

**CONSTRUCTION PLANS
FOR
PRIVATE ROAD, WATER, GAS AND ELECTRIC
IMPROVEMENTS
STREETS OF WEST PRYOR
LEE'S SUMMIT, MISSOURI**

^Δ JULY 2019

ELECTRIC- SERVICE
KCP&L
NATHAN MICHAEL
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KC-Google-UC@google.com
rebeccadavis@google.com



CALL BEFORE YOU
DIG - DRILL - BLAST
1-800-344-7483
(TOLL FREE)

MISSOURI ONE CALL SYSTEM, INC.

UTILITY STATEMENT:

THE UNDERGROUND UTILITIES SHOWN HEREON ARE FROM FIELD SURVEY INFORMATION OF ONE-CALL LOCATED UTILITIES, FIELD SURVEY INFORMATION OF ABOVE GROUND OBSERVABLE EVIDENCE, AND/OR THE SCALING AND PLOTTING OF EXISTING UTILITY MAPS AND DRAWINGS AVAILABLE TO THE SURVEYOR AT THE TIME OF SURVEY. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. FURTHERMORE, THE SURVEYOR DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES BY EXCAVATION UNLESS OTHERWISE NOTED ON THIS SURVEY.

CAUTION - NOTICE TO CONTRACTOR

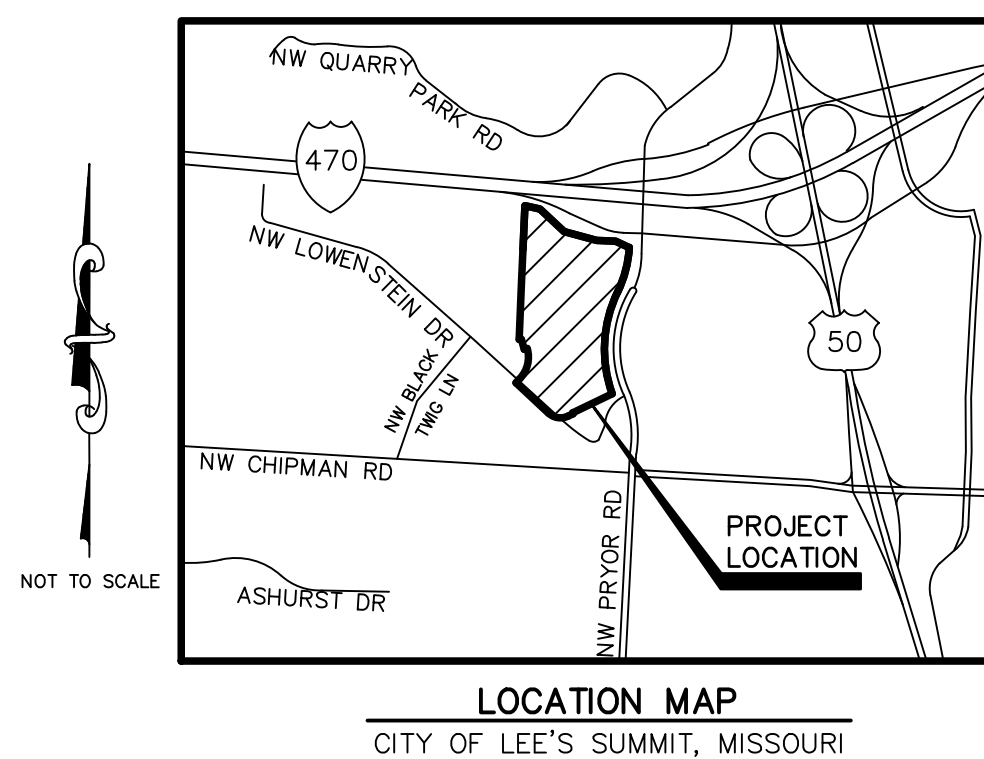
THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH PROPOSED IMPROVEMENTS SHOWN ON THE PLANS. THE CONTRACTOR SHALL EXPOSE EXISTING UTILITIES AT LOCATIONS OF POSSIBLE CONFLICTS PRIOR TO ANY CONSTRUCTION.

SAFETY NOTICE TO CONTRACTOR

IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR WILL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.

WARRANTY / DISCLAIMER

THE DESIGNS REPRESENTED IN THESE PLANS ARE IN ACCORDANCE WITH ESTABLISHED PRACTICES OF CIVIL ENGINEERING FOR THE DESIGN FUNCTIONS AND USES INTENDED BY THE OWNER AT THIS TIME. HOWEVER, NEITHER KAW VALLEY ENGINEERING, INC NOR ITS PERSONNEL CAN OR DO WARRANTY THESE DESIGNS OR PLANS AS CONSTRUCTED, EXCEPT IN THE SPECIFIC CASES WHERE KAW VALLEY ENGINEERING PERSONNEL INSPECT AND CONTROL THE PHYSICAL CONSTRUCTION ON A CONTEMPORARY BASIS AT THE SITE.



	POSTED SPEED	DESIGN SPEED
PRIVATE ROAD "A", "B" & "C"	25	25

APPROVED THIS _____ DAY OF _____, _____

OWNER: MATT PENNINGTON

APPROVED THIS _____ DAY OF _____, _____

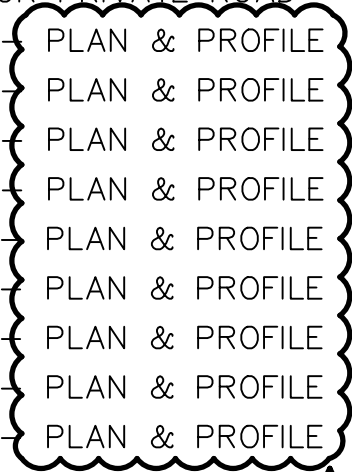
CITY APPROVAL

OWNER:
STREETS OF WEST PRYOR, LLC
7200 WEST 132ND STREET
OVERLAND PARK, KS 66213
CONTACT: MATT PENNINGTON
email: matt@drakekc.com

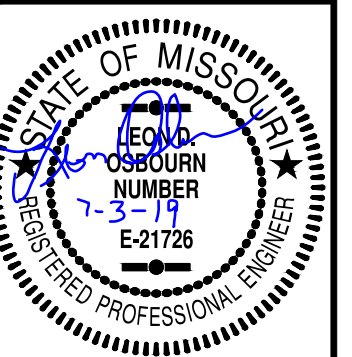
DEVELOPER:
STREETS OF WEST PRYOR, LLC
7200 WEST 132ND STREET
OVERLAND PARK, KS 66213
AGENT: DAVID N. OLSON
email: daveolson@monarchprojectllc.com

PREPARED BY:
KAW VALLEY ENGINEERING, INC
2319 N. JACKSON
JUNCTION CITY, KS 66441
785-762-5040
CONTACT: LEON D OSBOURN
EMAIL: ldo@kvenq.com

INDEX TO SHEETS

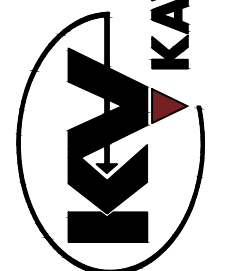
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C-2	GENERAL NOTES		
C-3	GENERAL LAYOUT SHEET		
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C-5	TYPICAL SECTIONS FOR PRIVATE ROAD - B & C		
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SL-2	LIGHTING FIXTURE SCHEDULE & FIXTURE CUT SHEETS
LANDSCAPING	
L 1.00	SIGNAGE LANDSCAPE PLAN



LEON D. OSBOURN
ENGINEER
MO # 021726

2319 N. JACKSON | P.O. BOX 1304
JUNCTION CITY, KANSAS 66441
PH. (785) 762-5040 | FAX (785) 762-7744
joe@kveg.com | www.kveg.com



KAW VALLEY ENGINEERING, INC., IS AUTHORIZED TO OFFER ENGINEERING SERVICES BY MISSOURI STATE CERTIFICATE OF AUTHORITY # 000842.
EXPIRES 12/31/19

WEST PRYOR
RD & NW LOWENSTEIN DR
SSOURI

PRIVATE ROAD PLANS TITLE SHEET

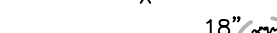
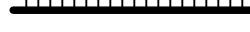
PROJ. NO.		A14_7067-1	
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CFN			
7067-1IR_TS			
SHEET		REV	
C-1		1	

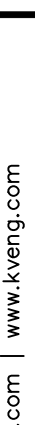
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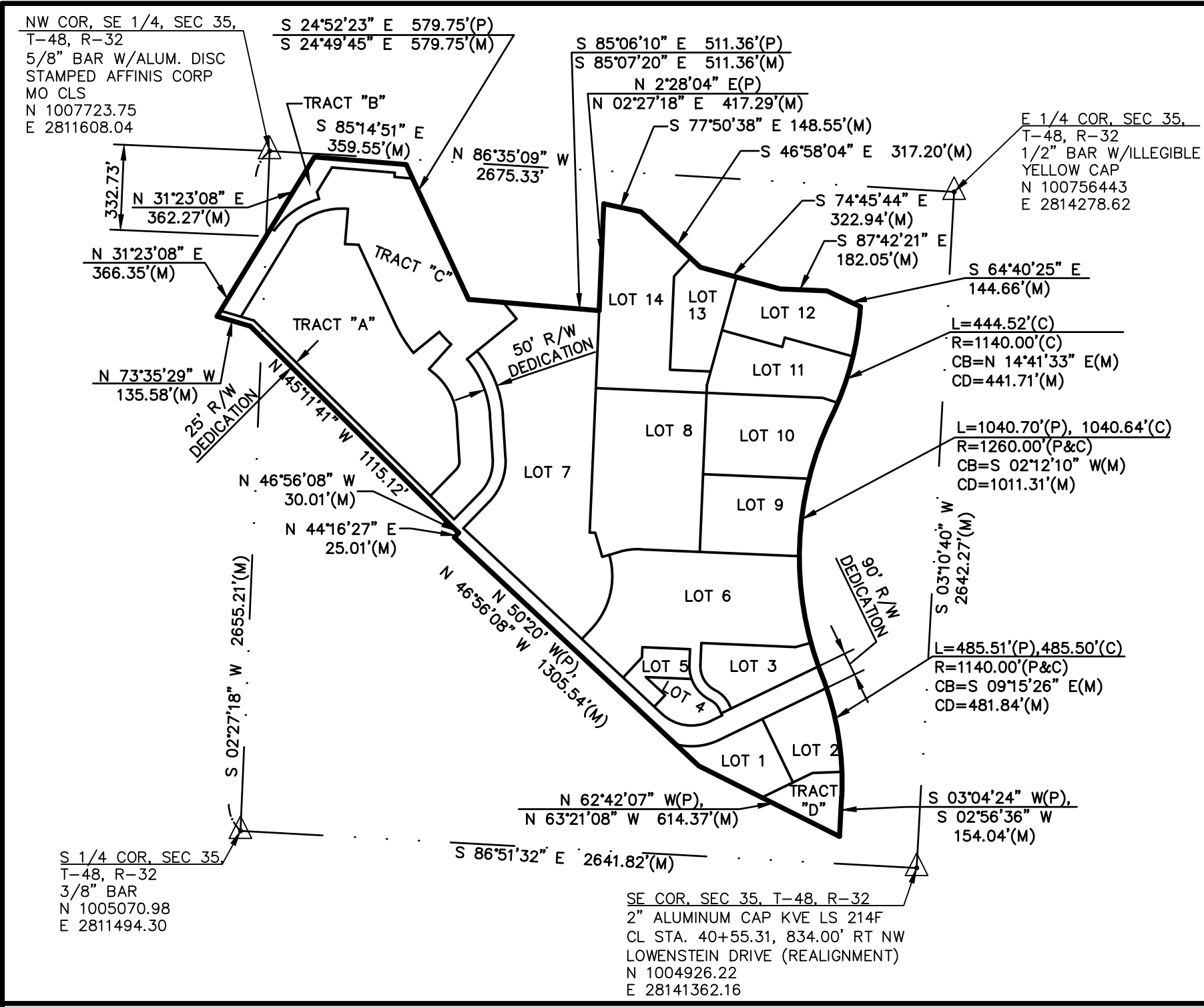
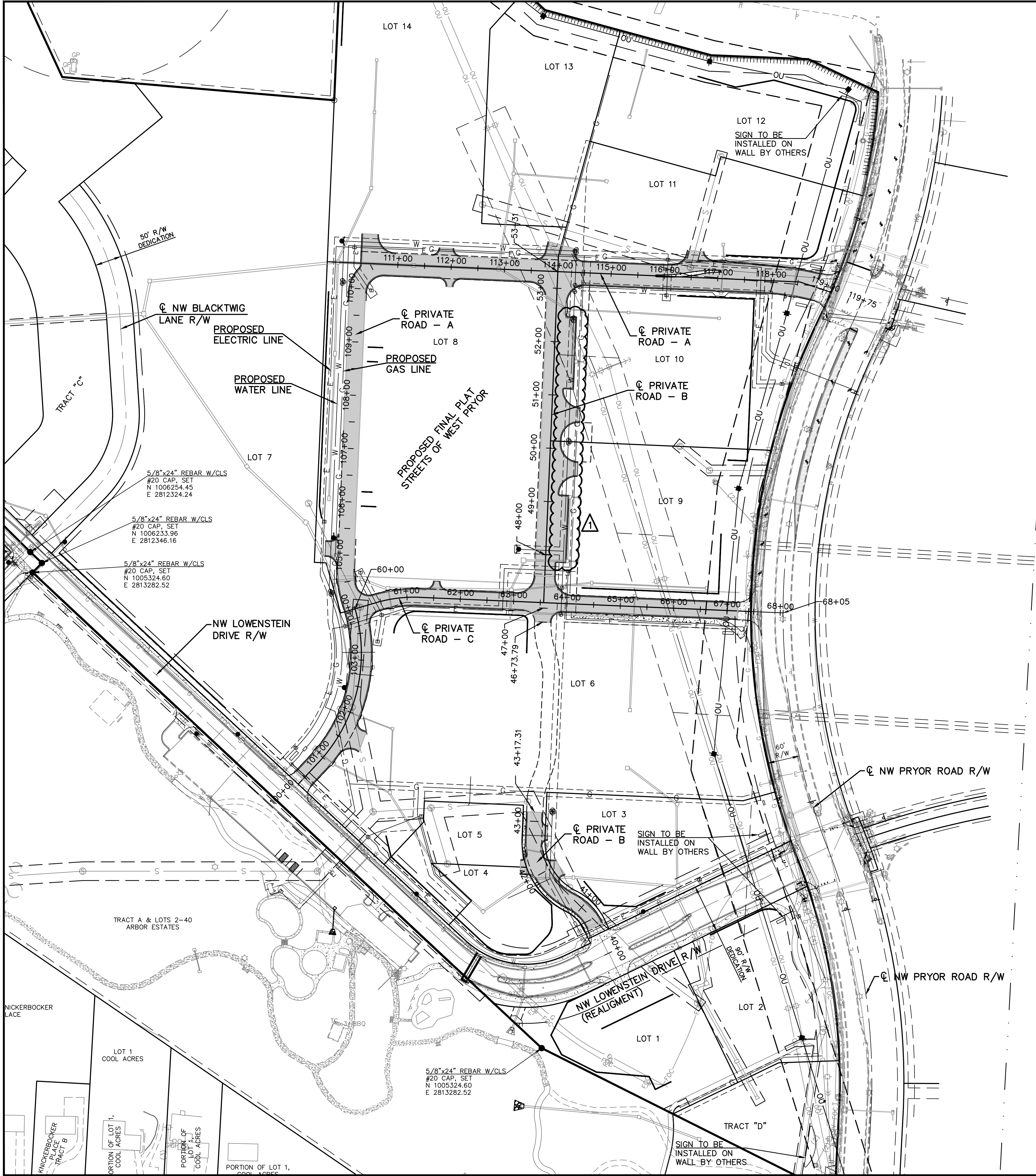
CONSTRUCTION NOTES:

3. EXCESS EXCAVATION SHALL BE DEPOSITED IN AREAS AS DIRECTED BY THE OWNER.
2. THE CONTRACTOR SHALL TAKE CARE NOT TO DAMAGE EXISTING SURFACING ON STREETS NEEDED TO BE TRAVELED UPON BY EQUIPMENT DURING CONSTRUCTION, AND IF DAMAGED, HE SHALL REPLACE THE SURFACING AND REPAIR THE STREET TO THE ORIGINAL CONDITION. NO TYPE OF EARTH MOVING EQUIPMENT WILL BE PERMITTED TO HAUL ON OR OVER ANY EXISTING STREET.
3. THE CONTRACTOR SHALL TAKE CARE IN PROTECTING EXISTING TREES AND SHRUBS OUTSIDE OF THE PROPOSED CONSTRUCTION. CARE SHALL BE TAKEN NOT TO DISTURB LAWNS OR EXISTING STRUCTURES OUTSIDE OF THE CONSTRUCTION LIMITS.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTROL OF DUST AND DIRT RISING AND SCATTERING IN THE AIR DURING CONSTRUCTION AND SHALL PROVIDE WATER SPRINKLING OR OTHER SUITABLE METHODS OF CONTROL. THE CONTRACTOR SHALL COMPLY WITH ALL GOVERNING REGULATIONS PERTAINING TO ENVIRONMENTAL PROTECTION.
5. CONTRACTOR SHALL SEED ALL DISTURBED AREAS IN ACCORDANCE TO REQUIREMENTS OF TECHNICAL SPECIFICATIONS. BUILDING LOTS WILL NOT REQUIRE SEEDING BUT ALL SLOPES AND BACKFILL BEHIND CURBS SHALL BE SEEDDED WITH RIGHT-OF-WAY LIMITS, AND ON SLOPES OF EMBANKMENTS. AREAS SHALL BE SEEDDED WITHIN 28 DAYS OF FINISH GRADING OR AS DIRECTED BY OWNER.
6. JOINT SPACING FOR CONCRETE PAVEMENT SHALL BE MODIFIED TO MEET THE CONTRACTOR'S CONSTRUCTION EQUIPMENT AND METHODS OF POURING. CONTRACTOR TO DRILL AND INSERT EPOXY-COATED DOWEL BARS INTO CONSTRUCTION JOINTS AND HEADERS. CONTRACTOR TO SAW-CUT CLEAN VERTICAL EDGE AT JOINT LOCATION. SAWED CONSTRUCTION JOINTS SHALL BE REQUIRED ON MAXIMUM 12'-0" CENTERS.
7. CONTRACTOR SHALL SUBMIT A JOINTING PLAN AND RECEIVE APPROVAL FROM THE ENGINEER AND CITY PRIOR TO CONCRETE PAVING OPERATIONS.
8. ALL SANITARY SEWER, WATER MAINS AND STORM SEWER UNDER PAVEMENTS SHALL BE BACKFILLED WITH MODOT TYPE 5 AGGREGATE IN TRENCHES GREATER THAN 24" AND FLOWABLE IN TRENCHES LESS THAN 24".
9. CONTRACTOR SHALL INSTALL SILT FENCE TO PREVENT SEDIMENT FROM LEAVING CONSTRUCTION LIMITS. SILT FENCE IS REQUIRED AT BOTTOM OF SLOPE ON ALL EMBANKMENTS AND AT DISCHARGE POINTS OF STREETS, STORM SEWER INLETS AND PIPE END SECTIONS.
10. PIPE LENGTHS ARE CENTER TO CENTER OF STRUCTURE OR TO END OF END SECTIONS.
11. THE CONSTRUCTION AREA SHALL BE CLEARED, CRUBBED, AND STRIPPED OF TOPSOIL AND ORGANIC MATTER FROM ALL AREAS TO BE OCCUPIED BY PAVING. TOPSOIL FOR REPLACEMENT ON SLOPES MAY BE STOCKPILED ON-SITE. EXCESS TOPSOIL MAY BE WASTED IN FILL SLOPES PROVIDED THAT NO TOPSOIL WILL BE WASTED WITHIN 10 FEET OF THE EDGE OF THE BUILDING OR PARKING AREA. BURNING OF TIMBER WILL NOT BE PERMITTED UNLESS APPROVAL IS OBTAINED FROM GOVERNING OFFICIALS. STRIPPING EXISTING TOPSOIL AND ORGANIC MATTER SHALL BE TO A MINIMUM DEPTH OF 6 INCHES.
12. CONTRACTOR SHALL COMPLETE ROUGH SITE AND STREET GRADING PRIOR TO INSTALLATION OF UTILITIES.
13. EROSION CONTROL SEDIMENT FENCE SHALL BE INSTALLED 1'-0" BEHIND CURB & GUTTER UPON COMPLETION OF BACKFILL OF CURB IN ALL AREAS WHERE SLOPES FROM LOT DRAIN TOWARDS CURB. UPON COMPLETION OF FINAL GRADING THE TOES OF ALL EMBANKMENTS IN EXCESS OF TWO FEET IN HEIGHT SHALL HAVE EROSION CONTROL SEDIMENT FENCE INSTALLED.
14. CUT AND FILL SECTIONS ARE TYPICAL ONLY. NEITHER ALTERNATE PAVEMENT TYPE IS SPECIFIED FOR EXCLUSIVE USE WITH CUT OR FILL SECTIONS. REFER TO SPECIFICATIONS FOR INFORMATION ON FLY ASH TREATED SUBGRADE, CRUSHED AGGREGATE BASE COURSE, AND PAVEMENT UNDERDRAINS.
15. WHERE CURB AND GUTTER IS MONOLITHIC WITH THE STREET, THE CURVE SHALL BE POURED AT THE SAME DEPTH AS THE STREET.
16. UNLESS SPECIFIED OTHERWISE, KCMMB 4K IS REQUIRED FOR ALL CONCRETE.
20. THE STANDARD SPECIFICATIONS AND DESIGN CRITERIA OF THE CITY OF LEE'S SUMMIT AND SHALL GOVERN THE CONSTRUCTION OF ALL PUBLIC IMPROVEMENTS FOR THIS PROJECT.

LEGEND

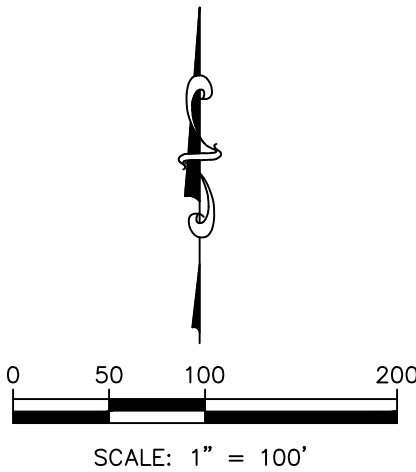
	SECTION CORNER, ORIGIN UNKNOWN UNLESS OTHERWISE NOTED		STORM SEWER MANHOLE
	MONUMENT FOUND, ORIGIN UNCERTAIN UNLESS OTHERWISE NOTED		TELEPHONE SIGN
(D)	DESCRIBED		TELEPHONE MANHOLE
(M)	MEASURED		TELEPHONE PEDESTAL
(C)	CALCULATED		UNDERGROUND TELEPHONE LINE
(P)	PLATTED		SPLICE BOX
	STREET SIGN		FIBER OPTIC CABLE SIGN
	UTILITY POLE		UNDERGROUND FIBER OPTIC CABLE
	UTILITY POLE W/ LIGHT		TRAFFIC CONTROL POLE
	UTILITY POLE W/TRANSFORMER		PULL BOX
	LIGHT POLE		FLAG POLE
	DEADMAN ANCHOR		MAILBOX
	OVERHEAD UTILITY -- # LINES		HANDICAP SIGN
	AIR CONDITIONING UNIT		HANDICAP PAINTED SYMBOL
	ELECTRIC PEDESTAL		LEFT TURN ARROW
	ELECTRIC METER		STRAIGHT ARROW
	UNDERGROUND ELECTRIC LINE		RIGHT TURN ARROW
	UTILITY MANHOLE		GATE POST
	CABLE TV SIGN		FENCE POST
	CABLE TV PEDESTAL		WOOD FENCE
	GAS SIGN		CHAIN LINK FENCE
	GAS METER		BARBED WIRE FENCE
	UNDERGROUND GAS LINE		DECIDUOUS TREE W/SIZE & DRIP LINE
	GAS CATHODIC PROTECTION STATION		EVERGREEN TREE W/SIZE & DRIP LINE
	WATER LINE		SAPLING TREE
	WATER LINE GATE VALVE		SHRUB
	WATER SPIGOT		STUMP
	WATER METER		TREE LINE
	WELL		SHRUB LINE
	FIRE HYDRANT		PARKING STALL COUNT
	SANITARY SEWER MANHOLE		1' CONTOUR INTERVAL
	SANITARY SEWER LINE		RESTRICTED ACCESS
			BACK OF CURB TO BACK OF CURB
			EDGE TO EDGE

STREETS OF WEST PRYOR NWQ NW PRYOR RD & NW LOWENSTEIN DR LEE'S SUMMIT, MISSOURI		 KAW VALLEY ENGINEERING KAW VALLEY ENGINEERING, INC. IS AUTHORIZED TO OFFER ENGINEERING SERVICES BY MISSOURI STATE CERTIFICATE OF AUTHORITY # 000842. EXPIRES 12/31/19				LEON D. OSBOURN ENGINEER MO # 021726								
PROJ. NO. A14-7067-1		DESIGNER LDO		DRAWN BY JT										
CFN 7067-1IR_GEN		SHEET C-2		REV 1				1 07-02-19 REVISED PER CITY COMMENTS 0 5-16-19 INITIAL ISSUE		LDO BKR LDO		LDO LDO LDO		
								REV DATE DESCRIPTION		DSN DWN CHK				



BOUNDARY INFORMATION & SURVEY CONTROL
SCALE: 1"=500'
(SEE FINAL PLAT OF STREETS OF WEST PRYOR LOTS 1 THRU 14, TRACTS "A", "B", "C", AND "D" FOR ADDITIONAL INFORMATION)

- PROPOSED LEGEND**
- S — SANITARY SEWER MAIN
 - G — UNDERGROUND GAS LINE
 - W — WATER MAIN
 - ⊙ — WATER VALVE
 - ⚡ — FIRE HYDRANT
 - OU — UNDERGROUND ELECTRIC LINE
 - E — OVERHEAD POWER (BY OTHERS)
 - — TRANSFORMER
 - — SECTIONALIZER
 - — RISER
 - — NEW POWER POLE



