

A G E N D A

SPECIAL MEETING OF THE PLAN COMMISSION OF THE VILLAGE OF WILLOWBROOK TO BE HELD ON WEDNESDAY, MAY 18, 2016 AT 7:00 P.M. AT THE BURR RIDGE POLICE DEPARTMENT TRAINING ROOM, 7700 S. COUNTY LINE ROAD, BURR RIDGE, ILLINOIS

1. CALL TO ORDER
2. ROLL CALL
3. OMNIBUS VOTE AGENDA
  - A. Waive Reading of Minutes (APPROVE)
  - B. Minutes - Regular Meeting May 4, 2016 (Minutes will be forwarded to the June 8, Special Meeting)
  - C. Minutes - Village Board Meeting April 25, 2016
4. PLAN COMMISSION CONSIDERATION: Zoning Hearing Case 16-06: (Omar Dweydari, 830 Clynderven Road, Burr Ridge IL) Petition for a special use permit and other relief as may be required to allow a 1,504 square foot restaurant to operate in Unit Number 858 in the Willowbrook Plaza Shopping Center located at 858 75<sup>th</sup> Street, Willowbrook IL.
  - A. PUBLIC HEARING
  - B. DISCUSSION/RECOMMENDATION
5. PLAN COMMISSION CONSIDERATION: Zoning Hearing Case 16-07: (Willowbrook 2012, LLC, 15 W. 580 N. Frontage Road, Suite 1, Burr Ridge, IL) Petition for a special use permit for a planned unit development, including such relief, exceptions and variations from Title 9 and Title 10 of the Village Code to allow construction of a 45,554 square foot facility that includes a 28,992 square foot indoor soccer facility and 16,562 square feet of restaurant, bar and golf simulator entertainment space; and approval of a Preliminary and Final Plat of PUD
  - A. PUBLIC HEARING
  - B. DISCUSSION/RECOMMENDATION
6. VISITOR'S BUSINESS
7. COMMUNICATIONS
8. ADJOURNMENT

# VILLAGE OF WILLOWBROOK

## STAFF REPORT TO THE PLAN COMMISSION

**Plan Commission Meeting Date:** 05/18/2016

**Prepared By:** Tiffany Kolodziej, Administrative Intern

**Case Number and Title:** PC 16-06:/Taste of Sham (\*expected name, subject to change)

**Petitioner:** Omar Dweydari

**Action Requested:** Special use for a restaurant

**Location:** Willowbrook Plaza Shopping Center (Formerly Wingren Plaza)  
858 75<sup>th</sup> Street  
Unit 858  
Northeast corner of 75<sup>th</sup> Street and Kingery Hwy

**PINs:** 09-26-202-014

**Existing Zoning:** B-2

**Existing Land Use:** Mixed Use Retail/Office Space

**Property Size:** Approximately 3.6 acres

**Surrounding Land Use:**

	<i>Use</i>	<i>Zoning</i>
North	Bakers Square	B-4
South	Gas Station & Multi-Tenant Industrial	B-2 & M-1
East	Vacant	M-1
West	Patio Retail Center	B-2

**Documents Attached:**

EXHIBIT 1	“Willowbrook Plaza Plat”
EXHIBIT 2	“Example Pictures”
EXHIBIT 3	“Parking Analysis”

**Necessary Action by Plan Commission:** Approve a recommendation to the Village Board

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## STAFF REPORT TO THE PLAN COMMISSION

**Site Description:** The Willowbrook Plaza shopping center is located on the northeast corner of 75<sup>th</sup> and Route 83 on property containing about 3.6 acres. There is 51,350 square feet of gross leasable space within the shopping center building; the site contains approximately 207 parking spaces, with 166 spaces in the west parking lot and 41 spaces along the east parking lot.



**History and Proposal:** The applicant, with the property owner's permission, is requesting approval of a special use to allow a 1,504 square foot fast-casual food restaurant (expected name: Taste of Sham) to operate in tenant space 858 in the Willowbrook Plaza Shopping Center. **SEE EXHIBIT 1.** This unit is one of the vacant spaces on the west end of the property, with a front entrance facing 75<sup>th</sup> street.

Prospective owners Omar Dweydari and Feras Nassif have had over 23 years of experience as chefs in various restaurants including Mr. Dweydari's previous ownership of the Pita Kabbab House in Norridge, IL. The owners' plan is to create a "carry out" restaurant as well as a dine-in establishment that will most resemble "fast-casual"; their business model is expected to be similar to Chipotle restaurants.

The fast-casual restaurant is expected to serve Mediterranean foodstuffs, with menu items influenced by the region between Syria and Lebanon. Menu items would include customizable meals of falafel, hummus, shawarma, etc. Customers are presented with a mixture of pre-made and ready-to-order items in which they will select to place on their

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plate. Similar restaurants to this proposed establishment include: Damascus Falafel (S of I-55, Rt. 83), I Dream of Falafel (N of 22<sup>nd</sup> St, Oakbrook), and even the Chipotle Restaurant Chain in terms of their food-ordering system. SEE EXHIBIT 2.

**\*Note that in EXHIBIT 2:**

1. The picture at the top left of the page is unit 858 in its current condition. *Picture dated: 5/12/16.*
2. While the applicant states that no demolition work is expected, no interior layout plans have been submitted by the applicant; ***the Plan Commission should require that the applicant submit Plans for Occupancy to the Willowbrook Building Department prior to making a recommendation to the Village Board.***
3. Other included pictures show comparable foodstuffs that the proposed business plans to sell, as well as comparable interior layouts.

Expected hours of operation will be Monday through Sunday, 11AM-9PM. The owners expect to employ a total of 2 full-time staff members as well as 2 part-time staff members. The owners expect that only 2 employees will be present at any given time (1 full-time member and 1 part-time staff member).

#### Staff Analysis:

##### Parking

The West side shopping center along 75<sup>th</sup> street and Kingery Hwy has a reported total of 166 total parking spaces. Currently, the occupied tenant spaces utilize a sizeable portion of the parking lot for their customers/clients. SEE EXHIBIT 3.

**\*Note that in EXHIBIT 3:**

1. Items in the parking analysis that may cause concern are marked in bold.
2. Included picture shows expected parking lot usage during normal operating hours. *Picture taken at 10:45am on 5/12/16.*

Willowbrook off-street parking requirements calculate the minimum available parking for a restaurant use as such: one (1) available parking space per every one hundred (100) square feet of restaurant floor space. Therefore, the proposed 1,504 square foot business will require 15 parking spaces. Adding to the current requirement of parking spaces for all of Willowbrook Plaza's currently occupied units, the proposed business will raise the current required number of spaces to 138.

In terms of the vacant tenant spaces, depending on if the Plaza reaches full occupancy in the coming future, required parking will max-out beyond the plaza's capacity. SEE EXHIBIT 3: "Total Parking Vacant & Occupied."

To further concerns, if unit 900 (the old bank) were to become a restaurant as past interests have incurred, that establishment alone would require 63 parking spaces instead of its current 13 spaces as a bank. Nevertheless, these parking requirements are merely hypothetical at this stage. As Willowbrook Plaza stands today, it does not have full occupancy and the bank does not have current plans to be converted into a restaurant. Therefore, the proposed restaurant use for unit 858 is not expected to be detrimental to the overall parking situation as it stands today.

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### Appropriateness of Use:

The shopping center is zoned B-2, Community Shopping District. While this zoning district includes sixty-two (62) listed "Permitted Uses", only ten (10) of them are for non-retail types of uses. In other words, the B-2 District is intended primarily to provide retail shopping opportunities for the community. With the exception of Papa John's and Men's Warehouse, this center has become a service oriented commercial center. While these uses do not help support the local sales tax which Willowbrook relies on, it may be unrealistic at this point to assume that most retailers would find the space suitable. This location in particular, as a unique restaurant whose store front will face both 75<sup>th</sup> street and Kingery Hwy will generate a places of eating tax revenue for Willowbrook. 11-8-2 of the Willowbrook Village Code signifies that the Village will generate 1% of a restaurant's gross receipts. The proposed restaurant does not intend to sell alcohol.

### Utilities:

The proposed use will not alter the approved utility service plan.

### Landscaping:

The proposed use will not alter the approved landscape plan, however it is noted that the center is not currently in compliance with its previously approved landscape plan. Staff will work with the management company to correct this situation as the center continues to be leased out. This includes shrubbery in the center islands of the West lot.

Wetland/Stormwater Management: The proposed use will not alter the approved storm water management plan.

### Standards:

Section 9-14-5.2 of the Willowbrook Zoning Ordinance establishes seven standards that must be evaluated by the Plan Commission and Village Board. Recommendations may include conditions of approval if appropriate to mitigate any negative impacts created by the special use. A list of the special use standards is provided below, along with the proposed findings to be incorporated in the Plan Commission's recommendation and the Village Board's ordinance if approved.

(A) That the establishment, maintenance, or operation of the special use will not be detrimental to or endanger the public health, safety, morals, comfort or general welfare.

**Finding:** A 1,504 square foot restaurant in space number 858 will not be detrimental to or endanger the public health, safety, morals, comfort or general welfare if approved with recommended conditions.

(B) That the special use will not be injurious to the use and enjoyment of other property in the immediate vicinity for the purposes already permitted, nor substantially diminish and impair property values within the neighborhood.

**Finding:** The location will fill a vacancy in the shopping center that will increase property values. It plans to sell foodstuffs that is unique to the area and will promote greater variety in Willowbrook's places of eating.

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(C) That the establishment of the restaurant will not impede the normal and orderly development and improvement of surrounding property for uses permitted in the district.

Finding: The proposed restaurant will not impede on the normality of the development. It is suspected to add to it.

(D) That adequate utilities, access roads, drainage and/or other necessary facilities have been or are being provided.

Finding: The shopping center is already provided with existing utilities, access roads, drainage and other facilities.

(E) That adequate measures have been or will be taken to provide ingress and egress so designed as to minimize traffic congestion in the public streets.

Finding: No extraneous measures related to this prospective restaurant should be needed to improve traffic congestion within the area.

(F) That the special use shall in all other respects conform to the applicable regulations of the district in which it is located, except as such regulations may in each instance be modified by the Village Board pursuant to the recommendation of the Plan Commission.

Finding: The proposed special use itself conforms to all other applicable regulations of the district in which it is located.

(G) Conditions in the area have substantially changed, and at least one year has elapsed since any denial by the Village Board of any prior application for a special use permit that would have authorized substantially the same use of all or part of the site. (Ord. 97-O-05, 1-27-1997)

Finding: This applicant has not requested approval in the past to locate in this shopping center.

**Staff Recommendation:**

The proposed restaurant use in this location will help fill a vacancy and bring additional life to the shopping center. Additionally, it will not generate any negative impacts on the center due to its irregularity with other services within immediate vicinity. Staff supports the requested use and recommends the Plan Commission approve the following sample motion:

**Based on the submitted petition and testimony presented, the special use for a 1,504 square foot restaurant in space 858 in the Willowbrook Plaza Shopping Center for the prospective Taste of Sham meets the standards for a special use as outlined in the Staff report prepared for the May 18th Plan Commission meeting and deliberated by the Plan Commission; therefore I move that the Plan Commission recommend approval of PC 16-06 subject to the following conditions:**

1. The special use granted herein only applies to the 1,504 square foot space in Unit 858.
2. The special use be approved only if the applicant agrees to submit Plans for Occupancy to the Willowbrook Building Department.
3. The special use shall be null and void if construction of the proposed use is not commenced and a certificate of occupancy is not granted within eighteen (18) months of the date of any approval of the special use by the Village Board.



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## STAFF REPORT TO THE PLAN COMMISSION

<b>Public Hearing Date:</b>	May 18, 2016 (Special Meeting)		
<b>Prepared By:</b>	Jo Ellen Charlton, Planning Consultant		
<b>Case Title:</b>	16-07: Compass Event Center, 635 Joliet Road		
<b>Petitioner:</b>	Willowbrook 2012, LLC, 15 W. 580 N. Frontage Road, Suite 1, Burr Ridge, IL 60527		
<b>Action Requested by Applicant:</b>	Consideration of a petition for a special use permit for a Planned Unit Development, including such relief, exceptions and variations from Title 9 and Title 10 of the Village Code.		
<b>Purpose:</b>	Develop a 45,934 square foot facility that includes a 28,992 square foot indoor soccer facility, and 16,562 square feet of restaurant, bar and golf simulator entertainment spaces; and approval of a Preliminary and Final Plat of PUD.		
<b>Location:</b>	South side of Frontage Road between Del Rhea's Chicken Basket and 7-11		
<b>Existing Zoning:</b>	B-3 General Business		
<b>Existing Land Use:</b>	Vacant Property		
<b>Property Size:</b>	3.657 Acres		
<b>Surrounding Land Use:</b>	<i>North</i>	<i>Use</i>	<i>Zoning</i>
	North	Vacant Lot	M-1
	South	I-55 Expressway	I-55 Expressway
	East	7-11	B-2 Community Shopping
	West	Del Rhea's Chicken Basket	B-3 General Business
<b>Documents Attached:</b>	<ol style="list-style-type: none"><li>1. Architectural Site Plan, dated 3/25/16 (7 Sheets)</li><li>2. Engineering Plans, dated 3/25/16 (8 Sheets)</li><li>3. Photometric/Lighting, dated 4/4/16, (2 Sheets)</li><li>4. Landscape Plan, dated 3/25/16 (1 Sheet)</li></ol>		
<b>Necessary Action by Plan Commission:</b>	Open Public Hearing, accept testimony, and continue public hearing in order to provide staff with direction regarding outstanding items.		

**Site Description:**

The development site is currently vacant. It is located on the south side of Frontage Road at the south end of Quincy Drive, between Del Rhea's Chicken Basket and the 7-11. The site consists of 3.657 acres. It is a shallow site with around 200 feet of depth, with over 500 feet of frontage along Frontage Road. The site's southern boundary is the I-55 expressway.



**Development Proposal:** The developer wishes to construct a multi-use facility consisting of a high ceiling approximately 28,992 square feet facility to accommodate two "mini" indoor soccer fields. Other uses in an attached 3 story structure that parallels the Joliet Road frontage that includes the following:

- 1<sup>st</sup> Floor:** Restaurant/Bar (Special Use in B-3)
- 2<sup>nd</sup> Floor:** Golf Simulators (Special Use in B-3)/Storage
- 3<sup>rd</sup> Floor:** Lounge, Party Room, Golf Simulator Offices and Storage

Note: All levels have outdoor seating.

The basement plan shown in earlier concept plans has been removed from the project.

**Staff Analysis:**

**Parking**

Table 1

**First Floor**

USE	SQFT	ZONING	
		PARKING REQUIREMENT	SPACES REQUIRED
Bar and Restaurant	3,952	1/100	40
Kitchen/Carry Out	1,183	1/100	12
Storage	660		
Private Dining	542	1/100	5
Outdoor Dining	860	1/100	9
<b>TOTAL SQFT 1ST</b>	<b>7,197</b>		

**Mezzanine/2nd Floor**

Storage	1,654	1/100	17
Golf	1,571	16 OCC. 1/3	5
Outdoor Seating	380	1/100	4
<b>TOTAL SQFT 2ND</b>	<b>3,605</b>		

**Soccer Field**

Field	23,824	24 OCC. 1/3	8
Seating	2,480	24 OCC. 1/3	8
Mens Locker	1,344	32 OCC. 1/3	11
Womens Locker	1,344	32 OCC. 1/3	11
<b>TOTAL SQFT SOCCER</b>	<b>28,992</b>		

**3rd Floor**

Bar/Lounge	2,306	1/100	23
Party Room	428	1/100	4
Golf	1,215	8 OCC. 1/3	3
Office	908	1/225	4
Outdoor Patio	1,283	1/100	13
<b>TOTAL SQFT 3RD</b>	<b>6,140</b>		
<b>TOTAL SQFT BLDG</b>	<b>45,934</b>		

<b>SPACES REQUIRED</b>	177
<b>SPACES PROVIDED</b>	174

<b>Surplus/(Deficit) Parking Spaces counting 2nd Sto</b>	(3)
<b>Surplus/(Deficit) Parking Spaces not counting 2nd</b>	20

After removing the basement use from their concept plan, the number of parking spaces designed for the site more closely meets the parking requirements of the Zoning Ordinance. The applicant's parking calculations can be found on Sheet "T" of the Architectural Site Plan Documents and show a surplus of about 20 parking spaces. The spreadsheet on the preceding page (Table 1) verifies most of the applicant's numbers, except that 380 square feet was added to account for the outdoor seating on the Second Floor, which requires an addition four (4) parking spaces. Finally, parking was re-calculated for the large 1,654 square foot second floor storage area to measure the impact if that space was converted to more restaurant/bar/party space. If this space was to be converted to anything other than storage as indicated on the plans, parking on the site would be short by a few spaces.

It is important to note that the Willowbrook Zoning Ordinance assigns parking for "Indoor Recreational Facilities" as "1 parking space for each 3 persons, based upon the maximum number of persons that can be accommodated at the same time in accordance with design capacity, plus 1 parking space for each 2 employees." This standard is important in calculating the parking requirement for the indoor soccer use associated with this facility. The term "design capacity" is, of course, open to interpretation. On the one hand, design capacity implies maximum capacity based on the amount of square footage, which has ties to the Village's Building Code. The Building Code defines maximum occupancy of these uses as 1 person for every 50 square feet. This creates a large occupancy number. Maximum occupancy in the 26,304 soccer arena based on this standard would be 526 people. Applying the Zoning Code standard of 1 space for every occupant would require 175 parking spaces (all of the proposed parking) just for the soccer facility. On the other hand, the applicant is suggesting that "design capacity" be based on their intended use of the soccer fields, which is for adult leagues that have no more than 6 people on a team, with no referees or coaches adding to the occupancy number. The applicant assumes a maximum capacity of 48 people in the field house at any one time in the parking figures shown between the field and the spectator areas, requiring only 16 parking spaces. This assumes 6 players per team (24 players total) and 24 spectators. Earlier reviews of this assumption noted this was not a reasonable assumption if younger teams (with more players, coaches and referees) were to be authorized on the field. The applicant's current submittal increased their parking requirement assumption by 22 spaces when their submittal assumed calculated added parking for the men's and women's locker rooms, which each accommodate 33 people. This adjustment by the applicant dedicates 38 parking spaces for the soccer arena use, which by the Zoning Ordinance accommodates 114 people on the two fields. This is the equivalent of having 4 younger teams on the field (15 players per team) with up to 4 coaches, 6 refs and 40 parents). Because this adjustment was made, staff is relatively comfortable with the parking numbers for the soccer arena as meeting the Zoning Ordinance requirement. It will be important, however, for the applicant to establish as part of their testimony that their primary business model is for the lower number adult leagues given that the higher occupancies may have trouble with occupant loads based on the other uses proposed on the site and with teams arriving when other the field is already occupied.

#### Bulk Requirements

The property is zoned B-3, however PUDs can allow for flexibility to the bulk requirements if authorized by the Village. A detailed discussion of important bulk exceptions and variations is provided below.

- Height.** Maximum height in a B-3 district is 30'. The proposed building has a maximum height of 49.8', which is to the peak of the parapet wall for the high ceiling soccer arena. The actual ceiling height for the arena is 40'. The 3 story restaurant/entertainment uses at the front of the property are proposed at a height of 35'6".
- Building Setbacks.** In a PUD, building setbacks are required to be equal to the required setback of the adjoining zoning district, and not less than the height of the building (shown in the 4<sup>th</sup> column in Table 2 below). The required and proposed minimum setbacks are shown in Table 2 below. The shallow depth of the property limits building placement on the lot, so setbacks relief from the front and rear property lines are being requested.

Table 2

Yard	Description	Zoning Ordinance	Based on Height	Minimum Provided(1)
Front	From Joliet	60'	49.67'	45.24'
Interior Side	From Chicken Basket	30'	49.67'	45.11'
Interior Side	From Storage	30'	49.67'	39.15'
Rear	Parallel I-55	40'	49.67'	24'
Interior Side	From 7-11	30'	49.67'	Exceeds Requirement

(1) Numbers represent minimums based on proposed design, not "build to" setbacks.

- Pavement Setbacks.** Pavement setbacks are regulated in the Parking Section of the Zoning Ordinance. The required and proposed minimum setbacks are shown in Table 3 below.

Table 3

Yard	Description	Zoning Ordinance	Minimum Provided(1)	Description
Front	From Joliet	15'	12.5'	For Driveway Pavement Around Building. Rest is minimum 15.85'
Interior Side	From Chicken Basket	10'	10'	For 3 spaces south of dumpster. Rest is 15'
Interior Side	From Storage	10'	10'	All meets
Rear	Parallel I-55	10'	0'	For Pavement Around Building. Rest is minimum 18.64'
Interior Side	From 7-11	10'	9.75'	Near cross access driveway. Varies to above minimum standard

- Foundation Setbacks.** The Zoning Ordinance requires a minimum foundation landscape area of 7'. Many areas meet this requirement around the buildings, excluding areas where the front and rear elevations are near the front and rear lot lines, where setbacks are already encroaching into required yards for buildings and pavement setbacks.

Cigar Lounge:

Earlier concept plans described the “lounge” areas as a “cigar lounge.” Cigar lounged are prohibited by the Illinois Smoke Free Indoor Act. Any recommendation for approval should include a condition that restricts this use.

Signage:

Signage variations are not allowed under the existing B-3 Zoning, and although relief is possible through a PUD, it is generally supported only to the extent needed to adequately promote the proposed business. On-going discussions about signage on this property have resulted in improvements, however, it is staff’s opinion that additional modifications should be required before a recommendation can be made to the Village Board. Specifically, staff recommends eliminating or further restricting the digital signs directed to I-55 and reducing the size of a front wall sign and the monument sign. A description of the requested signs and recommended modifications is provided in Table 4 below.

**Table 4**

Sign	Description	Location	Size	Comments
Compass Arena Wall Sign	Assumed to be an Individual letter wall sign	I-55 Elevation	125 sqft	<ul style="list-style-type: none"> <li>• Higher than allowed by code. Exception reasonable given I-55 frontage.</li> <li>• Individual letter sign type needs to be confirmed and lighting details added.</li> </ul>
“Typical Wall Mounted Sign”	1 of 2 requested. Believed to be the digital signs earlier requested	I-55 Elevation	120 sqft	See “Digital Signs” Section below
Typical Wall Mounted Sign	2 of 2 requested. Believed to be the digital signs earlier requested	I-55 Elevation	120 sqft	See “Digital Signs” Section below
Compass Arena Wall Sign	Assumed Individual letter wall sign	Joliet Elevation	125 sqft	<ul style="list-style-type: none"> <li>• 40’ height meets requirements, although the scale on the drawing suggests it might be at 41’.</li> <li>• Individual letter sign type needs to be confirmed and lighting details added</li> </ul>
Entry Sign	Round Compass over front door	Joliet Elevation	95 sqft	Suggest reducing size to fit in area above door but below patio barrier.
<b>Total Wall Sign Sqft Requested</b>			585 sqft	
<b>Total Wall Sign Sqft Allowed</b>			450	
<b>Excess Wall Signage</b>			135 sqft	

**Table 4 (continued)**

Monument Sign	12' high monument with materials to match building	Joliet frontage roughly center of property	240 sqft (120 per side)	<ul style="list-style-type: none"> <li>• Exceeds permitted size by over 200 percent</li> <li>• (45 sqft per side allowed) and is in addition to wall signage.</li> <li>• 20' wide sign extends over the front lot line. 5' setback required.</li> <li>• Base of sign to be indicated at no less than 3' above grade</li> </ul>
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1. **Digital Signs.** As indicated in the Table 4 above, Compass is requesting permission for two digital signs on the I-55 elevation. While it is possible to grant relief from the strict provisions of the Zoning Ordinance, it is important to note the extent to which these signs exceed Zoning Ordinance requirements. These signs do not comply with the following provisions of the Zoning Ordinance.

- a. Section 9-11-12(B)2 permits a maximum of four (4) wall signs, when five (5) are proposed. Removal of the two digital signs would bring the number of wall signs into compliance with the Ordinance.
- b. Section 9-11-12(B)2a permits a maximum of 450 square feet of signage when 585 is proposed. Removal of the two digital signs would bring the square footage down to 345 square footage
- c. Section 9-11-12(B)2b permits wall signs if they are spaced no closer than 20% of the width of the façade. 20 percent of 224' frontage is 45'. Both digital signs are about 25' from the "Compass Arena" wall sign.
- d. Section 9-11-12(B)2(c)1B restricts wall sign to no higher than 40' in height, when the proposed signs are greater than 40' in height
- e. Section 9-11-4R lists multiple message, digital, dynamic and/or video display signs as "prohibited signs".
- f. State Law prohibits digital signs or any "off-premise" signs that sell any advertising space on this sign given Joliet's designation as a "Scenic Byway". State officials note that while they will enforce against non-compliant signs, it's easier if they're not allowed because changing message signs are easy for owners to change and violate the law, but hard to catch and prove a case in court against an owner. The applicant states they will comply with State law requirements.
- g. Digital signs visible to I-55 are NOT consistent with the goals and objectives of the Comprehensive Plan for this site because the Plan provides that "it is extremely important that site and architectural features of new development or redevelopment recognize the need for aesthetically pleasing development as viewed from both the Stevenson Expressway and Joliet Road. This would include sensitive design with regard to off-site parking and loading areas, refuse disposal, signage, roof mounted equipment and other features." While "aesthetically pleasing" can be subjective, it is assumed that the Plan would recognize anything that is "prohibited" in the Zoning Ordinance as not aesthetically pleasing. The subject property is one of only four

Willowbrook properties with visibility to I-55. The image of what is built on this property may represent the only opportunity for the Village to make a good impression on I-55 travelers. Is the advertising or information about next week's tournament on digital signs the image the Village wants to leave with people about what Willowbrook is about?

2. **Monument Sign.** The 240 square foot monument sign is too large. The ordinance allows 45 square feet per side for a total of 90 square feet. With the exception of Chicken Basket and House of Trucks who both have legal non-conforming signs due to the fact that they were there when the property was annexed, all other signs along Joliet in Willowbrook meet the requirements of the Ordinance. While there may be some room for something a little bit larger as part of the PUD request, this sign should not dominate the roadway. The mere large scale of the building itself, along with the wall signage will provide adequate visibility to the use. Support might be offered for a design that incorporates certain historic features to compliment the road's "scenic byway" designation. Or, if a digital sign is still a priority, it may be more appropriate to incorporate one into this monument sign in lieu of the wall signs facing I-55...much like the digital sign approved for Willowbrook Square Shopping Center on 63rd.

Comprehensive Plan/Appropriateness of Use:

The Village Comprehensive Plan indicates that this property is best zoned for highway commercial uses. The Plan, adopted in 1993, provides the following specific recommendation for this area:

"The area along the south side of Joliet Road currently consists of a large vacant site, a vacant building, a small restaurant, and a self-service storage facility. Because the area between Joliet Road and the Stevenson Expressway is rather shallow in depth, existing development patterns have resulted in parcels of unusual configuration. The Plan recommends the consolidation and redevelopment of all parcels within the area except for the southern, most area which has recently been improved with a self-service storage facility. Parcels should be consolidated and developed with limited driveway access locations. It is extremely important that site and architectural features of new development or redevelopment recognize the need for aesthetically pleasing development as viewed from both the Stevenson Expressway and Joliet Road. This would include sensitive design with regard to off-site parking and loading areas, refuse disposal, signage, roof mounted equipment and other features. Special landscape treatment should be provided along the Stevenson Expressway right-of-way to lend a pleasing appearance to the development."

Recommended revisions to signage were discussed above. The proposed plan addresses roof mounted equipment and special landscaping satisfactorily.

Other relevant Comprehensive Plan Recommendations include the following:

- Frontage road should be improved from a rural cross section to an urban cross section, and upgraded to Industrial Collector Street Standard
- New commercial development should only be allowed where street capacities accommodate or can be modified to accommodate additional traffic and where there are no issues with access and compatibility of land uses
- Access points should be consolidated when possible.

- New commercial development should only occur on sites with sufficient land to provide well-landscaped, easily accessible and conveniently located parking areas.
- Natural features and mature landscaping should be preserved wherever possible
- Overhead utilities should be relocated underground.
- Sidewalks and crosswalks should be encouraged.

The subject property and the Chicken Basket property located immediately west are located between the self-service storage facility referenced in the comprehensive plan and the 7-11, which had not yet been constructed when the Plan was approved. Given the recommendation that new developments consider the consolidation of nearby smaller properties, it makes sense to consider the future of the Chicken Basket property as part of this development since it is the only other property on the South side of Joliet Road. This original "Route 66" business is on the National Register of Historic Places and predates Willowbrook's incorporation as a Village. Staff met with Pat Rhea who was generally receptive to the proposed use if it can modified to fit the site. His interest includes maintaining his visibility to south bound I-55 traffic, preventing unauthorized spill-over parking onto his parking lot, and ensuring the site has proper drainage. He liked the proposed northern orientation of the building, and noted that he would not want the building to be turned in a way that would place the rear of the building to adjoin his property. He is not opposed to the removal of any of the existing perimeter trees between their two properties. He has no immediate plans to sell his property, but did indicate he would consider reasonable offers to purchase the property, which also includes "buying-out" the business.

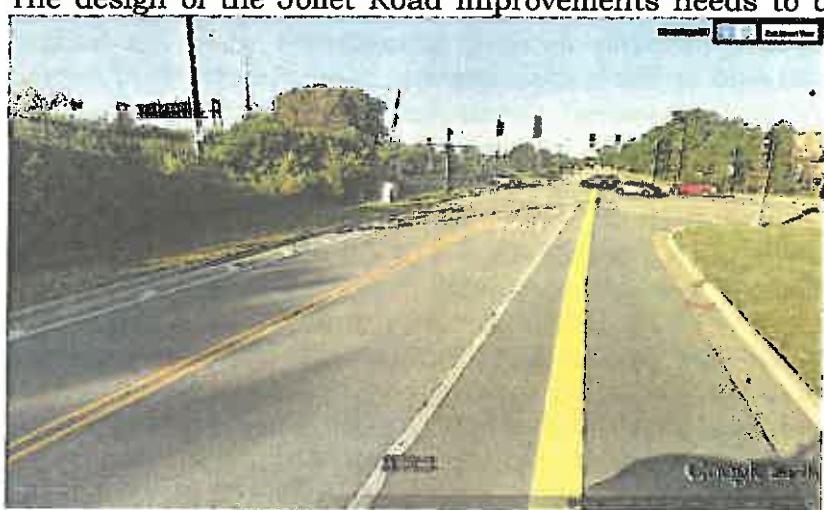
The proposed uses certainly fit the type of uses intended by "highway commercial" uses classified in the Comprehensive Plan, assuming it can be built to conform to the other objectives identified in the Plan. These objectives include ensuring the site is accommodated with adequate roadways, access, parking and circulation; in other words, the objects that make the site "work". Other objectives can be somewhat more subjective but suggest that the Village should not turn its back on that part of the property that is adjacent to I-55 just because we can't see it. To the contrary, the Plan promotes site design considerations that send a message to the outside world about who we are and how we want to be perceived. It suggest tasteful landscaping, sensible signage and screening of unsightly rooftop mechanical equipment, which is important given that most of the site is already quite a bit lower in elevation than the expressway.



