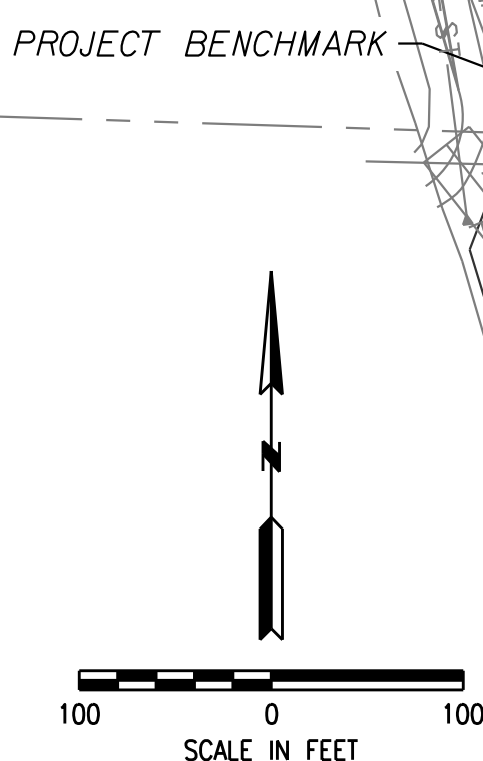
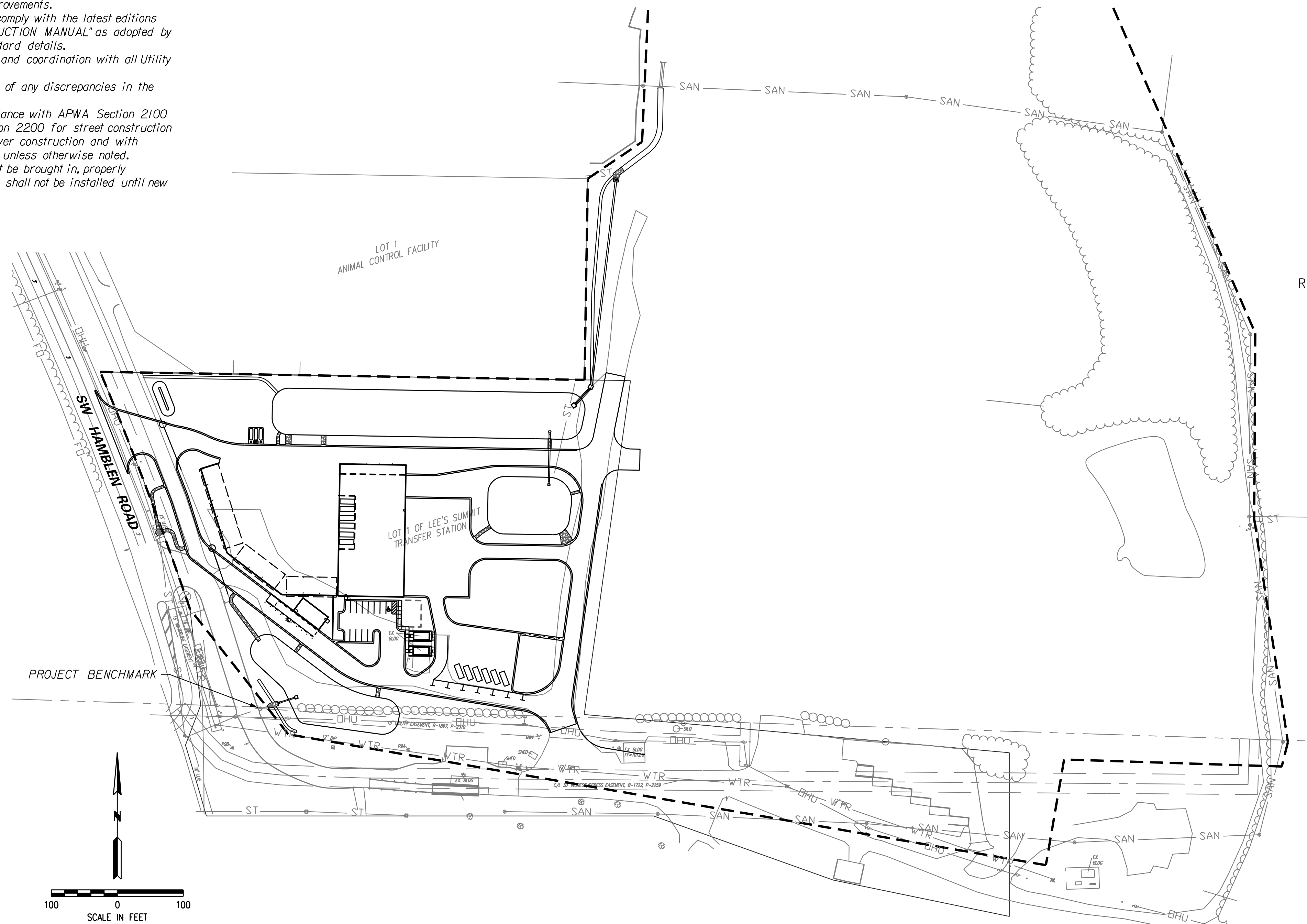


**GENERAL NOTES**

1. The underground utilities shown herein have been plotted from available information and do not necessarily reflect the actual existence, or nonexistence, size, type, number, or locations of these or other utilities. The contractor shall be responsible for verifying the actual locations of all underground utilities, shown or not shown, and said utilities shall be located in the field prior to any grading, excavation, or construction of improvements. These provisions shall in no way absolve any party from complying with the "UNDERGROUND FACILITY SAFETY AND DAMAGE PREVENTION ACT", Chapter 319, RSMO.
2. Gas, Water, and other Utilities shall not conflict with the depth or horizontal location of existing and proposed sanitary and storm sewers, including building laterals.
3. The contractor shall contact the City's Development Services Engineering Inspection to schedule a pre-construction meeting with a Field Engineering Inspector prior to any land disturbance work at (816) 969-1200.
4. Prior to submittal of construction bids, the Contractor shall be required to visit the site to verify existing conditions and proposed improvements.
5. All construction materials and methods used shall comply with the latest editions of the City of Lee's Summit "DESIGN AND CONSTRUCTION MANUAL" as adopted by City Ordinance NO. 5813. See said Manual for standard details.
6. The Contractor shall be responsible for notification and coordination with all Utility Companies.
7. The Contractor shall notify the Engineer immediately of any discrepancies in the plans.
8. "Controlled Fill" indicates fill to be placed in accordance with APWA Section 2100 for grading and site preparation, with APWA Section 2200 for street construction (paving), with APWA Section 2500 for sanitary sewer construction and with APWA Section 2600 for storm sewer construction unless otherwise noted.
9. Where finish grade is higher than existing, fill must be brought in, properly compacted, and then the pipe shall be installed. Pipe shall not be installed until new fill has been properly compacted.

# LEE'S SUMMIT PROCESSING FACILITY

## SW ¼ SECTION 16 & NW ¼ SECTION 21 TOWNSHIP 47 NORTH, RANGE 31 WEST LEE'S SUMMIT, JACKSON COUNTY, MISSOURI PRELIMINARY DEVELOPMENT PLAN



### INDEX

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#### APPENDIX

- R1.1-R1.4 SITE RENDERINGS
- A2.1 PROCESSING BUILDING ELEVATIONS
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- A3.1 ARCHITECTURAL PRELIMINARY SITE DETAILS
- ES-1 SITE LIGHTING PLAN
- C1 LAND USE AND ZONING MAP WITHIN 1,000' OF PROCESSING FACILITY
- C2 MoDNR SITE PLAN AND TRAFFIC FLOW

#### UTILITIES

City of Lee's Summit  
Development Services Inspections Group  
220 SE Green St.  
Lee's Summit, Mo.  
816-969-1200

EVERGY  
130 SE Hamblen Road  
Lee's Summit, Mo.  
816-347-4320

Spire  
3025 SE Clover Road  
Lee's Summit, Mo.  
816-537-4681

AT&T  
215 N. Spring  
Independence, Mo.  
816-325-5610

Time Warner  
6550 Winchester Avenue  
Kansas City, Mo.  
913-643-1901

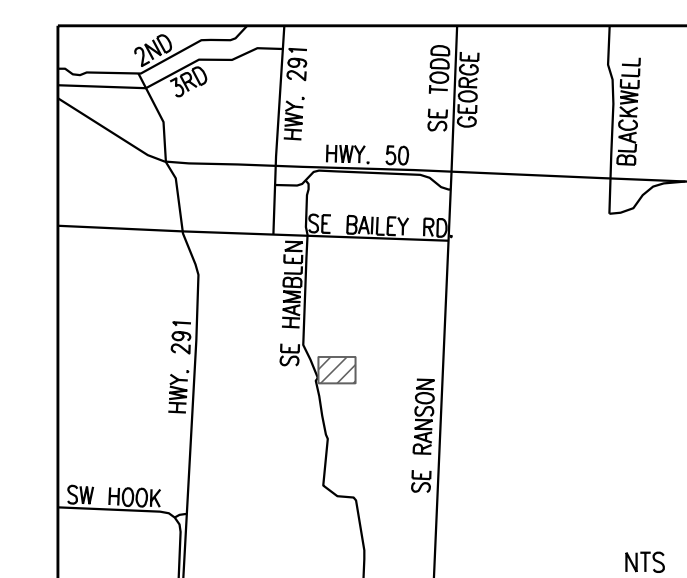
Comcast  
New Construction Hotline  
866-771-2281

Missouri One Call  
1-800-344-7483

#### PROJECT BENCHMARK

\*1 NW Corner of Existing Curb Inlet  
N: 988342.94  
E: 2829403.20  
Top Elev. 1001.9

#### VICINITY MAP



**PLANS PREPARED FOR**  
**KC DUMPSTER COMPANY**  
1280 SE CENTURY DRIVE  
LEE'S SUMMIT, MO 64081  
CONTACT - RODY TAYLOR  
816-491-4811

**PLANS PREPARED BY**  
**HG CONSULT**  
1533 LOCUST STREET  
KANSAS CITY, MO 64108  
CONTACT - KEVIN STERRETT  
816-703-7098



12/22/21



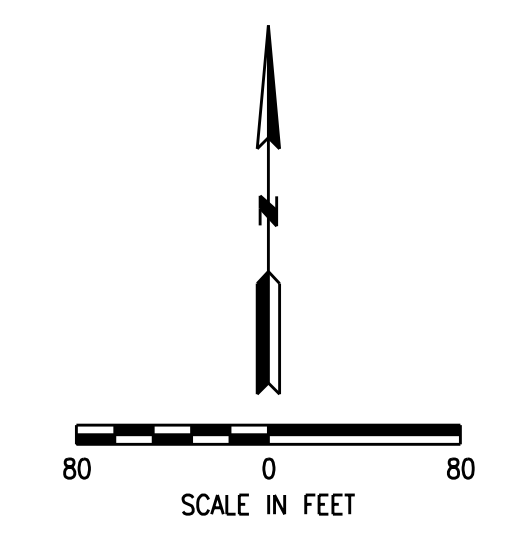
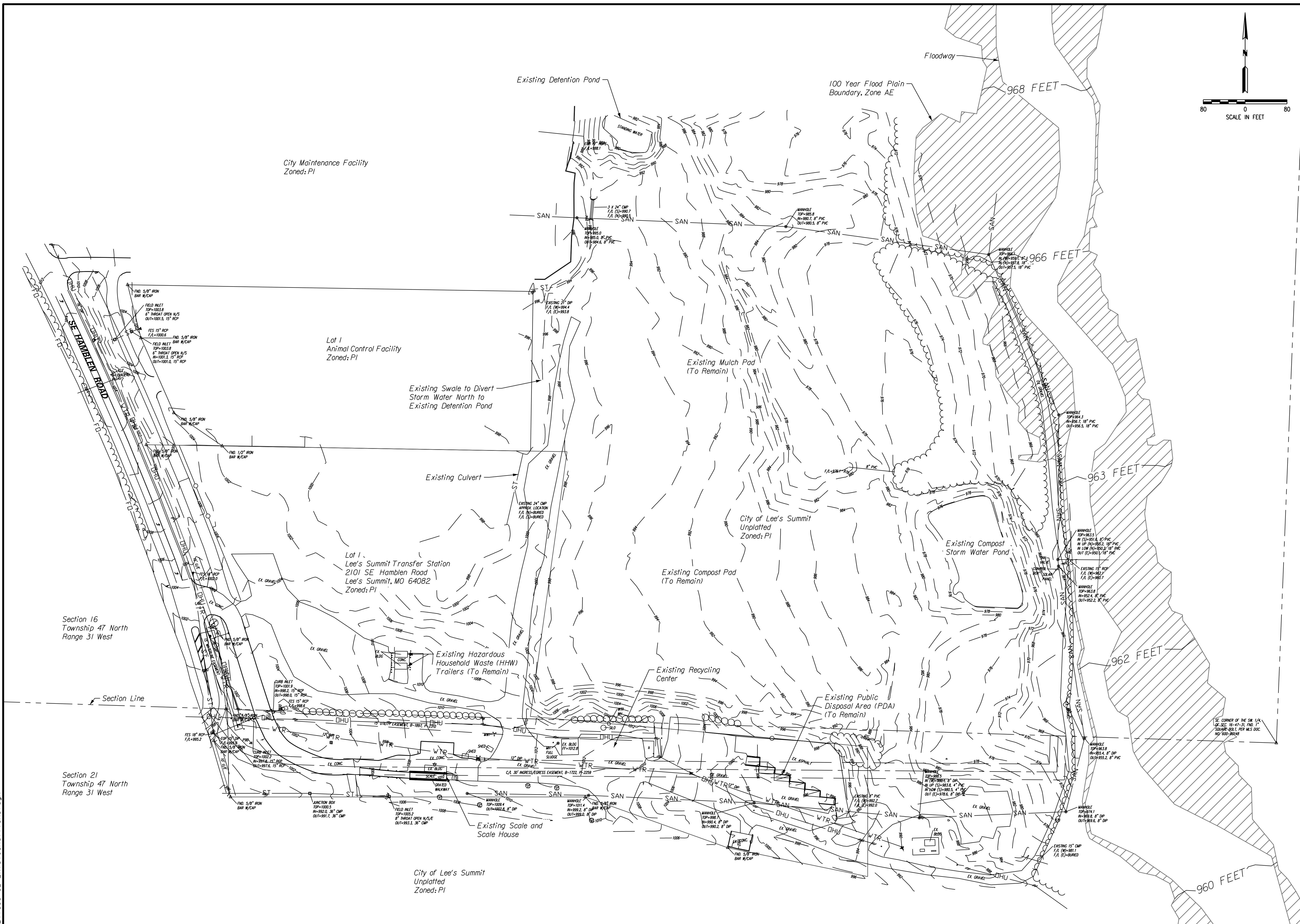
CORPORATE LICENSE NO. E2010005873  
1533 Locust Street Kansas City, MO 64108 816-703-7098

COVER SHEET	DATE December 22, 2021	LEE'S SUMMIT PROCESSING FACILITY LEE'S SUMMIT - JACKSON COUNTY - MISSOURI
	JOB NO. 21.033	
	SHEET OF 27	

12/22/2021 21.033-01-Cover.dgn

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21.033-02-ExistConditions.dgn



NO.	BY	DATE	REVISION

R. KEVIN STERRETT, NO. E-26440  
 12/22/21

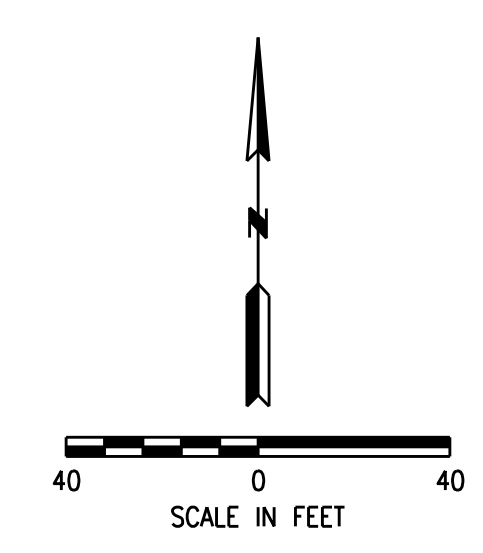
**Consult Inc**  
**engineers planners**  
 CORPORATE LICENSE NO. E2010005873  
 1533 Locust Street Kansas City, MO 64108 816-793-7098

**EXISTING CONDITIONS**  
**LEE'S SUMMIT**  
**PROCESSING FACILITY**  
 LEE'S SUMMIT - JACKSON COUNTY - MISSOURI

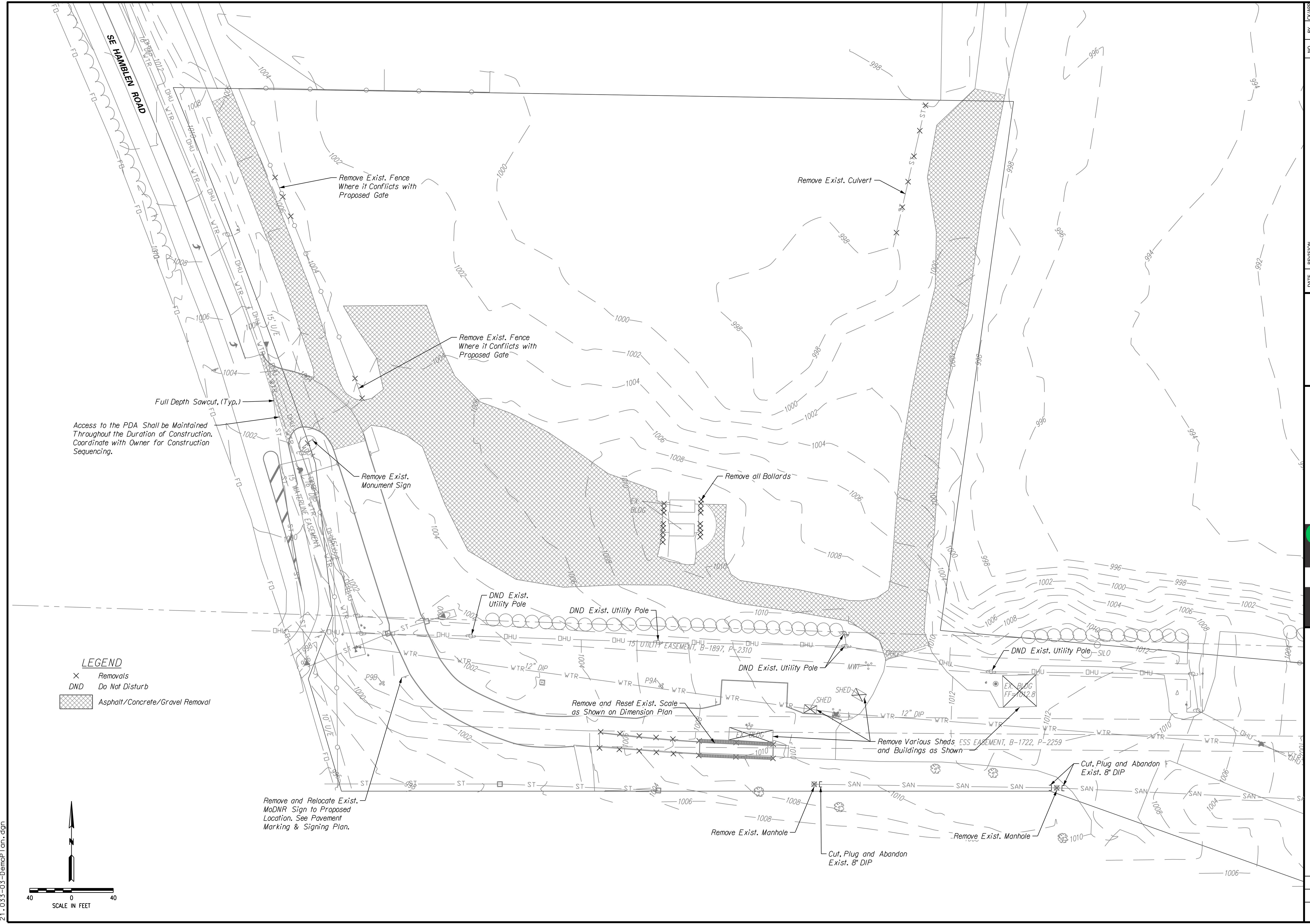
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December 22, 2021	
JOB NO.	
21.033	
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- LEGEND**
- X Removals
  - DND Do Not Disturb
  - Asphalt/Concrete/Gravel Removal



NO.	BY	REVISION

STATE OF MISSOURI  
 PROFESSIONAL ENGINEER  
 R. KEVIN STERRETT, MO E-26440  
 12/22/21

**Consult Inc**  
 engineers planners  
 CORPORATE LICENSE NO. E2010005873  
 1533 Locust Street Kansas City, MO 64108 816-703-7098

**DEMOLITION PLAN**  
**LEE'S SUMMIT PROCESSING FACILITY**  
 LEE'S SUMMIT - JACKSON COUNTY - MISSOURI

DATE: December 22, 2021  
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**GENERAL NOTES:**

1. A minor plat will be prepared to encompass the new plat boundary for the Lee's Summit Processing Facility.
2. There is no visible evidence of abandoned oil or gas wells located within the plat boundary, as shown by the Missouri Geological Survey GEOSTRAT (Geosciences Technical Resource Assessment Tool), as of October 4, 2021.
3. Watershed: Tributary B3 to Big Creek.
4. The subject property is located within "Zone X, Area of Minimal Flood Hazard" per the National Flood Insurance Program, FIRM, Flood Insurance Rate Map, Jackson County, Missouri, Map Number 29095C0438G effective date January 20, 2017.
5. Mechanical units shall be totally screened from view in accordance with Article 8 of the UDO.
6. All materials, colors, and architecture of buildings to meet the requirements of Article 8 of the UDO.
7. Contractor to locate and relocate any existing utilities that may conflict with construction as necessary.
8. The development shall meet the requirements of the Unified Development Ordinance, Design and Construction Manual, Access Management Code and other ordinance for development including, but not limited to, parking setbacks and spaces, ADA requirements, site lighting, landscaping and screening, utilities, and zoning requirements.
9. Every ADA accessible parking space shall be identified by a sign, mounted on a pole or other structure, located 60 inches above grade, measured from the bottom of the sign, and the head of the parking space.
10. All identifying signs shall be 12 inches wide by 18 inches in height and meet the requirement set forth in the Manual on Uniform Traffic Control Devices, as referenced in the Lee's Summit General Code of Ordinances.
11. There shall be two way traffic movement, except in the one way lane leading to the future HHW reception building.
12. See architectural submittal for all building dimensions, monument signs and lighting details.
13. See Lighting Plans and Specs for all information related to parking lot lighting.
14. All curb to be CG-1 curb, unless otherwise noted.

**STREETS:**

-A new entrance will be constructed off of SE Hamblen Road as shown. The existing outer road that was meant to be a temporary road will be sawcut on the Northern property line. Appropriate measures will be taken to alert drivers that this is now a dead end. The existing entrance off of SE Hamblen Road will be sawcut and demolished as shown.

**BUILDING SETBACK LINES:**

-Minimum required building line is 20 feet on SE Hamblen Road frontage, 10 feet on the North and South sides of the property, and 20 feet on the East side of the property.

**PARKING SETBACK LINES:**

-Minimum required parking setback line is 20 feet on SE Hamblen Road frontage, 6 feet is required from all other property lines.

**SIDEWALKS:**

-Interior sidewalks are 5' as shown. Sidewalks to be 5' PCC on 4' of compacted gravel.

**PROJECT DATA:**

The site is Zoned PI  
 Project Area - 38.174 acres (new boundary)  
 Sum of all building areas is 22,352 SF  
 FAR = .01  
 Maximum FAR in PI District is 1.0  
 Impervious Area - 3.6972 acres

**PHASING:**

-The project infrastructure as shown shall be completed in 1 phase, except for those items labeled as "Future"  
 -Access to the PDA shall be maintained throughout the duration of construction

**PARKING:**

-Parking Spaces Required/Provided - 13/13  
 1 per Employee on Max. Shift (10)  
 Additional Employee parking can be utilized on lower lot West of Processing Facility  
 1 per Appointment at Future HHW Building (2)  
 ADA Spaces Required/Provided - 1/1

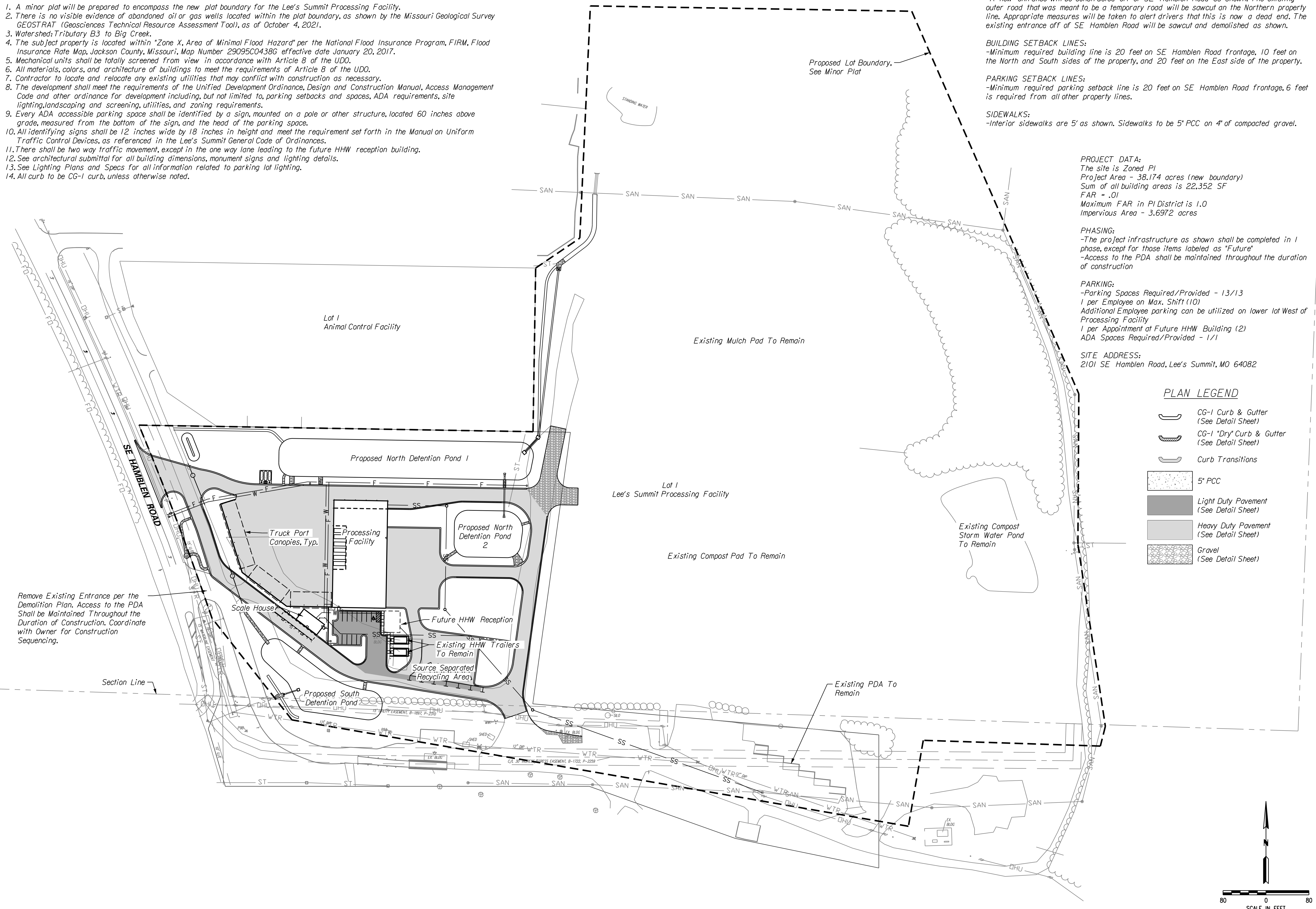
**SITE ADDRESS:**

2101 SE Hamblen Road, Lee's Summit, MO 64082

**PLAN LEGEND**

- CG-1 Curb & Gutter (See Detail Sheet)
- CG-1 "Dry" Curb & Gutter (See Detail Sheet)
- Curb Transitions
- 5' PCC
- Light Duty Pavement (See Detail Sheet)
- Heavy Duty Pavement (See Detail Sheet)
- Gravel (See Detail Sheet)

Remove Existing Entrance per the Demolition Plan. Access to the PDA Shall be Maintained Throughout the Duration of Construction. Coordinate with Owner for Construction Sequencing.



NO.	BY	DATE	REVISION

Professional Engineer Seal for R. Kevin Sterrett, No. E-26440, State of Missouri. Date: 12/22/21.

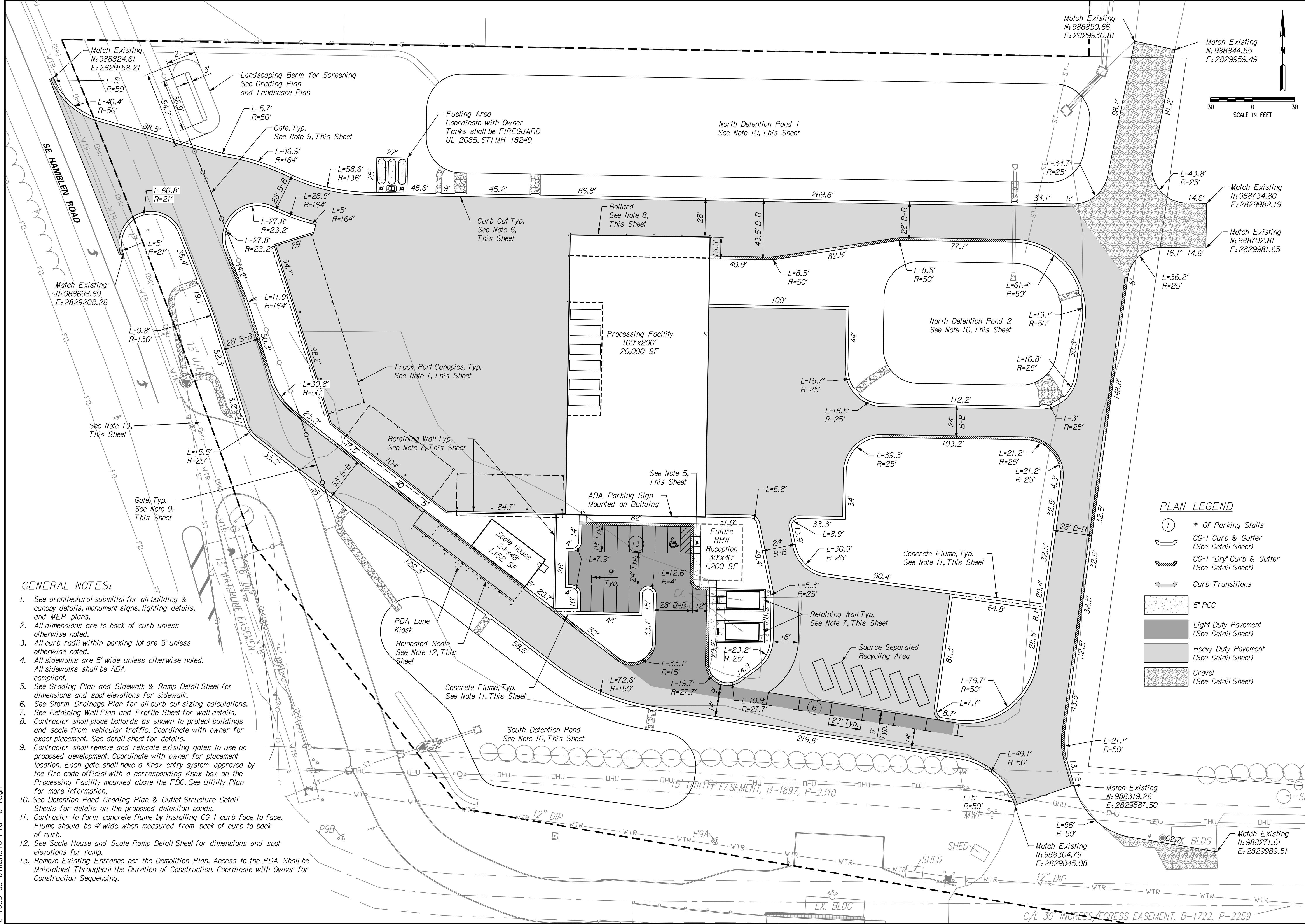
**Consult Inc engineers planners**  
 CORPORATE LICENSE NO. E2010005873  
 1533 Locust Street Kansas City, MO 64108 816-767-7098

**PRELIMINARY DEVELOPMENT PLAN**

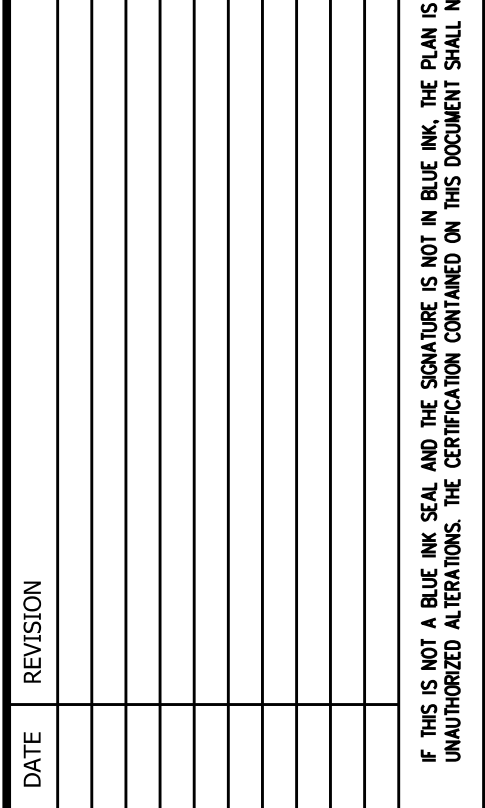
**LEE'S SUMMIT PROCESSING FACILITY**

LEE'S SUMMIT - JACKSON COUNTY - MISSOURI

DATE	December 22, 2021
DWG NO.	21.033
SHEET NO.	4
SHEET OF	27



NO.	BY	DATE



12/22/21

PLAN LEGEND

- Circle with 1: 1 of Parking Stalls
- U-shaped symbol: CG-1 Curb & Gutter (See Detail Sheet)
- U-shaped symbol with dashed line: CG-1 "Dry" Curb & Gutter (See Detail Sheet)
- Line symbol: Curb Transitions
- Stippled pattern: 5" PCC
- Light gray pattern: Light Duty Pavement (See Detail Sheet)
- Dark gray pattern: Heavy Duty Pavement (See Detail Sheet)
- Patterned area: Gravel (See Detail Sheet)

GENERAL NOTES:

1. See architectural submittal for all building & canopy details, monument signs, lighting details, and MEP plans.
2. All dimensions are to back of curb unless otherwise noted.
3. All curb radii within parking lot are 5' unless otherwise noted.
4. All sidewalks are 5' wide unless otherwise noted. All sidewalks shall be ADA compliant.
5. See Grading Plan and Sidewalk & Ramp Detail Sheet for dimensions and spot elevations for sidewalk.
6. See Storm Drainage Plan for all curb cut sizing calculations.
7. See Retaining Wall Plan and Profile Sheet for wall details.
8. Contractor shall place bollards as shown to protect buildings and scale from vehicular traffic. Coordinate with owner for exact placement. See detail sheet for details.
9. Contractor shall remove and relocate existing gates to use on proposed development. Coordinate with owner for placement location. Each gate shall have a Knox entry system approved by the fire code official with a corresponding Knox box on the Processing Facility mounted above the FDC. See Utility Plan for more information.
10. See Detention Pond Grading Plan & Outlet Structure Detail Sheets for details on the proposed detention ponds.
11. Contractor to form concrete flume by installing CG-1 curb face to face. Flume should be 4' wide when measured from back of curb to back of curb.
12. See Scale House and Scale Ramp Detail Sheet for dimensions and spot elevations for ramp.
13. Remove Existing Entrance per the Demolition Plan. Access to the PDA shall be maintained throughout the duration of construction. Coordinate with Owner for construction sequencing.

DIMENSION PLAN

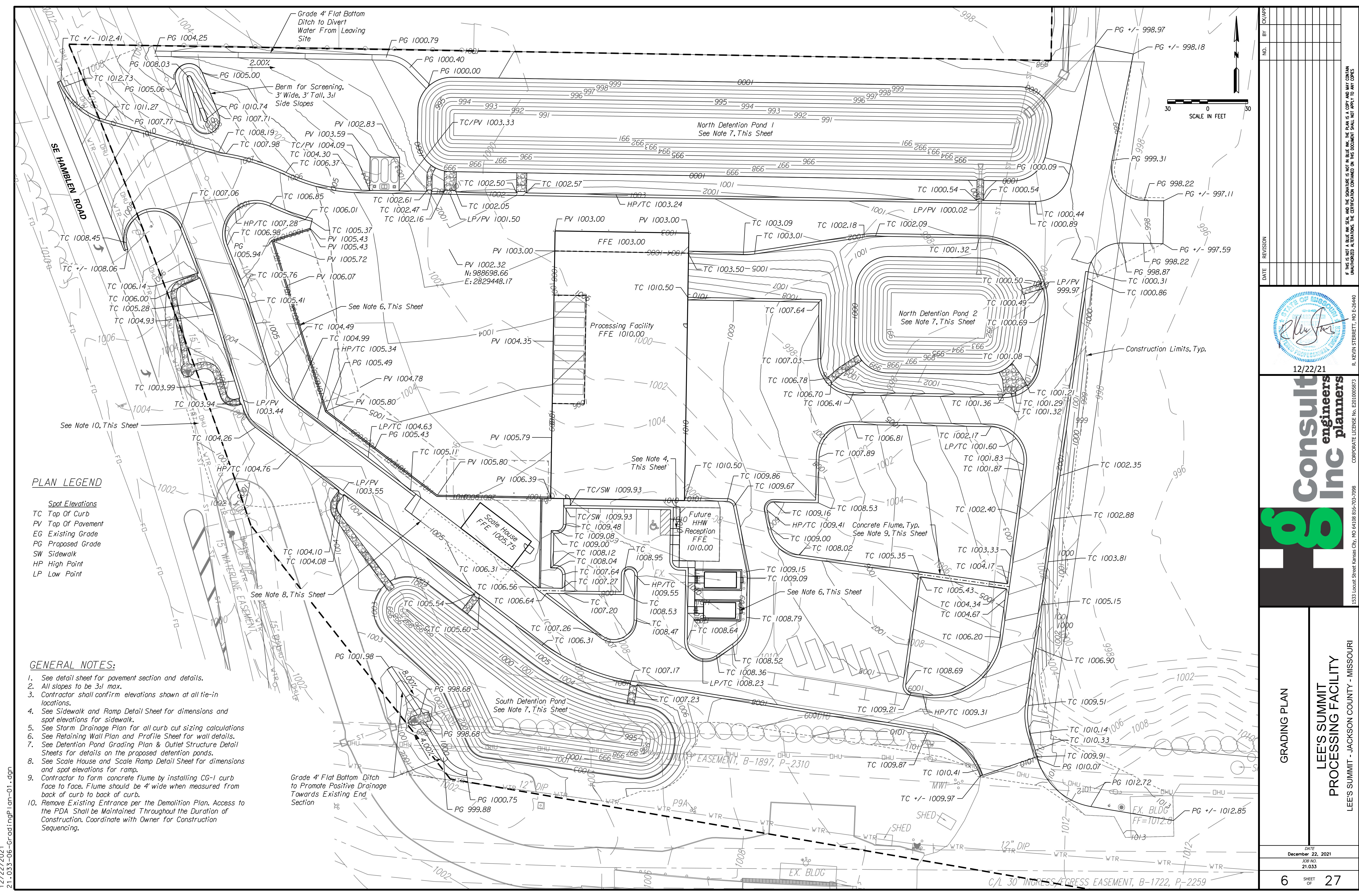
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DATE: December 22, 2021  
JOB NO: 21.033

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**PLAN LEGEND**

Spot Elevations  
 TC Top Of Curb  
 PV Top Of Pavement  
 EG Existing Grade  
 PG Proposed Grade  
 SW Sidewalk  
 HP High Point  
 LP Low Point

**GENERAL NOTES:**

1. See detail sheet for pavement section and details.
2. All slopes to be 3:1 max.
3. Contractor shall confirm elevations shown at all tie-in locations.
4. See Sidewalk and Ramp Detail Sheet for dimensions and spot elevations for sidewalk.
5. See Storm Drainage Plan for all curb cut sizing calculations.
6. See Retaining Wall Plan and Profile Sheet for wall details.
7. See Detention Pond Grading Plan & Outlet Structure Detail Sheets for details on the proposed detention ponds.
8. See Scale House and Scale Ramp Detail Sheet for dimensions and spot elevations for ramp.
9. Contractor to form concrete flume by installing CG-1 curb face to face. Flume should be 4' wide when measured from back of curb to back of curb.
10. Remove Existing Entrance per the Demolition Plan. Access to the PDA Shall be Maintained Throughout the Duration of Construction. Coordinate with Owner for Construction Sequencing.

