



CITY OF LEE'S SUMMIT, JACKSON COUNTY, MISSOURI
NW $\frac{1}{4}$, SECTION S17, TOWNSHIP 47N, RANGE 31W

ALL ISSUES PERTAINING TO LIFE, SAFETY, AND PROPERTY PROTECTION FROM THE HAZARDS OF FIRE
EXPLOSION OR DANGEROUS CONDITIONS IN NEW AND EXISTING BUILDINGS, STRUCTURES AND
PREMISES, AND TO THE SAFETY TO FIRE FIGHTERS AND EMERGENCY RESPONDERS DURING
EMERGENCY OPERATIONS, SHALL BE IN ACCORDANCE WITH THE 2018 INTERNATIONAL FIRE CODE.

MISSOURI GAS ENERGY:
RICHARD FROCK
3025 SW CLOVER DR.
LEE'S SUMMIT, MO 64082
TEL: (816) 472-3489

1. THE CONSTRUCTION COVERED BY THESE PLANS SHALL CONFORM TO ALL APPLICABLE STANDARDS AND SPECIFICATIONS OF THE PUBLIC WORKS DEPARTMENT OF THE CITY OF LEE'S SUMMIT, MISSOURI, IN ALL USAGE AND ALL SUPPLEMENTS THERE TO.
2. CONTRACTOR IS RESPONSIBLE FOR ALL PERMITS, BONDS, AND INSURANCE REQUIRED BY THE CITY.
3. THE IMPROVEMENTS SHOWN ON THIS PLAN ARE PRIVATE IMPROVEMENTS. COORDINATE WITH CITY FOR REQUIRED PERMITS, BONDS AND INSURANCE.
4. ALL WORKMANSHIP AND MATERIALS SHALL BE SUBJECT TO THE INSPECTION AND APPROVAL OF THE ENGINEERING DEPARTMENT OF THE CITY OF LEE'S SUMMIT, MISSOURI.
5. THE UTILITY LOCATIONS SHOWN ON THESE PLANS ARE TAKEN FROM UTILITY COMPANY RECORDS AND ARE APPROXIMATE ONLY. THEY DO NOT CONSTITUTE ACTUAL FIELD LOCATIONS. THE CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTH OF ALL UTILITIES PRIOR TO CONSTRUCTION.
6. THE DEVELOPER/OWNER SHALL CONTROL EROSION AND SILTATION DURING ALL PHASES OF CONSTRUCTION, AND SHALL KEEP THE STREETS CLEAN OF MUD AND DEBRIS.
7. ALL EXCESS MATERIAL SHALL BE REMOVED LEGALLY FROM SITE AND DISPOSED OF OFF SITE.
8. TRAFFIC CONTROL AND MAINTENANCE OF TRAFFIC DURING CONSTRUCTION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE PUBLIC WORKS DEPARTMENT AND MUTCD.
9. EROSION CONTROL MEASURES SHALL BE PROVIDED AT ALL LOCATIONS WHERE DRAINAGE IS LEAVING THE PROJECT SITE. THE EROSION CONTROL PLAN SHOWS MINIMUM EROSION CONTROL MEASURES TO BE PROVIDED. ADDITIONAL SITE SPECIFIC MEASURES MAY BE NECESSARY AND SHALL BE PROVIDED BY THE DEVELOPER/OWNER, AT THE CONTRACTOR'S EXPENSE.
10. ANY EXISTING OR NEW STORM SEWER INLETS IN USE DURING DEMOLITION, GRADING OR CONSTRUCTION SHALL HAVE INLET PROTECTION AS SPECIFIED.

SW MARKER ST

S MO RTE 291

SE SCHERER RD

SE DECKER

SE THOMPSON DR

PROJECT LOCATION

LOCATION MAP

1" = 100'

NORTH

	PROPOSED STANDARD DUTY ASPHALT PAVEMENT
	PROPOSED HEAVY DUTY CONCRETE PAVEMENT
	PROPOSED BUILDING
	EXISTING PUBLIC ROADWAY
	EXISTING 60' STREAM BUFFER
	PROPERTY LINE
	PROPOSED BUILDING OUTLINE
	EASEMENT LINE
	SETBACK LINE
	STANDARD CURB & GUTTER
	EXISTING SANITARY SEWER
	EXISTING WATER LINE
	EXISTING FIBER OPTIC
	EXISTING GAS
	EXISTING POWER
	EXISTING TELECOMMUNICATIONS
	PROPOSED WATER LINE
	PROPOSED UNDERGROUND ELECTRIC
	PROPOSED SANITARY SEWER

Sheet Number	Sheet Title
C001	COVER SHEET
C002	EXISTING CONDITIONS
C003	SITE PLAN
C004	GRADING PLAN
C005	ADA RAMPS
C006	UTILITY & STORMWATER PLAN
C007	STORMWATER PLAN & PROFILE
C008	STORMWATER PLAN & PROFILE
C009A	CONTECH HDS DETAILS
C009B	DETAILS
C010	DETAILS
C011	DETAILS
C012	DETAILS
L001	LANDSCAPE PLAN
L002	LANDSCAPE DETAILS
A101	FLOOR PLANS
A201	ELEVATIONS - BUILDING A
A202	ELEVATIONS - BUILDING B
A203	RENDERINGS
A204	TRASH ENCLOSURE PLAN & DETAILS
M101	MECHANICAL FLOOR PLANS
E001	SITE PHOTOMETRICS
F001	FIRE SUPPRESSION
F101	FIRE SUPPRESSION FLOOR PLANS
F500	FIRE SUPPRESSION DETAILS

COVER SHEET

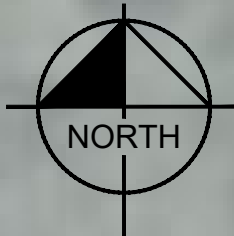
LEE'S SUMMIT
FLEX SPACE
60 SE THOMPSON DR
LEE'S SUMMIT, MISSOURI 64081

SHEET NUMBER

C001

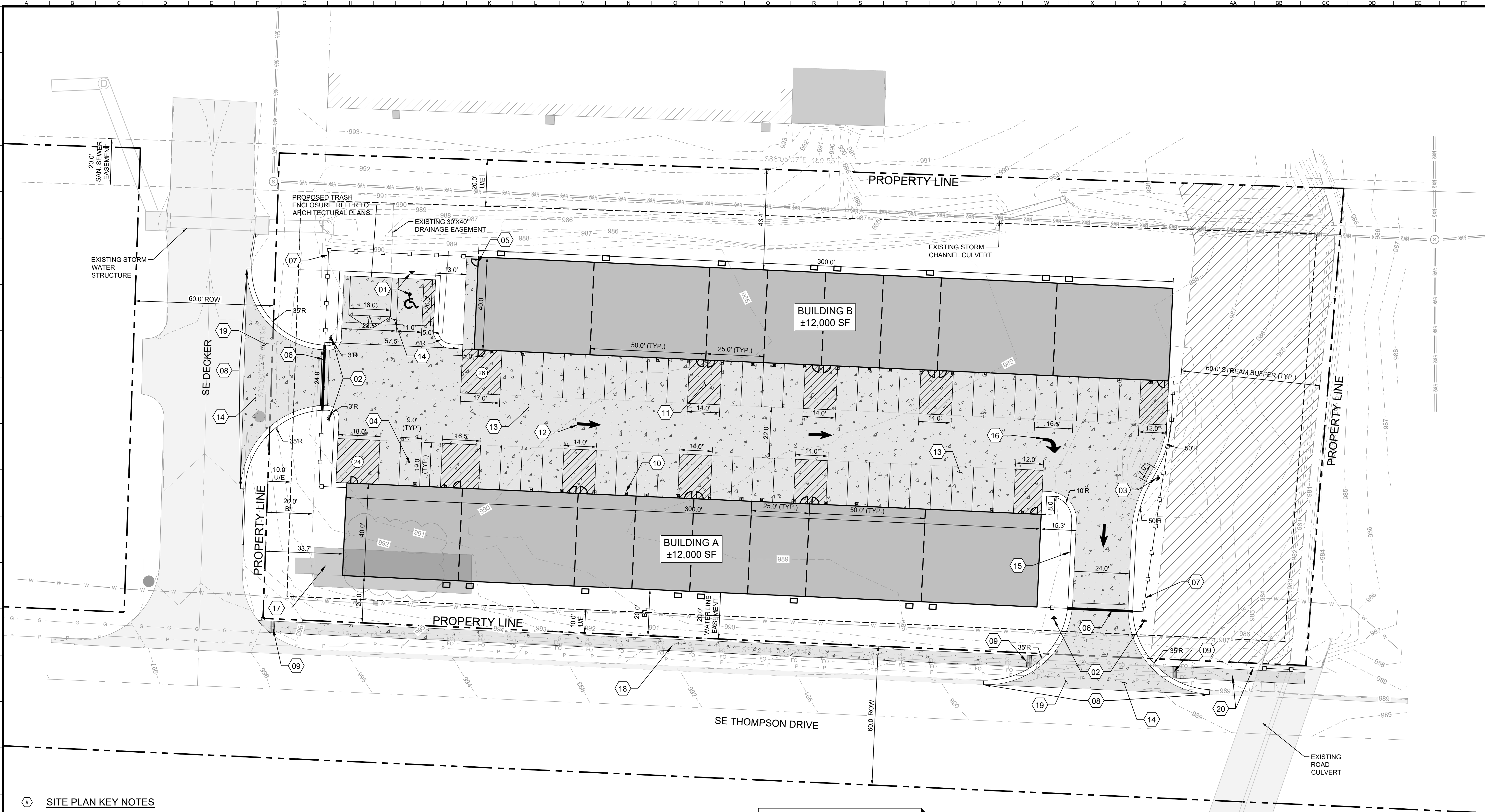


*NOTE: DASHED PARCEL LINES ARE FROM CITY OF LEE'S SUMMIT GIS DATABASE
AND ARE NOT SURVEYED. SOME SPACIAL DISCREPANCY MAY BE PRESENT.



LEE'S SUMMIT FLEX SPACE 60 SE THOMPSON DR LEE'S SUMMIT, MISSOURI 64081		EXISTING CONDITIONS		CAPITAL BUILDERS		Kimley»Horn © 2023 KIMLEY-HORN AND ASSOCIATES, INC. KANSAS CITY, MO 64105 WWW.KIMLEY-HORN.COM		STORMWATER ADDENDUM		10/30/2024		LLG	
ORIGINAL ISSUE: 10/29/2024		KHA PROJECT NO. 268442000		SHEET NUMBER C002		SCALE: AS NOTED DESIGNED BY: LLG DRAWN BY: LLG CHECKED BY: PUJ		REVISIONS		DATE		BY	

Drawing name: K:\KAC_LIEV\08442000_Capital Builders Lee's Summit\2023_Lee's Summit Flex Space2 Design\AD\PlanSheets\DP\003 - SITE PLAN.dwg C003 - SITE PLAN Oct 31, 2024 3:40pm by logan green
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SITE PLAN KEY NOTES

- 01 INSTALL 1 VAN ACCESSIBLE ADA PARKING STALL WITH SIGN MOUNTED A MINIMUM OF 6 FEET ABOVE FINISHED GRADE. REFER TO DETAIL 17, SHEET C012
- 02 INSTALL "DO NOT ENTER" SIGNS ACCORDING TO MUTCD R5-1, REFER TO DETAIL 17, SHEET C012
- 03 INSTALL "ONE WAY" SIGN ACCORDING TO MUTCD R6-2. REFER TO DETAIL 17, SHEET C012
- 04 INSTALL PARKING STALLS (TYP.). PAINT 4" PARKING STRIPING, PAINT TO BE LEAD-FREE, WATER-BORNE, EMULSION-BASED TRAFFIC PAINT, WHITE IN COLOR
- 05 INSTALL SECURED RESTROOM WITH SIDE DOOR
- 06 INSTALL AMERISTAR MONTAGE PLUS 3-RAIL SYSTEM GATE WITH KNOX KEY SWITCH (TYP.). REFER TO DETAIL 19, SHEET C012
- 07 INSTALL AMERISTAR MONTAGE PLUS 3-RAIL SYSTEM FENCE (TYP.). REFER TO DETAIL 18, SHEET C012
- 08 REMOVE EXISTING CURB WITHIN BOUNDS OF KEY NOTE ARROWS
- 09 INSTALL ADA RAMP WITH WARNING PAD. REFER TO DETAIL 14, SHEET C011
- 10 INSTALL STEEL-ENCASED CONCRETE BOLLARD (TYP.). REFER TO ARCHITECTURAL PLANS. REFER TO DETAIL 21, SHEET C012
- 11 PAINT 4" PARKING STRIPING AT 45°, PAINT TO BE LEAD-FREE, WATER-BORNE, EMULSION-BASED TRAFFIC PAINT, WHITE IN COLOR, AT 2-FT ON-CENTER SPACING (TYP.)
- 12 PAINT THRU TRAFFIC ARROW, PAINT TO BE LEAD-FREE, WATER-BORNE, EMULSION-BASED TRAFFIC PAINT, WHITE IN COLOR (TYP.). REFER TO DETAIL 16, SHEET C012
- 13 INSTALL STANDARD-DUTY CONCRETE PAVEMENT (PAVEMENT SECTION 1). REFER TO DETAIL 20, SHEET C012
- 14 INSTALL HEAVY-DUTY CONCRETE PAVEMENT (PAVEMENT SECTION 2). REFER TO DETAIL 20, SHEET C012
- 15 INSTALL STRAIGHT BACK CURB AND GUTTER (TYP.). REFER TO DETAIL 15, SHEET C011
- 16 PAINT RIGHT-TURN TRAFFIC ARROW, PAINT TO BE LEAD-FREE, WATER-BORNE, EMULSION-BASED TRAFFIC PAINT, WHITE IN COLOR. REFER TO DETAIL 16, SHEET C012
- 17 REMOVE EXISTING CONCRETE PAD
- 18 INSTALL SIDEWALK WITH BUFFER. REFER TO DETAIL 12, SHEET C011
- 19 INSTALL PRIVATE DRIVEWAY. REFER TO DETAIL 13, SHEET C011
- 20 INSTALL SIDEWALK WITH RAIL. REFER TO DETAIL 18, SHEET C012