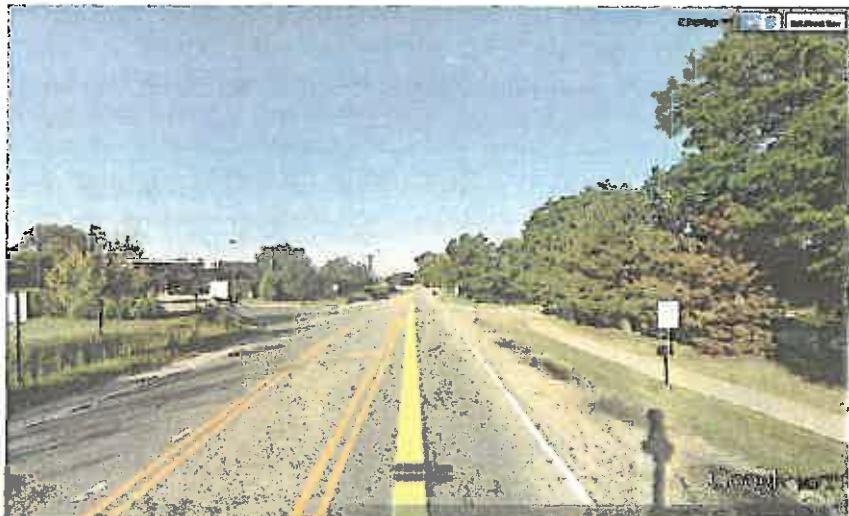
**Providing Adequate Access and Roads:**  
As recommended in the Comprehensive Plan as discussed above, improvements to Joliet Road are warranted and should be provided as part of this development. This IDOT right-of-way is

in a state of poor maintenance, has drainage problems, and the wide shoulders promote illegal semi-truck parking, which occurs nearly on a daily basis. This habit needs to be corrected as part of this project.

The design of the Joliet Road improvements needs to discourage this illegal parking, as the wide shoulders, when combined with a popular destination that may have a full parking lot will encourage additional illegal parking by semis as well as autos because "it's easier".



Improvement to this standard would adequately address staff's concern regarding the significant amount of unauthorized/illegal truck parking that occurs on the side of Joliet every day. It would also satisfy one of the required "findings" of a PUD that they "provide adequate control over vehicular traffic".



The section of Joliet Road between the 7-11 and the office properties on the north side of Joliet, as shown below, includes an alternate cross section design with mixed results. Truck parking is successfully mitigated on the south side of the road (left side of picture), where the shoulder is relatively narrow and a nearby ditch discourages illegal truck parking. It is easy to note that the design of the north side of the road, with its wide shoulder and level grassed parkway make it easy for trucks to easily ignore the "No Parking" signs that line that side of the road...as evidenced by the tire rutted shoulder and grassed parkway area.

As mentioned above, the Comprehensive Plan suggests an urban cross section, and staff will recommend Compass improve to that standard, unless they would like to propose an alternative design that will successfully discourage illegal parking on the sides of the road adjoining this project. One or two trucks parking along the side of the road now when traffic and activity are lighter are one thing. That many or more trucks when combined with the traffic and activity of a successful mixed use soccer arena project will cause visibility and other significant safety concerns

for motorists and pedestrians that cannot be overlooked. In addition to auto traffic in this area, there are a significant number of students from the trade school across the street that already cross Joliet to go to 7-11 for a sandwich, refreshments, etc. The proposed facility would undoubtedly also be an attraction for additional pedestrian trips across Joliet Road that should not be impeded by the illegal parking of semi trucks on the side of the road. Staff is recommending the Plan Commission not finalize a recommendation on this project until a satisfactory road improvement proposal is made by the applicant and at least conceptually approved by both the Village and IDOT.

According to the Alta Survey, the site is currently encumbered by an existing Ingress and Egress Easement on the east end of the site. The applicant will be required to provide a copy of the document that granted this easement with the application. It appears it is to the benefit of the 7-11 property and was likely intended to provide a secondary means to access that property. In fact the 7-11 property was constructed to include a stub that actually already extends onto the Subject Property. Depending on the details of the easement and the final site plan for this project, it may be necessary to work with the owners of the 7-11 property to amend or eliminate the easement.

Utilities: The property is served by a 12" water main located on the north side of Joliet Road. While it is expected this main will be adequate to serve the property, additional lines to and potentially around the site for fire flow, fire hydrants, and for domestic service will be required by Tri-State Fire Protection District and should be coordinated on the plans prior to finalizing a recommendation.

DuPage County provides sanitary service for the site, and there is an existing sewer along Joliet Road. The applicant will need to confirm with the County that there is adequate capacity for the proposed use.

A power pole and wire terminate on the property at the northwest corner. This line crosses Frontage Road, then continues west along the north side of Frontage Road. This line should be buried and the pole removed as part of the construction project.

Stormwater Management:

The site is designed with underground vaulted detention under the parking lot. This is why there is very little "green" space on the site, except for the perimeter landscape buffers.

Elevations:

The proposed building includes wider elevations on the north and south sides than on the east and west sides. Proposed materials include concrete precast panels. The front elevation, visible from Joliet, includes a large span of windows and doors, which will provide significant light into the interior restaurant/entertainment spaces. Some of these windows include "roll up" glass garage doors that turn indoor dining into semi-outdoor dining opportunities. A variety of patio and balcony dining options exist on the north and west elevations of the building. The east and west elevations (visible to Chicken Basket and the project's new parking lot), also include a significant amount of windows and other features that help break up long monotonous wall surfaces. The south elevation has contrasting features up high on the building, where it is visible to I-55. Lower elements of this elevation do not include many features, but are relatively not visible given that a retaining wall and the much higher grade of I-55 will screen this elevation from view. Colored elevation boards will be available at the Plan Commission for review.

Floor Plans:

The soccer arena on the first floor includes two “mini” soccer fields, each having an 80’ x 120’ playing surface and separated by a 16’ central observation area, and 7’ side and end areas. Mens and womens locker facilities are provided on both sides of the arena, with each group serving one of the two fields.

Attached to the north end of the field is three stories of mixed uses. All three floors have windows that look out over the soccer arena. The first floor includes a restaurant, bar, private dining area, and outdoor dining area, as well as a separate parking lot entrance for carry out pick-ups. The second floor is really an oversized mezzanine, with golf simulators and more outdoor balcony areas on the west side, with a “storage mezzanine” on the east side. As mentioned earlier, staff has concerns that this area, after constructed, will be converted to other purposes that will have an increased impact on parking. Any approving ordinance will specify approved uses per the approved plan such that any modification to any of the spaces will require approval by the Village, including a new public hearing and amendments to their approving ordinances. The third floor is designated as a lounge area, with more party rooms, a bar, outdoor patios, and more golf simulators, as well as two offices at the east end of the building.

The project will contribute to the Village’s revenues via both the restaurant and places of amusement taxes that will be generated on the site.

Engineering.

The following outstanding engineering items need to be addressed prior to finalizing a Plan Commission recommendation:

1. Benchmarks need to be confirmed in order to determine compliance with Section 15-33 of the DuPage County Stormwater Ordinance. The applicant’s last correspondence on this issue is that Geopool was working on it.
2. The light pole locations on the engineering plans do not match the photometric, or on the landscape plan. Plans should be coordinate, and with regard to the landscaping plan, landscape islands that do not have light standards should incorporate the standard shade tree in lieu of shorter ornamental trees.
3. IDOT uncertainties remain outstanding regarding improvements/restoration of the Joliet Road right-of-way. Staff conversations with IDOT indicate they will consider the improvements the Village deems necessary to support the development. See “Providing Adequate Access and Roads” above. To date, the applicant has not been providing proposed improvements indicating they are waiting for the State, and the State’s last review comments were geared to the submittal the applicant made with regard to curb cuts based on earlier plans. Given the chicken and egg scenario, staff recommends direction be provided to the applicant that the Village will not forward a recommendation on this project until they proposed an acceptable improvement to Joliet that addresses the Village’s concerns regarding illegal truck parking. If not curb and gutter as recommended by the Comprehensive Plan, the improvement to be proposed by the applicant must incorporate narrower shoulders and ditches or other methods that are acceptable to both the Village and IDOT.

Required Changes Prior to Formalizing a Recommendation

This public hearing provides the Plan Commission with an opportunity to incorporate feedback into one last set of plans before finalizing their recommendation to the Village Board. In addition to addressing the Engineering comments above, staff recommends the following changes be addressed/completed.

1. The outdoor area shown in the mezzanine shall be added to the parking table in the architectural site plan documents.
2. Joliet Road shall be improved to an urban cross section, or an approved alternative that discourages on-street semi truck parking.
3. Digital wall signs shall not be allowed.
4. The monument sign shall be reduced in size to or near the maximum 90 square feet in area, including digital technology if desired, and relocated so that it is no closer than five feet (5') from the property line.
5. The round compass sign on the front elevation shall be reduced in size to fit under the second floor patio barrier.
6. The plans shall specify that fire hydrant locations to be approved by Tri-State Fire Protection District.

Recommended Restrictions and Conditions

The current plan works, in part, based on the representations made by the applicant as to how the property is intended to be used. For example, parking works based on the fact that the applicant states that the fields will be used by adult leagues consisting of no more than 6 people on each team. If there are not enough teams to support the investment based on this scenario, it would be reasonable to assume that the applicant would look to other methods to fill the space. While these scenarios may be OK, staff is recommending conditions that limit the use of the space as stated by the applicant, with changes considered only as amendments to the PUD, requiring a new public hearing and approval by an ordinance. A list of this and similar other restrictions and conditions has been started and is provided below.

1. Approval only for construction in compliance with approved plans and the square footage and uses indicated.
2. Maximum occupancy of the arena is limited to no more than 48 people, unless otherwise approved by the Village as part of a major change to a PUD.
3. Approved uses shall be as shown on the approved plans. Future modifications to the use of any room subject to administrative review to determine whether a major change amendment is required based on parking.
4. A parking agreement shall be executed to accomplish the following:
  - a. Stipulates parking near the front for "Employees Only"
  - b. Parking shall be in designated parking spaces only (drive aisles shall be kept clear)
  - c. Semis shall not park on the site, except in the one loading spot and only when loading and unloading products.
5. The cross access with the 7-11 property shall be confirmed with 7-11.
6. Cigar Lounge use is not allowed.

## **Summary**

The Plan Commission first saw concepts for this project over two years ago. Those plans included a basement level, and site designs that could not be supported. The applicant has been working more diligently in the last 6-9 months to address written comments by the Village with regard to density, parking, setbacks, landscaping and other improvements, and has come a long way. This use will bring new people to town and will support existing hotels, surrounding restaurants and retail uses.

While there are some minor changes that will still be required prior to forwarding to the Village Board for formal consideration, the bigger issues needing feedback from the Plan Commission before a recommendation should be considered include signage and improvements to Joliet Road. Other questions or concerns may come out of the public hearing process and can also be incorporated into any final direction to the applicant to be used in finalizing their plans for a formal vote at a future meeting date that can be determined by the Plan Commission at the meeting. Any motion to continue the hearing should include the date and location of the continued meeting.

#### **GENERAL NOTES**

- GENERAL CONTRACTOR AND SUB-CONTRACTORS SHALL INSPECT THE CONSTRUCTION SITE IN ITS ENTIRETY AND NOTE ALL SITE RESTRICTIONS AND CONDITIONS.
  - GENERAL CONTRACTOR AND SUB-CONTRACTORS TO FIELD VERIFY ALL DIMENSIONS AND CONDITIONS PRIOR TO ORDERING, FABRICATING OR COMMENCING WORK AND NOTIFY ARCHITECT OF ANY DISCREPANCIES.
  - DO NOT SCALE DRAWINGS, VERIFY DIMENSIONING
    - ALL WORK TO BE PERFORMED PER ALL WILLOMBROOK, IL BUILDING CODE AND CURRENT REVISIONS OR ADDITIONS.
  - ALL JOINTS AND PENETRATIONS IN THE BUILDING ENVELOPE THAT ARE SOURCES OF AIR LEAKAGE MUST BE CAULKED, GASKETED, WEATHERSTRIPPED OR OTHERWISE SEALED IN AN APPROPRIATE MANNER.
  - ALL FINISHES TO BE CLASS 1 FSR.
  - ALL EXIT DOORS TO BE KEYLESS IN THE DIRECTION OF EGRESS.
  - ALL GLASS IN DOORS, SIDELITES, GLAZED PANELS & SKYLIGHTS TO BE TEMPERED SAFETY GLAZING.

### GENERAL SCOPE OF WORK

- NEW CONSTRUCTION OF RECREATIONAL FACILITY WITH ATTACHED RESTAURANT AND PER PLANS.

- SQ. FOOTAGE:  
TOTAL: 44,642  
1ST FLOOR: 35,968  
MEZZANINE: 3,280  
2ND FLOOR: 5,394

**PARKING CALCULATION PER  
WILLOWBROOK ZONING CODE**

SPACE	S.F.	CALCULATION	REQ'D SPACES
<u>FIRST FLOOR:</u>			
BAR & RESTAURANT	3952	1 SPACE PER 100 S.F.	39.52
KITCHEN/CARRY OUT	1183	1 SPACE PER 100 S.F.	11.83
STORAGE	650	-	NA
PRIVATE DINING	542	1 SPACE PER 100 S.F.	5.42
OUTDOOR DINING	650	1 SPACE PER 100 S.F.	6.5
STORAGE MEZZANINE	1654	-	NA
GOLF MEZZANINE	1571	1 SPACE PER 3 PERSONS (a)	5.3
<u>SECOND FLOOR:</u>			
SOCCER FIELD	23824	1 SPACE PER 3 PERSONS (b)	8
SOCCER SEATING	2480	1 SPACE PER 3 SEATS (c)	8
MENS LOCKER RM	1344	"DESIGN CAPACITY" / 3	10.66
WOMENS LOCKER RM	1344	"DESIGN CAPACITY" / 3	10.66
<u>TOTAL SPACE REQUIRED</u>			
			154.89
<u>TOTAL SPACE PROPOSED</u>			
			174

NOTE: ALL S.F. AREA'S ARE GROSS W/ THE EXCLUSION OF ONLY THE STAIR CORES AND ELEVATOR

#### FOOT NOTES:

- (a) OCCUPANCY BASED 4 GOLF SIMULATORS WITH 4 USERS EACH CREATING AN OCCUPANCY OF 16 PATRONS
  - (b) OCCUPANCY BASED 12 PLAYERS PER FIELD CREATING AN OCCUPANCY OF 24 PATRONS
  - (c) OCCUPANCY BASED 12 MEMBERS FOR EACH FIELD CREATING AN OCCUPANCY OF 24 PATRONS
  - (d) OCCUPANCY BASED 2 GOLF SIMULATORS WITH 4 USERS EACH CREATING AN OCCUPANCY OF 8 PATRONS

## ARCHITECTURAL SITE PLAN

13



LANDSCAPE NOTE: LANDSCAPING SHOWN IS REPRESENTATIONAL ONLY. SEE LANDSCAPE PLAN FOR ACCURATE LANDSCAPE DESIGN.

**COMPASS ARENA**  
635 JOILET ROAD  
WILLOWBROOK, ILLINOIS

This architectural site plan illustrates the layout of a building complex and its surrounding infrastructure. The plan includes the following key features and dimensions:

- Buildings:** A central building with a footprint of 118'-7" x 130'-88" (M) contains a **COVERED SIDEWALK ENTRY** and a **DELIVERIES** entrance. To the right is a **174 PARKING SPACES** area.
- Streets and Roads:** The complex is situated on **QUINCY STREET** and **JOLIET RD**. A **PRIVATE DRIVE** is located on the right side.
- Dimensions:** Key dimensions include 217'-06" (M) on Quincy Street, 24'-0" on Joliet Road, 118'-7" and 130'-88" (M) for the building footprint, and 361'-10" for the parking area.
- Landscaping and Screening:** The plan shows **LANDSCAPE SCREENING** and **ALL SIDES**, as well as a **DUMPSTER ENCLOSURE**.
- Parking:** The **174 PARKING SPACES** area is marked with a grid of 174 individual spaces.
- Signage and Notes:** Various notes and instructions are included, such as "SEE CIVL DRAWINGS FOR EXACT MOTH & RADIUS DIMENSIONS FOR DRIVE", "NOTE: OVERHEAD POWER LINES TO BE RELOCATED UNDERGROUND", "GROUND BASED MONUMENT SIGN SEE SHEET A2.3 FOR DETAILS", "5'-0" SIDEWALK", "EMPLOYEE PARKING ONLY", "NOTE: TWO WAY TRAFFIC AT DRIVE AROUND BUILDING SEE CIVL DRAWINGS FOR DIRECTION & SIGNAGE LOCATIONS.", "PROVIDE FIRE LANE NO PARKING SIGNS THROUGH OUT DRIVE AROUND", and "NOTE: PROVIDE SIDEWALK SEE CIVL DRAWINGS FOR DETAILS".
- Other:** The plan includes a **12' x 55' LOADING AREA** and a **EXISTING INGRESS/EGRESS DRIVE**.

## INTERSTATE-55

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**INDEX OF DRAWINGS**

SHT.	DESCRIPTION
T	SITE PLAN, SCHEDULES, & GENERAL NOTES
A1.1	FIRST FLOOR RESTAURANT PLAN & MEZZANINE PLAN
A1.2	SECOND FLOOR RESTAURANT PLAN
A1.3	1ST FLOOR SOCCER FACILITY PLAN
A2.1	NORTH ELEVATION & SOUTH ELEVATION
A2.2	EAST ELEVATION & WEST ELEVATION
A2.3	SIGNAGE DETAILS

THIS IS TO CERTIFY THAT THESE DRAWINGS WERE  
PREPARED UNDER MY DIRECT SUPERVISION AND TO  
THE BEST OF MY KNOWLEDGE CONFORM TO THE

Ronald

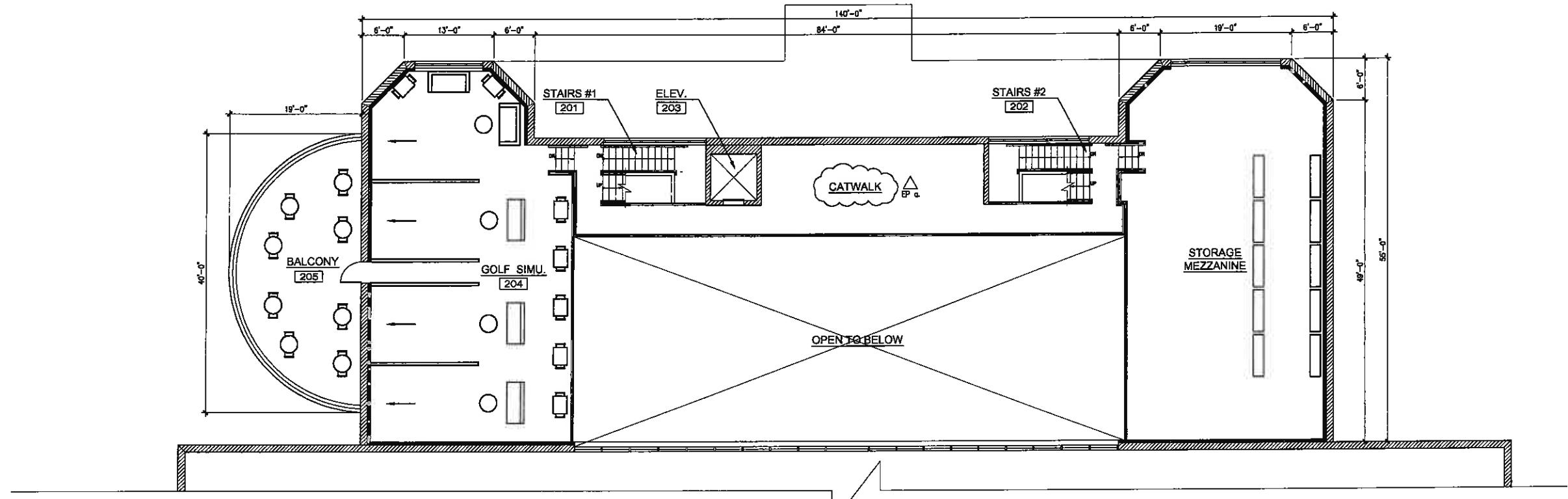
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5 OFFICE  
SUITE 260

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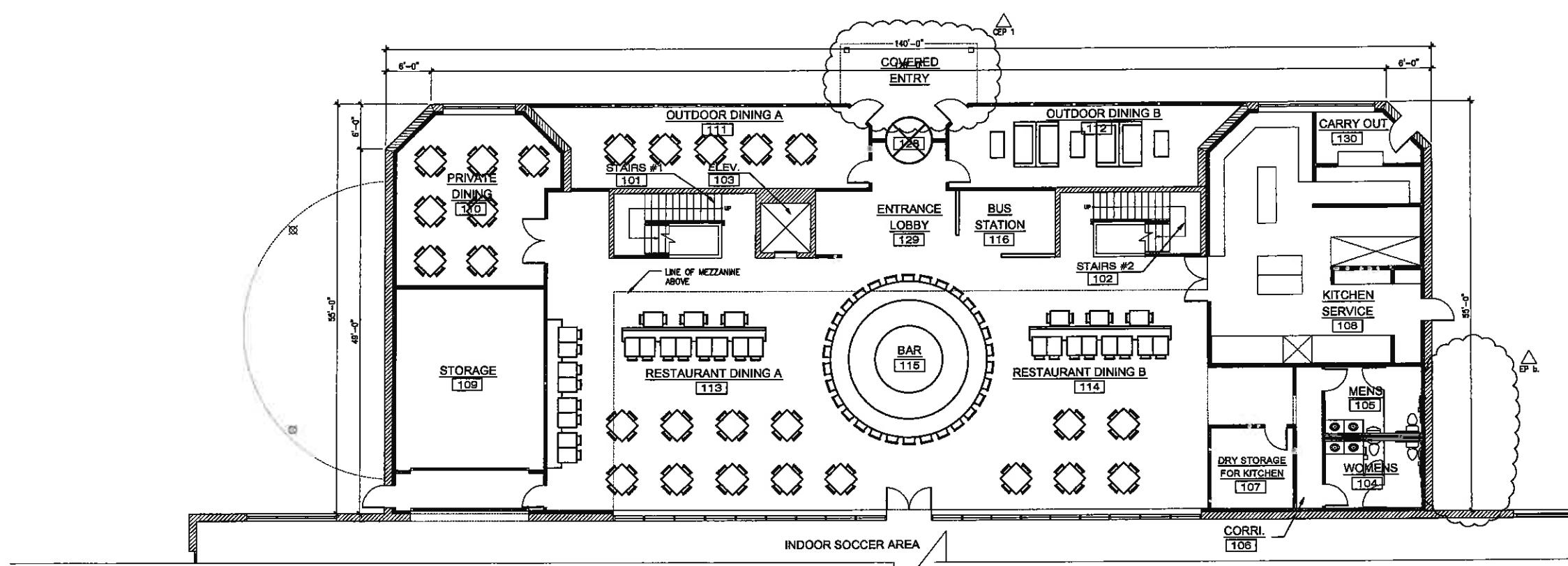
**COMPASS ARENA**  
635 JOILET ROAD  
WILLOWBROOK, ILLINOIS

date  
1-11-16  
drawn by  
job no.  
△ revisions  
2-8-16  
3-25-16  
scale  
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FIRST FLOOR MEZZANINE PLAN

1/8" = 1'-0"



PARTIAL FIRST FLOOR RESTAURANT PLAN

1/8" = 1'-0"

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drawn by:  
job no.:  
revs: 2-8-16  
3-25-16  
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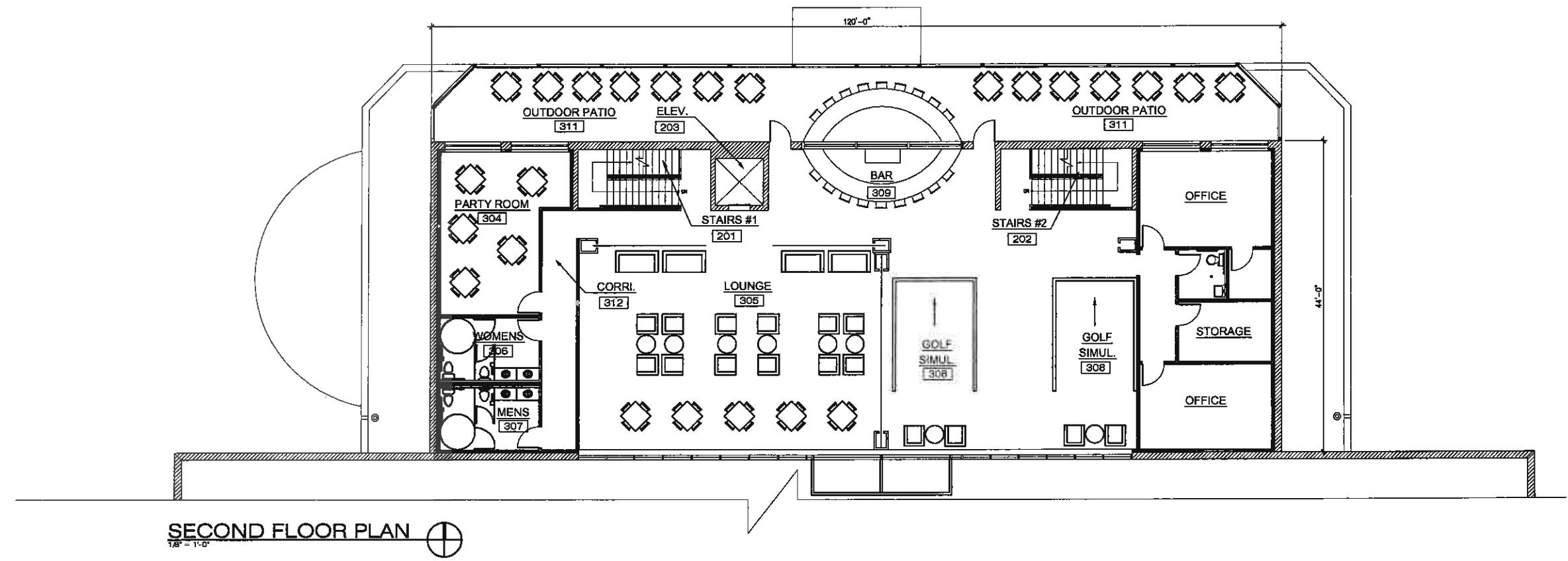
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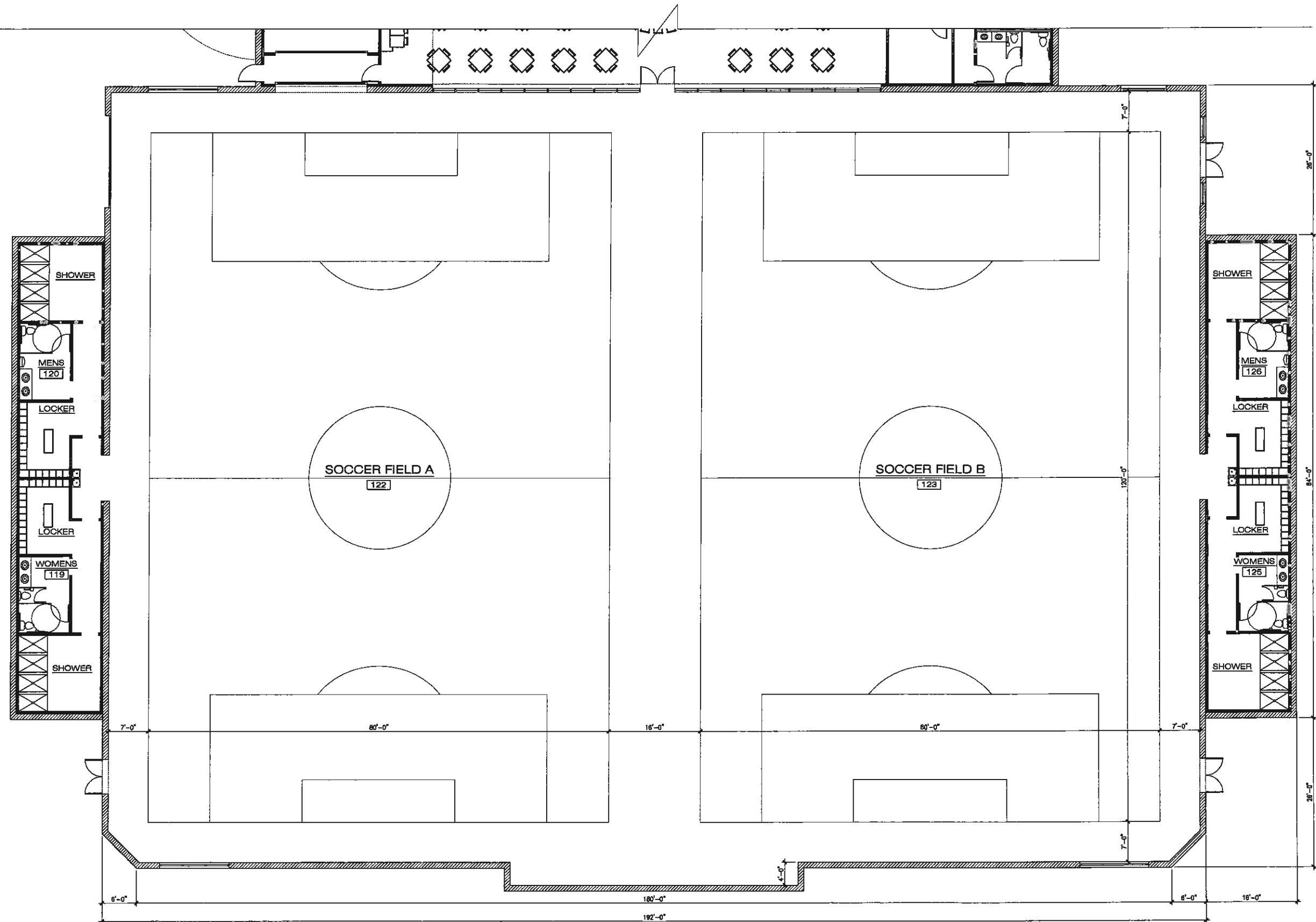
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A1.2



