

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
573	61HB-1-R	KANE	110	1
FED. ROAD DIST. NO. 1	ILLINOIS	CONTRACT NO. 60K76		

D-91-589-10 \*110+1=111



LOCATION OF SECTION INDICATED THUS: - [black box] -

# STATE OF ILLINOIS

## DEPARTMENT OF TRANSPORTATION

### DIVISION OF HIGHWAYS

# PROPOSED HIGHWAY PLANS

F.A.P. 573: ILLINOIS ROUTE 56

SECTION: 61HB-1-R

AT GALENA BOULEVARD

PROJECT NO.: ACBHF-ACF-0573(161)

BRIDGE NEW DECK; TRAFFIC SIGNAL INSTALLATION

KANE COUNTY

C-91-589-10

FOR INDEX OF SHEETS, SEE SHEET NO. 2

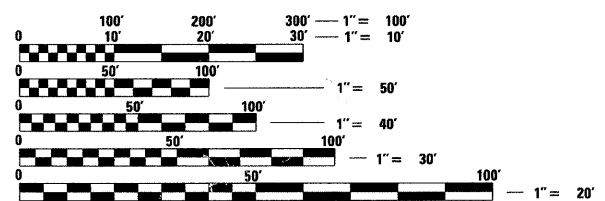
IMPROVEMENT LOCATED WITHIN  
VILLAGE OF SUGAR GROVE

**TRAFFIC DATA**  
**GALENA BLVD MINOR ARTERIAL, (URBAN)**  
 2006 ADT=7,700  
 2021 ADT=12,015  
 POSTED SPEED LIMIT=55 MPH  
 DESIGN SPEED LIMIT=55 MPH

PROJECT BEGINS  
STA. 187 + 60

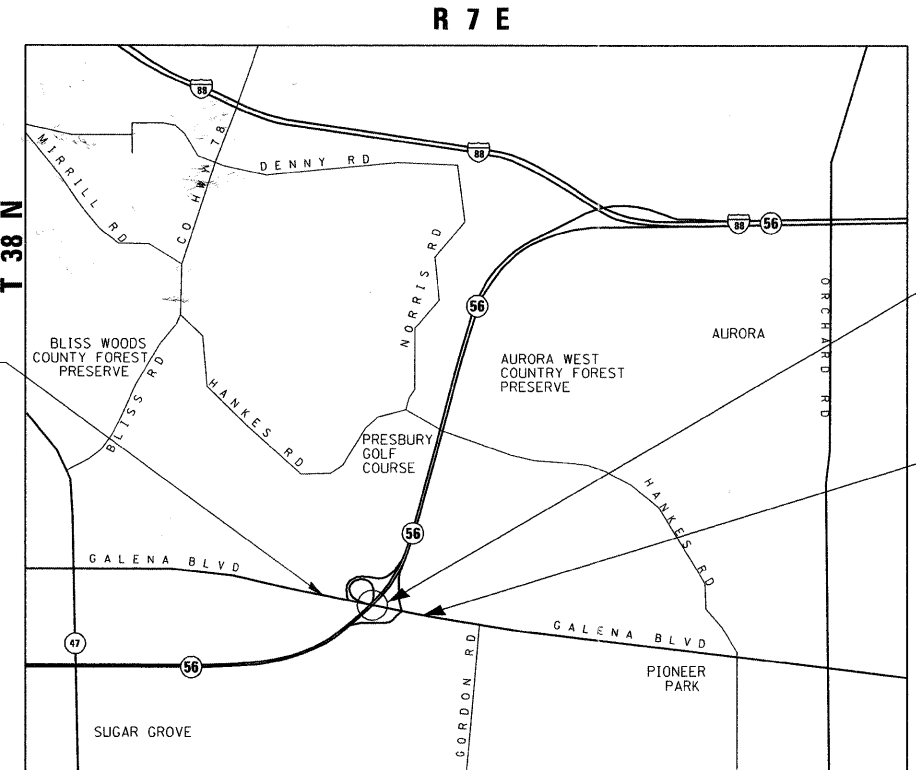
GALENA BLVD OVER  
FAP 573 (IL RTE 56)  
STRUCTURE NO: 045-0037  
STA. 198 + 80.6

PROJECT ENDS  
STA. 210 + 20



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



LOCATION MAP  
SCALE: NTS

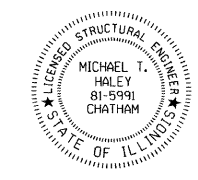
SUGAR GROVE TOWNSHIP

GROSS LENGTH OF PROJECT = 2260 FT = 0.43 MILE  
 NET LENGTH OF PROJECT = 2260 FT = 0.43 MILE



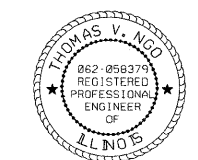
LIN ENGINEERING, LTD.  
MICHAEL T. HALEY, S.E.  
# 81-5991

*Michael T. Haley*  
DATE: 08/26/2011  
SIGNATURE AND SEAL APPLIES  
TO DRWG NO 51 TO 89



MILLENNIA PROFESSIONAL SERVICES  
THOMAS V. NGO, P.E.  
# 062-058379

*Thomas V. Ngo*  
DATE: 08/26/2011  
SIGNATURE AND SEAL APPLIES  
TO DRWG NO 1 TO 29, 103-110




STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

SUBMITTED August 29, 2011

*Diane M. O'Meara*  
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

October 14, 2011  
*Scott E. Stitt, P.E.*  
ENGINEER OF DESIGN AND ENVIRONMENT

October 14, 2011  
*Christine H. Reed*  
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

 200 22ND Street, Suite 216, Lombard, IL 60148  
630.705.0110 voice, 630.839.2566 fax  
www.mps-il.com

MILLENNIA PROFESSIONAL SERVICES

PROJECT MANAGER: ISAAC KWARTENG (847) 705-4230  
PROJECT ENGINEER: ALIX BRICE (847) 705-4552

CONTRACT NO. 60K76

PRINTED BY THE AUTHORITY  
OF THE STATE OF ILLINOIS

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**LIST OF ILLINOIS DOT HIGHWAY STANDARDS**

- 001001-02 AREAS OF REINFORCEMENT BARS
- 000001-06 STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
- 001006 DECIMAL OF AN INCH AND OF A FOOT
- 280001-05 TEMPORARY EROSION CONTROL SYSTEMS
- 420401-08 BRIDGE APPROACH PAVEMENT CONNECTOR
- 482011-03 HMA SHOULDER STRIPS/SHOULDERS WITH RESURFACING OR WIDENING AND RESURFACING PROJECTS
- 515001-03 NAME PLATE FOR BRIDGES
- 542301-03 PRECAST REINFORCED CONCRETE FLARED END SECTION
- 602001-02 CATCH BASIN TYPE A
- 602301-03 INLET - TYPE A
- 604001-03 FRAME AND LIDS TYPE 1
- 604061-02 FRAME AND LIDS TYPE 12
- 606001-04 CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
- 606301-04 PC CONCRETE ISLANDS AND MEDIANS
- 609006-05 BRIDGE APPROACH PAVEMENT (DRAIN DETAILS)
- 630001-04 STEEL PLATE BEAM GUARDRAIL
- 630301-05 SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
- 631011-07 TRAFFIC BARRIER TERMINAL, TYPE 2
- 631026-05 TRAFFIC BARRIER TERMINAL, TYPE 5
- 631031-09 TRAFFIC BARRIER TERMINAL, TYPE 6
- 635011-02 REFLECTOR MARKER AND MOUNTING DETAILS
- 701201-04 LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS >= 45 MPH
- 701301-04 LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
- 701336-06 LANE CLOSURE, 2L, 2W, WORK AREAS IN SERIES, FOR SPEEDS > 45 MPH
- 701411-07 LANE CLOSURE, MULTILANE, AT ENTRANCE OR EXIT RAMP, FOR SPEEDS > 45 MPH
- 701421-03 LANE CLOSURE, MULTILANE, DAY OPERATIONS ONLY FOR SPEEDS > OR = 45 MPH TO 55 MPH
- 701501-06 URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
- 701606-07 URBAN LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIUM
- 701701-07 URBAN LANE CLOSURE, MULTILANE INTERSECTION
- 701901-01 TRAFFIC CONTROL DEVICES
- 780001-02 TYPICAL PAVEMENT MARKINGS
- 814001-02 HANDHOLES
- 814006-02 DOUBLE HANDHOLES
- 857001-01 STANDARD PHASE DESIGNATION DIAGRAMS AND PHASE SEQUENCES
- 862001-01 UNINTERRUPTIBLE POWER SUPPLY (UPS)
- 873001-02 TRAFFIC SIGNAL GROUNDING & BONDING
- 877006-03 STEEL MASS ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS
- 877011-04 STEEL COMB. MAST ARM ASSEMBLY AND POLE 16' THROUGH 55'
- 878001-08 CONCRETE FOUNDATION DETAILS
- 880006-01 TRAFFIC SIGNAL MOUNTING DETAILS
- 886001-01 DETECTOR LOOP INSTALLATIONS