SITE PLAN LEGEND

	PROPOSED HEAVY DUTY CONCRETE PAVEMENT
	PROPOSED BUILDING
	EXISTING PUBLIC ROADWAY
	EXISTING 60' STREAM BUFFER
	PROPOSED BUILDING OUTLINE
	PROPERTY LINE
	EASEMENT LINE
	SETBACK LINE
	STANDARD CURB & GUTTER

SUMMARY TABLE

A	Zoning	
	Existing	Industrial
B	Proposed	Industrial
	Approximate Total Land Area*	
C	Existing	2.13 Acres
	Proposed	0.00 Acres
D	Right-of-way	
	Existing	0.00 Acres
E	Proposed	0.00 Acres
F	Approximate Net Land Area*	
	Existing	2.13 Acres
G	Proposed	2.13 Acres
	Impervious Area	
H	Existing	0.03 Acres 1.4% Area
	Proposed	1.19 Acres 55.9% Area
I	Proposed Uses	
	Flex Storage	
J	Building Information	
	Gross Floor Area (SF)	+/- 24,000
K	Floor Area Ratio	0.27
	Off-Street Vehicle Parking	
L	Stalls Required	25
	Stalls Provided	50
M	ADA Stalls Required	1
	ADA Stalls Provided	1

ZONING

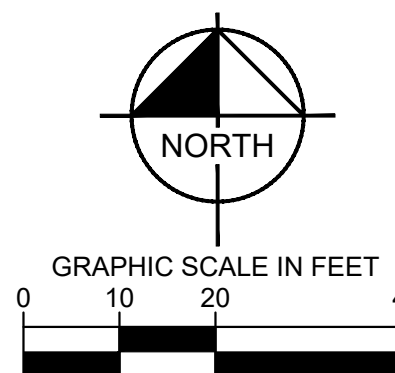
PI (PLANNED INDUSTRIAL)

CURRENT USE

VACANT

GENERAL NOTES

- ALL DIMENSIONS REFER TO THE EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.
- BUILDING DIMENSIONS ARE TO THE OUTSIDE FACE OF BUILDING UNLESS OTHERWISE NOTED.
- B/L REFERS TO THE BUILDING SETBACK LINE.
- U/E REFERS TO THE UTILITY EASEMENT LINE.
- RADIi ADJACENT TO PARKING STALL AND NOT DIMENSIONED ON THIS PLAN SHALL BE 3-FEET, TYPICAL.
- ALL PROPOSED ON-SITE STRIPING SHALL BE PAINTED UNLESS OTHERWISE NOTED.



LEE'S SUMMIT
FLEX SPACE
60 SE THOMPSON DR
LEE'S SUMMIT, MISSOURI 64081

ORIGINAL ISSUE:

10/29/2024

KHA PROJECT NO.

268442000

SHEET NUMBER

C003

CAPITAL BUILDERS

SITE PLAN

Kimley»Horn

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KANSAS CITY, MO 64105
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SCALE:
AS NOTED
DESIGNED BY: LLG
DRAWN BY: LLG
CHECKED BY: PUJ



STORMWATER ADDENDUM

LLG

10/30/2024

DATE

BY

REVISIONS

No.

996.14

995.97

996.07

3.26%

1.50%

0.97%

1.90%

995.96

995.89

990.76

2.39%

ADA WARNING PAD

ADA RAMP

ZONE

SIDEWALK

The diagram illustrates a road cross-section with various ADA-compliant features and grades. Key elements include:

- ADA WARNING PAD:** A rectangular area at the top of the road, labeled "ADA WARNING PAD".
- ADA RAMP:** A ramp area at the bottom of the road, labeled "ADA RAMP".
- SIDEWALK:** A sidewalk area on the left side of the road, labeled "SIDEWALK".
- TRANSITION ZONE:** A shaded area on the right side of the road, labeled "TRANSITION ZONE".
- Grades:** Various grades are indicated, including 1.91%, 0.75%, 1.49%, and 0.09%.
- Stationing:** Stationing markers are present, such as 990.41, 990.26, 990.34, and 990.18.
- Other Labels:** Labels like "01", "02", and "1" are used to identify specific points or areas.

Technical drawing showing a cross-section of a road and sidewalk. The drawing includes the following elements and labels:

- ADA WARNING PAD:** A rectangular area on the sidewalk with a 1.50% slope.
- ADA RAMP:** A ramp area with a 0.30% slope.
- TRANSITION ZONE:** A shaded area with a 0.60% slope.
- SIDEWALK:** The main paved area with a 1.00% slope.
- Labels and Dimensions:**
 - 989.56, 989.57, 989.50, 989.48, 989.43: Elevation points.
 - 01, 02: Stationing or marker numbers.
 - 0.60%, 1.50%, 0.30%, 1.00%: Slope percentages.

EXISTING CONTOUR

PROPOSED CONTOUR

SPOT ELEVATION

SLOPE ARROW

The diagram illustrates the relationship between different types of contour lines and spot elevations. It shows an 'EXISTING CONTOUR' (dashed line) and a 'PROPOSED CONTOUR' (solid line). A 'SPOT ELEVATION' is represented by a circle containing 'XXX.XX'. A 'SLOPE ARROW' is shown as an arrow pointing from the spot elevation to the proposed contour line, labeled 'X.XX%'.

01 INSTALL ADA SIDEWALK RAMP WITH WARNING PAD. REFER TO DETAIL 14, SHEET C011
02 INSTALL SIDEWALK WITH BUFFER. REFER TO DETAIL 12, SHEET C011

C005	SHEET NUMBER	KHA FOR PROJECT NO. 268442000	ORIGINAL ISSUE: 10/29/2024	LEE'S SUMMIT FLEX SPACE 60 SE THOMPSON DR LEE'S SUMMIT, MISSOURI 64081	ADA RAMPS	CAPITAL BUILDERS	 PATRICK J. ROYCE NUMBER PC-309090002	Kimley»Horn © 2023 KIMLEY-HORN AND ASSOCIATES, INC. 805 PENNSYLVANIA AVENUE, SUITE 150 PARKVILLE, MO 64151 PHONE 816-462-0350 WWW.KIMLEY-HORN.COM	SCALE: AS NOTED DESIGNED BY: LLG DRAWN BY: LLG CHECKED BY: PJJ TUGS/MZK STORMWATER AUDITUM LLL	NO. DATE BY REVISIONS
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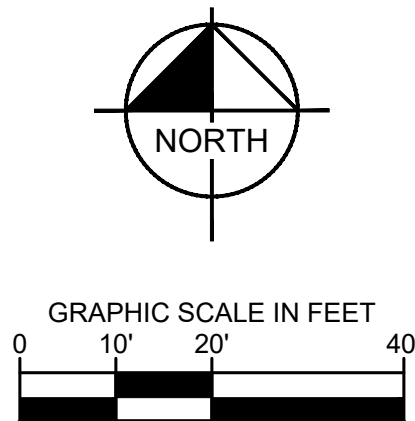
Drawing name: K:\KAC_LIE\20844000_Capital Builders Lee's Summit\Drawings\DWG - UTILITY & STORMWATER PLAN.dwg Oct 31, 2024 3:44pm by: logan.green
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UTILITY LEGEND		
	SAN	EXISTING SANITARY SEWER
	W	EXISTING WATER LINE
	FO	EXISTING FIBER OPTIC LINE
	G	EXISTING GAS LINE
	P	EXISTING POWER LINE
	T	EXISTING TELECOMMUNICATIONS LINE
	W	PROPOSED WATER LINE
	UE	PROPOSED UNDERGROUND ELECTRIC LINE
	SS	PROPOSED SANITARY SEWER LINE
	T	PROPOSED TRANSFORMER

UTILITY PLAN KEY NOTES

- INSTALL CONCRETE PLUG AND ABANDON EXISTING WATER LINE IN PLACE
- REMOVE EXISTING FIRE HYDRANT AND INSTALL CONCRETE PLUG. ABANDON EXISTING WATER LINE IN PLACE
- PUBLIC WATER MAIN EXTENSION TO BE DESIGNED UNDER SEPARATE COVER
- INSTALL 1.5" WATER METER WITH METER PIT. REFER TO DETAIL 9, SHEET C010
- INSTALL 2" TYPE K COPPER SERVICE LINE. REFER TO DETAILS 5 AND 11, SHEET C010
- INSTALL VAULT FOR DOUBLE DETECTOR CHECK VALVE. BACKFLOW VAULT SUMP SHALL BE DRAINED BY DAYLIGHT VIA A 3" SDR-26 PVC PIPE. FIRE LINE SHALL BE 6" SCHEDULE 40 BLACK STEEL TO BACKFLOW PREVENTER. REFER TO DETAIL 10, SHEET C010
- INSTALL FIRE HYDRANT, ALL YELLOW, PER CITY OF LEE'S SUMMIT DESIGN AND CONSTRUCTION MANUAL SECTION 3901.Q. REFER TO DETAIL 8, SHEET C010
- INSTALL TRANSFORMER WITH CONCRETE PAD FOOTING
- INSTALL 4" DIA. CONTECH CS-4 CASCADE HYDRODYNAMIC SEPARATOR. REFER TO DETAIL, SHEET C009A.
- INSTALL 4" SDR-26 PVC SANITARY SEWER LINE AND TIE IN TO EXISTING SANITARY SEWER LINE AT LOCATION SHOWN. REFER TO MEP PLANS
- INSTALL UNDERGROUND ELECTRICAL CONDUIT LINE AS SHOWN
- INSTALL CUT-IN WYE SANITARY SEWER CONNECTION WITH STUB. REFER TO DETAIL 12, SHEET C010
- INSTALL 3.75" X 2.5" PERMANENT MODOT TYPE 3 ROCK DITCH LINER PAD
- INSTALL 200' X 5' PERMANENT MODOT TYPE 3 ROCK DITCH LINER PAD
- INSTALL FIRE HYDRANT, YELLOW BARREL WITH SILVER BONNET, PER CITY OF LEE'S SUMMIT DESIGN AND CONSTRUCTION MANUAL SECTION 3901.Q. REFER TO DETAIL 8, SHEET C010
- INSTALL 2" TYPE K COPPER WATER LINE. REFER TO DETAILS 5 AND 11, SHEET C010
- INSTALL 1.5" TYPE K COPPER WATER SERVICE LINE. REFER TO DETAILS 5 AND 11, SHEET C010
- INSTALL FDC AT PROPOSED LOCATION WITH A KNOX BOX 6' AFF OVER THE FDC

Rip-Rap Pad Sizing Calculations	
Max. Shear Stress: $\tau_d = Y * d * S$	
Flared-End Section 100:	
τ_d : (lb/ft ²)	1.889082
Y: (lb/ft ²)	62.4
d: (ft)	0.8625
S: (ft/ft)	0.0351
Max. Permissible Shear Strength for MODOT Type 3 Rock Ditch Liner: 4 lb/ft ²	



LEE'S SUMMIT
FLEX SPACE
60 SE THOMPSON DR
LEE'S SUMMIT, MISSOURI 64081

UTILITY &
STORMWATER PLAN

CAPITAL BUILDERS



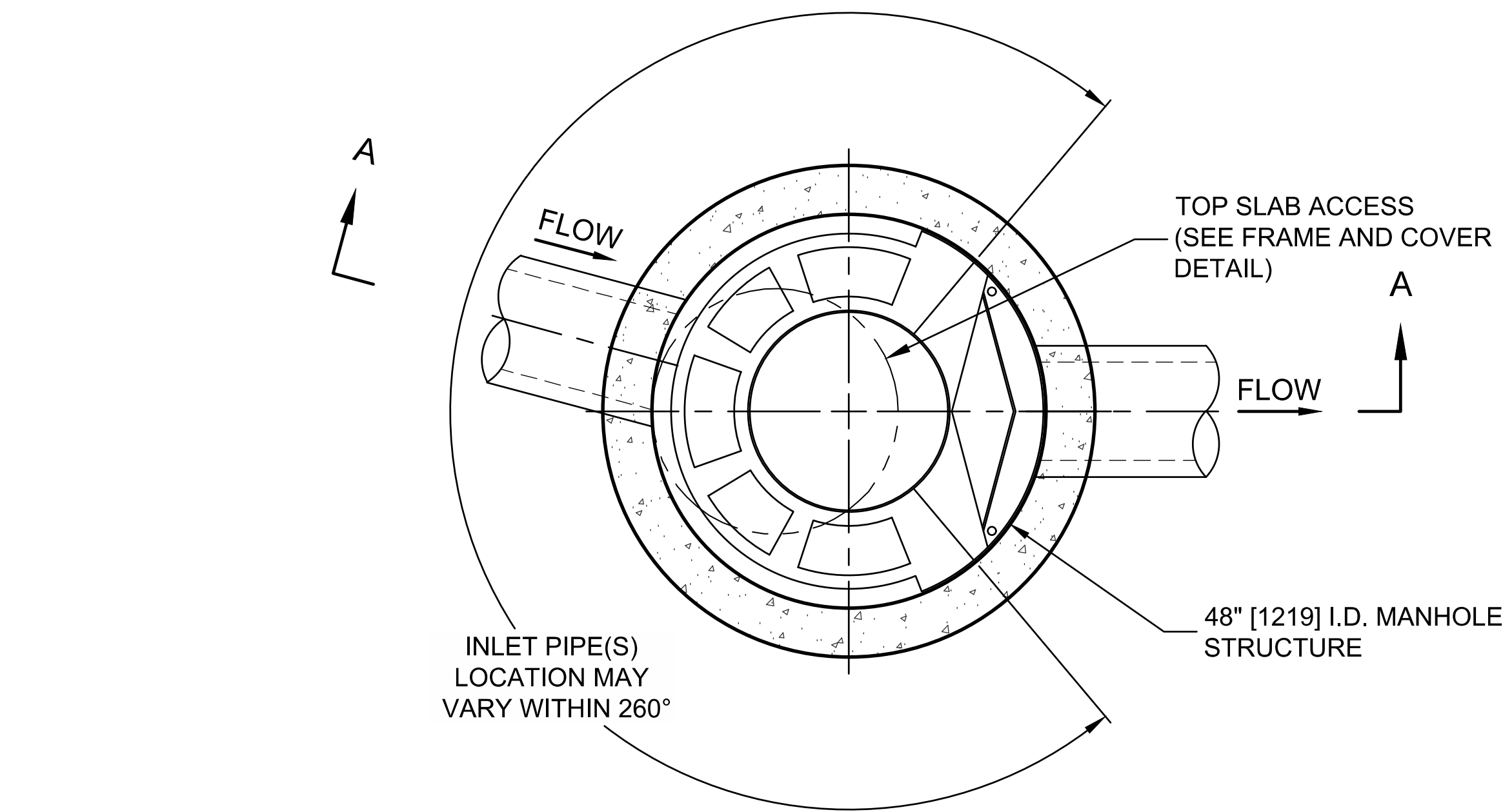
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DRAWN BY: LLG
CHECKED BY: PUJ

