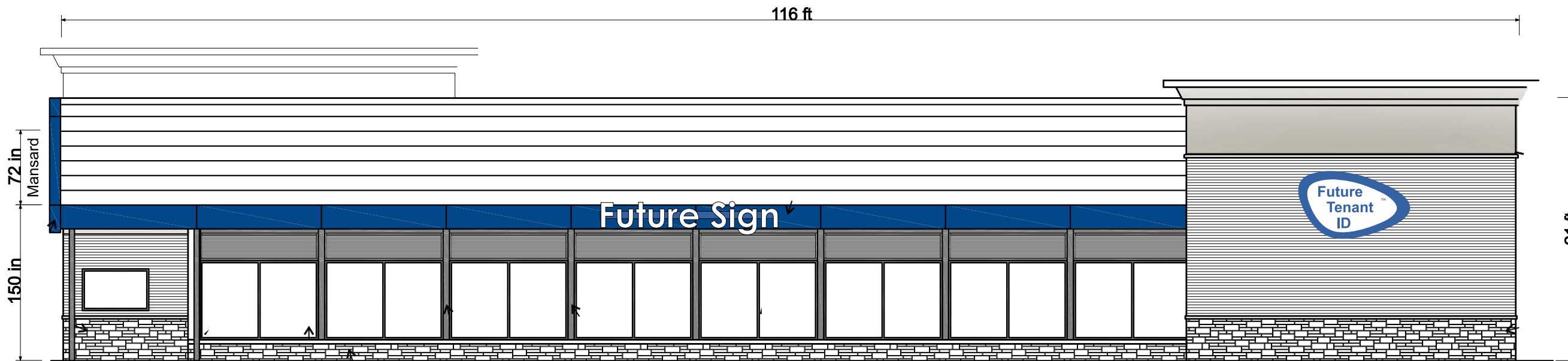
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SOUTH ELEVATION



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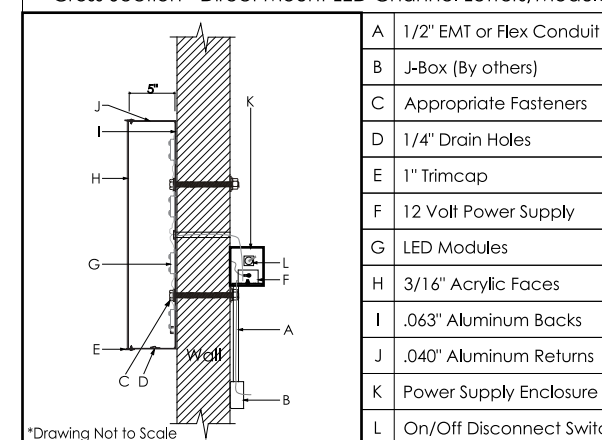
SPECIFICATIONS - SIGN C

- Qty. 1
- Flush mount channel letters
- White acrylic faces
- Black returns
- Black trimcap
- White LED lighting in sign

Allowed Square Footage: 107 sq'
Proposed Sign C: 24" x 162"/144 = 27sq'



Cross Section - Direct Mount LED Channel Letters/Module

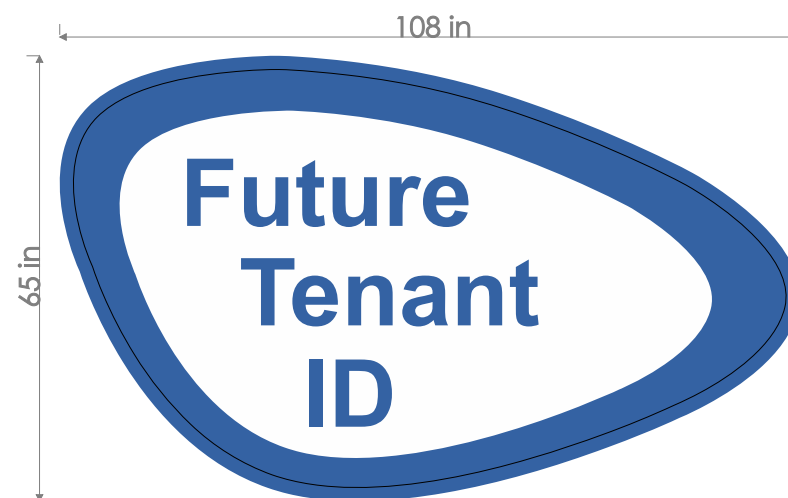


SPECIFICATIONS - SIGN D

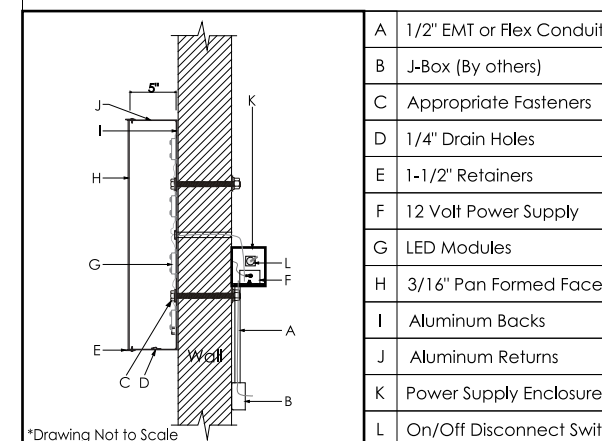
- Qty. 1
- Welded aluminum construction for cabinet
- Cabinet painted blue to color specifications
- Cabinet to have lexan embossed pan face
- White LED lighting in sign

