



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

OWNER:
CAPITAL BUILDERS
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LEE'S SUMMIT, MO. 64086
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THIS STRUCTURE IS NOT LISTED IN THE NATIONAL REGISTER OF HISTORIC PLACES

THIS SITE IS NOT LOCATED IN A LOCAL HISTORIC DISTRICT PER THE MISSOURI DEPARTMENT OF NATURAL RESOURCES HISTORIC DISTRICTS AND SITES DATABASE, ACCESSED JUNE 27, 2023.

THIS SITE IS LOCATED WITHIN ZONE X PER FEMA FIRM MAPS 29095C0438G: EFFECTIVE DATE JANUARY 20, 2017. NO LETTERS OF MAP AMENDMENT OR REVISION ARE BEING PROPOSED.

LOT 3A, DECKER STREET MINOR PLAT, LOTS 2A AND 3A, A SUBDIVISION IN LEE'S SUMMIT,
JACKSON COUNTY, MISSOURI, ACCORDING TO THE PLAT RECORDED AUGUST 6, 2021.

THE SPECIFICATIONS FOR THIS PROJECT SHALL BE THE FOLLOWING:

1. THE CITY OF LEE'S SUMMIT, MISSOURI
2. KANSAS CITY METRO APWA

THE STANDARD SPECIFICATIONS THROUGH AND INCLUDING THE LATEST AMENDMENTS SHALL BE PART OF THESE PROJECT DRAWINGS AND SPECIFICATION AND ARE INCORPORATED HEREIN BY REFERENCE. THE MORE STRINGENT OF THESE STANDARD SPECIFICATIONS AND THOSE PREPARED BY THE ENGINEERING PREPARING THESE PLANS SHALL GOVERN.

NO ABANDONED OIL OR GAS WELLS HAVE BEEN IDENTIFIED WITHIN THE PROPERTY LIMITS OF THE PROPOSED CONSTRUCTION ACTIVITIES, PER THE MISSOURI DEPARTMENT OF NATURAL RESOURCES (MDNR) PERMITTED OIL AND GAS DATABASE, ACCESSED JUNE 27, 2023.

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.

CITY OF LEE'S SUMMIT
JEFF THORN
1200 SE HAMBLER RD.
LEE'S SUMMIT, MO 64081
TEL: (816) 969-1900

CITY OF LEE'S SUMMIT
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LEE'S SUMMIT, MO 64063
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CITY OF LEE'S SUMMIT
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RONALD GIPFERT
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KANSAS CITY, MO 64106
TEL: (816) 275-1550

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.

LIMITS OF DISTURBANCE: 1.81 AC

SW MARKER ST

S MO RTE 291

SE SCHERER RD

SE DECKER

SE THOMPSON DR

PROJECT LOCATION

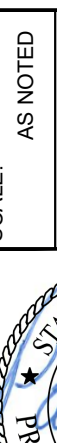
LOCATION MAP

1" = 100'

NORTH

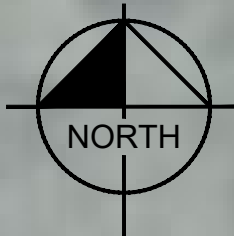
	PROPOSED STANDARD DUTY ASPHALT PAVEMENT
	PROPOSED HEAVY DUTY CONCRETE PAVEMENT
	PROPOSED BUILDING
	EXISTING PUBLIC ROADWAY
	EXISTING 60' STREAM BUFFER
	PROPERTY LINE
	PROPOSED BUILDING OUTLINE
	EASEMENT LINE
	SETBACK LINE
	STANDARD CURB & GUTTER
	EXISTING SANITARY SEWER
	EXISTING WATER LINE
	EXISTING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

C001	SHEET NUMBER	KHA PROJECT NO. 268442000	ORIGINAL ISSUE: 10/29/2024	LEE'S SUMMIT FLEX SPACE 60 SE THOMPSON DR LEE'S SUMMIT, MISSOURI 64081	COVER SHEET	CAPITAL BUILDERS	 10/31/2024	Kimley»Horn © 2000 KIMLEY-HORN AND ASSOCIATES, INC. 806 PENNSYLVANIA AVENUE, SUITE 150 KANSAS CITY, MO 64105 WWW.KIMLEY-HORN.COM	SCALE: AS NOTED DESIGNED BY: LLG DRAWN BY: LLG CHECKED BY: PJJ	No. _____ REVISIONS _____ DATE _____ BY _____	10/30/2024 LLG STORMWATER APPENDUM A
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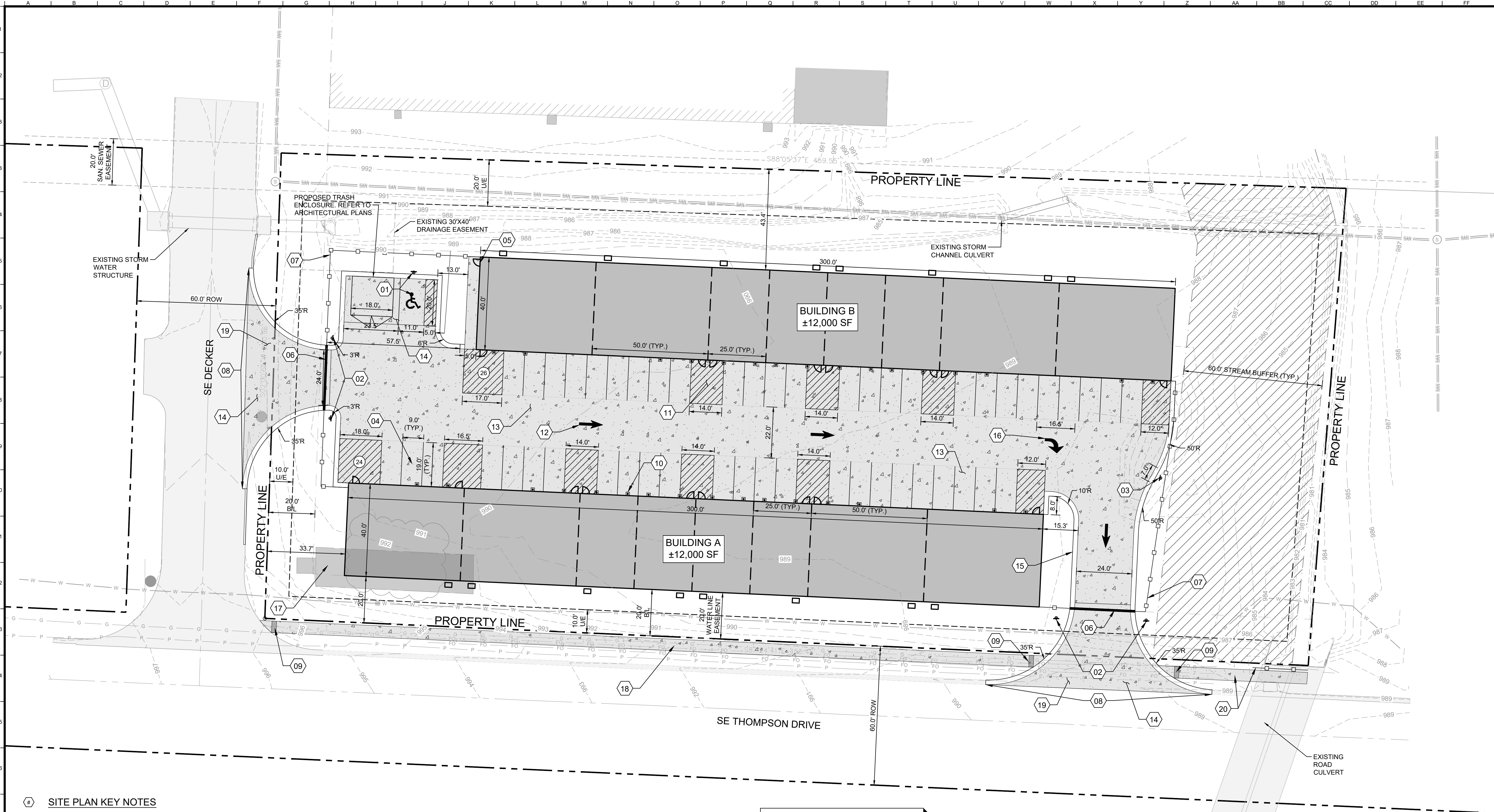


*NOTE: DASHED PARCEL LINES ARE FROM CITY OF LEE'S SUMMIT GIS DATABASE
AND ARE NOT SURVEYED. SOME SPACIAL DISCREPANCY MAY BE PRESENT.



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. 605 PENNSYLVANIA AVENUE, SUITE 150 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_LIE\208442000_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	Existing	2.13 Acres
	Proposed	2.13 Acres
E	Existing	0.03 Acres
	Proposed	1.19 Acres
F	Existing	0.00 Acres
	Proposed	0.00 Acres
G	Existing	0.00 Acres
	Proposed	0.00 Acres
H	Existing	0.00 Acres
	Proposed	0.00 Acres

ZONING

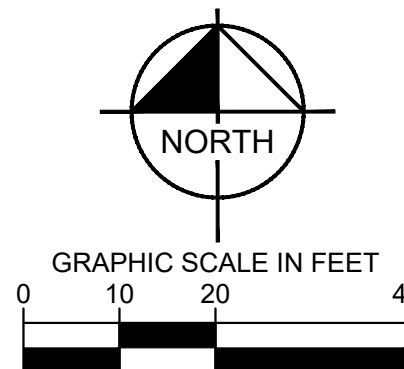
PI (PLANNED INDUSTRIAL)

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

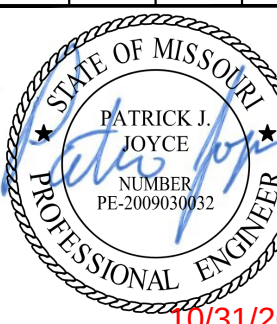
SHEET NUMBER

C003

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



CAPITAL BUILDERS

SITE PLAN

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

ORIGINAL ISSUE:

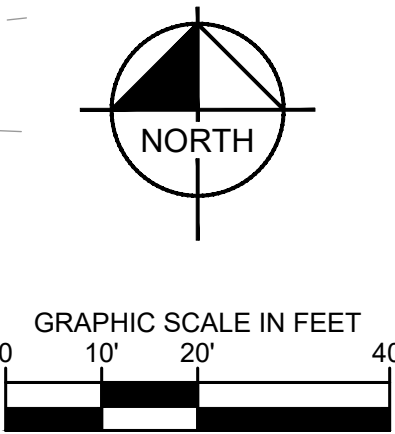
10/29/2024

KHA PROJECT NO.

268442000

SHEET NUMBER

C003



Technical drawing of a sidewalk cross-section showing ADA ramp and warning pad details. The drawing includes the following elements:

- ADA WARNING PAD:** A rectangular area with a stippled pattern, labeled "ADA WARNING PAD".
- ADA RAMP:** A sloped area leading up to the warning pad, labeled "ADA RAMP".
- SIDEWALK:** The main horizontal surface, labeled "SIDEWALK".
- Grades:** Various elevation points are marked in circles: 996.14, 995.97, 996.07, 995.96, 995.89, and 990.76. Slopes are indicated with percentages: 3.26%, 1.50%, 0.97%, and 1.90%.
- Other Features:** A dashed line labeled "01" and "02" runs across the sidewalk. A "ZONE" is indicated on the left. A "2.30%" slope is shown in the upper right corner.

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

- ADA WARNING PAD:** Located at the top center, with an elevation of 990.41.
- ADA RAMP:** Located at the bottom center, with an elevation of 990.34.
- SIDEWALK:** Located on the left side, with an elevation of 990.26.
- TRANSITION ZONE:** Located on the right side, with an elevation of 990.18.
- Elevations:** Various points are marked with elevations such as 990.41, 990.26, 990.34, and 990.18.
- Grades:** Slopes are indicated with percentages: 1.91%, 0.75%, 1.49%, and 0.09%.
- Labels:** The diagram includes labels for 'ADA WARNING PAD', 'ADA RAMP', 'SIDEWALK', and 'TRANSITION ZONE'.

Technical drawing of a street cross-section showing a transition zone, ADA ramp, and sidewalk. The drawing includes the following labels and features:

- TRANSITION ZONE**: Indicated by a dashed line and a label pointing to the area between the main road and the ADA ramp.
- ADA RAMP**: A ramp structure labeled **01** with a **1.50%** slope, leading from the sidewalk to the main road.
- SIDEWALK**: The paved area on the right side of the road, labeled **02**.
- ADA WARNING PAD**: A rectangular area on the sidewalk labeled **02**.
- Elevations**: Various points are marked with elevations: **989.56**, **989.57**, **989.50**, **989.48**, and **989.43**.
- Slopes**: The main road has a **0.60%** slope, and the ADA ramp has a **1.50%** slope.
- Other Labels**: **01** and **02** are labels for the ADA ramp and sidewalk, respectively. **W** and **P** are labels for the road surface and sidewalk, respectively.

Diagram illustrating the layout of a road cross-section with various labels and dimensions:

- EXISTING CONTOUR**: Indicated by a dashed line at the top.
- PROPOSED CONTOUR**: Indicated by a solid line below the existing contour.
- SPOT ELEVATION**: Indicated by a rounded rectangle containing the text "XXX.XX".
- SLOPE ARROW**: Indicated by an arrow pointing to the slope percentage "X.XX%".
- Dimensions**: Horizontal dimensions are marked with "1015" at two locations.

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 268442000	KHA 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	 10/31/2024	Kimley»Horn © 2023 KIMLEY-HORN AND ASSOCIATES, INC. 1000 WEST WILLOW AVE SUITE 150 KANSAS CITY, MO 64114 PHONE: 816-452-0350 WWW.KIMLEY-HORN.COM	AS NOTED DESIGNED BY: LLG DRAWN BY: LLG CHECKED BY: PJJ	No. _____ REVISIONS _____ DATE _____ BY _____
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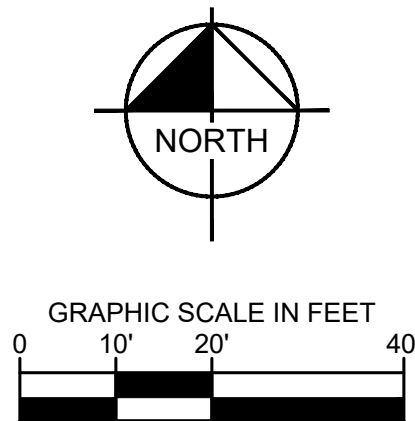
Drawing name: K:\KAC_LIE\20844000_Capital Builders Lee's Summit\Drawings\DWG - UTILITY & STORMWATER PLAN.dwg Oct 31, 2024 3:44pm by: logan.green
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UTILITY LEGEND		
	SAN	EXISTING SANITARY SEWER
	W	EXISTING WATER LINE
	FO	EXISTING FIBER OPTIC LINE
	G	EXISTING 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 ³)	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



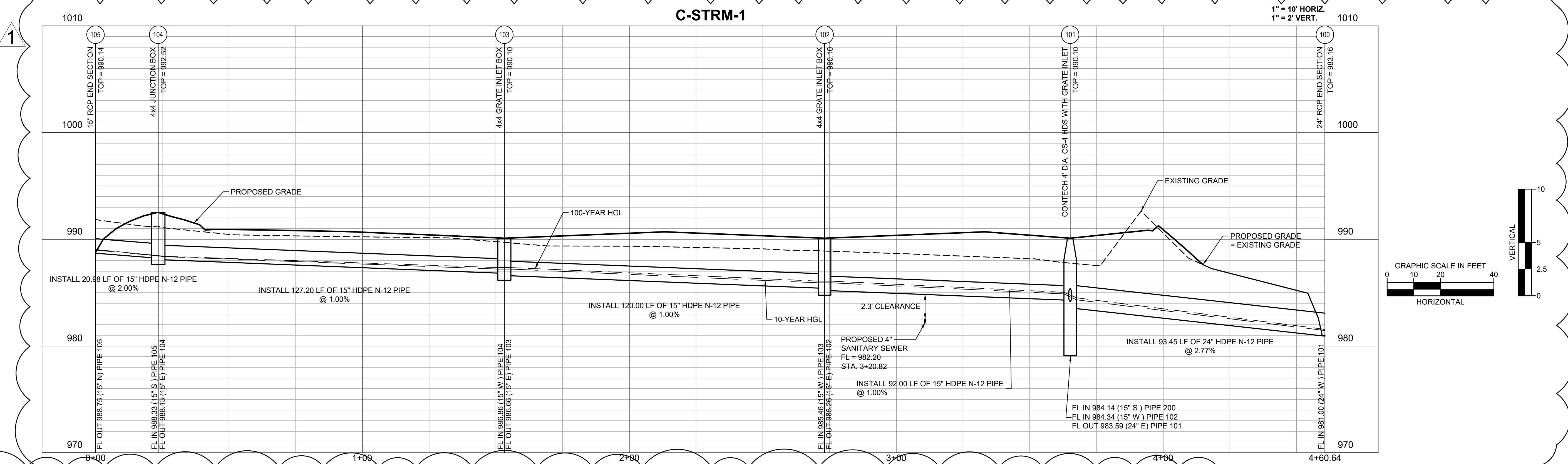
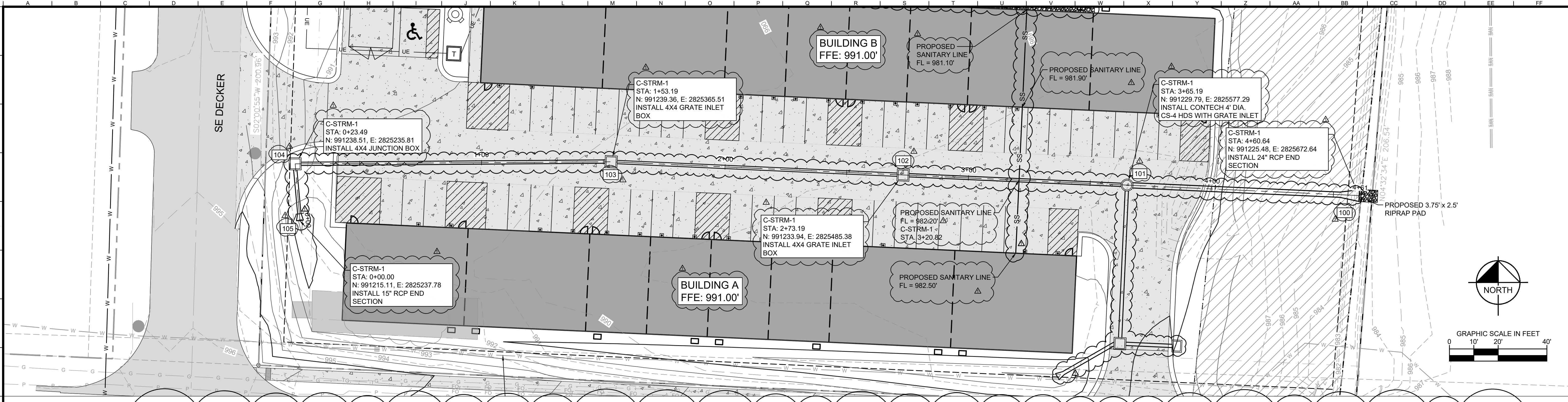
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DRAWN BY: LLG
CHECKED BY: PUJ

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KANSAS CITY, MO 64105
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STORMWATER ADDENDUM
10/30/2024
REVISIONS
No.

LLG
DATE
BY

Drawing name: C:\Users\LOAN\OneDrive\Documents\102020007 - STORMWATER PLAN & PROFILE - Rev 21, 2024, 9:02am by Logan Green
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PIPE SIZING CALCULATIONS - 10-YEAR EVENT

LineNo.	Upstream Structure	Description	RunoffCoeff (C)	DrainageArea (ac)	IncrCxA	InletTime (min)	TotalArea (ac)	TotalCxA	Tc (min)	iInlet (in/hr)	iSys (in/hr)	IncrQ (cfs)	FlowRate (cfs)	InvertUp (ft)	InvertDn (ft)	LineLength (ft)	LineSlope (%)	LineSize (in)	n-valuePipe	CapacityFull (cfs)	VelAve (ft/s)	HGLUp (ft)	HGLDn (ft)
PIPE 101	101	24" HDPE N-12	0.90	0.08	0.07	5.0	0.94	0.84	14.5	7.34	5.35	0.53	4.48	983.59	981.00	93.447	2.77	24	0.012	40.79	6.37	984.33	981.45
PIPE 102	102	15" HDPE N-12	0.90	0.17	0.15	5.0	0.56	0.49	13.9	7.34	5.43	1.12	2.68	985.26	984.34	92.000	1.00	15	0.012	7.00	4.71	985.92	984.88
PIPE 103	103	15" HDPE N-12	0.90	0.32	0.29	5.0	0.39	0.34	12.9	7.34	5.59	2.12	1.90	986.66	985.46	120.000	1.00	15	0.012	7.00	4.19	987.21	985.92
PIPE 104	104	15" HDPE N-12	0.00	0.00	0	0.0	0.07	0.05	6.1	0.00	7.03	0.00	0.37	988.13	986.86	127.201	1.00	15	0.012	6.99	1.81	988.37	987.21
PIPE 105	105	15" HDPE N-12	0.75	0.07	0.05	5.0	0.07	0.05	5.0	7.34	7.34	0.39	0.39	988.75	988.33	20.981	2.00	15	0.012	9.90	3.11	988.99	988.50
PIPE 200	200	15" HDPE N-12	0.00	0.00	0	0.0	0.30	0.27	6.7	0.00	6.87	0.00	1.87	985.62	984.14	65.157	2.28	15	0.012	10.56	5.07	986.17	984.49
PIPE 201	201	15" HDPE N-12	0.90	0.26	0.23	5.0	0.26	0.23	5.0	7.34	7.34	1.72	1.72	987.86	985.82	29.116	7.01	15	0.012	18.52	4.90	988.38	986.17
PIPE 300	300	15" HDPE N-12	0.95	0.04	0.04	5.0	0.04	0.04	5.0	7.34	7.34	0.28	0.28	986.23	986.00	23.423	0.98	15	0.012	6.93	2.45	986.43	986.17

PIPE SIZING CALCULATIONS - 100-YEAR EVENT

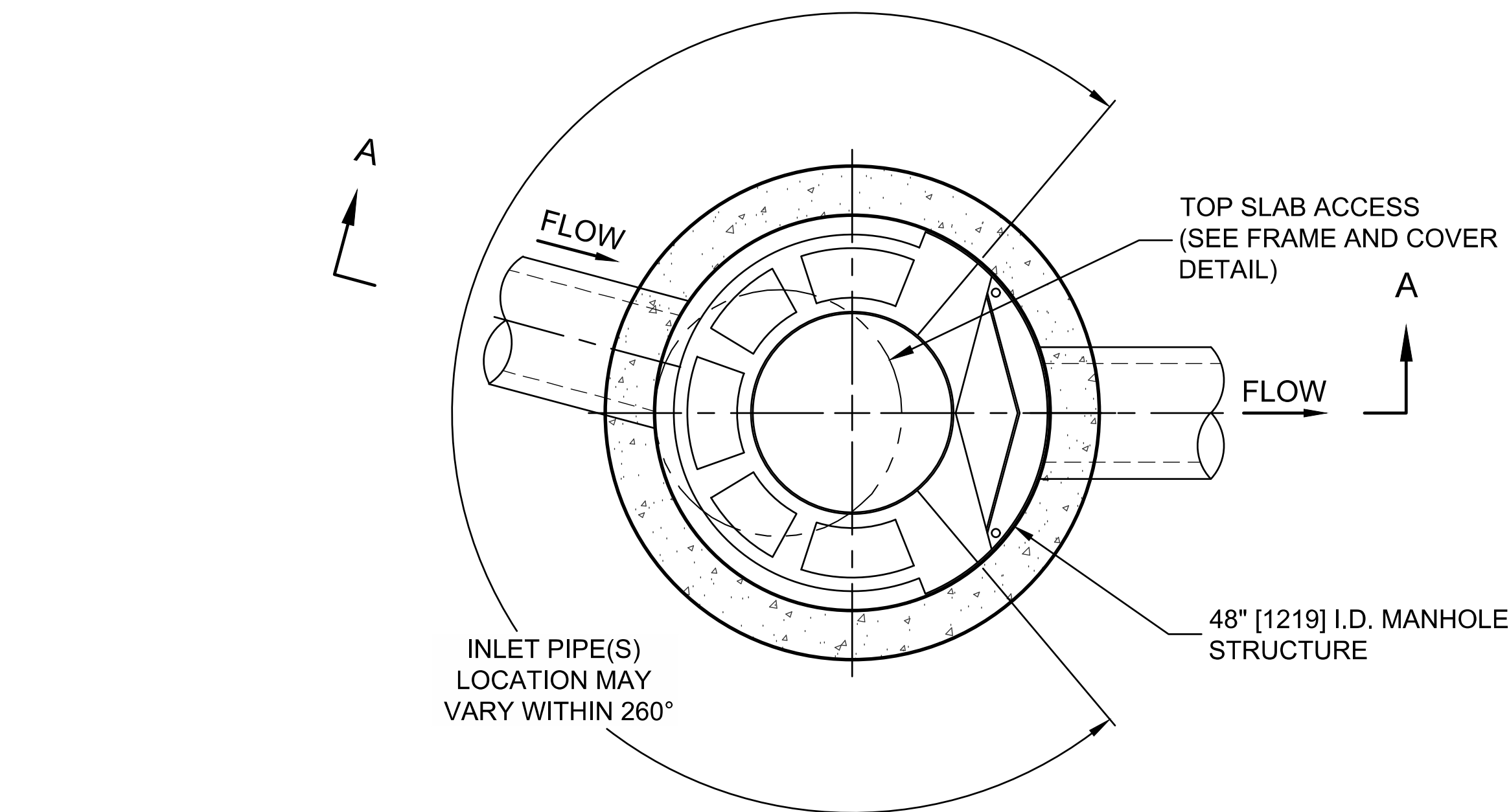
LineNo.	Upstream Structure	Description	RunoffCoeff (C)	DrainageArea (ac)	IncrCxA	InletTime (min)	TotalArea (ac)	TotalCxA	Tc (min)	iInlet (in/hr)	iSys (in/hr)	IncrQ (cfs)	FlowRate (cfs)	InvertUp (ft)	InvertDn (ft)	LineLength (ft)	LineSlope (%)	LineSize (in)	n-valuePipe	CapacityFull (cfs)	VelAve (ft/s)	HGLUp (ft)	HGLDn (ft)
PIPE 101	101	24" HDPE N-12	0.90	0.08	0.07	5.0	0.94	0.84	11.7	10.32	8.28	0.74	6.93	983.59	981.00	93.447	2.77	24	0.012	40.79	7.25	984.52	981.56
PIPE 102	102	15" HDPE N-12	0.90	0.17	0.15	5.0	0.56	0.49	11.3	10.32	8.37	1.58	4.13	985.26	984.34	92.000	1.00	15	0.012	7.00	5.38	986.08	985.03
PIPE 103	103	15" HDPE N-12	0.90	0.32	0.29	5.0	0.39	0.34	10.6	10.32	8.55	2.97	2.91	986.66	985.46	120.000	1.00	15	0.012	7.00	4.50	987.35	986.08
PIPE 104	104	15" HDPE N-12	0.00	0.00	0	0.0	0.07	0.05	5.8	0.00	10.02	0.00	0.53	988.13	986.86	127.201	1.00	15	0.012	6.99	1.86	988.41	987.35
PIPE 105	105	15" HDPE N-12	0.75	0.07	0.05	5.0	0.07	0.05	5.0	10.32	10.32	0.54	0.54	988.75	988.33	20.981	2.00	15	0.012	9.90	3.43	989.04	988.53
PIPE 200	200	15" HDPE N-12	0.00	0.00	0	0.0	0.30	0.27	6.2	0.00	9.87	0.00	2.68	985.62	984.14	65.157	2.28	15	0.012	10.56	5.64	986.28	984.57
PIPE 201	201	15" HDPE N-12	0.90	0.26	0.23	5.0	0.26	0.23	5.0	10.32	10.32	2.41	2.41	987.86	985.82	29.116	7.01	15	0.012	18.52	4.94	988.48	986.28
PIPE 300	300	15" HDPE N-12	0.95	0.04	0.04	5.0	0.04	0.04	5.0	10.32	10.32	0.39	0.39	986.23	986.00	23.423	0.98	15	0.012	6.93	2.13	986.47	986.28

