



# PLAN COMMISSION STAFF REPORT

MAY 7, 2015

## THE GREAT ESCAPE

17231 La Grange Road

### Applicant

Greg Seifert  
Geis Companies

### Property Location

17231 LaGrange Road

### Parcel Size

3.89 acres  
(Parcel 1: 3.11 acres;  
Parcel 2: .78 acres)

### Zoning

Parcel 1: B-3  
Parcel 2: R-5 PUD  
(Caledonia Townhomes)

### Approval Sought

Site Plan Approval

### Requested Action

Assign two Commissioners to meet with the Applicant in a Work Session.

### Project Planner

Paula J. Wallrich, AICP  
Deputy Planning Director



## EXECUTIVE SUMMARY

The Applicant, Greg Seifert, on behalf of the owner of *The Great Escape*- Mr. Barry Poll, seeks an approval for the proposed Site Plan. The Applicant proposes to construct a 40,070 SF structure which will include a 34,495 SF retail building and a 5,575 SF warehouse.

The Applicant has worked cooperatively with Staff, resolving several issues during the review process. The development meets B-3 zoning requirements; no variances are required. The proposed building meets the Village's masonry requirement with 62% of the façade as brick (requirement is 60%).

The property owner purchased two parcels for this development. The development will occur entirely on Parcel 1; Parcel 2 is part of the Caledonia Townhome PUD. Development of Parcel 2 will require rezoning and a Substantial Deviation of the approved PUD.

The Applicant has scheduled a meeting with the homeowners of the Caledonia Townhome Association for May 4<sup>th</sup> to present the proposed plans; Staff will attend and summarize the meeting at the May 7<sup>th</sup> Plan Commission meeting.

Great Escape received a "performance-based sales tax incentive" approved by the Village Board earlier this year.

## SUMMARY OF OPEN ITEMS

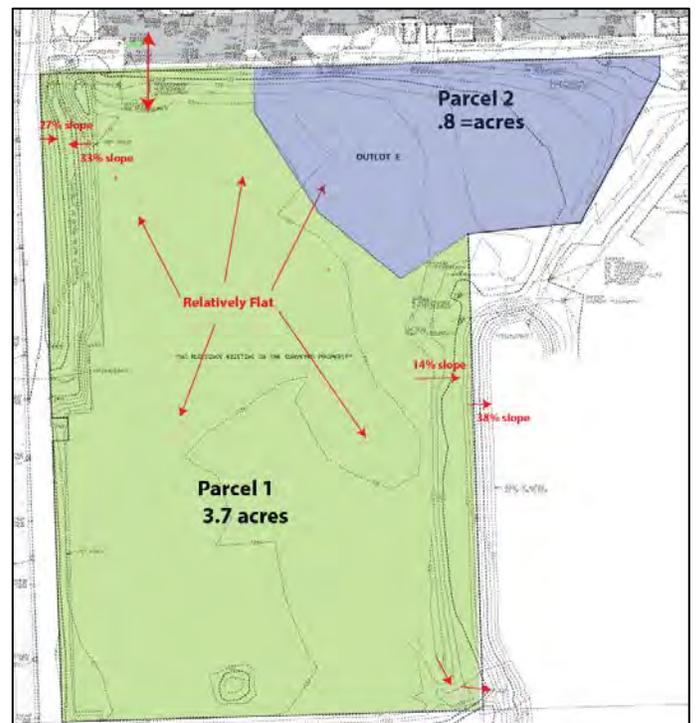
OPEN ITEM	SUGGESTED RESOLUTION
1. Areas of the access drive aisle are proposed without curbs.	Improve with curb.
2. Right-in/Right-out cross section indicates a striped median.	Improve with a 2" mountable median.

**EXISTING SITE**



The subject property is an undeveloped 3.89 acre parcel on LaGrange Road south of 171<sup>st</sup> Street. Existing commercial uses border the property on the north, Cook County Forest Preserve is across La Grange Road to the west, the Caledonia Townhome PUD is to the east and medical commercial (Alpha Med) is to the south.

The Applicant's property is comprised of two parcels: Parcel 1 is 3.7 acres and Parcel 2 comprises .8 ac., which is part of the Caledonia PUD. Parcel 1 is relatively flat with a ditch running in a north-south direction in the northwest corner of the parcel, adjacent to the LaGrange Road ROW. The side slopes of the ditch are steep at 27-33% slopes. The property falls five feet (5') along its east border and drains to the east at the southeast corner of the property where rip rap has been installed to mitigate the impact of the runoff. The slopes are significant here as well with a 14% slope on Parcel 1 sloping to 38% slopes for the detention pond on the adjacent property to the east.



Parcel 2 was platted with a conservation easement as part of the Caledonia PUD. There is a wetland identified on the National Wetland Inventory Map. Village engineers are reviewing the delineation report to determine if there is development potential for this parcel. The Applicant has stated that they are hoping to develop additional retail on

Parcel 2 in the future; it is not part of the current review. Storm water detention has been provided with a previous development.

## PROPOSED USE & COMPLIANCE WITH THE COMPREHENSIVE PLAN

The Applicant proposes to construct a new 34,495 SF retail store for *The Great Escape*; currently they operate two other stores both on 159<sup>th</sup> Street. One is located in Orland Park and the other in Tinley Park (limited to pool sales/supplies). Representatives from *The Great Escape* state that the Tinley Park store will be closed; no information has been provided on the Orland Park store. The new store will include a 5,575 SF warehouse as well. Representatives from *The Great Escape* note that the store has grown from a one-man company in 1971, selling pool supplies door-to-door, to the largest home leisure retailer in the Midwest.

The Village of Tinley Park Comprehensive Plan (2000) identifies this site as commercial; therefore, the proposed development is in accord with the Village's Comprehensive Plan.

## ZONING & NEARBY LAND USES

Parcel 1 is zoned B-3; Parcel 2 is zoned R-5 PUD. The proposed development involves only Parcel 1. The following table outlines the bulk regulations for the B-3 District. The proposed structure on Parcel 1 meets the requirements established for the B-3 District; no variations are required.

VILLAGE REGULATION B-3	DIMENSION REQUIRED	PETITIONER'S DIMENSION
Front Yard Setback	25'	90'
Side Yard(s) Setback	0	59'
Rear Yard Setback	25'	46.7'
Maximum Building Height	Three stories; 35 feet	26'6"
Lot Area Minimum	7,500 SF	161,171 SF
Lot Width Minimum	60 feet	484'
Lot Depth	125'	315'
Maximum Lot Coverage	50%	30% of Parcel1; 25%/total property



## GENERAL SITE PLAN REVIEW

The Applicant has exceeded the setbacks of the B-3 Zoning District. The relationship of parking fields to the structure is consistent with commercial properties in the area with parking in front of the building. The proposed retail store is located at the south end of the parcel; the Applicant hopes to develop additional retail on the northern portion of the property in the future.

Cross access will be provided along the north and south property lines; a plat of Easement has been provided. The Applicant will connect with the access aisle from the Charter Bank at the north property line; the south will be improved up to the property line. A landscape buffer will be planted at the south edge of the cross access easement per Staff's request.

Parking: The required parking for the proposed uses are:

Proposed Use	Village Code	Spaces Required	Spaces Provided
Furniture /Retail	1 per 600 SF	58 (34,495*/600)	58
Warehouse	1 per 2 employees + 1 per business vehicle	2 employees in the warehouse; no vehicles	2
<b>Total</b>		<b>60</b>	<b>60</b>

The Applicant has provided adequate parking for the proposed uses. The Applicant revised earlier proposals to meet the 26' wide aisle width. A sidewalk has been provided along the frontage of the property with a connection to the retail store.

### LANDSCAPE ARCHITECTURE

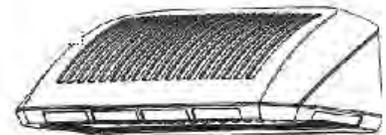
The intent of the Village's Landscape Ordinance is to utilize landscape materials to enhance proposed development, soften the impact of parking areas, provide a buffer between land uses, and create an overall quality aesthetic for the site. Per Village Landscape Ordinance Section 158.20, at least 15% of the parking lot shall be covered with landscaping; the Applicant has provided 17.72% of the parking lot in landscaping exclusive of required bufferyard and foundation plantings.

There is a significant amount of road and landscape improvements that will result from IDOT's widening of LaGrange Road. The Applicant has reflected these improvements/plantings on their landscape plan (L1.1); the proposed landscape plan has been reviewed inclusive of IDOT's proposed improvements.

The Applicant has worked cooperatively with Staff in meeting or exceeding bufferyard requirements, parking lot screening and diversity in plant choices, including an increase in evergreen material. With respect to foundation plantings the Landscape Ordinance requires a minimum ten foot (10') wide landscaped area fronting not less than seventy percent (70%) of the side of all buildings which front dedicated streets or major interior access lanes. The Applicant has revised their earlier proposal to increase the amount of foundation landscaping and has proposed approximately 62% of the length of the building frontage with at least a 10' landscape bed. In two areas, measuring over 47' along the foundation, the Applicant has increased the width of the landscape bed beyond the 10' requirement to over 20' in areas. Requiring additional foundation plantings would compromise the pedestrian circulation of the site. It is Staff's opinion that the project meets the integrity of the Landscape Ordinance with respect to required foundation plantings.

### LIGHTING

Village ordinance requires photometric readings of 0.5 foot candles or less at all property lines; the proposed plan meets Village ordinance. There are no pole lights proposed for the parking lot; all lighting will be mounted on the building. There are nine (9) wall sconces (depicted on the right) that will have full cutoffs, thus eliminating any off-site glare. There are three recessed can lights proposed in the canopy at the entrance. The Applicant is open to putting the rear lights on a timer; Staff will discuss this issue at the Homeowners meeting.



## ARCHITECTURE

The proposed structure is a large masonry building with over 247' LF of frontage on LaGrange Road. The Architect has utilized the corner tower elements and central entry to break up the mass of the building. The Applicant has been very cooperative with Staff in addressing concerns regarding building material, reduction of EFIS material, building articulation and glazing. The building meets the masonry requirement of the Building Code which requires 60% brick; the proposed architecture provides 62% of the building materials as brick. The tower elements are provided as full parapets.

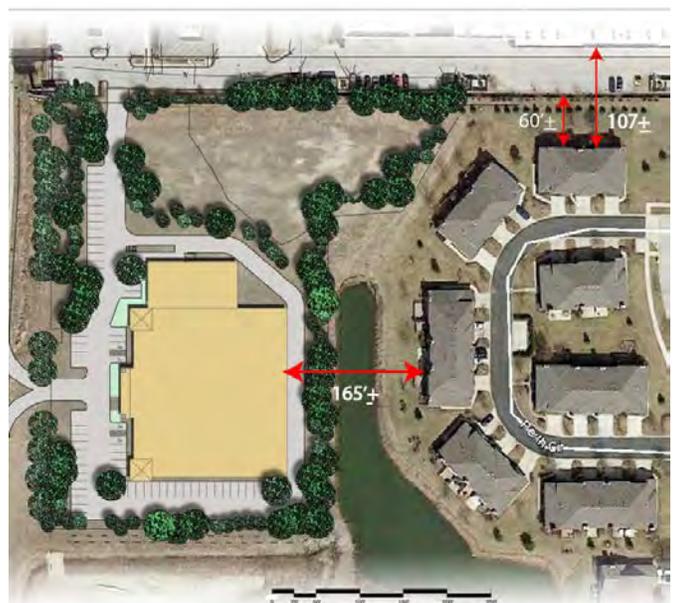
The front (west) façade is comprised almost entirely of brick (92%), with split face veneer and limestone columns flanking the entrance. Per Staff's request the Architect has reduced the amount of EFIS and increased the amount of brick in this location. The side elevations also include a significant amount of brick (71% & 76%) with the brick water table continuing along the same horizontal band as the front façade, and introduces the split face veneer for the top 5.5' to match the same banding as the front façade. The split face veneer will match the color of the EFIS on the front facade. The rear façade continues this same color banding with the brick water table at the bottom of the elevation and the split face veneer at the top of the elevation. The middle area will be colored to match the brick color on the side elevations but will be comprised of a split face veneer. The appearance will be consistent with the looks of the side elevations.

The Applicant has revised earlier proposals for Spandrel glass and is now providing true window glazing on both tower elements and all windows on the south elevation. The three windows on either side of the entry way are proposed for Spandrel glass, however only the bottom half of the window will be visible. These areas are used for display within the building. The shading from the awnings will limit the ability to determine the type of glazing on these windows.



Roof top HVAC units are proposed at five feet (5') in height. They are located 50' from the east and west edges of the building and approximately 30' from the north end of the building and 39' from the south end of the building. . A line of sight study has been provided per Staff request which indicates that the units are not visible from within 1,330' of the west (or front) of the building, from within 135' from the north side of the building, 200' from the south end of the building and 225' from the rear or east side of the building. The closest townhome to the east is approximately 160' from the rear of the building. Staff supports the proposed location of the HVAC units.

A line of sight study is included in the Commissioner's packet. The the closest townhome is approximately 165 feet from the rear of the proposed structure. As a point of comparison, the commercial center to the north of the townhomes is approximately 107' from the nearest townhome; 60' from the fence.



The trash receptacle will be enclosed on two sides with a 6' brick wall; the third side will be the brick exterior wall of the warehouse. The gates will be a heavy duty metal with wood facing. Details can be found on Sheet A.2.0.

## SIGNAGE

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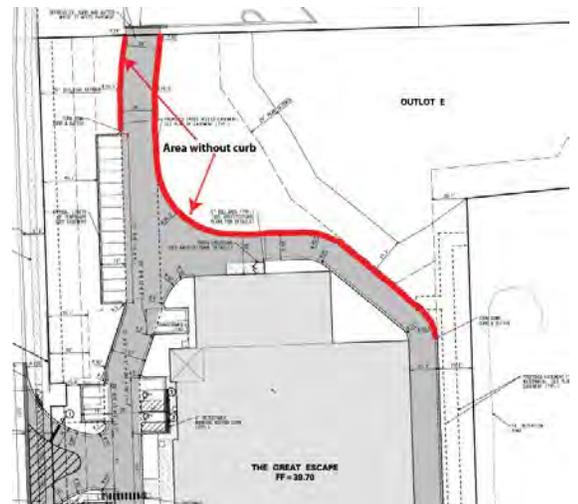
The proposed sign indicates individually lit letters, royal blue in color. The plan indicates the sign comprises 40 SF, it therefore meets Village ordinance. A ground mounted sign is indicated on the site plan with a 10' setback, however a sign has not been proposed. The Applicant understands that the sign must meet Village requirements.

## STAFF REVIEW: ENGINEERING

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The Village Engineer provided a list of concerns to the Applicant. Most of these issues will be resolved through final engineering review; final engineering approval will be required prior to issuance of a Building Permit.

The proposed site plan indicates an area without curb. Curbs are required between vehicular use and landscaped areas. The Applicant has requested that the curb in this area be phased in after they determine if future retail will be developed to the north. Staff does not support this request as the timing for future retail is undetermined and the uncurbed area will be utilized with the proposed development. The drive aisle is visible from LaGrange and access will be provided to the property to the north. Sheet flow drainage may also causes erosion issues along the edge of pavement.



**Open Item #1: Areas of the access drive aisle are proposed without curbs.**

The Engineer has also raised questions regarding the cross section for the right-in/right-out access at LaGrange Road. Plans indicate this to be striped. Staff is requesting a mountable median (2") that clearly depicts the appropriate turning movements but still allows turning maneuvers for delivery and firetruck vehicles.

**Open Item #2: Right-in/Right-out cross section indicates a striped median; Staff is recommending a 2" mountable median.**

## STAFF REVIEW: FIRE DEPARTMENT

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The Fire Department provided comments to the Applicant regarding Building Life Safety and Fire Protection. Final approval from the Fire Department will be required prior to final approval.

## RECOMMENDATION/RECOMMENDED MOTION

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Assign two Commissioners to meet with the Applicant in a work session with Staff.

**LIST OF REVIEWED PLANS****Brixmor – 15917 Harlem Avenue  
LIST OF SUBMITTED PLANS**

<b>Submitted Sheet Name</b>		<b>Prepared By</b>	<b>Date On Sheet</b>
C.1	Cover Sheet	Spaceco, Inc.	07/15/14
TS1	Typical Sections and General Notes	Spaceco, Inc.	04/22/15
EX1	Existing Conditions	Spaceco, Inc.	04/22/15
GM1	Geometric Plan	Spaceco, Inc.	04/22/15
GR1	Grading Plan	Spaceco, Inc.	04/22/15
UT1	Utility Plan	Spaceco, Inc.	04/22/15
SE1	Soil Erosion and Sediment Control Plan – 1	Spaceco, Inc.	04/22/15
SE2	Soil Erosion and Sediment Control Plan - 2	Spaceco, Inc.	04/22/15
SE3	Soil Erosion and Sediment Control Plan - 3	Spaceco, Inc.	04/22/15
S1	Specifications	Spaceco, Inc.	04/22/15
D1	Details – 1	Spaceco, Inc.	04/22/15
D2	Details – 2	Spaceco, Inc.	04/22/15
EXH-1	Truck Turn Exhibit – WB - 65	Spaceco, Inc.	04/22/15
EXH-2	Truck Turn Exhibit - Firetruck	Spaceco, Inc.	04/22/15
MWRD	MWRD Drainage Exhibit	Spaceco, Inc.	04/22/15
XS1	Cross Sections – 1	Spaceco, Inc.	04/22/15
XS2	Cross Sections – 2	Spaceco, Inc.	04/22/15
1 of 1	Plat of Easement	Spaceco, Inc.	04/21/15
1 of 1	Plat of Survey	Spaceco, Inc.	04/23/15
L1.1	Phase 1 Planting Plan	GEIS Companies	(Rec.) 04/30/15
L1.2	Phase 2 Evergreen Tree Planting	GEIS Companies	(Rec.) 04/30/15
L1.1	Phase 1 Planting Plan – Area Calc.	GEIS Companies	02/27/15
A.1.2	Site Plan – Adjacency Plan	GEIS Companies	02/11/15
	Rendered Perspective	GEIS Companies	N/A
A.2.0	Site Signage/Dumpster	GEIS Companies	03/09/15
A.1.2	Elevations	GEIS Companies	03/09/15
A-300	Elevations – Color	GEIS Companies	02/20/15
A.1.2a	RTU Sight Line Study	GEIS Companies	03/09/15
E.1.1	Site Photometric	GEIS Companies	03/03/15
	Lighting Spec Sheet		

JAS Joseph A. Schudt & Associates  
M&C Metz & Company  
DZA DZA Associates, Inc.

LSI LSI Industries  
SPIES SPIES & Associates, Inc  
Hubbardton Hubbardton Forge

# SITE IMPROVEMENT PLANS for THE GREAT ESCAPE

VILLAGE OF TINLEY PARK  
COOK COUNTY, ILLINOIS  
PROJECT NO: 8126

**GENERAL CONTRACTOR**

GEIS CONSTRUCTION  
10020 AURORA-HUDSON ROAD  
STREETSBORO, OHIO 44241  
PH: (330) 528-3500

**NOTE:**

SPACECO, INC. IS TO BE NOTIFIED AT LEAST  
THREE (3) DAYS PRIOR TO STARTING CONSTRUCTION  
AND SHALL BE INCLUDED IN THE PRECONSTRUCTION MEETINGS

**CALL J.U.L.I.E. 1-800-892-0123**

WITH THE FOLLOWING:  
COUNTY COOK  
CITY, TOWNSHIP TINLEY PARK, ORLAND  
SEC. & 1/4 SEC. NO. T36N, R12E, SEC 27 (SW 1/4)

**48 HOURS BEFORE YOU DIG.**  
EXCLUDING SAT., SUN. & HOLIDAYS

**SOURCE BENCHMARK**

DESCRIPTION: MARKHAM COOK CO CORS ARP  
NGS CORS ID CCMK NGS PID DN7484  
ELLIPSOID HEIGHT = 169.535 M (OR 556.246FT)  
ORTHO HEIGHT = 665.783 FT  
DATUM NAVD 88 GEOID 12A

**SITE BENCHMARK**

ELEVATION: 733.95  
DESCRIPTION: CUT SQUARE ON LIGHT POLE BASE SOUTH OF  
BANK DRIVE THRU.

**REVISIONS**

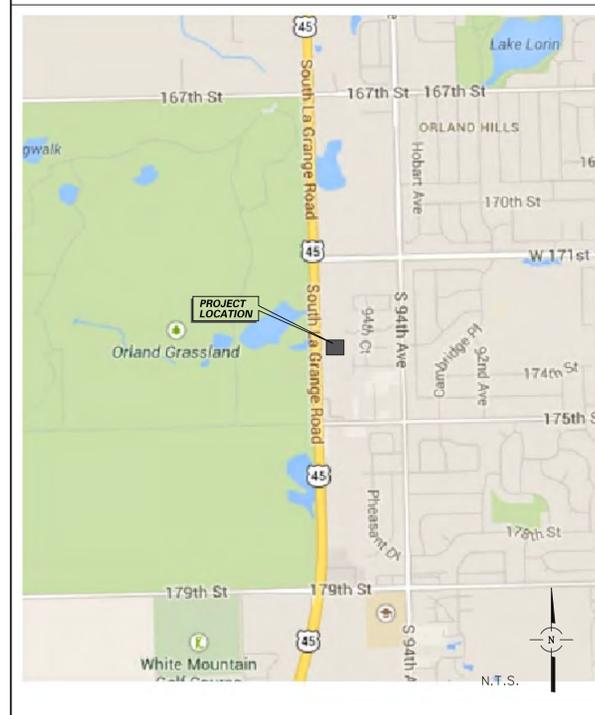
ORIGINAL PLAN DATE: JULY 15, 2014

#	SHEET #	REMARKS	DATE
1	ALL	SET FOR PERMIT SUBMITTAL	08/11/14
2	4-6,9,12	PER CLIENT	12/22/14
3	ALL	PER CLIENT	02/27/15
4	ALL	PER VILLAGE / MWRDGC	04/22/15

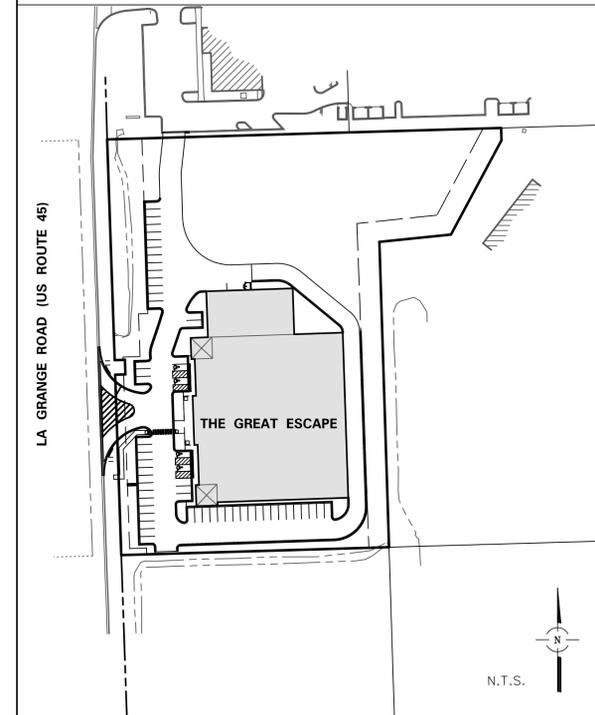
**INDEX**

SHEET #	SHEET I.D.	SHEET DESCRIPTION
1	C1	COVER SHEET
2	TS1	TYPICAL SECTIONS AND GENERAL NOTES
3	EX1	EXISTING CONDITIONS
4	GM1	GEOMETRIC PLAN
5	GR1	GRADING PLAN
6	UT1	UTILITY PLAN
7-9	SE1-SE3	SOIL EROSION AND SEDIMENT CONTROL PLANS
10	S1	SPECIFICATIONS
11-12	D1-D2	DETAILS
13-14	EXH1-EXH2	TRUCK TURN EXHIBITS
15	MWRD	MWRD DRAINAGE EXHIBIT
16-17	XS1-XS2	CROSS SECTIONS

**LOCATION MAP**



**KEY MAP**



ENGINEER \_\_\_\_\_ DATE \_\_\_\_\_  
MICHAEL MONDUS, P.E.  
ILLINOIS REGISTRATION NO.: 062-052057  
EXPIRATION DATE: 11/30/2015  
PROFESSIONAL DESIGN FIRM NO.: 184-001157  
EXPIRATION DATE: 04/30/2015  
THESE PLANS OR ANY PART THEREOF SHALL BE CONSIDERED VOID WITHOUT THE SIGNATURE, SEAL, AND EXPIRATION DATE OF SEAL OF THE ENGINEER

**THE GREAT ESCAPE  
TINLEY PARK, ILLINOIS**

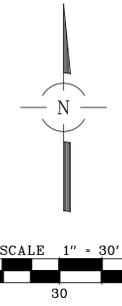
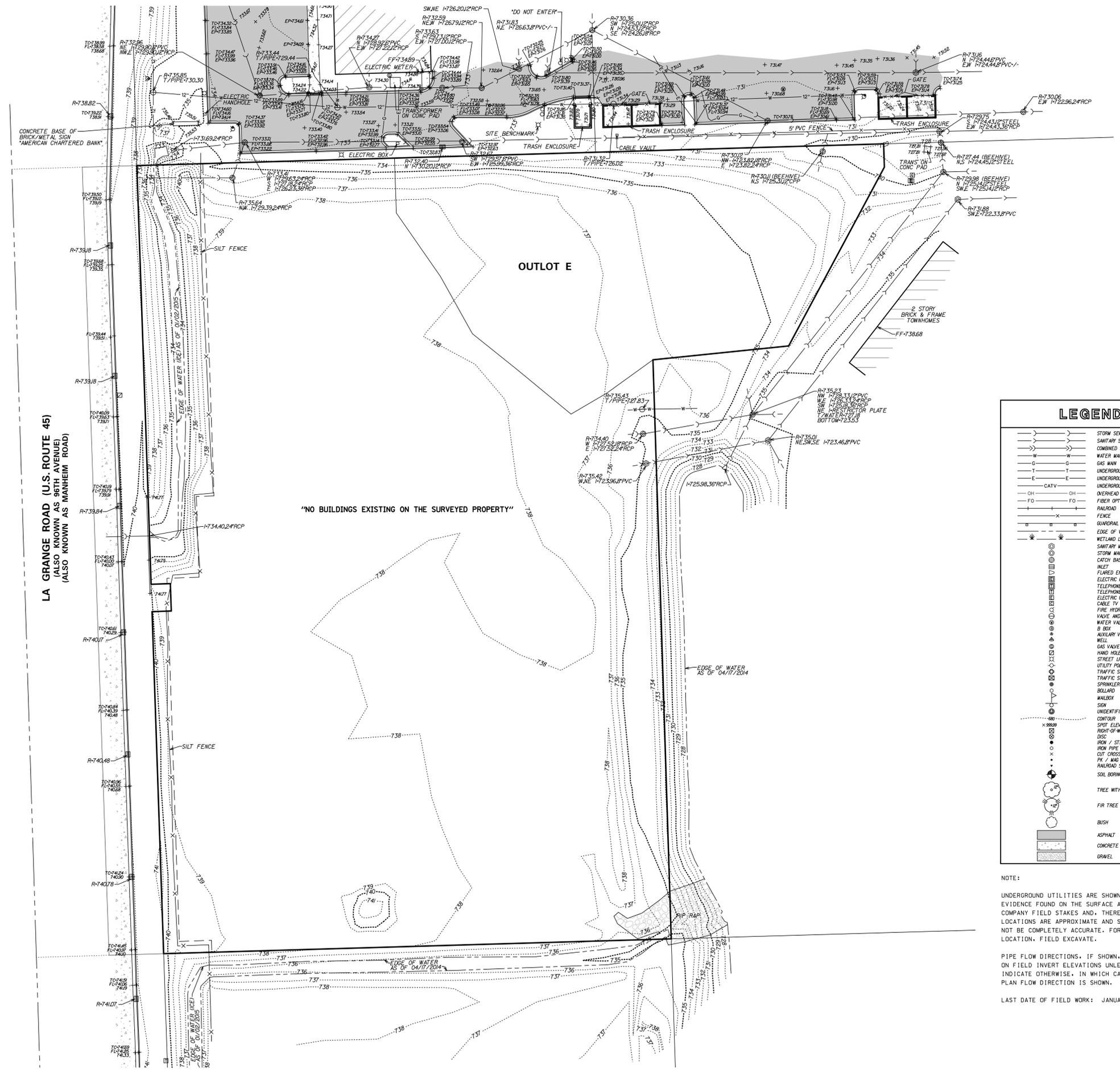
9575 W. Higgins Road, Suite 700, Rosemont, Illinois 60018  
Phone: (847) 696-4060 Fax: (847) 696-4065

**CONSULTING ENGINEERS  
SITE DEVELOPMENT ENGINEERS  
LAND SURVEYORS**



FILENAME:  
8126TITILE.DGN  
DATE:  
07/15/14  
JOB NO.  
8126  
SHEET  
**C1**  
1 OF 17





LEGEND	
	STORM SEWER
	SANITARY SEWER
	COMBINED SEWER
	WATER MAIN
	GAS MAIN
	UNDERGROUND TELEPHONE LINE
	UNDERGROUND ELECTRIC LINE
	UNDERGROUND CATV LINE
	OVERHEAD WIRE ON UTILITY POLES
	FIBER OPTIC LINE
	RAILROAD
	FENCE
	GUARDRAIL
	EDGE OF WATER
	WETLAND LIMITS
	SANITARY MANHOLE
	STORM MANHOLE
	CATCH BASIN
	INLET
	FLARED END SECTION
	ELECTRIC MANHOLE
	TELEPHONE MANHOLE
	TELEPHONE UPRIGHT
	ELECTRIC UPRIGHT
	CABLE TV UPRIGHT
	FIRE HYDRANT
	VALVE AND VAULT
	WATER VALVE
	B BOX
	AUXILIARY VALVE
	WELL
	GAS VALVE
	HAND HOLE
	STREET LIGHT
	UTILITY POLE
	TRAFFIC SIGNAL
	TRAFFIC SIGNAL BOX
	SPRINKLER HEAD
	BILLBOARD
	MAILBOX
	SIGN
	UNIDENTIFIED MANHOLE
	CONTOUR
	SPOT ELEVATION
	RIGHT-OF-WAY MONUMENT
	DSC
	IRON / STEEL ROD
	IRON PIPE
	CUT CROSS
	PK / MAG NAIL
	RAILROAD SPIKE
	SOIL BORING
	TREE WITH SIZE
	FIR TREE WITH SIZE
	BUSH
	ASPHALT
	CONCRETE
	GRAVEL

NOTE:  
 UNDERGROUND UTILITIES ARE SHOWN BY USING PHYSICAL EVIDENCE FOUND ON THE SURFACE AND/OR FROM UTILITY COMPANY FIELD STAKES AND, THEREFORE, THEIR LOCATIONS ARE APPROXIMATE AND SUSPECTED AND MAY NOT BE COMPLETELY ACCURATE. FOR MORE ACCURATE LOCATION, FIELD EXCAVATE.