NO.	BY	CHKD
DATE	REVISION	



12/22/21

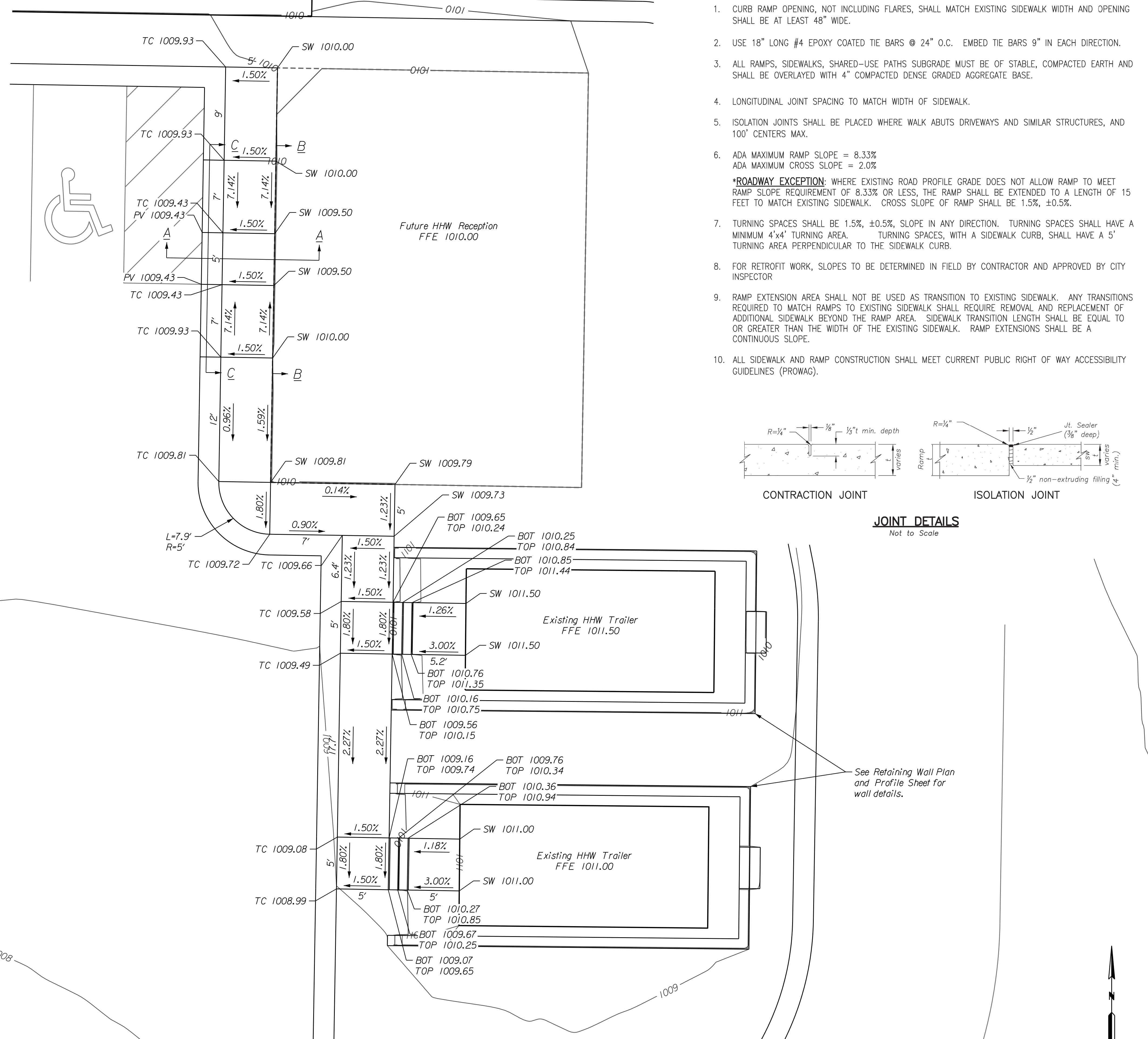
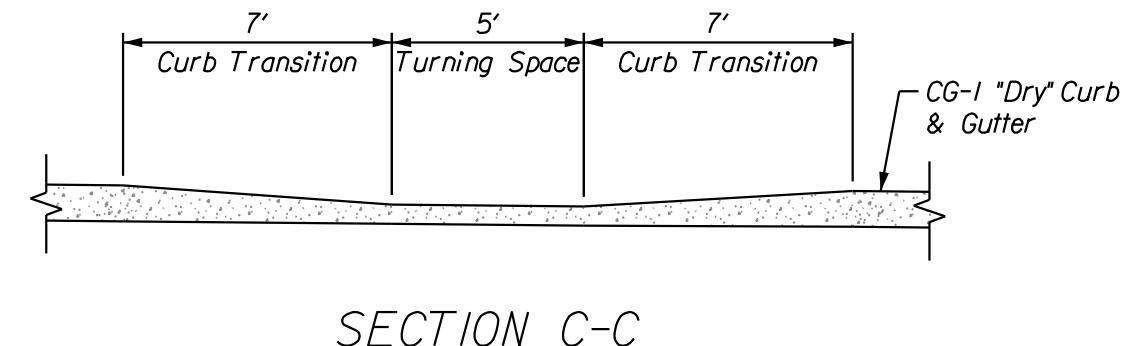
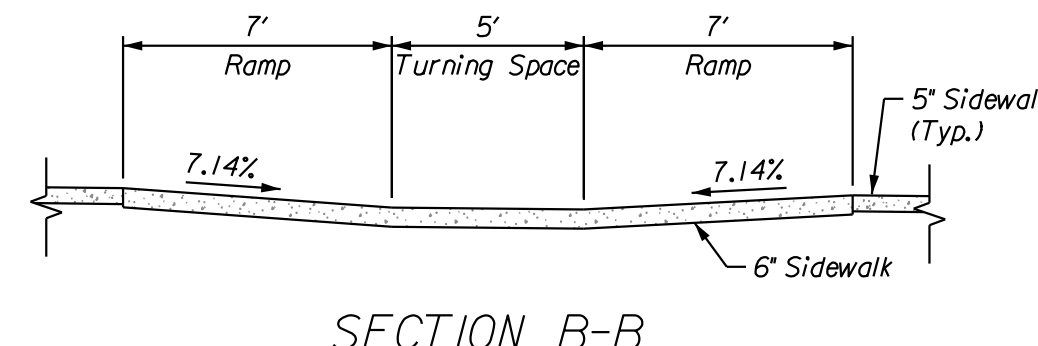
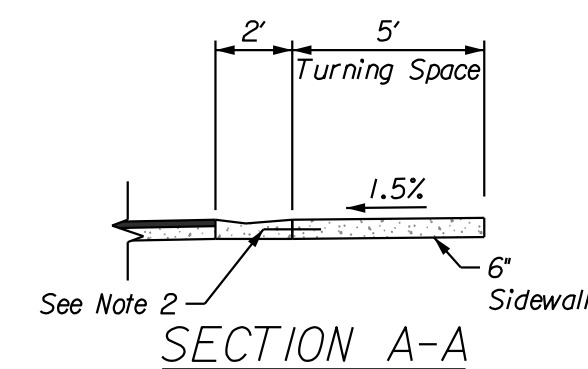
**Consult Inc**  
**engineers planners**

1533 Locust Street Kansas City, MO 64108 816-793-7098  
 CORPORATE LICENSE NO. E2010005873

**GRADING PLAN**

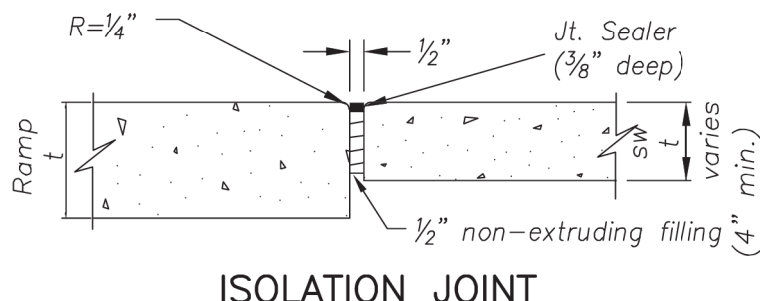
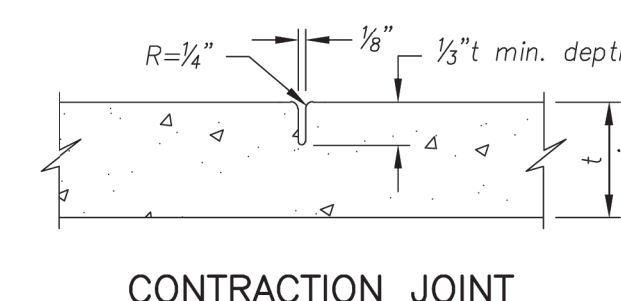
**LEE'S SUMMIT PROCESSING FACILITY**  
 LEE'S SUMMIT - JACKSON COUNTY - MISSOURI

DATE: December 22, 2021  
 JOB NO: 21.033  
 21.033



**SIDEWALK/SHARED-USE PATH & SIDEWALK/SHARED-USE RAMP NOTES:**

- 1. CURB RAMP OPENING, NOT INCLUDING FLARES, SHALL MATCH EXISTING SIDEWALK WIDTH AND OPENING SHALL BE AT LEAST 48" WIDE.
- 2. USE 18" LONG #4 EPOXY COATED TIE BARS @ 24" O.C. EMBED THE BARS 9" IN EACH DIRECTION.
- 3. ALL RAMPS, SIDEWALKS, SHARED-USE PATHS SUBGRADE MUST BE OF STABLE, COMPACTED EARTH AND SHALL BE OVERLAYED WITH 4" COMPACTED DENSE GRADED AGGREGATE BASE.
- 4. LONGITUDINAL JOINT SPACING TO MATCH WIDTH OF SIDEWALK.
- 5. ISOLATION JOINTS SHALL BE PLACED WHERE WALK ABUTS DRIVEWAYS AND SIMILAR STRUCTURES, AND 100' CENTERS MAX.
- 6. ADA MAXIMUM RAMP SLOPE = 8.33%  
ADA MAXIMUM CROSS SLOPE = 2.0%  
**\*ROADWAY EXCEPTION:** WHERE EXISTING ROAD PROFILE GRADE DOES NOT ALLOW RAMP TO MEET RAMP SLOPE REQUIREMENT OF 8.33% OR LESS, THE RAMP SHALL BE EXTENDED TO A LENGTH OF 15 FEET TO MATCH EXISTING SIDEWALK. CROSS SLOPE OF RAMP SHALL BE 1.5%, ±0.5%.
- 7. TURNING SPACES SHALL BE 1.5%, ±0.5%, SLOPE IN ANY DIRECTION. TURNING SPACES SHALL HAVE A MINIMUM 4'x4' TURNING AREA. TURNING SPACES, WITH A SIDEWALK CURB, SHALL HAVE A 5' TURNING AREA PERPENDICULAR TO THE SIDEWALK CURB.
- 8. FOR RETROFIT WORK, SLOPES TO BE DETERMINED IN FIELD BY CONTRACTOR AND APPROVED BY CITY INSPECTOR.
- 9. RAMP EXTENSION AREA SHALL NOT BE USED AS TRANSITION TO EXISTING SIDEWALK. ANY TRANSITIONS REQUIRED TO MATCH RAMPS TO EXISTING SIDEWALK SHALL REQUIRE REMOVAL AND REPLACEMENT OF ADDITIONAL SIDEWALK BEYOND THE RAMP AREA. SIDEWALK TRANSITION LENGTH SHALL BE EQUAL TO OR GREATER THAN THE WIDTH OF THE EXISTING SIDEWALK. RAMP EXTENSIONS SHALL BE A CONTINUOUS SLOPE.
- 10. ALL SIDEWALK AND RAMP CONSTRUCTION SHALL MEET CURRENT PUBLIC RIGHT OF WAY ACCESSIBILITY GUIDELINES (PROWAG).



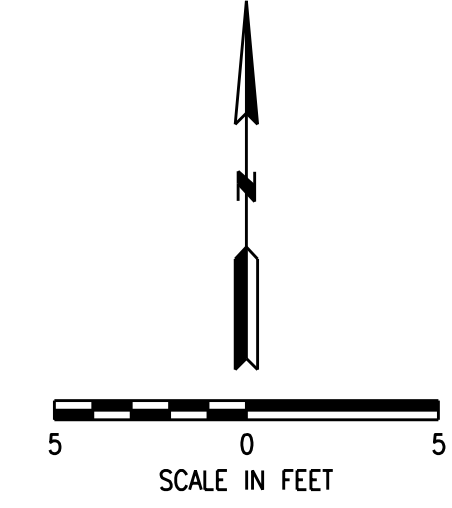
**JOINT DETAILS**  
Not to Scale

**PLAN LEGEND**

- Spot Elevations**  
TC Top Of Curb  
PV Top Of Pavement  
EG Existing Grade  
PG Proposed Grade  
SW Sidewalk  
HP High Point  
LP Low Point

**GENERAL NOTES:**

1. Contractor shall install concrete steps in front of the existing HHW trailers as shown. Steps shall have a 7" rise X 11" tread.



BY: CKA/APP		
NO.:		
REVISION:		
DATE:		

12/22/21  
R. KEVIN STERRETT, MO E-26440  
PROFESSIONAL ENGINEER  
CORPORATE LICENSE NO. E2010005873

8

Consult Inc  
engineers  
planners

1533 Locust Street Kansas City, MO 64108 816-703-7098

SIDEWALK AND RAMP DETAILS

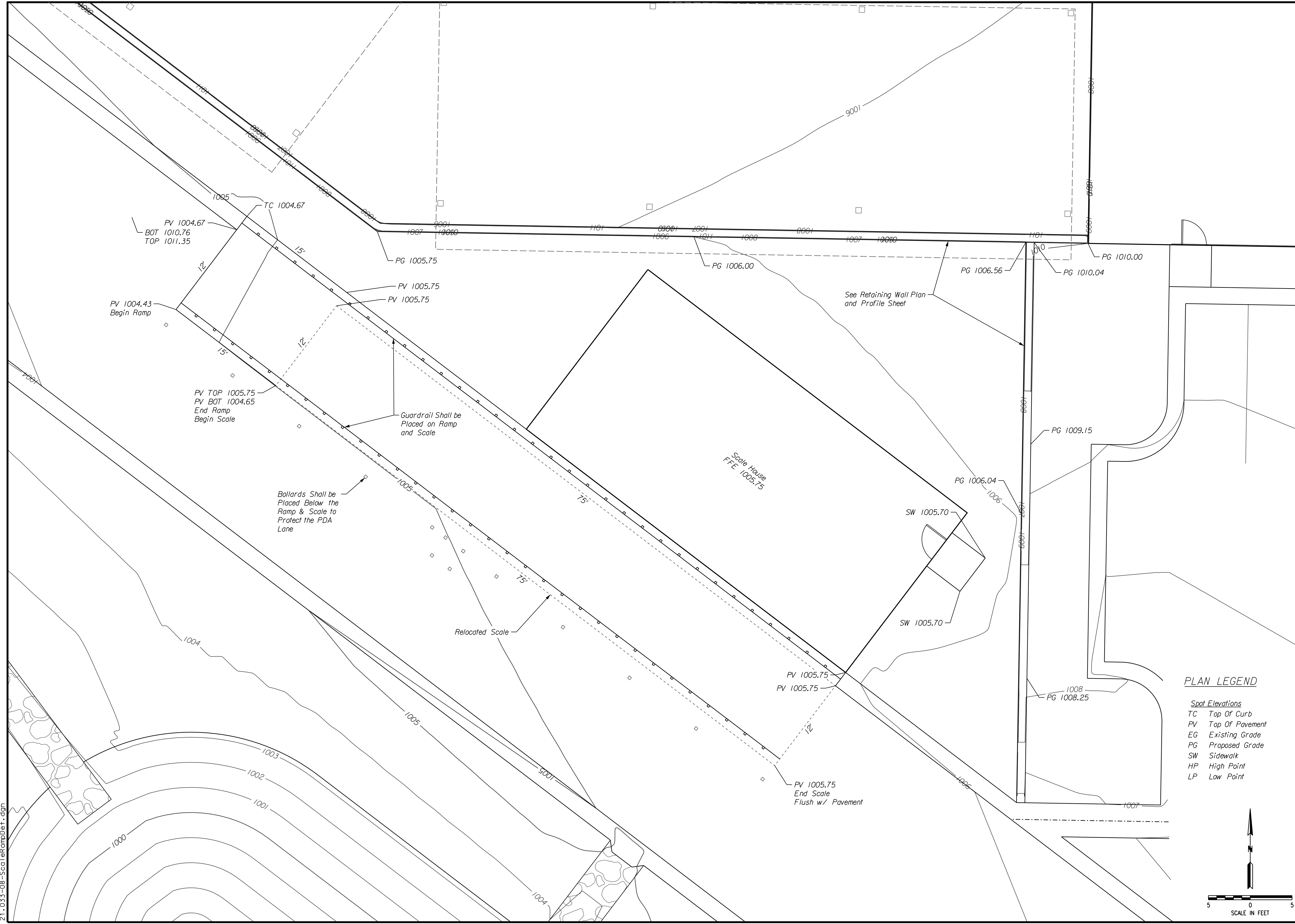
LEE'S SUMMIT  
PROCESSING FACILITY

LEE'S SUMMIT - JACKSON COUNTY - MISSOURI

DATE: December 22, 2021  
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SHEET OF 27

12/22/2021 21.033-07-SidewalkRampDet.dgn

12/22/2021  
21.033-08-ScaleRampDet.dgn



- PLAN LEGEND**
- Spot Elevations
  - TC Top Of Curb
  - PV Top Of Pavement
  - EG Existing Grade
  - PG Proposed Grade
  - SW Sidewalk
  - HP High Point
  - LP Low Point

NO.	DATE	BY	REVISION



12/22/21

**H2G Inc**  
Consulting  
engineers  
planners  
CORPORATE LICENSE NO. E2010005873  
1533 Locust Street Kansas City, MO 64108 816-793-7098

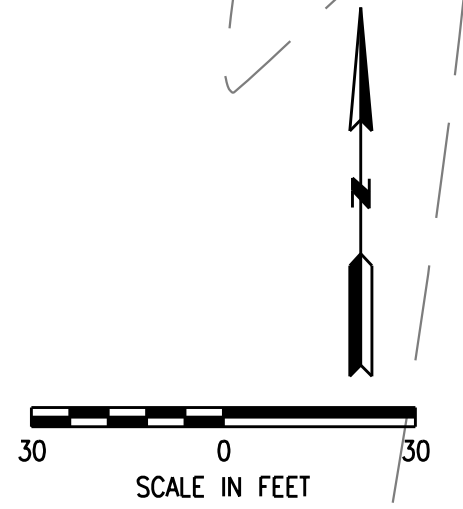
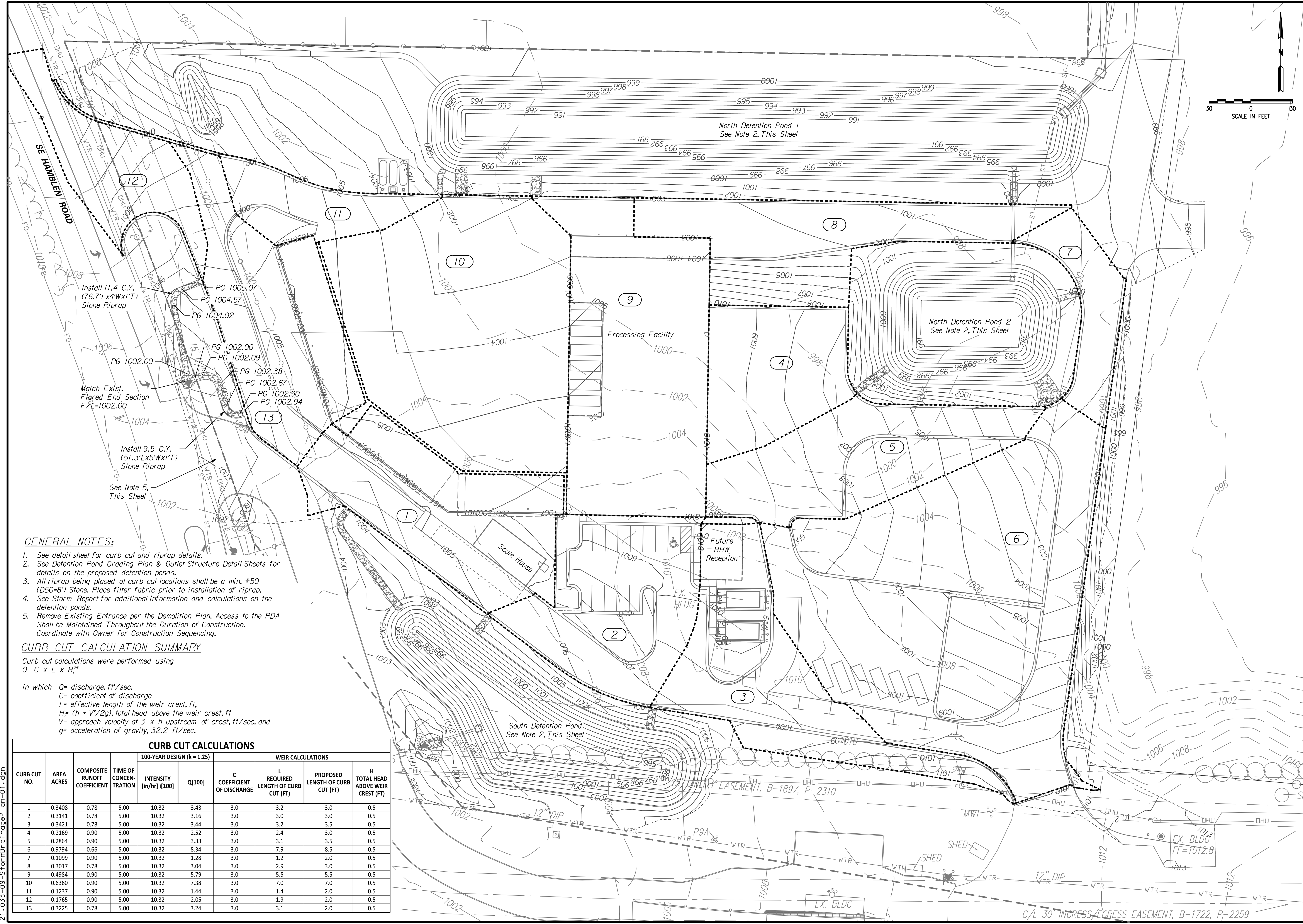
SCALE HOUSE AND SCALE RAMP DETAILS

LEE'S SUMMIT  
PROCESSING FACILITY  
LEE'S SUMMIT - JACKSON COUNTY - MISSOURI

DATE December 22, 2021
DRAWING NO. 21.033
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**Consult Inc engineers planners**

1533 Locust Street Kansas City, MO 64108 816-793-7098  
CORPORATE LICENSE NO. E2010005873

**GENERAL NOTES:**

1. See detail sheet for curb cut and riprap details.
2. See Detention Pond Grading Plan & Outlet Structure Detail Sheets for details on the proposed detention ponds.
3. All riprap being placed at curb cut locations shall be a min. #50 (D50=8") Stone. Place filter fabric prior to installation of riprap.
4. See Storm Report for additional information and calculations on the detention ponds.
5. Remove Existing Entrance per the Demolition Plan. Access to the PDA Shall be Maintained Throughout the Duration of Construction. Coordinate with Owner for Construction Sequencing.

**CURB CUT CALCULATION SUMMARY**

Curb cut calculations were performed using  $Q = C \times L \times H^{3/2}$

in which  $Q$  = discharge,  $ft^3/sec.$   
 $C$  = coefficient of discharge  
 $L$  = effective length of the weir crest,  $ft.$   
 $H$  =  $(h + V^2/2g)$ , total head above the weir crest,  $ft.$   
 $V$  = approach velocity at  $3 \times h$  upstream of crest,  $ft/sec.$ , and  
 $g$  = acceleration of gravity,  $32.2 \text{ ft/sec.}$

**CURB CUT CALCULATIONS**

CURB CUT NO.	AREA ACRES	COMPOSITE RUNOFF COEFFICIENT	TIME OF CONCENTRATION	100-YEAR DESIGN (K=1.25)		WEIR CALCULATIONS			
				INTENSITY [in/hr] @ 100'	Q[100]	C COEFFICIENT OF DISCHARGE	L REQUIRED LENGTH OF CURB CUT (FT)	PROPOSED LENGTH OF CURB CUT (FT)	H TOTAL HEAD ABOVE WEIR CREST (FT)
1	0.3408	0.78	5.00	10.32	3.43	3.0	3.2	3.0	0.5
2	0.3141	0.78	5.00	10.32	3.16	3.0	3.0	3.0	0.5
3	0.3421	0.78	5.00	10.32	3.44	3.0	3.2	3.5	0.5
4	0.2169	0.90	5.00	10.32	2.52	3.0	2.4	3.0	0.5
5	0.2864	0.90	5.00	10.32	3.33	3.0	3.1	3.5	0.5
6	0.9794	0.66	5.00	10.32	8.34	3.0	7.9	8.5	0.5
7	1.1099	0.90	5.00	10.32	1.28	3.0	1.2	2.0	0.5
8	0.3017	0.78	5.00	10.32	3.04	3.0	2.9	3.0	0.5
9	0.4984	0.90	5.00	10.32	5.79	3.0	5.5	5.5	0.5
10	0.6360	0.90	5.00	10.32	7.38	3.0	7.0	7.0	0.5
11	0.1237	0.90	5.00	10.32	1.44	3.0	1.4	2.0	0.5
12	0.1765	0.90	5.00	10.32	2.05	3.0	1.9	2.0	0.5
13	0.3225	0.78	5.00	10.32	3.24	3.0	3.1	2.0	0.5

21\_033-09-StormDrainagePlan-01.dgn

STORM DRAINAGE PLAN

LEE'S SUMMIT  
PROCESSING FACILITY

LEE'S SUMMIT - JACKSON COUNTY - MISSOURI

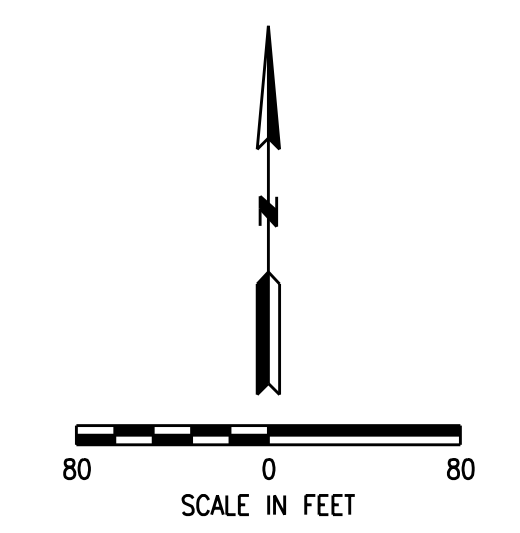
DATE: December 22, 2021  
 JOB NO: 21.033  
 SHEET OF 27

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12/22/2021  
21.033-10-DA-Mdp-Existing.dgn

**GENERAL NOTES:**

1. See Storm Report for additional information and calculations on the detention ponds.



NO.	DATE	REVISION	BY

12/22/21  
R. KEVIN STERRETT, MO E-26440

**Consult Inc**  
**engineers planners**

CORPORATE LICENSE NO. E2010005873  
1533 Locust Street Kansas City, MO 64108 816-703-7098

**PRE-DEVELOPMENT DRAINAGE AREA MAP**

**LEE'S SUMMIT PROCESSING FACILITY**

LEE'S SUMMIT - JACKSON COUNTY - MISSOURI

DATE	December 22, 2021
JOB NO.	21.033
SHEET NO.	10
TOTAL SHEETS	27

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12/22/2021  
21\_033-11-DA-Mdp-Proposed.dgn

GENERAL NOTES:  
1. See Storm Report for additional information and calculations on the detention ponds.



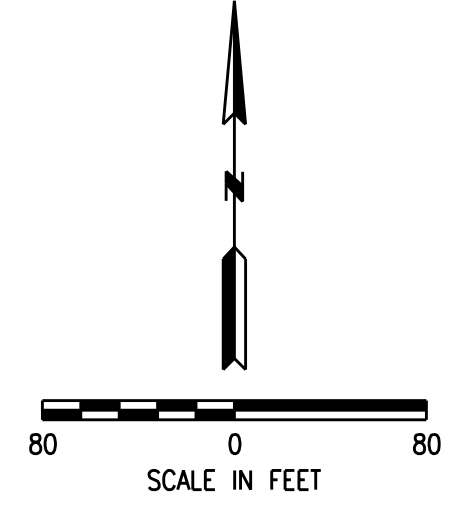
12/22/21

**Consult Inc planners**  
CORPORATE LICENSE NO. E2010005873  
1533 Locust Street Kansas City, MO 64108 816-783-7098

POST-DEVELOPMENT DRAINAGE AREA MAP

LEE'S SUMMIT  
PROCESSING FACILITY  
LEE'S SUMMIT - JACKSON COUNTY - MISSOURI

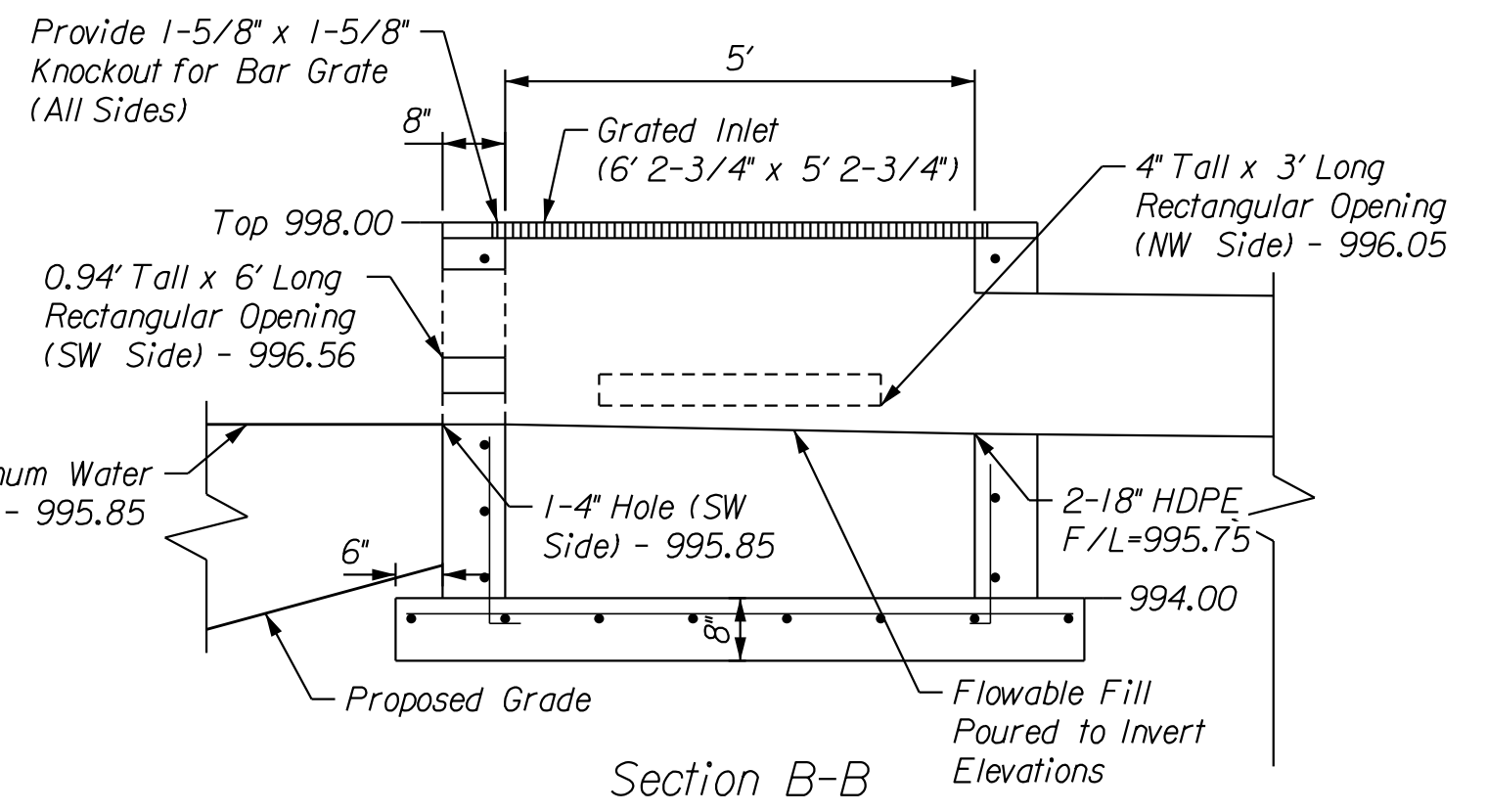
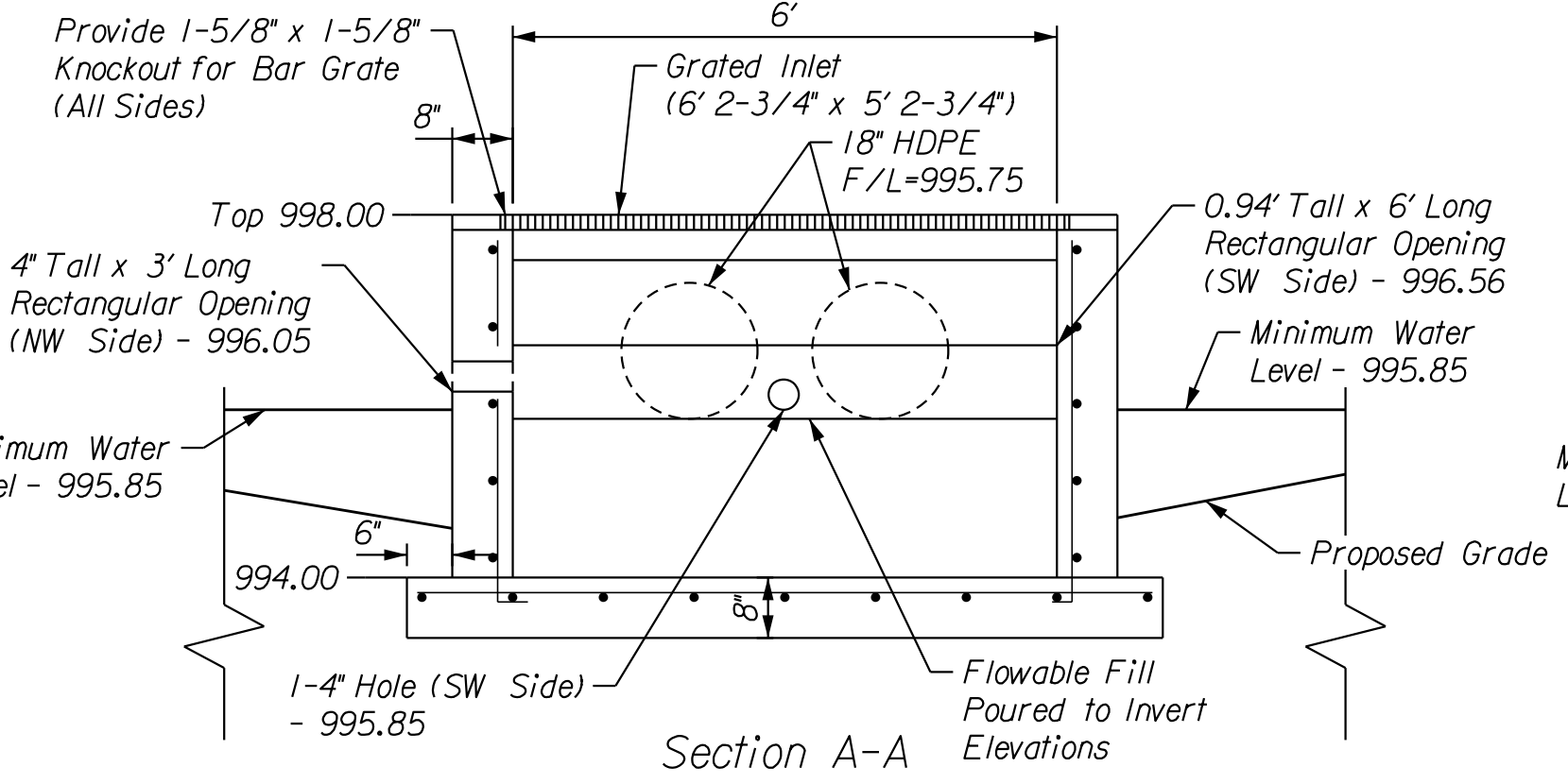
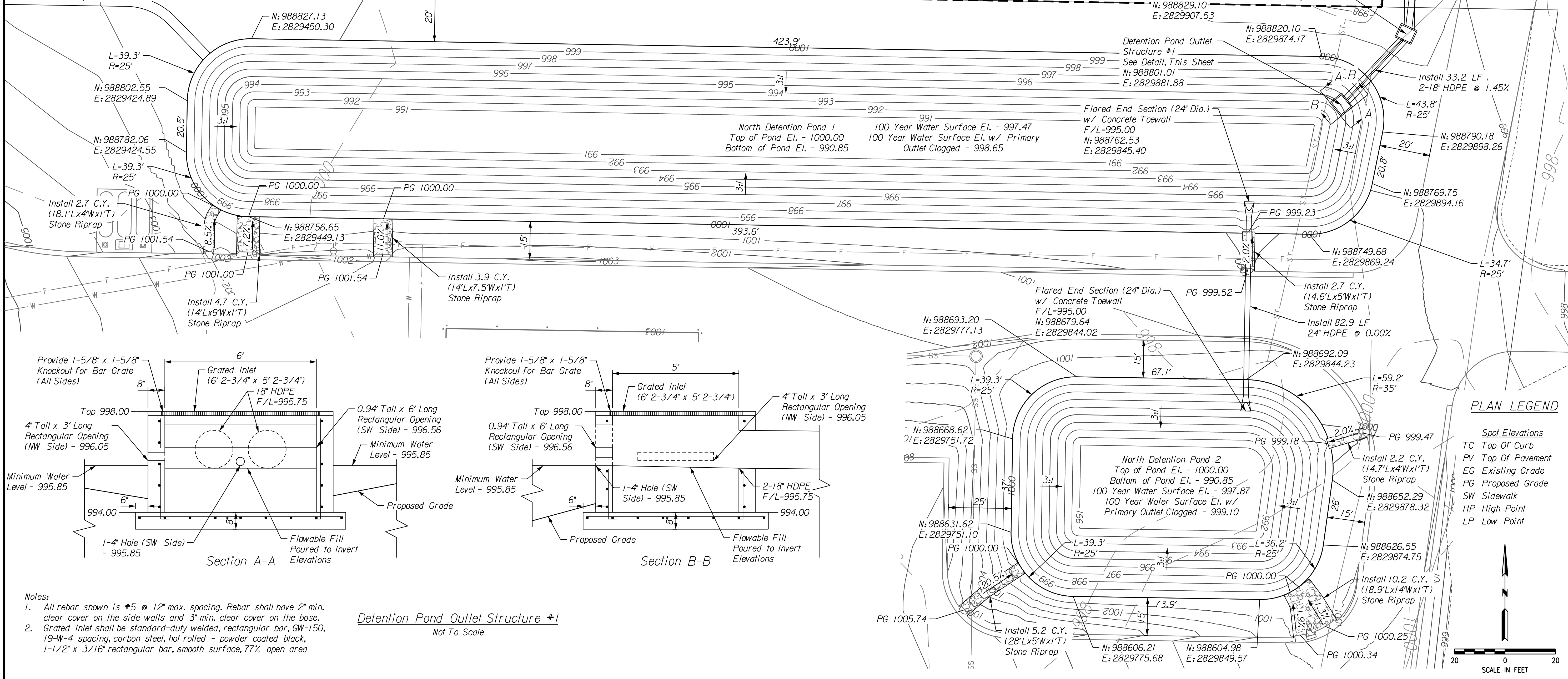
DATE: December 22, 2021  
JOB NO: 21.033



11 SHEET 27

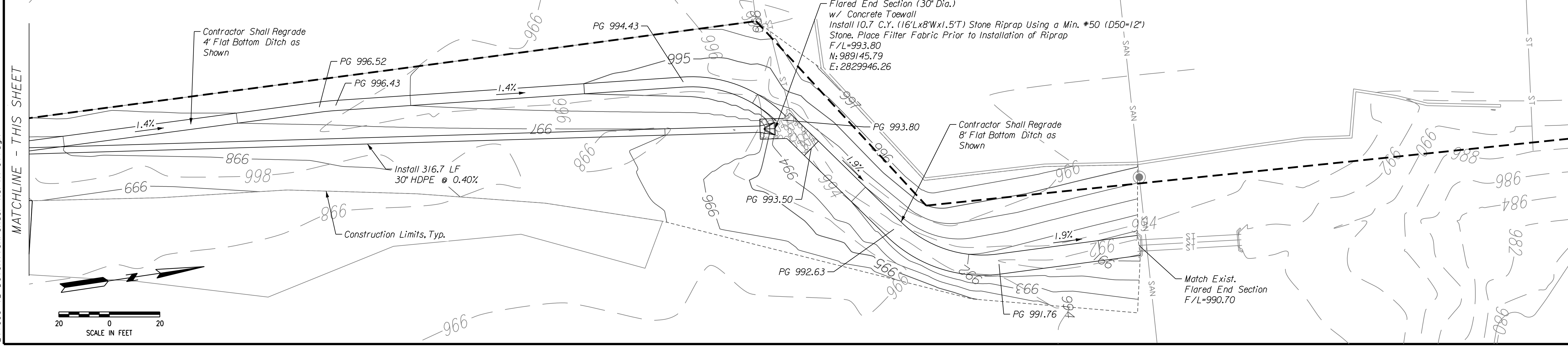
**GENERAL NOTES:**

- All riprap being placed at curb cut locations shall be a min. #50 (D50=8") Stone. Place filter fabric prior to installation of riprap.
- See detail sheet for curb cut and riprap details.
- See Storm Report for additional information and calculations on the detention ponds.