PUBLIC STREET, STORM & SANITARY SEWER ARE BY SEPARATE PLANS

REV	DATE	DESCRIPTION	DSN	DWN	CHK
1	07-02-19	REVISED PER CITY COMMENTS	LDO	JD	LDO
0	5-16-19	INITIAL ISSUE	LDO	BKR	LDO

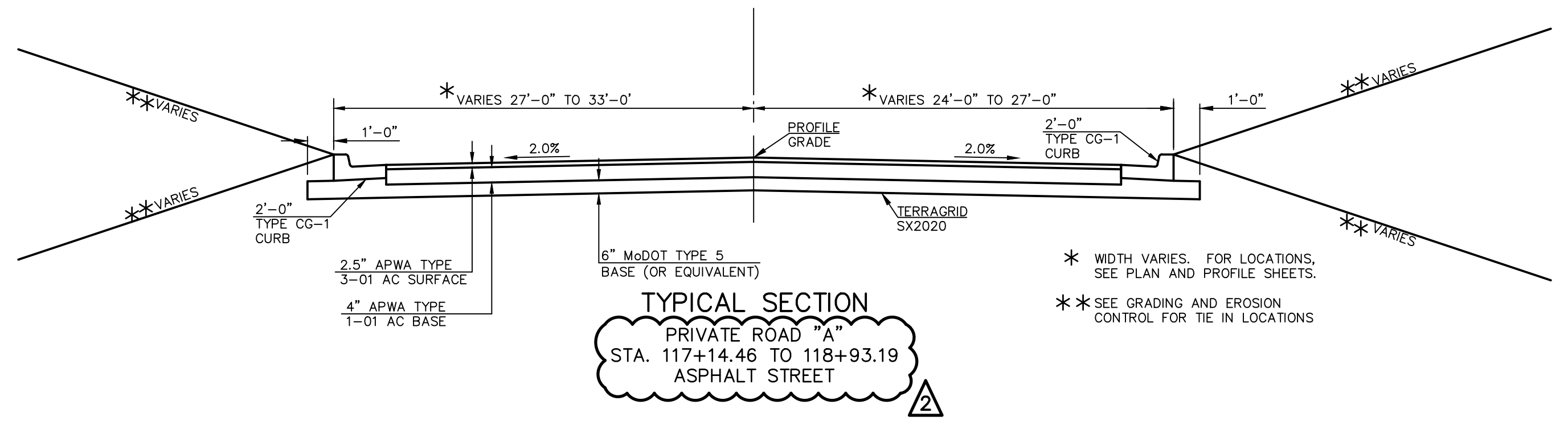
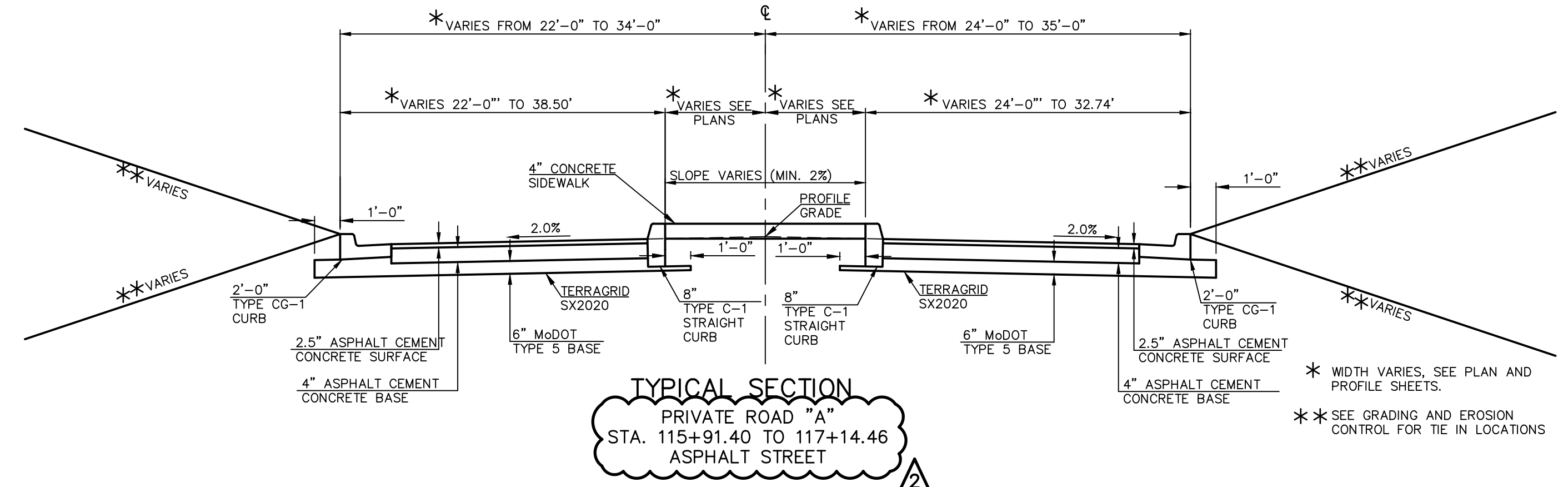
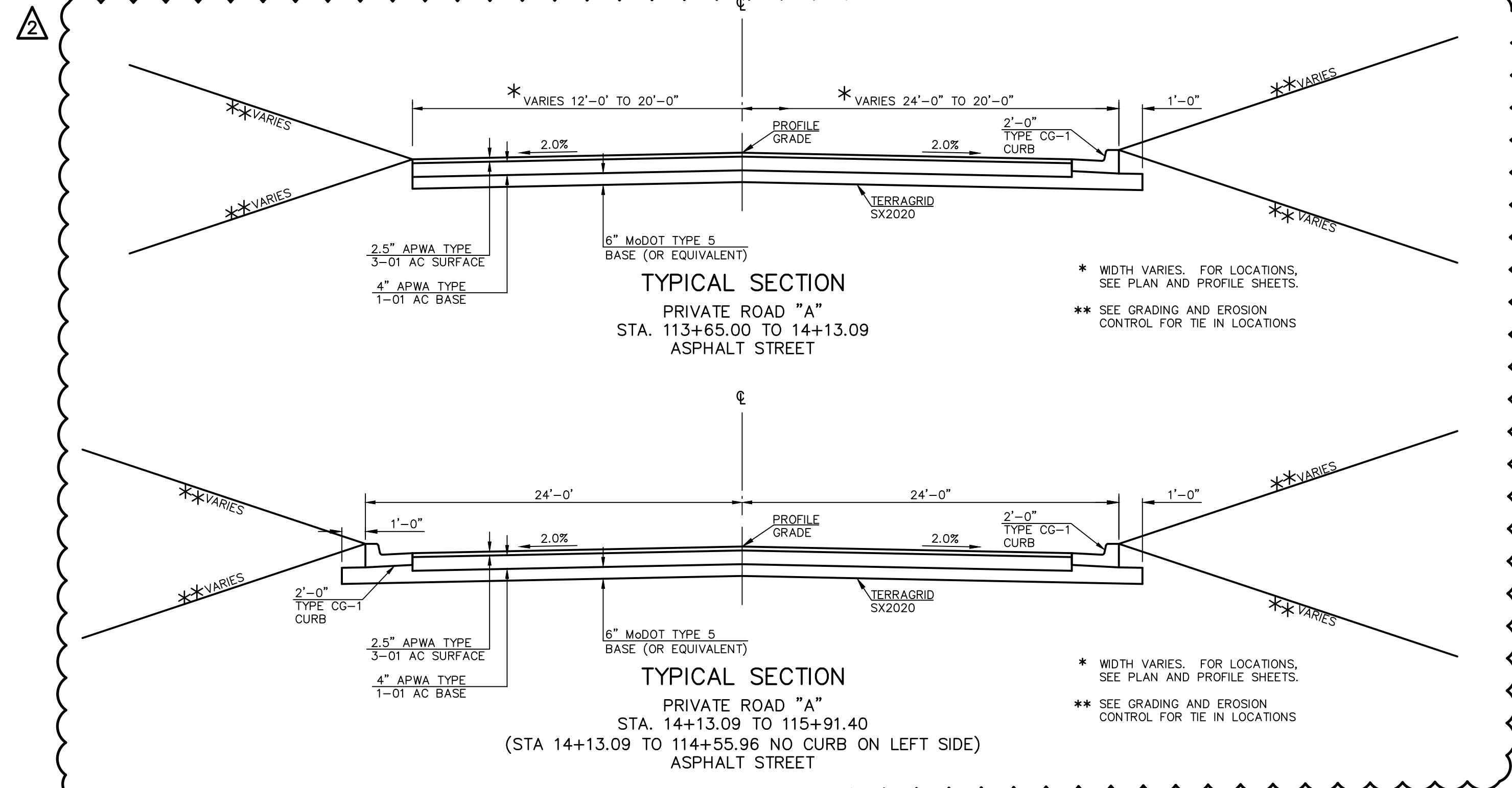
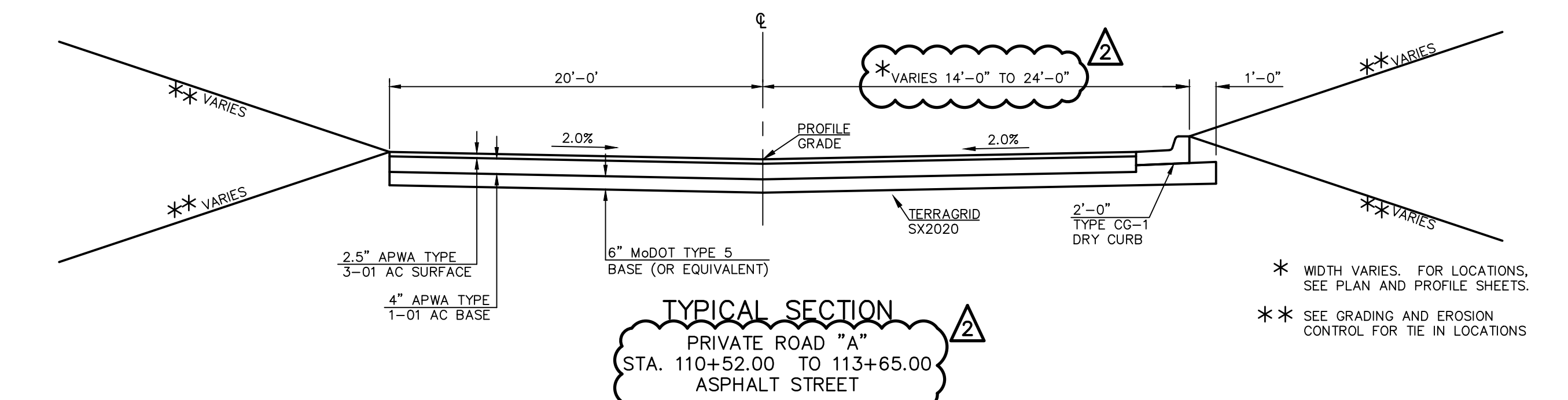
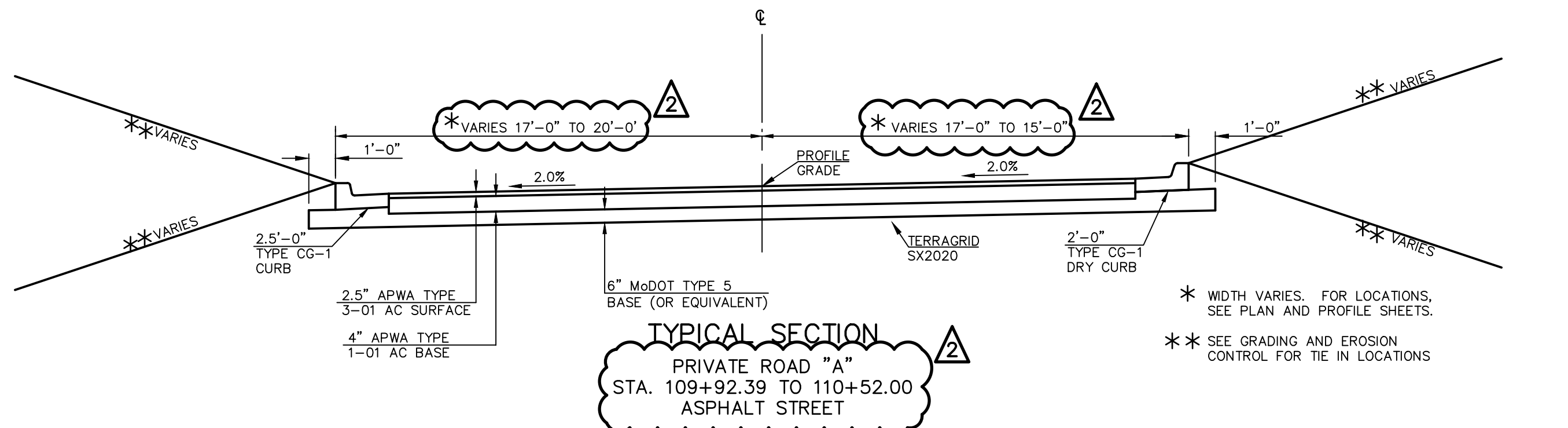
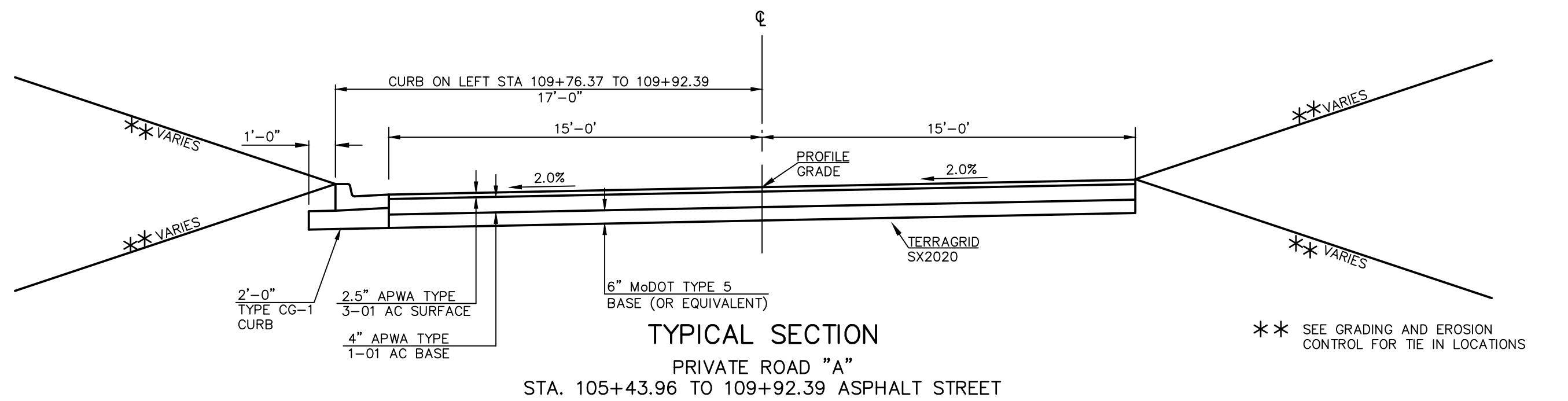
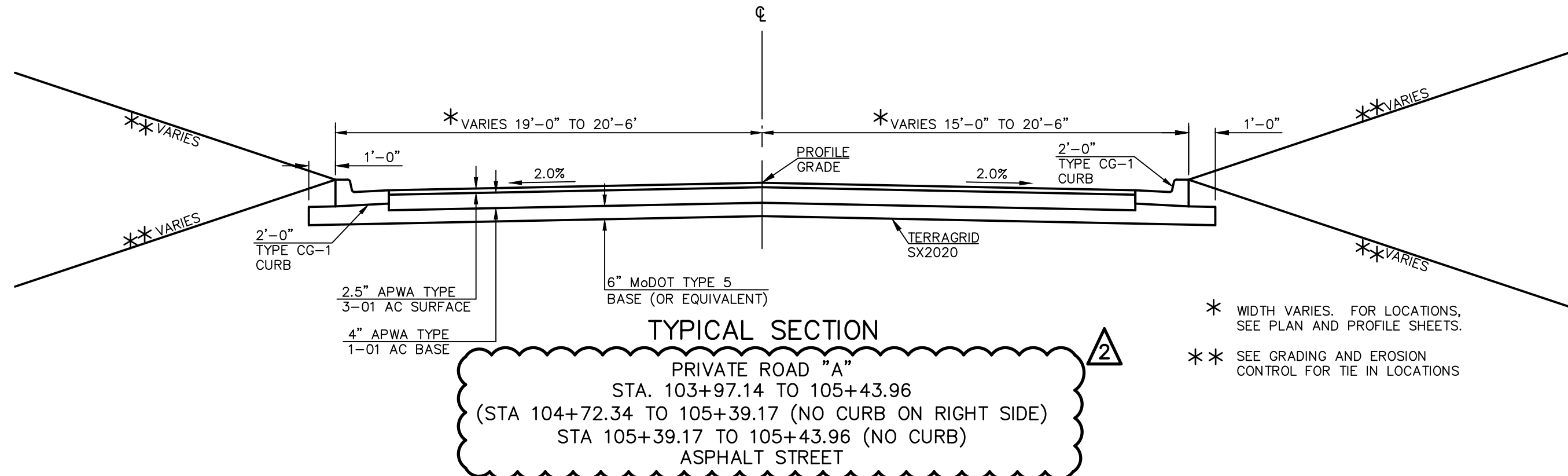
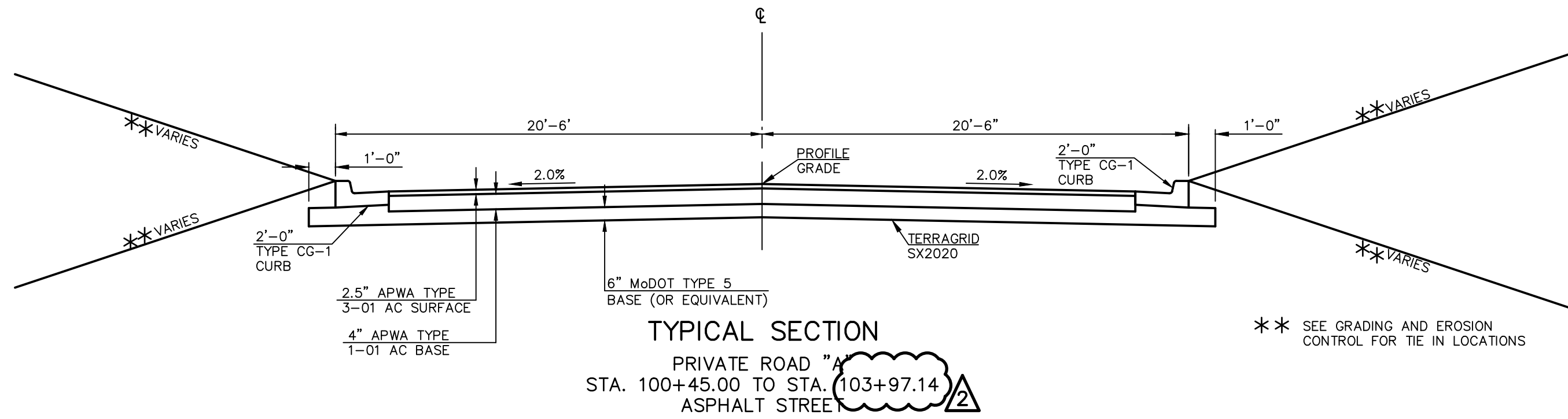
LEON D. OSBOURN
ENGINEER
MO # 021726

KAW VALLEY ENGINEERING
KAW VALLEY ENGINEERING, INC. IS AUTHORIZED TO OFFER ENGINEERING SERVICES IN THE STATE OF MISSOURI.
EXPIRES 12/31/19

STREETS OF WEST PRYOR
NW/4 NW PRYOR RD & NW LOWENSTEIN DR
LEE'S SUMMIT, MISSOURI

PRIVATE ROAD PLANS
GENERAL LAYOUT SHEET

PROJ. NO.	A14-7067-1
DESIGNER	LDO
DRAWN BY	JD
CFN	
SHEET	7067-11R_GLS
REV	
C-3	1



REV	DATE	DESCRIPTION	CHK
2	8-20-19	REVISED PER CLIENT COMMENTS	LDO
1	07-02-19	REVISED PER CITY COMMENTS	LDO
0	5-16-19	INITIAL ISSUE	LDO
			DSN
			DWN
			CHK

STATE OF MISSOURI

LEON D. OSBOURN

ENGINEER

MO # 021726

2319 N. JACKSON, P.O. BOX 304

JUNCTION CITY, KANSAS 66441

PH. (785) 762-5040 | FAX (785) 762-7744

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KAW VALLEY ENGINEERING

KAW VALLEY ENGINEERING, INC. IS AUTHORIZED TO OFFER ENGINEERING

MISSOURI STATE CERTIFICATE OF AUTHORITY # 000842

EXPIRES 12/31/19

STREETS OF WEST PRYOR

NWQ NW PRYOR RD & NW LOWENSTEIN DR

LEE'S SUMMIT, MISSOURI

PRIVATE ROAD PLANS

TYPICAL SECTIONS FOR PRIVATE ROAD - A

PROJ. NO. A14-7067-1

DESIGNER LDO

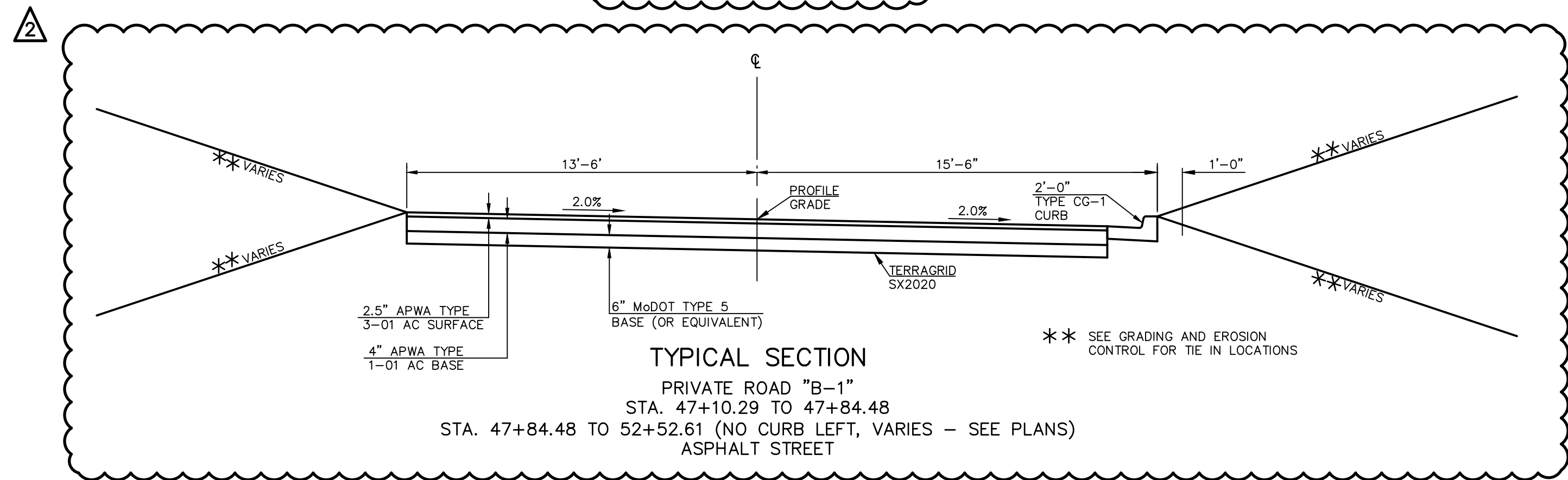
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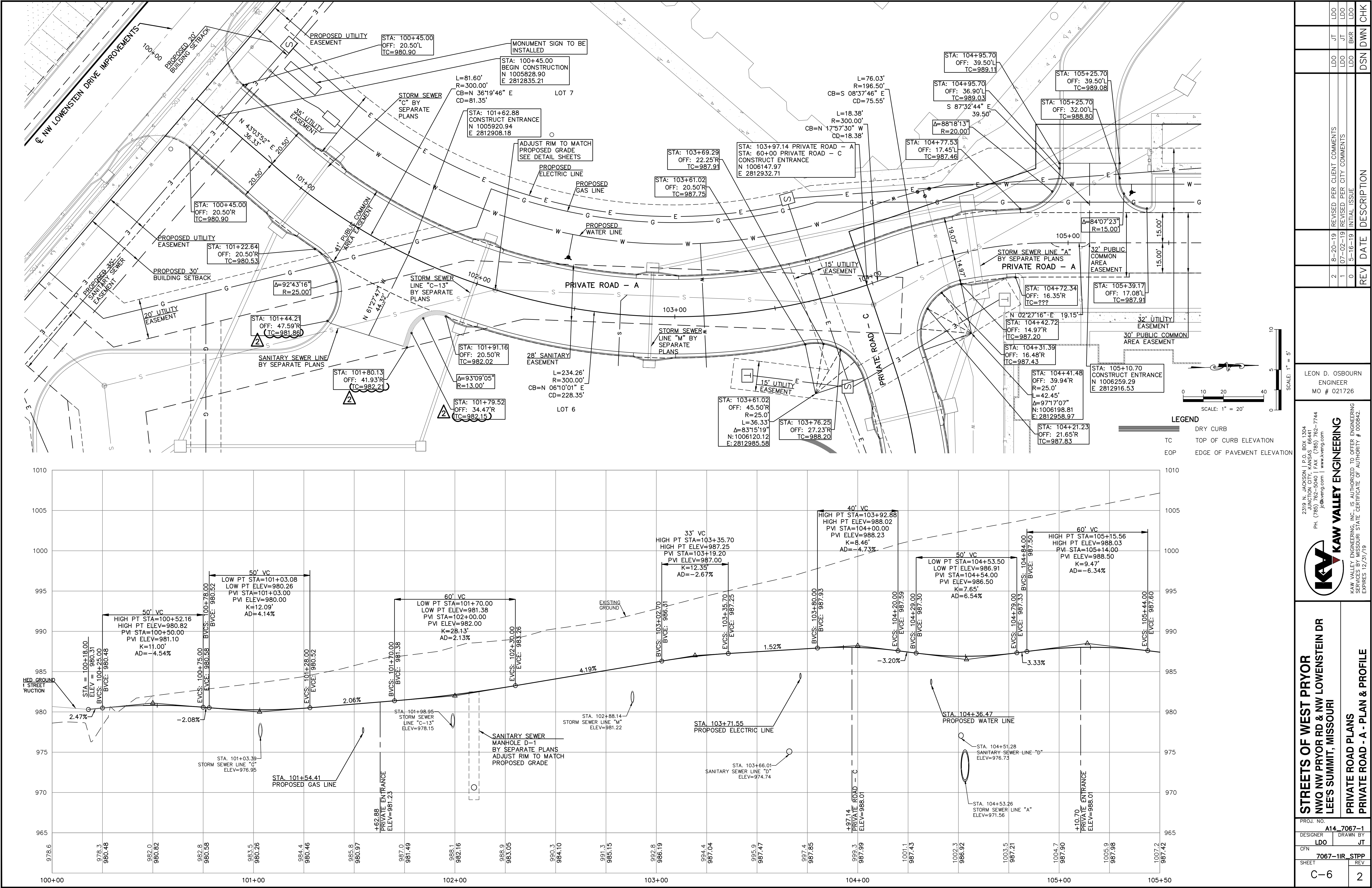
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SHEET C-4

REV 2



STREETS OF WEST PRYOR NWQ NW PRYOR RD & NW LOWENSTEIN DR LEE'S SUMMIT, MISSOURI		PROJ. NO. A14_7067-1	
PRIVATE ROAD PLANS TYPICAL SECTIONS FOR PRIVATE ROAD - B & C		DESIGNER LDO	
CFN 7067-1IR_TYP		DRAWN BY JT	
SHEET C-5		REV 2	



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REV	DATE	DESCRIPTION	CHK
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1	07-02-19	REVISED PER CITY COMMENTS	LDO
0	5-16-19	INITIAL ISSUE	LDO

PROJ. NO.	DESIGNER	DRAWN BY	SHEET
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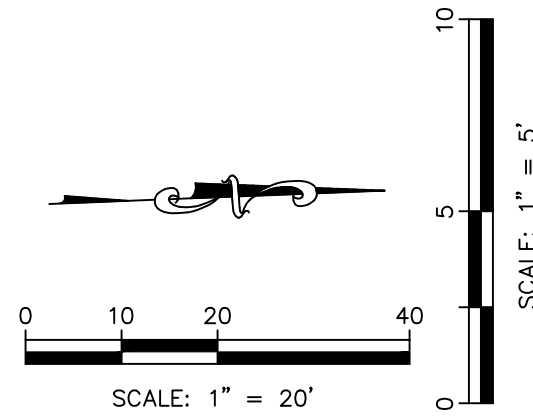
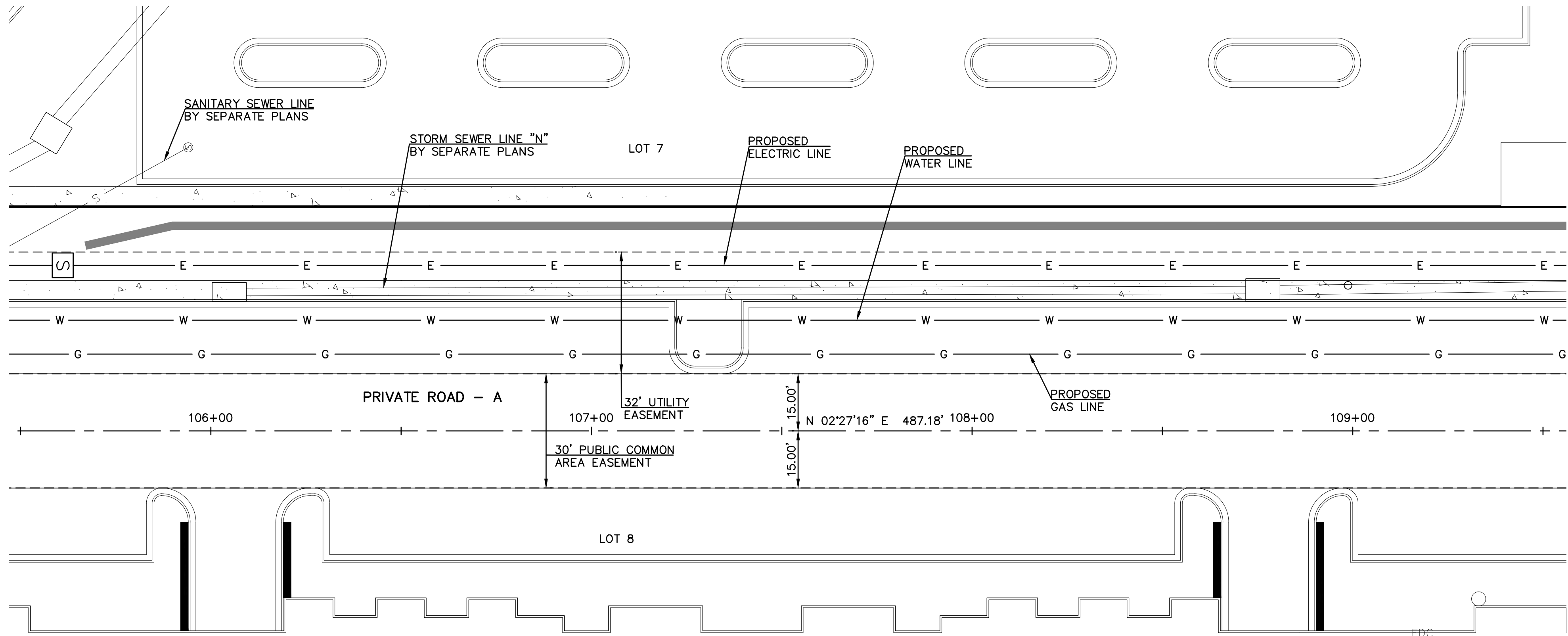
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STREETS OF WEST PRYOR NWQ NW PRYOR RD & NW LOWENSTEIN DR LEE'S SUMMIT, MISSOURI	PRIVATE ROAD PLANS PRIVATE ROAD - A - PLAN & PROFILE

LEON D. OSBOURN
ENGINEER
MO # 021726

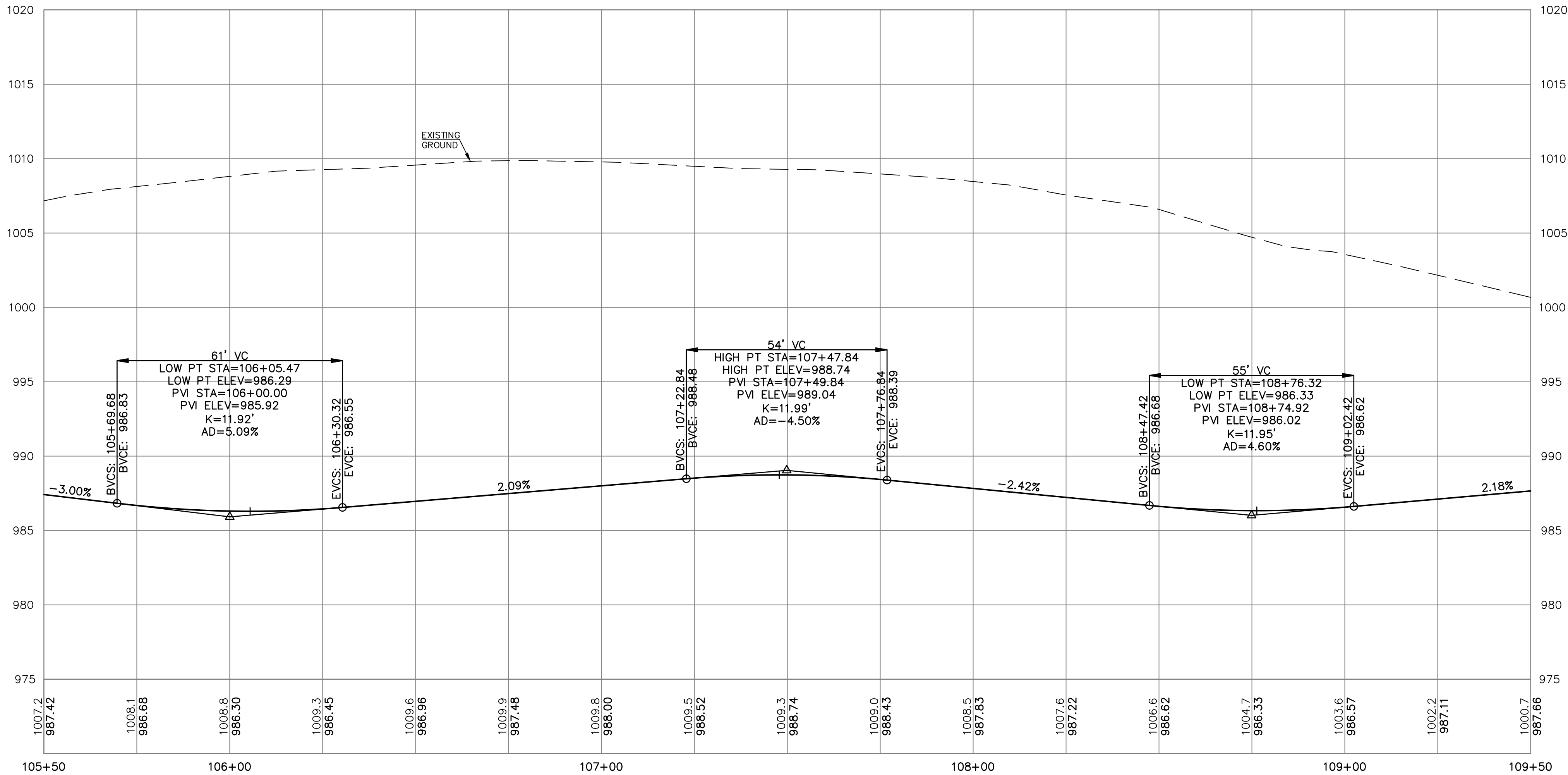
2319 N. JACKSON | P.O. BOX 1304
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joe@kaveng.com | www.kaveng.com

KAW VALLEY ENGINEERING

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- LEGEND**
- DRY CURB
 - TC TOP OF CURB ELEVATION
 - EOP EDGE OF PAVEMENT ELEVATION



PROJ. NO. A14-7067-1	
DESIGNER LDO	DRAWN BY 1
CFN	
SHEET 7067-11R-STPP	
C-7	0

REV	DATE	DESCRIPTION
0	5-16-19	INITIAL ISSUE

LDO	DSN	BKR	DWN	CHK
-----	-----	-----	-----	-----

STATE OF MISSOURI
LEON D. OSBOURN
REGISTERED PROFESSIONAL ENGINEER
NUMBER 7-3-19
E-21726

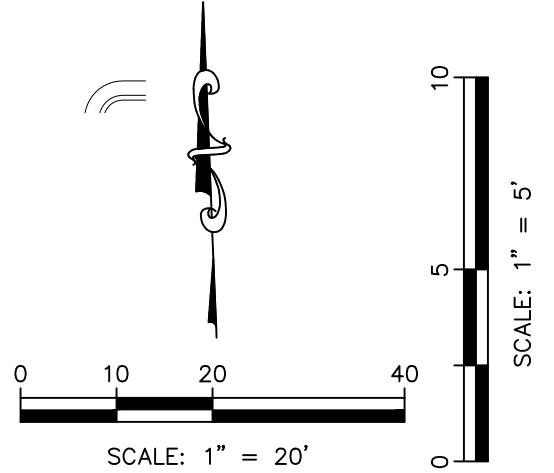
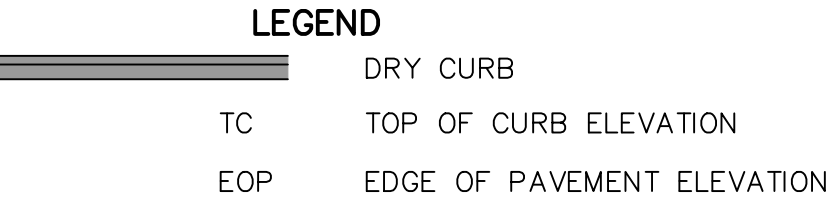
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PH. (785) 762-5040 | FAX (785) 762-7744
joe@kveeng.com | www.kveeng.com

KAW VALLEY ENGINEERING
KAW VALLEY ENGINEERING, INC. IS AUTHORIZED TO OFFER ENGINEERING SERVICES IN MISSOURI STATE CERTIFICATE OF AUTHORITY # 000842.
EXPIRES 12/31/19

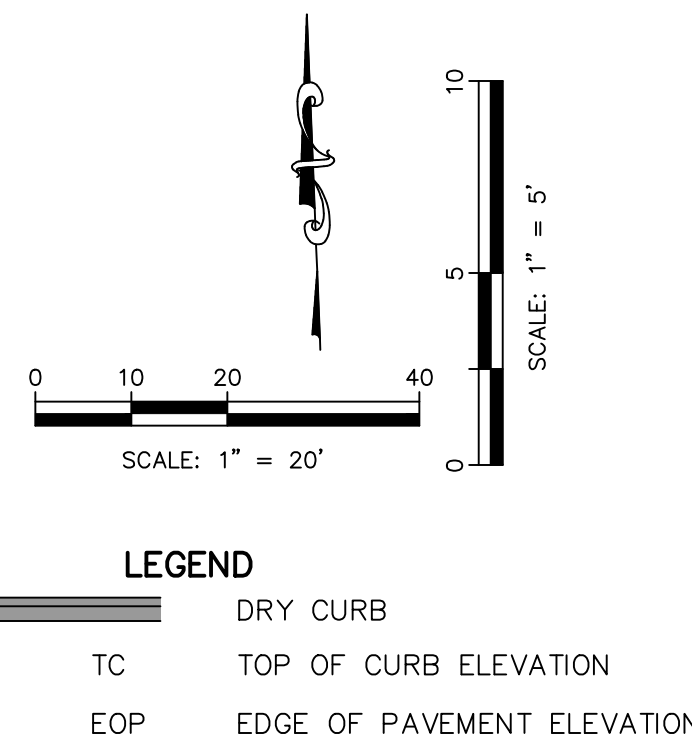
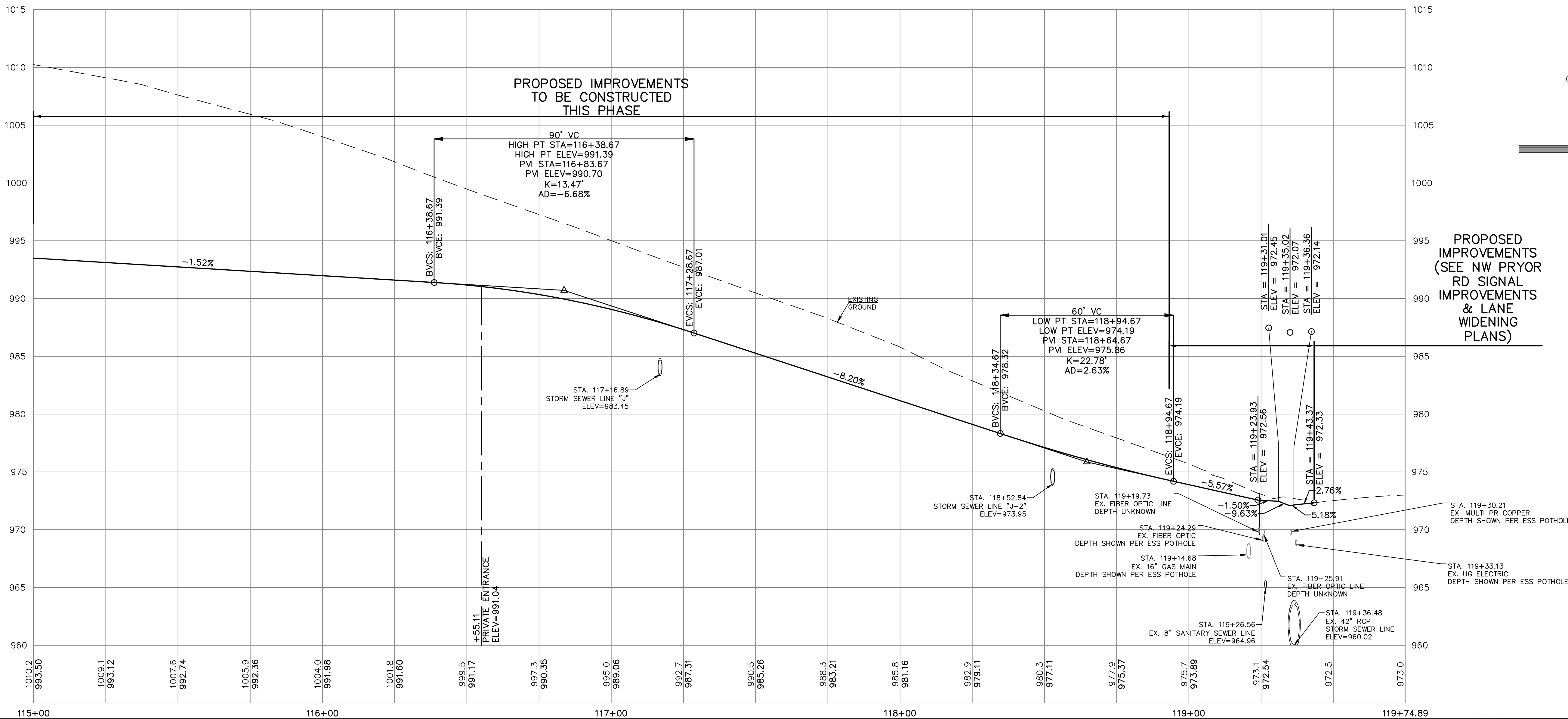
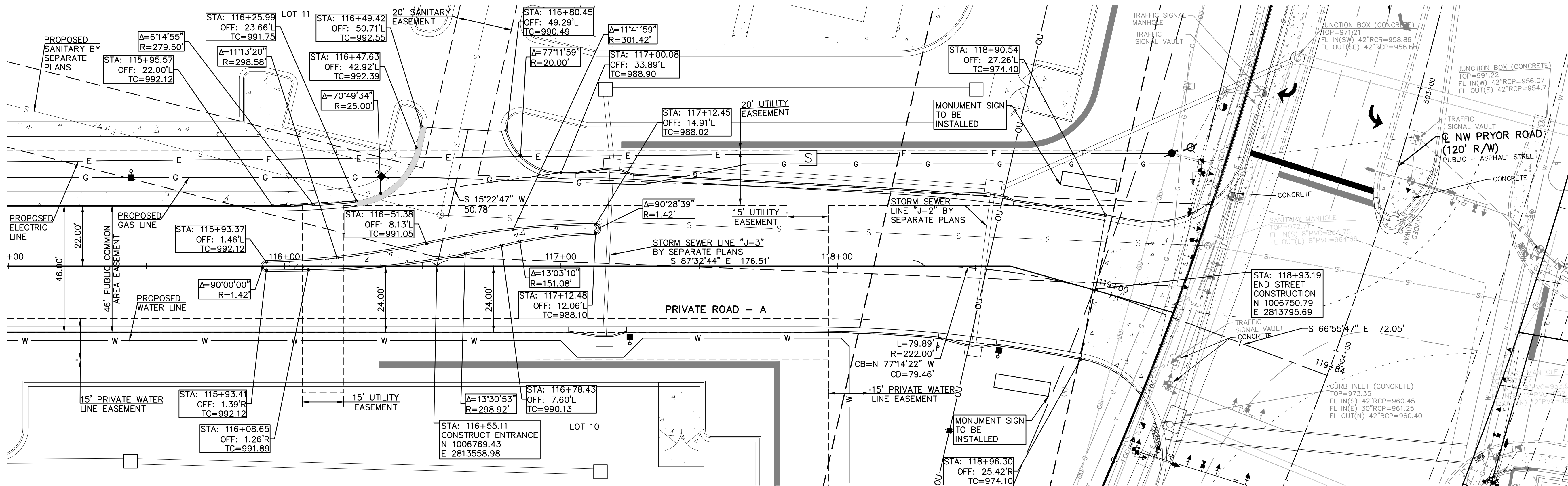
STREETS OF WEST PRYOR
NWQ NW PRYOR RD & NW LOWENSTEIN DR
LEE'S SUMMIT, MISSOURI

PRIVATE ROAD PLANS
PRIVATE ROAD - A - PLAN & PROFILE



STREETS OF WEST PRYOR											
NWQ NW PRYOR RD & NW LOWENSTEIN DR											
LEE'S SUMMIT, MISSOURI											
PRIVATE ROAD PLANS											
PRIVATE ROAD - A - PLAN & PROFILE											
PROJ. NO.						A14-7067-1					
DESIGNER						DRAWN BY					
LDO						JT					
CFN						7067-1IR_STPP					
SHEET						REV					
C-8						3					

THIS DRAWING SHALL NOT BE UTILIZED BY ANY PERSON, FIRM, OR CORPORATION IN WHOLE OR IN PART WITHOUT THE SPECIFIC PERMISSION OF KAW VALLEY ENGINEERING, INC.



