OLDHAM VILLAGE

CONSTRUCTION PLANS

Section 7, Township 47 North, Range 31 West

LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

DEVELOPER:
Oldham Investors, LLC
David Olson
1700 132nd St, Suite 150
Phone: 314-413-3598

Tract Description

A tract of land being located in Sections 7 & 8, Township 47, Range 31, Lee's Summit, Jackson County Missouri, being more particularly described as follows:
Commencing at the East Quarter Corner of said Section 7; thence N87°41'40"W along the North line of said Section 7, a distance of 937.51 feet; thence S2°18'20"W, a distance of 43.88 feet to the Point of Beginning; thence N5°09'44"W, a distance of 458.00 feet; thence S2°26'55"W, a distance of 2068.05 feet; thence S87°13'04"E, a distance of 215.90 feet; thence N2°25'22"E, a distance of 555.23 feet; thence S88°17'49"E, a distance of 260.52 feet; thence S2°33'08"W, a distance of 221.84 feet; thence S87°48'02"E, a distance of 280.68 feet; thence S2°32'26"W, a distance of 303.63 feet; thence S88°04'40"E, a distance of 339.94 feet; thence S2°23'57"W, a distance of 37.99 feet; thence S87°48'18"E, a distance of 263.03 feet; thence S2°32'23"W, a distance of 493.69 feet; thence S2°23'15"W, a distance of 224.32 feet; thence S49°43'38"E, a distance of 34.42 feet; thence S88°29'59"E, a distance of 67.84 feet; thence N2°23'15"E, a distance of 12.78 feet; thence S87°30'25"E, a distance of 327.07 feet; thence N6°07'34"W, a distance of 1,338.91 feet; thence N8°50'52"W, a distance of 62.60 feet; thence N2°37'19"E, a distance of 158.07; thence along a curve to the left tangent to the preceding course and having a radius of 1,375.94 feet, an arc distance of 490.71 feet; thence N87°25'57"W, a distance of 74.50 feet; thence along a curve to the right tangent to the preceding course and having a radius of 250.00 feet, an arc distance of 183.56 feet; thence N43°39'15"W, a distance of 495.95 feet; thence N44°17'15"W, a distance of 122.21 feet; thence S45°42'45"W, a distance of 46.13 feet; thence S69°02'59"W, a distance of 78.09 feet; thence N52°34'07"W, a distance of 298.65 feet to the Point of Beginning.

GENERAL NOTES:

1 ~ ALL CONSTRUCTION SHALL CONFORM TO THE CITY OF LEE'S SUMMIT DESIGN AND CONSTRUCTION MANUAL AS ADOPTED BY ORDINANCE 5813.
2 ~ ALL REQUIRED EASEMENTS WITHIN THE BOUNDARY OF THIS PROJECT SHALL BE PROVIDED FOR ON THE FINAL PLAT.
3 ~ ANY REQUIRED EASEMENT LOCATED OUTSIDE OF THE BOUNDARY OF THIS PROJECT SHALL BE PROVIDED FOR BY SEPARATE INSTRUMENT PRIOR TO ISSUANCE OF CONSTRUCTION PERMITS.
4 ~THE CONTRACTOR SHALL CONTACT THE CITY'S DEVELOPMENT SERVICES ENGINEERING INSPECTION TO SCHEDULE A PRE-CONSTRUCTION MEETING WITH AN INSPECTOR PRIOR TO ANY LAND DISTURBANCE WORK AT (816) 969-1200.
5 ~ THE CONTRACTOR SHALL NOTIFY ENGINEERING SOLUTIONS AT 816.623.9888 OF ANY CONFLICT WITH THE IMPROVEMENTS PROPOSED BY THESE PLANS AND SITE CONDITIONS.
6 ~ THE CONTRACTOR SHALL NOTIFY THE CITY ENGINEER AND OBTAIN THE APPROPRIATE BLASTING PERMITS FOR A REQUIRED BLASTING. IF BLASTING IS ALLOWED, ALL BLASTING SHALL CONFORM TO STATE REGULATIONS AND LOCAL ORDINANCES.

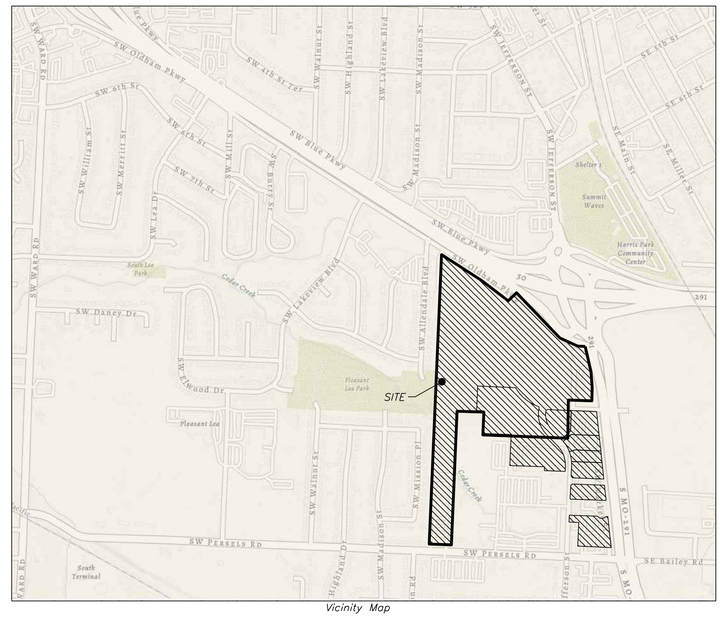
UTILITY COMPANIES:

THE FOLLOWING LIST OF UTILITY COMPANIES IS PROVIDED FOR INFORMATION ONLY. WE DO NOT OFFER ANY GUARANTEE OR WARRANTY THAT THIS LIST IS COMPLETE OR ACCURATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING ALL UTILITY COMPANIES THAT MAY BE AFFECTED BY THE PROPOSED CONSTRUCTION AND VERIFYING THE ACTUAL LOCATION OF EACH UTILITY LINE. THE CONTRACTOR SHALL NOTIFY ENGINEERING SOLUTIONS AT 816.623.9888 OF ANY CONFLICT WITH PROPOSED IMPROVEMENTS.

EVERGY ~ 298-1196
MISSOURI GAS ENERGY ~ 756-5261
SOUTHWESTERN BELL TELEPHONE ~ 761-5011
COMCAST CABLE ~ 795-1100
WILLIAMS PIPELINE ~ 422-6300
CITY OF LEE'S SUMMIT PUBLIC WORKS ~ 969-1800
CITY OF LEE'S SUMMIT DEVELOPMENT ENGINEERING INSPECTION AT 816.969.1200
CITY OF LEE'S SUMMIT WATER UTILITIES ~ 969-1900
MISSOURI ONE CALL (DIG RITE) ~ 1-800-344-7483

OIL - GAS WELLS
ACCORDING TO EDWARD ALTON MAY JR'S ENVIRONMENTAL IMPACT STUDY OF ABANDONED OIL AND GAS WELLS IN LEE'S SUMMIT, MISSOURI IN 1995, THERE ARE NOT OIL AND GAS WELLS WITHIN 185 FEET OF THE PROPERTY AS SURVEYED HEREON.

FLOOD INFORMATION:
The property is located in Zone "X" areas outside the 100 year flood plain per FEMA Map 29095C0419G, dated January 20, 2017



Vicinity Map

SITE LOCATION MAP

Summary of Quantities:

ITEM AND DESCRIPTION	UNIT	ESTIMATED QUANTITY
ASPHALT PAVING	S.Y.	16,680.00
CURBING	FT	8,453.00
5' SIDEWALK	S.F.	52,075.00
MoDOT Type 5 Base	S.Y.	20,220.00
GEOGRID	S.Y.	20,220.00
ADA SIDEWALK RAMP	UNIT	18
STORM	FT	
72" HDPE	FT	534.13
60" HDPE	FT	520.05
48" HDPE	FT	559.66
42" HDPE	FT	751.64
36" HDPE	FT	1,063.63
30" HDPE	FT	297.39
24" HDPE	FT	1,176.14
18" HDPE	FT	481.97
15" HDPE	FT	202.03
60" RCP	FT	97.35
48" RCP	FT	222.92
42" RCP	FT	196.77
36" RCP	FT	107.85
30" RCP	FT	98.40
24" RCP	FT	235.41
15" RCP	FT	43.49

INDEX OF SHEETS:

3 REVISED INDEX OF SHEETS

N
W E
S

LEGEND:

B/L	– BUILDING SET-BACK
C/A	– COMMON AREA
D/E	– DRAINAGE EASEMENT
FND.	– FOUND
L/E	– LANDSCAPE EASEMENT
L.N.A.	– LIMITS OF NO ACCESS
R/W	– RIGHT OF WAY
SAN	– SANITARY SEWER LINE
S/W	– SIDEWALK
U/E	– UTILITY EASEMENT
W	– WATER LINE
ST	– STORM SEWER LINE

ENGINEER'S CERTIFICATION:

I HEREBY CERTIFY THAT THIS PROJECT HAS BEEN DESIGNED AND THESE PLANS PREPARED IN ACCORDANCE WITH THE CURRENT DESIGN CRITERIA OF THE CITY OF LEE'S SUMMIT, MISSOURI AND THE STATE OF MISSOURI. I FURTHER CERTIFY THAT THESE PLANS WERE DESIGNED IN ACCORDANCE TO AASHTO STANDARDS.

ENGINEERING SOLUTIONS
ENGINEERING & SURVEYING
50 SE 30TH STREET
LEE'S SUMMIT, MO 64082
P:(816) 623-9888 F:(816)623-9849

Professional Registration
Missouri
Engineering 2005002186-D
Surveying 2005008319-D
Kansas
Engineering E-1695
Surveying LS-218
Oklahoma
Engineering 6254
Nebraska
Engineering CA2821

Oldham Village
Lee's Summit, Jackson County, Missouri

Project: OLDHAM MARKETPLACE, LSMO
Issue Date: November 5, 2024

Street & Storm Cover Sheet
Construction Plans for:
Oldham Village
Lee's Summit, Jackson County, Missouri

STATE OF MISSOURI
MATTHEW J. SCHLICHT
NUMBER
PE-2006019708
NOV 05, 2024
PROFESSIONAL ENGINEER

Matthew J. Schlicht
MO PE 2006019708
KS PE 19071
OK PE 25226
NE PE E-14335

REVISIONS

1 REV. 12/10/2024
2 REV. 1/2/2025
3 REV. 2/6/2025
REV. 3/5/2025
4 REV. 3/24/2025
5 REV. 4/15/2025

C.001

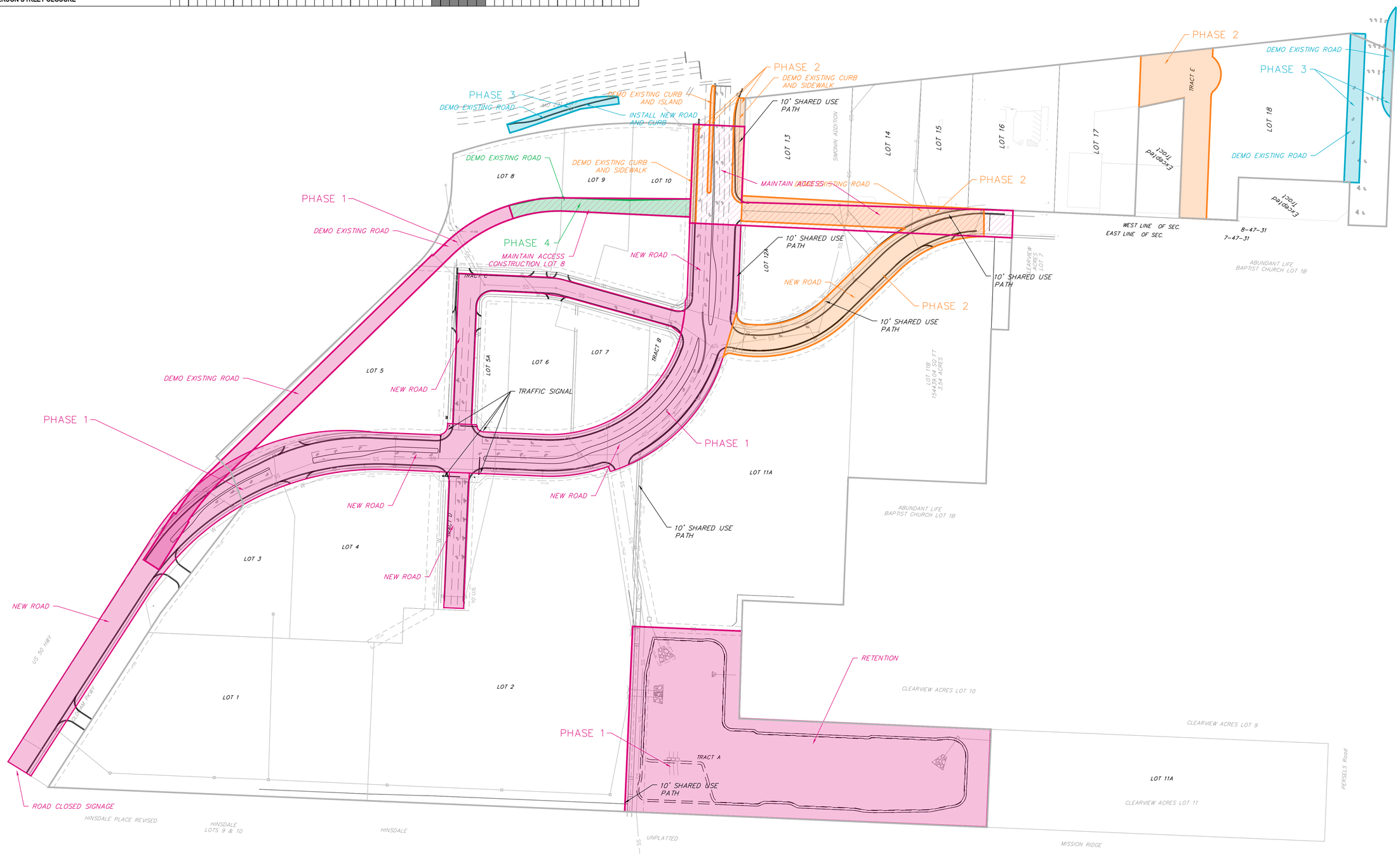
	CONSTRUCTION ACTIVITY	MAR	APRIL	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR
		2025 WORK SCHEDULE											2026 WORK SCHEDULE	
1	Demo Existing Buildings													
2	PHASE 1													
3	PHASE 2													
4	PHASE 3													
5	PHASE 4													
6	PHASE 5													
7	OLDHAM PKWY CLOSURE													
8	OLDHAM PKWY OPEN TO LOCAL TRAFFIC													
9	JEFFERSON STREET CLOSURE													

North

0 50' 100' 200'

CONSTRUCTION PHASING OVERALL SITE PLAN

SCALE: 1" = 100'



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Oldham Village
Lee's Summit, Jackson County, Missouri

Project: OLDHAM MARKETPLACE, LSMO

Issue Date: November 5, 2024

CONSTRUCTION PHASING
OVERALL SITE PLAN
Construction Plans for:
Oldham Village
Lee's Summit, Jackson County, Missouri

STATE OF MISSOURI
MATTHEW J. SCHLICHT
NUMBER
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REVISIONS

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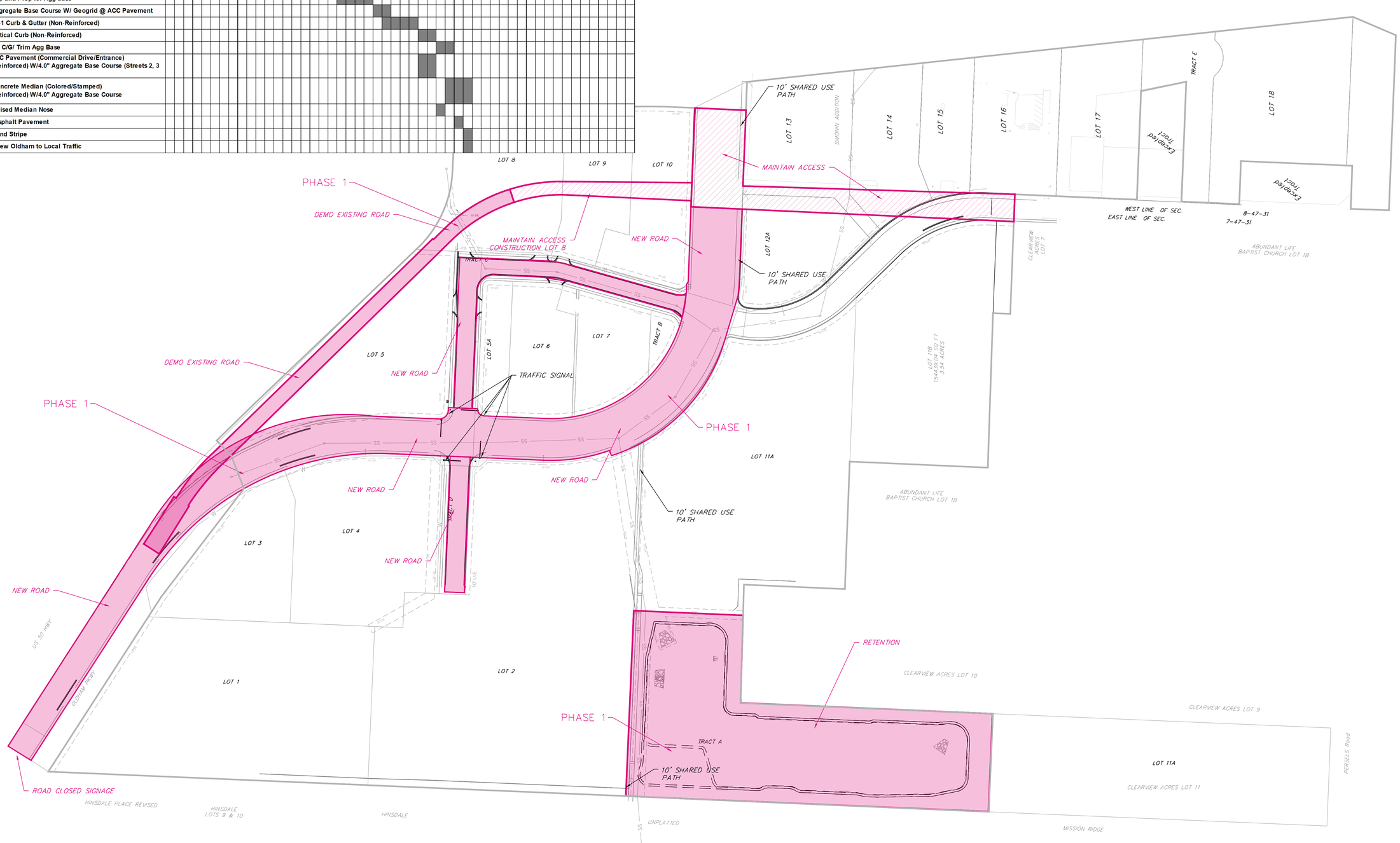
C.010

	CONSTRUCTION ACTIVITY	MAR	APRIL	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR
		2025 WORK SCHEDULE											2026 WORK SCHEDULE	
68	Clearing and Removals													
69	Mass Grading													
70	Retaining Walls													
71	Sanitary Sewer													
72	Storm Sewer													
73	Public													
74	Private													
75	Waterline													
76	Evergy Conduit													
77	Order Signal Poles													
78	Cleanup and Prep for Agg base													
79	7.0" Aggregate Base Course W/ Geogrid @ ACC Pavement													
80	2.0' CG-1 Curb & Gutter (Non-Reinforced)													
81	C-1 Vertical Curb (Non-Reinforced)													
82	Backfill C/G/ Trim Agg Base													
83	8.0" PCC Pavement (Commercial Drive/Entrance) (Non-Reinforced) W/4.0" Aggregate Base Course (Streets 2, 3 & 6)													
84	PCC Concrete Median (Colored/Stamped) (Non-Reinforced) W/4.0" Aggregate Base Course													
85	PCC Raised Median Nose													
86	10.0" Asphalt Pavement													
87	Signs and Stripe													
88	Open New Oldham to Local Traffic													



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Oldham Village
Lee's Summit, Jackson County, Missouri

Project: OLDHAM LEE'S SUMMIT-PLACE, LSMO
Issue Date: November 5, 2024

CONSTRUCTION PHASING PHASE 1
Construction Plans for:
Oldham Village
Lee's Summit, Jackson County, Missouri

STATE OF MISSOURI
MATTHEW J. SCHLICHT
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REVISIONS

1 REV. 12/10/2024
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REV. 3/5/2025
4 REV. 3/24/2025

C.011

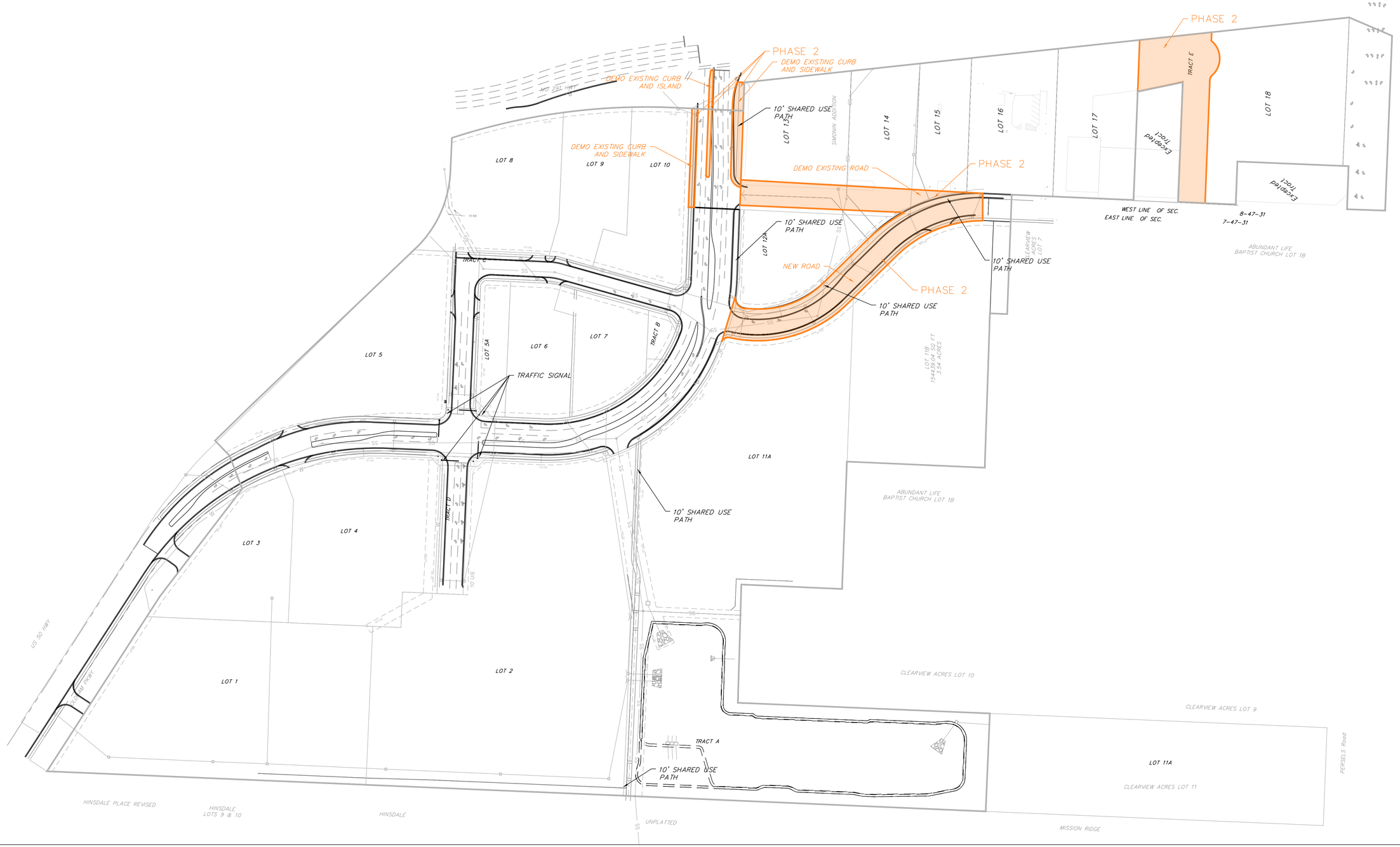
	CONSTRUCTION ACTIVITY	MAR	APRIL	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR
		2025 WORK SCHEDULE											2026 WORK SCHEDULE	
90	Close E/W Oldham and Jefferson													
91	Complete Jefferson Street Connection													
92	Complete South and Island Improvements on Existing Oldham													
93	Open Relocated Jefferson and E/W Oldham													

North

0 50' 100' 200'

CONSTRUCTION PHASING PHASE 2

SCALE: 1" = 100'



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Oldham Village
Lee's Summit, Jackson County, Missouri

Project: OLDHAM MARKETPLACE, LSMO

Issue Date: November 5, 2024

CONSTRUCTION PHASING PHASE 2
Construction Plans for:
Oldham Village
Lee's Summit, Jackson County, Missouri

STATE OF MISSOURI
MATTHEW J. SCHLICHT
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C.012

	CONSTRUCTION ACTIVITY	MAR	APRIL	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR
		2025 WORK SCHEDULE											2026 WORK SCHEDULE	
95	Complete Percels Improvements													
96	Complete 291 Improvements													
97	Complete Imporvements on North Side of Existing Oldham													

North

0 50' 100' 200'

CONSTRUCTION PHASING PHASE 3

SCALE: 1" = 100'

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Oklahoma
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Engineering CA2821

Oldham Village
Lee's Summit, Jackson County, Missouri

Project: OLDHAM MARKETPLACE. LSMO

Issue Date: November 5, 2024

CONSTRUCTION PHASING PHASE 3
Construction Plans for:
Oldham Village
Lee's Summit, Jackson County, Missouri

STATE OF MISSOURI
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4 REV. 3/24/2025

C.013

	CONSTRUCTION ACTIVITY	MAR	APRIL	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR
		2025 WORK SCHEDULE											2026 WORK SCHEDULE	
99	4.0" PCC Sidewalk (Non-Reinforced) W/4.0" Aggregate Base Course													
100	6.0" PCC Trail (Non-Reinforced) W/4.0" Aggregate Base Course													
101	ADA Ramps													
102	Backfill Sidewalk													
103	Street Light													
104	Signal Pole Delivery													
105	Complete Traffic Signal													
106	Open Oldham to Thru Traffic													

North

0 50' 100' 200'

CONSTRUCTION PHASING PHASE 4

SCALE: 1" = 100'

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Oldham Village
Lee's Summit, Jackson County, Missouri

Project: OLDHAM VILLAGE MARKETPLACE, LSMO

Issue Date: November 5, 2024

CONSTRUCTION PHASING PHASE 4
Construction Plans for:
Oldham Village
Lee's Summit, Jackson County, Missouri

STATE OF MISSOURI
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REVISIONS

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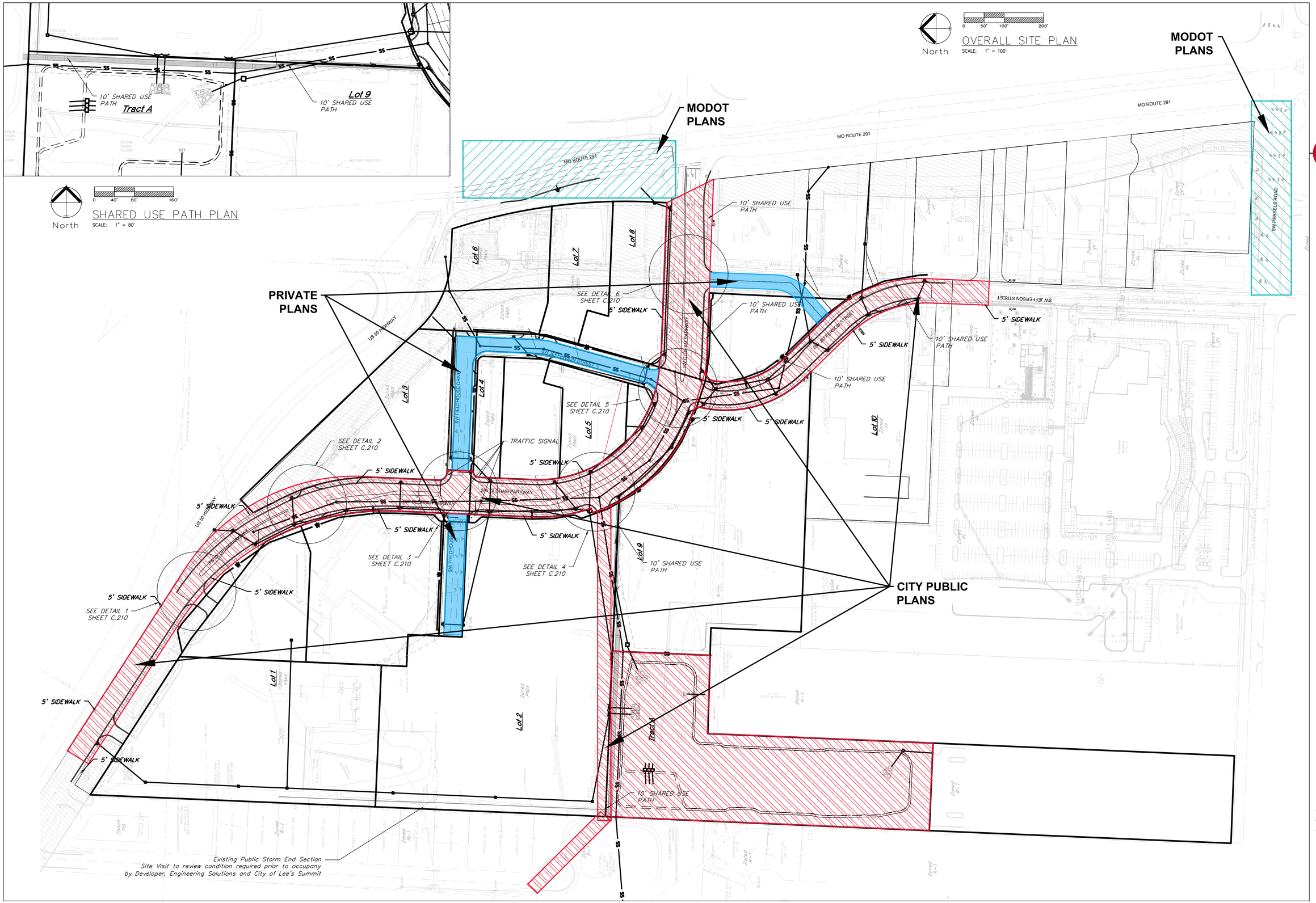

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Oldham Village
Lee's Summit, Jackson County, Missouri

Project: OLDHAM VILLAGE/TPLACE, LSMO
Issue Date: November 5, 2024

OVERALL SITE PLAN
Construction Plans for:
Oldham Village
Lee's Summit, Jackson County, Missouri

STATE OF MISSOURI
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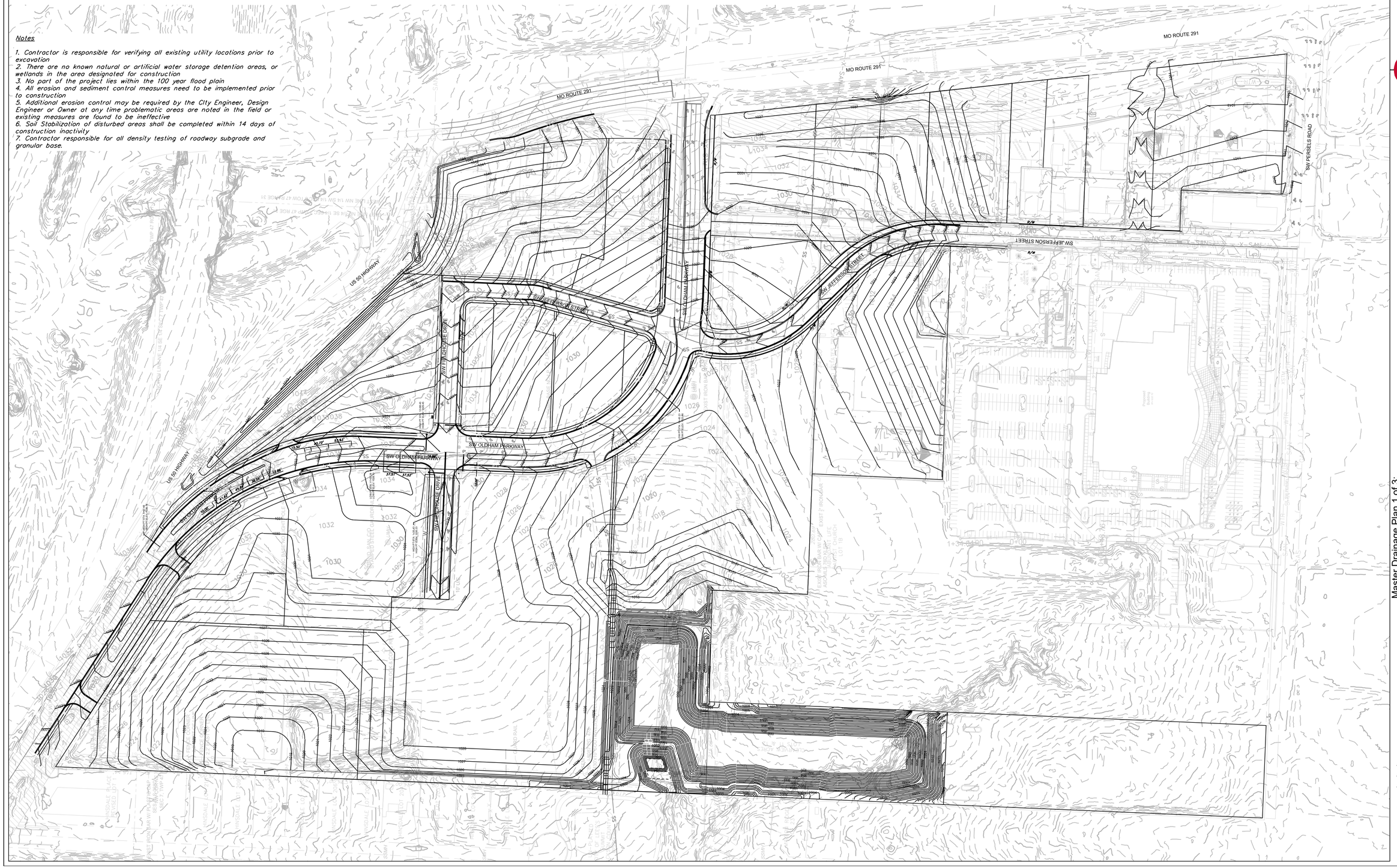
GRADING PLAN

SCALE: 1" = 100'



Notes

1. Contractor is responsible for verifying all existing utility locations prior to excavation
2. There are no known natural or artificial water storage detention areas, or wetlands in the area designated for construction
3. No part of the project lies within the 100 year flood plain
4. All erosion and sediment control measures need to be implemented prior to construction
5. Additional erosion control may be required by the CIty Engineer, Design Engineer or Owner at any time problematic areas are noted in the field or existing measures are found to be ineffective
6. Soil Stabilization of disturbed areas shall be completed within 14 days of construction inactivity
7. Contractor responsible for all density testing of roadway subgrade and granular base.

