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 S21°18'20"W, a distance of 43.88 feet to the Point of Beginning; thence N57°09'44"W, a distance of 458.00 feet; thence S2°26'55"W, a distance of 2068.05 feet; thence S87°33'04"E, a distance of 215.90 feet; thence N72°52'22"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°23'19"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°10'25"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.

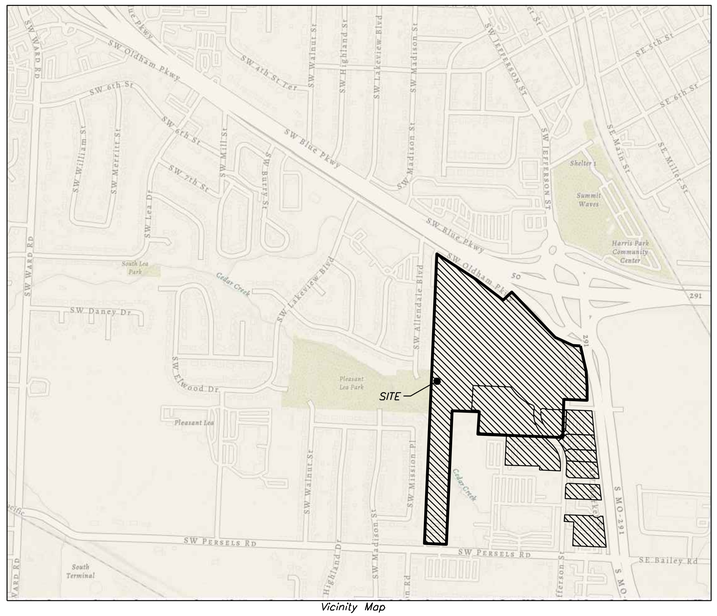
UTILITY COMPANIES:

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.

C.001 ~ STREET & STORM COVER SHEET
C.010 ~ CONSTRUCTION PHASING PLAN OVERALL
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C.013 ~ CONSTRUCTION PHASING PLAN PHASE 3
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C.100 ~ CONSTRUCTION PHASING PLAN PHASE 5
C.200 ~ MASTER DRAINAGE PLAN SHEET 1 OF 3 GRADING PLAN
C.201 ~ MASTER DRAINAGE PLAN SHEET 3 OF 3 DRAINAGE AREA MAP
C.202 ~ STREET PLAN AND PROFILE
C.203 ~ STREET PLAN AND PROFILE
C.204 ~ STREET PLAN AND PROFILE
C.205 ~ STREET PLAN AND PROFILE
C.206 ~ STREET PLAN AND PROFILE
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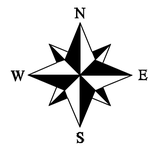
C.210 ~ STREET SIGNAGE PLANS
C.211 ~ PARK TRAIL PLAN AND PROFILE
C.215 ~ SIDEWALK AND INTERSECTION PLAN
C.216 ~ SIDEWALK AND INTERSECTION PLAN
C.220 ~ RETAINING WALL PLAN AND PROFILE
C.221 ~ RETAINING WALL PLAN AND PROFILE
C.222 ~ RETAINING WALL PLAN AND PROFILE
C.250 ~ TRAFFIC CONTROL PLAN PHASE 1
C.251 ~ TRAFFIC CONTROL PLAN PHASE 2 DETOUR
C.252 ~ TRAFFIC CONTROL PLAN PHASE 2
C.253 ~ TRAFFIC CONTROL PLAN PHASE 2B
C.254 ~ TRAFFIC CONTROL PLAN 3
C.300 ~ STORM SEWER GENERAL LAYOUT
C.301 ~ STORM SEWER PLAN AND PROFILE
C.302 ~ STORM SEWER PLAN AND PROFILE
C.303 ~ STORM SEWER PLAN AND PROFILE
C.304 ~ STORM SEWER PLAN AND PROFILE
C.305 ~ STORM SEWER PLAN AND PROFILE
C.306 ~ STORM SEWER PLAN AND PROFILE
C.307 ~ STORM SEWER PLAN AND PROFILE
C.308 ~ STORM SEWER PLAN AND PROFILE
C.309 ~ STORM SEWER PLAN AND PROFILE
C.310 ~ STORM SEWER TABLES
C.311 ~ STORM SEWER TABLES
C.312 ~ STORM SEWER TABLES
C.313 ~ STORM SEWER TABLES
C.600 ~ CONSTRUCTION DETAILS
C.601 ~ CONSTRUCTION DETAILS
STREET LIGHT PLANS
SIGNAL PLANS



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.

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Professional Registration
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Surveying 2005093319-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

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

C.001

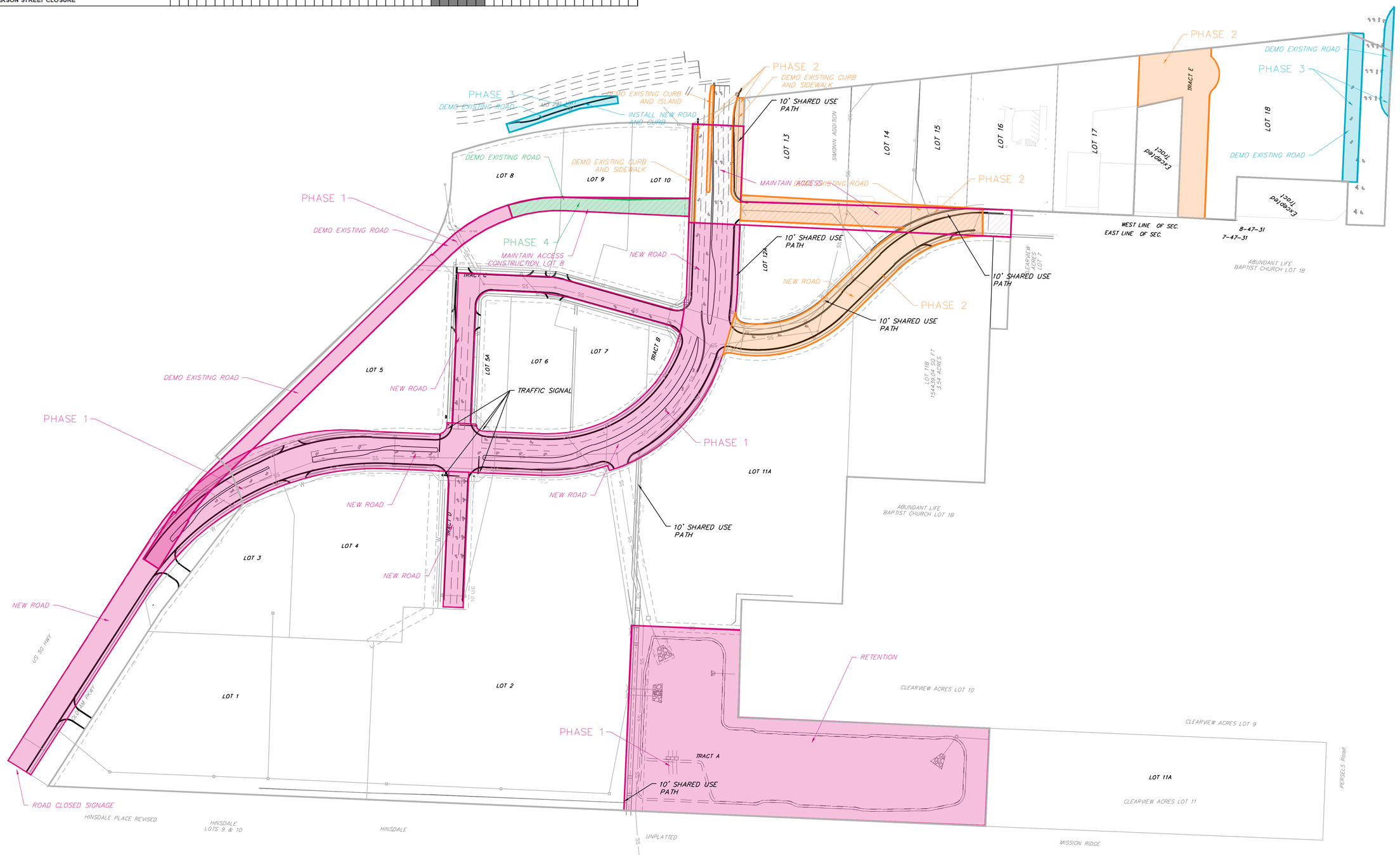
	CONSTRUCTION ACTIVITY	MAR	APRIL	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR
		2025 WORK SCHEDULE											2026 WORK SCHEDULE	
1	Demo Existing Buildings													
2	PHASE 1													
3	PHASE 2													
4	PHASE 3													
5	PHASE 4													
6	PHASE 5													
7	OLDHAM PKWY CLOSURE													
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 MASTERPLACE. 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 2006019708
REGISTERED
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

C.010

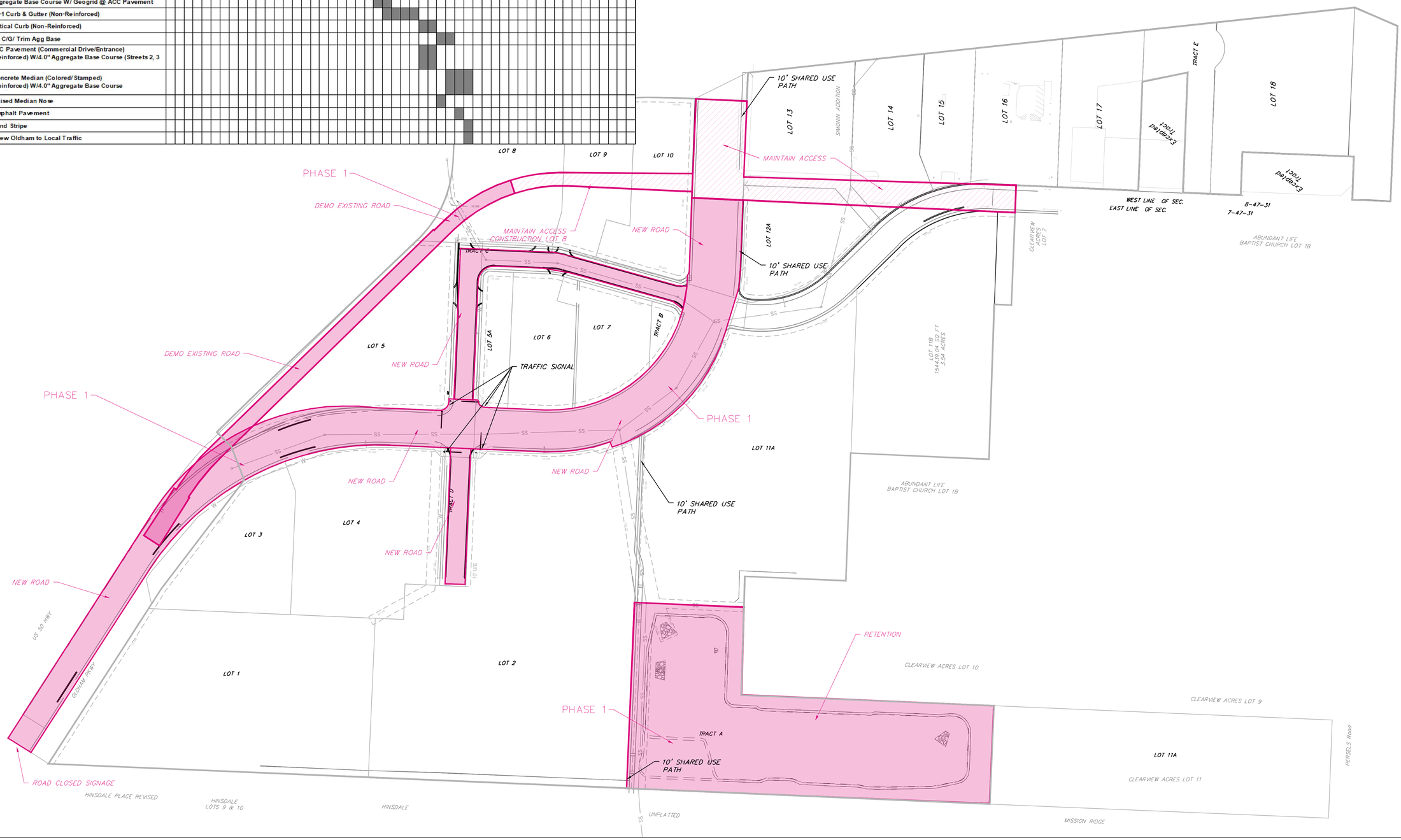
	CONSTRUCTION ACTIVITY	MAR	APRIL	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR
		2025 WORK SCHEDULE											2026 WORK SCHEDULE	
68	Clearing and Removals													
69	Mass Grading													
70	Retaining Walls													
71	Sanitary Sewer													
72	Storm Sewer													
73	Public													
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													

North

0 50' 100' 200'

CONSTRUCTION PHASING PHASE 1

SCALE: 1" = 100'



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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

CONSTRUCTION PHASING PHASE 1
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
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REV. 3/5/2025

C.011

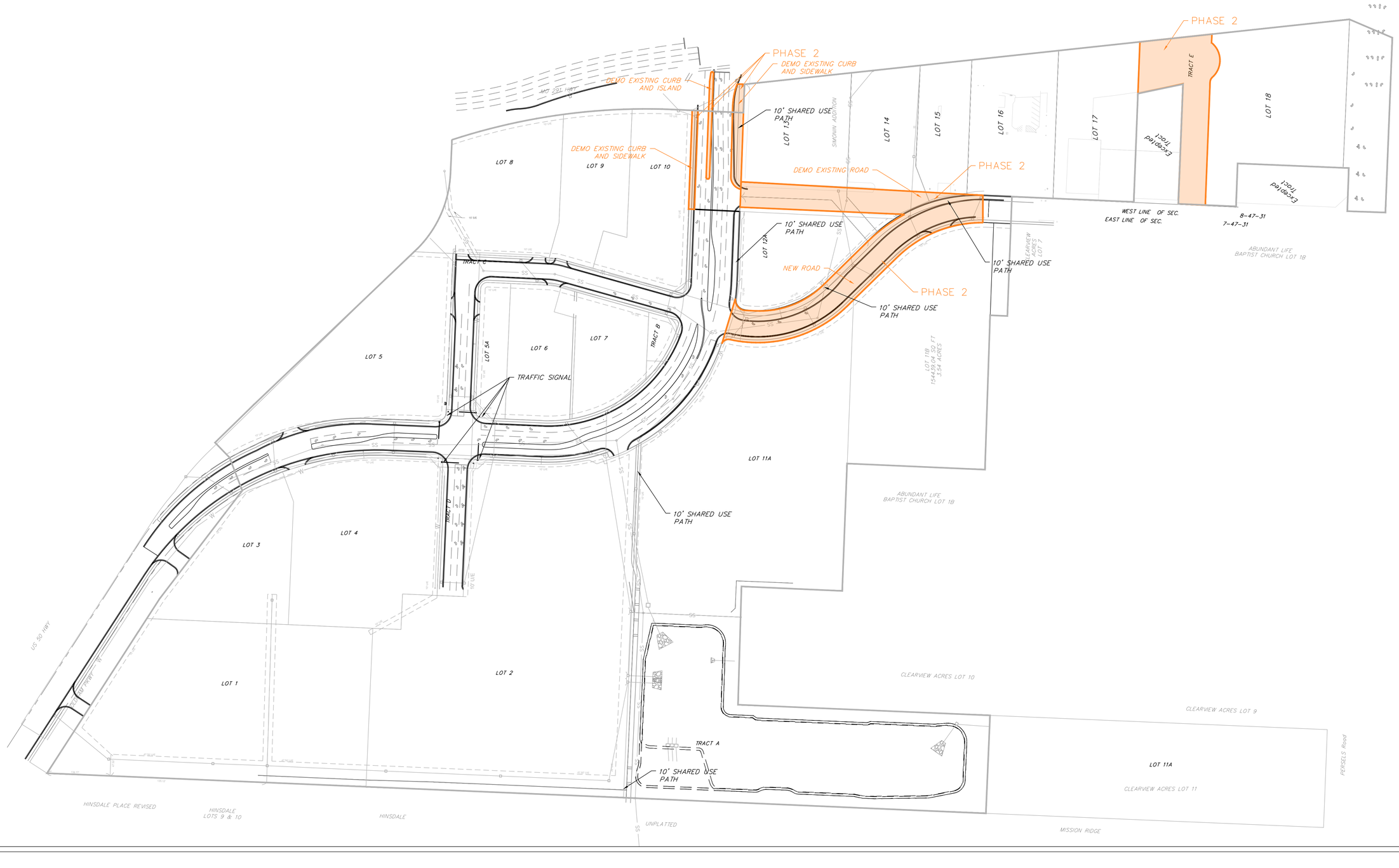
	CONSTRUCTION ACTIVITY	MAR	APRIL	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR
		2025 WORK SCHEDULE											2026 WORK SCHEDULE	
90	Close E/W Oldham and Jefferson													
91	Complete Jefferson Street Connection													
92	Complete South and Island Improvements on Existing Oldham													
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
NUMBER 2006019708
PERSONAL ENGINEER

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MO PE 2006019708
KS PE 19071
OK PE 25226
NE PE E-14335

REVISIONS

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

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'

PHASE 3
DEMO EXISTING ROAD
INSTALL NEW ROAD AND CURB
DEMO EXISTING ROAD
PHASE 3
DEMO EXISTING ROAD
10' SHARED USE PATH
10' SHARED USE PATH
10' SHARED USE PATH
TRAFFIC SIGNAL
TRACT A
TRACT B
TRACT C
TRACT D
TRACT E
LOT 1
LOT 2
LOT 3
LOT 4
LOT 5
LOT 5A
LOT 6
LOT 7
LOT 8
LOT 9
LOT 10
LOT 11A
LOT 12A
LOT 13
LOT 14
LOT 15
LOT 16
LOT 17
LOT 18
SIMONIN ADDITION
CLEARVIEW ACRES LOT 7
CLEARVIEW ACRES LOT 10
CLEARVIEW ACRES LOT 9
CLEARVIEW ACRES LOT 11
ABUNDANT LIFE BAPTIST CHURCH LOT 1B
Excepted Tract
WEST LINE OF SEC. 8-47-31
EAST LINE OF SEC. 7-47-31
US 50 HWY
PEPSEL S Road
HINSDALE PLACE REVISED
HINSDALE LOTS 9 & 10
HINSDALE
UNPLATTED
MISSION RIDGE

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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
MATTHEW J. SCHLICHT
NUMBER 2006019708
PERSONAL ENGINEER

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KS PE 19071
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NE PE E-14335

REVISIONS

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

C.013

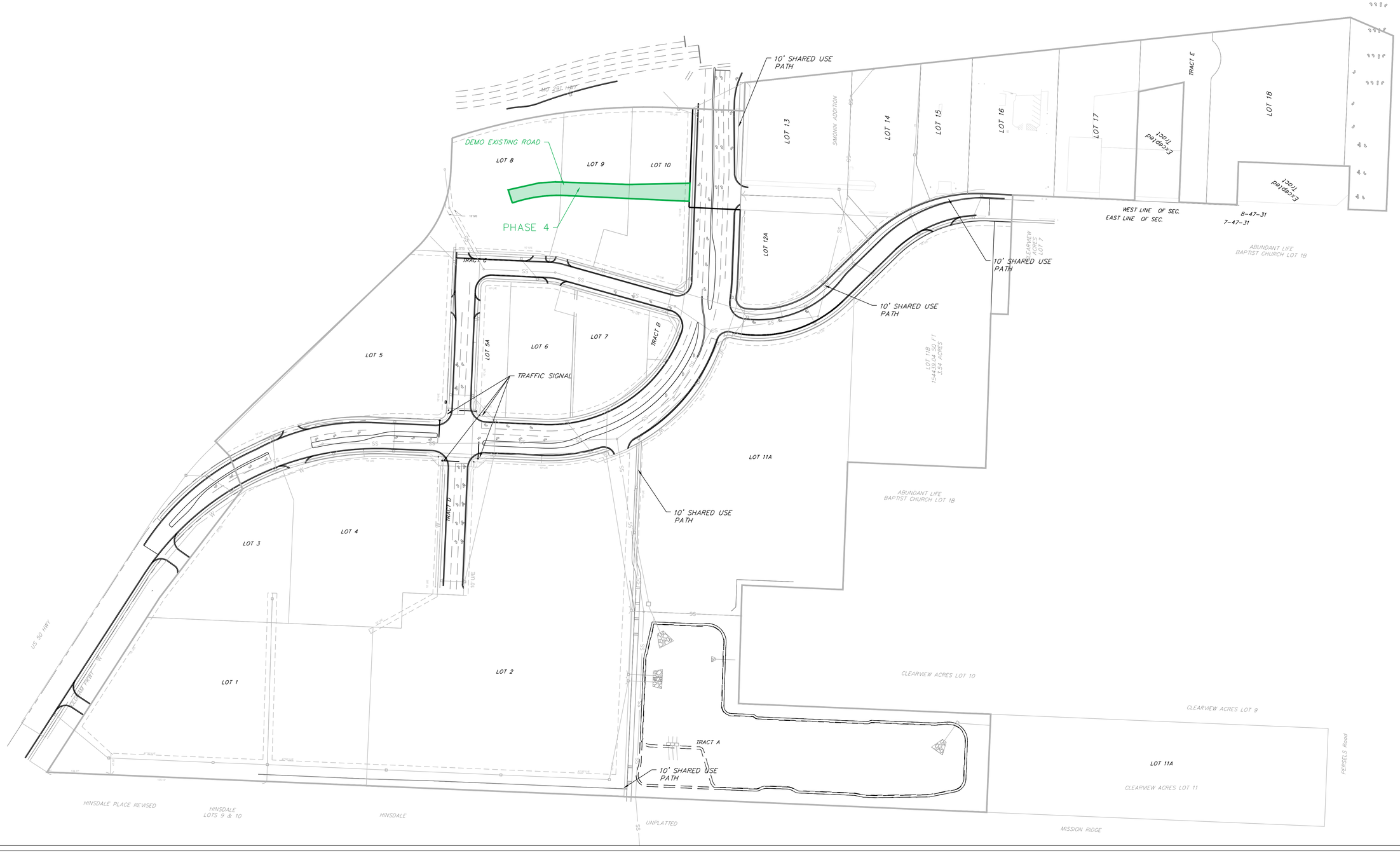
	CONSTRUCTION ACTIVITY	MAR	APRIL	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR
		2025 WORK SCHEDULE											2026 WORK SCHEDULE	
99	4.0" PCC Sidewalk (Non-Reinforced) W/4.0" Aggregate Base Course													
100	6.0" PCC Trail (Non-Reinforced) W/4.0" Aggregate Base Course													
101	ADA Ramps													
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 MARKETPLACE, LSMO
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CONSTRUCTION PHASING PHASE 4
Construction Plans for:
Oldham Village
Lee's Summit, Jackson County, Missouri

STATE OF MISSOURI
MATTHEW J. SCHLICHT
NUMBER 2006019708
PERSONAL ENGINEER

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

REVISIONS

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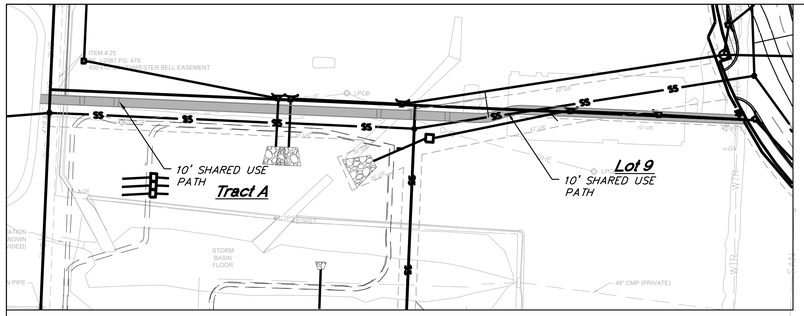
REV. 3/5/2025



North

0 40' 80' 160'

SHARED USE PATH PLAN

SCALE: 1" = 80'

North

0 50' 100' 200'

OVERALL SITE PLAN

SCALE: 1" = 100'

MODOT PLANS

MO ROUTE 291

10' SHARED USE PATH

PRIVATE PLANS

SEE DETAIL 6 SHEET C.210

5' SIDEWALK

Lot 6

Lot 7

Lot 8

US 50 HIGHWAY

SW WHITE FACE DRIVE

SW FIELDHOUSE DRIVE

Lot 3

Lot 4

Lot 5

SEE DETAIL 5 SHEET C.210

SW JEFFERSON STREET

SW PERSELS ROAD

Lot 10

SEE DETAIL 2 SHEET C.210

TRAFFIC SIGNAL

SW OLDHAM PARKWAY

SEE DETAIL 3 SHEET C.210

SEE DETAIL 4 SHEET C.210

Lot 9

SEE DETAIL 1 SHEET C.210

CITY PUBLIC PLANS

Lot 1

Lot 2

Tract A

Existing Public Storm End Section
Site Visit to review condition required prior to occupancy by Developer, Engineering Solutions and City of Lee's Summit

ENGINEERING SOLUTIONS
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Oldham Village
Lee's Summit, Jackson County, Missouri

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OVERALL SITE 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
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REVISIONS

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REV. 3/5/2025

C.100

North

GRAPHIC SCALE
0 50' 100' 200'

GRADING PLAN
SCALE: 1" = 100'

5 REVISED NORTH ARROW.

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.

MO ROUTE 291
US 50 HIGHWAY
SW JEFFERSON STREET
SW OLDHAM PARKWAY
SW PERSELS ROAD
SW FIELDHORSE DRIVE
R/W
SS

ENGINEERING SOLUTIONS
ENGINEERING & SURVEYING
50 SE 30TH STREET
LEE'S SUMMIT, MO 64082
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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 MASTERPLACE, 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

STATE OF MISSOURI
MATTHEW J. SCHLICHT
NUMBER PE-2006019708
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

C.200

GRAPHIC SCALE
0 50' 100' 200'

North

DRAINAGE AREA MAP
SCALE: 1" = 100'

2 REVISED NORTH ARROW

MO ROUTE 291
US 50 HIGHWAY
SW JEFFERSON STREET
SW OLDHAM PARKWAY
SW PERSELS ROAD
SW FLEMING CROSSE DRIVE
SW OLDHAM CROSSE DRIVE

12-5 12-3 12-4 8-4 12-2 12-1 4-10 4-9 4-8 4-7 8-2 8-1 4-6B 4-6R 4-6L 6-1 4-5 9-1L 9-1R 5-3R 6-3L 5-2 5-1 11-5 11-4 11-3 5-7 10-1 5-4 5-3B 5-6 5-5 2-1 7-2 7-1 4-3 4-2 3-2 1-8 1-7 1-6 1-5 1-4 1-3 1-2 16-3 16-2 15-1 16-1 11-15 11-14 11-13 11-12 11-11 11-10 11-9 11-8 11-7 11-6L 11-6R 14-1 13-1

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Oldham Village
Lee's Summit, Jackson County, Missouri

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

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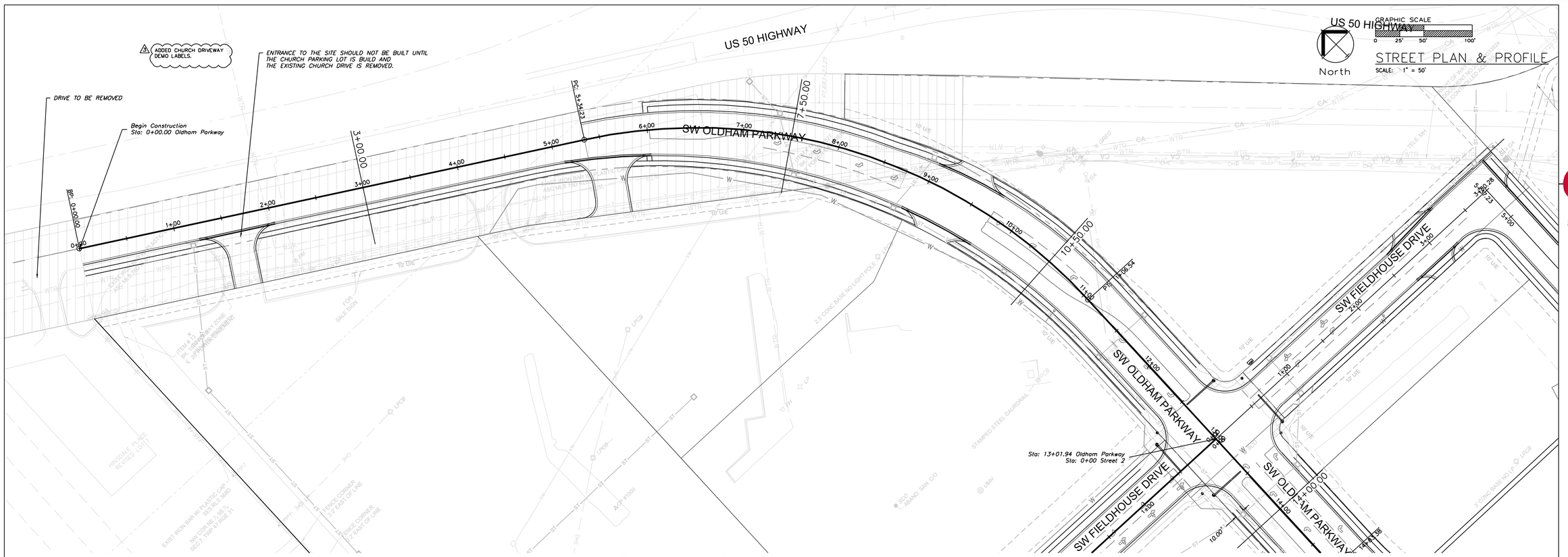
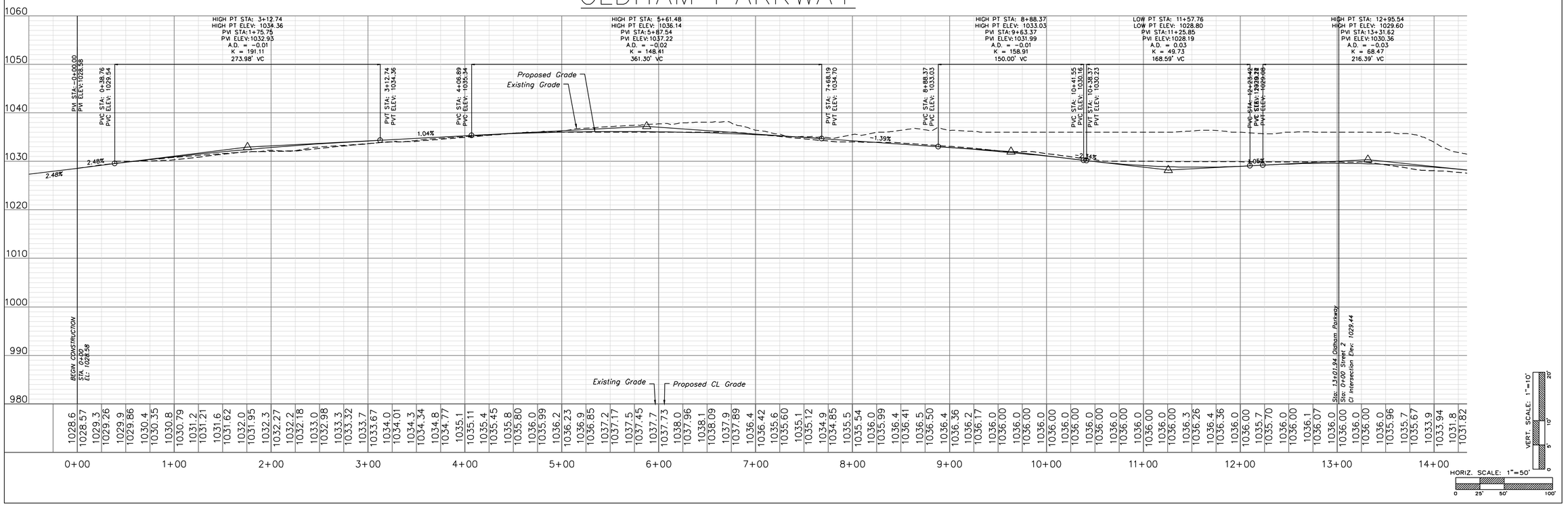
REV. 3/5/2025

C.201



OLDHAM PARKWAY



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

STATE OF MISSOURI
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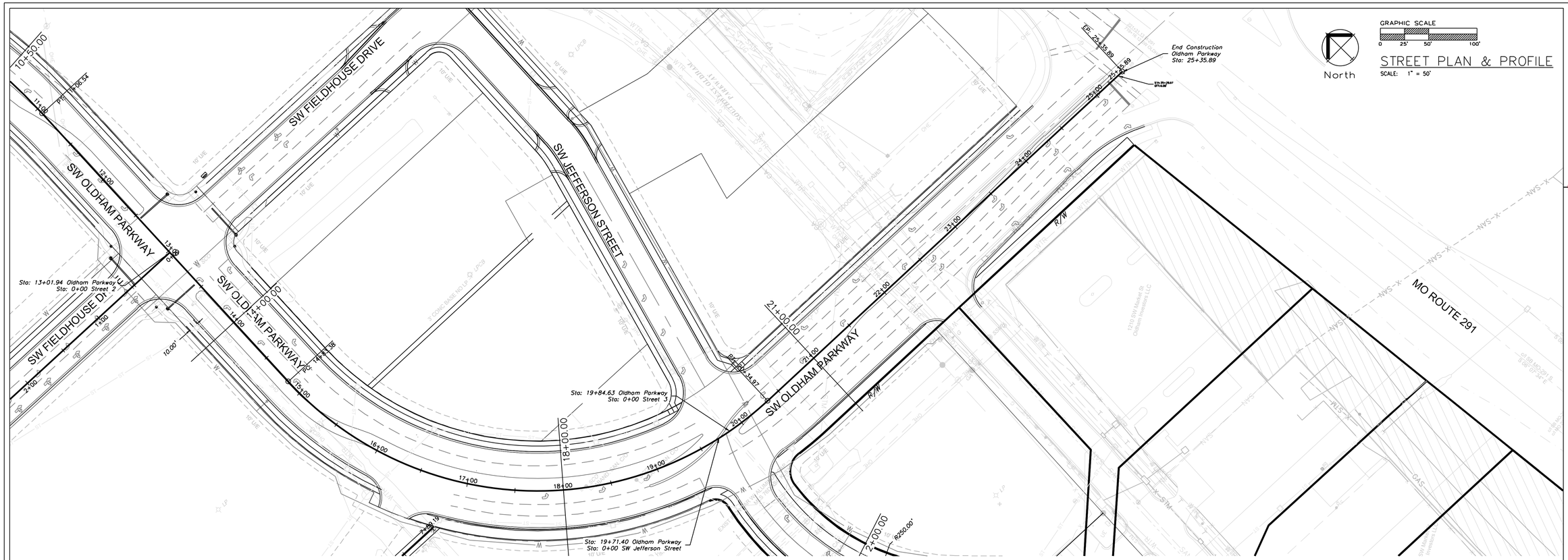
REV. 3/5/2025

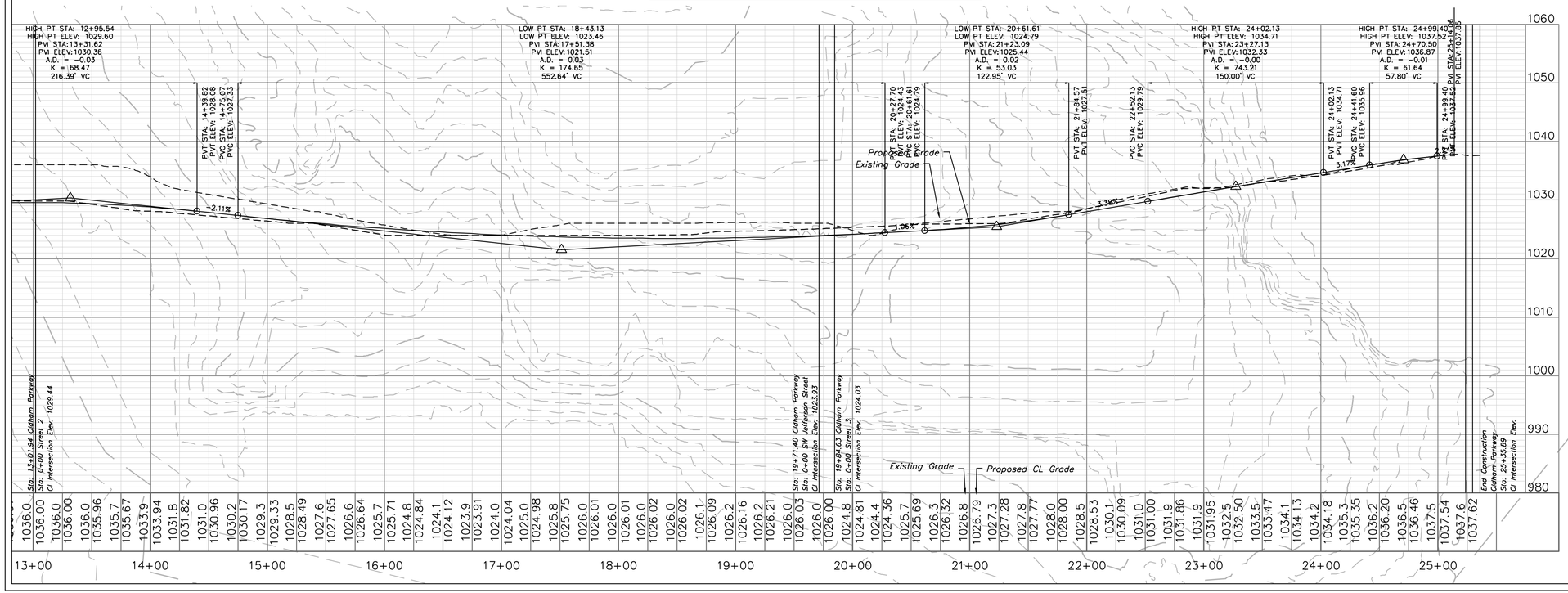
C.202



STREET PLAN & PROFILE

SCALE: 1" = 50'

OLDHAM PARKWAY



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

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

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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

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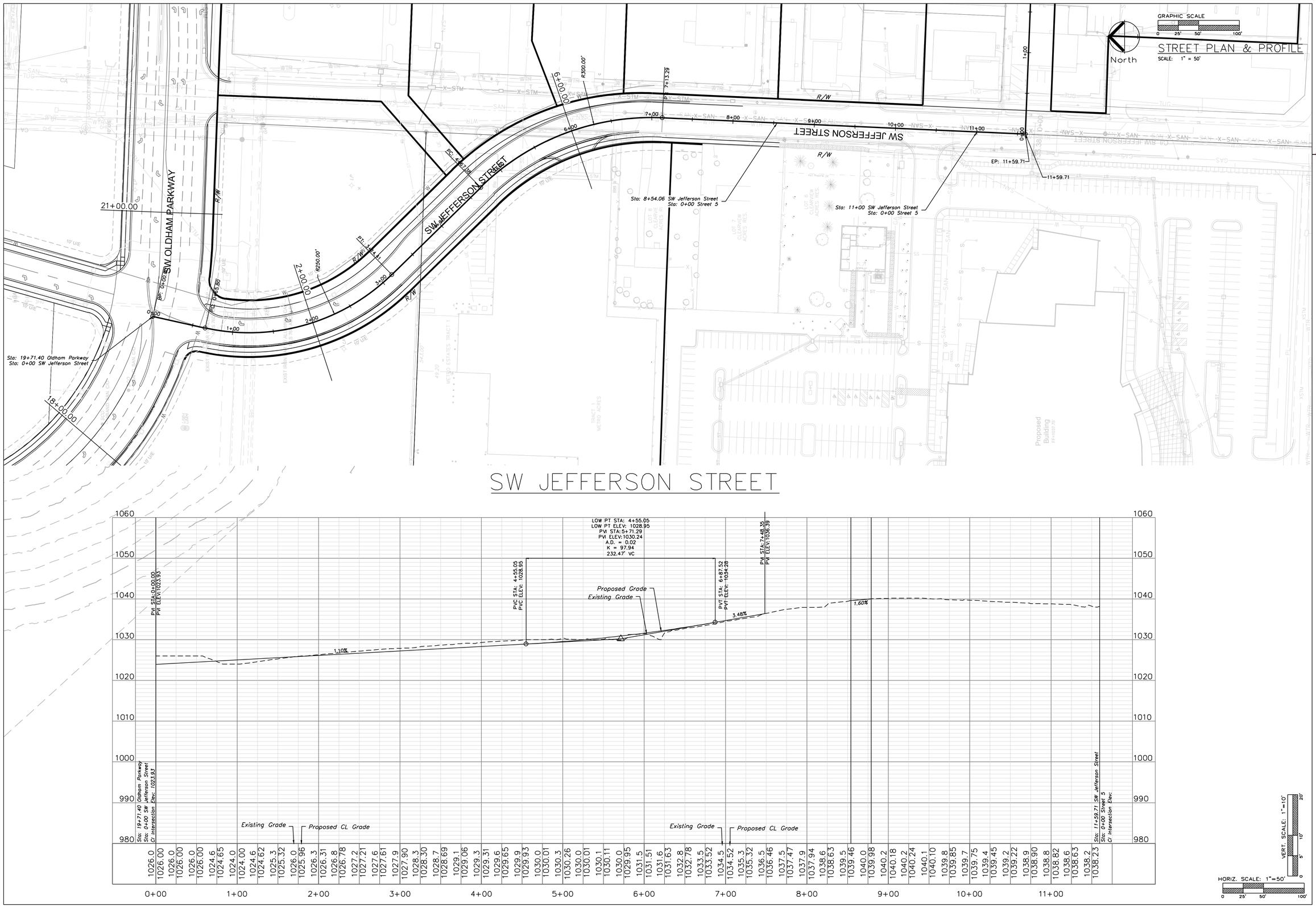
C.203



SW JEFFERSON STREET

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REV. 3/5/2025

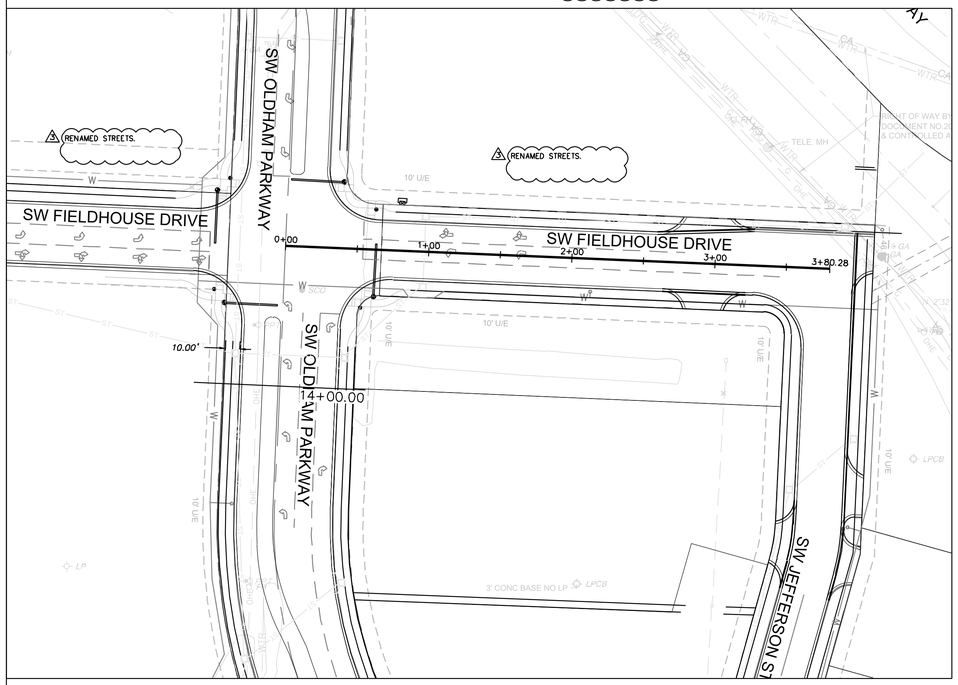
C.204

GRAPHIC SCALE
0 25' 50' 100'

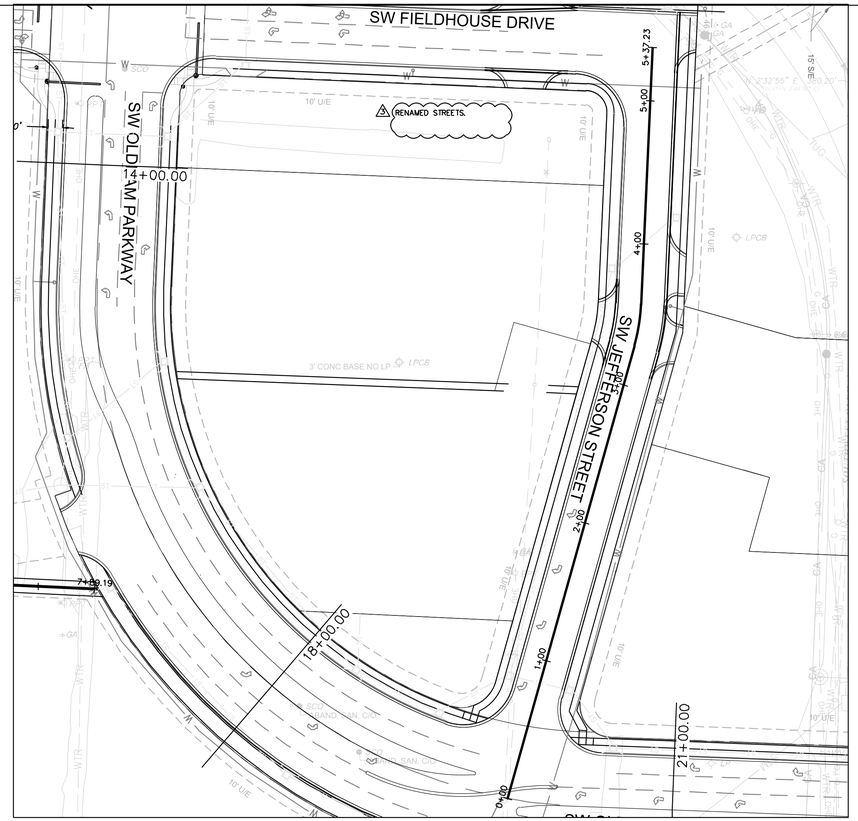
STREET PLAN & PROFILE

SCALE: 1" = 50'

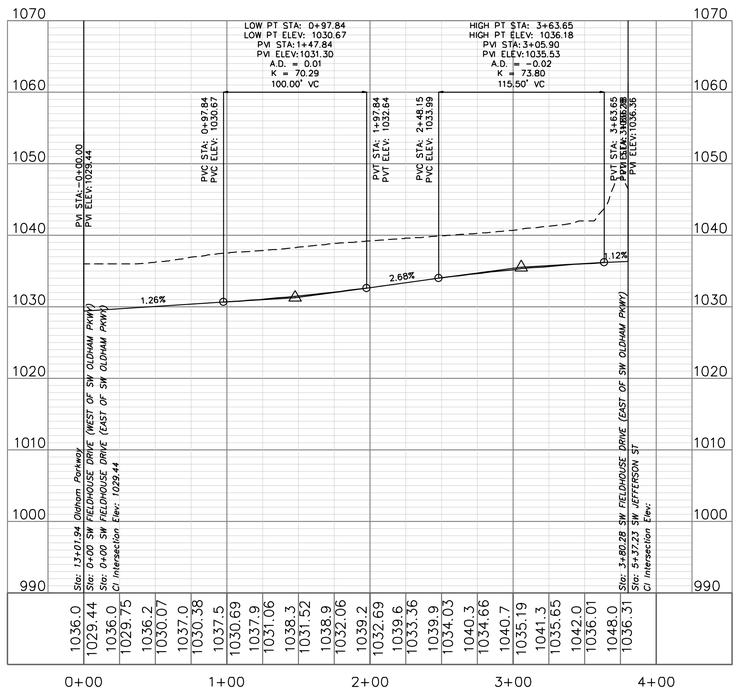
1 REVISED NORTH ARROW.

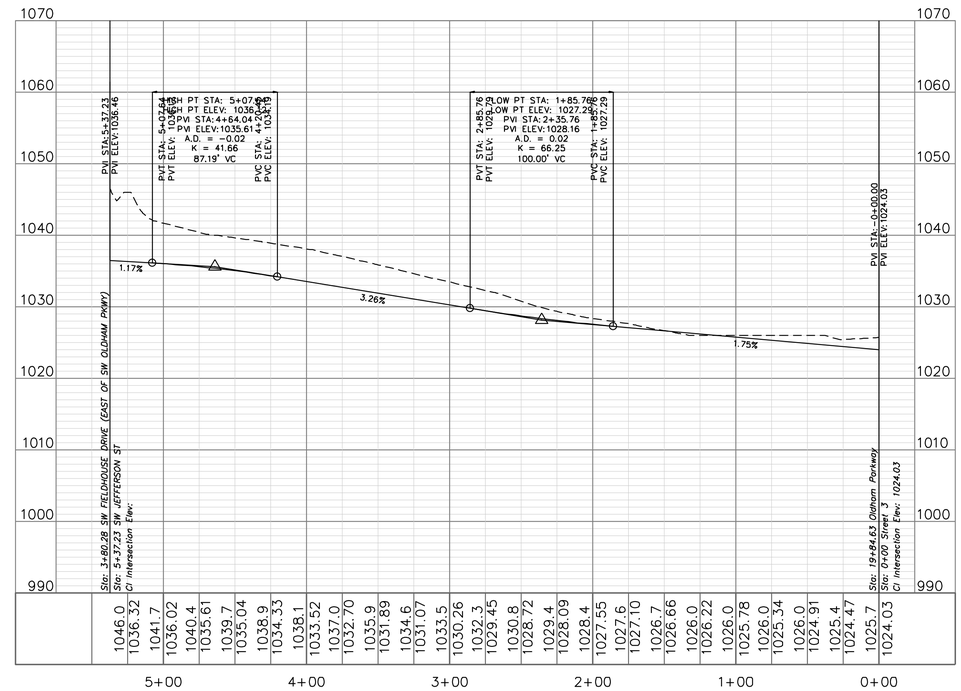


SW FIELDHOUSE DR



SW JEFFERSON ST





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

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

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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

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PROFESSIONAL ENGINEER

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OK PE 25226
NE PE E-14335

REVISIONS
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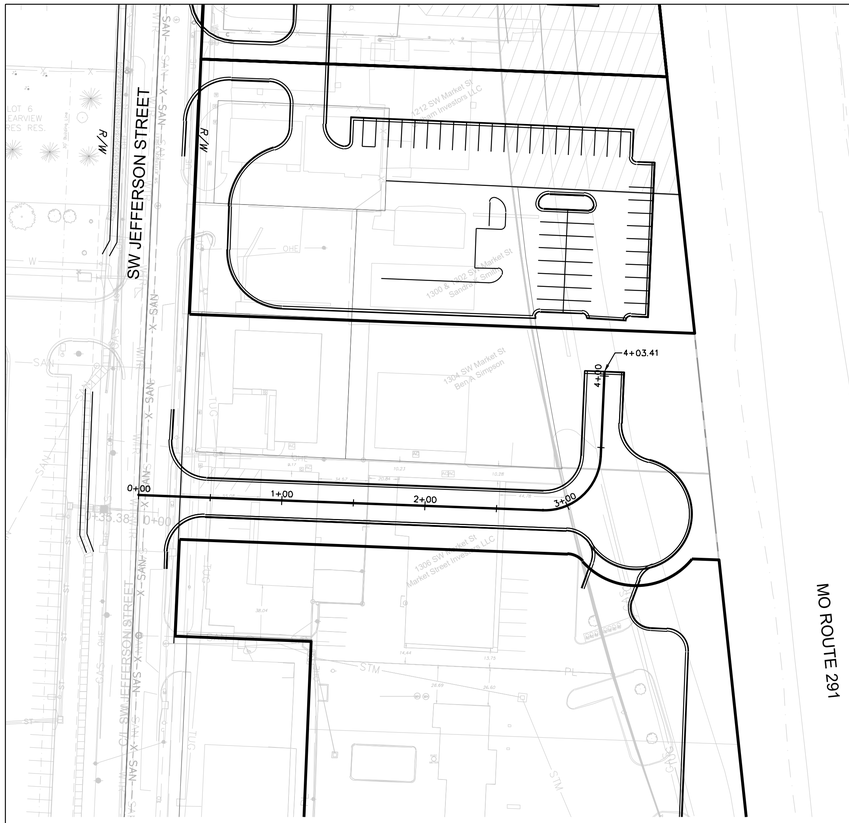
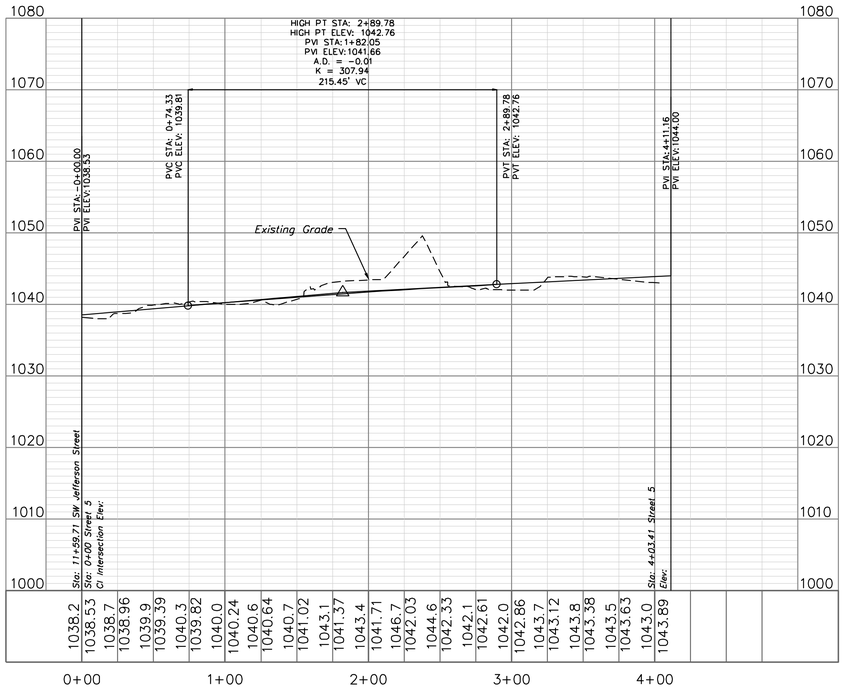


GRAPHIC SCALE
0 25' 50' 100'

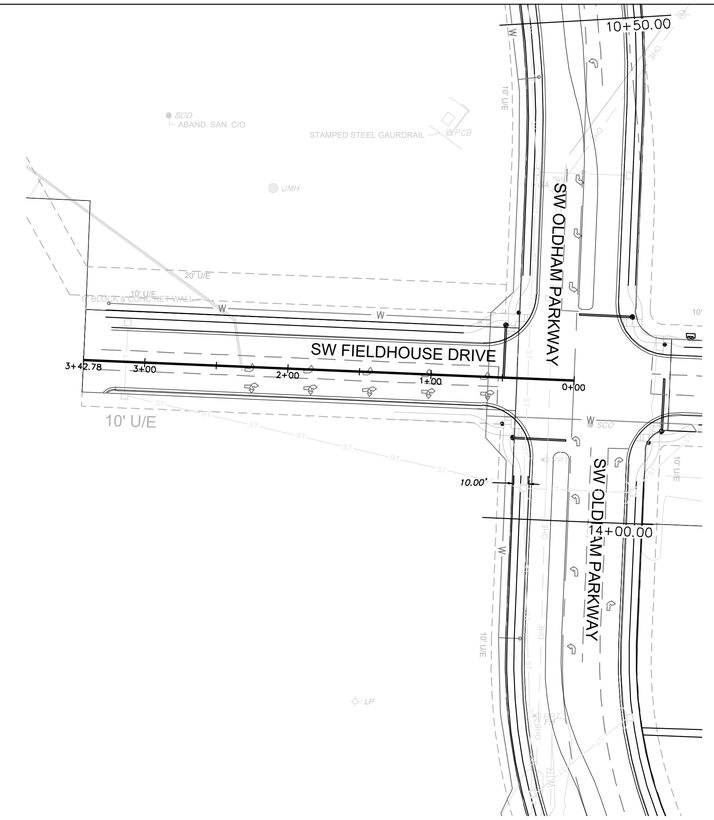
STREET PLAN & PROFILE
SCALE: 1" = 50'

STREET 5



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

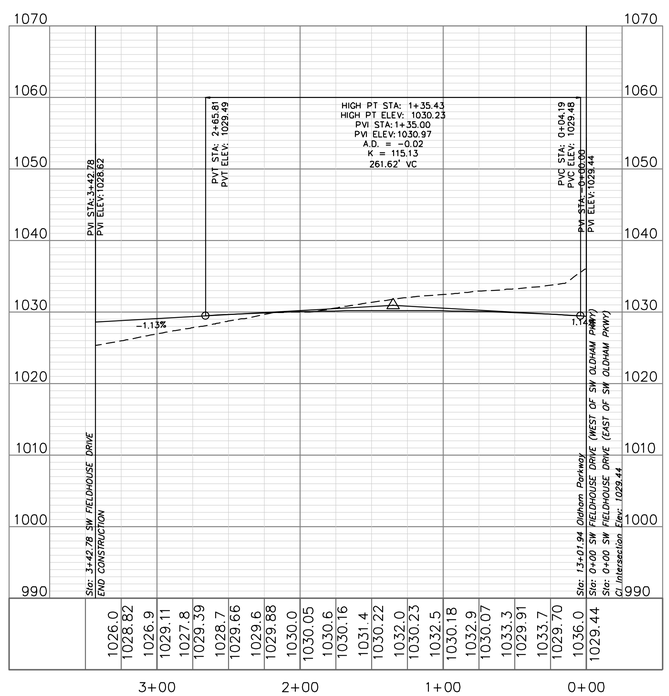
HORIZ. SCALE: 1"=50'
0 25' 50' 100'



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'

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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 PE-2006019708
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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

C.206

GENERAL NOTES:

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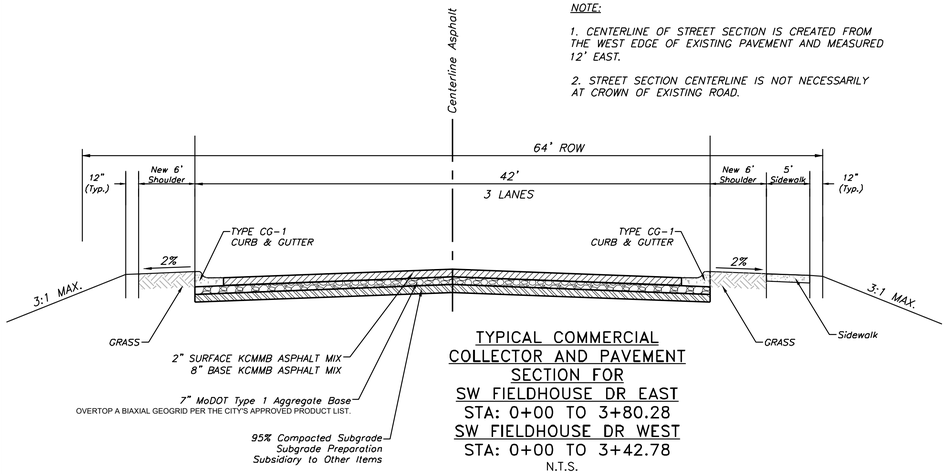
2 ~ ALL REQUIRED EASEMENTS WITHIN THE BOUNDARY OF THIS PROJECT SHALL BE PROVIDED FOR ON THE FINAL PLAT.
3 ~ ANY REQUIRED EASEMENT LOCATED OUTSIDE OF THE BOUNDARY OF THIS PROJECT SHALL BE PROVIDED FOR BY SEPARATE INSTRUMENT PRIOR TO ISSUANCE OF CONSTRUCTION PERMITS.
4 ~ THE CONTRACTOR SHALL NOTIFY THE CITY OF LEE'S SUMMIT DEVELOPMENT ENGINEERING INSPECTION AT 816.969.1200 AT LEAST 48 HOURS PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION.
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.

