

LEE'S SUMMIT R7 MIDDLE SCHOOL ON BAILEY RD. - OFF-SITE
TRAFFIC IMPROVEMENTS, TRAFFIC SIGNAL AT HAMBLEN RD. &
BAILEY RD. & GREENWAY TRAIL IMPROVEMENTS

SHEET NO. TITLE

WYOMING COUNTY, MISSOURI

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[illegible]

ABBREVIATION TABLE

[illegible]

EXISTING UTILITY LOCATIONS

THE EXISTING UTILITY LOCATIONS SHOWN ON THE PLANS ARE APPROXIMATE AND MAY NOT INCLUDE ALL LINES PRESENT. THE CONTRACTOR SHALL BE RESPONSIBLE TO CALL "1-800-DIG-RITE", AND COORDINATE FIELD LOCATION OF EXISTING UNDERGROUND UTILITIES PRIOR TO BEGINNING GRADING ACTIVITIES. **!!STOP!! CALL BEFORE YOU DIG!!**

1-800-DIG-RTT ~ 874
www.mojcall.com

FIBER OPTIC - GOOGLE FIBER
908 BROADWAY BLVD.
KANSAS CITY, MO 64105,
(913) 663-1900

WATER - LEE'S SUMMIT WATER UTILITIES
1200 SE HAMBLIN ROAD
LEE'S SUMMIT, MO 64081
(816) 969-1900

WASTEWATER - LITTLE BLUE VALLEY SEWER DISTRICT
21208 E OLD ATHONTON ROAD
INDEPENDENCE, MO 640581

(816) 600-3552
CABLE - SPECTRUM
188 NW OLDHAM PKWY
LEE'S SUMMIT, MO 64081
(800) 871-0788

(866) 874-2389

RANSON ROAD = 45 MPH
 BAILEY ROAD = 35 MPH
 CENTURY DRIVE (NORTH OF BAILEY ROAD) = 25 MPH
 CENTURY DRIVE (SOUTH OF BAILEY ROAD) = 40 MPH
 SE 15TH STREET = 25 MPH
 SE CAPE DRIVE = 25 MPH

NOT TO SCALE



7301 W. 133RD STREET, SUITE 200
OVERLAND PARK, KANSAS 66213

RYAN B. FLEMING, P.E. DATE 8/11/21

I CERTIFY THESE PLANS WERE PREPARED BY ME
OR UNDER MY CLOSE PERSONAL SUPERVISION.
ONE OR MORE OF THE FOLLOWING DO NOT APPLY:
1. I AM NOT A PROFESSIONAL ENGINEER.
2. I AM NOT A LICENSED PROFESSIONAL ENGINEER.
3. I AM NOT A LICENSED PROFESSIONAL ENGINEER
AUTHENTICATED BY MY SEAL: PE-20022003161

Ryan B. Fleming

SHANNON JEFFRIES, P.E. DATE 5/11/2011
I CERTIFY THESE PLANS WERE PREPARED BY ME OR UNDER MY IMMEDIATE PERSONAL SUPERVISION.

APPROVED BY:

GEORGE BINGER, P.E.
CITY ENGINEER

DATE

[illegible]

2023	LEES SUMMIT, MISSOURI	CLASS NO. _____ DRAWN BY: _____ CHECKED BY: _____ DATE: _____ PROJECT NO.: _____ DATE: _____ DATE: _____
LEES SUMMIT MIDDLE SCHOOL #4 BAILEY ROAD PUBLIC IMPROVEMENTS		TITLE SHEET 1 OF 101 SHEET



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olsson

LEE'S SUMMIT, MISSOURI
BAILEY ROAD PUBLIC IMPROVEMENTS
GENERAL LAYOUT

2021

REV. NO.

DATE

REVISIONS DESCRIPTION

BY

MO. NO. RE. 2020001867

DATE: 8/25/2021

DESIGNED BY: J. J. JONES

DRAWN BY: J. J. JONES

CHECKED BY: J. J. JONES

APPROVED BY: J. J. JONES

DATE: 8/25/2021

PROJECT NO. 2020001867

PROJECT NAME: LEE'S SUMMIT, MISSOURI
BAILEY ROAD PUBLIC IMPROVEMENTS

LEE'S SUMMIT, MISSOURI
BAILEY ROAD PUBLIC IMPROVEMENTS
GENERAL LAYOUT

2021

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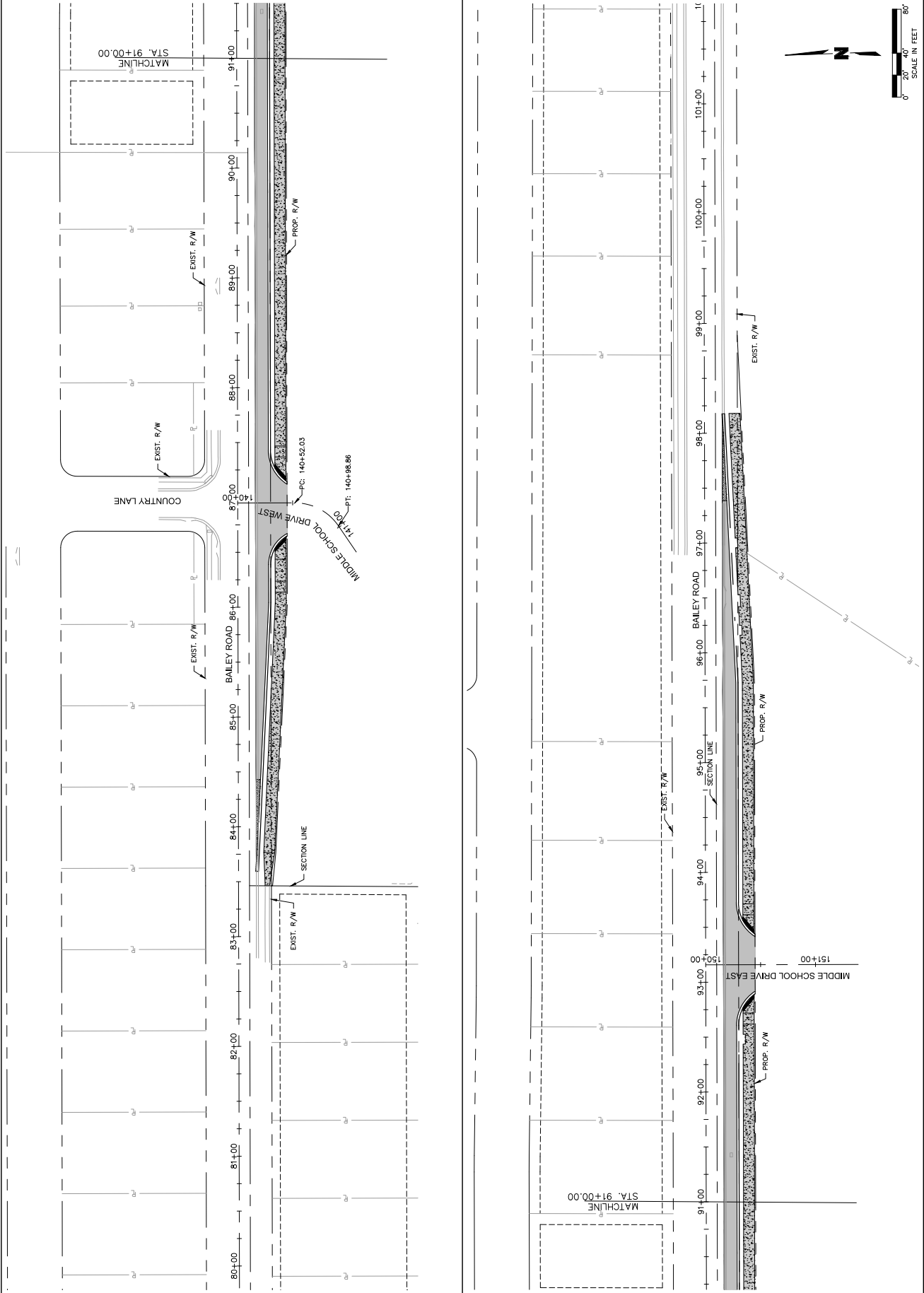
CHECKED BY: J. J. JONES

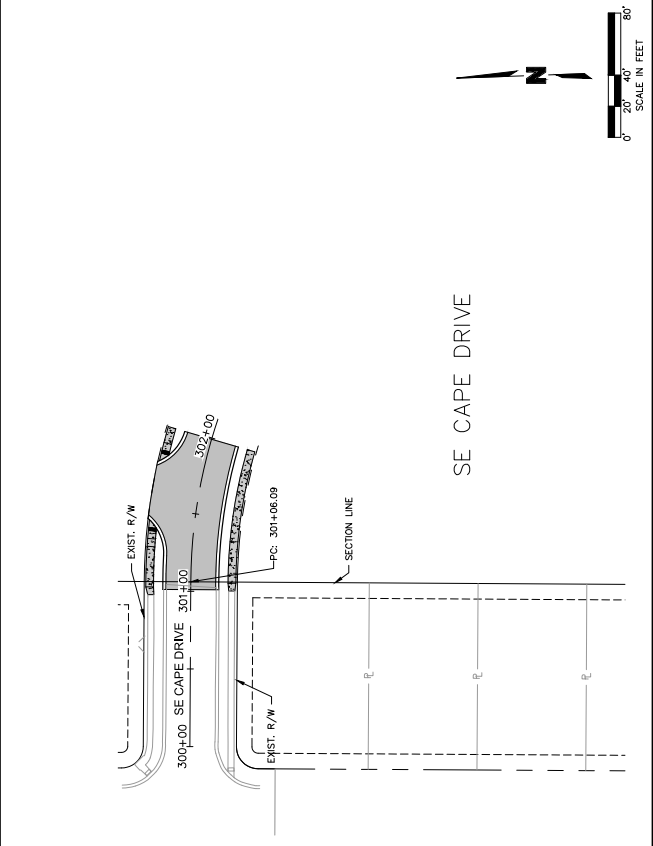
APPROVED BY: J. J. JONES

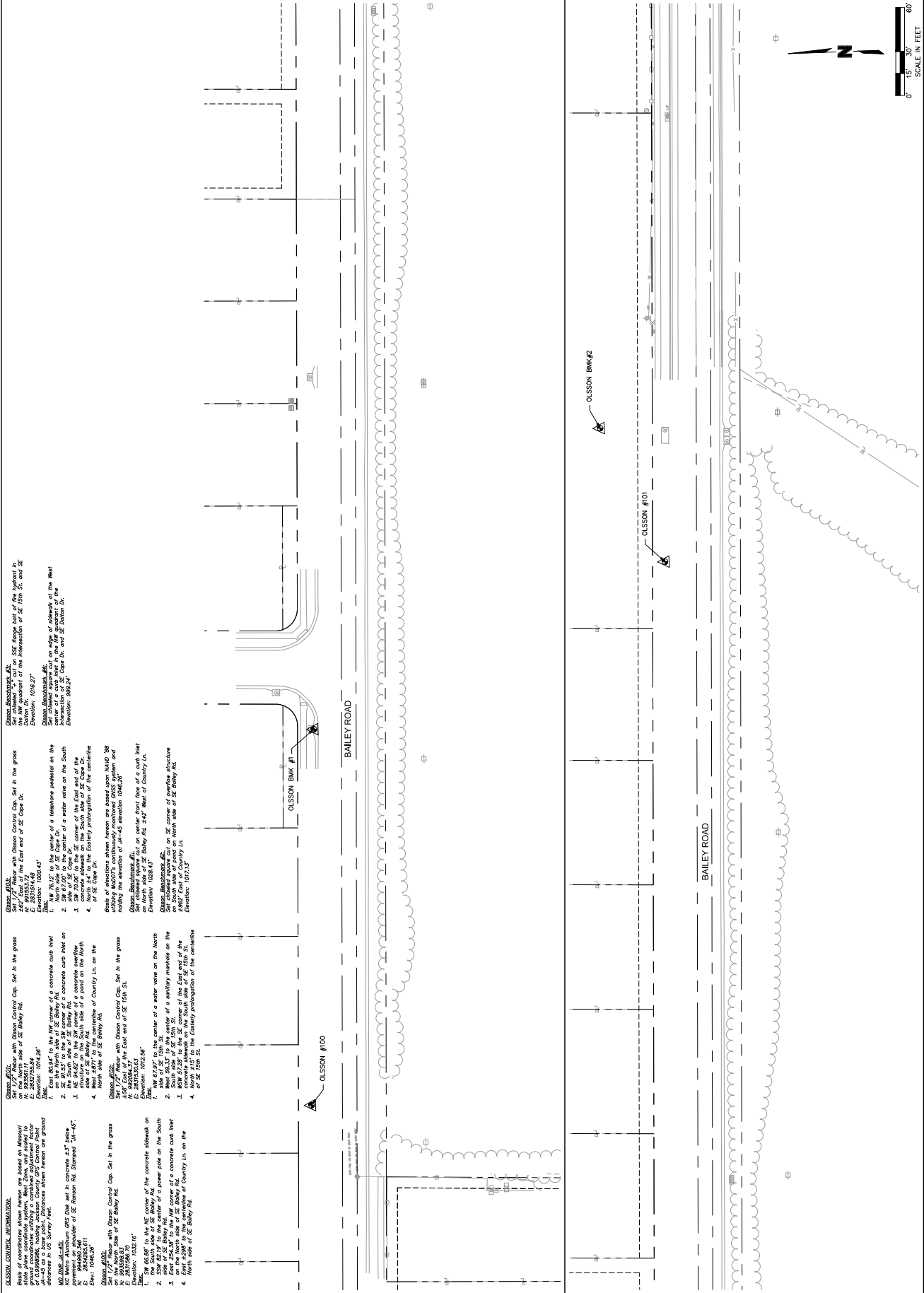
DATE: 8/25/2021

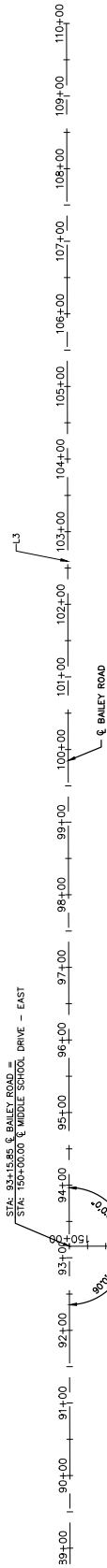
PROJECT NO. 2020001867

PROJECT NAME: LEE'S SUMMIT, MISSOURI
BAILEY ROAD PUBLIC IMPROVEMENTS







[illegible]

RYAN B. FLEMING
MO. NO. BE-2002003161



uoss|o

BAILEY ROAD						
NO.	STATION	NORTHING	EASTING	LENGTH	LINE/CHORD BEARING	DELTA TANGENT RADIUS
L1	43+69.83	993720.5791	2827663.2008	133.22'	S87°37'57"E	
L2	56+93.05	993665.9183	2826885.2877	2653.31'	S88°07'47"E	
L3	83+46.36	993579.3187	2831537.1864	2653.64'	S88°07'52"E	

CENTURY DRIVE						
NO.	STATION	NORTHING	EASTING	LENGTH	LINE/CHORD BEARING	DELTA TANGENT RADIUS
L4	201+00.00	993438.7700	2829227.1174	129.74'	S18°03'35"E	
C1	201+29.74	993894.1700	2828864.3338	109.59'	S7°35'40"E	300.00'
L5	202+38.33	993716.1456	2828860.7372	86.06'	S2°32'15"W	
L6	203+25.40	993532.1903	2828976.4268	378.23'	S2°22'24"W	

SE BROADWAY DR - SOUTH						
NO.	STATION	NORTHING	EASTING	LENGTH	LINE/CHORD BEARING	DELTA TANGENT RADIUS
L7	121+00.00	993562.3369	2829237.1363	133.44'	S1°52'13"W	
C2	121+33.44	993518.9376	2829097.7813	96.83'	S9°47'46"W	350.00'

SE NORWOOD DRIVE						
NO.	STATION	NORTHING	EASTING	LENGTH	LINE/CHORD BEARING	DELTA TANGENT RADIUS
L8	131+23.18	993518.4892	2829625.7144	123.18'	S1°52'13"W	

MIDDLE SCHOOL DRIVE - WEST						
NO.	STATION	NORTHING	EASTING	LENGTH	LINE/CHORD BEARING	DELTA TANGENT RADIUS
L9	140+00.00	993597.9501	2831885.5710	52.03'	S1°52'08"W	
C3	140+52.03	993515.9461	2831883.8740	46.83'	S2°04'03"W	48.00'
L10	140+98.86	993476.9095	2831861.5016	28.75'	S57°45'58"W	

MIDDLE SCHOOL DRIVE - EAST						
NO.	STATION	NORTHING	EASTING	LENGTH	LINE/CHORD BEARING	DELTA TANGENT RADIUS
L11	151+38.90	993408.8714	2832501.6323	138.90'	S1°52'08"W	

SE 13TH STREET						
NO.	STATION	NORTHING	EASTING	LENGTH	LINE/CHORD BEARING	DELTA TANGENT RADIUS
L12	350+00.00	993399.5226	2831222.9266	353.68'	S88°07'44"E	
C4	354+53.68	993387.9748	2831576.4215	75.78'	S66°25'4"E	100.00'
L13	354+29.46	993358.3824	2831644.2218	34.01'	S44°42'43"E	

SE DALTON DRIVE						
NO.	STATION	NORTHING	EASTING	LENGTH	LINE/CHORD BEARING	DELTA TANGENT RADIUS
L14	600+00.00	992250.3770	2831337.7063	381.73'	S27°19'52"W	

DRIVE STA. 550+00.00						
NO.	STATION	NORTHING	EASTING	LENGTH	LINE/CHORD BEARING	DELTA TANGENT RADIUS
L15	650+00.00	992091.3468	2831331.2327	49.37'	S88°02'17"E	
C5	650+49.37	992088.6585	2831380.5784	28.44'	S42°46'31"E	18.17'
L16	650+77.81	992070.8857	2831397.9452	15.35'	S22°39'16"W	

SE CAPE DRIVE						
NO.	STATION	NORTHING	EASTING	LENGTH	LINE/CHORD BEARING	DELTA TANGENT RADIUS
L17	300+00.00	991564.3519	2831348.8128	106.09'	S87°40'08"E	
C6	301+06.09	991560.0371	2831454.8109	118.91'	S77°30'00"E	60.09'

DRIVE STA. 301+60.38						
NO.	STATION	NORTHING	EASTING	LENGTH	LINE/CHORD BEARING	DELTA TANGENT RADIUS
C8	499+21.86	991553.4513	2831508.6475	78.04'	N10°06'17"E	514.00'

- a) WATER CAN BE PURCHASED FROM THE CITY'S WATER MAINS.
- b) ALL MANHOLES, VALES, LIDS, METER LIDS, FIRE HYDRANTS AND AIR RELIEF ASSEMBLIES WITHIN THE CONSTRUCTION LIMITS SHALL BE MAINTAINED IN ACCORDANCE WITH THE SPECIFICATIONS. ALL CONTRACTOR IN ACCORDANCE WITH THE SPECIFICATIONS, ALL VALES RISES IN PAVEMENT (WHETHER ADJUSTED, REPLACED OR REPAIRED) SHALL BE MAINTAINED IN ACCORDANCE WITH THE SPECIFICATIONS. NO EXCESS FILLING AND COMPACTING OF THE SUBGRADE SHALL BE ALLOWED.
- c) CONTRACTOR SHALL PROVIDE BYPASS PUMPING OF SEWAGE FROM THE EXISTING SEWER MAINS TO THE EXISTING SEWER MAINS. ALL MATERIALS, EQUIPMENT AND LABOR NECESSARY TO COMPLETE THE PUMPING SHALL BE SUPPLIED BY THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF THE EXISTING SEWAGE AND BEGINNING BYPASS PUMPING OPERATIONS. NO EXCESS FILLING AND COMPACTING OF THE SUBGRADE SHALL BE ALLOWED. ALL MATERIALS AND EQUIPMENT SHALL BE LISTED IN THE BID TAB.
- d) ENVIRONMENTAL & SAFETY:
 - a) CONTRACTOR SHALL USE ADEQUATE DUST CONTROL.
 - b) CONTRACTOR SHALL MAINTAIN THE LINES OF THE WORK. CONSULT SECTION 1145 IN DIVISION 1.
 - c) CONTRACTOR SHALL MAINTAIN THE LINES OF THE WORK. CONSULT SECTION 1145 IN DIVISION 1.
 - d) SITUATION FOR MAINTAINING EROSION CONTROL SHALL BE THE RESPONSIBILITY FOR MAINTAINING EROSION CONTROL. SYSTEMS, REPLACING DAMAGED OR FAILED EROSION CONTROL DEVICES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. EROSION CONTROL SYSTEMS WITHIN 24 HOURS AFTER A SIGNIFICANT RAIN EVENT. CHASING AND/OR PLACING OF PAVEMENTS SHALL BE IMMEDIATELY BEFORE 500' OF SEED IS PLACED. EROSION AND SEDIMENT CONTROL SHALL BE MAINTAINED TO PREVENT DISTURBANCE OF THE GROUND. FILL REQUIREMENTS TO MAINTAIN EROSION AND SEDIMENT CONTROL MAY BE ADJUSTED TO MAINTAIN EROSION AND SEDIMENT CONTROL.
 - e) UNLESS MAILED IN SECTION 1010, CONTRACTOR SHALL MAINTAIN THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) ON SITE IN ACCORDANCE WITH DNR REGULATIONS.
 - f) CONTRACTOR SHALL MAINTAIN THE LINES OF THE WORK. CONSULT SECTION 1145 IN DIVISION 1.
 - g) CONTRACTOR SHALL MAINTAIN THE LINES OF THE WORK. CONSULT SECTION 1145 IN DIVISION 1.

- 7). GRADING, REMOVALS & DAMAGED ITEMS:
SECTION 15.01 OF DIVISION 1.
- a) NO BURNING IS ALLOWED ON THE SITE.
 - b) SYSTEMS AND OTHER ITEMS DESTROYED OR DAMAGED BY THE CONTRACTOR SHALL BE RESTORED AT THE CONTRACTOR'S EXPENSE. ITEMS NOT RESTORED SHALL BE REMOVED FROM THE EXISTING BEFORE GRADING OCCUPANCY, UNLESS WAIVED BY OWNER. ALL ITEMS REQUIRING REPLACEMENT SHALL BE SUBJECT TO OWNER'S APPROVAL. NO DIRECT PAYMENT WILL BE MADE FOR THIS WORK, UNLESS LISTED IN THE BID TAB.
 - c) ALL FENCE REPLACEMENT SHOULD BE RELOCATED TO THE EXISTING FENCE LINE. FENCE LINE SHALL BE RELOCATED INSIDE OF THE PROPERTY LINES. FENCE INSIDE OF PROPERTY LINES SHOULD BE PLACED IN ITS ORIGINAL LOCATION. GATES SHOULD BE PLACED IN ITS ORIGINAL LOCATION. THE ORIGINAL LOCATIONS, UNLESS INDICATED BY THE DRAWINGS, SHALL BE SHOWN ON THE DRAWINGS OF A GRADING AND EROSION CONTROL PLAN. ALL REMOVED ITEMS SHALL BE SHOWN ON THE DRAWINGS OF A GRADING AND EROSION CONTROL PLAN. ALL REMOVED ITEMS WILL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

- f) MATERIALS THAT MAY BE CLASSIFIED AS UNSUITABLE OR REQUIRE UNDERGRADING SHALL BE DETERMINED BY THE OWNER OR THE OWNER'S REPRESENTATIVE. CONTRACTOR SHALL NOT MAKE THIS DETERMINATION.
- g) ALL WASTE MATERIAL SHALL BE DISPOSED OF ON SITES PROVIDED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER. ALL MATERIALS SHALL BE DISPOSED OF BY THE CONTRACTOR AT HIS OWN EXPENSE. SAWCUTTING SHALL BE SUBSIDIARY TO OTHER BID ITEMS.

- c) UNLESS DIRECTED IN THE CONTRACT DOCUMENTS OR DRAWINGS, CONTRACTOR SHALL MAINTAIN TRAFFIC AND PEDESTRIAN ACCESS AT ALL TIMES.
- b) APPROPRIATE TRAFFIC CONTROL DEVICES, SIGNAGE AND PAVEMENT MARKINGS SHALL BE ESTABLISHED AND MAINTAINED THROUGHOUT THE PROJECT IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND THE MUTCD.

- 8) TRAFFIC:

- a) UNLESS DIRECTED IN THE CONTRACT DOCUMENTS OR DRAWINGS, CONTRACTOR SHALL MAINTAIN TRAFFIC AND PEDESTRIAN ACCESS AT ALL TIMES.
- b) APPROPRIATE TRAFFIC CONTROL DEVICES, SIGNAGE AND PAYMENT MARKINGS SHALL BE ESTABLISHED AND MAINTAINED THROUGHOUT THE PROJECT IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND THE MUTCD.

LEE'S SUMMIT MIDDLE SCHOOL #4
BAILEY ROAD PUBLIC IMPROVEMENTS

LEE'S SUMMIT, MISSOURI

C.O.A. NO.: 001592
 DRAWN BY: M.W.
 CHECKED BY: RPH
 APPROVED BY: RBE
 QA/QC BY: RBE
 PROJECT NO.: 020-0103
 DWG NO.: T GEN01 0200103
 DATE: 2021-02-01

SHEET
10 OF 101

[illegible]

Clisson Engineering - MO State Certificate of Authority #001592
7301 West 133rd Street, Suite 200 TEL 913.381.1170
Overland Park, KS 66213-4750 FAX 913.381.1174
www.clisson.com



REVISIONS	
REV. NO.	DATE
1	08/25/2021
AS# #29	
REVISIONS DESCRIPTION	
BY	
APP'D	
MO. NO. RE. 000000169	

RECAPITULATION OF QUANTITIES	
LEE'S SUMMIT MIDDLE SCHOOL #4 BAILEY ROAD PUBLIC IMPROVEMENTS	
LEE'S SUMMIT, MISSOURI	
2021	

C.I.A. NO.	202006
DRAWN BY	SALE
CHECKED BY	SALE
APPROVED BY	SALE
DATE	08/25/2021
DATE	08/25/2021

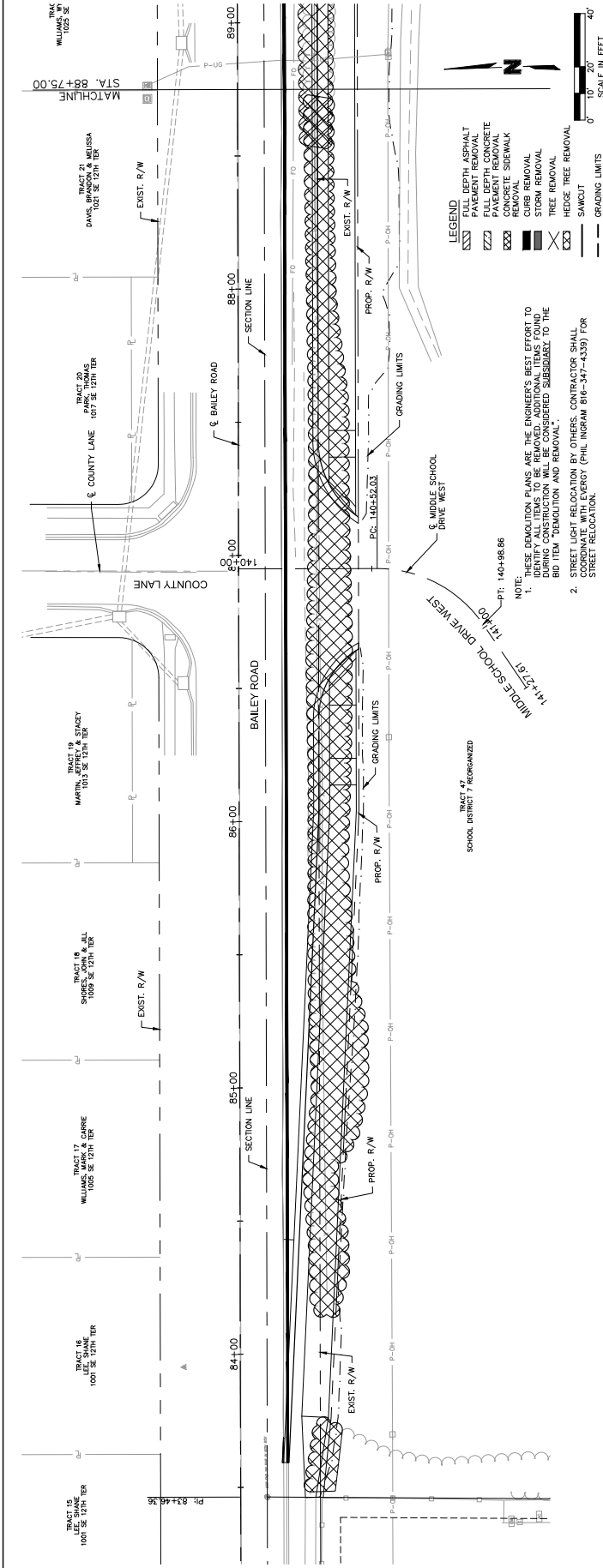
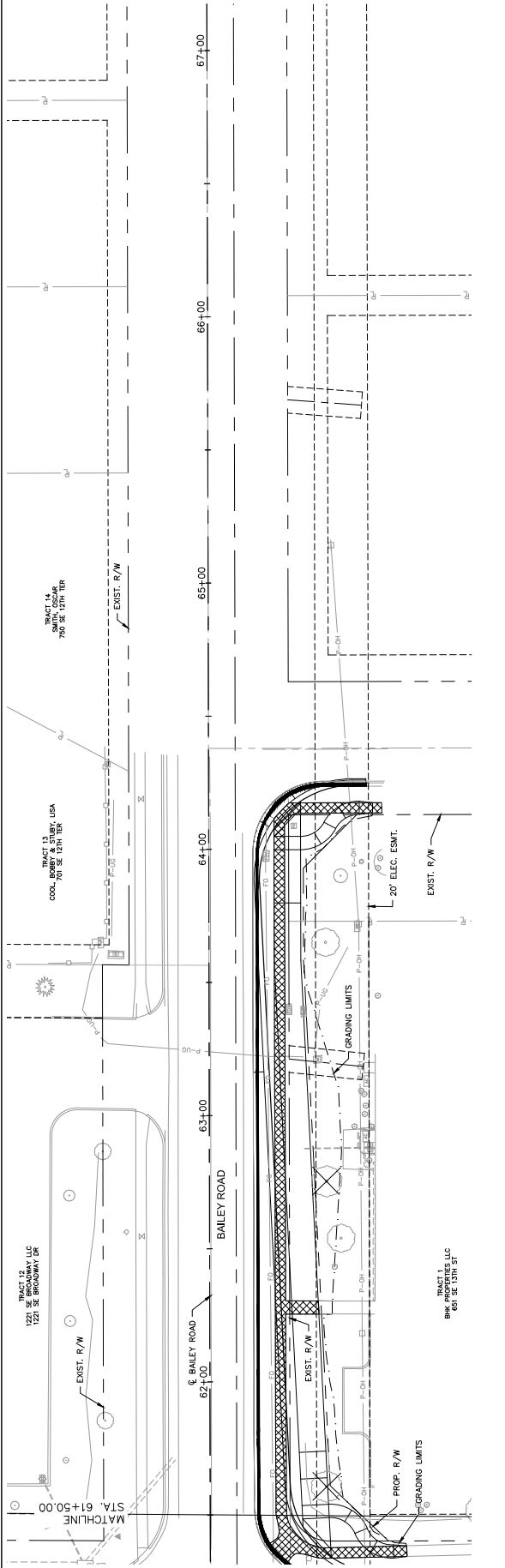
RECAPITULATION OF QUANTITIES		
ITEM NO.	ITEM DESCRIPTION	UNIT
1	Mobilization	Lump Sum
2	Cleaning and Grubbing	Lump Sum
3	Demolition and Removal	Lump Sum
4	Pavement, Asphaltic Surface (APWA Type 5-011 [2"]	Sq.Yd.
5	Pavement, Asphaltic Base (APWA RC Type 5-011 [4"]	Sq.Yd.
6	Pavement, Asphaltic Base (APWA RC Type 5-011 [5.5"]	Sq.Yd.
7	Pavement, Asphaltic Base (APWA RC Type 5-011 [8"]	Sq.Yd.
8	Pavement, Asphaltic Base (APWA RC Type 5-011 [10"]	Sq.Yd.
9	Concrete Base Widening	Sq.Yd.
10	Aggregate Base (McDOT Type 5 [4"]	Sq.Yd.
11	Aggregate Base (McDOT Type 5 [10"]	Sq.Yd.
12	Aggregate Base (McDOT Type 5 [12"]	Sq.Yd.
13	Geogrid (Tensar TX140)	Sq.Yd.
14	Curb & gutter (Type CG-1)	Lin.Ft.
15	Curb & gutter (Type CG-2)	Lin.Ft.
16	Concrete Driveway (6")	Sq.Yd.
17	Concrete Driveway (8")	Sq.Yd.
18	Concrete Sidewalk (4")	Sq.Yd.
19	Concrete Sidewalk (6")	Sq.Yd.
20	Concrete ADA Ramps	Sq.Ft.
21	Detectable Warning Surface	Sq.Ft.
22	Inlet (Curb) [5'x3']	Each
23	Inlet (Curb) [8'x4']	Each
24	Inlet (Curb) [10'x4']	Each
25	Junction Box (4'x4')	Each
26	Structure Modification	Each
27	30" Pipe Collar	Each
28	15" Storm Sewer (RCP Class III)	Lin.Ft.
29	30" Storm Sewer (RCP Class III)	Lin.Ft.
30	15" Storm Sewer (HDPE)	Lin.Ft.
31	End Section [15' RC]	Each
32	Erosion Control Devices	Lump Sum
33	Traffic Signal Installation (Bailey & Century)	Lump Sum
34	2" Conduit with Locate Cable and Pull String	Lin.Ft.
35	Class I Fiber Optic Pull Box	Each
36	Fiber Interface Panel with 250' Pigtail	Each
37	Ethernet Switch, Transition with Separate Power Source	Each
38	Single Mode Patch Cable	Each
39	Temporary Traffic Control	Lump Sum
40	Permanent Signing	Sq.Ft.
41	Sign Post	Each
42	Pavement Marking (4" Solid White Lane Line)	Lin.Ft.
43	Pavement Marking (4" Solid Yellow Line)	Lin.Ft.
44	Pavement Marking (12" Yellow Crosshatch Line)	Lin.Ft.
45	Pavement Marking (24" White Stop Line)	Lin.Ft.
46	Pavement Marking (6" White Crosswalk Line)	Lin.Ft.
47	Pavement Marking (White Right Turn Arrow)	Each
48	Pavement Marking (White Left Turn Arrow)	Each
49	Connection to Existing Main	Each
50	6" Water Line	Lin.Ft.
51	8" Water Line	Lin.Ft.
52	6" 11.25 Bend	Each
53	8" 11.25 Bend	Each
54	8" 90 Bend	Each
55	Thrust Blocks	Each



2021	LEE'S SUMMIT, MISSOURI
	LEE'S SUMMIT MIDDLE SCHOOL #4 BAILEY ROAD PUBLIC IMPROVEMENTS
	DEMOLITION & REMOVALS BAILEY ROAD

C.O.A. NO.:	001592
DRAWN BY:	N.W.
CHECKED BY:	RPH
APPROVED BY:	RBE
QA/QC BY:	RBE
PROJECT NO.:	020-0103
DWS NO.:	I DEM01_0200103
DATE:	2021-02-01

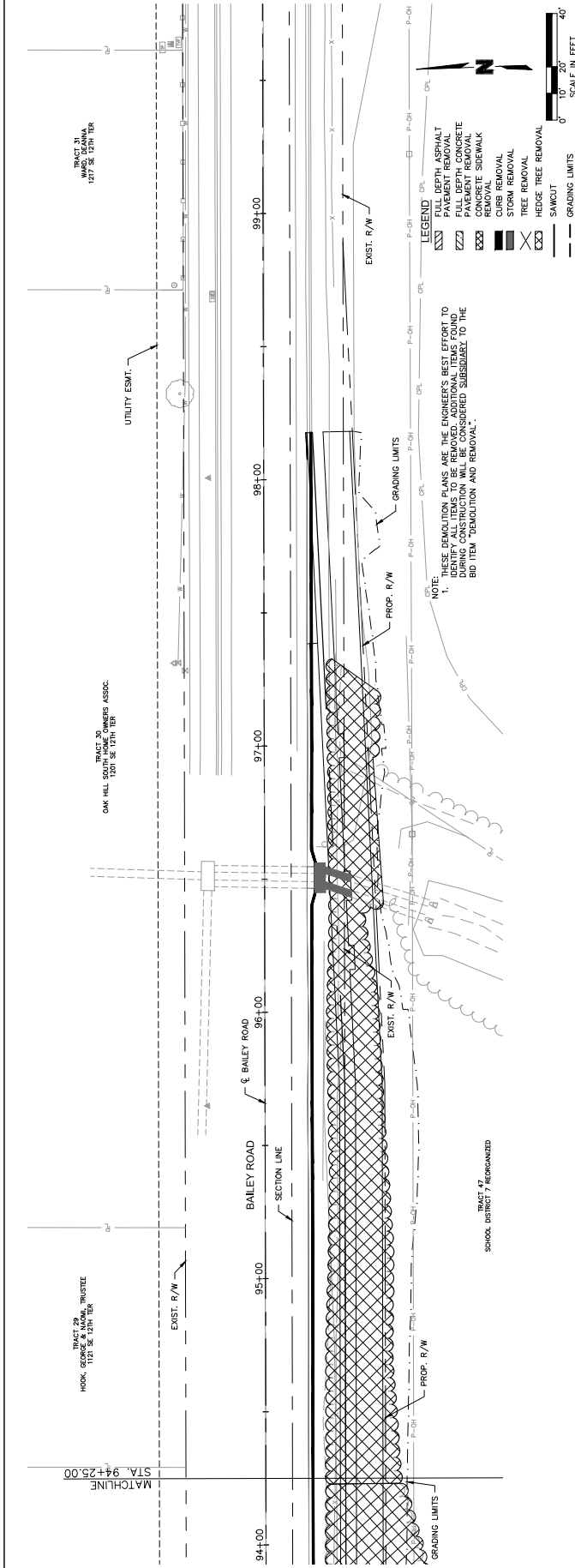
SHEET
13 OF 101



NOTE: THESE DEMOLITION PLANS ARE THE ENGINEER'S BEST EFFORT TO IDENTIFY ALL ITEMS TO BE REMOVED. ADDITIONAL ITEMS FOUND DURING CONSTRUCTION WILL BE CONSIDERED SUBSIDIARY TO THE BID ITEM "DEMOLITION AND REMOVAL".