PARTIAL FIRST FLOOR SOCCER FIELD PLAN  
1/8" = 1'-0"

A1.3

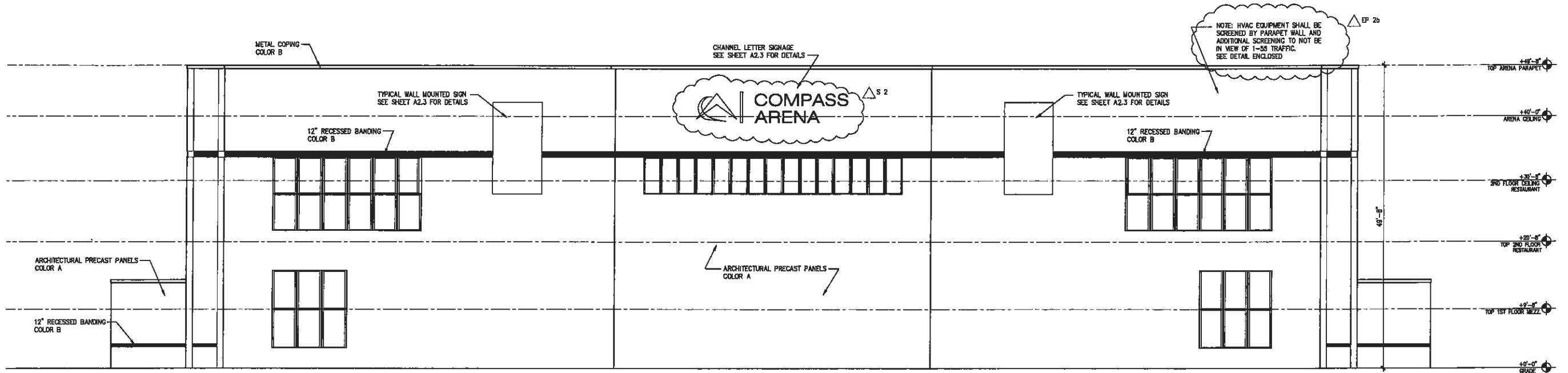
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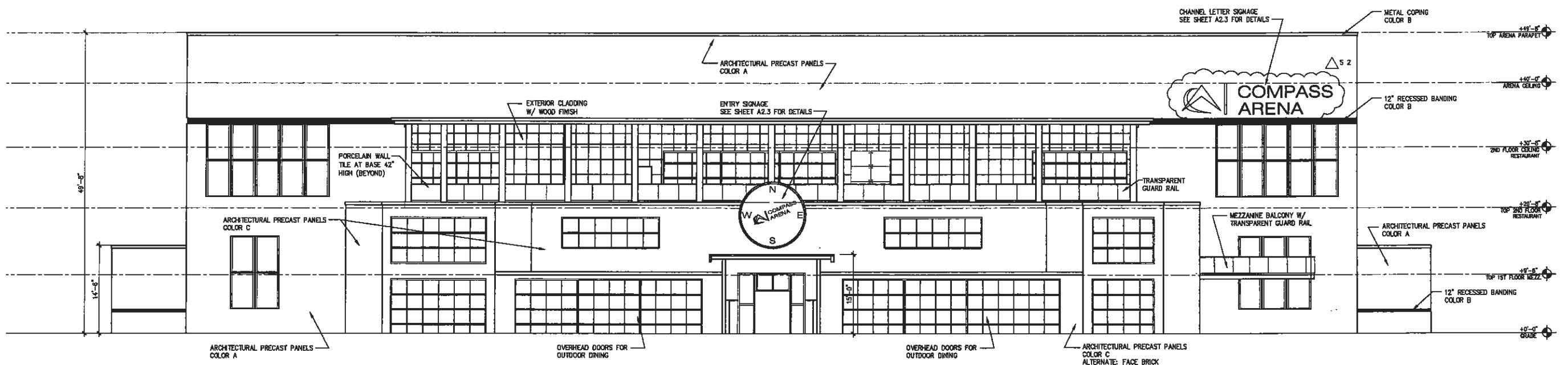
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3-25-16  
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### SOUTH ELEVATION (REAR)

1/8" = 1'-0"



### **NORTH ELEVATION (FRONT)**

1/8" = 1'-0"

date	1-11-16
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	3-25-16
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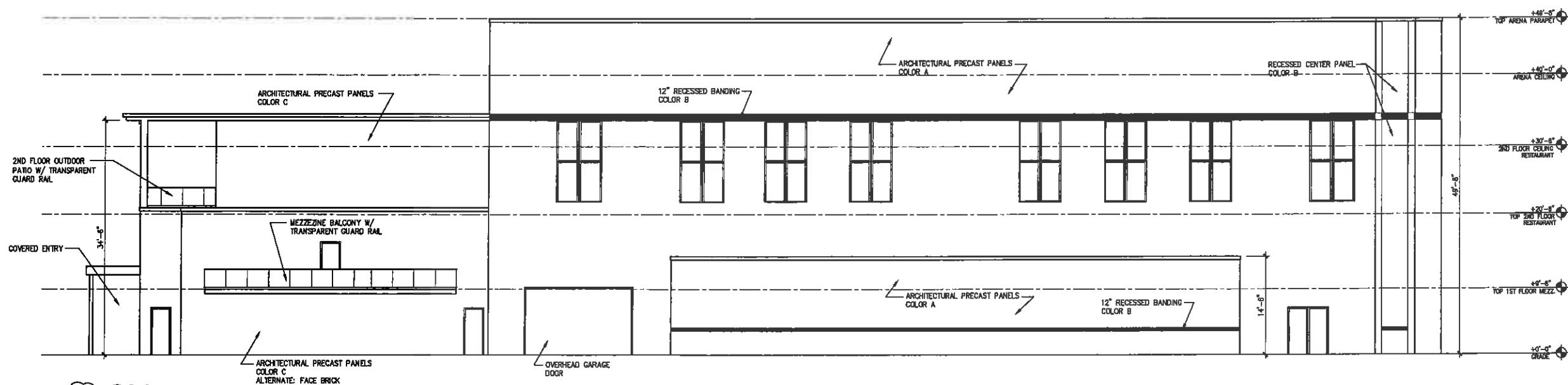
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90 JOIRE BLVD. SUITE 260

A3

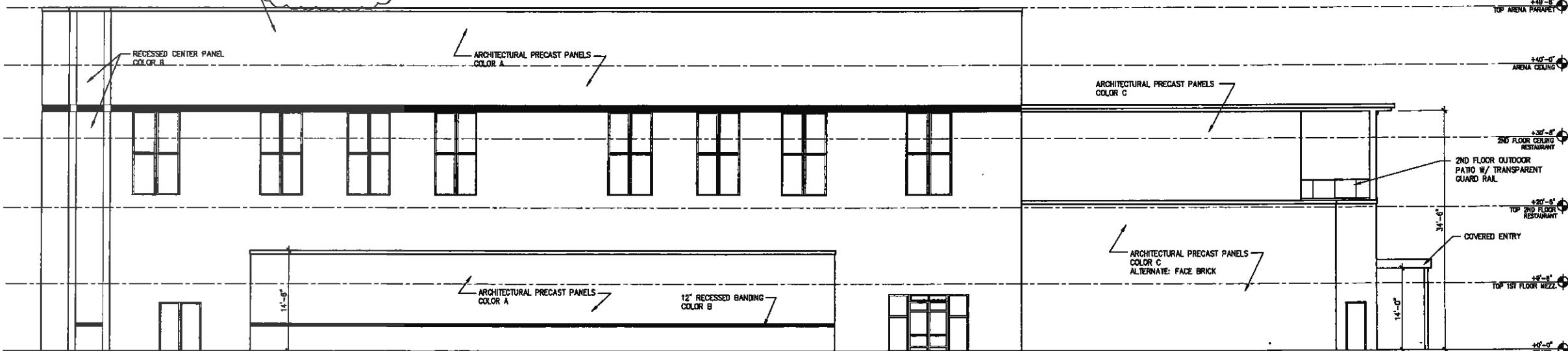


## WEST ELEVATION (RIGHT SIDE)

$$\frac{1}{8}'' = 1'-0$$

NOTE: HVAC EQUIPMENT SHALL  
SCREENED BY PARAPET WALL.  
ADDITIONAL SCREENING TO NOT  
IN VIEW OF 1-55 TRAFFIC.  
SEE DETAIL ENCL 00000000.

1



## EAST ELEVATION (LEFT SIDE)

1/8" = 1'-0"

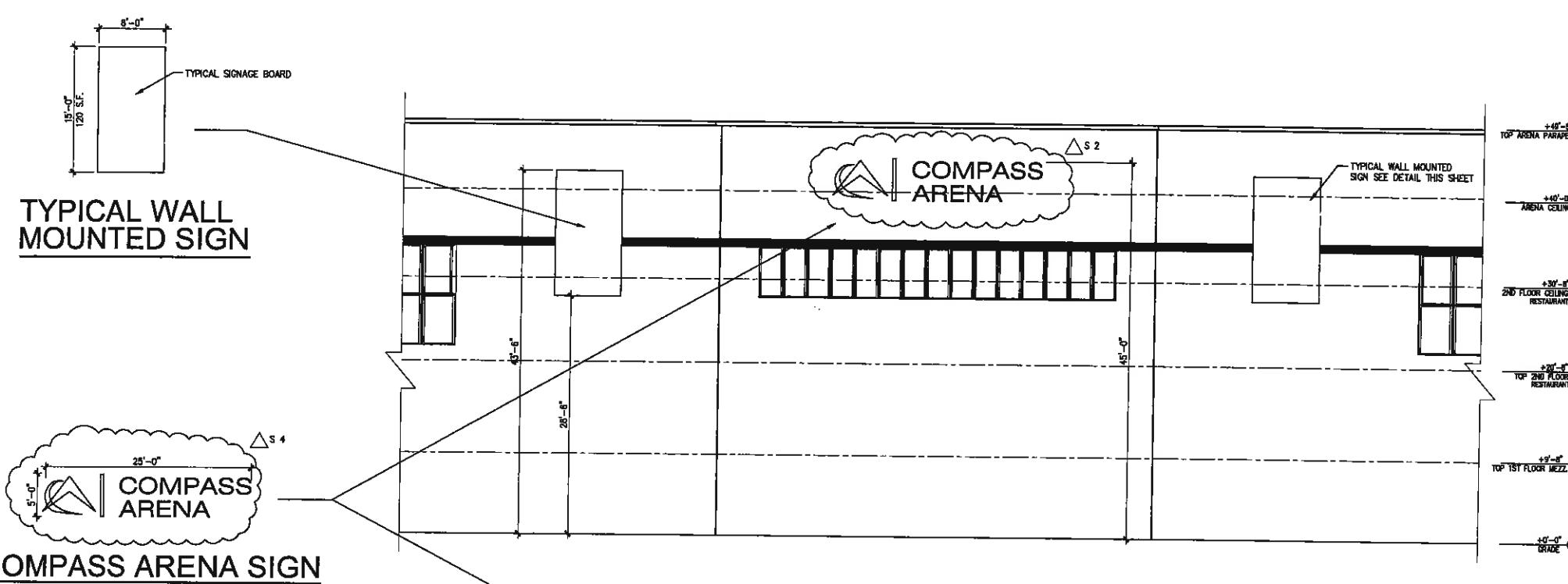
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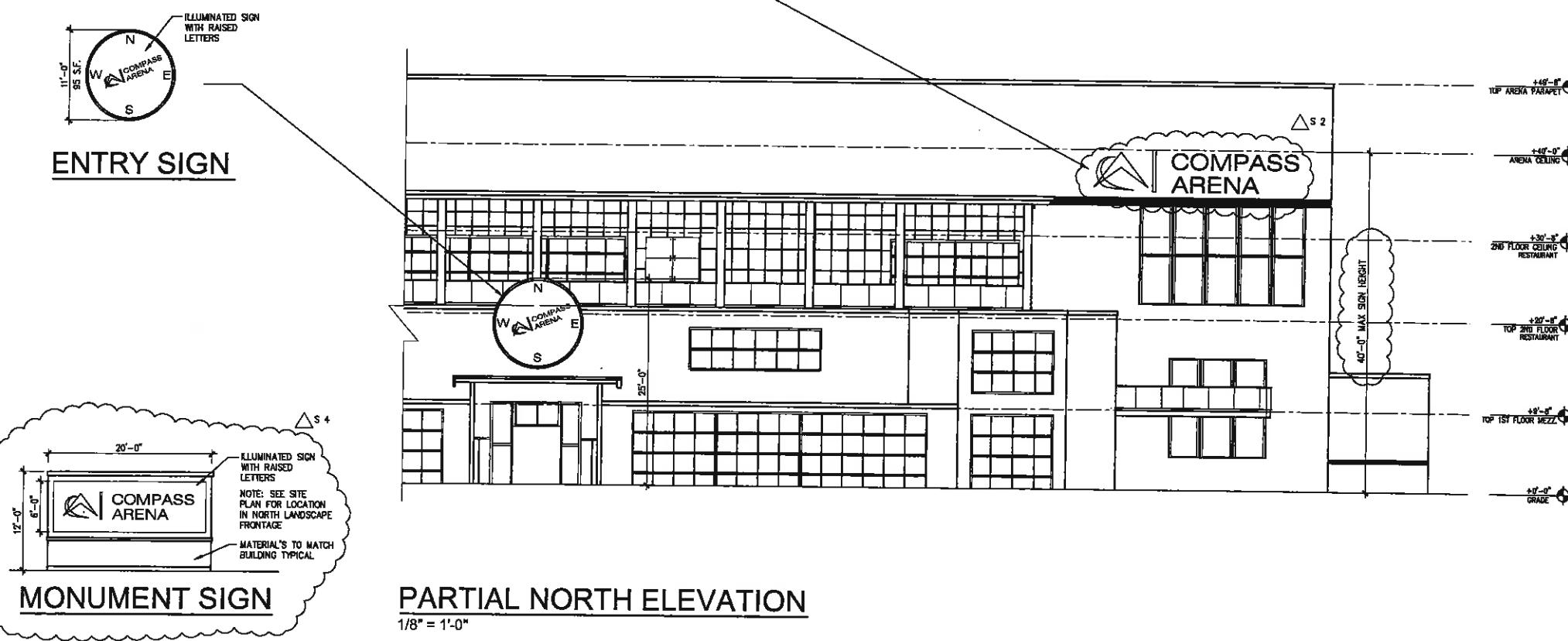
A2



COMPASS ARENA SIGN

PARTIAL SOUTH ELEVATION

1/8" = 1'-0"



PARTIAL NORTH ELEVATION

1/8" = 1'-0"

**SIGNAGE S.F. CALCULATION**

**WALL SIGNAGE:**

**SOUTH ELEVATION**

- (2) TYPICAL WALL MOUNTED SIGNS AT 120 S.F. OF SURFACE AREA EACH = 240 S.F.

- (1) COMPASS ARENA SIGN AT 80 S.F. OF SURFACE AREA = 125 S.F.

**NORTH ELEVATION**

- (1) ENTRY SIGN AT 95 S.F. OF SURFACE AREA = 95 S.F.

- (1) COMPASS ARENA SIGN AT 80 S.F. OF SURFACE AREA = 125 S.F.

TOTAL SURFACE AREA OF WALL SIGNAGE PROPOSED = 585 S.F.

**FREE STANDING MONUMENT SIGNAGE:**

**NORTH FRONTAGE**

- (1) GROUND MONUMENT SIGN WITH 115 S.F. OF SURFACE AREA PER SIDE = 230 S.F.

TOTAL SURFACE AREA OF MONUMENT SIGNAGE PROPOSED = 230 S.F.

date: 2-8-18  
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revs: 3-14-18  
3-23-18  
scale:

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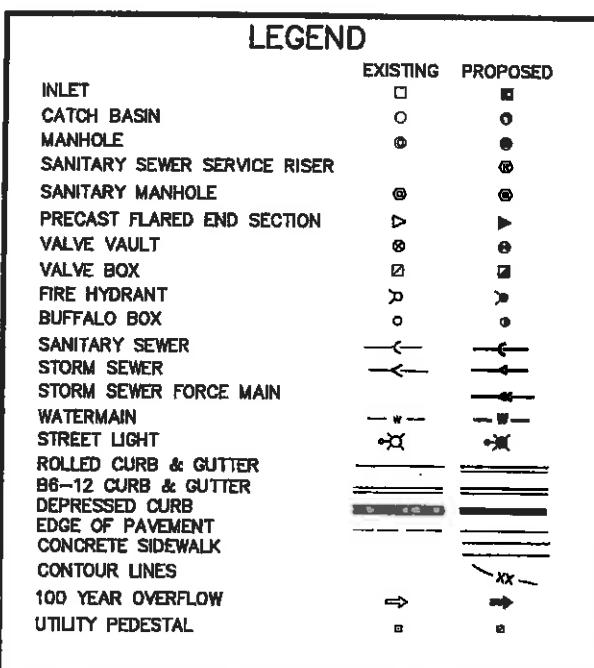
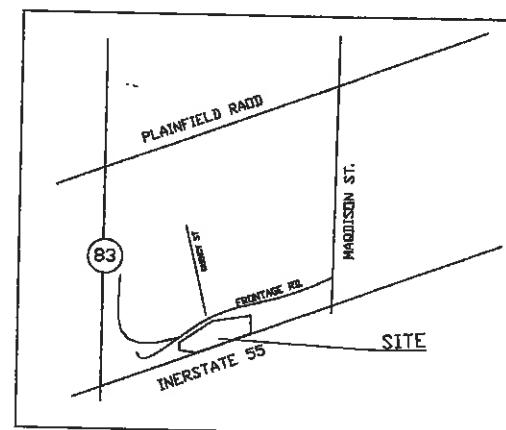
**A2.3**  
sheet

# COMPASS ARENA

## WILLOWBROOK, ILLINOIS

### INDEX

1. COVER SHEET
2. EXISTING CONDITIONS
3. GEOMETRIC STRIPING & LIGHTING PLAN
4. GRADING PLAN
5. UTILITY PLAN
- 6.-8. SOIL EROSION SEDIMENT CONTROL PLAN
9. SPECIFICATIONS
10. DETAILS
- 0.0-4.0 STORMTRAP DETAILS
- 1-3 JOLIET ROAD CROSS SECTIONS (GEOPOOL)



#### SITE DATA TABLE

TOTAL SITE AREA	3.657 ACRE
IMPERVIOUS AREA EXISTING	0.473 ACRE 12.93%
IMPERVIOUS AREA PROPOSED PAYMENT AND BUILDING	2.952 ACRE 80.72%
IMPERVIOUS AREA TO REMAIN	0 SQ-FT
PERCENTAGE OF IMPERVIOUS AREA GAIN	2.479 ACRE 67.78%



**STORMWATER STATEMENT**  
To the best of our knowledge and belief, the drainage of surface waters will not be changed by the construction of this development/redevelopment or any part thereof, and no new surface water drainage will be changed, reasonable provision has been made for collecting and diverting such surface waters into public areas or drains which the (owner/developer) has the right to use and that such surface waters will be planned for in accordance with generally accepted engineering practices, so as to reduce the likelihood of damage to the adjoining property because of the construction of the development/redevelopment.

To the best of our knowledge and belief, this development meets the minimum criteria for stormwater management in accordance with the Ordinance.

Dated the 25<sup>th</sup> day of **MARCH** 2016



**SEC INC.**  
SOUTHWEST ENGINEERING  
CONSULTANTS, INC.  
7621 BAIMBRIDGE DR.  
DOWNERS GROVE, IL 60516  
630-737-0025  
FAX 630-737-0026

CLIENT:  
COMPASS REAL ESTATE HOLDINGS LLC  
15W580 N. FRONTAGE RD.  
BURR RIDGE ILLINOIS 60527  
CONTACT: MARIO MAGLIANO  
PHONE: 630-788-4934

#### REVISIONS

1	REVISED PER OWNER REVIEW	1-19-15
2	REVISED PER VILLAGE REVIEW	1-4-16
3	REVISED PER VILLAGE REVIEW	2-12-16
4	" "	1-26-16

FINAL ENGINEERING  
COMPASS ARENA  
635 JOLIET RD. WILLOWBROOK, IL

#### COVER SHEET

PROJECT NO. **071014**  
DATE **1-16-16**  
SCALE **NONE**  
DESIGNED BY **WSK**  
DRAWN BY **WSK**  
CHECKED BY **DMK**

SHEET **1**  
**OF 10**

# TOPOGRAPHIC MAP

LOT 2 IN BARTON SUBDIVISION, BEING A SUBDIVISION OF PART OF THE SOUTHEAST 1/4 OF SECTION 36, TOWNSHIP 33 NORTH, RANGE 11 EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED JANUARY 12, 2001 AS DOCUMENT NUMBER R-2000-007678 AND RE-RECORDED MARCH 20, 2002 AS DOCUMENT R2002-076678 IN DUPAGE COUNTY, ILLINOIS.

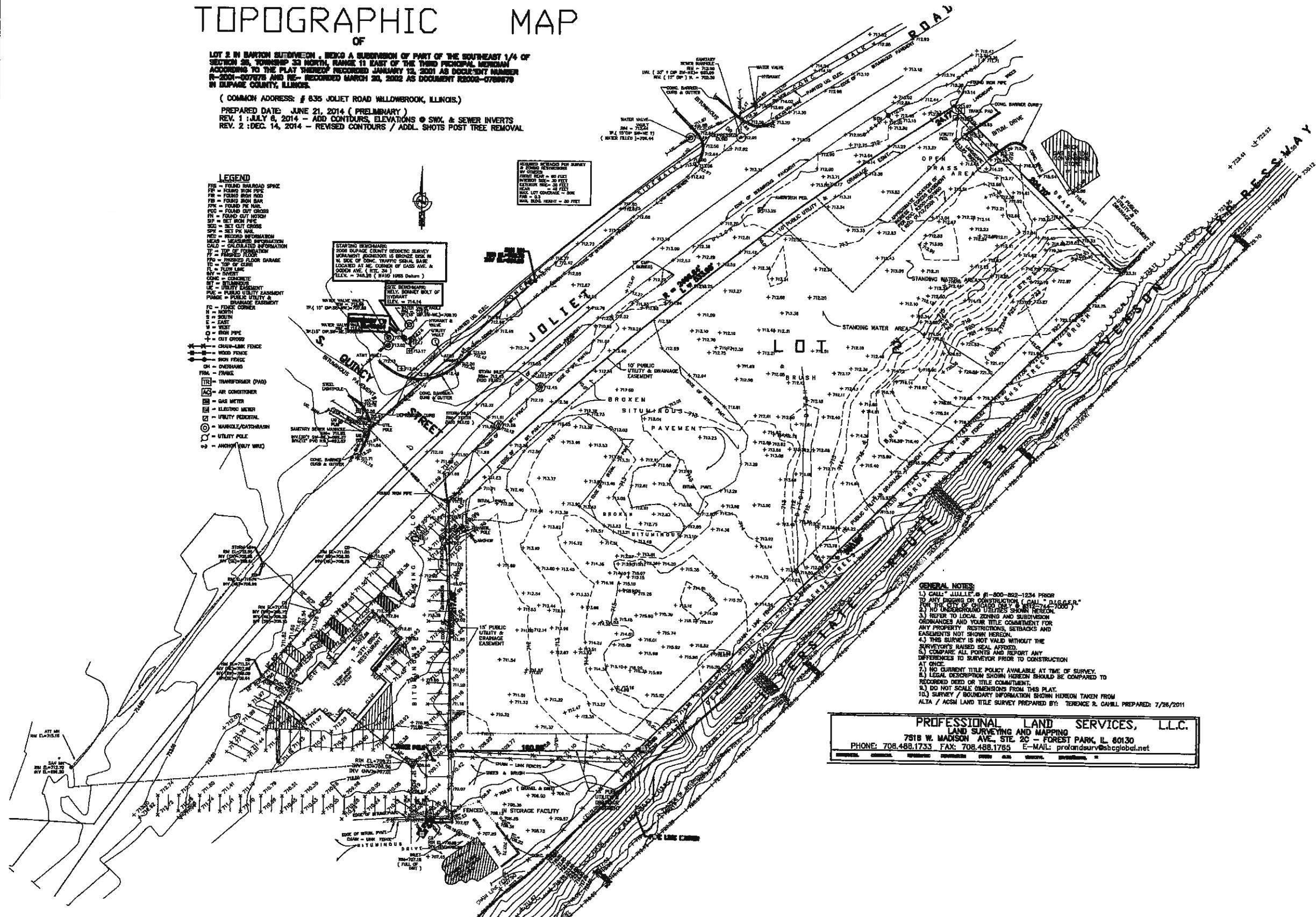
( COMMON ADDRESS: # 835 JOLIET ROAD WILLOMBROOK, ILLINOIS.)  
PREPARED DATE: JUNE 21, 2014 ( PRELIMINARY )  
REV. 1 : JULY 6, 2014 - ADD CONTOURS, ELEVATIONS @ SWX. & SEWER INVERTS  
REV. 2 : DEC 14, 2014 - REVISED CONTOURS / ADDL. SHOTS POST TREE REMOVAL

#### LEGEND



RECOMMENDED SETBACKS PER SUB  
IN ZONING RESTRICTIONS  
BY OTHERS:

FRONT REAR = 60 FEET
INTERIOR SIDE = 30 FEET
EXTENSION SIDE = 30 FEET
REAR = 48 FEET
MAX. LOT COVERAGE = 50%
FAR = 0.3
MAIL BLDG. HEIGHT = 30 FEET



**SEC INC**  
SOUTHWEST ENGINEERING  
CONSULTANTS, INC.  
7621 BAIMBRIDGE DR.  
DOWNERS GROVE, IL 60158  
847-227-0025

L E G E

O = FOUND IRON PIPE  
 S = SET IRON PIPE  
 C = CONCRETE MASONRY  
 T = TOP OF FOUNDATION  
 TC = TOP OF CURB  
 U. & R.E. = UTILITY AND DR  
 P.U. = PUBLIC UTILITY  
 U.E. = UTILITY EASEMENT

## REVISION

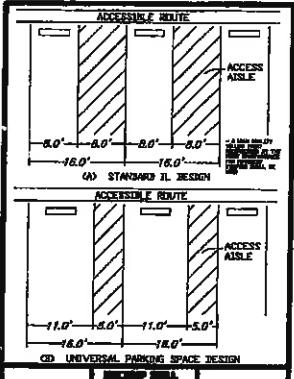
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2	REVISED PER VILLAGE REVIEW	1-4-16	
3	REVISED PER VILLAGE REVIEW	2/22/16	
4	REVISED PER VILLAGE REVIEW	3-25-16	
	<u>No Rev. This Sheet</u>		

FINAL ENGINEERING  
COMPASS ARENA  
635 JOLIET RD. WILLOWBROOK,

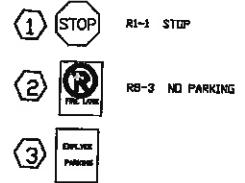
## EXISTING CONDITIONS

**CLIENT:**  
COMPASS REAL ESTATE HOLDINGS LLC  
15W580 N. FRONTAGE RD  
BURR RIDGE ILLINOIS 60527  
CONTACT: MARIO MAGLIANO  
PHONE: 830-788-0334

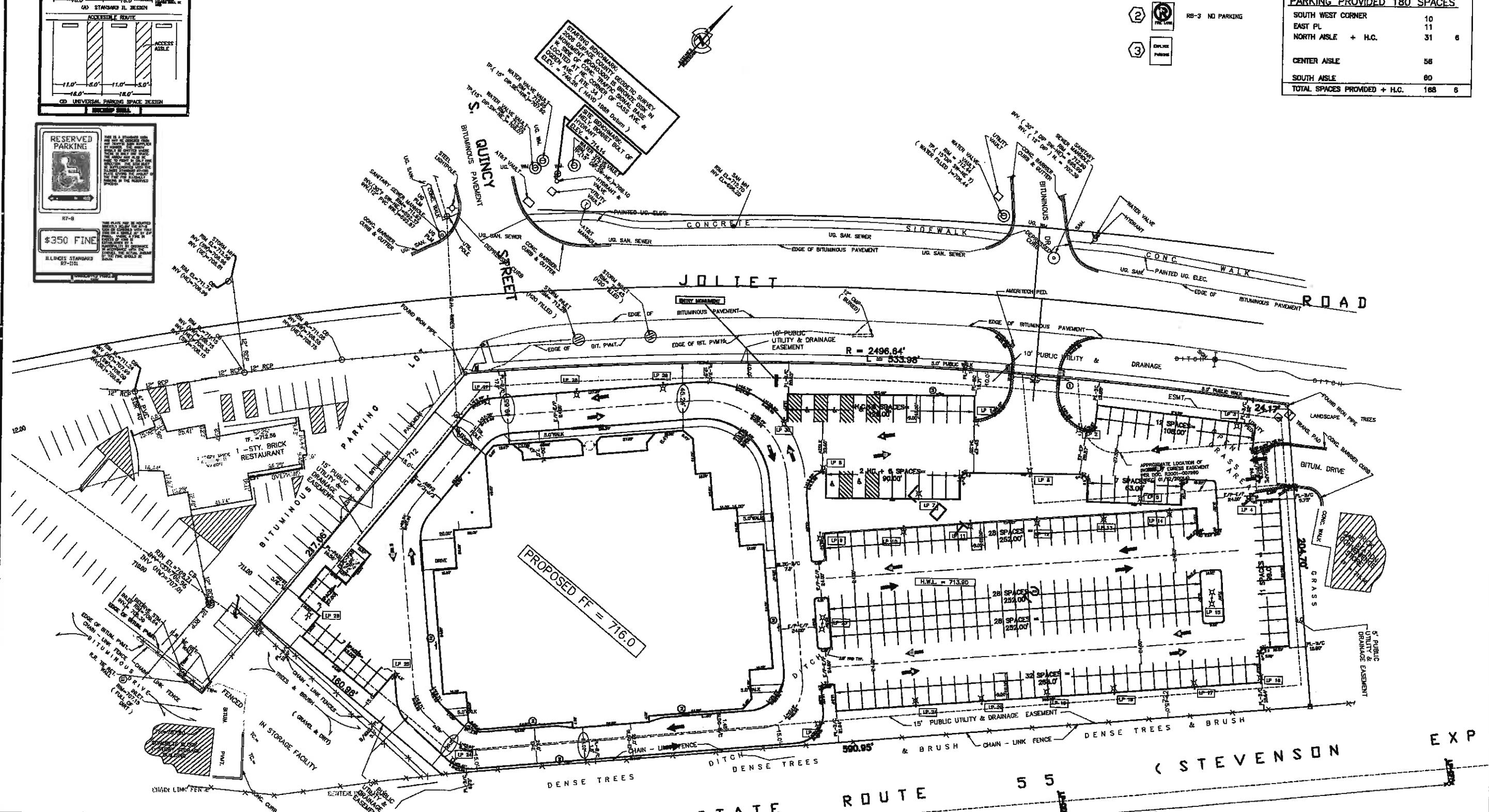
PROJECT NO. 071014 SHEET 2  
DATE 1-16-15  
SCALE 1" = 30'  
DESIGNED BY WSK  
DRAWN BY WSK  
CHECKED BY DMK  
of 10