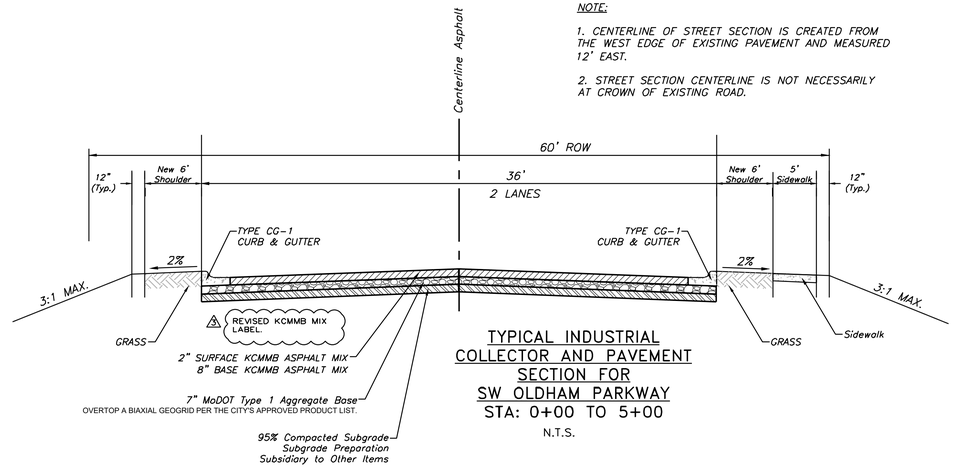


NOTE:

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 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.



NOTE:

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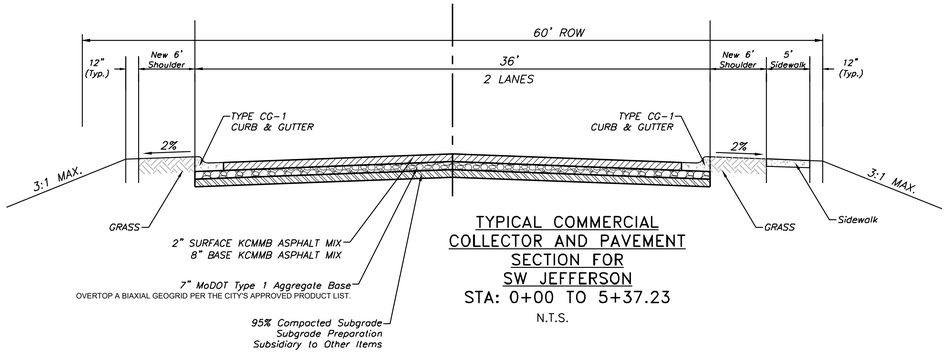
2. STREET SECTION CENTERLINE IS NOT NECESSARILY AT CROWN OF EXISTING ROAD.

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



NOTE:

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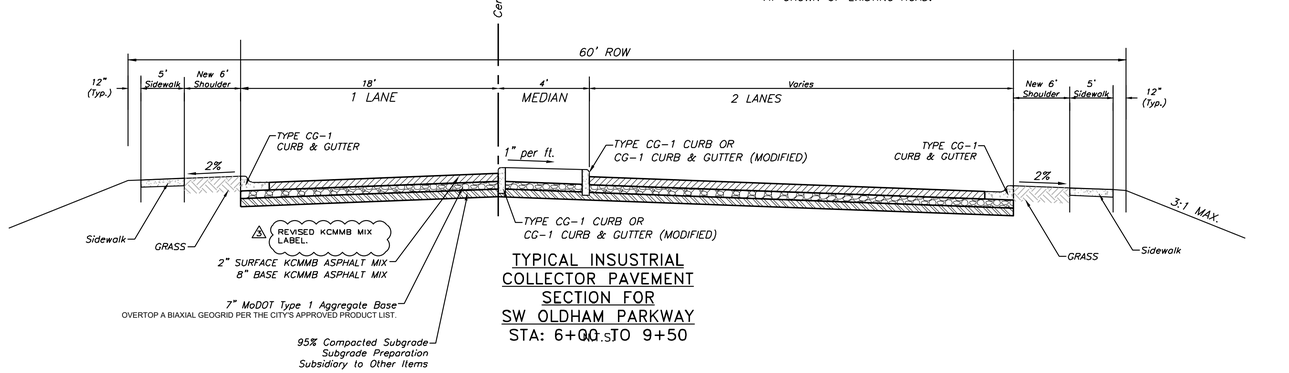
2. STREET SECTION CENTERLINE IS NOT NECESSARILY AT CROWN OF EXISTING ROAD.

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



NOTE:

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

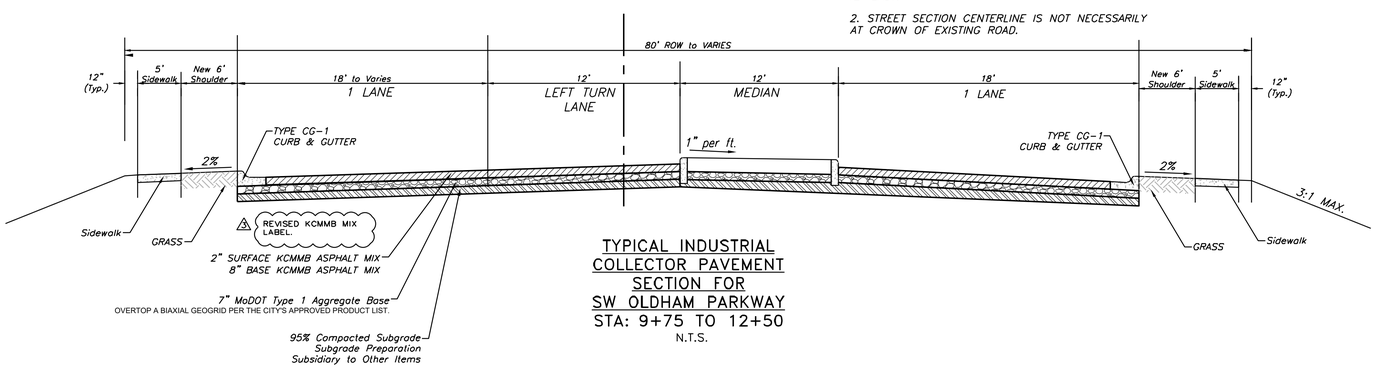
2. STREET SECTION CENTERLINE IS NOT NECESSARILY AT CROWN OF EXISTING ROAD.

TYPICAL 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 Temperature (Degrees F)
Surface	All	50	55
Base	Less than 3	40	45
Base	3 or more	30	35



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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 MASTERPLACE: 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
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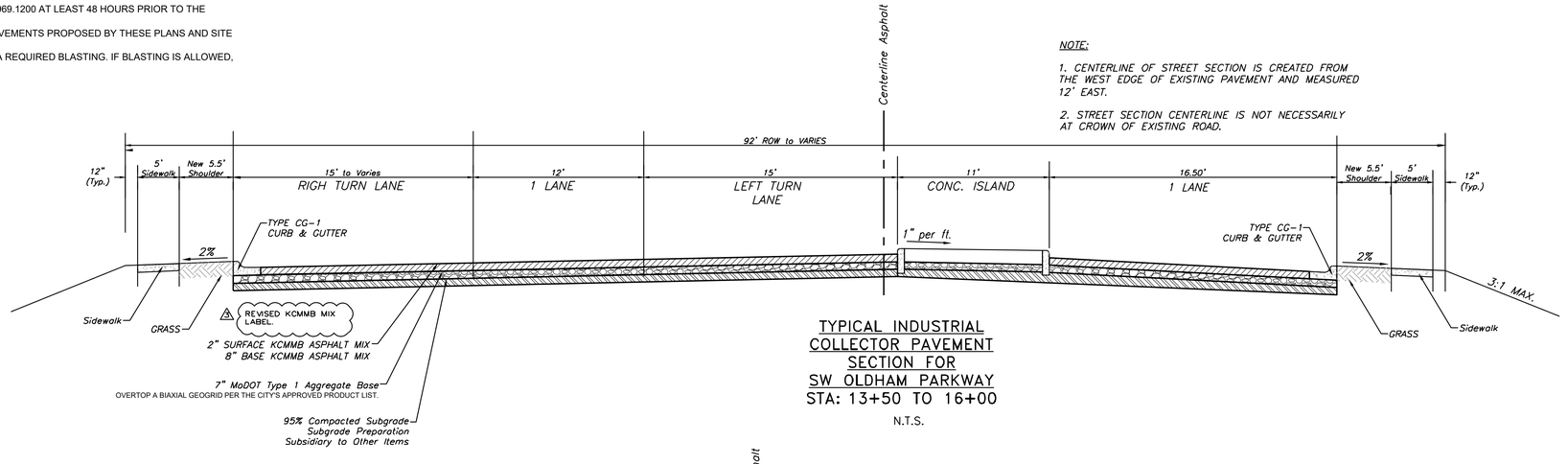

NOTE:

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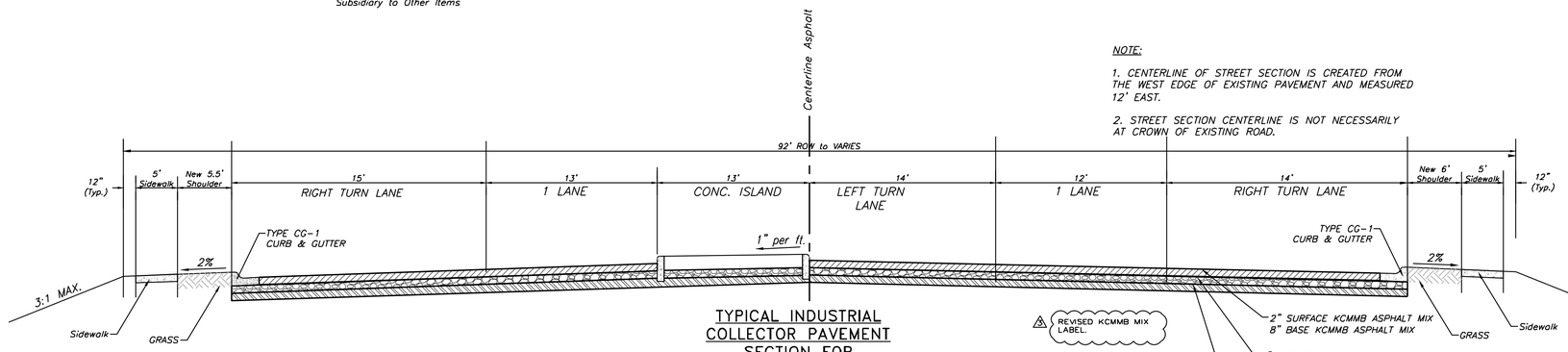
2. STREET SECTION CENTERLINE IS NOT NECESSARILY AT CROWN OF EXISTING ROAD.

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



NOTE:

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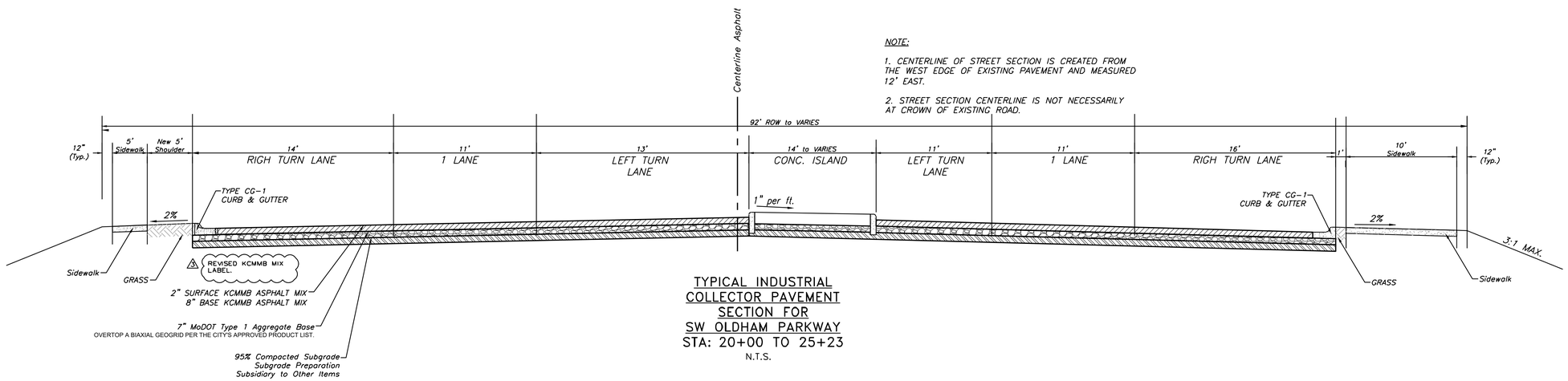
2. STREET SECTION CENTERLINE IS NOT NECESSARILY AT CROWN OF EXISTING ROAD.

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



NOTE:

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

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

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Project: OLDHAM MARKETPLACE: LSMO
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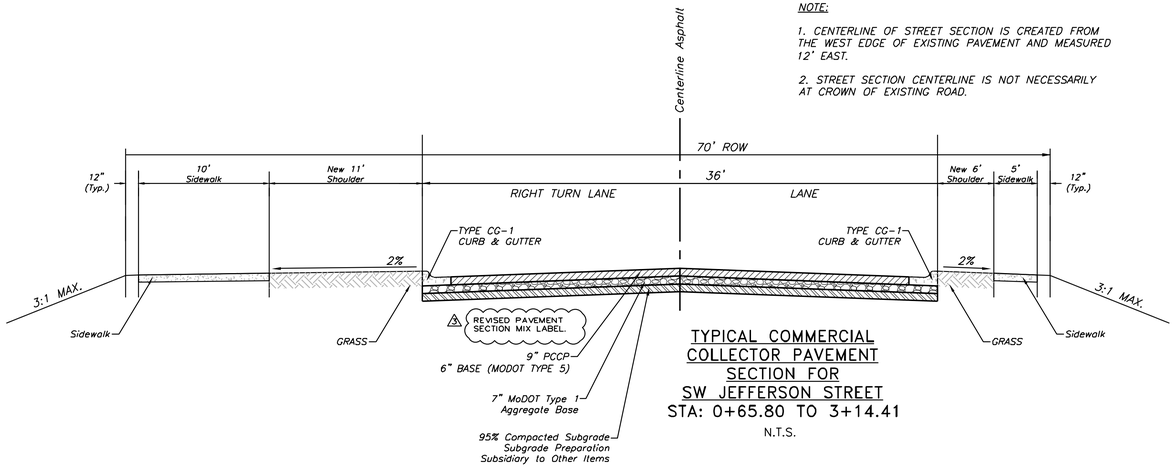
NE PE E-14335

REVISIONS

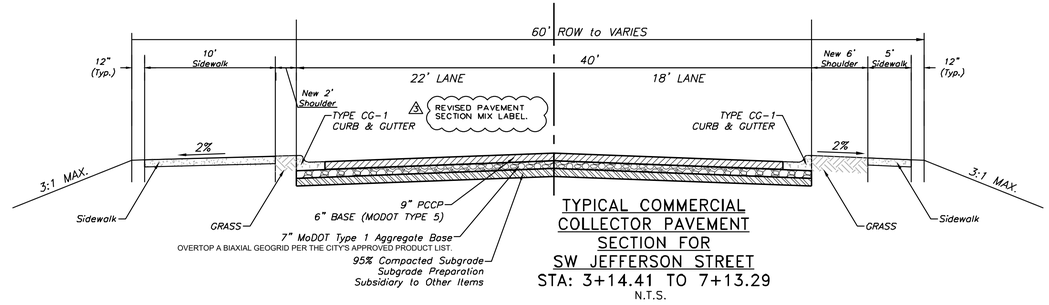
1 REV. 12/10/2024
2 REV. 1/2/2025
3 REV. 2/6/2025
REV. 3/5/2025

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 NOTIFY THE CITY OF LEE'S SUMMIT DEVELOPMENT ENGINEERING INSPECTION AT 816.969.1200 AT LEAST 48 HOURS PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION.
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.



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



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

ENGINEERING SOLUTIONS
ENGINEERING & SURVEYING
50 SE 30TH STREET
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Professional Registration
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Engineering 2006002186-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

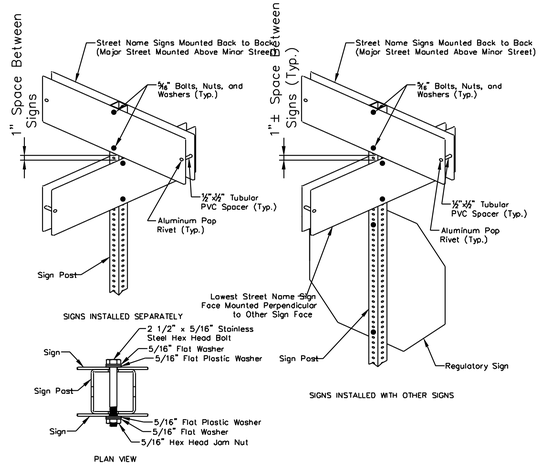
Project: OLDHAM MARKETPLACE: LSMO
Issue Date: November 5, 2024

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 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. 3/5/2024

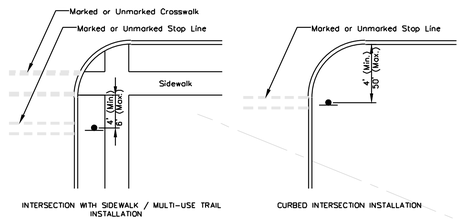


SQUARE STEEL POST MOUNTING DETAILS

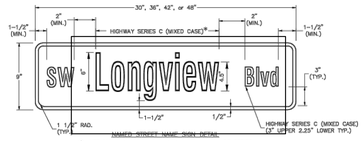
SIGN INSTALLATION FOR CURBED STREET

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'

North

STREET SIGNAGE

SCALE: 1" = 100'

1 ADDED STREET SIGNAGE PLAN.

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Oldham Village
Lee's Summit, Jackson County, Missouri

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

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

STATE OF MISSOURI
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REV. 3/5/2025

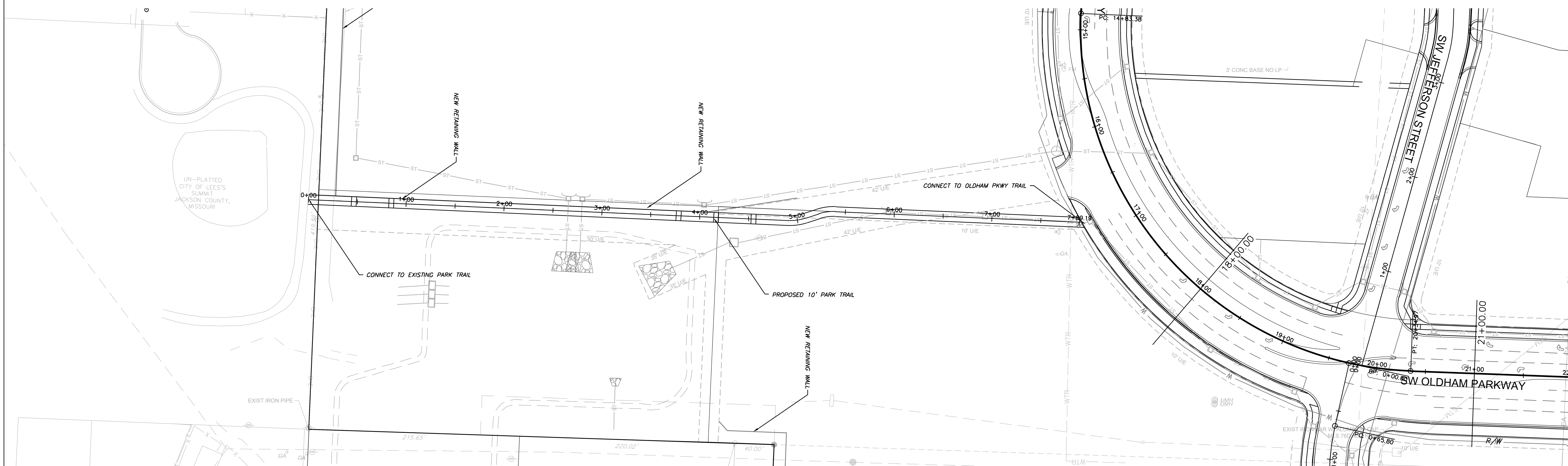
C.210

North

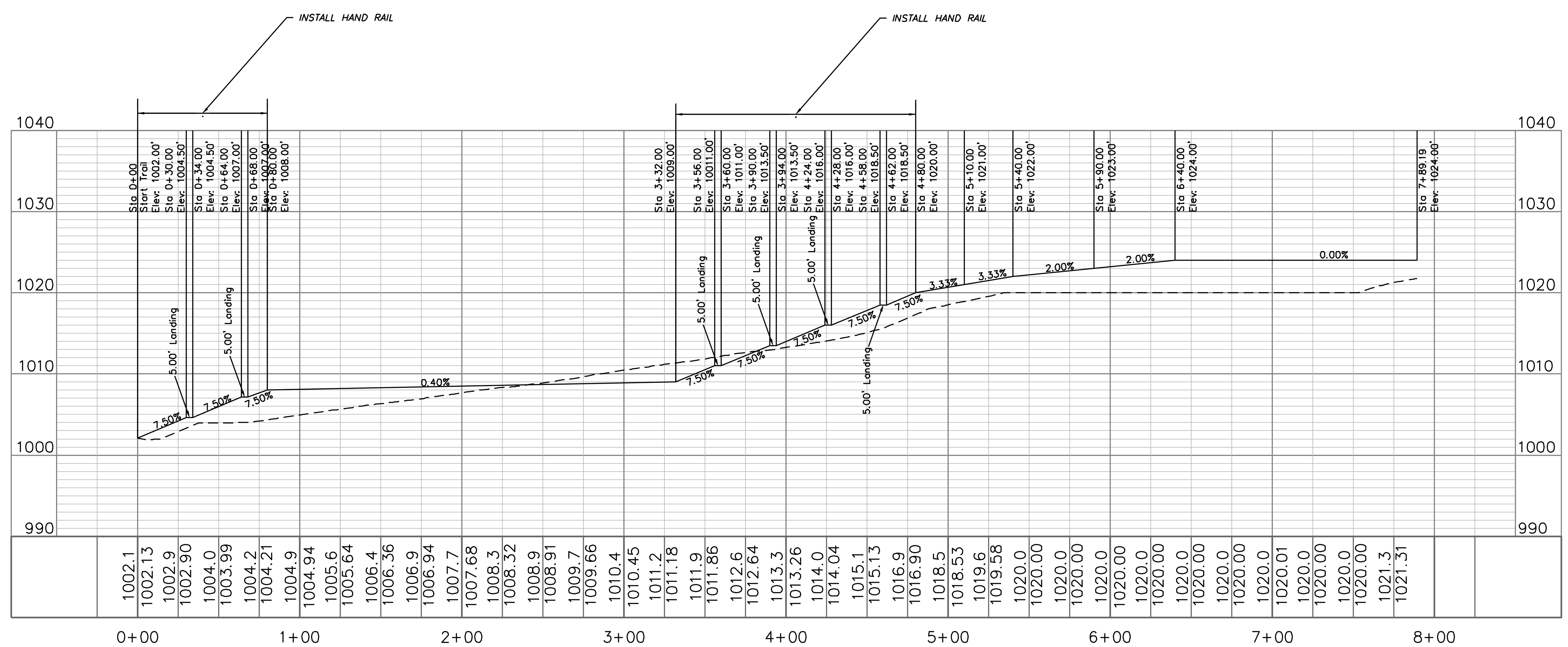
GRAPHIC SCALE
0 25' 50' 100'

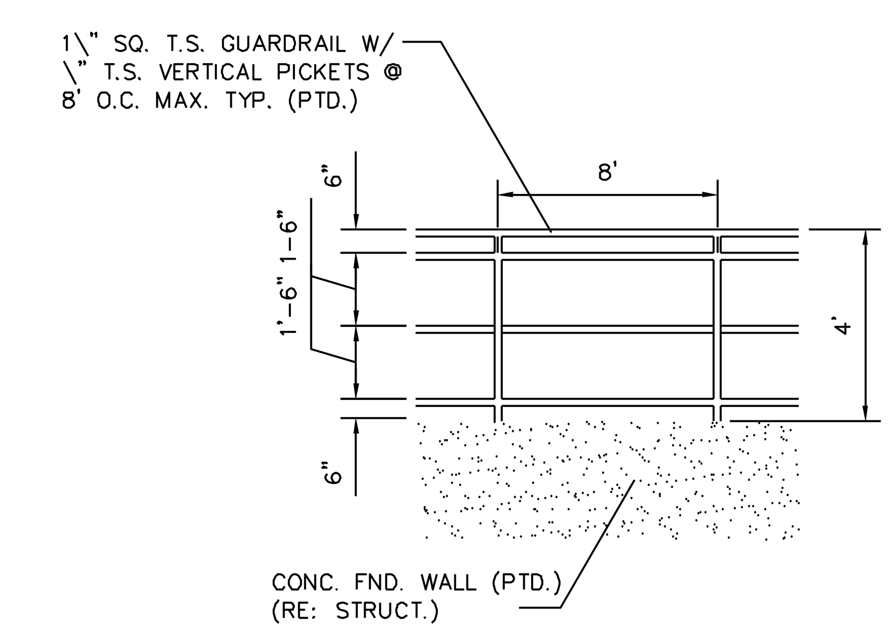
TRAIL PLAN & PROFILE

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'

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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

STATE OF MISSOURI
MATTHEW J. SCHLICHT
NUMBER PE-2006019708
PROFESSIONAL ENGINEER
3/5/2025

Matthew J. Schlicht
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REVISIONS

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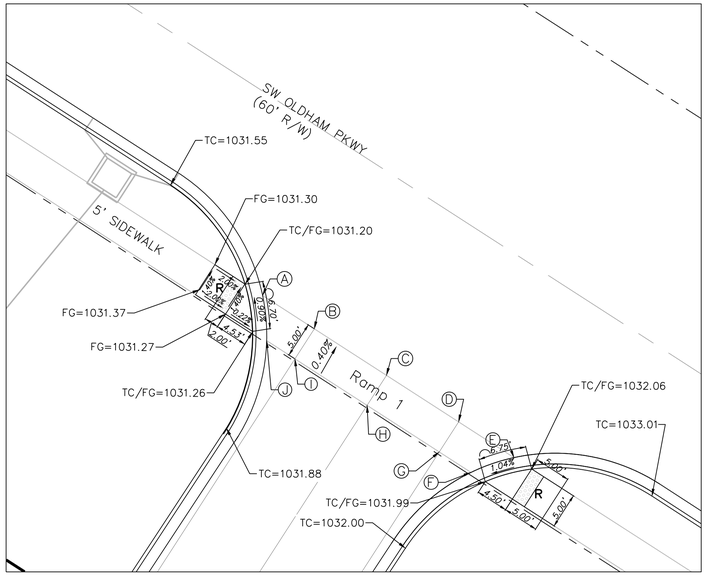
3 REV. 2/6/2025
REV. 3/5/2025

C.211

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

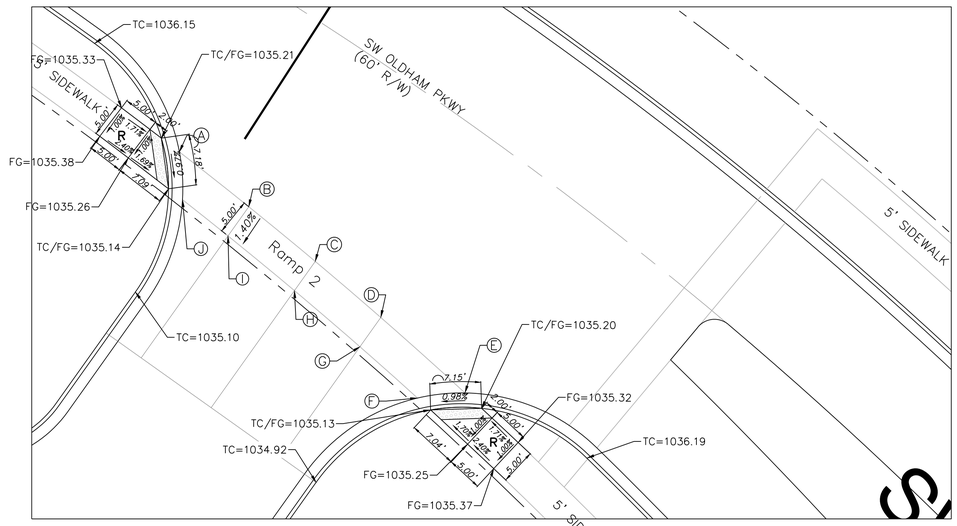
Detectable Warning

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'

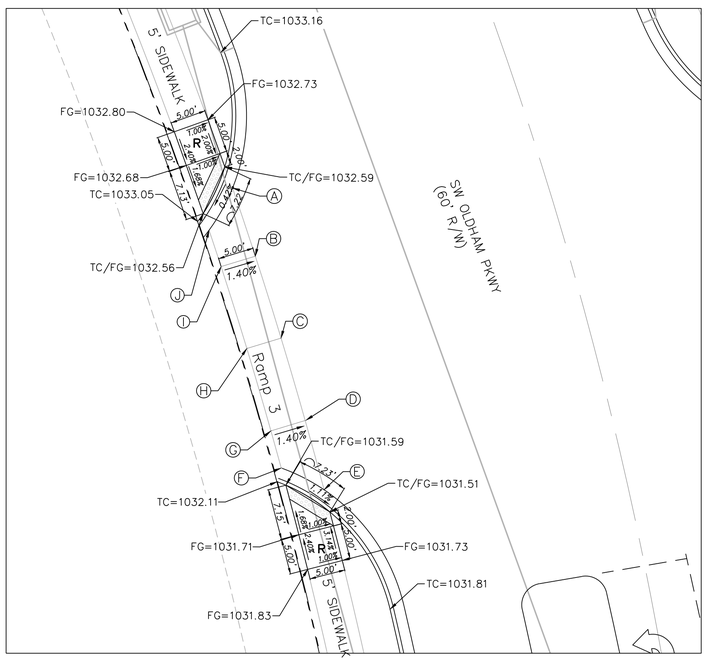


DETAIL 2

North

GRAPHIC SCALE
0 5' 10' 20'

SIDEWALK AND INTERSECTION PLAN
SCALE: 1" = 10'



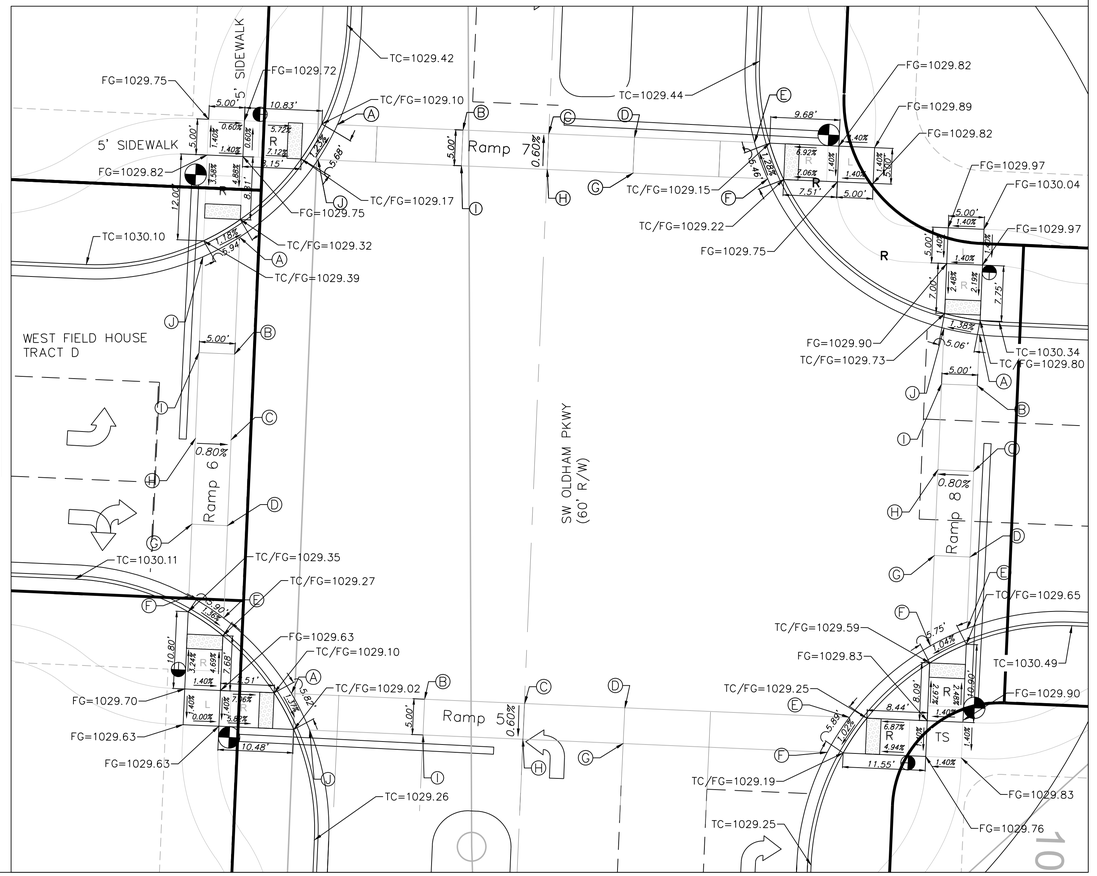
DETAIL 3

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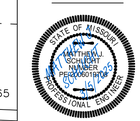
Surveying LS-218
Oklahoma
Engineering 6254
Nebraska
Engineering CA2821

Oldham Village
Lee's Summit, Jackson County, Missouri

Project: OLDHAM MASTER PLACE, LSMO
Issue Date: November 5, 2024

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



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

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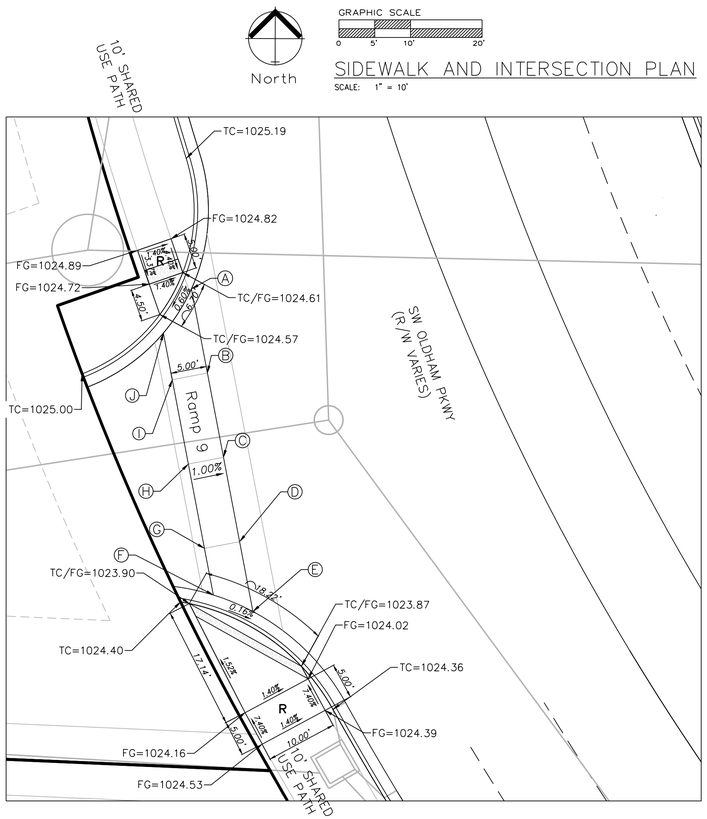
3 REV. 2/6/2025
REV. 3/5/2025

C.215



DETAIL 5

Legend:

EX TC = Existing Top of Curb

EX FG = Existing Finished Grade

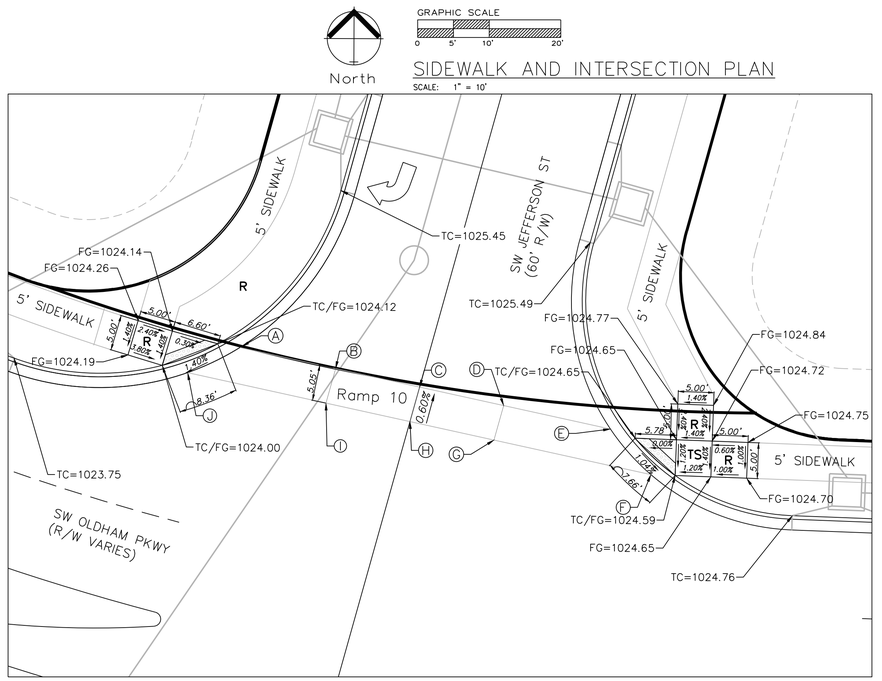
FG = Finished Grade

TC = Top of Curb

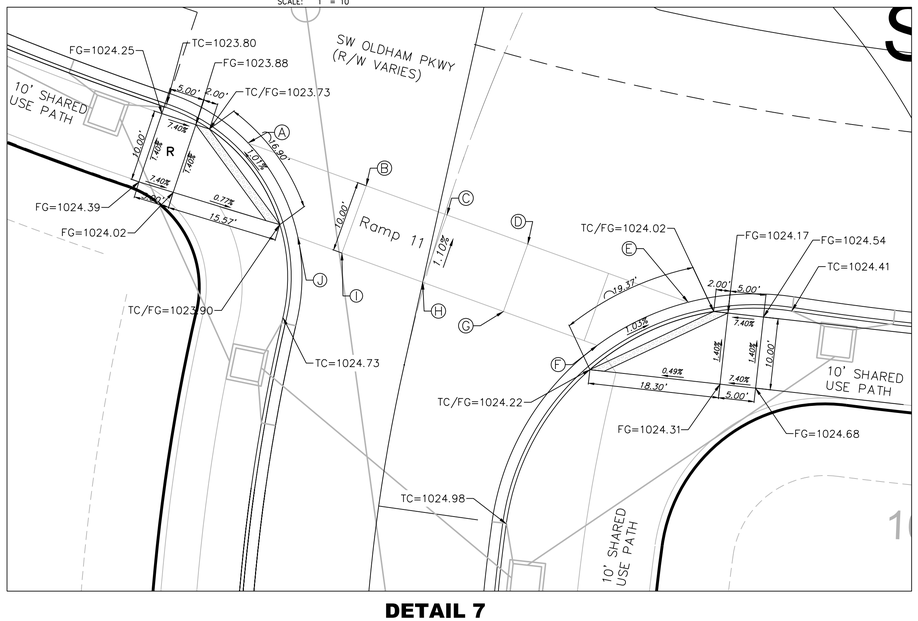
TC/FG = Top of Curb/Finished Grade

Detectable Warning

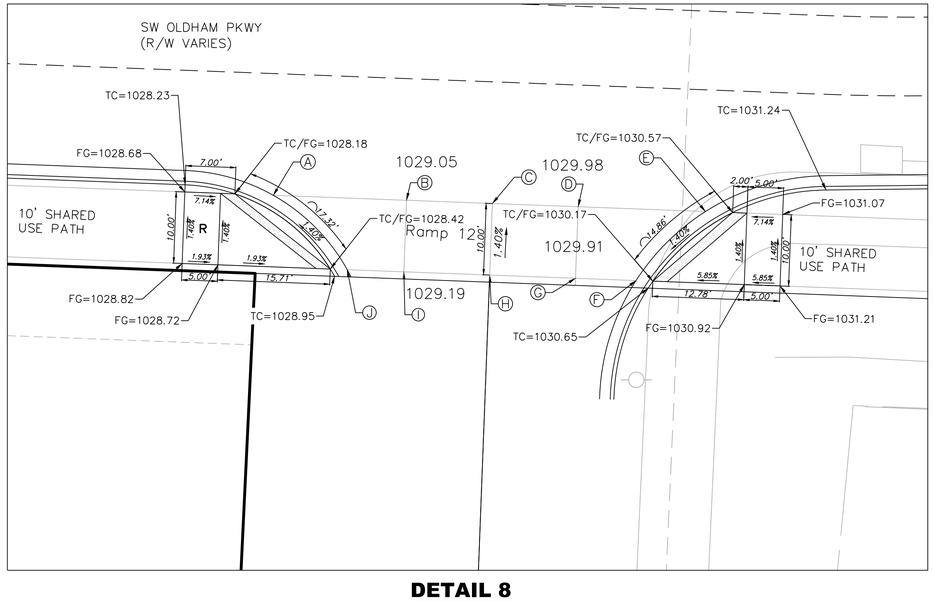
SPOT ELEVATION TABLE				
	Ramp 9	Ramp 10	Ramp 11	Ramp 12
Spot	Elevation	Elevation	Elevation	Elevation
A	1024.61	1024.12	1023.73	1028.18
B	1024.62	1024.57	1024.14	1029.05
C	1024.64	1024.94	1024.42	1029.58
D	1024.23	1024.83	1024.29	1029.98
E	1023.89	1024.65	1024.02	1030.57
F	1023.90	1024.59	1024.22	1030.17
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



DETAIL 6



DETAIL 7



DETAIL 8

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

Professional Registration
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Surveying 2005000319-D
Kansas
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Oklahoma
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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
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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. 3/5/2024

NOTE:

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

North

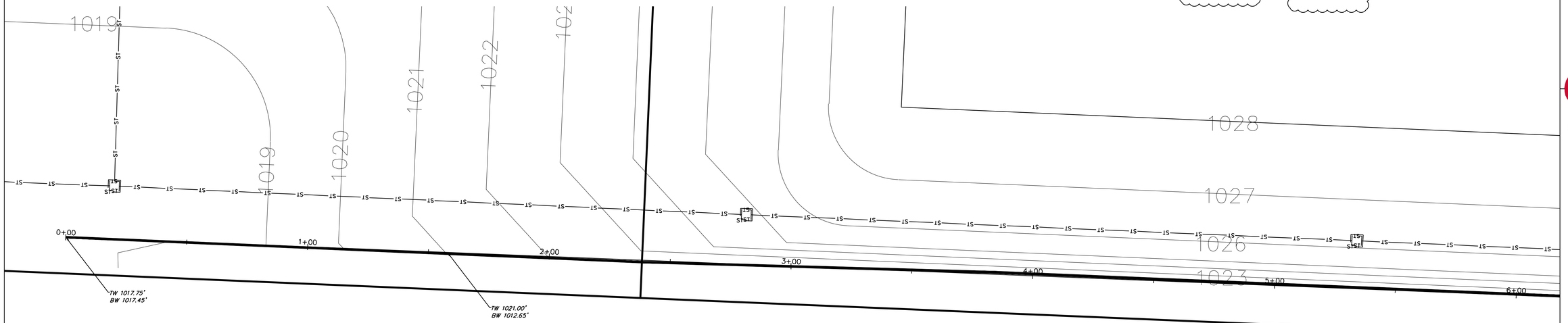
3 REVISED NORTH ARROW.

RETAINING WALL PLAN AND PROFILE

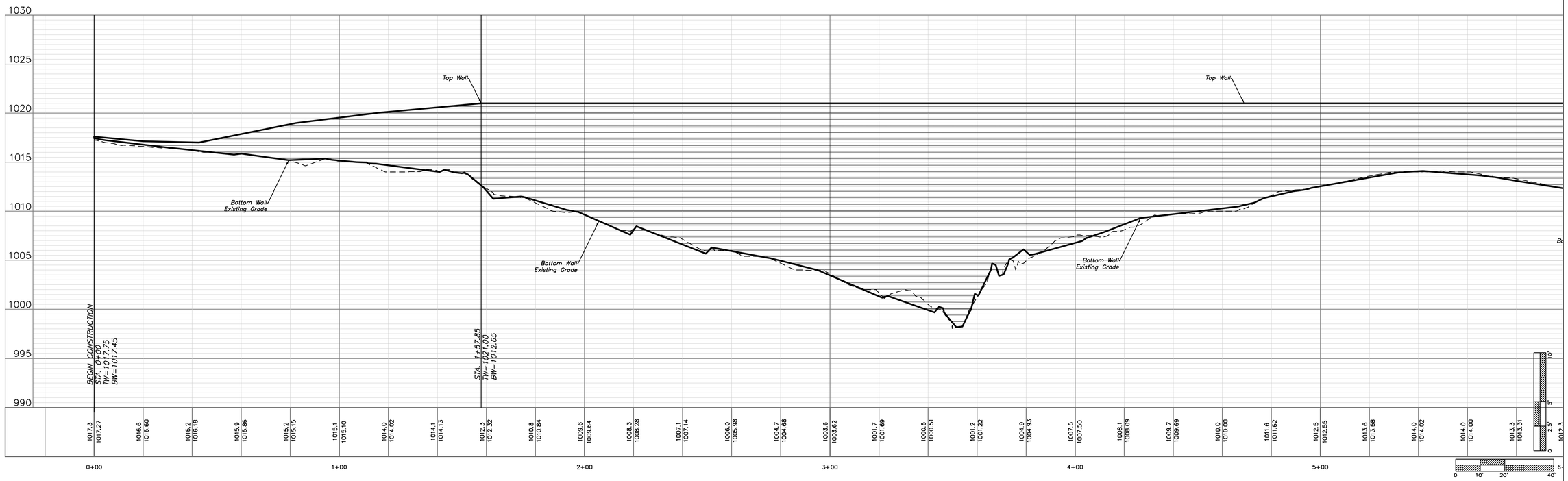
SCALE: 1" = 20'

0 10' 20' 40'

3 REVISED SCALE.



RETAINING WALL 1



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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
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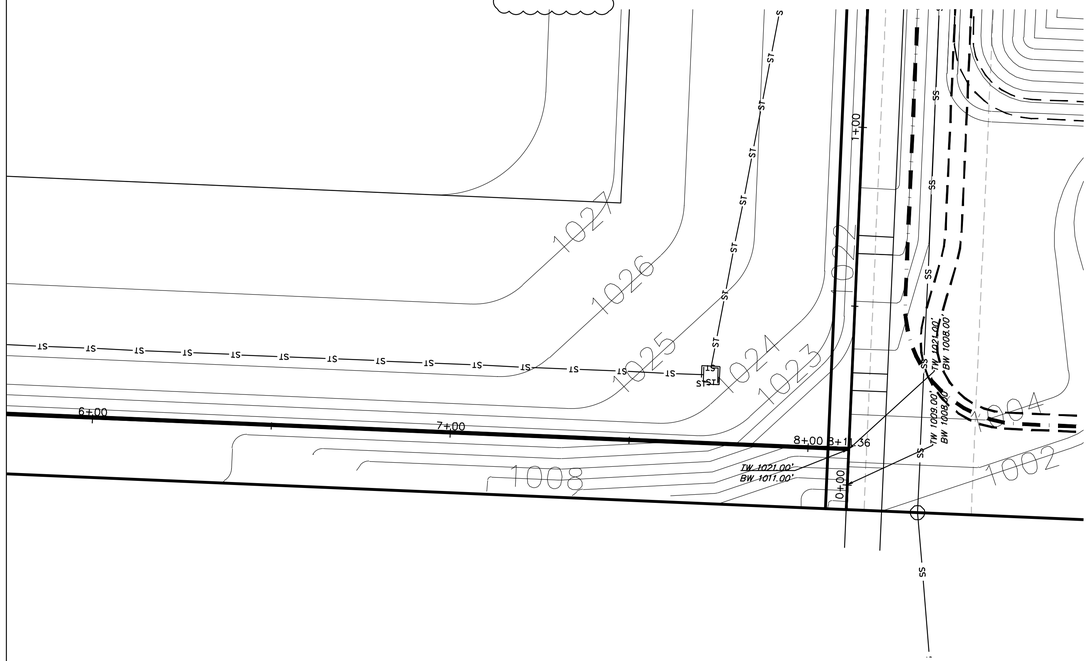
North

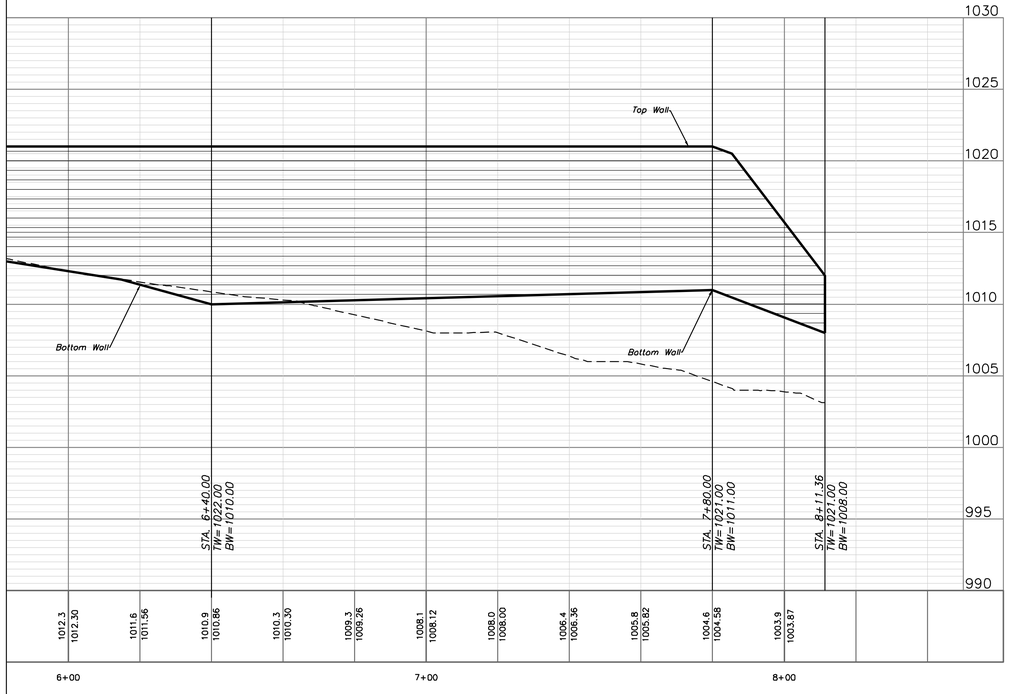
RETAINING WALL PLAN AND PROFILE

SCALE: 1" = 20'

0 10' 20' 40'

3 REVISED NORTH ARROW.





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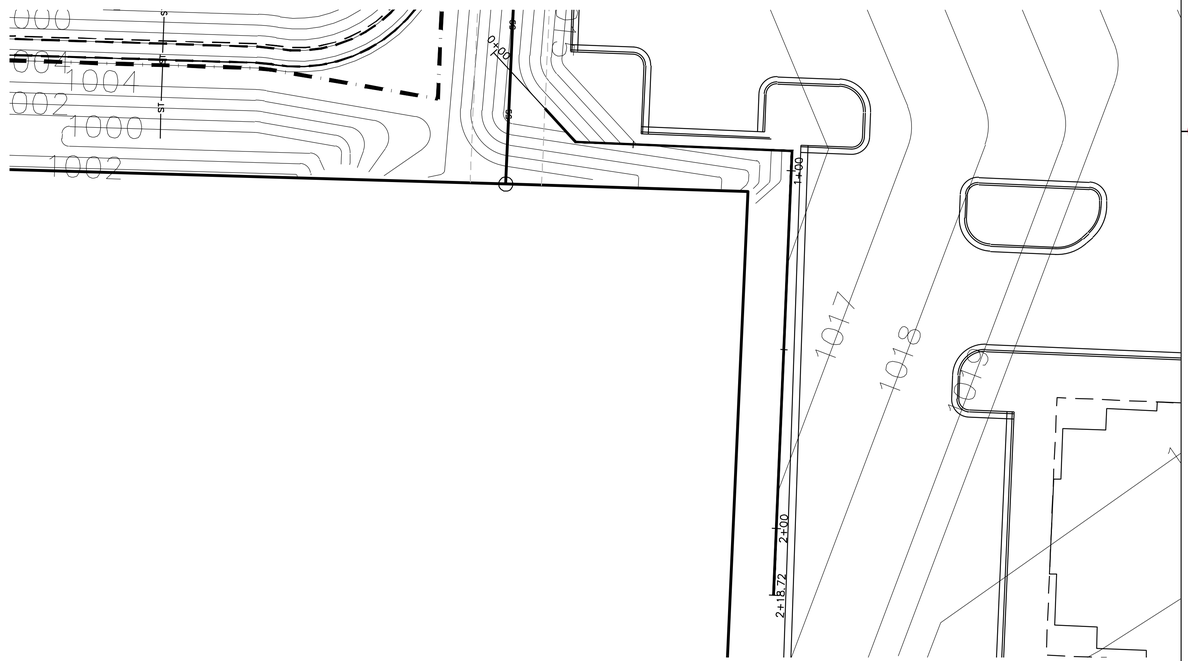
North