1. STREET LIGHT RELOCATION BY OTHERS. CONTRACTOR SHALL COORDINATE WITH EVERETT (PHIL INGRAM 616-347-4339) FOR STREET RELOCATION.

DWG: F:\2020\0001-0500\020-0103\40-Design\AutoCAD\Final Plans\Sheets\RBBL\Lee Summit Plan Set - (Century and Middle School Drives)\DEMOLITION & REMOVALS\T_PDEM01.0200103.dwg
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USER: thiller
T_PSTRM_0200103
DATE: Aug 25, 2021 9:41am



TRACT 52
STROMBERG, JAMES
157' SE DUTTON DR

TRACT 47
SCHOOL DISTRICT 7 REORGANIZED

TRACT 53
PAYNE, BEVERLY & WILLIAM, TERRELL
160' SE DUTTON DR

UTILITY ESMT.

EXIST. R/W

REMOVE OBJECT MARKER

SE CAPE DRIVE

REMOVE OBJECT MARKERS

GRADING LIMITS

300+00

302+00

LEGEND

- FULL DEPTH ASPHALT PAVEMENT REMOVAL
- FULL DEPTH CONCRETE PAVEMENT REMOVAL
- CONCRETE SIDEWALK REMOVAL
- STORM REMOVAL
- TREE REMOVAL
- HEDGE TREE REMOVAL
- SAWCUT
- GRADING LIMITS

NOTE: THESE DEMOLITION PLANS ARE THE ENGINEER'S BEST EFFORT TO IDENTIFY ALL ITEMS TO BE REMOVED. ADDITIONAL ITEMS FOUND DURING CONSTRUCTION WILL BE CONSIDERED SUBSIDIARY TO THE BID ITEM "DEMOLITION AND REMOVAL".

SCALE IN FEET
0 10 20 40

LEGEND

	FULL DEPTH ASPHALT PAVEMENT REMOVAL
	FULL DEPTH CONCRETE PAVEMENT REMOVAL
	CONCRETE SIDEWALK REMOVAL
	CURB REMOVAL
	STORM REMOVAL
	TREE REMOVAL
	HEDGE TREE REMOVAL
	SAWCUT
	GRADING LIMITS

A horizontal scale bar with four segments. The first segment is black, the second is white, the third is black, and the fourth is white. Below the bar are tick marks and labels: 0' at the left end, 10' at the first segment boundary, 20' at the second segment boundary, and 40' at the right end. The text 'SCALE IN FEET' is written vertically below the bar.

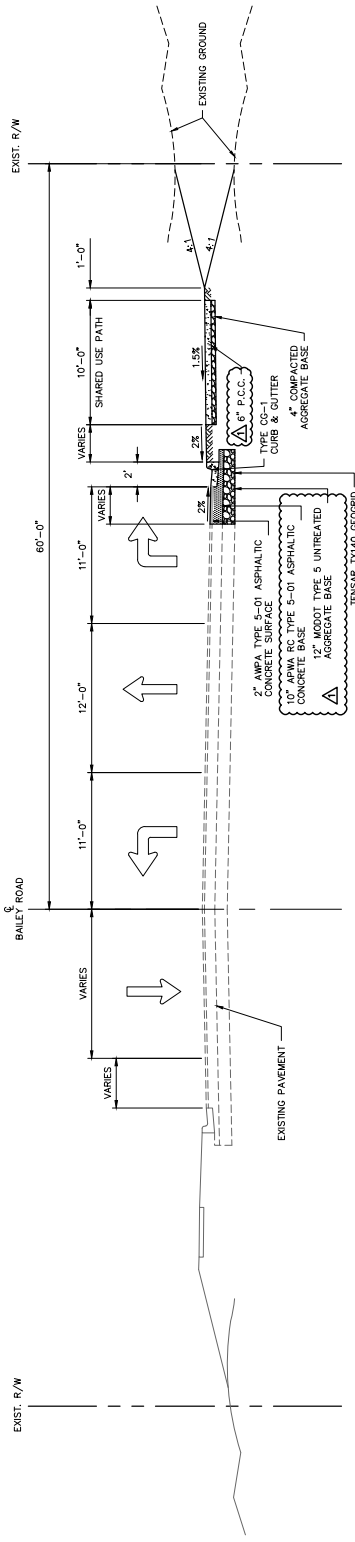
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DATE: Aug 26, 2021 9:42am XREFS: T_PBASE-0200103 T_PPAT1_0200103 V_XB0U_00103 V_T0P0_00103 V_XTOP0-2_00103 V_XB0U-2_00103 T_PTBLK_0200103 T_RFP01_0200103 USER: rholler
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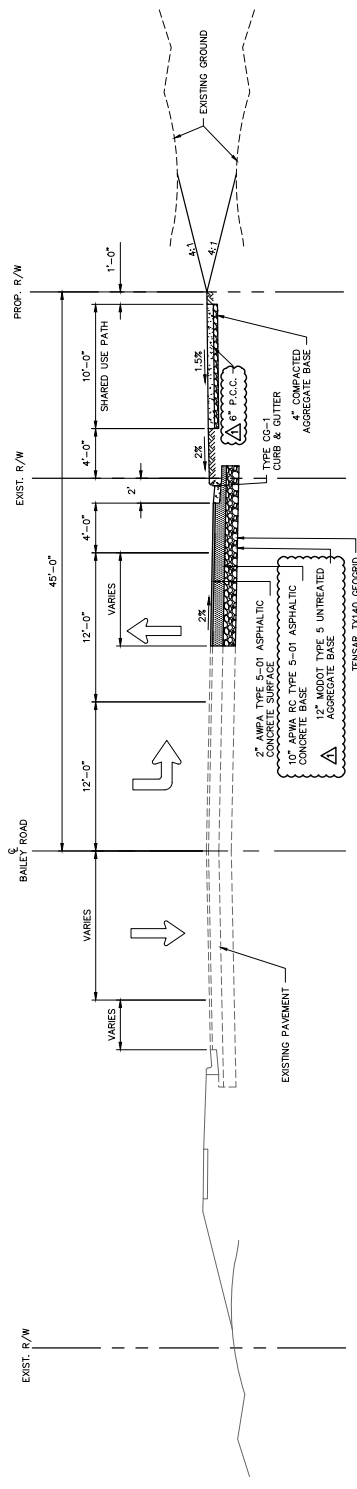
2021	LEE'S SUMMIT, MISSOURI
	LEE'S SUMMIT MIDDLE SCHOOL #4 BAILEY ROAD PUBLIC IMPROVEMENTS
	TYPICAL SECTIONS

C.O.A. NO.:	001592
DRAWN BY:	M.W.
CHECKED BY:	RPH
APPROVED BY:	RBE
QA/QC BY:	RBE
PROJECT NO.:	020-0103
DWG NO.:	T_TYP01_0200103
DATE:	2021-02-01

SHEET
17 OF 101

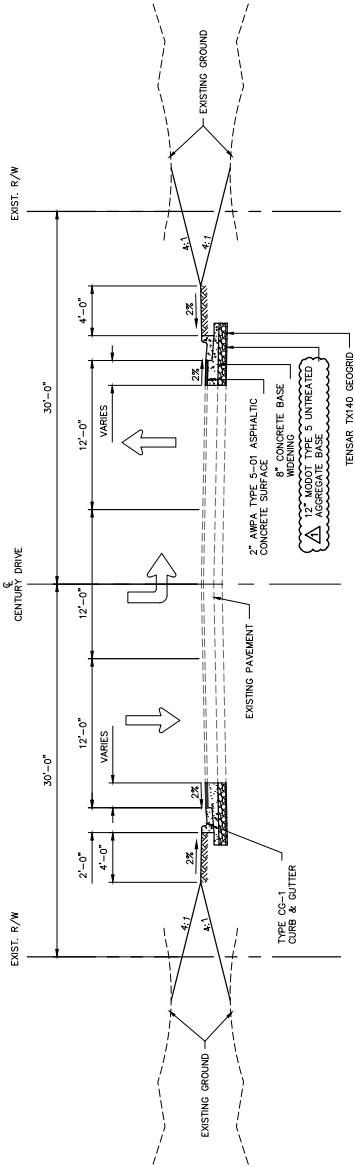


TYPICAL SECTION
BAILEY ROAD
NOT TO SCALE
STA. 55+52.44 TO STA. 56+01.64

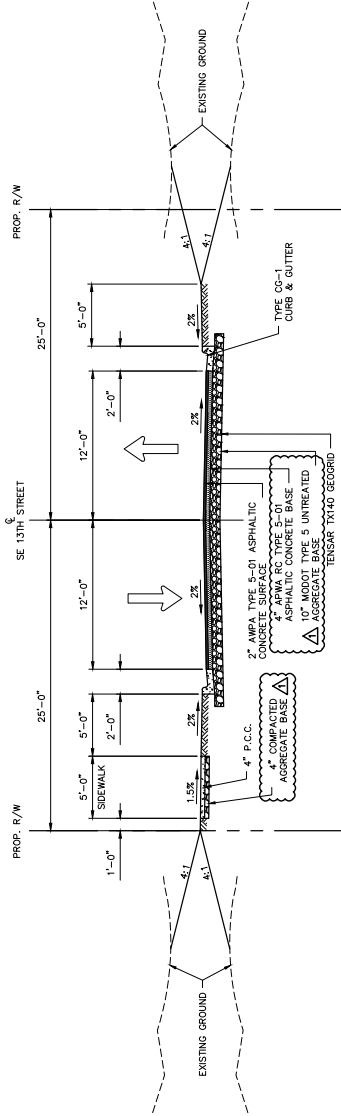


TYPICAL SECTION
BAILEY ROAD
NOT TO SCALE

	NOT TO SCALE
STA. 57+40.02 TO STA. 60+57.12	
STA. 86+04.25 TO STA. 86+38.73	
STA. 87+41.54 TO STA. 92+60.53	
STA. 93+71.24 TO STA. 95+72.70	



TYPICAL SECTION
SE CENTURY DRIVE
NOT TO SCALE
STA. 200+76.78 TO STA. 202+36.71

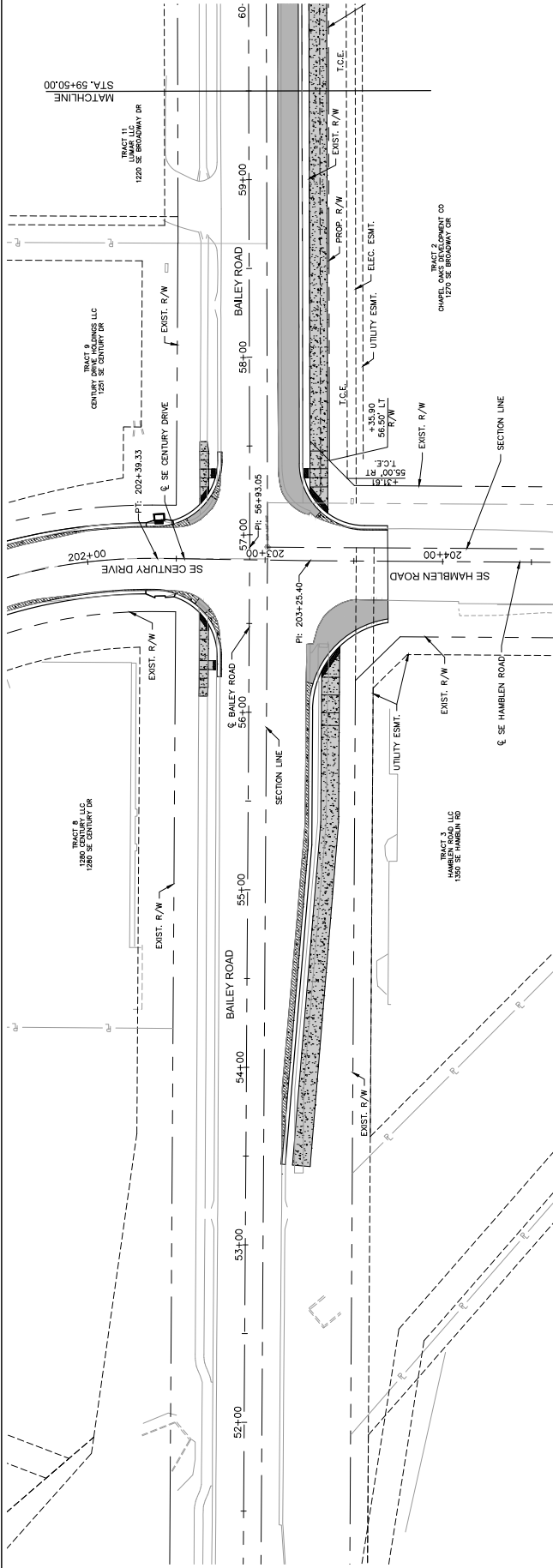


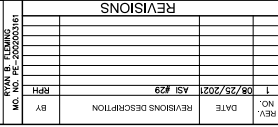
TYPICAL SECTION
SE 13TH STREET
NOT TO SCALE
STA. 353+02.70 TO STA. 353+35.59



RIGHT OF WAY PLANS	BALILEY ROAD	LEE'S SUMMIT MIDDLE SCHOOL #4	BALILEY ROAD PUBLIC IMPROVEMENTS	LEE'S SUMMIT, MISSOURI
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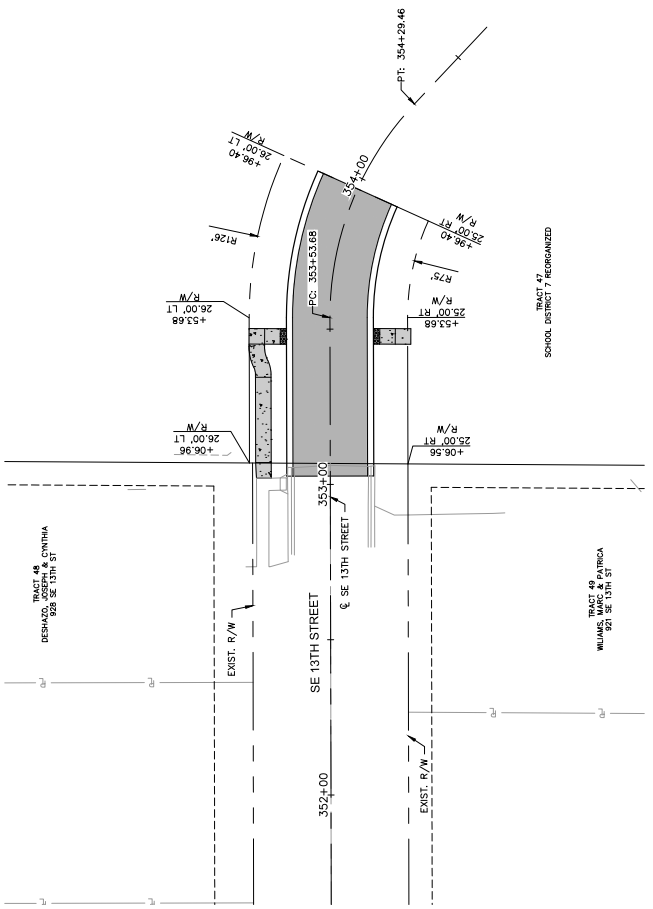
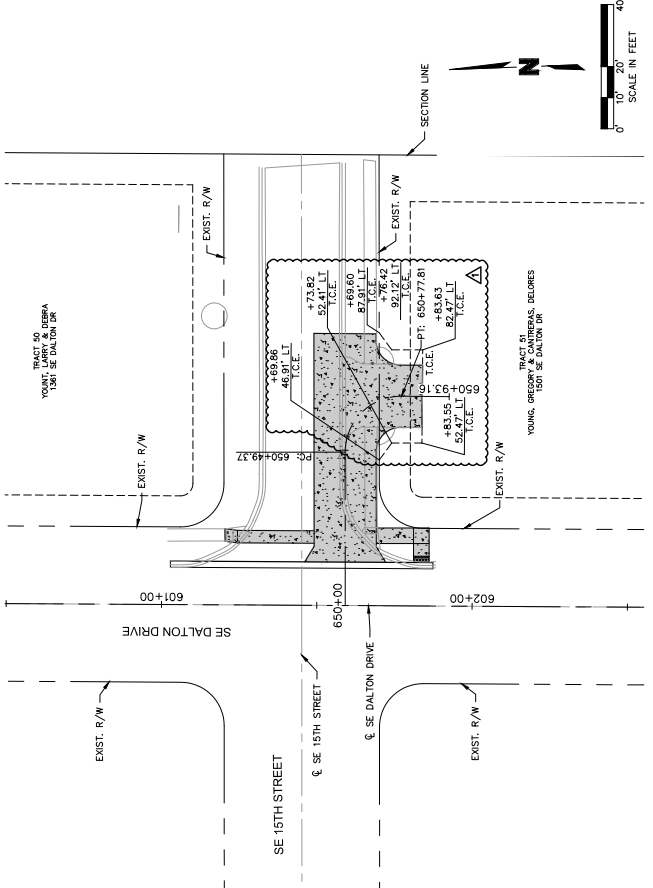
olsson

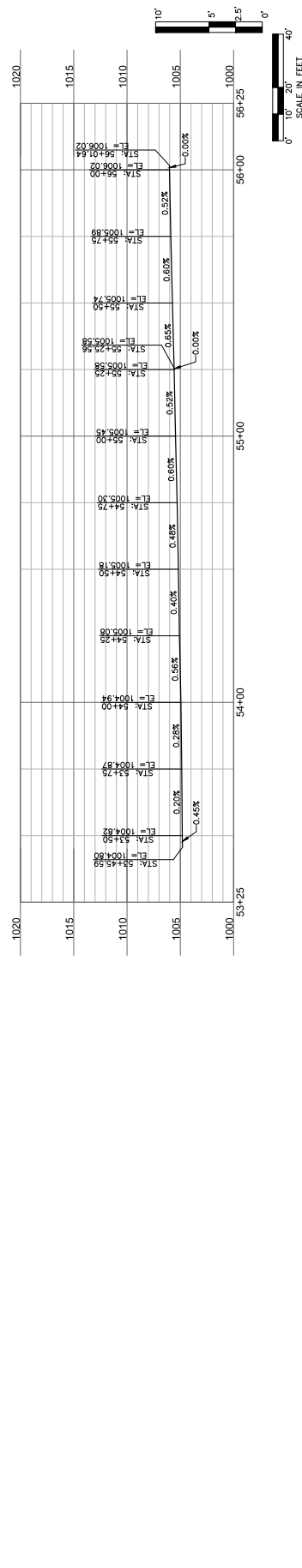
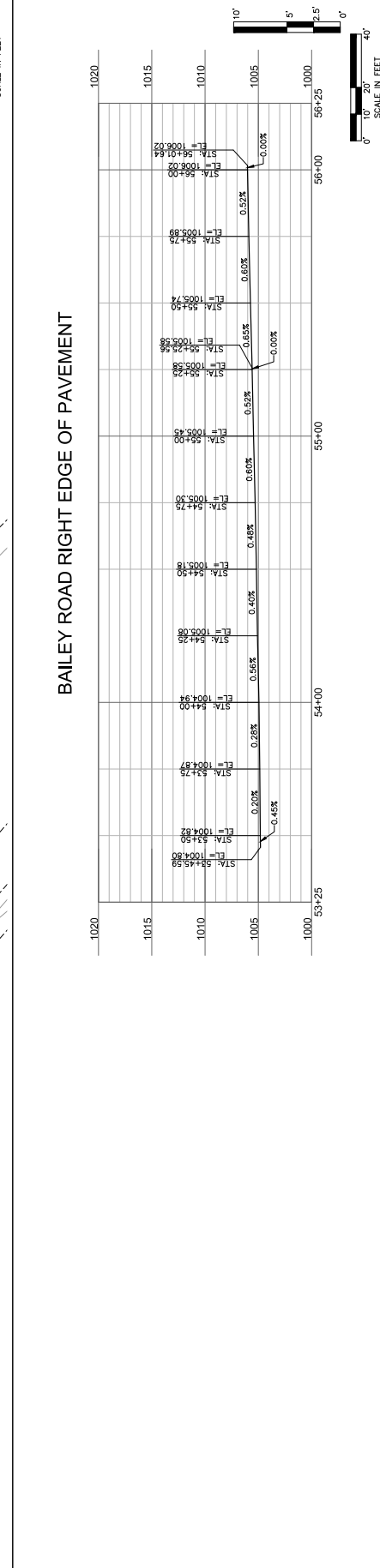




RIGHT OF WAY PLANS	LEES SUMMIT MIDDLE SCHOOL #4	2021
BALLEE ROAD	BALLEE ROAD PUBLIC IMPROVEMENTS	
	LEES SUMMIT, MISSOURI	

C.O.A. NO.:	001582
DRAWN BY:	N.W.
CHECKED BY:	RPH
APPROVED BY:	RBE
QA/QC BY:	RBE
PROJECT NO.:	020-0103
DWG NO.:	T ROWD01 0200103
DATE:	2021-02-01





C.I.A. NO. 2020002
DRAWN BY: JAL
CHECKED BY: JAL
APPROVED BY: JAL
DATE: 08/25/2020
DWG NO. 2020002

LEE'S SUMMIT, MISSOURI
BAILEY ROAD PUBLIC IMPROVEMENTS
BAILEY ROAD
PLAN & EDGE OF PAVEMENT PROFILE

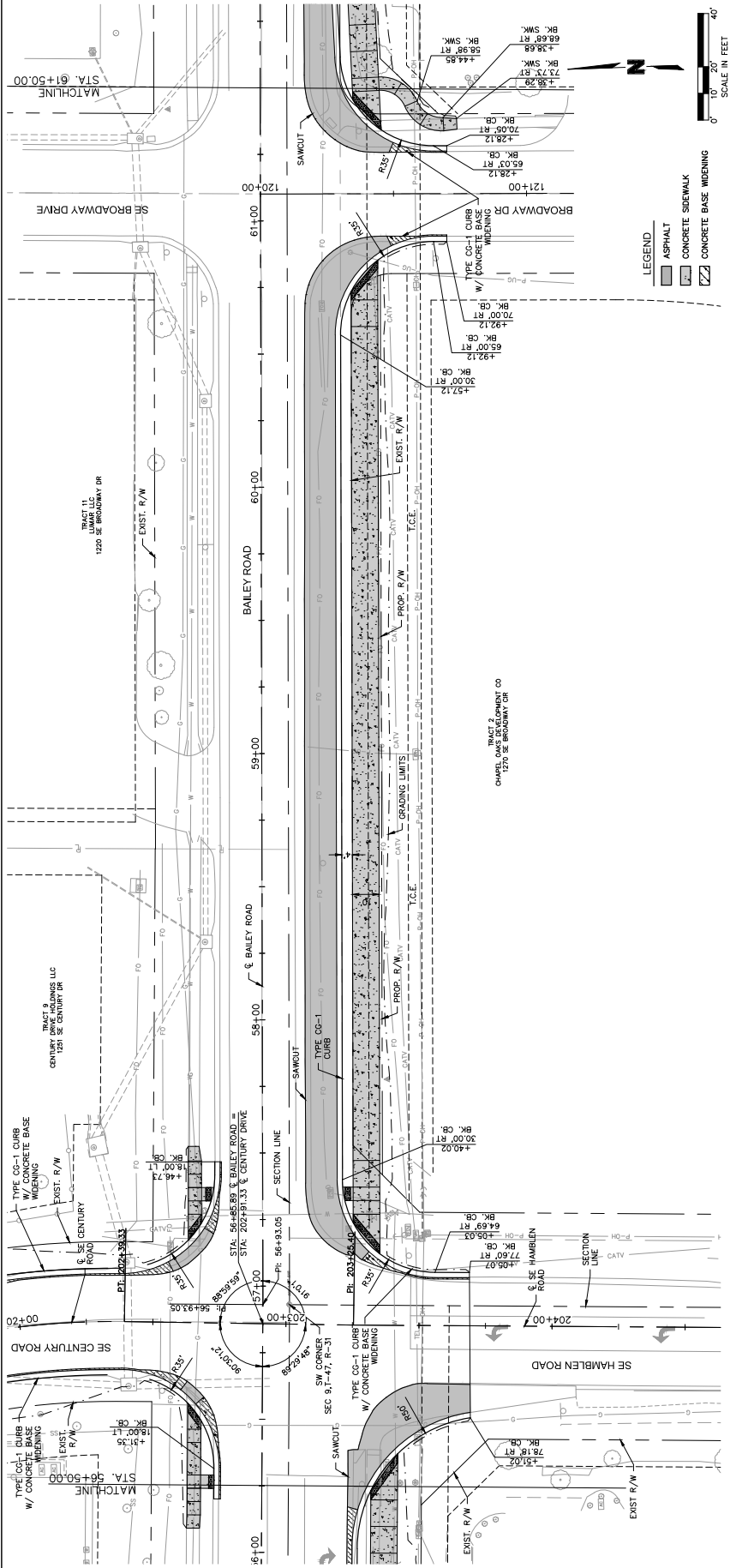
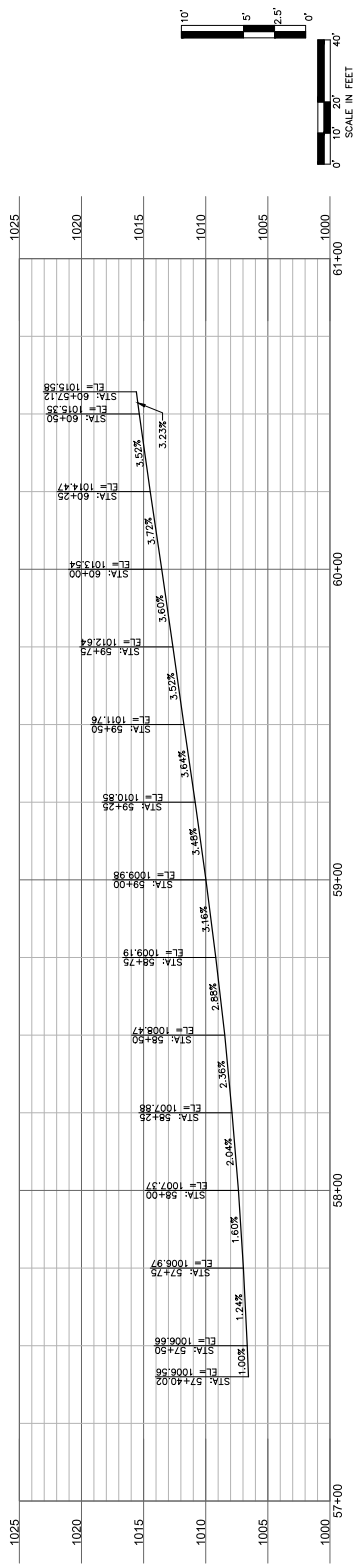
REV.	NO.	DATE	REVISIONS DESCRIPTION	BY
2021				

REV.	NO.	DATE	REVISIONS DESCRIPTION	BY
2021				



Olsson
Olsson Engineering - MO State Certificate of Authority #001592
7301 Wain 13rd Street, Suite 200
TEL: 913.381.1170 FAX: 913.381.1174 www.olsson.com

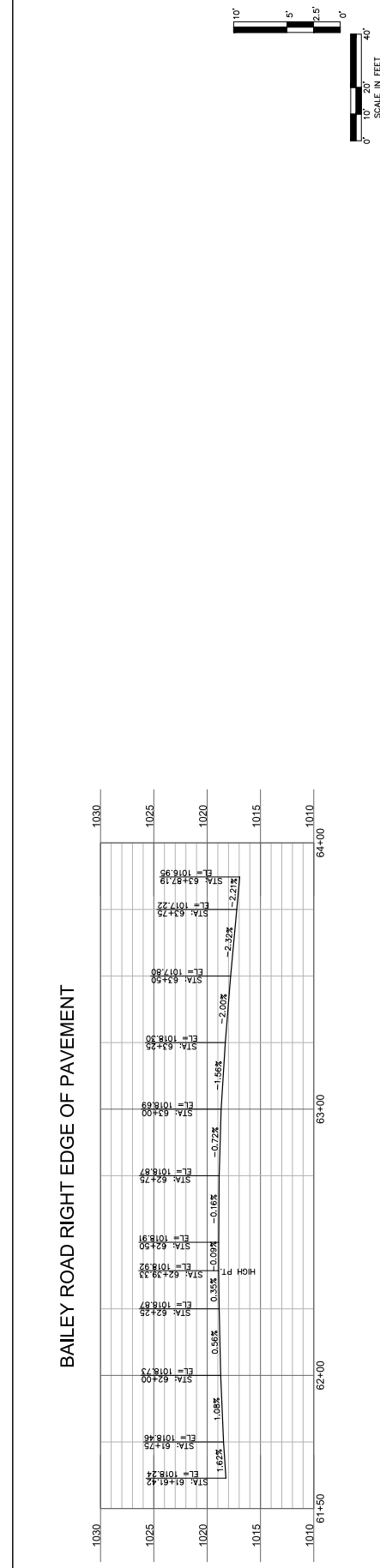
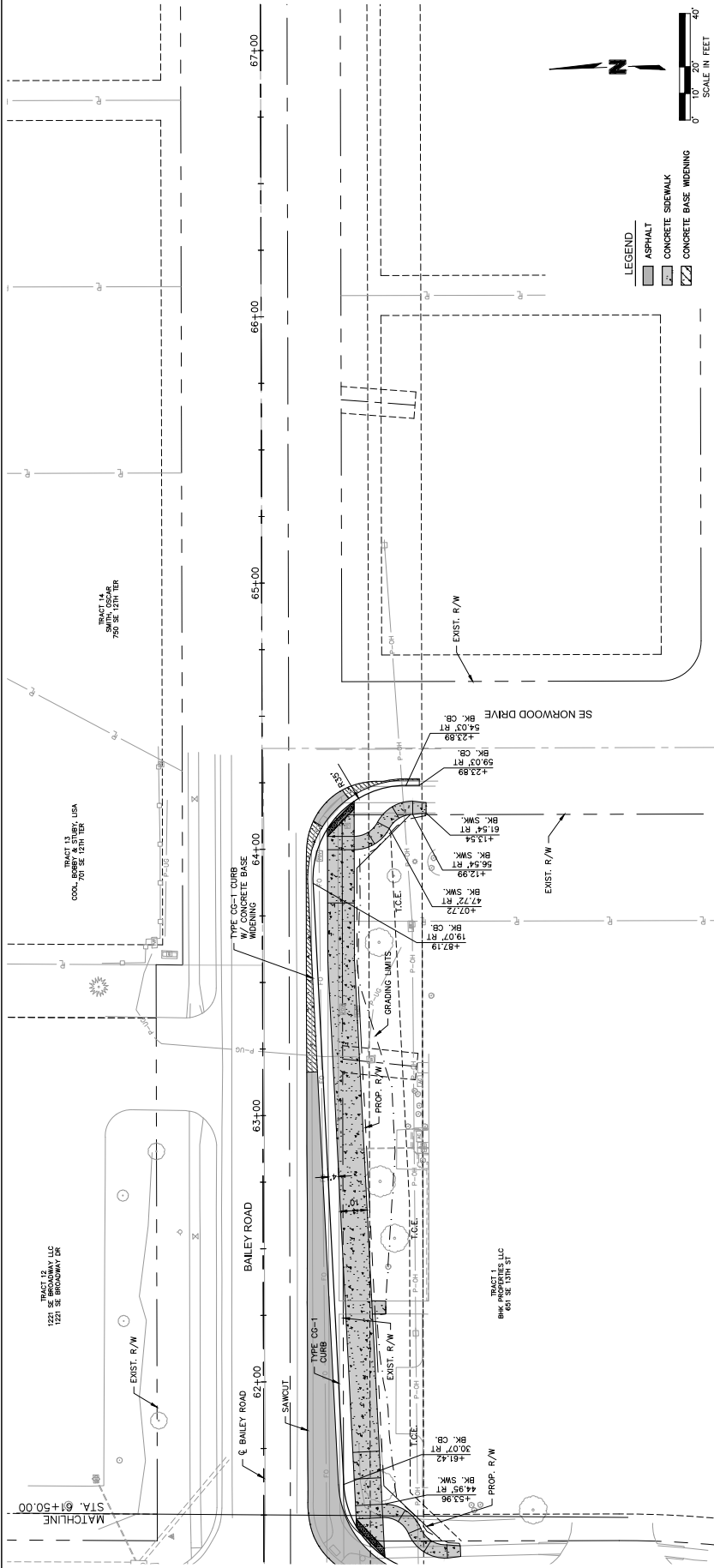
BAILEY ROAD RIGHT EDGE OF PAVEMENT



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PLAN & EDGE OF PAVEMENT PROFILE	LEE'S SUMMIT MIDDLE SCHOOL #4	LEE'S SUMMIT, MISSOURI	2021
BAILEY ROAD	BAILEY ROAD PUBLIC IMPROVEMENTS		

C.O.A. NO.:	001592
DRAWN BY:	M.W.
CHECKED BY:	RPH
APPROVED BY:	RBE
QA/QC BY:	RBE
PROJECT NO.:	020-0103
DWG NO.:	T_RPP03_0200103
DATE:	2021-02-01

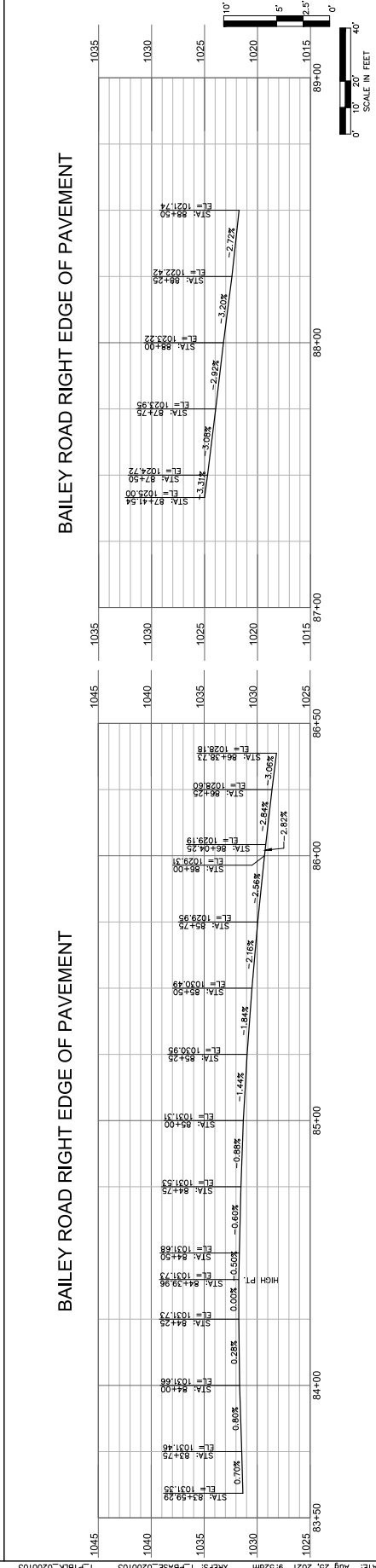
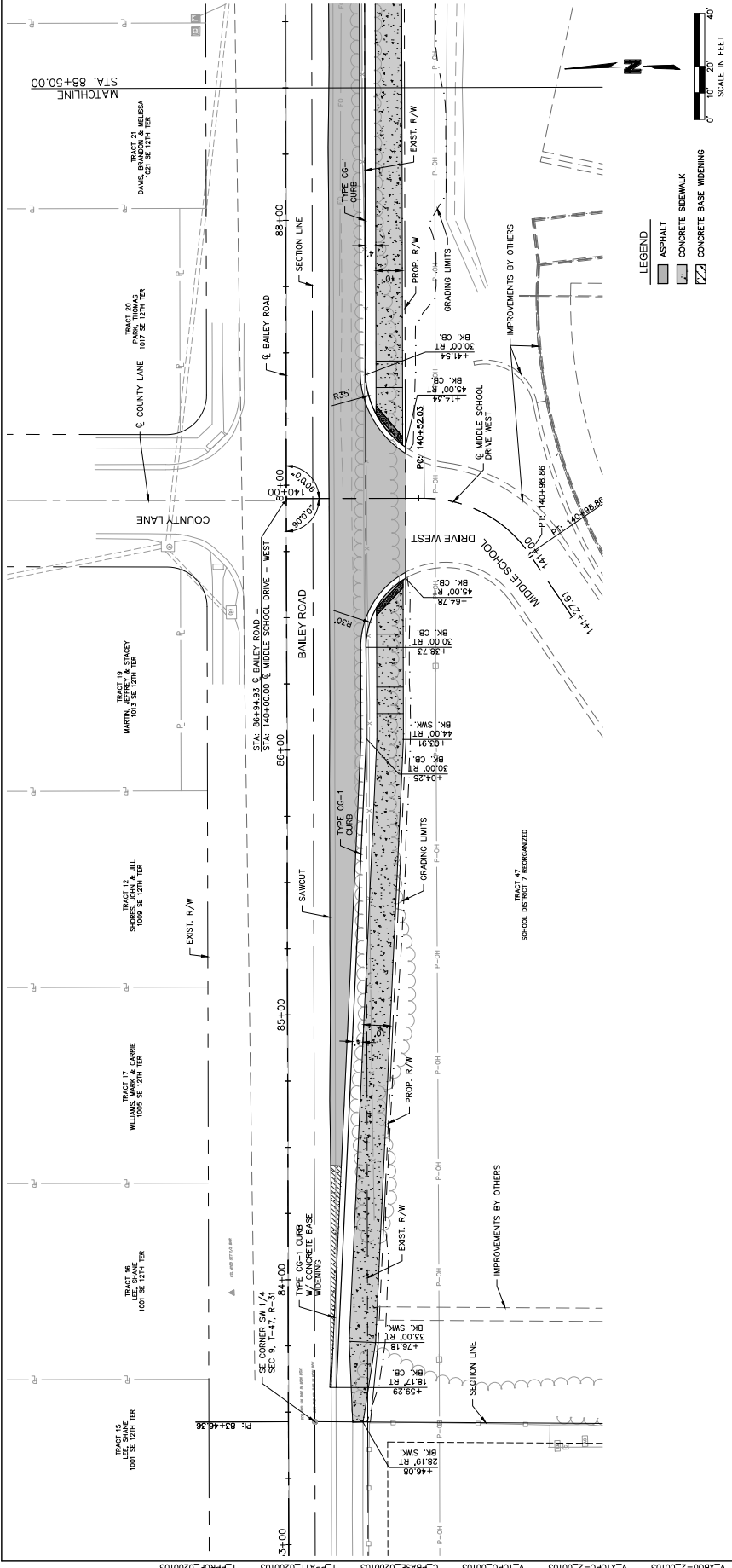


