

**INDEX**  
CIVIL SUBMITTAL

1. COVER SHEET
2. DEMOLITION PLAN
3. SITE DIMENSION PLAN
4. GRADING PLAN
5. EROSION CONTROL PLAN
6. PRE DEVELOPMENT DRAINAGE AREA MAP
7. POST DEVELOPMENT DRAINAGE AREA MAP
8. UTILITY PLAN
9. LANDSCAPE PLAN
10. SITE DETAIL SHEET
11. SITE DETAIL SHEET
12. SITE DETAIL SHEET

PHOTOMETRIC AND SITE LIGHTING PLANS

# ATTIC STORAGE OF LEE'S SUMMIT

## LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

### PRELIMINARY DEVELOPMENT PLAN

### CLIMATE CONTROLLED STORAGE BUILDING

**UTILITIES**

City of Lee's Summit  
Department of Public Works  
220 SE Green  
Lee's Summit, Mo.  
816-969-1800

KCP&L  
130 SE Hamblen Road  
Lee's Summit, Mo.  
816-347-4320

Spire (formerly MGE)  
(Administrative Offices)  
3025 SE Clover Road  
Lee's Summit, MO  
816-537-4681

AT&T  
Craig Perkins  
500 E. 8th Street  
Kansas City, MO 64106  
816-275-2721

Comcast  
New Construction Hotline  
866-771-2281

Missouri One Call  
1-800-344-7483

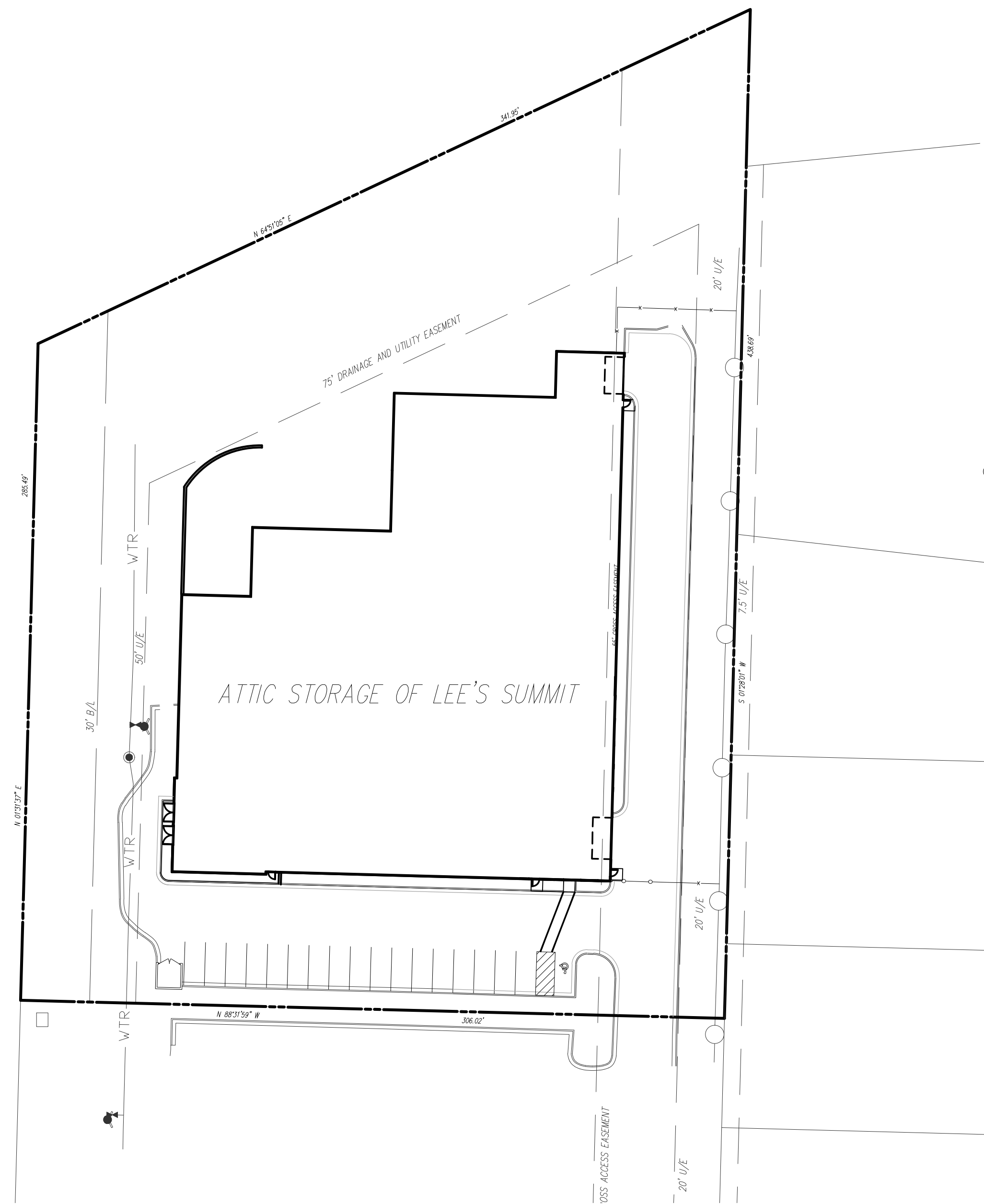
NO.	BY	CHK/APP	REVISION	DATE
1	EDH		City Comments 8/27/2018	12/21/18



1/21/19

**Consult Inc**  
engineers  
planners

CORPORATE LICENSE NO. E2010005873



Contractor to verify all invert elevations for existing sewer connections. Contact civil engineer if conflict arises.

**PROJECT BENCHMARK:**  
#1 Top of Sanitary Manhole lid at east side of site.  
N: 1008791.5340  
E: 2829029.6350  
TOP ELEV.=979.19

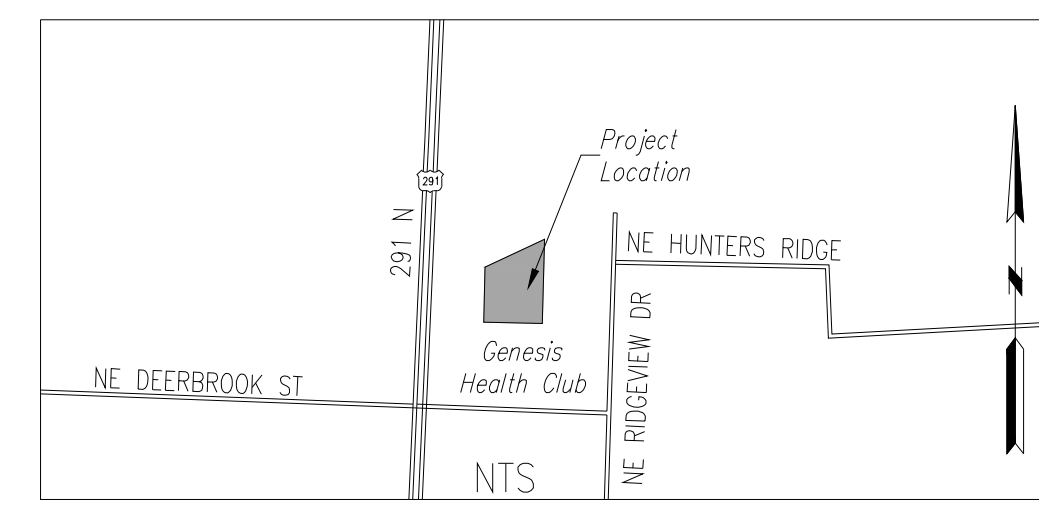
**GENERAL NOTES:**

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. Prior to submittal of construction bids, the Contractor shall be required to visit the site to verify existing conditions and proposed improvements.
4. The Contractor shall be responsible for notification and coordination with all Utility Companies.
5. The Contractor shall notify the Engineer immediately of any discrepancies in the plans.
6. All sidewalk shall be ADA compliant.
7. The subject property is located within the West Tributary to Prairie Lee Lake (East Fork of Little Blue River).
8. There was no oil or gas wells located on the subject property as of July 1, 2018 as shown by the Missouri Geological Survey GEOSTRAT (Geosciences Technical Resource Assessment Tool).

PLANS PREPARED FOR  
**STRICKLAND CONSTRUCTION COMPANY**  
720 S. ROGERS ROAD, SUITE B  
OLATHE, KS 66062  
913-764-7000  
CONTACT - ROGERS STRICKLAND

PLANS PREPARED BY  
**HG CONSULT**  
11010 HASKELL  
KANSAS CITY, KS 66109  
(816) 703-7098  
CONTACT - KEVIN STERRETT

**VICINITY MAP**



COVER SHEET

ATTIC STORAGE OF LEE'S SUMMIT  
LEE'S SUMMIT - JACKSON COUNTY - MISSOURI

PROJECT NO.	18-1118
DRAWING NO.	18022
DATE	JUNE 1, 2018
JOB NO.	18022
SHEET OF	12





Know what's below.  
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**DEMOLITION NOTES:**

- 1. Contractor shall be responsible for removal of the existing structures, related utilities, paving, underground storage tanks and any other existing improvements as noted. See the owner's/developer's site work specifications. Contractor is to remove and dispose of all debris, rubbish and other materials resulting from previous and current demolition operations. Disposal will be in accordance with all local, state and/or federal regulations governing such operations.
- 2. The general contractor shall take all precautions necessary to avoid property damage to adjacent properties during the construction phases of this project. The contractor will be held solely responsible for any damages to the adjacent properties occurring during the construction phases of this project.
- 3. The contractor is specifically cautioned that the location and/or elevation of existing utilities as shown on these plans is based on records of the various utility companies, and where possible, measurements taken in the field. The information is not to be relied upon as being exact or complete. The contractor must call the appropriate utility company at least 48 hours before any excavation to request exact field location of utilities.
- 4. It shall be the responsibility of the contractor to relocate all existing utilities which conflict with the proposed improvements shown on the plans, whether shown or not shown at no additional cost to the owner.

**DEMOLITION PROPOSED FEATURES**

- PROPERTY LINE
- LIMITS OF DEMOLITION
- ALL TREES, STRUCTURES, AND UTILITIES WITHIN THE HATCHED AREAS ARE TO BE REMOVED. ANYTHING LOCATED OUTSIDE THE HATCHED AREAS ARE TO REMAIN UNLESS OTHERWISE SPECIFIED.
- COMPLETE PAVEMENT REMOVAL

**DEMOLITION NOTES**

- (XXX) Items labeled by the following symbols are shown on this sheet.
- (DMO) EXISTING TO BE REMOVED
- (ERM) EXISTING TO REMAIN
- (ERL) EXISTING TO BE RELOCATED

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NO.	BY	CHK/APP

DATE	REVISION



1/21/19

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CORPORATE LICENSE NO. E2010005873

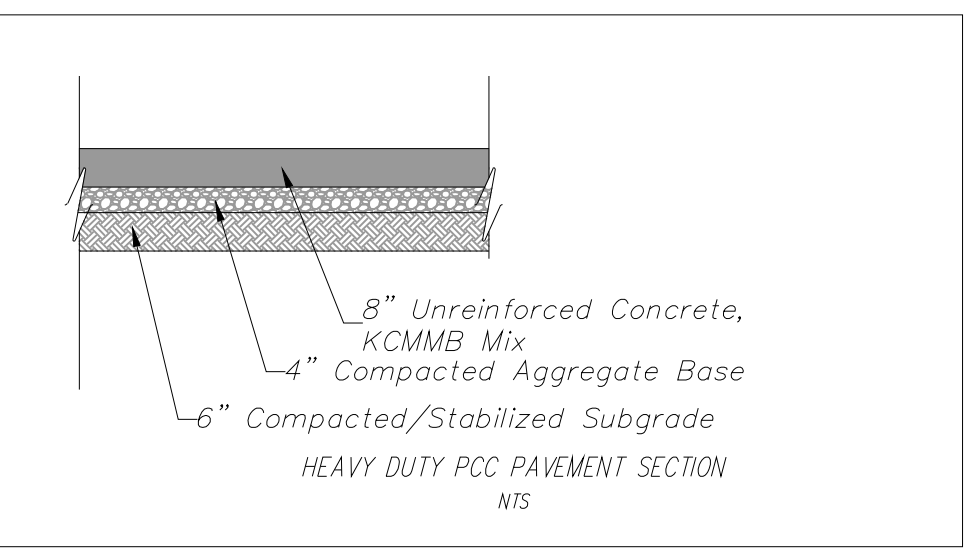
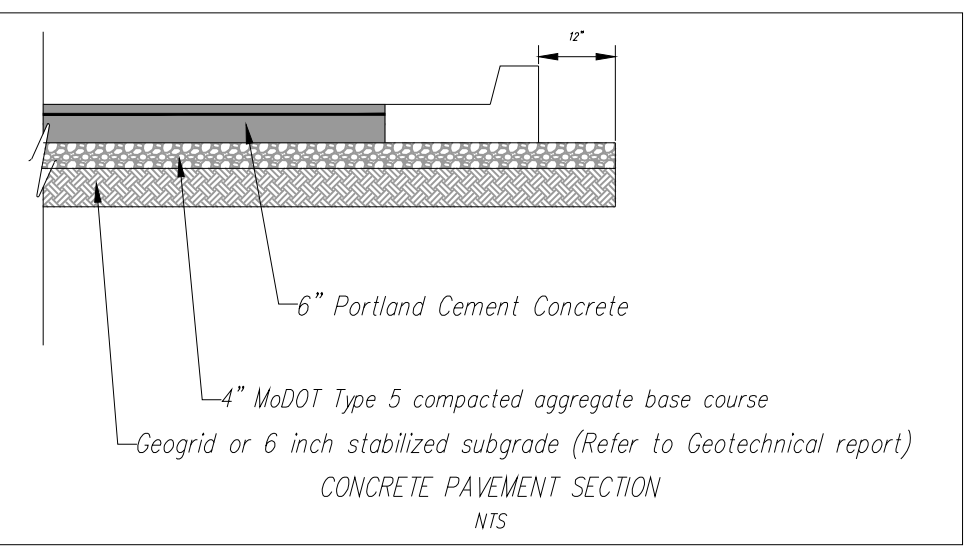
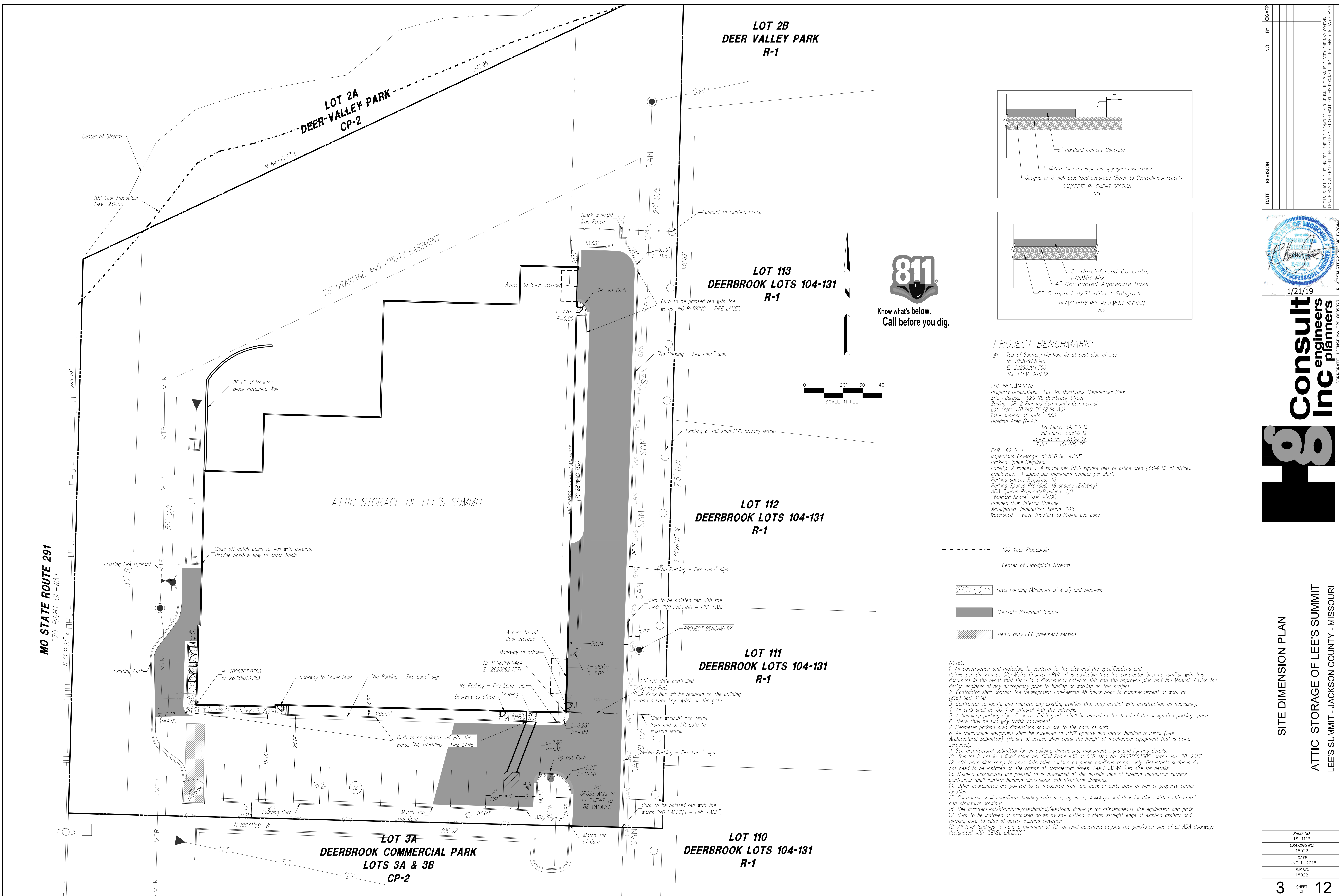
**DEMOLITION PLAN**

**ATTIC STORAGE OF LEE'S SUMMIT**  
LEE'S SUMMIT - JACKSON COUNTY - MISSOURI

DATE	JUNE 1, 2018
DRAWING NO.	18022
JOB NO.	18022

**2** SHEET OF **12**





**PROJECT BENCHMARK:**

#1 Top of Sanitary Manhole lid at east side of site.  
 N: 1008791.5340  
 E: 2829029.6350  
 TOP ELEV. = 979.19

**SITE INFORMATION:**  
 Property Description: Lot 3B, Deerbrook Commercial Park  
 Site Address: 920 NE Deerbrook Street  
 Zoning: CP-2 Planned Community Commercial  
 Lot Area: 110,740 SF (2.54 AC)  
 Total number of units: 583  
 Building Area (GFA):

1st Floor: 34,200 SF  
 2nd Floor: 33,600 SF  
 Lower Level: 33,600 SF  
 Total: 101,400 SF

FAR: .92 to 1  
 Impervious Coverage: 52,800 SF, 47.6%  
 Parking Space Required:  
 Facility: 2 spaces + 4 space per 1000 square feet of office area (3394 SF of office).  
 Employees: 1 space per maximum number per shift.  
 Parking spaces Required: 16  
 Parking Spaces Provided: 18 spaces (Existing)  
 ADA Spaces Required/Provided: 1/1  
 Standard Space Size: 9'x19'  
 Planned Use: Interior Storage  
 Anticipated Completion: Spring 2018  
 Watershed - West Tributary to Prairie Lee Lake

- 100 Year Floodplain
- - - Center of Floodplain Stream
- ▨ Level Landing (Minimum 5' x 5') and Sidewalk
- Concrete Pavement Section
- ▨ Heavy duty PCC pavement section

- NOTES:**
1. All construction and materials to conform to the city and the specifications and details per the Kansas City Metro Chapter APWA. It is advisable that the contractor become familiar with this document in the event that there is a discrepancy between this and the approved plan and the Manual. Advise the design engineer of any discrepancy prior to bidding or working on this project.
  2. Contractor shall contact the Development Engineering 48 hours prior to commencement of work at (816) 969-1200.
  3. Contractor to locate and relocate any existing utilities that may conflict with construction as necessary.
  4. All curbs shall be CC-1 or integral with the sidewalk.
  5. A handicap parking sign, 5' above finish grade, shall be placed at the head of the designated parking space.
  6. There shall be two way traffic movement.
  7. Perimeter parking area dimensions shown are to the back of curb.
  8. All mechanical equipment shall be screened to 100% opacity and match building material (See Architectural Submittal). (Height of screen shall equal the height of mechanical equipment that is being screened).
  9. See architectural submittal for all building dimensions, monument signs and lighting details.
  10. This lot is not in a flood plane per FIRM Panel 430 of 625, Map No. 29095C0430C, dated Jan. 20, 2017.
  11. ADA accessible ramp to have detectable surface on public handicap ramps only. Detectable surfaces do not need to be installed on the ramps of commercial drives. See KCAPWA web site for details.
  12. Building coordinates are pointed to or measured at the outside face of building foundation corners. Contractor shall confirm building dimensions with structural drawings.
  13. Other coordinates are pointed to or measured from the back of curb, back of wall or property corner location.
  14. Contractor shall coordinate building entrances, egresses, walkways and door locations with architectural and structural drawings.
  15. See architectural/structural/mechanical/electrical drawings for miscellaneous site equipment and pads.
  16. Curb to be installed at proposed drives by saw cutting a clean straight edge of existing asphalt and forming curb to edge of gutter existing elevation.
  17. All level landings to have a minimum of 18" of level pavement beyond the pull/latch side of all ADA doorways designated with "LEVEL LANDING".