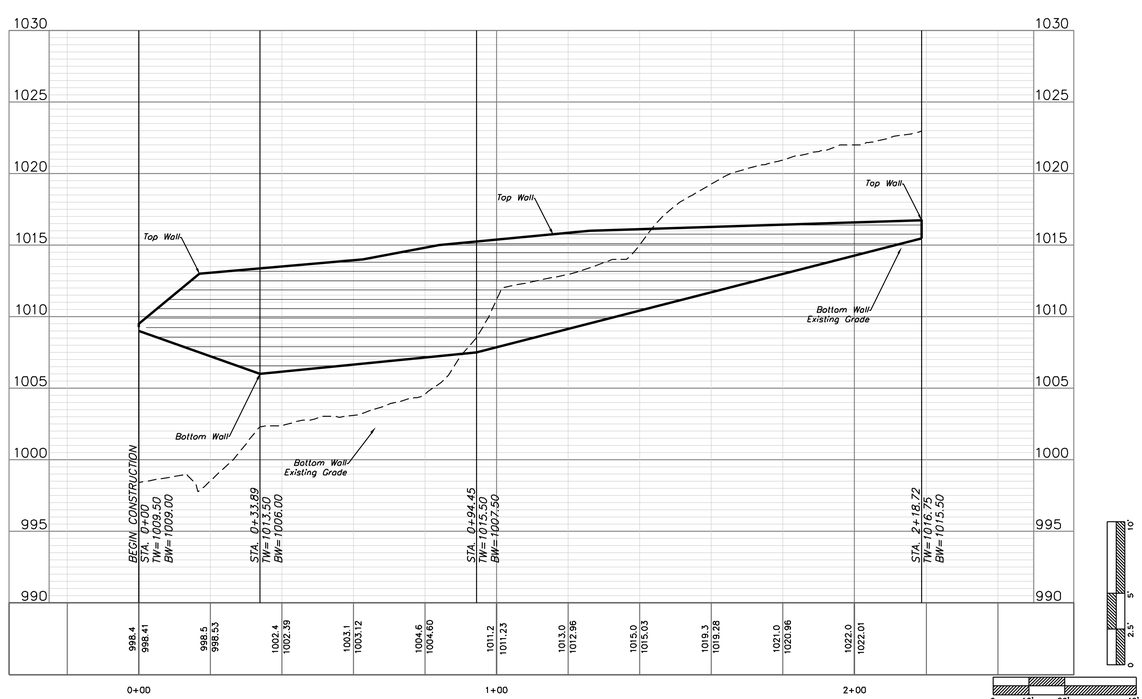
RETAINING WALL PLAN AND PROFILE

SCALE: 1" = 20'

0 10' 20' 40'



RETAINING WALL 3



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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
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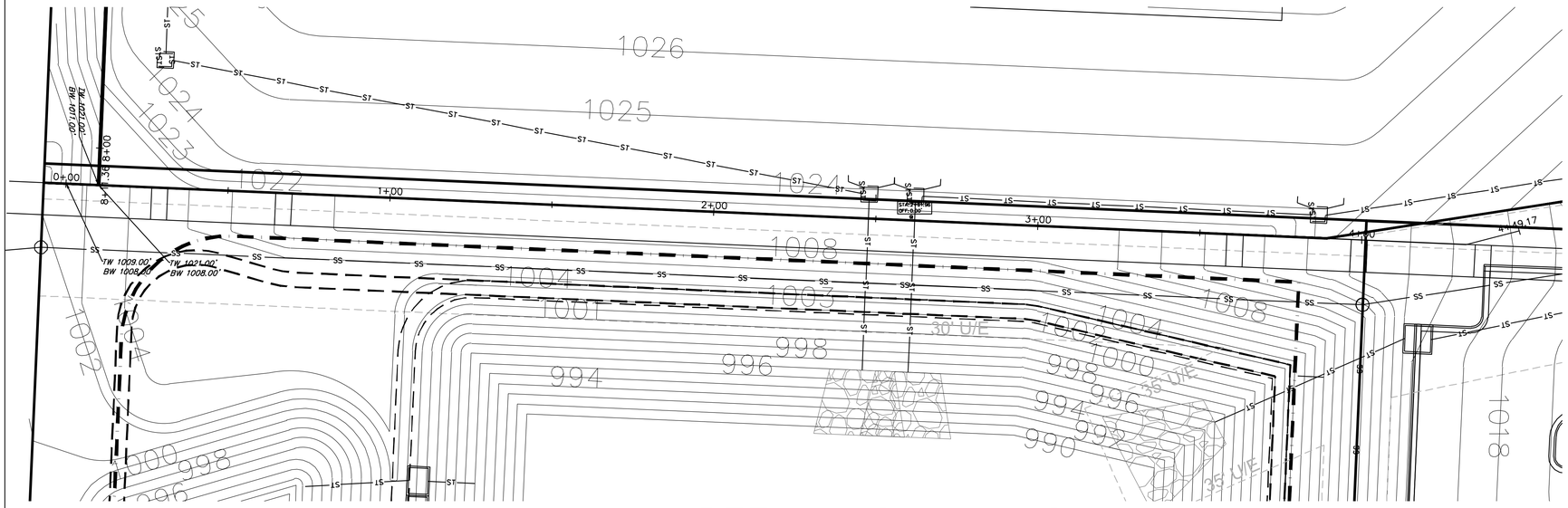
North

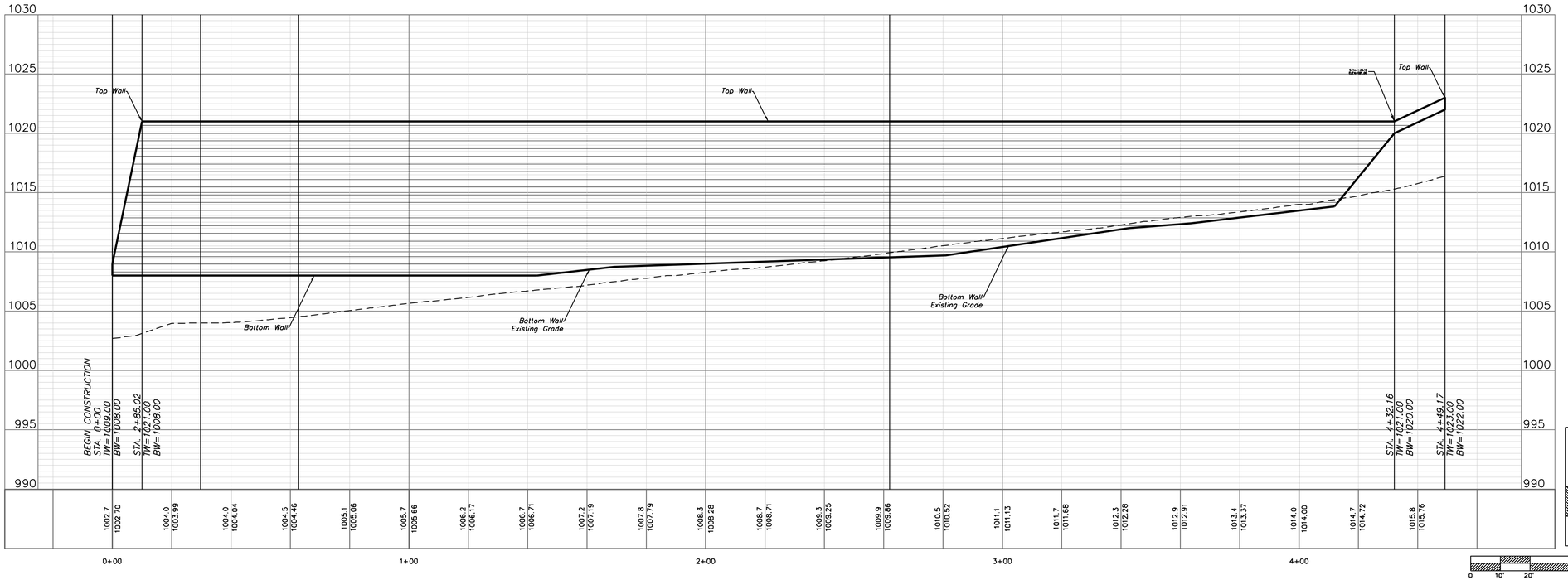
RETAINING WALL PLAN AND PROFILE

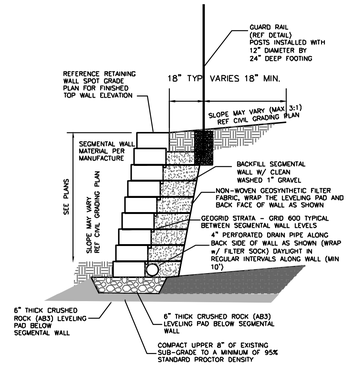
SCALE: 1" = 20'

0 10' 20' 40'



RETAINING WALL 2

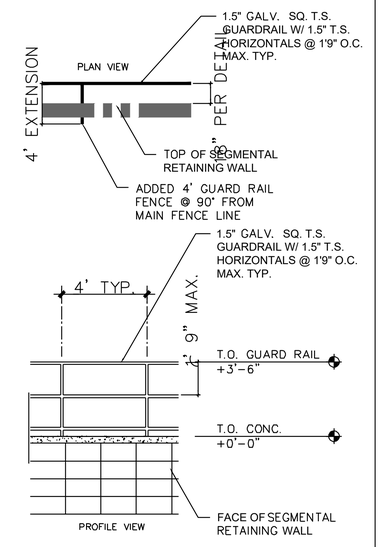




SEGMENTAL WALL SECTION

NOT TO SCALE

RETAINING WALL DESIGN DETAILS



GUARD RAIL DETAIL

NOT TO SCALE

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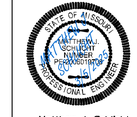
Engineering 6254
Nebraska
Engineering CA2821

Oldham Village
Lee's Summit, Jackson County, Missouri

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

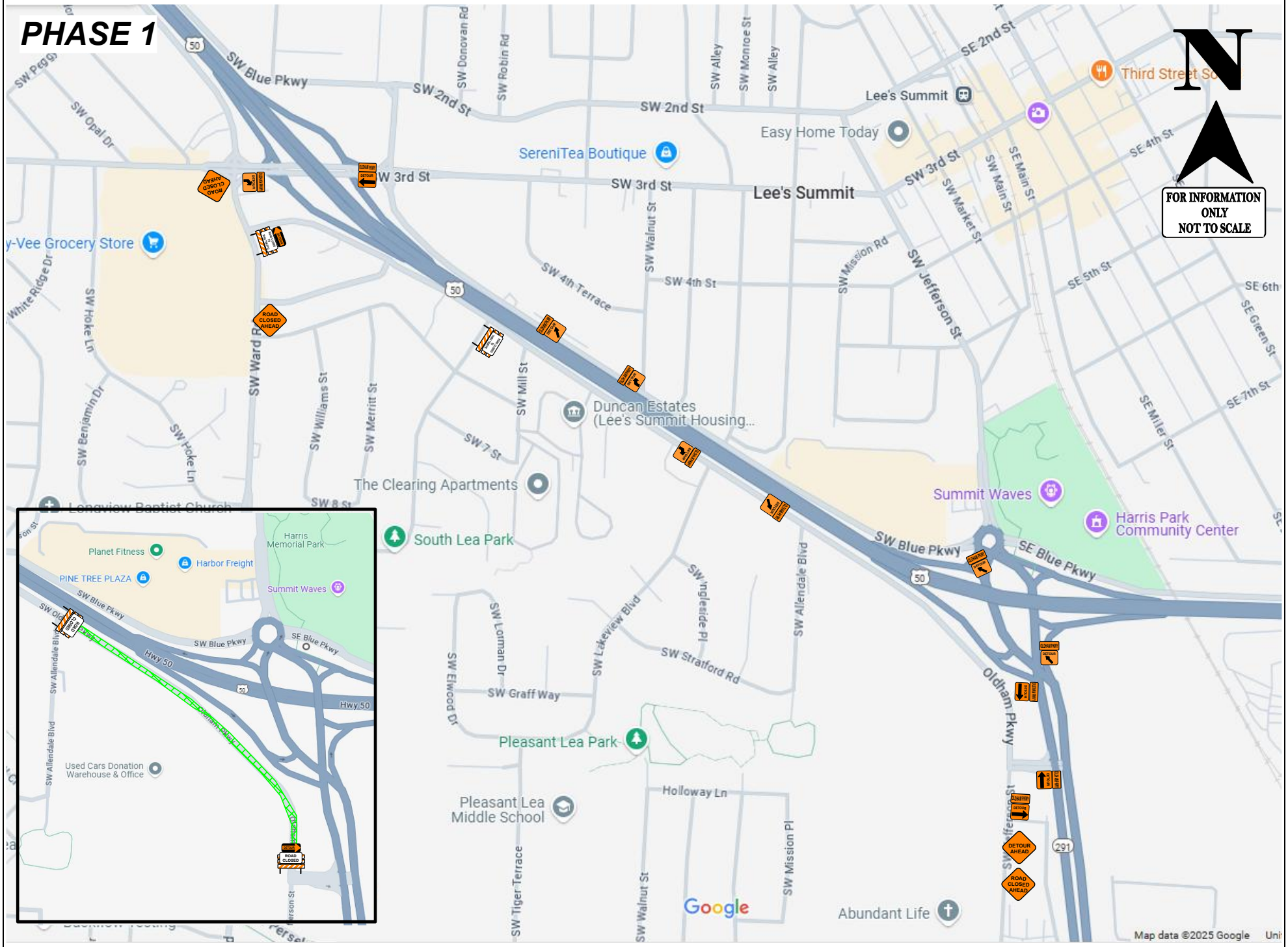
Spot Elevations
Construction Plans for:
Oldham Village
Lee's Summit, Jackson County, Missouri

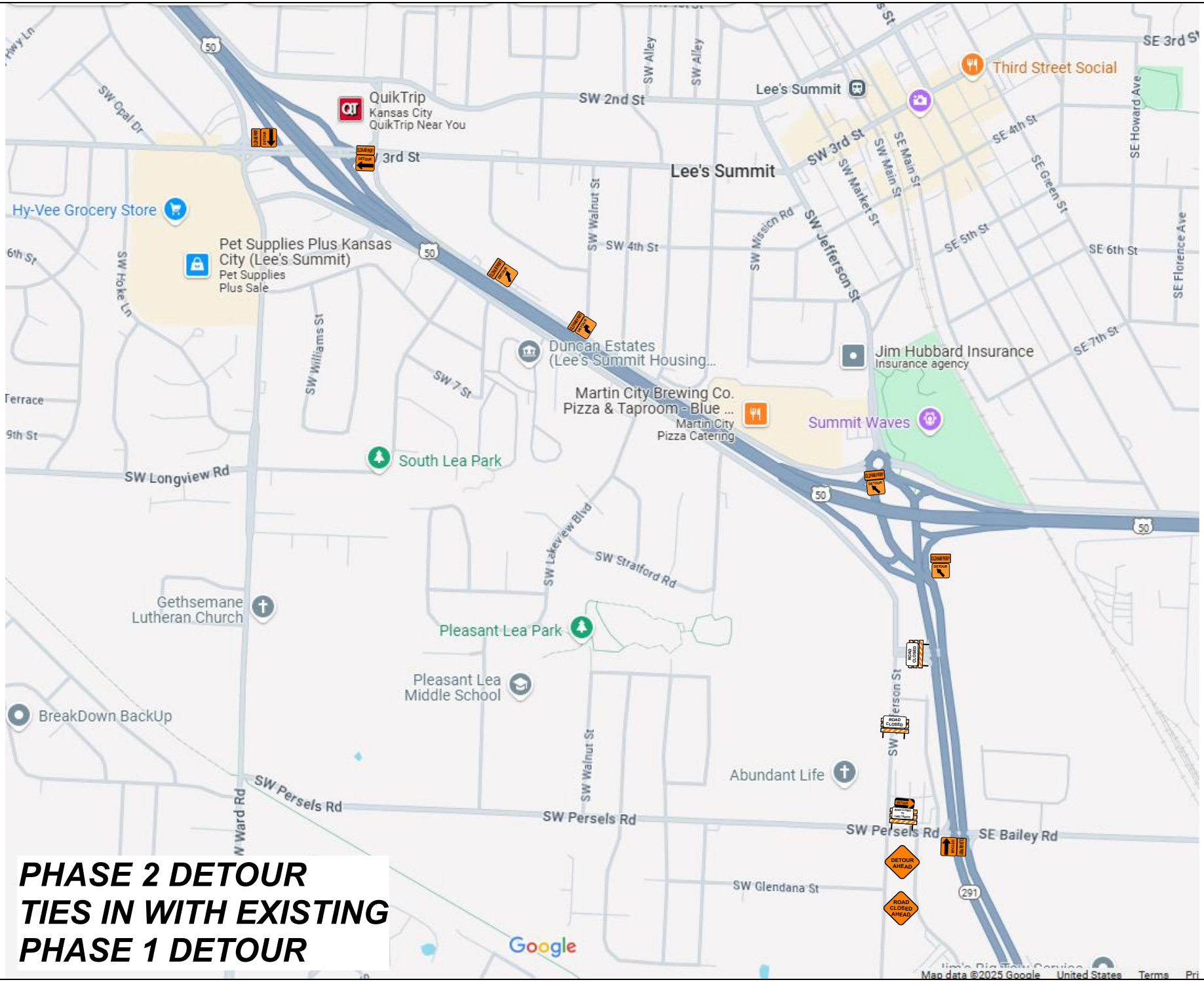


Matthew J. Schlicht
MO PE 2006019708
KS PE 19071
OK PE 25226
NE PE E-14335

REVISIONS

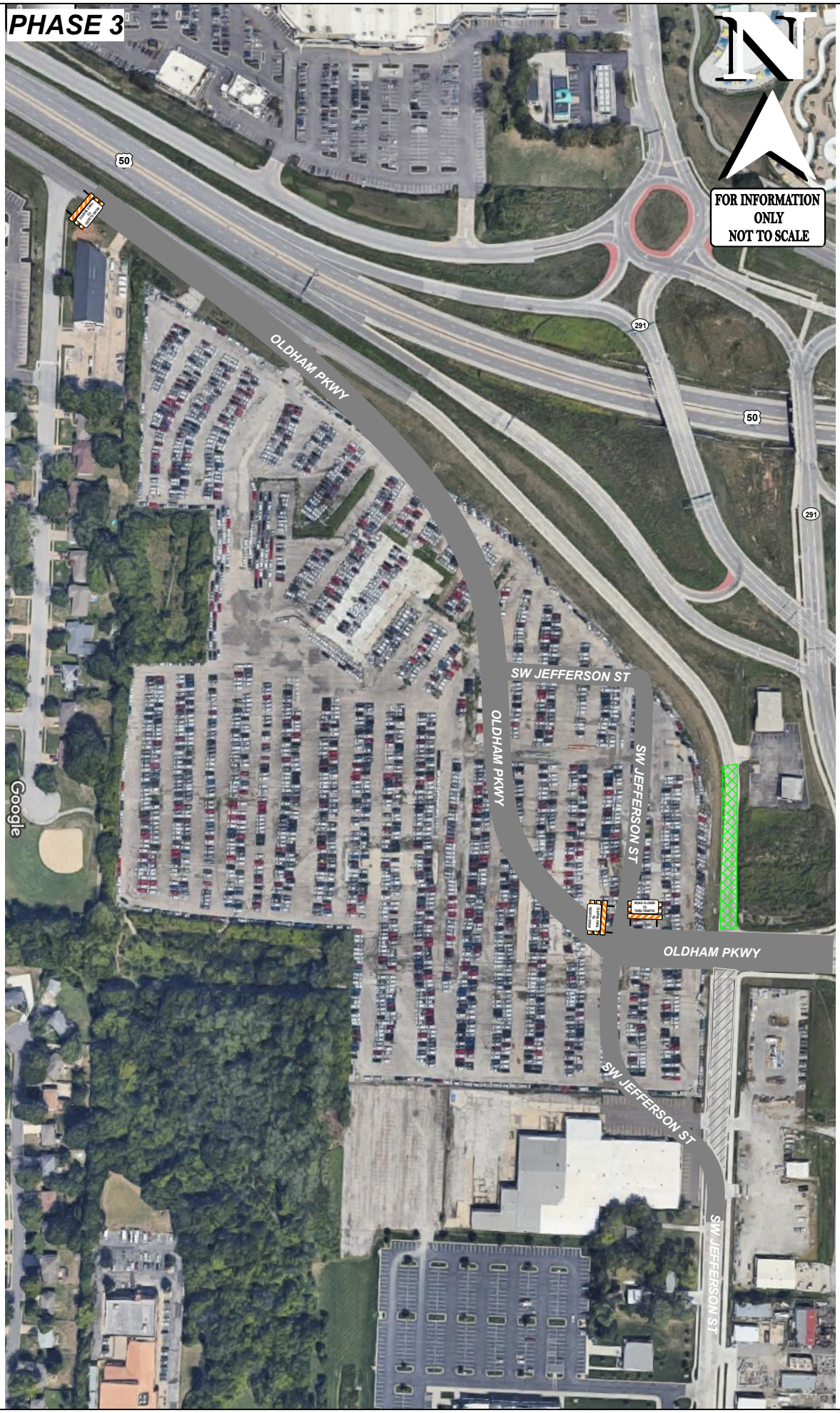
1 REV. 12/10/2024
2 REV. 1/2/2025
3 REV. 2/6/2025
REV. 3/5/2025


PHASE 1
N
FOR INFORMATION ONLY
NOT TO SCALE
SW Blue Pkwy
SW 2nd St
SW 3rd St
Lee's Summit
SW 4th St
SW 4th Terrace
SW 7 St
SW 8 St
SE 2nd St
SE 4th St
SE 5th St
SE 6th
SE 7th St
SE Blue Pkwy
Oldham Pkwy
SW Mill St
SW Walnut St
SW Mission Rd
SW Jefferson St
SW Market St
SW Main St
SE Main St
SW Ward Rd
SW Williams St
SW Merritt St
SW Hoke Ln
SW Benjamin Dr
SW Opal Dr
SW Peggy
White Ridge Dr
SW Donovan Rd
SW Robin Rd
SW Alley
SW Monroe St
SW Lakeview Blvd
SW Allendale Blvd
SW Elwood Dr
SW Lorman Dr
SW Graff Way
SW Stratford Rd
SW Ingleside Pl
Holloway Ln
SW Tiger Terrace
SE Miller St
SE Green St
Hwy 50
291
Lee's Summit
Easy Home Today
SereniTea Boutique
Third Street So
y-Vee Grocery Store
Duncan Estates (Lee's Summit Housing...
The Clearing Apartments
Longview Baptist Church
South Lea Park
Pleasant Lea Park
Pleasant Lea Middle School
Summit Waves
Harris Park Community Center
Abundant Life
Google
Map data ©2025 Google
Planet Fitness
Harbor Freight
PINE TREE PLAZA
Harris Memorial Park
Used Cars Donation Warehouse & Office
DETOUR AHEAD
ROAD CLOSED AHEAD
ROAD CLOSED


PHASE 2 DETOUR
TIES IN WITH EXISTING
PHASE 1 DETOUR
QuikTrip
Kansas City
QuikTrip Near You
Third Street Social
Lee's Summit
Hy-Vee Grocery Store
Pet Supplies Plus Kansas City (Lee's Summit)
Pet Supplies
Plus Sale
Duncan Estates (Lee's Summit Housing...
Jim Hubbard Insurance
Insurance agency
Martin City Brewing Co. Pizza & Taproom - Blue ...
Martin City Pizza Catering
Summit Waves
South Lea Park
Gethsemane Lutheran Church
Pleasant Lea Park
Pleasant Lea Middle School
BreakDown BackUp
Abundant Life
SW 2nd St
3rd St
SW 4th St
SW 7 St
SW Longview Rd
SW Stratford Rd
SW Persels Rd
SE Bailey Rd
SW Glendana St
SW 3rd St
SE 3rd St
SE 4th St
SE 5th St
SE 6th St
SE 7th St
SW Jefferson St
SW Walnut St
SW Williams St
SW Lakeview Blvd
SW Ward Rd
SW Market St
SW Main St
SE Main St
SE Howard Ave
SE Florence Ave
SE Green St
SW Opal Dr
SW Hoke Ln
SW Alley
SW Mission Rd
DETOUR AHEAD
ROAD CLOSED AHEAD
ROAD CLOSED
Google
Map data ©2025 Google
United States
Terms

PHASE 2 CLOSURE
291
OLDHAM PKWY
EXISTING
PHASE 1
CLOSURE
OLDHAM PKWY
ROAD CLOSED
JEFFERSON ST
ROAD CLOSED
291
291
ROAD WORK AHEAD
ROAD WORK AHEAD

PHASE 2B
FOR INFORMATION ONLY NOT TO SCALE
OLDHAM PKWY
OLDHAM PKWY
SW JEFFERSON ST
SW JEFFERSON ST
SW JEFFERSON ST
SW PERCELS
SE BAILEY
Google
50
291

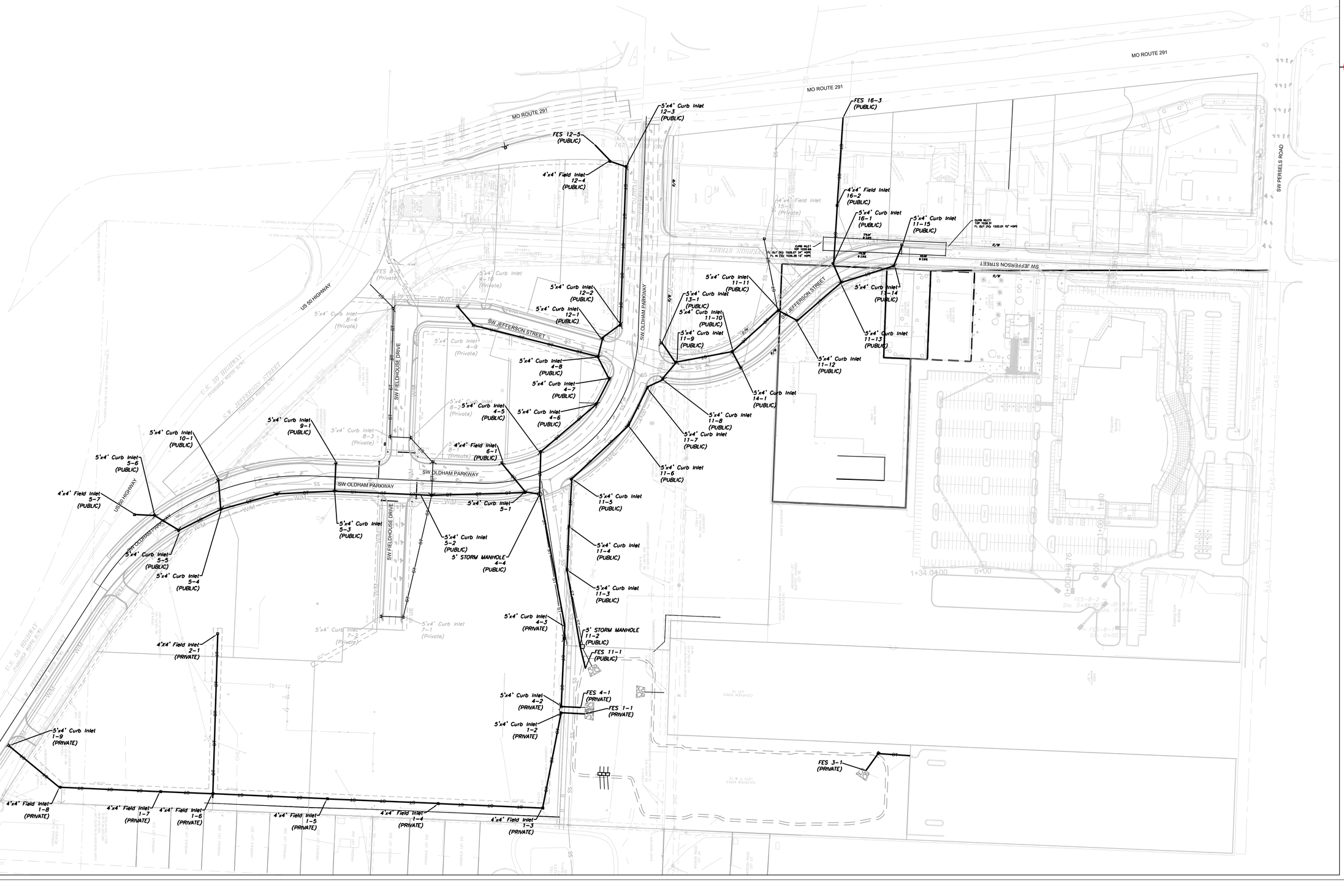

PHASE 3
FOR INFORMATION ONLY
NOT TO SCALE
50
291
OLDHAM PKWY
SW JEFFERSON ST
Google

STORM SEWER GENERAL LAYOUT

SCALE: 1" = 60'

0 30' 60' 120'

North



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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 MARKETPLACE. 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
NUMBER PE-2005019708
12-16-24
PROFESSIONAL ENGINEER

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

REVISIONS

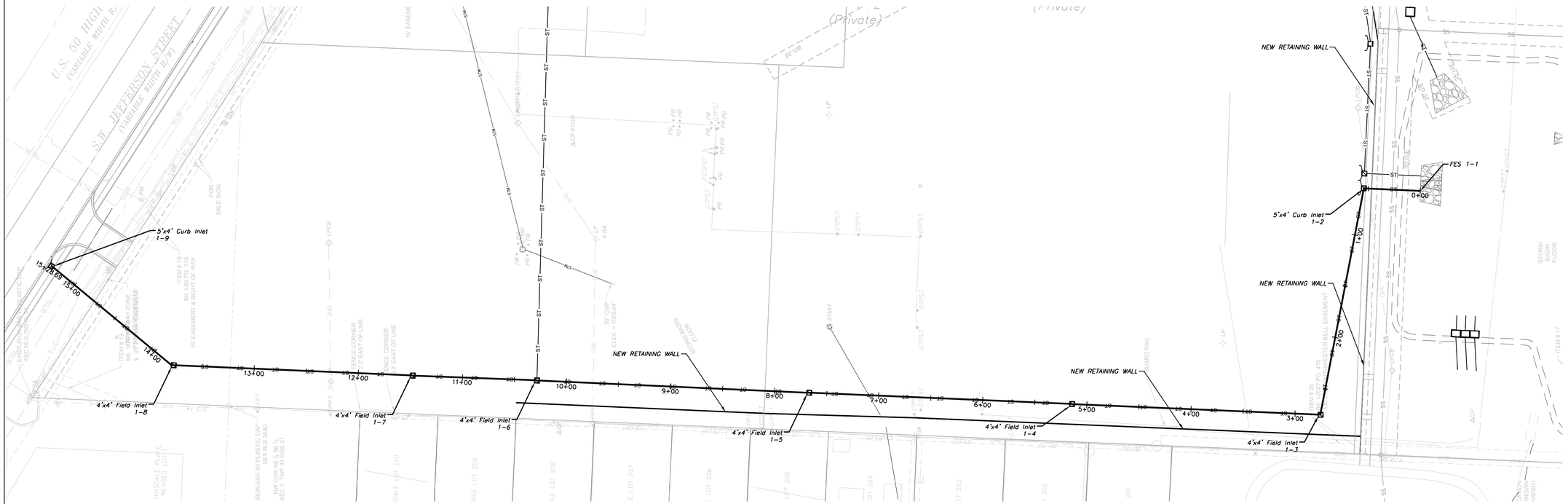
1 REV. 12/10/2024
2 REV. 1/2/2025
3 REV. 2/6/2025
REV. 3/5/2025

STORM SEWER PLAN AND PROFILE

SCALE: 1" = 50'

North

0 25' 50' 100'



STORM LINE 1

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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:
Oldham Village
Lee's Summit, Jackson County, Missouri

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

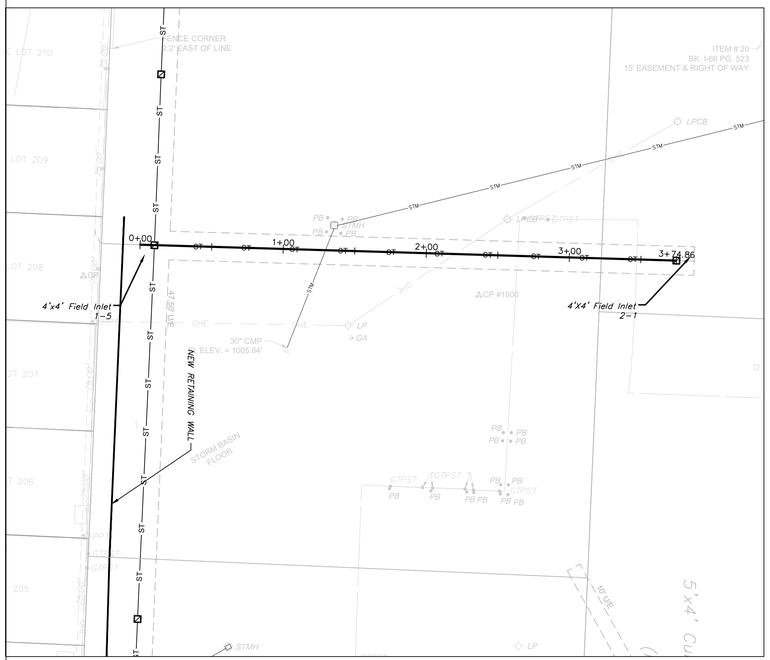
C.301

STORM SEWER PLAN AND PROFILE

SCALE: 1" = 50'

North

0 25' 50' 100'



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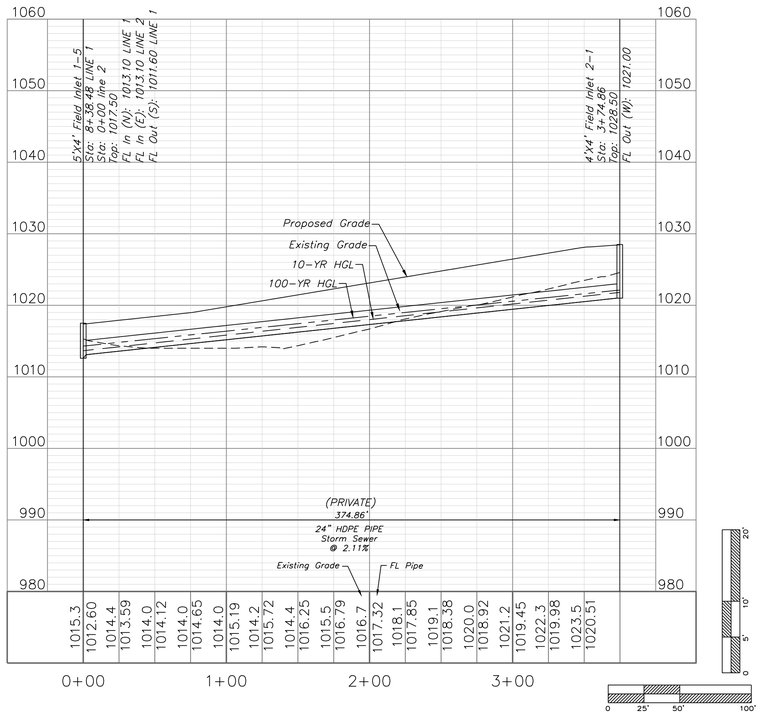
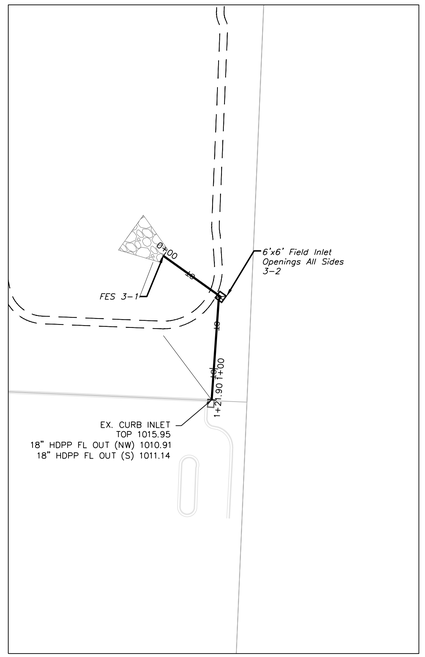


STORM SEWER PLAN AND PROFILE

SCALE: 1" = 50'

North

0 25' 50' 100'



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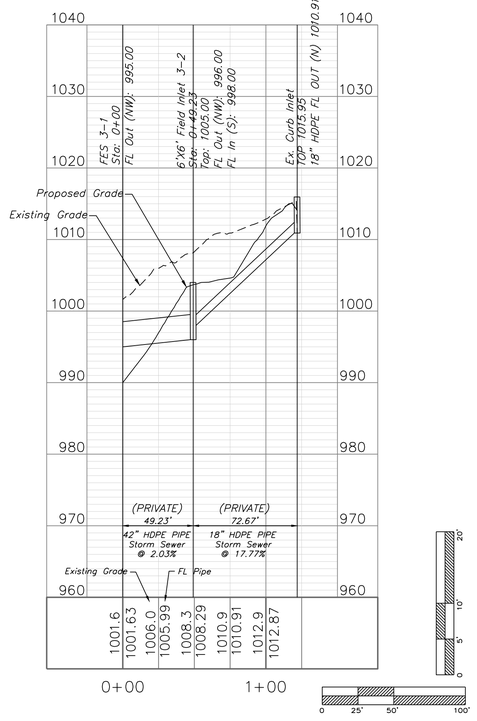
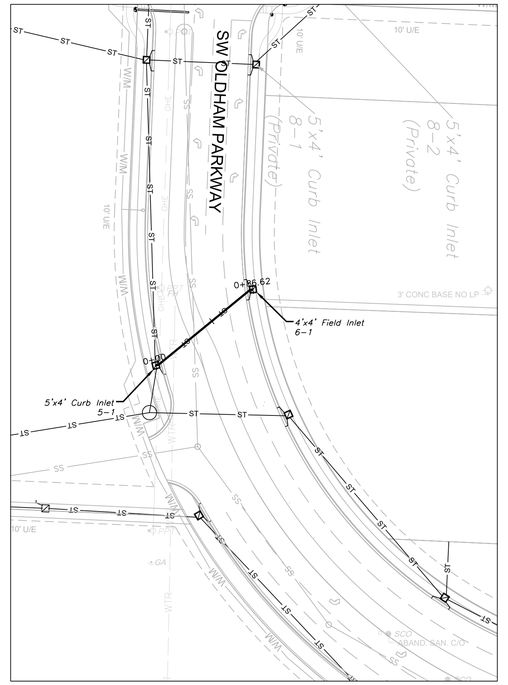


STORM SEWER PLAN AND PROFILE

SCALE: 1" = 50'

North

0 25' 50' 100'



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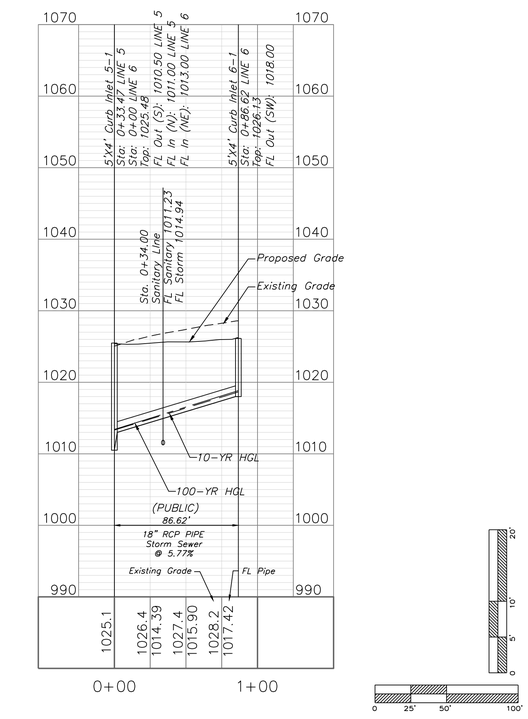

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Engineering 6254
Nebraska
Engineering CA2821

Oldham Village
Lee's Summit, Jackson County, Missouri

Project: OLDHAM MASTER PLACE, 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 A-2006019708
PROFESSIONAL ENGINEER

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

REVISIONS

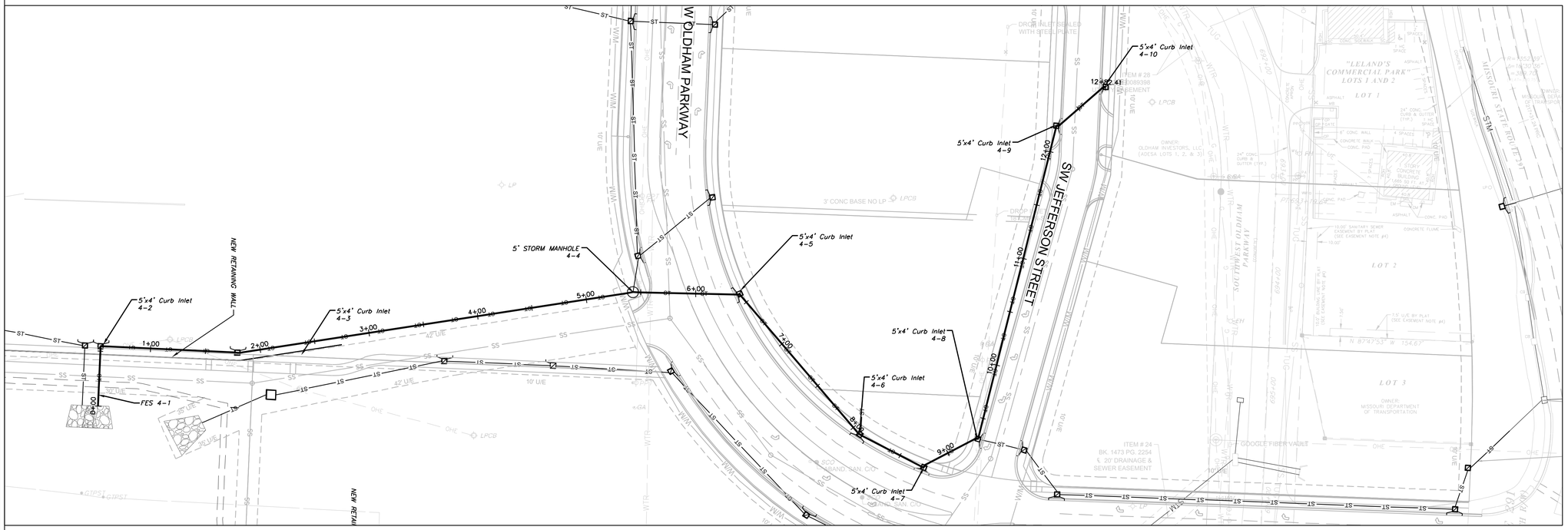
1 REV. 12/10/2024
2 REV. 1/2/2025
3 REV. 2/6/2025
REV. 3/5/2025

C.302

STORM SEWER PLAN AND PROFILE

SCALE: 1" = 50'

North



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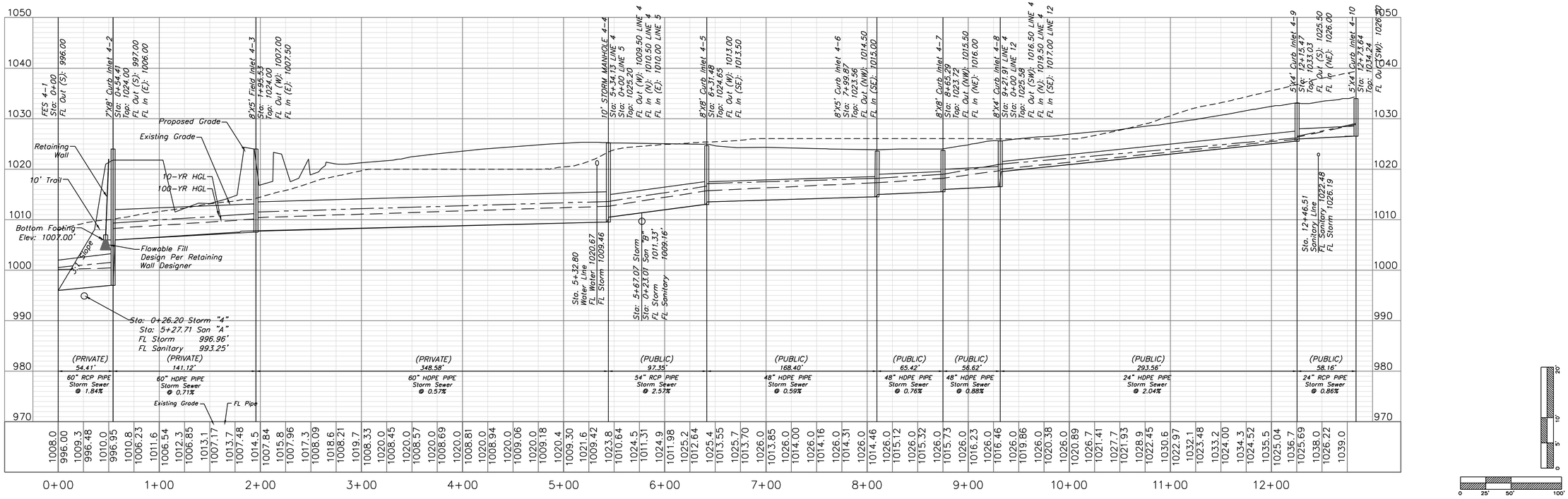

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Engineering E-1695
Surveying LS-218
Oklahoma
Engineering 6254
Nebraska
Engineering CA2821

Oldham Village
Lee's Summit, Jackson County, Missouri

Project: OLDHAM MASTERPLACE. 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
KS PE 19071
OK PE 25226
NE PE E-14335

REVISIONS

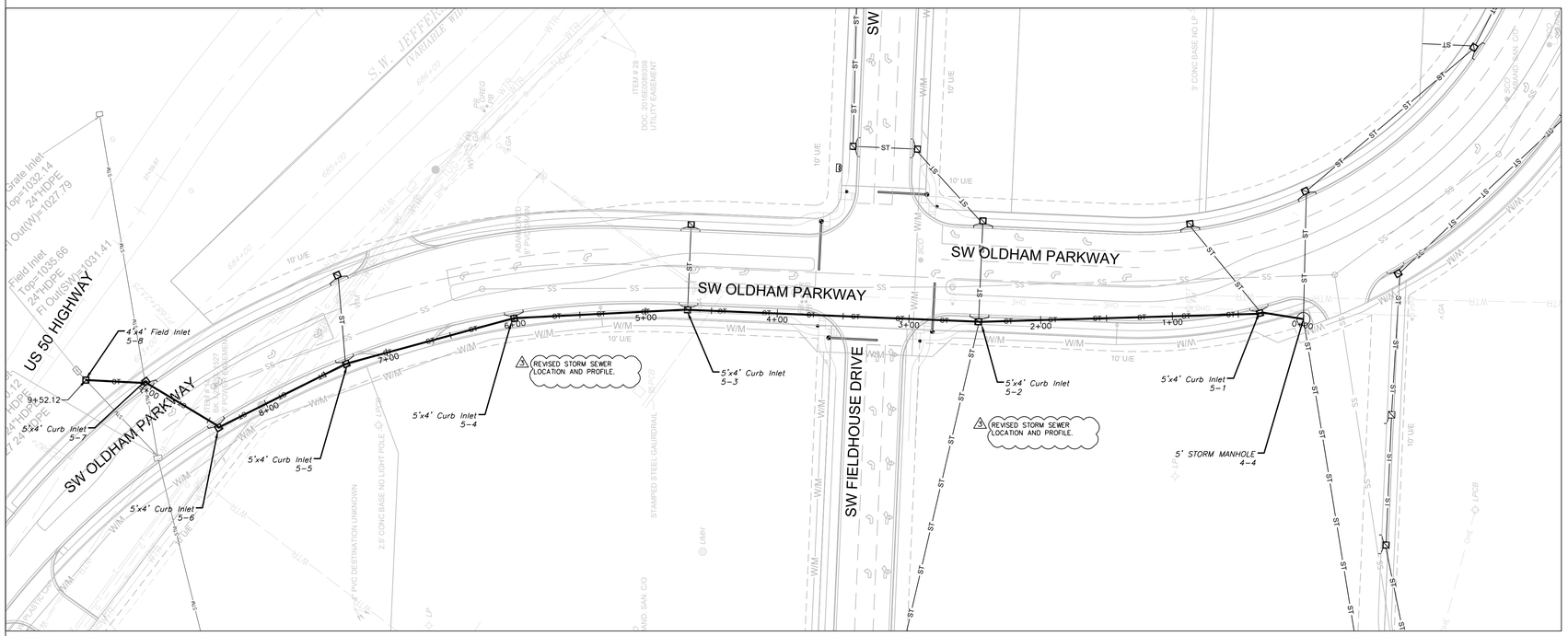
1. REV. 12/10/2024
2. REV. 1/2/2025
3. REV. 2/6/2025
4. REV. 3/5/2025

C.303

STORM SEWER PLAN AND PROFILE

SCALE: 1" = 50'

0 25' 50' 100'



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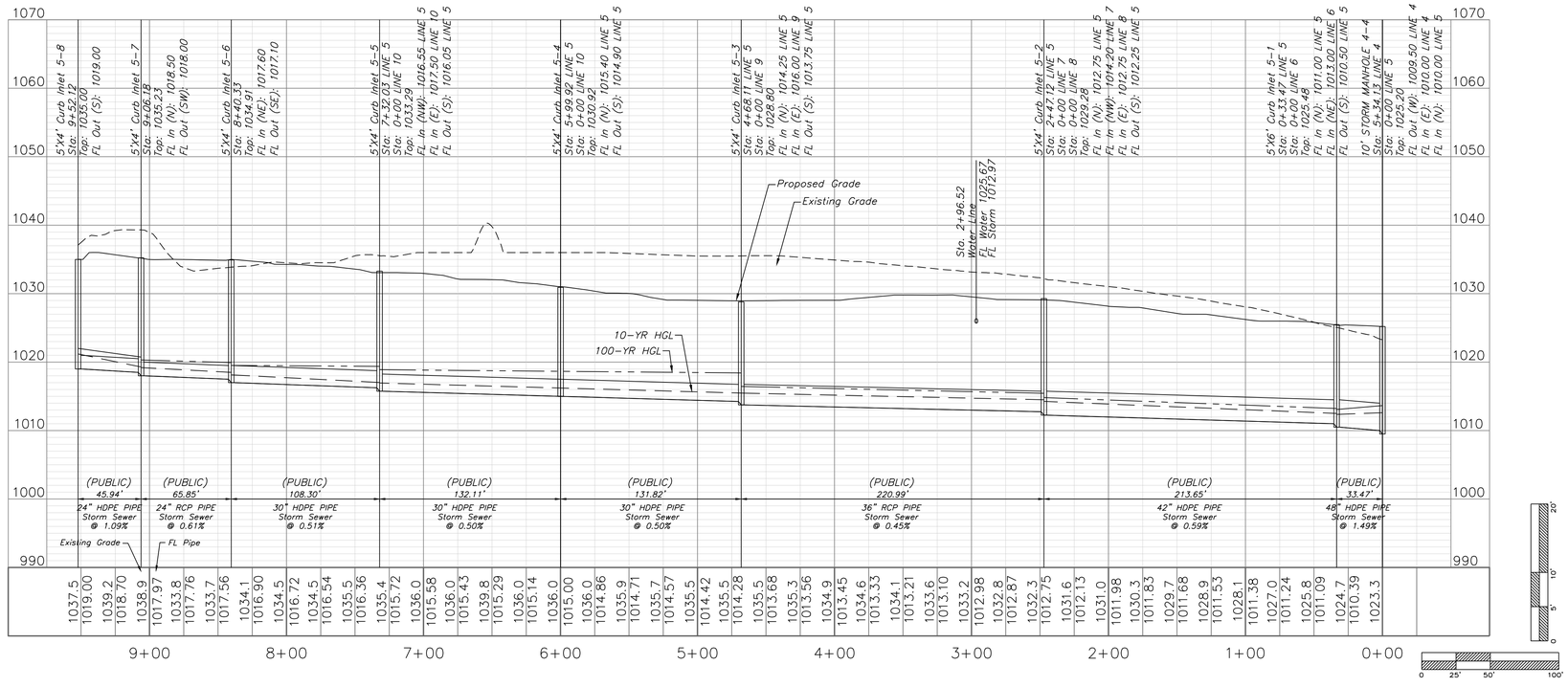

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Professional Registration
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Engineering E-1695
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Oklahoma
Engineering 6254
Nebraska
Engineering CA2821

Oldham Village
Lee's Summit, Jackson County, Missouri

Project: OLDHAM MARKETPLACE, LSMO

Issue Date: November 5, 2024

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

STATE OF MISSOURI
MATTHEW J. SCHLICHT
NUMBER 2006019708
REGISTERED 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

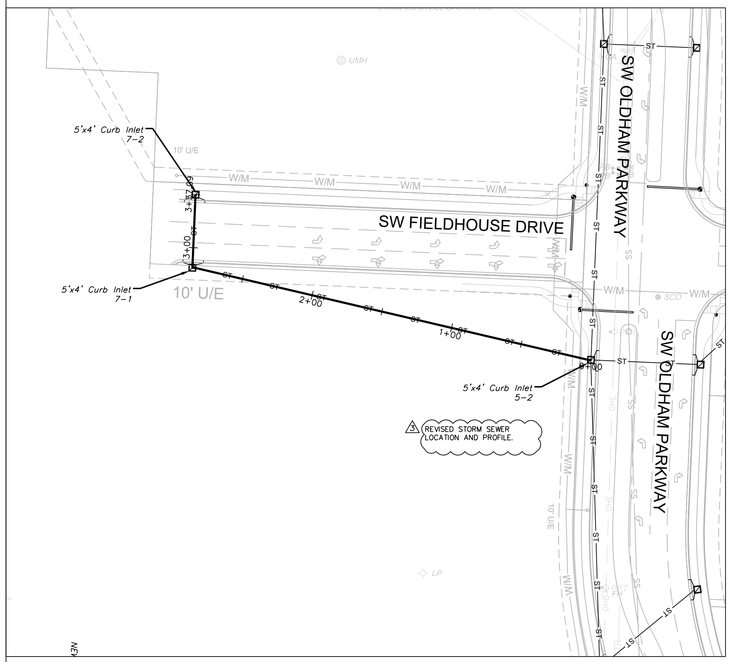
C.304

STORM SEWER PLAN AND PROFILE

SCALE: 1" = 50'

0 25' 50' 100'

North



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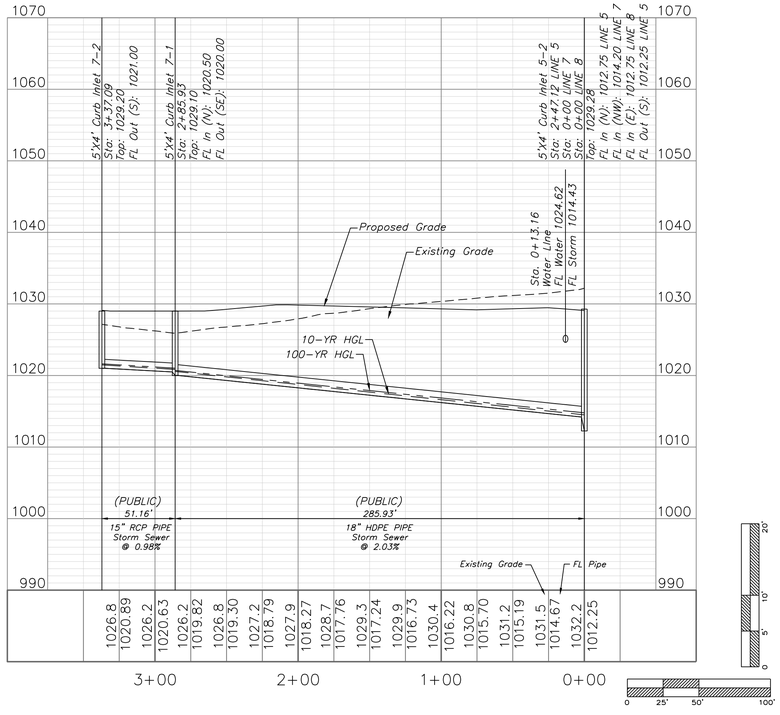
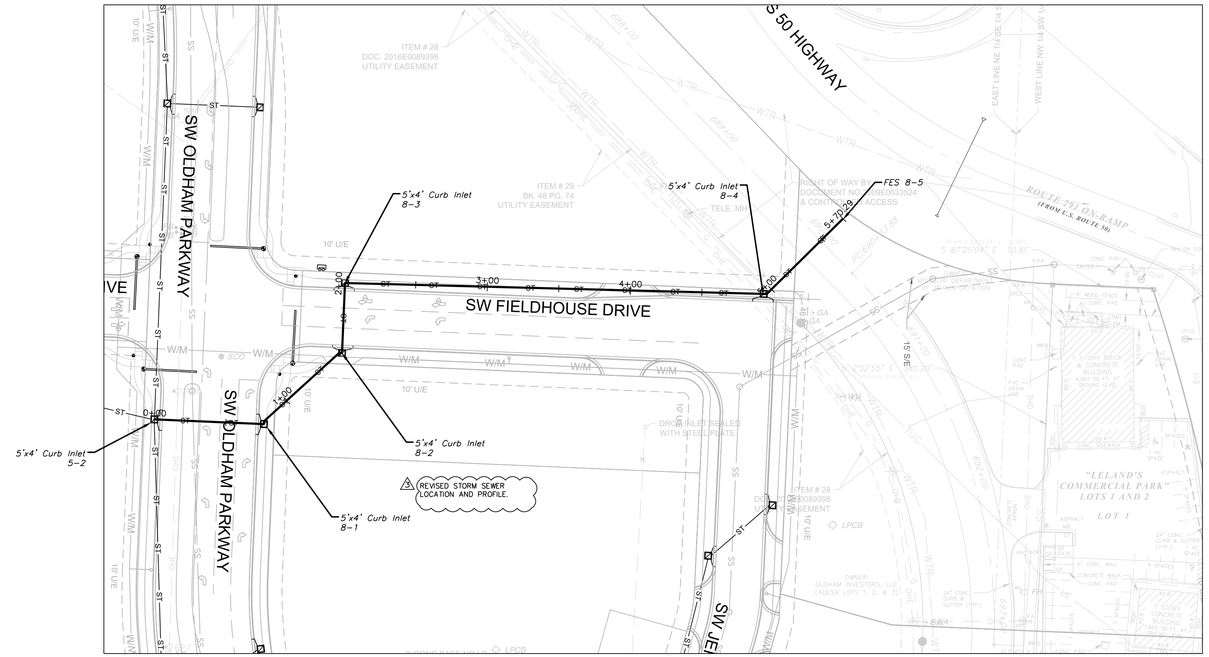


