

04-28-2017 LETTING ITEM 144

INDEX OF SHEETS  
SEE SHEET 2 FOR INDEX OF SHEETS

DISTRICT 1 DETAILS  
SEE SHEET 2 FOR LIST OF DISTRICT 1 DETAILS

TRAFFIC DATA

ADT BODE 5,700 VPD (2014)  
HARMON 2,200 VPD (2014)

BODE ROAD AND HARMON BLVD DESIGN INFORMATION

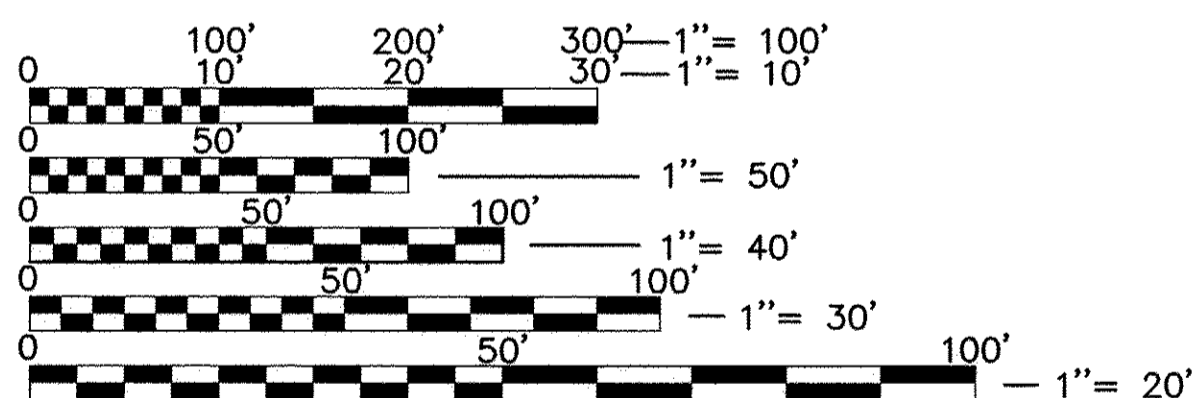
DES. DESIGNATION:	POSTED SPEED	DESIGN SPEED
FAU 1318 (BODE ROAD) - MAJOR COLLECTOR	25 MPH	25 MPH
FAU 2562 (HARMON BOULEVARD) - MAJOR COLLECTOR	25 MPH	25 MPH

Ciorba Group, Inc.

**DESIGN FIRM  
REGISTRATION NUMBER**

184-001016

CONSULTING ENGINEERS  
SUITE 402, 5507 NORTH CUMBERLAND AVE  
CHICAGO, ILLINOIS 60656 :: (773) 775-4009



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

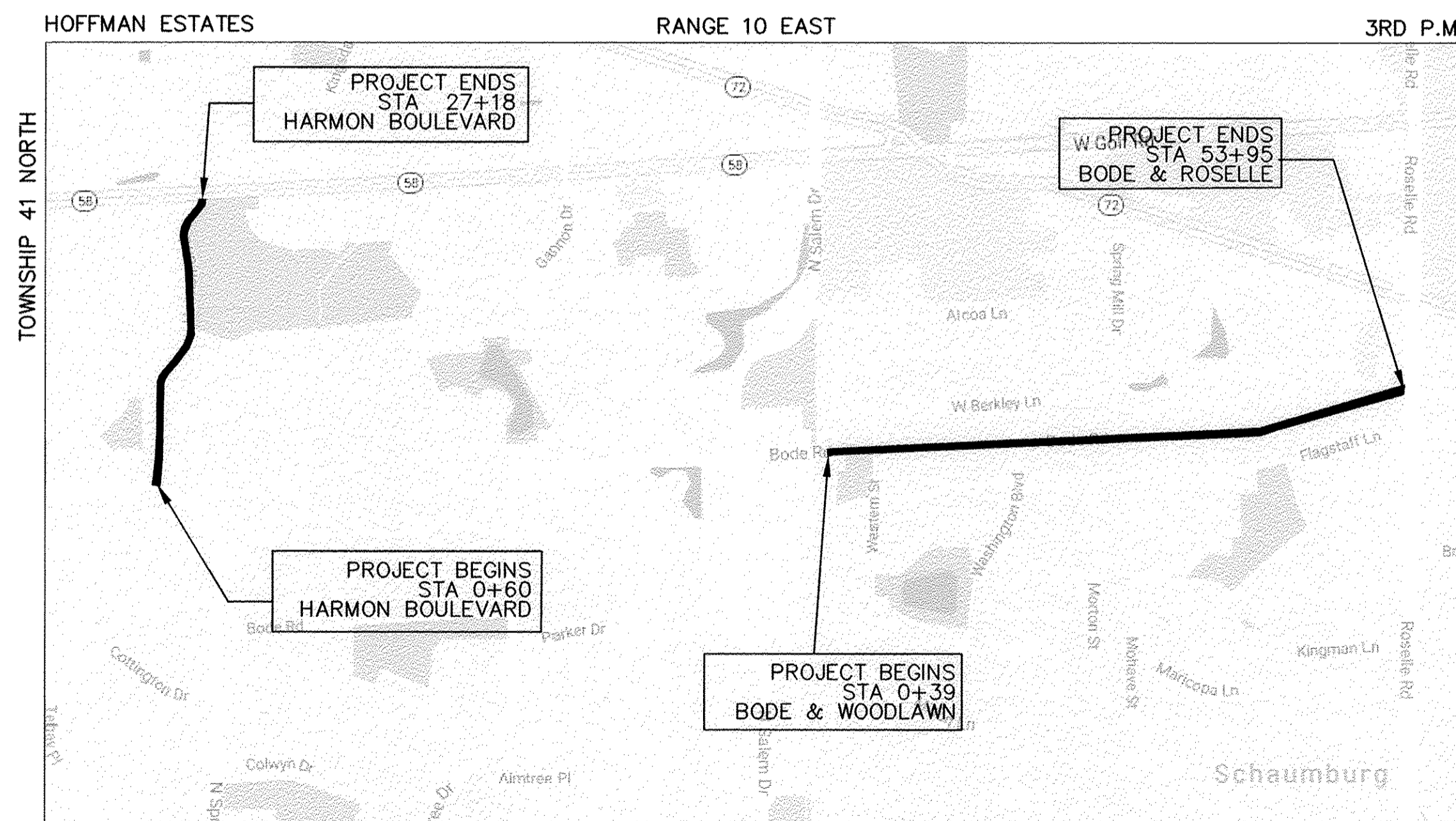
J.U.L.I.E.  
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION

1-800-892-0123  
OR 811

PROJECT ENGINEER: JOSEPH P. ATTANASEO

CONTRACT NO. 61D75

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
**PLANS FOR PROPOSED  
FEDERAL AID HIGHWAY**  
FAU 1318 (BODE ROAD: WOODLAWN ST  
TO ROSELLE RD)  
FAU 2562 (HARMON BLVD: BODE ROAD  
TO GOLF ROAD (IL 58))  
PAVEMENT RESURFACING  
SECTION 15-00095-00-RS  
PROJECT NO. M-4003(798)  
VILLAGE OF HOFFMAN ESTATES  
COOK COUNTY  
C-91-424-16



LOCATION MAP  
(NOT TO SCALE)

PROJECT LENGTH

**BODE ROAD:**  
GROSS LENGTH = 5,356 FT (1.014 MILES)  
NET LENGTH = 5,356 FT (1.014 MILES)  
**HARMON BOULEVARD:**  
GROSS LENGTH = 2,658 FT (0.503 MILES)  
NET LENGTH = 2,658 FT (0.503 MILES)

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	15-00095-00-RS	COOK	65	1
FED. ROAD DIST. NO.	ILLINOIS	CONTRACT NO. 61D75		
*1318 & 2562				



STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

Approved January 30, 2017 DATE

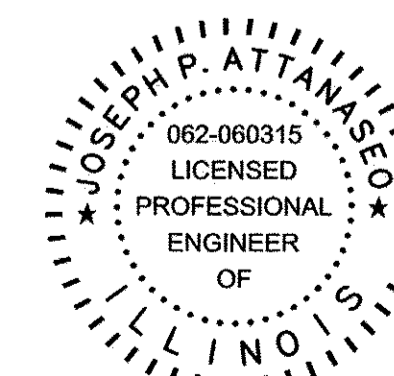
*[Signature]*  
Village of Hoffman Estates, Village Engineer

Passed FEBRUARY 6, 2017 DATE

*[Signature]*  
District 1 Engineer of Local Roads & Streets

Releasing for Bid Based on Limited Review February 6, 2017 DATE

*[Signature]*  
Regional Engineer



DATE: 01/30/2017  
SEAL EXPIRES: 1/31/2017  
*[Signature]*

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OF THE STATE OF ILLINOIS

CONSULTANT ENGINEER: JOSEPH P. ATTANASEO, P.E. CIORBA GROUP, INC.  
PROGRAM AND OFFICE ENGINEER: CHARLES F. RIDDLE, P.E. 847-705-4406 SCHAUMBURG, IL

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**DISTRICT ONE DETAILS**

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- TC-16 PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING
- TS-05 STANDARD TRAFFIC SIGNAL DESIGN DETAILS
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**STATE STANDARDS (INCLUDED FOR REFERENCE ONLY)**

- 000001-06 STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
- 424001-09 PERPENDICULAR CURB RAMPS FOR SIDEWALKS
- 424006-02 DIAGONAL CURB RAMPS FOR SIDEWALKS
- 424016-03 MID-BLOCK CURB RAMPS FOR SIDEWALK
- 424026-01 ENTRANCE / ALLEY PEDESTRIAN CROSSING
- 424031-01 MEDIAN PEDESTRIAN CROSSING
- 602001-02 CATCH BASIN TYPE A
- 602011-02 CATCH BASIN TYPE C
- 602301-04 INLET - TYPE A
- 602401-03 MANHOLE - TYPE A
- 602601-04 PRECAST REINFORCED CONCRETE FLAT SLAB TOP
- 602701-02 MANHOLE STEPS
- 604001-04 FRAME AND LIDS, TYPE 1
- 604036-03 GRATE, TYPE 8
- 604006-05 FRAME AND GRATE, TYPE 3
- 701001-02 OFF-ROAD OPERATIONS, 2L, 2W, MORE THAN 15' (4.5m) AWAY
- 701301-04 LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
- 701311-03 LANE CLOSURE, 2L, 2W, MOVING OPERATIONS - DAY ONLY
- 701501-06 URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
- 701502-07 URBAN LANE CLOSURE, 2L, 2W, WITH BIDIRECTIONAL LEFT TURN LANE
- 701701-10 URBAN LANE CLOSURE, MULTILANE INTERSECTION
- 701801-06 SIDEWALK, CORNER OR CROSSWALK CLOSURE
- 701901-06 TRAFFIC CONTROL DEVICES
- 720001-01 SIGN PANEL MOUNTING DETAILS
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- 729001-01 APPLICATIONS OF TYPES A AND B METAL POSTS (FOR SIGNS & MARKERS)
- 780001-05 TYPICAL PAVEMENT MARKINGS
- 782001-01 CURB REFLECTORS
- 886001-01 DETECTOR LOOP INSTALLATIONS

**GENERAL NOTES**

1. ALL REFERENCES TO "STANDARD SPECIFICATIONS" IN THESE GENERAL NOTES SHALL BE INTERPRETED TO MEAN "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" ADOPTED BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION, APRIL 1, 2016. ALL WORK TO BE COMPLETED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.
2. ITEMS OF WORK LISTED IN THE SUMMARY OF QUANTITIES WHICH ARE NOT SPECIFICALLY INDICATED IN THE PLANS SHALL BE PERFORMED AT LOCATIONS AS DIRECTED BY THE ENGINEER.
3. THE ENGINEER SHALL NOT ASSUME ANY OF THE RESPONSIBILITIES OF THE CONTRACTOR'S SUPERINTENDENT OR OF SUBCONTRACTORS ADDITIONALLY, THE ENGINEER SHALL NOT ADVISE ON, OR ISSUE DIRECTIONS CONCERNING ASPECTS OF CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OF PROCEDURES, OR SAFETY PRECAUTIONS AND/OR PROGRAMS IN CONNECTION WITH THE WORK.
4. THE LOCATIONS OF PUBLIC AND PRIVATE UTILITIES SHOWN ON THE PLANS ARE APPROXIMATE AND THEIR ACCURACY IS NOT GUARANTEED. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION AND ELEVATION OF ALL UTILITIES. THE CONTRACTOR SHALL REPORT ANY DISCREPANCIES TO THE ENGINEER AT ONCE. THE CONTRACTOR SHALL TAKE DUE CARE IN ALL PHASES OF THE CONSTRUCTION TO PROTECT ANY UTILITIES WHICH MAY BE AFFECTED BY THE WORK, INCLUDING MAKING ARRANGEMENTS FOR THE PROPER BRACING, AND OTHER REQUIRED PROTECTION, AS REQUIRED. ANY DAMAGE TO EXISTING UTILITIES SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
5. FOR UNDERGROUND UTILITY LOCATIONS, CALL 48 HOURS BEFORE DIGGING, (EXCLUDING SATURDAY, SUNDAY & HOLIDAYS) J.U.L.I.E. 1-800-692-0123 OR 811.
6. THE ENGINEER AND/OR HIS/HER REPRESENTATIVE WILL BE PROVIDING CONSTRUCTION LAYOUT AND STAKING OF THE PROPOSED IMPROVEMENTS. IF CONTRACTOR'S OPERATIONS DAMAGE THE LAYOUT, THE VILLAGE MAY CHARGE A FEE, TO THE CONTRACTOR, TO COVER THE ADDITIONAL COSTS INCURRED BY THE VILLAGE FOR LAYOUT.
7. THE CONTRACTOR SHALL KEEP THE AREA OF CONSTRUCTION FREE OF DEBRIS AND OBJECTIONABLE MATERIALS DURING CONSTRUCTION OR THE VILLAGE RESERVES THE RIGHT TO REMOVE AND BACK CHARGE THE CONTRACTOR.
8. ALL SIDEWALKS WITHIN THE PROJECT LIMITS THAT ARE ADJACENT TO THE CURB SHALL BE REMOVED AND CONSTRUCTED ACCORDING TO PLAN DETAILS AND STANDARDS. CATALOG CUTS OF DETECTABLE WARNINGS MUST BE APPROVED BY THE ENGINEER AS CORRGINATED WITH THE VILLAGE BEFORE INSTALLATION.
9. THE CONTRACTOR SHALL PROTECT ALL SIDEWALKS AND CURB & GUTTER FROM DAMAGE AND VANDALISM.
10. THE CONTRACTOR SHALL VERIFY THE ELEVATION AND LOCATION OF EXISTING SEWERS PRIOR TO THE START OF CONSTRUCTION OF NEW SEWERS.
11. ALL CURB SHALL BE DEPRESSED AT DRIVEWAYS.
12. INLET FILTERS SHALL BE PLACED IN ALL DRAINAGE STRUCTURES WITHIN AND/OR ADJACENT TO PROJECT LIMITS BEFORE THE START OF ANY WORK AT THAT LOCATION. INLET FILTERS SHALL REMAIN IN PLACE AND BE KEPT FREE FROM DEBRIS TO THE SATISFACTION OF THE ENGINEER UNTIL FINAL RESTORATION IS COMPLETE. THIS WORK SHALL BE PAID FOR AS INLET FILTERS
13. ALL REMOVED CASTINGS SHALL BE DELIVERED TO THE VILLAGE YARD BY THE CONTRACTOR.
14. CONTRACTOR MAY OBTAIN A VILLAGE WATER METER FOR FREE WATER USAGE ON THIS JOB. THE WATER METER CAN BE OBTAINED BY VILLAGE PUBLIC WORKS DEPARTMENT FOR A \$750 FEE DEPOSIT.
15. THE CONTRACTOR SHALL FIELD CHECK EACH EXISTING STRUCTURE TO BE REPLACED AND DETERMINE THE NUMBER OF PIPES, THEIR SIZE, AND ELEVATION PRIOR TO ORDERING EACH STRUCTURE.
16. CURB & GUTTER, SIDEWALK, AND DRIVEWAY WORK SHALL BE STAGED TO ALLOW FULL TIME ACCESS TO ALL SCHOOLS AND BUSINESSES. LOSS OF SIDEWALK AND DRIVEWAY ACCESS SHALL BE LIMITED TO ONE SIDE OF THE STREET AT A TIME.
17. RESIDENTIAL DRIVEWAY ACCESS SHALL BE RESTORED WITHIN 2 WEEKS OF LOSS OF ACCESS.
18. CONTRACTOR TO REQUEST FIELD BOOK FROM THE ENGINEER FOR LOCAL BENCHMARK INFORMATION FOR SIDEWALK DETAILS.
19. PROPOSED STOP BARS ON ALL SIDEROADS SHALL BE INSTALLED PER IDOT DISTRICT 1 DETAIL TC-13. (4' IN ADVANCE AND PARRALLEL TO CROSSWALK).

**LEGEND**

EXISTING	PROPOSED	
		SANITARY MANHOLE
		STORM MANHOLE
		CATCH BASIN
		STORM INLET
		VALVE AND VAULT
		FIRE HYDRANT
		STREET LIGHT
		STREET SIGN
		STORM SEWER
		SANITARY SEWER
		WATER MAIN
		RIGHT-OF-WAY
		CURB & GUTTER
		SIDEWALK
		DRIVEWAY
		POWER POLE
		DETECTABLE WARNINGS
		STREET LIGHT CABLE
		NICOR GAS VALVE
		AT&T HANDHOLE
		AT&T BURIED UTILITY
		COMCAST BURIED UTILITY
		COMED BURIED UTILITY
		NICOR BURIED UTILITY
		OVERHEAD UTILITY

RCN	STRUCTURES TO BE RECONSTRUCTED
ADJ	STRUCTURES TO BE ADJUSTED
G	NEW GRATE
F&G	NEW FRAME AND GRATE
F&L	NEW FRAME AND LID
C	EXISTING CONCRETE APRON
C/A	EXISTING CONCRETE & ASPHALT APRON
A	EXISTING ASPHALT APRON

	TREES TO BE ROOT PRUNED
	TREE
	SIDEWALK REMOVAL
	RESURFACING AREA
	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	BODE ROAD 0005	HARMON BOULEVARD 0005
20101200	TREE ROOT PRUNING	EACH	76	75	1
20400800	FURNISHED EXCAVATION	CU YD	100	100	
20800150	TRENCH BACKFILL	CU YD	140	140	
21101600	TOPSOIL FURNISH AND PLACE, VARIABLE DEPTH	SQ YD	5,377	4,241	1,136
25000100	SEEDING, CLASS 1	ACRE	1.25	1.00	0.25
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	100	79	21
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	100	79	21
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	100	79	21
25100630	EROSION CONTROL BLANKET	SQ YD	5,377	4,241	1,136
28000510	INLET FILTERS	EACH	108	84	24
31101400	SUBBASE GRANULAR MATERIAL, TYPE B 6"	SQ YD	285	285	
35501323	HOT-MIX ASPHALT BASE COURSE, 9 3/4"	SQ YD	156	156	
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGWAYS	TON	40	40	
40600827	POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	TON	1,087	1,087	

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	BODE ROAD 0005	HARMON BOULEVARD 0005
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	201	153	48
40600990	TEMPORARY RAMP	SQ YD	300	207	93
40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	1,331		1,331
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	3,357	2,174	1,183
42400800	DETECTABLE WARNINGS	SQ FT	640	440	200
44000100	PAVEMENT REMOVAL	SQ YD	317	317	
44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 2"	SQ YD	26,620	26,620	
44000165	HOT-MIX ASPHALT SURFACE REMOVAL, 4"	SQ YD	10,824		10,824
44000200	DRIVEWAY PAVEMENT REMOVAL	SQ YD	1,878	1,282	596
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	3,697	2,698	999
44000600	SIDEWALK REMOVAL	SQ FT	53,850	40,865	12,985
44003100	MEDIAN REMOVAL	SQ FT	1,404	1,404	
44201753	CLASS D PATCHES, TYPE II, 9 INCH	SQ YD	220	220	
44201757	CLASS D PATCHES, TYPE III, 9 INCH	SQ YD	760	760	
44201759	CLASS D PATCHES, TYPE IV, 9 INCH	SQ YD	1,195	1,195	

\* DENOTES SPECIALITY ITEM  
 △ DENOTES SPECIAL PROVISION

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 CHECKED - DJO  
 DATE - 12/5/2016

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**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**BODE ROAD & HARMON BOULEVARD PAVEMENT RESURFACING  
 SUMMARY OF QUANTITIES**

SCALE: N.T.S. SHEET NO. 1 OF 3 SHEETS STA. TO STA.

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	15-00095-00-RS	COOK	65	3
* 1318 & 2562		CONTRACT NO. 61D75		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT M-4003 (798)				

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	BODE ROAD 0005	HARMON BOULEVARD 0005
550A2320	STORM SEWERS, RUBBER GASKET, CLASS A, TYPE 1 12"	FOOT	110	110	
550A2330	STORM SEWERS, RUBBER GASKET, CLASS A, TYPE 1 15"	FOOT	152	152	
550A2340	STORM SEWERS, RUBBER GASKET, CLASS A, TYPE 1 18"	FOOT	29	29	
550A2410	STORM SEWERS, RUBBER GASKET, CLASS A, TYPE 1 42"	FOOT	219	219	
55100400	STORM SEWER REMOVAL 10"	FOOT	125	125	
55100500	STORM SEWER REMOVAL 12"	FOOT	155	155	
55100700	STORM SEWER REMOVAL 15"	FOOT	85	85	
55100900	STORM SEWER REMOVAL 18"	FOOT	87	87	
55101800	STORM SEWER REMOVAL 42"	FOOT	218	218	
60200305	CATCH BASINS, TYPE A, 4'-DIAMETER, TYPE 3 FRAME AND GRATE	EACH	1	1	
60207105	CATCH BASINS, TYPE C, TYPE 3 FRAME AND GRATE	EACH	1	1	
60207605	CATCH BASINS, TYPE C, TYPE 8 GRATE	EACH	1	1	
60218400	MANHOLES, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	1	1	
60221100	MANHOLES, TYPE A, 5'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	1	1	

\* DENOTES SPECIALITY ITEM  
 △ DENOTES SPECIAL PROVISION

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	BODE ROAD 0005	HARMON BOULEVARD 0005
60224445	MANHOLES, TYPE A, 7'-DIAMETER, TYPE 1 FRAME, OPEN LID	EACH	1	1	
60224447	MANHOLES, TYPE A, 7'-DIAMETER, TYPE 3 FRAME AND GRATE	EACH	2	2	
60235700	INLETS, TYPE A, TYPE 3 FRAME AND GRATE	EACH	3	3	
60255900	MANHOLES TO BE ADJUSTED WITH NEW TYPE 3 FRAME AND GRATE	EACH	24	17	7
60258300	MANHOLES TO BE RECONSTRUCTED WITH NEW TYPE 3 FRAME AND GRATE	EACH	2	1	1
60260500	INLETS TO BE ADJUSTED WITH NEW TYPE 3 FRAME AND GRATE	EACH	34	22	12
60500040	REMOVING MANHOLES	EACH	5	5	
60500050	REMOVING CATCH BASINS	EACH	1	1	
60500060	REMOVING INLETS	EACH	3	3	
67100100	MOBILIZATION	LSUM	1	1	
70102620	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	LSUM	1	0.5	0.5
70102622	TRAFFIC CONTROL AND PROTECTION, STANDARD 701502	LSUM	1	0.5	0.5
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	LSUM	1	0.5	0.5
70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	LSUM	1	0.5	0.5
70300100	SHORT TERM PAVEMENT MARKING	FOOT	9,330	8,260	1,070

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DATE - 12/5/2016	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**BODE ROAD & HARMON BOULEVARD PAVEMENT RESURFACING  
SUMMARY OF QUANTITIES**

SCALE: N.T.S. SHEET NO. 2 OF 3 SHEETS STA. TO STA.

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	15-00095-00-RS	COOK	65	4
* 1318 & 2562			CONTRACT NO. 61D75	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT M-4003 (798)				

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	BODE ROAD 0005	HARMON BOULEVARD 0005
70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	4,703	4,149	554
* 72000100	SIGN PANEL - TYPE 1	SQ FT	119	119	
72400100	REMOVE SIGN PANEL ASSEMBLY - TYPE A	EACH	1	1	
72400500	RELOCATE SIGN PANEL ASSEMBLY - TYPE A	EACH	11	11	
* 72900100	METAL POST - TYPE A	FOOT	387	387	
* 78006100	PREFORMED THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	729	729	
* 78009000	MODIFIED URETHANE PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	212	212	
* 78009004	MODIFIED URETHANE PAVEMENT MARKING - LINE 4"	FOOT	12,005	11,915	90
* 78009006	MODIFIED URETHANE PAVEMENT MARKING - LINE 6"	FOOT	2,465	2,095	370
* 78009008	MODIFIED URETHANE PAVEMENT MARKING - LINE 8"	FOOT	85	85	
* 78009012	MODIFIED URETHANE PAVEMENT MARKING - LINE 12"	FOOT	90	90	
* 78009024	MODIFIED URETHANE PAVEMENT MARKING - LINE 24"	FOOT	415	300	115
* 78200020	CURB REFLECTORS	EACH	12	12	
△ * 85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1	1	

\* DENOTES SPECIALITY ITEM  
△ DENOTES SPECIAL PROVISION

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	BODE ROAD 0005	HARMON BOULEVARD 0005
△ * 88600100	DETECTOR LOOP, TYPE I		198	198	
△ * 88600600	DETECTOR LOOP REPLACEMENT	FOOT	114		114
△ * 89502376	REBUILD EXISTING HANDHOLE	EACH	1	1	
△ X0322917	PROPOSED STORM SEWER CONNECTION TO EXISTING MANHOLE	EACH	1	1	
X0327979	PAVEMENT MARKING REMOVAL - GRINDING	SQ FT	328	316	12
△ X4021000	TEMPORARY ACCESS (PRIVATE ENTRANCE)	EACH	37		37
△ X4023000	TEMPORARY ACCESS (ROAD)	EACH	6		6
△ X4230710	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 6 INCH, SPECIAL	SQ YD	1,519	1,014	505
△ X4230800	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 8 INCH, SPECIAL	SQ YD	130	130	
△ X4240430	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH, SPECIAL	SQ FT	55,115	41,940	13,175
△ X6030310	FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)	EACH	2	2	
△ X6064200	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12 (SPECIAL)	FOOT	3,846	2,902	944
△ X7015005	CHANGEABLE MESSAGE SIGN	CAL DA	600	300	300
△ Z0004510	HOT-MIX ASPHALT DRIVEWAY PAVEMENT, 3"	SQ YD	143	53	90
△ Z0004518	HOT-MIX ASPHALT DRIVEWAY PAVEMENT, 5"	SQ YD	86	86	

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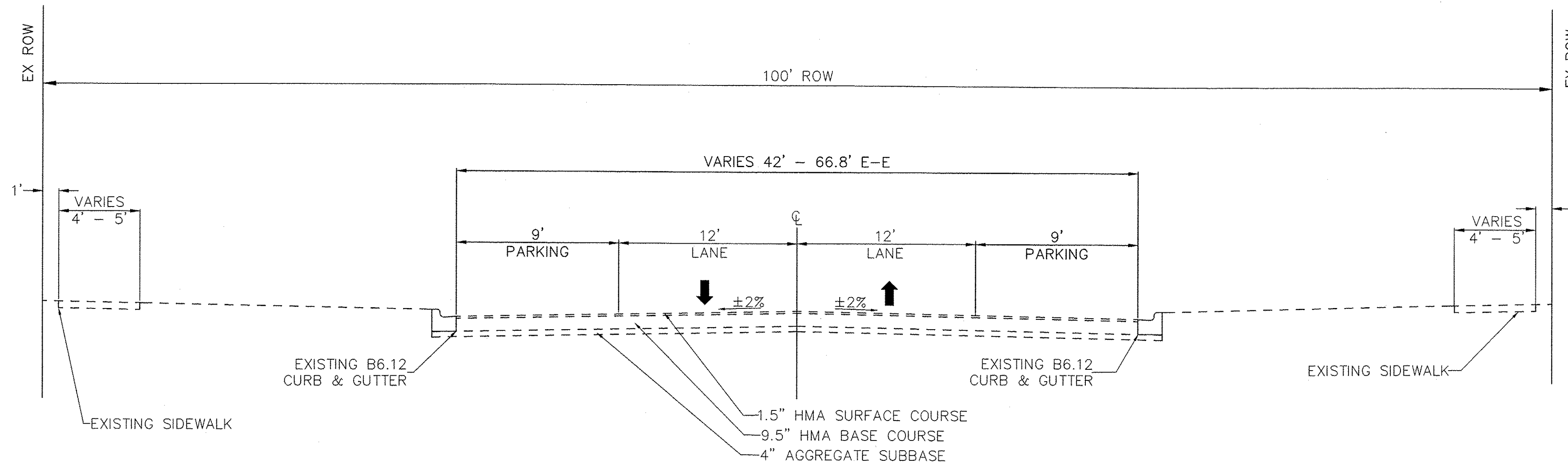
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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**BODE ROAD & HARMON BOULEVARD PAVEMENT RESURFACING  
SUMMARY OF QUANTITIES**

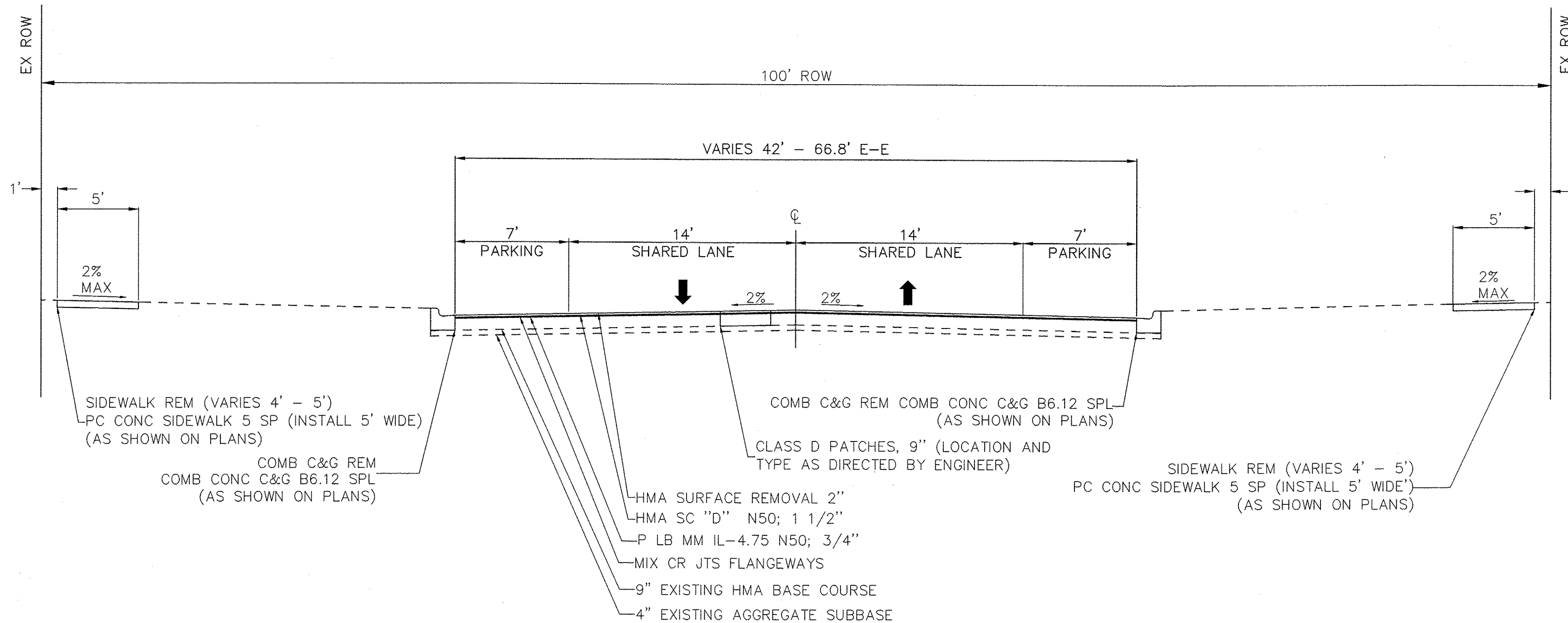
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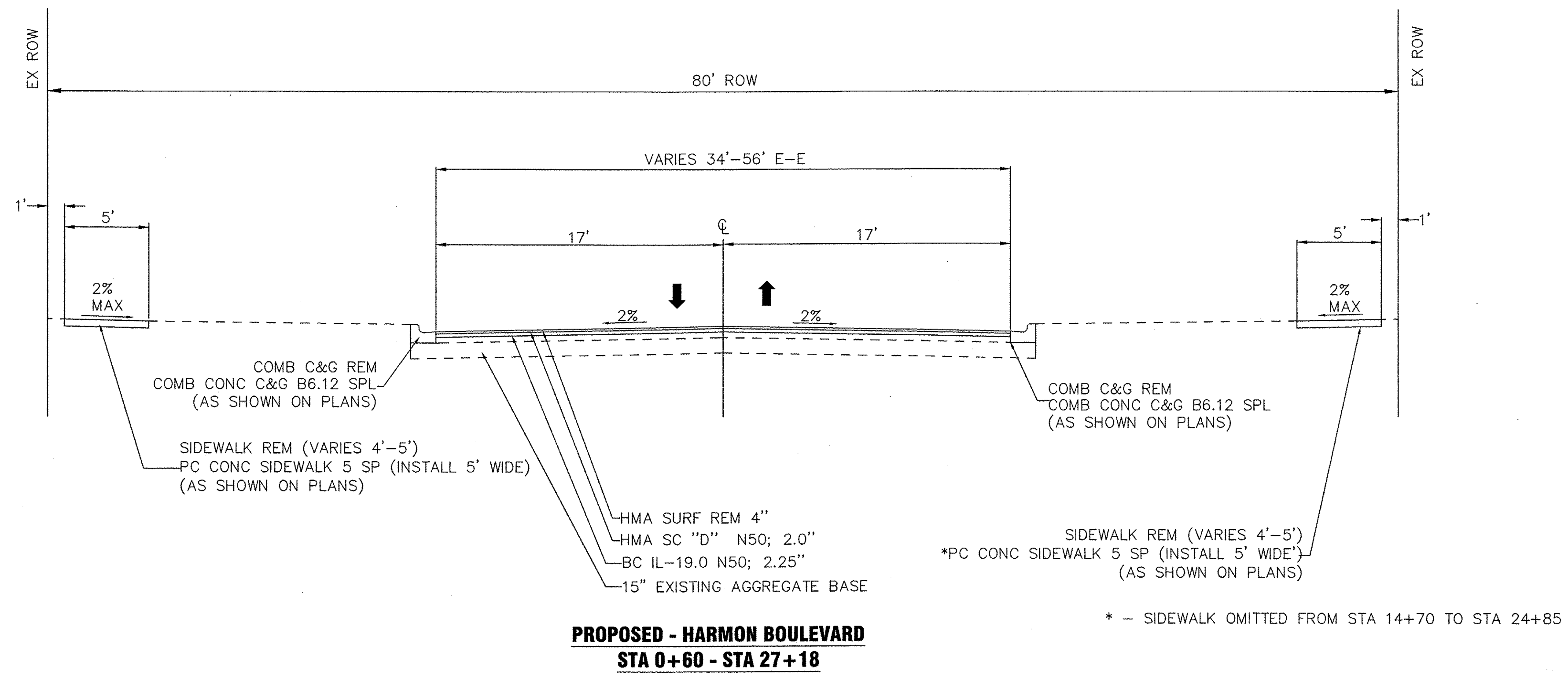
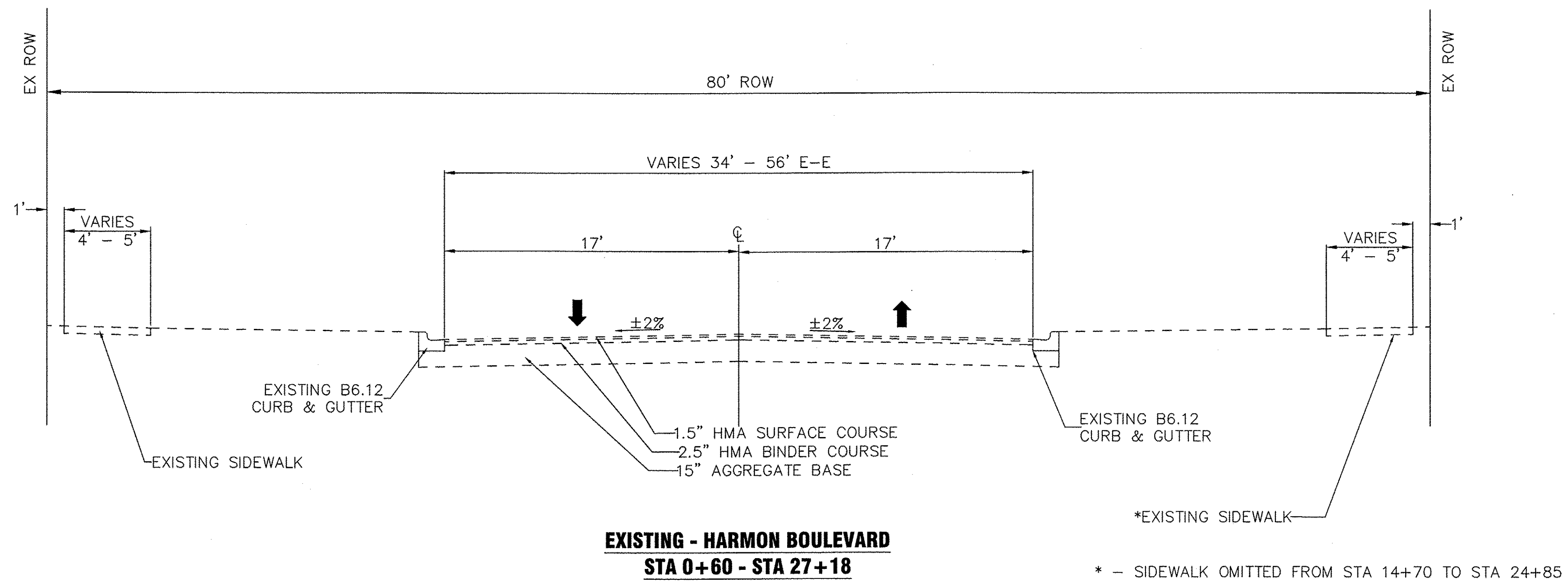
RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
* 15	15-00095-00-RS	COOK	65	5
* 1318 & 2562			CONTRACT NO. 61D75	
FED. ROAD DIST. NO. 1   ILLINOIS FED. AID PROJECT M-4003 (798)				

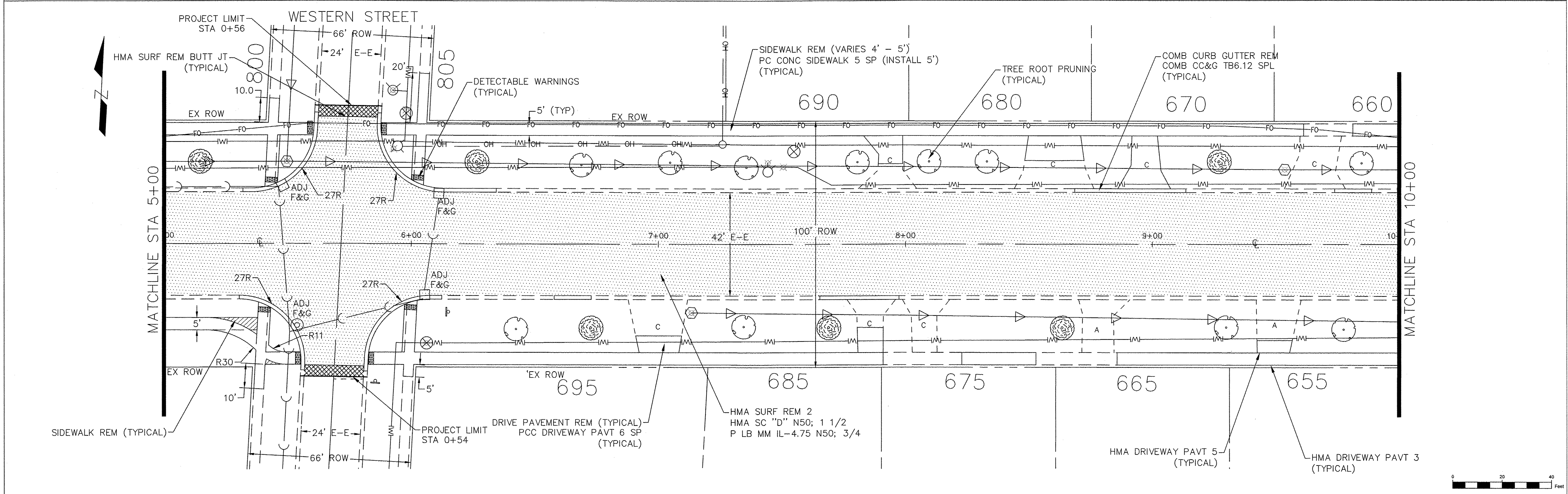
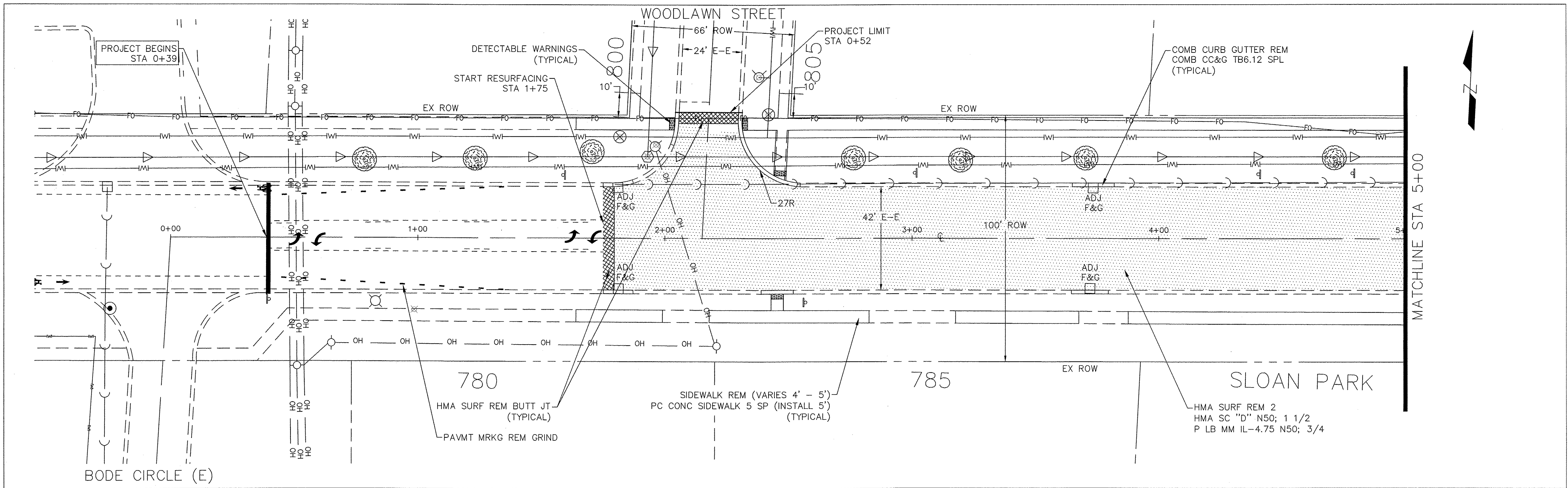


HOT-MIX ASPHALT MIXTURE REQUIREMENTS - BODE ROAD & HARMON BLVD			
MIXTURE TYPE	BODE ROAD	HARMON BLVD	AIR VOIDS @ NDES
<b>RESURFACING</b>			
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	1.50"	2.0"	4% @ 50 GYR.
HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	-	2.25"	4% @ 50 GYR.
POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	0.75"	-	3.5% @ 50 GYR.
<b>HMA DRIVEWAY 5" (SPECIAL)</b>			
HMA SURFACE COURSE, MIX "D", N50 (IL 9.5 mm)	3.0"	-	4% @ 50 GYR.
HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	2.0"	-	4% @ 50 GYR.
<b>HMA DRIVEWAY 3" (SPECIAL)</b>			
HMA SURFACE COURSE, MIX "D", N50 (IL 9.5 mm)	3.0"	3.0"	4% @ 50 GYR.
<b>CLASS D PATCHES</b>			
CLASS D PATCH (HMA BINDER IL-19 mm)	9.0"	-	4% @ 70 GYR.
<b>HMA BASE COURSE</b>			
HMA BASE COURSE (HMA BINDER IL-19 mm)	9 3/4"	-	4% @ 50 GYR.

1. THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURE QUANTITIES IS 112 LBS/SQ YD/IN.
2. THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 76-22" AND FOR NON POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS.
3. FOR USE OF RECYCLED MATERIALS SEE SPECIAL PROVISIONS.







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PLOT SCALE =	DRAWN - DW	REVISED -
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	DATE - 01/30/2017	REVISED -

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 DEPARTMENT OF TRANSPORTATION**

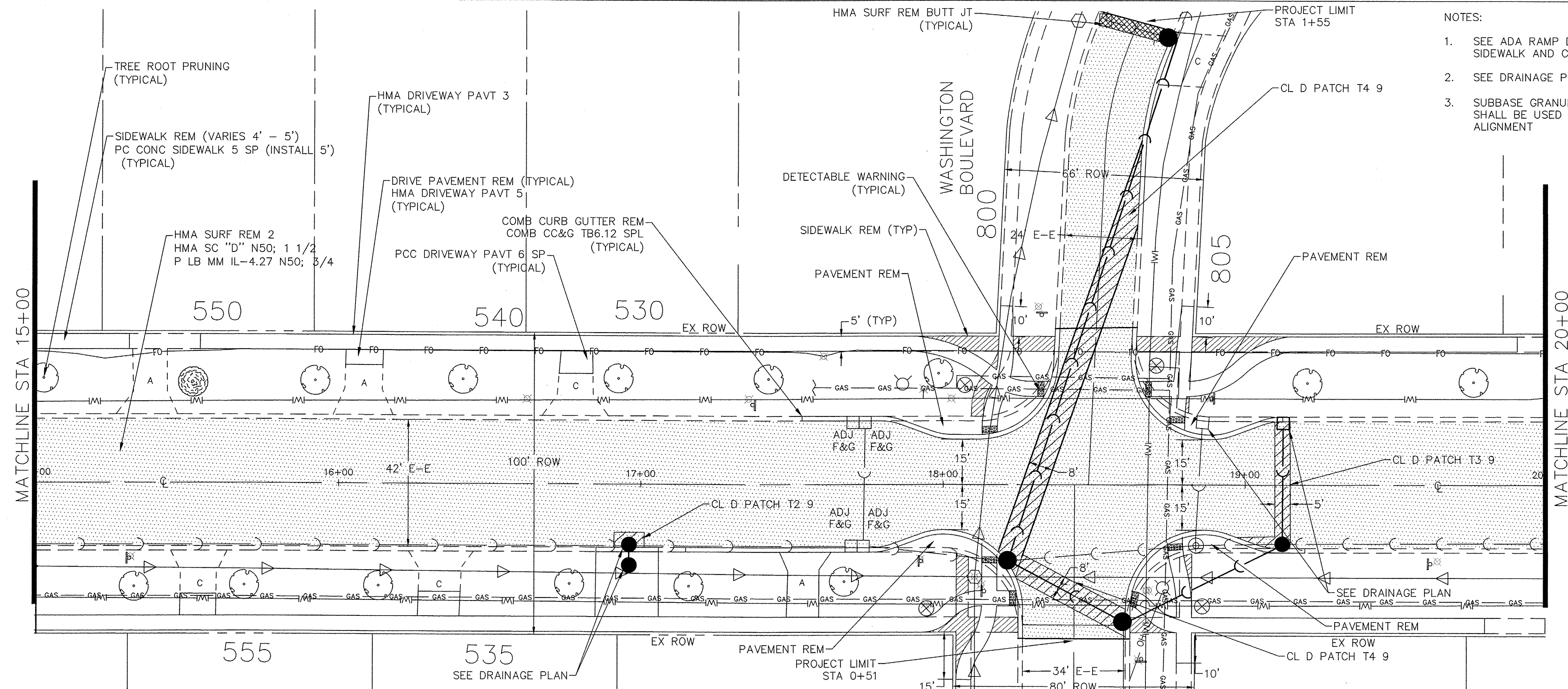
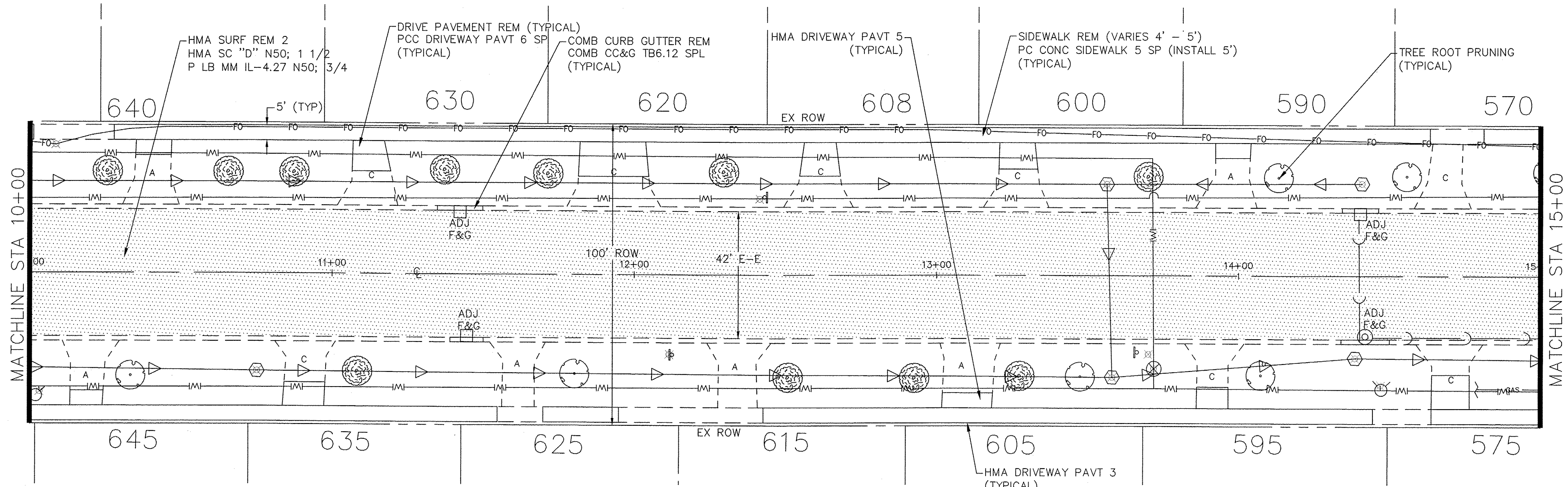
**BODE ROAD & HARMON BLVD PAVEMENT RESURFACING  
 ROADWAY PLAN - BODE ROAD**

SCALE: 1" = 20'    SHEET NO. 1 OF 6 SHEETS    STA. 0+00 TO STA. 10+00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	15-00095-00-RS	COOK	65	8
*1318 & 2562		CONTRACT NO. 61D75		
FED. ROAD DIST. 1		ILLINOIS	FED. AID PROJECT M-4003(798)	







- NOTES:
1. SEE ADA RAMP DETAILS FOR PROPOSED SIDEWALK AND CURB GEOMETRY
  2. SEE DRAINAGE PLAN FOR PROPOSED DRAINAGE
  3. SUBBASE GRANULAR MATERIAL, TYPE B 4" SHALL BE USED UNDER SIDEWALK ON NEW ALIGNMENT

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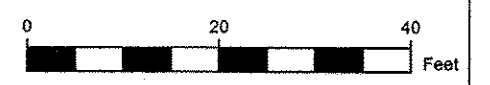
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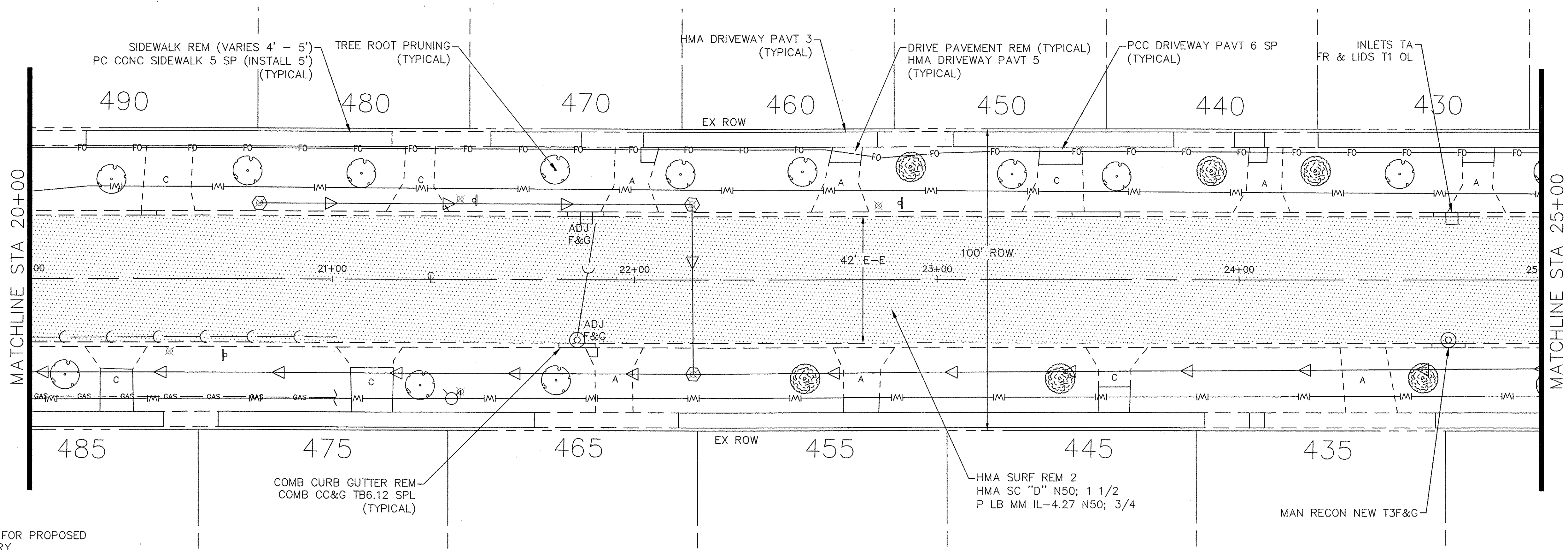
**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**BODE ROAD & HARMON BLVD PAVEMENT RESURFACING  
 ROADWAY PLAN - BODE ROAD**

SCALE: 1" = 20'    SHEET NO. 2 OF 6 SHEETS    STA. 10+00 TO STA. 20+00

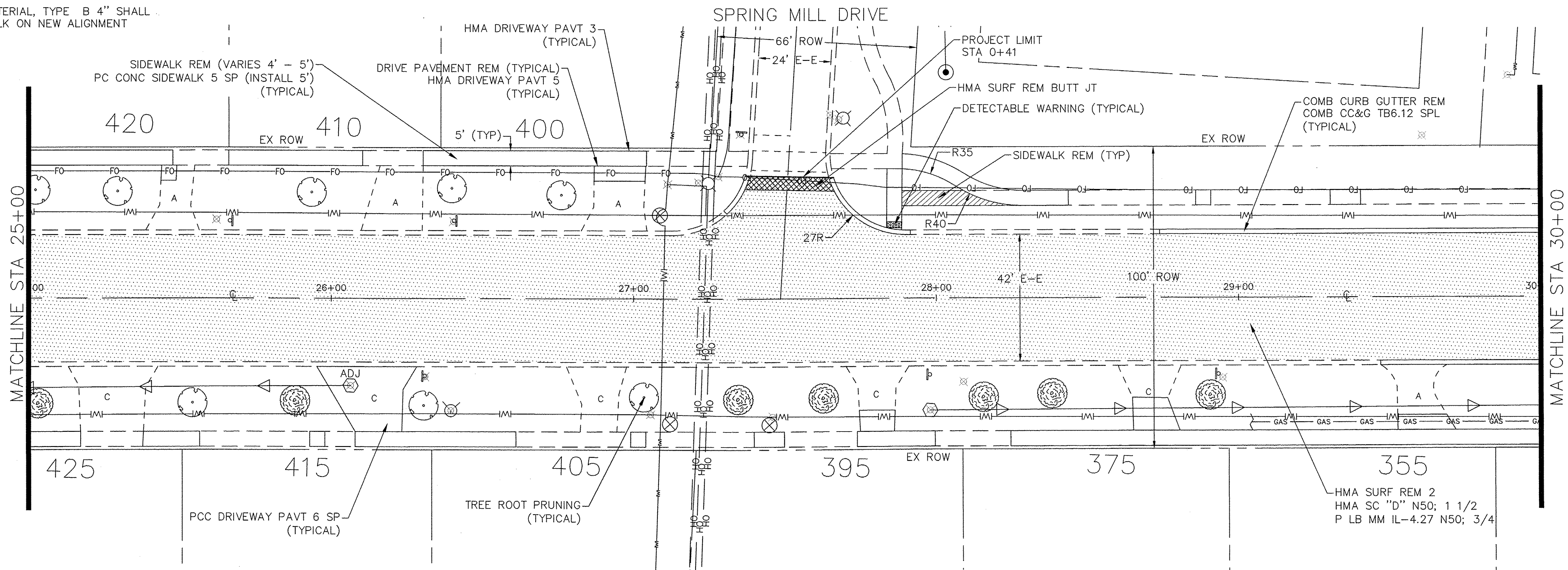
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* 1318 & 2562	15-00095-00-RS	COOK	65	9
FED. ROAD DIST. 1	ILLINOIS	FED. AID PROJECT M-4003(798)		





NOTES:

1. SEE ADA RAMP DETAILS FOR PROPOSED SIDEWALK AND CURB GEOMETRY
2. SEE DRAINAGE PLAN FOR PROPOSED DRAINAGE
3. SUBBASE GRANULAR MATERIAL, TYPE B 4" SHALL BE USED UNDER SIDEWALK ON NEW ALIGNMENT



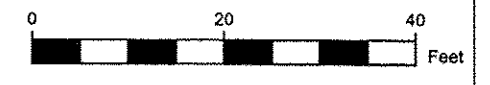
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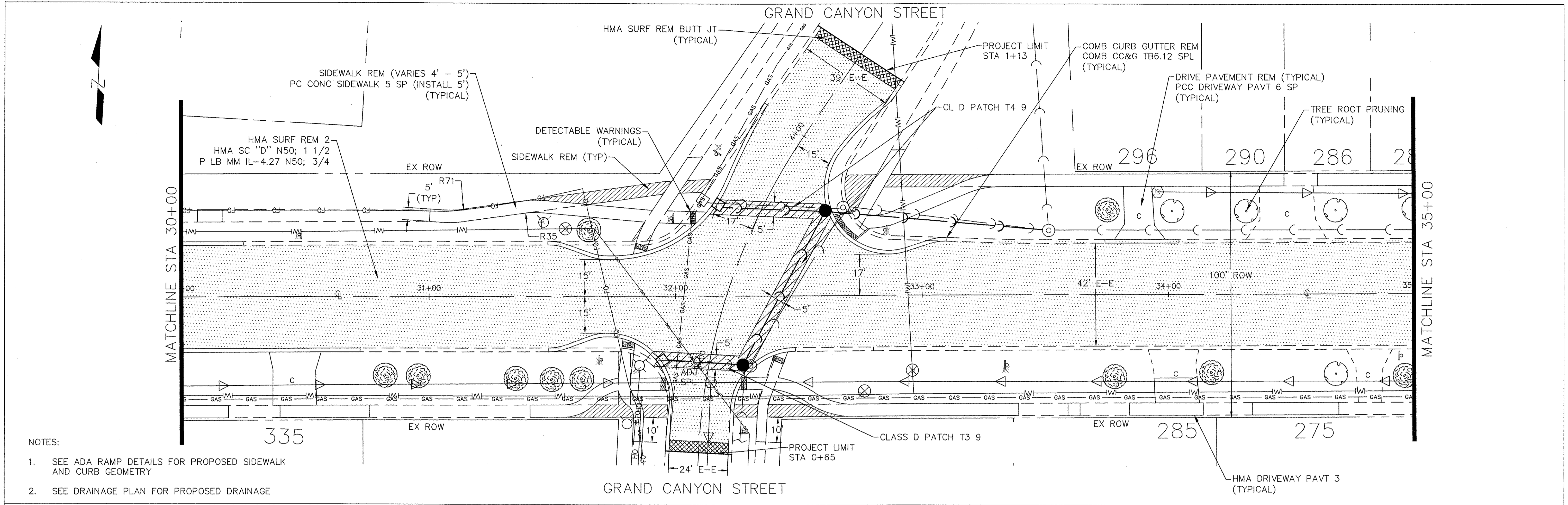
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**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

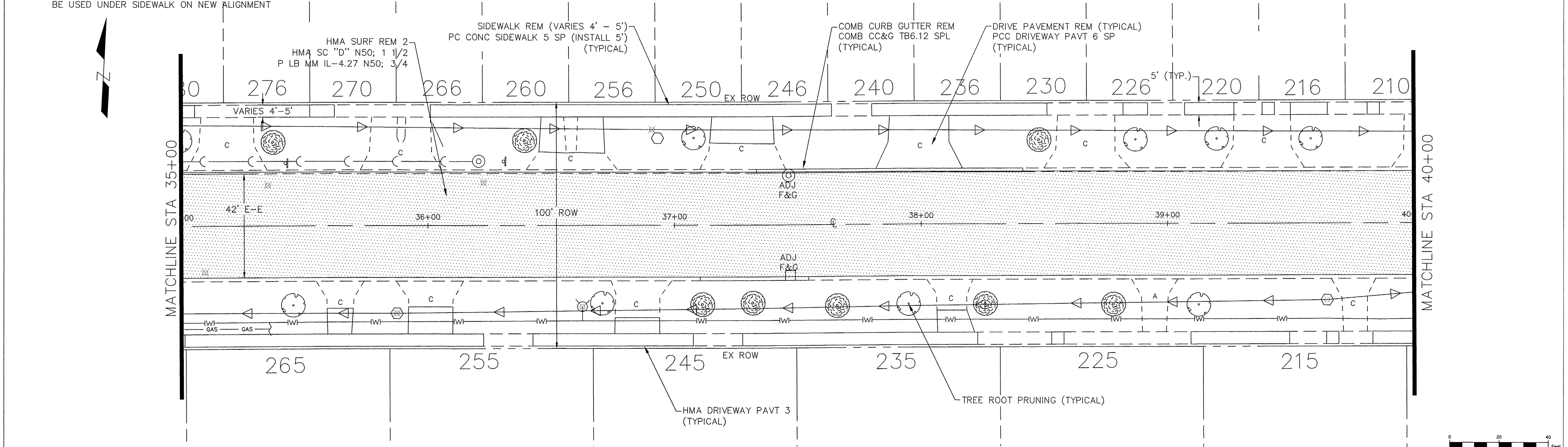
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 ROADWAY PLAN - BODE ROAD**  
 SCALE: 1" = 20' SHEET NO. 3 OF 6 SHEETS STA. 20+00 TO STA. 30+00

F.A.U. R.I.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	15-00095-00-RS	COOK	65	10
*1318 & 2562			CONTRACT NO. 61D75	
FED. ROAD DIST. 1 ILLINOIS			FED. AID PROJECT M-4003(798)	





- NOTES:
- SEE ADA RAMP DETAILS FOR PROPOSED SIDEWALK AND CURB GEOMETRY
  - SEE DRAINAGE PLAN FOR PROPOSED DRAINAGE
  - SUBBASE GRANULAR MATERIAL, TYPE B 4" SHALL BE USED UNDER SIDEWALK ON NEW ALIGNMENT