**COMMITMENTS**

NO COMMITMENTS

**GENERAL NOTES**

1. BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "J.U.L.I.E." AT 800-892-0123 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE, AND GAS FACILITIES. 48 HOUR NOTIFICATION IS REQUIRED.
2. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH THE UTILITY COMPANIES, AND VILLAGE OF SUGAR GROVE.
3. THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
4. ANY PAVEMENT MARKINGS AND RAISED REFLECTIVE PAVEMENT MARKERS OBLITERATED BY MILLING AND RESURFACING OPERATIONS ON SIDE STREETS AND ENTRANCES SHALL BE REPLACED AND PAID FOR IN KIND.
5. ALL DAMAGE TO EXISTING PAVEMENT MARKING OR RAISED REFLECTIVE PAVEMENT MARKERS OUTSIDE THE REMOVAL LINE SHOWN ON THE PLANS SHALL BE REPLACED AT THE CONTRACTORS EXPENSE. NO ADDITIONAL COST TO THE DEPARTMENT.
6. BEFORE BEGINNING ANY WORK, THE CONTRACTOR SHALL RETAIN AND RECORD FOR FUTURE REFERENCES, ALL EXISTING PAVEMENT MARKING LINES AND RAISED REFLECTIVE PAVEMENT MARKERS IN ORDER THAT THESE LOCATIONS CAN BE RE-ESTABLISHED FOR STRIPING. EXACT LOCATIONS OF ALL STRIPING SHALL BE AS DIRECTED BY THE ENGINEER.
7. ALL PAVEMENT PATCHING LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING MATERIALS.
9. THE CONTRACTOR SHALL CONTACT THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.
10. THE ENGINEER SHALL CONTACT DON CHIARUGI, THE TRAFFIC FIELD ENGINEER AT (847) 741-9857 A MINIMUM OF TWO (2) WEEKS PRIOR TO THE PLACEMENT OF PERMANENT PAVEMENT MARKINGS.
11. THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT.
12. DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.
13. DOUBLE LANE MARKERS ARE TO BE USED AS SHOWN ON THE DISTRICT ONE DETAIL "TYPICAL APPLICATIONS - RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)" SHOWN ON THE PLANS.
14. WHEN MILLED PAVEMENT IS OPEN TO TRAFFIC THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHINE SHALL NOT EXCEED 1 1/2 INCHES WHERE THE SPEED LIMIT IS 45 MPH OR LESS AND 1 INCH WHERE THE SPEED LIMIT IS GREATER THAN 45 MPH. WITH WRITTEN APPROVAL FROM THE ENGINEER, A MAXIMUM GRADE DIFFERENTIAL OF 3 INCHES MAY BE ALLOWED IF THE EDGE OF THE MILLING IS SLOPED A MINIMUM 1:3 (V:H).
15. BUTT JOINTS WILL BE INSTALLED AT THE ENDS OF ALL RESURFACING (WHERE RESURFACING MEETS EXISTING PAVEMENT), IN ACCORDANCE WITH THE "BUTT JOINT AND HOT-MIX ASPHALT TAPER DETAILS" SHEET INCLUDED IN THE PLANS UNLESS OTHERWISE SPECIFIED.
16. PAVEMENT MARKING TAPE, TYPE III SHALL BE USED FOR SHORT TERM PAVEMENT MARKINGS ON ALL FINAL SURFACES. THE COST OF THE PAVEMENT MARKING TAPE, TYPE III AND IT'S REMOVAL SHALL BE INCLUDED IN THE COST OF SHORT TERM PAVEMENT MARKING.
17. THE CONTRACTOR SHALL PLACE PROPOSED PAVEMENT MARKINGS IN ACCORDANCE WITH DISTRICT 1 TYPICAL PAVEMENT MARKINGS DETAIL (TC-13).
18. THE RESIDENT ENGINEER AND CONTRACTOR SHALL VERIFY ALL EXISTING PAVEMENT MARKING PRIOR TO THE PROJECT STARTING. IF A DISCREPANCIES OCCURS BETWEEN EXISTING PAVEMENT MARKINGS AND THE PROPOSED PAVEMENT MARKINGS, THE RESIDENT ENGINEER SHALL CONTACT THE BUREAU OF TRAFFIC OPERATIONS.

XXXX

FILE NAME : P:\2010\VE10012.PT\B156-16.Galena\CADD\Shets\02-GNOTE-sh.txdgn  
 USER NAME : Millennium Professional Services



200 22ND Street, Suite 216, Lombard, IL 60148  
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**MILLENNIA PROFESSIONAL SERVICES**

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CHECKED - TVN	REVISED -
DATE - 8/29/2011	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**GALENA BOULEVARD**

**INDEX OF SHEETS, HIGHWAY  
 STANDARDS, GENERAL NOTES,  
 AND COMMITMENTS**

F.A.P. RTE. 573	SECTION 61HB-1-R	COUNTY KANE	TOTAL SHEETS 110	SHEET NO. 2
CONTRACT NO. 60K76			FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT	

SCALE: N/A SHEET NO. 1 OF 1 SHEETS STA. TO STA.

P:\2010\VE10012.PT\B156-16.Galena\CADD\Shets\02-GNOTE-sh.txdgn

### SUMMARY OF QUANTITIES

CODE NO.	ITEM DESCRIPTION	UNIT	URBAN TOTAL QUANTITY	CONSTRUCTION TYPE CODE						EMERGENCY VEHICLE PREEMPTION
				ROADWAY	STRUCTURES	LIGHTING	TRAFFIC SIGNALS			
							GALENA & IL ROUTE 56 RAMP-C	GALENA & IL ROUTE 56 RAMP A/B	INTERCONNECT	
0004	0011	0021	0021	0021	0021	100% VILLAGE OF SUGAR GROVE				
20200100	EARTH EXCAVATION	CU YD	714	714	-	-	-	-	-	-
20800150	TRENCH BACKFILL	CU YD	10	10	-	-	-	-	-	-
21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	5684	5684	-	-	-	-	-	-
21400100	GRADING AND SHAPING DITCHES	FOOT	1545	1545	-	-	-	-	-	-
25000210	SEEDING, CLASS 2A	ACRE	1.2	1.2	-	-	-	-	-	-
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	110	110	-	-	-	-	-	-
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	110	110	-	-	-	-	-	-
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	110	110	-	-	-	-	-	-
28000305	TEMPORARY DITCH CHECKS	FOOT	100	100	-	-	-	-	-	-
28000400	PERIMETER EROSION BARRIER	FOOT	1315	1315	-	-	-	-	-	-
28000500	INLET AND PIPE PROTECTION	EACH	1	1	-	-	-	-	-	-
28000510	INLET FILTERS	EACH	18	18	-	-	-	-	-	-
28100105	STONE RIPRAP, CLASS A3	SQ YD	12	12	-	-	-	-	-	-
35600712	HOT-MIX ASPHALT BASE COURSE WIDENING, 9"	SQ YD	793	793	-	-	-	-	-	-
40600200	BITUMINOUS MATERIALS (PRIME COAT)	TON	8.4	8.4	-	-	-	-	-	-
40600300	AGGREGATE (PRIME COAT)	TON	41.9	41.9	-	-	-	-	-	-
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	31.4	31.4	-	-	-	-	-	-
40600635	LEVELING BINDER (MACHINE METHOD), N70	TON	10	10	-	-	-	-	-	-
40600895	CONSTRUCTING TEST STRIP	EACH	1	1	-	-	-	-	-	-
40600982	HOT-MIX ASPHALT SURFACE REMOVAL-BUTT JOINT	SQ YD	125	125	-	-	-	-	-	-
40601005	HOT-MIX ASPHALT REPLACEMENT OVER PATCHES	TON	8.5	8.5	-	-	-	-	-	-
40603595	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90	TON	2346	2346	-	-	-	-	-	-
44000100	PAVEMENT REMOVAL	SQ YD	1395	1395	-	-	-	-	-	-
44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 2"	SQ YD	20027	20027	-	-	-	-	-	-
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	2924	2924	-	-	-	-	-	-
44003100	MEDIAN REMOVAL	SQ FT	19303	19303	-	-	-	-	-	-
44004250	PAVED SHOULDER REMOVAL	SQ YD	506	506	-	-	-	-	-	-
44002212	HOT-MIX ASPHALT REMOVAL OVER PATCHES, 3"	SQ YD	50	50	-	-	-	-	-	-