STORM SEWER PLAN AND PROFILE

SCALE: 1" = 50'

0 25' 50' 100'

North



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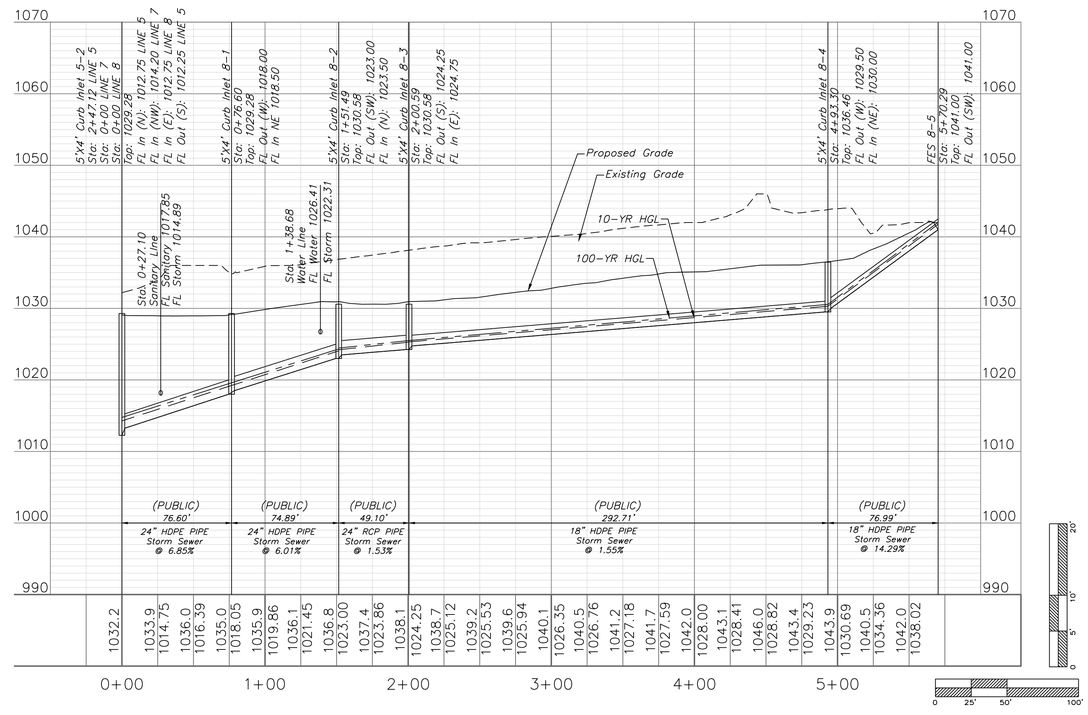

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Nebraska
Engineering CA2821

Oldham Village
Lee's Summit, Jackson County, Missouri

Project: OLDHAM MASTERPLACE, 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 A-2006019708
PROFESSIONAL ENGINEER

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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

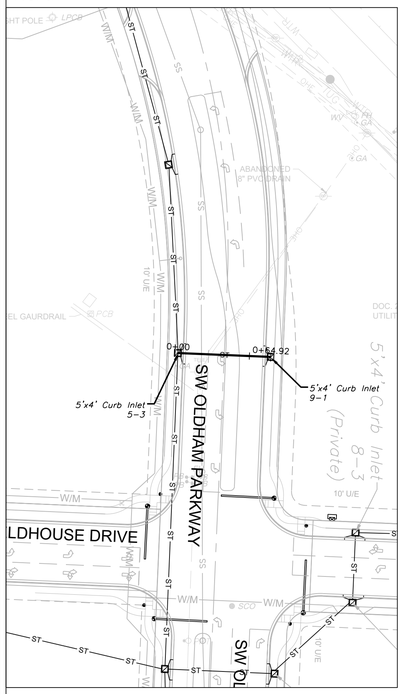
C.305

STORM SEWER PLAN AND PROFILE

SCALE: 1" = 50'

North

0 25' 50' 100'



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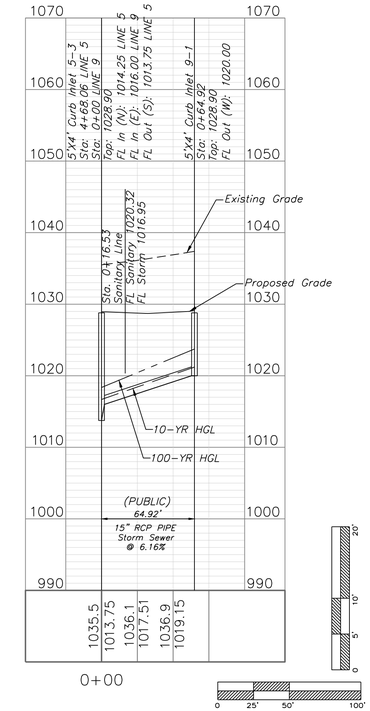
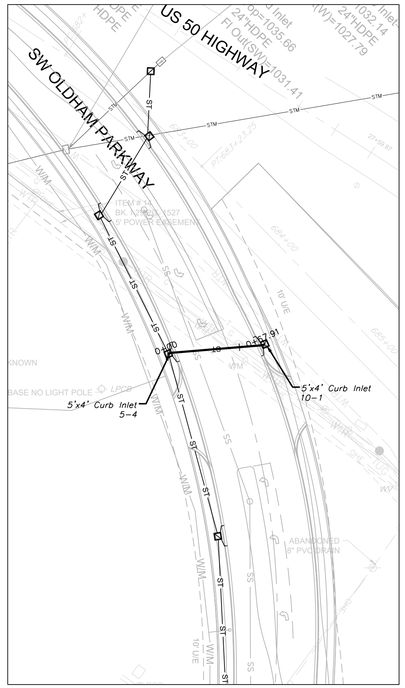


STORM SEWER PLAN AND PROFILE

SCALE: 1" = 50'

North

0 25' 50' 100'



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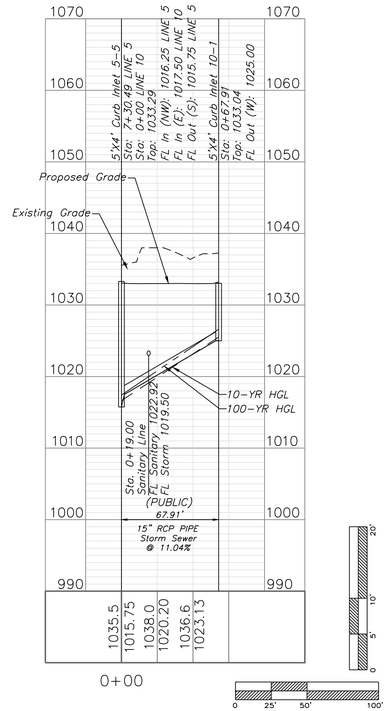
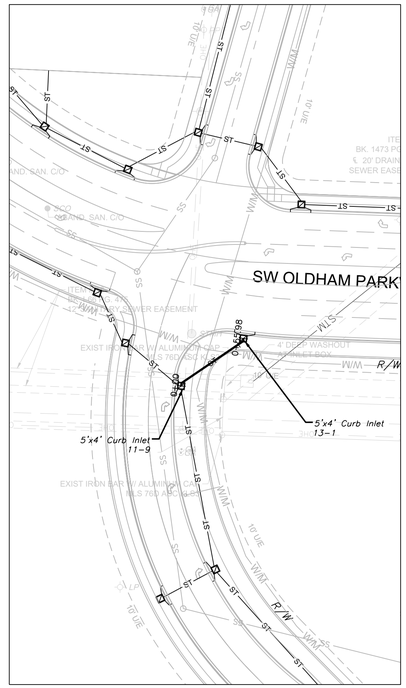


STORM SEWER PLAN AND PROFILE

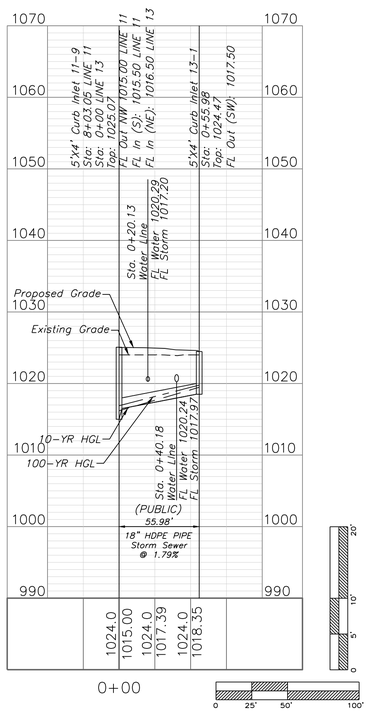
SCALE: 1" = 50'

North

0 25' 50' 100'



STORM LINE 13

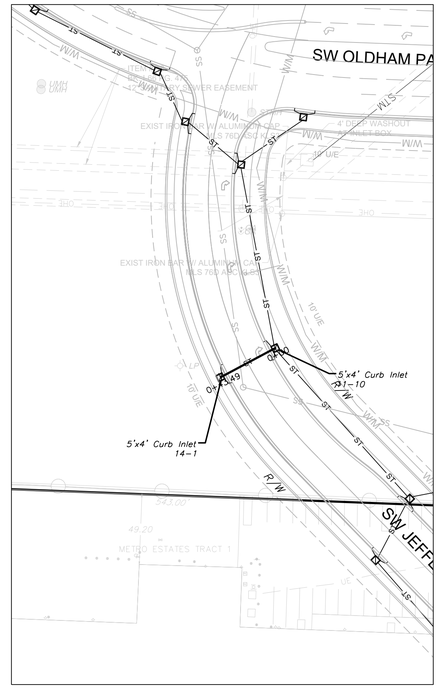


STORM SEWER PLAN AND PROFILE

SCALE: 1" = 50'

North

0 25' 50' 100'



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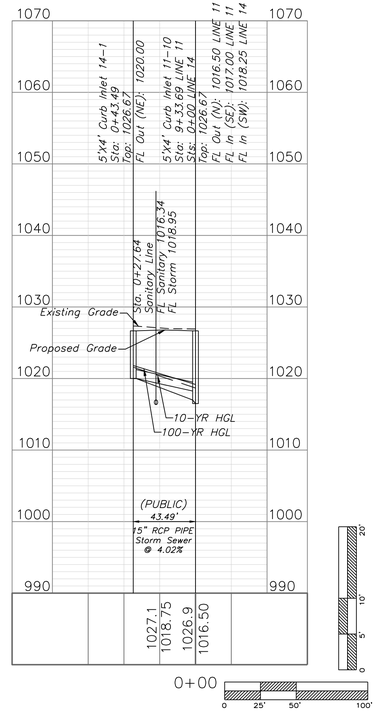

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Oldham Village
Lee's Summit, Jackson County, Missouri

Project: OLDHAM MASTER PLACE, 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
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PROFESSIONAL ENGINEER

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REVISIONS

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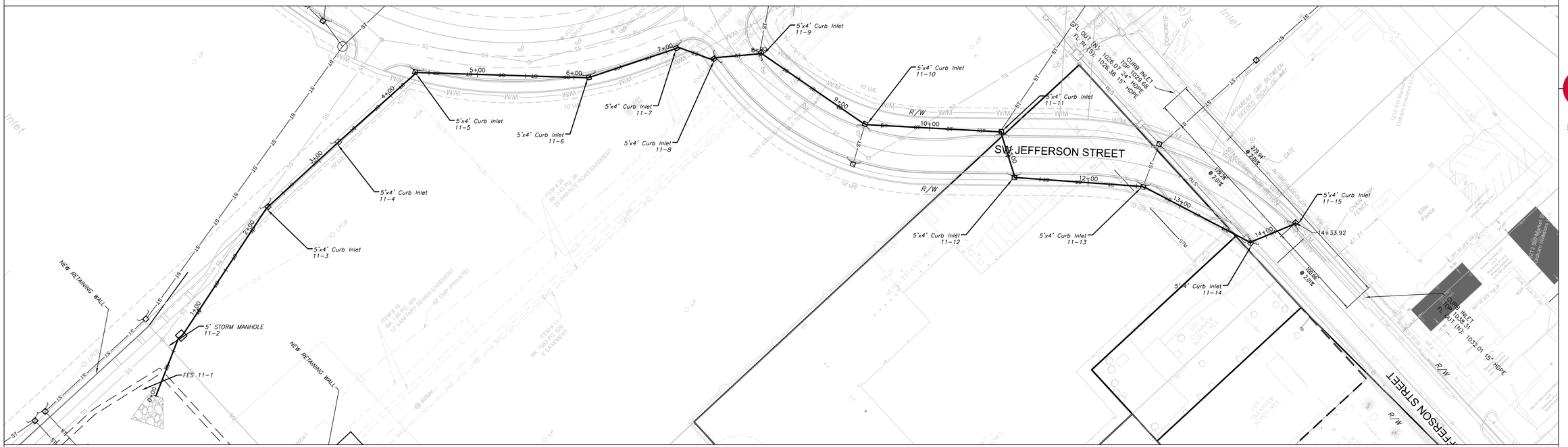
2 REV. 1/2/2025
3 REV. 2/6/2025
REV. 3/5/2025

STORM SEWER PLAN AND PROFILE

SCALE: 1" = 30'

0 15' 30' 60'

North



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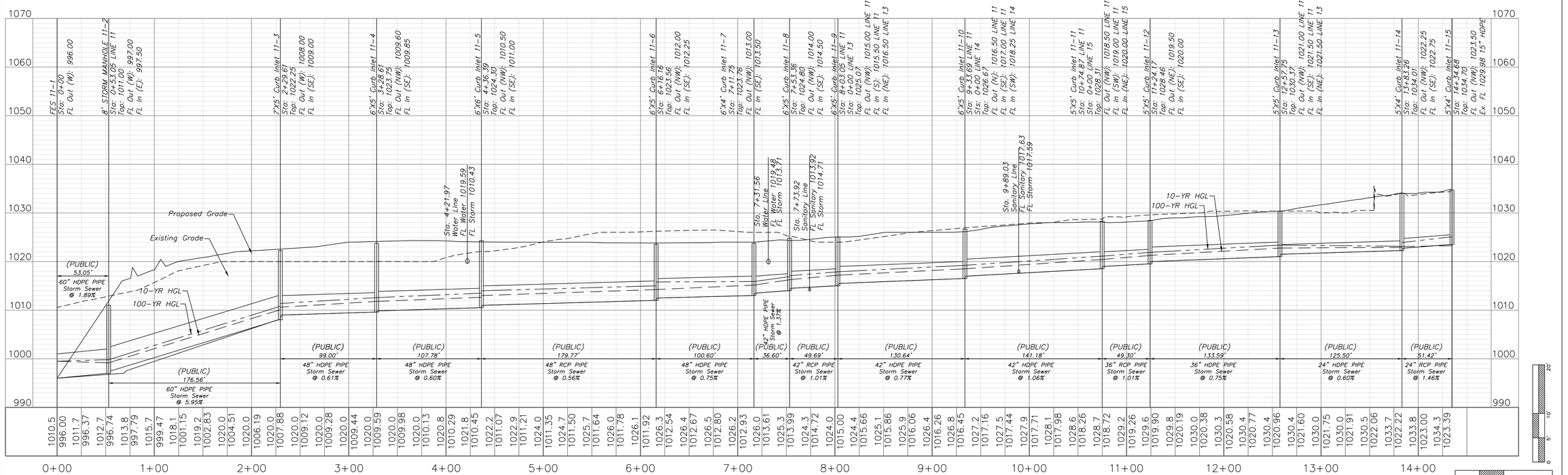

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Surveying LS-218
Oklahoma
Engineering 6254
Nebraska
Engineering CA2821

Oldham Village
Lee's Summit, Jackson County, Missouri

Project: OLDHAM VILLAGE-PLACE, LSMO

Issue Date: November 5, 2024

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

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

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

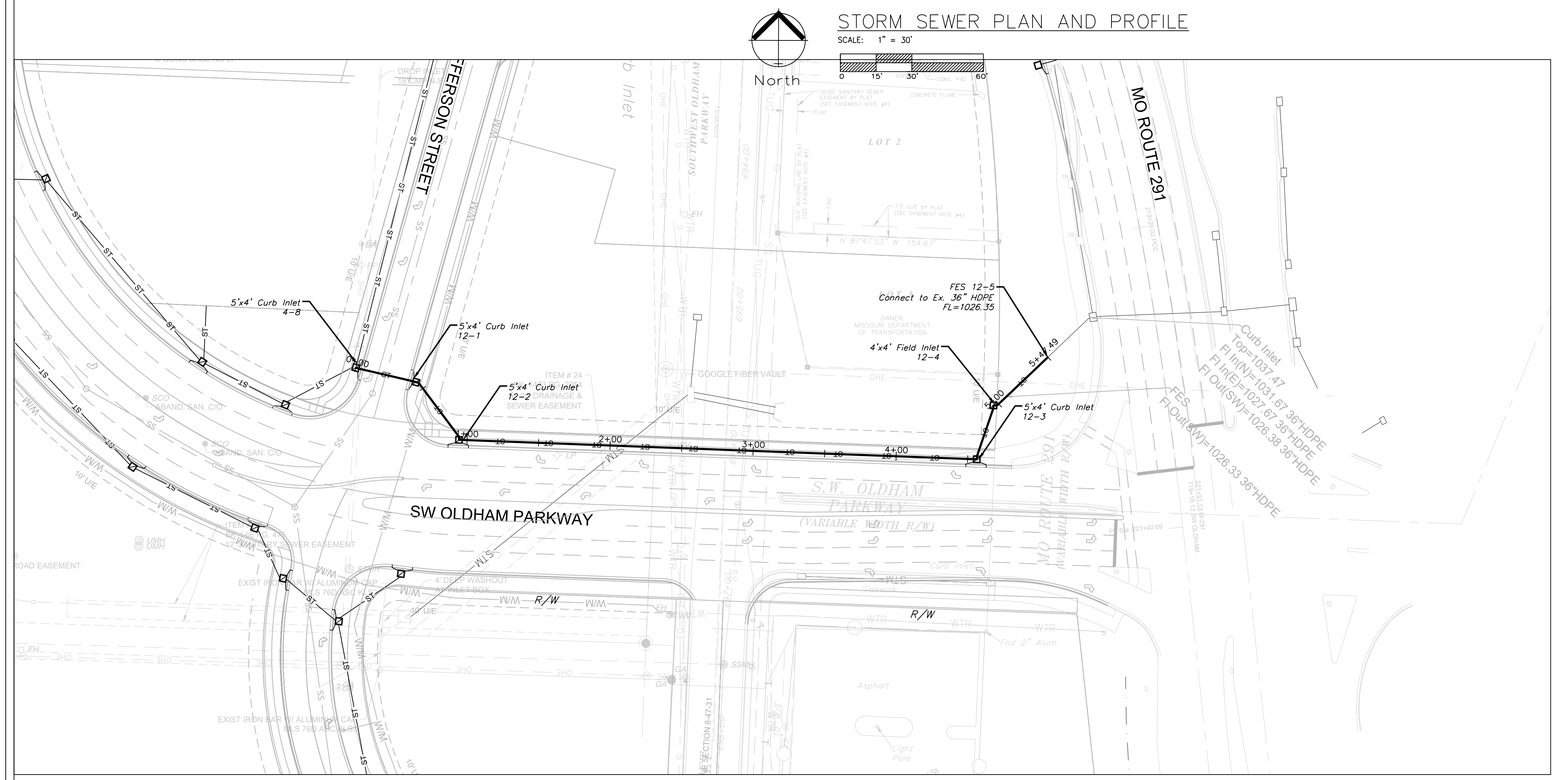
REVISIONS

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

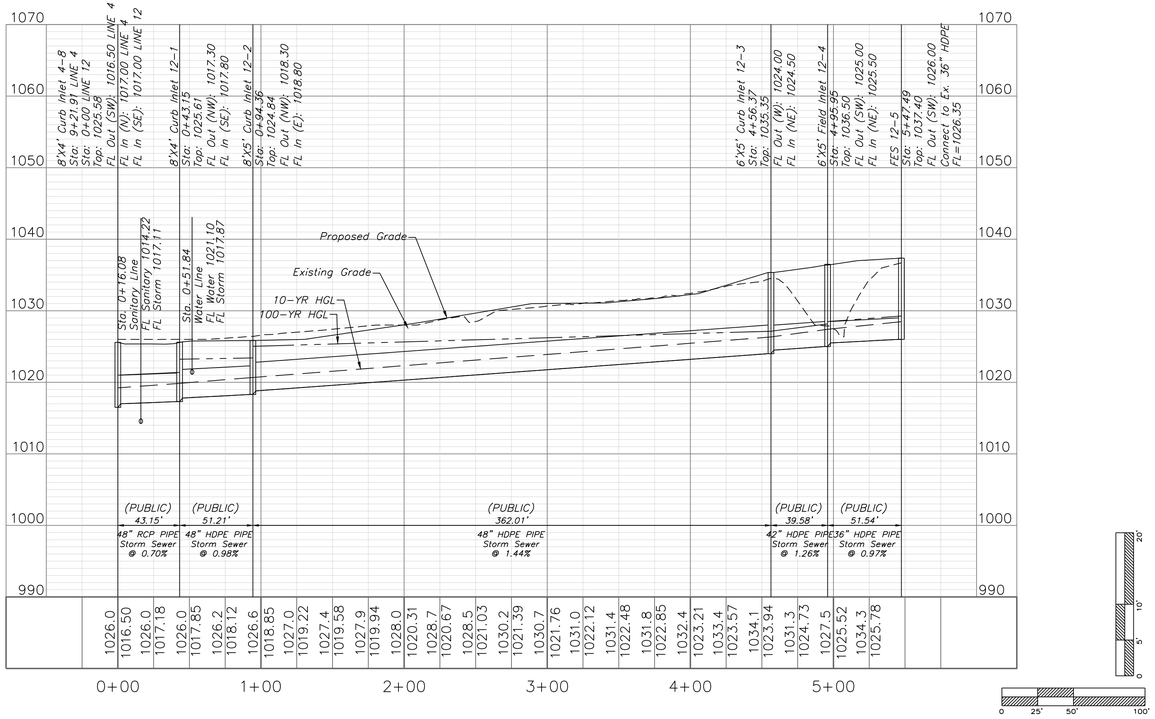
C.307

STORM SEWER PLAN AND PROFILE

SCALE: 1" = 30'



STORM LINE 12



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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 MASTERPLACE, LSMO

Issue Date: November 5, 2024

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

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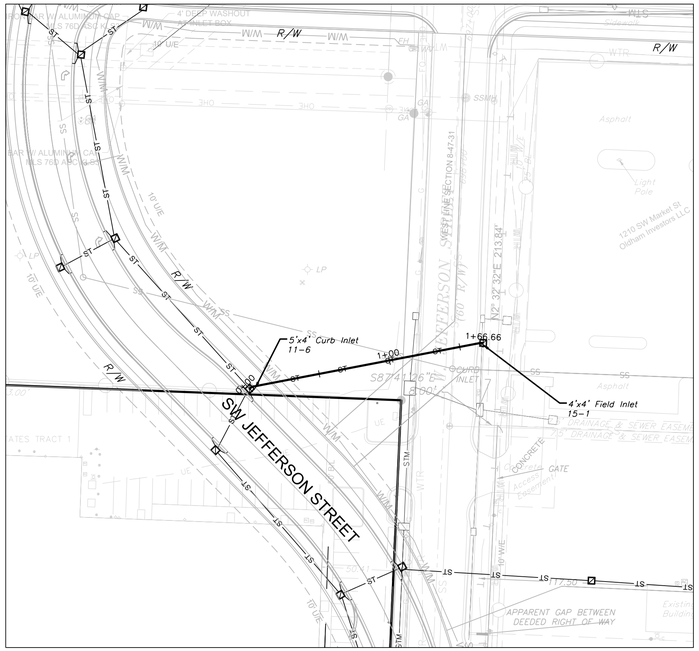
REV. 3/5/2025

North

STORM SEWER PLAN AND PROFILE

SCALE: 1" = 30'

0 15' 30' 60'



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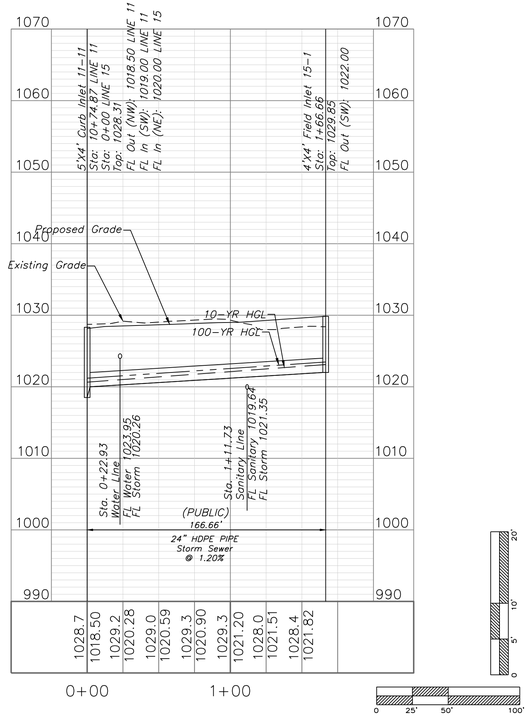
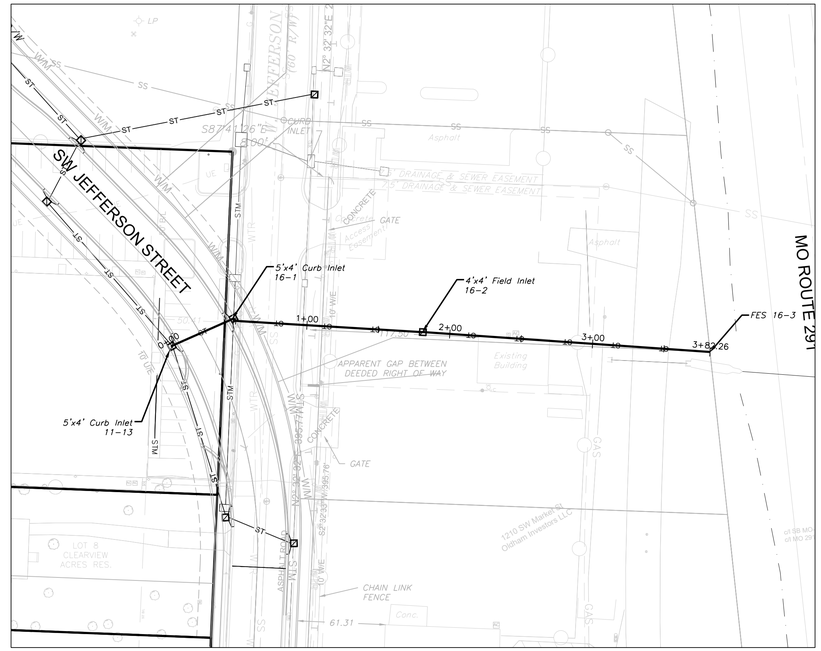


North

STORM SEWER PLAN AND PROFILE

SCALE: 1" = 30'

0 15' 30' 60'



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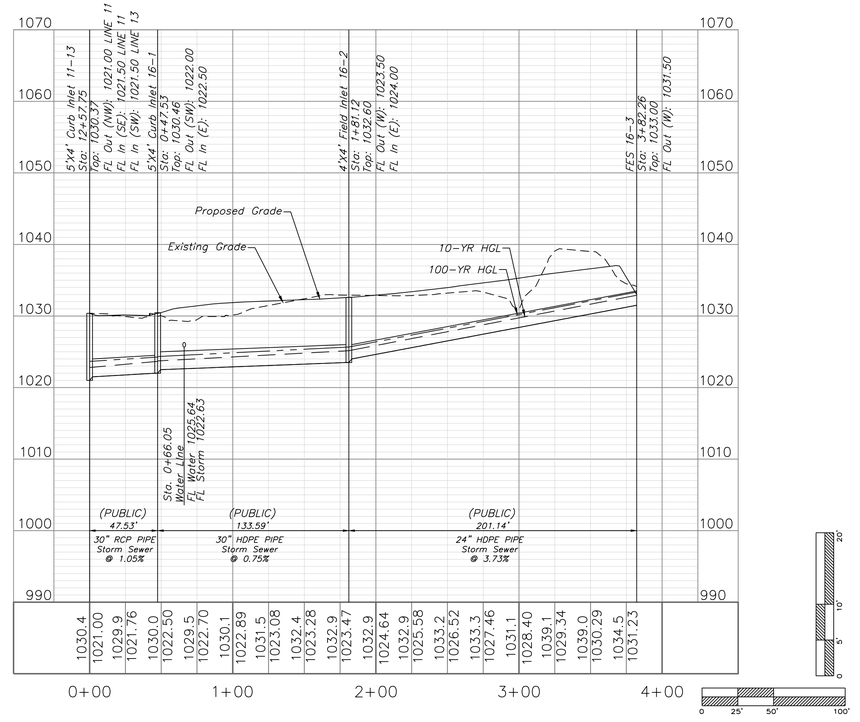

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Oldham Village
Lee's Summit, Jackson County, Missouri

Project: OLDHAM MASTERPLACE, LSMO

Issue Date: November 5, 2024

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Lee's Summit, Jackson County, Missouri

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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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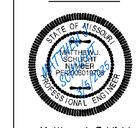
Oldham Village
Lee's Summit, Jackson County, Missouri

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



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REVISIONS

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3 REV. 2/6/2025
REV. 3/5/2025

10-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	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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Oldham Village
Lee's Summit, Jackson County, Missouri

Project: OLDHAM MASTER PLACE. LSMO

Issue Date: November 5, 2024

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

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. 3/5/2024

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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Oldham Village
Lee's Summit, Jackson County, Missouri

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

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

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

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
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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
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LEE'S SUMMIT, MO 64082
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Professional Registration
Missouri
Engineering 2006002186-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

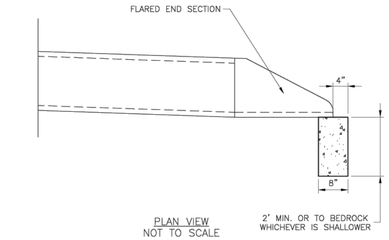
Storm Sewer Calcs - Pipe 100-Year
Construction Plans for:
Oldham Village
Lee's Summit, Jackson County, Missouri

STATE OF MISSOURI
MATTHEW J. SCHLICHT
NUMBER 2006019708
PROFESSIONAL ENGINEER

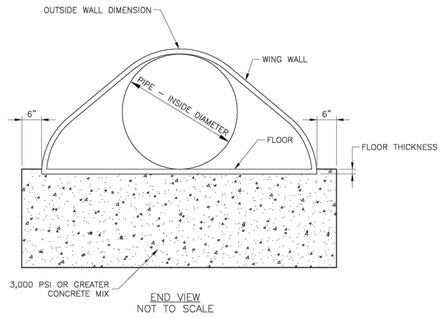
Matthew J. Schlicht
MO PE 2006019708
KS PE 19071
OK PE 25226
NE PE E-14335

REVISIONS

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



PLAN VIEW
NOT TO SCALE

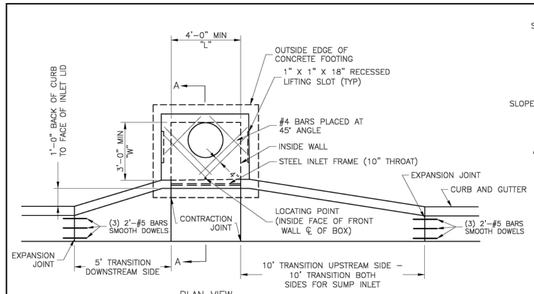


END VIEW
NOT TO SCALE

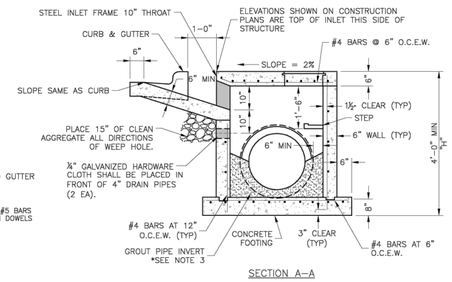
LEE'S SUMMIT
MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

FLARED END SECTION SUPPORT DETAIL

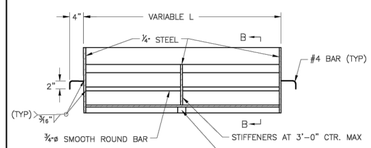
Date: 04/17
Drawn By: MJF
Checked By: DL
STM-5



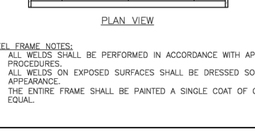
PLAN VIEW



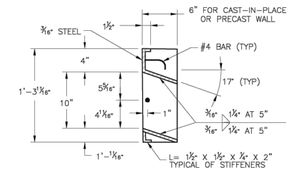
SECTION A–A



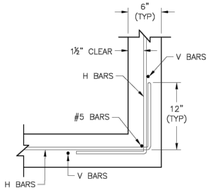
FRONT ELEVATION



PLAN VIEW



SECTION B–B



WALL CORNER DETAIL

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.

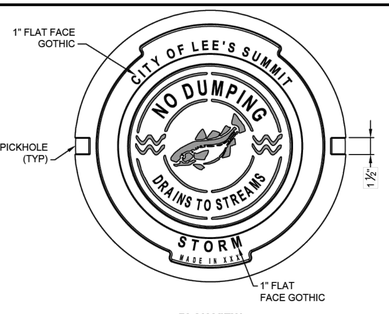
GENERAL NOTES:
1. THE FIRST DIMENSION LISTED IN THE CONSTRUCTION NOTES IS THE "L" DIMENSION. THE SECOND DIMENSION IS THE "W" DIMENSION.
2. FLOW LINES LISTED ON THE PROJECT PLANS ARE LISTED AT THE INSIDE FACE OF THE WALL.
3. FLOOR OF INLET GROUTED AND SHAPED TO MATCH PIPE INVERT TO PROVIDE SMOOTH FLOW.
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

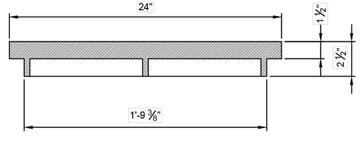
STANDARD DETAILS
CITY OF LEE'S SUMMIT, MO
LEE'S SUMMIT, JACKSON COUNTY, MO
CURB INLET DETAIL

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

STM-1



PLAN VIEW



SECTION VIEW

STORM MANHOLE COVER

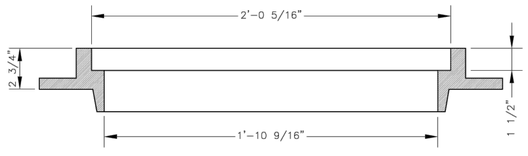
STANDARD 24" MANHOLE COVER
MINIMUM WEIGHT = 160 LB

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

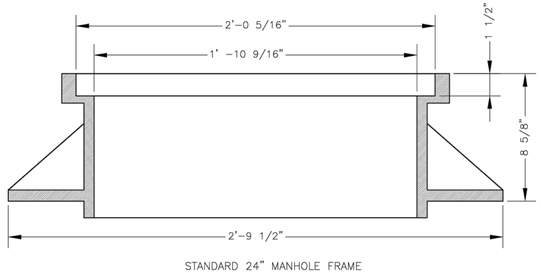
LEE'S SUMMIT
MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

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



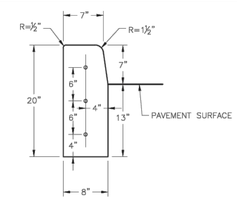
STANDARD 24" MANHOLE FRAME
LEE'S SUMMIT PART NO.: LS101A
MINIMUM WEIGHT = 250 LB

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

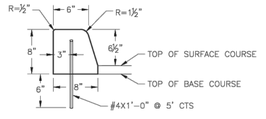
LEE'S SUMMIT
MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

STORM MANHOLE FRAME DETAIL

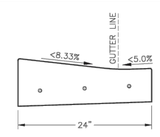
Date: 04/17
Drawn By: MJF
Checked By: DL
STM-7



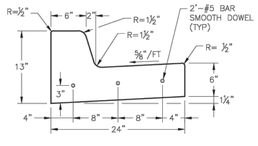
STRAIGHT CURB
(TYPE C–1)



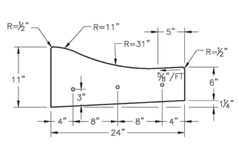
DOWELLED CURB
(TYPE DC)



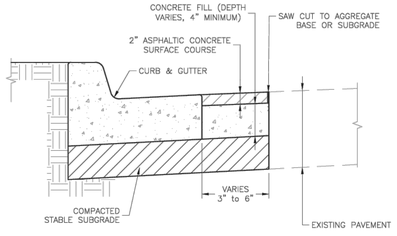
CURB & GUTTER DETAIL AT RAMP
(ADA SLOPE REQUIREMENTS)



STRAIGHT BACK CURB & GUTTER
(TYPE CG–1)



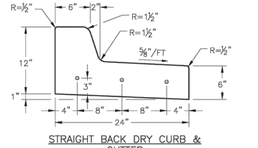
ROLL BACK CURB & GUTTER
(TYPE CG–2)



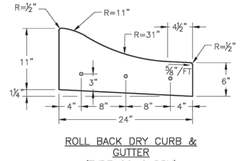
CURB REPLACEMENT DETAIL

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.



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



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

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

STANDARD DETAILS
CITY OF LEE'S SUMMIT, MO
LEE'S SUMMIT, JACKSON COUNTY, MO
CURB & GUTTER DETAIL

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

GEN-4

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 2006002186-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

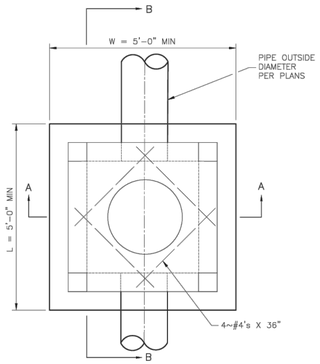
Project: OLDHAM VILLAGE-PHASE: LSMO
Issue Date: November 5, 2024

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

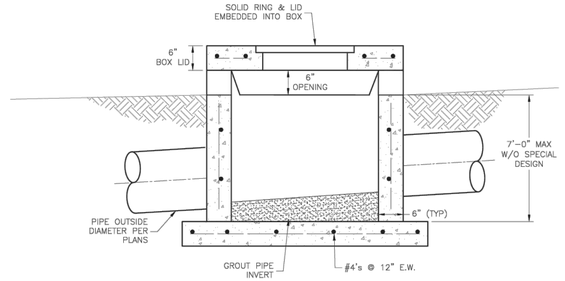
Matthew J. Schlicht
MO PE 2006019708
KS PE 19071
OK PE 25226
NE PE E-14335

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

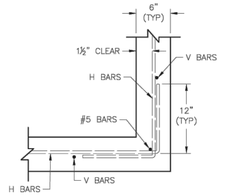
C.600



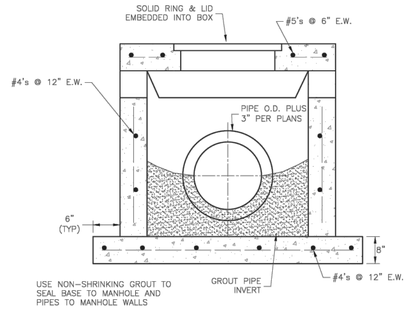
PLAN VIEW



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.

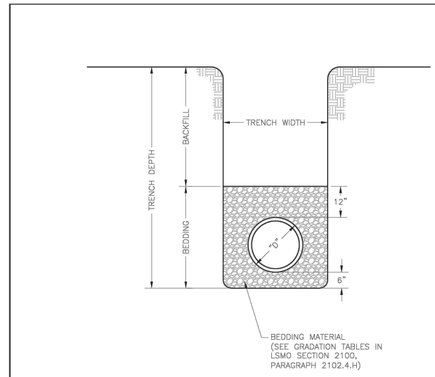
LEE'S SUMMIT MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

Project: STANDARD DETAILS
CITY OF LEE'S SUMMIT, MO
LEE'S SUMMIT, JACKSON COUNTY, MO
Client: Various

FIELD INLET DETAIL

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

STM-2



NOTES:

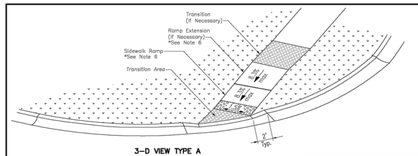
1. FOR TRENCHING AND PAVEMENT PATCHING REPAIRS WITHIN EXISTING OR FUTURE STREETS SEE STANDARD DETAIL GEN–5.
2. EXCAVATION DEPTH, SLOPES, SHORING, AND STOCKPILE LOCATIONS SHALL COMPLY WITH OSHA REGULATIONS.

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

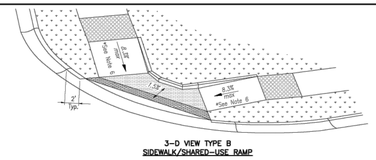
GEN-6



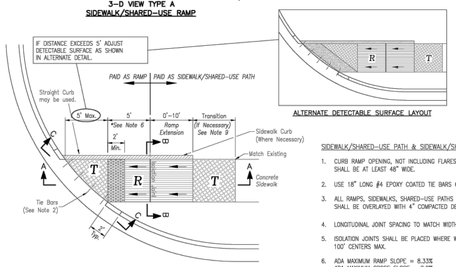
3–D VIEW TYPE A
SIDEWALK/SHARED–USE RAMP

LEGEND

R	SIDEWALK RAMP
TS	TURNING SPACE
	DETECTABLE WARNING SURFACE
T	TRANSITION



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

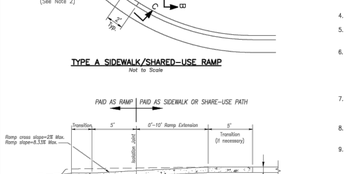


TYPE A SIDEWALK/SHARED–USE RAMP
Not to Scale

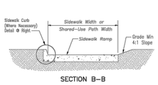
ALTERNATE DETECTABLE SURFACE LAYOUT

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

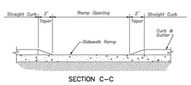
1. CURB RAMP OPENING, NOT INCLUDING FLARES, SHALL MATCH EXISTING SIDEWALK WIDTH AND OPENING SHALL BE AT LEAST 48" WIDE.
2. USE 18" LONG #4 EPOXY COATED TIE BARS @ 24" O.C. EMBED TIE BARS 9" IN EACH DIRECTION.
3. ALL RAMPS, SIDEWALKS, SHARED–USE PATHS SUBGRADE MUST BE OF STABLE, COMPACTED EARTH AND SHALL 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 A–A

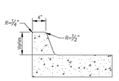


SECTION B–B

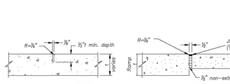


SECTION C–C

TYPE A & B SIDEWALK RAMP
Not to Scale

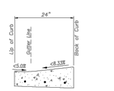


SIDEWALK CURB DETAIL
Not to Scale

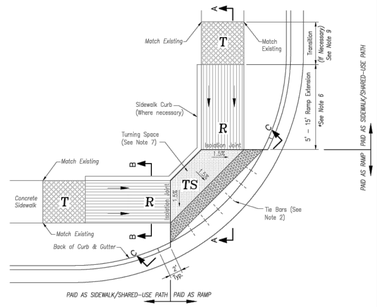


CONTRACTION JOINT ISOLATION JOINT

JOINT DETAILS
Not to Scale



CURB & GUTTER DETAIL AT RAMP
Not to Scale



TYPE B SIDEWALK/SHARED–USE RAMP
Not to Scale

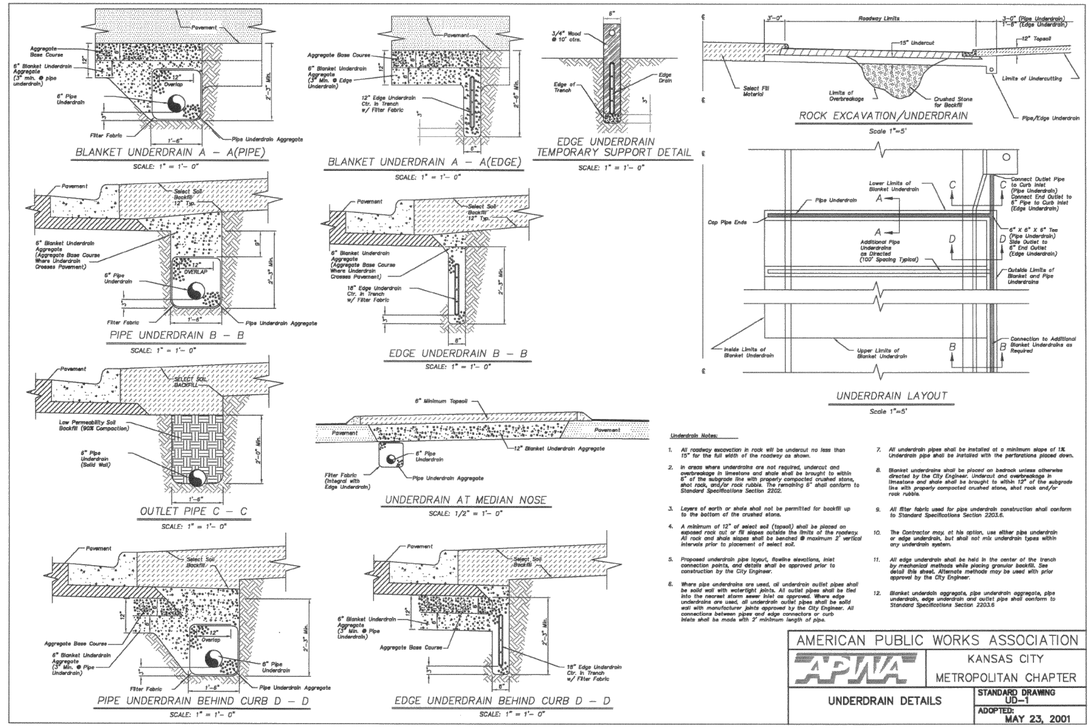
LEE'S SUMMIT MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

Project: STANDARD DETAILS
CITY OF LEE'S SUMMIT, MO
LEE'S SUMMIT, JACKSON COUNTY, MO
Client: Various

ADA RAMP RETROFIT DETAIL

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

GEN-3A



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 backfill with granular material to be brought to within 6" of the subgrade line with properly compacted shattered stone, shot rock, and/or rock rubble. The remaining 6" 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 joints approved by the City Engineer. All connections between pipes and edge connectors or curb inlets shall be made with 3' 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. Undercut 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 underdrains 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

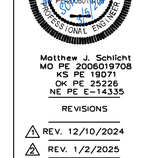
ENGINEERING SOLUTIONS
ENGINEERING & SURVEYING
50 SE 30TH STREET
LEE'S SUMMIT, MO 64082
P:(816) 623-9888 F:(816)623-9849

Professional Registration
Missouri
Engineering 2006002186-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 VILLAGE-SURFACE-LSMO
Issue Date: November 5, 2024

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



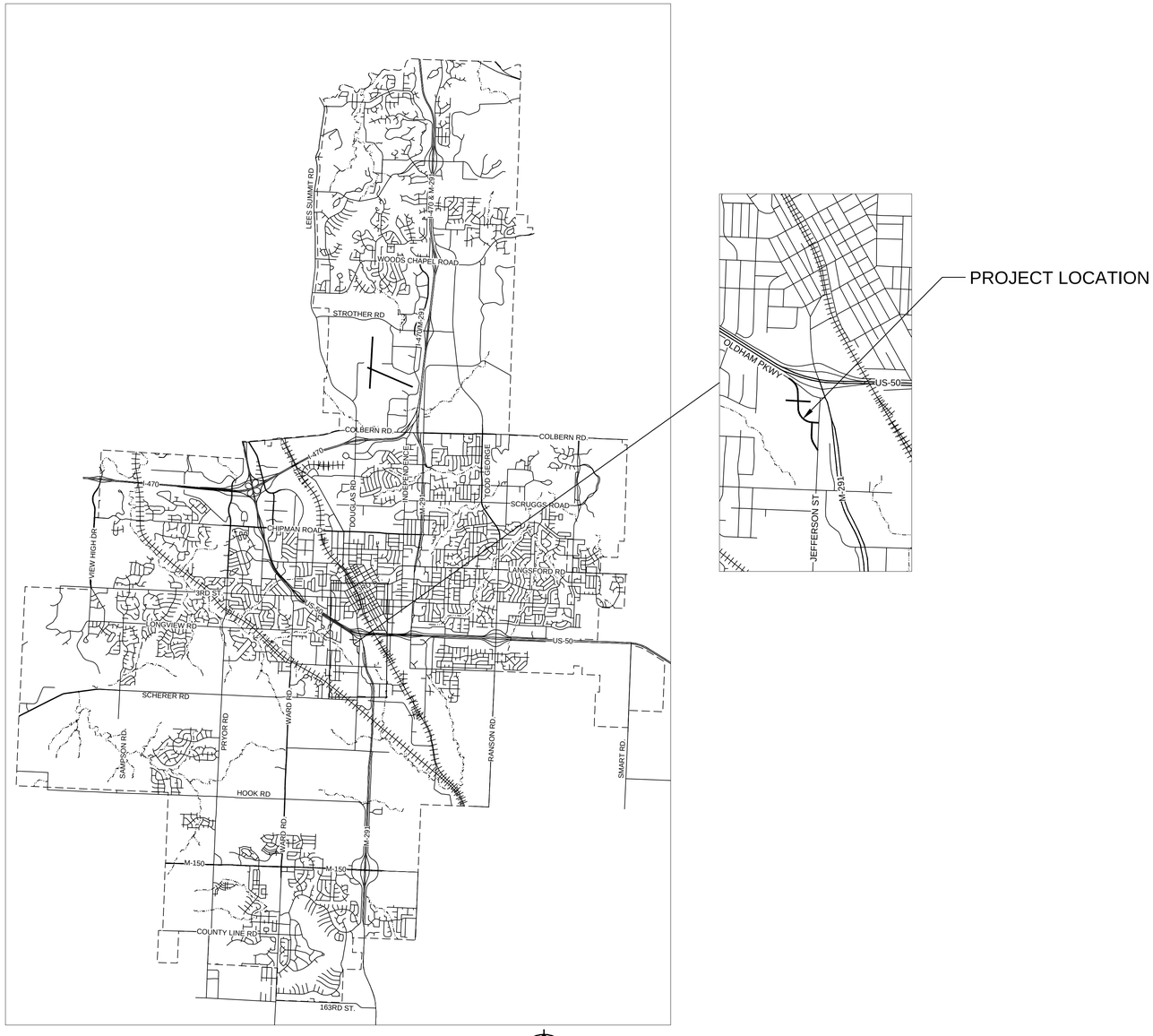
Matthew J. Schlicht
MO PE 2006019708
KS PE 19071
OK PE 25226
NE PE E–14335

REVISIONS

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

C.601

CITY OF LEE'S SUMMIT, MISSOURI
PUBLIC WORKS DEPARTMENT
STREET LIGHTING INSTALLATION
OLDHAM PARKWAY AND JEFFERSON STREET



LOCATION MAP
(NOT TO SCALE)

NORTH

Sheet List Table	
SHEET NUMBER	SHEET TITLE
1	COVER SHEET
2	GENERAL NOTES
3 - 5	LIGHTING PLANS
5	LIGHTING PLAN
6 - 7	WIRING DIAGRAMS
8	POLE DETAILS
9	POLE BASE DETAILS
10	BOX AND CONDUIT DETAILS
11	POWER SUPPLY DETAILS
12	ELECTRICAL DETAILS

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BRANDON.MYER@UPNFIBER.COM

BLUEBIRD COMMUNICATIONS
314-237-2125

CITY WATER UTILITIES
816-969-1940

CITY STORMWATER - PW OPERATIONS
816-969-1870

CITY FIBER - ITS DEPARTMENT
BRYAN HALL, 816-969-1234

NOTE:

KNOWN UNDERGROUND UTILITIES IN THE VICINITY OF THE WORK ARE SHOWN ON THESE PLANS, ALTHOUGH OTHERS MAY EXIST. THE LOCATIONS SHOWN ARE BELIEVED TO BE REASONABLY CORRECT, BUT DO NOT PURPORT TO BE ABSOLUTELY SO. BEFORE STARTING WORK, THE CONTRACTOR SHALL GIVE NOTICE TO AND OBTAIN INFORMATION FROM EACH OWNER AND OPERATOR OF EXISTING UNDERGROUND FACILITIES IN ACCORDANCE WITH THE MISSOURI UNDERGROUND FACILITY SAFETY AND DAMAGE PREVENTION STATUTE (RSMO CHAPTER 319.015 - 319.050).

MISSOURI ONE CALL SYSTEM, INC.
1-800-344-7483
STOP - CALL BEFORE YOU DIG!

No.	REVISIONS	DATE	BY

Kimley»Horn
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806 PENNSYLVANIA AVE, SUITE 150
KANSAS CITY, MO 64105
PHONE: 816-561-5555
WWW.KIMLEY-HORN.COM

SCALE: AS NOTED | DESIGNED BY: JJW | DRAWN BY: LCJ | CHECKED BY: JJW

STATE OF MISSOURI
JEFFREY J. WILKE
NUMBER PE-2007032448
PROFESSIONAL ENGINEER

COVER SHEET

OLDHAM PARKWAY & JEFFERSON STREET STREET LIGHTING
LEE'S SUMMIT, MO, 64086

ORIGINAL ISSUE: 02/28/2025

KHA PROJECT NO. 268132012

SHEET NUMBER 1

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Drawing name: K:\KNC_TPTO\268132012 - Oldham Village Signal\CAD\Plansheets\9 - COVER SHEET.dwg COVER SHEET Feb 28, 2025 8:54am by Ciara.Hogsett

GENERAL NOTES

1. EXISTING UNDERGROUND (U/G), OVERHEAD (O.H.) UTILITIES, AND DRAINAGE STRUCTURES HAVE BEEN PLOTTED FROM AVAILABLE INFORMATION AND THEREFORE THEIR LOCATIONS MUST BE CONSIDERED APPROXIMATE ONLY. IT IS THE RESPONSIBILITY OF THE INDIVIDUAL CONTRACTOR TO EXACTLY LOCATE EACH UTILITY BEFORE ACTUAL CONSTRUCTION, AND BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES, WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR' S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UTILITIES. IN ADDITION, THE CONTRACTOR SHALL AVOID DISRUPTION OF SERVICES PROVIDED BY THE UTILITIES AND SHALL INSURE THAT PROPER CLEARANCES (OVERHEAD AND UNDERGROUND) ARE MAINTAINED FOR THE DURATION OF CONSTRUCTION. SEE COVER SHEET FOR UTILITY COMPANY CONTACT INFORMATION.
2. SCREW- IN ANCHOR FOUNDATIONS HAVE BEEN ASSUMED FOR ALL AREAS, UNLESS OTHERWISE NOTED IN THE PLANS. IN THE EVENT A SCREW- IN ANCHOR MAY NOT BE INSTALLED, THEN THE CONTRACTOR MAY, AT HIS OWN OPTION, INSTALL THE SCREW- IN ANCHOR WITHIN A PRE- DRILLED HOLE, OR POUR A CONCRETE FOUNDATION. NO CHANGE IN PAYMENT SHALL BE MADE FOR FOUNDATION SUBSTITUTIONS. ALL PRE-DRILLED HOLES SHALL BE BACKFILLED WITH FLOWABLE BACKFILL. ALL CONDUIT TRENCHES SHALL BE BACKFILLED WITH EARTH OR AB- 3 AND PROPERLY COMPACTED IN ACCORDANCE WITH THE SPECIFICATIONS. THE TOP 4" TO 6" OF BACKFILL SHALL BE TOPSOIL.
3. FACTORY CONDUIT BENDS (PVC 90- DEGREE ELBOWS) SHALL BE INSTALLED INTO ALL POLE BASES, JUNCTION BOXES, PULL BOXES, AND POWER SUPPLIES. COUPLINGS SHALL BE USED TO TRANSITION BETWEEN HDPE AND PVC CONDUITS.
4. GALVANIZED RIGID STEEL (GRS) CONDUIT IS TO BE USED IF CONDUIT IS TO BE INSTALLED ON A STRUCTURE. ALL GRS CONDUITS THAT ARE TO BE USED SHALL BE CLEANED BY THE CONTRACTOR WITH A MANDREL PRIOR TO INSTALLATION OF CABLE.
5. CONTRACTOR SHALL INSTALL A 3" PVC (SCHEDULE 40) CONDUIT WITH POWER CABLE TO THE BASE OF THE SECONDARY SERVICE POINT. CONTRACTOR SHALL COORDINATE SECONDARY SERVICE CONNECTION WITH THE ELECTRICAL UTILITY COMPANY.
6. BRACKET ARMS SHALL BE ORIENTED PERPENDICULAR TO THE ROADWAY UNLESS OTHERWISE INDICATED ON THE PLANS.
7. ALL SPLICES TO THE DISTRIBUTION CABLE SHALL BE MADE WITH JUNCTION BOXES, PULL BOXES, OR POLE BASES USING REQUIRED CONNECTORS. SPLICES WILL ONLY BE ALLOWED IN JUNCTION OR PULL BOXES WHERE A CIRCUIT BRANCHES. ALL SPLICES IN BOXES SHALL BE PROTECTED WITH A WATERPROOF RESIN SPLICE KIT.
8. ALL DISTRIBUTION CABLES IN JUNCTION BOXES, PULL BOXES, AND POWER SUPPLIES SHALL BE LABELED WITH ROUND ALUMINUM IDENTIFICATION TAGS ATTACHED TO THE CABLES WITH COPPER WIRE. THE POWER SUPPLY AND CIRCUIT NUMBER SHALL BE STAMPED OR ENGRAVED ON EACH TAG.
9. ALL GROUNDING REQUIREMENTS AND NATIONAL ELECTRIC CODE REQUIREMENTS SHALL BE MET FOR THE STREET LIGHTING INSTALLATION TO PREVENT ANY HAZARDS TO THE PUBLIC.
10. ALL EXISTING STREET LIGHTING EQUIPMENT TO BE USED IN PLACE (UIP)
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE REMOVAL OF EXISTING EQUIPMENT WITH THE RESPECTIVE OWNER(S).
12. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO MINIMIZE THE DOWNTIME OF ANY EXISTING STREET LIGHTING SYSTEMS TO BE MODIFIED.
13. ANY EQUIPMENT DAMAGED DURING CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTOR' S EXPENSE.
14. THE CONTRACTOR SHALL BE REQUIRED TO ATTACH STREET ADDRESSES AND IDENTIFICATION NUMBERS ON THE POWER SUPPLY CABINETS, AND ATTACH THE IDENTIFICATION AND POLE NUMBERS ON EACH STREET LIGHT POLE AS INDICATED IN THE CITY' S STANDARD DRAWINGS. THE LETTERS AND NUMERALS WILL BE PROVIDED BY THE CITY.

