

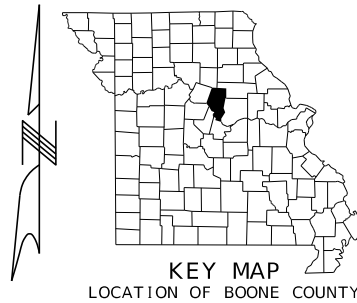
**DESIGN DESIGNATION**

A.A.D.T. - 2027 = 12,101  
 A.A.D.T. - 2047 = 13,370  
 T = 5.03%  
 V = 35 M.P.H.

FUNCTIONAL CLASSIFICATION-PRINCIPAL ARTERIAL

**PERMANENT AND TEMPORARY EASEMENTS REQUIRED ON THIS PROJECT**

**MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION  
 PLANS FOR PROPOSED  
 STATE HIGHWAY  
 BOONE COUNTY  
 SEC. 1, 2, 11, 12 T48N:R13W**



**INDEX OF SHEETS**

DESCRIPTION	SHEET NUMBER
TITLE SHEET .....	1
TYPICAL SECTIONS (TS) (3 SHEETS)---	2
QUANTITIES (QU) (2 SHEETS)-----	3
PLAN-PROFILE (PP)-----	4-13
SPECIAL SHEETS (SS)-----	14
CONTROL POINT SHEETS (CP) .....	15
TRAFFIC CONTROL SHEETS (TC) .....	16-20
SIGNALS (SG) .....	21-35



DATE PREPARED 4/27/2026	
ROUTE BUS 70	STATE MO
DISTRICT CD	SHEET NO. 1
COUNTY BOONE	
JOB NO. JCD0124	
CONTRACT ID.	

BUS. 70/PROVIDENCE ROAD INTERSECTION  
 STA 712+40.00 TO STA. 713+38.00  
 APS UPGRADES AT SIGNALS  
 ADA LANDING UPGRADES AT S.W. CORNER

BUS. 70/GARTH AVE. INTERSECTION  
 STA 698+67.00 TO STA 699+24.00

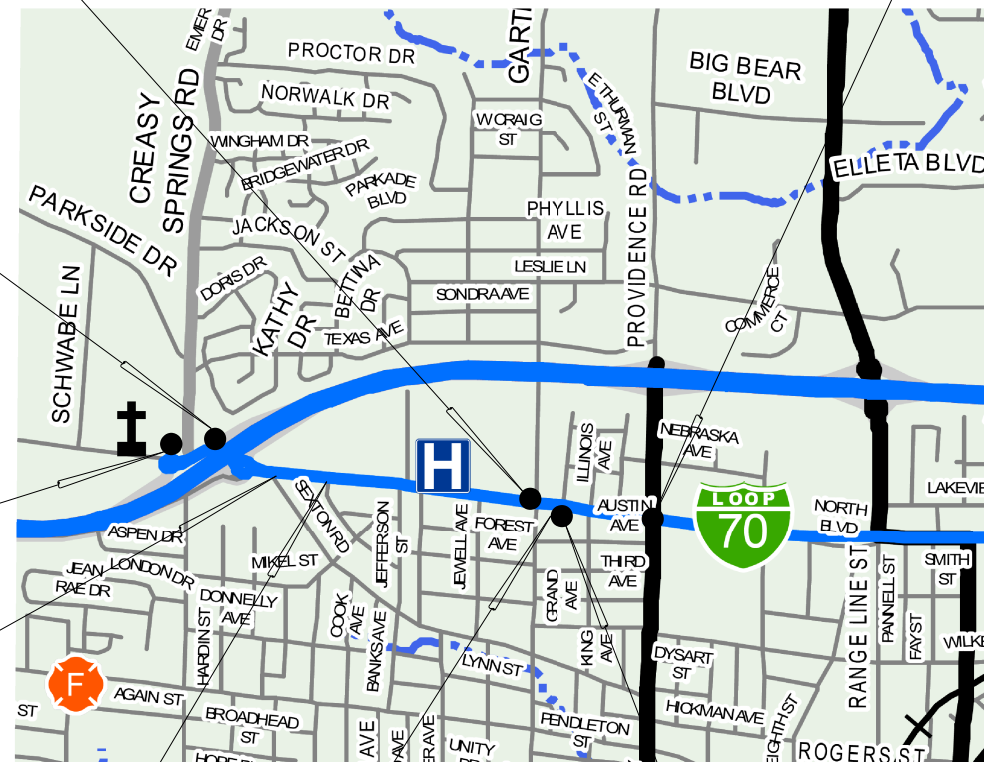
N.W. & S.W. CORNERS  
 ADA SIDEWALK IMPROVEMENTS  
 APS UPGRADES AT SIGNALS

I-70 WEST BOUND OFF RAMP  
 APS UPGRADES AT SIGNALS

MEMORIAL PARK CEMETERY  
 BUSINESS 70  
 ADA ENTRANCE IMPROVEMENTS  
 OLD 40  
 STA 656+87.00 TO STA 657+63.00

STA. 669+37.00  
 COLUMBIA BUSINESS 70  
 ADA SIDEWALK AND  
 ENTRANCE IMPROVEMENTS  
 STA. 675+14.00

STA. 707+84.00  
 COLUMBIA BUSINESS 70  
 ADA SIDEWALK IMPROVEMENTS  
 STA. 708+25.00



NOT TO SCALE

THE EXISTENCE AND APPROXIMATE LOCATION OF UTILITY FACILITIES KNOWN TO EXIST, AS SHOWN ON THE PLANS, ARE BASED ON THE BEST INFORMATION AVAILABLE TO THE COMMISSION AT THIS TIME. THIS INFORMATION IS PROVIDED BY THE COMMISSION "AS-IS" AND THE COMMISSION EXPRESSLY DISCLAIMS ANY REPRESENTATION OR WARRANTY AS TO THE COMPLETENESS, ACCURACY, OR SUITABILITY OF THE INFORMATION FOR ANY USE. RELIANCE UPON THIS INFORMATION IS DONE AT THE RISK AND PERIL OF THE USER, AND THE COMMISSION SHALL NOT BE LIABLE FOR ANY DAMAGES THAT MAY ARISE FROM ANY ERROR IN THE INFORMATION. IT IS, THEREFORE, THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE EXISTENCE, LOCATION AND STATUS OF ANY FACILITY. SUCH VERIFICATION INCLUDES DIRECT CONTACT WITH THE LISTED UTILITIES.

**LENGTH OF PROJECT**

<b>OLD 40</b>	
BEGINNING OF PROJECT	STA. 656+87.00
END OF PROJECT	STA. 657+63.00
APPARENT LENGTH	76.00 FEET
EQUATIONS AND EXCEPTIONS:	NONE
<b>BUSINESS 70</b>	
BEGINNING OF PROJECT	STA. 669+37.00
END OF PROJECT	STA. 675+14.00
APPARENT LENGTH	577.00 FEET
EQUATIONS AND EXCEPTIONS:	NONE
<b>BUSINESS 70</b>	
BEGINNING OF PROJECT	STA. 698+67.00
END OF PROJECT	STA. 699+24.00
APPARENT LENGTH	57.00 FEET
EQUATIONS AND EXCEPTIONS:	NONE
<b>BUSINESS 70</b>	
BEGINNING OF PROJECT	STA. 707+84.00
END OF PROJECT	STA. 708+25.00
APPARENT LENGTH	41.00 FEET
EQUATIONS AND EXCEPTIONS:	NONE
<b>BUSINESS 70</b>	
BEGINNING OF PROJECT	STA. 712+40.00
END OF PROJECT	STA. 713+38.00
APPARENT LENGTH	98.00 FEET
EQUATIONS AND EXCEPTIONS:	NONE
TOTAL CORRECTIONS	0.00 FEET
NET LENGTH OF PROJECT	849.00 FEET
STATE LENGTH	0.161 MILES

**CONVENTIONAL SYMBOLS (USED IN PLANS)**

	EXISTING	NEW
BUILDINGS AND STRUCTURES	[Symbol]	[Symbol]
GUARD RAIL	[Symbol]	[Symbol]
GUARD CABLE	[Symbol]	[Symbol]
CONCRETE RIGHT-OF-WAY MARKER	[Symbol]	[Symbol]
STEEL RIGHT-OF-WAY MARKER	[Symbol]	[Symbol]
LOCATION SURVEY MARKER	[Symbol]	[Symbol]
UTILITIES		
FIBER OPTICS	-FO-	-FO-
OVERHEAD CABLE TV	-OTV-	-OTV-
UNDERGROUND CABLE TV	-UTV-	-UTV-
OVERHEAD TELEPHONE	-OT-	-OT-
UNDERGROUND TELEPHONE	-UT-	-UT-
OVERHEAD POWER	-OE-	-OE-
UNDERGROUND POWER	-UE-	-UE-
SANITARY SEWER	-S-	-S-
STORM SEWER	-SS-	-SS-
GAS	-G-	-G-
WATER	-W-	-W-
MANHOLE	[Symbol]	[Symbol]
FIRE HYDRANT	[Symbol]	[Symbol]
WATER VALVE	[Symbol]	[Symbol]
WATER METER	[Symbol]	[Symbol]
DROP INLET	[Symbol]	[Symbol]
DITCH BLOCK	[Symbol]	[Symbol]
GROUND MOUNTED SIGN	[Symbol]	[Symbol]
LIGHT POLE	[Symbol]	[Symbol]
H-FRAME POWER POLE	[Symbol]	[Symbol]
TELEPHONE PEDESTAL	[Symbol]	[Symbol]
FENCE	[Symbol]	[Symbol]
CHAIN LINK	[Symbol]	[Symbol]
WOVEN WIRE	[Symbol]	[Symbol]
GATE POST	[Symbol]	[Symbol]
BENCHMARK	[Symbol]	[Symbol]

NOTE: DASHED OR OPEN SYMBOLS INDICATE EXISTING FEATURES

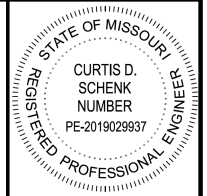
DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

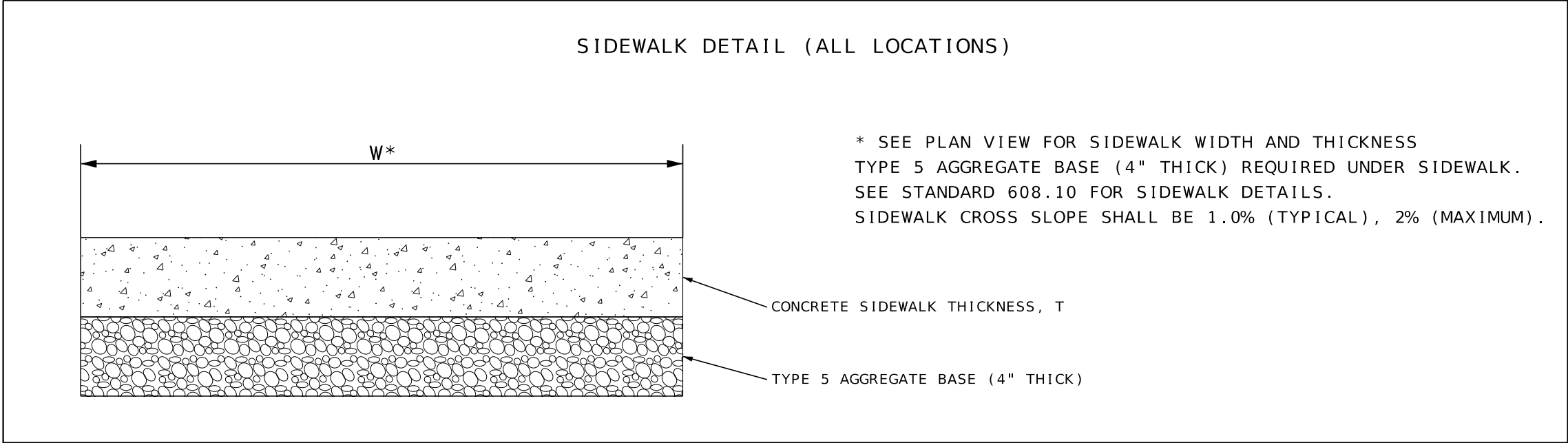
105 WEST CAPITOL  
 JEFFERSON CITY, MO 65102  
 1-888-ASK-MODOT (1-888-275-6636)

MISSOURI STATE CERTIFICATE OF AUTHORITY NO. 000866

Engineers • Architects • Surveyors  
 Quincy, Illinois  
 www.klingner.com  
 217-223-9670



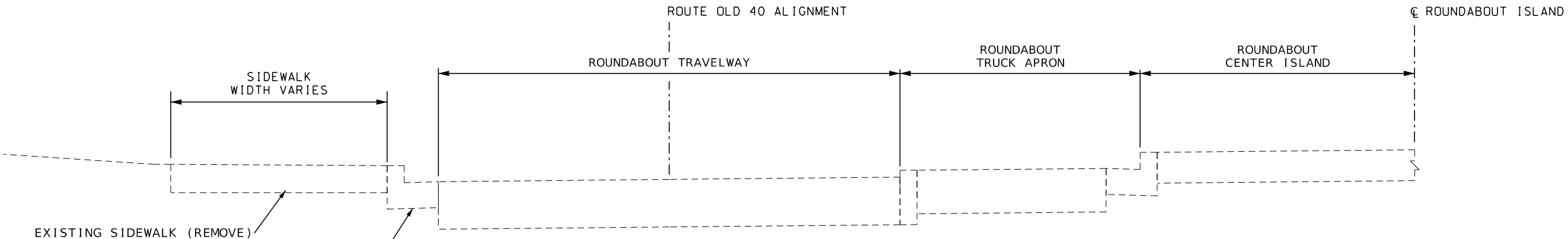
**SIDEWALK DETAIL (ALL LOCATIONS)**



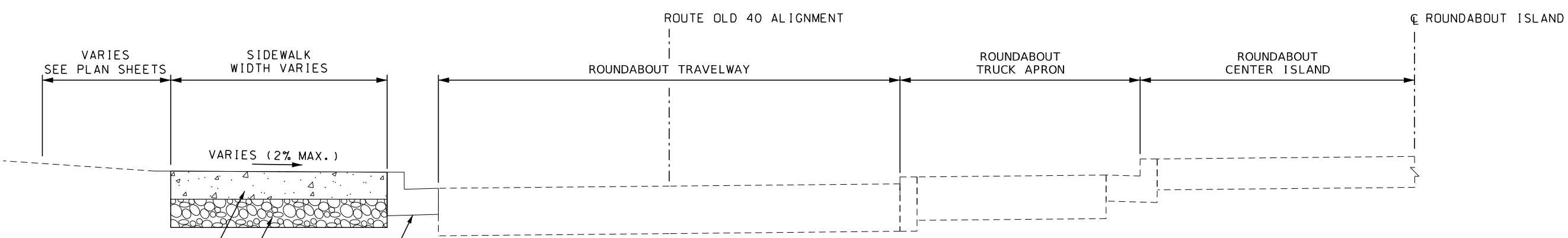
\* SEE PLAN VIEW FOR SIDEWALK WIDTH AND THICKNESS  
 TYPE 5 AGGREGATE BASE (4" THICK) REQUIRED UNDER SIDEWALK.  
 SEE STANDARD 608.10 FOR SIDEWALK DETAILS.  
 SIDEWALK CROSS SLOPE SHALL BE 1.0% (TYPICAL), 2% (MAXIMUM).

CONCRETE SIDEWALK THICKNESS, T  
 TYPE 5 AGGREGATE BASE (4" THICK)

DATE PREPARED 4/27/2026	
ROUTE BUS 70	STATE MO
DISTRICT CD	SHEET NO. 2
COUNTY BOONE	
JOB NO. JCD0124	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	



**EXIST. SIDEWALK TYPICAL SECTION (ROUTE 40)**  
 STA. 656+87.36 TO STA. 657+62.65



**PROPOSED SIDEWALK TYPICAL SECTION (ROUTE 40)**  
 STA. 656+87.36 TO STA. 657+62.65

**TYPICAL SECTION**  
 SHEET 1 OF 3  
 NOT TO SCALE

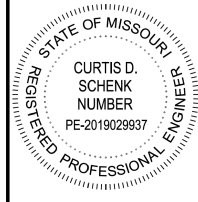
DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL  
 JEFFERSON CITY, MO 65102  
 1-888-ASK-MODOT (1-888-275-6636)

MISSOURI STATE CERTIFICATE OF AUTHORITY NO. 000866

**KLINGNER & ASSOCIATES, P.C.**  
 Engineers • Architects • Surveyors  
 Quincy, Illinois  
 www.klingner.com  
 217-223-3670



DATE PREPARED 4/27/2026	
ROUTE BUS 70	STATE MO
DISTRICT CD	SHEET NO. 2
COUNTY BOONE	
JOB NO. JCD0124	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

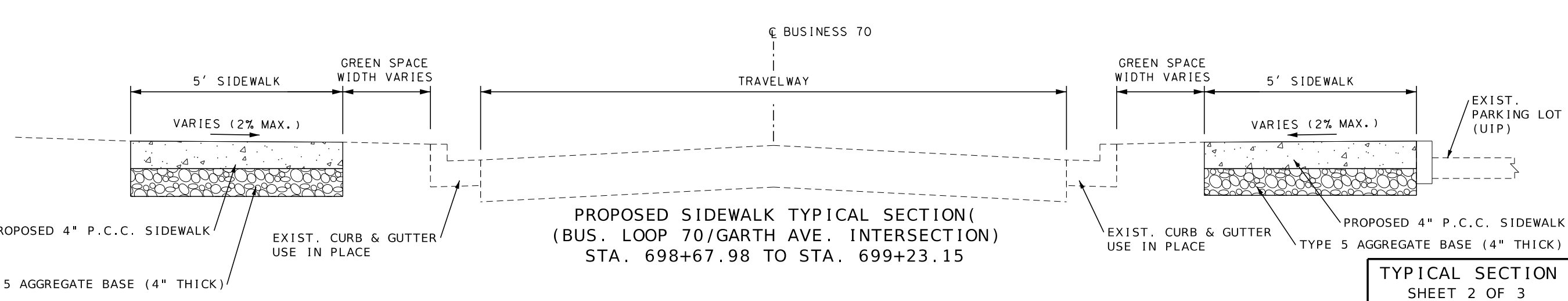
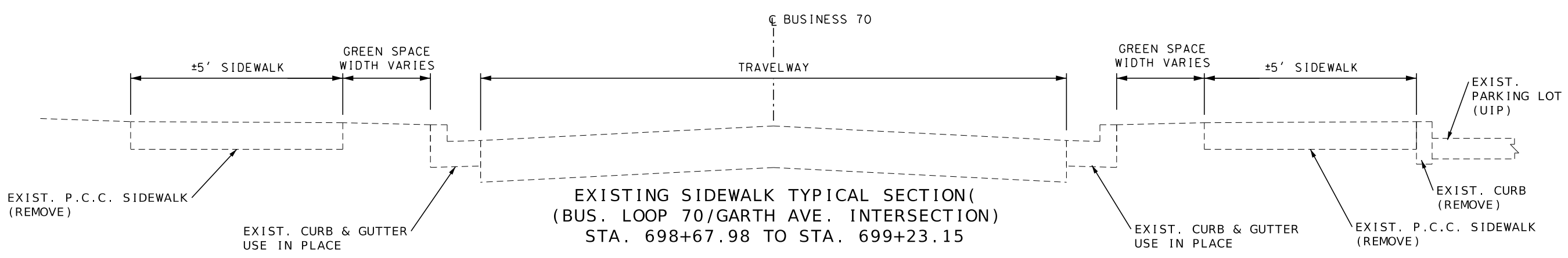
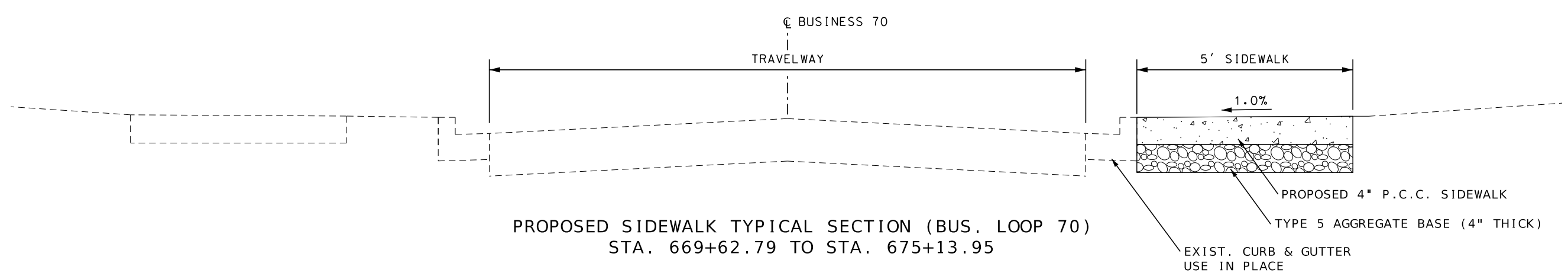
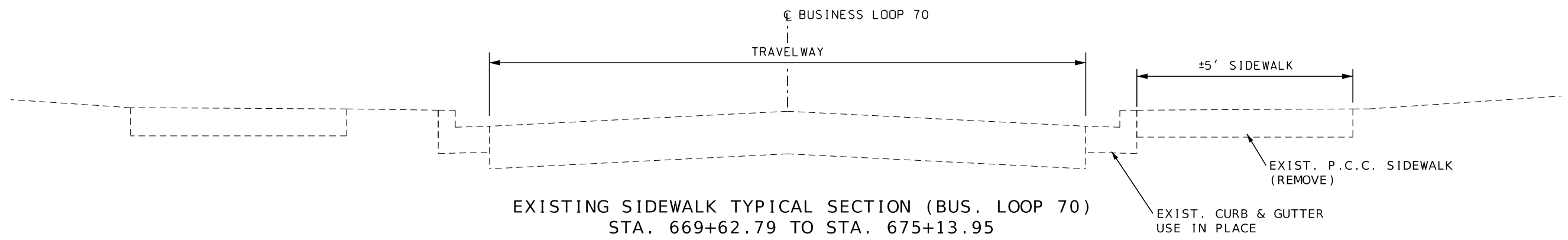
DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-273-6636)

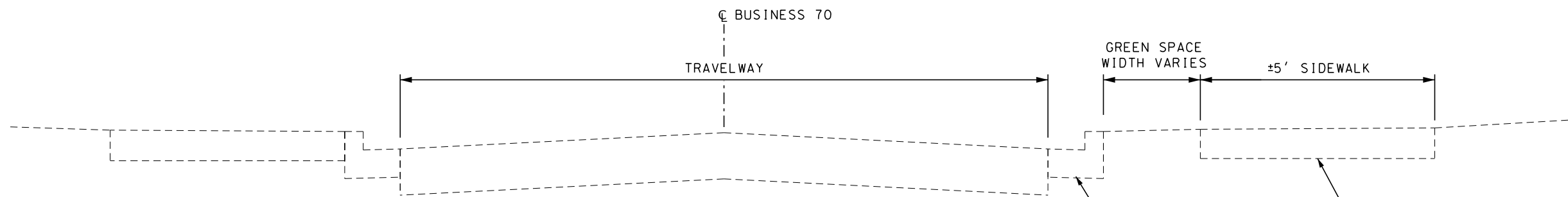
MISSOURI STATE CERTIFICATE OF AUTHORITY NO. 000866

**KLINGNER & ASSOCIATES, P.C.**  
Engineers • Architects • Surveyors  
Quincy, Illinois  
217-223-9670  
www.klingner.com

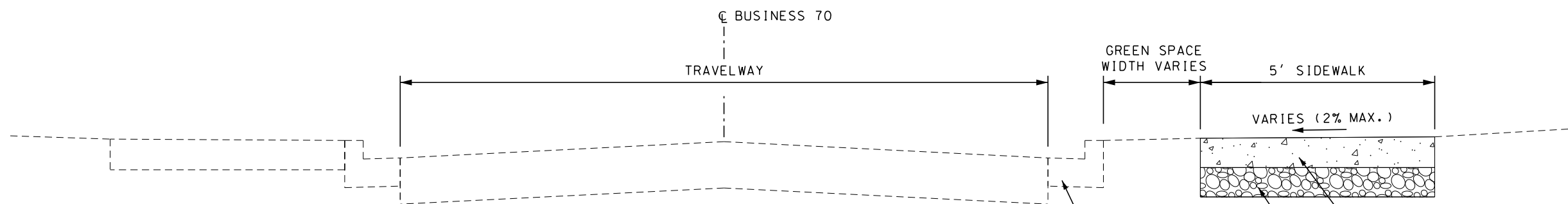


TYPICAL SECTION  
SHEET 2 OF 3  
NOT TO SCALE

TYPE 5 AGGREGATE BASE (4" THICK)

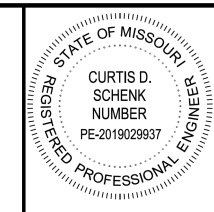


EXISTING SIDEWALK TYPICAL SECTION  
(BUS. LOOP 70)  
STA. 707+84.88 TO STA. 708+16.65



PROPOSED SIDEWALK TYPICAL SECTION  
(BUS. LOOP 70)  
STA. 707+84.88 TO STA. 708+18.65

TYPICAL SECTION  
SHEET 3 OF 3  
NOT TO SCALE



DATE PREPARED 4/27/2026	
ROUTE BUS 70	STATE MO
DISTRICT CD	SHEET NO. 2
COUNTY BOONE	
JOB NO. JCD0124	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-273-6636)

MISSOURI STATE CERTIFICATE OF AUTHORITY NO. 000866

**KLINGNER & ASSOCIATES, P.C.**  
Engineers • Architects • Surveyors  
Quincy, Illinois  
217-223-3670

MOBILIZATION  
1 LUMP SUM

LANDSCAPING REPAIR  
1 LUMP SUM

CONTRACTOR FURNISHED SURVEYING AND STAKING  
1 LUMP SUM

SEEDING AND MULCHING		
LOCATION	SEEDING AND MULCH ACRE	REMARKS
MEMORIAL PARK CEMETERY	0.006	SEE JOB SPECIAL PROVISIONS
KIA DEALERSHIP	0.020	SEE JOB SPECIAL PROVISIONS
NW CORNER - GARTH AVE.	0.004	SEE JOB SPECIAL PROVISIONS
COLUMBIA LAUNDRY	0.005	SEE JOB SPECIAL PROVISIONS
TOTAL	0.035	
USE	1 LUMP SUM	

MANHOLE ADJUSTMENT			
STA	ROUTE	ADJUST MANHOLE EACH	REMARKS
671+02.50	BUS 70 - RT	1.0	
673+72.52	BUS 70 - RT	1.0	
TOTAL		2.0	
USE		2	

CONCRETE MEDIAN STRIP			
STA	ROUTE	6 INCH DEPTH SY	REMARKS
698+74.93	BUS 70 - 5.4' LT	1.0	MEDIAN REPAIR AT PB 7
TOTAL		1.0	
USE		1	

INLET ADJUSTMENT			
STA	ROUTE	ADJUST INLET EACH	REMARKS
675+12.50	BUS 70 - RT	1.0	
TOTAL		1.0	
USE		1	

REMOVAL OF IMPROVEMENTS											
LOCATION				SIDEWALK REMOVAL S.Y.	CONCRETE ENTRANCE REMOVAL S.Y.	CURB AND GUTTER REMOVAL L.F.	CURB REMOVAL L.F.	TYPE C BASE REMOVAL EACH	MEDIAN PVMNT. REMOVAL S.Y.	PUSH BUTTON EQUIPMENT REMOVAL EACH	REMARKS
656+87.00	657+63.00	OLD 40	LT	38.8	88	13.7	-	-	-	-	MEMORIAL PARK CEMETERY
-	-	BUS. 70	LT	-	-	-	-	1.0	-	2.0	I-70 WBL RAMP
669+62.00	675+14.00	BUS. 70	RT	273.3	161.0	-	-	-	-	-	KIA DEALERSHIP
698+67.00	699+24.00	BUS. 70	LT	22.5	-	12.0	-	-	-	-	NW CORNER - GARTH AVE.
698+67.00	699+24.00	BUS. 70	RT	26.7	19.9	10.1	49.5	-	-	-	SW CORNER - GARTH AVE.
707+84.00	708+22.00	BUS. 70	RT	20.1	3.0	-	-	-	-	-	COLUMBIA LAUNDRY
712+40.00	712+50.00	BUS. 70	LT	-	-	-	-	-	-	2.0	NW ISLAND - PROVIDENCE
712+45.78	-	BUS. 70	RT	-	-	-	-	1.0	-	2.0	SW CORNER - PROVIDENCE
713+19.00	713+37.00	BUS. 70	LT	-	-	-	-	-	-	2.0	NE CORNER - PROVIDENCE
713+24.10	-	BUS. 70	RT	-	-	-	5.0	-	0.8	2.0	SE ISLAND - PROVIDENCE
TOTAL				381.4	271.9	35.8	54.5	2	1	10	
USE				1 LUMP SUM							

QUANTITIES SHOWN FOR INFORMATIONAL PURPOSES ONLY.