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PLAN & EDGE OF PAVEMENT PROFILE	LEE'S SUMMIT MIDDLE SCHOOL #4	LEE'S SUMMIT, MISSOURI	2021
BAILEY ROAD	BAILEY ROAD PUBLIC IMPROVEMENTS		

C.O.A. NO.:	001592
DRAWN BY:	M.W.
CHECKED BY:	RPH
APPROVED BY:	RBE
QA/QC BY:	RBE
PROJECT NO.:	020-0103
DWG NO.:	I-RPP04-0230103
DATE:	2021-12-31

SHEET
27 OF 101

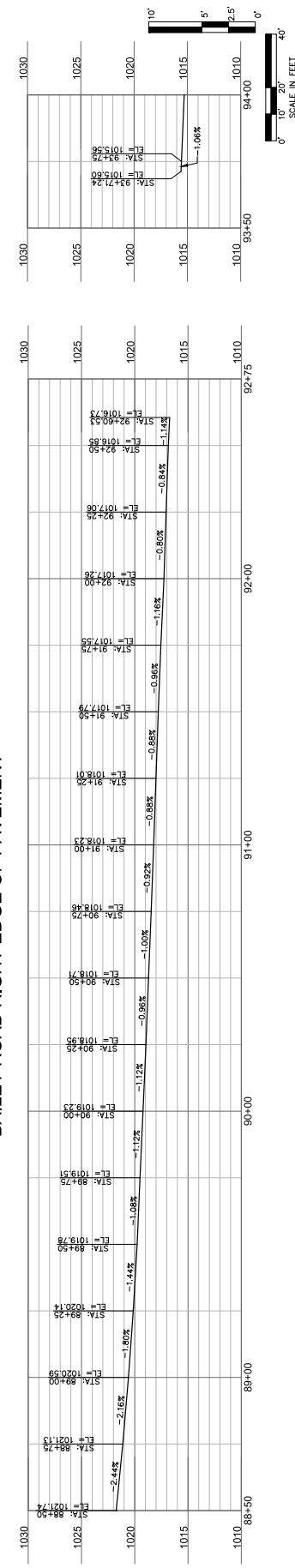
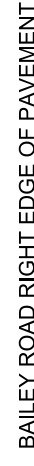
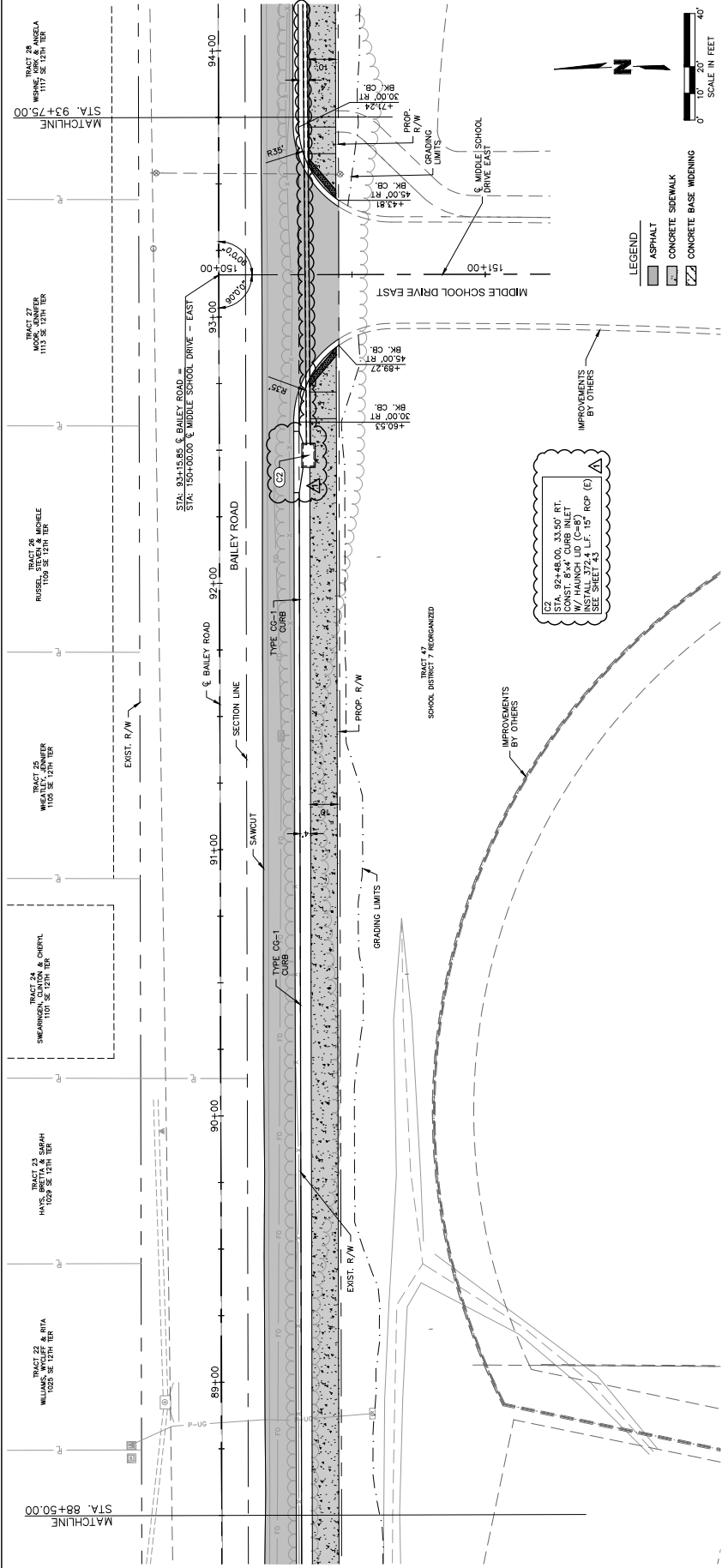


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PLAN & EDGE OF PAVEMENT PROFILE	LEE'S SUMMIT MIDDLE SCHOOL #4	LEE'S SUMMIT, MISSOURI	2021
BAILEY ROAD	BAILEY ROAD PUBLIC IMPROVEMENTS		

C.O.A. NO.:	001592
DRAWN BY:	M.W.
CHECKED BY:	RPH
APPROVED BY:	RBE
QA/QC BY:	RBE
PROJECT NO.:	020-0103
DWG NO.:	T_RPP05_0200103
DATE:	2021-02-01

SHEET
28 OF 101

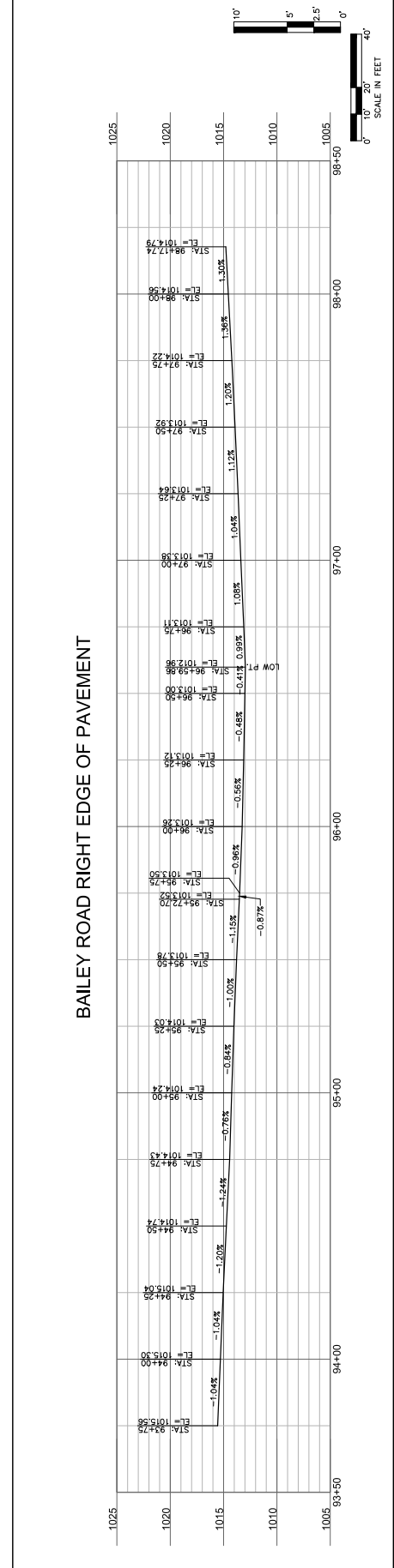
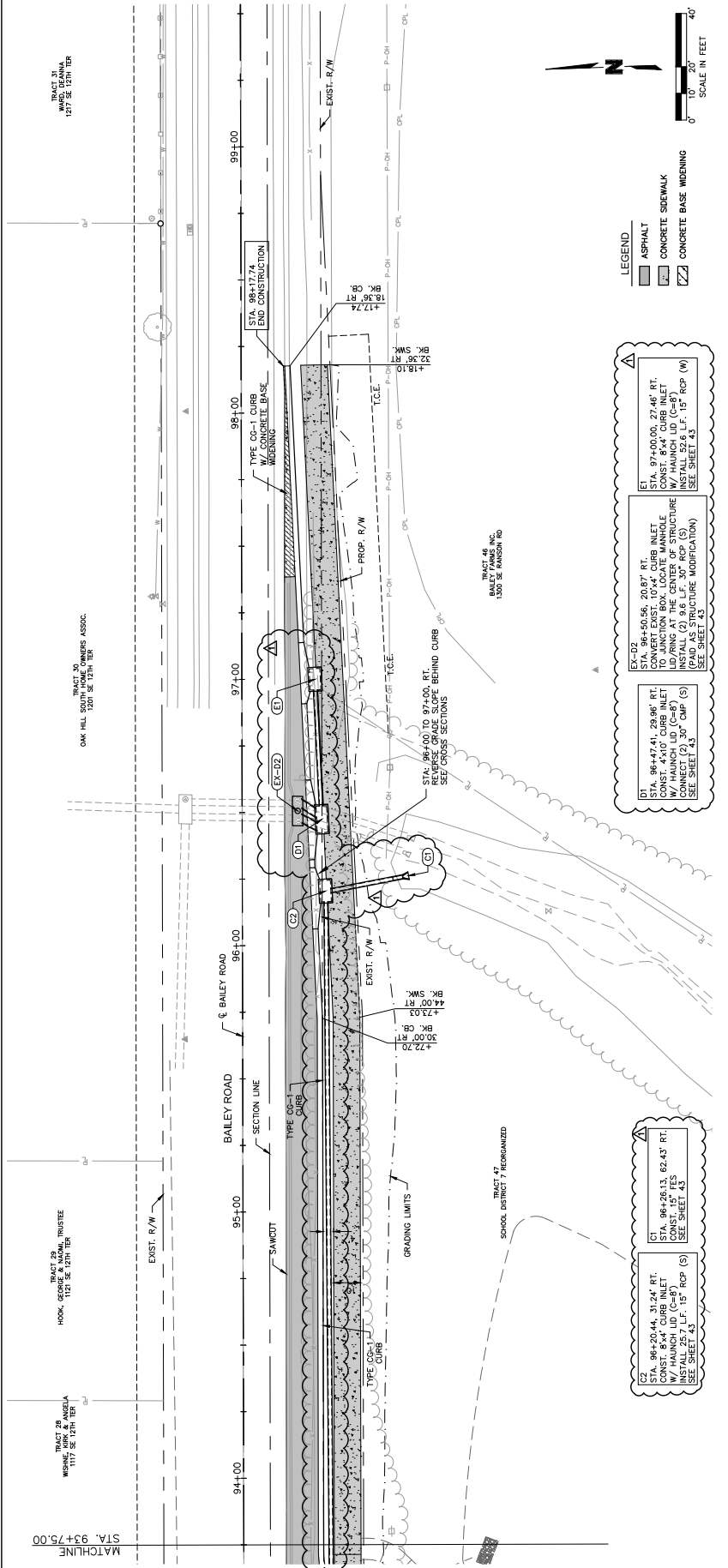


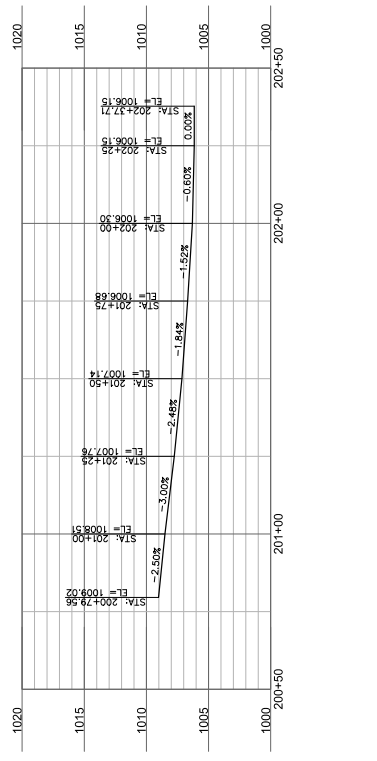
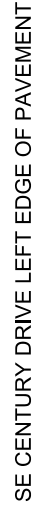
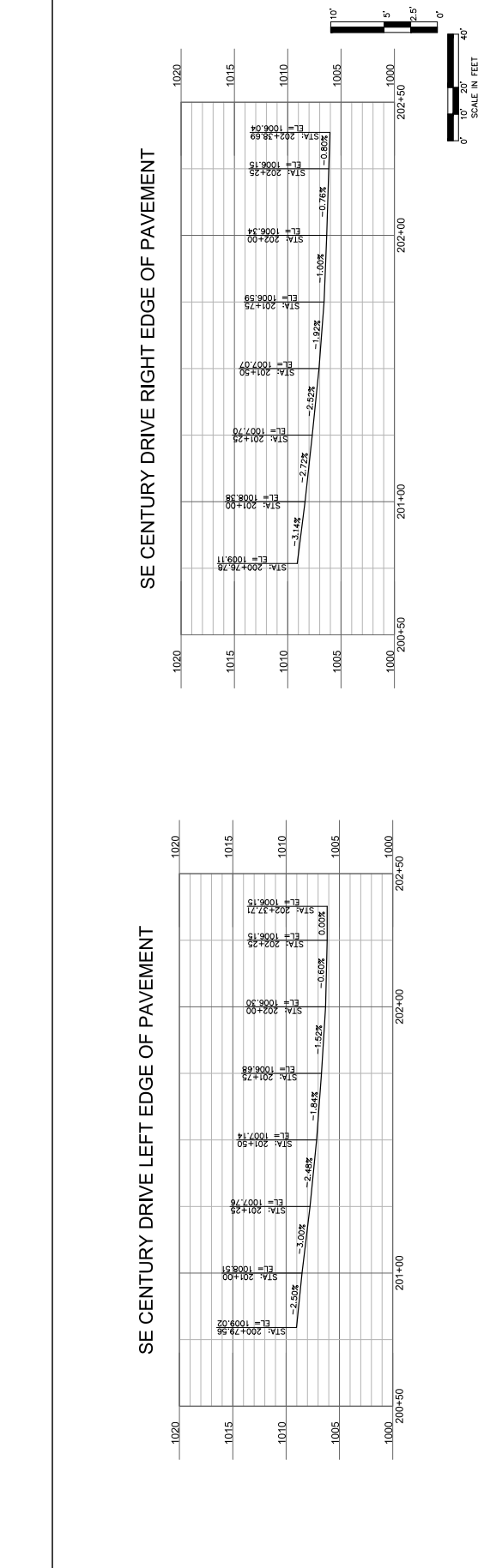
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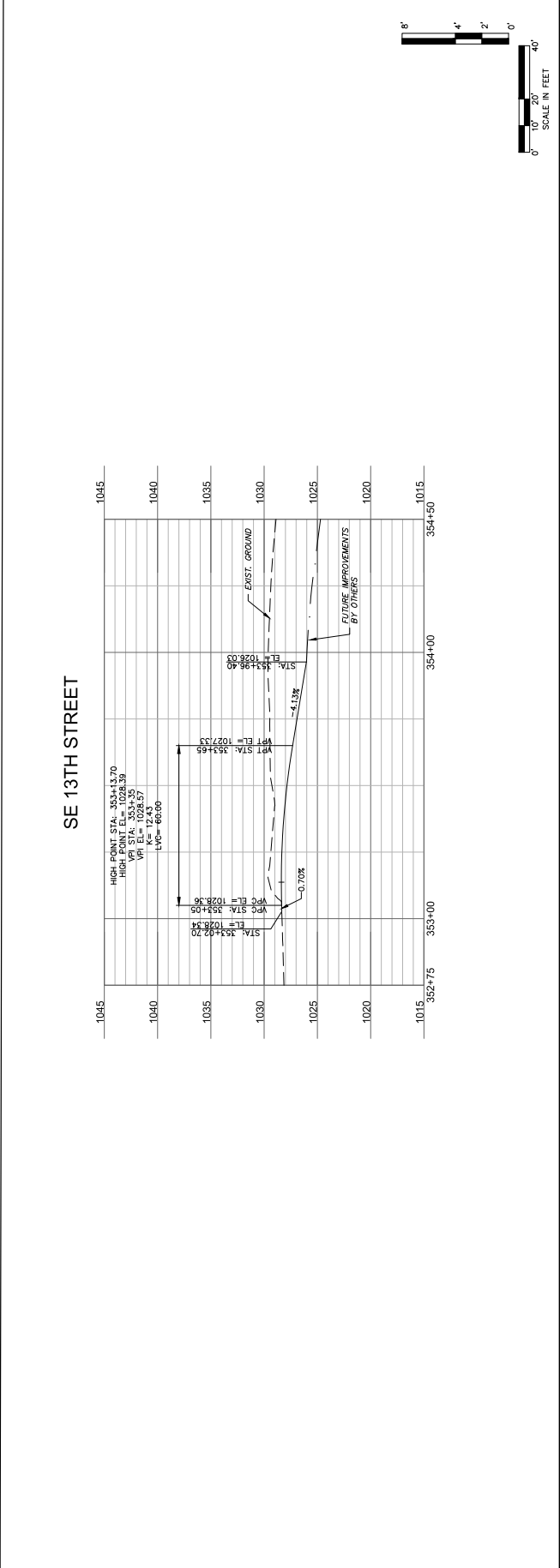
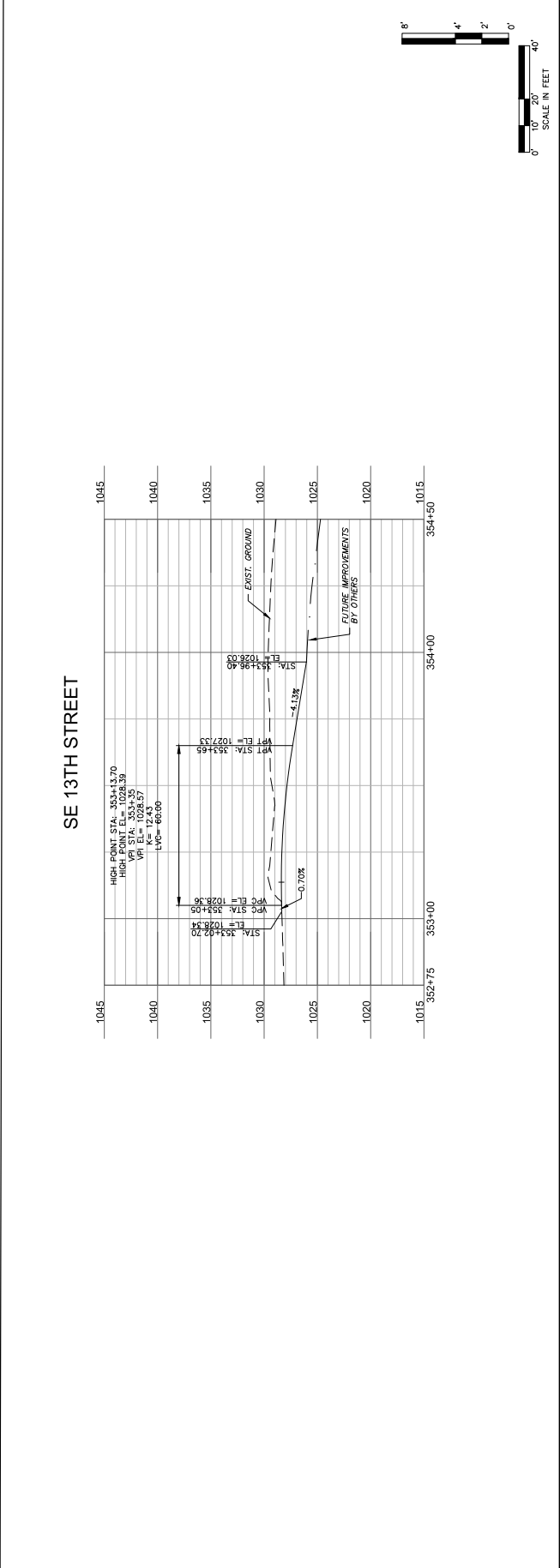
PLAN & EDGE OF PAVEMENT PROFILE	LEE'S SUMMIT MIDDLE SCHOOL #4	LEE'S SUMMIT, MISSOURI	2021
BAILEY ROAD	BAILEY ROAD PUBLIC IMPROVEMENTS		

C.O.A. NO.:	001592
DRAWN BY:	M.W.
CHECKED BY:	RPH
APPROVED BY:	RBE
QA/QC BY:	RBE
PROJECT NO.:	020-0103
DWG NO.:	T_RPP08_0200103
DATE:	2021-02-01

SHEET
29 OF 101



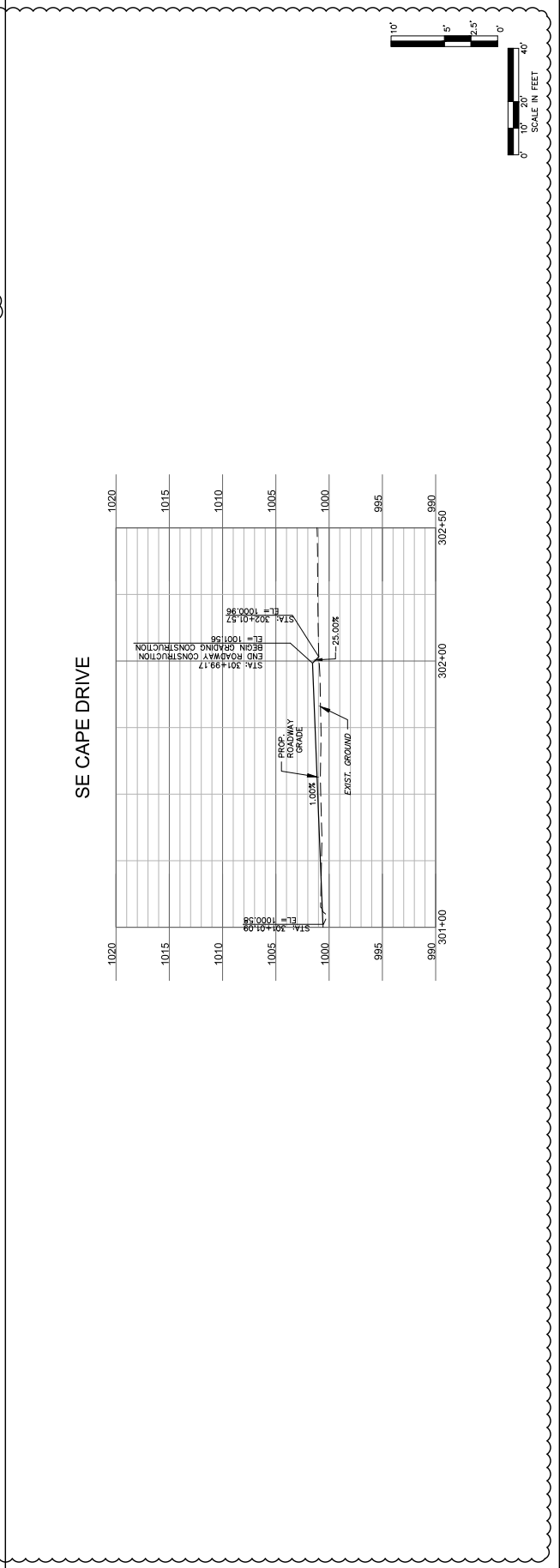
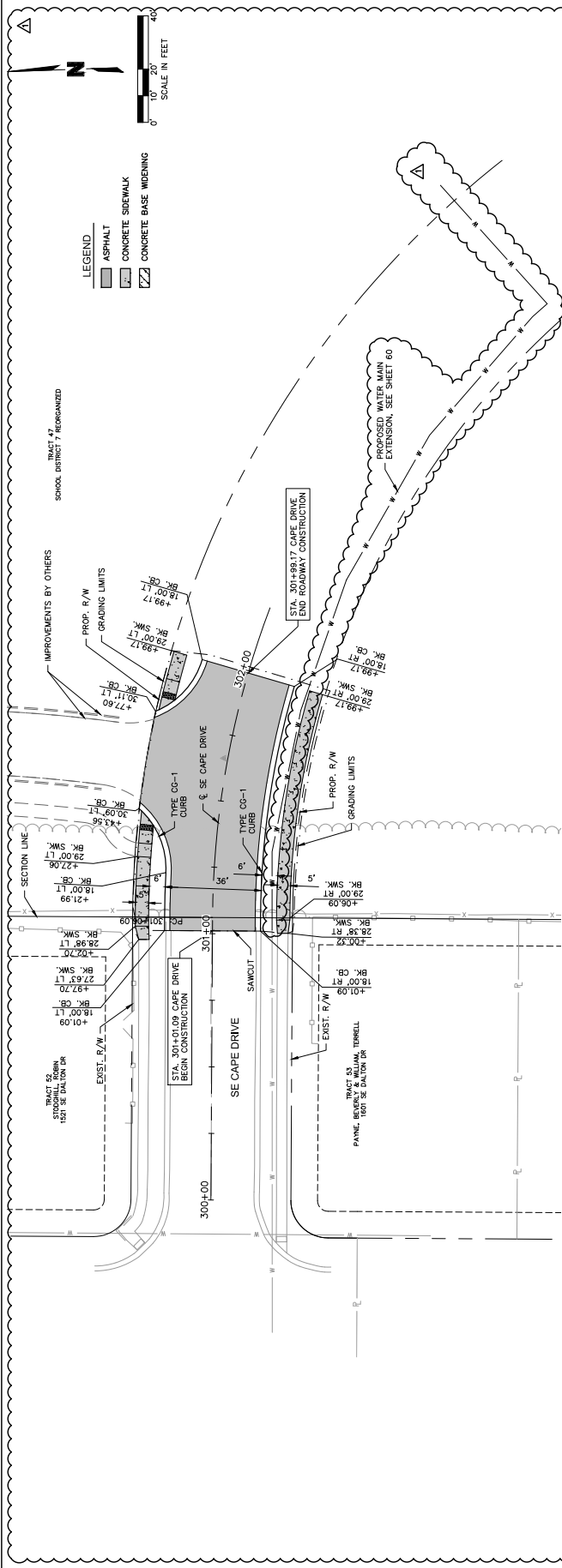


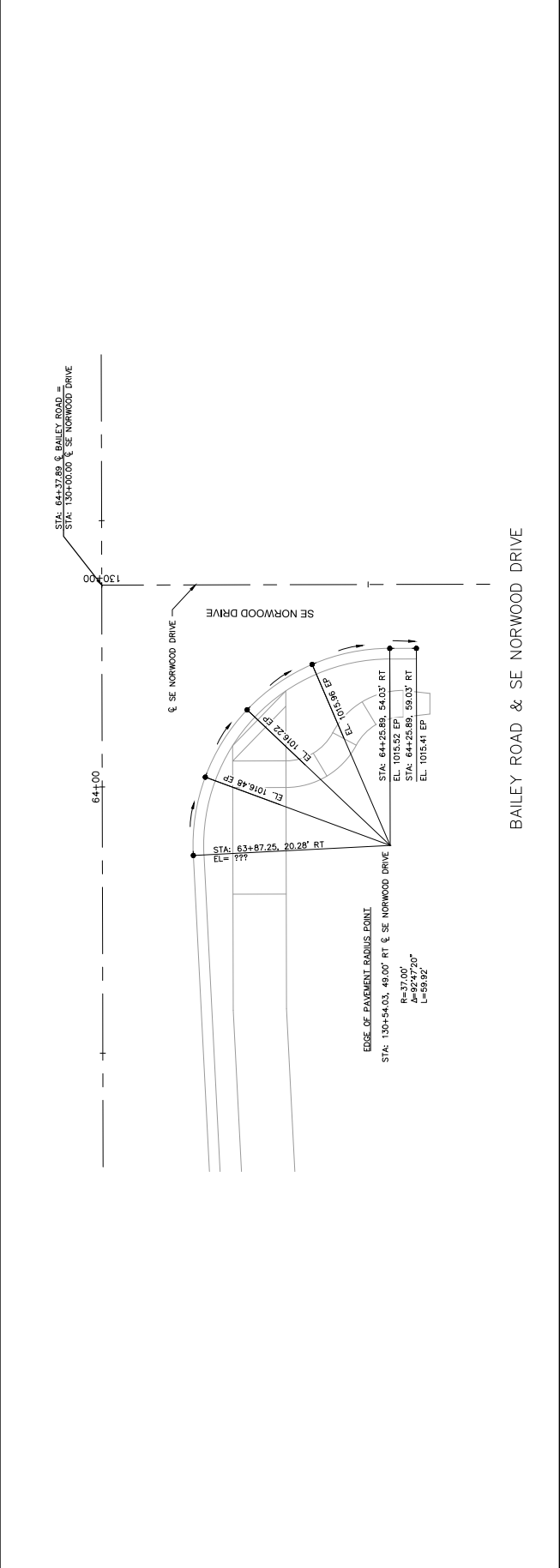


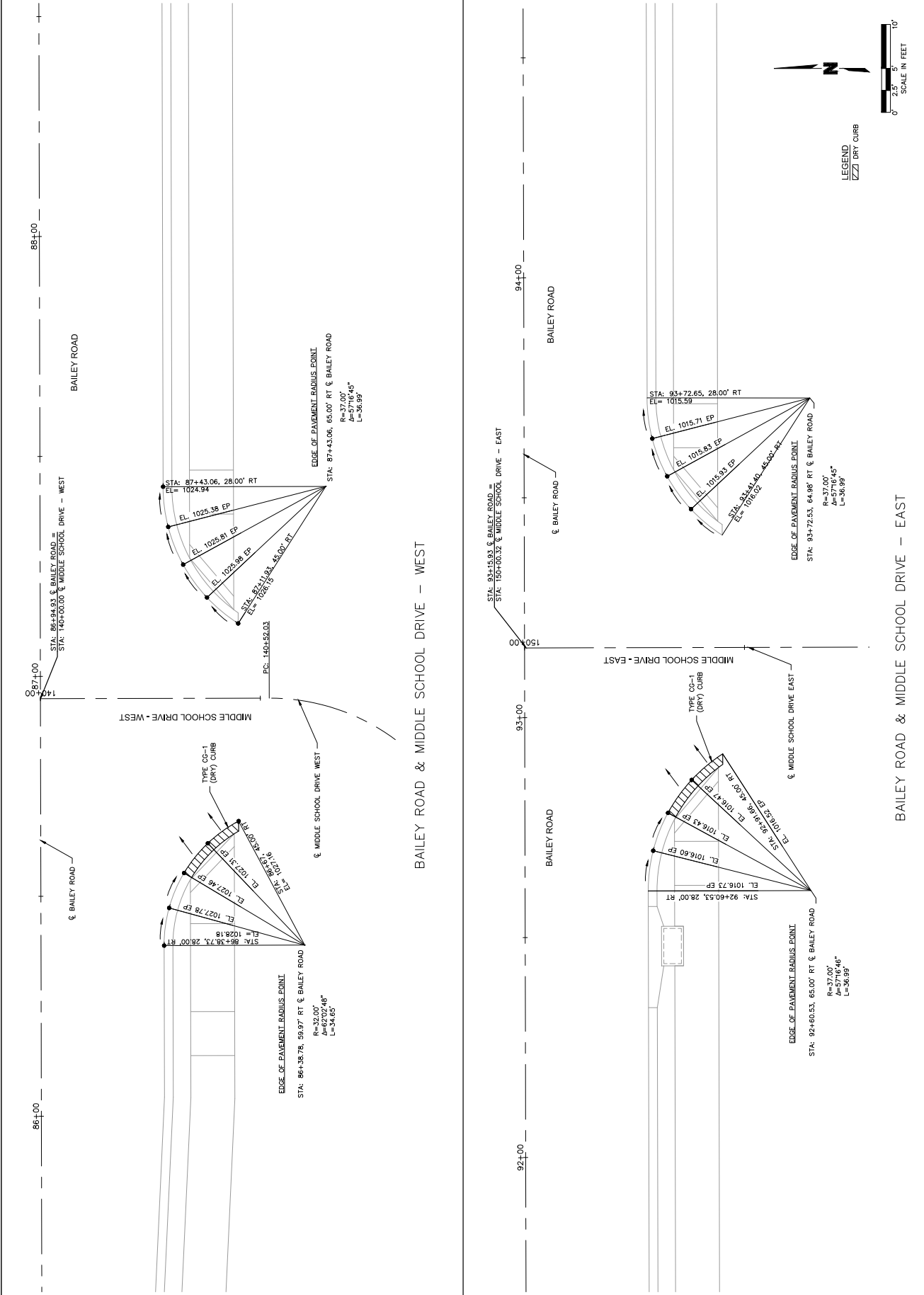
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LEES SUMMIT, MISSOURI	2024
LEES SUMMIT MIDDLE SCHOOL #4 BAILEY ROAD PUBLIC IMPROVEMENTS	
SE CAPE DRIVE PLAN & PROFILE	

C.O.A. NO.: 001582
 DRAWN BY: N.W.
 CHECKED BY: RPH
 APPROVED BY: RBE
 QADC BY: RBE
 PROJECT NO.: 020-0103
 DWG NO.: T RPP-09 0200103
 DATE: 2021-02-01









LEE'S SUMMIT MIDDLE SCHOOL #4
BAILEY ROAD PUBLIC IMPROVEMENTS

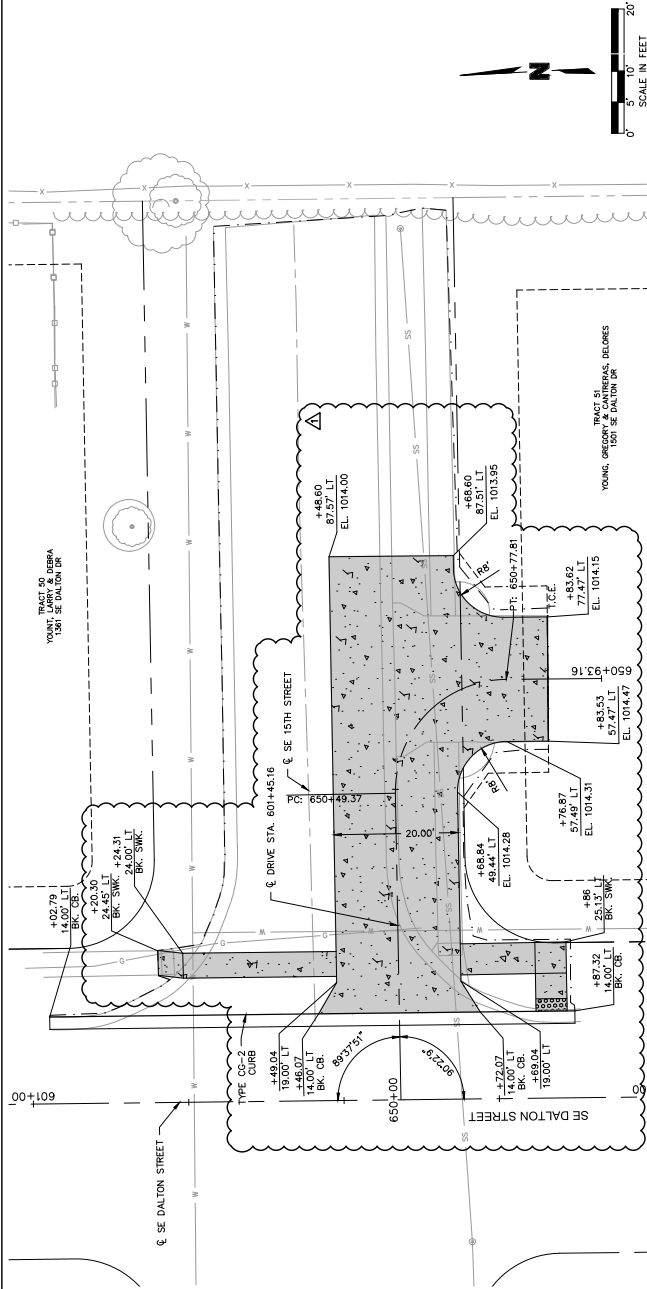
SHEET
36 OF 10

36 OF 101



0' 5' 10' 20'