Allowed Square Footage: 107sq'
Proposed Sign D: 65" x 108"/144 = 48.75sq'

Total sign area proposed on South Elevation = 75.75sq'



Cross Section - Direct Mount LED Cabinet



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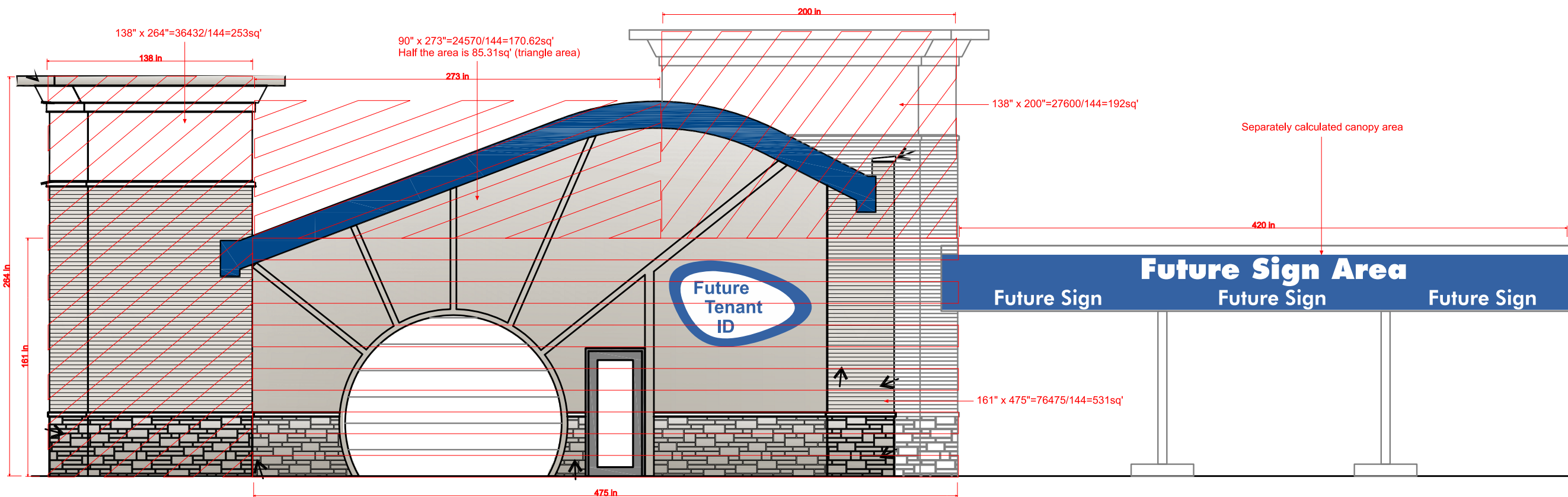
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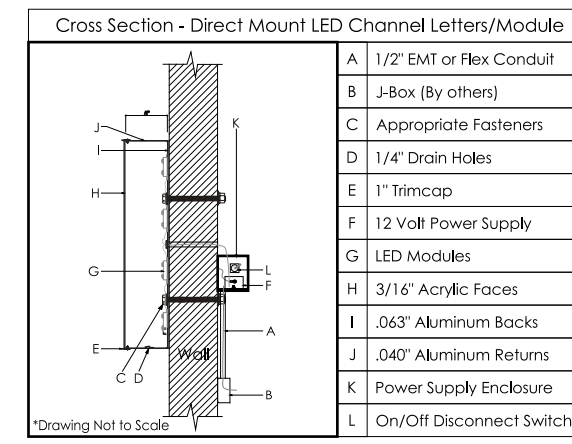
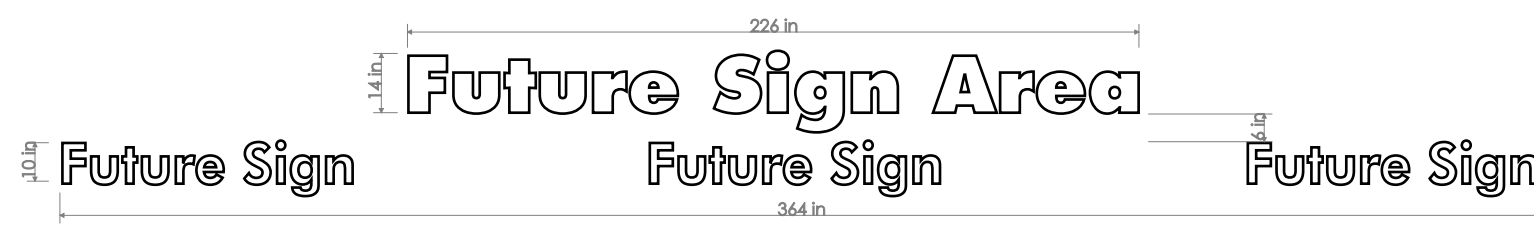


EAST ELEVATION

SPECIFICATIONS - SIGN F CANOPY SIGNAGE

- Direct mount channel letters
- White acrylic faces
- Black returns
- Black trimcap
- Internally illuminated w/ white LED's