ADA IMPROVEMENTS													
LOCATION					CONCRETE SIDEWALK 4 IN. S.Y.	* CONCRETE CURB RAMP S.Y.	TYPE 5 AGGR. FOR BASE 4" S.Y.	TRUNCATED DOMES S.F.	CURB AND GUTTER TYPE B SPECIAL L.F.	CONCRETE CURB UNDER 6" TYPE S L.F.	CONCRETE CURB OVER 6" TYPE S L.F.	8" PAVED APPROACH S.Y.	REMARKS
656+87.00	657+63.00	OLD 40	LT	MEMORIAL PARK CEMETERY	30.1	4.2	120.5	66.5	19.1	-	-	86.2	
669+62.00	675+14.00	BUS. 70	LT	KIA DEALERSHIP	256.4	15.3	422.9	-	30.0	-	-	151.2	
698+67.00	699+24.00	BUS. 70	RT	NW CORNER - GARTH AVE.	14.5	10.0	24.5	10.0	12.0	-	-	-	
698+67.00	699+24.00	BUS. 70	RT	SW CORNER - GARTH AVE.	27.5	4.6	53.1	10.0	10.0	-	56.1	21.0	
707+84.00	708+22.00	BUS. 70	RT	COLUMBIA LAUNDRY	18.1	-	21.1	-	-	-	-	3.0	
712+41.00	712+61.00	BUS. 70	RT	SW CORNER - PROVIDENCE ST.	5.9	-	5.9	-	-	-	34.7	-	
712+41.00	712+61.00	BUS. 70	RT	SE ISLAND - PROVIDENCE ST.	1.0	-	-	5.0	-	2.0	-	-	
TOTAL					353.5	34.1	648.0	91.5	71.1	2.0	90.8	261.4	
USE					353.5	34.1	648	92	71	2	91	261.4	

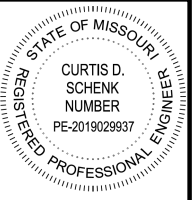
NOTE: SEE PLAN SHEETS FOR DETAILS.  
\* SIDE CURB QUANTITIES ARE INCLUDED IN THESE PAY ITEMS. SEE GENERAL NOTE 4 ON PLAN SHEETS.

LINEAR GRADING FOR ADA FACILITIES						
LOCATION					LIN. GRADING ADA FACILITIES FEET	REMARKS
656+87.00	657+63.00	OLD 40	LT	MEMORIAL PARK CEMETERY	78.0	GRADING FOR DRAINAGE, SIDEWALKS, AND ENTRANCES
669+62.00	675+14.00	BUS. 70	RT	KIA DEALERSHIP	594.0	GRADING FOR DRAINAGE, SIDEWALKS, AND ENTRANCES
698+67.00	699+24.00	BUS. 70	LT	NW CORNER - GARTH AVE.	48.0	GRADING FOR DRAINAGE, SIDEWALKS, AND ENTRANCES
698+67.00	699+24.00	BUS. 70	RT	SW CORNER - GARTH AVE.	60.0	GRADING FOR DRAINAGE, SIDEWALKS, AND ENTRANCES
707+84.00	708+22.00	BUS. 70	RT	COLUMBIA LAUNDRY	33.0	GRADING FOR DRAINAGE, SIDEWALKS, AND ENTRANCES
712+41.00	712+61.00	BUS. 70	RT	SW CORNER - PROVIDENCE ST.	10.5	GRADING FOR DRAINAGE, SIDEWALKS, AND ENTRANCES
TOTAL					823.50	
USE					824.0	

TEMPORARY EROSION CONTROL								
STA	STA	ROUTE	SIDE	QUADRANT	CURB INLET CHECK EACH	SILT FENCE L.F.	* SEDIMENT REMOVAL CU. YD.	REMARKS
669+62.00	675+14.00	BUS. 70	LT	KIA DEALERSHIP	4	-	4.0	SEE PLAN SHEET FOR DETAILS
698+67.00	699+24.00	BUS. 70	RT	NW CORNER - GARTH AVE.	1	24.0	1.2	SEE PLAN SHEET FOR DETAILS
698+67.00	699+24.00	BUS. 70	RT	SW CORNER - GARTH AVE.	-	-	-	SEE PLAN SHEET FOR DETAILS
707+84.00	708+22.00	BUS. 70	RT	COLUMBIA LAUNDRY	-	32.0	0.3	SEE PLAN SHEET FOR DETAILS
712+41.00	712+61.00	BUS. 70	RT	PROVIDENCE ST. - SW CORNER	1	-	1.0	SEE PLAN SHEET FOR DETAILS
TOTAL					6.0	56.0	6.5	
USE					6	56	7	

\* ONE CU. YD. PER DITCH CHECK AND 1 CU. YD. PER 100' OF SILT FENCE

SUMMARY OF QUANTITIES  
SHEET 1 OF 2



DATE PREPARED  
4/27/2026

ROUTE  
BUS 70

STATE  
MO

DISTRICT  
CD

SHEET NO.  
3

COUNTY  
BOONE

JOB NO.  
JCD0124

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-275-6636)

MISSOURI STATE CERTIFICATE OF AUTHORITY NO. 000866

**KLINGNER & ASSOCIATES, P.C.**  
Engineers • Architects • Surveyors  
Quincy, Illinois  
www.klingner.com  
217-223-3970



NOTE: ALL STATION AND OFFSET TIES FOR PERMANENT AND TEMPORARY EASEMENTS ARE IN REFERENCE TO OLD 40.

CITY OF COLUMBIA, MO  
T48N - R13W  
SEC 2

SIDEWALK ELEVATIONS

OLD 40 ALIGNMENT			
POINT	STATION	OFFSET	ELEVATION
1	656+99.26	17.7' LT	762.01
2	656+93.56	17.5' LT	762.45
3	656+87.36	17.8' LT	762.40
4	656+87.76	24.0' LT	762.50
5	656+93.49	23.9' LT	762.54
6	656+98.80	24.1' LT	762.14
7	657+14.99	25.5' LT	762.32
8	657+41.52	25.5' LT	762.55
9	657+58.16	22.0' LT	762.76
10	657+62.46	21.1' LT	762.87
11	657+58.87	12.1' LT	762.78
12	657+55.07	13.3' LT	762.65

**LEGEND**

- [Pattern] - DETECTABLE WARNING
- [Pattern] - PR CURB RAMP
- [Symbol] - PR SIDEWALK
- [Pattern] - SIDE CURB
- [Symbol] - SIDEWALK POINT NUMBER
- [Symbol] - GUTTER POINT NUMBER
- [Symbol] - CONC. PAVEMENT NUMBER
- [Symbol] - CURB POINT NUMBER
- [Symbol] - MATCH EXISTING ELEV.
- (DND) - DO NOT DISTURB
- (UIP) - USE IN PLACE
- (ADJ) - ADJUST
- (REL) - RELOCATE
- (L) - LANDING



DATE PREPARED: 4/27/2026

ROUTE: BUS 70 STATE: MO

DISTRICT: CD SHEET NO.: 4

COUNTY: BOONE

JOB NO.: JCD0124

CONTRACT ID.:

PROJECT NO.:

BRIDGE NO.:

DESCRIPTION

DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL JEFFERSON CITY, MO 65102

1-888-ASK-MODOT (1-888-275-6636)

MISSOURI STATE CERTIFICATE OF AUTHORITY NO. 000866

**KLINGNER & ASSOCIATES, P.C.**

Engineers • Architects • Surveyors

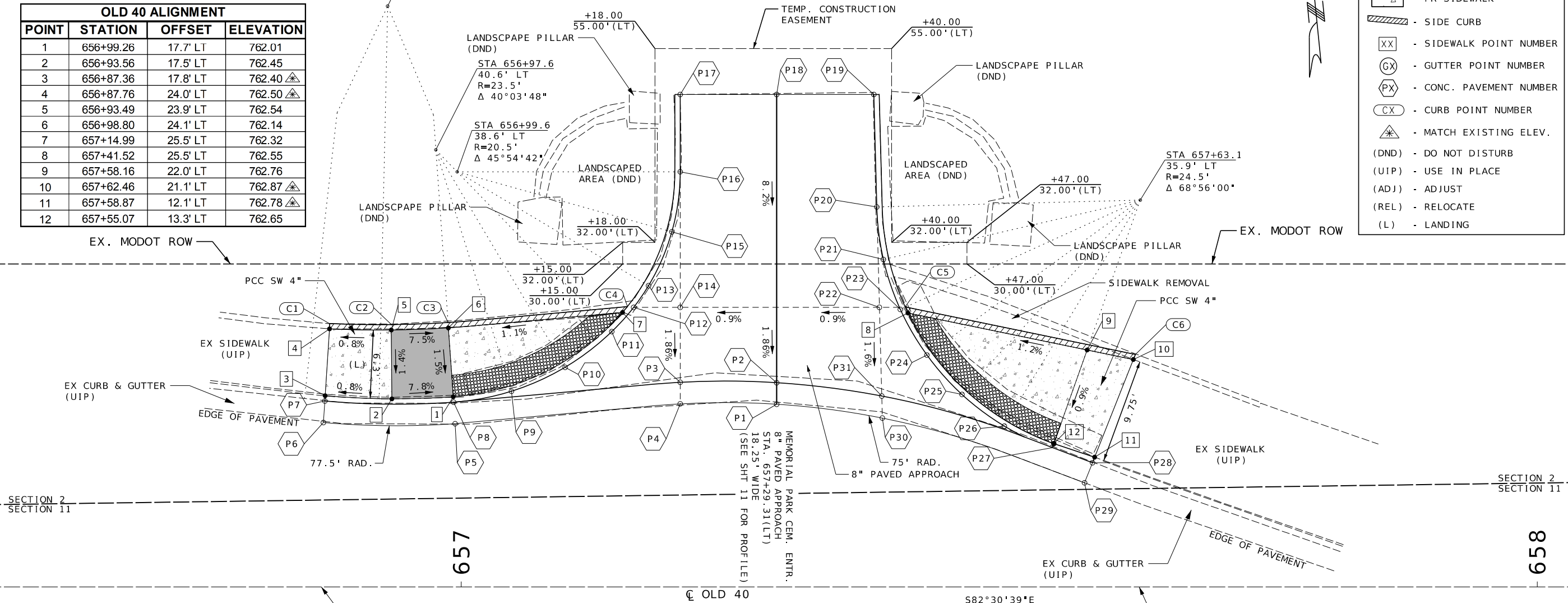
Quincy, Illinois

www.klingner.com

217-223-9670

**PLAN SHEET**  
SHEET 1 OF 10

COLUMBIA, MO  
OLD 40  
MEMORIAL PARK CEMETERY



CONC. PAVEMENT ELEVATIONS

OLD 40			
POINT	STATION	OFFSET	ELEVATION
P1	657+29.31	17.0' LT	762.37
P2	657+29.31	19.0' LT	762.32
P3	657+20.34	19.0' LT	762.24
P4	657+20.34	17.0' LT	762.29
P5	656+99.43	15.2' LT	762.04
P6	656+87.19	15.3' LT	761.82
*P7	656+87.32	17.3' LT	761.79
*P8	656+99.29	17.2' LT	762.01
P9	657+04.66	18.2' LT	762.09
P10	657+09.65	20.4' LT	762.18
P11	657+14.03	23.5' LT	762.27
*P12	657+16.02	26.0' LT	762.32
P13	657+17.40	28.0' LT	762.53
P14	657+20.34	26.0' LT	762.37
P15	657+19.57	33.0' LT	763.01
*P16	657+20.34	38.6' LT	763.50

CONC. PAVEMENT ELEVATIONS

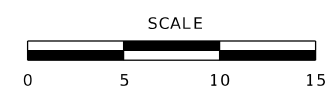
OLD 40			
POINT	STATION	OFFSET	ELEVATION
*P17	657+20.34	45.7' LT	764.14
P18	657+29.31	45.7' LT	764.07
*P19	657+38.34	45.7' LT	764.01
*P20	657+38.61	35.3' LT	763.22
P21	657+39.23	30.4' LT	762.88
P22	657+38.86	26.0' LT	762.53
*P23	657+40.81	25.8' LT	762.55
P24	657+43.28	21.5' LT	762.57
P25	657+46.54	17.9' LT	762.60
P26	657+50.47	14.9' LT	762.62
*P27	657+55.07	13.3' LT	762.65
*P28	657+58.66	11.5' LT	762.72
P29	657+57.92	9.7' LT	762.74
P30	657+39.13	15.7' LT	762.45
P31	657+39.08	17.7' LT	762.4

CURB ELEVATIONS

POINT	TOP ELEV.	CURB HEIGHT
C1	762.50	0"
C2	762.54	0"
C3	762.14	0"
C4	762.82	6"
C5	763.05	6"
C6	762.87	6"

- GENERAL NOTES**
- THE CONTRACTOR SHALL VERIFY EXISTING FIELD CONDITIONS PRIOR TO CONSTRUCTION OF ANY RAMP OR SIDEWALK. ANY ADJUSTMENTS NECESSARY TO MEET EXISTING FIELD CONDITIONS SHALL BE APPROVED BY THE ENGINEER PRIOR TO CONSTRUCTION.
  - MAXIMUM SIDEWALK CROSS SLOPE = 2.0%
  - THE CURB RAMPS AND SIDEWALKS SHALL BE BUILT TO THE LINES AND GRADES SHOWN ON THE PLAN SHEETS. SEE STANDARD 608.50 FOR ADDITIONAL INFORMATION.
  - SIDE CURB PAID FOR AS CONCRETE CURB RAMP OR CONCRETE SIDEWALK, 4 INCH.
  - ALL EXISTING SIDEWALK BEING REPLACED WITHIN THE PROJECT LIMITS SHALL BE REMOVED. SEE REMOVAL SCHEDULE FOR LOCATIONS.
  - ALL BEARINGS BASED ON MODIFIED STATE PLANE BEARINGS CENTRAL ZONE.
  - ANY WORK INDICATED ON THE PLANS THAT EXTENDS BEYOND THE PROJECT LIMITS IS CONSIDERED INCIDENTAL TO AND A PART OF THE CONSTRUCTION OF THIS PROJECT.

\* GRADE CONTROL POINT



BEGIN PROJECT AT STA. 656+87.00 OLD 40 IMPROVEMENTS BEGIN AT A POINT LOCATED 2903.57', S83°28'14"E TO THE COMMON CORNER OF SECTIONS 1,2,11 & 12. T48N, R13W

END PROJECT AT STA. 657+63.00 OLD 40 IMPROVEMENTS BEGIN AT A POINT LOCATED 2827.58', S83°29'46"E TO THE COMMON CORNER OF SECTIONS 1,2,11 & 12. T48N, R13W

**GENERAL NOTES**

1. THE CONTRACTOR SHALL VERIFY EXISTING FIELD CONDITIONS PRIOR TO CONSTRUCTION OF ANY RAMP OR SIDEWALK. ANY ADJUSTMENTS NECESSARY TO MEET EXISTING FIELD CONDITIONS SHALL BE APPROVED BY THE ENGINEER PRIOR TO CONSTRUCTION.
2. MAXIMUM SIDEWALK CROSS SLOPE = 2.0%
3. THE CURB RAMP AND SIDEWALKS SHALL BE BUILT TO THE LINES AND GRADES SHOWN ON THE PLAN SHEETS. SEE STANDARD 608.50 FOR ADDITIONAL INFORMATION.
4. SIDE CURB PAID FOR AS CONCRETE CURB RAMP OR CONCRETE SIDEWALK, 4 INCH.
5. ALL EXISTING SIDEWALK BEING REPLACED WITHIN THE PROJECT LIMITS SHALL BE REMOVED. SEE REMOVAL SCHEDULE FOR LOCATIONS.
6. ALL BEARINGS BASED ON MODIFIED STATE PLANE BEARINGS CENTRAL ZONE.
7. ANY WORK INDICATED ON THE PLANS THAT EXTENDS BEYOND THE PROJECT LIMITS IS CONSIDERED INCIDENTAL TO AND A PART OF THE CONSTRUCTION OF THIS PROJECT.

**TEMPORARY CONTROL LEGEND**



**CITY OF COLUMBIA, MO**  
T48N - R13W  
SEC 11

**SIDEWALK ELEVATIONS**

BUS. 70 ALIGNMENT			
POINT	STATION	OFFSET	ELEV.
1	669+62.79	40.2' RT	770.55
2	669+62.83	35.2' RT	770.47*
3	669+82.83	35.4' RT	770.21*
4	669+82.83	40.4' RT	770.26
5	670+02.83	40.5' RT	769.96
6	670+02.83	35.5' RT	769.91*
7	670+22.83	35.5' RT	769.45*
8	670+22.83	40.5' RT	769.50
9	670+42.83	40.4' RT	769.04
10	670+42.83	35.4' RT	768.99*
11	670+62.83	35.4' RT	768.53*

\*MATCH EXIST. TOP OF CURB ELEV.

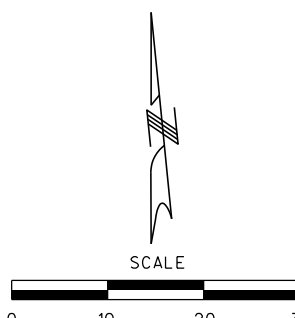
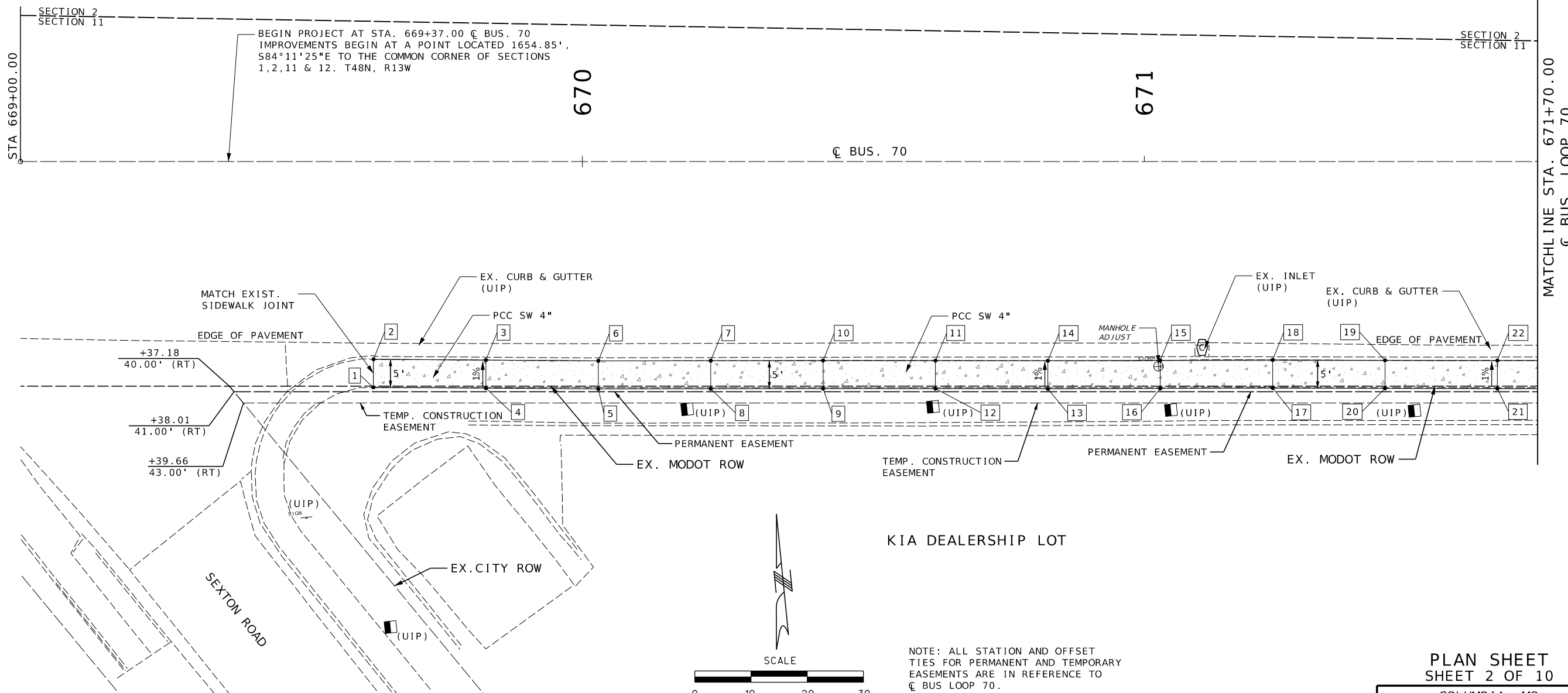
**SIDEWALK ELEVATIONS**

BUS. 70 ALIGNMENT			
POINT	STATION	OFFSET	ELEV.
12	670+62.83	40.4' RT	768.58
13	670+82.83	40.5' RT	768.12
14	670+82.83	35.5' RT	768.07*
15	671+02.83	35.4' RT	767.59*
16	671+02.83	40.4' RT	767.64
17	671+22.83	40.3' RT	767.14
18	671+22.83	35.3' RT	767.09*
19	671+42.83	35.4' RT	766.58*
20	671+42.83	40.4' RT	766.63
21	671+62.83	40.4' RT	766.17
22	671+62.83	35.4' RT	766.12*

\*MATCH EXIST. TOP OF CURB ELEV.

**LEGEND**

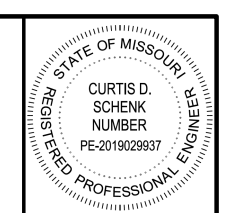
- DETECTABLE WARNING
- PR CURB RAMP
- PR SIDEWALK
- SIDE CURB
- SIDEWALK POINT NUMBER
- GUTTER POINT NUMBER
- CONC. PAVEMENT NUMBER
- CURB POINT NUMBER
- MATCH EXISTING ELEV.
- (DND) - DO NOT DISTURB
- (UIP) - USE IN PLACE
- (ADJ) - ADJUST
- (REL) - RELOCATE
- (L) - LANDING



NOTE: ALL STATION AND OFFSET TIES FOR PERMANENT AND TEMPORARY EASEMENTS ARE IN REFERENCE TO  $\text{\textcircled{C}}$  BUS LOOP 70.

**PLAN SHEET**  
SHEET 2 OF 10

COLUMBIA, MO  
BUS. 70  
KIA DEALERSHIP



DATE PREPARED 4/27/2026	
ROUTE BUS 70	STATE MO
DISTRICT CD	SHEET NO. 5
COUNTY BOONE	
JOB NO. JCD0124	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-275-6636)

MISSOURI STATE CERTIFICATE OF AUTHORITY NO. 000866

**KLINGNER & ASSOCIATES, P.C.**  
Engineers • Architects • Surveyors  
Quincy, Illinois  
www.klingner.com  
217-223-3670

**GENERAL NOTES**

1. THE CONTRACTOR SHALL VERIFY EXISTING FIELD CONDITIONS PRIOR TO CONSTRUCTION OF ANY RAMP OR SIDEWALK. ANY ADJUSTMENTS NECESSARY TO MEET EXISTING FIELD CONDITIONS SHALL BE APPROVED BY THE ENGINEER PRIOR TO CONSTRUCTION.
2. MAXIMUM SIDEWALK CROSS SLOPE = 2.0%
3. THE CURB RAMP AND SIDEWALKS SHALL BE BUILT TO THE LINES AND GRADES SHOWN ON THE PLAN SHEETS. SEE STANDARD 608.50 FOR ADDITIONAL INFORMATION.
4. SIDE CURB PAID FOR AS CONCRETE CURB RAMP OR CONCRETE SIDEWALK, 4 INCH.
5. ALL EXISTING SIDEWALK BEING REPLACED WITHIN THE PROJECT LIMITS SHALL BE REMOVED. SEE REMOVAL SCHEDULE FOR LOCATIONS.
6. ALL BEARINGS BASED ON MODIFIED STATE PLANE BEARINGS CENTRAL ZONE.
7. ANY WORK INDICATED ON THE PLANS THAT EXTENDS BEYOND THE PROJECT LIMITS IS CONSIDERED INCIDENTAL TO AND A PART OF THE CONSTRUCTION OF THIS PROJECT.