## SIGNS



<u>PARKING PROVIDED</u>		<u>180 SPACES</u>
SOUTH	WEST CORNER	10
EAST	PL	11
NORTH	AILSE + H.C.	31 6
CENTER	AILSE	58
SOUTH	AILSE	60
TOTAL SPACES PROVIDED	+ H.C.	168 6



**SEGMENT**

**L E G E N D**

<input type="checkbox"/> <b>IRON PIPE (FIP)</b>	<b>1</b> REVISED PER OWNER REVIEW	1-1
<input type="checkbox"/> <b>CONCRETE MONUMENT</b>	<b>2</b> REVISED PER VILLAGE REVIEW	1-1
<input type="checkbox"/> <b>TOP OF ELEVATION</b>	<b>3</b> REVISED PER VILLAGE REVIEW	2-1
<input type="checkbox"/> <b>TOP OF CURB</b>	<b>4</b> REVISED PER VILLAGE REVIEW	3-1
<b>U. &amp; B.C.</b>		
<input type="checkbox"/> <b>UTILITY AND DRAWDOWN EASEMENT</b>		
<input type="checkbox"/> <b>PUBLIC UTILITY EASEMENT</b>		
<input type="checkbox"/> <b>EXISTING GRADES</b>		
<input type="checkbox"/> <b>PROPOSED GRADES</b>		
<input type="checkbox"/> <b>EXISTING GRADES</b>		

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## REVISIONS

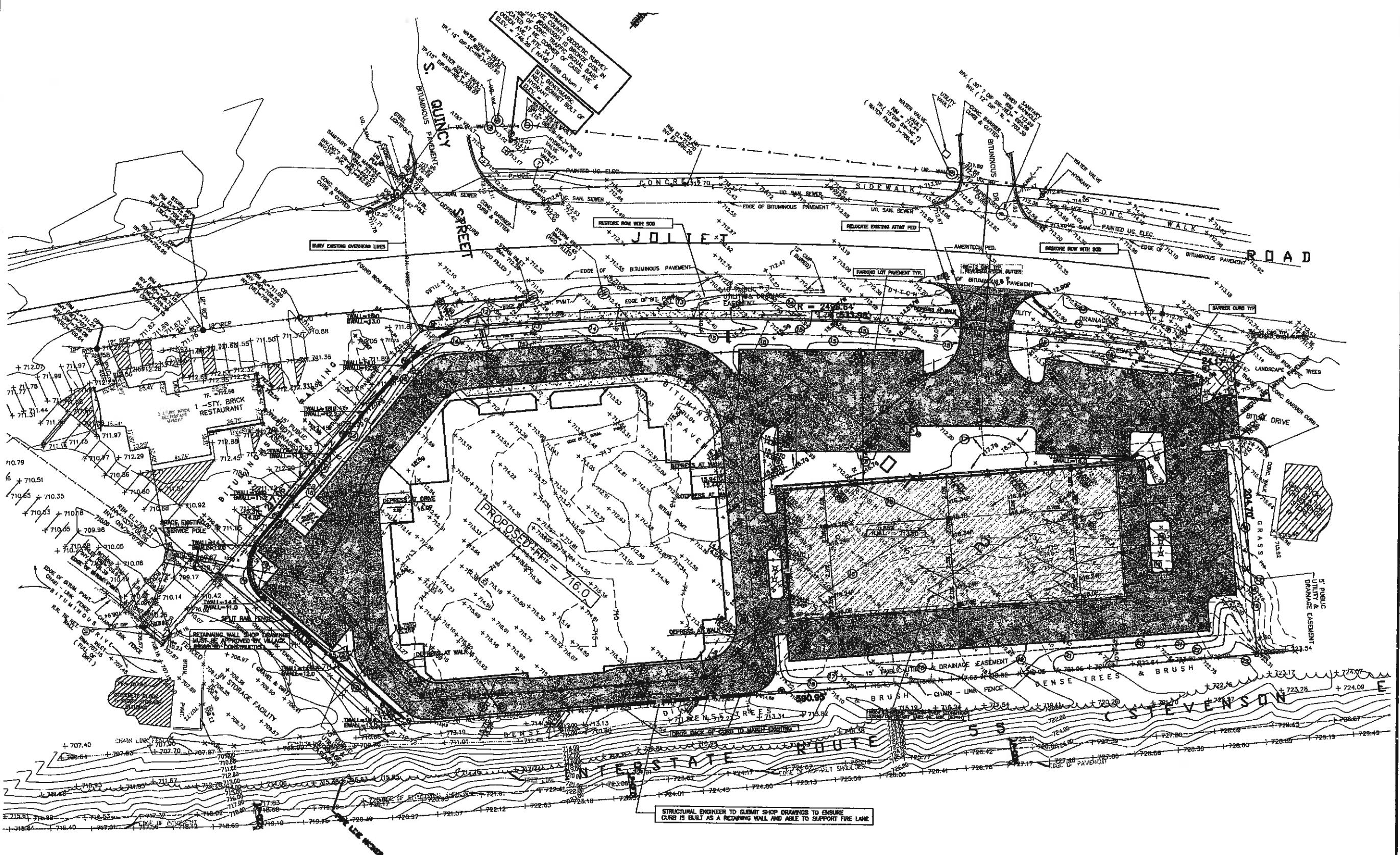
1-16-15  
1-4-16  
2-12-16  
3-25-16

FINAL ENGINEERING  
COMPASS ARENA  
635 JOLIET RD. WILLOWBROOK, IL

**GEOMETRIC PLAN &  
STRIPING PLAN  
LIGHTING PLAN**

**CLIENT:**  
COMPASS REAL ESTATE HOLDINGS LLC  
15W580 N. FRONTRAGE RD.  
BURR RIDGE ILLINOIS 60527  
CONTACT: MARIO MAGLIANO  
PHONE: 630-788-4934

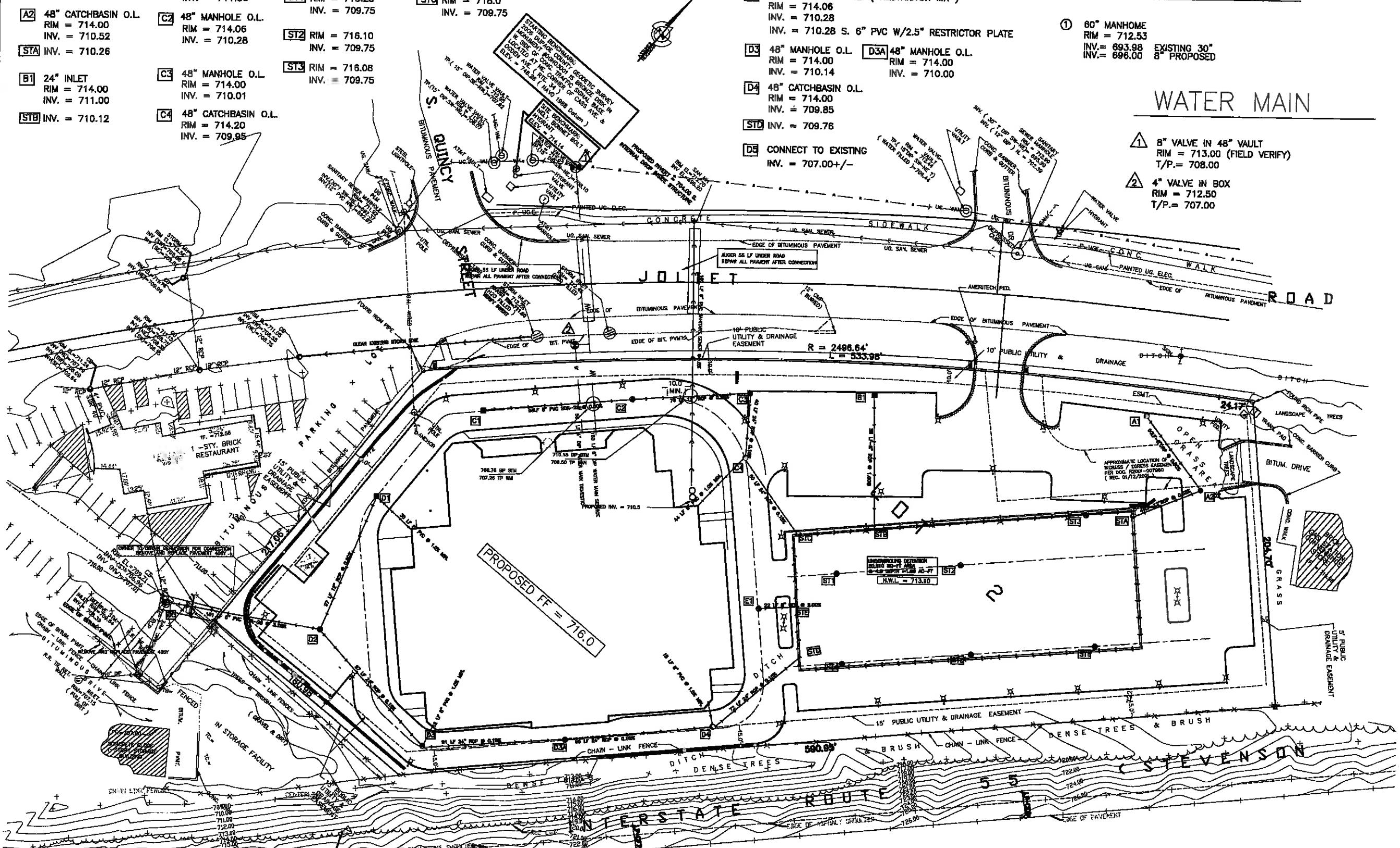
PROJECT NO. 071014  
DATE 07-10-14  
SCALE 1" = 30'  
DESIGNED BY WSK  
DRAWN BY WSK  
CHECKED BY DMK  
SHEET 3  
of 10



<b>SEC JAC</b> <b>SOUTHWEST ENGINEERING CONSULTANTS, INC.</b> <b>7621 BAIMBRIDGE DR.</b> <b>DOWNERS GROVE, IL 605616</b> <b>630-737-0025</b>	<b>CLIENT:</b>  <b>COMPASS REAL ESTATE HOLDINGS LLC</b> <b>15W80 N. FRONTRAGE RD</b> <b>BURR RIDGE ILLINOIS 60527</b>  <b>CONTACT: MARIO MAGLIAND</b> <b>PHONE: 630-788-4934</b>	<b>REVISIONS</b>  <table border="1"> <tr> <td>1 REVISED PER OWNER REVIEW</td> <td>1-18-15</td> </tr> <tr> <td>2 REVISED PER VILLAGE REVIEW</td> <td>1-4-16</td> </tr> <tr> <td>3 REVISED PER VILLAGE REVIEW</td> <td>2-12-16</td> </tr> <tr> <td>4 REVISED PER VILLAGE REVIEW</td> <td>3-25-16</td> </tr> </table>	1 REVISED PER OWNER REVIEW	1-18-15	2 REVISED PER VILLAGE REVIEW	1-4-16	3 REVISED PER VILLAGE REVIEW	2-12-16	4 REVISED PER VILLAGE REVIEW	3-25-16	<b>FINAL ENGINEERING COMPASS ARENA</b>  <b>635 JOLIET RD. WILLOWBROOK, IL</b>	<b>GRADING PLAN</b>	<b>PROJECT NO. 071014</b> <b>DATE 1-18-15</b> <b>SCALE 1"-30'</b> <b>DESIGNED BY WSK</b> <b>DRAWN BY WSK</b> <b>CHECKED BY DMK</b>
1 REVISED PER OWNER REVIEW	1-18-15												
2 REVISED PER VILLAGE REVIEW	1-4-16												
3 REVISED PER VILLAGE REVIEW	2-12-16												
4 REVISED PER VILLAGE REVIEW	3-25-16												

# STROM SEWER

A1	24" INLET RIM = 714.00 INV. = 711.00	C1	24" INLET RIM = 714.06 INV. = 711.06	STC	INV. = 709.86
A2	48" CATCHBASIN O.L. RIM = 714.00 INV. = 710.52	C2	48" MANHOLE O.L. RIM = 714.06 INV. = 710.28	ST1	RIM = 715.28 INV. = 709.75
STA	INV. = 710.26	ST2	RIM = 716.10 INV. = 709.75	ST3	RIM = 716.08 INV. = 709.75
B1	24" INLET RIM = 714.00 INV. = 711.00	C3	48" MANHOLE O.L. RIM = 714.00 INV. = 710.01	C4	48" CATCHBASIN O.L. RIM = 714.20 INV. = 709.95
STB	INV. = 710.12				



# SANITARY SEWER

D1	24" INLET RIM = 714.06 INV. = 711.06	E1	24" INLET RIM = 714.00 INV. = 711.00
D2	48" CATCHBASIN O.L. ( RESTRICTOR MH ) RIM = 714.06 INV. = 710.28	D3	48" MANHOLE O.L. RIM = 714.00 INV. = 710.14
STD	2005 DUE TO HIGH TRAFFIC CONCERN OF CARS AVE. & 74TH ST. SITE BENCHMARK BOLT ELEV. 714.14 (1988 DRAFT)	D4	48" CATCHBASIN O.L. RIM = 714.00 INV. = 709.85
STB	2005 DUE TO HIGH TRAFFIC CONCERN OF CARS AVE. & 74TH ST. SITE BENCHMARK BOLT ELEV. 714.14 (1988 DRAFT)	STD	INV. = 709.76
	2005 DUE TO HIGH TRAFFIC CONCERN OF CARS AVE. & 74TH ST. SITE BENCHMARK BOLT ELEV. 714.14 (1988 DRAFT)	D5	CONNECT TO EXISTING INV. = 707.00+/-

- ① 60" MANHOLE  
RIM = 712.53  
INV. = 693.98 EXISTING 30"  
INV. = 696.00 8" PROPOSED

# WATER MAIN

- ▲ 8" VALVE IN 48" VAULT  
RIM = 713.00 (FIELD VERIFY)  
T/P. = 708.00
- ▲ 4" VALVE IN BOX  
RIM = 712.50  
T/P. = 707.00

SEC INC.  
SOUTHWEST ENGINEERING  
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7621 BAINBRIDGE DR.  
DOWNERS GROVE, IL 60568  
630-787-0026

CLIENT:  
COMPASS REAL ESTATE HOLDINGS LLC  
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BURR RIDGE ILLINOIS 60527  
CONTACT: MARIO MACLINO  
PHONE: 630-788-4934

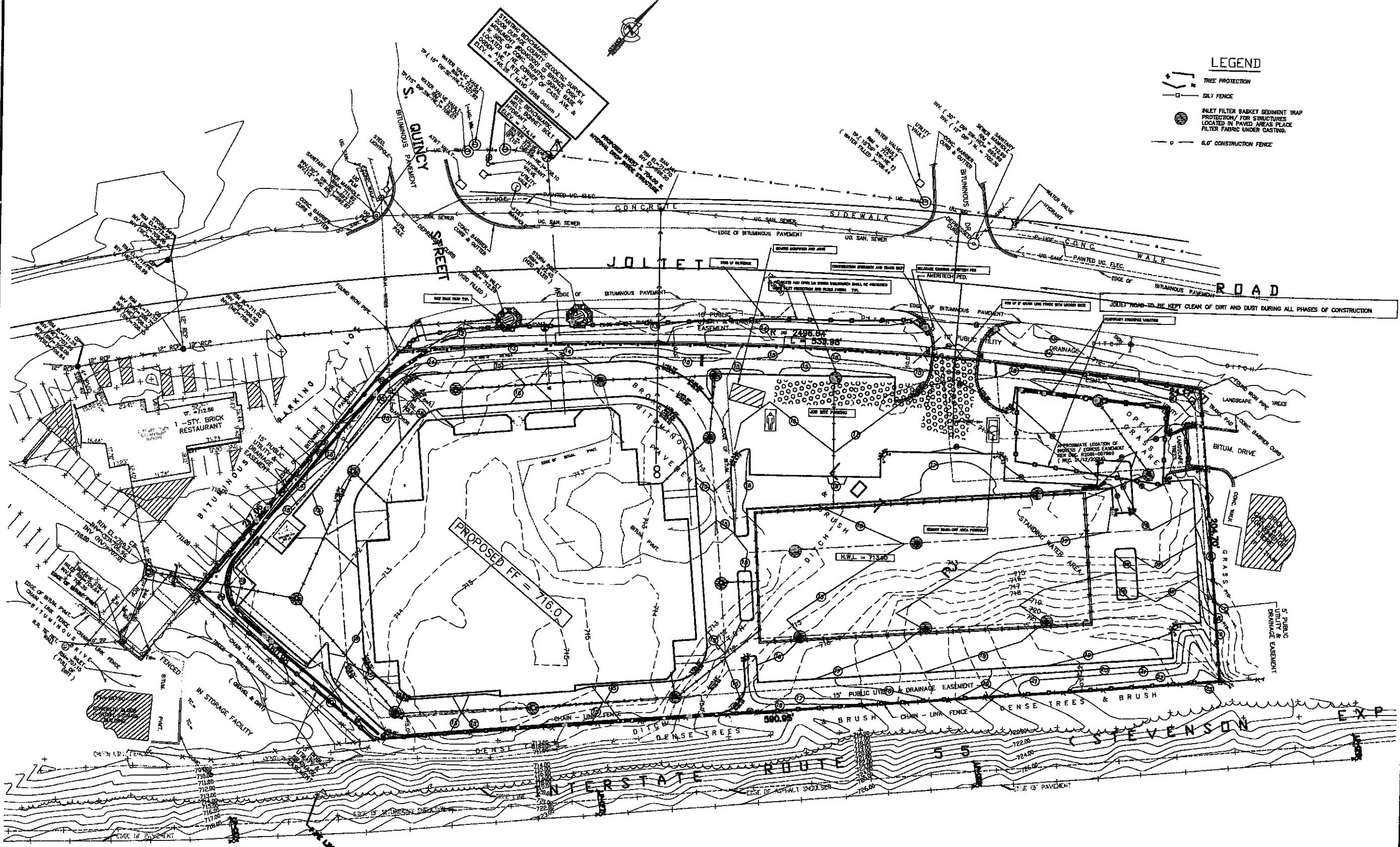
## REVISIONS

1. REVISED PER OWNER REVIEW  
2. REVISED PER VILLAGE REVIEW  
3. REVISED PER VILLAGE REVIEW  
4. REVISED PER VILLAGE REVIEW

FINAL ENGINEERING  
COMPASS ARENA  
635 JOLIET RD. WILLOWBROOK, IL

## UTILITY PLAN

PROJECT NO. 071014  
DATE 1-16-15  
SCALE 1"-30'  
DESIGNED BY WSK  
DRAWN BY WSK  
CHECKED BY DMK  
SHEET 5  
of 10



## STORMWATER POLLUTION PREVENTION PLAN

THIS PLAN HAS BEEN PREPARED TO COMPLY WITH THE PROVISIONS OF NPDES GENERAL PERMIT NUMBER ILR10 ISSUED BY THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY FOR STORM WATER DISCHARGES FROM CONSTRUCTION SITE ACTIVITIES.

THE PERMITEE MUST COMPLY WITH ALL CONDITIONS OF THE GENERAL PERMIT. ANY PERMIT NON-COMPLIANCE CONSTITUTES A VIOLATION OF THE ILLINOIS ENVIRONMENTAL PROTECTION ACT AND THE CLEAN WATER ACT AND IS GROUNDS FOR ENFORCEMENT ACTION; FOR PERMIT TERMINATION, REVOCATION AND REISSUANCE, OR MODIFICATION, OR FOR DENIAL OF A PERMIT RENEWAL APPLICATION.

### 1. SITE DESCRIPTION

A. THE FOLLOWING IS A DESCRIPTION OF THE CONSTRUCTION ACTIVITY WHICH IS THE SUBJECT OF THIS PLAN:

- GRADING (EXCAVATION AND FILL)
- UNDERGROUND CONSTRUCTION
- PAVING
- BUILDING CONSTRUCTION
- LANDSCAPING

B. THE FOLLOWING IS A DESCRIPTION OF THE INTENDED SEQUENCE OF MAJOR ACTIVITIES WHICH WILL DISTURB SOILS FOR MAJOR PORTIONS OF THE CONSTRUCTION SITE:

- 1) EROSION AND SEDIMENTATION CONTROL MEASURES SUCH AS SILT FENCE, DITCH CHECKS, CONSTRUCTION ENTRANCE, AND FENCING TO PROTECT VEGETATIVE BUFFERS (EARTHWORK CONTRACTOR)
- 2) TOPSOIL STRIPPING, EXCAVATION AND FILL (EARTHWORK CONTRACTOR)
- 3) UNDERGROUND UTILITY CONSTRUCTION INCLUDING INLET CONTROL MEASURES (UNDERGROUND CONTRACTOR)
- 4) FINE GRADING AND PAVING (PAVING CONTRACTOR)
- 5) BUILDING CONSTRUCTION (BUILDING CONTRACTOR)
- 6) TOPSOIL RESPIRE AND VEGETATIVE STABILIZATION (EARTHWORK CONTRACTOR AND LANDSCAPER)
- 7) PERFORM CONTINUING MAINTENANCE (OWNER)

C. THE TOTAL AREA OF THE SITE IS 3.857 ACRES.

THE TOTAL AREA OF THE SITE THAT IS ESTIMATED WILL BE DISTURBED BY EXCAVATION, GRADING OR OTHER ACTIVITIES IS 3.857 ACRES.

D. THE ESTIMATED RUNOFF CURVE NUMBER OF THE PROJECT AFTER CONSTRUCTION ACTIVITIES ARE COMPLETED IS 96 AS CONTAINED IN THE PROJECT STORMWATER REPORT WHICH IS HEREBY INCORPORATED BY REFERENCE IN THIS PLAN. INFORMATION DESCRIBING THE SOILS AT THE SITE IS CONTAINED IN THE STORMWATER REPORT FOR THE PROJECT. THE SOIL TYPES PRESENT ON THE SITE ARE ORTHENTS.

E. THESE PLAN DOCUMENTS CONTAIN SITE MAP(S) INDICATING THE DRAINAGE PATTERNS AND APPROXIMATE SLOPES ANTICIPATED AFTER THE MAJOR GRADING ACTIVITIES, AREA OF MAJOR STRUCTURAL AND NONSTRUCTURAL CONTROLS IDENTIFIED ON THE PLAN, THE LOCATION OF AREAS WHERE STABILIZATION PRACTICES ARE EXPECTED TO OCCUR, SURFACE WATERS (INCLUDING DETENTION AREAS), AND LOCATIONS WHERE STORMWATER IS DISCHARGED.

F. THE NAME OF THE RECEIVING WATERS DOWNSTREAM OF THE PROJECT IS SAWMILL CREEK TRIBUTARY TO THE DES PLAINES RIVER. NO WETLANDS, FLOODPLAIN, RIPARIAN AREAS OR THEIR BUFFERS ARE PRESENT ON THE SITE.

### 2. CONTROLS

THIS SECTION OF THE PLAN ADDRESSES THE VARIOUS CONTROLS THAT WILL BE IMPLEMENTED FOR EACH OF THE MAJOR CONSTRUCTION ACTIVITIES DESCRIBED IN 1. B. ABOVE. FOR EACH MEASURE DISCUSSED, THE CONTRACTOR RESPONSIBLE FOR ITS IMPLEMENTATION IS INDICATED AND HAS SIGNED THE REQUIRED CERTIFICATION ON FORMS ATTACHED TO, AND A PART OF, THIS PLAN.

#### A. EROSION AND SEDIMENTATION CONTROLS

1) STABILIZATION PRACTICES: PROVIDED BELOW IS A DESCRIPTION OF INTERIM AND PERMANENT STABILIZATION PRACTICES, INCLUDING SITE-SPECIFIC SCHEDULING OF THE IMPLEMENTATION OF THE PRACTICES. SITE PLANS WILL ENSURE THAT EXISTING VEGETATION IS PRESERVED WHERE ATTAINABLE AND DISTURBED PORTIONS OF THE SITE WILL BE STABILIZED. STABILIZATION PRACTICES INCLUDE: TEMPORARY SEEDING, PERMANENT SEEDING, MULCHING, SOD STABILIZATION, VEGETATIVE BUFFER STRIPS, PROTECTION OF TREES, PRESERVATION OF NATIVE VEGETATION, AND OTHER APPROPRIATE MEASURES. EXCEPT AS PROVIDED IN 2.A.1.A AND 2.B, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY WILL NOT OCCUR FOR A PERIOD OF 21 OR MORE CALENDAR DAYS.

(A) WHERE THE INITIATION OF STABILIZATION MEASURES BY THE 14TH DAY AFTER CONSTRUCTION ACTIVITY TEMPORARILY OR PERMANENTLY CEASES IS PRECLUDED BY SNOW COVER, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE THEREAFTER.

(B) WHERE CONSTRUCTION ACTIVITY WILL RESUME ON A PORTION OF THE SITE WITHIN 21 DAYS FROM WHEN THE ACTIVITIES CEASED (E.G. THE TOTAL TIME PERIOD THAT CONSTRUCTION ACTIVITY IS TEMPORARILY CEASED IS LESS THAN 21 DAYS) THEN STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF THE SITE BY THE 14TH DAY AFTER CONSTRUCTION ACTIVITY TEMPORARILY CEASED.

DESCRIPTION OF STABILIZATION PRACTICES:

##### TEMPORARY SEEDING

A). IDOT CLASS 7 EROSION CONTROL MIXTURE (ANY TIME OF YEAR)  
PERENNIAL RYEGRASS 50 LBS/ACRE  
SPRING OATS 64 LBS/ACRE

B). IDOT CLASS 6 CONSERVATION MIXTURE (AUGUST 1 TO NOVEMBER 1)

SMOOTH BROME GRASS 40 LBS/ACRE  
VERNAL ALFALFA 15 LBS/ACRE  
SPRING OATS 48 LBS/ACRE

##### PERMANENT SEEDING

A). PERMANENT SEEDING SHALL CONSIST OF THE FOLLOWING MIXTURE TO BE APPLIED DURING THE PERIOD OF MARCH THROUGH SEPTEMBER:  
KENTUCKY BLUE GRASS 40 LBS/ACRE  
PENN LAWN FESCUE 30 LBS/ACRE  
MANHATTAN PERENNIAL RYE 30 LBS/ACRE

B). THE SEEDBED (WHICH INCLUDES ALL AREAS TO BE LANDSCAPED) SHALL BE ADEQUATELY PREPARED FOR RECEIVING SEED. ALL FOREIGN MATERIALS SHALL BE DISPOSED OF AND LUMPS SHALL BE PULVERIZED AND GRADED IN AN ACCEPTABLE WORKMANLIKE MANNER.

FERTILIZER SHALL CONSIST OF 12% NITROGEN, 12% PHOSPHOROUS AND 12% POTASSIUM UNLESS OTHERWISE APPROVED BY THE ENGINEER AND SHALL BE SPREAD AT THE RATE OF 250 LBS/ACRE.

MULCHING: MULCH SHALL CONSIST OF STRAW MATERIAL AND FREE OF MATERIALS HARMFUL TO SEED GROWTH. MULCH SHALL BE APPLIED AT A RATE OF 2 TONS PER ACRE OR 90 LBS/1000 SQUARE FEET WHEN SEED IS APPLIED BETWEEN JUNE 8 AND AUGUST 20 AND WHERE SLOPES ARE STEEPER THAN 4:1.

2) STRUCTURAL PRACTICES: PROVIDED BELOW IS A DESCRIPTION OF STRUCTURAL PRACTICES THAT WILL BE IMPLEMENTED TO THE DEGREE ATTAINABLE, TO DIVERT FLOWS FROM EXPOSED SOILS, STORE FLOWS OR OTHERWISE LIMIT RUNOFF AND THE DISCHARGE OF POLLUTANTS FROM EXPOSED AREAS OF THE SITE. THE INSTALLATION OF THESE DEVICES MAY BE SUBJECT TO SECTION 404 OF THE CLEAN WATER ACT. SUCH PRACTICES WILL INCLUDE STABILIZED CONSTRUCTION ENTRANCE, SILT FENCES, DITCH CHECKS, SEDIMENT TRAPS, RIP-RAP, STORM DRAIN INLET PROTECTION, LEVEL SPREADERS, AND THE SITE DETENTION FACILITY WITH ITS INFILTRATION MEASURES AND OUTLET RESTRICTOR.

#### B. STORMWATER MANAGEMENT

PROVIDED BELOW IS A DESCRIPTION OF MEASURES THAT WILL BE INSTALLED DURING THE CONSTRUCTION PROCESS TO CONTROL POLLUTANTS IN STORMWATER DISCHARGES THAT WILL OCCUR AFTER CONSTRUCTION OPERATIONS HAVE BEEN COMPLETED.