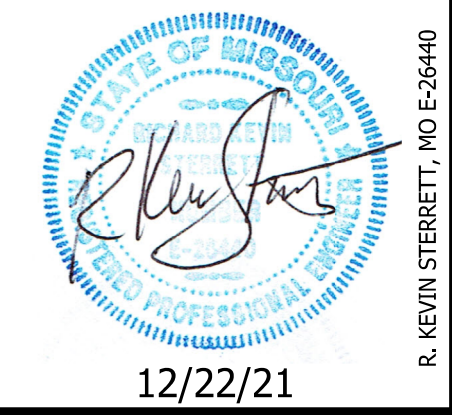


**Detention Pond Outlet Structure #1**  
Not To Scale

- Notes:**
- All rebar shown is #5 @ 12" max. spacing. Rebar shall have 2" min. clear cover on the side walls and 3" min. clear cover on the base.
  - Grated Inlet shall be standard-duty welded, rectangular bar, GW-150, 19-W-4 spacing, carbon steel, hot rolled - powder coated black, 1-1/2" x 3/16" rectangular bar, smooth surface, 77% open area



NO.	BY	DATE



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CORPORATE LICENSE NO. E201005873

**NORTH DETENTION PONDS GRADING PLAN AND OUTLET STRUCTURE DETAILS**

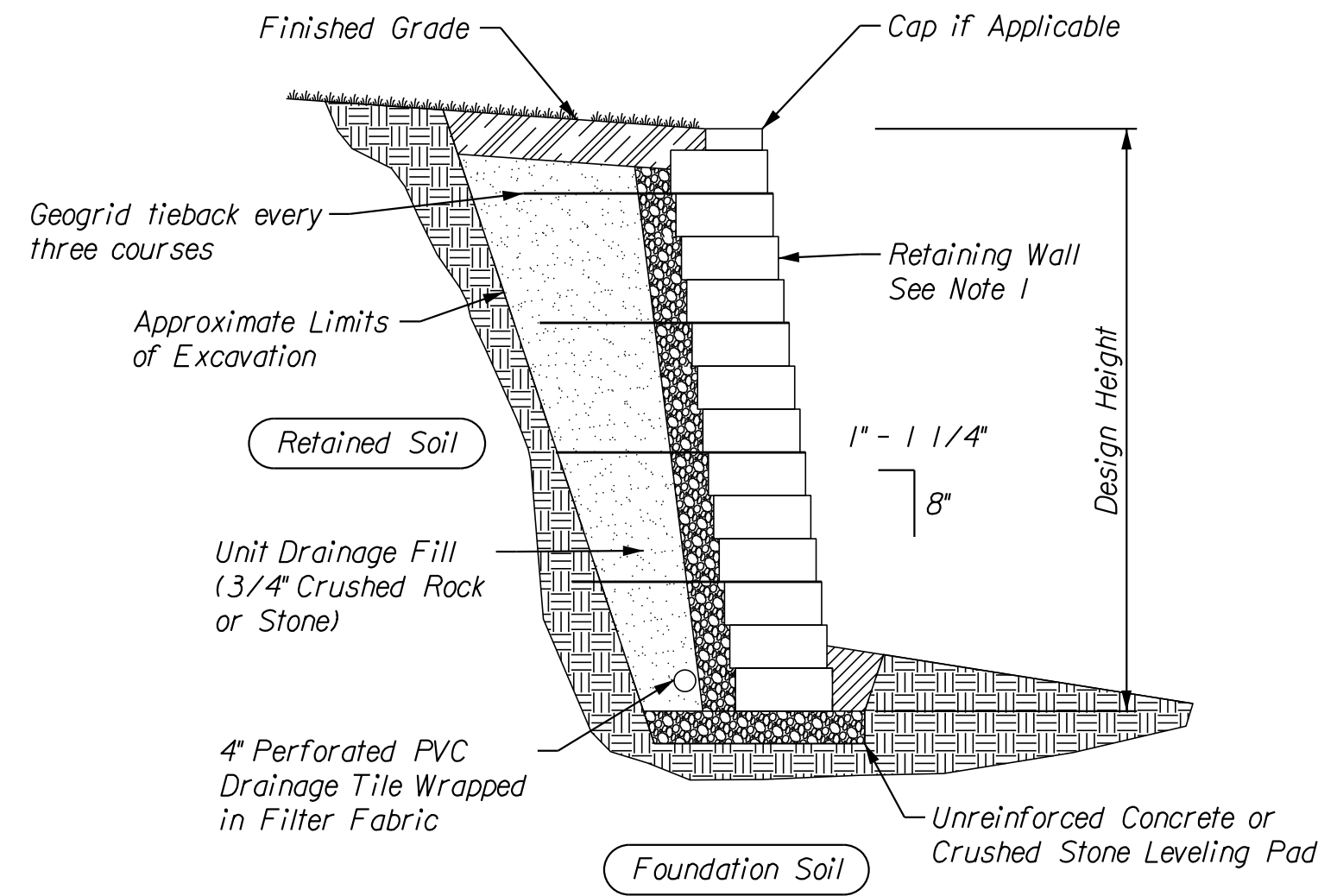
**LEE'S SUMMIT PROCESSING FACILITY**

LEE'S SUMMIT - JACKSON COUNTY - MISSOURI

DATE: December 22, 2021  
JOB NO: 21.033

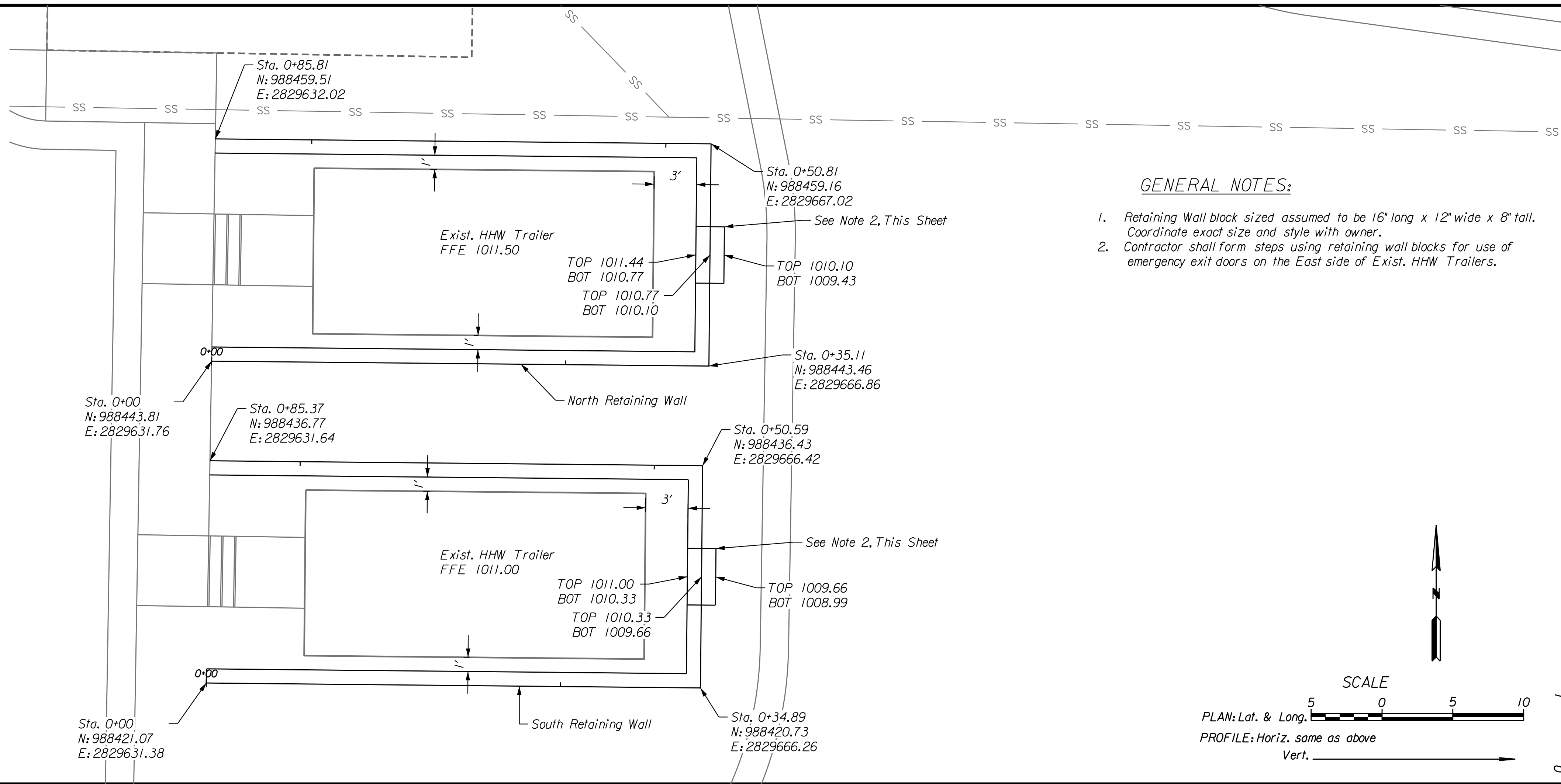
12 SHEET OF 27





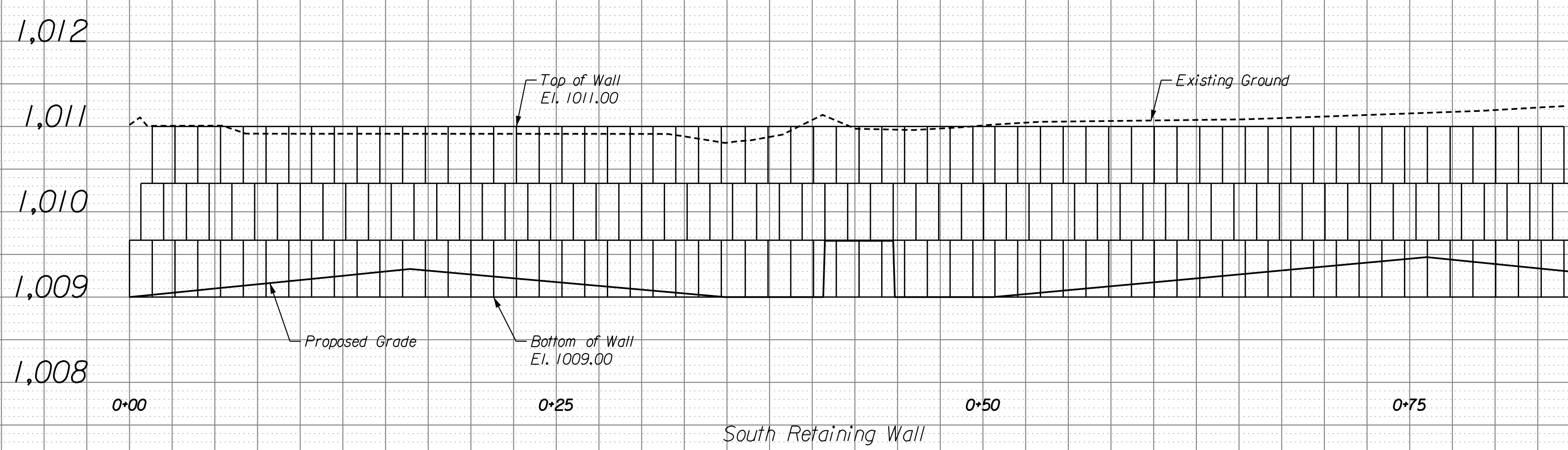
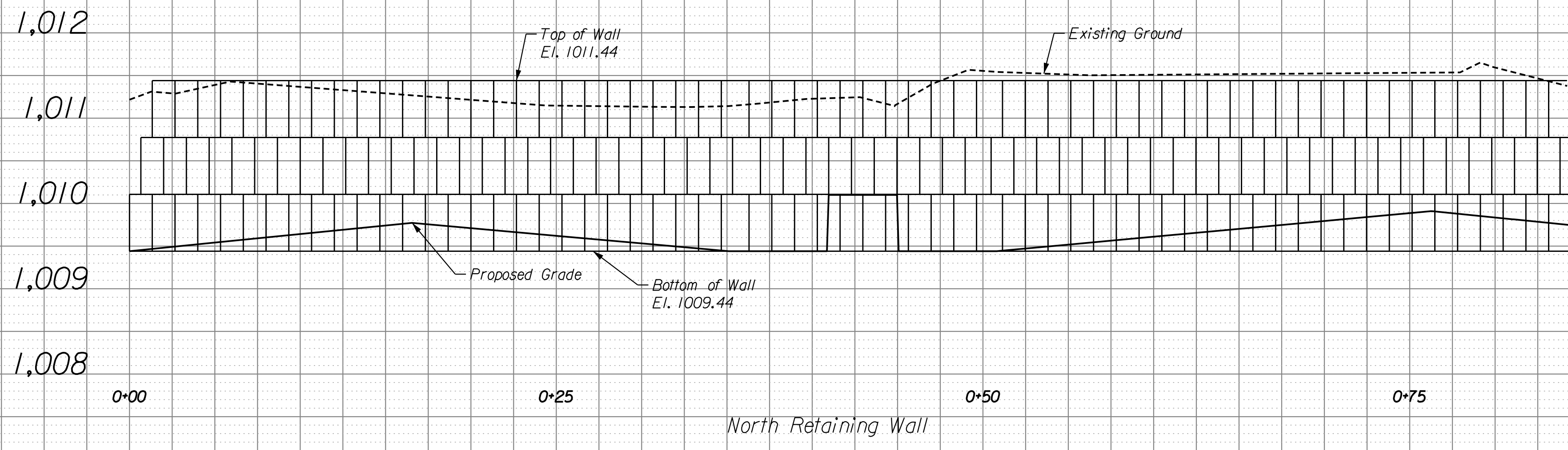
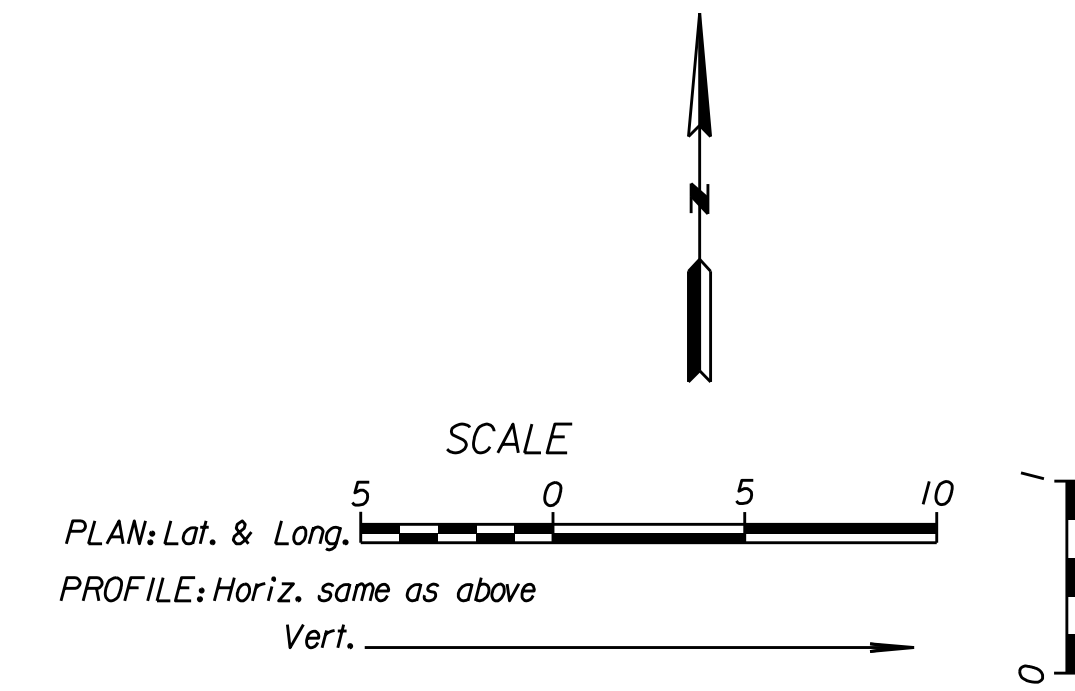
*Typical Gravity Wall Section*

Note:  
When site conditions require, wrap drainage tile in 3.4 aggregate and filter fabric with drainage composite or aggregate back drain system, as directed by engineer.



**GENERAL NOTES:**

- Retaining Wall block sized assumed to be 16" long x 12" wide x 8" tall. Coordinate exact size and style with owner.
- Contractor shall form steps using retaining wall blocks for use of emergency exit doors on the East side of Exist. HHW Trailers.



NO.	BY	CHK/APP	DATE	REVISION

12/22/21  
 R. KEVIN STERRETT, MO E-26440  
 PROFESSIONAL ENGINEER

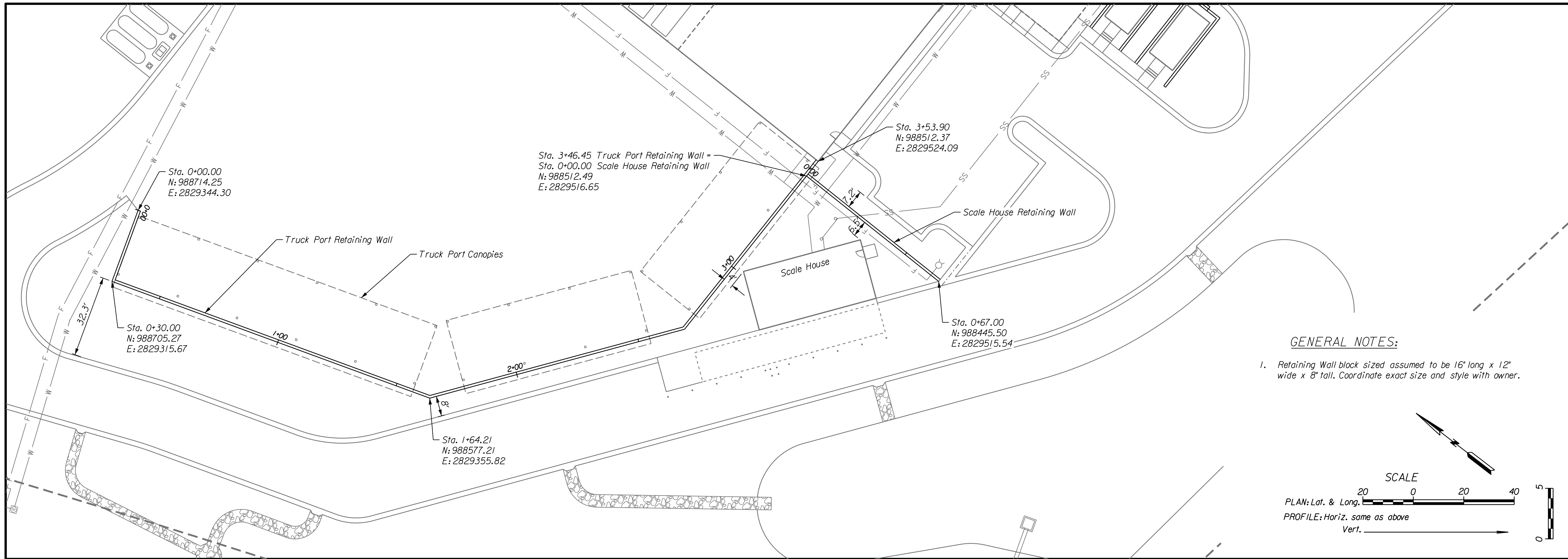
**Consult**  
**Inc**  
**engineers**  
**planners**

1533 Locust Street, Kansas City, MO 64108 816-783-7098  
 CORPORATE LICENSE NO. E2010005873

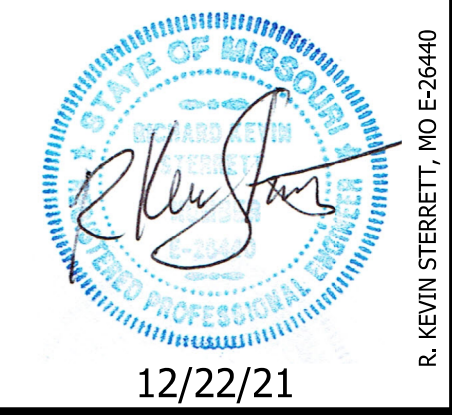
RETAINING WALL PLAN AND PROFILES  
 LEE'S SUMMIT  
 PROCESSING FACILITY  
 LEE'S SUMMIT - JACKSON COUNTY - MISSOURI

12/22/2021 21.033-14-RetainingWall-PlanProf-01.dgn

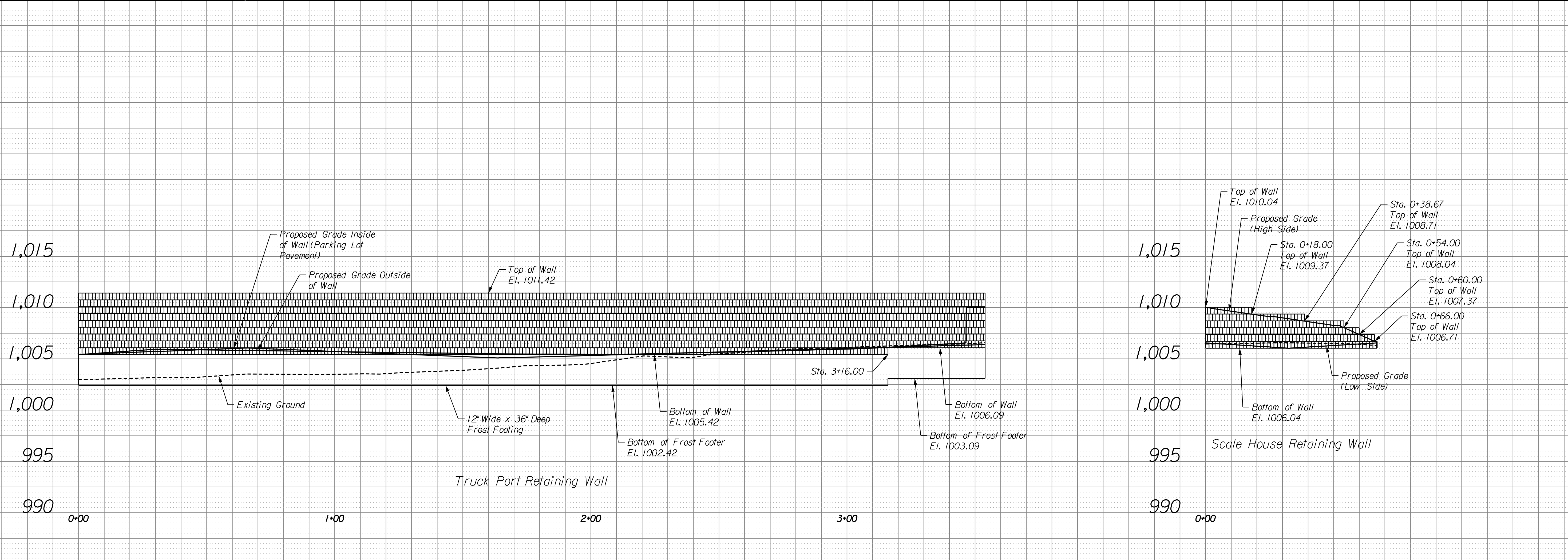
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**GENERAL NOTES:**  
 1. Retaining Wall block sized assumed to be 16" long x 12" wide x 8" tall. Coordinate exact size and style with owner.



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 CORPORATE LICENSE NO. E2010005873



**RETAINING WALL PLAN AND PROFILES**  
**LEE'S SUMMIT PROCESSING FACILITY**  
 LEE'S SUMMIT - JACKSON COUNTY - MISSOURI

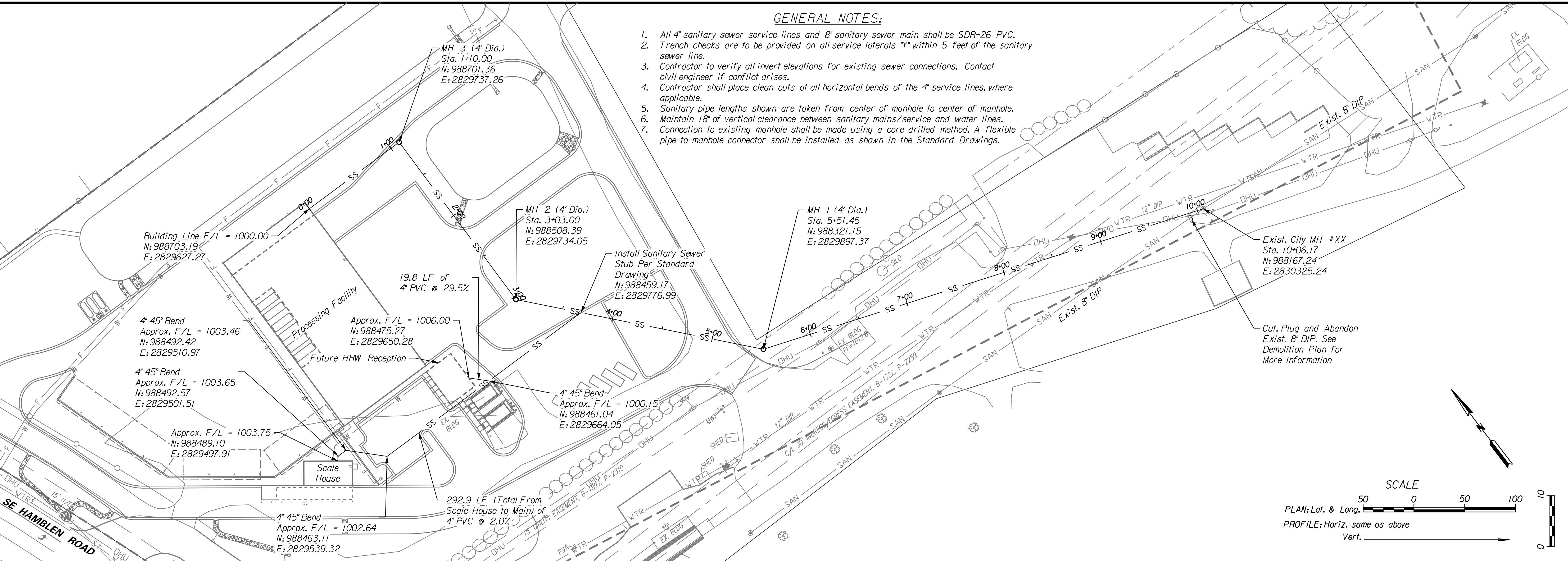
DATE: December 22, 2021  
 JOB NO: 21.033  
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12/22/2021 21.033-15-RetainingWall-PlanProf-01.dgn

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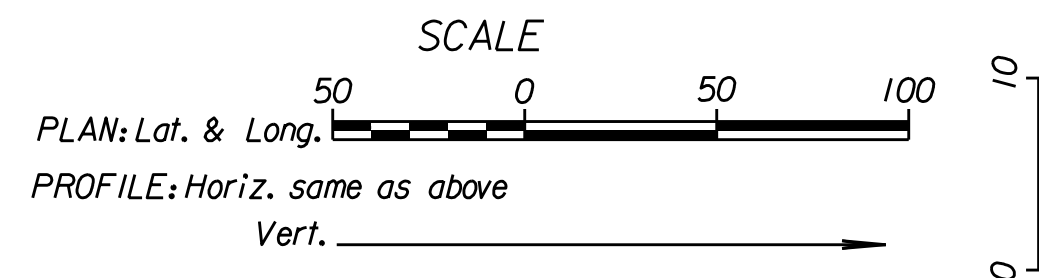
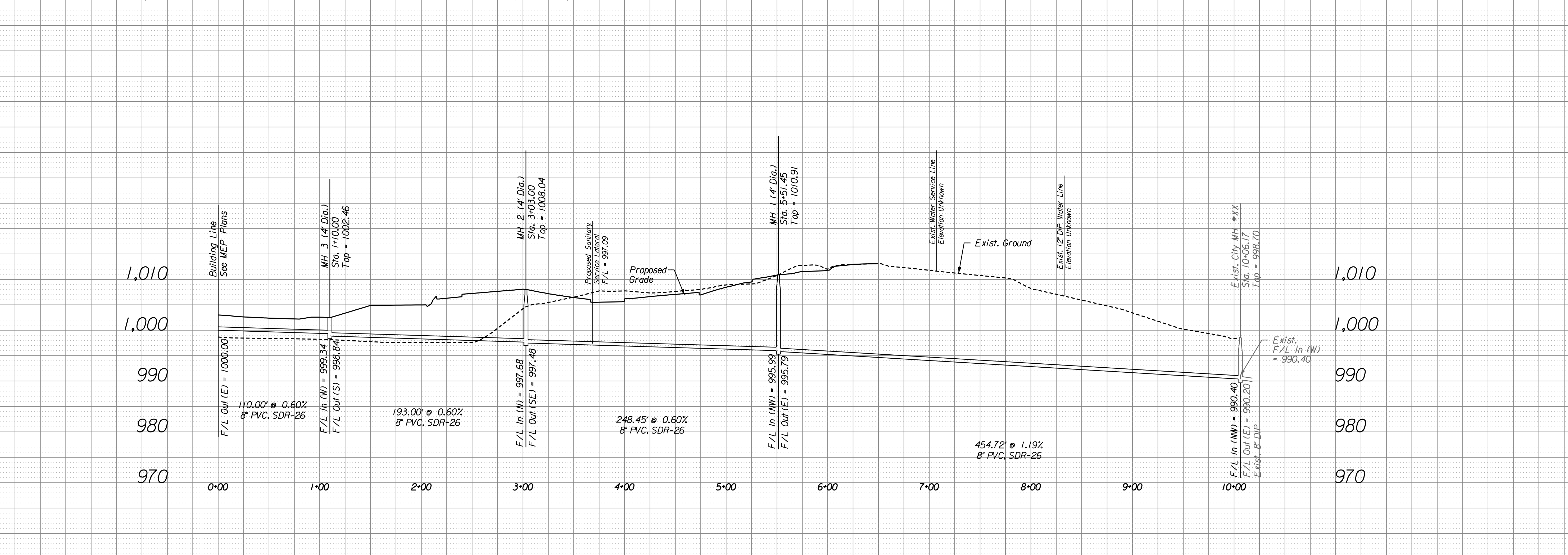




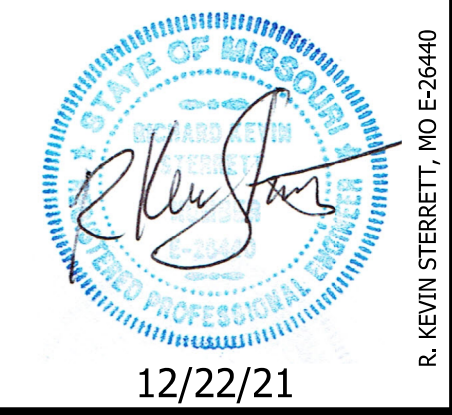


**GENERAL NOTES:**

1. All 4" sanitary sewer service lines and 8" sanitary sewer main shall be SDR-26 PVC.
2. Trench checks are to be provided on all service laterals "Y" within 5 feet of the sanitary sewer line.
3. Contractor to verify all invert elevations for existing sewer connections. Contact civil engineer if conflict arises.
4. Contractor shall place clean outs at all horizontal bends of the 4" service lines, where applicable.
5. Sanitary pipe lengths shown are taken from center of manhole to center of manhole.
6. Maintain 18" of vertical clearance between sanitary mains/service and water lines.
7. Connection to existing manhole shall be made using a core drilled method. A flexible pipe-to-manhole connector shall be installed as shown in the Standard Drawings.



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SANITARY SEWER PLAN AND PROFILE

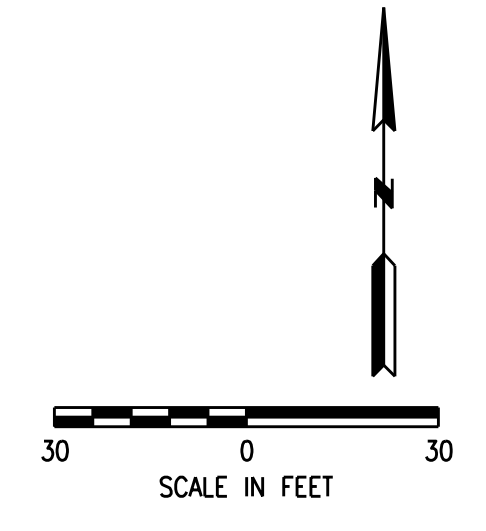
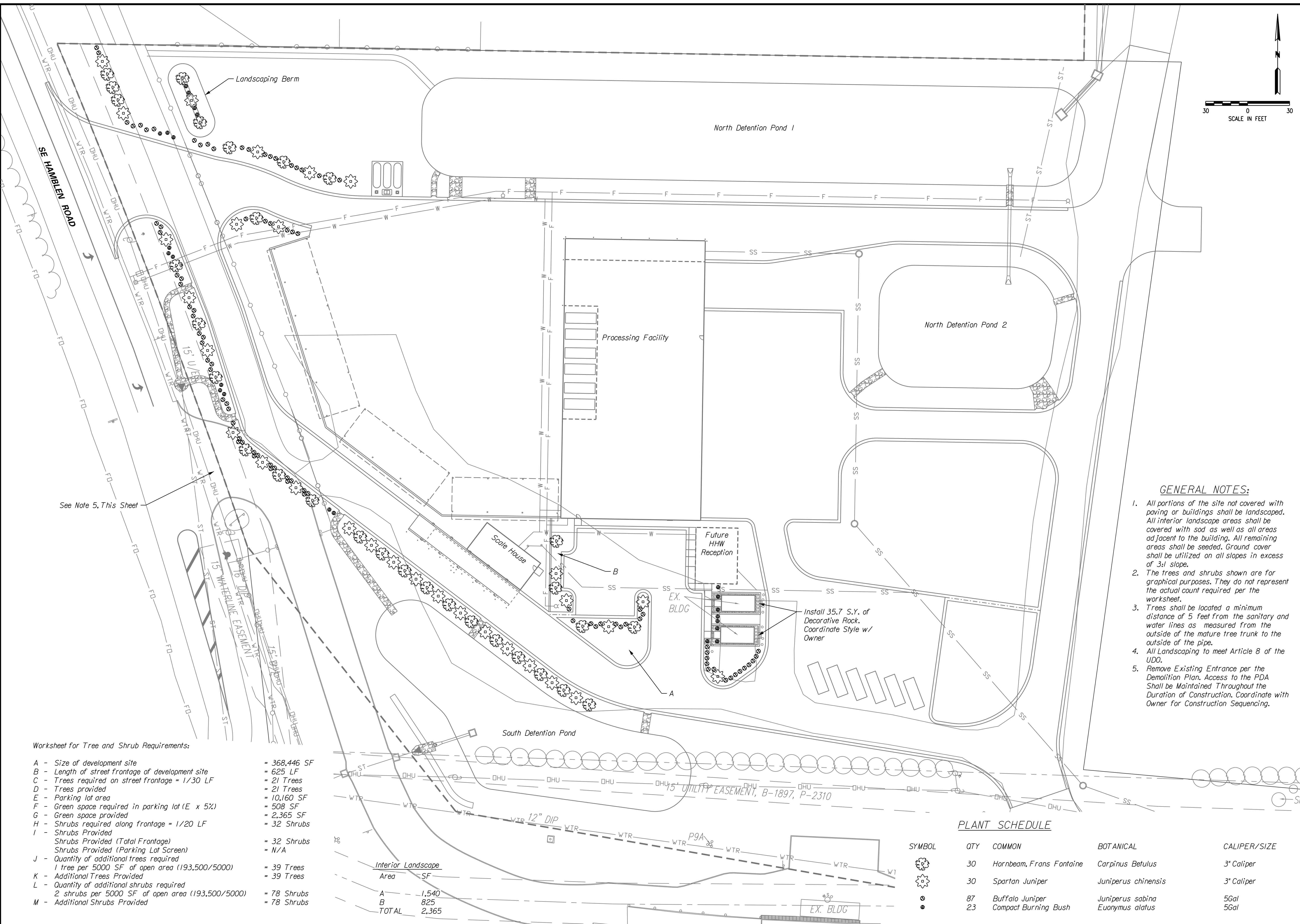
LEE'S SUMMIT  
PROCESSING FACILITY

LEE'S SUMMIT - JACKSON COUNTY - MISSOURI

DATE: December 22, 2021  
JOB NO: 21.033  
SHEET OF 27

12/22/2021 21.033-17-Sani.tanP1anProf-01.dgn

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NO.	BY	DATE	REVISION

R. KEVIN STERRETT, NO. E-26440  
 12/22/21

Consult  
 Inc  
 engineers  
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CORPORATE LICENSE NO. E2010005873  
 1533 Locust Street Kansas City, MO 64108 816-783-7098

- GENERAL NOTES:**
- All portions of the site not covered with paving or buildings shall be landscaped. All interior landscape areas shall be covered with sod as well as all areas adjacent to the building. All remaining areas shall be seeded. Ground cover shall be utilized on all slopes in excess of 3:1 slope.
  - The trees and shrubs shown are for graphical purposes. They do not represent the actual count required per the worksheet.
  - Trees shall be located a minimum distance of 5 feet from the sanitary and water lines as measured from the outside of the mature tree trunk to the outside of the pipe.
  - All Landscaping to meet Article 8 of the UDO.
  - Remove Existing Entrances per the Demolition Plan. Access to the PDA Shall be Maintained Throughout the Duration of Construction. Coordinate with Owner for Construction Sequencing.