**CITY OF COLUMBIA, MO**  
T48N - R13W  
SEC 11

**SIDEWALK ELEVATIONS**

BUS. 70 ALIGNMENT			
POINT	STATION	OFFSET	ELEV.
1	671+82.84	35.4' RT	765.70*
2	671+82.84	40.4' RT	765.75
3	672+02.45	40.4' RT	765.35
4	672+02.45	35.4' RT	765.30*
5	672+12.45	35.4' RT	764.65
6	672+42.45	40.4' RT	764.70
7	672+19.86	40.4' RT	764.55
8	672+51.01	40.2' RT	763.90
9	672+59.66	40.2' RT	763.69
10	672+59.66	35.2' RT	763.64
11	672+64.67	35.2' RT	763.98

**SIDEWALK ELEVATIONS**

BUS. 70 ALIGNMENT			
POINT	STATION	OFFSET	ELEV.
12	672+64.66	40.2' RT	764.03
13	672+69.66	40.2' RT	763.92
14	672+69.66	35.2' RT	763.87*
15	672+89.67	35.3' RT	763.41*
16	672+89.66	40.3' RT	763.46
17	673+09.66	40.3' RT	762.98
18	673+09.67	35.3' RT	762.93*
19	673+25.14	35.1' RT	762.55*
20	673+25.13	40.1' RT	762.60
21	673+35.13	40.1' RT	762.01
22	673+35.13	35.1' RT	761.96

**SIDEWALK ELEVATIONS**

BUS. 70 ALIGNMENT			
POINT	STATION	OFFSET	ELEV.
23	673+44.34	40.1' RT	761.84
24	673+71.44	40.1' RT	761.29
25	673+80.66	40.2' RT	761.02
26	673+80.67	35.2' RT	760.97
27	673+85.67	35.2' RT	761.14*
28	673+85.67	40.2' RT	761.19
29	674+05.67	40.2' RT	760.74
30	674+05.67	35.2' RT	760.69*
31	674+25.67	35.2' RT	760.25*
32	674+25.67	40.2' RT	760.30

\*MATCH EXIST. TOP OF CURB ELEV.

**LEGEND**

- [XXXXXX] - DETECTABLE WARNING
- [PR CURB RAMP] - PR CURB RAMP
- [PR SIDEWALK] - PR SIDEWALK
- [SIDE CURB] - SIDE CURB
- [XX] - SIDEWALK POINT NUMBER
- [GX] - GUTTER POINT NUMBER
- [PX] - CONC. PAVEMENT NUMBER
- [CX] - CURB POINT NUMBER
- [MATCH EXISTING ELEV.] - MATCH EXISTING ELEV.
- (DND) - DO NOT DISTURB
- (UIP) - USE IN PLACE
- (ADJ) - ADJUST
- (REL) - RELOCATE
- (L) - LANDING

NOTE: ALL STATION AND OFFSET TIES FOR PERMANENT AND TEMPORARY EASEMENTS ARE IN REFERENCE TO BUS LOOP 70.



DATE PREPARED 4/27/2026	
ROUTE <b>BUS 70</b>	STATE <b>MO</b>
DISTRICT <b>CD</b>	SHEET NO. <b>6</b>
COUNTY <b>BOONE</b>	
JOB NO. <b>JCD0124</b>	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

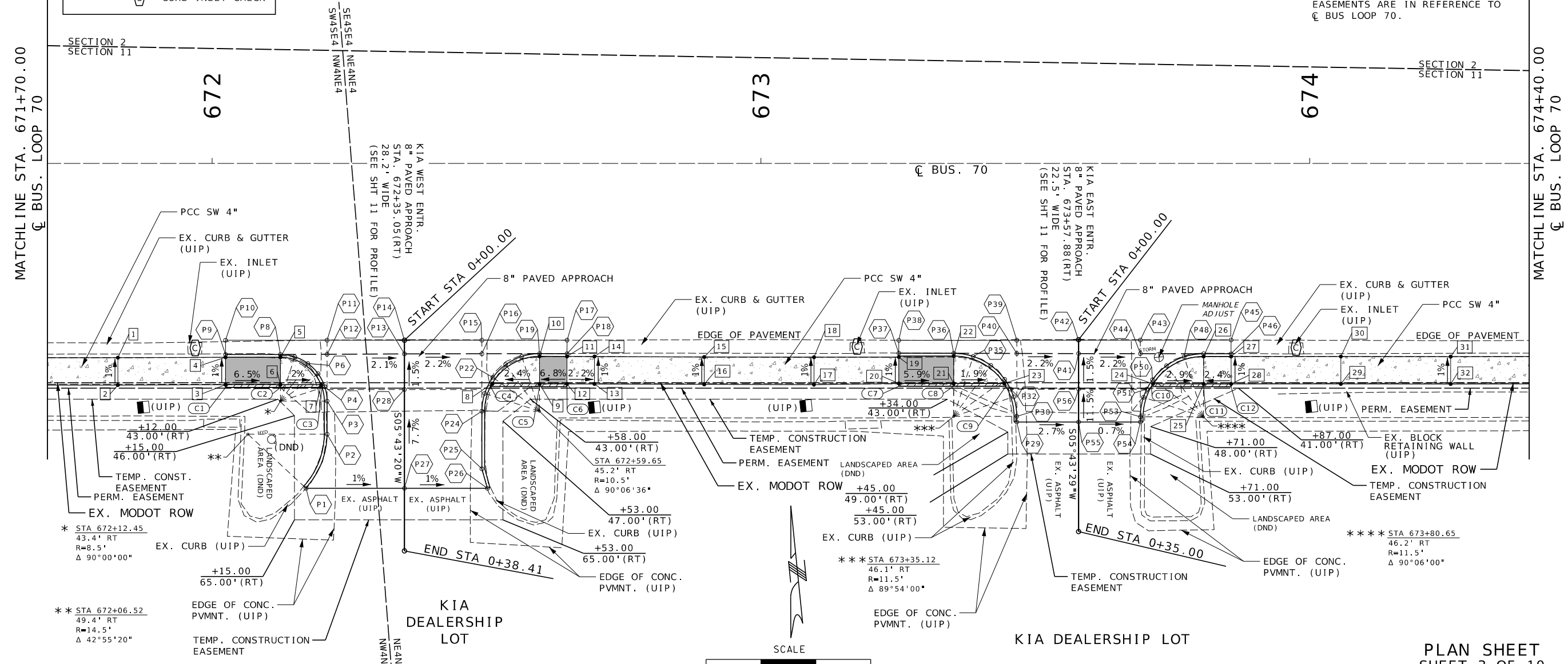
105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-275-6636)

MISSOURI STATE CERTIFICATE OF AUTHORITY NO. 000866

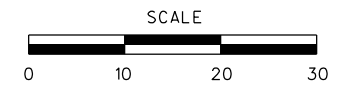
**KLINGNER & ASSOCIATES, P.C.**  
Engineers • Architects • Surveyors  
Quincy, Illinois  
www.klingner.com  
217-223-3670

**TEMPORARY CONTROL LEGEND**

— SILT FENCE  
C CURB INLET CHECK



**PLAN SHEET**  
SHEET 3 OF 10  
COLUMBIA, MO  
BUS. 70  
KIA DEALERSHIP





**GENERAL NOTES**

1. THE CONTRACTOR SHALL VERIFY EXISTING FIELD CONDITIONS PRIOR TO CONSTRUCTION OF ANY RAMP OR SIDEWALK. ANY ADJUSTMENTS NECESSARY TO MEET EXISTING FIELD CONDITIONS SHALL BE APPROVED BY THE ENGINEER PRIOR TO CONSTRUCTION.
2. MAXIMUM SIDEWALK CROSS SLOPE = 2.0%
3. THE CURB RAMP AND SIDEWALKS SHALL BE BUILT TO THE LINES AND GRADES SHOWN ON THE PLAN SHEETS. SEE STANDARD 608.50 FOR ADDITIONAL INFORMATION.
4. SIDE CURB PAID FOR AS CONCRETE CURB RAMP OR CONCRETE SIDEWALK, 4 INCH.
5. ALL EXISTING SIDEWALK BEING REPLACED WITHIN THE PROJECT LIMITS SHALL BE REMOVED. SEE REMOVAL SCHEDULE FOR LOCATIONS.
6. ALL BEARINGS BASED ON MODIFIED STATE PLANE BEARINGS CENTRAL ZONE.
7. ANY WORK INDICATED ON THE PLANS THAT EXTENDS BEYOND THE PROJECT LIMITS IS CONSIDERED INCIDENTAL TO AND A PART OF THE CONSTRUCTION OF THIS PROJECT.

**TEMPORARY CONTROL LEGEND**

---	SILT FENCE
C	CURB INLET CHECK

**CITY OF COLUMBIA, MO**  
**T48N - R13W**  
**SEC 11**

**SIDEWALK ELEVATIONS**

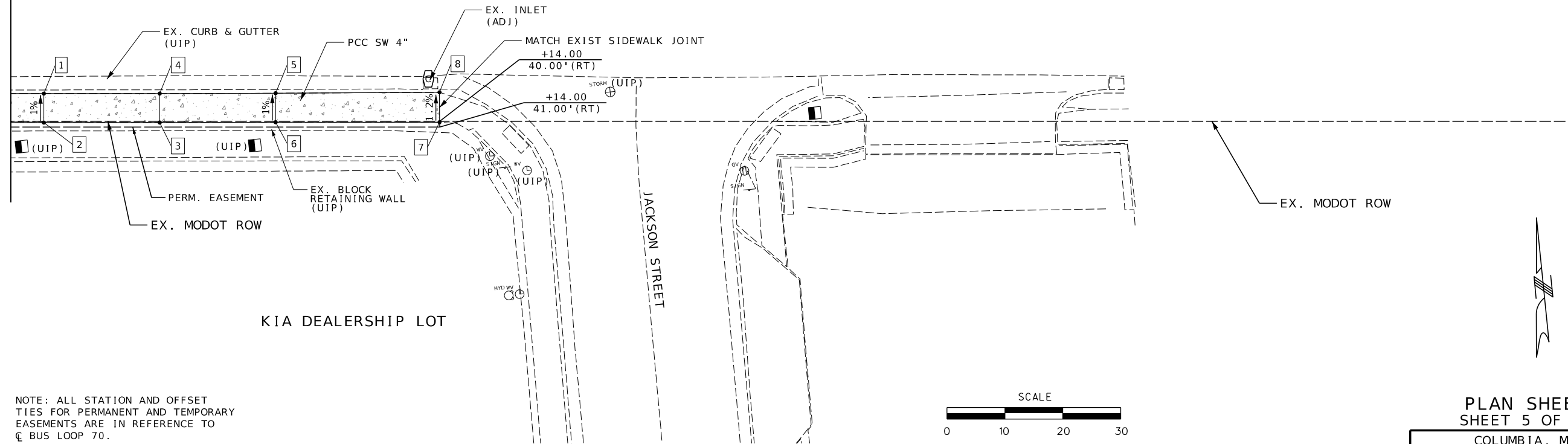
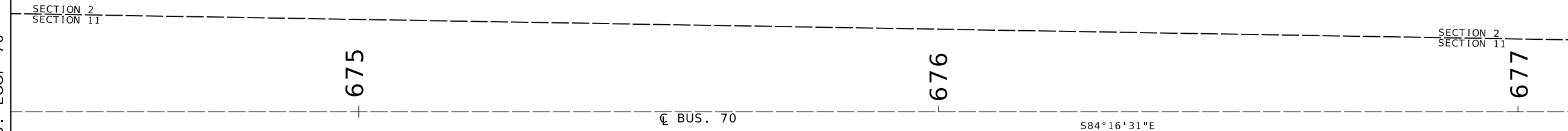
BUS. 70 ALIGNMENT			
POINT	STATION	OFFSET	ELEV.
1	674+45.67	32.2' RT	759.77*
2	674+45.67	40.2' RT	759.82
3	674+65.67	40.2' RT	759.32
4	674+65.67	35.2' RT	759.27*
5	674+85.67	35.2' RT	758.73*
6	674+85.67	40.2' RT	758.78
7	675+13.95	40.2' RT	757.97
8	675+13.95	35.0' RT	757.91*

\*MATCH EXIST. TOP OF CURB ELEV.

**LEGEND**

- DETECTABLE WARNING
- PR CURB RAMP
- PR SIDEWALK
- SIDE CURB
- SIDEWALK POINT NUMBER
- GUTTER POINT NUMBER
- CONC. PAVEMENT NUMBER
- CURB POINT NUMBER
- MATCH EXISTING ELEV.
- (DND) - DO NOT DISTURB
- (UIP) - USE IN PLACE
- (ADJ) - ADJUST
- (REL) - RELOCATE
- (L) - LANDING

MATCHLINE STA. 674+40.00  
C BUS. LOOP 70

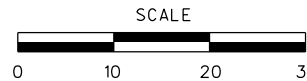


KIA DEALERSHIP LOT

JACKSON STREET

EX. MODOT ROW

NOTE: ALL STATION AND OFFSET TIES FOR PERMANENT AND TEMPORARY EASEMENTS ARE IN REFERENCE TO C BUS LOOP 70.



**PLAN SHEET**  
**SHEET 5 OF 10**

COLUMBIA, MO  
 BUS. 70  
 KIA DEALERSHIP



DATE PREPARED  
4/27/2026

ROUTE	STATE
BUS 70	MO
DISTRICT	SHEET NO.
CD	8
COUNTY	
BOONE	
JOB NO.	
JCD0124	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

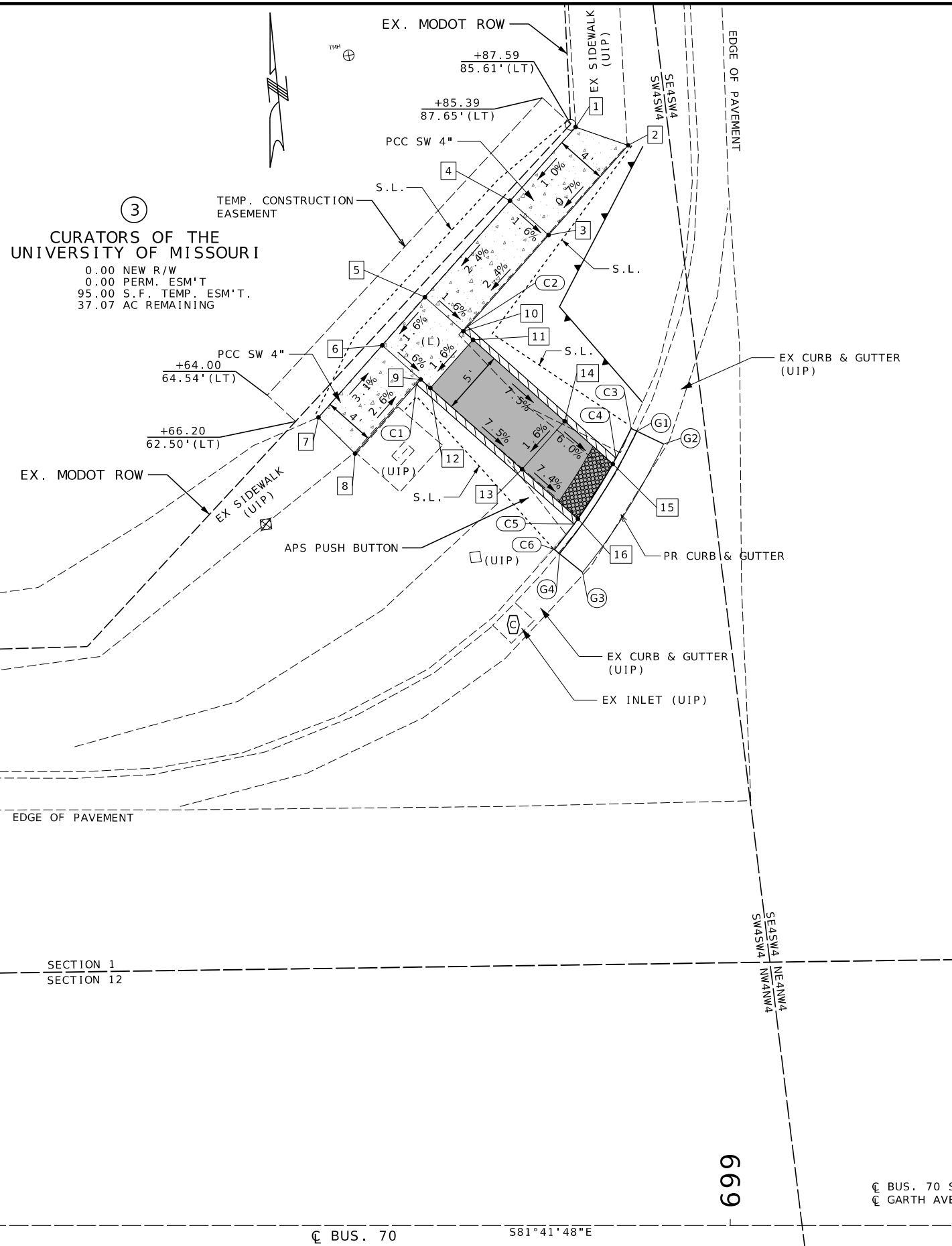
105 WEST CAPITOL  
 JEFFERSON CITY, MO 65102  
 1-888-ASK-MODOT (1-888-273-6636)

MISSOURI STATE CERTIFICATE OF AUTHORITY NO. 000866

**KLINGNER & ASSOCIATES, P.C.**  
 Engineers • Architects • Surveyors  
 www.klingner.com  
 Columbia, Missouri  
 573.356.5889

CITY OF COLUMBIA, MO  
T48N - R13W  
SEC 1

3  
CURATORS OF THE  
UNIVERSITY OF MISSOURI  
0.00 NEW R/W  
0.00 PERM. ESM'T  
95.00 S.F. TEMP. ESM'T.  
37.07 AC REMAINING



SIDEWALK ELEVATIONS

BUS. 70 ALIGNMENT			
POINT	STATION	OFFSET	ELEV.
1	698+87.97	85.4' LT	754.60
2	698+92.06	73.4' LT	754.52
3	698+85.88	77.0' LT	754.46
4	698+82.88	79.7' LT	754.52
5	698+76.25	72.2' LT	754.28
6	698+72.94	68.4' LT	754.20
7	698+67.98	62.5' LT	754.43
8	698+70.82	60.0' LT	754.34
9	698+75.93	65.8' LT	754.14
10	698+79.25	69.5' LT	754.22
11	698+80.00	68.8' LT	754.2
12	698+76.68	65.1' LT	754.12
13	698+83.81	58.8' LT	753.41
14	698+87.13	62.5' LT	753.49
15	698+90.87	59.2' LT	753.19
16	698+88.16	54.9' LT	752.98

**LEGEND**

- DETECTABLE WARNING
- PR CURB RAMP
- PR SIDEWALK
- SIDE CURB
- SIDEWALK POINT NUMBER
- GUTTER POINT NUMBER
- CONC. PAVEMENT NUMBER
- CURB POINT NUMBER
- MATCH EXISTING ELEV.
- DO NOT DISTURB
- USE IN PLACE
- ADJUST
- RELOCATE
- LANDING

**TEMPORARY CONTROL LEGEND**

- SILT FENCE
- CURB INLET CHECK

GUTTER ELEVATIONS

POINT	BUS. 70		ELEVATION
	STATION	OFFSET	
G1	698+95.74	61.7' LT	753.32
G2	698+94.82	60.8' LT	753.43
G3	698+88.51	50.8' LT	752.97
G4	698+86.72	52.2' LT	752.87

CURB ELEVATIONS

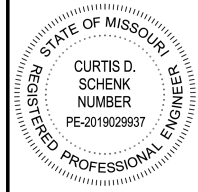
POINT	TOP ELEV.	CURB HEIGHT
C1	754.14	0"
C2	754.22	0"
C3	753.76	±6"
C4	753.69	6"
C5	753.48	6"
C6	753.27	±6"

GENERAL NOTES

1. THE CONTRACTOR SHALL VERIFY EXISTING FIELD CONDITIONS PRIOR TO CONSTRUCTION OF ANY RAMP OR SIDEWALK. ANY ADJUSTMENTS NECESSARY TO MEET EXISTING FIELD CONDITIONS SHALL BE APPROVED BY THE ENGINEER PRIOR TO CONSTRUCTION.
2. MAXIMUM SIDEWALK CROSS SLOPE = 2.0%
3. THE CURB RAMPS AND SIDEWALKS SHALL BE BUILT TO THE LINES AND GRADES SHOWN ON THE PLAN SHEETS. SEE STANDARD 608.50 FOR ADDITIONAL INFORMATION. SIDE CURB PAID FOR AS CONCRETE CURB RAMP OR CONCRETE SIDEWALK, 4 INCH.
4. ALL EXISTING SIDEWALK BEING REPLACED WITHIN THE PROJECT LIMITS SHALL BE REMOVED. SEE REMOVAL SCHEDULE FOR LOCATIONS.
5. ALL BEARINGS BASED ON MODIFIED STATE PLANE BEARINGS CENTRAL ZONE.
6. ANY WORK INDICATED ON THE PLANS THAT EXTENDS BEYOND THE PROJECT LIMITS IS CONSIDERED INCIDENTAL TO AND A PART OF THE CONSTRUCTION OF THIS PROJECT.

PLAN SHEET  
SHEET 6 OF 10

COLUMBIA, MO  
BUS. 70  
N.W. CORNER OF GARTH ST.



DATE PREPARED: 4/27/2026

ROUTE: BUS 70	STATE: MO
DISTRICT: CD	SHEET NO.: 9
COUNTY: BOONE	
JOB NO.: JCD0124	
CONTRACT ID.:	
PROJECT NO.:	
BRIDGE NO.:	

DESCRIPTION	DATE

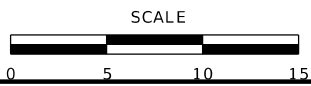
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-275-6636)

MISSOURI STATE CERTIFICATE OF AUTHORITY NO. 000866

**KLINGNER & ASSOCIATES, P.C.**  
Engineers • Architects • Surveyors  
Quincy, Illinois  
www.klingner.com  
217-223-3670

NOTE: ALL STATION AND OFFSET TIES FOR PERMANENT AND TEMPORARY EASEMENTS ARE IN REFERENCE TO CURB BUS LOOP 70.



NOTE: ALL STATION AND OFFSET TIES FOR PERMANENT AND TEMPORARY EASEMENTS ARE IN REFERENCE TO CL BUS LOOP 70.

CITY OF COLUMBIA, MO  
T48N - R13W  
SEC 12

699

700

CL BUS. 70

S81°41'48"E

CL BUS. 70

GENERAL NOTES

1. THE CONTRACTOR SHALL VERIFY EXISTING FIELD CONDITIONS PRIOR TO CONSTRUCTION OF ANY RAMP OR SIDEWALK. ANY ADJUSTMENTS NECESSARY TO MEET EXISTING FIELD CONDITIONS SHALL BE APPROVED BY THE ENGINEER PRIOR TO CONSTRUCTION.
2. MAXIMUM SIDEWALK CROSS SLOPE = 2.0%
3. THE CURB RAMP AND SIDEWALKS SHALL BE BUILT TO THE LINES AND GRADES SHOWN ON THE PLAN SHEETS. SEE STANDARD 608.50 FOR ADDITIONAL INFORMATION.
4. SIDE CURB PAID FOR AS CONCRETE CURB RAMP OR CONCRETE SIDEWALK, 4 INCH.
5. ALL EXISTING SIDEWALK BEING REPLACED WITHIN THE PROJECT LIMITS SHALL BE REMOVED. SEE REMOVAL SCHEDULE FOR LOCATIONS.
6. ALL BEARINGS BASED ON MODIFIED STATE PLANE BEARINGS CENTRAL ZONE.
7. ANY WORK INDICATED ON THE PLANS THAT EXTENDS BEYOND THE PROJECT LIMITS IS CONSIDERED INCIDENTAL TO AND A PART OF THE CONSTRUCTION OF THIS PROJECT.

GUTTER ELEVATIONS

POINT	BUS. 70		ELEVATION
	STATION	OFFSET	
G1	698+88.18	46.6' RT	752.55
G2	698+89.48	44.5' RT	752.60
G3	698+97.62	50.3' RT	752.50
G4	698+95.85	52.1' RT	752.39

SIDEWALK ELEVATIONS

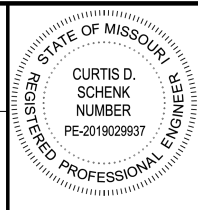
POINT	BUS. 70 ALIGNMENT		ELEV.
	STATION	OFFSET	
1	698+89.38	56.6' RT	752.94
2	698+93.79	51.1' RT	752.44
3	698+89.71	48.2' RT	752.50
4	698+85.49	53.4' RT	753.00
5	698+82.34	57.3' RT	753.07
6	698+86.23	60.4' RT	753.01
7	699+02.81	73.9' RT	752.90
8	699+07.26	71.0' RT	752.83
9	699+12.00	89.8' RT	752.18
10	699+07.15	91.1' RT	752.26
11	699+12.78	92.9' RT	752.12

CURB ELEVATIONS

POINT	TOP ELEV.	CURB HEIGHT	REMARKS
C1	752.94	0"	SW SIDE CURB
C2	752.82	±6"	GUTTER CURB
C3	752.94	6"	SW SIDE CURB
C4	753.00	6"	SW SIDE CURB
C5	752.97	±6"	GUTTER CURB
C6	753.57	6"	SW SIDE CURB
C7	753.72	8"	TYPE S CURB
C8	753.57	±6.5"	TYPE S CURB
C9	753.51	±6"	TYPE S CURB
C10	753.31	±6"	TYPE S CURB
C11	752.26	0"	TYPE S CURB
C12	752.62	6"	TYPE S CURB
C13	751.76	±6"	TYPE S CURB
C14	752.18	0"	SW SIDE CURB

CONC. PAVEMENT ELEVATIONS

POINT	BUS. 70		ELEVATION
	STATION	OFFSET	
P1	698+79.26	55.6' RT	753.04
P2	698+78.68	56.3' RT	753.06
P3	699+02.37	74.1' RT	752.81
P4	699+01.48	74.7' RT	752.81
P5	699+08.23	101.5' RT	752.13
P6	699+23.15	99.6' RT	751.24
P7	699+21.63	91.2' RT	751.44
P8	699+18.36	90.6' RT	751.27
P9	699+18.00	88.8' RT	751.32
P10	699+15.29	89.1' RT	751.26



DATE PREPARED	4/27/2026		
ROUTE	BUS 70	STATE	MO
DISTRICT	CD	SHEET NO.	10
COUNTY	BOONE		
JOB NO.	JCD0124		
CONTRACT ID.			

PROJECT NO.	
BRIDGE NO.	