PROJECT SPECIFIC NOTES

1. SEE OLDHAM VILLAGE CONSTRUCTION PLANS FOR ROADWAY ALIGNMENT INFORMATION.
2. STREET LIGHT POLES TO BE CENTERED 3' BEHIND BACK OF CURB OR 1' BEHIND BACK OF SIDEWALK WHERE SIDEWALK IS ADJACENT TO CURB.
3. ALL TRAFFIC CONTROL DURING CONSTRUCTION SHALL COMPLY WITH CITY STANDARDS.

STREET LIGHTING QUANTITIES

ITEM NO.	DESCRIPTION	QUANTITY	UNIT
1	EXISTING STREET LIGHT POLE AND LUMINAIRE RELOCATED	5	EA
2	STREET LIGHT POLE (P30S)	8	EA
3	STREET LIGHT POLE (P40S)	12	EA
4	6' BRACKET ARM	13	EA
5	10' BRACKET ARM	2	EA
6	15' BRACKET ARM	5	EA
7	SCREW-IN FOUNDATION (B30)	13	EA
8	SCREW-IN FOUNDATION (B40S)	12	EA
9	CLASS 2 LED LUMINAIRE	20	EA
10	TYPE 1 JUNCTION BOX	1	EA
11	TYPE 2 JUNCTION BOX	1	EA
12	CLASS 1 PULL BOX	1	EA
13	4-CIRCUIT LIGHTING POWER SUPPLY	1	EA
14	2" HDPE CONDUIT	4,100	LF
15	3" HDPE CONDUIT	25	LF
16	3" PVC CONDUIT	120	LF
17	#2 POWER CABLE	400	LF
18	#8 DISTRIBUTION CABLE	13,500	LF
19	#10 POLE AND BRACKET CABLE	3,600	LF
20	BREAK AWAY NON-FUSED CONNECTOR	25	EA
21	BREAK AWAY FUSED CONNECTOR	50	EA
22	MULTI-TAP CONNECTORS	75	EA
22	TRAFFIC CONTROL	1	LS

STREETLIGHTING LEGEND

PROPOSED

- CLASS 2 LED COBRA-HEAD LUMINAIRE W/ 30' POLE
- CLASS 2 LED COBRA-HEAD LUMINAIRE W/ 40' POLE
- CLASS 1 PULL BOX
- TYPE 1 JUNCTION BOX
- TYPE 2 JUNCTION BOX
- PAD MOUNTED POWER SUPPLY (SHADED AREA INDICATES PHOTOCELL ORIENTATION) (NORTH OR EAST)
- ELECTRICAL SERVICE
- CONDUIT

EXISTING

- LED COBRA-HEAD LUMINAIRE W/ 30' POLE
- CLASS 1 PULL BOX
- JUNCTION BOX
- PAD MOUNTED CONTROL CENTER (SHADED AREA INDICATES PHOTOCELL ORIENTATION) (NORTH OR EAST)
- ELECTRICAL SERVICE
- CONDUIT

LIGHTING DESIGN CALCULATIONS AND CRITERIA:

OLDHAM PARKWAY

MINIMUM AVERAGE MAINTAINED ILLUMINANCE (TARGET) - 1.1
AVERAGE MAINTAINED ILLUMINANCE (ACTUAL) - 1.27

UNIFORMITY RATIO (TARGET) - 4.00
UNIFORMITY RATIO (ACTUAL) - 2.12

JEFFERSON STREET

MINIMUM AVERAGE MAINTAINED ILLUMINANCE (TARGET) - 1.1
AVERAGE MAINTAINED ILLUMINANCE (ACTUAL) - 1.17

UNIFORMITY RATIO (TARGET) - 4.00
UNIFORMITY RATIO (ACTUAL) - 1.67

DESIGN LUMINAIRE MODEL
ARCH-M-PA2-100-740-U-T3

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DRAWN BY: LCJ
CHECKED BY: JJW

STATE OF MISSOURI
JEFFREY J. WILKE
NUMBER PE-2007032448
PROFESSIONAL ENGINEER

GENERAL NOTES

OLDHAM PARKWAY & JEFFERSON STREET STREET LIGHTING
LEE'S SUMMIT, MO, 64086

ORIGINAL ISSUE: 02/28/2025
KHA PROJECT NO. 268132012
SHEET NUMBER 2

Drawing name: K:\KNC_TPTO\268132012 - Oldham Village Signals\CAD\Plansheets\11 - LIGHTING PLAN.dwg ELECTRICAL LEGEND AND NOTES Feb 28, 2025 6:53am by Clara.Hogsett
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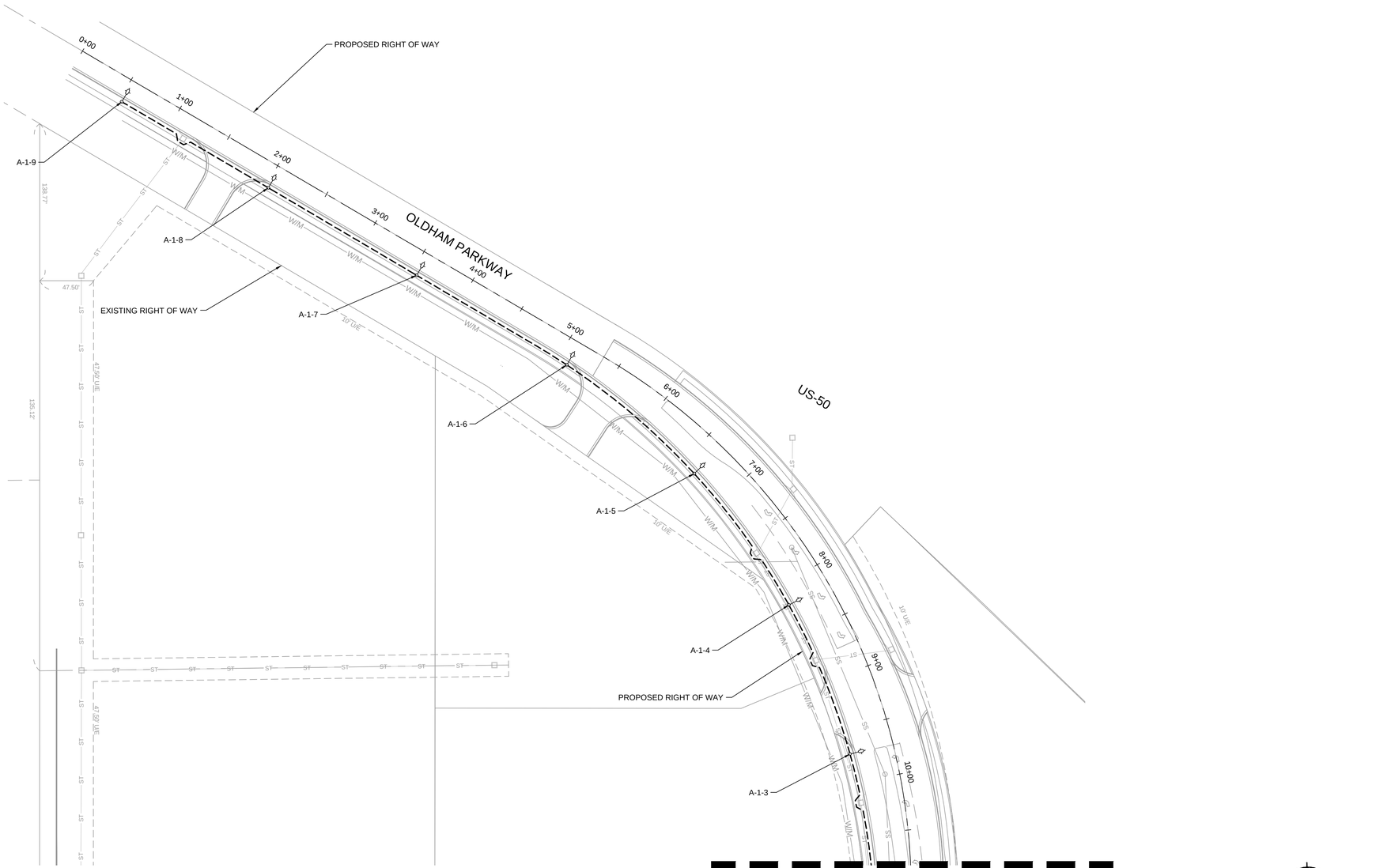
SCHEDULE OF POLES

POLE NO.	STATION	OFFSET	POLE TYPE	BASE TYPE	BRACKET ARM LENGTH	LED LUMINAIRE
A-1-9	0+52.7	21.0' RT	P30S	B30	6'	CLASS 2
A-1-8	2+02.8	21.1' RT	P30S	B30	6'	CLASS 2
A-1-7	3+55.0	21.4' RT	P30S	B30	6'	CLASS 2
A-1-6	5+09.5	22.6' RT	P30S	B30	6'	CLASS 2
A-1-5	6+64.5	34.1' RT	P30S	B30	6'	CLASS 2
A-1-4	8+18.3	39.8' RT	P30S	B30	6'	CLASS 2
A-1-3	9+72.3	39.1' RT	P30S	B30	6'	CLASS 2



MATCHLINE SEE SHEET 4

NORTH

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LIGHTING PLAN

OLDHAM PARKWAY & JEFFERSON STREET STREET LIGHTING
LEE'S SUMMIT, MO, 64086

ORIGINAL ISSUE: 02/28/2025
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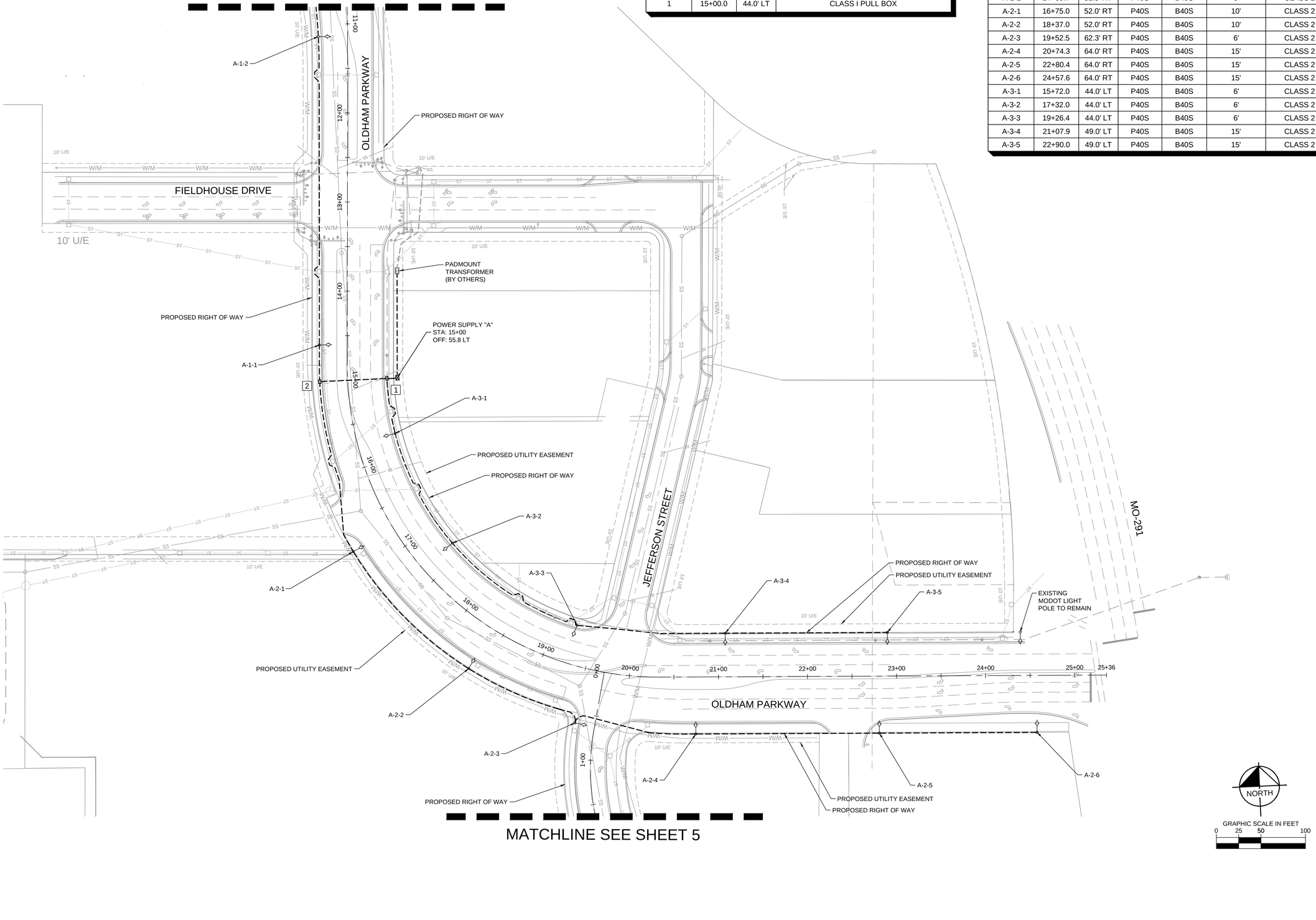
SCHEDULE OF JUNCTION/PULL BOXES

BOX NO.	STATION	OFFSET	BOX TYPE
2	15+00.0	31.5' RT	TYPE 2 JUNCTION BOX
1	15+00.0	44.0' LT	CLASS I PULL BOX

SCHEDULE OF POLES

POLE NO.	STATION	OFFSET	POLE TYPE	BASE TYPE	BRACKET ARM LENGTH	LED LUMINAIRE
A-1-2	11+14.2	32.8' RT	P30S	B30	6'	CLASS 2
A-1-1	14+60.7	31.5' RT	P40S	B40S	6'	CLASS 2
A-2-1	16+75.0	52.0' RT	P40S	B40S	10'	CLASS 2
A-2-2	18+37.0	52.0' RT	P40S	B40S	10'	CLASS 2
A-2-3	19+52.5	62.3' RT	P40S	B40S	6'	CLASS 2
A-2-4	20+74.3	64.0' RT	P40S	B40S	15'	CLASS 2
A-2-5	22+80.4	64.0' RT	P40S	B40S	15'	CLASS 2
A-2-6	24+57.6	64.0' RT	P40S	B40S	15'	CLASS 2
A-3-1	15+72.0	44.0' LT	P40S	B40S	6'	CLASS 2
A-3-2	17+32.0	44.0' LT	P40S	B40S	6'	CLASS 2
A-3-3	19+26.4	44.0' LT	P40S	B40S	6'	CLASS 2
A-3-4	21+07.9	49.0' LT	P40S	B40S	15'	CLASS 2
A-3-5	22+90.0	49.0' LT	P40S	B40S	15'	CLASS 2



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JEFFREY J. WILKE
NUMBER PE-2007032448
PROFESSIONAL ENGINEER

LIGHTING PLAN

OLDHAM PARKWAY & JEFFERSON STREET STREET LIGHTING
LEE'S SUMMIT, MO, 64086

ORIGINAL ISSUE: 02/28/2025
KHA PROJECT NO. 268132012
SHEET NUMBER
4

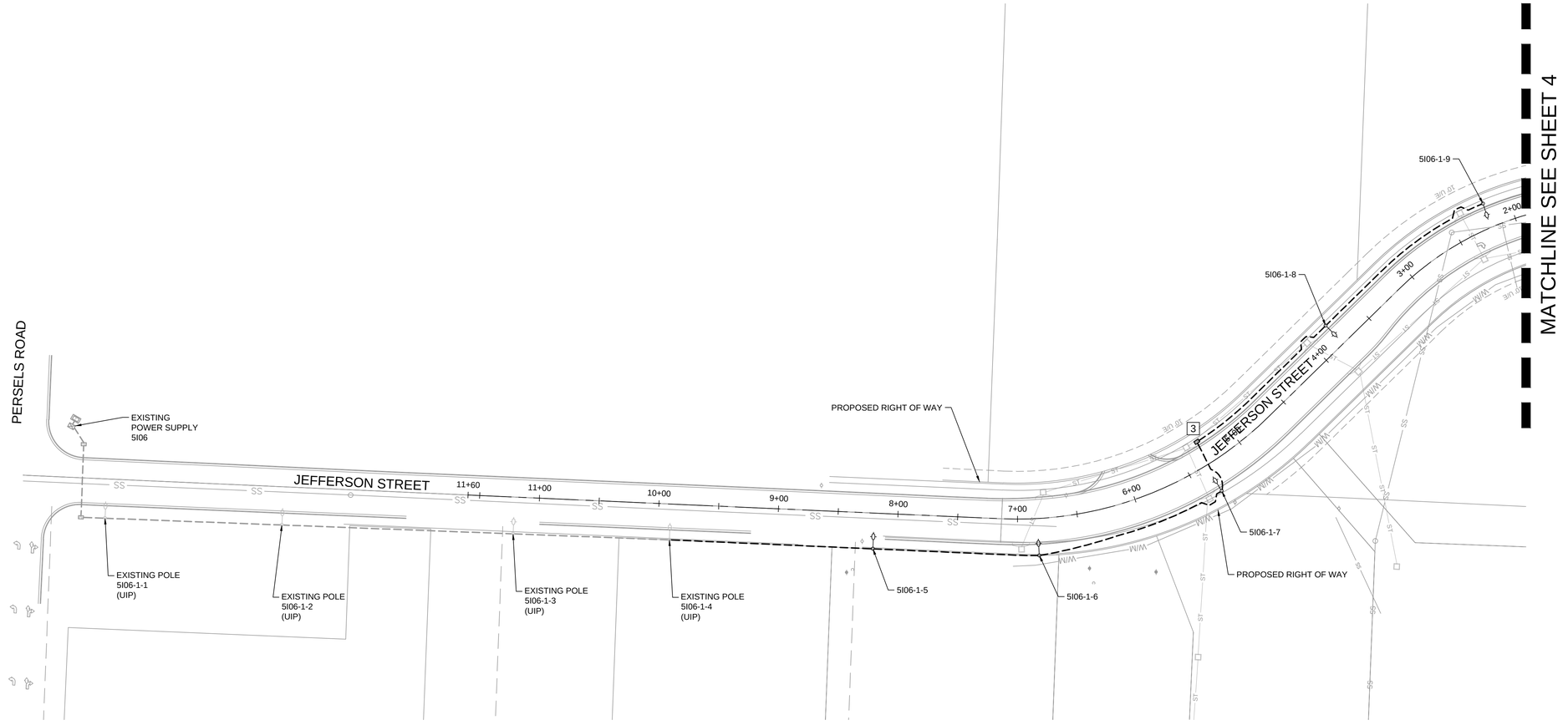
SCHEDULE OF JUNCTION/PULL BOXES

BOX NO.	STATION	OFFSET	BOX TYPE
3	5+29.8	21.0' RT	TYPE I JUNCTION BOX

SCHEDULE OF POLES

POLE NO.	STATION	OFFSET	POLE TYPE	BASE TYPE	BRACKET ARM LENGTH	LUMINAIRE TYPE
5I06-1-9	2+20.2	21.0' RT	P30S*	B30	6'*	150W LED*
5I06-1-8	3+80.0	21.0' RT	P30S*	B30	6'*	150W LED*
5I06-1-7	5+34.0	25.0' LT	P30S*	B30	6'*	150W LED*
5I06-1-6	6+83.5	31.0' LT	P30S*	B30	6'*	150W LED*
5I06-1-5	8+19.7	29.9' LT	P30S*	B30	6'*	150W LED*

*EXISTING EQUIPMENT TO BE RELOCATED



CONSTRUCTION NOTES:

1. REMOVE AND RELOCATE EXISTING STREET LIGHT POLES AND LUMINAIRES:
   5I06-1-5
   5I06-1-6
   5I06-1-7
   5I06-1-8
   5I06-1-9

2. REMOVE EXISTING LIGHTING DISTRIBUTION CABLES NORTH OF POLE 5I06-1-4. CONNECT NEW DISTRIBUTION CABLES TO EXISTING CABLES IN POLE BASES TO EXISTING CABLES IN POLE BASE. INSTALL NEW MULTI-TAP CONNECTORS IN POLE BASE.

NORTH

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STATE OF MISSOURI
JEFFREY J. WILKE
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PROFESSIONAL ENGINEER

LIGHTING PLAN

OLDHAM PARKWAY & JEFFERSON STREET STREET LIGHTING
LEE'S SUMMIT, MO, 64086

ORIGINAL ISSUE: 02/28/2025
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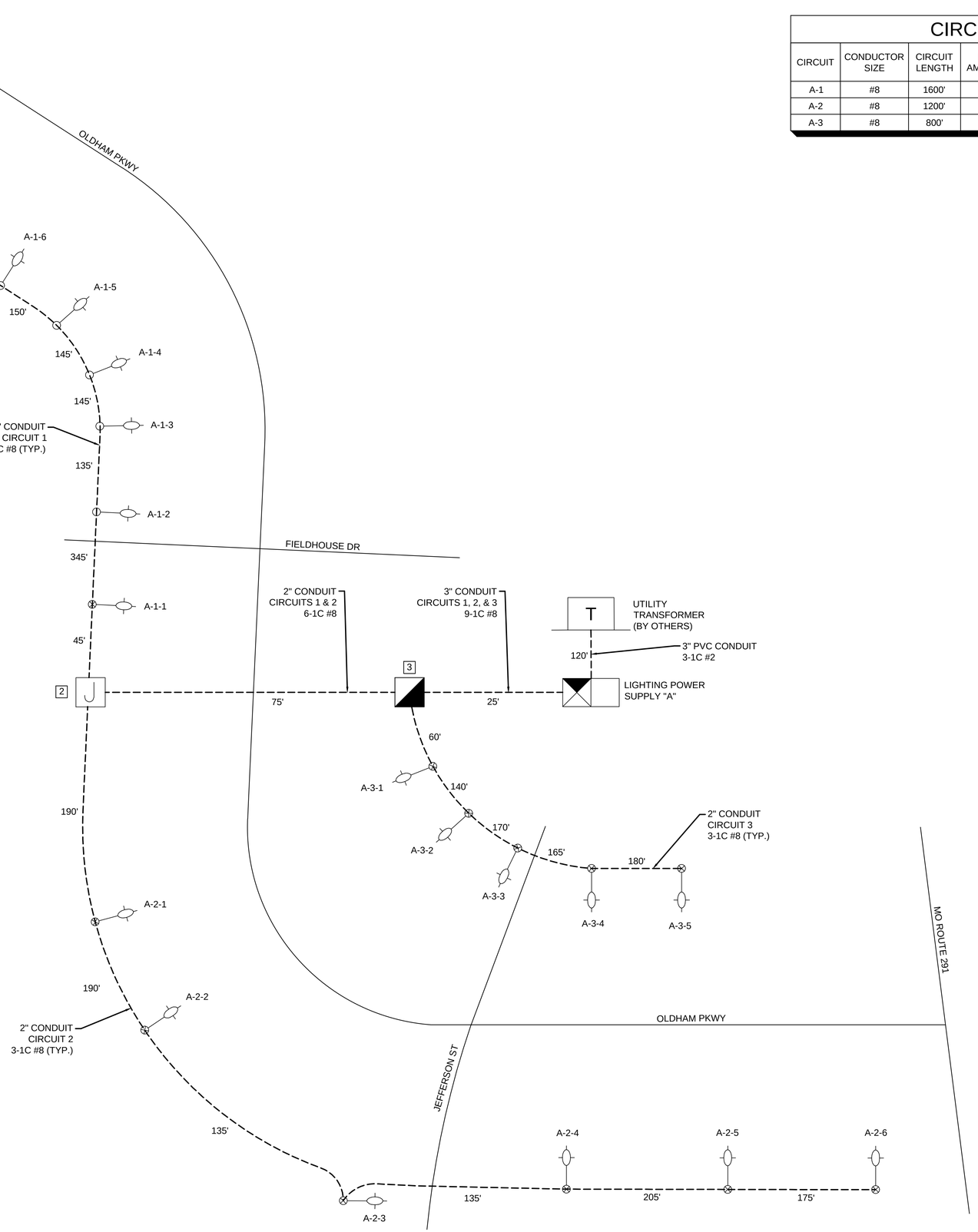
CIRCUIT SUMMARY TABLE

CIRCUIT	CONDUCTOR SIZE	CIRCUIT LENGTH	INPUT AMPERAGE	PERCENT VOLTAGE DROP	CIRCUIT ASSIGNMENT AT POWER SUPPLY	CIRCUIT BREAKER TRIP RATING
A-1	#8	1600'	3.75	2.43%	3 & 4	15A
A-2	#8	1200'	2.50	1.27%	5 & 6	15A
A-3	#8	800'	2.08	0.63%	7 & 8	15A



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STATE OF MISSOURI
JEFFREY J. WILKE
NUMBER PE-2007032448
PROFESSIONAL ENGINEER

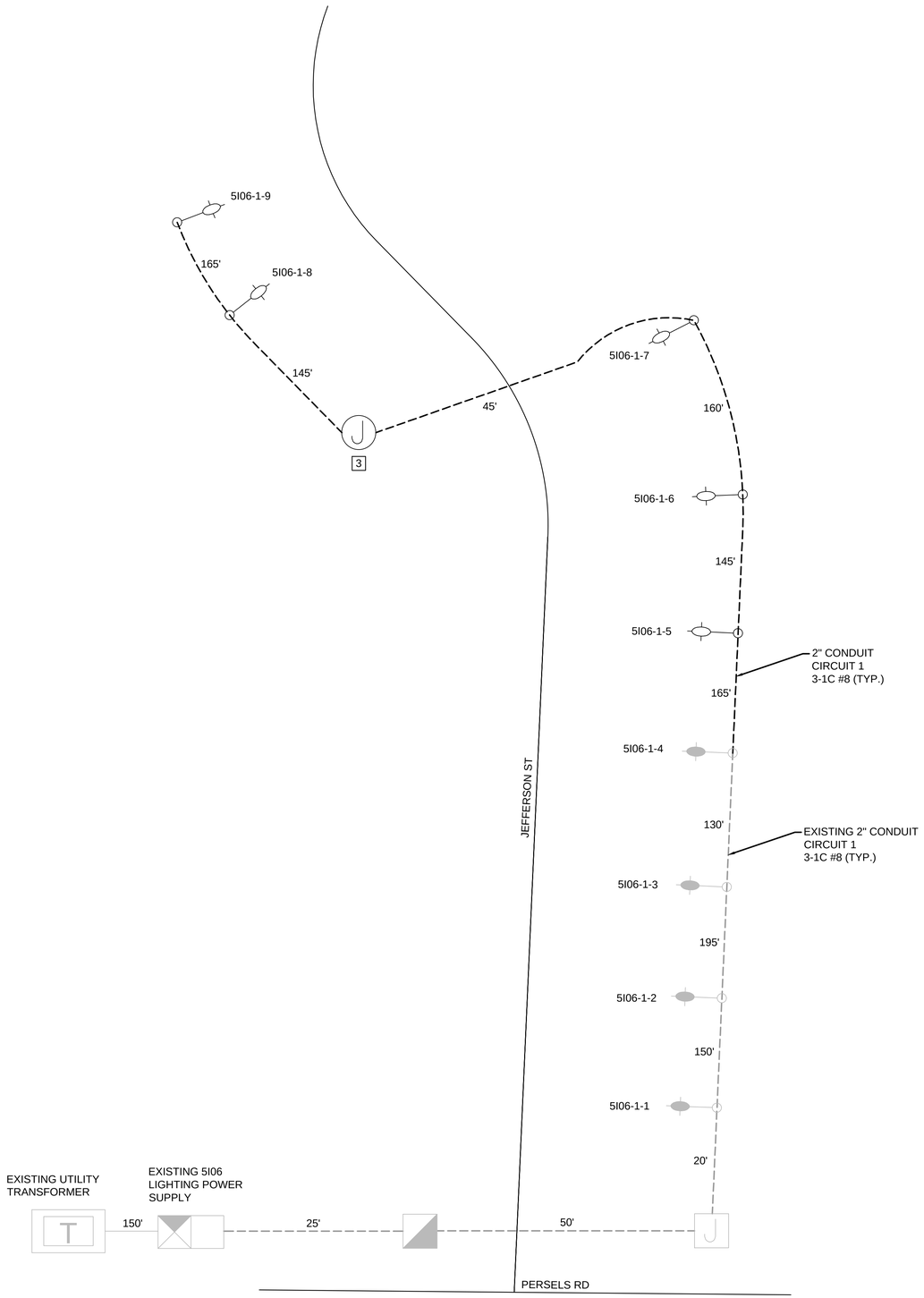
WIRING DIAGRAM

OLDHAM PARKWAY & JEFFERSON STREET STREET LIGHTING
LEE'S SUMMIT, MO, 64086

ORIGINAL ISSUE: 02/28/2025
KHA PROJECT NO. 268132012
SHEET NUMBER 6

CIRCUIT SUMMARY TABLE

CIRCUIT	CONDUCTOR SIZE	CIRCUIT LENGTH	INPUT AMPERAGE	PERCENT VOLTAGE DROP	CIRCUIT ASSIGNMENT AT POWER SUPPLY	CIRCUIT BREAKER TRIP RATING
1	#8	1400'	4.58	2.07%	3,4	15A



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STATE OF MISSOURI
JEFFREY J. WILKE
NUMBER PE-2007032448
PROFESSIONAL ENGINEER

WIRING DIAGRAM

OLDHAM PARKWAY & JEFFERSON STREET STREET LIGHTING

LEE'S SUMMIT, MO, 64086

ORIGINAL ISSUE: 02/28/2025

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STREET LIGHT POLE, BRACKET ARM, AND BREAK–AWAY BASE

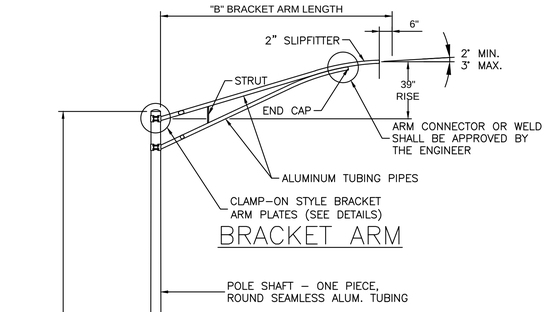
POLE TYPE	MOUNTING HEIGHT (A)	BRACKET ARMS		POLE SHAFT				SHOE BASE	ANCHOR BOLTS		
		LENGTH (B)		BASE O.D.	TOP O.D.	MIN. WALL THICKNESS	SHAFT LENGTH (C)	BOLT CIRCLE (BC)	DIAMETER	LENGTH	HOOK
		ARM 1	ARM 2								
P12	12'	–	–	6"	3"	0.156"	12'–0"	9.5"	0.75" 10NC	25"	3"
P14	14'	–	–	6"	3"	0.156"	14'–0"	9.5"	0.75" 10NC	25"	3"
P30S	30'	6' or 10'	–	8"	6"	0.188"	26'–6" ±2"	11.0"	1.00" 8NC	36"	4"
P30D	30'	6' or 10'	6' or 10'	8"	6"	0.219"	26'–6" ±2"	11.0"	1.00" 8NC	36"	4"
P40S	40'	6', 10' or 15'	–	8"	6"	0.219"	36'–6" ±2"	11.5"	1.00" 8NC	36"	4"
P40D	40'	6', 10' or 15'	6', 10' or 15'	10"	6"	0.219"	36'–6" ±2"	14.5"	1.00" 8NC	48"	4"

NOTES:

1. ALL POLES, ARMS, AND MISCELLANEOUS EQUIPMENT SHALL CONFORM TO THESE DETAILS AND AS SPECIFIED BY THE LATEST CITY STANDARD SPECIFICATIONS.
2. POLE SHAFT SHALL HAVE A SATIN GROUND FINISH.
3. ALL HARDWARE (BOLTS, NUTS, WASHERS BUT NOT INCLUDING ANCHOR BOLTS) NOT OTHERWISE SPECIFICALLY DESIGNATED IN THE SPECIFICATIONS OR DETAILS SHALL BE 300–SERIES STAINLESS STEEL CONFORMING TO ASTM A193 OR A194.
4. ANCHOR BOLTS SHALL BE USED WITH CONCRETE BASES. ANCHOR BOLTS SHALL BE STEEL WITH 50,000 PSI MINIMUM YIELD; TOP 10" MIN. GALVANIZED; INCLUDING 8 NUTS AND 8 FLAT WASHERS GALVANIZED TO ASTM A153 STANDARDS. GALVANIZED HEX HEAD BOLTS (SEE POLE FOUNDATION SHEET) SHALL BE USED WITH SCREW–IN ANCHOR BASES. 4 BOLTS, 4 NUTS AND 8 FLAT WASHERS TO PROVIDED WITH EACH ANCHOR.
5. ALL WELDING IS TO BE DONE WITH 4043 WELD WIRE. ALL ARMS AND SHAFTS ARE TO BE HEAT–TREATED TO T6 TEMPER AFTER WELDING.
6. ANCHOR BOLTS SHALL PROJECT ABOVE THE CONCRETE BASE AS PER MANUFACTURER'S RECOMMENDED PRACTICES, 2½" TO 3".
7. THE ALUMINUM STREET LIGHT POLE ASSEMBLY, INCLUDING ANCHORAGE AND LUMINAIRE, SHALL COMPLY WITH THE LATEST CITY STANDARD SPECIFICATIONS AND THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO) LOAD WIND LOADING.
8. ALL POLES AND ARMS SHALL BE CLEARLY IDENTIFIED BY THE MANUFACTURER'S NAME, ABBREVIATION, OR SYMBOL ENGRAVED ON THE SHAFT, SHOE BASE, HAND HOLE, OR OTHER MEANS SUCH AS TO BE READILY VISIBLE AFTER INSTALLATION.

MATERIAL DATA

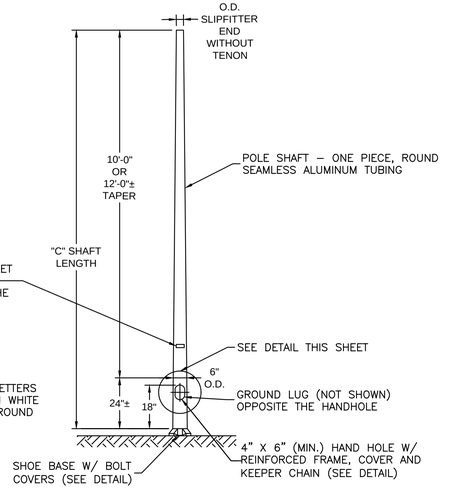
COMPONENT	ALUMINUM ALLOY DESIGNATION	SPECIFICATION
SHOE BASE	356–T6, CAST	ASTM B26 OR B108
BREAKAWAY BASE	356–T6, CAST	ASTM B108
BOLT COVERS	356 OR 360, CAST	ASTM B26 OR B108
POLE SHAFT	6063–T6, EXTRUDED	ASTM B221 OR B241
GROUND LUG	6061–T5 OR 6063–T6, PLATE	ASTM B221
REINFORCED HANDHOLE FRAME	356–T6 OR 6061–T6	ASTM B26, B108 OR B221
HANDHOLE COVER	6063–T6	ASTM B209, B221 OR B241
BRACKET ARM & TUBING PIPES	6063–T6	ASTM B221, B241 OR B249
BRACKET ARM MOUNTING PLATES	6061–T6 OR 6063–T6 EXTRUDED	ASTM B221
BRACKET ARM STRUT & ARM CONNECTOR	AU6061–T6 OR 6063–T6 EXTRUDED	ASTM B221, B241 OR B249
POLE CAP	356, CAST	ASTM B26 OR B108
ANCHOR BOLTS	N/A	GALVANIZED PER ASTM A153



BRACKET ARM

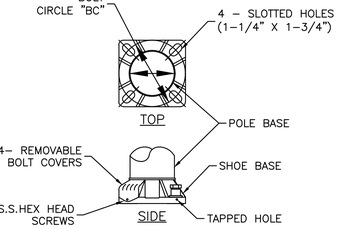
POLE ELEVATION

(SEE TABLES FOR DIMENSIONS AND MATERIALS)

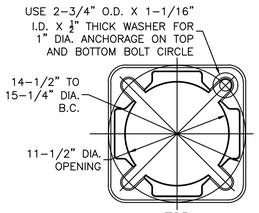


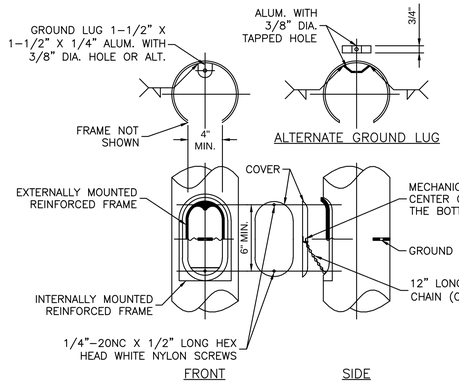
PEDESTAL POLE ELEVATION

(SEE TABLES FOR DIMENSIONS AND MATERIALS)

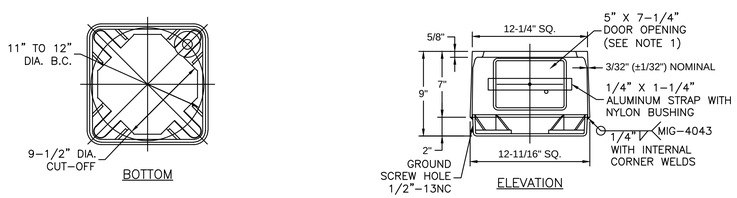


SHOE BASE





HAND HOLE



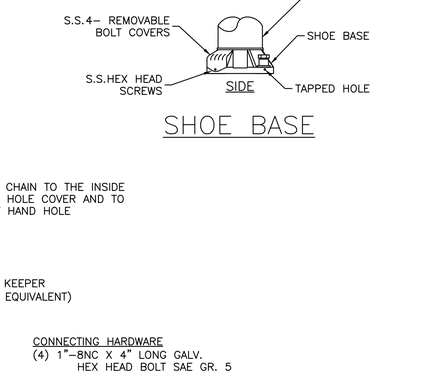
15" BREAK–AWAY BASE

NOTES:

1. DOOR SHALL BE ON THE SAME SIDE OF THE POLE AS THE HAND HOLE.
2. BASE CONFORMS TO BREAKAWAY CRITERIA OF AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS (1994).

11" BREAK–AWAY BASE

BRACKET ARM MOUNTING



BREAK–AWAY BASE ANCHORAGE

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	REVISIONS		

LEE'S SUMMIT MISSOURI

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

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STATE OF MISSOURI
JEFFREY J. WILKE
NUMBER PE-2007032448
PROFESSIONAL ENGINEER

Project: STREET LIGHT STANDARD DETAILS

Sheet Name: POLE DETAILS

Drawn By: KHA
Checked By:
Date: 02/2025

1 OF 5

SL-1

POLE DETAILS

OLDHAM PARKWAY & JEFFERSON STREET STREET LIGHTING
LEE'S SUMMIT, MO, 64086

ORIGINAL ISSUE: 02/28/2025

KHA PROJECT NO. 268132012

SHEET NUMBER 8

Drawing name: K:\KNC_TPTO\268132012 - Oldham Village Signals\CAD\Plansheets\12 - STREET LIGHT POLE DETAILS.dwg Layout1 Feb 28, 2025 7:00am by Ciara.Hoggatt
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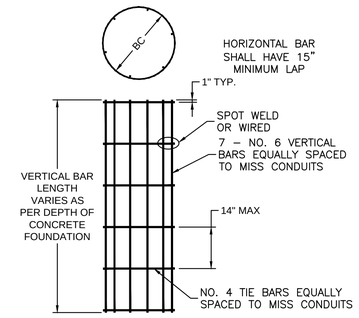
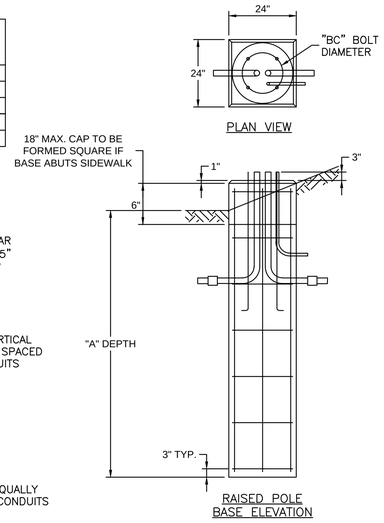
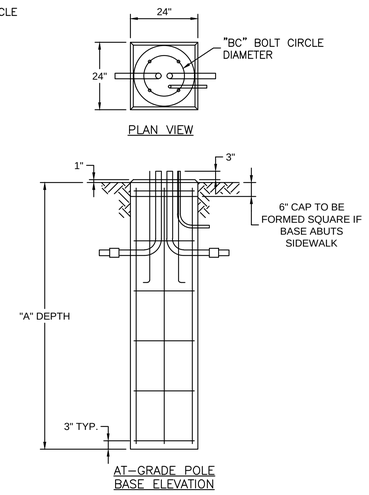
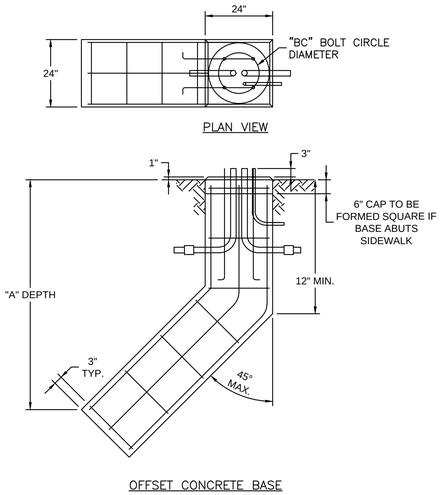
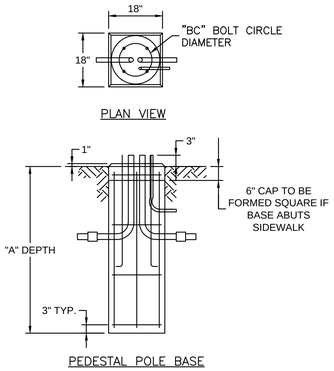
POLE TYPE	BRACKET ARM	DEPTH (A)	BOLT CIRCLE (BC)
P12	–––	48"	9.5"
P14	–––	48"	9.5"
P30S OR P30D	SINGLE OR DUAL	72"	11.0"
P40S	SINGLE	94"	11.5"
P40D	DUAL	94"	14.5"







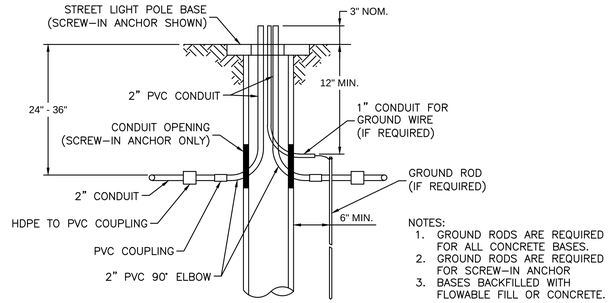




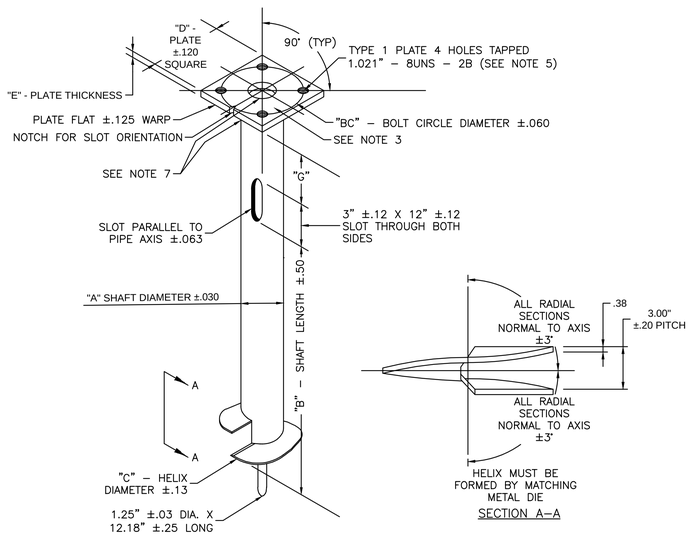
REBAR CAGE DETAIL

CONCRETE BASE DETAILS

BASE TYPE	POLE TYPE	MINIMUM TORQUE RATING (LBS. FT.)	MAXIMUM TORQUE RATING (LBS. FT.)	SHAFT DIA. (A)	SHAFT LENGTH (B)	HELIX DIA. (C)	PLATE SIZE (D)	PLATE THICKNESS (E)	BOLT CIRCLE (BC)	SLOT LOCATION (G)
B12	P12	2,000	15,000	6"	48"	12"	10"	0.75"	9.5"	12"
B14	P14	2,000	15,000	6"	48"	12"	10"	0.75"	9.5"	12"
B30	P30S & P30D	2,000	15,000	6"	60"	12"	12"	1.0"	11.0"	18"
B40S	P40S	2,000	20,000	8"	60"	14"	12"	1.0"	11.5"	18"
B40D	P40D	2,000	20,000	8"	60"	14"	15"	1.25"	14.5"	18"



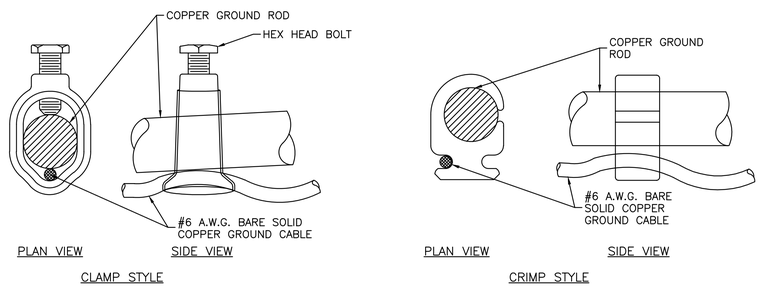
CONDUIT ENTRANCE AND GROUNDING



SCREW–IN ANCHOR BASE DETAILS

NOTES:

1. FINISH: HOT DIP GALVANIZE PER ASTM–A153 (LATEST REVISION).
2. BASEPLATE TO BE PERPENDICULAR TO SHAFT AXIS (±1°) AND HOLE AND CONCENTRIC (±.188 I.D. FIM) TO SHAFT AXIS.
3. ALL BASES SHALL BE IDENTIFIED BY THE MANUFACTURER'S INITIALS AND THE ANCHOR TYPE (1 OR 2) PERMANENTLY STAMPED INTO THE TOP PLATE WITH 1/2" LETTERS., THE JULIAN DATE OF MANUFACTURE SHALL BE PERMANENTLY STAMPED IN 1/4" NUMERALS.
4. PILOT POINT AND SHAFT AXES TO BE CONCENTRIC (±.125 FIM) AND IN LINE (±2°).
5. TAP 1" HOLES ON THE SPECIFIED BOLT CIRCLE PERPENDICULAR TO THE BASEPLATE. CLEAN AND CHASE THE THREADS AFTER HOT–DIP GALVANIZING SO THAT A BOLT MAY BE INSTALLED.
6. PREHEAT (ROOM TEMPERATURE 70°F), TUMBLEBLAST, HANDGRIND, AND CLEAN BASEPLATE, HELIX, AND CORE ON ALL WELD AREAS.
7. FLAME CUT IRREGULARITIES PERMISSIBLE:
   (1) VALLEYS NOT TO EXCEED 3/32 IN. BELOW NOMINAL SURFACE LEVEL.
   (2) PEAKS OR POSITIVE IRREGULARITIES NOT TO EXCEED 1/32 IN. ABOVE NOMINAL SURFACE LEVEL OR INTERSECTIONS OF NOMINAL SURFACES.
8. MANUFACTURER TO HAVE IN EFFECT INDUSTRY RECOGNIZED WRITTEN QUALITY CONTROL FOR ALL MATERIALS AND MANUFACTURING PROCESSES.
9. ALL MATERIAL IS TO BE NEW, UNUSED AND MILL TRACEABLE MEETING THE FOLLOWING SPECIFICATIONS:
   BASEPLATE: ASTM A36–(LATEST REVISION) HOT ROLLED STEEL PLATE (CONFORM TO AASHTO TECHNICAL BUL. #270).
   SHAFT: STEEL PIPE PILES, SEEMLESS OR STRAIGHT WELDED, GRADE 2 PER ASTM A252. ALTERNATE MATERIAL: PIPE TYPE E OR S, GRADE B PER ASTM A53.
   HELIX: ASTM A635–(LATEST REVISION) HOT ROLLED STEEL PLATE
   PILOT POINT: ASTM A575–(LATEST REVISION) HOT ROLLED STEEL
   BOLT: ASTM A325 OR GRADE 5 SAE J429 – 1" DIAMETER HOT DIP GALVANIZED HEX HEAD BOLT. BOLT SHALL INCLUDE ONE EACH LOCK AND FLAT WASHER.
10. THE DESIGN AND PERFORMANCE INTEGRITY OF THE FOUNDATION SHALL BE VERIFIED BY FULL–SCALE TESTS BY QUALIFIED ENGINEERS INDEPENDENT OF THE MANUFACTURER. CERTIFIED TEST REPORTS SHALL BE PROVIDED UPON REQUEST.
11. FLAME CUT NOTCH OR PROJECTION WILL BE ON THE BASE PLATE TO INDICATE SLOT ORIENTATION.



GROUND ROD CONNECTION DETAILS

No.	DESCRIPTION	DATE	BY

REVISIONS

LEE'S SUMMIT MISSOURI

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

Kimley»Horn

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SCALE: AS NOTED | DESIGNED BY: JJW | DRAWN BY: LCJ | CHECKED BY: JJW

JEFFREY J. WILKE, NUMBER PE-2007032448, STATE OF MISSOURI, PROFESSIONAL ENGINEER

Project: STREET LIGHT STANDARD DETAILS

Sheet Name: POLE BASE DETAILS

Drawn By: KHA

Checked By:

Date: 02/2025

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POLE BASE DETAILS

OLDHAM PARKWAY & JEFFERSON STREET STREET LIGHTING
LEE'S SUMMIT, MO, 64086

ORIGINAL ISSUE: 02/28/2025

KHA PROJECT NO. 268132012

SHEET NUMBER 9

Drawing name: K:\KNC_TPTO\268132012 - Oldham Village Signal\CAD\Plansheets\13 - STREET LIGHT POLE BASE DETAILS.dwg Layout: Layout1 Feb 28, 2025 7:01am by: Clara.Hoggatt
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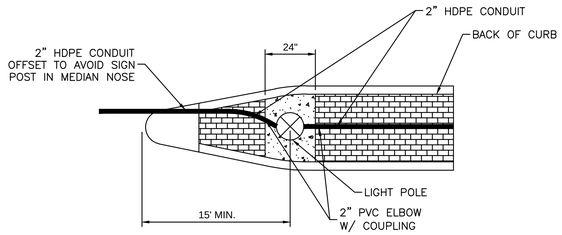
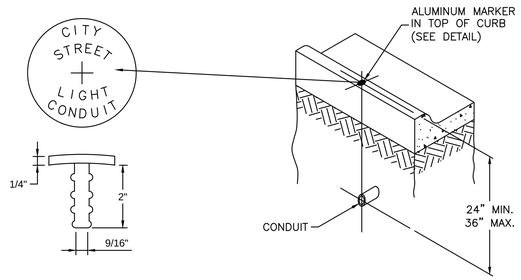


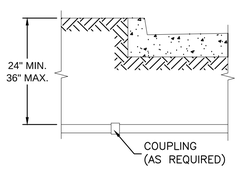
STREET LIGHT POLE IN MEDIAN



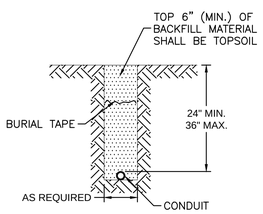
CONDUIT MARKING DETAIL

NOTES:

1. AN ALUMINUM MARKER SHALL BE PLACED IN THE TOP OF THE CURB DIRECTLY OVER THE CONDUIT.
2. MARKERS SHALL BE INSTALLED BY DRILLING THE CURB AND EXPOXYING THE MARKER IN PLACE. IF INSTALLED IN A SIDEWALK OR CURB RAMP, THE TOP OF THE MARKER SHALL BE FLUSH WITH THE CONCRETE SURFACE.
3. NO DIRECT PAYMENT SHALL BE MADE FOR CONDUIT MARKERS; THEY ARE SUBSIDIARY TO THE INSTALLATION OF CONDUIT.



BORED CONDUIT

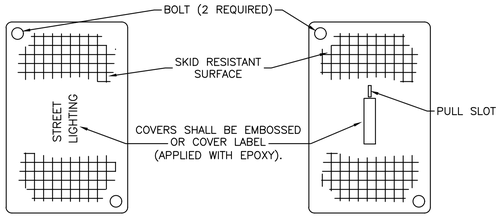


TRENCHED OR
PLOWED CONDUIT

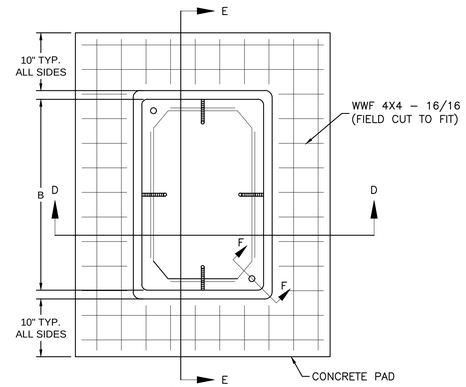
CONDUIT LOCATIONS

NOTES:

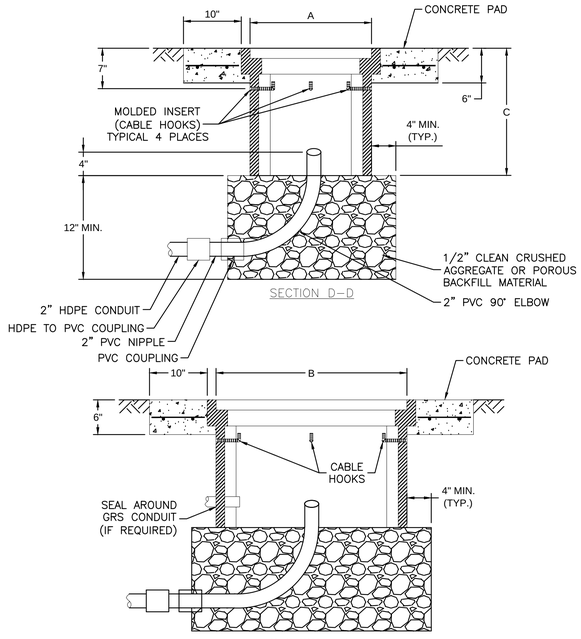
1. BACKFILL UNDER PAVED SURFACES SHALL BE FLOWABLE FILL.
2. THE CONDUIT SHALL NOT BE COVERED UNLESS INSPECTED AND APPROVED BY THE CITY ENGINEER, SO AS TO ENSURE PROPER DEPTH, CORRECT CONDUIT MATERIAL, AND PROPER CONDUIT END TREATMENT.