Worksheet for Tree and Shrub Requirements:

A - Size of development site	= 368,446 SF
B - Length of street frontage of development site	= 625 LF
C - Trees required on street frontage = 1/30 LF	= 21 Trees
D - Trees provided	= 21 Trees
E - Parking lot area	= 10,160 SF
F - Green space required in parking lot (E x 5%)	= 508 SF
G - Green space provided	= 2,365 SF
H - Shrubs required along frontage = 1/20 LF	= 32 Shrubs
I - Shrubs Provided	= 32 Shrubs
Shrubs Provided (Total Frontage)	= 32 Shrubs
Shrubs Provided (Parking Lot Screen)	= N/A
J - Quantity of additional trees required	= 39 Trees
1 tree per 5000 SF of open area (193,500/5000)	= 39 Trees
K - Additional Trees Provided	= 39 Trees
L - Quantity of additional shrubs required	= 78 Shrubs
2 shrubs per 5000 SF of open area (193,500/5000)	= 78 Shrubs
M - Additional Shrubs Provided	= 78 Shrubs

Interior Landscape Area

Area	SF
A	1,540
B	825
TOTAL	2,365

**PLANT SCHEDULE**

SYMBOL	QTY	COMMON	BOTANICAL	CALIPER/SIZE
	30	Hornbeam, Frans Fontaine	Carpinus Betulus	3" Caliper
	30	Spartan Juniper	Juniperus chinensis	3" Caliper
	87	Buffalo Juniper	Juniperus sabina	5Gal
	23	Compact Burning Bush	Euonymus alatus	5Gal

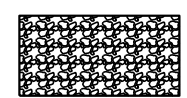



LANDSCAPE PLAN  
 LEE'S SUMMIT  
 PROCESSING FACILITY  
 LEE'S SUMMIT - JACKSON COUNTY - MISSOURI

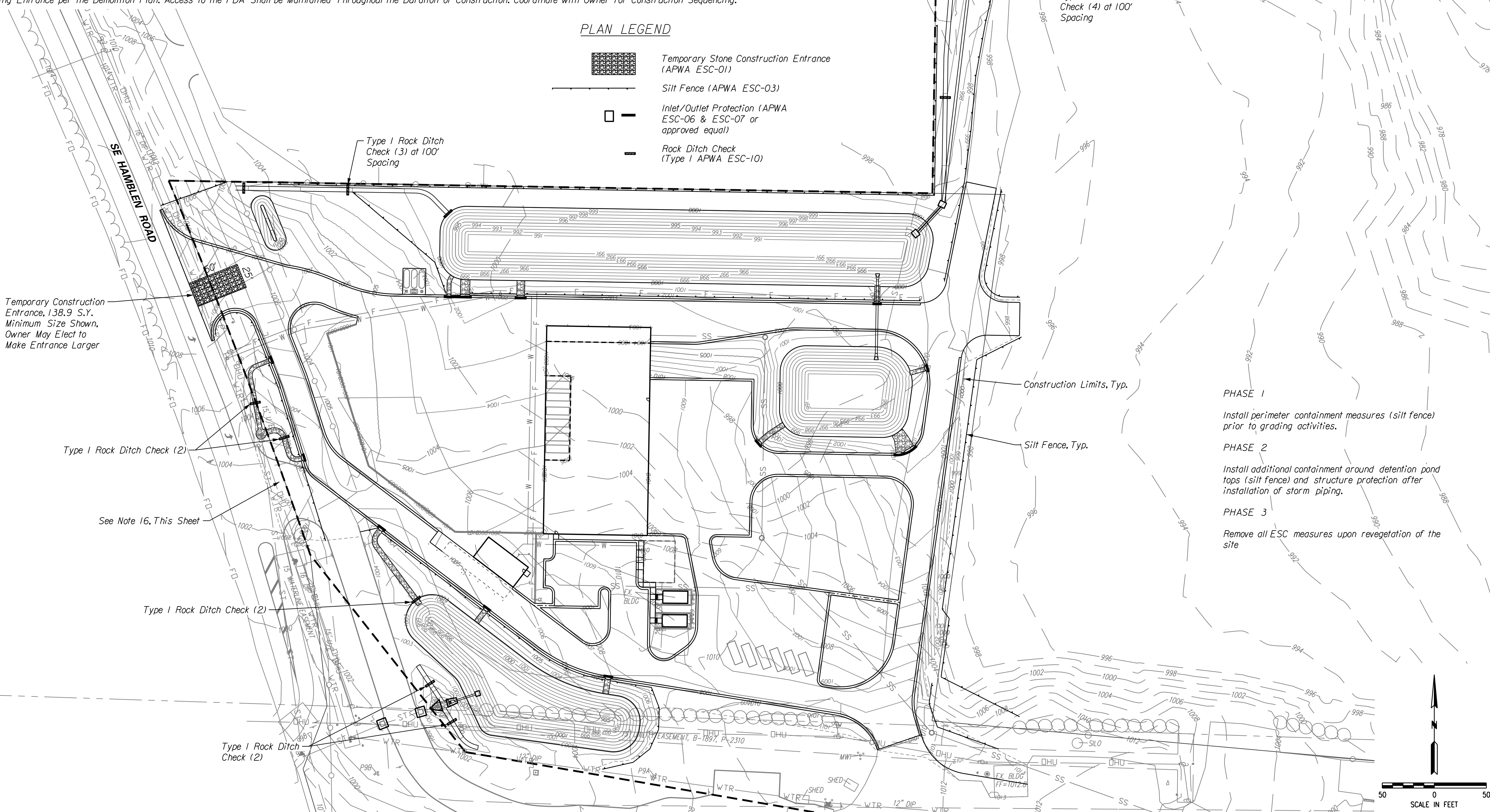
12/22/2021 21.033-18-LandscapePlan-01.dgn

**EROSION CONTROL NOTES:**

- The Developer shall be responsible for erosion control within the boundaries of this development. Erosion control shall be the responsibility of said Developer until all development work on site is complete, and all appropriate permits have been released and/or terminated. The Developer is responsible for seeing that all Development Contractors comply with the requirements of any and all land disturbance permits, grading permits and storm water discharge permits.
- Erosion Control and Siltation Control methods shall be in place prior to commencement of any grading and/or excavation of the site. All erosion control measures shall remain in place until final grade and sod is completed by the Builder, and shall be maintained throughout the project until the acceptance of the work by the City.
- No grading shall be steeper than 3H:1V. All areas graded should have the soil surface lightly roughened and loosened to a depth of 2 to 4 inches prior to seeding. Areas that have been graded and will not be stabilized immediately shall be roughened to reduce runoff velocity until seeding takes place.
- Sediment Fences shall be inspected periodically and after every rain event for damage and for the amount of sediment which has accumulated. Removal of sediment will be required when it reaches one-third (1/3) the height of the sediment fence. Sediment fences to be repaired or replaced as necessary.
- Inspect and repair the collection system (i.e. catch basins, piping, swales, riprap, etc.) after rain events to maintain proper function.
- After every significant runoff producing rainfall event of 1/2" or greater and at least once a week:
  - Inspect the detention basin system for sediment accumulation, erosion, trash accumulation, vegetated cover, and general condition.
  - Check and clear the outfall device of any obstructions.
- Parking on non-surfaced areas is prohibited in order to eliminate the condition whereby mud and debris from construction and employee vehicles is tracked onto existing pavement. The Contractor shall keep the existing roadways free of mud, rock and debris at all times. The site shall have a temporary construction access installed to prevent mud and debris from being tracked onto the public street. The contractor shall inspect, repair, and add stone to the construction entrance when it becomes saturated with mud to insure it functions as it was intended.
- Permanently stabilize all graded areas immediately after final grading is complete on each area in the Grading Plan. If clearing and/or grading operations are suspended for a period of thirty (30) days or longer, temporary stabilization measures are required. These measures may include seeding, periodic wetting, mulching or other suitable measures.
- If cut and fill operations occur during a season not favorable for immediate establishment of permanent ground cover, a fast germinating annual such as rye grasses or sudan grasses shall be utilized to retard erosion, if adequate stormwater detention and erosion control methods have not been established.
- All trash and debris located on the project site, either existing or as a result of construction, shall be removed and properly disposed of in accordance with all local, state and federal regulations.
- Dust control on site shall be minimized by spraying water on dry areas of the site. The use of oils and other petroleum based or toxic liquids for dust suppression is strictly prohibited.
- All existing structures, fencing, trees, etc. within the construction limits shall be removed and disposed of off site per state and local ordinances. Any burning on site shall be subject to local ordinances.
- All wash water (concrete truck, vehicle cleaning, equipment cleaning, etc.) shall be disposed of in a manner that prevents contact between these materials and storm water that is discharged from the site.
- Additional erosion and sediment control methods and devices may be required as directed by the City or MoDNR.
- Upon completion of the project, Contractor shall seed, mulch and fertilize all areas disturbed by construction.
- Remove Existing Entrance per the Demolition Plan. Access to the PDA Shall be Maintained Throughout the Duration of Construction. Coordinate with Owner for Construction Sequencing.

**PLAN LEGEND**

-  Temporary Stone Construction Entrance (APWA ESC-01)
-  Silt Fence (APWA ESC-03)
-  Inlet/Outlet Protection (APWA ESC-06 & ESC-07 or approved equal)
-  Rock Ditch Check (Type I APWA ESC-10)



- PHASE 1**  
Install perimeter containment measures (silt fence) prior to grading activities.
- PHASE 2**  
Install additional containment around detention pond tops (silt fence) and structure protection after installation of storm piping.
- PHASE 3**  
Remove all ESC measures upon revegetation of the site.

NO.	BY	DATE	REVISION

12/22/21

**Consult Inc**  
engineers  
planners

1533 Locust Street Kansas City, MO 64108 816-703-7098  
CORPORATE LICENSE NO. E2010005873

EROSION CONTROL PLAN

LEE'S SUMMIT  
PROCESSING FACILITY

LEE'S SUMMIT - JACKSON COUNTY - MISSOURI

DATE	December 22, 2021
DWG NO.	21.033
SHEET	19
OF	27

12/22/2021 21.033-19-ErosionControlPlan-01.dgn

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21\_033-20-Pvmk-Signing-01.dgn

N: 988991.15  
E: 2829060.43

N: 988875.92  
E: 2829111.40

White Left Turn Arrow, Typ.

Remove Exist. Pavement Marking as Shown at Proposed Entrance Location

Exist. Pavement Marking to Remain for Future Parks Development

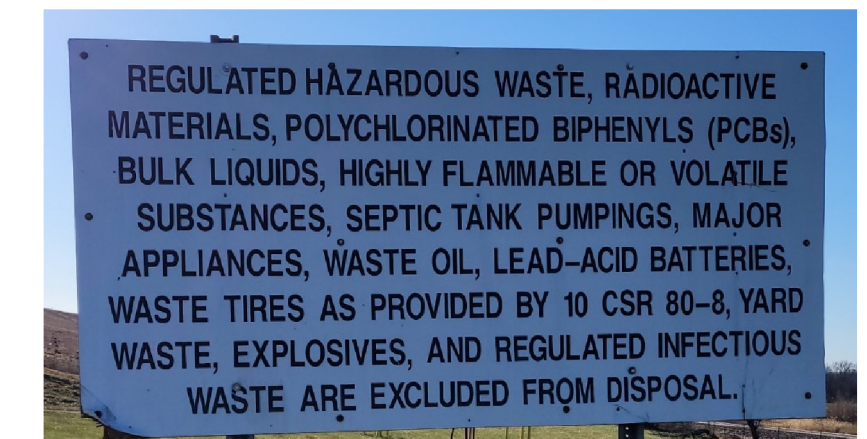
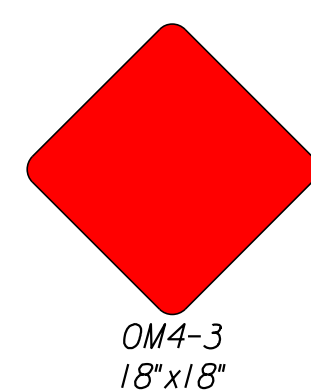
See Note 7, This Sheet

Relocated MoDNR Sign

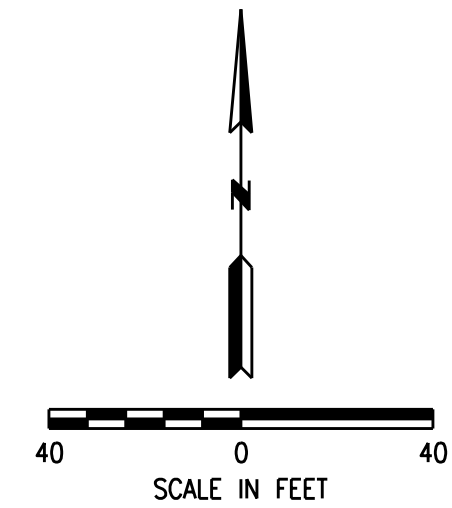
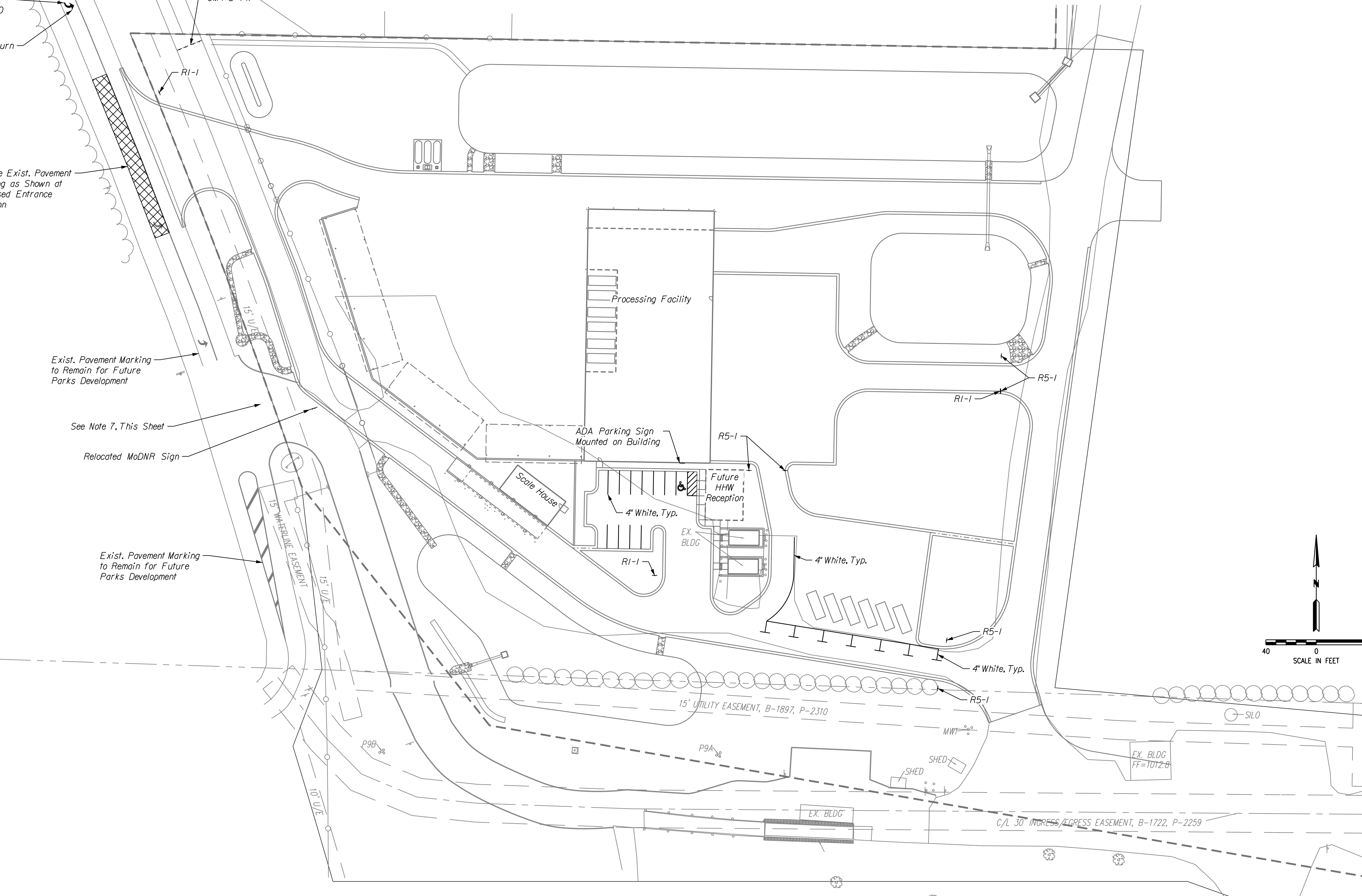
Exist. Pavement Marking to Remain for Future Parks Development

**GENERAL NOTES:**

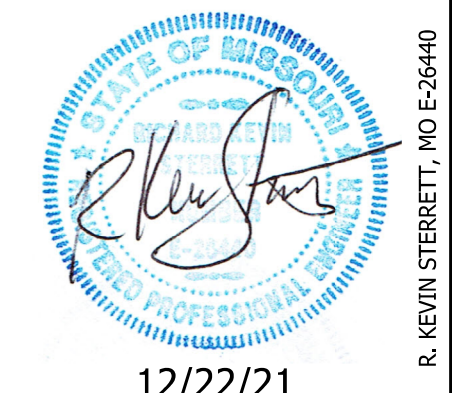
1. All pavement markings shall be in accordance with the latest edition of the manual on uniform traffic control devices (MUTCD).
2. All turn arrows and legends shall be centered in their respective traffic lanes.
3. All words and symbols shall conform to the latest edition of "Standard Alphabets for Highway Signs and Pavement Markings" printed by the U.S. Department of Transportation, Federal Highway Administration.
4. On asphalt pavement, all longitudinal and diagonal lines shall be thermoplastic and all legends, symbols and transverse lines shall be cold plastic.
5. All cold plastic markings shall be rolled into the asphalt in the final lift with a steel-wheeled roller.
6. On concrete pavement, all markings shall be cold plastic grooved into pavement.
7. Remove Existing Entrance per the Demolition Plan. Access to the PDA Shall be Maintained Throughout the Duration of Construction. Coordinate with Owner for Construction Sequencing.



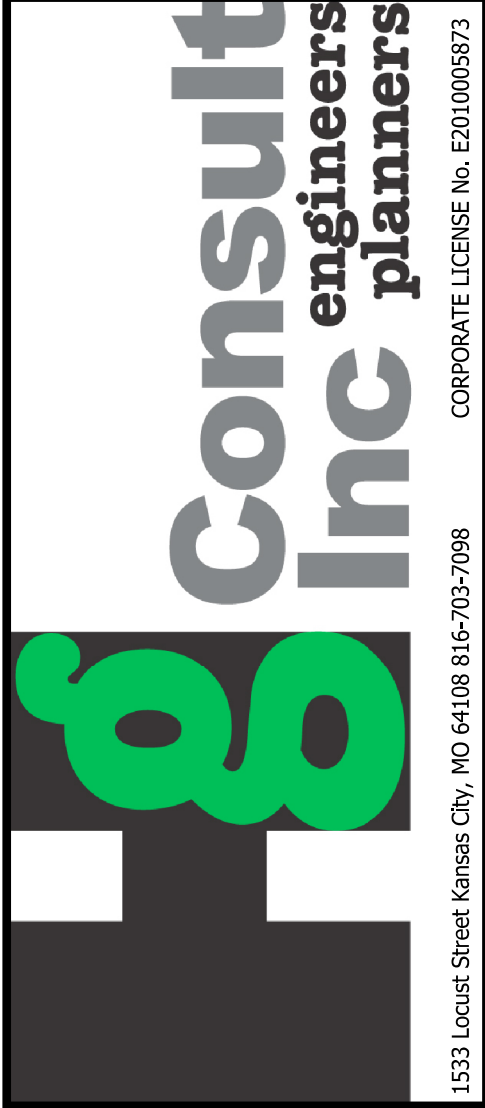
Relocated MoDNR Sign  
4'x8'



NO.	BY	REVISION



12/22/21



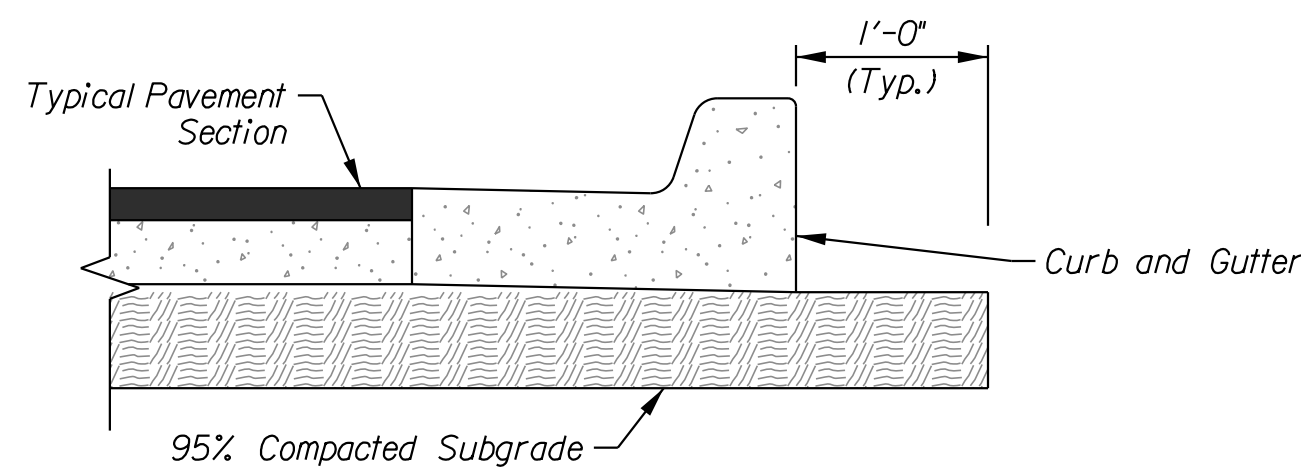
PAVEMENT MARKING & SIGNING PLAN

LEE'S SUMMIT  
PROCESSING FACILITY

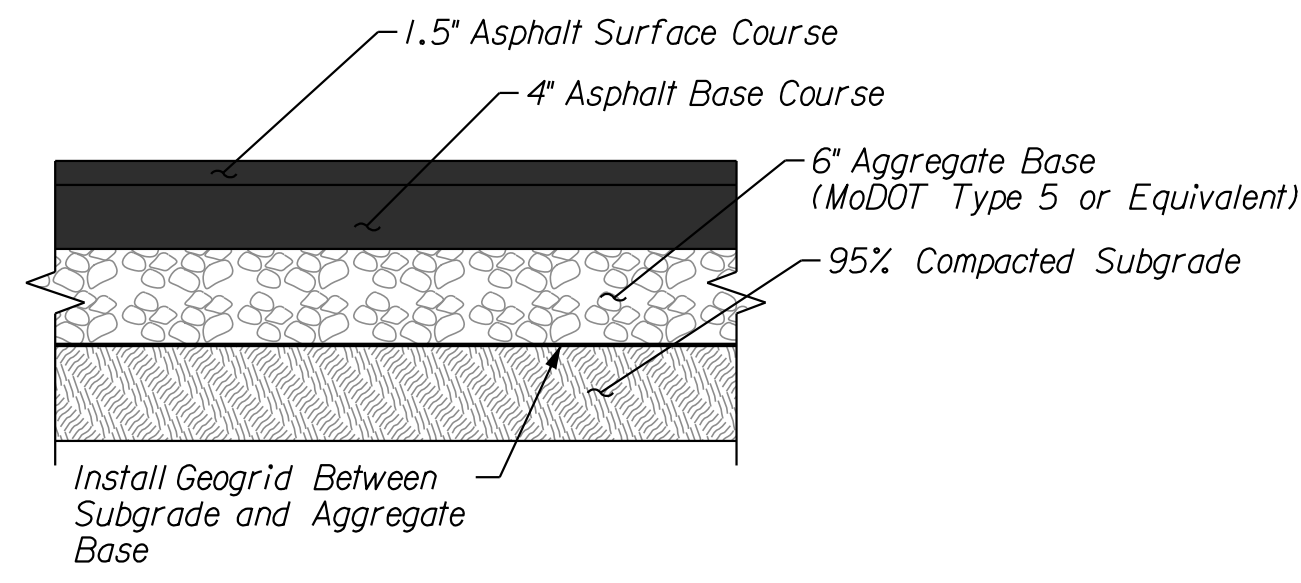
LEE'S SUMMIT - JACKSON COUNTY - MISSOURI

DATE: December 22, 2021  
JOB NO: 21.033

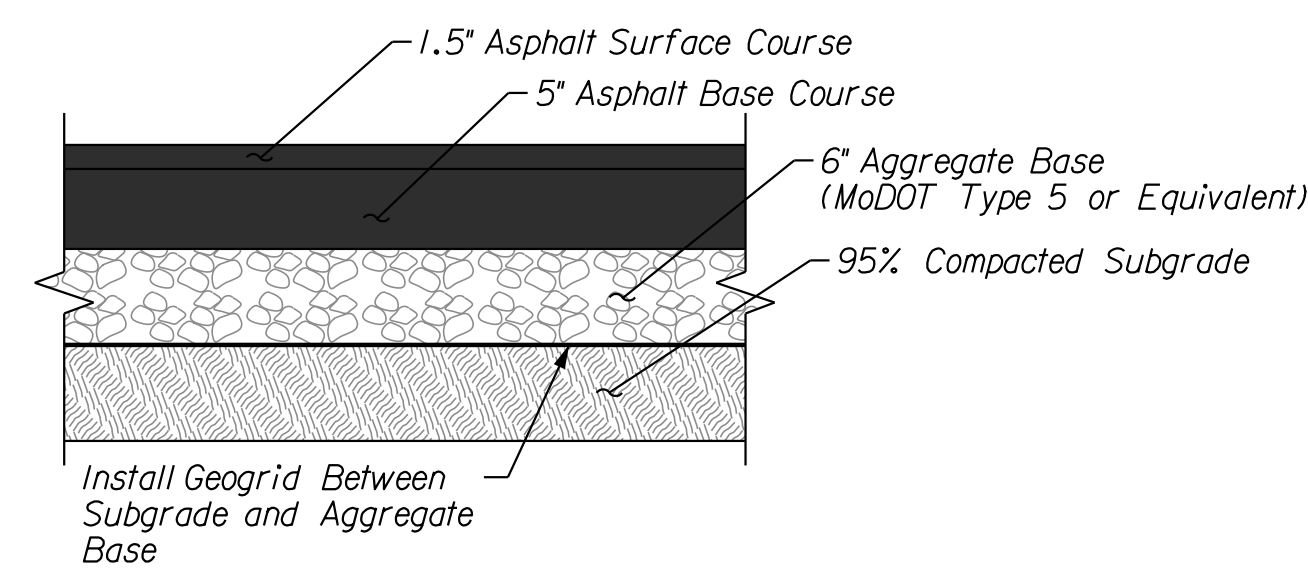
20 SHEET OF 27



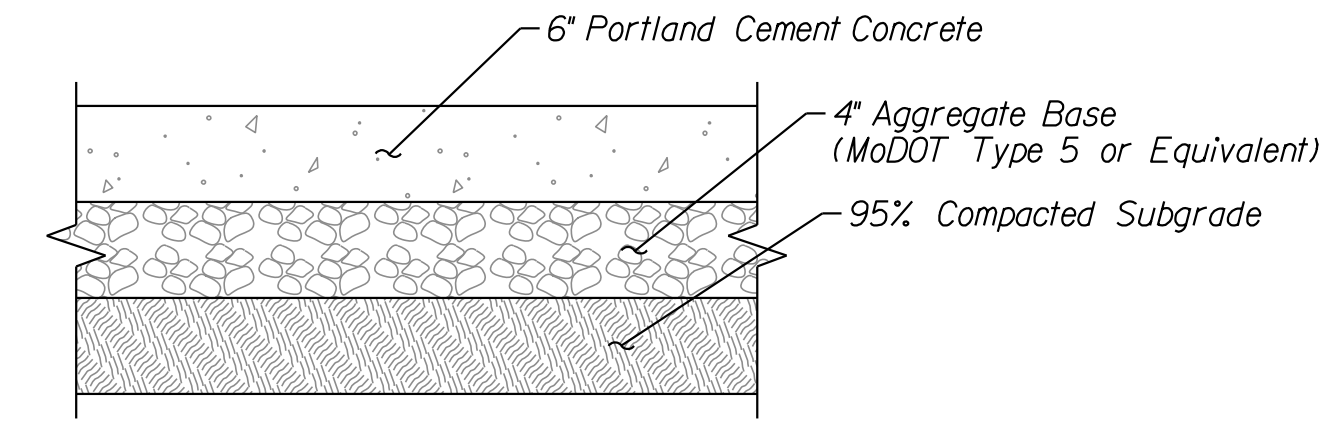
PAVING DETAIL  
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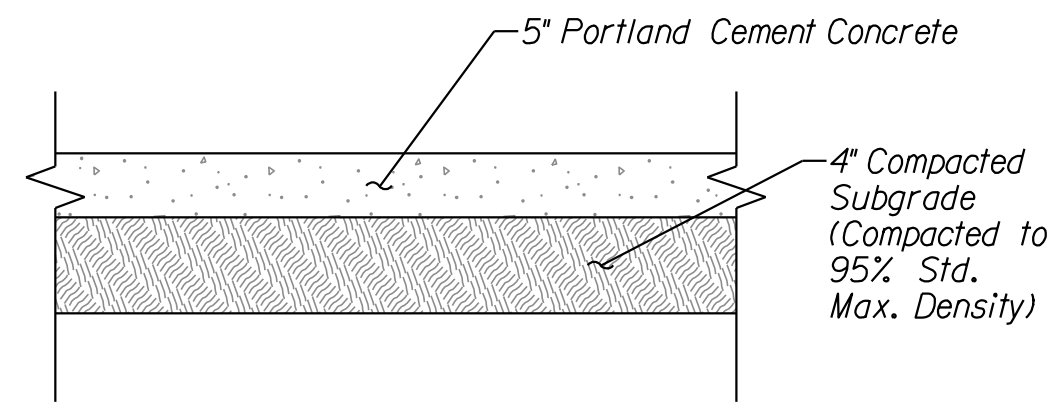
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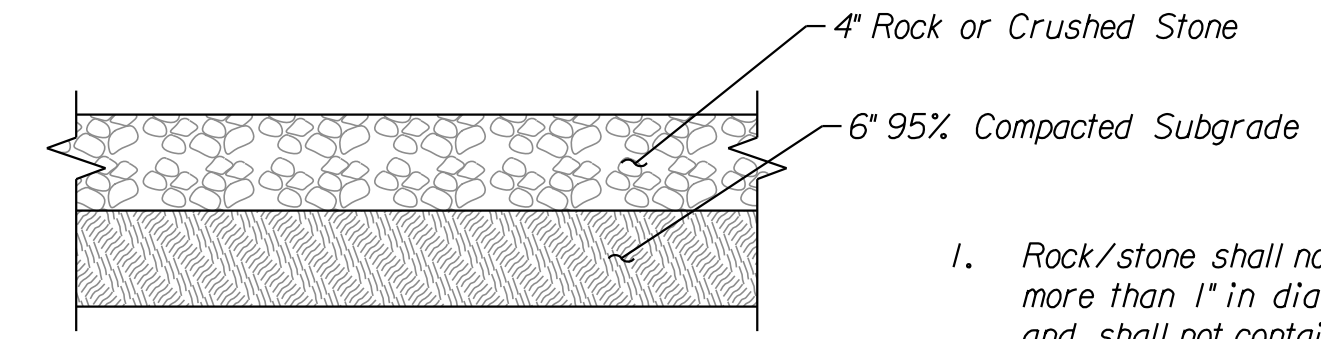
HEAVY DUTY PAVEMENT SECTION  
N.T.S.



HEAVY DUTY PAVEMENT SECTION  
BID ALTERNATIVE  
N.T.S.

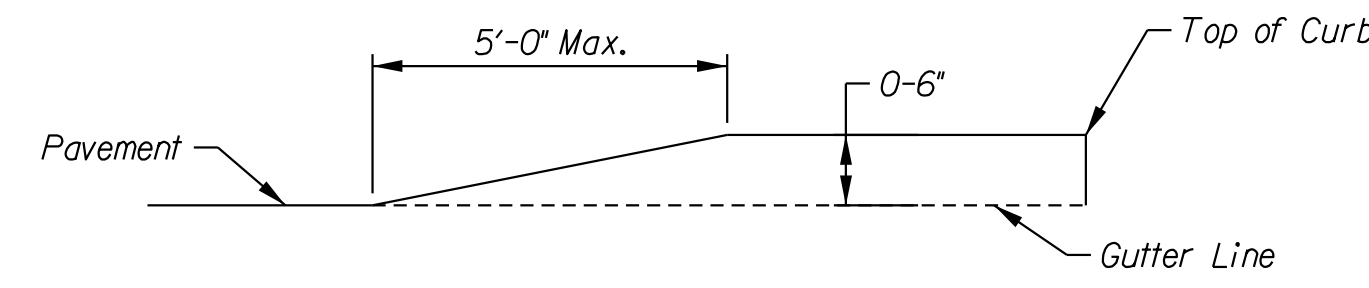


SIDEWALK SECTION  
N.T.S.

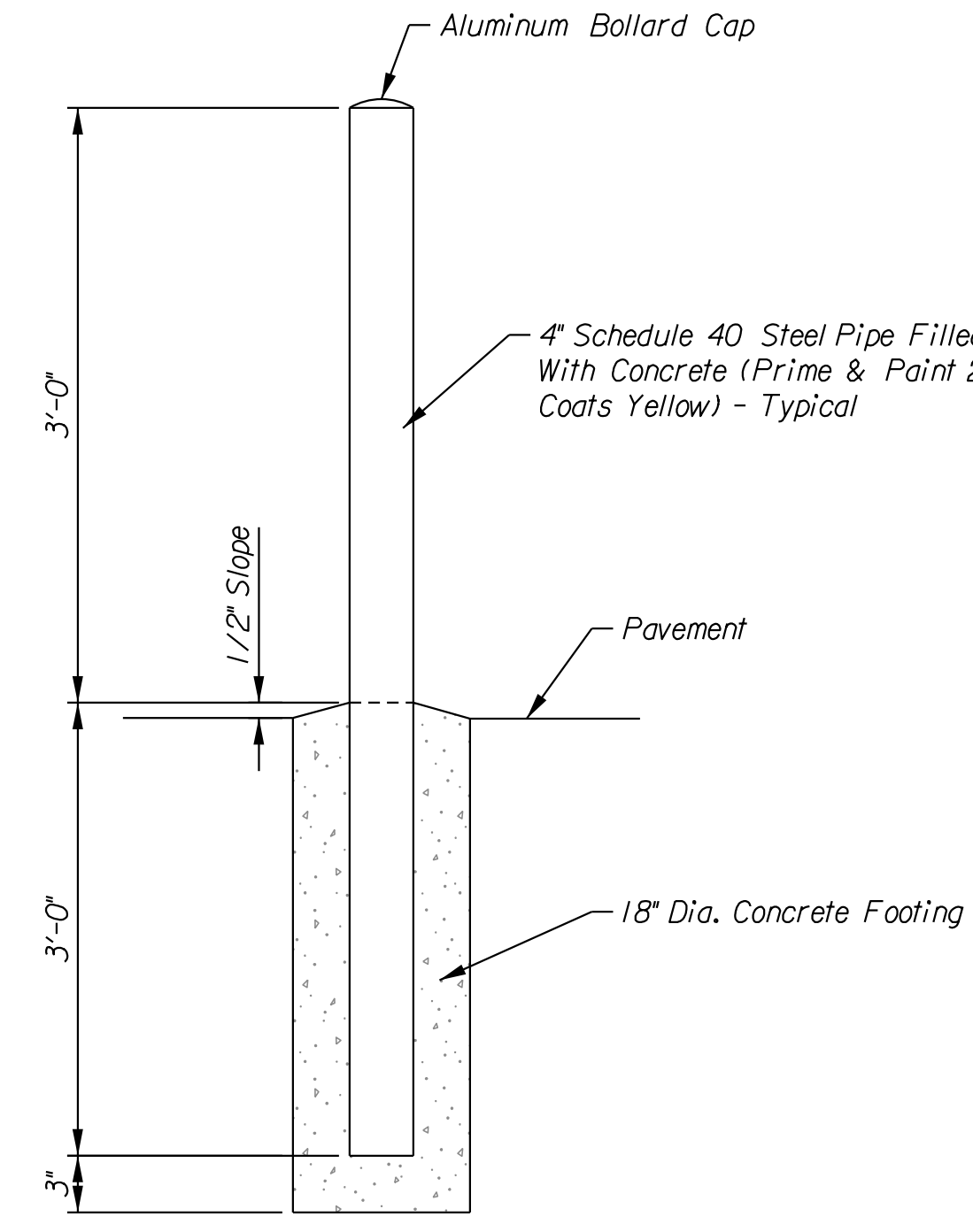


GRAVEL SECTION  
N.T.S.

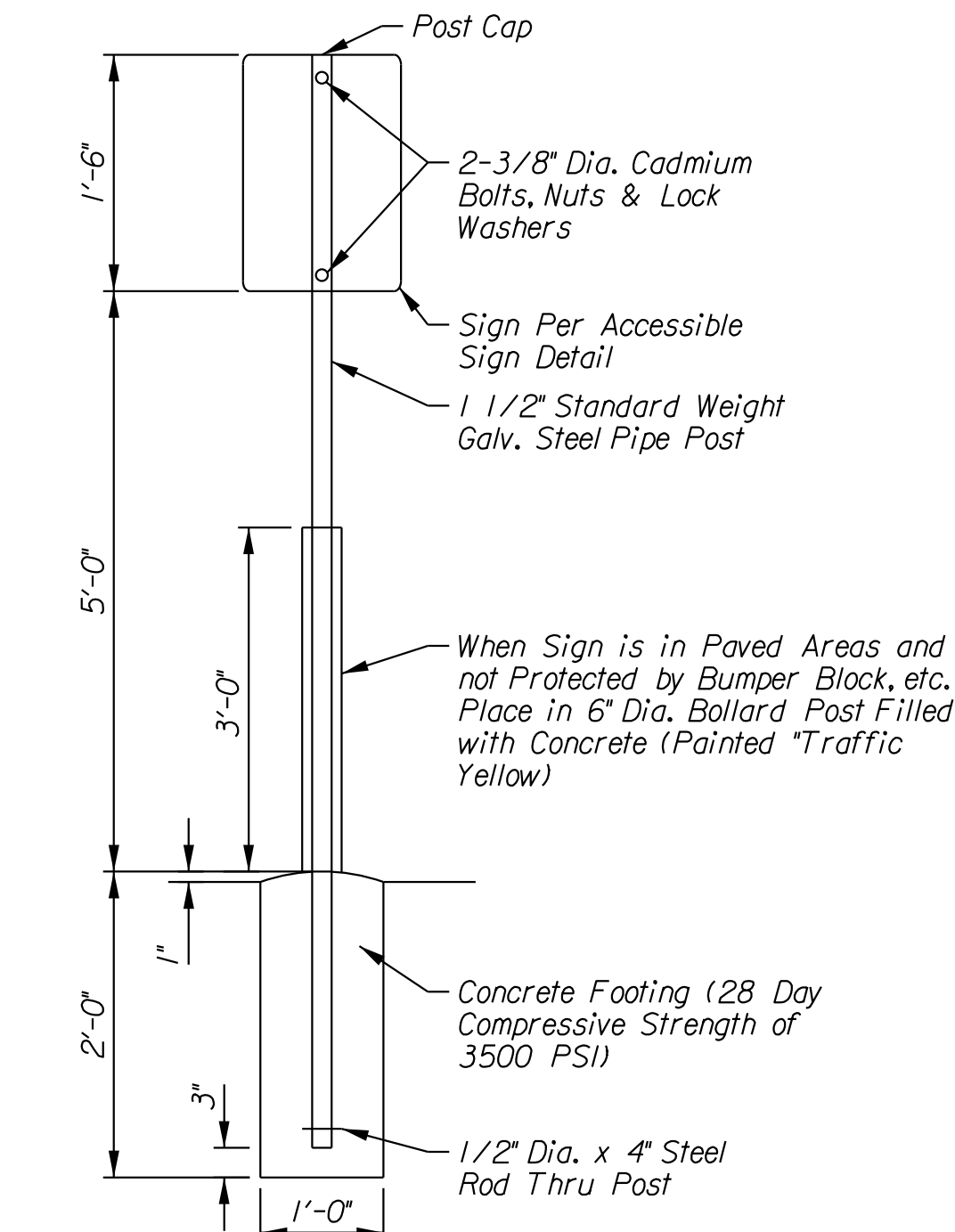
1. Rock/stone shall not be more than 1\"/>



CURB TERMINUS DETAIL  
N.T.S.



BOLLARD DETAIL  
N.T.S.



SIGN BASE  
N.T.S.