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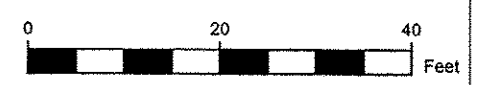
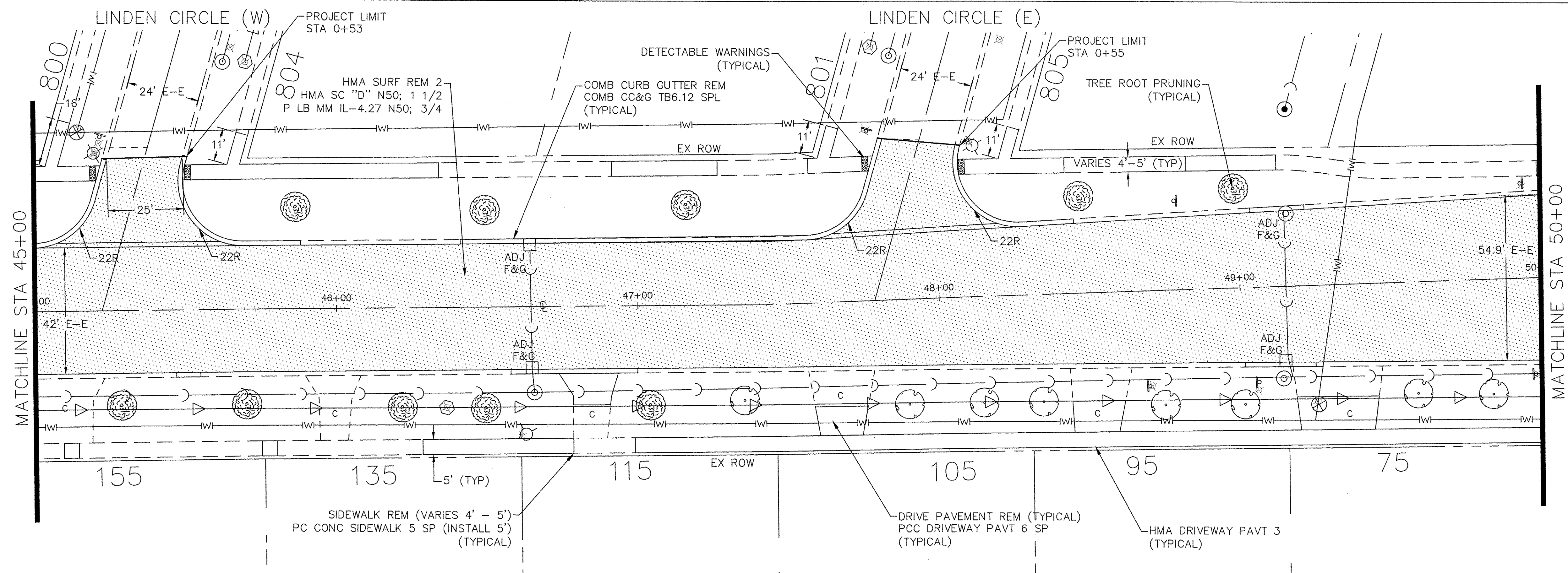
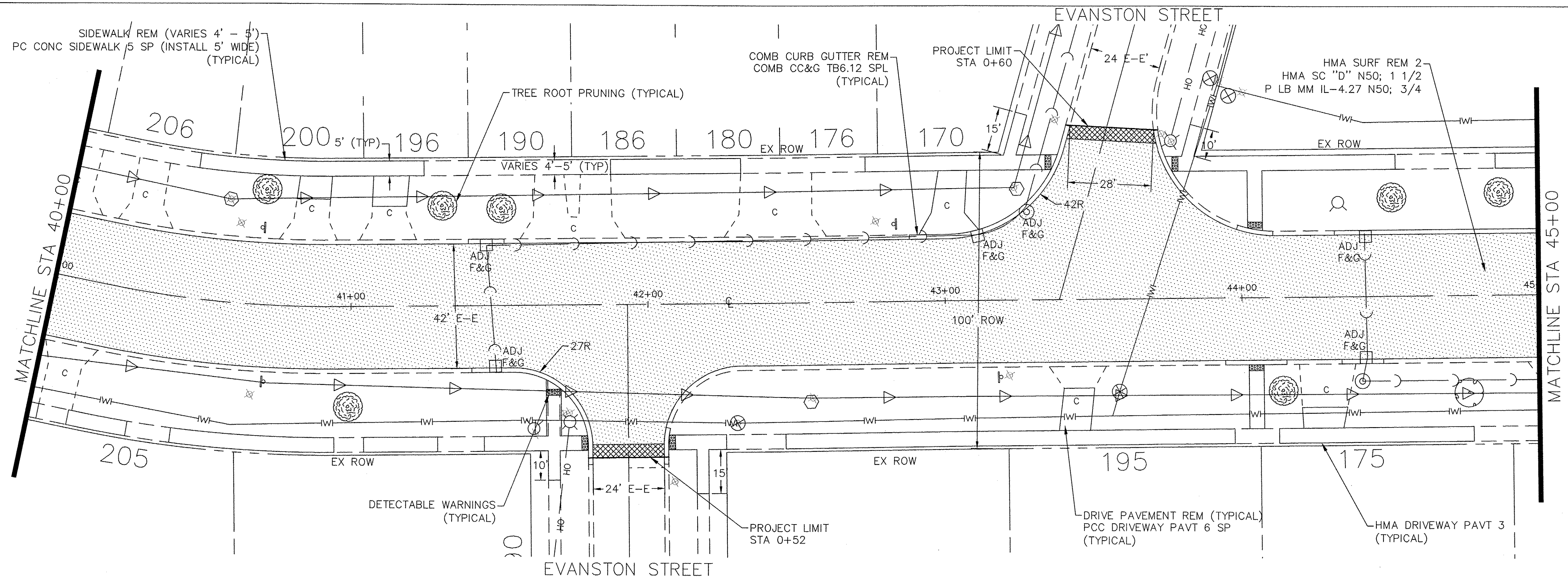
**STATE OF ILLINOIS**  
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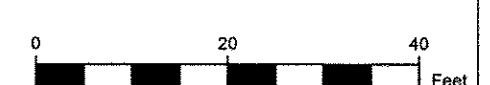
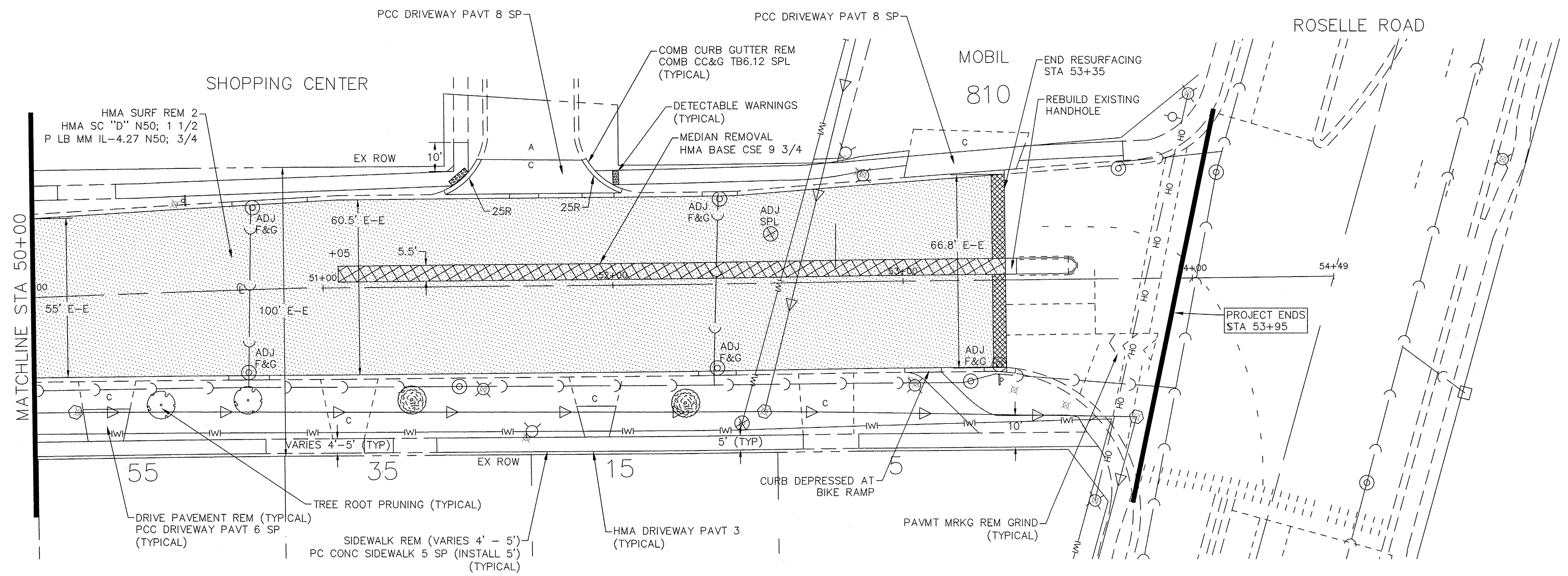
**BODE ROAD & HARMON BLVD PAVEMENT RESURFACING**  
**ROADWAY PLAN - BODE ROAD**

SCALE: 1" = 20'  
 SHEET NO. 4 OF 6 SHEETS  
 STA. 30+00 TO STA. 40+00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	15-00095-00-RS	COOK	65	11
*1318 & 2562			CONTRACT NO. 61075	
FED. ROAD DIST. 1 ILLINOIS			FED. AID PROJECT M-4003(798)	







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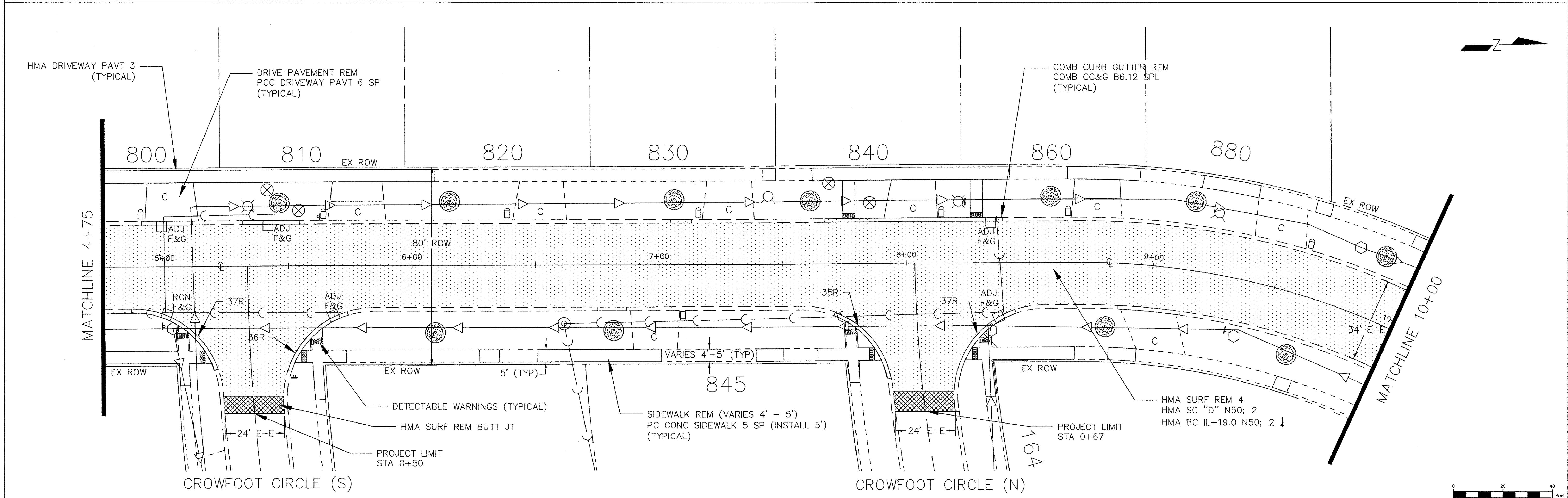
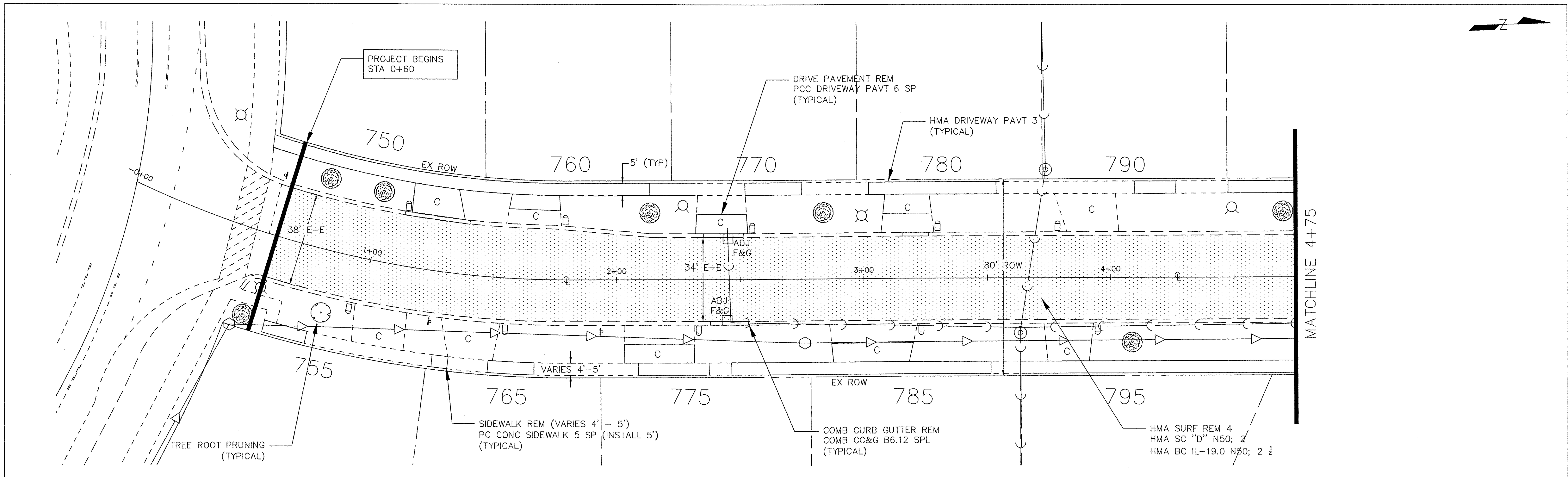
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**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**BODE ROAD & HARMON BLVD PAVEMENT RESURFACING  
 ROADWAY PLAN - BODE ROAD**

SCALE: 1" = 20' SHEET NO. 6 OF 6 SHEETS STA. 50+00 TO STA. 54+49

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	15-00095-00-RS	COOK	65	13
*1318 & 2562		CONTRACT NO. 61D75		
FED. ROAD DIST. 1	ILLINOIS	FED. AID PROJECT M-4003(798)		



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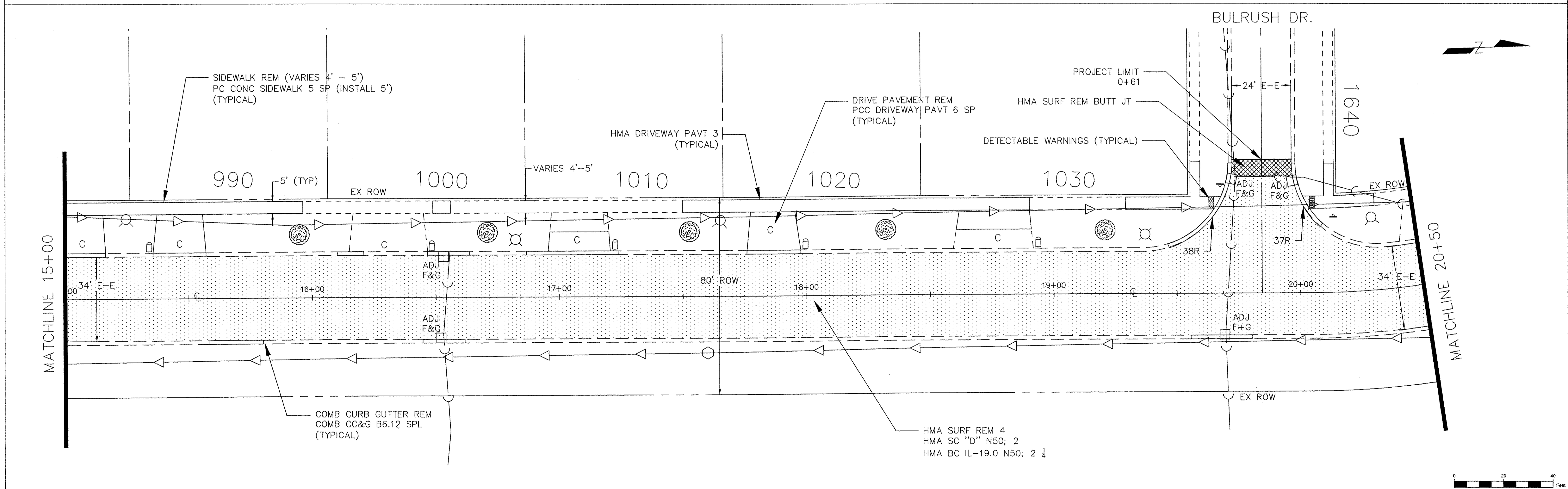
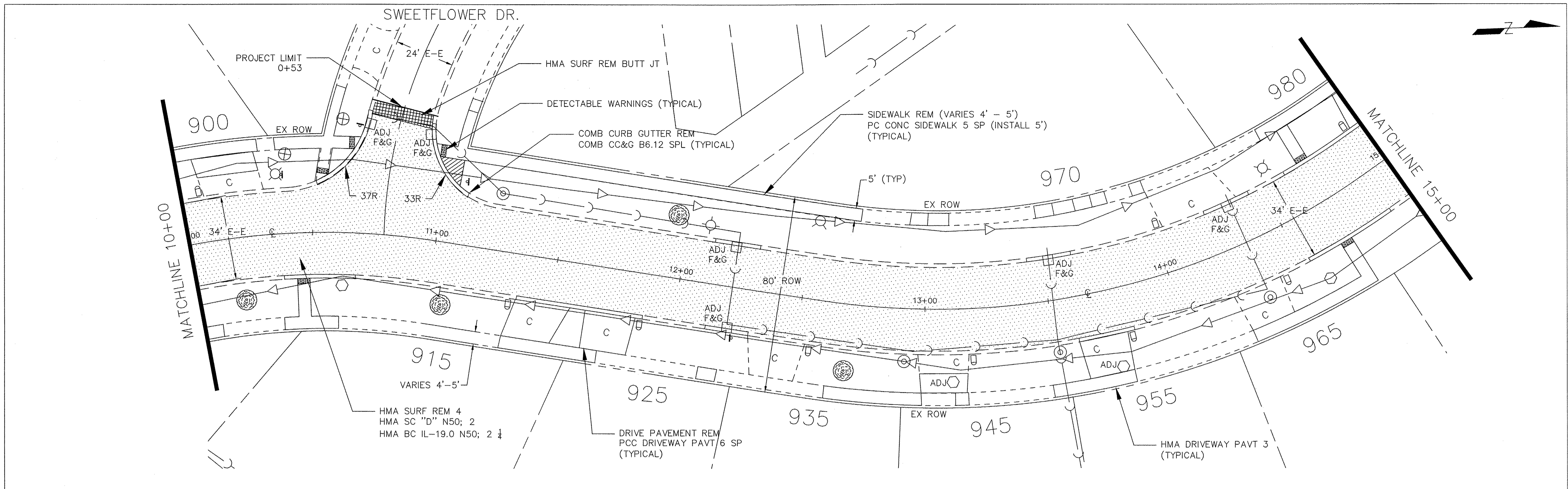
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**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**BODE ROAD & HARMON BLVD PAVEMENT RESURFACING**  
**ROADWAY PLAN - HARMON BOULEVARD**  
 SCALE: 1" = 20'  
 SHEET NO. 1 OF 3 SHEETS  
 STA. 0+00 TO STA. 10+00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	15-00095-00-RS	COOK	65	14
*1318 & 2562			CONTRACT NO. 61D75	
FED. ROAD DIST. 1 ILLINOIS			FED. AID PROJECT M-4003(798)	





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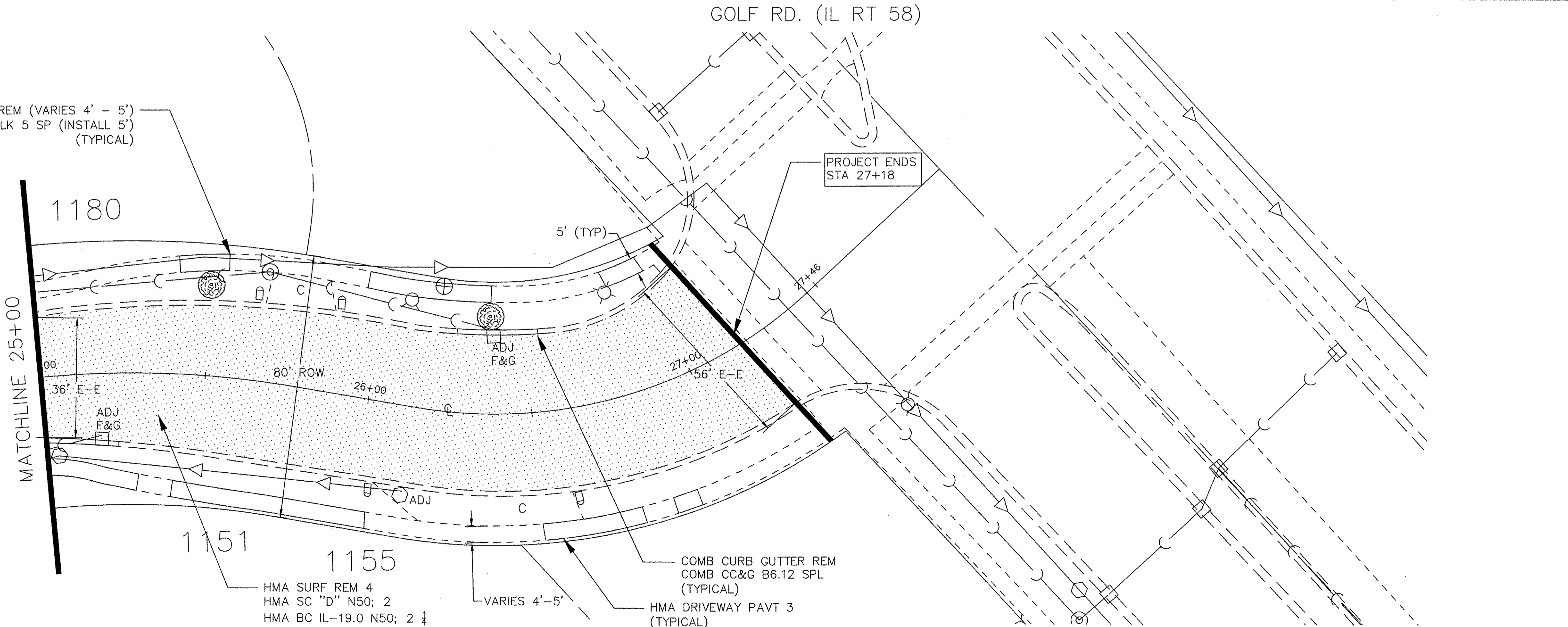
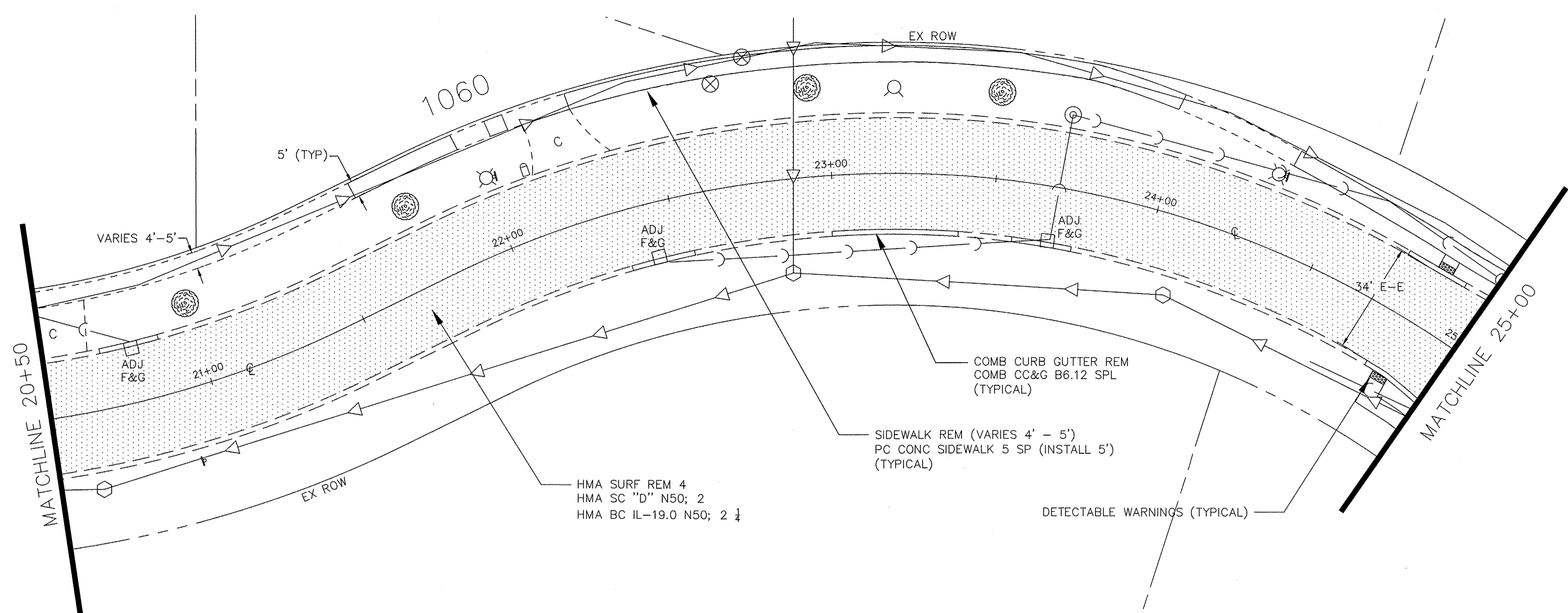
**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**BODE ROAD & HARMON BLVD PAVEMENT RESURFACING  
 ROADWAY PLAN - HARMON BOULEVARD**

SCALE: 1" = 20'    SHEET NO. 2 OF 3 SHEETS    STA. 10+00 TO STA. 20+50

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	15-00095-00-RS	COOK	65	15
*1318 & 2562		CONTRACT NO. 61D75		
FED. ROAD DIST. 1	ILLINOIS	FED. AID PROJECT M-4003(798)		





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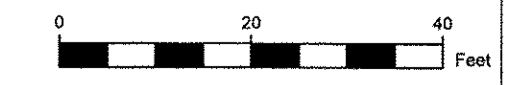
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**STATE OF ILLINOIS  
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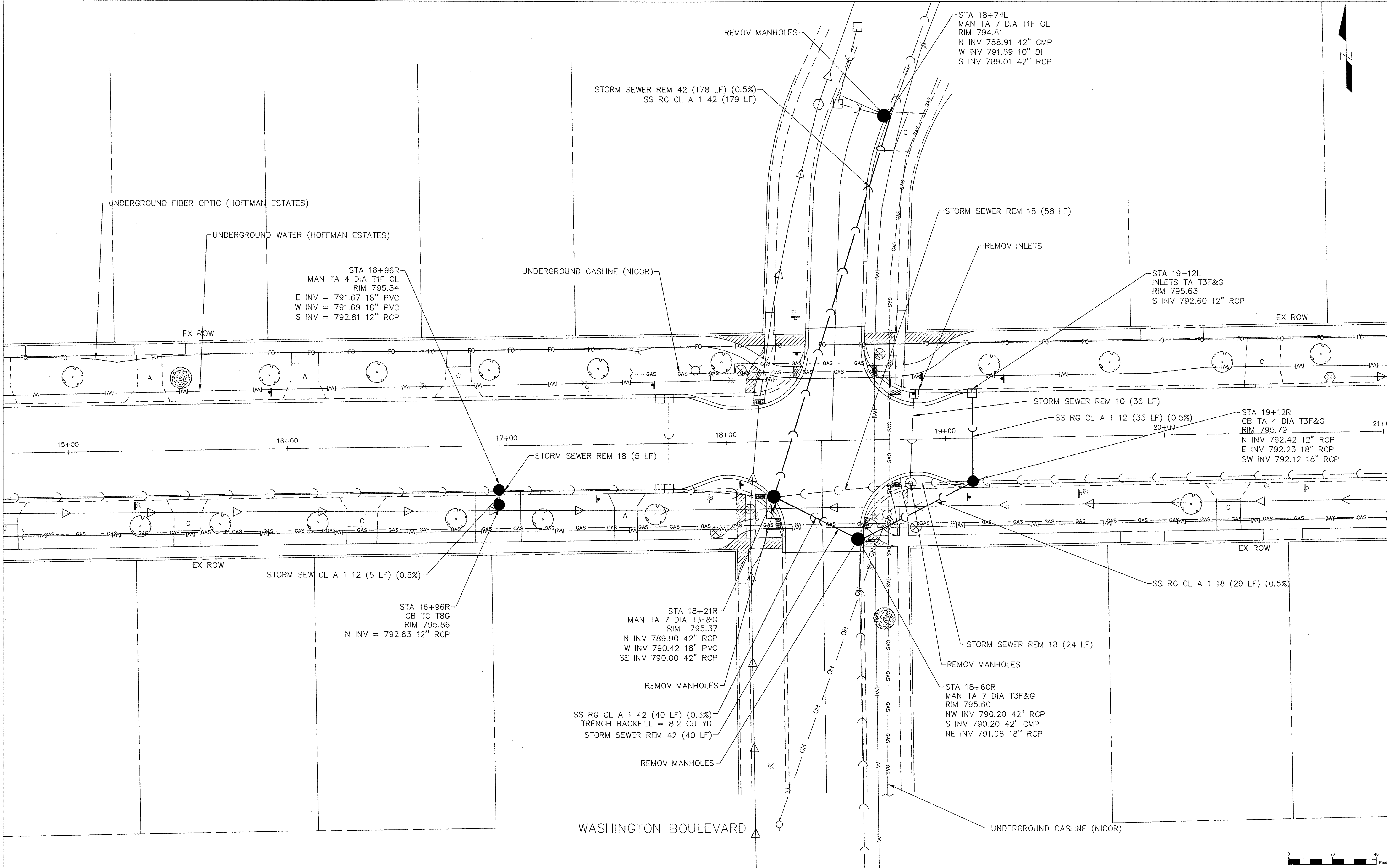
**BODE ROAD & HARMON BLVD PAVEMENT RESURFACING  
 ROADWAY PLAN - HARMON BOULEVARD**

SCALE: 1" = 20'    SHEET NO. 3 OF 3 SHEETS    STA. 20+50 TO STA. 27+18

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	15-00095-00-RS	COOK	65	16
*1318 & 2562		CONTRACT NO. 61D75		
FED. ROAD DIST. 1		ILLINOIS	FED. AID PROJECT M-4003(798)	







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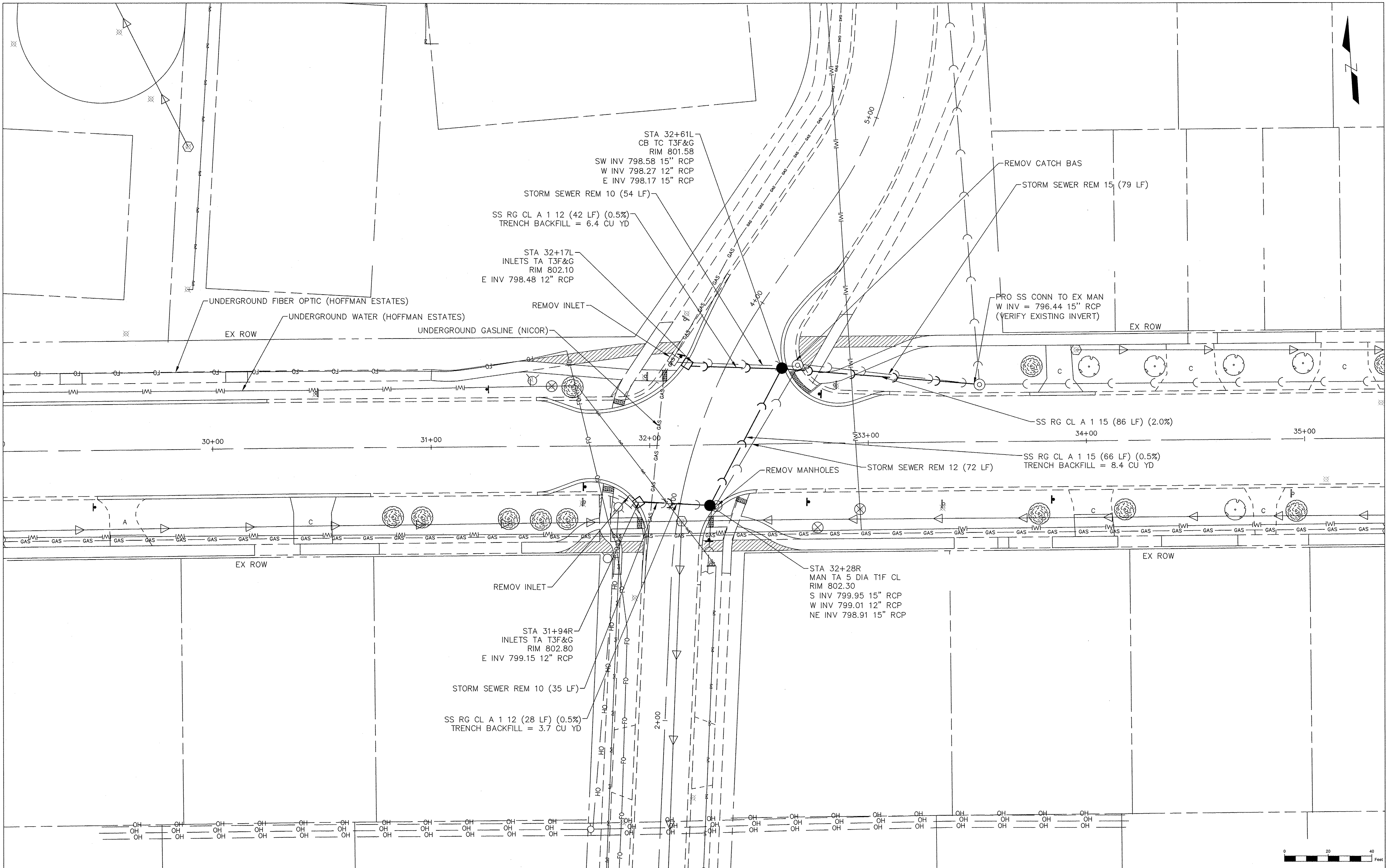
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**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**BODE ROAD & HARMON BLVD PAVEMENT RESURFACING  
 DRAINAGE PLAN - BODE ROAD**

SCALE: 1" = 20'    SHEET NO. 1 OF 2 SHEETS    STA. 14+70 TO STA. 21+05

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
* 1318 & 2562	15-00095-00-RS	COOK	65	17
FED. ROAD DIST. 1	ILLINOIS	FED. AID PROJECT M-4003(798)		



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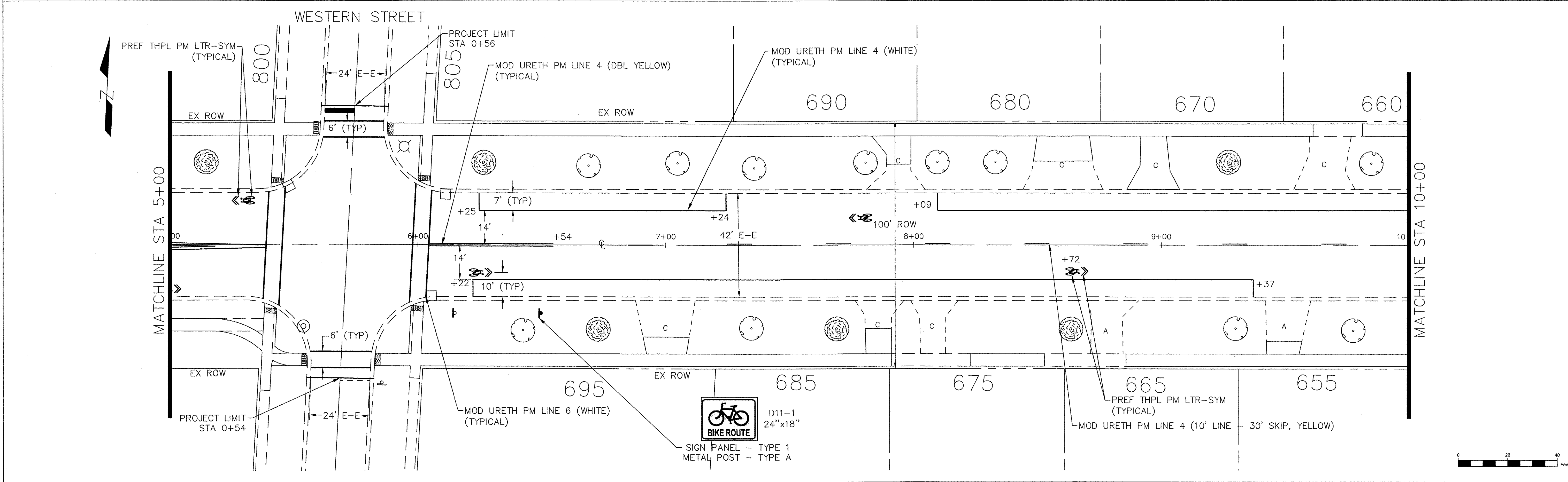
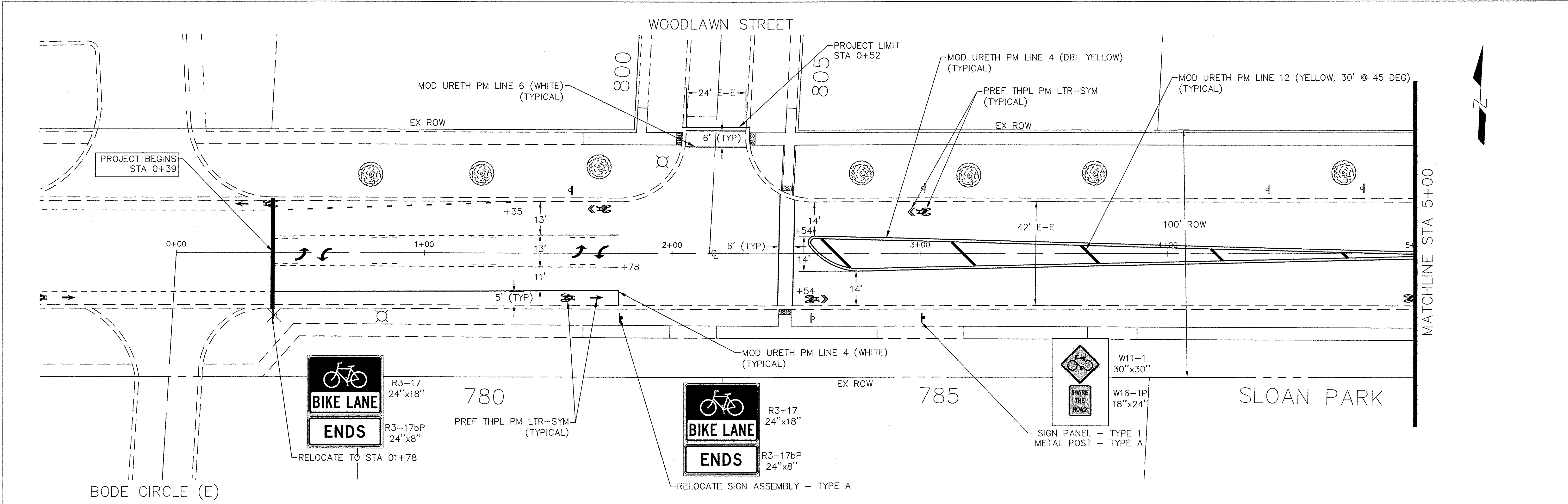
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**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**BODE ROAD & HARMON BLVD PAVEMENT RESURFACING  
 DRAINAGE PLAN - BODE ROAD**

SCALE: 1" = 20'    SHEET NO. 2 OF 2 SHEETS    STA. 31+05 TO STA. 35+40

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
* 1318 & 2562	15-00095-00-RS	COOK	65	18
FED. ROAD DIST. 1	ILLINOIS	CONTRACT NO. 61D75 FED. AID PROJECT M-4003(798)		



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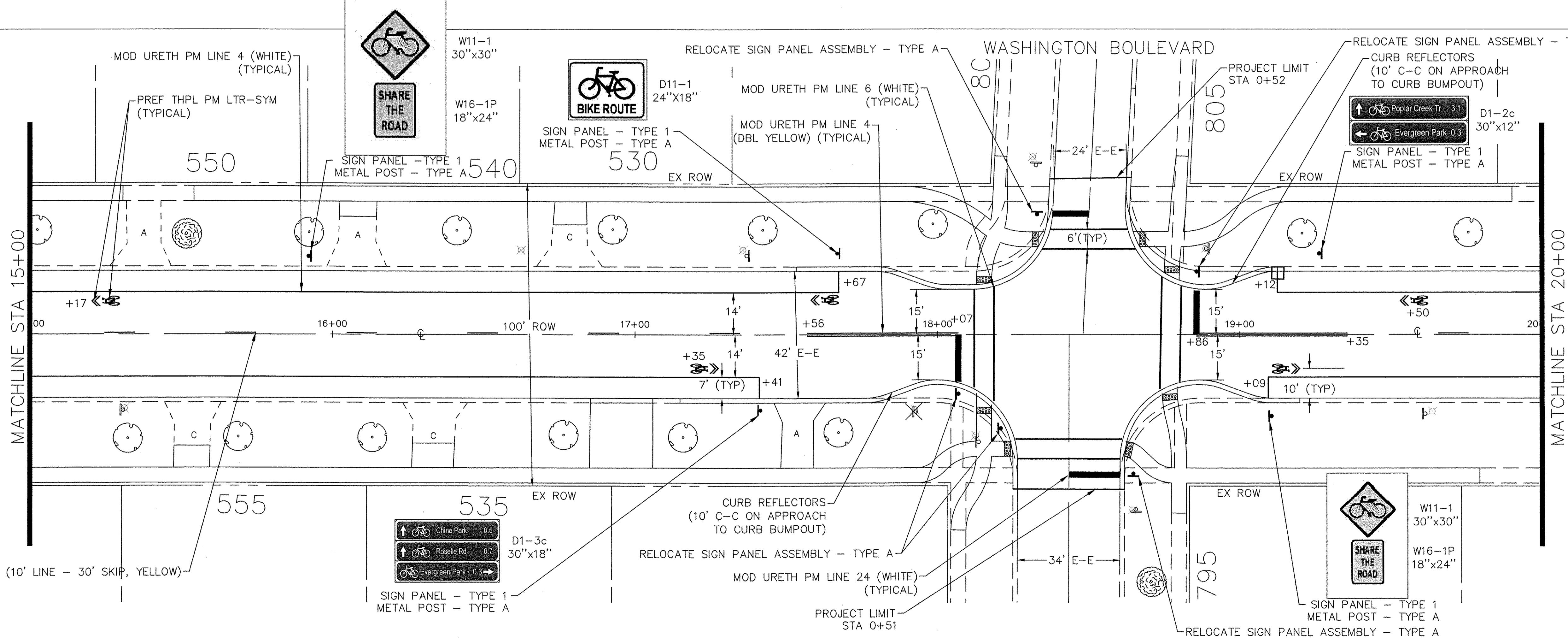
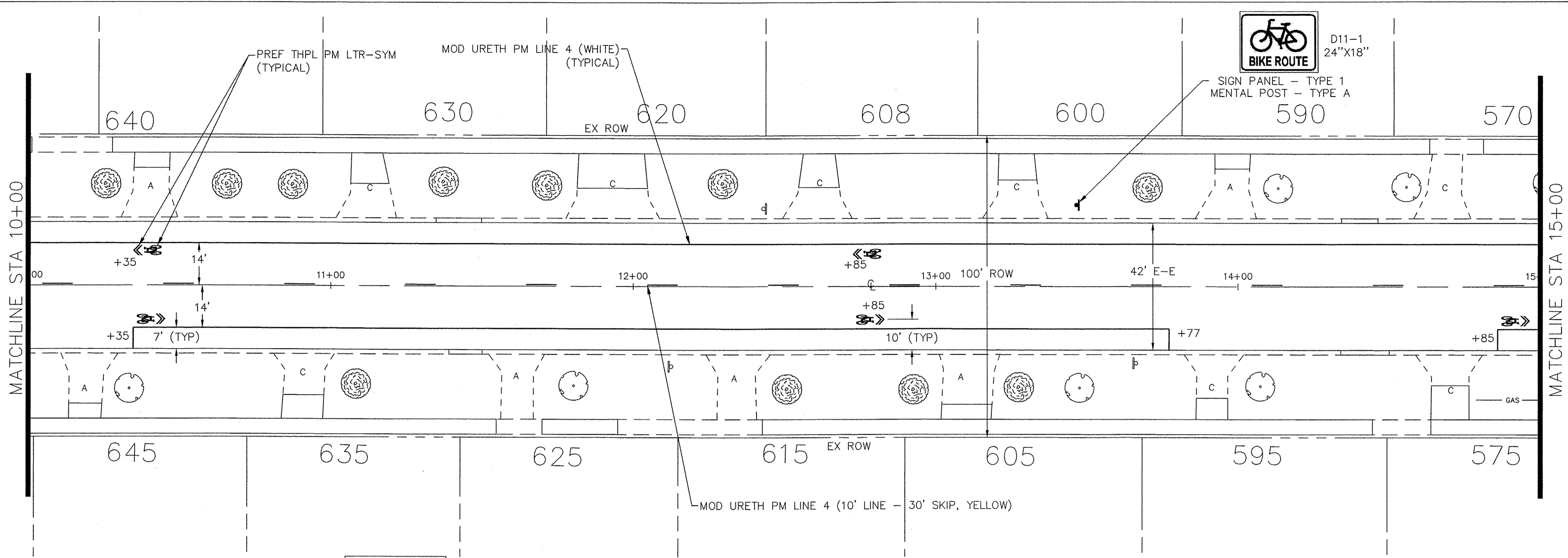
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**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**BODE ROAD & HARMON BLVD PAVEMENT RESURFACING  
 STRIPING AND SIGNAGE - BODE ROAD**

SCALE: 1" = 20' SHEET NO. 1 OF 6 SHEETS STA. 0+00 TO STA. 10+00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	15-00095-00-RS	COOK	65	19
*1318 & 2562		CONTRACT NO. 61D75		
FED. ROAD DIST. 1		ILLINOIS		
FED. AID PROJECT M-4003(798)				



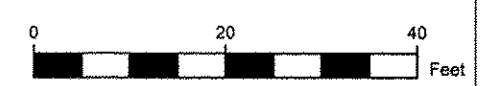
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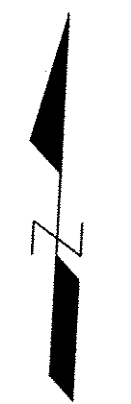
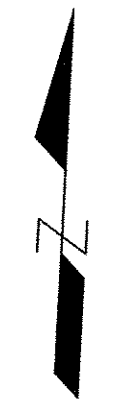
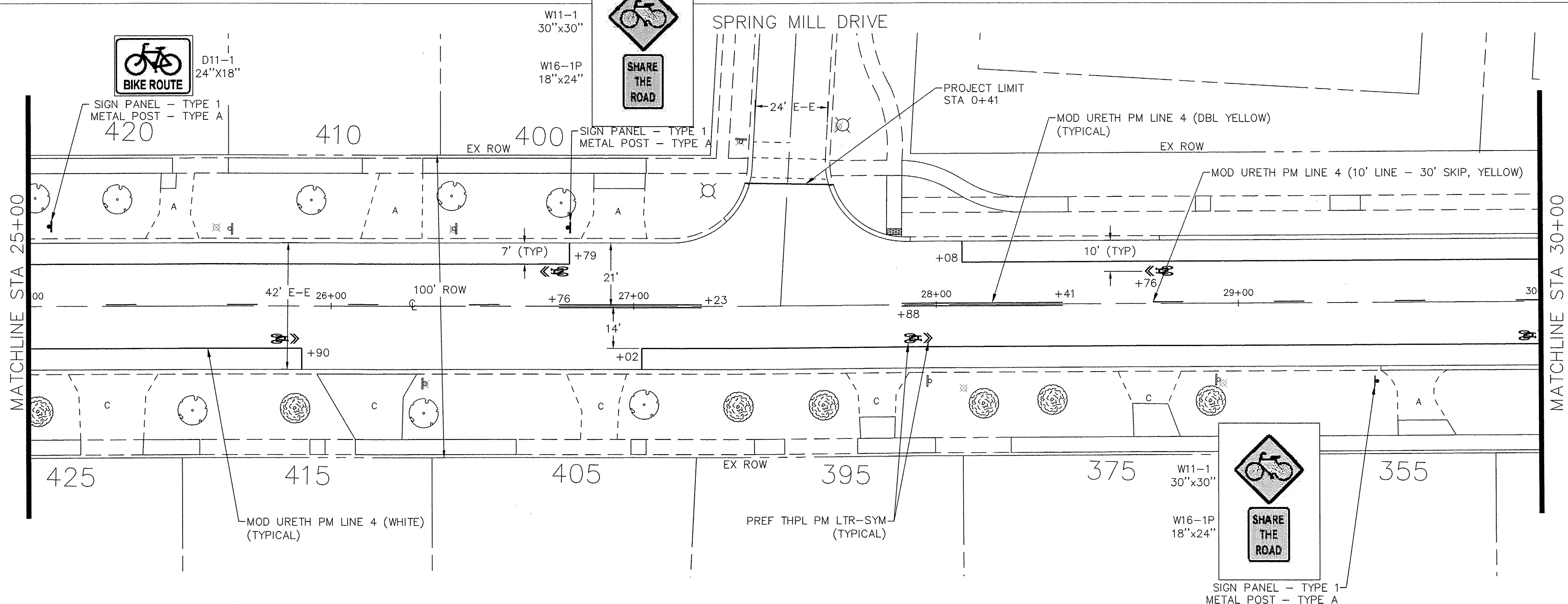
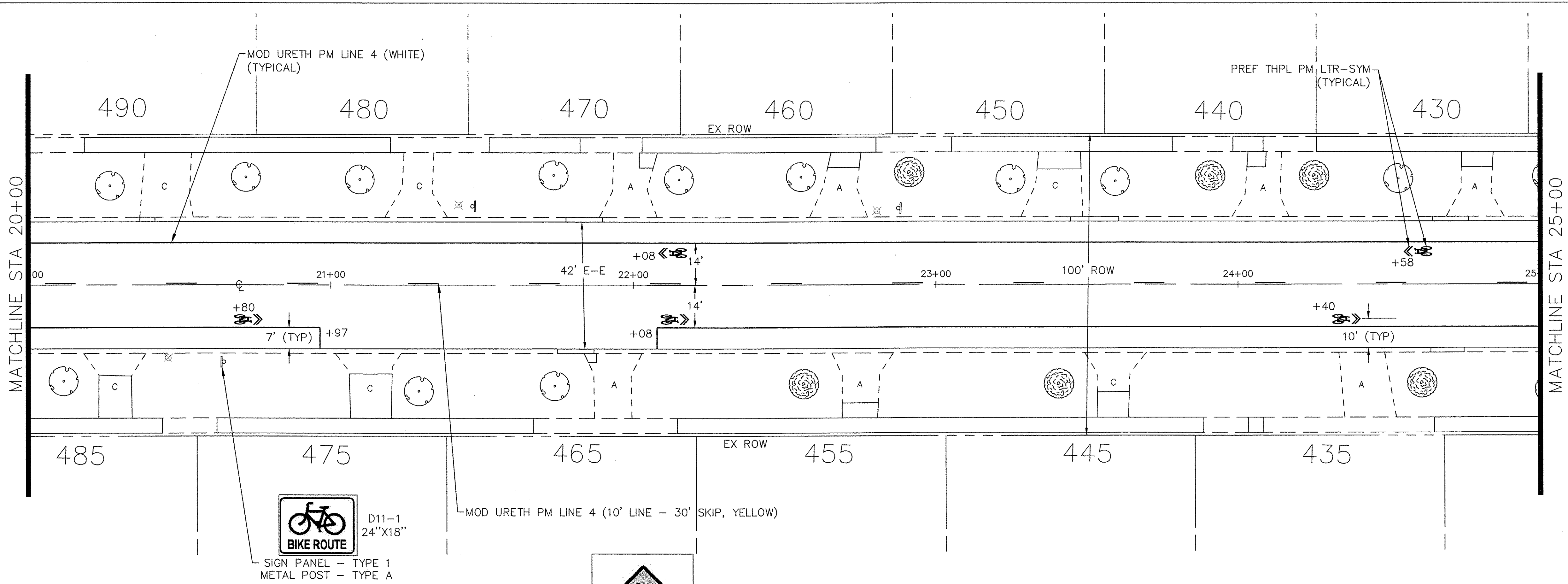
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**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**BODE ROAD & HARMON BLVD PAVEMENT RESURFACING**  
**STRIPING AND SIGNAGE - BODE ROAD**  
 SCALE: 1" = 20'  
 SHEET NO. 2 OF 6 SHEETS  
 STA. 10+00 TO STA. 20+00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*1318 & 2562	15-00095-00-RS	COOK	65	20
FED. ROAD DIST. 1 ILLINOIS			CONTRACT NO. 61D75	
			FED. AID PROJECT M-4003(798)	





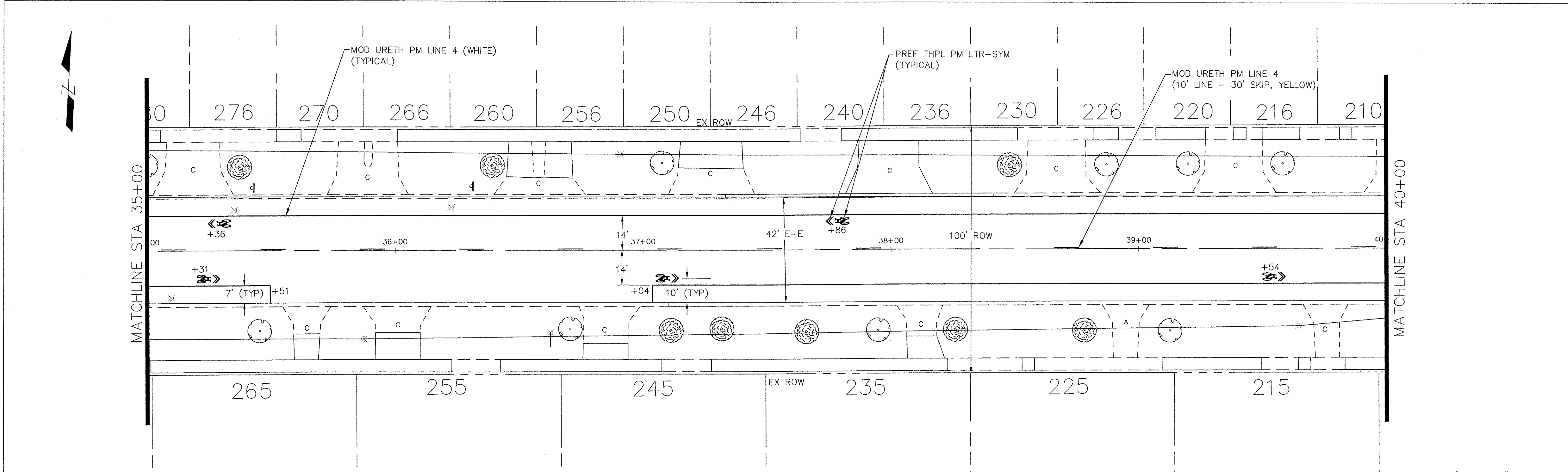
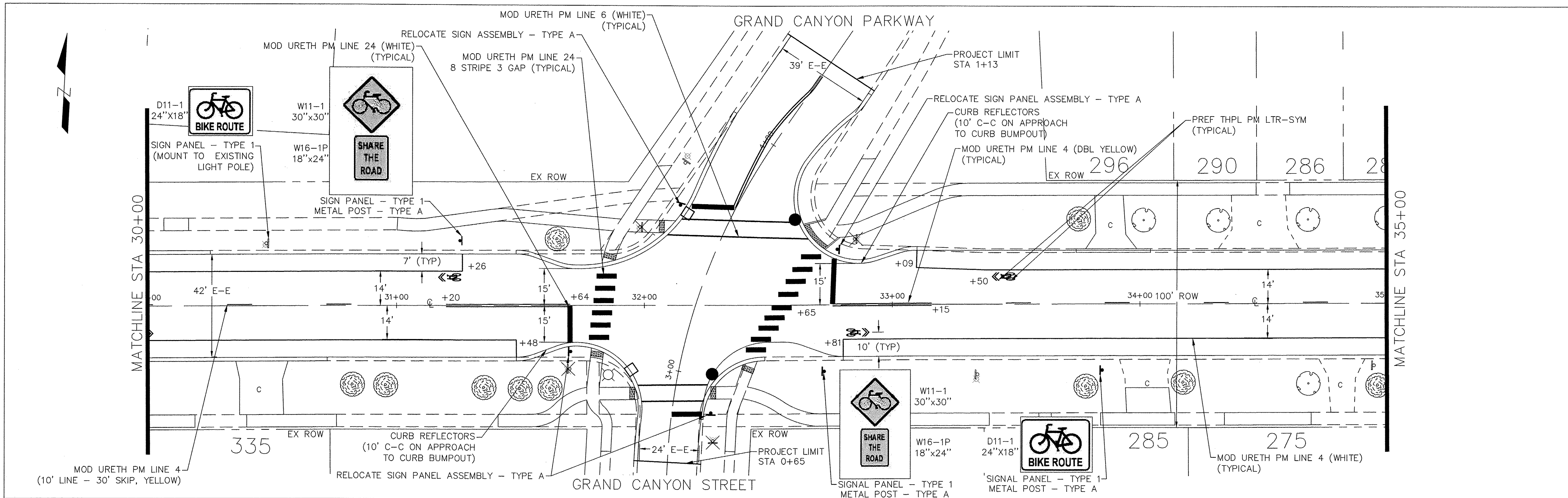
ENGINEERING CONSULTANT  
**Ciorba Group, Inc.**  
 CONSULTING ENGINEERS  
 5507 North Cumberland Avenue, Suite 402  
 Chicago, Illinois 60654  
 Tel. 773.775.4009 Fax 773.775.4014  
 Email chicao@ciorba.com

USERNAME = dwierzbicki	DESIGNED - JPA	REVISED -
DRAWN - DW	REVISED -	
PLOT SCALE =	CHECKED - DJO	REVISED -
PLOT DATE =	DATE - 01/30/2017	REVISED -

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**BODE ROAD & HARMON BLVD PAVEMENT RESURFACING**  
**STRIPING AND SIGNAGE - BODE ROAD**  
 SCALE: 1" = 20'  
 SHEET NO. 3 OF 6 SHEETS  
 STA. 20+00 TO STA. 30+00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*1318 & 2562	15-00095-00-RS	COOK	65	21
FED. ROAD DIST. 1 ILLINOIS		CONTRACT NO. 61D75 FED. AID PROJECT M-4003(798)		



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 5507 North Cumberland Avenue, Suite 402  
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 Email: chicago@ciorba.com

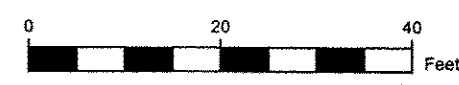
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	DATE - 01/30/2017	REVISED -

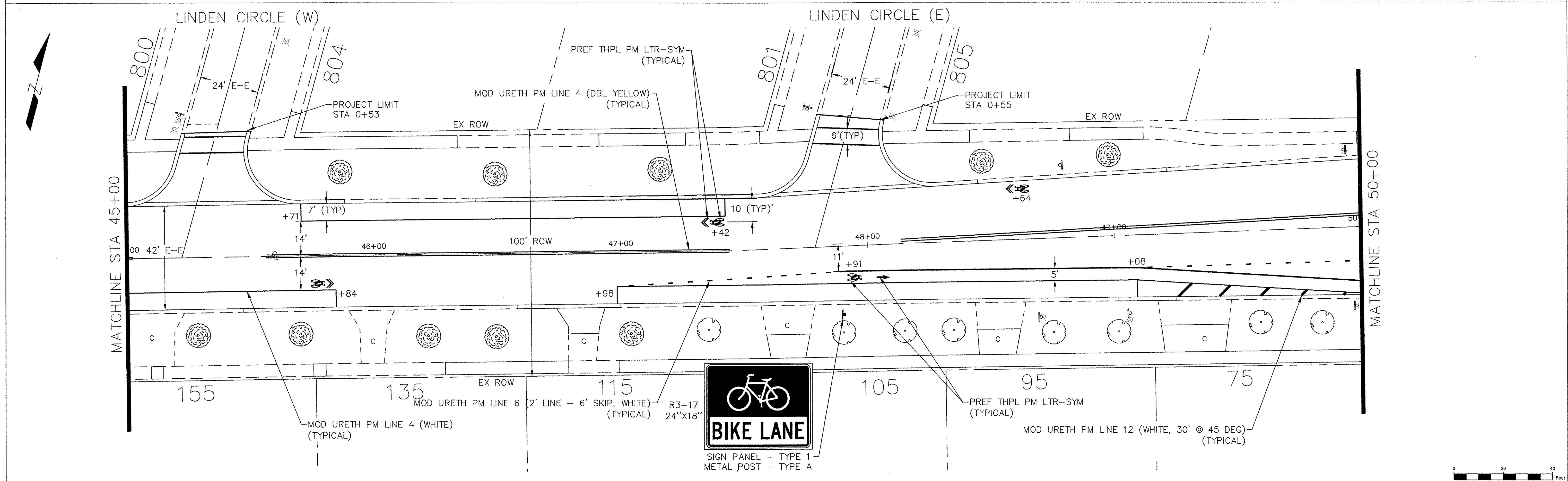
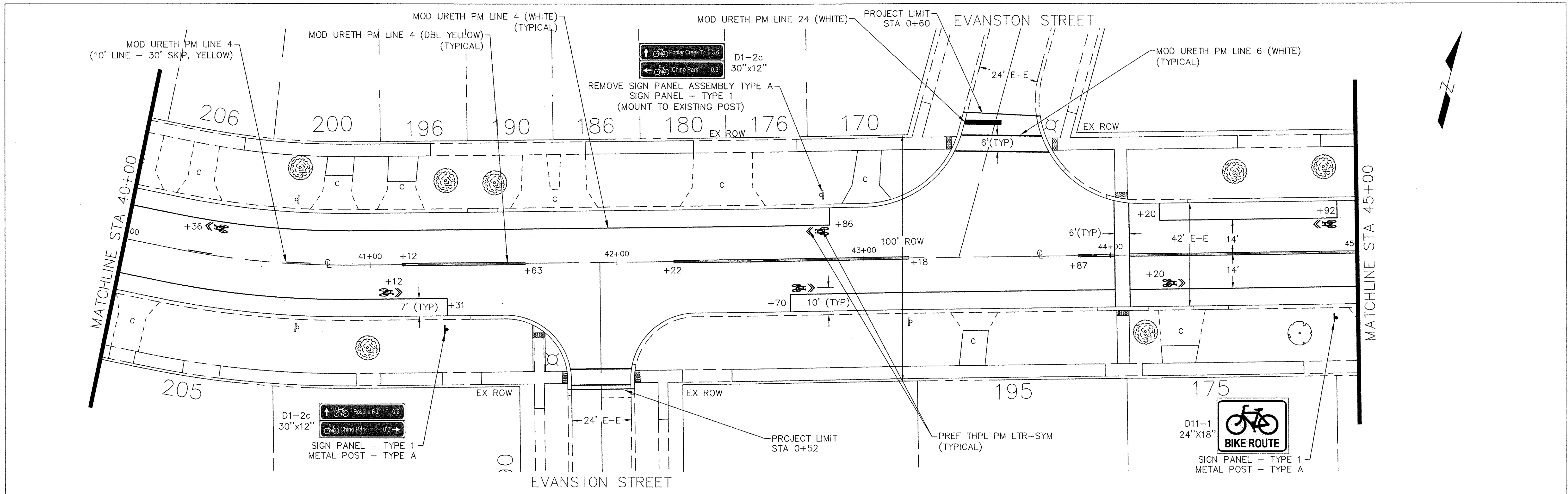
**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**BODE ROAD & HARMON BLVD PAVEMENT RESURFACING  
 STRIPING AND SIGNAGE - BODE ROAD**

SCALE: 1" = 20' SHEET NO. 4 OF 6 SHEETS STA. 30+00 TO STA. 40+00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	15-00095-00-RS	COOK	65	22
*1318 & 2562		CONTRACT NO. 61D75		
FED. ROAD DIST. 1		ILLINOIS	FED. AID PROJECT M-4003(798)	





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 5507 North Cumberland Avenue, Suite 402  
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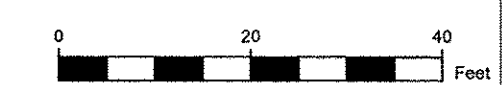
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DRAWN -	DW	REVISOR -		REVISION -	
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PLOT DATE =		DATE -	01/30/2017	REVISION -	

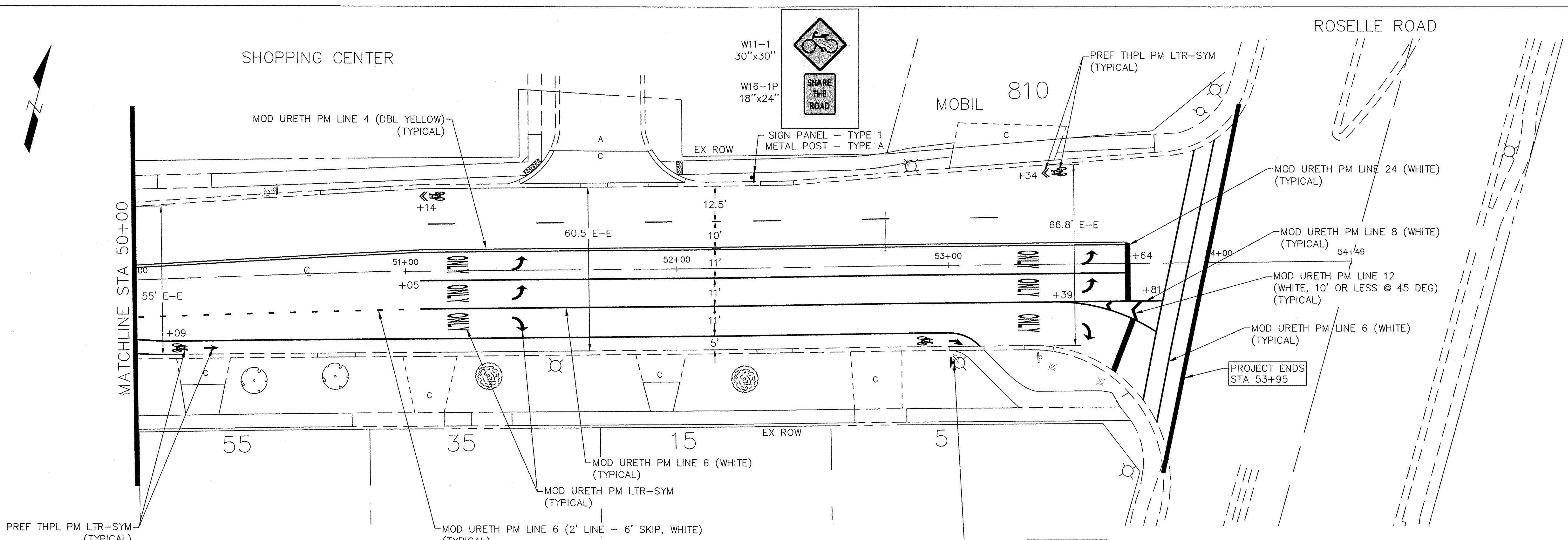
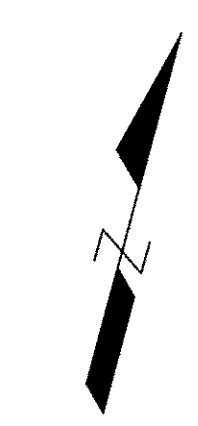
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**BODE ROAD & HARMON BLVD PAVEMENT RESURFACING**  
**STRIPING AND SIGNAGE - BODE ROAD**