REV	DATE	DESCRIPTION
2	8-20-19	REVISED PER CLIENT COMMENTS
1	07-02-19	REVISED PER CITY COMMENTS
0	5-16-19	INITIAL ISSUE

CHK	DWN	DSN

STATE OF MISSOURI
LEON D. OSBOURN
ENGINEER
NUMBER 82109
E-21726

LEON D. OSBOURN
ENGINEER
MO # 021726

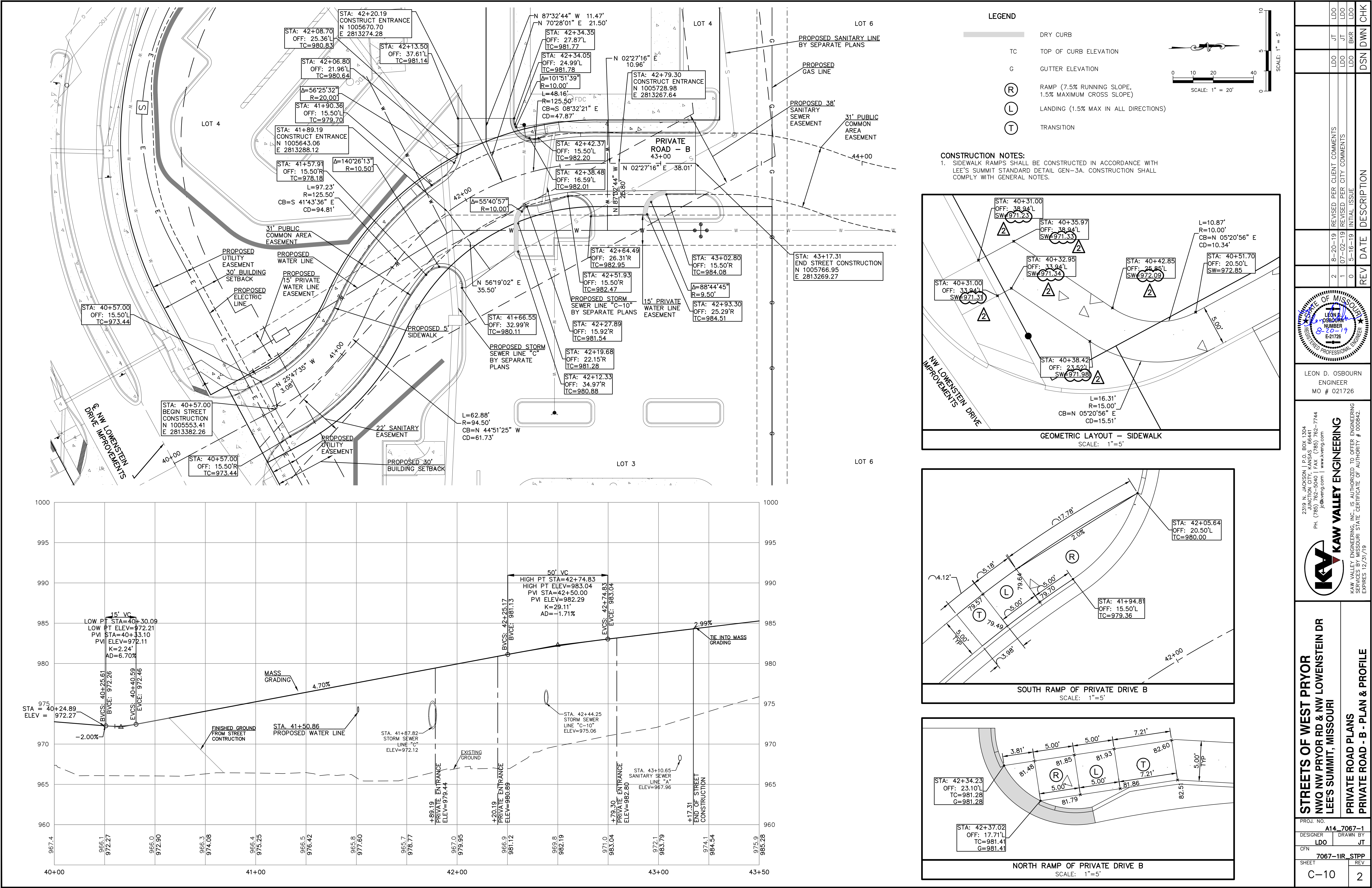
2319 N. JACKSON | P.O. BOX 1304
JUNCTION CITY, KANSAS 66441
PH. (785) 762-5040 | FAX (785) 762-7744
joe@kve.com | www.kve.com

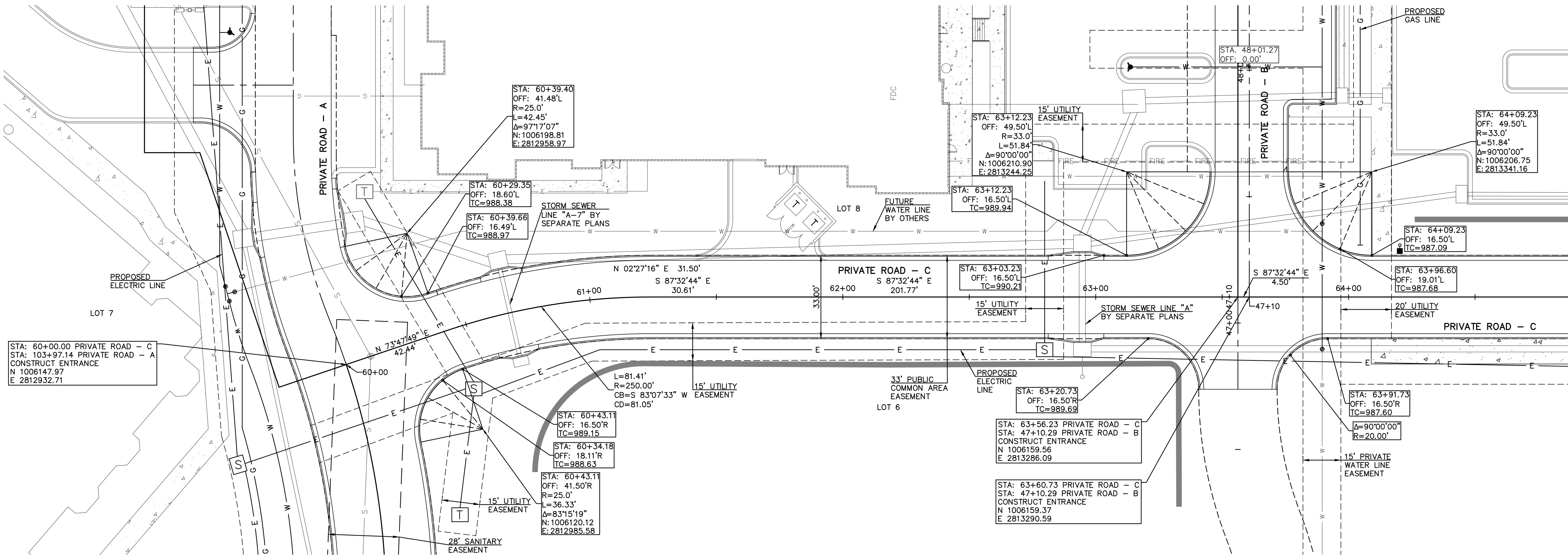
KAW VALLEY ENGINEERING
KAW VALLEY ENGINEERING, INC. IS AUTHORIZED TO OFFER ENGINEERING SERVICES IN THE STATE OF MISSOURI. CERTIFICATE OF AUTHORITY # 000842. EXPIRES 12/31/19.

STREETS OF WEST PRYOR
NWQ NW PRYOR RD & NW LOWENSTEIN DR
LEE'S SUMMIT, MISSOURI

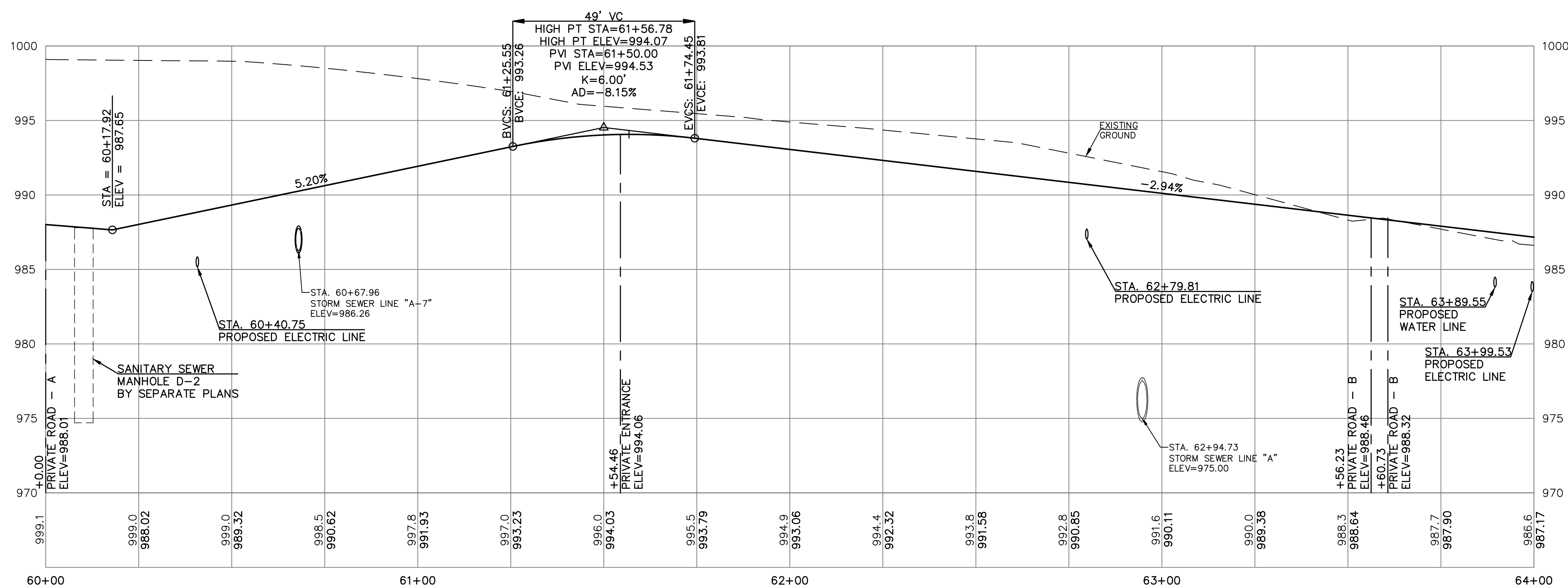
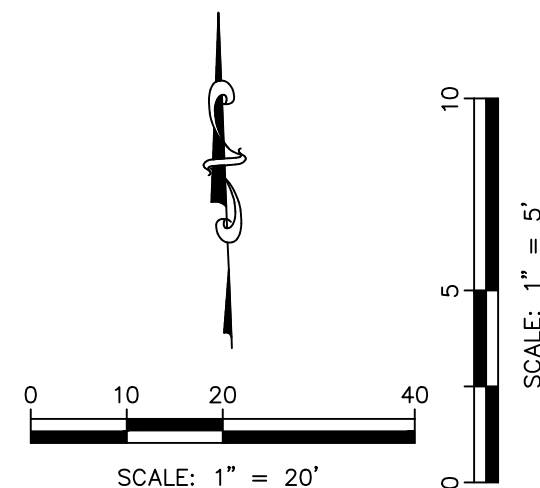
PRIVATE ROAD PLANS
PRIVATE ROAD - A - PLAN & PROFILE

PROJ. NO. **A14-7067-1**
DESIGNER **LDO** DRAWN BY **ST**
CFN **7067-11R-STPP**
SHEET **C-9** REV **2**



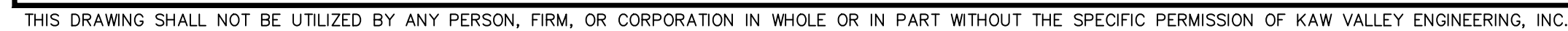
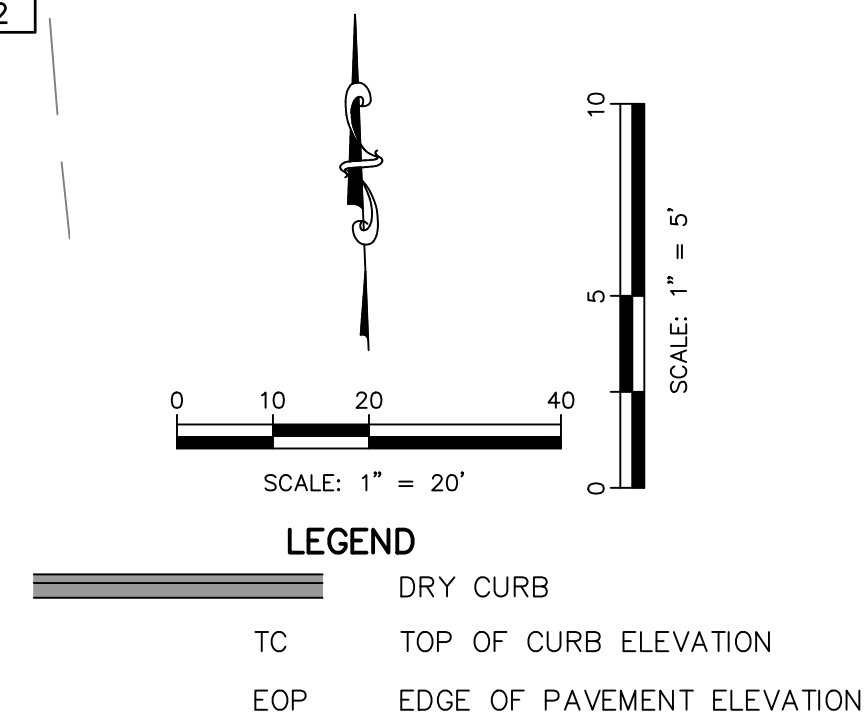


LEGEND
— DRY CURB
TC TOP OF CURB ELEVATION
EOP EDGE OF PAVEMENT ELEVATION



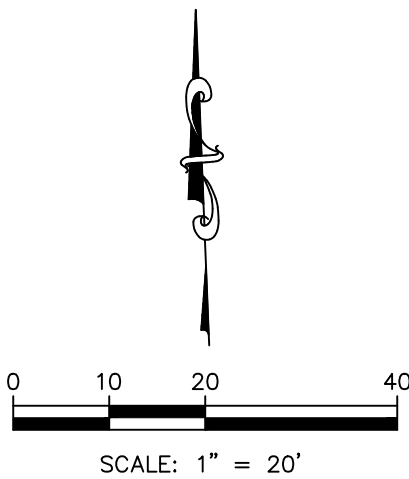
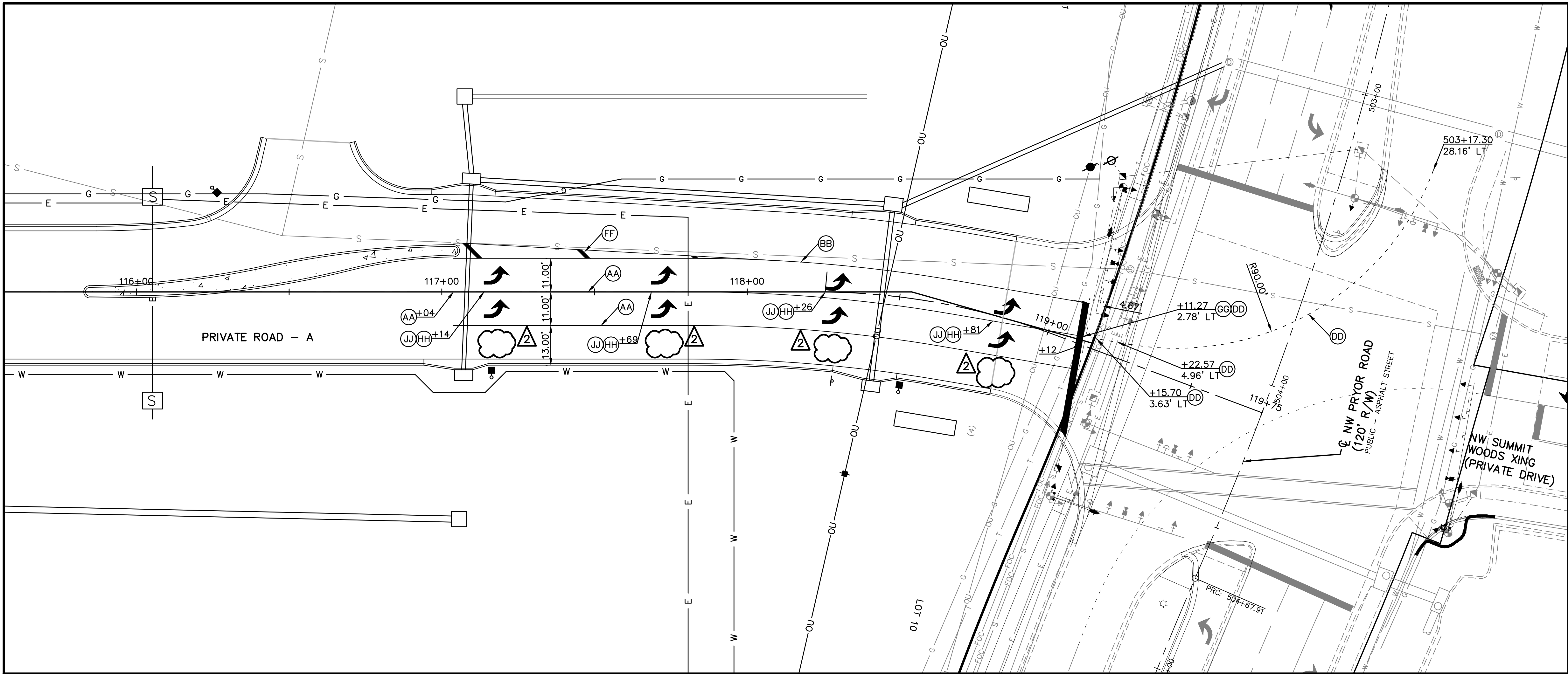
PROJ. NO. A14-7067-1		DESIGNER LDO		DRAWN BY JT	
CFN		7067-11R-STPP		SHEET	
C-13		1		REV	
STREETS OF WEST PRYOR NWQ NW PRYOR RD & NW LOWENSTEIN DR LEE'S SUMMIT, MISSOURI		PRIVATE ROAD PLANS		PRIVATE ROAD - C - PLAN & PROFILE	
KAW VALLEY ENGINEERING 2319 N. JACKSON P.O. BOX 1304 JUNCTION CITY, KANSAS 66441 PH. (785) 762-5040 FAX (785) 762-7744 joe@kveg.com www.kveg.com		LEON D. OSBOURN ENGINEER MO # 021726		STATE OF MISSOURI LEON D. OSBOURN NUMBER 8-20-19 521726 REGISTERED PROFESSIONAL ENGINEER	
KAW VALLEY ENGINEERING, INC. IS AUTHORIZED TO OFFER ENGINEERING SERVICES IN THE STATE OF MISSOURI UNDER CERTIFICATE OF AUTHORITY # 000842. EXPIRES 12/31/19		REV		DATE	
1		8-20-19		REVISED PER CLIENT COMMENTS	
0		5-16-19		INITIAL ISSUE	
				LDO	
				BKR	
				LDO	
				DSN	
				DWN	
				CHK	

EXTENSIVE
REVISIONS



STREETS OF WEST PRYOR											
NWQ NW PRYOR RD & NW LOWENSTEIN DR LEE'S SUMMIT, MISSOURI											
PRIVATE ROAD PLANS											
PRIVATE ROAD - C - PLAN & PROFILE											
PROJ. NO.						A14_7067-1					
DESIGNER						LDO		DRAWN BY		JT	
CFN						7067-1IR_STPP					
SHEET						C-14		REV		2	

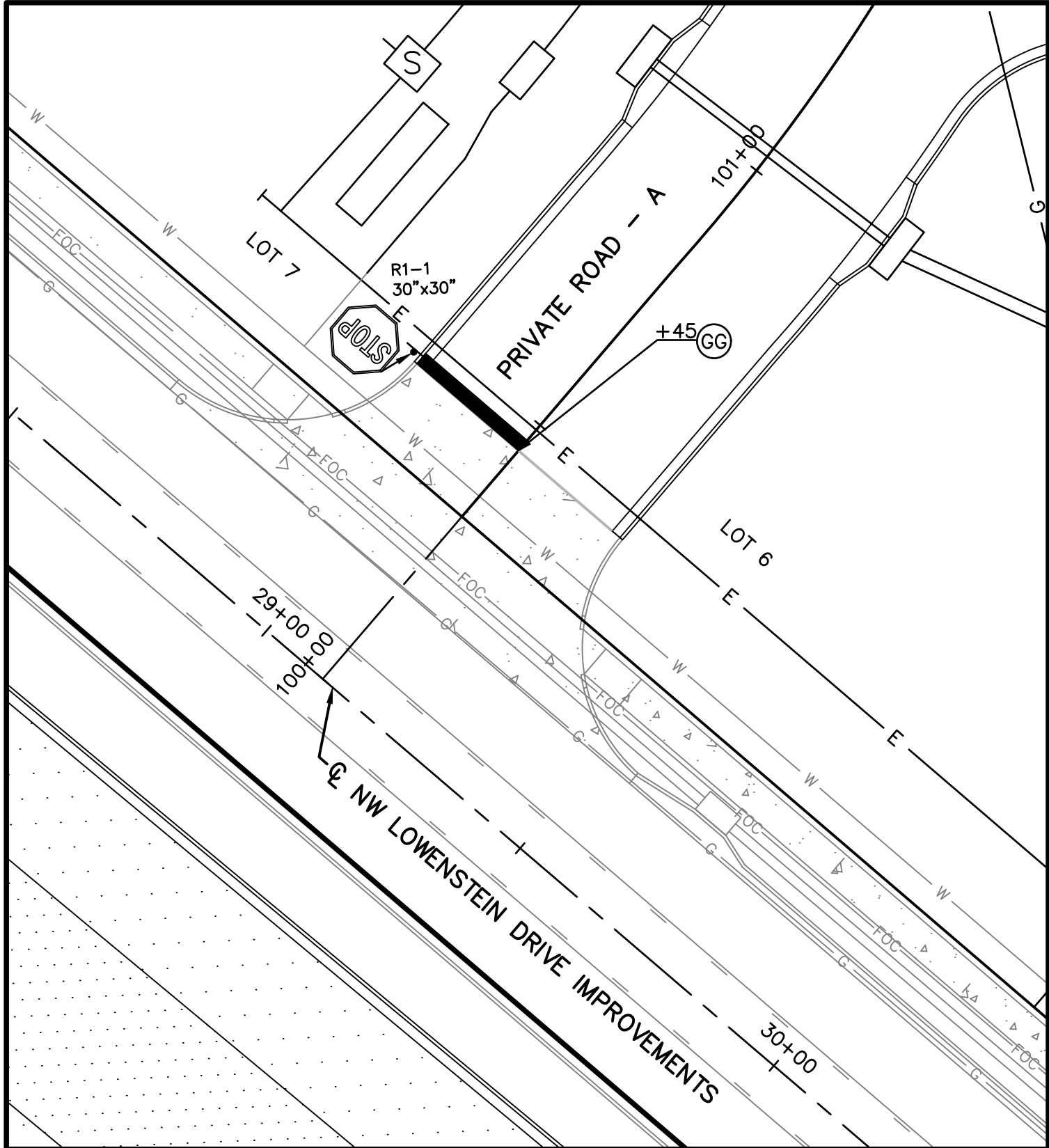




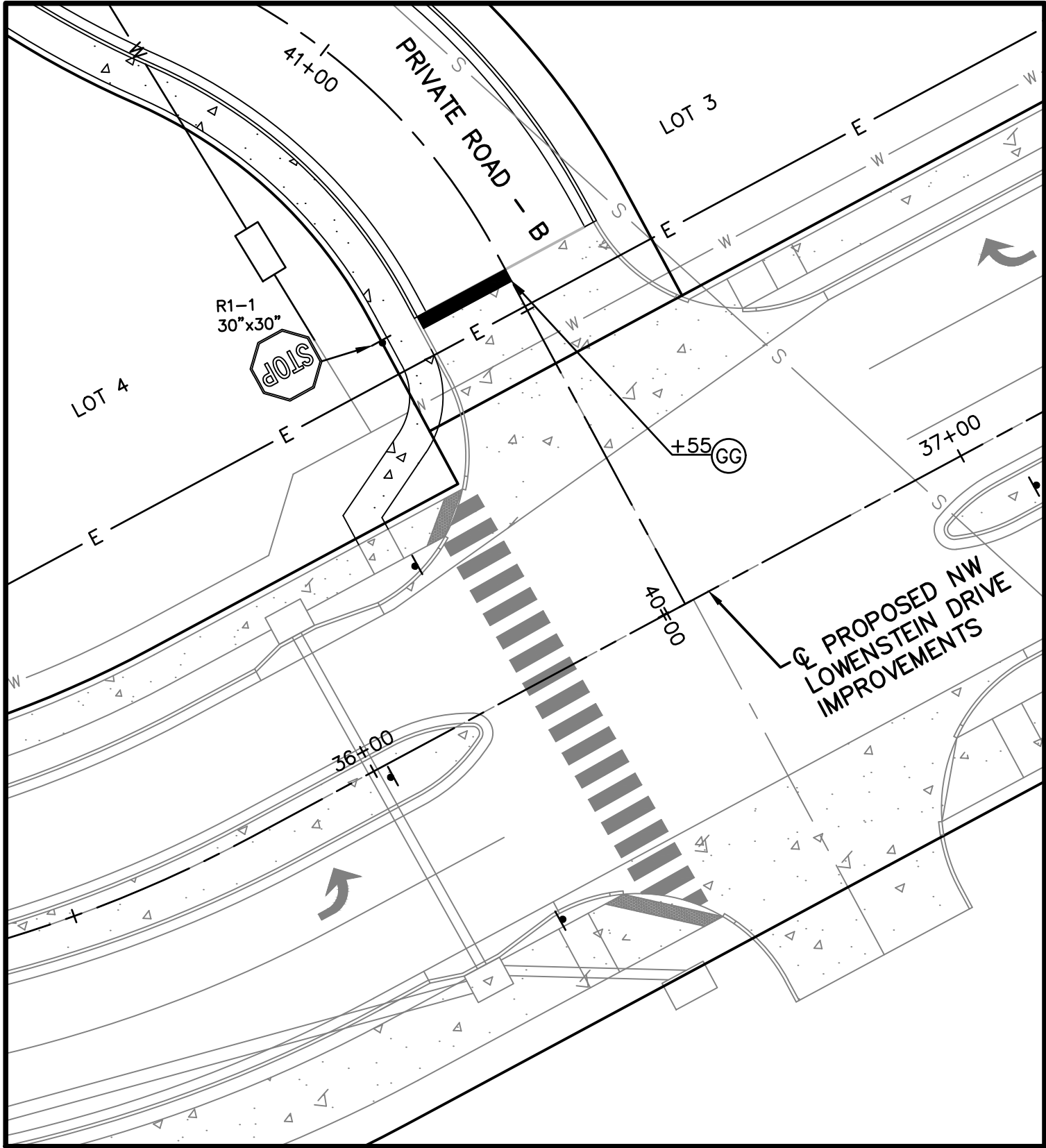
PRIVATE ROAD - A PAVEMENT MARKING

NOTE:
1. PAVEMENT MARKING SHALL BE PROVIDED AND INSTALLED IN ACCORDANCE WITH THE CURRENT CITY OF LEE'S SUMMIT PAVEMENT MARKING STANDARDS.

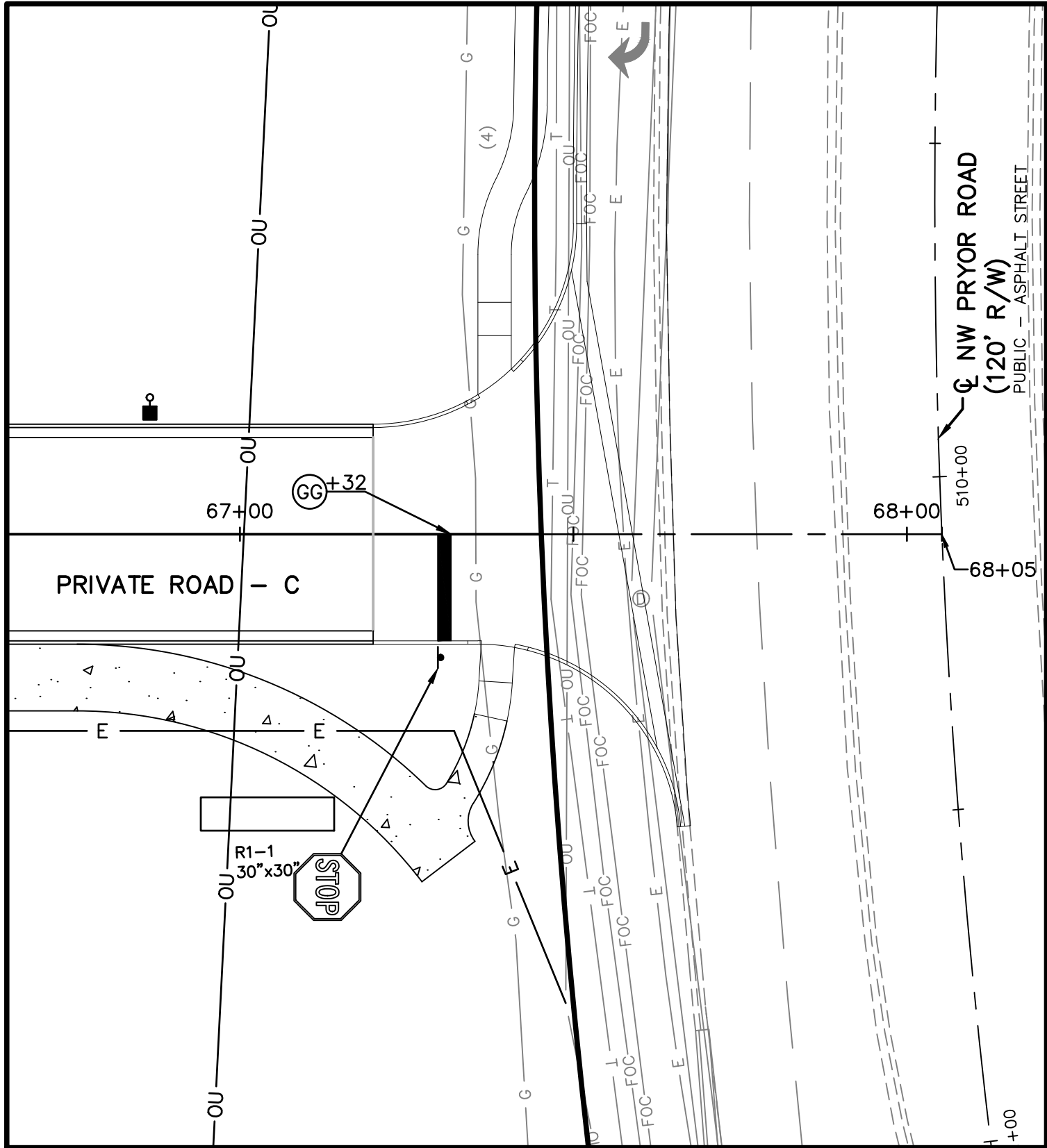
LIST OF PAVEMENT MARKING	
MARK	ITEM
AA	4" SOLID WHITE LINE (HIGH BUILD PAINT)
BB	4" DOUBLE YELLOW LINE (HIGH BUILD PAINT)
CC	NOT USED
DD	6" DASHED WHITE EXTENSION LINE (THERMOPLASTIC)
EE	NOT USED
FF	12" SOLID YELLOW LINE (THERMOPLASTIC)
GG	24" STOP BAR (THERMOPLASTIC)
HH	TURN ARROW WHITE (LEFT) (THERMOPLASTIC)
JJ	TURN ARROW WHITE (RIGHT) (THERMOPLASTIC)
KK	NOT USED



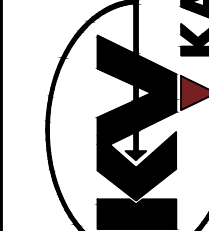
PRIVATE ROAD - A & NW LOWENSTEIN DRIVE PAVEMENT MARKING

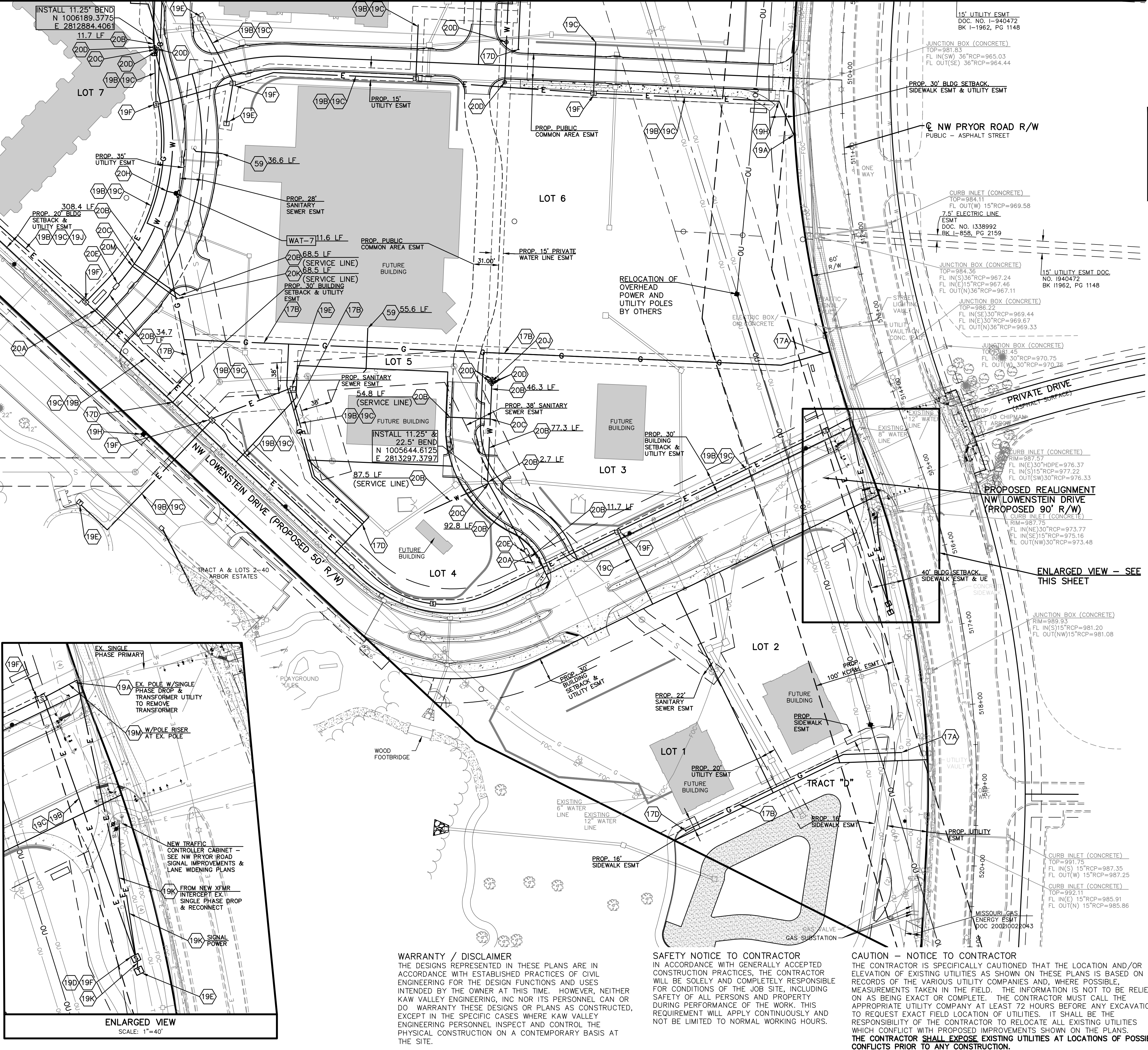


PRIVATE ROAD - B & NW LOWENSTEIN DRIVE PAVEMENT MARKING



PRIVATE ROAD - C & NW LOWENSTEIN DRIVE PAVEMENT MARKING

	2	7-25-19	REVISED PER CITY COMMENTS	LDO	LDO	CHK
	1	07-02-19	REVISED PER CITY COMMENTS	LDO	LDO	LDO
	0	5-16-19	INITIAL ISSUE	LDO	BKR	LDO
				REV	DATE	DESCRIPTION
LEON D. OSBOURN ENGINEER MO # 021726						
2319 N. JACKSON P.O. BOX 1304 JUNCTION CITY, KANSAS 66441 PH. (785) 762-5040 FAX (785) 762-7744 www.kawvalleyeng.com www.kawvalleyeng.com						
 KAW VALLEY ENGINEERING KAW VALLEY ENGINEERING, INC. IS AUTHORIZED TO OFFER ENGINEERING SERVICES IN THE STATE OF MISSOURI UNDER THE CERTIFICATE OF AUTHORITY # 000842, EXPIRES 12/31/19						
STREETS OF WEST PRYOR NWQ NW PRYOR RD & NW LOWENSTEIN DR LEE'S SUMMIT, MISSOURI						
PRIVATE ROAD PLANS PAVEMENT MARKING & SIGNING PLAN						
PROJ. NO. A14-7067-1						
DESIGNER LDO DRAWN BY 1						
CFN 7067-11R_PMP						
SHEET C-16 REV 2						



NOTE:
1. CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF ENTRANCE, SLOPED PAVING, EXIT PORCHES, RAMPS, TRUCK DOCKS, PRECISE BUILDING DIMENSIONS AND EXACT BUILDING UTILITY ENTRANCE LOCATIONS.
2. THESE PLANS HAVE NOT BEEN VERIFIED WITH FINAL ARCHITECTURAL CONTRACT DRAWINGS. CONTRACTOR SHALL VERIFY AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES. CONTRACTOR IS FULLY RESPONSIBLE FOR REVIEW AND COORDINATION OF ALL DRAWINGS AND CONTRACTOR DOCUMENTS.