PIPE FLOW DIRECTIONS, IF SHOWN, ARE BASED ON FIELD INVERT ELEVATIONS UNLESS EXISTING PLANS INDICATE OTHERWISE, IN WHICH CASE THE EXISTING PLAN FLOW DIRECTION IS SHOWN.

LAST DATE OF FIELD WORK: JANUARY 2, 2015

NO.	DATE	REMARKS

NO.	DATE	REMARKS
4	04/22/15	PER VILLAGE / MWPDGC
3	02/27/15	PER CLIENT

**EXISTING CONDITIONS**

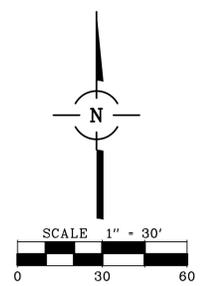
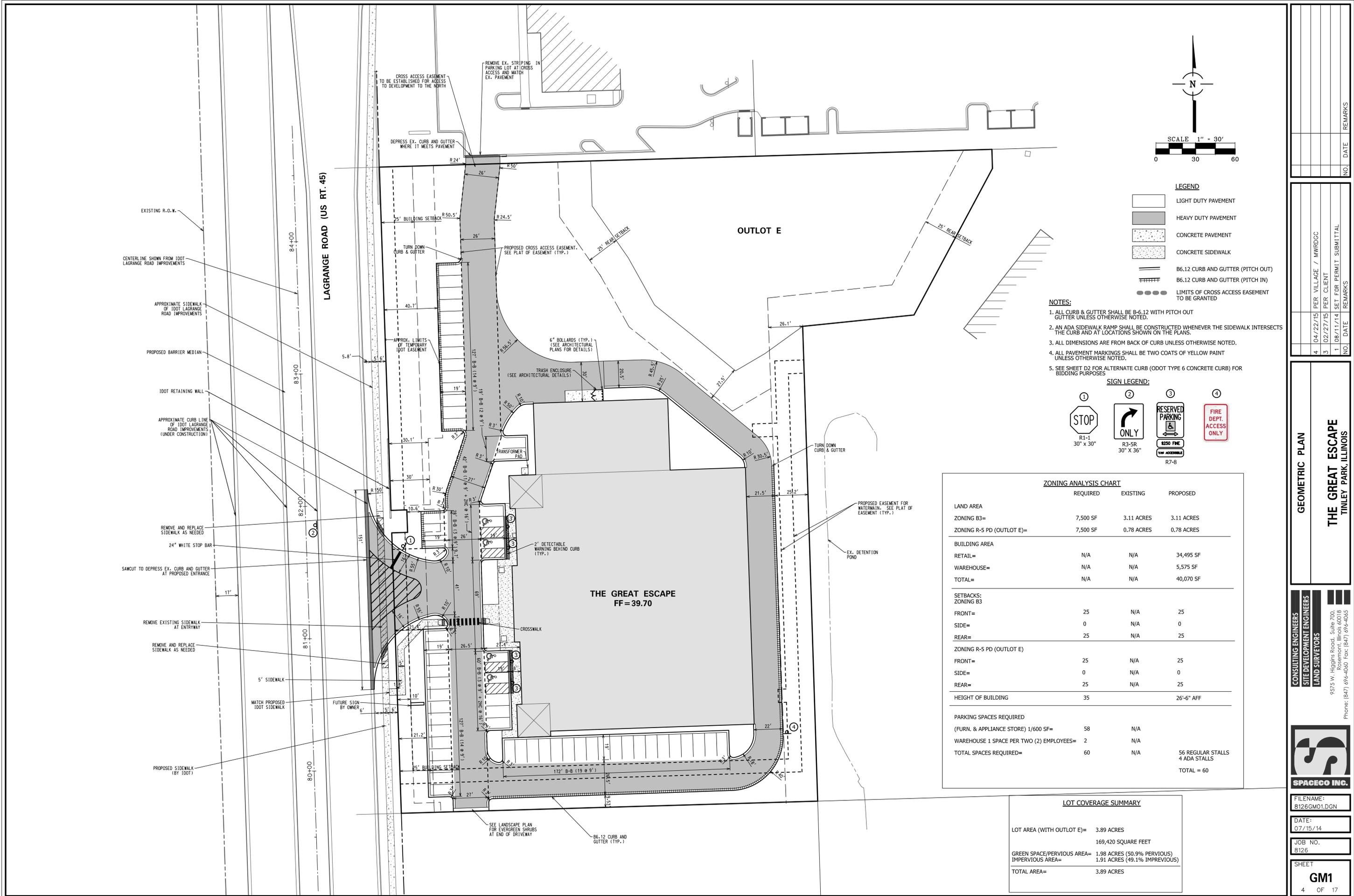
**THE GREAT ESCAPE**  
 TIMLEY PARK, ILLINOIS

**CONSULTING ENGINEERS**  
**SITE DEVELOPMENT ENGINEERS**  
**LAND SURVEYORS**

9575 W. Higgins Road, Suite 700,  
 Rosemont, Illinois 60018  
 Phone: (847) 676-4060 Fax: (847) 676-4065



FILENAME: 8126T1.DGN
DATE: 07/15/14
JOB NO. 8126
SHEET <b>EX1</b> 3 OF 17



**LEGEND**

[Symbol]	LIGHT DUTY PAVEMENT
[Symbol]	HEAVY DUTY PAVEMENT
[Symbol]	CONCRETE PAVEMENT
[Symbol]	CONCRETE SIDEWALK
[Symbol]	B6.12 CURB AND GUTTER (PITCH OUT)
[Symbol]	B6.12 CURB AND GUTTER (PITCH IN)
[Symbol]	LIMITS OF CROSS ACCESS EASEMENT TO BE GRANTED

- NOTES:**
1. ALL CURB & GUTTER SHALL BE B-6.12 WITH PITCH OUT UNLESS OTHERWISE NOTED.
  2. AN ADA SIDEWALK RAMP SHALL BE CONSTRUCTED WHENEVER THE SIDEWALK INTERSECTS THE CURB AND AT LOCATIONS SHOWN ON THE PLANS.
  3. ALL DIMENSIONS ARE FROM BACK OF CURB UNLESS OTHERWISE NOTED.
  4. ALL PAVEMENT MARKINGS SHALL BE TWO COATS OF YELLOW PAINT UNLESS OTHERWISE NOTED.
  5. SEE SHEET D2 FOR ALTERNATE CURB (ODOT TYPE 6 CONCRETE CURB) FOR BIDDING PURPOSES.

**SIGN LEGEND:**



**ZONING ANALYSIS CHART**

	REQUIRED	EXISTING	PROPOSED
<b>LAND AREA</b>			
ZONING B3=	7,500 SF	3.11 ACRES	3.11 ACRES
ZONING R-5 PD (OUTLOT E)=	7,500 SF	0.78 ACRES	0.78 ACRES
<b>BUILDING AREA</b>			
RETAIL=	N/A	N/A	34,495 SF
WAREHOUSE=	N/A	N/A	5,575 SF
TOTAL=	N/A	N/A	40,070 SF
<b>SETBACKS: ZONING B3</b>			
FRONT=	25	N/A	25
SIDE=	0	N/A	0
REAR=	25	N/A	25
<b>ZONING R-5 PD (OUTLOT E)</b>			
FRONT=	25	N/A	25
SIDE=	0	N/A	0
REAR=	25	N/A	25
<b>HEIGHT OF BUILDING</b>	35		26'-6" AFF
<b>PARKING SPACES REQUIRED</b>			
(FURN. & APPLIANCE STORE) 1/600 SF=	58	N/A	
WAREHOUSE 1 SPACE PER TWO (2) EMPLOYEES=	2	N/A	
TOTAL SPACES REQUIRED=	60	N/A	56 REGULAR STALLS 4 ADA STALLS TOTAL = 60

**LOT COVERAGE SUMMARY**

LOT AREA (WITH OUTLOT E)=	3.89 ACRES
	169,420 SQUARE FEET
GREEN SPACE/PERVIOUS AREA=	1.98 ACRES (50.9% PERVIOUS)
IMPERVIOUS AREA=	1.91 ACRES (49.1% IMPREVIOUS)
TOTAL AREA=	3.89 ACRES

- EXISTING R.O.W.
- CENTERLINE SHOWN FROM IDOT LAGRANGE ROAD IMPROVEMENTS
- APPROXIMATE SIDEWALK OF IDOT LAGRANGE ROAD IMPROVEMENTS
- PROPOSED BARRIER MEDIAN
- IDOT RETAINING WALL
- APPROXIMATE CURB LINE OF IDOT LAGRANGE ROAD IMPROVEMENTS (UNDER CONSTRUCTION)
- REMOVE AND REPLACE SIDEWALK AS NEEDED
- 24" WHITE STOP BAR
- SAWCUT TO DEPRESS EX. CURB AND GUTTER AT PROPOSED ENTRANCE
- REMOVE EXISTING SIDEWALK AT ENTRYWAY
- REMOVE AND REPLACE SIDEWALK AS NEEDED
- 5' SIDEWALK
- MATCH PROPOSED IDOT SIDEWALK
- FUTURE SIGN BY OWNER
- PROPOSED SIDEWALK (BY IDOT)

NO.	DATE	REMARKS

4	04/22/15	PER VILLAGE / MWDRCC
3	02/27/15	PER CLIENT
1	08/11/14	SET FOR PERMIT SUBMITTAL
NO.	DATE	REMARKS

**GEOMETRIC PLAN**

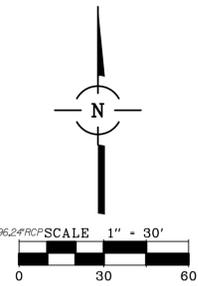
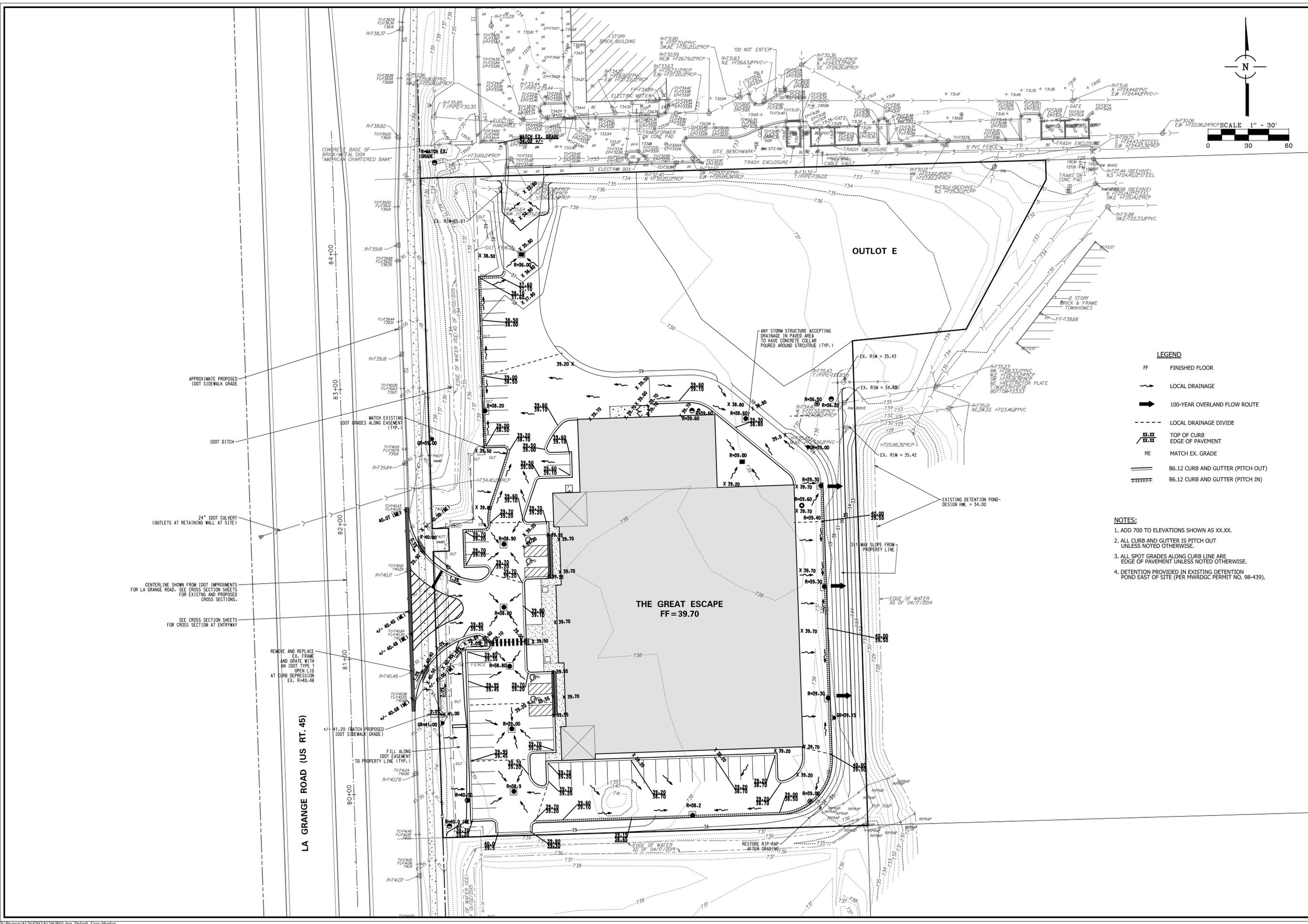
**THE GREAT ESCAPE**  
TIMLEY PARK, ILLINOIS

**CONSULTING ENGINEERS**  
**SITE DEVELOPMENT ENGINEERS**  
**LAND SURVEYORS**

9575 W. Higgins Road, Suite 700,  
Rosemont, Illinois 60018  
Phone: (847) 676-4060 Fax: (847) 676-4065



FILENAME: 8126GM01.DGN
DATE: 07/15/14
JOB NO. 8126
SHEET <b>GM1</b> 4 OF 17



**LEGEND**

- FF FINISHED FLOOR
- LOCAL DRAINAGE
- 100-YEAR OVERLAND FLOW ROUTE
- LOCAL DRAINAGE DIVIDE
- TOP OF CURB EDGE OF PAVEMENT
- ME MATCH EX. GRADE
- B6.12 CURB AND GUTTER (PITCH OUT)
- B6.12 CURB AND GUTTER (PITCH IN)

**NOTES:**

1. ADD 700 TO ELEVATIONS SHOWN AS XX.XX.
2. ALL CURB AND GUTTER IS PITCH OUT UNLESS NOTED OTHERWISE.
3. ALL SPOT GRADES ALONG CURB LINE ARE EDGE OF PAVEMENT UNLESS NOTED OTHERWISE.
4. DETENTION PROVIDED IN EXISTING DETENTION POND EAST OF SITE (PER MWRDGC PERMIT NO. 98-439).

NO.	DATE	REMARKS
4	04/22/15	PER VILLAGE / MWRDGC
3	02/27/15	PER CLIENT

NO.	DATE	REMARKS

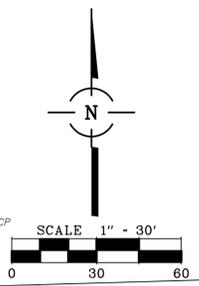
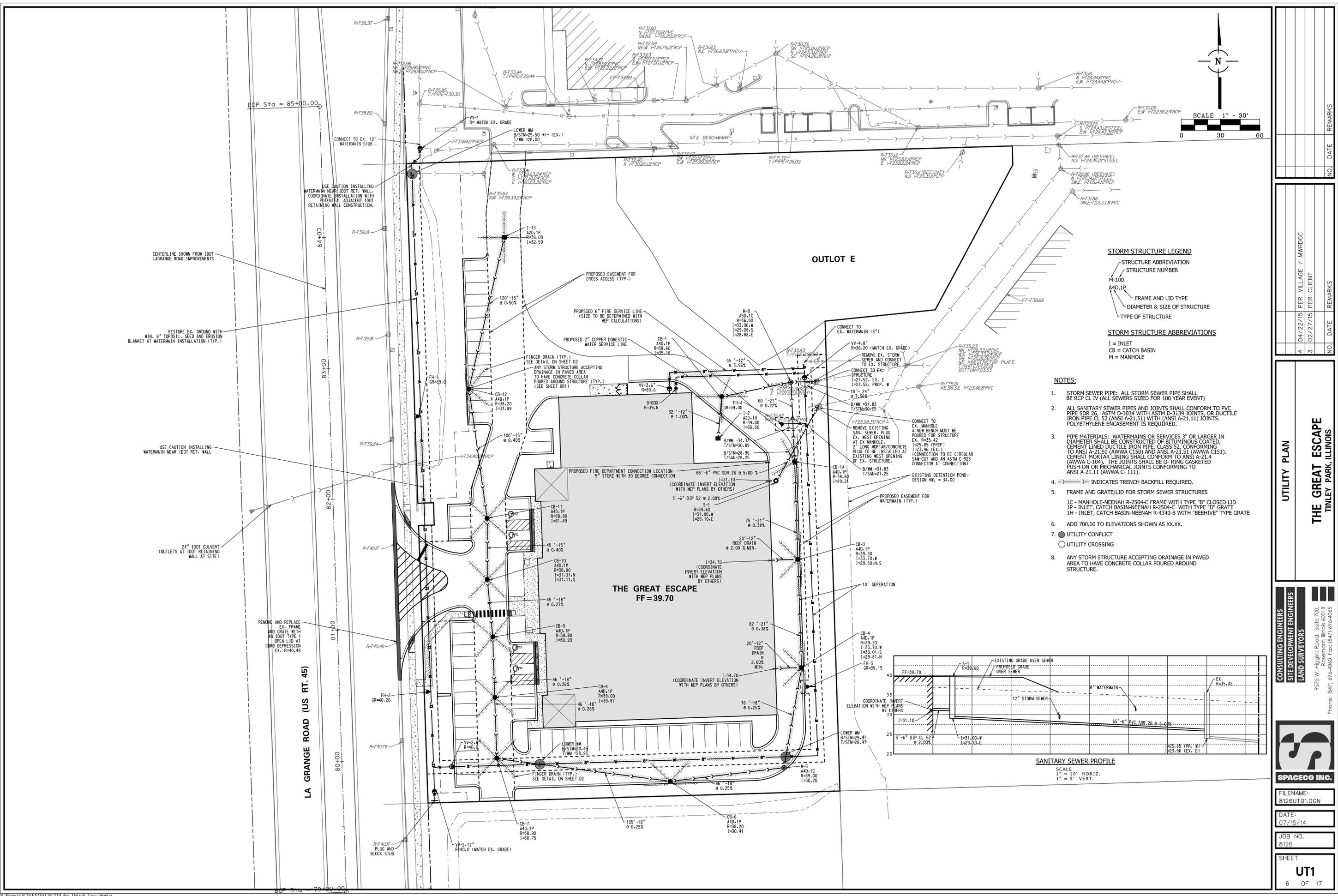
**GRADING PLAN**  
**THE GREAT ESCAPE**  
TIMLEY PARK, ILLINOIS

**CONSULTING ENGINEERS**  
**SITE DEVELOPMENT ENGINEERS**  
**LAND SURVEYORS**

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SHEET <b>GR1</b> 5 OF 17



**STORM STRUCTURE LEGEND**

- STRUCTURE ABBREVIATION
- STRUCTURE NUMBER
- M-100
- A4D, 1P
- FRAME AND LID TYPE
- DIAMETER & SIZE OF STRUCTURE
- TYPE OF STRUCTURE

**STORM STRUCTURE ABBREVIATIONS**

- I = INLET
- CB = CATCH BASIN
- M = MANHOLE

**NOTES:**

1. STORM SEWER PIPE: ALL STORM SEWER PIPE SHALL BE RCP CL IV (ALL SEWERS SIZED FOR 100 YEAR EVENT)
2. ALL SANITARY SEWER PIPES AND JOINTS SHALL CONFORM TO PVC PIPE SDR 26, ASTM D-3034 WITH ASTM D-3139 JOINTS, OR DUCTILE IRON PIPE CL 52 (ANSI A-21.51) WITH (ANSI A-21.11) JOINTS. POLYETHYLENE ENCASEMENT IS REQUIRED.
3. PIPE MATERIALS: WATERMAINS OR SERVICES 3" OR LARGER IN DIAMETER SHALL BE CONSTRUCTED OF BITUMINOUS COATED, CEMENT LINED DUCTILE IRON PIPE, CLASS 52, CONFORMING TO ANSI A-21.50 (AWWA C150) AND ANSI A-21.51 (AWWA C151). CEMENT MORTAR LINING SHALL CONFORM TO ANSI A-21.4 (AWWA C-104). THE JOINTS SHALL BE O-RING GASKETED PUSH-ON OR MECHANICAL JOINTS CONFORMING TO ANSI A-21.11 (AWWA C-111).
4. --- INDICATES TRENCH BACKFILL REQUIRED.
5. FRAME AND GRATE/LID FOR STORM SEWER STRUCTURES  
1C - MANHOLE-NEENAH R-2504-C FRAME WITH TYPE "B" CLOSED LID  
1P - INLET, CATCH BASIN-NEENAH R-2504-C WITH TYPE "D" GRATE  
1H - INLET, CATCH BASIN-NEENAH R-4340-B WITH "BEEHIVE" TYPE GRATE
6. ADD 700.00 TO ELEVATIONS SHOWN AS XX.XX.
7. ● UTILITY CONFLICT  
○ UTILITY CROSSING
8. ANY STORM STRUCTURE ACCEPTING DRAINAGE IN PAVED AREA TO HAVE CONCRETE COLLAR POURED AROUND STRUCTURE.

**UTILITY PLAN**

**THE GREAT ESCAPE**  
TINLEY PARK, ILLINOIS

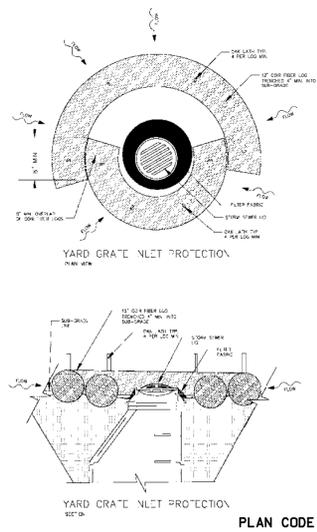
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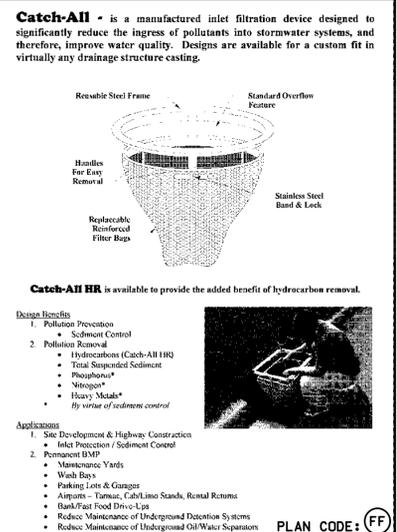
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FILENAME:  
8126UT01.DGN  
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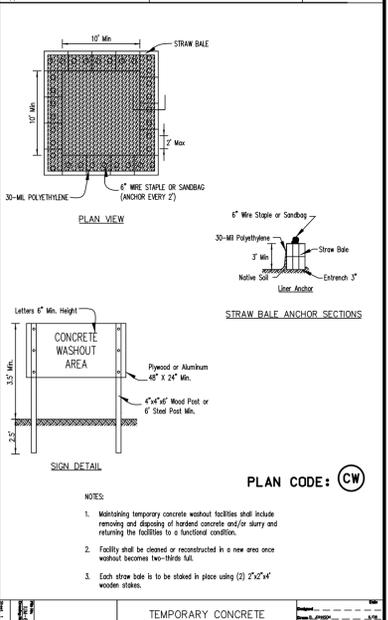
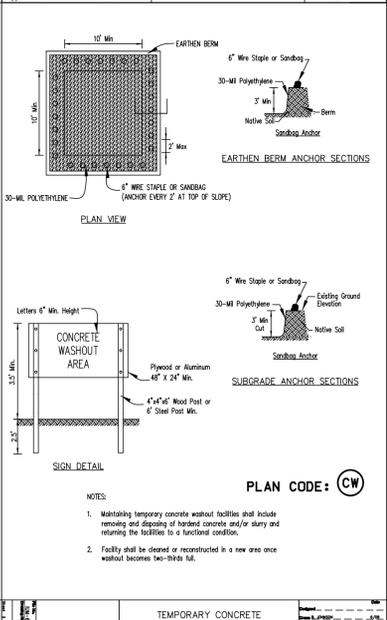
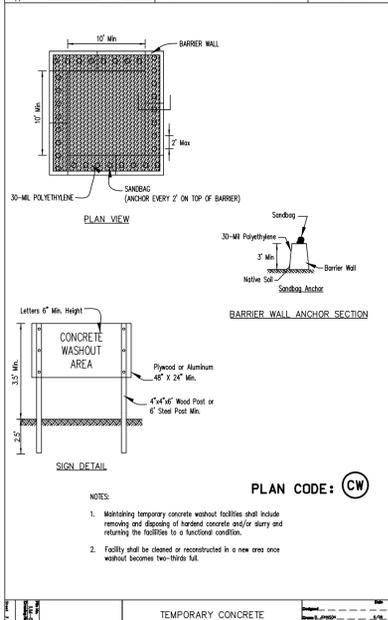
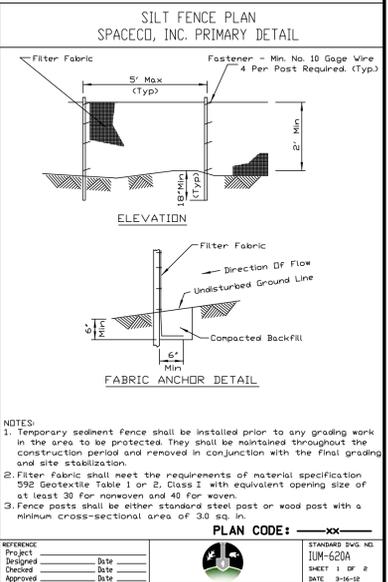
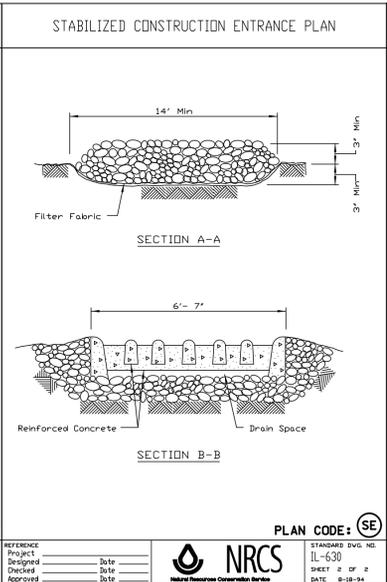
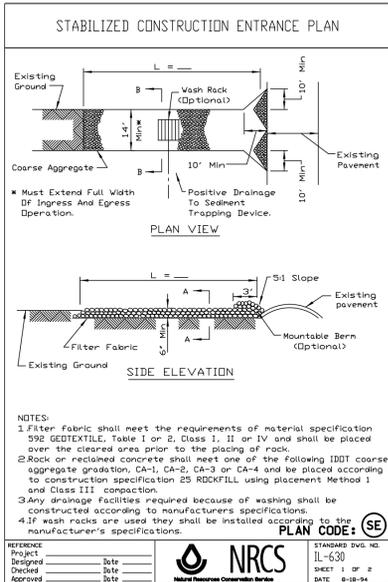