SCALE IN FEET

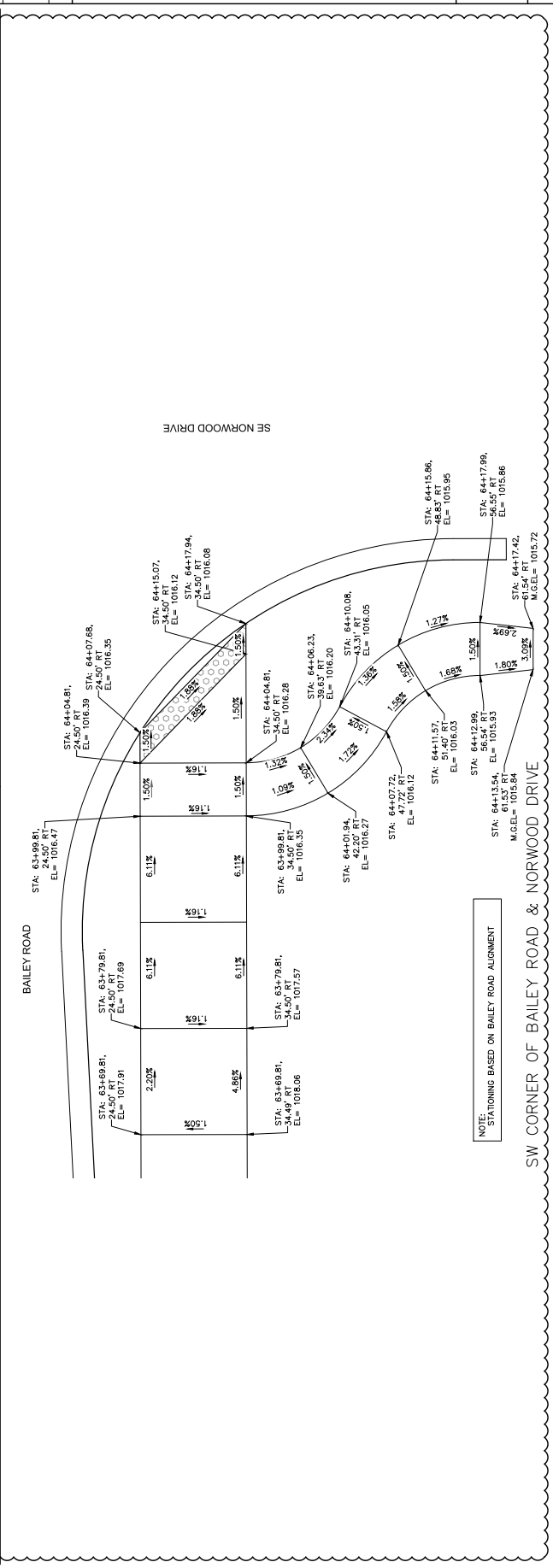
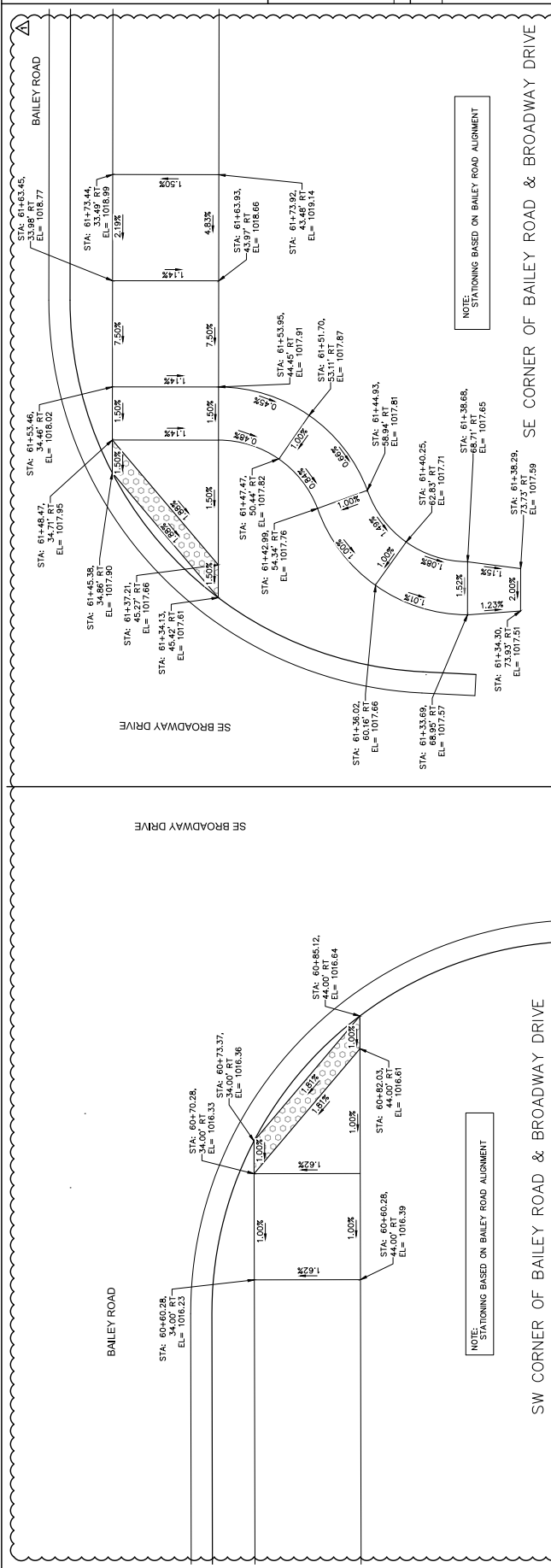


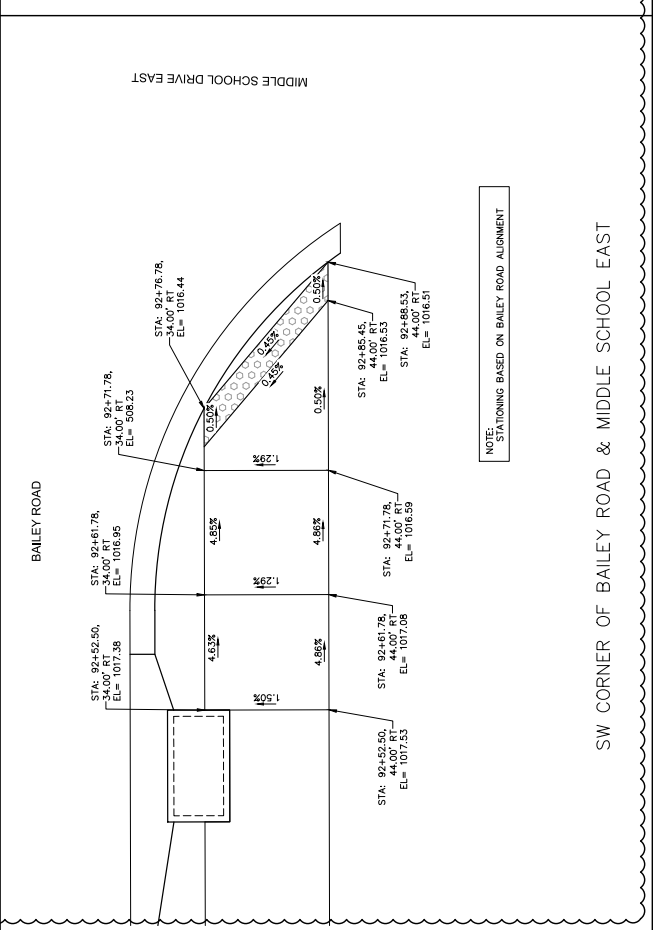
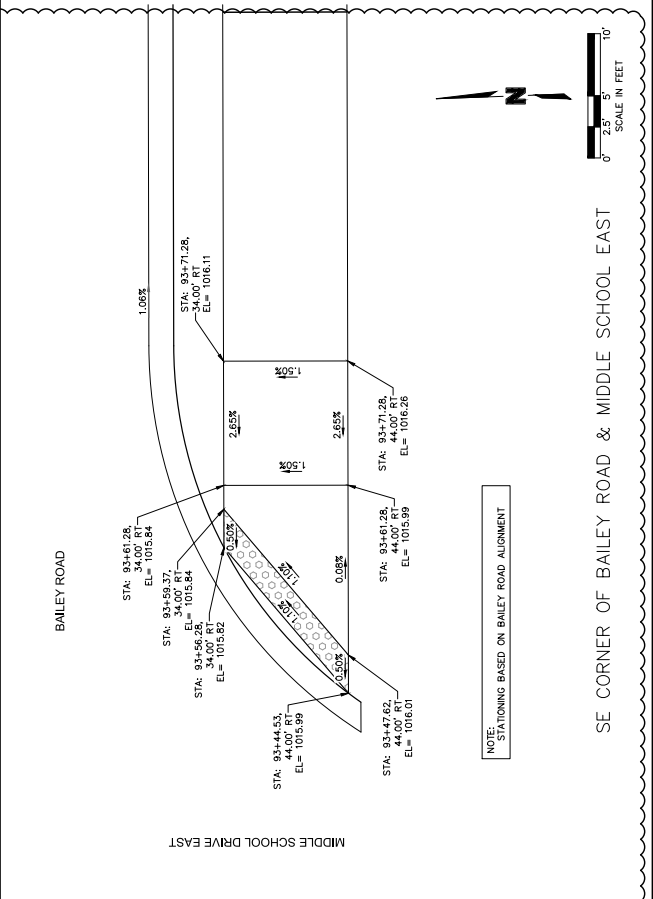
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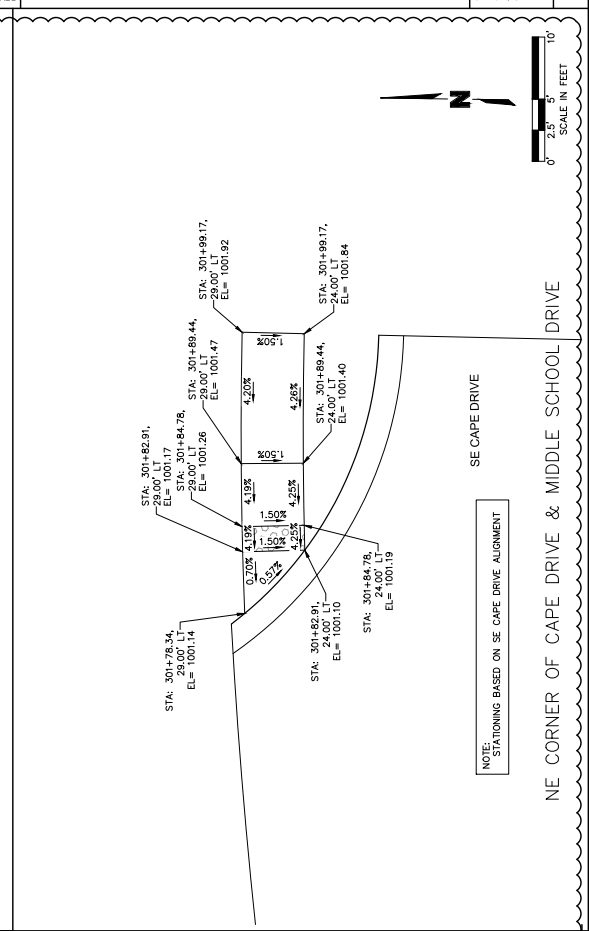
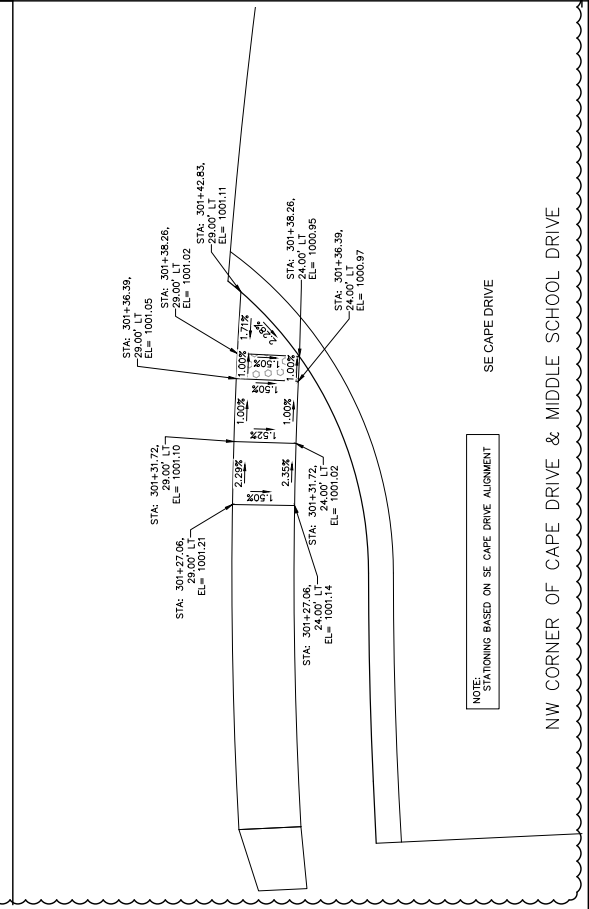
SIDEWALK LAYOUTS	LEES SUMMIT MIDDLE SCHOOL #4 BAILEY ROAD PUBLIC IMPROVEMENTS	LEES SUMMIT, MISSOURI	2021
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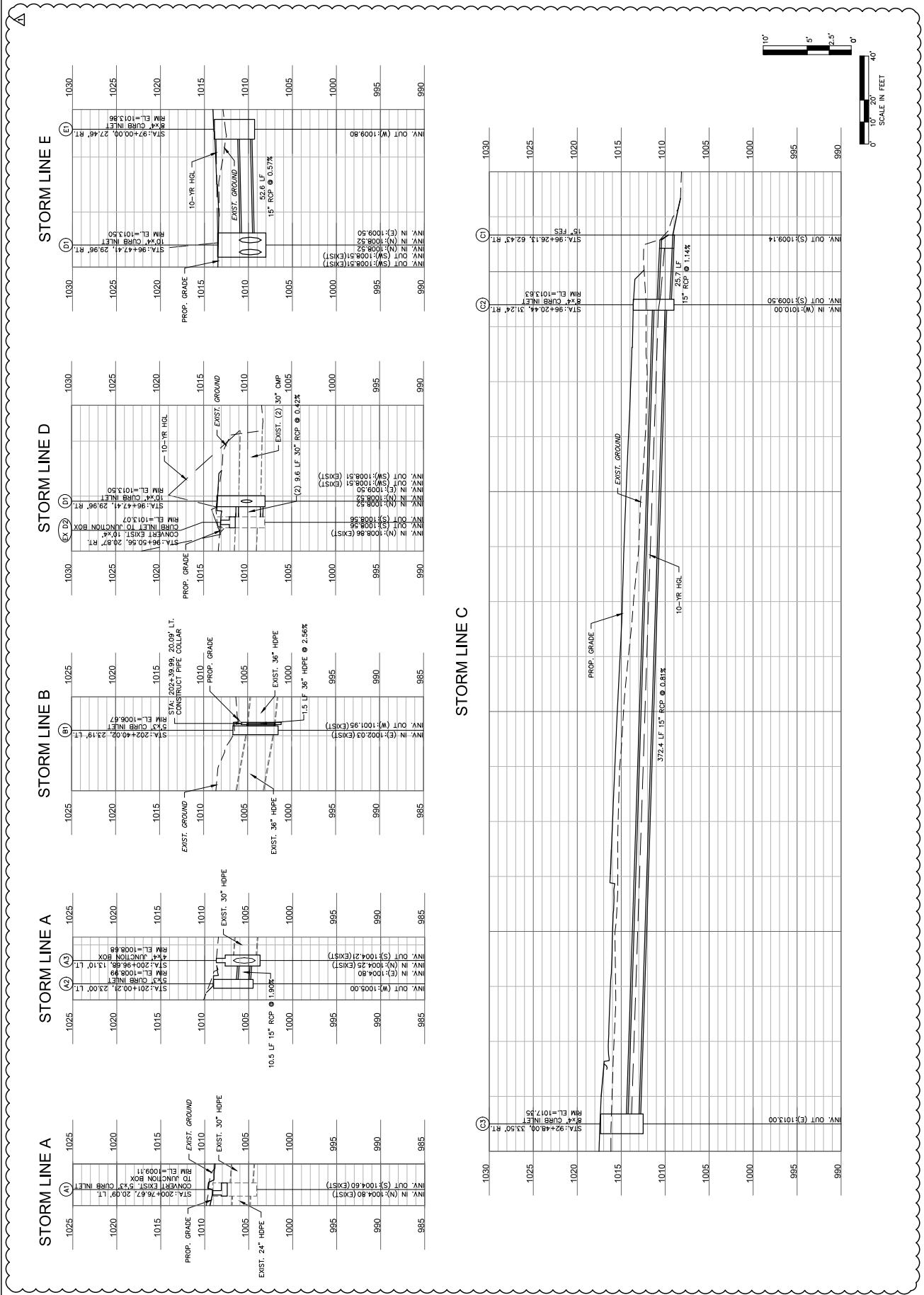
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DRAWN BY:	MLW
CHECKED BY:	RPH
APPROVED BY:	RBE
QA/QC BY:	RBE
PROJECT NO.:	020-0103
DWG NO.:	J. SWN01_0200103_LS
DATE:	2021-02-01

SHEET
40 OF 101









A. NO.: 001582
 MW BY: MW
 CKED BY: RPH
 ROVED BY: RBE
 C BY: RBE
 ECT NO.: 020-0103
 NO.: I DRN01 0200103
 2021-02-11

STORM SEWER CALCULATIONS

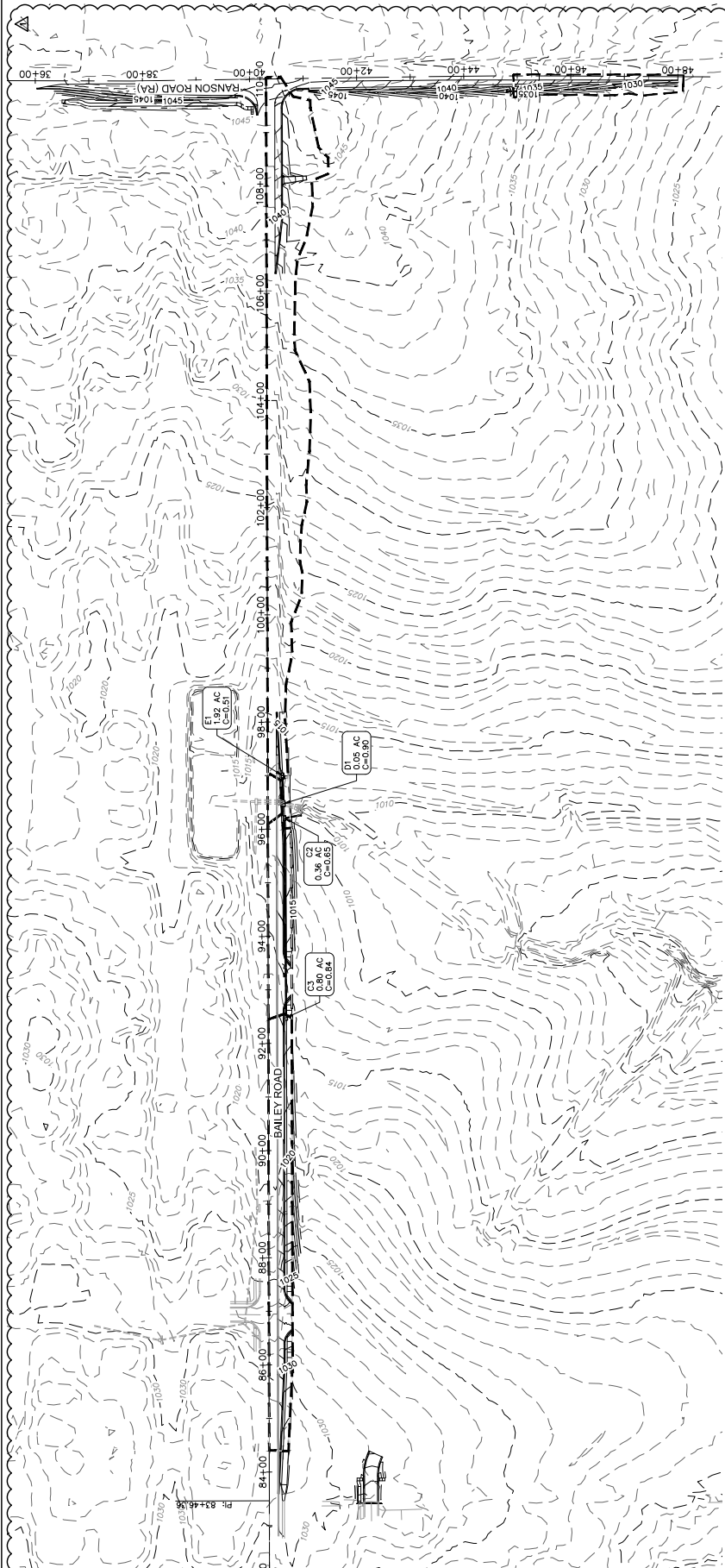
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RYAN B. FLEMING
L. NO. PE-2002003161

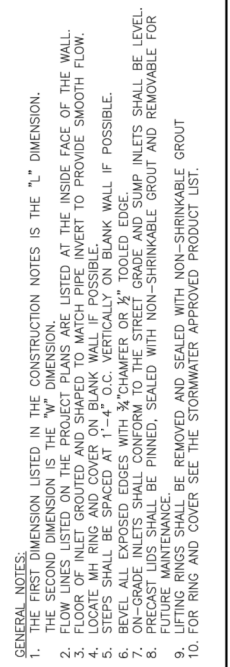


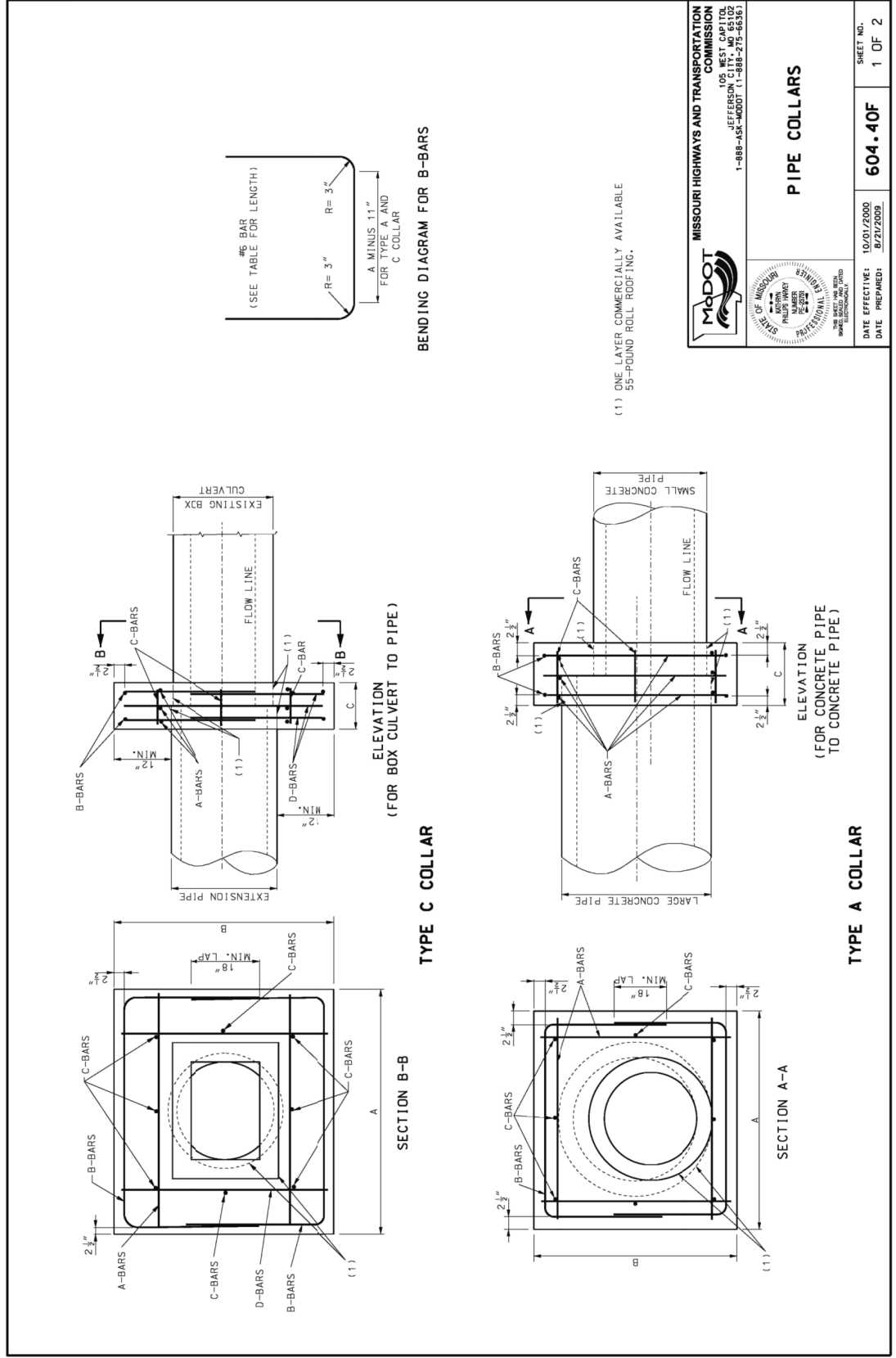
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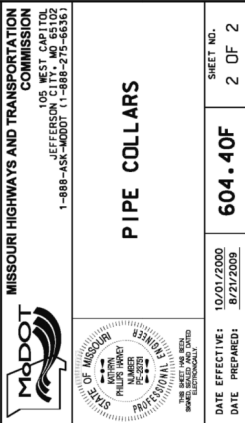
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10 YEAR STORM SEWER STRUCTURES																		
Label	Inlet Location	Elevation (Rim) (ft)	Inlet C	Inlet Drainage Area (acres)	Total Inlet Tc (min)	Local Intensity (in/hr)		System Intensity (in/hr)		Curb Opening Length (ft)	Flow (Captured) (cfs)	Flow (Total Bypassed) (cfs)	Capture Efficiency (Calculated) (%)	Bypass Target	Longitudinal Slope (in/ft) (%)	Road Cross Slope (%)	Spread / Top Width (ft)	Depth (cutter) (in)
C1	Standard Curb Inlet	1,013.63	0.64	0.36	5.00	7.35	7.00	6.27	8.00	2.45	0.13	95.00	D1	0.51	2.00	10.80	2.60	
C2	Standard Curb Inlet	1,013.63	0.84	0.80	5.00	7.35	7.35	7.35	8.00	4.13	0.85	83.00	C2	1.09	2.00	12.00	2.90	
D1	Standard Curb Inlet	1,013.50	0.90	0.05	5.00	7.35	5.17	210.55	8.00	3.19	0.00	100.00	N/A	N/A	2.00	3.20	3.50	
E1	Standard Curb Inlet	1,013.86	0.51	1.92	9.80	6.12	6.12	3.82	8.00	3.82	2.27	62.70	D1	1.15	2.00	12.60	3.50	





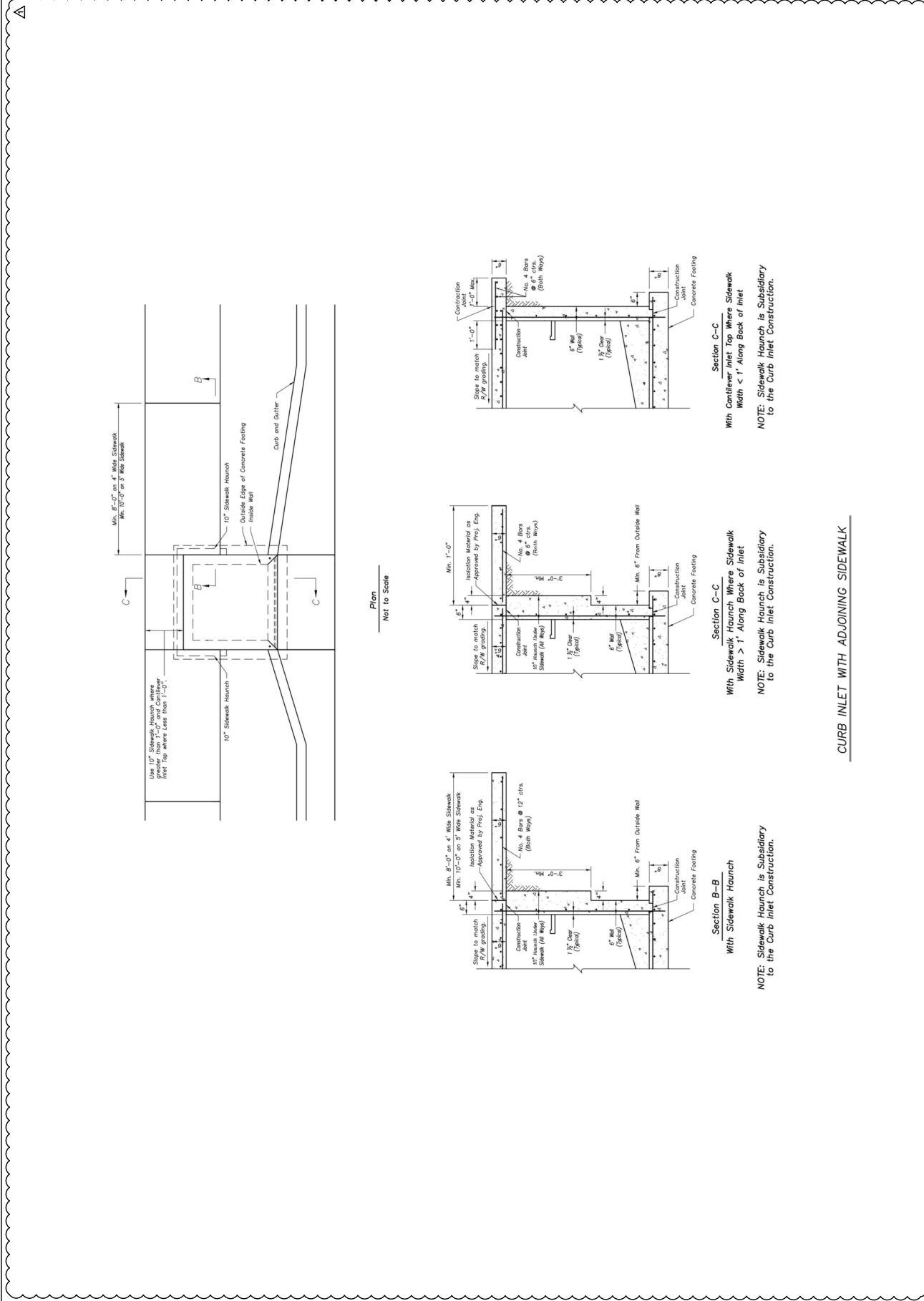




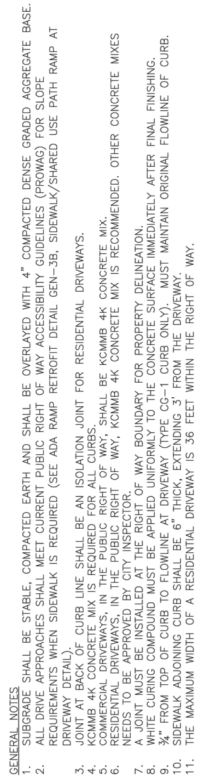
REVISIONS	
REV.	DATE
1	08/25/2021
BY	ASJ #29
CHK	
APP	
DATE	
DESCRIPTION	
NO.	
DATE	
DESCRIPTION	
NO.	
DATE	
DESCRIPTION	

2021	LEE'S SUMMIT MIDDLE SCHOOL #4 BAILEY ROAD PUBLIC IMPROVEMENTS
2021	LEE'S SUMMIT, MISSOURI

C.D.A. NO.	2021002
DRAWN BY	ASJ
CHECKED BY	ASJ
APPROVED BY	ASJ
DATE	08/25/2021
SCALE	AS SHOWN
DATE	08/25/2021
SCALE	AS SHOWN



LEE'S SUMMIT MISSOURI



[illegible]

2021	LEES SUMMIT, MISSOURI
	LEES SUMMIT MIDDLE SCHOOL #4 BAILEY ROAD PUBLIC IMPROVEMENTS
	STANDARD DETAILS

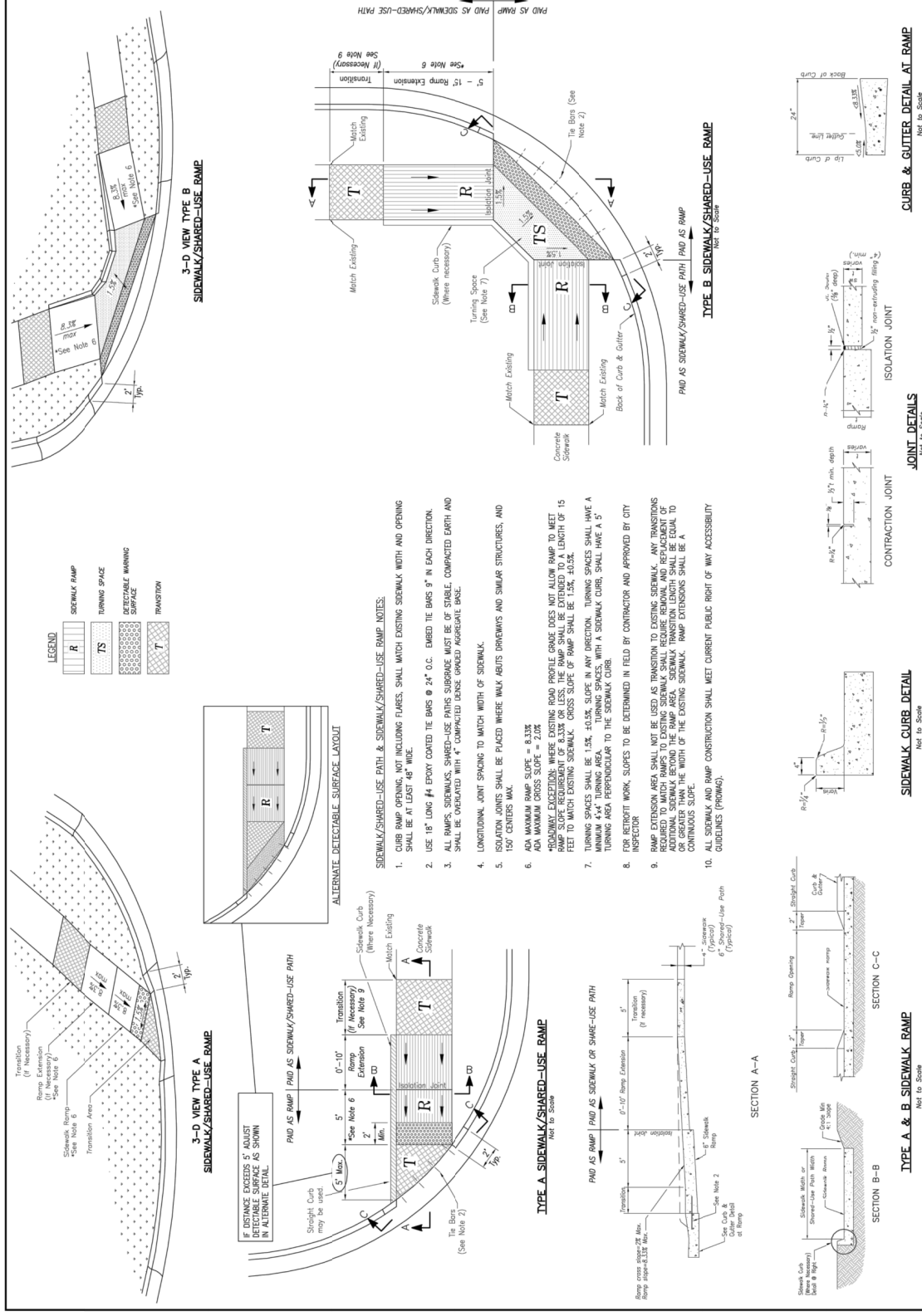
C.O.A. NO.:	001592
DRAWN BY:	M.W.
CHECKED BY:	RPH
APPROVED BY:	RBE
QA/QC BY:	RBE
PROJECT NO.:	020-0103
DWS NO.:	T DTL01_0200103
DATE:	2021-02-01

LEE'S SUMMIT MISSOURI

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

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

GEN-3A



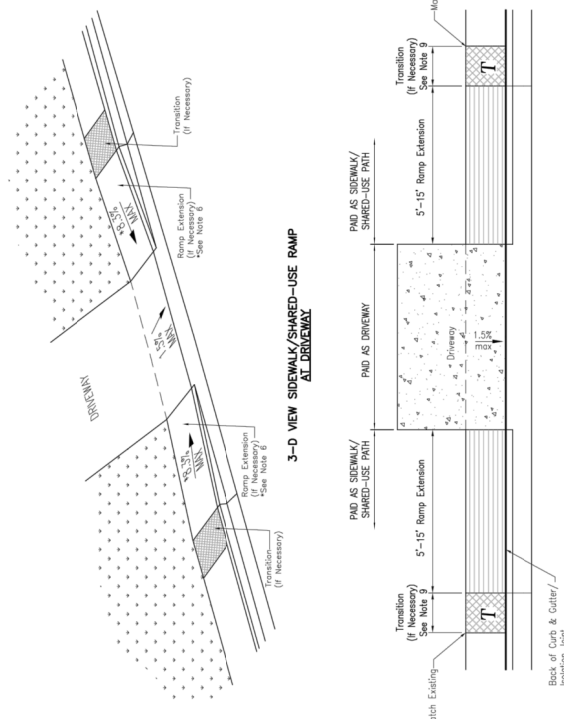
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2021	LEES SUMMIT, MISSOURI
	LEES SUMMIT MIDDLE SCHOOL #4 BAILEY ROAD PUBLIC IMPROVEMENTS
	STANDARD DETAILS

C.O.A. NO.:	001592
DRAWN BY:	M.W.
CHECKED BY:	RPH
APPROVED BY:	RBE
QA/QC BY:	RBE
PROJECT NO.:	020-0103
DWG NO.:	T_DTL01_0200103
DATE:	2021-02-01

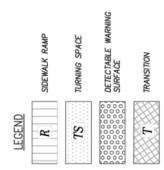
GEN-3B

STANDARD DETAILS
Y OF LEE'S SUMMIT, MO
MMIT, JACKSON COUNTY, MO
A RAMP RETROFIT DETAIL

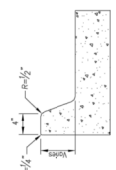
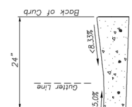


SIDEWALK/SHARED USE RAMP
AT DRIVEWAY WITH ADJOINING CURB

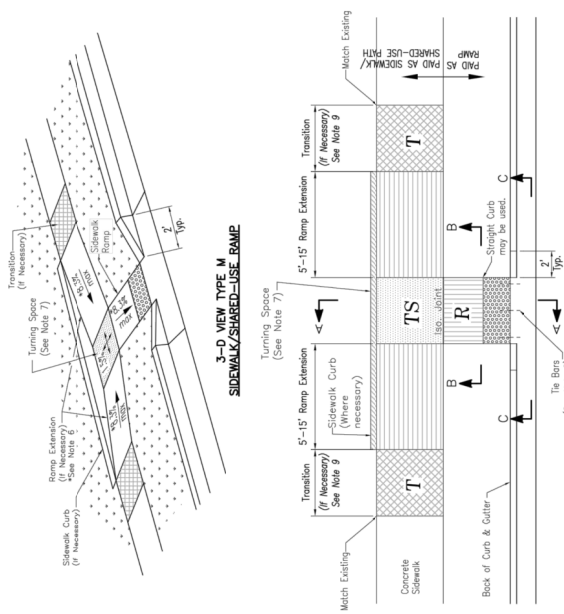
1. CURB RAMP OPENING, NOT INCLUDING FLANGES, SHALL MATCH EXISTING SIDEWALK WIDTH AND OPENING SHALL BE AT LEAST 48" WIDE.
2. USE 18" LONG #4 EPOXY COATED BARS @ 24" O.C. EMBED THE BARS 8" IN EACH DIRECTION.
3. ALL RAMP SIDEWALKS, SHARED-JOINT PAVING SURFACES MUST BE OF STURDY, COMPACTED EARTH AND SHALL BE OVERLAPPED WITH 4" COMPACTED DENSE GRADED AGGREGATE BASE.
4. LONGITUDINAL JOINT SPACING TO MATCH WIDTH OF SIDEWALK.
5. ISOLATION JOINTS SHALL BE PLACED WHERE WALK ADOPTS DRIVEWAYS AND SIMILAR STRUCTURES, AND 150' CENTERS MAX.
6. AIA MAXIMUM RAMP SLOPE = 6.33%
AIA MAXIMUM CROSS SLOPE = 2.03%
*FOOTCRAWL EXCEPTION: WHERE EXISTING ROAD PROFILE GRADE DOES NOT ALLOW RAMP TO MEET RAMP SLOPE REQUIREMENT OF 6.33% OR LESS, THE RAMP SHALL BE EXTENDED TO A LENGTH OF 15 FEET TO MATCH EXISTING SIDEWALK CROSS SLOPE. CROSS SLOPE OF RAMP SHALL BE 1.53% TO 2.03%.
7. TURNING SPACES SHALL BE 1.5X .+0.0% SLOPE IN ANY DIRECTION. TURNING SPACES SHALL HAVE A 3' MINIMUM TURNING RADIUS. TURNING SPACES SHALL BE PLACED WITH A SIDEWALK SPACE, SHALL HAVE A TURNING AREA PERPENDICULAR TO THE SIDEWALK CURB.
8. FOR INSPECTOR WORK, SLOPES TO BE DETERMINED IN FIELD BY CONTRACTOR AND APPROVED BY CITY ENGINEER.
9. RAMP EXTENSION AREA SHALL NOT BE USED AS TRANSITION TO EXISTING SIDEWALK. ANY TRANSITIONS REQUIRED TO MATCH RAMP TO EXISTING SIDEWALK SHALL REQUIRE REMOVAL AND REPLACEMENT OF ADDITIONAL SIDEWALK BEYOND THE RAMP AREA. SIDEWALK TRANSITION LENGTH SHALL BE EQUAL TO 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 (PROVA).