\* SPECIALTY ITEM

FILE NAME = P:\2018\ME10012.PTBI56-16.Galena\CADD\Shets\03-D168K76-sht-Galeno-500.dgn  
 PLOT SCALE = 1:5000 / IN.  
 SHEET NAME = Millennium Professional Services



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**MILLENNIA PROFESSIONAL SERVICES**

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DATE - 8/30/2011	REVISED -

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

**GALENA BOULEVARD**

**SUMMARY OF QUANTITIES**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
573	61HB-1-R	KANE	110	3
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			CONTRACT NO. 60K76	

SCALE: NTS      SHEET NO. 1 OF 6 SHEETS      STA.      TO STA.

**SUMMARY OF QUANTITIES**

CODE NO.	ITEM DESCRIPTION	UNIT	URBAN TOTAL QUANTITY	CONSTRUCTION TYPE CODE						EMERGENCY VEHICLE PREEMPTION  100% VILLAGE OF SUGAR GROVE 0021
				ROADWAY	STRUCTURES	LIGHTING	TRAFFIC SIGNALS			
							GALENA & IL ROUTE 56 RAMP-C	GALENA & IL ROUTE 56 RAMP A/B	INTERCONNECT	
0004	0011	0021	0021	0021	0021	0021				
44201769	CLASS D PATCHES, TYPE III, 10 INCH	SQ YD	50	50	-	-	-	-	-	-
48101500	AGGREGATE SHOULDERS, TYPE B 6"	SQ YD	473	473	-	-	-	-	-	-
48102100	AGGREGATE WEDGE SHOULDER, TYPE B	TON	220	220	-	-	-	-	-	-
48203029	HOT-MIX ASPHALT SHOULDERS, 8"	SQ YD	779	779	-	-	-	-	-	-
50102400	CONCRETE REMOVAL	CU YD	52.1	-	52.1	-	-	-	-	-
50104720	REMOVAL OF EXISTING CONCRETE DECK	EACH	1	-	1	-	-	-	-	-
50157300	PROTECTIVE SHIELD	SQ YD	1360	-	1360	-	-	-	-	-
50200100	STRUCTURE EXCAVATION	CU YD	312	-	312	-	-	-	-	-
50300225	CONCRETE STRUCTURES	CU YD	108.1	-	108.1	-	-	-	-	-
50300255	CONCRETE SUPERSTRUCTURE	CU YD	981	-	981	-	-	-	-	-
50300260	BRIDGE DECK GROOVING	SQ YD	2259	-	2259	-	-	-	-	-
50300300	PROTECTIVE COAT	SQ YD	3145	-	3145	-	-	-	-	-
50500405	FURNISHING AND ERECTING STRUCTURAL STEEL	POUND	24950	-	24950	-	-	-	-	-
50500505	STUD SHEAR CONNECTORS	EACH	8211	-	8211	-	-	-	-	-
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	241930	-	241930	-	-	-	-	-
50800515	BAR SPLICERS	EACH	1255	-	1255	-	-	-	-	-
51100100	SLOPE WALL 4 INCH	SQ YD	991	-	991	-	-	-	-	-
51500100	NAME PLATES	EACH	1	-	1	-	-	-	-	-
52000110	PREFORMED JOINT STRIP SEAL	FOOT	202	-	202	-	-	-	-	-
52100010	ELASTOMERIC BEARING ASSEMBLY, TYPE I	EACH	26	-	26	-	-	-	-	-
52100020	ELASTOMERIC BEARING ASSEMBLY, TYPE II	EACH	26	-	26	-	-	-	-	-
52100520	ANCHOR BOLTS, 1"	EACH	104	-	104	-	-	-	-	-
52100530	ANCHOR BOLTS, 1 1/4"	EACH	26	-	26	-	-	-	-	-
54213657	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 12"	EACH	6	6	-	-	-	-	-	-
550A0050	STORM SEWERS, CLASS A, TYPE 1 12"	FOOT	17	17	-	-	-	-	-	-
58700300	CONCRETE SEALER	SQ FT	987	-	987	-	-	-	-	-
59000200	EPOXY CRACK INJECTION	FOOT	154	-	154	-	-	-	-	-
59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	154	-	154	-	-	-	-	-

\* SPECIALTY ITEM

\* Specialty Items

FILE NAME = P:\2018\ME10012\_PTB156-16\_Galena\CADD\Shts\03-0160K76-sht-Galena-500.dgn  
 PLOT SCALE = 1/8"=1'-0"  
 USER NAME = Millennium Professional Services



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

**GALENA BOULEVARD**

**SUMMARY OF QUANTITIES**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
573	61HB-1-R	KANE	110	4
CONTRACT NO. 60K76				

SCALE: NTS SHEET NO. 2 OF 6 SHEETS STA. TO STA.

FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT



**SUMMARY OF QUANTITIES**

CODE NO.	ITEM DESCRIPTION	UNIT	URBAN TOTAL QUANTITY	CONSTRUCTION TYPE CODE						EMERGENCY VEHICLE PREEMPTION  100% VILLAGE OF SUGAR GROVE 0021
				ROADWAY 0004	STRUCTURES 0011	LIGHTING 0021	TRAFFIC SIGNALS			
							GALENA & IL ROUTE 56 W. RAMPS 0021	GALENA & IL ROUTE 56 E. RAMPS 0021	INTERCONNECT 0021	
60200105	CATCH BASINS, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, OPEN LID	EACH	1	1	-	-	-	-	-	-
60234200	INLETS, TYPE A, TYPE 1 FRAME, OPEN LID	EACH	1	1	-	-	-	-	-	-
60236900	INLETS, TYPE A, TYPE 12 FRAME AND GRATE	EACH	1	1	-	-	-	-	-	-
60252800	CATCH BASINS TO BE RECONSTRUCTED	EACH	4	4	-	-	-	-	-	-
60262700	INLETS TO BE RECONSTRUCTED	EACH	3	3	-	-	-	-	-	-
60300105	FRAMES AND GRATES TO BE ADJUSTED	EACH	5	5	-	-	-	-	-	-
60609200	COMBINATION CONCRETE CURB AND GUTTER, TYPE M-6.12	FOOT	3541	3541	-	-	-	-	-	-
60618300	CONCRETE MEDIAN SURFACE, 4 INCH	SQ FT	18,819	18,819	-	-	-	-	-	-
60619600	CONCRETE MEDIAN, TYPE SB-6.12	SQ FT	738	738	-	-	-	-	-	-
60624600	CORRUGATED MEDIAN	SO FT	193	193	-	-	-	-	-	-
* 63000001	STEEL PLATE BEAM GUARD RAIL, TYPE A, 6 FOOT POSTS	FOOT	638	638	-	-	-	-	-	-
* 63100045	TRAFFIC BARRIER TERMINAL, TYPE 2	EACH	1	1	-	-	-	-	-	-
* 63100070	TRAFFIC BARRIER TERMINAL, TYPE 5	EACH	1	1	-	-	-	-	-	-
* 63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	2	2	-	-	-	-	-	-
* 63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	2	2	-	-	-	-	-	-
63200310	GUARDRAIL REMOVAL	FOOT	397	397	-	-	-	-	-	-
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	7	7	-	-	-	-	-	-
67100100	MOBILIZATION	L SUM	1	1	-	-	-	-	-	-
70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	130	130	-	-	-	-	-	-
70106800	CHANGEABLE MESSAGE SIGN	CAL MO	6	4	-	-	1	1	-	-
70300100	SHORT-TERM PAVEMENT MARKING	FOOT	1616	1616	-	-	-	-	-	-
70300210	TEMPORARY PAVEMENT MARKING - LETTERS AND SYMBOLS	SO FT	146	146	-	-	-	-	-	-
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	37,710	37,710	-	-	-	-	-	-
70300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	775	775	-	-	-	-	-	-
70300250	TEMPORARY PAVEMENT MARKING - LINE 8"	FOOT	1573	1573	-	-	-	-	-	-
70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	372	372	-	-	-	-	-	-
70300520	PAVEMENT MARKING TAPE, TYPE III 4"	FOOT	6010	6010	-	-	-	-	-	-
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SO FT	270	270	-	-	-	-	-	-

\* SPECIALTY ITEM

\* Specialty Item

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**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**GALENA BOULEVARD**

**SUMMARY OF QUANTITIES**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
573	61HB-1-R	KANE	110	5
CONTRACT NO. 60K76				

SCALE: NTS SHEET NO. 3 OF 6 SHEETS STA. TO STA.