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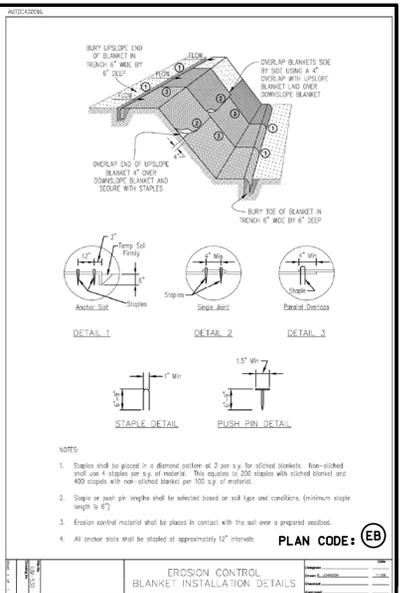
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TEMPORARY CONCRETE WASHOUT FACILITY - BARRIER WALL

TEMPORARY CONCRETE WASHOUT FACILITY - EARTHEN TYPE

TEMPORARY CONCRETE WASHOUT FACILITY - STRAW BALE



EROSION CONTROL BLANKET INSTALLATION DETAILS

NO.	DATE	REMARKS
4	04/22/15	PER VILLAGE / MWIRDCG
3	02/27/15	PER CLIENT
NO.	DATE	REMARKS

**SOIL EROSION AND SEDIMENT CONTROL PLAN - 2**

**THE GREAT ESCAPE**  
TIMLEY PARK, ILLINOIS

**CONSULTING ENGINEERS**  
SITE DEVELOPMENT ENGINEERS  
LAND SURVEYORS

9575 W. Higgins Road, Suite 700,  
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**SPACECO INC.**

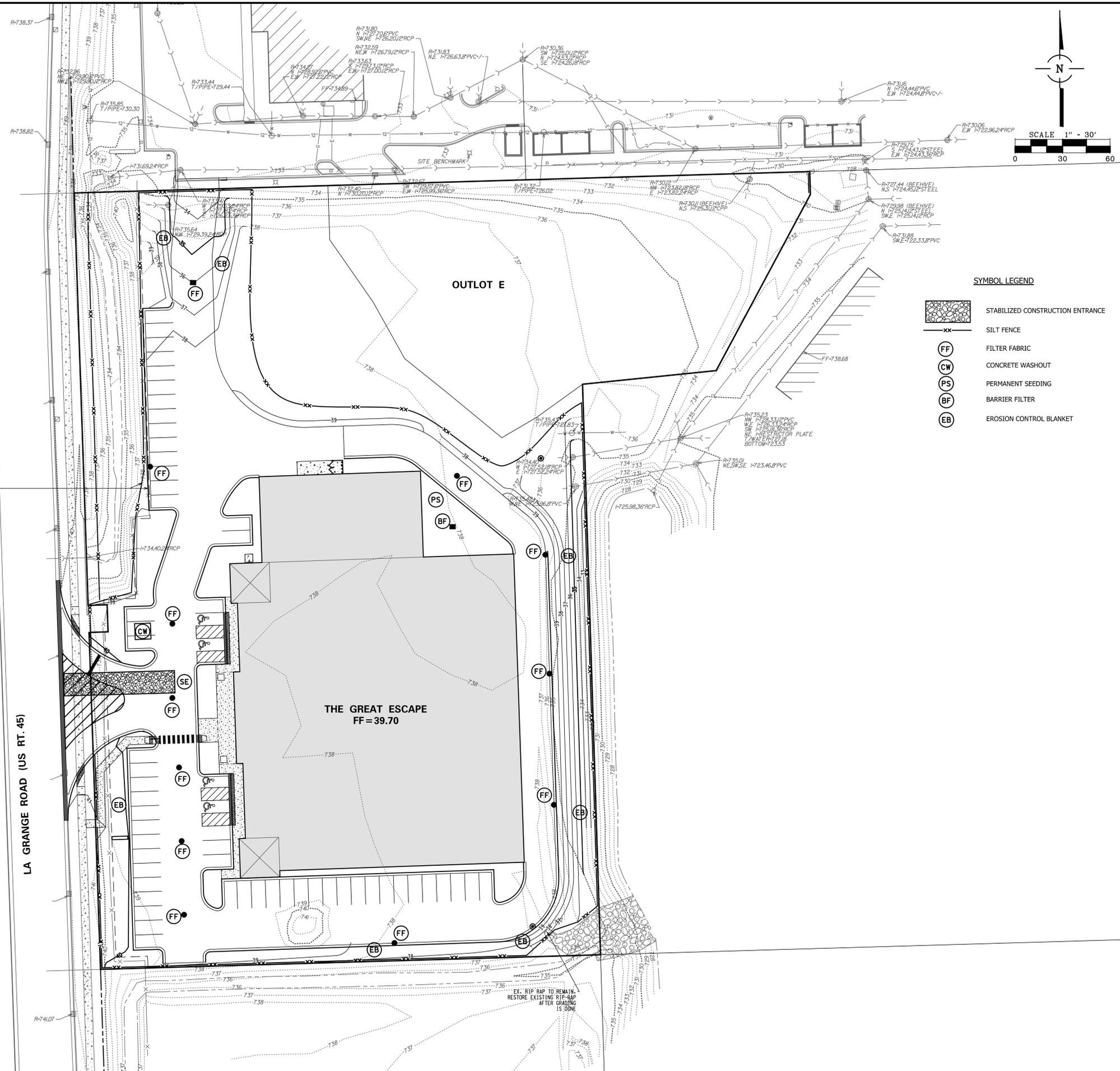
FILENAME:  
8126SE02.DGN

DATE:  
07/15/14

JOB NO.  
8126

SHEET  
**SE2**  
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CONDITION OF EXISTING SILT FENCE TO BE FIELD VERIFIED. KEEP IN PLACE AS ALLOWABLE INSTEAD OF INSTALLING NEW SILT FENCE AT TOP OF SLOPE.



- SYMBOL LEGEND**
-  STABILIZED CONSTRUCTION ENTRANCE
  -  SILT FENCE
  -  FILTER FABRIC
  -  CONCRETE WASHOUT
  -  PERMANENT SEEDING
  -  BARRIER FILTER
  -  EROSION CONTROL BLANKET

LA GRANGE ROAD (US RT. 45)

THE GREAT ESCAPE  
FF = 39.70

OUTLOT E

NO.	DATE	REMARKS

NO.	DATE	REMARKS
4	04/22/15	PER VILLAGE / MWPDGC
3	02/27/15	PER CLIENT

**SOIL EROSION AND SEDIMENT CONTROL PLAN - 3**  
**THE GREAT ESCAPE**  
TIMLEY PARK, ILLINOIS

**CONSULTING ENGINEERS**  
**SITE DEVELOPMENT ENGINEERS**  
**LAND SURVEYORS**  
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FILENAME: 8126SE03.DGN
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EARTHWORK NOTES

- 1. GENERAL
A. IT IS THE CONTRACTOR'S RESPONSIBILITY TO UNDERSTAND THE SOIL AND GROUNDWATER CONDITIONS AT THE SITE...
B. ANY QUANTITIES IN THE BID PROPOSAL ARE INTENDED AS A GUIDE FOR THE CONTRACTORS USE IN DETERMINING THE SCOPE OF THE COMPLETED PROJECT...
C. THE CONTRACTOR WILL NOTE THAT THE ELEVATIONS SHOWN ON THE CONSTRUCTION PLANS ARE FINISHED GRADE ELEVATIONS AND THAT PAVEMENT THICKNESS, TOPSOIL, ETC. MUST BE SUBTRACTED TO DETERMINE SUBGRADE ELEVATIONS...
D. THE CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE DURING CONSTRUCTION AND PREVENT STORMWATER FROM RUNNING INTO OR STANDING IN EXCAVATED AREAS...
E. PLANS FOR THE SITE Dewatering, IF EMPLOYED, SHALL BE SUBMITTED TO AND APPROVED BY THE OWNER PRIOR TO IMPLEMENTATION...
F. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTATION OF THE "SOIL EROSION AND SEDIMENTATION CONTROL MEASURES" AND THE INITIAL ESTABLISHMENT OF EROSION CONTROL PROCEDURES...
G. PRIOR TO COMMENCEMENT OF GRADING ACTIVITIES, THE CONTRACTOR SHALL ERECT A "SNOW FENCE" AROUND ANY TREE DESIGNATED TO BE PRESERVED...
H. EXCESS MATERIALS, IF NOT UTILIZED AS FILL SHALL BE COMPLETELY REMOVED FROM THE CONSTRUCTION SITE...
I. GEOTEXTILE FABRIC, IF AUTHORIZED BY THE OWNER, SHALL BE "SUPAC 8NP", "MIRAFI 160" OR EQUAL...
2. TOPSOIL EXCAVATION INCLUDES:
A. EXCAVATION OF TOPSOIL AND OTHER STRUCTURALLY UNSUITABLE MATERIALS WITHIN THOSE AREAS THAT WILL REQUIRE EARTH EXCAVATION OR COMPACTED EARTH FILL...
B. PLACEMENT OF THE EXCAVATED MATERIAL IN OWNER DESIGNATED AREAS FOR FUTURE USE WITHIN AREAS TO BE LANDSCAPED...
C. TOPSOIL STOCKPILED FOR RESPAED SHALL BE FREE OF CLAY AND SHALL NOT CONTAIN ANY OF THE TRANSITIONAL MATERIAL BETWEEN THE TOPSOIL AND CLAY...
D. TOPSOIL RESPAED SHALL INCLUDE HAULING AND SPREADING 6" OF TOPSOIL OVER AREAS TO BE LANDSCAPED...
E. MODERATE COMPACTION IS REQUIRED IN NON-STRUCTURAL FILL AREAS.
3. EARTH EXCAVATION INCLUDES:
A. EXCAVATION OF CLAY AND OTHER MATERIALS WHICH ARE SUITABLE FOR USE AS STRUCTURAL FILL...
B. PLACEMENT OF THE CLAY AND OTHER SUITABLE MATERIALS SHALL BE WITHIN THOSE AREAS REQUIRING STRUCTURAL FILL...
C. COMPACTION OF THE CLAY AND OTHER SUITABLE MATERIALS SHALL BE TO AT LEAST 93%...
D. UNSUITABLE MATERIAL
E. MISCELLANEOUS
A. SPREAD AND COMPACT UNIFORMITY TO THE DEGREE SPECIFIED ALL EXCESS TRENCH SPOIL AFTER COMPLETION OF THE UNDERGROUND IMPROVEMENTS.
B. SCARIFY, DISC, AERATE, AND COMPACT...
C. PROVIDE WATER TO ADD TO DRY MATERIAL IN ORDER TO ADJUST THE MOISTURE CONTENT...
D. BACKFILL THE CURB AND GUTTER AFTER ITS CONSTRUCTION AND PRIOR TO THE PLACEMENT OF THE BASE COURSE MATERIAL.
6. TESTING AND FINAL ACCEPTANCE
A. THE CONTRACTOR SHALL PROVIDE AS A MINIMUM, A FULLY LOADED SIX-WHEEL TANDEM AXLE TRUCK FOR PROOF ROLLING THE PAVEMENT SUBGRADE PRIOR TO THE PLACEMENT OF THE CURB AND GUTTER AND THE BASE MATERIAL...
B. ANY UNSUITABLE AREA ENCOUNTERED AS A RESULT OF PROOF ROLLING SHALL BE REMOVED AND REPLACED WITH SUITABLE MATERIAL, OR OTHERWISE CORRECTED.
C. THE SITE PARKING LOT WILL REQUIRE UNDERCUTTING OF UNSUITABLE MATERIAL AND THE DEVELOPER WILL PROVIDE COPIES OF THE WRITTEN REPORTS FROM HIS SOILS ENGINEER TO DOCUMENT THE ENGINEER'S APPROVAL.

PAVING NOTES

- 1. GENERAL
A. PAVING WORK INCLUDES FINAL SUBGRADE SHAPING, PREPARATION AND COMPACTION; PLACEMENT OF SUB-BASE OR BASE COURSE MATERIALS; BITUMINOUS BINDER AND/OR SURFACE COURSE(S); FINISHING AND FINISHING CONCRETE PAVEMENT, CURBS AND WALKS; AND FINAL CLEAN-UP AND ALL RELATED WORK.
B. COMPACTION REQUIREMENTS: REFERENCE ASTM D-1557 (MODIFIED PROCTOR) SUB-GRADE = 93%; SUB-BASE OR BASE COURSE = 93%; BITUMINOUS COURSES = 95%.
C. IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO PROVIDE PROPER BARRICADING, WARNING DEVICES AND THE SAFE MANAGEMENT OF TRAFFIC WITHIN THE AREA OF CONSTRUCTION...
2. SUB-GRADE PREPARATION
A. EARTHWORK FOR PROPOSED PAVEMENT SUBGRADE SHALL BE FINISHED TO WITHIN 0.1 FOOT, PLUS OR MINUS, OF PLAN ELEVATION...
B. PRIOR TO THE PLACEMENT OF THE BASE COURSE, THE SUBGRADE MUST BE PROOF ROLLED AND INSPECTED FOR UNSUITABLE MATERIALS AND/OR EXCESSIVE MOVEMENT...
3. CONCRETE WORK
A. ALL EXTERIOR CONCRETE SHALL BE PORTLAND CEMENT CONCRETE CLASS 51 OR PV PER (SSRBC) SECTION 102.04 WITH AIR ENTRAINMENT OF NOT LESS THAN FIVE (5%) OR MORE THAN EIGHT (8%) PERCENT...
B. CONCRETE CURB AND/OR COMBINATION CURB AND GUTTER SHALL BE OF THE TYPE SHOWN ON THE PLANS...
C. PRIOR TO THE CONSTRUCTION OF THE CURB AND GUTTER AND THE PLACEMENT OF THE BASE MATERIAL, THE PAVEMENT AREA SHALL BE FINE GRADED TO WITHIN 0.04 FEET (1/2") OF FINAL SUBGRADE ELEVATION...
D. PRIOR TO PLACEMENT OF THE BASE COURSE, THE SUBGRADE MUST BE APPROVED BY THE MUNICIPAL ENGINEER.
3. CONCRETE WORK
A. ALL EXTERIOR CONCRETE SHALL BE PORTLAND CEMENT CONCRETE CLASS 51 OR PV PER (SSRBC) SECTION 102.04 WITH AIR ENTRAINMENT OF NOT LESS THAN FIVE (5%) OR MORE THAN EIGHT (8%) PERCENT...
B. CONCRETE CURB AND/OR COMBINATION CURB AND GUTTER SHALL BE OF THE TYPE SHOWN ON THE PLANS...
C. PRIOR TO THE CONSTRUCTION OF THE CURB AND GUTTER AND THE PLACEMENT OF THE BASE MATERIAL, THE PAVEMENT AREA SHALL BE FINE GRADED TO WITHIN 0.04 FEET (1/2") OF FINAL SUBGRADE ELEVATION...
D. PRIOR TO PLACEMENT OF THE BASE COURSE, THE SUBGRADE MUST BE APPROVED BY THE MUNICIPAL ENGINEER.

STORM SEWER NOTES

- C. CURBS SHALL BE DEPRESSED AT LOCATIONS WHERE PUBLIC WALKS/PEDESTRIAN PATHS INTERSECT CURB LINES...
D. THE CURBS SHALL BE BACKFILLED AFTER THEIR CONSTRUCTION AND PRIOR TO THE PLACEMENT OF THE BASE COURSE.
E. THE CONSTRUCTION JOINT FOR THE CURB AND GUTTER SHALL BE SEALED WITHIN 24 HOURS OF SCOURING THE CURB AND GUTTER.
F. CONCRETE SIDEWALK SHALL BE IN ACCORDANCE WITH THE ABOVE AND THE PLANS. PROVIDE SCORED JOINTS AT 5 FOOT INTERVALS AND 1" PREMOLDED FIBER EXPANSION JOINTS AT 45 FOOT INTERVALS...
G. CONCRETE DRIVEWAY APRONS SHALL BE IN ACCORDANCE WITH THE ABOVE AND THE PLANS...
H. STANDARD REINFORCED CONCRETE PAVEMENT SHALL BE IN ACCORDANCE WITH THE ABOVE AND THE PLANS...
I. CONCRETE CURING AND PROTECTION SHALL BE IN ACCORDANCE WITH (SSRBC) - METHOD B, OR C...
J. THE COST OF AGGREGATE BASE OR SUB-BASE UNDER CONCRETE WORK SHALL BE INCLUDED IN THE COST OF THE RESPECTIVE CONCRETE ITEM.
4. FLEXIBLE PAVEMENT
A. THE PAVEMENT MATERIALS FOR BITUMINOUS STREETS, PARKING LOTS, DRIVEWAYS, SIDEWALKS AND DRIVEWAYS SHALL BE AS DETAILED ON THE PLANS...
B. ALL TRAFFIC SHALL BE KEPT OFF THE COMPLETED AGGREGATE BASE UNTIL THE BINDER COURSE IS LAID...
C. PRIOR TO PLACEMENT OF THE SURFACE COURSE, THE BINDER COURSE SHALL BE CLEANED AND TACK COATED IF DUSTY OR DIRTY...
D. SEAMS IN BAM, BINDER AND SURFACE COURSE SHALL BE STAGGERED A MINIMUM OF 6".
E. FOR NEW STREETS, THE CONTRACTOR SHALL PERMIT THE BITUMINOUS CONCRETE BINDER COURSE TO WEATHER PRIOR TO THE INSTALLATION OF THE BITUMINOUS CONCRETE SURFACE COURSE...
5. TESTING AND FINAL ACCEPTANCE: MATERIAL TESTING
A. THE CONTRACTOR SHALL FOLLOW THE QUALITY CONTROL TESTING PROGRAM FOR CONCRETE AND PAVEMENT MATERIALS ESTABLISHED BY THE OWNER AND/OR MUNICIPALITY.
B. WHEN REQUESTED BY THE OWNER, TEST RESULTS AND DOCUMENTATION FOR THE CONCRETE, BASE COURSE, BITUMINOUS CONCRETE BINDER, AND/OR SURFACE COURSE, SHALL BE SUBMITTED FOR VERIFICATION.
C. PRIOR TO PLACEMENT OF THE BITUMINOUS CONCRETE SURFACE COURSE, THE CONTRACTOR SHALL OBTAIN APPROVAL FROM THE OWNER OR MUNICIPALITY...
D. WHEN REQUIRED BY THE OWNER OR MUNICIPALITY, THE CONTRACTOR SHALL OBTAIN APPROVAL FROM THE OWNER OR MUNICIPALITY...
E. FINAL ACCEPTANCE OF THE TOTAL PAVEMENT INSTALLATION SHALL BE SUBJECT TO THE TESTING AND CHECKING REQUIREMENTS CITED ABOVE.

SANITARY SEWER NOTES

- 1. ALL SANITARY SEWER PIPES AND JOINTS SHALL CONFORM TO PVC PIPE SDR 26, ASTM D-3034 WITH ASTM D-3199 JOINTS, OR DUCTILE IRON PIPE CL 52 (ANSI A-21.51), WITH (ANSI A-21.11) JOINTS.
2. "BAND-SEAL" OR SIMILAR FLEXIBLE TYPE COUPLINGS SHALL BE USED WHEN CONNECTING SEWER PIPES OF DISSIMILAR MATERIALS.
3. ALL SANITARY SEWER CONSTRUCTION REQUIRES CRUSHED STONE BEDDING 1/2" TO 1" IN SIZE, (C-11) WITH A MINIMUM THICKNESS EQUAL TO THAT OF THE PIPE, BUT NOT LESS THAN 12" ABOVE TOP OF PIPE.
4. ALL UNSUITABLE MATERIAL SHALL BE REMOVED BELOW THE PROPOSED SANITARY SEWER AND REPLACED WITH COMPACTED STONE OR GRAVEL.
5. TRENCHES LOCATED UNDER A LINE AT 1:1 SLOPE FROM THE PAVEMENTS, ROADWAYS, SIDEWALKS, AND DRIVEWAYS WHERE SHOWN ON THE PLANS, SHALL BE BACKFILLED WITH SELECT GRANULAR BACKFILL (C-7) AND THOROUGHLY MECHANICALLY COMPACTED IN 9" THICK (LOOSE MEASUREMENT) LAYERS.
6. ALL SANITARY SEWERS ARE TO BE CONSTRUCTED USING A LASER INSTRUMENT TO MAINTAIN LINE AND GRADE.
7. ALL FLOOR DRAINS SHALL CONNECT TO THE SANITARY SEWER.
8. CONNECTIONS TO EXISTING SANITARY SEWER SYSTEM SHALL NOT BE DONE UNTIL AUTHORIZED BY THE MUNICIPALITY.
9. WATERMANS SHALL BE SEPARATED FROM SANITARY SEWERS AND STORM SEWERS IN ACCORDANCE WITH IEPA REQUIREMENTS AS SPECIFIED IN "WATER MAIN" SECTION.
10. NO WATER LINE SHALL BE PLACED IN THE SAME TRENCH AS A SEWER LINE EXCEPT UNDER SPECIAL CIRCUMSTANCES UNDER THE CLOSE SUPERVISION OF THE MUNICIPAL ENGINEER.
11. PERMISSION SHALL BE OBTAINED FROM THE MUNICIPAL ENGINEERING DEPARTMENT IN WRITING PRIOR TO BEGINNING CONSTRUCTION.
12. THE BOTTOM OF A WATER LINE SHALL BE INSTALLED ON A SHELF A MINIMUM OF 18" ABOVE THE TOP OF THE SEWER AND 18" HORIZONTALLY AWAY FROM THE EDGE OF THE SEWER.
13. MANHOLES: SANITARY SEWER MANHOLES SHALL BE 4'-0" I.D. PRECAST CONCRETE SECTIONS CONFORMING TO ASTM D-478 WITH "D" RING JOINTS...
14. DROP MANHOLE ASSEMBLIES: DROP MANHOLE ASSEMBLIES SHALL BE PROVIDED AT THE JUNCTION OF SANITARY SEWERS WHERE THE DIFFERENCE IN INVERT GRADES EXCEEDS TWO FEET (2') OR AS SHOWN ON THE PLANS...
15. CLEANING: ALL MANHOLES AND PIPES SHALL BE THOROUGHLY CLEANED OF DIRT AND DEBRIS...
16. TESTING: DEFLECTION AND LEAKAGE TESTING WILL BE REQUIRED...
17. TELEVISION: ALL SANITARY SEWERS SHALL BE TELEVIEWED WITH A COPY OF THE DVD OR HARD DRIVE AND A WRITTEN REPORT SHALL BE SUBMITTED AND REVIEWED BY THE OWNER OR MUNICIPALITY...
18. RECORD DRAWINGS: THE CONTRACTOR SHALL PROVIDE ALL INFORMATION TO PREPARE RECORD DRAWINGS...
19. TEST RESULTS: IF THE SANITARY SEWER INSTALLATION FAILS TO MEET THE TEST REQUIREMENTS...
20. VERIFICATION: CONTRACTOR SHALL SUBMIT TWO CERTIFIED COPIES OF ALL REPORTS OF TESTS CONDUCTED BY AN INDEPENDENT LABORATORY...
21. RECORD DRAWINGS: THE CONTRACTOR SHALL PROVIDE ALL INFORMATION TO PREPARE RECORD DRAWINGS...
22. LEAKAGE TESTING: INSPECTION AND LEAKAGE TESTING SHALL BE PERFORMED FOR ALL MANHOLES FOR WATER TIGHTNESS...
23. ANY SANITARY MANHOLES IN THE FLOODPLAIN SHALL BE PROVIDED WITH WATER TIGHT LOCKED-TYPE COVERS IF THEY ARE NOT 1 FOOT ABOVE THE FLOODPLAIN ELEVATION.

STORM SEWER NOTES

- 1. STORM SEWER PIPE: ALL STORM SEWER PIPE SHALL BE HOPE FOR SEWERS 24" OR SMALLER IN DIAMETER AND RCP FOR SEWERS GREATER THAN 24" IN DIAMETER OR LESS THAN 2" OF COVER (TO SUBGRADE) UNLESS NOTED OTHERWISE...
HOPE: HIGH DENSITY POLYETHYLENE CORRUGATED PIPE WITH SMOOTH INTERIOR MEETING AASHTO M-294 SUCH AS ADS N-12 BY ADVANCED DRAINAGE SYSTEMS, COLUMBUS, OHIO OR APPROVED EQUAL.
2. RCP: "BAND SEAL" OR SIMILAR COUPLINGS SHALL BE USED WHEN JOINING SEWER PIPES OF DISSIMILAR MATERIALS.
3. ALL FOOTING DRAIN AND SUMP PUMP DISCHARGE PIPES SHALL BE CONNECTED TO THE STORM SEWER SYSTEM...
4. BEDDING: ALL STORM SEWERS SHALL BE INSTALLED ON A TYPE GRANULAR BEDDING, 1/4" TO 3/4" IN SIZE (C-13) WITH A MINIMUM THICKNESS EQUAL TO 1/4 THE OUTSIDE DIAMETER OF THE SEWER PIPE...
5. CONSTRUCTION: ALL STORM SEWERS ARE TO BE CONSTRUCTED USING A LASER INSTRUMENT TO MAINTAIN LINE AND GRADE.
6. COVER: THE CONTRACTOR SHALL MAINTAIN AT LEAST THREE (3') FEET OF COVER OVER THE TOP OF SHALLOW PIPES...
7. STRUCTURES: MANHOLE, CATCH BASIN AND INLET BOTTOMS SHALL BE PRECAST CONCRETE SECTIONAL UNITS OR MONOLITHIC CONCRETE...
8. ALL LOW POINT STORM STRUCTURES ARE TO HAVE 10' OF 4" UNDERDRAIN PROVIDED 24" BELOW THE TOP OF LID IN EACH DIRECTION.
9. CLEANING: THE STORM SEWER SYSTEM SHALL BE THOROUGHLY CLEANED PRIOR TO FINAL INSPECTION AND TESTING.
10. THE STORM SEWER SHALL BE TELEVIEWED IF REQUIRED BY THE MUNICIPALITY.

SOIL EROSION AND SEDIMENTATION CONTROL SPECIFICATIONS

- 1. GENERAL
A. THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE PROVISIONS OF THE MUNICIPAL CODE...
B. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER INSTALLATION AND MAINTENANCE OF ALL TEMPORARY AND PERMANENT EROSION CONTROL MEASURES.
C. SEDIMENT AND EROSION CONTROL DEVICES SHALL BE FUNCTIONAL BEFORE LAND IS OTHERWISE DISTURBED ON THE SITE.
2. IMPLEMENTATION
A. BEFORE STARTING CLEARING AND SITE GRADING WORK, A CONSTRUCTION ENTRANCE AND SILT FENCES SHALL BE INSTALLED...
B. THE CONSTRUCTION ENTRANCE TO THE SITE SHALL BE STABILIZED WITH GRAVEL PRIOR TO ANY WORK ON THE SITE...
C. GRAVELED ROADS, ACCESS DRIVES, PARKING AREAS OF SUFFICIENT WIDTH AND LENGTH, AND VEHICLE WASHDOWN FACILITIES...
D. ANY PUBLIC AND/OR PRIVATE ROADS THAT ARE ADJACENT TO THE SITE AND USED FOR INGRESS AND EGRESS...
E. SILT SAVERS OR APPROVED EQUAL SHALL BE INSTALLED AND MAINTAINED AT ALL INTAKE STRUCTURES...
F. IF A STOCKPILE IS TO REMAIN IN PLACE FOR MORE THAN 10 DAYS...
G. THE SURFACE OF STRIPPED AREAS SHALL BE PERMANENTLY OR TEMPORARILY PROTECTED FROM SOIL EROSION...
H. WATER PUMPED OR OTHERWISE DISCHARGED FROM THE SITE DURING CONSTRUCTION Dewatering SHALL BE FILTERED.
3. INSPECTION AND MAINTENANCE
A. THE TEMPORARY EROSION CONTROL MEASURES SHALL BE IN PLACE AND WORK EFFECTIVELY UNTIL ALL THE PERMANENT EROSION CONTROL ITEMS ARE FULLY FUNCTIONAL.
B. THE CONTRACTOR SHALL INSPECT EROSION CONTROL MEASURES WEEKLY AND AMER AND ALL VISIBLE LEAKAGE ELIMINATED...
C. AT THE COMPLETION OF THE PROJECT, ALL STORM SEWER PIPES AND STRUCTURES SHALL BE CLEANED AND FREE OF DIRT AND DEBRIS...
17. ALL WATERMANS SHALL BE PRESSURE TESTED, FLUSHED AND DISINFECTED IN ACCORDANCE WITH AWWA AND MUNICIPAL SPECIFICATIONS...
18. CONSTRUCTION SHALL EXTEND ON EACH SIDE OF THE CROSSING UNTIL THE NORMAL DISTANCE FROM THE WATERMAIN TO THE SEWER OR DRAIN LINE IS AT LEAST TEN FEET.

VILLAGE OF TINLEY PARK EROSION CONTROL NOTES

The following general principles shall apply to any movement of earth and any sedimentation and erosion control...
(A) The smallest practical area of land shall be exposed at any given time during development...
(B) Sump pits and other depressions shall be kept to no less than a quarter of a foot above the ground...
(C) Temporary vegetation or, where appropriate, mulching or other non-erodible cover shall be used to stabilize exposed soil...
(D) Sediment basins, debris basins, desilting basins, or silt traps shall be installed and maintained to remove sediment from runoff waters...
(E) Protection shall be made to effectively accommodate the increased runoff caused by changed soil and surface conditions during and after development...
(F) Erosion control shall be installed as soon as possible...
(G) The plan of development shall relate to the topography and soils of the site so that the down-slope potential for erosion is minimized...
(H) Natural plant cover shall be retained and protected so far as is consistent with developing the site.