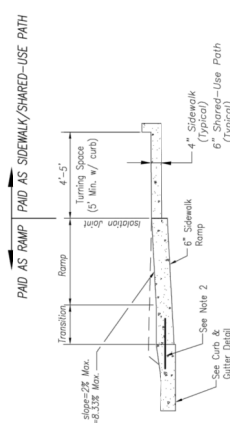
CURB & GUTTER DETAIL AT RAMP



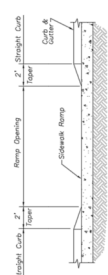
SIDEWALK CURB DETAIL



TYPE M SIDEWALK/SHARED-USE RAMP
Not to Scale

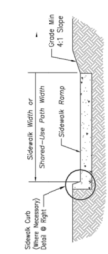


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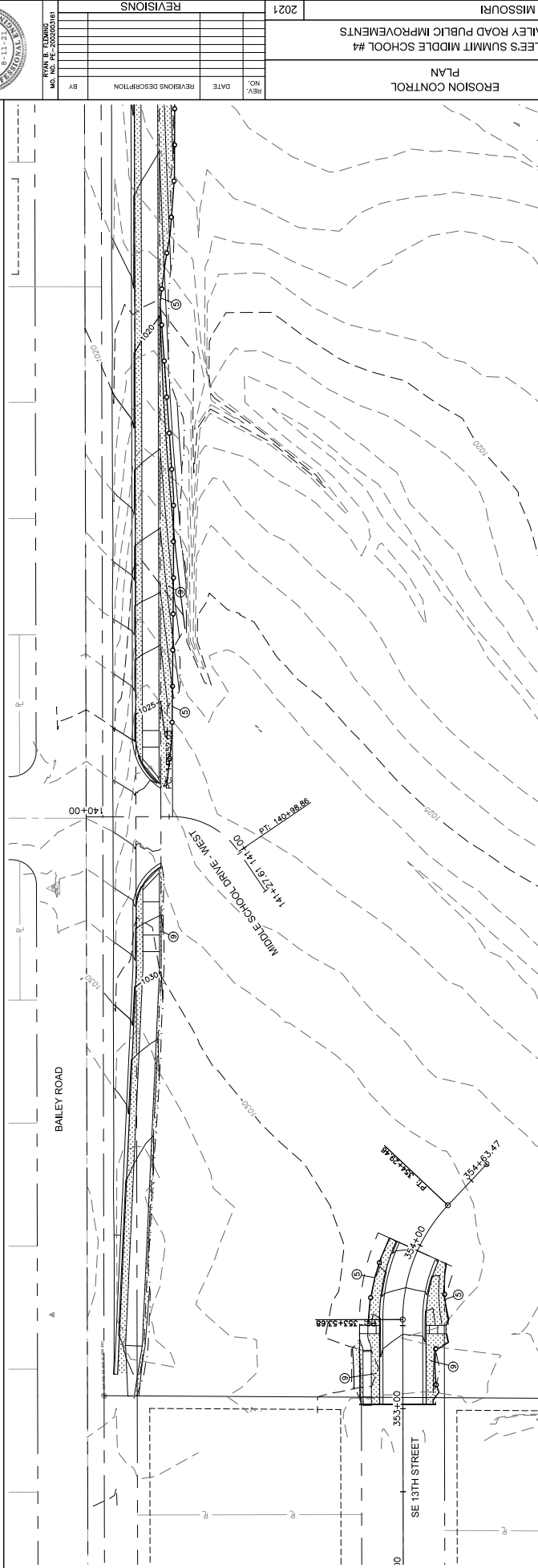
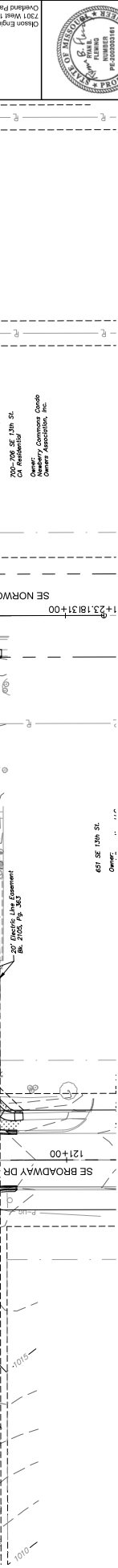
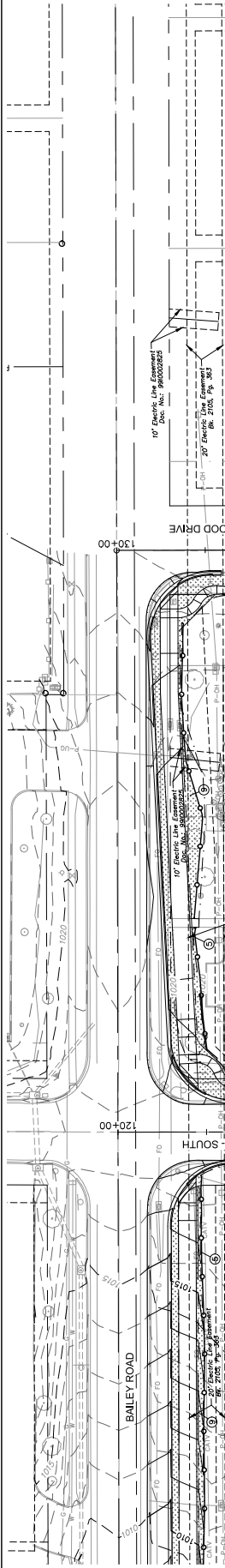


SECTION C-C

TYPE M SIDEWALK RAMP



[illegible]



EROSION AND SEDIMENT CONTROL STAGING CHART		NOTES:	
PROJECT STAGE	EROSION CONTROL PLAN REFERENCE	BMP DESCRIPTION	REMOVE AFTER STAGE
I - STORM SEWER INSTALLATION PRIOR TO ROADWAY GRADING	1	STAGING AREA	III
	2	TEMPORARY CONSTRUCTION ENTRANCE	III
	3	CONCRETE WASHOUT	III
	4	TEMP. ROCK DITCH CHECK AND/OR BIO LOGS	IV
	5	TEMP. ROCK DITCH CHECK AND/OR BIO LOGS	IV
	6	SILT FENCE FOR BIOGRAVABLE LOGS (9)	III
	7	CURB INLET PROTECTION	IV
II - ROADWAY GRADING & SWALE GRADING	8	TEMP. ROCK DITCH CHECK AND/OR BIO LOGS	IV
	9	CURB INLET/AREA INLET PROTECTION	IV
III - PAVING		GRAVEL FILTER BAGS	N/A
IV - STABILIZE SITE			

- LEGEND**
- SILT FENCE
 - INLET PROTECTION
 - TEMPORARY ROCK DITCH CHECKS
 - CONSTRUCTION ENTRANCE
 - CONCRETE WASHOUT
 - SOD

SCALE IN FEET
0 10 20 40

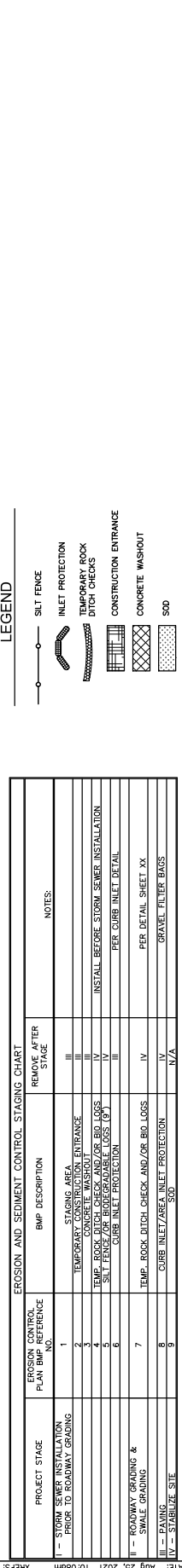
SE 13TH STREET
SE BROADWAY DR. SOUTH
BAILEY ROAD

MIDDLE SCHOOL DRIVE WEST

200-790 SE 13th St.
City of Lees Summit
Lees Summit Middle School #4
Lees Summit, Missouri

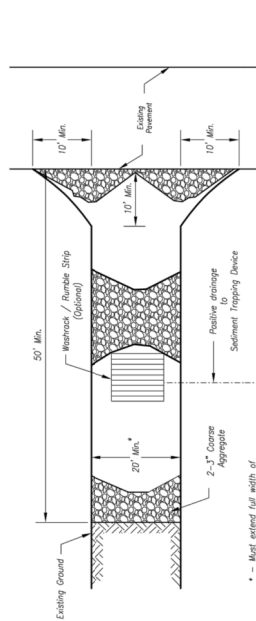
2021

2021

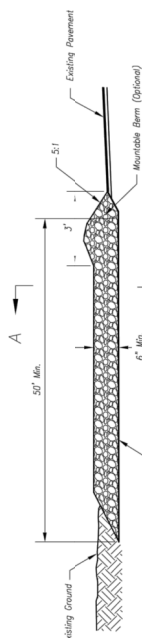


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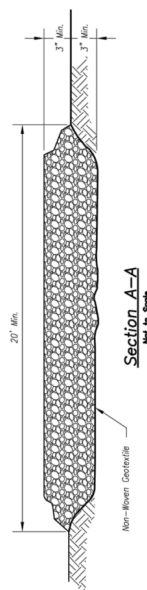
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Plan View
Not to Scale



Side Elevation
Not to Scale

Section A-A
Met to Seals

Notes for Construction Entrance:

- Avoid handling on steep slopes, or on slopes on public roads, or on roads of distressed areas.
- Remove all vegetation and other unsuitable material from the foundation area, and crown for positive drainage.
- If you locate the public road some 25% outside a 6 m 8-inch high edge with 30:1V side slopes, the foundation approximately 15 feet from the edge of the public road to avoid runoff from it.
- If, instead pipe under the entrance it's needed to maintain drainage ditches along public roads.
- Place surface to dimensions and grade as shown on plans.
- Leave surface sloped for drainage.
- Direct all surface runoff and drainage from the entrance to a sediment control device.
- If conditions present, place geotextile fabric on the ground surface to improve stability.

Maintenance for Construction Entrance:

1. Reshape entrance as needed to maintain function and integrity of installation. Top dress with clean aggregate as needed.

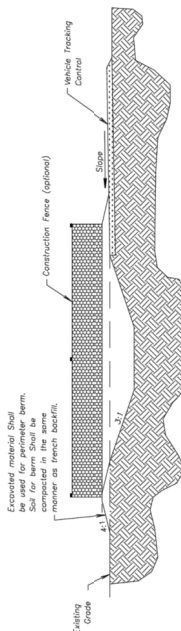
CONSTRUCTION ENTRANCE

Notes for Concrete Washout:

- [illegible]

Maintenance for Concrete Washout:

1. Concrete without materials shall be removed after the materials have been filled without to approximately 75% full.
2. Concrete without areas shall be subjected to maximum in vehicles capacity for tested concrete.
3. Concrete without water washed areas of concrete and all other debris in the substructure shall be transported from the job site in a water-tight container and disposed of properly.
4. Concrete without areas shall remain in place until all concrete for the project is placed.
5. When concrete without areas are removed, excavations shall be filled with suitable compressed boulds and topped, any disturbed areas shall be compacted and covered with a 2" layer of concrete or the concrete without areas shall be stabilized.

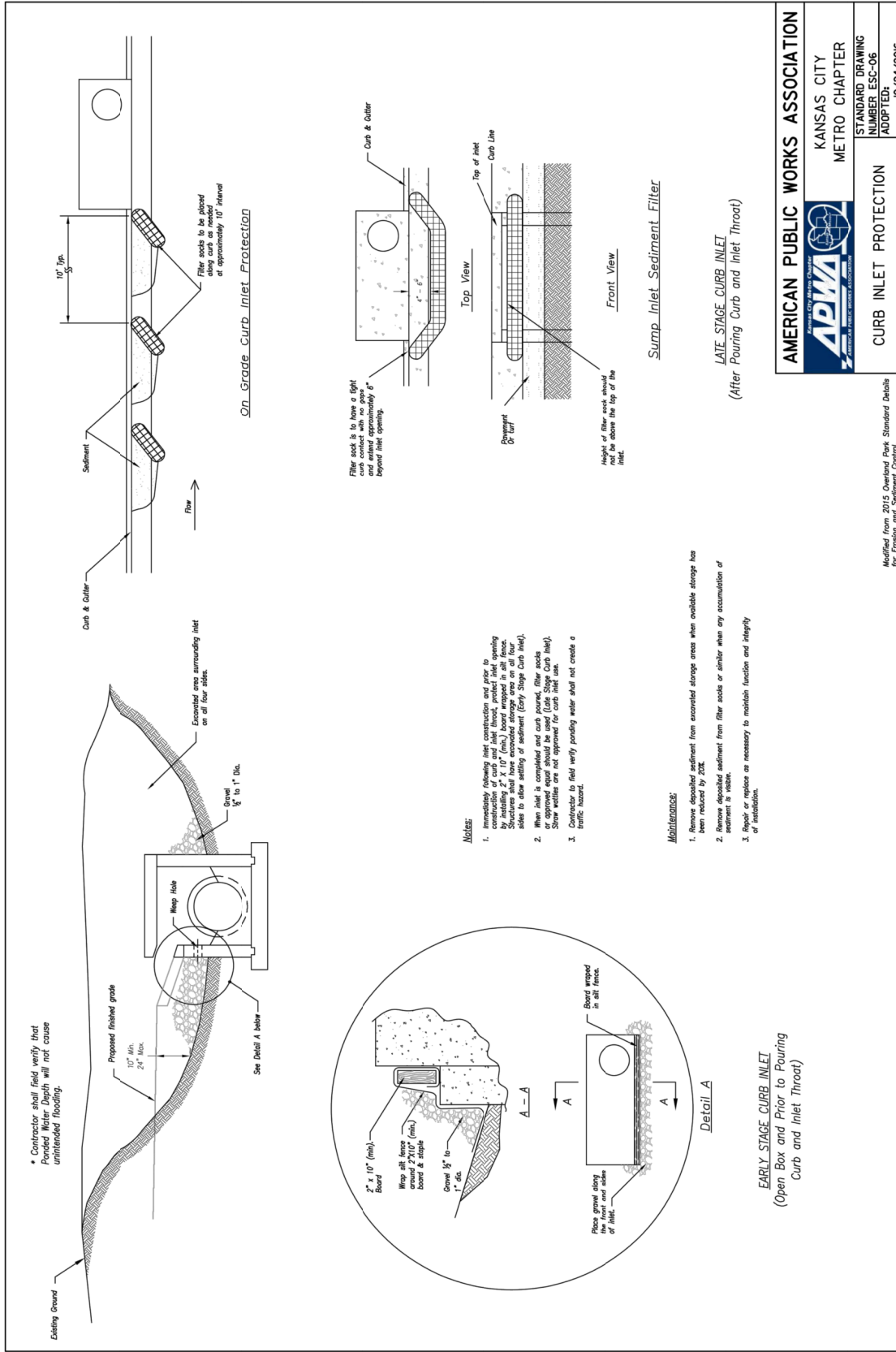


CONCRETE WASHOUT

AMERICAN PUBLIC WORKS ASSOCIATION
KANSAS CITY
METRO CHAPTER

 AMERICAN PUBLIC WORKS ASSOCIATION	CONSTRUCTION ENTRANCE AND CONCRETE WASHOUT	STANDARD DRAWING NUMBER ESC-01 ADOPTED:
		

Construction Entrance modified from 2015 Overland Park Standard Details for Erosion and Sediment Control; Concrete Washout modified from 2009 City of Great Bend Standard Drawings.



[illegible]

2021	LEES SUMMIT, MISSOURI
	LEES SUMMIT MIDDLE SCHOOL #4 BAILEY ROAD PUBLIC IMPROVEMENTS
	EROSION CONTROL DETAILS

G.O.A. NO.: 001592
DRAWN BY: M.W.
CHECKED BY: RPH
APPROVED BY: RBE
QA/QC BY: RBE
PROJECT NO.: 020-0103
DWG NO.: ERCOTLD1-0200004
DATE: 2021-02-01

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Notes:

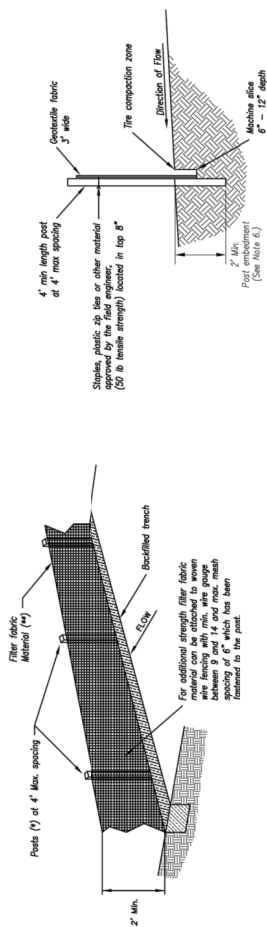
1. In order to contain water, the ends of the sill fence must be turned uphill (Figure 4).
2. Long perimeter runs of sill fence must be broken up into several smaller segments to minimize water concentrations (Figure 4).
3. Long slopes should be broken up with intermediate rows of sill fence to allow runoff vehicles.
4. Attach fabric to upstream side of post.
5. Install posts a minimum of 2' into the ground.

Maintenance;

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

SILT FENCE DETAILS

Not to Scale



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

SISTO (*)

- MIN. LENGTH 4"
- HARDWOOD 1 $\frac{3}{8}$ " x 1 $\frac{3}{8}$ "
- NO.2 SOUTHERN PINE 2 $\frac{5}{8}$ " x 2 $\frac{5}{8}$ "
- STEEL 1.33 LB/FT

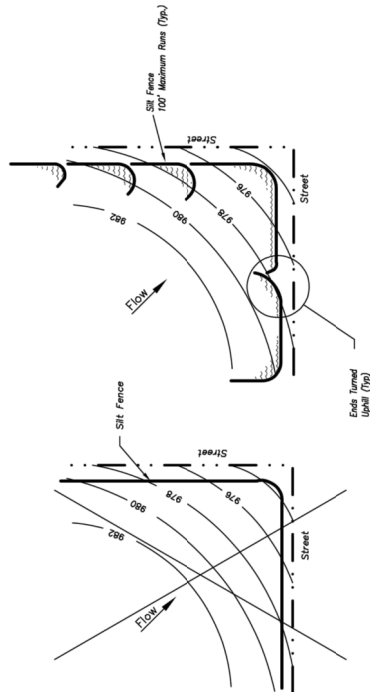
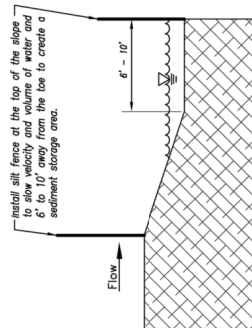
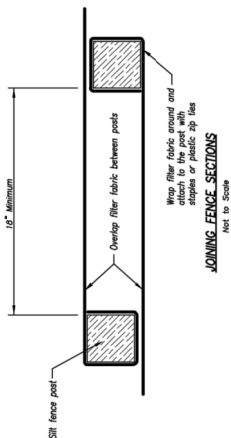


Figure A

SILT FENCE LAYOUT

not to scale

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

SILT FENCE	NUMBER ESC-03 ADOPTED: 10/24/2016
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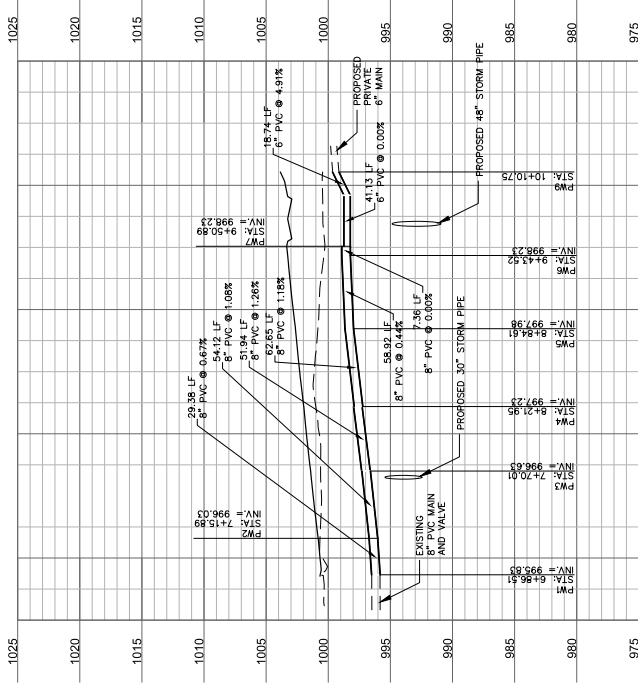
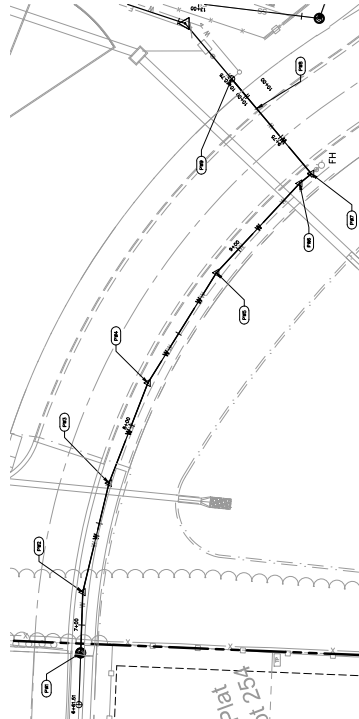
AMERICAN PUBLIC WORKS ASSOCIATION



APWA
Kansas City Metro Chapter

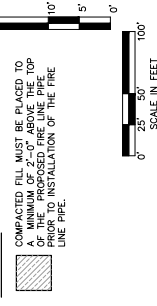
SILT FENCE

10/24/2016



ID	DESCRIPTION	STRUCTURES
PW1	CONNECT TO EXISTING VALVE CAPE DRIVE PUBLIC WATER MAIN EXTENSION INV IN = 998.83; (6" PVC) N: 891537.861; E: 283149.379	
PW2	11.25 BEND WITH THRUST BLOCK CAPE DRIVE PUBLIC WATER MAIN EXTENSION INV IN = 998.03; (6" PVC) N: 891536.631; E: 283178.740	
PW3	11.25 BEND WITH THRUST BLOCK CAPE DRIVE PUBLIC WATER MAIN EXTENSION INV IN = 998.03; (6" PVC) N: 891524.236; E: 283151.371	
PW4	11.25 BEND WITH THRUST BLOCK CAPE DRIVE PUBLIC WATER MAIN EXTENSION INV IN = 997.29; (6" PVC) N: 891508.415; E: 283159.766	
PW5	11.25 BEND WITH THRUST BLOCK CAPE DRIVE PUBLIC WATER MAIN EXTENSION INV IN = 997.98; (6" PVC) N: 891472.333; E: 283162.891	
PW6	11.25 BEND WITH THRUST BLOCK CAPE DRIVE PUBLIC WATER MAIN EXTENSION INV IN = 998.23; (6" PVC) N: 891432.192; E: 283176.720	
PW7	90 BEND WITH THRUST BLOCK, REDUCER, AND STANDARD FIRE HYDRANT ASSEMBLY CAPE DRIVE PUBLIC WATER MAIN EXTENSION INV IN = 998.23; (6" PVC) N: 891426.518; E: 283168.811	
PW8	11.25 BEND WITH THRUST BLOCK CAPE DRIVE PUBLIC WATER MAIN EXTENSION INV IN = 998.23; (6" PVC) N: 891455.963; E: 283172.506	
PW9	104-1075, 0.00' CAPE DRIVE PUBLIC WATER MAIN EXTENSION INV IN = 991485.015; E: 283172.659	

LEGEND



GENERAL NOTES:

1. ALL CONSTRUCTION SHALL CONFORM TO THE LATEST SPECIFICATIONS AND NOTIFICATIONS OF THE AMERICAN PUBLIC WORKS ASSOCIATION - KANSAS CITY METROPOLITAN CHAPTER (APWA-KC) AND THE CITY OF LEE'S SUMMIT, MO, EXCEPT WHERE SHOWN OTHERWISE. NOTIFY ENGINEER OF DISCREPANCIES
2. PIPE AND FITTING MATERIALS USED IN THE CONSTRUCTION OF WATER MAINS SHALL BE POLYVINYL CHLORIDE (PVC) AWWA C900 AND AWWA C300.



TERRY M. PARSONS
M.O. NO. PE-2018010505

[illegible]

PUBLIC WATER MAIN EXTENSION (CAPE DRIVE)
PLAN & PROFILE
LEES SUMMIT MIDDLE SCHOOL #4
BAILEY ROAD PUBLIC IMPROVEMENTS
SUMMIT, MISSOURI

C.O.A. NO.:	001592
DRAWN BY:	RPH
CHECKED BY:	RBE
APPROVED BY:	TMP
QA/QC BY:	RBE
PROJECT NO.:	020-0103
DWG NO.:	C-UTL08-0200103
DATE:	2021-12-21



MISSOURI
E'S SUMMIT MIDDLE SCHOOL #4
PUBLIC ROAD IMPROVEMENTS
GENERAL NOTES & LEGEND

SHEET
62 OF 101

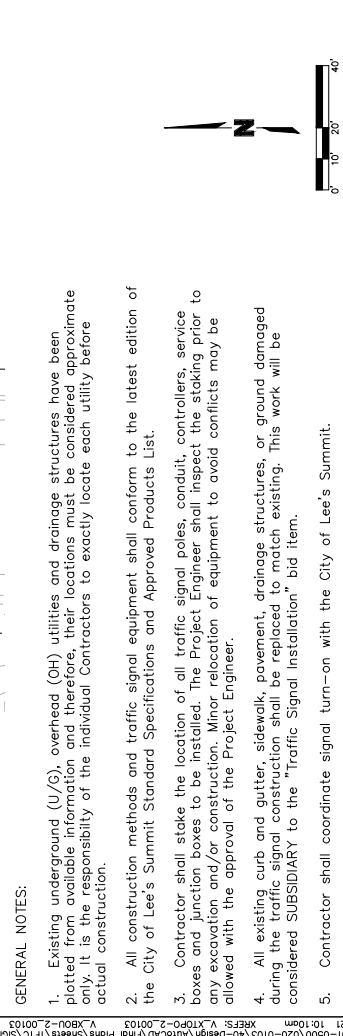
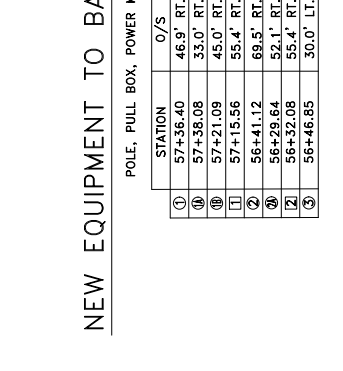
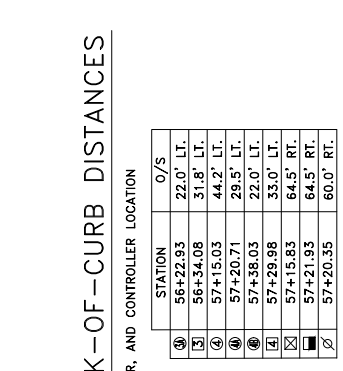
18. Final acceptance of traffic signals shall be defined as final written approval and acceptance by the City, including completion or correction of all punch list items and the traffic signals fully operational for a time period of fifteen (15) days, without any problem, as noted in the specifications. As-built plans shall be submitted prior to final acceptance by the City.

Traffic Controller Cabinet
Pull Box
Span Wire Signal Head
Power Supply (Disconnect)

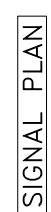
152

SIGN R10-12
24" X 30"





1. Existing underground (U/G), overhead (OH) 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 Contractors to exactly locate each utility before actual construction.
2. All construction methods and traffic signal equipment shall conform to the latest edition of the City of Lee's Summit Standard Specifications and Approved Products List.
3. Contractor shall stake the location of all traffic signal poles, conduit, controllers, service boxes and junction boxes to be installed. The Project Engineer shall inspect the staking prior to any excavation and/or construction. Minor relocation of equipment to avoid conflicts may be allowed with the approval of the Project Engineer.
4. All existing curb and gutter, sidewalk, pavement, drainage structures, or ground damaged during the Traffic Signal construction shall be replaced to match existing. This work will be considered SUBSIDIARY to the "Traffic Signal Installation" bid item.
5. Contractor shall coordinate signal turn-on with the City of Lee's Summit.
6. All traffic signal indications shall be L.E.D. (Light Emitting Diode.)
7. Contractor to verify location of power source with Eversource before construction.



	STATION	O/S
①	57+36.40	46.9' RT.
②	57+38.08	33.0' RT.
③	57+41.21	45.0' RT.
④	57+41.56	55.4' RT.
⑤	56+41.12	69.5' RT.
⑥	56+29.64	82.1' RT.
⑦	56+32.08	55.4' RT.
⑧	56+46.85	30.0' LT.

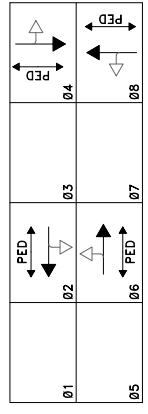
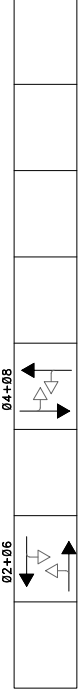
	STATION	O/S
⑨	56+22.93	22.0' LT.
⑩	56+34.08	31.8' LT.
⑪	57+15.03	44.2' LT.
⑫	57+20.71	29.5' LT.
⑬	57+38.03	22.0' LT.
⑭	57+29.98	33.0' LT.
⑮	57+15.93	64.5' RT.
⑯	57+21.93	64.5' RT.
⑰	57+20.35	60.0' RT.

[illegible]

WIRING DIAGRAM BAILEY ROAD & CENTURY DRIVE	LEE'S SUMMIT MIDDLE SCHOOL #4 PUBLIC ROAD IMPROVEMENTS	LEE'S SUMMIT, MISSOURI	2021
---	---	------------------------	------

C.O.A. NO.:	001582
DRAWN BY:	JRC
CHECKED BY:	JAB
APPROVED BY:	SLL
QA/QC BY:	THE
PROJECT NO.:	020-0103
DWG NO.:	F 303 02030
DATE:	8/25/2021

SEQUENCE



PHASE DIAGRAM

OUTPUT FILE ASSIGNMENTS

FR1	Ø1	Ø2	PED Ø2	Ø3	Ø4	PED Ø4
	FR2					
FR3	Ø5	Ø6	PED Ø6	Ø7	Ø8	PED Ø8
	FR4					

[illegible]

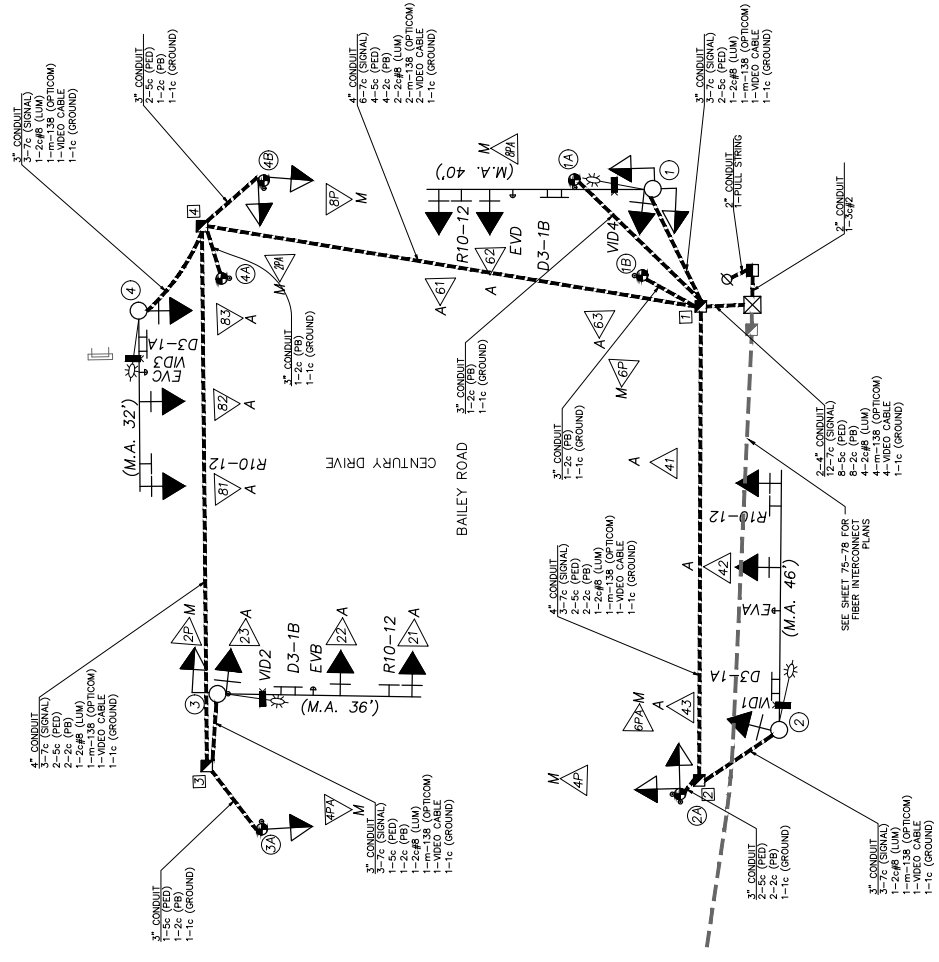
FLASHING		OPERATIONS
EMERGENCY		SCHEDULED
FY-No ϕ 's		FY-No ϕ 's
FR-All ϕ 's		FR-All ϕ 's

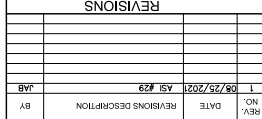
POWER SUPPLY			
LOCATION	Power Supply Type	CIRCUIT BREAKER TRIP RATINGS	
		SERVICE DISCONNECT (2-POLE)	TRAFFIC SIGNAL (1-POLE) LIGHTING (2-POLE)
SE CORNER	2-Circuit	40 AMP	40 AMP 15 AMP

Wiring and Phasing General Notes

1. All signal heads shall be served by one 7c#4 cable extending from the head back to the controller. No cable splices are allowed, including at the base of the pole and inside pull boxes. Most arm heads shall not be jumpered, so that additional 7c can be used for left–turn signal head if needed in the future.
2. A continuous 1c#6 AWG bare solid copper ground wire shall be provided in addition to ground rods. All grounding and ground rods shall be tied together using 1c#6 AWG bare solid copper wire to bond the system.