SCALE: 1" = 20'    SHEET NO. 5 OF 6 SHEETS    STA. 40+00 TO STA. 50+00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	15-00095-00-RS	COOK	65	23
*1318 & 2562		CONTRACT NO. 61D75		
FED. ROAD DIST. 1	ILLINOIS	FED. AID PROJECT M-4003(798)		





D11-1  
24"x18"  
 M6-2  
12"x 6"  
 CUSTOM  
(WHITE TEXT ON GREEN BACKGROUND)  
 SIGN PANEL - TYPE 1  
(MOUNT TO EXISTING LIGHT POLE)



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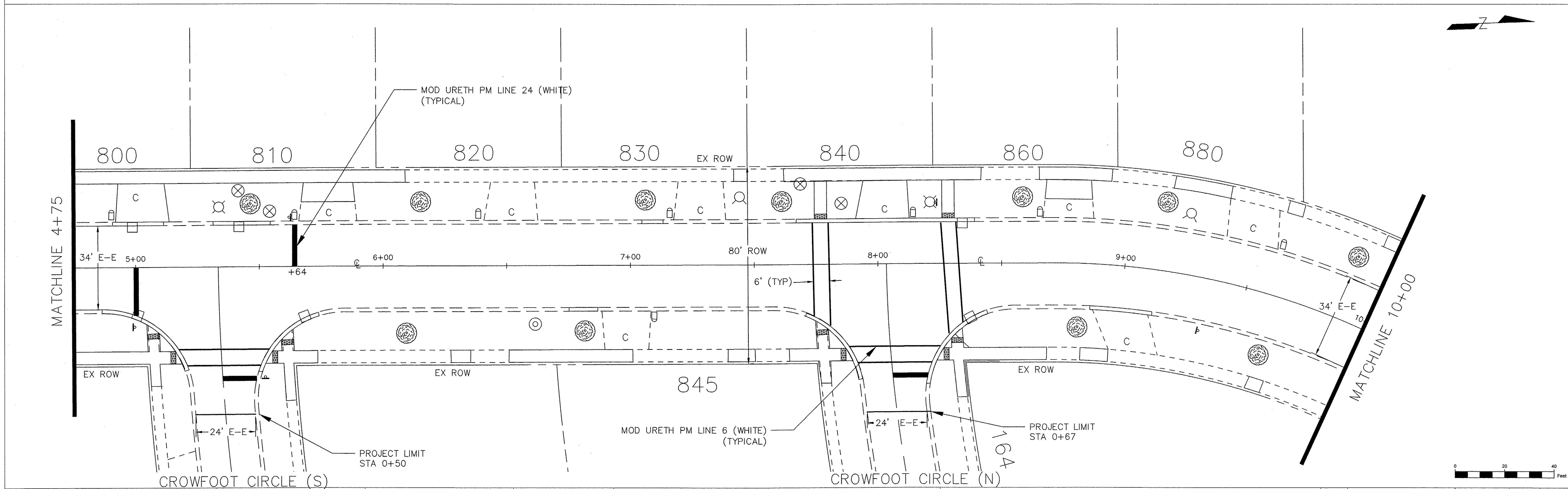
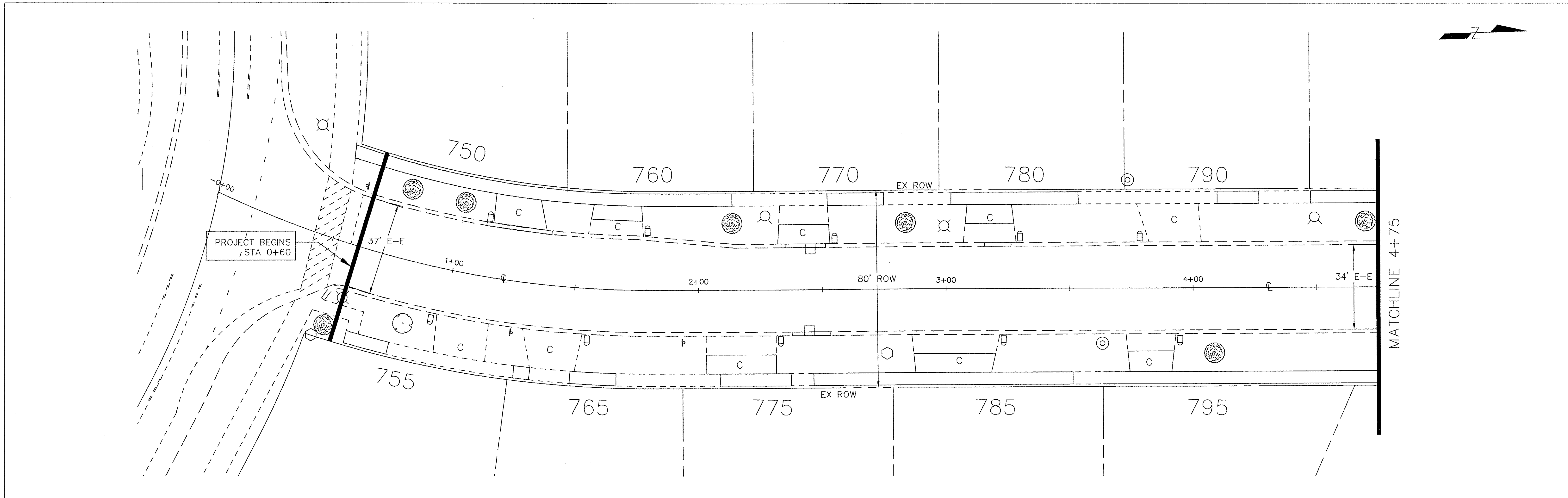
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PLOT SCALE =	DRAWN - DW	REVISED -
PLOT DATE =	CHECKED - DJO	REVISED -
	DATE - 01/30/2017	REVISED -

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**BODE ROAD & HARMON BLVD PAVEMENT RESURFACING**  
**STRIPING AND SIGNAGE - BODE ROAD**  
 SCALE: 1" = 20' SHEET NO. 6 OF 6 SHEETS STA. 50+00 TO STA. 54+49

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	15-00095-00-RS	COOK	65	24
*1318 & 2562		CONTRACT NO. 61D75		
FED. ROAD DIST. 1		ILLINOIS	FED. AID PROJECT M-4003(798)	





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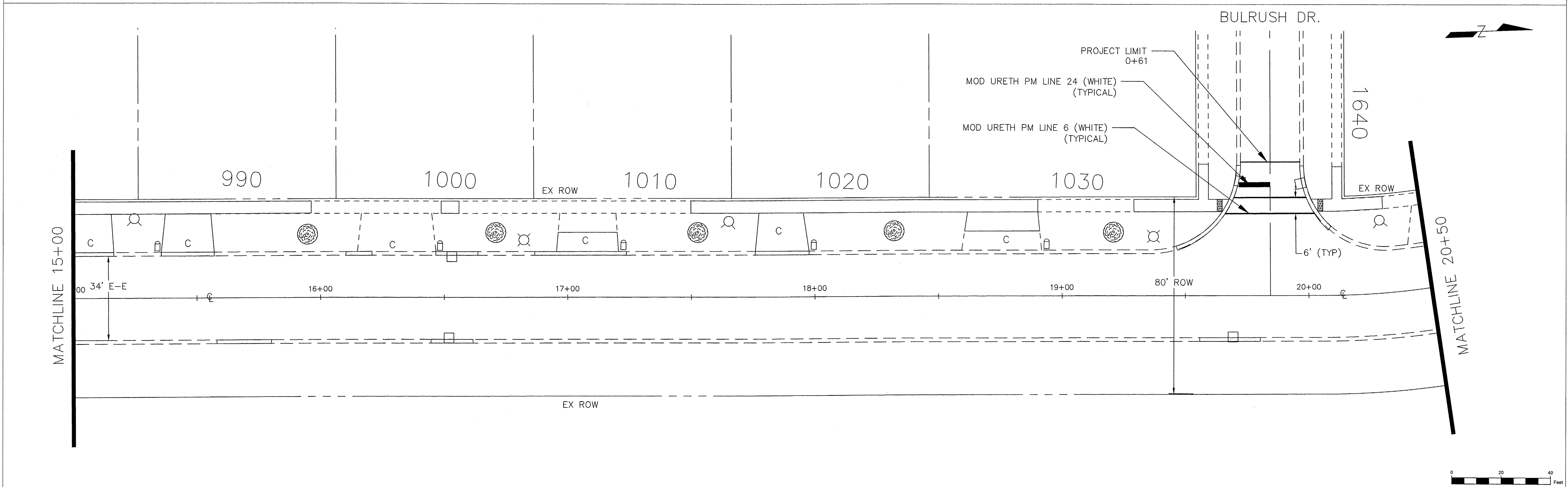
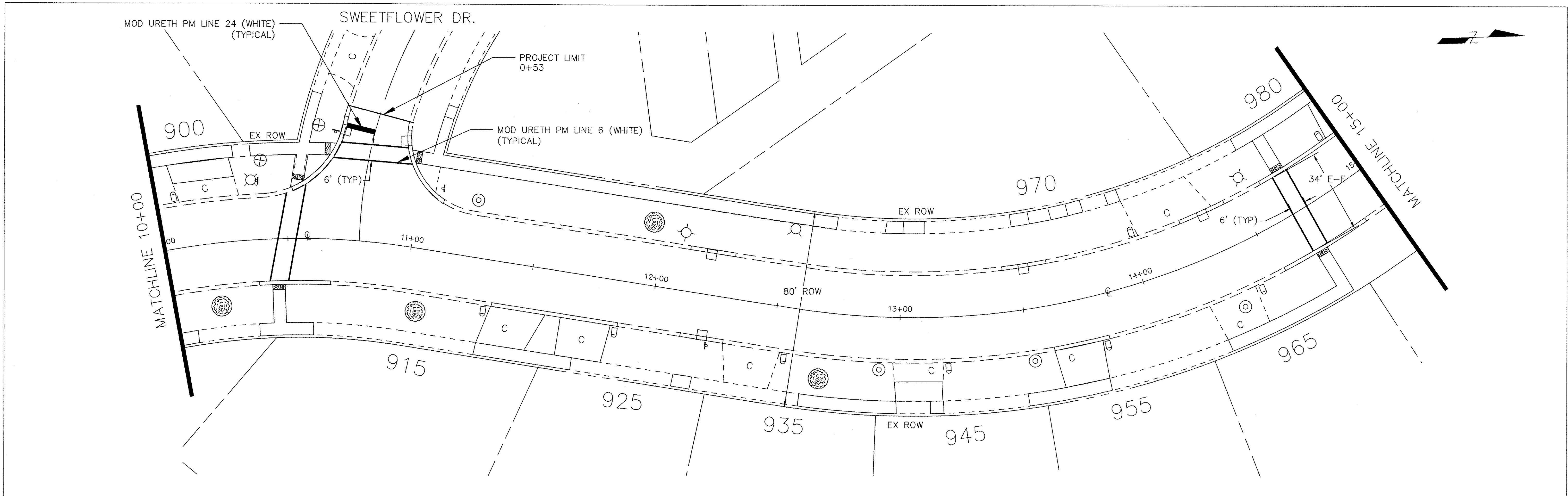
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PLOT SCALE =	DRAWN - DW	REVISED -
PLOT DATE =	CHECKED - DJO	REVISED -
	DATE - 01/30/2017	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**BODE ROAD & HARMON BLVD PAVEMENT RESURFACING  
 STRIPING AND SIGNAGE - HARMON BLVD**

SCALE: 1" = 20'    SHEET NO. 1 OF 3 SHEETS    STA. 0+00 TO STA. 10+00

F.A.U. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
* 1318 & 2562	15-00095-00-RS	COOK	65	25
FED. ROAD DIST. 1	ILLINOIS	FED. AID PROJECT M-4003(798)		



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USERNAME = dwierzbicki	DESIGNED - JPA	REVISED -
PLOT SCALE =	DRAWN - DW	REVISED -
PLOT DATE =	CHECKED - DJO	REVISED -
	DATE - 01/30/2017	REVISED -

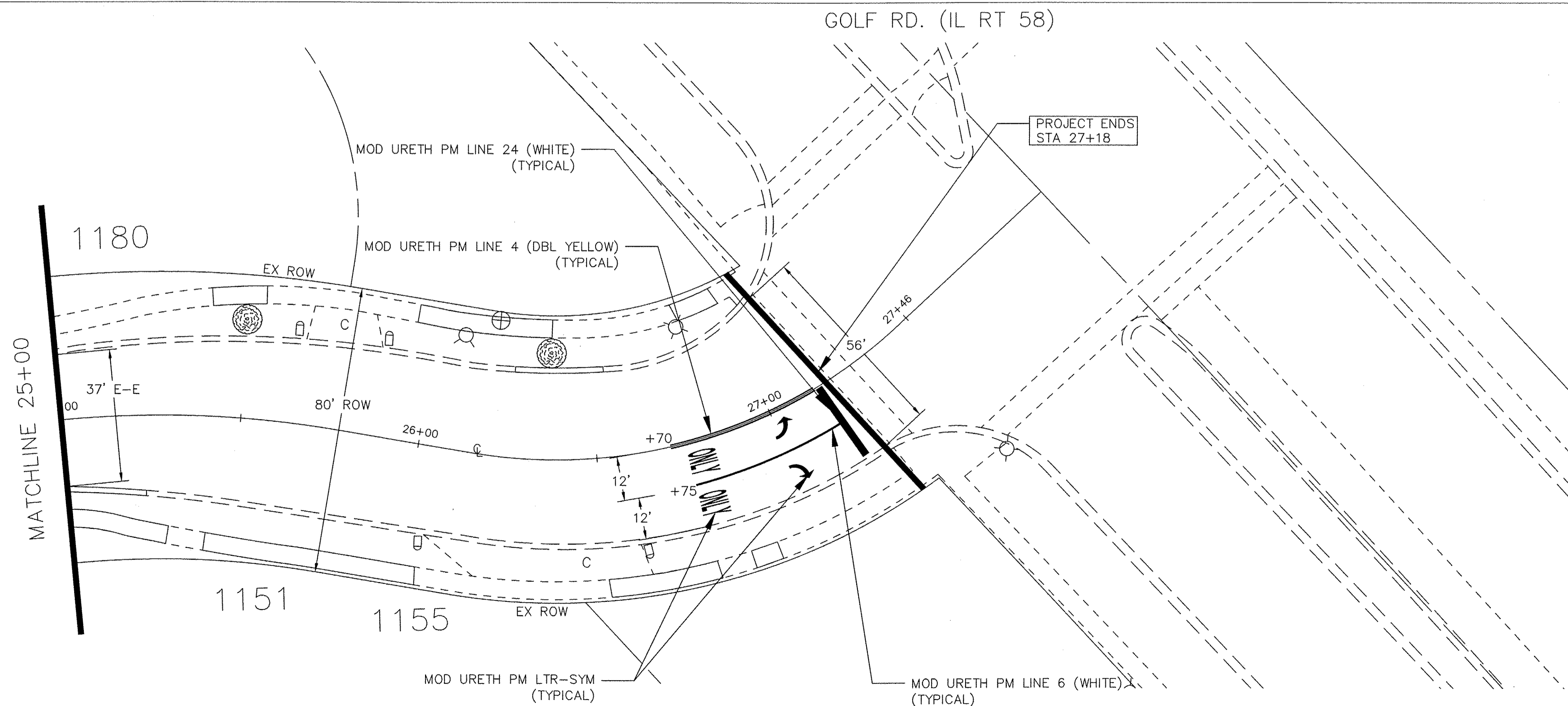
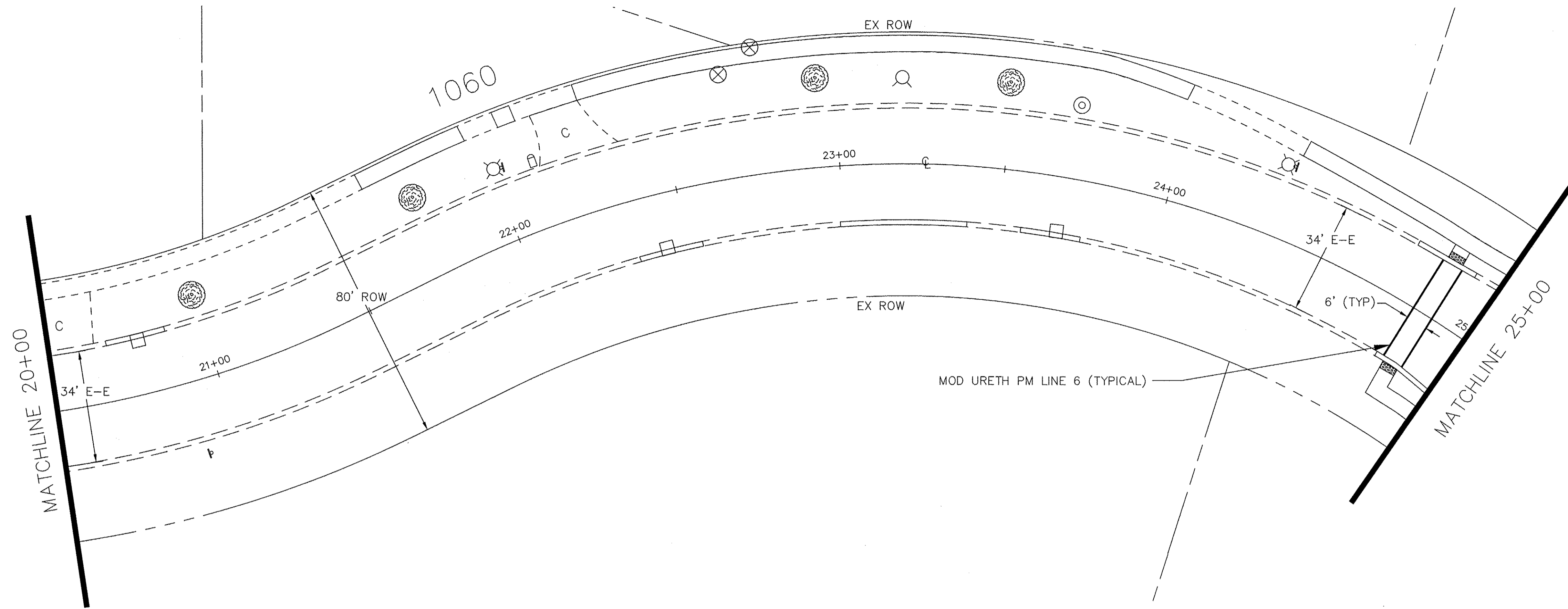
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**BODE ROAD & HARMON BLVD PAVEMENT RESURFACING**  
**STRIPING AND SIGNAGE - HARMON BLVD**

SCALE: 1" = 20'    SHEET NO. 2 OF 3 SHEETS    STA. 10+00 TO STA. 20+50

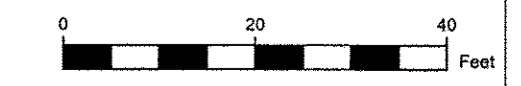
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	15-00095-00-RS	COOK	65	26
*1318 & 2562		CONTRACT NO. 61D75		
FED. ROAD DIST. 1		ILLINOIS	FED. AID PROJECT M-4003(798)	

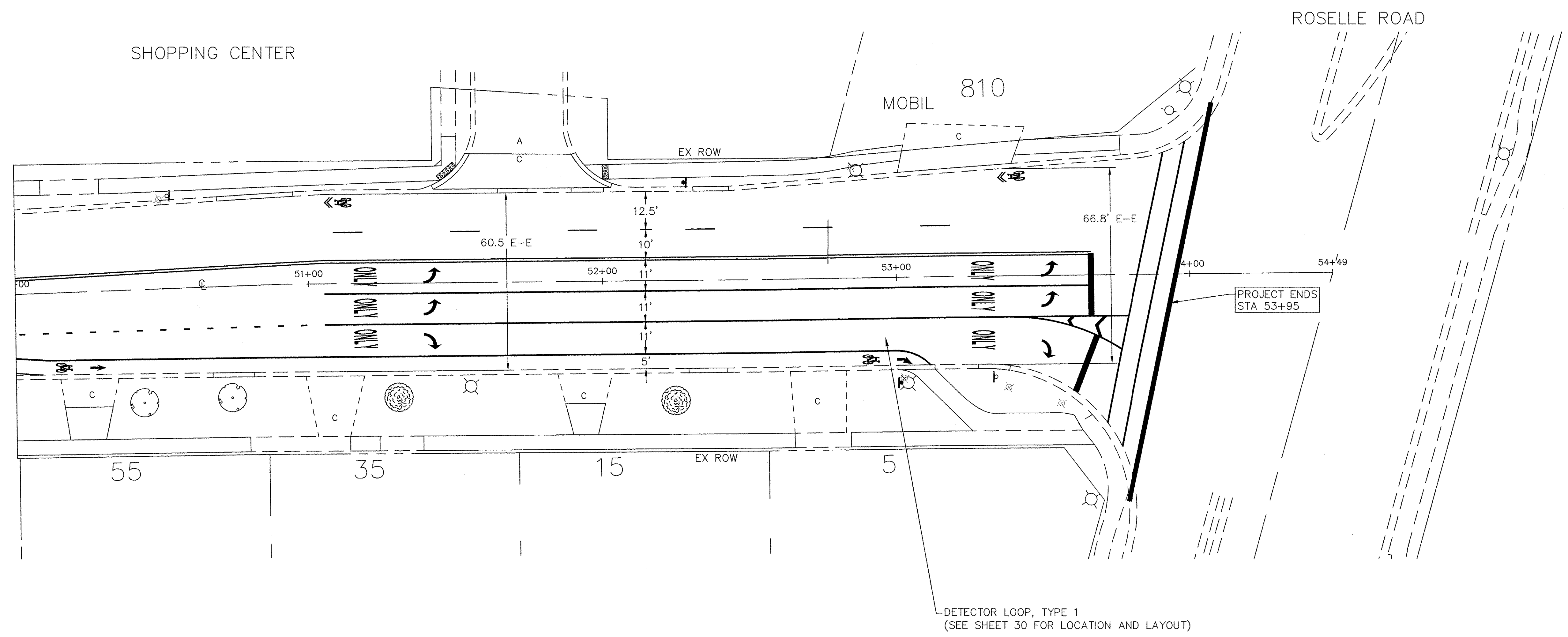




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	DATE - 01/30/2017	REVISED -

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	15-00095-00-RS	COOK	65	27
*1318 & 2562		CONTRACT NO. 61D75		
FED. ROAD DIST. 1		ILLINOIS	FED. AID PROJECT M-4003(798)	





DETECTOR LOOP, TYPE 1  
(SEE SHEET 30 FOR LOCATION AND LAYOUT)

PROJECT ENDS  
STA 53+95



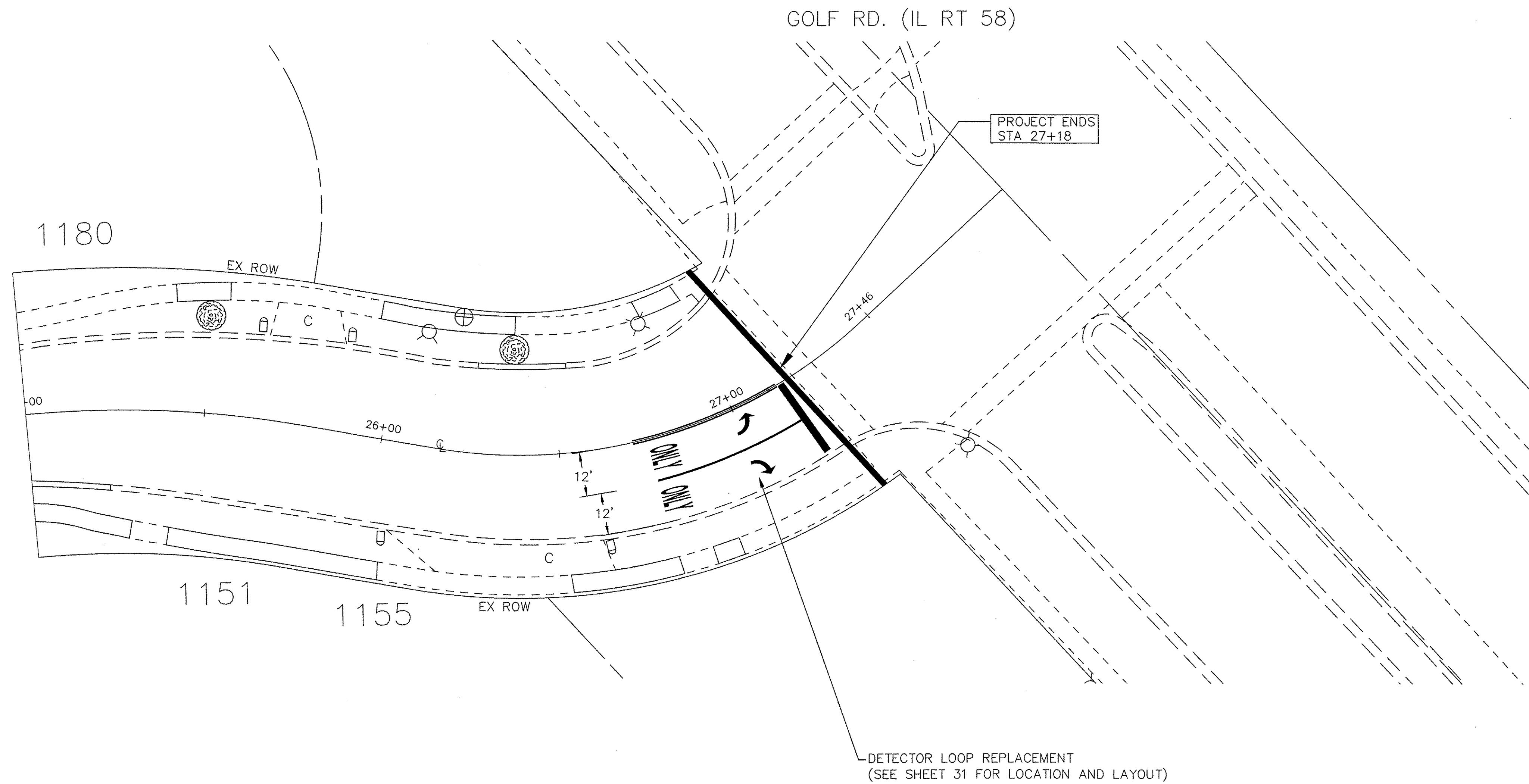
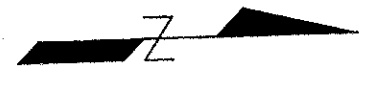
ENGINEERING CONSULTANT  
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USERNAME = dwierzbicki	DESIGNED - JPA	REVISED -
DRAWN - DW	REVISED -	
PLOT SCALE =	CHECKED - DJO	REVISED -
PLOT DATE =	DATE - 01/30/2017	REVISED -

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**BODE ROAD & HARMON BLVD PAVEMENT RESURFACING**  
**DETECTOR LOOP PLAN - BODE ROAD**  
SCALE: 1" = 20' SHEET NO. 1 OF 1 SHEETS STA. 50+00 TO STA. 54+49

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	15-00095-00-RS	COOK	65	28
*1318 & 2562		CONTRACT NO. 61D75		
FED. ROAD DIST. 1	ILLINOIS	FED. AID PROJECT M-4003(798)		



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USERNAME = dwierzbicki	DESIGNED - JPA	REVISED -
	DRAWN - DW	REVISED -
PLOT SCALE =	CHECKED - DJO	REVISED -
PLOT DATE =	DATE - 01/30/2017	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**BODE ROAD & HARMON BLVD PAVEMENT RESURFACING  
 DETECTOR LOOP PLAN - HARMON BLVD**

SCALE: 1" = 20' SHEET NO. 1 OF 1 SHEETS STA. 20+50 TO STA. 27+18

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	15-00095-00-RS	COOK	65	29
*1318 & 2562		CONTRACT NO. 61D75		
FED. ROAD DIST. 1	ILLINOIS	FED. AID PROJECT M-4003(798)		

COUNTY HIGHWAY	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
V60	1997	279	405
Section: 96-V6040-04-RP			

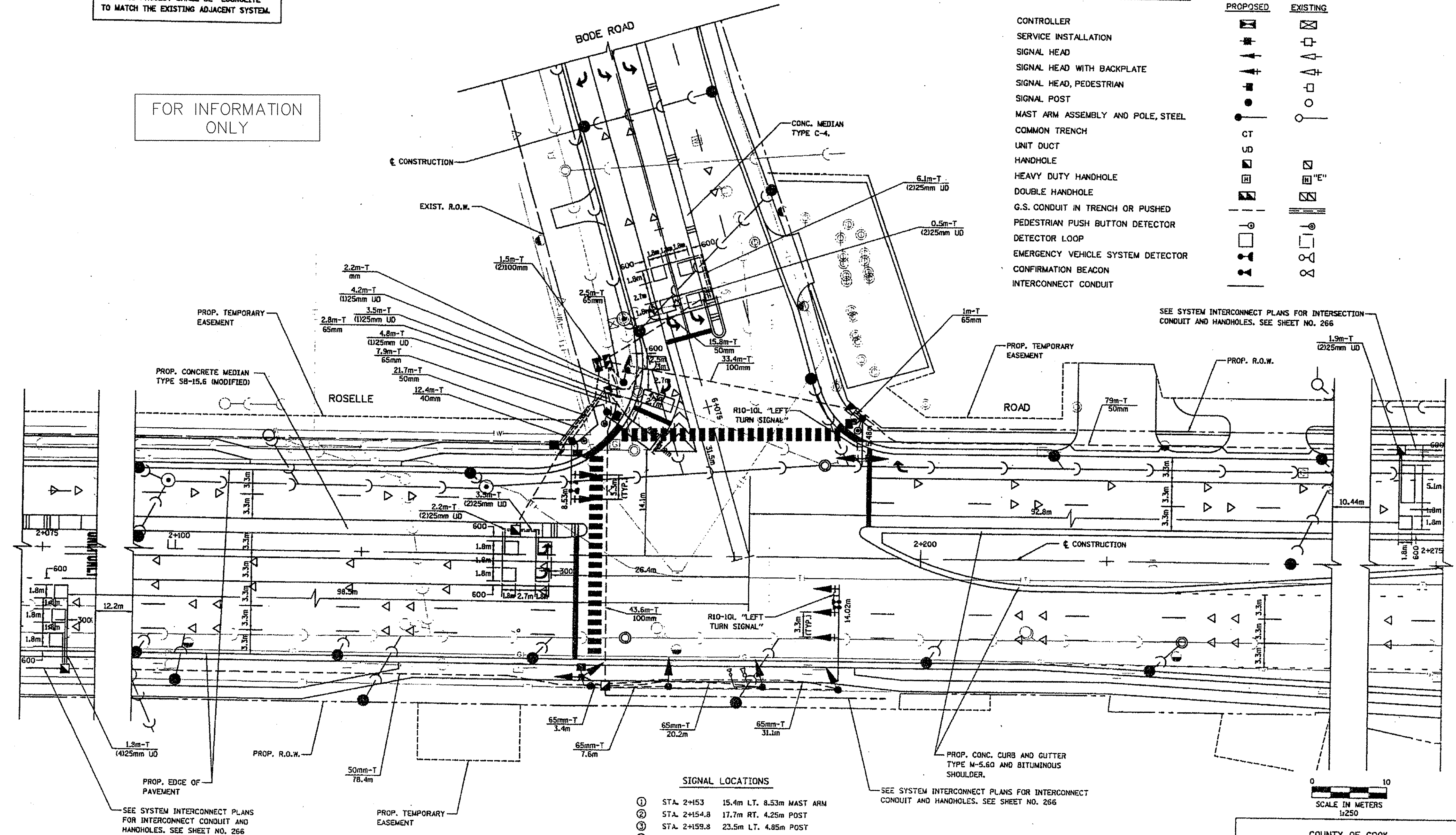
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

FOR INFORMATION ONLY



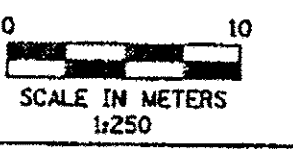
TRAFFIC SIGNAL LEGEND

	PROPOSED	EXISTING
CONTROLLER	[Symbol]	[Symbol]
SERVICE INSTALLATION	[Symbol]	[Symbol]
SIGNAL HEAD	[Symbol]	[Symbol]
SIGNAL HEAD WITH BACKPLATE	[Symbol]	[Symbol]
SIGNAL HEAD, PEDESTRIAN	[Symbol]	[Symbol]
SIGNAL POST	[Symbol]	[Symbol]
MAST ARM ASSEMBLY AND POLE, STEEL	[Symbol]	[Symbol]
COMMON TRENCH	CT	[Symbol]
UNIT DUCT	UD	[Symbol]
HANDHOLE	[Symbol]	[Symbol]
HEAVY DUTY HANDHOLE	[Symbol]	[Symbol]
DOUBLE HANDHOLE	[Symbol]	[Symbol]
G.S. CONDUIT IN TRENCH OR PUSHED	[Symbol]	[Symbol]
PEDESTRIAN PUSH BUTTON DETECTOR	[Symbol]	[Symbol]
DETECTOR LOOP	[Symbol]	[Symbol]
EMERGENCY VEHICLE SYSTEM DETECTOR	[Symbol]	[Symbol]
CONFIRMATION BEACON	[Symbol]	[Symbol]
INTERCONNECT CONDUIT	[Symbol]	[Symbol]



- SIGNAL LOCATIONS**
- ① STA. 2+153 15.4m LT. 8.53m MAST ARM
  - ② STA. 2+154.8 17.7m RT. 4.25m POST
  - ③ STA. 2+159.8 23.5m LT. 4.85m POST
  - ④ STA. 2+166.4 17.7m RT. 4.85m POST
  - ⑤ STA. 2+179 17.7m RT. 5.45m POST
  - ⑥ STA. 2+189.2 17.3m RT. 14.02m MAST ARM
  - ⑦ STA. 2+192 18.9m LT. 5.48m MAST ARM
  - ⑧ STA. 2+158 19.1m LT. 3.3m POST

FOR THE LOCATION OF LOOPS CONTACT THE C.C.H.D. DESIGN ENGINEER AT 1-312-443-1876 WHO WILL MARK THE PAVEMENT FOR THE CUTTING OF THE LOOPS.



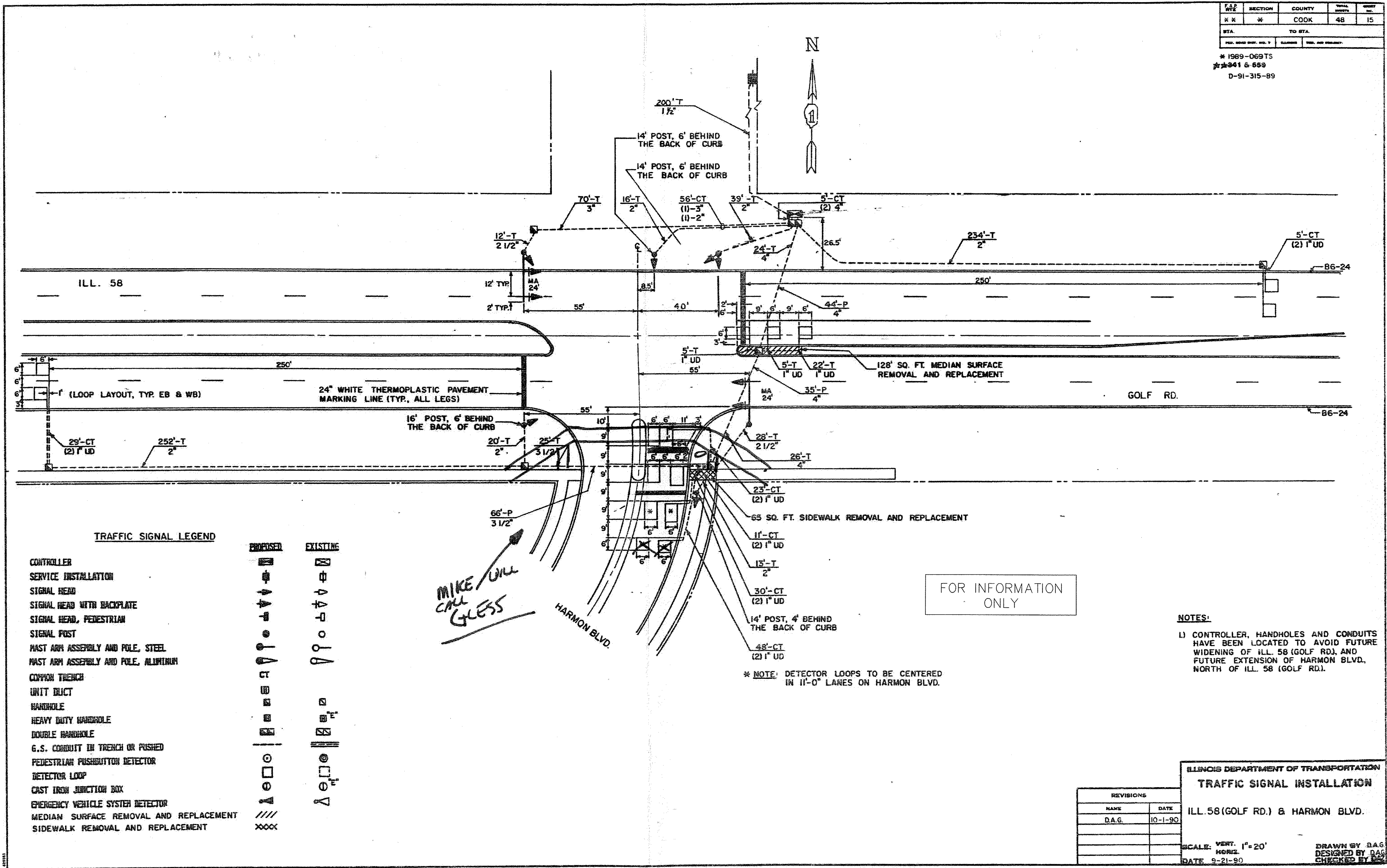
COUNTY OF COOK  
DEPARTMENT OF HIGHWAYS

TRAFFIC SIGNAL INSTALLATION  
ROSELLE ROAD AND BODE ROAD

COMPUTED	SRF
DRAWN	JAE
CHECKED	CJS

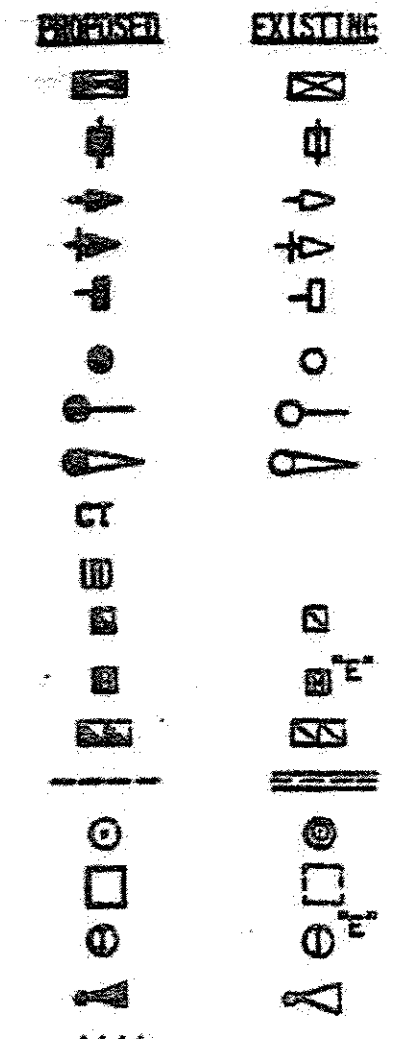
SECTION	COUNTY	SHEET NO.
X X	COOK	48 15
STA. TO STA.		

\* 1989-0697S  
 \* 341 & 659  
 D-91-315-89



**TRAFFIC SIGNAL LEGEND**

- CONTROLLER
- SERVICE INSTALLATION
- SIGNAL HEAD
- SIGNAL HEAD WITH BACKPLATE
- SIGNAL HEAD, PEDESTRIAN
- SIGNAL POST
- MAST ARM ASSEMBLY AND POLE, STEEL
- MAST ARM ASSEMBLY AND POLE, ALUMINUM
- COMMON TRENCH
- UNIT DUCT
- HANDHOLE
- HEAVY DUTY HANDHOLE
- DOUBLE HANDHOLE
- G.S. CONDUIT IN TRENCH OR PUSHED
- PEDESTRIAN PUSHBUTTON DETECTOR
- DETECTOR LOOP
- CAST IRON JUNCTION BOX
- EMERGENCY VEHICLE SYSTEM DETECTOR
- MEDIAN SURFACE REMOVAL AND REPLACEMENT
- SIDEWALK REMOVAL AND REPLACEMENT



*MIKE WILL CALL GLESS*

FOR INFORMATION ONLY

**NOTES:**

- 1) CONTROLLER, HANDHOLES AND CONDUITS HAVE BEEN LOCATED TO AVOID FUTURE WIDENING OF ILL. 58 (GOLF RD.), AND FUTURE EXTENSION OF HARMON BLVD. NORTH OF ILL. 58 (GOLF RD.).

ILLINOIS DEPARTMENT OF TRANSPORTATION  
**TRAFFIC SIGNAL INSTALLATION**

ILL. 58 (GOLF RD.) & HARMON BLVD.

REVISIONS	
NAME	DATE
D.A.G.	10-1-90

SCALE: VERT. 1"=20'  
 HORIZ. 1"=40'  
 DATE 9-21-90

DRAWN BY D.A.G.  
 DESIGNED BY D.A.G.  
 CHECKED BY D.A.G.

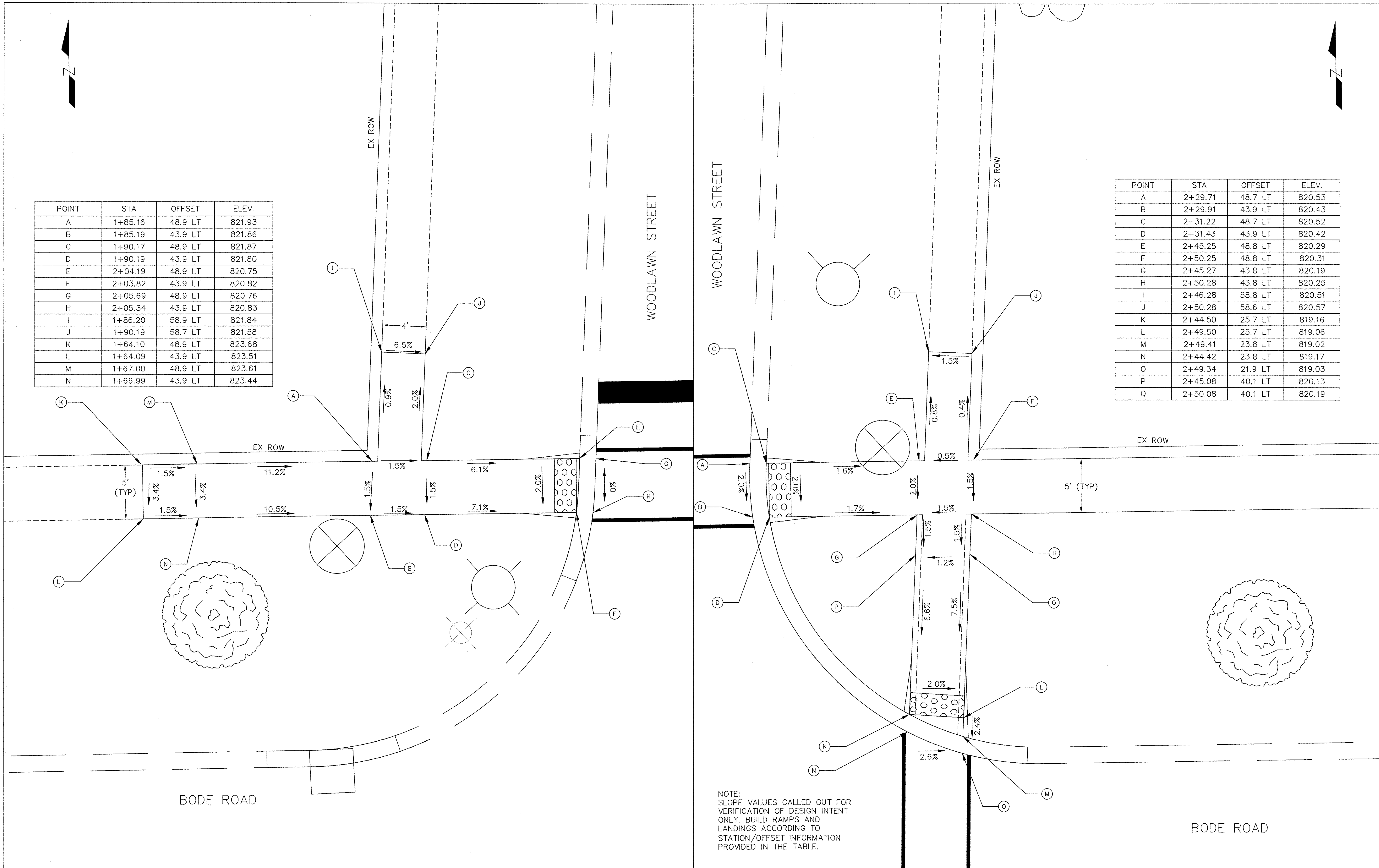
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PLOT DATE =	CHECKED - DJO	REVISED -
	DATE - 01/30/2017	REVISED -

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	15-00095-00-RS	COOK	65	31
* 1318 & 2562		CONTRACT NO. 61D75		
FED. ROAD DIST. 1 ILLINOIS		FED. AID PROJECT M-4003(798)		



POINT	STA	OFFSET	ELEV.
A	1+85.16	48.9 LT	821.93
B	1+85.19	43.9 LT	821.86
C	1+90.17	48.9 LT	821.87
D	1+90.19	43.9 LT	821.80
E	2+04.19	48.9 LT	820.75
F	2+03.82	43.9 LT	820.82
G	2+05.69	48.9 LT	820.76
H	2+05.34	43.9 LT	820.83
I	1+86.20	58.9 LT	821.84
J	1+90.19	58.7 LT	821.58
K	1+64.10	48.9 LT	823.68
L	1+64.09	43.9 LT	823.51
M	1+67.00	48.9 LT	823.61
N	1+66.99	43.9 LT	823.44

POINT	STA	OFFSET	ELEV.
A	2+29.71	48.7 LT	820.53
B	2+29.91	43.9 LT	820.43
C	2+31.22	48.7 LT	820.52
D	2+31.43	43.9 LT	820.42
E	2+45.25	48.8 LT	820.29
F	2+50.25	48.8 LT	820.31
G	2+45.27	43.8 LT	820.19
H	2+50.28	43.8 LT	820.25
I	2+46.28	58.8 LT	820.51
J	2+50.28	58.6 LT	820.57
K	2+44.50	25.7 LT	819.16
L	2+49.50	25.7 LT	819.06
M	2+49.41	23.8 LT	819.02
N	2+44.42	23.8 LT	819.17
O	2+49.34	21.9 LT	819.03
P	2+45.08	40.1 LT	820.13
Q	2+50.08	40.1 LT	820.19



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DRAWN -	DW	REVISOR -		REVISION -	
PLOT SCALE =		CHECKED -	DJO	REVISION -	
PLOT DATE =		DATE -	01/30/2017	REVISION -	

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**BODE ROAD & HARMON BLVD PAVEMENT RESURFACING  
 ADA RAMP DETAILS - BODE ROAD**

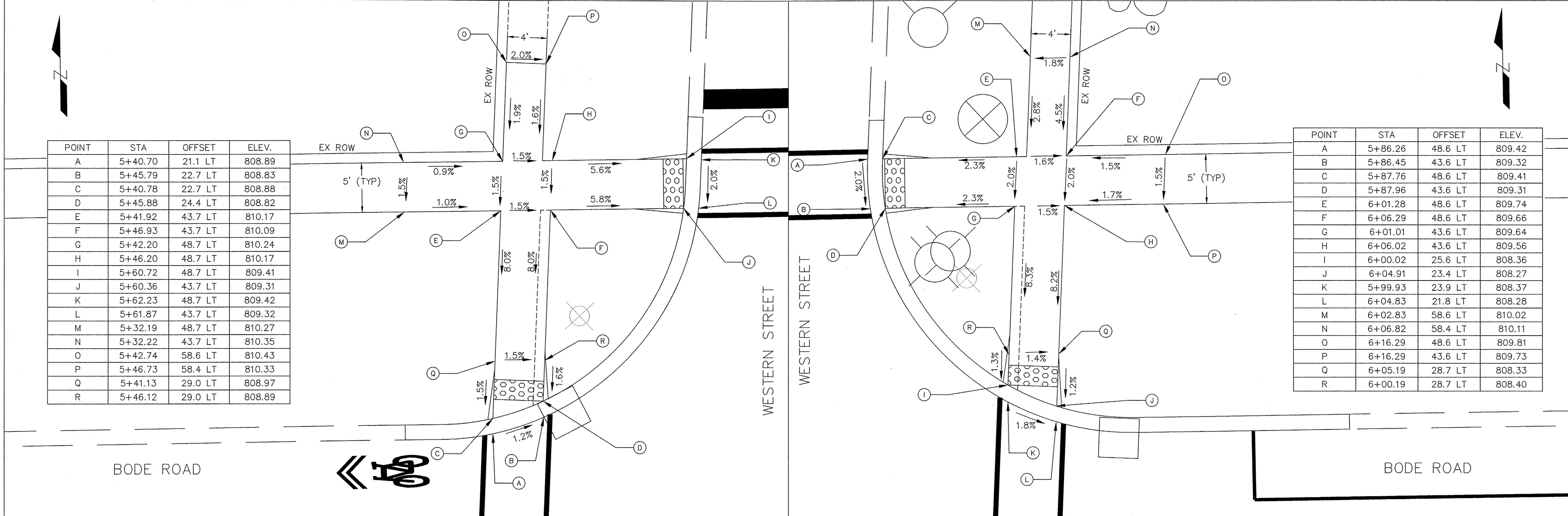
SCALE: 1" = 4'    SHEET NO. 1 OF 11 SHEETS    STA.    TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	15-00095-00-RS	COOK	65	32
*1318 & 2562		CONTRACT NO. 61D75		
FED. ROAD DIST. 1		ILLINOIS	FED. AID PROJECT M-4003(798)	



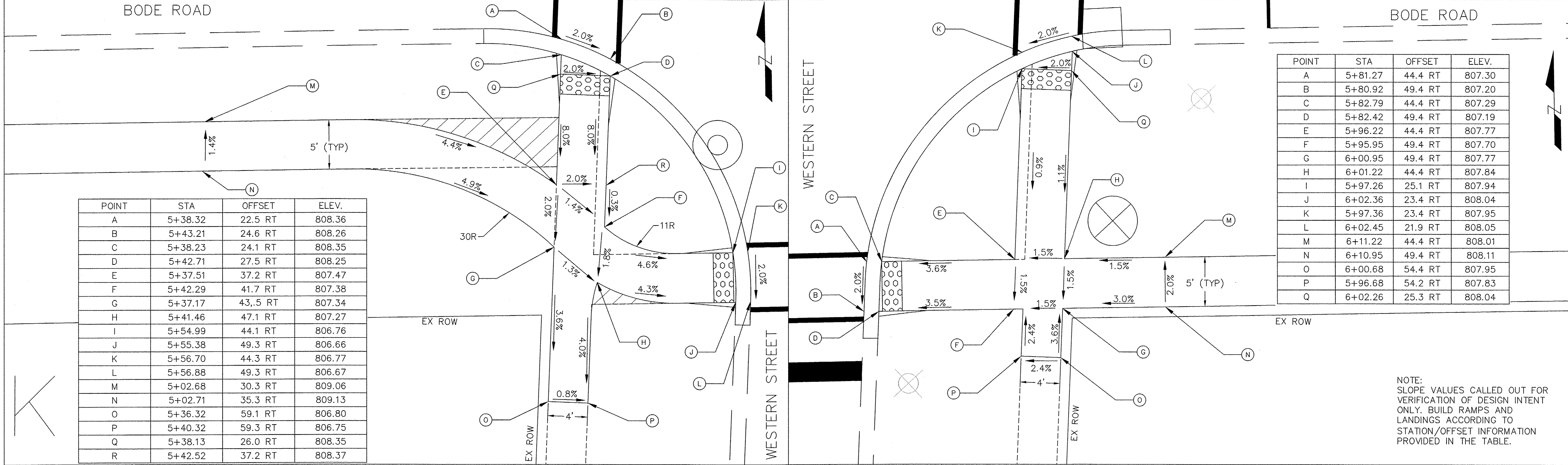
POINT	STA	OFFSET	ELEV.
A	5+40.70	21.1 LT	808.89
B	5+45.79	22.7 LT	808.83
C	5+40.78	22.7 LT	808.88
D	5+45.88	24.4 LT	808.82
E	5+41.92	43.7 LT	810.17
F	5+46.93	43.7 LT	810.09
G	5+42.20	48.7 LT	810.24
H	5+46.20	48.7 LT	810.17
I	5+60.72	48.7 LT	809.41
J	5+60.36	43.7 LT	809.31
K	5+62.23	48.7 LT	809.42
L	5+61.87	43.7 LT	809.32
M	5+32.19	48.7 LT	810.27
N	5+32.22	43.7 LT	810.35
O	5+42.74	58.6 LT	810.43
P	5+46.73	58.4 LT	810.33
Q	5+41.13	29.0 LT	808.97
R	5+46.12	29.0 LT	808.89

POINT	STA	OFFSET	ELEV.
A	5+86.26	48.6 LT	809.42
B	5+86.45	43.6 LT	809.32
C	5+87.76	48.6 LT	809.41
D	5+87.96	43.6 LT	809.31
E	6+01.28	48.6 LT	809.74
F	6+06.29	48.6 LT	809.66
G	6+01.01	43.6 LT	809.64
H	6+06.02	43.6 LT	809.56
I	6+00.02	25.6 LT	808.36
J	6+04.91	23.4 LT	808.27
K	5+99.93	23.9 LT	808.37
L	6+04.83	21.8 LT	808.28
M	6+02.83	58.6 LT	810.02
N	6+06.82	58.4 LT	810.11
O	6+16.29	48.6 LT	809.81
P	6+16.29	43.6 LT	809.73
Q	6+05.19	28.7 LT	808.33
R	6+00.19	28.7 LT	808.40



POINT	STA	OFFSET	ELEV.
A	5+38.32	22.5 RT	808.36
B	5+43.21	24.6 RT	808.26
C	5+38.23	24.1 RT	808.35
D	5+42.71	27.5 RT	808.25
E	5+37.51	37.2 RT	807.47
F	5+42.29	41.7 RT	807.38
G	5+37.17	43.5 RT	807.34
H	5+41.46	47.1 RT	807.27
I	5+54.99	44.1 RT	806.76
J	5+55.38	49.3 RT	806.66
K	5+56.70	44.3 RT	806.77
L	5+56.88	49.3 RT	806.67
M	5+02.68	30.3 RT	809.06
N	5+02.71	35.3 RT	809.13
O	5+36.32	59.1 RT	806.80
P	5+40.32	59.3 RT	806.75
Q	5+38.13	26.0 RT	808.35
R	5+42.52	37.2 RT	808.37

POINT	STA	OFFSET	ELEV.
A	5+81.27	44.4 RT	807.30
B	5+80.92	49.4 RT	807.20
C	5+82.79	44.4 RT	807.29
D	5+82.42	49.4 RT	807.19
E	5+96.22	44.4 RT	807.77
F	5+95.95	49.4 RT	807.70
G	6+00.95	49.4 RT	807.77
H	6+01.22	44.4 RT	807.84
I	5+97.26	25.1 RT	807.94
J	6+02.36	23.4 RT	808.04
K	5+97.36	23.4 RT	807.95
L	6+02.45	21.9 RT	808.05
M	6+11.22	44.4 RT	808.01
N	6+10.95	49.4 RT	808.11
O	6+00.68	54.4 RT	807.95
P	5+96.68	54.2 RT	807.83
Q	6+02.26	25.3 RT	808.04



NOTE:  
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ENGINEERING CONSULTANT  
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USERNAME = dwierzicki	DESIGNED - JPA	REVISED -
PLOT SCALE =	DRAWN - DW	REVISED -
PLOT DATE =	CHECKED - DJO	REVISED -
	DATE - 01/30/2017	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**BODE ROAD & HARMON BLVD PAVEMENT RESURFACING  
ADA RAMP DETAILS - BODE ROAD**

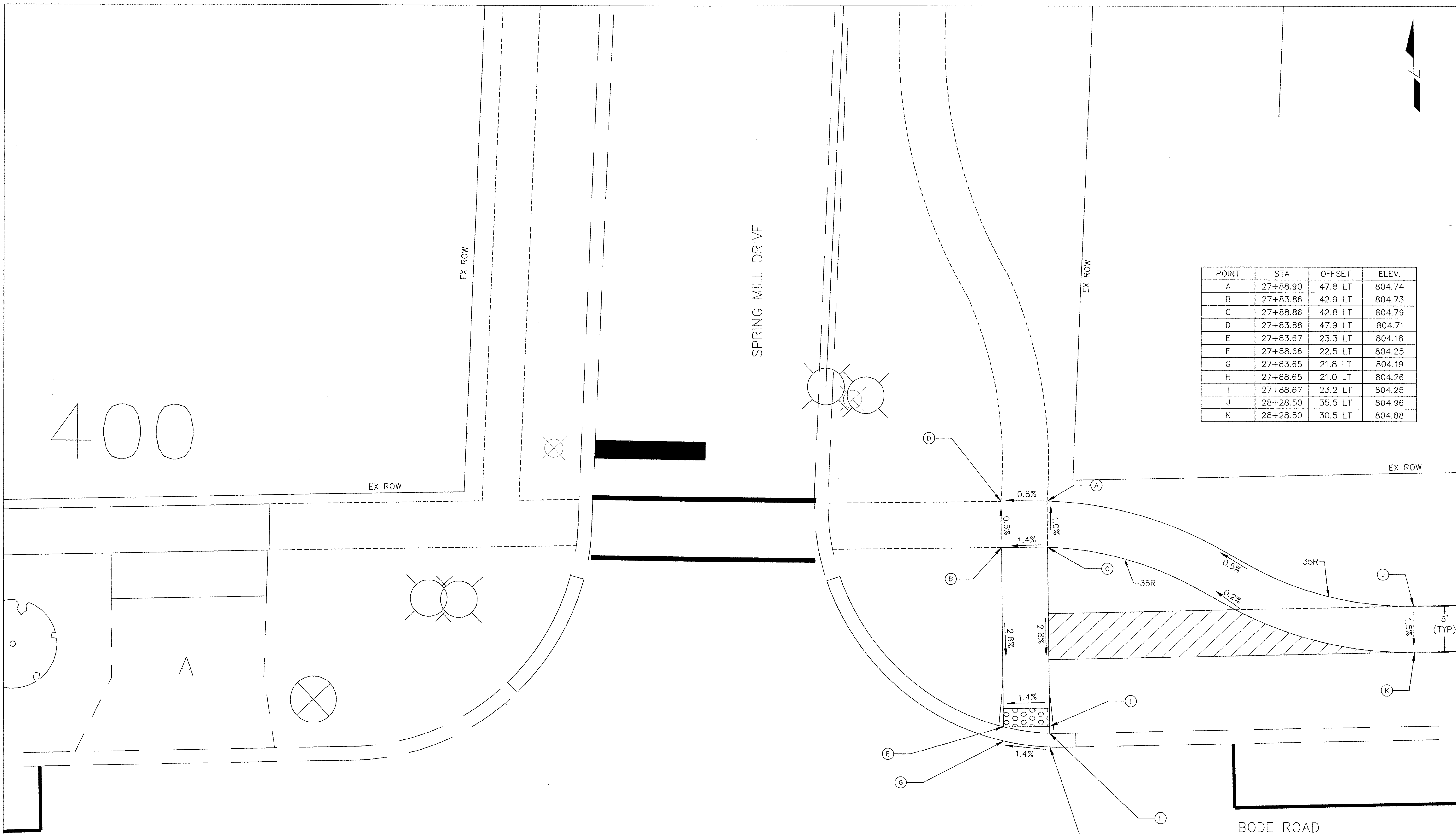
SCALE: 1" = 5'  
SHEET NO. 2 OF 11 SHEETS  
STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	15-00095-00-RS	COOK	65	33
*1318 & 2562		CONTRACT NO. 61D75		
FED. ROAD DIST. 1		ILLINOIS	FED. AID PROJECT M-4003(798)	





POINT	STA	OFFSET	ELEV.
A	27+88.90	47.8 LT	804.74
B	27+83.86	42.9 LT	804.73
C	27+88.86	42.8 LT	804.79
D	27+83.88	47.9 LT	804.71
E	27+83.67	23.3 LT	804.18
F	27+88.66	22.5 LT	804.25
G	27+83.65	21.8 LT	804.19
H	27+88.65	21.0 LT	804.26
I	27+88.67	23.2 LT	804.25
J	28+28.50	35.5 LT	804.96
K	28+28.50	30.5 LT	804.88



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PLOT DATE =	CHECKED - DJO	REVISED -
	DATE - 01/30/2017	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**BODE ROAD & HARMON BLVD PAVEMENT RESURFACING  
ADA RAMP DETAILS - BODE ROAD**

SCALE: 1" = 5'    SHEET NO. 4 OF 11 SHEETS    STA.    TO STA.

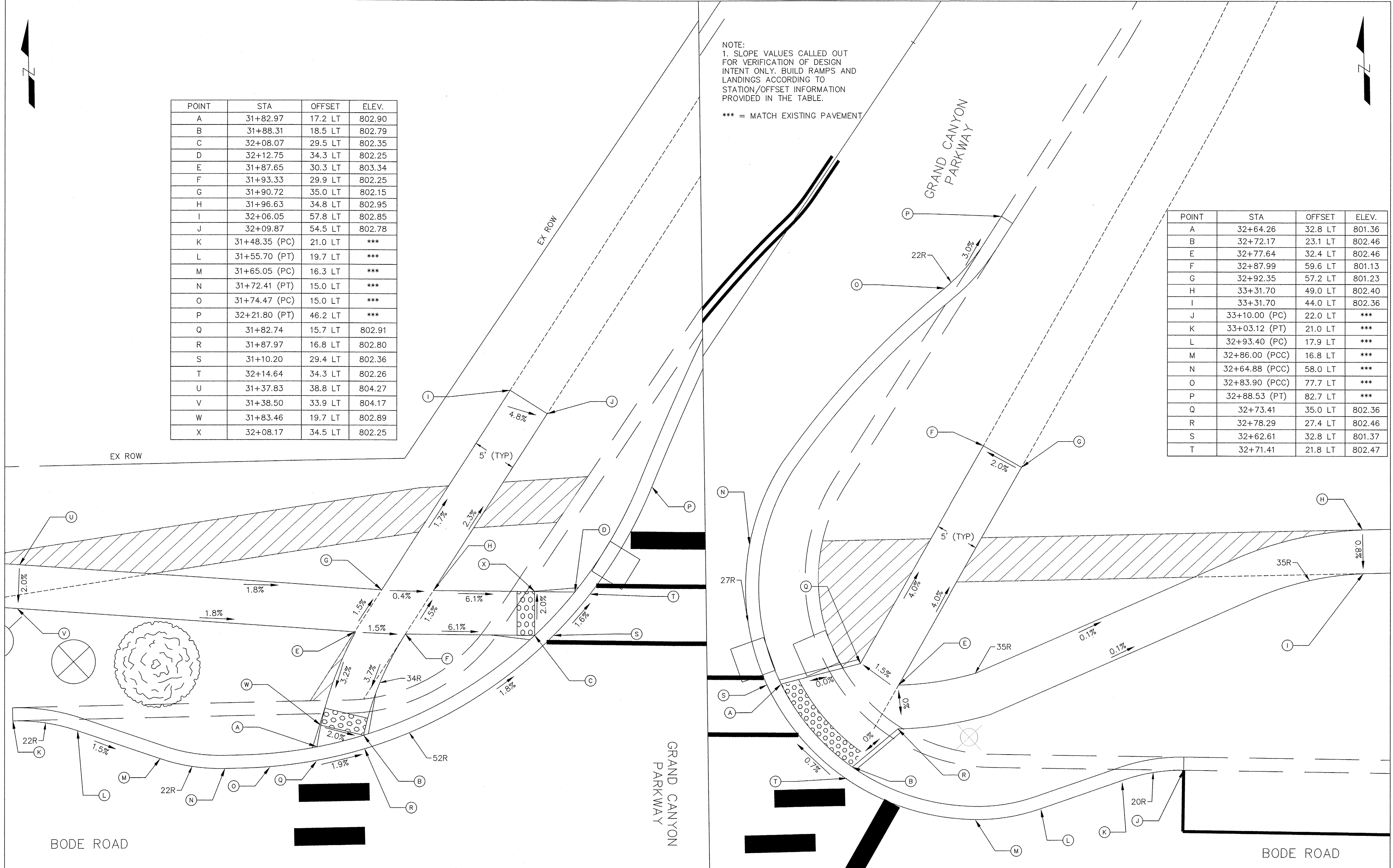
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	15-00095-00-RS	COOK	65	35
*1318 & 2562		CONTRACT NO. 61D75		
FED. ROAD DIST. 1	ILLINOIS	FED. AID PROJECT M-4003(798)		

NOTE:  
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\*\*\* = MATCH EXISTING PAVEMENT

POINT	STA	OFFSET	ELEV.
A	31+82.97	17.2 LT	802.90
B	31+88.31	18.5 LT	802.79
C	32+08.07	29.5 LT	802.35
D	32+12.75	34.3 LT	802.25
E	31+87.65	30.3 LT	803.34
F	31+93.33	29.9 LT	802.25
G	31+90.72	35.0 LT	802.15
H	31+96.63	34.8 LT	802.95
I	32+06.05	57.8 LT	802.85
J	32+09.87	54.5 LT	802.78
K	31+48.35 (PC)	21.0 LT	***
L	31+55.70 (PT)	19.7 LT	***
M	31+65.05 (PC)	16.3 LT	***
N	31+72.41 (PT)	15.0 LT	***
O	31+74.47 (PC)	15.0 LT	***
P	32+21.80 (PT)	46.2 LT	***
Q	31+82.74	15.7 LT	802.91
R	31+87.97	16.8 LT	802.80
S	31+10.20	29.4 LT	802.36
T	32+14.64	34.3 LT	802.26
U	31+37.83	38.8 LT	804.27
V	31+38.50	33.9 LT	804.17
W	31+83.46	19.7 LT	802.89
X	32+08.17	34.5 LT	802.25

POINT	STA	OFFSET	ELEV.
A	32+64.26	32.8 LT	801.36
B	32+72.17	23.1 LT	802.46
E	32+77.64	32.4 LT	802.46
F	32+87.99	59.6 LT	801.13
G	32+92.35	57.2 LT	801.23
H	33+31.70	49.0 LT	802.40
I	33+31.70	44.0 LT	802.36
J	33+10.00 (PC)	22.0 LT	***
K	33+03.12 (PT)	21.0 LT	***
L	32+93.40 (PC)	17.9 LT	***
M	32+86.00 (PCC)	16.8 LT	***
N	32+64.88 (PCC)	58.0 LT	***
O	32+83.90 (PCC)	77.7 LT	***
P	32+88.53 (PT)	82.7 LT	***
Q	32+73.41	35.0 LT	802.36
R	32+78.29	27.4 LT	802.46
S	32+62.61	32.8 LT	801.37
T	32+71.41	21.8 LT	802.47



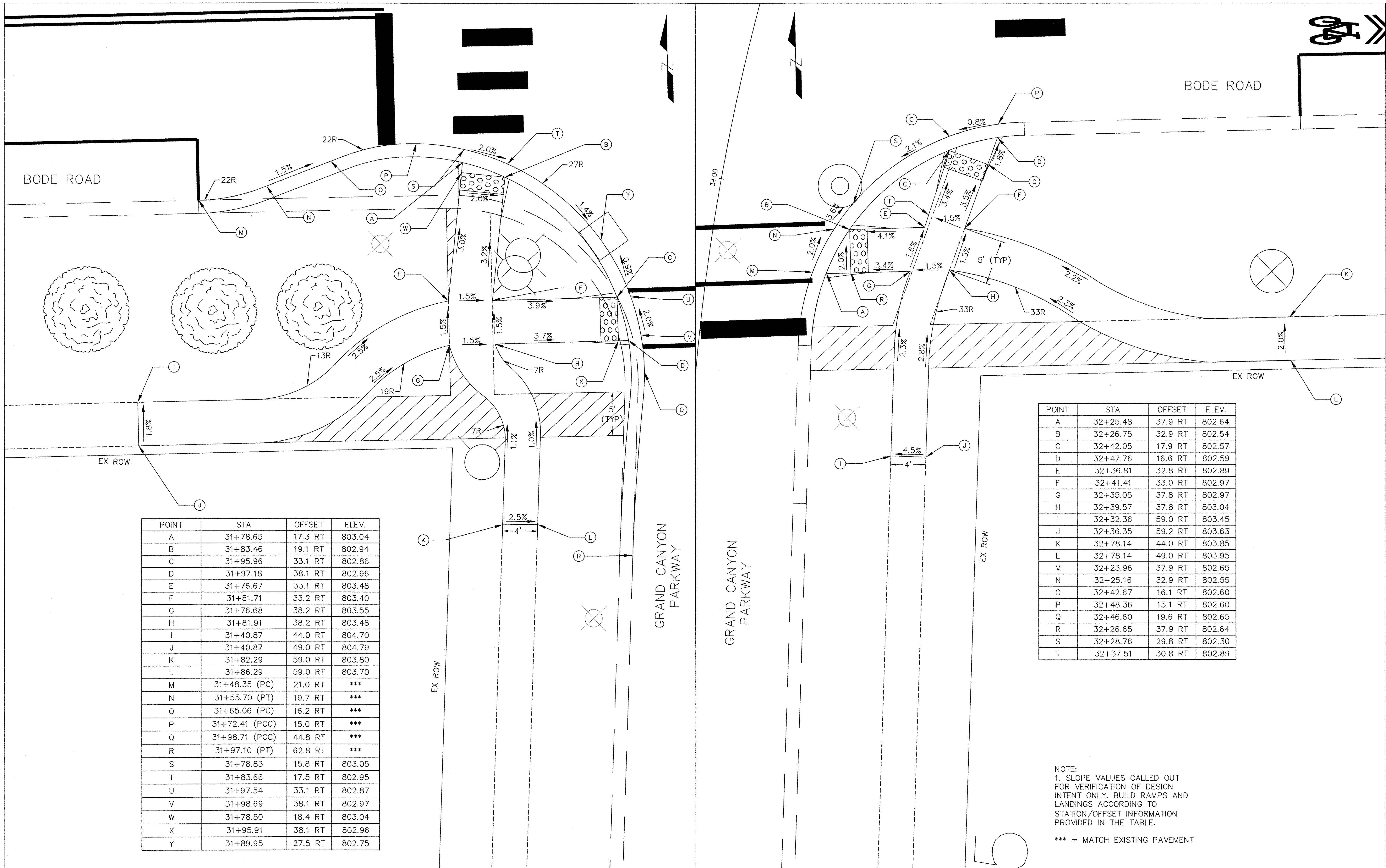
ENGINEERING CONSULTANT  
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PLOT SCALE =	DRAWN - DW	REVISED -
PLOT DATE =	CHECKED - DJO	REVISED -
	DATE - 01/30/2017	REVISED -

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**BODE ROAD & HARMON BLVD PAVEMENT RESURFACING**  
**ADA RAMP DETAILS - BODE ROAD**  
SCALE: 1" = 5'  
SHEET NO. 5 OF 11 SHEETS  
STA. TO STA.