WATERMAIN NOTES

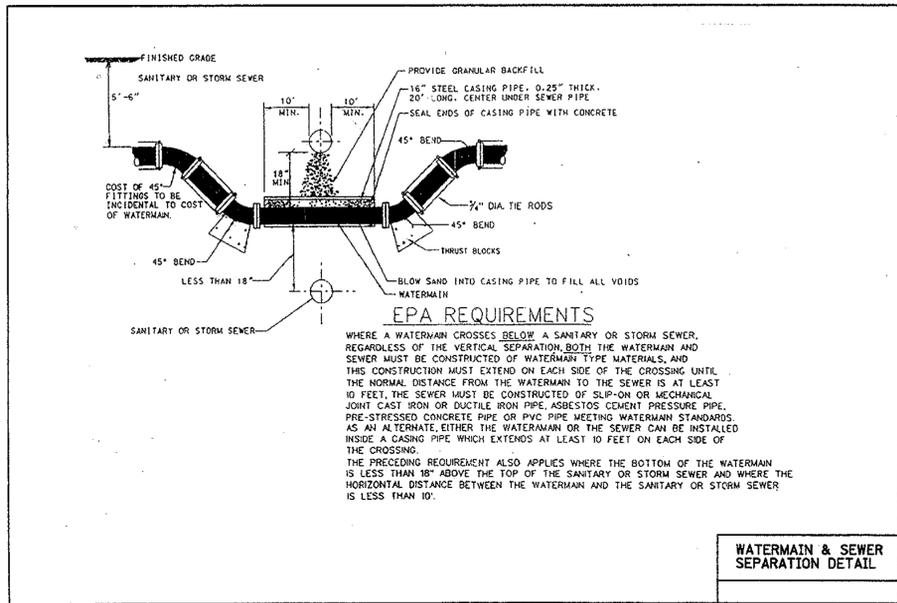
- 1. PIPE MATERIALS: WATERMANS OR SERVICES 3" OR LARGER IN DIAMETER SHALL BE CONSTRUCTED OF BITUMINOUS COATED, CEMENT LINED DUCTILE IRON PIPE, CLASS 52, CONFORMING TO ANSI A-21.50 (AWWA C150) AND ANSI A-21.51 (AWWA C151)...
2. FITTINGS: ALL FITTINGS SHALL BE OF DUCTILE IRON IN ACCORDANCE WITH AWWA LATEST STANDARD RATED 350 PSI.
3. MECHANICAL JOINTS: FITTINGS SHALL BE INSTALLED ON STEEL AND BOLTS...
4. A BARE #6 STRANDED ALUMINUM TRACER WIRE AND 3" WIDE, 4 MIL THICK, RED PLASTIC WARNING TAPE SHALL BE INSTALLED TO THE JOINTS...
5. WATER SERVICES: WATER SERVICE PIPE, 2" IN DIAMETER OR SMALLER, SHALL BE TYPE K COPPER WATER TUBING...
6. VALVES: GATE VALVES SHALL BE USED ON ALL WATERMAIN 3" TO 10" IN SIZE...
7. VALVE VAULTS: VALVE VAULTS SHALL BE PRECAST CONCRETE STRUCTURES AS NOTED ON THE PLANS...
8. FIRE HYDRANTS: FIRE HYDRANTS SHALL CONFORM TO AMERICAN WATER WORKS ASSOCIATION (AWWA) STANDARD NO. C-502...
9. CORPORATION STOPS: CORPORATION STOPS SHALL BE BRONZE BODY KEY STOPS CONFORMING TO AWWA C-800...
10. SERVICE BOX: PROVIDE CURB VALVE AND CURB BOX AS INDICATED ON THE PLANS...
11. MAXIMUM DEFLECTION AT PIPE JOINTS SHALL BE IN ACCORDANCE WITH PIPE MANUFACTURER'S CURRENT RECOMMENDATIONS AND AWWA SPECIFICATIONS.
12. BEDDING: ALL WATERMANS SHALL BE BEDDED ON FIRM GROUND WITH BELLHOLES EXCAVATED SO THAT THE PIPE HAS AN EVEN BEDDING FOR IT'S ENTIRE LENGTH...
13. GRANULAR BEDDING MATERIAL OR GRANULAR BACKFILL MATERIAL SHALL BE CAREFULLY PLACED TO 12" OVER THE TOP OF THE PIPE...
14. A MINIMUM DEPTH OF COVER OF 5' SHALL BE MAINTAINED OVER THE WATER LINES...
15. CONCRETE THRUST BLOCKING SHALL BE INSTALLED ON WATERMANS AT ALL BENDS, TEES, ELBOWS, ETC...
16. IEPA WATERMAIN PROTECTION
1. HORIZONTAL SEPARATION:
a) WATERMANS SHALL BE LAID AT LEAST TEN FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED DRAIN, STORM SEWER, SANITARY SEWER OR SEWER SERVICE CONNECTION.
b) WATERMANS MAY BE LAID CLOSER THAN TEN FEET TO A SEWER LINE WHEN:
1) THE CONSTRUCTION OF THE WATERMAIN IS IN PROGRESS AND THE WATERMAIN IS TO BE COVERED WITH JOINTS EQUIQUISITANCE FROM THE SEWER OR DRAIN.
2) BOTH THE WATERMAIN AND SEWER SHALL BE CONSTRUCTED WITH PIPE EQUIVALENT TO WATERMAIN STANDARDS OF CONSTRUCTION WHEN DESCRIBED IN (C) ABOVE OR.
3) THE WATERMAIN PASSES UNDER A SEWER OR DRAIN.
c) THE VERTICAL SEPARATION OF 18 INCHES BETWEEN THE INVERT OF THE SEWER OR DRAIN AND THE CROWN OF THE WATERMAIN SHALL BE MAINTAINED WHERE A WATERMAIN CROSSES UNDER A SEWER OR DRAIN...
2. VERTICAL SEPARATION:
a) WATERMAIN SHALL BE LAID SO THAT ITS INVERT IS 18 INCHES ABOVE THE CROWN OF THE DRAIN OR SEWER...
b) WATERMANS SHALL BE MAINTAINED WHERE A WATERMAIN CROSSES UNDER A SEWER OR DRAIN...
17. ALL WATERMANS SHALL BE PRESSURE TESTED, FLUSHED AND DISINFECTED IN ACCORDANCE WITH AWWA AND MUNICIPAL SPECIFICATIONS...
18. CONSTRUCTION SHALL EXTEND ON EACH SIDE OF THE CROSSING UNTIL THE NORMAL DISTANCE FROM THE WATERMAIN TO THE SEWER OR DRAIN LINE IS AT LEAST TEN FEET.

Table with columns: NO., DATE, REMARKS. Row 4: 04/22/15, PER VILLAGE / MWRDCC. Row 5: 02/27/15, PER CLIENT.

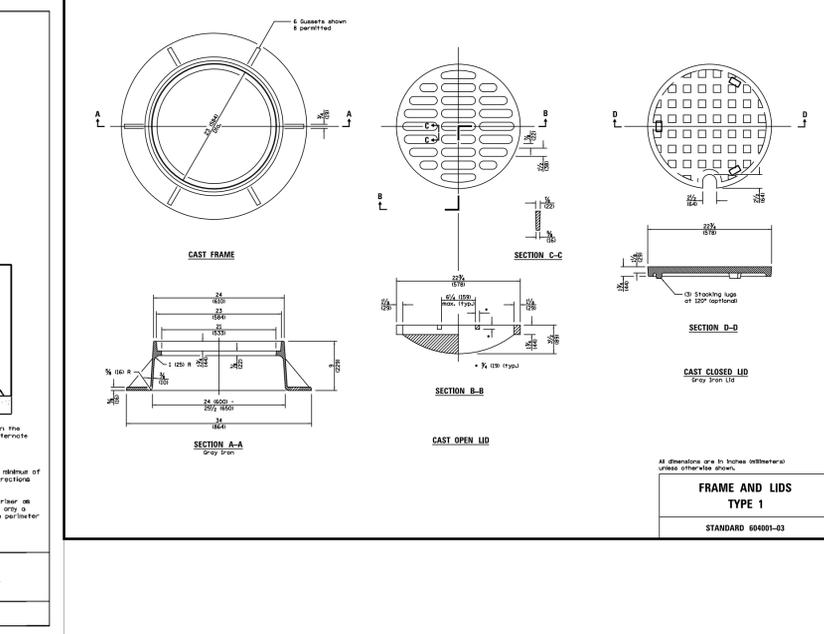
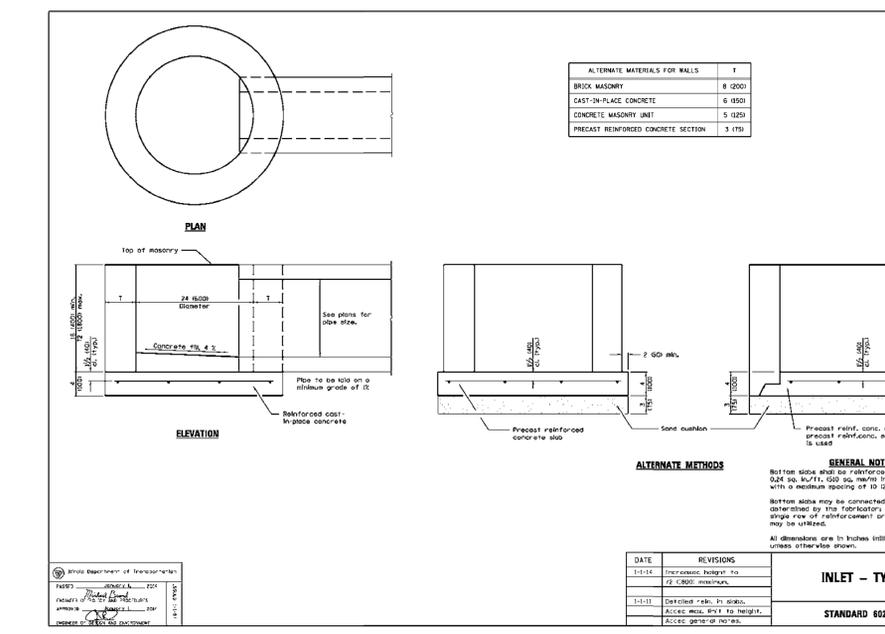
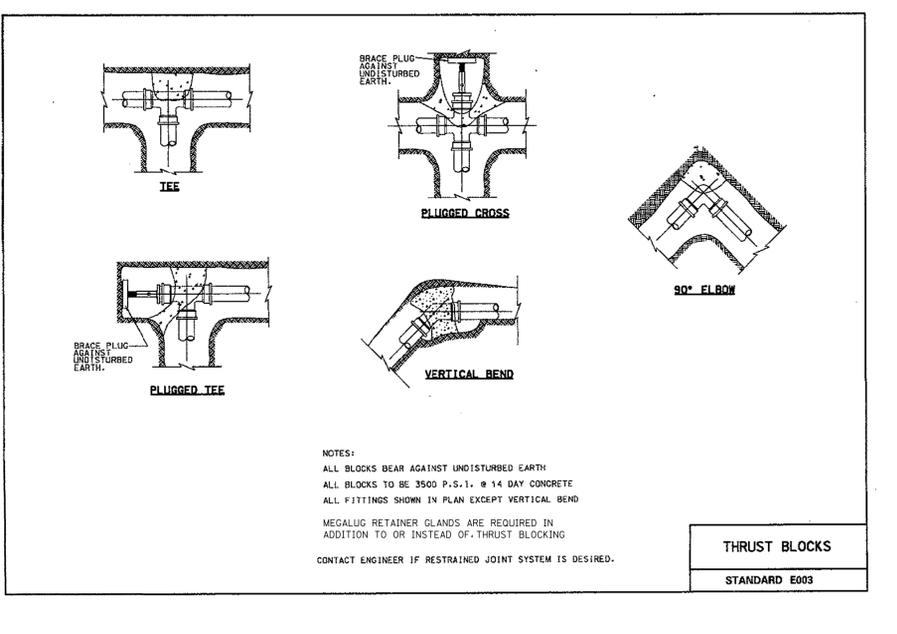
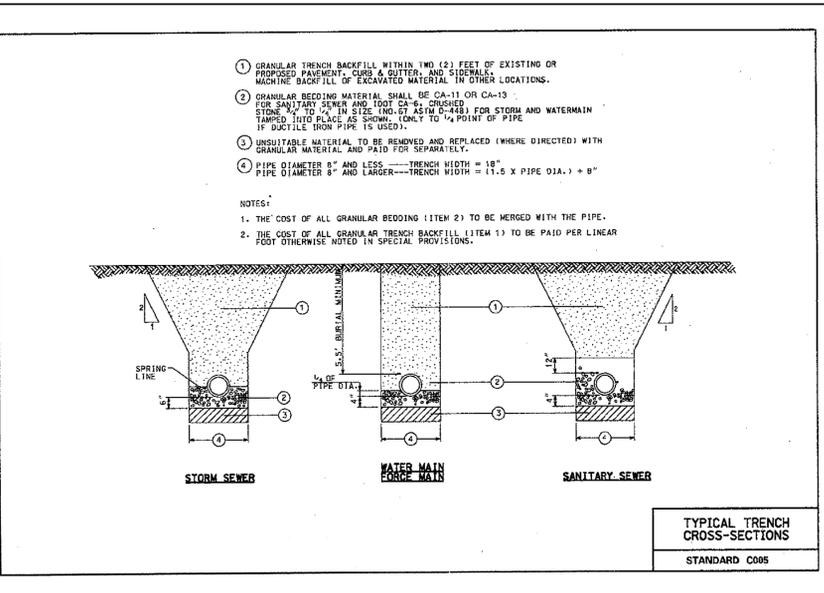
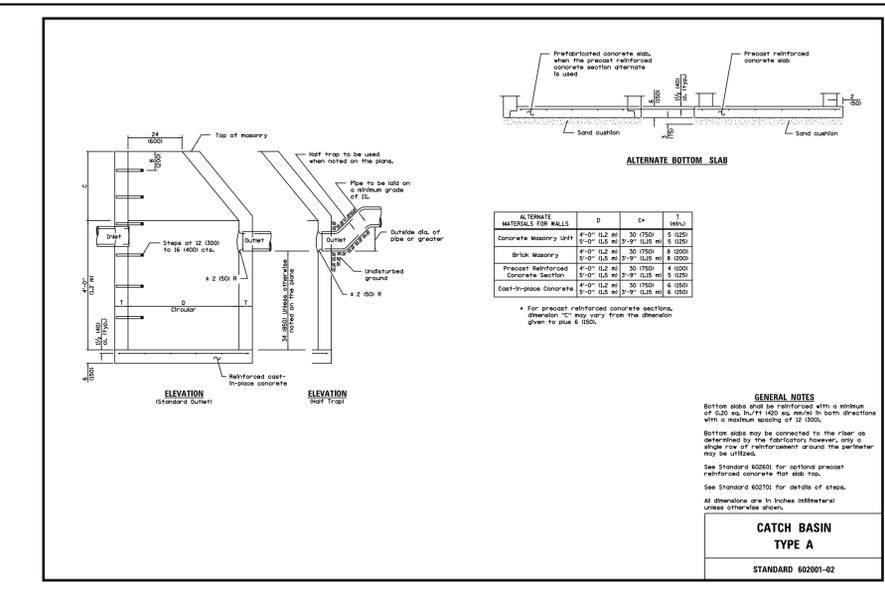
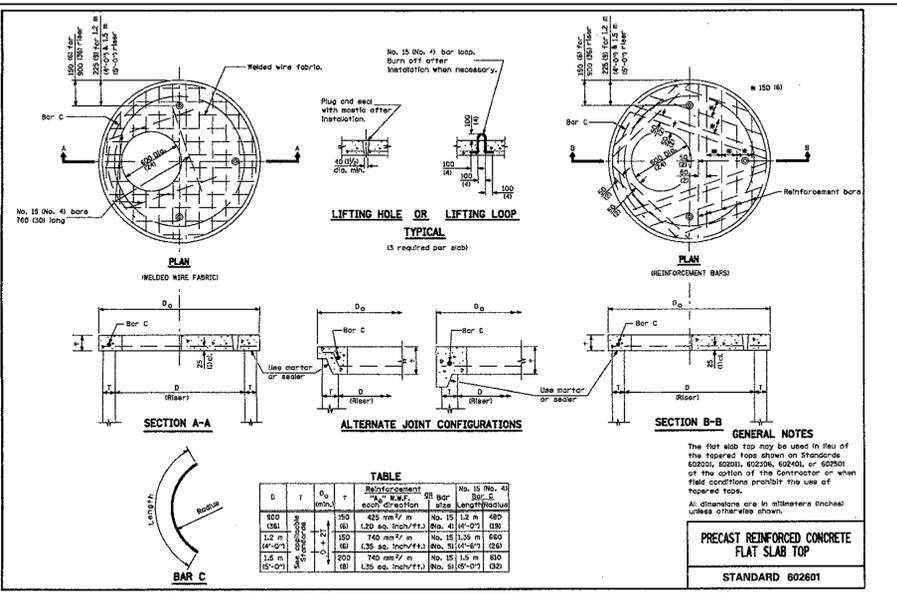
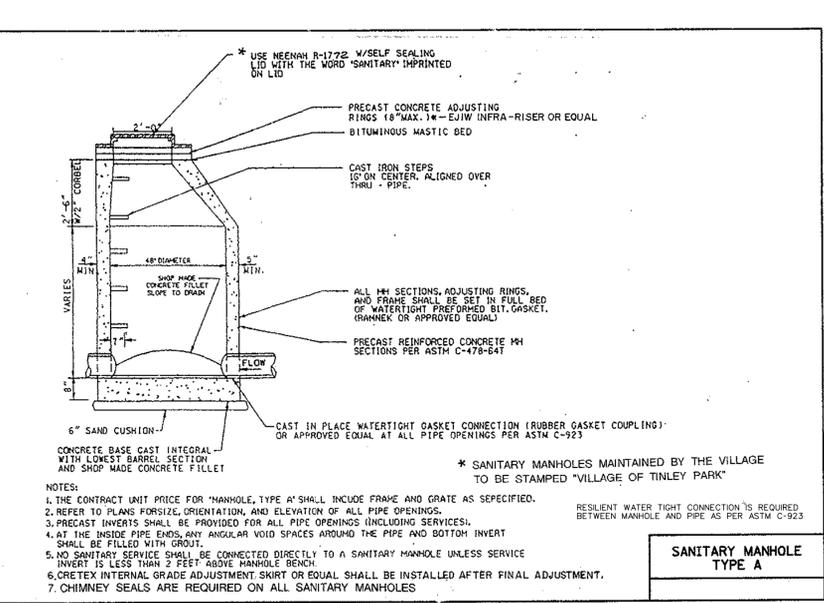
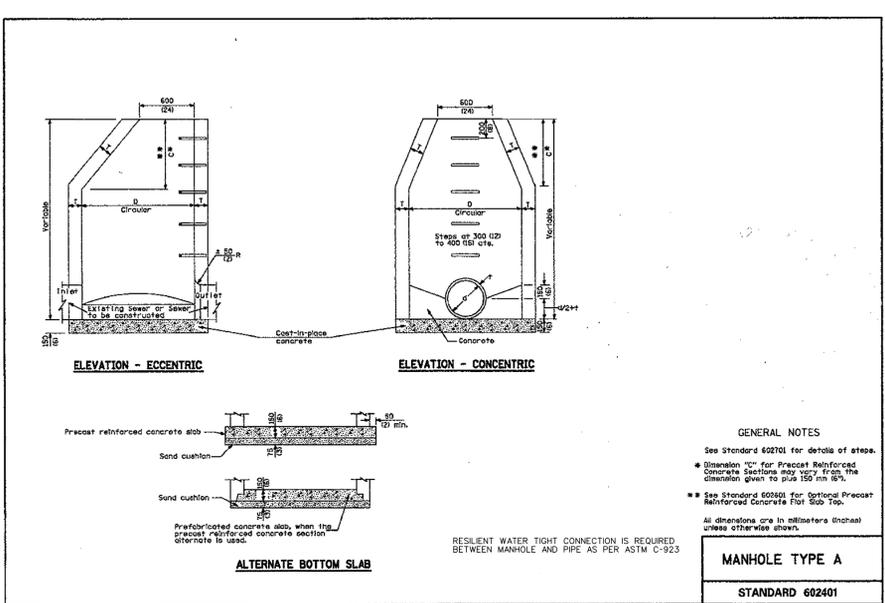
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Table with columns: SPECIFICATIONS, THE GREAT ESCAPE, TINLEY PARK, ILLINOIS.

Spaceco Inc. logo and contact information: FILENAME: 8126SPEC.DGN, DATE: 07/15/14, JOB NO. 8126, SHEET 51, 10 OF 17.



**WATERMAIN & SEWER SEPARATION DETAIL**



**DETAILS - 1**

**THE GREAT ESCAPE**  
TINLEY PARK, ILLINOIS

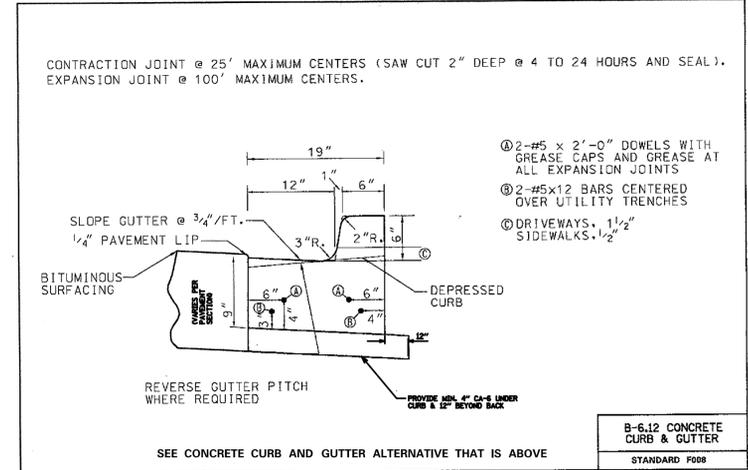
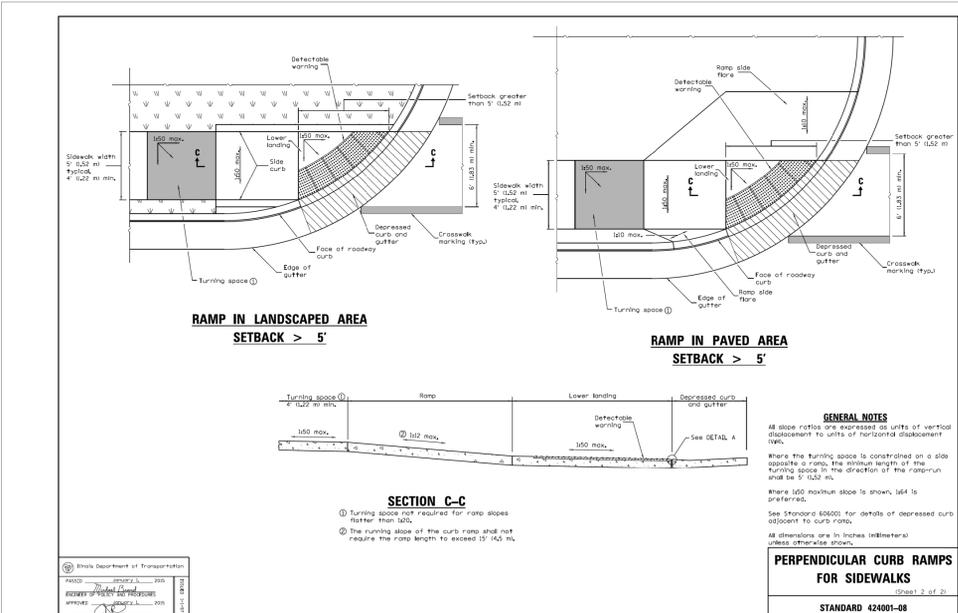
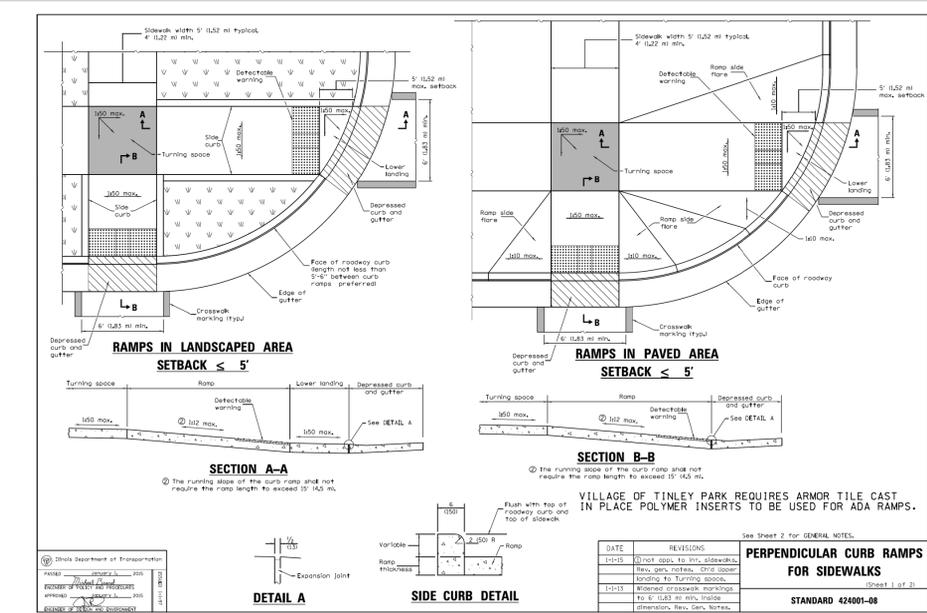
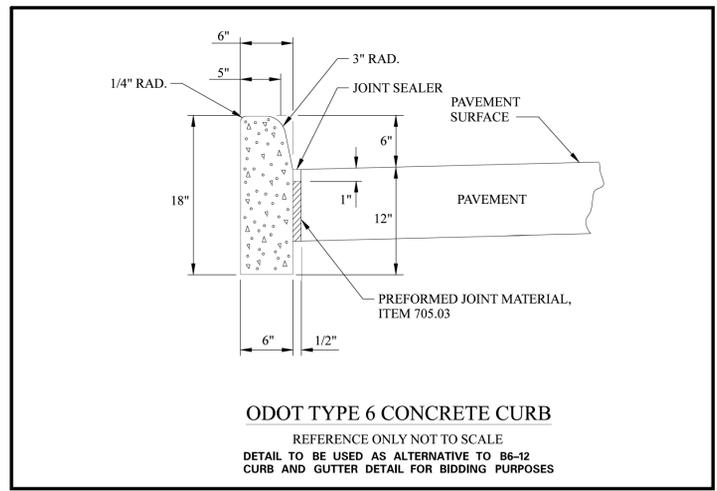
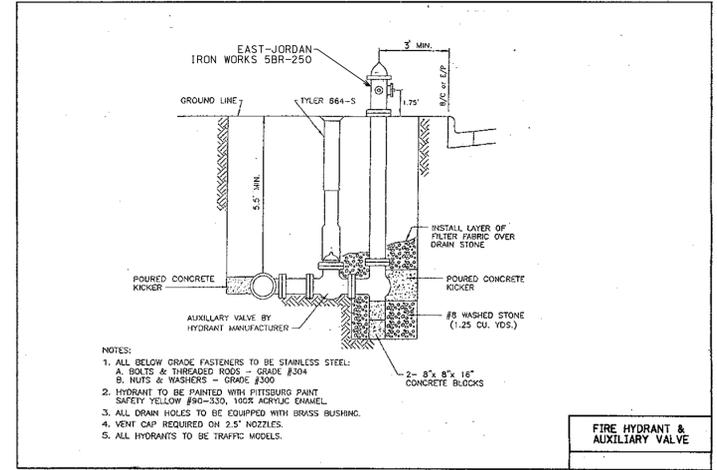
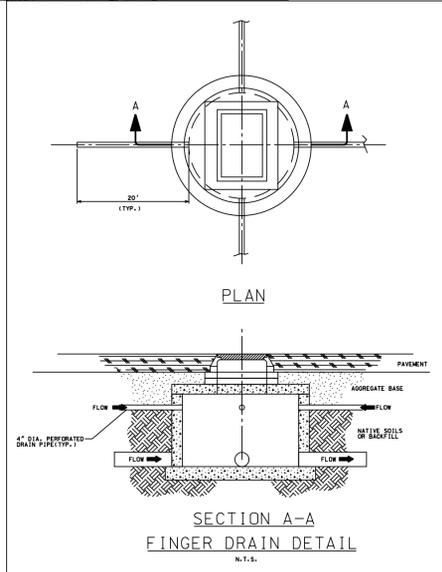
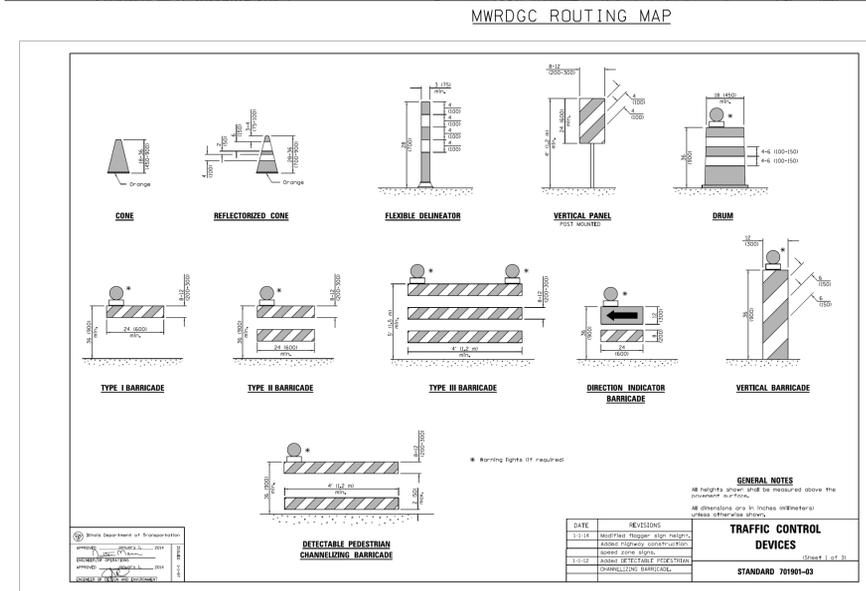
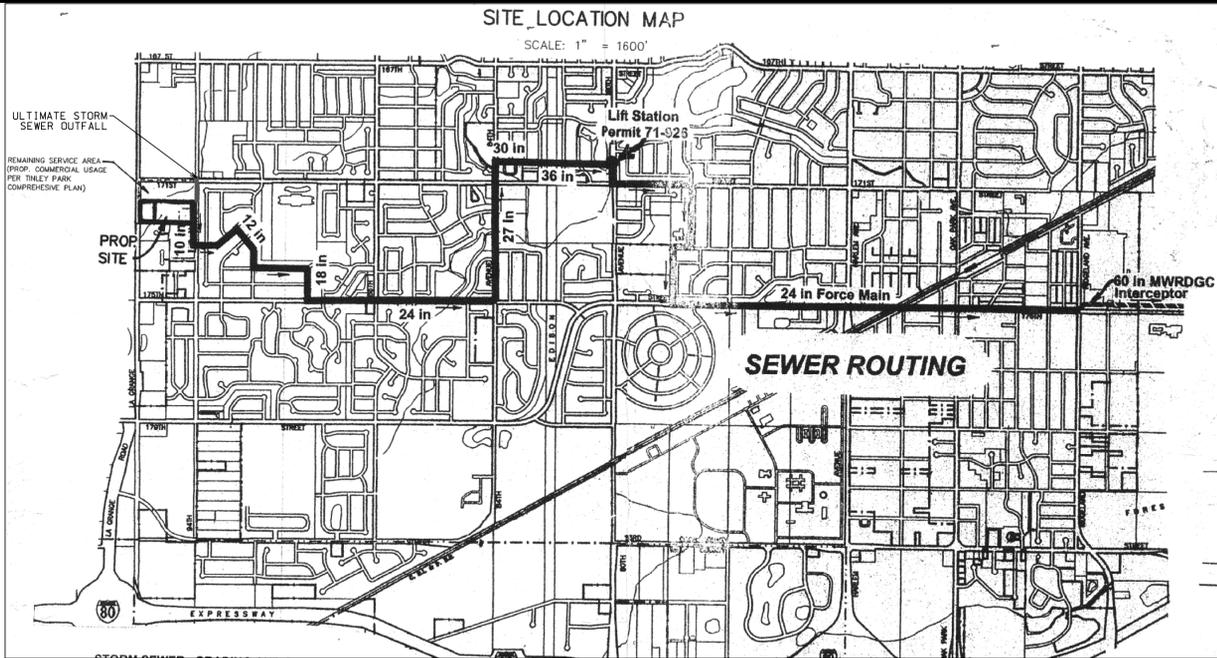
CONSULTING ENGINEERS  
SITE DEVELOPMENT ENGINEERS  
LAND SURVEYORS