- UTILITY NOTES:
- CONSTRUCTION SHALL NOT START ON ANY PUBLIC WATER OR SANITARY SEWER SYSTEM UNTIL WRITTEN APPROVAL OR PERMITS HAVE BEEN RECEIVED FROM THE OWNER.
 - ALL UTILITY AND STORM SEWER TRENCHES CONSTRUCTED UNDER AREAS THAT RECEIVE PAVING SHALL BE BACKFILLED TO 18 INCHES ABOVE THE TOP OF THE PIPE WITH SELECT GRANULAR MATERIAL PLACED ON EIGHT-INCH LIFTS, AND COMPACTED TO 95% MODIFIED PROCTOR DENSITY.
 - CONTRACTOR SHALL NOT OPEN, TURN OFF, INTERFERE WITH, OR ATTACH ANY PIPE OR HOSE TO OR TAP ANY WATER MAIN BELONGING TO THE CITY UNLESS DULY AUTHORIZED TO DO SO BY THE CITY. ANY ADVERSE CONSEQUENCE OF ANY SCHEDULED OR UNSCHEDULED DISRUPTIONS OF SERVICE TO THE PUBLIC ARE TO BE THE LIABILITY OF THE CONTRACTOR. **KAW VALLEY ENGINEERING AND OWNER ARE TO BE HELD HARMLESS.**
 - DISINFECTION AND PRESSURE TESTING OF WATER LINES SHALL BE PERFORMED AND PAID FOR BY THE CONTRACTOR UNDER SUPERVISION OF A REPRESENTATIVE OF THE CITY WATER DEPARTMENT. CONTRACTOR SHALL NOTIFY THE CITY OF LEE'S SUMMIT WATER DEPARTMENT 24 HOURS MINIMUM, PRIOR TO ANY TESTING.
 - ALL WATER AND SANITARY SEWER SYSTEMS THAT ARE TO BE PUBLIC LINES SHALL BE CONSTRUCTED IN ACCORDANCE WITH SPECIFICATIONS PREVIOUSLY APPROVED BY THE CITY OF LEE'S SUMMIT AND SHALL BE INSPECTED BY THE CITY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ASSURE THAT THIS INSPECTION OCCURS.
 - LOCATIONS SHOWN FOR PROPOSED WATER LINES ARE APPROXIMATE. VARIATIONS MAY BE MADE, WITH APPROVAL OF THE ENGINEER, TO AVOID CONFLICTS.
 - CONTRACTOR TO INSTALL TRACING WIRE ALONG ALL NON-METALLIC WATER MAINS AND SERVICE LINES PER SPECIFICATIONS.
 - CONTRACTOR SHALL EXPOSE EXISTING UTILITIES AT LOCATIONS OF POSSIBLE CONFLICT AND POINTS OF CONNECTION PRIOR TO ANY CONSTRUCTION OF NEW UTILITIES.
 - WATER LINES SHALL HAVE A MINIMUM COVER OF 42 INCHES. ALL VALVES ON MAINS AND FIRE HYDRANT LEADS SHALL BE WITH VALVE BOX ASSEMBLIES. THE SIZE OF VALVE BOX ASSEMBLY TO BE INSTALLED IS DETERMINED BY THE TYPE AND SIZE OF VALVE. VALVE BOX CAPS SHALL HAVE THE WORD "WATER".
 - A MINIMUM HORIZONTAL DISTANCE OF 10 FEET SHALL BE MAINTAINED BETWEEN PARALLEL WATER AND SANITARY SEWER LINES. WHEN IT IS NECESSARY FOR ANY WATER LINE TO CROSS A SANITARY SEWER LINE, THE SEWER LINE SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE AT LEAST 10 FEET EITHER SIDE OF THE WATER LINE UNLESS THE WATER LINE IS AT LEAST 2 FEET CLEAR DISTANCE ABOVE THE SANITARY SEWER LINE.

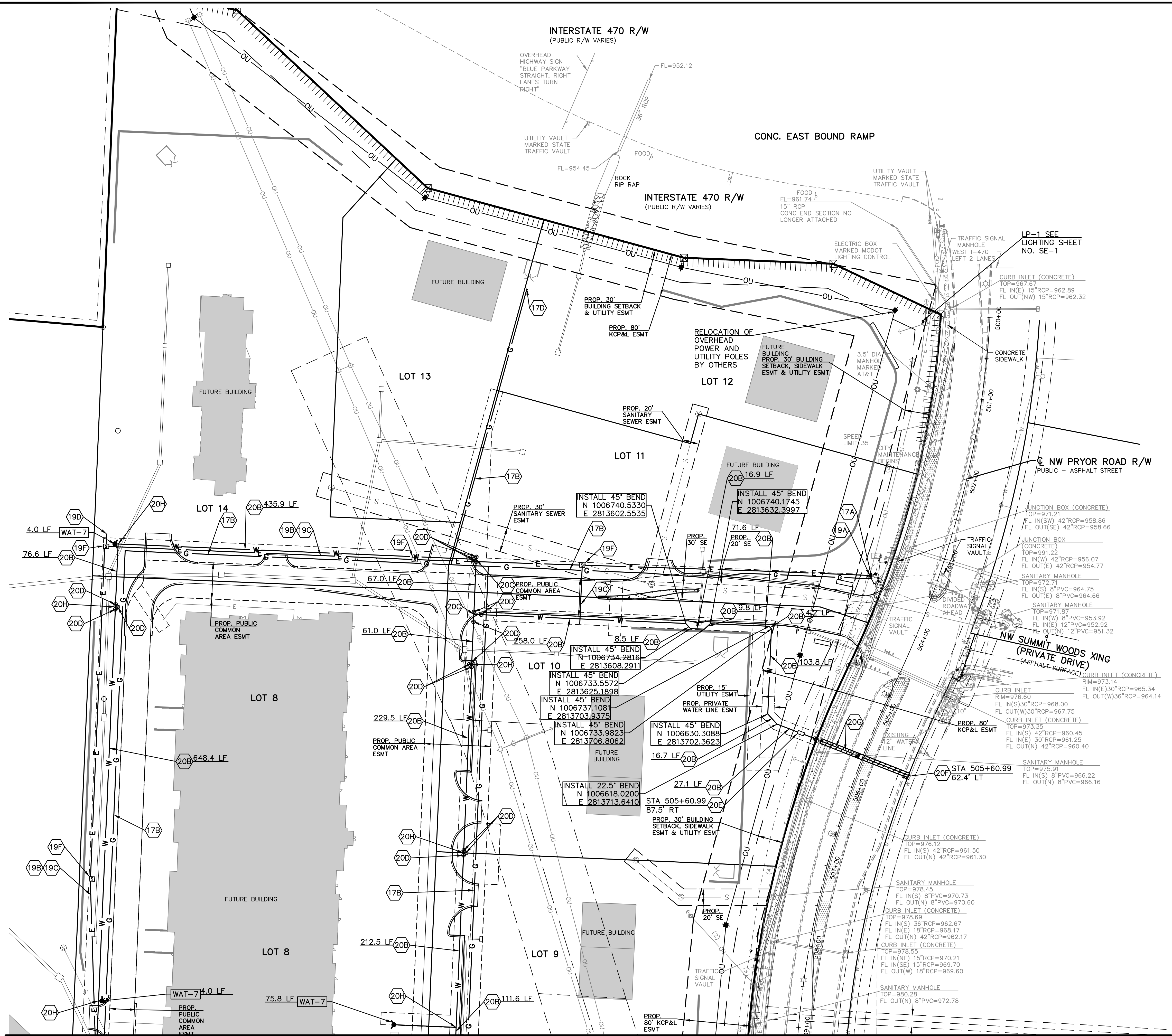
- DETAILS -- SEE DETAIL SHEETS FOR THE FOLLOWING DETAILS
- WAT-7 HYDRANT INSTALLATION -- STRAIGHT SET W/LINEAR FOOT OF 6" PVC C-900 WATER LINE (CITY OF LEE'S SUMMIT)
 - WAT-9 VALVE STEM EXTENSION AND VALVE BOX (CITY OF LEE'S SUMMIT)
 - WAT-12 VAULT FOR DOUBLE CHECK DETECTOR CHECK (CITY OF LEE'S SUMMIT)
 - GEN-5 TRENCHING/PATCHING ROADWAY (CITY OF LEE'S SUMMIT)

- NOTES:
- 17A POINT OF CONNECTION -- GAS SERVICE
 - 17B GAS SERVICE (BY GAS COMPANY)
 - 17D INSTALL CAP FOR GAS SERVICE
 - 19A POINT OF CONNECTION -- ELECTRIC SERVICE
 - 19B UNDERGROUND POWER PER LOCAL POWER COMPANY
 - 19C 4" CONDUIT INSTALLED BY CONTRACTOR -- ELECTRIC SERVICE
 - 19D CONDUIT STUB FOR FUTURE EXTENSION -- ELECTRIC
 - 19E INSTALL TRANSFORMER -- PER KCP&L STANDARD SPECIFICATIONS
 - 19F INSTALL SECTIONALIZER -- PER KCP&L STANDARD SPECIFICATIONS
 - 19G CONSTRUCT RISER -- PER KCP&L STANDARD SPECIFICATIONS
 - 19H NEW UTILITY POLE -- INSTALLED BY KCP&L
 - 19J POINT OF CONNECTION AT NEW UTILITY POLE APPROX STA 24+00
 - 19K 2" CONDUIT INSTALLED BY CONTRACTOR -- ELECTRIC SERVICE
 - 19M 3" CONDUIT INSTALLED BY CONTRACTOR -- ELECTRIC SERVICE
 - 20A POINT OF CONNECTION -- WATER
 - 20B 8" PVC C-900 WATER LINE WITH LINEAR FEET
 - 20C 8"x8"x8" TEE
 - 20D INSTALL 8" WATER VALVE. SEE DETAIL WAT-9.
 - 20E INSTALL 8" BACKFLOW PREVENTION DETECTOR ASSEMBLY IN 8'x6' VAULT (INSIDE DIAMETER) OR AS REQUIRED PER CLEARANCE. SEE DETAIL WAT-12.
 - 20F CONNECT TO EXISTING MAIN WITH 12"x12"x8" TEE
 - 20G DIRECTIONAL BORE 114.6 LF AND INSTALL 138.9 LF OF 8" PVC C-900 PIPE WITH RESTRAINED JOINTS.
 - 20H 8"x8"x6" TEE
 - 20J 8"x8"x8"x8" TEE
 - 20K 2" PVC C-900 WATER LINE WITH LINEAR FEET
 - 20M 8"x8"x8" TEE W/8" TO 2" REDUCER
 - 59 6" SANITARY SEWER SERVICE LINE BY CUT-IN WYE (1% MIN)

CONTRACTOR TO VERIFY EXACT LOCATION OF ELECTRICAL COMPONENTS WITH KCP&L

EXTENSIVE ELECTRIC COMPONENT REVISIONS

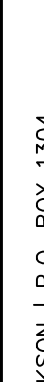
STREETS OF WEST PRYOR NWQ NW PRYOR RD & NW LOWENSTEIN DR LEE'S SUMMIT, MISSOURI		2319 N. JACKSON P.O. BOX 1304 JUNCTION CITY, KANSAS 66441 PH. (785) 685-1774 jckweng.com www.kaweng.com				LEON D. OSBOURN ENGINEER MO # 021726		 KAW VALLEY ENGINEERING KAW VALLEY ENGINEERING, INC. IS AUTHORIZED TO OFFER ENGINEERING SERVICES BY MISSOURI STATE CERTIFICATE OF AUTHORITY # 000942. EXPIRES 12/31/19		REV DATE DESCRIPTION		JIT LDO	
PRIVATE ROAD PLANS UTILITY PLAN		PROJ. NO. A14, 7067-1		DESIGNER LDO		DRAWN BY JT		CFN 7067-1IR_UP		REV		JIT LDO	
C-17		SHEET		7067-1IR_UP								JIT LDO	
4												JIT LDO	

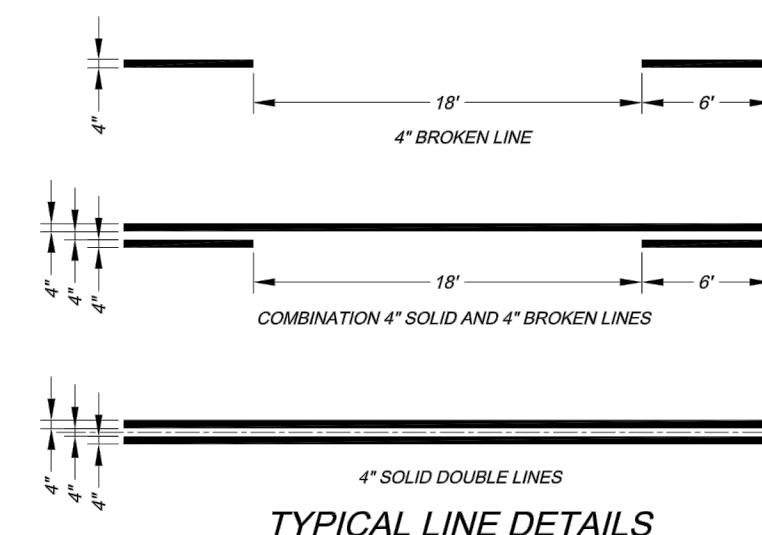


MATCH LINE - SHEET C-17

CONTRACTOR TO VERIFY EXACT
LOCATION OF ELECTRICAL
COMPONENTS WITH KCP&L

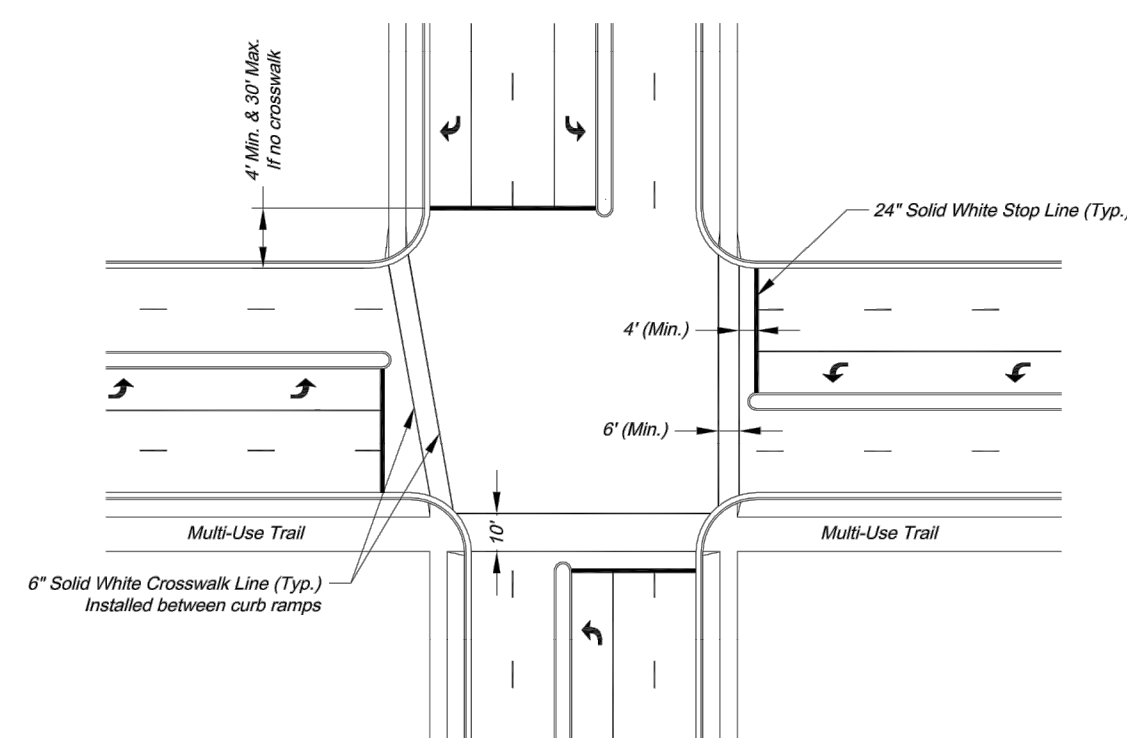
EXTENSIVE ELECTRIC
COMPONENT REVISIONS

STREETS OF WEST PRYOR NWQ NW PRYOR RD & NW LOWENSTEIN DR LEE'S SUMMIT, MISSOURI		PRIVATE ROAD PLANS UTILITY PLAN		 KAW VALLEY ENGINEERING KAW VALLEY ENGINEERING, INC. IS AUTHORIZED TO OFFER ENGINEERING SERVICES BY MISSOURI STATE CERTIFICATE OF AUTHORITY # 000842. EXPIRES 12/31/19	2319 N. JACKSON P.O. BOX 1004 JACKSON, MO 64501-0004 PH. (785) 762-5040 FAX (785) 762-7744 jack@kaweng.com www.kaweng.com		LEON D. OSBOURN ENGINEER MO # 021726							
PROJ. NO. A14_7067-1 DESIGNER LDO DRAWN BY JT CFN 7067-11R_UP SHEET C-18				REV		DATE		DESCRIPTION		DSN		CHK		
				4		5-18-19		INITIAL ISSUE		LDO		BKR		
				2		07-02-19		REVISED PER CITY COMMENTS		LDO		JT		
				7		25-19		REVISED PER CITY COMMENTS		LDO		JT		
				8		19-19		REVISED PER CITY COMMENTS		LDO		JT		
				9		20-19		REVISED PER KCP&L COMMENTS		LDO		JT		

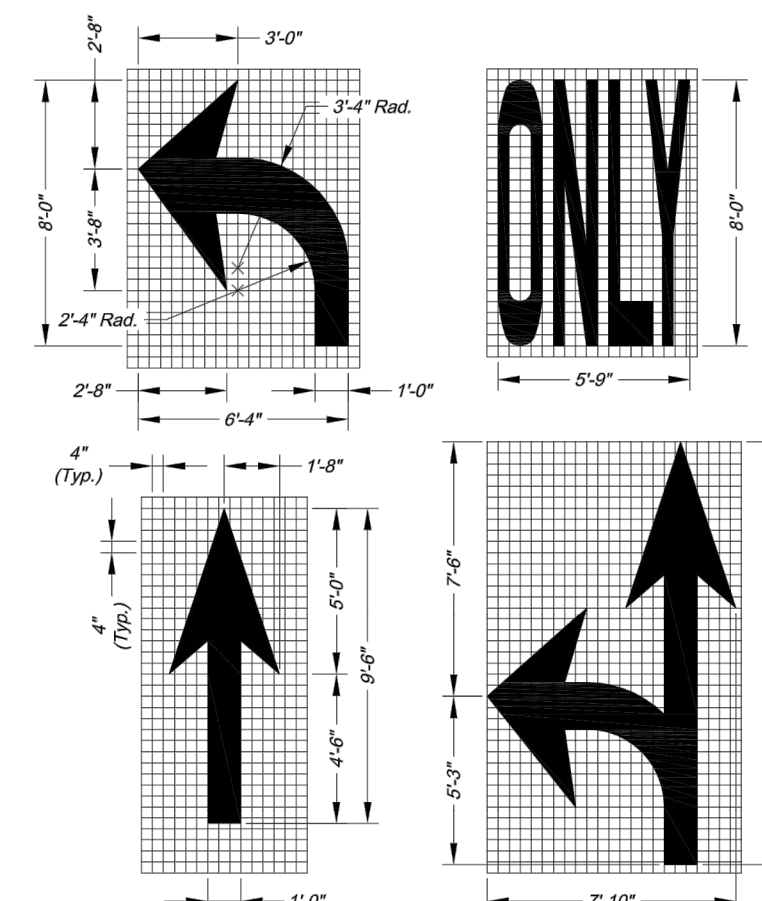
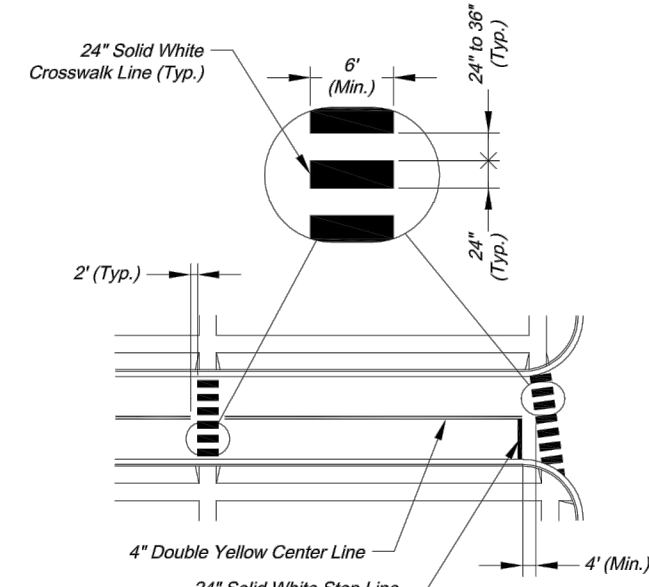


NOTES:

1. All edge line, center line, and lane line pavement markings shall be 4" wide unless otherwise noted.
2. Edge lines shall be continuous solid white or yellow lines. Right side edge lines shall be solid white. Median or left side edge lines on divided roadways are to be solid yellow. Edge lines and center lines shall be continuous across driveways.

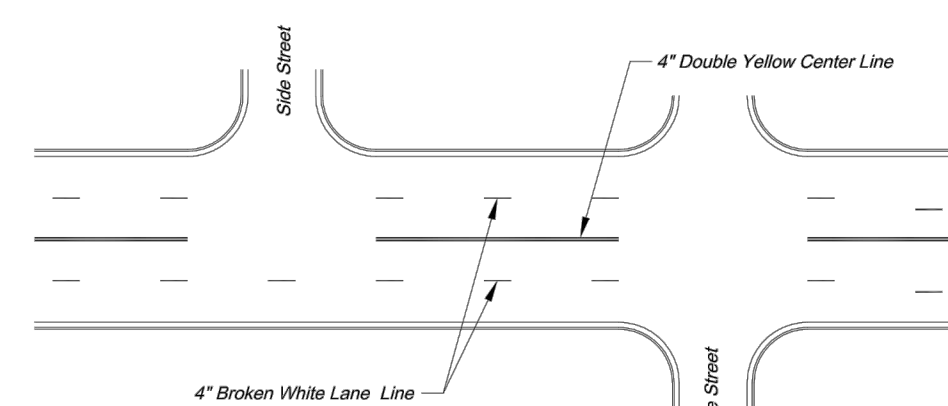


TYPICAL INTERSECTION MARKINGS

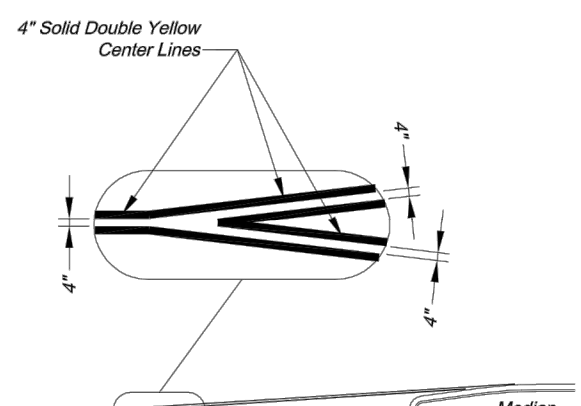


NOTES:

1. All arrow and symbol markings shall be white, and shall be centered in their respective traffic lanes.
2. Right-turn and combination right-turn/straight arrows are reverse of arrows shown.



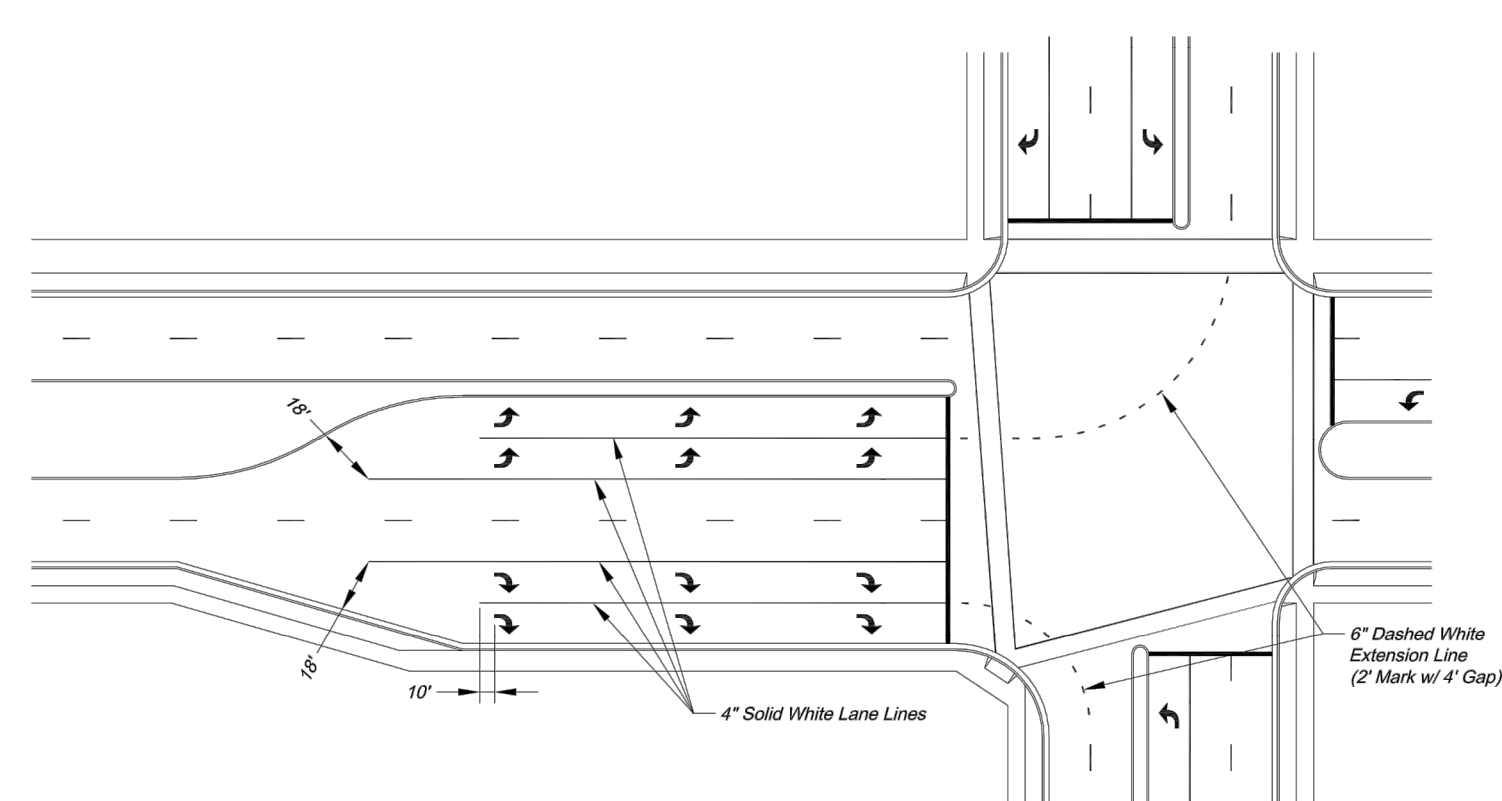
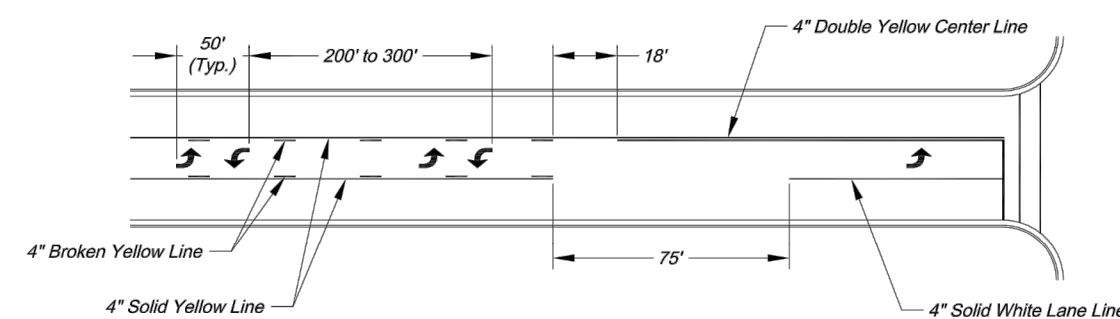
TYPICAL MARKINGS FOR FOUR-LANE
UNDIVIDED ROADWAY



TYPICAL MEDIAN NOSE
CENTER LINE DETAIL

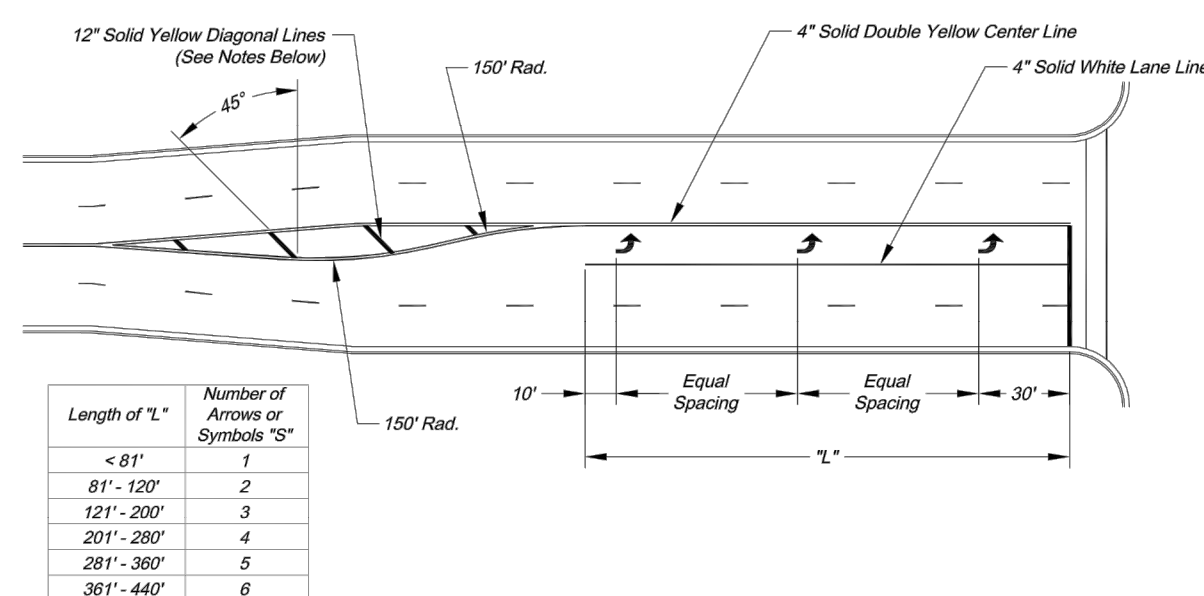
PAVEMENT MARKING GENERAL NOTES:

1. All pavement markings shall be in accordance with the latest edition of the *Manual on Uniform Traffic Control Devices (MUTCD)*
2. All words and symbols shall conform to the latest edition of *Standard Alphabets for Highway Signs and Pavement Markings* promulgated by the Federal Department of Transportation, Federal Highway Administration.
3. Pavement markings, either temporary or permanent are required at all times if the roadway is open to traffic.
4. All pavement markings that conflict with the desired markings shall be completely removed. Removals shall not leave the road surface scarred with an image that misleads traffic. Any excess damage or scarring of pavement shall be repaired at the Contractor's expense.
5. The proposed permanent markings shall be laid out by the Contractor in advance of the marking installation. Markings shall not be applied until the layout has been approved by the City Traffic Engineer.
6. Center lines shall be marked on all undivided arterial streets, and any other undivided street with more than two lanes and/or a speed limit of 30 mph or more.
7. Edge lines shall be marked on all non-urban streets.