BOX COVER



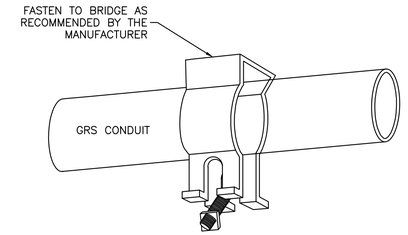
PLAN VIEW



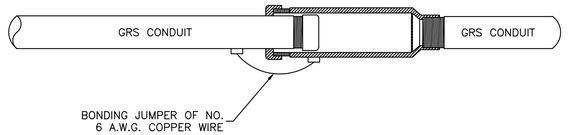
SECTION D–D

SECTION E–E

PULL OR JUNCTION BOX DETAILS



CONDUIT HANGER



EXPANSION
FITTING

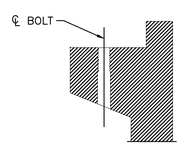
GRS CONDUIT DETAILS

NOTES:

1. ALL CONDUITS INSTALLED ABOVE GROUND SHALL BE GRS.
2. CONDUIT ATTACHED TO BRIDGES SHALL HAVE EXPANSION FITTINGS INSTALLED AT EACH END OF THE BRIDGE AND AT EACH EXPANSION JOINT ON THE BRIDGE.
3. ALL GRS CONDUITS SHALL BE ELECTRICALLY BONDED BY A GROUNDING BUSHING AND GROUND WIRE AS DETAILED.
4. INSTALL THE CONDUIT AND CONNECTOR ASSEMBLY TO PERMIT A 1/2" MINIMUM LONGITUDINAL TRAVEL IN EITHER DIRECTION.

NUMBER OF ENTERING/EXITING CONDUITS	BOX TYPE	MINIMUM BOX DIMENSIONS		
		A	B	C
1 – 2	TYPE 1 JUNCTION BOX	12"	12"	12"
3 – 4	TYPE 2 JUNCTION BOX	12"	18"	12"
> 4	CLASS 1 PULL BOX	17"	30"	22"

ALL DIMENSIONS SHOWN ARE NOMINAL



SECTION F–F

NOTES:

1. LIFT OPENING REQUIRED ON ALL COVERS.
2. PREFORMED BOX WALLS MAY BE EITHER FLARED OR VERTICAL. THE BOTTOM OF BOXES SHALL BE OPEN TO BELOW.
3. IF AN EXTENSION IS USED WITH A PREFORMED BOX, THE LIP OF THE EXTENSION MAY BE INTERIOR OR EXTERIOR. THE EXTENSION SHALL BE COMPATIBLE AND FROM THE SAME MANUFACTURER.
4. CABLE HOOKS ARE TO BE INCLUDED WITH CLASS 1 PULL BOXES ONLY.
5. A CLASS 1 PULL BOX SHALL BE INSTALLED ADJACENT TO EACH 4–CIRCUIT POWER SUPPLY.

No.	DESCRIPTION	DATE	BY

REVISIONS

LEE'S SUMMIT
MISSOURI

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

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SCALE: AS NOTED
DESIGNED BY: JJW
DRAWN BY: LCJ
CHECKED BY: JJW

JEFFREY J. WILKE
NUMBER
PE-2007032448
STATE OF MISSOURI
PROFESSIONAL ENGINEER

Project: STREET LIGHT STANDARD DETAILS

Sheet Name: BOX AND CONDUIT DETAILS

Drawn By: KHA
Checked By:
Date: 02/2025

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BOX AND CONDUIT DETAILS

OLDHAM PARKWAY & JEFFERSON STREET STREET LIGHTING
LEE'S SUMMIT, MO, 64086

ORIGINAL ISSUE: 02/28/2025

KHA PROJECT NO. 268132012

SHEET NUMBER 10

Drawing name: K:\KNC_TPTO\268132012 - Oldham Village Signal\CAD\Plansheets\14 - STREET LIGHT SERVICE BOX AND CONDUIT DETAILS.dwg Layout: Feb 28, 2025 7:02am by Clara.Hoggatt
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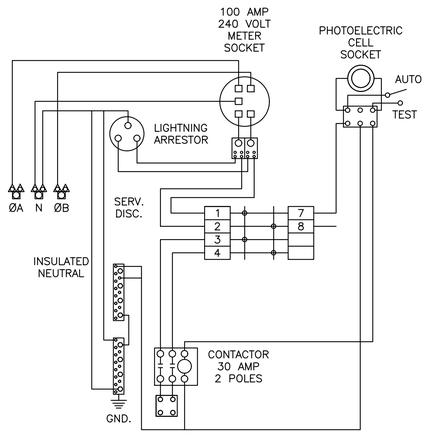
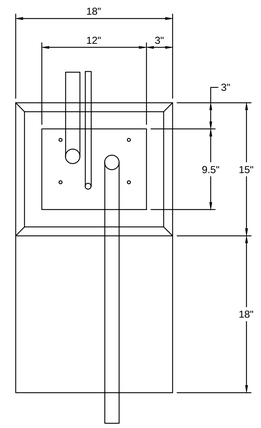
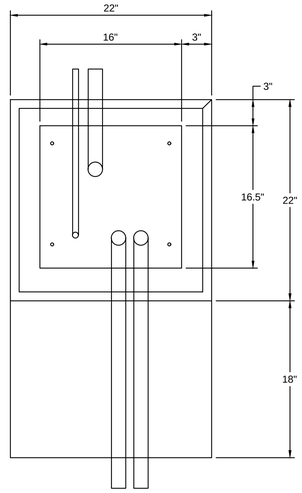


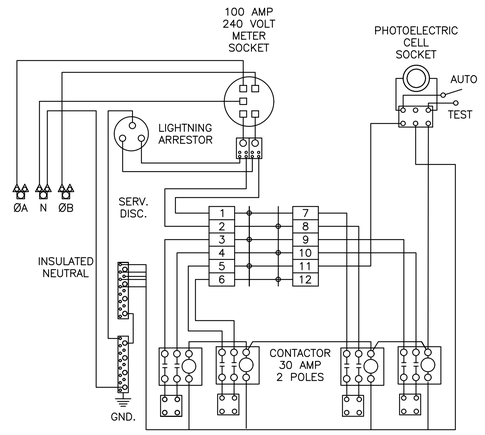
WIRING SCHEMATIC



PLAN VIEW



PLAN VIEW



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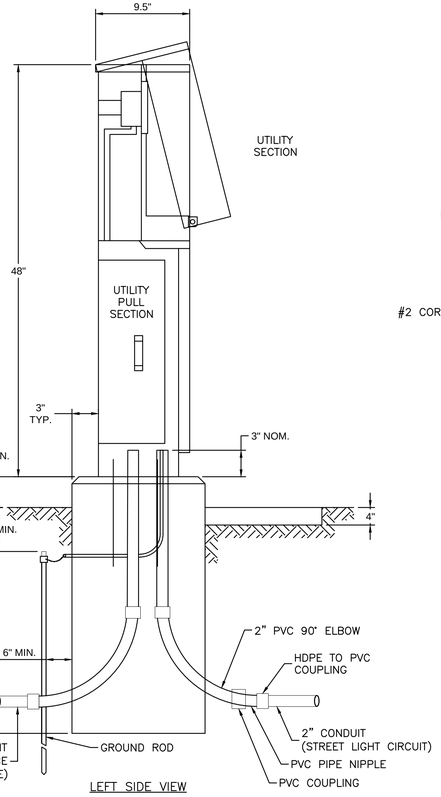
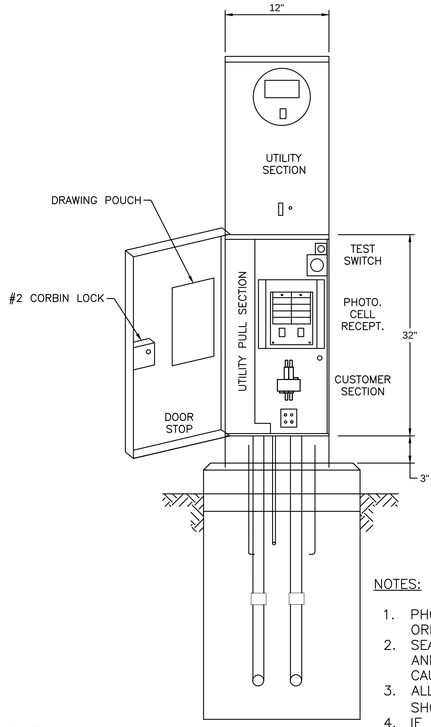
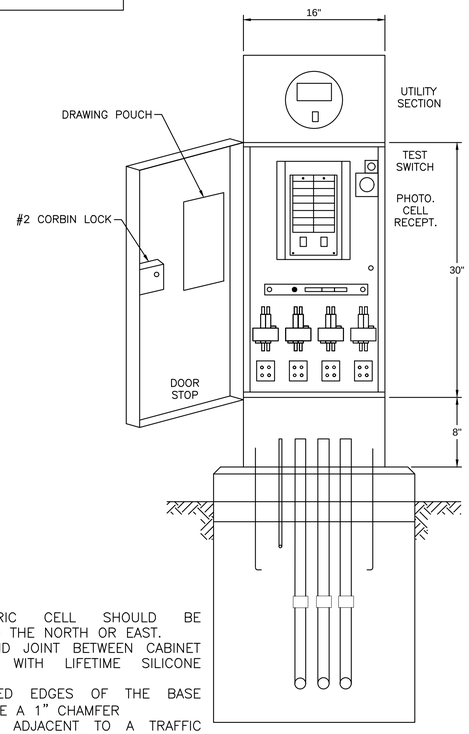


LEFT SIDE VIEW



FRONT VIEW

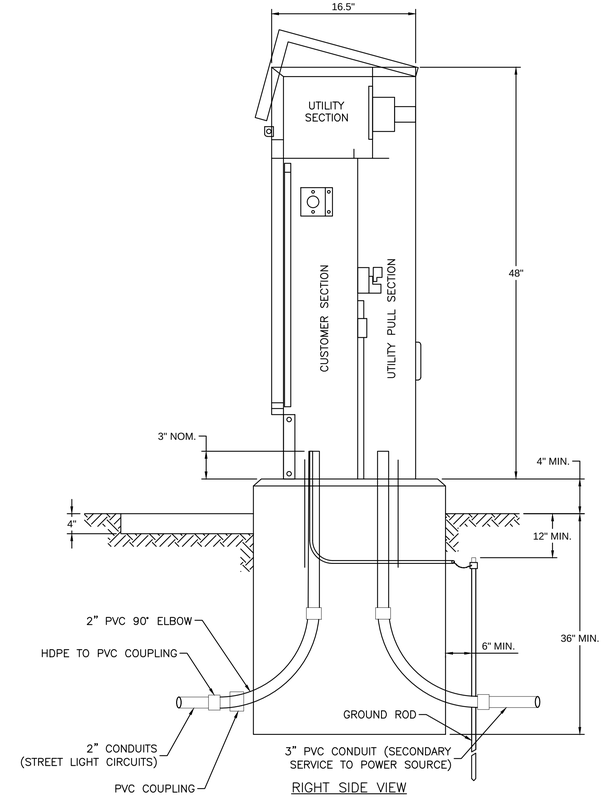
FUSED CONTRACTORS
ARE NOT PERMITTED



FRONT VIEW

NOTES:

1. PHOTOELECTRIC CELL SHOULD BE ORIENTED TO THE NORTH OR EAST.
2. SEAL AROUND JOINT BETWEEN CABINET AND BASE WITH LIFETIME SILICONE CAULK.
3. ALL EXPOSED EDGES OF THE BASE SHOULD HAVE A 1" CHAMFER
4. IF BASE IS ADJACENT TO A TRAFFIC SIGNAL CONTROLLER, RAISED PORTION OF BASE (ABOVE FINISHED GRADE) SHOULD BE CONSTRUCTED TO THE SAME HEIGHT AS THE SIGNAL CONTROLLER BASE.
5. THE STREET ADDRESS WITH THE POWER SUPPLY NUMBER BELOW IT SHOULD BE LABELED ON THE UPPER PORTION OF THE CABINET FACING THE STREET. THE CITY WILL SUPPLY STICKERS FOR THE CONTRACTOR TO INSTALL.



RIGHT SIDE VIEW

1 – CIRCUIT POWER SUPPLY

4 – CIRCUIT POWER SUPPLY

No.	DESCRIPTION	DATE	BY
	REVISIONS		

LEE'S SUMMIT
MISSOURI

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

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SCALE: AS NOTED
DESIGNED BY: JJW
DRAWN BY: LCJ
CHECKED BY: JJW

STATE OF MISSOURI
JEFFREY J. WILKE
NUMBER
PE-2007032448
PROFESSIONAL ENGINEER

Project: STREET LIGHT STANDARD DETAILS

Sheet Name: POWER SUPPLY DETAILS

Drawn By: KHA
Checked By:
Date: 02/2025

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POWER SUPPLY DETAILS

OLDHAM PARKWAY & JEFFERSON STREET STREET LIGHTING
LEE'S SUMMIT, MO, 64086

ORIGINAL ISSUE: 02/28/2025

KHA PROJECT NO. 268132012

SHEET NUMBER

11

Drawing name: K:\KNC_TPTO\268132012 - Oldham Village Signal\CAD\Plansheets\15 - STREET LIGHT POWER SUPPLY DETAILS.dwg Layout: Feb 28, 2025 7:04am by Clara.Hoppert
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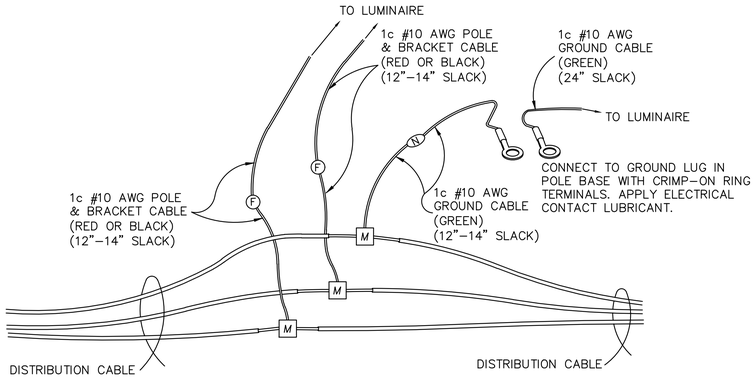
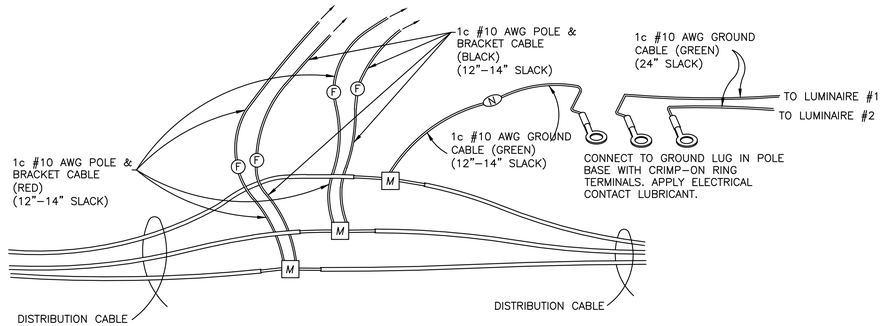


BREAK AWAY ELECTRICAL CONNECTOR SCHEMATIC (SINGLE LUMINAIRE)

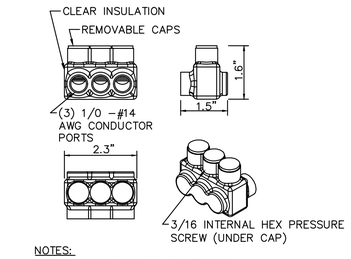


BREAK AWAY ELECTRICAL CONNECTOR SCHEMATIC (DUAL LUMINAIRES)

LEGEND

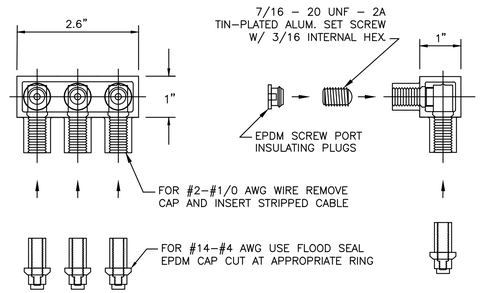
- M — MULTI–TAP ELECTRICAL CONNECTOR
- F — BREAK AWAY FUSED ELECTRICAL CONNECTOR WITH 8 AMP FUSE
- N — BREAK AWAY NON–FUSED ELECTRICAL CONNECTOR WITH GROUND "SLUG"

NOTES:
1. WHEN LOOKING AT THE HAND HOLE OPENING ON THE POLE, RED CABLES SHALL BE RUN TO THE LUMINAIRE ON THE RIGHT–HAND SIDE OF THE POLE, AND BLACK CABLES SHALL BE RUN TO THE LUMINAIRE ON THE LEFT–HAND SIDE OF THE POLE.
2. THE SPECIFIED CABLE SLACK SHALL BE PROVIDED ON EACH SIDE OF THE FUSED AND NON–FUSED CONNECTORS.
3. ADDITIONAL SLACK SHALL BE PROVIDED FOR THE DISTRIBUTION CABLE SUCH THAT WHEN EXTENDED UPWARD, THE TOP OF THE MULTI–TAP CONNECTORS ARE NO LESS THAN 1" AND NO MORE THAN 3" ABOVE THE TOP OF THE HAND HOLE OPENING.

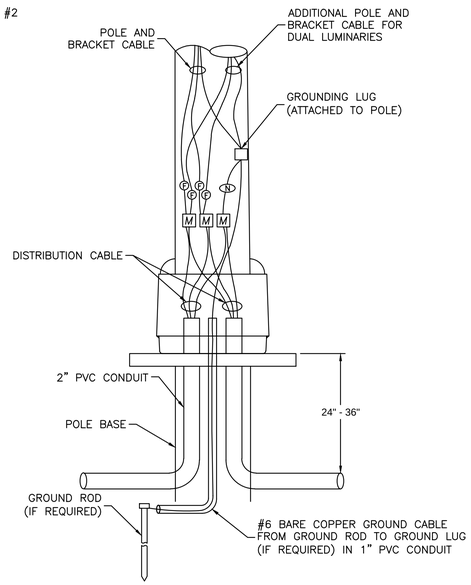


NOTES:
1. CONNECTOR PRE–FILLED W/ OXIDE INHIBITOR.
2. CONNECTOR MANUFACTURED FROM 6061–T6511 ALUM. ALLOY.

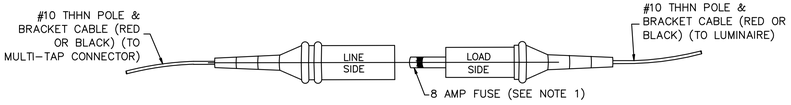
MULTI–TAP CONNECTOR



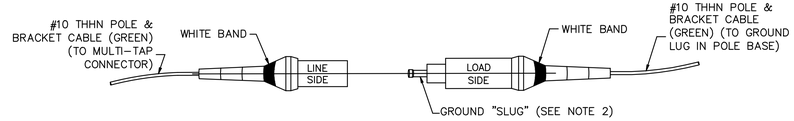
SUBMERSIBLE MULTI–TAP CONNECTOR



POLE WIRING DETAILS

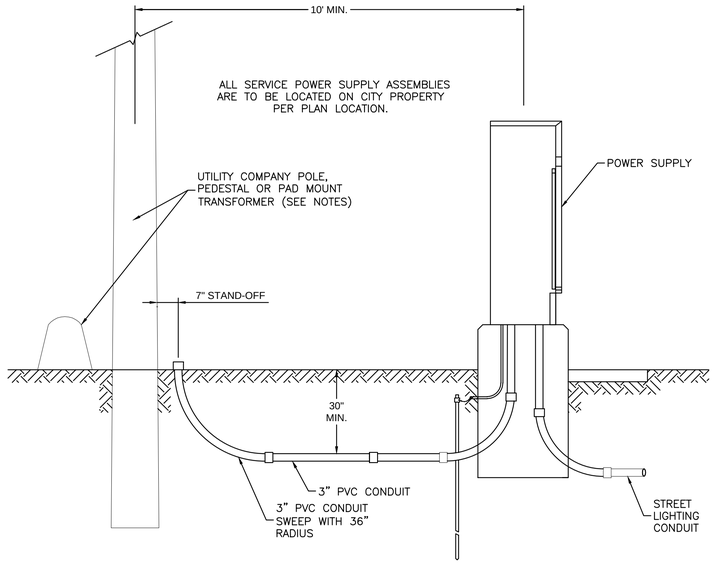


BREAK AWAY FUSED ELECTRICAL CONNECTOR



BREAK AWAY NON FUSED ELECTRICAL CONNECTOR

NOTES:
1. FUSE REMAINS IN "LOAD SIDE" AFTER BREAK AWAY.
2. GROUND "SLUG" REMAINS IN "LINE SIDE" AFTER BREAK AWAY.



SECONDARY SERVICE CONNECTION DETAILS

NOTES:
1. CONTRACTOR SHALL INSTALL A CONDUIT STUB 24" TO 6" ABOVE GROUND AT UTILITY POLES. CONDUIT SHALL BE STUBBED TO THE SIDE OF THE POLE THAT WILL ALLOW A DIRECT RUN UP THE POLE TO THE TRANSFORMER WITHOUT CROSSING OTHER UTILITY LINES OR CABLES. THE END OF THE CONDUIT SHALL BE CAPPED.
2. CONTRACTOR SHALL INSTALL CONDUIT IN A TRENCH TO WITHIN 24" OF PEDESTALS OR PAD MOUNT TRANSFORMERS AND LEAVE A 36" X 36" X 36" ACCESS HOLE IN THE GROUND. CONTRACTOR SHALL KEEP OPEN TRENCH COVERED AND PROMPTLY BACKFILL ACCESS HOLE WHEN SERVICE IS COMPLETED.

No.	DATE	DESCRIPTION

REVISIONS

LEE'S SUMMIT MISSOURI

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

Project: STREET LIGHT STANDARD DETAILS

Sheet Name: ELECTRICAL DETAILS

Drawn By: KHA
Checked By:
Date: 02/2025

5 OF 5

SL-5

Kimley»Horn

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JEFFREY J. WILKE NUMBER PE-2007032448 STATE OF MISSOURI PROFESSIONAL ENGINEER

ELECTRICAL DETAILS

OLDHAM PARKWAY & JEFFERSON STREET STREET LIGHTING
LEE'S SUMMIT, MO, 64086

ORIGINAL ISSUE: 02/28/2025

KHA PROJECT NO. 268132012

SHEET NUMBER 12

Drawing name: K:\KNC_TPTO\268132012 - Oldham Village Signal\CAD\Plansheets\sl - STREET LIGHT ELECTRICAL DETAILS.dwg Layout1 Feb 28, 2025 7:05am by Ciara.Hogaert
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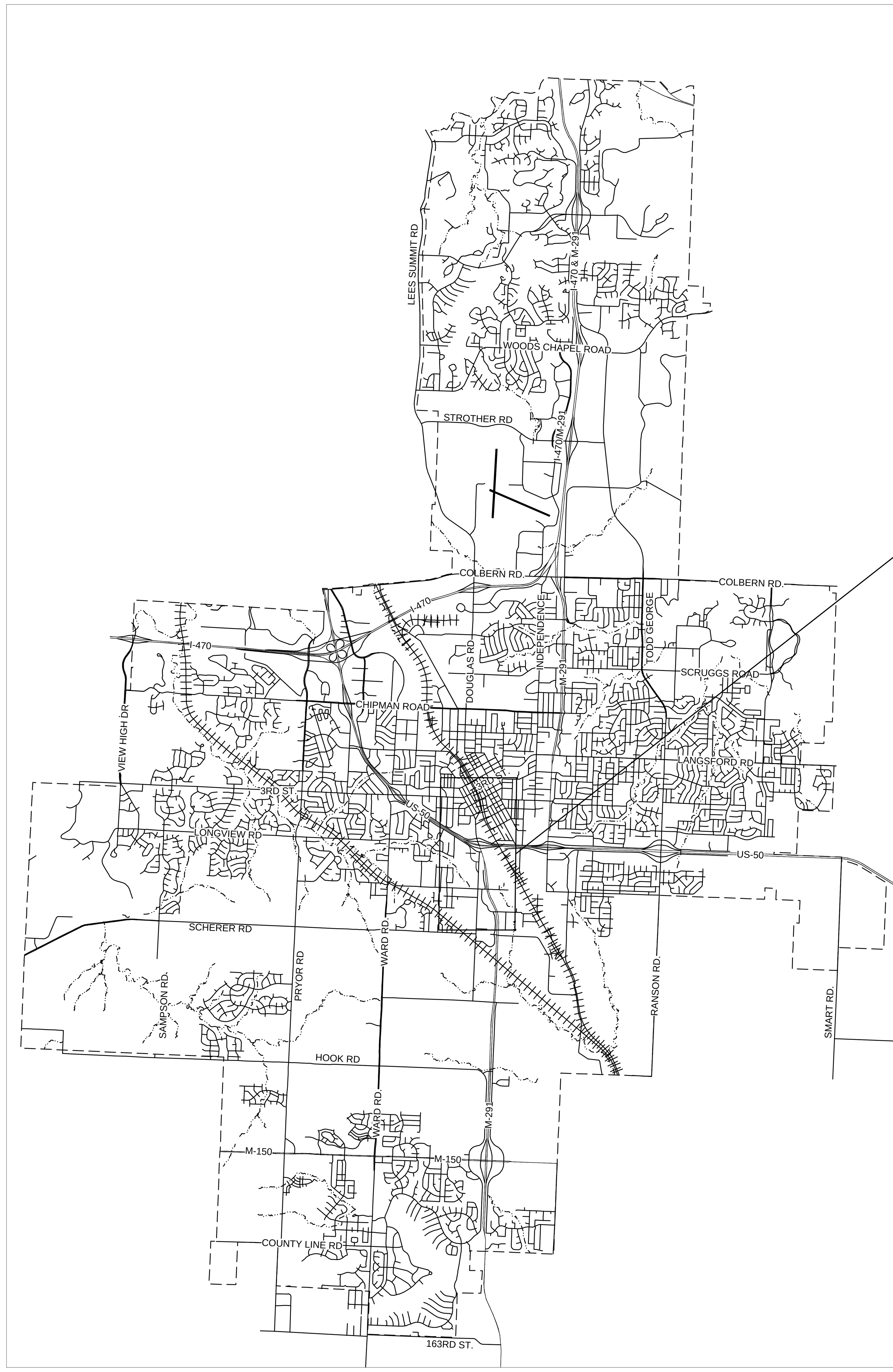
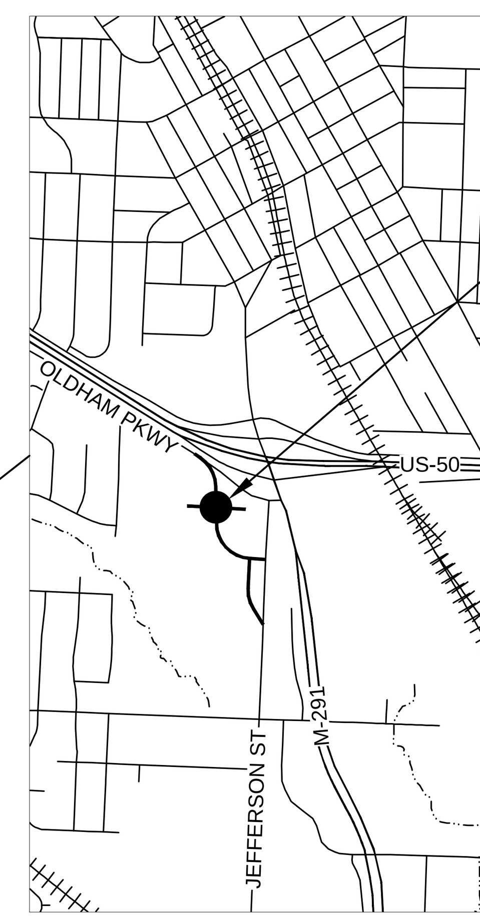
CITY OF LEE'S SUMMIT, MISSOURI
PUBLIC WORKS DEPARTMENT
TRAFFIC SIGNAL INSTALLATION
OLDHAM PARKWAY AND FIELD HOUSE DRIVE



LOCATION MAP

(NOT TO SCALE)

NORTH



PROJECT LOCATION

Sheet List Table	
SHEET NUMBER	SHEET TITLE
1	COVER SHEET
2	GENERAL NOTES
3	TRAFFIC SIGNAL PLAN
4	TRAFFIC SIGNAL INTERCONNECT PLAN
5	WIRING & PHASING DIAGRAM
6	SUMMARY OF SIGNAL QUANTITIES
7	SIGNAL HEAD MOUNTING DETAILS
8	CONTROLLER CABINET & BASE DETAILS
9	POST BASE DETAILS
10	TUBULAR STEEL POST DETAILS
11	TUBULAR STEEL LOADING REQUIREMENTS
12	PULL BOX DETAILS
13	CONDUIT & DETECTION DETAILS
14	POWER SUPPLY ASSEMBLY
15	POWER SUPPLY ASSEMBLY 120 V
16	TRAFFIC CONTROL DETAILS

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314-237-2125

CITY WATER UTILITIES
816-969-1940

CITY STORMWATER - PW OPERATIONS
816-969-1870

CITY FIBER - ITS DEPARTMENT
BRYAN HALL, 816-969-1234

NOTE:

KNOWN UNDERGROUND UTILITIES IN THE VICINITY OF THE WORK ARE SHOWN ON THESE PLANS, ALTHOUGH OTHERS MAY EXIST. THE LOCATIONS SHOWN ARE BELIEVED TO BE REASONABLY CORRECT, BUT DO NOT PURPORT TO BE ABSOLUTELY SO. BEFORE STARTING WORK, THE CONTRACTOR SHALL GIVE NOTICE TO AND OBTAIN INFORMATION FROM EACH OWNER AND OPERATOR OF EXISTING UNDERGROUND FACILITIES IN ACCORDANCE WITH THE MISSOURI UNDERGROUND FACILITY SAFETY AND DAMAGE PREVENTION STATUTE (RSMO CHAPTER 319.015 - 319.050).

MISSOURI ONE CALL SYSTEM, INC. 1-800-344-7483 STOP - CALL BEFORE YOU DIG!

No.	REVISIONS	DATE	BY

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DESIGNED BY: JJW
DRAWN BY: CNH
CHECKED BY: JJW

STATE OF MISSOURI ★ JEFFREY J. WILKE ★ NUMBER PE-2007032448 PROFESSIONAL ENGINEER

COVER SHEET

OLDHAM VILLAGE
TRAFFIC SIGNAL
LEE'S SUMMIT, MO, 64086

ORIGINAL ISSUE: 01/15/2025
KHA PROJECT NO. 268132012
SHEET NUMBER
1

Drawing name: K:\KNC_TPTO\268132012 - Oldham Village Signal\CAD\Plansheets\1 - COVER SHEET.dwg COVER SHEET Feb 21, 2025 1:57pm by: Ciara.Hogsett
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GENERAL NOTES:

1. THE CONTRACTOR SHALL HAVE ONE (1) SIGNED COPY OF THE PLANS (APPROVED BY THE CITY OF LEE'S SUMMIT) AND ONE (1) COPY OF THE APPROPRIATE DESIGN AND CONSTRUCTION STANDARDS AND SPECIFICATION AT THE JOB SITE AT ALL TIMES.

2. CONSTRUCTION OF THE IMPROVEMENTS SHOWN OR IMPLIED BY THIS SET OF DRAWINGS SHALL NOT BE INITIATED OR ANY PART THEREOF UNDERTAKEN UNTIL THE DIRECTOR OF PUBLIC WORKS OR HIS AGENT IS NOTIFIED OF SUCH INTENT, AND ALL REQUIRED AND PROPERLY EXECUTED BONDS AND CONTRACT AGREEMENTS ARE RECEIVED AND APPROVED BY THE CITY.

3. THE CONSTRUCTION COVERED BY THESE PLANS SHALL CONFORM TO ALL APPLICABLE STANDARDS AND SPECIFICATIONS OF THE PUBLIC WORKS DEPARTMENT OF THE CITY OF LEE'S SUMMIT, MISSOURI, IN CURRENT USE. SPECIFICALLY, BUT NOT EXCLUSIVE TO:

   TRAFFIC SIGNAL SPECIFICATION: SECTION 2900
   TRAFFIC SIGNAL STANDARD DRAWINGS: DRAWINGS TS-1 THROUGH TS-9

4. ALL WORKMANSHIP AND MATERIALS SHALL BE SUBJECT TO THE INSPECTION AND APPROVAL OF THE PUBLIC WORKS DEPARTMENT OF THE CITY OF LEE'S SUMMIT, MISSOURI.

5. RIGHT-OF-WAY LIMITS AND EASEMENTS SHOULD BE CROSS CHECKED BY THE CONTRACTOR AND APPROVED BY THE FIELD INSPECTOR BEFORE UNDERTAKING ANY EXCAVATIONS TO THE SITE.

6. THE CONTRACTOR SHALL STAKE THE LOCATION OF ALL POLES, PULL BOXES, AND CONTROLLER CABINET BASE, THEN PROVIDE THE CITY ONE WEEK NOTICE PRIOR TO THE START OF CONSTRUCTION, AND SUBSEQUENT CONSTRUCTION ACTIVITIES, FOR INSPECTION AND APPROVAL. THE CONTRACTOR SHALL PROVIDE A WORK SCHEDULE, CONTACT NAMES, AND PHONE NUMBERS. NOTIFICATION AND COORDINATION SHALL BE WITH THE CITY'S TRAFFIC ENGINEER.

7. ALL LOCATIONS INDICATED IN DRAWINGS, INCLUDING CONDUIT RUNS ARE SUBJECT TO ADJUSTMENT TO CLEAR OBSTRUCTIONS AND TO MEET SITE CONDITIONS, IF ANY, BY THE CITY.

8. EXISTENCE AND LOCATION OF ANY UNDERGROUND OR OVERHEAD FACILITIES SHOWN ON THESE DRAWINGS OR REFERENCE TO ANY SOIL CONDITIONS, IF MADE, ARE APPROXIMATE ONLY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL SITE CONDITIONS AND LOCATE ALL UTILITIES, INCLUDING DEPTH, BEFORE STARTING CONSTRUCTION SO THAT ANY ADJUSTMENTS TO DESIGN CAN BE MADE PRIOR TO POLE ORDERING OR FABRICATION. IN ADDITION, THE CONTRACTOR SHALL AVOID DISRUPTION OF SERVICES PROVIDED BY THE UTILITIES AND SHALL ENSURE THAT PROPER CLEARANCES (OVERHEAD AND UNDERGROUND) ARE MAINTAINED FOR THE DURATION OF CONSTRUCTION. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES CAUSED BY FAILURE TO EXACTLY LOCATE AND PRESERVE ALL UTILITIES.

9. THE CONTRACTOR SHALL COORDINATE WITH THE CITY TRAFFIC ENGINEER FOR ANY NECESSARY CHANGES TO THE TRAFFIC SIGNALS RESULTING FROM EXISTING UTILITIES OR OTHER CONSTRUCTION ISSUES.

10. ANY EQUIPMENT DAMAGED DURING CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

11. SIGNAL EQUIPMENT SHALL NOT FORM AN OBSTRUCTION TO THE MOVEMENT OF PEDESTRIAN AND WHEELCHAIR TRAFFIC AND SHALL BE ADA ACCESSIBLE. WHERE SIDEWALKS ARE PRESENT, A MINIMUM CLEAR WIDTH OF 48 INCHES SHALL BE AVAILABLE FOR PEDESTRIAN AND WHEELCHAIR MOVEMENT. PULL BOXES SHALL NOT BE INSTALLED WITHIN SIDEWALK RAMPS.

12. CONDUITS TO BE PLACED OUTSIDE OF PAVED AREAS SHALL BE TRENCHED IN PLACE. ALL COMPACTION AND BACKFILL SHALL MEET CITY OF LEE'S SUMMIT REQUIREMENTS. AT THE OPTION OF THE CONTRACTOR, CONDUITS MAY BE BORED OUTSIDE PAVED AREAS. CONDUITS TO BE PLACED WITHIN THE LIMITS OF PAVEMENT SHALL BE BORED UNLESS OTHERWISE AUTHORIZED BY THE CITY TRAFFIC ENGINEER.

13. THE CONTRACTOR SHALL COORDINATE ALL ELECTRICAL POWER REQUIREMENTS AND CONNECTION ACTIVITIES WITH THE ELECTRIC UTILITY COMPANY, INCLUDING LOCATION OF THE METER, CIRCUITRY AND CONNECTION REQUIREMENTS, AND POWERING UP THE COMPLETE SYSTEM. THE CONTRACTOR IS REQUIRED TO REQUEST METER INSTALLATION AND PAY ALL ELECTRIC BILLS AND SERVICE FEES.

14. ALL DISTURBED SURFACES SHALL BE MADE GOOD TO MATCH EXISTING AT THE CONTRACTOR'S EXPENSE.

15. CONTRACTOR SHALL MAINTAIN VEHICLE AND PEDESTRIAN TRAFFIC AT ALL TIMES.

16. FINAL ACCEPTANCE SHALL BE DEFINED AS FINAL WRITTEN APPROVAL AND ACCEPTANCE BY THE CITY, INCLUDING COMPLETION OR CORRECTION OF ALL PUNCH LIST ITEMS AND THE TRAFFIC SIGNAL IS FULLY OPERATIONAL FOR A TIME PERIOD OF FIFTEEN (15) DAYS, WITHOUT ANY DEFICIENCIES, AS NOTED IN THE SPECIFICATIONS.

PROJECT SPECIFIC NOTES:

1. ANY WORK NOT COVERED BY THESE DRAWINGS OR SPECIFICATIONS SHALL BE SUBJECT TO THE CITY OF LEE'S SUMMIT DESIGN & CONSTRUCTION MANUAL.

2. THE CONTRACTOR SHALL CONTACT THE PUBLIC WORKS OPERATIONS DEPARTMENT (816-969-1870) TO PROGRAM THE SIGNAL CONTROLLER. THE CONTRACTOR SHALL PROVIDE AT LEAST 10 WORKING DAYS NOTICE PRIOR TO INITIATING FLASHING SIGNAL OPERATION.

3. NEW SIDEWALKS AND CURB RAMPS WILL BE INSTALLED BY OTHERS.

4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DISPOSAL OF ALL EQUIPMENT THAT IS NOT SALVAGED.

5. THE TOP 6" OF ALL BACKFILL AREAS SHALL BE TOPSOIL. ALL UNPAVED SURFACES DISTURBED BY CONSTRUCTION SHALL BE SODDED.

6. PAVEMENT MARKINGS AT THE INTERSECTION WILL BE INSTALLED BY OTHERS.

7. INSTALL TRAFFIC SIGNAL CONTROLLER AND POWER SUPPLY ON THE SAME CONCRETE BASE.

8. ALL PEDESTRIAN PUSHBUTTONS SHALL BE INSTALLED ADACENT TO ADA COMPLIANT LEVEL LANDING SURFACES. SEE OLDHAM PARKWAY IMPROVEMENT PLANS FOR SIDEWALK PLANS.

9. MAINTAIN A 10" MAXIMUM REACH FROM A LEVEL LANDING TO THE PEDESTRIAN PUSHBUTTON. MOUNTING EXTENSION BRACKETS SHALL BE USED IF A 10" MAXIMUM REACH CANNOT BE ACHIEVED.

10. SHOP DRAWINGS SHALL BE APPROVED BY THE CITY PRIOR TO INSTALLING SIGNAL EQUIPMENT.

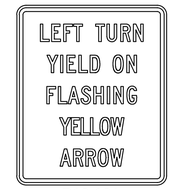
LEGEND

- OPTICALLY LIMITING TRAFFIC SIGNAL HEAD
- TRAFFIC SIGNAL HEAD
- TRAFFIC SIGNAL HEAD WITH BACKPLATE
- PEDESTRIAN SIGNAL HEAD
- STOP LINE
- LANE USE
- WOOD POLE
- MAST ARM POLE
- SIGNAL PEDESTAL POLE
- TRAFFIC CONTROLLER CABINET
- PULL BOX
- SPAN WIRE SIGNAL HEAD
- FIBER OPTIC PULL BOX
- POWER SUPPLY (DISCONNECT)
- SUGGESTED VEHICLE DETECTION ZONE
- INDUCTION LOOP DETECTOR
- PUSH BUTTON DETECTOR
- EMERGENCY VEHICLE DETECTOR (EVD)
- SECONDARY SERVICE POINT
- EXISTING CONDUIT
- PROPOSED CONDUIT
- 71 — SIGNAL FACE NUMBER
- 7 — POST NUMBER
- 71 — DETECTOR NUMBER
- 7 — PULL BOX NUMBER
- PB24 — PUSH BUTTON NUMBER
- COBRA HEAD LUMINAIRE
- VIDEO DETECTION CAMERA

TYPICAL REGULATORY SIGN DETAIL

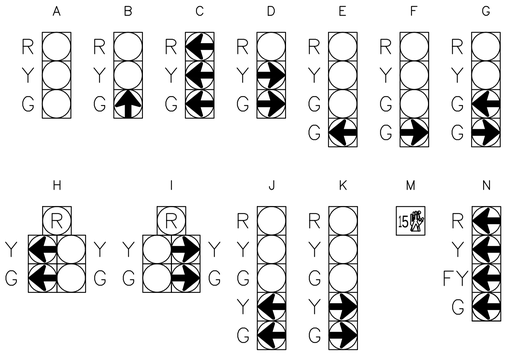
SIGN R10-12
24" X 30"

SIGN R10-3E
9" X 15"



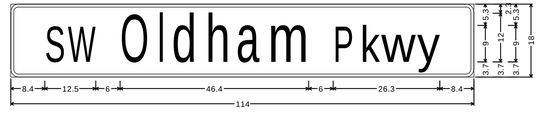
R10-12A
30" X 36"

NOTE:
SIGN R10-3E SHALL BE PROVIDED FOR EACH PUSH BUTTON. ARROWS SHALL BE ORIENTED AS INDICATED IN THE PEDESTRIAN PUSHBUTTON LOCATION DIAGRAM.

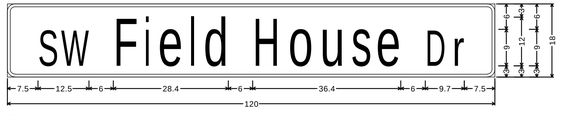


NOTE:
ALL INDICATIONS SHALL BE LED.

STREET NAME SIGN DETAILS



D3-1(A)
1.9" Radius, 0.8" Border, White on Green;
"SW", C 2K 80% spacing; "Oldham", C 2K; "Pkwy", C 2K;



D3-1(B)
1.9" Radius, 0.8" Border, White on Green;
"SW", C 2K 80% spacing; "Field", C 2K; "House", C 2K; "Dr", C 2K;

NOTE:
9" AND 12" SERIES "C", UPPERCASE/LOWERCASE WITH SILVER WHITE, HIGH INTENSITY LETTERS AND ¾" BORDER ON GREEN, HIGH INTENSITY BACKGROUND.

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DESIGNED BY: JJW
DRAWN BY: CNH
CHECKED BY: JJW

STATE OF MISSOURI
JEFFREY J. WIRE
NUMBER
E-2007032448
PROFESSIONAL ENGINEER

GENERAL NOTES

OLDHAM VILLAGE
TRAFFIC SIGNAL
LEE'S SUMMIT, MO, 64086

ORIGINAL ISSUE: 01/15/2025
KHA PROJECT NO. 268132012
SHEET NUMBER 2

Drawing name: K:\KAC_TPTO\268132012 - Oldham Village Signal\CAD\Plansheets\2 - GENERAL NOTES.dwg GENERAL NOTES Feb 21, 2025 1:57pm by Clara.Hogsett
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PROPOSED RIGHT OF WAY

10' U/E

OLDHAM PARKWAY

FIELD HOUSE DRIVE

R10-12

D3-1(A)

D3-1(B)

34' M.A.

38' M.A.

VIDEO-1

EVD-1

VIDEO-2

EVD-2

VIDEO-3

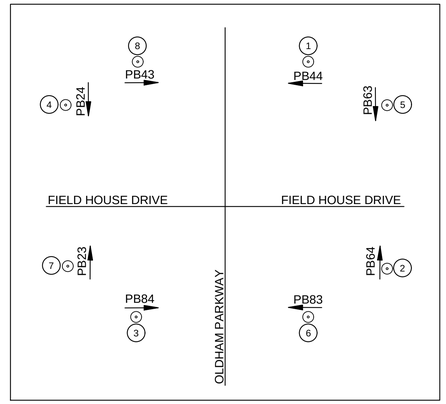
EVD-3

EVERGY TRANSFORMER

13+00

NORTH

GRAPHIC SCALE IN FEET
0 5 10 20



PEDESTRIAN PUSHBUTTON LOCATION DIAGRAM

SIGNAL EQUIPMENT LOCATION			
POLE	BOX	STA.	OFFSET
1		12+54	44.7' LT
2		13+33	68.4' LT
3		13+41	35.5' RT
4		12+63	43.5' RT
5		12+72	67.9' LT
6		13+41	59.5' LT
7		13+32	43.0' RT
8		12+54	34.9' RT
	1	12+63	71.6' LT
	2	13+29	77.5' LT
	3	13+30	50.3' RT
	4	12+68	51.8' RT
CONTROLLER		12+65	83.9' LT

No.	REVISIONS	DATE	BY

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SCALE: AS NOTED
DESIGNED BY: JJW
DRAWN BY: CNH
CHECKED BY: JJW

STATE OF MISSOURI
JEFFREY J. WIRE
NUMBER
E-2007032448
PROFESSIONAL ENGINEER

TRAFFIC SIGNAL PLAN

OLDHAM VILLAGE TRAFFIC SIGNAL
LEE'S SUMMIT, MO, 64086

ORIGINAL ISSUE: 01/15/2025
KHA PROJECT NO. 268132012
SHEET NUMBER 3

Drawing name: K:\KNC_TPTO\268132012 - Oldham Village Signal\CAD\Plansheets\3 - TRAFFIC SIGNAL PLAN.dwg Layout1 Feb 21, 2025 1:57pm by Cora.Hoppett
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INTERCONNECT EQUIPMENT LOCATION		
BOX	STA.	OFFSET
5	12+73	58.8' LT
6	14+70	50.1' LT
7	16+95	50.3' LT
8	19+01	47.9' LT
9	20+96	42.7' LT
10	22+82	42.7' LT
11	24+02	42.7' LT
12	EXISTING	

NOTES:

1. INSTALL 12-CT SM FIBER OPTIC CABLE FROM BOX 5 TO THE EXISTING MoDOT PULL BOX IN THE NORTHEAST CORNER OF THE M-291 AND OLDHAM PARKWAY INTERSECTION. COIL 50 FEET OF SURPLUS FIBER OPTIC CABLE IN THESE TWO BOXES.
2. INSTALL SPLICE ENCLOSURES IN BOX 5 AND IN THE EXISTING MODOT PULL BOX AT THE 291 INTERSECTION. SPLICE THE 12-CT FIBER TO 6-CT GATOR PATCH IN EACH ENCLOSURE. GATOR PATCH SHALL INCLUDE SUFFICIENT CABLE TO EXTEND BETWEEN THE CONTROLLER CABINET AND ADJACENT PULL BOX.
3. CONTACT MODOT AT LEAST 4 WEEKS PRIOR TO FIBER OPTIC INSTALLATION TO COORDINATE INTERCONNECTION.

OLDHAM PARKWAY
FIELD HOUSE DRIVE
JEFFERSON STREET
M-291 HIGHWAY
PROPOSED RIGHT OF WAY
10' U/E
W/M
ST
SS
10+00
11+00
12+00
13+00
14+00
15+00
16+00
17+00
18+00
19+00
20+00
21+00
22+00
23+00
24+00
25+00
25+36
5
6
7
8
9
10
11
12
EXISTING MODOT SIGNAL CONTROLLER
EXISTING TRAFFIC SIGNAL CONDUIT
EXISTING MODOT PULL BOX
NORTH
GRAPHIC SCALE IN FEET
0 25 50 100

BY | DATE | REVISIONS | No.

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STATE OF MISSOURI
JEFFREY J. WICKE
NUMBER PE-2009032448
PROFESSIONAL ENGINEER

TRAFFIC SIGNAL INTERCONNECT PLAN

OLDHAM VILLAGE TRAFFIC SIGNAL
LEE'S SUMMIT, MO, 64086

ORIGINAL ISSUE: 01/15/2025
KHA PROJECT NO. 268132012
SHEET NUMBER 4

Drawing name: K:\KHC_TPTO\268132012 - Oldham Village Signal\CAD\Plansheets\5 - TRAFFIC SIGNAL INTERCONNECT PLAN.dwg Layout: Feb 21, 2025 - 1:57pm by: Clara.Hoggard
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LEGEND

EVD - EMERGENCY VEHICLE DETECTOR

GND - GROUND

PED - PEDESTRIAN SIGNAL HEAD

PB - PUSHBUTTON

SIG - VEHICLE SIGNAL HEAD

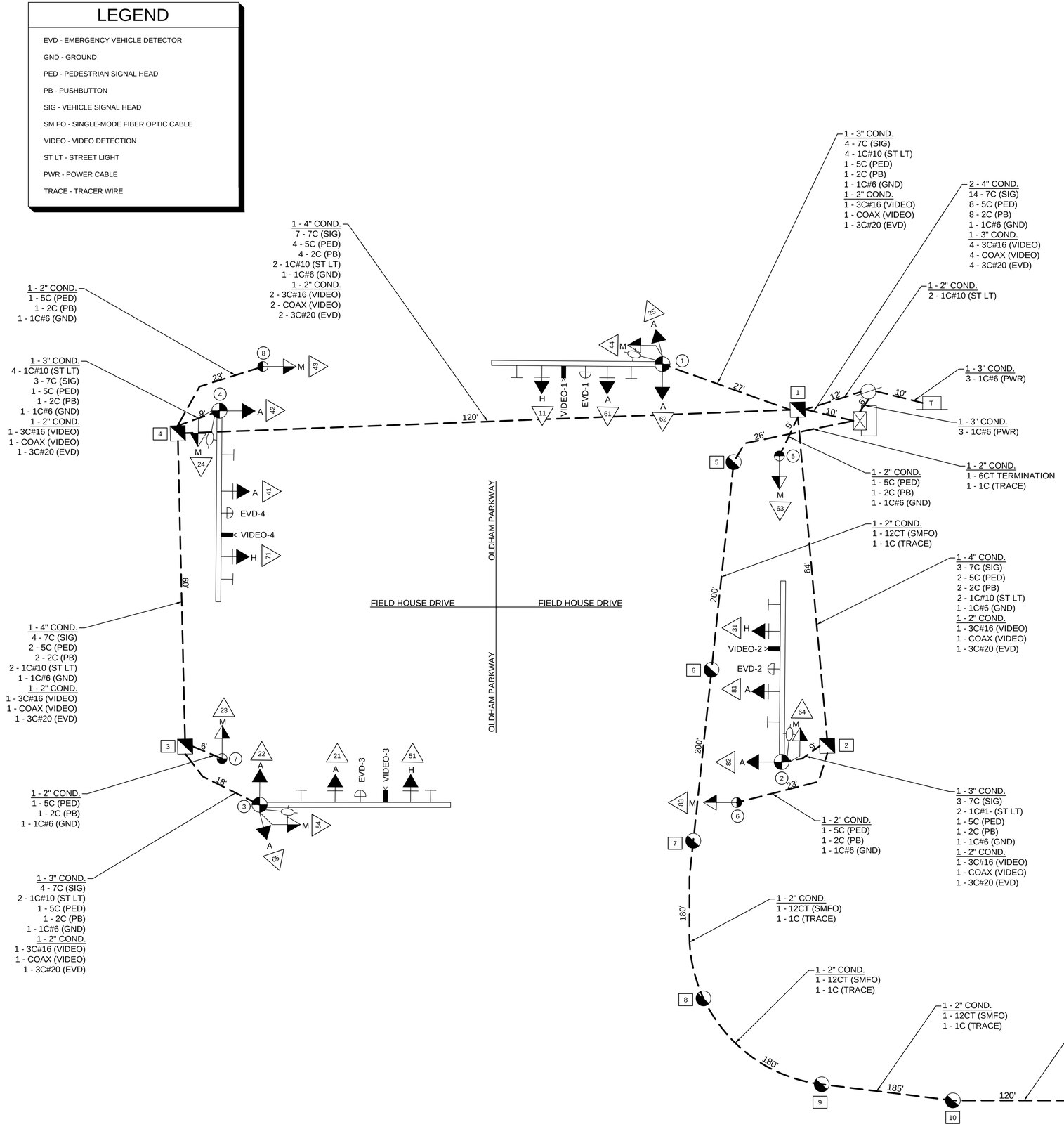
SM FO - SINGLE-MODE FIBER OPTIC CABLE

VIDEO - VIDEO DETECTION

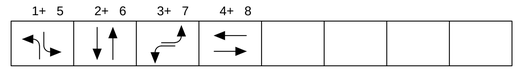
ST LT - STREET LIGHT

PWR - POWER CABLE

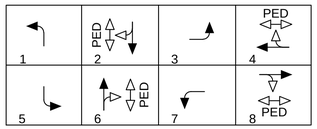
TRACE - TRACER WIRE



SEQUENCE



PHASE DIAGRAM



OUTPUT FILE ASSIGNMENTS

FR1	1	2	PED 2	4	PED 4	3	MONITOR
FR2							
FR3	5	6	PED 6	8	PED 8	7	
FR4							

1	2	3	4	5	6	7	8	9	10	11	12	13	14
			VIDEO DETECTION								PED 2	PED 4	FLH
											PED 6	PED 8	STOP TIME

FLASHING OPERATIONS

EMERGENCY	SCHEDULED
FY- 's	FY- 's
FR-ALL 's	FR-ALL 's

POWER SUPPLY

LOCATION	POWER SUPPLY TYPE	CIRCUIT BREAKER TRIP RATINGS		
		SERVICE DISCONNECT (2-POLE)	TRAFFIC SIGNAL (1-POLE)	LIGHTING (2-POLE)
NE CORNER	1-CIRCUIT	50 AMP	15 AMP	15 AMP

WIRING AND PHASING GENERAL NOTES:

1. THE OUTBOARD SIGNAL HEAD (FURTHEST ON THE MAST ARM FROM THE POLE) FOR EACH PHASE SHALL EACH BE SERVED BY ONE 7C#14 CABLE EXTENDING FROM THE HEAD BACK TO THE CONTROLLER. EACH OF THE REMAINING SAME PHASE VEHICLE SIGNAL HEADS LOCATED ON THE MAST ARM SHALL BE CONNECTED TO LIKE PHASE SIGNAL HEADS VIA A 7C#14 CABLE CONNECTED WITHIN THE SIGNAL HEAD TERMINAL BOX. A MAXIMUM OF THREE VEHICLE HEADS MAY BE JOINED TOGETHER, ANY ADDITIONAL SIGNAL HEADS WOULD REQUIRE A SEPARATE CABLE EXTENDING FROM THE HEAD BACK TO THE CONTROLLER.
2. NO CABLE SPLICES ARE ALLOWED, INCLUDING AT THE BASE OF THE POLE AND INSIDE THE PULL BOXES, EXCEPT FOR STREET LIGHTING CABLES.
3. GROUND RODS SHALL BE INSTALLED ADJACENT TO EACH CONCRETE BASE. ALL GROUND RODS SHALL BE TIED TOGETHER USING 1C#6 AWG BARE SOLID COPPER WIRE TO BOND THE SYSTEM.
4. STREET LIGHT CABLE SHALL BE SPLICED IN POLE BASES USING MULTI-TAP CONNECTORS AND FUSE HOLDERS. SEE STREET LIGHTING STANDARDS.

Drawing name: K:\KC_TPTO\268132012 - Oldham Village Signal\CAD\Plansheets\5 - WIRING & PHASING DIAGRAM.dwg WIRING & PHASING DIAGRAM Feb 21, 2025 1:58pm by Ciara.Hoggatt
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STATE OF MISSOURI
JEFFREY J. WICKE
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WIRING & PHASING DIAGRAM

OLDHAM VILLAGE
TRAFFIC SIGNAL
LEE'S SUMMIT, MO, 64086

ORIGINAL ISSUE: 01/15/2025

KHA PROJECT NO. 268132012

SHEET NUMBER

5

POLES

POLE NO.	PEDESTAL POLE HEIGHT (FEET)			MAST ARM LENGTH (FEET)			INCLUDED ANGLE	SIGNAL HEAD SPACING*				LIGHTING				REMARKS
								A	B	C	D	MOUNTING HEIGHT	12,500 LUMEN LED LUMINAIRES	BRACKET ARM LENGTH		
	4	8	15	34	36	38		E	F	G	H			10'	15'	
1				1				11'	13'			30'	1		1	
2					1			14'	12'			30'	1		1	
3						1		15'	15'			30'	1		1	
4						1		16'	14'			30'	1		1	
5		1														
6		1														
7		1														
8		1														
TOTALS		4		1	1	2							4		4	

*NOTE:
SIGNAL HEAD SPACING (FEET) MAY BE ADJUSTED TO
SITE CONDITIONS AS APPROVED BY THE PROJECT INSPECTOR.