9575 W. Higgins Road, Suite 700,  
Rosemont, Illinois 60018  
Phone: (847) 676-4060 Fax: (847) 676-4065

**SPACECO INC.**

FILENAME: 8126DET01.DGN  
DATE: 07/15/14  
JOB NO. 8126  
SHEET 11 OF 17

NO.	DATE	REMARKS
4	04/22/15	PER VILLAGE / MWROCC
5	02/27/15	PER CLIENT



NO. DATE REMARKS

4 04/22/15 PER VILLAGE / MWRDGC

5 02/27/15 PER CLIENT

NO. DATE REMARKS

DETAILS - 2

**THE GREAT ESCAPE**  
TINLEY PARK, ILLINOIS

CONSULTING ENGINEERS  
SITE DEVELOPMENT ENGINEERS  
LAND SURVEYORS

9575 W. Higgins Road, Suite 700,  
Rosemont, Illinois 60018  
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**SPACECO INC.**

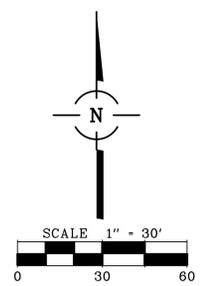
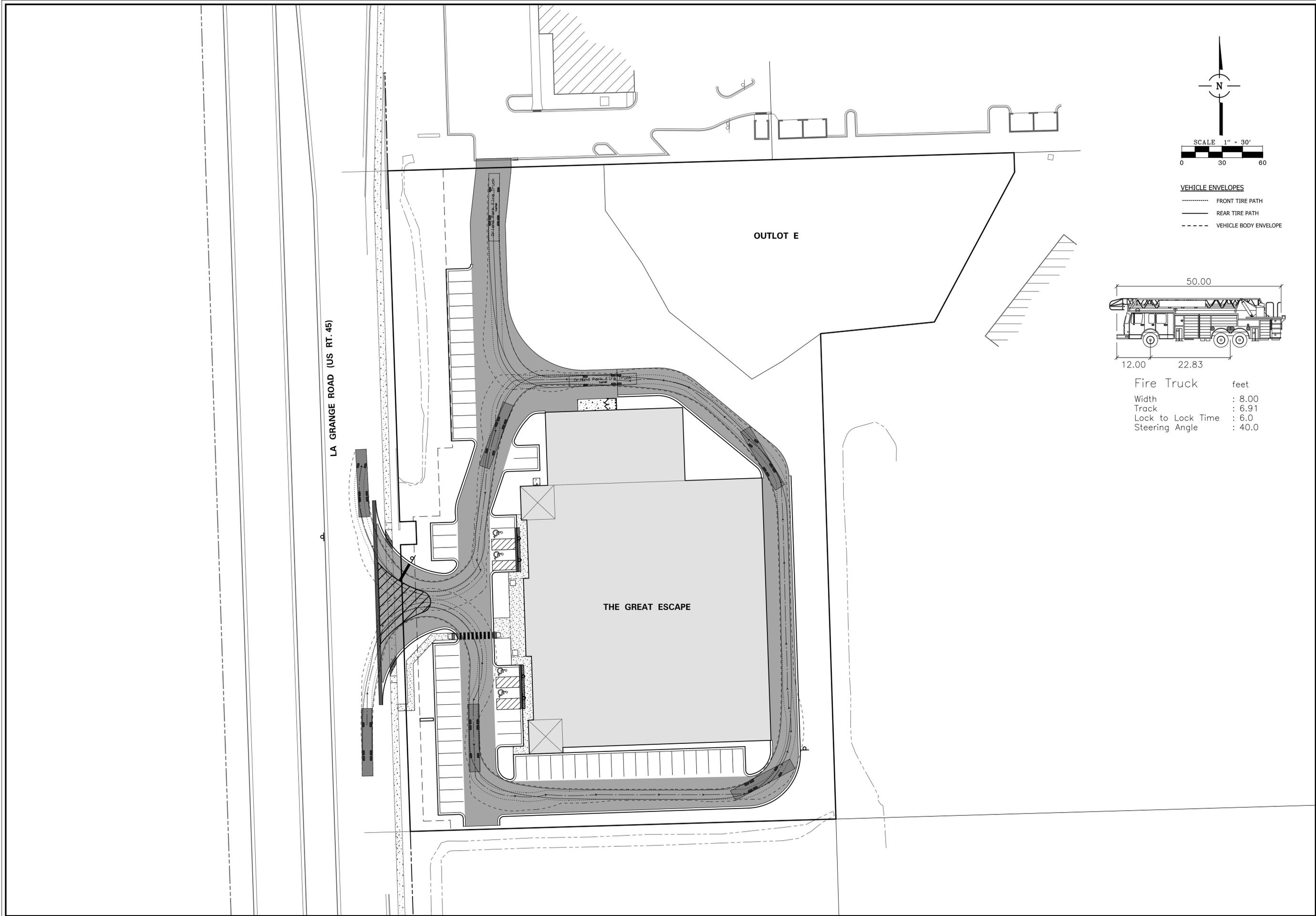
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DATE:  
07/15/14

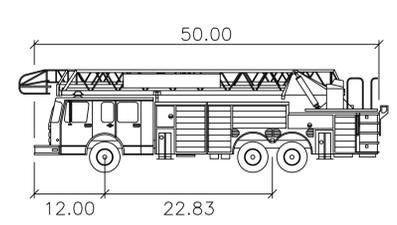
JOB NO.  
8126

SHEET  
**D2**  
12 OF 17





**VEHICLE ENVELOPES**  
 ..... FRONT TIRE PATH  
 ——— REAR TIRE PATH  
 - - - VEHICLE BODY ENVELOPE



Fire Truck      feet  
 Width            : 8.00  
 Track            : 6.91  
 Lock to Lock Time : 6.0  
 Steering Angle   : 40.0

NO.	DATE	REMARKS

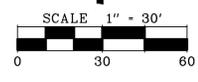
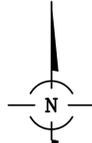
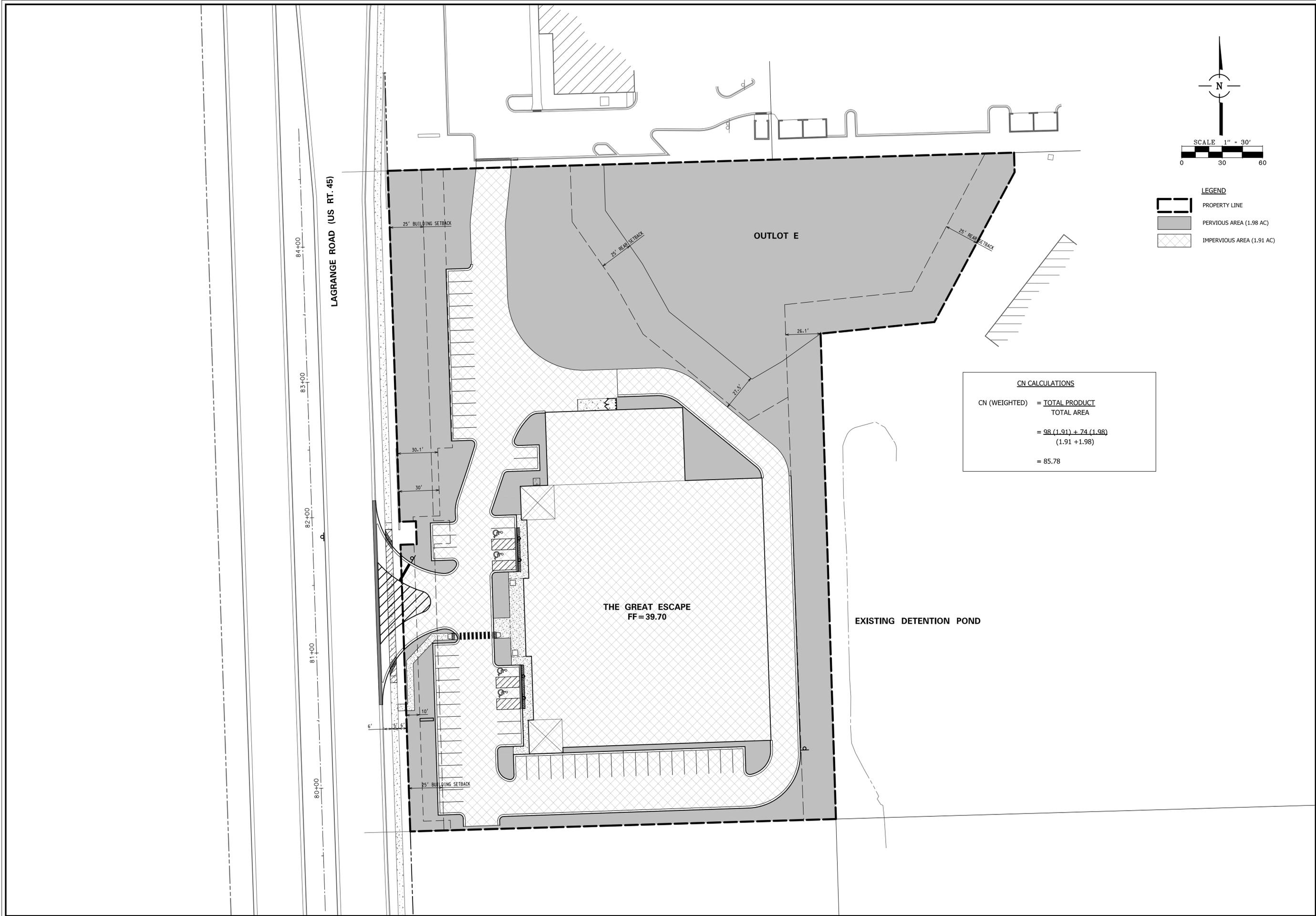
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3	02/27/15	PER CLIENT
NO.	DATE	REMARKS

**TRUCK TURN EXHIBIT - FIRETRUCK**  
**THE GREAT ESCAPE**  
 TINLEY PARK, ILLINOIS

**CONSULTING ENGINEERS**  
**SITE DEVELOPMENT ENGINEERS**  
**LAND SURVEYORS**  
 9575 W. Higgins Road, Suite 700,  
 Rosemont, Illinois 60018  
 Phone: (847) 676-4060 Fax: (847) 676-4065



FILENAME: 8126TRUCKTURNS01.DGN
DATE: 07/31/14
JOB NO. 8126
SHEET <b>EXH-2</b> 14 OF 17



- LEGEND**
- PROPERTY LINE
  - PERVIOUS AREA (1.98 AC)
  - IMPERVIOUS AREA (1.91 AC)

**CN CALCULATIONS**

CN (WEIGHTED) =  $\frac{\text{TOTAL PRODUCT}}{\text{TOTAL AREA}}$

=  $\frac{98 (1.91) + 74 (1.98)}{(1.91 + 1.98)}$

= 85.78

NO.	DATE	REMARKS

4	04/22/15	PER VILLAGE / MWRDCC
3	02/27/15	PER CLIENT
1	08/11/14	SET FOR PERMIT SUBMITTAL

**MWRD DRAINAGE EXHIBIT**

**THE GREAT ESCAPE**  
TINLEY PARK, ILLINOIS

**CONSULTING ENGINEERS**  
**SITE DEVELOPMENT ENGINEERS**  
**LAND SURVEYORS**

9575 W. Higgins Road, Suite 700,  
Rosemont, Illinois 60018  
Phone: (847) 676-4060 Fax: (847) 676-4065

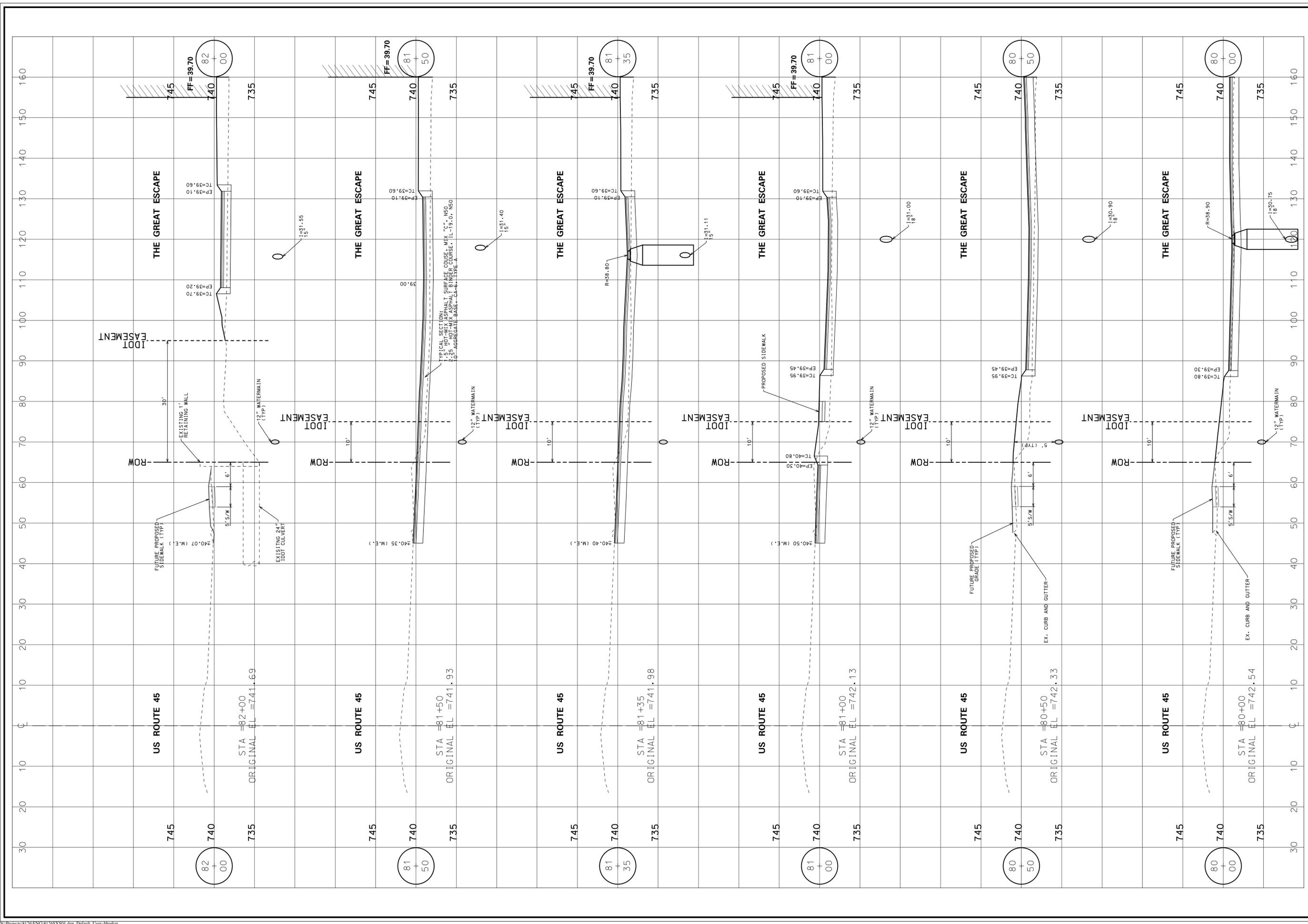


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8126MWRD.DGN

DATE:  
07/15/14

JOB NO.  
8126

SHEET  
**MWRD**  
15 OF 17



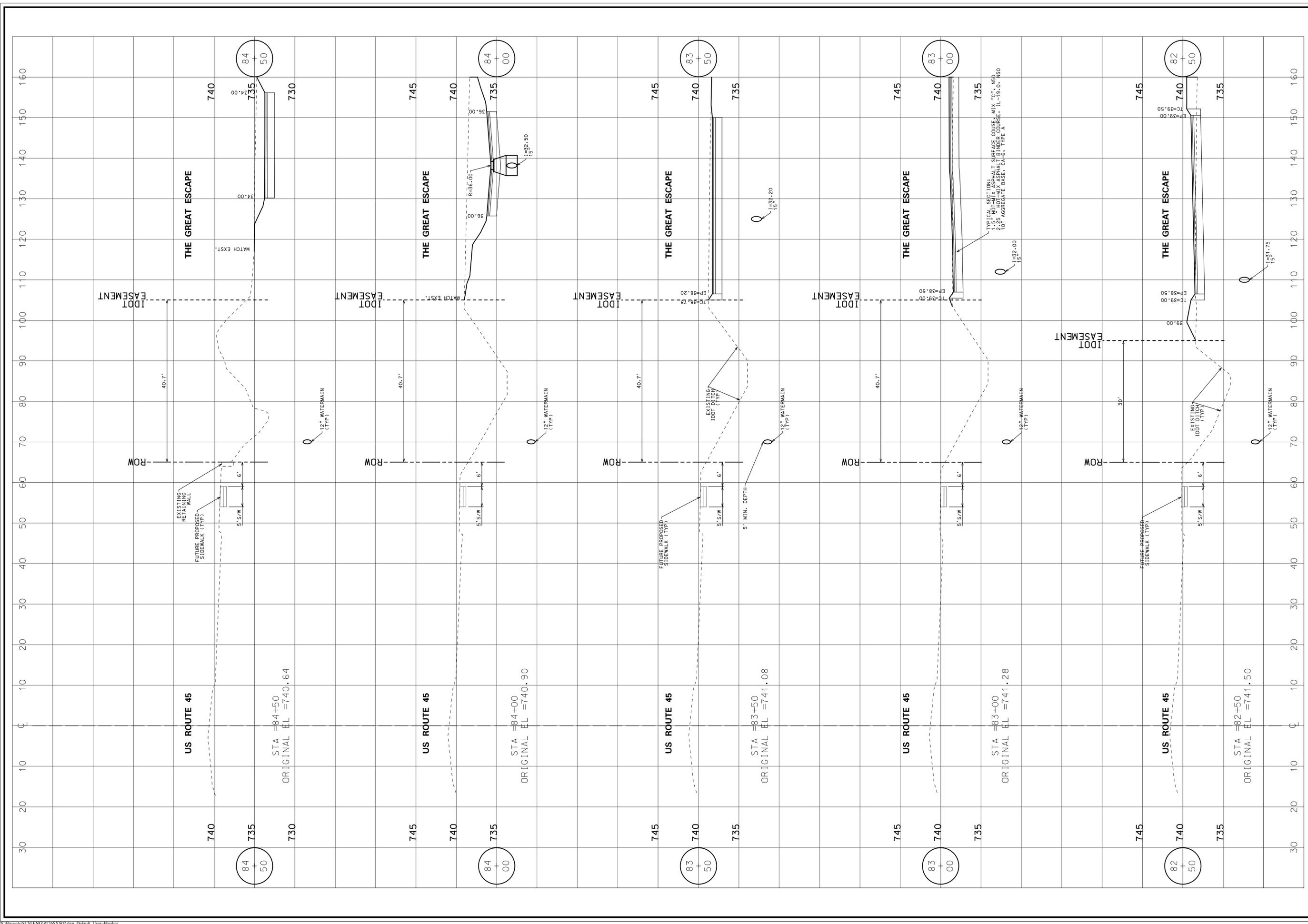
<b>CROSS SECTIONS-1</b>		
<b>THE GREAT ESCAPE</b> TINLEY PARK, ILLINOIS		
NO.	DATE	REMARKS
4	04/22/15	PER VILLAGE / MWIRDCG
3	02/27/15	PER CLIENT

CONSULTING ENGINEERS	 <b>SPACECO INC.</b>
SITE DEVELOPMENT ENGINEERS	
LAND SURVEYORS	

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Rosemont, Illinois 60018  
Phone: (847) 676-4060 Fax: (847) 676-4065

FILENAME:
DATE: 07/15/14
JOB NO. 8126
SHEET <b>XS1</b> 16 OF 17



<b>CROSS SECTIONS-2</b>	
<b>THE GREAT ESCAPE</b> TINLEY PARK, ILLINOIS	
<b>CONSULTING ENGINEERS</b> SITE DEVELOPMENT ENGINEERS LAND SURVEYORS	<small>9575 W. Higgins Road, Suite 700, Rosemont, Illinois 60018 Phone: (847) 676-4060 Fax: (847) 676-4065</small>
<b>SPACECO INC.</b>	
FILENAME: _____	
DATE: 07/15/14	
JOB NO. 8126	
SHEET <b>XS2</b> 17 OF 17	

NO.	DATE	REMARKS
4	04/22/15	PER VILLAGE / MWDRGC
3	02/27/15	PER CLIENT

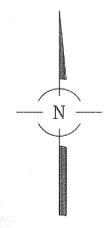
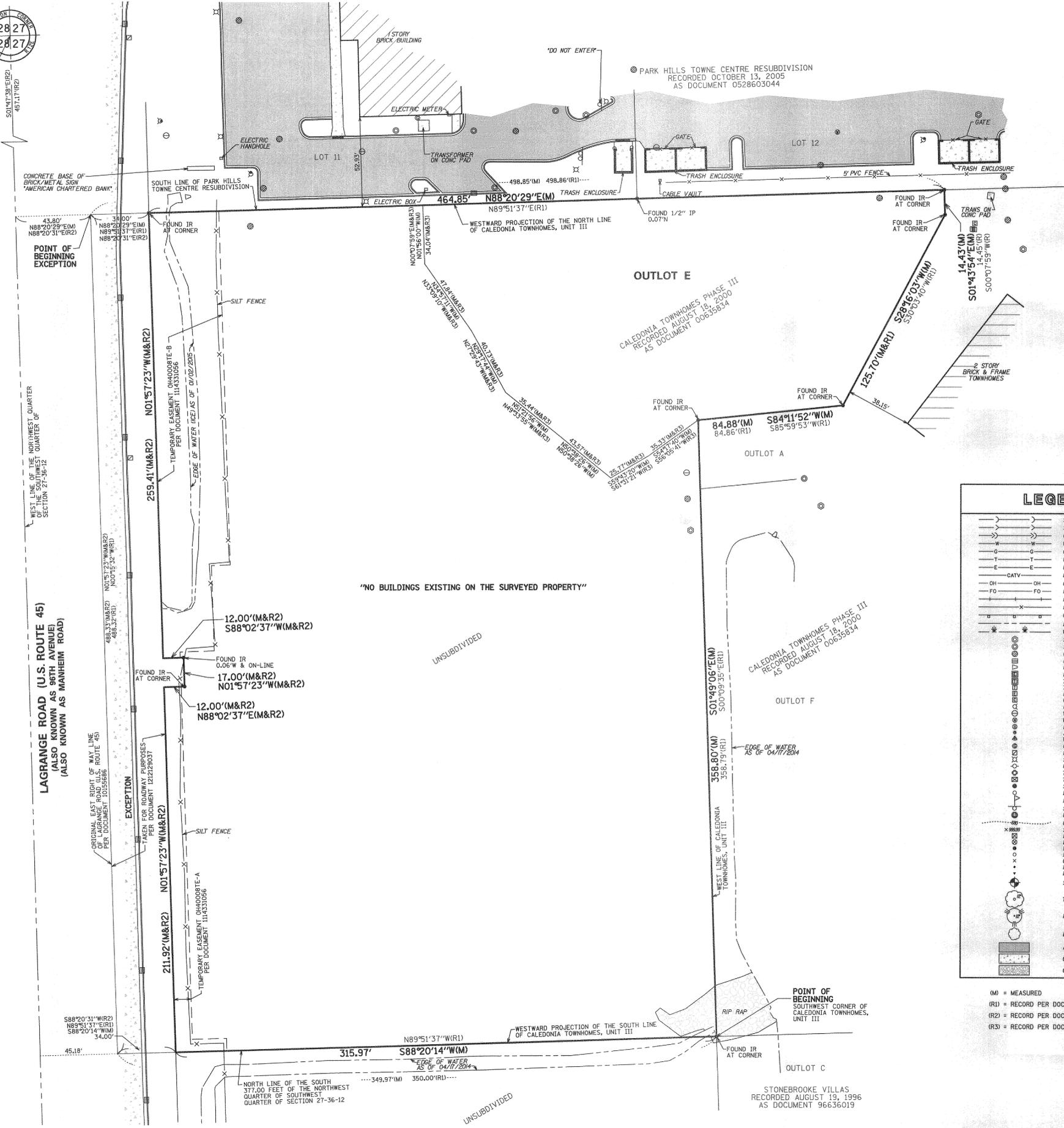
NO.	DATE	REMARKS



# PLAT OF SURVEY

28 27  
28 27

POINT OF COMMENCEMENT- EXCEPTION  
NORTHWEST CORNER OF  
SOUTHWEST QUARTER OF  
SECTION 27-36-12



SCALE 1" = 30'  
0 30 60

BASIS OF BEARINGS:  
TRUE NORTH BASED ON GEODETIC  
OBSERVATION IL EAST ZONE

PROPERTY DESCRIPTION  
PART OF THE NORTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 27, TOWNSHIP 36 NORTH, RANGE 12 EAST OF THE THIRD PRINCIPAL MERIDIAN IN COOK COUNTY, ILLINOIS, DESCRIBED AS FOLLOWS: BEGINNING AT THE SOUTHWEST CORNER OF CALEDONIA TOWNHOMES, UNIT III, ACCORDING TO THE PLAT THEREOF RECORDED AUGUST 18, 2000 AS DOCUMENT NO. 00635834, COOK COUNTY PLAT RECORDS; THENCE NORTH 89 DEGREES 51 MINUTES 37 SECONDS WEST ALONG THE WESTWARD PROJECTION OF THE SOUTH LINE OF SAID CALEDONIA TOWNHOMES, UNIT III A DISTANCE OF 350.00 FEET TO A POINT IN THE EAST LINE OF LAGRANGE ROAD RIGHT OF WAY (A/K/A U.S. 45, 96TH AVE., OR MANHEIM ROAD); THENCE NORTH 00 DEGREES 15 MINUTES 32 SECONDS WEST ALONG THE EAST LINE OF LAGRANGE ROAD A DISTANCE OF 498.86 FEET TO A POINT; THENCE SOUTH 89 DEGREES 51 MINUTES 37 SECONDS EAST ALONG THE WESTWARD PROJECTION OF THE NORTH LINE OF SAID CALEDONIA TOWNHOMES, PHASE III A DISTANCE OF 498.86 FEET TO THE NORTHWEST CORNER OF SAID CALEDONIA TOWNHOMES, PHASE III; THENCE SOUTH 00 DEGREES 07 MINUTES 59 SECONDS WEST A DISTANCE OF 14.45 FEET TO A POINT; THENCE SOUTH 30 DEGREES 03 MINUTES 40 SECONDS WEST A DISTANCE OF 125.70 FEET TO A POINT; THENCE SOUTH 85 DEGREES 59 MINUTES 53 SECONDS WEST A DISTANCE OF 84.86 FEET TO A POINT; THENCE SOUTH 00 DEGREES 09 MINUTES 35 SECONDS EAST ALONG THE WEST LINE OF SAID CALEDONIA TOWNHOMES, PHASE III A DISTANCE OF 358.79 FEET TO THE POINT OF BEGINNING, ACCORDING TO THE PLAT THEREOF RECORDED OCTOBER 4, 2001 AS DOCUMENT 0010928261.