NO.	BY	REVISION	DATE

1/21/19

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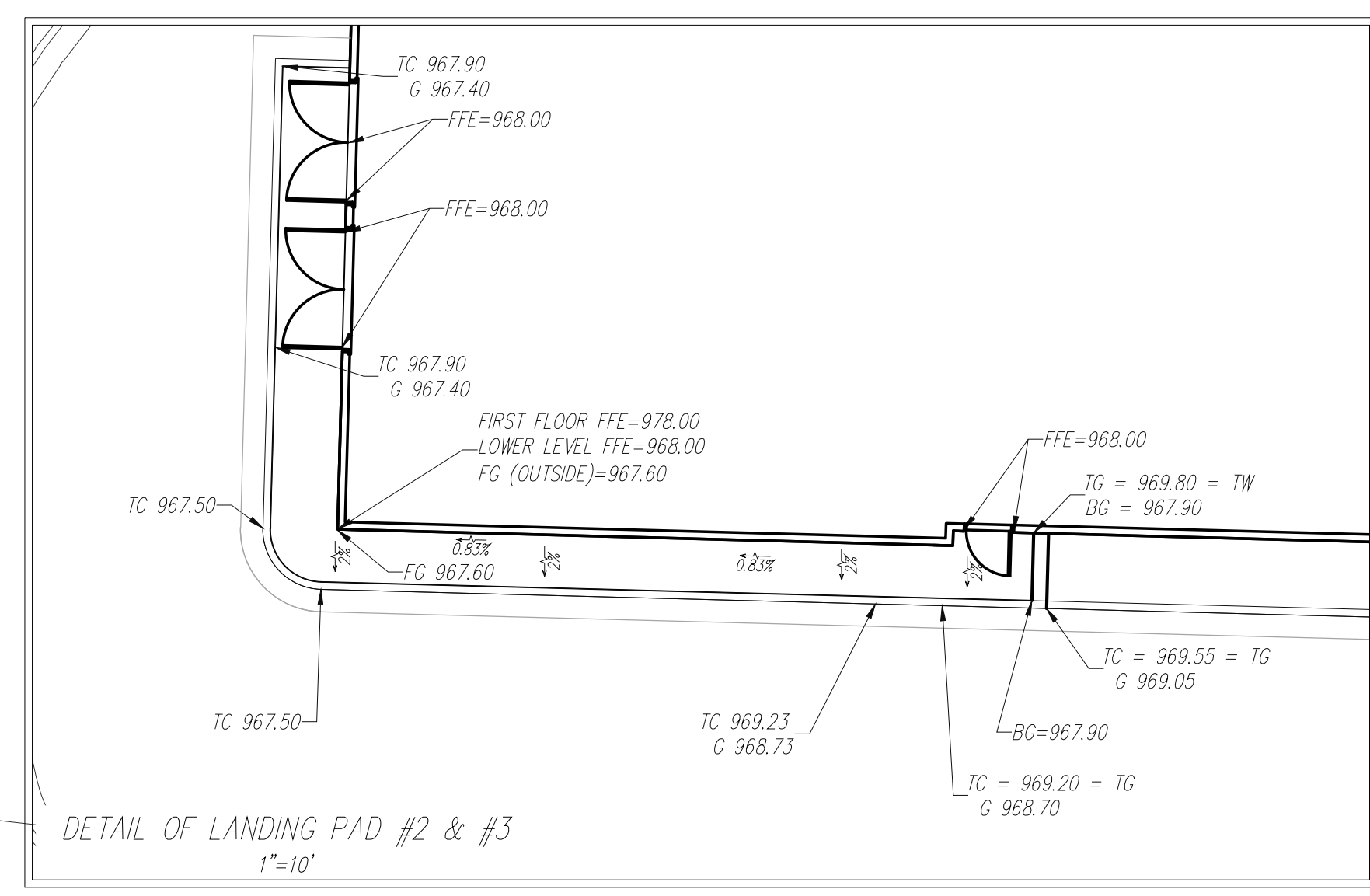
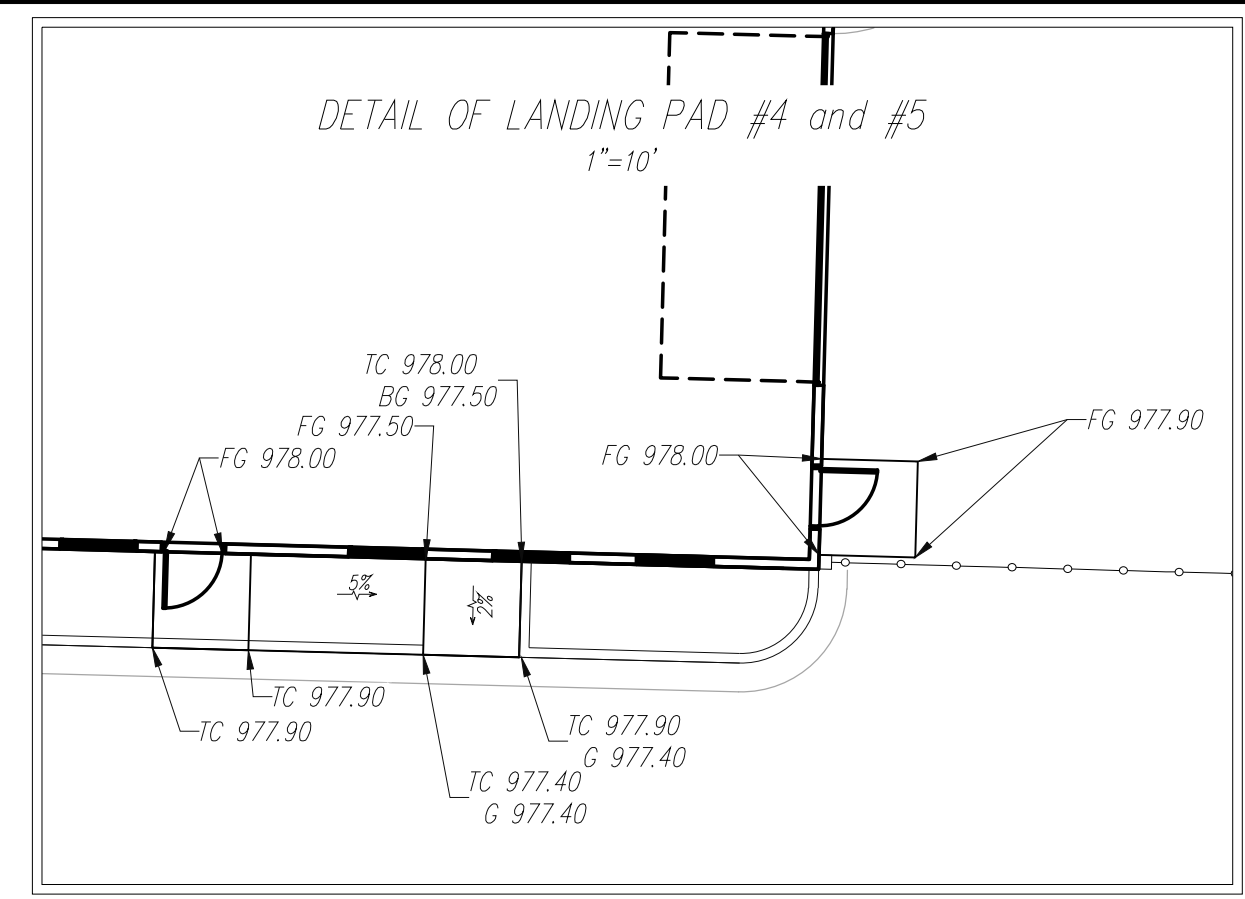
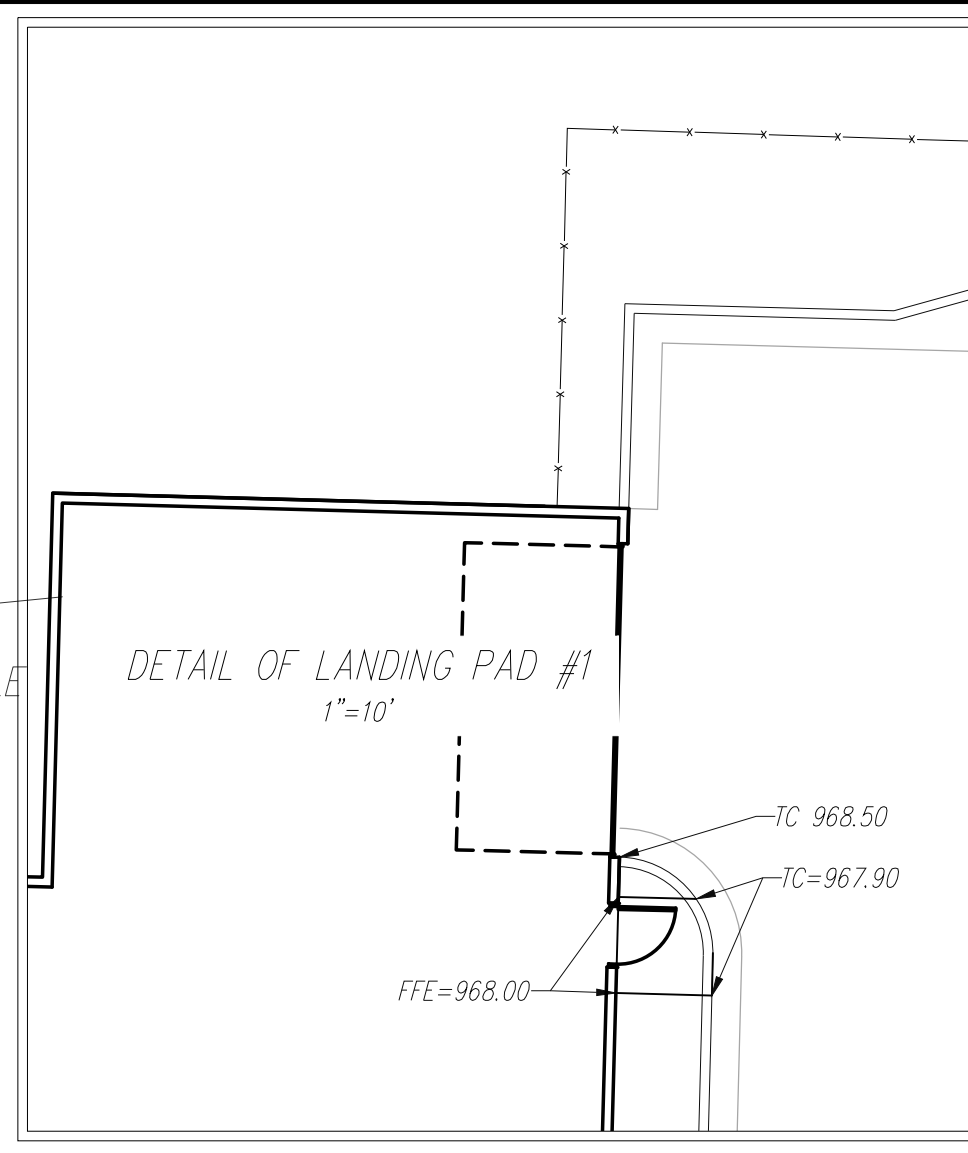
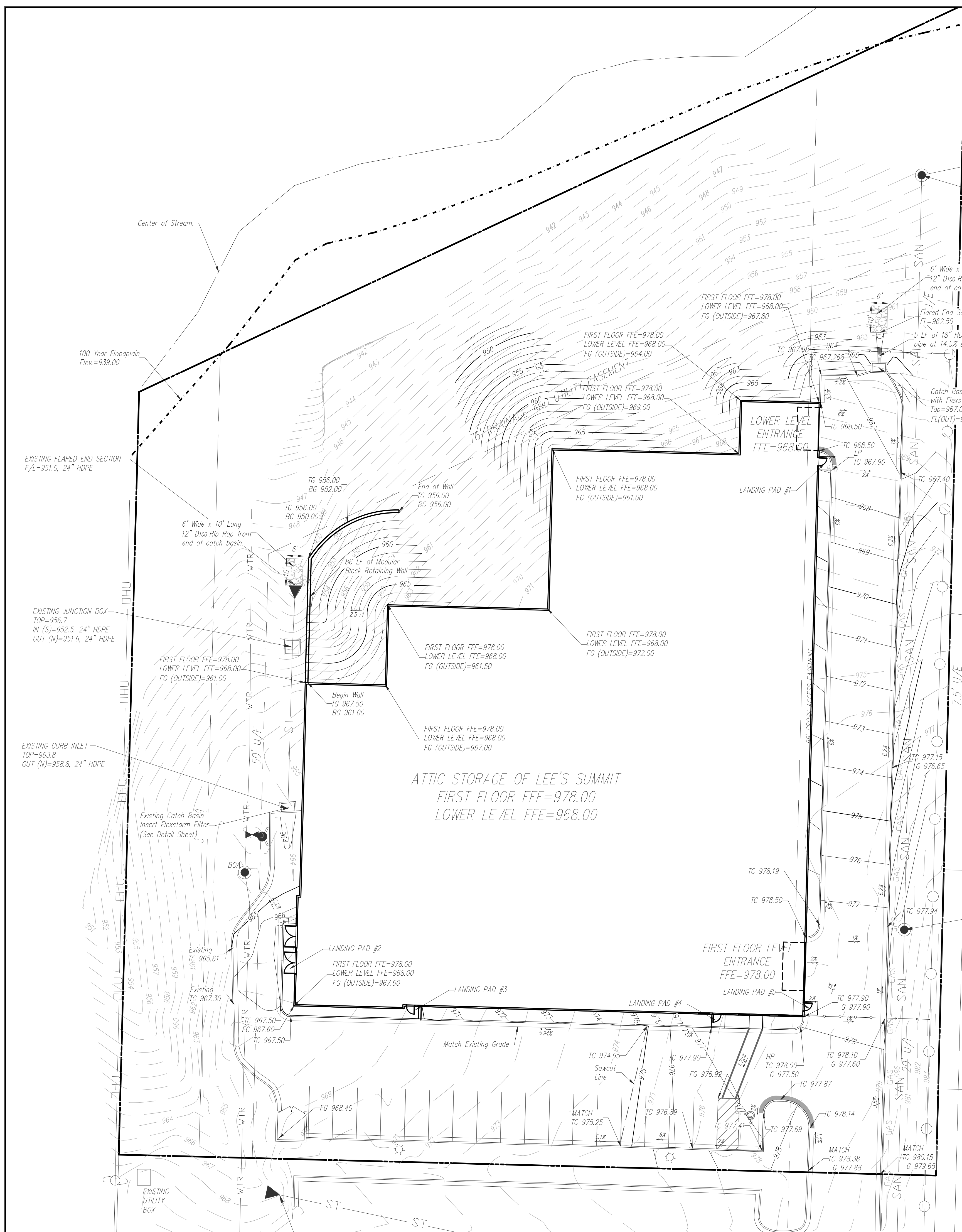
CORPORATE LICENSE NO. E220005873

**SITE DIMENSION PLAN**

**ATTIC STORAGE OF LEE'S SUMMIT**  
LEE'S SUMMIT - JACKSON COUNTY - MISSOURI

XREF NO. 18-1118	3	12
DRAWING NO. 18022	SHEET	OF
DATE JUNE 1, 2018		
JOB NO. 18022		



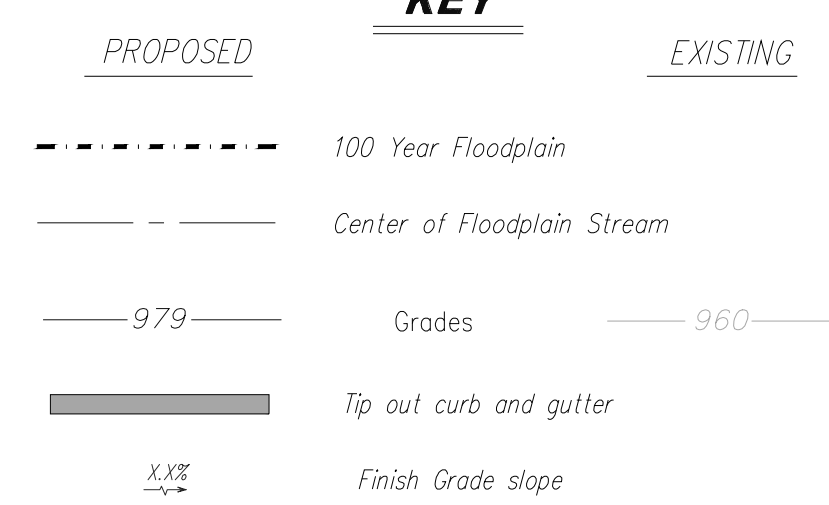


- GRADING NOTES:**
- All construction shall be in accordance with the latest edition of the City of Lee's Summit "DESIGN AND CONSTRUCTION MANUAL".
  - Contractor shall verify the exact location and depth of all existing utilities prior to construction.
  - Elevations are called out to top of curb, top of pavement, or top of structure, unless otherwise noted.
  - Parking lot grading shall be performed to route storm water as directed to the storm collection system.
  - ADA Space slope not to exceed 2% in any direction.
  - Parking lot grading shall be performed to route storm water as directed to the storm collection system.
  - Contractor shall contact the Development Engineering prior to commencement of work at 816-969-1200, 48 hours in advance.
  - All curbs shall be CG-1.
  - Roof drains (RD) to be daylighted to catch basin and through Flexstorm filtration system.
  - Subgrade to be compacted to 95% Standard Proctor Density.
  - Proposed elevations indicated are for the top of final grade, pavement or structure unless indicated otherwise.
  - All areas disturbed by construction shall be revegetated in accordance to the landscape plan.