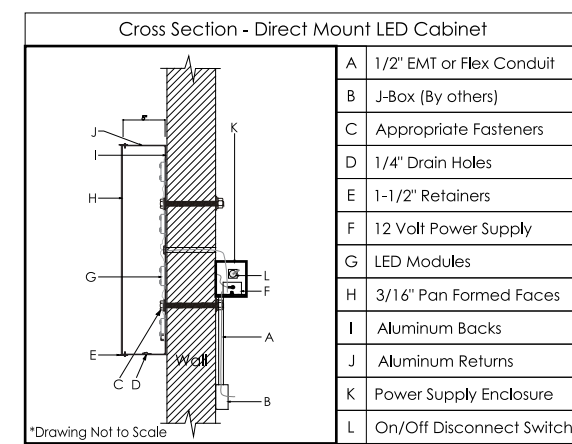
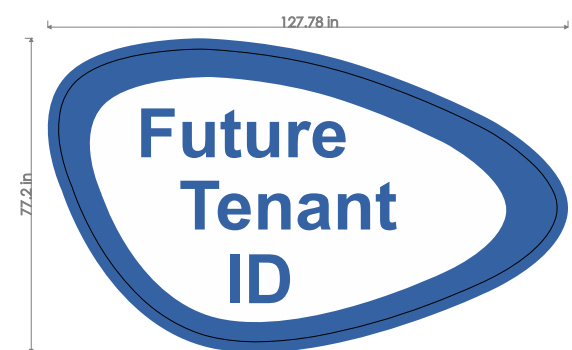
Allowed Square Footage: Specialty Area
Proposed Sign **F**: 14" x 226"/144 = 22sq'
10" x 364"/144 = 25.3sq'
Total Sign Area = 47.3sq'



SPECIFICATIONS - SIGN E

- Qty. 1
- Welded aluminum construction for cabinet
- Cabinet painted blue to color specifications
- Cabinet to have lexan embossed pan face
- White LED lighting in sign

Allowed Square Footage: 53.2sq'
Proposed Sign **E**: 58" x 96"/144 = 38.7sq'





Monument Signs **A**
 Directional Signs **B**

Building Signs **C**
 Building Signs **D**

Building Sign **E**
 Building Signs **F**



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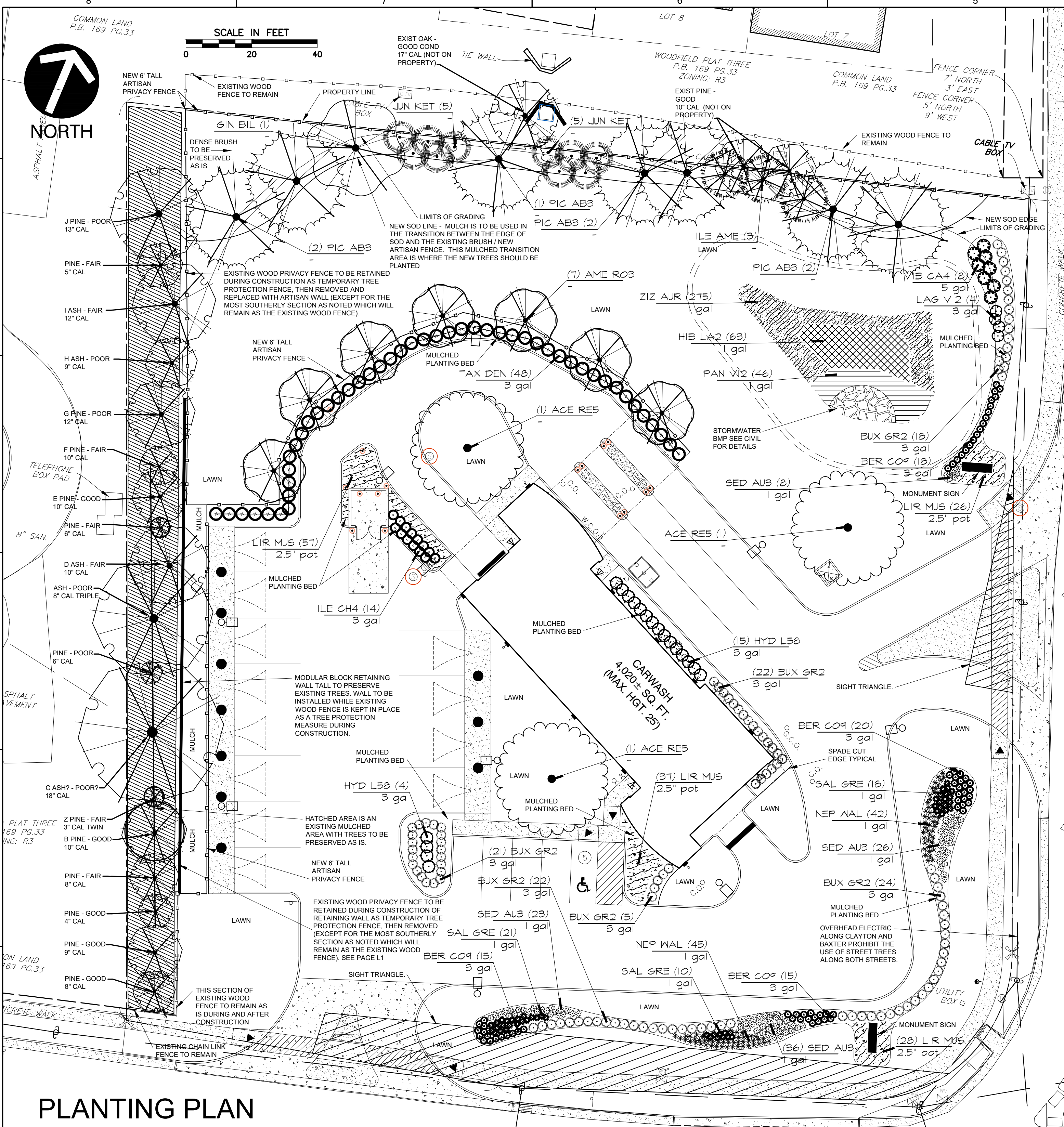
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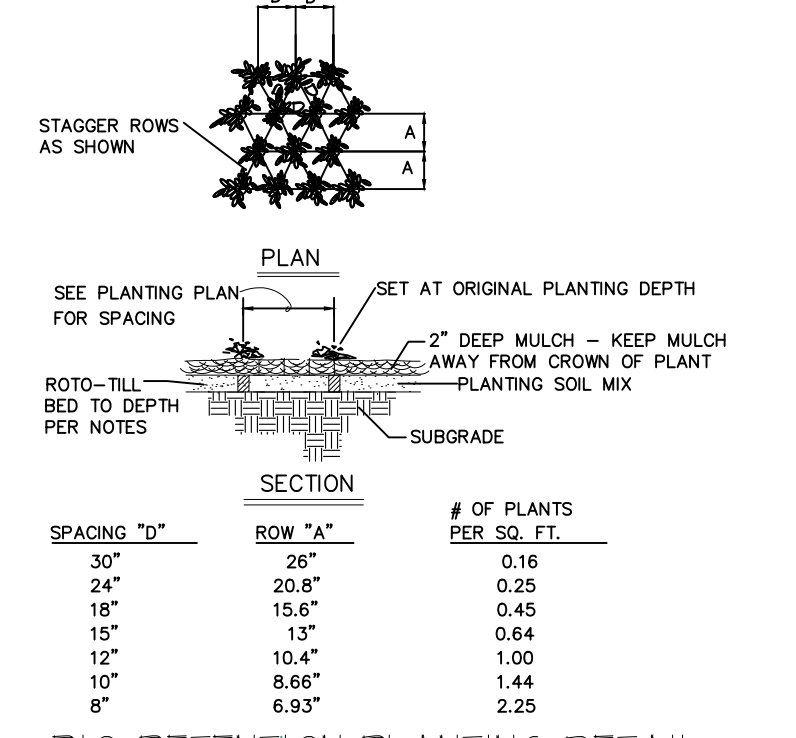
PLANTING PLAN