ENGINEERING
ENGINEERING & SURVEYING
SOLUTIONS
50 SE 30TH STREET
LEE'S SUMMIT, MO 64082
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Professional Registration
Missouri
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Oldham Village
Lee's Summit, Jackson County, Missouri

Project:
OLDHAM MARKETPLACE, LSMO

Issue Date:
November 5, 2024

Master Drainage Plan 1 of 3:
Grading Plan
Construction Plans for:
Oldham Village
Lee's Summit, Jackson County, Missouri

MATTHEW J. SCHLICHT
NUMBER
PE-2006019708
Matthew J. Schlicht
3/24/2025

Matthew J. Schlicht
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NE PE E-14335

REVISIONS

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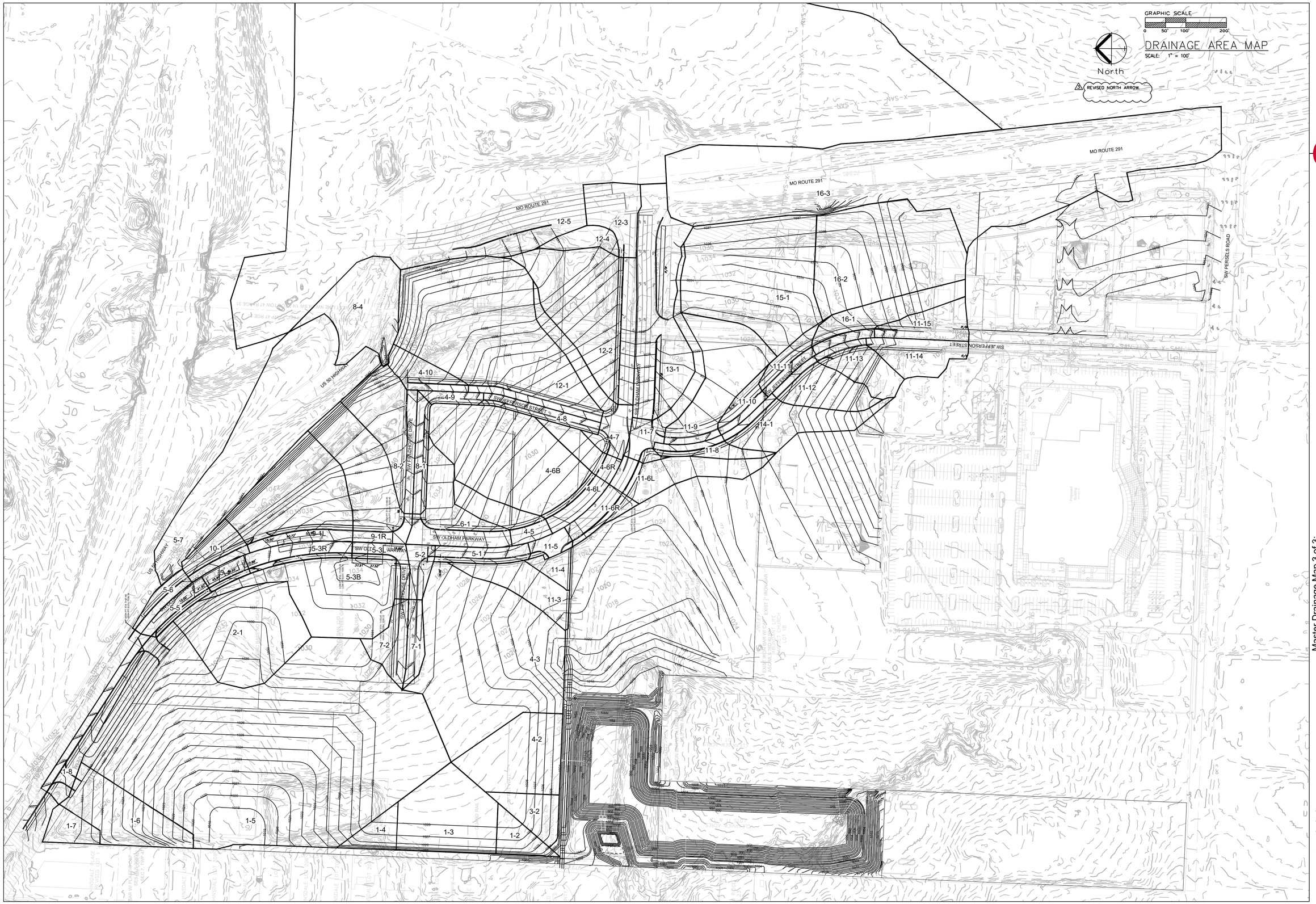

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Oldham Village
Lee's Summit, Jackson County, Missouri

Project:
OLDHAM
MARKETPLACE,
LSMO

Issue Date:
November 5, 2024

Master Drainage Map 3 of 3:
Drainage Area Map
Construction Plans for:
Oldham Village
Lee's Summit, Jackson County, Missouri

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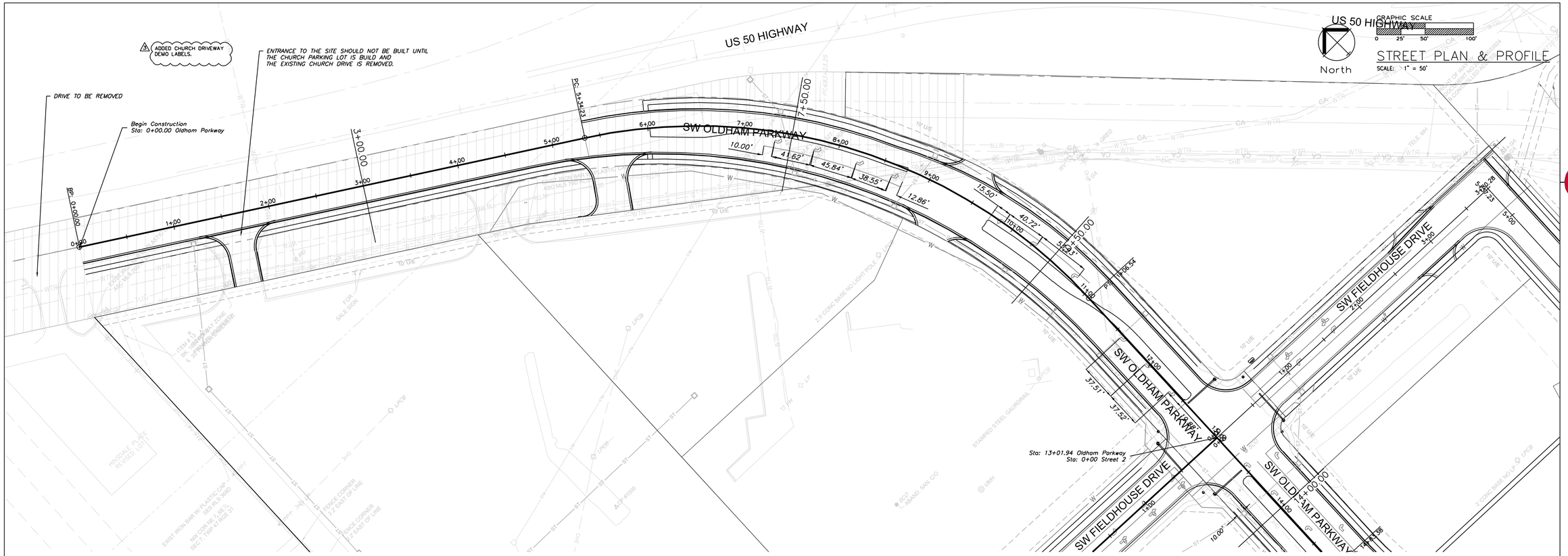

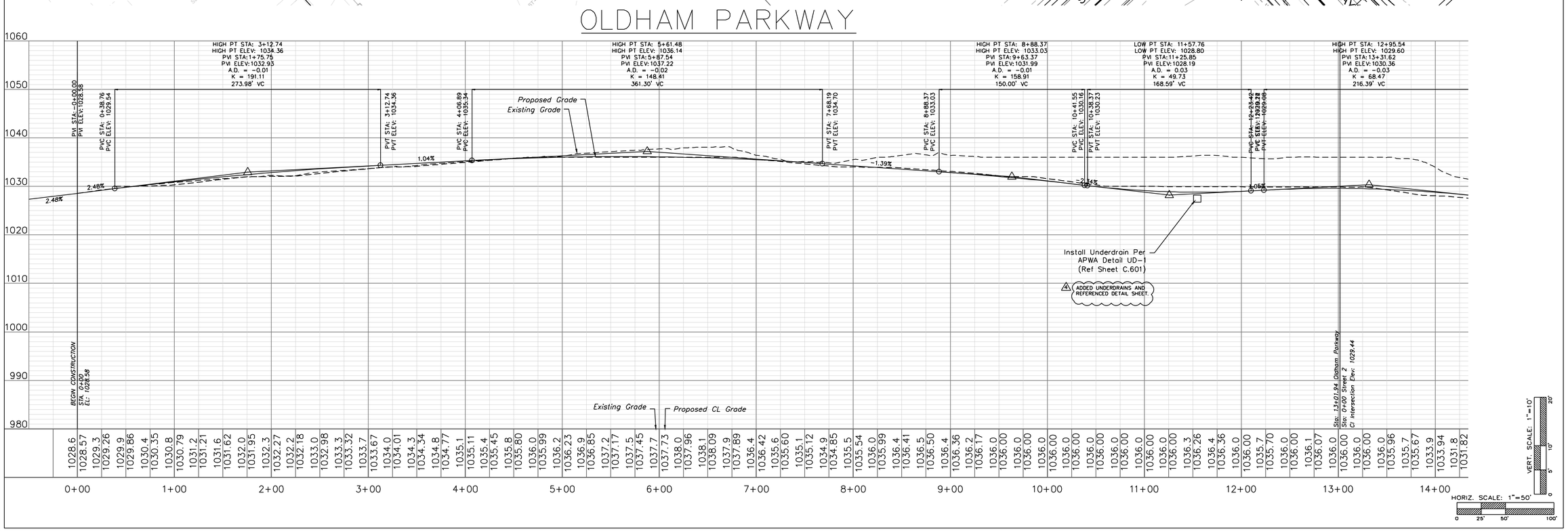

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Oldham Village
Lee's Summit, Jackson County, Missouri

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Street Plan and Profile
Construction Plans for:
Oldham Village
Lee's Summit, Jackson County, Missouri

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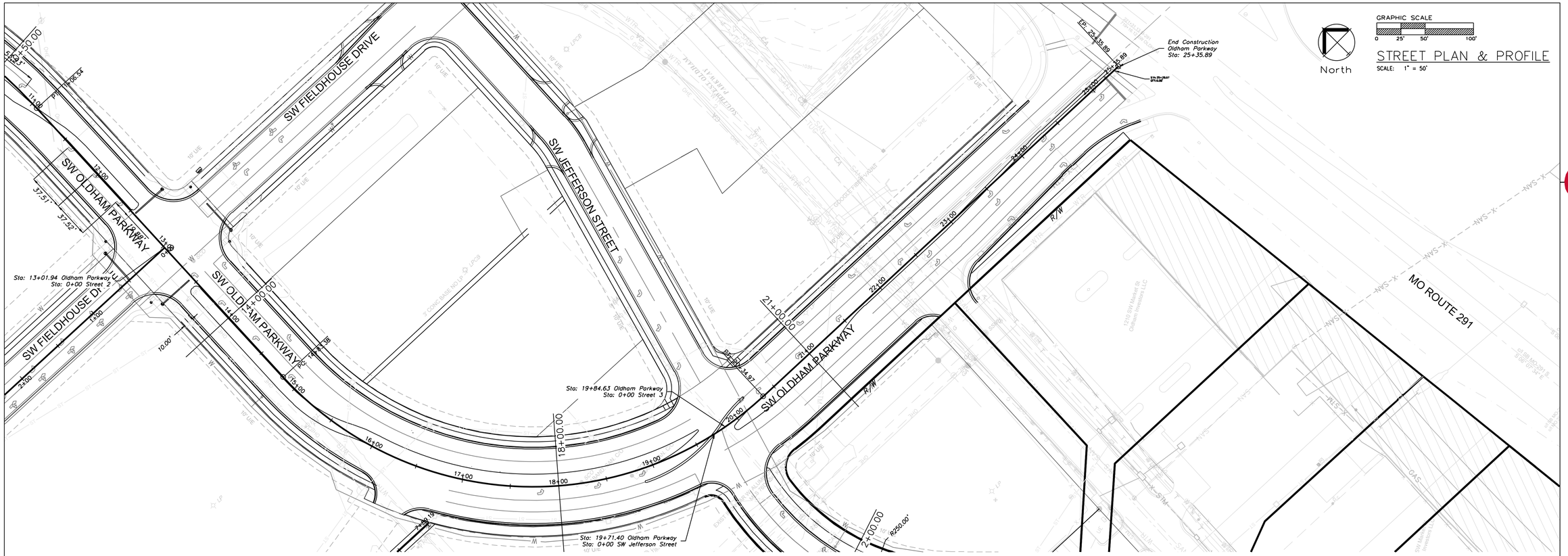
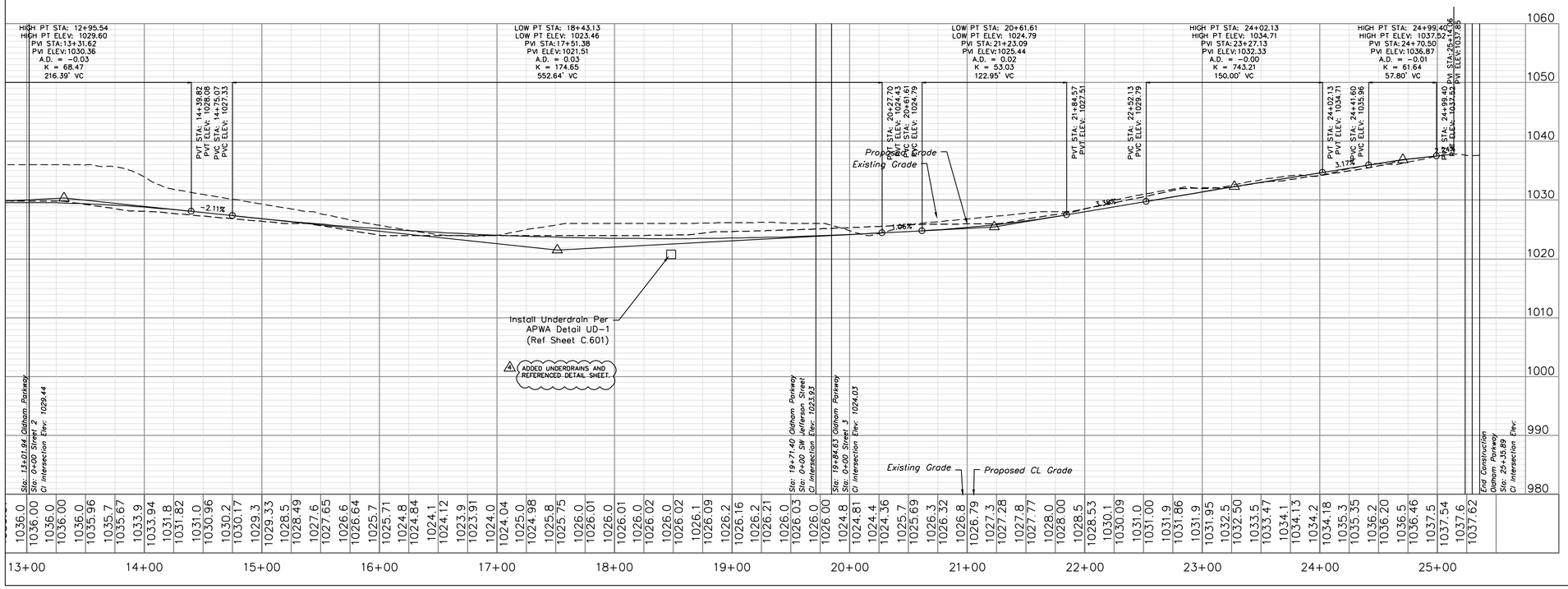
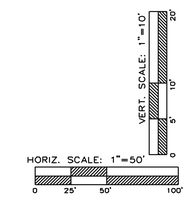
C.202



OLDHAM PARKWAY





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Professional Registration
Missouri
Engineering 2005002186-D
Surveying 2005008319-D
Kansas
Engineering E-1695
Surveying LS-218
Oklahoma
Engineering 6254
Nebraska
Engineering CA2821

Oldham Village
Lee's Summit, Jackson County, Missouri

Project: OLDHAM MARKETPLACE, LSMO
Issue Date: November 5, 2024

Street Plan and Profile
Construction Plans for:
Oldham Village
Lee's Summit, Jackson County, Missouri

STATE OF MISSOURI
MATTHEW J. SCHLICHT
NUMBER
2006019708
PROFESSIONAL ENGINEER

Matthew J. Schlicht
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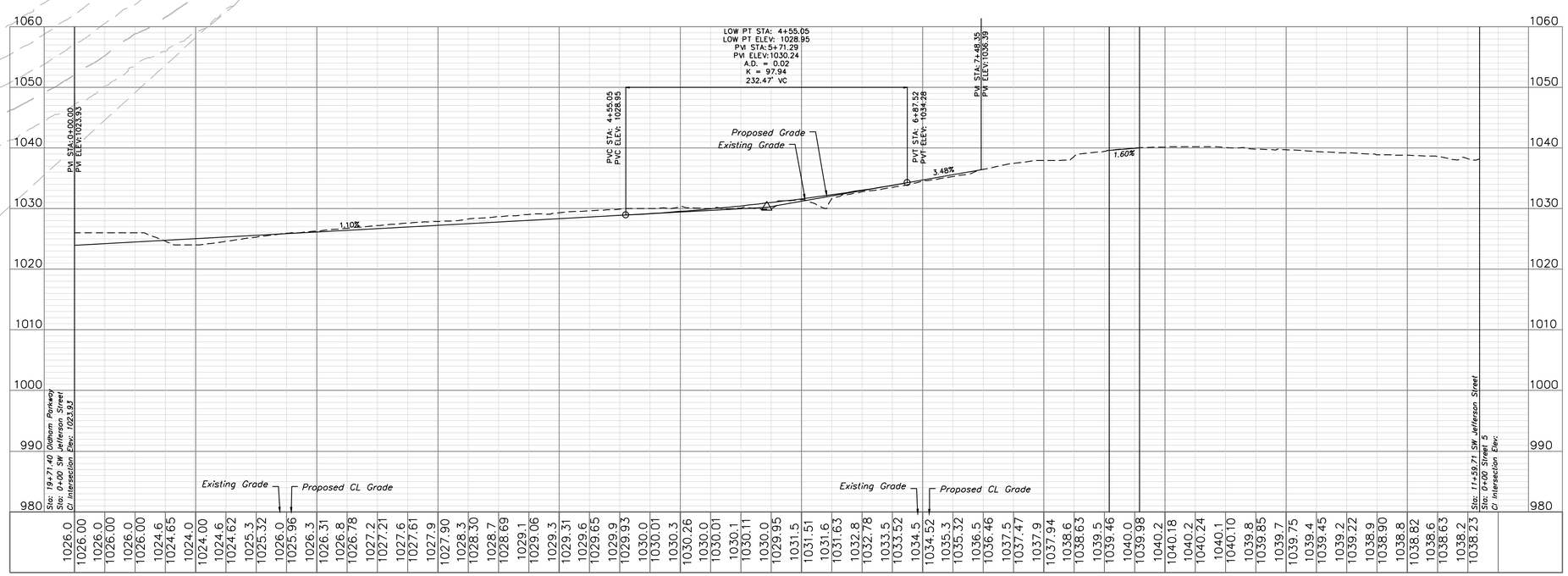
C.203

SW JEFFERSON STREET



HORIZ. SCALE: 1"=50'
0 25' 50' 100'

VERT. SCALE: 1"=10'
0 5' 10' 20'

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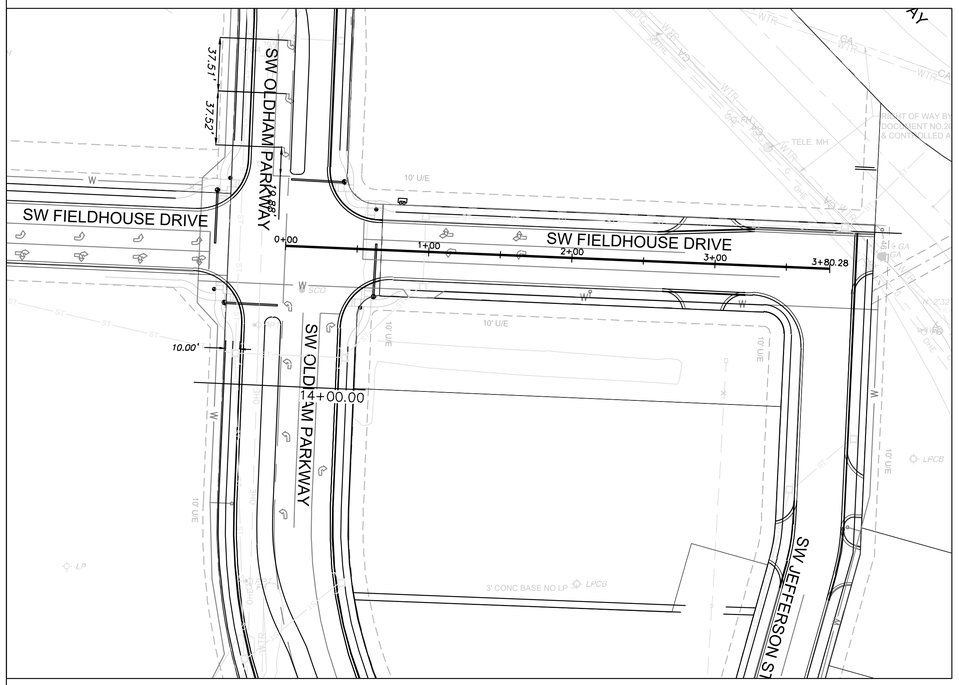
C.204

GRAPHIC SCALE
0 25' 50' 100'

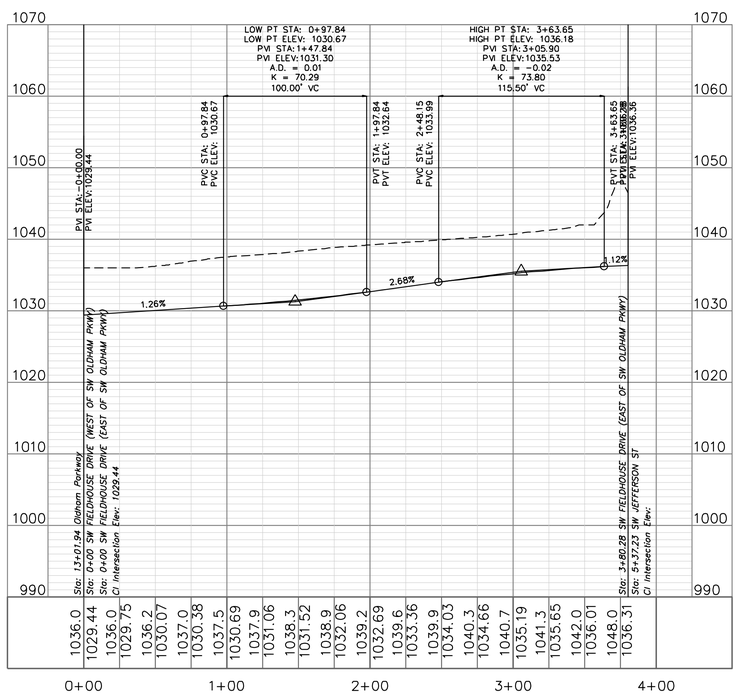
STREET PLAN & PROFILE

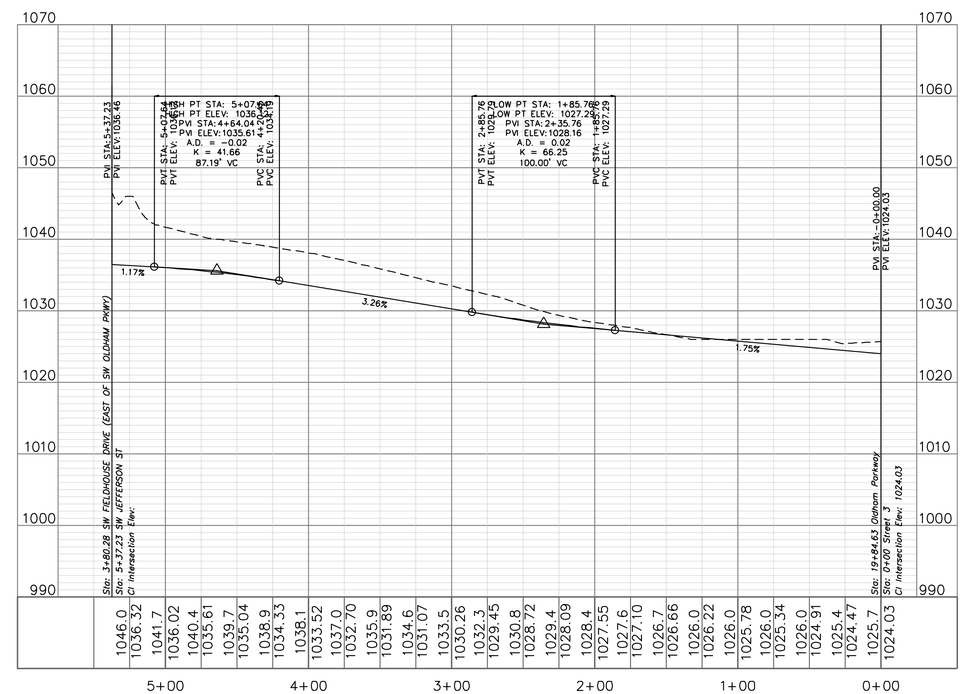
SCALE: 1" = 50'



SW FIELDHOUSE DR

SW JEFFERSON ST





VERT. SCALE: 1"=10'
0 5' 10' 20'

HORIZ. SCALE: 1"=50'
0 25' 50' 100'

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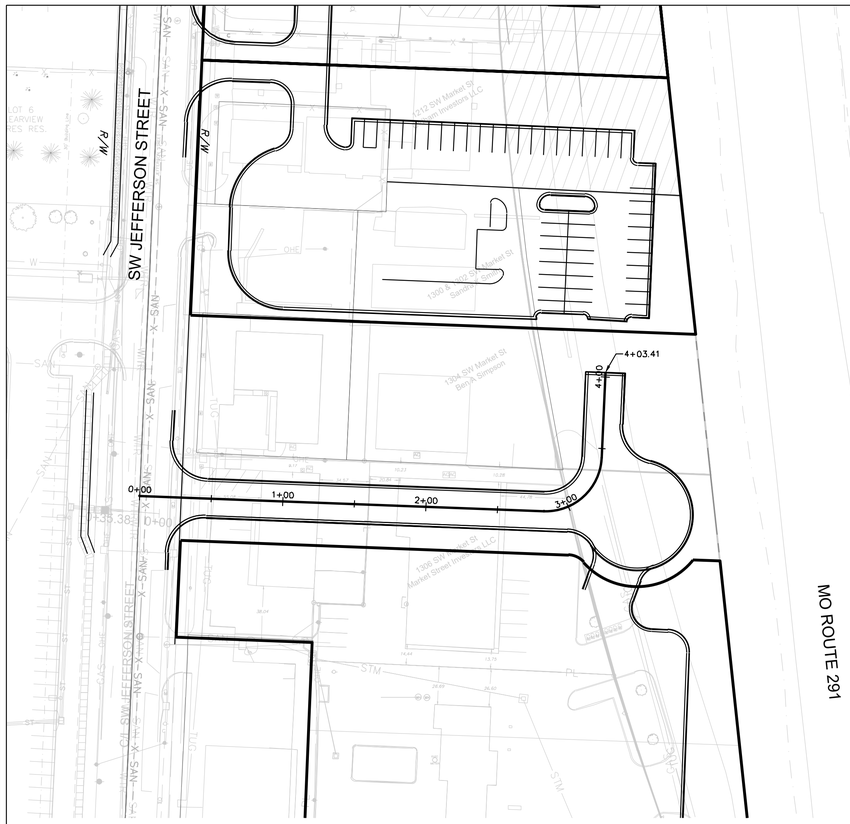
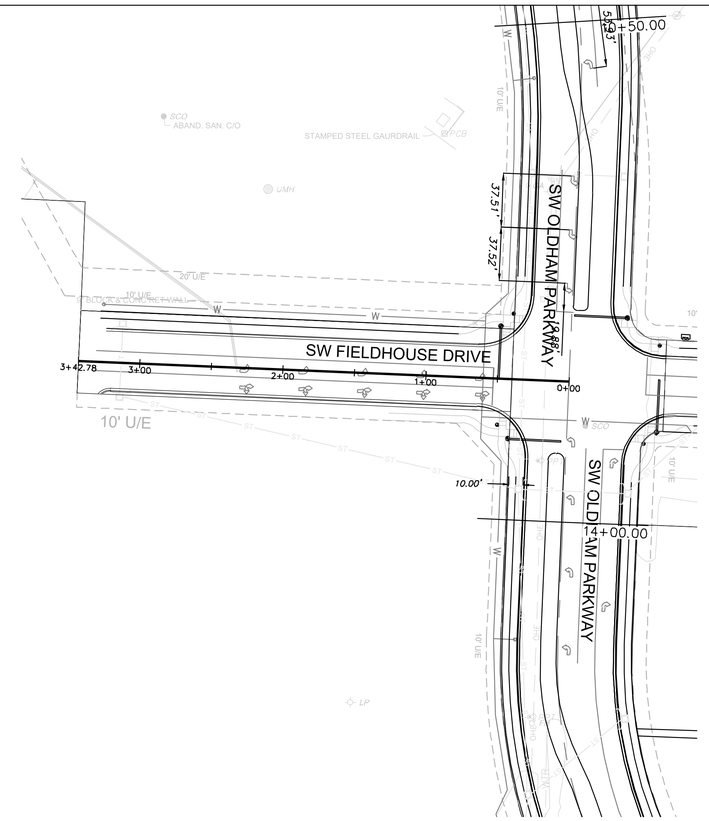
C.205



GRAPHIC SCALE
0 25' 50' 100'

STREET PLAN & PROFILE
SCALE: 1" = 50'

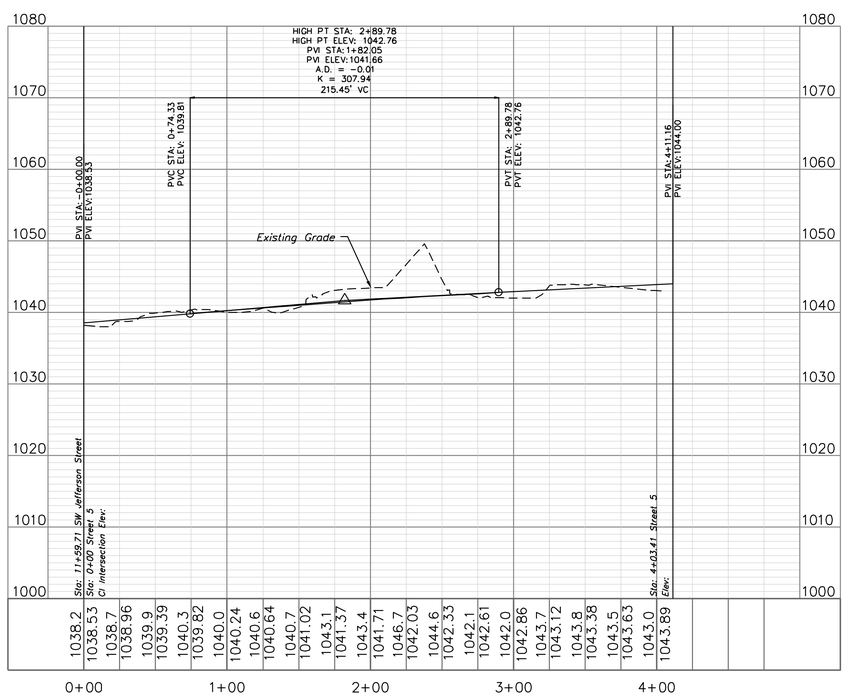
STREET 5



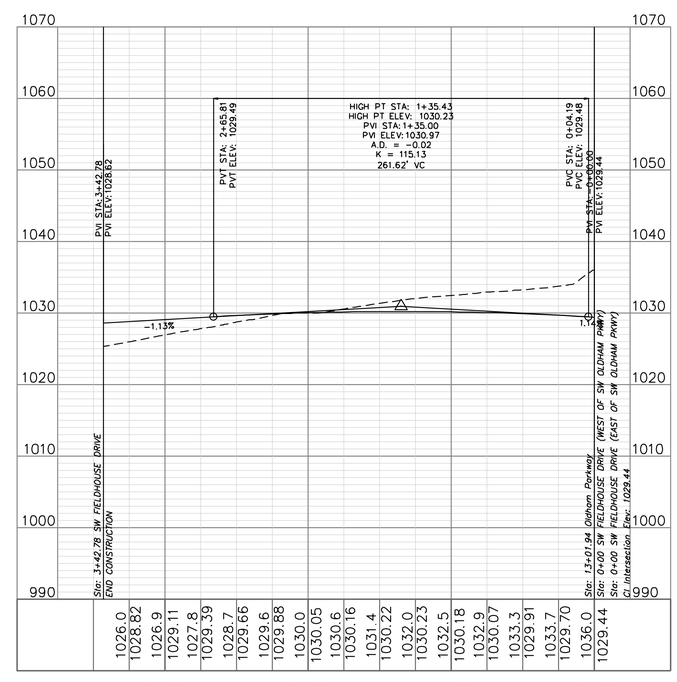
GRAPHIC SCALE
0 25' 50' 100'

STREET PLAN & PROFILE
SCALE: 1" = 50'

SW FIELDHOUSE DRIVE



VERT. SCALE: 1"=10'
0 5' 10' 20'
HORIZ. SCALE: 1"=50'
0 25' 50' 100'



VERT. SCALE: 1"=10'
0 5' 10' 20'
HORIZ. SCALE: 1"=50'
0 25' 50' 100'

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C.206

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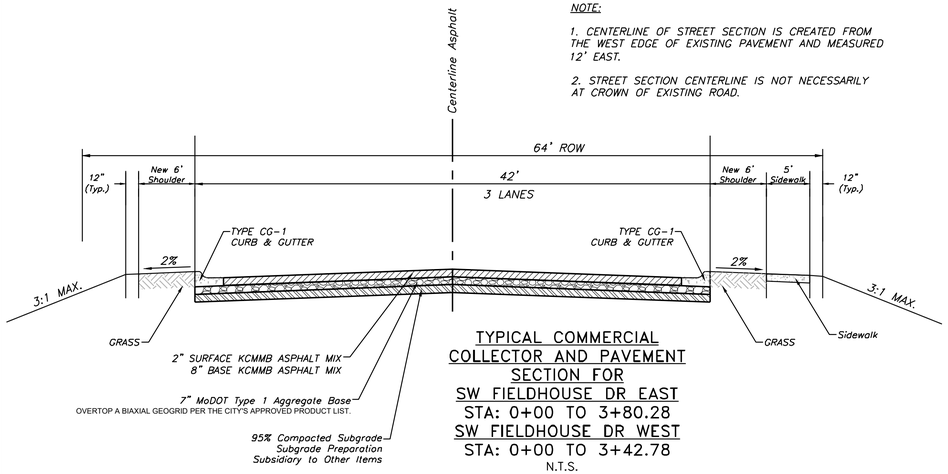
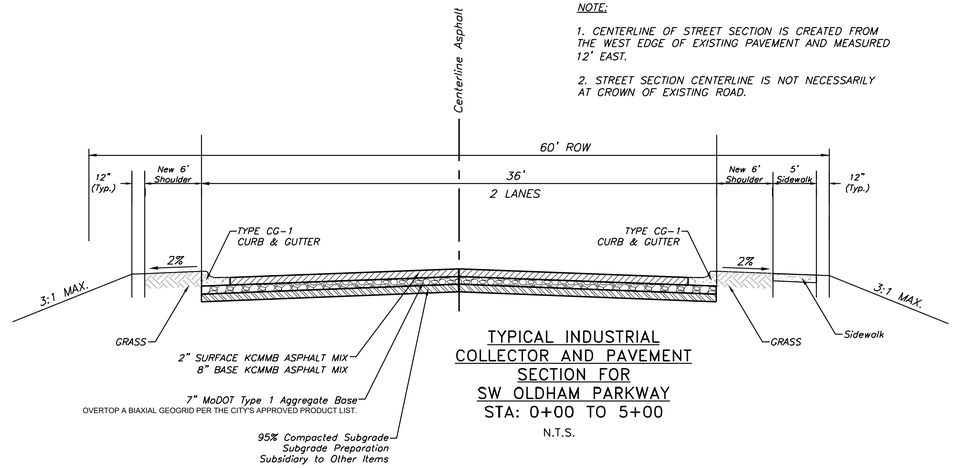
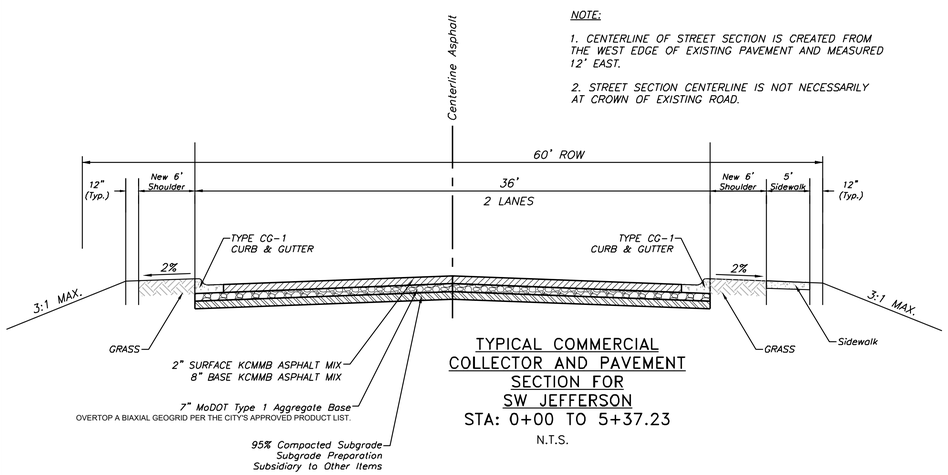


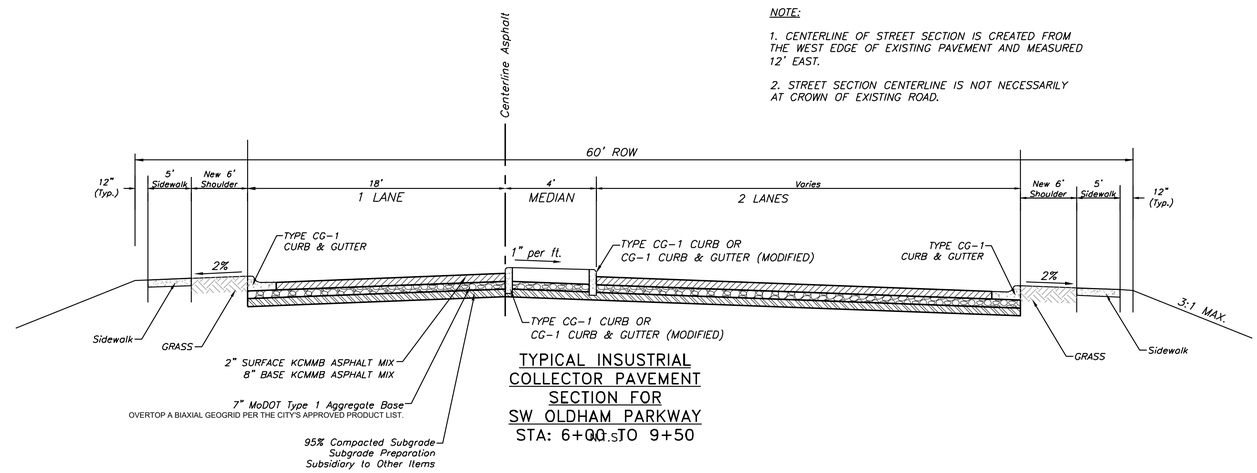
TYPICAL COMMERCIAL COLLECTOR AND PAVEMENT SECTION FOR SW FIELDHOUSE DR EAST
STA: 0+00 TO 3+80.28
SW FIELDHOUSE DR WEST
STA: 0+00 TO 3+42.78
N.T.S.



TYPICAL INDUSTRIAL COLLECTOR AND PAVEMENT SECTION FOR SW OLDHAM PARKWAY
STA: 0+00 TO 5+00
N.T.S.



TYPICAL COMMERCIAL COLLECTOR AND PAVEMENT SECTION FOR SW JEFFERSON
STA: 0+00 TO 5+37.23
N.T.S.

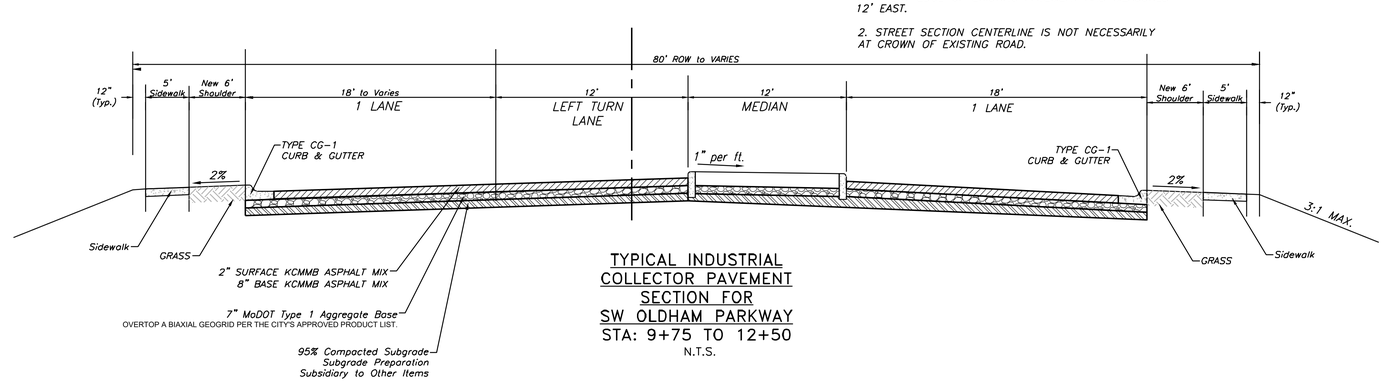


TYPICAL INSUSTRIAL COLLECTOR PAVEMENT SECTION FOR SW OLDHAM PARKWAY
STA: 6+00 TO 9+50
N.T.S.

B. Weather Limitations: When the moisture of the aggregate in the stockpile or from the dryer interferes with the quality of mix production, or with normal plant operations, the mixing and placing of hot-mix asphalt will not be permitted without the permission of the Engineer. No mixture shall be placed on wet or frozen surface.

Hot Mix asphalt paving shall not be mixed or placed when the ambient air or base temperature is below the temperatures shown in the following table, or when there is frost in the subgrade or any other time when weather conditions are unsuitable for the type of material being placed without expressed approval of the Engineer.

Paving Course	Thickness (inches)	Air Temperature (Degrees F)	Road Surface TemQerature (Degrees F)
Surface	All	50	55
Base	Less than 3	40	45
Base	3 or more	30	35



TYPICAL INDUSTRIAL COLLECTOR PAVEMENT SECTION FOR SW OLDHAM PARKWAY
STA: 9+75 TO 12+50
N.T.S.