DESCRIPTION	DATE

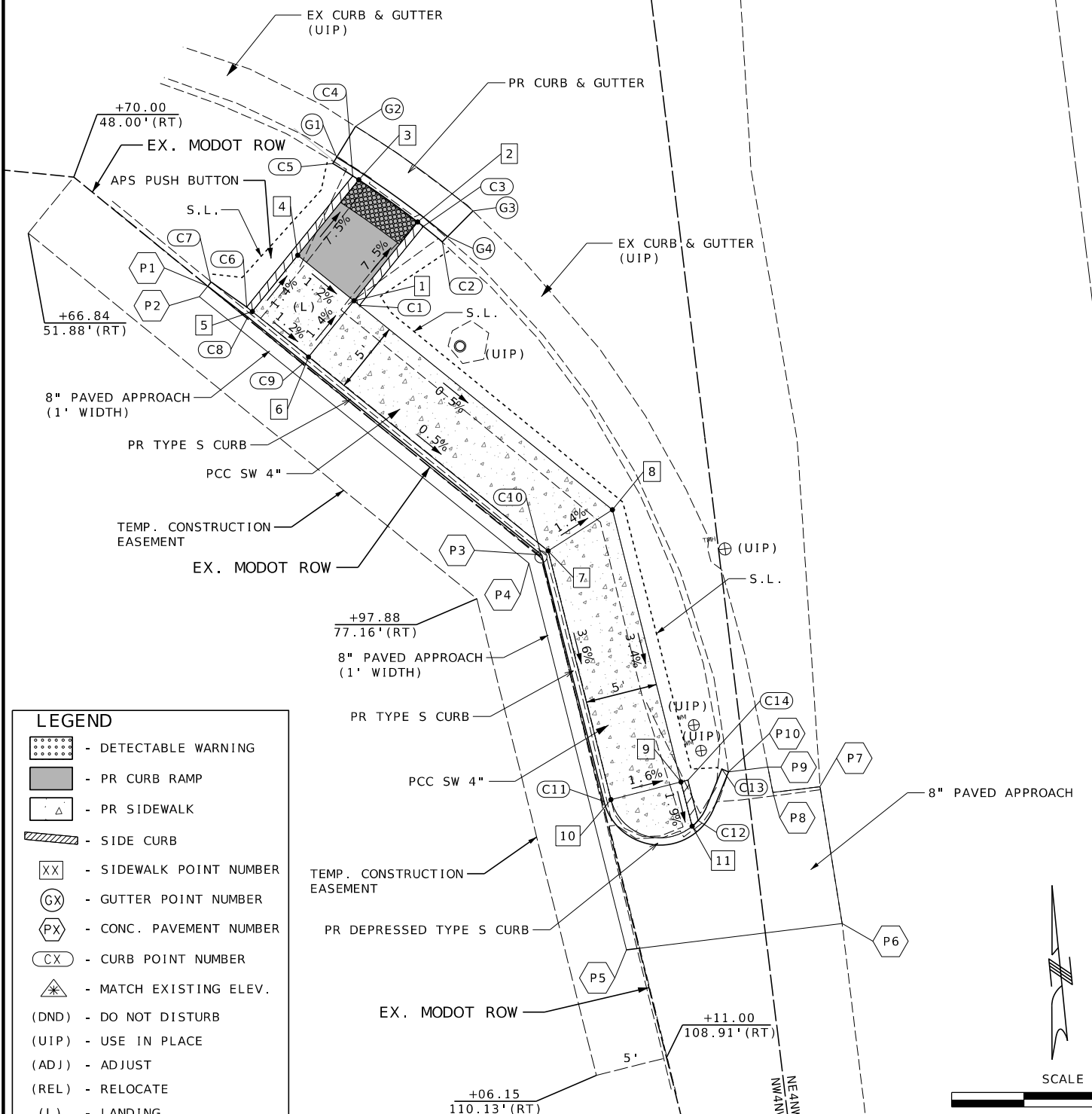
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-275-6636)

MISSOURI STATE CERTIFICATE OF AUTHORITY NO. 000866

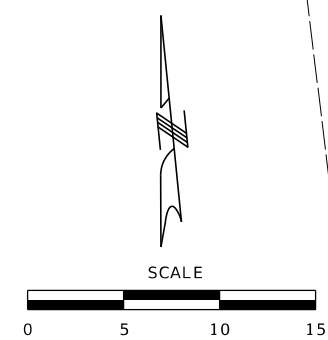
**KLINGNER & ASSOCIATES, P.C.**  
Engineers • Architects • Surveyors  
Quincy, Illinois  
www.klingner.com  
217-223-3670

PLAN SHEET  
SHEET 7 OF 10  
COLUMBIA, MO  
BUS. 70  
S.W. CORNER OF GARTH ST.



LEGEND

- DETECTABLE WARNING
- PR CURB RAMP
- PR SIDEWALK
- SIDE CURB
- SIDEWALK POINT NUMBER
- GUTTER POINT NUMBER
- CONC. PAVEMENT NUMBER
- CURB POINT NUMBER
- MATCH EXISTING ELEV.
- (DND) - DO NOT DISTURB
- (UIP) - USE IN PLACE
- (ADJ) - ADJUST
- (REL) - RELOCATE
- (L) - LANDING



**GENERAL NOTES**

1. THE CONTRACTOR SHALL VERIFY EXISTING FIELD CONDITIONS PRIOR TO CONSTRUCTION OF ANY RAMP OR SIDEWALK. ANY ADJUSTMENTS NECESSARY TO MEET EXISTING FIELD CONDITIONS SHALL BE APPROVED BY THE ENGINEER PRIOR TO CONSTRUCTION.
2. MAXIMUM SIDEWALK CROSS SLOPE = 2.0%
3. THE CURB RAMP AND SIDEWALKS SHALL BE BUILT TO THE LINES AND GRADES SHOWN ON THE PLAN SHEETS. SEE STANDARD 608.50 FOR ADDITIONAL INFORMATION.
4. SIDE CURB PAID FOR AS CONCRETE CURB RAMP OR CONCRETE SIDEWALK, 4 INCH.
5. ALL EXISTING SIDEWALK BEING REPLACED WITHIN THE PROJECT LIMITS SHALL BE REMOVED. SEE REMOVAL SCHEDULE FOR LOCATIONS.
6. ALL BEARINGS BASED ON MODIFIED STATE PLANE BEARINGS CENTRAL ZONE.
7. ANY WORK INDICATED ON THE PLANS THAT EXTENDS BEYOND THE PROJECT LIMITS IS CONSIDERED INCIDENTAL TO AND A PART OF THE CONSTRUCTION OF THIS PROJECT.

CITY OF COLUMBIA, MO  
T48N - R13W  
SEC 12

**LEGEND**

- [Dotted Box] - DETECTABLE WARNING
- [Shaded Box] - PR CURB RAMP
- [Box with Triangle] - PR SIDEWALK
- [Hatched Box] - SIDE CURB
- [Box with XX] - SIDEWALK POINT NUMBER
- [Box with GX] - GUTTER POINT NUMBER
- [Box with PX] - CONC. PAVEMENT NUMBER
- [Box with CX] - CURB POINT NUMBER
- [Triangle with X] - MATCH EXISTING ELEV.
- (DND) - DO NOT DISTURB
- (UIP) - USE IN PLACE
- (ADJ) - ADJUST
- (REL) - RELOCATE
- (L) - LANDING



DATE PREPARED 4/27/2026	
ROUTE BUS 70	STATE MO
DISTRICT CD	SHEET NO. 11
COUNTY BOONE	
JOB NO. JCD0124	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	



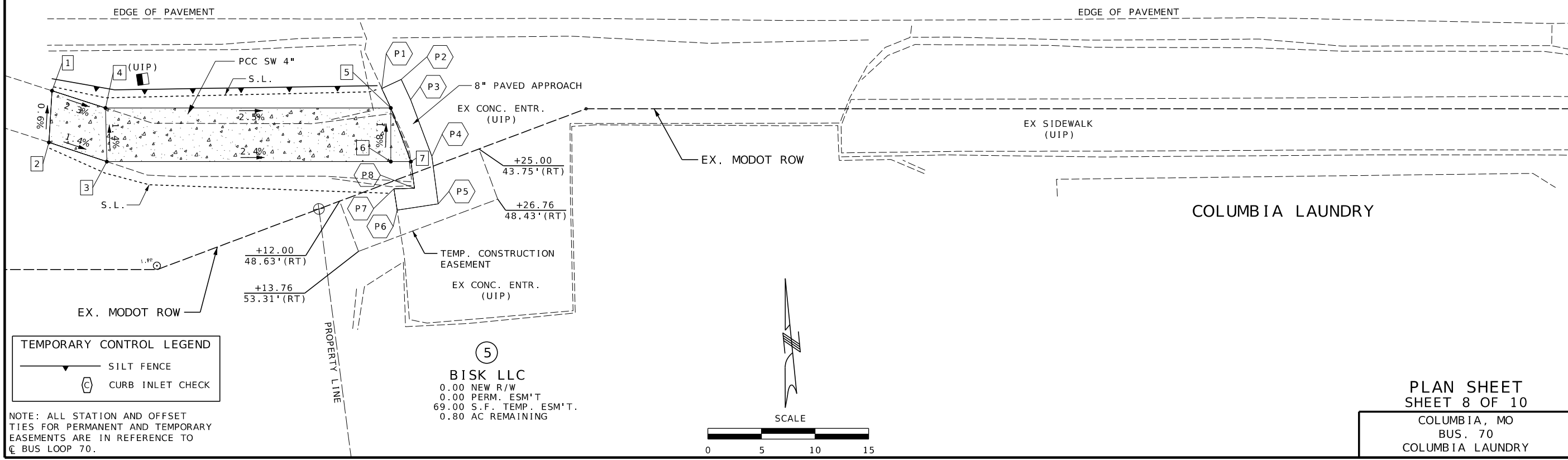
END PROJECT AT STA. 708+25.00 @ BUS. 70  
IMPROVEMENTS BEGIN AT A POINT LOCATED 2231.00',  
N81°37'49"W TO THE COMMON CORNER OF SECTIONS  
1, 2, 11 & 12, T48N, R13W

**SIDEWALK ELEVATIONS**

BUS. 70 ALIGNMENT			
POINT	STATION	OFFSET	ELEV.
1	707+85.17	38.3' RT	748.33
2	707+84.88	43.1' RT	748.36
3	707+90.27	44.9' RT	748.28
4	707+90.15	39.9' RT	748.21
5	708+16.78	39.9' RT	747.55
6	708+16.78	44.9' RT	747.64
7	708+18.65	44.9' RT	747.65

**CONC. PAVEMENT ELEV.**

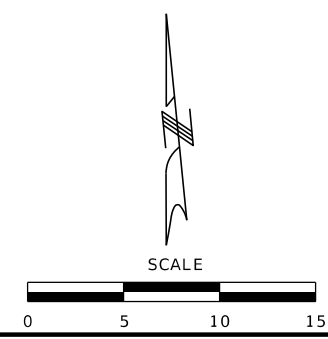
BUS. 70			
POINT	STATION	OFFSET	ELEVATION
P1	708+15.93	38.1' RT	747.47
P2	708+17.74	37.3' RT	747.36
P3	708+18.62	39.2' RT	747.45
P4	708+20.60	44.4' RT	747.64
P5	708+21.19	48.9' RT	747.84
P6	708+17.37	49.5' RT	748.00
P7	708+17.06	47.5' RT	747.95
P8	708+18.98	47.4' RT	747.75



**TEMPORARY CONTROL LEGEND**

- [Line with Triangle] SILT FENCE
- [Circle with C] CURB INLET CHECK

5  
**BISK LLC**  
0.00 NEW R/W  
0.00 PERM. ESM'T  
69.00 S.F. TEMP. ESM'T  
0.80 AC REMAINING



NOTE: ALL STATION AND OFFSET TIES FOR PERMANENT AND TEMPORARY EASEMENTS ARE IN REFERENCE TO @ BUS LOOP 70.

DATE	DESCRIPTION

MISSOURI STATE CERTIFICATE OF AUTHORITY NO. 000866

**KLINGNER & ASSOCIATES, P.C.**  
Engineers • Architects • Surveyors  
Quincy, Illinois  
www.klingner.com  
217-223-3670

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION  
105 WEST CAPITOL JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-273-6636)

**PLAN SHEET**  
SHEET 8 OF 10  
COLUMBIA, MO  
BUS. 70  
COLUMBIA LAUNDRY

CITY OF COLUMBIA, MO  
T48N - R13W  
SEC 12

BEGIN PROJECT AT STA. 712+40.00 @ BUS. 70  
@ BUS. 70

① BUS. 70 STA. 712+89.67=  
① PROVIDENCE RD. STA. 35+94.15

713

END PROJECT AT STA. 713+38.00 @ BUS 70

① BUS. 70 STA. 712+88.83=  
① PROVIDENCE RD. STA. 0+00.00

GENERAL NOTES

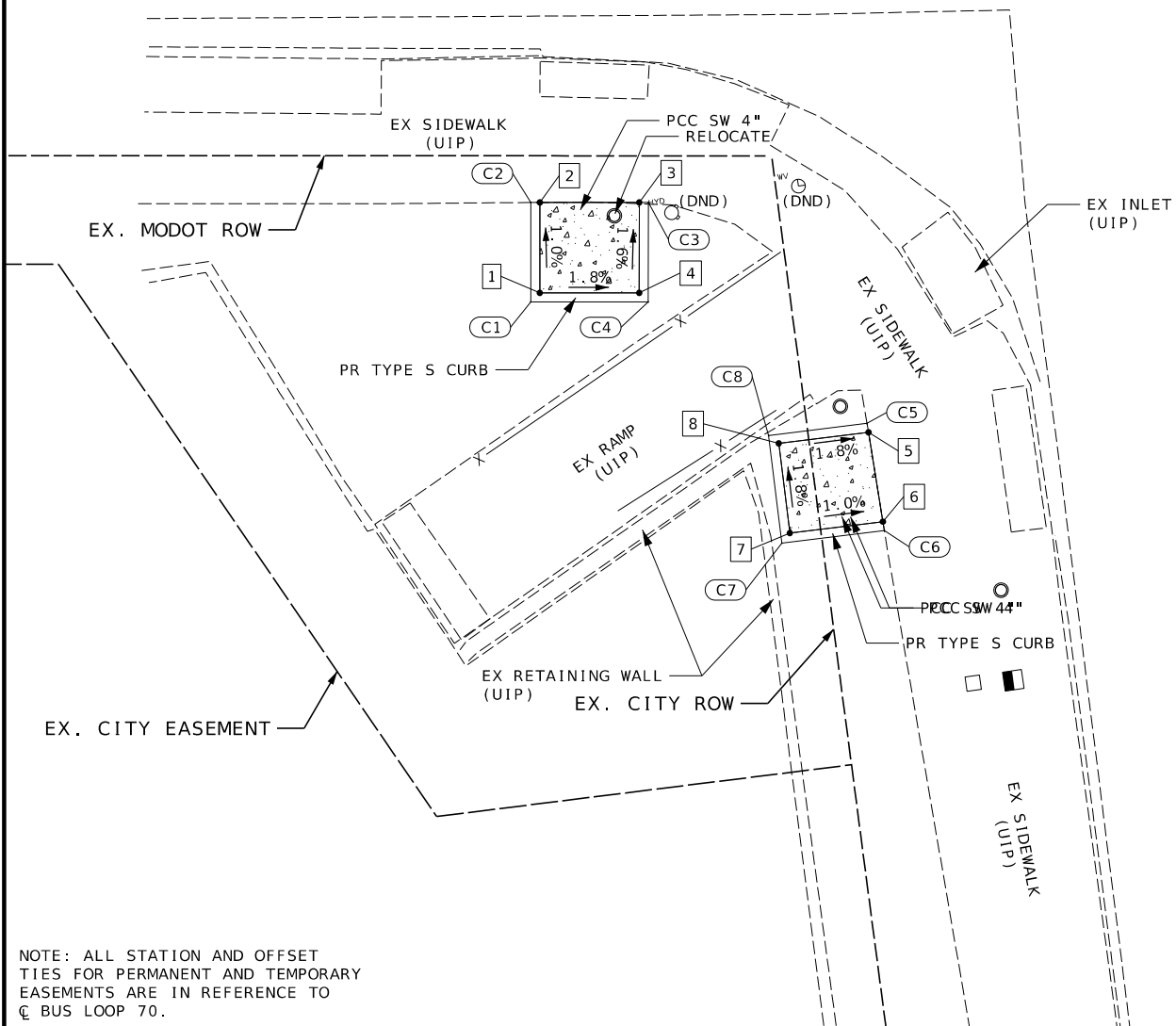
1. THE CONTRACTOR SHALL VERIFY EXISTING FIELD CONDITIONS PRIOR TO CONSTRUCTION OF ANY RAMP OR SIDEWALK. ANY ADJUSTMENTS NECESSARY TO MEET EXISTING FIELD CONDITIONS SHALL BE APPROVED BY THE ENGINEER PRIOR TO CONSTRUCTION.
2. MAXIMUM SIDEWALK CROSS SLOPE = 2.0%
3. THE CURB RAMP AND SIDEWALKS SHALL BE BUILT TO THE LINES AND GRADES SHOWN ON THE PLAN SHEETS. SEE STANDARD 608.50 FOR ADDITIONAL INFORMATION.
4. SIDE CURB PAID FOR AS CONCRETE CURB RAMP OR CONCRETE SIDEWALK, 4 INCH.
5. ALL EXISTING SIDEWALK BEING REPLACED WITHIN THE PROJECT LIMITS SHALL BE REMOVED. SEE REMOVAL SCHEDULE FOR LOCATIONS.
6. ALL BEARINGS BASED ON MODIFIED STATE PLANE BEARINGS CENTRAL ZONE.
7. ANY WORK INDICATED ON THE PLANS THAT EXTENDS BEYOND THE PROJECT LIMITS IS CONSIDERED INCIDENTAL TO AND A PART OF THE CONSTRUCTION OF THIS PROJECT.

BUS. 70 ALIGNMENT			
POINT	STATION	OFFSET	ELEV.
1	712+41.66	47.6' RT	737.22
2	712+41.66	42.6' RT	737.17
3	712+47.16	42.6' RT	737.04
4	712+47.16	47.6' RT	737.12
5	712+59.83	55.3' RT	737.15
6	712+60.63	60.2' RT	737.28
7	712+55.48	60.9' RT	738.33
8	712+54.87	55.9' RT	737.24

POINT	TOP ELEV.	CURB HEIGHT
C1	737.72	6"
C2	737.17	0"
C3	737.04	0"
C4	737.62	6"
C5	737.15	0"
C6	737.28	0"
C7	737.33	12"
C8	737.24	12"

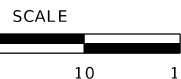
**LEGEND**

- [Grid Pattern] - DETECTABLE WARNING
- [Solid Gray] - PR CURB RAMP
- [Dashed Line] - PR SIDEWALK
- [Hatched] - SIDE CURB
- [XX] - SIDEWALK POINT NUMBER
- [GX] - GUTTER POINT NUMBER
- [PX] - CONC. PAVEMENT NUMBER
- [CX] - CURB POINT NUMBER
- [Triangle with X] - MATCH EXISTING ELEV.
- (DND) - DO NOT DISTURB
- (UIP) - USE IN PLACE
- (ADJ) - ADJUST
- (REL) - RELOCATE
- (L) - LANDING



SAWCUT AND REMOVE RAISED MEDIAN TO TYPE C BASE LIMIT. INSTALL 2 LF 6\" TYPE S CURB TO OBTAIN 10\" MAX REACH TO APS PUSH BUTTON

PCC SW 4\"  
PR TYPE S CURB



PLAN SHEET  
SHEET 9 OF 10  
COLUMBIA, MO  
BUS. 70  
S.W. CORNER PROVIDENCE ST.



DATE PREPARED 4/27/2026	
ROUTE BUS 70	STATE MO
DISTRICT CD	SHEET NO. 12
COUNTY BOONE	
JOB NO. JCD0124	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DESCRIPTION	DATE

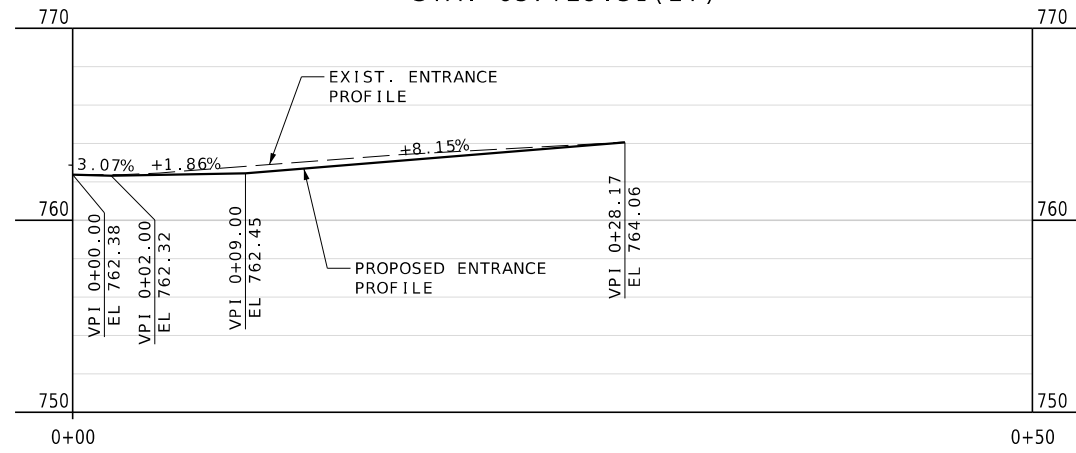
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-275-6636)

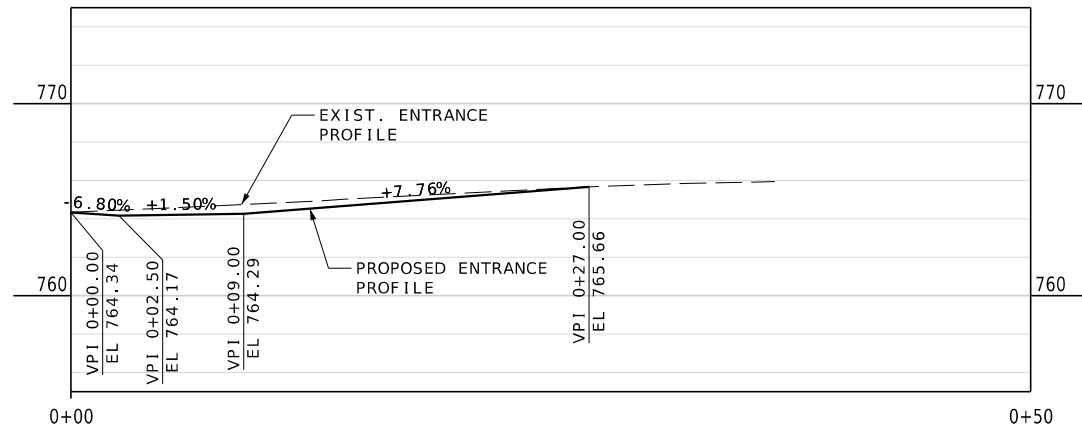
MISSOURI STATE CERTIFICATE OF AUTHORITY NO. 000866

**KLINGNER & ASSOCIATES, P.C.**  
Engineers • Architects • Surveyors  
Quincy, Illinois  
www.klingner.com  
217-223-3670

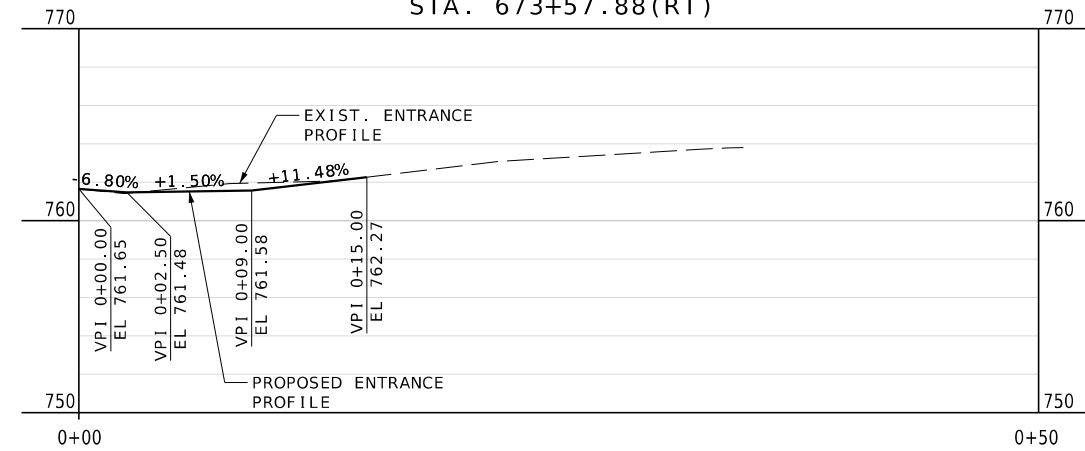
MEMORIAL PARK CEMETERY  
ENTRANCE PROFILE  
STA. 657+29.31(LT)



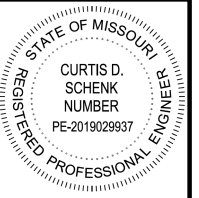
KIA DEALSHIP WEST  
ENTRANCE PROFILE  
STA. 672+35.05(RT)



KIA DEALSHIP EAST  
ENTRANCE PROFILE  
STA. 673+57.88(RT)



PLAN SHEET  
SHEET 10 OF 10  
COLUMBIA, MO  
BUS. 70  
ENTRANCE PROFILES



DATE PREPARED 4/27/2026	
ROUTE BUS 70	STATE MO
DISTRICT CD	SHEET NO. 13
COUNTY BOONE	
JOB NO. JCD0124	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-275-6636)

MISSOURI STATE CERTIFICATE OF AUTHORITY NO. 000866

**KLINGNER & ASSOCIATES, P.C.**  
Engineers • Architects • Surveyors  
Quincy, Illinois  
www.klingner.com  
217-223-3670