PLANTING, WATER and MULCH REQUIREMENTS FOR BIO-RETENTION AREA

WATER AVAILABILITY	REQUIRED PLANTING PERIOD	MINIMUM CONTAINER SIZE	WATER REQUIREMENT FIRST 3 WEEKS *	WATER REQUIREMENT AFTER 3 WEEKS *	MAXIMUM MULCH DEPTH
NO AVAILABILITY TO WATER AFTER	LATE FEB. - APRIL ONLY	2.25"x3.75" OR LARGER	WATER EACH PLUG IMMEDIATELY		1.5" FOR PLUGS
MANUAL WATERING WITH STANDARD SPRINKLER	LATE FEB. - EARLY JUNE or SET OCTOBER	4.5"x5" QT. OR LARGER IN SUMMER & FALL	1" (60 MIN.) EVERY 4 DAYS	1" (60 MIN.) EVERY 7 DAYS UNTIL PLANTS ESTABLISHED ***	1.5" FOR PLUGS 2.5" FOR QUARTS
AUTOMATIC IRRIGATION (SET TO WATER MORE FREQUENTLY THAN NORMAL DURING FIRST TWO MONTHS AFTER PLANTING)	LATE FEB. - EARLY OCTOBER	2.25"x3.75" PLUG OR LARGER IN SPRING 4.5"x5" QT. OR LARGER IN SUMMER & FALL	1" (60 MIN.) EVERY 4 DAYS IN SPRING AND FALL 1" (60 MIN.) EVERY 3 DAYS IN SUMMER	1" (60 MIN.) EVERY 7 DAYS UNTIL PLANTS ESTABLISHED ***	1.5" FOR PLUGS 2.5" FOR QUARTS

* THIS WATER AMOUNT INCLUDES NATURAL RUNOFF. IF YOU GET 1/2" OF RAIN, THEN YOU WILL NEED TO ADD 1/2" OF WATER TO MEET THE 1" REQUIREMENT.
 ** REQUIRES TRANSPORT OF WATER TO THE PLANTING SITE IN LARGE CONTAINERS AND POURING ENOUGH WATER ONTO EACH PLANT (AFTER PLANTING) TO MOISTEN THE ENTIRE PLANTING PIT.
 *** PLANTS ARE ESTABLISHED WHEN ROOTS HAVE GROWN OUT OF THE CONTAINER SOIL AND INTO THE NATIVE SOIL BY 3"-5". THIS NORMALLY TAKES 3-4 MONTHS FOR MOST PERENNIALS AND GRASSES AND UP TO 6-7 MONTHS FOR MOST TREES AND SHRUBS.