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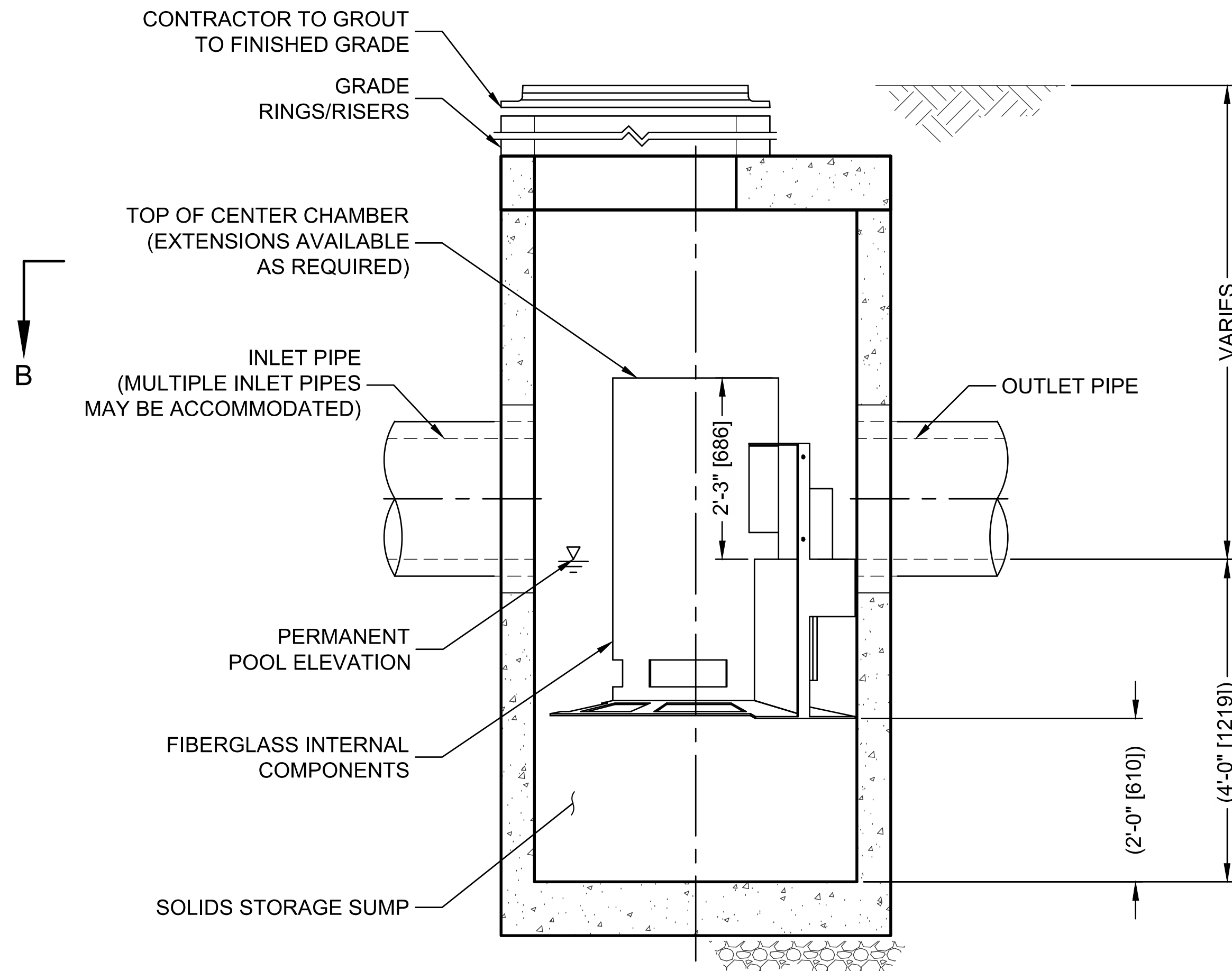
STORMWATER ADDENDUM
10/30/2024
REVISIONS
No.

LLG
DATE
BY

I:\COMMON\CAD\TREATMENT\21 CASCADE\40 STANDARD DRAWINGS\DWG\CS-4-DTL.DWG 10/31/2018 9:26 AM



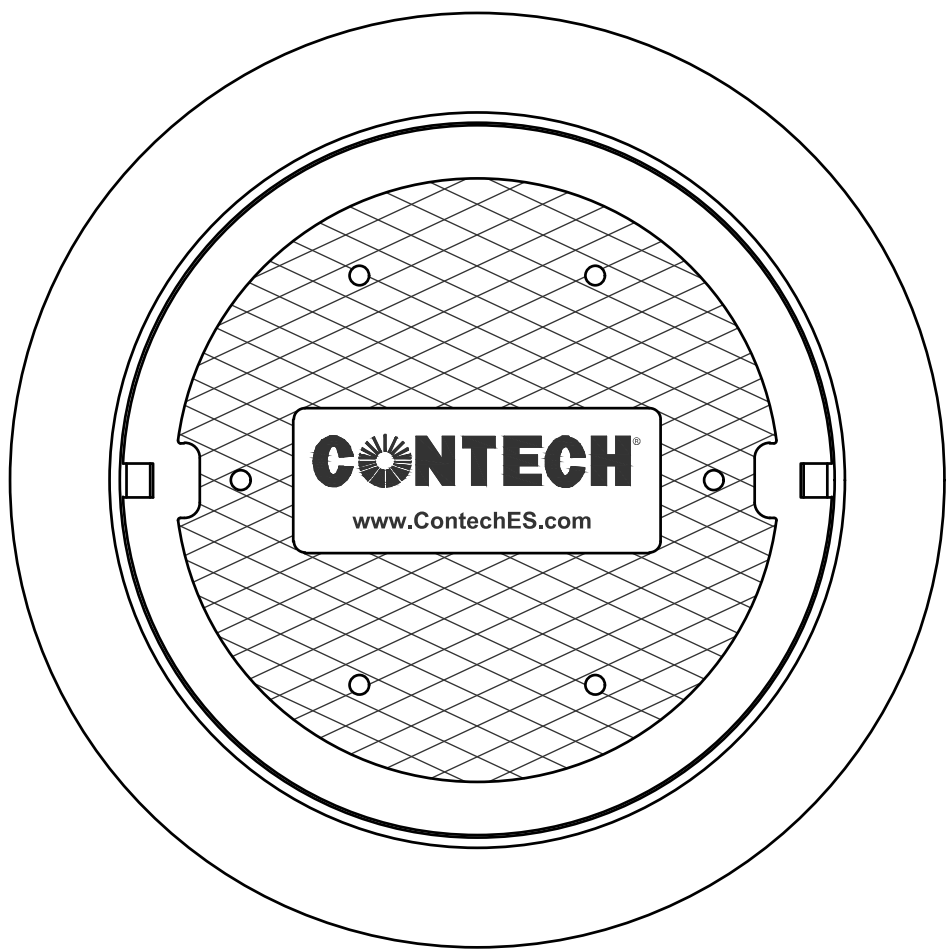
PLAN VIEW B-B
NOT TO SCALE



ELEVATION A-A
NOT TO SCALE

CASCADE
separator™

CS-4 DESIGN NOTES
THE STANDARD CS-4 CONFIGURATION IS SHOWN. ALTERNATE CONFIGURATIONS ARE AVAILABLE AND ARE LISTED BELOW. SOME CONFIGURATIONS MAY BE COMBINED TO SUIT SITE REQUIREMENTS.
CONFIGURATION DESCRIPTION
GRATED INLET ONLY (NO INLET PIPE)
GRATED INLET WITH INLET PIPE OR PIPES
CURB INLET ONLY (NO INLET PIPE)
CURB INLET WITH INLET PIPE OR PIPES



FRAME AND COVER
(DIAMETER VARIES)
NOT TO SCALE

SITE SPECIFIC DATA REQUIREMENTS			
STRUCTURE ID		101	
WATER QUALITY FLOW RATE (CFS OR L/s)		1.5	
PEAK FLOW RATE (CFS OR L/s)		17	
RETURN PERIOD OF PEAK FLOW (YRS)		100	
PIPE DATA:		I.E.	MATERIAL
INLET PIPE 1		984.14	HDPE
INLET PIPE 2		984.34	HDPE
OUTLET PIPE		983.59	HDPE
RIM ELEVATION		990.10	
ANTI-FLOTATION BALLAST		WIDTH	HEIGHT
		*	*
NOTES/SPECIAL REQUIREMENTS:			
CONTECH CS-4 HDS SHALL BE INSTALLED WITH CLAY AND BAILEY NO. 2153 FRAME AND NO. 2152 GRATE INLET OR APPROVED EQUAL			
* PER ENGINEER OF RECORD			

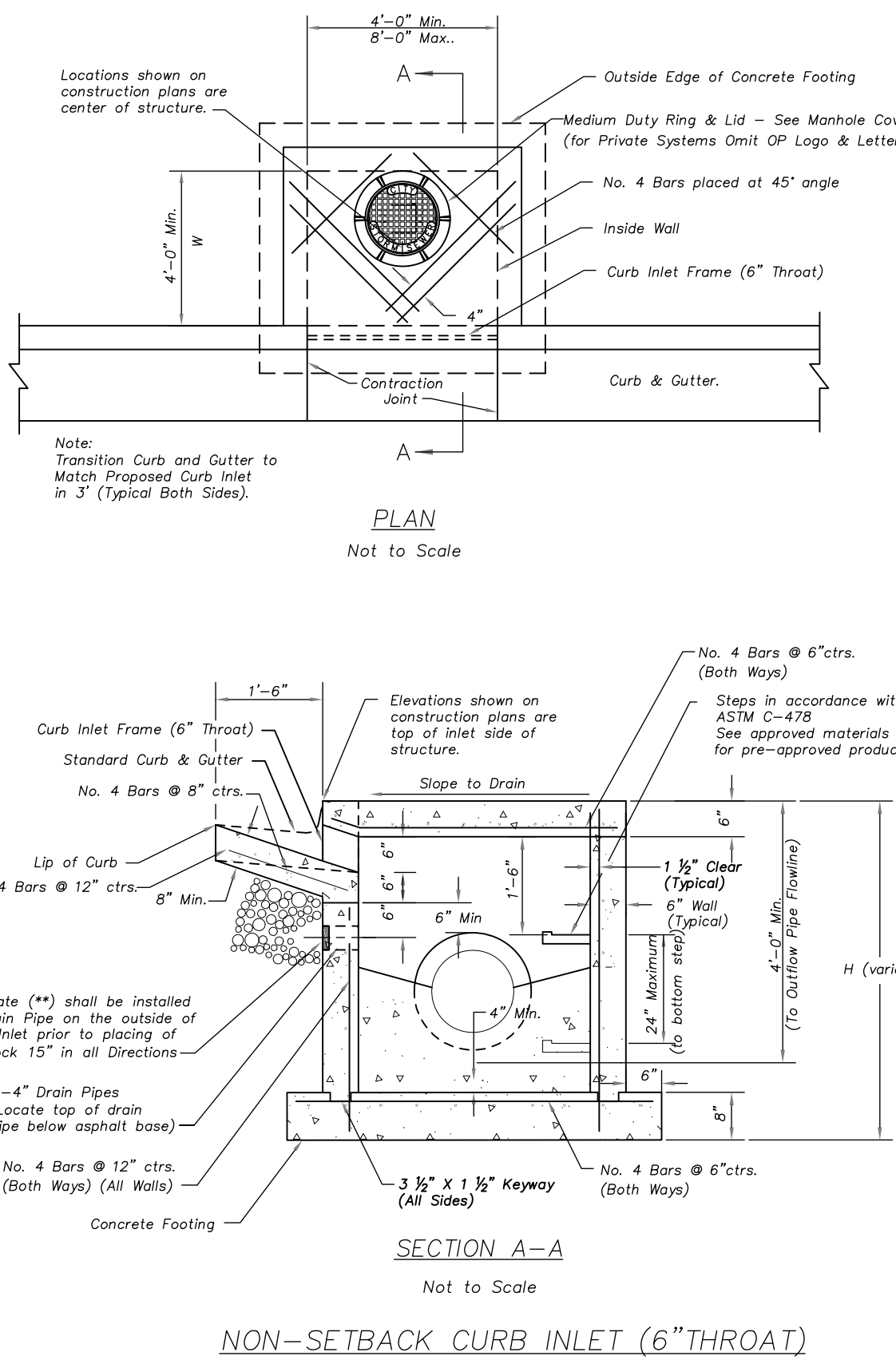
- GENERAL NOTES
- CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
 - FOR SITE SPECIFIC DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHT, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE. www.ContechES.com
 - CASCADE SEPARATOR WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING. CONTRACTOR TO CONFIRM STRUCTURE MEETS REQUIREMENTS OF PROJECT.
 - CASCADE SEPARATOR STRUCTURE SHALL MEET AASHTO HS20 LOAD RATING, ASSUMING EARTH COVER OF 0' - 2', AND GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION. CASTINGS SHALL MEET AASHTO M306 AND BE CAST WITH THE CONTECH LOGO..
 - CASCADE SEPARATOR STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C-478 AND AASHTO LOAD FACTOR DESIGN METHOD.
- INSTALLATION NOTES
- ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
 - CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CASCADE SEPARATOR MANHOLE STRUCTURE.
 - CONTRACTOR TO INSTALL JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS AND ASSEMBLE STRUCTURE.
 - CONTRACTOR TO PROVIDE, INSTALL, AND GROUT INLET AND OUTLET PIPE(S). MATCH PIPE INVERTS WITH ELEVATIONS SHOWN. ALL PIPE CENTERLINES TO MATCH PIPE OPENING CENTERLINES.
 - CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.