WIRING DIAGRAM





OTC

SIGNAL HEAD SPACING	LUMINAIRES												REMARKS		
	SIGNAL HEAD SPACING								LUMINAIRES						
	A	B	C	D	E	F	G	H	Arm Length	Bracket Type	Mounting Height	150W 240V Type III		200W 240V Type III	250W 240V Type III
4' 8" 15' 15' 35' 40' 46'															
1A	1	1	28.3'	9.0'					1.5'	CL	30'			1**	
1B	1														
2A	2	1	28.2'	14.9'					10'	CL	30'			1**	
3A	3	1	21.1'	12.7'					10'	CL	30'			1**	
4A	4	1	15.6'	15.1'					10'	CL	30'			1**	
4B	1														
TOTALS	3	3	1	1	1	1	1	1						4**	

*NOTE: Signal head spacing (feet) to be adjusted to site conditions and approved by the project inspector.
**Cobra-head luminaire w/280 watt H.P.S. equivalent

could need minimum 4,200 watt inc.: equivalent
led lamp.

[illegible]

P – Pole Mounted Signal Head

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.

140

[illegible]

1000

FROM	TO	Dig.	BORED	TRENCHED			IN EXISTING TRENCH			
			4"	2"	2 1/2"	3"	4"	2"	2 1/2"	4"
1	1	5'		15'						13'
2	2	6'		14'			13'			
3	3	7'								
4	4	8 1/2'								
5	5	9'								
6	6	10'								
7	7	11'								
8	8	12'								
9	9	13'								
10	10	14'								
11	11	15'								
12	12	16'								
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210	210									

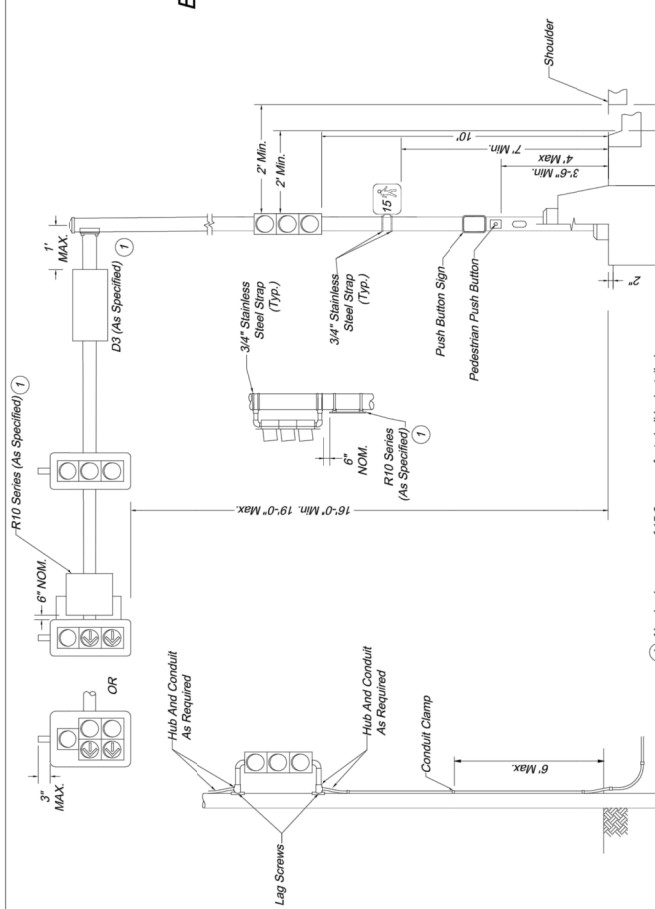
DET. NO.	PHASE	PUSH BUTTON	OPTICOM NTIP	VIDEO CAMERAS	LOOP (6x6)	LOOP (SIZE)	TOTALS	
							6	4
EVA							1	
EWB							1	
EWG							1	
EXD							1	
P2	2	1						
P2A	2							
P4	4	1						
P4A	4	1						
P6	6	1						
P6A	6	1						
P8	8	1						
P8A	8	1						
VID1					1			
VID2					1			
VID3					1			
VID4					1			

***NOTES:**
1. Push buttons shall be APS compatible

* Rate included in video camera system. ** Rate included in Pre-Emotion System. *** Includes 5% For Waste

* Rate included in video camera system. ** Rate included in Pre-Emption System.

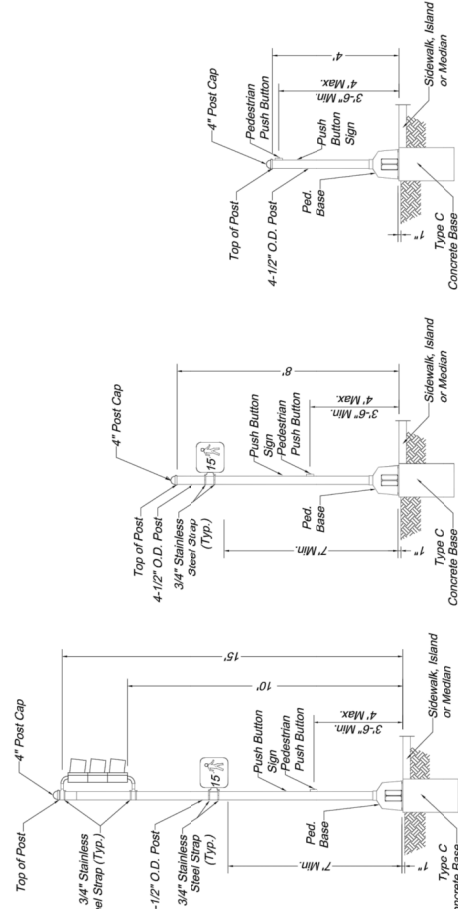
* Rate included in video camera system.



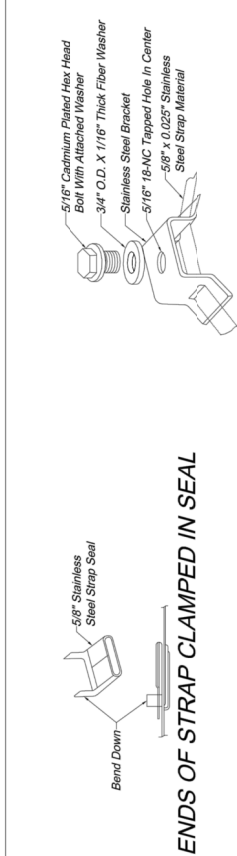
WOOD POLE MOUNTING

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 top of the post. R10 series signs shall be installed on the mast arm support. R10 series signs installed on the mast arm shall be mounted with an Astro-Bracket assembly.

MAST ARM POLE MOUNTING

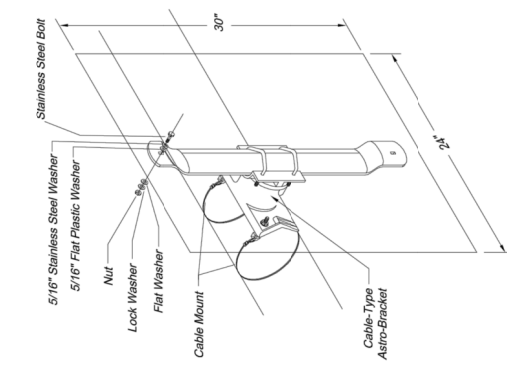


PEDESTAL POST MOUNTINGS



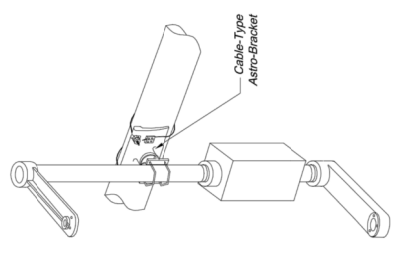
ENDS OF STRAP CLAMPED IN SEAL

STRAP TYPE SIGN SUPPORT



SIGNAL HEAD MAST ARM MOUNTING DETAIL

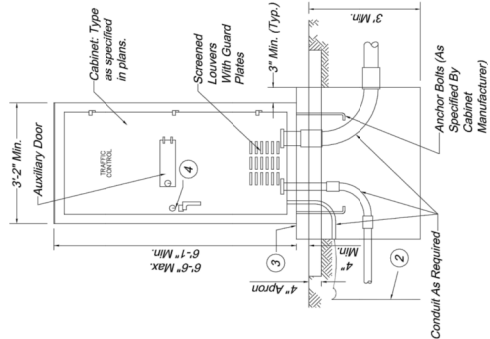
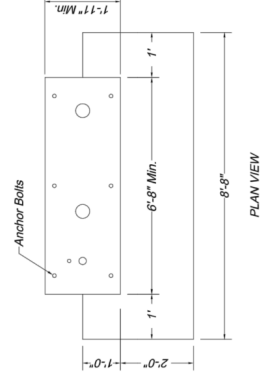
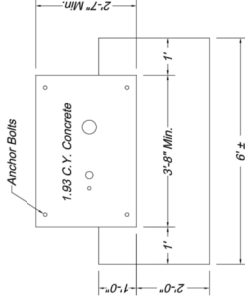
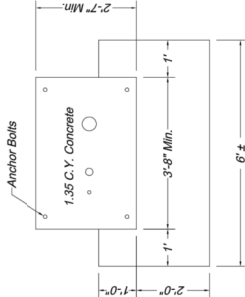
Astro-Brac Terminal Compartment Bracket Assembly
Note: Only cable type Astro-Brac will be allowed, no bands.



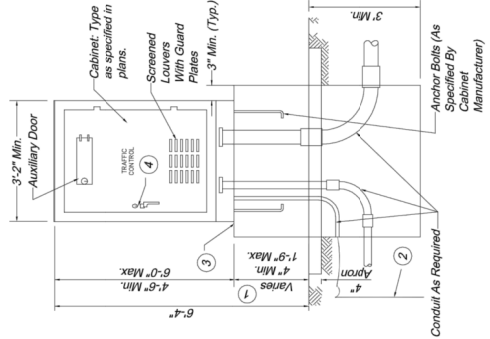
MAST ARM SIGN MOUNTING DETAIL

General Notes:
All post wire outlets shall be deburred and equipped with bushings.
Backplates not shown in mounting diagrams for clarity.
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 ground supply ground bus in controller cabinet.
Leads from pedestrian signal lamps are connected to the signal head terminal compartment.
All signals shall be mounted vertically unless otherwise noted on the traffic signal plans.
Span wire mounted signals shall have a disconnect hanger.
Signal heads on mast arms shall be tilted forward from the top 3 to 7 degrees from vertical.
If a sign exceeds 42" in length, two supports are required; and if a sign exceeds 95" in length, three supports are required.
Mast arm mounted signals shall have a terminal compartment.
Side-mounted optically limiting heads shall have a minimum post clearance of 5-1/2".
Symbol for pedestrian lenses shall have a minimum height of 11".
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.
Signal appearances 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.
See standard drawing TS-3 for base details.

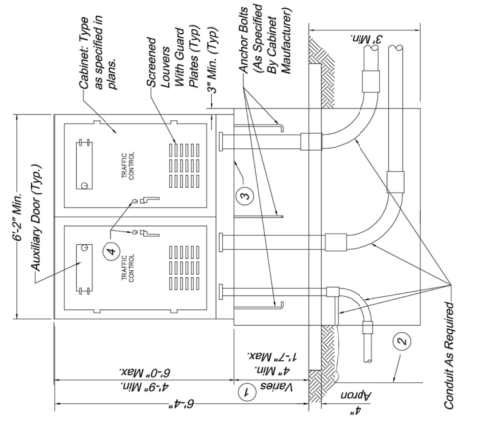
Signal appearances shall have a horizontal clearance no less than 2' from the face of a vertical curb or from the outside edge of a shoulder, except signals located in a median island.
See standard drawing TS-3 for base details.



For Controller Cabinets With Heights From 1' To 6'-6" TYPE E

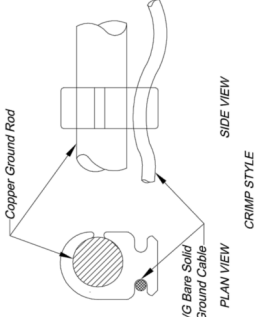
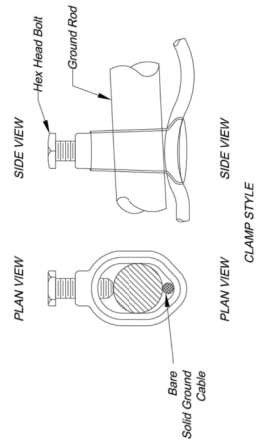


For Controller Cabinets With Heights From 4' To 6'-0" TYPE EV



DOUBLE

CONTROLLER CABINETS AND BASE TYPES

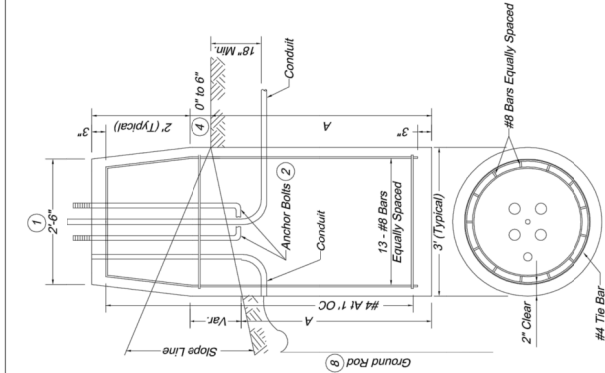


GROUND ROD CLAMP CONNECTION DETAIL

Ground rod clamp shall be subsidiary to ground rod.

- 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.
 - Dimension varies according to cabinet height.
 - 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.
 - Lifetime silicone caulk between cabinet and base.
 - #2 carbon lock.





TYPE A

TYPE B

POST BASES

Post Type	Arm Length (ft.)	Base Type
B, BL, C & CL	8 - 14	A-1 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

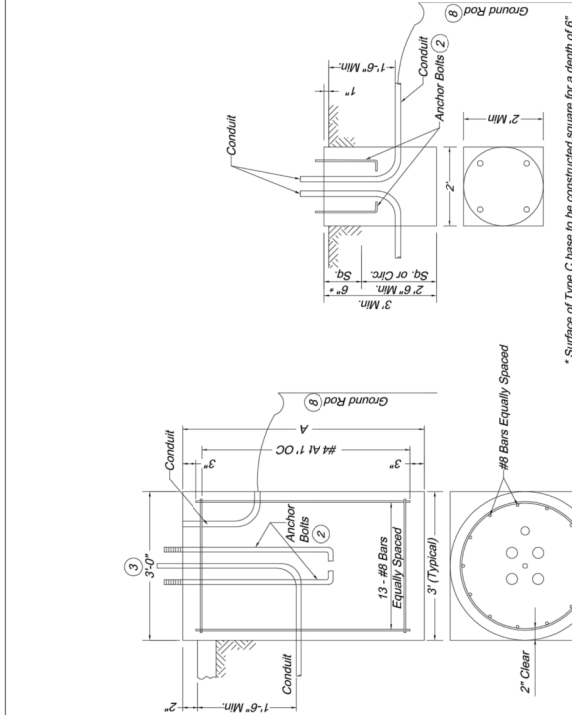
Arm length determined by length of longest arm for Type B & BL signal posts.

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 laws relating to architecture and professional engineers in the State of Missouri. The drawings shall include a list of materials which lists and certifies that the foundation will meet the design criteria.

- 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.
- Anchor bolt dimensions are shown on the manufacturer's approved drawings.
- Minimum bolt circle diameter is 20". Base plate shall stay within the top of the post base diameter.
- 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".
- Posts shall be furnished with individual nut covers.



* Surface of Type C base to be constructed square for a depth of 6".

TYPE C

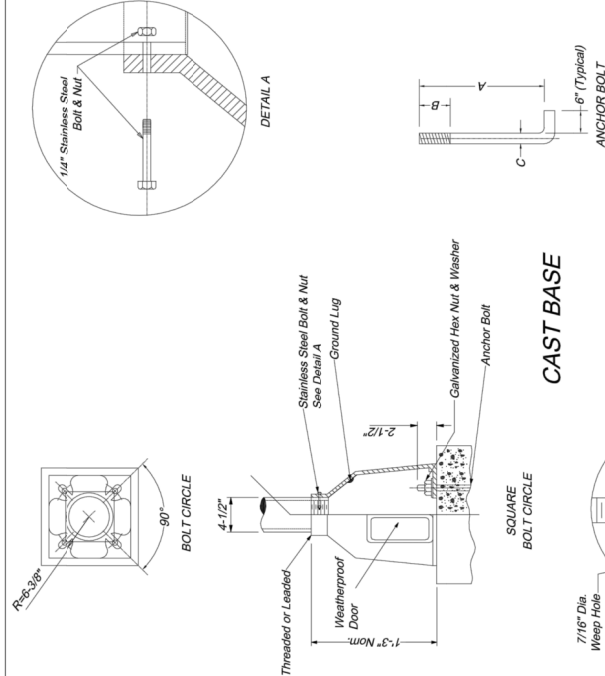
STEEL & CONCRETE REQUIREMENTS FOR POST BASES				
Bases		#8 Steel Bar	Weight Lbs (1)	Conc C.Y.
Type	A (10)	Length	Weight	
A-8	8'-0"	9'-6"	399	2.53
A-10	10'-0"	11'-6"	481	3.06
A-13	13'-0"	14'-6"	604	3.84
B-8	8'-0"	7'-6"	317	2.09
B-10	10'-0"	9'-6"	400	2.62
B-13	13'-0"	12'-6"	523	3.40
C*				0.44
(1) Steel depth, no rock				
(10) Include #4 tie bar				

(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".

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'-0"
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"

- Required embedment depths can be interpolated between encounter points for other solid rock encounter depths.
- Normal lengths for anchor bolts and reinforcing steel will be required.
- Core drill holes for anchor bolts and reinforcing steel in concrete shall be drilled to the full depth of the hole. The diameter of the anchor bolt and reinforcing steel shall be within 3 inches of the normal base depth.
- If soil, shale, gravel, fractured rock, or voids are encountered during core drilling, the rock shall be removed to the point of encounter.
- 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.
- 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.

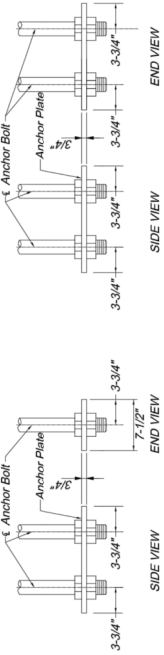


CAST BASE

Bolt Length	Vert. Thread	Dia. C
79	73	7.50
84	68	8.00
121	115	8.50
120	114	9.00
146	140	9.50
		2.500

Note: All Anchor Bolts Shall Be Fully Galvanized.

STEEL PLATE AND ANCHOR BASE



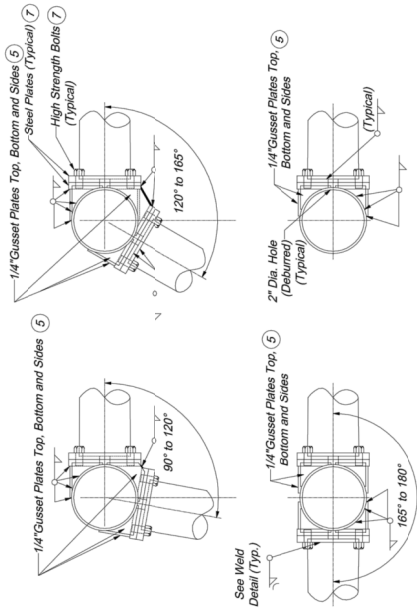
OPTIONAL STEEL PLATE FOR ANCHOR BOLTS



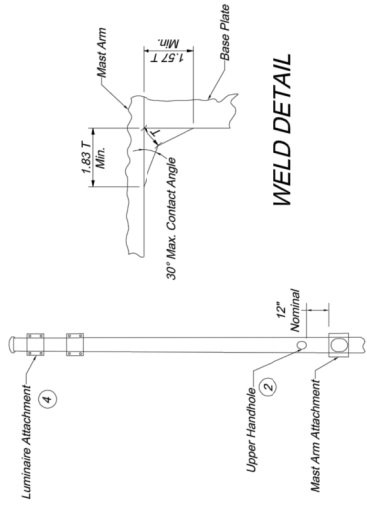


ID Tag Note:

Tag shall be aluminum or stainless steel and attached to pole or mast arm using two rivets or stainless steel drive screws. ID tag rivets shall be drilled prior to galvanizing.

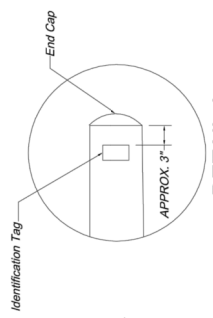


WELD DETAIL

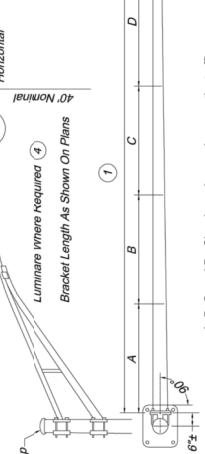
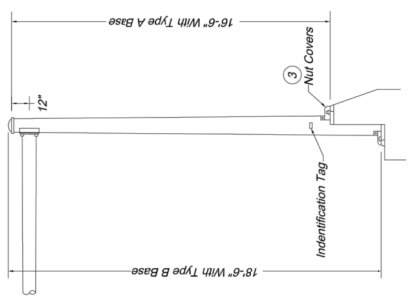


TYPE BL AND CL POSTS

ARM ATTACHMENTS

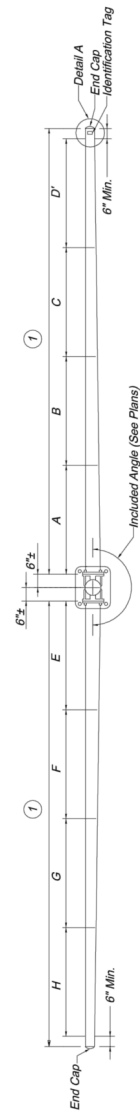


DETAIL A



TYPE C AND TYPE CL (WITH LUMINAIRE)

A, B, C, and D - Signal spacing as shown on the traffic signal plans.



E, F, G, and H - Signal spacing as shown on the traffic signal plans.

A, B, C, and D - 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 to 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:

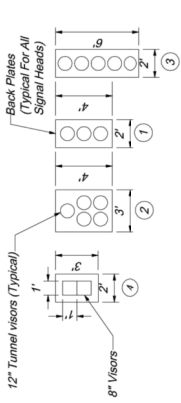
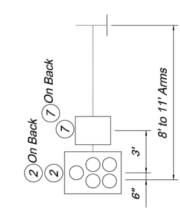
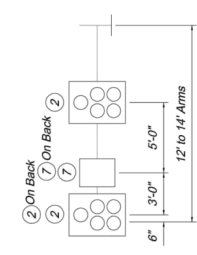
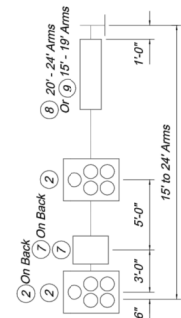
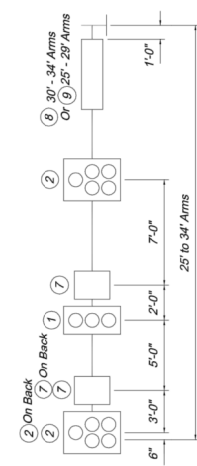
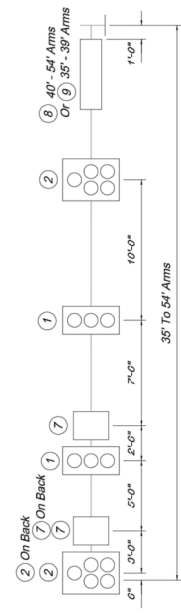
Arms shall be raked up 0.25" per foot minimum. Arms shall be provided with a permanent marking indicating proper orientation for installation. To determine left or right on Type B or C signal post, viewing position shall be from the center of the intersection being controlled and facing the signal involved.

Drawn By: AS
Checked By: MP
Date: 09/25/2009
Project#



CITY OF LEE'S SUMMIT
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION
220 SE GREEN STREET
LEE'S SUMMIT, MISSOURI 64083
PHONE: (816) 969-1800 FAX: (816) 969-1809

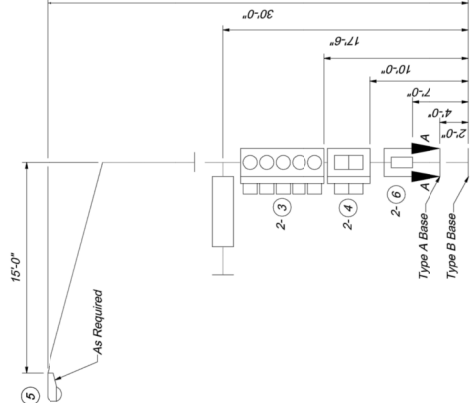
TUBULAR STEEL POST
DETAILS
STANDARD DRAWING TS-4



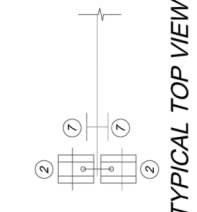
Item No.	Description	Weight (Lbs.)	Proj. Area (Sq. Ft.)	Surface Area (Sq. Ft.)
1	3-Section OL Head	60.0	8.0	32.5
2	5-Section OL Head	100.0	12.0	47.5
3	Vert. 5-Section OL Head	100.0	12.0	50.5
4	2-Section OL Head	40.0	6.0	23.0
5	150 Watt Luminaire	30.0	1.0	3.5
6	9" X 18" Sign	2.0	1.1	N/A
7	24" X 30" Sign	27.0	5.0	N/A
8	120" X 18" Sign	25.0	15.0	N/A
9	96" X 18" Sign	19.0	19.7	N/A
	96" X 18" Sign	20.0	12.0	N/A
	96" X 28" Sign	31.0	18.7	N/A

OL - Optically Limited
 *Mounting Hardware Included

SECTION A-A



TYPICAL POST LOADING



TYPICAL TOP VIEW

MAST ARM LOADING

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, Luminaires and Traffic Signals, 1994 or latest revision with these exceptions.

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, 2001, 4th Edition, including any interim with the criteria noted below:

- Minimum Basic Wind Speed 90 MPH at 30 Feet Above Ground
- Fatigue Category I
- Steel Design A36
- Structurally designed for truck induced wind gusts.
- Shall be specifically designed to resist periodic railgauge 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, KSMO) and shall include a copy of a primary 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 12.5(b) of the AASHTO Standard Specifications for Structural Supports, 1994 or latest version.

General Notes:

Attachment locations are for structural design purposes only. Actual locations are shown on the plans.

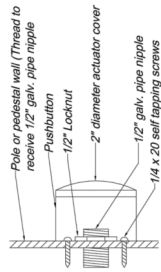
MINIMUM DESIGN LOADING FOR POST AND MAST ARM ATTACHMENTS



Video Detection Notes:

1. The video detection system shall consist of video cameras(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 B or C pole, the camera shall be mounted directly to the mast arm and 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 manufacturer's representative. The manufacturer's representative shall assist with identifying optical camera locations, system setup, programming, and turn-on.

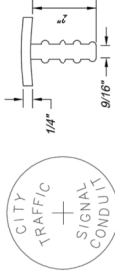
VIDEO DETECTION



Push Button Notes:

1. Push buttons shall include 2 mounting brackets each and be of the type as noted in the plans.
2. Push buttons shall be ADA approved and weatherproof, mounted in accordance with standard drawing TS-1.

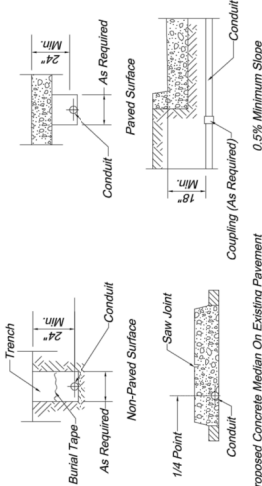
PUSH BUTTON MOUNT DETAIL



CONDUIT MARKER

Conduit Marker Notes:

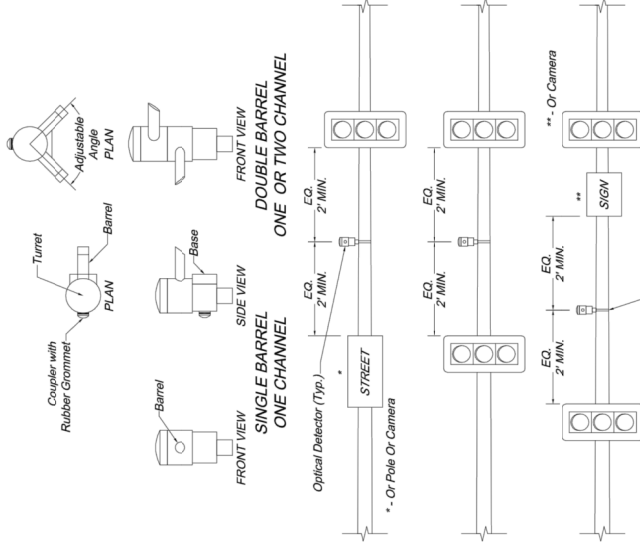
1. Wherever a conduit passes beneath a curbed street, aluminum conduit markers shall be installed in the curb immediately over the conduit location. Conduit markers shall be furnished by the contractor as detailed and shall be installed in the top of the curb by drilling the curb and epoxying the conduit marker in place. Conduit markers shall be flush with the curb. Conduit markers shall be subsidiary to conduit.



Conduit 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 design, correct conduit material and proper conduit end treatment as described above.

OPTICAL DETECTOR



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

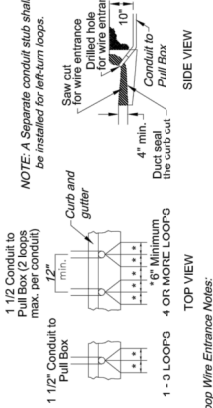
Emergency Vehicle Detection Notes:

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. Opticon 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 shall be reviewed by the City prior to installation by the supplier. Preemption sequences shall use an arrow pointing to the right to indicate 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
Eastbound	2	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.

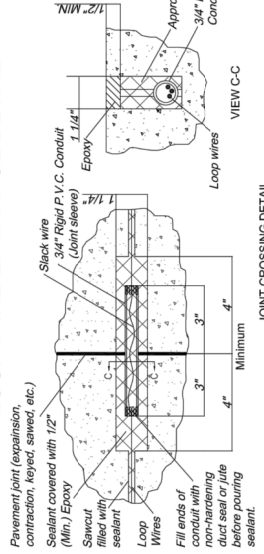
CURBED SECTION



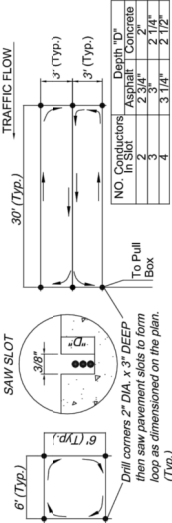
Loop Wire Entrance Notes:

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



TYPICAL TRANSVERSE LOOP (3 TURNS)

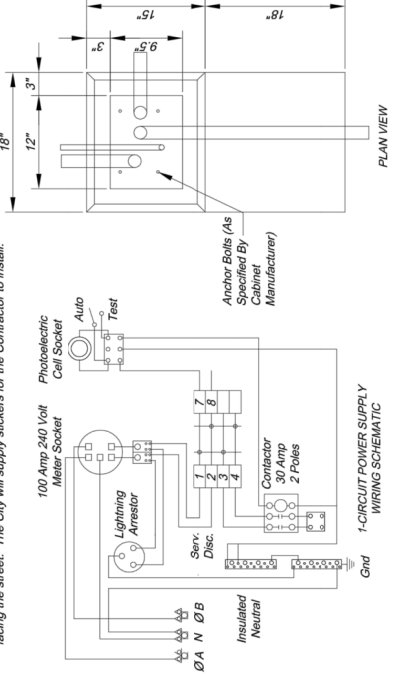
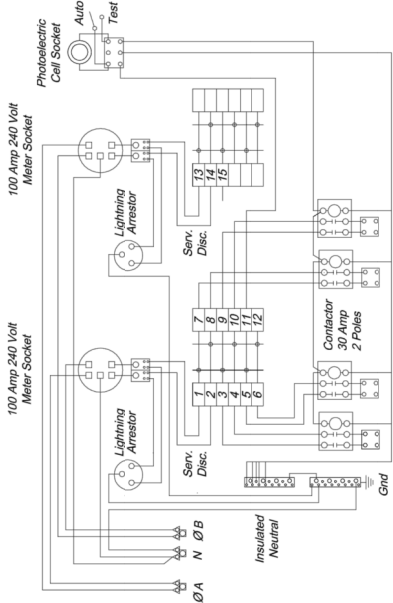
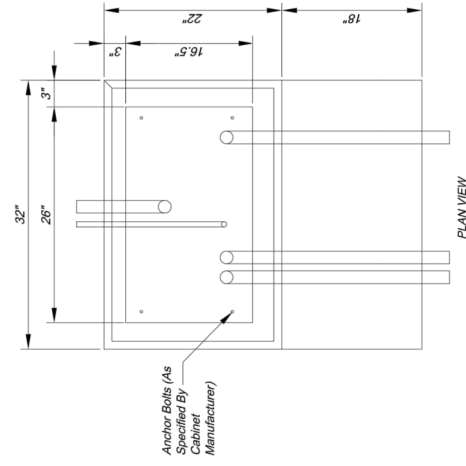
TYPICAL QUADRAPOLE LOOP (2-4-2 TURNS)

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.

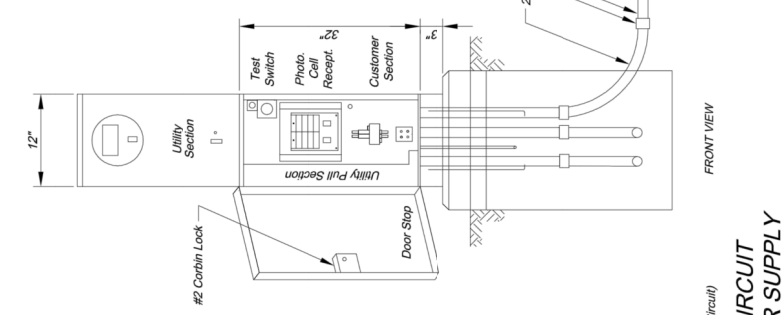
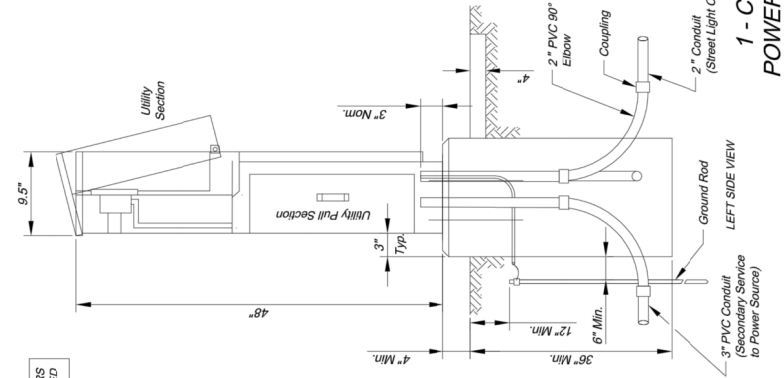
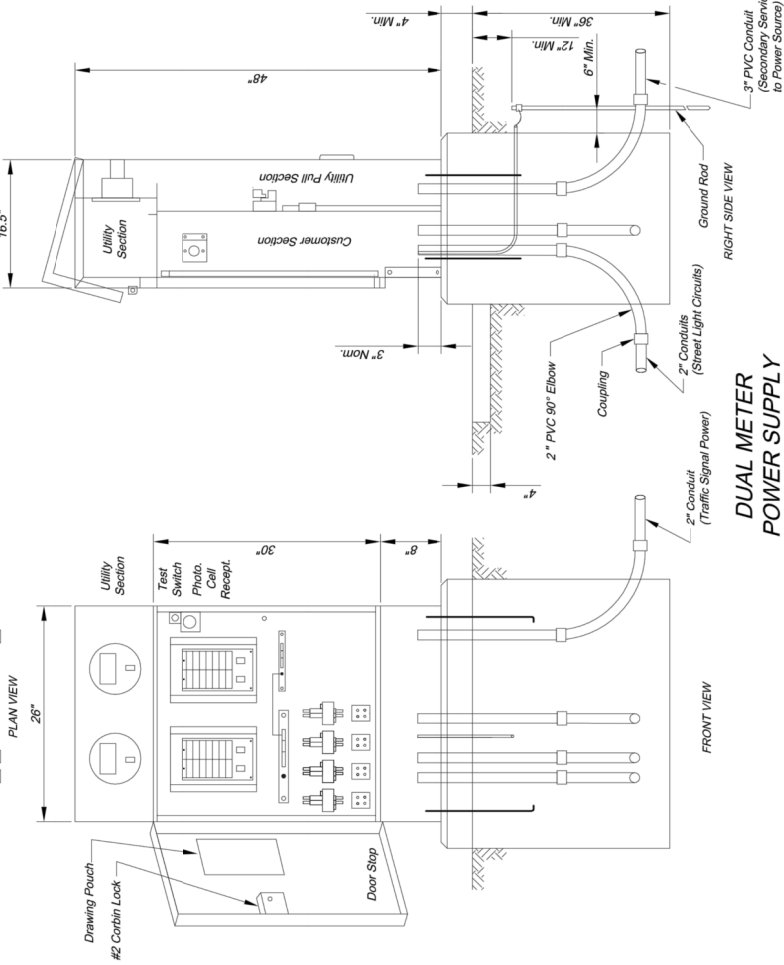
3. Slot in pavement for loops to be cut 3/4" wide at minimum depth "D" as indicated in Chart A. Slot in pavement for lead shall be 3/4" wide at minimum depth "D". Fill slots with an approved asphalt sealer (asphalt pavement) or an approved elastic epoxy sealant (concrete pavement) to within 3/8" of pavement surface.
4. Other than soldered type splice or splice made with wire nuts at their junction, 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 the manufacturer. The wire shall be installed in a figure eight manner with device which will not damage the wire insulation. Lead-in cable shall be 2-1/2 #14 AWG twisted.

LOOP DETECTION

- 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.