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Oldham Village
Lee's Summit, Jackson County, Missouri

Project: OLDHAM MARKETPLACE, LSMO
Issue Date: November 5, 2024

Oldham Parkway
Construction Notes and Cross Section
Construction Plans for:
Oldham Village
Lee's Summit, Jackson County, Missouri

STATE OF MISSOURI
MATTHEW J. SCHLICHT
NUMBER
PE2005019708
PROFESSIONAL ENGINEER

Matthew J. Schlicht
MO PE 2005019708
KS PE 19071
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NE PE E-14335

REVISIONS
1 REV. 12/10/2024
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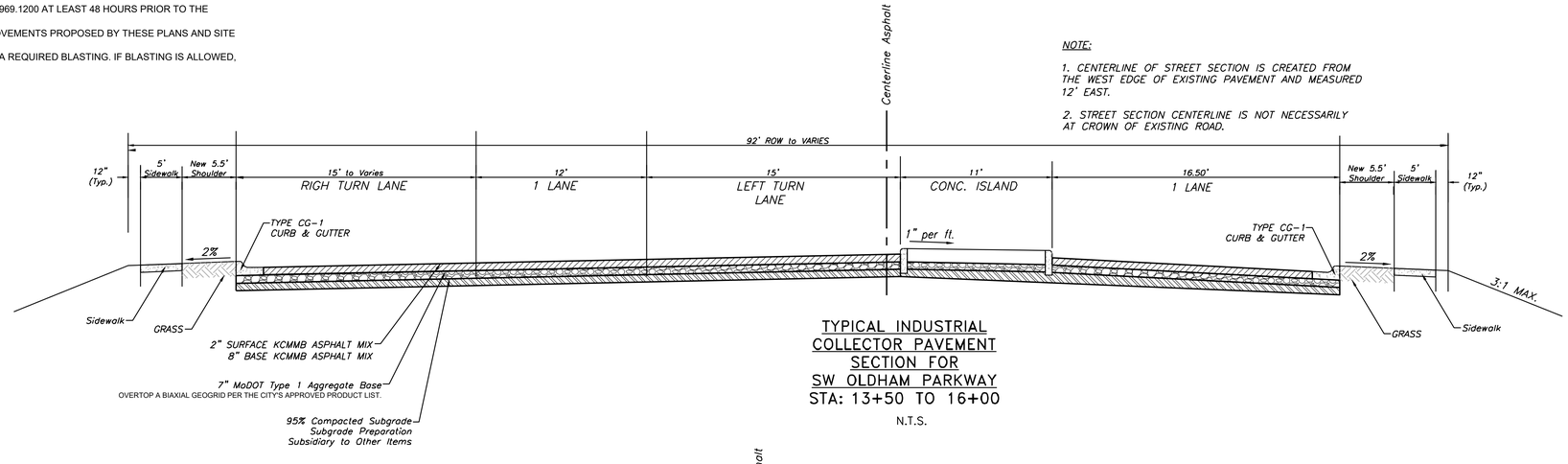
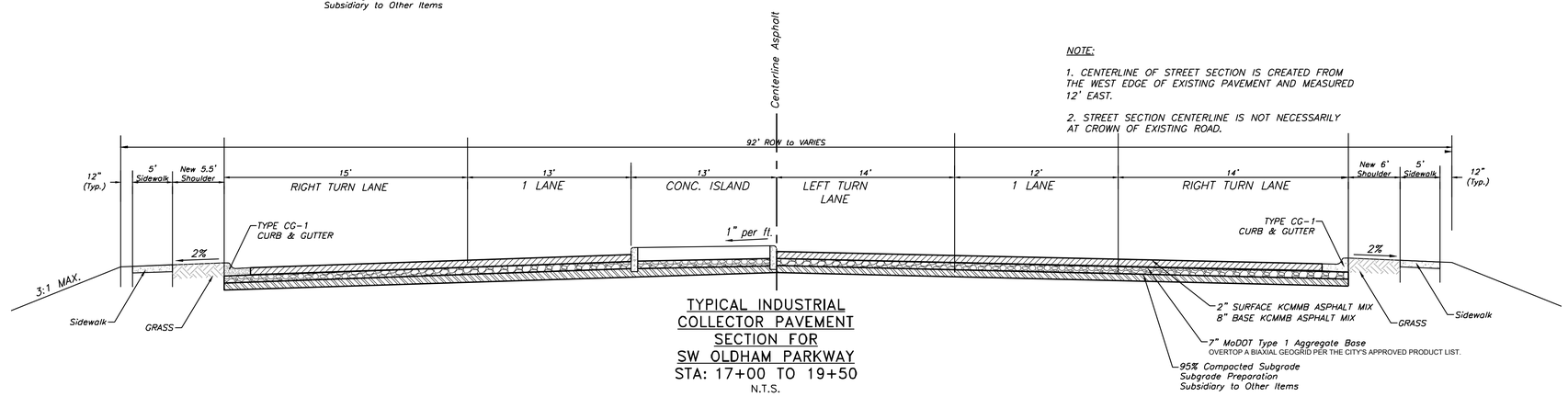
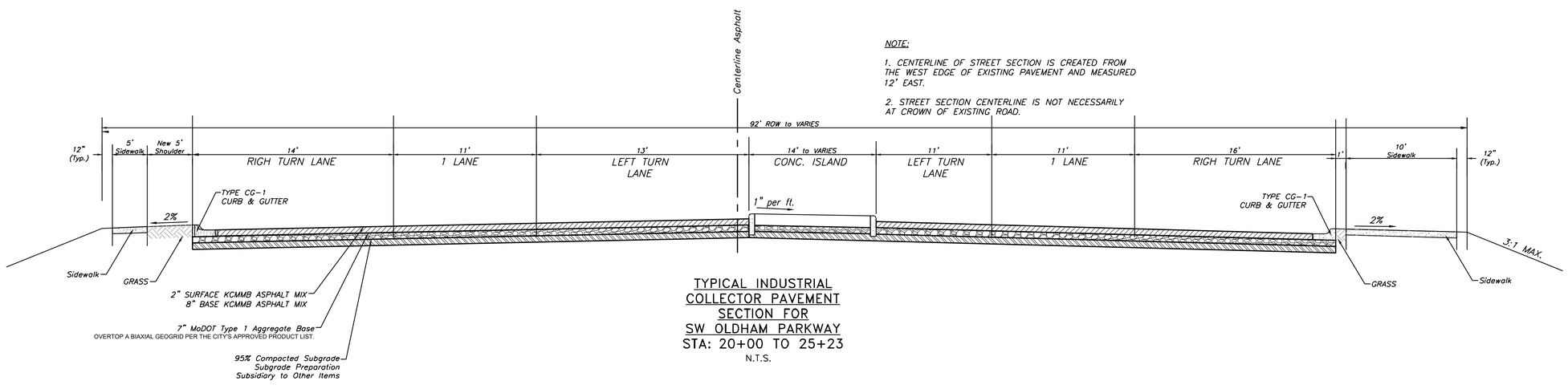


TYPICAL INDUSTRIAL COLLECTOR PAVEMENT SECTION FOR SW OLDHAM PARKWAY
STA: 13+50 TO 16+00
N.T.S.



TYPICAL INDUSTRIAL COLLECTOR PAVEMENT SECTION FOR SW OLDHAM PARKWAY
STA: 17+00 TO 19+50
N.T.S.



TYPICAL INDUSTRIAL COLLECTOR PAVEMENT SECTION FOR SW OLDHAM PARKWAY
STA: 20+00 TO 25+23
N.T.S.

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C.208

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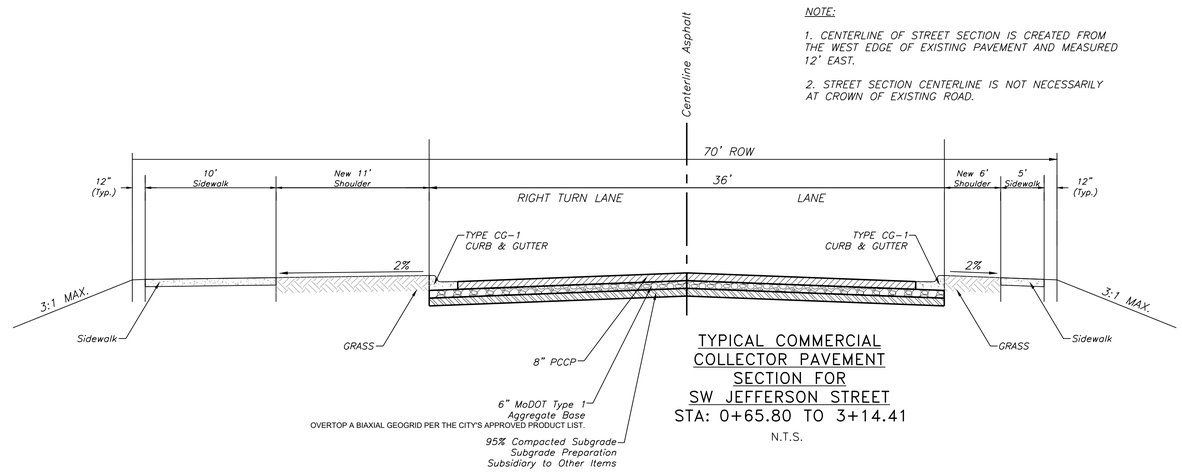
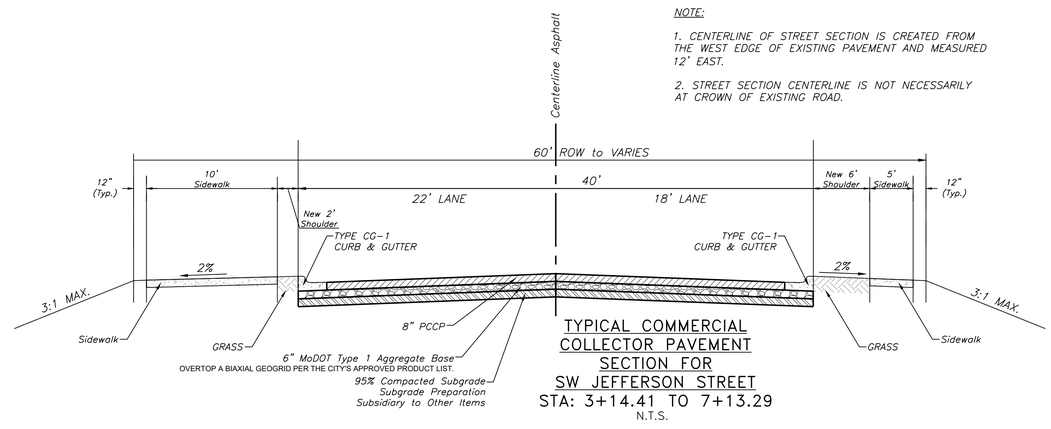


NOTE:

1. CENTERLINE OF STREET SECTION IS CREATED FROM THE WEST EDGE OF EXISTING PAVEMENT AND MEASURED 12' EAST.

2. STREET SECTION CENTERLINE IS NOT NECESSARILY AT CROWN OF EXISTING ROAD.

TYPICAL COMMERCIAL COLLECTOR PAVEMENT SECTION FOR SW JEFFERSON STREET
STA: 0+65.80 TO 3+14.41
N.T.S.



NOTE:

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2. STREET SECTION CENTERLINE IS NOT NECESSARILY AT CROWN OF EXISTING ROAD.

TYPICAL COMMERCIAL COLLECTOR PAVEMENT SECTION FOR SW JEFFERSON STREET
STA: 3+14.41 TO 7+13.29
N.T.S.

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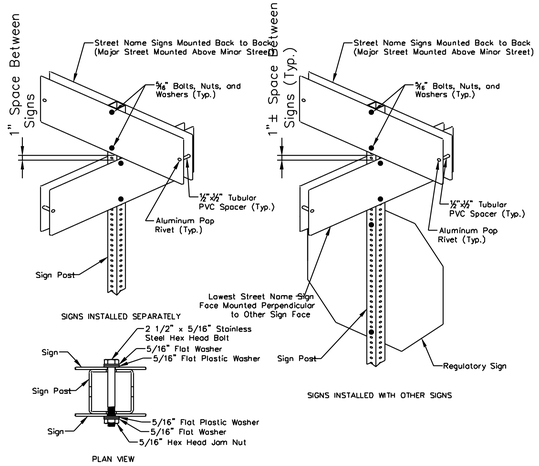
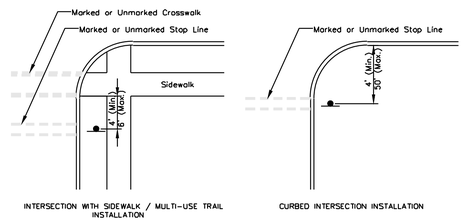


SQUARE STEEL POST MOUNTING DETAILS

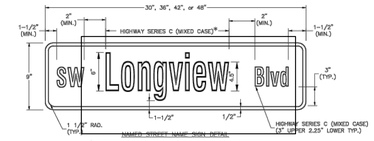
SIGN INSTALLATION FOR CURBED STREET

SIGN MOUNTING DETAILS

* The height to the bottom of a sign when it is located in a pedestrian walkway or extends into a walkway shall be a minimum of 80 inches above the walkway.



CONTROL SIGN LOCATION



STREET NAME SIGN FACE DETAILS

POST MOUNTED 2-LANE ALL SPEEDS AND MULTI-LANE UNDER 40 MPH

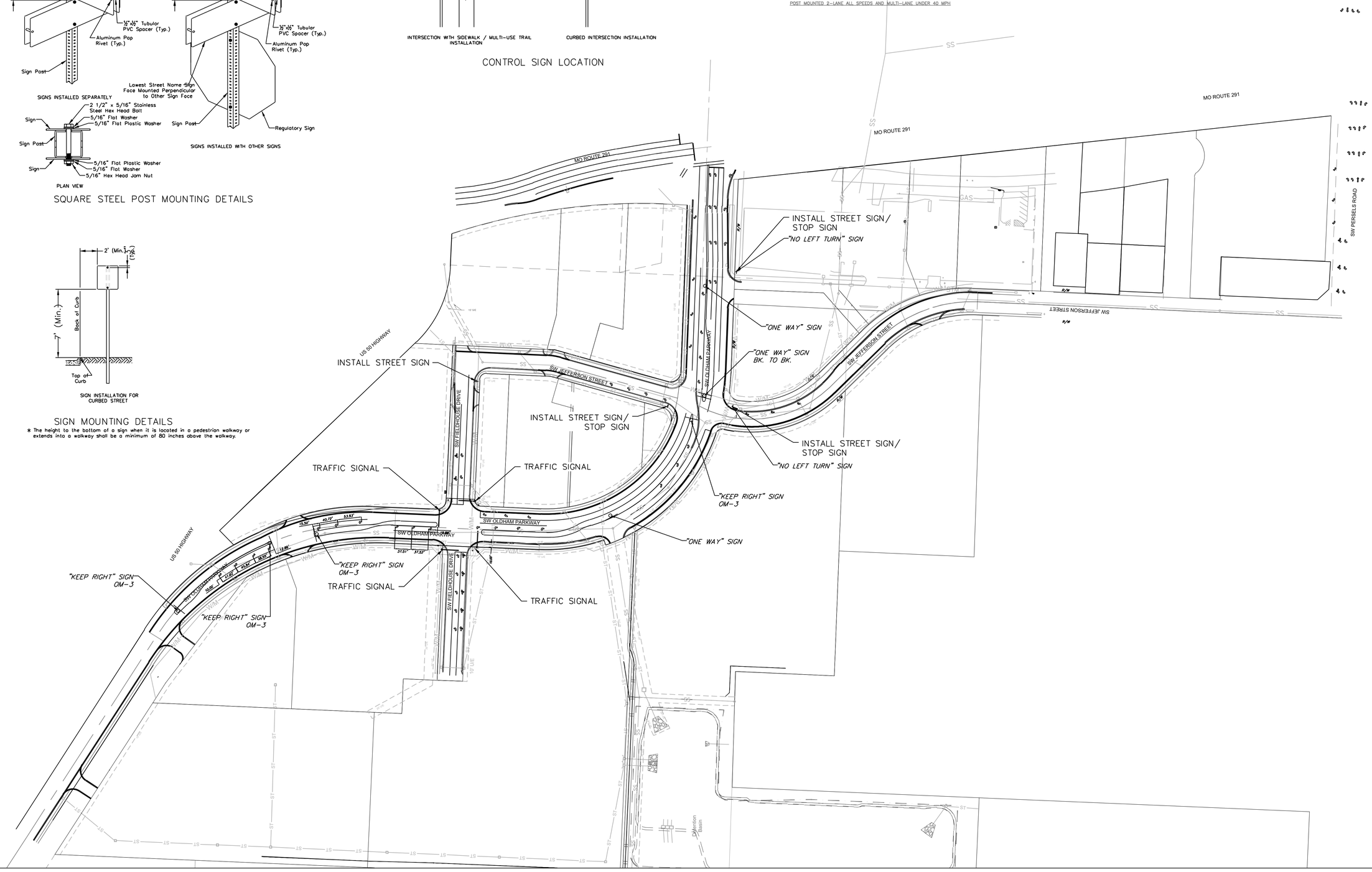
GRAPHIC SCALE

0 50' 100' 200'

STREET SIGNAGE

SCALE: 1" = 100'

North



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Street Signage Plan
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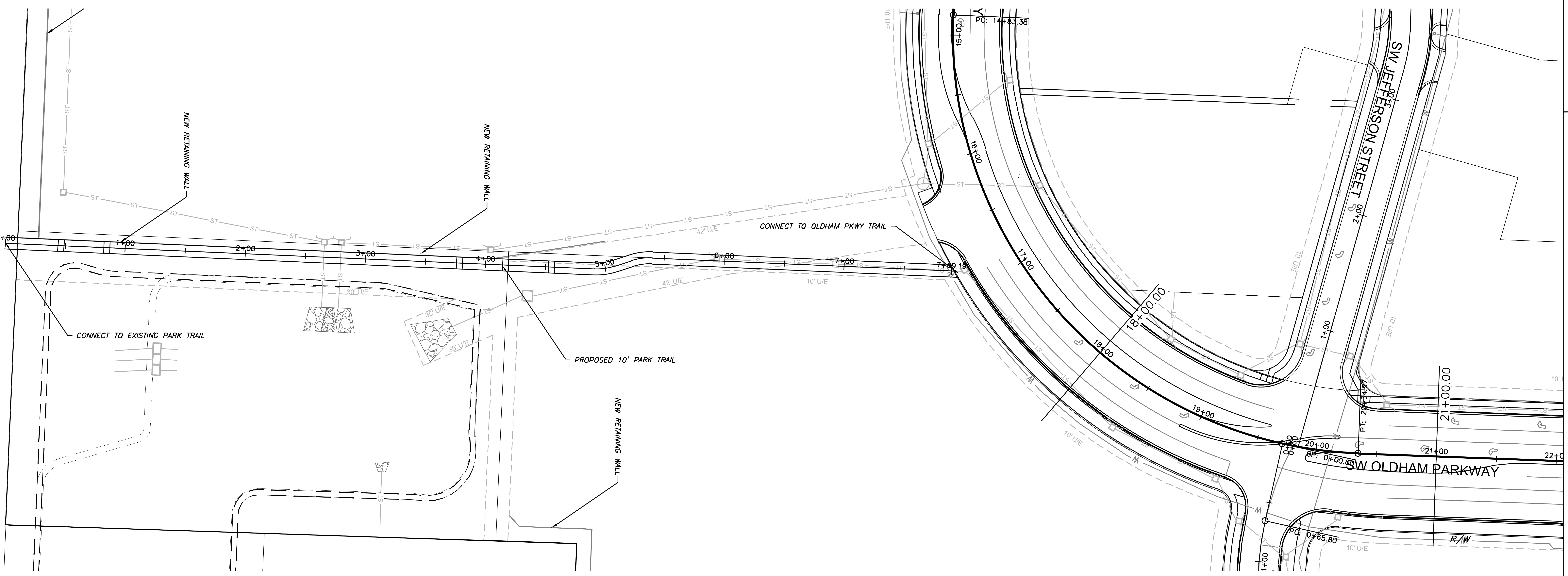
North

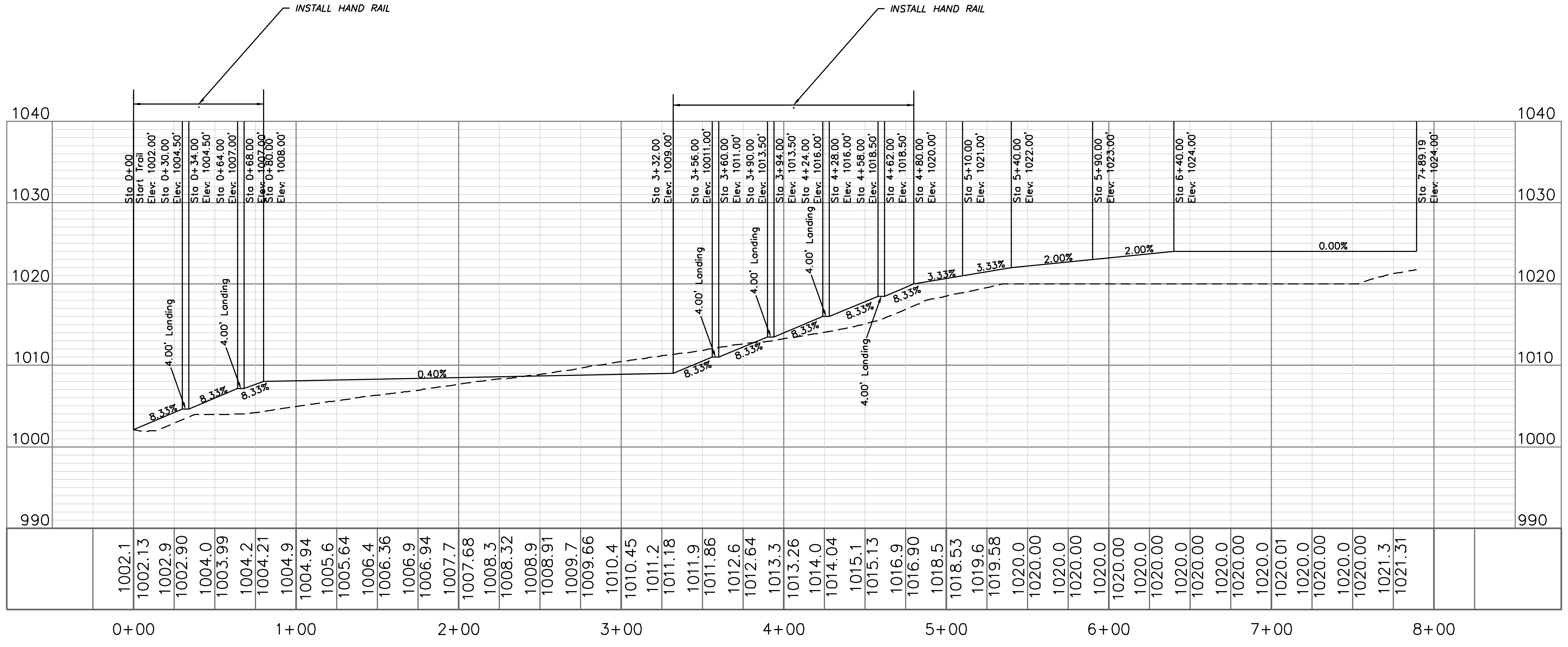
GRAPHIC SCALE
0 25' 50' 100'

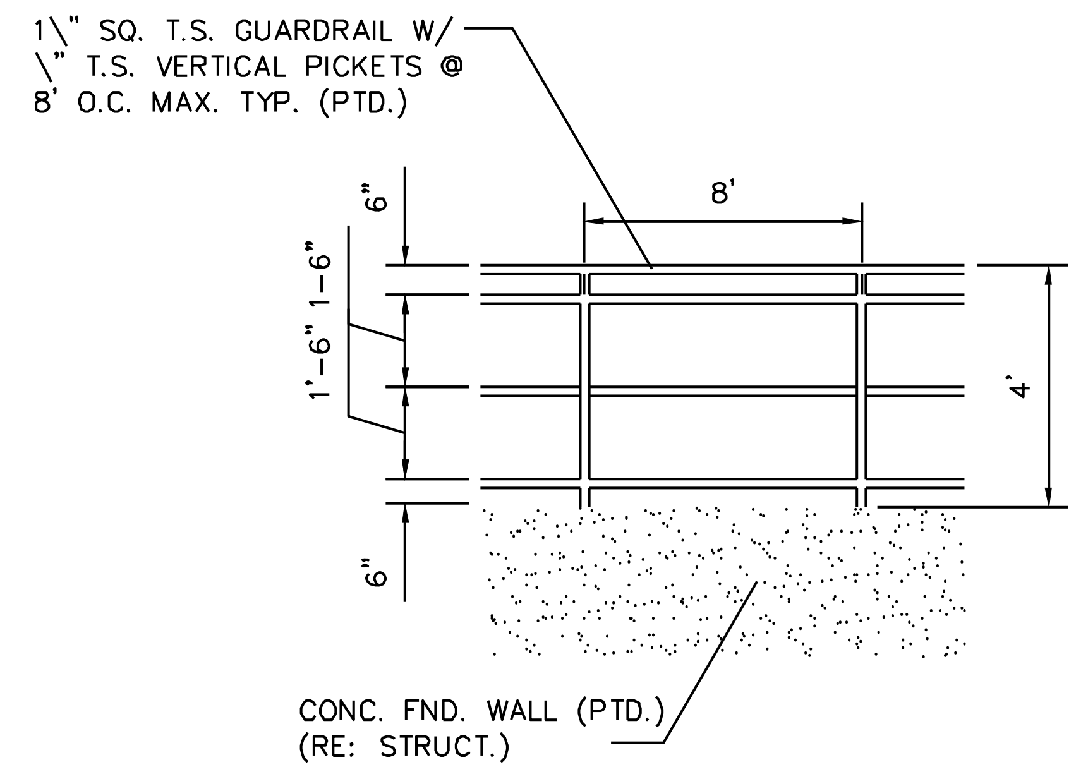
TRAIL PLAN & PROFILE

SCALE: 1" = 50'



PARK TRAIL ACCESS





HAND RAIL

NOT TO SCALE

VERT. SCALE: 1"=10'
0 5' 10' 20'

HORIZ. SCALE: 1"=50'
0 25' 50' 100'

ENGINEERING SOLUTIONS
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Professional Registration
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Engineering 2005002186-D
Surveying 2005008319-D
Kansas
Engineering E-1695
Surveying LS-218
Oklahoma
Engineering 6254
Nebraska
Engineering CA2821

Oldham Village
Lee's Summit, Jackson County, Missouri

Project:
OLDHAM
MARKETPLACE,
LSMO

Issue Date:
November 5, 2024

Trail Plan and Profile

Construction Plans for:
Oldham Village
Lee's Summit, Jackson County, Missouri

MATTHEW J.
SCHLICHT
NUMBER
PE-2006019708
MATTHEW J. SCHLICHT 3/24/2025

Matthew J. Schlicht
MO PE 2006019708
KS PE 19071
OK PE 25226
NE PE E-14335

REVISIONS

1	REV. 12/10/2024
2	REV. 1/2/2025
3	REV. 2/6/2025
	REV. 3/5/2025
4	REV. 3/24/2025

C.211

Notes:

1. New Arrows Shall Be Preformed Thermoplastic.

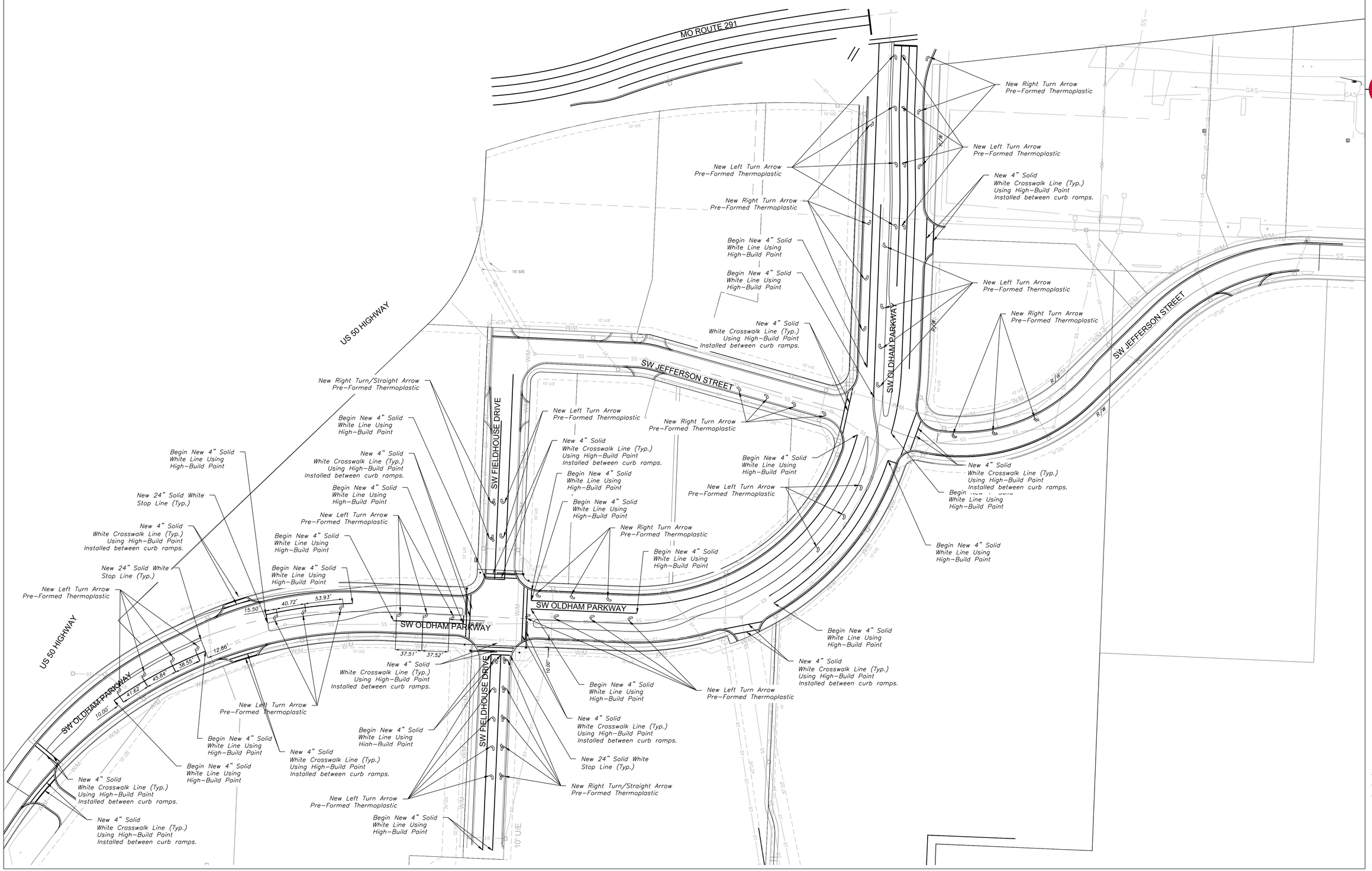
2. New Paint Stripes Shall Be High Build Paint In Accordance With City Standards and Specifications.

North

0 30' 60' 120'

PAVEMENT MARKING PLAN

SCALE: 1" = 60'



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Engineering CA2821

Oldham Village
Lee's Summit, Jackson County, Missouri

Project: OLDHAM MARKETPLACE, LSMO

Issue Date: November 5, 2024

PAVEMENT MARKING PLAN
Construction Plans for:
Oldham Village
Lee's Summit, Jackson County, Missouri

STATE OF MISSOURI
MATTHEW J. SCHLICHT
NUMBER 2006019708
PROFESSIONAL ENGINEER

Matthew J. Schlicht
MO PE 2006019708
KS PE 19071
OK PE 25226
NE PE E-14335

REVISIONS

1 REV. 12/10/2024
2 REV. 1/2/2025
3 REV. 2/6/2025
REV. 3/5/2025
4 REV. 3/24/2025
5 REV. 4/15/2025

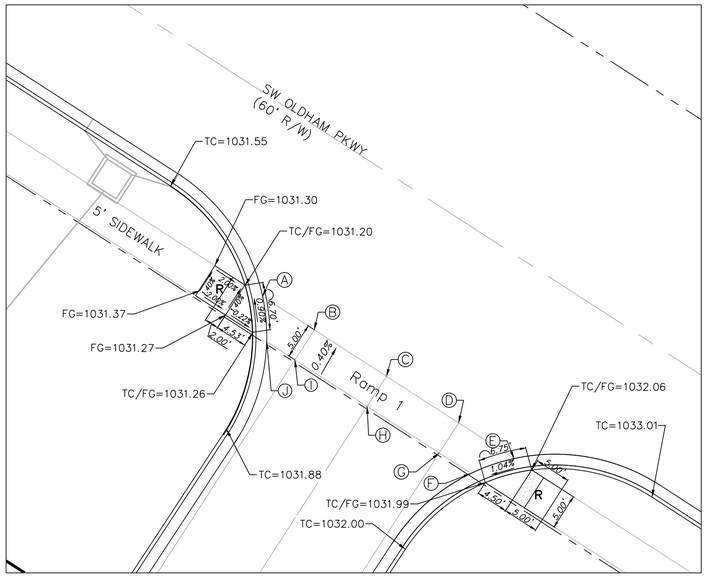
C.212

North

GRAPHIC SCALE
0 5' 10' 20'

SIDEWALK AND INTERSECTION PLAN

SCALE: 1" = 10'



DETAIL 1

Legend:

EX TC = Existing Top of Curb

EX FG = Existing Finished Grade

FG = Finished Grade

TC = Top of Curb

TC/FG = Top of Curb/Finished Grade

Detectable Warning

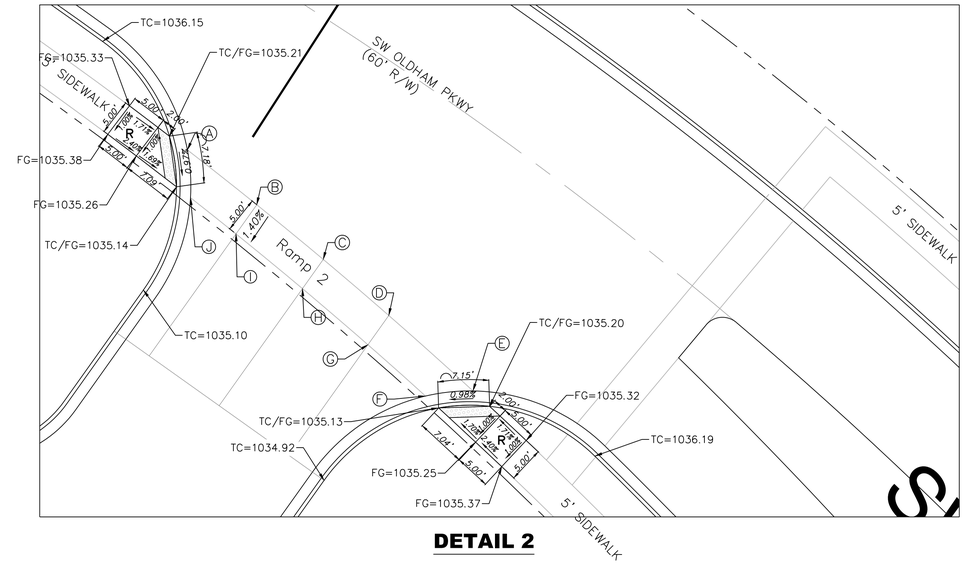
SPOT ELEVATION TABLE				
	Ramp 1	Ramp 2	Ramp 3	Ramp 2
Spot	Elevation	Elevation	Elevation	Elevation
A	1031.20	1035.21	1032.59	1035.21
B	1031.38	1035.21	1032.34	1035.21
C	1031.62	1035.21	1032.05	1035.21
D	1031.87	1035.20	1031.76	1035.20
E	1032.06	1035.20	1031.51	1035.20
F	1031.99	1035.13	1031.59	1035.13
G	1031.88	1035.13	1031.74	1035.13
H	1031.62	1035.14	1032.08	1035.14
I	1031.36	1035.14	1032.41	1035.14
J	1031.26	1035.14	1032.56	1035.14

North

GRAPHIC SCALE
0 5' 10' 20'

SIDEWALK AND INTERSECTION PLAN

SCALE: 1" = 10'



DETAIL 2

North

GRAPHIC SCALE
0 5' 10' 20'

SIDEWALK AND INTERSECTION PLAN

SCALE: 1" = 10'

DETAIL 3

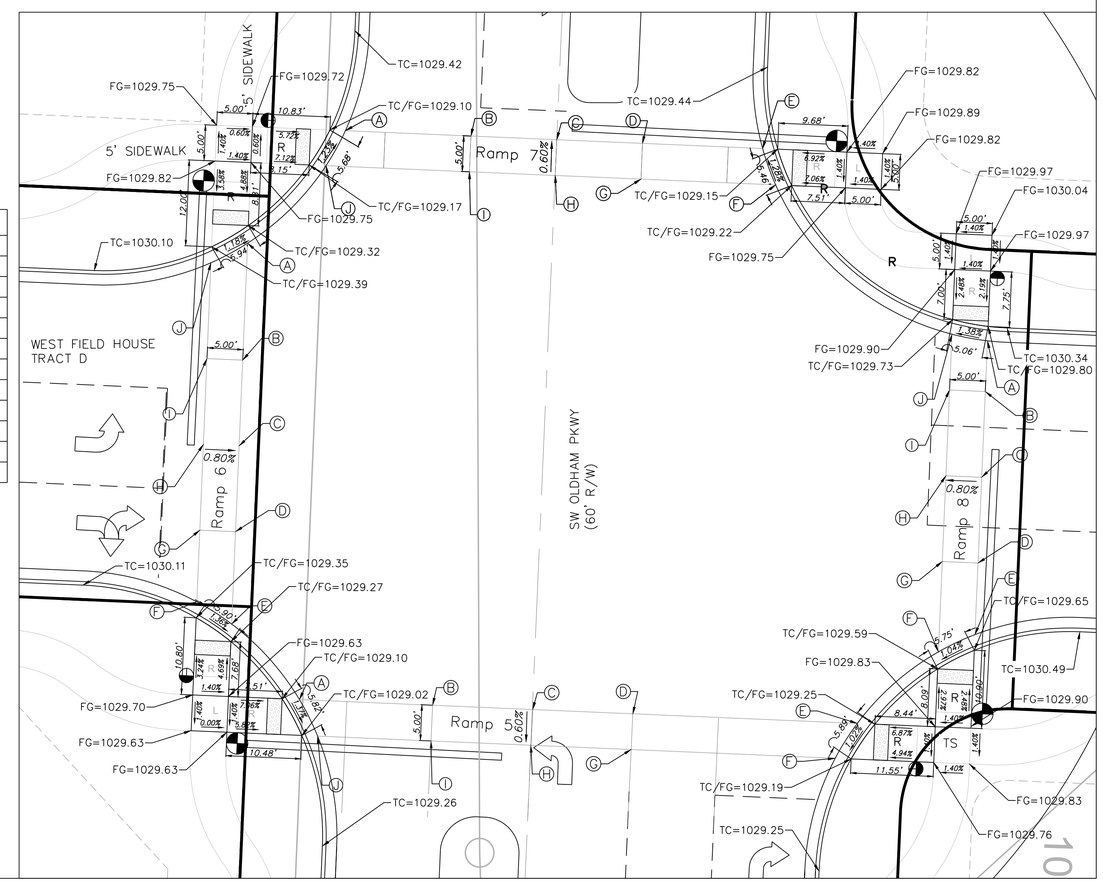
SPOT ELEVATION TABLE				
	Ramp 5	Ramp 6	Ramp 7	Ramp 8
Spot	Elevation	Elevation	Elevation	Elevation
A	1029.10	1029.32	1029.10	1029.80
B	1029.21	1029.63	1029.27	1029.95
C	1029.30	1029.86	1029.39	1030.21
D	1029.27	1029.58	1029.29	1029.90
E	1029.25	1029.27	1029.15	1029.65
F	1029.19	1029.35	1029.22	1029.59
G	1029.23	1029.60	1029.34	1029.87
H	1029.27	1029.90	1029.41	1030.14
I	1029.15	1029.66	1029.32	1029.89
J	1029.02	1029.39	1029.17	1029.73

North

GRAPHIC SCALE
0 5' 10' 20'

SIDEWALK AND INTERSECTION PLAN

SCALE: 1" = 10'



DETAIL 4

ENGINEERING SOLUTIONS
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Oklahoma
Engineering 6254
Nebraska
Engineering CA2821

Oldham Village
Lee's Summit, Jackson County, Missouri

Project: OLDHAM MARKETPLACE, LSMO

Issue Date: November 5, 2024

Sidewalk and Intersection Plan
Construction Plans for:
Oldham Village
Lee's Summit, Jackson County, Missouri

STATE OF MISSOURI
MATTHEW J. SCHLICHT
NUMBER
2006019708
PROFESSIONAL ENGINEER

Matthew J. Schlicht
MO PE 2006019708
KS PE 19071
OK PE 25226
NE PE E-14335

REVISIONS

1 REV. 12/10/2024
2 REV. 1/2/2025
3 REV. 2/6/2025
REV. 3/5/2025
4 REV. 3/24/2025

C.215

Legend:

EX TC = Existing Top of Curb

EX FG = Existing Finished Grade

FG = Finished Grade

TC = Top of Curb

TC/FG = Top of Curb/Finished Grade

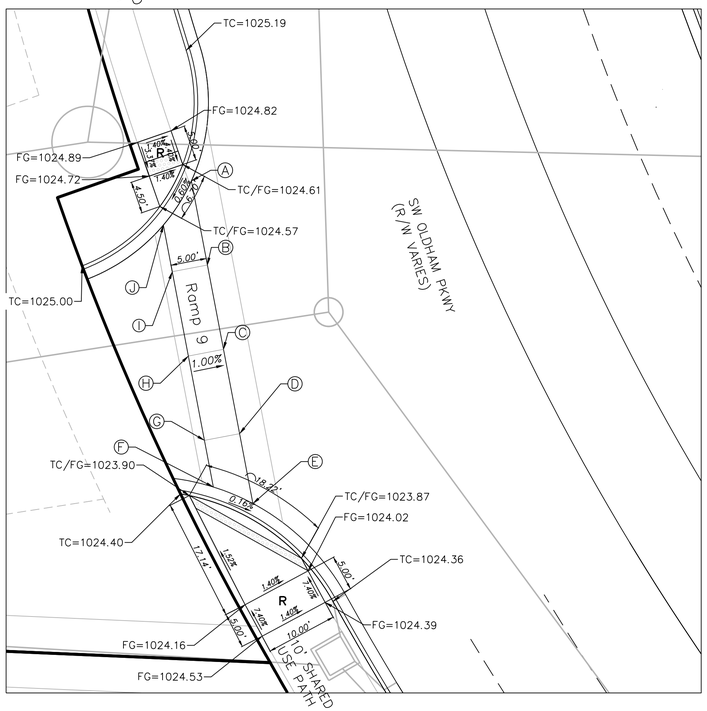
Detectable Warning

GRAPHIC SCALE 0 5' 10' 20'

North

SIDEWALK AND INTERSECTION PLAN

SCALE: 1" = 10'