CONTECH
ENGINEERED SOLUTIONS LLC
www.contechES.com
9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX

CS-4
CASCADE SEPARATOR
STANDARD DETAIL

Drawing name: K:\K4C_LIEV\201842000_Capital Builders Lee's Summit\2 Design\CAD\PlanSheets\DPIC009 - DETAILS.dwg C:\008 - DETAILS Oct 29, 2024 1:00pm by: logan green
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Non-Setback Curb Inlet Notes

General

- All storm sewer structures shall be pre-cast or poured in place. If pre-cast structures are used for publicly financed, maintained or administered construction, the tops shall be poured in place and the wall steel shall be left exposed to a height 2' below the finish top elevation, or as directed by the City Engineer.
- Pre-cast shop drawings are to be approved by the City Engineer for publicly financed or administered projects. Pre-cast shop drawings for privately financed projects are to be submitted to the Engineering Services Division of the Planning and Development Services Department upon request.
- Do not scale these drawings for dimensions or clearances. Any questions regarding dimensions shall be brought to the attention of the City Engineer prior to construction.
- On-grade inlets shall conform to the street grade. Sump inlets shall be level.
- The first dimension listed in the construction notes is the "L" dimension. The second dimension is the "W" dimension. The concrete thickness and reinforcement shown is for boxes with ("L"x"W") and ("W"x"H") less than or equal to 20. For boxes with either of these calculations greater than 20, a special design is required.

Concrete

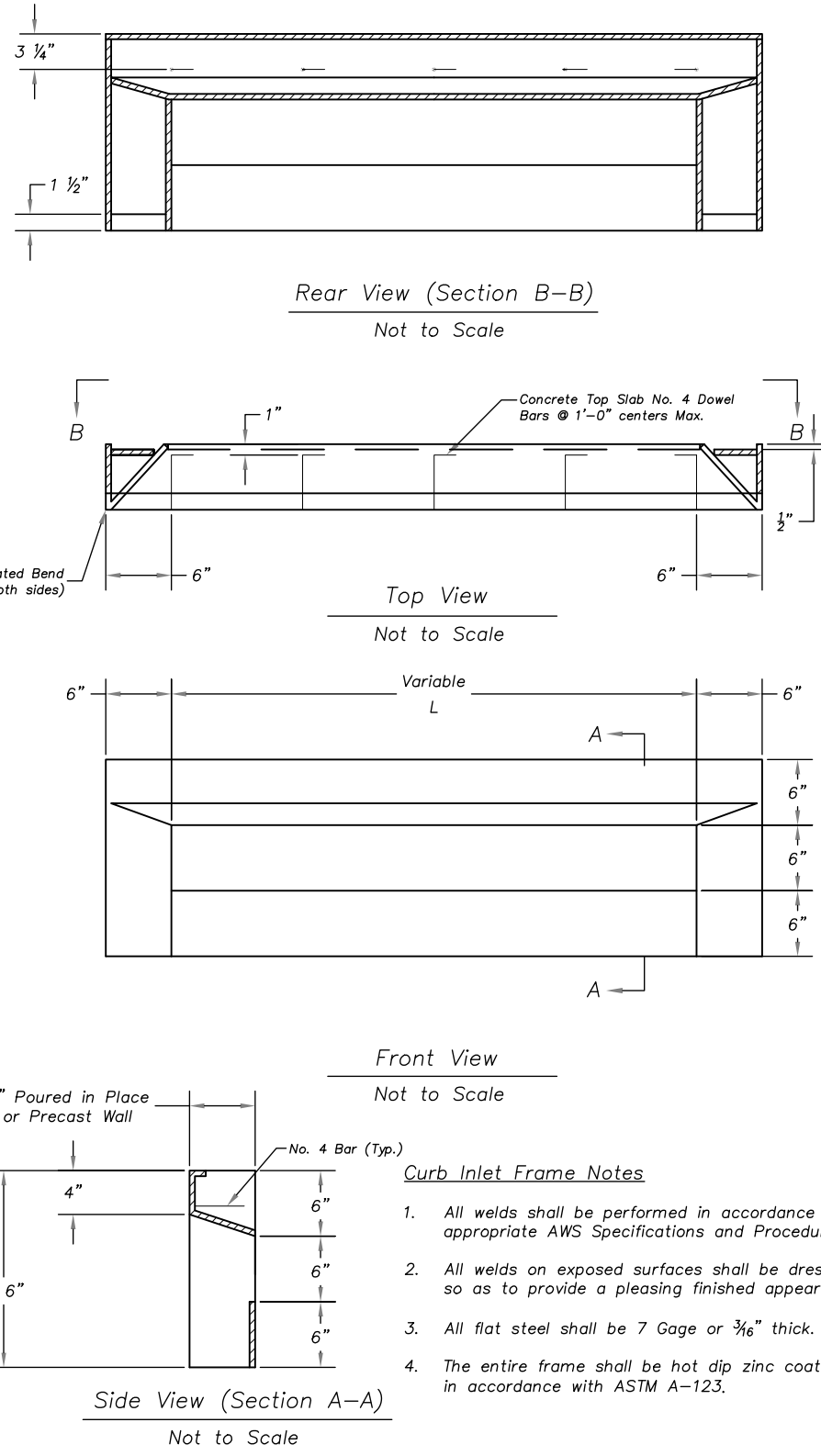
- Concrete used in this work shall be KOMM84K, as approved by the Kansas City Metropolitan Materials Board.

Reinforcing Steel

- Inlet floors shall be shaped with non-reinforced concrete inverts to provide smooth flow.
- Bevel all exposed edges with 3/4" triangular mounding.
- Reinforcing steel shall be new billet, minimum Grade 60 as per ASTM A615, and shall be bent cold.
- All dimensions relative to reinforcing steel are to centerline of bars. 2" clearance shall be provided throughout unless noted otherwise. Tolerance of +/- 3/8" shall be permitted.
- All lap splices not shown shall be a minimum of 40 bar diameters in length.
- All reinforcing steel shall be supported on fabricated steel bar supports @ 3'-0" maximum spacing.
- All dowels shall be accurately placed and securely tied in place prior to placement of bottom slab concrete. Sticking of dowels into fresh or partially hardened concrete will not be acceptable.

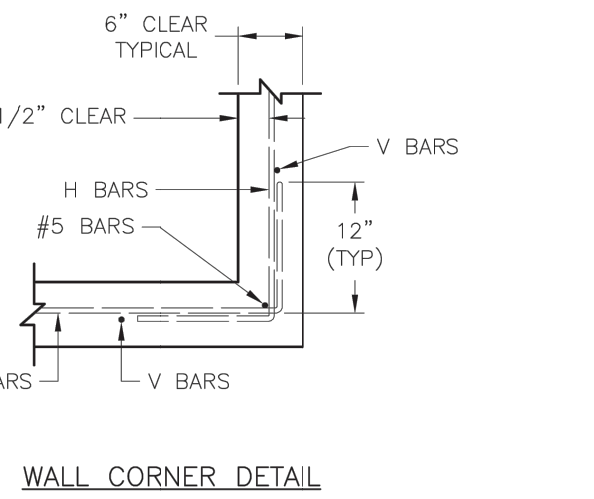
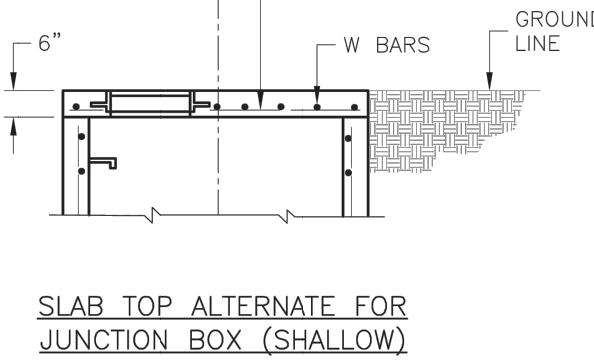
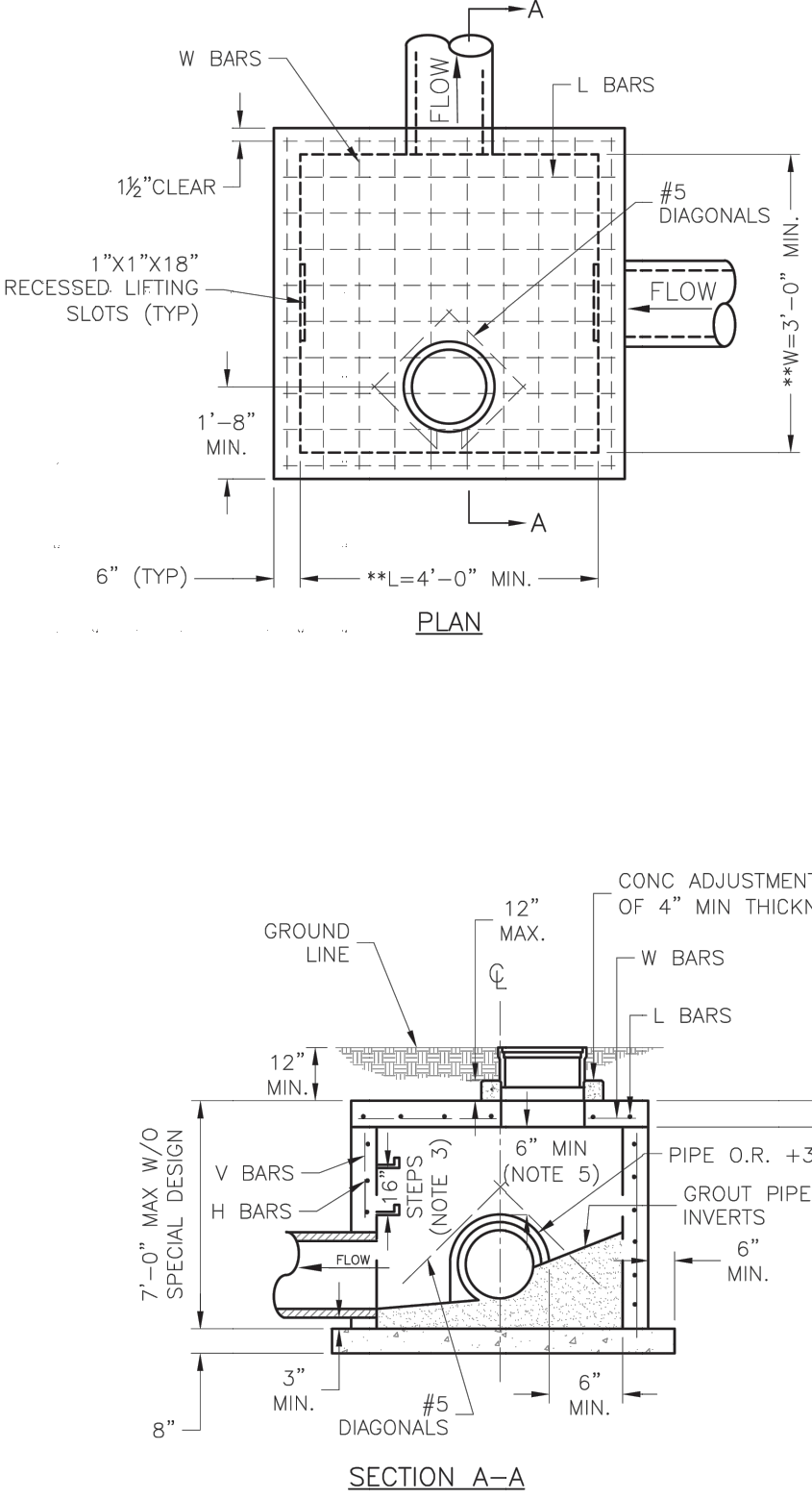
Construction

- The bottom slab shall be at least 24 hours old before placing sidewalk concrete. All sidewalk forms shall remain in place a minimum of 24 hours after sidewalks are poured before removal, and after removal shall be immediately treated with membrane curing compound.
- All curb inlet tops are to be constructed after final curb string line has been approved by the engineer and prior to curb construction or as directed by the city engineer.
- Pipe connections to pre-cast structures shall have a minimum of 6" of concrete around the entire pipe within 2' of the structure.
- Material selection and compaction requirements for backfill ground structures shall be as specified in the Manual of Infrastructure Standards for Right of Way Restoration, as promulgated by the City Engineer.