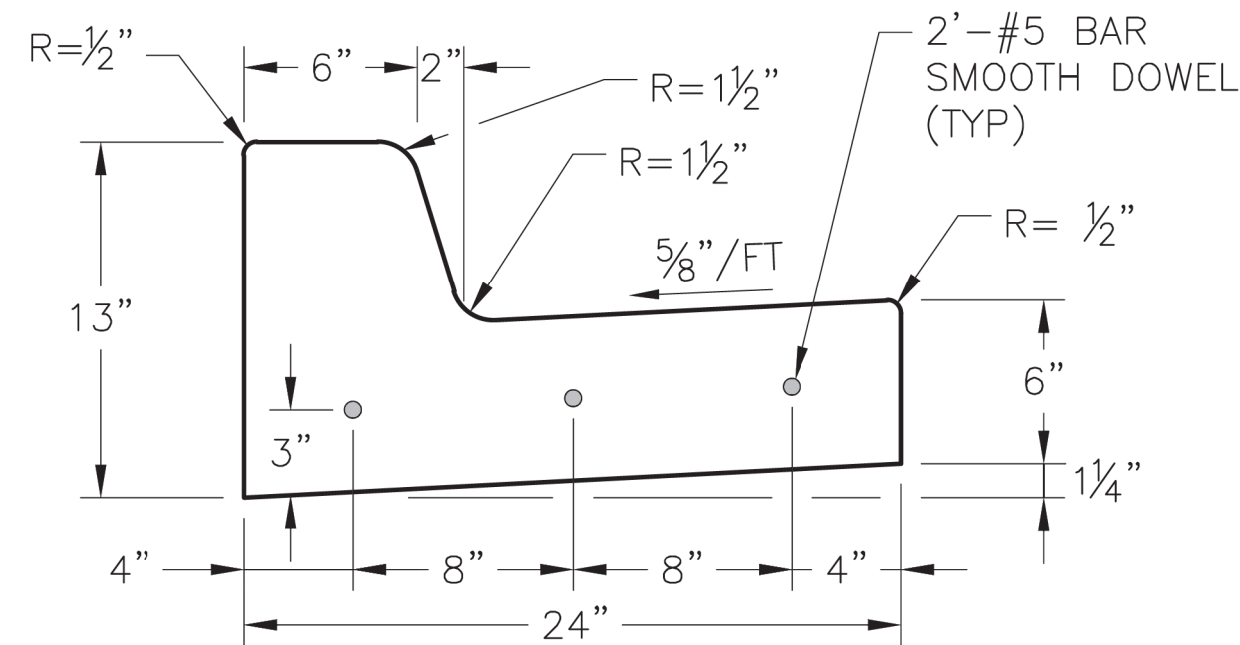


Colors  
Legend and Border - Green  
White Symbol on Blue Background  
Background - White  
(R7-8)

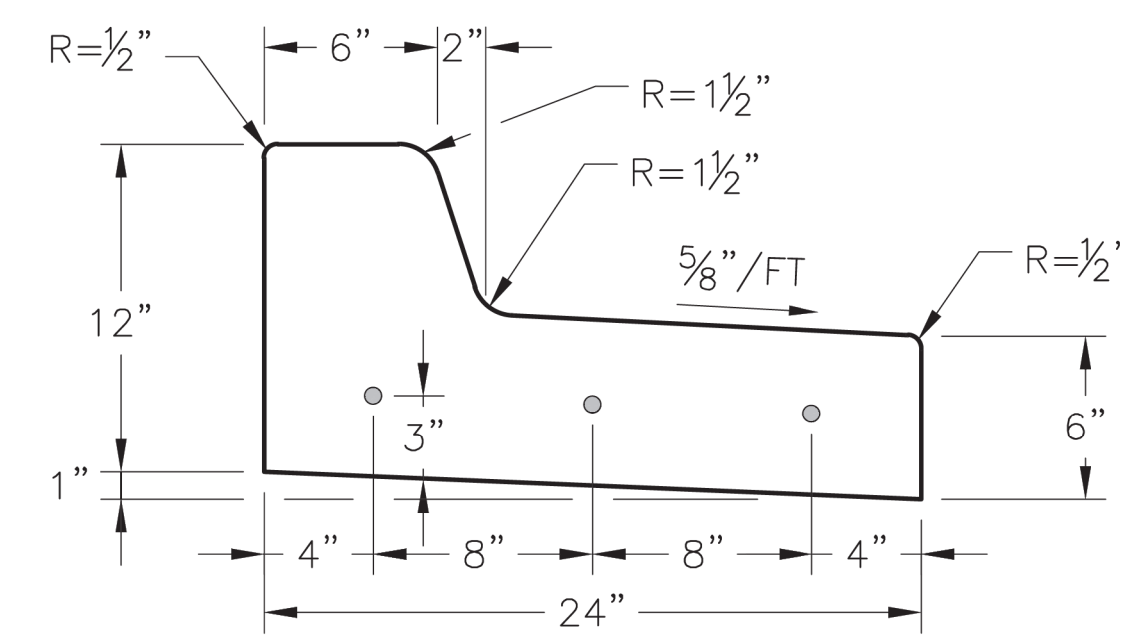


6\"/>

1. All signs should comply with U.S. Department of Transportation Federal Highway Administration's "Uniform Traffic Control Devices", and local codes as specified. Mount signs in accordance with manufacturer's instructions.



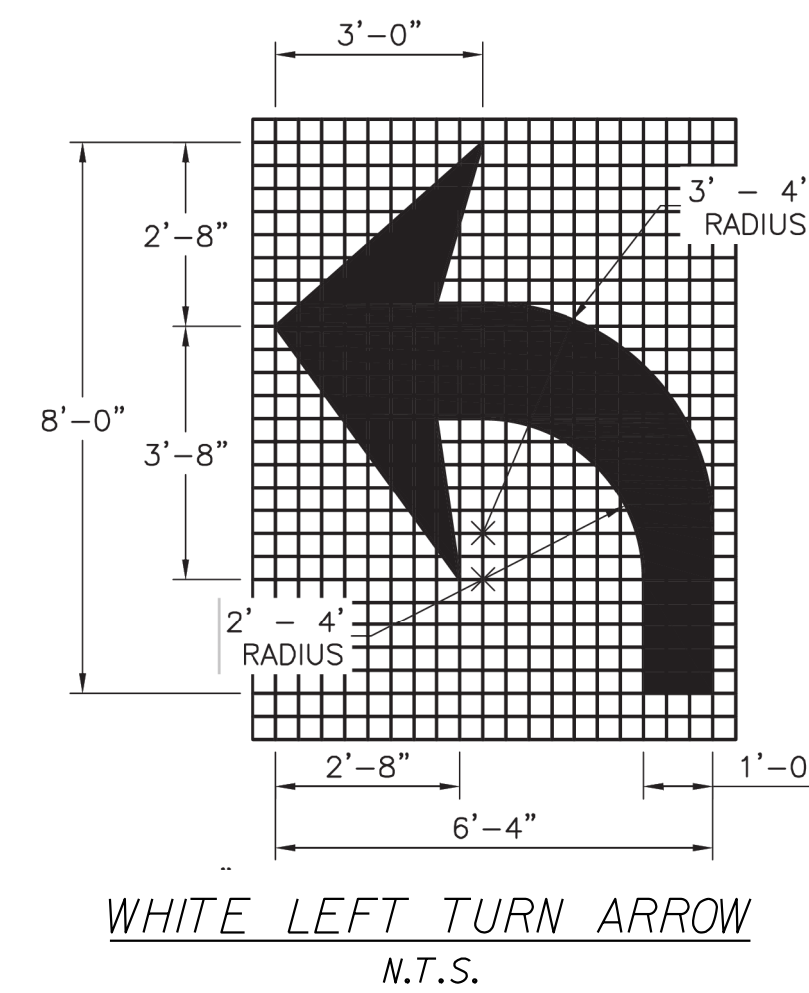
STRAIGHT BACK CURB &  
GUTTER  
(TYPE CG-1)



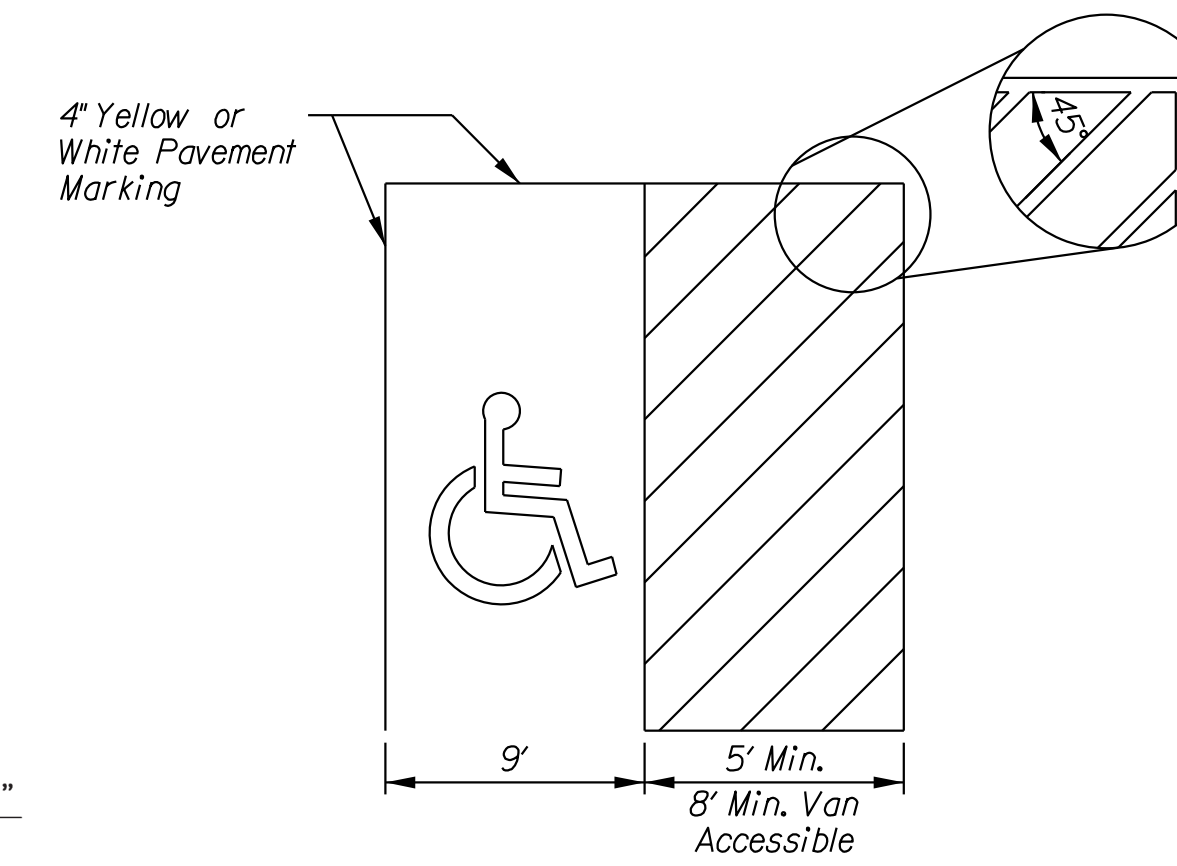
STRAIGHT BACK DRY CURB &  
GUTTER  
(TYPE CG-1 DRY)

GENERAL NOTES

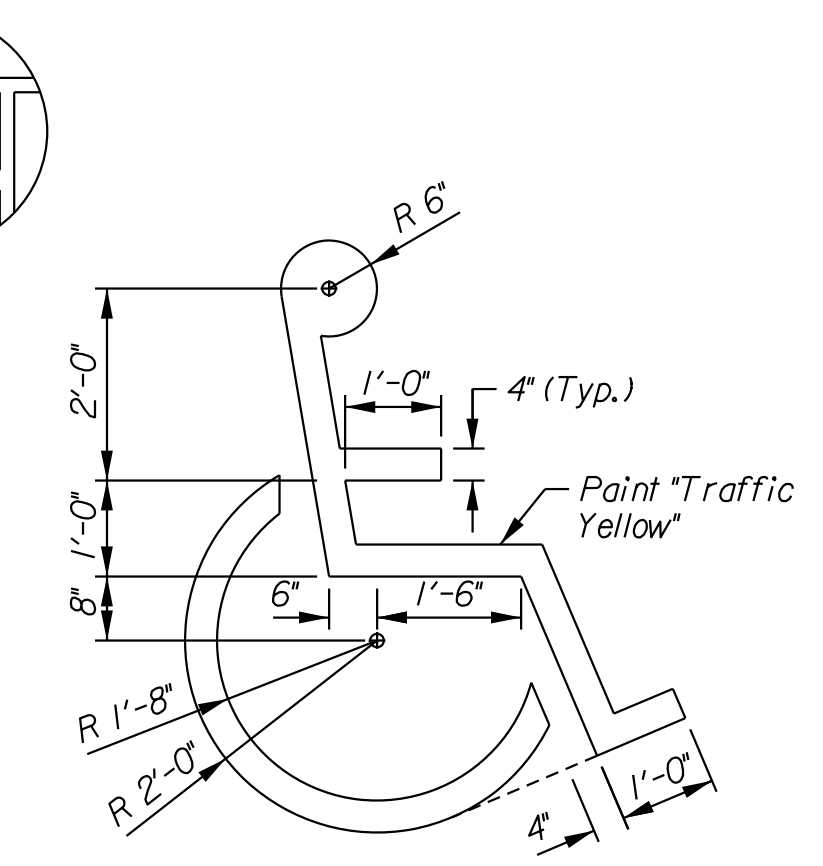
1.  $\frac{3}{4}$ " ISOLATION JOINTS WITH 3 (2'-#5 BAR) SMOOTH DOWELS SHALL BE PLACED AT RADIUS POINTS AND AT 150' INTERVALS. THESE DOWEL BARS SHALL BE GREASED AND WRAPPED ON ONE END WITH EXPANSION TUBES.
2. 3" DEEP CONTRACTION JOINTS SHALL BE INSTALLED AT APPROXIMATELY 10' INTERVALS. THESE JOINTS SHALL PASS ACROSS THE ENTIRE CURB SECTION.
3. CONCRETE FILL SHALL HAVE UNIFORM AND SMOOTH FINISH
4. KCM MB 4K CONCRETE SHALL BE USED FOR ALL CURB.
5. ASPHALTIC CONCRETE SURFACE COURSE SHALL CONFORM TO STANDARD SPECIFICATIONS SECTION 2205.2.
6. CURBS FOR NEW STREETS SHALL BE BUILT ON ASPHALT OR AGGREGATE BASE AS SHOWN IN TYPICAL SECTION DETAIL.
7. WHITE CURING COMPOUND MUST BE APPLIED UNIFORMLY TO THE CONCRETE SURFACE IMMEDIATELY AFTER FINAL FINISHING.
8. ALL DOWELS & TIE BARS SHALL BE EPOXY COATED.



WHITE LEFT TURN ARROW  
N.T.S.



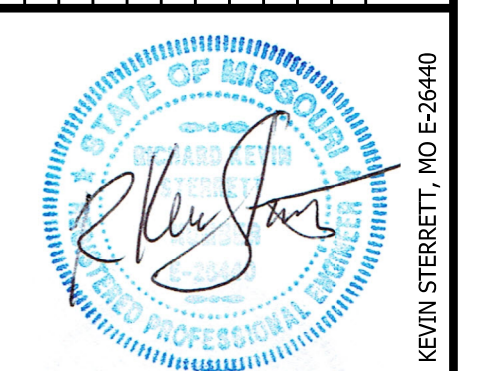
ACCESSIBLE STRIPING DETAIL  
N.T.S.



ACCESSIBLE PARKING SYMBOL  
N.T.S.

NOTE: Symbol to be centered in parking space and oriented as illustrated on plans.

NO.	BY	DATE	REVISION



12/22/21

**Consult Inc**  
engineers  
planners

1533 Locust Street  
Kansas City, MO 64108 816-703-7098  
CORPORATE LICENSE NO. E2010005873

**SITE DETAILS**

LEE'S SUMMIT  
PROCESSING FACILITY

LEE'S SUMMIT - JACKSON COUNTY - MISSOURI

DATE	December 22, 2021
DWG. NO.	21.033
SHEET	21
OF	27

12/22/2021 21\_033-21-Def.dwg



PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

PROJECT: CITY OF LEE'S SUMMIT, MO  
STANDARD DETAILS  
SHEET NAME: JUNCTION BOX DETAIL

Drawn By: MRF  
Checked By: DL  
Date: 05/2021  
Proj #: STM-3

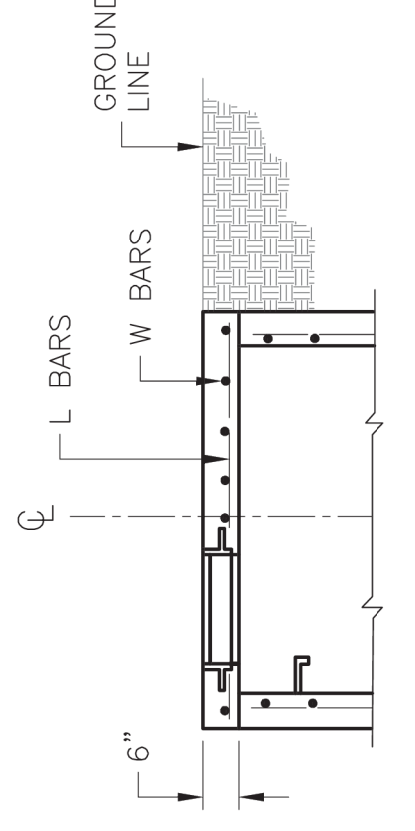
STM-3

\*\* INCREASE IN MULTIPLES OF 6"  
(7'-0") MAX WITHOUT SPECIAL DESIGN.  
(SEE PROJECT PLANS FOR DETAILS)

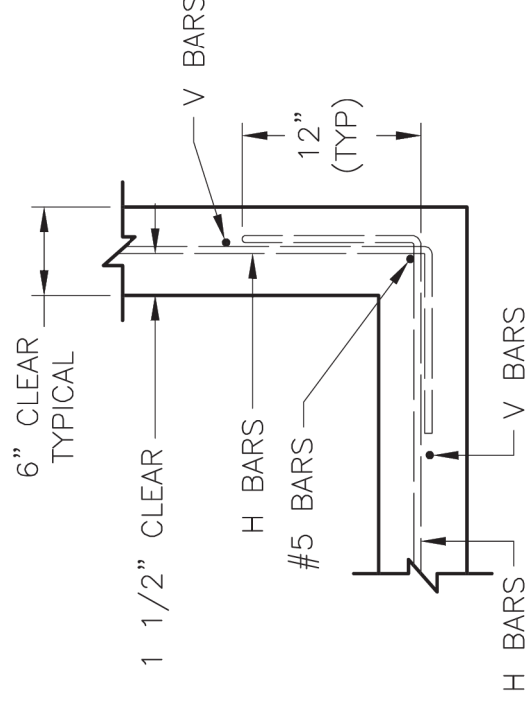
REINFORCING

BARS	BAR SIZE (IN.)
H	4
V	4
L	5
W	5
	6

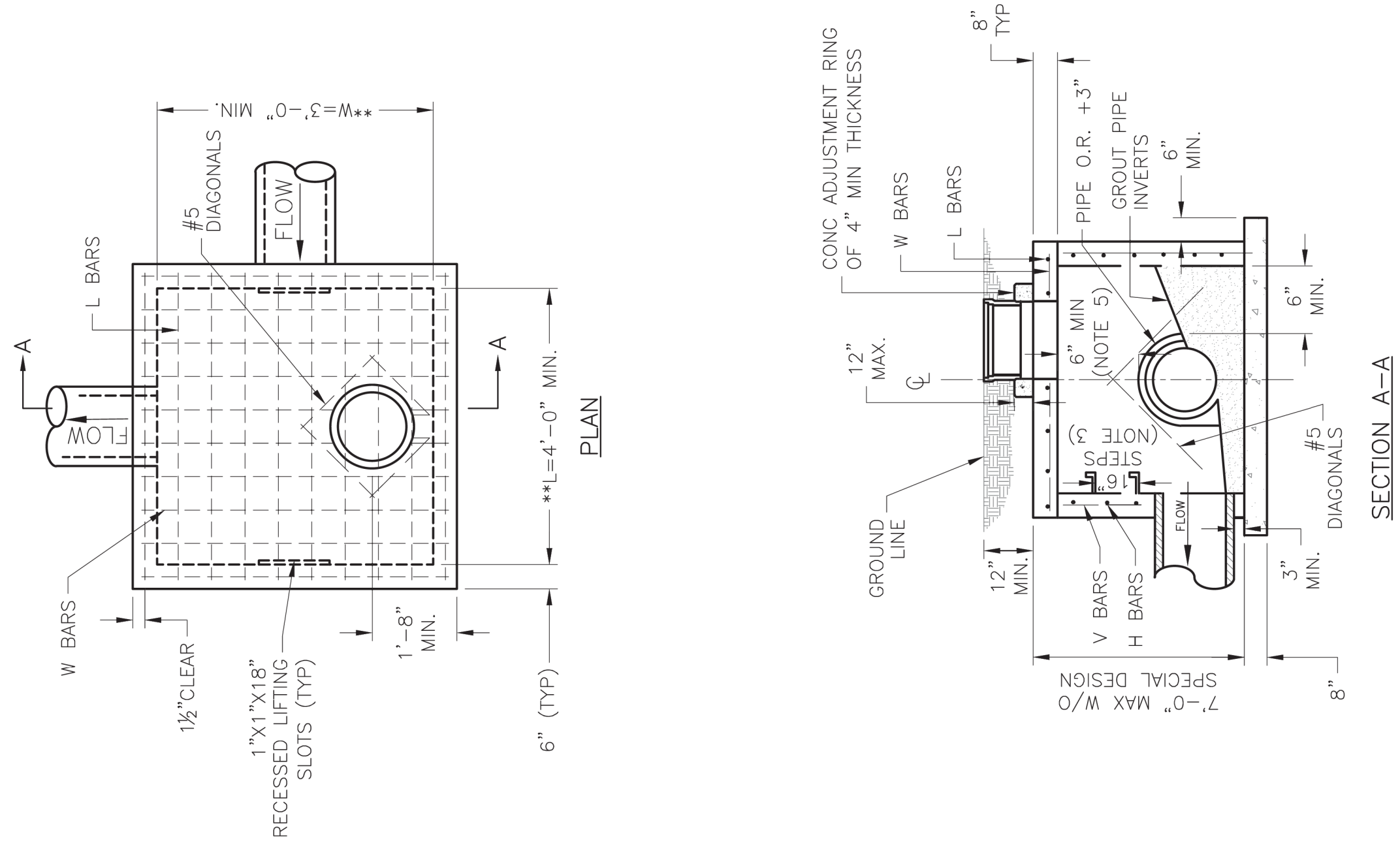
- GENERAL NOTES:
1. LOCATE RING AND COVER ON BLANK WALL.
  2. USE 3/4" CHAMFER STRIP OR 1/2" R EDGER TOOL ON ALL EXPOSED CONCRETE CORNERS.
  3. STEPS REQUIRED AT 18" O.C. WHEN DEPTH FROM TOP OF CASTING TO INVERT EXCEEDS 4' ON BLANK WALL IF POSSIBLE.
  4. BOXOUTS WILL NOT BE ALLOWED TO PROJECT THROUGH THE CORNERS OF THE STRUCTURE AND THE MINIMUM DISTANCE BETWEEN BOXOUTS IS 6".
  5. THE MINIMUM REINFORCING SHALL BE 1 H-BAR OVER A CAST-IN-PLACE PIPE AND 2 H-BARS OVER A PRECAST BOXOUT.
  6. PRECAST LIDS SHALL BE PINNED, SEALED WITH NON-SHrinkABLE GROUT AND REMOVABLE FOR FUTURE MAINTENANCE.
  7. REINFORCING OF COVERS IN STREETS REQUIRE SPECIAL DESIGN.
  8. FOR RING AND COVER SEE THE STORMWATER APPROVED PRODUCT LIST.



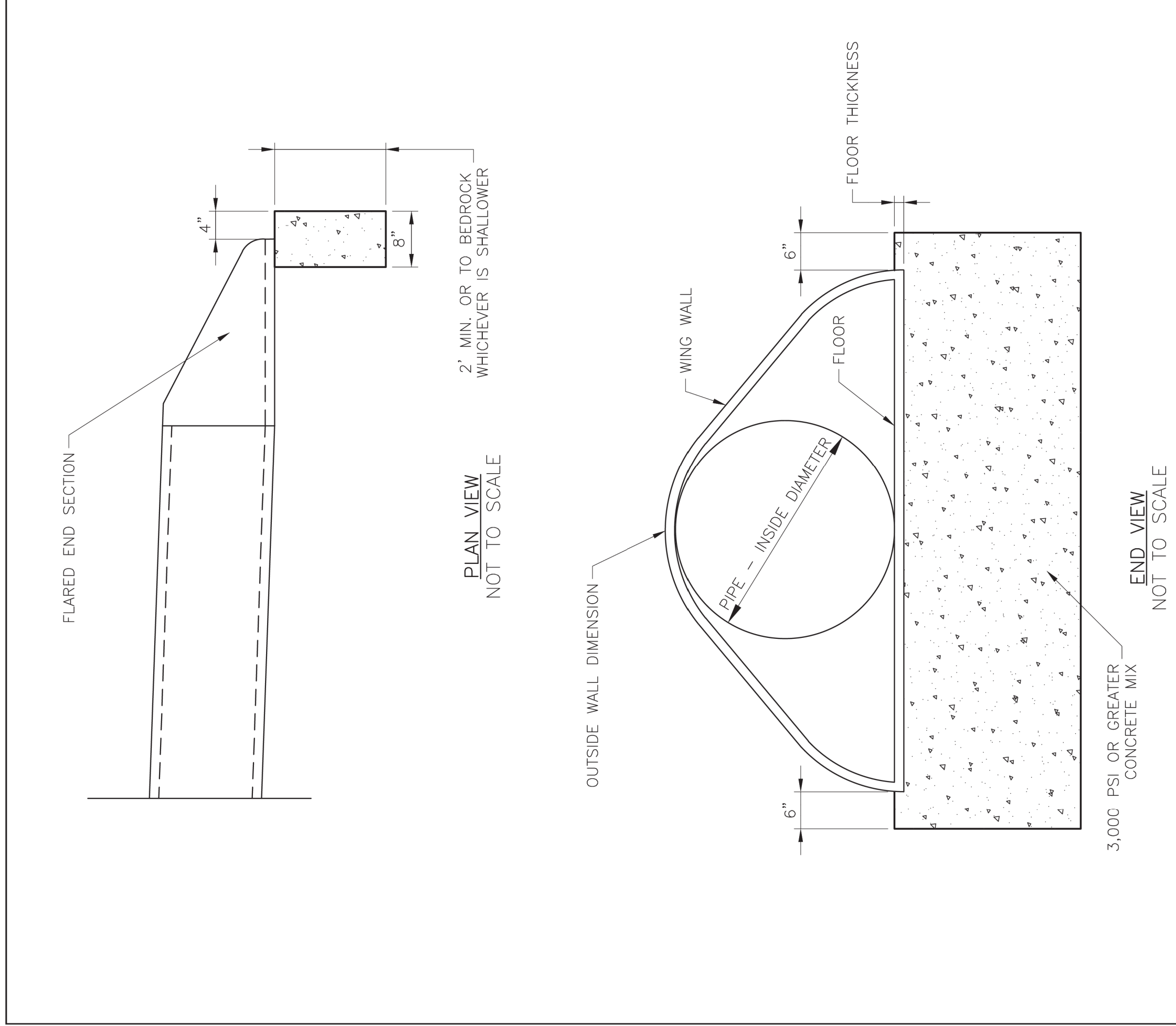
SLAB TOP ALTERNATE FOR JUNCTION BOX (SHALLOW)



WALL CORNER DETAIL



SECTION A-A



STM-5

LEE'S SUMMIT MISSOURI  
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063  
FLARED END SECTION SUPPORT DETAIL



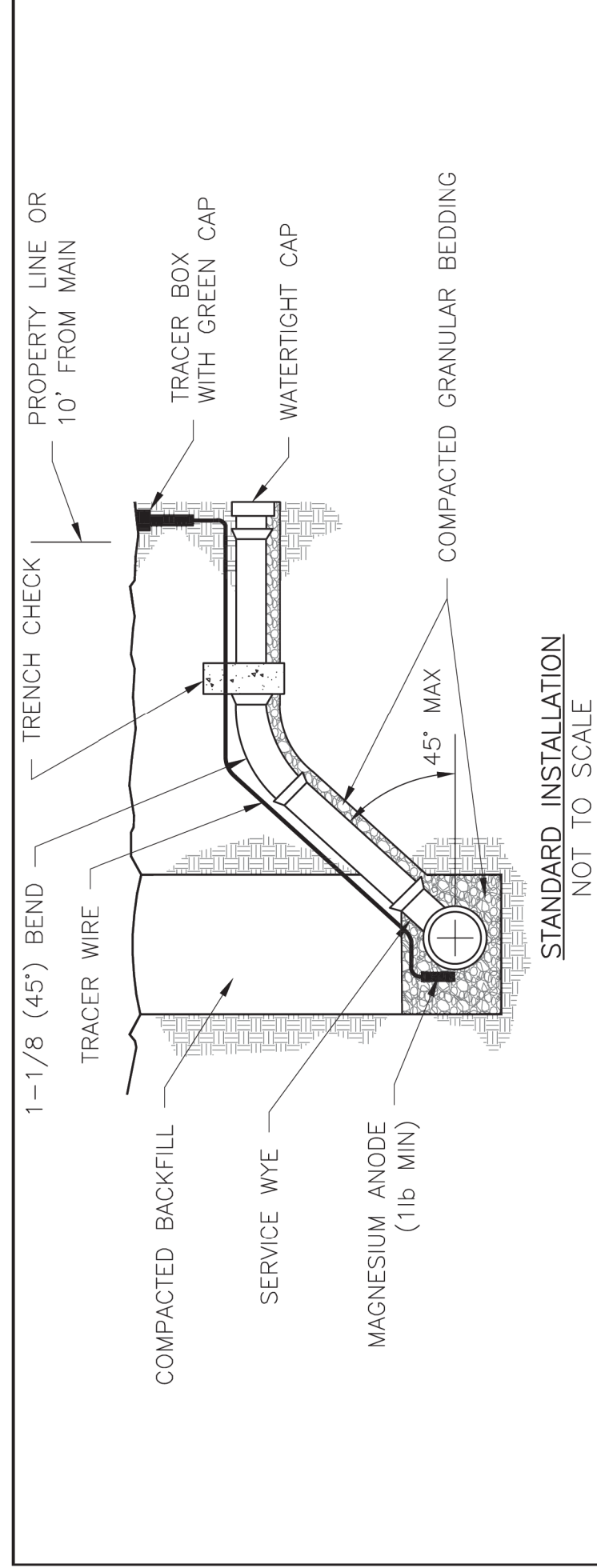
STORM DETAILS  
LEE'S SUMMIT  
PROCESSING FACILITY  
LEE'S SUMMIT - JACKSON COUNTY - MISSOURI



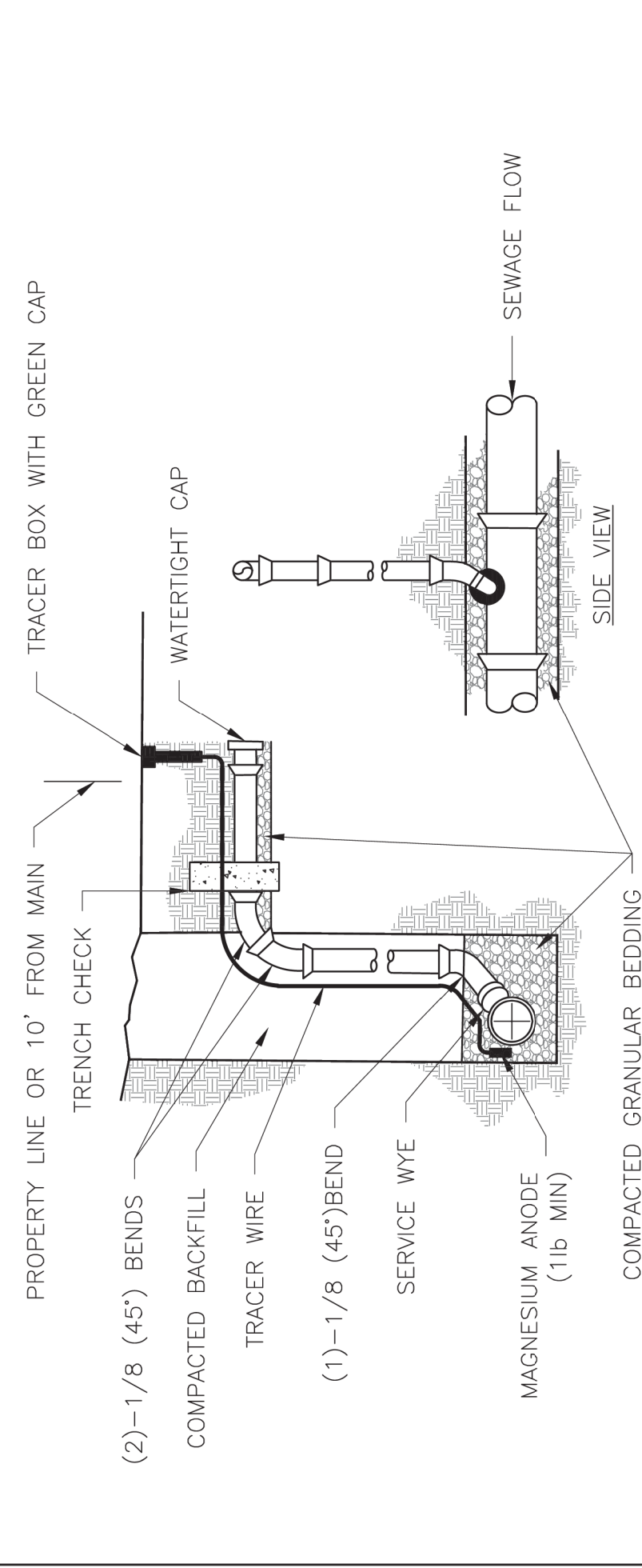
12/22/21

NO.	DATE	REVISION	BY

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STANDARD INSTALLATION  
NOT TO SCALE



VERTICAL RISER  
NOT TO SCALE

- NOTES:
1. ALL SEWER STUBS SHALL BE CONSTRUCTED TO PROPERTY LINE OR 10' MINIMUM FROM THE MAIN, WHICHEVER IS GREATER. WHERE SIDEWALKS ARE PRESENT, CONTRACTOR SHALL EXTEND SERVICE LINE UNDER EXISTING SIDEWALK TO TWO FEET BEYOND.
  2. IMPERVIOUS TRENCH CHECKS SHALL BE PLACED ON BUILDING SEWER STUBS (AT LEAST 5' AWAY FROM THE SANITARY SEWER MAIN).
  3. TRENCH CHECKS ON THE BUILDING SEWER SHALL EXTEND 6" BELOW THE BOTTOM OF THE PIPE. LENGTH SHALL BE A MINIMUM OF 12". THE HEIGHT OF THE TRENCH CHECK SHALL EXTEND 12" ABOVE THE TOP OF THE PIPE. THE WIDTH OF THE TRENCH CHECK SHALL BE THE WIDTH OF THE TRENCH.
  4. SEE SPECIFICATION SECTION 2100 FOR SEWER MAIN BEDDING AND BACKFILL.
  5. #12 GAUGE GREEN INSULATED COPPER TRACER WIRE SHALL BE INSTALLED. TRACER WIRE TERMINAL BOXES SHALL BE INSTALLED DIRECTLY ABOVE THE SEWER SERVICE OR AS DETERMINED BY THE ENGINEER.
  6. FOR SERVICES, TRACER WIRE SHALL RUN FROM THE WYE AND TERMINATE IN A FLUSH MOUNTED TRACER BOX WITH A GREEN CAST IRON LOCKABLE TOP. WIRE SHALL BE TAPED OR TIED TO THE PIPE AT 5' INTERVALS.
  7. TRACER WIRE BOX SHALL BE INSTALLED WITHIN 1.0' OF PROPERTY LINE.
  8. THE TRACER WIRE SHALL REMAIN CONTINUOUS TO THE GREATEST EXTENT POSSIBLE. SPLICES IN THE TRACER WIRE SHOULD BE MADE WITH SPLIT BOLT CONNECTORS. WIRE NUTS SHALL NOT BE USED. A WATER-PROOF CONNECTION IS NECESSARY TO PREVENT CORROSION.

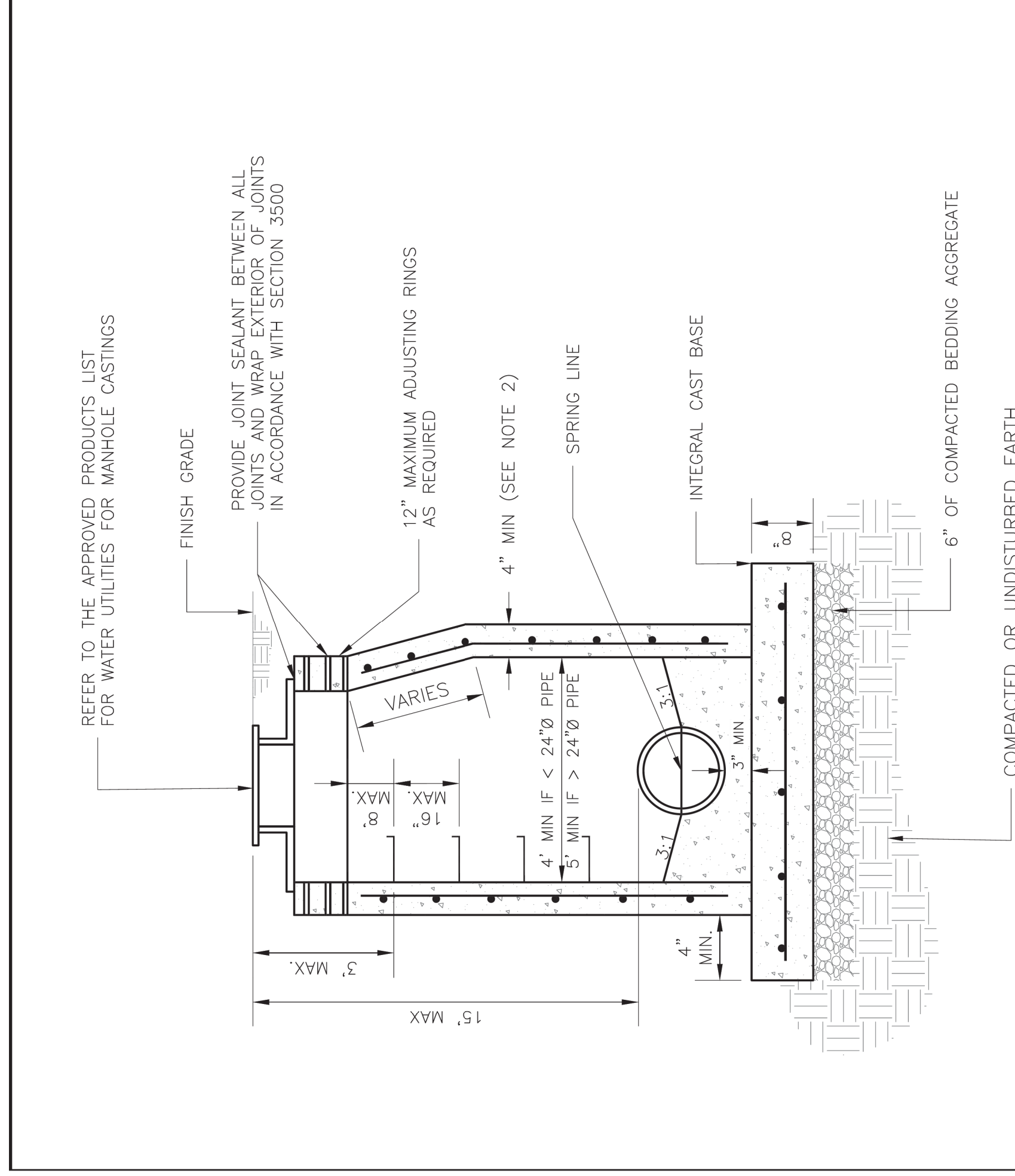


**LEE'S SUMMIT**  
**MISSOURI**  
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

Date: 12/2015  
Drawn By: MIF  
Checked By: DL

SAN-1

SANITARY SEWER STUB DETAIL



NOTES:

1. PRECAST CONCRETE MANHOLES SHALL CONFORM TO ASTM C478 EXCEPT AS MODIFIED BY THE SPECIFICATIONS.
2. A WALL THICKNESS NOT LESS THAN ONE-TWELFTH (1/12) OF THE INSIDE DIAMETER OR 4", WHICHEVER IS GREATER, SHALL BE USED WHEN THE MANHOLE DEPTH IS LESS THAN 15".
3. WATERPROOFING SHALL BE REQUIRED ON THE OUTSIDE OF MANHOLES. THE WATERPROOFING SHALL CONSIST OF TWO COATINGS OF BITUMINOUS MATERIAL, NOT LESS THAN 14 MILS OF BITUMINOUS COATING BY THE CITY ENGINEER. THE FILL CONCRETE FLOW CHANNEL FOR SIDE BRANCHES SHALL BE PLACED TO PROVIDE A SMOOTH TRANSITION INTO THE FLOW LINE.
4. REFER TO THE APPROVED PRODUCTS LIST FOR WATER UTILITIES FOR APPROVED MANHOLE GASKET MODELS.
5. REFER TO THE APPROVED PRODUCTS LIST FOR APPROVED STEPS.