\*\*\*Floodplain information shown as provided by Karen Quackenbush, Staff Engineer, City of Lee's Summit.

TC	Top of Curb
FG	Finish Grade
G	Gutter Elevation
HP	High Point
LP	Low Point
FFE	Finish Floor Elevation
TG	Top Grade
BG	Bottom Grade

**KEY**



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 N: 1008791.5340  
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 TOP ELEV.=979.19

811  
Know what's below.  
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SCALE IN FEET

NO.	BY	DATE	REVISION

1/21/19

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ATTC STORAGE OF LEE'S SUMMIT  
LEE'S SUMMIT - JACKSON COUNTY - MISSOURI

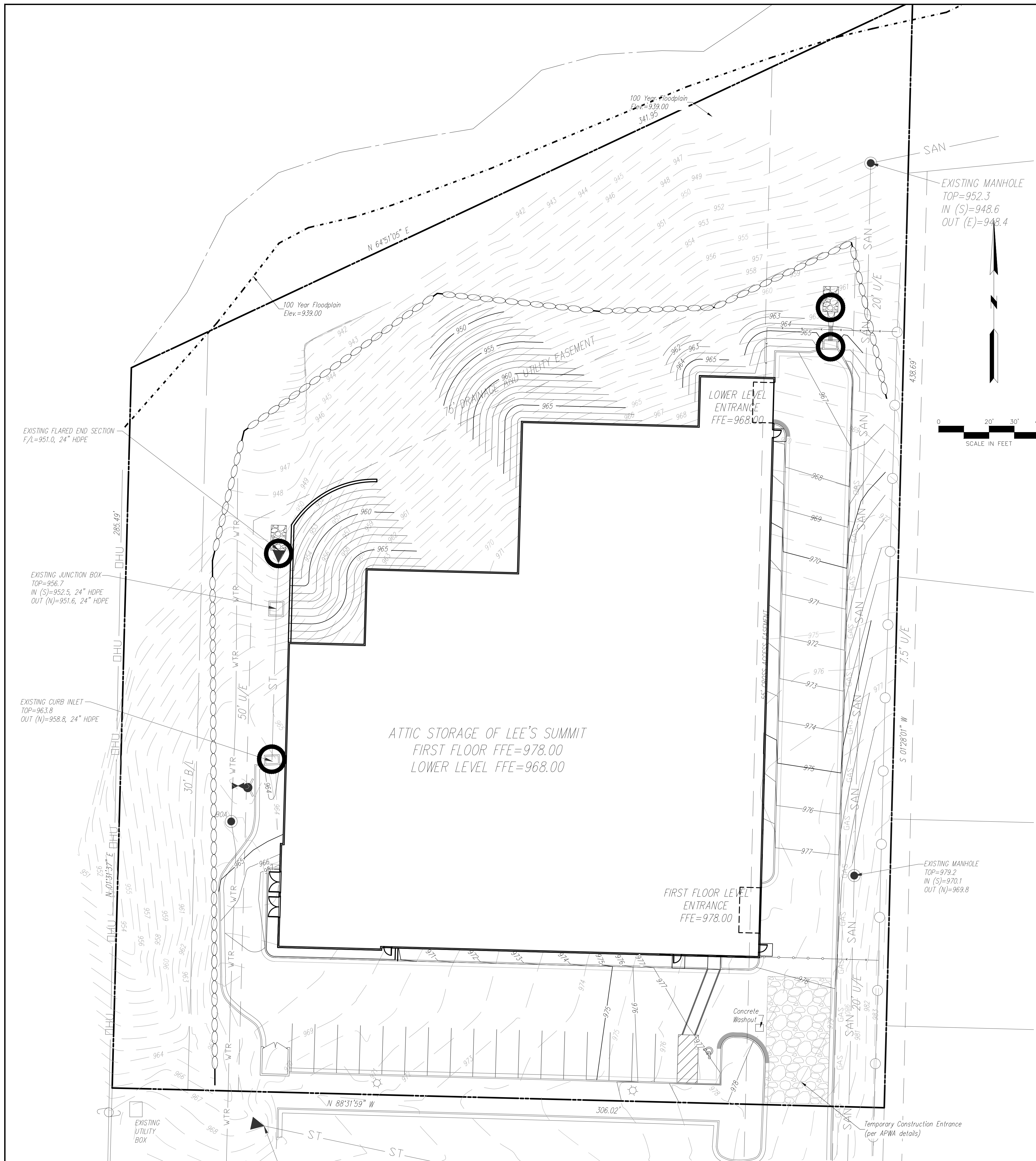
GRADING PLAN

4 OF 12

XREF NO. 18-1118  
 DRAWING NO. 18022  
 DATE JUNE 1, 2018  
 JOB NO. 18022

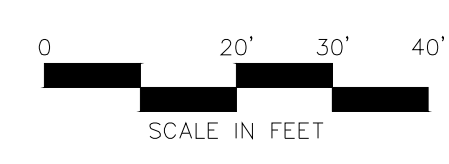
R. KEVIN STERRETT, NO. E-26440  
 MISSOURI PROFESSIONAL ENGINEER





- 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 the improvements have been accepted by the City. 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.
  - No grading shall exceed 3 feet horizontal to 1 foot vertical.
  - Siltation 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 siltation fence. Siltation fences to be repaired or replaced as necessary, or when required by the City or MoDNR.
  - 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.
  - 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.
  - 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.
  - Upon completion of the project, Contractor shall seed, mulch and fertilize all areas disturbed by construction.
  - Additional erosion and siltation control methods and devices may be required as directed by the City or MoDNR.
  - Contractor to verify all invert elevations for existing sewer connections. Contact civil engineer if conflict arises.

- MAJOR CONSTRUCTION ACTIVITIES:**
- Obtain all necessary city permits.
  - Construct temporary construction entrance at location shown on this sheet.
  - Install perimeter silt fences in the locations shown on this sheet. Install inlet protection on existing curb inlet.
  - Locate and disconnect all existing utilities.
  - Begin clearing and grubbing operations. Clearing and grubbing shall be done only in areas where earthwork will be performed and only in areas where building is planned to commence within 14 days after clearing and grubbing.
  - Commence site grading.
  - Disturbed areas of the site where construction activity has ceased for more than 14 days shall be temporarily seeded and watered.
  - Relocate existing utilities.
  - Install remaining erosion control measures and structures.
  - Prepare temporary parking and storage area.
  - Grade remainder of site.
  - Start construction of building pad and structures.
  - Install utilities, storm sewers, curbs and gutters.
  - Finalize pavement sub grade preparation.
  - Install base material as required for pavement.
  - Pave site.
  - Remove inlet protection around inlets and manholes no more than 48 hours prior to placing stabilized base course.
  - Remove temporary construction exits only prior to pavement construction in these areas (these areas are to be paved last).
  - Disturbed areas of the site where construction activity has ceased for more than 14 days shall be temporarily seeded and watered.
  - Carry out final grading, seeding and planting. Fine grade and install permanent seeding and plantings.
  - Submit notice of termination for permit termination.
  - Remove all temporary erosion and sediment control devices (only if site is stabilized and notice of termination has been filed).



Area of Disturbance: 1.95 AC

**KEY**

PROPOSED	EXISTING

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 TOP ELEV=979.19

NO.	BY	DATE	REVISION	DATE	BY

1/21/19

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EROSION CONTROL PLAN

ATTIC STORAGE OF LEE'S SUMMIT  
LEE'S SUMMIT - JACKSON COUNTY - MISSOURI

AREA OF DISTURBANCE: 1.95 AC

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X-REF NO.  
18-1118  
DRAWING NO.  
18022  
DATE  
JUNE 1, 2018  
JOB NO.  
18022

5      12

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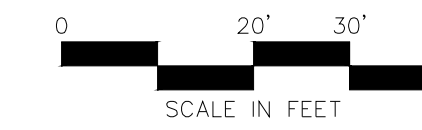
PRE DRAINAGE AREA CALCULATIONS:

Q = CIA  
 C = 0.40  
 I<sub>100</sub> = 7.32, I<sub>1000</sub> = 10.32  
 A = 2.54 ac

Q<sub>100</sub> = 0.40 x 7.32 x 2.54 = 7.44 cfs  
 Q<sub>1000</sub> = 0.40 x 10.32 x 2.54 = 10.49 cfs



Know what's below.  
 Call before you dig.



NO.	BY	CR/APP
DATE	REVISION	



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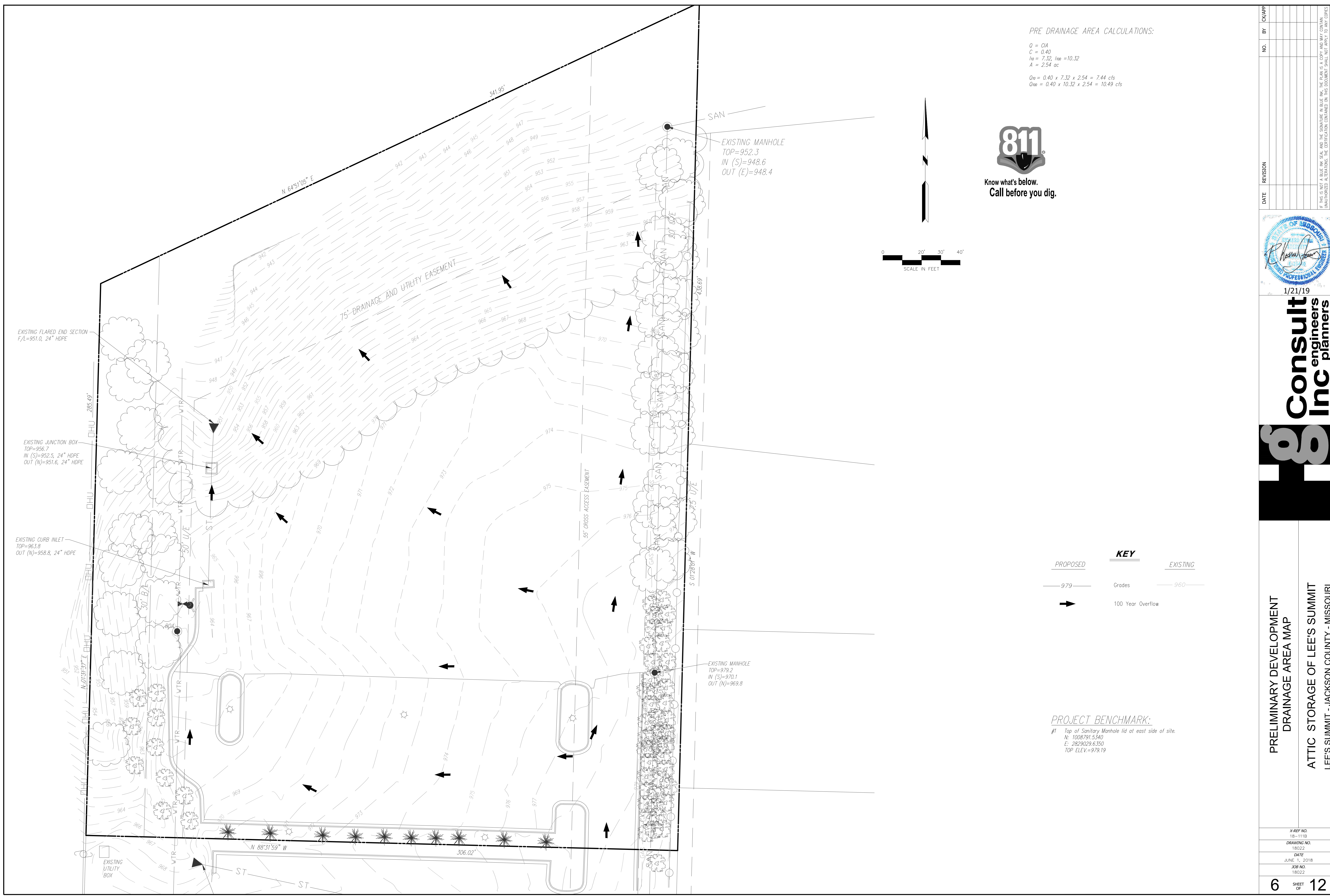
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 planners  
 CORPORATE LICENSE NO. E2010005873



KEY	
PROPOSED	EXISTING
—979—	—960—
➔	
	Grades
	100 Year Overflow

PROJECT BENCHMARK:

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PRELIMINARY DEVELOPMENT  
 DRAINAGE AREA MAP  
 ATTIC STORAGE OF LEE'S SUMMIT  
 LEE'S SUMMIT - JACKSON COUNTY - MISSOURI

KREF NO. 18-1115
DRAWING NO. 18022
DATE JUNE 1, 2018
JOB NO. 18022



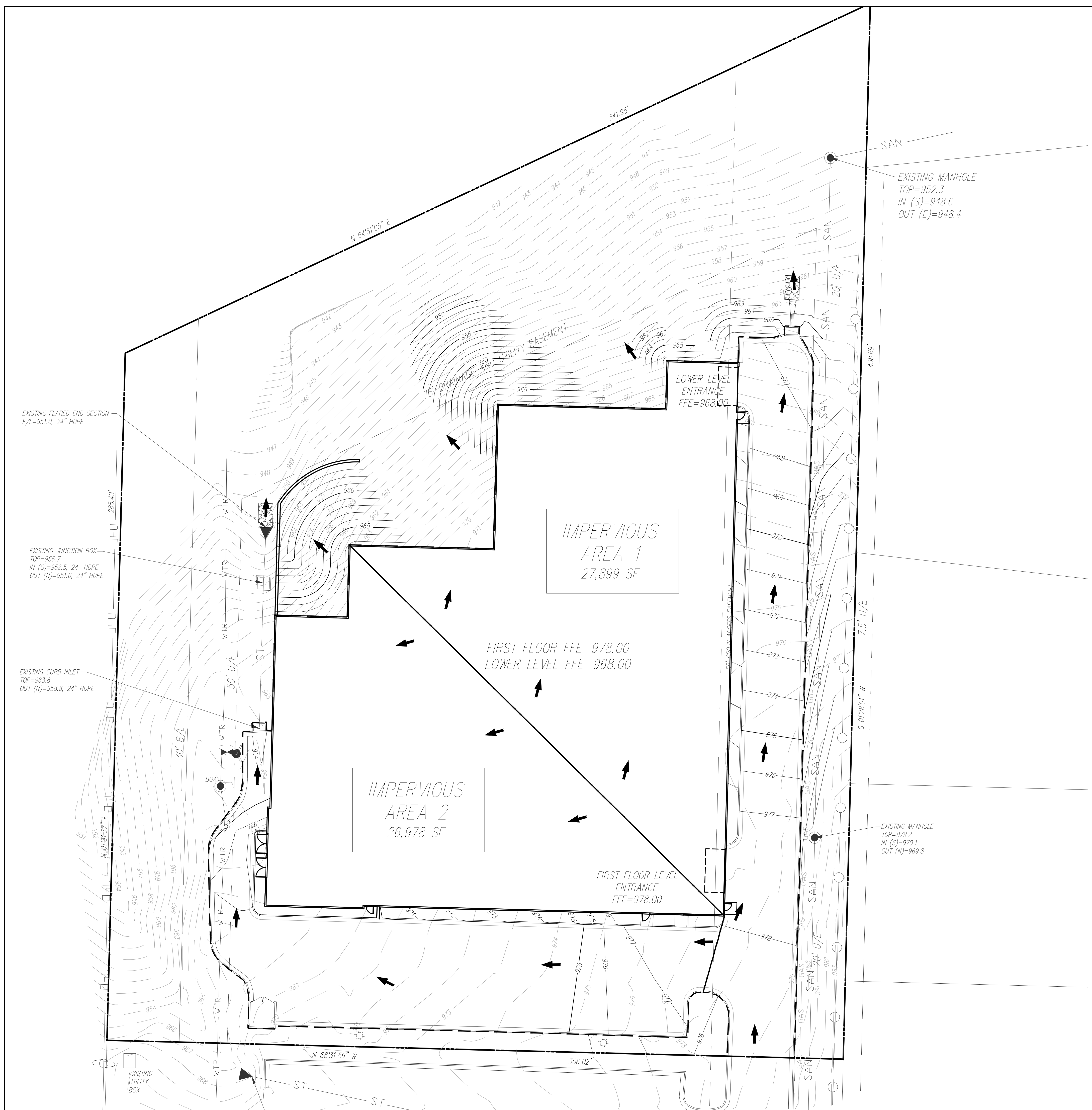
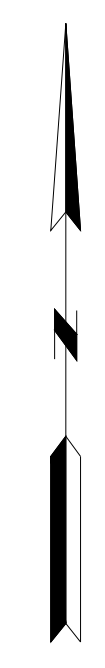
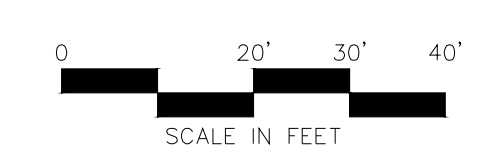
POST DRAINAGE AREA CALCULATIONS:

$Q = CIA$   
 $C = 0.59$   
 $I = 7.32, I_{100} = 10.32$   
 $A = 2.54 \text{ ac}$

$Q_{10} = 0.59 \times 7.32 \times 2.54 = 10.97 \text{ cfs}$   
 $Q_{100} = 0.59 \times 10.32 \times 2.54 = 15.47 \text{ cfs}$



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**KEY**

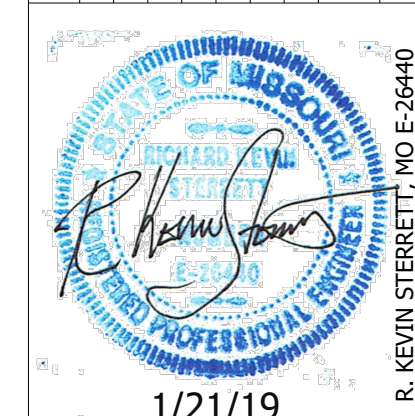
PROPOSED	EXISTING
—979—	—960—
➔	

\*\*All storm sewer piping is designed to carry the 100 year storm event. Storm events that are not carried by storm sewer piping is routed overland in parking lot.