**SUMMARY OF QUANTITIES**

CODE NO.	ITEM DESCRIPTION	UNIT	URBAN TOTAL QUANTITY	CONSTRUCTION TYPE CODE						EMERGENCY VEHICLE PREEMPTION
				ROADWAY	STRUCTURES	LIGHTING	TRAFFIC SIGNALS			
							GALENA & IL ROUTE 56 RAMP-C	GALENA & IL ROUTE 56 RAMP A/B	INTERCONNECT	
0004	0011	0021	0021	0021	0021	100% VILLAGE OF SUGAR GROVE				
70400100	TEMPORARY CONCRETE BARRIER	FOOT	803	803	-	-	-	-	-	-
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	769	769	-	-	-	-	-	-
* 78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	73	73	-	-	-	-	-	-
* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	16,324	16,324	-	-	-	-	-	-
* 78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	388	388	-	-	-	-	-	-
* 78000500	THERMOPLASTIC PAVEMENT MARKING - LINE 8"	FOOT	787	787	-	-	-	-	-	-
* 78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	854	854	-	-	-	-	-	-
* 78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	186	186	-	-	-	-	-	-
* 78008210	POLYUREA PAVEMENT MARKING TYPE I - LINE 4"	FOOT	825	825	-	-	-	-	-	-
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	218	218	-	-	-	-	-	-
* 78100105	RAISED REFLECTIVE PAVEMENT MARKER (BRIDGE)	EACH	20	20	-	-	-	-	-	-
* 78200410	GUARDRAIL MARKERS, TYPE A	EACH	11	11	-	-	-	-	-	-
* 78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	3	3	-	-	-	-	-	-
78300100	PAVEMENT MARKING REMOVAL	SQ FT	783	783	-	-	-	-	-	-
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	218	218	-	-	-	-	-	-
* 80500020	SERVICE INSTALLATION - POLE MOUNTED	EACH	2	-	-	-	1	1	-	-
* 81000600	CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	2225	-	-	-	700	950	575	-
* 81000700	CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	155	-	-	-	45	110	-	-
* 81000800	CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL	FOOT	100	-	-	-	35	65	-	-
* 81001000	CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	200	-	-	-	120	80	-	-
* 81018500	CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	620	-	-	200	200	220	-	-
* 81018600	CONDUIT PUSHED, 2 1/2" DIA., GALVANIZED STEEL	FOOT	195	-	-	-	135	60	-	-
* 81018700	CONDUIT PUSHED, 3" DIA., GALVANIZED STEEL	FOOT	100	-	-	-	-	100	-	-
* 81018900	CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	575	-	-	-	245	330	-	-
* 81304100	JUNCTION BOX EMBEDDED IN STRUCTURE 12" X 12" X 6"	EACH	2	-	-	-	-	-	2	-
* 81304900	JUNCTION BOX EMBEDDED IN STRUCTURE 20" X 18" X 10"	EACH	4	-	-	4	-	-	-	-
* 81400100	HANDHOLE	EACH	8	-	-	-	4	4	-	-
* 81400200	HEAVY-DUTY HANDHOLE	EACH	13	-	-	-	5	6	2	-

\* SPECIALTY ITEM

\* Specialty Item

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**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**GALENA BOULEVARD**

**SUMMARY OF QUANTITIES**

SCALE: NTS SHEET NO. 4 OF 6 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
573	61HB-1-R	KANE	110	6
CONTRACT NO. 60K76				

**SUMMARY OF QUANTITIES**

CODE NO.	ITEM DESCRIPTION	UNIT	URBAN TOTAL QUANTITY	CONSTRUCTION TYPE CODE						EMERGENCY VEHICLE PREEMPTION	100% VILLAGE OF SUGAR GROVE
				ROADWAY	STRUCTURES	LIGHTING	TRAFFIC SIGNALS				
							GALENA & IL ROUTE 56 RAMP-C	GALENA & IL ROUTE 56 RAMP A/B	INTERCONNECT		
0004	0011	0021	0021	0021	0021	0021	0021				
* 81400300	DOUBLE HANDHOLE	EACH	2	-	-	-	1	1	-	-	
* 81603090	UNIT DUCT, 600V, 3-1C NO.4, 1/C NO.6 GROUND, (XLP-TYPE USE), 1 1/4" DIA. POLYETHYLENE	FOOT	3200	-	-	3200	-	-	-	-	
* 81702130	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 6	FOOT	1000	-	-	1000	-	-	-	-	
* 81702140	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 4	FOOT	3000	-	-	3000	-	-	-	-	
* 81900200	TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	6070	-	-	3500	875	1120	575	-	
* 82102200	LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, 200 WATT	EACH	4	-	-	4	-	-	-	-	
* 83600350	LIGHT POLE FOUNDATION, METAL, 11" BOLT CIRCLE, 8" X 6'	EACH	1	-	-	1	-	-	-	-	
* 84200500	REMOVAL OF LIGHTING UNIT, SALVAGE	EACH	2	-	-	2	-	-	-	-	
* 84400105	RELOCATE EXISTING LIGHTING UNIT	EACH	10	-	-	10	-	-	-	-	
* 85700200	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET	EACH	1	-	-	-	1	-	-	-	
* 85700300	FULL-ACTUATED CONTROLLER AND TYPE V CABINET	EACH	1	-	-	-	-	1	-	-	
* 86000100	MASTER CONTROLLER	EACH	1	-	-	-	-	-	1	-	
* 86200120	UNINTERRUPTIBLE POWER SUPPLY	EACH	2	-	-	-	1	1	-	-	
* 86400100	TRANSCEIVER - FIBER OPTIC	EACH	2	-	-	-	1	1	-	-	
* 87100020	FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F	FOOT	1350	-	-	-	-	-	1350	-	
* 87300925	ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	1350	-	-	-	-	-	1350	-	
* 87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	760	-	-	-	-	-	-	760	
* 87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	5400	-	-	-	2320	3080	-	-	
* 87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	410	-	-	-	-	410	-	-	
* 87301305	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	4340	-	-	-	2170	2170	-	-	
* 87301805	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	315	-	-	-	125	190	-	-	
* 87301900	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	1970	-	-	-	890	1080	-	-	
* 87502480	<del>TRAFFIC SIGNAL POST, 14 FT.</del> <i>GALVANIZED STEEL</i>	EACH	9	-	-	-	5	4	-	-	
* 87502500	<del>TRAFFIC SIGNAL POST, 16 FT.</del> <i>GALVANIZED STEEL</i>	EACH	2	-	-	-	-	2	-	-	
* 87502520	<del>TRAFFIC SIGNAL POST, 18 FT.</del> <i>GALVANIZED STEEL</i>	EACH	1	-	-	-	1	-	-	-	
* 87700190	STEEL MAST ARM ASSEMBLY AND POLE, 30 FT.	EACH	1	-	-	-	1	-	-	-	
* 87702880	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 30 FT.	EACH	1	-	-	-	1	-	-	-	
* 87702960	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 46 FT.	EACH	1	-	-	-	1	-	-	-	
* 87702980	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 50 FT.	EACH	1	-	-	-	-	1	-	-	

\* SPECIALTY ITEM

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

**GALENA BOULEVARD**

**SUMMARY OF QUANTITIES**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
573	61HB-1-R	KANE	110	7
CONTRACT NO. 60K76				

SCALE: NTS SHEET NO. 5 OF 6 SHEETS STA. TO STA.

FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT

**SUMMARY OF QUANTITIES**

CODE NO.	ITEM DESCRIPTION	UNIT	URBAN TOTAL QUANTITY	CONSTRUCTION TYPE CODE						
				ROADWAY	STRUCTURES	LIGHTING	TRAFFIC SIGNALS			EMERGENCY VEHICLE PREEMPTION
							GALENA & IL ROUTE 56 RAMP-C	GALENA & IL ROUTE 56 RAMP A/B	INTERCONNECT	
0004	0011	0021	0021	0021	0021	0021	100% VILLAGE OF SUGAR GROVE 0021			
* 87704516	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 48 FT. AND 30 FT.	EACH	1	-	-	-	-	1	-	-
* 87800100	CONCRETE FOUNDATION, TYPE A	FOOT	48	-	-	-	24	24	-	-
* 87800150	CONCRETE FOUNDATION, TYPE C	FOOT	8	-	-	-	4	4	-	-
* 87800400	CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	20	-	-	-	20	-	-	-
* 87800415	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	42	-	-	-	13	29	-	-
* 88030020	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	12	-	-	-	6	6	-	-
* 88030050	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	10	-	-	-	6	4	-	-
* 88030210	SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2	-	-	-	1	1	-	-
* 88030240	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	2	-	-	-	-	2	-	-
* 88200210	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	12	-	-	-	6	6	-	-
* 88500100	INDUCTIVE LOOP DETECTOR	EACH	15	-	-	-	7	8	-	-
* 88600100	DETECTOR LOOP, TYPE 1	FOOT	895	-	-	-	385	510	-	-
* 88700200	LIGHT DETECTOR	EACH	4	-	-	-	-	-	-	4
* 88700300	LIGHT DETECTOR AMPLIFIER	EACH	2	-	-	-	-	-	-	2
X2070304	POROUS GRANULAR EMBANKMENT, SPECIAL	CU YD	312	-	312	-	-	-	-	-
Δ X5539700	STORM SEWERS TO BE CLEANED	FOOT	410	410	-	-	-	-	-	-
X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1	1	-	-	-	-	-	-
* X8180060	AERIAL CABLE, 3-1/C NO. 2, ALUMINUM, WITH MESSENGER WIRE	FOOT	150	-	-	150	-	-	-	-
* X8730250	ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED	FOOT	760	-	-	-	-	-	-	760
Z0001050	AGGREGATE SUBGRADE 12"	SQ YD	793	793	-	-	-	-	-	-
Z0001899	JACK AND REMOVE EXISTING BEARINGS	EACH	65	-	65	-	-	-	-	-
Z0001903	STRUCTURAL STEEL REMOVAL	POUND	7980	-	7980	-	-	-	-	-
Z0003500	BEAM STRAIGHTENING	EACH	3	-	3	-	-	-	-	-
Z0004552	APPROACH SLAB REMOVAL	SQ YD	574	-	574	-	-	-	-	-
Z0007112	CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES	L SUM	1	-	1	-	-	-	-	-
Z0010501	CLEANING AND PAINTING STEEL BRIDGE NO. 1	L SUM	1	-	1	-	-	-	-	-
Z0012754	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SO FT	292	-	292	-	-	-	-	-

Δ NON-PARTICIPATING (100% STATE)  
\* Specialty Items

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**STATE OF ILLINOIS  
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**GALENA BOULEVARD**

**SUMMARY OF QUANTITIES**

SCALE: NTS SHEET NO. 6 OF 6 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
573	61HB-1-R	KANE	110	8
CONTRACT NO. 60K76				

**SUMMARY OF QUANTITIES**

CODE NO.	ITEM DESCRIPTION	UNIT	URBAN TOTAL QUANTITY	CONSTRUCTION TYPE CODE						EMERGENCY VEHICLE PREEMPTION
				ROADWAY	STRUCTURES	LIGHTING	TRAFFIC SIGNALS			
							GALENA & IL ROUTE 56 RAMP-C	GALENA & IL ROUTE 56 RAMP A/B	INTERCONNECT	
0004	0011	0021	0021	0021	0021	100% VILLAGE OF SUGAR GROVE				
Z0012755	STRUCTURAL REPAIR OF CONCRETE (DEPTH GREATER THAN 5 INCHES)	SO FT	20	-	20	-	-	-	-	-
Z0013798	CONSTRUCTION LAYOUT	L SUM	1	-	1	-	-	-	-	-
Z0018002	DRAINAGE SCUPPERS, DS-11	EACH	16	-	16	-	-	-	-	-
Z0018004	DRAINAGE SCUPPERS, DS-12	EACH	1	-	1	-	-	-	-	-
Δ Z0018500	DRAINAGE STRUCTURES TO BE CLEANED	EACH	9	9	-	-	-	-	-	-
Z0018800	DRAINAGE SYSTEM	L SUM	1	-	1	-	-	-	-	-
<del>Z0024478</del>	<del>FLEXIBLE DELINEATORS</del>	<del>EACH</del>	<del>9</del>	<del>9</del>						
Z0026407	TEMPORARY SHEET PILING	SO FT	336	-	336	-	-	-	-	-
* Z0030250	IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 3	EACH	1	1	-	-	-	-	-	-
* Z0030350	IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE), TEST LEVEL 3	EACH	1	1	-	-	-	-	-	-
Z0030850	TEMPORARY INFORMATION SIGNING	SO FT	104	104	-	-	-	-	-	-
Z0031200	JACKING AND CRIBBING	EACH	4	-	4	-	-	-	-	-
* Z0033020	LUMINAIRE SAFETY CABLE ASSEMBLY	EACH	1	-	-	1	-	-	-	-
* Z0033056	OPTIMIZE TRAFFIC SIGNAL SYSTEM	EACH	1	-	-	-	-	1	-	-
Z0046304	PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	233	-	233	-	-	-	-	-
Z0062456	TEMPORARY PAVEMENT	SO YD	1395	1395	-	-	-	-	-	-
<del>X8361005</del>	<del>RELOCATE EXISTING LIGHT POLE FOUNDATION</del>	<del>EACH</del>	<del>10</del>		<del>10</del>					

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\* Specialty Items

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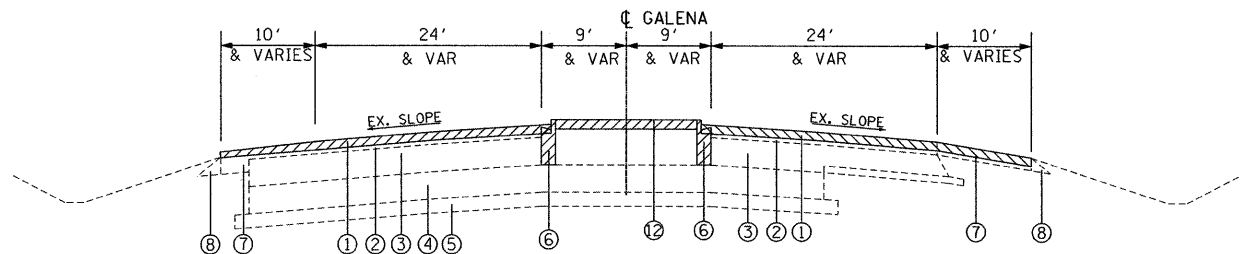
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**GALENA BOULEVARD**

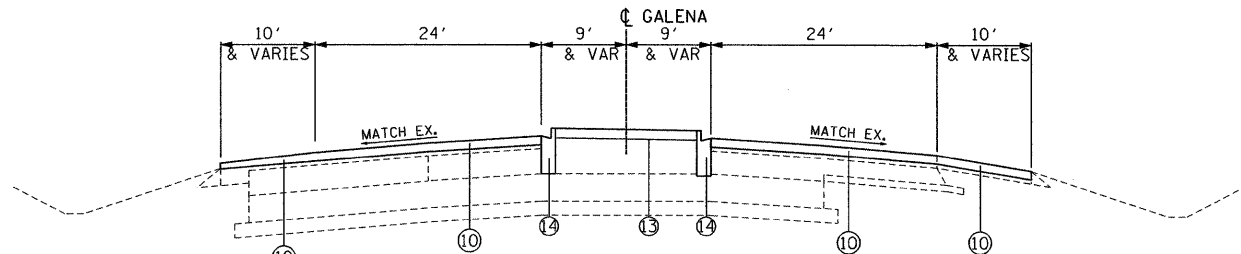
SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
573	61HB-1-R	KANE	110	8A
CONTRACT NO. 60K76				