2 NON-SETBACK CURB INLET DETAIL

SCALE: NOT TO SCALE



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

REINFORCING

BARS	BAR SIZE	SPACING (IN.)
H	4	12
V	4	12
L	5	6
W	5	6

GENERAL NOTES:

- LOCATE RING AND COVER ON BLANK WALL.
- USE 3/4" CHAMFER STRIP OR 3/4" R EDGER TOOL ON ALL EXPOSED CONCRETE CORNERS.
- STEPS REQUIRED AT 16" O.C. WHEN DEPTH FROM TOP OF CASTING TO INVERT EXCEEDS 4' ON BLANK WALL IF POSSIBLE.
- BOXOUTS WILL NOT BE ALLOWED TO PROJECT THROUGH THE CORNERS OF THE STRUCTURE AND THE MINIMUM DISTANCE BETWEEN BOXOUTS IS 6".
- THE MINIMUM REINFORCING SHALL BE 1 H-BAR OVER A CAST-IN-PLACE PIPE AND 2 H-BARS OVER A PRECAST BOXOUT.
- PRECAST LIDS SHALL BE PINNED, SEALED WITH NON-SHRINKABLE GROUT AND REMOVABLE FOR FUTURE MAINTENANCE.
- REINFORCING OF COVERS IN STREETS REQUIRE SPECIAL DESIGN.
- FOR RING AND COVER SEE THE STORMWATER APPROVED PRODUCT LIST.

LEE'S SUMMIT
MISSOURI

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

Drawn By: MJP
Checked By: JLS
Date: 05/2023
Rev. #

STM-3

3 JUNCTION BOX DETAIL

SCALE: NOT TO SCALE

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KANSAS CITY, MO 64105
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DESIGNED BY: LLG
DRAWN BY: LLG
CHECKED BY: PUJ



CAPITAL BUILDERS

DETAILS

LEE'S SUMMIT
FLEX SPACE
60 SE THOMPSON DR
LEE'S SUMMIT, MISSOURI 64081

ORIGINAL ISSUE:

10/29/2024

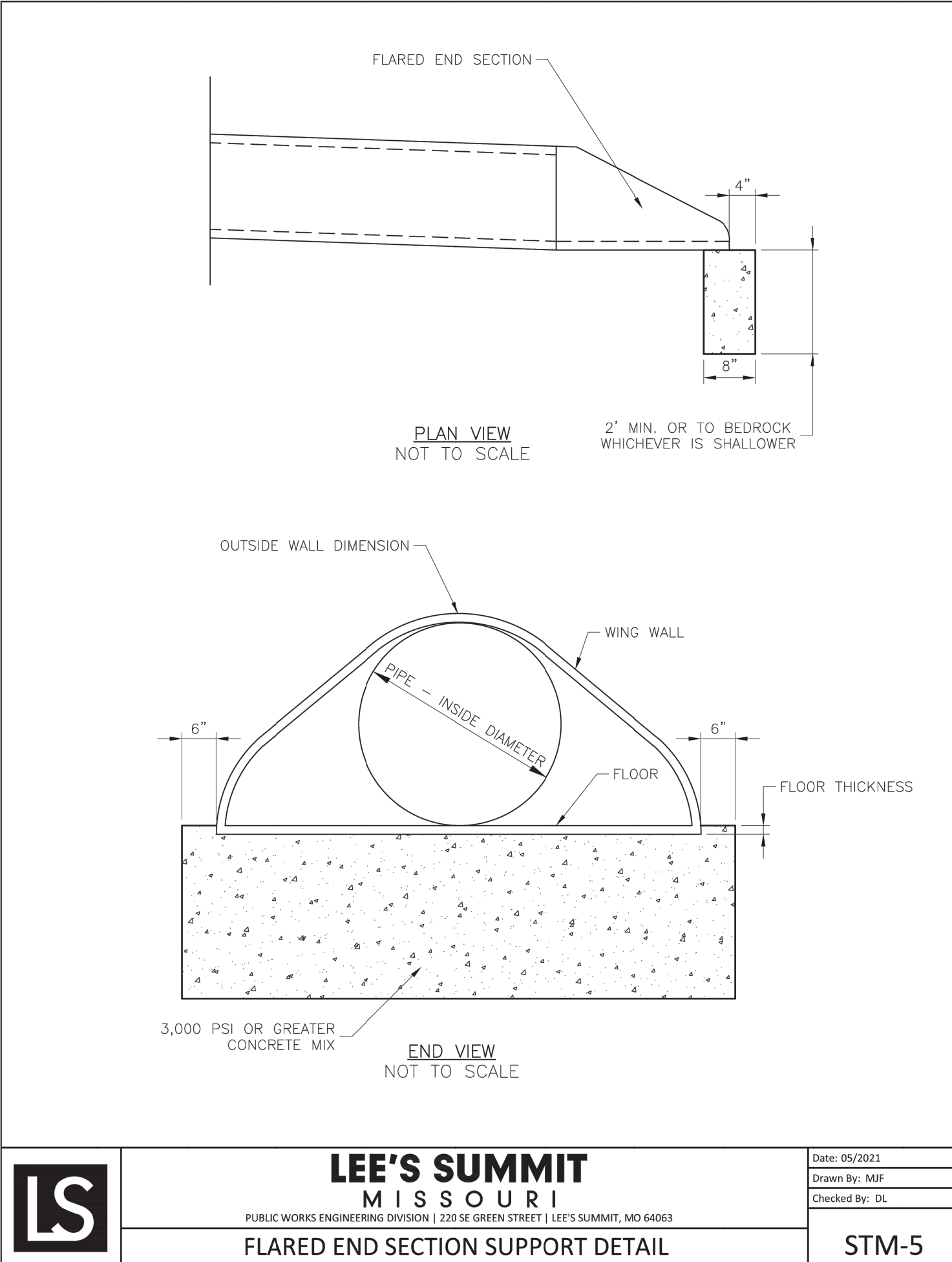
KHA PROJECT NO.

268442000

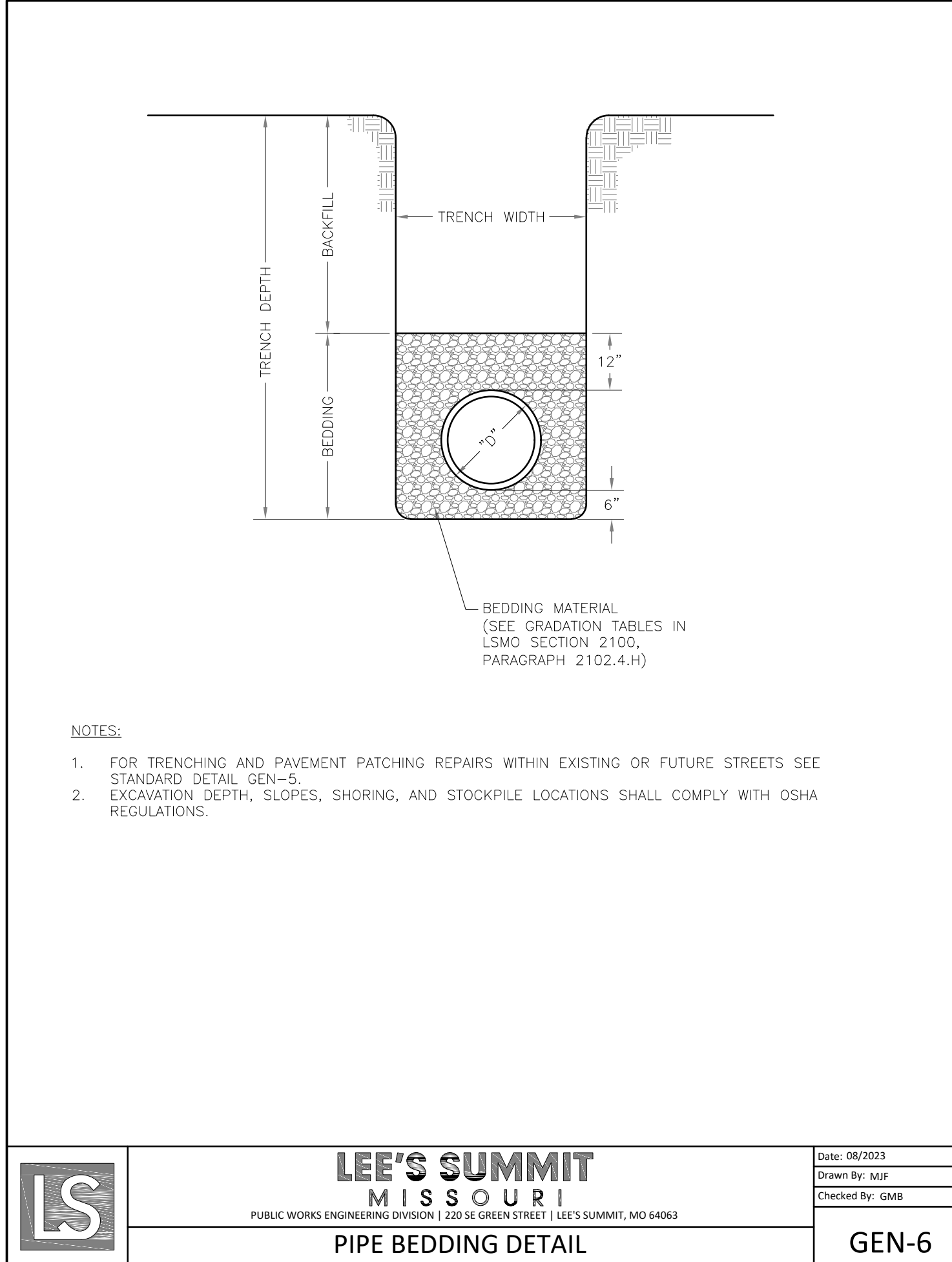
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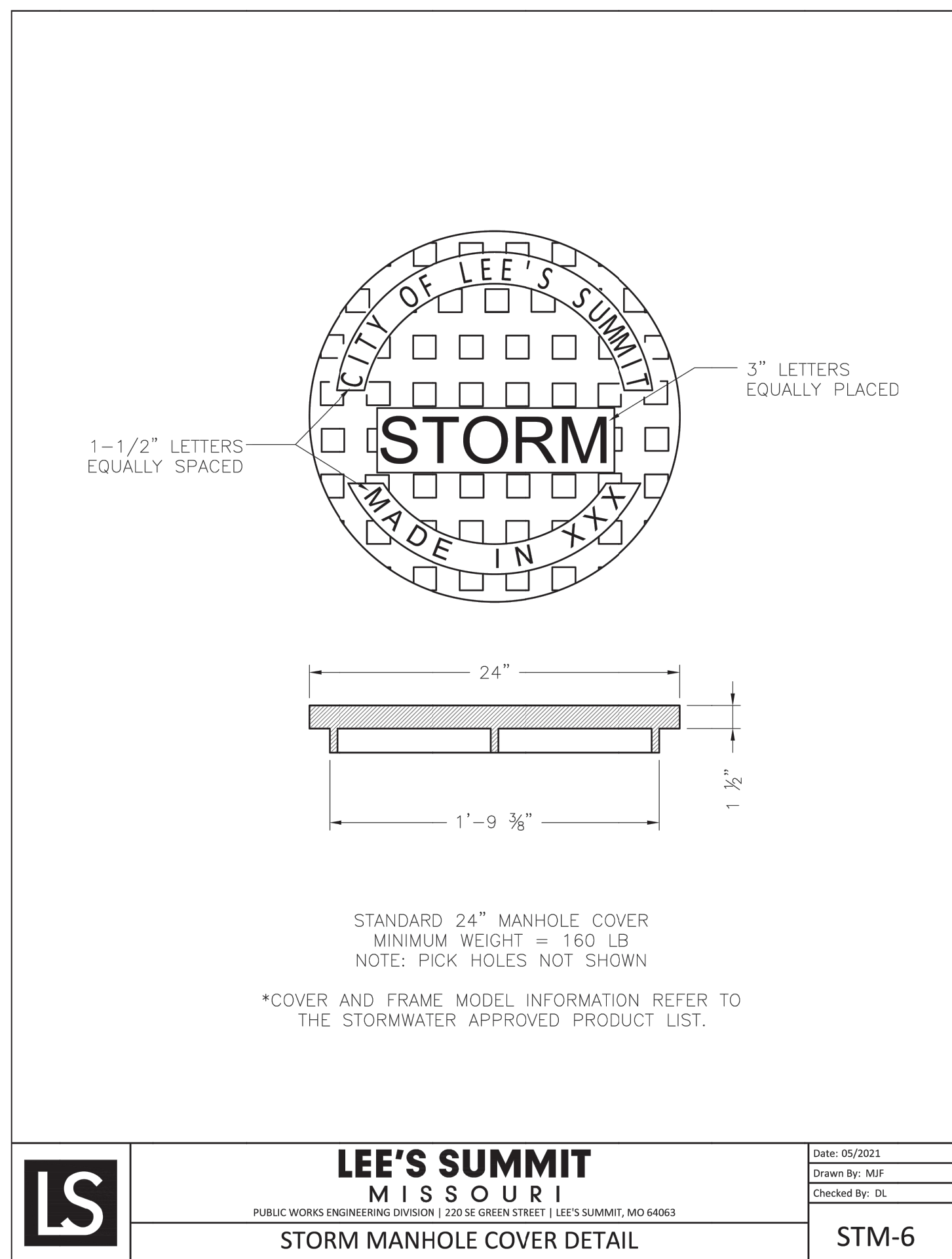
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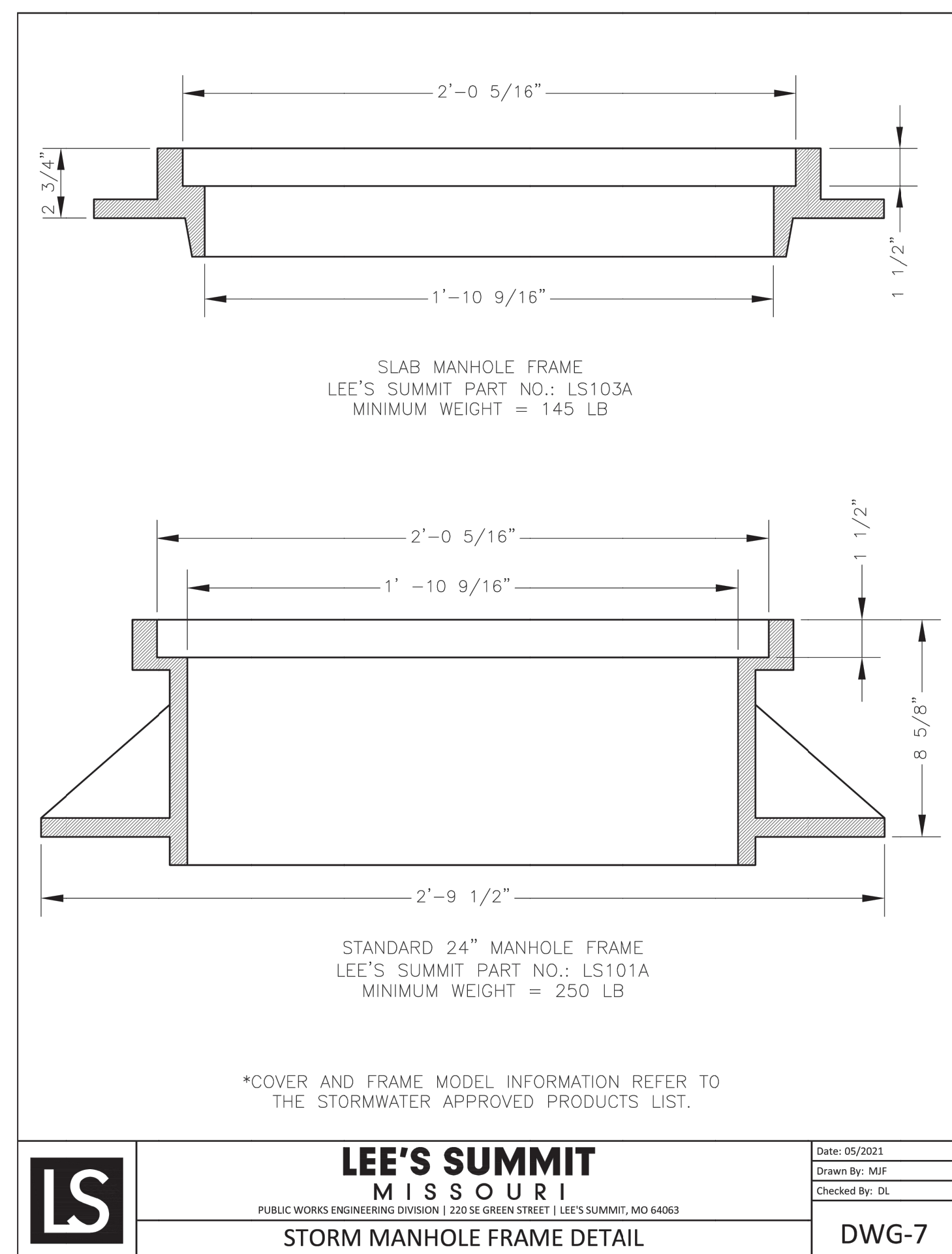
4 FLARED END SECTION WITH TOE WALL DETAIL
SCALE: NOT TO SCALE