1) SUCH PRACTICES MAY INCLUDE STORMWATER DETENTION STRUCTURES, INFILTRATION BASINS, INFILTRATION TRENCHES, FLOW ATTENUATION BY USE OF OPEN VEGETATED SWALES AND DEPRESSIONS AND SEQUENTIAL SYSTEMS (WHICH COMBINE SEVERAL PRACTICES). THE PRACTICES SELECTED FOR IMPLEMENTATION PROVIDE FOR INFILTRATION OF MINOR STORM EVENTS AND A RESTRICTED RELEASE RATE IN MAJOR STORMWATER EVENTS IN ACCORDANCE WITH LOCAL JURISDICTIONAL REQUIREMENTS.

2) RIP-RAP FOR VELOCITY DISSIPATION WILL BE PLACED AT DISCHARGE LOCATIONS AND ALONG THE LENGTH OF THE OUTFALL CHANNEL AS NECESSARY TO PROVIDE A NONEROSIVE VELOCITY FLOW FROM THE STRUCTURE TO A WATER COURSE SO THAT THE NATURAL PHYSICAL AND BIOLOGICAL CHARACTERISTICS AND FUNCTIONS ARE MAINTAINED AND PROTECTED (E.G. MAINTENANCE OF HYDRAULIC CONDITIONS, SUCH AS THE HYDROPERIOD AND HYDRODYNAMICS PRESENT PRIOR TO THE INITIATION OF CONSTRUCTION ACTIVITIES).

#### C. OTHER CONTROLS

1) WASTE DISPOSAL: NO SOLID MATERIALS, INCLUDING BUILDING MATERIALS SHALL BE DISCHARGED INTO WATERS OF THE STATE, EXCEPT AS AUTHORIZED BY A SECTION 404 PERMIT.

2) THE PROVISIONS OF THIS PLAN SHALL ENSURE AND DEMONSTRATE COMPLIANCE WITH APPLICABLE STATE AND/OR LOCAL WASTE DISPOSAL, SANITARY SEWER OR SEPTIC SYSTEMS REGULATIONS.

D. APPROVED STATE OR LOCAL PLANS: THE MANAGEMENT PRACTICES, CONTROLS, AND OTHER PROVISIONS CONTAINED IN THIS PLAN WILL BE IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS OF THE LOCAL JURISDICTIONAL AGENCIES, WHICH ARE AT LEAST AS PROTECTIVE AS THE REQUIREMENTS CONTAINED IN THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY'S ILLINOIS URBAN MANUAL, CURRENT EDITION. REQUIREMENTS SPECIFIED IN SEDIMENT AND EROSION CONTROL PLANS OR SITE STORMWATER MANAGEMENT PLANS OR SITE PERMITS APPROVED BY LOCAL OFFICIALS THAT ARE APPLICABLE TO PROTECTING SURFACE WATER RESOURCES ARE, UPON SUBMITTAL OF AN NOI TO BE AUTHORIZED TO DISCHARGE UNDER PERMIT ILR10, INCORPORATED BY REFERENCE AND ARE ENFORCEABLE UNDER THIS PERMIT EVEN IF THEY ARE NOT SPECIFICALLY INCLUDED IN THE PLAN.

#### 3. MAINTENANCE

THE FOLLOWING IS A DESCRIPTION OF PROCEDURES THAT WILL BE USED TO MAINTAIN IN GOOD AND EFFECTIVE OPERATING CONDITIONS, VEGETATION, EROSION AND SEDIMENT CONTROL MEASURES AND OTHER PROTECTIVE MEASURES IDENTIFIED IN THIS PLAN.

A. SILT FENCE: SILT FENCE SHALL BE INSTALLED AND MAINTAINED. DAMAGED FENCE SHALL BE RESTORED OR REPLACED.

B. STABILIZED CONSTRUCTION ENTRANCE: THE ENTRANCE SHALL BE MAINTAINED TO PREVENT TRACKING OF SEDIMENT ONTO PUBLIC STREETS. MUD TRACKED ONTO PUBLIC STREETS OR SEDIMENT WASHED INTO THE RIGHT-OF-WAY SHALL BE REMOVED IMMEDIATELY.

C. INLET PROTECTION: INLET PROTECTION SHALL BE INSPECTED FREQUENTLY, REPAIRED OR REMOVED AND REPLACED AS NEEDED.

D. VEGETATIVE EROSION CONTROL MEASURES: THE VEGETATIVE GROWTH OF TEMPORARY AND PERMANENT SEEDING, SODDING, VEGETATIVE CHANNELS, VEGETATIVE BUFFER STRIPS, ETC. SHALL BE MAINTAINED PERIODICALLY, ADEQUATELY WATERED AND FERTILIZED. THE VEGETATIVE COVER SHALL BE RESEEDED OR OVERSEEDED AS NECESSARY.

E. OTHER MAINTENANCE PROCEDURES IDENTIFIED IN THE STORMWATER REPORT ARE INCORPORATED BY REFERENCE.

#### 4. INSPECTIONS

QUALIFIED PERSONNEL SHALL MAKE PERIODIC INSPECTIONS OF THE CONSTRUCTION SITE WHICH HAS NOT BEEN FINALLY STABILIZED. SUCH INSPECTIONS SHALL BE CONDUCTED AT LEAST ONCE EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS AFTER THE END OF A RAINFALL THAT IS 0.50 INCHES ARE GREATER OR AN EQUIVALENT SNOWFALL.

A. DISTURBED AREAS AND AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION SHALL BE INSPECTED FOR EVIDENCE OF, OR THE POTENTIAL FOR, POLLUTANTS ENTERING THE DRAINAGE SYSTEM. EROSION AND SEDIMENT CONTROL MEASURES IDENTIFIED ON THE PLAN SHALL BE OBSERVED TO ENSURE THAT THEY ARE OPERATING CORRECTLY. WHERE DISCHARGE LOCATIONS OR POINTS ARE ACCESSIBLE, THEY SHALL BE INSPECTED TO ASCERTAIN WHETHER EROSION CONTROL MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICANT IMPACTS TO RECEIVING WATERS. LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE SHALL BE INSPECTED FOR EVIDENCE OF OFF SITE SEDIMENT TRACKING.

B. BASED ON THE RESULTS OF THE INSPECTION, THE DESCRIPTION OF POTENTIAL POLLUTANT SOURCES IDENTIFIED IN SECTION 1 ABOVE AND POLLUTION PREVENTION MEASURES IDENTIFIED IN SECTION 2 ABOVE SHALL BE REVISED AS APPROPRIATE AS SOON AS PRACTICABLE AFTER SUCH INSPECTION. ANY CHANGES TO THIS PLAN RESULTING FROM THE REQUIRED INSPECTIONS SHALL BE IMPLEMENTED WITHIN 7 CALENDAR DAYS FOLLOWING THE INSPECTION.

C. A REPORT SUMMARIZING THE SCOPE OF THE INSPECTION, NAME(S) AND QUALIFICATIONS OF PERSONNEL MAKING THE INSPECTION, THE DATE(S) OF THE INSPECTION, MAJOR OBSERVATIONS RELATING TO THE IMPLEMENTATION OF THIS WATER POLLUTION PREVENTION PLAN, AND ACTIONS TAKEN IN ACCORDANCE WITH SECTION 4.B. SHALL BE MADE AND RETAINED AS PART OF THE PLAN FOR AT LEAST THREE (3) YEARS AFTER THE DATE OF THE INSPECTION.

D. IF ANY VIOLATION OF THE PROVISIONS OF THIS PLAN IS IDENTIFIED DURING THE CONDUCT OF THE CONSTRUCTION WORK COVERED BY THIS PLAN, THE OWNER OR HIS REPRESENTATIVE SHALL COMPLETE AND FILE AN "INCIDENT OF NONCOMPLIANCE" (ION) REPORT FOR THE IDENTIFIED VIOLATION. THE RESIDENT ENGINEER OR PROJECT REPRESENTATIVE SHALL USE FORMS PROVIDED BY THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY AND SHALL INCLUDE SPECIFIC INFORMATION ON THE CAUSE OF THE NONCOMPLIANCE, ACTIONS WHICH WERE TAKEN TO PREVENT ANY FURTHER CAUSES OF NONCOMPLIANCE AND A STATEMENT DETAILING ANY ENVIRONMENTAL IMPACT WHICH MAY HAVE RESULTED FROM NONCOMPLIANCE. ALL REPORTS OF NONCOMPLIANCE SHALL BE SIGNED BY A RESPONSIBLE AUTHORITY IN ACCORDANCE WITH PART VI.G OF THE GENERAL PERMIT. THE REPORT OF NONCOMPLIANCE SHALL BE MAILED TO THE FOLLOWING ADDRESS:

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY  
DIVISION OF WATER POLLUTION CONTROL  
ATTN: COMPLIANCE ASSURANCE SECTION  
1021 NORTH GRAND AVENUE EAST  
POST OFFICE BOX 19278  
SPRINGFIELD, ILLINOIS 62794-9278

#### 5. NON-STORMWATER DISCHARGES

EXCEPT FOR FLOWS FROM

\*FIRE-FIGHTING ACTIVITIES,

\*WATERMAIN HYDRANT FLUSHING,

\*WATERING FOR DUST CONTROL,

\*IRRIGATION FOR VEGETATIVE GROWTH,

\*OR WASH WATER WHERE DETERGENTS ARE NOT USED.

SOURCES OF NON-STORM WATER SHALL NOT BE COMBINED WITH STORM WATER DISCHARGES ASSOCIATED WITH THE INDUSTRIAL ACTIVITY ADDRESSED IN THIS PLAN.

#### OWNER'S CERTIFICATION

I CERTIFY UNDER PENALTY OF LAW THAT I UNDERSTAND THE TERMS AND CONDITIONS OF THE NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT THAT AUTHORIZES THE STORM WATER DISCHARGES ASSOCIATED WITH THE INDUSTRIAL ACTIVITY FROM THE CONSTRUCTION SITE IDENTIFIED AS PART OF THIS CERTIFICATION.

SIGNATURE

TITLE

#### EARTHWORK CONTRACTOR'S CERTIFICATION

I CERTIFY UNDER PENALTY OF LAW THAT I UNDERSTAND THE TERMS AND CONDITIONS OF THE NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT THAT AUTHORIZES THE STORM WATER DISCHARGES ASSOCIATED WITH THE INDUSTRIAL ACTIVITY FROM THE CONSTRUCTION SITE IDENTIFIED AS PART OF THIS CERTIFICATION.

SIGNATURE

TITLE

#### UNDERGROUND CONTRACTOR'S CERTIFICATION

I CERTIFY UNDER PENALTY OF LAW THAT I UNDERSTAND THE TERMS AND CONDITIONS OF THE NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT THAT AUTHORIZES THE STORM WATER DISCHARGES ASSOCIATED WITH THE INDUSTRIAL ACTIVITY FROM THE CONSTRUCTION SITE IDENTIFIED AS PART OF THIS CERTIFICATION.

SIGNATURE

TITLE

#### LANDSCAPE CONTRACTOR'S CERTIFICATION

I CERTIFY UNDER PENALTY OF LAW THAT I UNDERSTAND THE TERMS AND CONDITIONS OF THE NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT THAT AUTHORIZES THE STORM WATER DISCHARGES ASSOCIATED WITH THE INDUSTRIAL ACTIVITY FROM THE CONSTRUCTION SITE IDENTIFIED AS PART OF THIS CERTIFICATION.

SIGNATURE

TITLE

SEC INC  
SOUTHWEST ENGINEERING  
CONSULTANTS, INC.  
7621 BAINBRIDGE DR.  
DOWNERS GROVE, IL 60516  
630-737-0025  
FAX 630-737-0026

CLIENT:  
COMPASS REAL ESTATE HOLDINGS LLC  
15W580 N. FRONTAGE RD.  
BURR RIDGE, ILLINOIS 60527  
CONTACT: MARIO MAGLIANO  
PHONE: 630-788-4934

#### REVISIONS

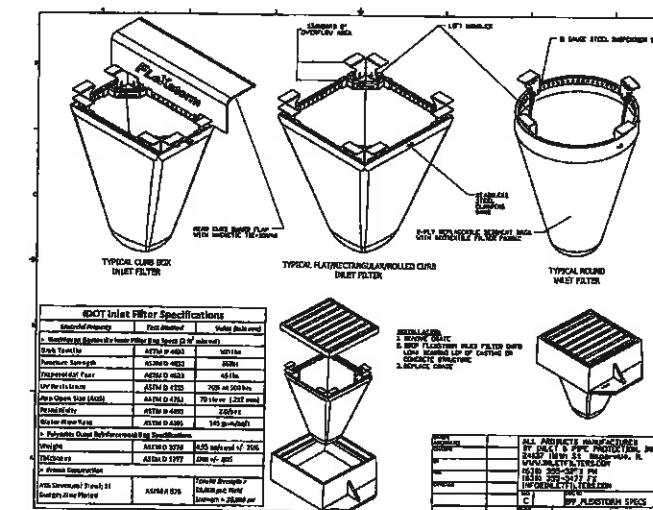
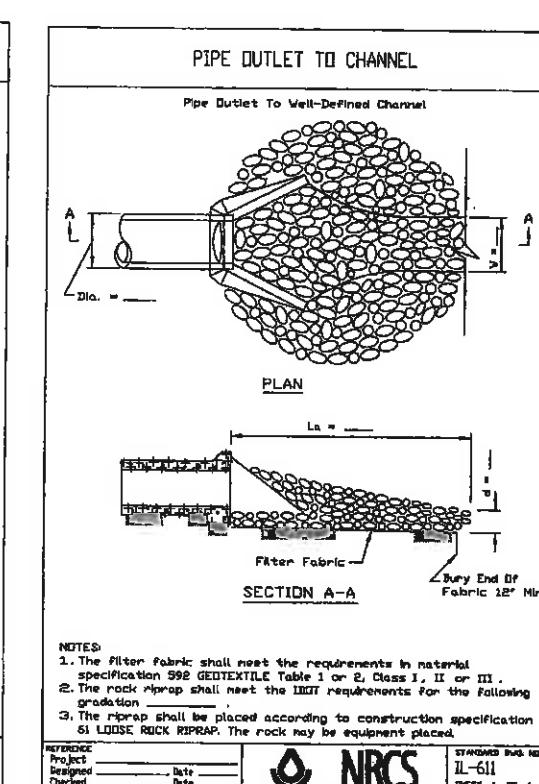
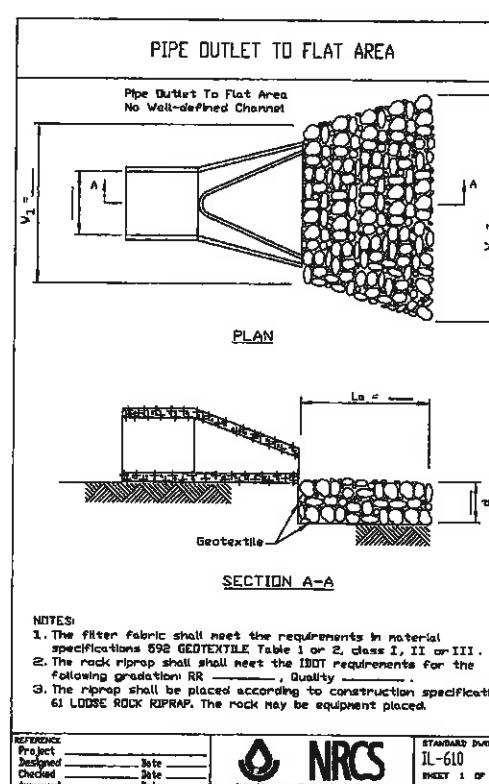
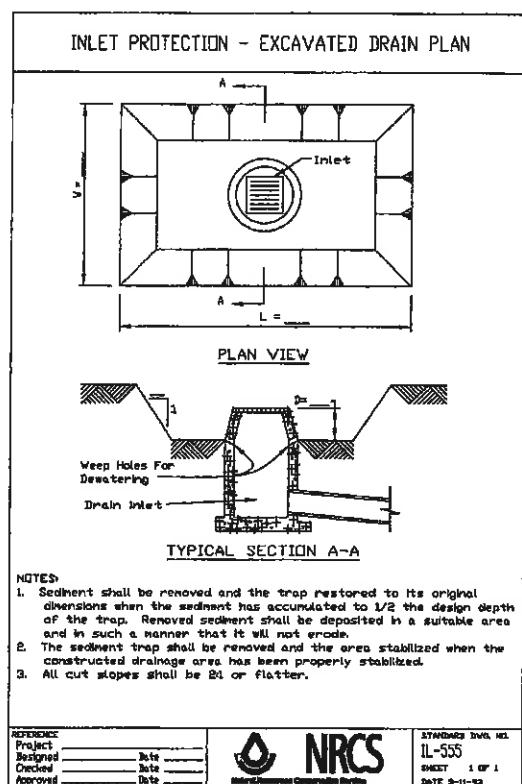
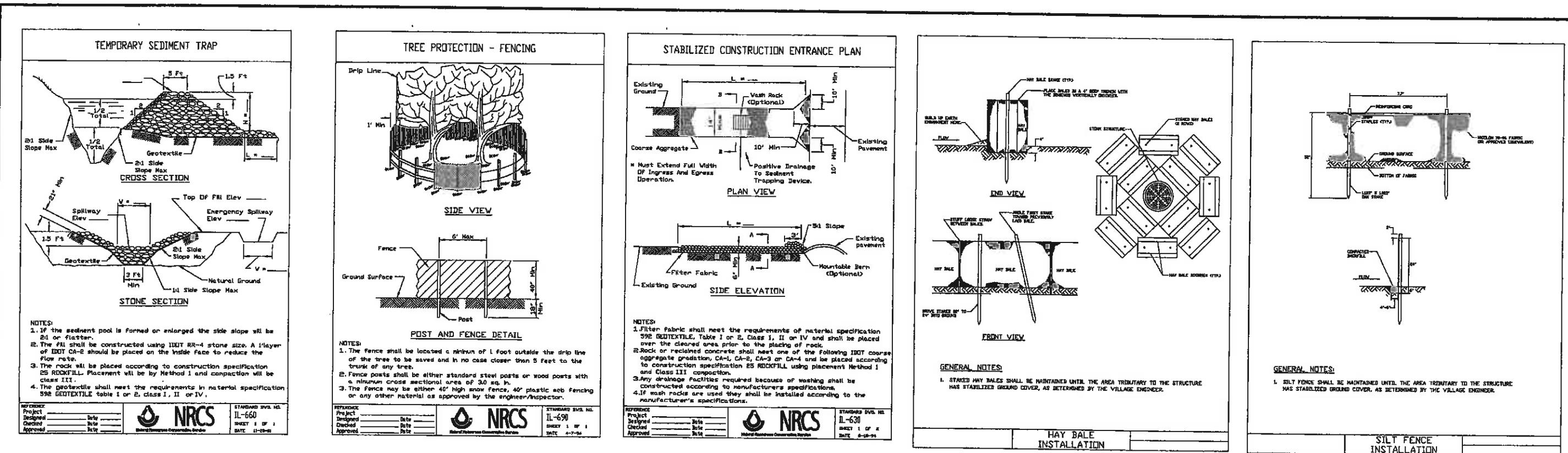
1	REVISED PER OWNER REVIEW	1-18-15
2	REVISED PER VILLAGE REVIEW	4-4-16
3	REVISED PER VILLAGE REVIEW	2-12-16
4	REVISED PER VILLAGE REVIEW	3-20-16

FINAL ENGINEERING  
COMPASS ARENA  
635 JOLIET RD. WILLOWBROOK, IL

SOIL EROSION AND SEDIMENT  
CONTROL PLAN

PROJECT NO. 071014  
DATE 1-16-14  
SCALE NONE  
DESIGNED BY WSK  
DRAWN BY WSK  
CHECKED BY DMK

SHEET  
7  
OF 10



## GENERAL NOTES

## L. Reference Codes

- A. All pavements and storm sewer construction shall conform to the standard specifications for Road and Bridge construction and supplemental specifications and requirements (if any) provisions adopted January 1, 2012 by the Illinois Department of Transportation and all amendments thereto and in accordance with the latest edition of the code or the municipality except as noted herein. In case of conflict, Municipal code shall take precedence.
- B. All sanitary and water main construction shall conform to the standard specifications for water and sewer main construction in Illinois published May 1996, and in accordance with the code or the municipality except as modified herein or by any public agency or authority having jurisdiction. In case of conflict, the more restrictive provision shall apply.
- C. All side walk and public areas must be constructed in accordance with current ADA Illinois handicap accessibility and any applicable local ordinances. In case of conflict, the more restrictive provision shall apply.
- D. The cited standard specifications, codes, and permits, with these construction plans and details, are all to be considered part of the contract. Incidental items or accessories necessary to complete this work may not be specifically noted but are considered a part of this contract.

## 2. Utility Coordination

- A. Owner shall obtain easements and permits necessary to facilitate construction of all proposed utilities. The contractor shall furnish all required records and evidence of insurance necessary to secure these permits.
- B. The contractor shall be responsible for having the utility companies locate their facilities in the field before construction, and shall coordinate for the protection, maintenance and preservation of these facilities. The owner does not warrant the location of any existing utilities shown on the plans. The contractor shall call JOLIET at 800-998-0183 and the Municipality, for utility locations. Keep all dig #'s in a log for future reference.
- C. The owner and the engineer shall be notified in writing by the contractor at least 48 hours before the start of any operation requiring cooperation with others. The engineer shall make the original contact with the utility companies and issue one copy of the approved preliminary engineering and preliminary plan. For other work, contact the utility companies shall be the responsibility of the owner.
- D. No plan shall be used for construction unless specifically marked "Approved for Construction" and has a date approved. Before the commencement of construction, the contractor shall examine the Engineering Plans, the existing site conditions, and notifying the ENGINEER at once of any discrepancies. Failure to make notification, the contractor will be considered to have proceeded at his own risk and expense.
- E. All proposed elevations shown on the plans refer to finished surface elevations, unless where otherwise specified on the engineering plans.
- F. When required by the Municipality or the Owner, the contractor shall furnish a labor, material and performance bond in the amount required guaranteeing completion of the work.
- G. The owner shall furnish the contractor a copy report if one is available. Otherwise, it shall be the responsibility of the contractor to perform their own sub-surface investigation of the site.
- H. The contractor shall videotape all work areas prior to construction and issue the owner 1 copy of the tape.
- I. The contractor shall furnish the owner any utility affected government agencies at least three working days prior to any required inspections or testing requirements to be scheduled to ensure final acceptance of their work. Failure to notify or obtain any required inspections or tests shall result in the contractor to be liable for all work until the testing agency can schedule testing operations.
- J. All contractors shall keep access available at all times for all types of traffic.
- K. The contractor shall preserve all construction stakes until they are no longer needed. Any stakes destroyed or disturbed by the contractor prior to their use shall be rebuilt by the owner's surveyor at the sole cost of the contractor.
- L. All field tiles encountered during construction shall be connected to the proposed storm sewer or shall be restored to original drainage conditions.
- M. The contractor is solely responsible for the safety on the job.

## 13. General excavation / Underground notes

- A. Stope slopes of excavations to comply with codes and ordinances having jurisdiction. Shores and braces where sloping is not possible because of either space restrictions or stability of material excavated.
- B. Provide materials for shoring and bracing, such as sheet piling, sprights, stringers and cross braces, in good serviceable condition.
- C. Prevent surface water and subsurface or groundwater from flowing into excavations.
- D. Final Acceptance
- A. All work performed under this contract shall be guaranteed by the contractor to the owner for a period of 1 (one) year from the date of final acceptance of the project by the municipality, and the contractor shall be held responsible for all defects in material and workmanship of whatever nature during that period.
- B. Before acceptance by the owner and final payment, the owner and the municipality shall inspect all work. Final payment will be made after the contractor's work is approved and accepted by the owner and the municipality.

## EARTHWORK IMPROVEMENTS

## L. Topsoil Excavation Includes

- A. Excavation of topsoil and other structurally unsuitable materials within those areas that will require earth excavation or compacted earth fill material in order to achieve the plan subgrade elevations.
- B. Placement of the excavated material in OWNER designated areas for future use within areas to be landscaped, and those areas not requiring structural fill material.
- C. Compaction of the excavated material where placed in areas not requiring structural fill material shall be moderate.
- D. Excess materials if not utilized as fill or if not anticipated for future landscaping, shall be completely removed from the construction site and disposed of by the CONTRACTOR.

## 2. Earth Excavation Includes

- A. Excavation of earth and other materials which are suitable for use as structural fill. The excavation shall be to within a tolerance of +/- 3" (+/- 6") of the plan subgrade elevations. The (+/-) tolerance within the pavement areas shall be such that the earth material shall "balance" as part of the fill grading operations.
- B. Placement of the earth and other suitable materials shall be within those areas requiring structural fill in order to achieve the plan subgrade elevations to attain a tolerance of +/- 3" (+/- 6"). The fill material shall be placed in loose lifts that shall not exceed 12" in thickness, and the water content shall be adjusted in order to achieve the required compaction. Earth material may be placed within those portions of the building site not requiring structural fill to within +/- 6" inches of the plan subgrade fill. However, the earth material may not be placed over topsoil or other unsuitable materials unless specifically directed by a Soils Engineer with the concurrence of the OWNER. The cost for obtaining cover which meet or exceed the specification shall be borne by the OWNER.
- C. Deficiencies in the subgrade concrete bender course shall be adjusted for by increasing the plan thickness of the surface course with no additional cost to the OWNER.
- D. Final acceptance of the total pavement installation shall be subject to the testing and checking requirements cited above.

## 4. Testing and Final Acceptance

- A. Prior to placement of the base course, the subgrade must be approved by the local jurisdictional authority. (See Testing and Final Acceptance for Earthwork)
- B. Prior to placement of the subgrade concrete surface, the CONTRACTOR if requested by the OWNER, shall obtain a core sample with a core drill where directed by the ENGINEER. For the purpose of thickness verification, Coring shall be in accordance with the applicable provisions of ART-061607 and of the Standard Specification entitled "Standard Practice for Road and Bridge Construction". The cost for obtaining cores shall be borne by the OWNER. The cost for obtaining cores which meet or exceed the specification shall be borne by the OWNER.
- C. Deficiencies in the subgrade concrete bender course shall be adjusted for by increasing the plan thickness of the surface course with no additional cost to the OWNER.
- D. Final acceptance of the total pavement installation shall be subject to the testing and checking requirements cited above.

## UNDERGROUND IMPROVEMENTS

## L. Sanitary Sewer Main and Services

## A. Material

1. Polyvinyl chloride pipe (PVC), which shall meet or exceed the performance requirements of ASTM D-2624, SDR-26 and be in accordance with Standard Village Specifications for Construction and Installation.
2. Ductile iron pipe (DIP), where indicated on the plans, which shall meet or exceed the performance requirements of ANSI A21.1, Class 50 cement-lined.

## B. Joints

1. For PVC, gasket type, ASTM D-2612.
2. For DIP, push-on (shell-type) type, ANSI A21.1.
- C. Bedding shall be CA-11 or CA-13 as detailed on the Engineering Plan.
- D. Cover over the pipe shall be a minimum depth of 4' or as detailed on the Engineering Plan.
- E. Slope for an 8-inch diameter pipe shall be a minimum of 0.045%. For a 6-inch diameter pipe, a minimum of 0.03%.
- F. Vyter shall be provided on the new sanitary sewer for existing sanitary sewer lines. All connections to existing sanitary sewer lines shall be made with a manhole for sewer extensions. All taps shall include a properly installed hub eye saddle.
- G. "Bend Seal" or similar couplings shall be used when joining pipes of dissimilar materials.
- H. Services shall extend five (5) feet inside the property line beyond any utility located in the front yard of either lot or service (either family development) or to within five (5) feet from the front of the building (or proposed development). The termination points shall be clearly located with a blue-topped 4 inch x 4 inch stake.

## E. Sizes shall be indicated on the Engineering Plan.

## 2. Water Main and Services

- A. Material for the water main shall be ductile iron pipe, which shall meet or exceed the performance requirements of ANSI A21.1, Class 52 cement-lined. Water service material shall be type "K" copper.
- B. Joints for the ductile iron pipe shall be the push-on (shell-type) type.
- C. Cover over the pipe shall be a minimum depth of 5' feet or as indicated on the Engineering Plans.
- D. Polyethylene Encasement, conforming to AWWA C-105-02 when provided for all ductile iron pipe.
- E. Services shall terminate at the valve box (single family development), or to within 10' of the front of a proposed building being served (multi-family and commercial development). The termination points shall be clearly located with a blue-topped 4 inch x 4 inch stake.

## F. Sizes shall be as indicated on the Engineering Plan.

## G. Valves, including pressure relief valves, adjacent to an existing wastewater and existing wastewater valves shall only be operated by the Village of Saug Village, Department of Public Utilities CEE/EN Division 48 hr. notice is required.

## 3. Storm Sewer

## A. Material

1. Reinforced concrete pipe (RCP), which shall meet or exceed the performance requirements of ASTM C-76, Class IV unless otherwise indicated on the Engineering Plans.
2. Ductile iron pipe (DIP), where indicated on the plans, which shall meet or exceed the performance requirements of ANSI A21.1, Class 50 cement-lined.
3. Polyvinyl chloride pipe (PVC), where indicated on the plans, which shall meet or exceed the performance requirements of ASTM D-2624, SDR-26.
4. Corrugated galvanized metal pipe (GMP), where indicated on the plans, which shall meet or exceed the performance requirements of ANSI D-26, with a 16-gauge thickness.
5. Permit the subgrade concrete bender course to weather one (1) winter season prior to the installation of the subgrade concrete surface course.

## B. Joints

1. For RCP, bell and spigot type with bituminous metric or ASTM C-449 gasket joints where indicated on the Engineering Plan.
2. For DIP, push-on (shell-type) type ANSI A21.1.
3. For PVC D-2612 gasket type.
- C. Bedding shall be CA-11 or CA-13 as detailed on the Engineering Plan.
- D. Size shall be as indicated on the Engineering Plan.

## 4. Trench Backfill Material

- A. Trench backfill material shall consist of CA-6 aggregate.
- B. All trenches under or within 2' of an existing or proposed curb and/or pavement are to be backfilled with trench backfill material.

## 5. General

- A. Adhere to the criteria for the separation between water main and the storm and sanitary sewer lines as described in the "Technical Policy Statement", Division of Public Water Supplies, Illinois Environmental Protection Agency (See Standard Specifications).

- B. Be responsible to place on grade, and coordinate with other CONTRACTORS, all underground utility structures (such as manholes, catchbasins, and inlets).
- C. Be aware of potential conflicts with existing utilities. The CONTRACTOR shall excavate around the existing utilities to determine their exact location and elevation prior to the construction of the proposed utility improvements.