ALIGNMENT DATA  
EXISTING I-70 AND BUSINESS 70

△ CONTROL POINT 801:  
5/8" REBAR W/CAP  
N = 1140048.6997  
E = 1692662.7668  
ELEV. = 762.88

△ CONTROL POINT 802:  
SPINDLE IN CURB ISLAND  
N = 1139964.1607  
E = 1693147.2428  
ELEV. = 766.46

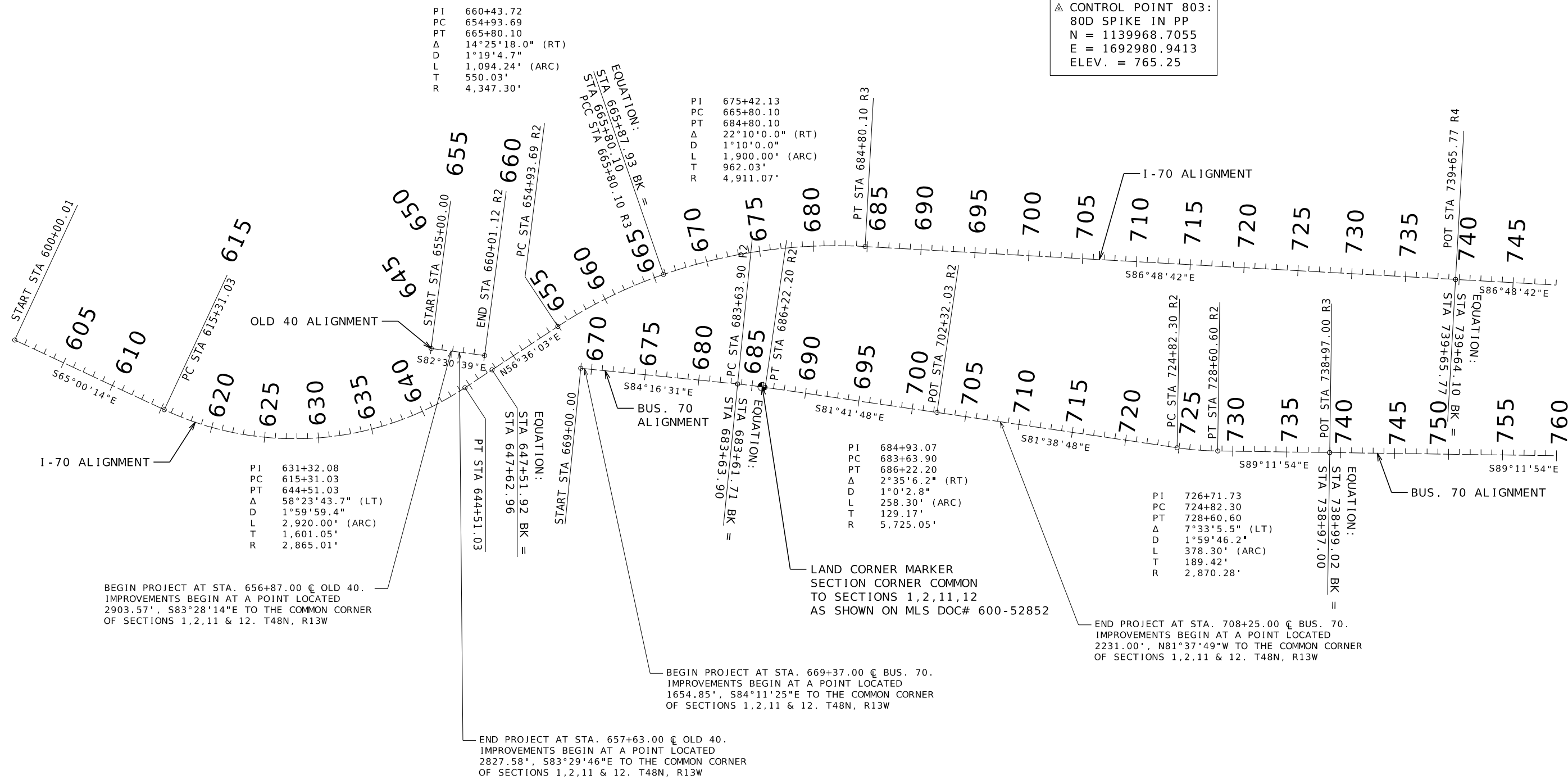
△ CONTROL POINT 803:  
80D SPIKE IN PP  
N = 1139968.7055  
E = 1692980.9413  
ELEV. = 765.25

PI 660+43.72  
PC 654+93.69  
PT 665+80.10  
Δ 14°25'18.0" (RT)  
D 1°19'4.7"  
L 1,094.24' (ARC)  
T 550.03'  
R 4,347.30'

PI 675+42.13  
PC 665+80.10  
PT 684+80.10  
Δ 22°10'0.0" (RT)  
D 1°10'0.0"  
L 1,900.00' (ARC)  
T 962.03'  
R 4,911.07'

PI 684+93.07  
PC 683+63.90  
PT 686+22.20  
Δ 2°35'6.2" (RT)  
D 1°0'2.8"  
L 258.30' (ARC)  
T 129.17'  
R 5,725.05'

PI 726+71.73  
PC 724+82.30  
PT 728+60.60  
Δ 7°33'5.5" (LT)  
D 1°59'46.2"  
L 378.30' (ARC)  
T 189.42'  
R 2,870.28'



BEGIN PROJECT AT STA. 656+87.00 @ OLD 40.  
IMPROVEMENTS BEGIN AT A POINT LOCATED  
2903.57', S83°28'14"E TO THE COMMON CORNER  
OF SECTIONS 1,2,11 & 12. T48N, R13W

BEGIN PROJECT AT STA. 669+37.00 @ BUS. 70.  
IMPROVEMENTS BEGIN AT A POINT LOCATED  
1654.85', S84°11'25"E TO THE COMMON CORNER  
OF SECTIONS 1,2,11 & 12. T48N, R13W

END PROJECT AT STA. 657+63.00 @ OLD 40.  
IMPROVEMENTS BEGIN AT A POINT LOCATED  
2827.58', S83°29'46"E TO THE COMMON CORNER  
OF SECTIONS 1,2,11 & 12. T48N, R13W

LAND CORNER MARKER  
SECTION CORNER COMMON  
TO SECTIONS 1,2,11,12  
AS SHOWN ON MLS DOC# 600-52852

END PROJECT AT STA. 708+25.00 @ BUS. 70.  
IMPROVEMENTS BEGIN AT A POINT LOCATED  
2231.00', N81°37'49"W TO THE COMMON CORNER  
OF SECTIONS 1,2,11 & 12. T48N, R13W

NOTES: MODIFIED STATE PLAN (CENTRAL ZONE) COORDINATES.



SPECIAL SHEET  
SHEET 1 OF 1  
COLUMBIA, MO  
I-70 AND BUS. 70  
ALIGNMENTS

DATE PREPARED 4/27/2026	
ROUTE BUS 70	STATE MO
DISTRICT CD	SHEET NO. 14
COUNTY BOONE	
JOB NO. JCD0124	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

**KLINGNER & ASSOCIATES, P.C.**  
Engineers • Architects • Surveyors  
Quincy, Illinois  
www.klingner.com  
217-223-3670

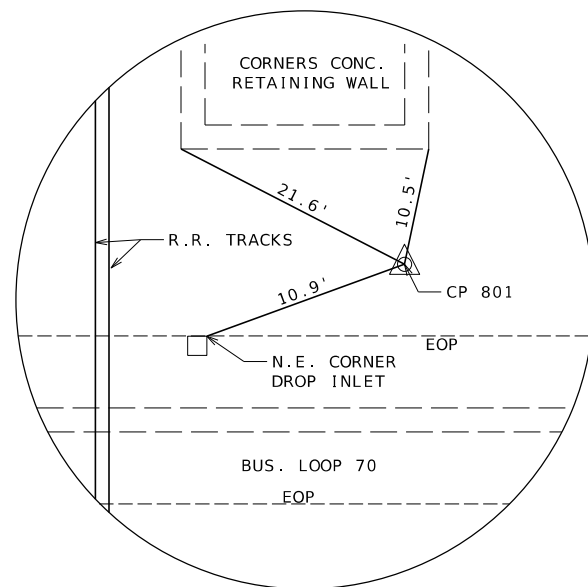
105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-275-6636)

ALL PROJECT COORDINATES HAVE BEEN PROJECTED FROM THE MISSOURI STATE PLANE COORDINATE (SPC) SYSTEM OF 1983 USING AN AVERAGE PROJECT PROJECTION (GRID TO GROUND) FACTOR. TO GET BACK TO STATE PLANE COORDINATES, MULTIPLY THE PROJECT COORDINATES BY THE AVERAGE GRID FACTOR AS SHOWN IN THE "REFERENCE CONTROL INFORMATION" PORTION OF THIS TABLE.

PROJECT COORDINATE INFORMATION	
COORDINATE SYSTEM	MODIFIED STATE PLAN
HORIZONTAL DATUM	NAD83
VERTICAL DATUM	NAVD88
GEOID MODEL	G2018U7
ELEVATIONS DETERMINED BY	DIFFERNETIAL LEVELING/GPS - MODOT VRS
PROJECT PROJECTION FACTOR	1.00009460
REFERENCE CONTROL INFORMATION	
COORDINATE SYSTEM	MO COORDINATE SYSTEM OF 1983
CONTROL STATION	MISSOURI CORS
DESIGNATION	MODOT COLUMBIA CORS ARP
CORS_ID	MOCO
PID	DN4500
LATITUDE	38°59'32.00211" N
LONGITUDE	92°17'04.88566" W
NORTHING (M)	350589.5150
EASTING (M)	518652.2980
ZONE	2402 (MO-CENTRAL)
PROJECT AVERAGE GRID FACTOR	0.99990503
EXAMPLE OF PROJECT COORDINATE TO S.P.C.	
PROJECT NORTHING X AVERAGE GRID FACTOR	= STATE PLANE NORTHING
PROJECT EASTING X AVERAGE GRID FACTOR	= STATE PLANE EASTING
LINEAR UNIT CONVERSION	
1 METER = 3.280833333 US SURVEY FEET (USFT)	

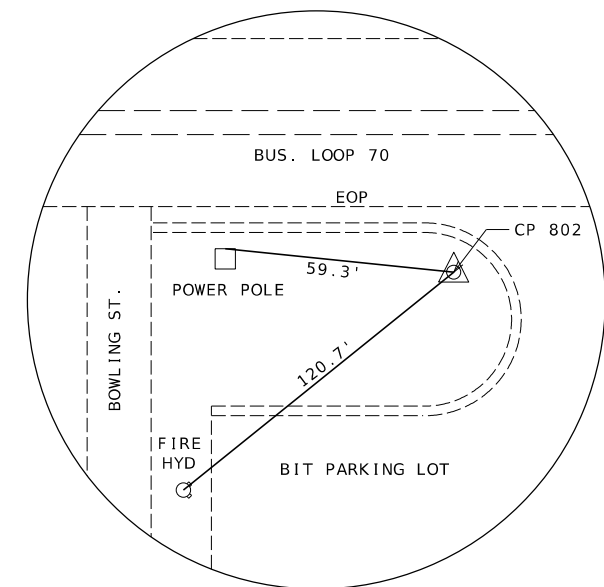
COORDINATE POINT LISTING								
SHEET NO	STATION	LOCATION	OFFSET (US FT)	MODIFIED STATE PLANE (GROUND)			DESCRIPTION	POINT ID
				NORTHING (US SURVEY FT)	EASTING (US SURVEY FT)	ELEVATION (US SURVEY FT)		
<b>PROJECT CONTROL POINTS</b>								
14	761+50.80 R3	BUS 70	38.04' LT	1,140,048.6997	1,692,662.7668	762.88	CONTROL POINT 801	801
14	764+70.06 R3	BUS 70	37.50' RT	1,139,968.7055	1,692,980.9413	765.25	BM1-19	803
14	766+36.41 R3	BUS 70	39.71' RT	1,139,964.1607	1,693,147.2428	766.46	CONTROL POINT 802	802
<b>OLD40A</b>								
14	655+00.00 R1	OLD 40 A	0.00'	1141006.9738	1682076.4182	-	POT	
14	660+01.12 R2	OLD 40 A	0.00'	1140941.8051	1682572.1531	-	POT	
<b>BL70</b>								
14	669+00.00 R1	BUS 70	0.00'	1140823.6215	1683463.3905	-	START	
14	683+61.71 R1	BUS 70	0.00'	1140677.8183	1684917.8151	-	EQUATION (BK)	
14	683+63.90 R2	BUS 70	0.00'	1140677.8183	1684917.8151	-	EQUATION (AH)	
14	683+63.90 R2	BUS 70	0.00'	1140677.8183	1684917.8151	-	PC	
14	684+93.07 R2	BUS 70	0.00'	1140664.9480	1685046.3442	-	PI	
14	686+22.20 R2	BUS 70	0.00'	1140646.2939	1685174.1621	-	PT	
14	702+32.03 R2	BUS 70	0.00'	1140413.8139	1686767.1152	-	POT	
14	724+82.30 R2	BUS 70	0.00'	1140086.9019	1688993.5180	-	PC	
14	726+71.73 R2	BUS 70	0.00'	1140059.3831	1689180.9327	-	PI	
14	728+60.60 R2	BUS 70	0.00'	1140056.7325	1689370.3384	-	PT	
14	738+99.02 R2	BUS 70	0.00'	1140042.2036	1690408.6568	-	EQUATION (BK)	
14	738+97.00 R3	BUS 70	0.00'	1140042.2036	1690408.6568	-	EQUATION (AH)	
14	738+97.00 R3	BUS 70	0.00'	1140042.2036	1690408.6568	-	POT	
14	781+03.60 R3	BUS 70	0.00'	1139983.3392	1694614.8411	-	EQUATION (BK)	
14	781+08.90 R4	BUS 70	0.00'	1139983.3392	1694614.8411	-	EQUATION (AH)	
14	781+08.90 R4	BUS 70	0.00'	1139983.3392	1694614.8411	-	POT	
14	806+75.35 R4	BUS 70	0.00'	1139947.4271	1697181.0407	-	END	

5/8" REBAR W/CAP  
BURIED 0.1' DEEP  
3' FROM BACK OF CURB  
38' EAST OF RR TRACKS  
±1215' EAST OF JCT BUS LOOP 70 & COLLEGE AVE



**CONTROL POINT 801**  
STA. 761+50.80 R3 - 38.04' LT (BUS 70)  
N. 1,140,048.6997  
E. 1,692,662.7668  
ELEV: 762.88

COTTON PICKER SPINDLE SET IN  
BIT. CURB ISLAND  
8' SOUTH OF EOP BUS LOOP 70  
141' EAST OF CL BOWLING ST.  
±1720' EAST OF JCT BUS LOOP 70 & COLLEGE AVE

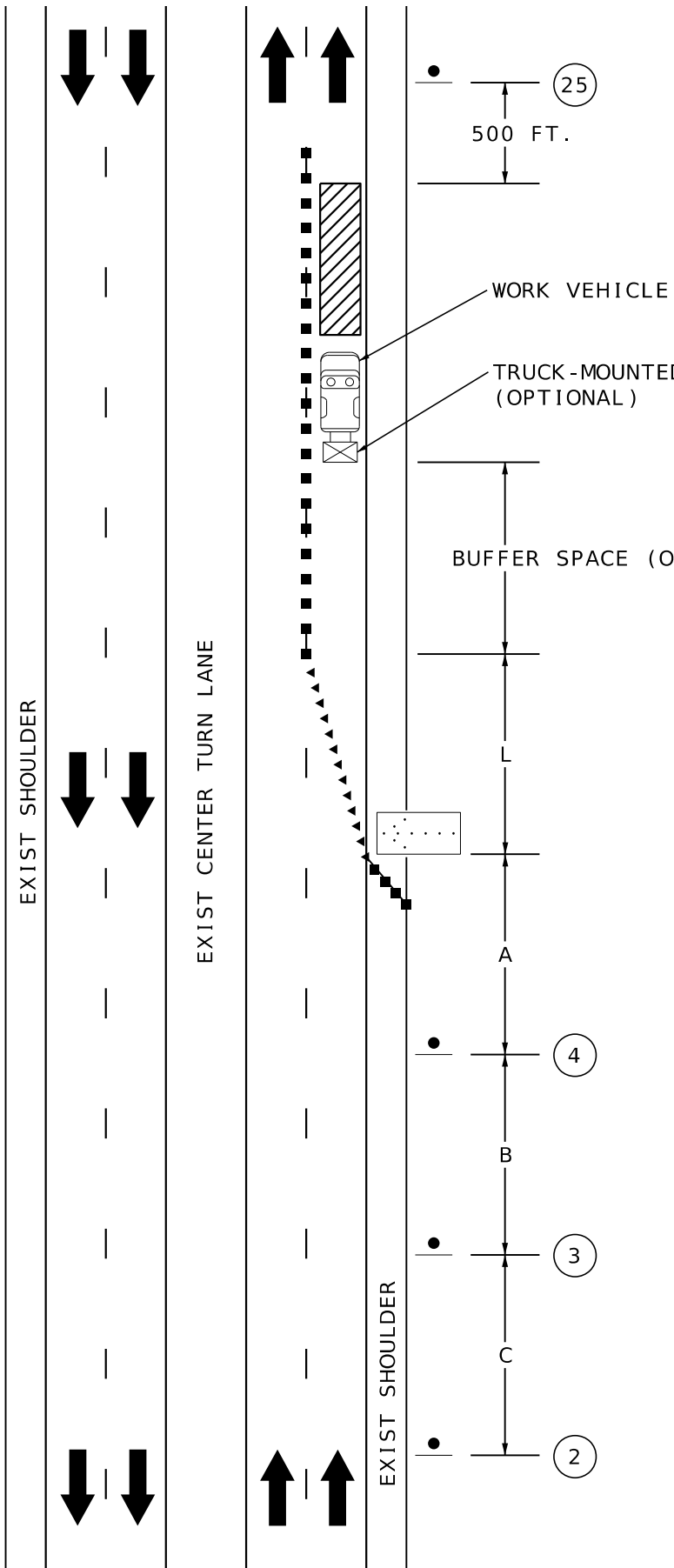


**CONTROL POINT 802**  
STA. 766+36.41 R3 - 39.71' RT (BUS 70)  
N. 1,139,964.1607  
E. 1,693,147.2428  
ELEV: 766.46

DATE PREPARED 4/27/2026	
ROUTE <b>BUS 70</b>	STATE <b>MO</b>
DISTRICT <b>CD</b>	SHEET NO. <b>15</b>
COUNTY <b>BOONE</b>	
JOB NO. <b>JCD0124</b>	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	
DESCRIPTION	
DATE	

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-275-6636)



SPEED MPH	MINIMUM TAPER LENGTHS (L) FOR LANE WIDTHS (W)			MAXIMUM CHANNELIZER SPACING	
	10 FT	11 FT	12 FT	THROUGH TAPER	THROUGH WORK AREA
	0-35	205	225	245	35
40-45	450	495	540	40	80
50-55	550	605	660	50	80
60-70	700	770	840	60	120

TAPER LENGTH (L):  
 $L = WS$  FOR 40 MPH OR MORE  
 $L = \frac{WS^2}{60}$  FOR 35 MPH OR LESS  
 FOR SHOULDER TAPER USE L/3

WHERE:  
 L = TAPER LENGTH IN FEET  
 W = LATERAL SHIFT IN FEET  
 S = POSTED SPEED IN MPH

LONGITUDINAL SPEED MPH	BUFFER SPACE
0-35	250
40-45	360
50-55	495
60-70	730

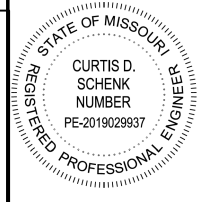
NOTE:  
 DIMENSIONS IN FEET UNLESS OTHERWISE NOTED.  
 (1) SPACING BETWEEN SIGNS AND SPACING BETWEEN LAST SIGN AND FLAGGER, BEGINNING OF TAPER, OR SIGNED CONDITION.  
 (2) SPACINGS MAY BE ADJUSTED AS NECESSARY TO MEET FIELD CONDITIONS.

ROAD TYPE	RECOMMENDED ADVANCE ROAD WARNING SIGN MINIMUM SPACING		
	DISTANCE BETWEEN SIGNS **		
	A	B	C
URBAN (Low Speed)*	100 feet	100 feet	100 feet
URBAN (High Speed)*	360 feet	360 feet	360 feet
RURAL	500 feet	500 feet	500 feet
EXPRESSWAY / FREEWAY	1000 feet	1000 feet	1000 feet

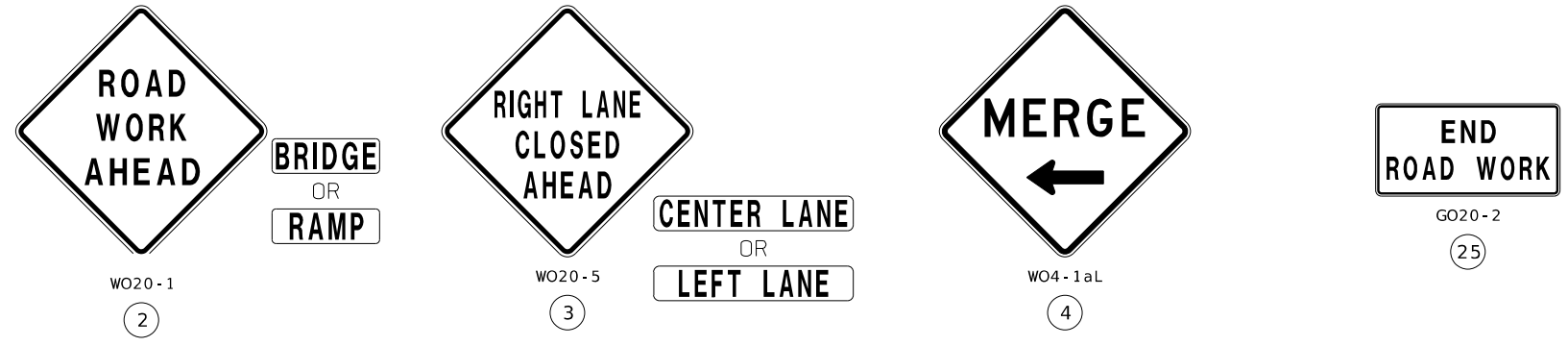
\* Speed category to be determined by the highway agency or owner of site roadways open to public travel.  
 \*\* The column headings A, B, C are the dimensions shown in the Figure.

TRAFFIC CONTROL LEGEND

- SIGN (SINGLE SIDED)
- DIRECTIONAL INDICATOR BARRICADE
- CHANNELIZERS
- FLASHING ARROW PANEL
- WORK VEHICLE
- TMA
- BARRICADE
- WORK AREA



DATE PREPARED 4/27/2026	
ROUTE BUS 70	STATE MO
DISTRICT CD	SHEET NO. 16
COUNTY BOONE	
JOB NO. JCD0124	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	



GENERAL NOTES:  
 NO DIRECT PAY WILL BE MADE FOR THE RELOCATION OF CHANNELIZERS, CONST. SIGNS, OR FLASHING ARROW PANEL.  
 ALL SIGNS SHALL BE PORTABLE MOUNTED AND ARE TO BE MOVED AS WORK PROGRESSES, UNLESS OTHERWISE NOTED. ALL TRAFFIC CONTROL ITEMS SHALL BE REMOVED FROM THE ROADWAY DURING NON-WORKING HOURS.  
 WORK WILL REQUIRE LANE CLOSURES UNLESS OTHERWISE APPROVED BY THE ENGINEER.  
 LAYOUT IS TYPICAL FOR EITHER DIRECTION. ALTERNATE TRAFFIC CONTROL MAY BE USED AS NEEDED AT THE APPROVAL OF THE ENGINEER. SEE STANDARD DRAWING 616.10 FOR ADDITIONAL DETAILS.  
 LOCATE FLASHING ARROW PANEL AT BEGINNING OF TAPER WHEN FEASIBLE. ARROW PANELS ARE ALWAYS LOCATED BEHIND CHANNELIZERS.

TRAFFIC CONTROL  
 SHEET 1 OF 5  
 MULTI-LANE OUTSIDE  
 LANE CLOSURE  
 NOT TO SCALE

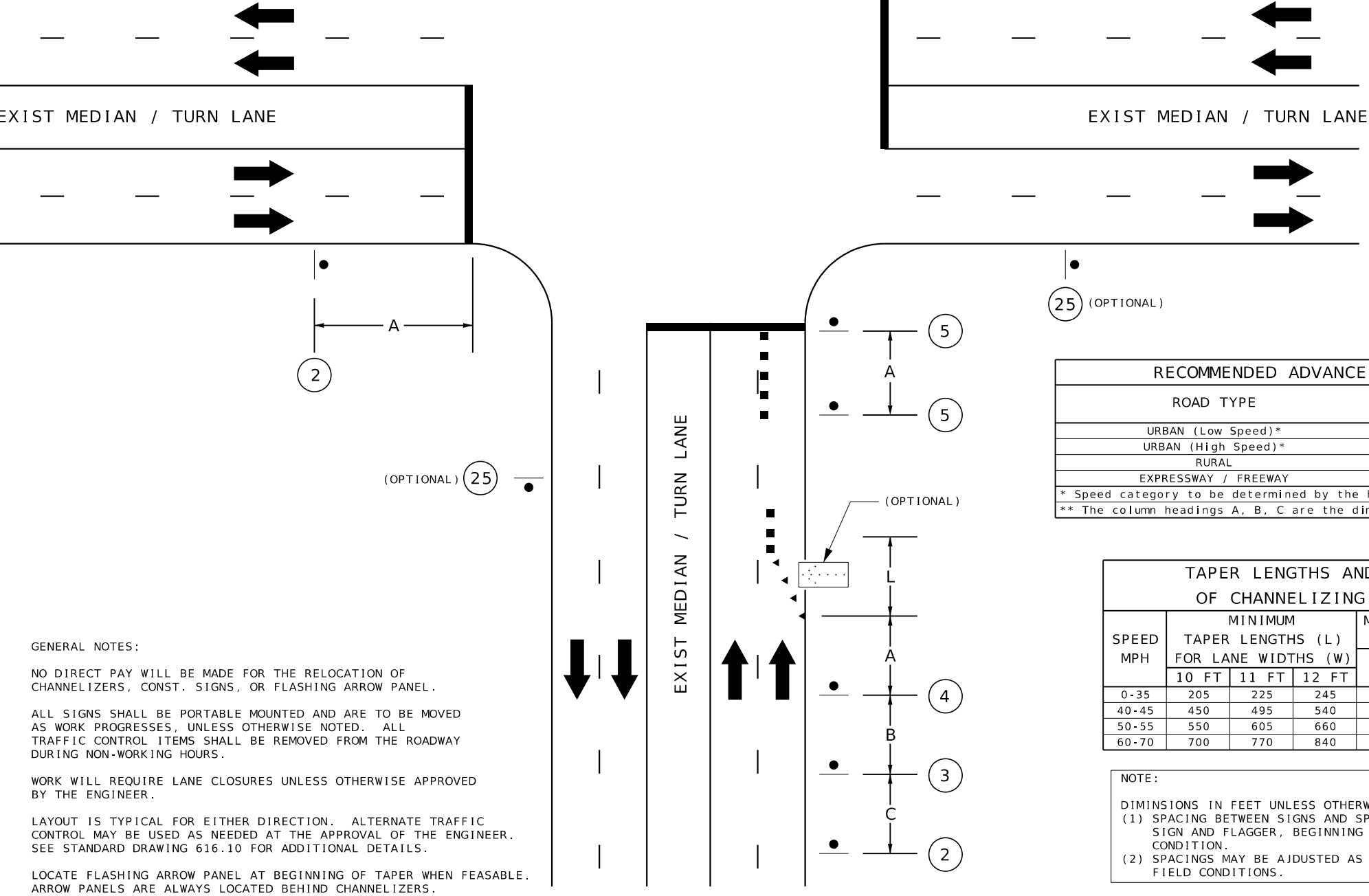
DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION  
 MODOT  
 105 WEST CAPITOL  
 JEFFERSON CITY, MO 65102  
 1-888-ASK-MODOT (1-888-275-6636)

MISSOURI STATE CERTIFICATE OF AUTHORITY NO. 000866  
**KLINGNER & ASSOCIATES, P.C.**  
 Engineers • Architects • Surveyors  
 Quincy, Illinois  
 217-223-3670  
 www.klingner.com

**TRAFFIC CONTROL LEGEND**

- SIGN (SINGLE SIDED)
- ◀ DIRECTIONAL INDICATOR BARRICADE
- CHANNELIZERS
- ⋯ FLASHING ARROW PANEL
- 🚚 WORK VEHICLE
- ⊠ TMA
- } BARRICADE
- ▨ WORK AREA



LONGITUDINAL SPEED MPH	BUFFER SPACE
0-35	250
40-45	360
50-55	495
60-70	730

ROAD TYPE	RECOMMENDED ADVANCE ROAD WARNING SIGN MINIMUM SPACING		
	DISTANCE BETWEEN SIGNS **		
	A	B	C
URBAN (Low Speed)*	100 feet	100 feet	100 feet
URBAN (High Speed)*	360 feet	360 feet	360 feet
RURAL	500 feet	500 feet	500 feet
EXPRESSWAY / FREEWAY	1000 feet	1000 feet	1000 feet

\* Speed category to be determined by the highway agency or owner of site roadways open to public travel.  
 \*\* The column headings A, B, C are the dimensions shown in the Figure.