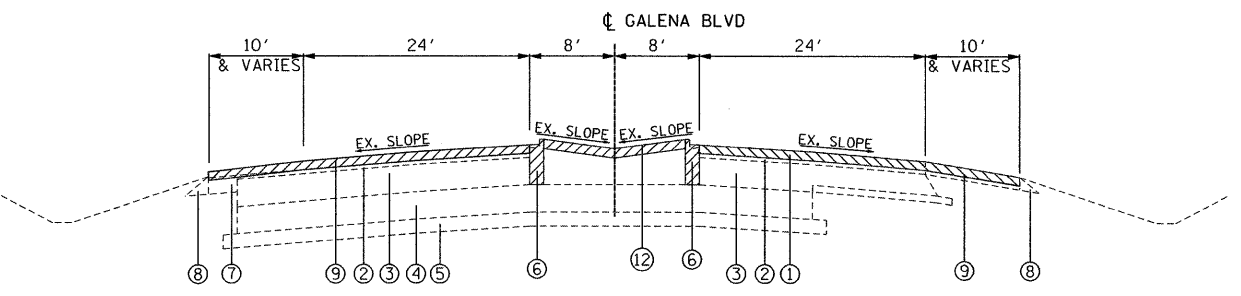
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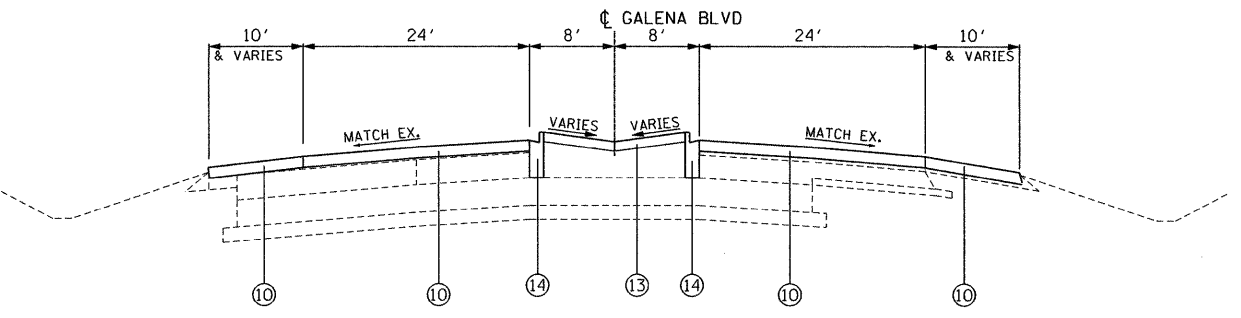
**EXISTING TYPICAL SECTION**  
 STA. 187+60 TO STA. 189+00  
 STA. 209+00 TO STA. 210+20



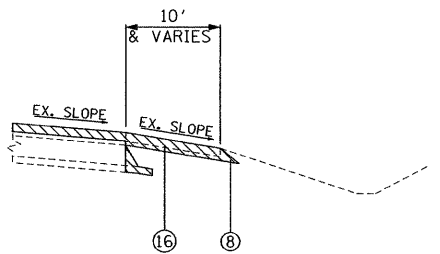
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 STA. 187+60 TO STA. 189+00  
 STA. 209+00 TO STA. 210+20



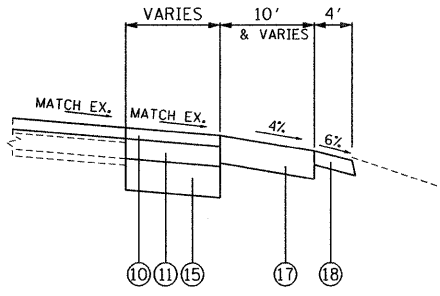
**EXISTING TYPICAL SECTION**  
 STA. 189+00 TO STA. 197+18  
 STA. 200+30.65 TO STA. 209+00



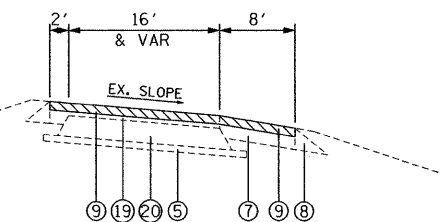
**PROPOSED TYPICAL SECTION**  
 STA. 196+00 TO STA. 197+18  
 STA. 200+30.65 TO STA. 202+00



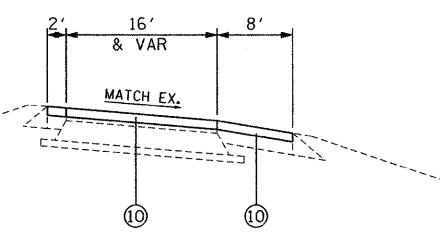
**EXISTING WIDENING SECTION**  
 SEE PLAN SHEET FOR LOCATIONS



**PROPOSED WIDENING SECTION**  
 STA. 190+60.6 TO 192+33.1 LT  
 STA. 205+17.9 TO 207+02.3 LT  
 STA. 205+33.5 TO 207+11.3 RT



**EXISTING RAMP TYPICAL SECTION**  
 RAMP A 117+00 TO 120+00  
 RAMP B 100+00 TO 105+00  
 RAMP C 100+00 TO 106+00  
 RAMP D 103+25 TO 107+00



**PROPOSED RAMP TYPICAL SECTION**  
 RAMP A 117+00 TO 120+00  
 RAMP B 100+00 TO 105+00  
 RAMP C 100+00 TO 106+00  
 RAMP D 103+25 TO 107+00

**LEGEND**

- ① EXISTING +/- 1 1/2" HMA SURFACE COURSE
- ② EXISTING +/- 1 1/2" HMA BINDER COURSE
- ③ EXISTING STABILIZED BASE CSE., 8" & VAR.
- ④ EXISTING +/- 10" P.C.C. BASE
- ⑤ EXISTING SUB BASE
- ⑥ EXISTING COMBINATION CURB AND GUTTER REMOVAL
- ⑦ EXISTING BITUMINOUS SHOULDER +/- 8"
- ⑧ EXISTING +/- 8" AGGREGATE SHOULDER, TYPE B
- ⑨ HMA SURFACE REMOVAL - 2"
- ⑩ POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90 - 2"
- ⑪ HOT MIX ASPHALT BASE COURSE WIDENING, 9" (3 LIFTS)
- ⑫ EXISTING MEDIAN REMOVAL
- ⑬ PROPOSED CONCRETE MEDIAN SURFACE, 4"
- ⑭ PROPOSED COMBINATION CONCRETE CURB AND GUTTER M-6.12
- ⑮ AGGREGATE SUBGRADE 12"
- ⑯ PAVED SHOULDER REMOVAL
- ⑰ HOT MIX ASPHALT SHOULDERS, 8" (2 LIFTS)
- ⑱ AGGREGATE SHOULDER TYPE B, 6"
- ⑲ EXISTING +/- 3" HMA
- ⑳ EXISTING +/- 8" PCC BASE

**PAVEMENT DESIGN DATA**

STRUCTURAL DESIGN TRAFFIC: YEAR 2021  
 PV= 937 SU = 132 MU = 132  
 ROAD/STREET CLASSIFICATION: CLASS I  
 PERCENT OF STRUCTURAL DESIGN TRAFFIC IN DESIGN LANE:  
 P = 32% S = 45% M = 45%  
 TRAFFIC FACTOR: ACTUAL TF = 0.72  
 MINIMUM TF = 2.13  
 STRUCTURE NUMBER (SNc) = 4.73

**HOT-MIX ASPHALT MIXTURE REQUIREMENTS**

MIXTURE TYPE	AIR VOIDS @ Ndes
PAVEMENT / SHOULDER RESURFACING	
POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90 (IL-9.5 mm)	4% @ 90 GYR.
LEVELING BINDER (MACHINE METHOD), N70	4% @ 70 GYR.
TEMPORARY PAVEMENT*	
TEMP PAVEMENT (HMA BINDER IL-19 mm); 9"	4% @ 50 GYR.
HMA SURFACE COURSE, MIX "D", N50 (IL 9.5 mm); 2"	4% @ 50 GYR.
PAVEMENT WIDENING / PATCHING	
HMA BASE COURSE WIDENING 9" (HMA BINDER IL-19MM)	4% @ 70 GYR.
CLASS D PATCHES (HMA BINDER IL-19MM)	4% @ 70 GYR.
HMA REPLACEMENT OVER PATCHES (HMA BINDER IL-19MM)	4% @ 70 GYR.
SHOULDER	
HMA SHOULDER (HMA BINDER IL-19 mm)	3% @ 50 GYR.