DETAIL 5

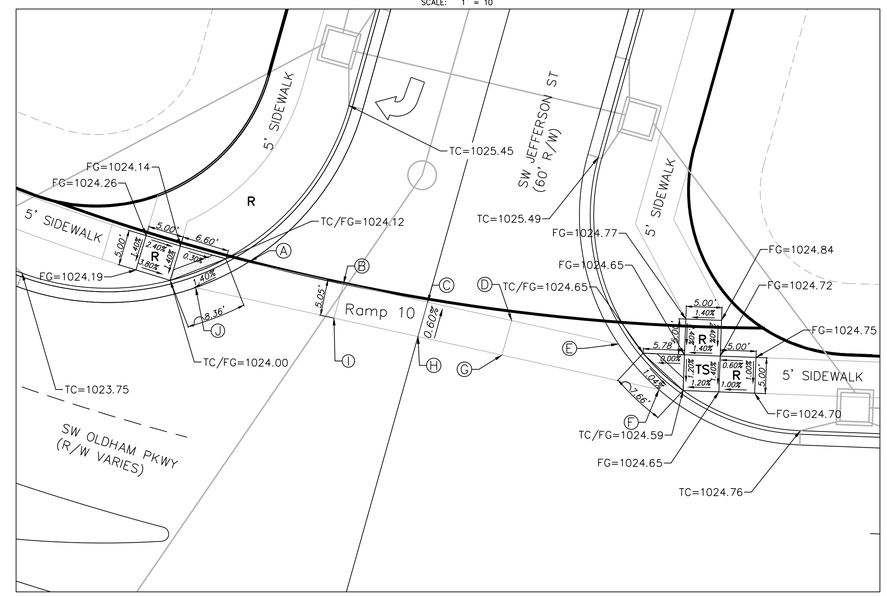
SPOT ELEVATION TABLE				
	Ramp 9	Ramp 10	Ramp 11	Ramp 12
Spot	Elevation	Elevation	Elevation	Elevation
A	1024.61	1024.12	1023.73	1028.18
B	1024.62	1024.57	1024.14	1029.05
C	1024.64	1024.94	1024.42	1029.58
D	1024.23	1024.83	1024.29	1029.98
E	1023.89	1024.65	1024.02	1030.57
F	1023.90	1024.59	1024.22	1030.17
G	1024.18	1024.77	1024.39	1029.91
H	1024.69	1024.85	1024.53	1029.65
I	1024.61	1024.54	1024.12	1029.19
J	1024.57	1024.00	1023.90	1028.95

GRAPHIC SCALE 0 5' 10' 20'

North

SIDEWALK AND INTERSECTION PLAN

SCALE: 1" = 10'



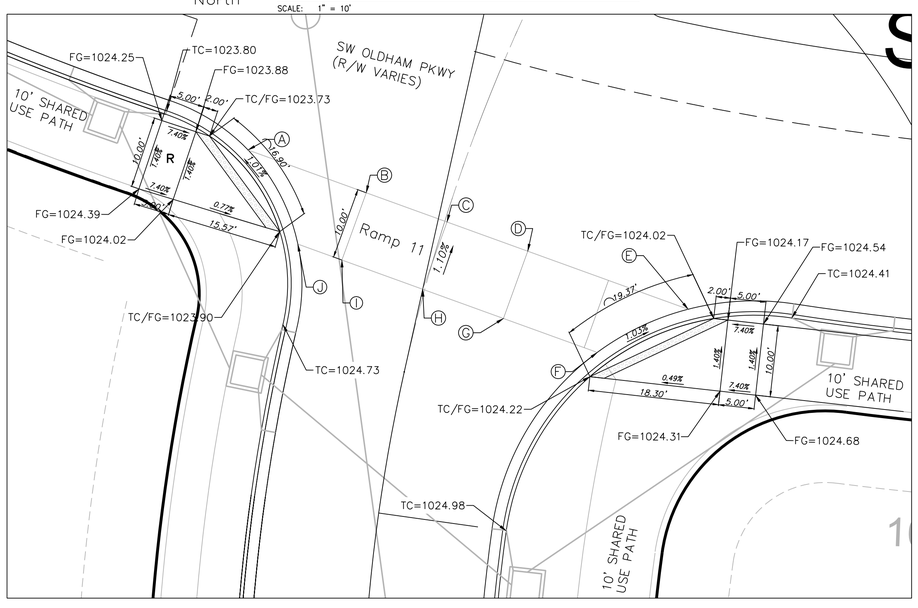
DETAIL 6

GRAPHIC SCALE 0 5' 10' 20'

North

SIDEWALK AND INTERSECTION PLAN

SCALE: 1" = 10'



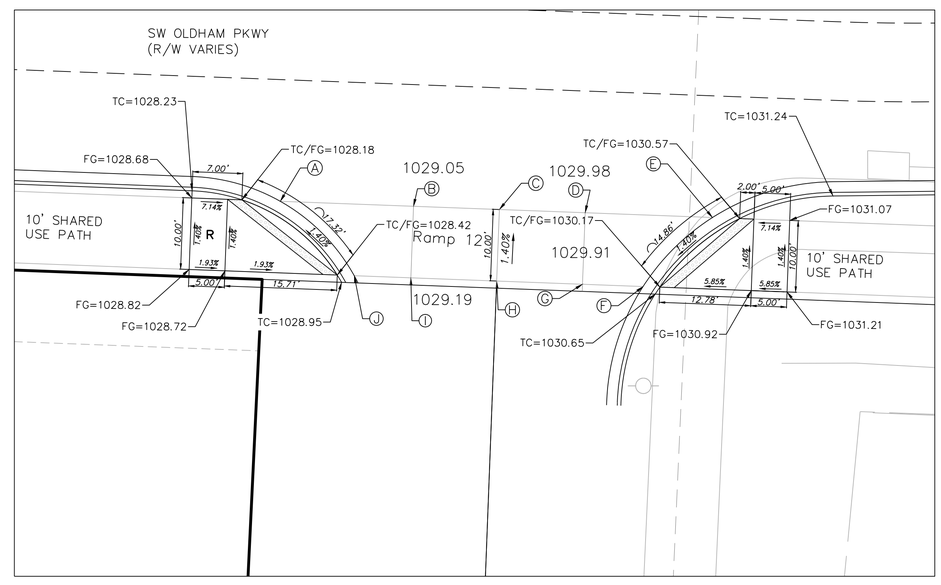
DETAIL 7

GRAPHIC SCALE 0 5' 10' 20'

North

SIDEWALK AND INTERSECTION PLAN

SCALE: 1" = 10'



DETAIL 8

ENGINEERING SOLUTIONS
ENGINEERING & SURVEYING
50 SE 30TH STREET
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Professional Registration
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Surveying 2005000319-D
Kansas
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Oklahoma
Engineering 6254
Nebraska
Engineering CA2821

Oldham Village
Lee's Summit, Jackson County, Missouri

Project: OLDHAM MARKETPLACE, LSMO

Issue Date: November 5, 2024

Sidewalk and Intersection Plan
Construction Plans for:
Oldham Village
Lee's Summit, Jackson County, Missouri

STATE OF MISSOURI
MATTHEW J. SCHLICHT
NUMBER
PE-2006019708
PROFESSIONAL ENGINEER

Matthew J. Schlicht
MO PE 2006019708
KS PE 19071
OK PE 25226
NE PE E-14335

REVISIONS

1 REV. 12/10/2024

2 REV. 1/2/2025

3 REV. 2/6/2025

REV. 3/5/2025

4 REV. 3/24/2025

NOTE:

RETAINING WALL SHALL BE DESIGNED BY A DESIGN PROFESSIONAL LICENSED IN THE STATE OF MISSOURI.

North

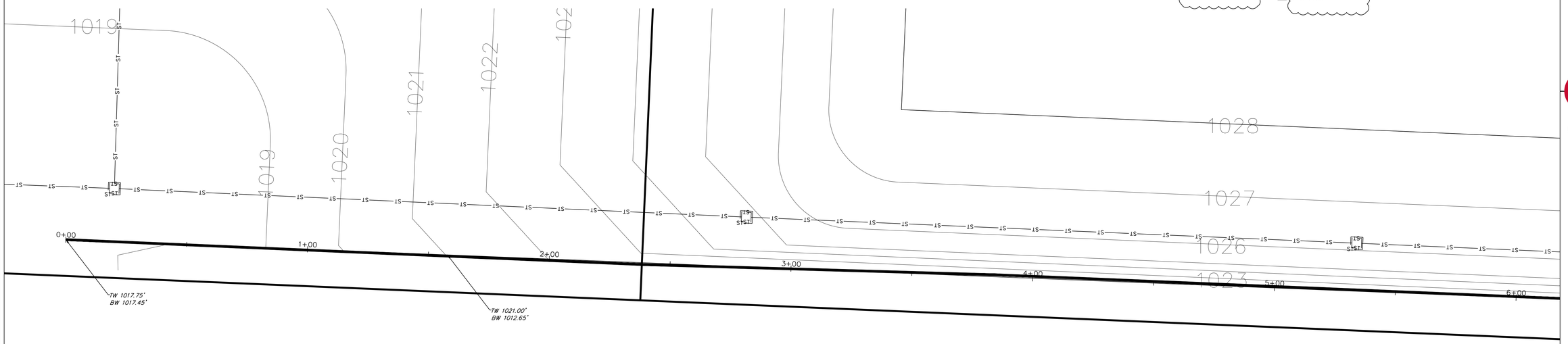
3 REVISED NORTH ARROW.

RETAINING WALL PLAN AND PROFILE

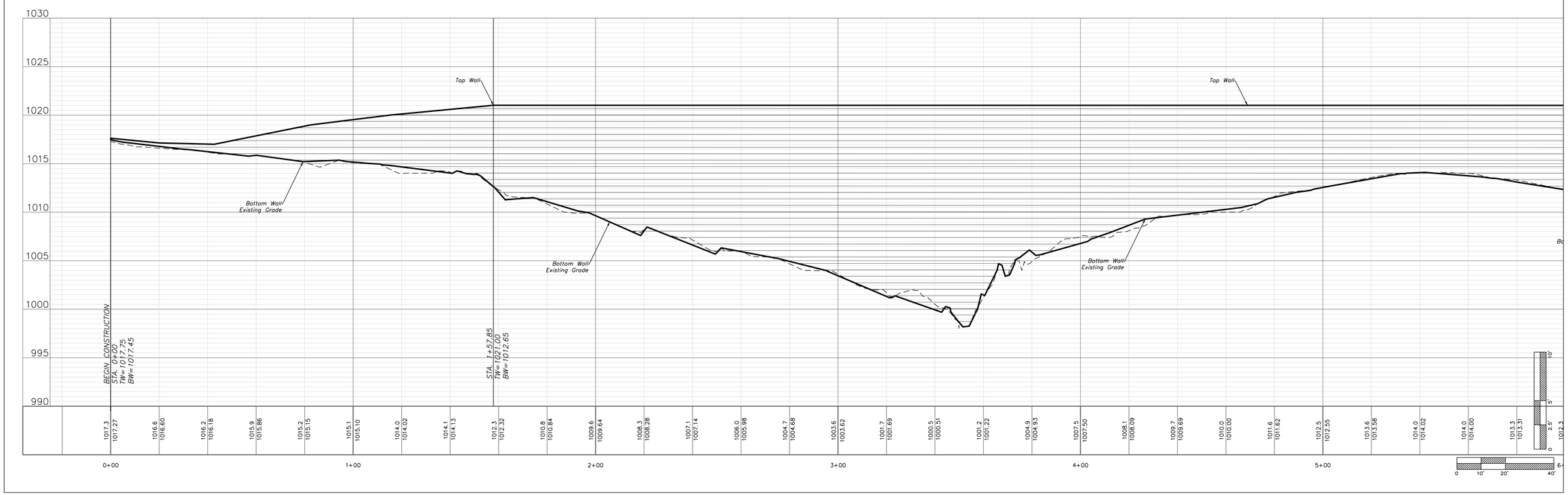
SCALE: 1" = 20'

0 10' 20' 40'

3 REVISED SCALE.



RETAINING WALL 1



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Nebraska
Engineering CA2821

Oldham Village
Lee's Summit, Jackson County, Missouri

Project: OLDHAM MARKETPLACE, LSMO
Issue Date: November 5, 2024

Spot Elevations
Construction Plans for:
Oldham Village
Lee's Summit, Jackson County, Missouri

STATE OF MISSOURI
MATTHEW J. SCHLICHT
NUMBER
PE-2006019708
PROFESSIONAL ENGINEER

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REVISIONS

1 REV. 12/10/2024
2 REV. 1/2/2025
3 REV. 2/6/2025
REV. 3/5/2025
4 REV. 3/24/2025

C.220

NOTE:

RETAINING WALL SHALL BE DESIGNED BY A DESIGN PROFESSIONAL LICENSED IN THE STATE OF MISSOURI.

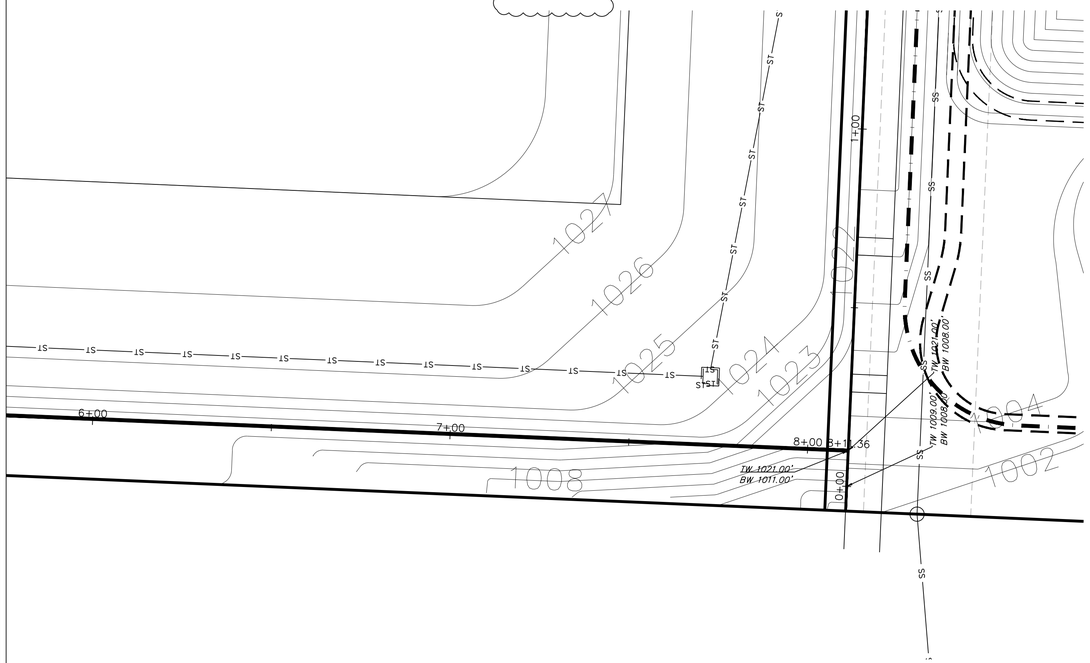
North

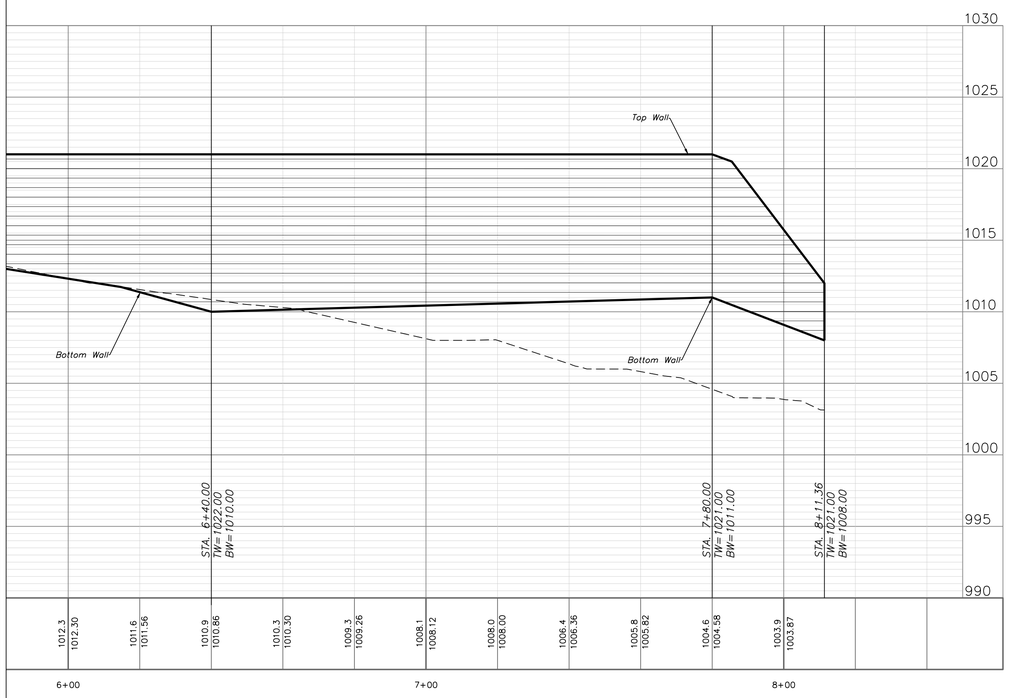
RETAINING WALL PLAN AND PROFILE

SCALE: 1" = 20'

0 10' 20' 40'

3 REVISED NORTH ARROW.





NOTE:

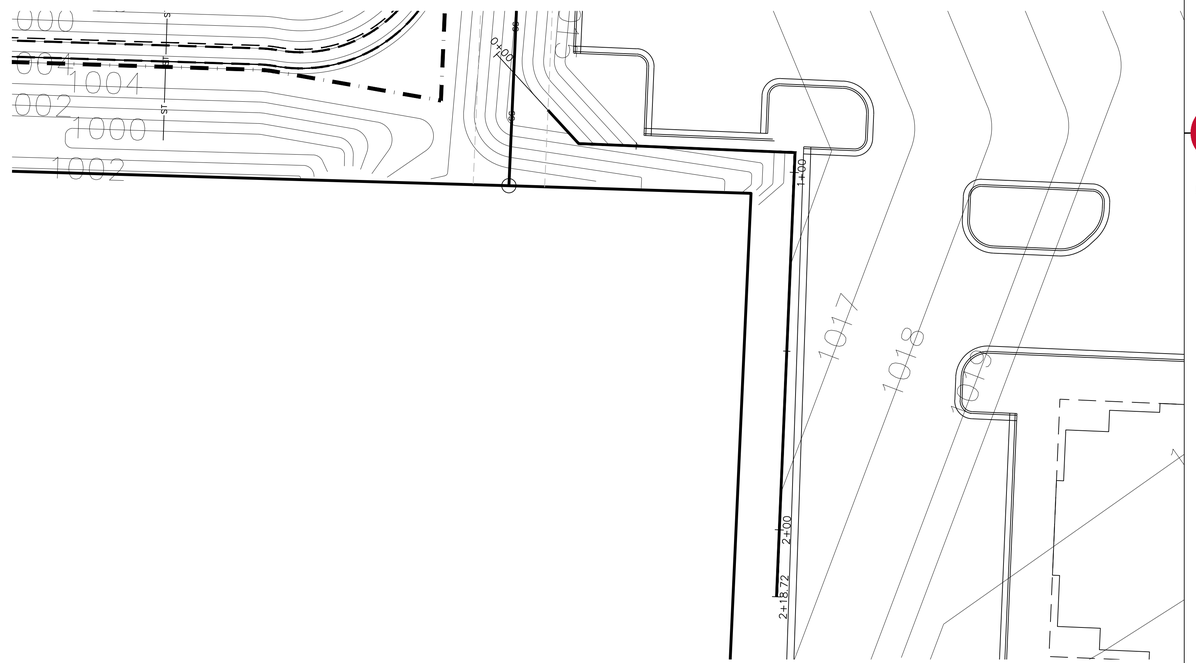
RETAINING WALL SHALL BE DESIGNED BY A DESIGN PROFESSIONAL LICENSED IN THE STATE OF MISSOURI.

North

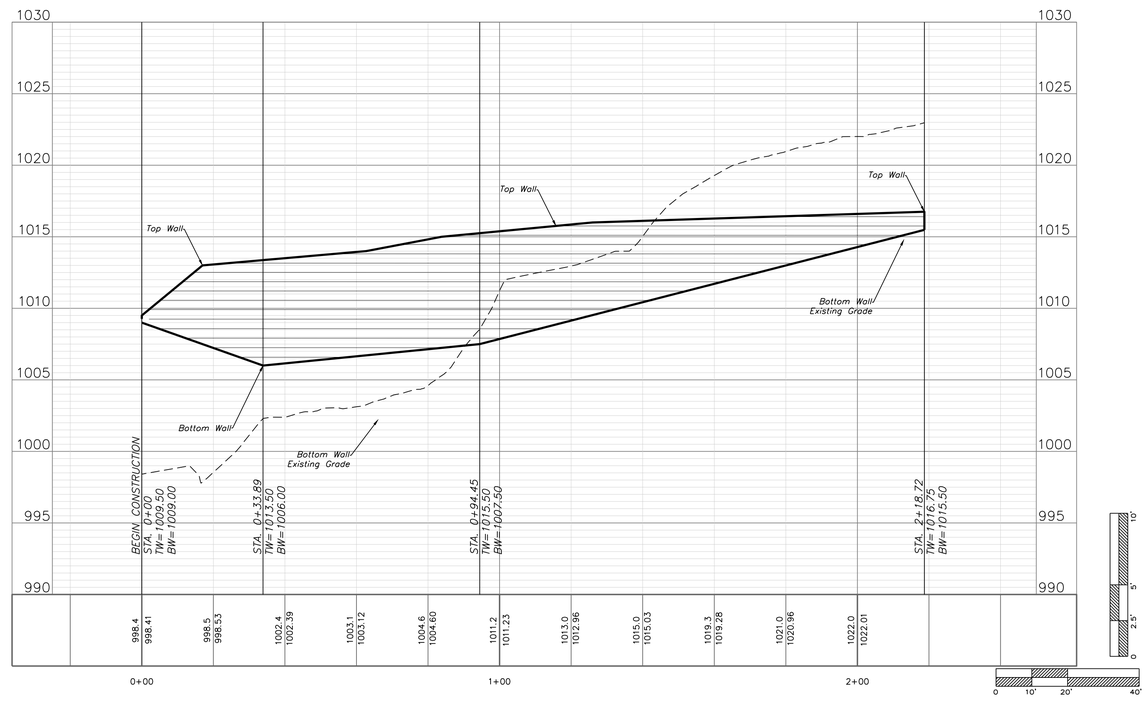
RETAINING WALL PLAN AND PROFILE

SCALE: 1" = 20'

0 10' 20' 40'



RETAINING WALL 3



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Nebraska
Engineering CA2821

Oldham Village
Lee's Summit, Jackson County, Missouri

Project: OLDHAM VILLAGE-FLA-LSMO

Issue Date: November 5, 2024

Spot Elevations
Construction Plans for:
Oldham Village
Lee's Summit, Jackson County, Missouri

STATE OF MISSOURI
MATTHEW J. SCHLICHT
NUMBER
PE-2006019708
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Matthew J. Schlicht
MO PE 2006019708
KS PE 19071
OK PE 25226
NE PE E-14335

REVISIONS

1 REV. 12/10/2024
2 REV. 1/2/2025
3 REV. 2/6/2025
REV. 3/5/2025
4 REV. 3/24/2025

C.221

NOTE:

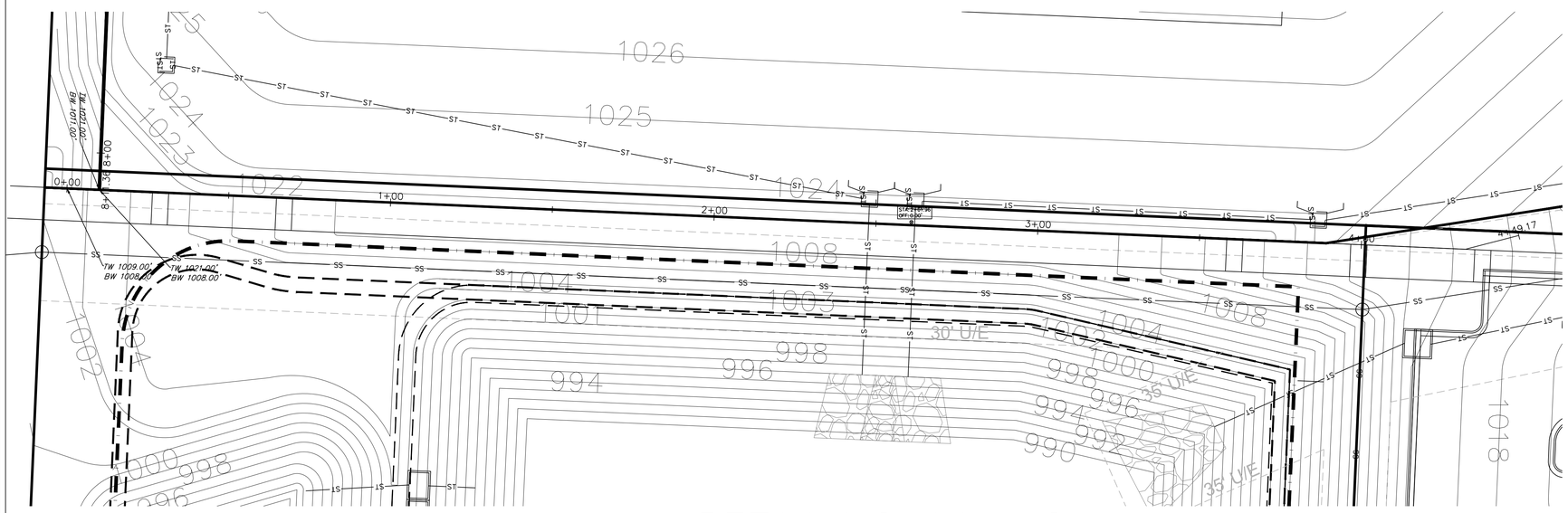
RETAINING WALL SHALL BE DESIGNED BY A DESIGN PROFESSIONAL LICENSED IN THE STATE OF MISSOURI.

North

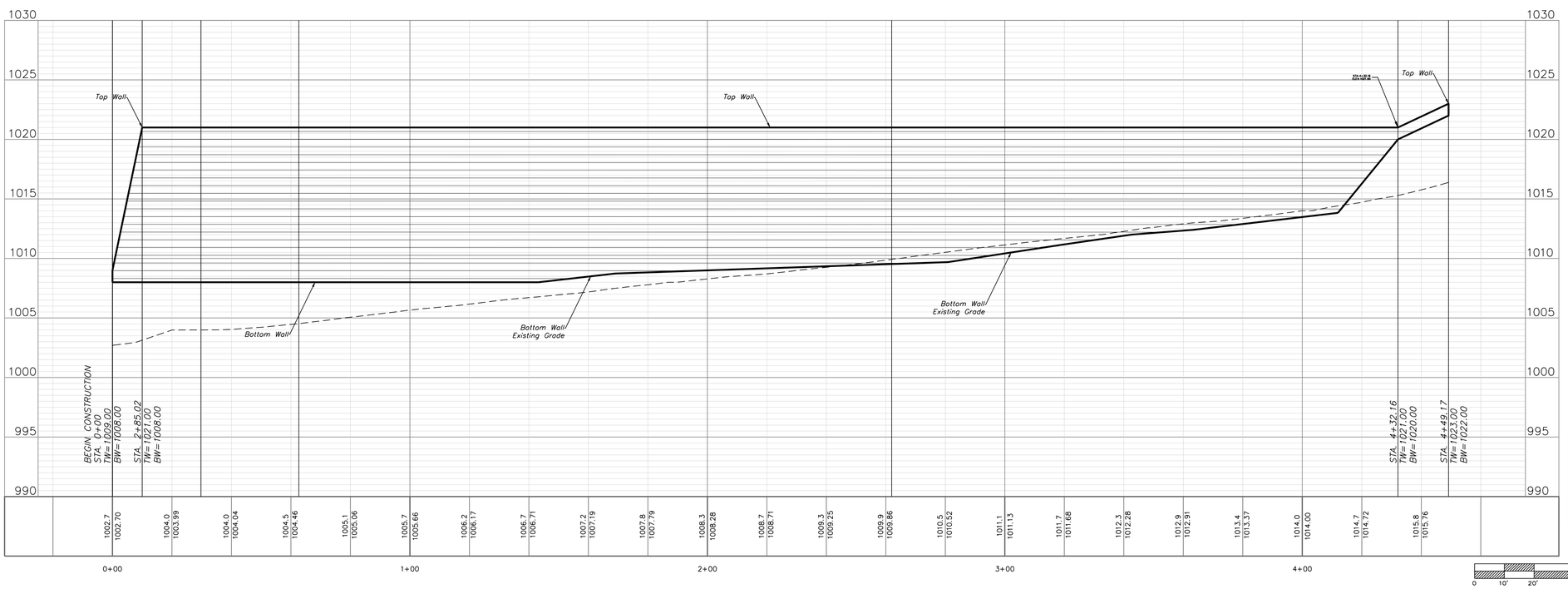
RETAINING WALL PLAN AND PROFILE

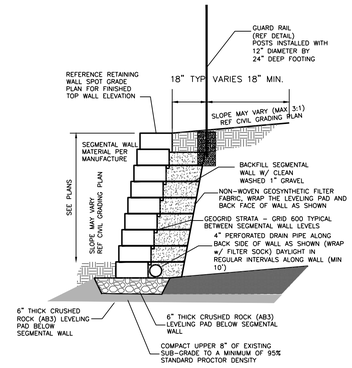
SCALE: 1" = 20'

0 10' 20' 40'



RETAINING WALL 2

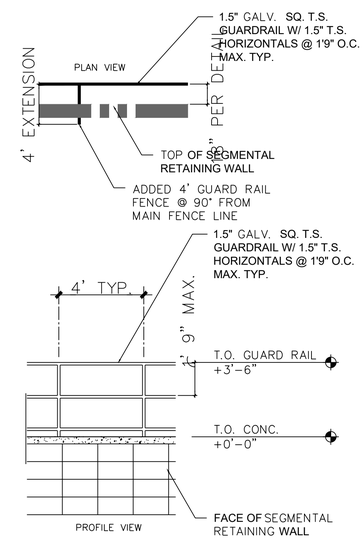




SEGMENTAL WALL SECTION

NOT TO SCALE

RETAINING WALL DESIGN DETAILS



GUARD RAIL DETAIL

NOT TO SCALE

ENGINEERING SOLUTIONS
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Nebraska
Engineering CA2821

Oldham Village
Lee's Summit, Jackson County, Missouri

Project: OLDHAM MAGETTE-ACE, LSMO

Issue Date: November 5, 2024

Spot Elevations
Construction Plans for:
Oldham Village
Lee's Summit, Jackson County, Missouri

STATE OF MISSOURI
MATTHEW J. SCHLICHT
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PROFESSIONAL ENGINEER

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NE PE E-14335

REVISIONS

1 REV. 12/10/2024
2 REV. 1/2/2025
3 REV. 2/6/2025
REV. 3/5/2025
4 REV. 3/24/2025

C.222

North

0 125' 250' 500'

TRAFFIC CONTROL PLAN GENERAL LAYOUT

SCALE: 1" = 250'

NOTES:

1. ALL SIGNS TO BE PLACED PER MUTCD MANUAL.

2. THE ROAD SHALL BE CLOSED AND WORK ONLY BE ALLOWED BETWEEN 9:00 A.M. AND 4:00 P.M., MONDAY THROUGH FRIDAY.

3. THE STREET TO BE PLATED DURING NON-WORKING HOURS AND THE ROAD REOPENED FOR NORMAL TRAFFIC.

4. GIVEN THE DEPTH OF THE TRENCH, THE CONTRACTOR MAY DECIDE TO DO A COMPACTED BACKFILL, COMPACTION TESTING AND REPORTS WILL BE REQUIRED.

5. A RIGHT-OF-WAY AND TRAFFIC CONTROL PERMIT APPLICATION WILL NEED TO BE COMPLETED PRIOR TO COMMENCEMENT OF THE WORK.

6. A PRE-CONSTRUCTION MEETING IS REQUIRED BETWEEN THE CONTRACTOR AND THE CITY'S FIELD ENGINEERING INSPECTOR PRIOR TO COMMENCEMENT OF ANY WORK.

7. CONTRACTOR TO NOTIFY CITY 14 CALENDAR DAYS BEFORE CLOSURE.

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Engineering CA2821

Oldham Village
Lee's Summit, Jackson County, Missouri

Project: OLDHAM MARKETPLACE, LSMO
Issue Date: November 5, 2024

TRAFFIC CONTROL PLAN GENERAL LAYOUT
Construction Plans for:
Oldham Village
Lee's Summit, Jackson County, Missouri

STATE OF MISSOURI
MATTHEW J. SCHLICHT
NUMBER
2006019708
PROFESSIONAL ENGINEER

Matthew J. Schlicht
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REVISIONS

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2 REV. 1/2/2025
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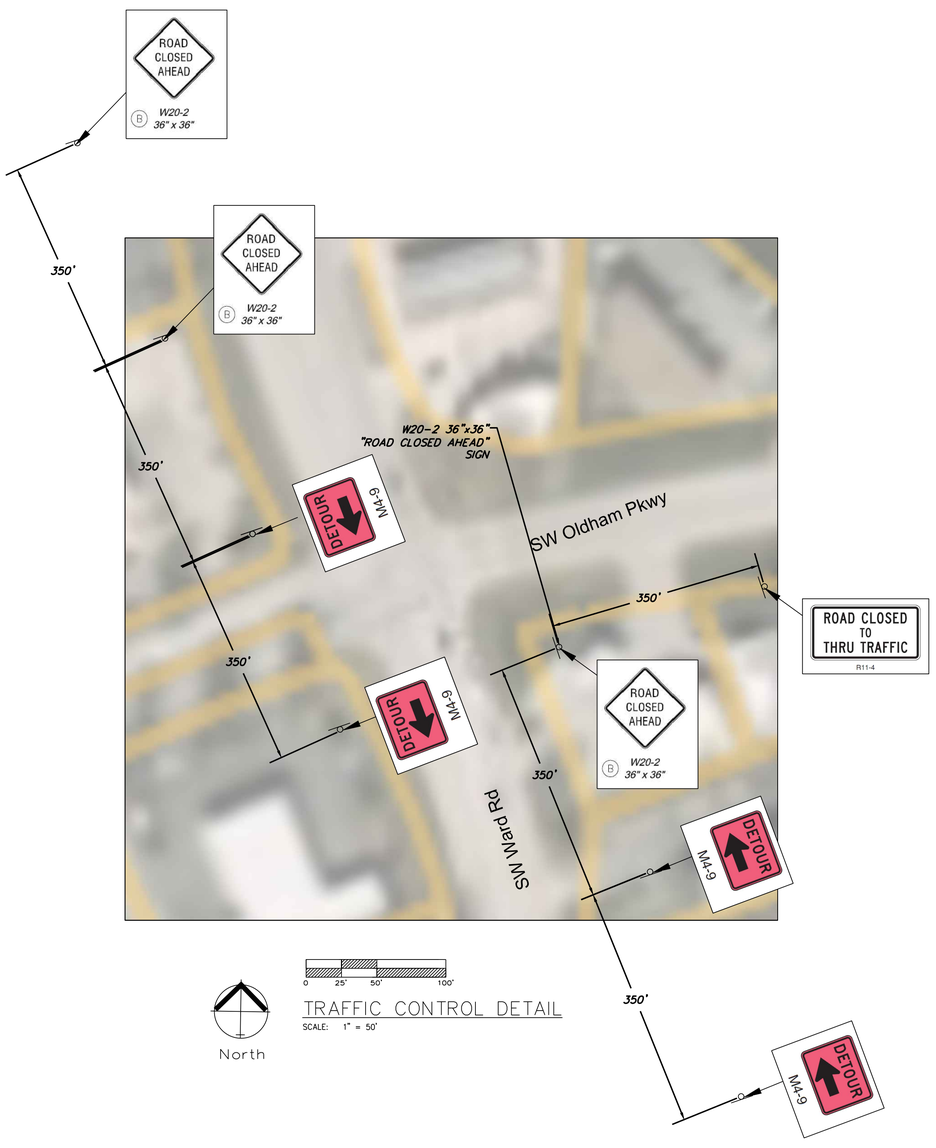
REV. 3/5/2025
4 REV. 3/24/2025

C.250

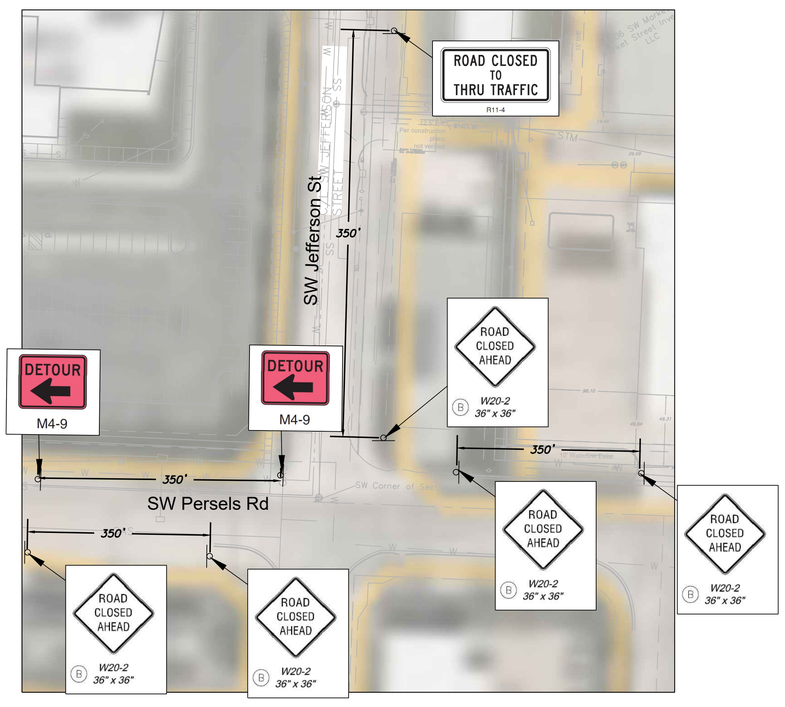


North

0 25' 50' 100'

TRAFFIC CONTROL DETAIL

SCALE: 1" = 50'



North

0 25' 50' 100'

TRAFFIC CONTROL DETAIL

SCALE: 1" = 50'

North

0 50' 100' 200'

TRAFFIC CONTROL PLAN

SCALE: 1" = 100'

NOTES:

1. ALL SIGNS TO BE PLACED PER MUTCD MANUAL.

2. THE ROAD SHALL BE CLOSED AND WORK ONLY BE ALLOWED BETWEEN 9:00 A.M. AND 4:00 P.M., MONDAY THROUGH FRIDAY.

3. THE STREET TO BE PLATED DURING NON-WORKING HOURS AND THE ROAD REOPENED FOR NORMAL TRAFFIC.

4. GIVEN THE DEPTH OF THE TRENCH, THE CONTRACTOR MAY DECIDE TO DO A COMPACTED BACKFILL, COMPACTION TESTING AND REPORTS WILL BE REQUIRED.

5. A RIGHT-OF-WAY AND TRAFFIC CONTROL PERMIT APPLICATION WLL NEED TO BE COMPLETED PRIOR TO COMMENCEMENT OF THE WORK.

6. A PRE-CONSTRUCTION MEETING IS REQUIRED BETWEEN THE CONTRACTOR AND THE CITY'S FIELD ENGINEERING INSPECTOR PRIOR TO COMMENCEMENT OF ANY WORK.