STORM SEWER CONSTRUCTION NOTES

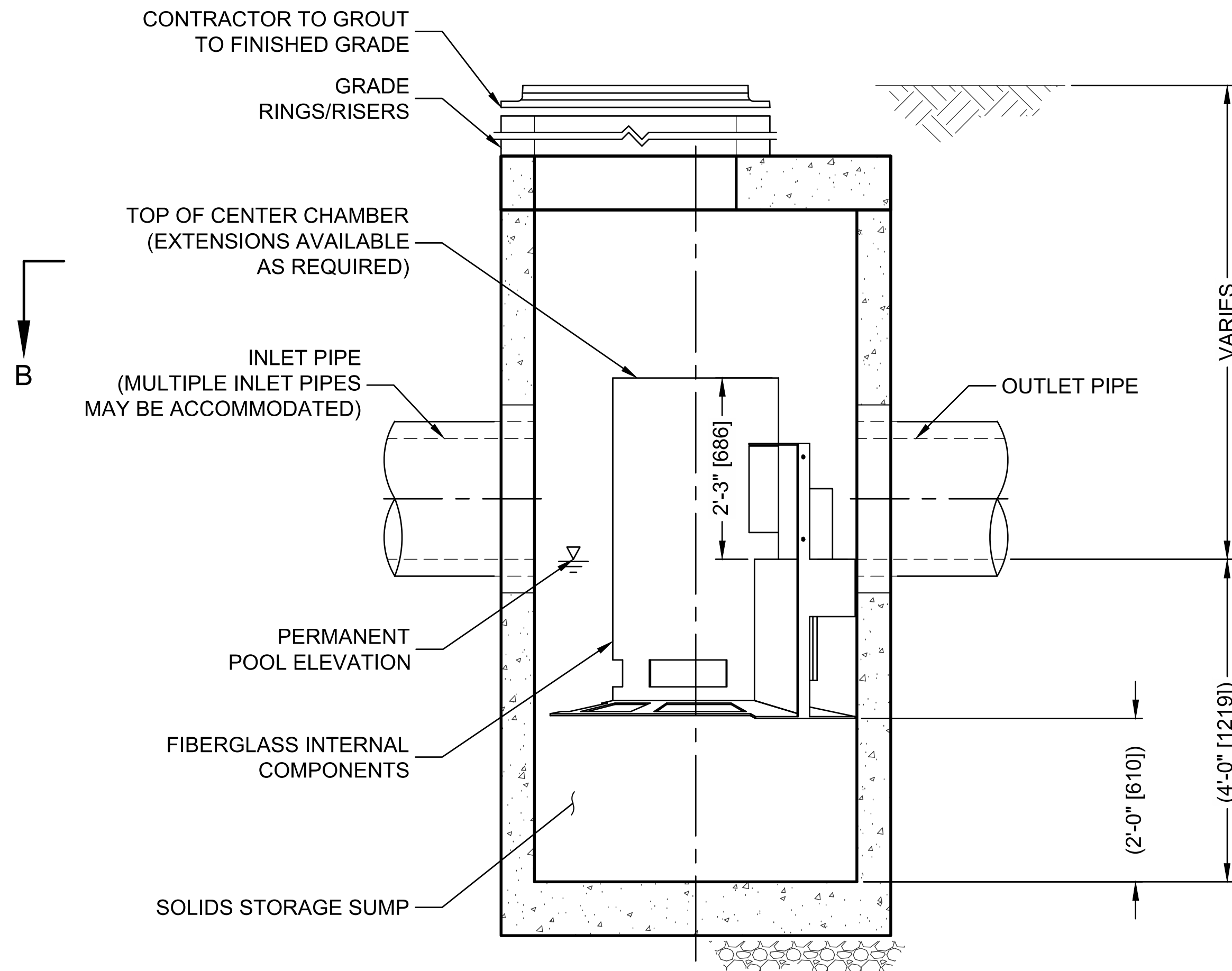
- PIPE LENGTHS SHOWN ARE MEASURED FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE OR TO THE END OF END SECTION. ALL PIPES SHALL BE FIELD STAKED TO THE INSIDE WALL FACE OF THE STRUCTURE.
- ALL PIPES SHALL BE PLACED IN TRENCH CONDITIONS. PLACE A MINIMUM OF 2 FEET OF FILL OVER PROPOSED PIPE BEFORE TRENCHING AND PIPE INSTALLATION. PROPOSED FILL SHALL BE PLACED IN ACCORDANCE WITH PROJECT REQUIREMENTS.
- UTILITY LINES AND STRUCTURES IN FILL AREAS BELOW PIPE GRADE SHALL NOT BE CONSTRUCTED UNTIL ALL CONSOLIDATION OF THE FILL IS COMPLETE AND SO APPROVED BUY THE ON-SITE GEOTECHNICAL ENGINEER.
- THE DIMENSIONS FOR ALL STRUCTURES ARE FROM INSIDE FACE OF STRUCTURE TO INSIDE FACE OF STRUCTURE.
- STORM SEWER PIPE SHALL BE AS FOLLOWS UNLESS OTHERWISE NOTED:
 - REINFORCED CONCRETE PIPE (RCP), CLASS III PER ASTM C-76, WITH "O-RING" OR SINGLE OFFSET RUBBER GASKETED JOINT (TYLOX SUPERSEAL OR AN APPROVED EQUAL).
 - ALL REINFORCING STEEL SHALL COMPLY WITH ASTM-615 GRADE 60.
 - ALL CURB INLETS AND OTHER STRUCTURES SET AT LOW POINTS ARE TO BE SET LEVEL. ALL OTHER CURB INLETS ARE TO BE SET WITH THE GRADE OF THE TOP OF CURB OR PAVEMENT.
 - ALL HYDRAULIC GRADE LINES (HGL) SHOWN ARE FOR THE 10 AND 100-YEAR STORM.
- PRECAST STRUCTURES MAY BE USED AT CONTRACTOR'S OPTION. ALL STORM STRUCTURES SHALL HAVE A SMOOTH UNIFORM POURED CONCRETE INVERT FROM INVERT IN TO INVERT OUT.
- THE LIDS OF ALL PRECAST STRUCTURES SHALL BE GROUTED TO THE TOP OF THE WALLS.
- NORTHING AND EASTINGS SHOWN ARE TO CENTER OF STRUCTURE, OR END OF END SECTION.
- THE FIRST DIMENSION SHOWN IS THE "L" DIMENSION AND THE SECOND IS THE "W" DIMENSION. SEE DETAILS.
- ALL HDPE PIPE SHALL BE IN ADS N-12, OR APPROVED EQUAL, MEETING AASHTO M294, TYPE S OR ASTM F2306. THE PIPE SHALL HAVE A SMOOTH INTERIOR AND ANNULAR EXTERIOR CORRUGATIONS. PIPE JOINTS SHALL BE JOINED USING A BELL & SPIGOT JOINT MEETING AASHTO M252, AASHTO M294, OR ASTM F2306. THE JOINT SHALL BE WATERTIGHT, ACCORDING TO THE REQUIREMENTS OF ASTM D 3212, AND GASKETS SHALL MEET THE REQUIREMENTS OF ASTM F477. GASKETS SHALL BE INSTALLED BY THE PIPE MANUFACTURER AND COVERED WITH A REMOVABLE WRAP TO ENSURE THE GASKET IS FREE FROM DEBRIS. A JOINT LUBRICANT SUPPLIED BY THE MANUFACTURER SHALL BE USED ON THE GASKET AND BELL DURING ASSEMBLY.
- FITTINGS FOR PLASTIC PIPE SHALL CONFORM TO AASHTO M252, AASHTO M294, OR ASTM F2306. ALL TEES SHALL BE DUAL WALL REDUCING TEES CONSISTENT WITH THE ADS N-12 PIPE WATERTIGHT CONNECTIONS.

LG	10/20/2024	STORMWATER ADDENDUM	REVISIONS	DATE	BY
Δ			No.		
SCALE:	AS NOTED	DESIGNED BY: LG	DRAWN BY: LG	CHECKED BY: PUJ	
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CAPITAL BUILDERS					
STORMWATER PLAN & PROFILE					
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 C007					

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



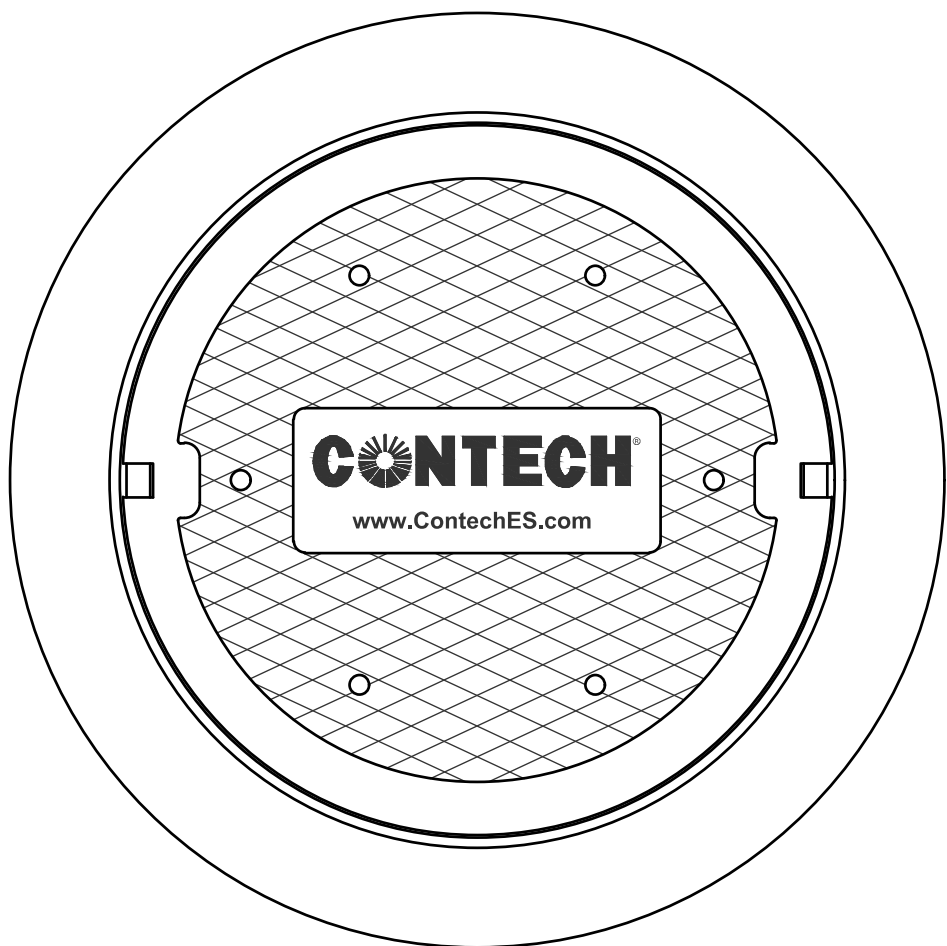
PLAN VIEW B-B
NOT TO SCALE



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

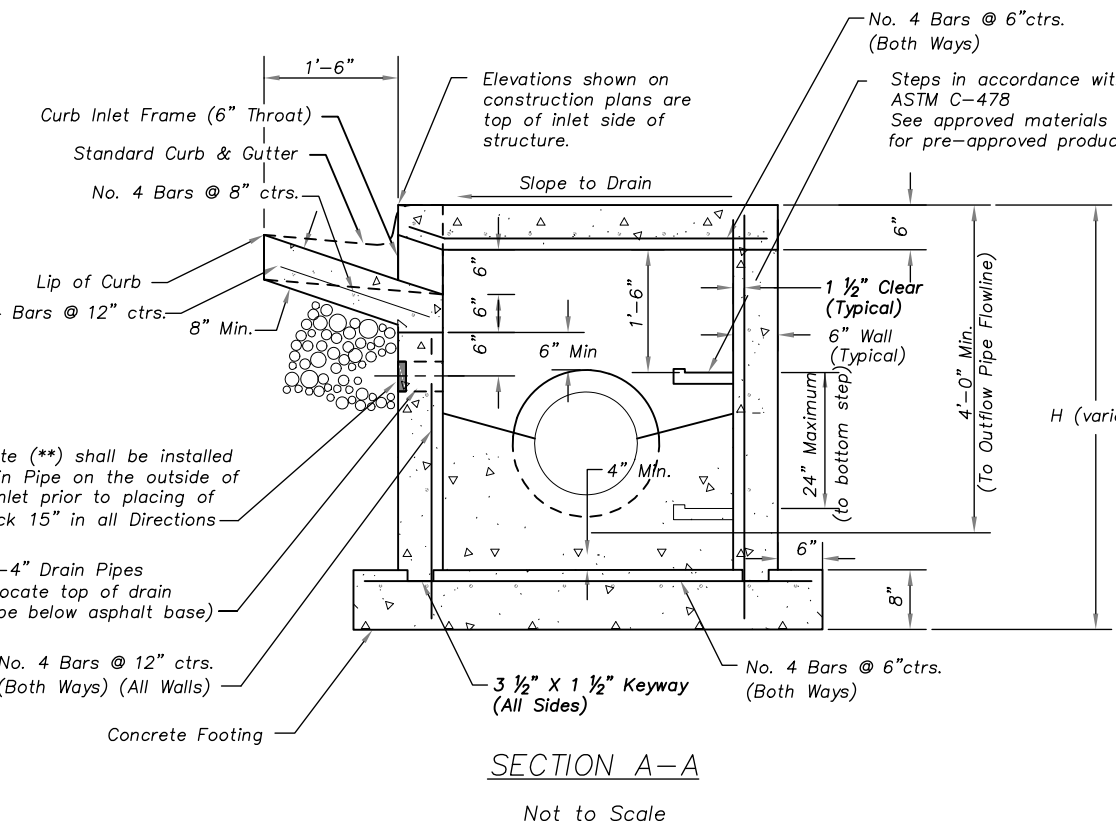
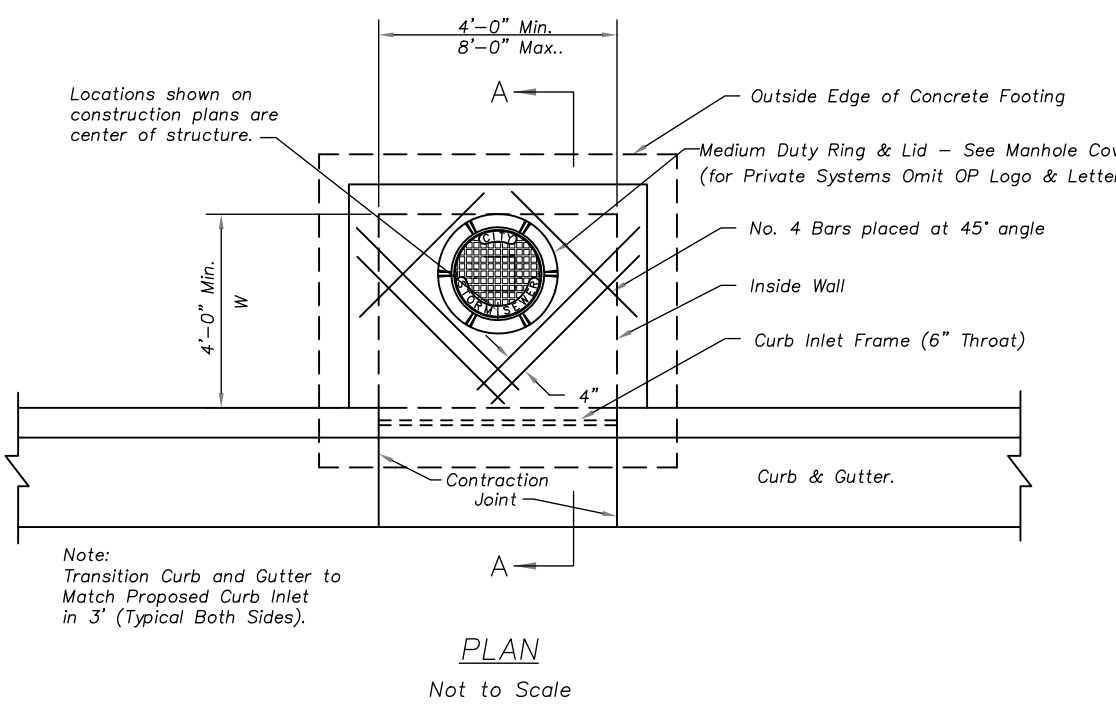
- ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
- CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CASCADE SEPARATOR MANHOLE STRUCTURE.
- CONTRACTOR TO 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 (6" THROAT)

Non-Setback Curb Inlet Notes

General

1. 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.
2. 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.
3. 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.
4. On-grade inlets shall conform to the street grade. Sump inlets shall be level.
5. 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

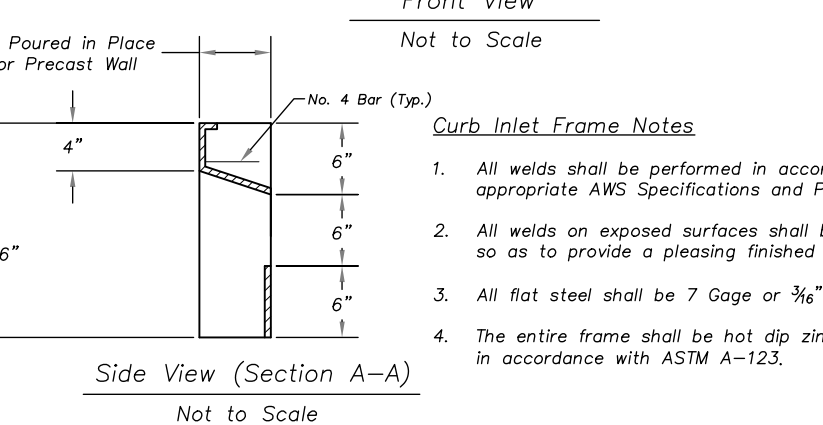
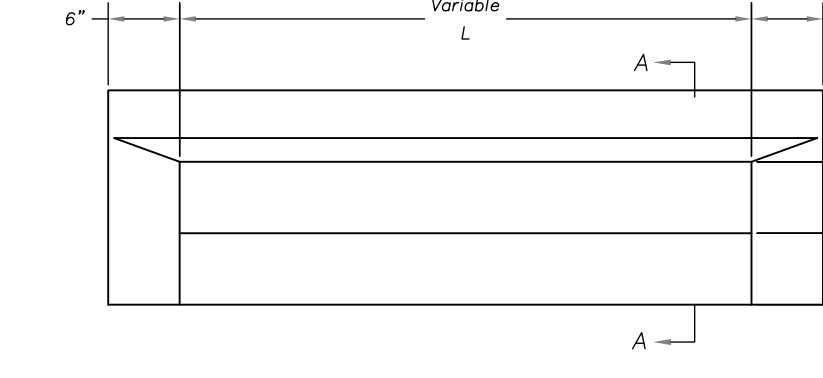
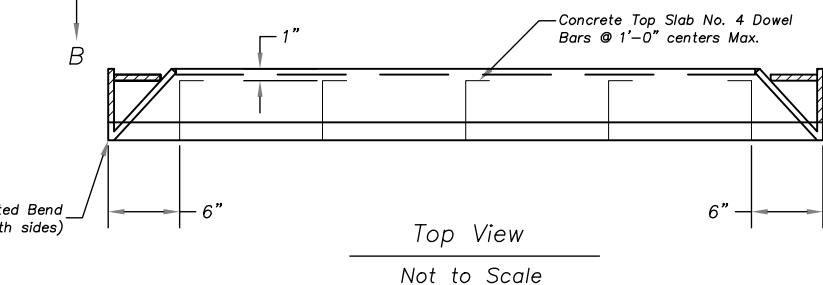
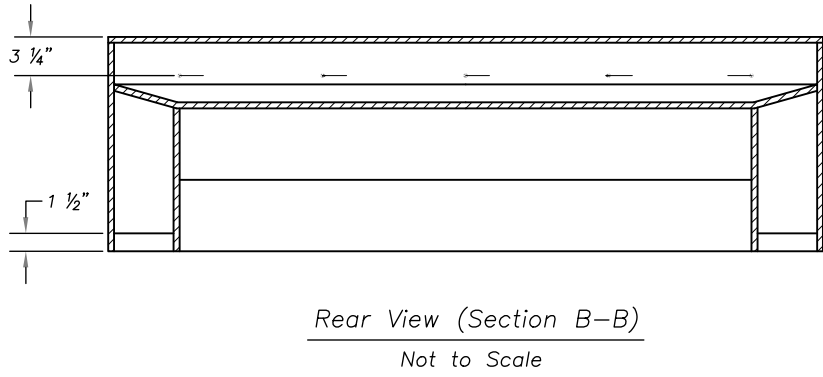
6. Concrete used in this work shall be KOMM84K, as approved by the Kansas City Metropolitan Materials Board.

Reinforcing Steel

7. Inlet floors shall be shaped with non-reinforced concrete inverts to provide smooth flow.
8. Bevel all exposed edges with 3/4" triangular mauling.
9. Reinforcing steel shall be new billet, minimum Grade 60 as per ASTM A615, and shall be bent cold.
10. 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.
11. All lap splices not shown shall be a minimum of 40 bar diameters in length.
12. All reinforcing steel shall be supported on fabricated steel bar supports @ 3'-0" maximum spacing.
13. 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

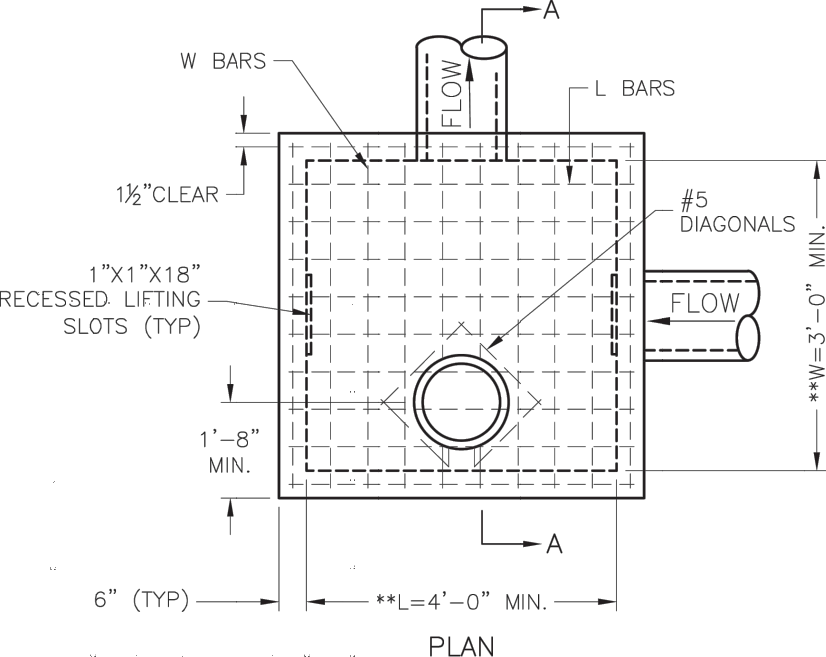
14. The bottom slab shall be at least 24 hours old before placing sidewalk concrete. All sidewalk forms shall remain in place a minimum of 24 hours after sidewalks are poured before removal, and after removal shall be immediately treated with membrane curing compound.
15. All curb inlet tops are to be constructed after final curb string line has been approved by the engineer and prior to curb construction or as directed by the city engineer.
16. Pipe connections to pre-cast structures shall have a minimum of 6" of concrete around the entire pipe within 2' of the structure.
17. 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.



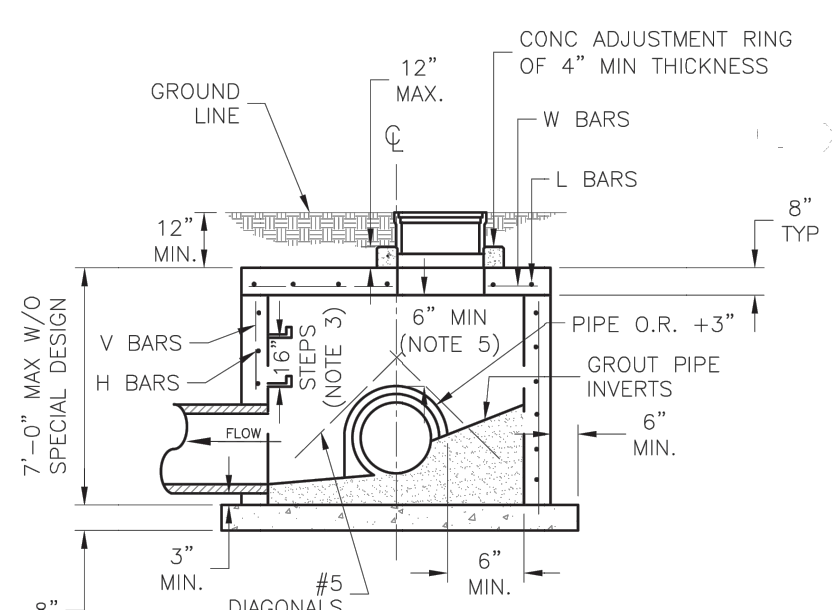
Curb Inlet Frame Notes

1. All welds shall be performed in accordance with appropriate AWS Specifications and Procedures.
2. All welds on exposed surfaces shall be dressed so as to provide a pleasing finished appearance.
3. All flat steel shall be 7 Gage or 3/4" thick.
4. The entire frame shall be hot dip zinc coated in accordance with ASTM A-123.