- D. Provide poured concrete fillets conforming to the shape of the pipe in all sanitary and storm manholes, and inlets.

- E. Be responsible for maintaining the top of any utility trench at least two (2) feet away from any existing or proposed curb or pavement. In those instances where the trench runs parallel to said curb or pavement.

- F. Be responsible for the sheeting of utility trenches during construction and providing the necessary trench bracing that may be required to assure safe working conditions.

- G. Remove soft materials that may be encountered at the pipe invert elevation to a depth of at least one (1) ft. below the bottom of the pipe, and backfill with compacted bedding material.

- H. Not damage the road subgrade with excessive water saturation from hydrant flushing, or from leaks in the water main distribution system. The cost of any damage shall be borne by the CONTRACTOR. Hoses should be used to direct the water from hydrant flushing into the storm sewer system if available.

- I. Repair any existing field drainage tile damaged during construction, and properly reroute and/or connect said tile to the nearest storm sewer outlet. All locations of encountered field drainage tile shall be properly indicated on the CONTRACTOR's record drawing.

- K. Furnish one (1) set of Record drawings to the ENGINEER upon completion of the sanitary sewer and water main. Drawings shall show the location of all sanitary sewer lines originating from the nearest downstream manhole, hydrants, valves, and individual service boxes.

- L. Be responsible for implementation of "Toll Erosion and Sediment Control Measures" as applicable.

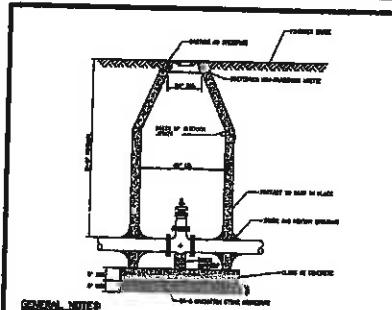
- M. Any existing utility lines requiring adjustment or reconstruction shall be done at the expense of the utility owner. Adjustments and reconstruction shall be done to the satisfaction of the utility owner. Adjustments and reconstruction not called for on the engineering plans shall be at the contractor's expense. No more than a total of 10' of adjusting rings and/or two adjusting rings shall be allowed.

## 6. Testing and Final Acceptance

- A. Sanitary sewer main and services shall be tested in accordance with the local jurisdictional requirements prior to the final acceptance. All necessary testing tests shall be as described in the "Standard Specifications" unless the local requirements are more restrictive. Service stubs must be properly plugged and sealed and clearly located at their termination points for testing. All sewer main and service lines and manholes shall be clean and free of debris prior to their final acceptance.

- B. Storm sewer and all storm structures shall be clean and free of debris prior to their final acceptance.

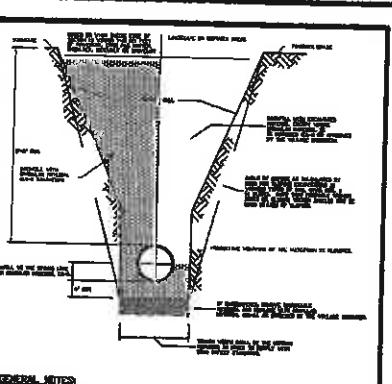
- C. Water main shall be tested in accordance with the local jurisdictional requirements prior to the final acceptance. The pressure and leakage tests and inspection of valves shall be as described in the "Standard Specifications" unless the local requirements are more restrictive. All valve valves shall be clean and free of debris and water, and individual service boxes shall be visible and clearly located prior to their final acceptance.



## GENERAL NOTES

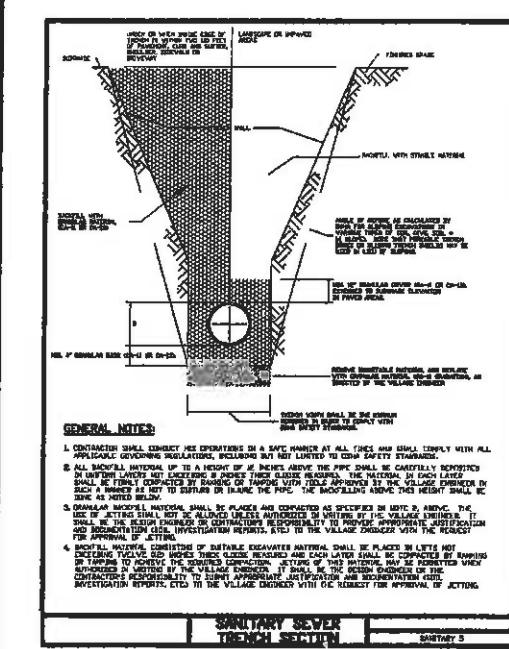
1. PERMIT, ETC. CONSTRUCTION PERMIT AND OTHER PERMITTING REQUIREMENTS ARE THE RESPONSIBILITY OF THE CONTRACTOR.
2. DUE TO THE INACCESSIBILITY OF THE PROPERTY, AGRICULTURE, FOREST, AND OTHER USES ARE PROHIBITED.
3. APPLY A CONTINUOUS LAYER OF 60-POUNDS PER SQUARE FOOT PRECAST CONCRETE ADJUSTABLE RINGS MAY BE USED TO A MAXIMUM HEIGHT OF 8 INCHES.
4. WHEN THE TYPICAL SOIL IS EXPOSED TO GATE AVOID INFLATION. USE A SOIL SCAFFOLDING SYSTEM OR A SOIL SCAFFOLDING SYSTEM WITH A ROLLING SOIL SCAFFOLDING SYSTEM.
5. APPROVED EARTHWORK CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT THE SOIL IS NOT EXPOSED TO THE ELEMENTS.
6. SOIL SCAFFOLDING SYSTEMS SHALL BE REINFORCED WITH 1/2 INCH DIA. STEEL CABLES.
7. SOIL SCAFFOLDING SYSTEMS SHALL NOT BE USED TO LIE DOWN EXISTING PIPE OR PIPING.
8. SOIL SCAFFOLDING SYSTEMS SHALL NOT BE USED TO SUPPORT EXISTING PIPE OR PIPING.
9. USE OF ADJUSTABLE JOINTS WITH HYDRAULIC CYLINDERS.
10. USE OF ADJUSTABLE JOINTS WITH HYDRAULIC CYLINDERS.
11. OTHERS MUST BE CONSIDERED WHEN PLACING SOIL SCAFFOLDING SYSTEMS.
12. BUTTERFLY VALVES MUST BE LOCATED AS SHOWN.

## WATER MAIN VALVE VAULT

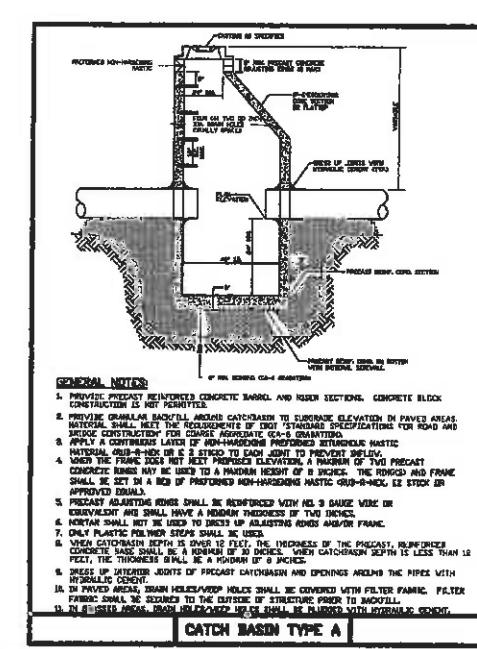


## GENERAL NOTES

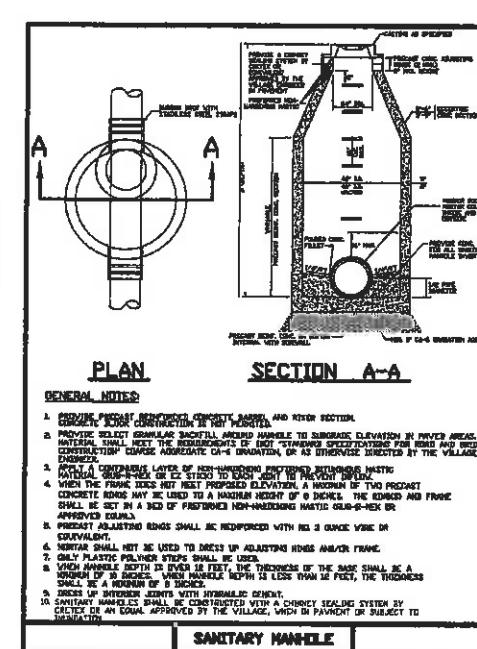
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57. ALL EXISTING FIELD DRAWDRAINS SHALL BE REMOVED AND RELOCATED AS NECESSARY.
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62. ALL EXISTING FIELD DRA



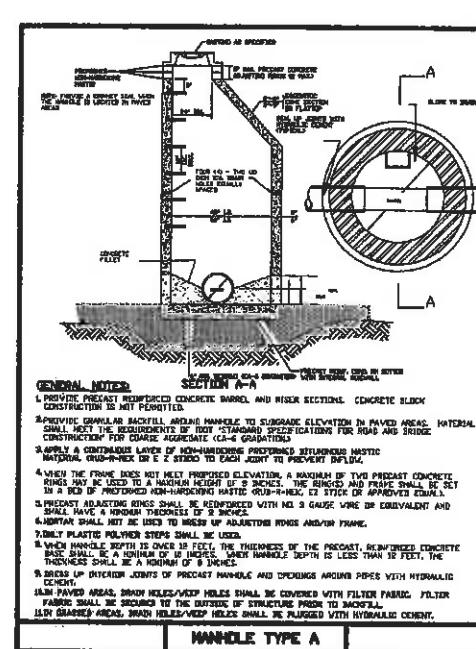
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TRENCH SECTION



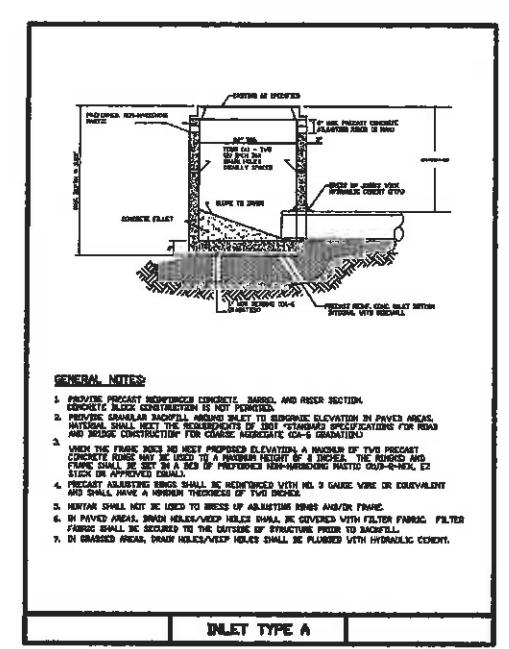
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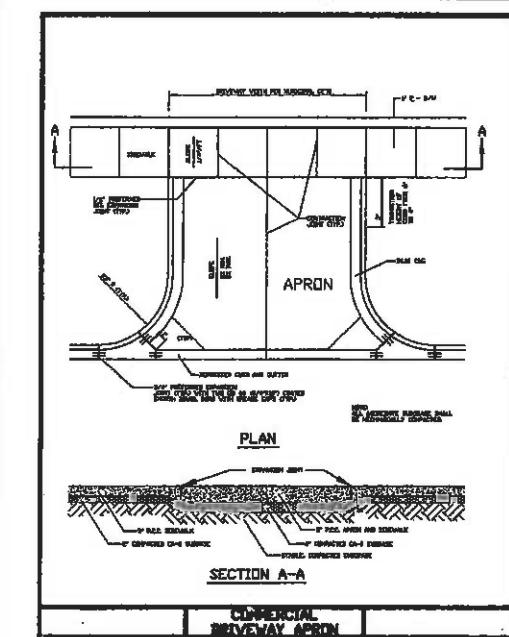
SANITARY MANHOLE



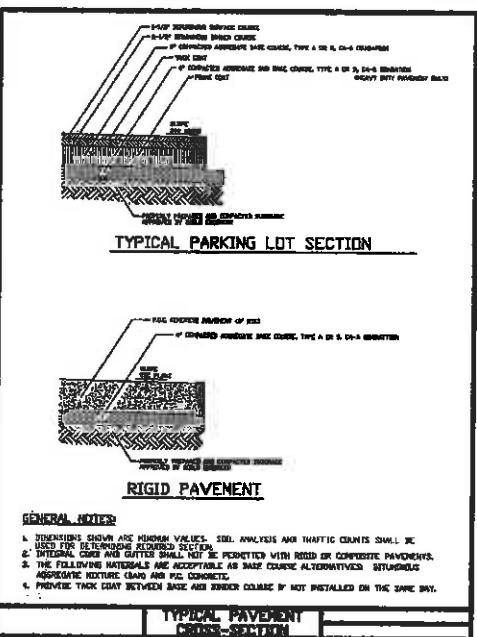
MANHOLE TYPE A



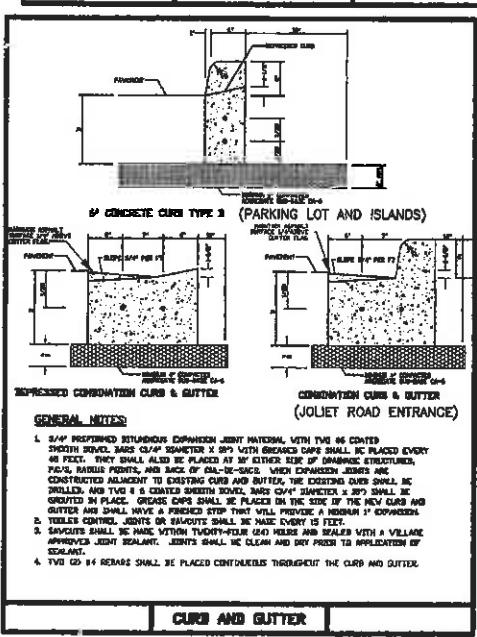
INLET TYPE A



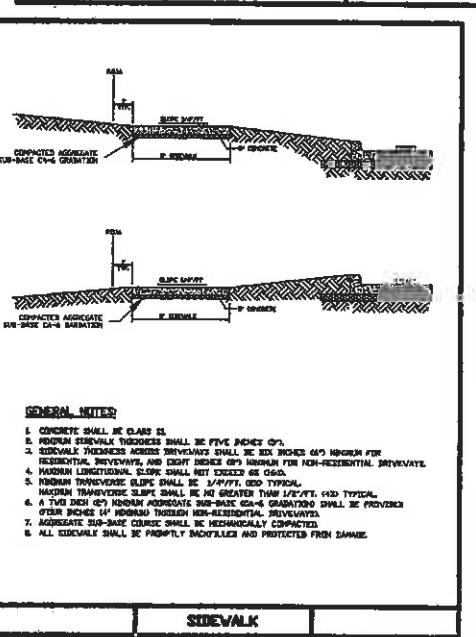
COMMERCIAL  
DRIVEWAY APRON



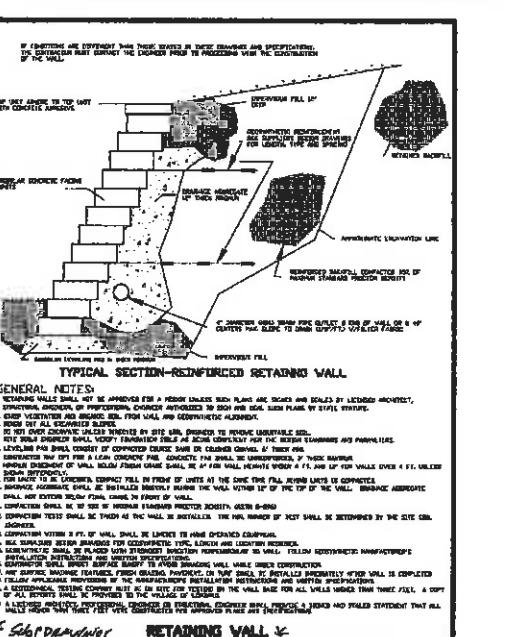
Typical Pavement  
Cross-Section



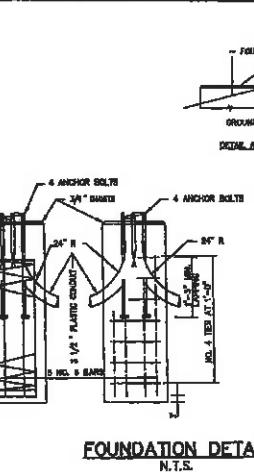
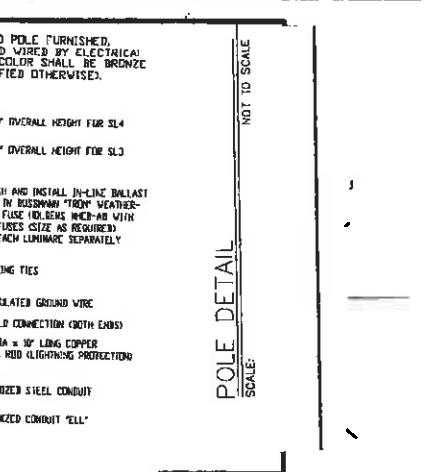
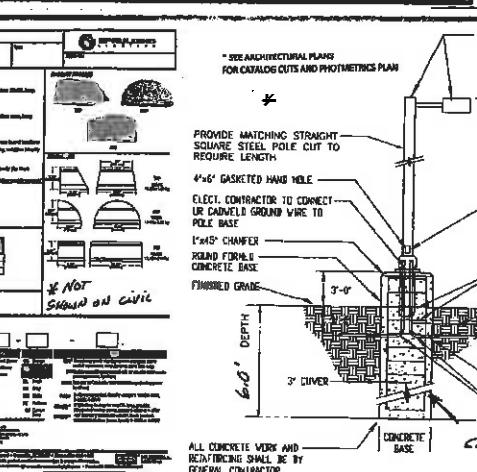
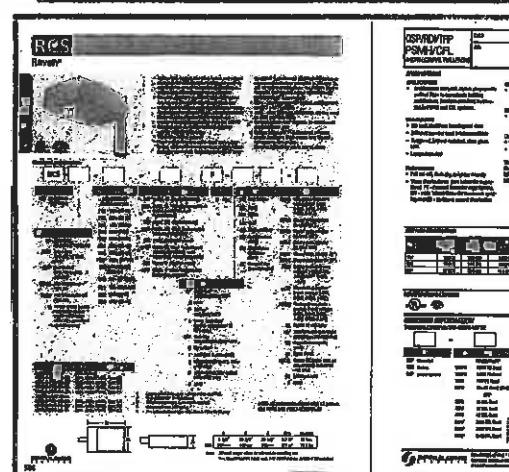
CURB AND GUTTER



SIDEWALK



Typical Section Reinforced Retaining Wall





## STORMTRAP INSTALLATION SPECIFICATION

1. STORMTRAP MODULES SHALL BE MANUFACTURED ACCORDING TO SHOP DRAWINGS APPROVED BY THE INSTALLING CONTRACTOR AND ENGINEER. THE SHOP DRAWINGS SHALL INDICATE SIZE AND LOCATION OF ROOF OPENINGS AND INLET/ OUTLET PIPE OPENINGS.
2. STORMTRAP SHALL BE INSTALLED IN ACCORDANCE WITH ASTM C891-09, STANDARD PRACTICE FOR INSTALLATION OF UNDERGROUND PRE-CAST CONCRETE UTILITY STRUCTURES. THE FOLLOWING ADDITIONS AND/OR EXCEPTIONS SHALL APPLY:
  - A. SPECIFICATIONS ON THE ENGINEER'S DRAWINGS SHALL TAKE PRECEDENCE.
  - B. THE STONE FOUNDATION HAS BEEN DESIGNED BASED ON THE FOLLOWING ASSUMPTIONS. THESE ASSUMPTIONS WILL NEED TO BE VERIFIED BY A GEOTECHNICAL ENGINEER WHICH WILL NEED TO BE EMPLOYED BY THE OWNER.
  1. A QUALIFIED GEOTECHNICAL ENGINEER WILL BE EMPLOYED, BY OWNER, TO PROVIDE ASSISTANCE IN EVALUATING THE EXISTING SOIL CONDITIONS AT THE ELEVATION THE STONE FOUNDATION IS TO BE PLACED. IF A STONE FOUNDATION IS TO BE USED FOR THIS CONDITION, THE BEARING PRESSURE OF THE SOILS AT THIS LEVEL WILL NEED TO MEET OR EXCEED 4000 PSF ALLOWABLE CAPACITY. IF THIS IS NOT POSSIBLE, THE GEOTECHNICAL ENGINEER MUST MAKE REMEDIAL RECOMMENDATIONS IN ORDER TO REACH THIS CAPACITY. IF THIS IS NOT POSSIBLE, THE STONE FOUNDATION MAY NOT BE AN OPTION FOR THIS LOCATION.
  2. A QUALIFIED GEOTECHNICAL ENGINEER WILL BE EMPLOYED, BY OWNER, TO EVALUATE A SOURCE OF STONE AGGREGATES THAT WILL BE PLACED ON THE PROPERLY COMPAKTED 4000 PSF ALLOWABLE CAPACITY SOILS. THE STONE BASE COURSE FOR WHICH THE STORMTRAP SYSTEM WILL BEAR DIRECTLY ON WILL NEED TO ATTAIN A MINIMUM 20,000 PSF ALLOWABLE BEARING CAPACITY. STORMTRAP HAS RECOMMENDED A MINIMUM BED OF 3/4" DIAMETER ANGULAR STONE WELL COMPAKTED AND SEADED, WITH NO FINES AT A 3 INCH THICKNESS AND AN ADDITIONAL 3 INCH DIAMETER CRUSHED ANGULAR STONE, WELL COMPAKTED AND SEADED, WITH NO FINES AT A 15 INCH THICKNESS. PLEASE NOTE THAT THESE ARE ONLY MINIMUM RECOMMENDATIONS AND A QUALIFIED GEOTECHNICAL ENGINEER SHALL BE USED TO DETERMINE THE EXACT REQUIREMENTS FOR THE LOCATIONS THAT THE STORMTRAP SYSTEM IS TO BE LOCATED.
  3. THE CONTRACTOR SHALL REMOVE ANY AND ALL EXPANDABLE OR COLLAPSIBLE SOILS AT THE DIRECTION OF A QUALIFIED GEOTECHNICAL ENGINEER.
  4. THE STONE SHALL BE INSTALLED A MINIMUM OF 2'-0" BEYOND THE LIMITS OF THE STORMTRAP MODULES PERIMETER.
  5. USE CRUSHED ANGULAR STONE AND COMPACT THE STONE USING A VIBRATING ROLLER WITH ITS FULL DYNAMIC FORCE APPLIED TO ACHIEVE A FLAT SURFACE.
  6. DISK, DRY, AND COMPACT THE TOP 8" OF THE SUBGRADE SOILS TO 95% OF THE STANDARD DRY DENSITY AND 110% OPTIMUM MOISTURE CONTENT.

- C. AGGREGATE SHALL BE GRADED TO WITHIN +/- 1/4" OF THE GRADE SHOWN ON THE PLANS
- D. MINIMUM 4000 PSF SOIL BEARING CAPACITY. SOIL STRENGTHS TO BE VERIFIED IN FIELD BY OTHERS.
- E. THE STORMTRAP MODULES SHALL BE PLACED SUCH THAT THE MAXIMUM SPACE BETWEEN ADJACENT MODULES DOES NOT EXCEED 3/4". IF THE SPACE EXCEEDS 3/4", THE MODULES SHALL BE RESET WITH APPROPRIATE ADJUSTMENT MADE TO LINE AND GRADE TO BRING THE SPACE INTO SPECIFICATION.
- F. ALL EXTERIOR JOINTS BETWEEN ADJACENT STORMTRAP MODULES SHALL BE SEALED WITH PRE-FORMED, COLD-APPLIED, SELF-ADHERING ELASTOMERIC RESIN BONDED TO A WOVEN HIGHLY PUNCTURE RESISTANT POLYMER WRAP CONFORMING TO ASTM C891-09 AND SHALL BE 0'-0" WIDE WITH INTEGRATED PRIMER SEALANT AS APPROVED BY STORMTRAP. THE ADHESIVE EXTERIOR JOINT WRAP SHALL BE INSTALLED ACCORDING TO THE FOLLOWING INSTALLATION INSTRUCTIONS:
  1. USE A BRUSH OR WET CLOTH TO THOROUGHLY CLEAN THE OUTSIDE SURFACE AT THE POINT WHERE THE JOINT WRAP IS TO BE APPLIED.
  2. A RELEASE PAPER PROTECTS THE ADHESIVE SIDE OF THE JOINT WRAP. PLACE THE ADHESIVE TAPE (ADHESIVE SIDE DOWN) AROUND THE STRUCTURE, REMOVING THE RELEASE PAPER AS YOU GO. PRESS THE JOINT WRAP FIRMLY AGAINST THE STORMTRAP MODULE SURFACE WHEN APPLYING.
- G. THE FILL PLACED AROUND THE STORMTRAP UNITS MUST BE DEPOSITED ON BOTH SIDES AT THE SAME TIME AND TO APPROXIMATELY THE SAME ELEVATION. AT NO TIME SHALL THE FILL BEHIND ONE SIDE WALL BE MORE THAN 2'-0" HIGHER THAN THE FILL ON THE OPPOSITE SIDE. BACKFILL SHALL BE COMPAKTED TO 95% STANDARD PROCTOR DENSITY OR OTHERWISE SPECIFIED BY ENGINEER. CARE SHALL BE TAKEN TO PREVENT ANY WEDGING ACTION AGAINST THE STRUCTURE, AND ALL SLOPES BOUNDING OR WITHIN THE AREA TO BE BACKFILLED MUST BE STEPPED OR SERRATED TO PREVENT WEDGE ACTION. (REFERENCE ARTICLE 502.10 I.D.O.T. S.S.R.B.C.) CARE SHALL ALSO BE TAKEN AS NOT TO DISRUPT THE JOINT WRAP FROM THE JOINT DURING THE BACKFILL PROCESS. BACKFILL MATERIAL SHALL BE CLEAN, CRUSHED, ANGULAR No.5 (AASHTO M43) AGGREGATE.

- H. DISTRIBUTE THE FILL OVER THE SYSTEM WITH A TRACKED CONSTRUCTION VEHICLE, DO NOT EXCEED THE MAXIMUM ALLOWABLE GROUND PRESSURE SHOWN IN TABLE 1.

TABLE 1.

FILL DEPTH	TRACK WIDTH	MAX GROUND PRESSURE
12"	12"	1690 psf
	18"	1219 psf
	24"	1111 psf
	30"	1000 psf
	36"	924 psf

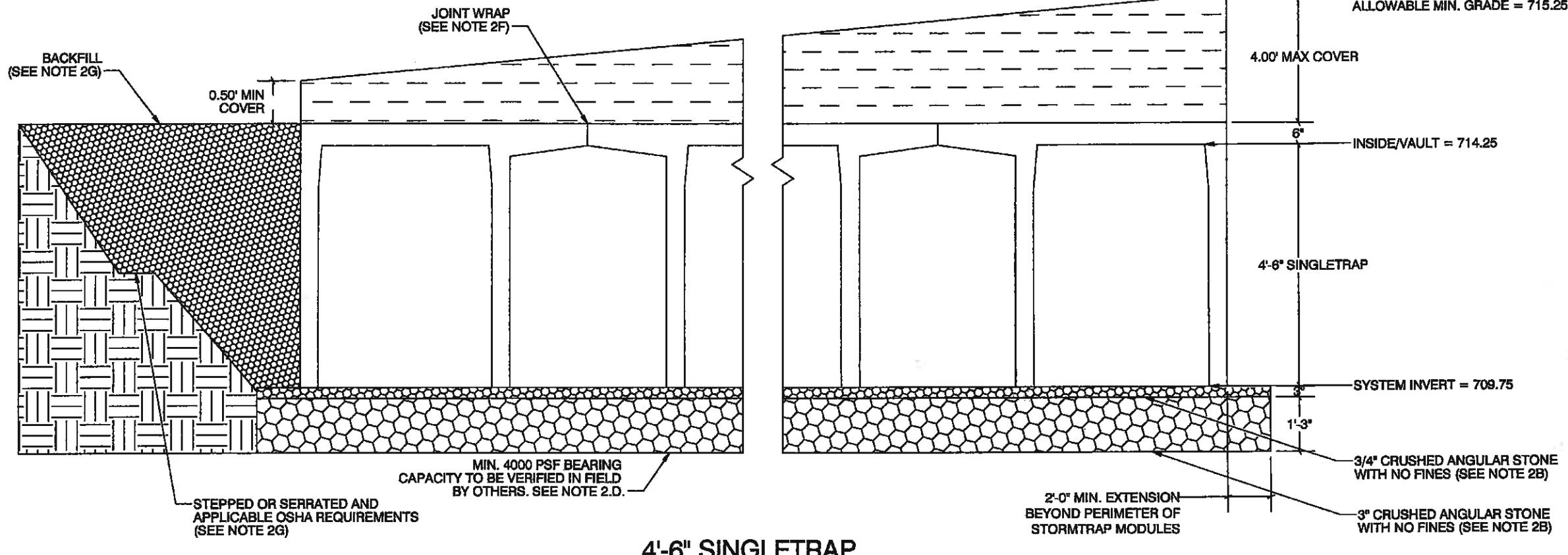
MAXIMUM ALLOWABLE GROUND PRESSURE IS THE VEHICLE OPERATING WEIGHT DIVIDED BY THE TOTAL VEHICLE TRACK-GROUND CONTACT AREA, FOR BOTH TRACKS.

USE A WALK-BEHIND OR VIBRATORY ROLLER, NOT TO EXCEED A MAXIMUM GROSS VEHICLE WEIGHT OF 12,000# AND A MAXIMUM DYNAMIC FORCE OF 20,000#, WITH A MINIMUM OF 12" OF COMPAKTED FILL OVER THE SYSTEM.

FULL DUMP TRUCKS MUST NOT BE DRIVEN OR DUMP STONE OVER THE SYSTEM. RAISING THE BODY TO DUMP STONE SIGNIFICANTLY INCREASES THE REAR WHEEL LOADS.