EXCEPT THEREFROM THE FOLLOWING TRACT TAKEN FOR ROADWAY PURPOSES PER DEED RECORDED APRIL 30, 2012 AS DOCUMENT 1212129037; THAT PART OF SOUTHWEST QUARTER OF SECTION 27, TOWNSHIP 36 NORTH, RANGE 12 EAST OF THE THIRD PRINCIPAL MERIDIAN, IN COOK COUNTY, ILLINOIS, DESCRIBED AS FOLLOWS: BEGINNING AT THE NORTHWEST CORNER OF SAID SOUTHWEST QUARTER; THENCE SOUTH 01 DEGREES 47 MINUTES 38 SECONDS EAST, 457.17 FEET (BEARINGS BASED ON ILLINOIS STATE PLANE COORDINATE SYSTEM, EAST ZONE, NAD 1983) ALONG THE WEST LINE OF SAID SOUTHWEST QUARTER TO THE SOUTH LINE OF PARK HILLS TOWNE CENTRE RESUBDIVISION, ACCORDING TO THE PLAT THEREOF RECORDED OCTOBER 13, 2005 AS DOCUMENT NO. 0528603044, SAID LINE ALSO BEING THE WESTERLY EXTENSION OF THE NORTH LINE OF CALEDONIA TOWNHOMES PHASE III, ACCORDING TO THE PLAT THEREOF RECORDED AUGUST 18, 2000 AS DOCUMENT NO. 00635834; THENCE NORTH 88 DEGREES 20 MINUTES 31 SECONDS EAST, 43.80 FEET ALONG SAID COMMON LINE TO THE EAST RIGHT-OF-WAY OF US ROUTE 45, ACCORDING TO DOCUMENT NO. 10155686 RECORDED SEPTEMBER 24, 1998 AND THE POINT OF BEGINNING THENCE CONTINUING NORTH 88 DEGREES 20 MINUTES 31 SECONDS EAST, 34.00 FEET ALONG SAID COMMON LINE; THENCE SOUTH 01 DEGREE 57 MINUTES 23 SECONDS EAST, 259.41 FEET; THENCE NORTH 88 DEGREES 02 MINUTES 37 SECONDS EAST, 17.00 FEET; THENCE SOUTH 88 DEGREES 02 MINUTES 37 SECONDS WEST, 12.00 FEET; THENCE SOUTH 01 DEGREE 57 MINUTES 23 SECONDS EAST, 211.92 FEET TO THE NORTH LINE OF THE SOUTH 371.00 FEET OF THE NORTHWEST QUARTER OF SAID SOUTHWEST QUARTER; SAID LINE ALSO BEING THE WESTERLY EXTENSION OF THE SOUTH LINE OF SAID CALEDONIA TOWNHOMES PHASE III; THENCE SOUTH 89 DEGREES 51 MINUTES 37 SECONDS WEST, 34.00 FEET ALONG SAID COMMON LINE TO SAID EAST RIGHT-OF-WAY LINE; THENCE NORTH 01 DEGREE 57 MINUTES 23 SECONDS WEST, 488.33 FEET (488.33 FEET RECORDED DISTANCE) ALONG SAID EAST RIGHT-OF-WAY LINE TO THE POINT OF BEGINNING.

NOTES:  
THIS SURVEY WAS PREPARED WITHOUT THE BENEFIT OF A TITLE COMMITMENT. IT IS POSSIBLE THAT ADDITIONAL EASEMENTS, RESTRICTIONS OR OTHER ENCUMBRANCES EXIST OVER THE PROPERTY THAT HAVE NOT BEEN SHOWN HEREON.  
LAST DATE OF FIELD WORK: JANUARY 2, 2015  
PROPERTY SURVEYED: 169,420 SQ. FT. OR 3.889 ACRES MORE OR LESS.  
MISSING MONUMENTATION ALONG THE WEST LINE HAVE NOT BEEN SET DUE TO ONGOING CONSTRUCTION IN THAT AREA.

STATE OF ILLINOIS ) SS  
COUNTY OF GRUNDY )

WE, SPACECO, INC., AN ILLINOIS PROFESSIONAL DESIGN FIRM, NUMBER 184-001157, DO HEREBY DECLARE THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED IS A TRUE AND CORRECT REPRESENTATION OF SAID SURVEY.

ALL DIMENSIONS ARE IN FEET AND DECIMAL PARTS THEREOF. NO DISTANCES OR ANGLES SHOWN HEREON MAY BE ASSUMED BY SCALING.  
THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A BOUNDARY SURVEY.

GIVEN UNDER OUR HAND AND SEAL THIS 16 DAY OF April, 2015 IN MORRIS, ILLINOIS.

KEVIN W. DONOVAN, I.P.L.S., No. 038-3781  
LICENSE EXPIRES: 11-30-2016  
k.donovan@spacecoinc.com  
(VALID ONLY IF EMBOSSED SEAL AFFIXED)  
COMPARE ALL DIMENSIONS BEFORE BUILDING AND REPORT ANY DISCREPANCIES AT ONCE. REFER TO DEED OR TITLE POLICY FOR BUILDING LINES AND EASEMENTS.



LEGEND	
	STORM SEWER
	SANITARY SEWER
	COMBINED SEWER
	WATER MAIN
	GAS MAIN
	UNDERGROUND TELEPHONE LINE
	UNDERGROUND ELECTRIC LINE
	CATV
	OVERHEAD WIRES ON UTILITY POLES
	FIBER OPTIC LINE
	RAILROAD
	FENCE
	QUARRY
	EDGE OF WATER
	WETLAND LIMITS
	SANITARY MANHOLE
	STORM MANHOLE
	CATCH BASIN
	INLET
	FLARED END SECTION
	ELECTRIC MANHOLE
	TELEPHONE MANHOLE
	TELEPHONE UPRIGHT
	ELECTRIC UPRIGHT
	CABLE TV UPRIGHT
	FIRE HYDRANT
	VALVE, NO VAULT
	WATER VALVE
	B BOX
	AUXILIARY VALVE
	WELL
	GAS VALVE
	HAND HOLE
	STREET LIGHT
	UTILITY POLE
	TRAFFIC SIGNAL
	TRAFFIC SIGNAL BOX
	SPRINKLER HEAD
	BOLLARD
	MARKER
	SIGN
	UNIDENTIFIED MANHOLE
	SPOT ELEVATION
	RIGHT-OF-WAY MONUMENT
	D.C.
	IRON / STEEL ROD
	IRON PIPE
	CUT CROSS
	P.C. / M&M
	RAILROAD SPIKE
	SOIL BORINGS
	TREE WITH SIZE
	FIR TREE WITH SIZE
	BUSH
	ASPHALT
	CONCRETE
	GRAVEL

- (M) = MEASURED
- (R1) = RECORD PER DOCUMENT 0010928261
- (R2) = RECORD PER DOCUMENT 1212129037
- (R3) = RECORD PER DOCUMENT 00635834

PREPARED FOR:  
GETS CONSTRUCTION  
10020 AURORA-HUDSON ROAD  
STREETSBORO, OHIO 44241-1621

REVISIONS: 04/16/2015	SPACECO INC.	CONSULTING ENGINEERS SITE DEVELOPMENT ENGINEERS LAND SURVEYORS	DATE: 04/23/2014 JOB NO: 8126 FILENAME: 8126SUR-01 SHEET 1 OF 1
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224 1/2 N. Liberty Street  
Morris, Illinois 60450  
Phone: (815) 941-0260 Fax: (815) 941-0263

**PLANT LIST**

QTY.	KEY	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	ROOTS
<b>EVERGREEN TREES</b>						
15	PI-AB	PICEA ABIES	NORWAY SPRUCE	6'	-	B & B
9	PI-PU	PICEA PUNGENS	COLORADO SPRUCE	6'	-	B & B
<b>SHADE TREES</b>						
7	LI-RO	LIQUIDAMBAR S. 'ROTUNDILOBA'	FRUITLESS SWEETGUM	3" CAL.	-	B & B
6	NY-SY	NYSSA SYLVATICA	SOUR GUM	3" CAL.	-	B & B
3	PL-OC	PLATANUS OCCIDENTALIS	AMERICAN SYCAMORE	3" CAL.	-	B & B
10	QU-MA	QUERCUS MACROCARPA	BUR OAK	3" CAL.	-	B & B
5	QU-MU	QUERCUS MUEHLENBERGII	CHINGUAPIN OAK	3" CAL.	-	B & B
5	QU-RU	QUERCUS RUBRA	RED OAK	3" CAL.	-	B & B
9	TI-ST	TILIA T. 'STERLING'	STERLING SILVER LINDEN	3" CAL.	-	B & B
<b>ORNAMENTAL TREES</b>						
8	AC-GI	ACER GINNALA	AMUR MAPLE	2.5" CAL.	-	B & B
11	AM-AB	AMELANCHIER G. 'AUTUMN BRILLIANCE'	AUTUMN BRILLIANCE SERVICE BERRY	2.5" CAL. TREE FORM	-	B & B
9	CO-MA	CORNUS MAS	CORNELIAN CHERRY DOGWOOD	2.5" CAL.	-	B & B
<b>SHRUBS</b>						
53	BU-RO	BUXUS S. ROTUNDFOLIA	UPRIGHT BOXWOOD	36"	-	B & B
44	CH-GC	CHAMAECYPARIS O. 'GRACILIS COMPACTA'	COMPACT HINOKI FALSE CYPRESS	5'	-	B & B
34	IL-GL	ILEX GLABRA 'SHAMROCK'	SHAMROCK INKBERRY	24"	-	B & B
44	JU-LO	JUNIPERUS SQ. 'LODERI'	LODERI JUNIPER	5'	-	B & B
36	PI-CO	PICEA GLAUCA 'CONICA'	DWARF ALBERTA SPRUCE	42"	-	#10 CONT.
41	PI-NA	PINUS STROBUS 'NANA'	DWARF WHITE PINE	5'	-	B & B
54	TA-CH	TAXUS X. MEDIA 'CHADWICK'	CHADWICK YEW	24"	-	B & B
38	TH-EM	THUJA O. 'EMERALD'	EMERALD ARBORVITAE	5'	-	B & B
<b>ORNAMENTAL GRASSES</b>						
361	SP-HE	SPOROBOLUS HETEROLEPIS	PRAIRIE DROPSEED	CLUMP	#2 CONT.	24" O.C.
<b>PERENNIAL FLOWERS</b>						
67	EC-MA	ECHINACEA PURPUREA 'MAGNUS'	MAGNUS PURPLE CONE FLOWER	CLUMP	#2 CONT.	18" O.C.
139	HE-HA	HEMEROCALLIS 'HEARTS AFIRE'	HEARTS AFIRE DAYLILY	CLUMP	#2 CONT.	12" O.C.
78	SL-MN	SLAVIA 'MAY NIGHT'	MAY NIGHT SALVIA	CLUMP	#2 CONT.	18" O.C.

**BUFFERYARD CALCULATIONS**

LOCATION	REQ. BUFFER YD/WIDTH	PROPOSED WIDTH	BUFFERYARD LENGHT	REQUIRED UNITS	PROVIDED	COMMENTS
WEST PL	C/20'	20'	395'	16 CANOPY TREES 7 UNDERSTORY TREES 64 SHRUBS	16 CANOPY TREES 7 UNDERSTORY TREES 64 SHRUBS	10 CANOPY TREES ARE EVERGREENS
NORTH PL	B/15'	15'	440'	13 CANOPY TREES 4 UNDERSTORY TREES 62 SHRUBS	13 CANOPY TREES 4 UNDERSTORY TREES 62 SHRUBS	3 CANOPY TREE ARE EVERGREEN
EAST PL	C/25'	25'	563'	20 CANOPY TREES 8 UNDERSTORY TREES 79 SHRUBS	20 CANOPY TREES 9 UNDERSTORY TREES 79 SHRUBS	4 CANOPY TREES ARE EVERGREEN
SOUTH PL	C/10'	10'	256'	13 CANOPY TREES 6 UNDERSTORY TREES 52 SHRUBS	13 CANOPY TREES 6 UNDERSTORY TREES 52 SHRUBS	7 CANOPY TREES ARE EVERGREEN

**PARKING COVERAGE CALCULATIONS**

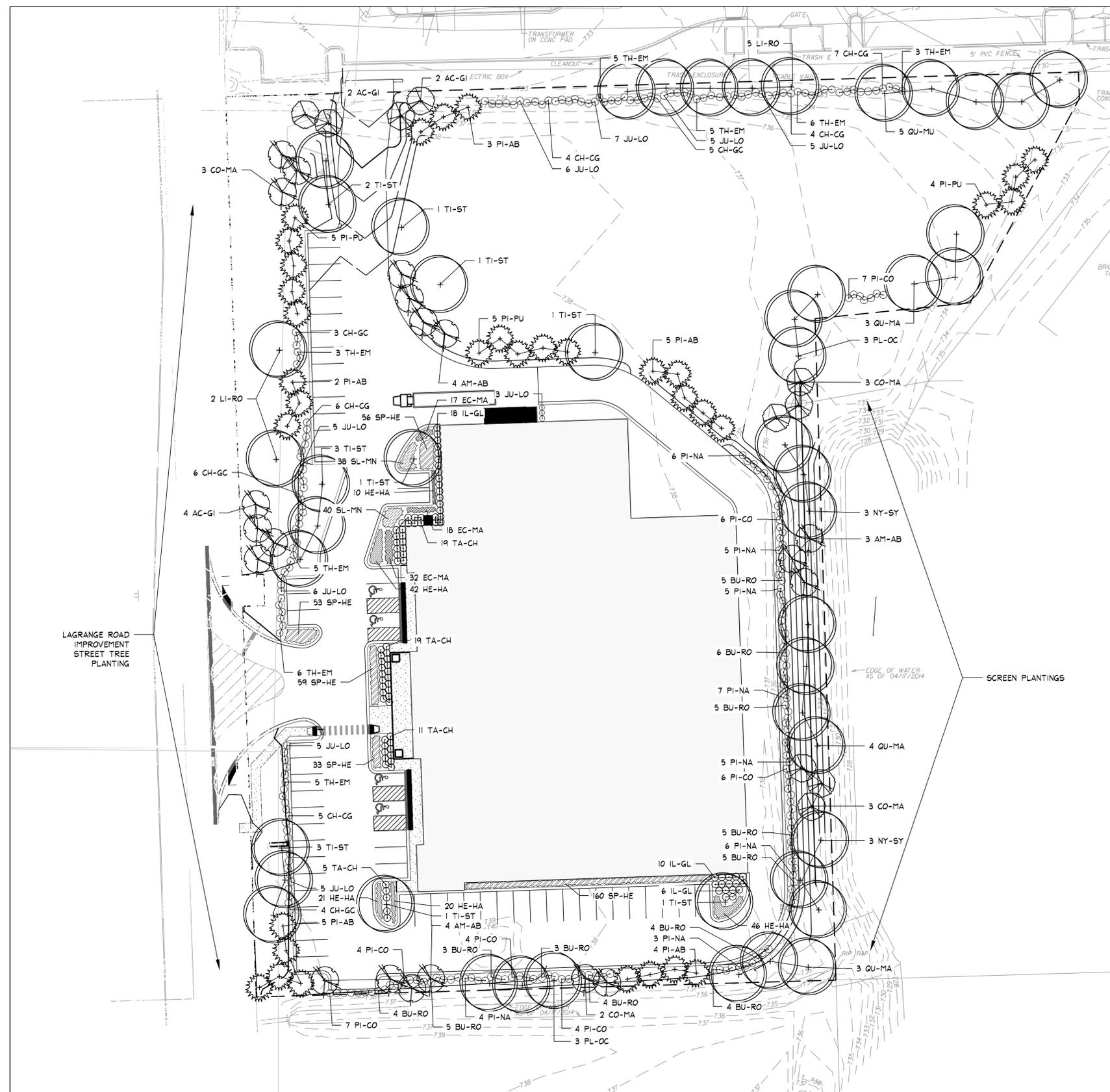
PARKING LOT COVERAGE AREA = 33,992 SF  
 COVERAGE AREA = 5,343 SF - 15.72%

**GENERAL NOTES:**

- THIS SHEET IS FOR PLANTING AND TURF INSTALLATION PURPOSES ONLY.
- PROVIDE AND INSTALL 12" PLANTING BED MIX IN ALL SHRUB, ORNAMENTAL GRASS, GROUND COVER AND PERENNIAL BEDS.
- PROVIDE AND INSTALL 4" TOPSOIL AND SEED ON ALL DISTURBED, NON-PLANTING BED MIX AREAS.
- SEED WITH TURF MIX ALL DISTURBED AREAS WHICH ARE NOT TO BE SEEDED WITH WILDFLOWER, MEADOW GRASS OR CROWN VETCH MIXES.
- THE CONTRACTOR IS RESPONSIBLE FOR INSTALLING ALL PLANTS, AS SHOWN ON THE PLANTING PLAN. QUANTITIES PROVIDED ON THE PLANT LIST ARE FOR ESTIMATION PURPOSES ONLY.
- COORDINATE LOCATIONS OF ALL TREES WITH ALL UTILITIES
- ALL PLANTING, SEEDING, AND SOIL MATERIALS TO CONFORM TO ILDOT STANDARD SPECIFICATION SECTION 1081.
- TOPSOIL ACTIVITIES TO CONFORM TO ILDOT 211.
- FINE GRADING ACTIVITIES TO CONFORM TO ILDOT 212 AND 214.
- SEEDING AND MULCHING ACTIVITIES SHALL CONFORM TO ILDOT 250 AND 251.
- PLANTING ACTIVITIES SHALL CONFORM TO ILDOT 253 AND 254.

**LEGEND:**

- DECIDUOUS SHADE TREE--SEE DET. 1/1.1.2
- ORNAMENTAL TREE--SEE DET. 1/1.1.2
- CONIFEROUS TREE--SEE DET. 2/1.1.2
- SHRUBS--SEE DET. 3/1.1.2



**PHASE 1 PLANTING PLAN**



1-800-362-2764  
 CALL TWO WORKING DAYS BEFORE YOU DIG  
 (NON MEMBERS MUST BE CALLED DIRECTLY)



SITE PLAN  
 DRAWING NO:

**L1.1**

**The Great Escape**  
 LaGrange Road  
 Tinley Park, IL.

Drawn By DPS  
 Checked By MH  
 Project Number

**GEIS COMPANIES**  
 10020 Aurora-Hudson Rd  
 Streetsboro, Ohio 44241  
 PH: (330) 528-3500  
 FX: (330) 528-0008  
 www.geisco.net

**DATES AND REVISIONS**  
 27 FEB 15

**NOTICE**  
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 GEIS CONSTRUCTION  
 REVISIONS REFLECTED IN THESE DRAWINGS INVOLVE CHANGES TO CONTRACT PRICE PREVIOUSLY PROVIDED. CHANGE ORDERS WILL BE PROVIDED FOR ALL CHANGES. THESE CHANGES ARE NOT IN THE BASE BID.







The Great Escape - Tinley Park, IL





**GEIS COMPANIES**  
 10020 Aurora-Hudson Rd  
 Streetsboro, Ohio 44241  
 PH: (330) 528-3500  
 FX: (330) 528-0008  
 www.geisco.net

**DATES AND REVISIONS**

03-03-2015  
 PLAN SUBMISSION  
 03-09-2015  
 PLAN SUBMISSION REV. 1

**NOTICE**

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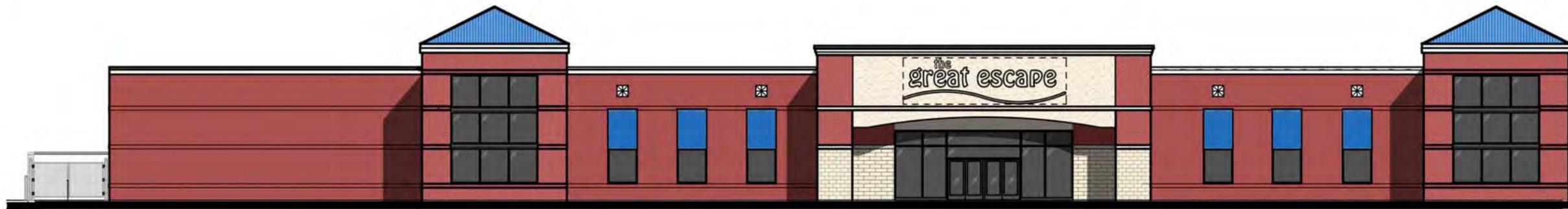
**The Great Escape**  
 W. 171st St. + LaGrange Road  
 Village of Tinley Park, IL.

Drawn By AL  
 Checked By GS  
 Project Number

FLOOR PLAN  
 DRAWING NO:

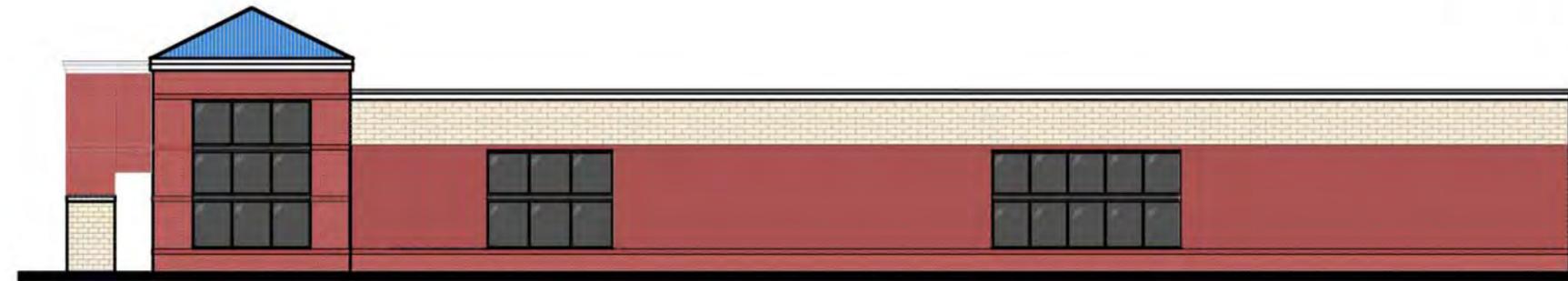
**A.1.2**





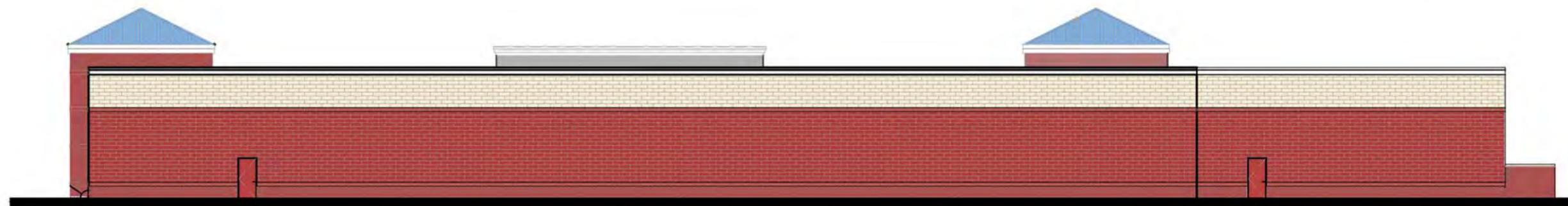
WEST ELEVATION  
SCALE: 1/16" = 1'-0"

4  
A-300



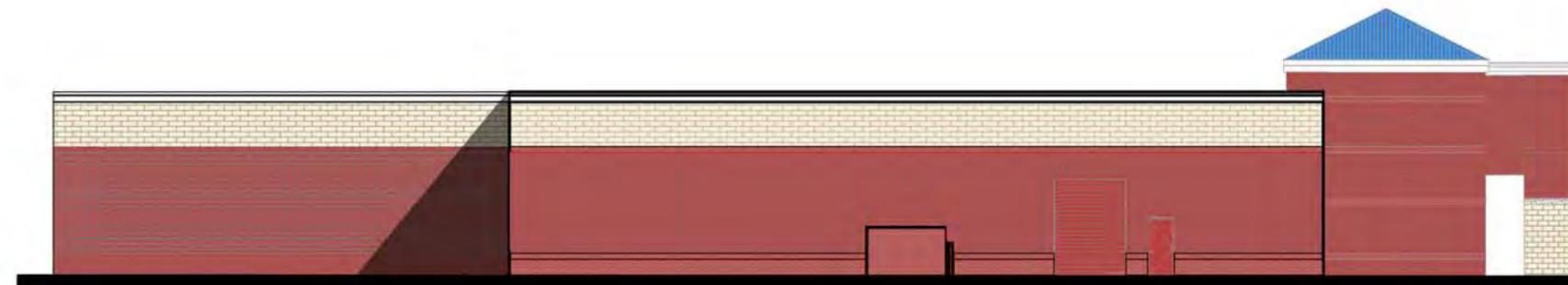
SOUTH ELEVATION  
SCALE: 1/16" = 1'-0"

3  
A-300



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

2  
A-300



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

1  
A-300

**GEIS**  
Architects, L.L.C.  
10020 Aurora-Hudson Rd  
Streetsboro, Ohio 44241  
PH: (330) 528-3500  
FX: (330) 528-0008  
www.geisco.net

Drawn By AL  
Checked By JD  
Project Number PROJ-NO

**NOTICE**  
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GEIS CONSTRUCTION  
REVISIONS REFLECTED IN THESE  
DRAWINGS INVOLVE CHANGES TO  
CONTRACT PRICE PREVIOUSLY  
PROVIDED. CHANGE ORDERS WILL BE  
PROVIDED FOR ALL CHANGES. THESE  
CHANGES ARE NOT IN THE BASE BID.

**DATES AND REVISIONS**  
02.20.2015  
PRELIMINARY

OCCUPANCY DATE  
OCC-DATE

**GEIS COMPANIES**  
10020 Aurora-Hudson Rd  
Streetsboro, Ohio 44241  
PH: (330) 528-3500  
FX: (330) 528-0008  
www.geisco.net

**THE GREAT ESCAPE**  
W171ST STREET + LA GRANGE RD  
VILLAGE OF TINLEY PARK, IL

JOB-SPEC

EXTERIOR ELEVATIONS  
DRAWING NO:  
**A-300**



**GEIS COMPANIES**  
 10020 Aurora-Hudson Rd  
 Streetsboro, Ohio 44221  
 PH: (330) 528-3500  
 FX: (330) 528-0008  
 www.geisco.net

**DATES AND REVISIONS**

03-03-2015  
 PLAN SUBMISSION  
 03-09-2015  
 PLAN SUBMISSION REV. 1

**NOTICE**

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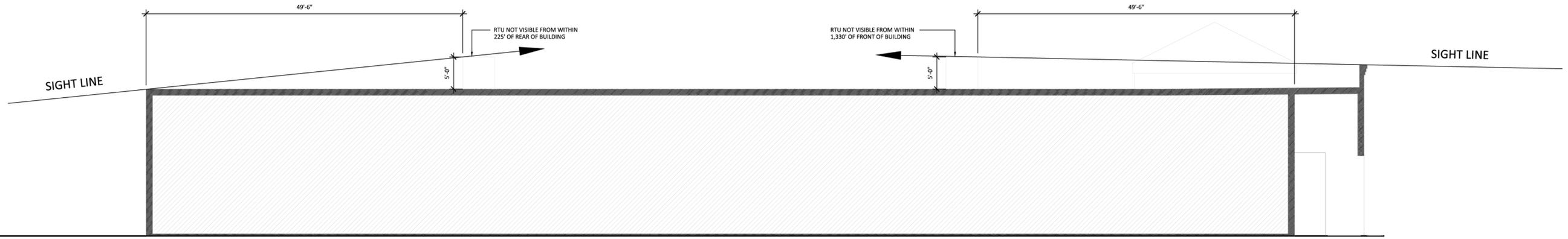
REVISIONS REFLECTED IN THESE DRAWINGS INVOLVE CHANGES TO CONTRACT PRICE PREVIOUSLY PROVIDED. CHANGE ORDERS WILL BE PROVIDED FOR ALL CHANGES. THESE CHANGES ARE NOT IN THE BASE BID.