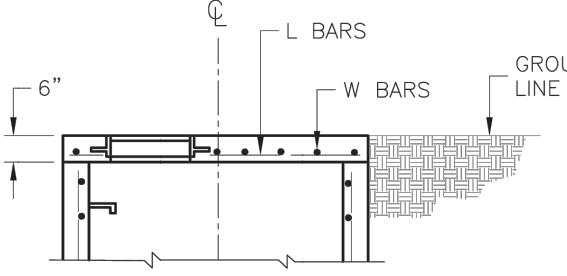
2 NON-SETBACK CURB INLET DETAIL
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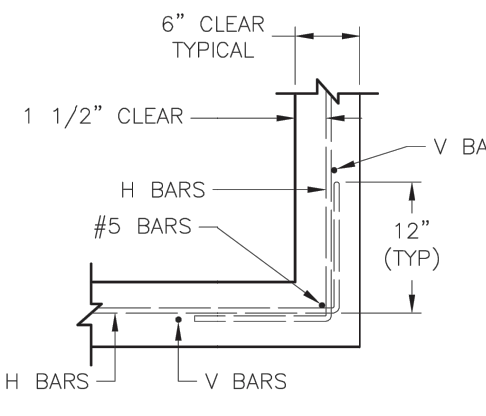
PLAN



SECTION A-A



SLAB TOP ALTERNATE FOR JUNCTION BOX (SHALLOW)



WALL CORNER DETAIL

**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:

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

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. #

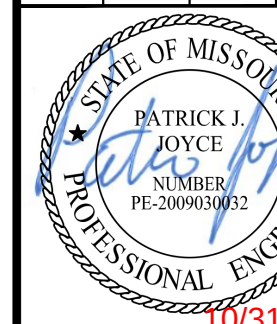
STM-3

3 JUNCTION BOX DETAIL
SCALE: NOT TO SCALE

Kimley»Horn

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



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DETAILS

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

ORIGINAL ISSUE:

10/29/2024

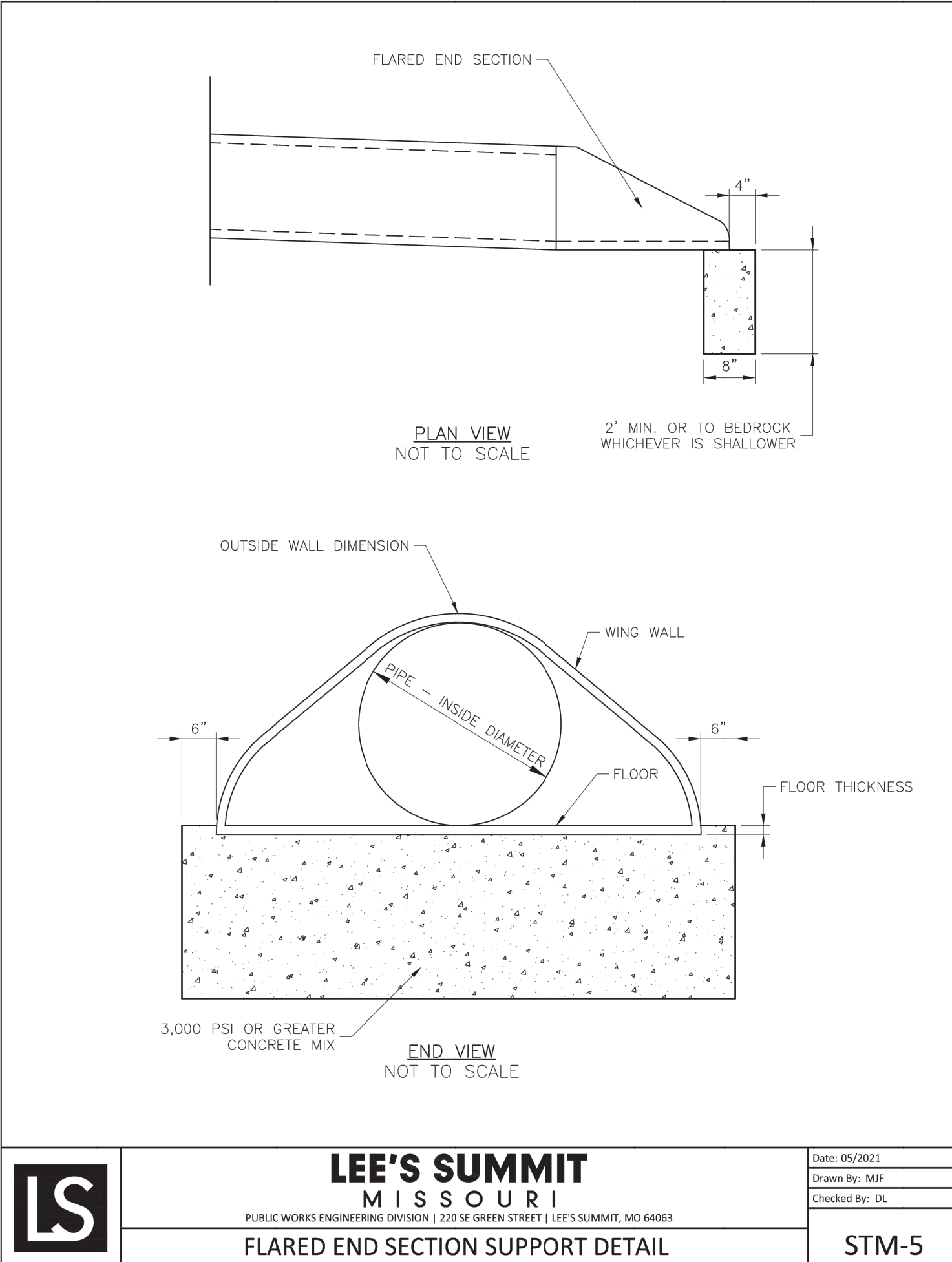
KHA PROJECT NO.

268442000

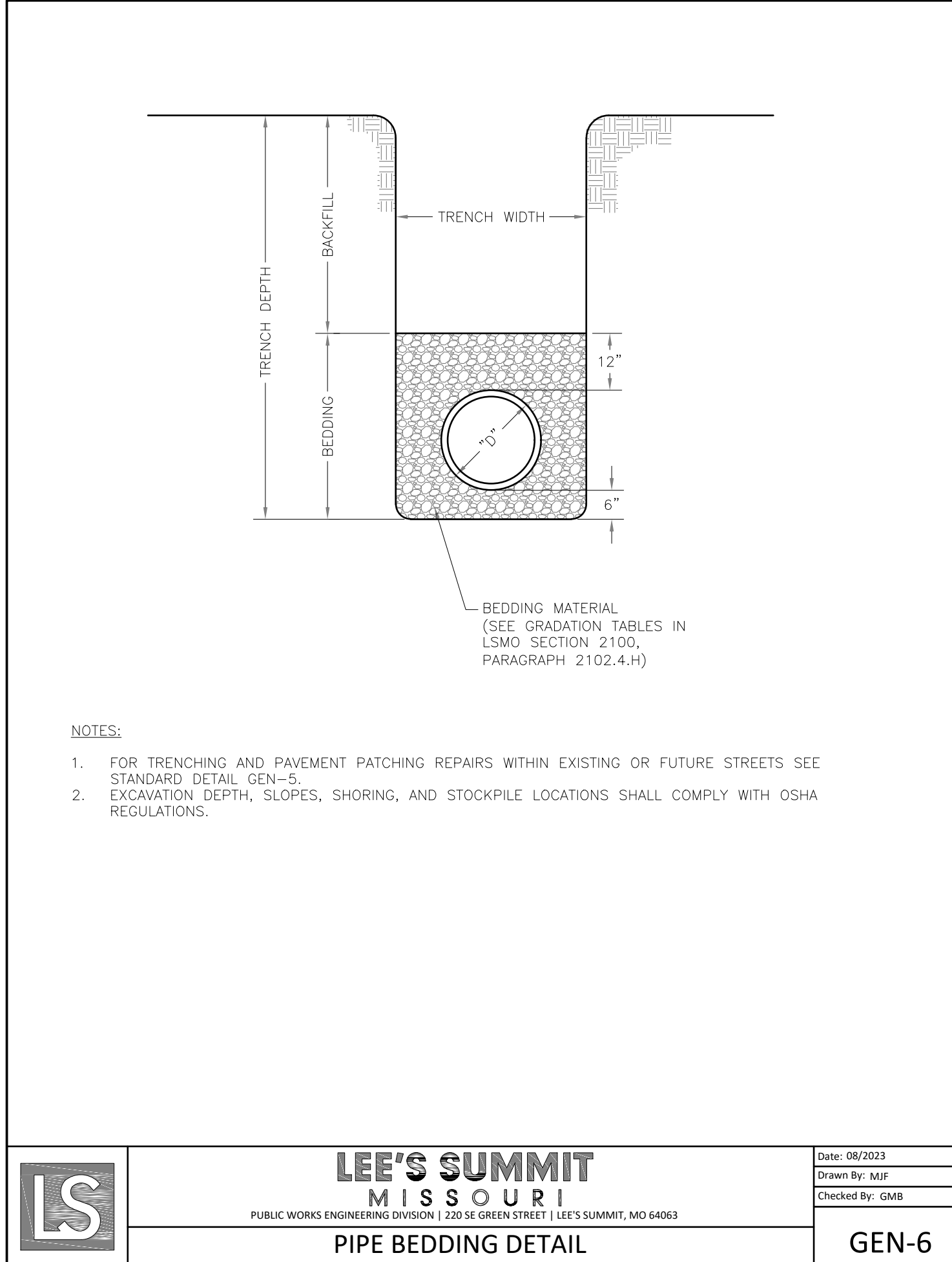
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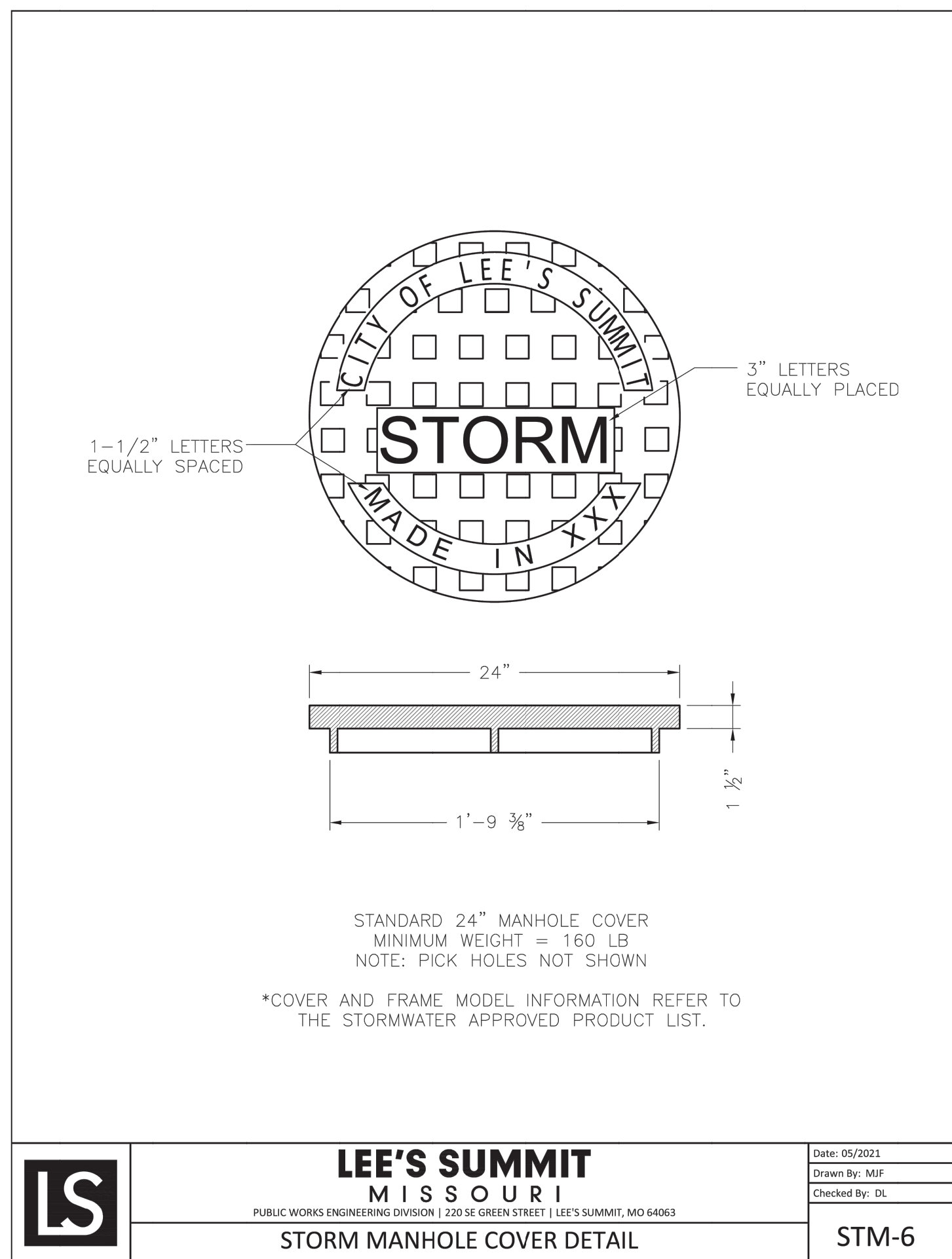
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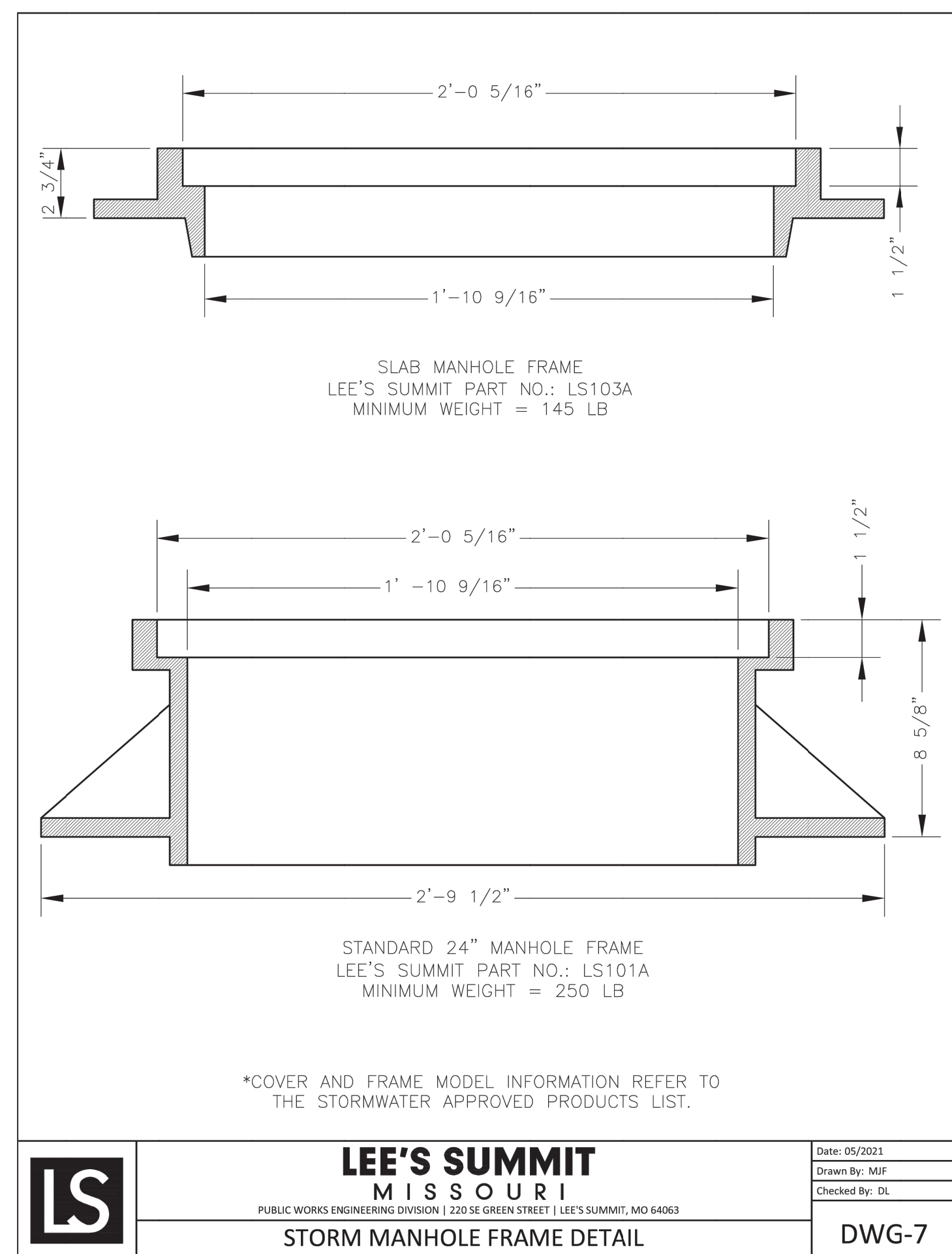
4 FLARED END SECTION WITH TOE WALL DETAIL
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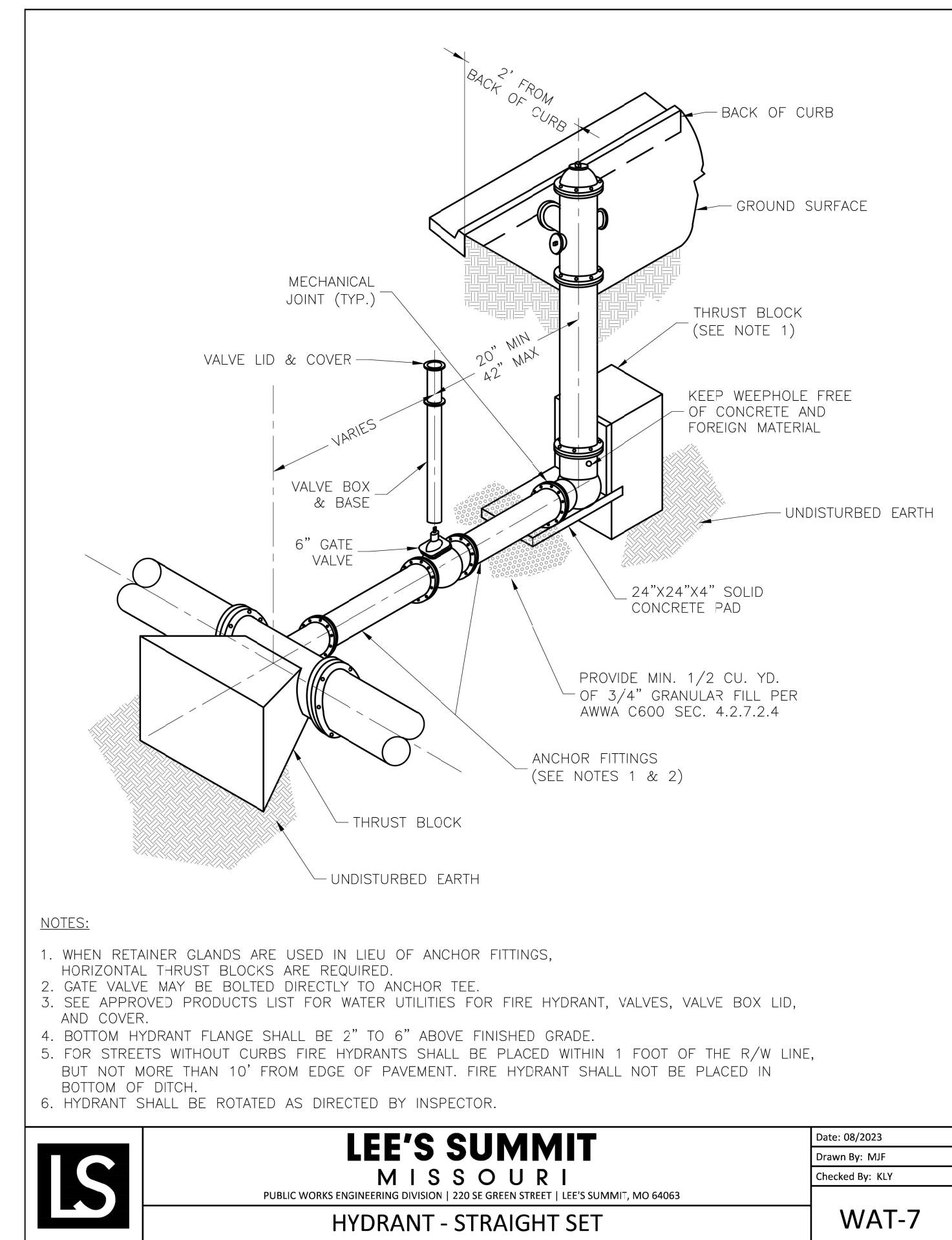
5 PIPE BEDDING DETAIL
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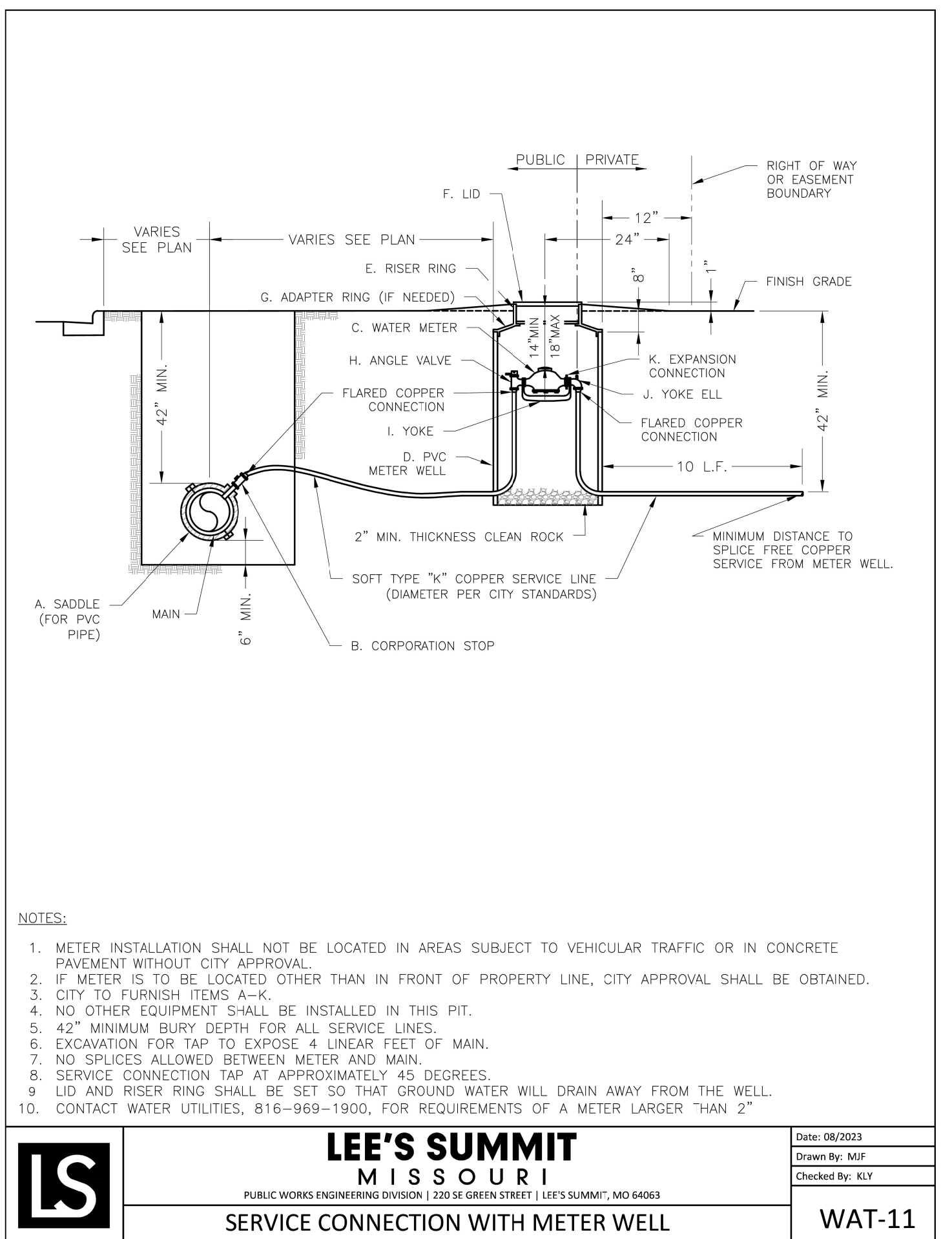
6 STORM MANHOLE COVER DETAIL
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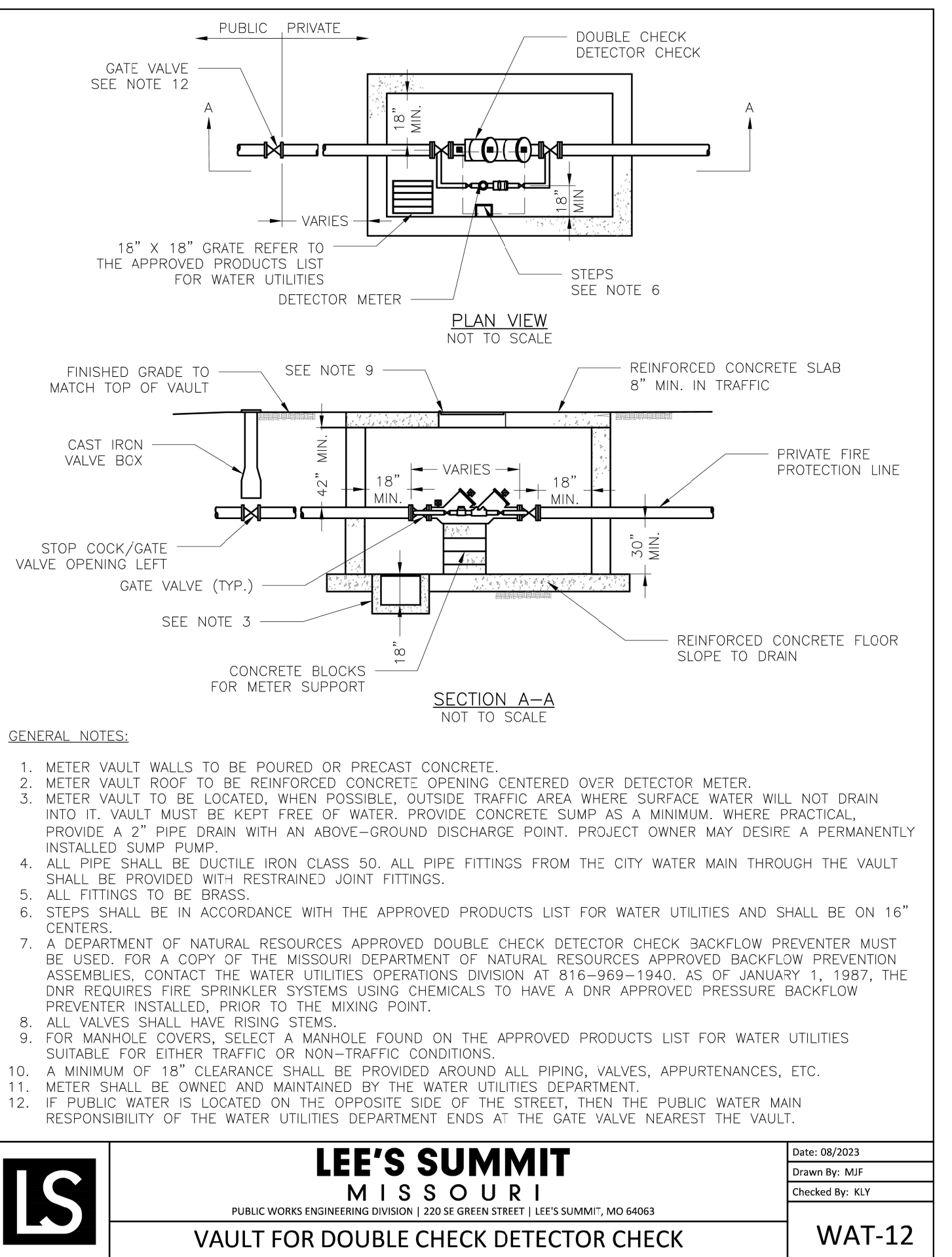
7 STORM MANHOLE FRAME DETAIL
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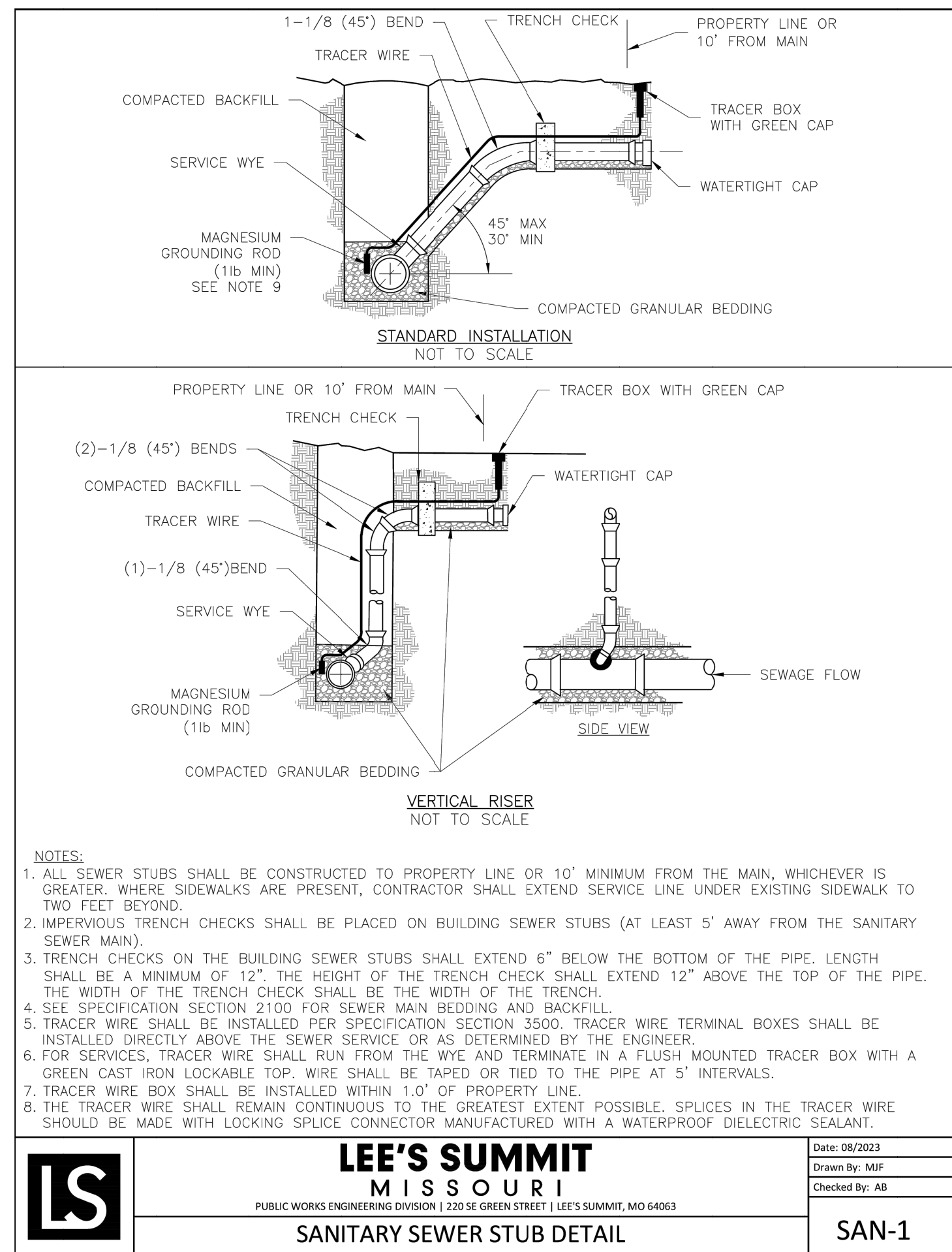
8 HYDRANT - STRAIGHT SET DETAIL
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9 SERVICE CONNECTION WITH METER WELL DETAIL
SCALE: NOT TO SCALE