SPEED MPH	TAPER LENGTHS AND SPACING OF CHANNELIZING DEVICES				
	MINIMUM TAPER LENGTHS (L) FOR LANE WIDTHS (W)			MAXIMUM CHANNELIZER SPACING	
	10 FT	11 FT	12 FT	THROUGH TAPER	THROUGH WORK AREA
0-35	205	225	245	35	40
40-45	450	495	540	40	80
50-55	550	605	660	50	80
60-70	700	770	840	60	120

TAPER LENGTH (L):  
 L = WS FOR 40 MPH OR MORE  
 L =  $\frac{WS^2}{60}$  FOR 35 MPH OR LESS  
 FOR SHOULDER TAPER USE L/3

WHERE:  
 L = TAPER LENGTH IN FEET  
 W = LATERAL SHIFT IN FEET  
 S = POSTED SPEED IN MPH

NOTE:  
 DIMENSIONS IN FEET UNLESS OTHERWISE NOTED.  
 (1) SPACING BETWEEN SIGNS AND SPACING BETWEEN LAST SIGN AND FLAGGER, BEGINNING OF TAPER, OR SIGNED CONDITION.  
 (2) SPACINGS MAY BE ADJUSTED AS NECESSARY TO MEET FIELD CONDITIONS.

**TRAFFIC CONTROL**  
 SHEET 2 OF 5  
 RIGHT LANE CLOSER  
 AT INTERSECTION  
 NOT TO SCALE

**GENERAL NOTES:**  
 NO DIRECT PAY WILL BE MADE FOR THE RELOCATION OF CHANNELIZERS, CONST. SIGNS, OR FLASHING ARROW PANEL.  
 ALL SIGNS SHALL BE PORTABLE MOUNTED AND ARE TO BE MOVED AS WORK PROGRESSES, UNLESS OTHERWISE NOTED. ALL TRAFFIC CONTROL ITEMS SHALL BE REMOVED FROM THE ROADWAY DURING NON-WORKING HOURS.  
 WORK WILL REQUIRE LANE CLOSURES UNLESS OTHERWISE APPROVED BY THE ENGINEER.  
 LAYOUT IS TYPICAL FOR EITHER DIRECTION. ALTERNATE TRAFFIC CONTROL MAY BE USED AS NEEDED AT THE APPROVAL OF THE ENGINEER. SEE STANDARD DRAWING 616.10 FOR ADDITIONAL DETAILS.  
 LOCATE FLASHING ARROW PANEL AT BEGINNING OF TAPER WHEN FEASIBLE. ARROW PANELS ARE ALWAYS LOCATED BEHIND CHANNELIZERS.

DATE PREPARED: 4/27/2026  
 ROUTE: BUS 70, STATE: MO  
 DISTRICT: CD, SHEET NO.: 17  
 COUNTY: BOONE  
 JOB NO.: JCD0124  
 CONTRACT ID.:  
 PROJECT NO.:  
 BRIDGE NO.:

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL  
 JEFFERSON CITY, MO 65102  
 1-888-ASK-MODOT (1-888-275-6636)

MISSOURI STATE CERTIFICATE OF AUTHORITY NO. 000866

**KLINGNER & ASSOCIATES, P.C.**  
 Engineers • Architects • Surveyors  
 Quincy, Illinois  
 www.klingner.com  
 217-223-9670



DATE PREPARED  
4/27/2026

ROUTE STATE  
BUS 70 MO

DISTRICT SHEET NO.  
CD 18

COUNTY  
BOONE

JOB NO.  
JCD0124

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

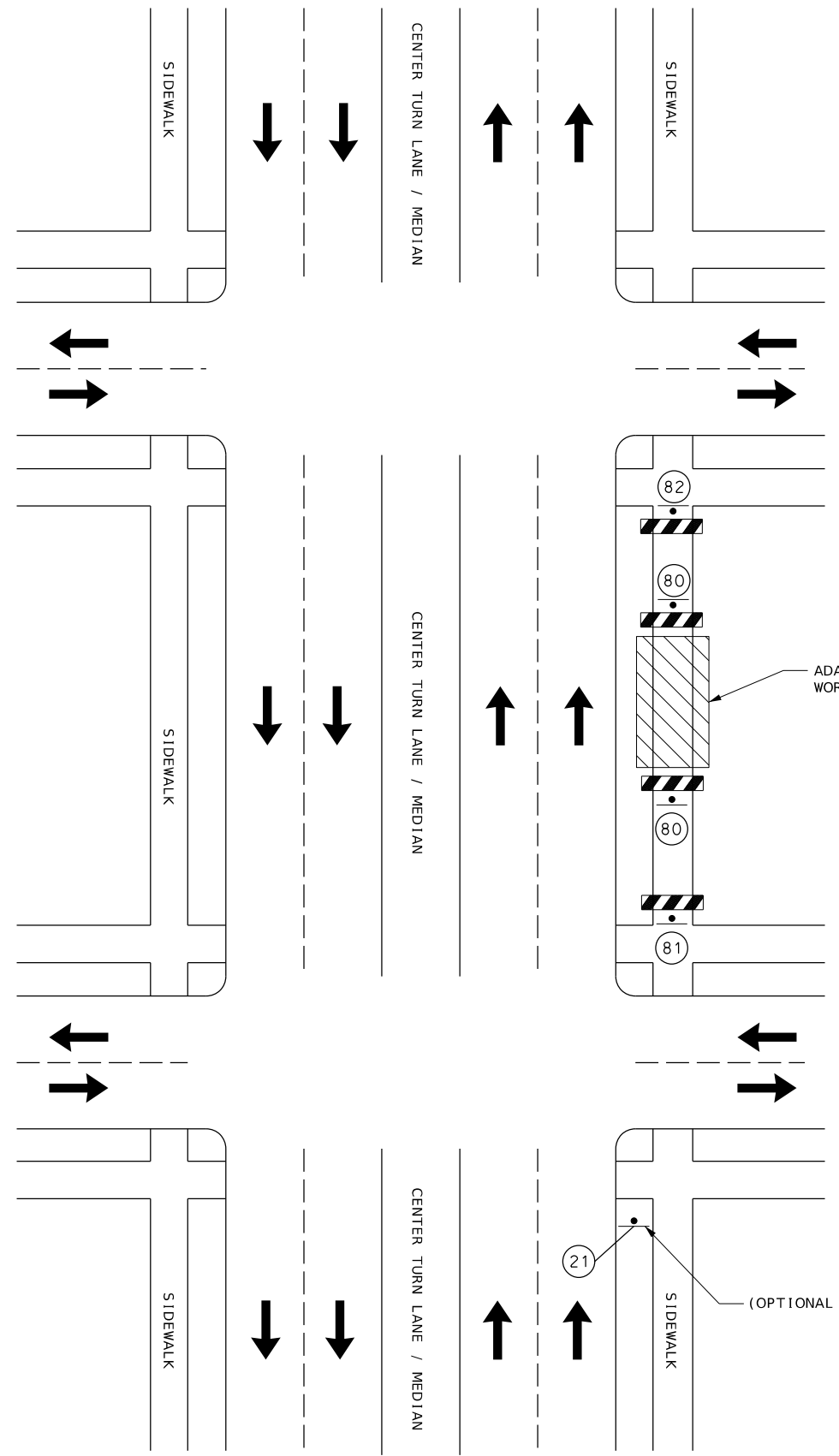
105 WEST CAPITOL JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-275-6636)

MISSOURI STATE CERTIFICATE OF AUTHORITY NO. 000866

Engineers • Architects • Surveyors  
Quincy, Illinois  
www.klingner.com  
217-223-3670

**TRAFFIC CONTROL LEGEND**

- SIGN (SINGLE SIDED)
- CHANNELIZER
- ▨ WORK AREA
- ▩ DETECTABLE PEDESTRIAN BARRICADE
- ← TRAFFIC FLOW DIRECTION



WO21 - 5  
21

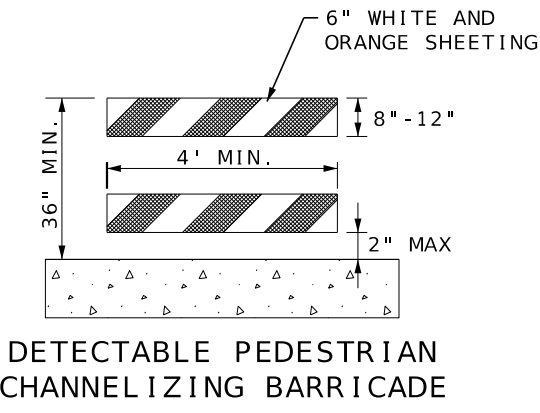
R9 - 9  
80

R9 - 11R  
82

R9 - 11L  
81

ADA IMPROVEMENT WORK AREA

(OPTIONAL SIGN)



**NOTES:**

TEMPORARY STOP SIGNS TO BE UTILIZED AT STREET INTERSECTIONS UNTIL PERMANENT SIGNS ARE IN PLACE.

INSTALL DETECTABLE PEDESTRIAN CHANNELIZING BARRICADES AND SIGNS AS DIRECTED BY THE ENGINEER.

ALL EXISTING SIGNS THAT CONFLICT WITH THE PROPOSED TRAFFIC CONTROL PLAN SHALL BE COVERED, NO DIRECT PAY.

RELOCATION OF TRAFFIC CONTROL SIGNS AND DEVICES AT NO DIRECT PAY.

**TRAFFIC CONTROL**  
SHEET 3 OF 5  
SIDEWALK CORNER CLOSURE  
NOT TO SCALE



DATE PREPARED  
4/27/2026

ROUTE STATE  
BUS 70 MO

DISTRICT SHEET NO.  
CD 19

COUNTY  
BOONE

JOB NO.  
JCD0124

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

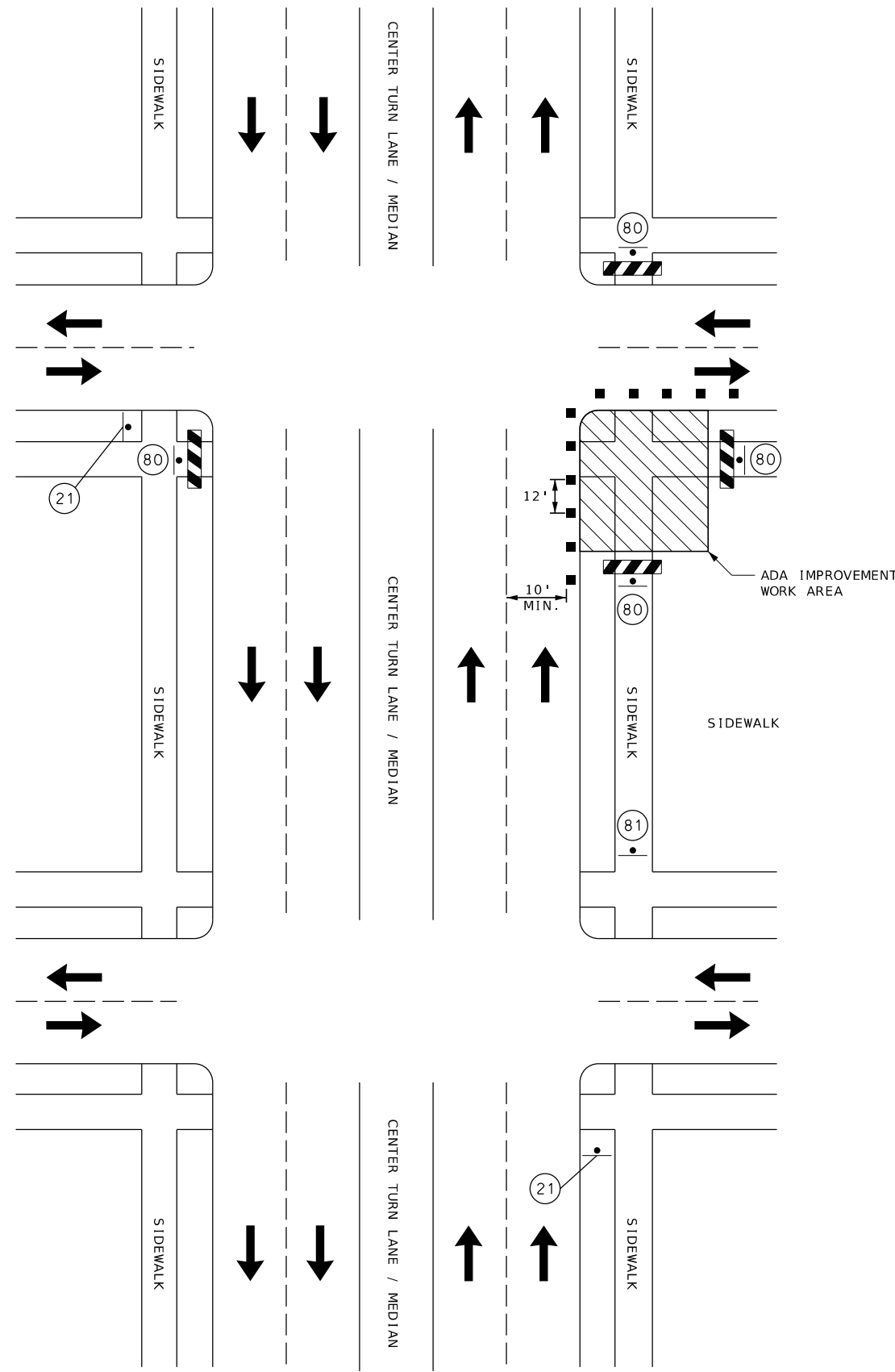
105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-275-6636)

MISSOURI STATE CERTIFICATE OF AUTHORITY NO. 000866

**KLINGNER & ASSOCIATES, P.C.**  
Engineers • Architects • Surveyors  
Quincy, Illinois  
www.klingner.com  
217-223-9670

### TRAFFIC CONTROL LEGEND

- SIGN (SINGLE SIDED)
- CHANNELIZER
- ▨ WORK AREA
- ▩ DETECTABLE PEDESTRIAN BARRICADE
- ← TRAFFIC FLOW DIRECTION

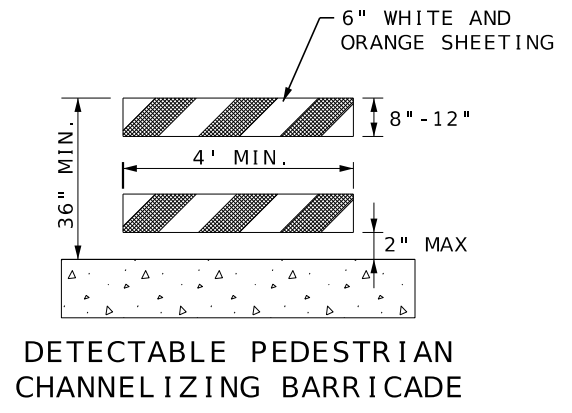


**SHOULDER WORK AHEAD**  
WO21-5  
(21)

**SIDEWALK CLOSED**  
R9-9  
(80)

**SIDEWALK CLOSED AHEAD**  
R9-11R  
(82)

**SIDEWALK CLOSED AHEAD**  
R9-11L  
(81)



NOTES:

TEMPORARY STOP SIGNS TO BE UTILIZED AT STREET INTERSECTIONS UNTIL PERMANENT SIGNS ARE IN PLACE.

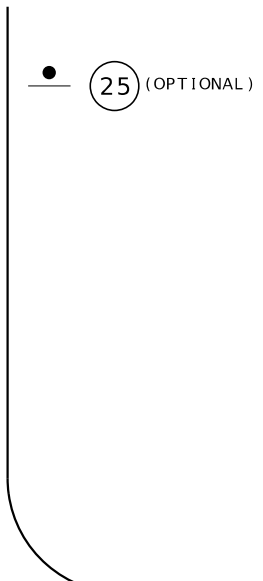
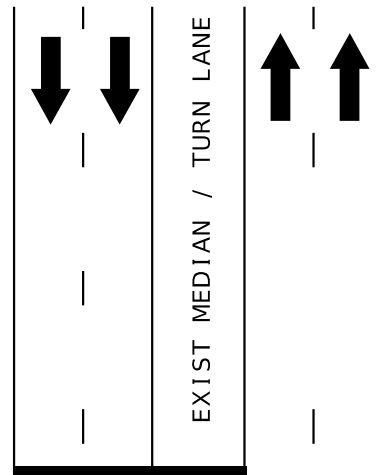
INSTALL DETECTABLE PEDESTRIAN CHANNELIZING BARRICADES AND SIGNS AS DIRECTED BY THE ENGINEER.

ALL EXISTING SIGNS THAT CONFLICT WITH THE PROPOSED TRAFFIC CONTROL PLAN SHALL BE COVERED, NO DIRECT PAY.

RELOCATION OF TRAFFIC CONTROL SIGNS AND DEVICES AT NO DIRECT PAY.

**TRAFFIC CONTROL**  
SHEET 4 OF 5  
SIDEWALK CORNER CLOSURE  
NOT TO SCALE

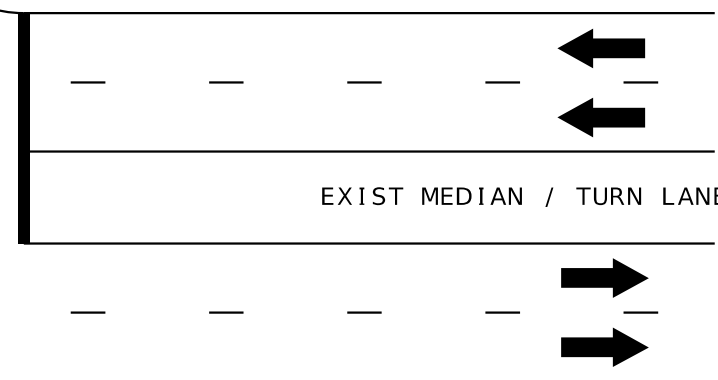
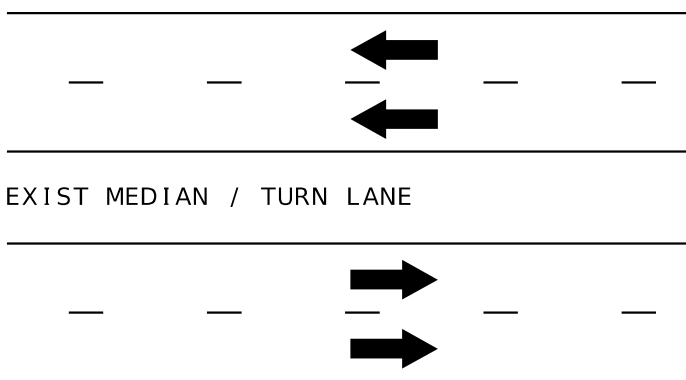
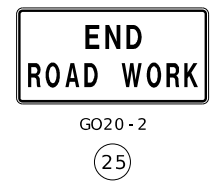
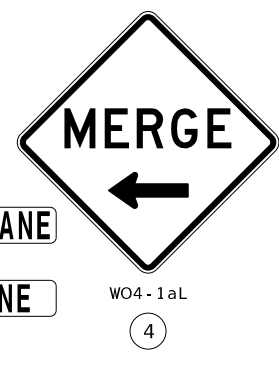
TRAFFIC CONTROL LEGEND	
•	SIGN (SINGLE SIDED)
◀	DIRECTIONAL INDICATOR BARRICADE
■	CHANNELIZERS
}	BARRICADE
▨	WORK AREA



BRIDGE  
OR  
RAMP



CENTER LANE  
OR  
LEFT LANE



LONGITUDINAL SPEED MPH	BUFFER SPACE
0-35	250
40-45	360
50-55	495
60-70	730

ROAD TYPE	DISTANCE BETWEEN SIGNS **		
	A	B	C
URBAN (Low Speed)*	100 feet	100 feet	100 feet
URBAN (High Speed)*	360 feet	360 feet	360 feet
RURAL	500 feet	500 feet	500 feet
EXPRESSWAY / FREEWAY	1000 feet	1000 feet	1000 feet

\* Speed category to be determined by the highway agency or owner of site roadways open to public travel.  
\*\* The column headings A, B, C are the dimensions shown in the Figure.

SPEED MPH	TAPER LENGTHS AND SPACING OF CHANNELIZING DEVICES					
	MINIMUM TAPER LENGTHS (L) FOR LANE WIDTHS (W)			MAXIMUM CHANNELIZER SPACING		
	10 FT	11 FT	12 FT	THROUGH TAPER	THROUGH WORK AREA	
0-35	205	225	245	35	40	
40-45	450	495	540	40	80	
50-55	550	605	660	50	80	
60-70	700	770	840	60	120	

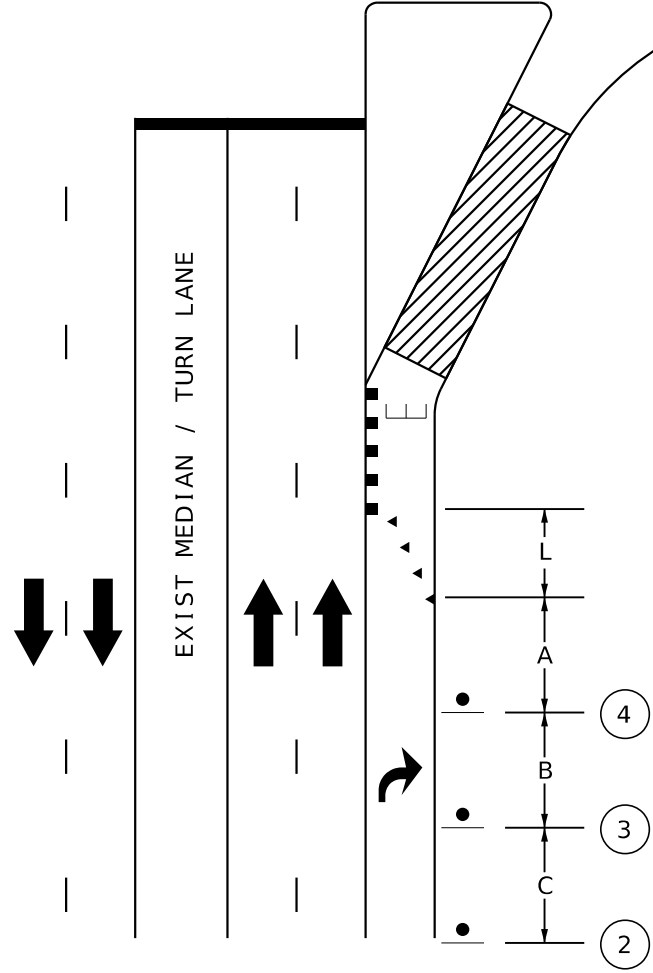
TAPER LENGTH (L):  
 $L = WS$  FOR 40 MPH OR MORE  
 $L = \frac{WS^2}{60}$  FOR 35 MPH OR LESS  
 FOR SHOULDER TAPER USE L/3

WHERE:  
 L = TAPER LENGTH IN FEET  
 W = LATERAL SHIFT IN FEET  
 S = POSTED SPEED IN MPH

NOTE:  
 DIMENSIONS IN FEET UNLESS OTHERWISE NOTED.  
 (1) SPACING BETWEEN SIGNS AND SPACING BETWEEN LAST SIGN AND FLAGGER, BEGINNING OF TAPER, OR SIGNED CONDITION.  
 (2) SPACINGS MAY BE ADJUSTED AS NECESSARY TO MEET FIELD CONDITIONS.

TRAFFIC CONTROL  
 SHEET 5 OF 5  
 RIGHT TURN LANE CLOSER  
 AT INTERSECTION  
 NOT TO SCALE

GENERAL NOTES:  
 NO DIRECT PAY WILL BE MADE FOR THE RELOCATION OF CHANNELIZERS, CONST. SIGNS, OR FLASHING ARROW PANEL.  
 ALL SIGNS SHALL BE PORTABLE MOUNTED AND ARE TO BE MOVED AS WORK PROGRESSES, UNLESS OTHERWISE NOTED. ALL TRAFFIC CONTROL ITEMS SHALL BE REMOVED FROM THE ROADWAY DURING NON-WORKING HOURS.  
 WORK WILL REQUIRE LANE CLOSURES UNLESS OTHERWISE APPROVED BY THE ENGINEER.  
 LAYOUT IS TYPICAL FOR EITHER DIRECTION. ALTERNATE TRAFFIC CONTROL MAY BE USED AS NEEDED AT THE APPROVAL OF THE ENGINEER. SEE STANDARD DRAWING 616.10 FOR ADDITIONAL DETAILS.  
 LOCATE FLASHING ARROW PANEL AT BEGINNING OF TAPER WHEN FEASIBLE. ARROW PANELS ARE ALWAYS LOCATED BEHIND CHANNELIZERS.