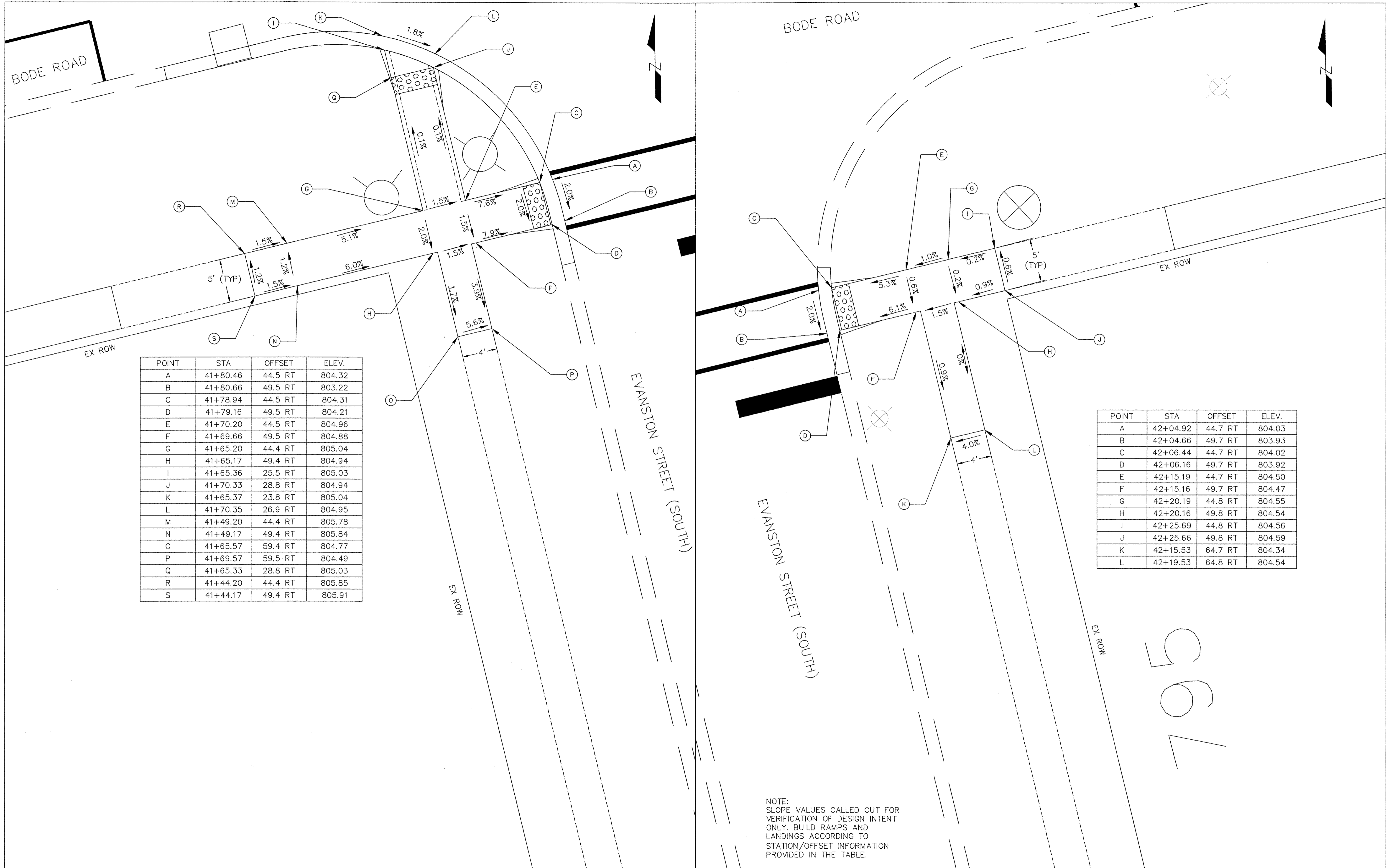
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	15-00095-00-RS	COOK	65	36
*1318 & 2562		CONTRACT NO. 61D75		
FED. ROAD DIST. 1		ILLINOIS	FED. AID PROJECT M-4003(798)	



POINT	STA	OFFSET	ELEV.
A	31+78.65	17.3 RT	803.04
B	31+83.46	19.1 RT	802.94
C	31+95.96	33.1 RT	802.86
D	31+97.18	38.1 RT	802.96
E	31+76.67	33.1 RT	803.48
F	31+81.71	33.2 RT	803.40
G	31+76.68	38.2 RT	803.55
H	31+81.91	38.2 RT	803.48
I	31+40.87	44.0 RT	804.70
J	31+40.87	49.0 RT	804.79
K	31+82.29	59.0 RT	803.80
L	31+86.29	59.0 RT	803.70
M	31+48.35 (PC)	21.0 RT	***
N	31+55.70 (PT)	19.7 RT	***
O	31+65.06 (PC)	16.2 RT	***
P	31+72.41 (PCC)	15.0 RT	***
Q	31+98.71 (PCC)	44.8 RT	***
R	31+97.10 (PT)	62.8 RT	***
S	31+78.83	15.8 RT	803.05
T	31+83.66	17.5 RT	802.95
U	31+97.54	33.1 RT	802.87
V	31+98.69	38.1 RT	802.97
W	31+78.50	18.4 RT	803.04
X	31+95.91	38.1 RT	802.96
Y	31+89.95	27.5 RT	802.75

POINT	STA	OFFSET	ELEV.
A	32+25.48	37.9 RT	802.64
B	32+26.75	32.9 RT	802.54
C	32+42.05	17.9 RT	802.57
D	32+47.76	16.6 RT	802.59
E	32+36.81	32.8 RT	802.89
F	32+41.41	33.0 RT	802.97
G	32+35.05	37.8 RT	802.97
H	32+39.57	37.8 RT	803.04
I	32+32.36	59.0 RT	803.45
J	32+36.35	59.2 RT	803.63
K	32+78.14	44.0 RT	803.85
L	32+78.14	49.0 RT	803.95
M	32+23.96	37.9 RT	802.65
N	32+25.16	32.9 RT	802.55
O	32+42.67	16.1 RT	802.60
P	32+48.36	15.1 RT	802.60
Q	32+46.60	19.6 RT	802.65
R	32+26.65	37.9 RT	802.64
S	32+28.76	29.8 RT	802.30
T	32+37.51	30.8 RT	802.89

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 \*\*\* = MATCH EXISTING PAVEMENT



POINT	STA	OFFSET	ELEV.
A	41+80.46	44.5 RT	804.32
B	41+80.66	49.5 RT	803.22
C	41+78.94	44.5 RT	804.31
D	41+79.16	49.5 RT	804.21
E	41+70.20	44.5 RT	804.96
F	41+69.66	49.5 RT	804.88
G	41+65.20	44.4 RT	805.04
H	41+65.17	49.4 RT	804.94
I	41+65.36	25.5 RT	805.03
J	41+70.33	28.8 RT	804.94
K	41+65.37	23.8 RT	805.04
L	41+70.35	26.9 RT	804.95
M	41+49.20	44.4 RT	805.78
N	41+49.17	49.4 RT	805.84
O	41+65.57	59.4 RT	804.77
P	41+69.57	59.5 RT	804.49
Q	41+65.33	28.8 RT	805.03
R	41+44.20	44.4 RT	805.85
S	41+44.17	49.4 RT	805.91

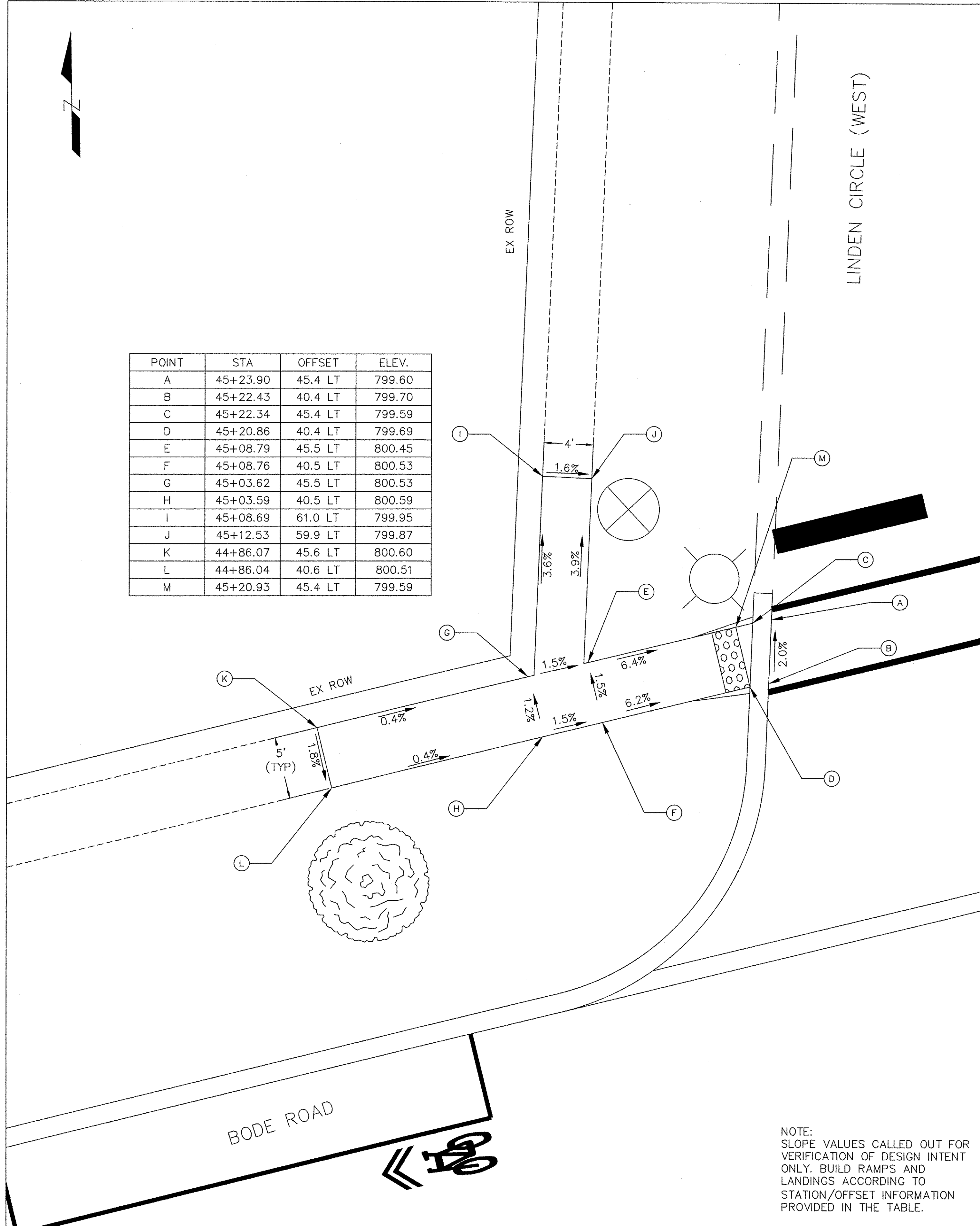
POINT	STA	OFFSET	ELEV.
A	42+04.92	44.7 RT	804.03
B	42+04.66	49.7 RT	803.93
C	42+06.44	44.7 RT	804.02
D	42+06.16	49.7 RT	803.92
E	42+15.19	44.7 RT	804.50
F	42+15.16	49.7 RT	804.47
G	42+20.19	44.8 RT	804.55
H	42+20.16	49.8 RT	804.54
I	42+25.69	44.8 RT	804.56
J	42+25.66	49.8 RT	804.59
K	42+15.53	64.7 RT	804.34
L	42+19.53	64.8 RT	804.54

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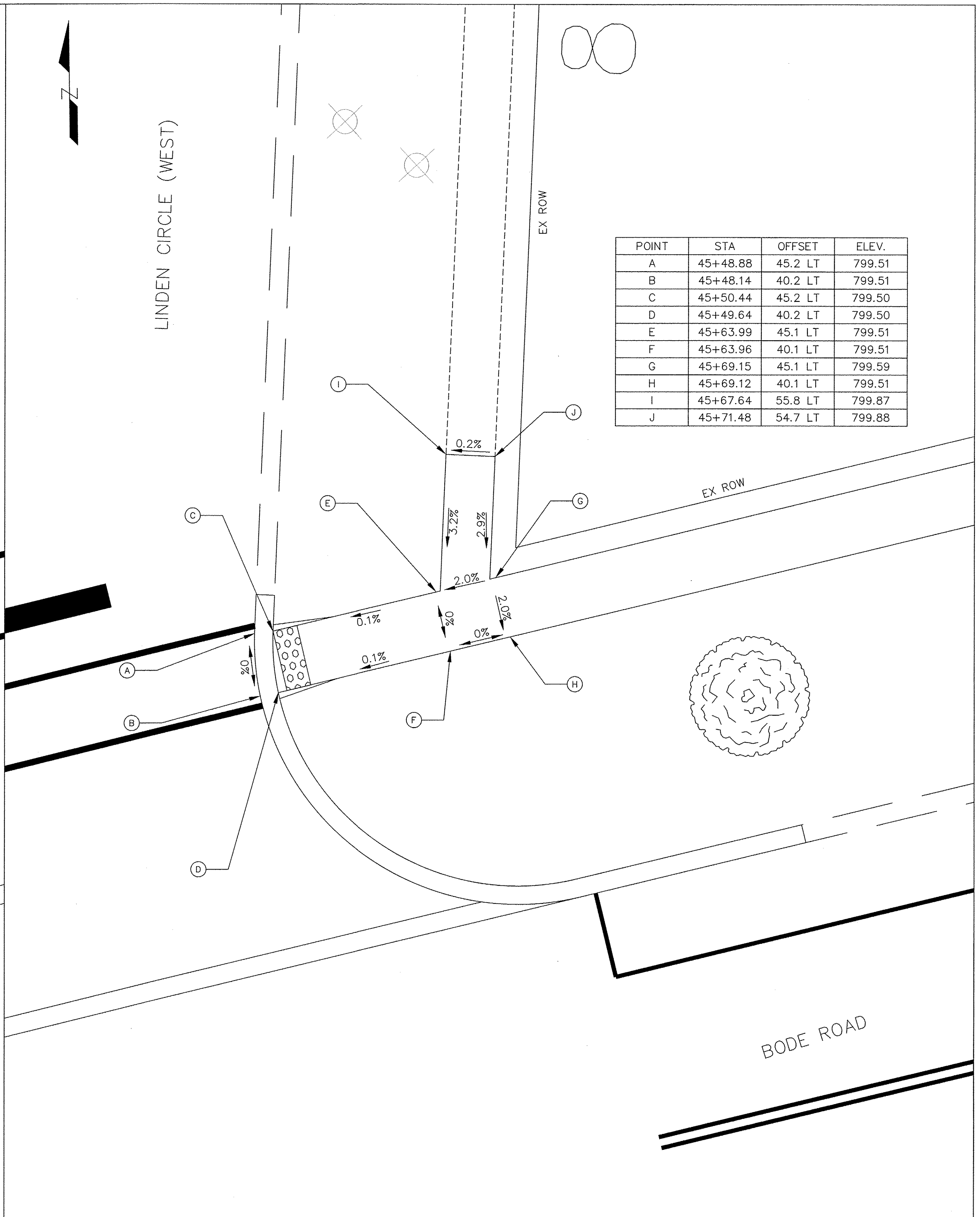
POINT	STA	OFFSET	ELEV.
A	45+23.90	45.4 LT	799.60
B	45+22.43	40.4 LT	799.70
C	45+22.34	45.4 LT	799.59
D	45+20.86	40.4 LT	799.69
E	45+08.79	45.5 LT	800.45
F	45+08.76	40.5 LT	800.53
G	45+03.62	45.5 LT	800.53
H	45+03.59	40.5 LT	800.59
I	45+08.69	61.0 LT	799.95
J	45+12.53	59.9 LT	799.87
K	44+86.07	45.6 LT	800.60
L	44+86.04	40.6 LT	800.51
M	45+20.93	45.4 LT	799.59



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POINT	STA	OFFSET	ELEV.
A	45+48.88	45.2 LT	799.51
B	45+48.14	40.2 LT	799.51
C	45+50.44	45.2 LT	799.50
D	45+49.64	40.2 LT	799.50
E	45+63.99	45.1 LT	799.51
F	45+63.96	40.1 LT	799.51
G	45+69.15	45.1 LT	799.59
H	45+69.12	40.1 LT	799.51
I	45+67.64	55.8 LT	799.87
J	45+71.48	54.7 LT	799.88



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PLOT SCALE =	DRAWN -- DW	REVISED --
PLOT DATE =	CHECKED -- DJO	REVISED --
	DATE -- 01/30/2017	REVISED --

**STATE OF ILLINOIS**  
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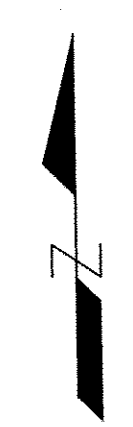
**BODE ROAD & HARMON BLVD PAVEMENT RESURFACING**  
**ADA RAMP DETAILS - BODE ROAD**

SCALE: 1" = 5'    SHEET NO. 9 OF 11 SHEETS    STA.    TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	15-00095-00-RS	COOK	65	40
*1318 & 2562		CONTRACT NO. 61D75		
FED. ROAD DIST. 1	ILLINOIS	FED. AID PROJECT M-4003(798)		







POINT	STA	OFFSET	ELEV.
A	51+52.73	41.6 LT	788.99
B	51+48.09	37.0 LT	789.03
C	51+50.81	41.6 LT	788.98
D	51+45.32	37.0 LT	789.02
E	51+41.85	41.9 LT	789.14
F	51+30.81	41.6 LT	789.63
G	51+30.93	36.6 LT	789.53
H	51+45.96	51.4 LT	789.14
I	51+50.96	51.9 LT	788.99
J	51+45.86	45.3 LT	789.07
K	51+40.35	41.8 LT	789.16
L	51+50.86	45.0 LT	788.98
M	51+40.53	36.8 LT	789.09

POINT	STA	OFFSET	ELEV.
A	51+92.56	41.4 LT	788.07
B	51+97.84	36.4 LT	787.96
C	51+94.50	41.4 LT	788.06
D	52+00.64	36.5 LT	787.95
E	52+15.55	41.6 LT	788.04
F	52+15.64	36.6 LT	787.94
G	52+05.61	41.5 LT	788.05
H	52+05.64	36.5 LT	787.95



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		DRAWN -	DW	REVISED -	
PLOT SCALE =		CHECKED -	DJO	REVISED -	
PLOT DATE =		DATE -	01/30/2017	REVISED -	

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**BODE ROAD & HARMON BLVD PAVEMENT RESURFACING  
ADA RAMP DETAILS - BODE ROAD**

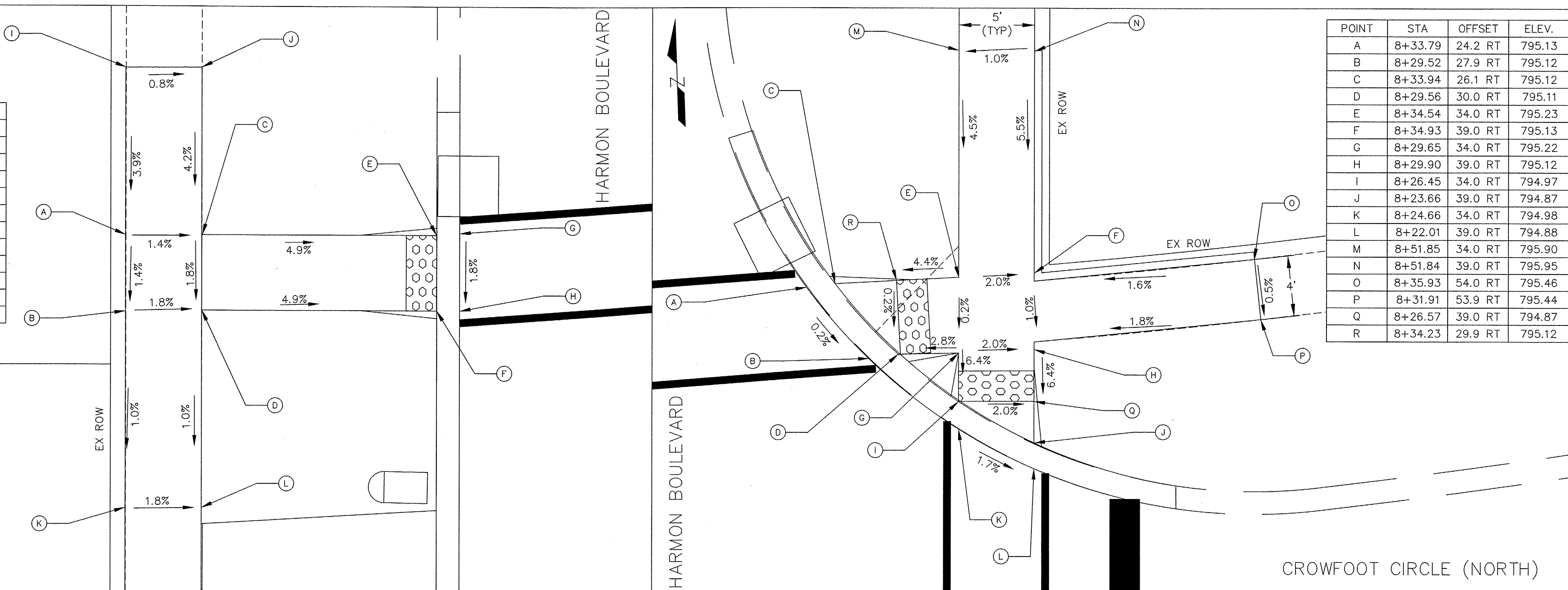
SCALE: 1" = 4' SHEET NO. 11 OF 11 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	15-00095-00-RS	COOK	65	42
*1318 & 2562		CONTRACT NO. 61D75		
FED. ROAD DIST. 1	ILLINOIS	FED. AID PROJECT M-4003(798)		



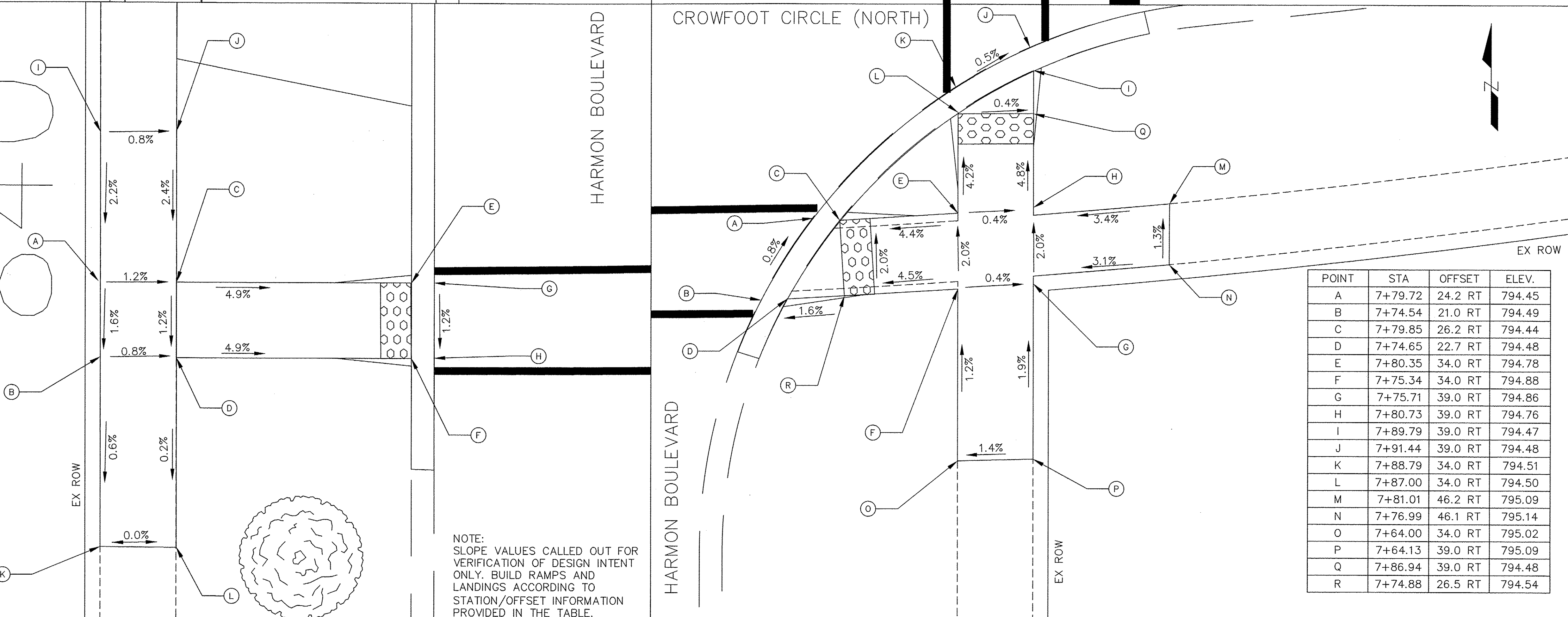
POINT	STA	OFFSET	ELEV.
A	8+30.93	39.0 LT	796.27
B	8+25.93	39.0 LT	796.20
C	8+30.93	34.0 LT	796.20
D	8+25.93	34.0 LT	796.11
E	8+30.93	18.5 LT	795.44
F	8+25.93	18.5 LT	795.35
G	8+30.93	17.0 LT	795.45
H	8+25.93	17.0 LT	795.36
I	8+41.94	39.0 LT	796.69
J	8+41.73	34.0 LT	796.65
K	8+13.93	39.0 LT	796.07
L	8+13.90	34.0 LT	795.98

POINT	STA	OFFSET	ELEV.
A	8+33.79	24.2 RT	795.13
B	8+29.52	27.9 RT	795.12
C	8+33.94	26.1 RT	795.12
D	8+29.56	30.0 RT	795.11
E	8+34.54	34.0 RT	795.23
F	8+34.93	39.0 RT	795.13
G	8+29.65	34.0 RT	795.22
H	8+29.90	39.0 RT	795.12
I	8+26.45	34.0 RT	794.97
J	8+23.66	39.0 RT	794.87
K	8+24.66	34.0 RT	794.98
L	8+22.01	39.0 RT	794.88
M	8+51.85	34.0 RT	795.90
N	8+51.84	39.0 RT	795.95
O	8+35.93	54.0 RT	795.46
P	8+31.91	53.9 RT	795.44
Q	8+26.57	39.0 RT	794.87
R	8+34.23	29.9 RT	795.12



POINT	STA	OFFSET	ELEV.
A	7+79.31	39.0 LT	795.60
B	7+74.38	39.0 LT	795.52
C	7+79.38	34.0 LT	795.54
D	7+74.38	34.0 LT	795.48
E	7+79.38	18.5 LT	794.79
F	7+74.38	18.5 LT	794.73
G	7+79.38	17.0 LT	794.80
H	7+74.38	17.0 LT	794.74
I	7+89.01	39.0 LT	795.82
J	7+89.01	34.0 LT	795.78
K	7+62.30	39.0 LT	795.45
L	7+62.21	34.0 LT	795.45

POINT	STA	OFFSET	ELEV.
A	7+79.72	24.2 RT	794.45
B	7+74.54	21.0 RT	794.49
C	7+79.85	26.2 RT	794.44
D	7+74.65	22.7 RT	794.48
E	7+80.35	34.0 RT	794.78
F	7+75.34	34.0 RT	794.88
G	7+75.71	39.0 RT	794.86
H	7+80.73	39.0 RT	794.76
I	7+89.79	39.0 RT	794.47
J	7+91.44	39.0 RT	794.48
K	7+88.79	34.0 RT	794.51
L	7+87.00	34.0 RT	794.50
M	7+81.01	46.2 RT	795.09
N	7+76.99	46.1 RT	795.14
O	7+64.00	34.0 RT	795.02
P	7+64.13	39.0 RT	795.09
Q	7+86.94	39.0 RT	794.48
R	7+74.88	26.5 RT	794.54



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POINT	STA	OFFSET	ELEV.
A	10+56.02	21.6 LT	800.85
B	10+50.93	19.0 LT	800.75
C	10+56.25	23.5 LT	800.84
D	10+51.20	20.7 LT	800.74
E	10+57.77	34.1 LT	801.59
F	10+53.20	34.0 LT	801.51
G	10+54.08	39.0 LT	801.61
H	10+58.60	39.0 LT	801.67
I	10+65.70	34.0 LT	801.07
J	10+67.27	34.0 LT	801.08
K	10+67.93	39.0 LT	801.09
L	10+69.35	39.0 LT	801.10
M	10+59.04	58.3 LT	801.69
N	10+62.74	58.3 LT	801.57
O	10+36.55	39.0 LT	801.44
P	10+36.87	34.0 LT	801.32
Q	10+65.70	39.0 LT	801.14
R	10+51.75	24.2 LT	800.79

POINT	STA	OFFSET	ELEV.
A	10+93.87	39.0 LT	800.76
B	10+95.25	39.0 LT	800.75
C	10+95.60	34.0 LT	800.70
D	10+97.12	34.0 LT	800.69
G	11+02.55	39.0 LT	801.20
H	11+07.57	39.0 LT	801.27
I	11+07.19	34.0 LT	801.20
J	11+02.18	34.0 LT	801.13
K	11+05.09	54.5 LT	802.37
L	11+09.05	53.9 LT	802.38
M	10+97.19	39.0 LT	800.75
N	11+06.08	59.4 LT	802.45
O	11+10.04	58.8 LT	802.40

POINT	STA	OFFSET	ELEV.
A	10+48.41	17.0 RT	799.74
B	10+48.47	18.5 RT	799.73
C	10+43.14	17.0 RT	799.74
D	10+43.14	18.5 RT	799.73
E	10+48.78	34.0 RT	800.26
F	10+43.14	34.0 RT	800.26
G	10+48.90	39.0 RT	800.36
H	10+43.14	39.0 RT	800.29
I	10+61.16	34.0 RT	800.33
J	10+61.22	39.0 RT	800.41
K	10+36.53	34.0 RT	800.21
L	10+36.45	39.0 RT	800.25

NOTE:  
SLOPE VALUES CALLED OUT FOR  
VERIFICATION OF DESIGN INTENT  
ONLY. BUILD RAMPS AND  
LANDINGS ACCORDING TO  
STATION/OFFSET INFORMATION  
PROVIDED IN THE TABLE.

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

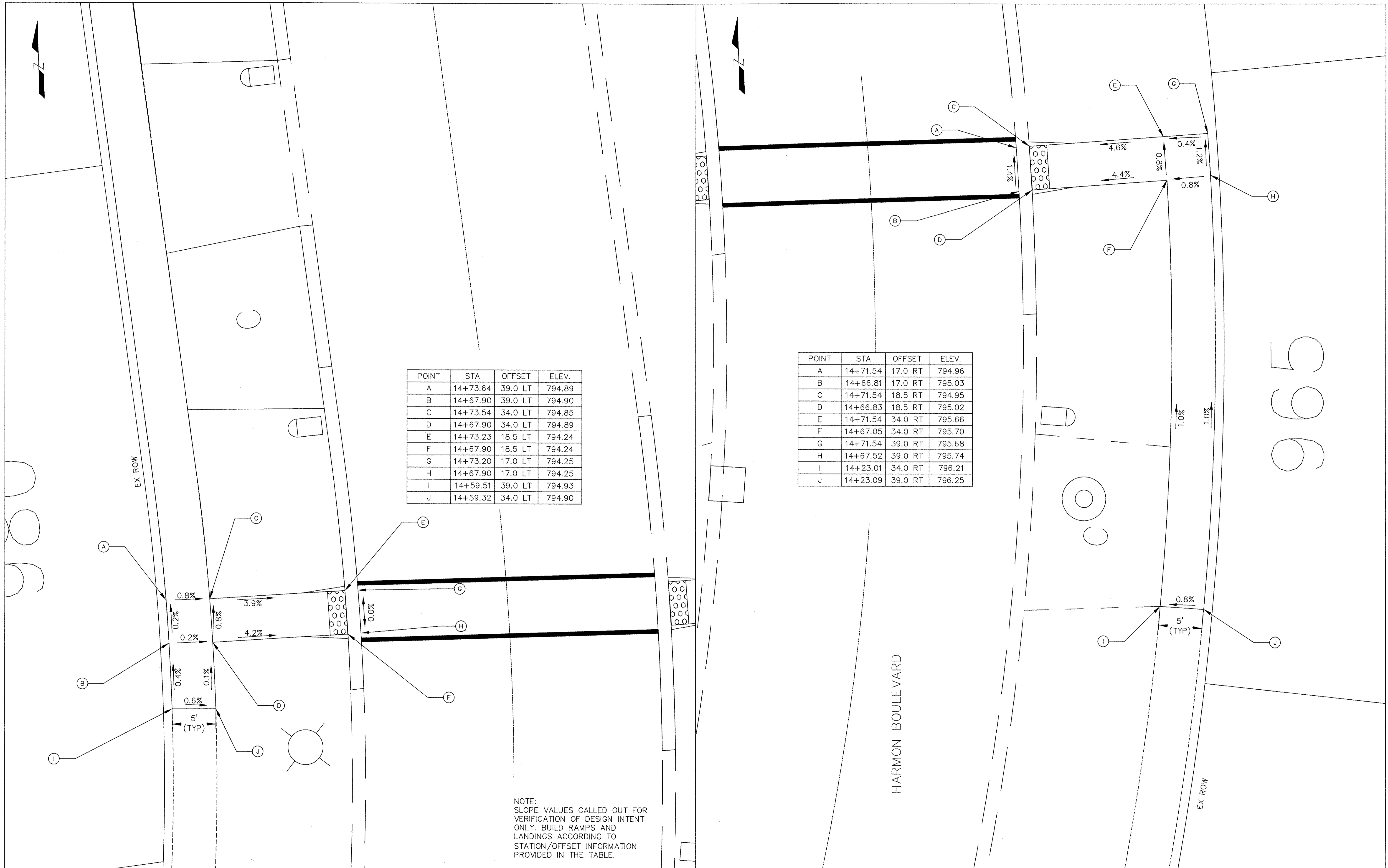
**BODE ROAD & HARMON BLVD PAVEMENT RESURFACING  
ADA RAMP DETAILS - HARMON BOULEVARD**

SCALE: 1" = 5' SHEET NO. 3 OF 6 SHEETS STA. TO STA.

USERNAME =	DESIGNED -	REVISIONS -
dwierzbicki	JPA	
PLOT SCALE =	DRAWN -	REVISIONS -
	DW	
PLOT DATE =	CHECKED -	REVISIONS -
	DJO	
	DATE -	REVISIONS -
	01/30/2017	

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	15-00095-00-RS	COOK	65	45
*1318 & 2562		CONTRACT NO. 61D75		
FED. ROAD DIST. 1	ILLINOIS	FED. AID PROJECT M-4003(798)		

ENGINEERING CONSULTANT  
**Ciorba Group, Inc.**  
CONSULTING ENGINEERS  
6507 North Cumberland Avenue, Suite 402  
Chicago, Illinois 60658  
Tel: 773.775.4009 Fax: 773.775.4014  
Email: chicagocg@ciorba.com

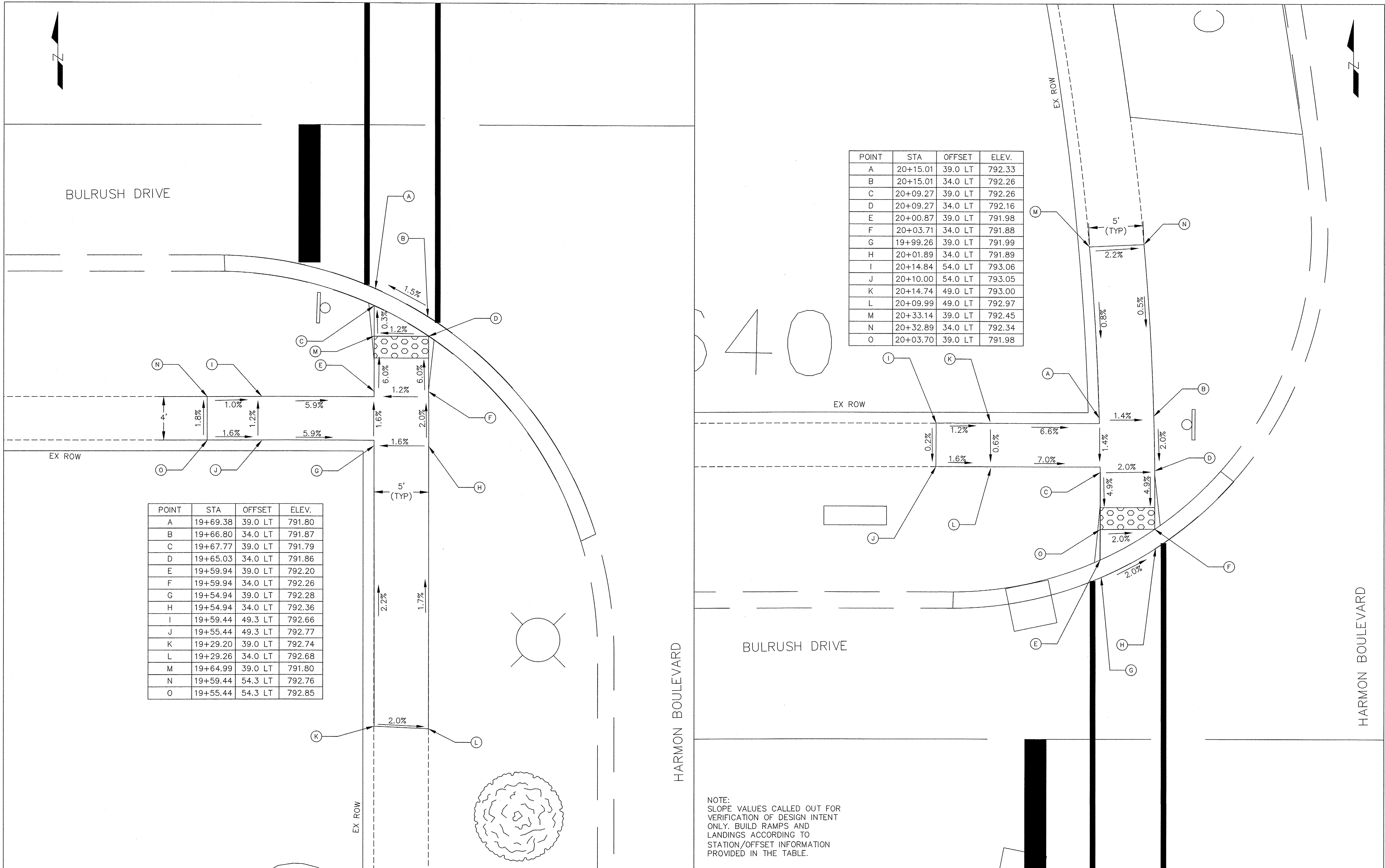


POINT	STA	OFFSET	ELEV.
A	14+73.64	39.0 LT	794.89
B	14+67.90	39.0 LT	794.90
C	14+73.54	34.0 LT	794.85
D	14+67.90	34.0 LT	794.89
E	14+73.23	18.5 LT	794.24
F	14+67.90	18.5 LT	794.24
G	14+73.20	17.0 LT	794.25
H	14+67.90	17.0 LT	794.25
I	14+59.51	39.0 LT	794.93
J	14+59.32	34.0 LT	794.90

POINT	STA	OFFSET	ELEV.
A	14+71.54	17.0 RT	794.96
B	14+66.81	17.0 RT	795.03
C	14+71.54	18.5 RT	794.95
D	14+66.83	18.5 RT	795.02
E	14+71.54	34.0 RT	795.66
F	14+67.05	34.0 RT	795.70
G	14+71.54	39.0 RT	795.68
H	14+67.52	39.0 RT	795.74
I	14+23.01	34.0 RT	796.21
J	14+23.09	39.0 RT	796.25

NOTE:  
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996



POINT	STA	OFFSET	ELEV.
A	20+15.01	39.0 LT	792.33
B	20+15.01	34.0 LT	792.26
C	20+09.27	39.0 LT	792.26
D	20+09.27	34.0 LT	792.16
E	20+00.87	39.0 LT	791.98
F	20+03.71	34.0 LT	791.88
G	19+99.26	39.0 LT	791.99
H	20+01.89	34.0 LT	791.89
I	20+14.84	54.0 LT	793.06
J	20+10.00	54.0 LT	793.05
K	20+14.74	49.0 LT	793.00
L	20+09.99	49.0 LT	792.97
M	20+33.14	39.0 LT	792.45
N	20+32.89	34.0 LT	792.34
O	20+03.70	39.0 LT	791.98

POINT	STA	OFFSET	ELEV.
A	19+69.38	39.0 LT	791.80
B	19+66.80	34.0 LT	791.87
C	19+67.77	39.0 LT	791.79
D	19+65.03	34.0 LT	791.86
E	19+59.94	39.0 LT	792.20
F	19+59.94	34.0 LT	792.26
G	19+54.94	39.0 LT	792.28
H	19+54.94	34.0 LT	792.36
I	19+59.44	49.3 LT	792.66
J	19+55.44	49.3 LT	792.77
K	19+29.20	39.0 LT	792.74
L	19+29.26	34.0 LT	792.68
M	19+64.99	39.0 LT	791.80
N	19+59.44	54.3 LT	792.76
O	19+55.44	54.3 LT	792.85

NOTE:  
SLOPE VALUES CALLED OUT FOR  
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POINT	STA	OFFSET	ELEV.
A	24+87.18	28.0 LT	794.31
B	24+82.61	28.0 LT	794.24
C	24+87.39	22.0 LT	794.24
D	24+82.75	23.0 LT	794.14
E	24+87.58	18.8 LT	794.05
F	24+82.87	18.6 LT	793.95
G	24+87.64	17.3 LT	794.06
H	24+82.92	17.1 LT	793.96
I	25+00.00	28.7 LT	794.75
J	25+00.00	23.7 LT	794.80



HARMON BOULEVARD

POINT	STA	OFFSET	ELEV.
A	24+88.33	29.7 RT	793.71
B	24+82.77	29.6 RT	793.67
C	24+88.02	24.7 RT	793.66
D	24+82.56	24.6 RT	793.62
E	24+87.66	18.6 RT	793.19
F	24+82.32	18.5 RT	793.15
G	24+87.58	17.2 RT	793.20
H	24+82.26	17.0 RT	793.16

NOTE:  
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**ENGINEERING CONSULTANT**  
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5507 North Cumberland Avenue, Suite 402  
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Email: chicago@ciorba.com

USERNAME = dwierzbicki	DESIGNED - JPA	REVISED -
PLOT SCALE =	DRAWN - DW	REVISED -
PLOT DATE =	CHECKED - DJO	REVISED -
	DATE - 01/30/2017	REVISED -

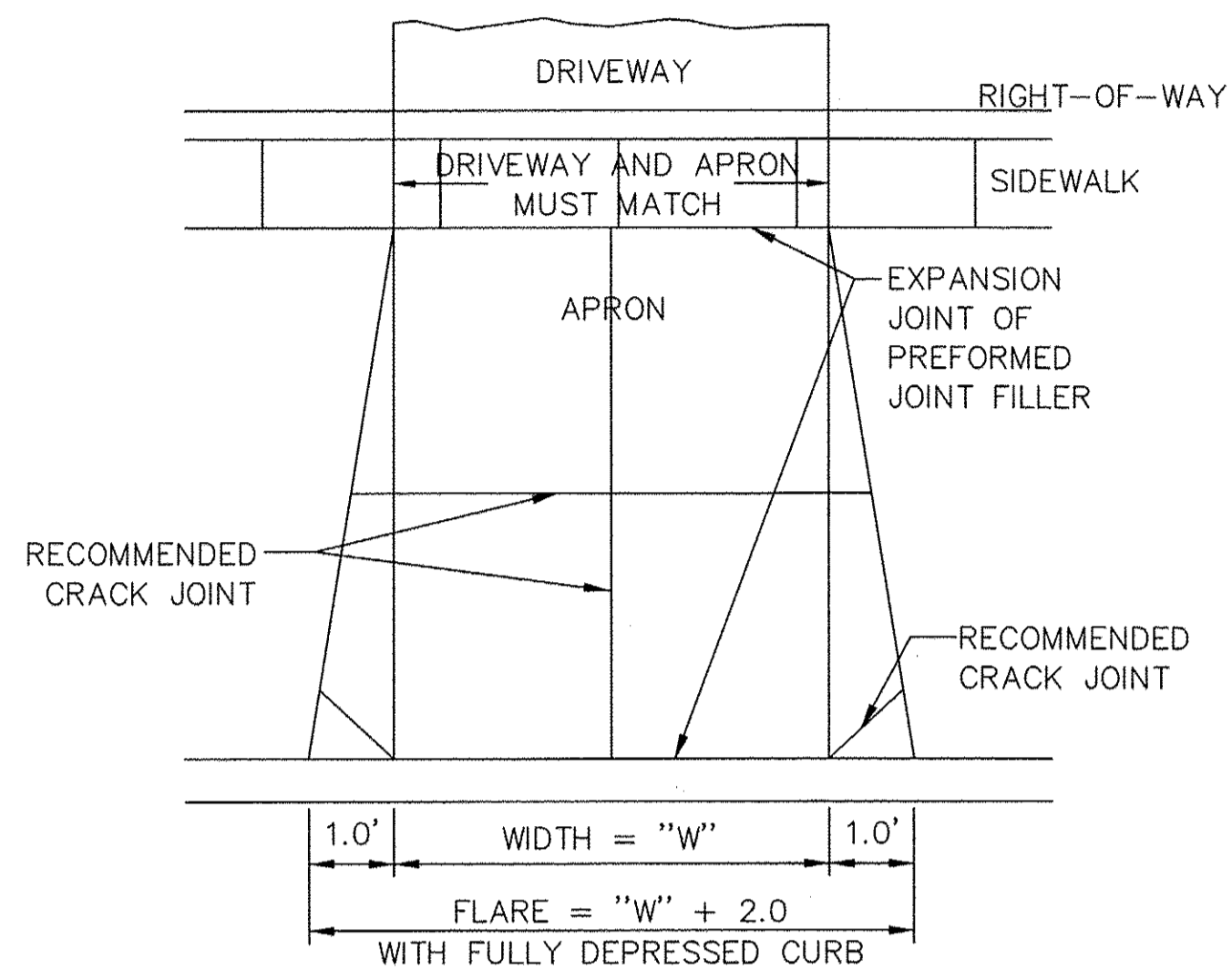
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**BODE ROAD & HARMON BLVD PAVEMENT RESURFACING**  
**ADA RAMP DETAILS - HARMON BOULEVARD**

SCALE: 1" = 2' | SHEET NO. 6 OF 6 SHEETS | STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	15-00095-00-RS	COOK	65	48
*1318 & 2562		CONTRACT NO. 61D75		
FED. ROAD DIST. 1		ILLINOIS	FED. AID PROJECT M-4003(798)	





NOTE: MINIMUM WIDTH, "W" = 10', MINIMUM FLARE = 12'  
 MAXIMUM WIDTH, "W" = 28', MAXIMUM FLARE = 30'

NOTES:

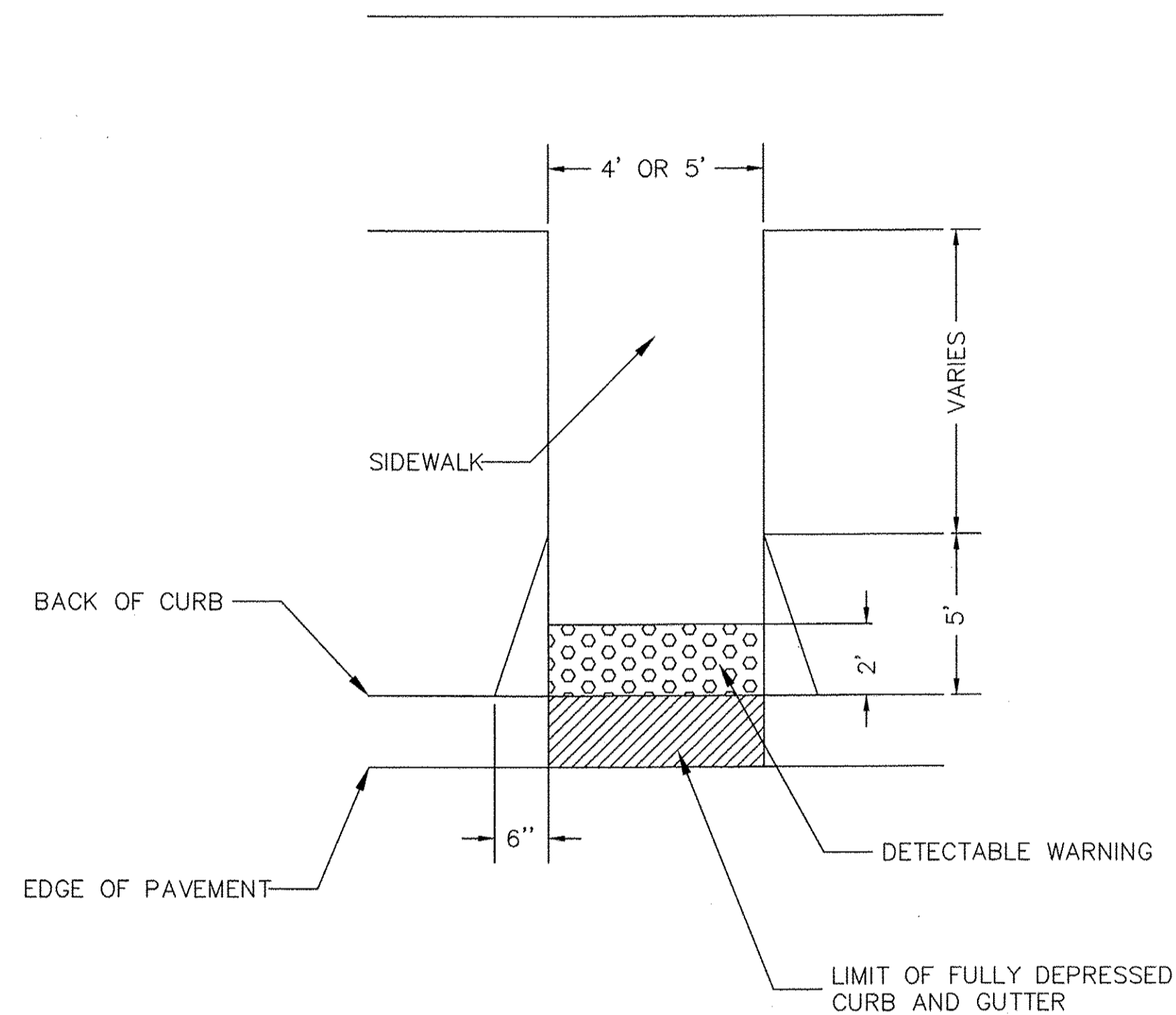
CONCRETE

1. THE APRON SHALL CONSIST OF 6" CONCRETE OVER 4" CA-6 CRUSHED STONE OR GRAVEL.
2. CONCRETE TO BE IDOT APPROVED MIX, MIN. 3500 PSI COMPRESSIVE STRENGTH WITH SYNTHETIC FIBERS.
3. CONCRETE MUST BE CURED IN ACCORDANCE WITH CONTRACT SPECIFICATIONS

ASPHALT

1. THE RESIDENTIAL APRON SHALL CONSIST OF 3" ASPHALT OVER 8" CA-6 CRUSHED STONE OR GRAVEL.
2. THE COMMERCIAL APRON SHALL CONSIST OF 5" ASPHALT OVER 10" CA-6 CRUSHED STONE OR GRAVEL.

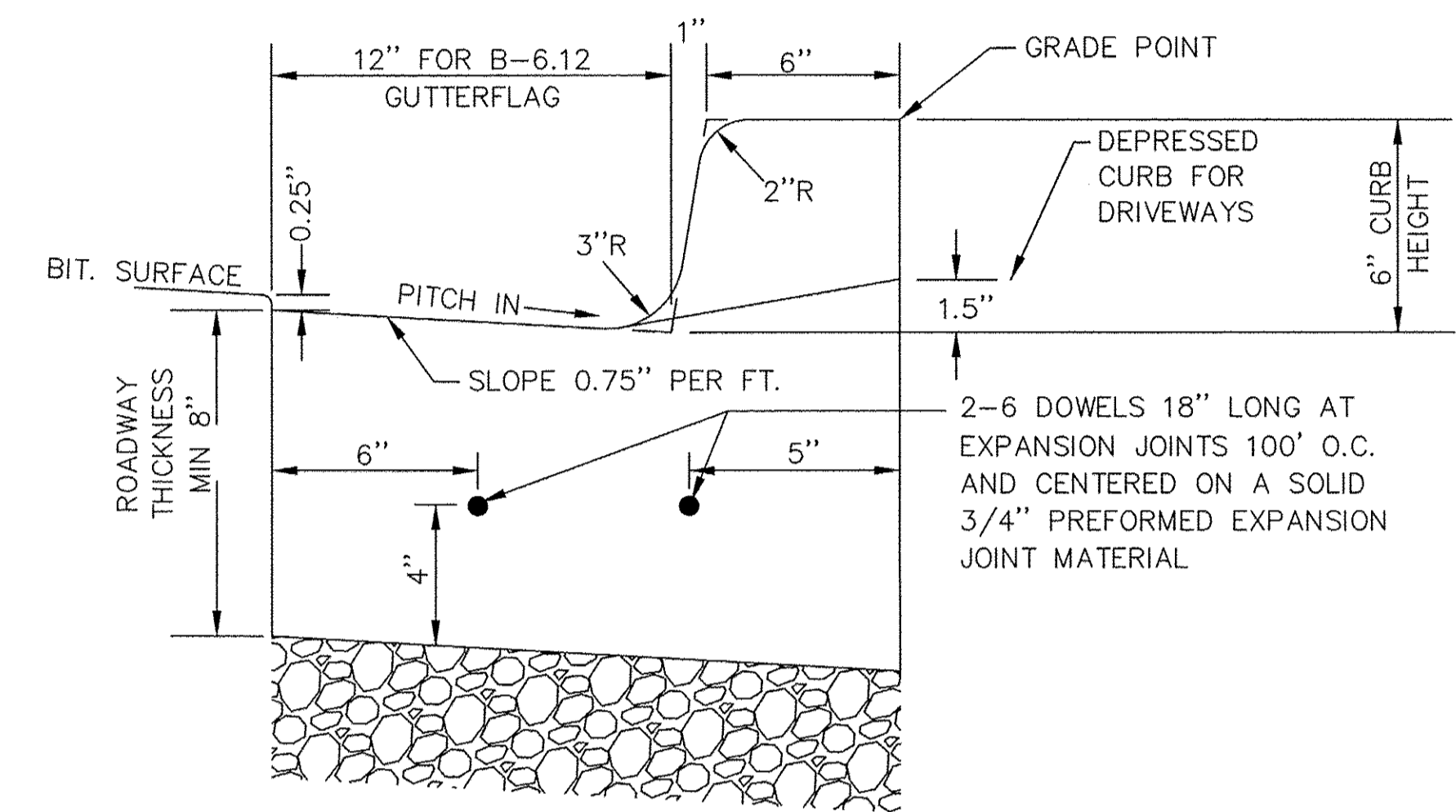
APRON DETAIL



NOTES:

1. DETECTABLE WARNING PLACEMENT AND SIDEWALK/RAMP SLOPE SHALL FOLLOW IDOT STANDARDS 424001 AND 424006
2. DETECTABLE WARNING TO MATCH FULL WIDTH OF APPROACH SIDEWALK, MINIMUM 4 FEET.

SIDEWALK RAMP REMOVAL



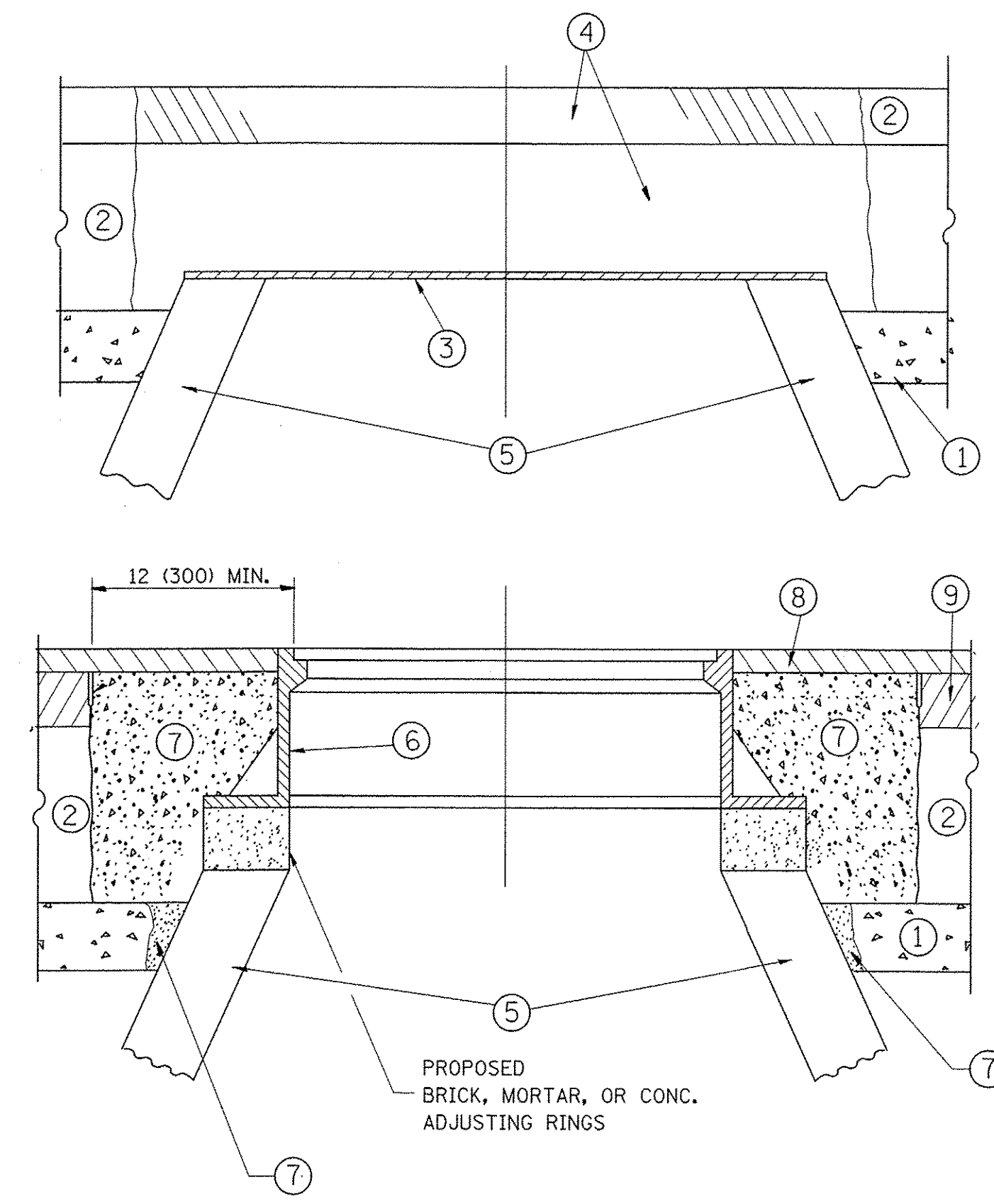
CURB & GUTTER, TYPE B-6.12 (SPECIAL)

NOTES:

1. THE CURB SHALL BE DEPRESSED AT ALL APRONS ACROSS ALL SIDEWALK RAMPING IN ACCORDANCE WITH PROJECT DETAILS AND ADA GUIDELINES.
2. CONTRACTION JOINTS TO BE TOOLED OR SAWCUT EVERY 15' TO A DEPTH OF 1.5".
3. EXPANSION JOINTS SHALL BE PROVIDED AT THE BEGINNING AND END OF ALL RETURN RADII, 5 FEET EITHER SIDE OF A DRAINAGE STRUCTURE, AT THE END OF A DAYS POUR, AND/OR AT SPACING NOT TO EXCEED 100 FEET

CURB AND GUTTER DETAIL





**CONSTRUCTION PROCEDURES**

**STAGE 1 (BEFORE PAVEMENT MILLING)**

- A) REMOVE A MINIMUM OF 12 (300) OF THE PAVEMENT FROM AROUND THE STRUCTURE.
- B) REMOVE THE EXISTING FRAME AND LID FROM THE STRUCTURE.
- C) COVER THE STRUCTURE OPENING WITH A 36 (900) DIAMETER METAL PLATE.
- D) BACKFILL WITH CRUSHED STONE AND A MINIMUM 1/2 (40) THICK HMA SURFACE MIX APPROVED BY THE ENGINEER.

**STAGE 2 (AFTER PAVEMENT MILLING)**

- A) REMOVE THE HMA SURFACE MIX AND CRUSHED STONE.
- B) INSTALL THE FRAME AND LID; ADJUST THE FRAME TO ITS FINAL SURFACE ELEVATION.
- C) THE SURROUNDING SPACE SHALL BE FILLED WITH CLASS PP-1\* CONCRETE TO THE ELEVATION OF THE SURFACE OF THE EXISTING BASE COURSE OR THE BINDER COURSE.

\*UNLESS OTHERWISE SPECIFIED IN THE PLANS.