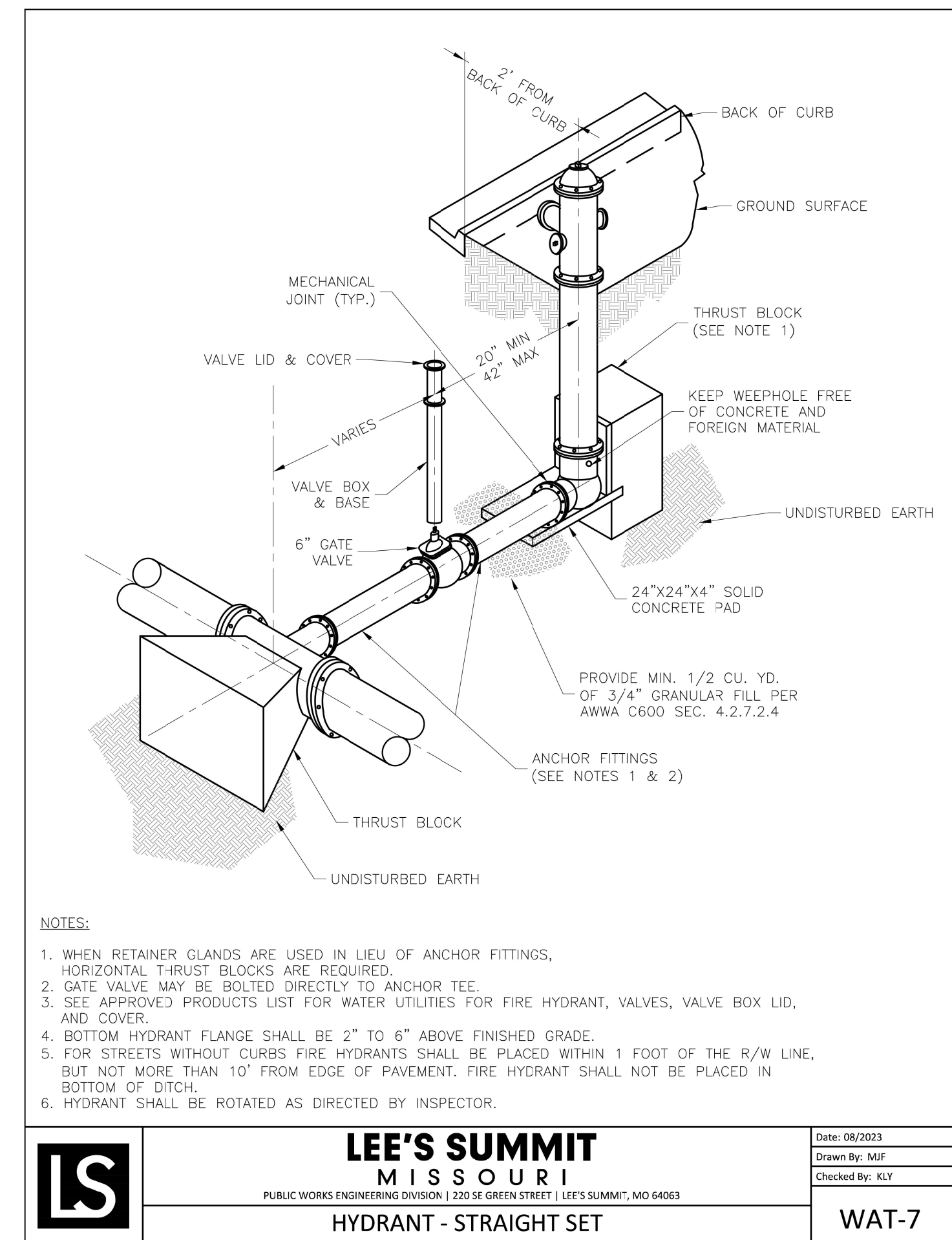
5 PIPE BEDDING DETAIL
SCALE: NOT TO SCALE



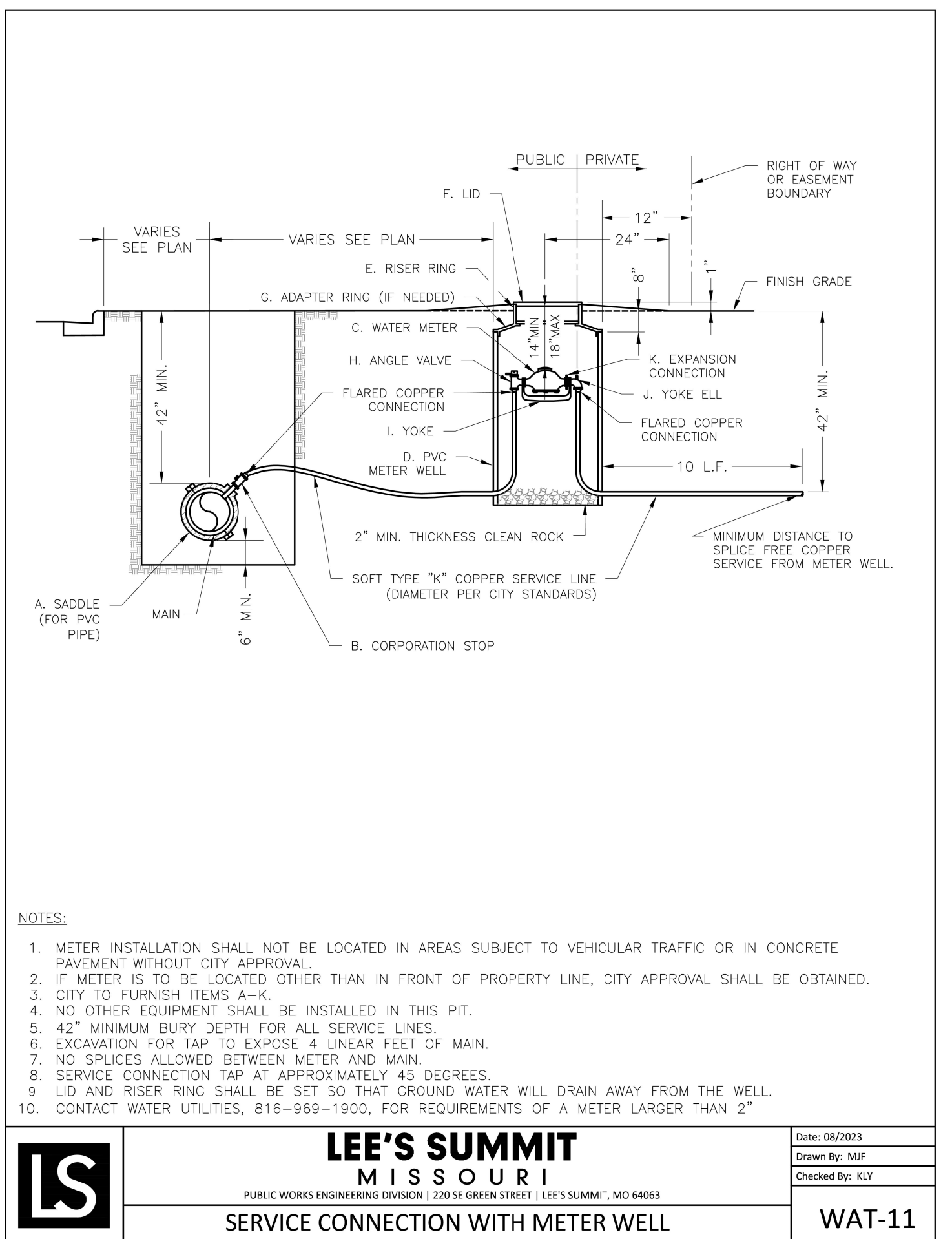
6 STORM MANHOLE COVER DETAIL
SCALE: NOT TO SCALE



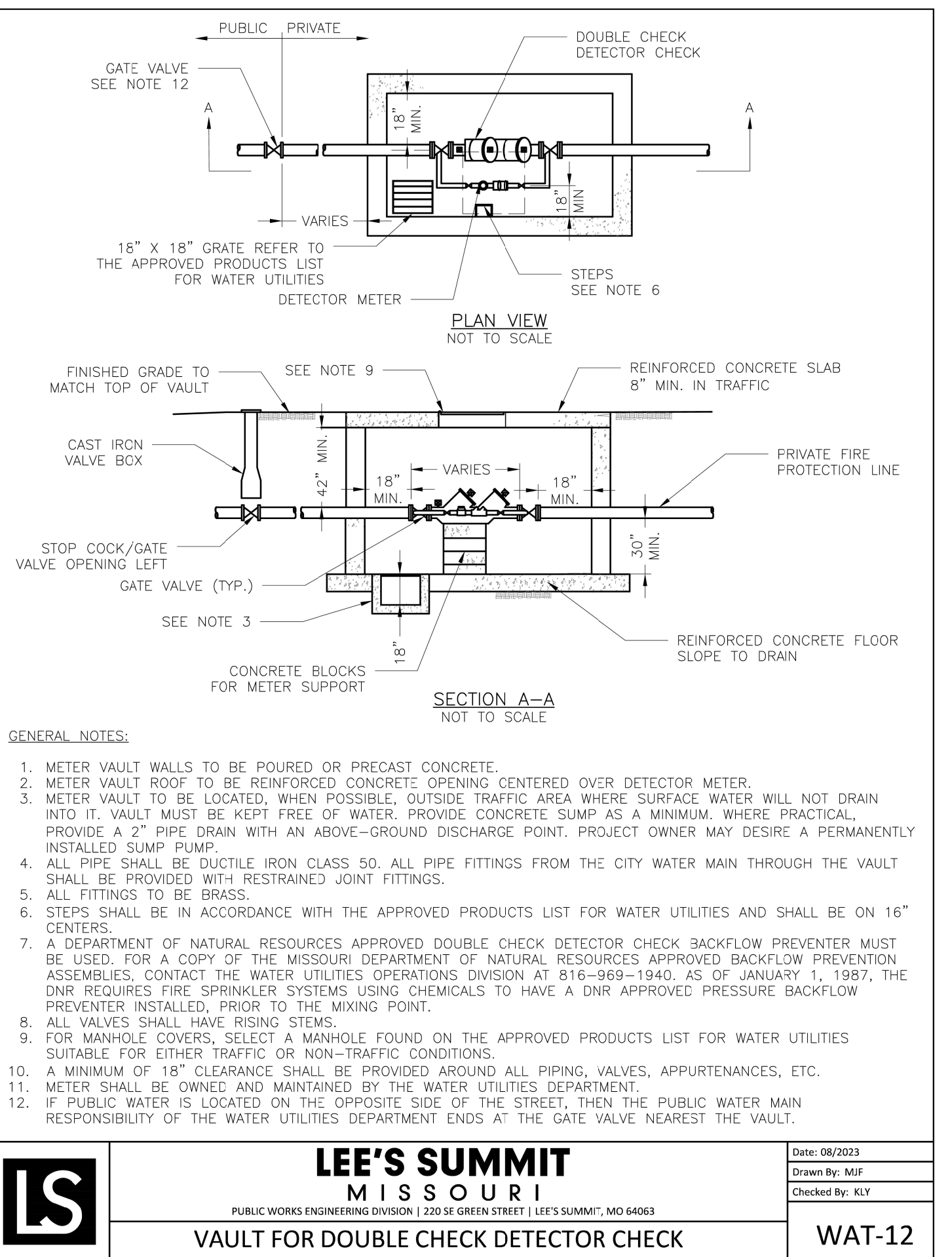
7 STORM MANHOLE FRAME DETAIL
SCALE: NOT TO SCALE