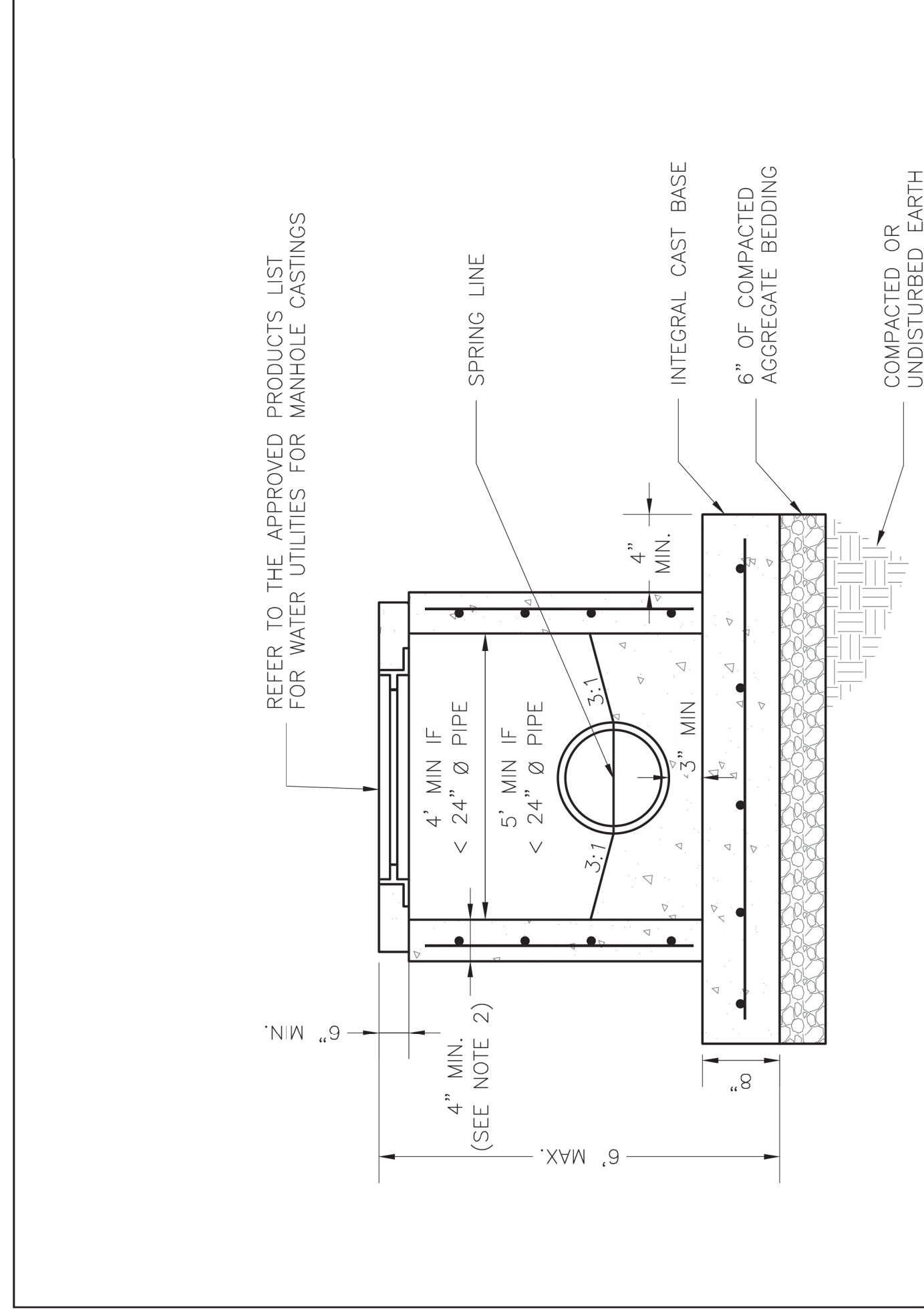


**LEE'S SUMMIT**  
**MISSOURI**  
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

Date: 12/2015  
Drawn By: SC  
Checked By: DL

SAN-2

STANDARD SANITARY PRECAST MANHOLE



NOTES:

1. PRECAST CONCRETE MANHOLES SHALL CONFORM TO ASTM C478 EXCEPT AS MODIFIED BY THE SPECIFICATIONS.
2. WALL THICKNESS NOT LESS THAN ONE-TWELFTH (1/12) OF THE INSIDE DIAMETER OR 4", WHICHEVER IS GREATER, SHALL BE USED WHEN THE MANHOLE DEPTH IS LESS THAN 15".
3. WATERPROOFING SHALL BE REQUIRED ON THE OUTSIDE OF MANHOLES. THE WATERPROOFING SHALL CONSIST OF A TOTAL DRY FILM THICKNESS OF NOT LESS THAN 14 MILS OF BITUMINOUS COATING.
4. THE FILL CONCRETE FLOW CHANNEL FOR SIDE BRANCHES SHALL BE PLACED TO PROVIDE A SMOOTH TRANSITION INTO THE FLOW LINE.
5. REFER TO THE APPROVED PRODUCTS LIST FOR WATER UTILITIES FOR MANHOLE GASKET MODELS.
6. PROVIDE STEPS AS SHOWN ON THE APPROVED PRODUCTS LIST FOR MANHOLE DEPTHS GREATER THAN 4'.

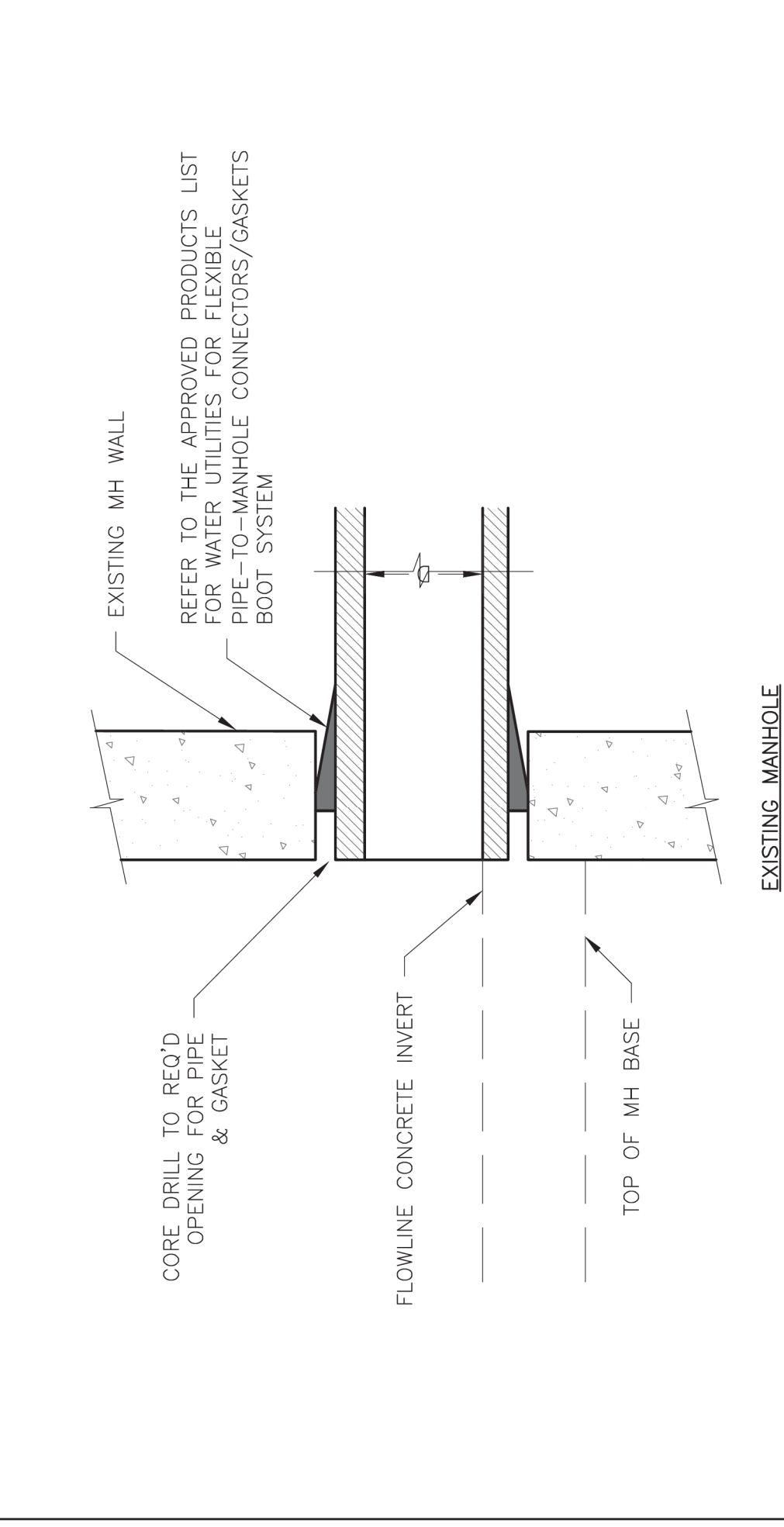
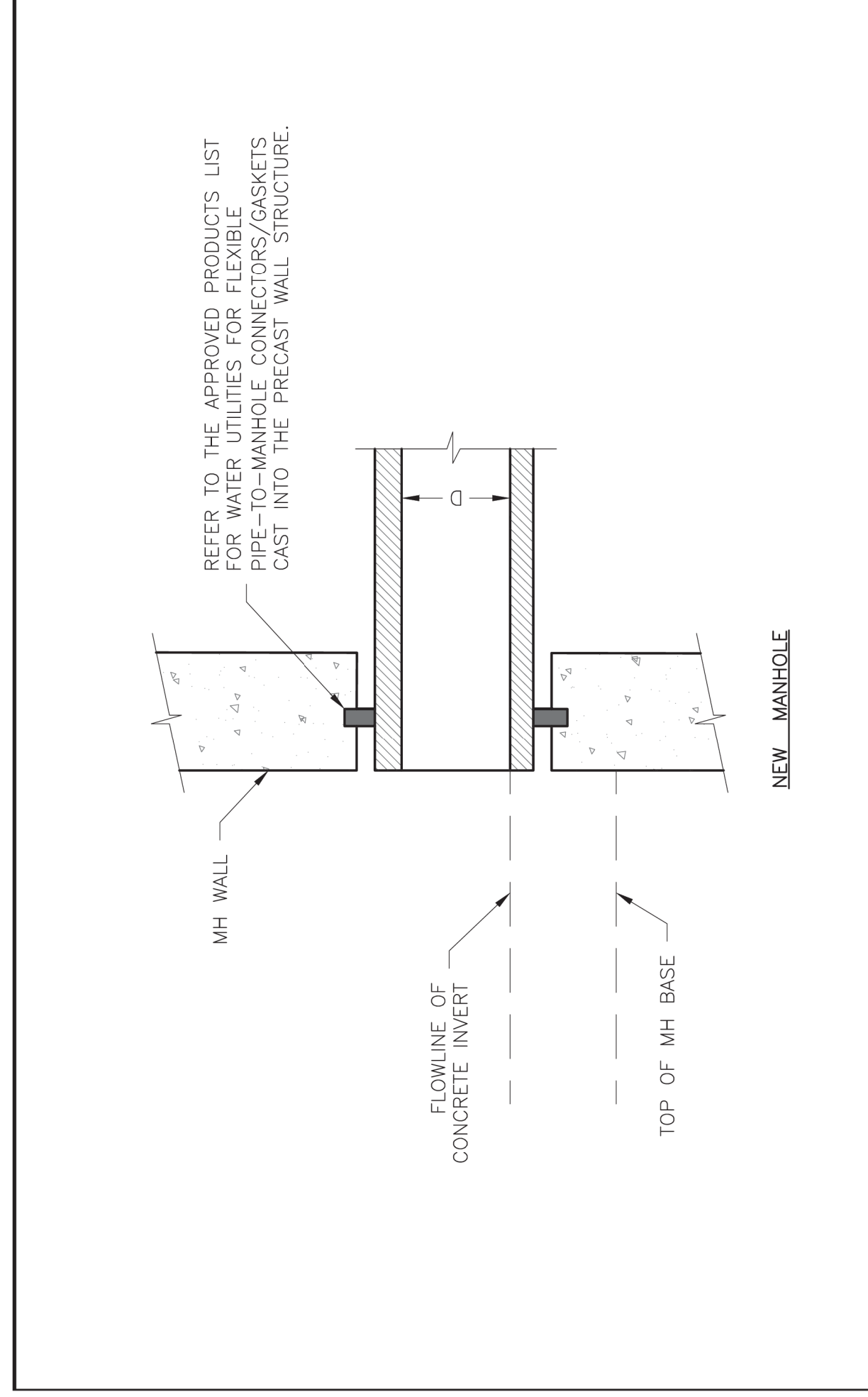


**LEE'S SUMMIT**  
**MISSOURI**  
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

Date: 12/2015  
Drawn By: MIF  
Checked By: DL

SAN-3

STANDARD SHALLOW SANITARY PRECAST MANHOLE



**LEE'S SUMMIT**  
**MISSOURI**  
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

Date: 02/2013  
Drawn By: MIF  
Checked By: DL

SAN-5

MANHOLE WALL CONNECTION

SANITARY DETAILS

LEE'S SUMMIT  
PROCESSING FACILITY

LEE'S SUMMIT - JACKSON COUNTY - MISSOURI



12/22/21

R. KEVIN STERRETT, MO E-26440

CORPORATE LICENSE No. E2010005873



1533 Locust Street Kansas City, MO 64108 816-793-7098

**NOTES:**

1. FLOWABLE FILL SHALL MEET THE REQUIREMENTS OF THE CITY OF LEE'S SUMMIT DESIGN AND CONSTRUCTION MANUAL. ABOVE THE TRENCH CHECK SHALL BE FREE OF DEBRIS, ORGANIC MATTER, AND STONES 3" IN ANY DIMENSION.
2. TOP OF FLOWABLE BACKFILL SHALL EXTEND 12" ABOVE THE TOP OF THE PIPE.
3. TOP OF FLOWABLE BACKFILL SHALL EXTEND 12" ABOVE THE TOP OF THE PIPE.
4. LENGTH OF TRENCH CHECK SHALL BE A MINIMUM OF 12'.

<b>LS</b>	<b>LEE'S SUMMIT MISSOURI</b> <small>PUBLIC WORKS ENGINEERING DIVISION   220 SE GREEN STREET   LEE'S SUMMIT, MO 64063</small>	<small>Date: 01/2016 Drawn By: JN Checked By: DL</small>
<b>WATER TRENCH CHECK DETAIL</b>		<b>WAT-6</b>

**NOTES:**

1. WHEN RESTRAINER GLANDS ARE USED IN LIEU OF MECHANICAL JOINT (MJ) RESTRAINT FITTINGS, HORIZONTAL THRUST BLOCKS ARE REQUIRED.
2. GATE VALVE MAY BE BOLTED DIRECTLY TO MJ RESTRAINT TEE.
3. SEE APPROVED PRODUCTS LIST FOR WATER UTILITIES FOR FIRE HYDRANT, VALVES, VALVE BOX LID, AND COVER.
4. BOTTOM HYDRANT FLANGE SHALL BE 2" TO 6" ABOVE FINISHED GRADE.
5. FOR STREETS WITHOUT CURBS FIRE HYDRANTS SHALL BE PLACED WITHIN 1 FOOT OF THE R/W LINE, BUT NOT MORE THAN 10' FROM EDGE OF PAVEMENT. FIRE HYDRANT SHALL NOT BE PLACED IN BOTTOM OF DITCH.
6. HYDRANT SHALL BE ROTATED AS DIRECTED BY INSPECTOR.

<b>LS</b>	<b>LEE'S SUMMIT MISSOURI</b> <small>PUBLIC WORKS ENGINEERING DIVISION   220 SE GREEN STREET   LEE'S SUMMIT, MO 64063</small>	<small>Date: 01/2016 Drawn By: JN Checked By: DL</small>
<b>HYDRANT - STRAIGHT SET</b>		<b>WAT-7</b>

<b>LS</b>	<b>LEE'S SUMMIT MISSOURI</b> <small>PUBLIC WORKS ENGINEERING DIVISION   220 SE GREEN STREET   LEE'S SUMMIT, MO 64063</small>	<small>Date: 01/2016 Drawn By: JN Checked By: DL</small>
<b>VALVE STEM EXTENSION AND VALVE BOX</b>		<b>WAT-9</b>

**WATER DETAILS**

**LEE'S SUMMIT  
PROCESSING FACILITY**

LEE'S SUMMIT - JACKSON COUNTY - MISSOURI

**8 Inc**  
**Consulting engineers planners**

1533 Locust Street Kansas City, MO 64108 816-703-7098

CORPORATE LICENSE No. E2010005873

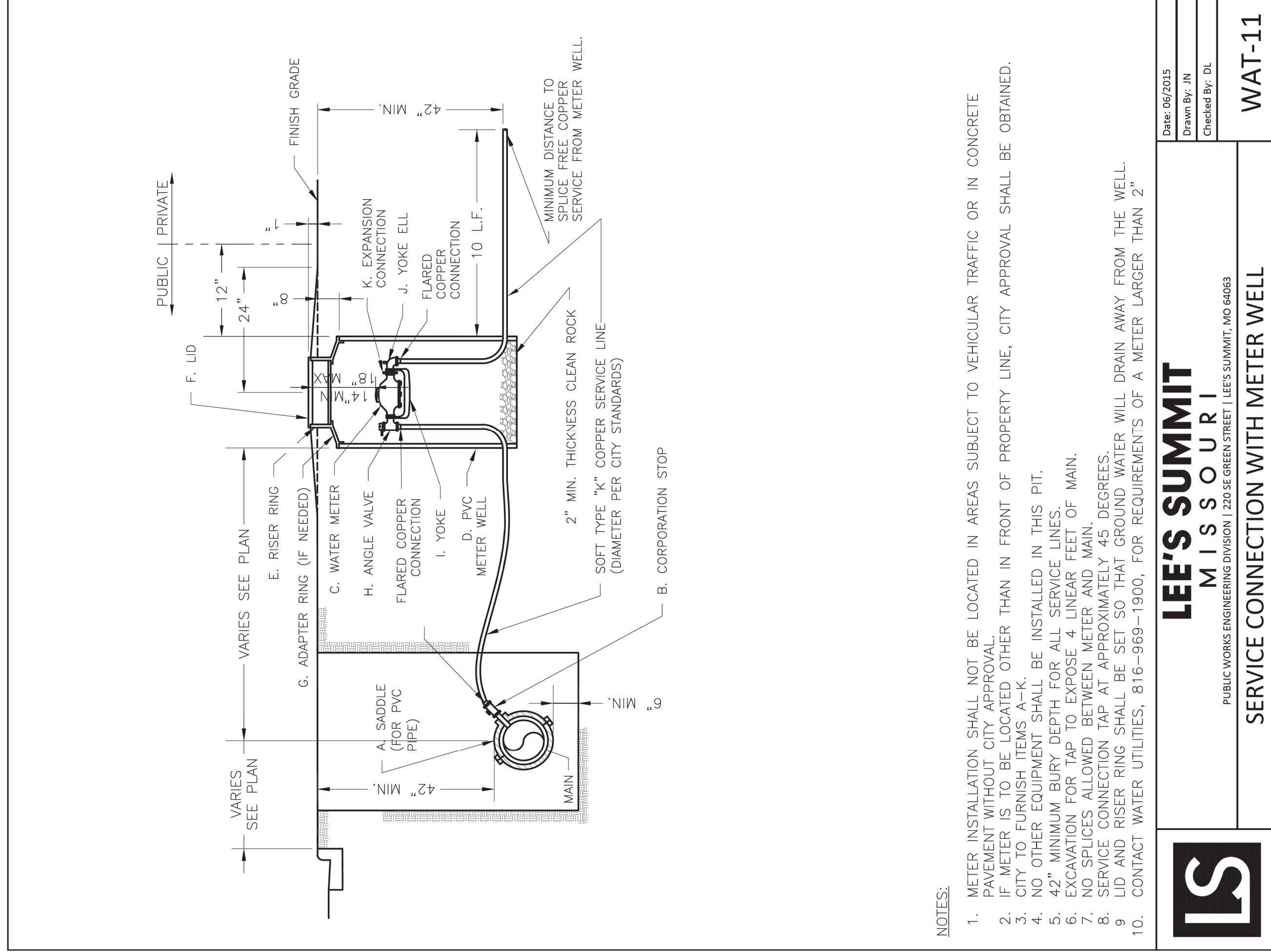
12/22/21

R. KEVIN STERRETT, MO E-26440

NO.	DATE	REVISION	BY

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**NOTES:**

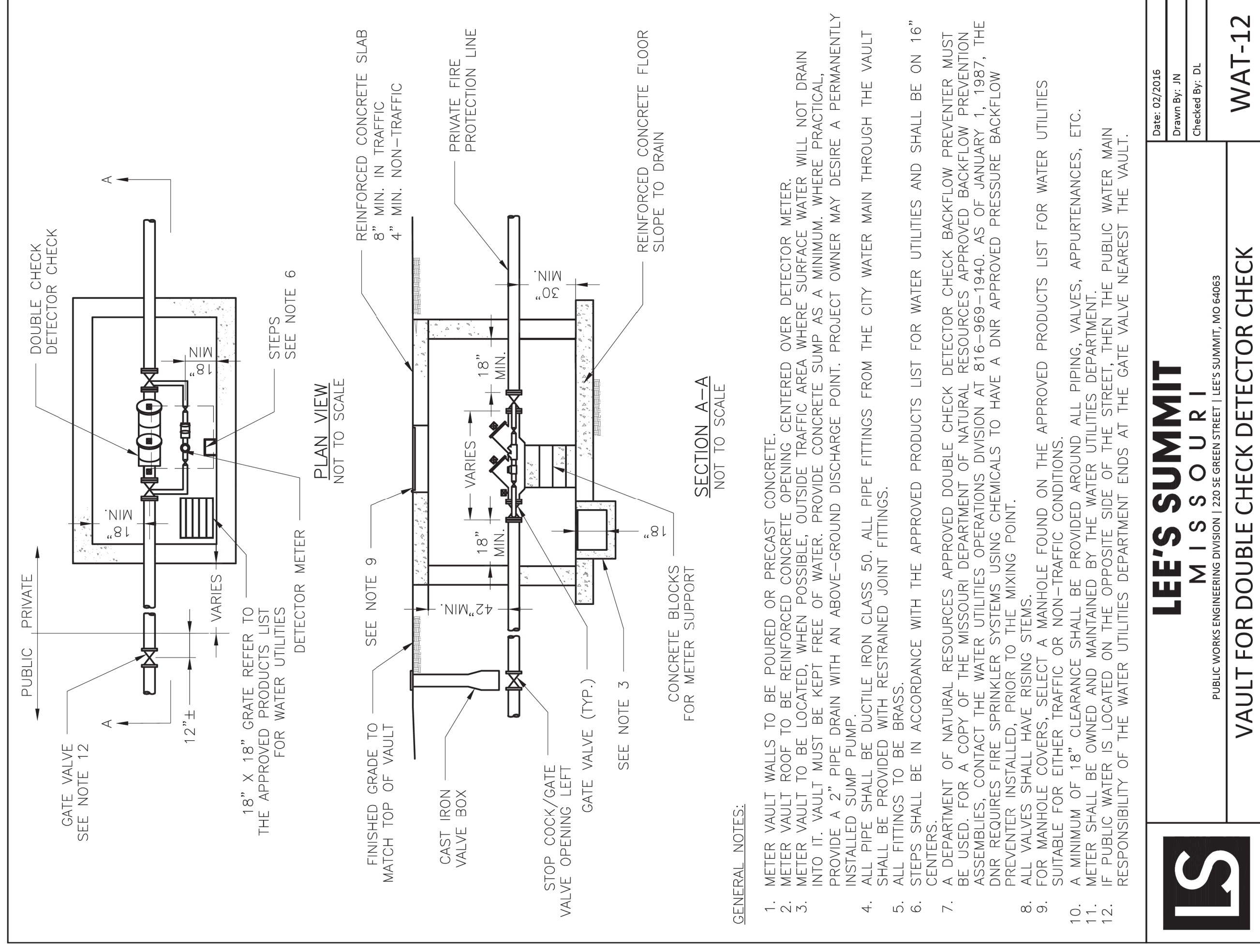
1. METER INSTALLATION SHALL NOT BE LOCATED IN AREAS SUBJECT TO VEHICULAR TRAFFIC OR IN CONCRETE PAVEMENT WITHOUT CITY APPROVAL.
2. IF METER IS TO BE LOCATED OTHER THAN IN FRONT OF PROPERTY LINE, CITY APPROVAL SHALL BE OBTAINED.
3. CITY TO FURNISH ITEMS A-K.
4. ALL OTHER EQUIPMENT SHALL BE INSTALLED IN THIS PIT.
5. NO EXCAVATION SHALL BE PERMITTED FOR ALL SERVICE LINES.
6. EXCAVATION FOR TAP TO EXPOSE LINES' FEET OF MAIN.
7. NO SPLICES ALLOWED BETWEEN METER AND MAIN.
8. SERVICE CONNECTION TAP AT APPROXIMATELY 45 DEGREES.
9. LID AND RISER RING SHALL BE SET SO THAT GROUND WATER WILL DRAIN AWAY FROM THE WELL.
10. CONTACT WATER UTILITIES, 816-969-1900, FOR REQUIREMENTS OF A METER LARGER THAN 2"



LEE'S SUMMIT  
MISSOURI  
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64663

SERVICE CONNECTION WITH METER WELL

WAT-11



**GENERAL NOTES:**

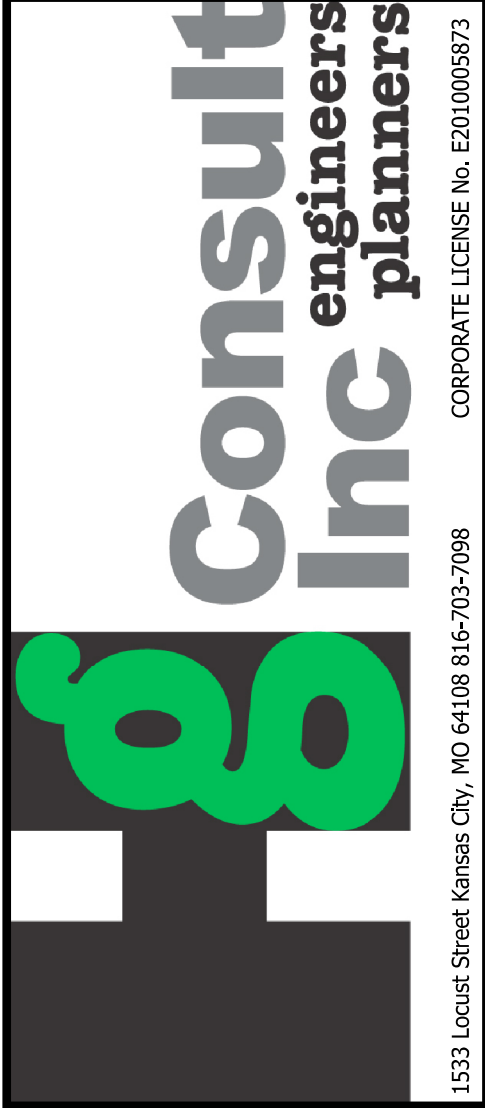
1. METER VAULT WALLS TO BE POURED OR PRECAST CONCRETE.
2. METER VAULT ROOF TO BE REINFORCED CONCRETE OPENING CENTERED OVER DETECTOR METER.
3. METER VAULT TO BE LOCATED, WHEN POSSIBLE, OUTSIDE TRAFFIC AREA WHERE SURFACE WATER WILL NOT DRAIN INTO IT. VAULT MUST BE KEPT FREE OF WATER. PROVIDE CONCRETE SUMP AS A MINIMUM. WHERE PRACTICAL, PROVIDE A SUMP WITH AN ABOVE-GROUND DISCHARGE POINT. PROJECT OWNER MAY DESIRE A PERMANENTLY INSTALLED SUMP PUMP.
4. ALL PIPE SHALL BE DUCTILE IRON CLASS 50. ALL PIPE FITTINGS FROM THE CITY WATER MAIN THROUGH THE VAULT SHALL BE PROVIDED WITH RESTRAINED JOINT FITTINGS.
5. ALL FITTINGS TO BE BRASS.
6. STEPS SHALL BE IN ACCORDANCE WITH THE APPROVED PRODUCTS LIST FOR WATER UTILITIES AND SHALL BE ON 16" CENTERS.
7. A DEPARTMENT OF NATURAL RESOURCES APPROVED DOUBLE CHECK DETECTOR CHECK BACKFLOW PREVENTER MUST BE USED. FOR A COPY OF THE MISSOURI DEPARTMENT OF NATURAL RESOURCES APPROVED BACKFLOW PREVENTION ASSEMBLIES, CONTACT THE WATER UTILITIES OPERATIONS DIVISION AT 816-969-1940. AS OF JANUARY 1, 1987, THE DNR REQUIRES FIRE SPRINKLER SYSTEMS USING CHEMICALS TO HAVE A DNR APPROVED PRESSURE BACKFLOW PREVENTER.
8. ALL VALVES SHALL HAVE RISING STEPS.
9. FOR MANHOLE COVERS, SELECT A MANHOLE FOUND ON THE APPROVED PRODUCTS LIST FOR WATER UTILITIES SUITABLE FOR EITHER TRAFFIC OR NON-TRAFFIC CONDITIONS.
10. A MINIMUM OF 18" CLEARANCE SHALL BE PROVIDED AROUND ALL PIPING, VALVES, APPURTENANCES, ETC.
11. METER SHALL BE OWNED AND MAINTAINED BY THE WATER UTILITIES DEPARTMENT.
12. IF PUBLIC WATER IS LOCATED ON THE OPPOSITE SIDE OF THE STREET, THEN THE PUBLIC WATER MAIN RESPONSIBILITY OF THE WATER UTILITIES DEPARTMENT ENDS AT THE GATE VALVE NEAREST THE VAULT.



LEE'S SUMMIT  
MISSOURI  
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64663

VAULT FOR DOUBLE CHECK DETECTOR CHECK

WAT-12



WATER DETAILS

LEE'S SUMMIT  
PROCESSING FACILITY

LEE'S SUMMIT - JACKSON COUNTY - MISSOURI



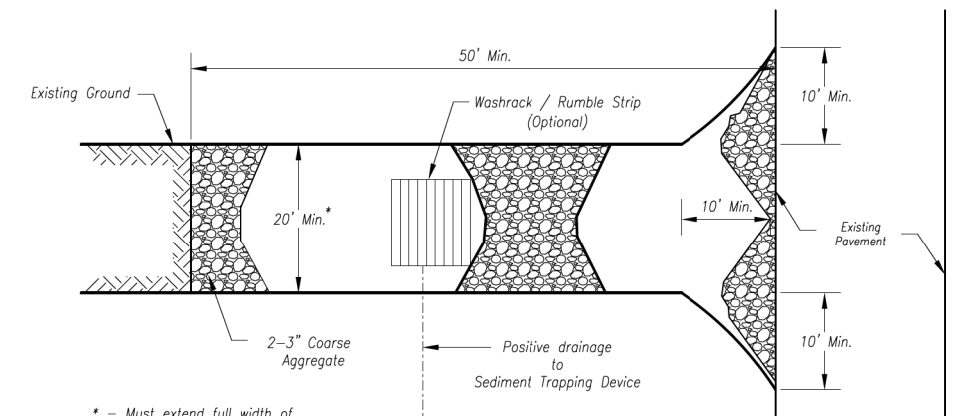
12/22/21

R. KEVIN STERRETT, NO. E-26440

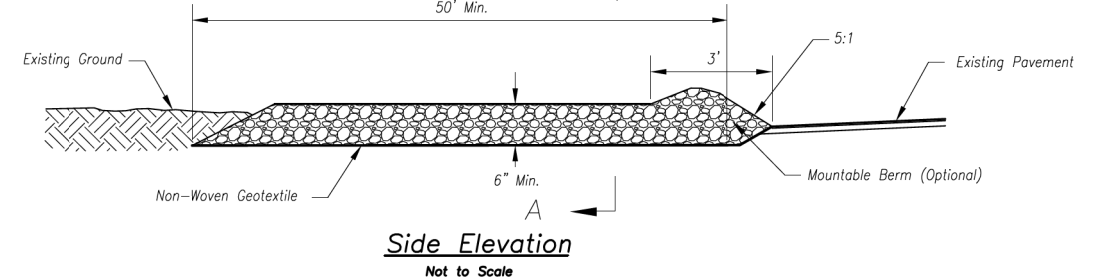
NO.	REVISION	DATE	BY

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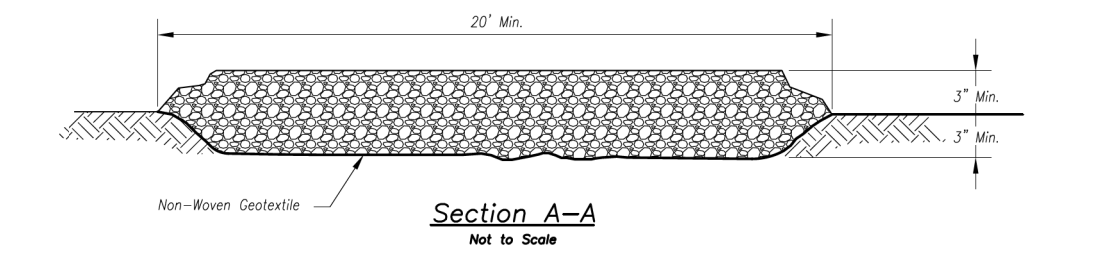
DATE: December 22, 2021  
JOB NO: 21.033



**Plan View**  
Not to Scale



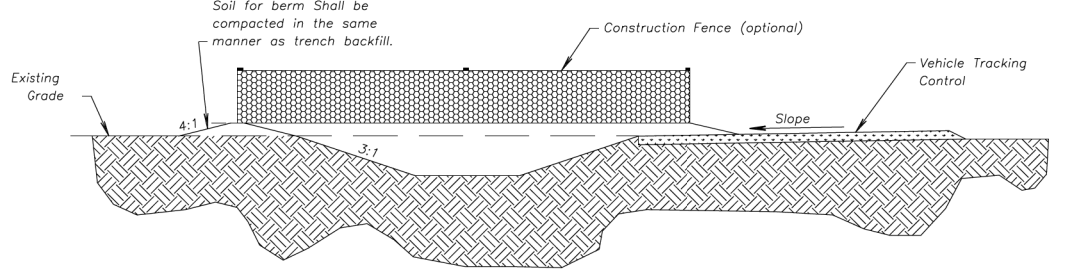
**Side Elevation**  
Not to Scale



**Section A-A**  
Not to Scale

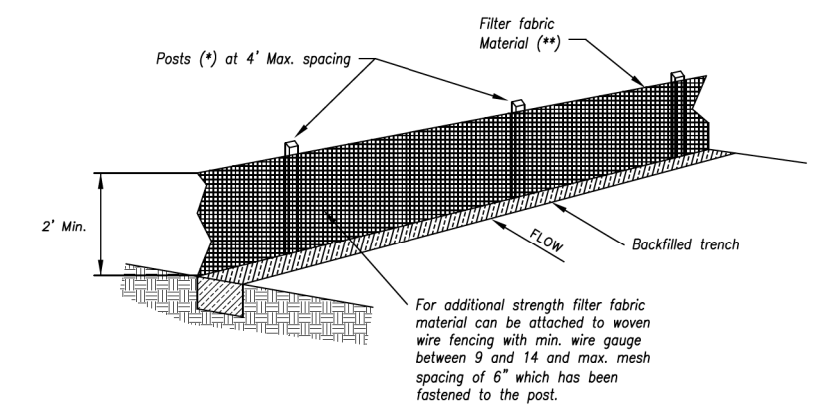
- Notes for Concrete Washout:**
- Concrete washout areas shall be installed prior to any concrete placement on site.
  - Concrete washout areas shall include a flat substrate pit sized relative to the amount of concrete to be placed on site. The edges leading out of the substrate pit shall be 3:1. The vehicle tracking pit shall be sloped toward the concrete washout area.
  - Vehicle tracking control is required at the access point to all concrete washout areas.
  - Slope shall be placed at the construction site entrance, washout area and elsewhere as necessary to clearly indicate the location(s) of the concrete washout area(s) to operators of concrete trucks and pumps.
  - A permeable impervious liner may be required along the bottom and sides of the substrate pit in sandy or gravelly soils.

- Maintenance for Concrete Washout:**
- Concrete washout materials shall be removed once the materials have filled the washout to approximately 75% full.
  - Concrete washout areas shall be enlarged as necessary to maintain capacity for washed concrete.
  - Concrete washout areas, washed pieces of concrete and all other debris in the substrate pit shall be transported from the job site in a water-tight container and disposed of properly.
  - Concrete washout areas shall remain in place until all concrete for the project is placed.
  - When concrete washout areas are removed, excavations shall be filled with suitable compacted soil and topped, any disturbed areas associated with the installation, maintenance, and/or removal of the concrete washout areas shall be stabilized.



**CONCRETE WASHOUT**

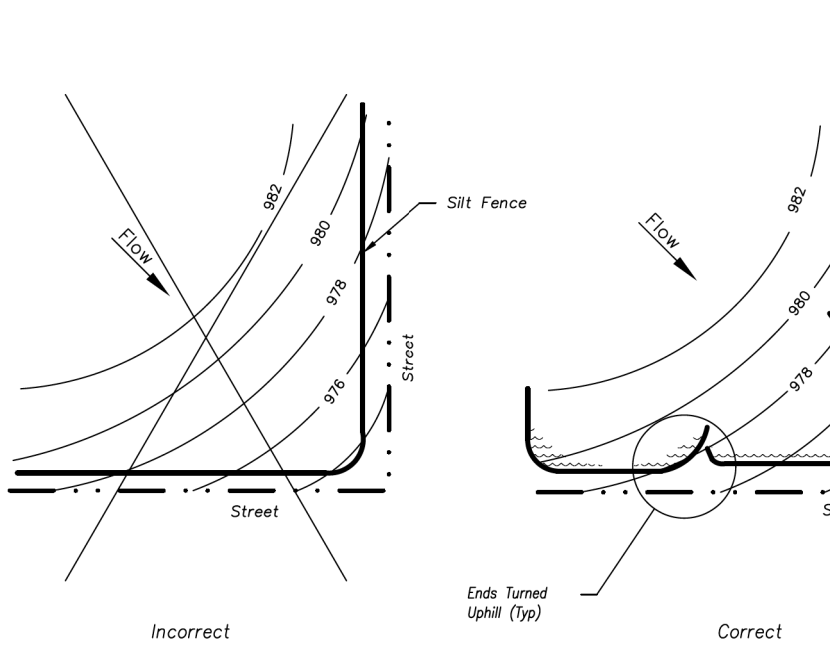
AMERICAN PUBLIC WORKS ASSOCIATION  
**APWA** KANSAS CITY METRO CHAPTER  
 CONSTRUCTION ENTRANCE AND CONCRETE WASHOUT  
 STANDARD DRAWING NUMBER ESC-01  
 ADOPTED 10/24/2016



- (\*) POSTS**
- MIN. LENGTH 4'
  - WOOD: 1 1/2" x 1 1/2"
  - NO. 2 SOUTHERN PINE 2 1/4" x 2 1/4"
  - STEEL: 1.53 LB/FT

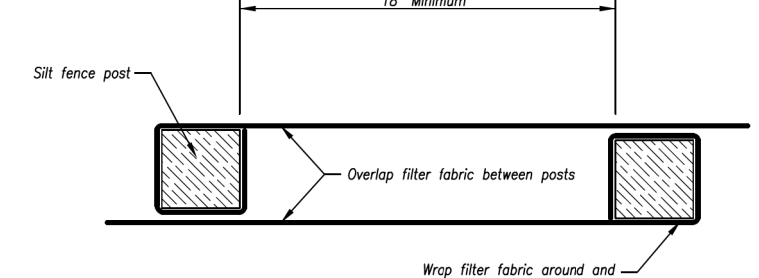
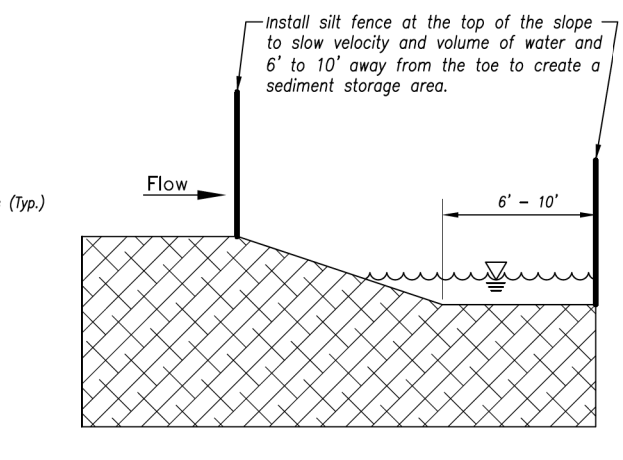
**(\*\*) Geotextile Fabric** shall meet the requirements of AASHTO M288

**SILT FENCE DETAILS**  
Not to Scale



**Figure A**

**SILT FENCE LAYOUT**  
Not to Scale



**JOINING FENCE SECTIONS**  
Not to Scale

- Notes:**
- In order to contain water, the ends of the silt fence must be turned uphill (Figure A).
  - Long perimeter runs of silt fence must be limited to 100'. Runs should be broken up into several smaller segments to minimize water concentrations (Figure A).
  - Long slopes should be broken up with intermediate rows of silt fence to slow runoff velocities.
  - Attach fabric to upstream side of post.
  - Install posts a minimum of 2' into the ground.
  - Trenching will only be allowed for small or difficult installation, where slicing machine cannot be reasonably used.