## STORMTRAP SPECIFICATION

1. TOTAL COVER: MIN. 0.50' MAX. 4.00' CONSULT STORMTRAP FOR ADDITIONAL COVER OPTIONS.
2. CONCRETE CHAMBER DESIGNED FOR AASHTO HS-20 HIGHWAY LOADING. MIN. SOIL PRESSURE 4000 PSF.
3. ALL DIMENSIONS AND SOIL CONDITIONS, INCLUDING BUT NOT LIMITED TO GROUNDWATER AND SOIL BEARING CAPACITY ARE TO BE VERIFIED IN THE FIELD BY OTHERS PRIOR TO STORMTRAP INSTALLATION.
4. FOR STRUCTURAL CALCULATIONS THE GROUND WATER TABLE IS ASSUMED TO BE BELOW THE SYSTEMS INVERT. IF WATER TABLE IS DIFFERENT THAN ASSUMED, CONTACT STORMTRAP.
5. FOR STRUCTURAL CALCULATIONS THE SOIL DENSITY IS ASSUMED TO BE 120 PCF.



\*FOR STRUCTURAL CALCULATIONS THE GROUND WATER TABLE IS ASSUMED TO BE BELOW THE SYSTEMS INVERT. IF WATER TABLE IS DIFFERENT THAN ASSUMED, CONTACT STORMTRAP.

**STORMTRAP®**  
PRE-CAST CONCRETE MODULAR STORMWATER MANAGEMENT SYSTEMS  
THIS STORMTRAP DESIGN MAY BE COVERED BY 1 OR MORE OF THE  
FOLLOWING U.S. PATENTS: NO. 5,912,717; NO. 6,020,958; NO. 7,344,385 AND  
CA. PATENT NO. 2,445,207

2495 WEST BUNGALOW ROAD  
MORRIS, IL 60450  
P: 815-941-4663  
F: 815-416-1100

ENGINEER INFORMATION:

SOUTHWEST  
ENGINEERING  
CONSULTANTS, INC  
7821 BAINBRIDGE DR  
DOWNERS GROVE, IL 60516  
PHONE: 630-737-0025  
FAX: 630-737-0026

PROJECT INFORMATION:

COMPASS ARENA  
WILLOWBROOK, IL

CURRENT ISSUED DATE:

27-JAN-2015

APPROVED BY:

PRELIMINARY

REV.: DATE: DESC. DWG.

27-JAN-2015 ISSUED FOR PRELIMINARY DS

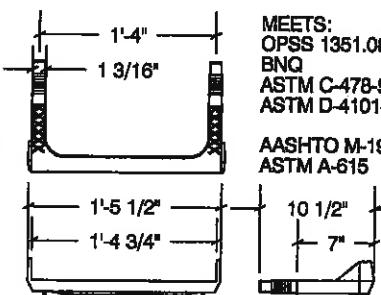
SCALE:  
NTS

SHEET TITLE:  
SINGLETRAP  
INSTALLATION  
SPECIFICATIONS

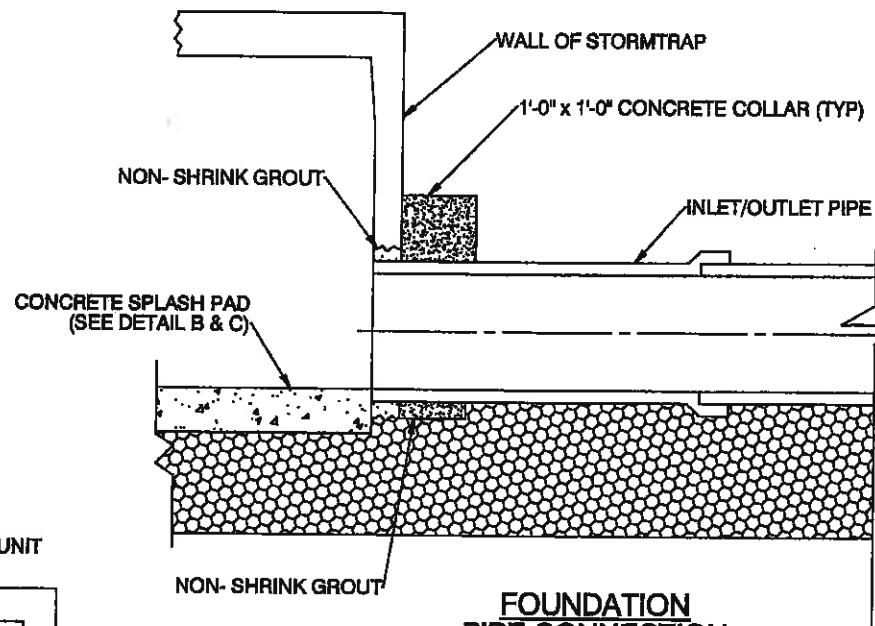
SHEET NUMBER:  
1.0

**RECOMMENDED  
ACCESS OPENING SPECIFICATION**

1. TYPICAL ACCESS OPENINGS FOR THE STORMTRAP SYSTEM ARE 2'-0" IN DIAMETER. ACCESS OPENINGS LARGER THAN 2'-0" IN DIAMETER NEED TO BE APPROVED BY STORMTRAP. ALL OPENINGS MUST RETAIN AT LEAST 1'-0" OF CLEARANCE IN ALL DIRECTIONS FROM THE EDGE OF THE STORMTRAP UNITS.
  2. PLASTIC COATED STEEL STEPS PRODUCED BY M.A. INDUSTRIES PART #PS3-PFC (SEE DETAIL TO THE RIGHT) ARE PROVIDED INSIDE ANY UNIT WHERE DEEMED NECESSARY. THE HIGHEST STEP IN THE UNIT IS TO BE PLACED A DISTANCE OF 1'-0" FROM THE INSIDE EDGE OF THE STORMTRAP UNITS. ALL ENSUING STEPS SHALL BE PLACED WITH A MAXIMUM DISTANCE OF 1'-4" BETWEEN THEM. STEPS MAY BE MOVED OR ALTERED TO AVOID OPENINGS OR OTHER IRREGULARITIES IN THE UNIT.
  3. STORMTRAP LIFTING INSERTS MAY BE RELOCATED TO COINCIDE WITH THE ACCESS OPENING OR THE CENTER OF GRAVITY OF THE UNIT AS NEEDED.
  4. STORMTRAP ACCESS OPENINGS MAY BE RELOCATED TO AVOID INTERFERENCE WITH INLET AND/OR OUTLET PIPE OPENINGS SO PLACEMENT OF STEPS IS ATTAINABLE.
  5. ACCESS OPENINGS SHOULD BE LOCATED IN ORDER MEET THE APPROPRIATE MUNICIPAL REQUIREMENTS. STORMTRAP RECOMMENDS AT LEAST ONE ACCESS OPENING PER SYSTEM FOR ACCESS AND INSPECTION.
  6. USE PRECAST ADJUSTING RINGS AS NEEDED TO MEET GRADE. STORMTRAP RECOMMENDS FOR COVER OVER 2' TO USE PRECAST BARREL OR CONE SECTIONS. (BY OTHERS)

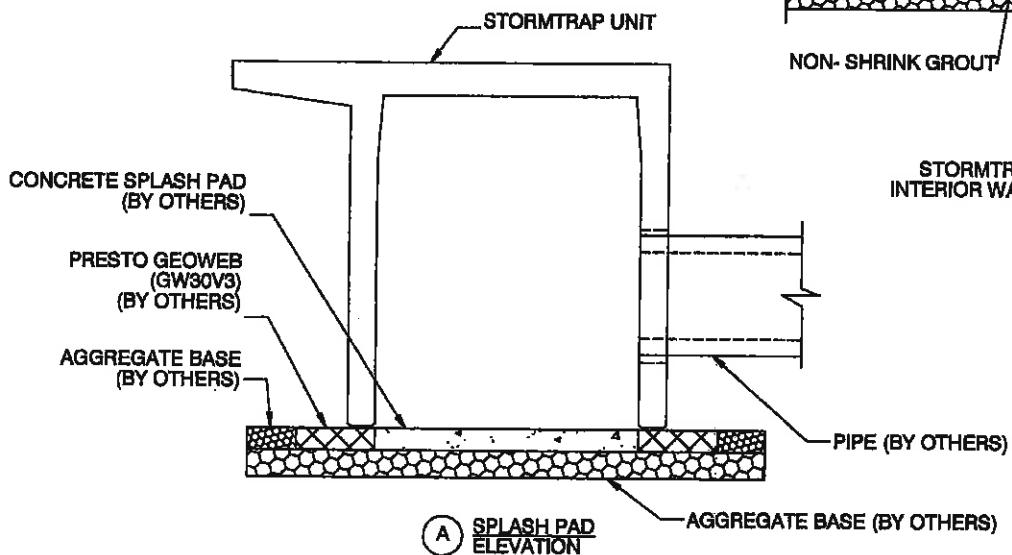


### STEP DETAIL



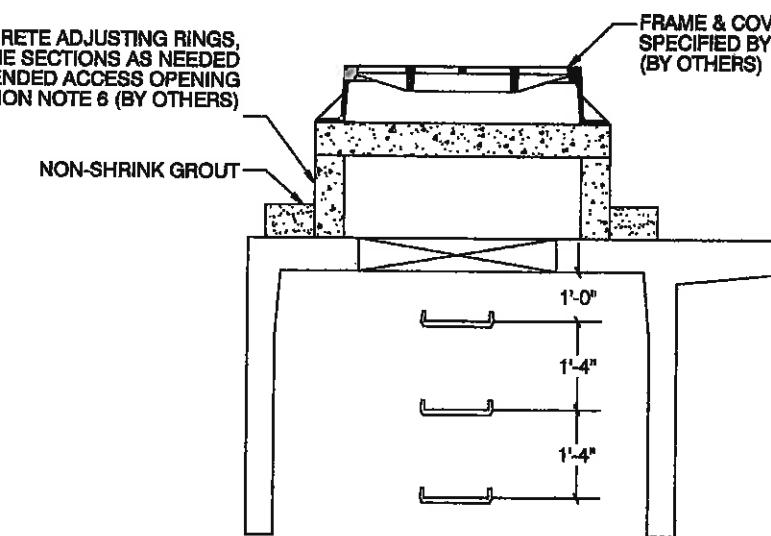
## RECOMMENDED PIPE OPENING SPECIFICATION

1. PIPE OPENINGS SHALL MAINTAIN A MINIMUM 1'-0" OF CLEARANCE FROM A VERTICAL EDGE OF THE STORMTRAP UNIT.
  2. MAXIMUM OPENING SIZE TO BE DETERMINED BY UNIT HEIGHT. PREFERRED OPENING SIZE Ø 36" OR LESS. ANY OPENING NEEDED THAT DOES NOT FIT THIS CRITERIA SHALL BE BROUGHT TO THE ATTENTION OF STORMTRAP FOR REVIEW.
  3. CONNECTING PIPES SHALL BE INSTALLED WITH A 1'-0" CONCRETE COLLAR, AND A AGGREGATE CRADLE FOR AT LEAST ONE PIPE LENGTH, AS SHOWN. A STRUCTURAL GRADE CONCRETE OR GROUT WITH A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3000 PSI SHALL BE USED.
  4. THE ANNULAR SPACE BETWEEN THE PIPE AND THE HOLE SHALL BE FILLED WITH NON-SHRINK GROUT.

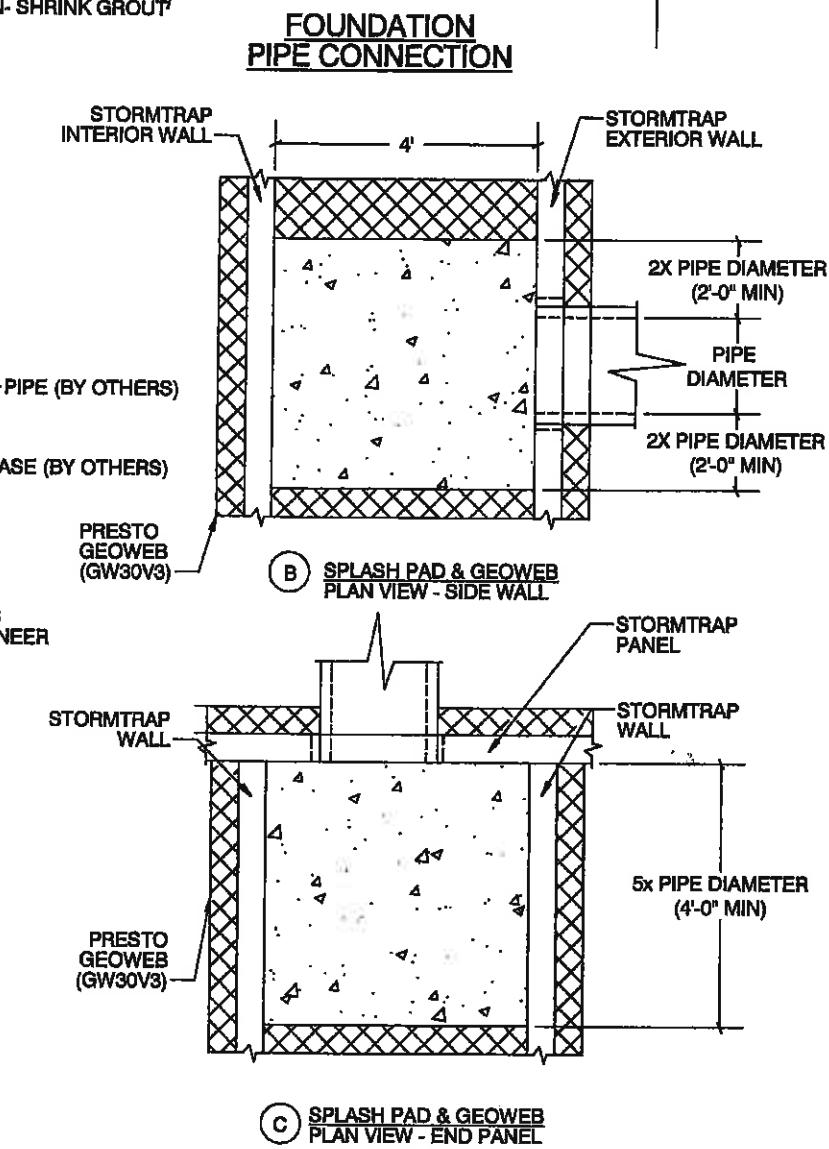


## RECOMMENDED PIPE INSTALLATION INSTRUCTIONS

1. CLEAN AND LIGHTLY LUBRICATE ALL OF PIPE TO BE INSERTED INTO STORMTRAP.
  2. IF PIPE IS CUT, CARE SHOULD BE TAKEN TO ALLOW NO SHARP EDGES. BEVEL AND LUBRICATE LEAD END OF PIPE.
  3. ALIGN CENTER OF PIPE TO CORRECT ELEVATION AND INSERT INTO OPENING.



## RISER / STAIR DETAIL



**STORMTRAP®**  
PRECAST CONCRETE MODULAR WATER MANAGEMENT SYSTEMS  
THIS STORMTRAP DESIGN MAY BE COVERED BY 1 OR MORE OF THE  
FOLLOWING U.S. PATENTS: NO. 6,991,482 B2, 7,160,658 B2, 7,344,335 B2  
CA. PATENT NO. 2,446,469

2495 WEST BUNGALOW ROAD  
MORRIS, IL 60450  
P: 815-941-4663  
F: 815-416-1100

---

**ENGINEER INFORMATION:**

**SOUTHWEST  
ENGINEERING  
CONSULTANTS, INC  
7821 BAIMBRIDGE DR  
DOWNERS GROVE, IL 60516  
PHONE: 630-737-0025  
FAX: 630-737-0026**

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**PROJECT INFORMATION:**

**COMPASS ARENA**  
**WILLOWBROOK, IL**

**CURRENT ISSUED DATE:**

27-JAN-2015

**APPROVED BY:**

## PRELIMINARY

REV: DATE: DESC: PWD:

1 27-JAN-2015 ISSUED FOR PRELIMINARY DS

NETS

SWEET TEE E.

## RECOMMENDED SINGLETRAP INSTALLATION SPECIFICATIONS

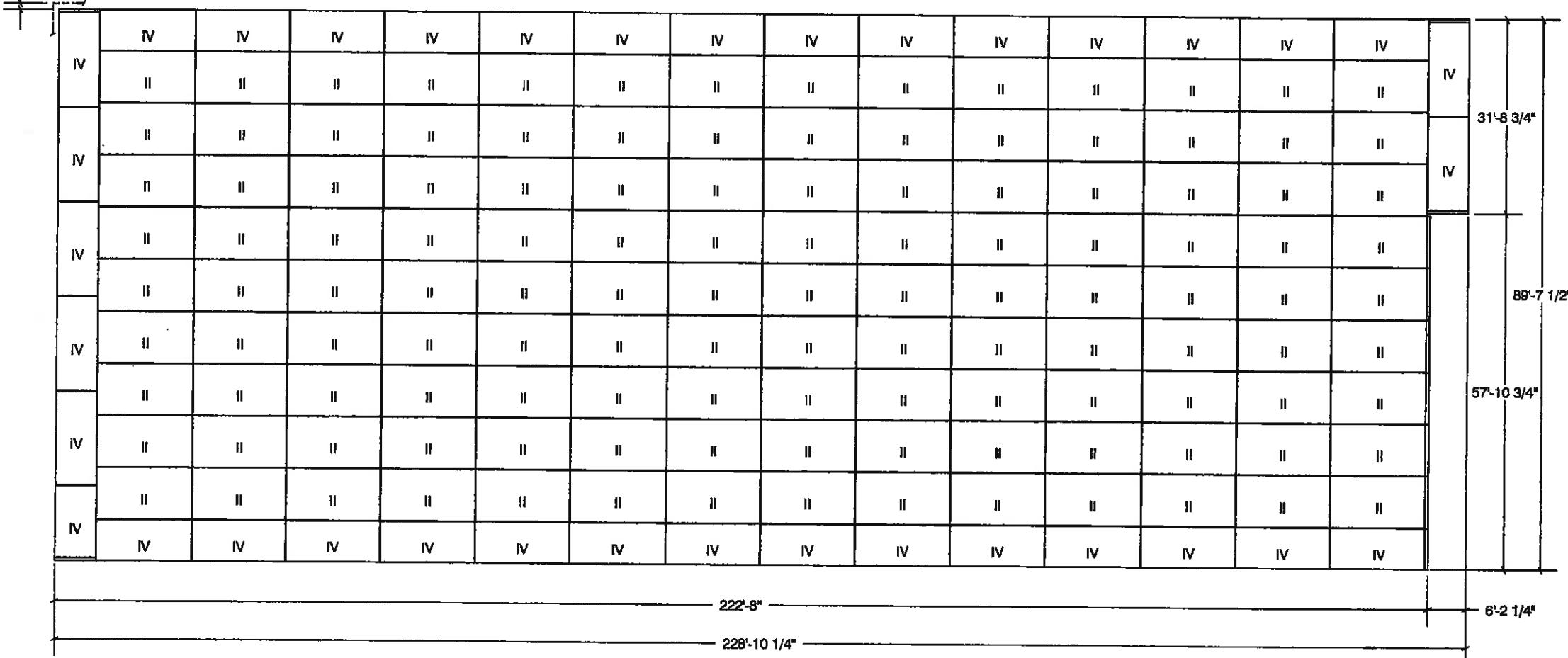
SHEET NUMBER

2.0

## **BILL OF MATERIALS**

QTY.	UNIT TYPE	DESCRIPTION	WEIGHT
0	I	4'-6" SINGLETRAP	15188
126	II	4'-6" SINGLETRAP	17263
0	III	4'-6" SINGLETRAP	14779
35	IV	4'-6" SINGLETRAP	16817
0	VII	4'-6" SINGLETRAP	14365
1	SPIV	4'-6" SINGLETRAP	VARIABLE
11	PANEL	6" THICK WALL PANELS	VARIABLE
28	JOINTWRAP	150' PER ROLL	

**FOUNDATION DETAILS**  
**SEE SHEET 1.0**



## **DESIGN CRITERIA**

**ALLOWABLE MAX GRADE = 718.75**

**ALLOWABLE MAX GRADE = 718.75**  
**ALLOWABLE MIN GRADE = 715.25**

INSIDE HEIGHT ELEVATION = 714.2

**SYSTEM INVERT = 709.7**

STORMTRAP VOLUME = 81,171.86 C.F.

**NOTES:**

1. DIMENSION OF STORMTRAP SYSTEM ALLOW FOR A 3/4" GAP BETWEEN EACH UNIT.
  2. ALL DIMENSIONS TO BE VERIFIED IN THE FIELD BY OTHERS.
  3. SEE SHEET 2 FOR INSTALLATION SPECIFICATIONS.
  4. SP - INDICATES A UNIT WITH MODIFICATIONS.
  5. P - INDICATES A UNIT WITH A PANEL ATTACHMENT

## DETAIL LAYOUT

**STORMTRAP®**  
INTEGRATED CONCRETE MODULAR STORMWATER MANAGEMENT SYSTEMS  
THE STORMTRAP® SYSTEM IS A REGISTERED TRADEMARK OF  
FOLLOWING U.S. PATENT & TRADEMARK OFFICE:  
CA. PATENT NO. 2,445,607

**ENGINEER INFORMATION:**

**SOUTHWEST  
ENGINEERING  
CONSULTANTS, INC  
7621 BAIMBRIDGE DR  
DOWNERS GROVE, IL 60516  
PHONE: 630-737-0025  
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**SCALE:**

NTS

**SHEET TITLE:**

## DETAIL LAYOUT

**SHEET NUMBER**

3.0

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 FOLLOWING U.S. PATENTS: NO. 6,991,402 B2, 7,160,668 B2, 7,344,385 B2  
 CA. PATENT NO. 2,443,609  
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PRELIMINARY

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SCALE:

NTS

SHEET TITLE:

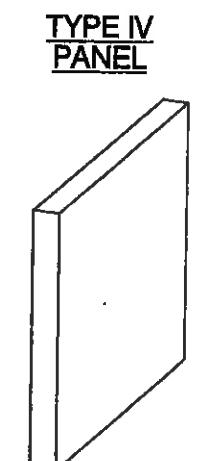
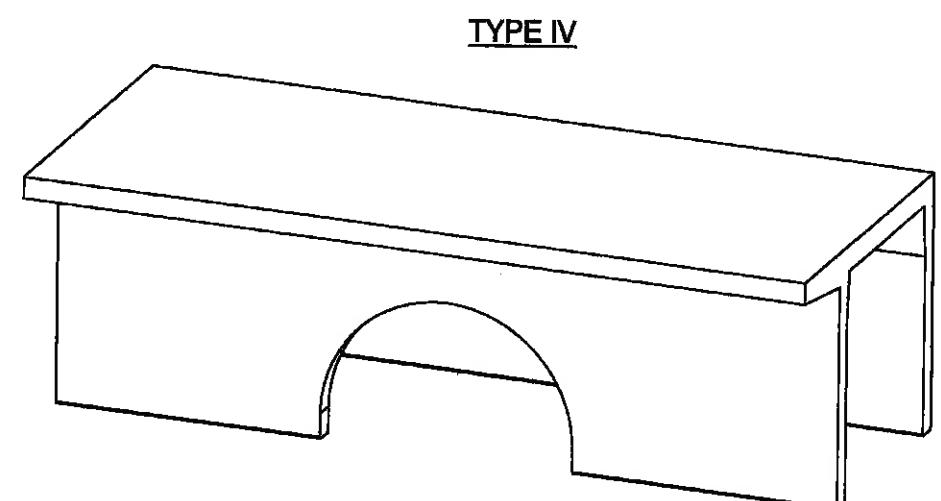
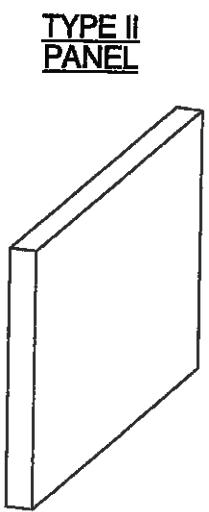
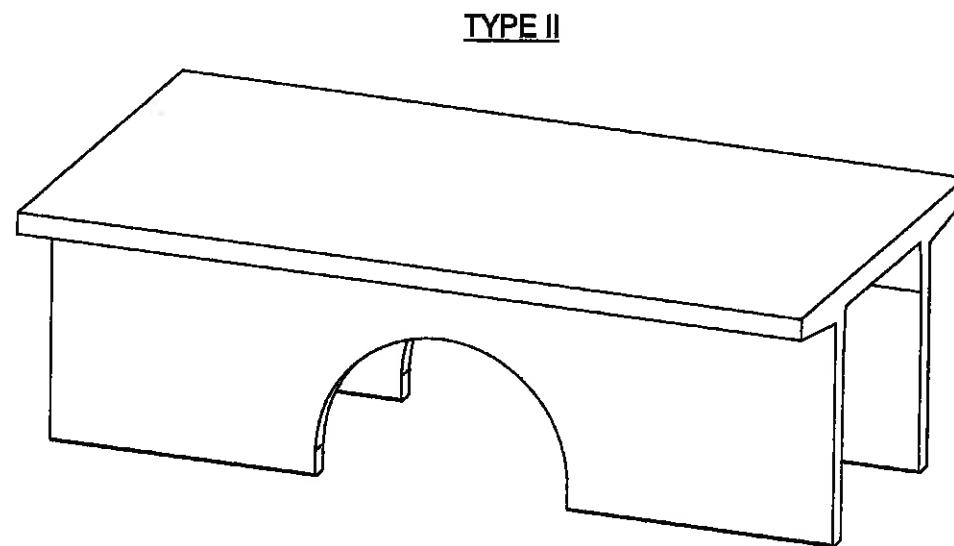
4'-6" SINGLETRAP  
UNIT TYPES

SHEET NUMBER:

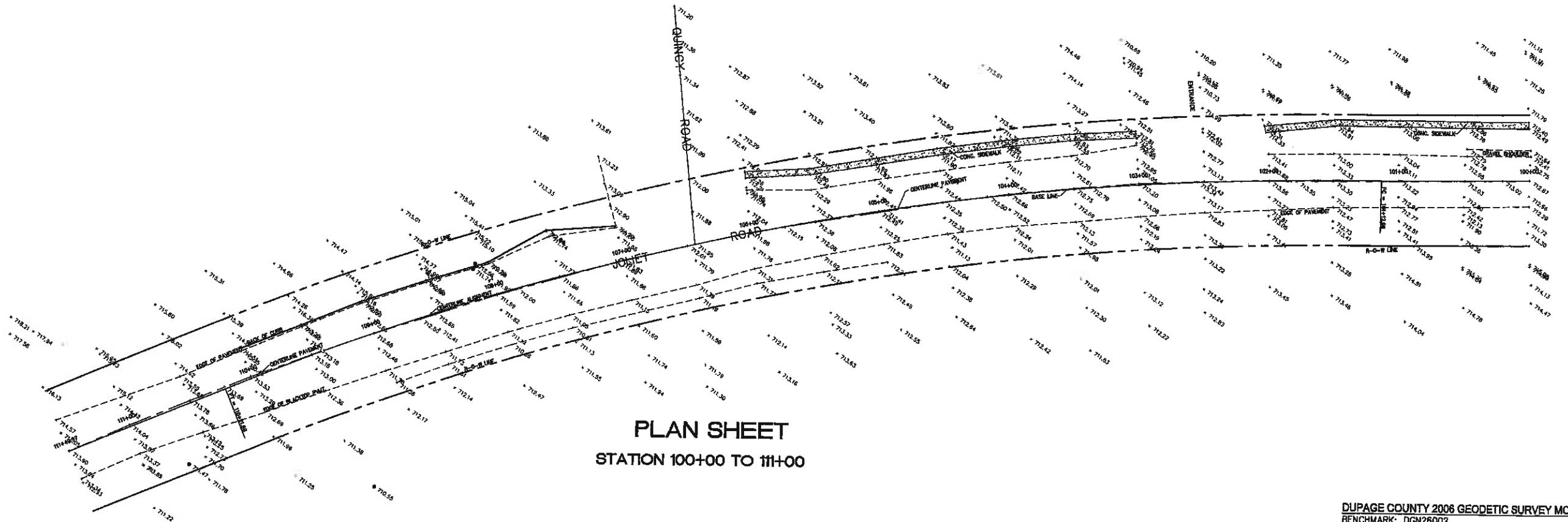
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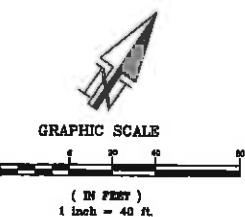
1. OPENING LOCATIONS AND SHAPES MAY VARY.
2. SP - INDICATES A UNIT WITH MODIFICATIONS.
3. P - INDICATES A UNIT WITH A PANEL ATTACHMENT.
4. POCKET WINDOW OPENINGS ARE OPTIONAL.



**EXISTING CROSS SECTIONS ALONG  
JOLIET ROAD IN WILLOWBROOK, ILLINOIS  
(ON MAY 8, 2015)**



**PLAN SHEET**  
STATION 100+00 TO 111+00



## GRAPHIC SCALE

( IN FEET )  
1 inch = 40 ft.

( IN FEET )

635 JULIET ROAD, WILLOWBROOK, ILLINOIS

SEARCHED  INDEXED  SERIALIZED  FILED  PREPARED FOR:

SOUTHWEST ENGINEERING CONSULTANT

7621 BAINBRIDGE DR.  
DOHNER'S GROVE, ILLINOIS 60516

卷之三

B. NC

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1



THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ALL UNDERGROUND UTILITIES.

**DUPAGE COUNTY 2006 GEODETIC SURVEY MONUMENT**  
**BENCHMARK: DGN26002**  
STATION IS LOCATED ALONG THE WEST SIDE OF MADISON  
STREET IN THE EAST FACE OF THE SECOND PIER ON A BRIDGE  
FOR THE INTERSTATE 55 OVERPASS. STATION IS 16.2 FT. WEST  
OF THE CENTERLINE OF MADISON STREET AND 362 FT. NORTH  
OF THE CENTERLINE OF SOUTH FRONTEAGE ROAD. MONUMENT IS  
A 3" DISK WITH A DIMPLE LOCATED 3.75 FT. ABOVE THE  
STREET SURFACE.