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



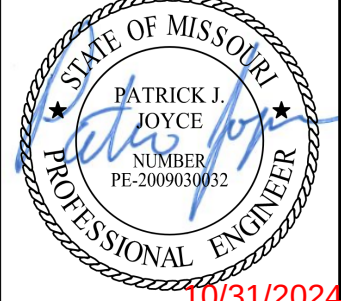
11 SANITARY SEWER STUB DETAIL
SCALE: NOT TO SCALE

NO.	REVISIONS	DATE	BY

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CHECKED BY:	PJJ



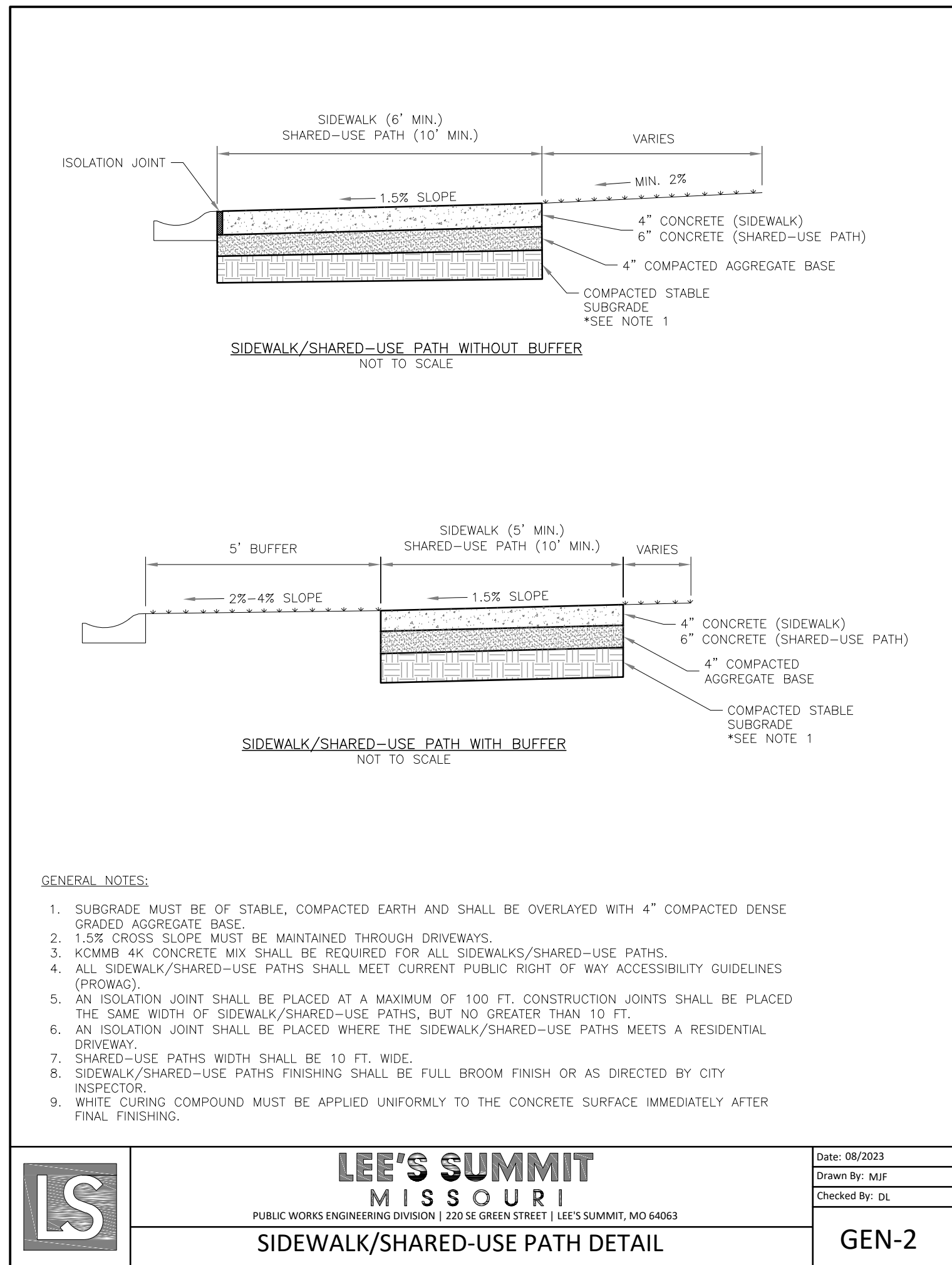
CAPITAL BUILDERS

DETAILS

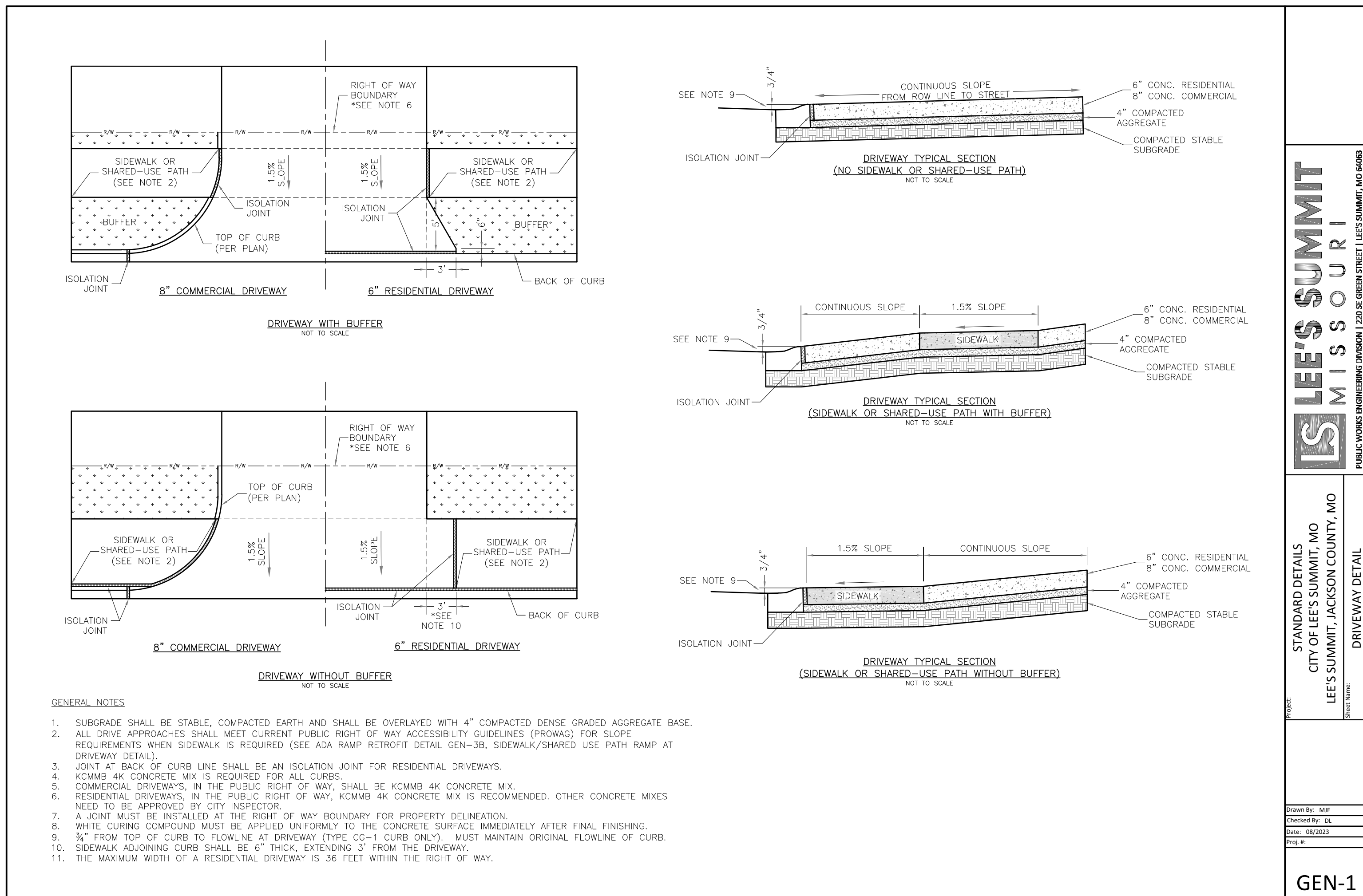
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SHEET NUMBER