- MIXTURE NOTES:  
 1. THE UNIT WEIGHT USED TO CALCULATE ALL HOT-MIX ASPHALT SURFACE MIXTURE QUANTITIES IS 112 LBS/SQ YD/IN.  
 2. THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 70-22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS. FOR "PERCENT OF RAP" SEE DISTRICT ONE SPECIAL PROVISIONS.  
 3. IF CONTRACTOR CHOOSES TO USE CONCRETE THE THICKNESS WILL BE 10" PC CONCRETE TEMPORARY PAVEMENT SHALL CONSIST OF CLASS PV CONCRETE MEETING THE REQUIREMENTS OF ART. 1020 OF THE STANDARD SPECIFICATIONS, TYPICALLY 10" THICK.

**NOTES**

- 1. THE CONTRACTOR SHALL PATCH BEFORE MILLING. SEE IDOT DISTRICT 1 DETAIL PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT BD-400-04 (BD-22) FOR ADDITIONAL INFORMATION.
- 2. THE LEVELING BINDER SHALL BE USED TO SMOOTH OUT THE PROFILE AS SHOWN ON PLAN AND PROFILE SHEETS. THICKNESS VARIES 3/4" MIN. TO 2 1/4" MAX.

FILE NAME = P:\2010\ME10012.PTB156-16.Galena\CADD\Shots\04-shr-TYP.dgn  
 PLOT SCALE = 1/8"=1'-0"  
 USER NAME = Millennium Professional Services



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DATE - 8/31/2011	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**GALENA BOULEVARD**

**MAINLINE TYPICAL SECTIONS**

SCALE: SHEET NO. 1 OF 1 SHEETS

STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
573	61HB-1-R	KANE	110	9
CONTRACT NO. 60K76				

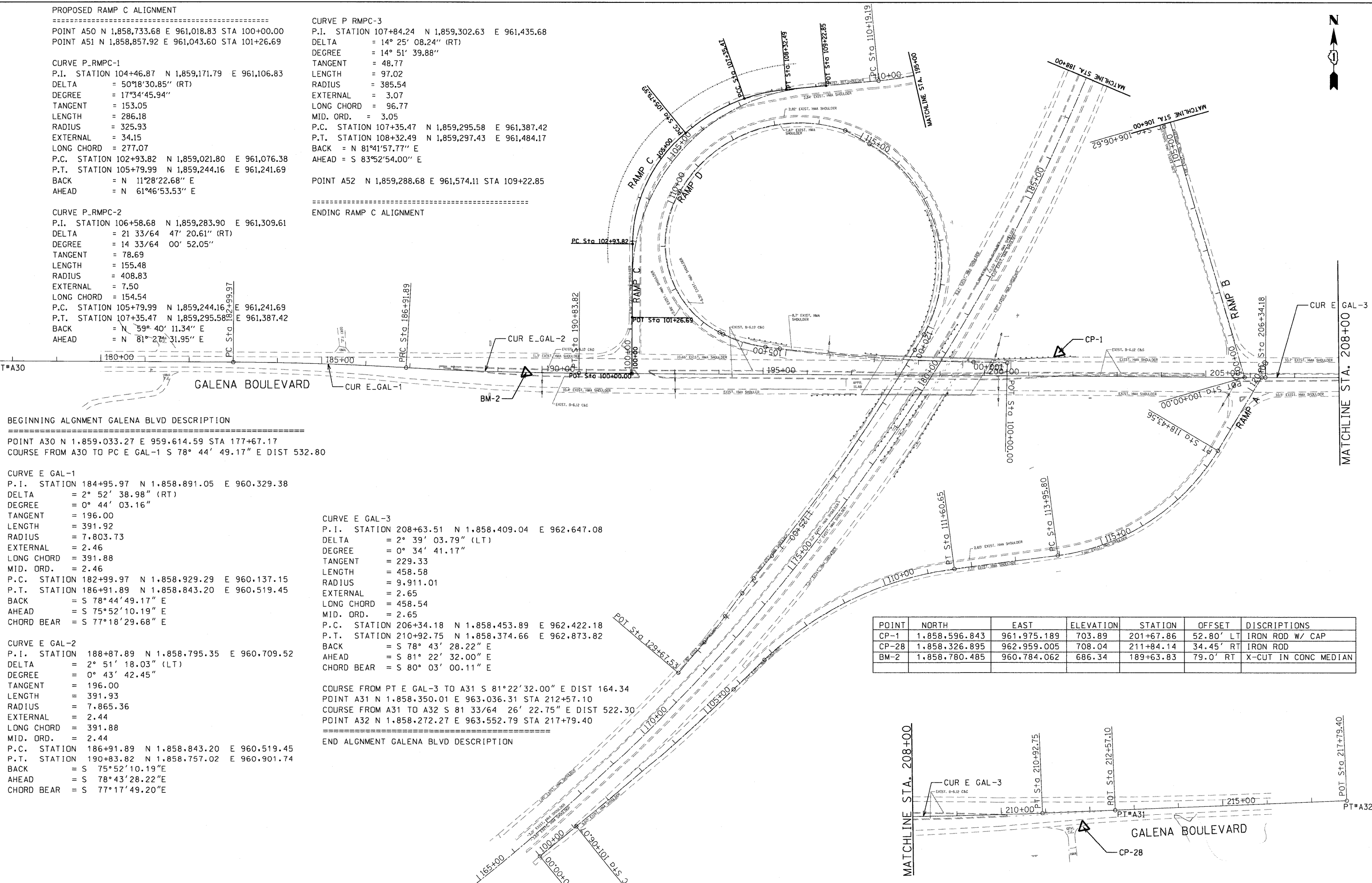
PROPOSED RAMP C ALIGNMENT  
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 POINT A50 N 1,858,733.68 E 961,018.83 STA 100+00.00  
 POINT A51 N 1,858,857.92 E 961,043.60 STA 101+26.69

CURVE P\_RMPC-1  
 P.I. STATION 104+46.87 N 1,859,171.79 E 961,106.83  
 DELTA = 50°18'30.85" (RT)  
 DEGREE = 17°34'45.94"  
 TANGENT = 153.05  
 LENGTH = 286.18  
 RADIUS = 325.93  
 EXTERNAL = 34.15  
 LONG CHORD = 277.07  
 P.C. STATION 102+93.82 N 1,859,021.80 E 961,076.38  
 P.T. STATION 105+79.99 N 1,859,244.16 E 961,241.69  
 BACK = N 11°28'22.68" E  
 AHEAD = N 61°46'53.53" E

CURVE P\_RMPC-3  
 P.I. STATION 107+84.24 N 1,859,302.63 E 961,435.68  
 DELTA = 14° 25' 08.24" (RT)  
 DEGREE = 14° 51' 39.88"  
 TANGENT = 48.77  
 LENGTH = 97.02  
 RADIUS = 385.54  
 EXTERNAL = 3.07  
 LONG CHORD = 96.77  
 MID. ORD. = 3.05  
 P.C. STATION 107+35.47 N 1,859,295.58 E 961,387.42  
 P.T. STATION 108+32.49 N 1,859,297.43 E 961,484.17  
 BACK = N 81°41'57.77" E  
 AHEAD = S 83°52'54.00" E

CURVE P\_RMPC-2  
 P.I. STATION 106+58.68 N 1,859,283.90 E 961,309.61  
 DELTA = 21 33/64 47' 20.61" (RT)  
 DEGREE = 14 33/64 00' 52.05"  
 TANGENT = 78.69  
 LENGTH = 155.48  
 RADIUS = 408.83  
 EXTERNAL = 7.50  
 LONG CHORD = 154.54  
 P.C. STATION 105+79.99 N 1,859,244.16 E 961,241.69  
 P.T. STATION 107+35.47 N 1,859,295.58 E 961,387.42  
 BACK = N 59° 40' 11.34" E  
 AHEAD = N 81° 27' 31.95" E