THE PROCEDURE EXPLAINED ABOVE SHALL CONFORM TO THE APPLICABLE PORTIONS OF SECTIONS 353, 406, 602, AND 603 OF THE STANDARD SPECIFICATIONS EXCEPT THAT "THE CONTRACTOR SHALL ADJUST THE STRUCTURES TO THE FINISHED PAVEMENT ELEVATION NO MORE THAN 5 CALENDAR DAYS PRIOR TO PLACEMENT OF THE FINAL LIFT OF SURFACE UNLESS APPROVED BY THE ENGINEER."

**LEGEND**

- ① SUB-BASE GRANULAR MATERIAL
- ② EXISTING PAVEMENT
- ③ 36 (900) DIAMETER METAL PLATE
- ④ PROPOSED CRUSHED STONE AND HMA SURFACE MIX
- ⑤ EXISTING STRUCTURE
- ⑥ FRAME AND LID (SEE NOTES)
- ⑦ CLASS PP-1\* CONCRETE
- ⑧ PROPOSED HMA SURFACE COURSE
- ⑨ PROPOSED HMA BINDER COURSE

**LOCATION OF STRUCTURES:**

THE CONTRACTOR WILL BE REQUIRED TO KEEP A RECORD OF THE LOCATIONS OF THE BURIED STRUCTURES ACCORDING TO THE STATION AND DISTANCE LEFT OR RIGHT OF THE CENTERLINE OF PAVEMENT. UPON COMPLETION OF THE WORK, THE CONTRACTOR WILL DELIVER THE RECORD TO THE ENGINEER.

**BASIS OF PAYMENT:**

REMOVING FRAMES AND LIDS ON DRAINAGE AND UTILITY STRUCTURES IN THE PAVEMENT PRIOR TO MILLING, AND ADJUSTING TO FINAL GRADE PRIOR TO PLACING THE SURFACE COURSE, WILL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR "FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)."

THIS WORK WILL NOT BE PAID FOR WHEN DRAINAGE AND UTILITY STRUCTURES ARE SPECIFIED FOR PAYMENT AS STRUCTURE RECONSTRUCTION.

NEW FRAMES AND LIDS, WHEN SPECIFIED, WILL BE PAID FOR SEPARATELY.

**NOTES:**

EXISTING BROKEN FRAMES AND LIDS SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR AND SHALL BE REPLACED AS DIRECTED BY THE ENGINEER. REPLACEMENT FRAMES AND LIDS WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS UNLESS A SEPARATE PAY ITEM HAS BEEN PROVIDED.

IF THE EXISTING LIDS ARE OPEN, THE FRAME WILL BE ADJUSTED TO THE ELEVATION OF THE MILLED PAVEMENT SURFACE PRIOR TO THE MILLING OPERATION. THE FRAME WILL NOT BE REMOVED AND COVERED BY THE METAL PLATE.

CITY OF CHICAGO CASTINGS ARE THE PROPERTY OF THE CITY AND THE CONTRACTOR SHALL NOTIFY THE CITY FOR REMOVAL AND DISPOSITION OF THE CASTINGS.

THE METAL PLATE USED TO COVER THE STRUCTURE SHALL REMAIN THE PROPERTY OF THE CONTRACTOR.

WHEN STRUCTURES ARE TO BE ADJUSTED OR RECONSTRUCTED, THE LOWERING AND RAISING OF THE FRAMES AND LIDS WILL NOT BE PAID FOR SEPARATELY BUT WILL BE INCLUDED IN THE COST OF THE CORRESPONDING PAY ITEM.

**DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING**

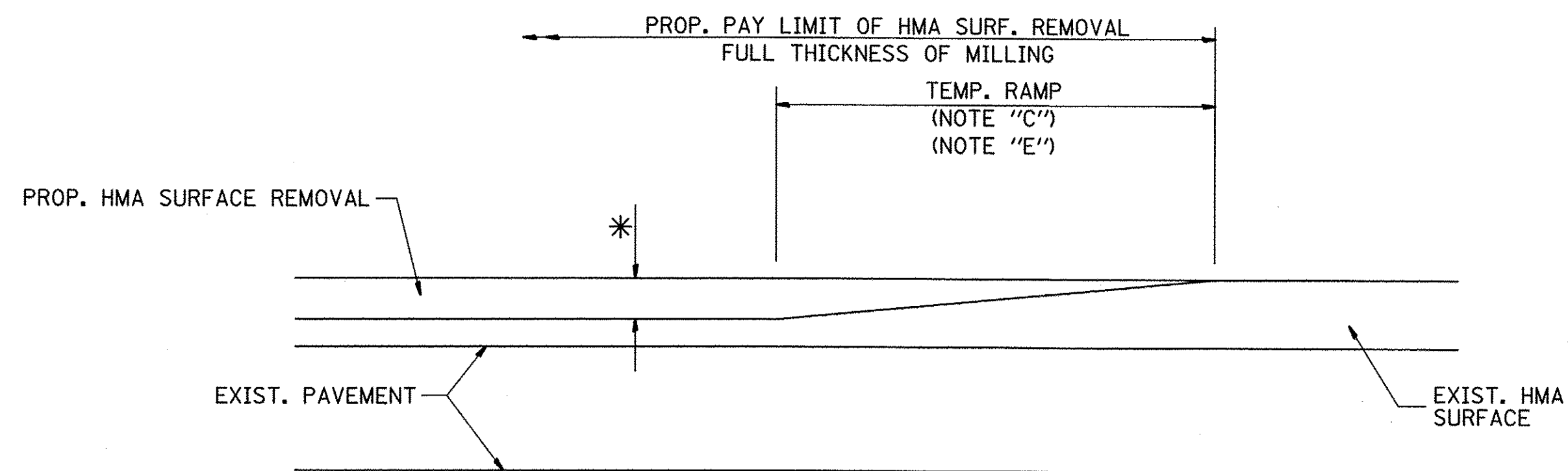
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

FILE NAME =	USER NAME = bauerdl	DESIGNED - R. SHAH	REVISED - R. WIEDEMAN 05-14-04
c:\pw_work\pwsdot\bauerdl\d0100315\bd08.dgn		DRAWN -	REVISED - R. BORO 01-01-07
		CHECKED -	REVISED - R. BORO 03-09-11
		DATE - 10-25-94	REVISED - R. BORO 12-06-11

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

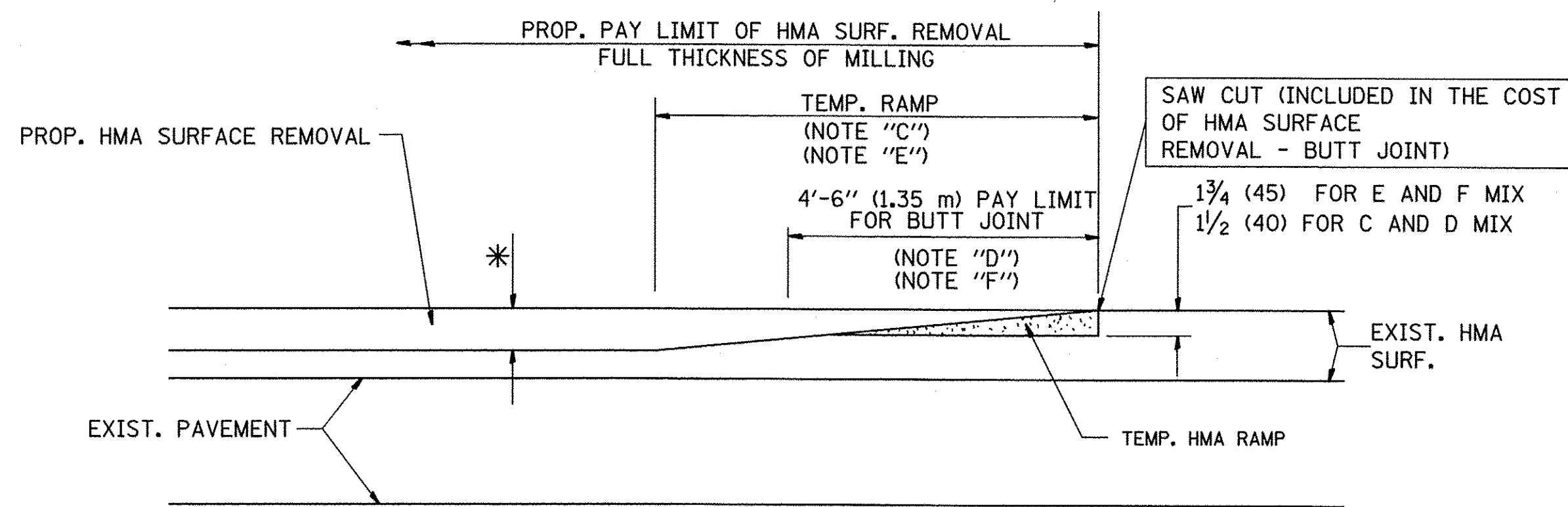
<b>DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING</b>			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	15-00095-00-RS	COOK	65	51
*1318 & 2562		CONTRACT NO. 61D75		
FED. ROAD DIST. 1	ILLINOIS	FED. AID PROJECT M-4003(798)		



MILLED TEMPORARY RAMP  
(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

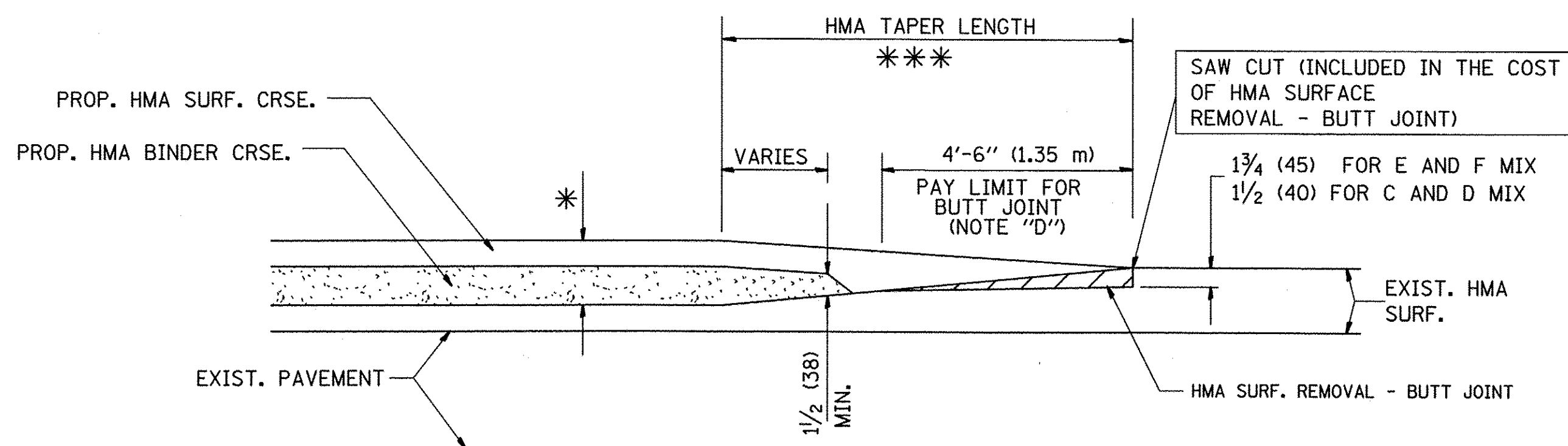
**OPTION 1**



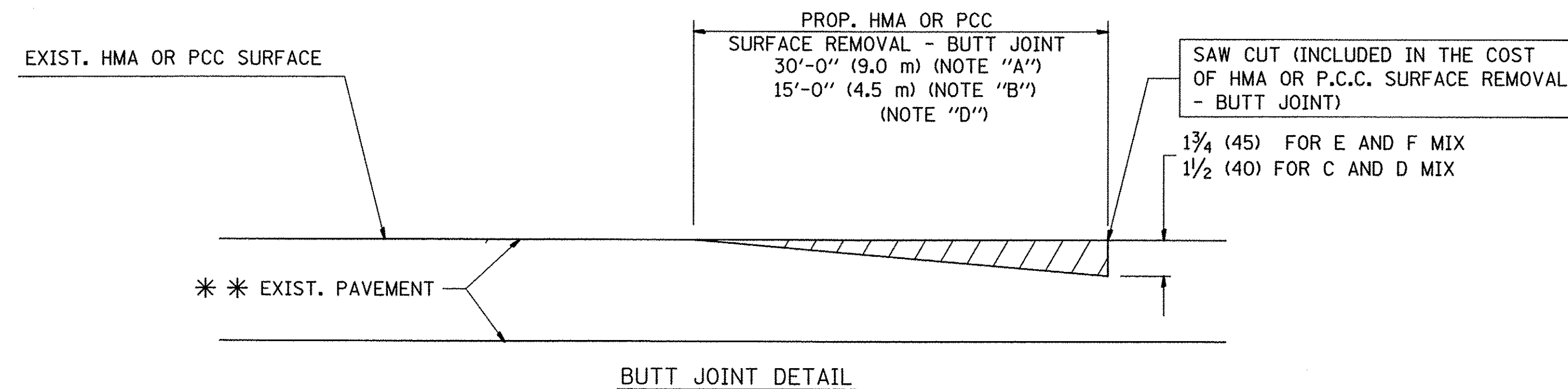
HMA CONSTRUCTED TEMPORARY RAMP  
(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

**OPTION 2**

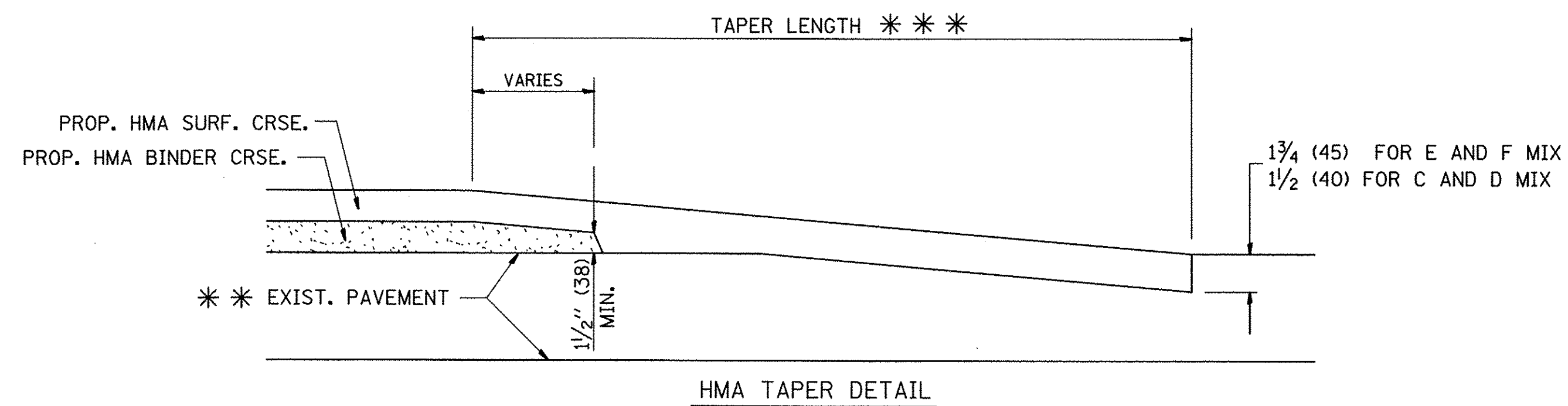
**TYPICAL TEMPORARY RAMP**



BUTT JOINT AND HMA TAPER  
**TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING**



BUTT JOINT DETAIL



HMA TAPER DETAIL

**TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY**

\*\*\* PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

**NOTES**

- A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.
- B: MINOR SIDE ROADS.
- C: THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE.
- D: THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSES.
- E: TAPER THE TEMP. RAMP AT A RATE OF 3'-0" (900 mm) PER 1 INCH (25 mm) OF MILLING THICKNESS.
- F: INSTALLATION AND REMOVAL OF THE 4'-6" (1.35 m) TEMP. RAMP IS INCLUDED IN COST OF HMA SURFACE REMOVAL - BUTT JOINT
- G: SEE ARTICLE 406.08 AND 406.14 OF THE STANDARD SPECIFICATIONS FOR "HMA AND/OR PCC SURFACE REMOVAL, BUTT JOINT".

\* SEE TYPICAL SECTIONS FOR MILLING THICKNESS.

\*\*\* 20'-0" (6.1 m) PER 1 (25) RESURFACING (NOTE "A")  
10'-0" (3.0 m) PER 1 (25) RESURFACING (NOTE "B")

**BASIS OF PAYMENT:**

THE BUTT JOINT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD (SQUARE METER) FOR "HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT" OR FOR "PORTLAND CEMENT CONCRETE SURFACE REMOVAL - BUTT JOINT".

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

FILE NAME = W:\dststd\22x34\bd32.dgn	USER NAME = gaglianob	DESIGNED - M. DE YONG	REVISED - R. SHAH 10-25-94
		DRAWN -	REVISED - A. ABBAS 03-21-97
	PLOT SCALE = 50.0000' / IN.	CHECKED -	REVISED - M. GOMEZ 04-06-01
	PLOT DATE = 1/4/2008	DATE - 06-13-90	REVISED - R. BORO 01-01-07

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**BUTT JOINT AND  
HMA TAPER DETAILS**

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	15-00095-00-RS	COOK	65	52
*1318 & 2562		CONTRACT NO. 61D75		
FED. ROAD DIST. 1		ILLINOIS	FED. AID PROJECT M-4003(798)	

**GENERAL NOTES**

ALTERNATE MATERIAL FOR THE WALLS MAY BE CONCRETE MASONRY UNITS, PRECAST REINFORCED CONCRETE SECTIONS OR CAST-IN-PLACE CONCRETE. THE CAST IRON STEPS AS DETAILED HEREON ARE TYPICAL. STEPS OF OTHER DESIGN AND MATERIAL THAT CONFORM TO THE MINIMUM REQUIREMENTS OF THE STEPS SHOWN MAY BE USED WHEN APPROVED BY THE ENGINEER.

CAST IRON STEPS SHALL BE GRAY IRON CONFORMING TO THE REQUIREMENTS OF ARTICLE 1006.14 OF THE STANDARD SPECIFICATIONS.

STEPS SHALL BE EMBEDDED INTO THE WALL A MINIMUM OF THREE (3) INCHES. STEPS SHALL NOT BE EXTENDED ON THE OUTSIDE.

STEPS SHALL BE OMITTED FOR WORK IN COOK COUNTY WHEN THE DEPTH OF THE MANHOLE IS TEN (10') OR LESS.

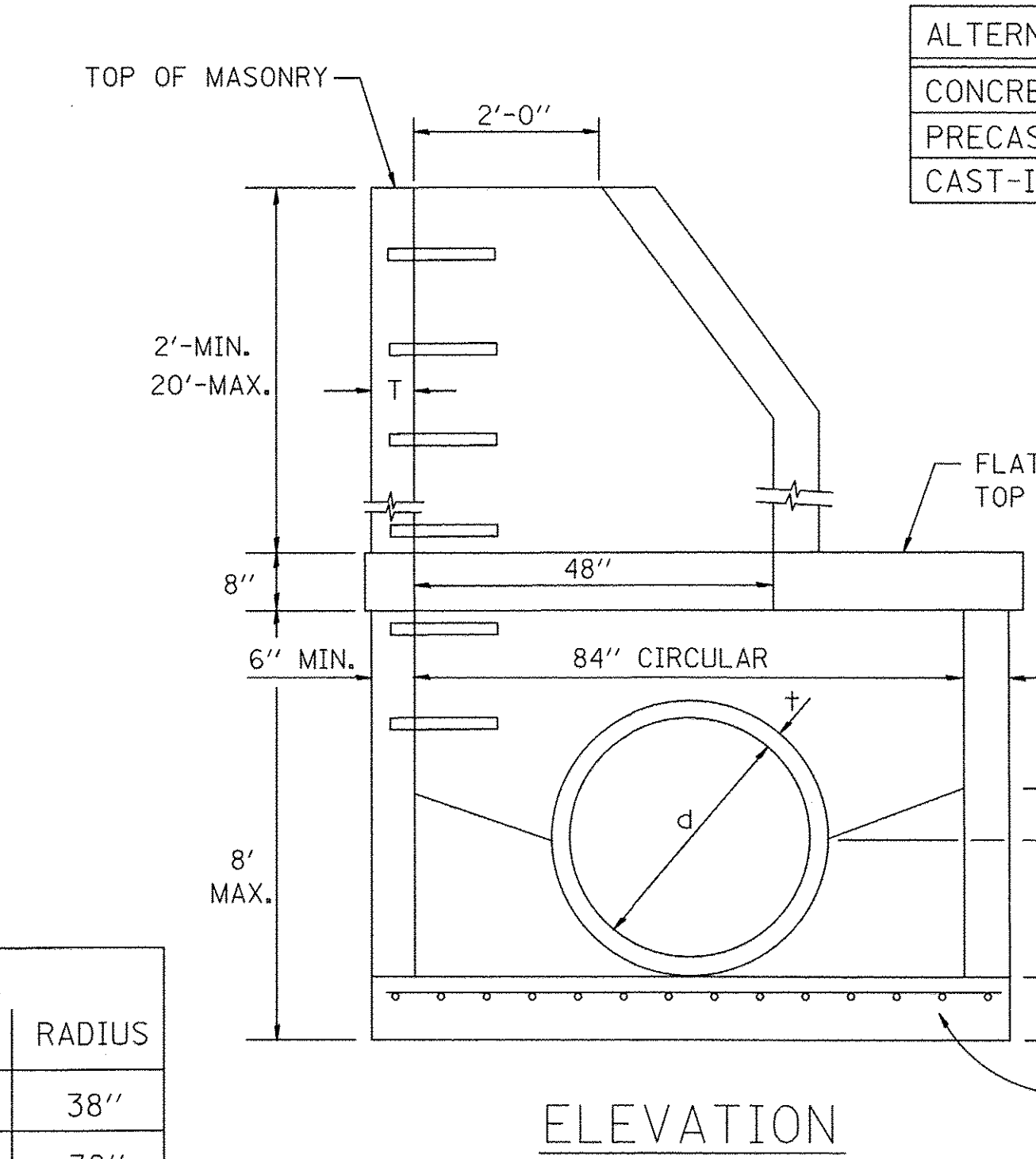
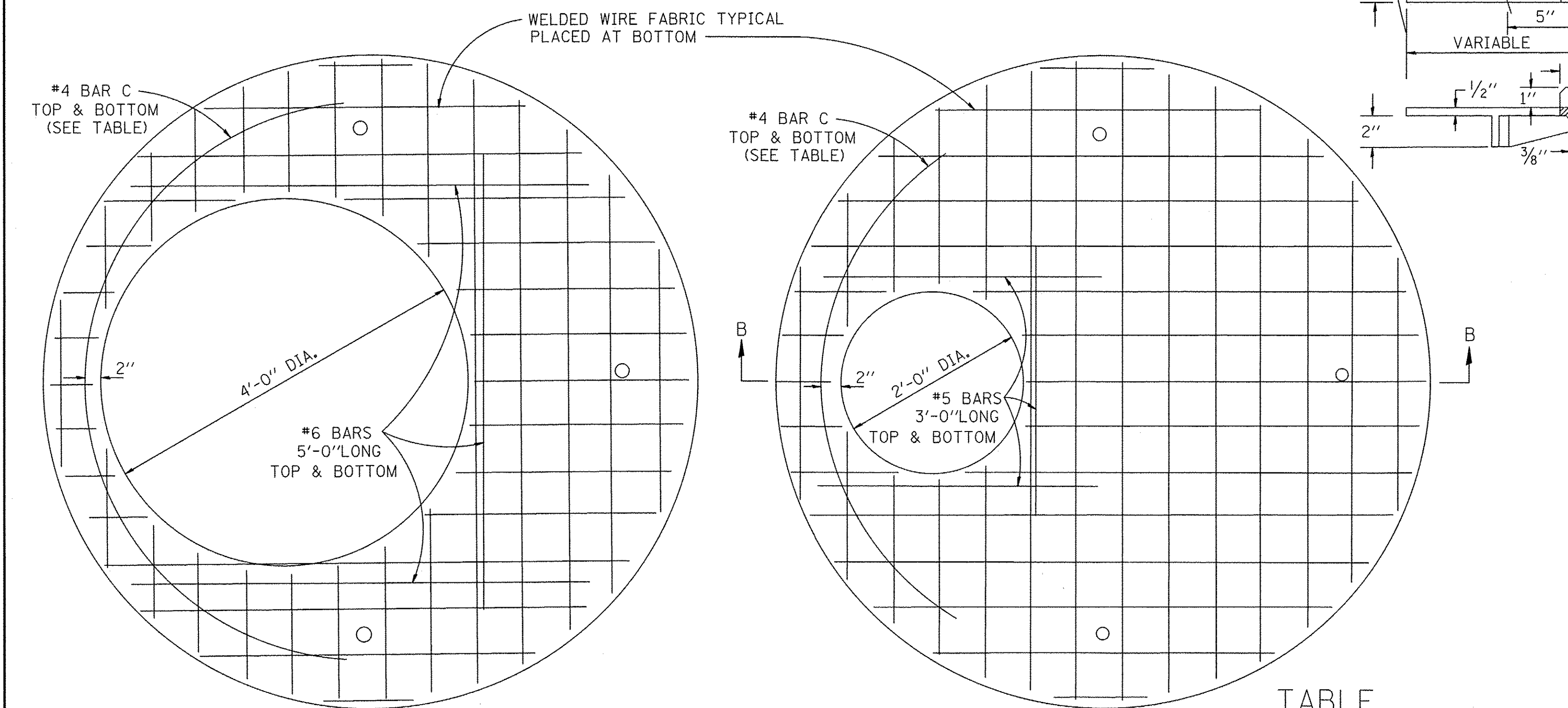
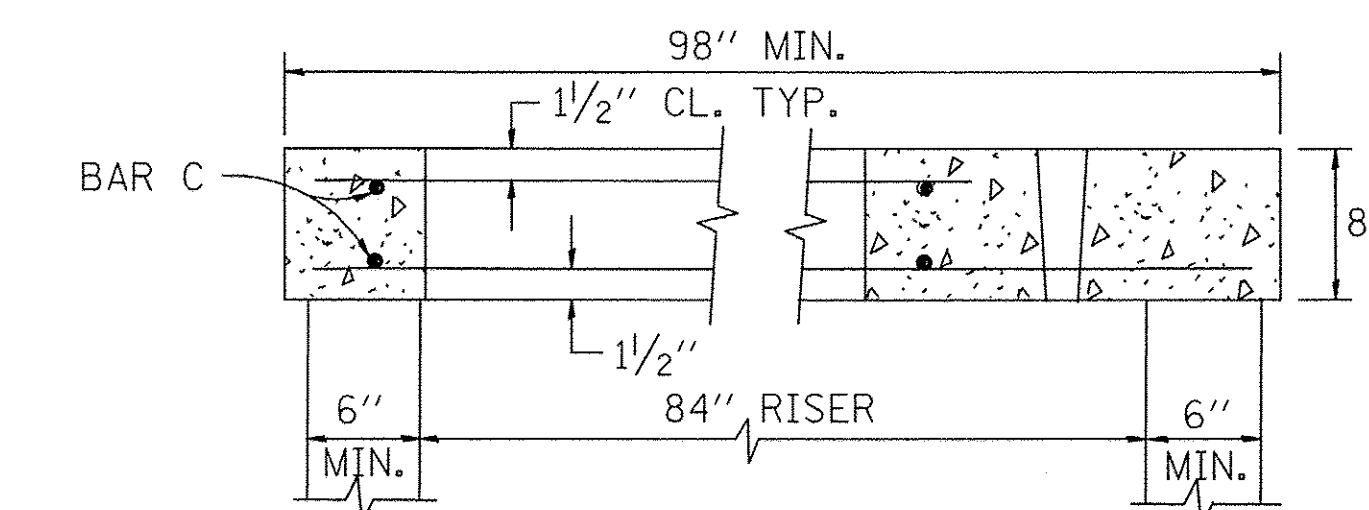
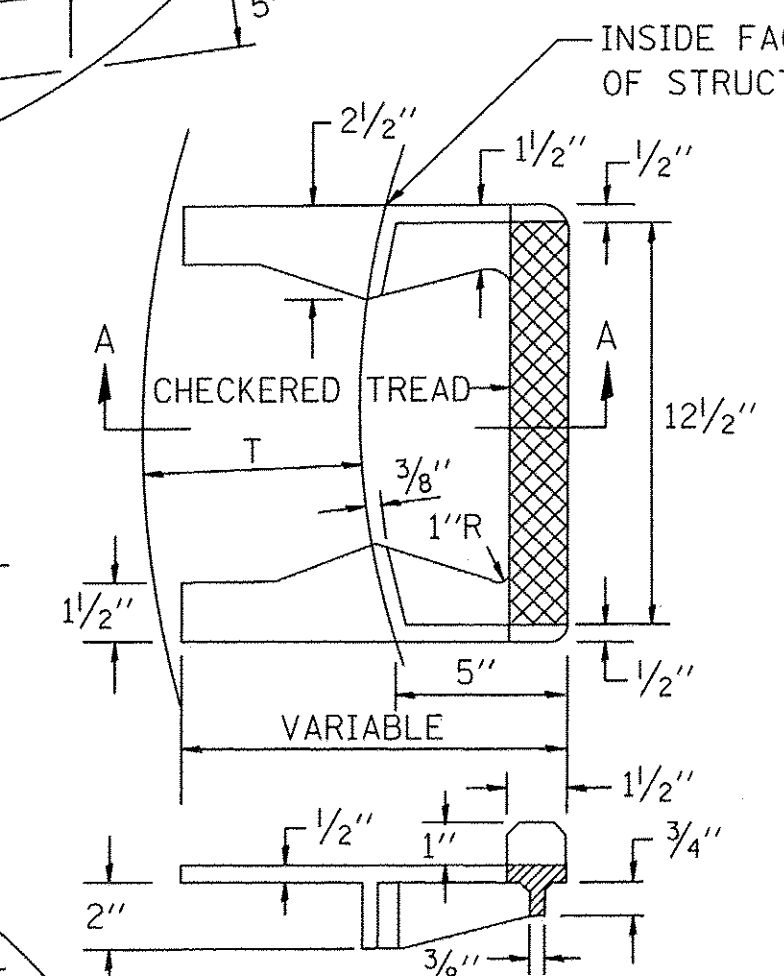
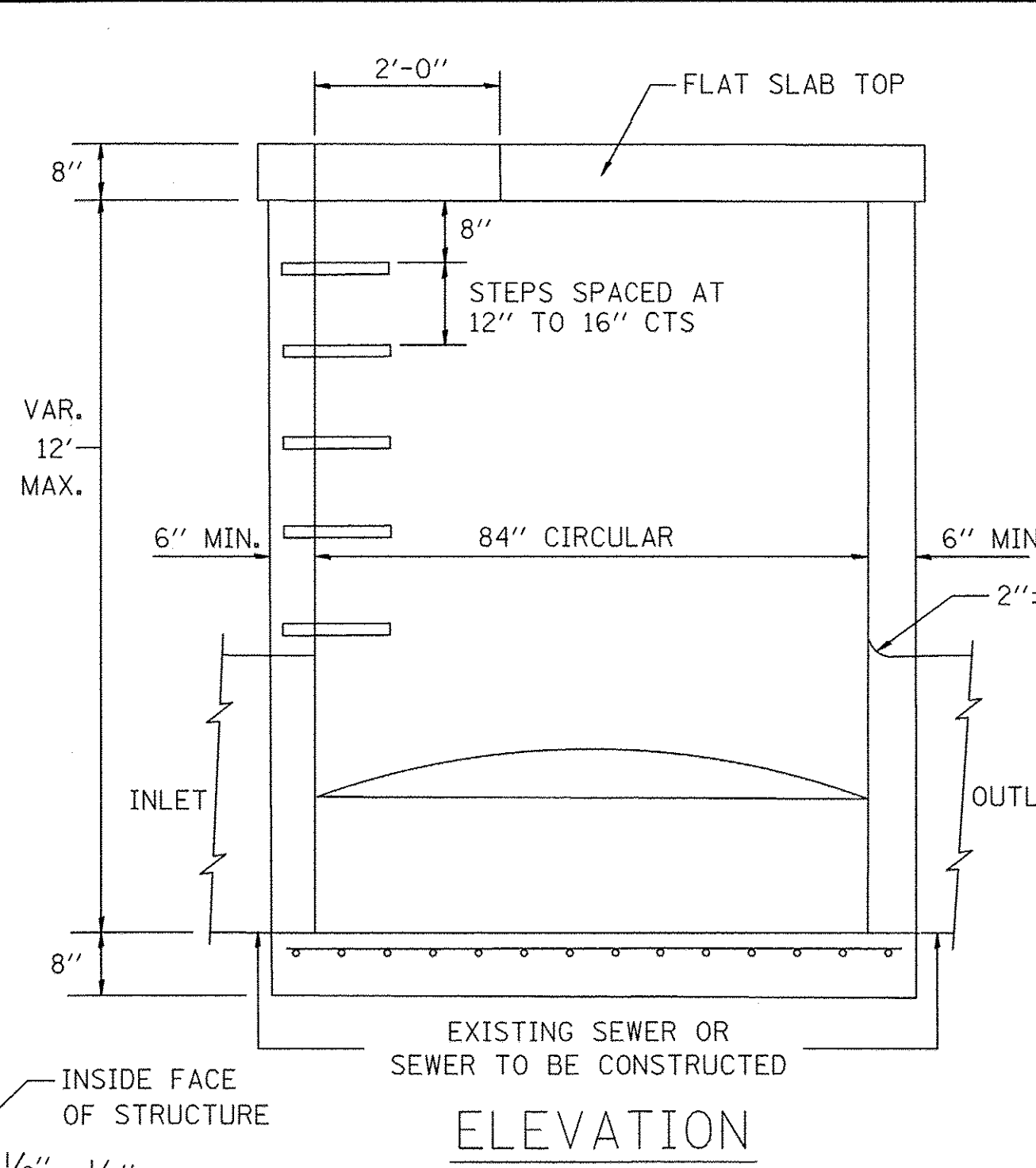
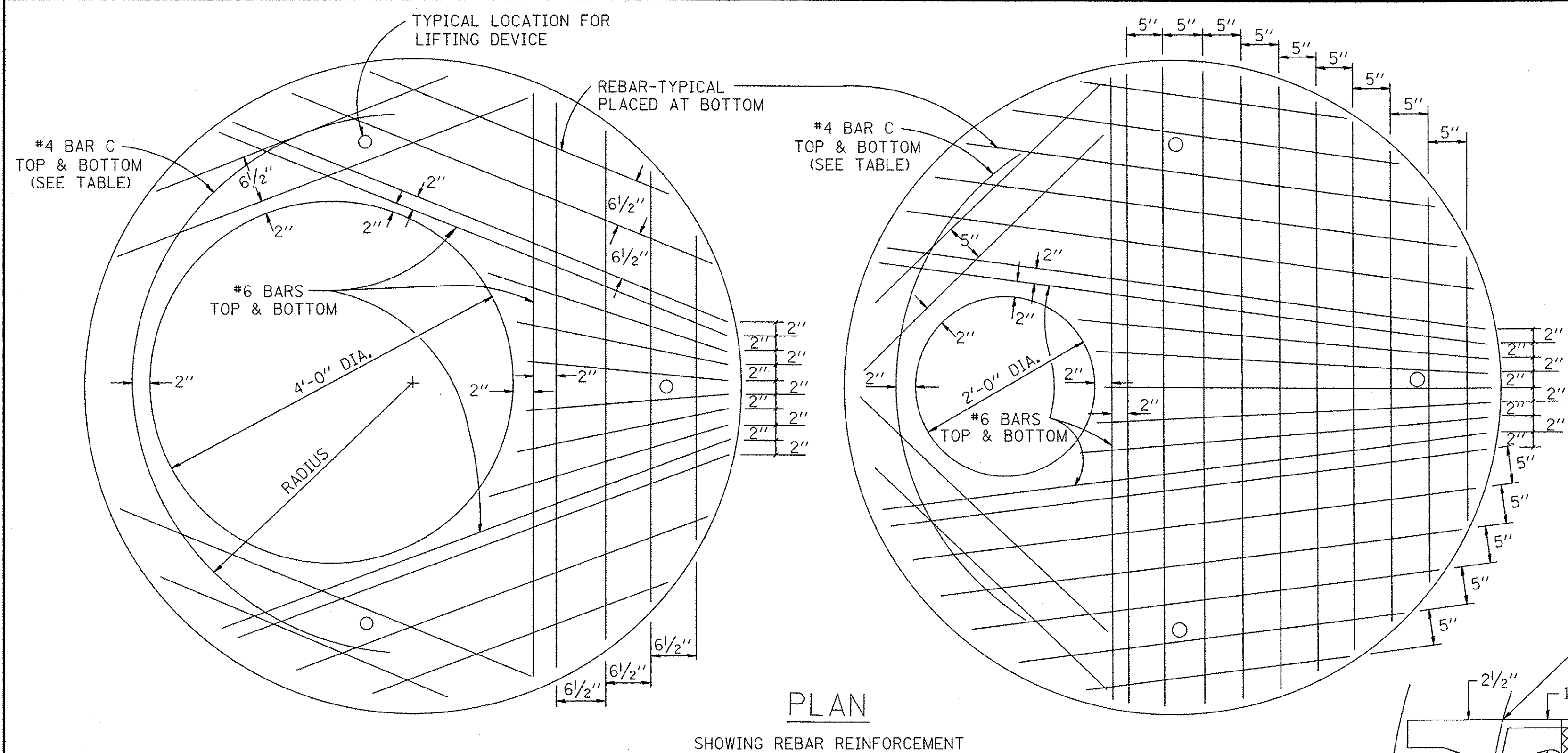
IN ADDITION TO THE REQUIREMENTS OF ARTICLE 612.13 OF THE STANDARD SPECIFICATIONS, THE CONTRACT UNIT PRICE FOR MANHOLES, TYPE A, 7'-DIAMETER SHALL INCLUDE THE SAND CUSHION WHEN REQUIRED, FURNISHING AND INSTALLING STEPS WHEN REQUIRED, FURNISHING AND COMPACTING THE SPECIFIED BACKFILL MATERIAL, AND FURNISHING AND INSTALLING FLAT SLAB TOP.

PRECAST FLAT SLAB TOP SHALL CONFORM TO ARTICLES 505.01 THRU 505.05 OF THE STANDARD SPECIFICATIONS EXCEPT THAT THE CONCRETE STRENGTH SHALL BE 4,000 PSI AFTER 28 DAYS. REINFORCEMENT BARS AND WELDED WIRE FABRIC SHALL CONFORM TO THE REQUIREMENTS OF ARTICLE 1006.10. ONLY GRADE 60 REINFORCEMENT BARS WILL BE PERMITTED.

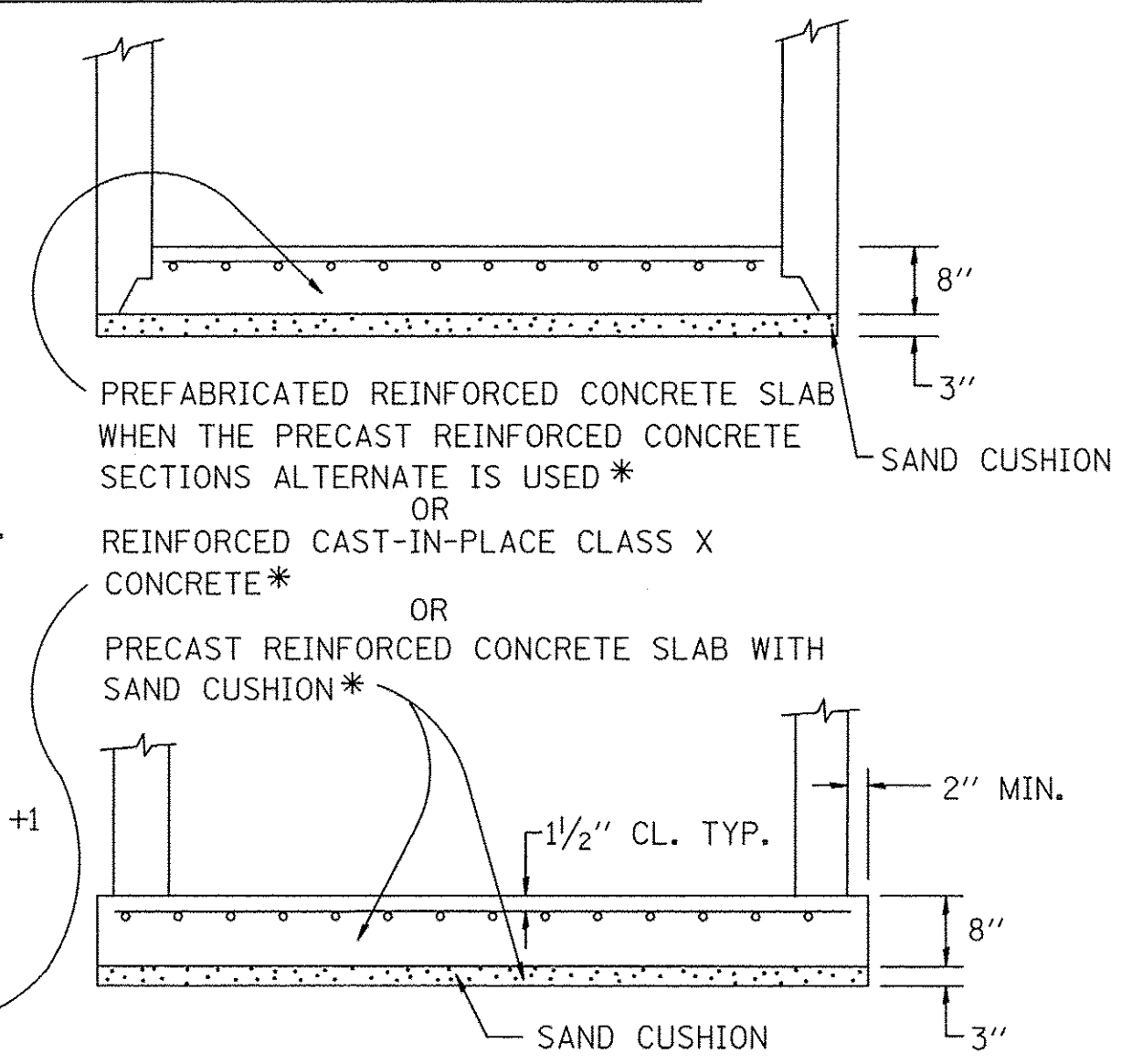
BOTTOM SLAB SHALL BE REINFORCED BY EITHER REINFORCEMENT BARS OR WELDED WIRE FABRIC. THE MINIMUM REINFORCEMENT SHALL BE 0.46 SQUARE INCH PER LINEAR FOOT IN BOTH DIRECTIONS.

JOINT CONFIGURATION AND DIMENSIONS OF FLAT SLAB TOP SHALL MATCH AND FIT THE RISER JOINT DETAIL.

LIFTING DEVICES SHALL BE APPROVED BY THE ENGINEER.



ALTERNATE MATERIALS FOR RISERS	T (MIN.)
CONCRETE MASONRY UNITS	5"
PRECAST REINFORCED CONCRETE SECTIONS	4"
CAST-IN-PLACE CONCRETE	6"



DIAMETER OF OPENING	REINFORCEMENT "AS" WWF OR BAR SIZE EACH DIRECTION	BAR SIZE	BAR C		
			SIZE	LENGTH	RADIUS
2'-0"	1.06 SQ.IN./LIN.FT.	#6	#4	6'-0"	38"
4'-0"	0.82 SQ.IN./LIN.FT.	#6	#4	9'-0"	38"

**PLAN**  
SHOWING WELDED WIRE FABRIC REINFORCEMENT  
NOTE: THIS STRUCTURE SHOULD BE USED WITH PIPES SIZE 54" DIA. OR SMALLER.

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**MANHOLE TYPE A  
7 FOOT DIAMETER**

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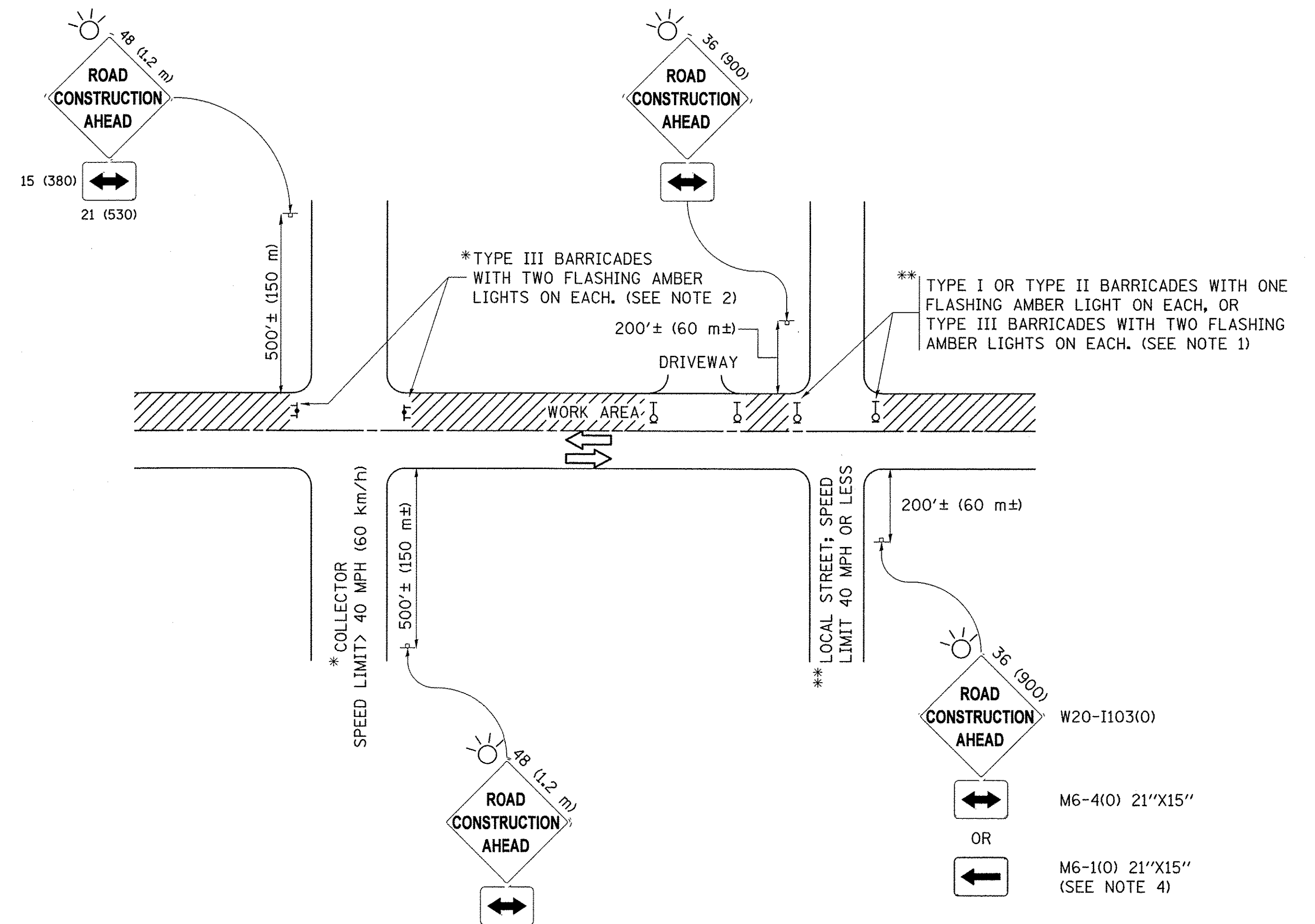
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DESIGNED -  
DRAWN -  
CHECKED -  
DATE - 10-18-02

REVISED -  
REVISED -  
REVISED -  
REVISED -

SCALE: NONE  
SHEET NO. 1 OF 1 SHEETS  
STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	15-00095-00-RS	COOK	65	53
*1318 & 2562		CONTRACT NO. 61D75		
FED. ROAD DIST. 1		ILLINOIS		
FED. AID PROJECT M-4003(798)				



**NOTES:**

1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
  - a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 36 x 36 (900x900) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
  - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
  - a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
  - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
3. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT.
4. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).
5. WHEN WORK IS BEING PERFORMED ON A SIDE ROAD OR DRIVEWAY, FOLLOW THE APPLICABLE STANDARD(S). THE DIRECTIONAL ARROW (M6-1 OR M6-4) SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE TRAFFIC CONTROL SET-UP.
6. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAYS UNLESS OTHERWISE SPECIFIED IN THE PLANS OR BY THE ENGINEER.
7. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

All dimensions are in inches (millimeters) unless otherwise shown.

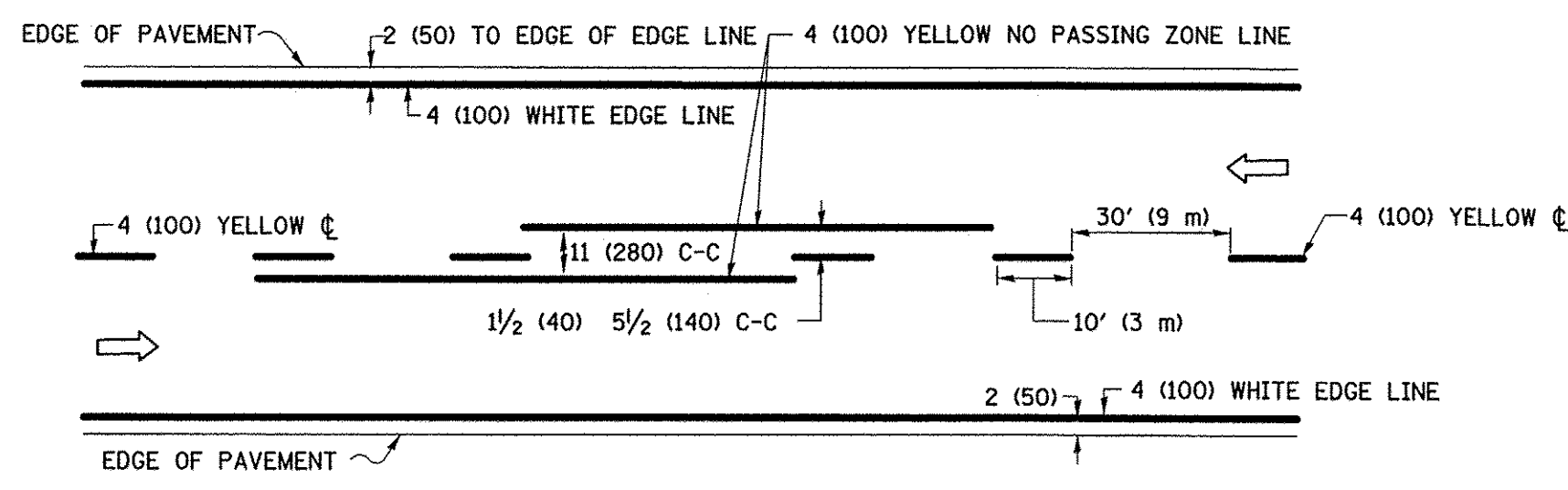
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Default	PLOT DATE = 9/15/2016	DATE - 06-89	REVISED - A. SCHUETZE 07-01-13
			REVISED - A. SCHUETZE 09-15-16

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

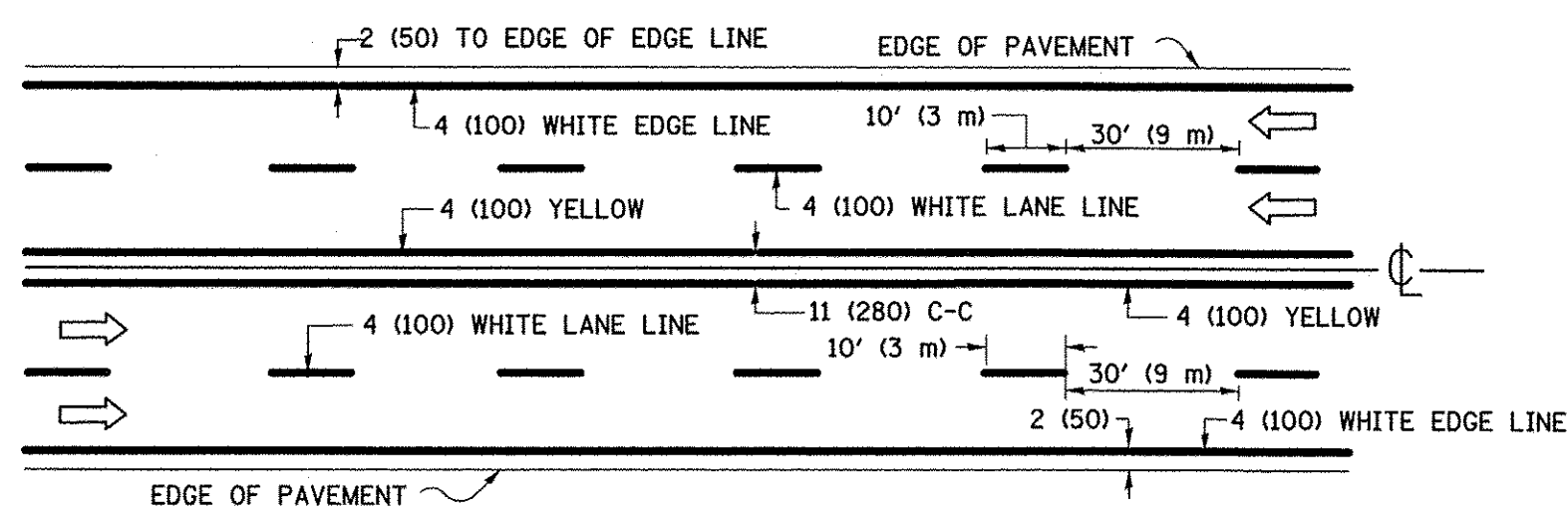
**TRAFFIC CONTROL AND PROTECTION FOR  
SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS**

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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*1318 & 2562		CONTRACT NO. 61D75		
FED. ROAD DIST. 1		ILLINOIS	FED. AID PROJECT M-4003(798)	

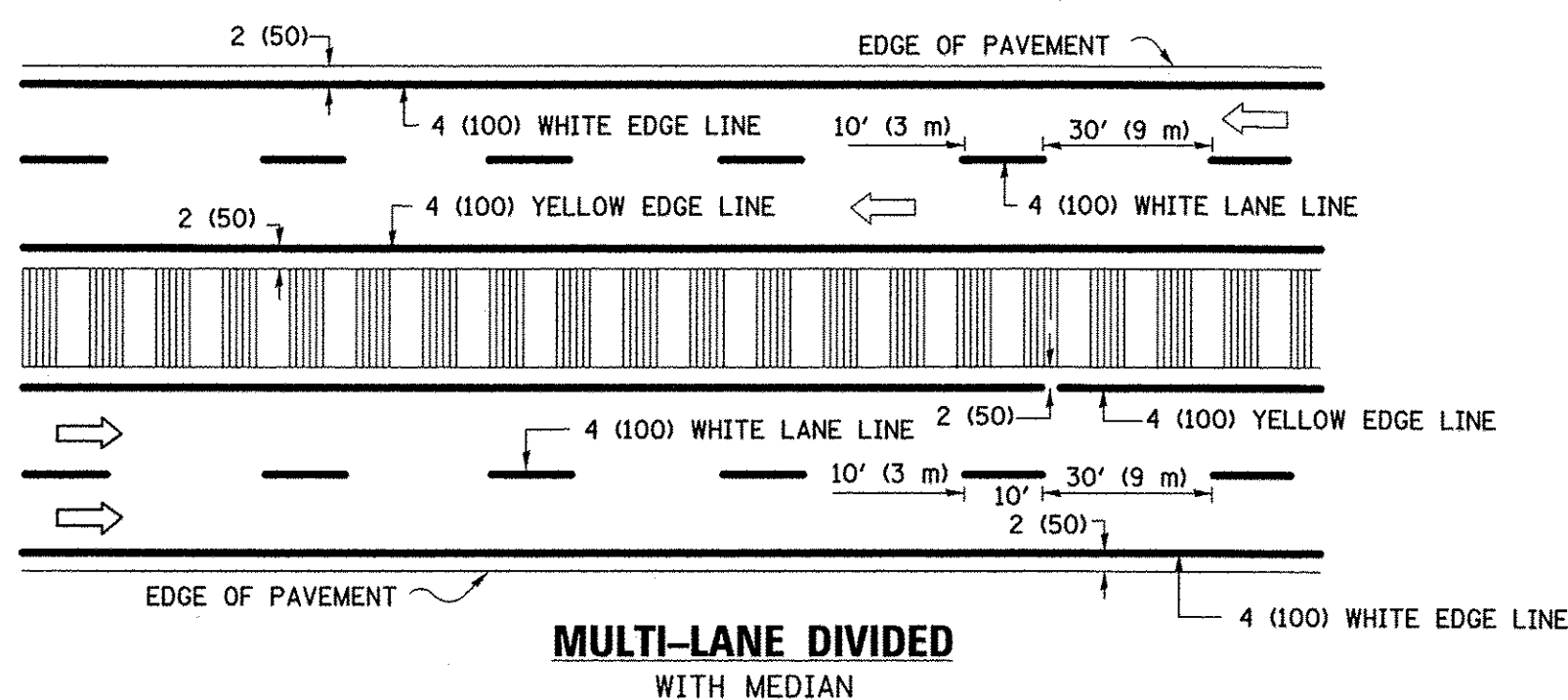
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**2-LANE ROADWAY**

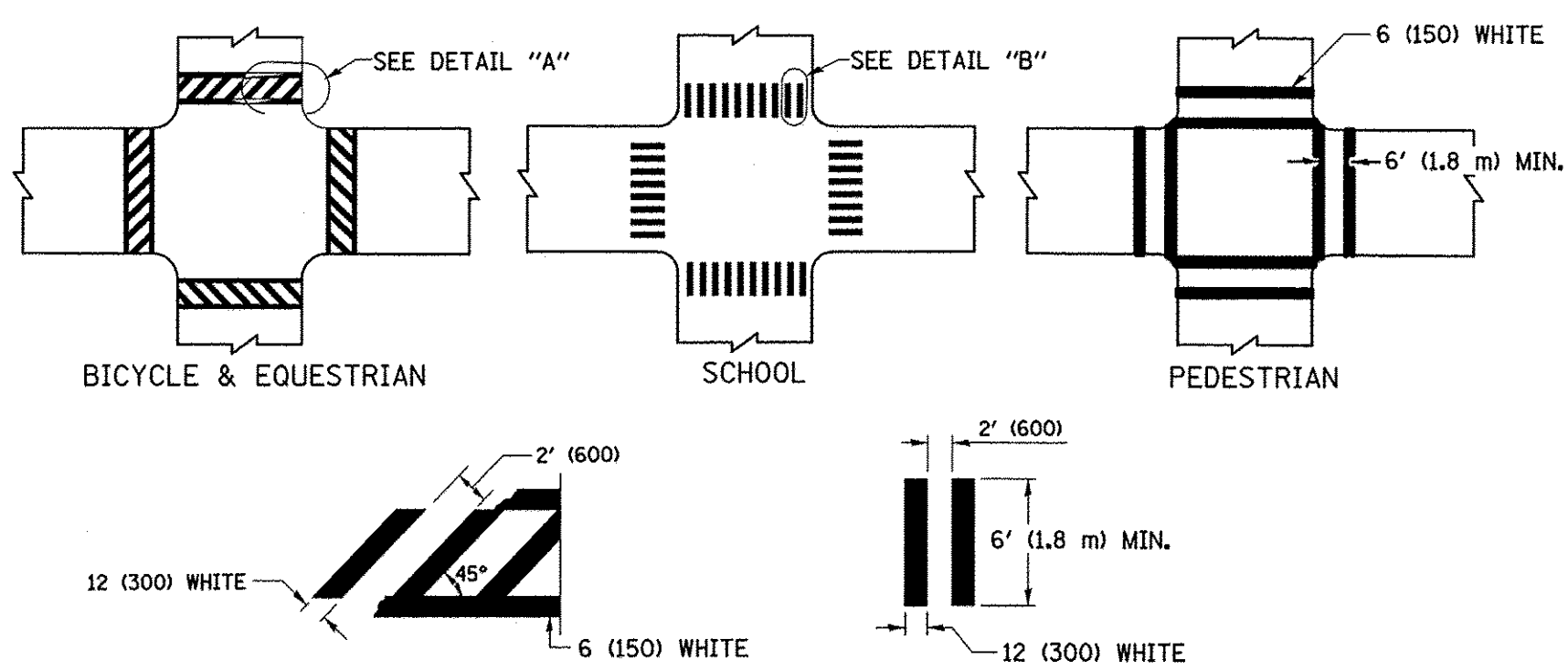


**MULTI-LANE UNDIVIDED**



**MULTI-LANE DIVIDED WITH MEDIAN**

**TYPICAL LANE AND EDGE LINE MARKING**

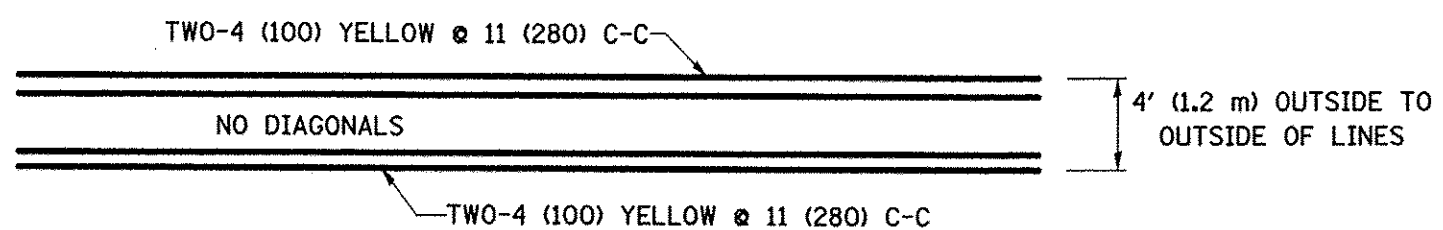


**DETAIL "A"**

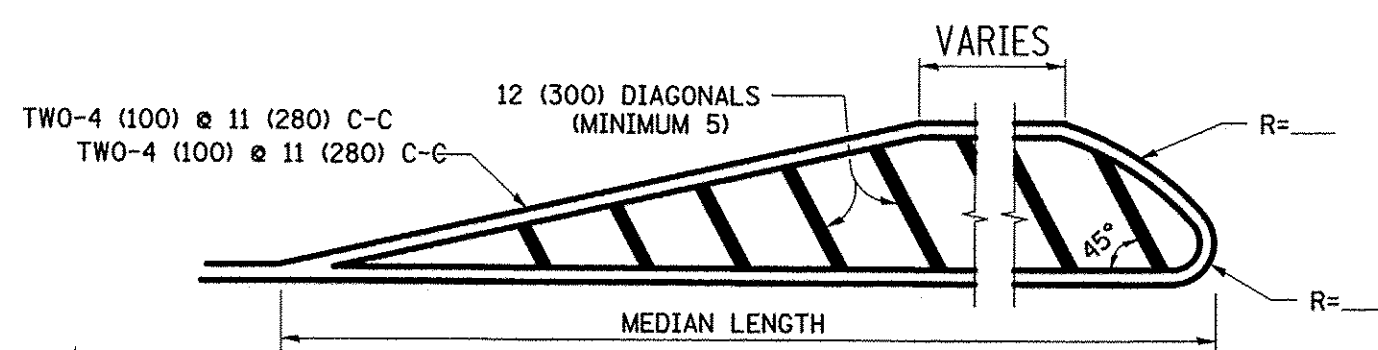
**DETAIL "B"**

**TYPICAL CROSSWALK MARKING**

\* MARKINGS SHALL BE INSTALLED PARALLEL TO THE CENTERLINE OF THE ROAD WHICH IT CROSSES

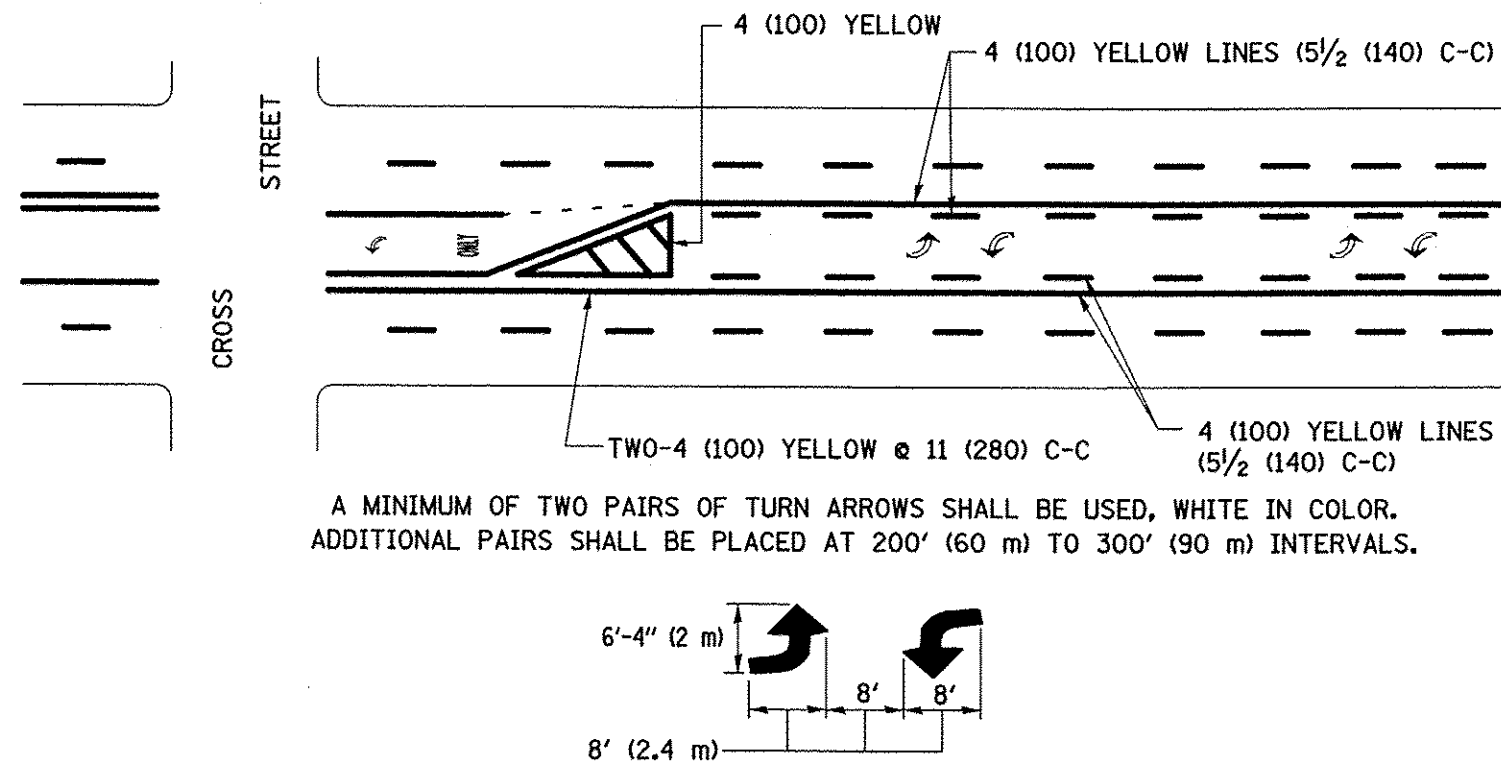


**4' (1.2 m) WIDE MEDIANS ONLY**



DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))  
75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)  
150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

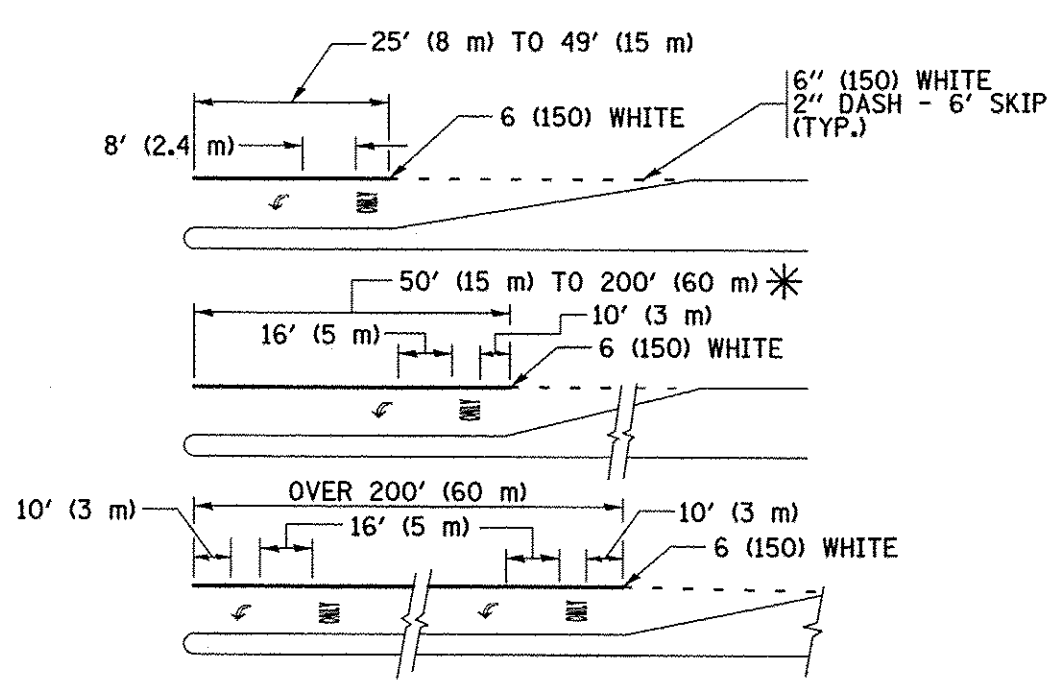
**MEDIANS OVER 4' (1.2 m) WIDE**



A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.