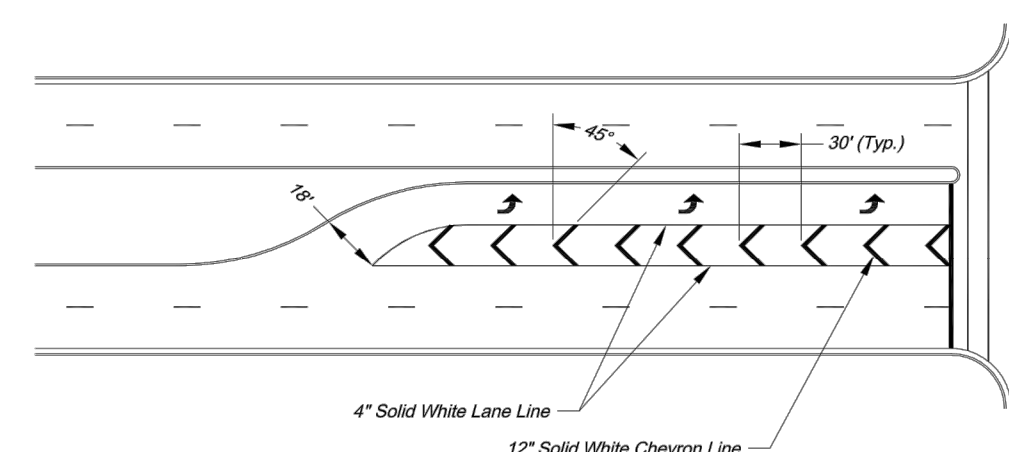
TYPICAL DUAL TURN LANE MARKINGS

NOTE:
1. Dashed extension lines shall not extend through crosswalks.



NOTES:

1. *Diagonal lines are required between centerlines if the width of the area between the center lines is greater than 12' and/or the length of the area between center lines is greater than 250'.*
2. *Diagonal lines should be spaced at 5' increments, equal to the posted speed limit.*
3. *Equal Spacing is calculated as $(L - 40) / (S - 1)$.*
4. *When a through lane of traffic terminates as a mandatory turn lane, Arrow and "ONLY" symbols should be marked in the turn lane, in alternating order. The first and last symbols should be Arrows.*



TYPICAL STRIPED OUT TURN LANE MARKINGS



Project: _____
 Roadway Marking Details
 Sheet Name: STANDARD DRAWING BM-1

Project:

Drawn By: AS
Checked By: JW
Date: 09/09/2009
Project#

1 OF 2

1

1 OF 2
1



Project Name: STANDARD DRAWING DM 2

Object: INTERSECTION MARKING DETAILS

Project:

Drawn By: AS
Checked By: JW
Date: 09/09/2009

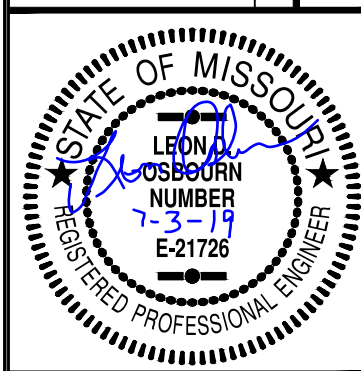
Project#

2 OF 2

2

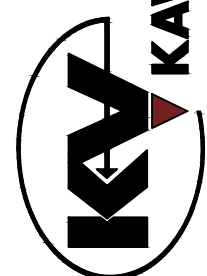
2 OF 2
2

CITY OF LEE'S SUMMIT
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION
220 SE GREEN STREET
LEE'S SUMMIT, MISSOURI 64063
PHONE: (816) 969-1800 FAX: (816) 969-1809



LEON D. OSBOURN
ENGINEER
MO # 021726

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JUNCTION CITY, KANSAS 66441
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jc@kveng.com | www.kveng.com



KAW VALLEY ENGINEERING, INC., IS AUTHORIZED TO OFFER ENGINEERING SERVICES BY MISSOURI STATE CERTIFICATE OF AUTHORITY # 000842. EXPIRES 12/31/19

STREETS OF WEST PRYOR
NW NWQ NW PRYOR RD & NW LOWENSTEIN DR
LEE'S SUMMIT, MISSOURI

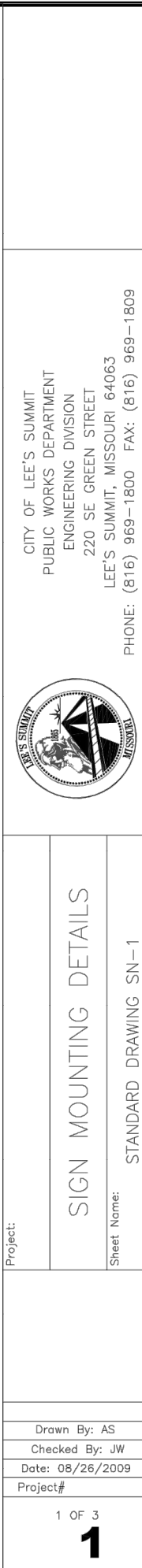
PRIVATE ROAD PLANS PAVEMENT MARKING DETAIL SHEET

PROJ. NO.		A14_7067-1	
DESIGNER		DRAWN BY	
LDO		JT	
CFN			
067-1IR_DET			
SHEET		REV	
C-19		0	

REV	DATE	DESCRIPTION
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REV	DATE	DESCRIPTION
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EDS	BK1	EDS
DSN	DWN	CHK



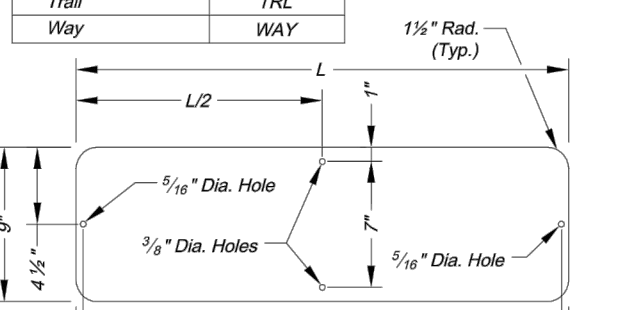
STANDARD ABBREVIATION LISTS

Named Streets	
Avenue	AVE
Boulevard	BLVD
Circle	CIR
Creek	CR
Court	CT
Crossing	XING
Drive	DR
Highway	HWY
Lane	LN
Parkway	PKWY
Place	PL
Road	RD
Street	ST
Terrace	TER
Trail	TRL
Way	WAY

Numbered Streets	
First	ST
Second	ND
Third	RD
Fourth to Tenth	TH

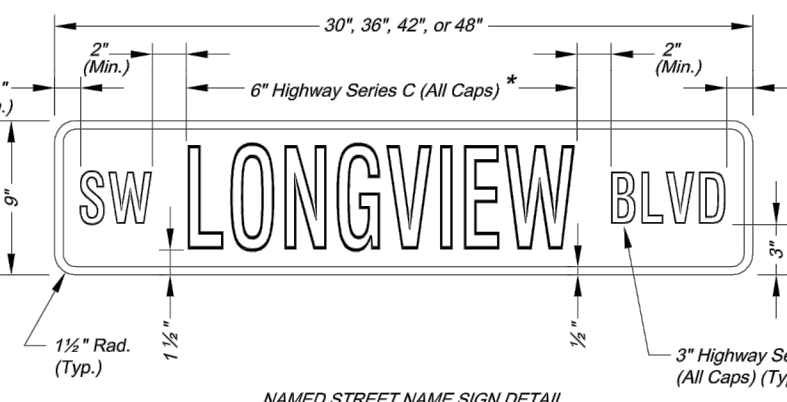
STREET NAME SIGN QUANTITIES

<i>Sign Designation</i>	<i>Sign Size</i>	<i>Sign Area (Sq. Ft.)</i>	<i>Number</i>	<i>Quantity (Sq. Ft.)</i>
D3-1 (SP-1)	9" x	Sq. Ft.	1	1
D3-1 (SP-2)	9" x			
D3-1 (SP-3)	9" x			
D3-1 (SP-4)	9" x			
D3-1 (SP-5)	9" x			
D3-1 (SP-6)	9" x			

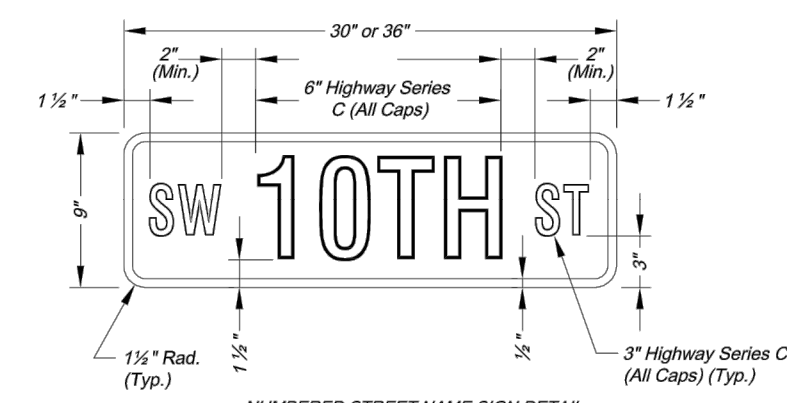


STREET NAME SIGN BLANK DETAILS

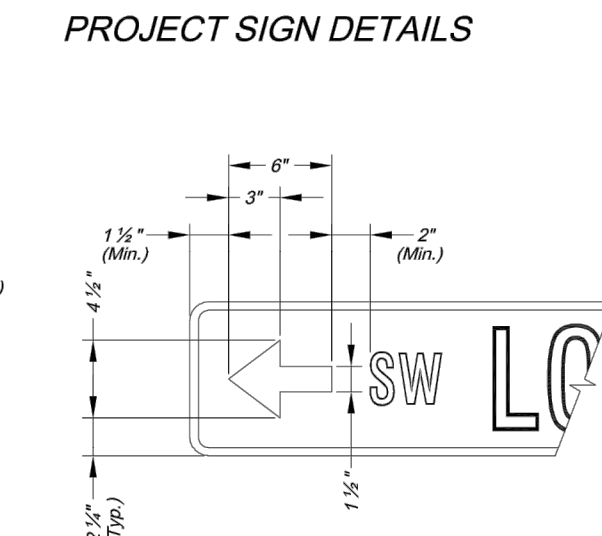
For Mounting on Square Steel Posts



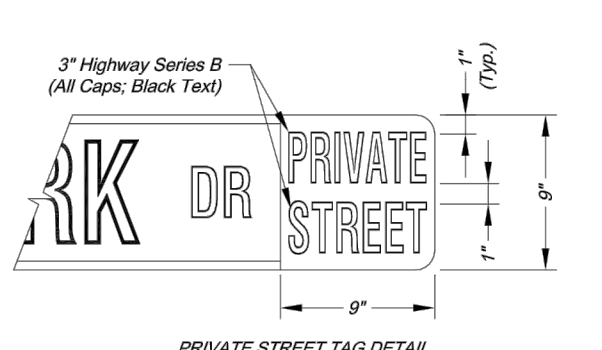
* Use Highway Series B (All Caps) in lieu of series C if necessary to fit text on a 36" sign blank.



NUMBERED STREET NAME SIGN DETAIL

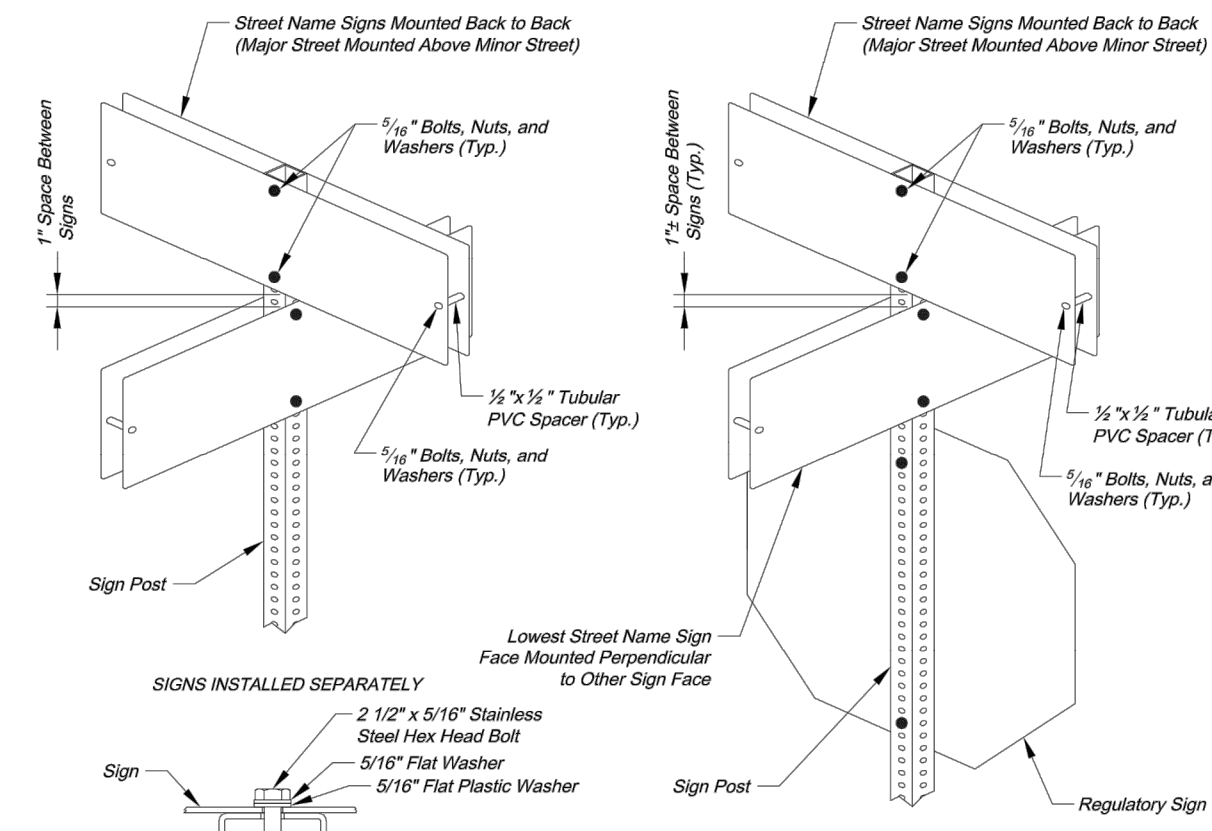


2C ARROW DETAIL

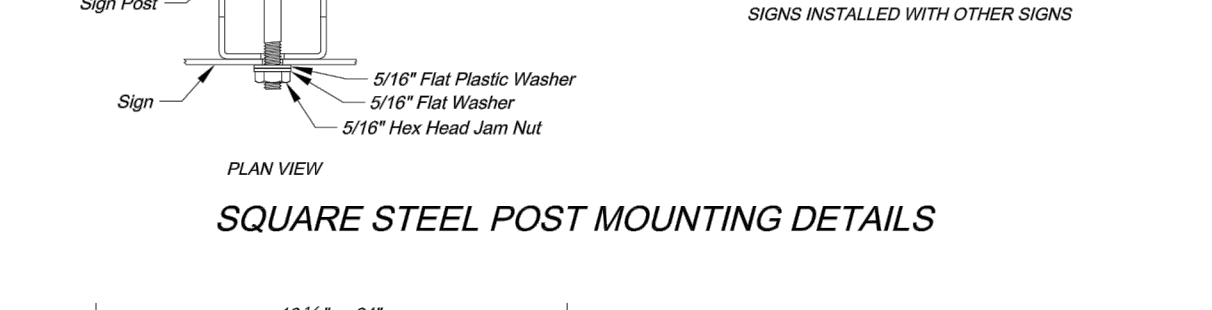


NOTES:

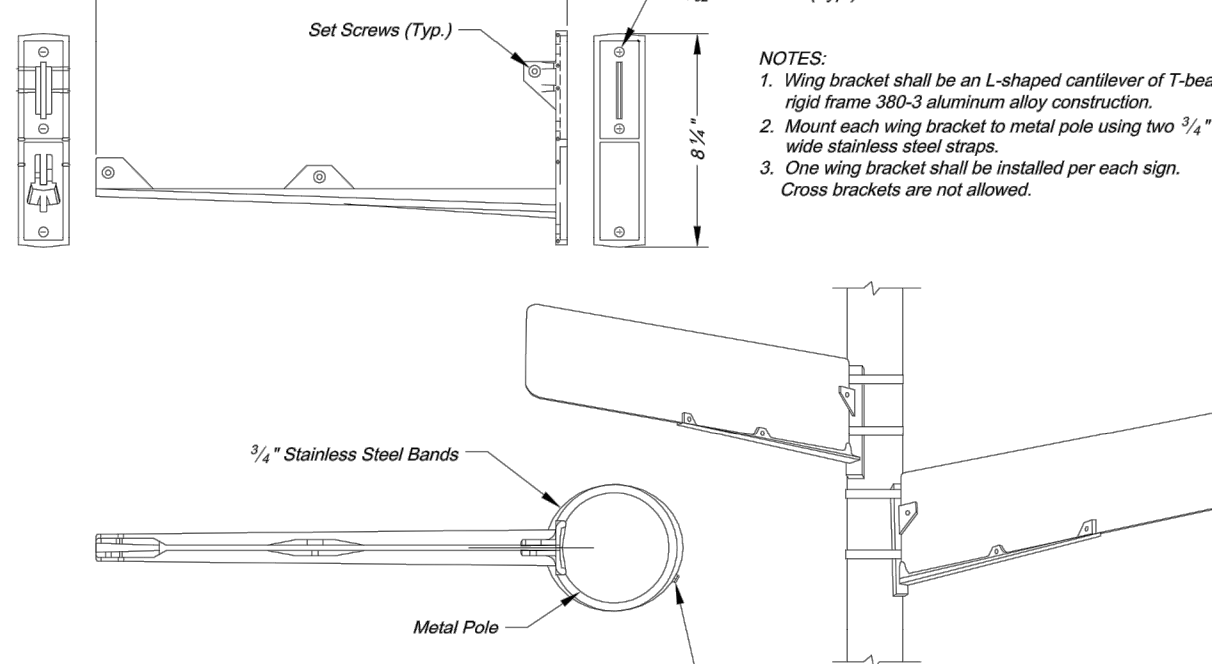
Arrows shall be added to street name signs where the name of a street changes at an intersection. Street name signs with arrows are to be installed on each side of the intersection to indicate the change in names. Arrows shall be added to the "PRIVATE STREET" tag should be added to the end of street name signs to indicate where a street that is outside the right-of-way intersects a public street. The background for the "PRIVATE STREET" tag shall be yellow.



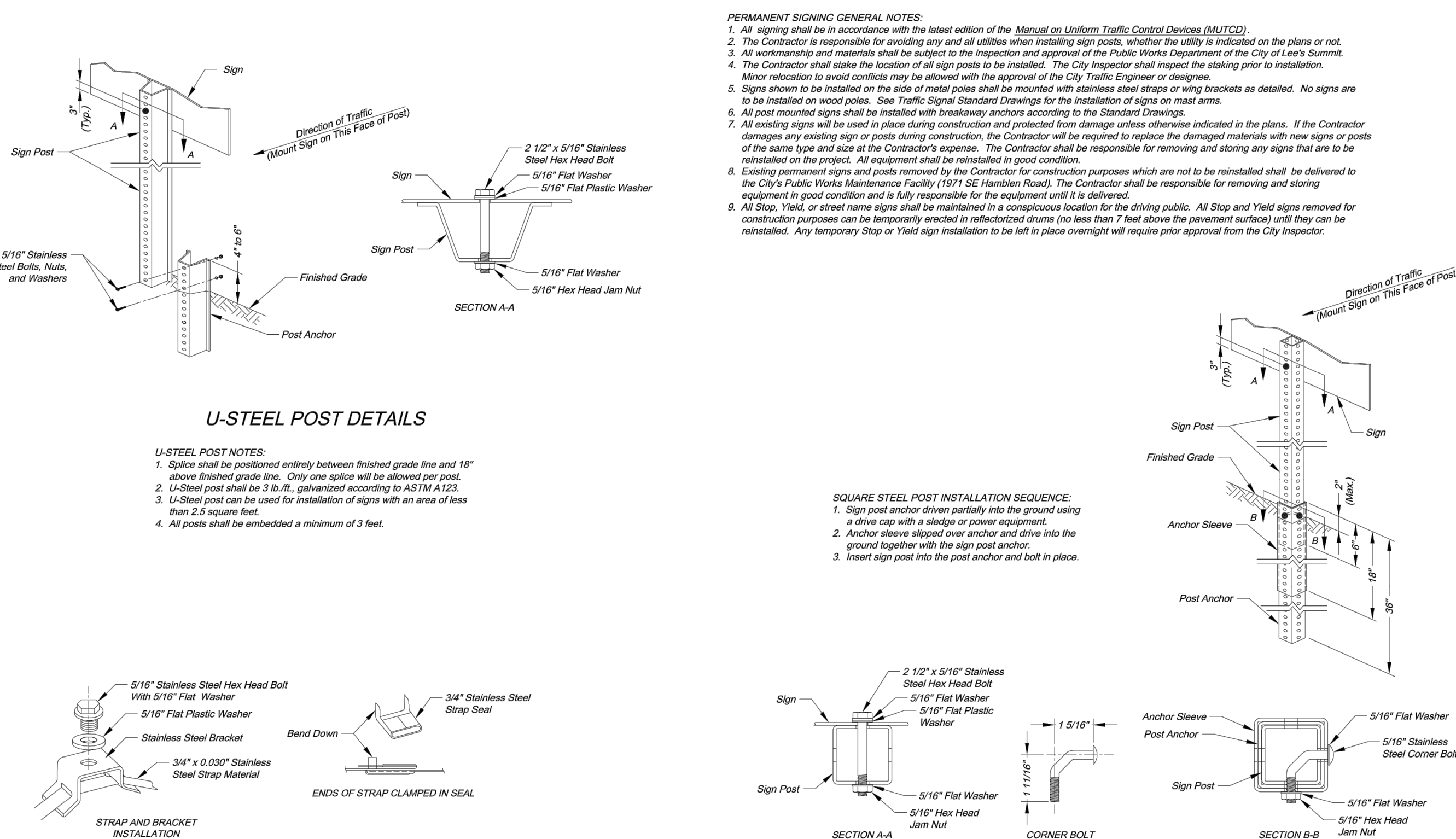
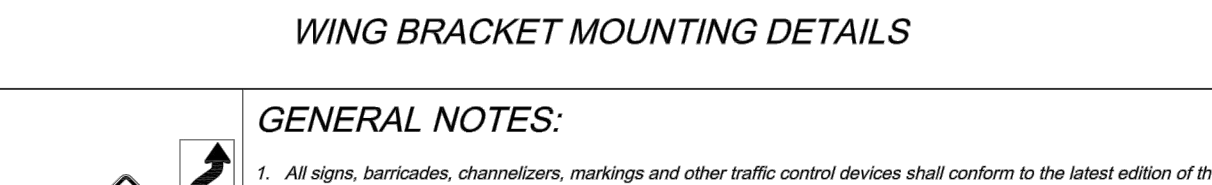
☐ **Other** ☐ **Don't know** ☐ **Refuse to answer**



16 1/2" or 24" 1 1/32" Dia. Holes (Typ.)



Steel Strap Seal — V



STRAP TYPE SIGN SUPPORT DETAILS

METAL POLE SIGN MOUNTING NOTES:

- METAL POLE SIGN MOUNTING NOTES:**
1. Signs on metal poles shall be attached with two brackets and stainless steel bands.
 2. Holes in sign for attachment to the mounting brackets shall be offset a minimum of 2 inches from the edge of the sign.
 3. Holes in sign shall be located such that the sign is level.
 4. All strap, bracket, and seal materials should be Type 201 stainless steel.

SQUARE STEEL POST DETAILS

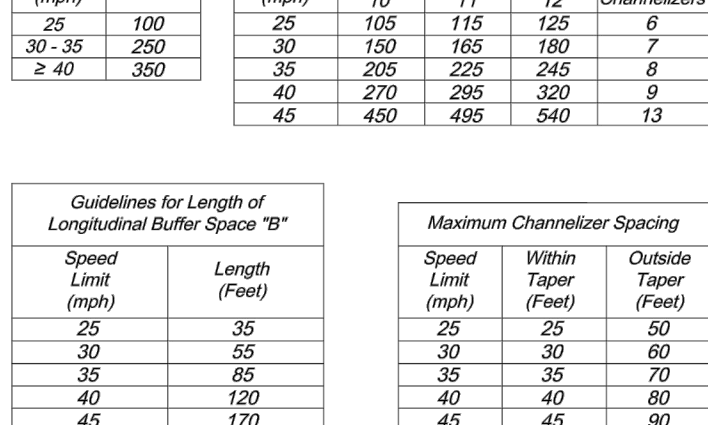
SQUARE STEEL PIPE NOTES:

- SQUARE STEEL POST NOTES:**
1. Square steel sign posts and break-away anchor shall consist of the following materials:
 - Sign Post - 14 Ga. 2" x 2" Square Steel Post
 - Post Anchor - 12 Ga. 2 1/2" x 2 1/2" x 36" Square Steel Post
 - Anchor Sleeve - 12 Ga. 2 1/2" x 2 1/2" x 18" Square Steel Post
 2. 14 Gauge posts must meet a certified minimum yield strength of 60,000 psi.
 3. In all cases, the signs must be placed above the finished grade on the sign post, anchor, and anchor sleeve must be in line for the insertion of the corner bolts.
 4. The maximum area for one sign post is 9.0 square feet. A sign or combination of signs with an area greater than 9.0 square feet will require two posts. Also, signs with a width greater than 36" (not including 36" x 36" diamond shaped signs) will require two posts.

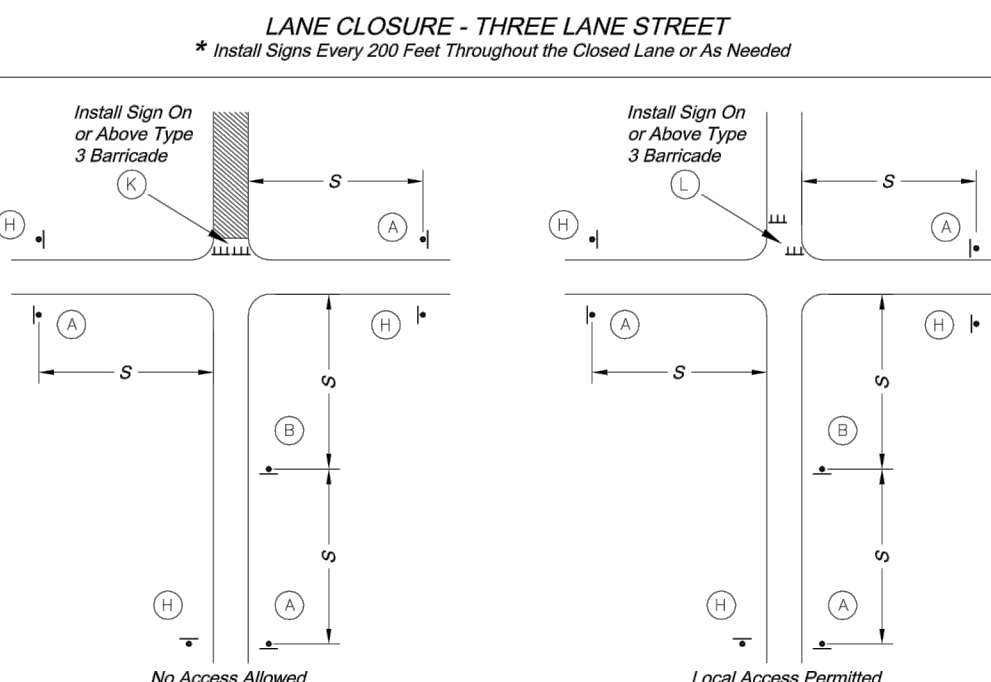
Sign Spacing "S"		Taper Dimensions (Feet)				
Speed Limit (mph)	Spacing (Feet)	Speed Limit (mph)	Minimum Taper Length "L", per Lane Width "W"			Minimum Number of Channelizers
			10	11	12	
25	100	25	105	115	125	6
30 - 35	250	30	150	165	180	7
≥ 40	350	35	205	225	245	8
		40	270	295	320	9
		45	450	495	540	13

Speed Limit (mph)	Length (Feet)
25	35
30	55
35	85

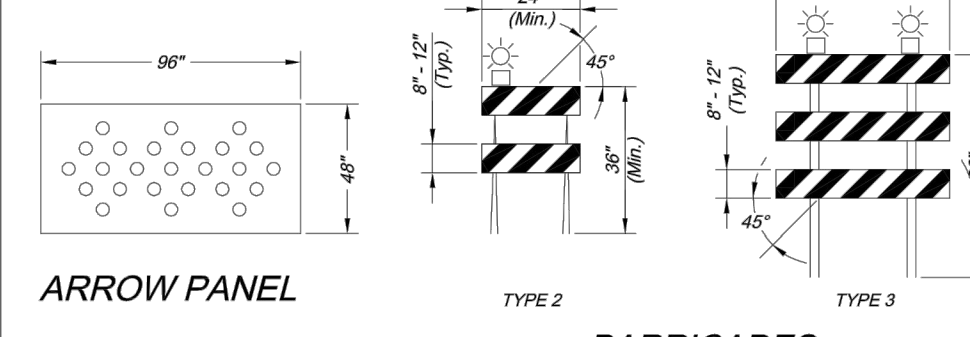
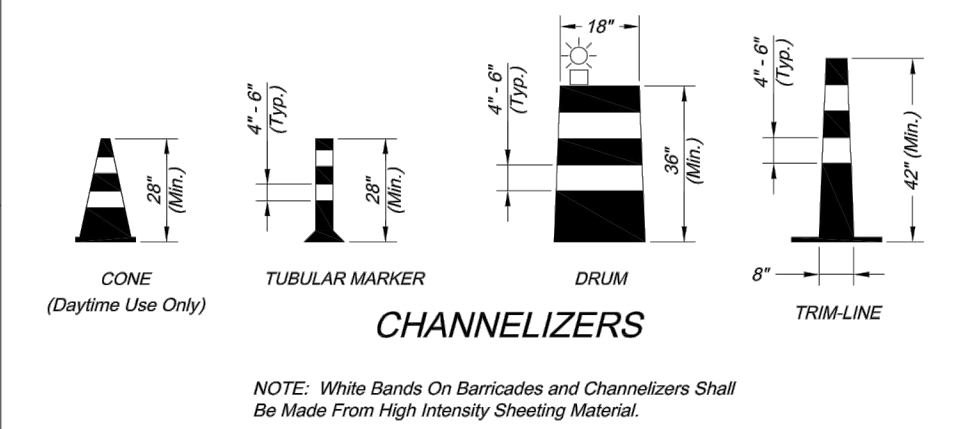
Speed Limit (mph)	Within Taper (Feet)	Outside Taper (Feet)
25	25	50
30	30	60
35	35	70
40	40	80
45	45	90



TYPICAL STREET CLOSURE



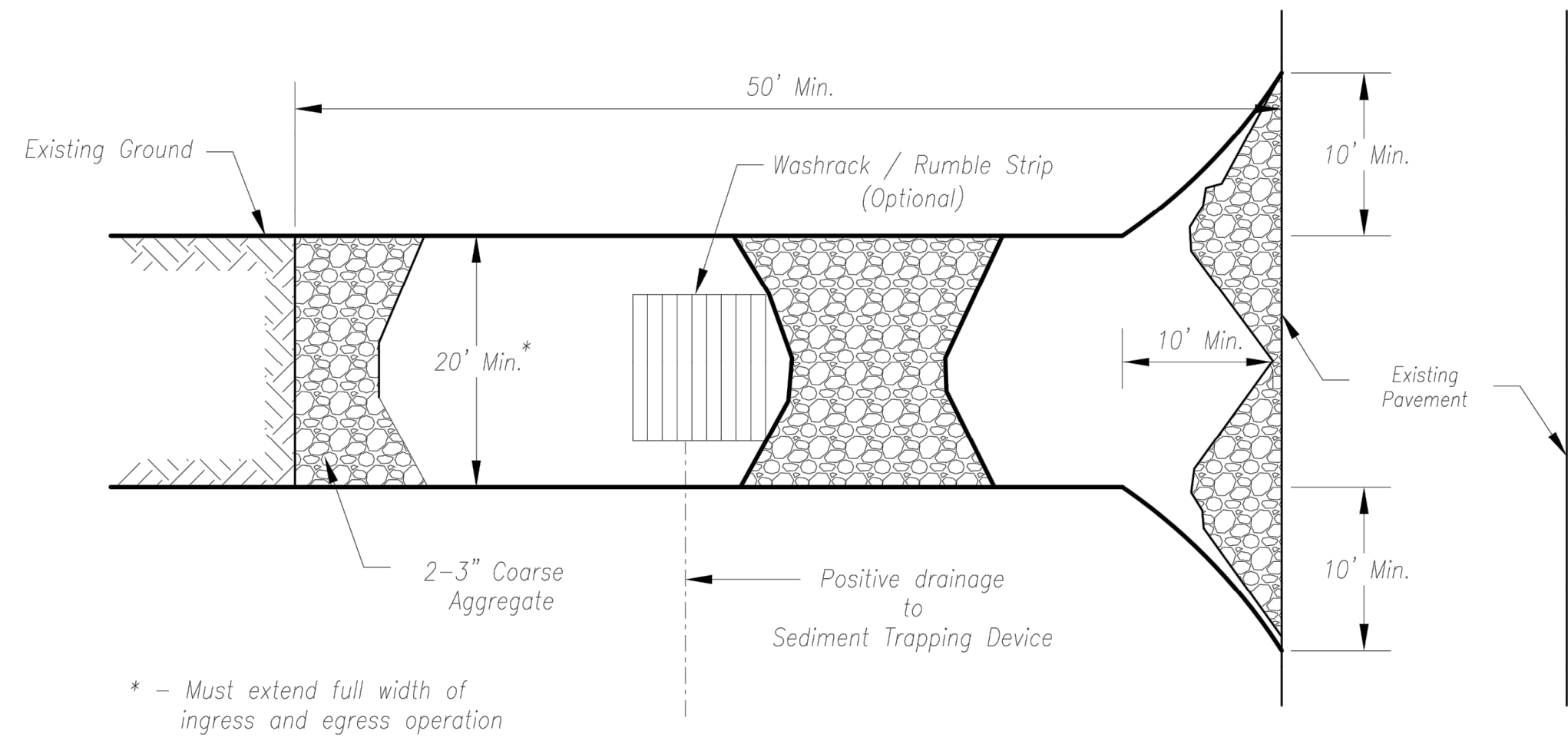
(Daytime Use Only) **CHANNELIZERS**



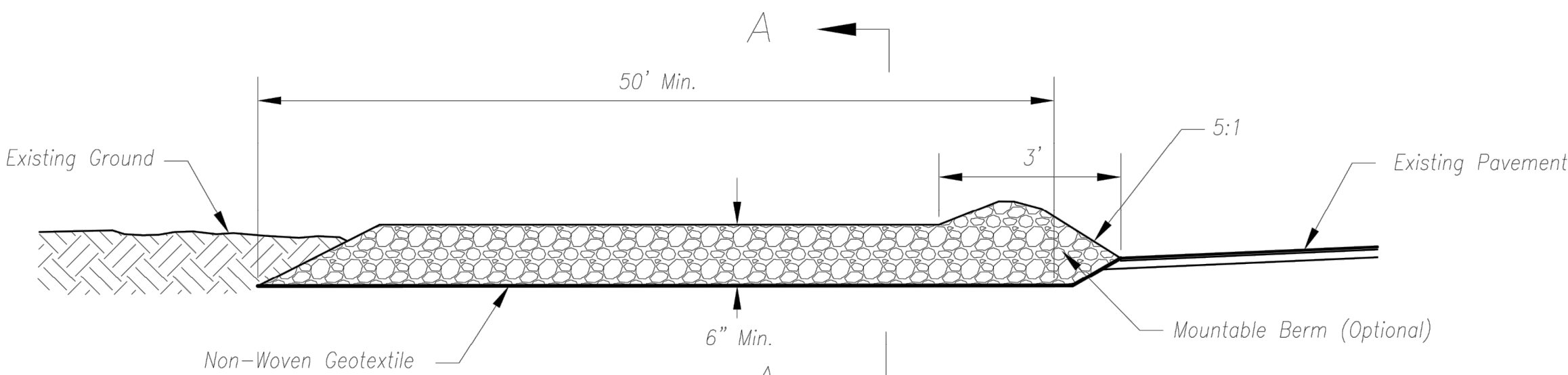
ARROW PANEL

BARRICADES

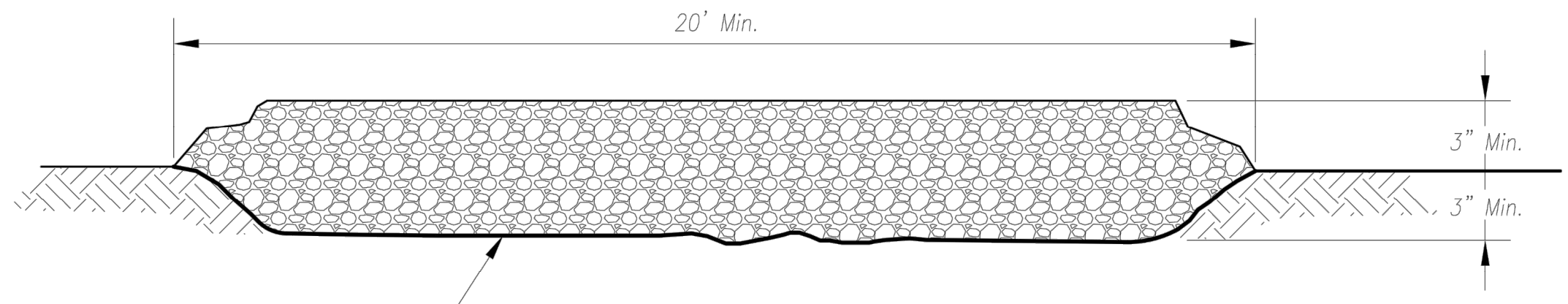




Plan View
Not to Scale



Side Elevation
Not to Scale



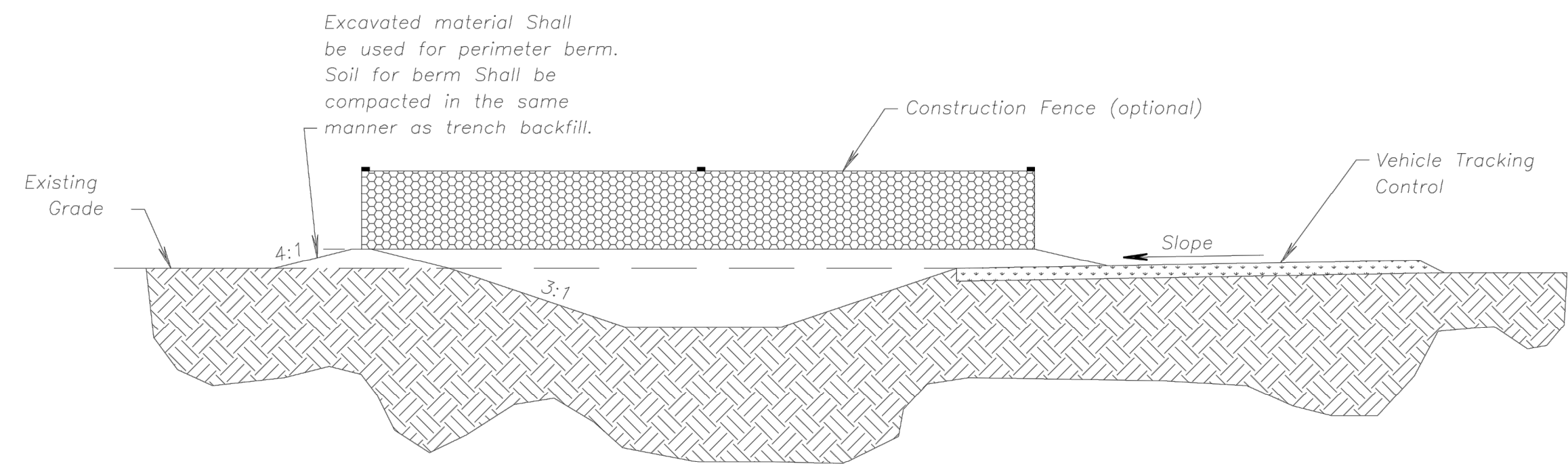
Section A-A
Not to Scale

Notes for Concrete Washout:

1. Concrete washout areas shall be installed prior to any concrete placement on site.
2. Concrete washout area shall include a flat subsurface pit sized relative to the amount of concrete to be placed on site. The slopes leading out of the subsurface pit shall be 3:1. The vehicle tracking pad shall be sloped towards the concrete washout area.
3. Vehicle tracking control is required at the access point to all concrete washout areas.
4. Signs 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 truck and pump rigs.
5. A one-piece impervious liner may be required along the bottom and sides of the subsurface pit in sandy or gravelly soils.