C010

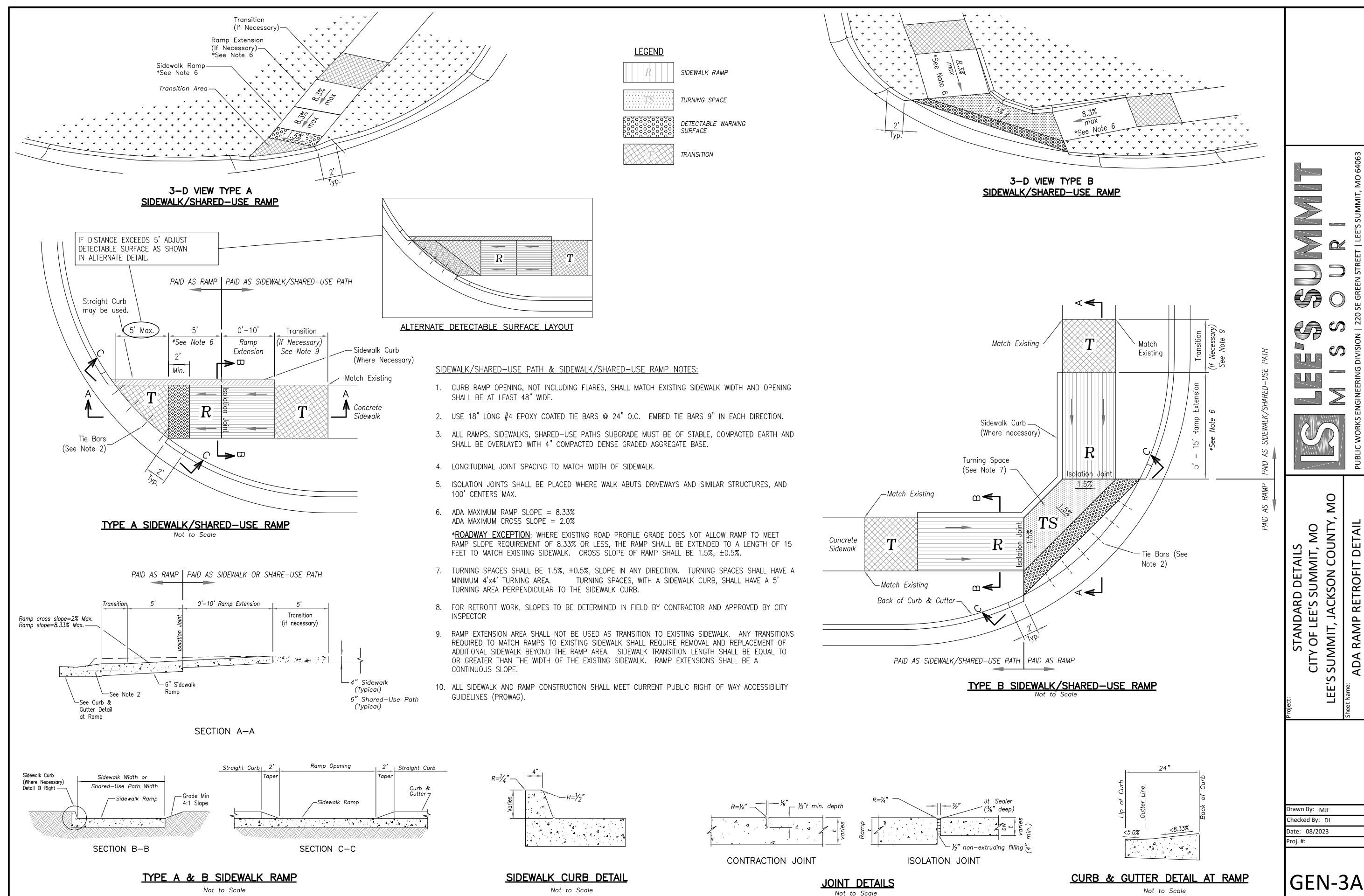


12 SIDEWALK WITH BUFFER DETAIL
SCALE: NOT TO SCALE

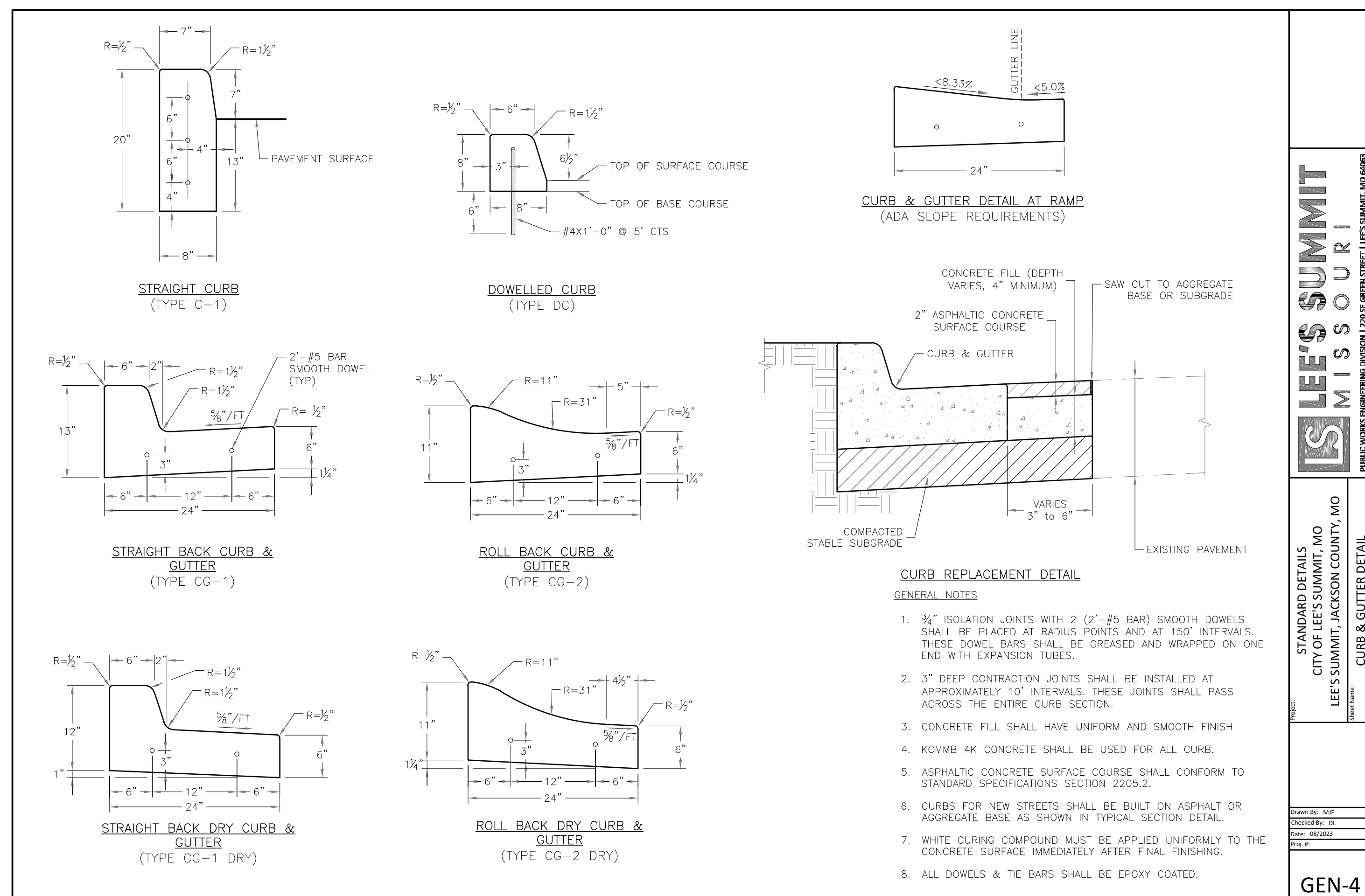


13 DRIVEWAY DETAIL

SCALE: NOT TO SCALE

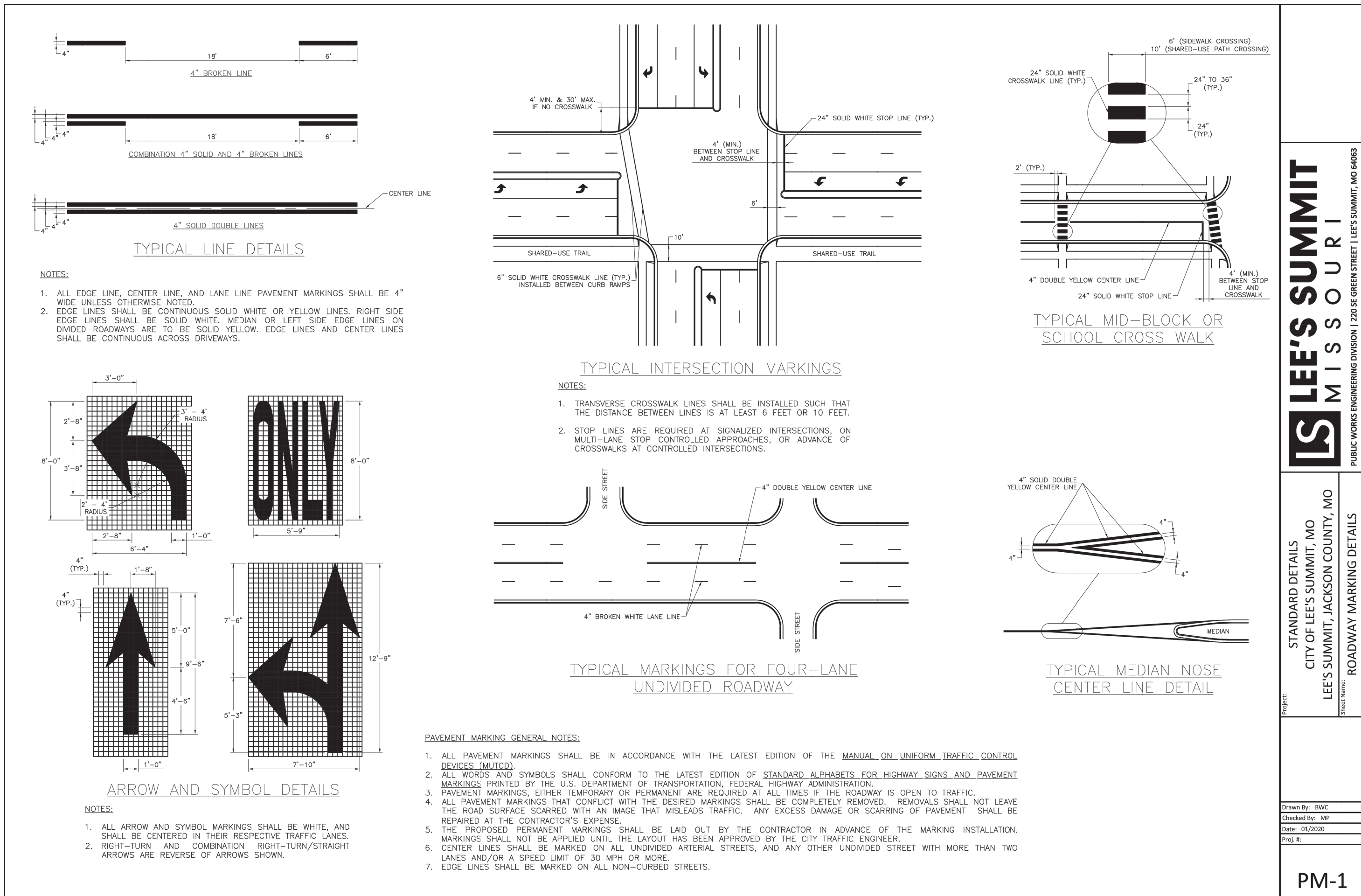


14 TYPE A SIDEWALK ADA RAMP RETROFIT DETAIL
SCALE: NOT TO SCALE

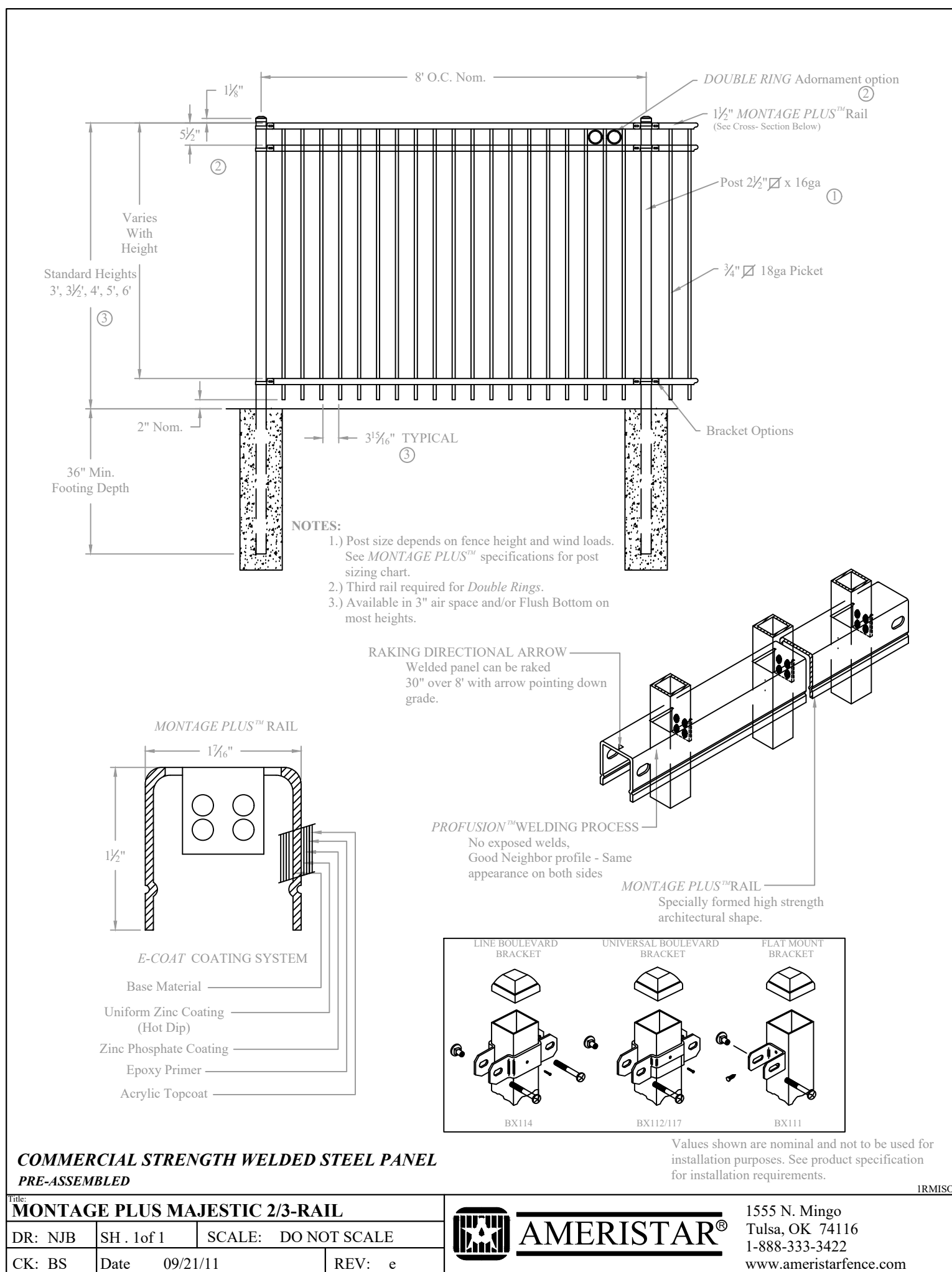


15 STRAIGHT BACK CURB AND GUTTER DETAIL
SCALE: NOT TO SCALE

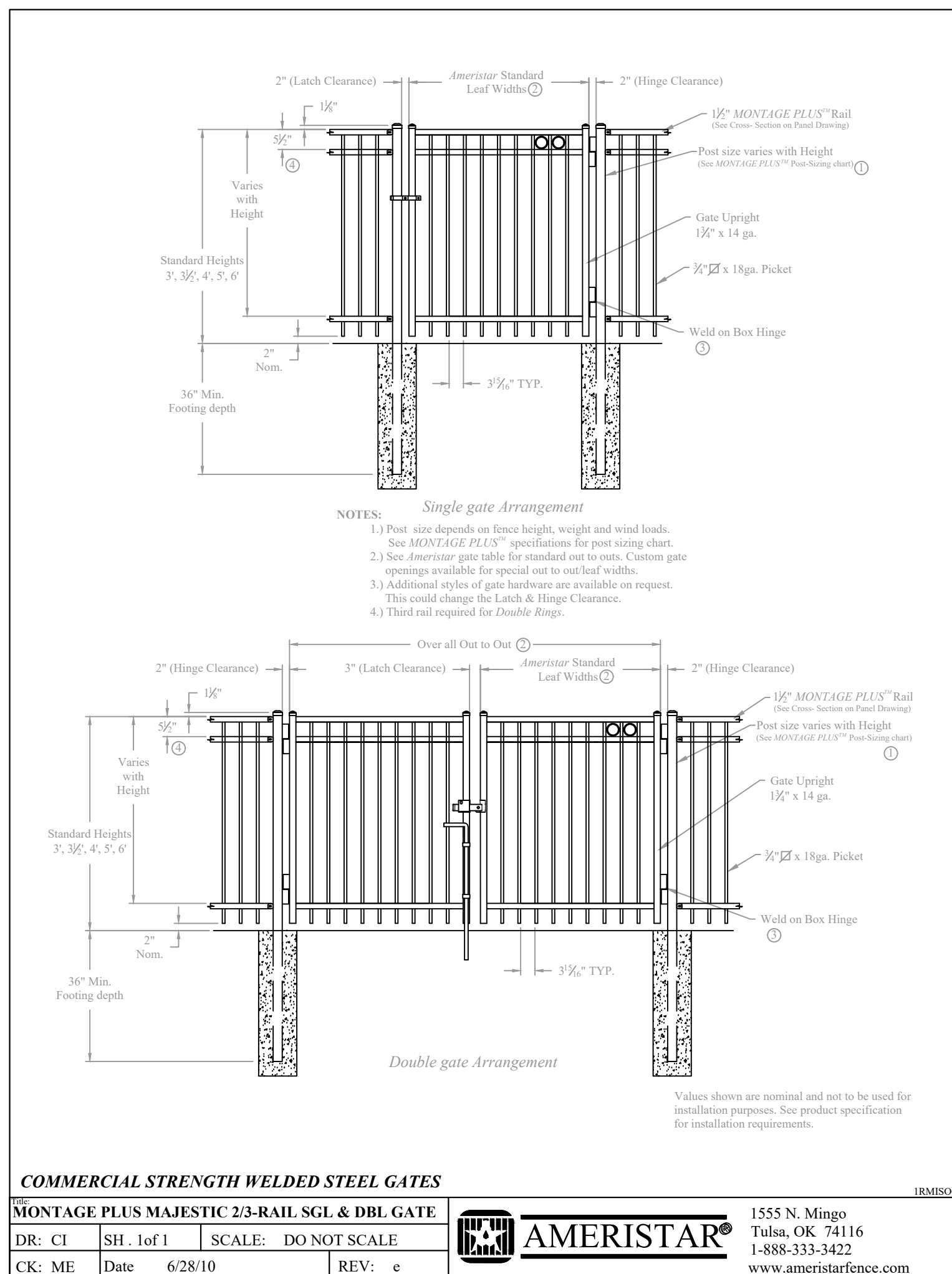
Drawing name: K:\K4C_LIE\2024\0000_Capital Builders Lee's Summit\2023\Lee's Summit\2023\DETAILS.dwg C012 - DETAILS Oct 29, 2024 1:00pm by logan.green
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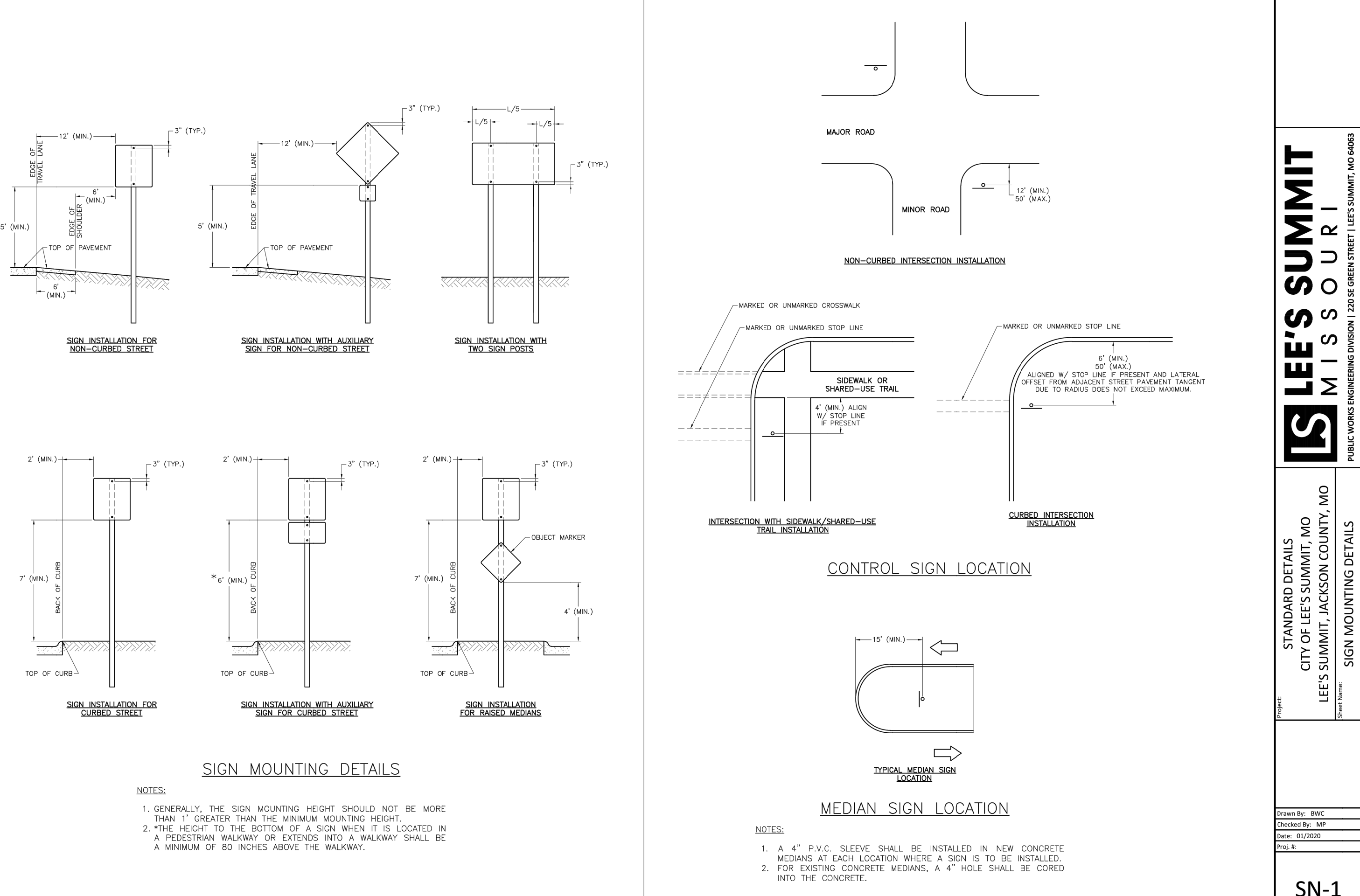
16 PAVEMENT MARKING ARROW AND SYMBOL DETAILS
SCALE: NOT TO SCALE



18 AMERISTAR FENCE DETAIL
SCALE: NOT TO SCALE

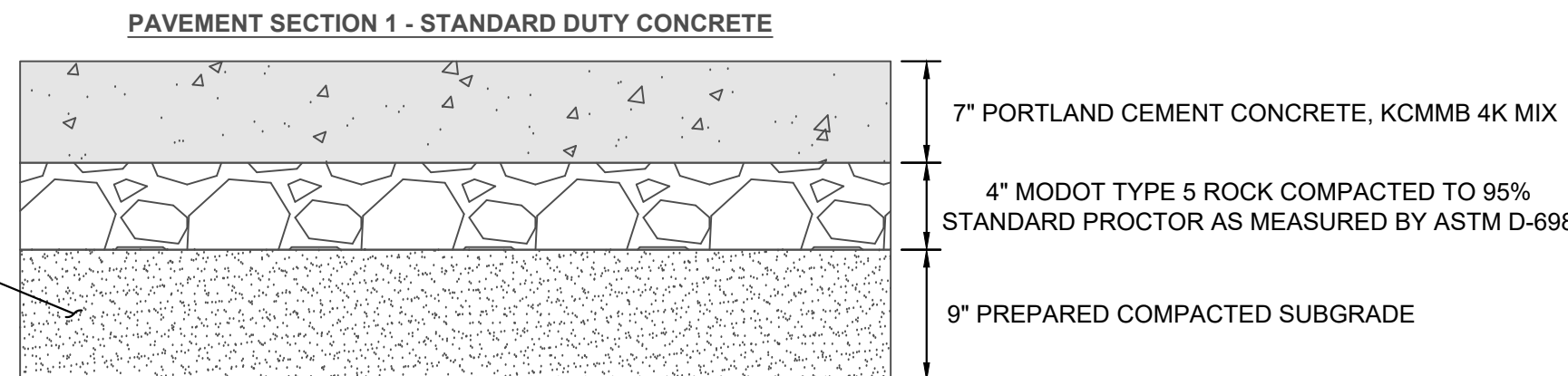


19 AMERISTAR GATE DETAIL
SCALE: NOT TO SCALE

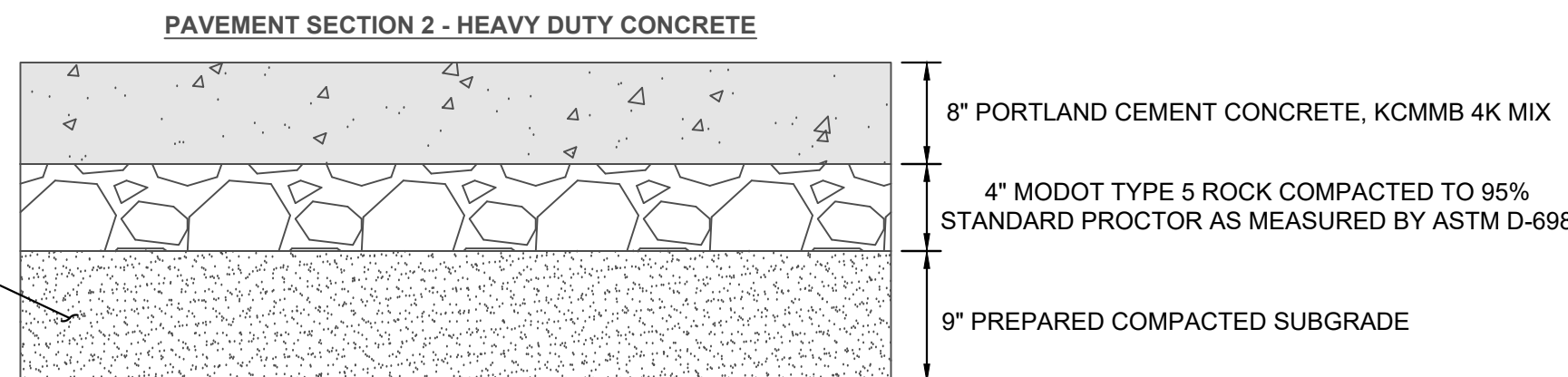


17 SIGN MOUNTING DETAILS
SCALE: NOT TO SCALE

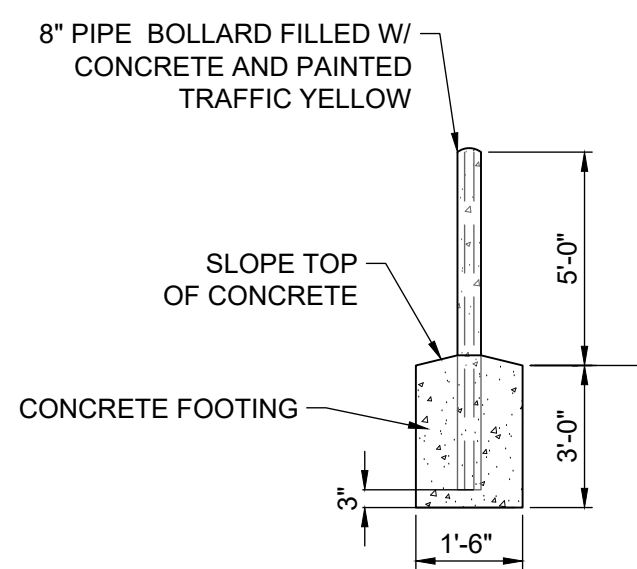
CONTRACTOR SHALL SCARIFY AND RECOMPACT UPPER 9" OF EXISTING MATERIAL. COMPACTION SHOULD BE 95% STANDARD PROCTOR MAXIMUM DRY DENSITY, AS MEASURED BY ASTM D-698, AT A MOISTURE CONTENT 0.4% ABOVE OPTIMUM.



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.



20 PAVEMENT SECTIONS DETAIL
SCALE: NOT TO SCALE



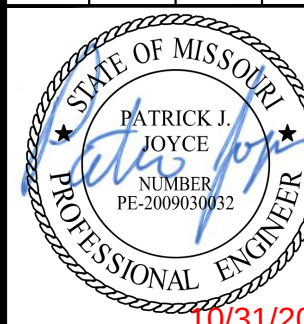
21 STEEL-ENCASED CONCRETE BOLLARD DETAIL
SCALE: NOT TO SCALE

LEE'S SUMMIT MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64083

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

SN-1

Kimley»Horn
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805 PENNSYLVANIA AVENUE, SUITE 150
KANSAS CITY, MO 64105
WWW.KIMLEY-HORN.COM



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

STREET FRONTAGE

REQUIRED: 1 TREE PER 30 FEET OF FRONTAGE AND 1 SHRUB PER 20 FEET OF FRONTAGE.

THOMPSON DRIVE	452 FEET / 30 = 15 TREES AND 23 SHRUBS
DECKER STREET	200 FEET / 30 = 7 TREES AND 10 SHRUBS

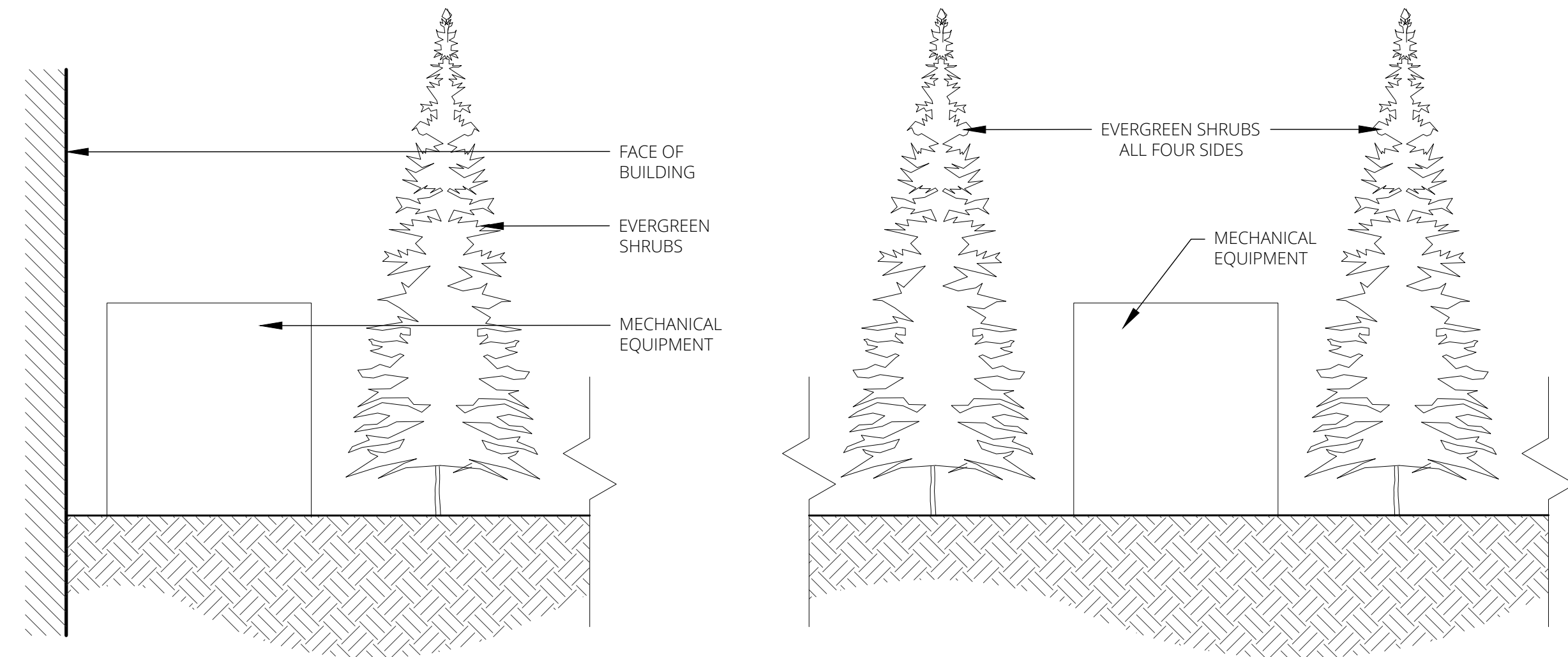
THOMPSON DRIVE	15 TREES AND 23 SHRUBS
DECKER STREET	7 TREES AND 10 SHRUBS

REQUIRED: 1 TREE AND 2 SHRUBS PER 5,000 SQUARE FEET OF TOTAL LOT AREA EXCLUDING BUILDING FOOTPRINT AREA

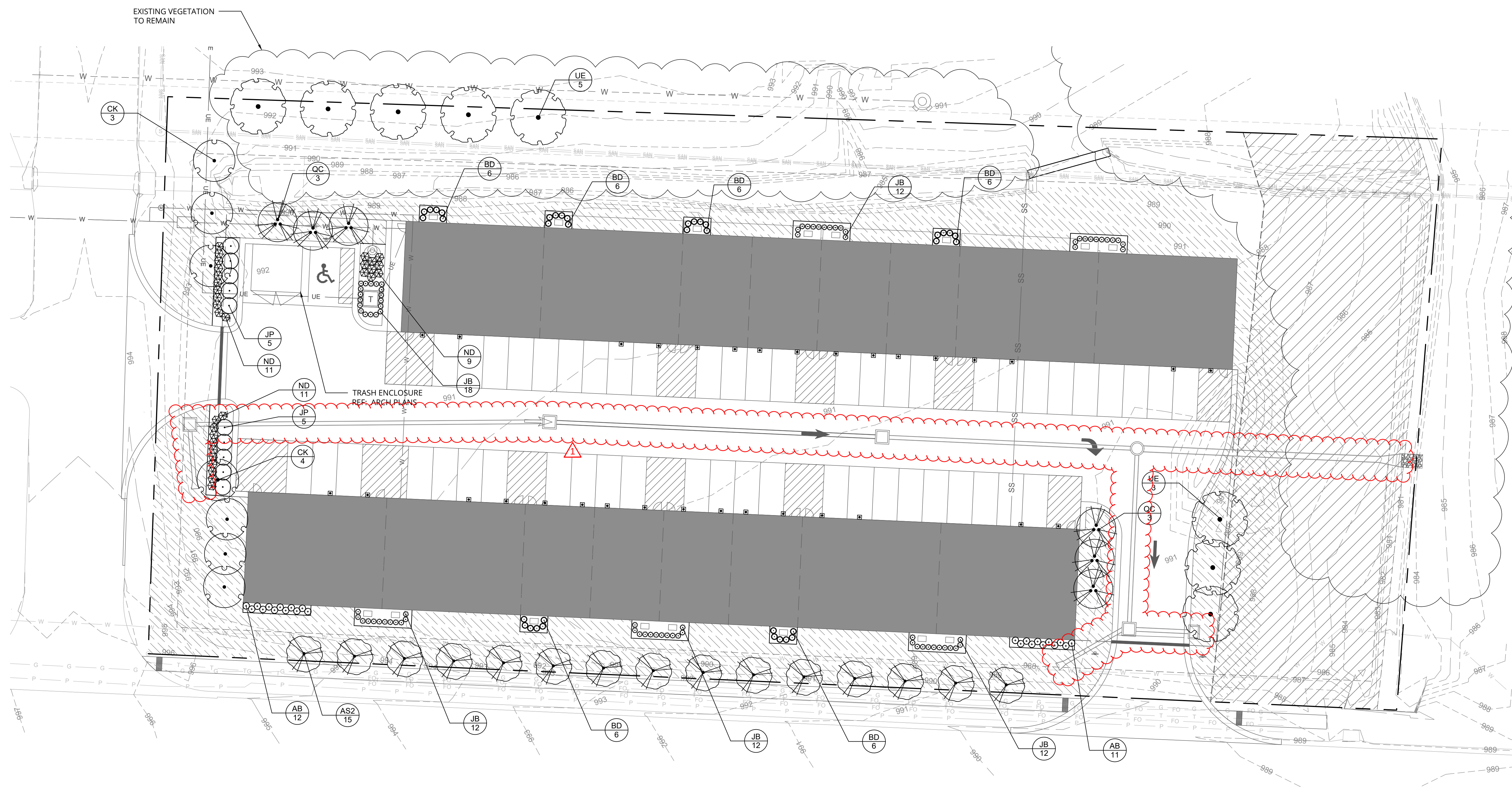
92,667 SF - 24,000 SF = 68,667 SF / 5,000 = 14 TREES AND 27 SHRUBS
PROVIDED: 14 TREES AND 27 SHRUBS

1. GROUND MOUNTED EQUIPMENT SHALL BE TOTALLY SCREENED FROM VIEW BY EVERGREENS ON ALL FOUR SIDES OR BY EVERGREENS ON THREE SIDES AND BUILDING FACE ON FOURTH SIDE, AS SHOWN ON PLAN BELOW AND DETAIL THIS SHEET.

<u>SYMBOL</u>	<u>CODE</u>	<u>QTY</u>	<u>COMMON / BOTANICAL NAME</u>	<u>CONT</u>	<u>CAL</u>
DECIDUOUS TREES					
	AS2	15	SUGAR CONE SUGAR MAPLE / ACER SACCHARUM 'SUGAR CONE'	B & B	3" CAL
	QC	6	CRIMSON SPIRE™ OAK / QUERCUS ROBUR X ALBA 'CRIMSCHMIDT'	B & B	3" CAL
	UE	8	ALLEE LACEBARK ELM / ULMUS PARVIFOLIA 'EMER II' TM	B & B	3" CAL
ORNAMENTAL TREE					
	CK	7	KOUSA DOGWOOD / CORNUS KOUSA	B & B	3" CAL
SHRUBS					
	AB	23	LOW SCAPE HEDGER BLACK CHOKEBERRY / ARONIA MELANOCARPA 'U'CONNAM166' TM	2 GAL	
	BD	36	DEE RUNK COMMON BOXWOOD / BUXUS SEMPERVIRENS 'DEE RUNK'	5 GAL	
	JB	78	BLUE ARROW JUNIPER / JUNIPERUS SCOPULORUM 'BLUE ARROW'	5 GAL	
	JP	10	SEA GREEN JUNIPER / JUNIPERUS X PFITZERIANA 'SEA GREEN'	5 GAL	
	ND	31	FIREPOWER DWARF NANDINA / NANDINA DOMESTICA 'FIREPOWER'	2 GAL	
	TTF	17,455 SF	TURF TYPE TALL FESCUE / DROUGHT TOLERANT FESCUE BLEND	SOD	

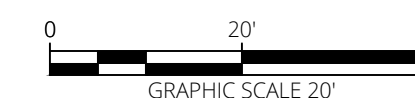


2



1

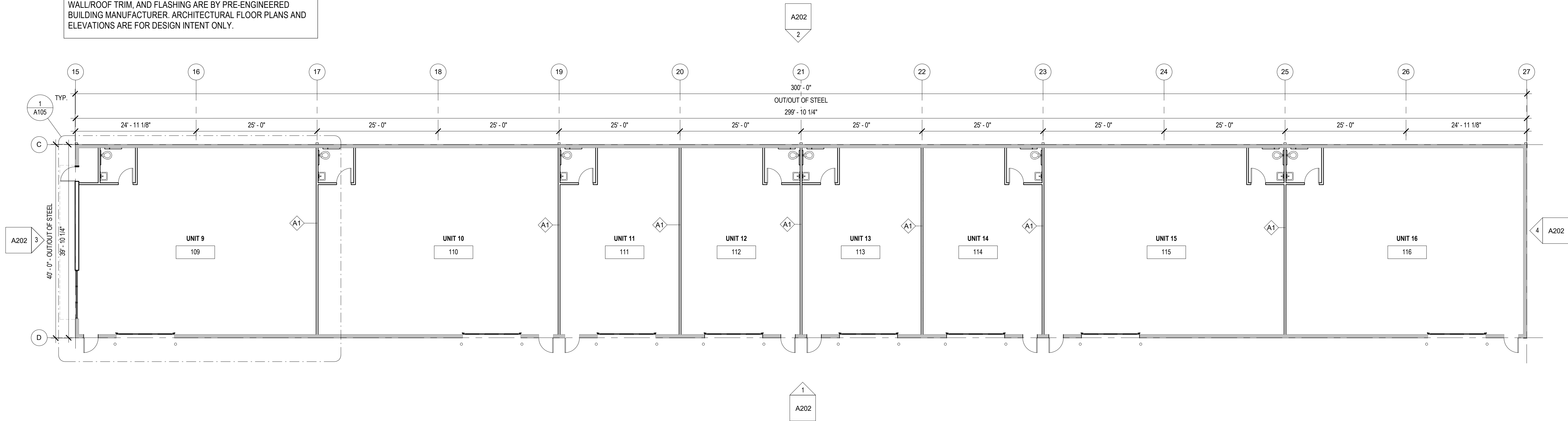
SCALE = 1" = 1'-20"



LEE'S SUMMIT FLEX SPACE 60 SE THOMPSON DR LEE'S SUMMIT, MISSOURI 64081	LANDSCAPE PLAN	 landworks STUDIO 102 S. Cherry St. Olathe, KS 66061 Phone: 313-760-7077 www.landworkstudio.com	 ANDREW N. KAC REGISTERED PROFESSIONAL ENGINEER NUMBER 1A-2010000198 LANDSCAPE ARCHITECT STATE OF MISSOURI	SCALE:	AS NOTED	Kimley»Horn © 2023 KIMLEY-HORN AND ASSOCIATES, INC. 805 PENNSYLVANIA AVENUE, SUITE 150 PHILADELPHIA, PA 19106 PHONE: 215-565-4655 WWW.KIMLEY-HORN.COM	STORMWATER ADDENDUM	10/29/2024	EF
				DESIGNED BY:	ENF				
				DRAWN BY:	ENF				
				CHECKED BY:	LWS				
				No.	REVISIONS		DATE	BY	

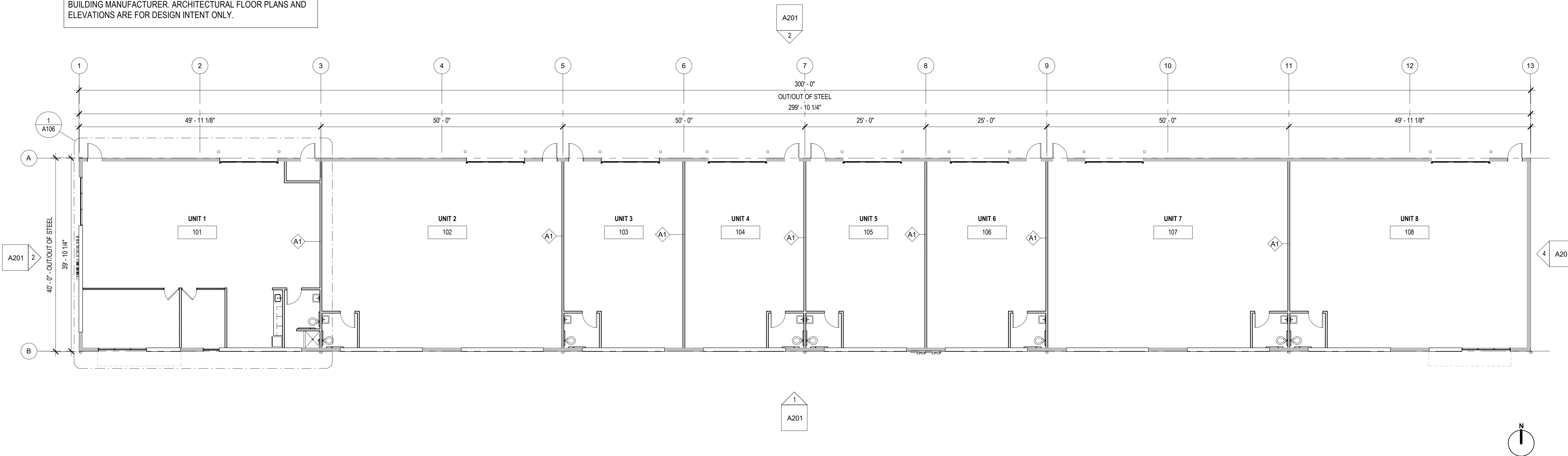
L001

NOTE: BUILDING ENCLOSURE INCLUDING STRUCTURAL FRAME, EXTERIOR WALLS, ROOF, INSULATION, GUTTERS, DOWNSPOUTS, WALL/ROOF TRIM, AND FLASHING ARE BY PRE-ENGINEERED BUILDING MANUFACTURER. ARCHITECTURAL FLOOR PLANS AND ELEVATIONS ARE FOR DESIGN INTENT ONLY.