**MEDIAN WITH TWO-WAY LEFT TURN LANE**

**TYPICAL PAINTED MEDIAN MARKING**

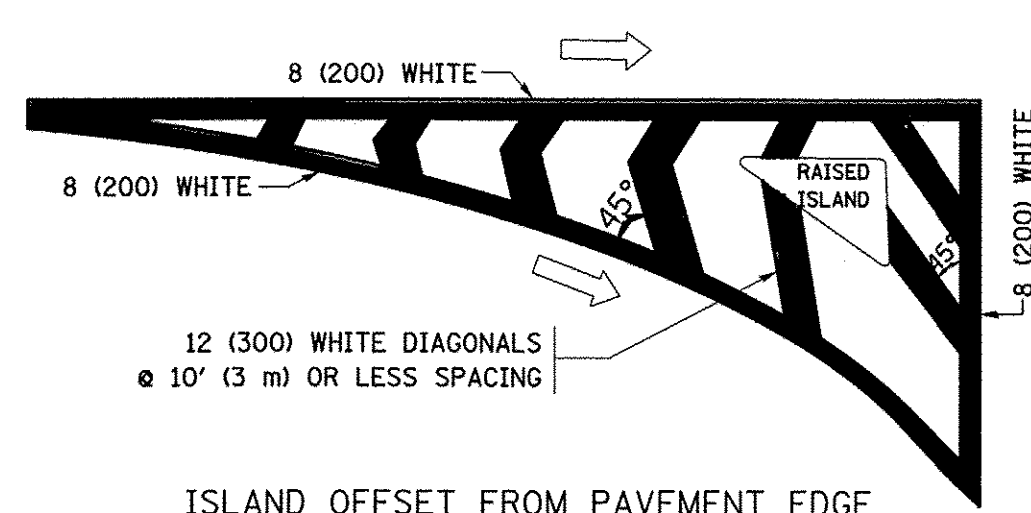


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.  
AREA = 15.6 SQ. FT. (1.5 m<sup>2</sup>) ONLY AREA = 20.8 SQ. FT. (1.9 m<sup>2</sup>)

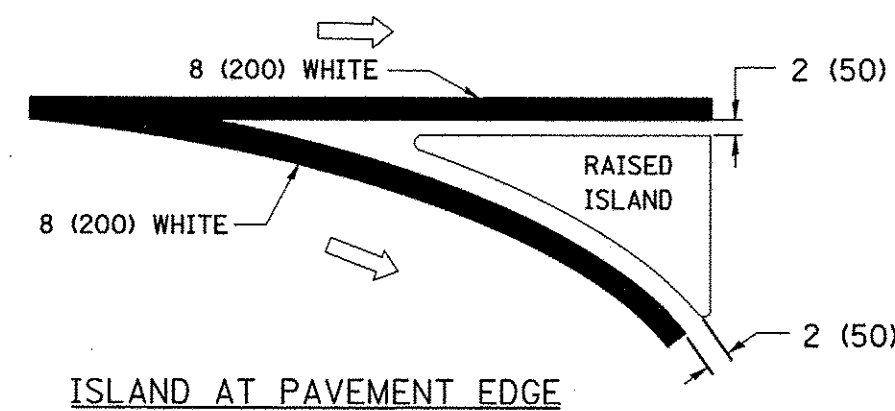
\* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

**TYPICAL LEFT (OR RIGHT) TURN LANE**

**TYPICAL TURN LANE MARKING**

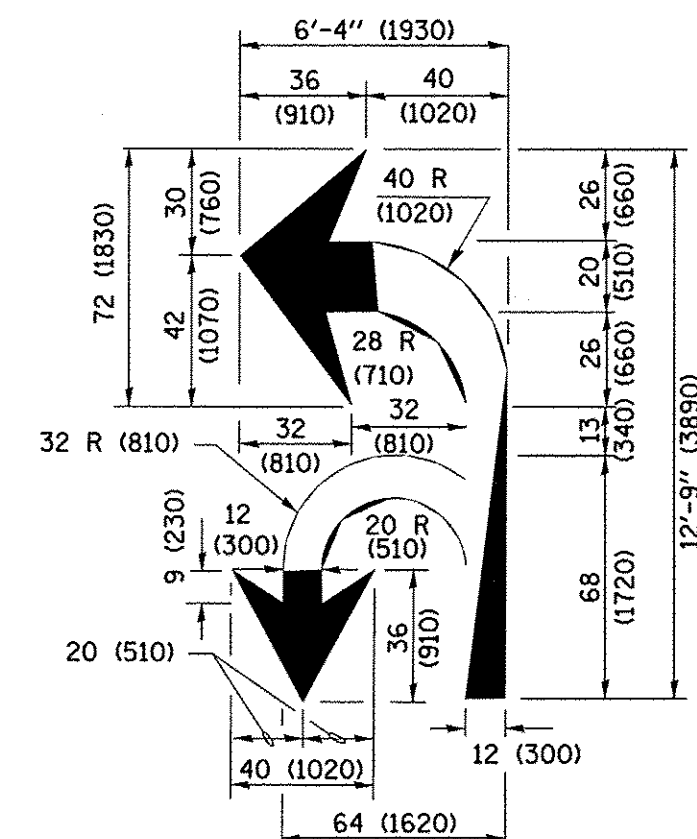


**ISLAND OFFSET FROM PAVEMENT EDGE**

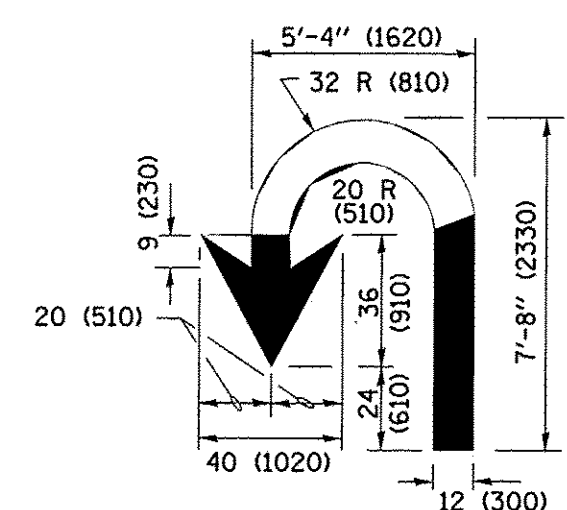


**ISLAND AT PAVEMENT EDGE**

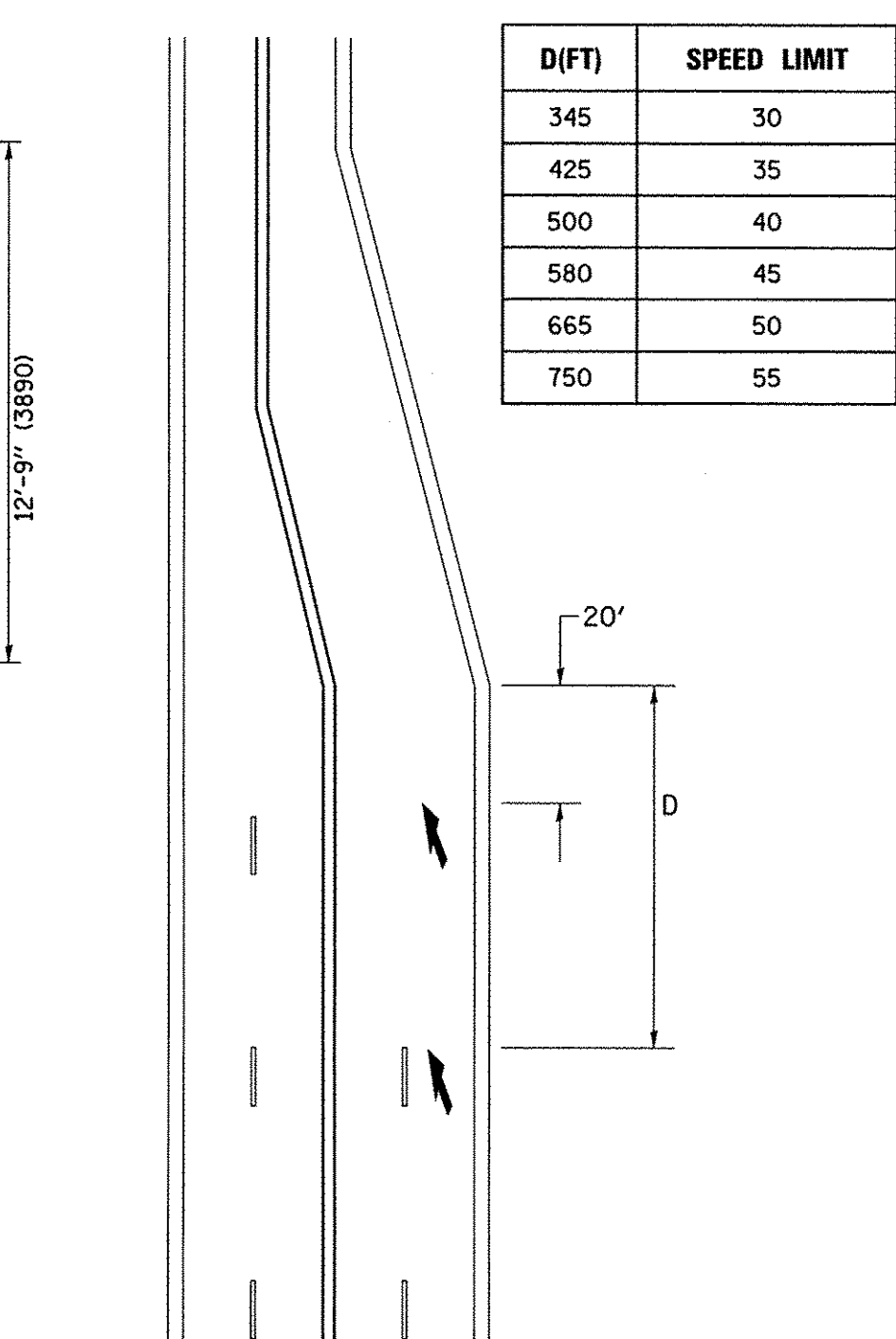
**TYPICAL ISLAND MARKING**



**COMBINATION LEFT AND U-TURN**



**U-TURN**



**LANE REDUCTION TRANSITION**

\* LANE REDUCTION ARROWS REQUIRED AT SPEEDS OF 45 MPH OR GREATER OR WHEN SPECIFIED IN PLANS.

D(FT)	SPEED LIMIT
345	30
425	35
500	40
580	45
665	50
750	55

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING /REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 @ 4 (100)	SOLID SOLID	YELLOW YELLOW	5 1/2 (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MEDIANS IN YELLOW
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION 8' (2.4m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5 1/2 (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW; TWO WAY TRAFFIC WHITE; ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m <sup>2</sup> ) EACH "X"=54.0 SQ. FT. (5.0 m <sup>2</sup> )
SHOULDER DIAGONALS (REQUIRED FOR SHOULDERS ≥ 8')	12 (300) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))
U TURN ARROW	SEE DETAIL	SOLID	WHITE	16.3 SF
2 ARROW COMBINATION LEFT AND U TURN	SEE DETAIL	SOLID	WHITE	30.4 SF

FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

All dimensions are in inches (millimeters) unless otherwise shown.

FILE NAME =	USER NAME = footemj	DESIGNED - EVERS	REVISED - C. JUCIUS 09-09-09
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Default	PLOT SCALE = 50.000' / in.	DATE - 03-19-90	REVISED - C. JUCIUS 12-21-15
	PLOT DATE = 4/13/2016		REVISED - C. JUCIUS 04-12-16

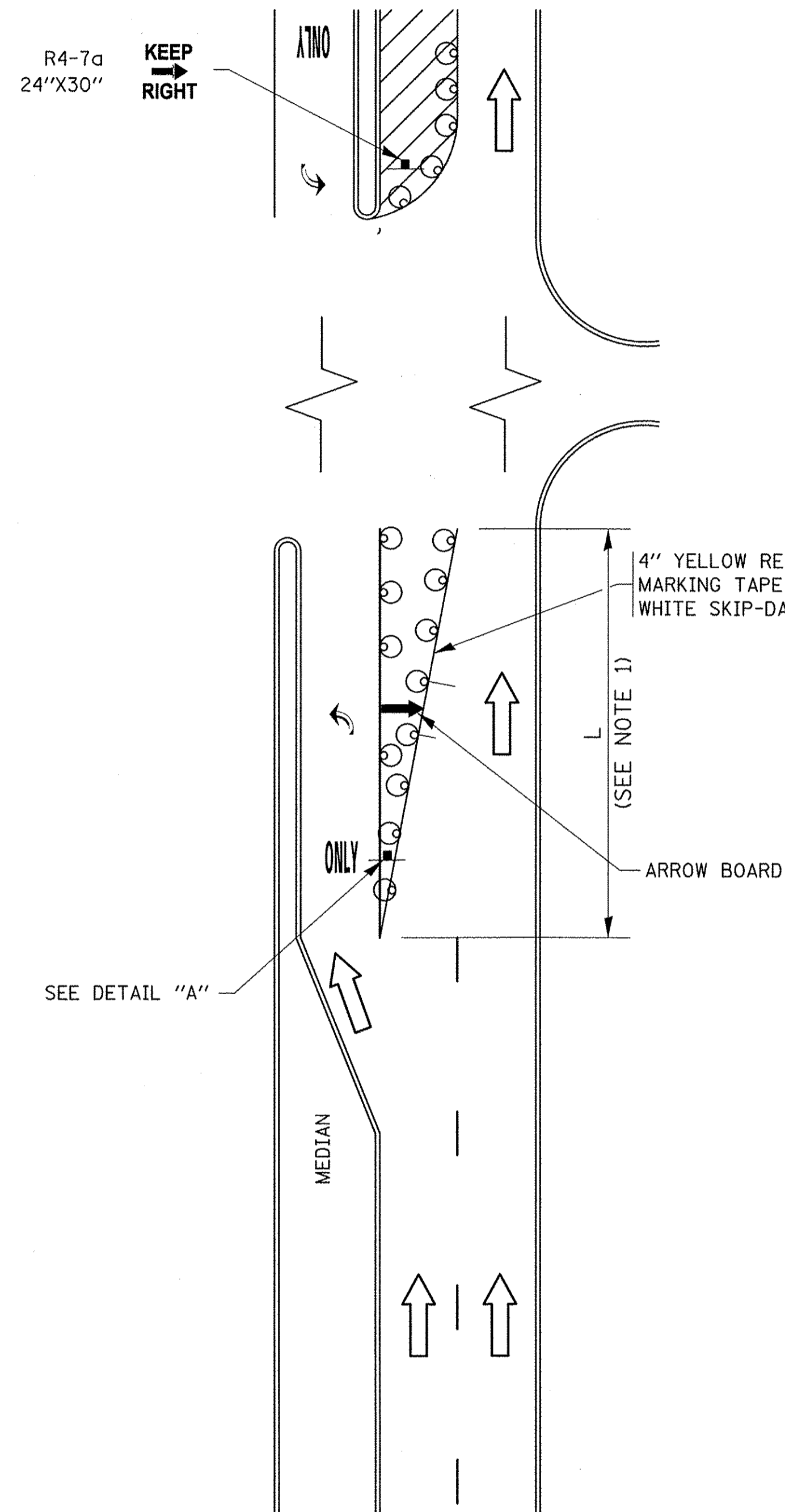
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**DISTRICT ONE  
TYPICAL PAVEMENT MARKINGS**

SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

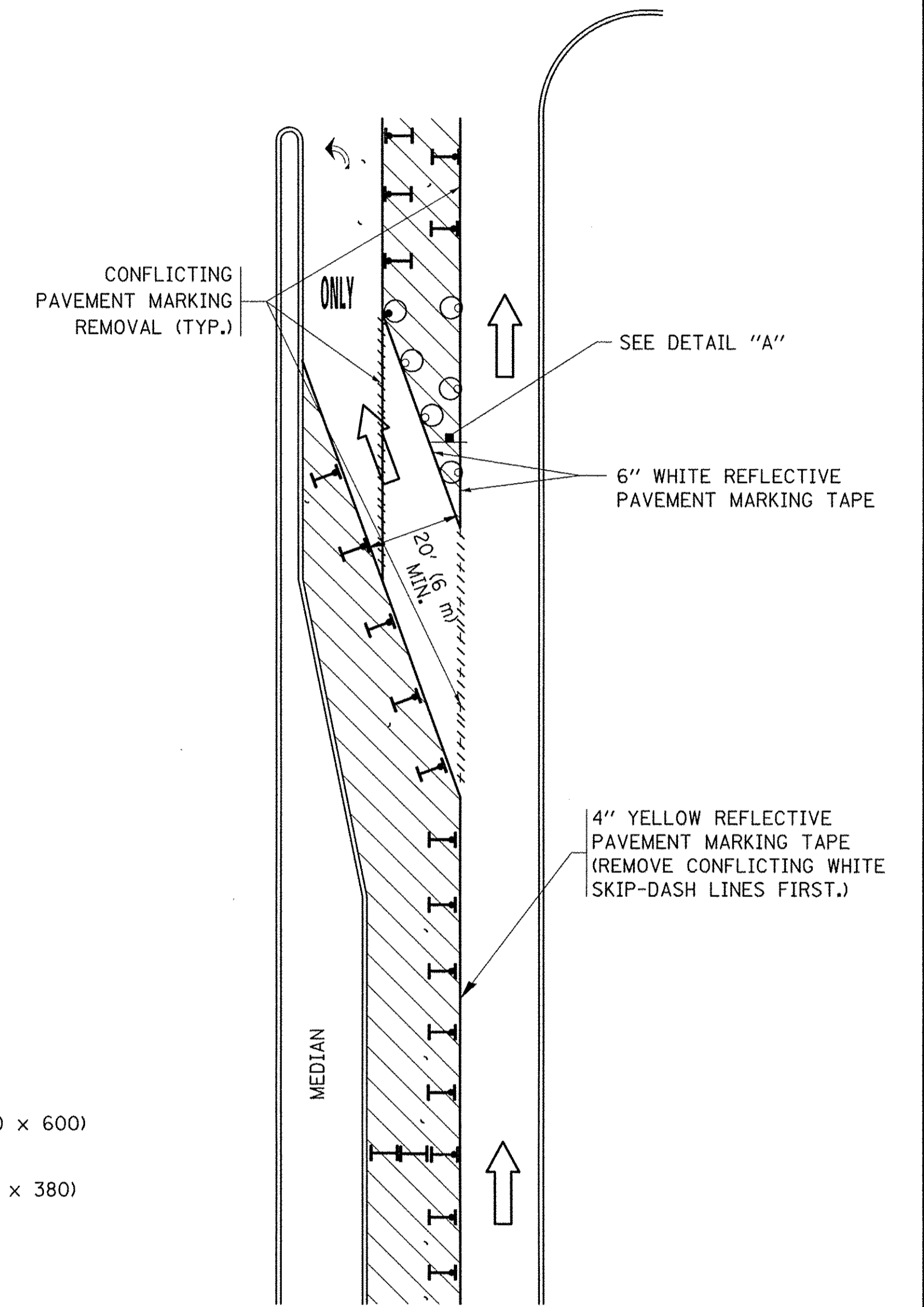
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	15-00095-00-RS	COOK	65	55
*1318 & 2562		CONTRACT NO. 61D75		
FED. ROAD DIST. 1		ILLINOIS	FED. AID PROJECT M-4003(798)	

# TURN BAY ENTRANCE AT START OF LANE CLOSURE TAPER



**FIGURE 1**

# TURN BAY ENTRANCE WITHIN A LANE CLOSURE



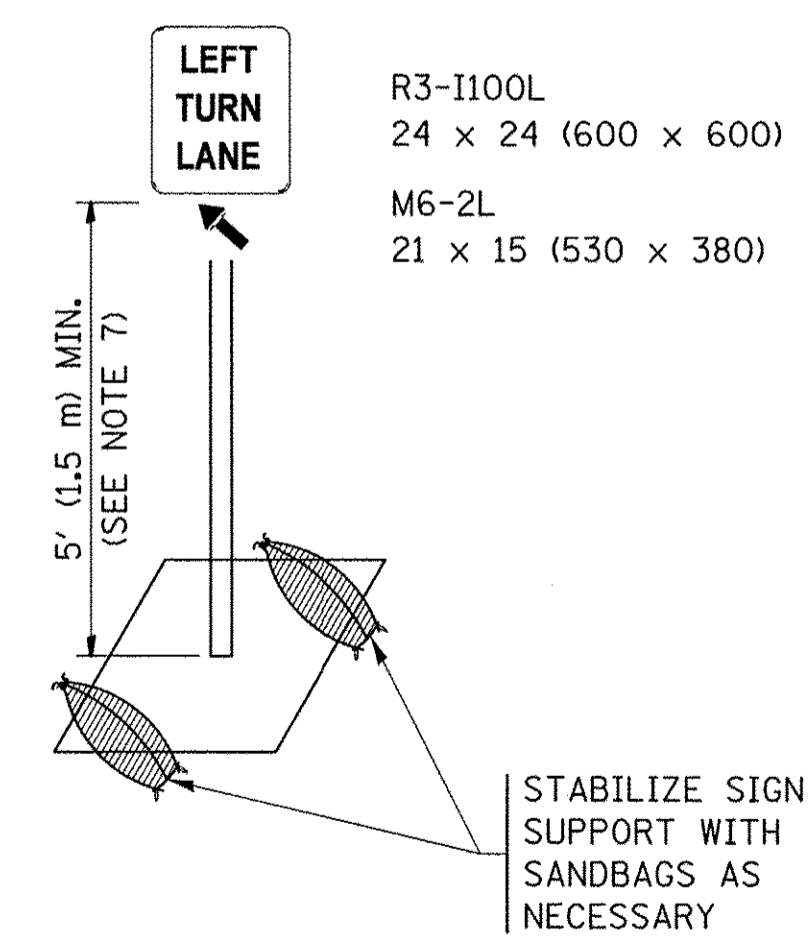
**FIGURE 2**

### LEGEND

- WORK AREA
- LANE OPEN TO TRAFFIC
- ARROW BOARD
- TYPE I OR II BARRICADE OR DRUM WITH STEADY BURN LIGHT
- DRUM WITH STEADY BURN LIGHT
- SIGN ASSEMBLY
- TYPE I OR II CHECK BARRICADE WITH FLASHING LIGHT

### NOTES:

1. A) WHEN "L" IS  $\leq$  THE STORAGE LENGTH OF THE TURN LANE (AS SHOWN IN FIG. 1), USE FIGURE 1.  
B) WHEN "L" IS  $>$  THE STORAGE LENGTH OF THE TURN LANE OR THE TURN LANE IS WITHIN THE LANE CLOSURE, USE FIGURE 2.
2. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT.
3. LIGHTS WILL NOT BE REQUIRED ON BARRICADES OR DRUMS FOR DAY OPERATIONS. ALL LIGHTS SHALL BE MONODIRECTIONAL.
4. REFLECTIVE TEMPORARY PAVEMENT MARKINGS SHALL BE PLACED THROUGHOUT THE BARRICADED AREAS OF EACH TURN BAY AS SHOWN WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN (14) DAYS.
5. THIS APPLICATION ALSO APPLIES WHEN WORK IS BEING PERFORMED IN THE RIGHT LANE(S) AND THE RIGHT TURN BAY IS TO REMAIN OPEN. UNDER THIS CONDITION, "RIGHT TURN LANE" R3-1100R 24 x 24 (600 x 600) AND M6-2R 21 x 15 (530 x 380) SHALL BE USED.
6. THESE CONTROLS SHALL SUPPLEMENT MAINLINE TRAFFIC CONTROL FOR LANE CLOSURES.
7. THE SIGNS SHALL BE MOUNTED ABOVE THE BARRICADES/DRUMS ON SEPARATE SIGN SUPPORTS THAT MEET NCHRP 350 OR MASH REQUIREMENTS.
8. TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

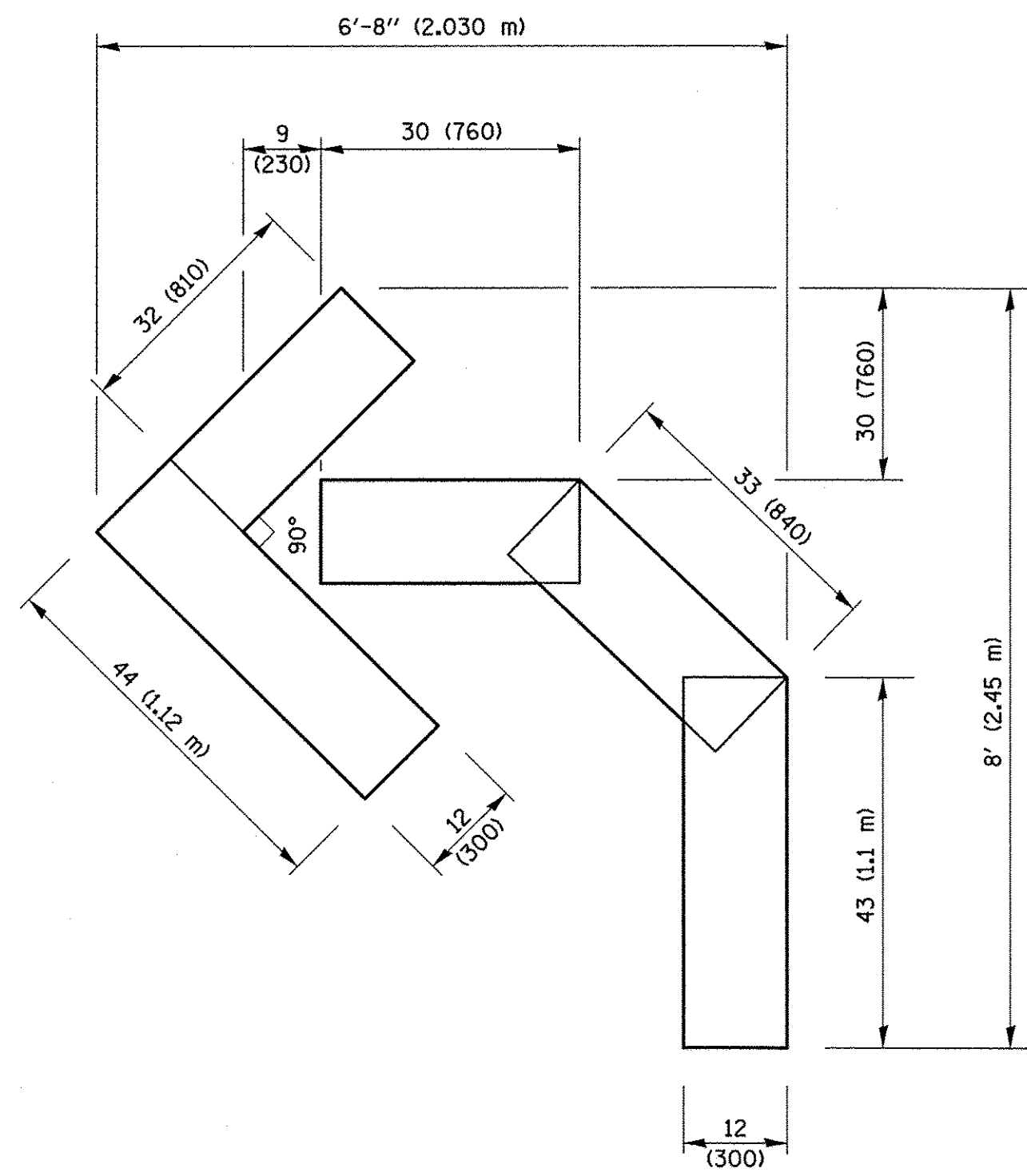


**DETAIL A**

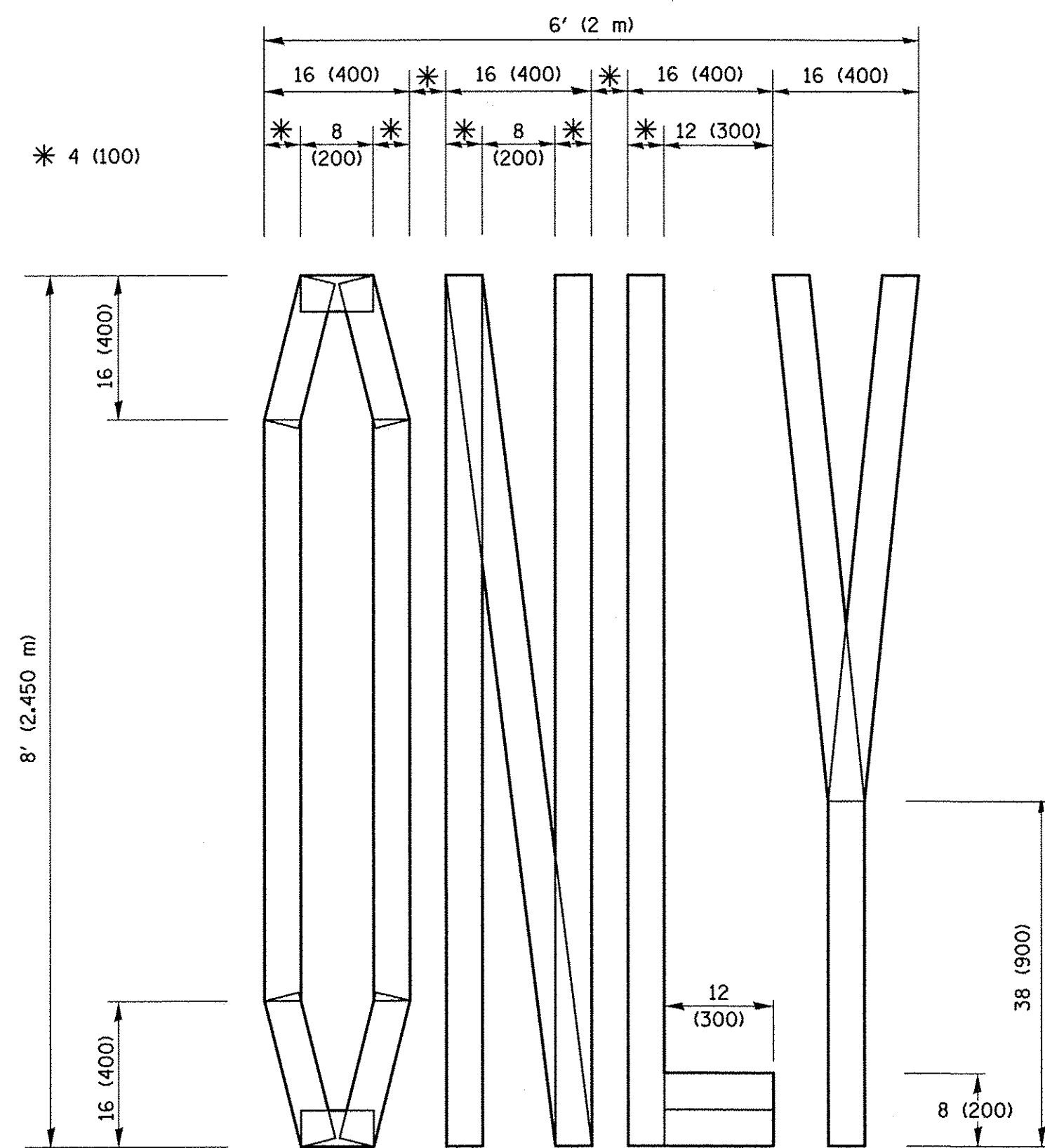
All dimensions are in inches (millimeters) unless otherwise shown.

FILE NAME =	USER NAME = footemj	REVISED - T. RAMMACHER 09-08-94	REVISED - R. BORO 09-14-09	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC)</b>		F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
pw:\IL084EBIDINTEG.illinois.gov\PWIDOT\Documents\DOT Offices\District 1\Projects\Dist	REVISED - A. HOUSEH 10-07-95	REVISED - A. SCHUETZE 07-01-13			*	15-00095-00-RS	COOK	65	56			
Default	REVISED - T. RAMMACHER 01-06-00	REVISED -			*1318 & 2562				CONTRACT NO. 61D75			
	PLOT SCALE = 50.0000' / in.	REVISED - A. HOUSEH 10-12-96	REVISED - A. SCHUETZE 09-15-16	SCALE: NONE	SHEET 1	OF 1	SHEETS	STA.	TO STA.	FED. ROAD DIST. 1	ILLINOIS	FED. AID PROJECT M-4003(798)

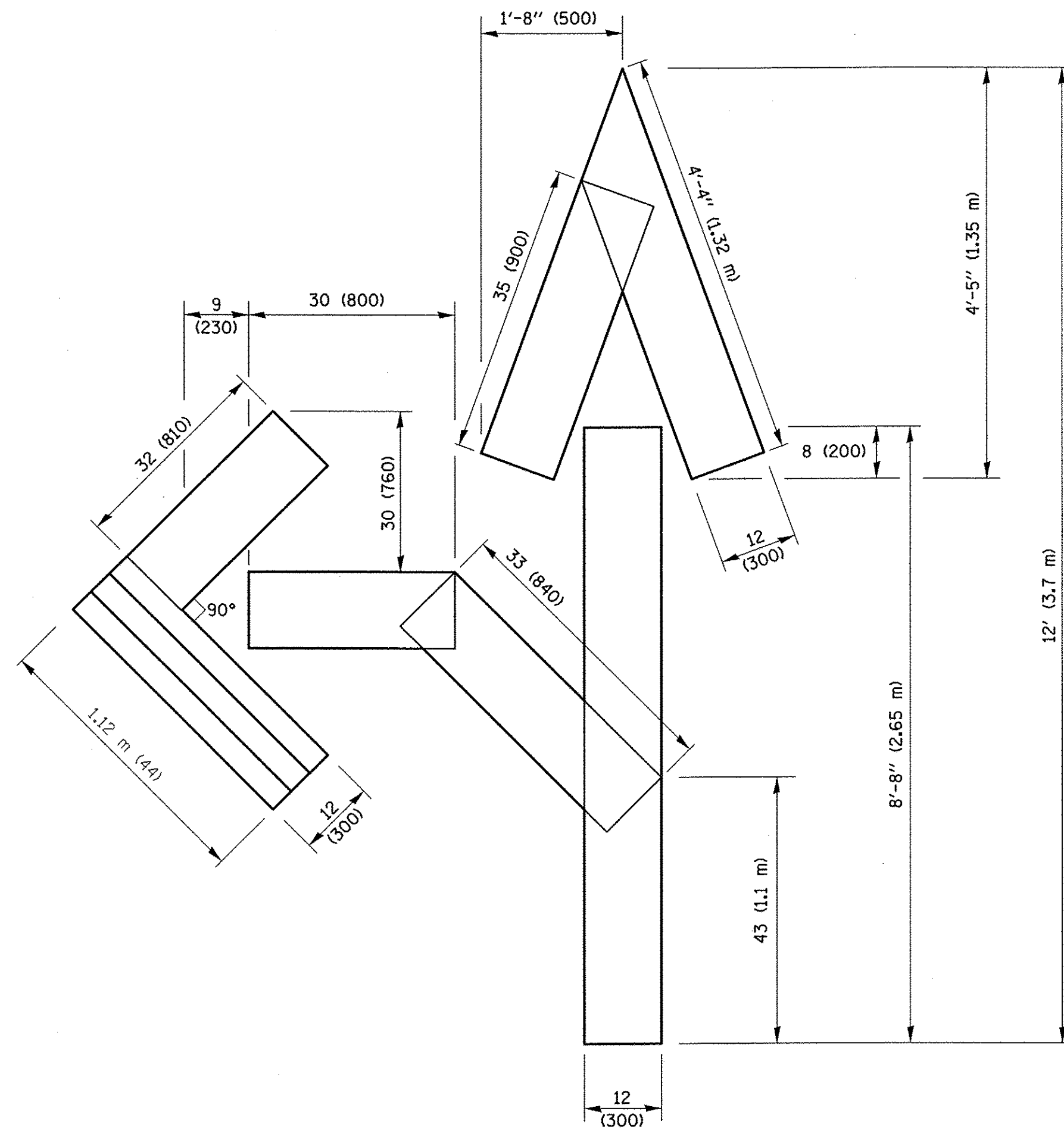




**QUANTITY**  
 4 (100) LINE = 45.5 ft. (13.9 m)  
 15.2 sq. ft. (1.41 sq. m)

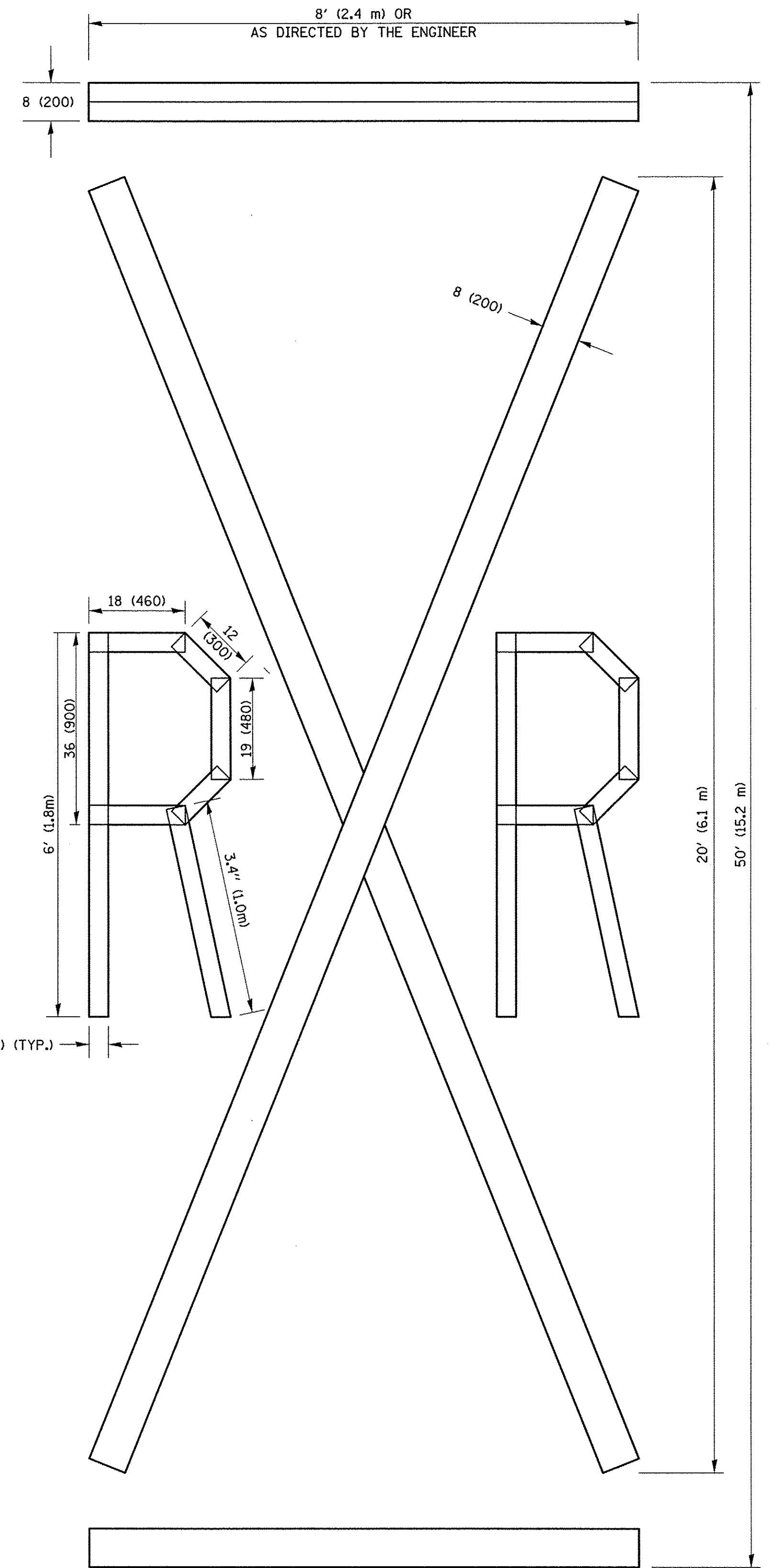


**QUANTITY**  
 4 (100) LINE = 64.1 ft. (19.5 m)  
 21.4 sq. ft. (1.99 sq. m)



**QUANTITY**  
 4 (100) LINE = 82.5 ft. (25.1 m)  
 27.5 sq. ft. (2.53 sq. m)

**NOTE:**  
 ALL QUANTITIES OF PLACEMENT ARE REPRESENTED IN LINEAR FEET OF 4" LINES TO MATCH THE 4" TEMPORARY TAPE PAY ITEM AND REPRESENTS THE TOTAL QUANTITY OF 4" TAPE REQUIRED.



**QUANTITY**  
 4 (100) LINE = 225.9 ft. (68.9 m)  
 75.3 sq. ft. (6.99 sq. m)

All dimensions are in inches (millimeters) unless otherwise shown.

FILE NAME =	USER NAME = footemj	DESIGNED -	REVISED - T. RAMMACHER 03-02-98
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		CHECKED -	REVISED - E. GOMEZ 08-28-00
		DATE - 09-18-94	REVISED - A. SCHUETZE 09-15-16

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**SHORT TERM PAVEMENT MARKING LETTERS AND SYMBOLS**

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	15-00095-00-RS	COOK	65	57
*1318 & 2562		CONTRACT NO. 61D75		
FED. ROAD DIST. 1 ILLINOIS		FED. AID PROJECT M-4003(798)		

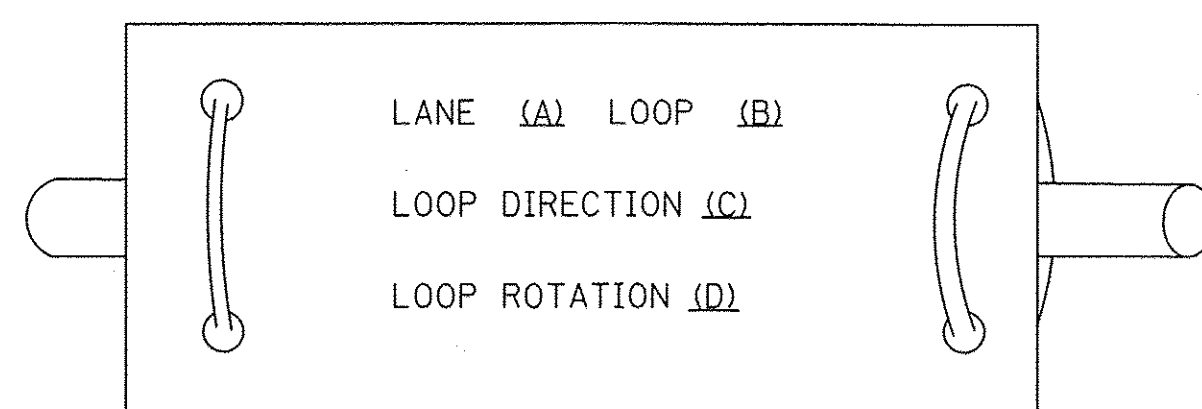
# TRAFFIC SIGNAL LEGEND

ITEM	REMOVAL	EXISTING	PROPOSED	ITEM	REMOVAL	EXISTING	PROPOSED	ITEM	REMOVAL	EXISTING	PROPOSED
CONTROLLER CABINET				EMERGENCY VEHICLE LIGHT DETECTOR				ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1/C, UNLESS NOTED OTHERWISE			
RAILROAD CONTROL CABINET				CONFIRMATION BEACON				COAXIAL CABLE			
COMMUNICATIONS CABINET				HANDHOLE				VENDOR CABLE FOR CAMERA			
MASTER CONTROLLER				HEAVY DUTY HANDHOLE				COPPER INTERCONNECT CABLE, NO. 18 3 PAIR TWISTED, SHIELDED			
MASTER MASTER CONTROLLER				DOUBLE HANDHOLE				FIBER OPTIC CABLE NO. 62.5/125, MM12F			
UNINTERRUPTABLE POWER SUPPLY				JUNCTION BOX				FIBER OPTIC CABLE NO. 62.5/125, MM12F SM12F			
SERVICE INSTALLATION, (P) POLE OR (G) GROUND MOUNT				UNDERGROUND CONDUIT, GALVANIZED STEEL (UC)				FIBER OPTIC CABLE NO. 62.5/125, MM12F SM24F			
TELEPHONE CONNECTION (P) POLE OR (G) GROUND MOUNT				TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE				FIBER OPTIC CABLE NO. 62.5/125, MM12F SM24F			
STEEL MAST ARM ASSEMBLY AND POLE				COMMON TRENCH				FIBER OPTIC CABLE NO. 62.5/125, MM12F SM24F			
ALUMINUM MAST ARM ASSEMBLY AND POLE				COILABLE NONMETALLIC CONDUIT (EMPTY)				GROUND ROD AT (C) CONTROLLER, (H) HANDHOLE, (P) POST, (M) MAST ARM, OR (S) SERVICE			
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE				SYSTEM ITEM		S	S	CONTROLLER CABINET AND FOUNDATION TO BE REMOVED			
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH PTZ CAMERA				INTERSECTION ITEM		I	IP	STEEL MAST ARM POLE AND FOUNDATION TO BE REMOVED			
SIGNAL POST				REMOVE ITEM	R			ALUMINUM MAST ARM POLE AND FOUNDATION TO BE REMOVED			
TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT (13.7m) MINIMUM				RELOCATE ITEM	RL			STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE AND FOUNDATION TO BE REMOVED			
GUY WIRE				ABANDON ITEM	A			SIGNAL POST AND FOUNDATION TO BE REMOVED			
SIGNAL HEAD				12" (300mm) TRAFFIC SIGNAL SECTION				INTERSECTION & SAMPLING (SYSTEM) DETECTOR			
SIGNAL HEAD CONSTRUCTION STAGES (NUMBERS INDICATE THE CONSTRUCTION STAGE)				12" (300mm) RED WITH 8" (200mm) YELLOW AND GREEN TRAFFIC SIGNAL FACE				SAMPLING (SYSTEM) DETECTOR			
SIGNAL HEAD WITH BACKPLATE				SIGNAL FACE				QUEUE DETECTOR			
SIGNAL HEAD OPTICALLY PROGRAMMED				SIGNAL FACE WITH BACKPLATE. "P" INDICATES PROGRAMMED HEAD				PREFORMED QUEUE DETECTOR			
FLASHER INSTALLATION (S DENOTES SOLAR POWER)				"RB" INDICATES REFLECTIVE BACKPLATE				PREFORMED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR			
PEDESTRIAN SIGNAL HEAD				12" (300mm) PEDESTRIAN SIGNAL HEAD WALK/DON'T WALK SYMBOL				PREFORMED SAMPLING (SYSTEM) DETECTOR			
PEDESTRIAN PUSHBUTTON DETECTOR				12" (300mm) PEDESTRIAN SIGNAL HEAD INTERNATIONAL SYMBOL, OUTLINED				<b>RAILROAD SYMBOLS</b>			
ACCESSIBLE PEDESTRIAN PUSHBUTTON DETECTOR				12" (300mm) PEDESTRIAN SIGNAL HEAD INTERNATIONAL SYMBOL, SOLID				EXISTING		PROPOSED	
ILLUMINATED SIGN "NO LEFT TURN"				PEDESTRIAN SIGNAL HEAD, INTERNATIONAL SYMBOL, WITH COUNTDOWN TIMER				RAILROAD CONTROL CABINET			
ILLUMINATED SIGN "NO RIGHT TURN"				RADIO INTERCONNECT				RAILROAD CANTILEVER MAST ARM			
DETECTOR LOOP, TYPE I				RADIO REPEATER				FLASHING SIGNAL			
PREFORMED DETECTOR LOOP				DENOTES NUMBER OF CONDUCTORS, ELECTRIC CABLE NO. 14, UNLESS NOTED OTHERWISE, ALL DETECTOR LOOP CABLE TO BE SHIELDED				CROSSING GATE			
MICROWAVE VEHICLE SENSOR				GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)				CROSSBUCK			
VIDEO DETECTION CAMERA											
VIDEO DETECTION ZONE											
PAN, TILT, ZOOM CAMERA											
WIRELESS DETECTOR SENSOR											
WIRELESS ACCESS POINT											

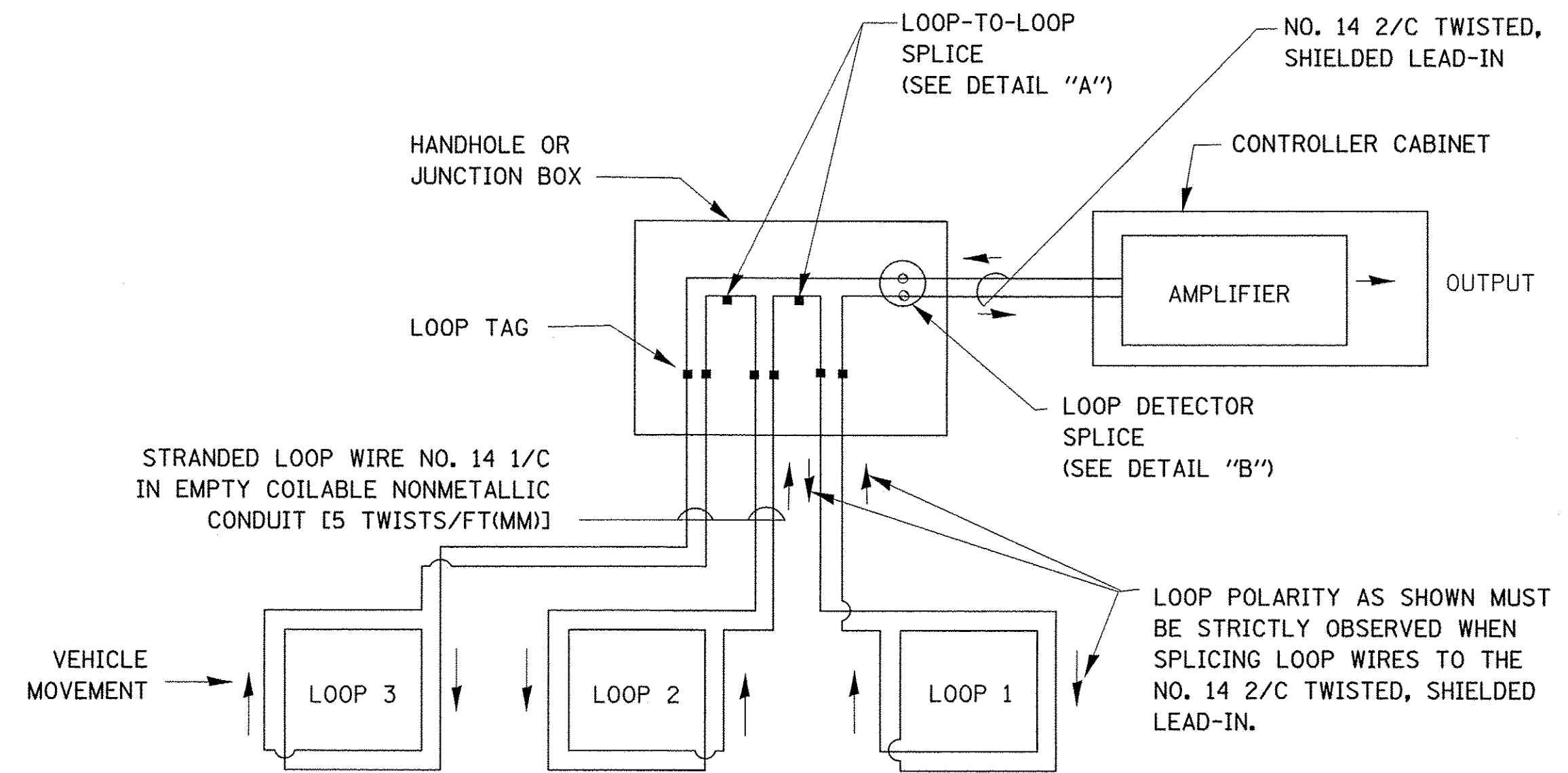
**LOOP DETECTOR NOTES**

1. EACH PAIR OF LOOP WIRES SHALL BE PLACED IN A SEPARATE EMPTY COILABLE NONMETALLIC CONDUIT FROM THE EDGE OF PAVEMENT TO THE HANDHOLE. SPACING BETWEEN THE HOLES DRILLED IN THE PAVEMENT SHALL NOT BE LESS THAN 6" (150 mm). EMPTY COILABLE NONMETALLIC CONDUIT SHALL BE INCLUDED IN THE COST OF THE LOOP WIRE.
2. THE NUMBER OF LOOP TURNS SHALL BE AS RECOMMENDED BY THE AMPLIFIER MANUFACTURER. ALL ADJACENT SIDES OF THE LOOPS SHALL BE INSTALLED IN SUCH A WAY THAT THE CURRENT FLOW IS IN THE SAME DIRECTION TO REINFORCE ITS MAGNETIC FIELDS FOR SMALL VEHICLE DETECTION.
3. EACH LOOP LEAD-IN SHALL BE IDENTIFIED AND PERMANENTLY TAGGED IN THE HANDHOLE. EACH LEAD-IN CABLE TAG SHALL INDICATE THE LOCATION OF THE LOOP, LOOP ROTATION (CLOCKWISE/COUNTERCLOCKWISE), LOOP LEAD-IN DIRECTION (IN OR OUT), LOOP CABLE NUMBER AND LOCATION IN CABINET, AND NUMBER OF TURNS IN THE DETECTOR LOOPS IN WATER PROOF INK AS INDICATED ON THE DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAIL. THE CONTRACTOR SHALL MARK LOOP LOCATIONS ON RECORD DRAWINGS AND PRESENT TO THE ENGINEER AFTER FINAL INSPECTION. LOOPS SHALL BE MARKED BY LANE AND LOOP NUMBER. SEE DETAIL BELOW.
4. ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.
5. IN ASPHALT PAVEMENT, LOOPS SHOULD BE PLACED IN THE BINDER AND DIVEHOLES MARKED AT THE CURB WITH A SAW-CUT. THE SAW-CUT SHALL BE CUT IN ACCORDANCE WITH LOCAL AND E.P.A. DUST CONTROL REQUIREMENTS. DETECTOR LOOP(S) SHALL NOT BE INSTALLED IN WET CONDITIONS AND THE SAW-CUTS MUST BE FREE OF DEBRIS AND RESIDUE SUCH AS DUST AND WATER WHICH IS TO BE ACHIEVED BY THE USE OF COMPRESSED AIR, WIRE BRUSHING AND HEAT DRYING ACCORDING TO SEALANT MANUFACTURER REQUIREMENTS. THE DETECTOR WIRE SHALL BE HELD IN PLACE BY THE USE OF FORM WEDGES. WEDGES SHALL BE SPACED NO MORE THAN 18" (450 mm) APART.
6. LOOP SPLICES SHALL BE SOLDERED USING A SOLDERING IRON. BLOW TORCHES OR OTHER DEVICES WHICH OXIDIZE COPPER CABLE SHALL NOT BE ALLOWED FOR SOLDERING OPERATIONS. SEE DETAIL BELOW RIGHT.
7. PREFORMED DETECTOR LOOPS SHALL BE USED, AS SHOWN ON THE PLANS, WHERE NEW CONCRETE PAVEMENT IS PROPOSED. THE INSTALLATION OF PREFORMED LOOPS SHALL BE IN ACCORDANCE WITH THE DISTRICT 1 SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER.

**LOOP LEAD-IN CABLE TAG**

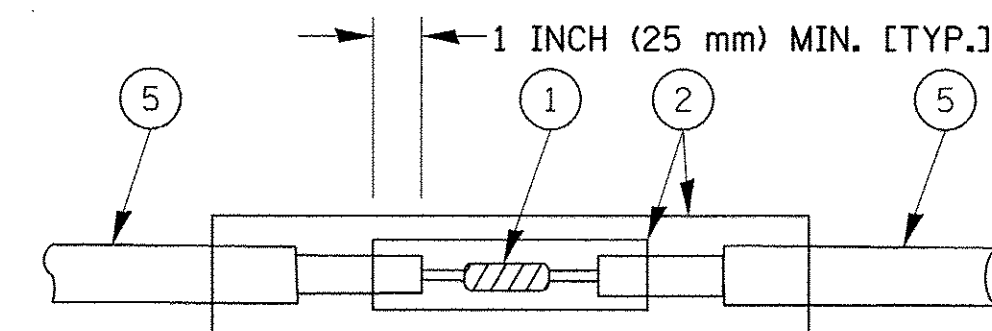


- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

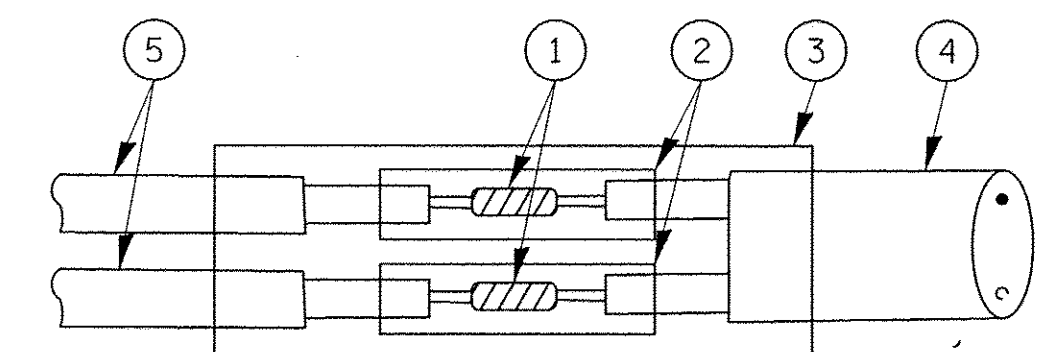


**DETECTOR LOOP WIRING SCHEMATIC**

- LOOPS SHALL BE SPLICED IN SERIES.
- SAW-CUTS SHALL BE A MINIMUM WIDTH OF 5/16" (8 mm).
- SAW-CUT DEPTHS SHALL BE 3" (75 mm). IF IN CONCRETE, THE SAW-CUT DEPTH SHALL BE TO THE TOP OF THE REINFORCEMENT.
- LOOP CORNERS SHALL BE DRILLED WITH A 2" (50 mm) DIAMETER CORE.