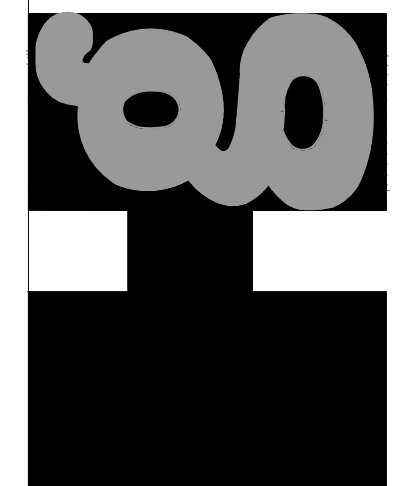
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NO.	BY	REVISION



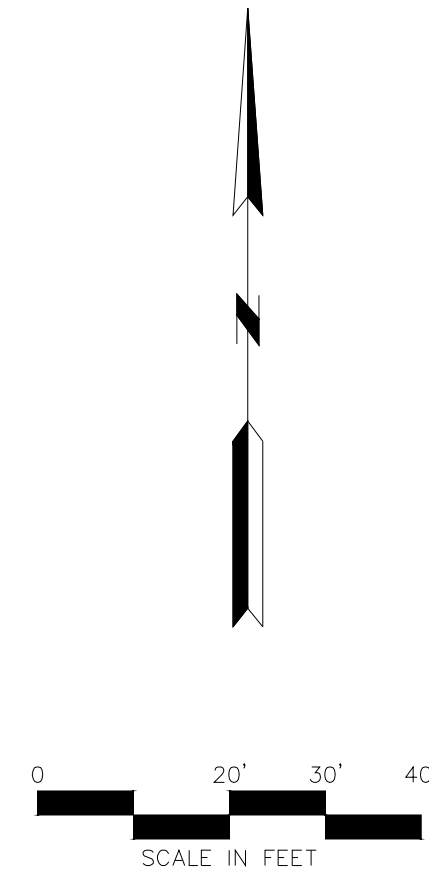
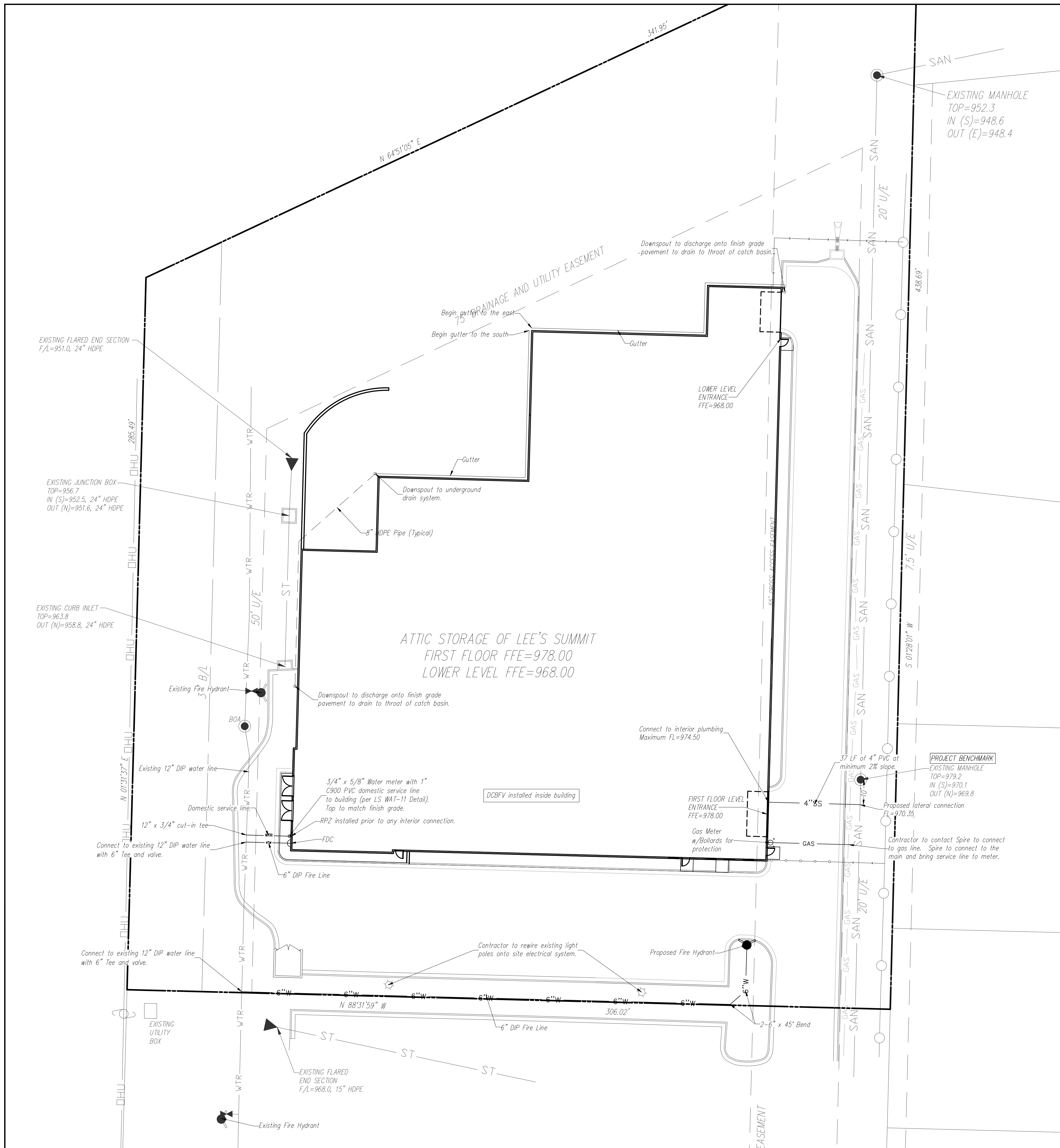
1/21/19  
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 engineers  
 planners  
 CORPORATE LICENSE NO. E2010005873



POST DEVELOPMENT  
 DRAINAGE AREA MAP  
 ATTIC STORAGE OF LEE'S SUMMIT  
 LEE'S SUMMIT - JACKSON COUNTY - MISSOURI

XREF NO. 18-1116
DRAWING NO. 18022
DATE JUNE 1, 2018
JOB NO. 18022





- UTILITY NOTES:**
- All utility installation to be in accordance to Lee's Summit "DESIGN AND CONSTRUCTION MANUAL" per Ordinance 5813. See manual for specifications and standard details.
  - Domestic water lines to be 3/4" diameter, K Copper from main to meter and 1" diameter C900 PVC from meter to building.
  - Sanitary sewer service to be 4" Schedule 40 or DR-26 PVC at 2% minimum slope.
  - Storm pipe to be HDPE, corrugated with smooth interior.
  - Roof drains (RD) to be daylighted to catch basin and through Flexform filtration system.
  - Contractor to contact the Water Utilities Department, Operations Division, at (816) 969-7606 to schedule water main taps and cut-ins, 48 hours in advance.
  - Mechanical equipment to be roof mounted.
  - Contractor to coordinate with KCPL and MGE for electric and gas hookup.
  - Thrust blocks to be provided at all water line bends and tee locations.
  - See MEP plans for all utility information inside of the building.
  - Contractor to verify all invert elevations for existing sewer connections. Contact civil engineer if conflict arises.
  - A Knox box will be required. Developer to provide to the fire department for the building and a key switch for the gate.

NO.	BY	DATE	REVISION



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CORPORATE LICENSE No. E2010005873

**UTILITY PLAN**

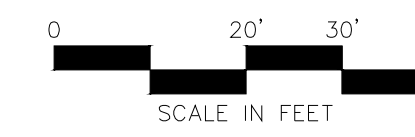
**ATTIC STORAGE OF LEE'S SUMMIT**  
LEE'S SUMMIT - JACKSON COUNTY - MISSOURI

K-APP NO. 18-1116
DRAWING NO. 18022
DATE JUNE 1, 2018
JOB NO. 18022
<b>8</b> SHEET OF <b>12</b>





Know what's below.  
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Interior Landscape

Area	SF
A	214
B	63
C	414
D	517
TOTAL	1208

Worksheet for Tree and Shrub Requirements:

A - Size of development site	= 110,740 SF
B - Length of street frontage of development site	= 286 LF
C - Trees required on street frontage = 1/30 LF	= 10 Trees
D - Trees provided	= 32 Existing Trees + 14 Austrian Pine
E - Parking lot area	= 16,328 SF
F - Green space required in parking lot (E x 5%)	= 816 SF
G - Green space provided	= 1,208 SF
H - Shrubs required along frontage = 1/20 LF=306.2/20	= 16 Shrubs
Shrubs required along frontage (Parking lot screen)	171 LF at 12/40 LF
I - Shrubs Provided	= 52 Shrubs
Shrubs Provided (Parking lot screen)	= 52 Shrubs
Shrubs Provided (Total frontage)	= 69 Shrubs
J - Quantity of additional trees required	1 tree per 5000 SF of open area (76,559/5,000)
K - Existing Additional Trees Provided	= 16 Trees
L - Quantity of additional shrubs required	2 shrubs per 5000 SF of open area (76,559/5,000)
M - Additional Shrubs Provided	= 31 Shrubs

LANDSCAPE SCHEDULE FOR EXISTING TREES:

SPECIES CALIPER/HEIGHT QUANTITY

Walnut, Elm and Oak 3" - 7" 70

Bradford Pear 3" - 6" 56

Norway Spruce 12' - 14' 10

LANDSCAPE SCHEDULE FOR PROPOSED TREES AND SHRUBS:

SPECIES CALIPER/HEIGHT QUANTITY

Dwarf Burning Bush  
Euonymus alatus 'Compactus' 18"-24" Minimum height at time of planting 74

Skyrocket Juniper  
Juniperus scopularum 'Skyrocket' 8' Minimum height at time of planting 7

Austrian Pine  
Pinus nigra 8' Minimum height at time of planting 8

October Glory Red Maple  
Acer rubrum 3" Caliper at time of planting 8

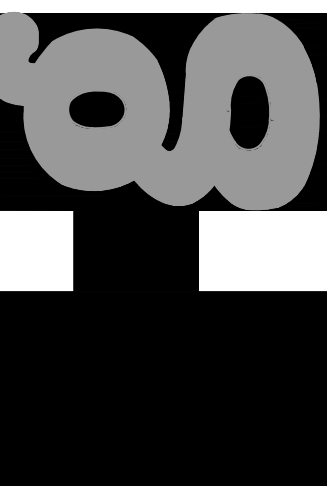
White Dogwood  
Cornus florida 3" Caliper at time of planting 7

NO.	BY	DATE	REVISION



1/21/19

**Consult Inc**  
engineers  
planners

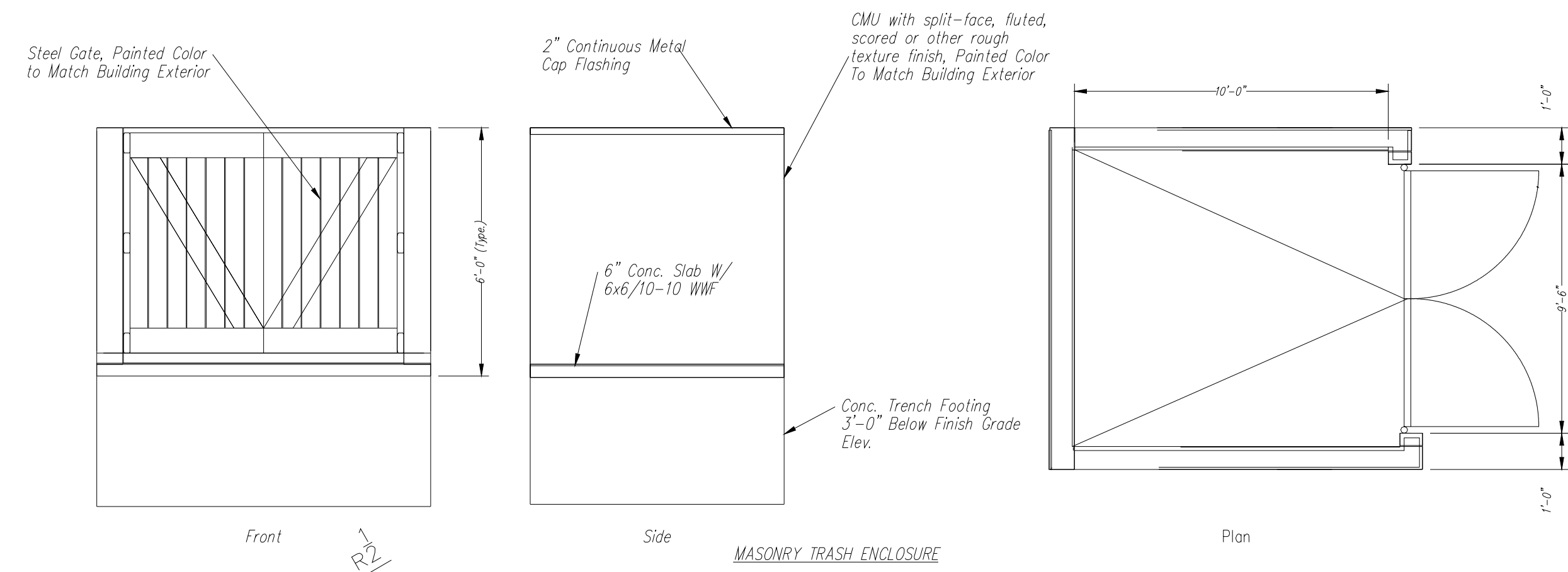


LANDSCAPE PLAN

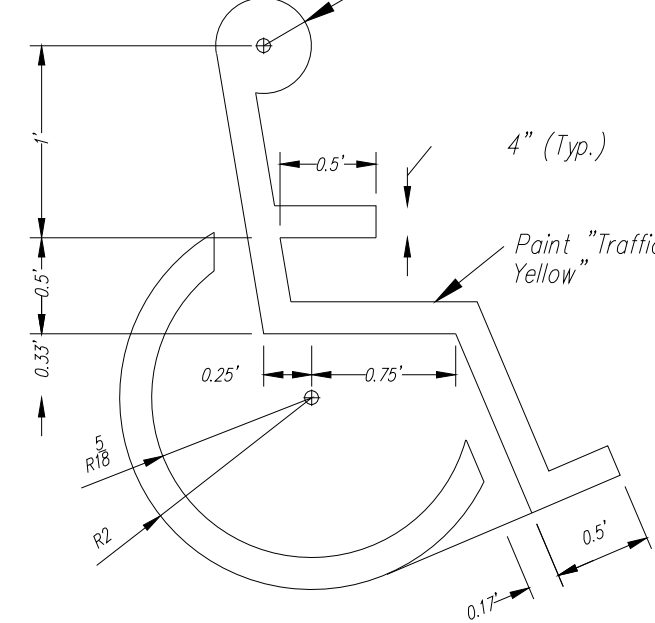
ATTIC STORAGE OF LEE'S SUMMIT  
LEE'S SUMMIT - JACKSON COUNTY - MISSOURI

XREF NO.	18-1118
DRAWING NO.	18022
DATE	JUNE 1, 2018
JOB NO.	18022





MASONRY TRASH ENCLOSURE  
N.T.S.



ACCESSIBLE PARKING SYMBOL  
N.T.S.