CONTROLLER AND EQUIPMENT

	TOTALS
CABINET AND ACCESSORIES: NEMA TYPE P TS1 CABINET FIBER OPTIC READY	1
CONTROLLER: TYPE 3608 M 60 EAGLE EPAC COMPLETE PER PLANS, INCLUDING SOFTWARE, NTCIP REV 4.57	1
EMERGENCY VEHICLE DETECTION (EVD) SYSTEM (COMPLETE): GTT	1
VIDEO DETECTION SYSTEM (COMPLETE)	1
SINGLE-METER POWER SUPPLY (UTILITY ENCLOSURE PEDESTAL)	1
GROUND RODS	9
PUSHBUTTON DETECTORS	8

INTERCONNECT EQUIPMENT

	TOTALS
FIBER OPTIC DISTRIBUTION UNIT:	1
FIBER OPTIC DATA LINK SWITCH: TRANSITION SWITCH WITH SEPARATE POWER SUPPLY	1
FIBER OPTIC SPLICE ENCLOSURE	2

CABLE

FROM	TO	GROUND	POWER/LIGHTING				CONTROL TYPE 20-1			EMERGENCY VEHICLE DETECTION CABLE	VIDEO DETECTION		REMARKS
		#6	2C-10	3C-4	3C-6	3C-10	2C-14	5C-14	7C-14	M-138	3C#14	COAX	
⊠	①						60'	61'	199'	84'	89'	89'	
⊠	②						112'	113'	295'	139'	143'	143'	
⊠	③						243'	244'	575'	272'	277'	277'	
⊠	④						168'	169'	412'	203'	208'	208'	
⊠	⑤						42'	43'					
⊠	⑥						126'	127'					
⊠	⑦						231'	232'					
⊠	⑧						182'	183'					
XFMR	⌀				30'								
⌀	⊠				18'								
⌀	1												
1	②		85			50							
1	①		33			50							
①	④		168			50							
④	③		99			50							
SYSTEM		378'											
SUBTOTAL (FEET)		378'	385'		48'	200'	1,164'	1,172'	1,481'	698'	717'	717'	
BID TOTAL (FEET)		400'	450'		100'	200'	1,200'	1,200'	1,500'	750'	800'	800'	

SIGNS

SIGN	LEGEND	NO.	S.F.	TOTAL S.F.
R10-12	LEFT TURN YIELD ON GREEN	4	7.5	30
D3-1(A)	OLDHAM PARKWAY	2	14.25	28.5
D3-1(B)	FIELD HOUSE DRIVE	2	15	30
TOTAL		8		88.5

NOTE:
THE TRAFFIC SIGNAL SYSTEM SHALL BE COMPLETE AND THE CONTRACTOR SHALL FURNISH AND INSTALL ALL EQUIPMENT AND MATERIALS NECESSARY FOR THE SATISFACTORY OPERATION OF ELECTRICAL APPARATUS AND FOR COMPLETE OPERATION OF THE TRAFFIC SIGNAL SYSTEM WHETHER SPECIFICALLY MENTIONED OR NOT.

SIGNAL CONDUIT

FROM	TO	3" PVC	2" HDPE	3" HDPE	4" HDPE
XFMR	⌀			10'	
⌀	⊠			6'	
⌀	1		12'		
⊠	1			10'	20'
1	①		27'	27'	
1	⑤		9'		
1	2		64'		64'
2	②		9'	9'	
2	⑥		23'		
1	4		120'		120'
4	④		9'	9'	
4	⑧		23'		
4	3		60'		60'
3	③		18'	18'	
3	⑦		6'		
SUBTOTAL (FEET)			380'	90'	264'
BID TOTAL (FEET)			400'	100'	300'

SIGNAL HEADS

NO. POLE	NO. FACE	HEAD TYPE	OPT. LIMITED	LOUVERS	BACKPLATE	INDICATIONS 12" LED'S R	Y	G	R←	Y←	G←	G↑	Y→	G→	WALK	FLASH DON'T WALK	W/DW	COUNTDOWN INDICATIONS	VISORS TYPE TUN.	CUT AWAY	SECTIONS MOUNTING 1 P	S	M	2 P	S	M	3 P	S	M	4 P	S	M	5 P	S	M	6 P	M
1	44	M																1																		
	25	A				1	1	1																			1									
	62	A				1	1	1																			1									
	61	A			1	1	1	1																				1								
	11	H			1	1	1	1		1	1																							1		
2	64	M																1																		
	82	A				1	1	1																			1									
	81	A			1	1	1	1																				1								
	31	H			1	1	1	1		1	1																							1		
3	84	M																1																		
	65	A				1	1	1																			1									
	22	A				1	1	1																			1									
	21	A			1	1	1	1																				1								
	51	H			1	1	1	1		1	1																							1		
4	24	M																1																		
	42	A				1	1	1																			1									
	41	A			1	1	1	1																				1								
	71	H			1	1	1	1		1	1																							1		
5	63	M																1																		
6	83	M																1																		
7	23	M																1																		
8	43	M																1																		
TOTALS					8	14	14	14		4	4							8						6			4						4			

P - POLE MOUNTED SIGNAL HEAD
M - MAST ARM MOUNTED SIGNAL HEAD
S - SPAN WIRE MOUNTED SIGNAL HEAD

BASES AND PULL BOXES

NO. POLE	NO. PULL BOX	BASES B10	B13	C	EV	POWER SUPPLY	CONC. (C.Y.)	PULL BOXES CLASS 1	CLASS 2	CLASS 3	FIBER OPTIC
1		1									
2			1								
3			1								
4			1								
5				1							
6				1							
7				1							
8				1							
9				1							
	1									1	
	2								1		
	3								1		
	4									1	
	5										1
	6										1
	7										1
	8										1
	9										1
	10										1
	11										1
CONTR.*					1						
POWER*						1					
TOTALS		1	3	5	1	1			2	2	7

*INSTALL CONTROLLER CABINET AND POWER SUPPLY CABINET ON THE SAME BASE

FIBER OPTIC INTERCONNECT CONDUIT & CABLE

FROM	TO	2" CONDUIT HDPE (ORANGE)	2" CONDUIT GRS	12-COUNT FIBER OPTIC CABLE (12 SM)	#14 STRANDED COPPER TRACER WIRE *	PULL STRING *	6-COUNT FIBER OPTIC GATOR PATCH TERMINATION
⊠	5	26'			26'	26'	36'
5	6	200'		260'	200'	200'	
6	7	200'		210'	200'	200'	
7	8	180'		190'	180'	180'	
8	9	180'		190'	180'	180'	
9	10	185'		195'	185'	185'	
10	11	120'		130'	120'	120'	
11	12	260'		320'	260'	260'	40'
12	⊠	EXISTING			30'		
SUBTOTAL (FEET)		1,351		1,531'	1,381	1,351	76'
BID TOTAL (FEET)		1,400		1,600'	1,400	1,400	80'

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NO.	DATE	BY

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STATE OF MISSOURI
JEFFREY J. WIRT
NOTARY PUBLIC
NOTARY ID 20032448

SUMMARY OF SIGNAL QUANTITIES

OLDHAM VILLAGE TRAFFIC SIGNAL
LEE'S SUMMIT, MO, 64086

ORIGINAL ISSUE: 01/15/2025
KHA PROJECT NO. 268132012
SHEET NUMBER 6

Drawing name: K:\KNC_TPT\0268132012 - Oldham Village Signals\CAD\Plansheets\7 - SUMMARY OF SIGNAL QUANTITIES.dwg SUMMARY OF SIGNAL QUANTITIES Feb 21, 2025 1:59pm by Ciara Hogarth
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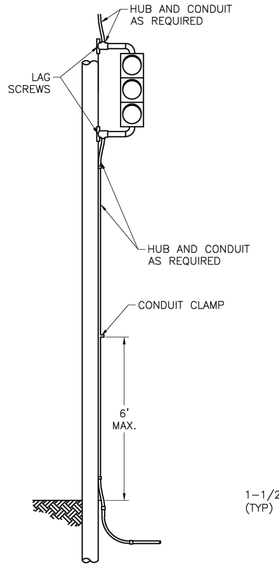
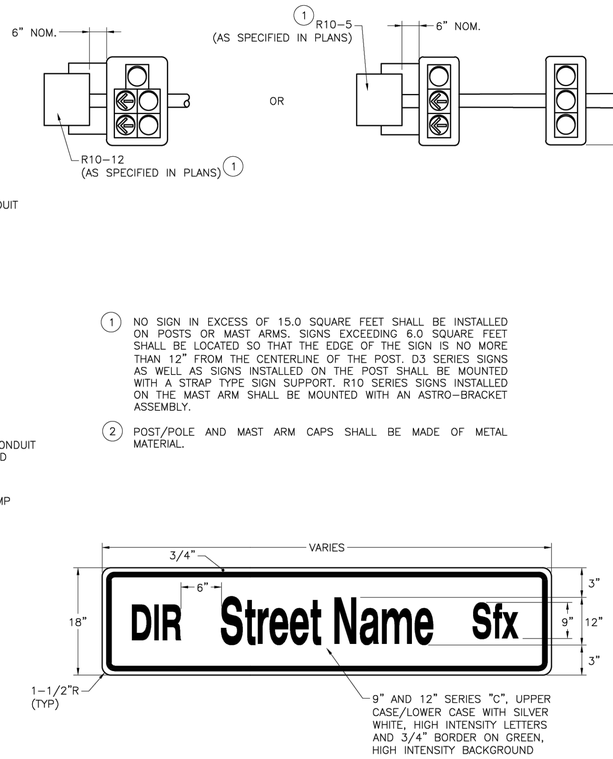
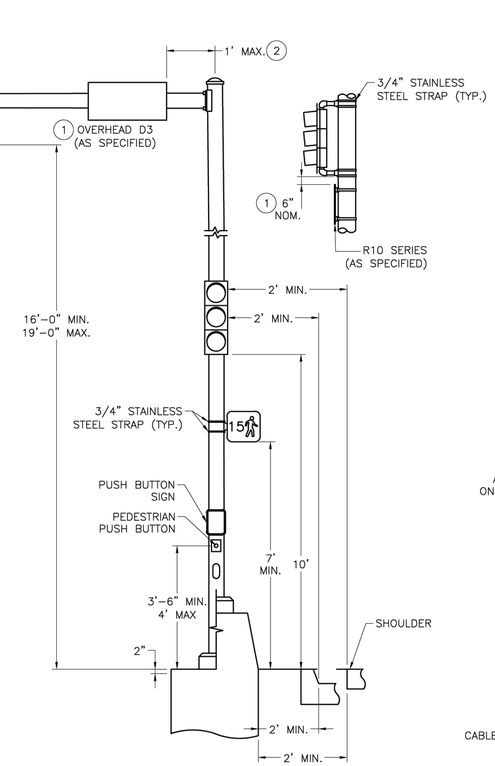


WOOD POLE MOUNTING

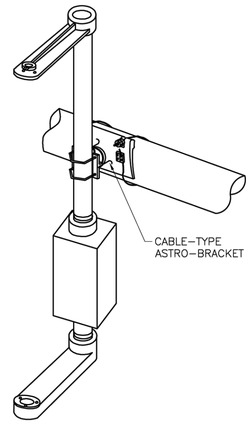


OVERHEAD D3 SIGN

1. NO SIGN IN EXCESS OF 15.0 SQUARE FEET SHALL BE INSTALLED ON POSTS OR MAST ARMS. SIGNS EXCEEDING 6.0 SQUARE FEET SHALL BE LOCATED SO THAT THE EDGE OF THE SIGN IS NO MORE THAN 12" FROM THE CENTERLINE OF THE POST. D3 SERIES SIGNS AS WELL AS SIGNS INSTALLED ON THE POST SHALL BE MOUNTED WITH A STRAP TYPE SIGN SUPPORT. R10 SERIES SIGNS INSTALLED ON THE MAST ARM SHALL BE MOUNTED WITH AN ASTRO-BRACKET ASSEMBLY.
2. POST/POLE AND MAST ARM CAPS SHALL BE MADE OF METAL MATERIAL.

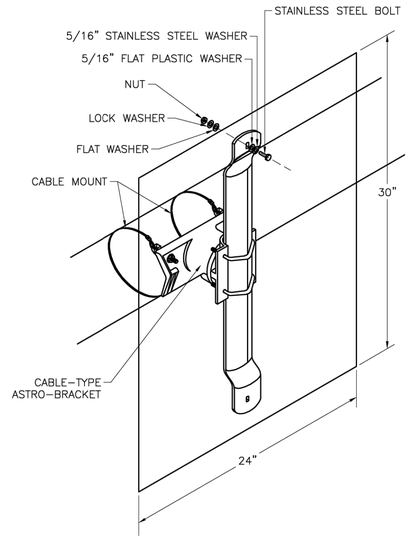


MAST ARM POLE MOUNTING

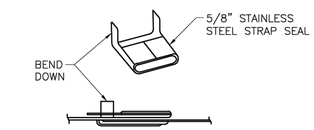


SIGNAL HEAD MAST ARM MOUNTING DETAIL

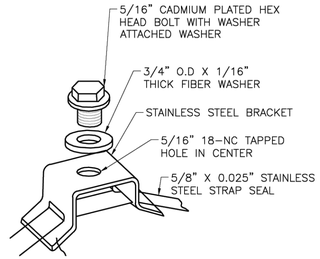
ASTRO-BRAC TERMINAL COMPARTMENT BRACKET ASSEMBLY ONLY CABLE TYPE ASTRO-BRAC WILL BE ALLOWED, NO BANDS.



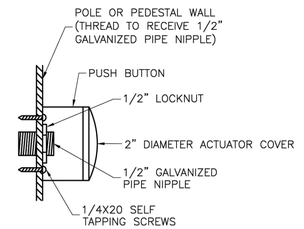
MAST ARM SIGN MOUNTING DETAIL



ENDS OF STRAP CLAMPED IN SEAL



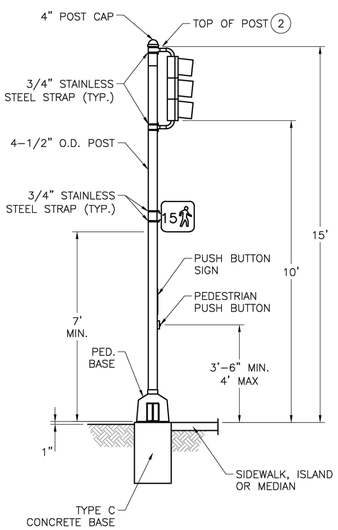
STRAP TYPE SIGN SUPPORT

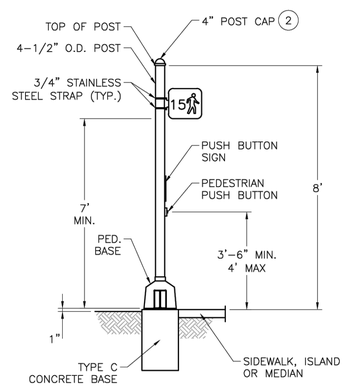


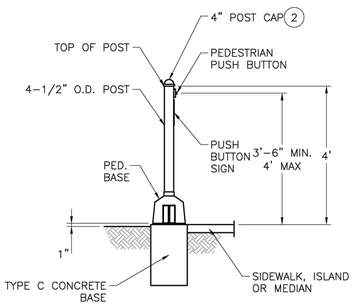
PUSH BUTTON NOTES:

1. PUSH BUTTONS SHALL INCLUDE TWO MOUNTING BRACKETS EACH AND BE OF THE TYPE AS NOTED IN THE PLANS.
2. PUSH BUTTONS SHALL BE ADA APPROVED AND WEATHERPROOF, MOUNTED.

PUSH BUTTON MOUNT DETAIL







PEDESTAL POST MOUNTINGS

GENERAL NOTES:

1. ALL POST WIRE OUTLETS SHALL BE DEBURRED AND EQUIPPED WITH BUSHINGS.
2. BACKPLATES NOT SHOWN IN MOUNTING DIAGRAMS FOR CLARITY. ALL SIGNAL HEADS SHALL HAVE BACKPLATES.
3. POSTS SHALL BE GROUNDED WITH #6 AWG BARE COPPER WIRE FROM GROUNDING BUSHING ON CONDUIT TO GROUNDING LUG IN POST BASE IF STEEL CONDUIT IS USED. IF NON-METALLIC CONDUIT IS USED, PROVIDE #6 AWG WIRE FROM GROUNDING LUG IN POST TO POWER SUPPLY GROUND BUSS IN CONTROLLER CABINET.
4. LEADS FROM PEDESTRIAN SIGNAL LAMPS ARE CONNECTED TO THE SIGNAL HEAD TERMINAL COMPARTMENT.
5. ALL SIGNALS SHALL BE MOUNTED VERTICALLY UNLESS OTHERWISE NOTED ON THE TRAFFIC SIGNAL PLANS.
6. SPAN WIRE MOUNTED SIGNALS SHALL HAVE A DISCONNECT HANGER.
7. SIGNAL HEADS ON MAST ARMS SHALL BE TILTED FORWARD FROM THE TOP 3 TO 7 DEGREES FROM VERTICAL.
8. IF A SIGN EXCEEDS 42" IN LENGTH, TWO SUPPORTS ARE REQUIRED AND IF A SIGN EXCEEDS 96" IN LENGTH, THREE SUPPORTS ARE REQUIRED.
9. MAST ARM MOUNTED SIGNALS SHALL HAVE A TERMINAL COMPARTMENT.
10. SIDE-MOUNTED OPTICALLY LIMITING HEADS SHALL HAVE A MINIMUM POST CLEARANCE OF 5-1/2".
11. SYMBOL FOR PEDESTRIAN LENSES SHALL HAVE A MINIMUM HEIGHT OF 11"
12. PUSH BUTTON SIGNS SHALL BE MOUNTED DIRECTLY ABOVE THE ACTUATOR, EXCEPT FOR LOCATIONS ON 4' PEDESTALS THE SIGN SHALL BE LOCATED DIRECTLY BELOW THE ACTUATOR. PUSH BUTTON SIGNS SHALL BE AS SPECIFIED IN THE PLANS.
13. SIGNAL APPURTENANCES SHALL HAVE A HORIZONTAL CLEARANCE NO LESS THAN 2' FROM THE FACE OF A VERTICAL CURB OR FROM THE OUTSIDE EDGE OF A SHOULDER, EXCEPT SIGNALS LOCATED IN A MEDIAN ISLAND.
14. SEE STANDARD DRAWING TS-3 FOR BASE DETAILS.

LEE'S SUMMIT MISSOURI

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

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DESIGNED BY: JJW
DRAWN BY: CNH
CHECKED BY: JJW

Project: POLE AND LUMINAIRE DETAILS
CITY OF LEE'S SUMMIT, MO
LEE'S SUMMIT, JACKSON COUNTY, MO

Sheet Name: SIGNAL HEAD MOUNTING DETAILS

Drawn By: BWC
Checked By: MP
Date: 01/2020
Proj. #:

TS-1

SIGNAL HEAD MOUNTING DETAILS

OLDHAM VILLAGE TRAFFIC SIGNAL
LEE'S SUMMIT, MO. 64086

ORIGINAL ISSUE: 01/15/2025
KHA PROJECT NO. 268132012
SHEET NUMBER 7

Drawing name: K:\KHC_TPTO\268132012 - Oldham Village Signal\CAD\Sheets\08 - TRAFFIC SIGNAL DETAILS.dwg SIGNAL HEAD MOUNTING DETAILS Feb 21, 2025 1:58pm by Ciara.Hogsett
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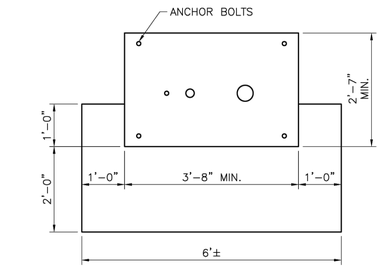
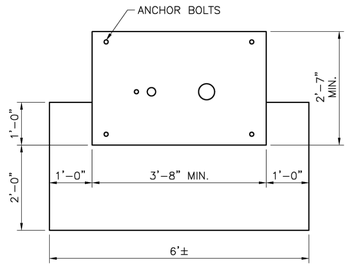
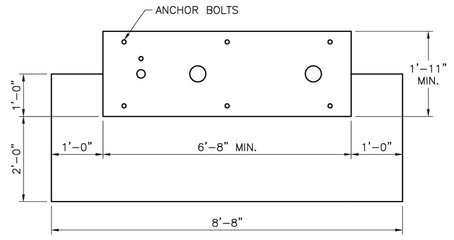


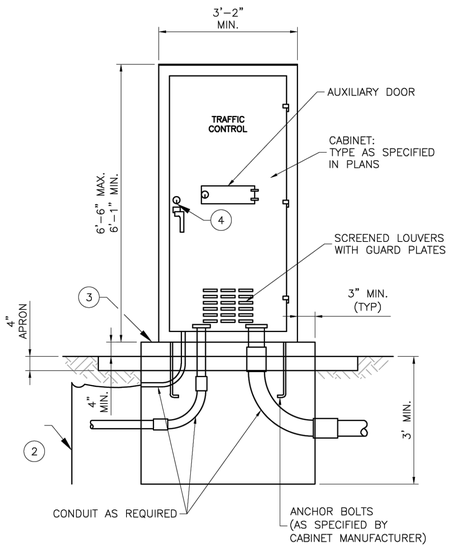
PLAN VIEW



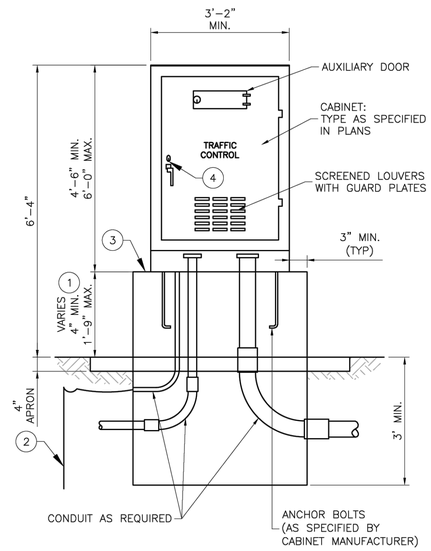
PLAN VIEW



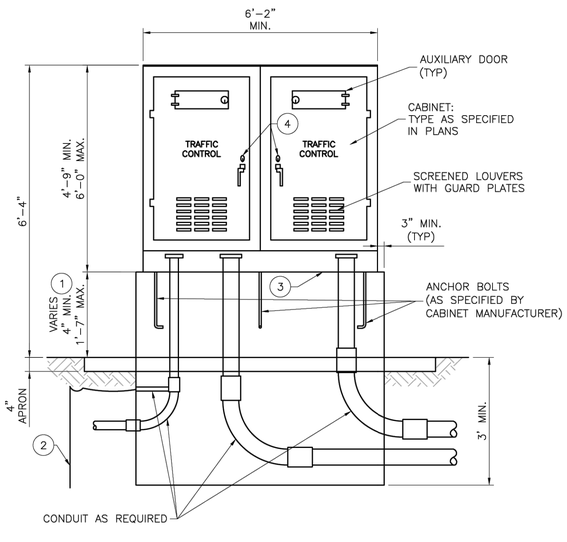
PLAN VIEW



FOR CONTROLLER CABINETS WITH HEIGHTS FROM 6'-1" TO 6'-6" TYPE E



FOR CONTROLLER CABINETS WITH HEIGHTS FROM 4'-4" TO 6'-0" TYPE EV



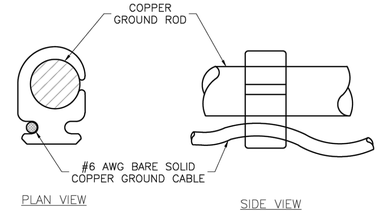
DOUBLE

CONTROLLER CABINETS AND BASE TYPES

1. DIMENSION VARIES ACCORDING TO CABINET HEIGHT.
2. GROUND ROD, 3/4" DIA. X 8' MIN. IF SUBSURFACE CONDITIONS EXIST WHICH PROHIBIT THE PLACEMENT OF THE GROUND ROD IN A VERTICAL POSITION, THE ROD MAY BE DRIVEN AT AN OBLIQUE ANGLE NOT TO EXCEED 45 DEGREES FROM VERTICAL OR BURIED IN A TRENCH AT LEAST 30 IN. DEEP. CONNECTION TO GROUND ROD SHALL BE CLAMP TYPE AS DETAILED.
3. LIFETIME SILICONE CAULK BETWEEN CABINET AND BASE.
4. #2 CORBIN LOCK.

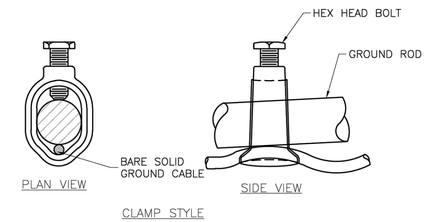
GENERAL NOTES:

TRAFFIC SIGNAL CONTROLLER CABINET SHALL BE ORIENTED WITH THE BACK OF THE CONTROLLER CABINET FACING THE INTERSECTION, SUCH THAT WHEN THE DOOR IS OPEN THE SIGNAL HEAD INDICATIONS CAN BE VIEWED WHILE LOOKING INSIDE THE CABINET.



PLAN VIEW — SIDE VIEW

CRIMP STYLE



PLAN VIEW — SIDE VIEW

CLAMP STYLE

GROUND ROD CLAMP CONNECTION DETAIL

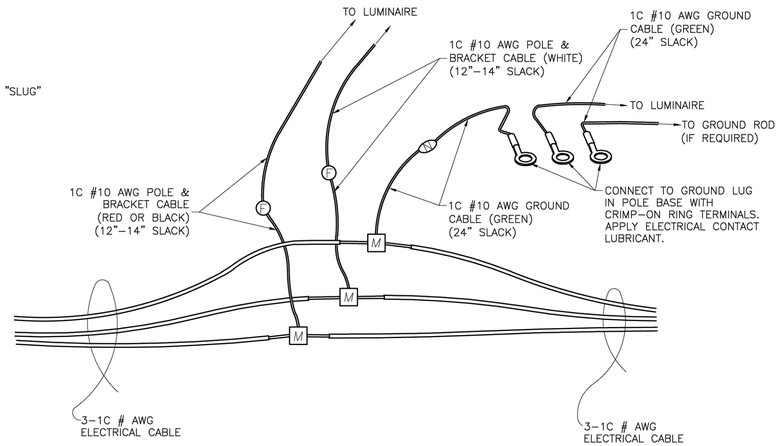
GROUND ROD CLAMP SHALL BE SUBSIDIARY TO GROUND ROD.

LEGEND

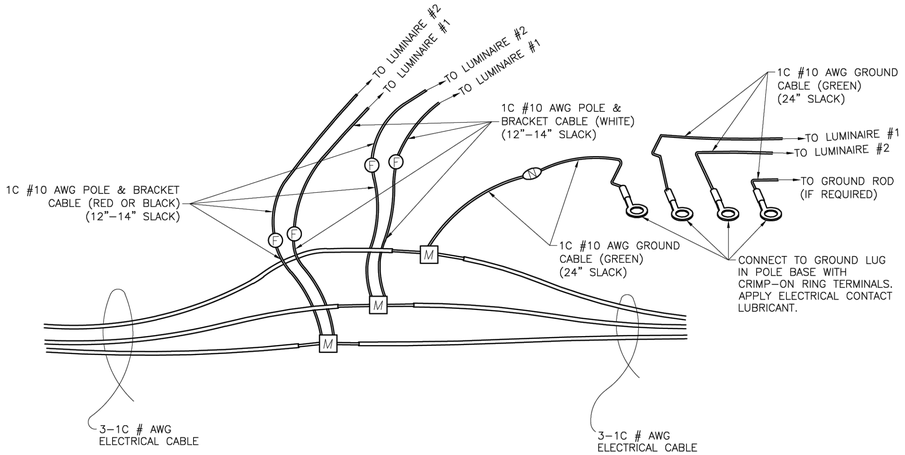
- (M) MULTI-TAP ELECTRICAL CONNECTOR
- (F) BREAK-AWAY FUSED ELECTRICAL CONNECTOR WITH 8 AMP FUSE
- (N) BREAK-AWAY NON-FUSED ELECTRICAL CONNECTOR WITH GROUND "SLUG"

GENERAL NOTES:

1. RED CABLES SHALL BE CONNECTED TO WEST OR NORTH ORIENTED LUMINAIRE.
   BLACK CABLES SHALL BE CONNECTED TO EAST OR SOUTH ORIENTED LUMINAIRE.
2. THE SPECIFIED CABLE SLACK SHALL BE PROVIDED ON EACH SIDE OF THE FUSED AND UN-FUSED CONNECTORS.
3. ADDITIONAL SLACK SHALL BE PROVIDED FOR THE #4 AWG CABLE SUCH THAT WHEN EXTENDED UPWARD, THE TOP OF THE MULTI-TAP CONNECTORS ARE NO LESS THAN 1" AND NO MORE THAN 3" ABOVE THE TOP OF THE HAND HOLE OPENING.



ELECTRICAL CONNECTOR KIT SCHEMATIC
(SINGLE LUMINAIRE)



ELECTRICAL CONNECTOR KIT SCHEMATIC
(TWIN LUMINAIRES)

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NO.	REVISIONS	DATE	BY

SCALE: AS NOTED
DESIGNED BY: JJW
DRAWN BY: CNH
CHECKED BY: JJW

JEFFREY J. WICKE
NUMBER PE-2007032448
PROFESSIONAL ENGINEER
STATE OF MISSOURI

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

Project: POLE AND LUMINAIRE DETAILS
CITY OF LEE'S SUMMIT, MO
LEE'S SUMMIT, JACKSON COUNTY, MO

Sheet Name: CONTROLLER CABINET & BASE DETAILS

Drawn By: BWC
Checked By: MP
Date: 01/2020
Proj. #:

TS-2

CONTROLLER CABINET & BASE DETAILS

OLDHAM VILLAGE TRAFFIC SIGNAL
LEE'S SUMMIT, MO, 64086

ORIGINAL ISSUE: 01/15/2025
KHA PROJECT NO. 268132012
SHEET NUMBER 8

Drawing name: K:\KNC_TPTO\268132012 - Oldham Village Signal\CAD\Plansheets\8 - TRAFFIC SIGNAL DETAILS.dwg CONTROLLER CABINET & BASE DETAILS Feb 21, 2025 1:58pm by Ciara Hoggett
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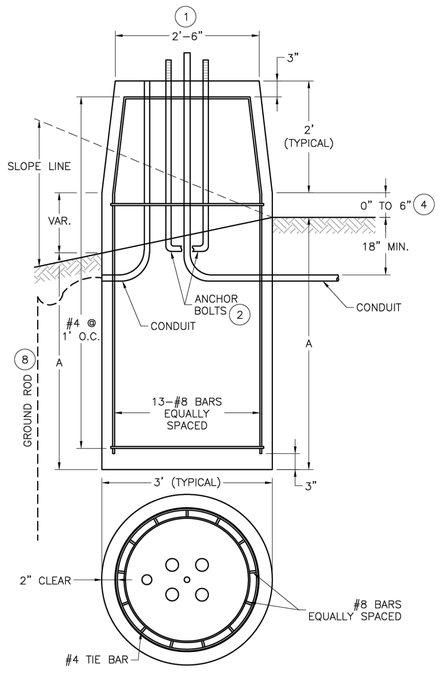
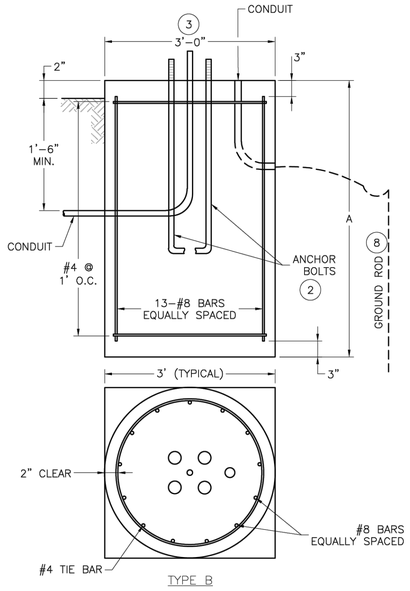
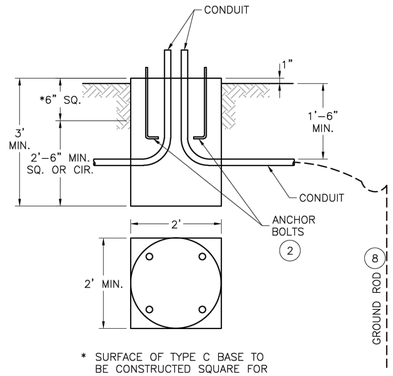


TYPE A



TYPE B



* SURFACE OF TYPE C BASE TO BE CONSTRUCTED SQUARE FOR A DEPTH OF 6"

TYPE C

POST BASES

POST BASES		
POST TYPE	ARM LENGTH (FT.)	BASE TYPE
B, BL, C & CL	8 – 14	A–8 OR B–8
B, BL, C & CL	15 – 34	A–10 OR B–10
B, BL, C & CL	35 – 54	A–13 OR B–13

ARM LENGTH DETERMINED BY LENGTH OF LONGEST ARM FOR TYPE B & BL SIGNAL POSTS.

BASE TYPE A OR B DETERMINED BY LOCATION OF POST BASE.

SPECIAL DESIGN REQUIREMENTS:

SIGNAL STRUCTURES WHICH WILL EXCEED THE DIMENSION LIMITS SHOWN ON STANDARD DRAWING TS–5 SHALL HAVE ITS POST BASE DESIGNED BY A PROFESSIONAL ENGINEER AND APPROVED BY THE CITY ENGINEER (OR DESIGNEE). A SET OF DRAWINGS INCLUDING SPECIFICATIONS AND DESIGN COMPUTATIONS SHALL BE SUBMITTED FOR RECORD AND REFERENCE. THE SUBMITTED DRAWINGS AND CALCULATIONS SHALL BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEER IN ACCORDANCE WITH THE LAWS RELATING TO ARCHITECTS AND PROFESSIONAL ENGINEERS (CHAPTER 327, RSMO) AND SHALL INCLUDE A TITLE BLOCK OR SUMMARY SHEET WHICH LISTS AND CERTIFIES THAT THE FOUNDATION WILL MEET THE DESIGN CRITERIA.

(1) IF BOLT CIRCLE IS 22 INCHES OR GREATER, USE TYPE B BASE. IF TYPE B BASE IS USED ANYWHERE, ALL TYPE B, BL, C, AND CL POSTS SHALL HAVE TYPE B BASE. BASE PLATE SHALL STAY WITHIN THE TOP OF THE POST BASE DIAMETER.

(2) ANCHOR BOLT DIMENSIONS ARE SHOWN ON THE MANUFACTURER'S APPROVED DRAWINGS.

(3) MAXIMUM BOLT CIRCLE DIAMETER IS 26". BASE PLATE SHALL STAY WITHIN THE TOP OF THE POST BASE DIAMETER.

(4) 0" TO 6" VARIATION IN BASE HEIGHT IS FOR OBTAINING 16'–0" CLEARANCE. 0.13" C.Y. CONCRETE AND 3 LBS. REINFORCING STEEL PER 6".

STEEL & CONCRETE REQUIREMENTS FOR POST BASES				
BASES		#8 STEEL BAR		CONC. C.Y.
TYPE	A (10)	LENGTH	WEIGHT LBS (11)	
A–8	8'–0"	9'–6"	399	2.53
A–10	10'–0"	11'–6"	481	3.06
A–13	13'–0"	14'–6"	604	3.84
B–8	8'–0"	7'–6"	317	2.09
B–10	10'–0"	9'–6"	400	2.62
B–13	13'–0"	12'–6"	523	3.40
C*				0.44
(10) SOIL DEPTH, NO ROCK			(11) INCLUDE #4 TIE BAR	

* SURFACE OF TYPE C BASE TO BE CONSTRUCTED SQUARE FOR A MINIMAL DEPTH OF 6".

(5) POSTS SHALL BE FURNISHED WITH INDIVIDUAL NUT COVERS.

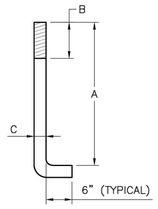
(6) EXPANSIVE GROUT SHALL BE USED BETWEEN THE POST BASE PLATE AND CONCRETE BASE.

(7) PLATE AND BOLT SIZES SHALL BE SHOWN ON FABRICATORS SHOP DRAWINGS AND SHALL BE SUBJECT TO APPROVAL.

(8) 3/4" X 8' MINIMUM GROUND ROD. IF SUBSURFACE CONDITIONS EXIST WHICH PROHIBIT THE PLACEMENT OF THE GROUND ROD IN VERTICAL POSITION, THE ROD MAY BE DRIVEN AT AN OBLIQUE ANGLE NOT TO EXCEED 45 DEGREES FROM VERTICAL OR BURIED IN A TRENCH AT LEAST 30 IN. DEEP. CONNECTION TO GROUND ROD SHALL BE CLAMP TYPE AS DETAILED ON STANDARD DRAWING TS–2.

BASE EMBEDMENT IN SOLID ROCK			
SOLID ROCK ENCOUNTER POINT	REQUIRED EMBEDMENT FOR BASE TYPE		
	A–8 B–8	A–10 B–10	A–13 B–13
AT SURFACE	4'–6"	4'–9"	5'–9"
AT ONE–FOURTH NORMAL DEPTH	3'–6"	4'–0"	5'–0"
AT ONE–HALF NORMAL DEPTH	3'–0"	3'–3"	3'–3"
AT THREE–FOURTHS NORMAL DEPTH	1'–3"	1'–3"	1'–0"

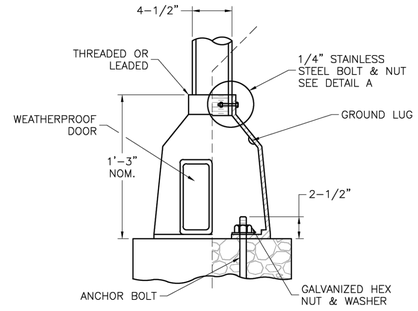
1. REQUIRED EMBEDMENT DEPTHS CAN BE INTERPOLATED BETWEEN ENCOUNTER POINTS FOR OTHER SOLID ROCK ENCOUNTER DEPTHS.
2. NORMAL LENGTHS FOR ANCHOR BOLTS AND REINFORCING STEEL WILL BE REQUIRED.
3. CORE DRILL HOLES FOR ANCHOR BOLTS AND REINFORCING STEEL IN SOLID ROCK SHALL BE PROVIDED. CORE DRILL HOLES SHALL BE TWICE THE DIAMETER OF THE ANCHOR BOLT AND REINFORCING STEEL DIAMETER AND TO WITHIN 3 INCHES OF THE NORMAL BASE DEPTH.
4. IF SOIL, SHALE, GRAVEL, FRACTURED ROCK, OR VOIDS ARE ENCOUNTERED DURING CORE DRILLING, THE ROCK SHALL BE REMOVED TO THE POINT OF ENCOUNTER.
5. ANCHOR BOLTS AND REINFORCING STEEL SHALL BE GROUTED IN THE CORE DRILL HOLES WITH NON–SHRINK GROUT HAVING A MINIMUM STRENGTH OF 9,000 POUNDS IN 24 HOURS.
6. STRAIGHT ANCHOR BOLTS OF THE LENGTH SHOWN IN THE ANCHOR BOLT TABLE UNDER THE COLUMN "BOLT LENGTH"ARE ADEQUATE FOR USE IN GROUTED CORE DRILLED HOLES. NO HEAT INDUCED ALTERATION OR BENDING OF ANCHOR BOLTS WILL BE PERMITTED.



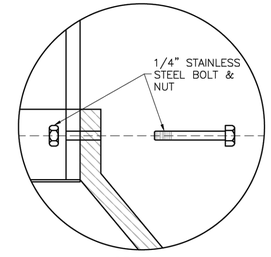
BOLT LENGTH	VERT HT. A	THREAD LEN. B	DIA. C
INCHES	INCHES	INCHES	INCHES
19	17	1.50	0.625
57	51	7.00	1.250
79	73	7.50	1.500
94	88	8.00	1.750
121	115	8.50	2.000
120	114	9.00	2.250
146	140	9.50	2.500

NOTE:
ALL ANCHOR BOLTS SHALL BE FULLY GALVANIZED.

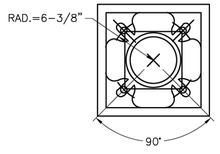
ANCHOR BOLT



SQUARE BOLT CIRCLE

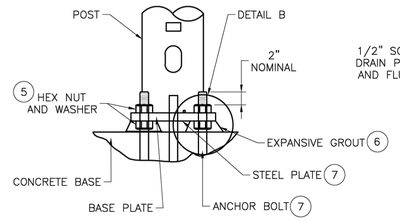


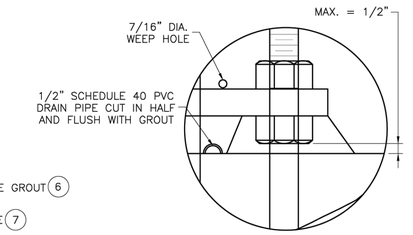
DETAIL A



BOLT CIRCLE
(PLAN VIEW)

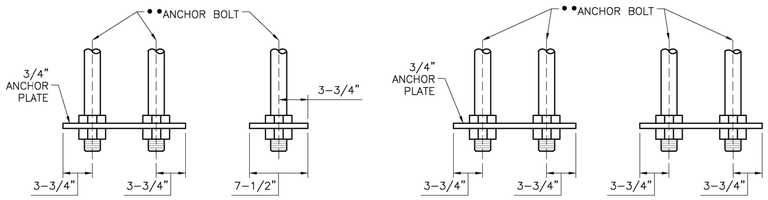
CAST BASE





DETAIL B

STEEL PLATE AND ANCHOR BASE



OPTIONAL STEEL PLATE FOR ANCHOR BOLTS

CAST BASE

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

Project: POST BASE DETAILS CITY OF LEE'S SUMMIT, MO LEE'S SUMMIT, JACKSON COUNTY, MO

Sheet Name: POLE AND LUMINAIRE DETAILS

Drawn By: BWC
Checked By: MP
Date: 01/2020
Proj. #:

TS-3

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NO.	REVISIONS	DATE	BY

SCALE: AS NOTED
DESIGNED BY: JJW
DRAWN BY: CNH
CHECKED BY: JJW

POST BASE DETAILS

OLDHAM VILLAGE TRAFFIC SIGNAL
LEE'S SUMMIT, MO, 64086

ORIGINAL ISSUE: 01/15/2025
KHA PROJECT NO. 268132012
SHEET NUMBER 9

Drawing name: K:\KNC_TPTO\268132012 - Oldham Village Signal\CAD\Sheetsheets\8 - TRAFFIC SIGNAL DETAILS.dwg POST BASE DETAILS Feb 21, 2025 1:38pm by Claira Hoppert
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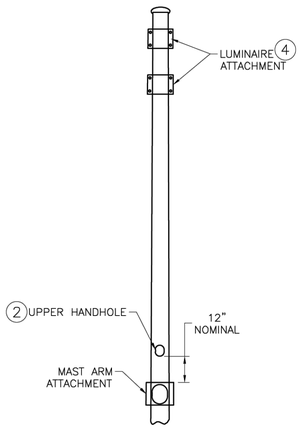
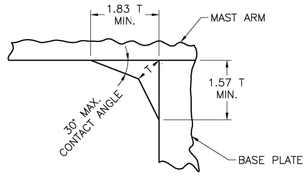
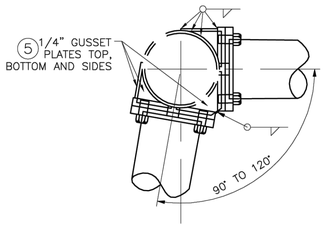
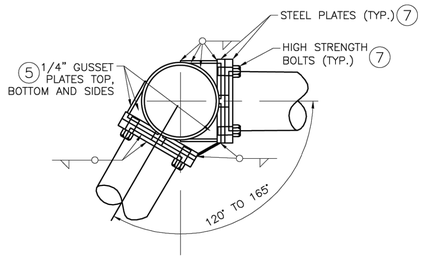


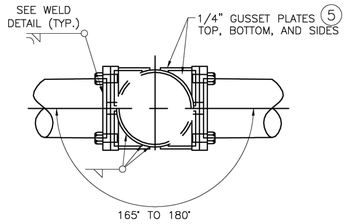
TYPE BL AND CL POSTS

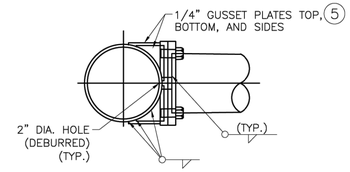


WELD DETAIL

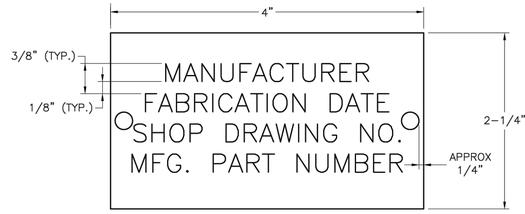








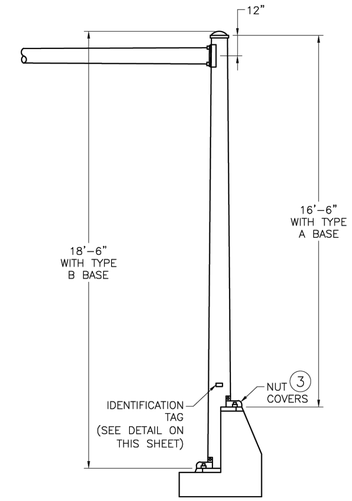
ARM ATTACHMENTS



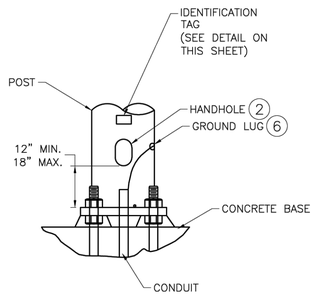
NOTE:

TAG SHALL BE ALUMINUM OR STAINLESS STEEL AND ATTACHED TO POLE OR MAST ARM USING TWO RIVETS OR STAINLESS STEEL DRIVE SCREWS. ID TAG HOLES SHALL BE DRILLED PRIOR TO GALVANIZING.

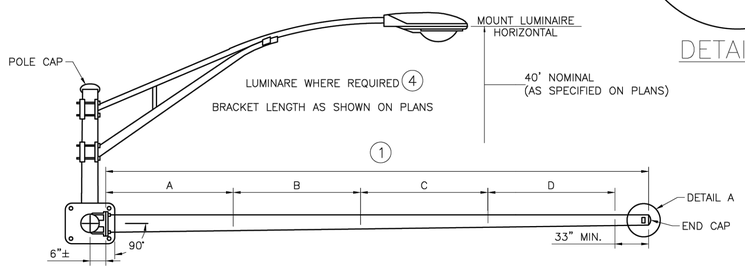
IDENTIFICATION TAG



POLE BASE WITH TYPE A AND B POST



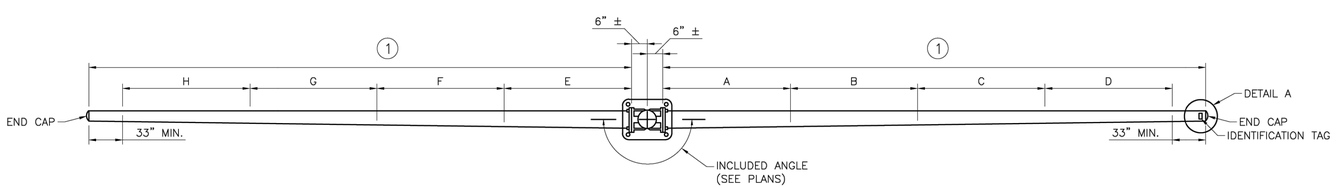
POLE BASE



NOTE:
A, B, C, AND D – SIGNAL SPACING AS SHOWN ON THE TRAFFIC SIGNAL PLANS.

TYPE C AND TYPE CL (WITH LUMINAIRE)

DETAIL A



NOTE:
A, B, C, D, E, F, G AND H – SIGNAL SPACING AS SHOWN ON THE TRAFFIC SIGNAL PLANS.

TYPE B AND TYPE BL (WITH LUMINAIRE)

1. ARM LENGTHS SHALL NOT EXCEED 54 FEET. SEE TRAFFIC SIGNAL PLANS FOR DIMENSIONS.
2. HANDHOLES SHALL BE APPROXIMATELY 4" X 6-1/2". HANDHOLE FRAME SHALL BE REINFORCED SO THAT THE POLE STRENGTH IS NOT REDUCED.
3. POSTS SHALL BE FURNISHED WITH INDIVIDUAL NUT COVERS.
4. SEE STREET LIGHTING STANDARD DETAILS FOR TYPICAL BRACKET ARM MOUNTING FOR TYPE BL AND TYPE CL POSTS.
5. ANY OPENINGS BETWEEN TOP AND SIDE GUSSET PLATES SHALL BE SEALED WITH LIFETIME CAULK AT TIME OF INSTALLATION.
6. POST SHALL BE GROUNDED FROM GROUND LUG IN POST WITH #6 AWG BARE COPPER WIRE TO CONDUIT SYSTEM. GROUND LUG SHALL BE 90° OR 180° FROM THE HANDHOLE.
7. PLATE AND BOLT SIZES SHALL BE SHOWN ON FABRICATORS SHOP DRAWINGS AND SHALL BE SUBJECT TO APPROVAL.

GENERAL NOTES:

ARMS SHALL BE RAKED UP 0.25" PER FOOT MINIMUM. ARMS SHALL BE PROVIDED WITH A PERMANENT MARKING INDICATING PROPER ORIENTATION FOR INSTALLATION.

TO DETERMINE LEFT OR RIGHT ON TYPE B OR C SIGNAL POST, VIEWING POSITION SHALL BE FROM THE CENTER OF THE INTERSECTION BEING CONTROLLED AND FACING THE SIGNAL INVOLVED.

NO.	REVISIONS	DATE	BY

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DRAWN BY: CNH
CHECKED BY: JJW

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

Project: POLE AND LUMINAIRE DETAILS
CITY OF LEE'S SUMMIT, MO
LEE'S SUMMIT, JACKSON COUNTY, MO

Sheet Name: TUBULAR STEEL POST DETAILS

Drawn By: BWC
Checked By: MP
Date: 01/2020
Proj. #:

TS-4

TUBULAR STEEL POST DETAILS

OLDHAM VILLAGE TRAFFIC SIGNAL
LEE'S SUMMIT, MO. 64086

ORIGINAL ISSUE: 01/15/2025
KHA PROJECT NO. 268132012
SHEET NUMBER 10

Drawing name: K:\KNC_TPTO\268132012 - Oldham Village Signals\CAD\Plansheets\8 - TRAFFIC SIGNAL DETAILS.dwg TUBULAR STEEL POST DETAILS Feb 21, 2025 1:38pm by Clara.Hoggett
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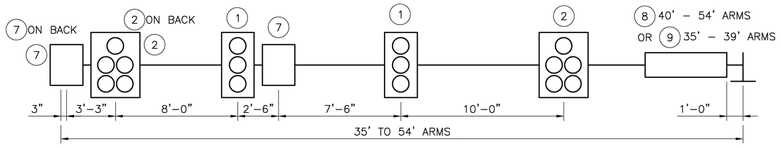
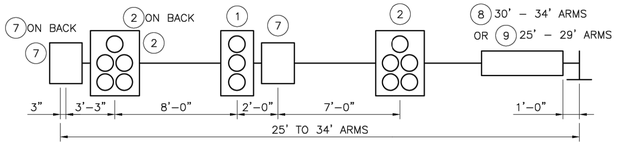
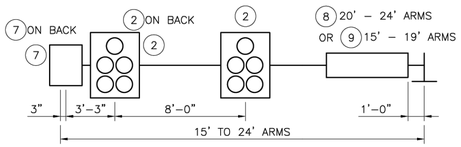


MAST ARM LOADING
(35' TO 54' ARMS)



MAST ARM LOADING
(25' TO 34' ARMS)



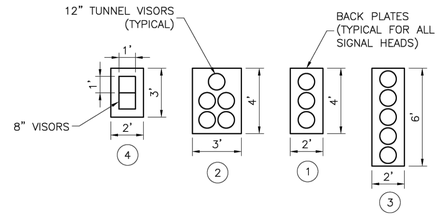
MAST ARM LOADING
(15' TO 24' ARMS)

MAST ARM LOADING
(12' TO 14' ARMS)

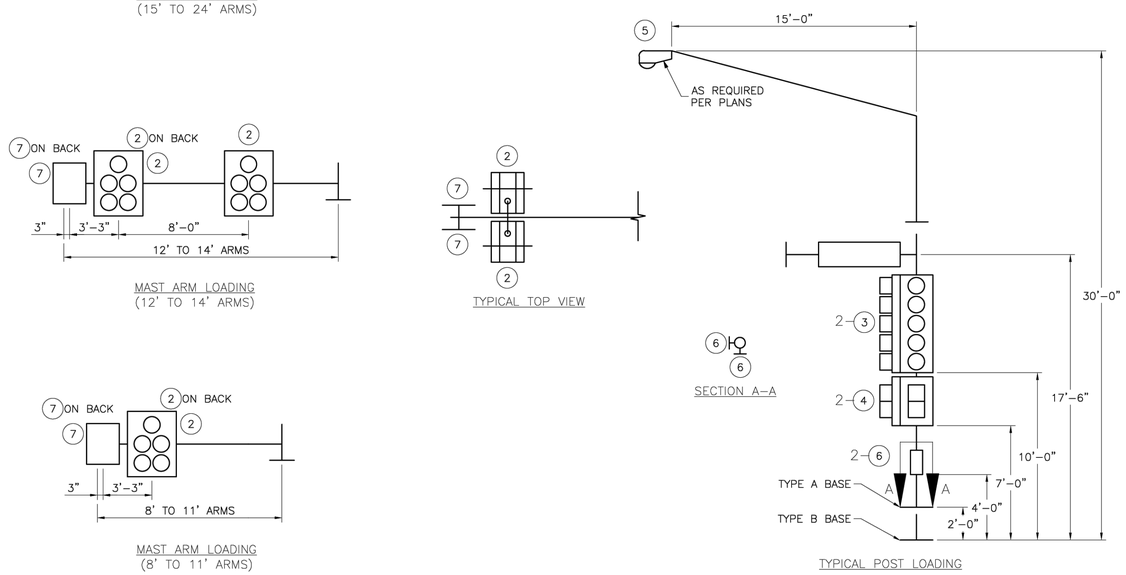
MAST ARM LOADING
(8' TO 11' ARMS)

ITEM NO.	DESCRIPTION	WEIGHT (LBS.)*	PROJ. AREA (SQ. FT.)	SURFACE AREA (SQ. FT.)
1	3–SECTION OL HEAD	60.0	8.0	32.5
2	5–SECTION OL HEAD	100.0	12.0	47.5
3	VERT. 5–SECTION OL HEAD	100.0	12.0	50.5
4	2–SECTION OL HEAD	40.0	6.0	23.0
5	150 WATT LUMINAIRE	30.0	1.0	3.5
6	9" X 18" SIGN	2.0	1.1	N/A
7	30" X 36" SIGN	27.0	7.5	N/A
8	120" X 18" SIGN	25.0	15.0	N/A
9	96" X 16" SIGN 96" X 16" SIGN 96" X 28" SIGN	18.0 20.0 31.0	10.7 12.0 18.7	N/A N/A N/A

OL – OPTICALLY LIMITED
* MOUNTING HARDWARE INCLUDED



TRAFFIC SIGNAL HEAD TYPES



TYPICAL POST LOADING

NOTE:
ATTACHMENT LOCATIONS ARE FOR STRUCTURAL DESIGN PURPOSES ONLY. ACTUAL LOCATIONS ARE SHOWN ON THE PLANS.

MINIMUM DESIGN LOADING FOR POST AND MAST ARM ATTACHMENTS

STRUCTURAL DESIGN REQUIREMENTS:

STRUCTURAL SUPPORTS SHALL BE DESIGNED AND FABRICATED TO WITHSTAND THEIR OWN LOADING AND THE ATTACHMENT LOADING SHOWN ON THIS DRAWING OR ON THE PLANS, WHICHEVER IS GREATER. STRUCTURAL MEMBERS INCLUDE POSTS, MAST ARMS AND LUMINAIRES BRACKET ARMS, AS REQUIRED.

DESIGN OF THE STRUCTURAL SUPPORTS SHALL BE BASED ON AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINARIES AND TRAFFIC SIGNALS, 2015 OR LATEST REVISION WITH THESE EXCEPTIONS AND SPECIFICATIONS.