2 FLOOR PLAN - BUILDING B
3/32\" = 1'-0"

NOTE: BUILDING ENCLOSURE INCLUDING STRUCTURAL FRAME, EXTERIOR WALLS, ROOF, INSULATION, GUTTERS, DOWNSPOUTS, WALL/ROOF TRIM, AND FLASHING ARE BY PRE-ENGINEERED BUILDING MANUFACTURER. ARCHITECTURAL FLOOR PLANS AND ELEVATIONS ARE FOR DESIGN INTENT ONLY.



1 FLOOR PLAN - BUILDING A
3/32\" = 1'-0"

LEE'S SUMMIT FLEX
SPACES

604 E. TOWNSHIP RD.
Lee's Summit, MO 64082

PROJECT NUMBER: 23082

CLIENT:
Capital Builders

FINAL DEVELOPMENT
PLAN

02.22.2024

Architect:
License:

REV.	DATE	ISSUE

ARCHITECT:

six
twenty
one

SixTwentyOne
1705 SUMMIT ST.
KANSAS CITY, MO 64108
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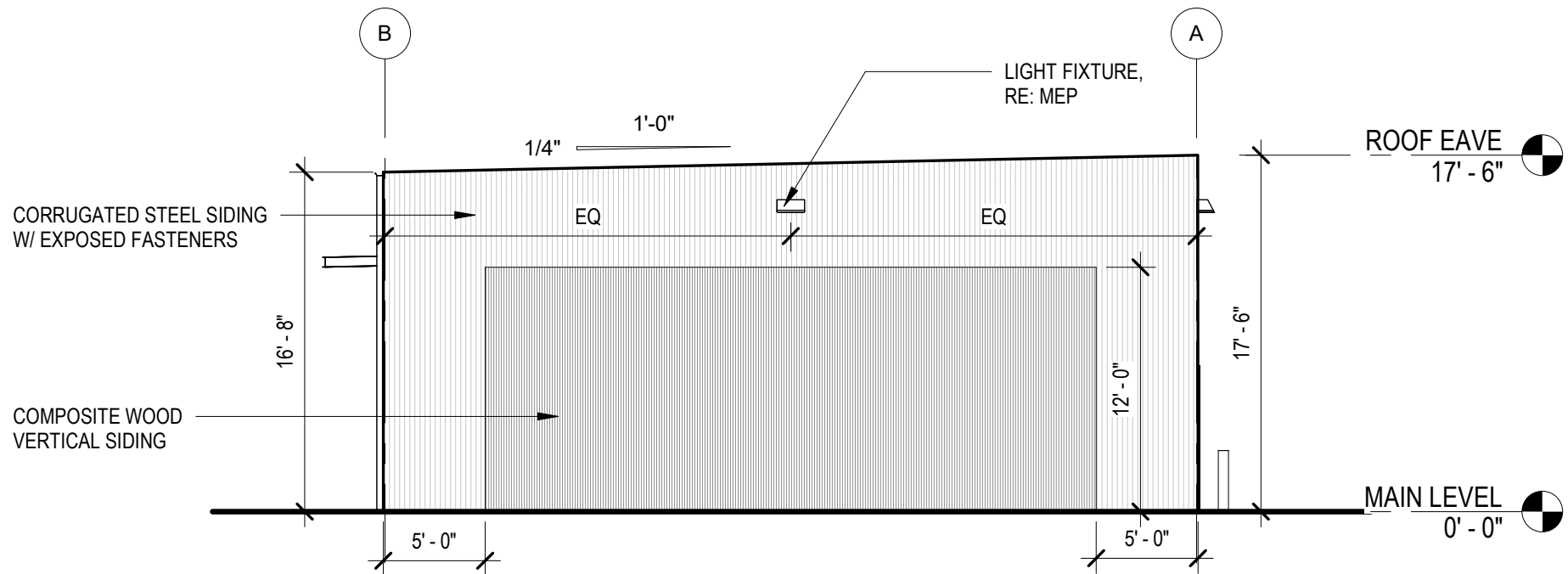
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FLOOR PLANS

Sheet Revision no.

A101

- CORRUGATED STEEL SIDING: MBCI, PBC METAL WALL PANEL, MIDNIGHT BRONZE
- COMPOSITE WOOD SIDING: NEWTECH WOOD, EUROPEAN SIDING, NORWEGIAN BOARD, PERUVIAN TEAK
- STEEL TRIM



4 ELEVATION - BUILDING A (EAST)
1/8" = 1'-0"

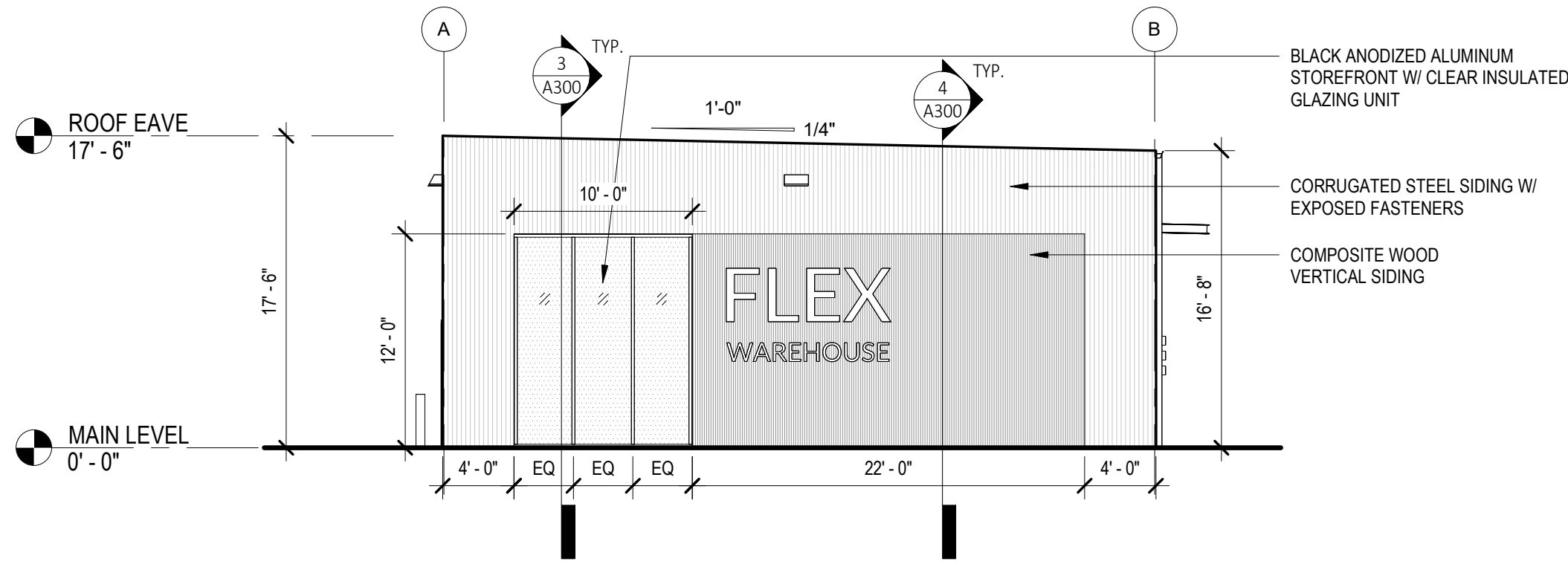
TOTAL WALL AREA: 683 SF

- CORRUGATED STEEL SIDING

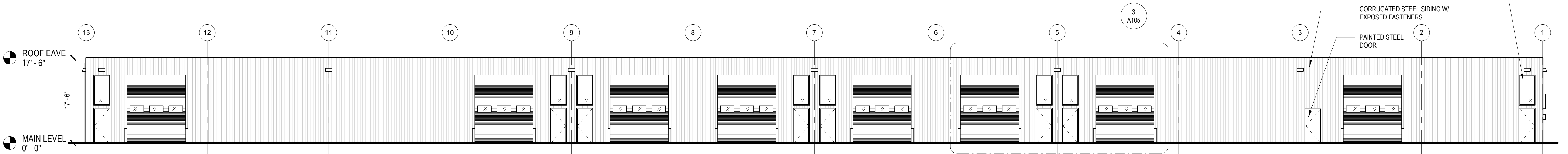
299 SF (44%)
- COMPOSITE WOOD SIDING

264 SF (39%)
- STOREFRONT GLASS

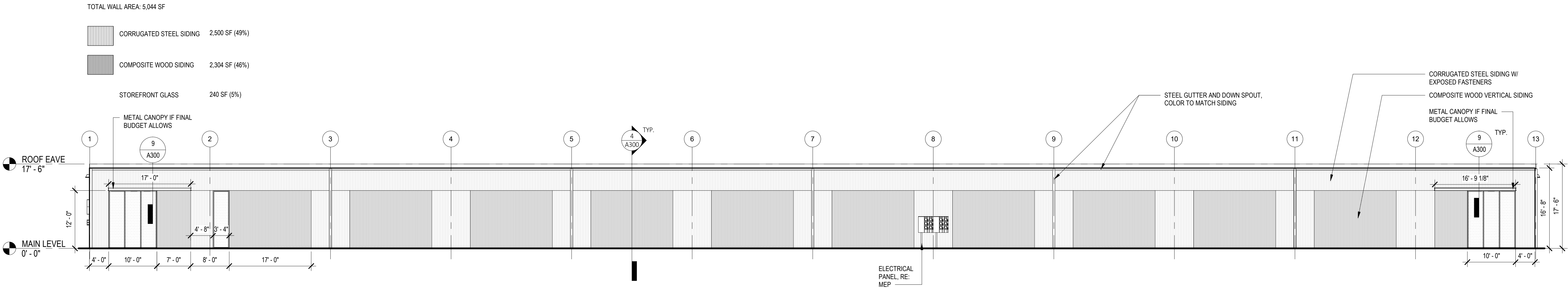
120 SF (17%)



3 ELEVATION - BUILDING A (WEST)
1/8" = 1'-0"



2 ELEVATION - BUILDING A (NORTH)
3/32" = 1'-0"



1 ELEVATION - BUILDING A (SOUTH)
3/32" = 1'-0"

LEE'S SUMMIT FLEX SPACES

604 E. Front Street
Lee's Summit, MO 64082

PROJECT NUMBER: 23092

CLIENT:
Capital Builders

FINAL DEVELOPMENT PLAN

02.22.2024

Architect:
SixTwentyOne

REV.	DATE	ISSUE

ARCHITECT:

six
twenty
one

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1705 SUMMIT ST.
KANSAS CITY, MO 64108
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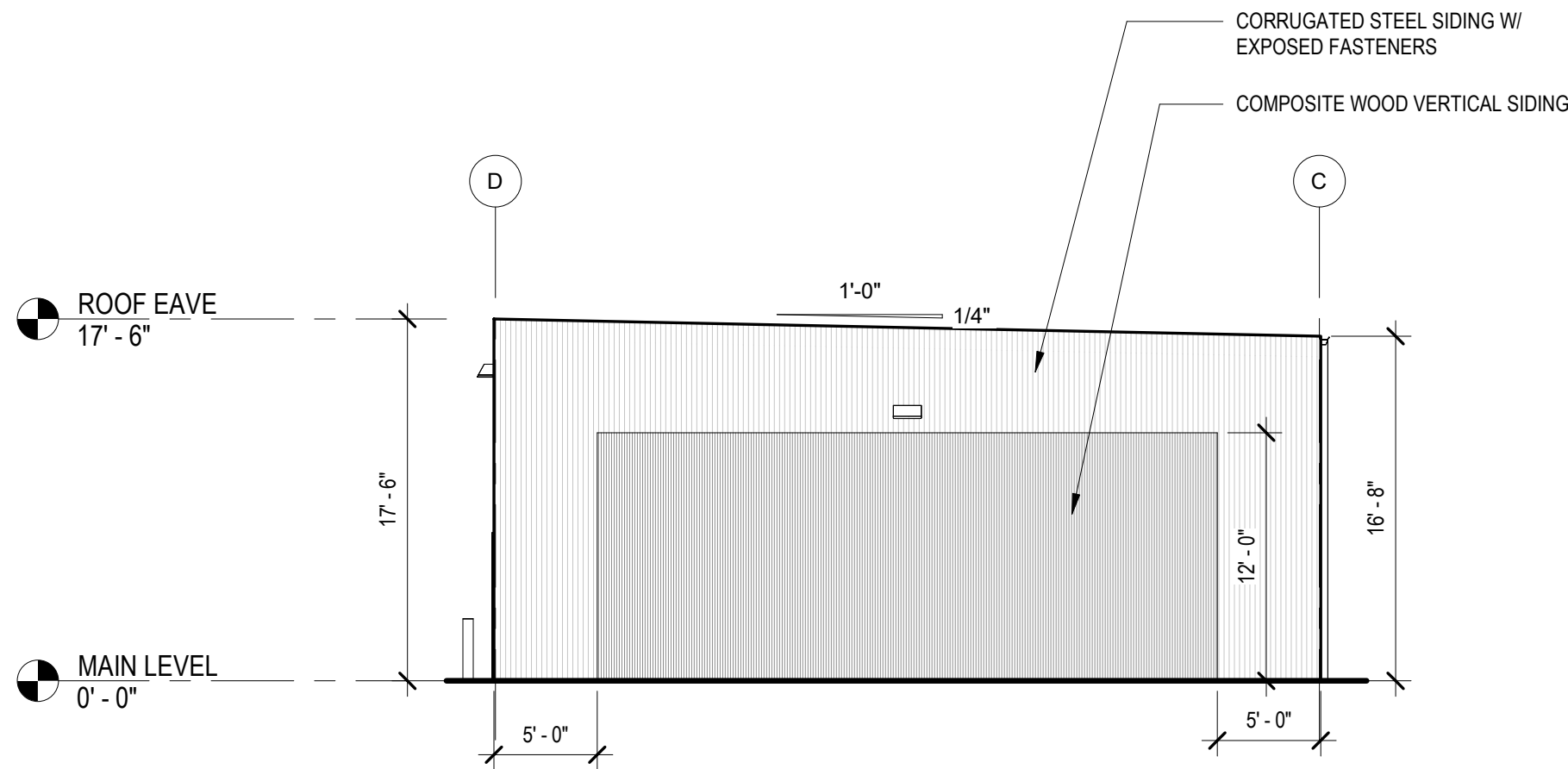
ELEVATIONS - BUILDING A

Sheet

Revision no.

A201

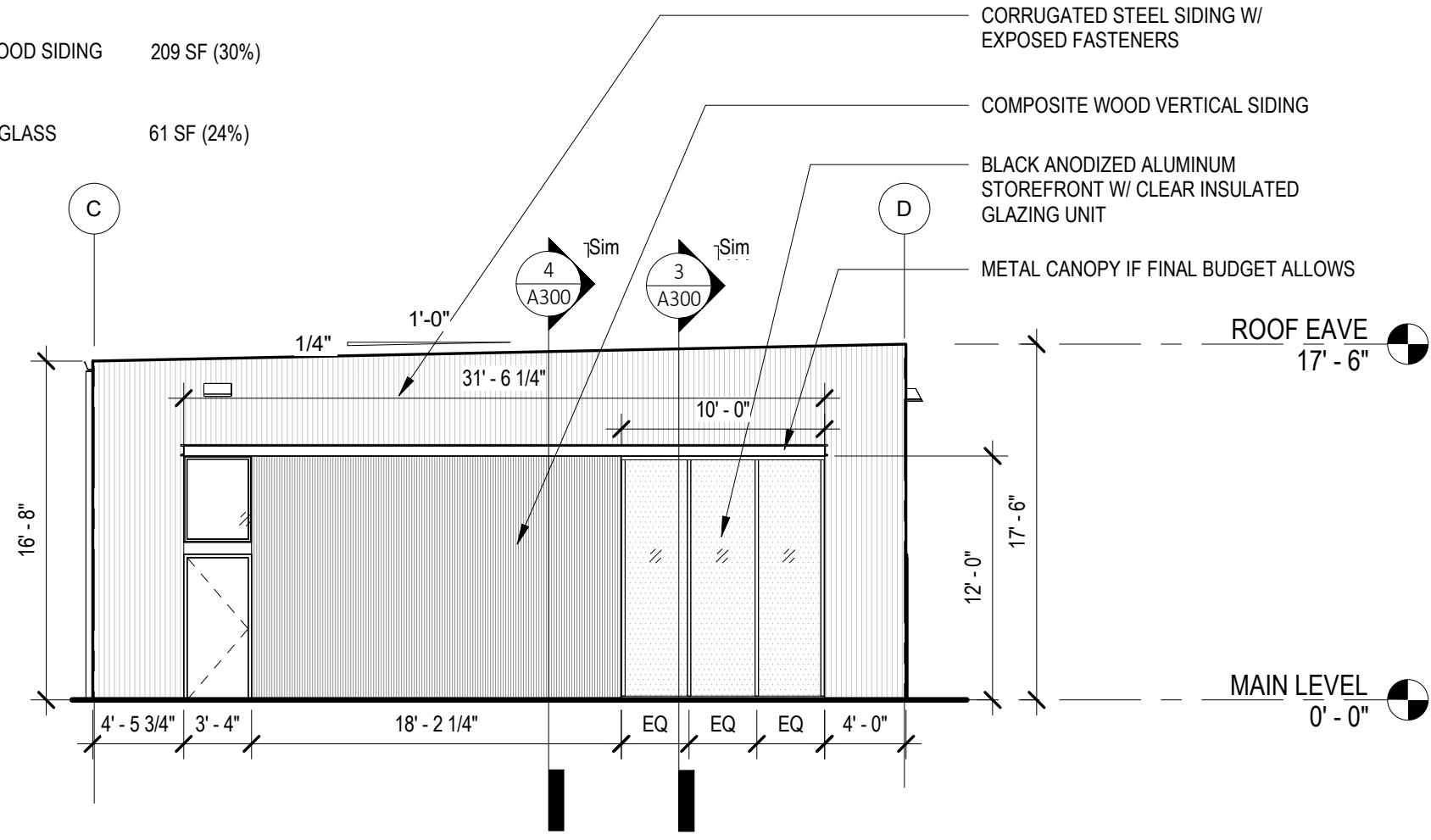
- CORRUGATED STEEL SIDING: MBCI, PBC METAL WALL PANEL, MIDNIGHT BRONZE
- COMPOSITE WOOD SIDING: NEWTECH WOOD, EUROPEAN SIDING, NORWEGIAN BOARD, PERUVIAN TEAK
- STEEL TRIM



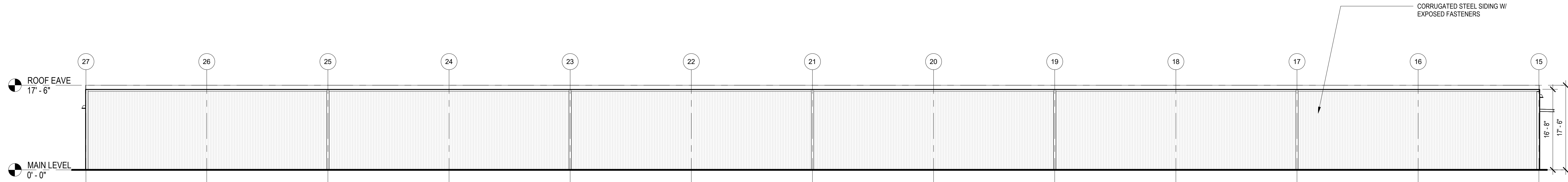
4 ELEVATION - BUILDING B (EAST)
1/8" = 1'-0"

TOTAL WALL AREA: 683 SF

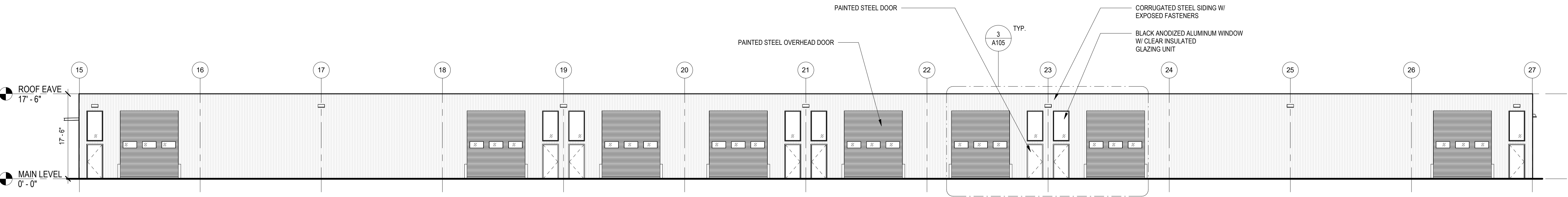
- CORRUGATED STEEL SIDING 314 SF (46%)
- COMPOSITE WOOD SIDING 209 SF (30%)
- STOREFRONT GLASS 61 SF (24%)



3 ELEVATION - BUILDING B (WEST)
1/8" = 1'-0"



2 ELEVATION - BUILDING B (NORTH)
3/32" = 1'-0"



1 ELEVATION - BUILDING B (SOUTH)
3/32" = 1'-0"

LEE'S SUMMIT FLEX
SPACES
804 E. Truman Blvd.
Lee's Summit, MO 64082

PROJECT NUMBER: 23082

CLIENT:
Capital Builders

FINAL DEVELOPMENT
PLAN

02.22.2024

Architect -
License -

REV.	DATE	ISSUE

ARCHITECT:

six
twenty
one

SixTwentyOne
1705 SUMMIT ST.
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ELEVATIONS - BUILDING B

Sheet

Revision no.

A202



BUILDING A - WEST AND SOUTH ELEVATIONS



BUILDING A - EAST AND NORTH ELEVATIONS



BUILDING B - WEST AND SOUTH ELEVATIONS



BUILDING B - SOUTH AND EAST ELEVATIONS

LEE'S SUMMIT FLEX
SPACES
804 E. Truman Blvd.
Lee's Summit, MO 64082

PROJECT NUMBER: 23092

CLIENT:
Capital Builders

FINAL DEVELOPMENT
PLAN

02.22.2024

Architect:
SixTwentyOne

REV.	DATE	ISSUE

ARCHITECT:

**six
twenty
one**

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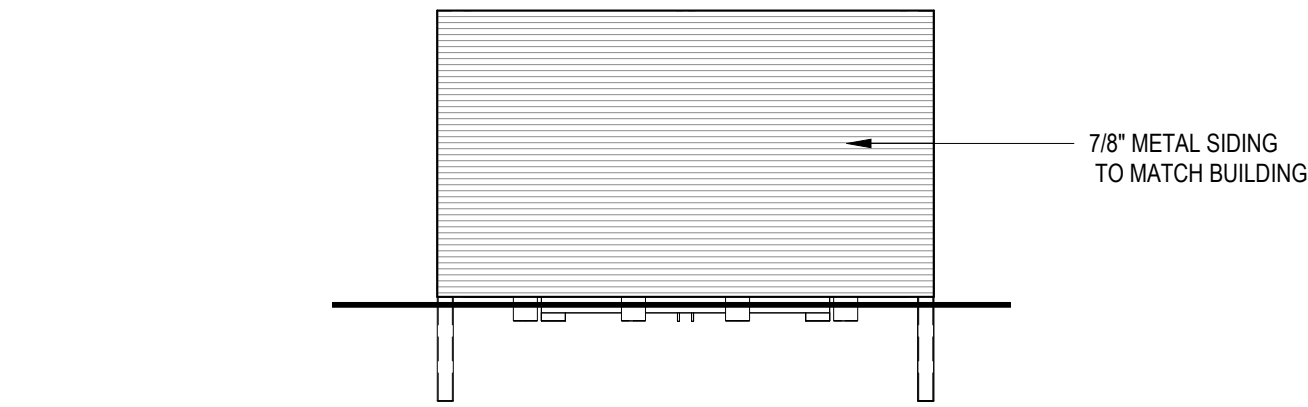
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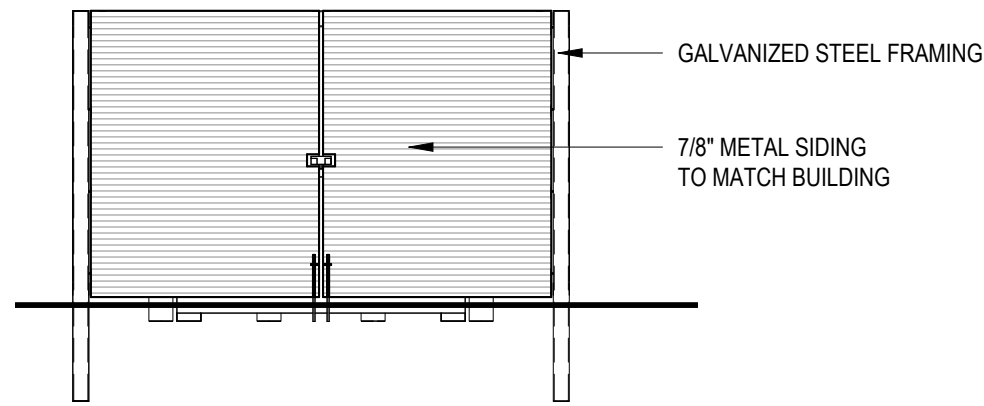
RENDERINGS