**The Great Escape**  
 W.171st St. + LaGrange Road  
 Village of Tinley Park, IL.

Drawn By AL  
 Checked By GS  
 Project Number

RTU STUDY  
 DRAWING NO:

**A.1.2a**



**NORTH ELEVATION**  
 1/8" = 1'-0"



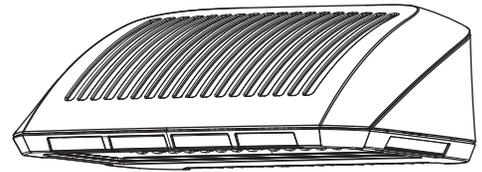
**EAST ELEVATION**  
 1/8" = 1'-0"

**RTU SIGHT LINE STUDY**



# High performance and integrated style, all in one luminaire

## LED Wall Sconce 161



DESIGNLIGHTS CONSORTIUM 

Project: GREAT ESCAPES TINLEY

Location: WALLPACK

Catalog No:

Fixture Type: S1

Mfg: Qty:

Notes: 18.5' MOUNTING HEIGHT

### PHILIPS GARDCO, LED WALL SCONCE 161

The Philips Gardco LED Wall Sconce 161 is an enlarged and enhanced version of the 121, providing performance capability up to that of a 400W metal halide luminaire, while using considerably less energy.

#### Ordering guide

example: 161-CWL-2-70LA-6435-CW-UNIV-BRP

Prefix	Distribution	Wattage	LED Type	Voltage	Finish	Options
161-CWL	4	110LA-935	NW	UNIV	BRP	
161-CWL	2 IES Type 2 distribution	350mA 70LA-6435 2 LED arrays, 70W	CW 5700°K 70 CRI	120	BRP Bronze	F <sup>2</sup> Fusing
161-MR	3 IES Type 3 distribution	110LA-9635 2 LED arrays, 110W	NW 4000°K 70 CRI	208	BLP Black	PCB <sup>2</sup> Button
161-DCC <sup>1</sup>	4 IES Type 4 distribution	530mA 110LA-6453 2 LED arrays, 110W	WW 3000°K 70 CRI	240	NP Natural	photocell (not available with 161-DCC)
161-DIM	161 with 0-10V dimming controlled by others	170LA-9653 2 LED arrays, 170W		277	WP White	DL Diffusing lens
161-APD	161 with automatic profile dimming (120V thru 277V ONLY)	700mA 150LA-6470 2 LED arrays, 150W		347	OC Optional color (specify optional color or RAL ex: OC-LGP or RAL7024)	WS Surface mount conduit feed junction box
161-APD-MRI	161 with automatic profile dimming and motion response override – integrated motion sensor (120V or 277V ONLY)	220LA-9670 2 LED arrays, 220W		480	SC Special color (specify, must supply color chip)	
				UNIV 120-277V AC HVU 347-480V AC		

#### Footnotes:

<sup>1</sup> For luminaires with input voltages above 277V (347, 480 or HVU) the 161-DCC is available with 110LA-9635, 170LA-9653 and 220LA-9670 LED wattages only.

<sup>2</sup> Available 120-277V only. Provide specific input voltage.

#### Accessories (order separately)

- **FS1R-100** – MR hand held programmer (For use with 'MR' motion response when field programming is required). If desired, only one is needed per job.

#### Features

- Complements the 121 wall sconce
- Perfect companion to Philips Gardco PureForm site and area luminaires
- Type 2, 3, and 4 optical distributions available
- Full cutoff performance minimizes glare and light trespass
- 10kA surge protection provided standard, meeting ANSI C62.41.2

#### Benefits

- Exceptional performance can reduce pole requirements on a site
- Motion response and control options available for additional energy savings
- Performance equivalent to 400W HID while utilizing less energy

#### Description

- **Housing:** Die cast housing
- **Finish:** Painted finish only
- **Lens:** Light engines will be sealed IP66 (in downlight application only). Tempered flat glass and diffuse glass lens option
- **Mounting:** Wall mounted only
- **Supply connection:** 90°C supply wire minimum (supplied by others)
- **Driver:** 120-277VAC and 347-480VAC non-class 2, constant current driver 350mA and 530mA, 700mA 0-10VDC dimming
- **Light engine:** LEDgine 32, 48 LEDs. LEDgine optics - acrylic. IES distributions - 2, 3, and 4. 0% uplight (full cut-off).
- **Agency approvals:** UL/CUL listed for wet locations when mounted in the downlight position. All 161 luminaires equipped with NW or CW are DesignLights Consortium® qualified.



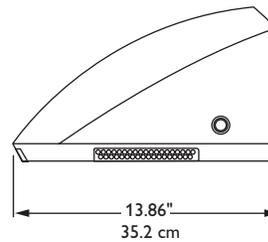
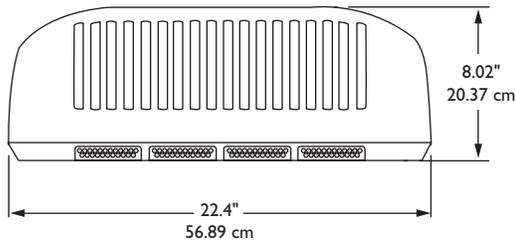
PHILIPS



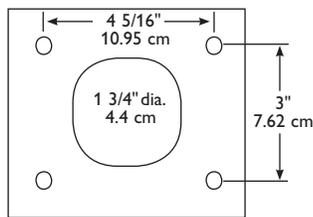
## LED Wattage and Lumen Values

Ordering Code	Average System Watts <sup>3</sup>	LED Current (mA)	LED Quantity - Dual LED Arrays		LED Selection	Luminaire Initial Absolute Lumens		
			Per LED Array	Total LEDs		TYPE 2	TYPE 3	TYPE 4
70LA-6435	74.4	350	32	64	NW	6,815	7,105	6,890
110LA-9635	110.0	350	48	96	NW	10,029	10,469	10,171
110LA-6453	106.8	530	32	64	NW	9,565	9,972	9,670
170LA-9653	158.0	530	48	96	NW	14,061	14,532	14,181
150LA-6470	142.0	700	32	64	NW	11,957	12,466	12,087
220LA-9670	210.0	700	48	96	NW	17,509	18,103	17,822

## Dimensions



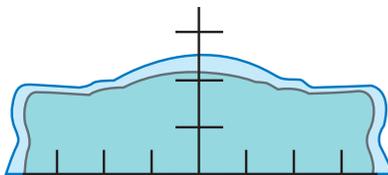
Approximate luminaire weight – 40lbs (18.15kg)



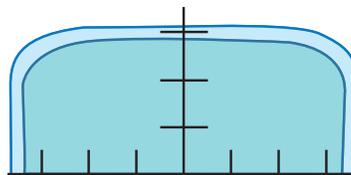
## Mounting plate and bolt pattern

**Note:** Mounting plate center is located in the center of the luminaire width and 3.5" (8.89cm) above the luminaire bottom (lens down position). Splices must be made in the J-box (by others). Mounting plate must be secured by max. 5/16" (.79cm) diameter bolts (by others) structurally to the wall.

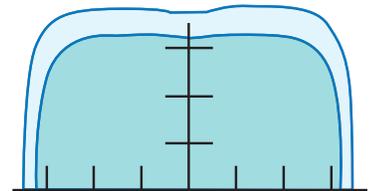
## Distribution Options



Type 2



Type 3



Type 4

## LED Performance

Predicted Lumen Depreciation Data <sup>4</sup>		
Ambient Temperature °C	Driver mA	L <sub>70</sub> Hours <sup>5</sup>
25 °C	350 mA	180,000
	530 mA	150,000
	700 mA	120,000
40 °C	350 mA	170,000
	530 mA	130,000
	700 mA	100,000

## Footnotes:

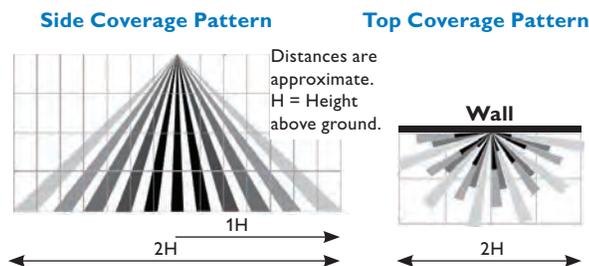
- Wattage may vary by +/- 8% due to LED manufacturer forward volt specification and ambient temperature. Wattage shown is average for 120V through 277V input. Actual wattage may vary by an additional +/- 10% due to actual input voltage.
- Predicted performance derived from LED manufacturer's data and engineering design estimates.
- L<sub>70</sub> is the predicted time when LED performance depreciates to 70% of initial lumen output.

## Luminaire Configuration Information

- **161-CWL:** 161 LED sconce providing constant wattage and constant light output when power to the luminaire is energized.
- **161-MR:** Luminaires include a passive infrared (PIR) motion sensor, WattStopper® FSP-211 equipped with an FS-L3W lens, capable of detecting motion within 20 feet of the sensor, 180° around the luminaire, when placed at a 20 foot mounting height, and mounted on a wall. Available in 120V or 277V input only. Motion sensor off state power is 0.0 watts.

In Motion Response (MR) luminaires, when no motion is detected for 10 minutes, the Motion Response system reduces the wattage by 90%, to 10% of the normal constant wattage, reducing the light level accordingly. When motion is detected by the PIR, the luminaire returns to full wattage and full light output. Dimming on low is factory set to 10% with duration set at 10 minutes.

The approximate motion sensor coverage pattern is as shown below.



### • FS1R-100 Wireless Remote Programming Tool:

The FS1R-100 Remote Programming Tool accessory permits adjustment of 161-MR sensor settings, including duration and dimming level on low, without the need to connect any wires to the luminaire.

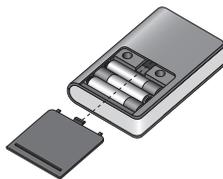
The FS1R-100 Wireless IR Programming Tool is a handheld tool for setup and testing of WattStopper FSP-211. It provides wireless access to the FSP-211 sensors for setup and parameter changes.

The FS1R-100 display shows menus and prompts to lead you through each process. The navigation pad provides a familiar way to navigate through the customization fields.

Within a certain mounting height of the sensor, the FS1R-100 allows modification of the system without requiring ladders or tools simply with a touch of a few buttons.

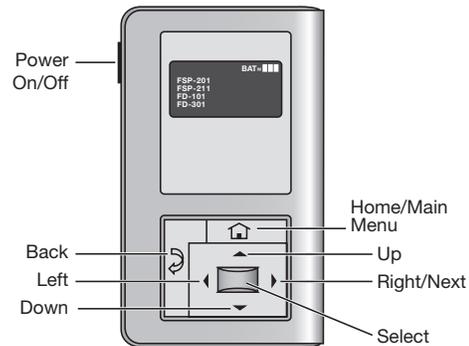
The FS1R-100 IR transceiver allows bi-directional communication between the FSP-211 and the FS1R-100 programming tool. Simple menu screens let you see the current status of the system and make changes. It can change FSP-211 sensor parameters such as high/low mode, sensitivity, time delay, cut off and more. With the FS1R-100 you can also establish and store FSP-211 parameter profiles.

The FS1R-100 operates on three standard 1.5V AAA Alkaline batteries or three rechargeable AAA NiMH batteries. The battery status displays in the upper right corner of the display. Three bars next to BAT= indicates a full battery charge. A warning appears on the display when the battery level falls below a minimum acceptable level. To conserve battery power, the FS1R-100 automatically shuts off 10 minutes after the last key press.



You navigate from one field to another using (up) or (down) arrow keys. The active field is indicated by flashing (alternates between yellow text on black background and black text on yellow background.)

Once active, use the Select button to move to a menu or function within the active field. Value fields are used to adjust parameter settings. They are shown in "less-than" greater-than" symbols: <value>. Once active, change them using (left) and (right) arrow keys. In general the up key increments and the down key decrements a value. Selections wrap-around if you continue to press the key beyond maximum or minimum values. Moving away from the value field overwrites the original value. The Home button takes you to the main menu. The Back button can be thought of as an undo function. It takes you back one screen. Changes that were in process prior to pressing the key are lost.



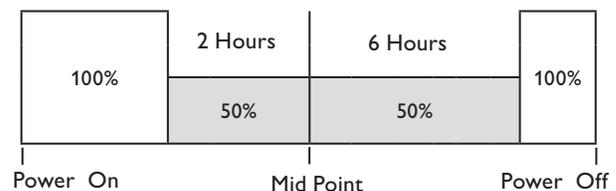
More information on the FS1R-100 Remote Programming Tool is available at [wattstopper.com](http://wattstopper.com).

**The FS1R-100 Wireless Remote Programming Tool can be used to adjust sensor settings on 161-MR luminaires ONLY. It cannot be used to adjust sensor settings on the 161-APD-MRI.**

- **161-DCC:** 161 LED sconce provided with dual circuiting, permitting separate switching of each LED array. Note, for luminaires with input voltages above 277V (347, 480 or HVU) the 161-DCC is available with 110LA-9635, 170LA-9653 and 220LA-9670 LED wattages only.
- **161-DIM:** 161 LED sconce provided with 0-10V dimming for connection to a control system provided by others.
- **161-APD:** 161 LED sconces with Automatic Profile Dimming, are provided with a programmable driver, programmed to go to 50% power, 50% light output two (2) hours prior to night time mid-point and remain at 50% for six (6) hours after night time mid-point. Mid-point is continuously recalculated by the programmable driver based on the average mid-point of the last two full night cycles. Short duration cycles, and power interruptions are ignored and do not affect the determination of mid-point.

161-APD is available in 120V through 277V input only.

### APD Dimming Profile:



## Luminaire Configuration Information

- **161 - APD- MRI:** 161 wall sconce with Automatic Profile Dimming and Motion Response Override (with integral motion sensor) combines the benefits of both automatic profile dimming and motion response. The luminaire will dim to 50% power, 50% light output, per the dimming profile shown for the 161-APD. If motion is detected during the time that the luminaire is operating at 50%, the luminaire returns to 100% power and light output. The luminaire remains on high until no motion is detected for the duration period, after which the luminaire returns to low. Duration period is factory set at 10 minutes.  
**APD-MRI luminaires are available with 120V or 277V input voltages only.**  
**APD-MRI luminaires use the identical motion sensor as MR luminaires.**

## Additional Specifications

### General Description

The Philips Gardco LED Wall Sconce 161 is an enlarged and enhanced version of the 121, providing performance capability up to that of a 400W metal halide luminaire, while using considerably less energy.

### Housing

Housing constructed of die-cast aluminum.

### IP Rating

LED light engine rated IP66 (in downlight application only).

### Optical Systems

IES Type 2, 3 and 4 distributions available. 0% uplight (full cut-off).

### Listings

UL/CUL listed for wet locations when mounted in the downlight position. All 161 luminaires equipped with NW or CW are DesignLights Consortium® qualified.

### Finish

Each luminaire receives a fade and abrasion resistant, electrostatically applied, thermally cured, triglycidal isocyanurate (TGIC) textured polyester powdercoat finish. Standard colors are as listed. Consult factory for specs on custom colors.

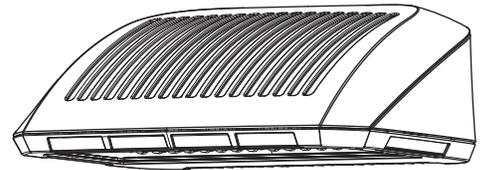
### Warranty

161 Luminaires feature a 5 year limited warranty. LED luminaires with LED arrays feature a 5 year limited warranty covering the LED arrays. LED drivers are covered by a 5 year limited warranty. PIR sensors carry a 5 year limited warranty from the sensor manufacturer.



# High performance and integrated style, all in one luminaire

## LED Wall Sconce 161



Project: **GREAT ESCAPES TINLEY**

Location: **WALL PACK**

Catalog No:

Fixture Type: **S2**

Mfg:

Qty:

Notes: **18.5' MOUNTING HEIGHT**

### PHILIPS GARDCO, LED WALL SCONCE 161

The Philips Gardco LED Wall Sconce 161 is an enlarged and enhanced version of the 121, providing performance capability up to that of a 400W metal halide luminaire, while using considerably less energy.

#### Ordering guide

example: 161-CWL-2-70LA-6435-CW-UNIV-BRP

Prefix	Distribution	Wattage	LED Type	Voltage	Finish	Options
<b>161-CWL</b>	<b>2</b>	<b>70LA-6435</b>	<b>NW</b>	<b>UNV</b>	<b>BRP</b>	
<b>161-CWL</b> Sconce 161 LED	<b>2</b> IES Type 2 distribution	<b>350mA</b>	<b>CW</b> 5700°K	<b>120</b>	<b>BRP</b> Bronze	<b>F<sup>2</sup></b> Fusing
<b>161-MR</b> 161 with motion response (120V or 277V only)	<b>3</b> IES Type 3 distribution	<b>70LA-6435</b> 2 LED arrays, 70W	<b>NW</b> 4000°K	<b>208</b>	<b>BLP</b> Black	<b>PCB<sup>2</sup></b> Button
<b>161-DCC<sup>1</sup></b> 161 with dual circuit control	<b>4</b> IES Type 4 distribution	<b>110LA-9635</b> 2 LED arrays, 110W	<b>WW</b> 3000°K	<b>240</b>	<b>NP</b> Natural	photocell (not available with 161-DCC)
<b>161-DIM</b> 161 with 0-10V dimming controlled by others		<b>530mA</b>	<b>70 CRI</b>	<b>277</b>	<b>WP</b> White	<b>DL</b> Diffusing lens
<b>161-APD</b> 161 with automatic profile dimming (120V thru 277V ONLY)		<b>110LA-6453</b> 2 LED arrays, 110W	<b>70 CRI</b>	<b>347</b>	<b>OC</b> Optional color (specify optional color or RAL ex: OC-LGP or RAL7024)	<b>WS</b> Surface mount conduit feed junction box
<b>161-APD-MRI</b> 161 with automatic profile dimming and motion response override – integrated motion sensor (120V or 277V ONLY)		<b>170LA-9653</b> 2 LED arrays, 170W		<b>480</b>	<b>SC</b> Special color (specify, must supply color chip)	
		<b>700mA</b>		<b>UNIV</b> 120-277V AC		
		<b>150LA-6470</b> 2 LED arrays, 150W		<b>HVU</b> 347-480V AC		
		<b>220LA-9670</b> 2 LED arrays, 220W				

#### Footnotes:

<sup>1</sup> For luminaires with input voltages above 277V (347, 480 or HVU) the 161-DCC is available with 110LA-9635, 170LA-9653 and 220LA-9670 LED wattages only.

<sup>2</sup> Available 120-277V only. Provide specific input voltage.

#### Accessories (order separately)

- **FS1R-100** – MR hand held programmer (For use with 'MR' motion response when field programming is required). If desired, only one is needed per job.

#### Features

- Complements the 121 wall sconce
- Perfect companion to Philips Gardco PureForm site and area luminaires
- Type 2, 3, and 4 optical distributions available
- Full cutoff performance minimizes glare and light trespass
- 10kA surge protection provided standard, meeting ANSI C62.41.2

#### Benefits

- Exceptional performance can reduce pole requirements on a site
- Motion response and control options available for additional energy savings
- Performance equivalent to 400W HID while utilizing less energy

#### Description

- **Housing:** Die cast housing
- **Finish:** Painted finish only
- **Lens:** Light engines will be sealed IP66 (in downlight application only). Tempered flat glass and diffuse glass lens option
- **Mounting:** Wall mounted only
- **Supply connection:** 90°C supply wire minimum (supplied by others)
- **Driver:** 120-277VAC and 347-480VAC non-class 2, constant current driver 350mA and 530mA, 700mA 0-10VDC dimming
- **Light engine:** LEDgine 32, 48 LEDs. LEDgine optics - acrylic. IES distributions - 2, 3, and 4. 0% uplight (full cut-off).
- **Agency approvals:** UL/CUL listed for wet locations when mounted in the downlight position. All 161 luminaires equipped with NW or CW are DesignLights Consortium® qualified.



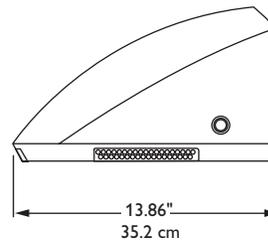
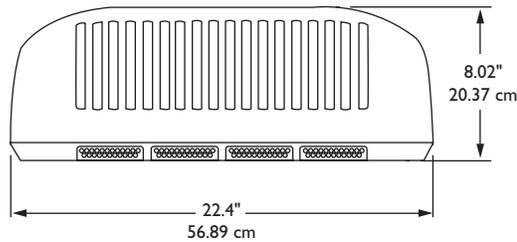
**PHILIPS**



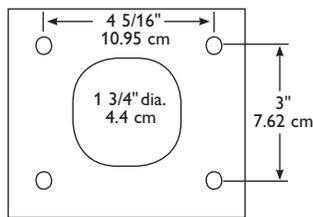
## LED Wattage and Lumen Values

Ordering Code	Average System Watts <sup>3</sup>	LED Current (mA)	LED Quantity - Dual LED Arrays		LED Selection	Luminaire Initial Absolute Lumens		
			Per LED Array	Total LEDs		TYPE 2	TYPE 3	TYPE 4
70LA-6435	74.4	350	32	64	NW	6,815	7,105	6,890
110LA-9635	110.0	350	48	96	NW	10,029	10,469	10,171
110LA-6453	106.8	530	32	64	NW	9,565	9,972	9,670
170LA-9653	158.0	530	48	96	NW	14,061	14,532	14,181
150LA-6470	142.0	700	32	64	NW	11,957	12,466	12,087
220LA-9670	210.0	700	48	96	NW	17,509	18,103	17,822

## Dimensions



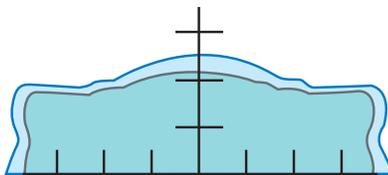
Approximate luminaire weight – 40lbs (18.15kg)



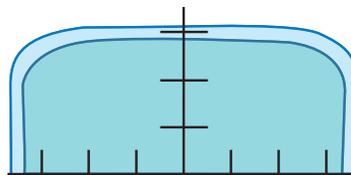
## Mounting plate and bolt pattern

**Note:** Mounting plate center is located in the center of the luminaire width and 3.5" (8.89cm) above the luminaire bottom (lens down position). Splices must be made in the J-box (by others). Mounting plate must be secured by max. 5/16" (.79cm) diameter bolts (by others) structurally to the wall.

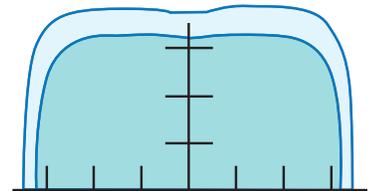
## Distribution Options



Type 2



Type 3



Type 4

## LED Performance

Predicted Lumen Depreciation Data <sup>4</sup>		
Ambient Temperature °C	Driver mA	L <sub>70</sub> Hours <sup>5</sup>
25 °C	350 mA	180,000
	530 mA	150,000
	700 mA	120,000
40 °C	350 mA	170,000
	530 mA	130,000
	700 mA	100,000

## Footnotes:

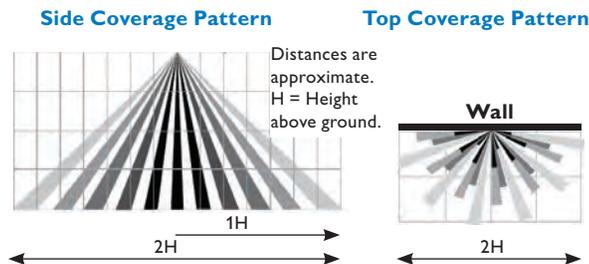
- Wattage may vary by +/- 8% due to LED manufacturer forward volt specification and ambient temperature. Wattage shown is average for 120V through 277V input. Actual wattage may vary by an additional +/- 10% due to actual input voltage.
- Predicted performance derived from LED manufacturer's data and engineering design estimates.
- L<sub>70</sub> is the predicted time when LED performance depreciates to 70% of initial lumen output.

## Luminaire Configuration Information

- **161-CWL:** 161 LED sconce providing constant wattage and constant light output when power to the luminaire is energized.
- **161-MR:** Luminaires include a passive infrared (PIR) motion sensor, WattStopper® FSP-211 equipped with an FS-L3W lens, capable of detecting motion within 20 feet of the sensor, 180° around the luminaire, when placed at a 20 foot mounting height, and mounted on a wall. Available in 120V or 277V input only. Motion sensor off state power is 0.0 watts.

In Motion Response (MR) luminaires, when no motion is detected for 10 minutes, the Motion Response system reduces the wattage by 90%, to 10% of the normal constant wattage, reducing the light level accordingly. When motion is detected by the PIR, the luminaire returns to full wattage and full light output. Dimming on low is factory set to 10% with duration set at 10 minutes.

The approximate motion sensor coverage pattern is as shown below.



### FS1R-100 Wireless Remote Programming Tool:

The FS1R-100 Remote Programming Tool accessory permits adjustment of 161-MR sensor settings, including duration and dimming level on low, without the need to connect any wires to the luminaire.

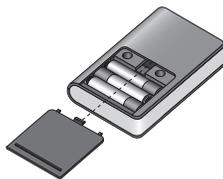
The FS1R-100 Wireless IR Programming Tool is a handheld tool for setup and testing of WattStopper FSP-211. It provides wireless access to the FSP-211 sensors for setup and parameter changes.

The FS1R-100 display shows menus and prompts to lead you through each process. The navigation pad provides a familiar way to navigate through the customization fields.

Within a certain mounting height of the sensor, the FS1R-100 allows modification of the system without requiring ladders or tools simply with a touch of a few buttons.

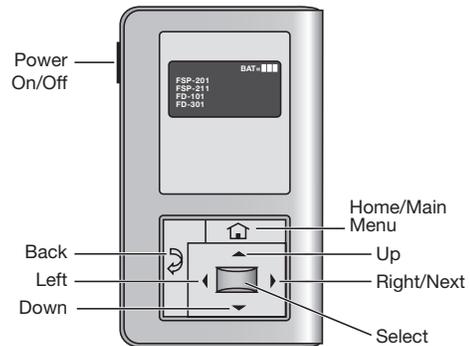
The FS1R-100 IR transceiver allows bi-directional communication between the FSP-211 and the FS1R-100 programming tool. Simple menu screens let you see the current status of the system and make changes. It can change FSP-211 sensor parameters such as high/low mode, sensitivity, time delay, cut off and more. With the FS1R-100 you can also establish and store FSP-211 parameter profiles.

The FS1R-100 operates on three standard 1.5V AAA Alkaline batteries or three rechargeable AAA NiMH batteries. The battery status displays in the upper right corner of the display. Three bars next to BAT= indicates a full battery charge. A warning appears on the display when the battery level falls below a minimum acceptable level. To conserve battery power, the FS1R-100 automatically shuts off 10 minutes after the last key press.



You navigate from one field to another using (up) or (down) arrow keys. The active field is indicated by flashing (alternates between yellow text on black background and black text on yellow background.)

Once active, use the Select button to move to a menu or function within the active field. Value fields are used to adjust parameter settings. They are shown in "less-than" greater-than" symbols: <value>. Once active, change them using (left) and (right) arrow keys. In general the up key increments and the down key decrements a value. Selections wrap-around if you continue to press the key beyond maximum or minimum values. Moving away from the value field overwrites the original value. The Home button takes you to the main menu. The Back button can be thought of as an undo function. It takes you back one screen. Changes that were in process prior to pressing the key are lost.



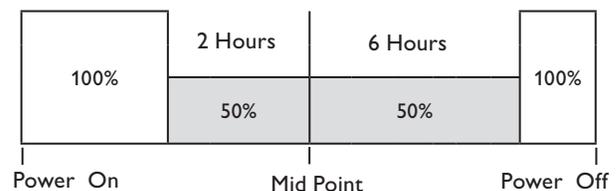
More information on the FS1R-100 Remote Programming Tool is available at [wattstopper.com](http://wattstopper.com).

**The FS1R-100 Wireless Remote Programming Tool can be used to adjust sensor settings on 161-MR luminaires ONLY. It cannot be used to adjust sensor settings on the 161-APD-MRI.**

- **161-DCC:** 161 LED sconce provided with dual circuiting, permitting separate switching of each LED array. Note, for luminaires with input voltages above 277V (347, 480 or HVU) the 161-DCC is available with 110LA-9635, 170LA-9653 and 220LA-9670 LED wattages only.
- **161-DIM:** 161 LED sconce provided with 0-10V dimming for connection to a control system provided by others.
- **161-APD:** 161 LED sconces with Automatic Profile Dimming, are provided with a programmable driver, programmed to go to 50% power, 50% light output two (2) hours prior to night time mid-point and remain at 50% for six (6) hours after night time mid-point. Mid-point is continuously recalculated by the programmable driver based on the average mid-point of the last two full night cycles. Short duration cycles, and power interruptions are ignored and do not affect the determination of mid-point.

161-APD is available in 120V through 277V input only.

### APD Dimming Profile:



## Luminaire Configuration Information

- **161 - APD- MRI:** 161 wall sconce with Automatic Profile Dimming and Motion Response Override (with integral motion sensor) combines the benefits of both automatic profile dimming and motion response. The luminaire will dim to 50% power, 50% light output, per the dimming profile shown for the 161-APD. If motion is detected during the time that the luminaire is operating at 50%, the luminaire returns to 100% power and light output. The luminaire remains on high until no motion is detected for the duration period, after which the luminaire returns to low. Duration period is factory set at 10 minutes.  
**APD-MRI luminaires are available with 120V or 277V input voltages only.**  
**APD-MRI luminaires use the identical motion sensor as MR luminaires.**

## Additional Specifications

### General Description

The Philips Gardco LED Wall Sconce 161 is an enlarged and enhanced version of the 121, providing performance capability up to that of a 400W metal halide luminaire, while using considerably less energy.

### Housing

Housing constructed of die-cast aluminum.

### IP Rating

LED light engine rated IP66 (in downlight application only).

### Optical Systems

IES Type 2, 3 and 4 distributions available. 0% uplight (full cut-off).