MINIMUM DESIGN WIND SPEED OF 90 MPH AT 30 FEET ABOVE GROUND.
GROUP LOADING:

LOADS	PERCENT OF ALLOWABLE STRESS*
GROUP I – DL	100
GROUP II – DL + W	133
GROUP III – DL + ICE + 0.5(W**)	133

*NO LOAD REDUCTION FACTORS SHALL BE APPLIED IN CONJUNCTION WITH THESE INCREASED ALLOWABLE STRESSES.
** W TO BE COMPUTED ON THE BASIS OF THE WIND PRESSURE FORMULA. 25 PSF (1197 PA) MINIMUM FOR W FOR GROUP III.

SIGNAL STRUCTURES WHICH WILL EXCEED THE DIMENSION LIMITS SHOWN SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER*** BASED ON AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS, 2015, 6TH EDITION, INCLUDING ANY INTERIM WITH THE CRITERIA NOTED BELOW:

- ** ULTIMATE DESIGN WIND SPEED
- ** SERVICE DESIGN WIND SPEED
- ** FATIGUE CATEGORY I
- ** MEAN RECURRENCE INTERVAL 700 YEARS
- ** 50 YEAR DESIGN LIFE.
- ** SHALL NOT BE SPECIFICALLY DESIGNED FOR TRUCK INDUCED WIND GUSTS.
- ** SHALL BE SPECIFICALLY DESIGNED TO RESIST PERIODIC GALLOPING FORCES.

***A SET OF SHOP DRAWINGS INCLUDING WELD PROCEDURE SPECIFICATIONS AND DESIGN COMPUTATIONS SHALL BE SUBMITTED FOR RECORD AND REFERENCE. THE SUBMITTED DRAWINGS AND CALCULATIONS SHALL BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEER IN ACCORDANCE WITH THE LAWS RELATING TO ARCHITECTS AND PROFESSIONAL ENGINEERS (CHAPTER 327, RSMO) AND SHALL INCLUDE A TITLE BLOCK OR SUMMARY SHEET WHICH LISTS AND CERTIFIES THAT THE PRODUCT MEETS ALL OF THE SPECIFIED DESIGN CRITERIA.

FOR TYPE B AND BL POSTS. ICE AND DEAD LOADING SHALL BE BASED ON THE COMBINED EFFECT OF DESIGN LOADING ON EACH ARM. WIND LOADING IS APPLIED AS DESCRIBED IN SECTION 1.2.5(B) OF THE AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS, 2015 OR LATEST VERSION.

GENERAL NOTES:

ATTACHMENT LOCATIONS ARE FOR STRUCTURAL DESIGN PURPOSES ONLY. ACTUAL LOCATIONS ARE SHOWN ON THE PLANS.

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

Project: POLE AND LUMINAIRE DETAILS
CITY OF LEE'S SUMMIT, MO
LEE'S SUMMIT, JACKSON COUNTY, MO

Sheet Name: TUBULAR STEEL POST DESIGN LOADING REQUIREMENTS

Drawn By: BWC
Checked By: MP
Date: 01/2020
Proj. #:

TS-5

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SCALE: AS NOTED
DESIGNED BY: JJW
DRAWN BY: CNH
CHECKED BY: JJW

TUBULAR STEEL LOADING REQUIREMENTS

OLDHAM VILLAGE TRAFFIC SIGNAL
LEE'S SUMMIT, MO, 64086

ORIGINAL ISSUE: 01/15/2025
KHA PROJECT NO. 268132012
SHEET NUMBER
11

Drawing name: K:\KNC_TPTO\268132012 - Oldham Village Signal\CAD\Plansheets\8 - TRAFFIC SIGNAL DETAILS.dwg TUBULAR STEEL LOADING REQUIREMENTS Feb 21, 2025 1:58pm by: Clara.Hoggett
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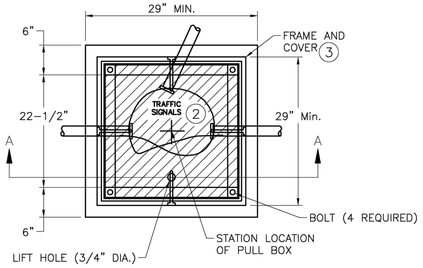
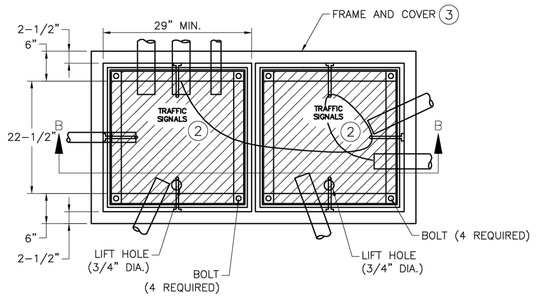
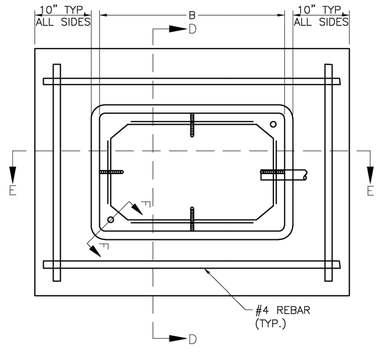


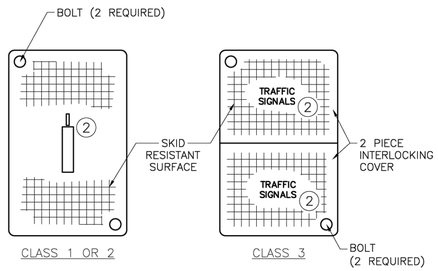
PLAN VIEW



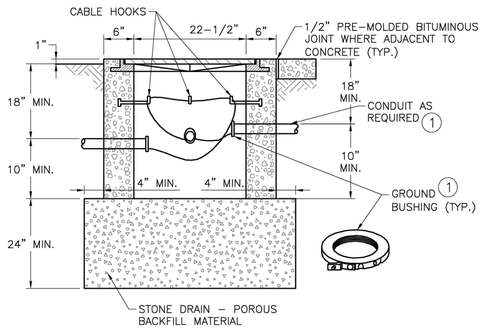
PLAN VIEW



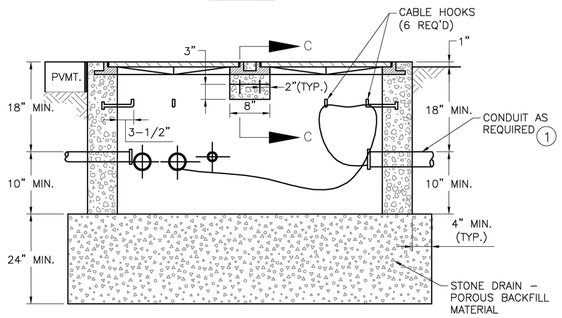
PLAN VIEW



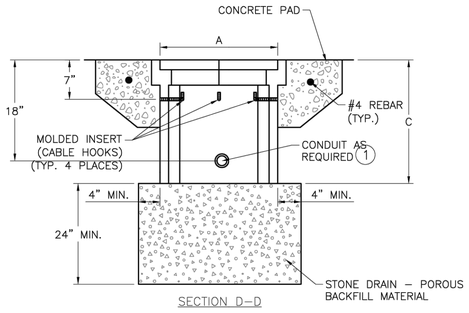
PREFORMED PULL BOX COVER



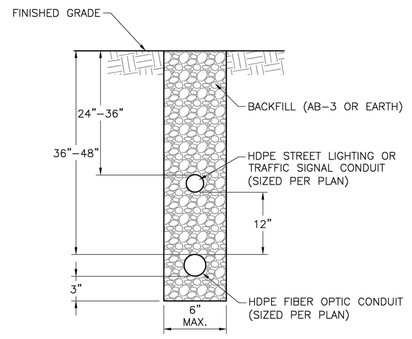
SECTION A–A
TYPE I DRAIN



SECTION B–B
TYPE A DOUBLE CONCRETE PULL BOX



SECTION D–D



TRENCH DETAIL

SINGLE CONCRETE PULL BOX

(1) ALL METAL CONDUITS SHALL BE ELECTRICALLY BONDED BY A GROUND BUSHING AND #6 AWG BARE COPPER WIRE. FOR PVC, ALL GROUND WIRES SHALL BE CONNECTED.

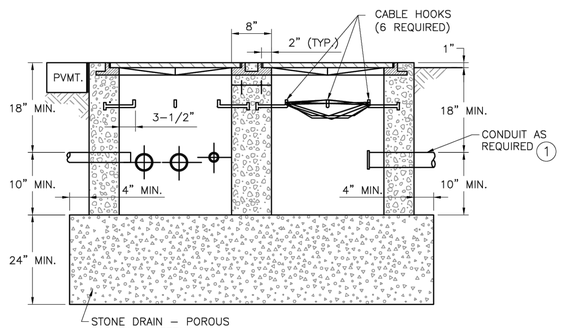
(2) SIGNAL PULL BOX COVERS SHALL BE EMBOSSED "TRAFFIC SIGNALS" OR HAVE COVER LABEL (APPLIED WITH EPOXY).

(3) PULL BOX FRAMES AND COVERS SHALL BE CAST IRON AND THE FOLLOWING MINIMUM DIMENSIONS:

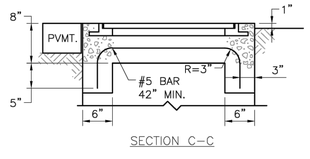
FRAME SIZE:	29" X 29"
OPENING SIZE:	22 1/2" X 22 1/2"
FRAME HEIGHT:	4–1/4"
FRAME WEIGHT:	120 LBS.
COVER SIZE:	22–5/8" X 22–5/8"
COVER THICKNESS:	3/4"
COVER WEIGHT:	140 LBS.

GENERAL NOTES:

1. ALL DIMENSIONS SHOWN ARE NOMINAL.
2. BOLT CLEANOUT DETAIL SHALL BE APPROVED BY THE CITY TRAFFIC ENGINEER.
3. ALL CONCRETE SHALL BE 3,000 PSI MINIMUM, AND SHALL BE SUBSIDIARY TO THE PULL BOX.
4. PAVEMENT AND SUBGRADE SHALL BE AS SHOWN ON PLANS.
5. STONE DRAIN MATERIAL SHALL BE 1/2" – 3/4" CLEAN ROCK.
6. LIFT OPENING REQUIRED ON ALL COVERS.
7. PREFORMED BOX WALLS MAY BE EITHER FLARED OR VERTICAL.
8. IF AN EXTENSION IS USED WITH A PREFORMED BOX, THE LIP OF THE EXTENSION MAY BE INTERIOR OR EXTERIOR. THE EXTENSION SHALL BE COMPATIBLE AND FROM THE SAME MANUFACTURER.
9. IF PREFORMED PULL BOXES ARE SPECIFIED, THE CONTRACTOR MAY USE THE STANDARD CONCRETE PULL BOX IN LIEU OF THE CLASS 1 OR 2 PREFORMED PULL BOX OR THE DOUBLE CONCRETE PULL BOX, TYPE A, IN LIEU OF THE CLASS 3 PREFORMED PULL BOXES.

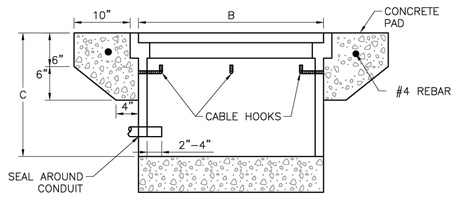


SECTION B–B
TYPE B DOUBLE CONCRETE PULL BOX



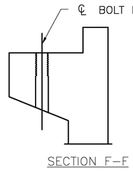
SECTION C–C

DOUBLE CONCRETE PULL BOX



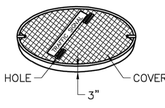
SECTION E–E

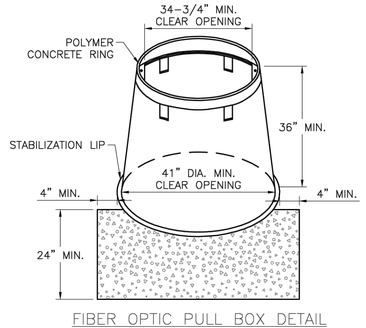
NUMBER OF ENTERING CONDUCTORS	CLASS	PREFORMED PULL BOX MINIMUM DIMENSIONS		
		A	B	C
< 23	1	17"	30"	20"
23 – 68	2	24"	36"	24"
> 68	3	30"	48"	24"



SECTION F–F
TYPICAL BOLT CLEANOUT

PREFORMED PULL BOX





FIBER OPTIC PULL BOX DETAIL

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

Project: POLE AND LUMINAIRE DETAILS
CITY OF LEE'S SUMMIT, MO
LEE'S SUMMIT, JACKSON COUNTY, MO

Sheet Name: PULL BOX DETAILS

Drawn By: BWC
Checked By: MP
Date: 01/2020
Proj. #:

TS-6

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NO.	REVISIONS	DATE	BY

SCALE: AS NOTED
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PULL BOX DETAILS

OLDHAM VILLAGE
TRAFFIC SIGNAL
LEE'S SUMMIT, MO, 64086

ORIGINAL ISSUE: 01/15/2025
KHA PROJECT NO. 268132012
SHEET NUMBER 12

Drawing name: K:\KNC_TPTO\268132012 - Oldham Village Signal\CAD\Plansheets\8 - TRAFFIC SIGNAL DETAILS.dwg PULL BOX DETAILS Feb 21, 2025 1:38pm by Ciara Hoggatt
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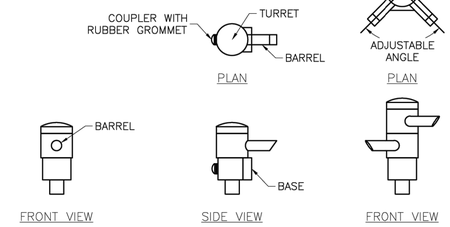
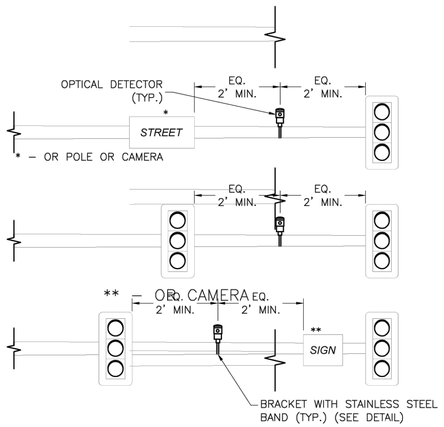


SINGLE BARREL ONE CHANNEL

DOUBLE BARREL ONE OR TWO CHANNEL



WHEN MULTIPLE DETECTOR UNITS ARE MOUNTED ON THE SAME MAST ARM, THEY SHALL BE SPACED APPROXIMATELY 12 INCHES APART.

EMERGENCY VEHICLE DETECTION NOTES:

1. THE DETECTOR CABLE SHALL BE CONTINUOUS FROM THE OPTICAL DETECTOR TO THE TRAFFIC SIGNAL CONTROLLER. NO SPLICES SHALL BE ALLOWED.
2. THE CONTRACTOR SHALL LABEL THE OPTICAL DETECTOR CABLE IN ALL PULL BOXES BY CHANNELS AS INDICATED ON THE PLANS. THIS SHALL BE ACCOMPLISHED WITH ALUMINUM TAGS ATTACHED TO THE CABLE WITH ALUMINUM WIRE. NO DIRECT PAYMENT SHALL BE MADE FOR THIS WORK.
3. OPTICOM SHALL BE MOUNTED INSIDE THE CONTROLLER CABINET. UNLESS OTHERWISE INDICATED ON THE PLANS, THE PLACEMENT OF THE OPTICAL DETECTORS SHALL BE CENTERED BETWEEN THE SIGNAL HEADS AND/OR SIGNAL HEAD AND SIGN LOCATED ON THE MAST ARMS. FURTHER INFORMATION ON OPTICAL DETECTOR PLACEMENT IS SHOWN IN THE DETAILS. THE FINAL PLACEMENT OF THE OPTICAL DETECTOR MAY BE ADJUSTED FOR LINE OF SIGHT REQUIREMENTS.
4. THE EQUIPMENT MANUFACTURER SHALL BE RESPONSIBLE FOR PROVIDING ONSITE TECHNICAL ASSISTANCE TO THE CONTRACTOR IN FINAL PLACEMENT OF THE OPTICAL DETECTORS, AS WELL AS IN ALL THE ASPECTS OF THE SYSTEM INSTALLATION.
5. PREEMPTION SEQUENCES AND TIMINGS SHALL BE DEVELOPED BY THE EQUIPMENT SUPPLIER. TIMINGS SHALL BE MARKED UP ON THE TIMING SHEETS FROM THE SPECIFIC MODEL OF CONTROLLER AT EACH INTERSECTION AND SUBMITTED FOR REVIEW BY THE CITY PRIOR TO IMPLEMENTATION BY THE SUPPLIER. PRE–EMPTION SEQUENCES SHALL USE AN ALL RED INTERVAL OR OTHER METHODS TO PREVENT THE OCCURRENCE OF "YELLOW TRAPS" AT INTERSECTIONS WITH PROTECTED/PERMITTED LEFT–TURN PHASING.
6. PREEMPTS ARE TO BE ASSIGNED AS FOLLOWS UNLESS OTHERWISE INDICATED IN THE PLANS:

DIRECTION	PREEMPT NO.	CHANNEL
NORTHBOUND	1	A
SOUTHBOUND	2	B
EASTBOUND	3	C
WESTBOUND	4	D

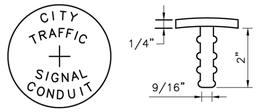
7. THE CONTRACTOR SHALL INSTALL THE EQUIPMENT CONSISTENT WITH THE EQUIPMENT MANUFACTURER'S RECOMMENDED INSTALLATION PROCEDURES AND INTERFACE DIAGRAMS IN A NEAT AND WORKMANLIKE MANNER. EMERGENCY VEHICLE DETECTION SYSTEM SHALL BE PROVIDED AND INSTALLED BY THE CONTRACTOR AND SHALL CONSIST OF ALL DETECTORS, PROCESSORS, MOUNTING BRACKETS, ETC FOR A FULLY OPERATIONAL SYSTEM.

OPTICAL DETECTOR

RADAR/VIDEO DETECTION NOTES:

1. THE RADAR/VIDEO DETECTION SYSTEM SHALL CONSIST OF VIDEO CAMERA(S), VIDEO DETECTION PROCESSOR (VDP), CABLES, BRACKETS, AND ALL OTHER MATERIALS NECESSARY FOR A FULLY FUNCTIONAL SYSTEM.
2. THE VIDEO DETECTION SYSTEM SHALL INCLUDE SOFTWARE THAT DETECTS VEHICLES IN MULTIPLE LANES OF EACH DIRECTION USING ONLY ONE VIDEO CAMERA. DETECTION ZONES (DZ) SHALL BE DEFINED USING ONLY A VIDEO MENU AND A POINTING DEVICE TO DEFINE AND PLACE ZONES ON A VIDEO IMAGE. UP TO 24 DZ PER CAMERA SHALL BE AVAILABLE.
3. THE ACTUAL NUMBER AND LOCATION OF DZ SHALL BE DETERMINED IN THE FIELD BY THE CITY TRAFFIC ENGINEER. THE CITY RESERVES THE RIGHT TO HAVE ADDITIONAL ZONES PROGRAMMED OR MODIFY THOSE SHOWN BASED ON THE FIELD PROGRAMMING PERIOD COMPLETED PRIOR TO TURNING ON THE SIGNAL.
4. VIDEO CAMERAS ARE TO BE MOUNTED AS SHOWN ON THE TRAFFIC SIGNAL PLANS. IF THE CAMERA IS MOUNTED ON A TYPE BL OR CL POLE, THE CAMERA SHALL BE MOUNTED DIRECTLY TO THE LUMINAIRE BRACKET ARM. IF THE CAMERA IS MOUNTED ON A TYPE B OR C POLE, THE CAMERA SHALL BE MOUNTED ON THE MAST ARM USING A 6–FOOT RISER.
5. VIDEO CAMERA PLACEMENT, ADJUSTMENT, SETUP AND INITIAL PROGRAMMING SHALL BE AT THE DIRECTION OF THE MANUFACTURERS REPRESENTATIVE. THE MANUFACTURERS REPRESENTATIVE SHALL ASSIST WITH IDENTIFYING OPTICAL CAMERA LOCATIONS, SYSTEM SETUP, PROGRAMMING, AND TURN–ON.

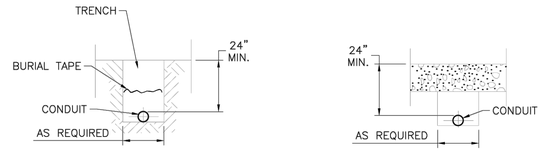
RADAR/VIDEO DETECTION

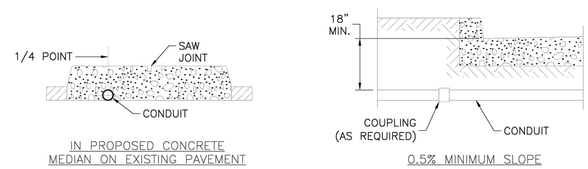


CONDUIT MARKER NOTES:

1. WHEREVER A CONDUIT PASSES BENEATH A CURBED STREET, ALUMINUM CONDUIT MARKERS SHALL BE INSTALLED IN THE CURB IMMEDIATELY OVER THE CONDUIT LOCATION. CONDUIT MARKERS SHALL BE FURNISHED BY THE CONTRACTOR AS DETAILED AND SHALL BE INSTALLED IN THE TOP OF THE CURB BY DRILLING THE CURB AND EPOXYING THE CONDUIT MARKER IN PLACE. CONDUIT MARKERS SHALL BE FLUSH WITH THE CURB. CONDUIT MARKERS SHALL BE SUBSIDIARY TO CONDUIT.

CONDUIT MARKER

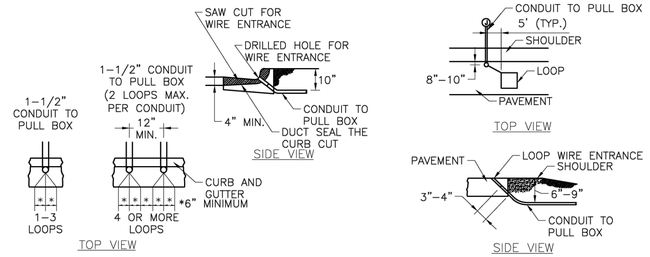




CONDUIT LOCATION NOTES:

1. CONDUIT SHALL BE INSTALLED TO DRAIN, AND IF METALLIC ALL ENDS SHALL BE THREADED AND CAPPED.
2. THE CONTRACTOR SHALL NOTIFY THE CITY OF LEE'S SUMMIT, DEPARTMENT OF PUBLIC WORKS TRAFFIC DIVISION AT (816) 969–1807 FOR INSPECTION OF THE CONDUIT INSTALLATION. AT LEAST 24 HOURS NOTICE SHALL BE PROVIDED. THE CONDUIT SHALL NOT BE COVERED UNLESS INSPECTED AND APPROVED BY THE ENGINEER OR HIS AUTHORIZED REPRESENTATIVE, SO AS TO ENSURE PROPER DEPTH, CORRECT CONDUIT MATERIAL AND PROPER CONDUIT END TREATMENT AS DESCRIBED ABOVE.

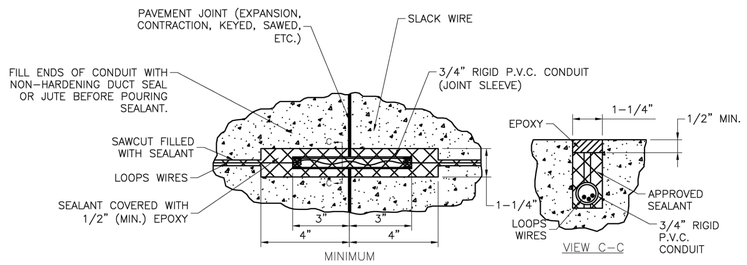
CONDUIT LOCATIONS



LOOP WIRE ENTRANCE NOTES:

1. SAW CUT IN THE CURB AND GUTTER SECTION AND CONDUIT ENTRANCE TO BE SEALED WITH A PLIABLE, NON–HARDENING DUCT SEALANT PRIOR TO APPLICATION OF LOOP SEALANT. NO LOOP SEALANT SHALL BE APPLIED IN THE CURB AND GUTTER SECTION OR AT CONDUIT ENTRANCE.
2. GROUT AROUND CONDUIT INSERTED INTO CURB OR PAVEMENT SECTION.
3. EACH LOOP SHALL HAVE A SEPARATE LEAD–IN–SAW CUT TO THE LOOP WIRE ENTRANCE IN THE CURB OR AT THE EDGE OF PAVEMENT.

LOOP WIRE ENTRANCE DETAIL



JOINT CROSSING DETAIL

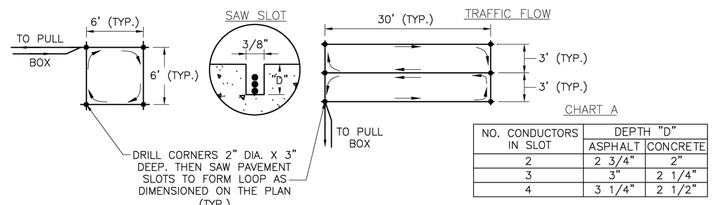


CHART A

NO. CONDUCTORS IN SLOT	DEPTH "D"	
	ASPHALT	CONCRETE
2	2 3/4"	2"
3	3"	2 1/4"
4	3 1/4"	2 1/2"

TYPICAL LOOP DETAIL

LOOP DETECTION NOTES:

1. QUADRAPOLE LOOP TO BE ONE CONTINUOUS WIRE PLACED IN TWO TURNS. ALL LOOPS TO BE WOUND IN SAME DIRECTION, WITH START AND END CLEARLY MARKED AT PULL BOX.
2. TRANSVERSE LOOP TO BE ONE CONTINUOUS WIRE PLACED IN THREE TURNS. ALL LOOPS TO BE WOUND IN SAME DIRECTION, WITH START AND END CLEARLY MARKED AT PULL BOX.
3. SLOT IN PAVEMENT FOR LOOPS TO BE CUT ¼" WIDE AT MINIMUM DEPTH "D" AS INDICATED IN CHART A. SLOT IN PAVEMENT FOR LEAD SHALL BE ¼" WIDE AT MINIMUM DEPTH "D". FILL SLOTS WITH AN APPROVED ASPHALT SEALER (ASPHALT PAVEMENT) OR AN APPROVED ELASTIC EPOXY SEALANT (CONCRETE PAVEMENT) TO WITHIN ⅛" OF PAVEMENT SURFACE.
4. OTHER THAN SOLDERED TYPE SPLICE OR SPLICE MADE WITH WIRE NUTS AT THEIR JUNCITON, FEEDER CABLE AND LOOP WIRE SHALL BE OF CONTINUOUS RUN WITH NO SPLICES. ALL CONNECTIONS TO BE WATERTIGHT WITH APPROVED SPLICE KITS. WATERTIGHT CONNECTIONS SHALL EXTEND TO AND ENCOMPASS EACH OUTER JACKET OF THE DETECTOR FEEDER AND LOOP WIRE CABLES.
5. ALL LEADS FOR INDIVIDUAL LOOPS TO BE KEPT SEPARATE AND LOOP WIRE BETWEEN THE LOOP AND THE FEEDER CABLE CONNECTION SHALL BE TWISTED THREE TURNS PER FOOT.
6. ALL LOOPS SHALL BE WET CUT WITH EQUIPMENT APPROVED BY THE CITY TRAFFIC ENGINEER.
7. WHERE LOOPS ARE TO BE INSTALLED ON PROJECTS INVOLVING EITHER ASPHALT PAVEMENT CONSTRUCTION OR MILLING AND OVERLAY OF AN EXISTING ASPHALT PAVEMENT, LOOPS SHALL BE INSTALLED IN THE BASE COURSE PRIOR TO PLACEMENT OF THE ASPHALT SURFACE COURSE.
8. IF EXISTING LOOPS ARE TO BE ABANDONED AND NEW LOOP INSTALLED, ABANDONED LOOP WIRES SHALL BE REMOVED OR CUT COMPLETELY THROUGH ALONG ALL SLOTS PARALLEL TO VEHICLE FLOW.
9. LOOPS SHALL BE #14 AWG STRANDED WIRE IN PVC DUCT MADE UP OF 2 NON–TWISTED TURNS IN SINGLE SLOT OR AS RECOMMENDED BY MANUFACTURER OF THE DETECTOR AMPLIFIER. LOOP SHALL BE PLACED IN SAWED SLOTS IN A FIGURE EIGHT MANNER WITH DEVICE WHICH WILL NOT DAMAGE THE WIRE INSULATION. LEAD–IN CABLE SHALL BE 2–1C #14 AWG TWISTED.

LOOP DETECTION

No.	REVISIONS	DATE	BY

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DRAWN BY: CNH
CHECKED BY: JJW

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

Project: POLE AND LUMINAIRE DETAILS
CITY OF LEE'S SUMMIT, MO
LEE'S SUMMIT, JACKSON COUNTY, MO

Sheet Name: CONDUIT & DETECTION DETAILS

Drawn By: BWC
Checked By: MP
Date: 01/2020
Proj. #:

TS-7

CONDUIT & DETECTION DETAILS

OLDHAM VILLAGE TRAFFIC SIGNAL
LEE'S SUMMIT, MO, 64086

ORIGINAL ISSUE: 01/15/2025
KHA PROJECT NO. 268132012
SHEET NUMBER 13

Drawing name: K:\KNC_TPTO\268132012 - Oldham Village Signal\CAD\Plansheets\8 - TRAFFIC SIGNAL DETAILS.dwg CONDUIT & DETECTION DETAILS Feb 21, 2025 1:58pm by Clara.Hogsett
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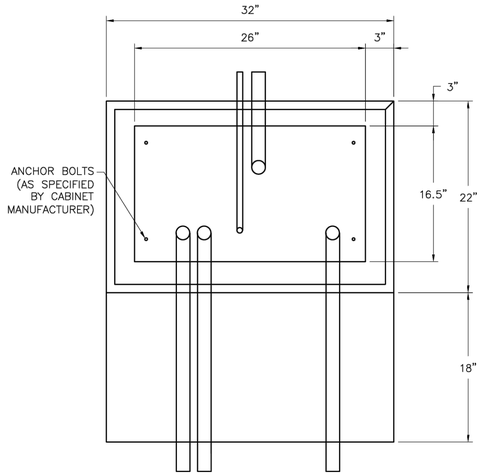
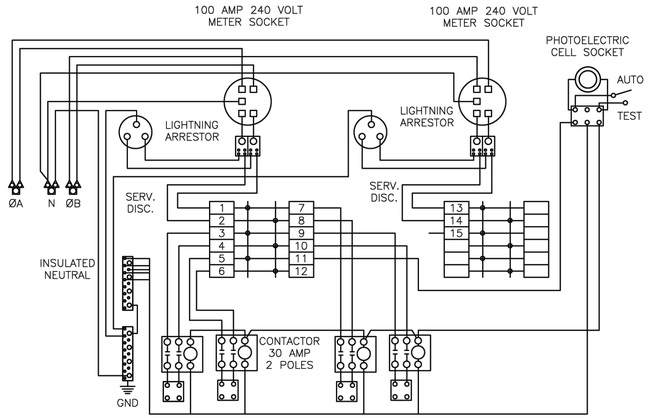
GENERAL NOTES:

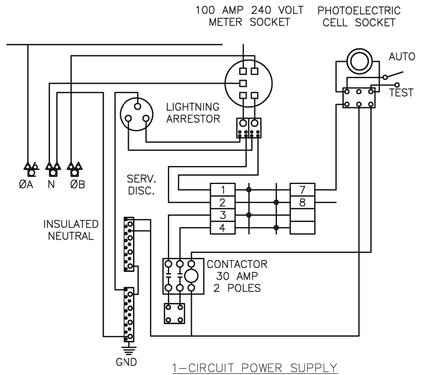
1. PHOTOELECTRIC CELL SHOULD BE ORIENTED TO THE NORTH OR EAST.
2. SEAL AROUND JOINT BETWEEN CABINET AND BASE WITH LIFETIME SILICONE CAULK.
3. ALL EXPOSED EDGES OF THE BASE SHOULD HAVE A 1" CHAMFER.
4. IF BASE IS ADJACENT TO A TRAFFIC SIGNAL CONTROLLER, RAISED PORTION OF BASE (ABOVE FINISHED GRADE) SHOULD BE CONSTRUCTED TO THE SAME HEIGHT AS THE SIGNAL CONTROLLER BASE.
5. THE STREET ADDRESS WITH THE POWER SUPPLY NUMBER BELOW IT SHOULD BE LABELED ON THE UPPER PORTION OF THE CABINET FACING THE STREET. THE CONTRACTOR WILL SUPPLY AND INSTALL LABELS FOR THE CABINETS.



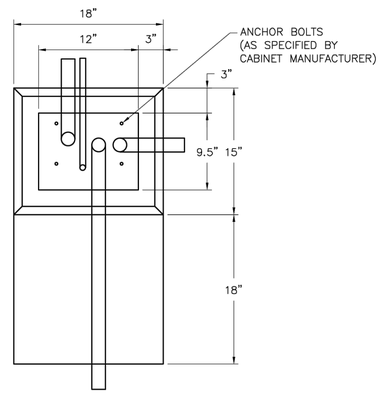
PLAN VIEW



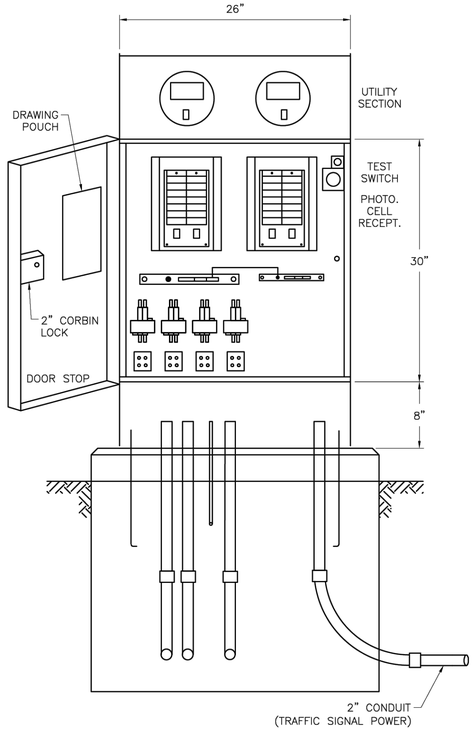
DUAL METER POWER SUPPLY
WIRING SCHEMATIC



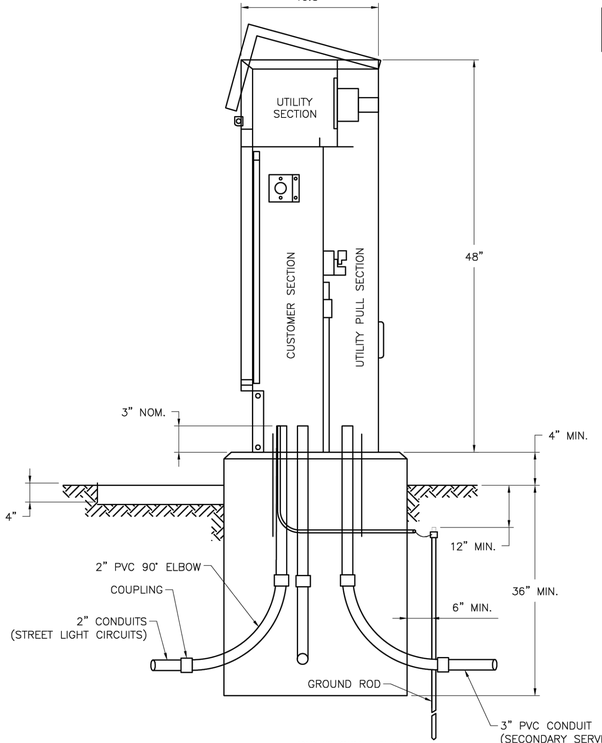
1–CIRCUIT POWER SUPPLY
WIRING SCHEMATIC



PLAN VIEW



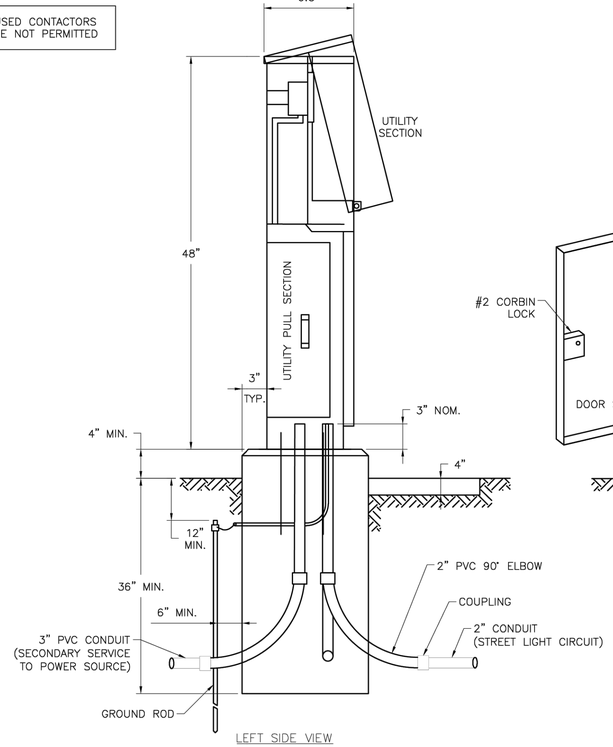
FRONT VIEW



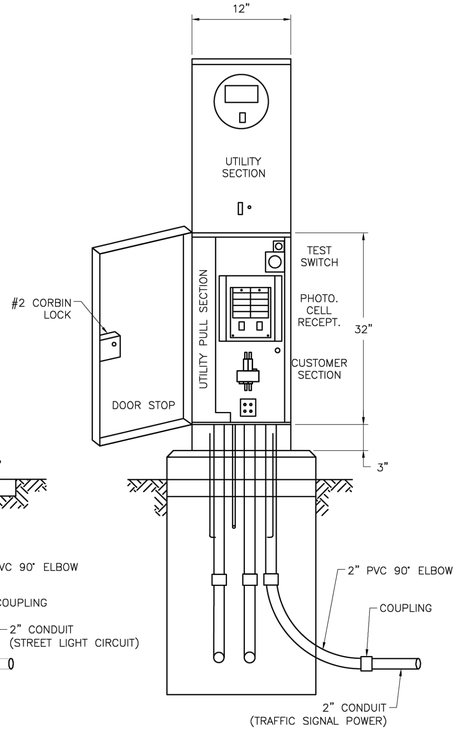
RIGHT SIDE VIEW

DUAL METER POWER SUPPLY

FUSED CONTACTORS
ARE NOT PERMITTED



LEFT SIDE VIEW



FRONT VIEW

1 – CIRCUIT POWER SUPPLY

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DESIGNED BY: JJW
DRAWN BY: CNH
CHECKED BY: JJW

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

Project: POLE AND LUMINAIRE DETAILS
CITY OF LEE'S SUMMIT, MO
LEE'S SUMMIT, JACKSON COUNTY, MO

Sheet Name: POWER SUPPLY ASSEMBLY DETAILS

Drawn By: BWC
Checked By: MP
Date: 01/2020
Proj. #:

TS-8

POWER SUPPLY
ASSEMBLY

OLDHAM VILLAGE
TRAFFIC SIGNAL
LEE'S SUMMIT, MO. 64086

ORIGINAL ISSUE:
01/15/2025

KHA PROJECT NO.
268132012

SHEET NUMBER
14

Drawing name: K:\KHC_TPTO\268132012 - Oldham Village Signal\CAD\Plansheets\8 - TRAFFIC SIGNAL DETAILS.dwg POWER SUPPLY ASSEMBLY Feb 21, 2025 1:59pm by Ciara.Hogsett
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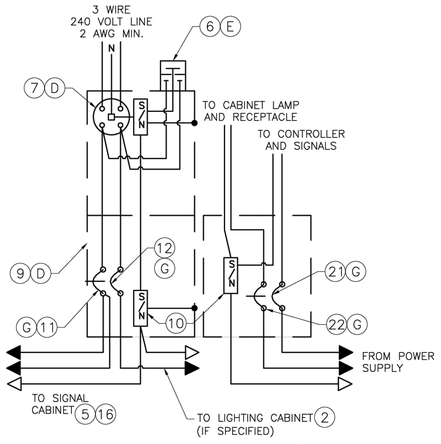


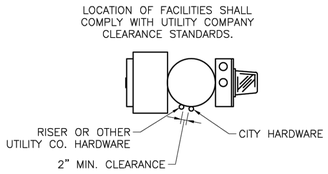
POWER SUPPLY SIGNAL CABINET POWER PANEL

OVERHEAD SERVICE POWER SUPPLY WIRING SCHEMATIC SIGNALS AND/OR LIGHTING

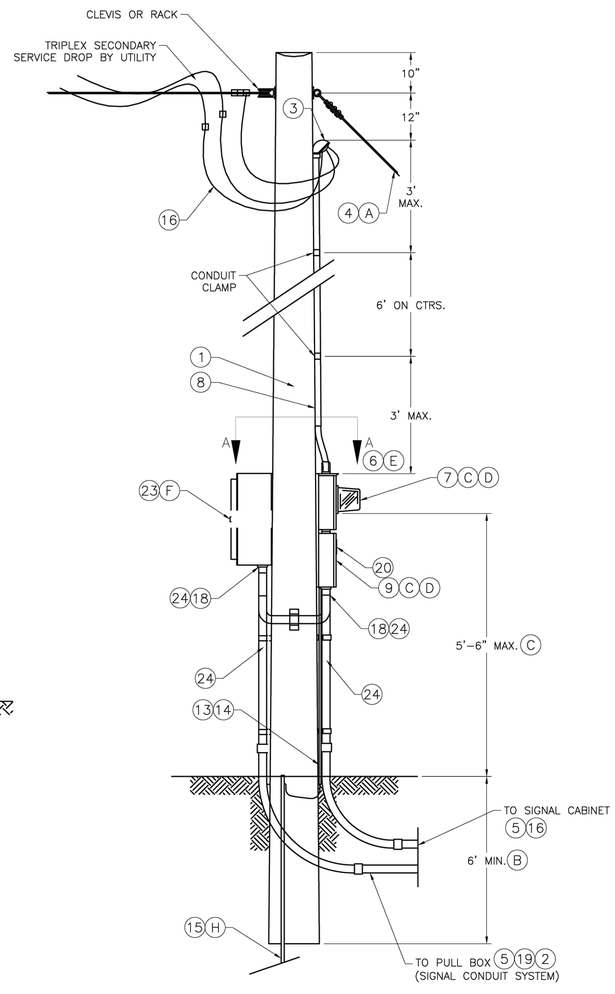
SECONDARY SERVICE CONNECTION DETAILS

NOTES:

1. CONTRACTOR SHALL INSTALL A CONDUIT STUB 24" TO 6" ABOVE GROUND AT UTILITY POLES. CONDUIT SHALL BE STUBBED TO THE SIDE OF THE POLE THAT WILL ALLOW A DIRECT RUN UP THE POLE TO THE TRANSFORMER WITHOUT CROSSING OTHER UTILITY LINES OR CABLES. THE END OF THE CONDUIT SHALL BE CAPPED.
2. CONTRACTOR SHALL INSTALL CONDUIT IN A TRENCH TO WITHIN 24" OF PEDESTALS OR PAD MOUNT TRANSFORMERS AND LEAVE A 36" X 36" X 36" ACCESS HOLE IN THE GROUND. CONTRACTOR SHALL KEEP OPEN TRENCH COVERED AND PROMPTLY BACKFILL ACCESS HOLE WHEN SERVICE IS COMPLETED.



SECTION A–A



OVERHEAD SERVICE POWER SUPPLY TEMPORARY SPAN WIRE SIGNAL ONLY

	LIST OF MATERIALS
ITEM	DESCRIPTION
1	SERVICE POLE 30' MIN., CLASS IV WOOD, CONTRACTOR PROVIDED, CITY OWNED. *
2	#8 AWG MIN. CABLE, 600 VOLT *
3	SERVICE ENTRANCE HEAD
4	GUY CABLE, AS REQUIRED
5	2" MIN. RIGID CONDUIT WITH PREFORMED ELBOWS
6	LIGHTNING ARRESTOR, VALVE TYPE, 2 POLE, 650 VOLT
7	240 VOLT METER SOCKET, 100 AMP FOR SIGNALS
8	2" MIN. RIGID CONDUIT
9	SERVICE DISCONNECT BOX, LOCKING, RAINTIGHT, NEMA 4
10	INSULATED, GROUNDABLE NEUTRAL, 200 AMP MINIMUM
11	SIGNAL BREAKER, SINGLE POLE, 40 AMP MIN., TYPE A OR B
12	LIGHTING BREAKER, SINGLE POLE, 40 AMP, TYPE A OR B
13	METAL CONDUIT, 1/2"
14	GROUND WIRE, #2 AWG MIN.
15	GROUND ROD, 3/4" X 8' MIN.
16	#2 AWG MIN. CABLE, 600 VOLT
17	RESERVED
18	THREADED CONDUIT HUB WITH SEALING WASHERS
19	LIGHTING CABLES *
20	WEATHERPROOF ADHESIVE LABEL (SIGNALS) VINYL RAISED LETTERING
21	TYPE B CONTROLLER AND SIGNAL BREAKER, AS SPECIFIED.
22	TYPE B AUXILIARY BREAKER, 15 AMP
23	LIGHTING CONTROL CABINET
24	2" STEEL CONDUIT (MIN.)
*	SEE PLANS

NOTES:

(A) SERVICE POLE SHALL BE GUYED WHEN SPAN OF OVERHEAD WIRE EXCEEDS 50 FEET.

(B) INCREASE 1 FOOT FOR EACH 5 FEET ABOVE 50 FEET.

(C) SERVICE DISCONNECT BOXES AND METER BOXES SHALL BE ALUMINUM OR STAINLESS STEEL. ALL HARDWARE, HINGES, CATCHES, ETC. SHALL BE STAINLESS STEEL. METER SOCKET AND OTHER EQUIPMENT SHALL BE U.L. APPROVED AND CONFORM TO THE REQUIREMENTS OF THE UTILITY COMPANY PROVIDING POWER.

(D) SCHEMATIC DIAGRAM SHALL BE MOUNTED ON INSIDE OF DOOR.

(E) UTILITY COMPANY SHALL DECIDE IF LIGHTING ARRESTERS ARE TO BE CONNECTED ONT HE LOAD SIDE OR LINE SIDE OF THE METER. THE UTILITY COMPANY SHALL ALSO DECIDE IF THE LIGHTING ARRESTER IS TERMINATED IN THE METER OR DISCONNECT CABINET. IF TERMINATED IN THE DISCONNECT CABINET, IT SHALL BE INSTALLED ON THE CONNECT CABINET.

(F) IF LIGHTING IS SPECIFIED, INSTALL LIGHTING CONTROL ON POWER SUPPLY.

(G) BREAKERS SHALL CONFORM TO THE STANDARD SPECIFICATIONS.

(H) IF SUBSURFACE CONDITIONS EXIST WHICH PROHIBIT THE PLACEMENT OF THE GROUND ROD IN VERTICAL POSITION, THE ROD MAY BE DRIVEN AT AN OBLIQUE ANGLE NOT TO EXCEED 45 DEGREES BURIED IN A TRENCH AT LEAST 30 IN. DEEP. CONNECTION TO GROUND ROD SHALL BE CLAMP TYPE AS DETAILED ON STANDARD DRAWING TS-2.

GENERAL NOTES:

1. FOR CABLE TYPES AND INSTALLATION, SEE STANDARD SPECIFICATIONS.
2. THE TYPE OF POWER SUPPLY ASSEMBLY IS SHOWN ON THE PLANS OR IS DESIGNATED ON THE CONTRACT.
3. THE UTILITY COMPANY SHALL BE NOTIFIED 30 DAYS PRIOR TO THE DATE OF SERVICE WILL BE REQUIRED.
4. ALL OPENINGS IN ANY UTILITY ENCLOSURE, SERVICE BOX, OR METER SHALL BE COVERED AND SEALED WITH LIFETIME SILICONE CAULK.
5. CONTRACTOR TO PROVIDE SUFFICIENT NUMBER OF GROUND ROD(S) AS REQUIRED FOR MAXIMUM OF 25 OHMS RESISTANCE TO GROUND.
6. ALL MATERIALS REQUIRED EXCLUDING REFERENCED ITEMS AS SHOWN ON DRAWING SHALL BE INCLUDED IN PRICE BID FOR POWER SUPPLY ASSEMBLY.

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

Project: POLE AND LUMINAIRE DETAILS
CITY OF LEE'S SUMMIT, MO
LEE'S SUMMIT, JACKSON COUNTY, MO

Sheet Name: POWER SUPPLY ASSEMBLY (120 VOLTS) DETAILS

Drawn By: BWC
Checked By: MP
Date: 01/2020
Proj. #:

TS-9

NO.	REVISIONS	DATE	BY

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SCALE: AS NOTED
DESIGNED BY: JJW
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POWER SUPPLY ASSEMBLY 120 V

OLDHAM VILLAGE
TRAFFIC SIGNAL
LEE'S SUMMIT, MO, 64086

ORIGINAL ISSUE: 01/15/2025
KHA PROJECT NO. 268132012
SHEET NUMBER 15

Drawing name: K:\KNC_DPTO\268132012 - Oldham Village Signal\CAD\Plansheets\8 - TRAFFIC SIGNAL DETAILS.dwg POWER SUPPLY ASSEMBLY 120 V Feb 21, 2025 1:39pm by Clara.Hogsett
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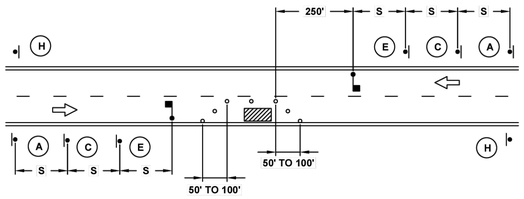
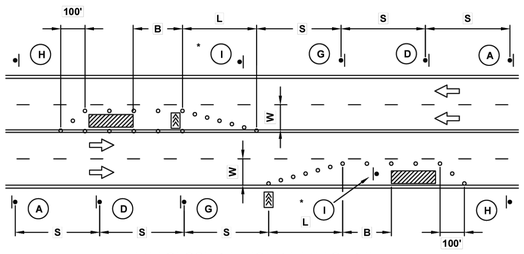
SYMBOL LEGEND

- WORK AREA
- SIGN
- BARRICADE
- DIRECTION OF TRAVEL
- CHANNELIZER
- ARROW PANEL
- FLAGGER

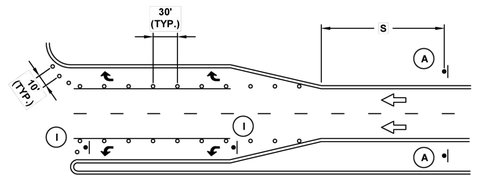


LANE CLOSURE - TWO LANE STREET

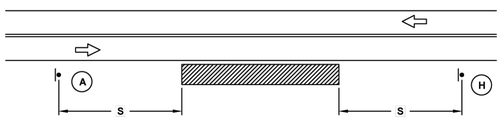


LANE CLOSURE - FOUR LANE STREET

*INSTALL SIGNS EVERY 200 FEET THROUGHOUT THE CLOSED LANE OR AS NEEDED



TURN LANE CLOSURE



TYPICAL SIGNING FOR WORK ADJACENT TO THE STREET

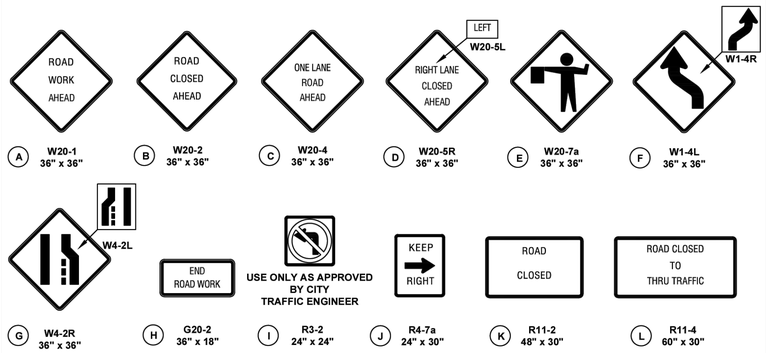
GUIDELINES FOR LENGTH OF LONGITUDINAL BUFFER SPACE "B"	
SPEED LIMIT (MPH)	LENGTH (FEET)
25	35
30	55
35	85
40	120
45	170

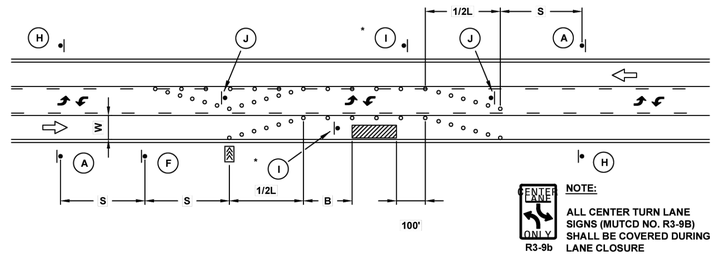
MAXIMUM CHANNELIZER SPACING		
SPEED LIMIT (MPH)	WITHIN TAPER (FEET)	OUTSIDE TAPER (FEET)
25	25	50
30	30	60
35	35	70
40	40	80
45	45	90

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

SIGN SPACING "S"	
SPEED LIMIT (MPH)	SPACING (FEET)
25	100
30-35	250
≥ 40	350

SIGN LEGEND



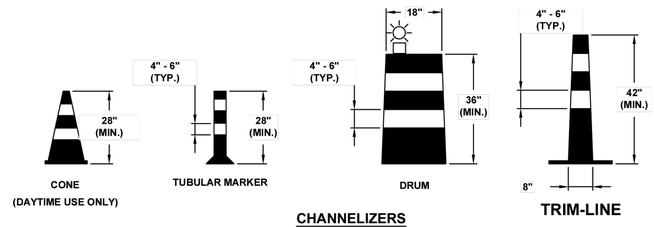


NOTE:

ALL CENTER TURN LANE SIGNS (MUTCD NO. R3-9B) SHALL BE COVERED DURING LANE CLOSURE

LANE CLOSURE - THREE LANE STREET

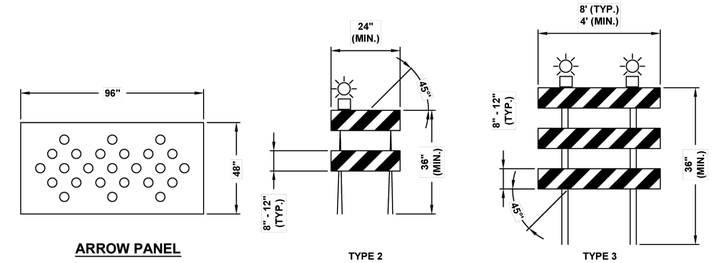
*INSTALL SIGNS EVERY 200 FEET THROUGHOUT THE CLOSED LANE OR AS NEEDED



CHANNELIZERS

NOTE:

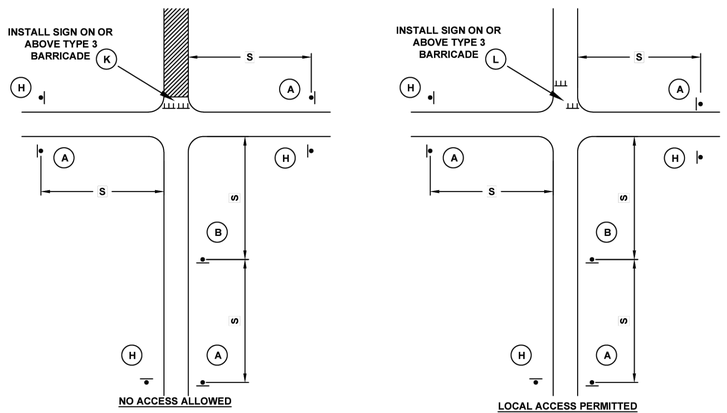
WHITE BANDS ON BARRICADES AND CHANNELIZERS SHALL BE MADE FROM HIGH INTENSITY SHEETING MATERIAL.



BARRICADES

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.



TYPICAL STREET CLOSURE

REV	DESCRIPTION	DATE

LEE'S SUMMIT MISSOURI

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

PROJECT: STANDARD DETAILS
PUBLIC WORKS ENGINEERING
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

SHEET NAME: TRAFFIC CONTROL DETAILS

DRAWN BY:	CNS
CHECKED BY:	MJF
DATE:	05/13/2024
PROJECT #:	---.-

TC-1

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REVISIONS		
NO.	DATE	BY

SCALE:	AS NOTED
DESIGNED BY:	JJW
DRAWN BY:	CNH
CHECKED BY:	JJW

TRAFFIC CONTROL DETAILS

OLDHAM VILLAGE
TRAFFIC SIGNAL
LEE'S SUMMIT, MO. 64086

ORIGINAL ISSUE: 01/15/2025

KHA PROJECT NO. 268132012

SHEET NUMBER

16

Drawing name: K:\KVC_TPTO\268132012 - Oldham Village Signals\CAD\Plansheets\8 - TRAFFIC SIGNAL DETAILS.dwg TRAFFIC CONTROL DETAILS Feb 21, 2025, 1:59pm, by Ciara.Hogarth
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