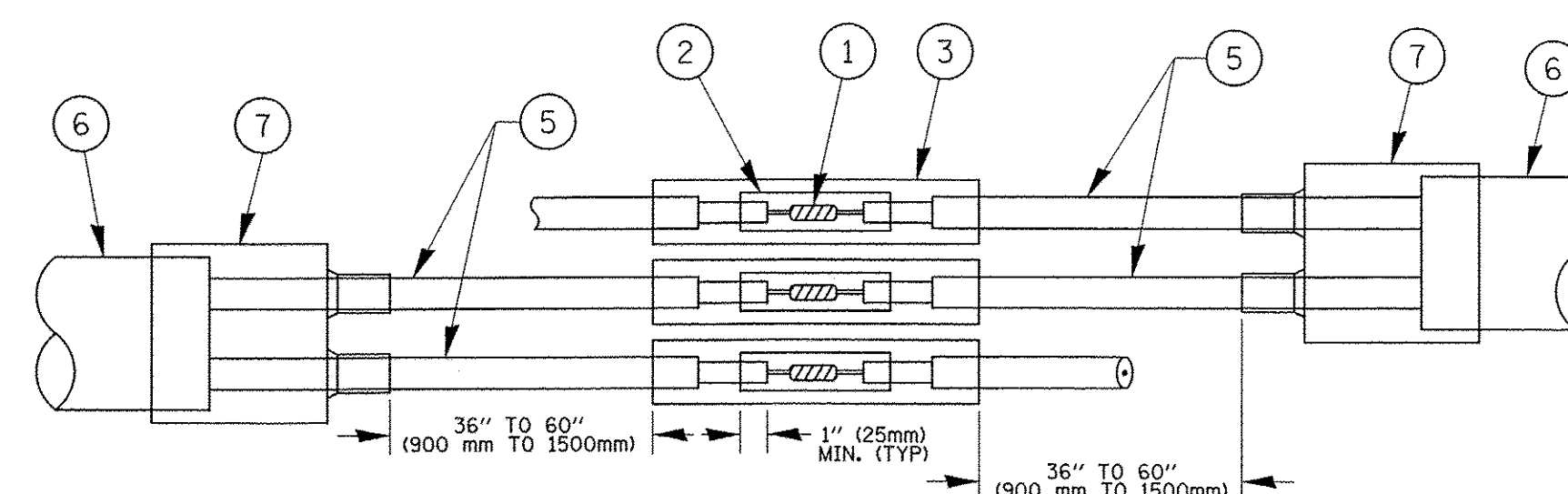


DETAIL "A"  
LOOP-TO-LOOP SPLICE

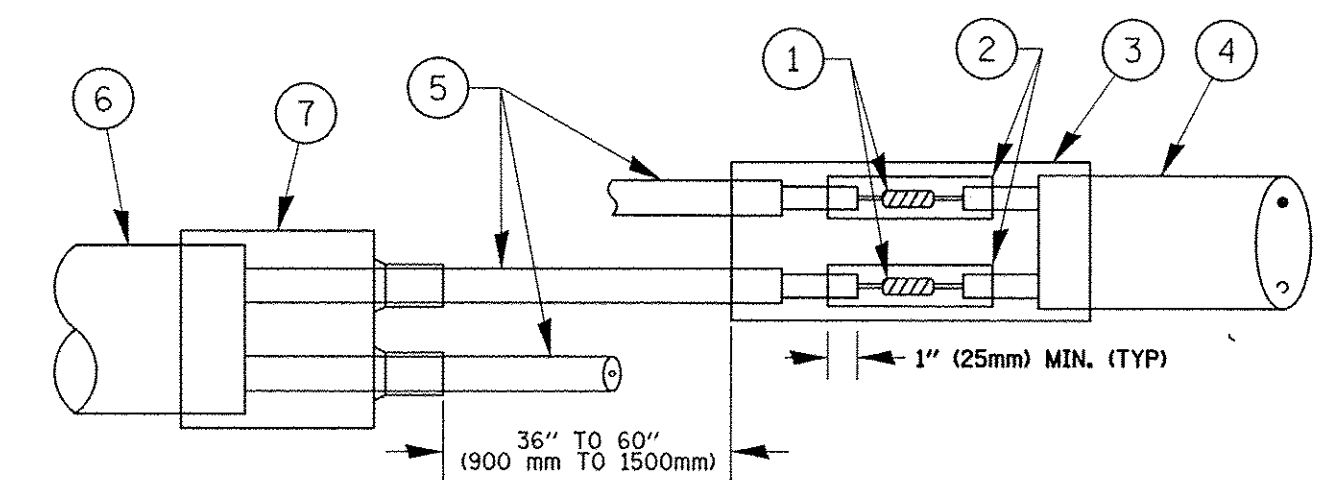


DETAIL "B"  
LOOP-TO-CONTROLLER SPLICE

**TYPE I LOOP**



DETAIL "A"  
LOOP-TO-LOOP SPLICE



DETAIL "B"  
LOOP-TO-CONTROLLER SPLICE

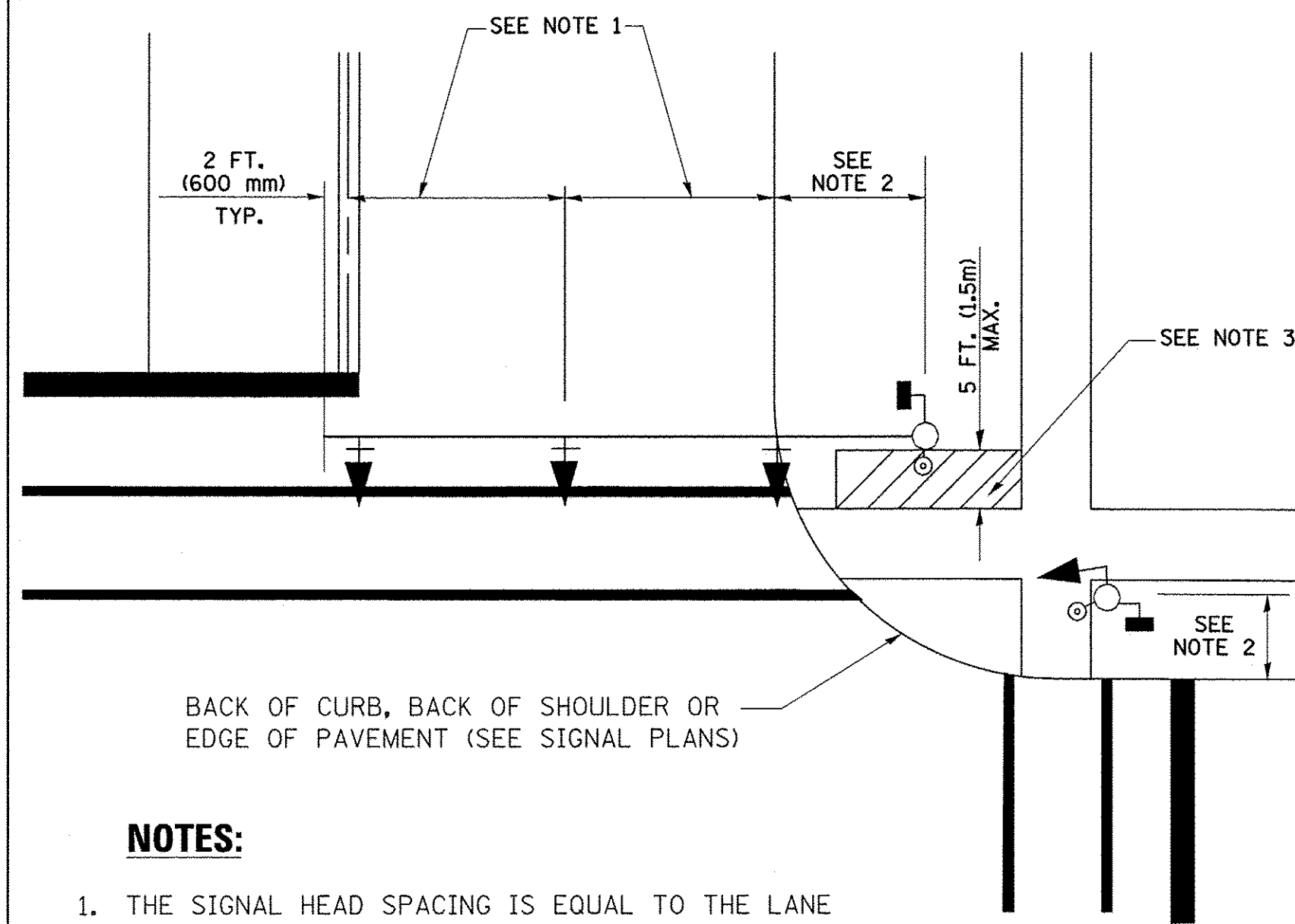
**PREFORMED LOOP**

**LOOP DETECTOR SPLICE**

- ① WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH. THE WESTERN UNION SPLICES SHALL BE STAGGERED.
- ② WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE.
- ③ WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGTH 6" (150 mm), UNDERWATER GRADE.
- ④ NO. 14 2/C TWISTED, SHIELDED CABLE.
- ⑤ LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.
- ⑥ PREFORMED LOOP
- ⑦ XL POLYOLEFIN 2 CONDUCTOR BREAKOUT SEALS. TYCO CBR-2 OR APPROVED EQUAL

FILE NAME =	USER NAME = footemj	DESIGNED - DAD	REVISED - DAG 1-1-14	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS</b>			F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
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		CHECKED - DAD	REVISED -						* 1318 & 2562				CONTRACT NO. 61D75
		DATE - 10-28-09	REVISED -						FED. ROAD DIST. 1	ILLINOIS			FED. AID PROJECT M-4003(798)

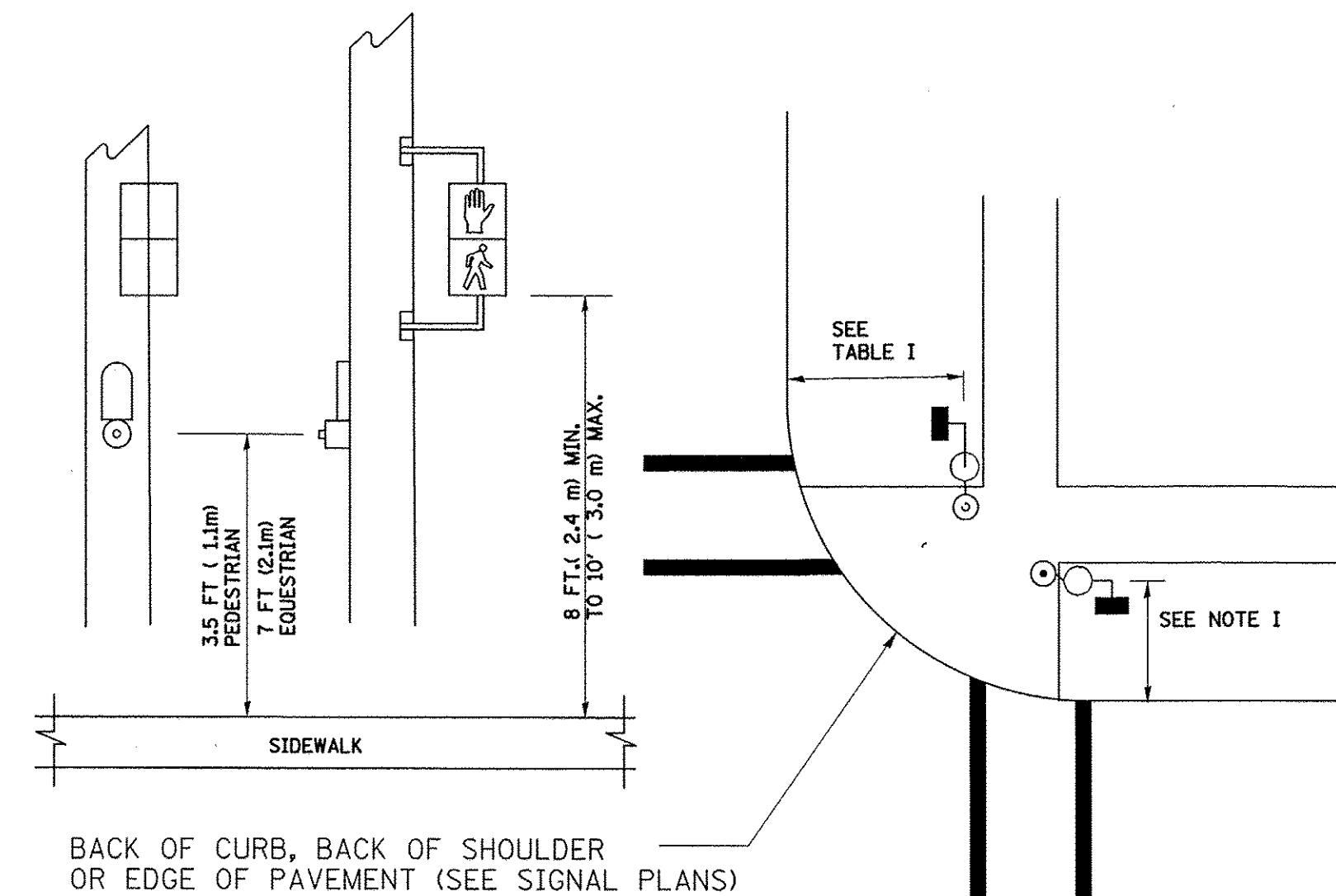
**TRAFFIC SIGNAL MAST ARM AND SIGNAL POST  
MAST ARM MOUNTED SIGNALS IN EXISTING, PROPOSED OR  
FUTURE SIDEWALK/BICYCLE PATH AREA. INTERSECTION SHOWN  
WITH PEDESTRIAN SIGNALS AND PEDESTRIAN PUSHBUTTON DETECTORS.**



**NOTES:**

1. THE SIGNAL HEAD SPACING IS EQUAL TO THE LANE WIDTH OR AS SHOWN ON THE TRAFFIC SIGNAL PLAN.
2. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
3. PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE MAST ARM SHAFT OR THE SIGNAL POST.
4. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO THE CROSSWALK TO BE USED.
5. THE LOCATIONS AND INSTALLATION OF PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS SHALL MEET THE REQUIREMENTS OF THE MUTCD AND INFORMATION FOUND IN THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES."

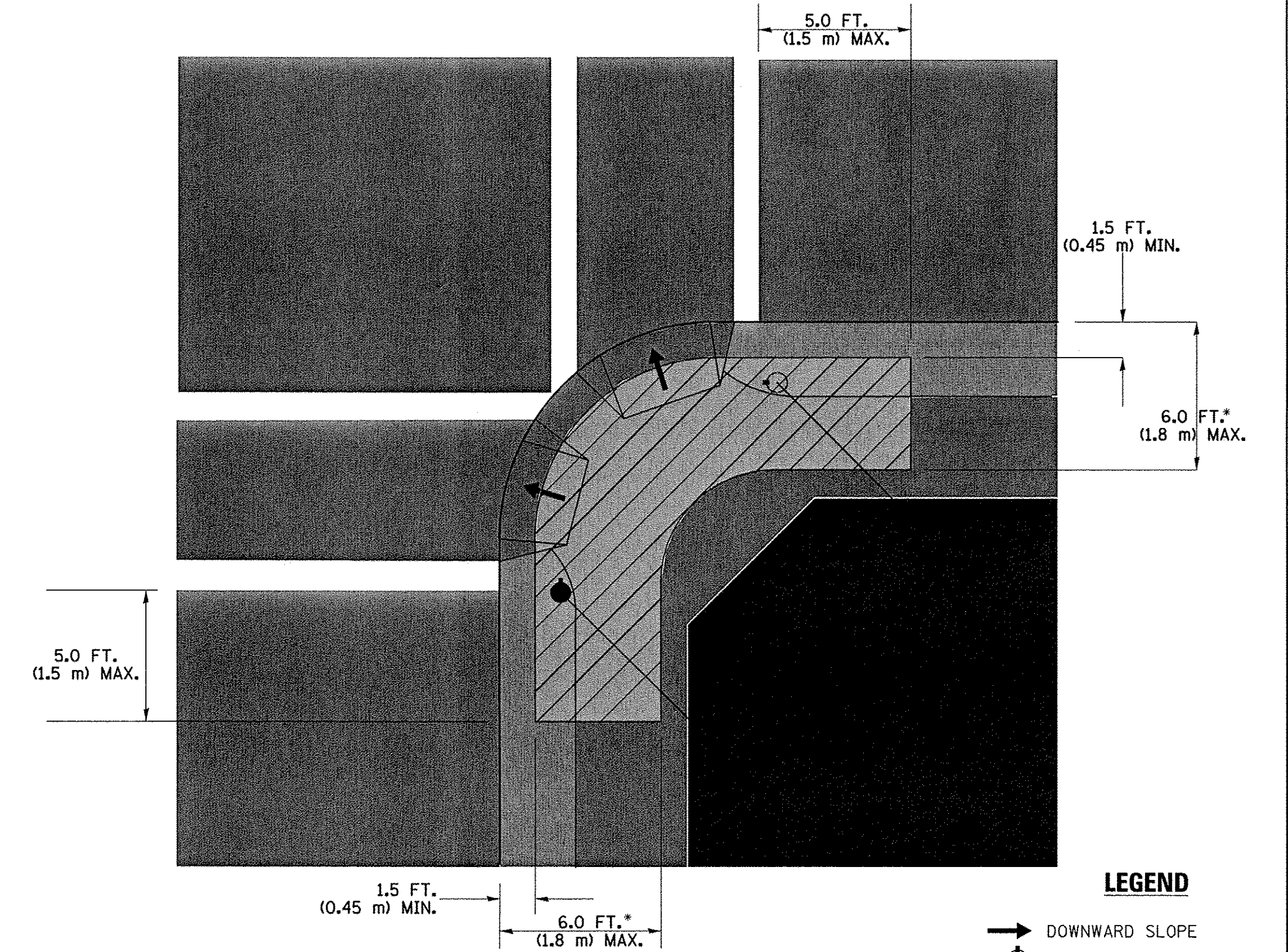
**PEDESTRIAN SIGNAL POST  
AND  
PEDESTRIAN PUSH BUTTON POST**



**NOTES:**

1. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
2. PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE PEDESTRIAN SIGNAL POST OR THE PEDESTRIAN PUSH BUTTON POST.
3. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO THE CROSSWALK TO BE USED.
4. THE LOCATIONS AND INSTALLATION OF PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS SHALL MEET THE REQUIREMENTS OF THE MUTCD AND INFORMATION FOUND IN THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES."

**RECOMMENDED PUSHBUTTON LOCATIONS**



**LEGEND**

- DOWNWARD SLOPE
- PEDESTRIAN PUSHBUTTON
- RECOMMENDED PUSHBUTTON LOCATIONS

- \* WHERE THERE ARE CONSTRAINTS THAT MAKE IT IMPRACTICAL TO PLACE THE PEDESTRIAN PUSHBUTTON BETWEEN 1.5 FT (0.45 m) AND 6 FT ( 1.8 m) FROM THE EDGE OF THE CURB, SHOULDER, OR PAVEMENT, IT SHOULD NOT BE FURTHER THAN 10 FT (3 m) FROM THE EDGE OF CURB, SHOULDER, OR PAVEMENT.
- \*\* WHERE THERE ARE CONSTRAINTS ON A PARTICULAR CORNER THAT MAKE IT IMPRACTICAL TO PROVIDE THE 10 FT (3 m) SEPERATION BETWEEN THE TWO PEDESTRIAN PUSHBUTTONS, THE PUSHBUTTONS MAY BE PLACED CLOSER TOGETHER OR ON THE SAME POLE.

**NOTES:**

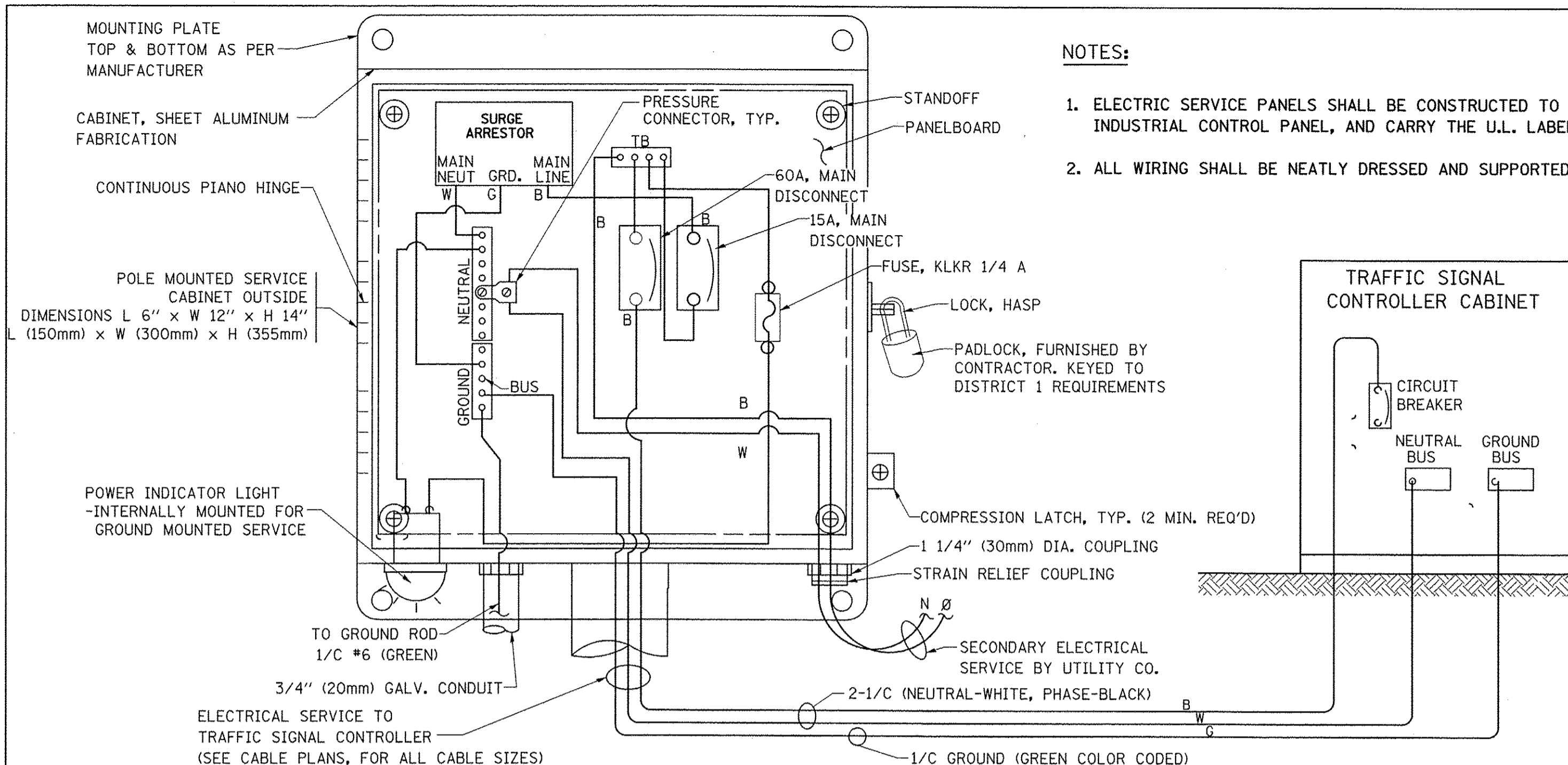
1. PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING INCLUDING BRACKETS NOT LESS THAN 8 FT (2.4 m) OR MORE THAN 10 FT (3 m) ABOVE SIDEWALK LEVEL, AND SHALL BE POSITIONED AND ADJUSTED TO PROVIDE MAXIMUM VISIBILITY AT THE BEGINNING OF THE CONTROLLED CROSSWALK.
2. THE BOTTOM OF THE SIGNAL HOUSING (INCLUDING BRACKETS) OF A VEHICULAR SIGNAL FACE THAT IS NOT LOCATED OVER A HIGHWAY SHALL BE AT LEAST 8 FT (2.4 m) BUT NOT MORE THAN 19 FT (5.8 m) ABOVE THE SIDEWALK OR, IF THERE IS NO SIDEWALK, ABOVE THE PAVEMENT GRADE AT THE CENTER OF THE ROADWAY.
3. THE BOTTOM OF THE SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARDS 877001, 877002, 877006, 877011 AND 877012 WITH A MINIMUM OF 16 FT (5.0 m) AND A MAXIMUM OF 18 FT. (5.5 m) FROM THE HIGHEST POINT OF PAVEMENT.
4. THE BOTTOM OF THE TEMPORARY SPAN WIRE MOUNTED SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARD 880001 WITH A MINIMUM OF 17 FT (5.18 m) FROM THE HIGHEST POINT OF PAVEMENT.
5. THE TOP OF THE SIGNAL HOUSING OF A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL NOT BE MORE THAN 25.6 FT (7.8 m) ABOVE THE PAVEMENT.

**TRAFFIC SIGNAL EQUIPMENT OFFSET**

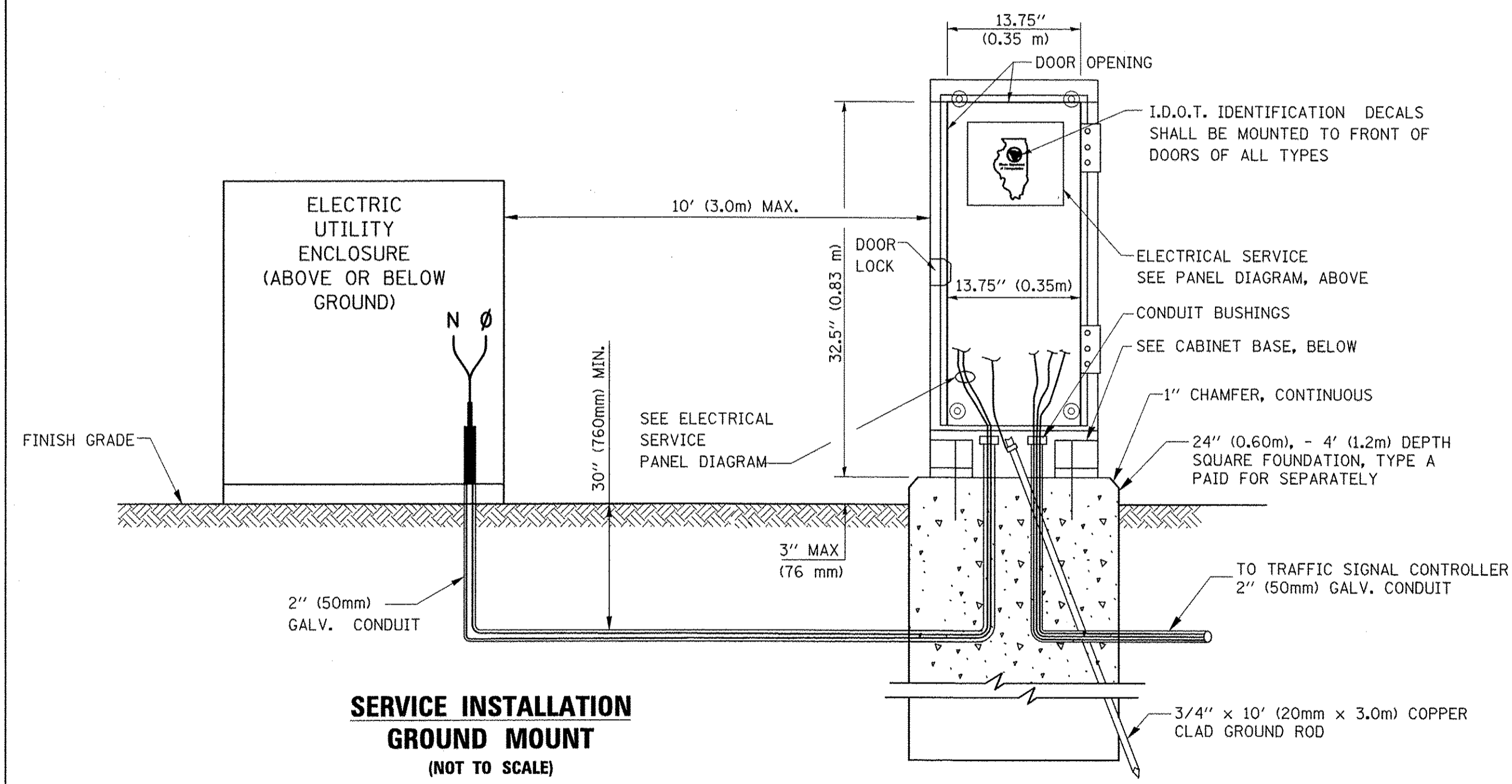
TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MINIMUM DISTANCE FROM BACK OF CURB TO CENTERLINE OF FOUNDATION)	SHOULDER/NON-CURBED AREA (MINIMUM DISTANCE FROM EDGE OF PAVEMENT TO CENTERLINE OF FOUNDATION)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
TRAFFIC SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
PEDESTRIAN SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
PEDESTRIAN PUSHBUTTON POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
TEMPORARY WOOD POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
CONTROLLER CABINET	6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2	SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 3.
SERVICE INSTALLATION, GROUND MOUNT	6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2	SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 3.

**NOTES:**

1. CONTACT THE "AREA TRAFFIC SIGNAL MAINTENANCE AND OPERATIONS ENGINEER" FOR ASSISTANCE IN LOCATING THE TRAFFIC SIGNAL EQUIPMENT WHEN THERE ARE CONFLICTS WITH DITCHES OR THE MINIMUM OFFSET DISTANCES CANNOT BE MET.
2. MINIMUM DISTANCE FROM THE BACK OF CURB TO THE ROADWAY SIDE OF THE FOUNDATION.
3. MINIMUM DISTANCE FROM THE EDGE OF PAVEMENT TO THE ROADWAY SIDE OF THE FOUNDATION.
4. ANY CHANGES TO THE OFFSETS OF THE FOUNDATIONS, FROM THE MINIMUM DISTANCES LISTED IN THE "TRAFFIC SIGNAL EQUIPMENT OFFSET" CHART AND THE TRAFFIC SIGNAL INSTALLATION PLAN, COULD EFFECT THE PLACEMENT OF THE SIGNAL HEADS, PEDESTRIAN SIGNAL HEADS AND THE PEDESTRIAN PUSHBUTTONS. THE SIGNAL HEAD PLACEMENT ON THE MAST ARMS SHALL REMAIN AS PER THE TRAFFIC SIGNAL INSTALLATION PLAN AND THE "TRAFFIC SIGNAL MAST ARM AND SIGNAL POST" DETAIL ABOVE. THE PROPOSED MAST ARM LENGTHS MAY NEED TO BE REVISED TO MEET THE ABOVE REQUIREMENTS. THE PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS MUST MEET THE REQUIREMENTS UNDER THE DETAILS ON THIS SHEET.

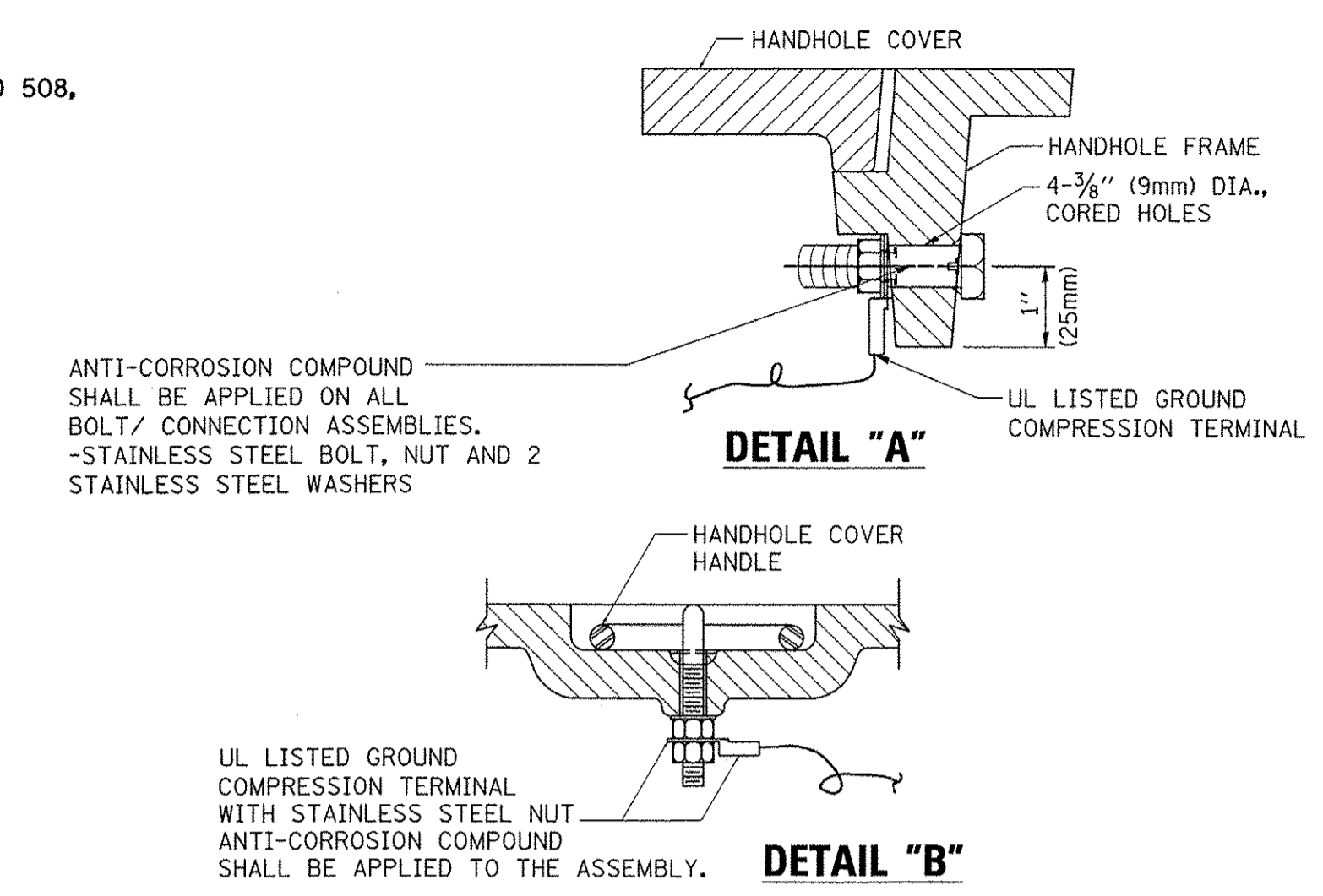
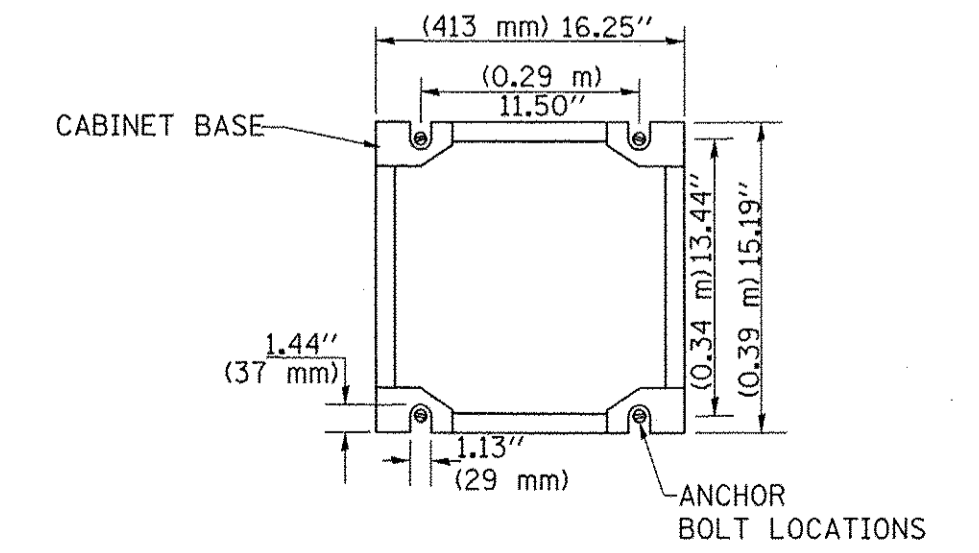


**ELECTRICAL SERVICE - PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)**  
**SERVICE INSTALLATION POLE MOUNT (SHOWN)**  
 (NOT TO SCALE)



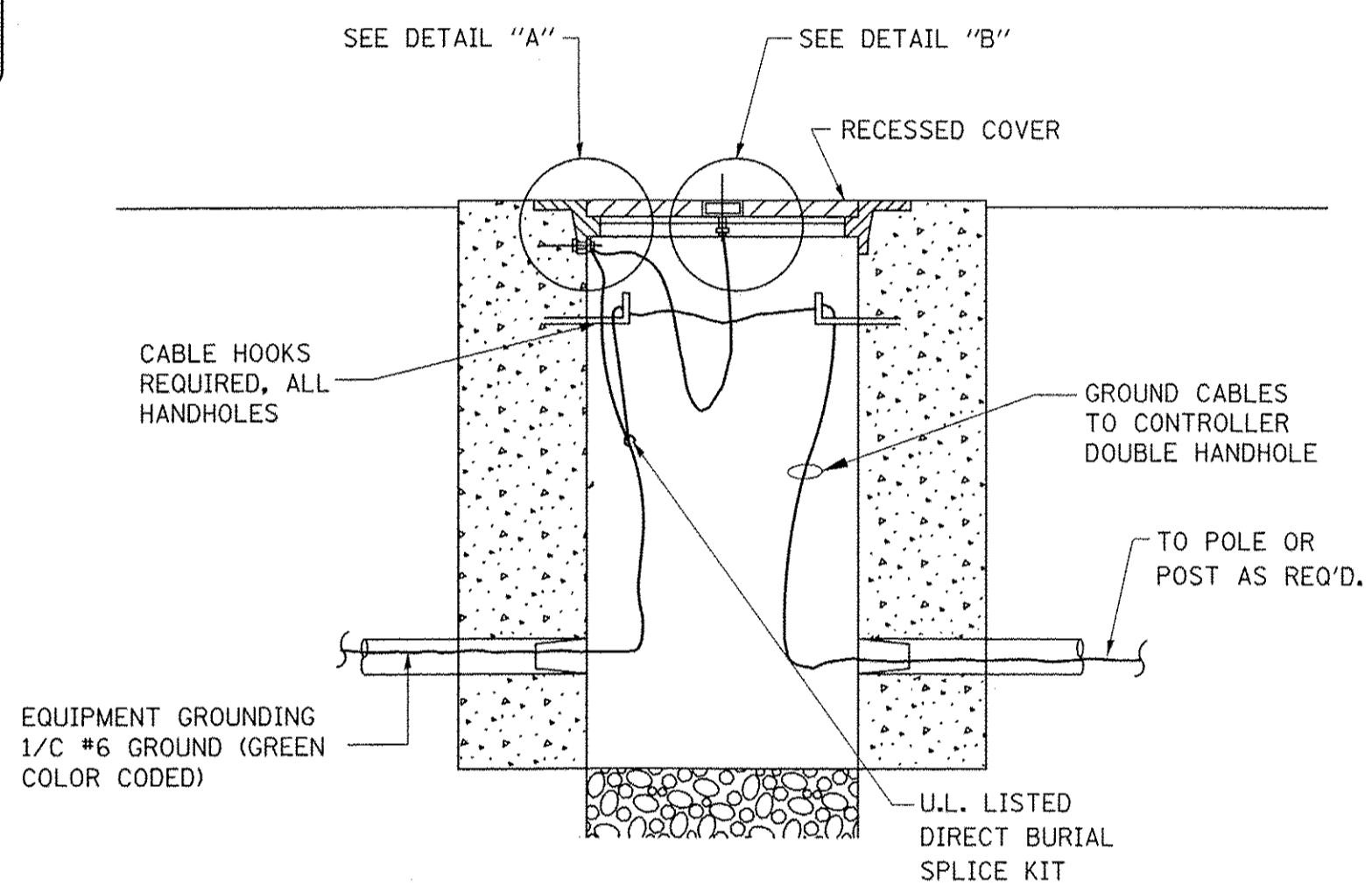
**SERVICE INSTALLATION GROUND MOUNT**  
 (NOT TO SCALE)

**CABINET - BASE BOLT PATTERN**  
 (NOT TO SCALE)

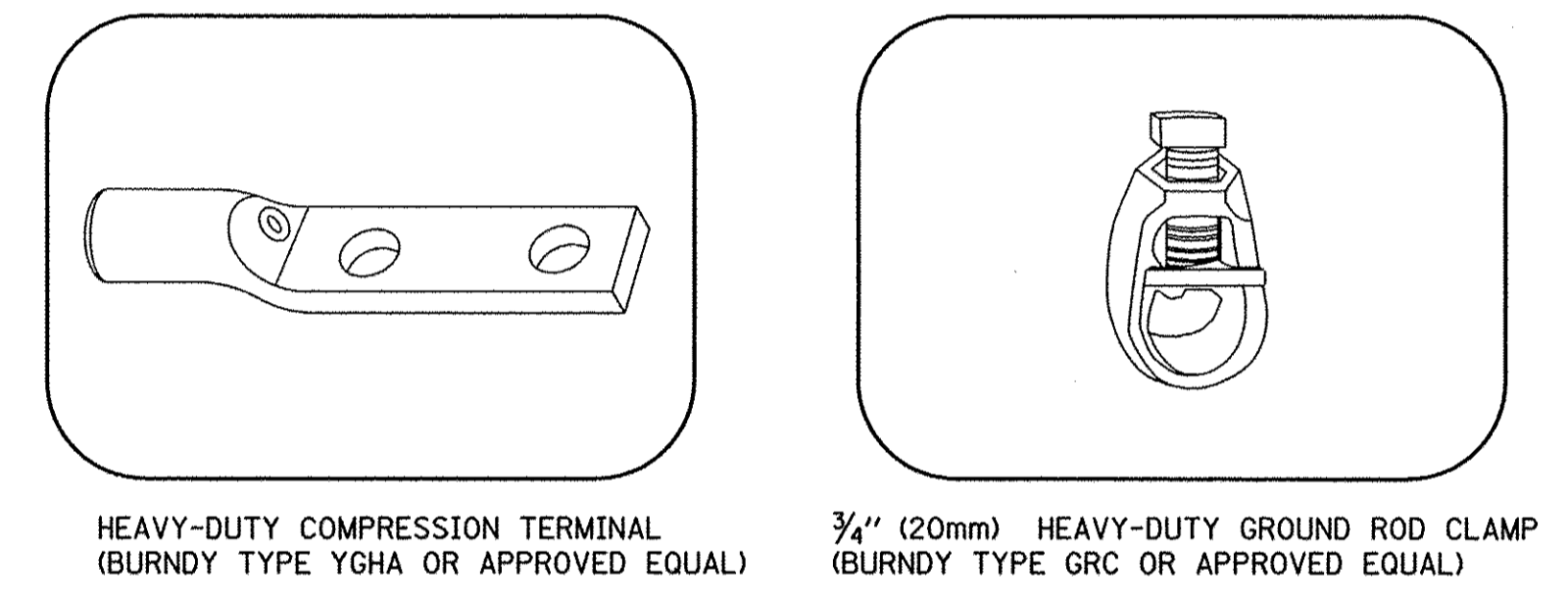


**NOTES:**  
**GROUNDING SYSTEM**

1. THE GROUNDING SYSTEM SHALL CONSIST OF AN INSULATED CONDUCTOR TYPE XLP, NO. 6 A.W.G., STRANDED COPPER TO BE INSTALLED IN RACEWAYS. THE GROUNDING CABLE SHALL BE INSTALLED IN A CONTINUOUS MANNER AS SHOWN ON THE CABLE PLAN PROVIDED. ALL GROUNDING CONDUCTORS SHALL BE BONDED TO METAL ENCLOSURE (HANDHOLE, POST, MAST ARM, CONTROLLER, ETC.). GROUND ROD SHALL BE 3/4" DIA. x 10'-0" (20mm x 3.0m) LONG, COPPER CLAD. ONE GROUND ROD SHALL BE INSTALLED AT ALL POST FOUNDATIONS, POLE FOUNDATIONS, CONTROLLER CABINET FOUNDATION AND ELECTRICAL SERVICE INSTALLATION AS INDICATED ON THE CABLE PLAN. IF THERE ARE ANY SPECIAL CONDITIONS SUCH AS SUB-SURFACE CONDITIONS OR INSTALLATION PROBLEMS, THE RESIDENT ENGINEER SHALL BE NOTIFIED OR CONTACT THE BUREAU OF TRAFFIC, ILLINOIS DEPARTMENT OF TRANSPORTATION DISTRICT ONE AT (847) 705-4139.
2. THE NEUTRAL CONDUCTOR AND THE GROUND CONDUCTOR SHALL BE CONNECTED IN THE SERVICE INSTALLATION. AT NO OTHER POINT IN THE TRAFFIC SIGNAL SYSTEM SHALL THE NEUTRAL AND GROUND CONDUCTORS BE CONNECTED.
3. ALL EQUIPMENT GROUNDING CONDUCTORS SHALL TERMINATE AT THE GROUND BUS IN THE CONTROLLER CABINET.
4. THE CONTRACTOR SHALL PROVIDE A GROUND CABLE WITH CONNECTORS BETWEEN THE HANDHOLE COVER AND HANDHOLE FRAME.

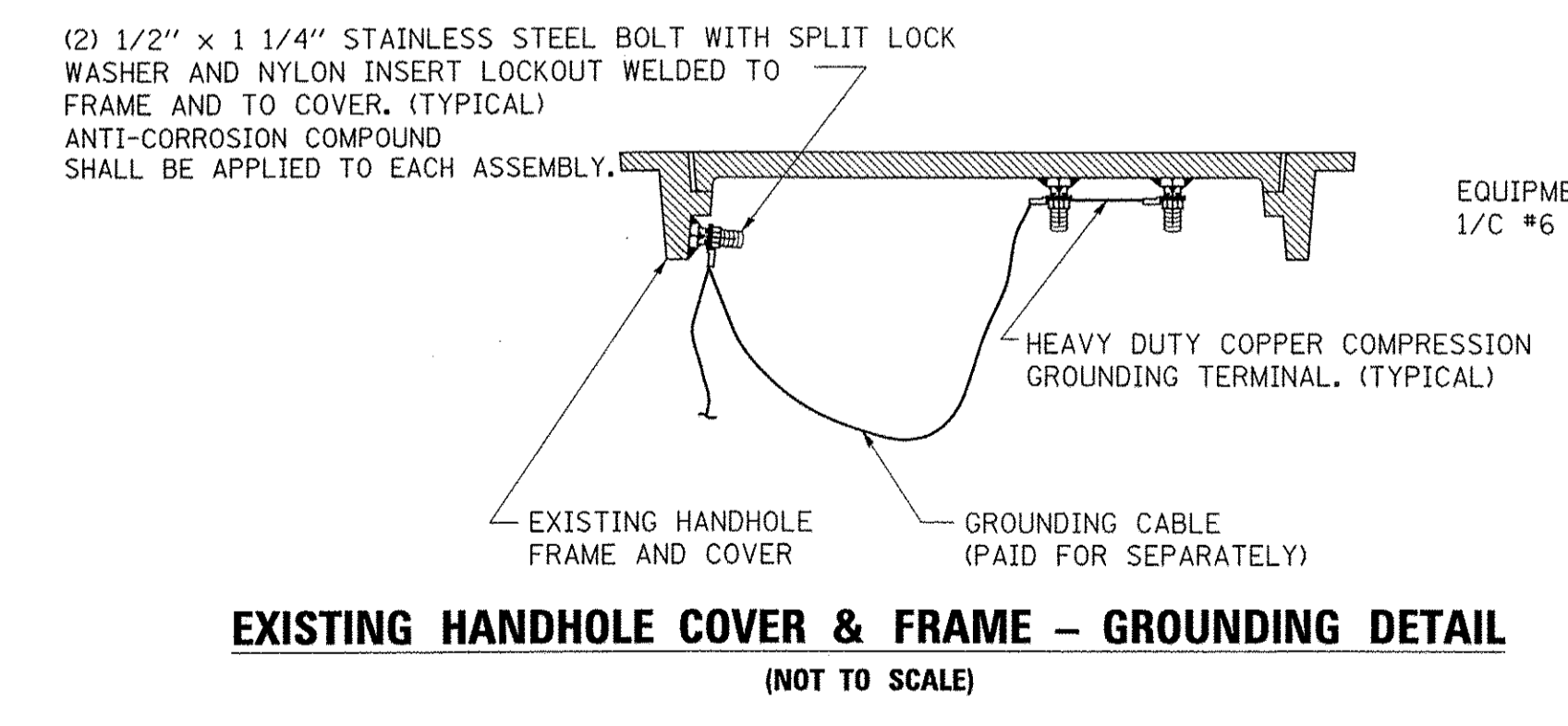


**HANDHOLE COVER & FRAME - GROUNDING DETAIL**  
 (NOT TO SCALE)

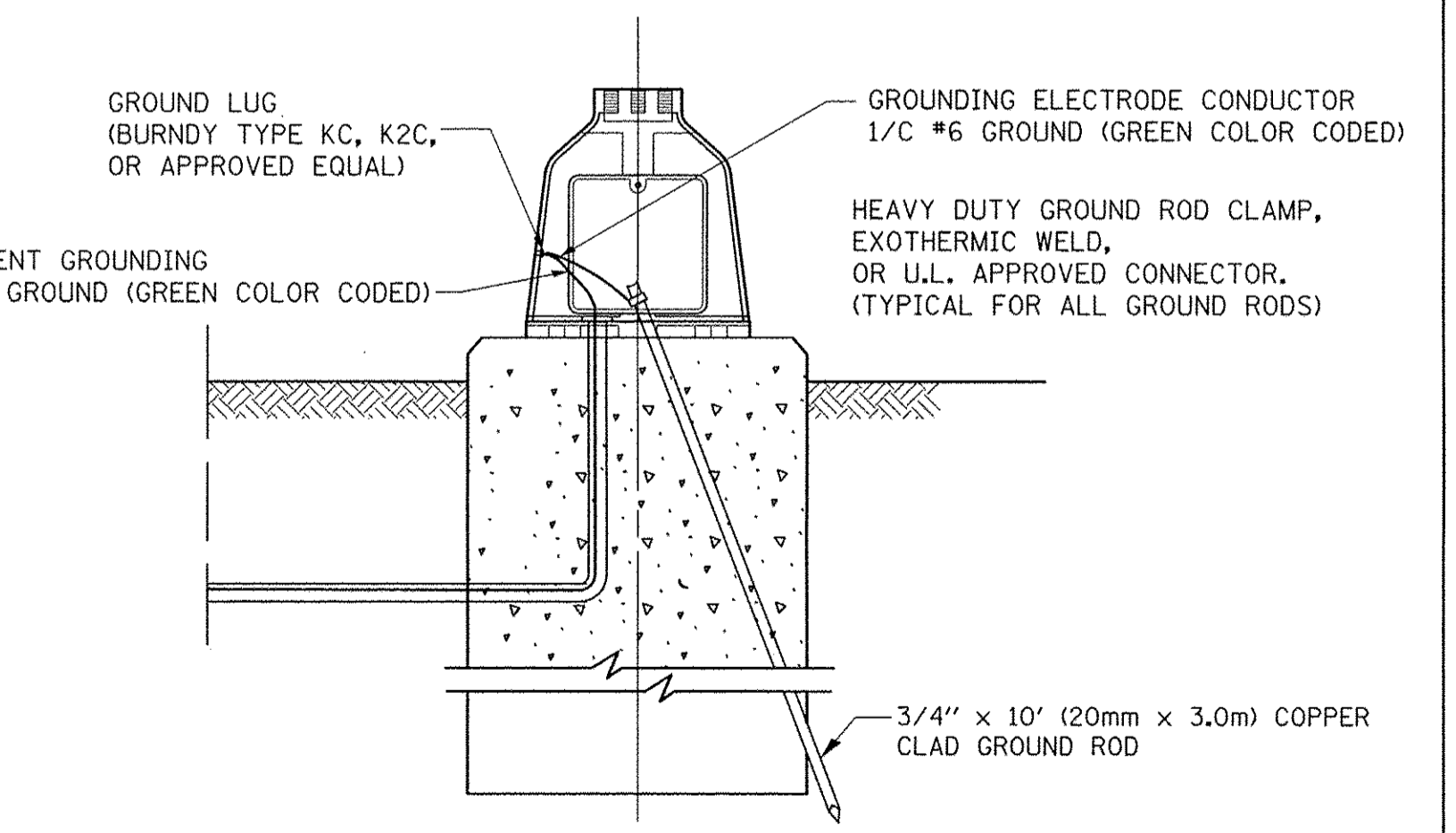


**NOTES:**

- ALL CLAMPS SHALL BE BRONZE OR COPPER, UL APPROVED.
- GROUND CABLE SHALL BE LOOPED OVER HOOKS IN THE HANDHOLES 6.5' (2.0m) SLACK SHALL BE PROVIDED IN SINGLE HANDHOLES 13' (4.0m) OF SLACK SHALL BE PROVIDED IN DOUBLE HANDHOLES. 5' (1.4m) OF SLACK SHALL BE PROVIDED BETWEEN FRAME AND COVER.

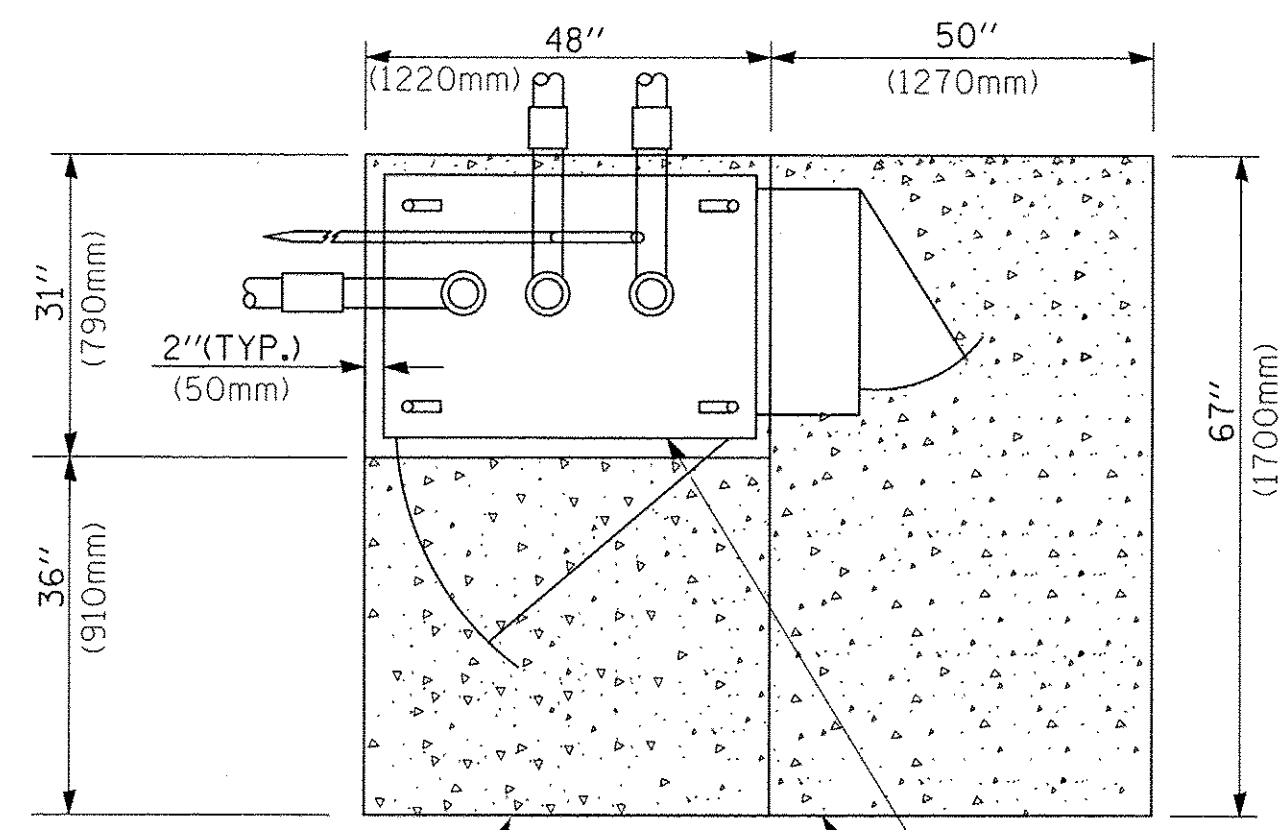


**EXISTING HANDHOLE COVER & FRAME - GROUNDING DETAIL**  
 (NOT TO SCALE)

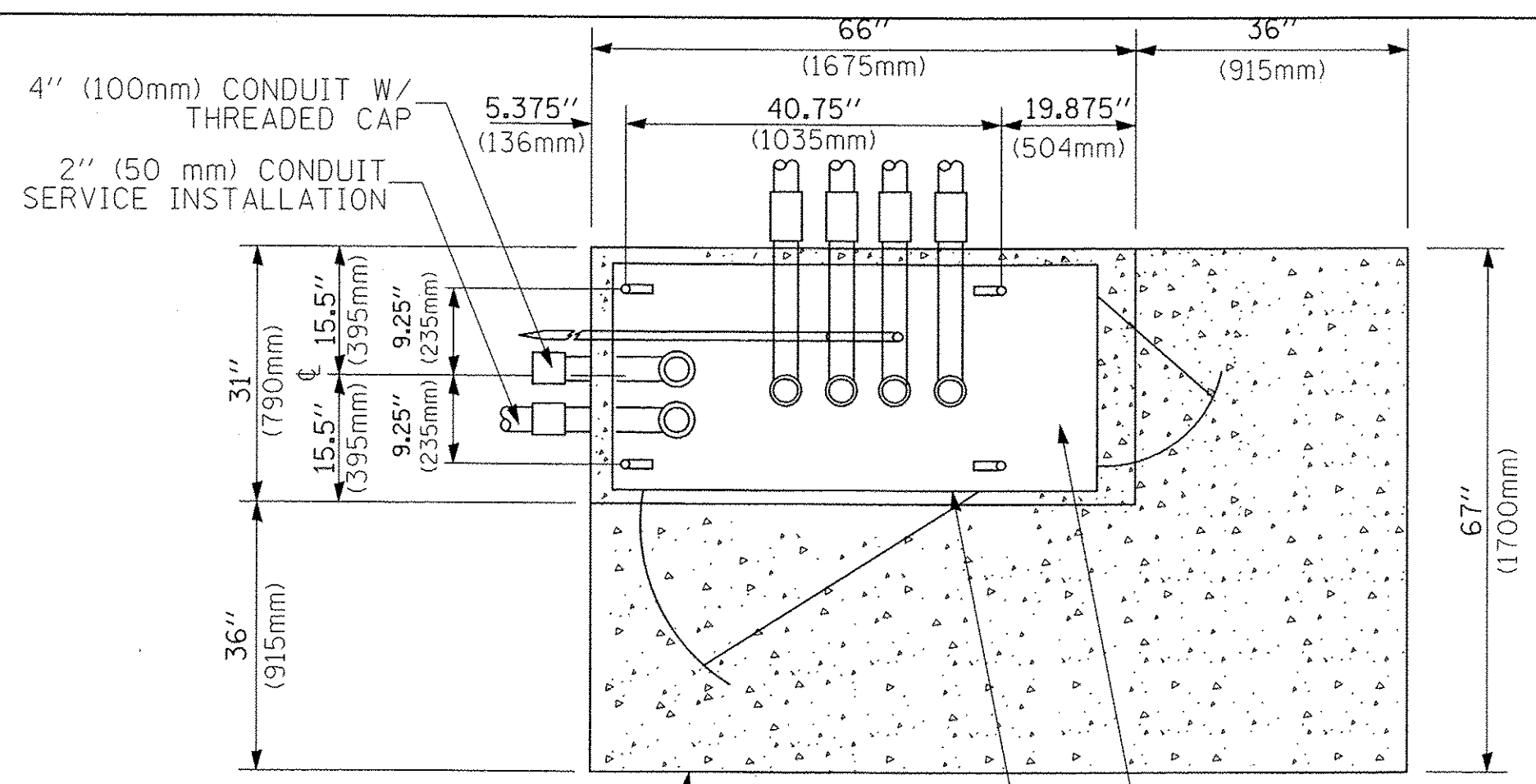


**MAST ARM POLE /POST-GROUNDING DETAIL**  
 (NOT TO SCALE)

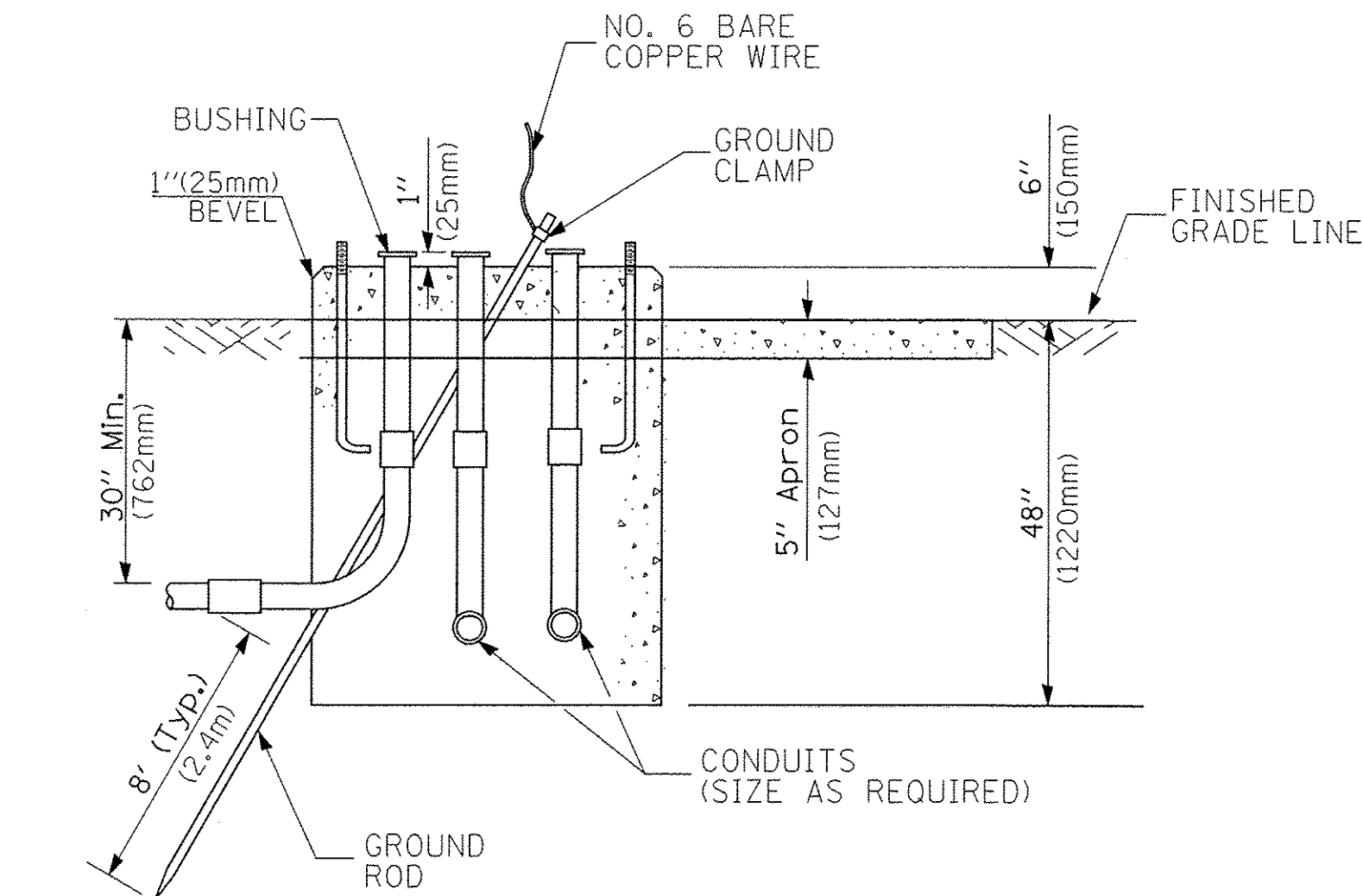
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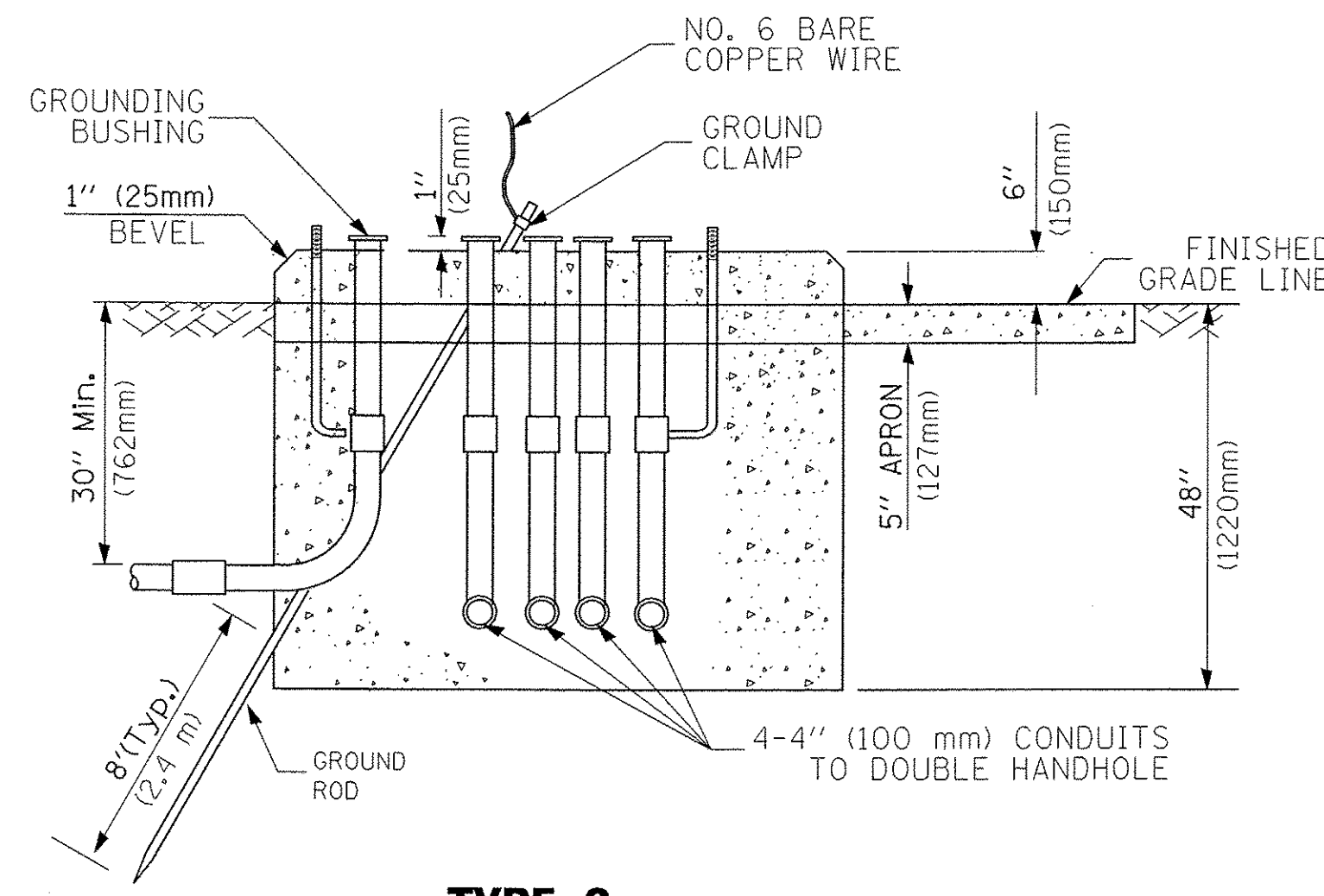
**TOP VIEW**



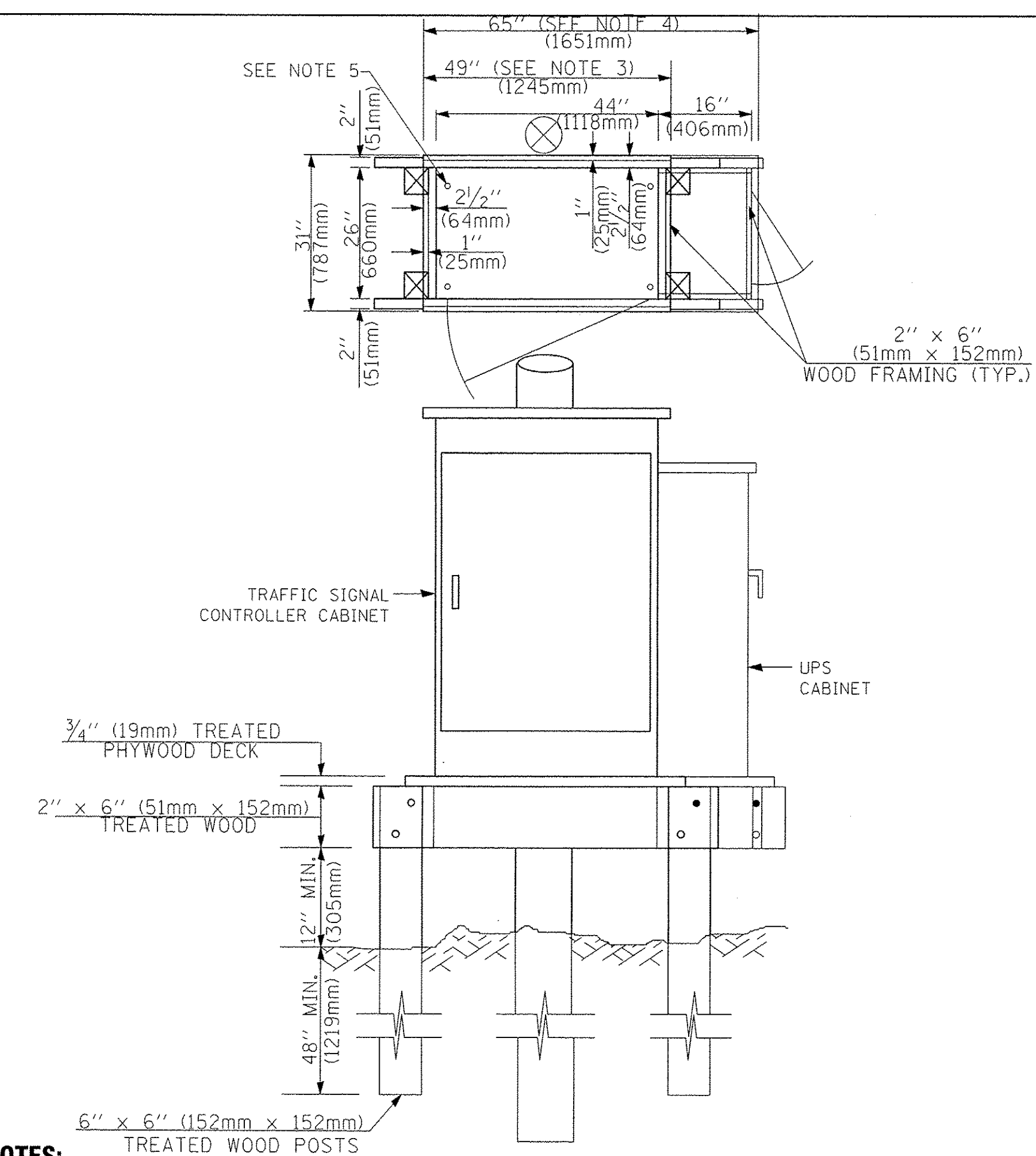
**TOP VIEW**



**TYPE D  
FOR GROUND MOUNTED  
CONTROLLER CABINET  
AND UPS BATTERY CABINET**



**TYPE C  
FOR GROUND MOUNTED  
SUPER P (TYPE IV) AND SUPER R (TYPE V)  
CONTROLLER CABINETS**



**NOTES:**

1. BASED ON CONTROLLER CABINET TYPE IV WITH BASE DIMENSIONS OF 26" x 44" (660mm x 1118mm). ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED.
2. BASED ON UNINTERRUPTIBLE POWER SUPPLY CABINET WITH BASE DIMENSIONS OF 16" x 25" (406mm x 635mm). ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED.
3. PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV.
4. PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV AND UNINTERRUPTIBLE POWER SUPPLY CABINET.
5. DRILLED HOLES THROUGH THE PLATFORM BASE TO MATCH THE CONTROLLER CABINET BOLT TEMPLATE. FASTEN THE CONTROLLER CABINET TO THE PLATFORM WITH CARRIAGE BOLTS, WASHERS AND NUTS.
6. FASTEN ALL SUPPORT WOOD FRAMING TO THE WOOD POSTS WITH 2 LAG SCREWS FOR EACH CONNECTION.