CONTRACTOR TO PROVIDE SIGNED AND SEALED SHOP DRAWINGS TO BE APPROVED BY THE PROJECT ENGINEER AND MSD. CONTACT MSD AT 314/335-2072.



BIO-RETENTION PLANTING DETAIL N.T.S.

PLANT SCHEDULE

TREES	BOTANICAL NAME / COMMON NAME	CONT	CAL	SIZE	QTY
	Acer rubrum / Red Maple	-	2.5 cal.		3
	Amelanchier x grandiflora 'Robin Hill' / Apple Serviceberry Single Stem	-	2.5 cal.		7
	Ginkgo biloba / Maidenhair Tree MALE VARIETY ONLY	-	2.5 cal.		1
	Ilex opaca / American Holly	-		6' tall	3
	Juniperus chinensis 'Keteleeri' / Keteleeri Chinese Juniper	-		6' tall	10
	Picea abies / Norway Spruce	-		6' tall	7
SHRUBS	BOTANICAL NAME / COMMON NAME	CONT	QTY		
	Barberis thunbergii 'Concorde' / Concorde Barberry	3 gal	68		
	Buxus x 'Green Velvet' / Boxwood	3 gal	112		
	Hydrangea paniculata 'Little Lime' / Little Lime Hydrangea	3 gal	19		
	Ilex x meserveae 'China Girl' TM / China Girl Holly	3 gal	14		
	Lagerstroemia indica 'Victor' / Crape Myrtle	3 gal	4		
	Nepeta x faassenii 'Walkers Low' / Walkers Low Catmint	1 gal	87		
	Salvia greggii / Autumn Sage	1 gal	44		
	Sedum x 'Autumn Joy' / Autumn Joy Sedum	1 gal	93		
	Taxus x media 'Densiformis' / Dense Yew	3 gal	48		
	Viburnum dilatatum 'Cardinal Candy' / Cardinal Candy Viburnum	5 gal	8		
GROUND COVERS	BOTANICAL NAME / COMMON NAME	CONT	SPACING	QTY	
	Liriope muscari / Lily Turf may substitute larger size	2.5" pot	24" o.c.	148	
BIO-RETENTION PLANTS	BOTANICAL NAME / COMMON NAME	CONT	SPACING	QTY	
	Hibiscus lasiocarpus / Rosemallow	1 gal	30" o.c.	63	
	Panicum virgatum / Switch Grass	1 gal	30" o.c.	46	
	Zizia aurea / Golden Alexander	1 gal	18" o.c.	275	

NOTE:
 ALL BIO-RETENTION DETAILS AND SPECIFICATIONS ARE INCLUDED ON THIS PAGE.
 FOR ALL OTHER LANDSCAPING OUTSIDE OF THE BIO-RETENTION AREA SEE PAGE L3 FOR PLANTING DETAILS AND SPECIFICATIONS.
 ALL LANDSCAPE NEW PLANTING BEDS AND LAWN TO BE IRRIGATED WITH AN IN GROUND MECHANICAL IRRIGATION SYSTEM.

EXISTING TREE TO REMAIN = 18
 Soil testing should be done before planting operations and, thereafter, every twelve (12) months to determine the Ph (acidity) level and the nutrient levels. A Ph range of 5.2 to 7.6 is appropriate for the plants chosen. To treat low Ph, add iron sulfate and sulphur.
 Use controlled burning as a tool only under the approval and supervision of the fire department/district.
 No fertilization is required or desirable.; the rain gardens and bio-retention basins should be self-sustaining with the help of the organic material in the topsoil. In fact, the presence of fertilizer will encourage weed growth.
 Additional maintenance might include treatment or removal of plants presenting diseases and/or fungal problems, removal of litter and larger debris, seed collections and harvesting cuttings, moving rocks that may divert water flow, planting more of a successful species, build-up of areas needing more protection, etc.

Maintenance plan @ rain garden AND/OR bio-retention basin:
 Routine inspections and attention to maintenance needs are required in both rain gardens and bio-retention basins if they are to function properly and as designed. As the plant material matures, however, the amount of maintenance decreases. A properly trained team of lawn maintenance contractors should be able to maintain the system properly. The bottom line: rain gardens and bio-retention basins do not require as much maintenance as a lawn.
 The primary maintenance involves inspecting the beds on a regular basis and repairing damage and/or replacing plant material as needed. Each of these areas require minimal use of pesticides, fertilizers and supplemental watering. Over time, the plant growth, root establishment and organic decomposition will create a natural soil horizon. This will result in the need for less maintenance and a longer life span.
 After installation of all plant material, water the plants daily for at least two weeks. Thereafter, the system will need about 1" of natural rainfall or supplemental watering until it is established. Initially, weeding (bi-weekly) of new rain gardens/bio-retention basins is critical for the first few months after the planting is completed. Mulch will help to keep weed germination and erosion issues to a minimum. It is very important to re-mulch all void areas and to maintain a good coverage.
 Accumulation of sediment is a sign that the system is working properly. However, sediment and debris removal (approximately twice a year), especially at the point of inflow, will be the most important task thereafter to maintain the rain gardens and bio-retention basins. Replacement of dead plant material, repair of soil erosions, annual re-mulching with pea gravel, unclogging drains and the repair of the overflow structures may be necessary as they develop and mature. Unfortunately, over the span of about ten (10) years, the soils may need to be replaced due to the exchange capacity of the cells as they become closed and the drainage qualities will deteriorate.
 Dense shrub growth will increase the filtering capacity. Scruffy or discolored plants should be cut back after the spring growth is 6" tall. If possible, raising a mower deck to a height of 6" will make this job easier. By deadheading the flowers, new growth will result. Leaving seed heads and fruit should be encouraged to provide winter interest, bird food and wildlife coverage.