Maintenance for Concrete Washout:

1. Concrete washout materials shall be removed once the materials have filled the washout to approximately 75% full.
2. Concrete washout areas shall be enlarged as necessary to maintain capacity for wasted concrete.
3. Concrete washout water, wasted pieces of concrete and all other debris in the subsurface pit shall be transported from the job site in a water-tight container and disposed of properly.
4. Concrete washout areas shall remain in place until all concrete for the project is placed.
5. When concrete washout areas are removed, excavations shall be filled with suitable compacted backfill and topsoil, 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
Kansas City Metro Chapter
KANSAS CITY METRO CHAPTER

CONSTRUCTION ENTRANCE AND CONCRETE WASHOUT
STANDARD DRAWING NUMBER ESC-01
ADOPTED: 10/24/2016

Notes for Construction Entrance:

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

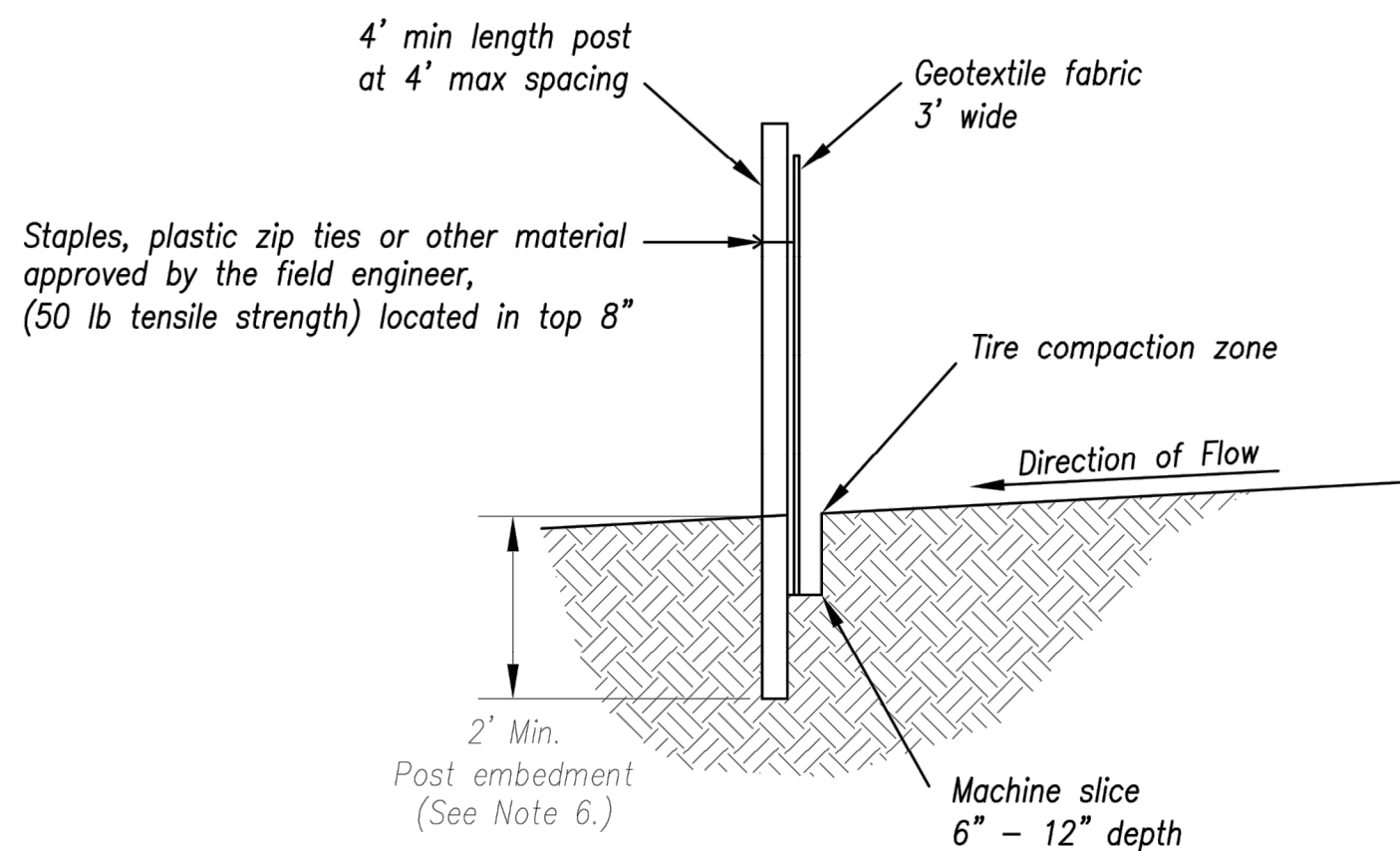
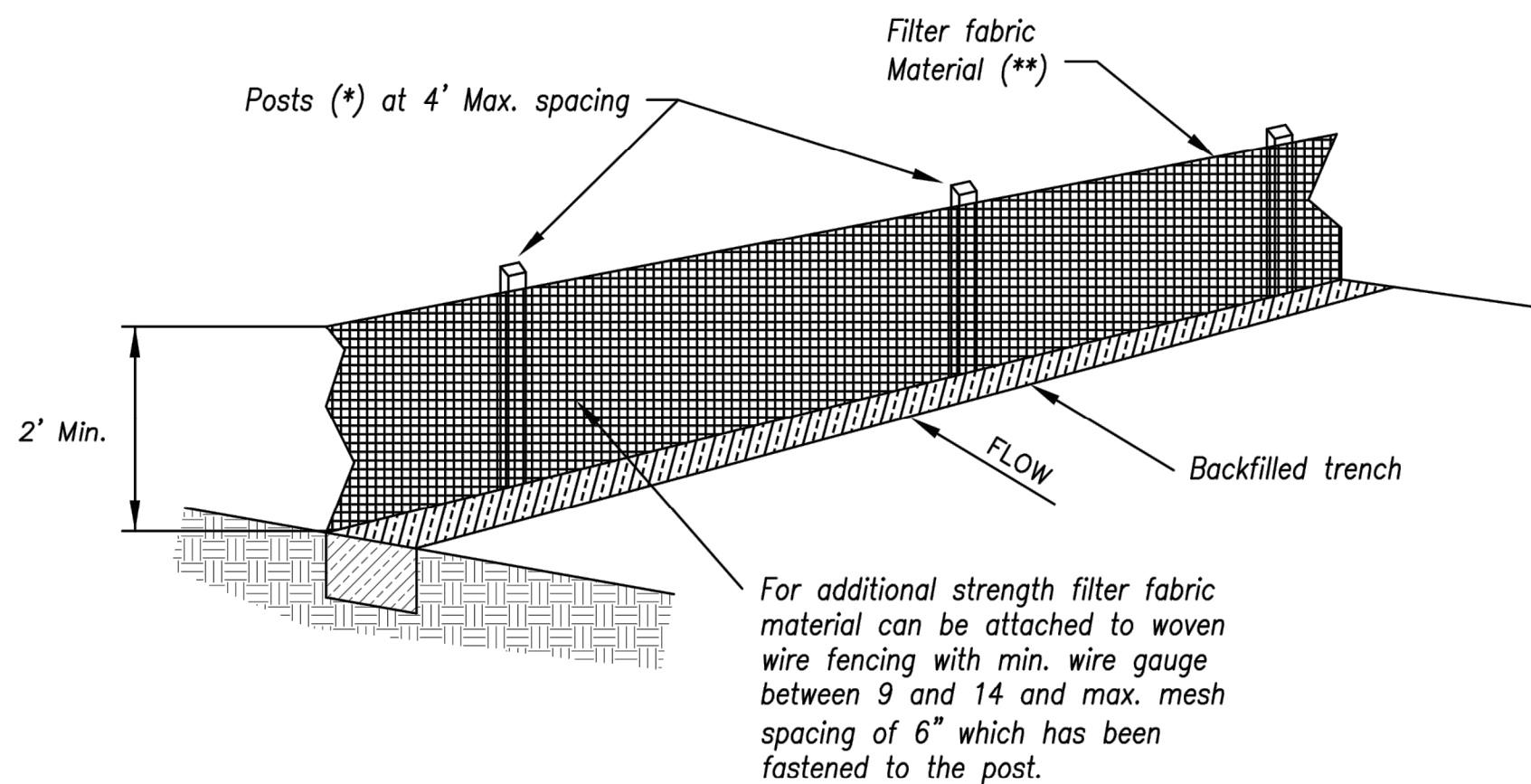
Maintenance for Construction Entrance:

1. 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.

2319 N. JACKSON P.O. BOX 1304 JUNCTION CITY, KANSAS 66441 PH. (785) 762-5040 FAX (785) 762-7744 joe@kveeng.com www.kveeng.com	LEON D. OSBOURN ENGINEER MO # 021726	STATE OF MISSOURI LEON D. OSBOURN NUMBER 1-3-19 E-21726 REGISTERED PROFESSIONAL ENGINEER	STREETS OF WEST PRYOR NWQ NW PRYOR RD & NW LOWENSTEIN DR LEE'S SUMMIT, MISSOURI PRIVATE ROAD PLANS EROSION CONTROL DETAIL SHEET
PROJ. NO. A14-7067-1	DESIGNER LDO	DRAWN BY JT	CFN 7067-1IR_DET
SHEET 0	REV 0	DATE 5-16-19	INITIAL ISSUE
REV 0	DATE 5-16-19	INITIAL ISSUE	DESCRIPTION



(*) **POSTS**

- MIN. LENGTH 4'
- HARDWOOD 1 3/8" x 1 3/8"
- NO.2 SOUTHERN PINE 2 5/8" x 2 5/8"
- STEEL 1.33 LB/FT

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

SILT FENCE DETAILS

Not to Scale

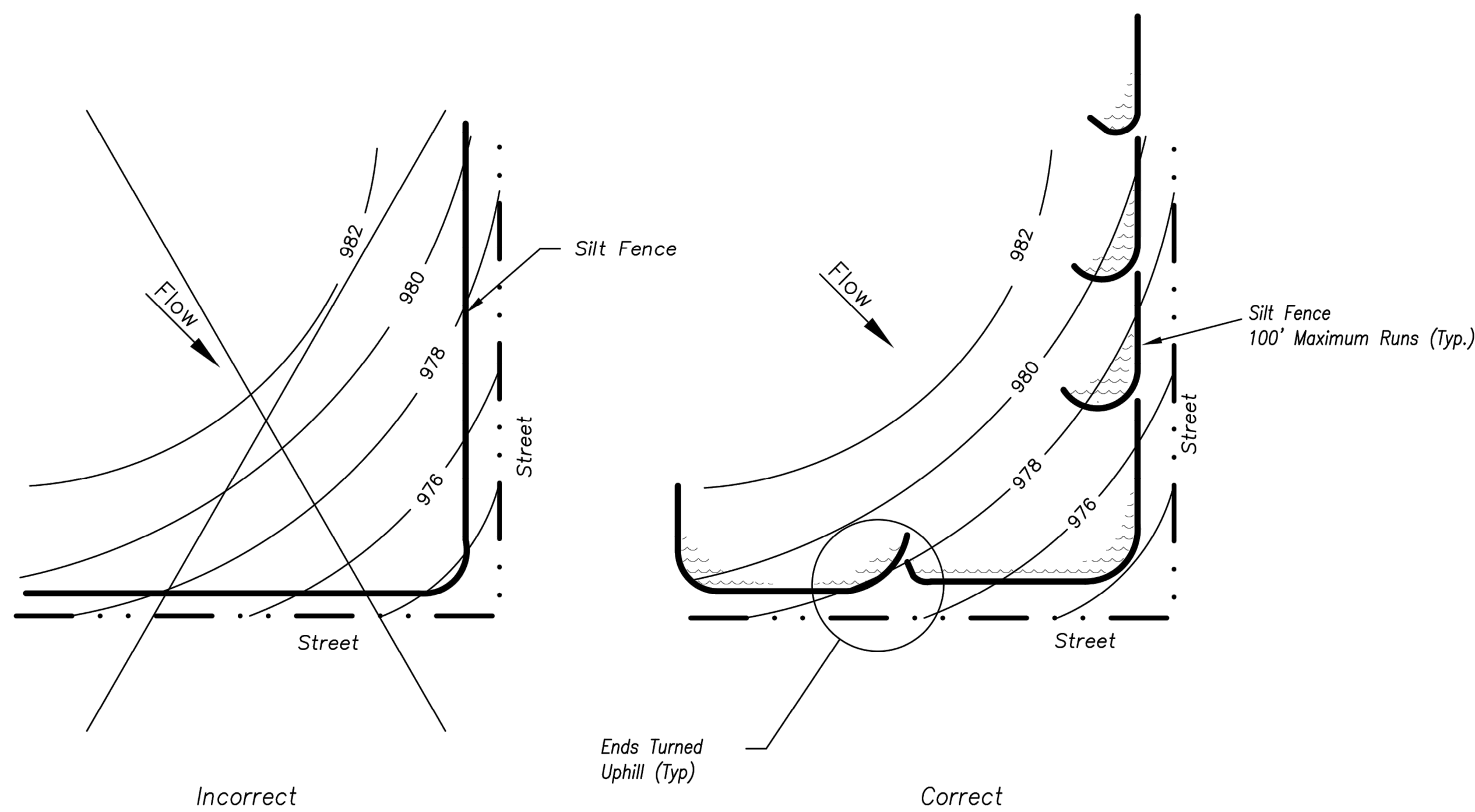
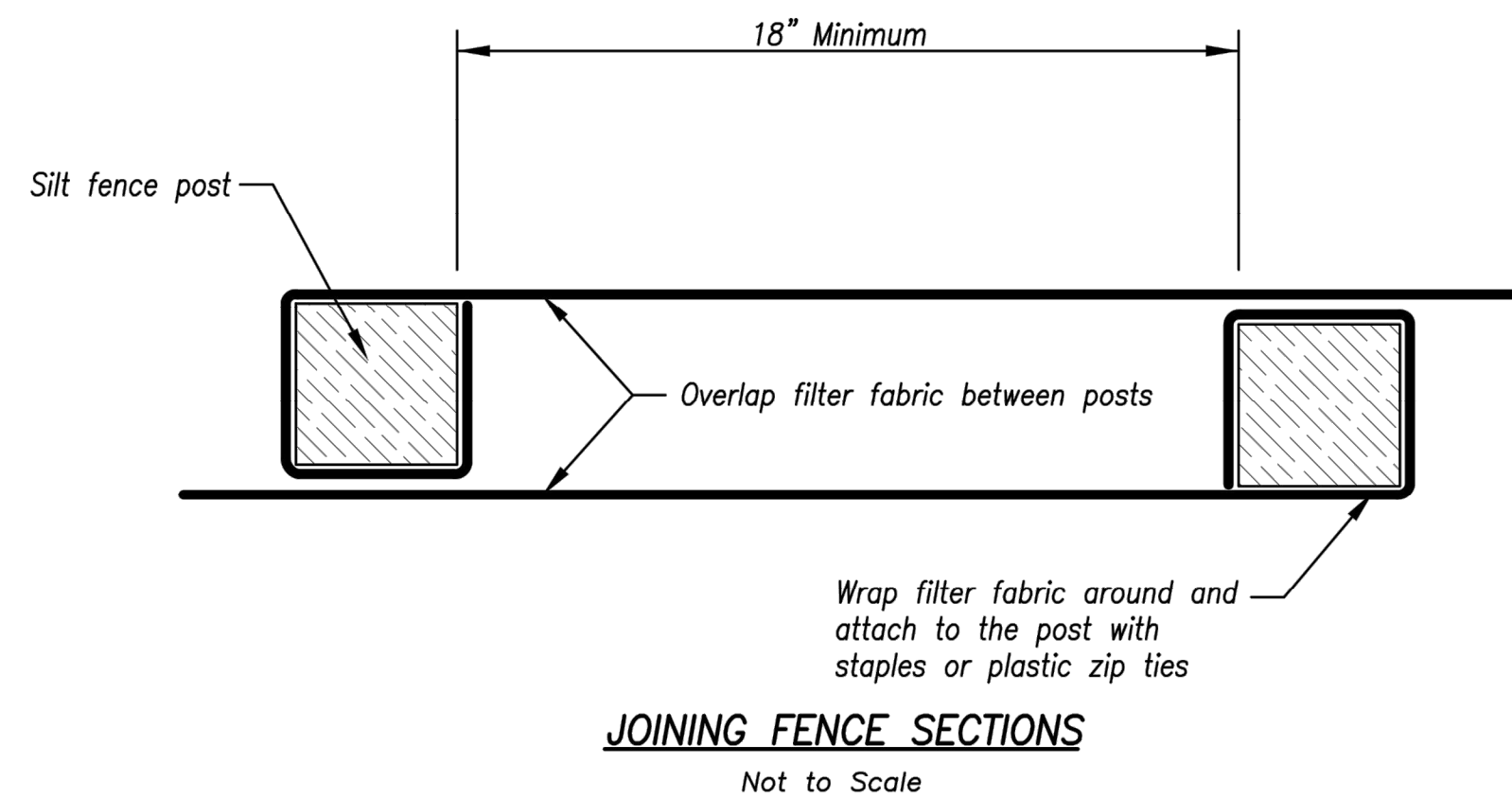
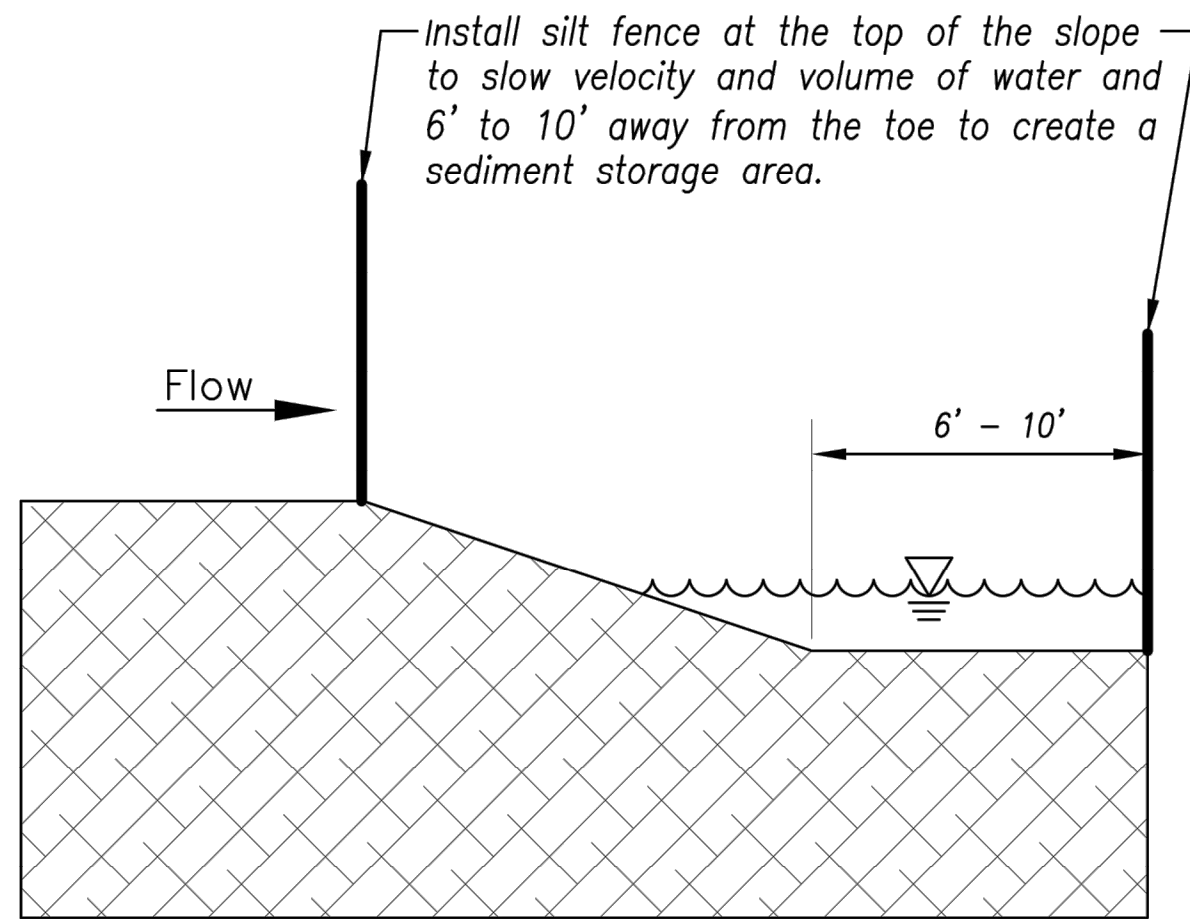


Figure A

SILT FENCE LAYOUT

Not to Scale



Notes:

1. In order to contain water, the ends of the silt fence must be turned uphill (Figure A).
2. 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).
3. Long slopes should be broken up with intermediate rows of silt fence to slow runoff velocities.
4. Attach fabric to upstream side of post.
5. Install posts a minimum of 2' into the ground.
6. Trenching will only be allowed for small or difficult installation, where slicing machine cannot be reasonably used.

Maintenance:

1. Remove and dispose of sediment deposits when the deposit approaches 1/3 the height of silt fence.
2. Repair as necessary to maintain function and structure.

AMERICAN PUBLIC WORKS ASSOCIATION



KANSAS CITY
METRO CHAPTER

SILT FENCE

STANDARD DRAWING
NUMBER ESC-03

ADOPTED:
10/24/2016

STREETS OF WEST PRYOR
NWQ NW PRYOR RD & NW LOWENSTEIN DR
LEE'S SUMMIT, MISSOURI

PRIVATE ROAD PLANS
EROSION CONTROL DETAIL SHEET

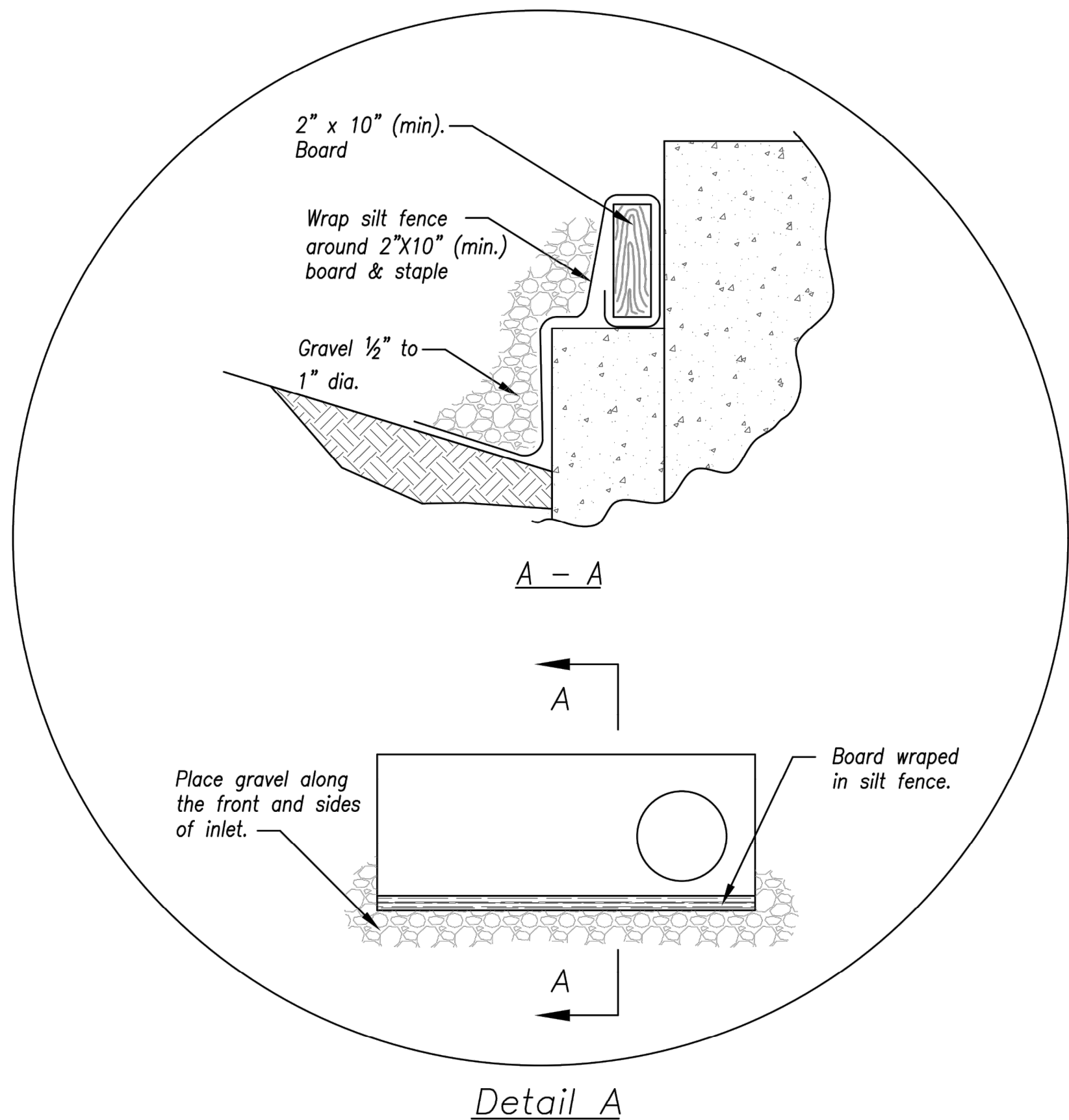
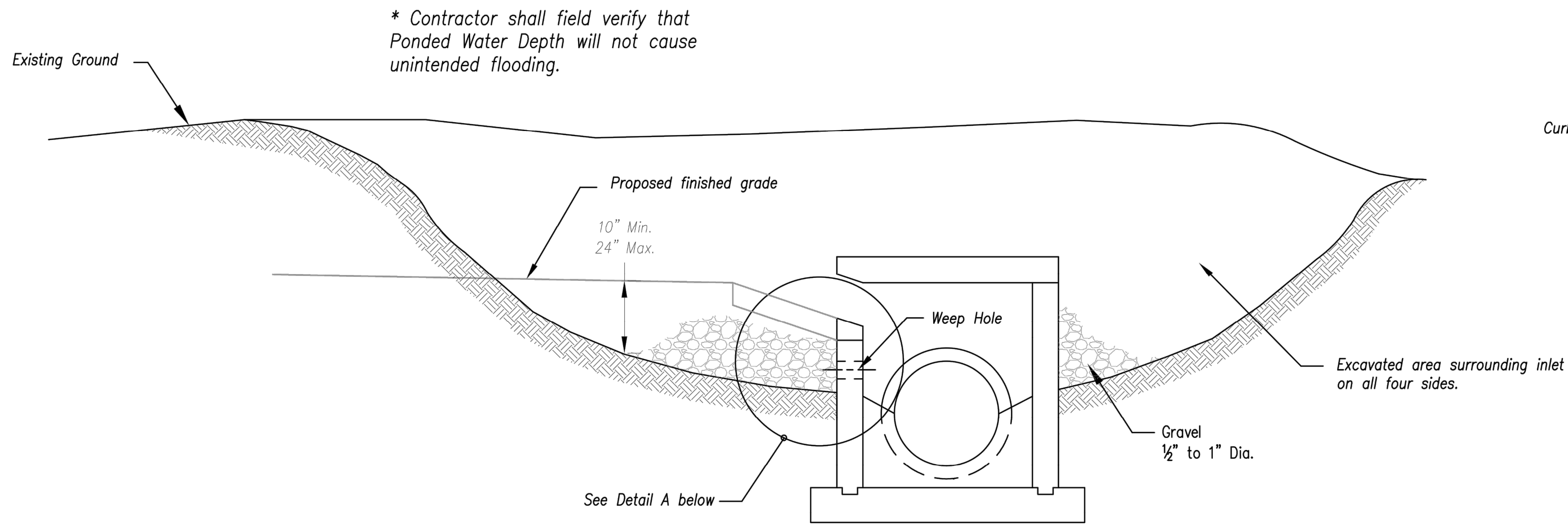
PROJ. NO. A14-7067-1
DESIGNER LDO DRAWN BY JT
CFN 7067-1IR_DET
SHEET REV
C-24 0



LEON D. OSBOURN
ENGINEER
MO # 021726

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JUNCTION CITY, KANSAS 66441
PH. (785) 762-5040 | FAX (785) 762-7744
joe@kveeng.com | www.kveeng.com
KAW VALLEY ENGINEERING
KAW VALLEY ENGINEERING, INC. IS AUTHORIZED TO OFFER ENGINEERING SERVICES IN THE STATE OF MISSOURI. CERTIFICATE OF AUTHORITY # 000842. EXPIRES 12/31/19

0 5-16-19 INITIAL ISSUE
REV DATE DESCRIPTION
LDO BKR LDO DSN LDO CHK



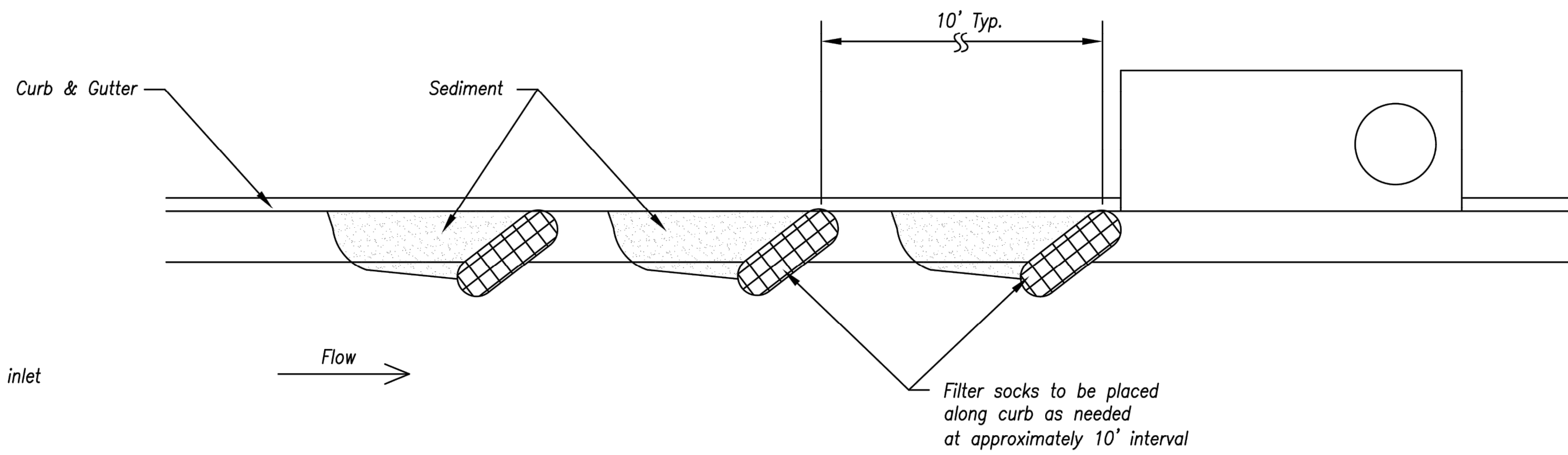
EARLY STAGE CURB INLET
(Open Box and Prior to Pouring
Curb and Inlet Throat)

Notes:

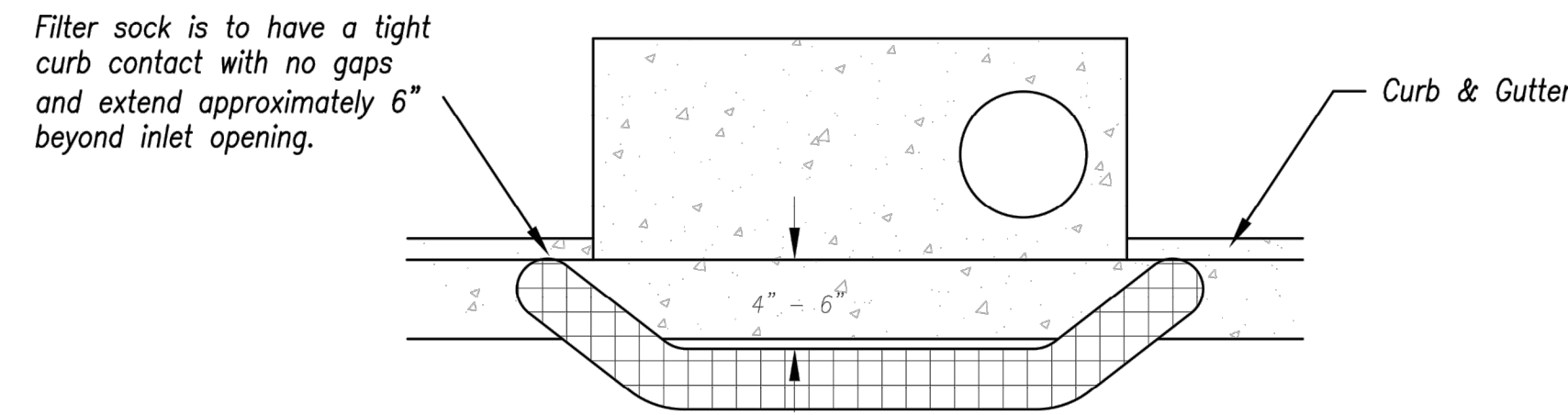
1. Immediately following inlet construction and prior to construction of curb and inlet throat, protect inlet opening by installing 2" X 10" (min.) board wrapped in silt fence. Structures shall have excavated storage area on all four sides to allow settling of sediment (Early Stage Curb Inlet).
2. When 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.
3. Contractor to field verify ponding water shall not create a traffic hazard.