**TEMPORARY SIGNAL CONTROLLER  
WOOD SUPPORT PLATFORM**

CABLE SLACK LENGTH	FEET	METER
HANDHOLE	6.5	2.0
DOUBLE HANDHOLE	13.0	4.0
SIGNAL POST	2.0	0.6
MAST ARM	2.0	0.6
CONTROLLER CABINET	1.5	0.5
FIBER OPTIC AT CABINET	13.0	4.0
ELECTRIC SERVICE AT (CABINET OR SERVICE LOCATION)	1.5	0.5
GROUND CABLE (SIGNAL POST, MAST ARM, CABINET)	1.5	0.5
GROUND CABLE (BETWEEN FRAME AND COVER)	5.0	1.6

**CABLE SLACK**

VERTICAL CABLE LENGTH	FEET	METER
MAST ARM POLE (MAST ARM MOUNTED SIGNAL HEAD) (L = MAST ARM LENGTH - DISTANCE TO SIGNAL HEAD FROM END OF ARM)	20.0+L	6.0+L
BRACKET MOUNTED (MAST ARM POLE OR SIGNAL POLE)	13.0	4.0
PEDESTRIAN PUSH BUTTON	6.0	2.0
SERVICE INSTALLATION POLE MOUNT TO SERVICE DROP	13.5	4.1
SERVICE INSTALLATION POLE MOUNT TO GROUND	13.5	4.1
SERVICE INSTALLATION GROUND MOUNT	6.0	2.0
FOUNDATION (SIGNAL POST, MAST ARM POLE, CONTROLLER CABINET, SERVICE-GROUND MOUNT)	3.0	1.0

**VERTICAL CABLE LENGTH**

FOUNDATION	DEPTH
TYPE A - Signal Post	4'-0" (1.2m)
TYPE C - CONTROLLER W/ UPS	4'-0" (1.2m)
TYPE D - CONTROLLER	4'-0" (1.2m)
SERVICE INSTALLATION, GROUND MOUNT, TYPE A - SQUARE	4'-0" (1.2m)

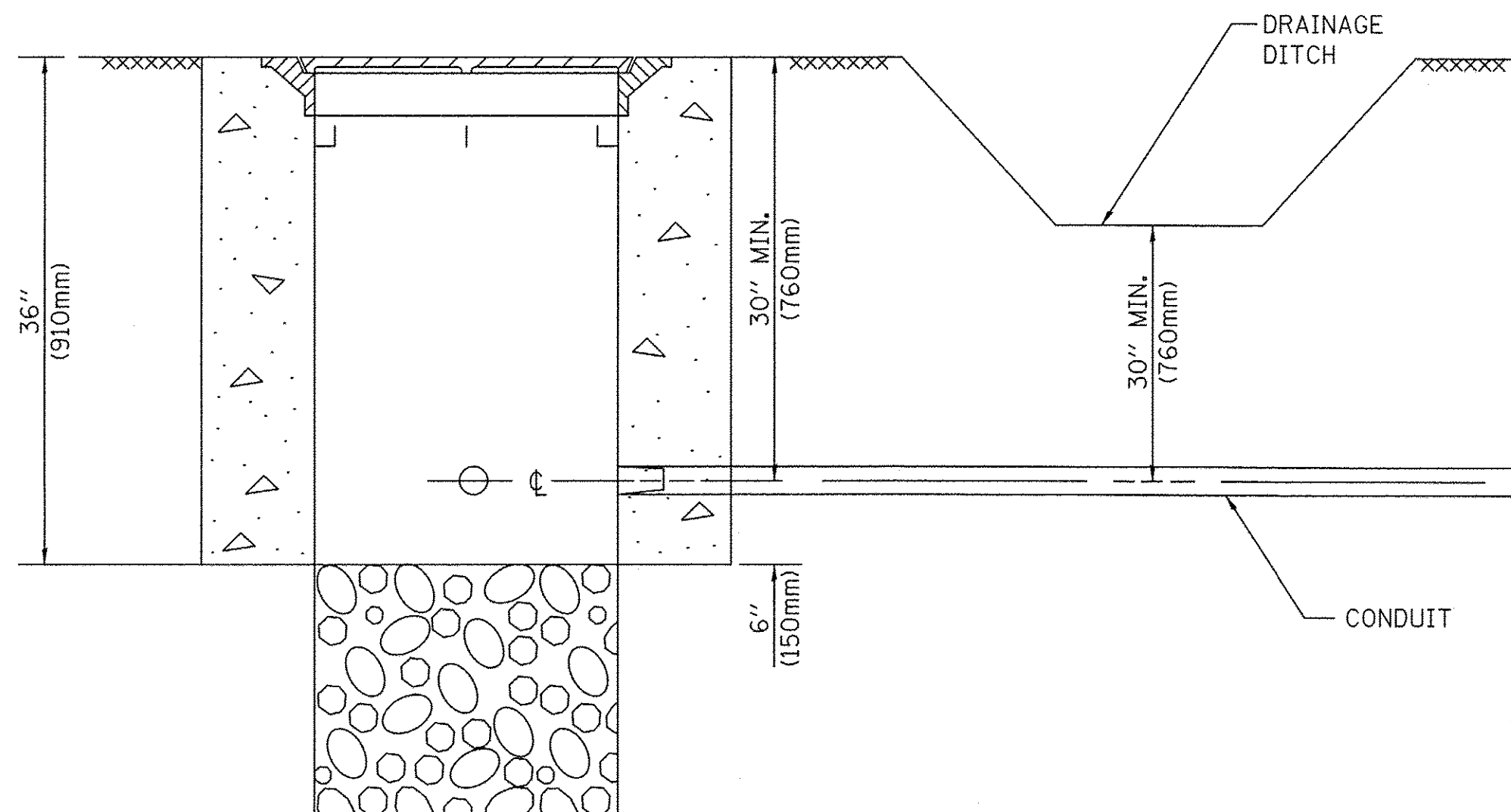
**DEPTH OF FOUNDATION**

MAST ARM LENGTH	FOUNDATION DEPTH	FOUNDATION DIAMETER	SPIRAL DIAMETER	QUANTITY OF REBARS	SIZE OF REBARS
Less than 30' (9.1 m)	10'-0" (3.0 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to 30' (9.1 m) and less than 40' (12.2 m)	13'-6" (4.1 m) 11'-0" (3.4 m)	30" (750mm) 36" (900mm)	24" (600mm) 30" (750mm)	8 12	6(19) 7(22)
Greater than or equal to 40' (12.2 m) and less than 50' (15.2 m)	13'-0" (4.0 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 50' (15.2 m) and up to 55' (16.8 m)	15'-0" (4.6 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 56' (16.8 m) and less than 65' (19.8 m)	21'-0" (6.4 m)	42" (1060mm)	36" (900mm)	16	8(25)
Greater than or equal to 65' (19.8 m) and up to 75' (22.9 m)	25'-0" (7.6 m)	42" (1060mm)	36" (900mm)	16	8(25)

**NOTES:**

1. These foundation depths are for sites which have cohesive soils (clayey silt, sandy clay, etc.) along the length of the shaft, with an average Unconfined Compressive Strength (qu) > 1.0 tsf (100 kpa). This strength shall be verified by boring data prior to construction or with testing by the Engineer during foundation drilling. The Bureau of Bridges & structures should be contacted for a revised design if other conditions are encountered.
2. Combination mast arm assemblies under 55 feet (16.8 m) shall use 36" (900 mm) diameter foundations.
3. Combination mast arm assemblies under 56 feet (16.8 m) through 75 feet (22.9 m) shall use 42" (1060 mm) diameter foundations.
4. For mast arm assemblies with dual arms refer to state standard 878001..

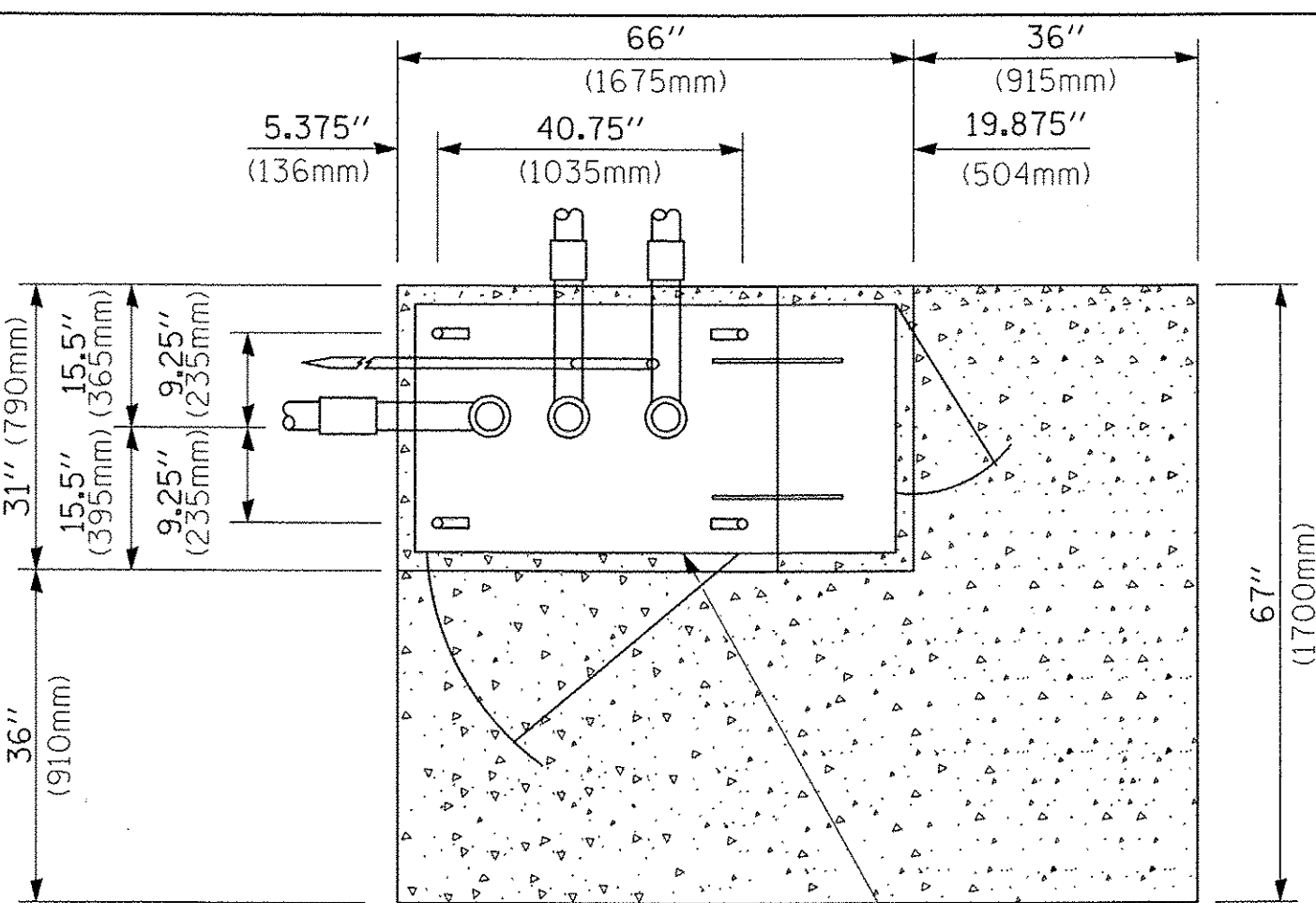
**DEPTH OF MAST ARM FOUNDATIONS, TYPE E**



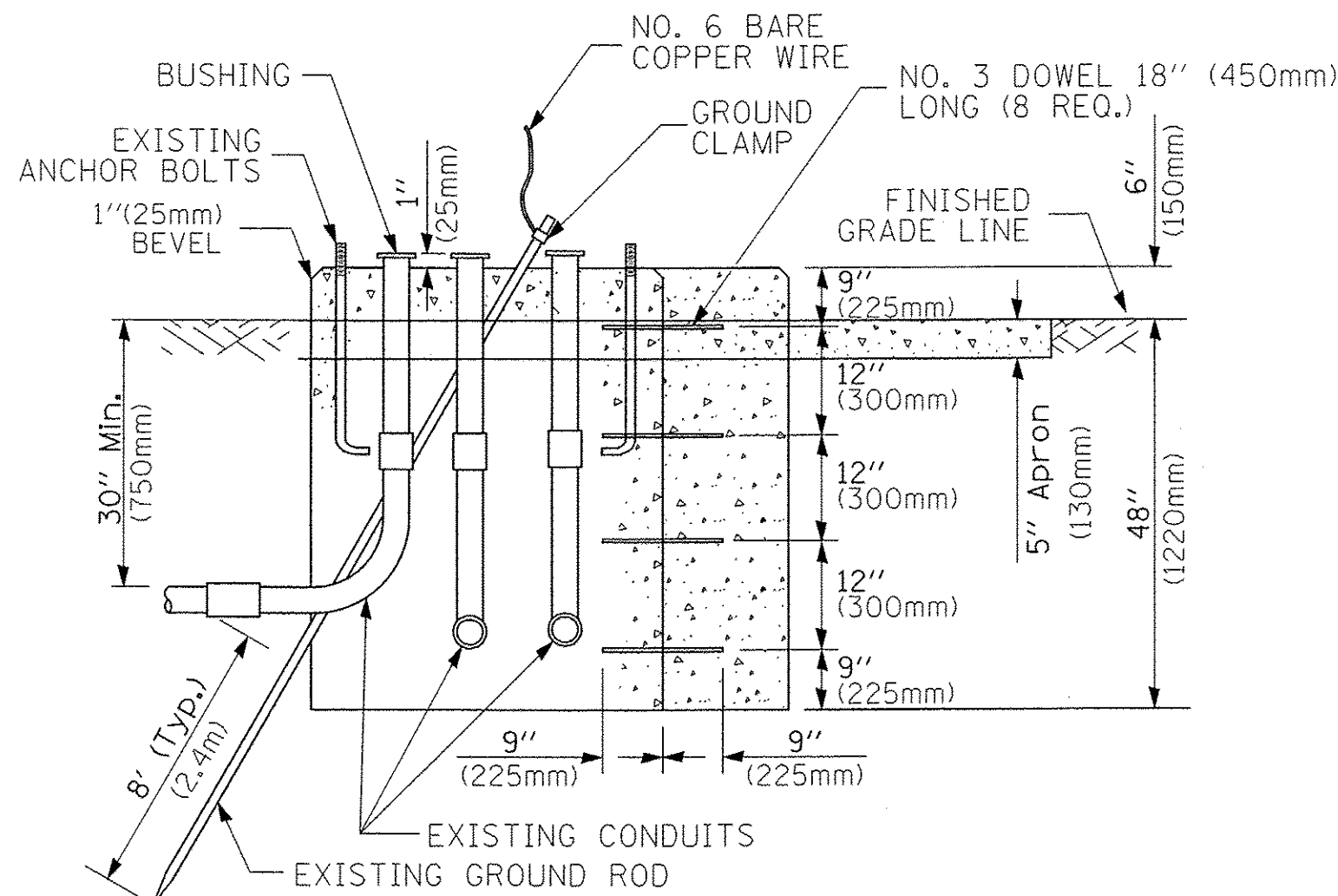
**NOTES:**

1. CONDUIT DEPTH SHALL BE A MINIMUM OF 30" (760mm) BELOW THE BOTTOM OF THE DRAINAGE DITCH OR ANY SLOPING GROUND
2. THE MINIMUM CONDUIT DEPTH APPLIES TO ALL CONDUIT PLACED UNDER ROADWAY PAVEMENT, MULTI-USE PATHS, SIDEWALKS AND SOIL SURFACES.
3. THE MINIMUM CONDUIT DEPTH APPLIES TO ALL HANDHOLES, HEAVY DUTY HANDHOLES AND DOUBLE HANDHOLES.

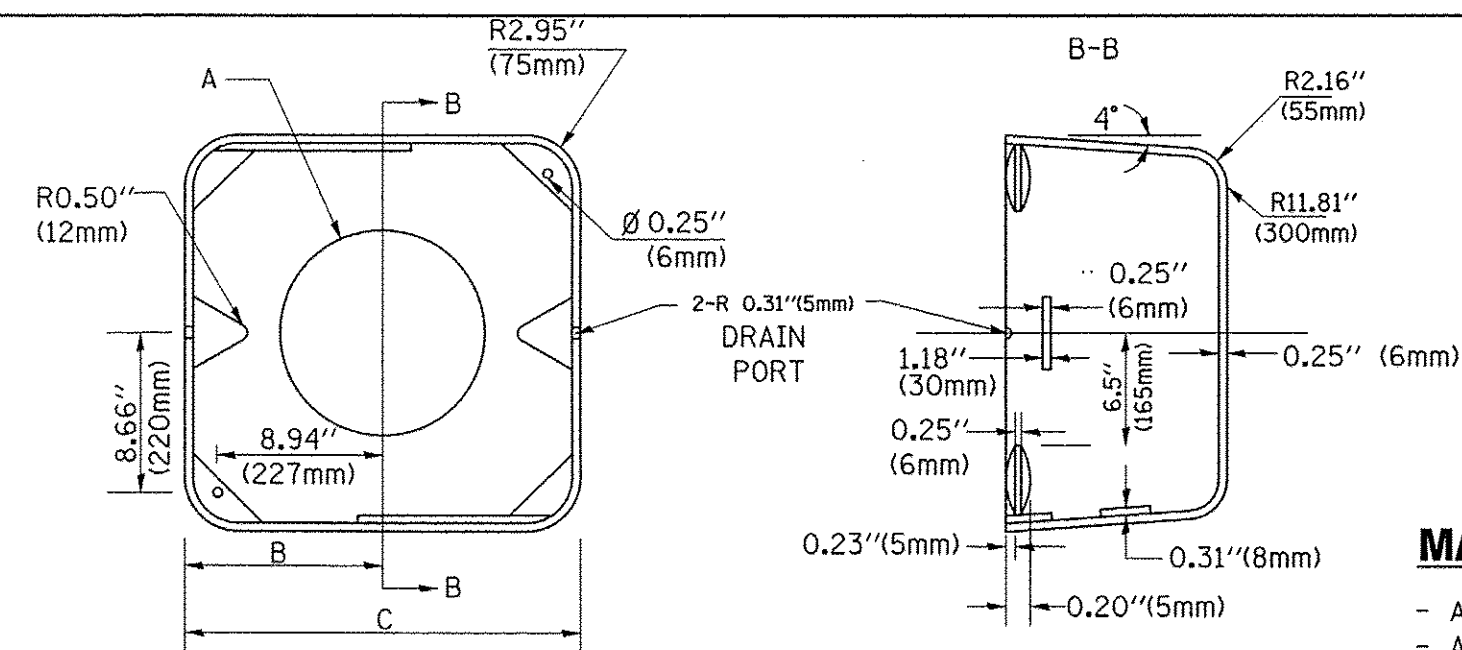
**HANDHOLE WITH MINIMUM CONDUIT DEPTH**  
(NOT TO SCALE)



**TOP VIEW**  
(NOT TO SCALE)



**MODIFY EXISTING TYPE "D" FOUNDATION TO TYPE "C" FOUNDATION**  
(NOT TO SCALE)



**MATERIAL:**  
- ASTM A36 STEEL  
- ASTM A-123 HOT DIPPED GALVANIZED

A	B	C	HEIGHT	WEIGHT
VARIABLES	9.5"(241mm)	19"(483mm)	7" (178mm) - 12" (300mm)	53 lbs (24kg)
VARIABLES	10.75"(273mm)	21.5"(546mm)	7" (178mm) - 12" (300mm)	68 lbs (31 kg)
VARIABLES	13.0"(330mm)	26"(660mm)	7" (178mm) - 12" (300mm)	81 lbs (37 kg)
VARIABLES	18.5"(470mm)	37"(940mm)	7" (178mm) - 12" (300mm)	126 lbs (57 kg)

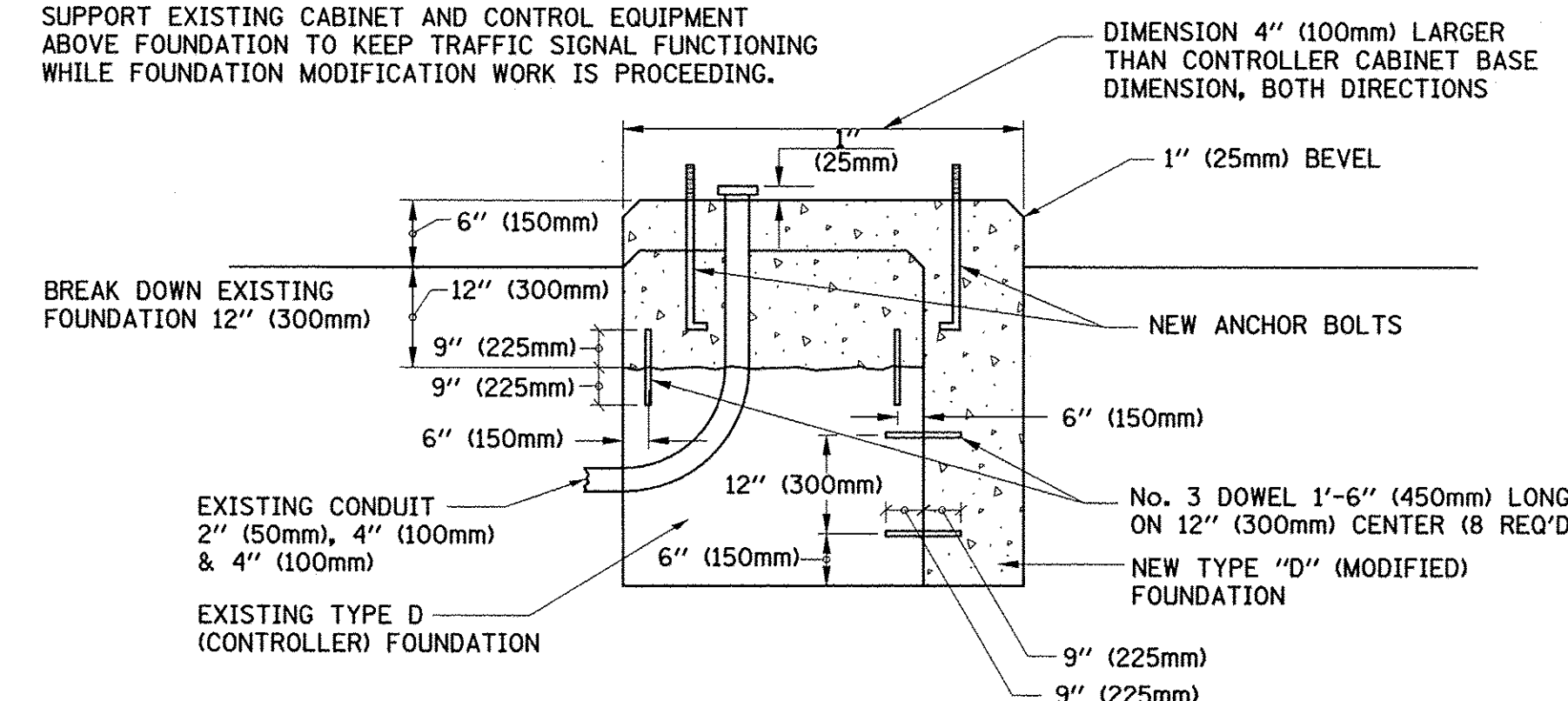
**SHROUD**

**NOTES:**

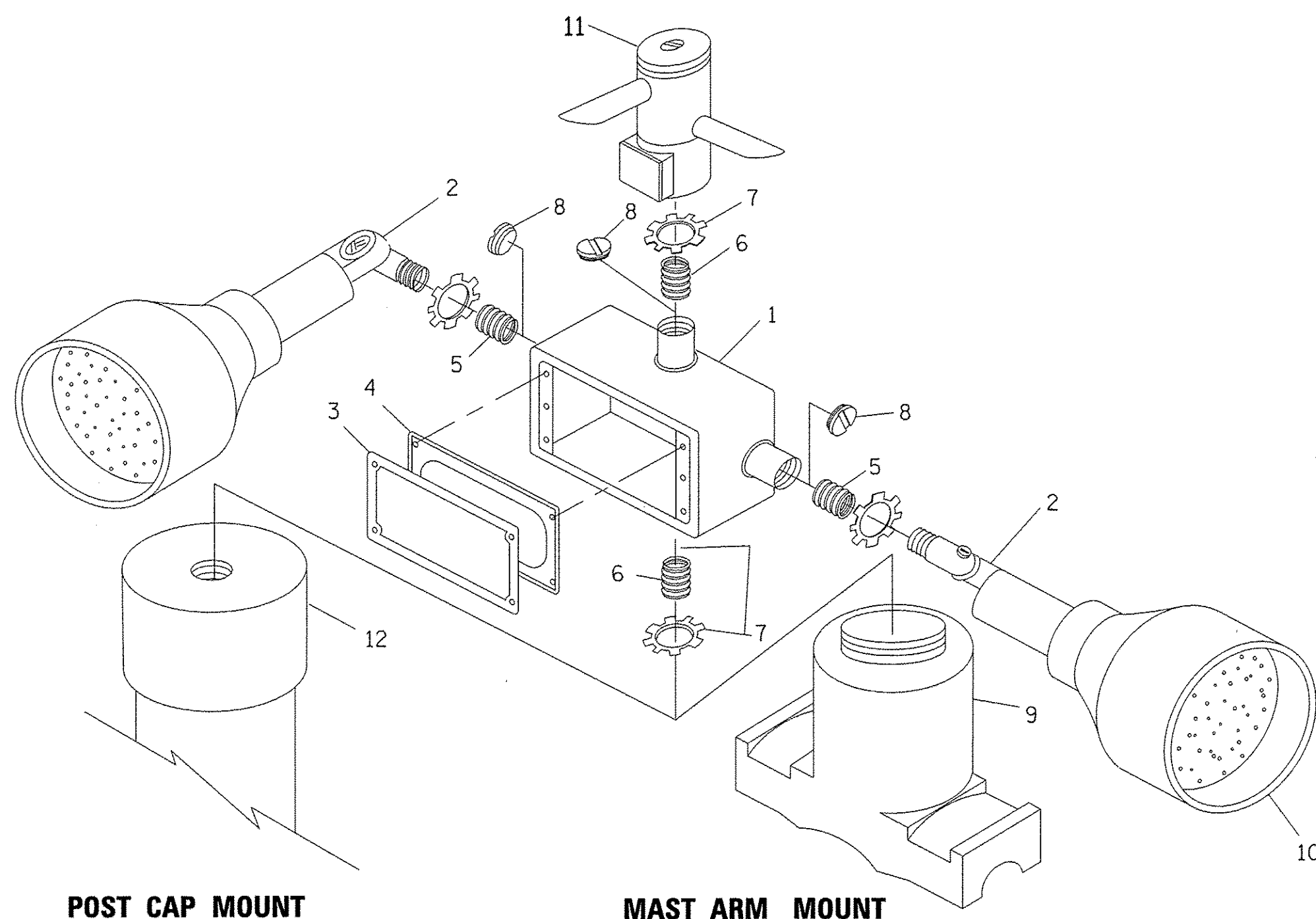
1. DIMENSION "A" IS EQUAL TO THE DIAMETER OF THE MAST ARM POLE AT THE TOP OF THE SHROUD. THE SHROUD SHALL BE TIGHT TO THE MAST ARM POLE.
2. THE SUPPLIER SHALL VERIFY THE ABOVE DIMENSIONS BASED ON MAST ARM REQUIREMENTS.
3. THE HEIGHT OF THE SHROUD SHALL COVER THE ANCHOR BOLTS, NUTS AND MAST ARM POLE BASE.

**NOTE:**

SUPPORT EXISTING CABINET AND CONTROL EQUIPMENT ABOVE FOUNDATION TO KEEP TRAFFIC SIGNAL FUNCTIONING WHILE FOUNDATION MODIFICATION WORK IS PROCEEDING.



**MODIFY EXISTING TYPE "D" FOUNDATION**



**POST CAP MOUNT**

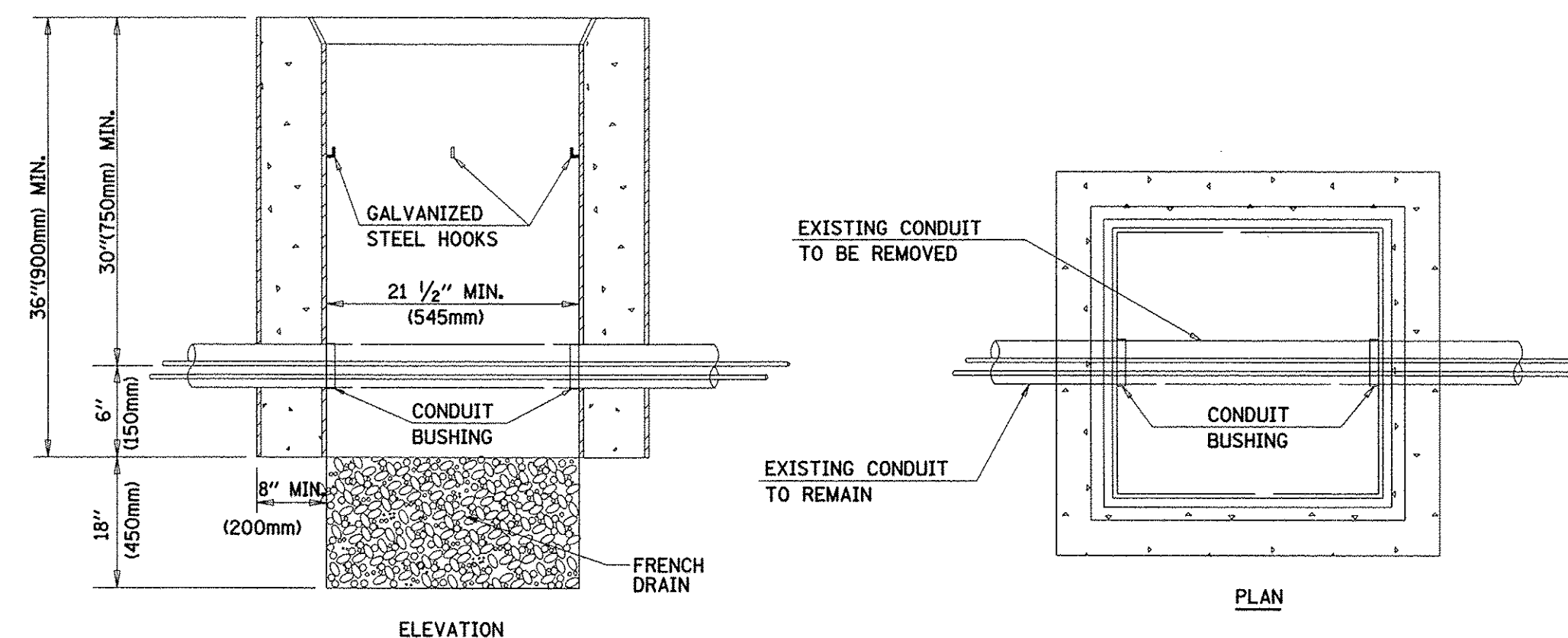
**MAST ARM MOUNT**

**EMERGENCY VEHICLE DETECTOR WITH CONFIRMATION BEACON MOUNTING DETAIL**

ITEM NO.	IDENTIFICATION
1	OUTLET BOX- GALV. 21 CU.IN. (0.000344 CU-M)
2	LAMP HOLDER AND COVER
3	OUTLET BOX COVER
4	RUBBER COVER GASKET
5	REDUCING BUSHING
6	3/4"(19 mm) CLOSE NIPPLE
7	3/4"(19 mm) LOCKNUT
8	3/4"(19 mm) HOLE PLUG
9	SADDLE BRACKET - GALV.
10	6 WATT PAR 38 LED FLOOD LAMP
11	DETECTOR UNIT
12	POST CAP [18 FT. (5.4 m) POST MIN.]

**NOTES:**

1. ALL ELECTRICAL ITEMS, EXCEPT ITEMS #2 AND #11 SHALL BE ALUMINUM OR GALVANIZED
2. ITEM #1- OZ/GEDNEY FSX-1-50 OR EQUIVALENT  
ITEM #2- MULBERRY CON-0-SHADE LAMP SHIELD OR EQUIVALENT  
ITEM #9- "BAND-IT" SADDLE BRACKET OR EQUIVALENT
3. WHEN POST MOUNTING IS SPECIFIED, ITEM #9 SHALL NOT BE REQUIRED. THE DETECTION UNIT SHALL BE MOUNTED DIRECTLY ON TOP OF THE CAP BY DRILLING AND TAPPING A 3/4 "(19 mm) HOLE WITH PIPE THREADS. THE POST CAP SHALL EITHER BE SCREWED TO THE TOP OF THE POST OR A MINIMUM OF 3 TIGHTENING SCREWS SHALL BE REQUIRED ON EACH CAP.



**NOTES:**

1. HANDHOLE CONSTRUCTED PER STATE STANDARD 814001.
2. REMOVAL OF THE EXISTING CONDUIT FROM THE HANDHOLE AND THE INSTALLATION OF THE CONDUIT BUSHINGS SHALL BE INCLUDED WITH THE COST OF THE HANDHOLE.

**HANDHOLE TO INTERCEPT EXISTING CONDUIT**

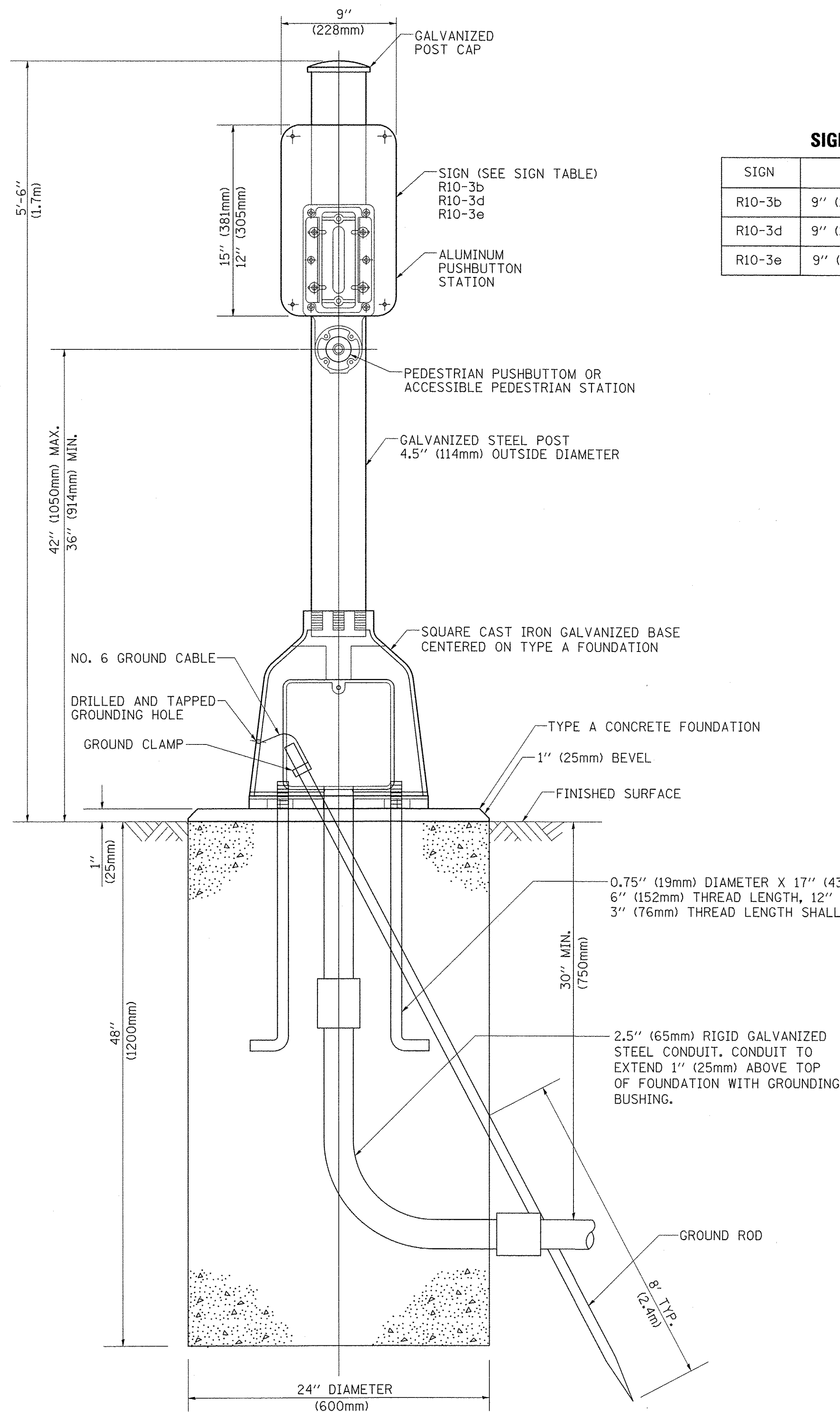
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PLOT DATE = 1/13/2014		DATE - 10-28-09	REVISED -

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**DISTRICT ONE**  
**STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

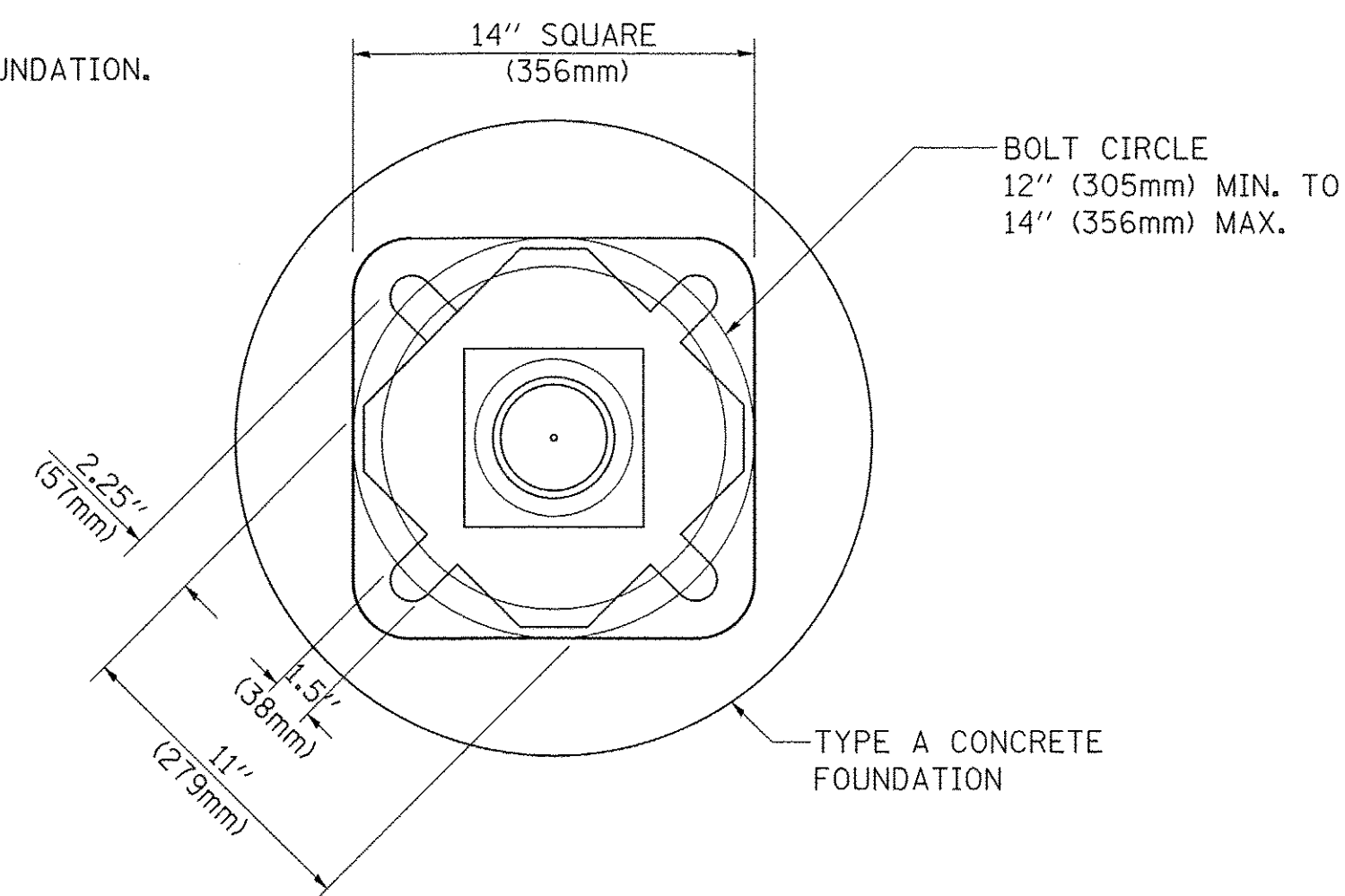
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	15-00095-00-RS	COOK	65	63
*1318 & 2562		CONTRACT NO. 61D75		
FED. ROAD DIST. 1		ILLINOIS	FED. AID PROJECT M-4003(798)	

SCALE: NONE SHEET NO. 6 OF 7 SHEETS STA. TO STA.



**SIGN TABLE**

SIGN	DIMENSIONS
R10-3b	9" (228mm) X 12" (305mm)
R10-3d	9" (228mm) X 12" (305mm)
R10-3e	9" (228mm) X 15" (381mm)



**BOLT PATTERN**

**PEDESTRIAN PUSH BUTTON POST, TYPE A**

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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**DISTRICT ONE  
STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

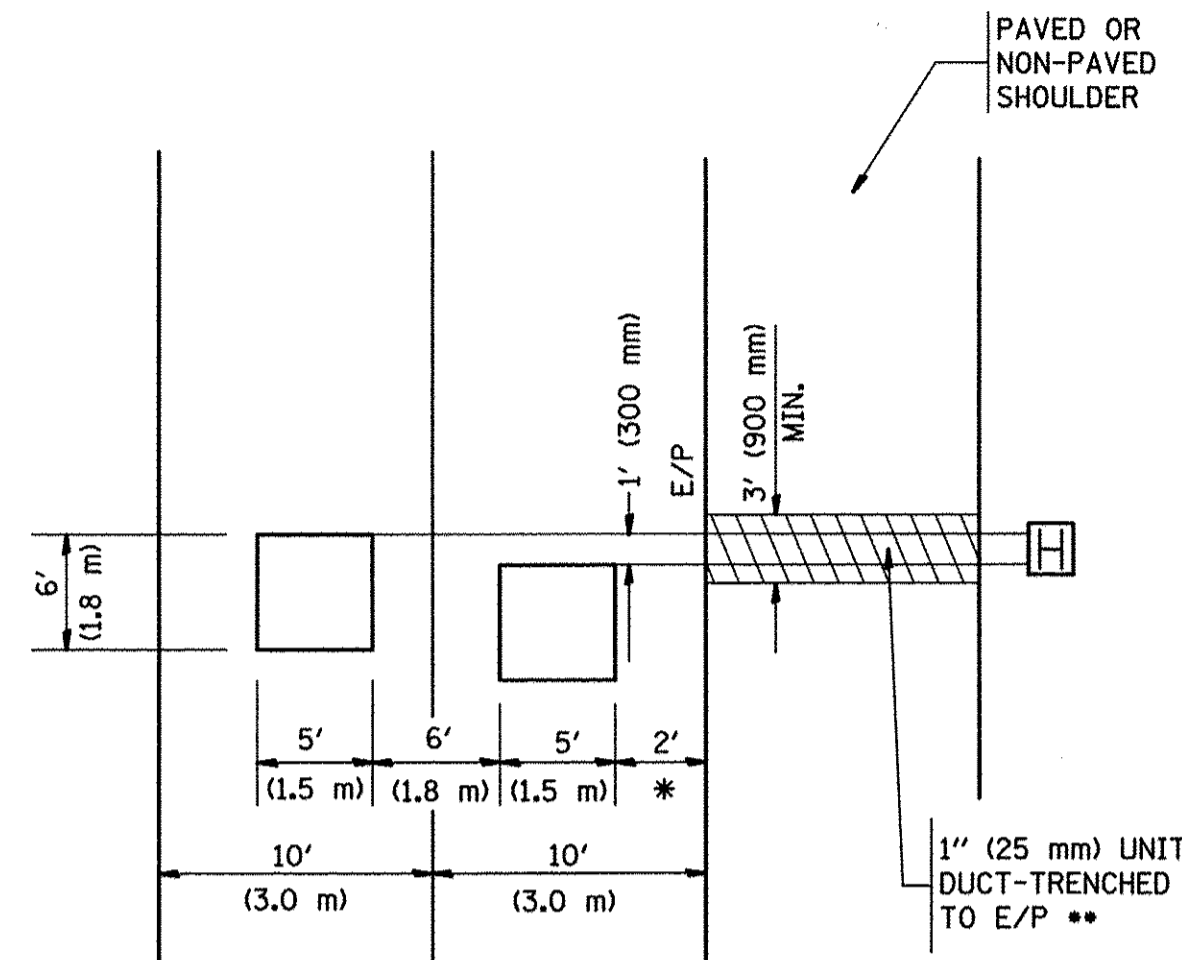
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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	15-00095-00-RS	COOK	65	64
*1318 & 2562		CONTRACT NO. 61D75		
FED. ROAD DIST. 1		ILLINOIS	FED. AID PROJECT M-4003(798)	



**LOOPS NEXT TO SHOULDERS**

PROVIDE A PAVEMENT REPLACEMENT NOTE WHICH SHOULD EQUAL 3' (900 mm) X WIDTH OF PAVED SHOULDER.

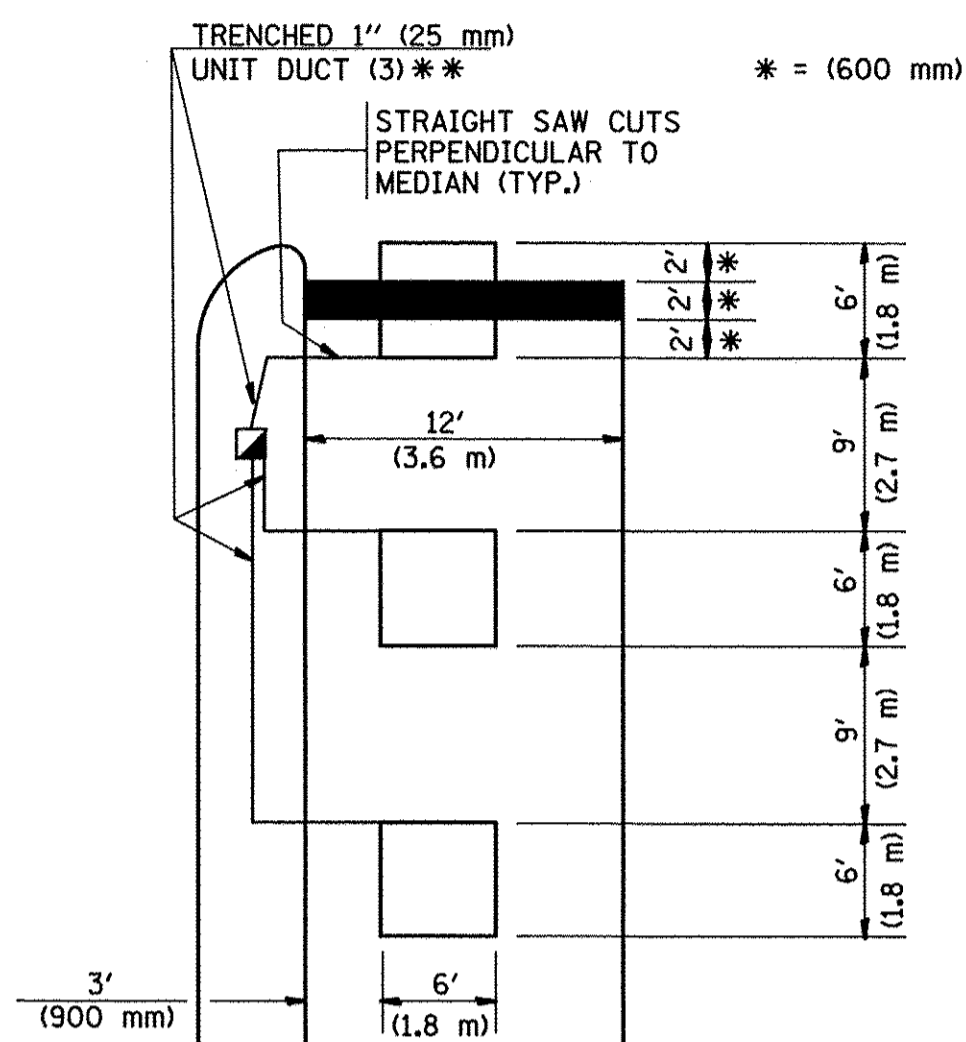


\* = (600 mm)

\*\* UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

**LEFT TURN LANES WITH MEDIANS  
VOLUME DENSITY ("FAR OUT" DETECTION)  
ON SAME APPROACH  
(PROTECTED / PERMITTED LEFT TURN PHASING)**

HANDHOLE LOCATION MAY VARY DEPENDING ON GEOMETRICS AND DESIGN OF TRAFFIC SIGNALS. HEAVY-DUTY HANDHOLES TO BE USED WHEN THE MEDIAN IS MOUNTABLE. REFER TO STANDARD 814001 TO ENSURE THAT HANDHOLE FITS IN MEDIAN.

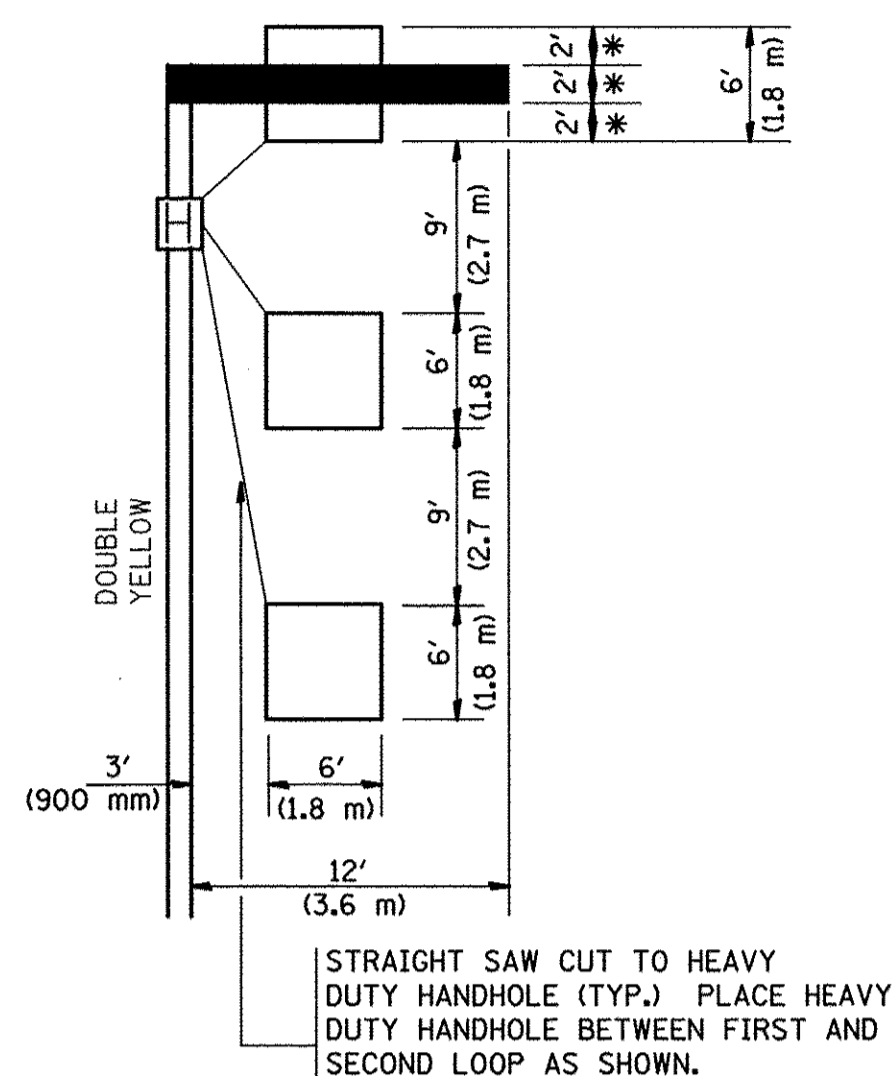


\*\* UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

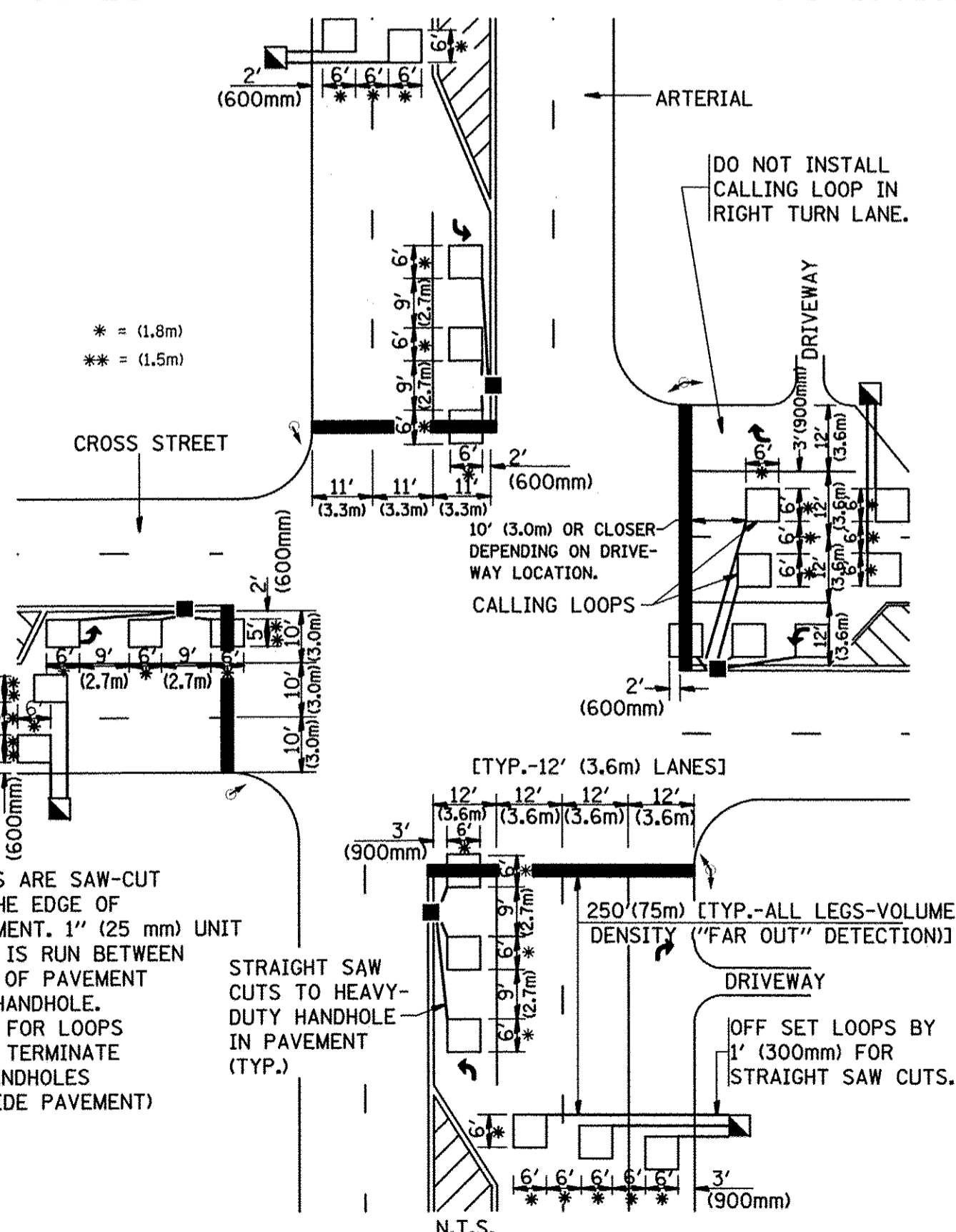
**LEFT TURN LANES WITHOUT MEDIANS  
VOLUME DENSITY ("FAR OUT" DETECTION)  
ON SAME APPROACH  
(PROTECTED / PERMITTED LEFT TURN PHASING)**

\* = (600 mm)



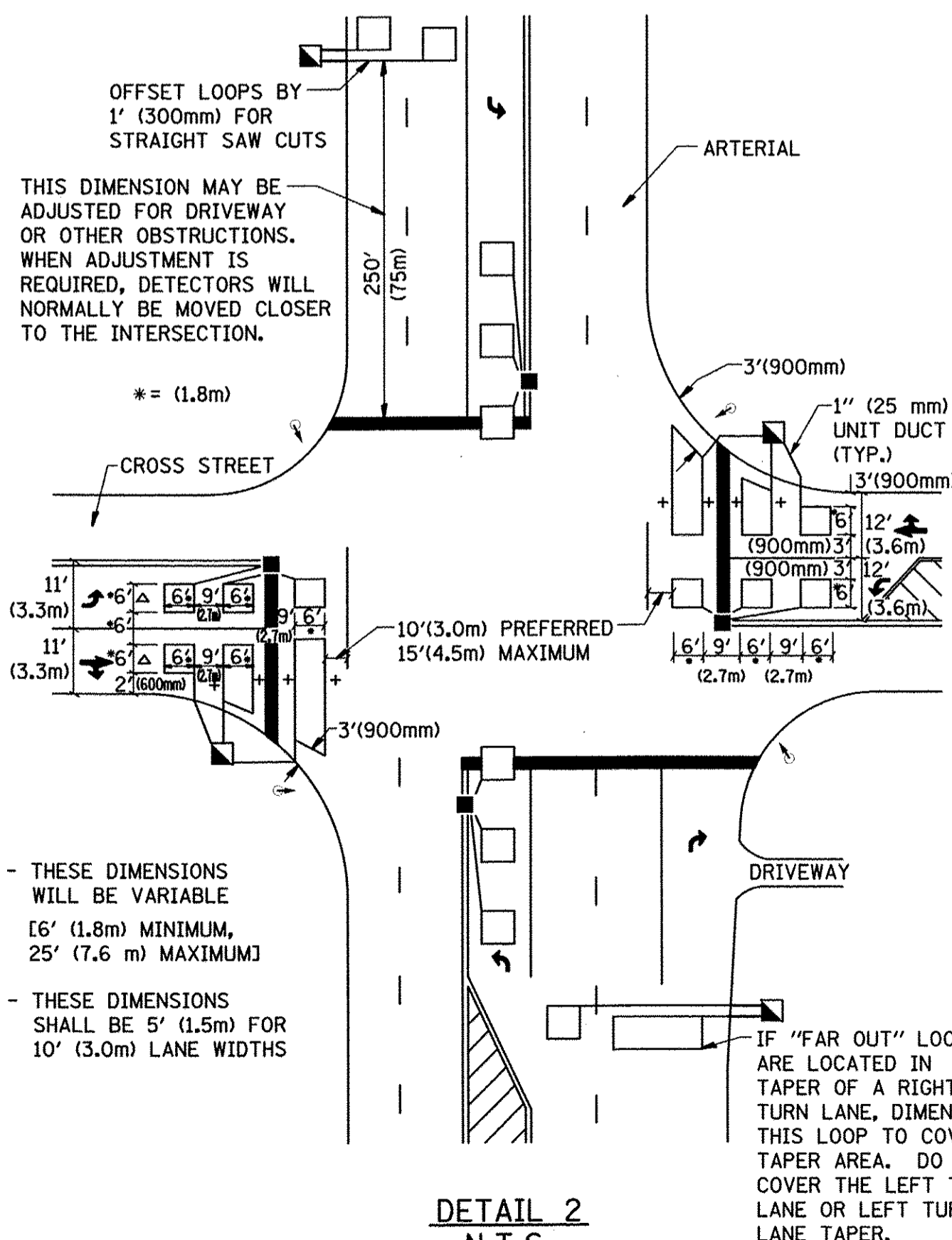
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

**ARTERIAL-VOLUME DENSITY ("FAR OUT" DETECTION)  
CROSS STREET-VOLUME DENSITY ("FAR OUT" DETECTION)**



**DETAIL 1  
N.T.S.**

**ARTERIAL-VOLUME DENSITY ("FAR OUT" DETECTION)  
CROSS STREET-NON VOLUME DENSITY ("UPTIGHT" PRESENCE DETECTION)**



**DETAIL 2  
N.T.S.**

**NOTES:**

**VEHICLES LOOP DETECTORS**

- \* ALL LEAD IN CABLE SHALL BE TWO CONDUCTOR NO. 14 TWISTED, SHIELDED.
- \* EACH DETECTOR LOOP SHALL HAVE ITS OWN SAW CUT FROM THE LOOP TO THE EDGE OF PAVEMENT OR TO A HANDHOLE IN THE PAVEMENT.
- \* EACH DETECTOR LOOP SHALL HAVE ITS OWN ONE INCH (25 mm) UNIT DUCT BETWEEN THE EDGE OF PAVEMENT AND THE FIRST HANDHOLE OR JUNCTION BOX. EACH UNIT DUCT RUN SHALL BE SHOWN ON THE PLANS BY THE DESIGNER, BUT SHALL NOT BE PAID FOR SEPARATELY. THIS ITEM IS INCIDENTAL TO THE PAY ITEM FOR DETECTOR LOOPS.
- \* ONE DIMENSION OF ALL DETECTOR LOOPS SHALL BE SIX FEET (1.8 m)
- \* EACH LANE OF NON-LOCKING, PRESENCE DETECTION AND EACH LANE OF A DOUBLE LEFT TURN LANE REQUIRES A SEPARATE INDUCTIVE LOOP DETECTOR AND LEAD IN CABLE.
- \* WHEN NON-LOCKING, PRESENCE DETECTION IS USED, MORE THAN ONE LOOP PER LANE IS REQUIRED BEHIND THE STOP BAR (i.e. 1-1/2, 1-3/4, 2).
- \* WHEN SYSTEM LOOPS ARE REQUIRED ON AN APPROACH OF AN INTERSECTION, THE LOOPS USED FOR VOLUME DENSITY AND INTERSECTION TIMING SHALL ALSO BE USED AS SYSTEM DETECTORS. EACH ONE OF THESE TYPE OF LOOPS REQUIRES A SEPARATE TWO CONDUCTOR NO. 14 TWISTED SHIELDED CABLE AND A SEPARATE INDUCTIVE LOOP DETECTOR WHEN NEW CONTROLLERS ARE UTILIZED. THE DESIGNER SHALL LABEL THESE TYPES OF LOOPS AS "INTERSECTION AND SAMPLING (SYSTEM) DETECTORS" ON THE SIGNAL LAYOUT, THE INTERCONNECT PLAN AND THE SYSTEM CABLE PLAN. WHEN AN EXISTING CONTROLLER IS UTILIZED FOR THIS TYPE OF DETECTION, THE PAY ITEM "INDUCTIVE LOOP DETECTOR WITH SYSTEM OUTPUT" SHOULD BE USED.

**PLACEMENT OF DETECTORS**

THE FOLLOWING FIGURES REPRESENT THE MOST COMMON DETECTOR LOOP LOCATIONS AND SIZES. ADJUSTMENTS WILL BE NECESSARY FOR SPECIFIC GEOMETRIC CONSIDERATIONS.

LOCATIONS AND DIMENSIONS OF DETECTOR LOOPS ARE REQUIRED ON ALL SIGNAL LAYOUT PLAN SHEETS.

"FAR OUT" DETECTION REFERS TO LOCKING, PRESENCE TYPE DETECTION LOCATED IN THRU LANES, RIGHT TURN LANES, AND RIGHT TURN LANE TAPER AREAS (IF APPLICABLE), USUALLY 250' (75 m) IN ADVANCE OF STOP BARS. "UPTIGHT" DETECTION REFERS TO NON-LOCKING PRESENCE TYPE DETECTION LOCATED IN ALL LANES AND 10'-15' (3.0 m-4.5 m) BEHIND THE CROSSING STREET'S EDGE OF PAVEMENT EXTENDED.

**NOTE:**

ALL DETAILS AND NOTES SHOWN ARE FROM THE I.D.O.T. DISTRICT 1 TRAFFIC SIGNAL DESIGN GUIDELINES DATED JANUARY 1995

THIS DRAWING HAS BEEN PREPARED TO ASSIST THE RESIDENT ENGINEER FOR ALL ROADWAY RESURFACING OR S.M.A.R.T. PROJECTS WHERE THE DIMENSIONS ARE NOT SHOWN ON THE PLANS AND THE FINAL LOCATIONS FOR CROSSWALKS OR STOP BARS ARE NOT DETERMINED.

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PLOT DATE = 1/4/2008

DESIGNED -  
DRAWN -  
CHECKED - R.K.F.  
DATE -

REVISED -  
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REVISED -  
REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**DISTRICT 1 - DETECTOR LOOP INSTALLATION  
DETAILS FOR ROADWAY RESURFACING**

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	15-00095-00-RS	COOK	65	65
*1318 & 2562		CONTRACT NO. 61D75		
FED. ROAD DIST. 1		ILLINOIS	FED. AID PROJECT M-4003(798)	