Sheet	Revision no.
A203	

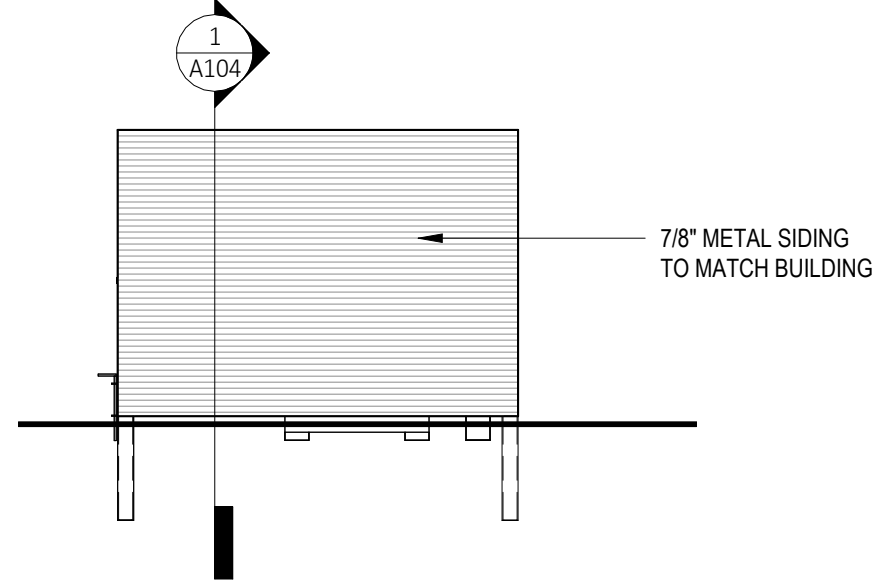
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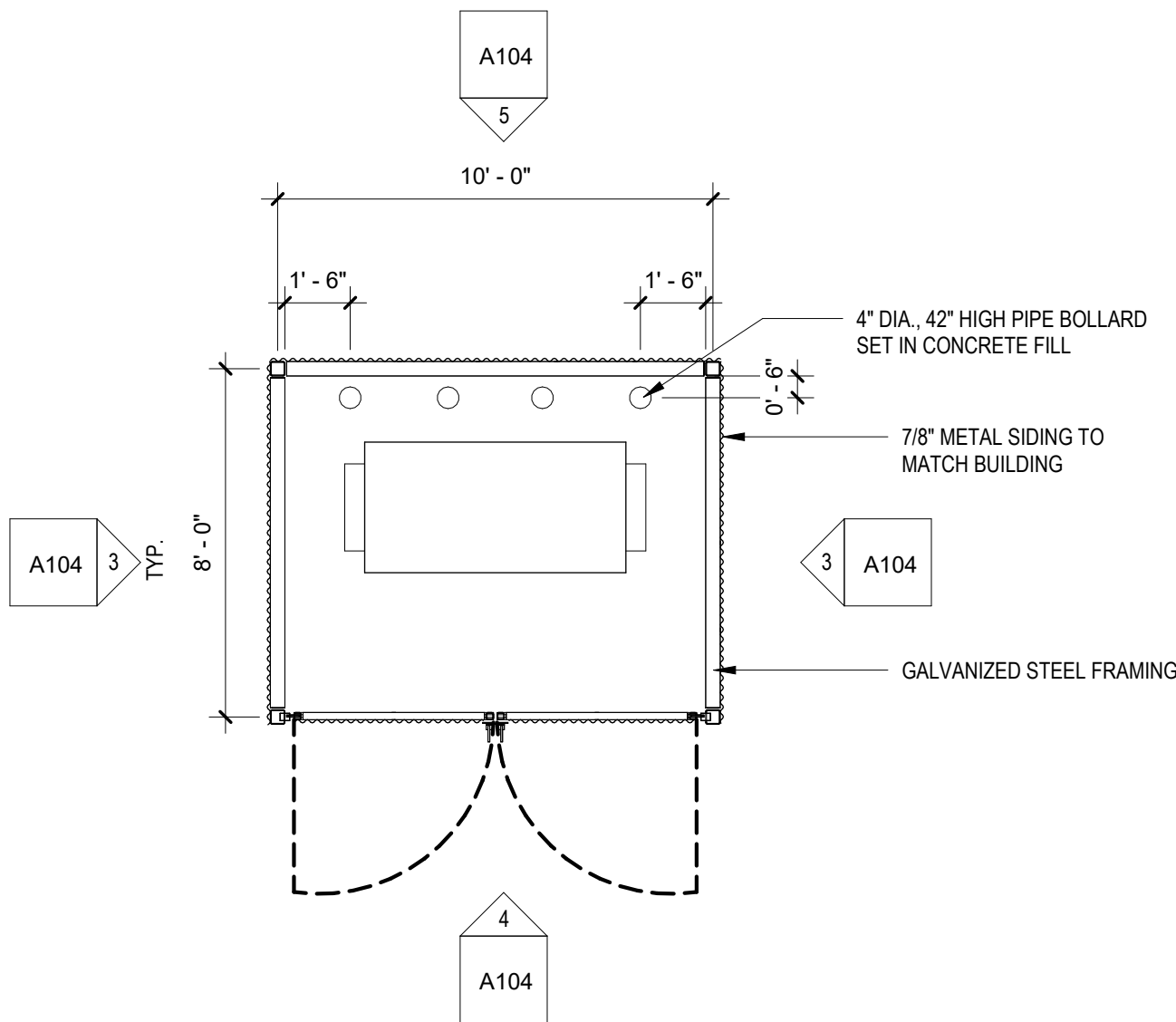
5 ELEVATION - TRASH ENCLOSURE - NORTH
 1/4" = 1'-0"



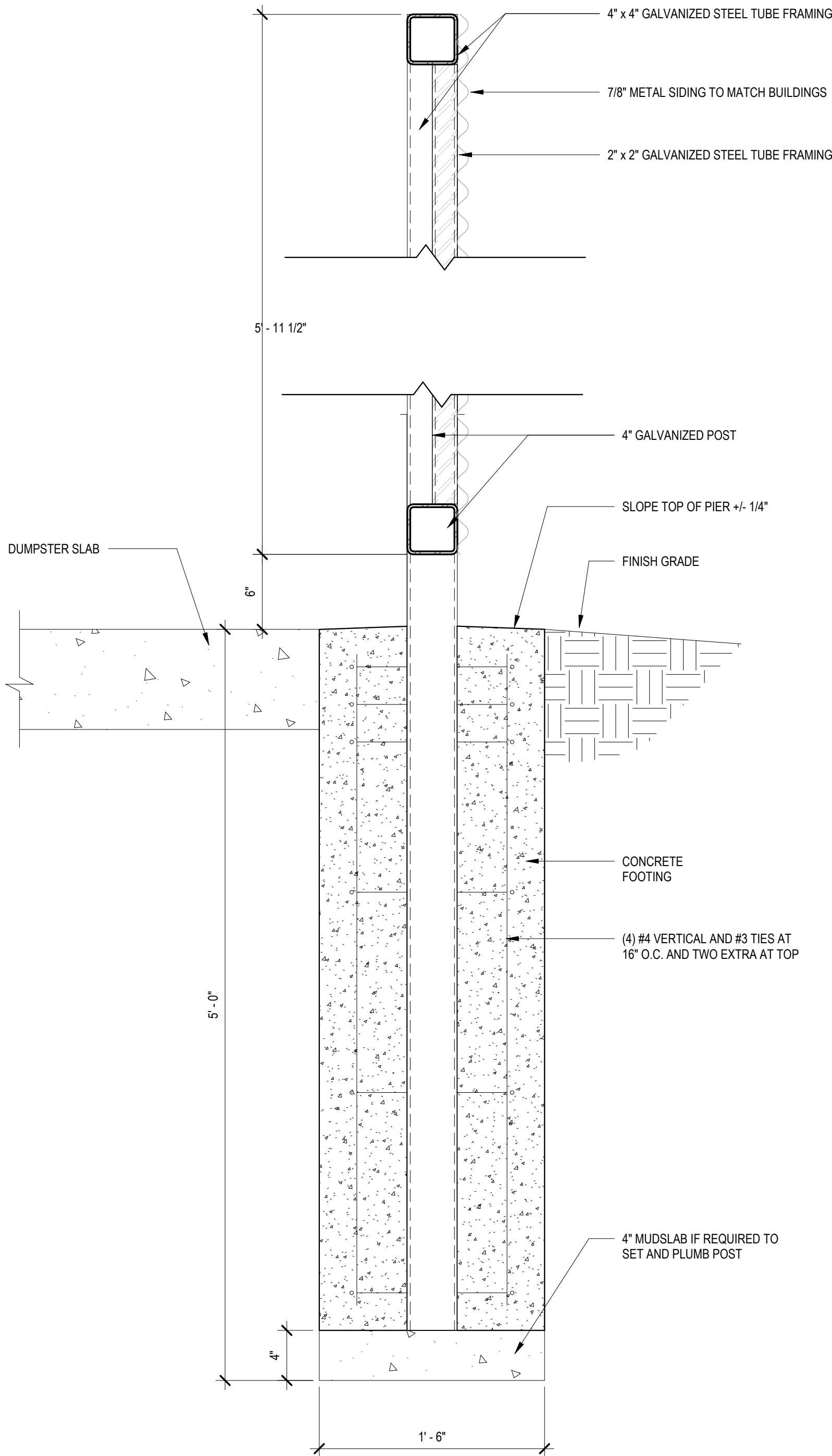
4 ELEVATION - TRASH ENCLOSURE - SOUTH
 1/4" = 1'-0"



3 ELEVATION - TRASH ENCLOSURE - EAST/WEST
 1/4" = 1'-0"



2 FLOOR PLAN - TRASH ENCLOSURE
 1/4" = 1'-0"



1 SECTION DETAIL - DUMPSTER ENCLOSURE
 1 1/2" = 1'-0"

REV.	DATE	ISSUE

ARCHITECT:

six
 twenty
 one

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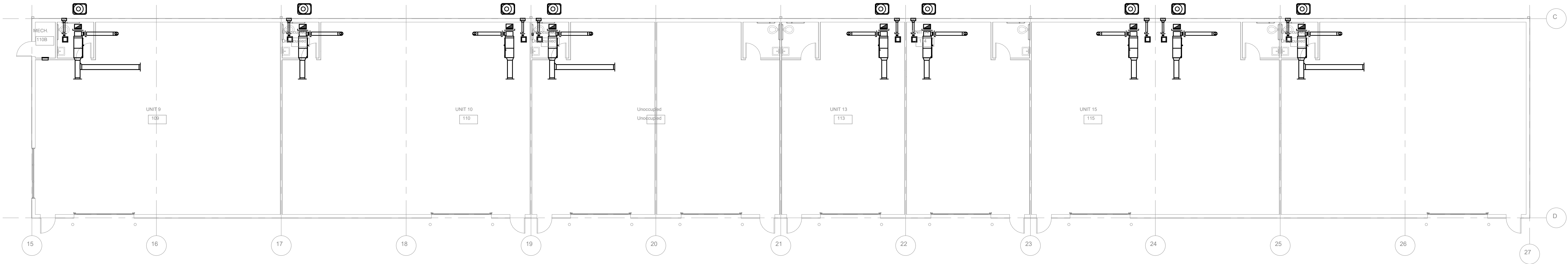
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TRASH ENCLOSURE PLAN & DETAILS

Sheet

Revision no.

A204



2

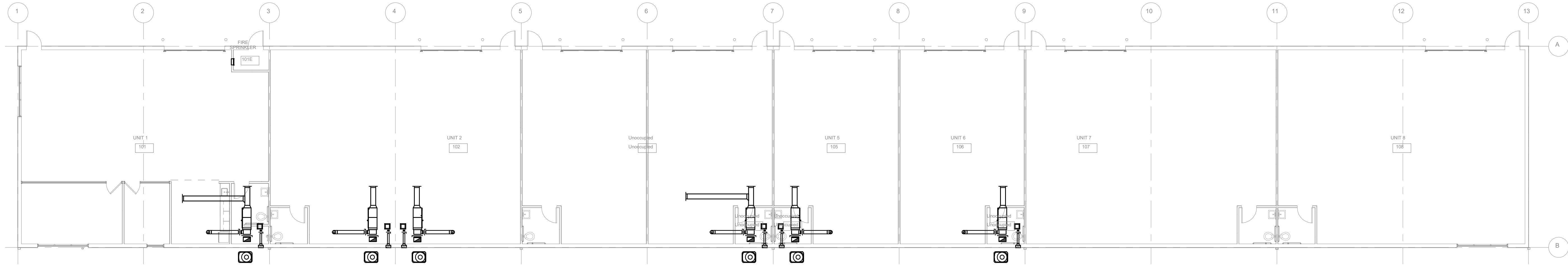
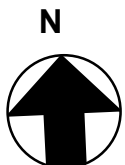
MECHANICAL FLOOR PLAN - BUILDING B

SCALE: 3/32" = 1'-0"

GENERAL NOTES

1. REPLACE THIS NOTE WITH YOUR SHEET SPECIFIC GENERAL NOTES KEEPING THE SAME FORMAT, WIDTH AND POSITION. DELETE THIS NOTE AND TITLE IF YOU DO NOT HAVE ANY NOTES.

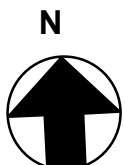
KEYED NOTES



1

MECHANICAL FLOOR PLAN - BUILDING A

SCALE: 3/32" = 1'-0"



FLEX SPACES

60 SE Thompson Dr.
Lees Summit, MO 64082
PROJECT NUMBER:
CLIENT:
Capital Builders

CONSTRUCTION / PERMIT DRAWINGS

08.28.2023

REV.	DATE	ISSUE

ARCHITECT:

six
twenty
one

501 Twenty One
1705 SUMMIT ST.
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4711 Northside Dr. North Little Rock, AR 72116
501-776-3622
www.garverusa.com

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MECHANICAL FLOOR PLANS

Sheet: Revision No:

M101

HAZARD CLASSIFICATION
LEGEND - NFPA 13

	LIGHT HAZARD DESIGN DENSITY: 0.10 GPM/S.F DESIGN AREA: 1,500 S.F. HYDRANT FLOW: 250 GPM CHARACTERISTICS: SPACES WITH LOW QUANTITY AND LOW COMBUSTIBILITY OF CONTENTS
	ORDINARY HAZARD 1: DESIGN DENSITY: 0.15 GPM/S.F DESIGN AREA: 1,500 S.F. HYDRANT FLOW: 250 GPM CHARACTERISTICS: SPACES WITH MODERATE QUANTITY AND LOW COMBUSTIBILITY OF CONTENTS. STOCKPILES OF CONTENTS WITH LOW COMBUSTIBILITY DO NOT EXCEED 8 FT.
	ORDINARY HAZARD 2 DESIGN DENSITY: 0.2 GPM/S.F DESIGN AREA: 1,500 S.F. HYDRANT FLOW: 250 GPM CHARACTERISTICS: SPACES WITH MODERATE TO HIGH QUANTITY AND MODERATE TO HIGH COMBUSTIBILITY OF CONTENTS. STOCKPILES OF CONTENTS WITH MODERATE TO HIGH COMBUSTIBILITY DO NOT EXCEED 12 FT.
	EXTRA HAZARD 1 DESIGN DENSITY: 0.3 GPM/S.F DESIGN AREA: 2,500 S.F. HYDRANT FLOW: 500 GPM CHARACTERISTICS: SPACES WITH VERY HIGH QUANTITY AND VERY HIGH COMBUSTIBILITY OF CONTENTS. SPACES WHERE DUST, LINT, OR OTHER MATERIAL ARE PRESENT, INTRODUCING THE PROBABILITY OF RAPIDLY DEVELOPING FIRES.
	EXTRA HAZARD 2 DESIGN DENSITY: 0.4 GPM/S.F DESIGN AREA: 2,500 S.F. HYDRANT FLOW: 500 GPM CHARACTERISTICS: SPACES WITH VERY HIGH QUANTITY AND VERY HIGH COMBUSTIBILITY OF CONTENTS. SPACES WITH SUBSTANTIAL AMOUNTS OF COMBUSTIBLE OR FLAMMABLE LIQUIDS. SPACES WHERE SHIELDING OF COMBUSTIBLES IS EXTENSIVE.
	NOT IN SCOPE

SEISMIC GENERAL NOTES

- A. SEISMIC-RESTRAINT LOADING BASED ON ASCE 7-10:
1. SITE CLASS
 2. OCCUPANCY CATEGORY OF BUILDING OR STRUCTURE
 3. SEISMIC DESIGN CATEGORY C.
 4. DESIGN SPECTRAL RESPONSE ACCELERATION AT SHORT PERIODS (0.2 SECOND): (S_{ds}) = X_G (WHERE G IS THE FORCE OF GRAVITY).
 5. DESIGN SPECTRAL RESPONSE ACCELERATION AT 1-SECOND PERIOD: (S_{d1}) = X_G (WHERE G IS THE FORCE OF GRAVITY).
 6. COMPONENT IMPORTANCE FACTOR: (I_p) = 1.5.
 7. F_{pw} = Y X WEIGHT OF WATER FILLED PIPE (THIS IS THE HORIZONTAL FORCE ACTION ON THE BRACE, AS DEFINED BY NFPA 13 (2016), 9.3.5.9.3.
- B. INSTALL SEISMIC RESTRAINTS IN ACCORDANCE WITH NFPA 13:
1. INSTALL LATERAL BRACES ON ALL FEED AND CROSS MAIN LINES, REGARDLESS OF PIPE DIAMETER.
 2. INSTALL LATERAL BRACES ON BRANCH LINES LARGER THAN 2-INCH DIAMETER. (EXCEPT THAT IF THE BRANCH LINE DOES NOT EXCEED 12 FT IN LENGTH, BRACING MAY BE OMITTED.)
 3. LATERAL BRACES ARE TO BE INSTALLED WITHIN 6 FT FROM THE ENDS OF PIPES
 4. LATERAL BRACES ARE TO BE INSTALLED AT 40 FT MAXIMUM INTERVALS.
 5. WHERE HANGER RODS DO NOT EXCEED 6 INCHES LONG, LATERAL BRACING MAY BE OMITTED.
 6. A LONGITUDINAL BRACE MAY SERVE AS A LATERAL BRACE IF IT IS WITHIN 24 INCHES OF THE CENTERLINE OF THE PIPE BRACED LONGITUDINALLY.
 7. INSTALL LONGITUDINAL BRACES ON ALL FEED AND CROSS MAIN LINES, REGARDLESS OF PIPE DIAMETER.
 8. LONGITUDINAL BRACES ARE TO BE INSTALLED WITHIN 40 FT FROM THE ENDS OF PIPES.
 9. LONGITUDINAL BRACES ARE TO BE INSTALLED AT 80 FT MAXIMUM INTERVALS
 10. A LATERAL BRACE MAY SERVE AS A LONGITUDINAL BRACE IF IT IS WITHIN 24 INCHES OF THE CENTERLINE OF THE PIPE BRACED LATERALLY.
- C. INSTALL SEISMIC-RESTRAINT DEVICES USING METHODS APPROVED BY OSHPD PROVIDING REQUIRED SUBMITTALS FOR COMPONENT
- D. ATTACHMENT TO STRUCTURE: IF SPECIFIC ATTACHMENT IS NOT INDICATED, ANCHOR BRACING TO STRUCTURE AT FLANGES OF BEAMS, AT UPPER TRUSS CHORDS OF BAR JOISTS, OR AT CONCRETE MEMBERS
- E. DRILLED-IN ANCHORS:
1. IDENTIFY POSITION OF REINFORCING STEEL AND OTHER EMBEDDED ITEMS PRIOR TO DRILLING HOLES FOR ANCHORS. DO NOT DAMAGE EXISTING REINFORCING OR EMBEDDED ITEMS DURING CORING OR DRILLING. NOTIFY THE STRUCTURAL ENGINEER IF REINFORCING STEEL OR OTHER EMBEDDED ITEMS ARE ENCOUNTERED DURING DRILLING. LOCATE AND AVOID PRESTRESSED TENDONS, ELECTRICAL AND ENCOUNTERED DURING DRILLING. LOCATE AND AVOID PRESTRESSED TENDONS, ELECTRICAL AND TELECOMMUNICATIONS CONDUIT, AND GAS LINES.
- G. ADJUSTING:
1. ADJUST RESTRAINTS TO PERMIT FREE MOVEMENT OF EQUIPMENT WITHIN NORMAL MODE OF OPERATION.
2. DO NOT DRILL HOLES IN CONCRETE OR MASONRY UNTIL CONCRETE, MORTAR, OR GROUT HAS ACHIEVED FULL DESIGN STRENGTH.
3. WEDGE ANCHORS: PROTECT THREADS FORM DAMAGE DURING ANCHOR INSTALLATION. HEAVY-DUTY SLEEVE SHALL BE INSTALLED WITH SLEEVE FULLY ENGAGED IN THE STRUCTURAL ELEMENT TO WHICH ANCHOR IS TO BE FASTENED.
4. SET ANCHORS TO MANUFACTURER'S RECOMMENDED TORQUE, USING A TORQUE WRENCH.
5. INSTALL ZINC-COATED STEEL ANCHORS FOR INTERIOR AND STAINLESS-STEEL ANCHORS FOR EXTERIOR APPLICATIONS.
- F. ACCOMMODATION OF DIFFERENTIAL SEISMIC MOTION: INSTALL FLEXIBLE CONNECTIONS IN ACCORDANCE WITH NFPA 13 IN PIPING WHERE:
1. PIPING 2-1/2 INCH OR LARGER CROSSES SEISMIC JOINTS, WHERE ADJACENT SECTIONS OR BRANCHES ARE SUPPORTED BY DIFFERENT STRUCTURAL ELEMENTS, AND WHERE THE CONNECTIONS TERMINATE WITH CONNECTION TO EQUIPMENT THAT IS ANCHORED TO A DIFFERENT STRUCTURAL ELEMENT FROM ONE SUPPORTING THE CONNECTIONS AS THEY APPROACH EQUIPMENT.
 2. WITHIN 24 INCHES OF THE TOP AND BOTTOM OF ALL RISERS 2-1/2 INCH OR LARGER (IN RISERS LESS THAN 3 FT IN LENGTH, FLEXIBLE COUPLINGS MAY BE OMITTED; IN RISERS 3 FT TO 7 FT, ONE FLEXIBLE COUPLING IS ADEQUATE).
 3. WITHIN 12 IN ABOVE AND WITHIN 24 IN BELOW THE FLOOR IN MULTI FLOOR BUILDINGS FOR PIPING 2-1/2 INCH OR LARGER.
 4. ON BOTH SIDES OF CONCRETE OR MASONRY WALLS WITHIN 1 FT OF FACE OF WALL FOR PIPING 2-1/2 INCH OR LARGER, UNLESS CLEARANCE IS PROVIDED PER NFPA 13.
 5. WITHIN 24 INCHES OF BUILDING EXPANSION JOINTS FOR PIPING 2-1/2 INCH OR LARGER.
 6. WITHIN 24 INCHES OF THE TOP OF DROPS EXCEEDING 15 FEET IN LENGTH TO PORTIONS OF SYSTEMS SUPPLYING MORE THAN ONE SPRINKLER, REGARDLESS OF PIPE SIZE.
 7. WITHIN 24 INCHES ABOVE AND 24 INCHES BELOW ANY INTERMEDIATE POINTS OF SUPPORT FOR A RISER OR OTHER VERTICAL PIPE FOR PIPING 2-1/2 INCH OR LARGER.
 8. WHEN THE FLEXIBLE COUPLING BELOW THE FLOOR IS ABOVE THE TIE-IN TO THE MAIN SUPPLYING THAT FLOOR, A FLEXIBLE COUPLING SHALL BE INSTALLED EITHER ON THE HORIZONTAL PORTION WITHIN 24 INCHES OF THE TIE-IN WHERE THE TIE-IN IS HORIZONTAL OR ON THE VERTICAL PORTION OF THE TIE-IN WHERE THE TIE-IN INCORPORATES A RISER FOR PIPING 2-1/2 INCH OR LARGER.
 9. FOR DROPS TO HOSE LINES, RACK SPRINKLERS, MEZZANINES AND FREE STANDING STRUCTURES. INSTALL FLEXIBLE COUPLINGS REGARDLESS OF PIPE SIZE WITHIN 24 INCHES OF THE TOP OF THE DROP, WITHIN 24 INCHES ABOVE THE UPPERMOST DROP SUPPORT ATTACHMENT, WHERE DROP SUPPORTS ARE PROVIDED TO THE STRUCTURE, RACK, OR MEZZANINE, AND WITHIN 24 INCHES ABOVE THE BOTTOM OF THE DROP WHERE NO ADDITIONAL DROP SUPPORT IS PROVIDED.

WET SPRINKLER GENERAL NOTES

ALL PIPE, DEVICES, AND INSTALLATION SHALL FULLY COMPLY WITH NFPA 13, AND ALL REQUIRED AUTHORITIES HAVING JURISDICTION.

REFER TO NOTES ON DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS. REFER TO STRUCTURAL AND ARCHITECTURAL DRAWINGS FOR BUILDING DETAILS.

PROVIDE A COMPLETE, HYDRAULICALLY CALCULATED, FULLY AUTOMATIC WET PIPE SPRINKLER SYSTEM THROUGHOUT THE BUILDING. FIRE PROTECTION CONTRACTOR SHALL INSTALL THE FIRE PROTECTION SYSTEM IN ACCORDANCE WITH ALL APPLICABLE NFPA STANDARDS, JOB SPECIFICATIONS, AND LOCAL CODE.

FIRE PROTECTION SYSTEM(S), PIPING, VALVES AND APPURTENANCES INDICATED ON THE DRAWING ARE DIAGRAMMATIC ONLY IN THAT ALL FITTINGS AND OFFSETS MAY NOT BE SHOWN. FIRE PROTECTION CONTRACTOR SHALL VERIFY EQUIPMENT SELECTIONS, PIPE ROUTING, ETC. FOR CODE COMPLIANCE, COMPLIANCE, AND ARCHITECTURAL AND STRUCTURAL CONFORMITY. FIRE PROTECTION CONTRACTOR SHOULD THOROUGHLY SURVEY THE PROPERTY AND REVIEW ARCHITECTURAL, STRUCTURAL, MECHANICAL, ELECTRICAL AND PLUMBING (M.E.P.) CONSTRUCTION DOCUMENTS PRIOR TO BID.

FIRE PROTECTION SHOP DRAWINGS SHALL HAVE COMPLETE REFLECTED CEILING PLANS INDICATING LOCATION OF EACH SPRINKLER HEAD, AS WELL AS PIPING LAYOUTS. PROVIDE ADDITIONAL SPRINKLER HEADS (OVER CODE MINIMUM), IF REQUESTED BY THE ARCHITECT, TO OBTAIN SYMMETRICAL CEILING LAYOUTS.

FIRE PROTECTION SYSTEM SHALL BE COMPLETE WITH BACKFLOW PREVENTER, FIRE DEPARTMENT CONNECTION, STANDPIPES, CONTROL VALVES, SPRINKLER PIPING AND HEADS, ELECTRONIC SUPERVISION AND APPURTENANCES AS REQUIRED BY NFPA AND AUTHORITIES HAVING JURISDICTION.

GENERAL CONTRACTOR SHALL CONDUCT A COORDINATION MEETING WITH THE SUBCONTRACTORS TO ESTABLISH CLEARANCE REQUIREMENTS NEEDED FOR M.E.P. WORK PRIOR TO FABRICATION OF THE SPRINKLER SYSTEM. ANY RELOCATION OF FIRE SPRINKLER SYSTEM REQUIRED FOR PROPER INSTALLATION OF M.E.P. SYSTEMS SHALL BE AT THE FIRE PROTECTION CONTRACTOR'S EXPENSE.

FIRE PROTECTION CONTRACTOR SHALL BASE BID ON CAREFUL COORDINATION OF MECHANICAL DUCT, MECHANICAL AND PLUMBING PIPING, ELECTRICAL, AND STRUCTURAL SYSTEMS IN THE BUILDING.

HYDRAULIC CALCULATIONS SHALL BE BASED ON A WATER FLOW TEST OBTAINED FROM THE CITY OF **LEE'S SUMMIT** BY THE FIRE PROTECTION CONTRACTOR. CONTRACTOR SHALL VERIFY FLOW TEST DATA WITH LOCAL AUTHORITIES. IF A CURRENT TEST IS NOT AVAILABLE, CONTRACTOR SHALL CONDUCT A PROPER FLOW TEST PRIOR TO PREPARATION OF SHOP DRAWINGS. PROVIDE A MINIMUM OF 10 PSI SAFETY FACTOR FOR ALL HYDRAULIC CALCULATIONS. PIPE SIZING INDICATED ON THE DRAWINGS IS FOR INFORMATIONAL PURPOSES ONLY. PIPE SIZING SHALL BE ESTABLISHED BY THE FIRE PROTECTION CONTRACTOR. EXCEPTION: STANDPIPES SHALL BE SIZED AS INDICATED ON THE DRAWINGS OR LARGER. NOTE: AVOID SYSTEM PRESSURES EXCEEDING 175 PSI.

PROVIDE A REDUCED PRESSURE ZONE (R.P.Z.) BACKFLOW PREVENTER TO ISOLATE THE SPRINKLER SYSTEM FROM THE MAIN SUPPLY. COORDINATE REQUIREMENTS WITH THE CITY OF **LEE'S SUMMIT** AND THE STATE OF **MISSOURI**.