**Maintenance:**

- Remove and dispose of sediment deposits when the deposit approaches 1/2 the height of silt fence.
- Repair as necessary to maintain function and structure.

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**APWA** KANSAS CITY METRO CHAPTER  
 SILT FENCE  
 STANDARD DRAWING NUMBER ESC-03  
 ADOPTED 10/24/2016

- Notes for Construction Entrance:**
- Avoid locating on steep slopes, at curves on public roads, or down-drift of disturbed areas.
  - Remove all vegetation and other unsuitable material from the foundation area, grade, and crown for positive drainage.
  - If slope towards the public road exceeds 2%, construct a 6" to 8" high ridge with 3:1 V side slopes across the foundation approximately 15 feet from the edge of the public road to divert runoff from it.
  - Install pipe under the entrance if needed to maintain drainage ditches along public roads.
  - Place stone to dimensions and grade as shown on plans. Leave surface sloped for drainage.
  - Divert all surface runoff and drainage from the entrance to a sediment control device.
  - If conditions warrant, place geotextile fabric on the graded foundation to improve stability.

- Maintenance for Construction Entrance:**
- Reshape entrance as needed to maintain function and integrity of installation. Top dress with clean aggregate as needed.

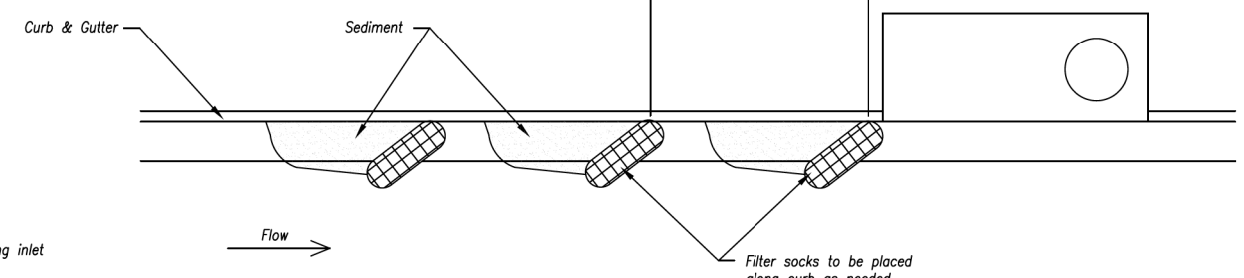
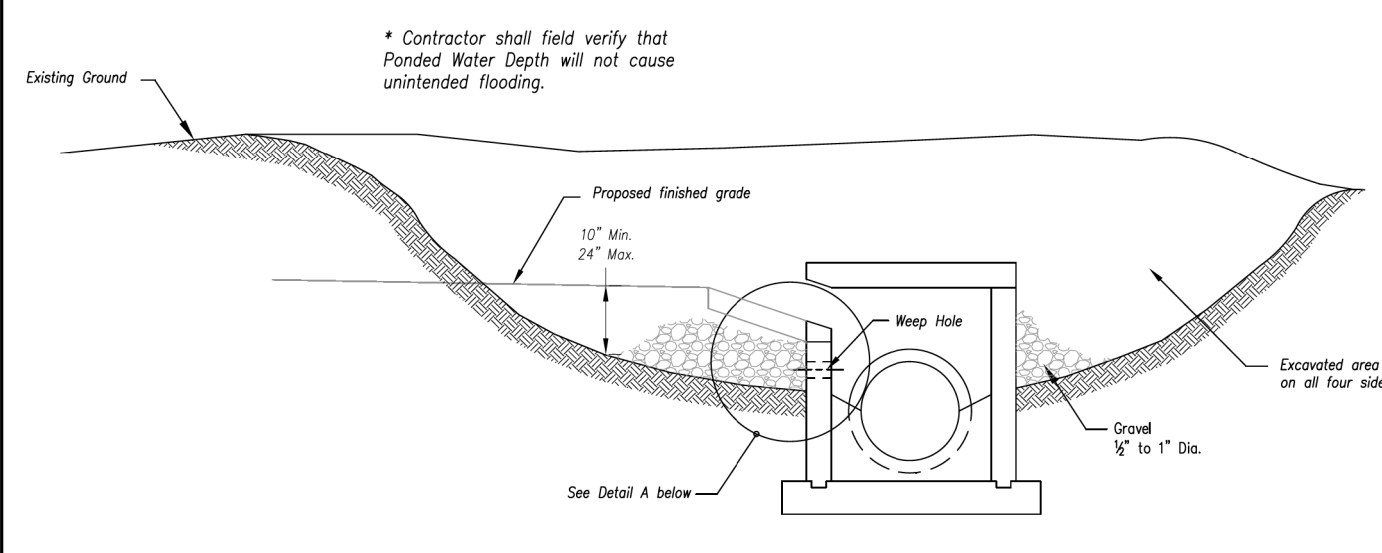
**CONSTRUCTION ENTRANCE**

Construction Entrance modified from 2015 Overland Park Standard Details for Erosion and Sediment Control, Concrete Washout modified from 2009 City of Great Bend Standard Drawings.

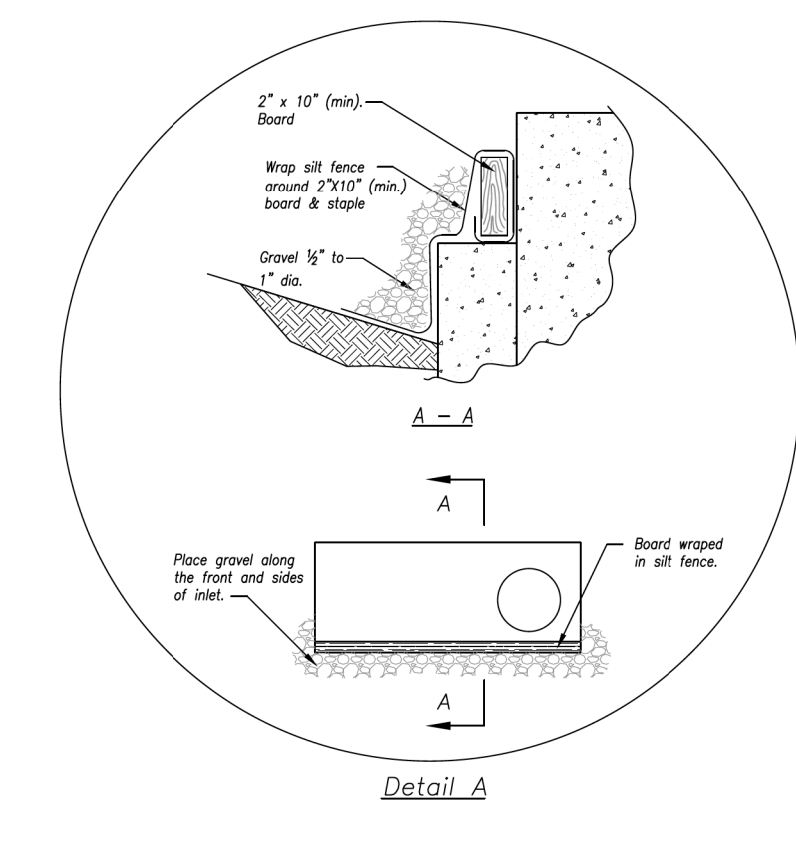


12/22/21

**Consult Inc** engineers planners  
 1533 Locust Street, Kansas City, MO 64108 816-783-7098  
 CORPORATE LICENSE NO. E2010005873



**On Grade Curb Inlet Protection**

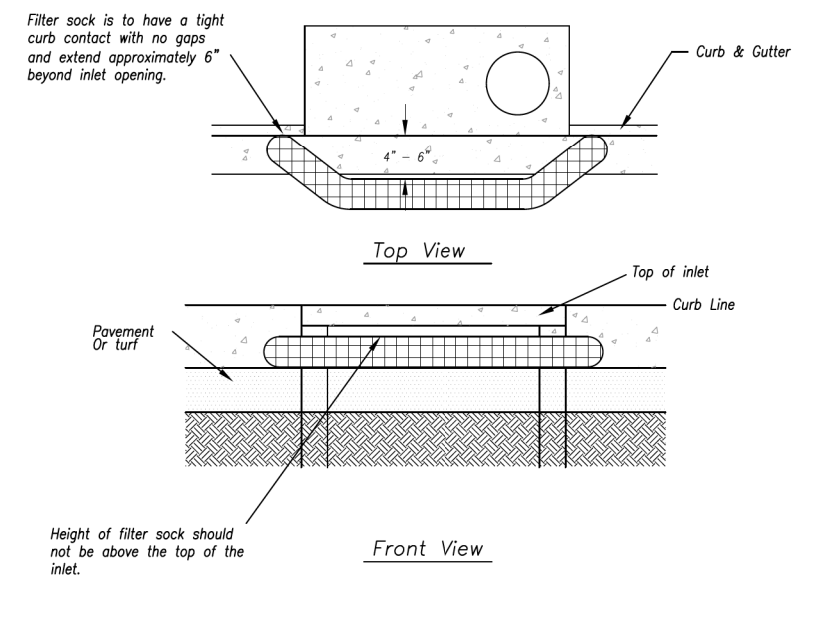


**EARLY STAGE CURB INLET**  
(Open Box and Prior to Pouring Curb and Inlet Throat)

- Notes:**
- Immediately following inlet construction and prior to construction of curb and inlet throat, protect inlet opening by installing 2' x 10' (min) board wrapped in silt fence. Structures shall have excavated storage area on all four sides to allow settling of sediment (Early Stage Curb Inlet).
  - When inlet is completed and curb poured, filter socks or approved equal should be used (Late Stage Curb Inlet). Straw wattles are not approved for curb inlet use.
  - Contractor to field verify pending water shall not create a traffic hazard.

**Maintenance:**

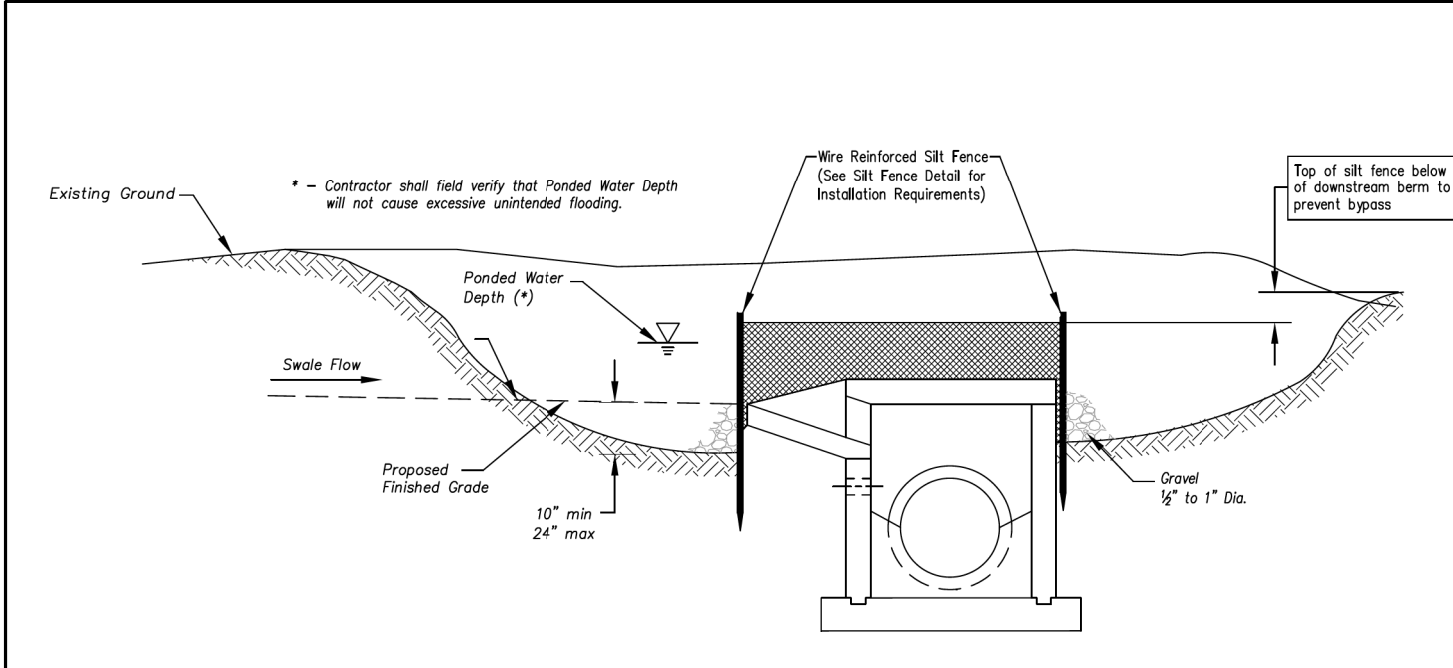
- Remove deposited sediment from excavated storage areas when available storage has been reduced by 20%.
- Remove deposited sediment from filter socks or similar when any accumulation of sediment is visible.
- Repair or replace as necessary to maintain function and integrity of installation.



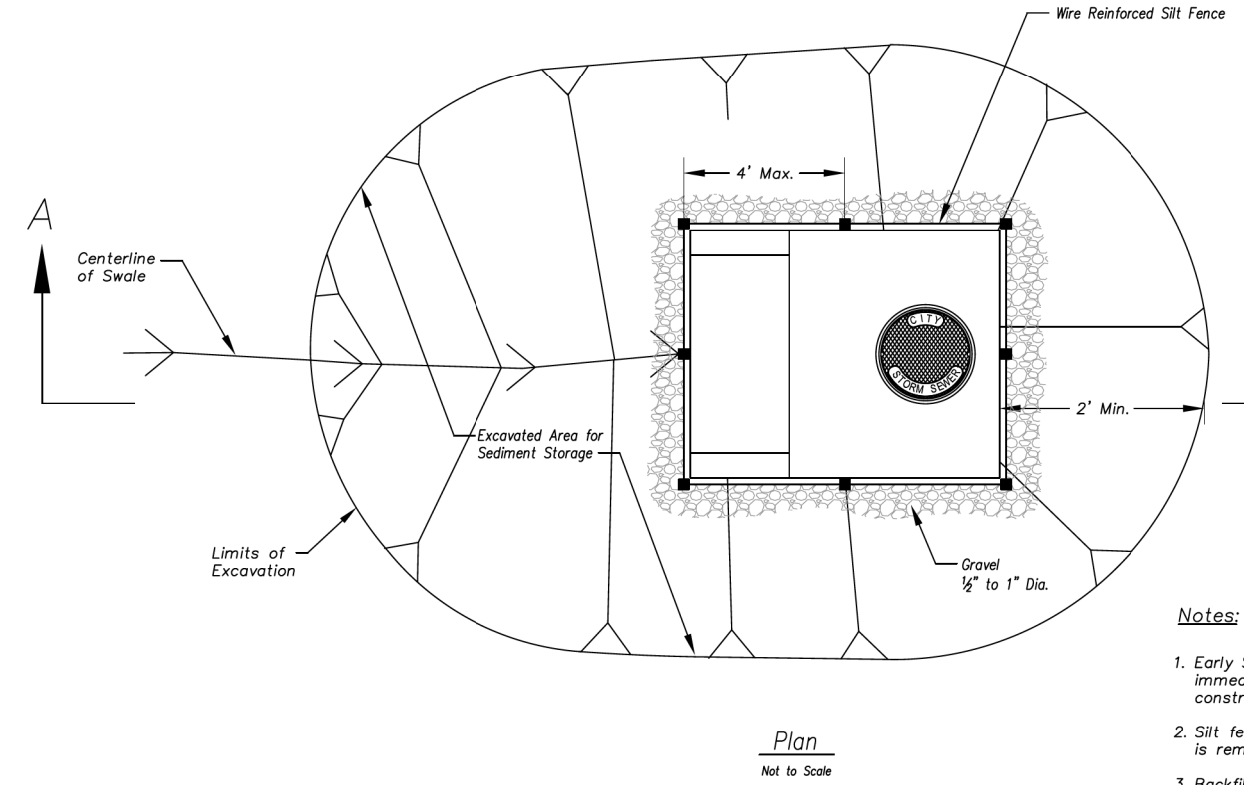
**Sump Inlet Sediment Filter**

**LATE STAGE CURB INLET**  
(After Pouring Curb and Inlet Throat)

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**APWA** KANSAS CITY METRO CHAPTER  
 CURB INLET PROTECTION  
 STANDARD DRAWING NUMBER ESC-06  
 ADOPTED 10/24/2016

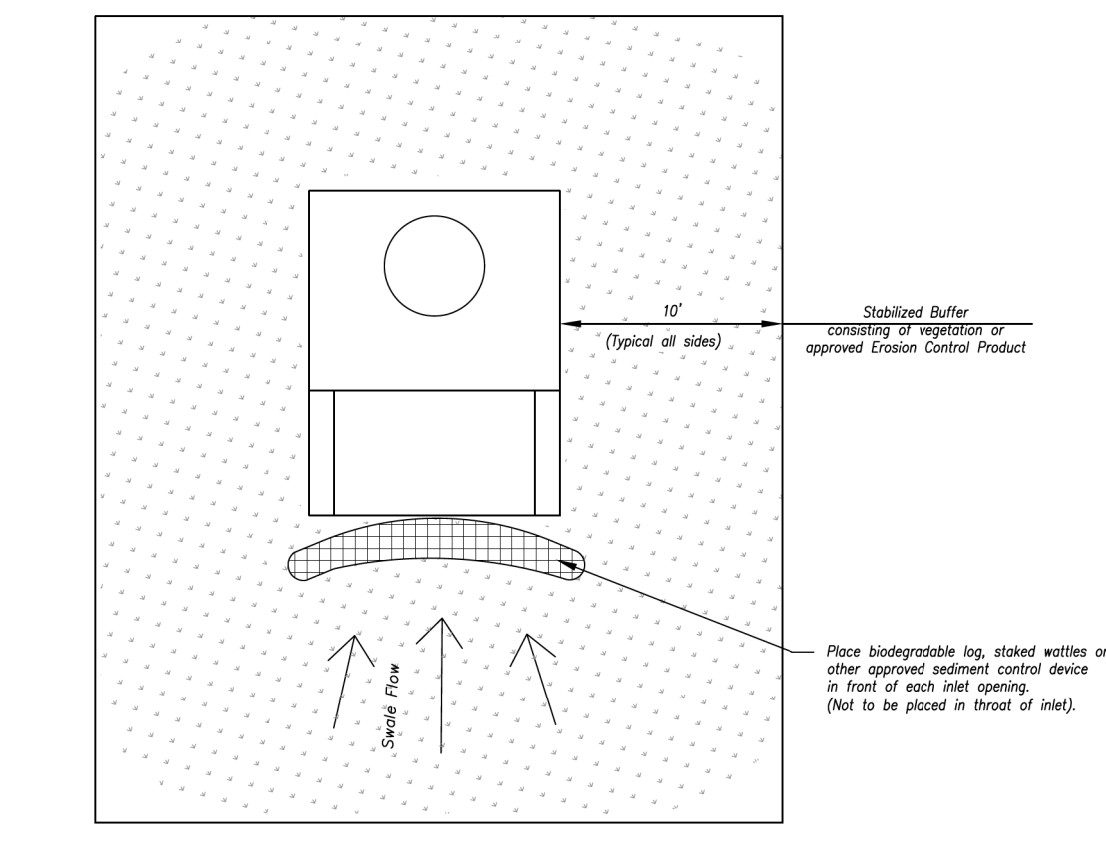


**Section A-A**  
Not to Scale



**EARLY STAGE AREA INLET**  
(All open boxes and inlets not at final grade)

- Notes:**
- Early Stage Area Inlet Sediment Barrier to be installed immediately after inlet or junction box is constructed.
  - Silt fence shall remain in place until excavated area is removed and Late Stage Area Inlet is being installed.
  - Backfill excavated area ONLY after final grading of the site. Stabilization of the site is to immediately follow.
  - Wire reinforced silt fence may be used in place of silt fence attached to wood frame.



**LATE STAGE AREA INLET**  
(Area inlets at final grade and existing inlets)

**Maintenance:**

- Remove deposited sediment from excavated storage areas when available storage has been reduced by 20%.
- Remove deposited sediment from filter socks or similar when any accumulation of sediment is visible.
- Repair or replace as necessary to maintain function and integrity of installation.

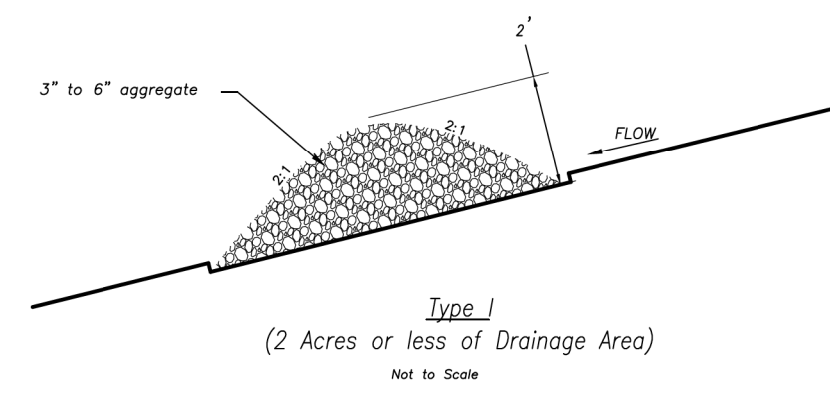
AMERICAN PUBLIC WORKS ASSOCIATION  
**APWA** KANSAS CITY METRO CHAPTER  
 AREA INLET AND JUNCTION BOX PROTECTION  
 STANDARD DRAWING NUMBER ESC-07  
 ADOPTED 10/24/2016

**EROSION CONTROL DETAILS**

**LEE'S SUMMIT PROCESSING FACILITY**  
 LEE'S SUMMIT - JACKSON COUNTY - MISSOURI

DATE: December 22, 2021  
 JOB NO: 21.033

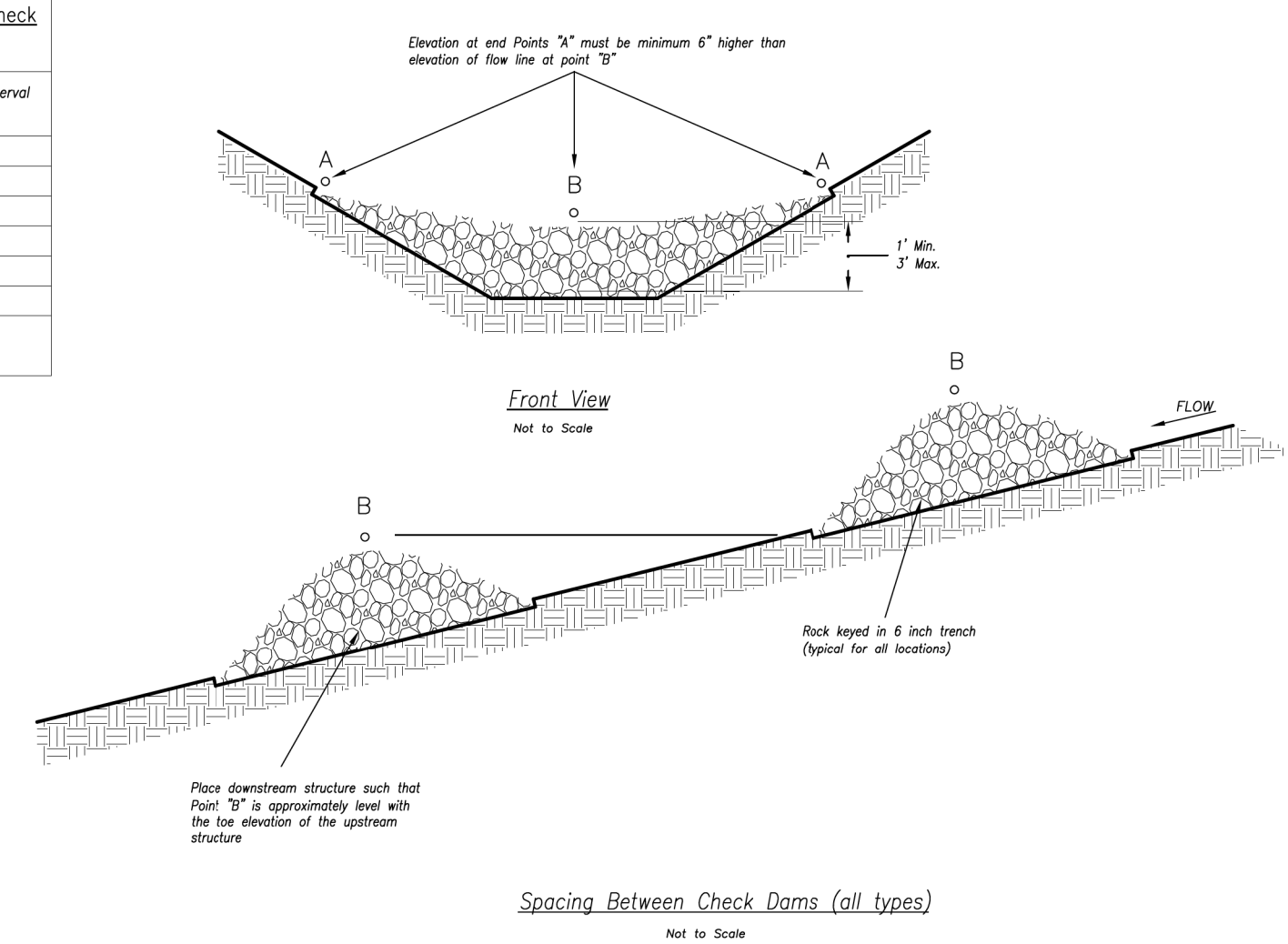
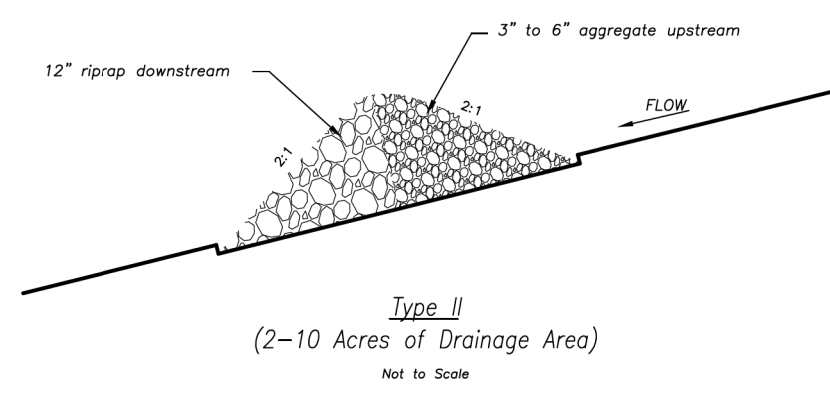
12/22/2021 21.033-26-ErosionControlDetails-01.dgn



**Temporary Rock Ditch Check Spacing**

Ditch Centerline Slope ( X )	Spacing Interval (Feet)
5:0	60
6:0	50
7:0	43
8:0	36
9:0	33
10:0	29

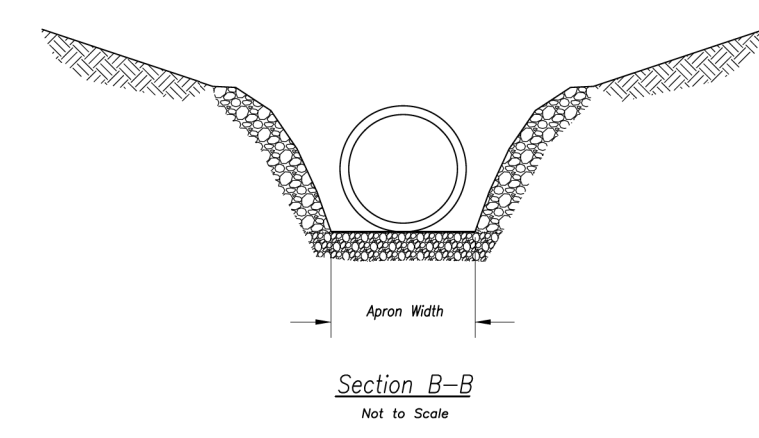
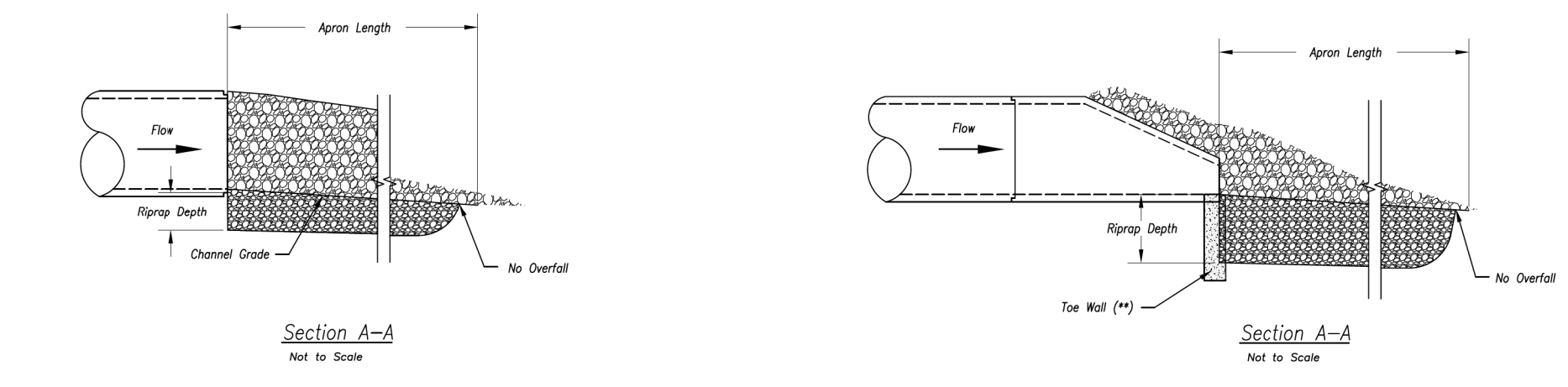
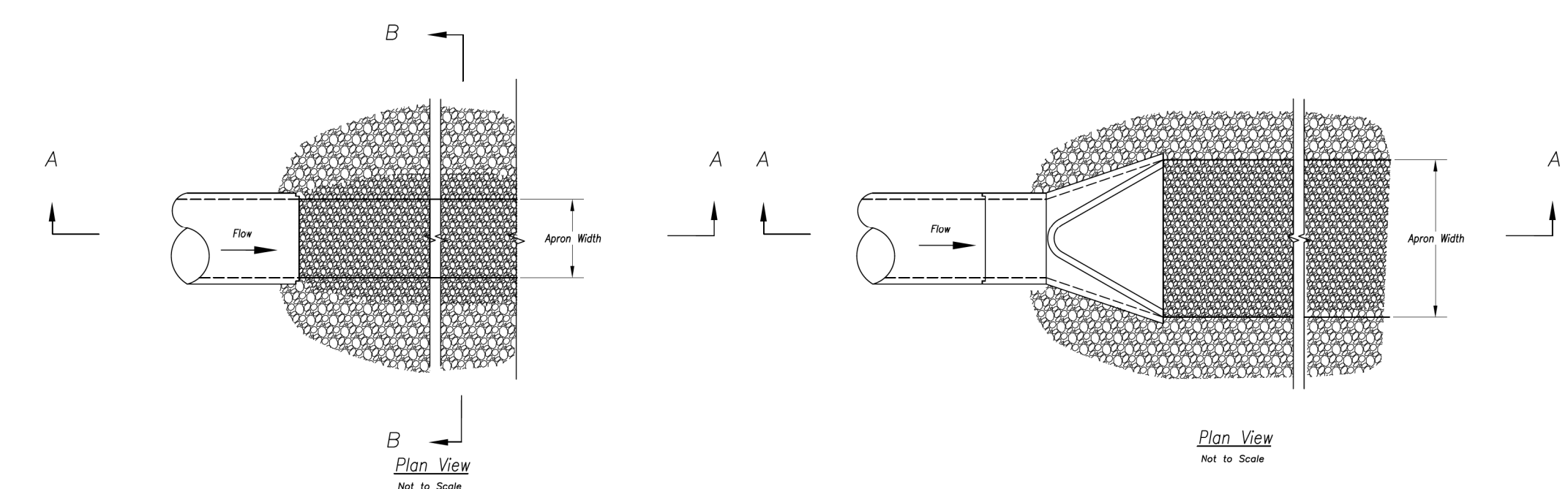
Note: Use this spacing only for Rock Ditch Checks.



- Notes:**
1. Rock check dams shall be used only for drainage areas less than 10 acres unless approved by the City Engineer.
  2. Use rock checks only in situations where the ditch slope exceeds 8:1.
- Maintenance:**
1. Remove and replace sediment deposits when the deposit approaches  $\frac{1}{2}$  the height of the ditch check.
  2. Replace and reshape as necessary to maintain function and integrity of installation.

Modified from 2015 Overland Park Standard Details for Erosion and Sediment Control

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**APWA**  
 KANSAS CITY METRO CHAPTER  
 STANDARD DRAWING NUMBER ESC-10 ADOPTED: 10/24/2016  
**ROCK DITCH CHECKS**



- Notes:**
1. Rock all sides steeper than 3:1.
  2. Stabilize all disturbed areas downstream of outlet to the limits of disturbance.
  3. Alternative outlet protection and slope stabilization measures may be used with approval by the Engineer.
  4. Install riprap apron so that it is no higher than flowline of pipe.
  5. Reference APWA Specification 2650 for rock type, size, and placement.

Modified from 2015 Overland Park Standard Details for Erosion and Sediment Control

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 KANSAS CITY METRO CHAPTER  
 STANDARD DRAWING NUMBER ESC-14 ADOPTED: 10/24/2016  
**OUTLET PROTECTION**

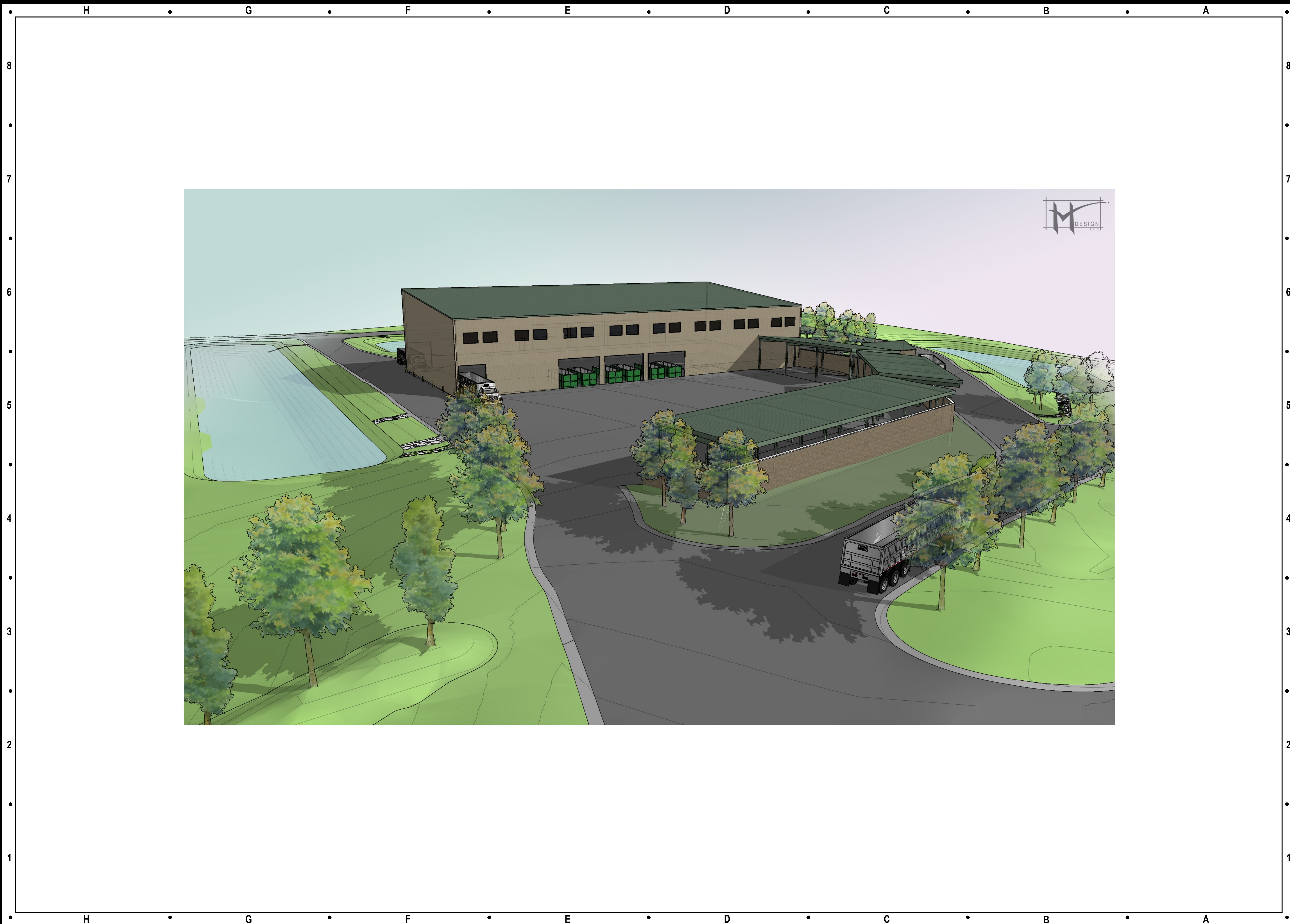
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12/22/21  
**Consult Inc engineers planners**  
 CORPORATE LICENSE NO. E2010005873  
 1533 Locust Street Kansas City, MO 64108 816-703-7098

EROSION CONTROL DETAILS  
 LEE'S SUMMIT PROCESSING FACILITY  
 LEE'S SUMMIT - JACKSON COUNTY - MISSOURI

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Architect:



201 L STREET  
LAKE LOTAWANA, MO 64086  
t: (816) 516-4861  
MO Certificate of Authority A-2010004610

Consultants:

Civil Engineering:  
Hg Consult Inc.  
9111 NE 79th Street  
Kansas City, MO 64158  
t: (816) 912-4720

Structural Engineering:  
Structura Logica  
18901 E. 299th Street  
Harrisonville, MO 64701  
t: (816) 872-4883

MEP Engineering:  
JSC Engineers  
1925 Central Street, Suite 201  
Kansas City, MO 64108  
t: (816) 272-5289

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Seal:

Michael Moores, MO Architect #2009032812

Project Number: 2111  
Project Type: NEW CONSTRUCTION  
Project Name and Address:

**LS PROCESSING FACILITY**

2101 SE Hamblen Road  
Lee's Summit, MO 64082

Issue: Preliminary Dev. Plan Date: 12.07.21

Sheet Title:

RENDERINGS  
AERIAL VIEW 1

**R1.1**



Architect:



201 L STREET  
LAKE LOTAWANA, MO 64086  
t: (816) 516-4861  
MO Certificate of Authority A-2010004610

Consultants:

Civil Engineering:  
Hg Consult Inc.  
9111 NE 79th Street  
Kansas City, MO 64158  
t: (816) 912-4720

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Structura Logica  
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Harrisonville, MO 64701  
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**LS PROCESSING FACILITY**

2101 SE Hamblen Road  
Lee's Summit, MO 64082

Issue: Preliminary Dev. Plan Date: 12.07.21

Sheet Title:

RENDERINGS  
AERIAL VIEW 2

R1.2



Architect:



201 L STREET  
LAKE LOTAWANA, MO 64086  
t: (816) 516-4861  
MO Certificate of Authority A-2010004610

Consultants:

Civil Engineering:  
Hg Consult Inc.  
9111 NE 79th Street  
Kansas City, MO 64158  
t: (816) 912-4720