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Oldham Village
Lee's Summit, Jackson County, Missouri

Project: OLDHAM MARKETPLACE, LSMO

Issue Date: November 5, 2024

TRAFFIC CONTROL PLAN
Construction Plans for:
Oldham Village
Lee's Summit, Jackson County, Missouri

STATE OF MISSOURI
MATTHEW J. SCHLICHT
NUMBER
PE2006019708
PROFESSIONAL ENGINEER

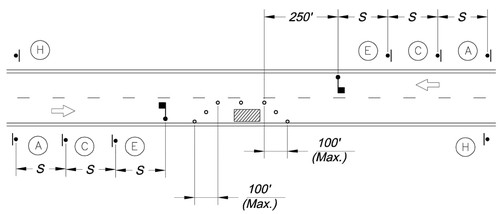
Matthew J. Schlicht
MO PE 2006019708
KS PE 19071
OK PE 25226
NE PE E-14335

REVISIONS

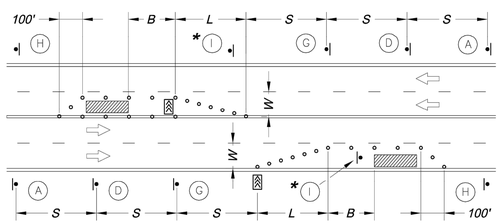
1 REV. 12/10/2024
2 REV. 1/2/2025
3 REV. 2/6/2025
REV. 3/5/2025
4 REV. 3/24/2025

SYMBOL LEGEND

- Work Area
- Sign
- Barricade
- Direction of Travel
- Channelizer
- Arrow Panel
- Flagger

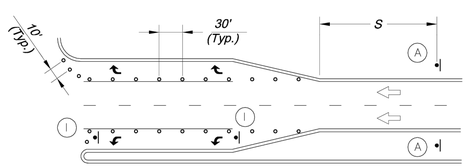


LANE CLOSURE - TWO LANE STREET



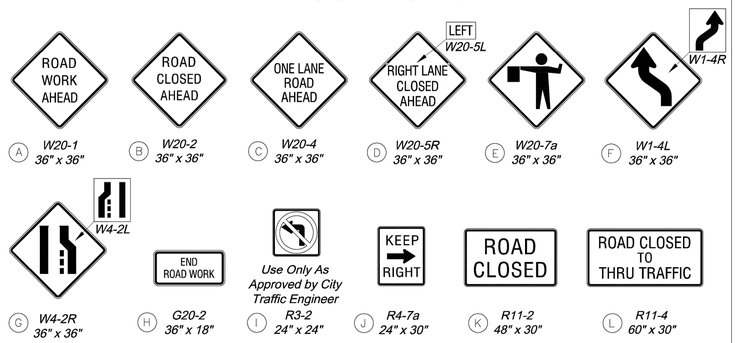
LANE CLOSURE - FOUR LANE STREET

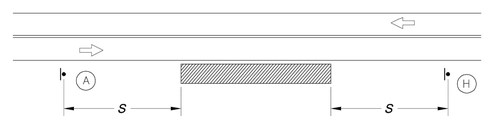
* Install Signs Every 200 Feet Throughout the Closed Lane or As Needed



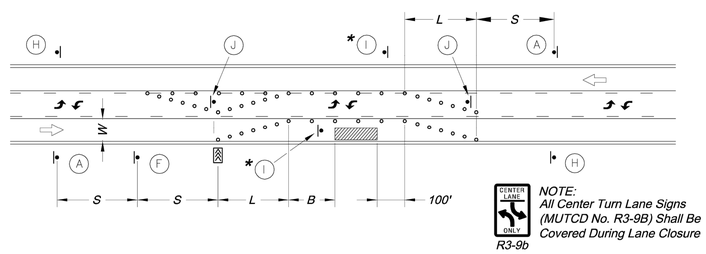
TURN LANE CLOSURE

SIGN LEGEND





TYPICAL SIGNING FOR WORK ADJACENT TO THE STREET



NOTE:
All Center Turn Lane Signs (MUTCD No. R3-9B) Shall Be Covered During Lane Closure

LANE CLOSURE - THREE LANE STREET

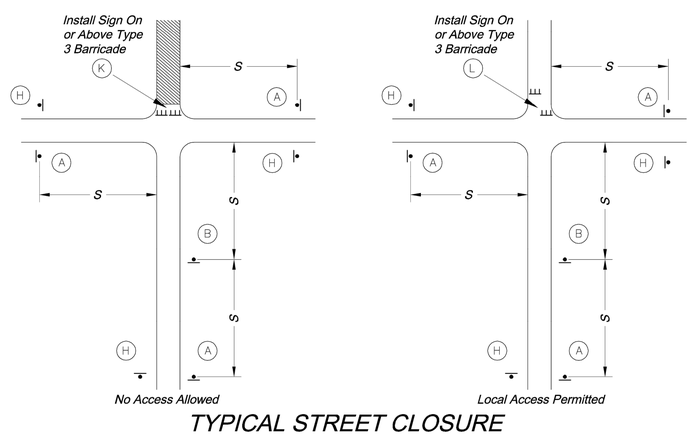
* Install Signs Every 200 Feet Throughout the Closed Lane or As Needed

Sign Spacing "S"	
Speed Limit (mph)	Spacing (Feet)
25	100
30 - 35	250
≥ 40	350

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

Guidelines for Length of Longitudinal Buffer Space "B"	
Speed Limit (mph)	Length (Feet)
25	35
30	55
35	85
40	120
45	170

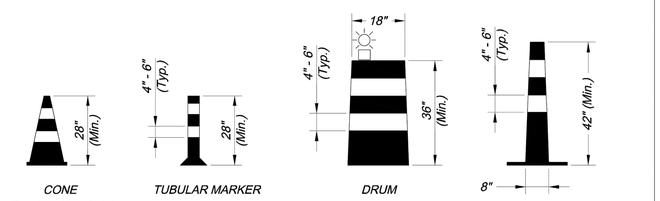
Maximum Channelizer Spacing		
Speed Limit (mph)	Within Taper (Feet)	Outside Taper (Feet)
25	25	50
30	30	60
35	35	70
40	40	80
45	45	90



TYPICAL STREET CLOSURE

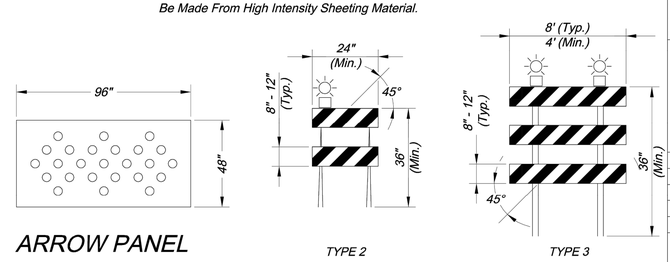
GENERAL NOTES:

1. All signs, barricades, channelizers, markings and other traffic control devices shall conform to the latest edition of the Manual on Uniform Traffic Control Devices (MUTCD).
2. All traffic control devices shall be standard in size, shape, color, and message, in good condition, and retro-reflectorized. All signs shall be securely mounted with height and lateral location as described in the MUTCD.
3. Warning lights shall be used on barricades in place at night and on warning signs which alert drivers about a change in alignment, traffic control, lane closure, or road closure.
4. Flaggers shall be used where indicated on the plans, where construction vehicles interact with normal traffic, or where construction activities impose a restriction on traffic, as directed by the City Traffic Engineer. Where flaggers are used, advance signing shall be erected as shown in the details or as specified in the MUTCD. Flaggers shall meet the requirements in the MUTCD in regard to character, training, attire, and behavior.
5. Trim-lines are the City's preferred channelizing device. Cones may not be used at nighttime.
6. Traffic control devices not in use or not applicable shall be either covered or removed from the work area.
7. The Contractor shall use barricades, street plates, or fencing as needed to effectively shield pedestrian and vehicular traffic from exposed objects, excavations, and construction activities.
8. Access shall be maintained to all driveways and side streets unless noted otherwise on the plans.
9. No street shall be closed without the approval of the City Traffic Engineer. The Contractor shall notify the City Traffic Engineer at least 7 days in advance of any street closure. If a detour route around the closure is to be provided, all detour signing shall be as shown on a plan approved by the City Traffic Engineer.
10. Construction vehicles parked along streets shall be located within the work area (traffic control) or where otherwise normally permitted. Construction materials, including traffic control and vehicles shall not restrict sight distance for vehicles exiting at streets or drives.
11. Construction materials shall be kept off of sidewalks, consolidated in one location within City right-of-way, and removed daily unless otherwise approved by the Inspector. Dirt, mud, and other construction debris on streets and sidewalks shall be removed immediately.
12. The Contractor shall not perform any work that will restrict vehicular traffic in any way between the hours of 7:00 a.m. and 9:00 a.m. or 4:00 p.m. and 6:00 p.m. Monday through Friday unless otherwise indicated in the specifications.
13. All travel lanes should be at least 11 feet wide unless otherwise authorized by the City Traffic Engineer. A "Narrow Lanes" sign shall be installed in advance of a lane width reduction to less than 11 feet.
14. All edge drop-offs of more than 2 inches and less than 4 inches should be protected by a wedge or barrier and all edge drop-offs greater than 4 inches shall have edge protection (see Traffic Control Specifications for edge treatment requirements).
15. The "Workers" symbolic sign (MUTCD No. W21-1a) may be used instead of the "Road Work Ahead" sign for work with a duration of 12 hours or less. The "End Road Work" sign is not required to be installed after the "Workers" sign.
16. No traffic signal shall be altered or modified in any way without a plan approved by the City Traffic Engineer.
17. The Contractor shall be responsible for maintaining all traffic control devices on an around-the-clock basis, whether or not work is actively being pursued and any deficiencies noted shall be corrected immediately.
18. The traffic control requirements shown on these plans are minimum requirements only and do not attempt to address in depth the variety of situations that may occur once construction has started. In no way do the requirements shown on these plans relieve the Contractor of his responsibility for selecting the proper traffic control devices and implementation procedures that will assure the safety of drivers, pedestrians, and workers at all times.
19. Should the contractor fail to enforce the traffic control plan or fail to clean, replace or otherwise maintain the traffic control devices when directed to do so by the City Traffic Engineer or representative, the City may take one or more of the following actions:
    - A) Employ another agency to correct deficiencies in traffic control devices and deduct the cost from the Contractor's pay estimate,
    - B) Stop the work until deficiencies are corrected,
    - C) Suspend all pay estimates until deficiencies are corrected, or
    - D) Place the Contractor in default.



CHANNELIZERS

NOTE: White Bands On Barricades and Channelizers Shall Be Made From High Intensity Sheeting Material.



ARROW PANEL

TYPE 2

TYPE 3

BARRICADES

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

Project:

TRAFFIC CONTROL DETAILS

Sheet Name: STANDARD DRAWING TC-1

Drawn By: JJW
Checked By: MP
Date: 12-10-2008
Project No.: X

x OF x

X

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Surveying 2005008319-D
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Engineering E-1695
Surveying LS-218
Oklahoma
Engineering 6254
Nebraska
Engineering CA2821

Oldham Village
Lee's Summit, Jackson County, Missouri

Project: OLDHAM VILLAGE-PLACE, LSMO

Issue Date: November 5, 2024

TRAFFIC CONTROL STANDARD DETAILS
Construction Plans for:
Oldham Village
Lee's Summit, Jackson County, Missouri

STATE OF MISSOURI
MATTHEW J. SCHLICHT
NUMBER
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PROFESSIONAL ENGINEER

Matthew J. Schlicht
MO PE 2006019708
KS PE 19071
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NE PE E-14335

REVISIONS

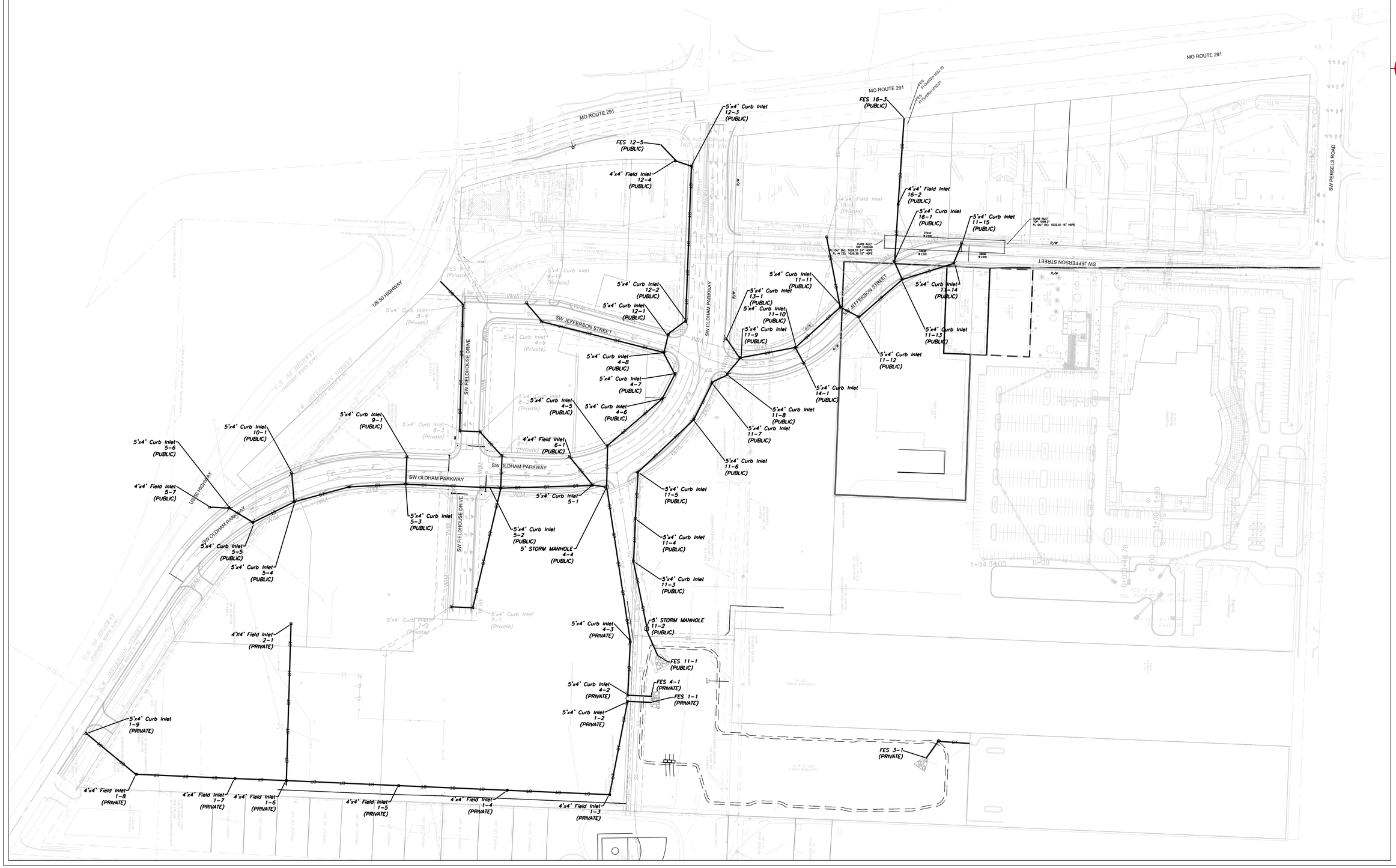
1. REV. 12/10/2024
2. REV. 1/2/2025
3. REV. 2/6/2025
   REV. 3/5/2025
4. REV. 3/24/2025

STORM SEWER GENERAL LAYOUT

SCALE: 1" = 60'

0 30' 60' 120'

North



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Engineering CA2821

Oldham Village
Lee's Summit, Jackson County, Missouri

Project: OLDHAM MANOR TOWNHOMES PLACE, LSMO
Issue Date: November 5, 2024

Storm Sewer General Layout
Construction Plans for:
Oldham Village
Lee's Summit, Jackson County, Missouri

STATE OF MISSOURI
MATTHEW J. SCHLICHT
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PROFESSIONAL ENGINEER

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REVISIONS

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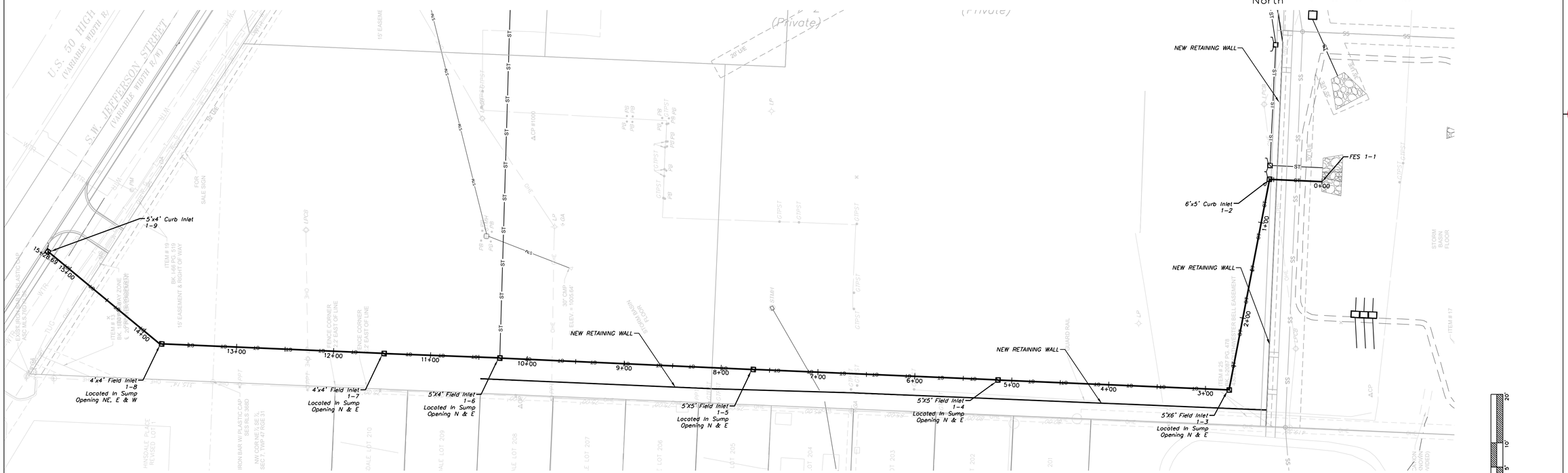
REV. 3/5/2025
4 REV. 3/24/2025
5 REV. 4/15/2025

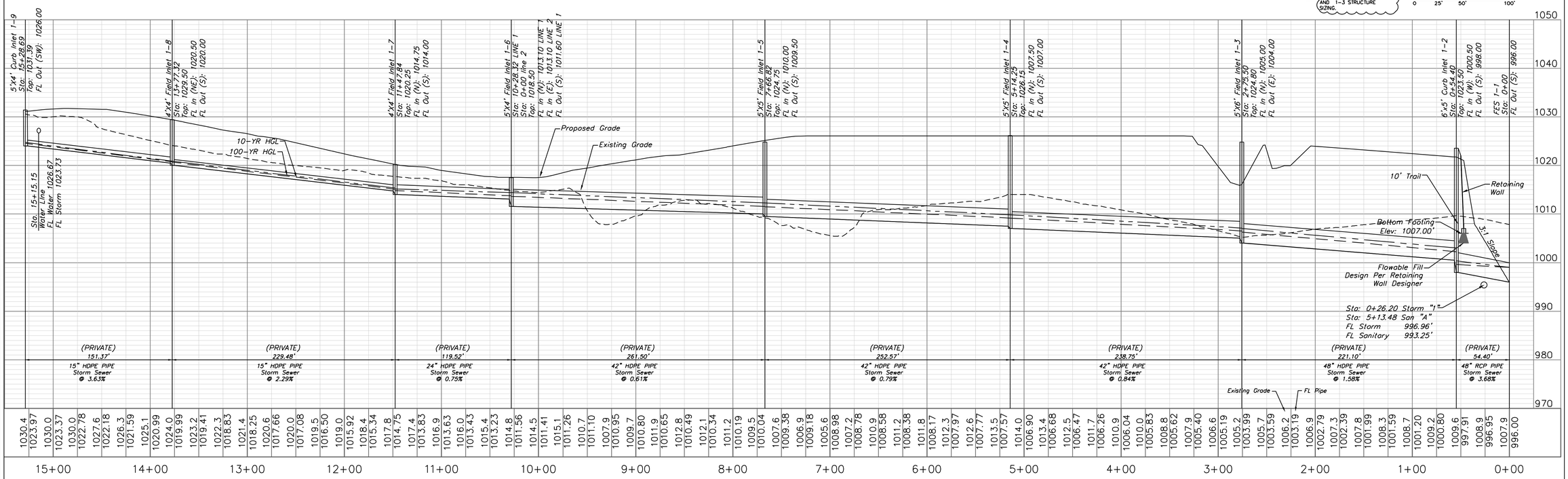
C.300

STORM SEWER PLAN AND PROFILE

SCALE: 1" = 50'



STORM LINE 1



REVISED INLETS 1-2 AND 1-3 STRUCTURE SIZING.

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Engineering CA2821

Oldham Village
Lee's Summit, Jackson County, Missouri

Project: OLDHAM VILLAGE/FIFTH-ACE. LSMO
Issue Date: November 5, 2024

Storm Sewer Plan and Profile
Construction Plans for:
Oldham Village
Lee's Summit, Jackson County, Missouri

Matthew J. Schlicht
MO PE 2006019708
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NE PE E-14335

REVISIONS

1 REV. 12/10/2024
2 REV. 1/2/2025
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REV. 3/5/2025
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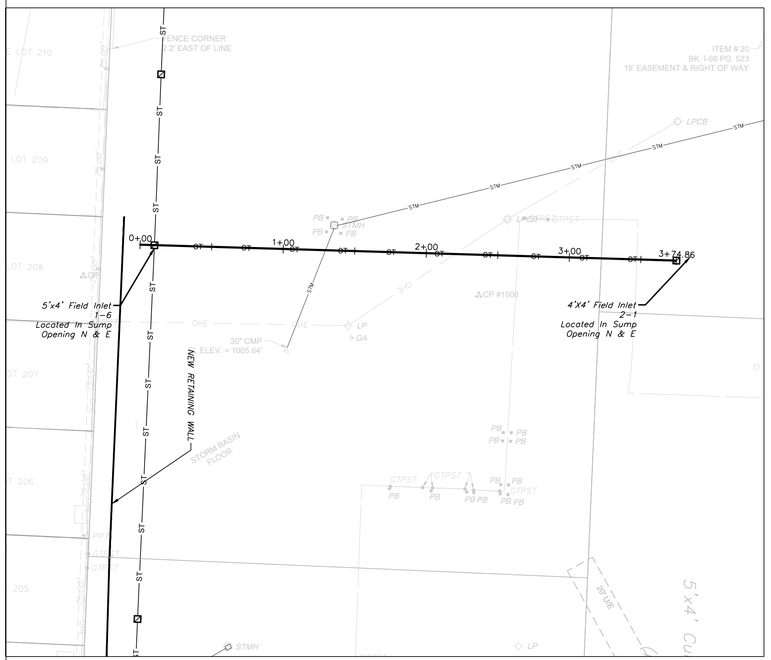
5 REV. 4/15/2025

C.301

STORM SEWER PLAN AND PROFILE

SCALE: 1" = 50'



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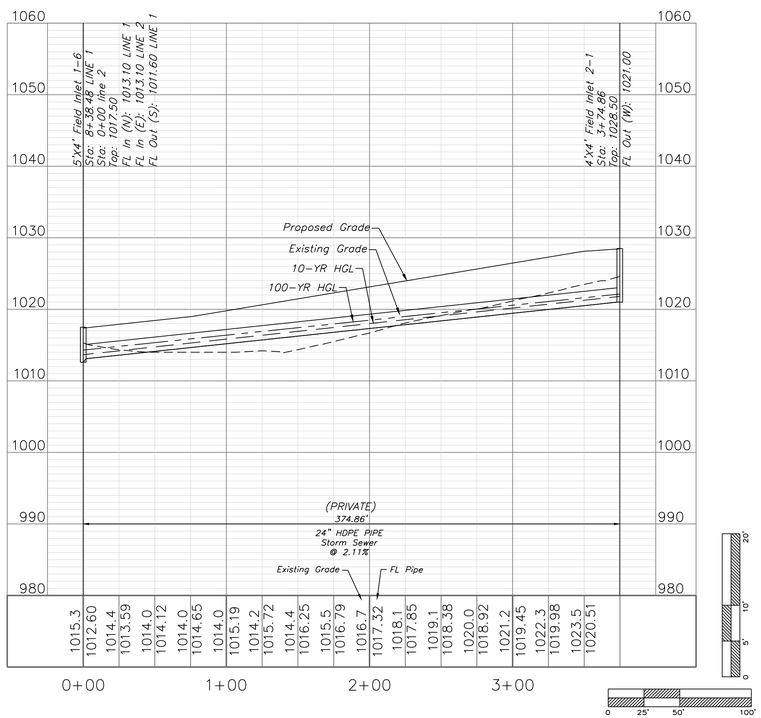
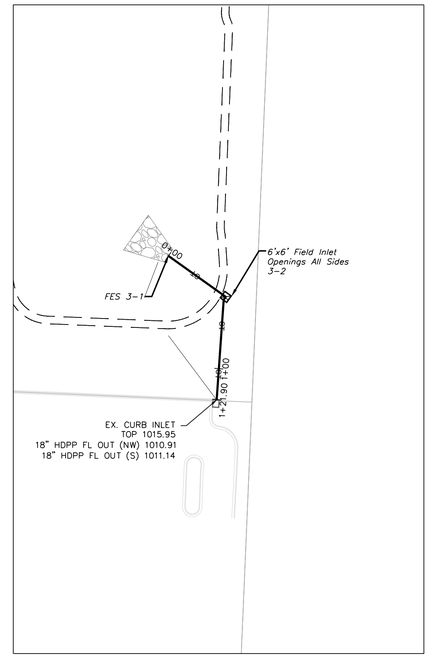


STORM SEWER PLAN AND PROFILE

SCALE: 1" = 50'



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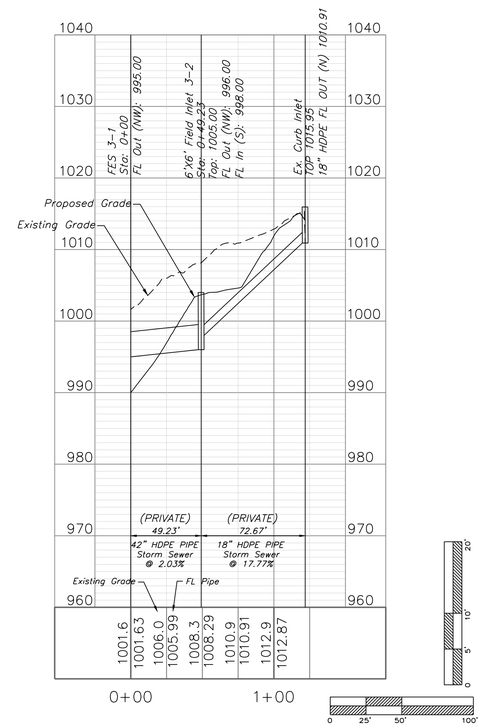
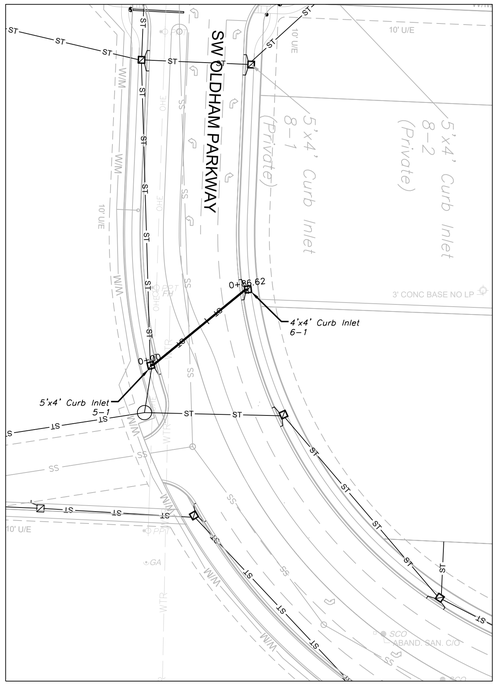


STORM SEWER PLAN AND PROFILE

SCALE: 1" = 50'



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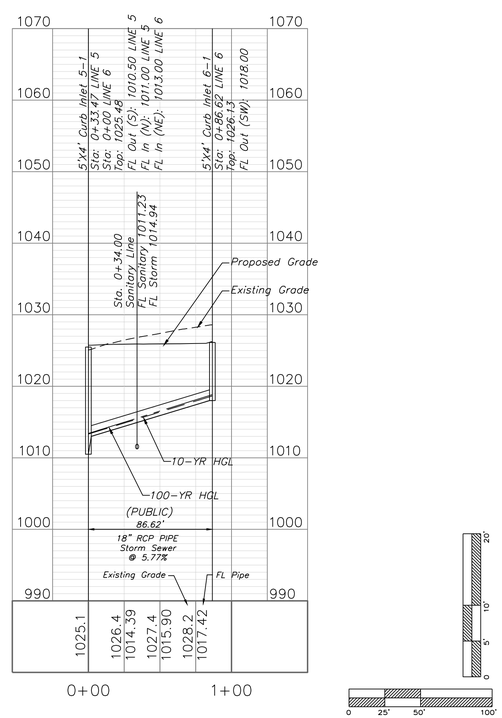

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Oldham Village
Lee's Summit, Jackson County, Missouri

Project: OLDHAM VILLAGE-FLA-ACE, LSMO

Issue Date: November 5, 2024

Storm Sewer Plan and Profile
Construction Plans for:
Oldham Village
Lee's Summit, Jackson County, Missouri

STATE OF MISSOURI
MATTHEW J. SCHLICHT
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1 REV. 12/10/2024
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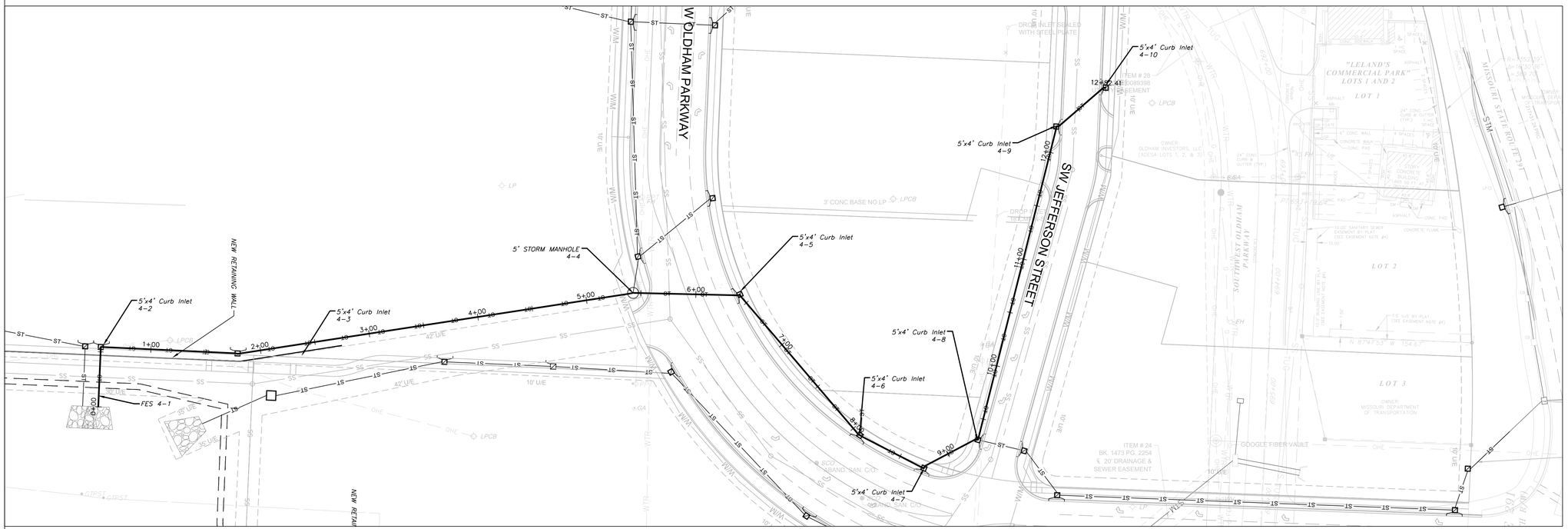
REV. 3/5/2025
4 REV. 3/24/2025
5 REV. 4/15/2025

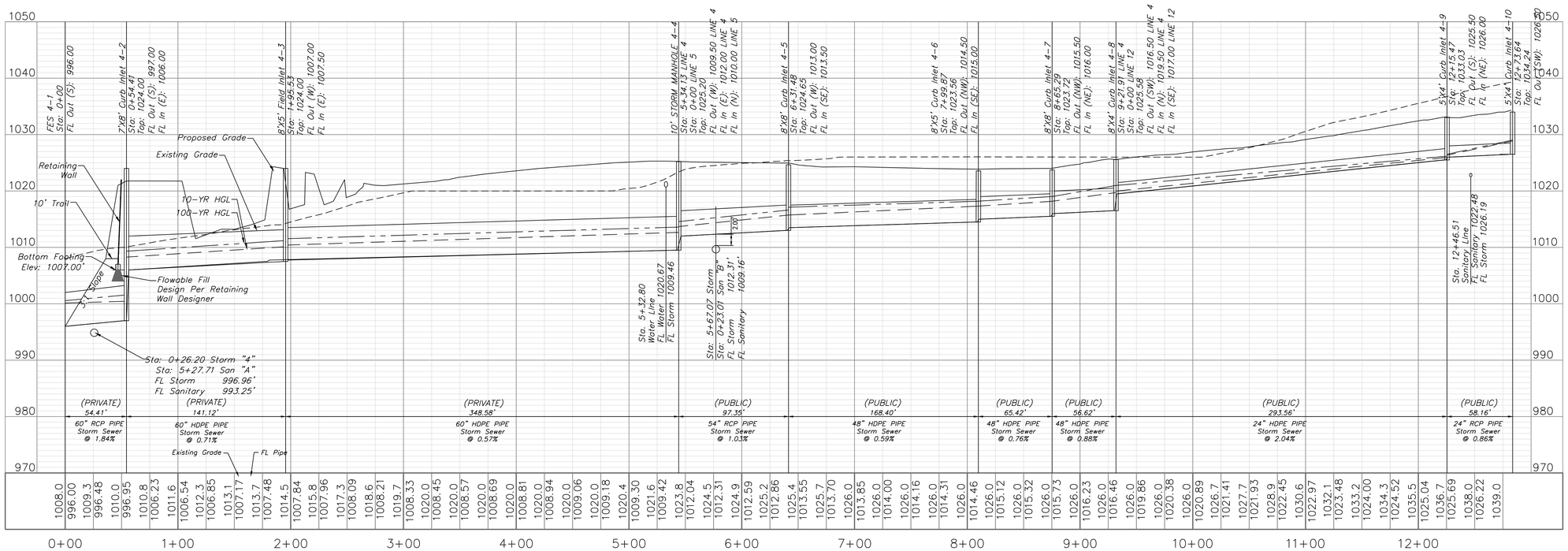
STORM SEWER PLAN AND PROFILE

SCALE: 1" = 50'

0 25' 50' 100'



STORM LINE 4



0 25' 50' 100'

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Oldham Village
Lee's Summit, Jackson County, Missouri

Project: OLDHAM VILLAGE-TIFF-ACE, LSMO
Issue Date: November 5, 2024

Storm Sewer Plan and Profile
Construction Plans for:
Oldham Village
Lee's Summit, Jackson County, Missouri

STATE OF MISSOURI
MATTHEW J. SCHLICHT
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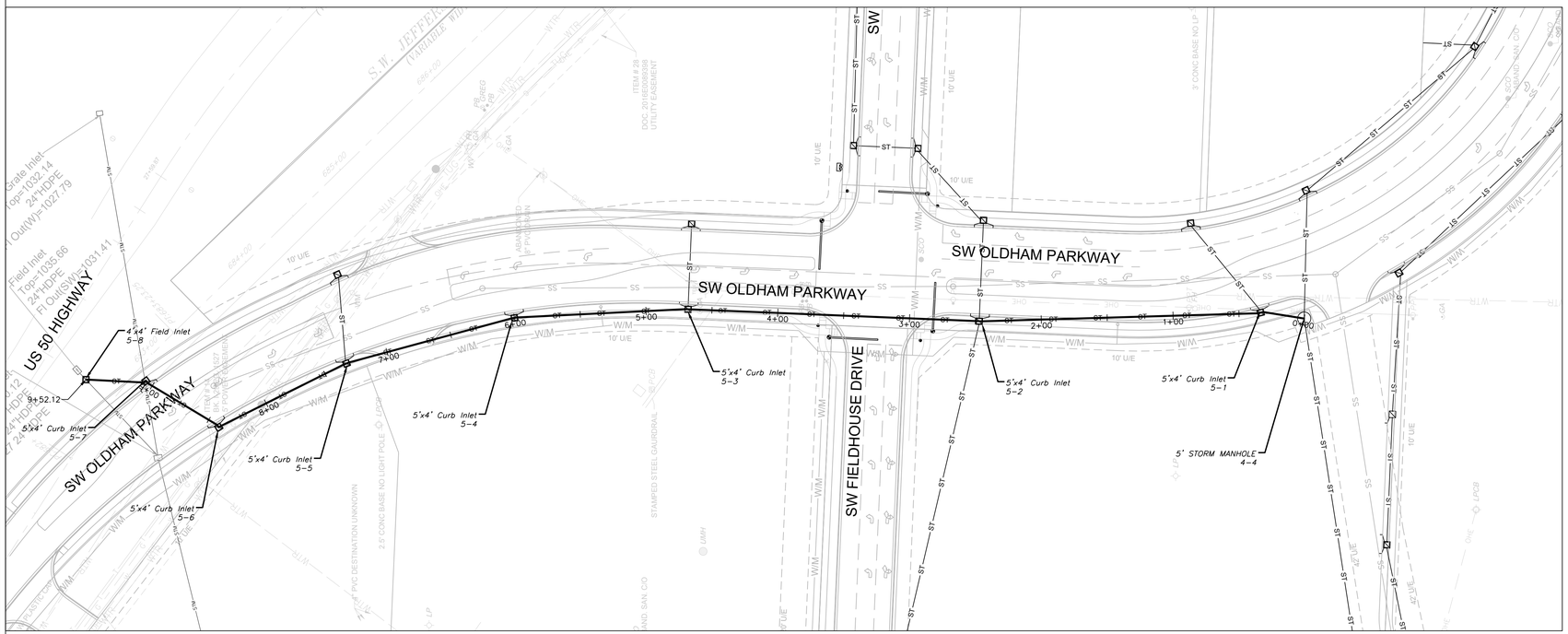
C.303

STORM SEWER PLAN AND PROFILE

SCALE: 1" = 50'

0 25' 50' 100'

North



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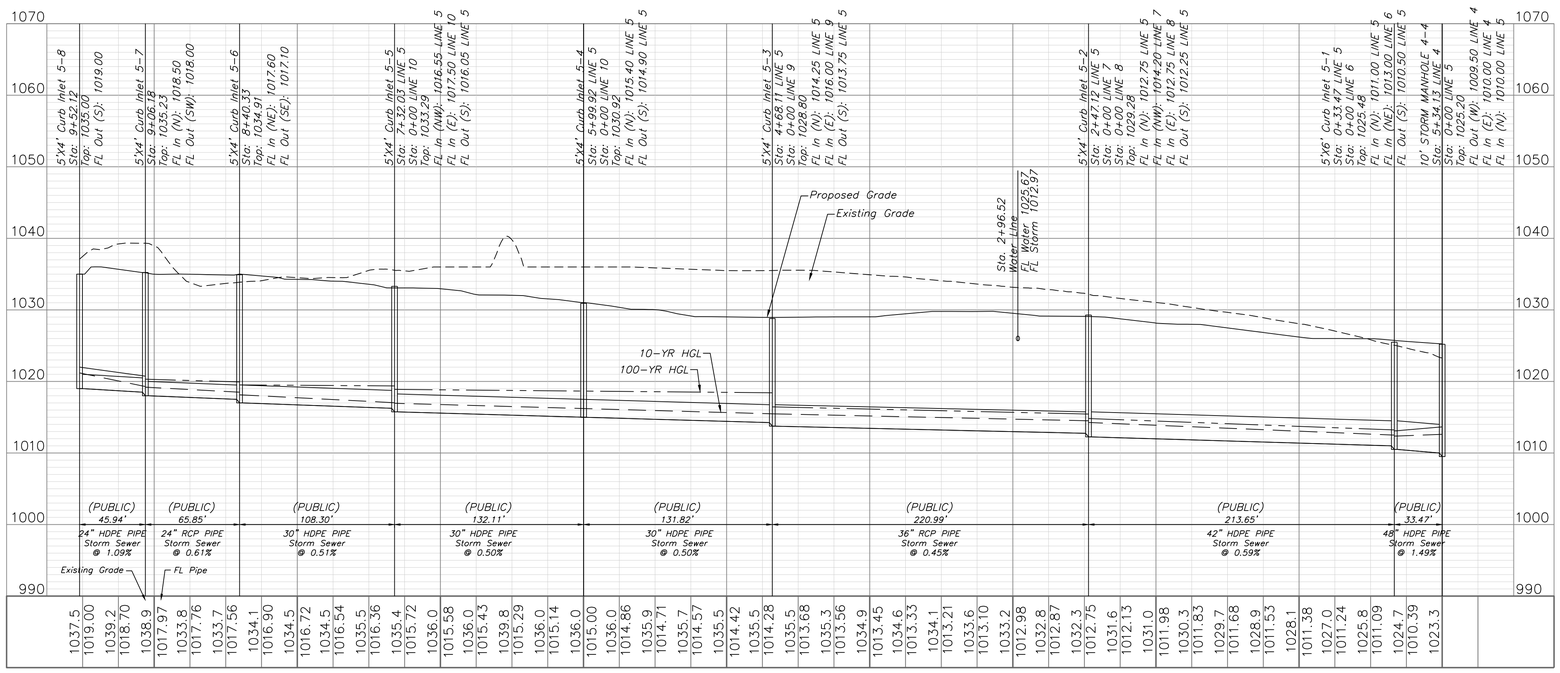

0 25' 50' 100'

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Oldham Village
Lee's Summit, Jackson County, Missouri

Project: OLDHAM MARKETPLACE, LSMO

Issue Date: November 5, 2024

Storm Sewer Plan and Profile
Construction Plans for:
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Lee's Summit, Jackson County, Missouri