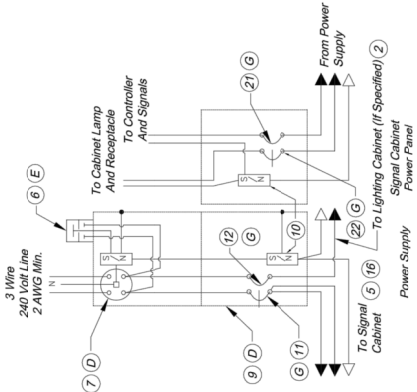
FUSED CONTACTORS ARE NOT PERMITTED



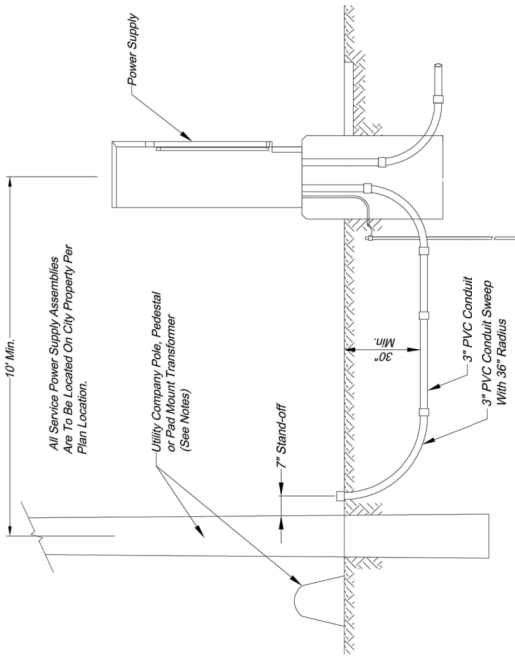
1 - CIRCUIT POWER SUPPLY

DUAL METER POWER SUPPLY



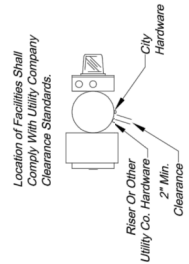


OVERHEAD SERVICE POWER SUPPLY
WIRING SCHEMATIC
SIGNALS AND/OR LIGHTING

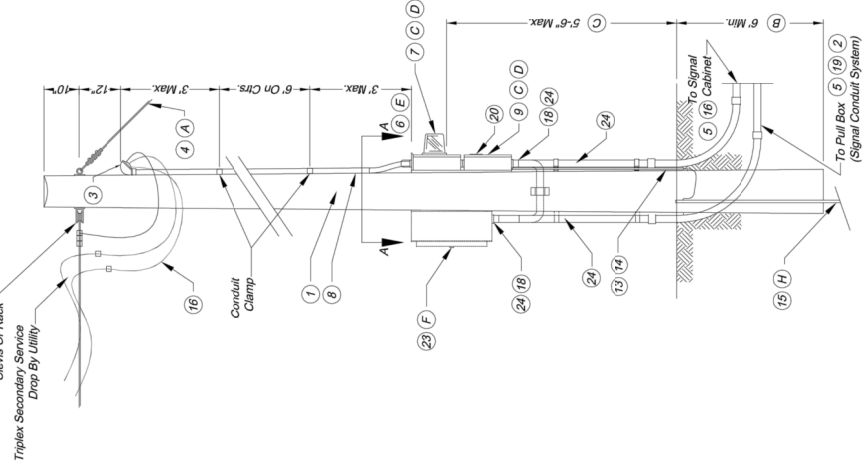


SECONDARY SERVICE CONNECTION DETAILS

- NOTES:
- 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.
 - Contractor shall install conduit in a trench to within 24" of pedestals or pad mount transformers and leave a 36" x 36" access hole in the ground. Contractor shall keep open trench covered and promptly seal access hole when service is completed.



SECTION A-A



OVERHEAD SERVICE POWER SUPPLY
TEMPORARY SIGNAL ONLY

Item	LIST OF MATERIALS	Description
1	Service pole 30' min., Class IV wood, Contractor provided, City owned *	
2	2" AWG min. cable, 600 volt	
3	Service disconnect box	
4	Guy cable, as required	
5	2" min. rigid conduit with preformed elbows	
6	Lighting arrester, Valve type, 2 pole, 650 volt	
7	240 volt meter socket, 100 amp for signals	
8	2" min. rigid conduit box, Locking, Rainlight, NEMA 4	
9	Signal cabinet, 200 amp minimum	
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	60' 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 cables *	
24	2" Steel Conduit (minimum)	

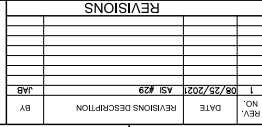
Notes

- Service pole shall be guyed when span of overhead wire exceeds 50'. Increase 1 foot for each 5 feet above 50 feet.
- 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.
- Schematic diagram shall be mounted on inside of door.
- Utility company shall decide if lightning arresters are to be connected to the back or line side of the meter. The utility company shall also decide if the lightning arrester is terminated in the meter or disconnected cabinet. If terminated in the disconnect cabinet, it shall be installed on the connect cabinet.
- If lighting is specified, install lighting control on power supply. Breakers shall conform to the standard specifications.
- 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 15-2.

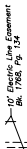
General Notes:

- For cable types and installation. See standard specifications.
- The type power supply assembly is shown on the plans or is designated on the contract.
- The utility company shall be notified 30 days prior to date service will be required.
- All openings in any utility enclosure, service box, or meter shall be covered and sealed with lifetime silicone caulk.
- Contractor to provide sufficient number of ground rods (as required for maximum of 25 Ohms resistance to ground).
- All materials required excluding reference items as shown on drawing shall be included in price bid for power supply assembly.





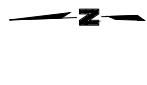
C.O.A. NO.:	001592
DRAWN BY:	JRC
CHECKED BY:	JAB
APPROVED BY:	SLL
QA/QC BY:	THE
PROJECT NO.:	020-0103
DWG NO.:	F 001 02030
DATE:	8/25/2021



*EACH ETHERNET SWITCH SHALL INCLUDE:
ONE (1) CONTROL MP-1204-XT
ONE (1) MEAN WELL 240 DIN RAIL POWER SUPPLY
TWO (2) CONTROL 1200060 SFP MODULE

GENERAL NOTES:

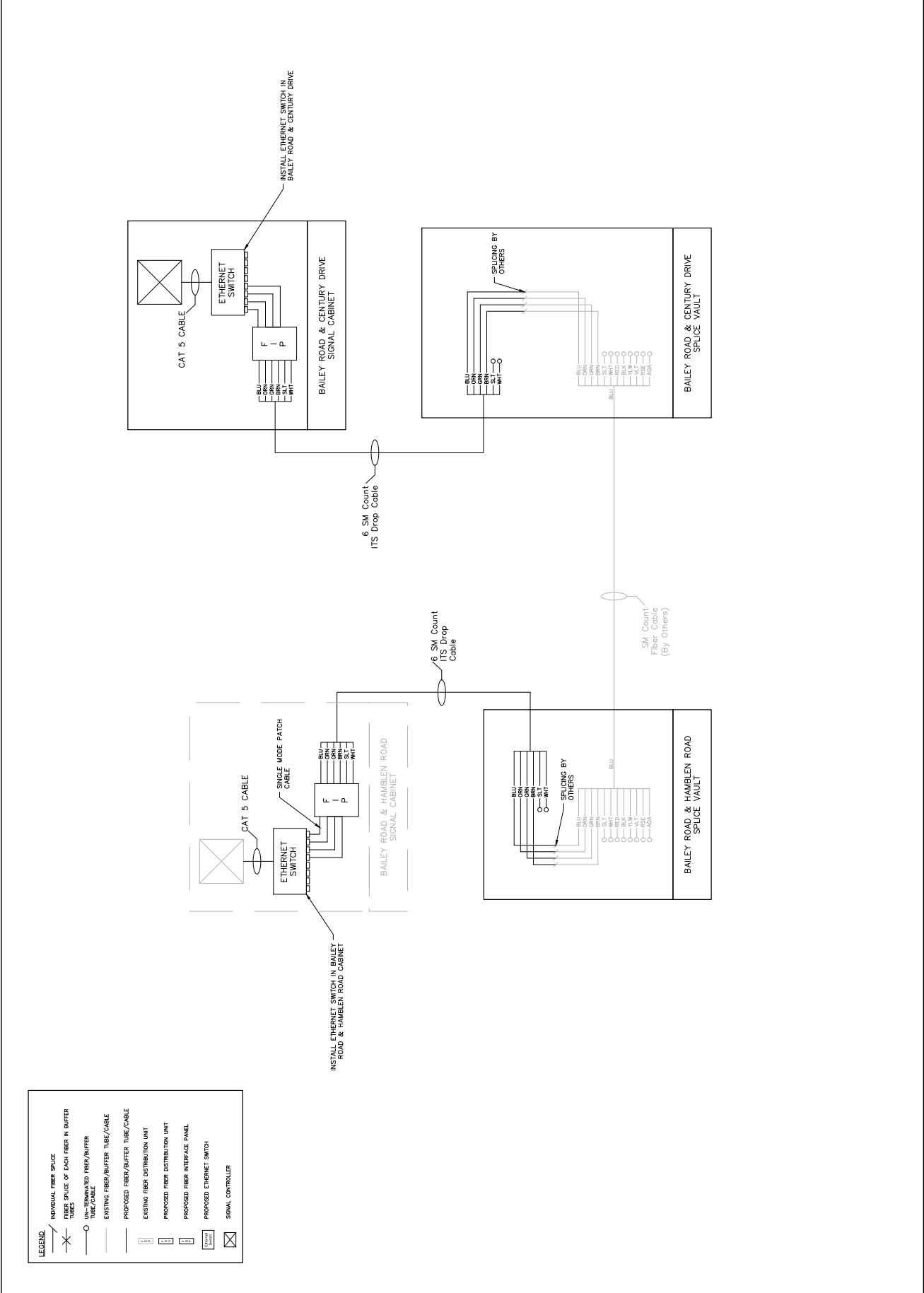
1. GENERAL NOTES:
 - a. 1. 1¢10 AWG THHN/THWN STRANDED COPPER LOCATING CABLE (RED) AND PULL STRING SHALL BE INSTALLED IN ALL CONDUITS AND IS CONSIDERED SUBSIDIARY TO THE CONDUIT BID ITEM.
2. CONTRACTOR TO INSTALL CONDUIT, PULL BOXES, PULL STRING, TRACER WIRE, AND CONNECTIONS TO INSIDE THE CABINET. ONCE COMPLETE CONTACT TIM SCHARFF AT CITY OF LEE'S SUMMIT IT DEPARTMENT 816-989-1234 TO COORDINATE INSTALLATION OF FIBER OPTIC CABLE.
3. FIBER OPTIC CONDUIT AND PULL BOX LOCATIONS MAY BE FIELD ADJUSTED (AS APPROVED BY THE ENGINEER) TO MAINTAIN ADEQUATE HORIZONTAL AND VERTICAL CLEARANCE FROM UNDERGROUND UTILITIES.



[illegible]

SPICE DIAGRAM BAILEY ROAD	LEES SUMMIT MIDDLE SCHOOL #4 PUBLIC ROAD IMPROVEMENTS	LEES SUMMIT, MISSOURI	2021
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C.O.A. NO.:	001592
DRAWN BY:	JRC
CHECKED BY:	JAB
APPROVED BY:	SLL
QA/QC BY:	THE
PROJECT NO.:	020-0103
DWG NO.:	F 001 02030
DATE:	8/25/2021



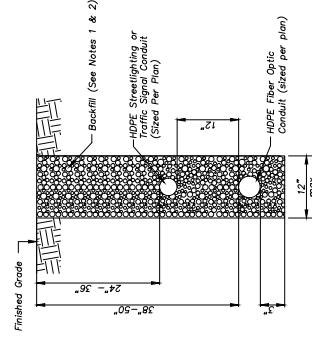
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FIBER DETAILS	LEES SUMMIT MIDDLE SCHOOL #4	LEES SUMMIT, MISSOURI	2024
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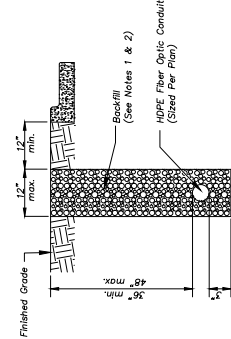
C.O.A. NO.:	001592
DRAWN BY:	JRC
CHECKED BY:	JAB
APPROVED BY:	SLL
QA/QC BY:	THE
PROJECT NO.:	020-0103
DWG NO.:	F 001 02030
DATE:	8/25/2021

1. **Conduit Marking Detail Notes:**
 - a. Conduit under all roadway surfaces shall be placed a minimum of 4'-0" below the bottom of pavement and shall extend to a junction box or service box. Refer to the notes on the drawing for details of the junction box and service box. Refer to the notes on the drawing for details of the conduit and the conduit support. The contractor shall be responsible for obtaining the necessary permits and for obtaining the necessary permits for the installation of the conduit. The contractor shall be responsible for obtaining the necessary permits and for obtaining the necessary permits for the installation of the conduit.
 - b. Conduit shall be installed to depth. All ends shall be capped if not used. An aluminum marker shall be placed in the top of the conduit directly over the conduit.
 - c. The contractor shall notify the City of Las Vegas, Summit, Department of Public Works Traffic Services Division, 799-3939, for inspection of the conduit installation by the City of Las Vegas. The contractor shall be responsible for obtaining the necessary permits and for obtaining the necessary permits for the installation of the conduit.
 - d. The contractor shall be responsible for obtaining the necessary permits and for obtaining the necessary permits for the installation of the conduit.
 - e. The contractor shall be responsible for obtaining the necessary permits and for obtaining the necessary permits for the installation of the conduit.
 - f. The contractor shall be responsible for obtaining the necessary permits and for obtaining the necessary permits for the installation of the conduit.
 - g. The contractor shall be responsible for obtaining the necessary permits and for obtaining the necessary permits for the installation of the conduit.
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 - m. The contractor shall be responsible for obtaining the necessary permits and for obtaining the necessary permits for the installation of the conduit.
 - n. The contractor shall be responsible for obtaining the necessary permits and for obtaining the necessary permits for the installation of the conduit.
 - o. The contractor shall be responsible for obtaining the necessary permits and for obtaining the necessary permits for the installation of the conduit.
 - p. The contractor shall be responsible for obtaining the necessary permits and for obtaining the necessary permits for the installation of the conduit.
 - q. The contractor shall be responsible for obtaining the necessary permits and for obtaining the necessary permits for the installation of the conduit.
 - r. The contractor shall be responsible for obtaining the necessary permits and for obtaining the necessary permits for the installation of the conduit.
 - s. The contractor shall be responsible for obtaining the necessary permits and for obtaining the necessary permits for the installation of the conduit.
 - t. The contractor shall be responsible for obtaining the necessary permits and for obtaining the necessary permits for the installation of the conduit.
 - u. The contractor shall be responsible for obtaining the necessary permits and for obtaining the necessary permits for the installation of the conduit.
 - v. The contractor shall be responsible for obtaining the necessary permits and for obtaining the necessary permits for the installation of the conduit.
 - w. The contractor shall be responsible for obtaining the necessary permits and for obtaining the necessary permits for the installation of the conduit.
 - x. The contractor shall be responsible for obtaining the necessary permits and for obtaining the necessary permits for the installation of the conduit.
 - y. The contractor shall be responsible for obtaining the necessary permits and for obtaining the necessary permits for the installation of the conduit.
 - z. The contractor shall be responsible for obtaining the necessary permits and for obtaining the necessary permits for the installation of the conduit.

Conduit Marking Detail



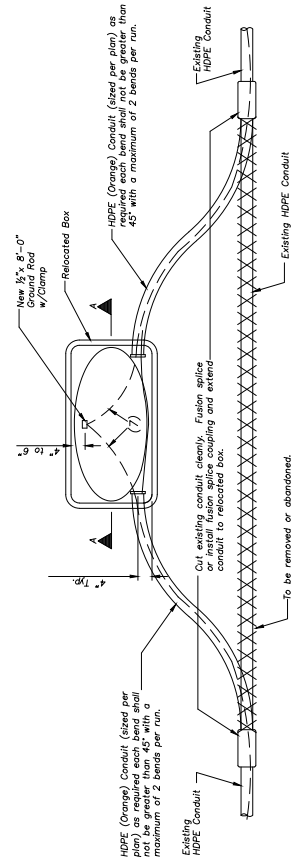
Trench w/Multiple
Conduits in Unpaved
Areas



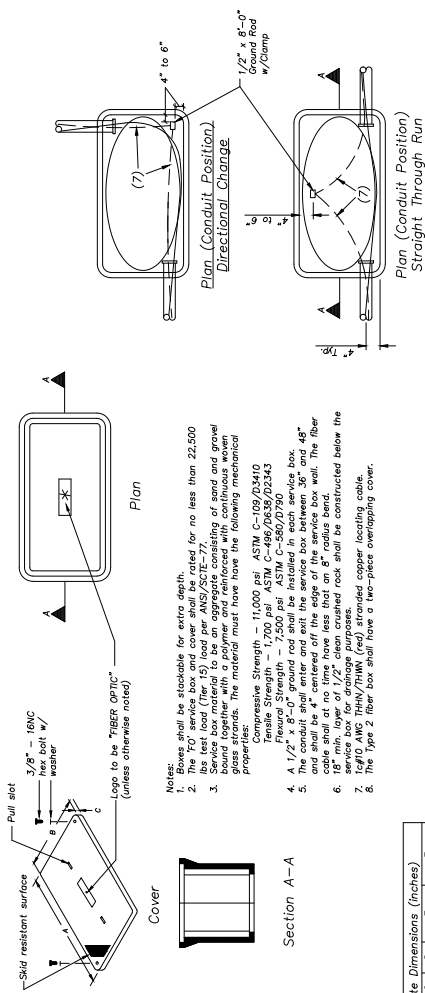
Trenching in Unpaved Areas

Trenching Details

- Notes:**
1. All trenches for conduit under proposed paved surfaces shall be backfilled with flowable fill.
 2. Backfill in unpaved areas shall be earth or AB-3 and free of rubble and rock. Conduits shall be pitched to drain.
 3. If multiple conduits are installed, they shall have a minimum of 12" horizontal or vertical separation between them.



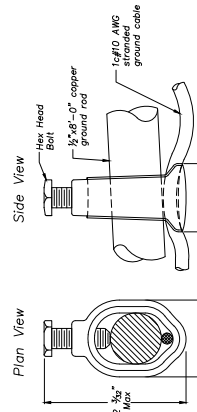
Plan (Conduit Position)
Relocated Box Installation Detail



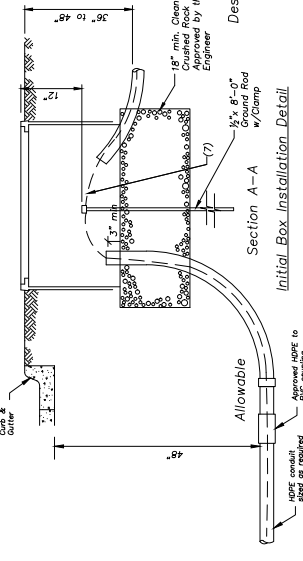
1. Boxes shall be stackable for extra depth.
2. The TFO service box and cover shall be rated for no less than 22,500 lbs.
3. Service box material to have an aggregate consisting of sand and gravel bound together with a polymer and reinforced with continuous woven mesh. The material must have the following mechanical properties:
Compressive Strength – 11,000 psi ASTM C-109/3410
Flexure Strength – 1,200 psi ASTM C-567/2434
Flexure Modulus – 1,200,000 psi ASTM C-567/2434
4. A 1/2" x 6" ground rod shall be installed in each service box.
5. The conduit shall enter and exit the service box between 36" and 48" from the ground.
6. The service box shall be installed on a 4" thick concrete pad. The fiber optic cable shall not touch the ground or the 4" pad below.
7. 18" min. layer of 1/2" clean crushed rock shall be constructed below the service box.
8. The Type 2 fiber box shall have a two-piece overlapping cover.
9. The Type 2 fiber box shall have a 1/2" thick copper locking cable.

Box Type	Approximate Dimensions (inches)						
	A	B	C	D	E	F	
Type 1 Fiber	35 5/8	24	3	24	22 1/4	33 7/8	
Type 2 Fiber (8)	47 5/8	30 1/8	3	24	28 1/8	45 5/8	

Fiberglass Reinforced Polymer Concrete Fiber Optic Service Box Details



Ground Rod Clamp Connection Detail



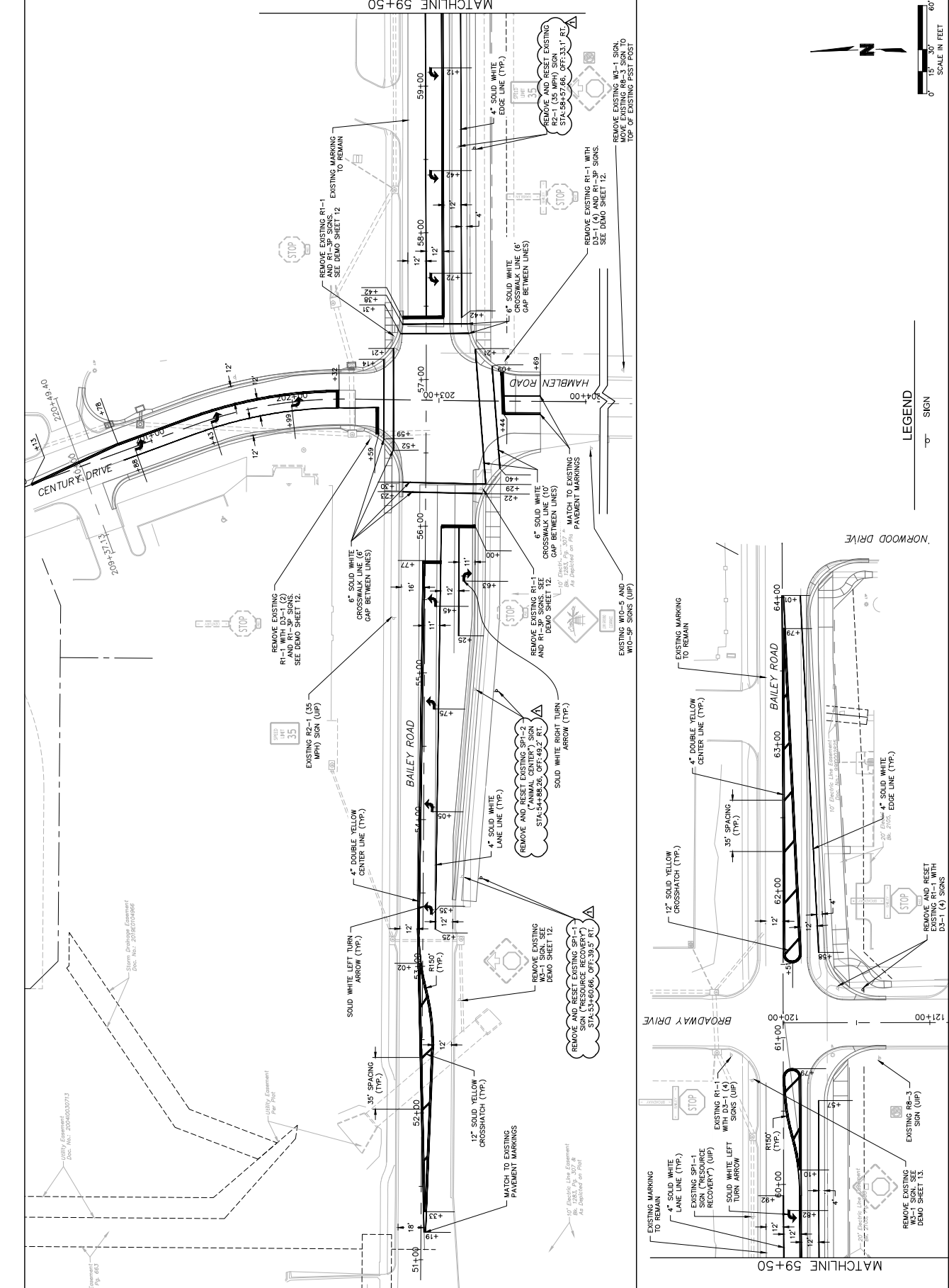
Initial Box Installation Detail

PAVEMENT MARKING AND SIGNING PLAN
BAILEY ROAD
LEE'S SUMMIT MIDDLE SCHOOL #4
PUBLIC ROAD IMPROVEMENTS
JANUARY, MISSOURI

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Olsson

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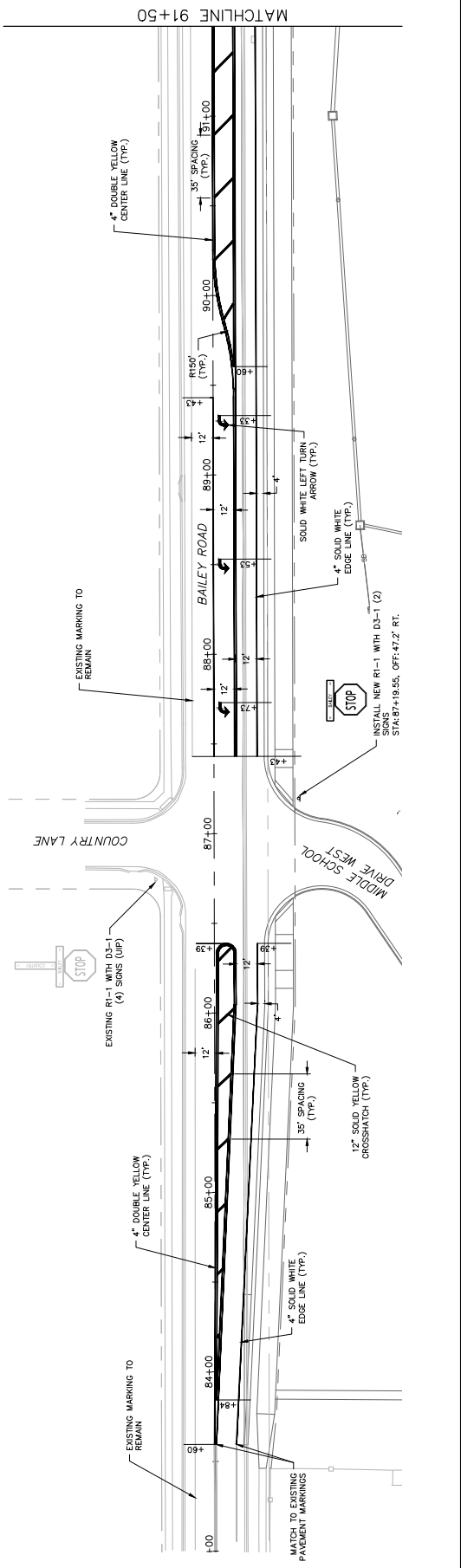
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 DATE: Aug 26, 2021 10:13am
 XREFS: T_PSTRM_0200103 F_PBASE_0200103 F_PBASE_0200103
 T_PBASE_0200103 C_PBASE_02

C.O.A. NO.: 001592
DRAWN BY: JRC
CHECKED BY: JAB
APPROVED BY: SLL
QA/QC BY: THE
PROJECT NO.: 020-0103
DWG NO.: F-98-0003
DATE: 8/24/2021

PAVEMENT MARKING AND SIGNING PLAN
BAILEY ROAD
LEE'S SUMMIT MIDDLE SCHOOL #4
PUBLIC ROAD IMPROVEMENTS
CITY, MISSOURI

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Olsson





Olsson

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PAVEMENT MARKING AND SIGNING PLAN	LEE'S SUMMIT MIDDLE SCHOOL #4	LEE'S SUMMIT, MISSOURI	2021
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C.O.A. NO.:	001592
DRAWN BY:	JRC
CHECKED BY:	JRB
APPROVED BY:	SJA
QA/QC BY:	THE
PROJECT NO.:	020-0103
DWG NO.:	F 58-0005
DATE:	8/25/2021

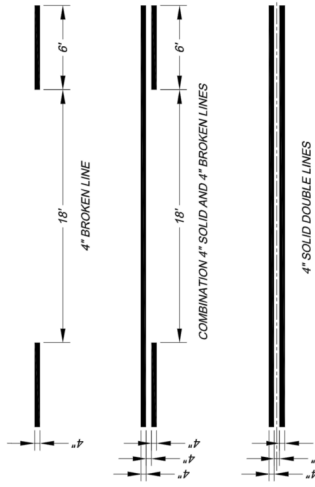
PAVEMENT MARKING SUMMARY												
STATION TO STATION		LOCATION	4" SOLID WHITE LANE LINE (LF)	4" BROKEN WHITE LANE LINE (LF)	8" DASHED WHITE EXTENSION LINE (LF)	4" SOLID YELLOW LINE (LF)	4" BROKEN YELLOW LANE LINE (LF)	12" YELLOW CROSSHATCH LINE (LF)	24" WHITE STOP LINE (LF)	6" WHITE CROSSWALK LINE (LF)	WHITE TURN ARROW (EA)	
											RT	LT
51+19	51+33	BAILEY ROAD				28		26				
51+33	53+02	BAILEY ROAD				678						
53+02	55+77	BAILEY ROAD				550						
53+25	56+00	BAILEY ROAD	275									4
55+25	56+00	BAILEY ROAD	75								1	
55+77	55+77	BAILEY ROAD							12			
56+00	56+00	BAILEY ROAD							23			
56+22	56+23	BAILEY ROAD								54		
56+29	56+30	BAILEY ROAD								56		
56+29	57+21	BAILEY ROAD								92		
56+40	57+09	BAILEY ROAD								70		
56+52	57+21	BAILEY ROAD								70		
56+59	57+14	BAILEY ROAD								55		
200+13	202+32	CENTURY DRIVE				442						
200+78	202+59	CENTURY DRIVE	179									3
202+32	202+32	CENTURY DRIVE							12			
202+59	202+59	CENTURY DRIVE							18			
203+44	203+44	CENTURY DRIVE							29			
203+44	203+69	CENTURY DRIVE	25									
203+44	203+69	CENTURY DRIVE				50						
57+31	57+31	BAILEY ROAD								47		
57+38	57+38	BAILEY ROAD								44		
57+42	57+42	BAILEY ROAD							28			
57+42	59+92	BAILEY ROAD	250									4
57+42	60+10	BAILEY ROAD				534						
57+42	60+57	BAILEY ROAD	315									
60+10	60+79	BAILEY ROAD				288		22				
61+51	63+79	BAILEY ROAD				926		51				
61+58	64+01	BAILEY ROAD	243									
63+79	64+01	BAILEY ROAD				44						
83+60	83+84	BAILEY ROAD				48						
83+60	86+39	BAILEY ROAD	280									
83+84	86+39	BAILEY ROAD				1030		53				
87+43	89+43	BAILEY ROAD	200									3
87+43	89+60	BAILEY ROAD				434						
87+43	92+61	BAILEY ROAD	518									
89+60	92+61	BAILEY ROAD				1218		115				
93+73	95+73	BAILEY ROAD	200									3
93+73	95+99	BAILEY ROAD				452						
93+73	98+31	BAILEY ROAD	459									
95+99	98+04	BAILEY ROAD				824		28				
98+04	98+31	BAILEY ROAD				54						
TOTALS			3019	0	0	7600	0	295	122	488	1	17

CLASS. NO.: CHECKED BY: APPROVED BY: PROJECT NO.: DATE:		001000 JMS JMS 000000 000000	
PAYMENT MARKING AND SIGNING PLAN BAILEY ROAD		LEES SUMMIT MIDDLE SCHOOL, #4 PUBLIC ROAD IMPROVEMENTS	
REV. NO. DATE REVISIONS DESCRIPTION		2021 REVISIONS	
REV.	NO.	DATE	DESCRIPTION
1	06/25/2021	AS	JMS

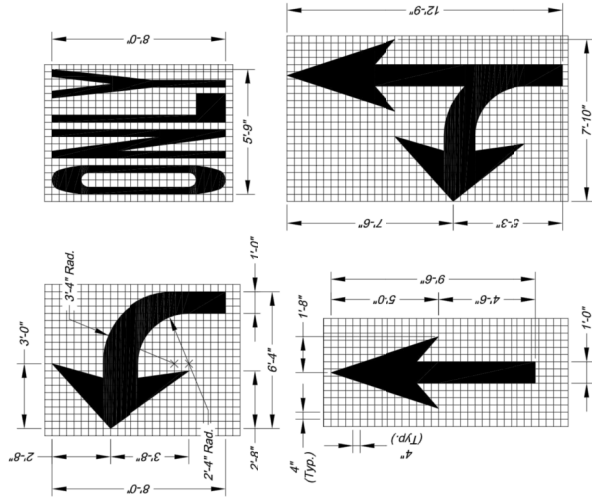


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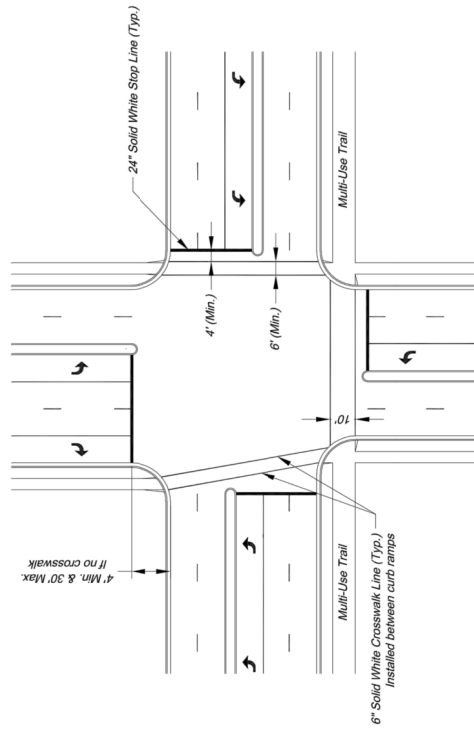
Clisson Engineering - MO State Certificate of Authority #001592
7301 West 133rd Street, Suite 200 TEL 913.381.1170
Overland Park, KS 66213-4750 FAX 913.381.1174
www.clisson.com



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

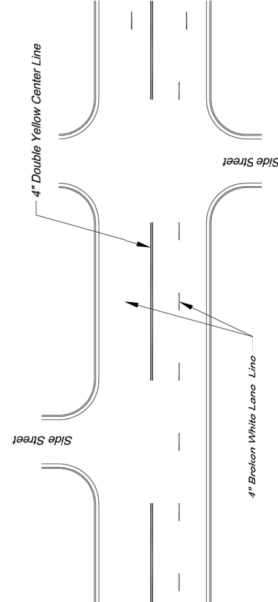


- NOTES:**
1. All arrow and symbol markings shall be white, and shall be centered in their respective traffic lanes.
 2. Right-turn and combination right-turn/straight arrows are reverse of arrows shown.



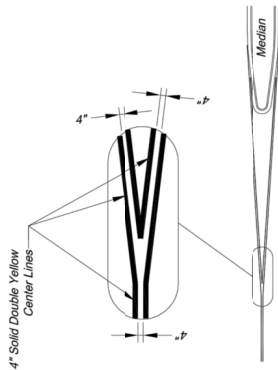
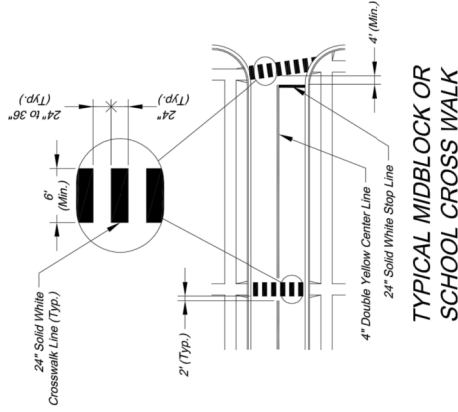
TYPICAL INTERSECTION MARKINGS

- NOTES:**
1. Transverse crosswalk lines shall be installed such that the distance between lines is at least 6 or 10 feet.
 2. Stop lines are required at signalized intersections, on multi-lane stop controlled approaches, or in front of crosswalks at controlled intersections.



TYPICAL MARKINGS FOR FOUR-LANE UNDIVIDED ROADWAY

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



TYPICAL MEDIAN NOSE CENTER LINE DETAIL

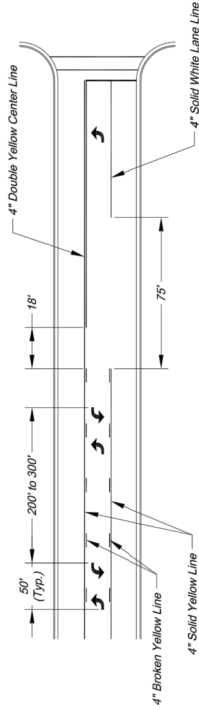


CITY OF LEE'S SUMMIT
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION
220 SE GREEN STREET
LEE'S SUMMIT, MISSOURI 64063
PHONE: (816) 969-1800 FAX: (816) 969-1809

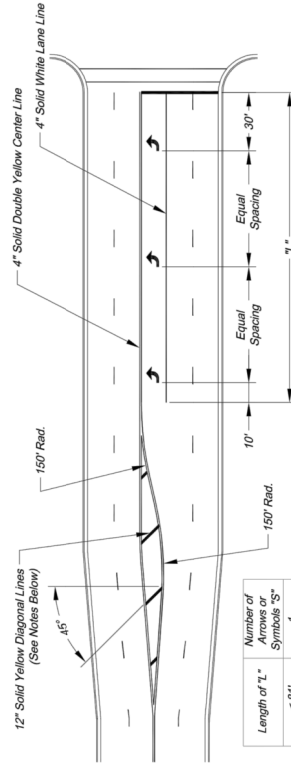
ROADWAY MARKING DETAILS
STANDARD DRAWING PM-1

Project: _____
Sheet Name: _____

Drawn By: AS
Checked By: JH
Date: 09/09/2009
Project# _____
1 OF 2



TYPICAL MARKINGS FOR TWO-WAY LEFT-TURN LANE

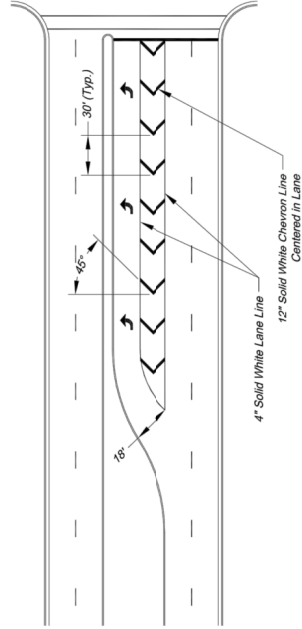


Length of L*	Number of Arrows or Symbols "S"
< 81'	1
81' - 120'	2
121' - 200'	3
201' - 280'	4
281' - 360'	5
361' - 440'	6

- NOTES:
1. Diagonal lines are required between centerlines if the width of the area between the center lines is greater than 12' and/or the length of the area between center lines is greater than 250'.
 2. Equal spacing is calculated as $(L - 40) / (S - 1)$.
 3. Equal spacing is calculated as $(L - 40) / (S - 1)$.
 4. When a through lane of traffic terminates as a mandatory turn lane, arrow and "ONLY" symbols should be marked in the turn lane, in alternating order. The first and last symbols should be Arrows.