Structural Engineering:  
Structura Logica  
18901 E. 299th Street  
Harrisonville, MO 64701  
t: (816) 872-4883

MEP Engineering:  
JSC Engineers  
1925 Central Street, Suite 201  
Kansas City, MO 64108  
t: (816) 272-5289

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Project Number: 2111

Project Type: NEW CONSTRUCTION

Project Name and Address:

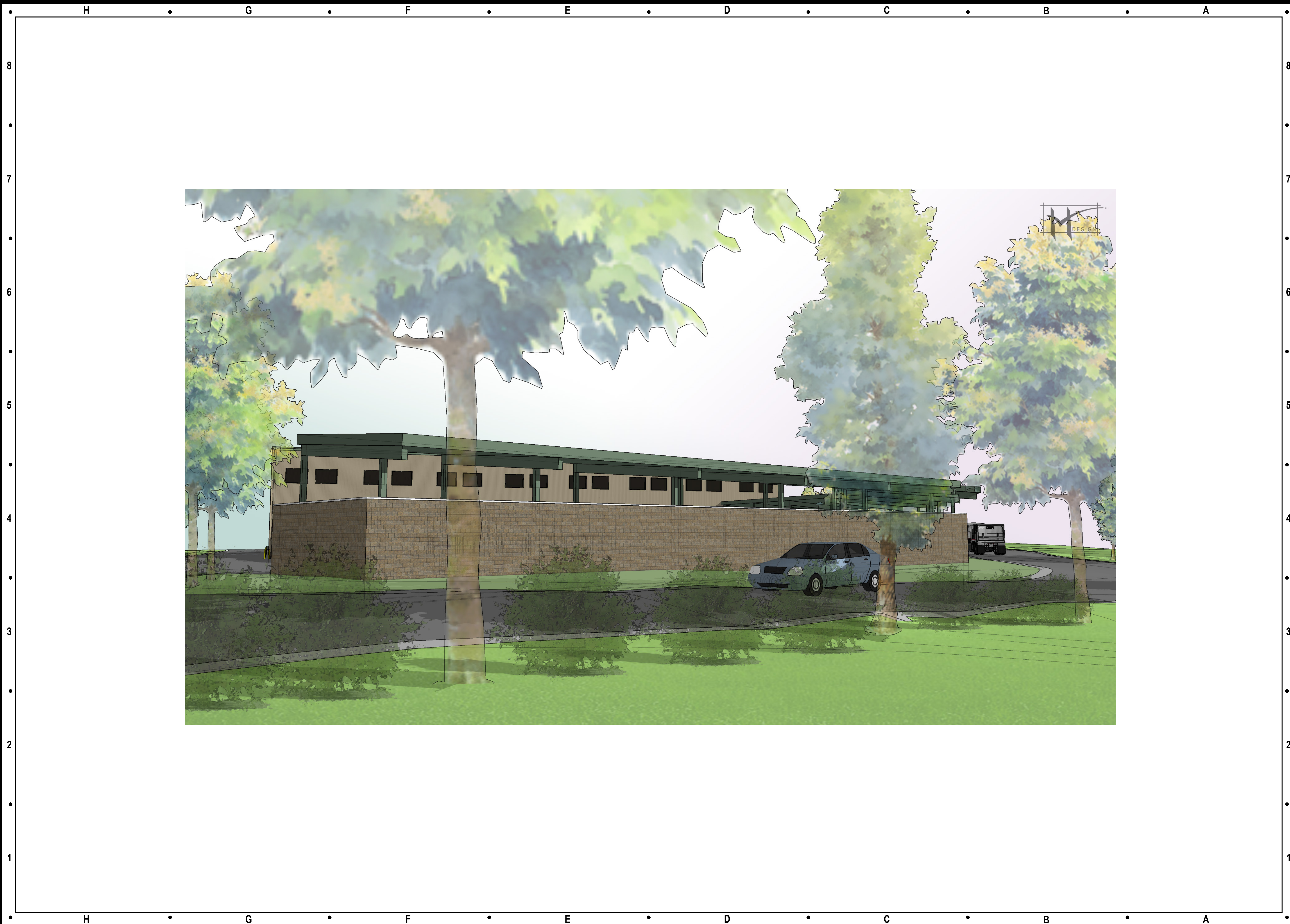
**LS PROCESSING FACILITY**  
  
2101 SE Hamblen Road  
Lee's Summit, MO 64082

Issue: Preliminary Dev. Plan Date: 12.07.21

Sheet Title:

RENDERINGS  
AERIAL VIEW 3

R1.3



Architect:



201 L STREET  
LAKE LOTAWANA, MO 64086  
t: (816) 516-4861  
MO Certificate of Authority A-2010004610

Consultants:

Civil Engineering:  
Hg Consult Inc.  
9111 NE 79th Street  
Kansas City, MO 64158  
t: (816) 912-4720

Structural Engineering:  
Structura Logica  
18901 E. 299th Street  
Harrisonville, MO 64701  
t: (816) 872-4883

MEP Engineering:  
JSC Engineers  
1925 Central Street, Suite 201  
Kansas City, MO 64108  
t: (816) 272-5289

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Project Name and Address:

**LS PROCESSING FACILITY**  
  
2101 SE Hamblen Road  
Lee's Summit, MO 64082

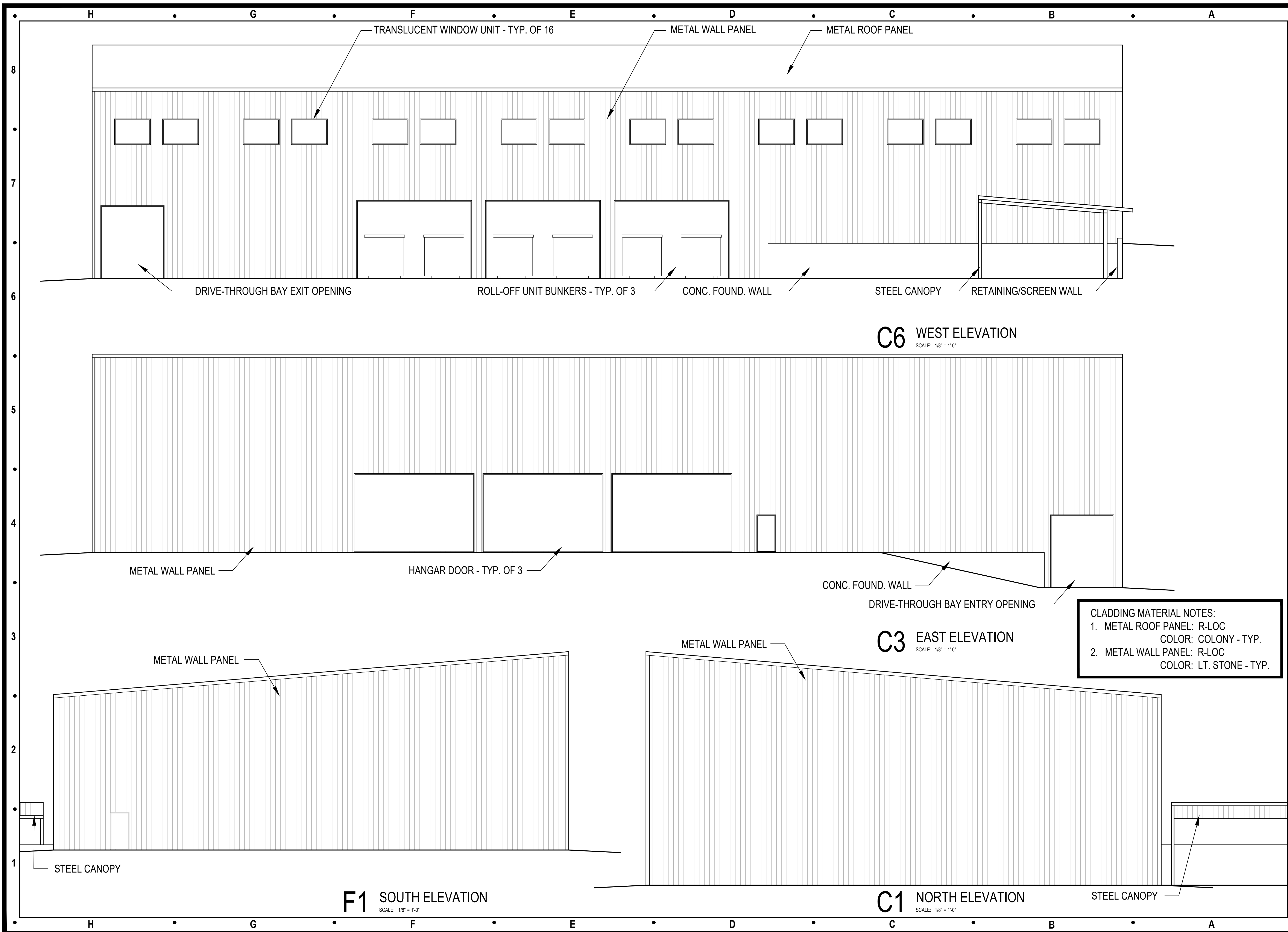
Issue: Date:

Preliminary Dev. Plan 12.07.21

Sheet Title:

RENDERINGS  
TREET VIEW

R1.4



Architect:

201 L STREET  
LAKE LOTAWANA, MO 64086  
t: (816) 516-4861  
MO Certificate of Authority A-2010004610

Consultants:

Civil Engineering:  
Hg Consult Inc.  
9111 NE 79th Street  
Kansas City, MO 64158  
t: (816) 912-4720

Structural Engineering:  
Structura Logica  
18901 E. 299th Street  
Harrisonville, MO 64701  
t: (816) 872-4883

MEP Engineering:  
JSC Engineers  
1925 Central Street, Suite 201  
Kansas City, MO 64108  
t: (816) 272-5289

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Project Number: 2111  
Project Type: NEW CONSTRUCTION  
Project Name and Address:

**LS PROCESSING FACILITY**  
2101 SE Hamblen Road  
Lee's Summit, MO 64082

Issue: Preliminary Dev. Plan  
Date: 12.07.21

Sheet Title:  
PROCESSING BUILDING ELEVATIONS  
**A2.1**





**G5 WEST ELEVATION**  
SCALE: 1/4" = 1'-0"

**B5 SOUTH ELEVATION**  
SCALE: 1/4" = 1'-0"

**G2 EAST ELEVATION**  
SCALE: 1/4" = 1'-0"

**B2 NORTH ELEVATION**  
SCALE: 1/4" = 1'-0"

**CLADDING MATERIAL NOTES:**  
 1. METAL ROOF PANEL: R-LOC  
 COLOR: COLONY - TYP.  
 2. METAL WALL PANEL: R-LOC  
 COLOR: LT. STONE - TYP.

Architect:



201 L STREET  
 LAKE LOTAWANA, MO 64086  
 t: (816) 516-4861  
 MO Certificate of Authority A-2010004610

Consultants:

Civil Engineering:  
 Hg Consult Inc.  
 9111 NE 79th Street  
 Kansas City, MO 64158  
 t: (816) 912-4720

Structural Engineering:  
 Structura Logica  
 18901 E. 299th Street  
 Harrisonville, MO 64701  
 t: (816) 872-4883

MEP Engineering:  
 JSC Engineers  
 1925 Central Street, Suite 201  
 Kansas City, MO 64108  
 t: (816) 272-5289

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Project Number: 2111

Project Type: NEW CONSTRUCTION

Project Name and Address:

**LS PROCESSING FACILITY**  
 2101 SE Hamblen Road  
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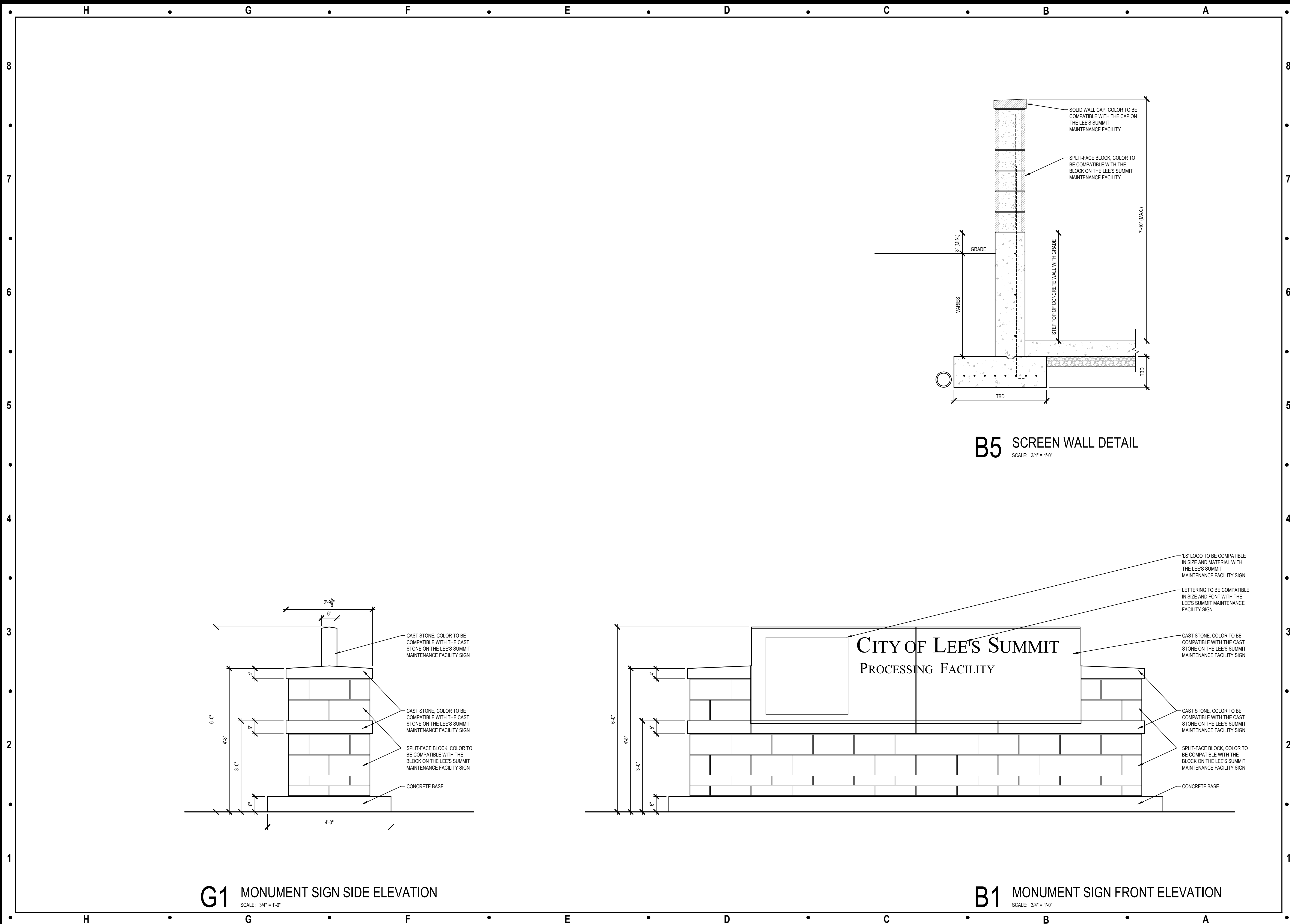
Issue: Date:

Preliminary Dev. Plan 12.07.21

Sheet Title:

SCALE HOUSE ELEVATIONS

**A2.2**



Architect:

201 L STREET  
LAKE LOTAWANA, MO 64086  
t: (816) 516-4861  
MO Certificate of Authority A-2010004610

Consultants:

Civil Engineering:  
Hg Consult Inc.  
9111 NE 79th Street  
Kansas City, MO 64158  
t: (816) 912-4720

Structural Engineering:  
Structura Logica  
18901 E. 299th Street  
Harrisonville, MO 64701  
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Kansas City, MO 64108  
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Seal:

Michael Moores, MO Architect #2009032812

Project Number: 2111  
Project Type: NEW CONSTRUCTION  
Project Name and Address:

**LS PROCESSING FACILITY**  
2101 SE Hamblen Road  
Lee's Summit, MO 64082

Issue: Preliminary Dev. Plan  
Date: 12.07.21

Sheet Title:  
**ARCHITECTURAL PRELIMINARY SITE DETAILS**  
**A3.1**



### WDGE4 LED Architectural Wall Sconce

Category Number: A1  
 Finish: A1  
 Size: A1

#### Specifications

Depth (D1): 10"  
 Depth (D2): 2"  
 Height: 9"  
 Width: 25"  
 Weight: 30.5 lbs (without options)

**Introduction**  
 The WDGE LED family is designed to meet specifier's every wall-mounted lighting need in a widely accepted shape that blends with any architecture. The clean rectangular design comes in four sizes with lumen packages ranging from 1,200 to 25,000 lumens, providing a true site-wide solution. Embedded with nLight® AIR wireless controls, the WDGE family provides additional energy savings and code compliance. WDGE4 has been designed to deliver up to 25,000 lumens through a precision refractive lens with wide distribution, perfect for augmenting the lighting from pole mounted luminaires.

Luminaire	Standard EM, °C	Cold EM, 30°C	Sensor	P1	P2	P3	P4	P5	P6
WDGE11ED	4W	---	---	1,200	2,000	---	---	---	---
WDGE21ED	10W	10W	Standard / at night	1,200	2,000	3,000	4,500	6,000	---
WDGE31ED	15W	15W	Standard / at night	7,500	8,500	10,000	12,000	---	---
WDGE41ED	---	---	Standard / at night	12,000	16,000	18,000	20,000	22,000	25,000

#### Ordering Information

EXAMPLE: WDGE4 LED P3 40K 70CRI R3 MVOLT SRM DDBX

Series	Package	Color Temperature	CRI	Distribution	Voltage	Mounting	Shipped separately
WDGE41ED	P1 P2 P3	30K 1000 40K 4000 50K 3000K	90 90 90	R2 Type 2 R3 Type 1 R4 Type 1 R5 Type 1 R6 Type 1	MVOLT 480V	SRM SRM SRM SRM SRM	AWSS PBWS

Options	Standard Sensors/Controls	Networked Sensors/Controls	Finish
PE* Photocell, Button Type	SRM Bi-level (100/75%) motion sensor for 8-15' mounting heights. Intended for use on switched circuits with external dusk-to-dawn switching.	SRM Bi-level (100/75%) motion sensor for 8-15' mounting heights. Intended for use on switched circuits with external dusk-to-dawn switching.	DBRZD Dark bronze
DS* Dual switching (comes with 2 down and 2 up signals)	SRM Bi-level (100/75%) motion sensor for 15-30' mounting heights. Intended for use on switched circuits with external dusk-to-dawn switching.	SRM Bi-level (100/75%) motion sensor for 15-30' mounting heights with photo-cell pre-programmed for dusk-to-dawn operation.	BLALD Black
DMG* 0-10V dimming (wired or wireless)	SRM Bi-level (100/75%) motion sensor for 15-30' mounting heights with photo-cell pre-programmed for dusk-to-dawn operation.	SRM Bi-level (100/75%) motion sensor for 15-30' mounting heights with photo-cell pre-programmed for dusk-to-dawn operation.	BLALD Black
KEC* Battery backup entry for back box (PBWS)	SRM Bi-level (100/75%) motion sensor for 15-30' mounting heights with photo-cell pre-programmed for dusk-to-dawn operation.	SRM Bi-level (100/75%) motion sensor for 15-30' mounting heights with photo-cell pre-programmed for dusk-to-dawn operation.	BLALD Black
SPIV* 10K surge pack	SRM Bi-level (100/75%) motion sensor for 15-30' mounting heights with photo-cell pre-programmed for dusk-to-dawn operation.	SRM Bi-level (100/75%) motion sensor for 15-30' mounting heights with photo-cell pre-programmed for dusk-to-dawn operation.	BLALD Black

**Accessories**  
 WDGE41ED DBRZD SRM Bi-level (100/75%) motion sensor for 8-15' mounting heights.  
 WDGE41ED DBRZD SRM Bi-level (100/75%) motion sensor for 15-30' mounting heights.  
 WDGE41ED DBRZD SRM Bi-level (100/75%) motion sensor for 15-30' mounting heights with photo-cell pre-programmed for dusk-to-dawn operation.

LITHONIA LIGHTING COMMERCIAL OUTDOOR One Lithonia Way • Conyers, Georgia 30012 • Phone: 1-800-705-5519 (7278) • www.lithonia.com WDGE4 LED Rev: 08/2021



### WDGE2 LED Architectural Wall Sconce Visual Comfort Optic

Category Number: A2  
 Finish: A2  
 Size: A2

#### Specifications

Depth (D1): 7"  
 Depth (D2): 1.5"  
 Height: 9"  
 Width: 11.5"  
 Weight: 13.5 lbs (without options)

**Introduction**  
 The WDGE LED family is designed to meet specifier's every wall-mounted lighting need in a widely accepted shape that blends with any architecture. The clean rectangular design comes in four sizes with lumen packages ranging from 1,200 to 25,000 lumens, providing a true site-wide solution. Embedded with nLight® AIR wireless controls, the WDGE family provides additional energy savings and code compliance. WDGE2 delivers up to 6,000 lumens with a soft, non-polluted light source, creating a visually comfortable environment. When combined with multiple integrated emergency battery backup options, including an 18W cold temperature option, the WDGE2 becomes the ideal wall-mounted lighting solution for pedestrian scale applications in any environment.

Luminaire	Options	Standard EM, °C	Cold EM, 30°C	Sensor	P1	P2	P3	P4	P5	P6
WDGE11ED	Visual Comfort	4W	---	---	750	1,200	2,000	3,000	4,500	---
WDGE21ED	Visual Comfort	10W	10W	Standard / at night	750	1,200	2,000	3,000	4,500	---
WDGE31ED	Precision Reflector	10W	10W	Standard / at night	7,500	8,500	10,000	12,000	---	---
WDGE41ED	Precision Reflector	15W	15W	Standard / at night	12,000	16,000	18,000	20,000	22,000	25,000

#### Ordering Information

EXAMPLE: WDGE2 LED P3 40K 80CRI VF MVOLT SRM DDBX

Series	Package	Color Temperature	CRI	Distribution	Voltage	Mounting	Shipped separately
WDGE21ED	P1 P2 P3	30K 1000 40K 4000 50K 3000K	90 90 90	VF Visual Comfort VF Visual Comfort VF Visual Comfort	MVOLT 480V	SRM SRM SRM	AWSS PBWS

Options	Standard Sensors/Controls	Networked Sensors/Controls	Finish
EBR* Emergency battery backup, Certified in CA Title 20 (MADESS 18W, 20W, 30W)	SRM Bi-level (100/75%) motion sensor for 8-15' mounting heights. Intended for use on switched circuits with external dusk-to-dawn switching.	SRM Bi-level (100/75%) motion sensor for 8-15' mounting heights. Intended for use on switched circuits with external dusk-to-dawn switching.	DBRZD Dark bronze
EBN* Emergency battery backup, Certified in CA Title 20 (MADESS 18W, 20W, 30W)	SRM Bi-level (100/75%) motion sensor for 15-30' mounting heights. Intended for use on switched circuits with external dusk-to-dawn switching.	SRM Bi-level (100/75%) motion sensor for 15-30' mounting heights. Intended for use on switched circuits with external dusk-to-dawn switching.	BLALD Black
EBW* Emergency battery backup, Certified in CA Title 20 (MADESS 18W, 20W, 30W)	SRM Bi-level (100/75%) motion sensor for 15-30' mounting heights with photo-cell pre-programmed for dusk-to-dawn operation.	SRM Bi-level (100/75%) motion sensor for 15-30' mounting heights with photo-cell pre-programmed for dusk-to-dawn operation.	BLALD Black
PE* Photocell, Button Type	SRM Bi-level (100/75%) motion sensor for 15-30' mounting heights with photo-cell pre-programmed for dusk-to-dawn operation.	SRM Bi-level (100/75%) motion sensor for 15-30' mounting heights with photo-cell pre-programmed for dusk-to-dawn operation.	BLALD Black
DS* Dual switching (comes with 2 down and 2 up signals)	SRM Bi-level (100/75%) motion sensor for 15-30' mounting heights with photo-cell pre-programmed for dusk-to-dawn operation.	SRM Bi-level (100/75%) motion sensor for 15-30' mounting heights with photo-cell pre-programmed for dusk-to-dawn operation.	BLALD Black
DMG* 0-10V dimming (wired or wireless)	SRM Bi-level (100/75%) motion sensor for 15-30' mounting heights with photo-cell pre-programmed for dusk-to-dawn operation.	SRM Bi-level (100/75%) motion sensor for 15-30' mounting heights with photo-cell pre-programmed for dusk-to-dawn operation.	BLALD Black
KEC* Battery backup entry for back box (PBWS)	SRM Bi-level (100/75%) motion sensor for 15-30' mounting heights with photo-cell pre-programmed for dusk-to-dawn operation.	SRM Bi-level (100/75%) motion sensor for 15-30' mounting heights with photo-cell pre-programmed for dusk-to-dawn operation.	BLALD Black
SPIV* 10K surge pack	SRM Bi-level (100/75%) motion sensor for 15-30' mounting heights with photo-cell pre-programmed for dusk-to-dawn operation.	SRM Bi-level (100/75%) motion sensor for 15-30' mounting heights with photo-cell pre-programmed for dusk-to-dawn operation.	BLALD Black

LITHONIA LIGHTING COMMERCIAL OUTDOOR One Lithonia Way • Conyers, Georgia 30012 • Phone: 1-800-705-5519 (7278) • www.lithonia.com WDGE2 LED Rev: 08/2021

## FIXTURE SPECIFICATION

SCALE: N/A

2

## CALCULATION SUMMARY

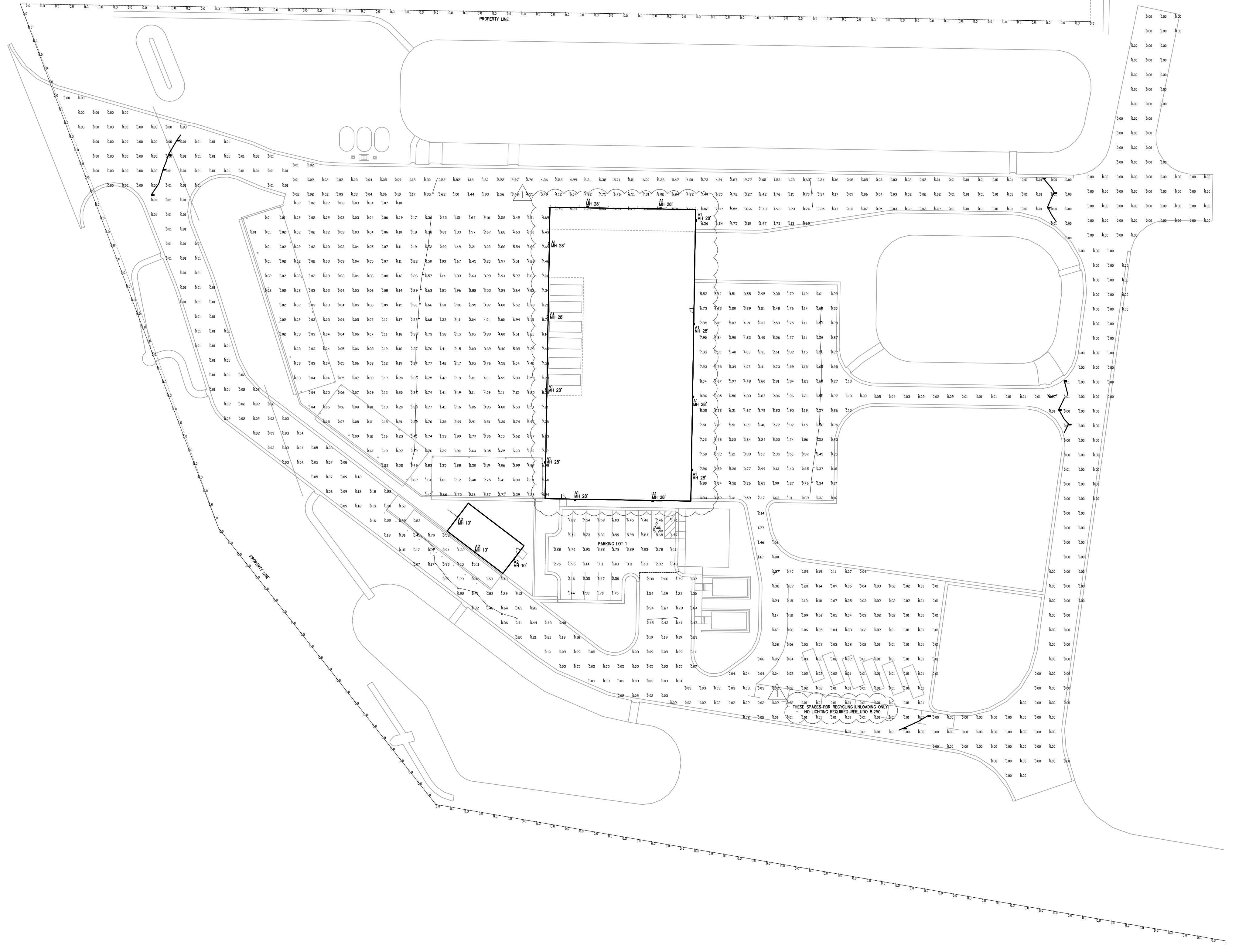
SCALE: N/A

2

Calculation Summary	Units	Avg	Max	Min	Avg/Min	Max/Min
Label:						
Parking Lot 1	Fc	4.12	7.54	1.44	2.86	5.24
Property Line	Fc	0.00	0.0	0.0	N.A.	N.A.

## GENERAL NOTES

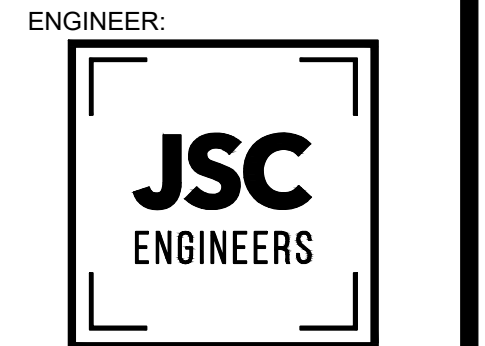
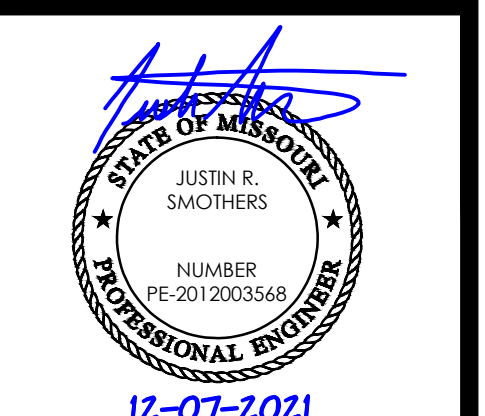
- ALL WORK SHALL COMPLY WITH SECTION 8 SUBDIVISION 5 - LIGHTING STANDARDS OF THE CITY OF LEE'S SUMMIT MISSOURI UNIFIED DEVELOPMENT ORDINANCE DESIGN CRITERIA OF THE AMERICAN PUBLIC WORKS ASSOCIATION, CONSTRUCTION & MATERIAL SPECIFICATION, AND ALL APPLICABLE MUNICIPAL AND UTILITY SUPPLEMENTS.
- ALL ELECTRICAL/CONDUIT STREET CROSSINGS NEED TO BE BACKFILLED WITH AB-3 OR FLOWABLE FILL IN ACCORDANCE WITH MUNICIPAL REQUIREMENTS.



## SITE LIGHTING PLAN

SCALE: 1" = 40'-0"

1



MO CO. NO. 201200780 / KS CO. NO. E-018  
 1924 CENTRAL ST., SUITE 201  
 KANSAS CITY, MO 64108  
 phone: 816.272.2289  
 email: jrs@jsceng.com

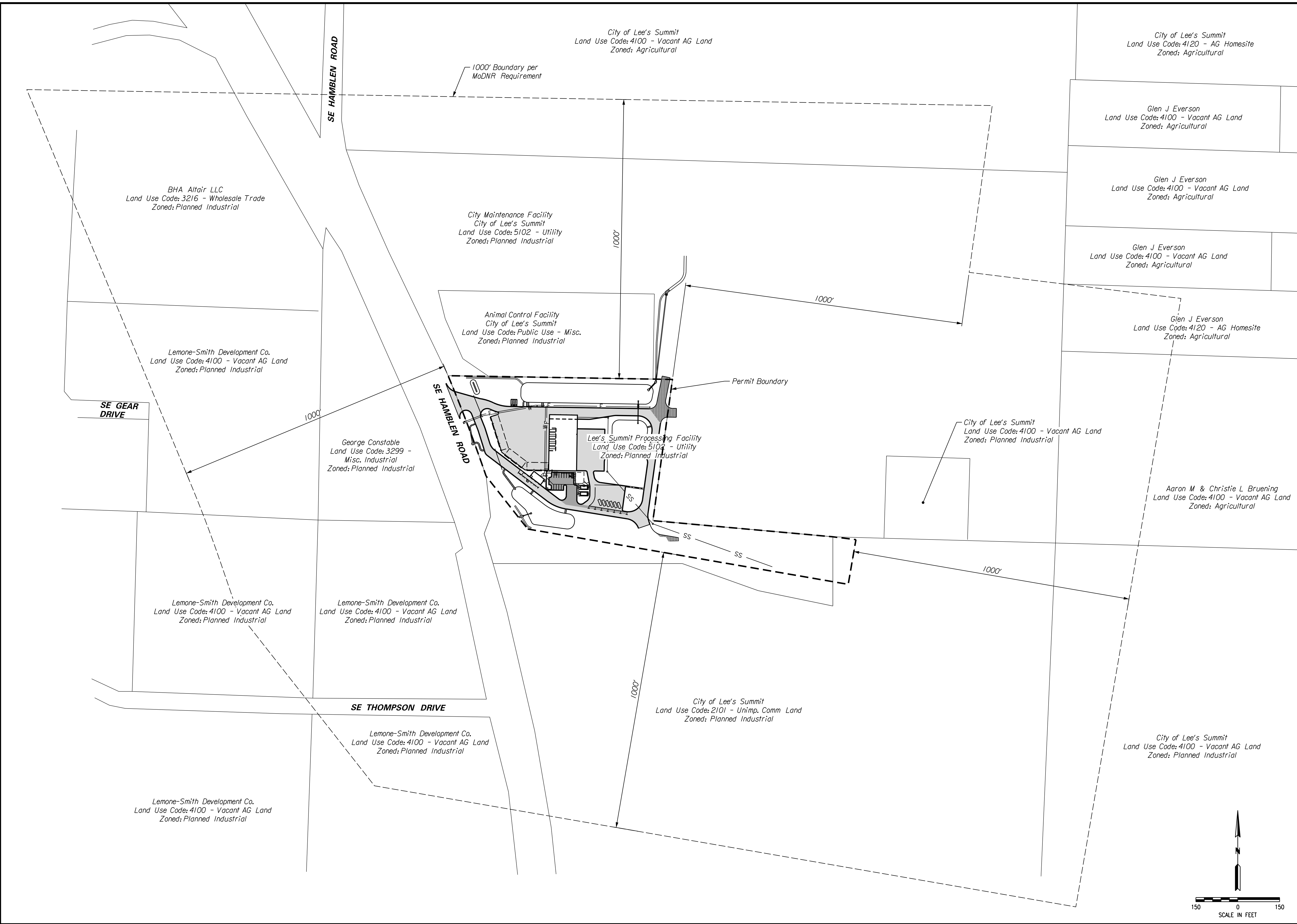
SHEET NUMBER  
 Site Lighting Plan for:  
**LSMO PROCESSING FACILITY**  
 LEE'S SUMMIT - CASS COUNTY - MISSOURI

DATE ISSUED:  
12.07.2021

REVISIONS:  
1. PRELIM. DEV. PLAN - 12.07.21

PROJECT NUMBER  
JSC 21-230

SITE LIGHTING PLAN  
ES-1



NO.	BY	DATE	REVISION

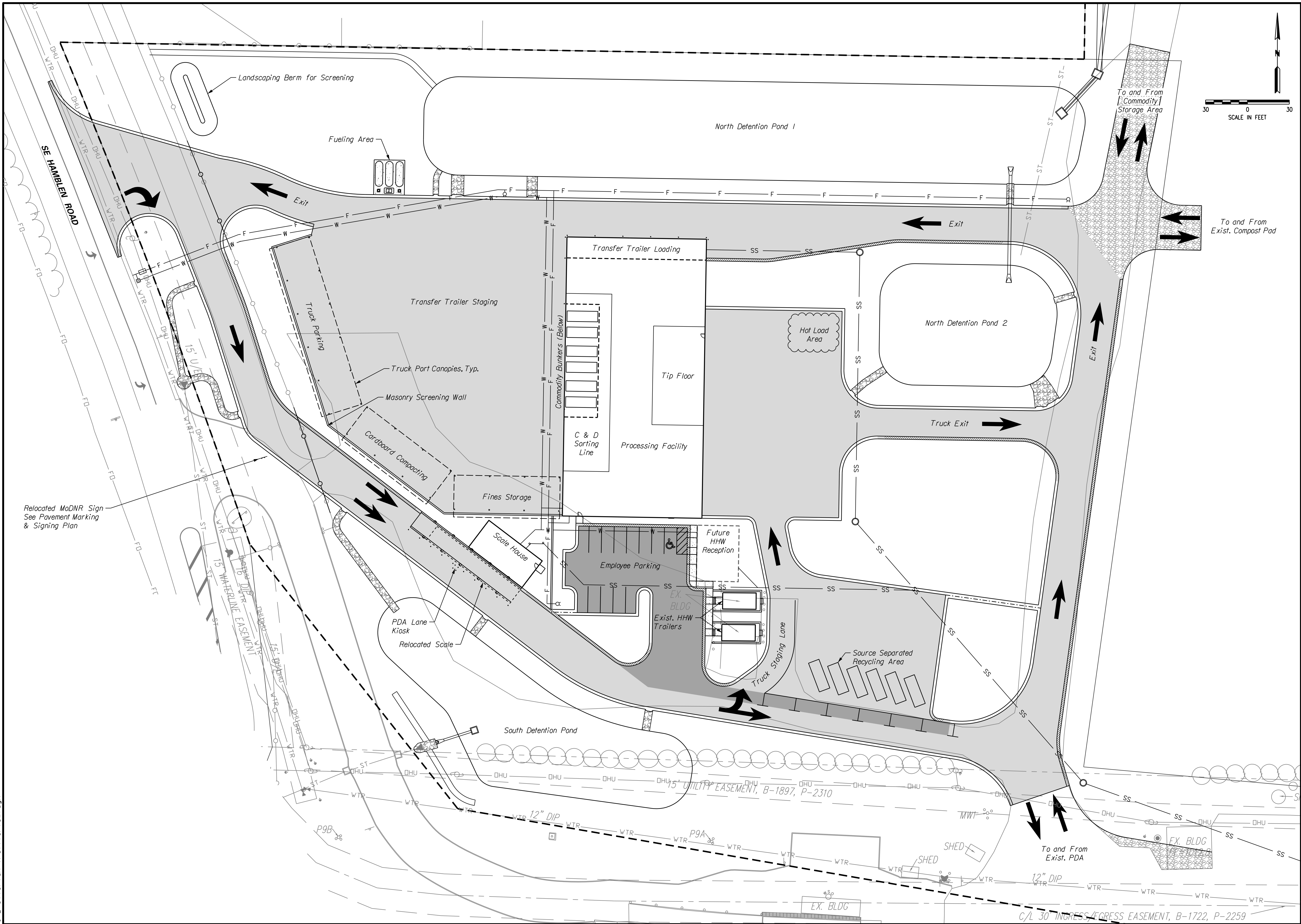
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**Consult Inc** engineers planners  
CORPORATE LICENSE NO. E2010005873  
1533 Locust Street, Kansas City, MO 64108 816-783-7098

LAND USE AND ZONING MAP  
WITHIN 1,000' OF PROCESSING FACILITY  
**LEE'S SUMMIT PROCESSING FACILITY**  
LEE'S SUMMIT - JACKSON COUNTY - MISSOURI  
DATE: December 22, 2021  
JOB NO: 21.033  
C1

12/22/2021  
C-2-SitePlan-TrafficLow.dgn



NO.	BY	CHK/APR
DATE	REVISION	



12/22/21

**Consult Inc**  
engineers planners

1533 Locust Street, Kansas City, MO 64108 816-793-7098  
CORPORATE LICENSE NO. E2010005873

MO DNR SITE PLAN AND TRAFFIC FLOW

**LEE'S SUMMIT PROCESSING FACILITY**

LEE'S SUMMIT - JACKSON COUNTY - MISSOURI

DATE: December 22, 2021  
JOB NO: 21.033

C2

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