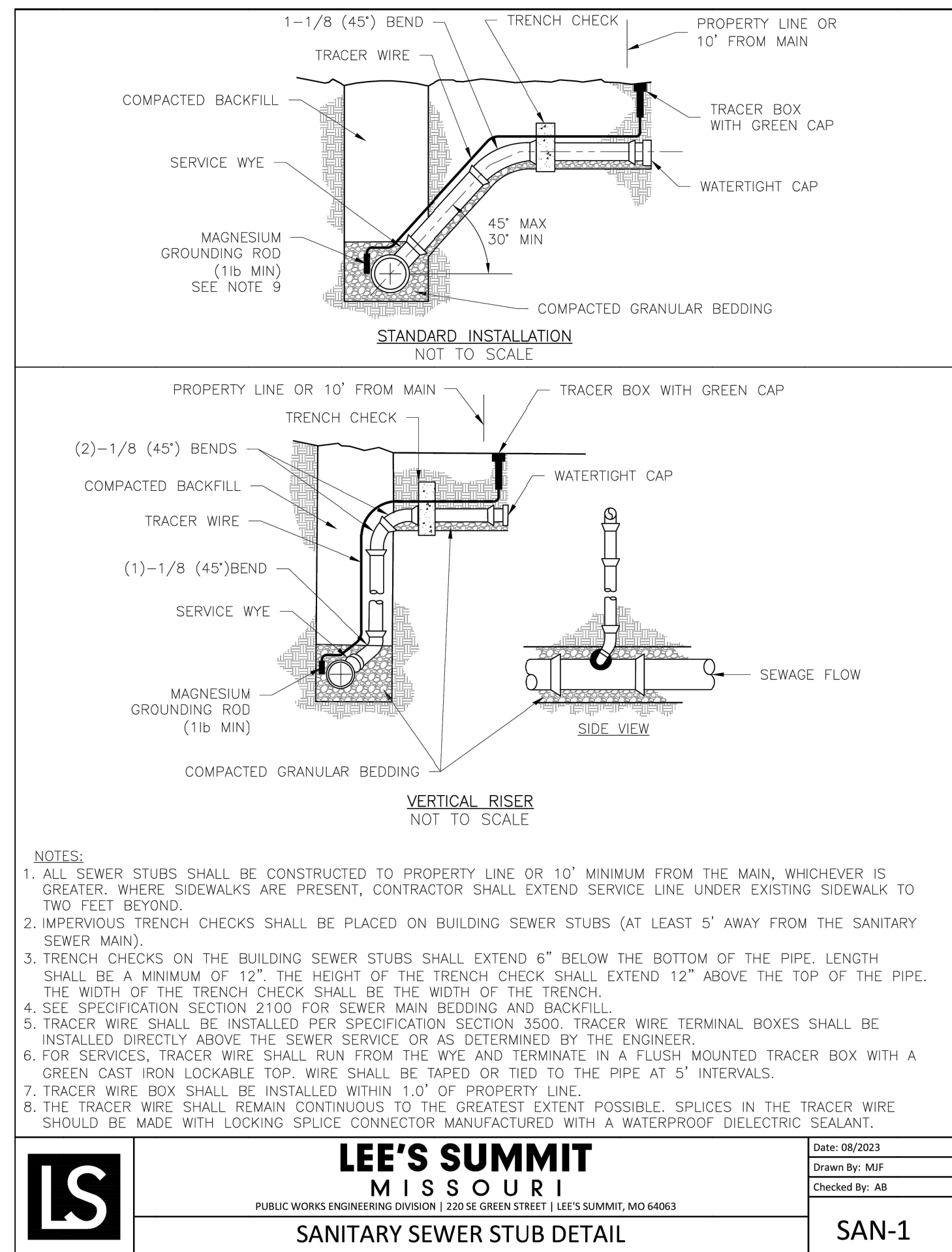
8 HYDRANT - STRAIGHT SET DETAIL
SCALE: NOT TO SCALE



9 SERVICE CONNECTION WITH METER WELL DETAIL
SCALE: NOT TO SCALE



10 VAULT FOR DOUBLE CHECK DETECTOR CHECK DETAIL
SCALE: NOT TO SCALE



11 SANITARY SEWER STUB DETAIL
SCALE: NOT TO SCALE

NO.	REVISIONS	DATE	BY

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SCALE:	AS NOTED
DESIGNED BY:	LLG
DRAWN BY:	LLG
CHECKED BY:	PJL



CAPITAL BUILDERS

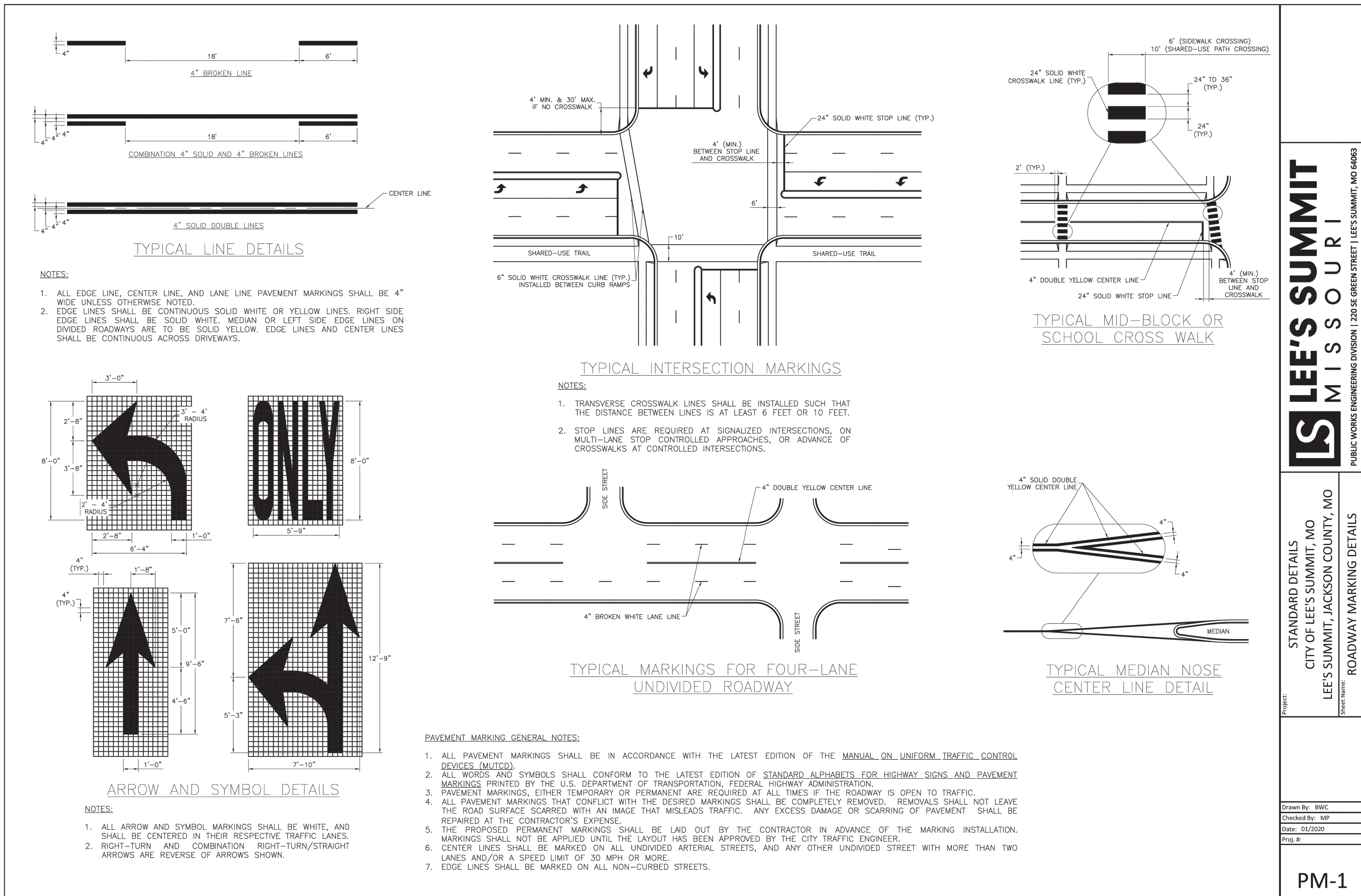
DETAILS

LEE'S SUMMIT
FLEX SPACE
60 SE THOMPSON DR
LEE'S SUMMIT, MISSOURI 64081

ORIGINAL ISSUE:	10/29/2024
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SHEET NUMBER	