### Listings

UL/CUL listed for wet locations when mounted in the downlight position. All 161 luminaires equipped with NW or CW are DesignLights Consortium® qualified.

### Finish

Each luminaire receives a fade and abrasion resistant, electrostatically applied, thermally cured, triglycidal isocyanurate (TGIC) textured polyester powdercoat finish. Standard colors are as listed. Consult factory for specs on custom colors.

### Warranty

161 Luminaires feature a 5 year limited warranty. LED luminaires with LED arrays feature a 5 year limited warranty covering the LED arrays. LED drivers are covered by a 5 year limited warranty. PIR sensors carry a 5 year limited warranty from the sensor manufacturer.



Job: **GREAT ESCAPES TINLEY PARK**

Type: S3

Notes: 18.5' MOUNTING HEIGHT

# 120 LINE LED

Page 1 of 4

## 121 LED Performance Sconce - Generation 2

The Philips Gardco 121 LED Performance Sconce provides an energy efficient, architecturally pleasing solution for wall mount applications. The sloped surface ribs of the die cast aluminum housing create a distinctly unique aesthetic element, and perform important functions in the Philips Gardco thermal management system. 121 Generation 2 luminaires feature high performance Class 1 LED systems. The high performance LED optical systems produce full cutoff performance, minimizing glare and light trespass. Philips Gardco's LED technology provides maximized light output and maximum energy savings.



PREFIX	OPTICAL SYSTEM	LED WATTAGE	LED SELECTION	VOLTAGE	FINISH	OPTIONS
121	MT	50LA	NW	UNIV	BRP	

Enter the order code into the appropriate box above. Note: Philips Gardco reserves the right to refuse a configuration. Not all combinations and configurations are valid. Refer to notes below for exclusions and limitations. For questions or concerns, please consult the factory.

### PREFIX

**121** 121 LED Performance Sconce - Constant Wattage / Full Light Output  
**121-MR** 121 LED Performance Sconce - Motion Response  
**121-DIM** 121 LED Performance Sconce - 0 - 10V Dimming  
**121-APD** 121 LED Performance Sconce - Automatic Profile Dimming

### OPTICAL SYSTEM

**2** Type 2  
**3** Type 3  
**4** Type 4  
**MT** Medium Throw

All optical systems are supplied with a clear glass lens standard. A Diffuse Lens (DL) option is available. See **OPTIONS** on Page 2.

**121-DCC** 121 LED Performance Sconce - Dual Circuit Control

### LED WATTAGE AND LUMEN VALUES

Single LED Array Wattages, Available in 121, 121-MR, 121-DIM and 121-APD Only

Ordering Code	Average System Watts <sup>1</sup>	LED Current (mA)	LED Quantity - Single LED Array	LED Selection	Luminaire Initial Absolute Lumens <sup>2</sup>			
					TYPE 2	TYPE 3	TYPE 4	MT
18LA	18	350	16	NW	1,673	1,707	1,609	2,022
26LA	26	530	16	NW	2,442	2,485	2,345	2,927
35LA-700	36	700	16	NW	3,102	3,139	2,972	3,650
35LA-350	35	350	32	NW	3,664	3,736	3,523	4,425
50LA	52	530	32	NW	5,587	5,685	5,365	6,697
75LA	72	700	32	NW	6,199	6,538	6,296	7,289

Dual LED Array Wattages, Available in 121-DCC Only

Ordering Code	Average System Watts <sup>1</sup>	LED Current (mA)	LED Quantity - Dual LED Arrays		LED Selection	Luminaire Initial Absolute Lumens <sup>2</sup>			
			Per LED Array	Total LEDs		TYPE 2	TYPE 3	TYPE 4	MT
50LA-2	52	530	16	32	NW	5587	5,685	5,365	6,697
75LA-2	72	700	16	32	NW	6199	6,538	6,296	7,289

1. Wattage may vary by +/- 8% due to LED manufacturer forward volt specification and ambient temperature. Wattage shown is average for 120V through 277V input. Actual wattage may vary by an additional +/- 10% due to actual input voltage.

2. Values shown are for luminaires without the DL option. Tests are in process for configurations not shown. "(s)" following the value indicates that values are scaled from tests on similar, but not identical luminaire configurations. Contact Gardco.applications@philips.com if any approximate estimates are required for design purposes. Lumen values based on tests performed in compliance with IESNA LM-79.



**PHILIPS**



# 120 LINE LED

## 121 LED Performance Sconce - Generation 2

### LED SELECTION

<b>CW</b>	Cool White - 5700°K - 75 CRI Nominal
<b>NW</b>	Neutral White - 4000°K - 70 CRI Nominal
<b>WW</b>	Warm White - 3000°K - 80 CRI Nominal

### VOLTAGE

<b>120</b>	
<b>208</b>	
<b>240</b>	
<b>277</b>	
<b>UNIV</b>	Accepts 120V through 277V input, 50hz to 60hz.
<b>347</b>	347V - Requires Extended Back Box, which is provided standard. Requires and includes auxilliary transformer mounted in Extended Back Box.

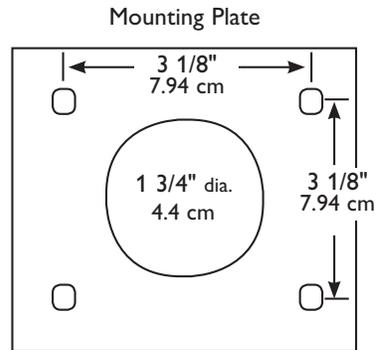
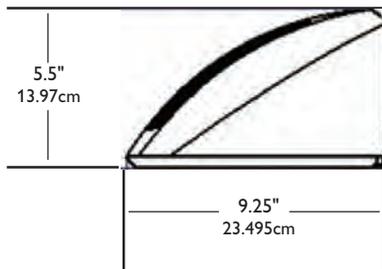
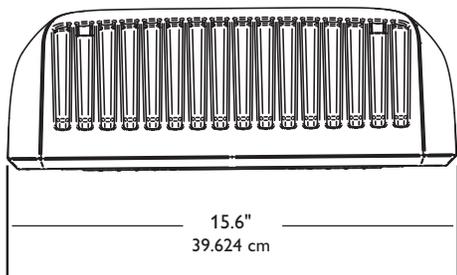
### FINISH

<b>BRP</b>	Bronze Paint
<b>BLP</b>	Black Paint
<b>WP</b>	White Paint
<b>NP</b>	Natural Aluminum Paint
<b>BGP</b>	Beige Paint
<b>OC</b>	Optional Color Paint Specify Optional Color or RAL ex: OC-LGP or OC-RAL7024.
<b>SC</b>	Special Paint Specify. Must supply color chip.

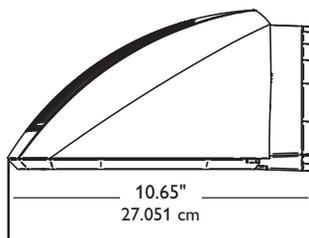
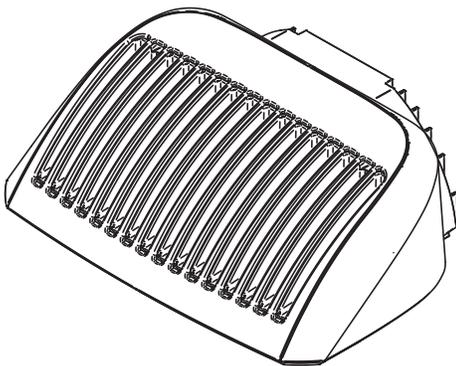
### OPTIONS

<b>F</b>	Fusing (Provide specific input voltage)
<b>DL</b>	Solite Diffusing Glass Lens (Reduces performance significantly.)
<b>PCB</b>	Button Type Photocontrol (Provide specific input voltage)
<b>WS</b>	Wall Mounted Box for Surface Conduit (Rear entry permitted.)
<b>EBB</b>	Extended Back Box (Provided standard with 347V luminaires.)

### DIMENSIONS

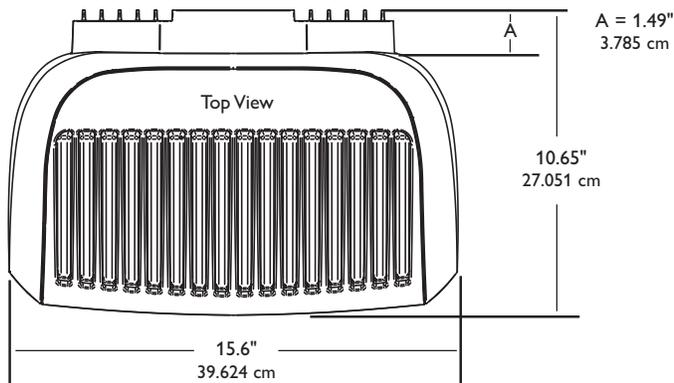


### With Extended Back Box (EBB) Option



Mounting Bolt Pattern

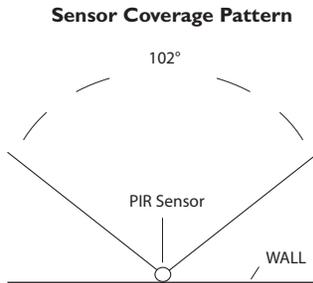
Note: Mounting plate center is located in the center of the luminaire width and 2.38" (6.03cm) above the luminaire bottom (lens down position). Splices must be made in the J-box (by others). Mounting plate must be secured by max. 5/16" (.79cm) diameter bolts (by others) structurally to the wall.



### LUMINAIRE CONFIGURATION INFORMATION

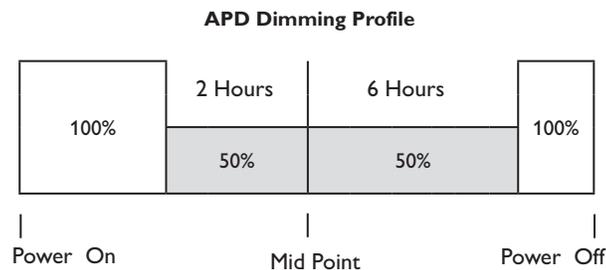
**121-CWL:** 121 LED sconce providing constant wattage and constant light output when power to the luminaire is energized.

**121-MR:** 121 LED sconce including a passive infrared (PIR) motion sensor capable of detecting motion within 30 feet of the 121 LED Sconce. The PIR sensor is mounted in the center of the luminaire, near the wall edge of the door frame, approximately 1.5" forward from the wall, and is less than .75" in diameter. When no motion is detected for 5 minutes, the Motion Response system reduces the wattage by 75%, to 25% of the normal constant wattage, reducing the light level accordingly. When motion is detected by the PIR, the luminaire returns to full wattage and full light output. The PIR sensor is capable of motion detection across a total angle of 102° from the center of the sensor (51° to either side of center.) The sensor may be adjusted directionally to maximize detection of motion to one side of the luminaire if desired based on site traffic patterns. PIR sensor provided is the Panasonic EKMB1203112. If the PIR sensor fails, the luminaire will operate in default-high mode. Motion sensors utilized consume 0.0 watts in the off state.



**121-DIM:** 121 LED sconce provided with 0 -10V dimming for connection to a control system provided by others.

**121-APD:** Philips Gardco performance LED sconces with Automatic Profile Dimming are provided with the Philips DynaDimmer included. The DynaDimmer is factory programmed to go to 50% power, 50% light output two (2) hours prior to night time mid-point and remain at 50% for six (6) hours after night time mid-point. Mid-point is continuously calculated by the DynaDimmer based on the average mid-point of the last two full night cycles. Short duration cycles, and power interruptions are ignored and do not affect the determination of mid-point.



**121-DCC:** 121 LED sconce provided with dual circuiting, and dual arrays, permitting separate switching of each led array. Available in LED wattages shown on Page 1 only.

### SPECIFICATIONS

**GENERAL:** Each Philips Gardco 121 luminaire is a wall mounted full cutoff luminaire with integrated lensed LEDs mounted in a fixed array. Internal components are totally enclosed in a rain-tight, dust-tight and corrosion resistant housing. The housing, back plate and door frame are die cast aluminum. A choice of four (4) optical systems is available. Luminaires are suitable for wet locations, mounted in the normal downlight position.

**HOUSING:** The single-piece stylized housing is die cast aluminum. A memory retentive gasket seals the housing with the door frame to exclude moisture, dust, insects and pollutants from the luminaire. A black, die cast ribbed backplate is included.

**IP RATING:** Luminaires are rated IP66.

**DOOR FRAME:** A single-piece die cast aluminum door frame integrates to the housing form. The door frame is hinged closed and secured to the housing with two (2) captive stainless steel fasteners.

**OPTICAL SYSTEMS:** Philips Gardco 121 Generation 2 LED luminaires utilize lensed LED arrays set to achieve IES Type II, Type III, and Type IV distributions, as well as a Medium Throw distribution. Individual LED arrays are replaceable. Luminaires feature high performance Class 1 LED systems. Luminaires are supplied standard with a clear glass lens.

**ELECTRICAL:** Luminaires are equipped with an LED driver that accepts 120V through 277V, 50hz to 60hz, input. Driver output is either 350 mA, 530 mA or 700 mA, based on the LED wattage selected. Component-to-component wiring within the luminaire will carry no more than 80% of rated current and is listed by UL for use at 600 VAC at 302°F/150°C or higher. Plug disconnects are listed by UL for use at 600 VAC, 15A or higher. Power factor is not less than 90%. Luminaires consume 0.0 watts in the off state. Surge protector standard. 10KA per AN SI/IEEE C62.41.2.

**LED THERMAL MANAGEMENT:** The 121 design provides deep integral thermal radiation fins cast into the upper housing to assist in the thermal management so critical to long LED system life. Metallic screens are placed over the fins and integrated to the housing to prevent the buildup of dust, dirt and contaminants, while permitting required air flow for cooling

### LED PERFORMANCE:

PREDICTED LUMEN DEPRECIATION DATA <sup>4</sup>		
Ambient Temperature °C	Driver mA	L <sub>70</sub> Hours <sup>5</sup>
25 °C	350 mA	180,000
	530 mA	150,000
	700 mA	120,000
40 °C	350 mA	170,000
	530 mA	130,000
	700 mA	100,000

4. Predicted performance derived from LED manufacturer's data and engineering design estimates, based on IESNA LM-80 methodology. Actual experience may vary due to field application conditions.

5. L<sub>70</sub> is the predicted time when LED performance depreciates to 70% of initial lumen output.

**FINISH:** Each standard color luminaire receives a fade and abrasion resistant, electrostatically applied, thermally cured, triglycidal isocyanurate (TGIC) textured polyester powdercoat finish. Standard colors include bronze (BRP), black (BLP), white (WVP), natural aluminum (NP) and beige (BGP). Consult factory for specifications on custom colors.

**LABELS:** All luminaires bear either UL or CUL (where applicable) Wet Location labels.

**WARRANTY:** Philips Gardco luminaires feature a 5 year limited warranty. Philips Gardco LED luminaires with LED arrays feature a 5 year limited warranty covering the LED arrays and LED drivers. See Warranty Information on [www.sitelighting.com](http://www.sitelighting.com) for complete details and exclusions.

**FULL CUTOFF PERFORMANCE:** Full cutoff performance means a luminaire distribution where zero candela intensity occurs at an angle at or above 90° above nadir. Additionally, the candela per 1000 lamp lumens does not numerically exceed 100 (10 percent) at a vertical angle of 80° above nadir. This applies to all lateral angles around the luminaire.



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Tel. 800-668-9008

# C7L1520DL (M)

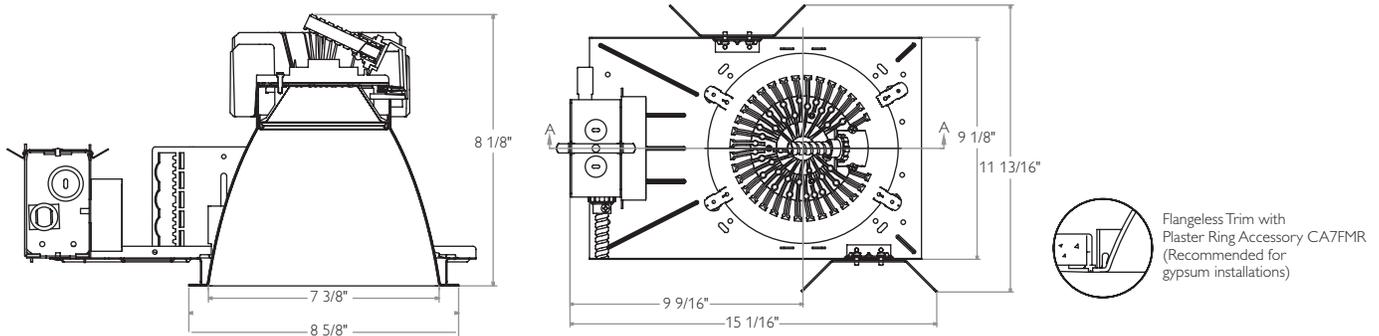
## Calculite LED 7" Downlight Medium Beam

Page 1 of 3

Catalog number: C7L50N1VBZ10/C7L50DL35KWCLWVB

Notes: 15' MOUNTING HEIGHT

Type: S4



### Ordering Guide: Light Engines

Light Engine Series	Style	Color Temperature	Beam Spread	Reflector Finish	Flange	Options
C7L1520	DL (Downlight)	27K (2700K) 30K (3000K) 35K (3500K) 40K (4000K)	M (Medium beam, 0.9 s.c.)	CL (Clear) CCL (Comfort Clear) CCD (Comfort Clear Diffuse) CCZ (Champagne Bronze) WH (Painted White)	W (Painted white) P (Aperture-matching/polished) FT (Flush-mount/flangeless) <sup>1</sup>	EM (Integral emergency test switch)

Example: C7L1520DL35KMCCLLWEM

<sup>1</sup>Accessory CA7FMR recommended for gypsum applications. Reflector flange is 1/8".

### Ordering Guide: Frame-in Kits

Frame-in Kit Series	Installation Options	Input Voltage	Options
C7L15 (1500 Lumen) C7L20 (2000 Lumen) C7L35 (3500 Lumen)	N (New construction) R (Remodeler for 1500 and 2000 lumen only)	1 (120V) 2 (277V)	Blank (0-10 volt dimming) EM (Emergency for 1500 and 2000 lumen only)
CUL15 (1500 Lumen) CUL20 (2000 Lumen)	J (J-box mount retrofit) S (Screw-in base retrofit (120V only))	1 (120V) 2 (277V)	Blank (0-10 volt dimming)

Example: C7L15N1EM

### Features

**Aperture:** 7 3/8" (187mm) I.D., 8 5/8" (219mm) O.D.

**Input Wattage:** 27W (1500 Lumens), 39W (2000 Lumens), 60W (3500 Lumens).

**Reflector Cone:** Aluminum. Provides 50° cutoff to source & source image. Self-flanged.

**Depth (including Frame-in kit):** 8 1/8" (206mm)

**Power Connection:** Attaches to frame-in kit via push-in connector (on frame). Removable cover provides access.

### Technology

**LED Board:** Array of 22 high brightness royal blue LED's.

**Remote Phosphor Technology:** Remote phosphor technology provides increased efficiency and color consistency. Phosphor lens assembly positioned in front of LED array converts blue light to white. Color shift will not exceed +/- 100K over life.

**Optical Mixing Chamber:** Lightolier-specific mixing chamber redirects back-reflected light through aperture resulting in 20% increase in efficiency.

**Thermal Management:** Heat sink and thermal design along with clean room assembly ensures specified performance.

### Technology (continued)

**Rated Life:** Based on IESNA LM-80-2008

1500 Lumen – 60,000 hours at 70% lumen maintenance.

2000 Lumen – 57,000 hours at 70% lumen maintenance.

3500 Lumen – 35,000 hours at 70% lumen maintenance.

**Photometric Performance:** Tested in accordance to IESNA LM-79-2008

### Options

**Dimming Capability:** 0-10V. See LED-DIM specification sheet

**Emergency Capability (Integral):** Add "EM" suffix. See LED-EM spec sheet.

**Emergency Capability (Inverter):** See LED-LMI specification sheet

### Labels

UL (suitable for wet locations), cUL, I.B.E.W.

5 Year Warranty

**PHILIPS**  
**LIGHTOLIER**

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## Calculite LED 7" Downlight Medium Beam

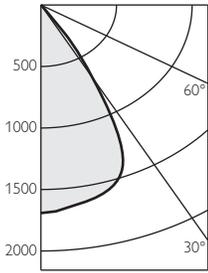
### Correlated Color Temperature (CCT) Multipliers

**2700K** (x 0.92), **3000K** (x 1.00), **3500K** (x 1.07), **4000K** (x 1.14)

### Reflector Finish Multipliers

**CL** (x 1.00), **CCL** (x 0.94), **CCD** (x 0.93), **CCZ** (x 0.76), **WH** (x 0.82) — **CL & CCD** finishes are tested. **CCL, CCZ & WH** are calculated.

### 1500 LM, 3000K, CL FINISH TRIM



Angle	MeanCP	Lumens
0	1692	
5	1664	158
10	1634	
15	1594	449
20	1518	
25	1300	562
30	768	
35	351	238
40	147	
45	35	37
50	3	
55	1	1
60	1	0
65	0	0
70	0	0
75	0	0
80	0	0
85	0	0
90	0	0

**Trim:** C7L1520DL30KMCLW

**Frame:** C7L15N1

**Output lumens:** 1445 lm

**CCT:** 3000K

**Input Watts:** 26.6W

**Efficacy:** 54.3 lm/w

**CRI:** 78

**Spacing Criterion:** 0.9

**Certified Test Report No:** F10022<sup>3</sup>

### Single Unit Data

Height to Lighted Plane	Initial Footcandles	Beam Diameter
5'	68	6'
6'	47	7'
7'	35	8'
8'	26	9'
9'	21	10'

### Multiple Unit Data - RCR 2

Spacing	Initial On Ctr.	Watts/ Footcandles	Sq. Ft.
5'	66.5	1.18	
6'	43.7	0.77	
7'	31.2	0.55	
8'	26.0	0.46	
9'	20.8	0.37	

38'x38'x10' Room, Workplane 2 1/2' above floor, 80/50/20% Reflectances

### Zonal Lumens & Percentages

Zone	Lumens	%Luminaire
0-30	1169	80.9%
0-40	1406	97.3%
0-60	1445	100.0%
0-90	1445	100.0%

Ceiling Wall	80%				70%		50%		30%		0%
	70	50	30	10	50	10	50	10	50	10	0
<b>RCR</b>	Zonal Cavity Method - Effective Floor Cavity Reflectance = 20%										
0	119	119	119	119	116	116	111	111	106	106	100
1	114	111	109	107	109	105	105	102	101	99	94
2	109	104	100	97	102	96	99	94	96	92	88
3	104	98	93	89	96	88	94	87	91	86	83
4	99	92	87	83	91	82	88	81	86	80	78
5	94	86	81	77	85	76	84	76	82	75	73
6	90	81	76	72	81	71	79	71	78	71	69
7	86	77	71	67	76	67	75	67	74	66	65
8	82	73	67	63	72	63	71	63	70	63	61
9	78	69	63	60	68	59	67	59	67	59	58
10	75	65	60	56	65	56	64	56	63	56	54

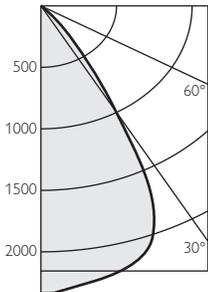
1. Correlated Color Temperature within specs as defined in ANSL\_NEMA\_ANSLG C78.377-2008: Specifications for the Chromaticity of Solid-State Lighting Products.

2. Wattage controlled to within 5%.

3. Tested using absolute photometry as specified in LM79: IESNA Approved Method for the Electrical and Photometric Measurements of Solid-State Lighting Products.

4. Color Rendering Index within +/- 2%.

### 2000 LM, 3000K, CL FINISH TRIM



Angle	MeanCP	Lumens
0	2338	
5	2298	218
10	2257	
15	2201	619
20	2095	
25	1792	776
30	1068	
35	487	330
40	205	
45	49	52
50	4	
55	2	2
60	1	0
65	0	1
70	0	0
75	0	0
80	0	0
85	0	0
90	0	0

**Trim:** C7L1520DL30KMCLW

**Frame:** C7L20N1

**Output lumens:** 1998 lm

**CCT:** 3000K

**Input Watts:** 39.5W

**Efficacy:** 50.6 lm/w

**CRI:** 78

**Spacing Criterion:** 0.9

**Certified Test Report No:** F10023<sup>3</sup>

### Single Unit Data

Height to Lighted Plane	Initial Footcandles	Beam Diameter
5'	94	6'
6'	65	7'
7'	48	8'
8'	37	9'
9'	29	10'

### Multiple Unit Data - RCR 2

Spacing	Initial On Ctr.	Watts/ Footcandles	Sq. Ft.
5'	92.0	1.75	
6'	60.4	1.15	
7'	43.1	0.82	
8'	35.9	0.68	
9'	28.8	0.55	

38'x38'x10' Room, Workplane 2 1/2' above floor, 80/50/20% Reflectances

### Zonal Lumens & Percentages

Zone	Lumens	%Luminaire
0-30	1613	80.7%
0-40	1944	97.3%
0-60	1998	100.0%
0-90	1998	100.0%

Ceiling Wall	80%				70%		50%		30%		0%
	70	50	30	10	50	10	50	10	50	10	0
<b>RCR</b>	Zonal Cavity Method - Effective Floor Cavity Reflectance = 20%										
0	119	119	119	119	116	116	111	111	106	106	100
1	114	111	109	107	109	105	105	102	101	99	94
2	109	104	100	97	102	96	99	94	96	92	88
3	104	98	93	89	96	88	94	87	91	86	83
4	99	92	86	83	91	82	88	81	86	80	78
5	94	86	81	77	85	76	84	76	82	75	73
6	90	81	76	72	81	71	79	71	78	70	69
7	86	77	71	67	76	67	75	67	74	66	65
8	82	73	67	63	72	63	71	63	70	63	61
9	78	69	63	60	68	60	67	59	67	59	58
10	75	65	60	56	65	56	64	56	63	56	54

1. Correlated Color Temperature within specs as defined in ANSL\_NEMA\_ANSLG C78.377-2008: Specifications for the Chromaticity of Solid-State Lighting Products.

2. Wattage controlled to within 5%.

3. Tested using absolute photometry as specified in LM79: IESNA Approved Method for the Electrical and Photometric Measurements of Solid-State Lighting Products.

4. Color Rendering Index within +/- 2%.

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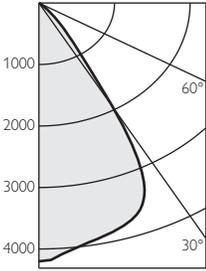
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### Reflector Finish Multipliers

**CL** (x 1.00), **CCL** (x 0.94), **CCD** (x 0.93), **CCZ** (x 0.76), **WH** (x 0.82) — **CL & CCD** finishes are tested. **CCL, CCZ & WH** are calculated.

3500 LM, 3000K, CL FINISH TRIM



**Trim:** C7L1520DL30KMCLW

**Frame:** C7L35N1

**Output lumens:** 3524 lm

**CCT<sup>1</sup>:** 3000K

**Input Watts<sup>2</sup>:** 64.1

**Efficacy:** 55.0 lm/w

**CRI<sup>3</sup>:** 79

**Spacing Criterion:** 0.8

**Certified Test Report No:** F12023<sup>3</sup>

Angle	MeanCP	Lumens
0	4211	
5	4072	390
10	3937	
15	3836	1080
20	3699	
25	3299	1408
30	1900	
35	828	561
40	337	
45	68	79
50	7	
55	4	4
60	2	
65	1	1
70	1	
75	0	0
80	0	
85	0	0
90	0	

Single Unit Data		
Height to Lighted Plane	Initial Footcandles	Beam Diameter
5'	168	4'
6'	117	5'
7'	86	6'
8'	66	6'
9'	52	7'

Multiple Unit Data - RCR 2		
Spacing On Ctr.	Initial Footcandles	Watts/Sq. Ft.
5'	163	2.84
6'	107	1.86
7'	76	1.33
8'	64	1.11
9'	51	0.89

38'x38'x10' Room, Workplane 2 1/2' above floor, 80/50/20% Reflectances

Zonal Lumens & Percentages		
Zone	Lumens	%Luminaire
0-30	2879	81.7%
0-40	3439	97.6%
0-60	3523	100.0%
0-90	3524	100.0%

Ceiling	80%			70%			50%			30%			0%
	70	50	30	10	50	10	50	10	50	10	50	10	0
<b>Wall</b>	70	50	30	10	50	10	50	10	50	10	50	10	0
<b>RCR</b>	Zonal Cavity Method - Effective Floor Cavity Reflectance = 20%												
0	119	119	119	119	116	116	111	111	106	106	100		
1	114	111	109	107	109	105	105	102	101	99	94		
2	109	104	100	97	102	96	99	94	96	92	88		
3	104	98	93	89	96	89	94	87	91	86	83		
4	99	92	87	83	91	82	88	81	87	80	78		
5	94	86	81	77	85	76	84	76	82	75	73		
6	90	81	76	72	81	72	79	71	78	71	69		
7	86	77	71	67	76	67	75	67	74	66	65		
8	82	73	67	63	72	63	71	63	70	63	61		
9	78	69	63	60	68	59	68	59	67	59	58		
10	75	65	60	56	65	56	64	56	63	56	54		

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4. Color Rendering Index within +/- 2%.



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C7L1520DL(M) May 24, 2012

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