Maintenance:

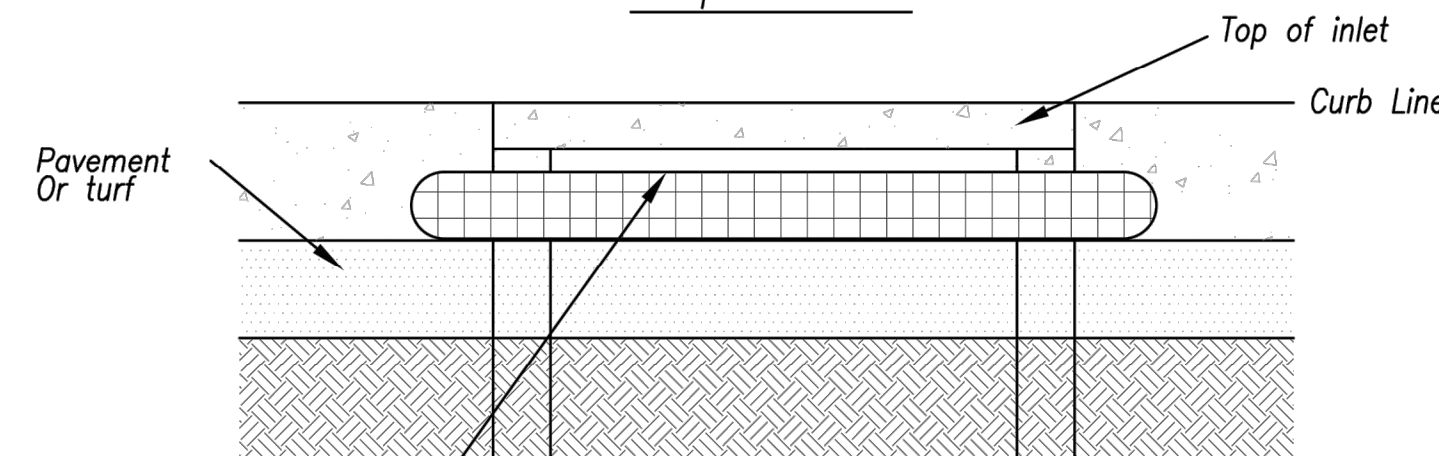
1. Remove deposited sediment from excavated storage areas when available storage has been reduced by 20%.
2. Remove deposited sediment from filter socks or similar when any accumulation of sediment is visible.
3. Repair or replace as necessary to maintain function and integrity of installation.



On Grade Curb Inlet Protection



Top View

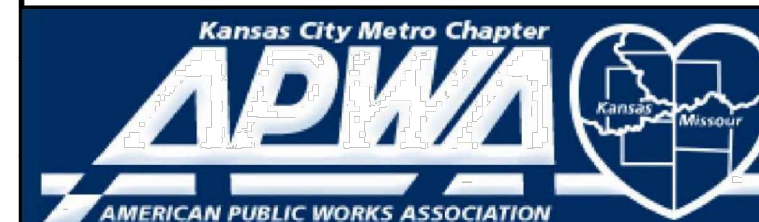


Front View

Sump Inlet Sediment Filter

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

AMERICAN PUBLIC WORKS ASSOCIATION



KANSAS CITY
METRO CHAPTER

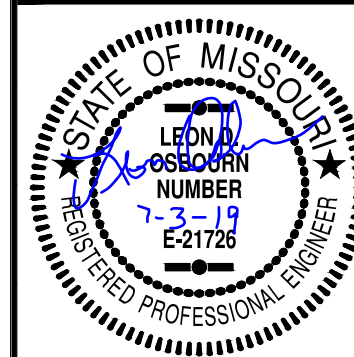
CURB INLET PROTECTION

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

STREETS OF WEST PRYOR
NWQ NW PRYOR RD & NW LOWENSTEIN DR
LEE'S SUMMIT, MISSOURI

PRIVATE ROAD PLANS
EROSION CONTROL DETAIL SHEET

PROJ. NO. A14-7067-1
DESIGNER LDO DRAWN BY JT
CFN 7067-1IR_DET
SHEET C-25 REV 0



LEON D. OSBOURN
ENGINEER
MO # 021726

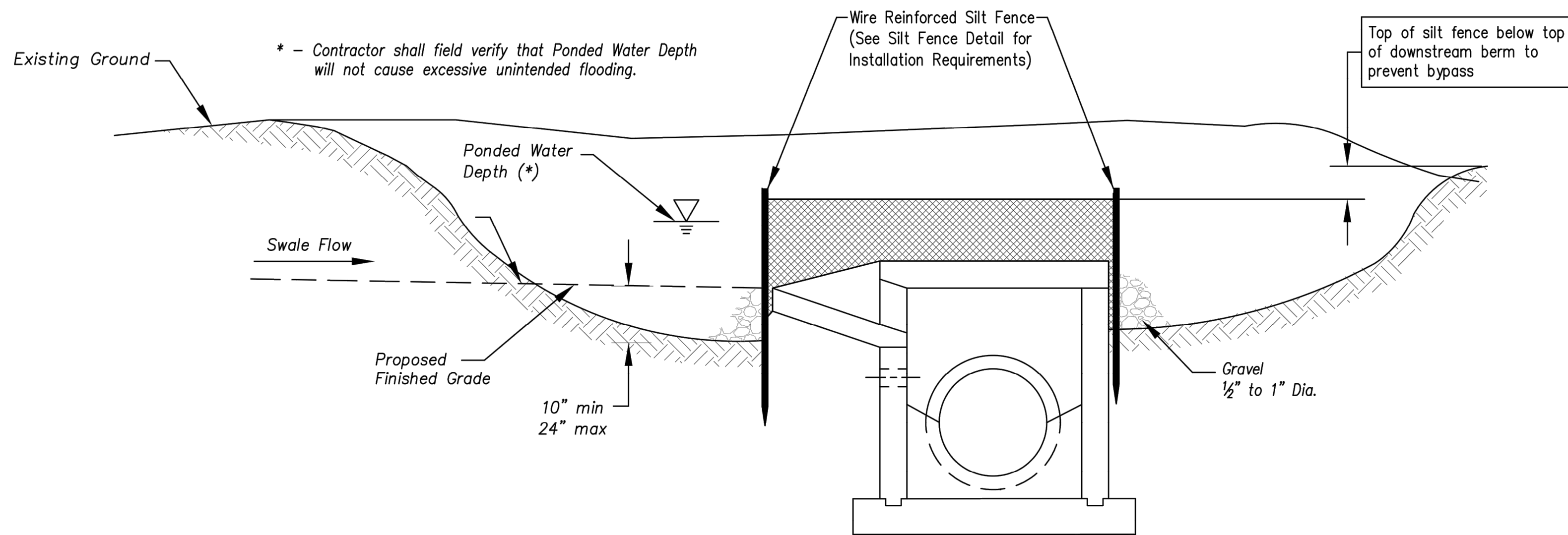
2319 N. JACKSON | P.O. BOX 1304
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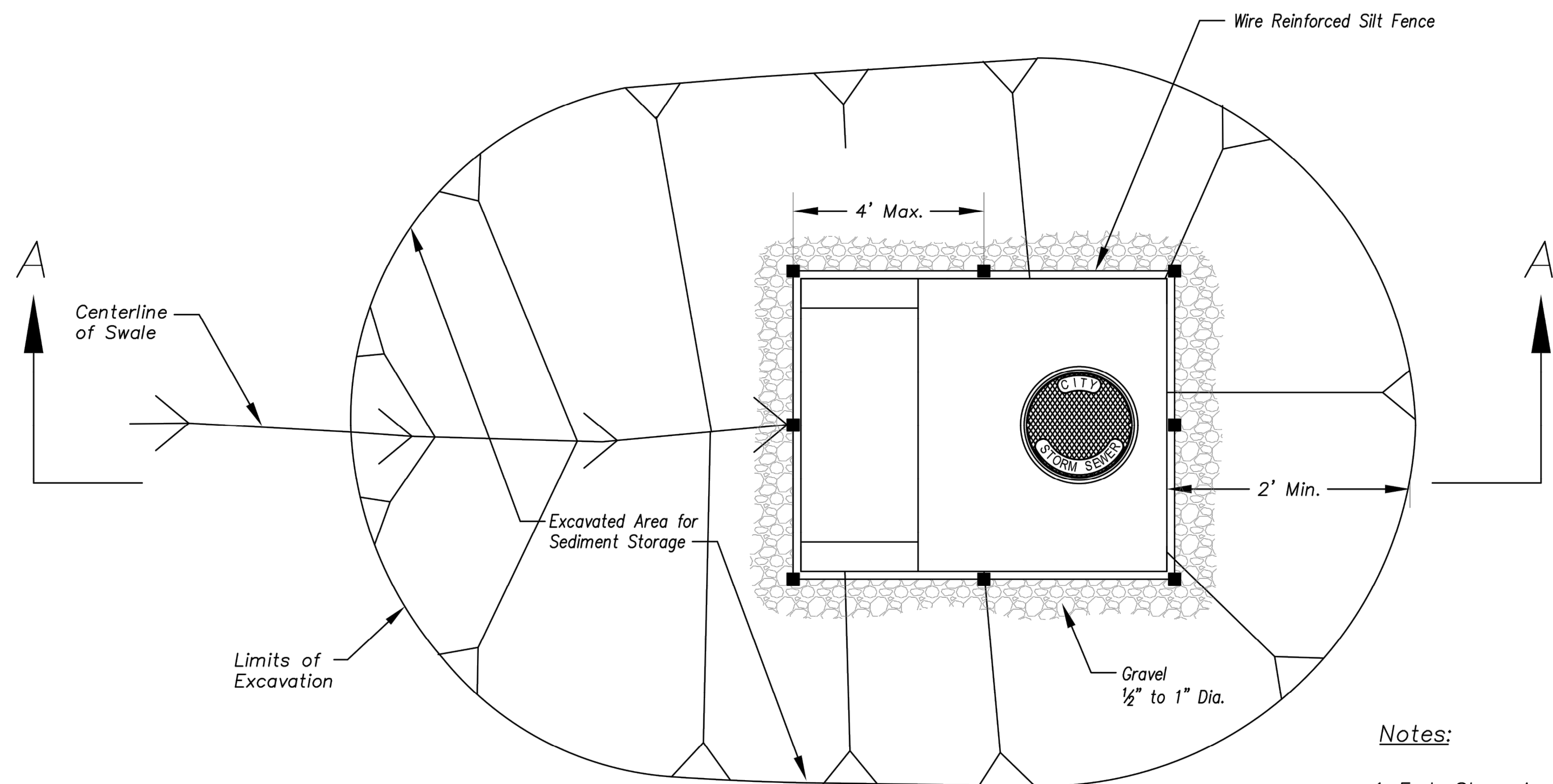
KAW VALLEY ENGINEERING
KAW VALLEY ENGINEERING, INC. IS AUTHORIZED TO OFFER ENGINEERING
SERVICES IN THE STATE OF MISSOURI. CERTIFICATE OF AUTHORITY # 000842.
EXPIRES 12/31/19

REV 0 5-16-19 INITIAL ISSUE DESCRIPTION

LDO BKR LDO DSN LDO CHK



Section A-A
Not to Scale

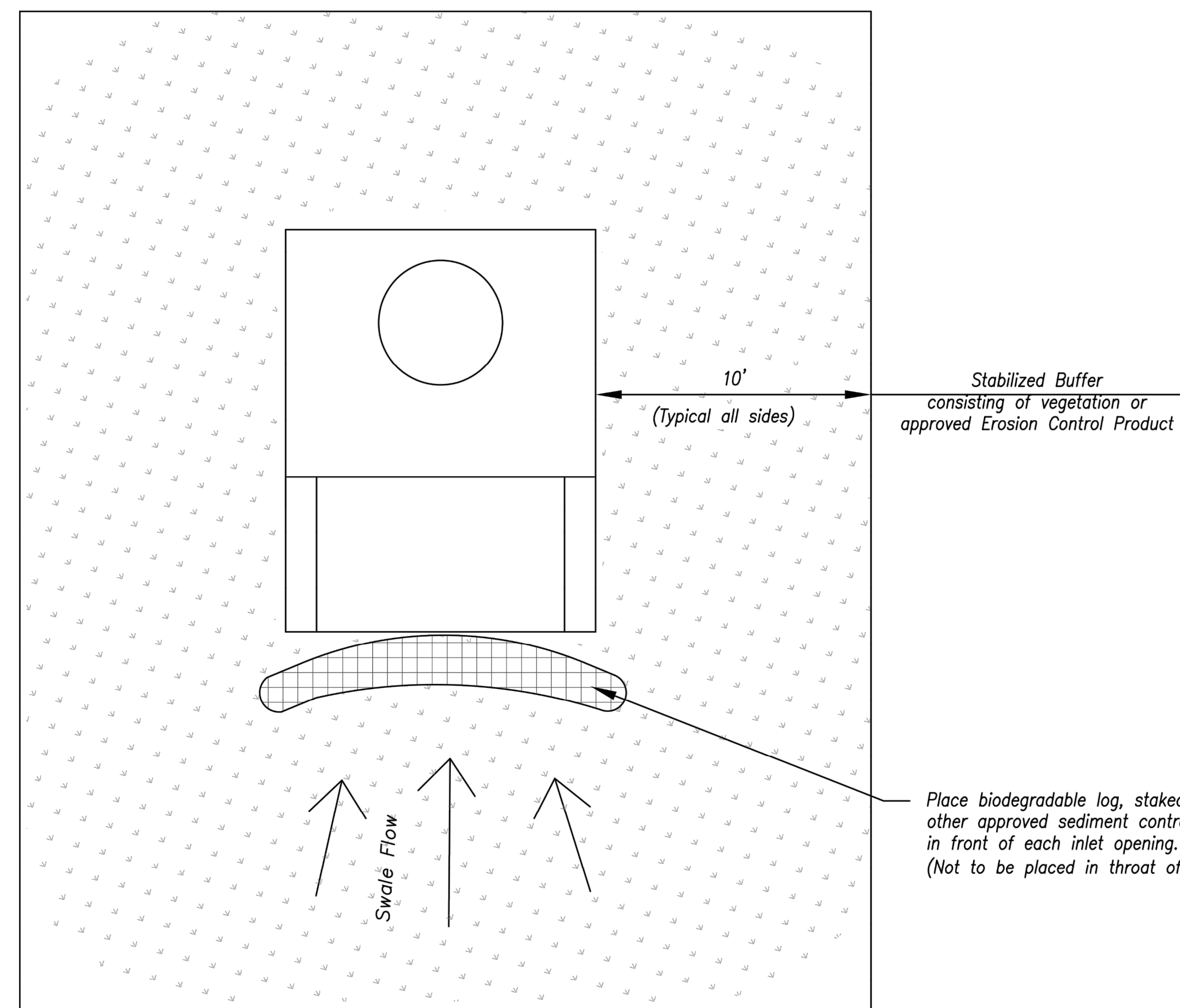


Plan
Not to Scale

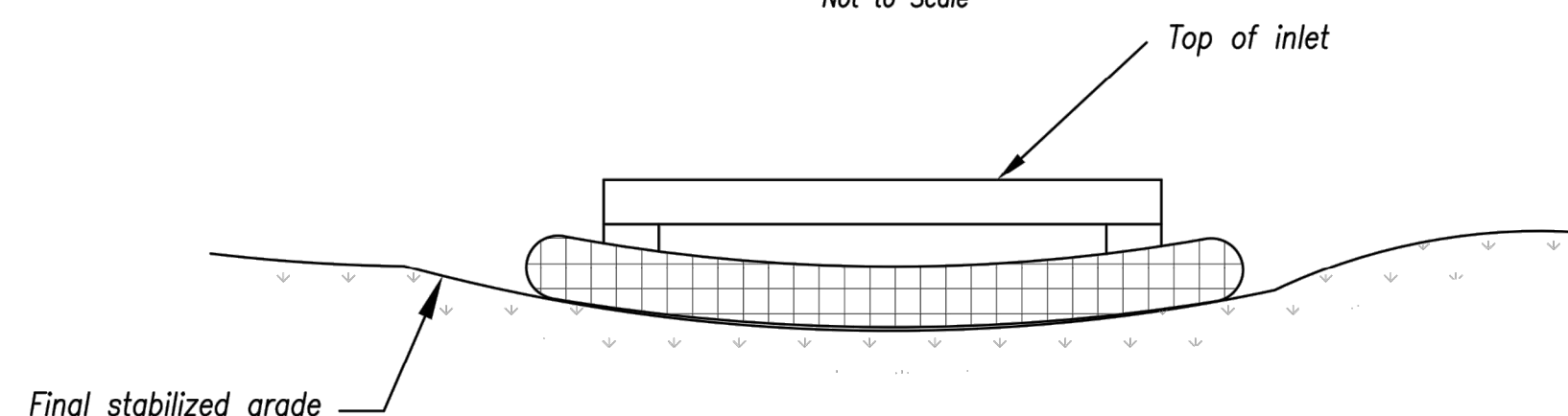
EARLY STAGE AREA INLET
(All open boxes and inlets not at final grade)

Notes:

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



Plan
Not to Scale



Front View

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

Maintenance:

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

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

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

STREETS OF WEST PRYOR NWQ NW PRYOR RD & NW LOWENSTEIN DR LEE'S SUMMIT, MISSOURI		PRIVATE ROAD PLANS EROSION CONTROL DETAIL SHEET	
PROJ. NO. A14-7067-1		DESIGNER LDO DRAWN BY JT	
CFN 7067-1IR_DET		SHEET REV	
C-26		0	
STATE OF MISSOURI LEON D. OSBOURN ENGINEER MO # 021726		REV DATE DESCRIPTION	
2310 N. JACKSON P.O. BOX 1304 JUNCTION CITY, KANSAS 66441 PH. (785) 762-5040 FAX (785) 762-7744 www.kawvalley.com www.keweng.com		5-16-19 INITIAL ISSUE	
KAW VALLEY ENGINEERING KAW VALLEY ENGINEERING, INC. IS AUTHORIZED TO OFFER ENGINEERING SERVICES IN THE STATE OF MISSOURI EXPIRES 12/31/19		LDO BKR DSN LDO DWN CHK	

REQUIRED CONCRETE BEARING AREA (SQUARE FEET – SF)

NOM. DIA. (INCHES)	TEE, PLUG	90 BEND	45 BEND	22.5 BEND	11.25 BEND
6	4.7	6.7	4.0	4.0	4.0
8	8.4	11.8	6.4	4.0	4.0
10	13.1	18.5	10.0	5.1	4.0
12	18.6	26.7	14.4	7.4	4.0
14	25.7	36.3	19.6	10.0	5.0
16	33.5	47.4	25.6	13.1	6.6
18	42.4	59.1	32.5	16.5	8.3
20	51.3	71.4	40.1	20.4	10.3
24	74.2	100.0	56.2	29.4	14.8

REQUIRED CONCRETE VOLUME (CUBIC FEET – CF)

NOM. DIA. (INCHES)	TEE, PLUG	90 BEND	45 BEND	22.5 BEND	11.25 BEND
6	50.5	71.4	38.6	19.7	9.9
8	89.8	126.9	68.7	35.0	17.6
10	140.2	198.3	107.3	54.7	27.5
12	202.0	285.1	154.6	78.8	39.6
14	274.1	390.4	210.4	107.3	53.9
16	356.8	504.1	270.1	140.1	70.4
18	449.1	636.8	336.8	177.3	89.1
20	551.0	789.1	410.1	220.4	110.0
24	804.1	1140.0	594.1	314.1	158.4

NOTES:

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

POURED CONCRETE BLOCKS (TYP.)

UNDISTURBED EARTH

BEARING AREA (TYP.)

BOND BREAKER (TYP. ALL BLOCKS)

PLAN

1/4" BOND BREAKER

SECTION A

1/2" DIAMETER

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
Rev:

REQUIRED CONCRETE BEARING AREA (SQUARE FEET – SF)

NOM. DIA. (INCHES)	TEE, PLUG	90 BEND	45 BEND	22.5 BEND	11.25 BEND
6	4.7	6.7	4.0	4.0	4.0
8	8.4	11.8	6.4	4.0	4.0
10	13.1	18.5	10.0	5.1	4.0
12	18.6	26.7	14.4	7.4	4.0
14	25.7	36.3	19.6	10.0	5.0
16	33.5	47.4	25.6	13.1	6.6
18	42.4	59.1	32.5	16.5	8.3
20	51.3	71.4	40.1	20.4	10.3
24	74.2	100.0	56.2	29.4	14.8

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NOM. DIA. (INCHES)	TEE, PLUG	90 BEND	45 BEND	22.5 BEND	11.25 BEND
6	50.5	71.4	38.6	19.7	9.9
8	89.8	126.9	68.7	35.0	17.6
10	140.2	198.3	107.3	54.7	27.5
12	202.0	285.1	154.6	78.8	39.6
14	274.1	390.4	210.4	107.3	53.9
16	356.8	504.1	270.1	140.1	70.4
18	449.1	636.8	336.8	177.3	89.1
20	551.0	789.1	410.1	220.4	110.0
24	804.1	1140.0	594.1	314.1	158.4

NOTES:

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

POURED CONCRETE BLOCKS (TYP.)

UNDISTURBED EARTH

BEARING AREA (TYP.)

BOND BREAKER (TYP. ALL BLOCKS)

PLAN

1/4" BOND BREAKER

SECTION A

1/2" DIAMETER

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
Rev:

REQUIRED CONCRETE BEARING AREA (SQUARE FEET – SF)

NOM. DIA. (INCHES)	TEE, PLUG	90 BEND	45 BEND	22.5 BEND	11.25 BEND
6	4.7	6.7	4.0	4.0	4.0
8	8.4	11.8	6.4	4.0	4.0
10	13.1	18.5	10.0	5.1	4.0
12	18.6	26.7	14.4	7.4	4.0
14	25.7	36.3	19.6	10.0	5.0
16	33.5	47.4	25.6	13.1	6.6
18	42.4	59.1	32.5	16.5	8.3
20	51.3	71.4	40.1	20.4	10.3
24	74.2	100.0	56.2	29.4	14.8

REQUIRED CONCRETE VOLUME (CUBIC FEET – CF)

NOM. DIA. (INCHES)	TEE, PLUG	90 BEND	45 BEND	22.5 BEND	11.25 BEND
6	50.5	71.4	38.6	19.7	9.9
8	89.8	126.9	68.7	35.0	17.6
10	140.2	198.3	107.3	54.7	27.5
12	202.0	285.1	154.6	78.8	39.6
14	274.1	390.4	210.4	107.3	53.9
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20	551.0	789.1	410.1	220.4	110.0
24	804.1	1140.0	594.1	314.1	158.4

NOTES:

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2. MEGA LUGS MAY BE USED ONLY IN CONJUNCTION WITH CONCRETE THRUST BLOCKING.
3. BEARING AREA MUST BE AGAINST UNDISTURBED SOIL.
4. DO NOT COVER JOINTS OR BOLTS (WHERE APPLICABLE) WITH CONCRETE.

POURED CONCRETE BLOCKS (TYP.)

UNDISTURBED EARTH

BEARING AREA (TYP.)

BOND BREAKER (TYP. ALL BLOCKS)

PLAN

1/4" BOND BREAKER

SECTION A

1/2" DIAMETER

LEE'S SUMMIT MISSOURI

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

STRADDLE BLOCK

Date: 02/13
Drawn By: JN
Checked By: DL
FILE: WAT-3
Rev: 1/14
Rev:

REQUIRED CONCRETE BEARING AREA (SQUARE FEET – SF)

NOM. DIA. (INCHES)	TEE, PLUG	90 BEND	45 BEND	22.5 BEND	11.25 BEND
6	4.7	6.7	4.0	4.0	4.0
8	8.4	11.8	6.4	4.0	4.0
10	13.1	18.5	10.0	5.1	4.0
12	18.6	26.7	14.4	7.4	4.0
14	25.7	36.3	19.6	10.0	5.0
16	33.5	47.4	25.6	13.1	6.6
18	42.4	59.1	32.5	16.5	8.3
20	51.3	71.4	40.1	20.4	10.3
24	74.2	100.0	56.2	29.4	14.8

REQUIRED CONCRETE VOLUME (CUBIC FEET – CF)

NOM. DIA. (INCHES)	TEE, PLUG	90 BEND	45 BEND	22.5 BEND	11.25 BEND
6	50.5	71.4	38.6	19.7	9.9
8	89.8	126.9	68.7	35.0	17.6
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20	551.0	789.1	410.1	220.4	110.0
24	804.1	1140.0	594.1	314.1	158.4

NOTES:

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3. BEARING AREA MUST BE AGAINST UNDISTURBED SOIL.
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POURED CONCRETE BLOCKS (TYP.)

UNDISTURBED EARTH

BEARING AREA (TYP.)

BOND BREAKER (TYP. ALL BLOCKS)

PLAN

1/4" BOND BREAKER

SECTION A

1/2" DIAMETER

LEE'S SUMMIT MISSOURI

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

VALVE STEM EXTENSION AND VALVE BOX

Date: 02/13
Drawn By: JN
Checked By: DL
FILE: WAT-9
Rev: 1/14
Rev:

REQUIRED CONCRETE BEARING AREA (SQUARE FEET – SF)

NOM. DIA. (INCHES)	TEE, PLUG	90 BEND	45 BEND	22.5 BEND	11.25 BEND
6	4.7	6.7	4.0	4.0	4.0
8	8.4	11.8	6.4	4.0	4.0
10	13.1	18.5	10.0	5.1	4.0
12	18.6	26.7	14.4	7.4	4.0
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24	74.2	100.0	56.2	29.4	14.8

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NOM. DIA. (INCHES)	TEE, PLUG	90 BEND	45 BEND	22.5 BEND	11.25 BEND
6	50.5	71.4	38.6	19.7	9.9
8	89.8	126.9	68.7	35.0	17.6
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POURED CONCRETE BLOCKS (TYP.)

UNDISTURBED EARTH

BEARING AREA (TYP.)

BOND BREAKER (TYP. ALL BLOCKS)

PLAN

1/4" BOND BREAKER

SECTION A

1/2" DIAMETER

LEE'S SUMMIT MISSOURI

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

HYDRANT INSTALLATION – STRAIGHT SET

Date: 02/13
Drawn By: JN
Checked By: DL
FILE: WAT-7
Rev: 1/14
Rev:

REQUIRED CONCRETE BEARING AREA (SQUARE FEET – SF)

NOM. DIA. (INCHES)	TEE, PLUG	90 BEND	45 BEND	22.5 BEND	11.25 BEND
6	4.7	6.7	4.0	4.0	4.0
8	8.4	11.8	6.4	4.0	4.0
10	13.1	18.5	10.0	5.1	4.0
12	18.6	26.7	14.4	7.4	4.0
14	25.7	36.3	19.6	10.0	5.0
16	33.5	47.4	25.6	13.1	6.6
18	42.4	59.1	32.5	16.5	8.3
20	51.3	71.4	40.1	20.4	10.3
24	74.2	100.0	56.2	29.4	14.8

REQUIRED CONCRETE VOLUME (CUBIC FEET – CF)

NOM. DIA. (INCHES)	TEE, PLUG	90 BEND	45 BEND	22.5 BEND	11.25 BEND
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8	89.8	126.9	68.7	35.0	17.6
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POURED CONCRETE BLOCKS (TYP.)

UNDISTURBED EARTH

BEARING AREA (TYP.)

BOND BREAKER (TYP. ALL BLOCKS)

PLAN

1/4" BOND BREAKER

SECTION A

1/2" DIAMETER

LEE'S SUMMIT MISSOURI

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

TRENCH CHECK

Date: 02/13
Drawn By: JN
Checked By: DL
FILE: WAT-6
Rev: 1/14
Rev:

REQUIRED CONCRETE BEARING AREA (SQUARE FEET – SF)

NOM. DIA. (INCHES)	TEE, PLUG	90 BEND	45 BEND	22.5 BEND	11.25 BEND
6	4.7	6.7	4.0	4.0	4.0
8	8.4	11.8	6.4	4.0	4.0
10	13.1	18.5	10.0	5.1	4.0
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POURED CONCRETE BLOCKS (TYP.)

UNDISTURBED EARTH

BEARING AREA (TYP.)

BOND BREAKER (TYP. ALL BLOCKS)

PLAN

1/4" BOND BREAKER

SECTION A

1/2" DIAMETER

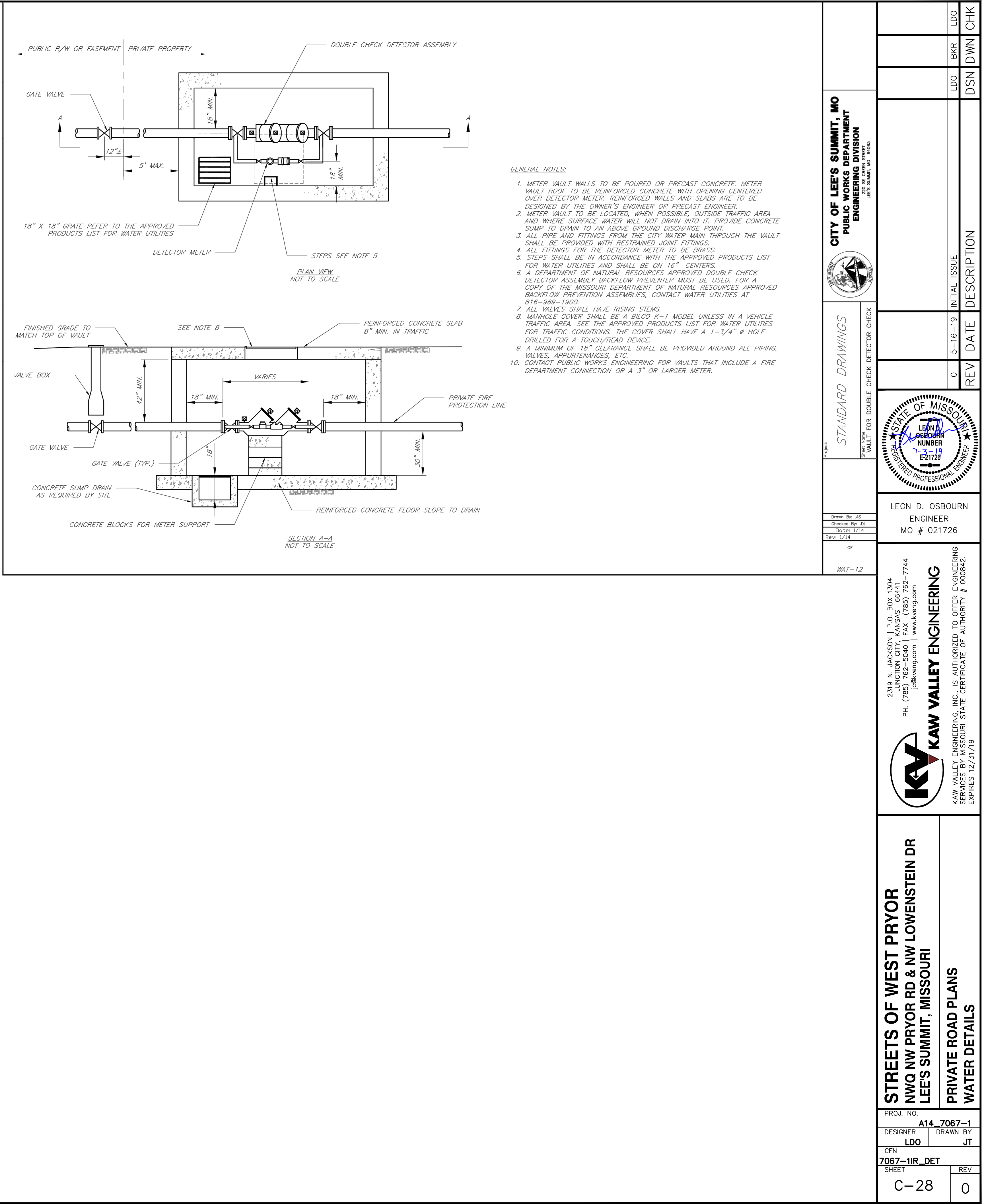
LEE'S SUMMIT MISSOURI

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

TRENCH CHECK

Date: 02/13
Drawn By: JN
Checked By: DL
FILE: WAT-6
Rev: 1/14
Rev:

THIS DRAWING SHALL NOT BE UTILIZED BY ANY PERSON, FIRM, OR CORPORATION IN WHOLE OR IN PART WITHOUT THE SPECIFIC PERMISSION OF KAW VALLEY ENGINEERING, INC.



RE: SHEET SE-1 FOR CONTINUATION



1 SITE ELECTRICAL PLAN
SCALE: 1:60



PLAN NOTES:

- ① CONDUCTORS SHALL BE INCREASED BASED ON VOLTAGE DROP. CONTRACTOR SHALL COORDINATE FINAL ENTRANCE SIGN WATTAGE WITH CONDUCTOR SIZES. PROVIDE NEMA 3R DISCONNECTING MEANS AT EACH ENTRANCE SIGN.