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



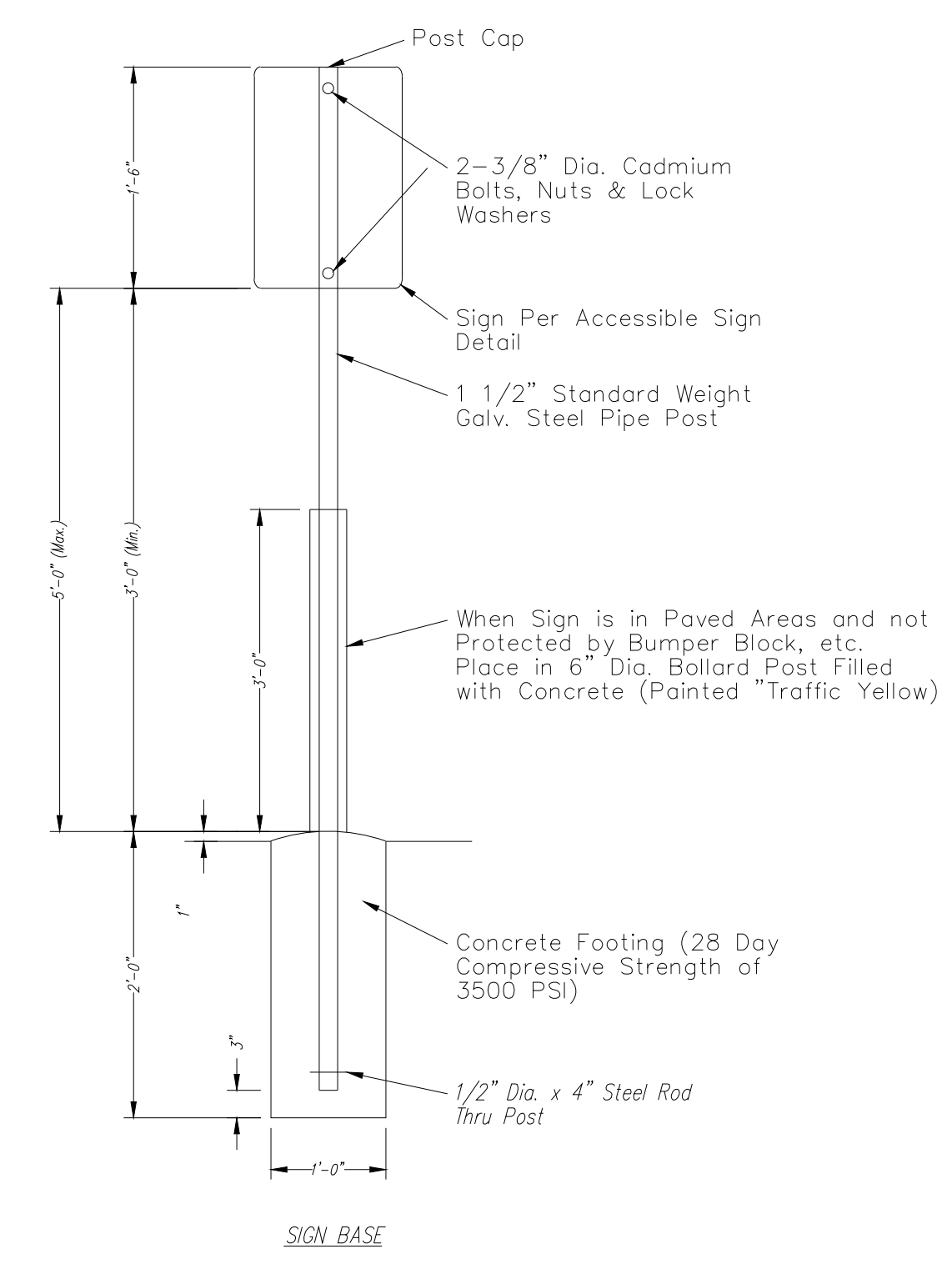
Colors  
Legend and Border - Green  
White Symbol on Blue Background  
Background - White  
(R7-8)



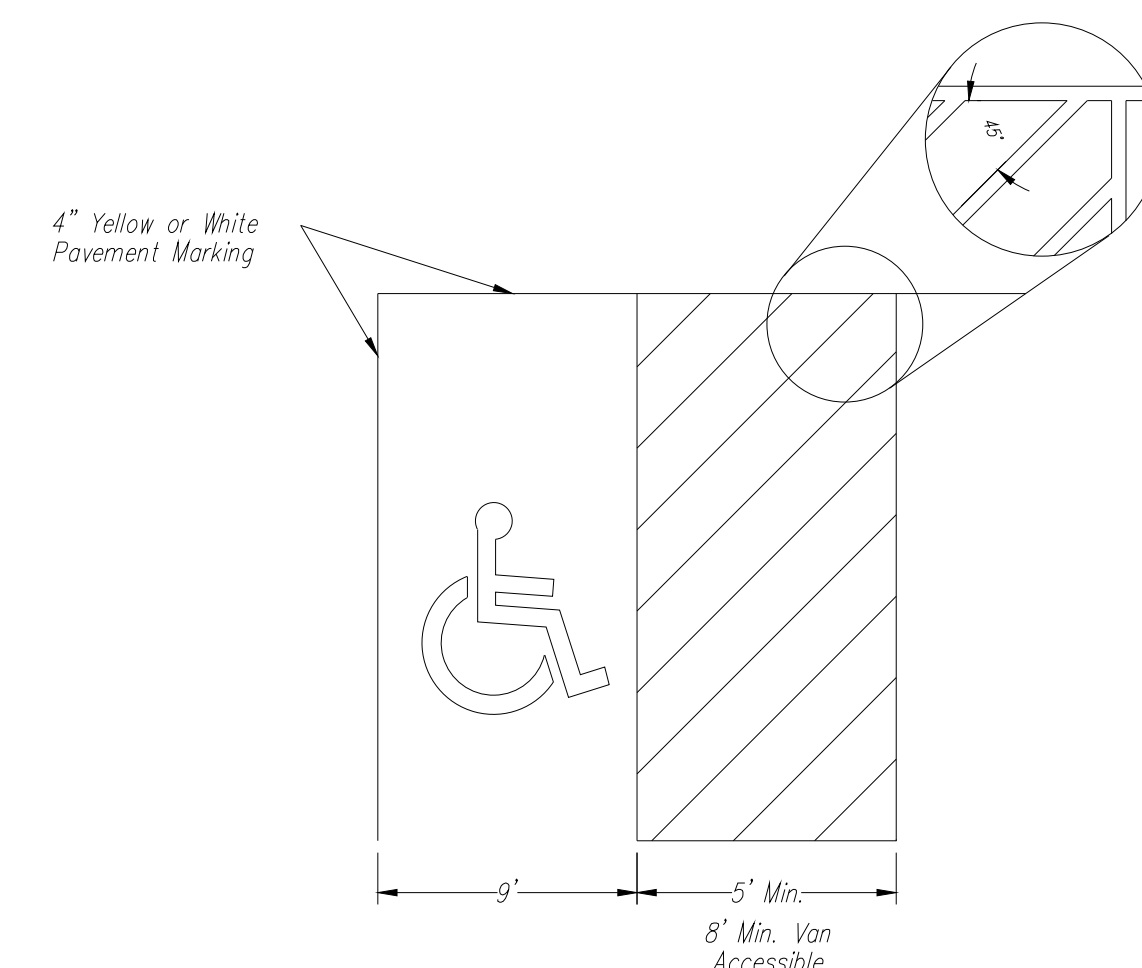
6"x12"

ACCESSIBLE SIGN DETAIL  
N.T.S.

1. Mount 2 Accessible Signs to building. See plans for locations.
2. 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.

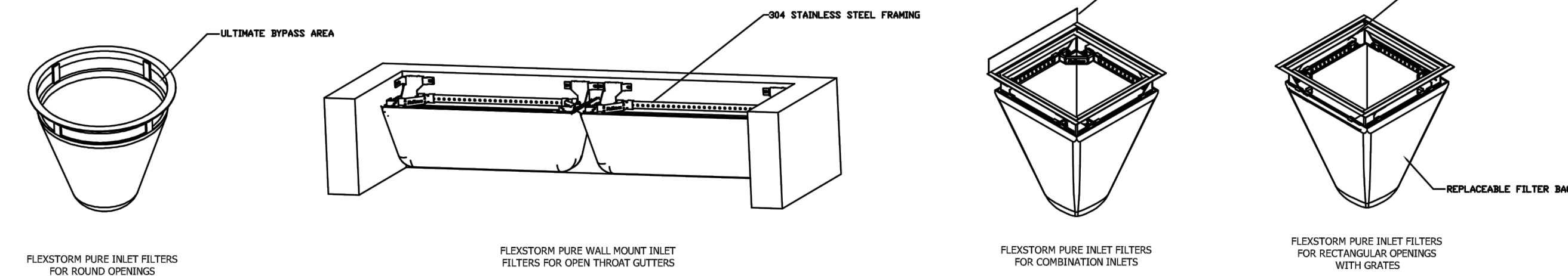


SIGN BASE



ACCESSIBLE STRIPING DETAIL  
N.T.S.

FLEXSTORM PURE FILTERS FOR PERMANENT INLET PROTECTION  
PRODUCT SELECTION AND SPECIFICATION DRAWING



For Round Openings with Grates		Minimum Bypass Flow Rates (CF5)* Based on Nominal Frame Size with minimum 2" Bypass flow gap	
Drop Thru Opening Size Dia	Flexstorm Frame P/N	Minimum 2" Bypass flow gap	Minimum Bypass Flow Rate (CF5)*
Small: 10.0" - 18.0"	62SHDR	1.6	1.6
Medium: 18.1" - 24.0"	62MHDR	2.7	2.7
Large: 24.1" - 36.0"	62LHDR	3.8	3.8

For Open Throat Curb Inlets - Mounted to Wall Beneath Curb Opening		Minimum Bypass Flow Rates (CF5)* Based on Nominal Frame Size with minimum 2" Bypass flow gap	
Curb Opening Size	Flexstorm Frame P/N	Minimum 2" Bypass flow gap	Minimum Bypass Flow Rate (CF5)*
Up to 4" curb openings (1 Filter)	62HDWM1	1.6	1.6
Between 4" and 8" curb openings (2 Filters)	62HDWM2	2.7	2.7
Between 8" and 12" curb openings (3 Filters)	62HDWM3	3.8	3.8
Between 12" and 16" curb openings (4 Filters)	62HDWM4	4.9	4.9

For Rectangular/Square Openings with Grates		Minimum Bypass Flow Rates (CF5)* Based on Nominal Frame Size with minimum 2" Bypass flow gap	
Clear Drop Thru Opening Size (not grate or seat also)	Flexstorm Frame P/N	Minimum 2" Bypass flow gap	Minimum Bypass Flow Rate (CF5)*
Small: 12" x 12" up to 16" x 16" (or 64" max perimeter)	62SHDR	1.6	1.6
Medium: 18" x 18" up to 24" x 24" (or 96" max perimeter)	62MHDR	2.7	2.7
Large: 28" x 28" up to 36" x 36" (or 144" max perimeter)	62LHDR	3.8	3.8
XL: 32" x 32" up to 48" x 48" (or 192" max perimeter) (2 pc set)	62XLHD	4.9	4.9

CREATE YOUR ADS FLEXSTORM PART NUMBER BY COMBINING FRAME P/N AND BAG P/N

1. IDENTIFY YOUR FLEXSTORM FRAME PART NUMBER FROM TABLES ABOVE

2. SELECT YOUR BAG PART NUMBER BASED ON APPLICATION NEEDS

FLEXSTORM FILTER BAGS	(22" depth) STD Bag P/N	(12" depth) Short Bag P/N	Clean Water Flow Rate (GPM/SqFt)	Min A.O.S.
FX: Standard Woven Bag	FX	FX-S	200	40
FX+: Woven w/ MyCelx	FXP	FXP-S	200	40
FXO: Woven w/ Oil Boom	FXO	FXO-S	200	40
PC: Post Construction Bag	PC	PC-S	137	140
PC+: PC Bag w/ MyCelx	PCP	PCP-S	137	140
LL: Litter and Leaf Bag	LL	LL-S	High	3.5
IL: IDOT Non-Woven Bag	IL	IL-S	145	70

SPECIFICATIONS FOR STANDARD BAGS BY NOMINAL BAG / FRAME SIZE

Nominal Bag Size Matched to Frame Size	Solids Storage (CuFt)	Filtered Flow Rate at 50% Max (CF5)	Retention (Oz)	Retention (Oz)	**PC+ Oil Retention (Oz)	**FX+ Oil Retention (Oz)
Small	1.6	1.2	0.8	0.9	79	168
Medium	2.1	1.7	1.2	1.3	115	204
Large	3.8	2.7	1.8	1.9	173	262
XL	4.2	3.6	2.4	2.6	230	319

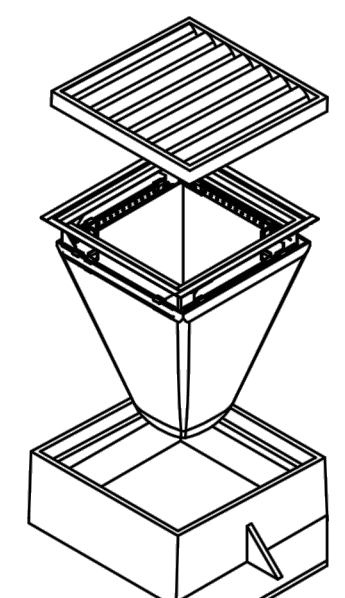
Filtration Efficiency: 82%  
 TSS (total suspended solids rem): NA, 99%  
 TPH (tot petroleum hydrocarbons): NA, 96%  
 \* PC filter bag at 50% max adsorption capacity  
 \*\* PC filter bag at 50% capacity and MyCelx skimmer at 100% capacity

3. CREATE YOUR FLEXSTORM INLET FILTER PART NUMBER

Frame P/N from Step 1.	Filter Bag P/N from Step 2.
------------------------	-----------------------------

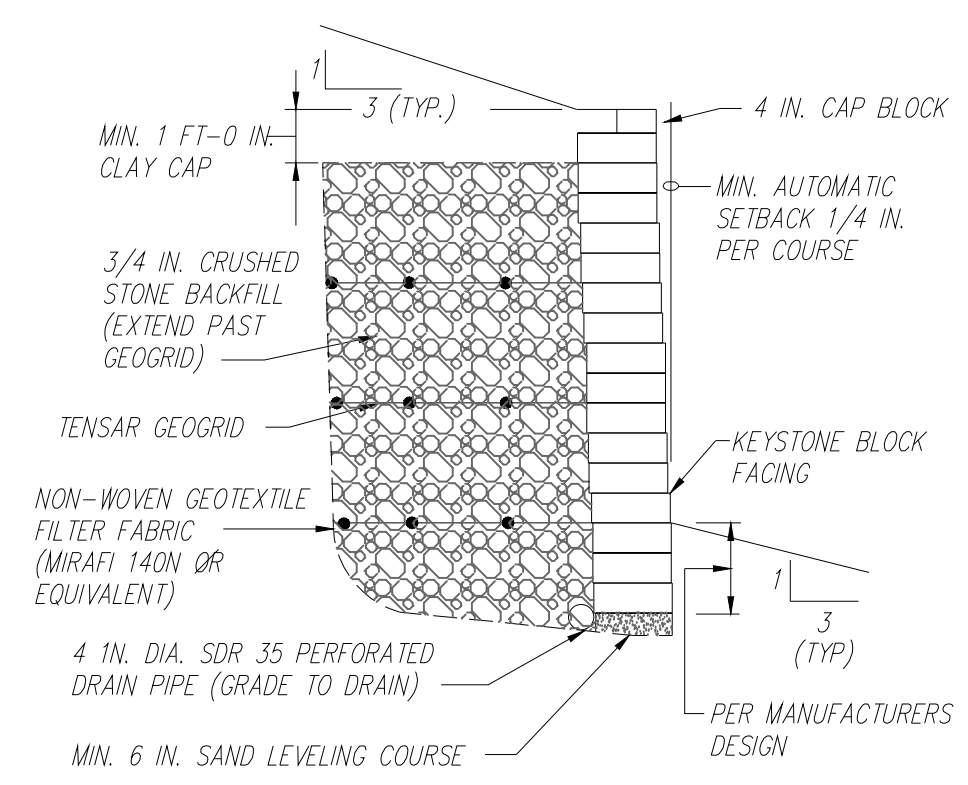
- NOTES:
1. ALL FRAMING IS CONSTRUCTED OF 304 STAINLESS STEEL FOR 25 YEAR SERVICE LIFE RATING
  2. TOTAL BYPASS CAPACITY: BYPASS CAPACITY WILL VARY WITH EACH SIZE DRAINAGE STRUCTURE. FLEXSTORM DESIGNS FRAMING BYPASS TO MEET OR EXCEED THE DESIGN FLOW OF THE PARTICULAR DRAINAGE STRUCTURE.
  3. UPON ORDERING CONFIRMATION OF THE DOT CALLOUT, PRECAST OR CASTING MAKE AND MODEL, OR DETAILED DIMENSIONAL FORMS MUST BE PROVIDED TO CONFIGURE AND ASSEMBLE YOUR CUSTOMIZED FLEXSTORM INLET FILTER. PART NUMBER ALONE IS NOT SUFFICIENT.
  4. FOR WRITTEN SPECIFICATIONS AND MAINTENANCE GUIDELINES VISIT WWW.INLETFILTERS.COM

- INSTALLATION:
1. REMOVE GRATE
  2. DROP FLEXSTORM INLET FILTER ONTO LOAD BEARING LIP OF CASTING OR CONCRETE STRUCTURE
  3. REPLACE GRATE



ALL PRODUCTS MANUFACTURED BY INLET & PIPE PROTECTION, INC A DIVISION OF ADS, INC. WWW.INLETFILTERS.COM (866) 287-8655 PH (630) 355-3477 FX INFO@INLETFILTERS.COM

SIZE	DWG NO	REV
C	FLEXSTORM_PURE	A
SCALE		SHEET 1 OF 1



SEGMENTAL RETAINING WALL DETAIL

LEGEND

---	FILTER FABRIC
•••	GEOGRID

NO.	BY	DATE	REVISION

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**Consult Inc**  
engineers  
planners