TYPICAL DUAL TURN LANE MARKINGS

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



TYPICAL STRIPED OUT TURN LANE MARKINGS



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

Sheet Name: STANDARD DRAWING PM-2
Project: INTERSECTION MARKING DETAILS

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

SIGN INSTALLATION FOR
CURBED STREET

PERMANENT SIGNING GENERAL NOTES:

1. All signing shall be in accordance with the latest edition of the *Manual on Uniform Traffic Control Devices (MUTCD)*.
2. The Contractor is responsible for providing any and all utilities when installing sign posts, whether the utility is indicated on the plans or not.
3. All workmanship and materials shall be subject to the inspection and approval of the Public Works Department of the City of Lee's Summit.
4. All signs shall be installed in accordance with the latest edition of the *Manual on Uniform Traffic Control Devices (MUTCD)* and the *Standard Drawings*.
5. Messages to avoid conflicts may be placed on all sign posts at the approval of the City Traffic Engineer or design engineer prior to installation.
6. Signs shown to be installed on the side of metal poles shall be mounted with stainless steel straps or wing brackets as detailed. No signs are to be installed on wood poles. See Traffic Signal Standard Drawings for the installation of signs on mast arms.
6. All post mounted signs shall be installed with breakaway anchors according to the *Standard Drawings*.
7. All existing signs will be used in place during construction, and protected from damage unless otherwise indicated in the plans. If the Contractor determines any existing signs are unusable during construction, the Contractor is required to replace the damaged materials with new signs or post mounted signs of the same type and size. The Contractor shall be responsible for removing and storing any signs that are to be replaced or removed from the project. All signs shall be installed in good condition.
8. Existing permanent signs and posts removed by the Contractor for construction purposes which are not to be reinstalled shall be delivered to the City's Public Works Maintenance Facility (197 SE Hambleton Road). The Contractor shall be responsible for removing and storing the equipment in good condition and is fully responsible for the equipment until it is delivered.
9. All Stop, Yield, or street name signs shall be maintained in a safe location for the driving public. All Stop and Yield signs removed for replacement shall be stored in a safe location for the driving public. All signs removed for replacement shall be stored in a safe location for the driving public. All signs removed for replacement shall be stored in a safe location for the driving public.



U-STEEL POST NOTES:

1. Splice shall be positioned entirely between finished grade line and 18" above finished grade line. Only one splice will be allowed per post.
2. U-Steel post shall be 3 lb./ft., galvanized according to ASTM A123.
3. U-Steel post can be used for installation of signs with an area of less than 2.5 square feet.
4. All posts shall be embedded a minimum of 3 feet.



METAL POLE SIGN MOUNTING NOTES:

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



SQUARE STEEL POST NOTES:

1. Square steel sign posts and break-away anchor shall consist of the following materials:

1. Square steel sign posts and break-away anchor shall consist of the following materials:

Sign Post	14 Ga. x 2" Square Steel Post
Post Anchor	12 Ga. $2\frac{1}{2}$ " x 2 $\frac{1}{2}$ " x 16" Square Steel Post
Anchor Sleeve	12 Ga. $2\frac{1}{2}$ " x $2\frac{1}{2}$ " x 15" Square Steel Post
2. All gauge posts must meet a certified minimum yield strength of 60,000 psi.
3. In all installations the first hole above the finished grade line on the sign post, anchor, and anchor sleeve must be in line for the insertion of the sign bolt.
4. The maximum area for one sign post is 9.0 square feet. A corner or combination of signs with an area greater than 9.0 square feet will require two posts. Also, signs with a width greater than 36" (not including 36") and a height greater than 36" (diamond shaped signs) will require two posts.

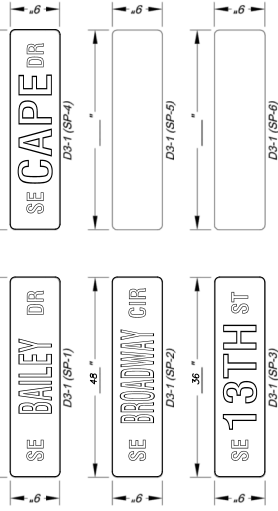
STANDARD ABBREVIATION LISTS

Named Streets		Numbered Streets			
Avenue	AVE	First	Second	Third	TH
Boulevard	BLVD				ND
Circle	CIR				RD
Creek	CR				
Court	CT				
Crossing	XING				
Drive	DR				
Highway	Hwy				
Lane	LN				
Parkway	Pkwy				
Place	PL				
Road	RD				
Street	ST				
Terrace	TER				
Trail	TRL				
Way	WAY				

STREET NAME SIGN QUANTITIES

Sign Designation	Sign Size	Sign Area (Sq. Ft.)	Sign Number	Quantity (Sq. Ft.)
D3-1 (BAILEY RD)	9" x 42"	2.63	4	10.50
D3-1 (BROADWAY CIR)	9" x 48"	3.00	0	0.00
D3-1 (13TH ST)	9" x 36"	2.25	2	4.50
D3-1 (CAPE DR)	9" x 36"	2.25	2	4.50

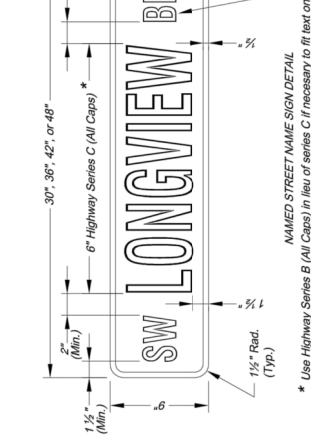
UPDATED QUANTITY TABLE
08/25/2021



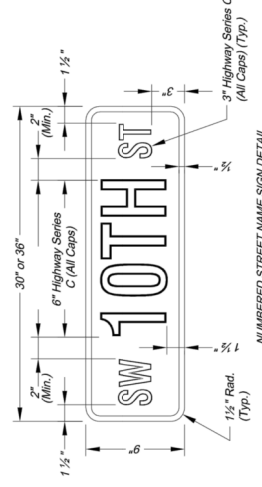
PROJECT SIGN DETAILS

STREET NAME SIGN BLANK DETAILS

For Mounting on Square Steel Posts



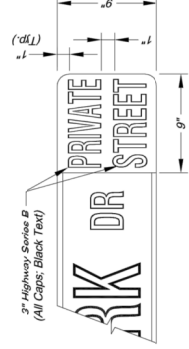
* Use Highway Series B (All Caps) in lieu of series C. If necessary to fit text on a 36" sign blank.



NUMBERED STREET NAME SIGN DETAIL

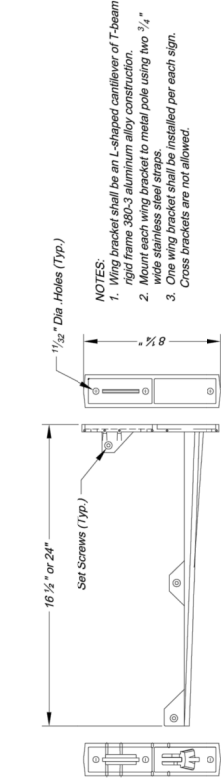
STREET NAME SIGN FACE DETAILS

- NOTES:
- For all street name signs, the legend shall be white and the background shall be green.
 - Arrows shall be added to street name signs where the name of a street changes at an intersection. See Figure 10-1 for details.
 - The "PRIVATE STREET" tag should be added to the end of street name signs to indicate where a street that is outside the right-of-way intersects a public street. The background for the "PRIVATE STREET" tag shall be yellow.

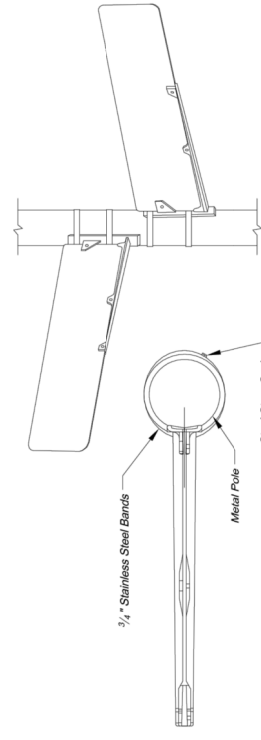


PRIVATE STREET TAG DETAIL

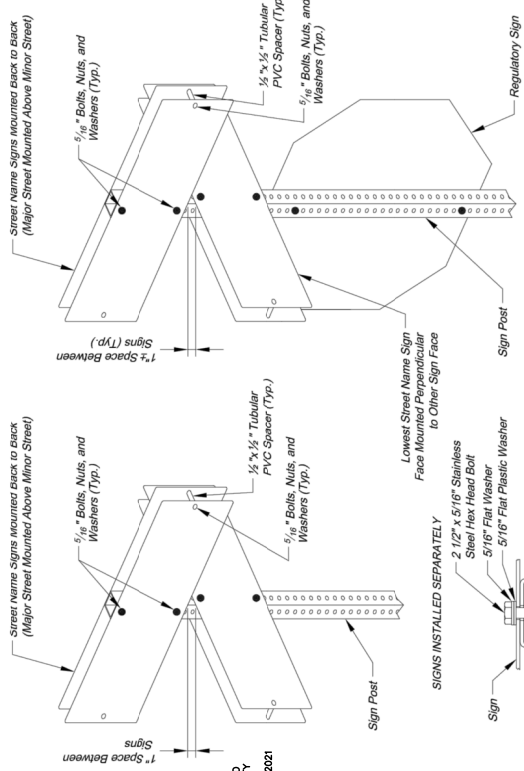
SQUARE STEEL POST MOUNTING DETAILS



- NOTES:
- Wing bracket shall be an L-shaped cantilever of T-beam rigid frame 380-3 aluminum alloy construction.
 - Mount each wing bracket to metal pole using two 3/4" wide stainless steel straps.
 - One wing bracket shall be installed per each sign. Cross brackets are not allowed.



WING BRACKET MOUNTING DETAILS



SIGNS INSTALLED WITH OTHER SIGNS

SIGNS INSTALLED SEPARATELY

Lowest Street Name Sign Face Mounted Perpendicular to Other Sign Face

Sign Post

Sign

Sign Post

Sign

PLAN VIEW

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



STREET NAME SIGN DETAILS
Sheet Name: STANDARD DRAWING SN-3

Project:
Drawn By: AS
Checked By: JW
Date: 08/26/2009
Project#:
3 OF 3



uoss|o

[illegible]

LEES SUMMIT, MISSOURI	2021
LEES SUMMIT MIDDLE SCHOOL #4 PUBLIC ROAD IMPROVEMENTS	
TRAFFIC CONTROL PLAN	

C.O.A. NO.:	001582
DRAWN BY:	JRC
CHECKED BY:	JAB
APPROVED BY:	SLJ
QA/QC BY:	THE
PROJECT NO.:	020-0103
DWG NO.:	F 108 120103
DATE:	8/25/2021



PHASING LEGEND

- PHASE 1 WORK AREA
PHASE 2 WORK AREA
PHASE 3 WORK AREA



NOT TO SCALE

CONSTRUCTION PHASING:

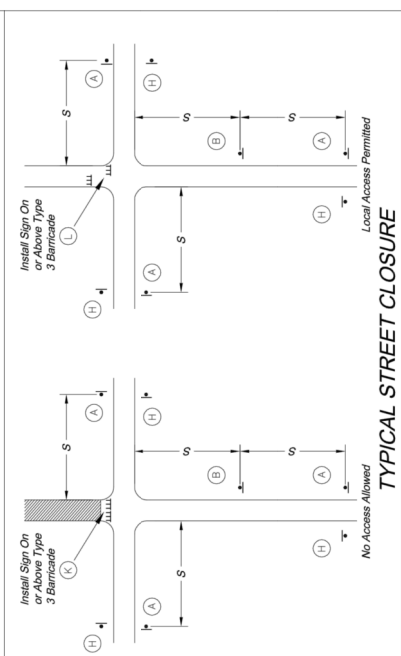
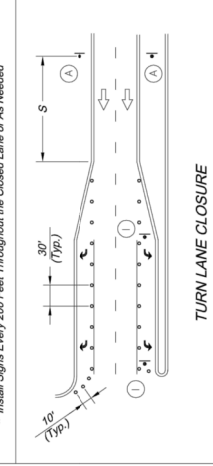
GENERAL NOTES:

- 1) SEE SHEET 89 FOR MINIMUM TAPER LENGTHS, TEMPORARY SIGNAGE, AND OTHER TRAFFIC CONTROL REQUIREMENTS.
- 2) DURING ALL PHASES OF CONSTRUCTION, CONTRACTOR SHALL MAINTAIN TWO-WAY TRAFFIC (ONE LANE EACH DIRECTION) ON ALL ADJACENT ROADWAYS WITH 10' MINIMUM LANE WIDTHS.

PHASE 1:
 CONSTRUCT BAILEY ROAD IMPROVEMENTS, SHIFT TRAFFIC TO NORTH HALF OF BAILEY ROAD AND MAINTAIN TWO-WAY TRAFFIC (ONE LANE EACH DIRECTION) ON BAILEY ROAD AND ON ALL SIDES STREETS. MAINTAIN 10' MIN. LANE WIDTH. SEE SHEET 89 FOR TAPER, TEMPORARY SIGNAGE, AND OTHER TRAFFIC CONTROL REQUIREMENTS.

PHASES 2A AND 2B:
 CONSTRUCT CENTURY DRIVE IMPROVEMENTS ONE HALF AT A TIME (E.G. WEST HALF, THEN EAST HALF). MAINTAIN TWO-WAY TRAFFIC (ONE LANE EACH DIRECTION) ON CENTURY DRIVE WITH 10' MIN. LANE WIDTH.

PHASE 3:
 CONSTRUCT MIDDLE SCHOOL ROADWAY CONNECTIONS WITH 13TH STREET, 15TH STREET, AND CAPE DRIVE. SEE "TYPICAL STREET CLOSURE (NO ACCESS ALLOWED)" DETAIL ON SHEET 89 FOR SIDE STREET AND MAINLINE TRAFFIC CONTROL REQUIREMENTS. NOTE, PHASE 3 WORK MAY BE CONSTRUCTED SIMULTANEOUSLY WITH PRECEDING PHASE IF DESIRED.

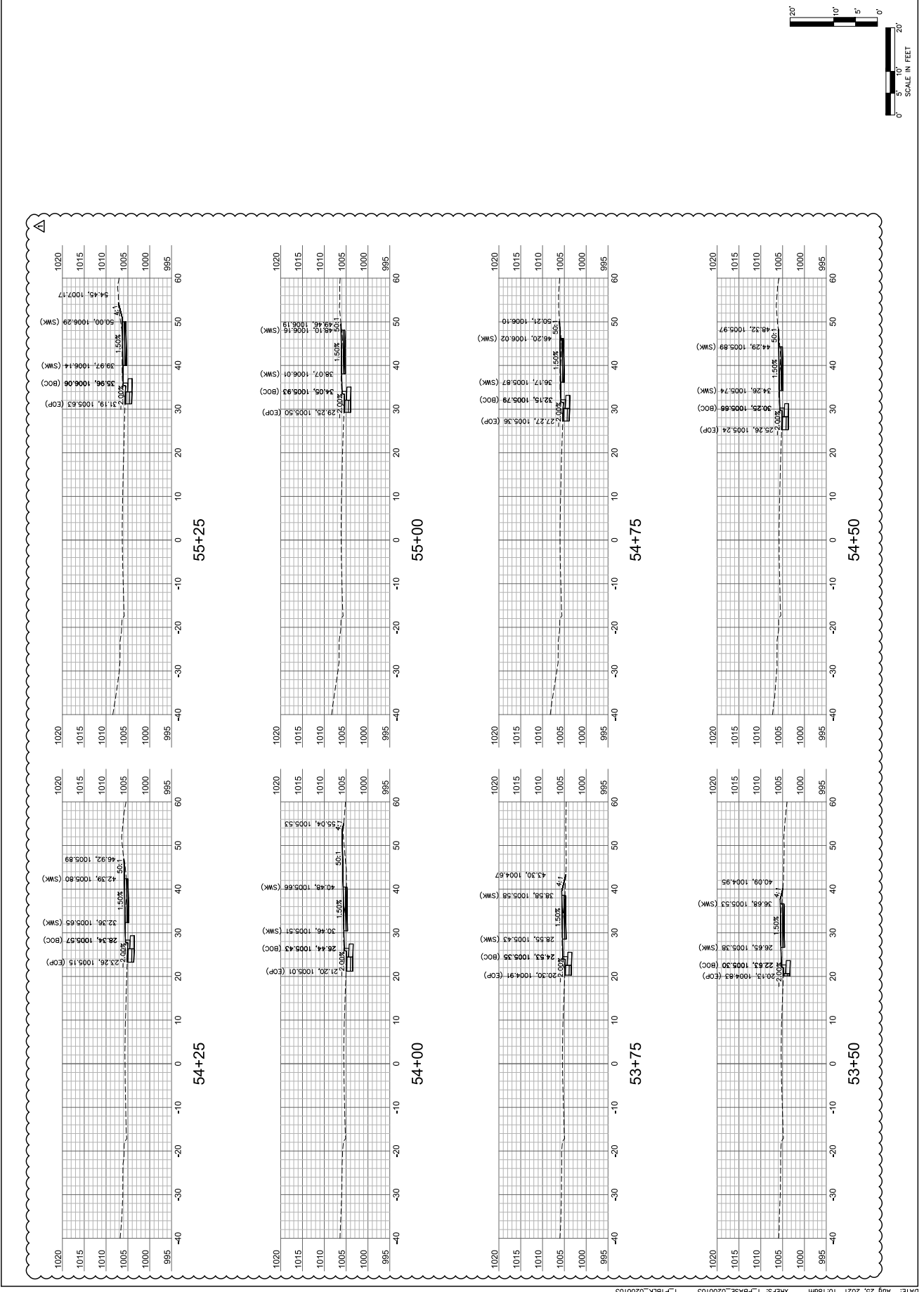




REVISIONS	
REV. NO.	DATE
1	08/25/2021
BY: RPH	
APPROVED BY: [Signature]	
PROJECT NO. 202000103	

CROSS SECTIONS	
BAILEY ROAD	
LEE'S SUMMIT MIDDLE SCHOOL #4	
BAILEY ROAD PUBLIC IMPROVEMENTS	
2021	

C.A.A. NO.	2020001
DRAWN BY	WJL
CHECKED BY	WJL
APPROVED BY	[Signature]
DATE	08/25/2021

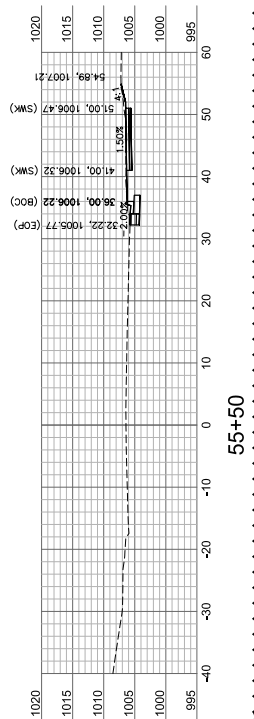
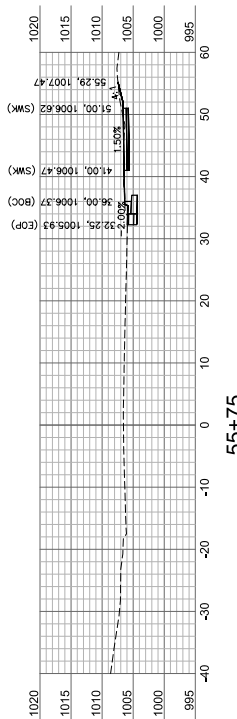
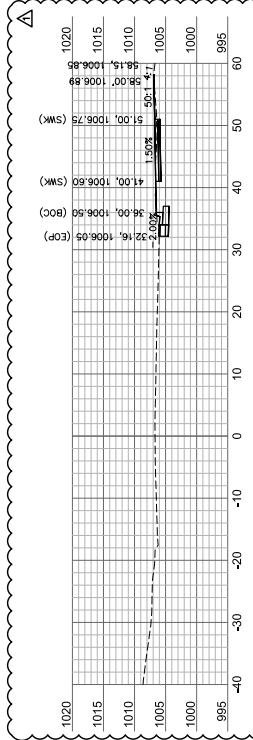
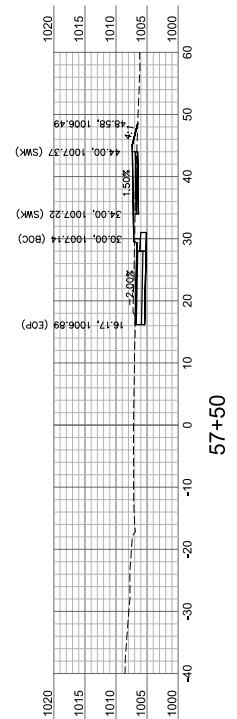
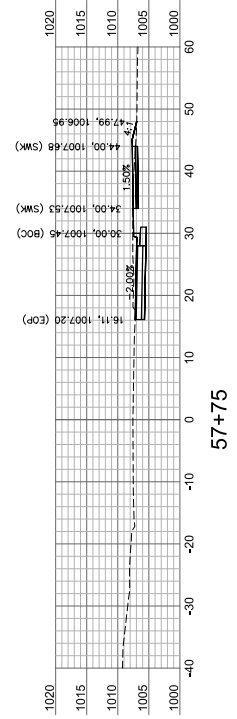
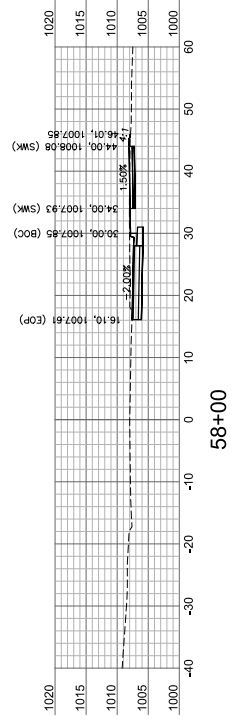
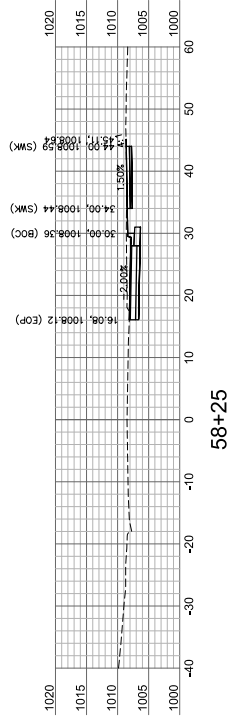
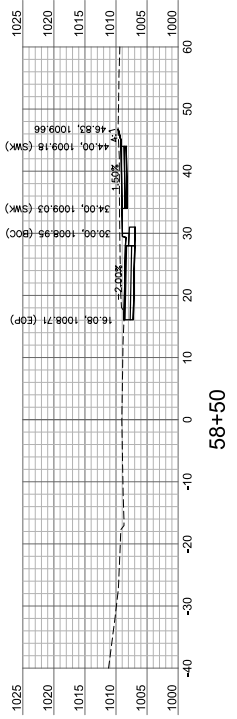
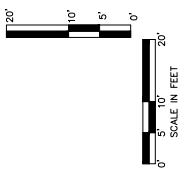


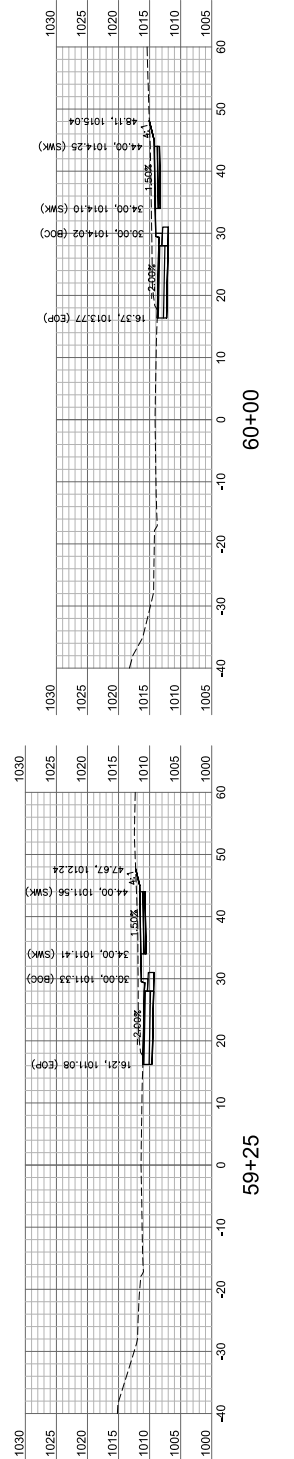


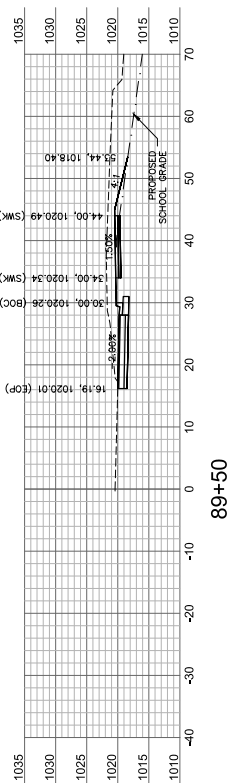
REVISIONS	
REV. NO.	DATE
1	08/25/2021
BY	
DATE	
REVISIONS DESCRIPTION	
RPH	
MO. NO. RE. 202000189	

CROSS SECTIONS	
BAILEY ROAD	
LEE'S SUMMIT MIDDLE SCHOOL #4	
BAILEY ROAD PUBLIC IMPROVEMENTS	
2021	

C.I.A. NO.	202000189
DRAWN BY	DAVID E. TENNY
CHECKED BY	DAVID E. TENNY
APPROVED BY	DAVID E. TENNY
DATE	08/25/2021





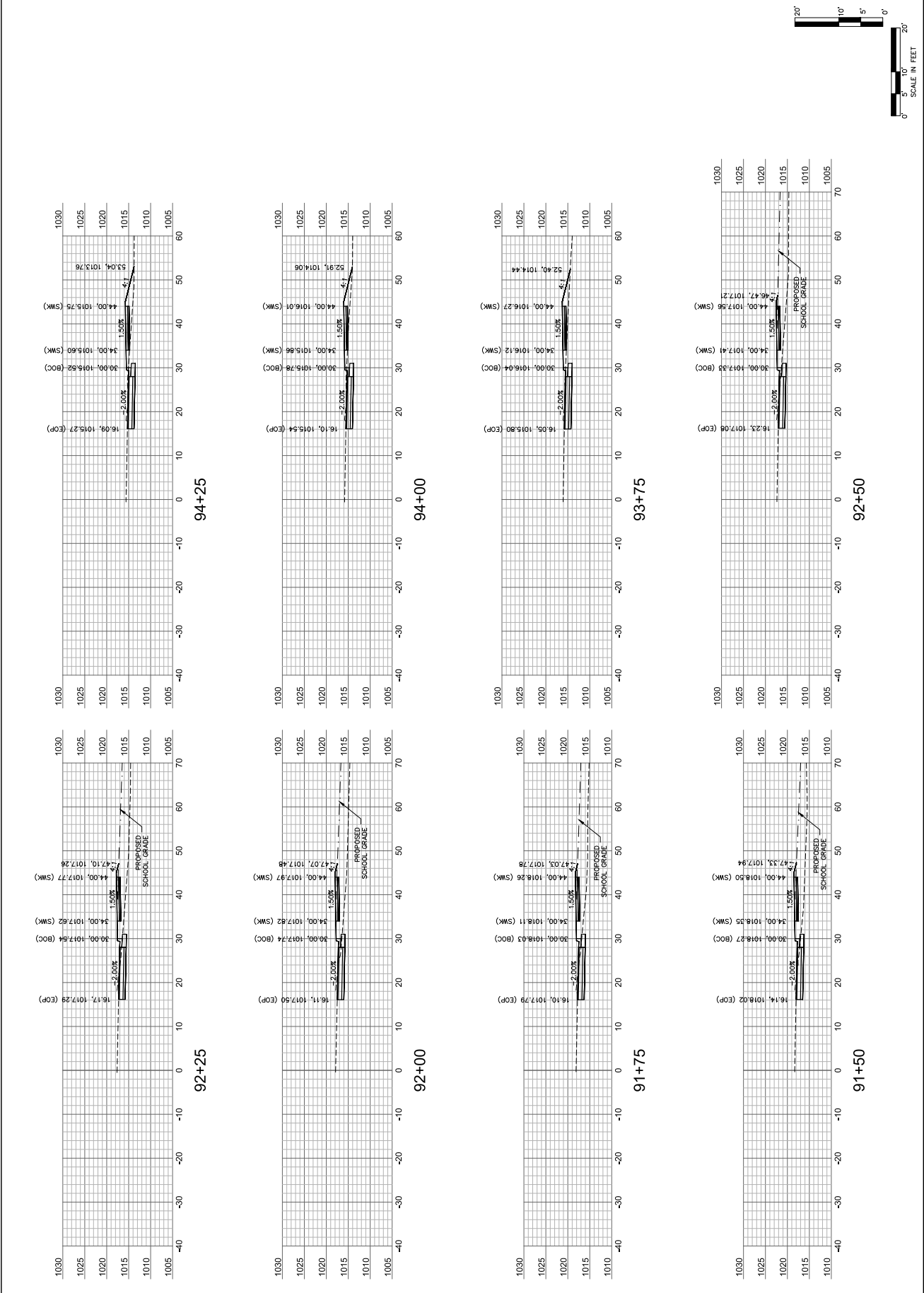


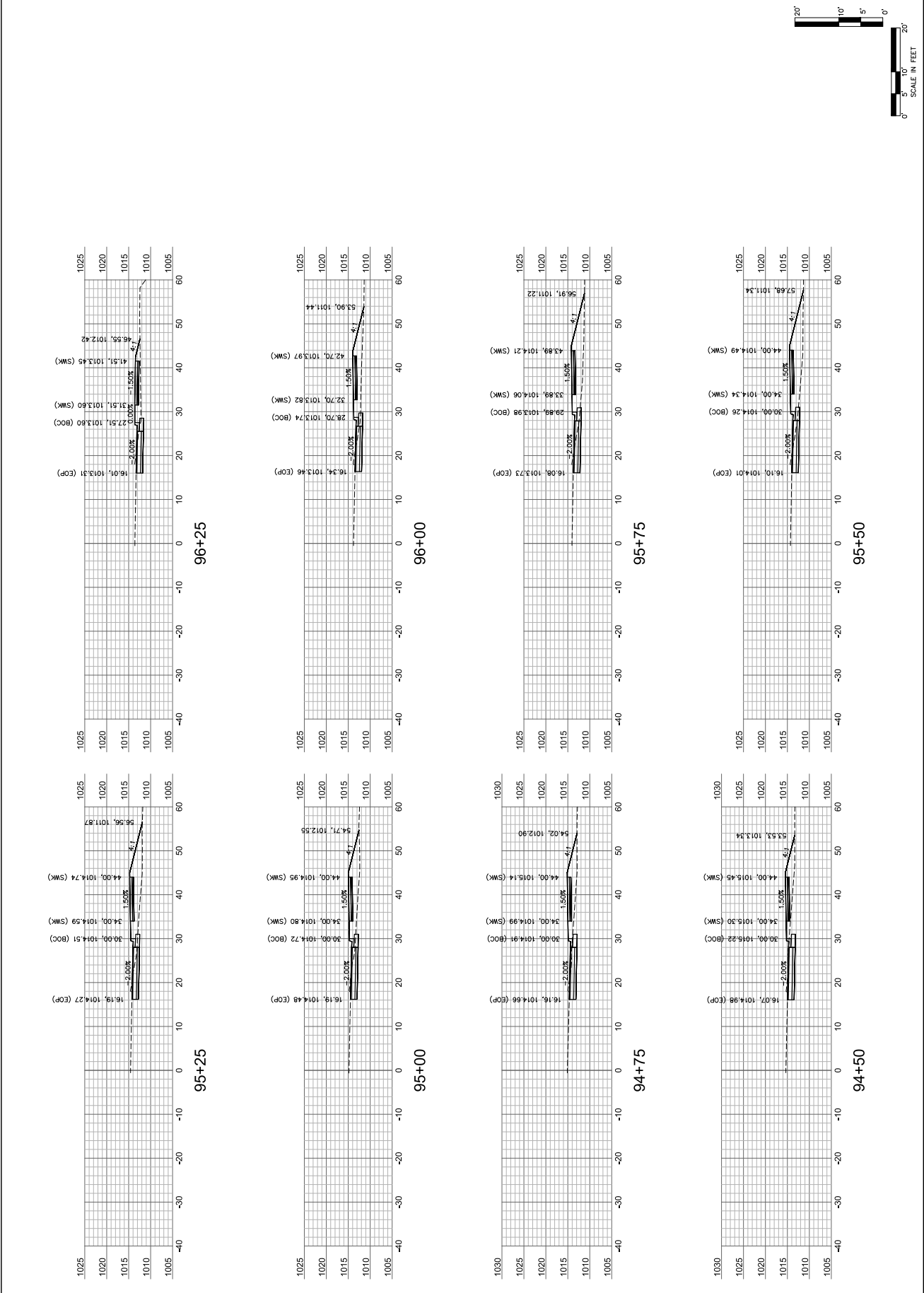
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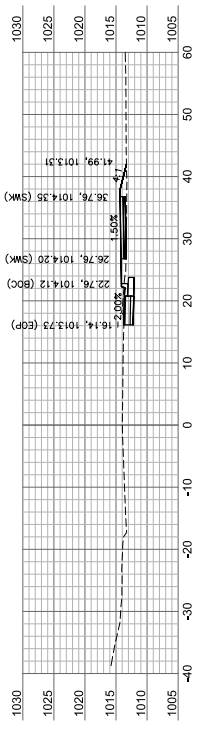
BAILEY ROAD	LEES SUMMIT MIDDLE SCHOOL #4	LEES SUMMIT, MISSOURI	2024
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C.O.A. NO.: 001582
DRAWN BY: N.W.
CHECKED BY: RPH
APPROVED BY: RBE
QA/QC BY: RBE
PROJECT NO.: 020-0103
DWG NO.: T-XSC01-0200103
DATE: 2021-02-01

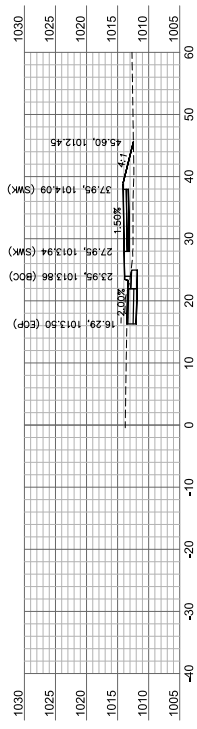
SHEET
98 OF 101



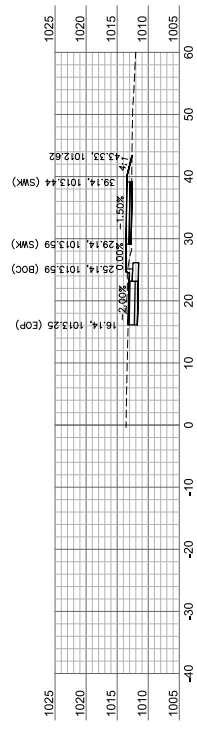




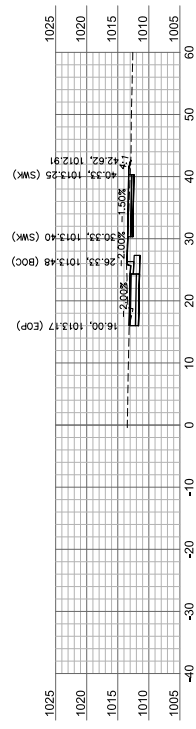
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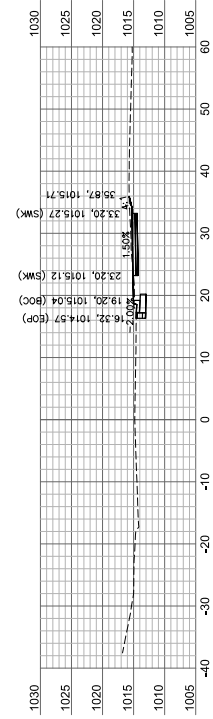
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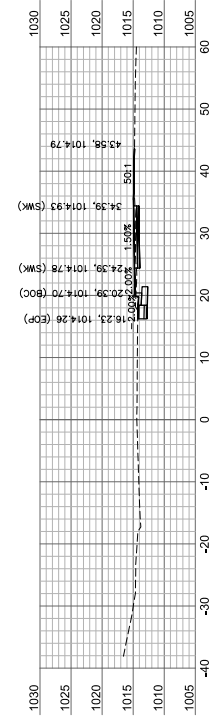
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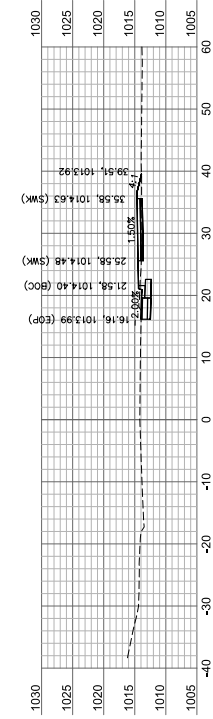
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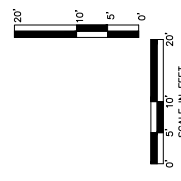
98+00



97+75



97+50



BAILEY ROAD CROSS SECTIONS	LEES SUMMIT MIDDLE SCHOOL #4 BAILEY ROAD PUBLIC IMPROVEMENTS	LEES SUMMIT, MISSOURI	2021	REVISIONS		
				REV. NO.	DATE	REVISIONS DESCRIPTION
				BY		

C.O.A. NO.: 001592
DRAWN BY: MLW
CHECKED BY: RPH
APPROVED BY: RBE
QA/QC BY: RBE
PROJECT NO.: 020-0103
DWG NO.: T-XSO01-0200103
DATE: 2007-1-02-01