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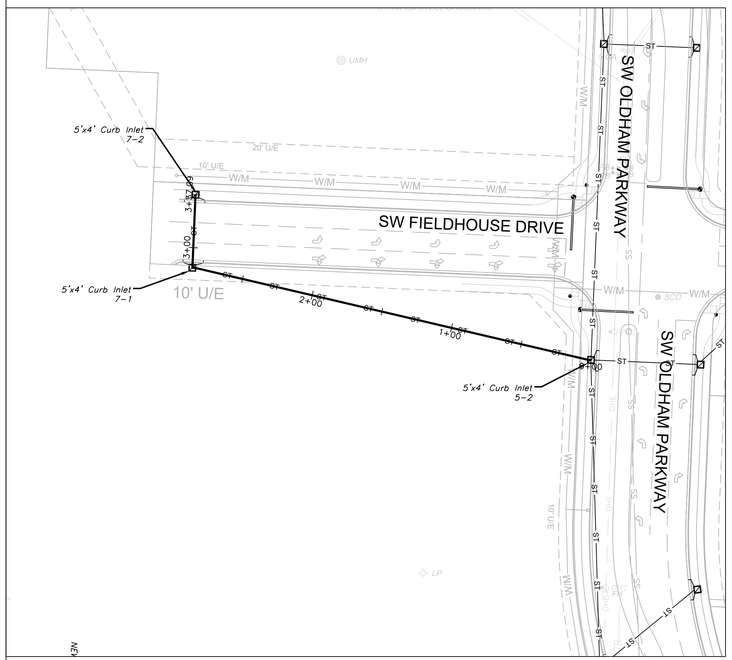
C.304

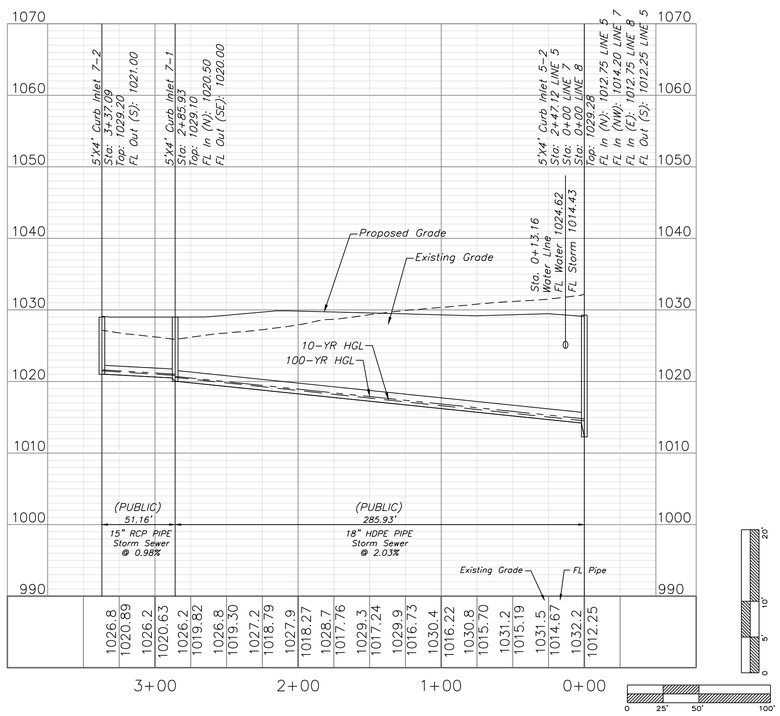
STORM SEWER PLAN AND PROFILE

SCALE: 1" = 50'

North



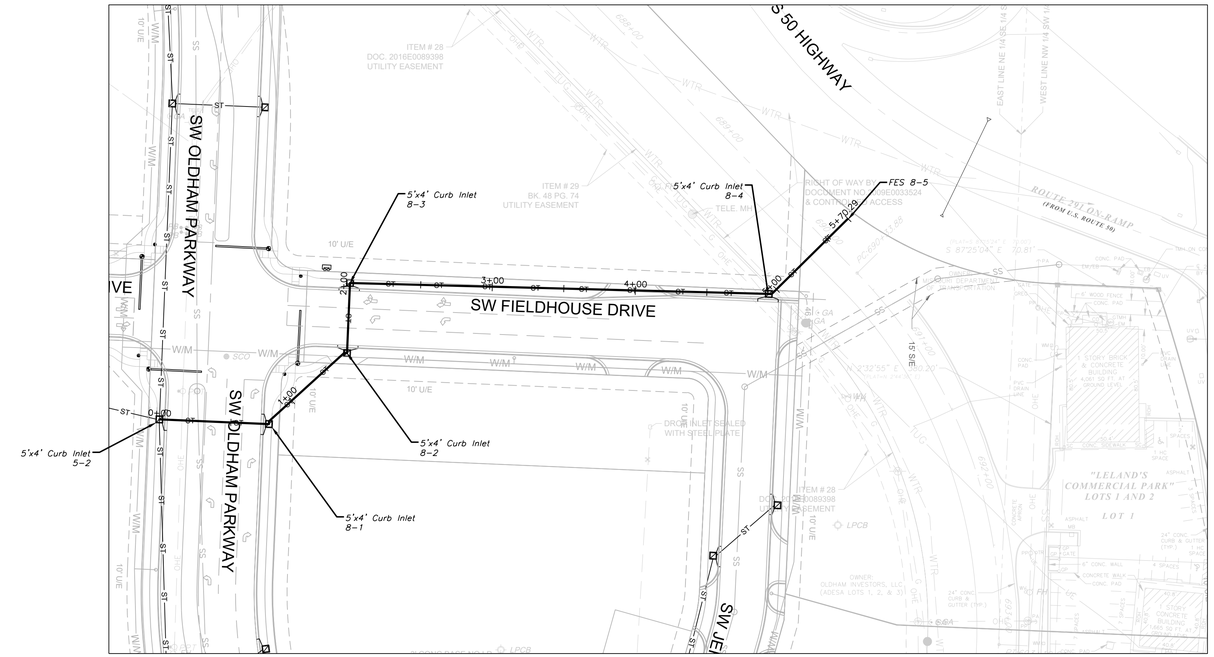
STORM LINE 7



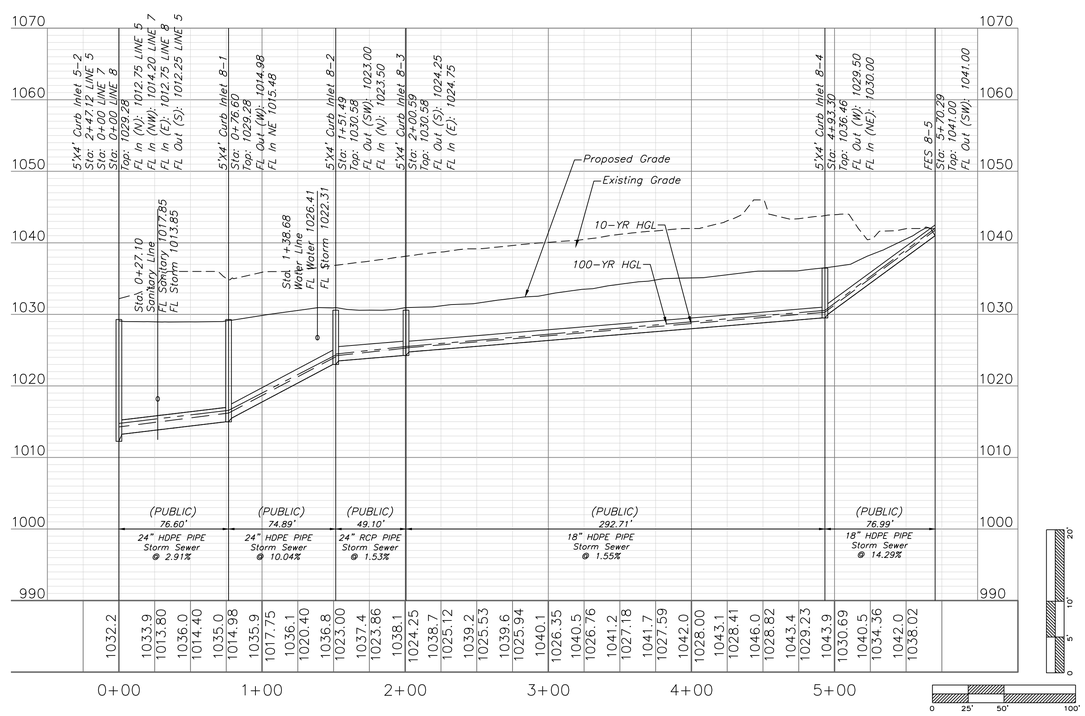
STORM SEWER PLAN AND PROFILE

SCALE: 1" = 50'

North



STORM LINE 8



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Oldham Village
Lee's Summit, Jackson County, Missouri

Project: OLDHAM
Manager: MATT-PLACE, LSMO
Issue Date: November 5, 2024

Storm Sewer Plan and Profile
Construction Plans for:
Oldham Village
Lee's Summit, Jackson County, Missouri

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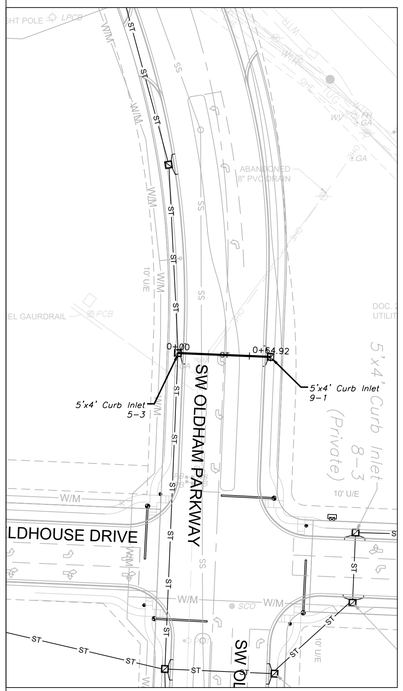
5 REV. 4/15/2025

C.305

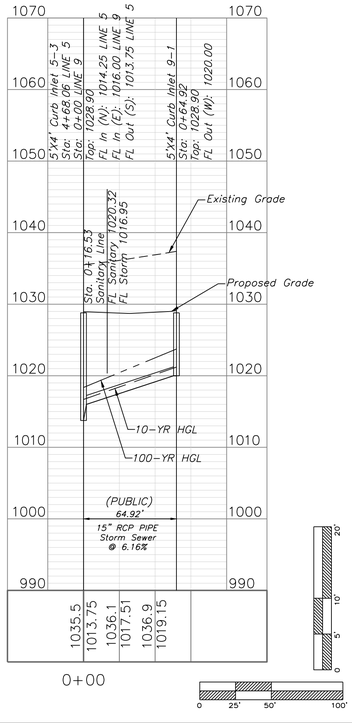
STORM SEWER PLAN AND PROFILE

SCALE: 1" = 50'

0 25' 50' 100'



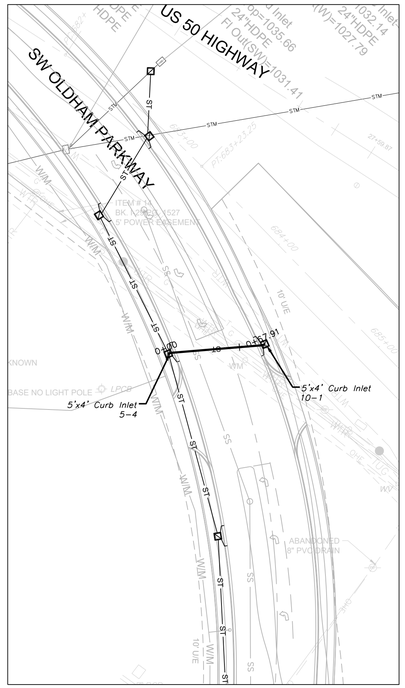
STORM LINE 9



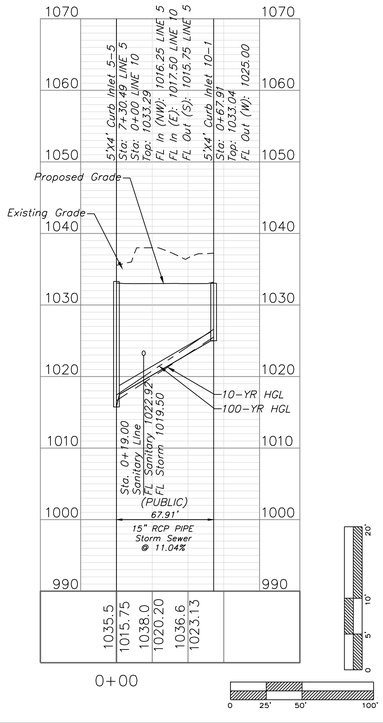
STORM SEWER PLAN AND PROFILE

SCALE: 1" = 50'

0 25' 50' 100'



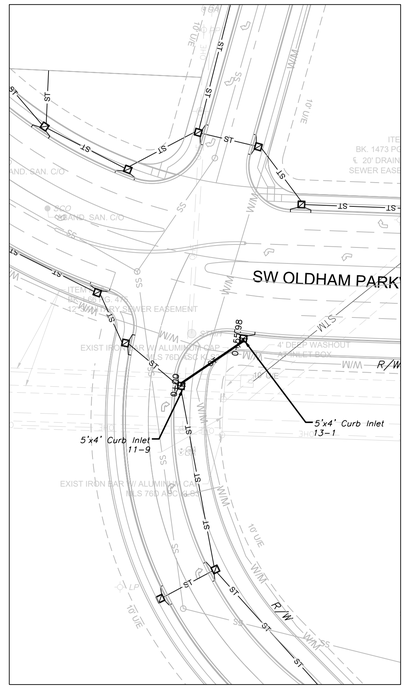
STORM LINE 10



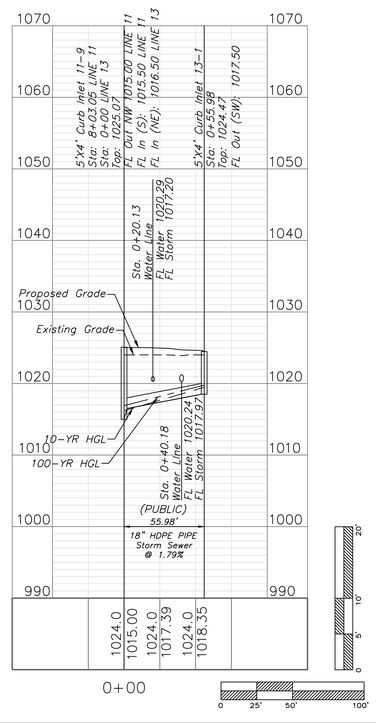
STORM SEWER PLAN AND PROFILE

SCALE: 1" = 50'

0 25' 50' 100'



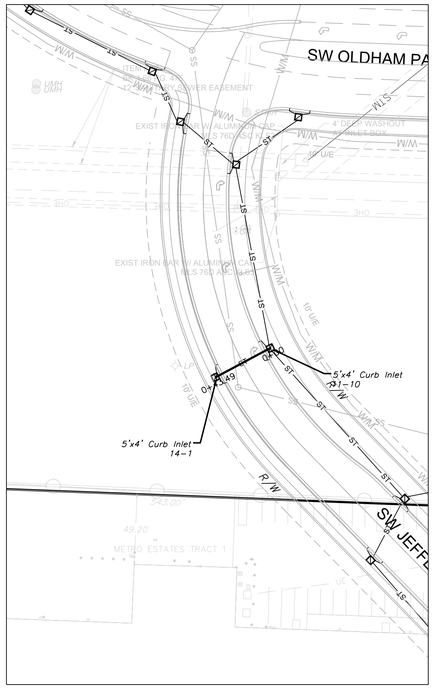
STORM LINE 13



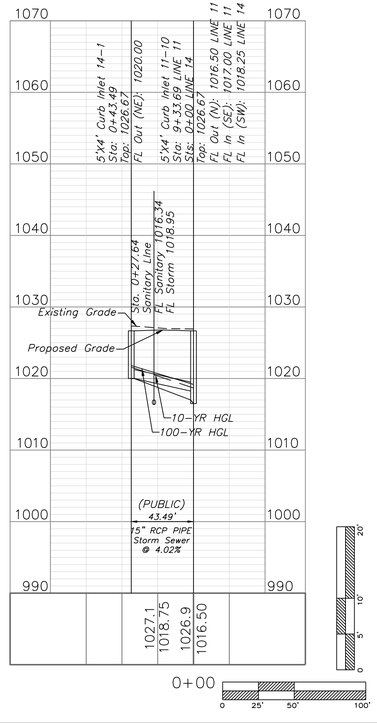
STORM SEWER PLAN AND PROFILE

SCALE: 1" = 50'

0 25' 50' 100'



STORM LINE 14



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Surveying 2005008319-D
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Engineering E-1695
Surveying LS-218
Oklahoma
Engineering 6254
Nebraska
Engineering CA2821

Oldham Village
Lee's Summit, Jackson County, Missouri

Project: OLDHAM MATTHEW-ACE, LSMO

Issue Date: November 5, 2024

Storm Sewer Plan and Profile
Construction Plans for:
Oldham Village
Lee's Summit, Jackson County, Missouri

STATE OF MISSOURI
MATTHEW J. SCHLICHT
NUMBER
PE-2006019708
PROFESSIONAL ENGINEER

Matthew J. Schlicht
MO PE 2006019708
KS PE 19071
OK PE 25226
NE PE E-14335

REVISIONS

1 REV. 12/10/2024
2 REV. 1/2/2025
3 REV. 2/6/2025
REV. 3/5/2025
4 REV. 3/24/2025
5 REV. 4/15/2025

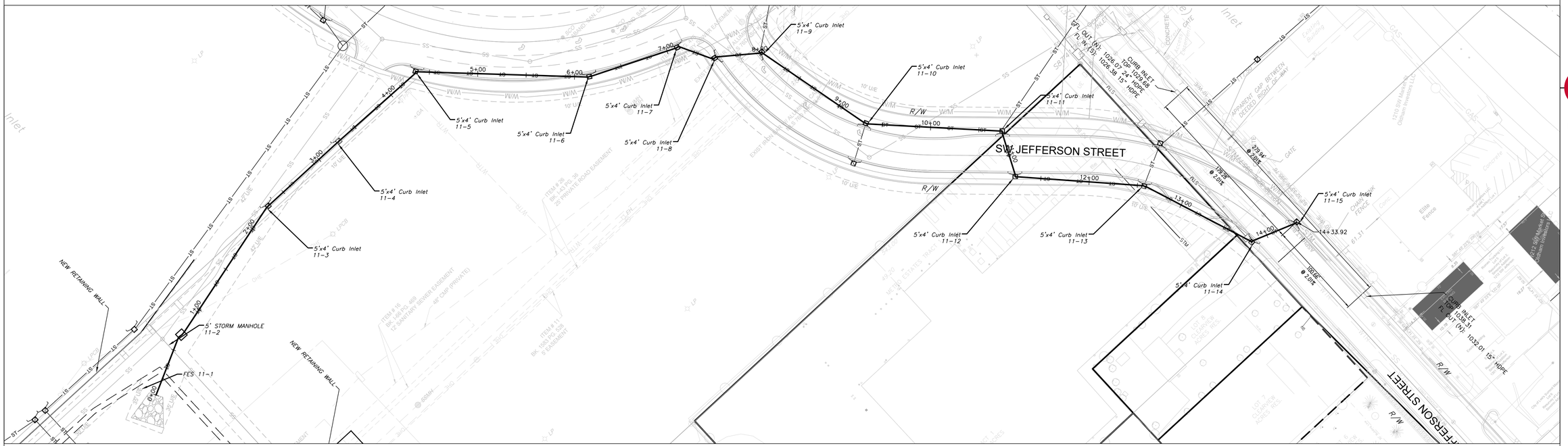
C.306

STORM SEWER PLAN AND PROFILE

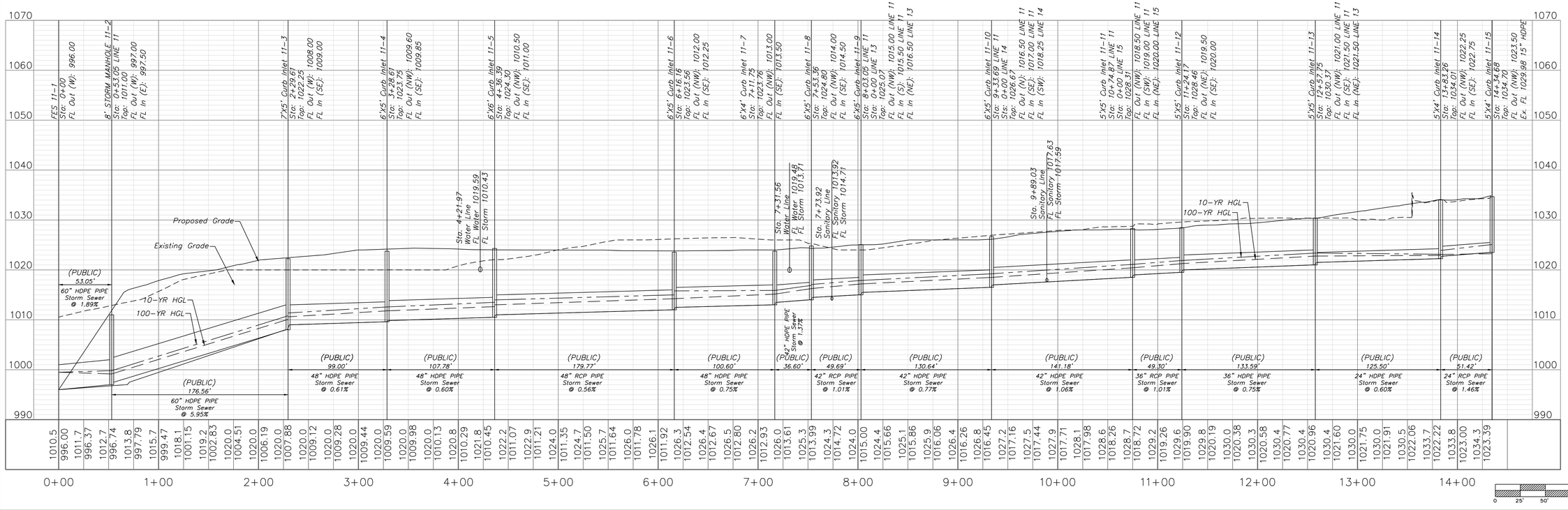
SCALE: 1" = 30'

0 15' 30' 60'

North



STORM LINE 11



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Oldham Village
Lee's Summit, Jackson County, Missouri

Project: OLDHAM VILLAGE-PLACE, LSMO

Issue Date: November 5, 2024

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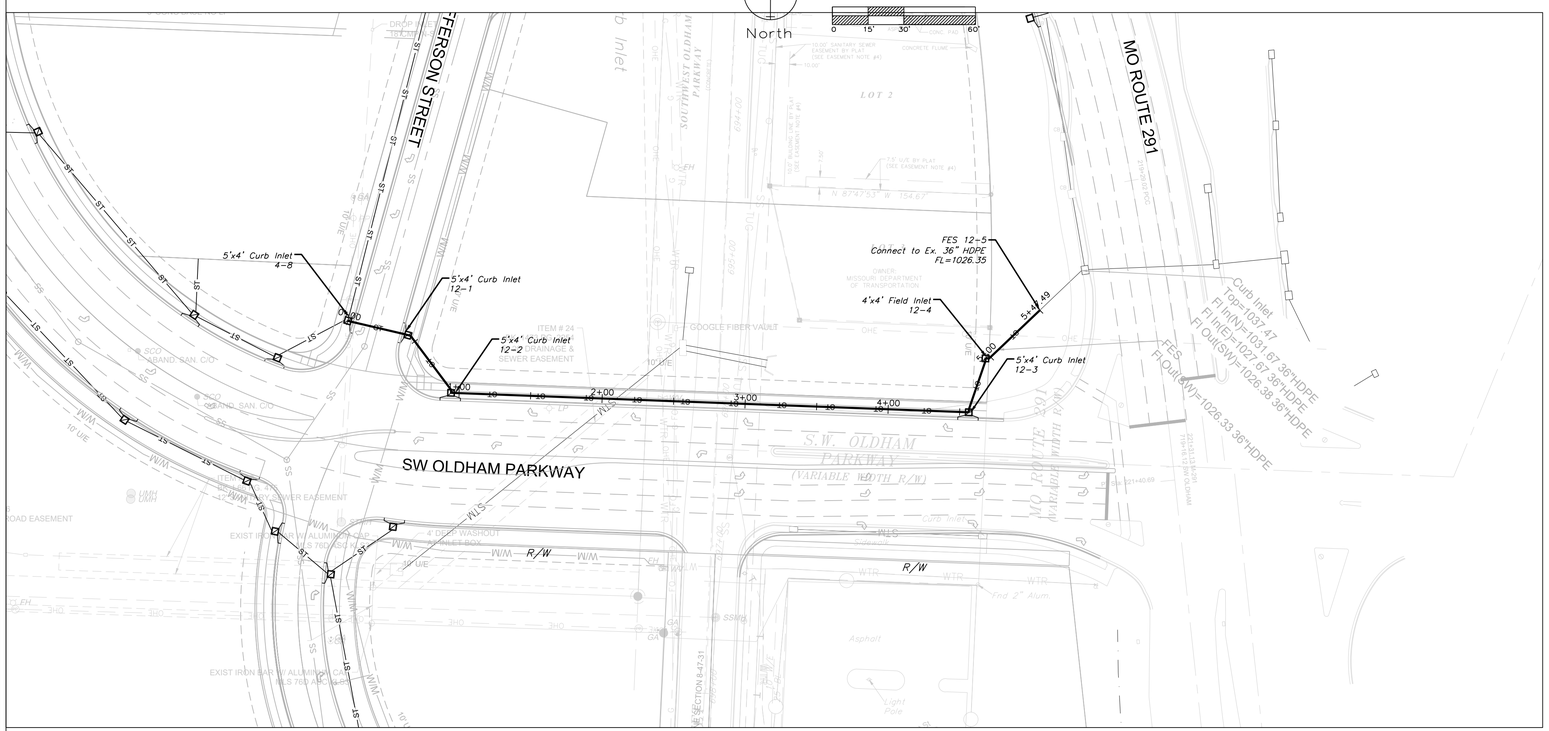
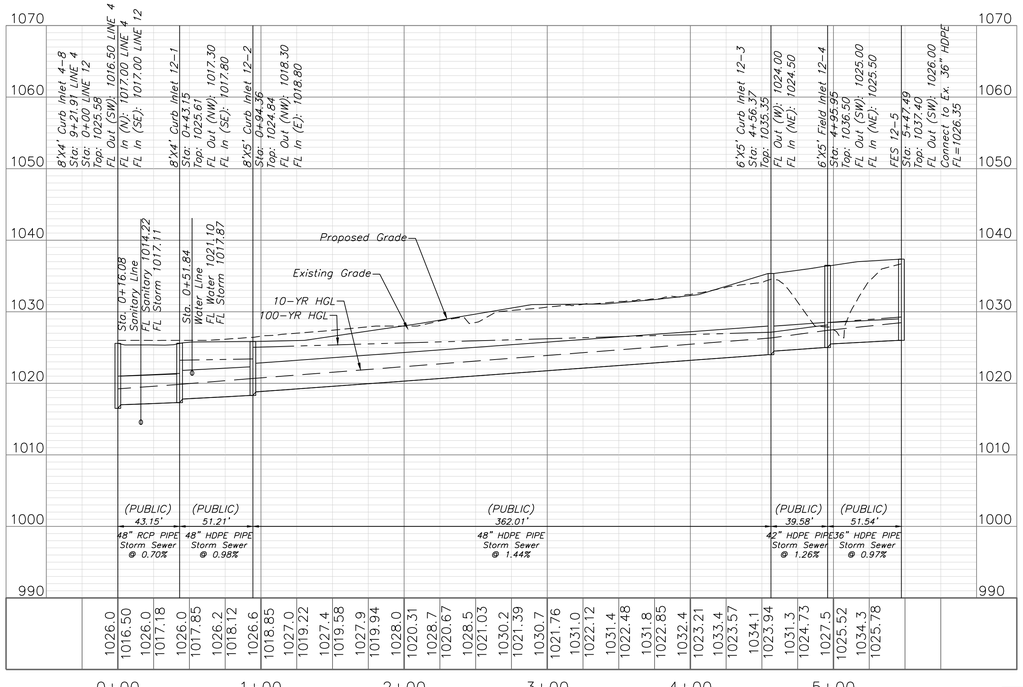
C.307

STORM SEWER PLAN AND PROFILE

SCALE: 1" = 30'



STORM LINE 12



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Lee's Summit, Jackson County, Missouri

Project:
OLDHAM
LEE'S SUMMIT-PLACE.
LSMO

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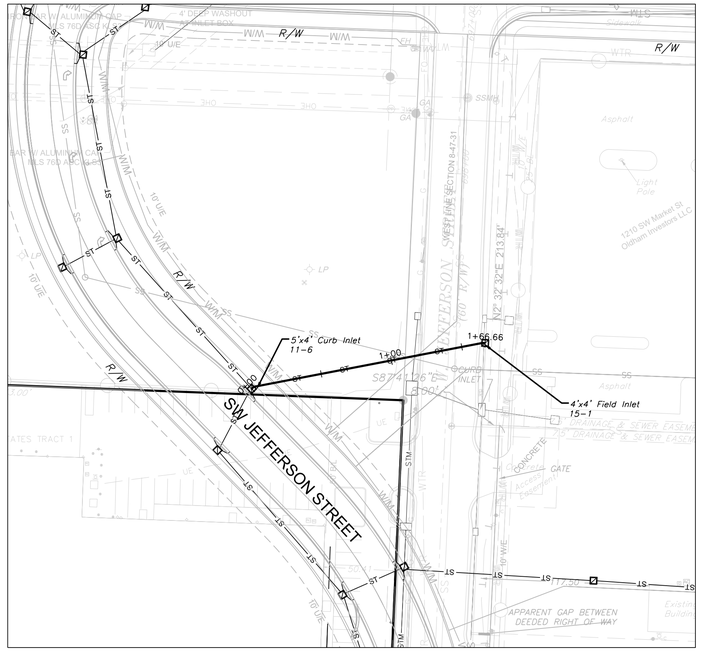
C.308

STORM SEWER PLAN AND PROFILE

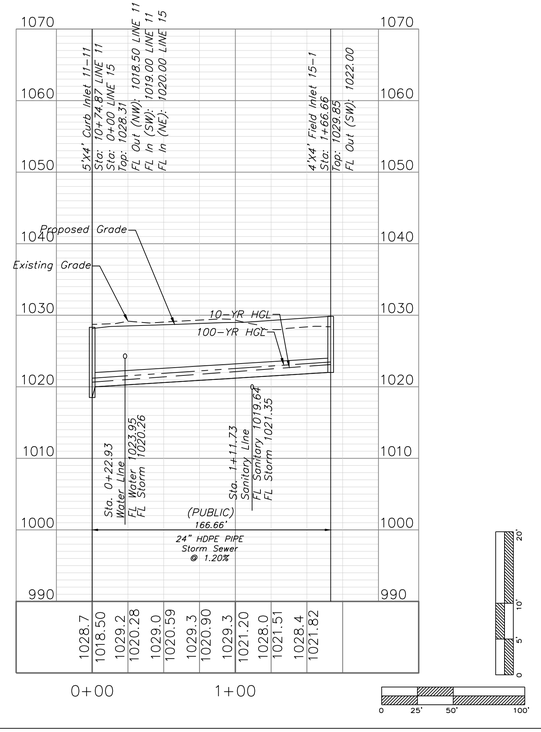
North

SCALE: 1" = 30'

0 15' 30' 60'



STORM LINE 15

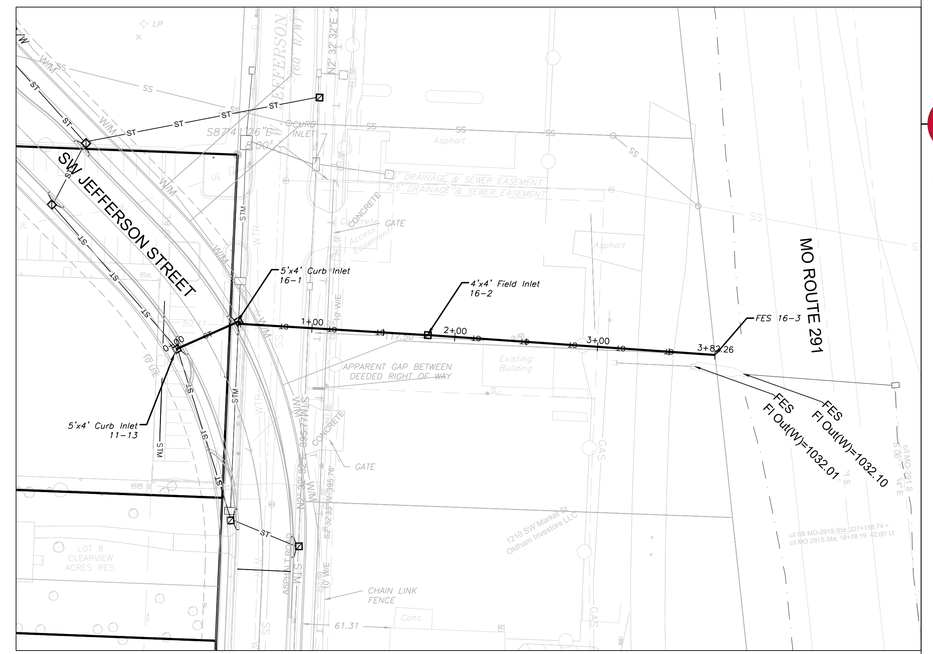


STORM SEWER PLAN AND PROFILE

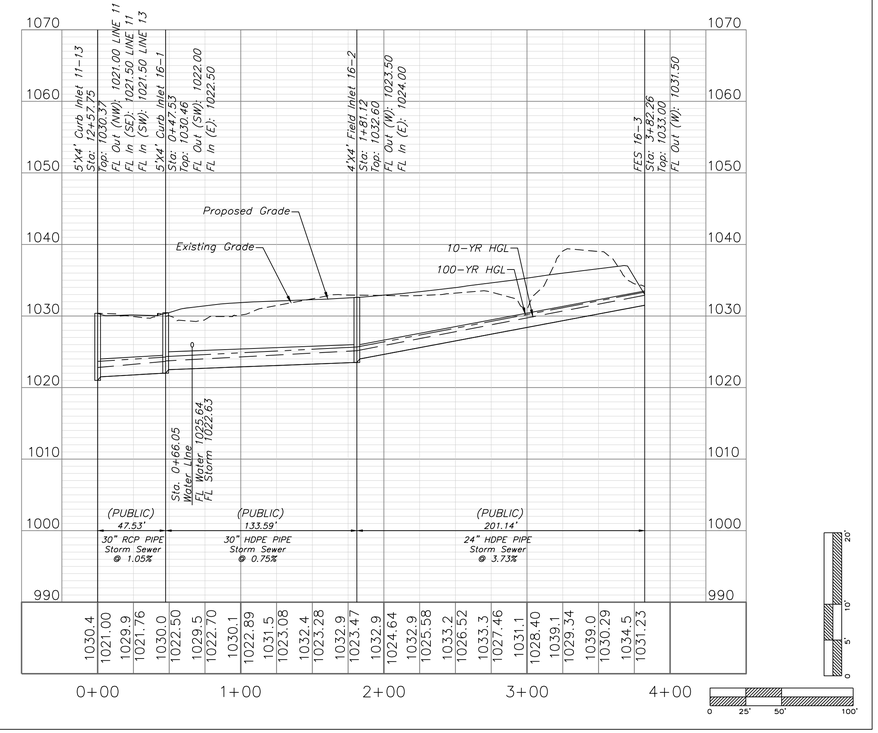
North

SCALE: 1" = 30'

0 15' 30' 60'