R. KEVIN STERRETT, NO. E-26440  
CORPORATE LICENSE NO. E2010005873



SITE DETAIL SHEET

ATTIC STORAGE OF LEE'S SUMMIT  
LEE'S SUMMIT - JACKSON COUNTY - MISSOURI

KREF NO.	18-1118
DRAWING NO.	18022
DATE	JUNE 1, 2018
JOB NO.	18022
SHEET	12

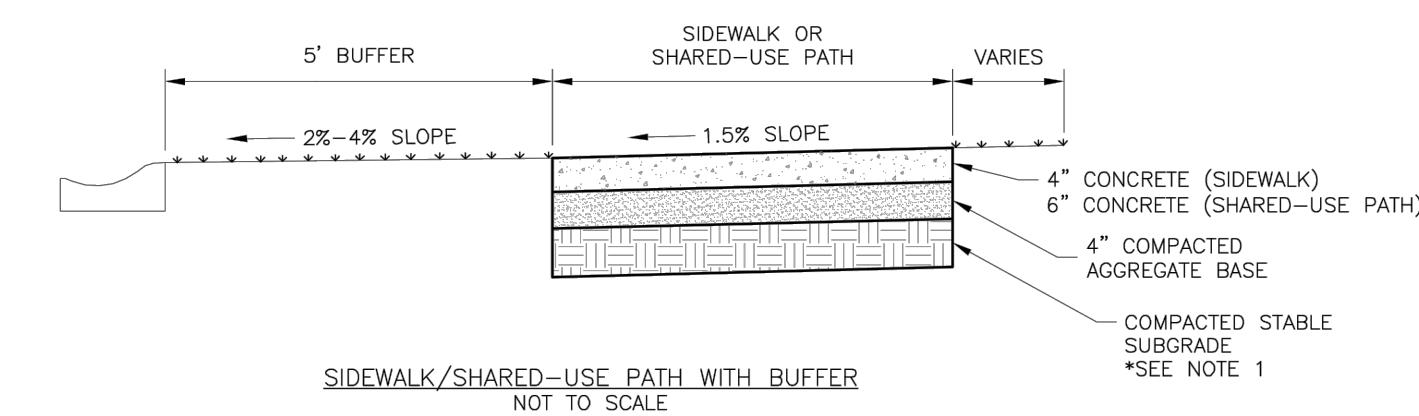
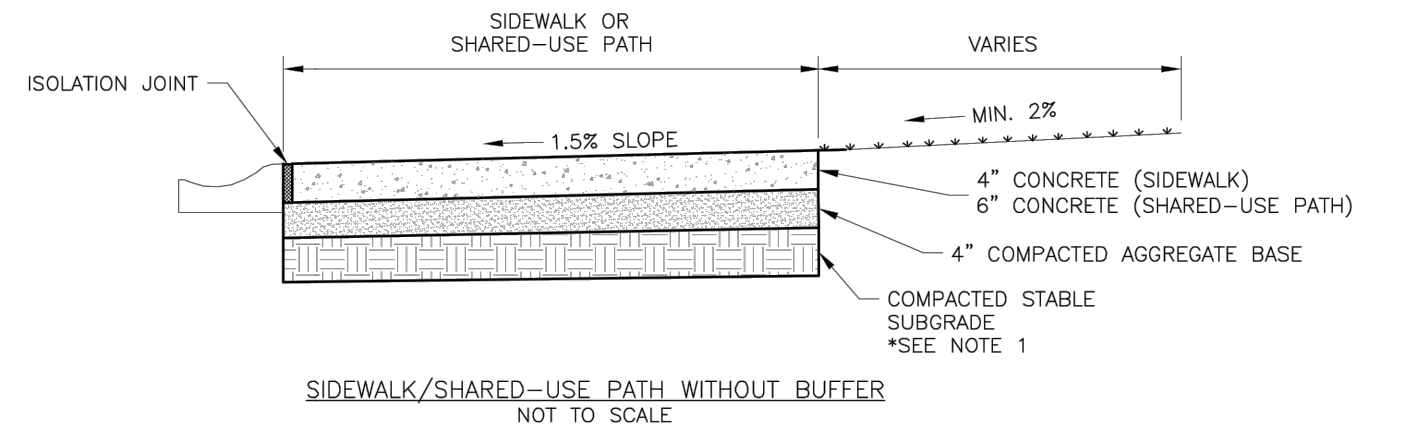
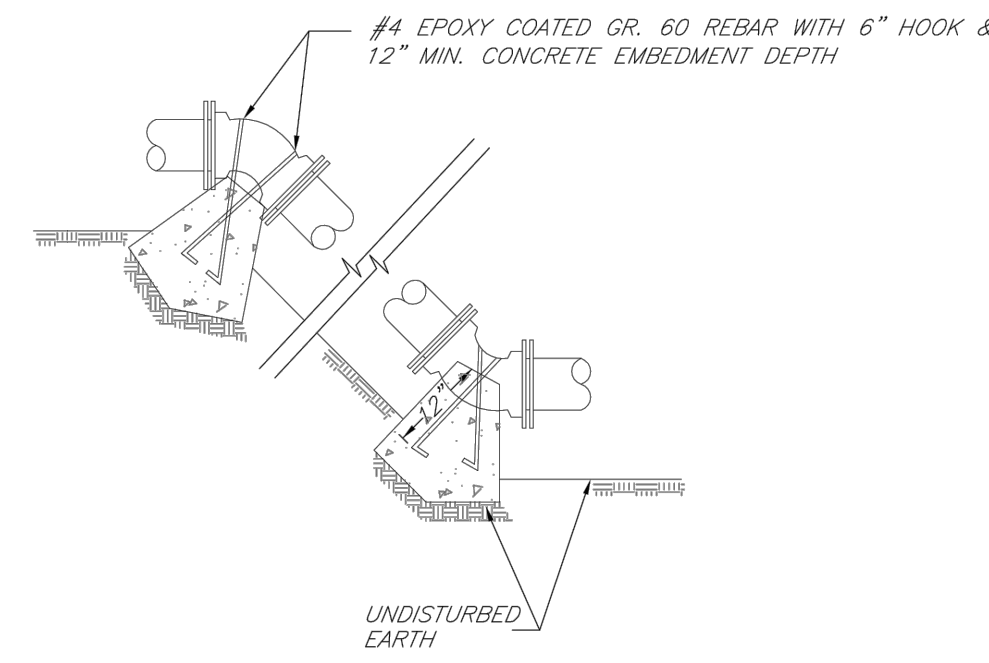
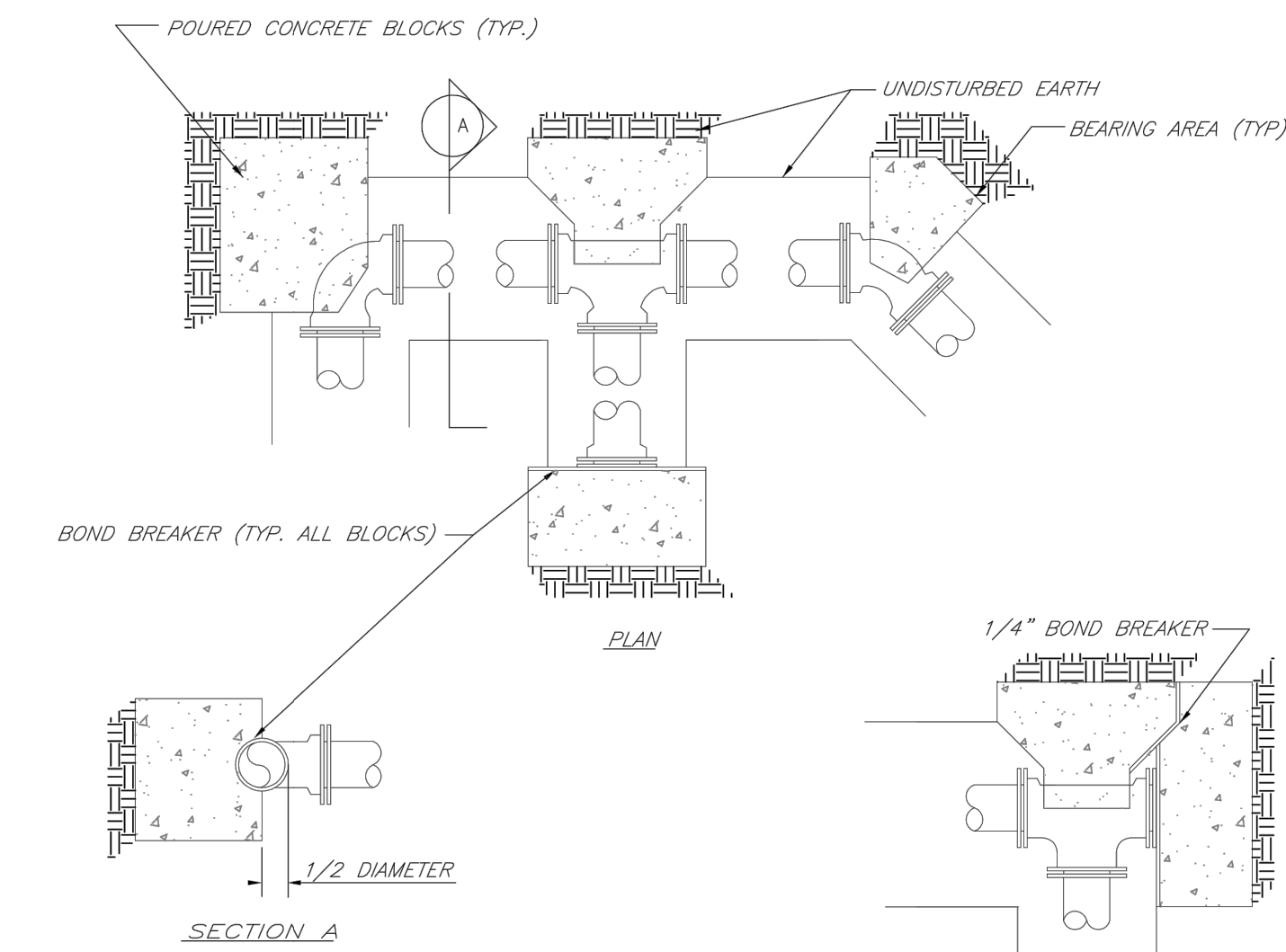


REQUIRED CONCRETE BEARING AREA (SQUARE FEET - SF)							
NOM. DIA. (INCHES)	TEE, PLUG	BEND	BEND	BEND	BEND	BEND	BEND
180	4.7	6.7	4.0	22.5	11.25		
90	8.4	11.8	6.4	4.0	4.0		
45	13.1	18.5	10.0	5.1	4.0		
6	18.8	26.2	14.4	7.4	4.0		
8	25.7	36.3	19.6	10.0	5.0		
10	33.5	47.4	25.6	13.1	6.6		
12	42.4	58.7	32.5	16.5	8.3		
14	REST. JT.	REST. JT.	REST. JT.	REST. JT.	REST. JT.		
16	REST. JT.	REST. JT.	REST. JT.	REST. JT.	REST. JT.		
18	REST. JT.	REST. JT.	REST. JT.	REST. JT.	REST. JT.		
20	REST. JT.	REST. JT.	REST. JT.	REST. JT.	REST. JT.		
24	REST. JT.	REST. JT.	REST. JT.	REST. JT.	REST. JT.		

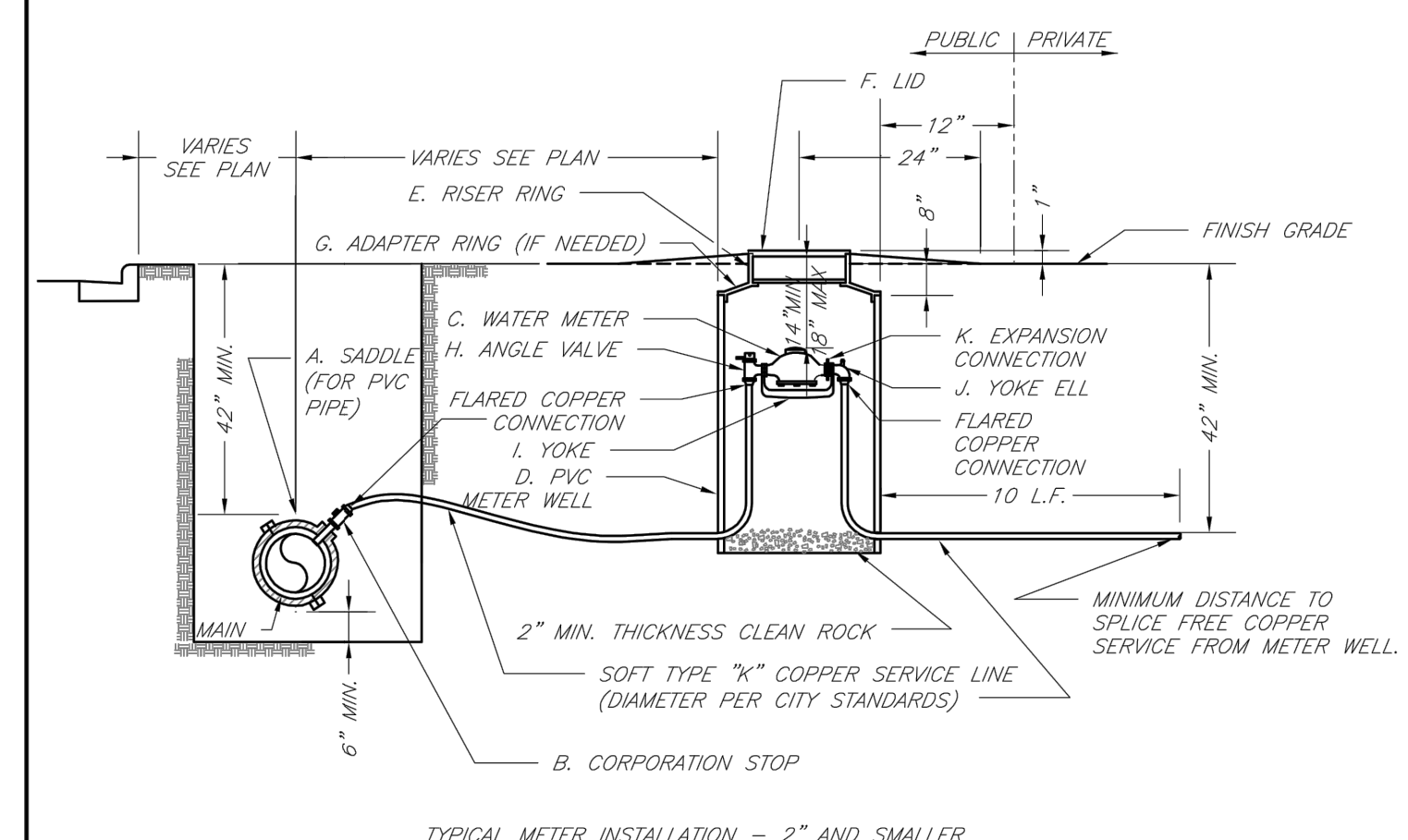
REQUIRED CONCRETE VOLUME (CUBIC FEET - CF)							
NOM. DIA. (INCHES)	TEE, PLUG	BEND	BEND	BEND	BEND	BEND	BEND
180	50.5	71.4	38.6	19.7	9.9		
90	89.8	126.9	68.7	35.0	17.6		
45	140.2	198.3	107.3	54.7	27.5		
6	202.0	REST. JT.	154.6	78.8	39.6		
8	REST. JT.	REST. JT.	210.4	107.3	53.9		
10	REST. JT.	REST. JT.	140.1	70.4			
12	REST. JT.	REST. JT.	REST. JT.	177.3	89.1		
14	REST. JT.	REST. JT.	REST. JT.	REST. JT.	110.0		
16	REST. JT.	REST. JT.	REST. JT.	REST. JT.	158.4		
18	REST. JT.	REST. JT.	REST. JT.	REST. JT.			
20	REST. JT.	REST. JT.	REST. JT.	REST. JT.			
24	REST. JT.	REST. JT.	REST. JT.	REST. JT.			

- NOTES:
- ALL BENDS WITHOUT RESTRAINED JOINTS SHALL HAVE CONCRETE THRUST BLOCKS INSTALLED FOR RESTRAINT.
  - MEGA LUGS MAY BE USED ONLY IN CONJUNCTION WITH CONCRETE THRUST BLOCKING.
  - BEARING AREA MUST BE AGAINST UNDISTURBED SOIL.
  - DO NOT COVER JOINTS OR BOLTS (WHERE APPLICABLE) WITH CONCRETE.

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  - DO NOT COVER JOINTS OR BOLTS (WHERE APPLICABLE) WITH CONCRETE.



- GENERAL NOTES:
- SUBGRADE MUST BE OF STABLE, COMPACTED EARTH AND SHALL BE OVERLAYED WITH 4" COMPACTED DENSE GRADED AGGREGATE BASE.
  - 1.5% CROSS SLOPE MUST BE MAINTAINED THROUGH DRIVEWAYS.
  - KCMB 4K CONCRETE MIX SHALL BE REQUIRED FOR ALL SIDEWALKS AND SHARED-USE PATHS OR AS APPROVED BY THE CITY INSPECTOR.
  - ALL SIDEWALKS SHALL MEET CURRENT PUBLIC RIGHT OF WAY ACCESSIBILITY GUIDELINES (PROWAG).
  - AN EXPANSION JOINT SHALL BE PLACED AT A MAXIMUM OF 150 FT. CONSTRUCTION JOINTS SHALL BE PLACED THE SAME WIDTH OF SIDEWALK, BUT NO GREATER THAN 10 FT.
  - SHARED-USE PATH WIDTH SHALL BE 10 FT. WIDE.
  - SIDEWALK FINISHING (NO PICTURE FRAMING) AS DIRECTED BY CITY INSPECTOR.
  - WHITE CURING COMPOUND MUST BE APPLIED UNIFORMLY TO THE CONCRETE SURFACE IMMEDIATELY AFTER FINAL FINISHING.



- NOTES:
- METER INSTALLATION SHALL NOT BE LOCATED IN AREAS SUBJECT TO VEHICULAR TRAFFIC OR IN CONCRETE PAVEMENT WITHOUT CITY APPROVAL.
  - IF METER IS TO BE LOCATED OTHER THAN IN FRONT OF PROPERTY LINE, CITY APPROVAL SHALL BE OBTAINED.
  - CITY TO FURNISH ITEMS A-K.
  - NO OTHER EQUIPMENT SHALL BE INSTALLED IN THIS PIT.
  - 42" MINIMUM BURY DEPTH FOR ALL SERVICE LINES.
  - EXCAVATION FOR TAP TO EXPOSE 4 LINEAR FEET OF MAIN.
  - NO SPLICES ALLOWED BETWEEN METER AND MAIN.
  - SERVICE CONNECTION TAP AT APPROXIMATELY 45 DEGREES.
  - LID AND RISER RING SHALL BE SET SO THAT GROUND WATER WILL DRAIN AWAY FROM THE WELL.
  - 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 64063