Tasks schedule:
 Immediate tasks: water plant material for fourteen (14) consecutive days unless sufficient rainfall is recorded.
 Weekly: weed beds. Inspect for mosquito larva (after four (4) days of standing water). Re-mulch any void areas by hand. Water during extreme drought periods, early in the morning, as needed.
 Monthly: visually inspect and repair erosion. Also visually inspect for pest infestation and/or disease (use least toxic approach). Inspect drainage paths and cells to assure proper dissipation of water.
 Twice a year: remove excess sediment and debris. Apply fresh mulch layer. Between march 15TH-April 30TH and again between October 1ST-November 30TH, remove and replace all dead and diseased vegetation considered beyond treatment.
 Once a year: check the Ph. Prune excess growth and recycle any removed vegetation material if no disease is present. Remove any stakes and wires that remain on trees.
 Every two to three years: remove old mulch layer before applying a new layer.

PZ-08-2017 MSD MAP# 21-R ZIP- 63017

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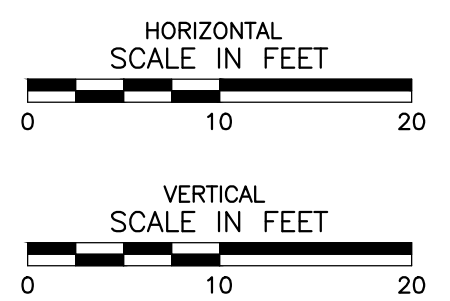
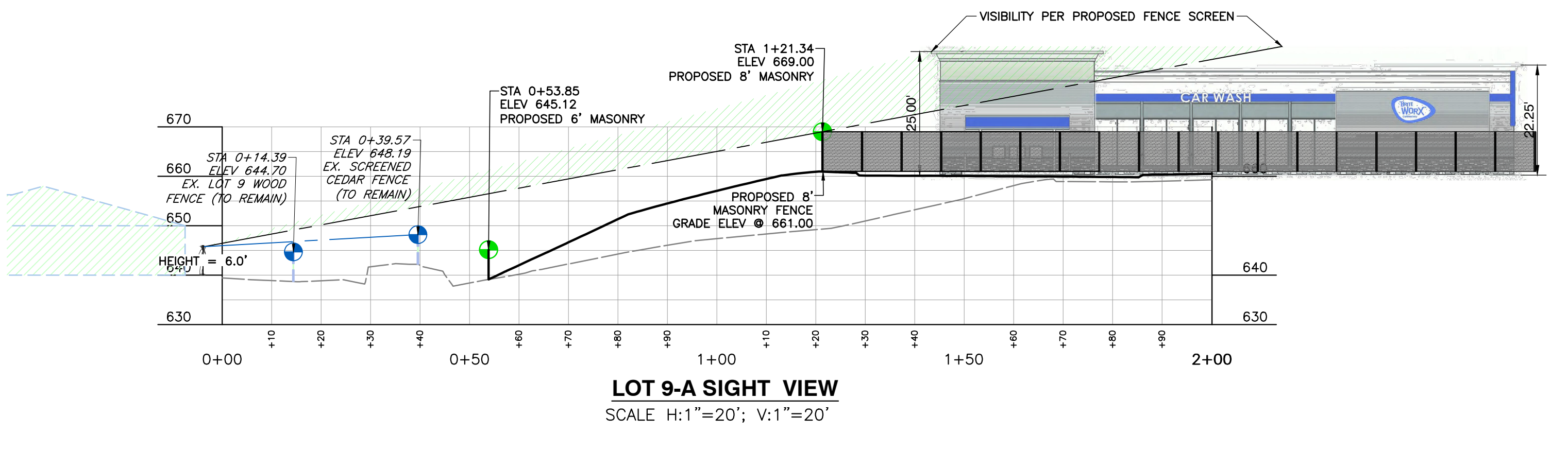
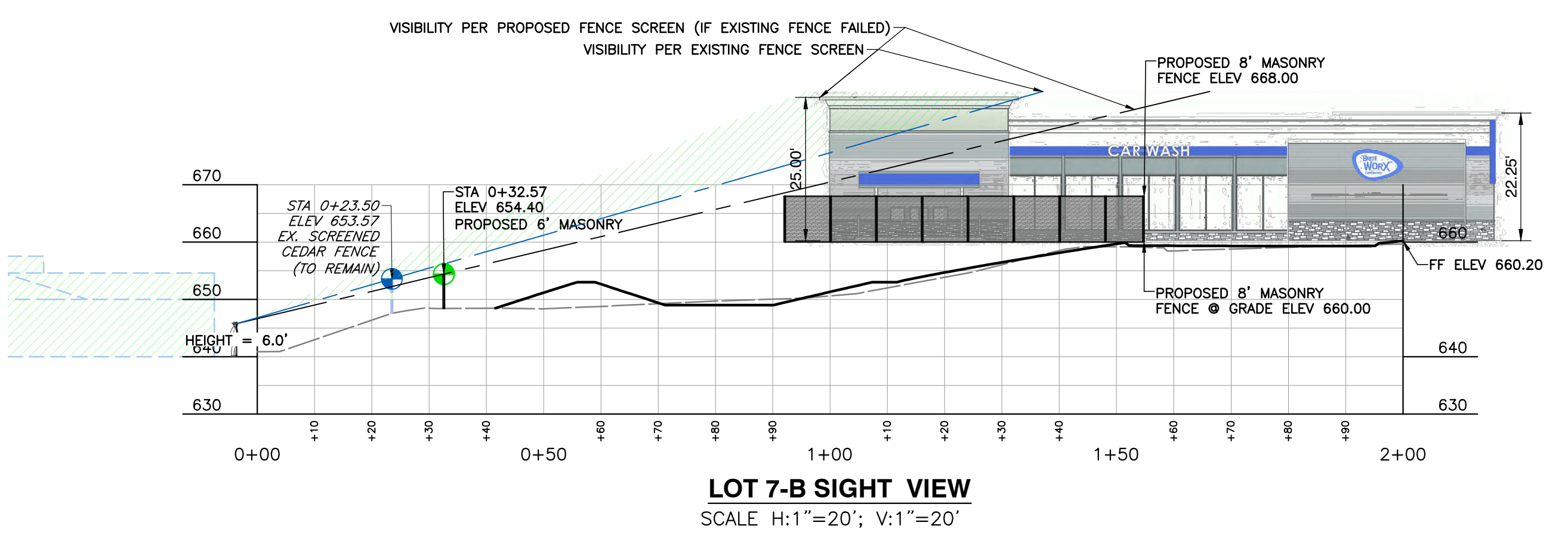
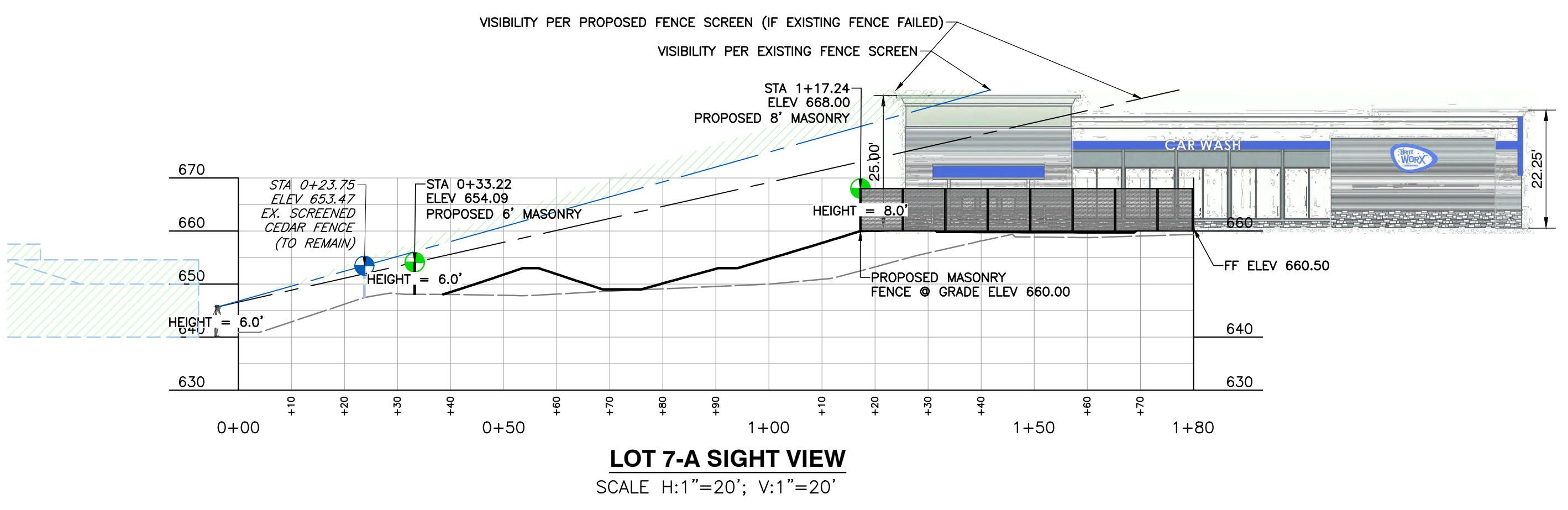
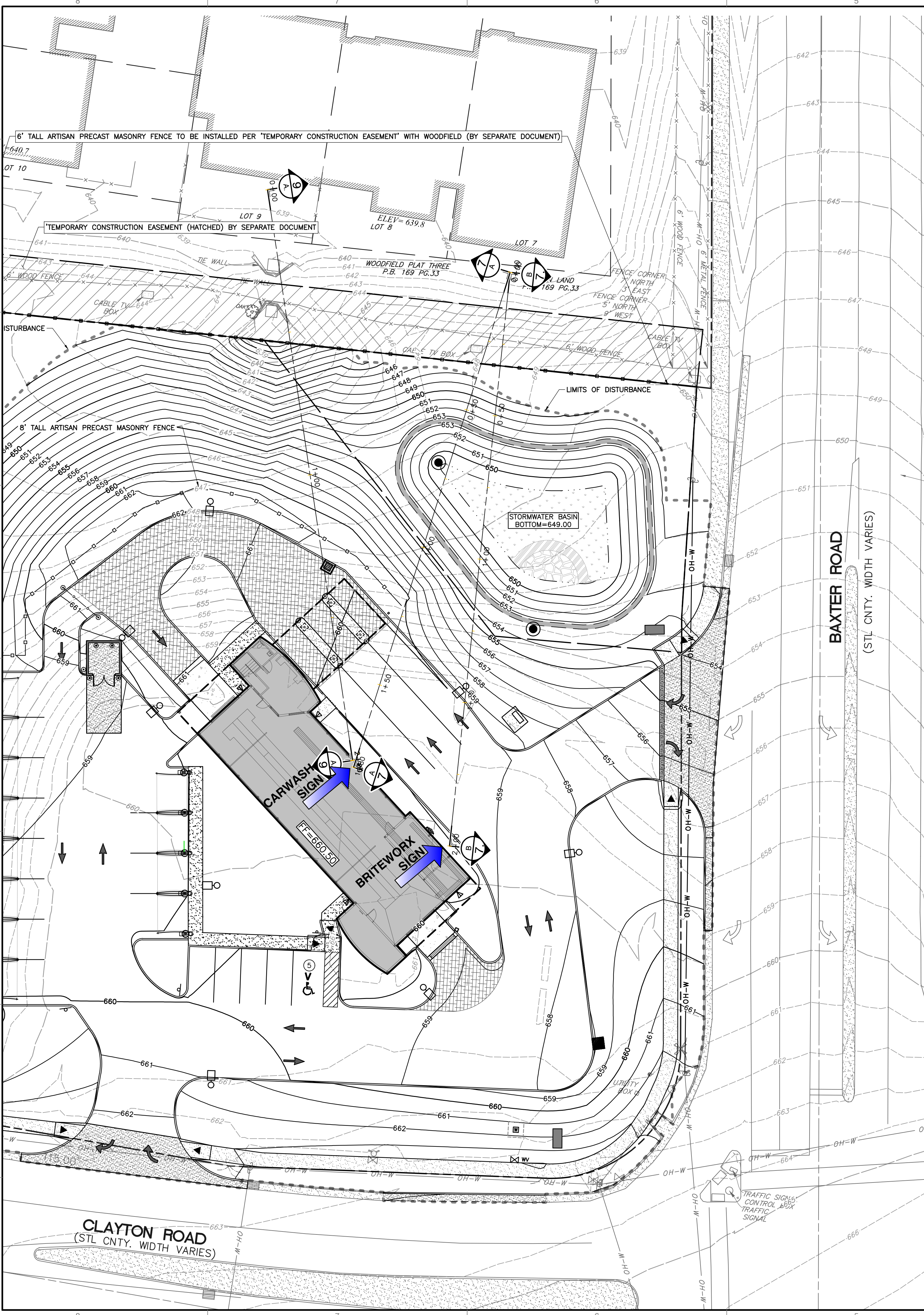
SITE DEVELOPMENT PLAN
 BRITE WORX CARWASH
 14905 CLAYTON ROAD
 PLANTING PLAN