STORM LINE 16



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C.309

10-YEAR STRUCTURE

D.S. Str.	Str. No.	Area	InletTime	Int.	RunoffCoeff.	Q =CIA	Q Carry-over	QCaptured	QBypassed	JunctType	CurbHeight	CurbLength	GutterSlope	GutterWidth	CrossSlope, Sw	CrossSlope, Sx	LocalDepr.	InletDepth	BypassDepth	BypassSpread	GutterDepth	GutterSpread	Bypass Str.
		(ac)	(min)	(in/hr)	(C)	(cfs)	(cfs)	(cfs)	(cfs)		(in)	(ft)	(ft/ft)	(ft)	(ft/ft)	(ft/ft)	(in)	(ft)	(ft)	(ft)	(ft)	(ft)	
1-1	1-2	0.8	7.1	6.77	0.68	3.68	0	3.68	0	Curb	5.8	6	Sag	2	0.02	0.02	9	1.05	n/a	n/a	0.3	15.14	Sag
1-2	1-3	0.23	6.3	6.98	0.68	1.09	0	1.09	0	Dp-Curb	6	16	Sag	....	0.02	0.02	....	0.08	n/a	n/a	0.08	4.01	Sag
1-3	1-4	0.97	6.5	6.92	0.68	4.57	0	4.57	0	Dp-Curb	6	20	Sag	....	0.02	0.02	....	0.18	n/a	n/a	0.18	8.97	Sag
1-4	1-5	0.2	6.3	6.98	0.68	0.95	0	0.95	0	Dp-Curb	6	16	Sag	....	0.02	0.02	....	0.07	n/a	n/a	0.07	3.65	Sag
1-5	1-6	7.54	9.3	6.26	0.68	32.11	0	32.11	0	Dp-Curb	6	16	Sag	....	0.02	0.02	....	0.81	n/a	n/a	0.81	40.39	Sag
1-6	1-7	0.76	6.2	7	0.68	3.62	0	3.62	0	Dp-Curb	6	16	Sag	....	0.02	0.02	....	0.18	n/a	n/a	0.18	8.92	Sag
1-7	1-8	0.2	5.2	7.28	0.68	0.99	0	0.99	0	Dp-Curb	6	16	Sag	....	0.02	0.02	....	0.08	n/a	n/a	0.08	3.76	Offsite
1-8	1-9	0.45	8.1	6.53	0.68	2	0	1.85	0.15	Curb	5.8	5	0.015	2	0.05	0.02	9	0.96	0.08	1.69	0.21	7.37	Sag
1-5	2-1	1.32	7.3	6.72	0.68	6.03	0	6.03	0	Dp-Curb	6	16	Sag	....	0.02	0.02	....	0.25	n/a	n/a	0.25	12.53	Sag
3-1	3-2	24.42	21.9	4.44	0.68	73.75	0	73.75	0	Dp-Curb	6	24	Sag	....	0.02	0.02	....	1.56	n/a	n/a	1.56	77.9	Sag
3-2	EX CI	3.68	30	3.77	0.68	9.43	0	9.43	0	Curb	5.8	5	Sag	2	0.05	0.02	9	1.42	n/a	n/a	0.67	30.51	Sag
4-1	4-2	0.46	7.1	6.77	0.68	2.12	0	2.12	0	Curb	5.8	5	Sag	2	0.05	0.02	9	1.04	n/a	n/a	0.29	11.26	....
4-2	4-3	2.8	8.7	6.39	0.68	12.17	0	12.17	0	Curb	5.8	5	Sag	2	0.05	0.02	9	1.53	n/a	n/a	0.78	36.16	4-6L
4-3	4-4	0	0	0	0.68	0	....	....	....	MH	....	....	....	....	....	....	....	....	....	....	....	....	Sag
4-4	4-5	0.34	5.7	7.14	0.68	1.65	0.66	2.31	0	Curb	5.8	8	0.021	2	0.05	0.02	9	0.96	0	0	0.21	7.29	Sag
4-5	4-6L	0.21	6.6	6.9	0.68	0.98	2.16	3.14	0	Curb	5.8	5	Sag	2	0.05	0.02	9	1.1	n/a	n/a	0.35	14.66	....
4-6L	4-6R	0.25	6.6	6.9	0.68	1.17	0	1.17	0	Curb	5.8	5	Sag	2	0.05	0.02	9	0.96	n/a	n/a	0.21	7.59	4-6L
4-6L	4-6B	1.62	7.7	6.62	0.68	7.29	0	7.29	0	Hdwall	....	....	....	....	....	....	....	....	....	....	....	....	4-7
4-6L	4-7	0.46	7.5	6.67	0.68	2.09	6.64	6.56	2.16	Curb	5.8	8	0.01	2	0.05	0.02	9	1.1	0.23	8.32	0.35	14.69	4-8
4-7	4-8	0.21	6.5	6.92	0.68	0.99	0	0.99	0	Curb	5.8	8	0.018	2	0.05	0.02	9	0.91	0	0	0.16	5.06	12-1
4-8	4-9	0.1	5.7	7.14	0.68	0.49	0	0.49	0	Curb	5.8	5	0.033	2	0.05	0.02	9	0.86	0	0	0.11	2.72	11-5
4-9	4-10	0.28	5.5	7.2	0.68	1.37	0	1.3	0.07	Curb	5.8	5	0.033	2	0.05	0.02	9	0.91	0.06	1.12	0.16	5.12	5-1
4-4	5-1	0.21	6.5	6.92	0.68	0.99	0	0.99	0	Curb	5.8	5	0.018	2	0.05	0.02	9	0.91	0	0	0.16	5.06	Sag
5-1	5-2	0.16	5.8	7.11	0.68	0.77	0	0.77	0	Curb	5.8	5	0.015	2	0.05	0.02	9	0.9	0	0	0.15	4.67	Sag
5-2	5-3L	0.2	7.1	6.77	0.68	0.92	0	0.92	0	Curb	5.8	5	Sag	2	0.05	0.02	9	0.94	n/a	n/a	0.19	6.46	....
5-3L	5-3R	0.27	6.5	6.92	0.68	1.27	0	1.27	0	Curb	5.8	5	Sag	2	0.05	0.02	9	0.97	n/a	n/a	0.22	8.01	5-3L
5-3L	5-3B	1.2	7.2	6.74	0.68	5.5	0	5.5	0	Hdwall	....	....	....	....	....	....	....	....	....	....	....	....	5-4
5-3L	5-4	0.12	5.6	7.17	0.68	0.58	0	0.58	0	Curb	5.8	5	0.014	2	0.05	0.02	9	0.89	0	0	0.14	4.08	10-1
5-4	5-5	0.18	7.4	6.69	0.68	0.82	0	0.82	0	Curb	5.8	5	0.014	2	0.05	0.02	9	0.91	0	0	0.16	4.9	Sag
5-5	5-6	0.16	7.8	6.6	0.68	0.72	0	0.72	0	Curb	5.8	5	0.013	2	0.05	0.02	9	0.9	0	0	0.15	4.66	4-5
5-6	5-7	2.34	9.2	6.28	0.68	10	0	10	0	Dp-Curb	6	16	Sag	....	0.02	0.02	....	0.35	n/a	n/a	0.35	17.56	1-4
5-1	6-1	0.66	7.1	6.77	0.68	3.04	0	2.38	0.66	Curb	5.8	5	0.018	2	0.05	0.02	9	0.98	0.14	4.06	0.23	8.49	1-4
5-2	7-1	0.18	6.7	6.87	0.68	0.84	0	0.84	0	Curb	5.8	5	0.011	2	0.05	0.02	9	0.92	0	0	0.17	5.28	6-1
7-1	7-2	0.3	6.7	6.87	0.68	1.4	0	1.4	0	Curb	5.8	5	0.011	2	0.05	0.02	9	0.94	0	0	0.19	6.74	9-1L
5-2	8-1	0.21	6.6	6.9	0.68	0.98	0	0.98	0	Curb	5.8	5	0.013	2	0.05	0.02	9	0.92	0	0	0.17	5.48	8-2
8-1	8-2	0.76	6.5	6.92	0.68	3.58	0	2.74	0.84	Curb	5.8	5	0.013	2	0.05	0.02	9	1	0.16	5.05	0.25	9.74	....
8-2	8-3	0	0	0	0.68	0	0	0	0	Curb	5.8	5	0.011	2	0.05	0.02	9	0.75	0	0	0	0	Sag
8-3	8-4	0.88	6.7	6.87	0.68	4.11	0	4.11	0	Hdwall	....	....	....	....	....	....	....	....	....	....	....	....	Sag
5-3	9-1L	1.31	6.6	6.9	0.68	6.14	0.84	6.98	0	Curb	5.8	5	Sag	2	0.05	0.02	9	1.31	n/a	n/a	0.56	24.96	9-1L
9-1L	9-1R	0.96	6.8	6.84	0.68	4.47	0	4.47	0	Curb	5.8	5	Sag	2	0.05	0.02	9	1.18	n/a	n/a	0.43	18.54	4-7
5-4	10-1	0.28	5.6	7.17	0.68	1.36	0	1.36	0	Curb	5.8	5	0.014	2	0.05	0.02	9	0.94	0.02	0.32	0.19	6.3	4-7
4-8	12-1	2.72	7.7	6.62	0.68	12.25	0.07	7.22	5.1	Curb	5.8	8	0.018	2	0.05	0.02	9	1.11	0.27	10.54	0.36	14.98	12-2
12-1	12-2	1.59	7.4	6.69	0.68	7.24	0.21	5.91	1.54	Curb	5.8	8	0.011	2	0.05	0.02	9	1.08	0.2	7.03	0.33	13.54	Sag
12-2	12-3	0.41	8.7	6.39	0.68	1.78	0	1.57	0.21	Curb	5.8	5	0.032	2	0.05	0.02	9	0.93	0.08	1.68	0.18	5.87	....
12-3	12-4	0.19	6.5	6.92	0.68	0.89	0	0.89	0	Dp-Curb	6	24	Sag	....	0.02	0.02	....	0.05	n/a	n/a	0.05	2.68	....
12-4	12-5	21.58	14.8	5.3	0.51	58.28	0	58.28	0	Hdwall	....	....	....	....	....	....	....	....	....	....	....	....	Sag
11-1	11-2	0	0	0	0.68	0	....	....	....	MH	....	....	....	....	....	....	....	....	....	....	....	....	Sag
11-2	11-3	0.43	7.3	6.72	0.68	1.96	0	1.96	0	Curb	5.8	5	Sag	2	0.05	0.02	9	1.02	n/a	n/a	0.27	10.71	11-6R
11-3	11-4	0.13	5.6	7.17	0.68	0.63	0	0.63	0	Curb	5.8	5	Sag	2	0.05	0.02	9	0.91	n/a	n/a	0.16	5.04	Sag
11-4	11-5	0.12	5.8	7.11	0.68	0.58	0	0.58	0	Curb	5.8	6	0.011	2	0.05	0.02	9	0.9	0	0	0.15	4.34	Sag
11-5	11-6R	0.24	7.5	6.67	0.68	1.09	1.14	2.23	0	Curb	5.8	5	Sag	2	0.05	0.02	9	1.04	n/a	n/a	0.29	11.65	11-6R
11-6R	11-6L	0.53	7.9	6.57	0.68	2.37	0	2.37	0	Curb	5.8	5	Sag	2	0.05	0.02	9	1.05	n/a	n/a	0.3	12.14	11-7
11-6R	11-7	0.43	8.8	6.37	0.68	1.86	2.44	3.16	1.14	Curb	5.8	5	0.01	2	0.05	0.02	9	1.03	0.19	6.26	0.28	11.08	Sag
11-7	11-8	0.21	6.8	6.84	0.68	0.98	0.41	1.39	0	Curb	5.8	6	0.01	2	0.05	0.02	9	0.95	0	0	0.2	6.86	11-9
11-8	11-9	0.94	7.9	6.57	0.68	4.2	0	4.2	0	Curb	5.8	6	Sag	2	0.05	0.02	9	1.14	n/a	n/a	0.39	16.53	11-10
11-9	11-10	0.17	6.1	7.03	0.68	0.81	0.01	0.82	0	Curb	5.8	5	0.011	2	0.05	0.02	9	0.91	0	0	0.16	5.23	11-11
11-10	11-11	0.22	5.9	7.08	0.68	1.06	0.53	1.58	0.01	Curb	5.8	5	0.011	2	0.05	0.02	9	0.95	0.03	0.69	0.2	7.14	11-12
11-11	11-12	0.47	5.9	7.08	0.68	2.26	0.19	2.21	0.25	Curb	5.8	5	0.011	2	0.05	0.02	9	0.98	0.11	2.46	0.23	8.61	11-13
11-12	11-13	0.38	5.6	7.17	0.68	1.85	0.35	2.01	0.19	Curb	5.8	5	0.013	2	0.05	0.02	9	0.97	0.1	1.92	0.22	7.93	11-14
11-13	11-14	0.4	5.7	7.14	0.68	1.94	0.17	1.76	0.35	Curb	5.8	5	0.032	2	0.05	0.02	9	0.94	0.1	2.1	0.19	6.36	11-7
11-14	11-15	0.35	6.7	6.87	0.68	1.64	0	1.47	0.17	Curb	5.8	5	0.035	2	0.05	0.02	9	0.92	0.08	1.52	0.17	5.51	11-8
11-9	13-1	1.42	8.4	6.46	0.68	6.24	0	3.8	2.44	Curb	5.8	5	0.011	2	0.05	0.02	9	1.06	0.23	8.59	0.31	12.62	Sag
11-10	14-1	0.61	6.7	6.87	0.68	2.85	0	2.44	0.41	Curb	5.8	5	0.011	2	0.05	0.02	9	0.99	0.13	3.55	0.24	9.17	11-11
11-11	15-1	2.03	6.5	6.92	0.68	9.56	0	9.56	0	Dp-Curb	6	16	Sag	....	0.02	0.02	....	0.34	n/a	n/a	0.34	17.04	Sag
11-13	16-1	0.54	7.4	6.69	0.68	2.46	0	2.17	0.29	Curb	5.8	5	0.013	2	0.05	0.02	9	0.98	0.11	2.61	0.23	8.32	....
16-1	16-2	1.86	7.6	6.65	0.68	8.4	0	8.4	0	Dp-Curb	6	16	Sag	....	0.02	0.02	....	0.31	n/a	n/a	0.31	15.64	Sag
16-2	16-3	5.69	13.1	5.56	0.51	16.13	0	16.13	0	Hdwall	....	....	....	....	....	....	....	....	....	....	....	....	....

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Engineering CA2821

Oldham Village
Lee's Summit, Jackson County, Missouri

Project: OLDHAM MARKETPLACE, LSMO
Issue Date: November 5, 2024

Storm Sewer Calcs - Structure 10-Year
Construction Plans for:
Oldham Village
Lee's Summit, Jackson County, Missouri

STATE OF MISSOURI
MATTHEW J. SCHLICHT
NUMBER
2006019708
PROFESSIONAL ENGINEER

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REVISIONS

1 REV. 12/10/2024
2 REV. 1/2/2025
3 REV. 2/6/2025
REV. 3/5/2025
4 REV. 3/24/2025
5 REV. 4/15/2025

10-YEAR PIPE																							
D.S. Str.	U.S. Str.	LineLength	Incr.Area	TotalArea	RunoffCoeff.	IncrC x A	TotalC x A	InletTime	TimeConc	RnfalIntt	TotalRunoff	TotalFlow	CapacFull	Veloc	PipeSize	PipeSlope	Inv ElevDn	Inv ElevUp	HGLDn	HGLUp	Grnd/RimDn	Grnd/RimUp
		(ft)	(ac)	(ac)	(C)			(min)	(min)	(in/hr)	(cfs)	(cfs)	(cfs)	(ft/s)	(in)	(%)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)
1-1	1-2	54.4	0.8	12.47	0.68	0.54	8.48	7.1	11.2	5.9	49.89	49.89	358.06	6.14	48	3.68	996.00	998.00	999.03	1000.12	0.00	1023.50
1-2	1-3	221.1	0.23	11.67	0.68	0.16	7.94	6.3	10.9	5.9	47.19	47.19	234.95	10.93	48	1.58	1000.50	1004.00	1001.72	1006.06	1023.50	1024.80
1-3	1-4	238.75	0.97	11.44	0.68	0.66	7.78	6.5	10.5	6	46.87	46.87	119.71	9.65	42	0.84	1005.00	1007.00	1006.52	1009.14	1024.80	1025.15
1-4	1-5	252.57	0.2	10.47	0.68	0.14	7.12	6.3	10	6.1	43.58	43.58	116.39	8.65	42	0.79	1007.50	1009.50	1009.14	1011.56	1025.15	1024.50
1-5	1-6	261.5	7.54	10.27	0.68	5.13	6.98	9.3	9.5	6.2	43.46	43.46	102.3	8.8	42	0.61	1010.00	1011.60	1011.59	1013.65	1024.50	1017.50
1-6	1-7	119.52	0.76	1.41	0.68	0.52	0.96	6.2	9.1	6.3	6.04	6.04	25.52	5.63	24	0.75	1013.10	1014.00	1013.76	1014.87	1017.50	1019.25
1-7	1-8	229.48	0.2	0.65	0.68	0.14	0.44	5.2	8.5	6.4	2.84	2.84	12.7	6.27	15	2.29	1014.75	1020.00	1015.15	1020.68	1019.25	1026.15
1-8	1-9	157.61	0.45	0.45	0.68	0.31	0.31	8.1	8.1	6.5	2	2	15.68	6.25	15	3.49	1020.50	1026.00	1020.80	1026.56	1026.15	1031.39
1-5	2-1	374.86	1.32	1.32	0.68	0.9	0.9	7.3	7.3	6.7	6.03	6.03	42.68	6.58	24	2.11	1013.10	1021.00	1013.65	1021.87	1017.50	1028.50
3-1	3-2	49.23	24.42	28.1	0.68	16.61	19.11	21.9	30.2	3.8	71.76	71.76	186.41	7.63	42	2.03	996.00	997.00	1000.13	1000.19	0.00	1005.00
3-2	EX CI	72.67	3.68	3.68	0.68	2.5	2.5	30	30	3.8	9.43	9.43	57.54	5.82	18	17.77	998.00	1010.91	1001.59	1012.10	1005.00	1015.95
4-1	4-2	44.43	0.46	43.6	0.68	0.31	25.98	7.1	17.8	4.9	127.29	127.29	508	6.48	60	2.25	996.00	997.00	1011.81	1011.87	0.00	1024.00
4-2	4-3	183.92	2.8	43.14	0.68	1.9	25.67	8.7	17.3	5	127.28	127.28	305.8	6.48	60	0.82	1006.00	1007.50	1012.85	1013.11	1024.00	1024.00
4-3	4-4	305.78	0	40.34	0.68	0	23.76	0	16.5	5.1	120.24	120.24	256.16	6.5	60	0.57	1007.75	1009.50	1013.44	1013.67	1024.00	1025.20
4-4	4-5	97.35	0.34	29.96	0.68	0.23	16.7	5.7	16.3	5.1	85.03	85.03	315.15	7.19	54	2.57	1010.50	1013.00	1014.37	1015.70	1025.20	1024.65
4-5	4-6L	168.4	0.21	29.62	0.68	0.14	16.47	6.6	16	5.1	84.45	84.45	143.9	10.48	48	0.59	1013.50	1014.50	1015.70	1017.28	1024.65	1023.56
4-6L	4-6R	1	0.25	0.25	0.68	0.17	0.17	6.6	6.6	6.9	1.17	1.17	1320.46	1.37	48	50	1014.50	1015.00	1017.28	1015.31	1023.56	1023.56
4-6L	4-6B	50	1.62	1.62	0.68	1.1	1.1	7.7	7.7	6.6	7.29	7.29	33.44	10.34	18	6	1017.00	1020.00	1017.48	1021.05	1023.56	0.00
4-6L	4-7	65.42	0.46	27.54	0.68	0.31	15.06	7.5	15.9	5.1	77.43	77.43	163.26	9.58	48	0.76	1015.00	1015.50	1017.28	1018.16	1023.56	1023.72
4-7	4-8	56.62	0.21	27.08	0.68	0.14	14.75	6.5	15.8	5.2	76.02	76.02	175.49	9.81	48	0.88	1016.00	1016.50	1018.16	1019.14	1023.72	1025.58
4-8	4-9	293.56	0.1	0.38	0.68	0.07	0.26	5.7	5.8	7.1	1.84	1.84	32.34	4.42	24	2.04	1019.50	1025.50	1019.82	1025.97	1025.58	1033.03
4-9	4-10	58.16	0.28	0.28	0.68	0.19	0.19	5.5	5.5	7.2	1.37	1.37	20.97	3.39	24	0.86	1026.00	1026.50	1026.35	1026.90	1033.03	1034.24
4-4	5-1	33.47	0.21	10.38	0.68	0.14	7.06	6.5	12	5.7	40.53	40.53	228.24	3.24	48	1.49	1010.00	1010.50	1014.37	1014.38	1025.20	1025.48
5-1	5-2	237.82	0.16	9.51	0.68	0.11	6.47	5.8	11.2	5.9	38.09	38.09	94.82	4.79	42	0.53	1011.00	1012.25	1014.55	1014.58	1025.48	1029.28
5-2	5-3L	196.77	0.2	7.02	0.68	0.14	4.77	7.1	10.6	6	28.66	28.66	47.55	5.44	36	0.51	1012.75	1013.75	1015.66	1015.48	1029.28	1028.80
5-3L	5-3R	1	0.27	0.27	0.68	0.18	0.18	6.5	6.5	6.9	1.27	1.27	613.08	1.54	36	50	1013.75	1014.25	1015.48	1014.60	1028.80	1028.80
5-3L	5-3B	25	1.2	1.2	0.68	0.82	0.82	7.2	7.2	6.7	5.5	5.5	16.79	8.87	15	4	1016.00	1017.00	1016.49	1017.95	1028.80	0.00
5-3L	5-4	262.42	0.12	3.08	0.68	0.08	2.09	5.6	9.8	6.2	12.91	12.91	40.31	5.43	30	0.57	1014.25	1015.75	1015.48	1016.96	1028.80	1033.29
5-4	5-5	108.31	0.18	2.68	0.68	0.12	1.82	7.4	9.5	6.2	11.34	11.34	44.37	6.42	30	0.69	1016.25	1017.00	1017.11	1018.13	1033.29	1034.91
5-5	5-6	65.85	0.16	2.5	0.68	0.11	1.7	7.8	9.3	6.3	10.64	10.64	19.71	5.99	24	0.76	1017.50	1018.00	1018.55	1019.17	1034.91	1035.23
5-6	5-7	45.64	2.34	2.34	0.68	1.59	1.59	9.2	9.2	6.3	10	10	30.78	7.1	24	1.1	1018.50	1019.00	1019.28	1020.13	1035.23	1035.00
5-1	6-1	86.62	0.66	0.66	0.68	0.45	0.45	7.1	7.1	6.8	3.04	3.04	32.8	2.88	18	5.77	1013.00	1018.00	1014.55	1018.66	1025.48	1026.13
5-2	7-1	282.43	0.18	0.48	0.68	0.12	0.33	6.7	6.9	6.8	2.22	2.22	19.56	2.47	18	2.05	1014.20	1020.00	1015.66	1020.56	1029.28	1029.10
7-1	7-2	51.16	0.3	0.3	0.68	0.2	0.2	6.7	6.7	6.9	1.4	1.4	6.38	3.76	15	0.98	1020.50	1021.00	1020.90	1021.47	1029.10	1029.20
5-2	8-1	118.16	0.21	1.85	0.68	0.14	1.26	6.6	7.8	6.6	8.31	8.31	82.27	3.9	24	7.83	1013.75	1023.00	1015.66	1024.03	1029.28	1030.58
8-1	8-2	49.1	0.76	1.64	0.68	0.52	1.12	6.5	7.6	6.6	7.4	7.4	27.95	6.22	24	1.53	1023.50	1024.25	1024.20	1025.22	1030.58	1030.58
8-2	8-3	306.93	0	0.88	0.68	0	0.6	0	6.8	6.8	4.09	4.09	16.98	6.18	18	1.55	1024.75	1029.50	1025.25	1030.27	1030.58	1036.46
8-3	8-4	76.99	0.88	0.88	0.68	0.6	0.6	6.7	6.7	6.9	4.11	4.11	51.6	10.95	18	14.29	1030.00	1041.00	1030.29	1041.78	1036.46	0.00
5-3	9-1L	64.92	1.31	2.27	0.68	0.89	1.54	6.6	6.8	6.8	10.56	10.56	16.03	11.34	15	6.16	1016.00	1020.00	1016.74	1021.20	1028.80	1028.80
9-1L	9-1R	1	0.96	0.96	0.68	0.65	0.65	6.8	6.8	6.8	4.47	4.47	45.66	4.34	15	50	1020.00	1020.50	1021.20	1021.36	1028.80	1028.80
5-4	10-1	67.91	0.28	0.28	0.68	0.19	0.19	5.6	5.6	7.2	1.36	1.36	21.46	6.54	15	11.04	1017.50	1025.00	1017.71	1025.46	1033.29	1033.04
4-8	12-1	43.15	2.72	26.49	0.68	1.85	14.34	7.7	15.7	5.2	74.1	74.1	119.77	9.3	48	0.7	1017.00	1017.30	1019.28	1019.90	1025.58	1025.61
12-1	12-2	51.21	1.59	23.77	0.68	1.08	12.5	7.4	15.6	5.2	64.71	64.71	184.52	8.89	48	0.98	1017.80	1018.30	1019.90	1020.73	1025.61	1024.84
12-2	12-3	362.01	0.41	22.18	0.68	0.28	11.41	8.7	14.9	5.3	60.2	60.2	223.81	8.98	48	1.44	1018.80	1024.00	1020.73	1026.34	1024.84	1035.35
12-3	12-4	39.58	0.19	21.77	0.68	0.13	11.14	6.5	14.9	5.3	58.84	58.84	147	9.94	42	1.26	1024.50	1025.00	1026.34	1027.40	1035.35	1036.50
12-4	12-5	51.54	21.58	21.58	0.51	11.01	11.01	14.8	14.8	5.3	58.28	58.28	85.4	10.85	36	0.97	1025.50	1026.00	1027.40	1028.47	1036.50	0.00
11-1	11-2	53.05	0	17.17	0.68	0	10.71	0	16.6	5.1	54.09	54.09	464.9	2.76	60	1.89	996.00	997.00	1011.41	1011.42	0.00	1011.00
11-2	11-3	176.56	0.43	17.17	0.68	0.29	10.71	7.3	15.7	5.2	55.36	55.36	825.75	3.36	60	5.95	997.50	1008.00	1011.44	1011.39	1011.00	1022.25
11-3	11-4	99	0.13	16.74	0.68	0.09	10.42	5.6	15.5	5.2	54.19	54.19	145.37	7.07	48	0.61	1009.00	1009.60	1011.51	1011.81	1022.25	1023.75
11-4	11-5	107.78	0.12	16.61	0.68	0.08	10.33	5.8	15.2	5.2	54.05	54.05	145.02	8.21	48	0.6	1009.85	1010.50	1011.81	1012.71	1023.75	1024.30
11-5	11-6R	179.77	0.24	16.49	0.68	0.16	10.25	7.5	14.9	5.3	54.17	54.17	107.14	8.08	48	0.56	1011.00	1012.00	1013.01	1014.21	1024.30	1023.56
11-6R	11-6L	1	0.53	0.53	0.68	0.36	0.36	7.9	7.9	6.6	2.37	2.37	1015.74	1.73	48	50	1012.00	1012.50	1014.21	1012.94	1023.56	1023.56
11-6R	11-7	100.6	0.43	15.72	0.68	0.29	9.72	8.8	14.7	5.3	51.7	51.7	161.24	7.96	48	0.75	1012.25	1013.00	1014.21	1015.16	1023.56	1023.76
11-7	11-8	36.6	0.21	15.29	0.68	0.14	9.43	6.8	14.6	5.3	50.23	50.23	152.87	9.52	42	1.37	1013.50	1014.00	1015.16	1016.21	1023.76	1024.80
11-8	11-9	49.69	0.94	15.08	0.68	0.64	9.29	7.9	14.5	5.3	49.6	49.6	100.92	9.12	42	1.01	1014.50	1015.00	1016.23	1017.20	1024.80	1025.07
11-9	11-10	130.64	0.17	12.72	0.68	0.12	7.68	6.1	14.2	5.4	41.34	41.34	114.43	8.1	42	0.77	1015.50	1016.50	1017.20	1018.50	1025.07	1026.67
11-10	11-11	141.18	0.22	11.94	0.68	0.15	7.15	5.9	14	5.4	38.79	38.79	134.81	8.48	42	1.06	1017.00	1018.50	1018.50	1020.43	1026.67	1028.31
11-11	11-12	49.3	0.47	9.69	0.68	0.32	5.62	5.9	13.8	5.4	30.58	30.58	67.17	8.06	36	1.01	1019.00	1019.50	1020.43	1021.29	1028.31	1028.46
11-12	11-13	133.59	0.38	9.22	0.68	0.26	5.3	5.6	13.6	5.5	29.06	29.06	75.01	8.38	36	0.75	1020.00	1021.00	1021.30	1022.74	1028.46	1030.37
11-13	11-14	125.5	0.4	0.75	0.68	0.27	0.51	5.7	6.9	6.8	3.48	3.48	22.73	2.8	24	0.6	1021.50	1022.25	1022.74	1022.90	1030.37	1034.01
11-14	11-15	51.42	0.35	0.35	0.68	0.24	0.24	6.7	6.7	6.9	1.64	1.64	27.32	3.97	24	1.46	1022.75	1023.50	1023.08	1023.94	1034.01	1034.70
11-9	13-1	55.98	1.42	1.42	0.68	0.97	0.97	8.4	8.4	6.5	6.24	6.24	22.35	6.46	18	2.68	1016.50	1018.00	1017.20	1018.96	1025.07	1024.47
11-10	14-1	43.49	0.61	0.61	0.68	0.41	0.41	6.7	6.7	6.9	2.85	2.85	12.95	6.33	15	4.02	1018.25	1020.00	1018.65	1020.68	1026.67	1026.67
11-11	15-1	166.66	2.03	2.03	0.68	1.38	1.38	6.5	6.5	6.9	9.56	9.56	32.21	7.15	24	1.2	1020.00	1022.00	1020.75	1023.10	1028.31	1029.85
11-13	16-1	47.53	0.54	8.09	0.68	0.37	4.53	7.4	13.5	5.5	24.92	24.92	42.06	7.97	30	1.05	1021.50	1022.00	1022.89	1023.70	1030.37	1030.46
16-1	16-2	133.59	1.86	7.55	0.68	1.26	4.17	7.6	13.2	5.5	23.08	23.08	46.13	8.09	30	0.75	1022.50	1023.50	1023.75	1025.13	1030.46	1032.60
16-2	16-3	50	5.69	5.69	0.51	2.9	2.9	13.1	13.1	5.6	16.13	16.13	113.88	7.7	24	15	1024.00	1031.50	1025.13	1032.95	1032.60	0.00

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Surveying 2005008319-D
Kansas
Engineering E-1695
Surveying LS-218
Oklahoma
Engineering 6254
Nebraska
Engineering CA2821

Oldham Village
Lee's Summit, Jackson County, Missouri

Project: OLDHAM MARKETPLACE, LSMO
Issue Date: November 5, 2024

Storm Sewer Calcs - Pipe 10-Year
Construction Plans for:
Oldham Village
Lee's Summit, Jackson County, Missouri

STATE OF MISSOURI
MATTHEW J. SCHLICHT
NUMBER
PE2006019708
PROFESSIONAL ENGINEER

Matthew J. Schlicht
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NE PE E-14335

REVISIONS

1 REV. 12/10/2024
2 REV. 1/2/2025
3 REV. 2/6/2025
REV. 3/5/2025
4 REV. 3/24/2025
5 REV. 4/15/2025

100-YEAR STRUCTURE																							
D.S. Str.	Str. No.	Area	InletTime	Int.	RunoffCoeff.	Q =CIA	Q Carry-over	QCaptured	QBypassed	JunctType	CurbHeight	CurbLength	GutterSlope	GutterWidth	CrossSlope, Sw	CrossSlope, Sx	LocalDepr.	InletDepth	BypassDepth	BypassSpread	GutterDepth	GutterSpread	Bypass Str.
		(ac)	(min)	(in/hr)	(C)	(cfs)	(cfs)	(cfs)	(cfs)		(in)	(ft)	(ft/ft)	(ft)	(ft/ft)	(ft/ft)	(in)	(ft)	(ft)	(ft)	(ft)	(ft)	
1-1	1-2	0.8	7.1	11.96	0.68	6.51	0	6.51	0	Curb	5.8	6	Sag	2	0.02	0.02	9	1.19	n/a	n/a	0.44	22.13	Sag
1-2	1-3	0.23	6.3	12.3	0.68	1.92	0	1.92	0	Dp-Curb	6	16	Sag	....	0.02	0.02	....	0.12	n/a	n/a	0.12	5.85	Sag
1-3	1-4	0.97	6.5	12.21	0.68	8.06	0	8.06	0	Dp-Curb	6	20	Sag	....	0.02	0.02	....	0.26	n/a	n/a	0.26	13.1	Sag
1-4	1-5	0.2	6.3	12.3	0.68	1.67	0.26	1.93	0	Dp-Curb	6	16	Sag	....	0.02	0.02	....	0.12	n/a	n/a	0.12	5.86	Sag
1-5	1-6	7.54	9.3	11.13	0.68	57.06	0	57.06	0	Dp-Curb	6	16	Sag	....	0.02	0.02	....	2.01	n/a	n/a	2.01	100.59	Sag
1-6	1-7	0.76	6.2	12.34	0.68	6.38	0	6.38	0	Dp-Curb	6	16	Sag	....	0.02	0.02	....	0.26	n/a	n/a	0.26	13.01	Sag
1-7	1-8	0.2	5.2	12.8	0.68	1.74	0	1.74	0	Dp-Curb	6	16	Sag	....	0.02	0.02	....	0.11	n/a	n/a	0.11	5.47	Offsite
1-8	1-9	0.45	8.1	11.57	0.68	3.54	0	2.67	0.87	Curb	5.8	5	0.015	2	0.05	0.02	9	1	0.16	4.97	0.25	9.41	Sag
1-5	2-1	1.32	7.3	11.88	0.68	10.66	0	10.66	0	Dp-Curb	6	16	Sag	....	0.02	0.02	....	0.37	n/a	n/a	0.37	18.33	Sag
3-1	3-2	24.42	21.9	8.06	0.68	133.86	0	133.86	0	Dp-Curb	6	24	Sag	....	0.02	0.02	....	4.56	n/a	n/a	4.56	228	Sag
3-2	EX CI	3.68	30	6.9	0.68	17.27	0	17.27	0	Curb	5.8	5	Sag	2	0.05	0.02	9	1.72	n/a	n/a	0.97	45.67	Sag
4-1	4-2	0.46	7.1	11.96	0.68	3.74	0	3.74	0	Curb	5.8	5	Sag	2	0.05	0.02	9	1.14	n/a	n/a	0.39	16.47	....
4-2	4-3	2.8	8.7	11.34	0.68	21.6	0	21.6	0	Curb	5.8	5	Sag	2	0.05	0.02	9	1.87	n/a	n/a	1.12	53.02	4-6L
4-3	4-4	0	0	0	0.68	0	....	....	....	MH	....	....	....	....	....	....	....	....	....	....	....	....	Sag
4-4	4-5	0.34	5.7	12.57	0.68	2.91	2.15	4.29	0.76	Curb	5.8	8	0.021	2	0.05	0.02	9	1.01	0.14	4.23	0.26	10.18	Sag
4-5	4-6L	0.21	6.6	12.17	0.68	1.74	11.97	13.71	0	Curb	5.8	5	Sag	2	0.05	0.02	9	1.59	n/a	n/a	0.84	39.15	....
4-6L	4-6R	0.25	6.6	12.17	0.68	2.07	0	2.07	0	Curb	5.8	5	Sag	2	0.05	0.02	9	1.03	n/a	n/a	0.28	11.09	4-6L
4-6L	4-6B	1.62	7.7	11.72	0.68	12.91	0	12.91	0	Hdwall	....	....	....	....	....	....	....	....	....	....	....	....	4-7
4-6L	4-7	0.46	7.5	11.8	0.68	3.69	18.05	10.54	11.21	Curb	5.8	8	0.01	2	0.05	0.02	9	1.23	0.38	16.2	0.48	20.92	4-8
4-7	4-8	0.21	6.5	12.21	0.68	1.74	0	1.74	0	Curb	5.8	8	0.018	2	0.05	0.02	9	0.94	0	0	0.19	6.65	12-1
4-8	4-9	0.1	5.7	12.57	0.68	0.85	0	0.85	0	Curb	5.8	5	0.033	2	0.05	0.02	9	0.89	0	0	0.14	3.96	11-5
4-9	4-10	0.28	5.5	12.66	0.68	2.41	0	1.9	0.51	Curb	5.8	5	0.033	2	0.05	0.02	9	0.94	0.12	2.81	0.19	6.71	5-1
4-4	5-1	0.21	6.5	12.21	0.68	1.74	0	1.65	0.1	Curb	5.8	5	0.018	2	0.05	0.02	9	0.94	0.07	1.41	0.19	6.66	Sag
5-1	5-2	0.16	5.8	12.52	0.68	1.36	0	1.36	0	Curb	5.8	5	0.015	2	0.05	0.02	9	0.93	0.02	0.43	0.18	6.19	Sag
5-2	5-3L	0.2	7.1	11.96	0.68	1.63	0	1.63	0	Curb	5.8	5	Sag	2	0.05	0.02	9	1	n/a	n/a	0.25	9.45	....
5-3L	5-3R	0.27	6.5	12.21	0.68	2.24	0	2.24	0	Curb	5.8	5	Sag	2	0.05	0.02	9	1.04	n/a	n/a	0.29	11.7	5-3L
5-3L	5-3B	1.2	7.2	11.92	0.68	9.73	0	9.73	0	Hdwall	....	....	....	....	....	....	....	....	....	....	....	....	5-4
5-3L	5-4	0.12	5.6	12.61	0.68	1.03	0.01	1.04	0	Curb	5.8	5	0.014	2	0.05	0.02	9	0.92	0	0	0.17	5.52	10-1
5-4	5-5	0.18	7.4	11.84	0.68	1.45	0	1.44	0.01	Curb	5.8	5	0.014	2	0.05	0.02	9	0.94	0.03	0.6	0.19	6.47	Sag
5-5	5-6	0.16	7.8	11.68	0.68	1.27	0	1.27	0	Curb	5.8	5	0.013	2	0.05	0.02	9	0.93	0	0	0.18	6.19	4-5
5-6	5-7	2.34	9.2	11.16	0.68	17.76	0	17.76	0	Dp-Curb	6	16	Sag	....	0.02	0.02	....	0.52	n/a	n/a	0.52	25.76	1-4
5-1	6-1	0.66	7.1	11.96	0.68	5.37	0.05	3.27	2.15	Curb	5.8	5	0.018	2	0.05	0.02	9	1.03	0.21	7.31	0.28	10.81	1-4
5-2	7-1	0.18	6.7	12.13	0.68	1.48	0	1.48	0	Curb	5.8	5	0.011	2	0.05	0.02	9	0.95	0.02	0.34	0.2	6.91	6-1
7-1	7-2	0.3	6.7	12.13	0.68	2.47	0	2.22	0.25	Curb	5.8	5	0.011	2	0.05	0.02	9	0.98	0.11	2.52	0.23	8.64	9-1L
5-2	8-1	0.21	6.6	12.17	0.68	1.74	0	1.69	0.05	Curb	5.8	5	0.013	2	0.05	0.02	9	0.95	0.06	1.18	0.2	7.15	8-2
8-1	8-2	0.76	6.5	12.21	0.68	6.31	0	3.72	2.59	Curb	5.8	5	0.013	2	0.05	0.02	9	1.06	0.23	8.5	0.31	12.26	....
8-2	8-3	0	0	0	0.68	0	0	0	0	Curb	5.8	5	0.011	2	0.05	0.02	9	0.75	0	0	0	0	Sag
8-3	8-4	0.88	6.7	12.13	0.68	7.26	0	7.26	0	Hdwall	....	....	....	....	....	....	....	....	....	....	....	....	Sag
5-3	9-1L	1.31	6.6	12.17	0.68	10.84	2.87	13.71	0	Curb	5.8	5	Sag	2	0.05	0.02	9	1.59	n/a	n/a	0.84	39.16	9-1L
9-1L	9-1R	0.96	6.8	12.08	0.68	7.89	0	7.89	0	Curb	5.8	5	Sag	2	0.05	0.02	9	1.35	n/a	n/a	0.6	27.08	4-7
5-4	10-1	0.28	5.6	12.61	0.68	2.4	0	2.12	0.28	Curb	5.8	5	0.014	2	0.05	0.02	9	0.97	0.11	2.5	0.22	8.1	4-7
4-8	12-1	2.72	7.7	11.72	0.68	21.68	0.51	9.59	12.59	Curb	5.8	8	0.018	2	0.05	0.02	9	1.19	0.36	15.11	0.44	18.83	12-2
12-1	12-2	1.59	7.4	11.84	0.68	12.8	0.92	8.26	5.46	Curb	5.8	8	0.011	2	0.05	0.02	9	1.15	0.3	11.97	0.4	17.2	Sag
12-2	12-3	0.41	8.7	11.34	0.68	3.16	0	2.24	0.92	Curb	5.8	5	0.032	2	0.05	0.02	9	0.96	0.14	4.17	0.21	7.63	....
12-3	12-4	0.19	6.5	12.21	0.68	1.58	0	1.58	0	Dp-Curb	6	24	Sag	....	0.02	0.02	....	0.08	n/a	n/a	0.08	3.91	....
12-4	12-5	21.58	14.8	9.52	0.51	104.73	0	104.73	0	Hdwall	....	....	....	....	....	....	....	....	....	....	....	....	Sag
11-1	11-2	0	0	0	0.68	0	....	....	....	MH	....	....	....	....	....	....	....	....	....	....	....	....	Sag
11-2	11-3	0.43	7.3	11.88	0.68	3.47	0	3.47	0	Curb	5.8	5	Sag	2	0.05	0.02	9	1.12	n/a	n/a	0.37	15.67	11-6R
11-3	11-4	0.13	5.6	12.61	0.68	1.11	0	1.11	0	Curb	5.8	5	Sag	2	0.05	0.02	9	0.96	n/a	n/a	0.21	7.34	Sag
11-4	11-5	0.12	5.8	12.52	0.68	1.02	0.1	1.12	0	Curb	5.8	6	0.011	2	0.05	0.02	9	0.93	0	0	0.18	6.07	Sag
11-5	11-6R	0.24	7.5	11.8	0.68	1.93	4.87	6.79	0	Curb	5.8	5	Sag	2	0.05	0.02	9	1.3	n/a	n/a	0.55	24.51	11-6R
11-6R	11-6L	0.53	7.9	11.64	0.68	4.2	0	4.2	0	Curb	5.8	5	Sag	2	0.05	0.02	9	1.17	n/a	n/a	0.42	17.78	11-7
11-6R	11-7	0.43	8.8	11.31	0.68	3.31	6.35	4.79	4.87	Curb	5.8	5	0.01	2	0.05	0.02	9	1.12	0.29	11.65	0.37	15.28	Sag
11-7	11-8	0.21	6.8	12.08	0.68	1.73	1.63	3.04	0.32	Curb	5.8	6	0.01	2	0.05	0.02	9	1.01	0.12	3.12	0.26	10.02	11-9
11-8	11-9	0.94	7.9	11.64	0.68	7.44	0.55	7.99	0	Curb	5.8	6	Sag	2	0.05	0.02	9	1.32	n/a	n/a	0.57	25.39	11-10
11-9	11-10	0.17	6.1	12.39	0.68	1.43	1.71	2.59	0.55	Curb	5.8	5	0.011	2	0.05	0.02	9	1	0.14	4.22	0.25	9.56	11-11
11-10	11-11	0.22	5.9	12.48	0.68	1.87	3.29	3.44	1.71	Curb	5.8	5	0.011	2	0.05	0.02	9	1.04	0.21	7.37	0.29	11.69	11-12
11-11	11-12	0.47	5.9	12.48	0.68	3.99	1.6	3.59	2	Curb	5.8	5	0.011	2	0.05	0.02	9	1.05	0.22	7.89	0.3	12.08	11-13
11-12	11-13	0.38	5.6	12.61	0.68	3.26	1.59	3.25	1.6	Curb	5.8	5	0.013	2	0.05	0.02	9	1.03	0.2	6.89	0.28	11.03	11-14
11-13	11-14	0.4	5.7	12.57	0.68	3.42	0.79	2.61	1.59	Curb	5.8	5	0.032	2	0.05	0.02	9	0.98	0.17	5.56	0.23	8.63	11-7
11-14	11-15	0.35	6.7	12.13	0.68	2.89	0	2.1	0.79	Curb	5.8	5	0.035	2	0.05	0.02	9	0.95	0.13	3.7	0.2	7.19	11-8
11-9	13-1	1.42	8.4	11.45	0.68	11.06	0	5.03	6.03	Curb	5.8	5	0.011	2	0.05	0.02	9	1.13	0.31	12.45	0.38	15.82	Sag
11-10	14-1	0.61	6.7	12.13	0.68	5.03	0	3.4	1.63	Curb	5.8	5	0.011	2	0.05	0.02	9	1.04	0.2	7.22	0.29	11.58	11-11
11-11	15-1	2.03	6.5	12.21	0.68	16.86	0	16.86	0	Dp-Curb	6	16	Sag	....	0.02	0.02	....	0.5	n/a	n/a	0.5	24.88	Sag
11-13	16-1	0.54	7.4	11.84	0.68	4.35	0	3.06	1.29	Curb	5.8	5	0.013	2	0.05	0.02	9	1.02	0.18	6.23	0.27	10.55	....
16-1	16-2	1.86	7.6	11.76	0.68	14.87	0	14.87	0	Dp-Curb	6	16	Sag	....	0.02	0.02	....	0.46	n/a	n/a	0.46	22.89	Sag
16-2	16-3	5.69	13.1	9.96	0.51	28.89	0	28.89	0	Hdwall	....	....	....	....	....	....	....	....	....	....	....	....	....