**HORIZONTAL THRUST BLOCKS**

Date: 02/13  
Drawn By: JN  
Checked By: DL  
FILE: WAT-1  
Rev: 1/14

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

**VERTICAL THRUST BLOCKS**

Date: 02/13  
Drawn By: JN  
Checked By: DL  
FILE: WAT-2  
Rev: 1/14

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

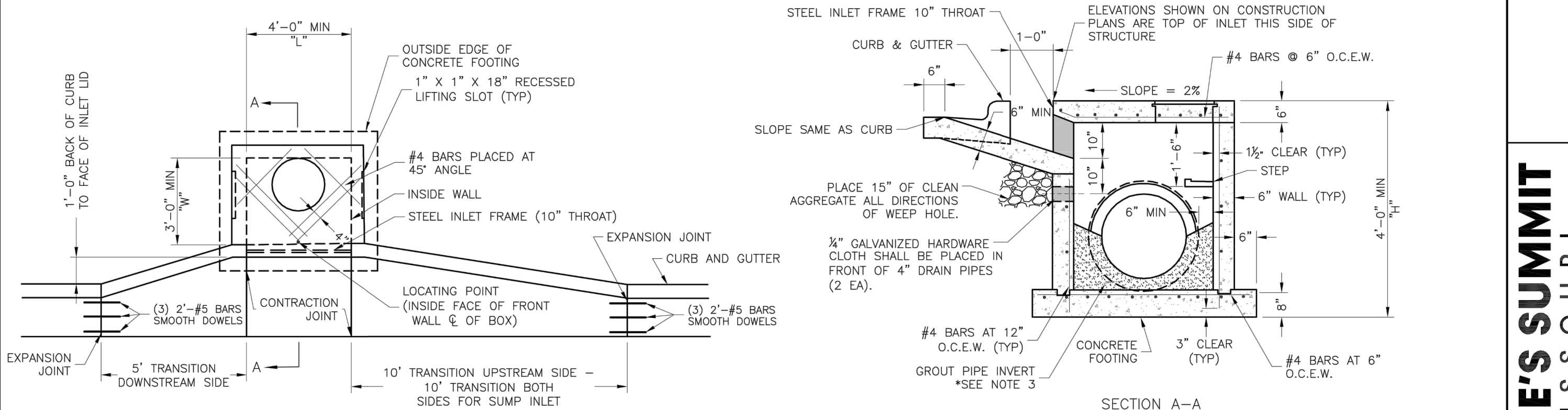
**SIDEWALK/SHARED-USE PATH DETAIL**

Date: 04/17  
Drawn By: MIF  
Checked By: DL  
GEN-2

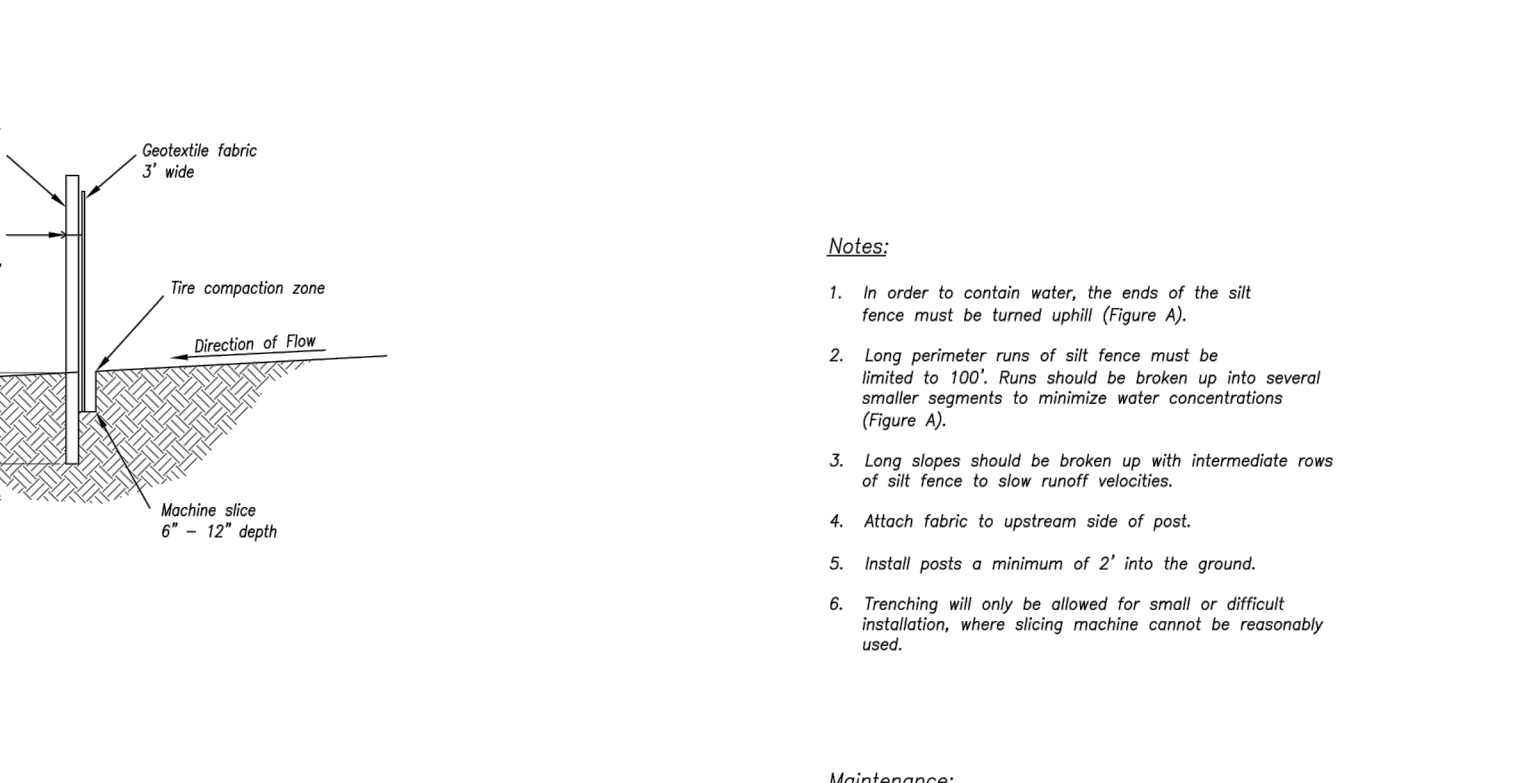
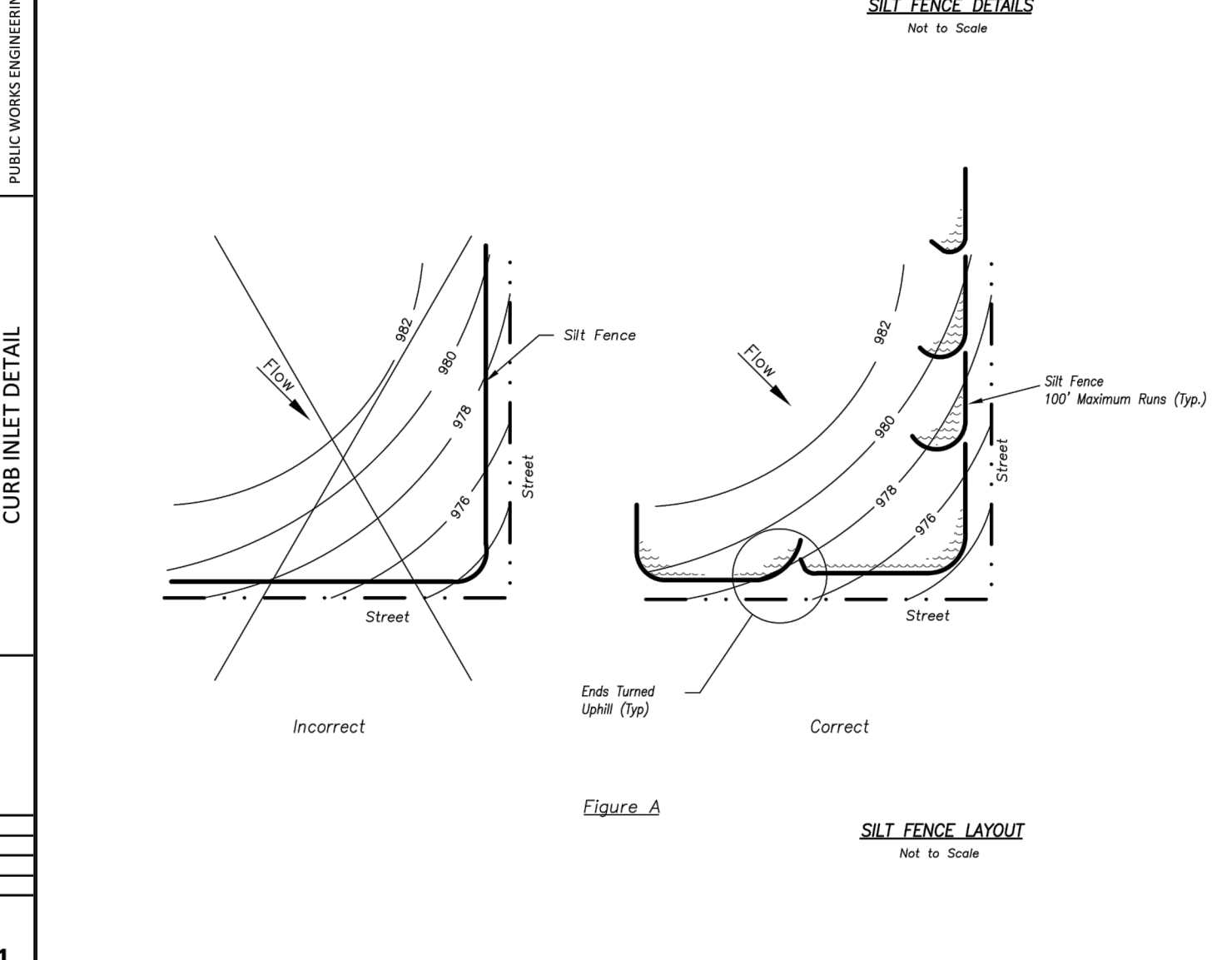
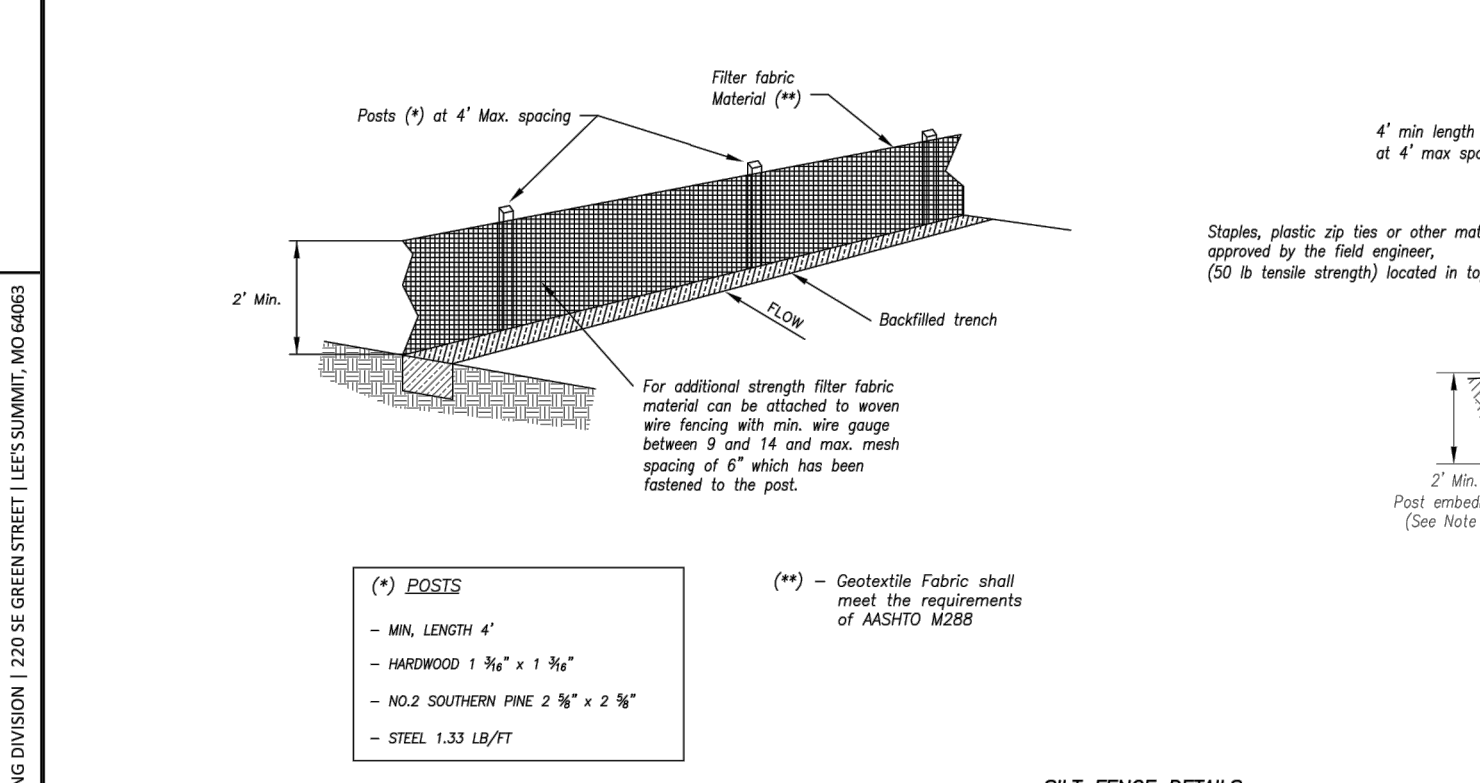
**LEE'S SUMMIT MISSOURI**  
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

**SERVICE CONNECTION/METER WELL**

Date: 02/13  
Drawn By: JN  
Checked By: DL  
FILE: WAT-11  
Rev: 1/14



- GENERAL NOTES:
- THE FIRST DIMENSION LISTED IN THE CONSTRUCTION NOTES IS THE "L" DIMENSION.
  - THE SECOND DIMENSION IS THE "W" DIMENSION.
  - FLOW LINES LISTED ON THE PROJECT PLANS ARE LISTED AT THE INSIDE FACE OF THE WALL.
  - FLOOR OF INLET GROUDED AND SHAPED TO MATCH PIPE INVERT TO PROVIDE SMOOTH FLOW.
  - LOCATE MH RING AND COVER ON BLANK WALL IF POSSIBLE.
  - STEPS SHALL BE SPACED AT 1'-4" O.C. VERTICALLY ON BLANK WALL IF POSSIBLE.
  - BEVEL ALL EXPOSED EDGES WITH 3/8" CHAMFER OR 1/2" TOOLED EDGE.
  - ON-GRADE INLETS SHALL CONFORM TO THE STREET GRADE AND SUMP INLETS SHALL BE LEVEL.
  - PRECAST LIDS SHALL BE PINNED, SEALED WITH NON-SHRINKABLE GROUT AND REMOVABLE FOR FUTURE MAINTENANCE.
  - LIFTING RINGS SHALL BE REMOVED AND SEALED WITH NON-SHRINKABLE GROUT FOR RING AND COVER SEE THE STORMWATER APPROVED PRODUCT LIST.
  - FOR RING AND COVER SEE THE STORMWATER APPROVED PRODUCT LIST.



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

**STANDARD DETAILS**  
CITY OF LEE'S SUMMIT, MO  
LEE'S SUMMIT, JACKSON COUNTY, MO

**CURB INLET DETAIL**

Date: 04/17  
Drawn By: MIF  
Checked By: DL  
STM-1

**AMERICAN PUBLIC WORKS ASSOCIATION**

**KANSAS CITY METRO CHAPTER**

**SILT FENCE**

STANDARD DRAWING NUMBER ESC-03 ADOPTED: 10/24/2016

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

**Consult Inc engineers planners**

**8**

**ATTIC STORAGE OF LEE'S SUMMIT**  
LEE'S SUMMIT - JACKSON COUNTY - MISSOURI

**SITE DETAIL SHEET**

**11 OF 12**

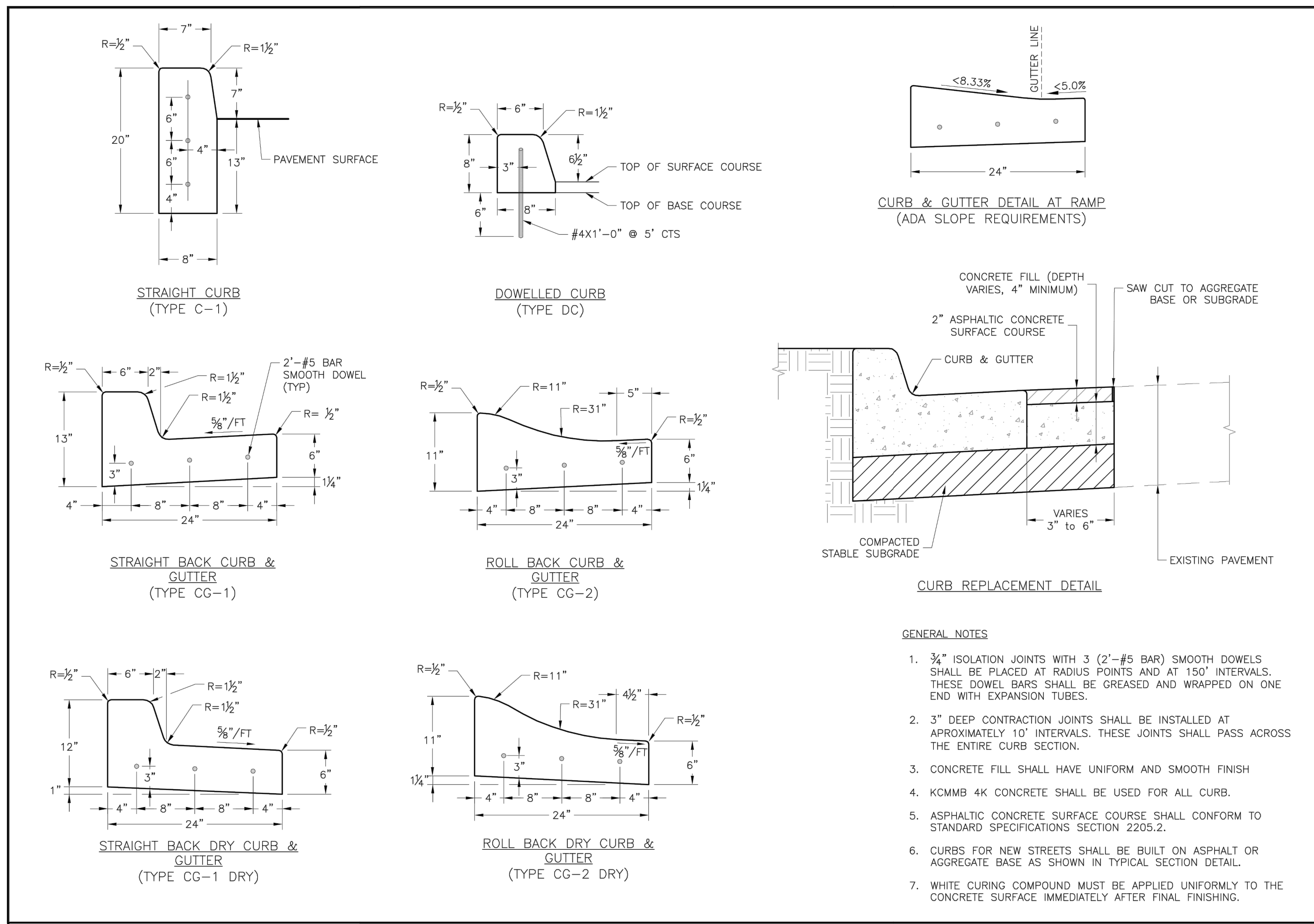
NO. BY: CK/APP  
REVISION  
DATE

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R. KEVIN STERRETT, NO. E-26440  
CORPORATE LICENSE NO. E2010005873

K-APP NO. 18-1119  
DRAWING NO. 18022  
DATE: JUNE 1, 2018  
JOB NO. 18022





- GENERAL NOTES**
- 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.
  - 3" DEEP CONTRACTION JOINTS SHALL BE INSTALLED AT APPROXIMATELY 10' INTERVALS. THESE JOINTS SHALL PASS ACROSS THE ENTIRE CURB SECTION.
  - CONCRETE FILL SHALL HAVE UNIFORM AND SMOOTH FINISH
  - KCMBB 4K CONCRETE SHALL BE USED FOR ALL CURB.
  - ASPHALTIC CONCRETE SURFACE COURSE SHALL CONFORM TO STANDARD SPECIFICATIONS SECTION 2205.2.
  - CURBS FOR NEW STREETS SHALL BE BUILT ON ASPHALT OR AGGREGATE BASE AS SHOWN IN TYPICAL SECTION DETAIL.
  - WHITE CURING COMPOUND MUST BE APPLIED UNIFORMLY TO THE CONCRETE SURFACE IMMEDIATELY AFTER FINAL FINISHING.