DATE PREPARED 4/27/2026	
ROUTE BUS 70	STATE MO
DISTRICT CD	SHEET NO. 20
COUNTY BOONE	
JOB NO. JCD0124	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL  
 JEFFERSON CITY, MO 65102  
 1-888-ASK-MODOT (1-888-275-6636)

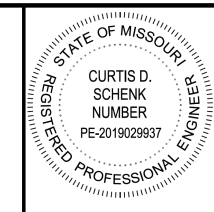
MISSOURI STATE CERTIFICATE OF AUTHORITY NO. 000866  
 Engineers • Architects • Surveyors  
 Quincy, Illinois  
 www.klingner.com  
 217-223-9670

TRAFFIC SIGNALS LEGEND

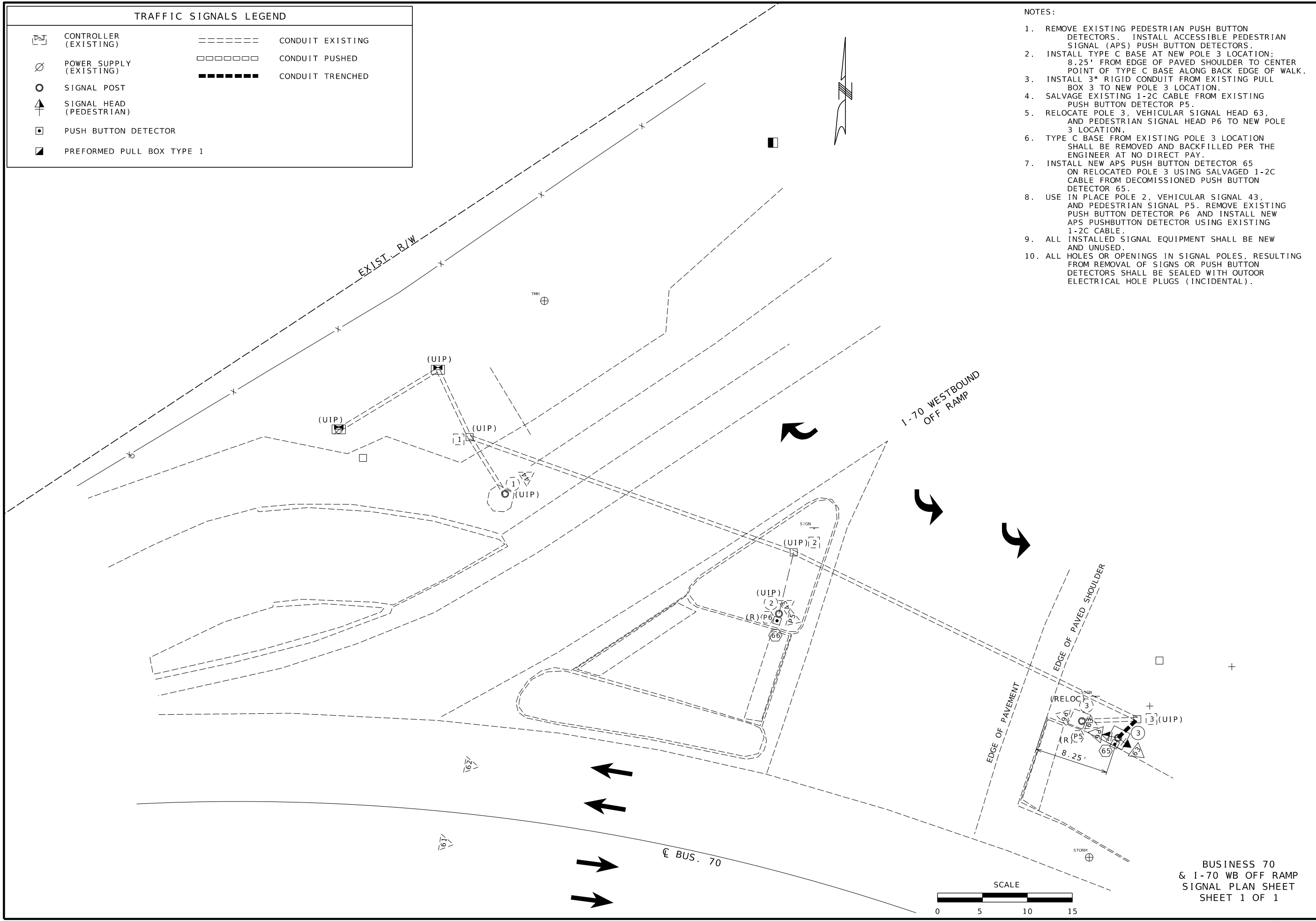
- |  |                           |  |                  |
|--|---------------------------|--|------------------|
|  | CONTROLLER (EXISTING)     |  | CONDUIT EXISTING |
|  | POWER SUPPLY (EXISTING)   |  | CONDUIT PUSHED   |
|  | SIGNAL POST               |  | CONDUIT TRENCHED |
|  | SIGNAL HEAD (PEDESTRIAN)  |  |                  |
|  | PUSH BUTTON DETECTOR      |  |                  |
|  | PREFORMED PULL BOX TYPE 1 |  |                  |

NOTES:

- REMOVE EXISTING PEDESTRIAN PUSH BUTTON DETECTORS. INSTALL ACCESSIBLE PEDESTRIAN SIGNAL (APS) PUSH BUTTON DETECTORS.
- INSTALL TYPE C BASE AT NEW POLE 3 LOCATION; 8.25' FROM EDGE OF PAVED SHOULDER TO CENTER POINT OF TYPE C BASE ALONG BACK EDGE OF WALK.
- INSTALL 3" RIGID CONDUIT FROM EXISTING PULL BOX 3 TO NEW POLE 3 LOCATION.
- SALVAGE EXISTING 1-2C CABLE FROM EXISTING PUSH BUTTON DETECTOR P5.
- RELOCATE POLE 3, VEHICULAR SIGNAL HEAD 63, AND PEDESTRIAN SIGNAL HEAD P6 TO NEW POLE 3 LOCATION.
- TYPE C BASE FROM EXISTING POLE 3 LOCATION SHALL BE REMOVED AND BACKFILLED PER THE ENGINEER AT NO DIRECT PAY.
- INSTALL NEW APS PUSH BUTTON DETECTOR 65 ON RELOCATED POLE 3 USING SALVAGED 1-2C CABLE FROM DECOMMISSIONED PUSH BUTTON DETECTOR 65.
- USE IN PLACE POLE 2, VEHICULAR SIGNAL 43, AND PEDESTRIAN SIGNAL P5. REMOVE EXISTING PUSH BUTTON DETECTOR P6 AND INSTALL NEW APS PUSHBUTTON DETECTOR USING EXISTING 1-2C CABLE.
- ALL INSTALLED SIGNAL EQUIPMENT SHALL BE NEW AND UNUSED.
- ALL HOLES OR OPENINGS IN SIGNAL POLES, RESULTING FROM REMOVAL OF SIGNS OR PUSH BUTTON DETECTORS SHALL BE SEALED WITH OUTDOOR ELECTRICAL HOLE PLUGS (INCIDENTAL).



DATE PREPARED 4/27/2026	
ROUTE BUS 70	STATE MO
DISTRICT CD	SHEET NO. 21
COUNTY BOONE	
JOB NO. JCD0124	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	



DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

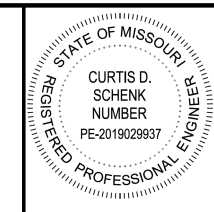
105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-275-6636)

MISSOURI STATE CERTIFICATE OF AUTHORITY NO. 000866

**KLINGNER & ASSOCIATES, P.C.**  
Engineers • Architects • Surveyors  
Quincy, Illinois  
www.klingner.com  
217-223-3670

BUSINESS 70 & I-70 WB OFF RAMP SIGNAL PLAN SHEET SHEET 1 OF 1





NOTE: CONTRACTOR SHALL FIELD VERIFY LOCATIONS OF EXISTING EQUIPMENT AND CONDUIT NETWORK.

CONDUIT (WITH #14 TRACER WIRE)

CABLE

Main data table with columns for FROM, TO, CENTER TO CENTER DISTANCE, LOOP DET., TRENCH (1-4"), PUSHED (2-4"), MEDIAN (2-4"), ON STRUCTURE (2-3"), REMARKS, POWER, CONTROL (2c #16, 5c #16, 7c #16, 3c #16), CLOSED LOOP INTERCONNECT (3 PAIR #16), LUMINAIRE (CONTROL 2c #12, POLE & BRACKET 1c #10), DETECTOR (1c #14 IN DUCT, 2c #14 LEAD-IN CABLE), FIBER (SINGLE-MODE, MULTI-MODE), and REMARKS.

Project Information Table: DATE PREPARED 4/27/2026, ROUTE BUS 70, STATE MO, DISTRICT CD, SHEET NO. 23, COUNTY BOONE, JOB NO. JCD0124, CONTRACT ID., PROJECT NO., BRIDGE NO.

DESCRIPTION Table with columns for DESCRIPTION and DATE.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION logo and address: 105 WEST CAPITOL JEFFERSON CITY, MO 65102 1-888-ASK-MODOT (1-888-273-6636)

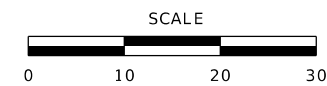
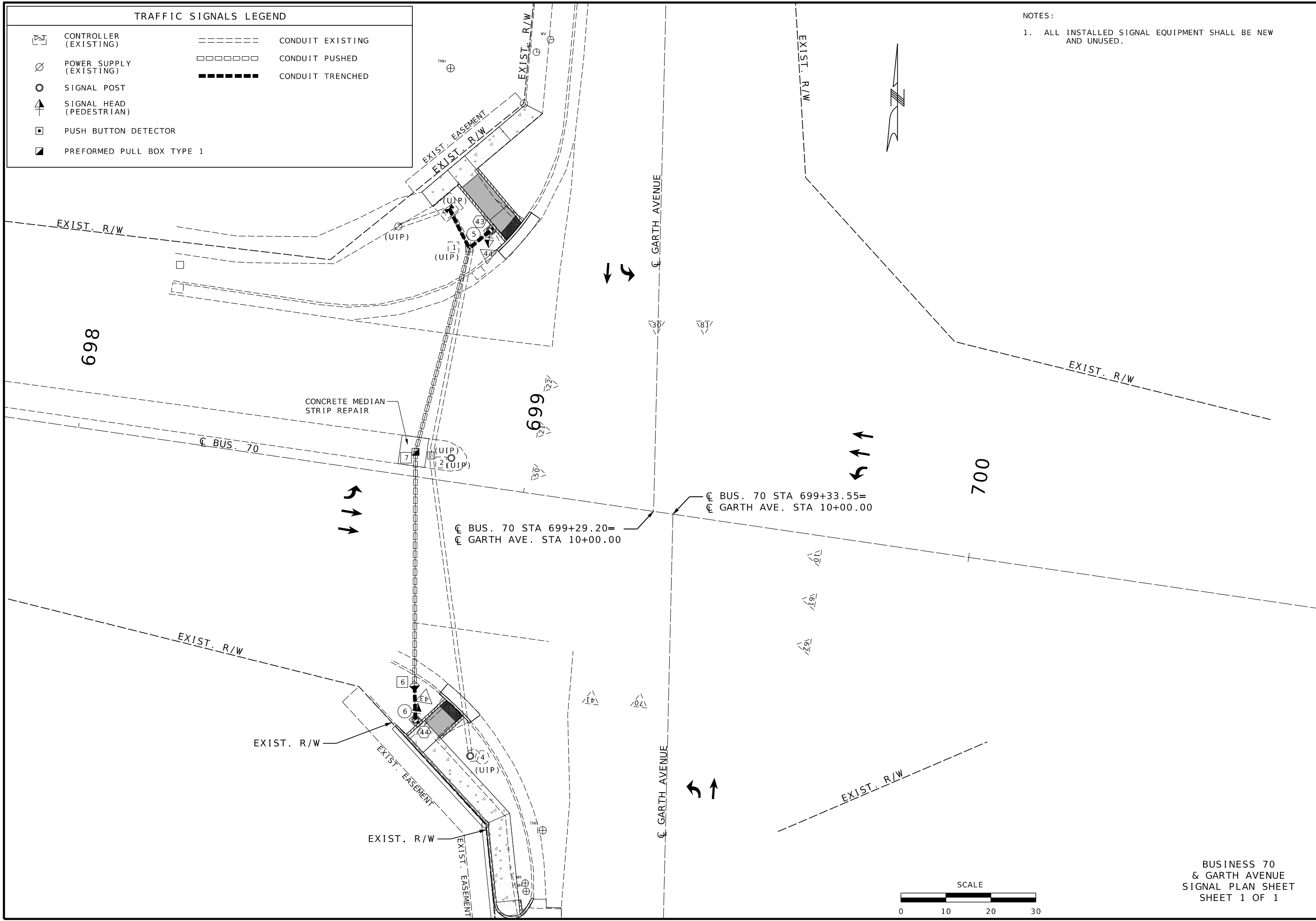
KLINGNER & ASSOCIATES, P.C. Missouri State Certificate of Authority No. 000866. Engineers • Architects • Surveyors. Quincy, Illinois www.klingner.com 217-223-3670



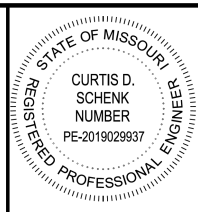
TRAFFIC SIGNALS LEGEND

- |  |                           |  |                  |
|--|---------------------------|--|------------------|
|  | CONTROLLER (EXISTING)     |  | CONDUIT EXISTING |
|  | POWER SUPPLY (EXISTING)   |  | CONDUIT PUSHED   |
|  | SIGNAL POST               |  | CONDUIT TRENCHED |
|  | SIGNAL HEAD (PEDESTRIAN)  |  |                  |
|  | PUSH BUTTON DETECTOR      |  |                  |
|  | PREFORMED PULL BOX TYPE 1 |  |                  |

NOTES:  
1. ALL INSTALLED SIGNAL EQUIPMENT SHALL BE NEW AND UNUSED.



BUSINESS 70 & GARTH AVENUE  
SIGNAL PLAN SHEET  
SHEET 1 OF 1



DATE PREPARED 4/27/2026	
ROUTE BUS 70	STATE MO
DISTRICT CD	SHEET NO. 25
COUNTY BOONE	
JOB NO. JCD0124	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

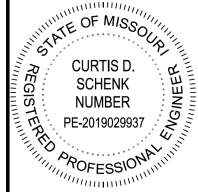
DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-275-6636)

MISSOURI STATE CERTIFICATE OF AUTHORITY NO. 000866

**KLINGNER & ASSOCIATES, P.C.**  
Engineers • Architects • Surveyors  
Quincy, Illinois  
www.klingner.com  
217-223-3670



Main table with columns: LOCATION (APPROACH, STATION, OFFSET), BASE (A, F, C), PULL BOX (PREFORMED, CONCRETE), POST (TYPE C & CL, TYPE B & BL), LUMINAIRE BRACKET ARM\*. Includes rows 5-7 and subtotal/totals.

SUBTOTAL TOTAL 0.88 2 2 2

Project information: DATE PREPARED 4/27/2026, ROUTE BUS 70, STATE MO, DISTRICT CD, COUNTY BOONE, JOB NO. JCD0124, CONTRACT ID.

SIGNAL HEADS table with columns: SPAN NUMBER, POST NUMBER, FACE NUMBER, LUMINAIRE, INDICATIONS \* (CONVENTIONAL, OPTICAL LIMITING), VISORS \*, LOUVERS \*, BACKPLATE\*, RETROREFLECTIVE BACKPLATE\*, BRACKET\*, ONE-FACE SECTION, TWO-FACE SECTIONS.

SPAN WIRE POLES table with columns: POST NUMBER, WOOD CLASS IV, STEEL (A10 BASE REQUIRED).

SUBTOTAL OPTICALLY LIMITED table with rows: SUBTOTAL CONVENTIONAL, SUBTOTAL COMBINATION OL & CONV, TOTAL OPTICALLY LIMITED, TOTAL CONVENTIONAL, TOTAL COMBINATION OL & CONV.

SPAN WIRE CABLE SPANS table with columns: SPAN NUMBER, FROM POST, TO POST, SINGLE MESSENGER ASSEMBLY (LIN. FT.), MESSENGER ASSEMBLY WITH TETHER (LIN. FT.).

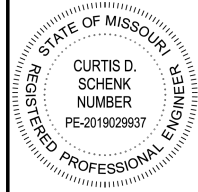
REMARKS: ALL LENGTHS AND SPACINGS ARE IN FEET UNLESS OTHERWISE INDICATED. \* ITEMS FOR WHICH SEPARATE PAYMENT WILL NOT BE MADE. \*\* SEE STANDARD PLANS 902.10 AND 902.30 FOR CONCRETE REQUIREMENTS ON BASES. \*\*\* USE D3-16 FOR ONE LINE. USE D3-18 FOR TWO LINE. SIGNAL STRUCTURES WHICH WILL EXCEED THE DIMENSION LIMITS SHOWN ON STANDARD PLAN SHEETS IN SECTION 902 AND ANY OTHER INSTALLATION WHERE THE DETAILS OF CONSTRUCTION ARE NOT FURNISHED IN THE CONTRACT PLANS, SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER...

- LEGEND: T - TOP MOUNT, S - SIDE MOUNT, C - SPANWIRE MOUNT, B - MAST ARM MOUNT

BUSINESS 70 / GARTH AVENUE INTERSECTION

Table with columns: DESCRIPTION, DATE. Includes Missouri Highways and Transportation Commission logo.

MISSOURI STATE CERTIFICATE OF AUTHORITY NO. 000866 KLINGNER & ASSOCIATES, P.C. Engineers • Architects • Surveyors Quincy, Illinois www.klingner.com 217-225-9670



NOTE: CONTRACTOR SHALL FIELD VERIFY LOCATIONS OF EXISTING EQUIPMENT AND CONDUIT NETWORK.

CONDUIT (WITH #14 TRACER WIRE)

CABLE

FROM	TO	CENTER TO CENTER DISTANCE	LOOP DET.	TRENCH				PUSHED			MEDIAN			ON STRUCTURE		REMARKS	FROM	TO	CENTER TO CENTER DISTANCE	POWER	CONTROL				CLOSED LOOP INTERCONNECT	LUMINAIRE		DETECTOR		FIBER		REMARKS		
				1"	2"	3"	4"	2"	3"	4"	2"	3"	4"	2"	3"						2c #16	5c #16	7c #16	3c #16		3 PAIR #16	CONTROL	POLE & BRACKET	1c #14 IN DUCT	2c #14 LEAD-IN CABLE	SINGLE-MODE		MULTI-MODE	
	1	10			13											EX. CONTROLLER- UIP	44	16				40												
1	7	47								45							43	16		39														
7	6	52								50							43	117			153													
6	6	8			9												44	117		152														
1	5	6			7																													
SUBTOTALS					29					95							SUBTOTALS					191	193											
TOTALS					29					95							TOTALS					191	193											

DATE PREPARED  
4/27/2026

ROUTE  
BUS 70

STATE  
MO

DISTRICT  
CD

SHEET NO.  
27

COUNTY  
BOONE

JOB NO.  
JCD0124

CONTRACT ID.

PROJECT NO.

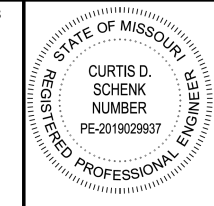
BRIDGE NO.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-275-6636)

MISSOURI STATE CERTIFICATE OF AUTHORITY NO. 000866

**KLINGNER & ASSOCIATES, P.C.**  
Engineers • Architects • Surveyors  
Quincy, Illinois  
www.klingner.com  
217-223-3670



POWER SUPPLY												
LOCATION			POWER SUPPLY ASSEMBLY		CIRCUIT BREAKER TRIP RATING*			LIGHTING CONTROL * (ON POWER SUPPLY)		SERVICE POLE		
APPROACH	STATION	OFFSET	DRAWING 902.15	DRAWING	CONTROLLER		POWER SUPPLY DISCONNECT		120 VOLT CONTROL CABINET	MAIN BREAKER	CONTRACT FURNISH	UTILITY COMPANY
					AUXILIARY BREAKER	CONT & SIGNAL LAMPS	MAIN BREAKER	SIGNALS LIGHTING				
UIP EXISTING			Type		15 Amps	Amps	Amps	Amps			Cl. Ft.	
			Type		15 Amps	Amps	Amps	Amps			Cl. Ft.	

CONTROLLER ASSEMBLY AND AUXILIARY EQUIPMENT																				
LOCATION			SYSTEM MASTER (CLOSED LOOP)		ACTUATED		ON-OFF* SWITCH		COORDINATION INTERFACE *				TIME * CLOCK	NEMA CABINET TYPE *			170 CABINET TYPE *		170 SOFTWARE *	
APPROACH	STATION	OFFSET	NEMA		NEMA		TYPE		12C/7C HARDWARE (1)		TIME BASE	CLOSED LOOP		FIBER	E EV DOUBLE			332 336S BITRAN WAPIT1		
			170		170		I	II	MASTER	LOCAL		NEMA	170							
UIP EXISTING																				

NEMA DETECTOR ASSIGNMENT									
CARD POSITION									
CHANNEL	1	2	3	4	5	6	7	8	9
2									

TOTAL NUMBER OF DETECTOR CARDS(2-CHANNEL) = (2)

DETECTOR SCHEDULE						
DETECTOR NUMBER	APPROACH	APS PUSH BUTTON	TYPE			VIDEO
			INDUCTION LOOP (2)			
			STANDARD	DELAY/EXTEND *	CALL UNIT *	
43	GARTH SB	1				
44	GARTH NB	1				
TOTAL		2				

\* ITEMS FOR WHICH SEPARATE PAYMENT WILL NOT BE MADE.  
 \*\*\* USE D3-1 FOR ONE LINE. USE D3-1B FOR TWO LINE.  
 (1) MODOT \*D\* PLUG SHALL BE WIRED INTO ALL NEMA CONTROLLERS WITH 7C HARDWARE INTERCONNECT.  
 (2) PAYMENT IS MADE FOR THE NUMBER OF 2-CHANNEL DETECTOR CARDS AS SHOWN BELOW THE ASSIGNMENT CHART.

NEMA LOAD SWITCH ASSIGNMENTS											
1	2	3	4	5	6	7	8	9	10	11	12

170 OUTPUT FILE ASSIGNMENTS							
FR1	FR2	FR3	FR4	MONITOR			

SIGNAL SIGNS					
QUANTITY	MUTCD SIGN NUMBER	SIZE	AREA	SIGN TOTAL AREA	SIGNAL SIGN MOUNTING HARDWARE
				ITEM NO. 90208.33	ITEM NO. 90208.34
		INCHES	SQ. FT.	SQ. FT.	EA.
	R10-10L	24 X 30	5.0		
	R10-10R	24 X 30	5.0		
	R3-5L	30 X 36	7.5		
	R3-5R	30 X 36	7.5		
	R3-5A	30 X 36	7.5		
	R3-6L	30 X 36	7.5		
	R3-6R	30 X 36	7.5		
	R3-2	24 X 24	4.0		
	R3-1	24 X 24	4.0		
	R3-3	24 X 24	4.0		
	D3-1 ***	VAR. X 18			
	D3-1B ***	VAR. X 18			
1	R10-3EL	9 X 15	0.9	0.9	1
1	R10-3ER	9 X 15	0.9	0.9	1
	R10-11A	24 X 30	5.0		
	R10-13	36 X 24	6.0		
	R10-27A	30 X 36	7.5		
SUBTOTAL				1.8	2
TOTAL				1.8	2

170 INPUT FILE ASSIGNMENTS														
CHANNEL	1	2	3	4	5	6	7	8	9	10	11	12	13	14
"I"	U													
	L													
"J"	U													
	L													

TOTAL NUMBER OF DETECTOR CARDS(2-CHANNEL) = (2)

170 AUXILIARY OUTPUT FILE							
FR5	FR6	X					

BUSINESS 70/ GARTH AVENUE INTERSECTION D-37C

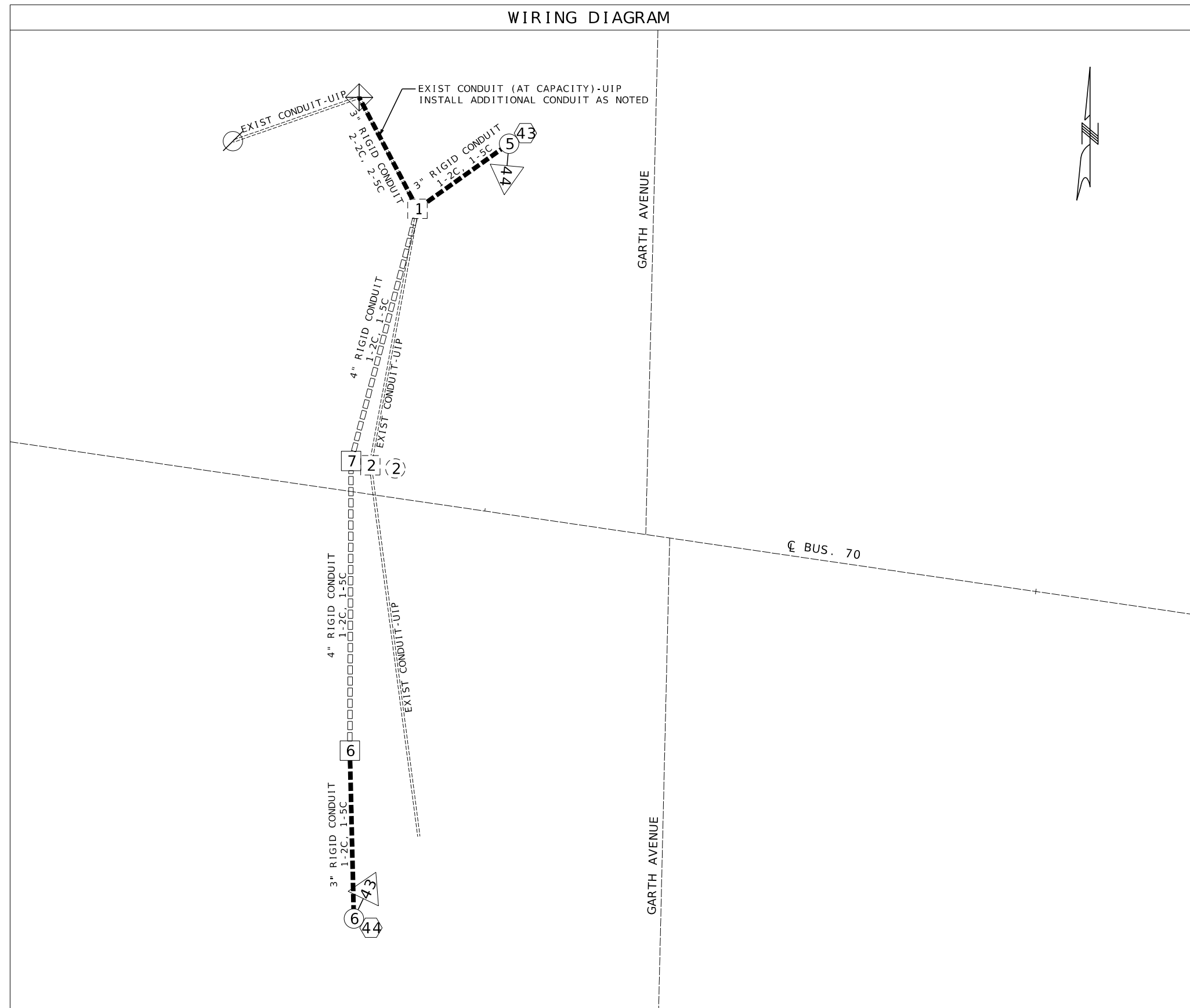
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL JEFFERSON CITY, MO 65102 1-888-ASK-MODOT (1-888-275-6636)