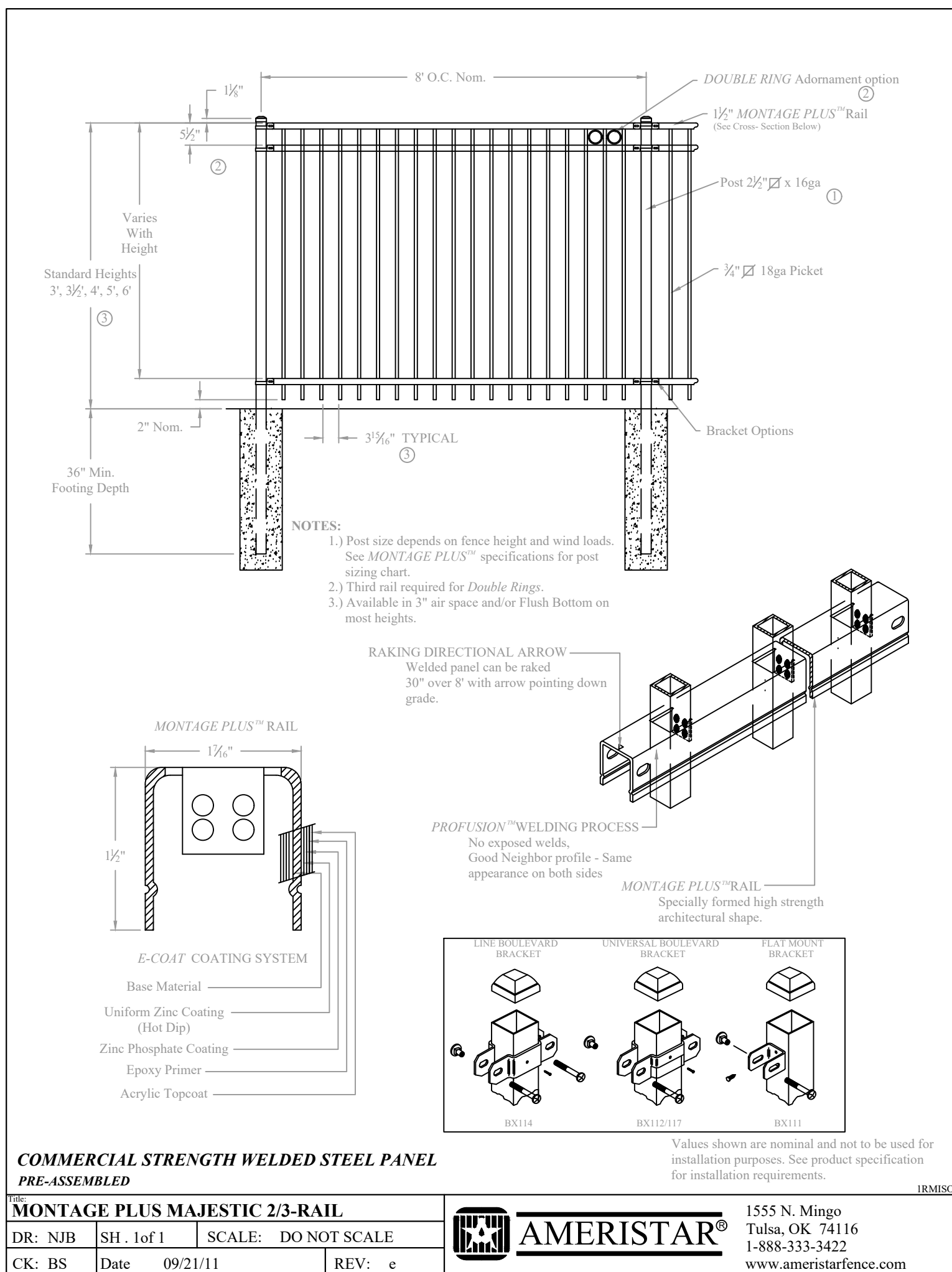
C010

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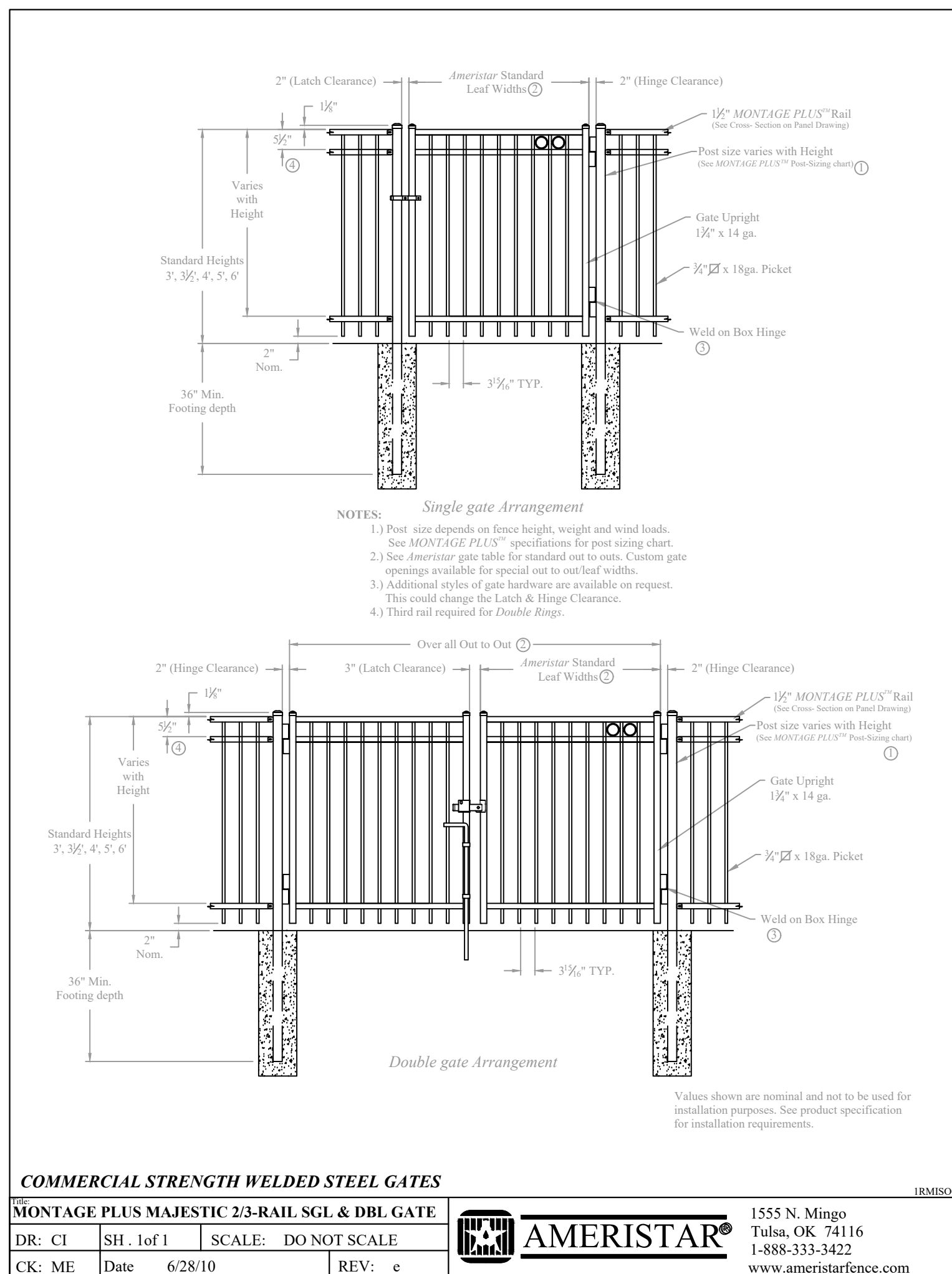
16 PAVEMENT MARKING ARROW AND SYMBOL DETAILS

SCALE: NOT TO SCALE



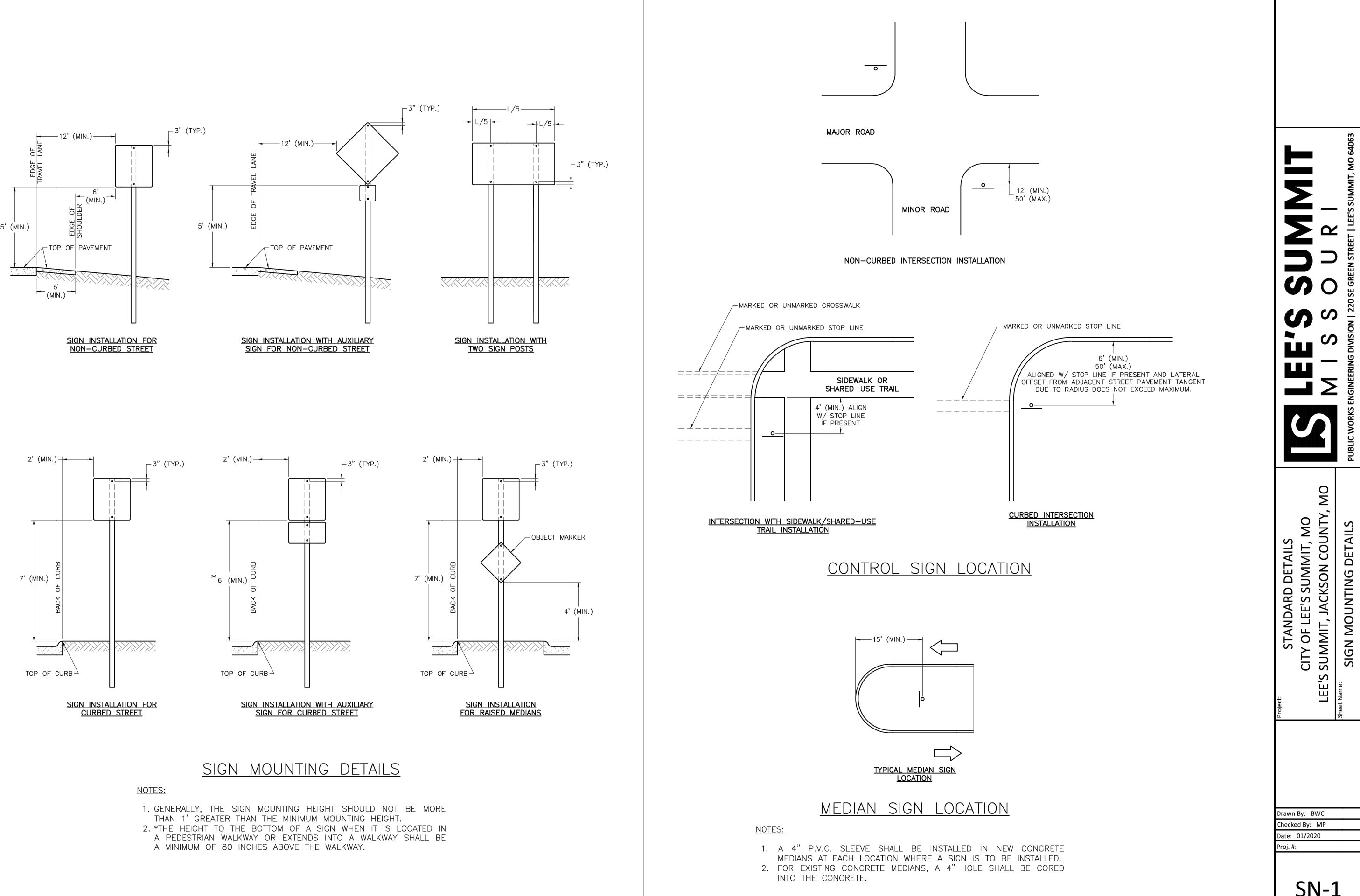
18 AMERISTAR FENCE DETAIL

SCALE: NOT TO SCALE



19 AMERISTAR GATE DETAIL

SCALE: NOT TO SCALE

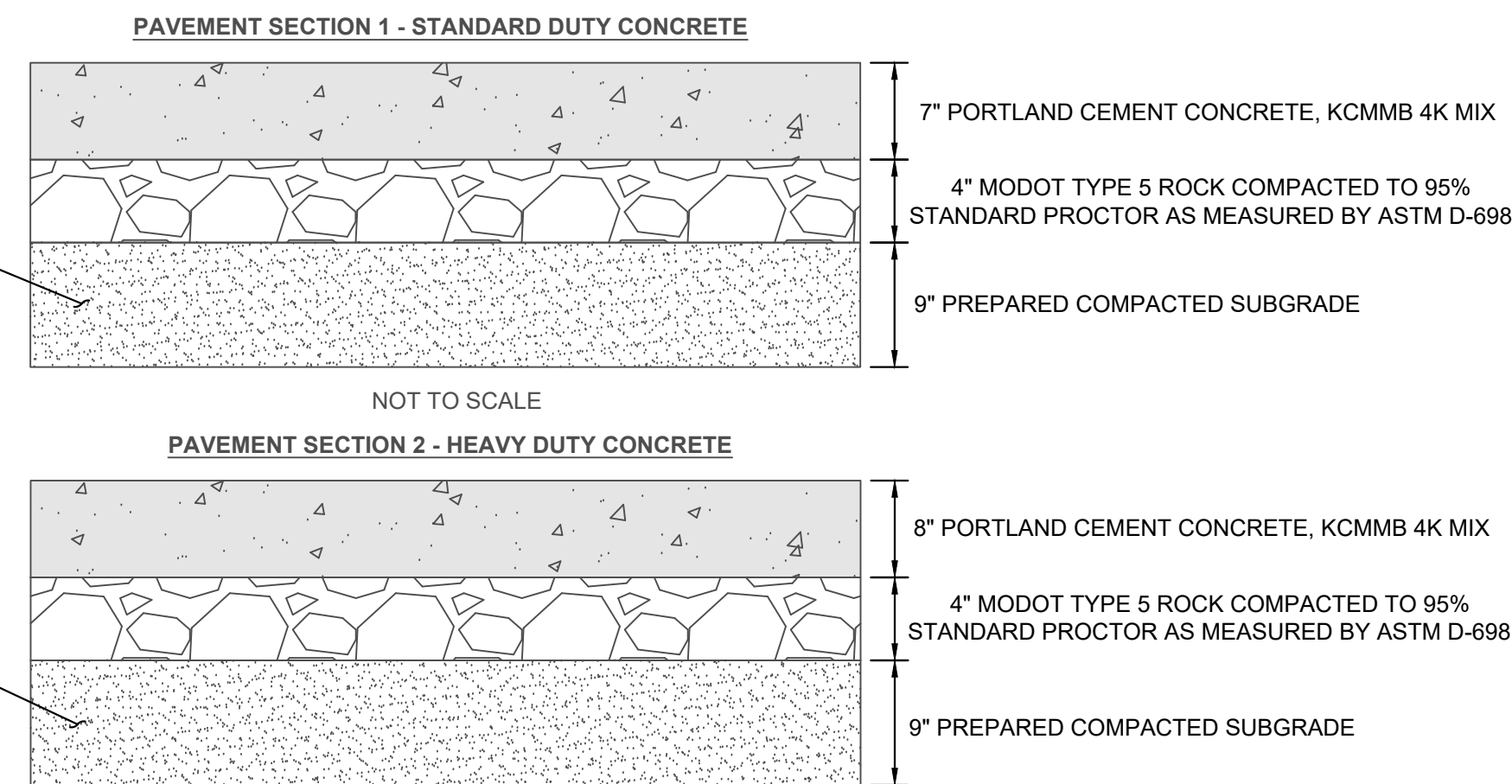


17 SIGN MOUNTING DETAILS

SCALE: NOT TO SCALE

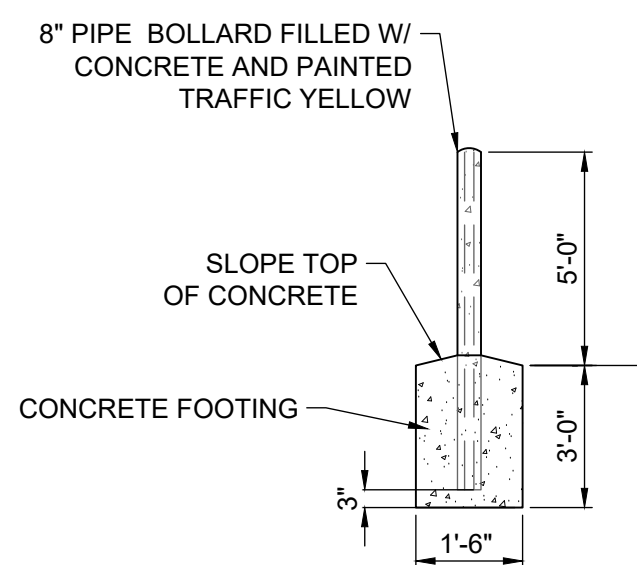
CONTRACTOR SHALL SCARIFY AND RECOMPACT UPPER 9" OF EXISTING MATERIAL. COMPACTION SHOULD BE 95% STANDARD PROCTOR MAXIMUM DRY DENSITY, AS MEASURED BY ASTM D-698, AT A MOISTURE CONTENT 0.4% ABOVE OPTIMUM.

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20 PAVEMENT SECTIONS DETAIL

SCALE: NOT TO SCALE



NOTES:
1. POLE TO BE PROVIDED AND INSTALLED BY GENERAL CONTRACTOR.
2. COORDINATE ALL MEGASLAB PENETRATIONS WITH THE MEGASLAB CONTRACTOR

21 STEEL-ENCASED CONCRETE BOLLARD DETAIL

SCALE: NOT TO SCALE

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STATE OF MISSOURI PATRICK J. JOYCE NUMBER PE-200903002 10/31/2024 PROFESSIONAL ENGINEER	
CAPITAL BUILDERS	
DETAILS	
LEE'S SUMMIT FLEX SPACE 60 SE THOMPSON DR LEE'S SUMMIT, MISSOURI 64081	
ORIGINAL ISSUE: 10/29/2024 KHA PROJECT NO. 268442000 SHEET NUMBER	
C012	