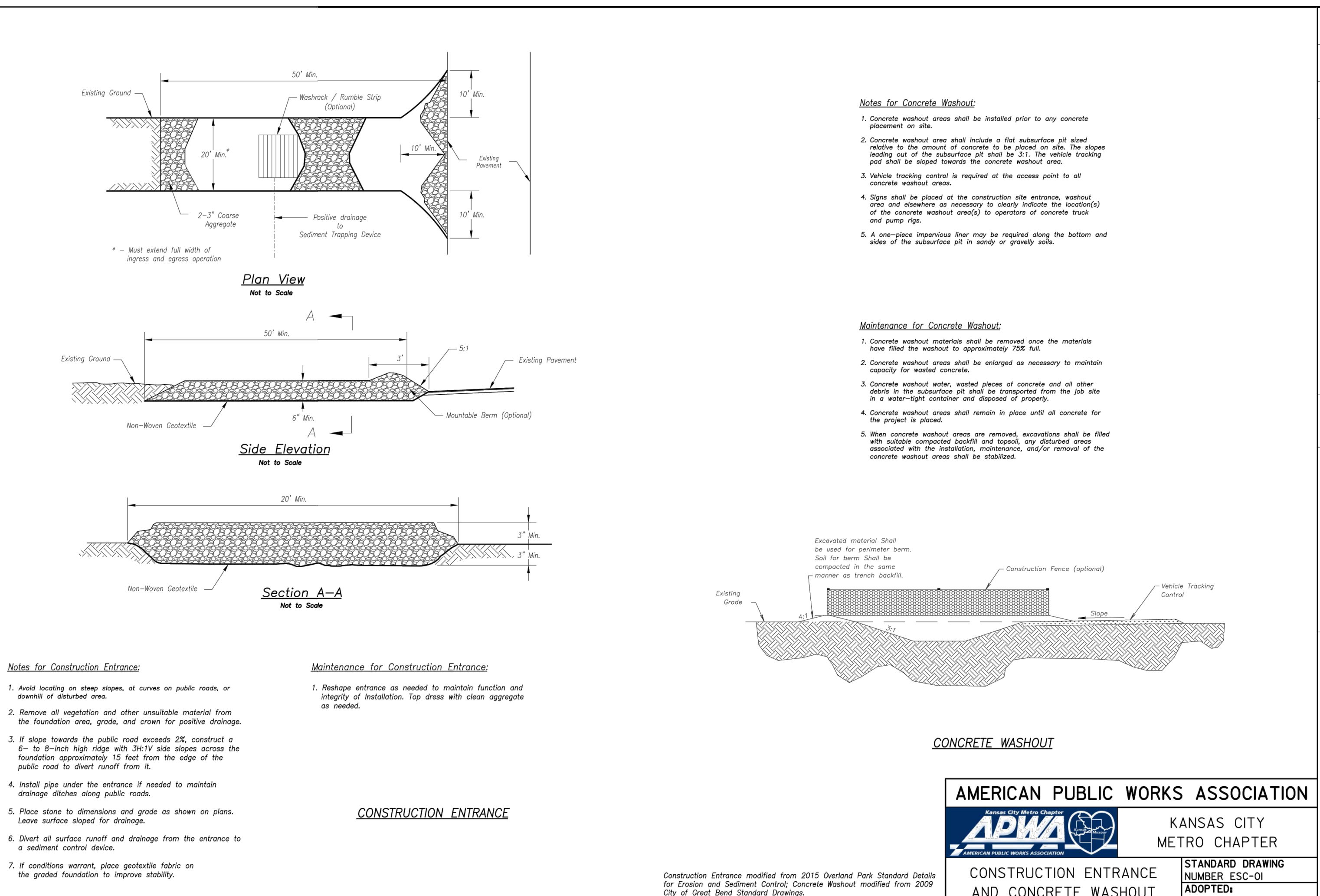
**LEE'S SUMMIT MISSOURI**

PUBLIC WORKS ENGINEERING DIVISION 12038 GREEN STREET, LEE'S SUMMIT, MO 64083

STANDARD DETAILS  
CITY OF LEE'S SUMMIT, MO  
LEE'S SUMMIT, JACKSON COUNTY, MO

Drawn By: MEF  
Checked By: JG  
Date: 04/12  
Proj. #:

**GEN-4**

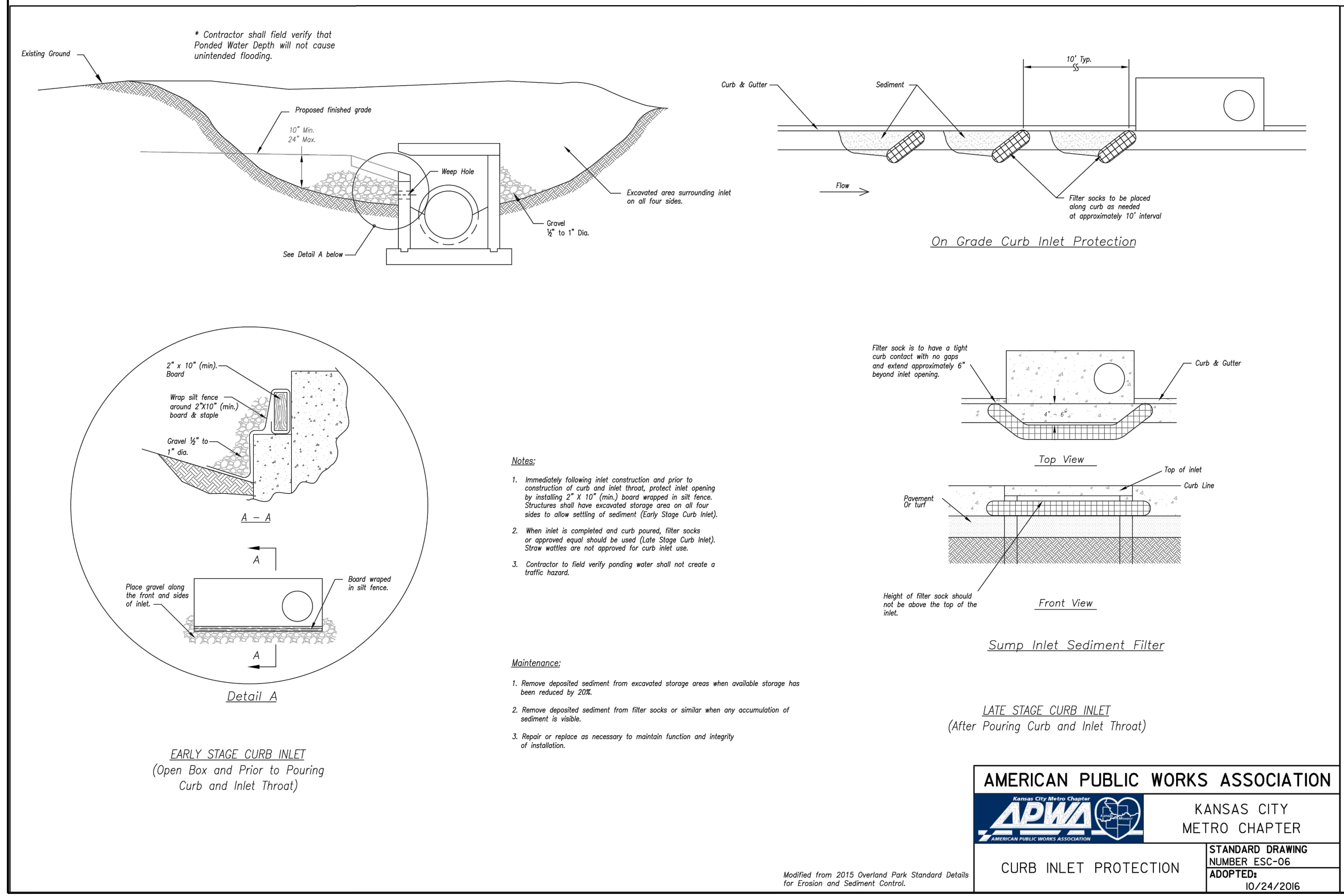


**AMERICAN PUBLIC WORKS ASSOCIATION**

KANSAS CITY METRO CHAPTER

STANDARD DRAWING NUMBER ESC-01 ADOPTED: 10/24/2016

CONSTRUCTION ENTRANCE AND CONCRETE WASHOUT

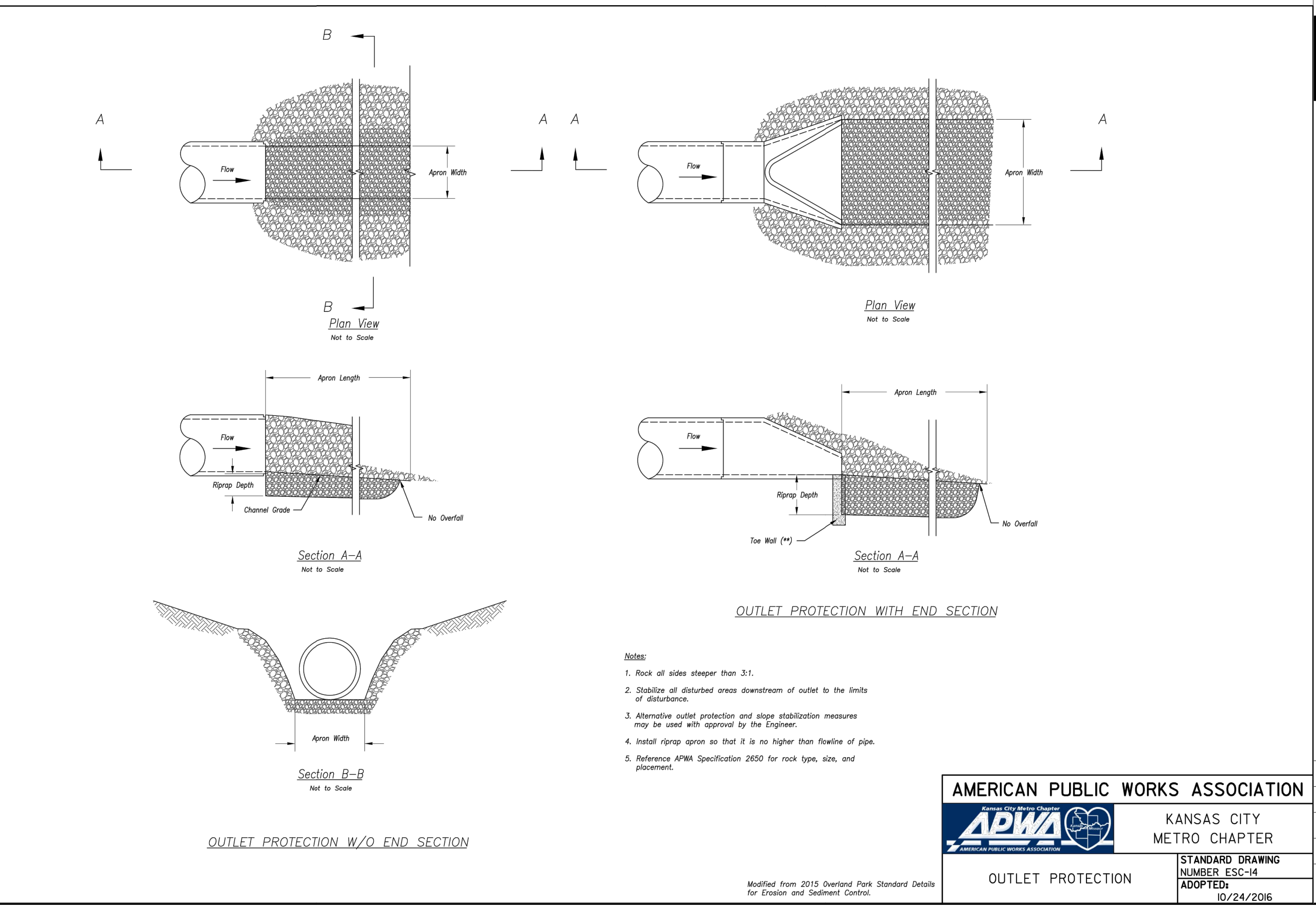


**AMERICAN PUBLIC WORKS ASSOCIATION**

KANSAS CITY METRO CHAPTER

STANDARD DRAWING NUMBER ESC-06 ADOPTED: 10/24/2016

CURB INLET PROTECTION



**AMERICAN PUBLIC WORKS ASSOCIATION**

KANSAS CITY METRO CHAPTER

STANDARD DRAWING NUMBER ESC-14 ADOPTED: 10/24/2016

OUTLET PROTECTION



Luminaire Schedule							
Symbol	Qty	Label	Arrangement	LLF	Description	Lum. Watts	Arr. Watts
⊕	2	P1	SINGLE	0.910	EXISTING FIXTURE	400	400
⊕	6	WP1	SINGLE	0.910	XTOR6B-Y	58	58

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Site Plan_1	Illuminance	Fc	1.45	17.8	0.0	N.A.	N.A.

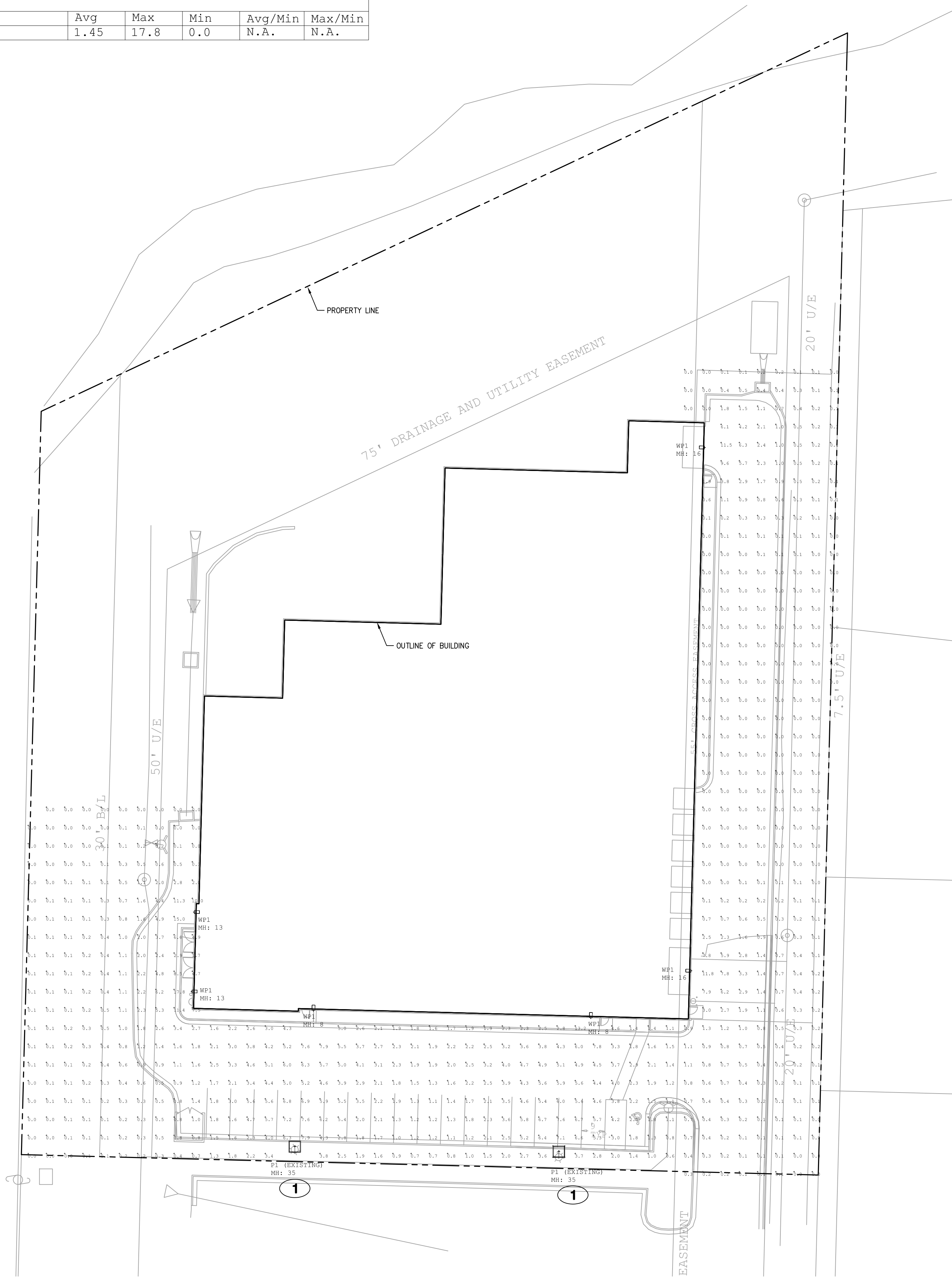
LPD Area Summary			
Label	Area	Total Watts	LPD
Site Plan	110740	1148	0.010



EXISTING FIXTURE



XTOR



**SITE LIGHTING PLAN**

SCALE : 1" = 25'-0"

1

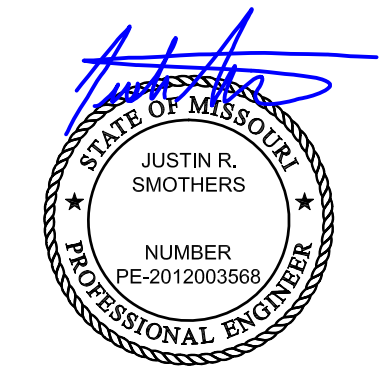


**ELECTRICAL SPECIFICATIONS**

1. ALL CONDUCTORS SHALL BE THHN COPPER ABOVE GRADE, XHHW-2 BELOW GRADE, MINIMUM #12 OR LARGER AS REQUIRED OR SHOWN.
2. ALL SERVICE WIRING, EXPOSED TO WEATHER, OR WIRING BELOW GRADE, SHALL BE IN RIGID GALVANIZED CONDUIT OR SCH. 40 PVC.
3. THE ENTIRE SYSTEM SHALL BE ELECTRICALLY CONTINUOUS AND PROPERLY GROUNDED. EVERY FEEDER AND BRANCH CONDUIT SHALL HAVE CODE SIZED GREEN INSULATED GROUND CONDUCTOR.
4. FURNISH AND INSTALL ALL LIGHTING FIXTURES, LAMPS, FUSES, BREAKERS, ETC. TO COMPLETE THE BRANCH CIRCUITS INDICATED.
5. ALL 120V, 20A LIGHTING AND RECEPTACLE CIRCUITS REQUIRING MORE THAN 100' OF CONDUCTORS (ONE WAY) SHALL BE #10 CONDUCTORS, MINIMUM.

**# KEYED PLAN NOTES**

1. PER LEE'S SUMMIT U007 DESIGN STANDARDS SECTION 7.250, EXISTING FIXTURE IS ALLOWED TO REMAIN.



ENGINEER:



MO COA NO. 201200781 / KS COA NO. E2818  
 1901 NW BLUE PARKWAY, UNITY VILLAGE, MO 64085  
 3rd FLOOR UNITY VILLAGE TOWER  
 Phone: (816) 276-5289  
 email: jsmothers@jscengr.com

Site Lighting for:  
**ATTIC STORAGE OF LEE'S SUMMIT**  
 920 NE DEERBROOK ST.  
 LEE'S SUMMIT, MISSOURI

DATE ISSUED:  
1.15.19

REVISIONS:

PROJECT NUMBER  
JSC 19-014

SITE  
PHOTOMETRIC

**ES1**

SHEET NUMBER