FIRE PROTECTION SYSTEM SHALL INTERFACE WITH THE BUILDING FIRE ALARM SYSTEM. REFER TO ELECTRICAL.

ALL CONTROL VALVES SHALL HAVE ELECTRONIC SUPERVISION.

SPECIAL CONSIDERATION SHALL BE GIVEN TO AREAS THROUGHOUT THE BUILDING SUCH AS DROPPED SOFFITS, RAISED CEILINGS AND LIGHTING SOFFITS THAT NECESSITATE ADDITIONAL SPRINKLER HEADS. REFER TO ARCHITECTURAL DRAWINGS FOR REFLECTED CEILING PLANS AND BUILDING DETAILS.

ALL SPRINKLER HEADS FOR LIGHT HAZARD AND ALL STANDARD SPRAY SPRINKLER HEADS FOR ORDINARY HAZARD SHALL BE QUICK RESPONSE.

ALL CEILING MOUNTED SPRINKLER HEADS SHALL BE CHROME WITH CHROME RECESSED ESCUTCHEONS, UNLESS NOTED OTHERWISE ON FIRE PROTECTION PLANS OR SPECIFICATIONS.

ALL SPRINKLER HEADS INSTALLED IN EXPOSED STRUCTURE SHALL BE BRASS UPRIGHT, UNLESS NOTED OTHERWISE ON FIRE PROTECTION PLANS OR SPECIFICATIONS.

ALL CEILING MOUNTED SPRINKLER HEADS SHALL BE LOCATED IN THE CENTER OF CEILING TILES IN ALL PUBLIC AREAS. BRAIDED FLEXIBLE SPRINKLER DROP CONNECTIONS MAY BE USED FOR EASE OF INSTALLATION, SPECIFIC SPRINKLER HEAD LOCATION OR SPECIFIC OWNER REQUIREMENTS. EXCEPTION: CLOSETS, STORAGE ROOMS, EQUIPMENT ROOMS AND OTHER SIMILAR NON-PUBLIC AREAS ARE NOT REQUIRED TO BE CENTER OF TILE BUT SHALL BE NO CLOSER THAN 6" TO CEILING GRID.

ROOMS AND OTHER SIMILAR NON-PUBLIC AREAS ARE NOT REQUIRED TO BE CENTER OF TILE BUT SHALL BE NO CLOSER THAN 6" TO CEILING GRID.

PROVIDE SPRINKLER SYSTEM MAIN DRAIN IN ACCORDANCE WITH NFPA 13.

PROVIDE AUXILIARY DRAINS FOR ALL TRAPPED PIPING SECTIONS IN ACCORDANCE WITH NFPA 13.

ALL DRAIN PIPING SHALL TERMINATE AT THE EXTERIOR WITH 45 DEGREE ELBOW DOWN. INSTALL THE DRAIN IN A MANNER TO PREVENT FLOODING OR DAMAGE TO LANDSCAPING, AND TO PREVENT WETTING OF WALKWAYS. EXCEPTION: DRAIN PIPING MAY TERMINATE AT INTERIOR FLOOR DRAINS IF THE DRAIN HAS BEEN SIZED APPROPRIATELY. COORDINATE WITH PLUMBING CONTRACTOR FOR LOCATION OF FLOOR DRAIN.

INSTALL PIPING HORIZONTALLY AND AT RIGHT ANGLES TO WALLS AND CEILINGS.

ALL SPRINKLER MAIN PIPING SHALL BE SCHEDULE 10 WITH ROLL GROOVED AND WELDED OUTLETS, UNLESS NOTED OTHERWISE. FITTINGS AND COUPLINGS SHALL BE STANDARD GROOVED, UNLESS NOTED OTHERWISE.

ALL SPRINKLER BRANCH LINE PIPING SHALL BE BLACK SCHEDULE 40, UNLESS NOTED OTHERWISE. FITTINGS SHALL BE STANDARD "BLACK" GRADE CAST IRON, DUCTILE IRON OR MALLEABLE IRON, UNLESS NOTED OTHERWISE.

ALTERNATIVE STEEL PIPE SCHEDULES ALLOWED BY NFPA 13 ARE NOT ACCEPTABLE ON THIS PROJECT.

ALL FIRE PROTECTION PIPING, FITTINGS, SUPPORTS AND ACCESSORIES IN EXPOSED AREAS SHALL BE PREPARED FOR FINISH PAINTING. PIPING, FITTINGS, SUPPORTS AND ACCESSORIES IN MECHANICAL ROOMS SHALL BE PAINTED OSHA RED. ALL PAINTING SHALL BE PERFORMED BY OTHERS.

FIRE PROTECTION CONTRACTOR SHALL PROVIDE PROTECTION FOR SPRINKLER HEADS IN AREAS WHERE THE CEILING AND SURROUNDING AREAS ARE TO BE PAINTED. FIRE PROTECTION CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF SPRINKLER PROTECTION AFTER PAINTING WORK IS COMPLETE. ANY SPRINKLER HEAD WITH PAINT OR TEXTURE OVERSPRAY SHALL BE REPLACED BY THE FIRE PROTECTION CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE OWNER.

PROVIDE HEAD GUARDS ON ALL SPRINKLER HEADS AT OR BELOW AN ELEVATION OF 7'-0" AFF. OR THAT OTHERWISE MAY BE SUBJECT TO MECHANICAL DAMAGE, SUCH AS IN THE MECHANICAL ROOMS.

SEISMIC BRACING/ RESTRAINT IS NOT REQUIRED FOR THIS PROJECT.

FIRE PROTECTION PLANS SHALL BE SUBMITTED TO ALL REQUIRED LOCAL AND STATE AUTHORITIES.

FLEX SPACES

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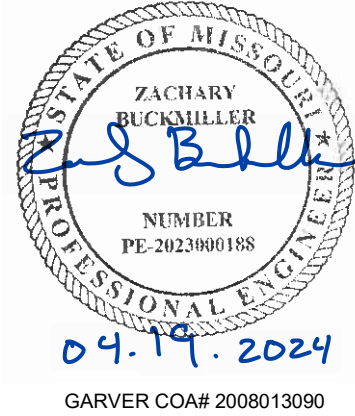
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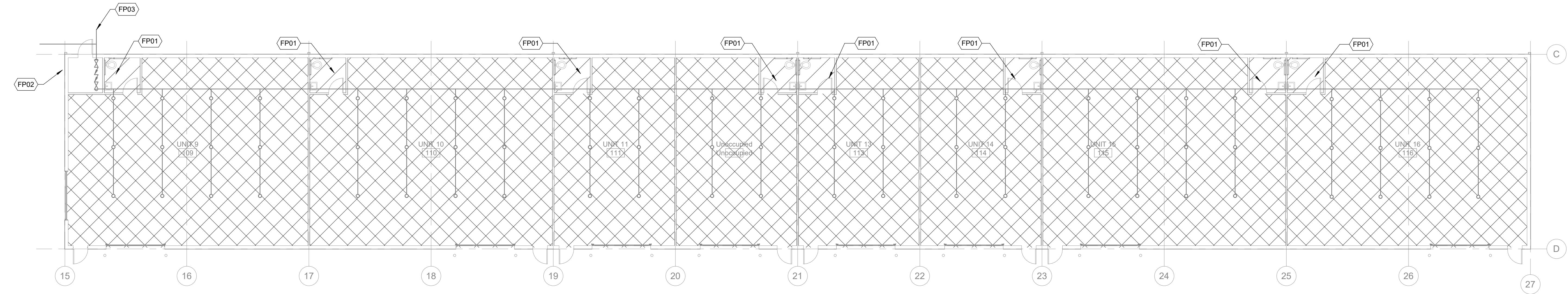


FIRE SUPPRESSION NOTES,
LEGENDS AND SPECIFICATIONS

Sheet

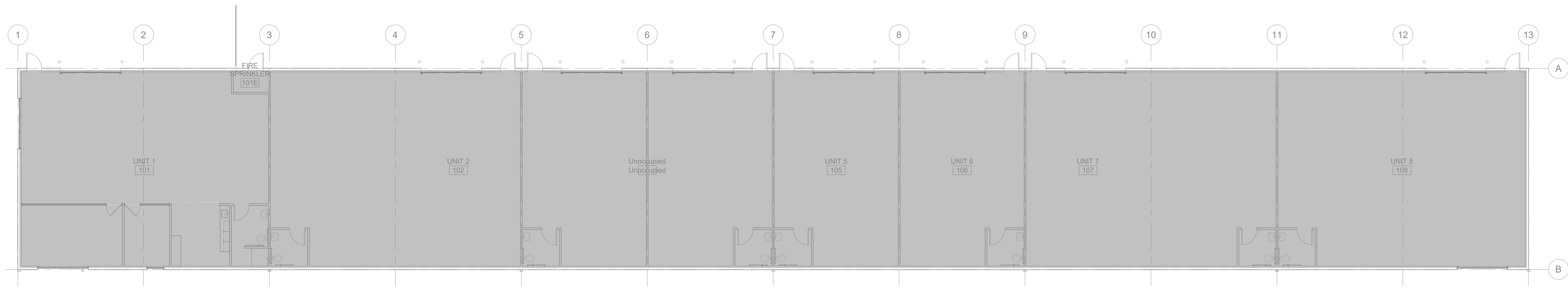
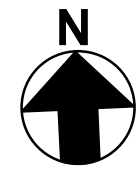
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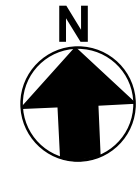


2 FIRE SUPPRESSION FLOOR PLAN - BUILDING B
SCALE: 3/32" = 1'-0"

- KEYED NOTES**
- FP01 PROVIDE FIRE PROTECTION HEADS ABOVE CEILING SPACED BASED ON ORDINARY HAZARD 1
 - FP02 SIAMESE FIRE DEPARTMENT CONNECTION. PROVIDE HORN AND STROBE ABOVE.
 - FP03 REFER TO CIVIL PLANS FOR FIRE SERVICE CONNECTION AND CONTINUATION.



1 FIRE SUPPRESSION FLOOR PLAN - BUILDING A
SCALE: 3/32" = 1'-0"



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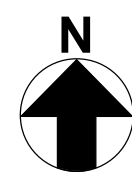
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FIRE SUPPRESSION FLOOR PLANS

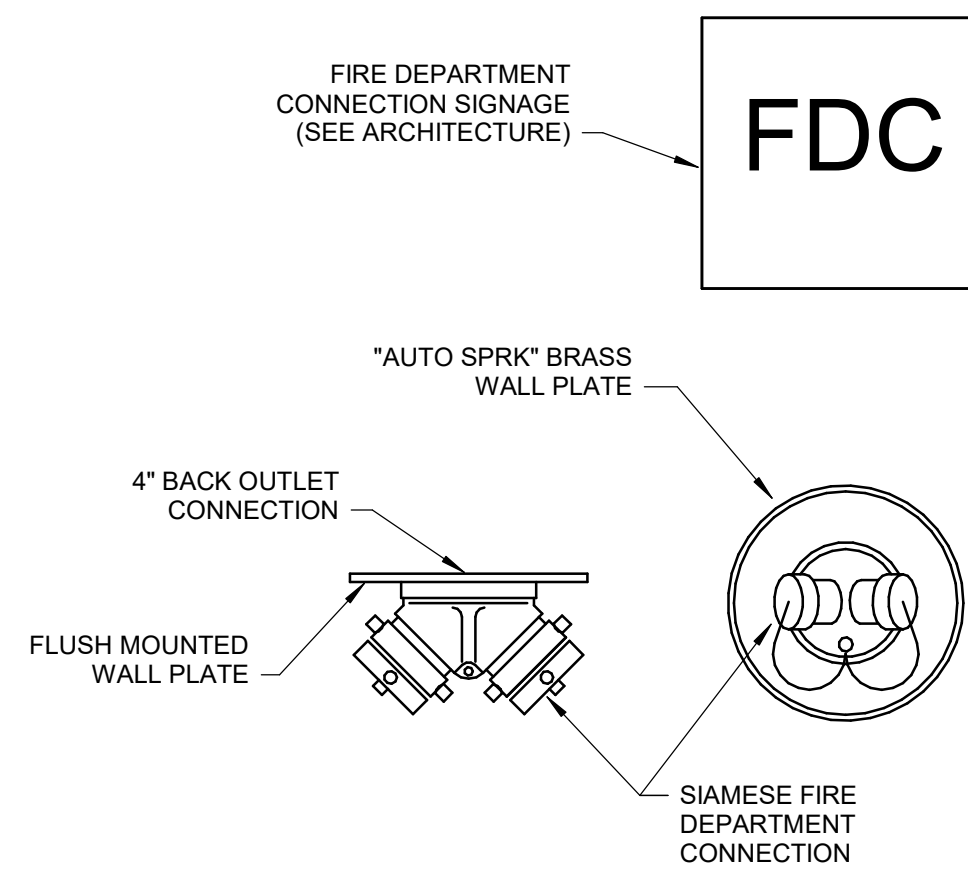
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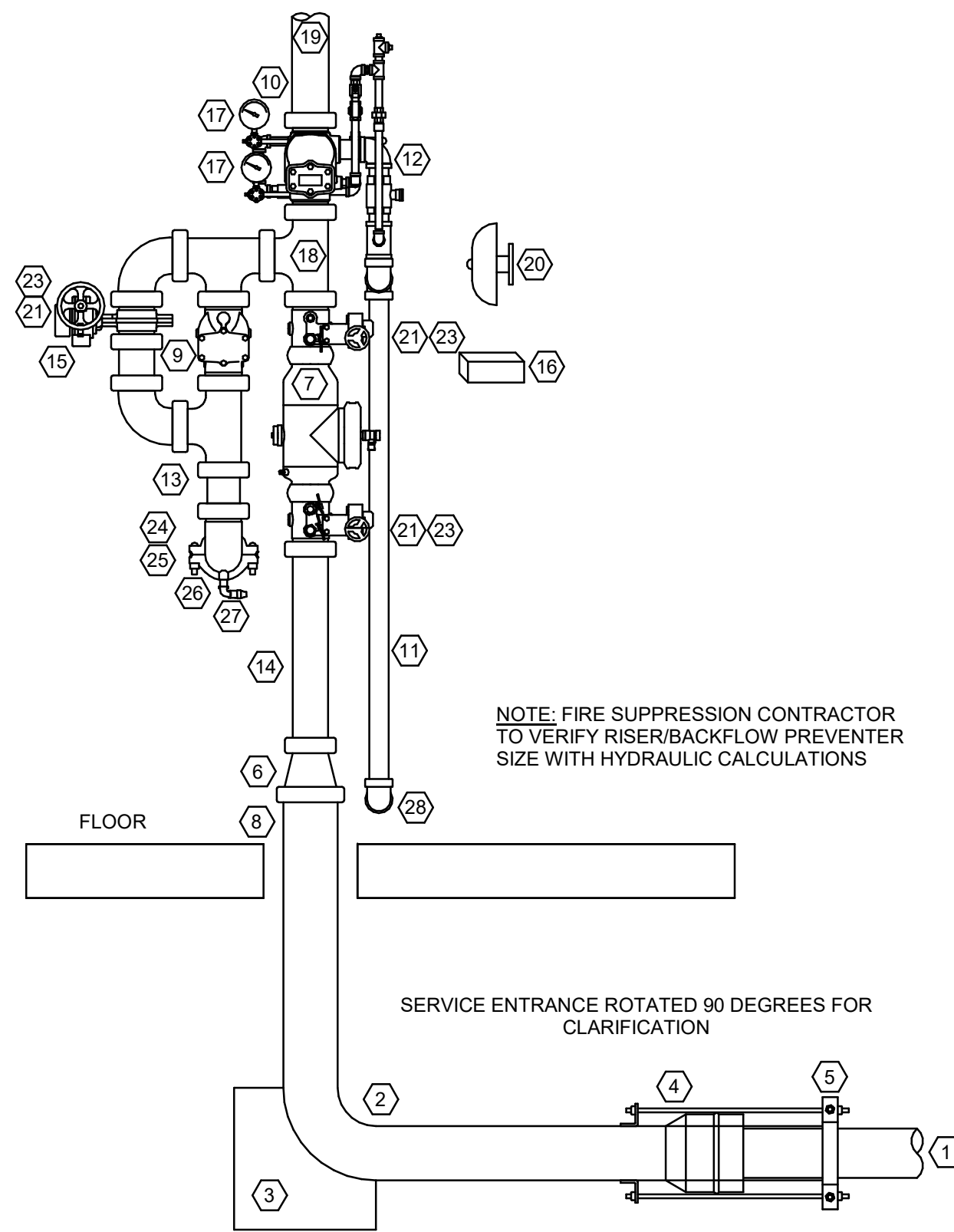
1 FDC DETAIL

SCALE: NONE



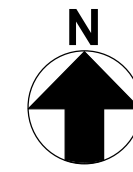
2 FIRE SUPPRESSION RISER DETAIL

SCALE: NOT TO SCALE



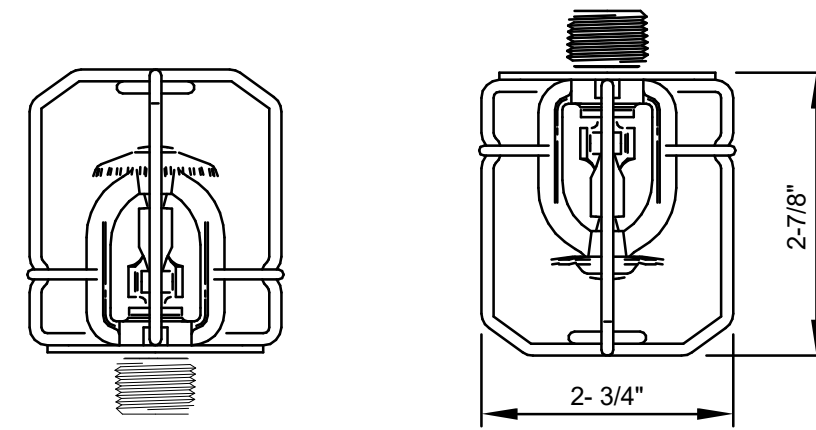
EQUIPMENT NOTES

- 6" UTILITY FIRE MAIN
- 6" STAINLESS STEEL ONE PIECE RISER (SHOWN MFxGROOVE CONFIGURATION)
- CONCRETE THRUST BLOCK (PER NFPA-24)
- CORROSION RESISTANT THREADED ROD THRUST RESTRAINT
- 6" GALVANIZED PIPE CLAMP
- 6" X 4" G X G REDUCER
- AMES C200 (OR EQUAL) 4" (GxG) DOUBLE CHECK ASSEMBLY WITH INDICATING BFG VALVES
- SLEEVE WITH NOMINAL 4-INCH ANNULAR CLEARANCE AND FILL WITH FLEXIBLE MATERIAL
- 4" GROOVED SWING CHECK VALVE
- 4" ALARM CHECK VALVE WITH TRIM
- 2" SCH. 40 THREADED DRAIN PIPE
- MAIN DRAIN VALVE
- 4" SCH. 40 GROOVED PIPE TO FIRE DEPARTMENT CONNECTION
- 4" SPOOL PIECE
- 4" GROOVED BUTTERFLY TEST VALVE
- SPARE HEAD BOX (STOCKED WITH HEADS & WRENCH)
- 3" WATER PRESSURE GAUGE
- HYDRAULIC DATA PLATE
- 4" SCH. 40 PIPE (SYSTEM FEED)
- WEATHERPROOF EXTERIOR BELL (BY FIRE ALARM CONTRACTOR)
- SUPERVISORY CIRCUIT (BY OTHERS)
- NOT USED
- VALVE SUPERVISORY "TAMPER" SWITCH
- 4" SCH. 40 GxG SPOOL (2.5" x 2.5" SIAMESE FIRE DEPARTMENT CONNECTION). COORDINATE FINAL FDC LOCATION WITH FIRE DEPARTMENT.
- "FDC" SIGNAGE: 18"x18" MINIMUM SIZE
- 4" GROOVED DRAIN ELBOW
- AUTOMATIC BALL DRIP VALVE
- EXTEND 1.25" DRAIN PIPE TO EXTERIOR DRAIN (INSTALL 1.25" GALVANIZED 45 ELBOW WITH WALL PLATE)



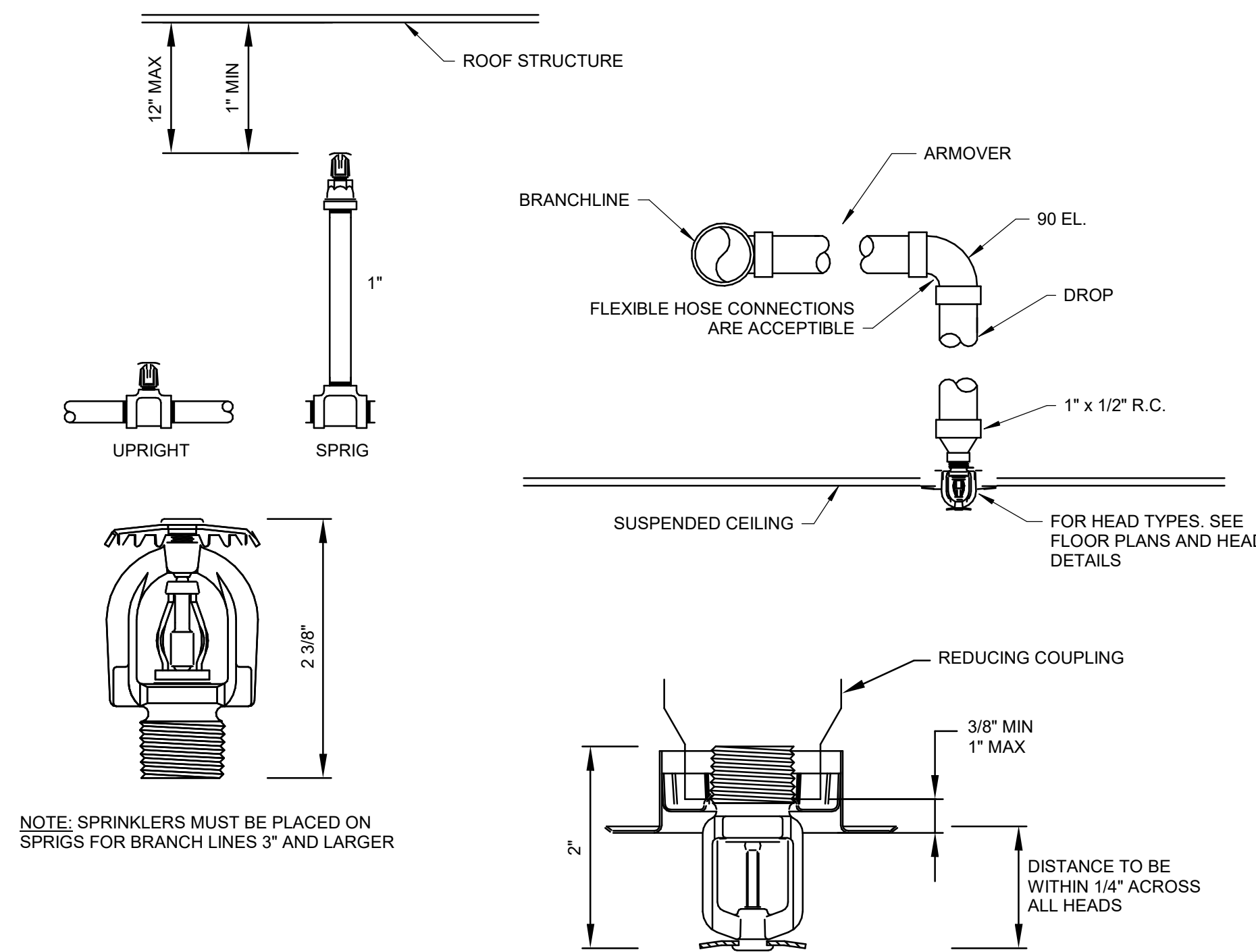
3 SPRINKLER GUARD DETAIL

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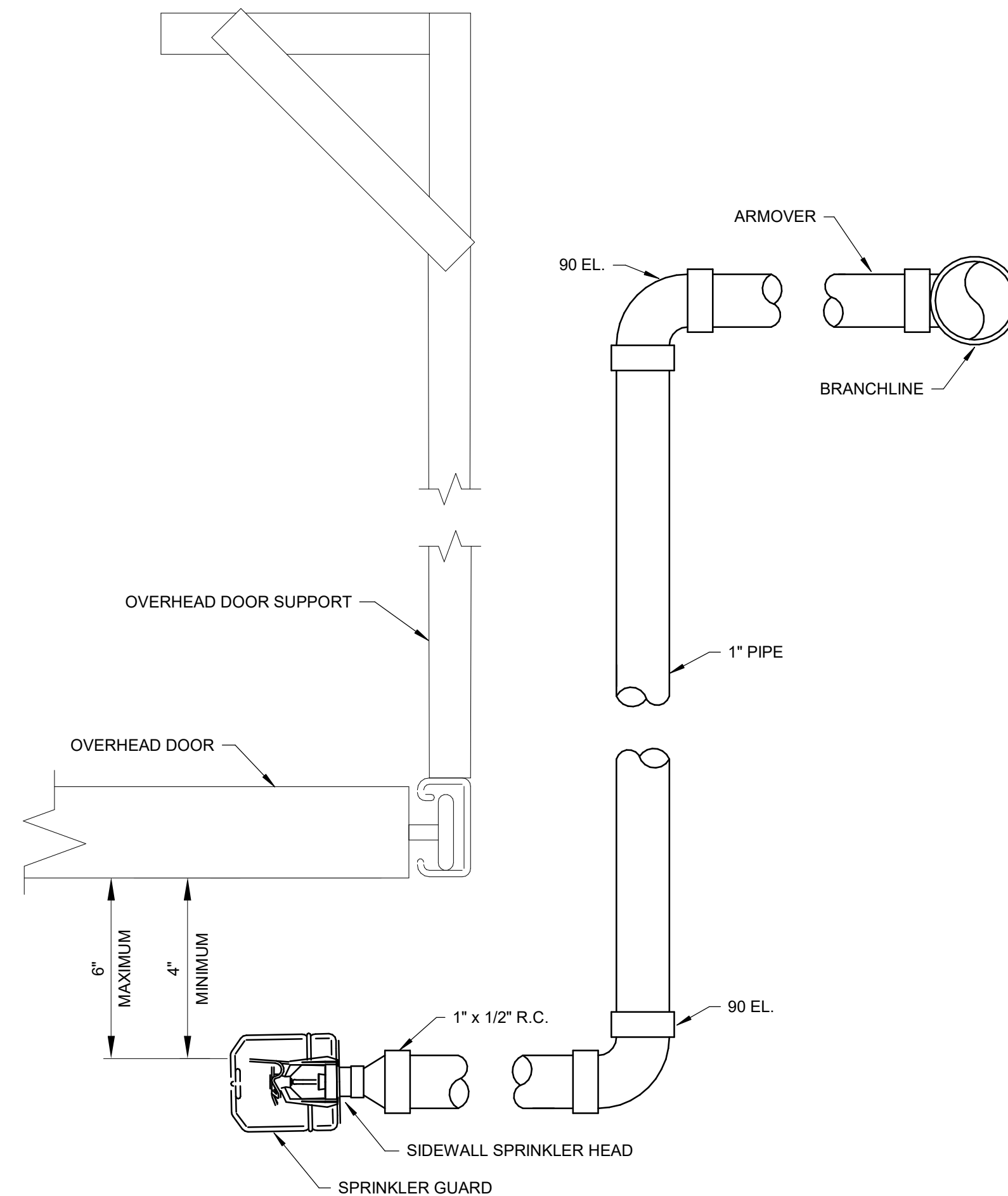
4 TYPICAL SPRINKLER DETAILS

SCALE: SCALE: NONE



5 OVERHEAD DOOR SPRINKLER DETAIL

SCALE: NONE



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FIRE SUPPRESSION DETAILS

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