DATE: FEB. 2018 DRAWN BY: MFD
 DATE SCALE: 1" = 20' CHECKED BY: KTK
 PROJECT NO: 153-224
 APPROVED BY: KTK

DRAWING NO. **L2**
 SHEET 02 OF 03

C:\PASTORINO\2018\CONCEPT\DESIGN\PERSON 12.17.18\LANDSCAPE WITH ADDED AND SPONS BLUMS LAST SHED (MAP#) - 12/17/2018 8:06:02 PM, LACT PROVIDED BY (MAP# REVISED) - 12/20/2018 4:58:37 PM

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SIGN EXHIBIT
BRITWORK CARWASH
 14905 CLAYTON ROAD
PLAN & SECTION VIEWS

DATE:	DEC. 2018	DRAWN BY:	CAC
DWG SCALE:	1" = 20'	CHECKED BY:	KTK
PROJECT NO.:	185-672	APPROVED BY:	KTK

DRAWING NO. **SP01**
 SHEET 01 OF 01

MATRIX SUMMARY OF REQUESTED SIGNS

Sign Label	Location	Sign Type	Sign Size in square feet	Total amount of sign area on wall elevation	Max Square feet of sign allowed by code	Hours sign will be lit
A	Clarkson Rd.	Monument	32.34 sf	N/A	42 sf	Dusk till Dawn
A	Baxter Rd.	Monument	32.34 sf	N/A	42 sf	Dusk till 10pm
B	Clarkson Entrance	Directional	2.46 sf	N/A	10 sf	N/A
B	Baxter Entrance	Directional	2.46 sf	N/A	10 sf	N/A
C	North Elevation	Channel Letter	27 sf	75.75 sf	121 sf	Dusk till 10pm
C	South Elevation	Channel Letter	27 sf	75.75 sf	107 sf	Dusk till 10pm
D	North Elevation	Custom Cabinet	48.75 sf	75.75 sf	121 sf	Dusk till 10pm
D	South Elevation	Custom Cabinet	48.75 sf	75.75 sf	107 sf	Dusk till 10pm
E	East Elevation	Custom Cabinet	38.7 sf	38.7 sf	53.2 sf	Dusk till Dawn
F	East Elevation - Canopy	Channel Letter	47.3 sf	47.3	Not Addressed	Dusk till 10pm