FEEDER SCHEDULE:

- ① (2) #4 AWG, (1) #4 AWG GROUND IN 1-1/4" PVC CONDUIT
② (2) #8 AWG, (1) #8 AWG GROUND IN 1" PVC CONDUIT
③ (2) #10 AWG, (1) #10 AWG GROUND IN 1" PVC CONDUIT
④ (2) 3" PVC CONDUIT WITH TWO HOMERUNS, EACH WITH: (2) #2/0 AWG, (1) #2/0 AWG GROUND

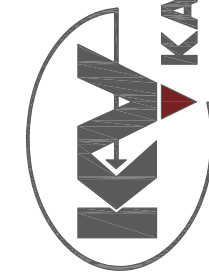
GENERAL NOTES:

- 1) RE: SHEET SE-3 FOR GENERAL NOTES, SYMBOLS AND ANNOTATIONS.
2) RE: SHEET SE-3 FOR PANEL SCHEDULE.
3) UNDERGROUND POWER CIRCUITS AND FEEDERS SHALL BE IN PVC CONDUIT WITH WET RATED THHN/THWN INSULATED WRING. RE: SHEET SE-3 FOR ADDITIONAL CONDUIT AND WIRING REQUIREMENTS.



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ISG PROJECT NUMBER
16-5419-3

STREETS OF WEST PRYOR
NWQ NW PRYOR RD & NW LOWENSTEIN DR
LEE'S SUMMIT, MISSOURI
PRIVATE ROAD PLANS
SITE LIGHTING

PROJ. NO.	A14-7067-1
DESIGNER	AWN
DRAWN BY	AWN
CFN	
SHEET	SE-2
REV	A

0	6-28-19	REV	DATE	CONSTRUCTION DOCUMENTS	DESCRIPTION
				AWN	DSN
				AWN	DWN
				CLB	CHK



- 1 EXISTING RELOCATED UTILITY POLE AND POLE MOUNTED TRANSFORMERS. COORDINATE EXACT LOCATION WITH CIVIL DRAWINGS.
- 2 PROVIDE AND INSTALL NEW KCPUL APPROVED METER SOCKET. NEW METER SHALL BE INSTALLED AT 4'-0" MINIMUM AND A MAXIMUM OF 5'-0" (CENTER OF SOCKET). INSTALL PER UTILITY COMPANY REQUIREMENTS.
- 3 CONDUIT FROM METER SHALL BE 1-1/4" RIGID METALLIC CONDUIT.
- 4 PROVIDE AND INSTALL NEW SERVICE RATED, NEMA 3R, 100A FUSES DISCONNECT SWITCH WITH 100A FUSES. DISCONNECT SHALL HAVE LUGS AND BAR FOR SERVICE GROUNDING. DISCONNECT SWITCH FUSES SHALL BE RATED FOR 100,000 AICS. CONTRACTOR SHALL TAG 100A DISCONNECT WITH PERMANENT LABEL.
- 5 PROVIDE AND INSTALL NEW 100A, 120/240V, 1PH, 3W MAIN LUG ONLY PANEL. PANEL SHALL BE RATED FOR 35,000 AIC.
- 6 PROVIDE NEW UNISTRUT SUPPORT SYSTEM FOR SERVICE ENTRANCE. CONTRACTOR SHALL INSTALL PER KCPUL STANDARDS SEE DETAIL 2 ON THIS SHEET. CONTRACTOR SHALL GROUND UNISTRUT SYSTEM TO MAIN SYSTEM GROUNDING WITH A #6 AWG CONDUCTOR.
- 7 PROVIDE NEW SERVICE CONDUIT AND CONDUCTORS. CONTRACTOR SHALL SUPPLY PULL STRING IN CONDUIT. CONDUIT SHALL EXTEND CONDUIT UP UTILITY AT A MINIMUM OF 2". PROVIDE SLIP JOINTS AT CONNECTIONS. CONTRACTOR SHALL PROVIDE ADDITIONAL LENGTH OF SERVICE CONDUIT TO ALLOW FOR KCPUL TO INSTALLATION TO UTILITY TRANSFORMER. COORDINATE WITH KCPUL FOR CONNECTION TO MAIN SERVICE DISCONNECT. RE. FEEDER SCHEDULE.
- 8 APPROXIMATE HORIZONTAL DISTANCE FROM UTILITY POLE TO BUILDING SERVICE ENTRANCE. CONTRACTOR SHALL CONFIRM LENGTH REQUIRED TO GET CONDUIT BELOW RETAINING WALL. FIELD VERIFY EXACT LOCATION OF EXISTING UTILITY POLE AND VERIFY EXACT DISTANCE.
- 9 CONNECT GROUNDING ELECTRODE CONDUCTOR TO AVAILABLE CONCRETE ENCASED ELECTRODE (I.E. RETAINING WALL AND SIGN). PROVIDE GROUNDING TO AVAILABLE CONNECTIONS PER NEC 250.
- 10 PROVIDE AND INSTALL NEW COPPER GROUND BAR IN NEMA 3R WIREWAY FOR CONNECTIONS TO GROUNDING ELECTRODE SYSTEM.
- 11 CONTRACTOR SHALL PROVIDE SLIP AND JOINT AND INSULATED BUSHINGS PER KCPUL REQUIREMENTS.
- 12 CONTRACTOR SHALL TRANSITION TO SCHEDULE 80 PVC AT OR BELOW SLIDE. PROVIDE CLAMP AT FINISH GRADE TO UNISTRUT SYSTEM. LEAVE CLAMP LOOSE TO ALLOW SLIDE JOINT TO WORK.

- ① #1 AWG. COPPER CONDUCTORS, IN 3" PVC CONDUIT. CONDUCTORS BY CONTRACTOR. COORDINATE WITH KOP.
- ② #6 SOLID BARE TINNED COPPER GROUND TO 1/2"x8FT COPPER CLAD STEEL GROUND ROD PER UTILITY REQUIREMENTS.
- ③ #6 AWG SOLID BARE TINNED COPPER GROUND TO GROUND ROD, BUILDING STEEL, ENCASED ELECTRODE, ETC PER NEC 250.
- ④ #1 AWG. COPPER CONDUCTORS, IN 1-1/4" RIGID METAL CONDUIT.
- ⑤ #1 AWG, (1) #6 AWG CONDUCTORS, COPPER CONDUCTORS, IN 1-1/4" RIGID CONDUIT.

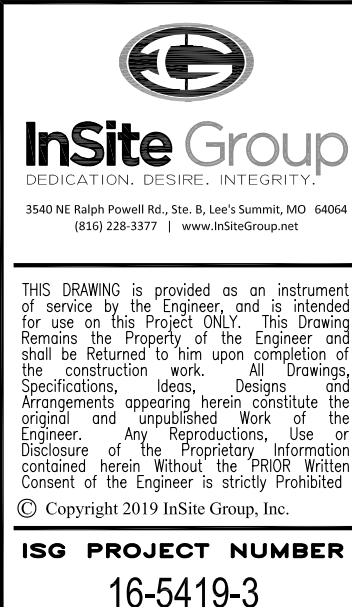


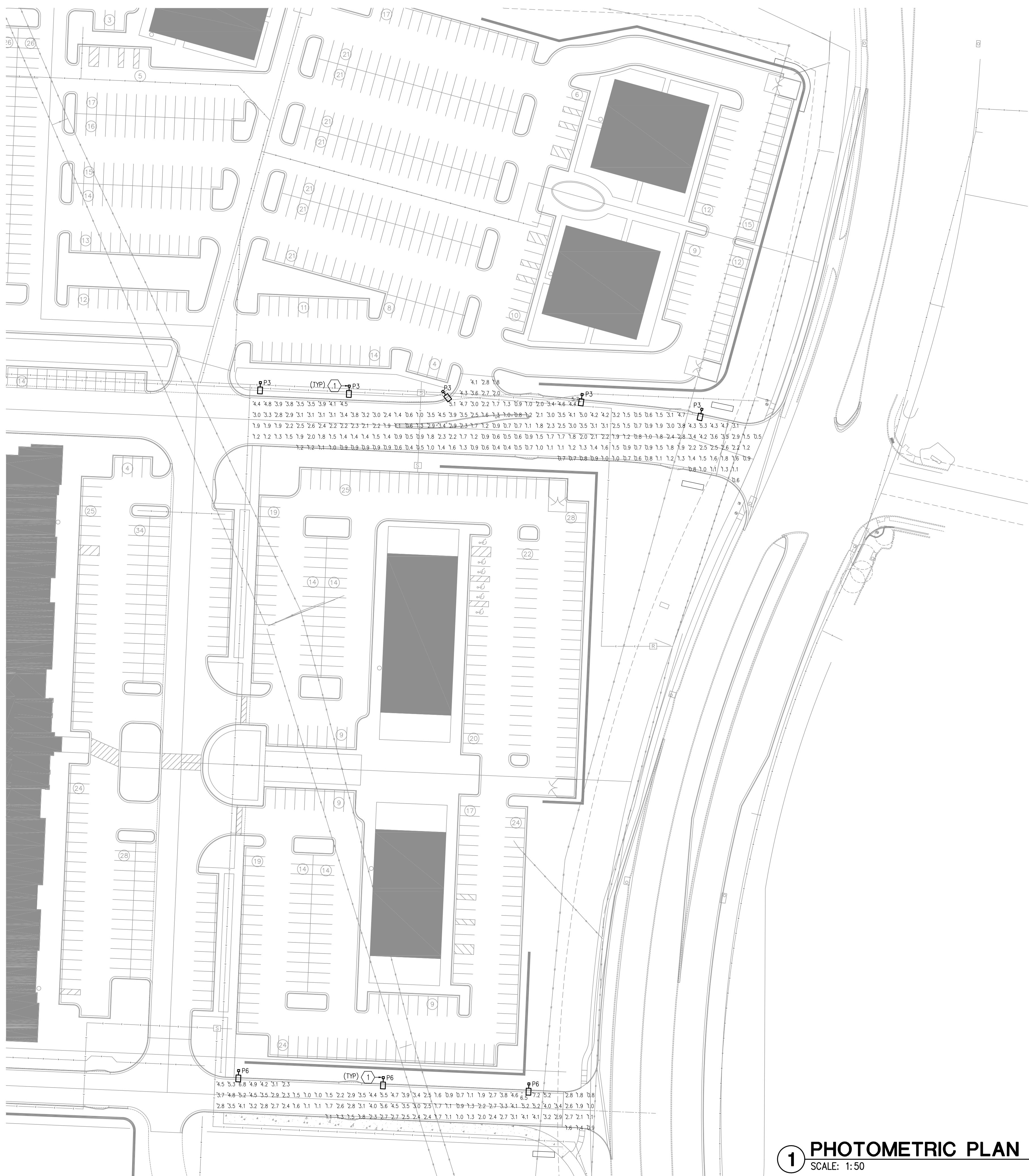
- 1) THESE DRAWINGS ARE SCHEMATIC IN NATURE AND INTENDED TO DEPICT GENERAL SCOPE OF WORK. ALL WORK SHALL BE PERFORMED PER LOCAL AND STATE REQUIREMENTS.
- 2) COORDINATE POWER REQUIREMENTS AND FINAL LOCATIONS OF ALL EQUIPMENT, DEVICES, ETC. WITH FINAL EQUIPMENT SELECTION AND INSTALL ALL NECESSARY DEVICES ALLOWING FOR END TERMINATION/CONNECTIONS.
- 3) ALL WIRING SHALL BE IN PVC CONDUIT BELOW GRADE AND RIGID METAL CONDUIT ABOVE GRADE.
- 4) UPDATE ALL PANELBOARD SCHEDULES.
- 5) FURNISH, INSTALL AND CONNECT ALL WIRE, WIREWAY, CONDUIT, CONNECTORS, OUTLETS, ETC. NECESSARY TO ACHIEVE A COMPLETE ELECTRICAL INSTALLATION. ALTHOUGH SUCH WORK IS NOT SPECIFICALLY SHOWN OR SPECIFIED EQUIPMENT SHALL BE INSTALLED PER CODE REQUIREMENTS PROVIDING A SOUND, SECURE AND COMPLETE INSTALLATION.
- 6) RE: THIS SHEET FOR ELECTRICAL SYMBOLS/NOTATIONS.
- 7) RE: THIS SHEET FOR PANEL SCHEDULES.
- 8) PROVIDE COPPER CONDUCTORS FOR LISTED APPLICATIONS AS FOLLOWS:

UNDERGROUND POWER CIRCUITS AND FEEDERS: TYPE THHN/THWN, 600 VOLT, 75 DEGREE C (167 DEGREE F) WET RATING AND 90 DEGREE C (194 DEGREE F) DRY RATED THERMOSETTING FILLED INSULATING CABLE.
* MINIMUM BRANCH CIRCUIT WIRE SIZE IS #12AWG UNLESS NOTED OTHERWISE.
- 9) ALL FIRE RATED ASSEMBLIES SHALL BE MAINTAINED. CAULK AROUND ELECTRICAL PENETRATIONS TO MAINTAIN FIRE RESISTANCE RATING OF THE FIRE RATED ASSEMBLY.
- 10) INSTALL ALL EQUIPMENT WHILE MAINTAINING ALL CLEARANCES PER EQUIPMENT MANUFACTURER'S RECOMMENDATIONS AND PER LOCAL CODES.
- 11) THE OWNER AND ENGINEER ARE NOT RESPONSIBLE FOR THE CONTRACTOR'S SAFETY PRECAUTIONS OR TO MEANS, METHODS, TECHNIQUES, CONSTRUCTION SEQUENCES, OR PROCEDURES REQUIRED TO PERFORM HIS/HER WORK.
- 12) DRAWINGS ARE DESIGNED FOR THE MANUFACTURER'S MATERIALS, COMPANY AND ARRANGE FOR ELECTRIC SERVICE IS INDICATED ON DRAWINGS. INCLUDE ALL COSTS, CHARGES, FEES, ETC., INCURRED BY LOCAL AUTHORITIES INTO BID. PROVIDE ALL MATERIALS AS REQUIRED BY LOCAL AUTHORITIES FOR ELECTRIC SERVICE. CONTRACTOR SHALL BE RESPONSIBLE FOR ACCORDING WITH REQUIREMENTS OF LOCAL AUTHORITIES.
- 13) CONTRACTOR SHALL CONTACT THE LOCAL ELECTRICAL UTILITY COMPANY AND ARRANGE FOR ELECTRIC SERVICE. IS INDICATED ON DRAWINGS. INCLUDE ALL COSTS, CHARGES, FEES, ETC., INCURRED BY LOCAL AUTHORITIES INTO BID. PROVIDE ALL MATERIALS AS REQUIRED BY LOCAL AUTHORITIES FOR ELECTRIC SERVICE. CONTRACTOR SHALL BE RESPONSIBLE FOR ACCORDING WITH REQUIREMENTS OF LOCAL AUTHORITIES.



A	AMPS
AG	ABOVE COUNTER, GROUND FAULT
G	INDICATES GROUND FAULT
W	INDICATES WEATHERPROOF
UNO	UNLESS NOTED OTHERWISE
TYP	TYPICAL
RE: IE2	REFERENCE DESIGNATION
1	SHEET NUMBER
2	DETAIL/PLAN NUMBER





PLAN NOTES:

1 NEW POLE MOUNTED LIGHT FIXTURE SHALL BE INSTALLED IN APPROXIMATE LOCATION SHOWN.
RE: LIGHTING FIXTURE SCHEDULE ON SHEET SL-2.

CALCULATION SUMMARY

AREA	AVE	MAX	MIN	MAX/MIN	AVE/MIN
ENTRANCE - NORTH	2.05	5.7	0.4	14.25	5.13
ENTRANCE - SOUTH	2.85	7.2	0.7	10.29	4.07

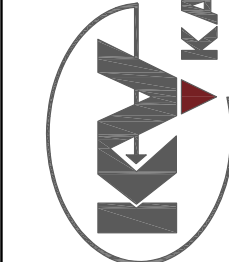
NOTES

1) N/A



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STREETS OF WEST PRYOR
NWQ NW PRYOR RD & NW LOWENSTEIN DR
LEE'S SUMMIT, MISSOURI
PRIVATE ROAD PLANS
SITE LIGHTING

PROJ. NO. A14-7067-1
DESIGNER AWN
DRAWN BY AWN

SHEET SL-1
REV A

DEDICATION. DESIRE. INTEGRITY.

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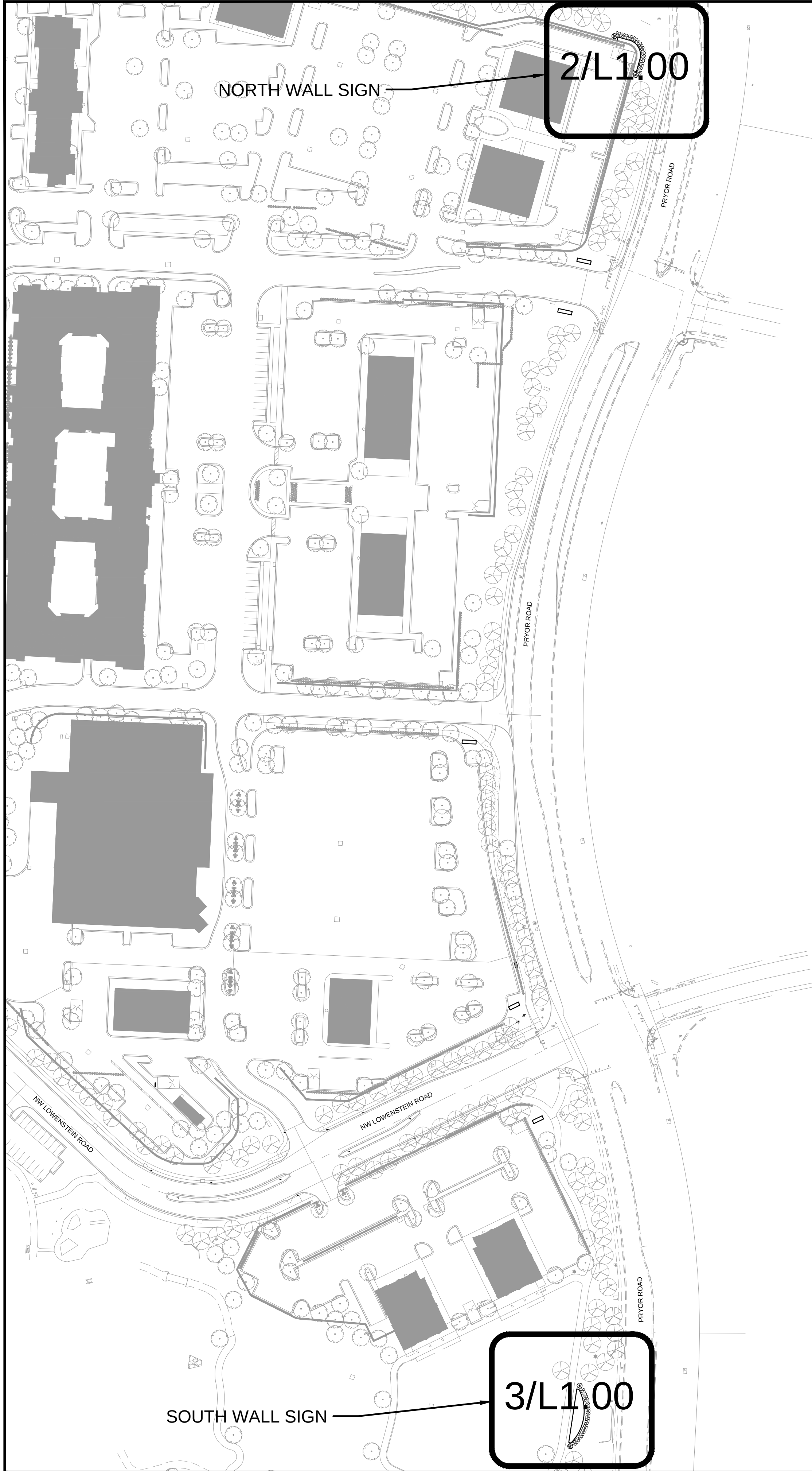
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ISG PROJECT NUMBER
16-5419-3

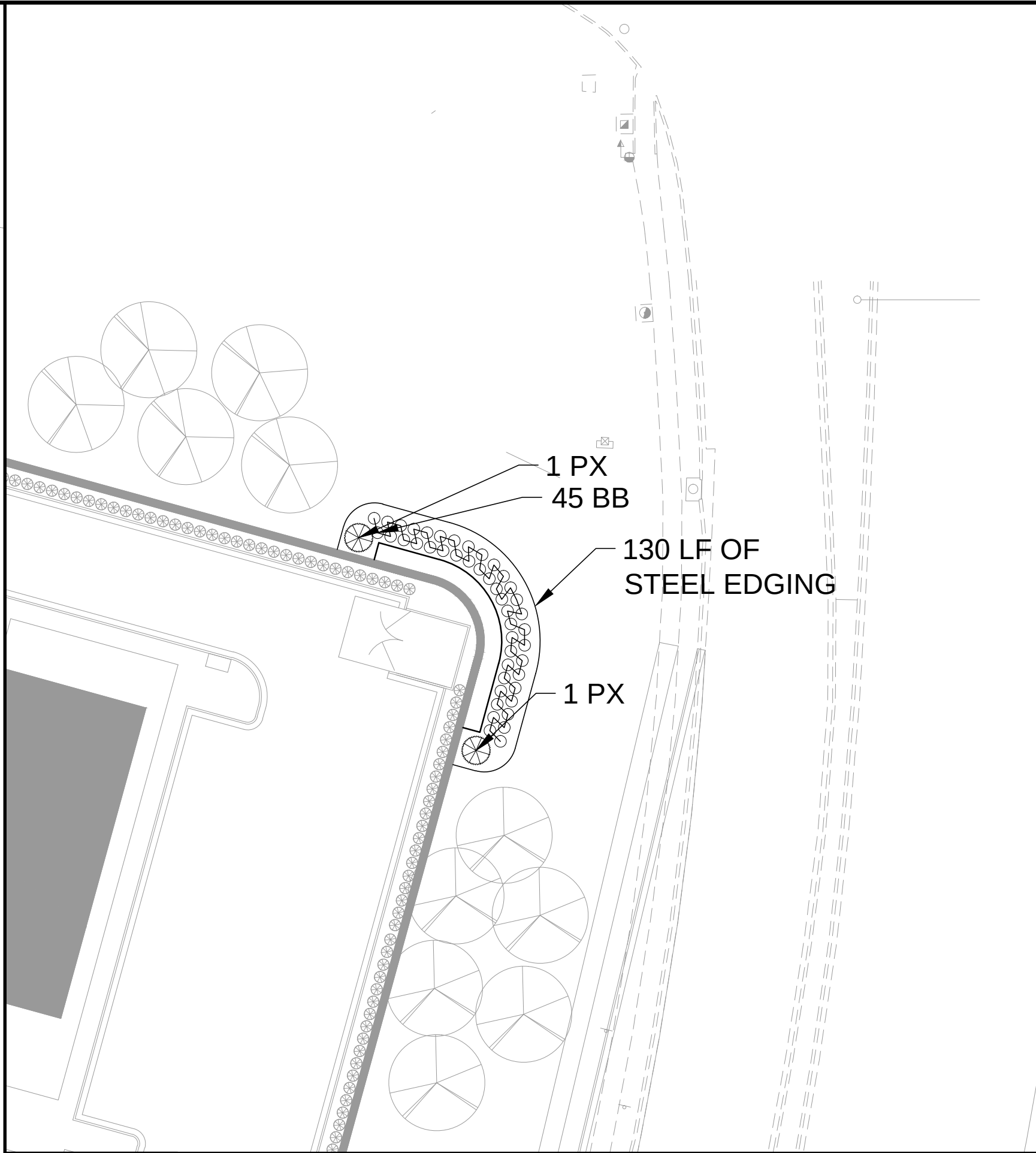
1 PHOTOMETRIC PLAN

SCALE: 1:50

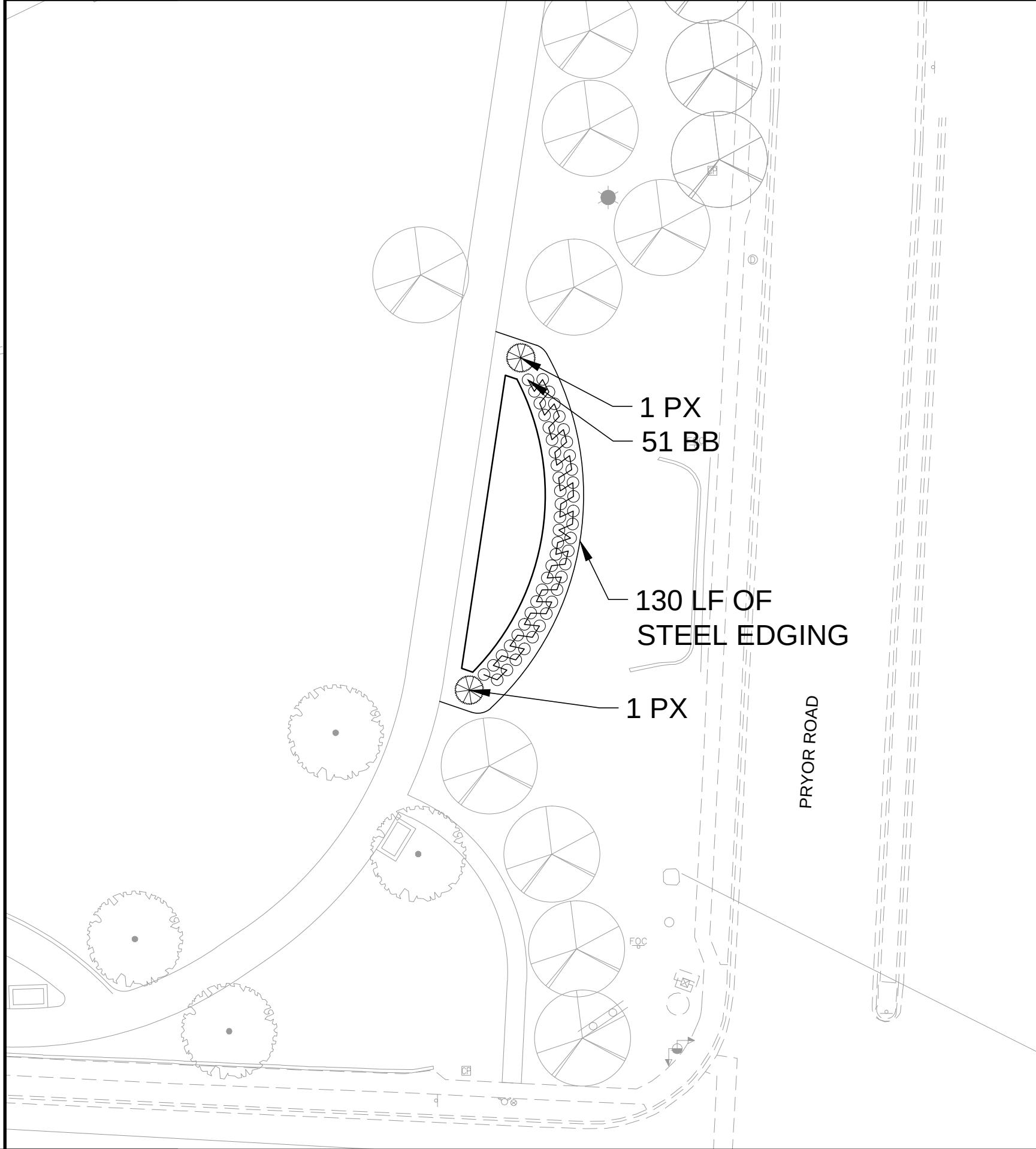




1 OVERALL SITE PLAN
SCALE: 1" = 100'-0"



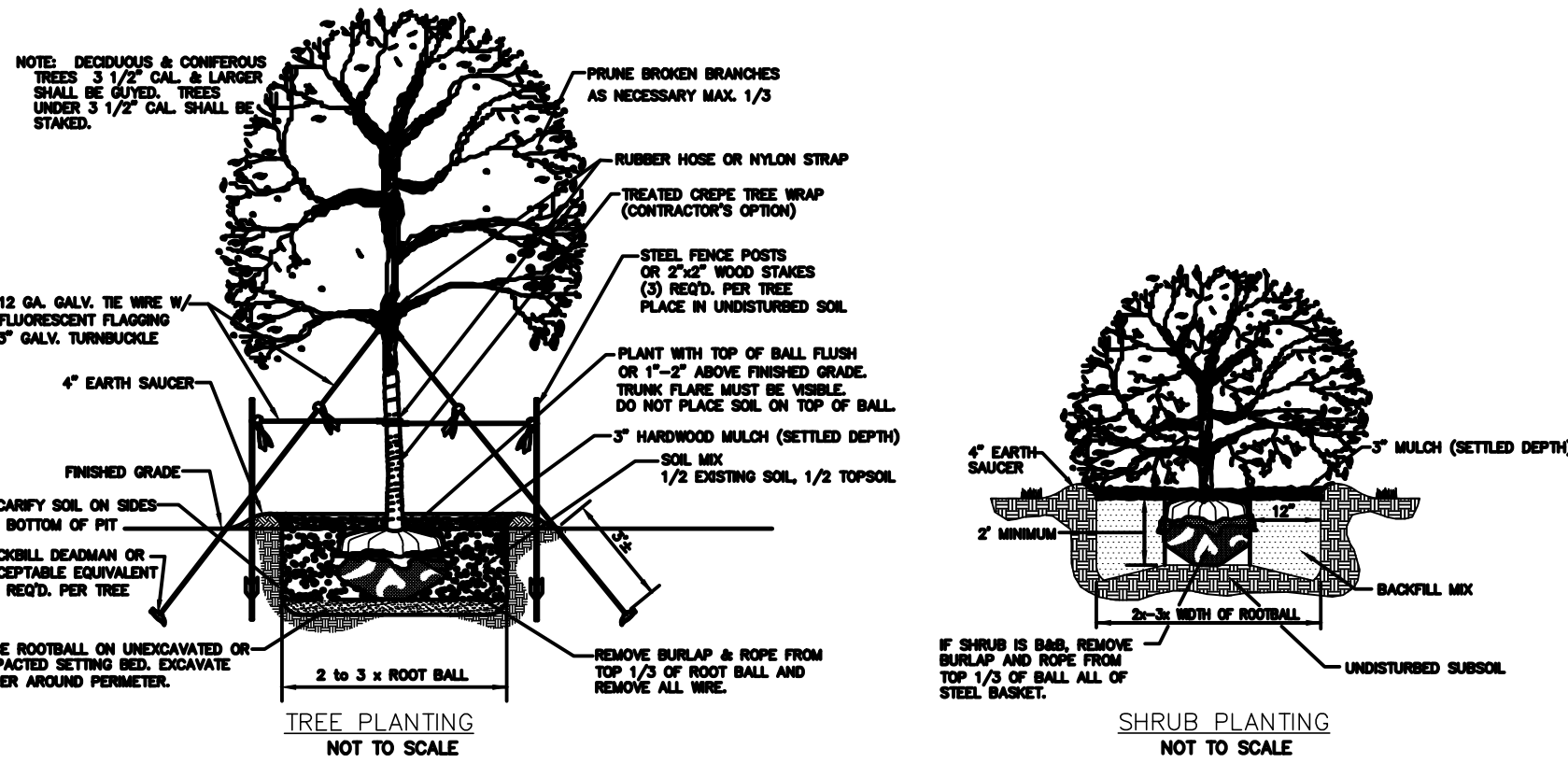
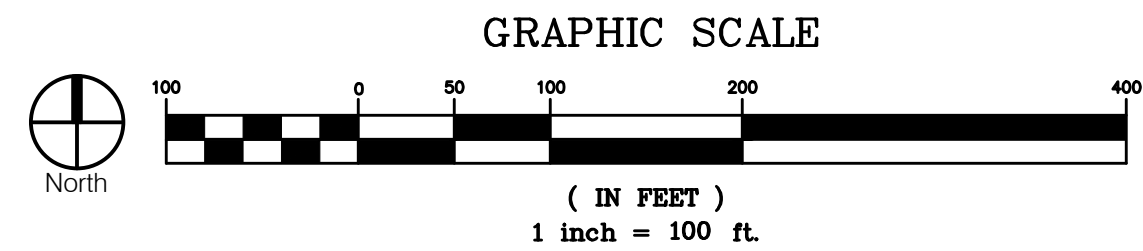
2 SOUTH WALL SIGN
SCALE: 1" = 30'-0"



3 SOUTH WALL SIGN
SCALE: 1" = 30'-0"

- LANDSCAPING NOTES:**
1. LOCATE ALL UTILITIES BEFORE LANDSCAPE CONSTRUCTION BEGINS.
 2. NOTIFY OWNER REPRESENTATIVE OF ANY LAYOUT DISCREPANCIES.
 3. ALL EXTERIOR GROUND WITHIN THE LIMITS OF THE CONTRACT, EXCEPT FOR SURFACES OCCUPIED BY BUILDINGS, STRUCTURES,PAVING, AND AS DIRECTED ON THE DRAWINGS AS UNDISTURBED, SHALL BE FILLED WITH SIX INCHES (6") OF TOPSOIL.
 4. ALL DISTURBED AREAS NOT DESIGNATED FOR OTHER PLANTING SHALL BE SODDED. SOD SHALL CONSIST OF 90% TURF TYPE TALL FESCUE 10% BLUEGRASS.
 5. QUANTITIES INDICATED IN PLANT LIST ARE FOR CONVENIENCE ONLY. CONTRACTOR IS RESPONSIBLE FOR PLANT QUANTITIES AS ILLUSTRATED ON THE PLAN.
 6. SHREDDED HARDWOOD MULCH SHALL BE USED AS THREE INCH (3") TOP DRESSING IN ALL PLANT BEDS AND AROUND ALL TREES. SINGLE TREES OR SHRUBS SHALL BE MULCHED TO THE OUTSIDE EDGE OF SAUCER OR LANDSCAPE ISLAND (SEE PLANTING DETAILS).
 7. FERTILIZE ALL PLANTS AT THE TIME OF PLANTING WITH TIME-RELEASE FERTILIZER(3-4 SLOW-RELEASE TABLETS/PELLETS).
 8. IF LEANING OCCURS WITHIN ONE YEAR, TREES SHALL BE RE-STAKED (SEE PLANTING DETAILS).
 9. CONTRACTOR SHALL STAKE ALL PLANT MATERIALS PRIOR TO INSTALLATION FOR THE PURPOSE OF DETERMINING CONFLICTS WITH ROCK, UTILITIES, ETC. NO PLANTS CAN BE PLANTED DIRECTLY ON ROCK OR UTILITIES. NOTIFY ARCHITECT/ENGINEER/OWNER AT ONCE IF ANY CONFLICTS OCCUR.
 - CONTRACTOR WILL BE REQUIRED TO ADJUST PLANT LOCATIONS AT NO ADDITIONAL COST.
 10. CONTRACTOR IS RESPONSIBLE FOR WATERING ALL SOD UNTIL ROOTS HAVE KNITTED INTO SOIL AND OWNER HAS OCCUPIED THE BUILDING.
 11. PROVIDE "GATOR" BAGS ON ALL TREES. REFILL AS NECESSARY UNTIL OWNER OCCUPIES THE BUILDING.
 12. ALL TREES SHALL BE 3" CALIPER, EVERGREEN TREES SHALL BE 8' TALL AND SHRUBS SHALL BE 18" HEIGHT AT TIME OF PLANTING

PLANT SCHEDULE				
KEY	QTY.	BOTANICAL NAME	COMMON NAME	SIZE/REMARKS
TREES				
PX	4	TAXUS X MEDIA 'PERFECTA'	PERFECTA YEW	5 GAL/18" HT. MIN.
SHRUBS/GRASSES/GROUNDCOVER				
BB	96	EUONYMUS ALATUS	DWARF BURNING BUSH	5 GAL/18" HT. MIN.



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STREETS OF WEST PRYOR
NWQ NW PRYOR ROAD & NW LOWENSTEIN DRIVE
LEE'S SUMMIT, MISSOURI

SIGNAGE LANDSCAPE PLAN

PROJ. NO.
CFN

DESIGNER
VSR

SHEET
L 1.00

DRAWN BY
KLS

REV

DSN

DWN

CHK