ELEVATION ..... 714.55 (NAVD 88)

GENERAL NOTES:

1. TITLE COMMITMENT REPORT HAS NOT BEEN PROVIDED BY THE CLIENT FOR THIS SURVEY;
  2. FOR BUILDING LINES, EASEMENTS AND OTHER RESTRICTIONS NOT SHOWN HEREON REFER TO YOUR DEED, TITLE COMMITMENT, ORDINANCE, ETC.
  3. BEARINGS ARE FOR ANGULAR REFERENCE ONLY AND ARE NOT RELATED TO TRUE OR MAGNETIC NORTH.
  4. SURVEY IS BASED ON FIELD WORK COMPLETED ON MAY 6, 2015

STATE OF ILLINOIS }  
COUNTY OF DUPAGE } ss

WE, THE DEEDPOLL SURVEYORS, DO HEREBY STATE THAT WE HAVE PREPARED THE EXISTING CROSS SECTIONS DEPICTED HEREON. THIS PLAT REPRESENTS THE CONDITIONS FOUND AT THE TIME OF THIS SURVEY.

LEMON, ILLINOIS DECEMBER 29, 2015

Kenneth Kennedy

ILLINOIS INTELLIGENCE, 1910, GRANT PARK, 100-101

MY LICENSE EXPIRES 11/10/2018

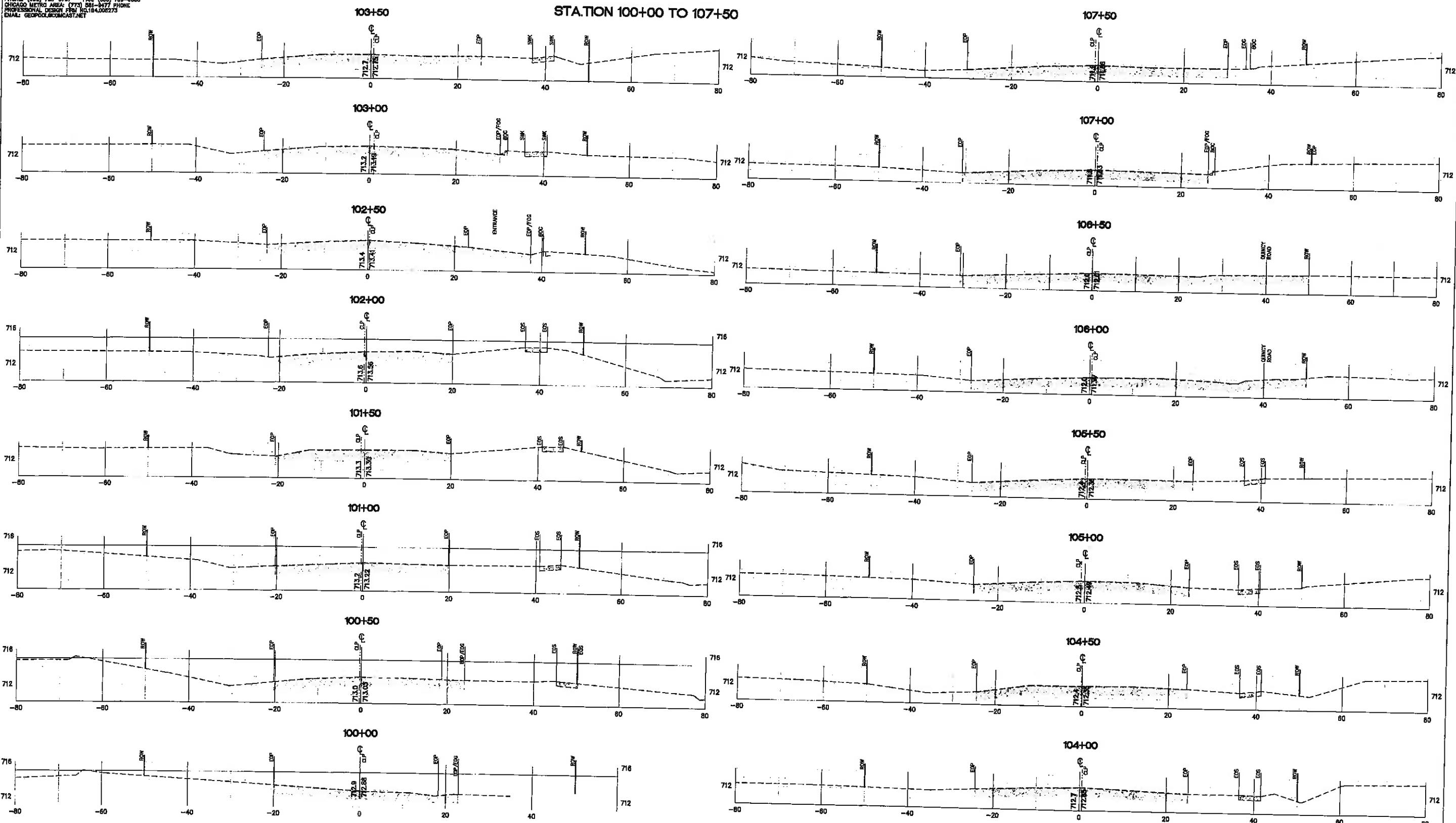


**GEOPOL**  
SURVEYORS

128388 LEMONT RD, LEMONT, ILLINOIS 60438  
PHONE: (630) 739-0707 FAX: (630) 739-6080  
CHICAGO METRO AREA: (773) 581-5477 PHONE  
PROFESSIONAL DESIGN FIRM K#164,008273  
EMAIL: GEOPOL@COMCAST.NET

## EXISTING CROSS SECTIONS

STATION 100+00 TO 107+50



SCALE: HORIZONTAL: 1"=10'  
VERTICAL: 1"=5'

LEGEND:  
EOP - EDGE OF PAVEMENT  
EOG - EDGE OF GRAVEL  
EOS - EDGE OF SIDEWALK  
BOC - BACK OF CURB  
CLP - CENTERLINE PAVEMENT  
C - BASE LINE

635 JOLIET ROAD, WILLOWBROOK, ILLINOIS			
DRAWN: K.B.	DATE: 07-15-15	PREPARED FOR:	SHEET:
checked: A.B.	DATE: 08-08-15	SOUTHWEST ENGINEERING CONSULTANTS, INC	
PROJ # 15-078	SRV. FILE: 15076	7621 BAMBRIDGE DR. DOWNERS GROVE, ILLINOIS 60516	2 OF 3

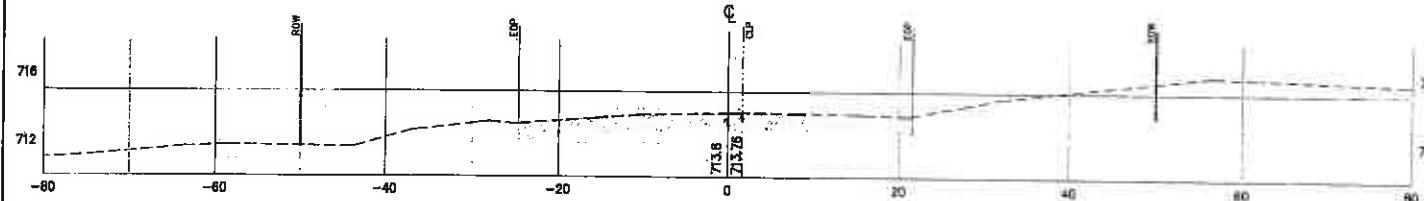


GEOPOL  
SURVEYORS  
128355 LEMONT RD, LEMONT, ILLINOIS 60438  
PHONE: (630) 738-0707 FAX: (630) 738-5080  
CHICAGO METRO AREA: (708) 861-8477 PHONE  
FAX: (708) 861-8477 (630) 894-0027 FAX  
EMAIL: GEOPOL@CONCAST.NET

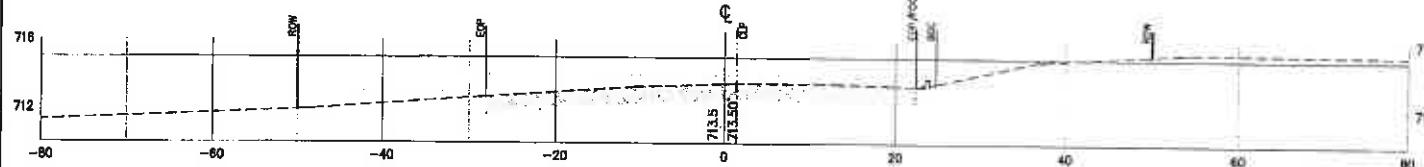
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STATION 108+00 TO 111+00

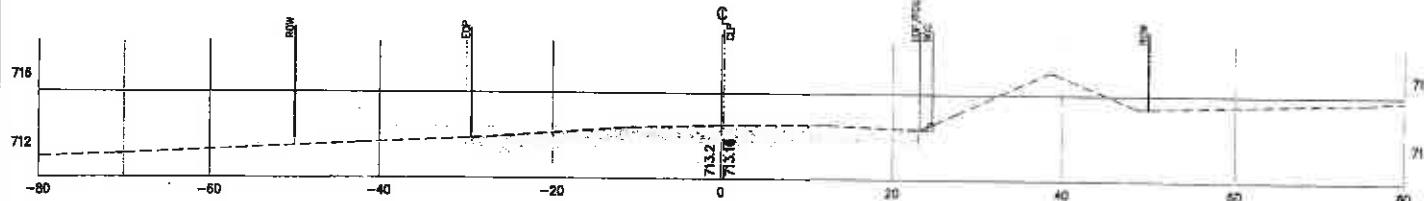
110+50



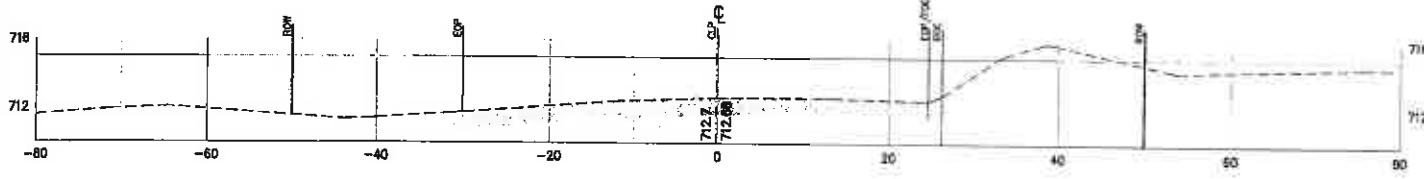
110+00



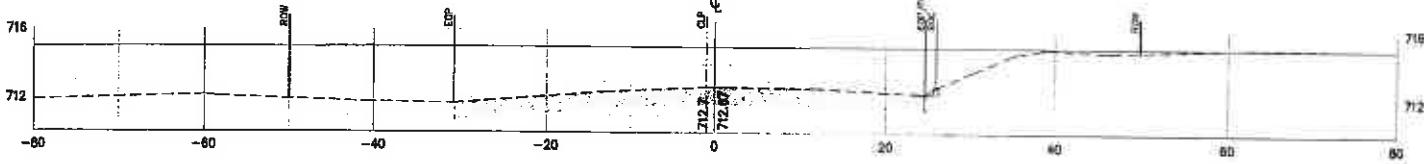
109+50



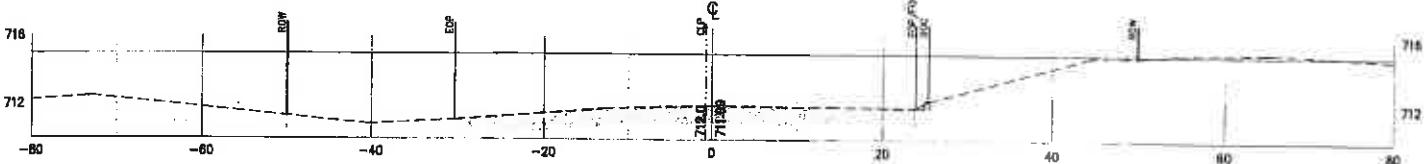
109+00



108+50



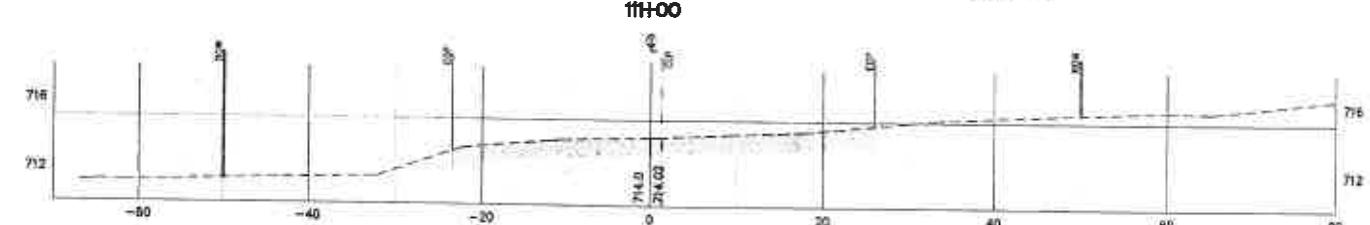
108+00



LEGEND:  
EOP - EDGE OF PAVEMENT  
EOG - EDGE OF GRAVEL  
EOS - EDGE OF SIDEWALK  
FOG - FACE OF CUTTER  
BOC - BACK OF CURB  
CLP - CENTERLINE PAVEMENT  
C - BASE LINE

SCALE: HORIZONTAL: 1"=10'  
VERTICAL: 1"=5'

111+00



635 JOLIET ROAD, WILLOWBROOK, ILLINOIS

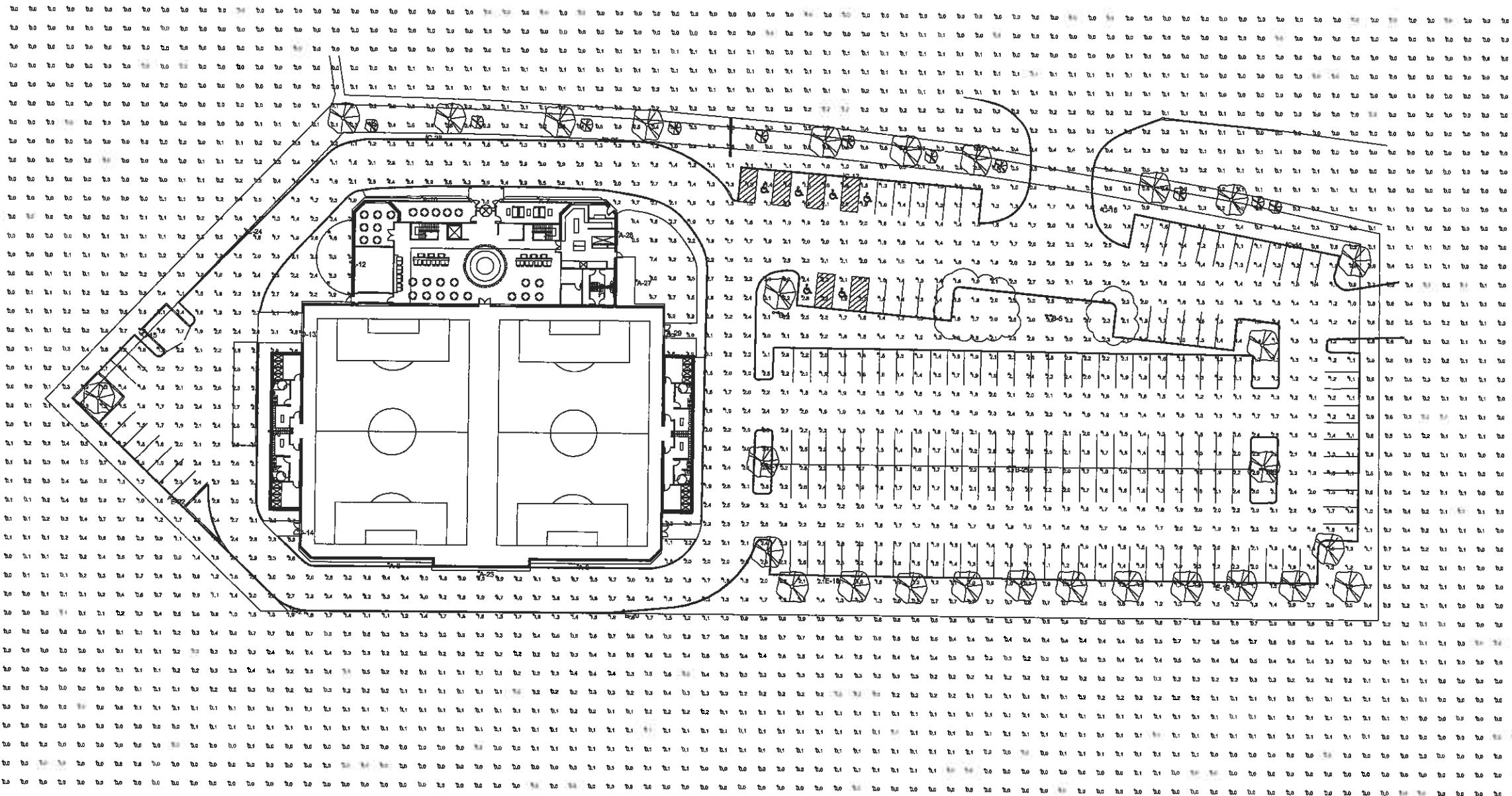
DRAWN: K.B. DATE: 07-15-15 PREPARED FOR:  
SOUTHWEST ENGINEERING CONSULTANTS, INC.  
7627 BAMBRIDGE DR.  
DOWNERS GROVE, ILLINOIS 60566  
CHECKED: A.B. DATE: 09-08-15  
PROJ # 15-076 SURV. FILE: 15076

3 OF 3

LUMINAIRE SCHEDULE								
Symbol	Label	Qty	Catalog Number	Description	Lamp	File		
						Lumens		
□	A	8	DSX1 LED 300 700 40K T28 MVOLT	DSX1 LED WITH (1) 20 LED LIGHT ENGINES, TYPE T28 OPTIC, 4000K, @ 700mA	LED	DSX1_LED_30_C_700_40K_T28_MVOLTies	0.96	68
□	B	5	DSX1 LED 40C 1000 40K T3M MVOLT	DSX1 LED WITH (2) 20 LED LIGHT ENGINES, TYPE T3M OPTIC, 4000K, @ 1050mA	LED	DSX1_LED_40_C_1000_40K_T3M_MVOLTies	0.95	278
□	C	7	DSX1 LED 40C 1000 40K T4M MVOLT HS	DSX1 LED WITH (2) 20 LED LIGHT ENGINES, TYPE T4M OPTIC, 4000K, @ 1050mA WITH HOUSE SIDE SHIELD	LED	DSX1_LED_40_C_1000_40K_T4M_MVOLTies	0.95	138
□	D	3	DSX1 LED 30C 700 40K T4M MVOLT	DSX1 LED WITH (1) 30 LED LIGHT ENGINES, TYPE T4M OPTIC, 4000K, @ 700mA	LED	DSX1_LED_30_C_700_40K_T4M_MVOLTies	0.95	68
□	E	5	DSX1 LED 40C 1000 40K T3M MVOLT	DSX1 LED WITH (2) 20 LED LIGHT ENGINES, TYPE T3M OPTIC, 4000K, @ 1050mA	LED	DSX1_LED_40_C_1000_40K_T3M_MVOLTies	0.95	138

STATISTICS						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Entire Calc Zone	+	0.8 fc	8.0 fc	0.0 fc	N/A	N/A
Parking/ Drive Area	X	2.1 fc	8.8 fc	1.0 fc	6.9:1	2.1:1

LUMINAIRE LOCATIONS						
No.	Label	X	Y	M/H	Orientation	
1	B	371.0	80.8	30.0	90.0	
2	B	502.5	90.8	30.0	90.0	
3	B	835.5	90.8	30.0	90.0	
4	B	378.5	171.3	30.0	90.0	
5	B	520.5	171.3	30.0	90.0	
6	D	108.1	105.3	15.0	270.0	
7	A	248.7	230.9	15.0	0.0	
8	A	172.9	38.6	15.0	180.0	
9	A	273.1	38.6	15.0	180.0	
10	A	188.1	231.0	15.0	0.0	
11	C	646.9	211.1	30.0	180.0	
12	A	160.9	198.5	15.0	270.0	
13	D	124.9	199.3	15.0	270.0	
14	D	125.0	54.1	15.0	270.0	
15	C	40.1	156.2	30.0	180.0	
16	C	544.4	229.0	30.0	180.0	
17	C	411.1	245.1	30.0	180.0	
18	E	403.3	30.7	30.0	0.0	
19	E	810.7	29.2	30.0	0.0	
20	E	288.0	11.5	30.0	0.0	
21	E	121.7	12.0	30.0	0.0	
22	E	55.2	69.9	30.0	45.0	
23	A	220.0	32.7	15.0	180.0	
24	C	86.0	219.6	30.0	180.0	
25	C	283.5	263.3	30.0	180.0	
26	C	190.0	263.7	30.0	180.0	
27	A	322.5	187.8	75.0	90.0	
28	A	292.5	218.1	15.0	90.0	
29	A	318.5	181.4	15.0	90.0	



### SITE PLAN

SCALE: 1'-0"-0"

1

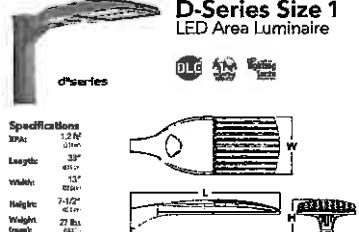
VARI  
708-354-4005 OFFICE  
1420 KENSINGTON RD. SUITE 106

AND ASSOCIATES  
OAK BROOK IL, 60523

SE1

COMPASS ARENA  
635 JOLIET ROAD  
WILLOWBROOK, ILLINOIS

date  
4-4-18  
drawn by  
Job no.  
revisions  
scale  
1  
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**D-Series Size 1**  
LED Area Luminaire

**Specs**

Specs	1.2 N
Wattage	35W
Length	13"
Width	13"
Height	7-1/2"
Weight	27 lbs
Beam	62°

**Introduction**  
The modern styling of the D-Series is striking yet unobtrusive - making a bold, progressive statement even as it blends seamlessly with its environment. The D-Series delivers the benefits of the latest in LED technology into a high performance, high efficacy, long-life luminaire. The outstanding photometric performance results in sites with excellent uniformity, greater pole spacing and lower power density. It is ideal for replacing 100-400W metal halide in pedestrian and area lighting applications with typical energy savings of 65% and expected service life of over 100,000 hours.

**EXAMPLE: DSK1 LED 60C 1000 40K T3M MYOLT SPA DD/RKD**

DSK1 LED	60C	1000	40K	T3M	MYOLT	SPA	DD/RKD
Specs	1.2 N	35W	13"	7-1/2"	27 lbs	62°	
Wattage	35W	13"	13"	7-1/2"	27 lbs	62°	
Length	13"	13"	13"	7-1/2"	27 lbs	62°	
Width	13"	13"	13"	7-1/2"	27 lbs	62°	
Height	7-1/2"	7-1/2"	7-1/2"	7-1/2"	27 lbs	62°	
Weight	27 lbs	62°					
Beam	62°	62°	62°	62°	62°	62°	

**Controls & Shields**

PIR	PIR motion sensor, 6-10' detection, 180° field of view, 12VDC
PER	PER - motion only, 180° field of view
PER	PIR motion sensor, 10-15' field of view
PER	PIR motion sensor, 15-20' field of view
DS	DS - photocell, 10-15' detection, 180° field of view
DS	DS - photocell, 15-20' detection, 180° field of view
PR	PR - motion, 10-15' field of view, 180° field of view
PR	PR - motion, 15-20' field of view, 180° field of view
PIR	PIR motion sensor, 10-15' field of view, 180° field of view
PIR	PIR motion sensor, 15-20' field of view, 180° field of view

**Accessories**

PIR	PIR motion sensor, 6-10' detection, 180° field of view, 12VDC
PIR	PIR motion sensor, 10-15' field of view
PIR	PIR motion sensor, 15-20' field of view
DS	DS - photocell, 10-15' detection, 180° field of view
DS	DS - photocell, 15-20' detection, 180° field of view
PR	PR - motion, 10-15' field of view, 180° field of view
PR	PR - motion, 15-20' field of view, 180° field of view

Lithonia Lighting  
One Lithonia Way • Cypress, Georgia 30033 • Phone: 800.279.6041 • Fax: 770.711.1309  
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Page 1 of 4

**OSP/RD/TRP PSMH/CFL ARCHITECTURAL WALLPACKS**

**SPECIFICATIONS**

**APPLICATIONS**

- Architectural wallpack-style shapes with integrated lens for accent lighting applications. Provides recessed illumination in PSMH and CFL systems.
- Die cast aluminum housing and door
- Efficient powder coat finishes available
- Tempered, impact-resistant, clear glass lens
- Lamps included

**Components**

- Die cast aluminum housing and door
- Efficient powder coat finishes available
- Tempered, impact-resistant, clear glass lens
- Lamps included

**Performance**

- Full cut-off, dark sky, reduction fixture
- Three distributions: low below eye height, FT - forward throw for area lighting, WT - wide lens for recessed uplighting and UD - Up/Down accent distribution

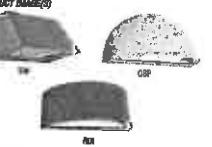
**Warranty**

Five year limited warranty (for more information visit [www.spraulding.com/warranty.html](http://www.spraulding.com/warranty.html))

**OPTIONS**

TRP	TRP - recessed	10.5" dia	13.5" dia	15.5" dia	17.5" dia
TRP	TRP - recessed	10.5" dia	13.5" dia	15.5" dia	17.5" dia
TRP	TRP - recessed	10.5" dia	13.5" dia	15.5" dia	17.5" dia
TRP	TRP - recessed	10.5" dia	13.5" dia	15.5" dia	17.5" dia

**PRODUCT IMAGES**



**SHIPPING INFORMATION**

TRP	10.5" dia	13.5" dia	15.5" dia	17.5" dia
TRP	10.5" dia	13.5" dia	15.5" dia	17.5" dia
TRP	10.5" dia	13.5" dia	15.5" dia	17.5" dia
TRP	10.5" dia	13.5" dia	15.5" dia	17.5" dia

**CERTIFICATIONS/LISTINGS**

**ORDERING INFORMATION**

**EXAMPLE: TRP-150P-WT-52**

TRP	150P	WT	52
TRP	150P	WT	52
TRP	150P	WT	52
TRP	150P	WT	52

Spraulding Lighting • 2911 Allendale Boulevard • Greer, SC 29649 • Phone: 864.478.1000  
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**date**  
1-7-15

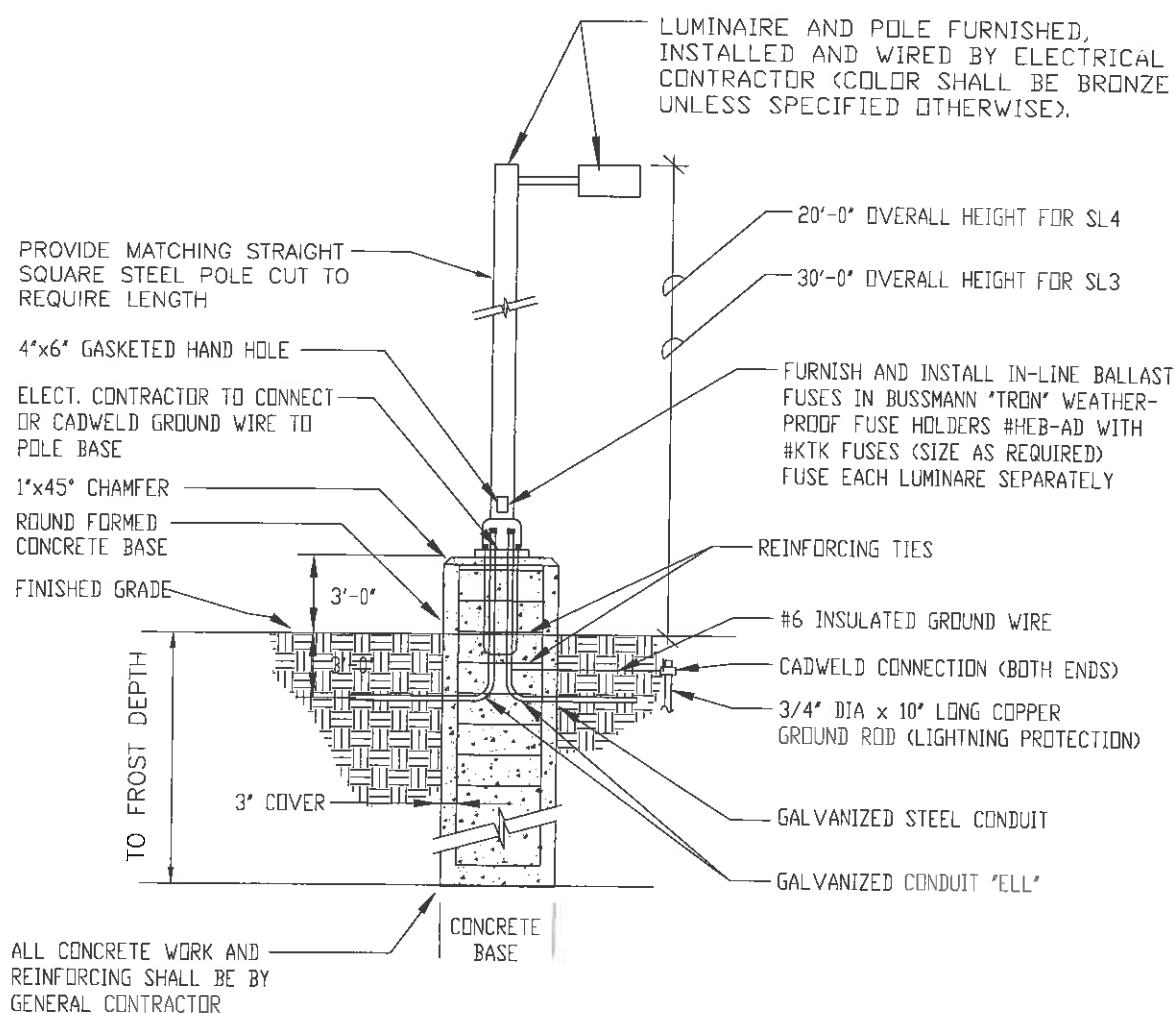
**drawn by**

**job no.**

**revisions**

**scale**

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## POLE DETAIL

SCALE:

NOT TO SCALE

1  
SE2

COMPASS ARENA  
635 JOLET ROAD  
WILLOWBROOK, ILLINOIS

AND ASSOCIATES  
708.354.4005 OFFICE  
1420 KENSINGTON RD, SUITE 106  
OAK BROOK IL, 60521

sheet

SE2