MISSOURI STATE CERTIFICATE OF AUTHORITY NO. 000866

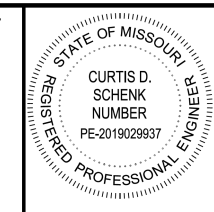
**KLINGNER & ASSOCIATES, P.C.**  
 Engineers • Architects • Surveyors  
 Quincy, Illinois www.klingner.com 217-223-3670

### WIRING DIAGRAM



### LEGEND

- □ □ □ □ PUSHED CONDUIT CONTAINING CABLE WITH SIZE NOTED
- ▬▬▬▬▬ TRENCHED CONDUIT CONTAINING CABLE WITH SIZE NOTED
- X-XC MULTI-CONDUCTOR CABLE #16 AWG (UNLESS OTHERWISE INDICATED)
- L IC #14 AWG DETECTOR LEAD-IN CABLE (2C TWISTED SHIELDED)
- ⊠ PULL BOX WITH NUMBER
- ⊙ POST WITH NUMBER
- ⊙ POST WITH MAST ARM
- ⊙ POST WITH MAST ARM AND LUMINAIRE
- ⊙ DETECTOR WITH NUMBER
- ⊠ SIGNAL HEAD WITH NUMBER
- ⊠ SIGNAL CONTROLLER
- ⊙ POWER SUPPLY
- ⊠ LIGHTING CONTROLLER



DATE PREPARED 4/27/2026	
ROUTE BUS 70	STATE MO
DISTRICT CD	SHEET NO. 29
COUNTY BOONE	
JOB NO. JCD0124	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-275-6636)

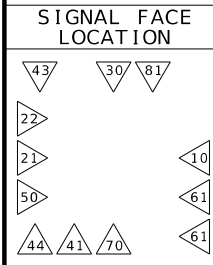
MISSOURI STATE CERTIFICATE OF AUTHORITY NO. 000866

**KLINGNER & ASSOCIATES, P.C.**  
Engineers • Architects • Surveyors  
www.klingner.com  
Quincy, Illinois  
217-223-3670

BUSINESS 70/ GARTH AVENUE

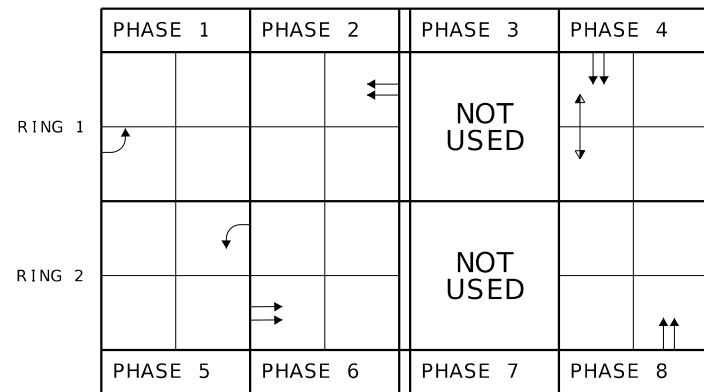
INTERSECTION

D-37D



TRAFFIC PHASING AND COLOR SEQUENCE - ACTUATED CONTROLLERS																						
PHASE 1		PHASE 2		PHASE 3		PHASE 4		PHASE 5		PHASE 6		PHASE 7		PHASE 8		PED Ø4 OVERLAP	PED Ø OVERLAP	PED Ø OVERLAP	PED Ø OVERLAP			
NOT USED		NOT USED		NOT USED		NOT USED		NOT USED		NOT USED		NOT USED		NOT USED		NOT USED		NOT USED				
FACE NUMBERS	10	21	22	41	70	50	61	62	81	30	43	44										
SIGNAL INDICATIONS	R	R		R	R		R	R		R	R		R		DW	DW				R		
	Y	YL		Y	Y		Y	Y		Y					FDW	FDW				Y		
	FYA			S	S		G	G		L		S	S		W	W				G		
	G		RT																		G	
DETECTOR ASSIGNMENTS																DETECTOR ASSIGNMENTS (PEDS. ONLY)	44	43				
																OVERLAP PARENT PHASES						

\*\*\* USE IN PLACE ALL EXISTING VEHICULAR SIGNAL EQUIPMENT AND PHASING. VEHICULAR SIGNAL PHASING FROM AS-BUILT PLANS INCLUDED FOR INFORMATION ONLY.



RING STRUCTURE

IF CALLED, ALL NON-CONFLICTING PHASES SHALL COMBINE AND TIME CONCURRENTLY. TIME TO BE DETERMINED BY THE ENGINEER AT SIGNAL TURN ON AND SET IN THE CONTROLLER BY THE CONTRACTOR.

LEGEND

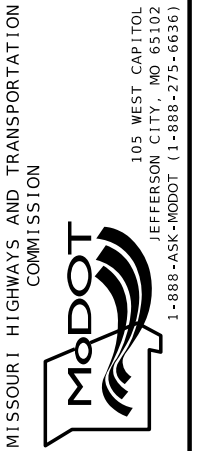
- ➔ - ACTUATED VEHICULAR MOVEMENT
- ➡ - PARTIALLY RESTRICTED ACTUATED VEHICULAR MOVEMENT
- ▷ - NON-ACTUATED VEHICULAR MOVEMENT
- ▷ - PARTIALLY RESTRICTED NON-ACTUATED VEHICULAR MOVEMENT
- ➔ - ACTUATED PEDESTRIAN MOVEMENT
- ▷ - NON-ACTUATED PEDESTRIAN MOVEMENT
- - VEHICLE STOPPED
- FDW - FLASHING DON'T WALK
- W - WALK
- DW - DON'T WALK
- R/W - RIGHT OF WAY INTERVAL
- YRt - YELLOW RIGHT ARROW
- RT - GREEN RIGHT ARROW
- LY - YL - YELLOW LEFT ARROW
- L - GREEN LEFT ARROW
- S - GREEN STRAIGHT AHEAD ARROW
- G - CIRCULAR GREEN
- Y - CIRCULAR YELLOW
- R - CIRCULAR RED
- RL - RED LEFT ARROW
- Ø - TRAFFIC PHASE
- AO - ALL OTHERS
- FR - FLASHING RED
- FY - FLASHING CIRCULAR YELLOW
- FYL - FLASHING YELLOW LEFT ARROW

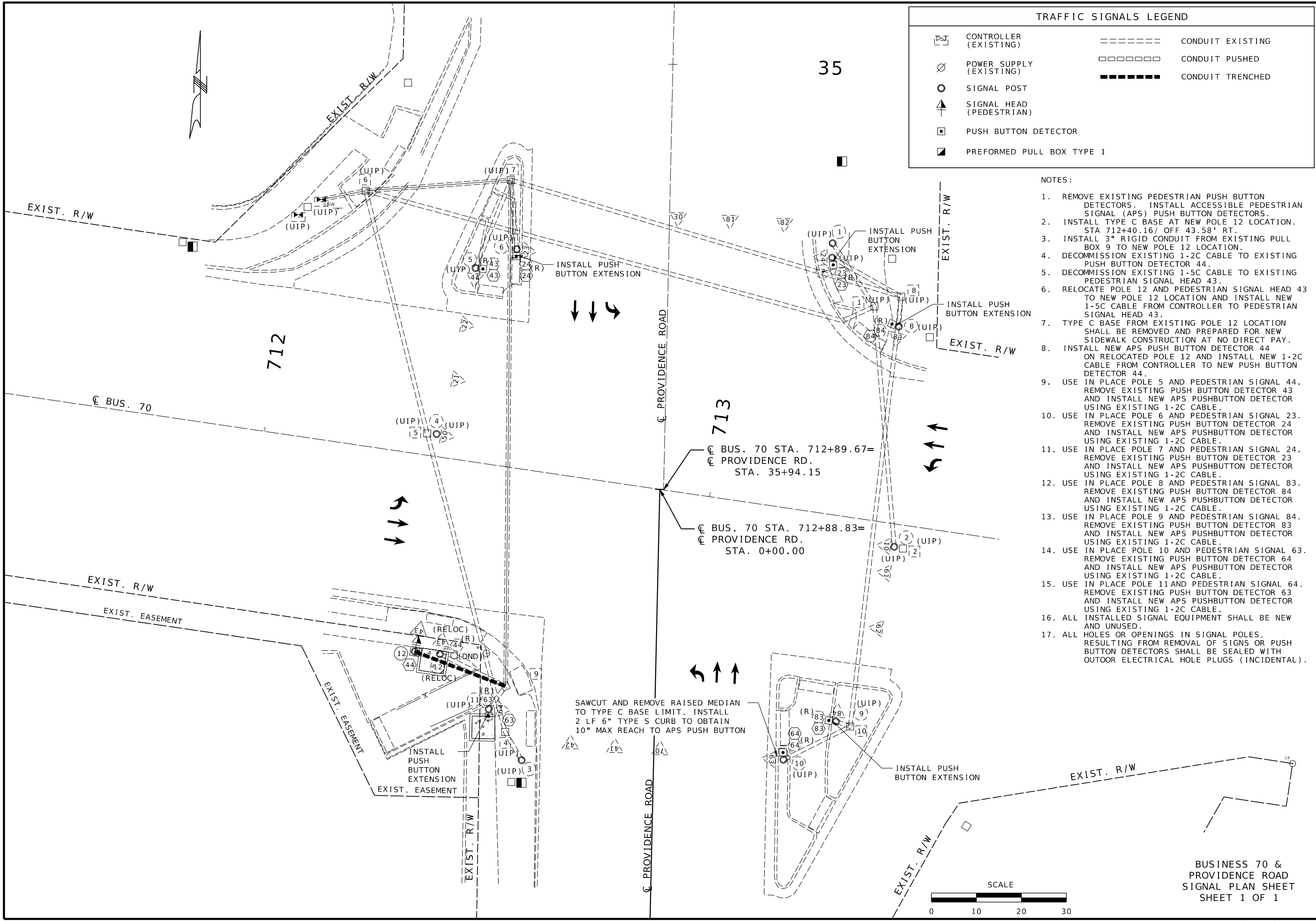
FLASHING OPERATION	
	FR
	FY
CONTROLLER TYPE	

TRAFFIC SIGNAL CONTROL OPERATION	
INTERSECTION OF BUSINESS 70/ GARTH AVENUE	

DATE PREPARED 4/27/2026	
ROUTE BUS 70	STATE MO
DISTRICT CD	SHEET NO. 30
COUNTY BOONE	
JOB NO. JCD0124	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DESCRIPTION	
DATE	





TRAFFIC SIGNALS LEGEND			
	CONTROLLER (EXISTING)		CONDUIT EXISTING
	POWER SUPPLY (EXISTING)		CONDUIT PUSHED
	SIGNAL POST		CONDUIT TRENCHED
	SIGNAL HEAD (PEDESTRIAN)		
	PUSH BUTTON DETECTOR		
	PREFORMED PULL BOX TYPE 1		

- NOTES:
1. REMOVE EXISTING PEDESTRIAN PUSH BUTTON DETECTORS. INSTALL ACCESSIBLE PEDESTRIAN SIGNAL (APS) PUSH BUTTON DETECTORS.
  2. INSTALL TYPE C BASE AT NEW POLE 12 LOCATION. STA 712+40.16/ OFF 43.58' RT.
  3. INSTALL 3" RIGID CONDUIT FROM EXISTING PULL BOX 9 TO NEW POLE 12 LOCATION.
  4. DECOMMISSION EXISTING 1-2C CABLE TO EXISTING PUSH BUTTON DETECTOR 44.
  5. DECOMMISSION EXISTING 1-5C CABLE TO EXISTING PEDESTRIAN SIGNAL HEAD 43.
  6. RELOCATE POLE 12 AND PEDESTRIAN SIGNAL HEAD 43 TO NEW POLE 12 LOCATION AND INSTALL NEW 1-5C CABLE FROM CONTROLLER TO PEDESTRIAN SIGNAL HEAD 43.
  7. TYPE C BASE FROM EXISTING POLE 12 LOCATION SHALL BE REMOVED AND PREPARED FOR NEW SIDEWALK CONSTRUCTION AT NO DIRECT PAY.
  8. INSTALL NEW APS PUSH BUTTON DETECTOR 44 ON RELOCATED POLE 12 AND INSTALL NEW 1-2C CABLE FROM CONTROLLER TO NEW PUSH BUTTON DETECTOR 44.
  9. USE IN PLACE POLE 5 AND PEDESTRIAN SIGNAL 44. REMOVE EXISTING PUSH BUTTON DETECTOR 43 AND INSTALL NEW APS PUSHBUTTON DETECTOR USING EXISTING 1-2C CABLE.
  10. USE IN PLACE POLE 6 AND PEDESTRIAN SIGNAL 23. REMOVE EXISTING PUSH BUTTON DETECTOR 24 AND INSTALL NEW APS PUSHBUTTON DETECTOR USING EXISTING 1-2C CABLE.
  11. USE IN PLACE POLE 7 AND PEDESTRIAN SIGNAL 24. REMOVE EXISTING PUSH BUTTON DETECTOR 23 AND INSTALL NEW APS PUSHBUTTON DETECTOR USING EXISTING 1-2C CABLE.
  12. USE IN PLACE POLE 8 AND PEDESTRIAN SIGNAL 83. REMOVE EXISTING PUSH BUTTON DETECTOR 84 AND INSTALL NEW APS PUSHBUTTON DETECTOR USING EXISTING 1-2C CABLE.
  13. USE IN PLACE POLE 9 AND PEDESTRIAN SIGNAL 84. REMOVE EXISTING PUSH BUTTON DETECTOR 83 AND INSTALL NEW APS PUSHBUTTON DETECTOR USING EXISTING 1-2C CABLE.
  14. USE IN PLACE POLE 10 AND PEDESTRIAN SIGNAL 63. REMOVE EXISTING PUSH BUTTON DETECTOR 64 AND INSTALL NEW APS PUSHBUTTON DETECTOR USING EXISTING 1-2C CABLE.
  15. USE IN PLACE POLE 11 AND PEDESTRIAN SIGNAL 64. REMOVE EXISTING PUSH BUTTON DETECTOR 63 AND INSTALL NEW APS PUSHBUTTON DETECTOR USING EXISTING 1-2C CABLE.
  16. ALL INSTALLED SIGNAL EQUIPMENT SHALL BE NEW AND UNUSED.
  17. ALL HOLES OR OPENINGS IN SIGNAL POLES, RESULTING FROM REMOVAL OF SIGNS OR PUSH BUTTON DETECTORS SHALL BE SEALED WITH OUTDOOR ELECTRICAL HOLE PLUGS (INCIDENTAL).

**STATE OF MISSOURI**  
REGISTERED PROFESSIONAL ENGINEER  
**CURTIS D. SCHENK**  
NUMBER  
PE-2019029937

DATE PREPARED  
**4/27/2026**

ROUTE <b>BUS 70</b>	STATE <b>MO</b>
DISTRICT <b>CD</b>	SHEET NO. <b>31</b>

COUNTY  
**BOONE**

JOB NO.  
**JCD0124**

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-275-6636)

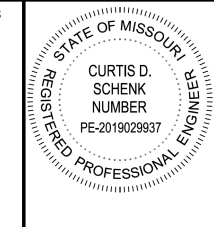
**MoDOT**

MISSOURI STATE CERTIFICATE OF AUTHORITY NO. 000866

**KLINGNER & ASSOCIATES, P.C.**  
Engineers • Architects • Surveyors  
Quincy, Illinois  
www.klingner.com  
217-223-3670







POWER SUPPLY												
LOCATION			POWER SUPPLY ASSEMBLY		CIRCUIT BREAKER TRIP RATING*				LIGHTING CONTROL * (ON POWER SUPPLY)		SERVICE POLE	
APPROACH	STATION	OFFSET	DRAWING 902.15	DRAWING	CONTROLLER		POWER SUPPLY DISCONNECT		120 VOLT CONTROL CABINET		CONTRACT FURNISH	UTILITY COMPANY
					AUXILIARY BREAKER	CONT & SIGNAL LAMPS	MAIN BREAKER	SIGNALS LIGHTING				
UIP EXISTING			Type		15 Amps	Amps	Amps	Amps			Cl.	Ft.
			Type		15 Amps	Amps	Amps	Amps			Cl.	Ft.

CONTROLLER ASSEMBLY AND AUXILIARY EQUIPMENT																				
LOCATION			SYSTEM MASTER (CLOSED LOOP)		ACTUATED		ON-OFF* SWITCH		COORDINATION INTERFACE *				TIME * CLOCK	NEMA CABINET TYPE *			170 CABINET TYPE *		170 SOFTWARE *	
APPROACH	STATION	OFFSET	NEMA		NEMA		TYPE		12C/7C HARDWARE (1)		TIME BASE	CLOSED LOOP		FIBER	E EV DOUBLE			332 336S BITRAN WAPIT1		
			170		170		I	II	MASTER	LOCAL		NEMA	170							
UIP EXISTING																				

NEMA DETECTOR ASSIGNMENT									
CARD POSITION									
CHANNEL	1	2	3	4	5	6	7	8	9
2									

TOTAL NUMBER OF DETECTOR CARDS(2-CHANNEL) = (2)

DETECTOR SCHEDULE							REMARKS
DETECTOR NUMBER	APPROACH	APS PUSH BUTTON	TYPE			VIDEO	
			INDUCTION LOOP (2)				
			STANDARD	DELAY/EXTEND *	CALL UNIT *		
23	BUS. 70 WB	1					PUSH BUTTON EXTENSION REQUIRED- SEE JSP
24	BUS. 70 EB	1					PUSH BUTTON EXTENSION REQUIRED- SEE JSP
43	PROVIDENCE SB	1					
44	PROVIDENCE NB	1					
63	BUS. 70 EB	1					PUSH BUTTON EXTENSION REQUIRED- SEE JSP
64	BUS. 70 WB	1					
83	PROVIDENCE NB	1					
84	PROVIDENCE SB	1					PUSH BUTTON EXTENSION REQUIRED- SEE JSP
TOTAL			8				

- \* ITEMS FOR WHICH SEPARATE PAYMENT WILL NOT BE MADE.
- \*\*\* USE D3-1 FOR ONE LINE. USE D3-1B FOR TWO LINE.
- (1) MODOT \*D\* PLUG SHALL BE WIRED INTO ALL NEMA CONTROLLERS WITH 7C HARDWARE INTERCONNECT.
- (2) PAYMENT IS MADE FOR THE NUMBER OF 2-CHANNEL DETECTOR CARDS AS SHOWN BELOW THE ASSIGNMENT CHART.

NEMA LOAD SWITCH ASSIGNMENTS											
1	2	3	4	5	6	7	8	9	10	11	12

170 OUTPUT FILE ASSIGNMENTS									
FR1	FR2	FR3	FR4	MONITOR					

SIGNAL SIGNS					
QUANTITY	MUTCD SIGN NUMBER	SIZE	AREA	SIGN TOTAL AREA	SIGNAL SIGN MOUNTING HARDWARE
				ITEM NO. 90208.33	ITEM NO. 90208.34
		INCHES	SQ. FT.	SQ. FT.	EA.
	R10-10L	24 X 30	5.0		
	R10-10R	24 X 30	5.0		
	R3-5L	30 X 36	7.5		
	R3-5R	30 X 36	7.5		
	R3-5A	30 X 36	7.5		
	R3-6L	30 X 36	7.5		
	R3-6R	30 X 36	7.5		
	R3-2	24 X 24	4.0		
	R3-1	24 X 24	4.0		
	R3-3	24 X 24	4.0		
	D3-1 ***	VAR. X 18			
	D3-1B ***	VAR. X 18			
4	R10-3EL	9 X 15	0.9	3.6	4
4	R10-3ER	9 X 15	0.9	3.6	4
	R10-11A	24 X 30	5.0		
	R10-13	36 X 24	6.0		
	R10-27A	30 X 36	7.5		
SUBTOTAL				7.2	8
TOTAL				7.2	8

170 INPUT FILE ASSIGNMENTS														
CHANNEL	1	2	3	4	5	6	7	8	9	10	11	12	13	14
"I"	U													
"I"	L													
"J"	U													
"J"	L													

TOTAL NUMBER OF DETECTOR CARDS(2-CHANNEL) = (2)

170 AUXILIARY OUTPUT FILE									
FR5	FR6	X							

BUSINESS 70 / PROVIDENCE ROAD

INTERSECTION **D-37C**

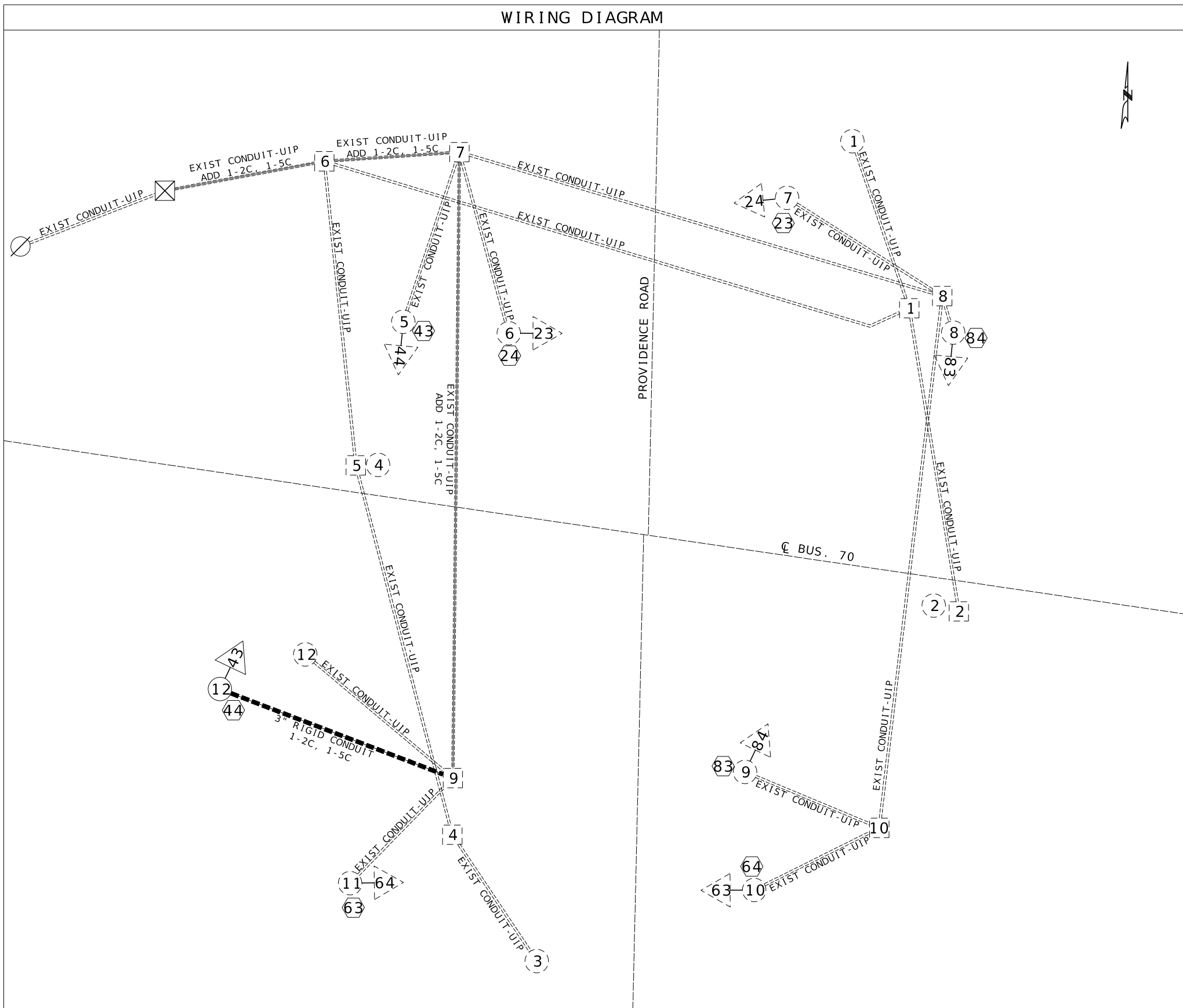
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL JEFFERSON CITY, MO 65102 1-888-ASK-MODOT (1-888-275-6636)

MISSOURI STATE CERTIFICATE OF AUTHORITY NO. 000866

**KLINGNER & ASSOCIATES, P.C.**  
Engineers • Architects • Surveyors  
Quincy, Illinois www.klingner.com 217-223-3670

WIRING DIAGRAM



### LEGEND

- □ □ □ □ PUSHED CONDUIT CONTAINING CABLE WITH SIZE NOTED
- TRENCHED CONDUIT CONTAINING CABLE WITH SIZE NOTED
- X-XC MULTI-CONDUCTOR CABLE #16 AWG (UNLESS OTHERWISE INDICATED)
- L IC #14 AWG DETECTOR LEAD-IN CABLE (2C TWISTED SHIELDED)
- ⊗ PULL BOX WITH NUMBER
- ⊗ POST WITH NUMBER
- ⊗ POST WITH MAST ARM
- ⊗ POST WITH MAST ARM AND LUMINAIRE
- ⊗ DETECTOR WITH NUMBER
- ⊗ SIGNAL HEAD WITH NUMBER
- ⊗ SIGNAL CONTROLLER
- ⊗ POWER SUPPLY
- ⊗ LIGHTING CONTROLLER



DATE PREPARED 4/27/2026	
ROUTE BUS 70	STATE MO
DISTRICT CD	SHEET NO. 35
COUNTY BOONE	
JOB NO. JCD0124	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-275-6636)

MISSOURI STATE CERTIFICATE OF AUTHORITY NO. 000866

**KLINGNER & ASSOCIATES, P.C.**  
Engineers • Architects • Surveyors  
www.klingner.com  
Quincy, Illinois  
217-223-3670

BUSINESS 70/ PROVIDENCE ROAD

INTERSECTION

D-37D