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Engineering CA2821

Oldham Village
Lee's Summit, Jackson County, Missouri

Project: OLDHAM VILLAGE/TPLACE, LSMO
Issue Date: November 5, 2024

Storm Sewer Calcs - Structure 100-Year
Construction Plans for:
Oldham Village
Lee's Summit, Jackson County, Missouri

STATE OF MISSOURI
MATTHEW J. SCHLICHT
NUMBER
PE-2006019708
PROFESSIONAL ENGINEER

Matthew J. Schlicht
MO PE 2006019708
KS PE 19071
OK PE 25226
NE PE E-14335

REVISIONS

1 REV. 12/10/2024
2 REV. 1/2/2025
3 REV. 2/6/2025
REV. 3/5/2025
4 REV. 3/24/2025
5 REV. 4/15/2025

100-YEAR PIPE																							
D.S. Str.	U.S. Str.	LineLength	Incr.Area	TotalArea	RunoffCoeff.	IncrC x A	TotalC x A	InletTime	TimeConc	RnfallInt	TotalRunoff	TotalFlow	CapacFull	Veloc	PipeSize	PipeSlope	Inv ElevDn	Inv ElevUp	HGLDn	HGLUp	Grnd/RimDn	Grnd/RimUp
		(ft)	(ac)	(ac)	(C)			(min)	(min)	(in/hr)	(cfs)	(cfs)	(cfs)	(ft/s)	(in)	(%)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)
1-1	1-2	54.4	0.8	12.47	0.68	0.54	8.48	7.1	10.8	10.6	90.23	90.23	358.06	9.08	48	3.68	996.00	998.00	999.03	1000.88	0.00	1023.50
1-2	1-3	221.1	0.23	11.67	0.68	0.16	7.94	6.3	10.5	10.7	85.15	85.15	234.95	13.14	48	1.58	1000.50	1004.00	1002.17	1006.80	1023.50	1024.80
1-3	1-4	238.75	0.97	11.44	0.68	0.66	7.78	6.5	10.1	10.8	84.33	84.33	119.71	11.75	42	0.84	1005.00	1007.00	1007.17	1009.86	1024.80	1025.15
1-4	1-5	252.57	0.2	10.47	0.68	0.14	7.12	6.3	9.7	11	78.14	78.14	116.39	10.46	42	0.79	1007.50	1009.50	1009.86	1012.26	1025.15	1024.50
1-5	1-6	261.5	7.54	10.27	0.68	5.13	6.98	9.3	9.3	11.1	77.63	77.63	102.3	10.63	42	0.61	1010.00	1011.60	1012.28	1014.35	1024.50	1017.50
1-6	1-7	119.52	0.76	1.41	0.68	0.52	0.96	6.2	9	11.2	10.78	10.78	25.52	5.41	24	0.75	1013.10	1014.00	1014.35	1015.18	1017.50	1019.25
1-7	1-8	229.48	0.2	0.65	0.68	0.14	0.44	5.2	8.5	11.4	5.05	5.05	12.7	7.51	15	2.29	1014.75	1020.00	1015.30	1020.91	1019.25	1026.15
1-8	1-9	157.61	0.45	0.45	0.68	0.31	0.31	8.1	8.1	11.6	3.54	3.54	15.68	7.31	15	3.49	1020.50	1026.00	1020.91	1026.76	1026.15	1031.39
1-5	2-1	374.86	1.32	1.32	0.68	0.9	0.9	7.3	7.3	11.9	10.66	10.66	42.68	5.37	24	2.11	1013.10	1021.00	1014.35	1022.17	1017.50	1028.50
3-1	3-2	49.23	24.42	28.1	0.68	16.61	19.11	21.9	30.1	6.9	131.56	131.56	186.41	13.68	42	2.03	996.00	997.00	1000.13	1000.63	0.00	1005.00
3-2	EX CI	72.67	3.68	3.68	0.68	2.5	2.5	30	30	6.9	17.27	17.27	57.54	9.83	18	17.77	998.00	1010.91	1004.93	1012.35	1005.00	1015.95
4-1	4-2	44.43	0.46	43.6	0.68	0.31	25.98	7.1	17.1	9	233.5	233.5	508	11.89	60	2.25	996.00	997.00	1011.81	1012.02	0.00	1024.00
4-2	4-3	183.92	2.8	43.14	0.68	1.9	25.67	8.7	16.8	9	232.15	232.15	305.8	11.82	60	0.82	1006.00	1007.50	1015.32	1016.19	1024.00	1024.00
4-3	4-4	305.78	0	40.34	0.68	0	23.76	0	16.4	9.1	217.37	217.37	256.16	11.07	60	0.57	1007.75	1009.50	1017.27	1018.53	1024.00	1025.20
4-4	4-5	97.35	0.34	29.96	0.68	0.23	16.7	5.7	16.2	9.2	153.44	153.44	315.15	9.65	54	2.57	1010.50	1013.00	1020.34	1020.94	1025.20	1024.65
4-5	4-6L	168.4	0.21	29.62	0.68	0.14	16.47	6.6	16	9.2	152.19	152.19	143.9	12.11	48	0.59	1013.50	1014.50	1022.63	1023.75	1024.65	1023.56
4-6L	4-6R	1	0.25	0.25	0.68	0.17	0.17	6.6	6.6	12.2	2.07	2.07	1320.46	0.16	48	50	1014.50	1015.00	1028.70	1028.70	1023.56	1023.56
4-6L	4-6B	50	1.62	1.62	0.68	1.1	1.1	7.7	7.7	11.7	12.91	12.91	33.44	7.31	18	6	1017.00	1020.00	1028.70	1029.15	1023.56	0.00
4-6L	4-7	65.42	0.46	27.54	0.68	0.31	15.06	7.5	15.9	9.3	139.47	139.47	163.26	11.1	48	0.76	1015.00	1015.50	1028.70	1029.06	1023.56	1023.72
4-7	4-8	56.62	0.21	27.08	0.68	0.14	14.75	6.5	15.8	9.3	136.87	136.87	175.49	10.89	48	0.88	1016.00	1016.50	1031.50	1031.80	1023.72	1025.58
4-8	4-9	293.56	0.1	0.38	0.68	0.07	0.26	5.7	6.8	12.1	3.13	3.13	32.34	1	24	2.04	1019.50	1025.50	1034.72	1034.77	1025.58	1033.03
4-9	4-10	58.16	0.28	0.28	0.68	0.19	0.19	5.5	5.5	12.7	2.41	2.41	20.97	0.77	24	0.86	1026.00	1026.50	1034.79	1034.79	1033.03	1034.24
4-4	5-1	33.47	0.21	10.38	0.68	0.14	7.06	6.5	11.9	10.3	72.64	72.64	228.24	5.78	48	1.49	1010.00	1010.50	1020.34	1020.39	1025.20	1025.48
5-1	5-2	237.82	0.16	9.51	0.68	0.11	6.47	5.8	11.4	10.5	67.64	67.64	94.82	7.03	42	0.53	1011.00	1012.25	1020.95	1021.59	1025.48	1029.28
5-2	5-3L	196.77	0.2	7.02	0.68	0.14	4.77	7.1	10.9	10.6	50.6	50.6	47.55	7.16	36	0.51	1012.75	1013.75	1023.29	1024.43	1029.28	1028.80
5-3L	5-3R	1	0.27	0.27	0.68	0.18	0.18	6.5	6.5	12.2	2.24	2.24	613.08	0.32	36	50	1013.75	1014.25	1026.22	1026.22	1028.80	1028.80
5-3L	5-3B	25	1.2	1.2	0.68	0.82	0.82	7.2	7.2	11.9	9.73	9.73	16.79	7.93	15	4	1016.00	1017.00	1026.22	1026.56	1028.80	0.00
5-3L	5-4	262.42	0.12	3.08	0.68	0.08	2.09	5.6	10	10.9	22.84	22.84	40.31	4.65	30	0.57	1014.25	1015.75	1026.22	1026.70	1028.80	1033.29
5-4	5-5	108.31	0.18	2.68	0.68	0.12	1.82	7.4	9.5	11.1	20.14	20.14	44.37	4.1	30	0.69	1016.25	1017.00	1027.21	1027.36	1033.29	1034.91
5-5	5-6	65.85	0.16	2.5	0.68	0.11	1.7	7.8	9.3	11.1	18.9	18.9	19.71	6.02	24	0.76	1017.50	1018.00	1027.70	1028.16	1034.91	1035.23
5-6	5-7	45.64	2.34	2.34	0.68	1.59	1.59	9.2	9.2	11.2	17.76	17.76	30.78	5.65	24	1.1	1018.50	1019.00	1028.61	1028.78	1035.23	1035.00
5-1	6-1	86.62	0.66	0.66	0.68	0.45	0.45	7.1	7.1	12	5.37	5.37	32.8	3.04	18	5.77	1013.00	1018.00	1020.95	1021.08	1025.48	1026.13
5-2	7-1	282.43	0.18	0.48	0.68	0.12	0.33	6.7	7.1	12	3.9	3.9	19.56	2.21	18	2.05	1014.20	1020.00	1023.29	1023.52	1029.28	1029.10
7-1	7-2	51.16	0.3	0.3	0.68	0.2	0.2	6.7	6.7	12.1	2.47	2.47	6.38	2.02	15	0.98	1020.50	1021.00	1023.64	1023.71	1029.10	1029.20
5-2	8-1	118.16	0.21	1.85	0.68	0.14	1.26	6.6	7.7	11.7	14.73	14.73	82.27	5.52	24	7.83	1013.75	1023.00	1023.29	1024.38	1029.28	1030.58
8-1	8-2	49.1	0.76	1.64	0.68	0.52	1.12	6.5	7.6	11.7	13.1	13.1	27.95	7.4	24	1.53	1023.50	1024.25	1024.46	1025.55	1030.58	1030.58
8-2	8-3	306.93	0	0.88	0.68	0	0.6	0	6.8	12.1	7.22	7.22	16.98	6.52	18	1.55	1024.75	1029.50	1025.55	1030.54	1030.58	1036.46
8-3	8-4	76.99	0.88	0.88	0.68	0.6	0.6	6.7	6.7	12.1	7.26	7.26	51.6	9.11	18	14.29	1030.00	1041.00	1030.54	1042.04	1036.46	0.00
5-3	9-1L	64.92	1.31	2.27	0.68	0.89	1.54	6.6	6.8	12.1	18.65	18.65	16.03	15.2	15	6.16	1016.00	1020.00	1026.22	1031.64	1028.80	1028.80
9-1L	9-1R	1	0.96	0.96	0.68	0.65	0.65	6.8	6.8	12.1	7.89	7.89	45.66	6.43	15	50	1020.00	1020.50	1033.43	1033.45	1028.80	1028.80
5-4	10-1	67.91	0.28	0.28	0.68	0.19	0.19	5.6	5.6	12.6	2.4	2.4	21.46	1.96	15	11.04	1017.50	1025.00	1027.21	1027.30	1033.29	1033.04
4-8	12-1	43.15	2.72	26.49	0.68	1.85	14.34	7.7	15.7	9.3	133.37	133.37	119.77	10.61	48	0.7	1017.00	1017.30	1034.72	1035.09	1025.58	1025.61
12-1	12-2	51.21	1.59	23.77	0.68	1.08	12.5	7.4	15.6	9.3	116.44	116.44	184.52	9.27	48	0.98	1017.80	1018.30	1036.91	1037.11	1025.61	1024.84
12-2	12-3	362.01	0.41	22.18	0.68	0.28	11.41	8.7	14.9	9.5	108.29	108.29	223.81	8.62	48	1.44	1018.80	1024.00	1038.74	1039.96	1024.84	1035.35
12-3	12-4	39.58	0.19	21.77	0.68	0.13	11.14	6.5	14.9	9.5	105.8	105.8	147	11	42	1.26	1024.50	1025.00	1041.63	1041.89	1035.35	1036.50
12-4	12-5	51.54	21.58	21.58	0.51	11.01	11.01	14.8	14.8	9.5	104.73	104.73	85.4	14.82	36	0.97	1025.50	1026.00	1043.37	1044.13	1036.50	0.00
11-1	11-2	53.05	0	17.17	0.68	0	10.71	0	15.7	9.3	99.49	99.49	464.9	5.07	60	1.89	996.00	997.00	1011.41	1011.46	0.00	1011.00
11-2	11-3	176.56	0.43	17.17	0.68	0.29	10.71	7.3	15.3	9.4	100.69	100.69	825.75	6.22	60	5.95	997.50	1008.00	1011.52	1011.30	1011.00	1022.25
11-3	11-4	99	0.13	16.74	0.68	0.09	10.42	5.6	15.1	9.4	98.34	98.34	145.37	10.26	48	0.61	1009.00	1009.60	1011.72	1012.60	1022.25	1023.75
11-4	11-5	107.78	0.12	16.61	0.68	0.08	10.33	5.8	14.9	9.5	97.95	97.95	145.02	10.16	48	0.6	1009.85	1010.50	1012.60	1013.50	1023.75	1024.30
11-5	11-6R	179.77	0.24	16.49	0.68	0.16	10.25	7.5	14.6	9.6	97.96	97.96	107.14	9.67	48	0.56	1011.00	1012.00	1014.01	1015.01	1024.30	1023.56
11-6R	11-6L	1	0.53	0.53	0.68	0.36	0.36	7.9	7.9	11.6	4.2	4.2	1015.74	1.98	48	50	1012.00	1012.50	1015.86	1013.09	1023.56	1023.56
11-6R	11-7	100.6	0.43	15.72	0.68	0.29	9.72	8.8	14.4	9.6	93.42	93.42	161.24	8.65	48	0.75	1012.25	1013.00	1015.86	1015.93	1023.56	1023.76
11-7	11-8	36.6	0.21	15.29	0.68	0.14	9.43	6.8	14.4	9.6	90.74	90.74	152.87	11.61	42	1.37	1013.50	1014.00	1015.93	1016.95	1023.76	1024.80
11-8	11-9	49.69	0.94	15.08	0.68	0.64	9.29	7.9	14.3	9.6	89.54	89.54	100.92	11.12	42	1.01	1014.50	1015.00	1017.07	1017.94	1024.80	1025.07
11-9	11-10	130.64	0.17	12.72	0.68	0.12	7.68	6.1	14.1	9.7	74.5	74.5	114.43	9.89	42	0.77	1015.50	1016.50	1017.94	1019.20	1025.07	1026.67
11-10	11-11	141.18	0.22	11.94	0.68	0.15	7.15	5.9	13.8	9.8	69.79	69.79	134.81	10.01	42	1.06	1017.00	1018.50	1019.20	1021.12	1026.67	1028.31
11-11	11-12	49.3	0.47	9.69	0.68	0.32	5.62	5.9	13.8	9.8	54.99	54.99	67.17	9.69	36	1.01	1019.00	1019.50	1021.12	1021.90	1028.31	1028.46
11-12	11-13	133.59	0.38	9.22	0.68	0.26	5.3	5.6	13.5	9.8	52.17	52.17	75.01	9.91	36	0.75	1020.00	1021.00	1021.90	1023.35	1028.46	1030.37
11-13	11-14	125.5	0.4	0.75	0.68	0.27	0.51	5.7	6.9	12.1	6.15	6.15	22.73	3.33	24	0.6	1021.50	1022.25	1023.35	1023.13	1030.37	1034.01
11-14	11-15	51.42	0.35	0.35	0.68	0.24	0.24	6.7	6.7	12.1	2.89	2.89	27.32	4.68	24	1.46	1022.75	1023.50	1023.19	1024.09	1034.01	1034.70
11-9	13-1	55.98	1.42	1.42	0.68	0.97	0.97	8.4	8.4	11.5	11.06	11.06	22.35	6.64	18	2.68	1016.50	1018.00	1017.94	1019.27	1025.07	1024.47
11-10	14-1	43.49	0.61	0.61	0.68	0.41	0.41	6.7	6.7	12.1	5.03	5.03	12.95	5.15	15	4.02	1018.25	1020.00	1019.20	1020.91	1026.67	1026.67
11-11	15-1	166.66	2.03	2.03	0.68	1.38	1.38	6.5	6.5	12.2	16.86	16.86	32.21	8.06	24	1.2	1020.00	1022.00	1021.12	1023.48	1028.31	1029.85
11-13	16-1	47.53	0.54	8.09	0.68	0.37	4.53	7.4	13.5	9.9	44.71	44.71	42.06	9.65	30	1.05	1021.50	1022.00	1023.74	1024.24	1030.37	1030.46
16-1	16-2	133.59	1.86	7.55	0.68	1.26	4.17	7.6	13.2	9.9	41.39	41.39	46.13	8.43	30	0.75	1022.50	1023.50	1025.35	1026.16	1030.46	1032.60
16-2	16-3	50	5.69	5.69	0.51	2.9	2.9	13.1	13.1	10	28.89	28.89	113.88	9.37	24	15	1024.00	1031.50	1026.71	1033.34	1032.60	0.00

ENGINEERING SOLUTIONS
ENGINEERING & SURVEYING
50 SE 30TH STREET
LEE'S SUMMIT, MO 64082
P:(816) 623-9888 F:(816)623-9849

Professional Registration
Missouri
Engineering 2005002186-D
Surveying 2005000319-D
Kansas
Engineering E-1695
Surveying LS-218
Oklahoma
Engineering 6254
Nebraska
Engineering CA2821

Oldham Village
Lee's Summit, Jackson County, Missouri

Project:
OLDHAM
LAWSON-PLACE,
LSMO

Issue Date:
November 5, 2024

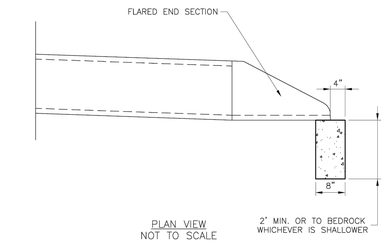
Storm Sewer Calcs - Pipe 100-Year
Construction Plans for:
Oldham Village
Lee's Summit, Jackson County, Missouri

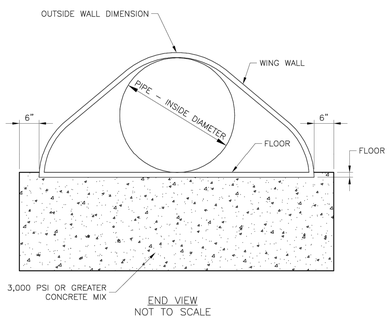
STATE OF MISSOURI
MATTHEW J. SCHLICHT
NUMBER
PE-2006019708
PROFESSIONAL ENGINEER

Matthew J. Schlicht
MO PE 2006019708
KS PE 19071
OK PE 25226
NE PE E-14335

REVISIONS

1 REV. 12/10/2024
2 REV. 1/2/2025
3 REV. 2/6/2025
REV. 3/5/2025
4 REV. 3/24/2025
5 REV. 4/15/2025



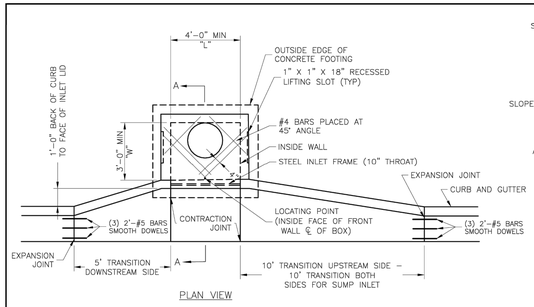


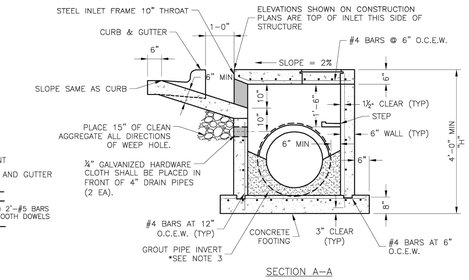
LEE'S SUMMIT
MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

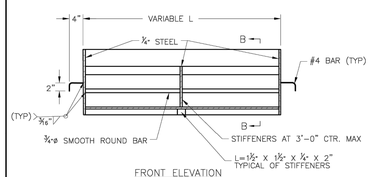
FLARED END SECTION SUPPORT DETAIL

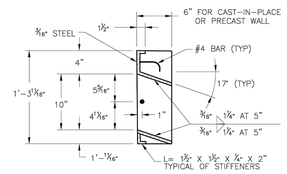
Date: 04/17
Drawn By: MJF
Checked By: DL

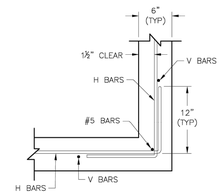
STM-5

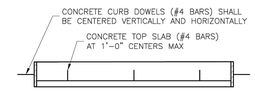












STEEL FRAME NOTES:
1. ALL WELDS SHALL BE PERFORMED IN ACCORDANCE WITH APPROPRIATE AWS SPECIFICATIONS AND PROCEDURES.
2. ALL WELDS ON EXPOSED SURFACES SHALL BE DRESSED SO AS TO PROVIDE A PLEASING FINISHED APPEARANCE.
3. THE ENTIRE FRAME SHALL BE PAINTED A SINGLE COAT OF CHEM–PRIME #37H–78 PRIMER (GRAY) OR EQUAL.

GENERAL NOTES:
1. THE FIRST DIMENSION LISTED IN THE CONSTRUCTION NOTES IS THE "L" DIMENSION. THE SECOND DIMENSION IS THE "W" DIMENSION.
2. FLOW LINES LISTED ON THE PROJECT PLANS ARE LISTED AT THE INSIDE FACE OF THE WALL.
3. FLOOR OF INLET GROUTED AND SHAPED TO MATCH PIPE INVERT TO PROVIDE SMOOTH FLOW.
4. LOCATE MH RING AND COVER ON BLANK WALL IF POSSIBLE.
5. STEPS SHALL BE SPACED AT 1'–4" O.C. VERTICALLY ON BLANK WALL IF POSSIBLE.
6. BEVEL ALL EXPOSED EDGES WITH ¾"CHAMFER OR ½" TOOLED EDGE.
7. ON–GRADE INLETS SHALL CONFORM TO THE STREET GRADE AND SUMP INLETS SHALL BE LEVEL.
8. PRECAST LIDS SHALL BE PINNED, SEALED WITH NON–SHRINKABLE GROUT AND REMOVABLE FOR FUTURE MAINTENANCE.
9. LIFTING RINGS SHALL BE REMOVED AND SEALED WITH NON–SHRINKABLE GROUT
10. FOR RING AND COVER SEE THE STORMWATER APPROVED PRODUCT LIST.

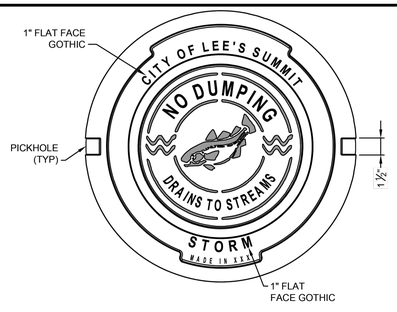
LEE'S SUMMIT
MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

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

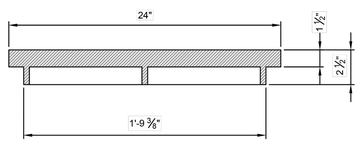
Project:
Sheet Name: CURB INLET DETAIL

Drawn By: MJF
Checked By: DL
Date: 04/17
Freq. #

STM-1



PLAN VIEW



SECTION VIEW

STORM MANHOLE COVER

STANDARD 24" MANHOLE COVER
MINIMUM WEIGHT = 160 LB

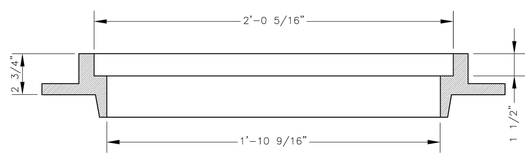
*COVER AND FRAME MODEL INFORMATION REFER TO THE STORMWATER APPROVED PRODUCT LIST.

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

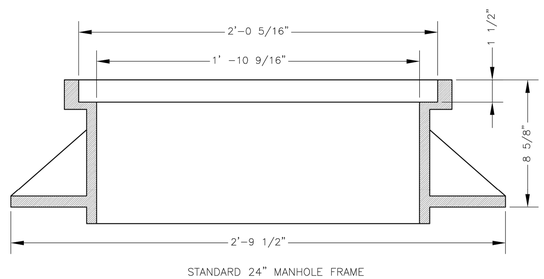
STORM MANHOLE COVER

DATE: 04/30/2024
DRAWN BY: CNS
CHECKED BY: MJF
DWG No.

STM-6



SLAB MANHOLE FRAME
LEE'S SUMMIT PART NO.: LS103A
MINIMUM WEIGHT = 145 LB



STANDARD 24" MANHOLE FRAME
LEE'S SUMMIT PART NO.: LS101A
MINIMUM WEIGHT = 250 LB

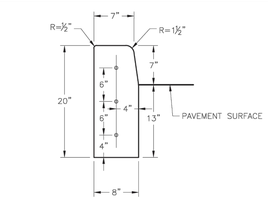
*COVER AND FRAME MODEL INFORMATION REFER TO THE STORMWATER APPROVED PRODUCTS LIST.

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

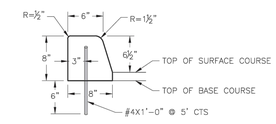
STORM MANHOLE FRAME DETAIL

Date: 04/17
Drawn By: MJF
Checked By: DL

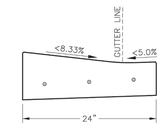
STM-7



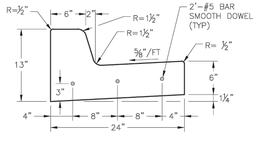
STRAIGHT CURB
(TYPE C–1)



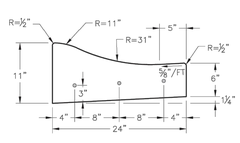
DOWELLED CURB
(TYPE DC)



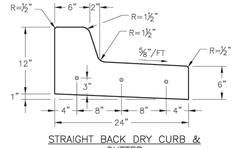
CURB & GUTTER DETAIL AT RAMP
(ADA SLOPE REQUIREMENTS)



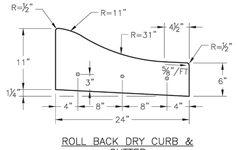
STRAIGHT BACK CURB & GUTTER
(TYPE CG–1)



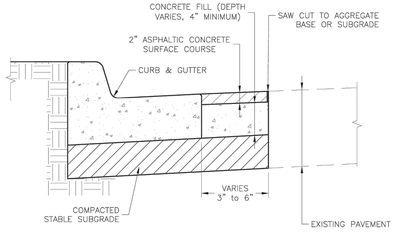
ROLL BACK CURB & GUTTER
(TYPE CG–2)



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



ROLL BACK DRY CURB & GUTTER
(TYPE CG–2 DRY)



CURB REPLACEMENT DETAIL

GENERAL NOTES

1. ¾" ISOLATION JOINTS WITH 3 (2'–#5 BAR) SMOOTH DOWELS SHALL BE PLACED AT RADIUS POINTS AND AT 150' INTERVALS. THESE DOWEL BARS SHALL BE GREASED AND WRAPPED ON ONE END WITH EXPANSION TUBES.
2. 3" DEEP CONTRACTION JOINTS SHALL BE INSTALLED AT APPROXIMATELY 10' INTERVALS. THESE JOINTS SHALL PASS ACROSS THE ENTIRE CURB SECTION.
3. CONCRETE FILL SHALL HAVE UNIFORM AND SMOOTH FINISH
4. KCMMB 4K CONCRETE SHALL BE USED FOR ALL CURB.
5. ASPHALTIC CONCRETE SURFACE COURSE SHALL CONFORM TO STANDARD SPECIFICATIONS SECTION 2205.2.
6. CURBS FOR NEW STREETS SHALL BE BUILT ON ASPHALT OR AGGREGATE BASE AS SHOWN IN TYPICAL SECTION DETAIL.
7. WHITE CURING COMPOUND MUST BE APPLIED UNIFORMLY TO THE CONCRETE SURFACE IMMEDIATELY AFTER FINAL FINISHING.
8. ALL DOWELS & TIE BARS SHALL BE EPOXY COATED.

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

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

Project:
Sheet Name: CURB & GUTTER DETAIL

Drawn By: MJF
Checked By: DL
Date: 05/2021
Freq. #

GEN-4

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Surveying 2005000319-D
Kansas
Engineering E-1695
Surveying LS-218
Oklahoma
Engineering 6254
Nebraska
Engineering CA2821

Oldham Village
Lee's Summit, Jackson County, Missouri

Project: OLDHAM VILLAGE/TRACE, LSMO
Issue Date: November 5, 2024

Construction Details
Construction Plans for:
Oldham Village
Lee's Summit, Jackson County, Missouri

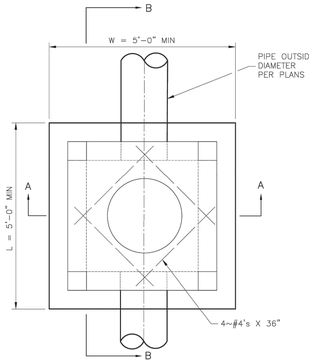
STATE OF MISSOURI
MATTHEW J. SCHLICHT
NUMBER
PE-2006019708
PROFESSIONAL ENGINEER

Matthew J. Schlicht
MO PE 2006019708
KS PE 19071
OK PE 25226
NE PE E-14335

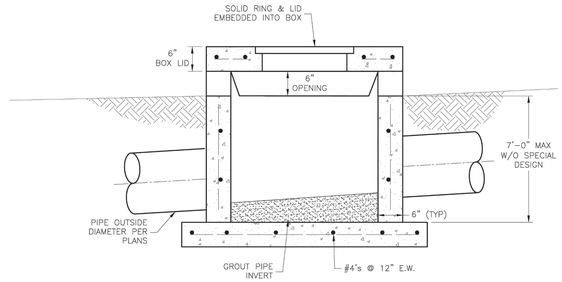
REVISIONS

1 REV. 12/10/2024
2 REV. 1/2/2025
3 REV. 2/6/2025
REV. 3/5/2025
4 REV. 3/24/2025

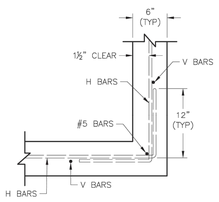
C.600



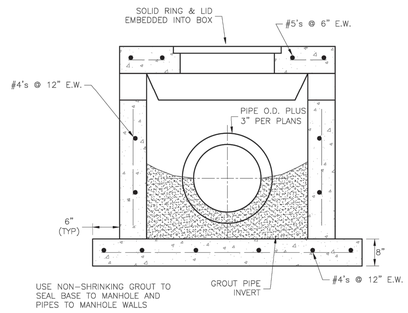
PLAN VIEW



SECTION B–B



WALL CORNER DETAIL



SECTION A–A

GENERAL NOTES:

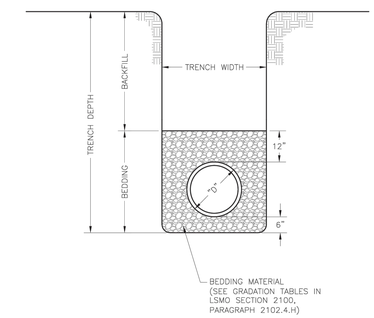
1. LOCATE RING AND COVER OVER OUTLET ON BLANK WALL.
2. USE ¾" CHAMFER ON ALL EXPOSED CONCRETE CORNERS.
3. FLOOR OF INLET GROUTED AND SHAPED TO MATCH PIPE INVERT TO PROVIDE SMOOTH FLOW.
4. STEPS REQUIRED AT 16" O.C. WHEN DEPTH FROM TOP OF CASTING TO INVERT EXCEEDS 3' ON BLANK WALL IF POSSIBLE.
5. BOXOUTS WILL NOT BE ALLOWED TO PROJECT THROUGH THE CORNERS OF THE STRUCTURE.
6. THE MINIMUM REINFORCING SHALL BE 1 H–BAR OVER A CAST–IN–PLACE PIPE AND 2 H–BARS OVER A PRECAST BOXOUT.
7. SHOW FIELD INLET ORIENTATION ON PLANS PLUS NUMBER AND SIDE OF OPENINGS.
8. PRECAST LIDS SHALL BE PINNED, SEALED WITH NON–SHRINKABLE GROUT AND REMOVABLE FOR FUTURE MAINTENANCE.
9. FOR RING AND COVER SEE THE STORMWATER APPROVED PRODUCT LIST.

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

Project: STANDARD DETAILS CITY OF LEE'S SUMMIT, MO LEE'S SUMMIT, JACKSON COUNTY, MO
Sheet Name: FIELD INLET DETAIL

Drawn By: MJF
Checked By: DL
Date: 05/2021
Proj. #:

STM-2



NOTES:

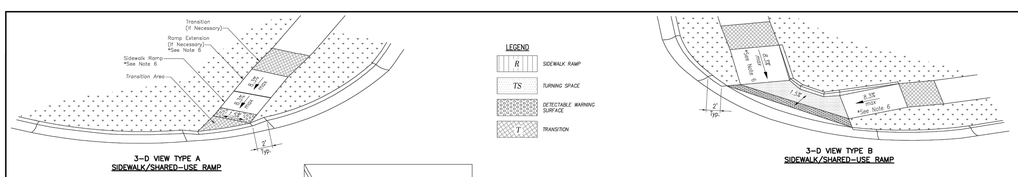
1. FOR TRENCHING AND PAVEMENT PATCHING REPAIRS WITHIN EXISTING OR FUTURE STREETS SEE STANDARD DETAIL GEN–5.
2. EXCAVATION DEPTH, SLOPES, SHORING, AND STOCKPILE LOCATIONS SHALL COMPLY WITH OSHA REGULATIONS.

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

PIPE BEDDING DETAIL

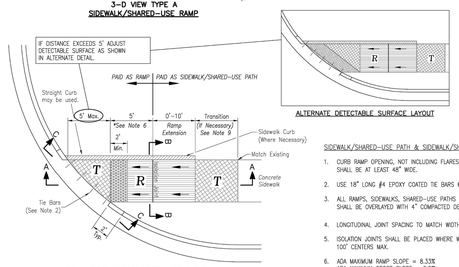
Date: 08/2023
Drawn By: MJF
Checked By: GMB

GEN-6



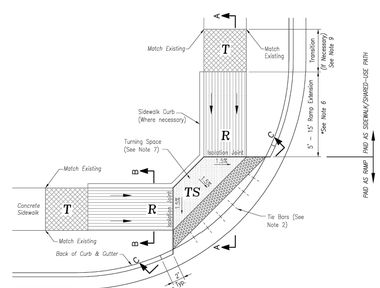
3–D VIEW TYPE A
SIDEWALK/SHARED–USE RAMP

3–D VIEW TYPE B
SIDEWALK/SHARED–USE RAMP



ALTERNATE DETECTABLE SURFACE LAYOUT

TYPE A SIDEWALK/SHARED–USE RAMP
Not to Scale

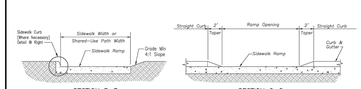


PAD AS SIDEWALK/SHARED–USE PATH PAD AS RAMP

TYPE B SIDEWALK/SHARED–USE RAMP
Not to Scale

SIDEWALK/SHARED–USE PATH & SIDEWALK/SHARED–USE RAMP NOTES:

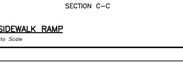
1. CURB RAMP OPENING, NOT INCLUDING FLARES, SHALL MATCH EXISTING SIDEWALK WIDTH AND OPENING SHALL BE AT LEAST 48" WIDE.
2. USE 18" LONG #4 EPOXY COATED TIE BARS @ 24" O.C. EMBED TIE BARS 9" IN EACH DIRECTION.
3. ALL RAMPS, SIDEWALKS, SHARED–USE PATHS SUBGRADE MUST BE OF STABLE, COMPACTED EARTH AND SHALL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



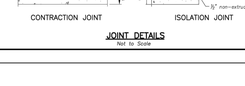
SECTION B–B

SECTION C–C

TYPE A & B SIDEWALK RAMP
Not to Scale



SIDEWALK CURB DETAIL
Not to Scale



CONTRACTION JOINT

ISOLATION JOINT

JOINT DETAILS
Not to Scale

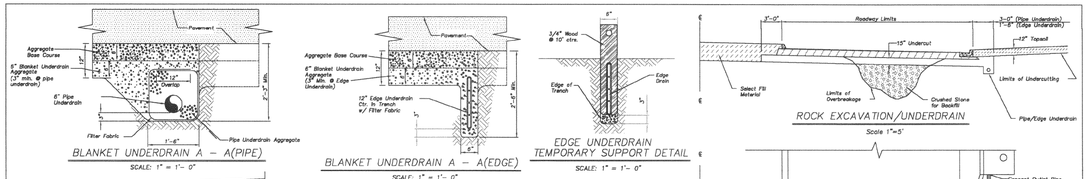
CURB & GUTTER DETAIL AT RAMP
Not to Scale

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

Project: STANDARD DETAILS CITY OF LEE'S SUMMIT, MO LEE'S SUMMIT, JACKSON COUNTY, MO
Sheet Name: ADA RAMP RETROFIT DETAIL

Drawn By: MJF
Checked By: DL
Date: 08/2023
Proj. #:

GEN-3A

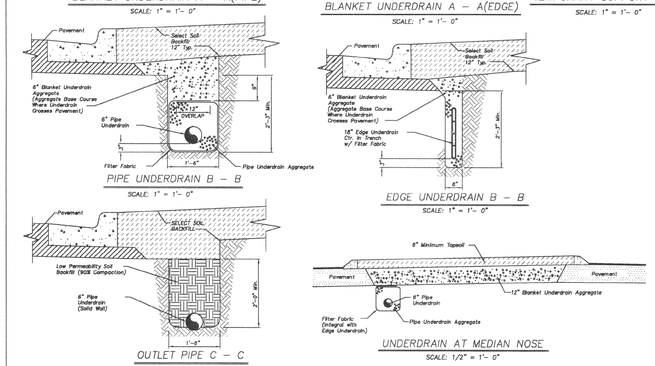


BLANKET UNDERDRAIN A – A(PIPE)
SCALE: 1" = 1'– 0"

BLANKET UNDERDRAIN A – A(EDGE)
SCALE: 1" = 1'– 0"

EDGE UNDERDRAIN TEMPORARY SUPPORT DETAIL
SCALE: 1" = 1'– 0"

ROCK EXCAVATION/UNDERDRAIN
Scale 1"=5'



PIPE UNDERDRAIN B – B
SCALE: 1" = 1'– 0"

EDGE UNDERDRAIN B – B
SCALE: 1" = 1'– 0"

OUTLET PIPE C – C
SCALE: 1" = 1'– 0"

UNDERDRAIN AT MEDIAN NOSE
SCALE: 1/2" = 1'– 0"

UNDERDRAIN LAYOUT
Scale 1"=5'

Underdrain Notes:

1. All roadway excavation in rock will be undercut no less than 15" for the full width of the roadway as shown.
2. In areas where underdrains are not required, undercut and overbreakage in limestone and shale shall be brought to within 8" of the subgrade line with properly compacted crushed stone, shot rock, and/or rock rubble. The remaining 8" shall conform to Standard Specifications Section 2202.
3. Layers of earth or shale shall not be permitted for backfill up to the bottom of the crushed stone.
4. A minimum of 12" of select soil (topsoil) shall be placed on exposed rock cut or fill slopes outside the limits of the roadway. All rock and shale slopes shall be benched @ maximum 2' vertical intervals prior to placement of select soil.
5. Proposed underdrain pipe layout, flowline elevations, inlet connection points, and details shall be approved prior to construction by the City Engineer.
6. Where pipe underdrains are used, all underdrain outlet pipes shall be solid wall with watertight joints. All outlet pipes shall be tied into the nearest storm sewer inlet as approved. Where edge underdrains are used, all underdrain outlet pipes shall be solid wall with manufacturer fabrication approved by the City Engineer. All connections between pipes and edge connectors or curb inlets shall be made with 2' minimum length of pipe.
7. All underdrain pipes shall be installed at a minimum slope of 1% Underdrain pipe shall be installed with the perforations placed down.
8. Blanket underdrains shall be placed on bedrock unless otherwise directed by the City Engineer. Underdrains and overbreakage in limestone and shale shall be brought to within 12" of the subgrade line with properly compacted crushed stone, shot rock and/or rock rubble.
9. All filter fabric used for pipe underdrain construction shall conform to Standard Specifications Section 2203.6.
10. The Contractor may, at his option, use either pipe underdrain or edge underdrain, but shall not mix underdrain types within any underdrain system.
11. All edge underdrain shall be held in the center of the trench by mechanical methods while placing granular backfill. See detail this sheet. Alternate methods may be used with prior approval by the City Engineer.
12. Blanket underdrain aggregate, pipe underdrain aggregate, pipe underdrain, edge underdrain and outlet pipe shall conform to Standard Specifications Section 2203.6.

AMERICAN PUBLIC WORKS ASSOCIATION
KANSAS CITY METROPOLITAN CHAPTER

UNDERDRAIN DETAILS

STANDARD DRAWING UD–1
ADOPTED: MAY 23, 2001

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Surveying LS-218
Oklahoma
Engineering 6254
Nebraska
Engineering CA2821

Oldham Village
Lee's Summit, Jackson County, Missouri

Project: OLDHAM MARKETPLACE, LSMO
Issue Date: November 5, 2024

Construction Details
Construction Plans for:
Oldham Village
Lee's Summit, Jackson County, Missouri

STATE OF MISSOURI
MATTHEW J. SCHLICHT
NUMBER PE-2006019708
NOTARIAL SEAL

Matthew J. Schlicht
MO PE 2006019708
KS PE 19071
OK PE 25226
NE PE E-14335

REVISIONS

1 REV. 12/10/2024
2 REV. 1/2/2025
3 REV. 2/6/2025
REV. 3/5/2025
4 REV. 3/24/2025

C.601