POINT A52 N 1,859,288.68 E 961,574.11 STA 109+22.85  
 =====  
 ENDING RAMP C ALIGNMENT



BEGINNING ALIGNMENT GALENA BLVD DESCRIPTION

POINT A30 N 1,859,033.27 E 959,614.59 STA 177+67.17  
 COURSE FROM A30 TO PC E GAL-1 S 78° 44' 49.17" E DIST 532.80

CURVE E GAL-1  
 P.I. STATION 184+95.97 N 1,858,891.05 E 960,329.38  
 DELTA = 2° 52' 38.98" (RT)  
 DEGREE = 0° 44' 03.16"  
 TANGENT = 196.00  
 LENGTH = 391.92  
 RADIUS = 7,803.73  
 EXTERNAL = 2.46  
 LONG CHORD = 391.88  
 MID. ORD. = 2.46  
 P.C. STATION 182+99.97 N 1,858,929.29 E 960,137.15  
 P.T. STATION 186+91.89 N 1,858,843.20 E 960,519.45  
 BACK = S 78° 44' 49.17" E  
 AHEAD = S 75° 52' 10.19" E  
 CHORD BEAR = S 77° 18' 29.68" E

CURVE E GAL-3  
 P.I. STATION 208+63.51 N 1,858,409.04 E 962,647.08  
 DELTA = 2° 39' 03.79" (LT)  
 DEGREE = 0° 34' 41.17"  
 TANGENT = 229.33  
 LENGTH = 458.58  
 RADIUS = 9,911.01  
 EXTERNAL = 2.65  
 LONG CHORD = 458.54  
 MID. ORD. = 2.65  
 P.C. STATION 206+34.18 N 1,858,453.89 E 962,422.18  
 P.T. STATION 210+92.75 N 1,858,374.66 E 962,873.82  
 BACK = S 78° 43' 28.22" E  
 AHEAD = S 81° 22' 32.00" E  
 CHORD BEAR = S 80° 03' 00.11" E

CURVE E GAL-2  
 P.I. STATION 188+87.89 N 1,858,795.35 E 960,709.52  
 DELTA = 2° 51' 18.03" (LT)  
 DEGREE = 0° 43' 42.45"  
 TANGENT = 196.00  
 LENGTH = 391.93  
 RADIUS = 7,865.36  
 EXTERNAL = 2.44  
 LONG CHORD = 391.88  
 MID. ORD. = 2.44  
 P.C. STATION 186+91.89 N 1,858,843.20 E 960,519.45  
 P.T. STATION 190+83.82 N 1,858,757.02 E 960,901.74  
 BACK = S 75° 52' 10.19" E  
 AHEAD = S 78° 43' 28.22" E  
 CHORD BEAR = S 77° 17' 49.20" E

COURSE FROM PT E GAL-3 TO A31 S 81°22'32.00" E DIST 164.34  
 POINT A31 N 1,858,350.01 E 963,036.31 STA 212+57.10  
 COURSE FROM A31 TO A32 S 81 33/64 26' 22.75" E DIST 522.30  
 POINT A32 N 1,858,272.27 E 963,552.79 STA 217+79.40  
 =====  
 END ALIGNMENT GALENA BLVD DESCRIPTION

POINT	NORTH	EAST	ELEVATION	STATION	OFFSET	DISCRIPTIONS
CP-1	1,858,596.843	961,975.189	703.89	201+67.86	52.80' LT	IRON ROD W/ CAP
CP-28	1,858,326.895	962,959.005	708.04	211+84.14	34.45' RT	IRON ROD
BM-2	1,858,780.485	960,784.062	686.34	189+63.83	79.0' RT	X-CUT IN CONC MEDIAN

FILE NAME = P:\2010\ME\0012\_PTB156-16\Galena\CADD\Shets\0160K76-Sht-A1.dgn  
 PLOT SCALE = 1/8" = 1'-0"  
 USER NAME = Millennia Professional Services

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DATE - 8/29/2011	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**GALENA BOULEVARD**

**ALIGNMENTS & TIES PLAN**





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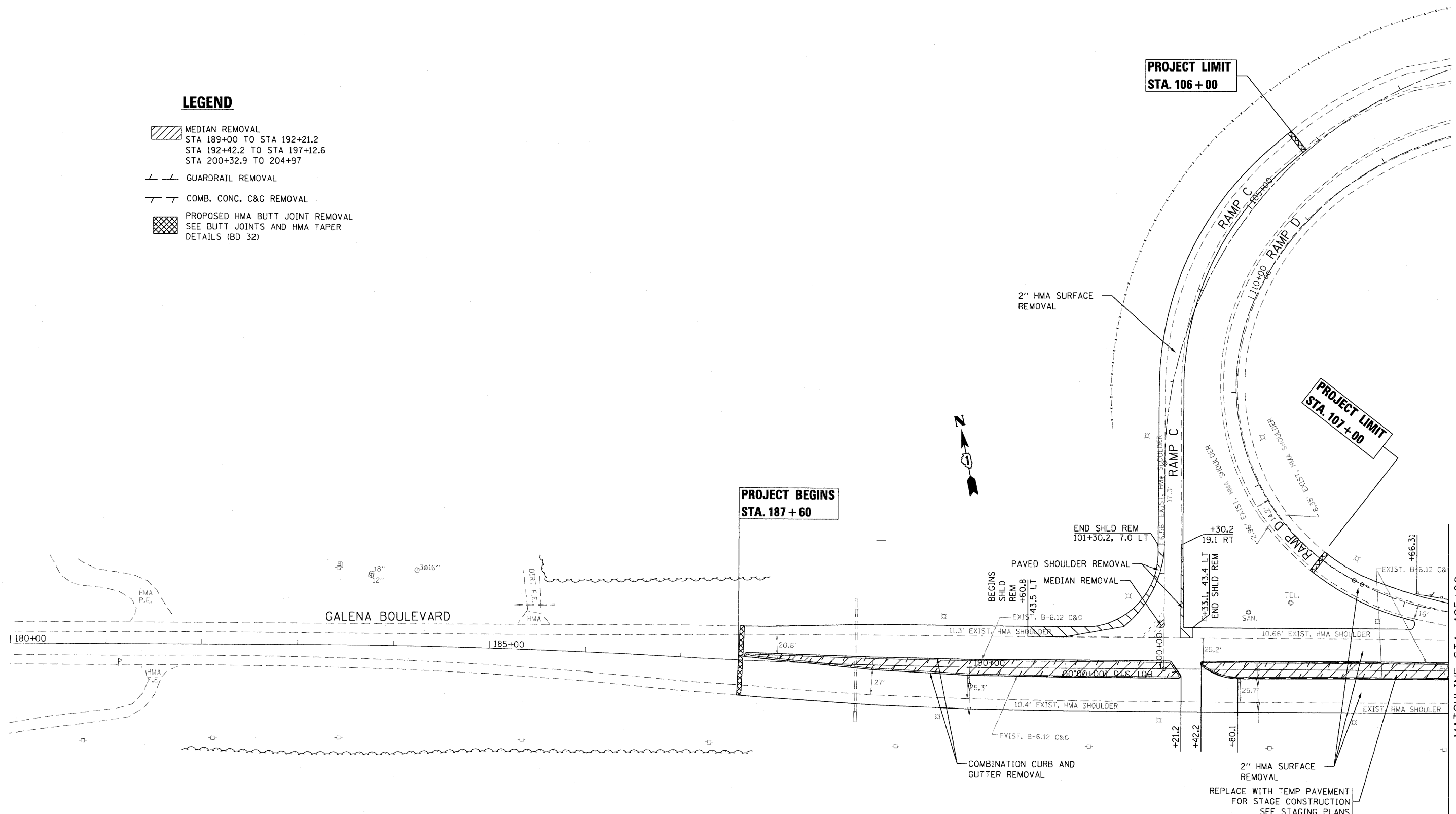
F.A.P. RTE. 573	SECTION 61HB-1-R	COUNTY KANE	TOTAL SHEETS 110	SHEET NO. 10
CONTRACT NO. 60K76				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				


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**LEGEND**

-  MEDIAN REMOVAL  
STA 189+00 TO STA 192+21.2  
STA 192+42.2 TO STA 197+12.6  
STA 200+32.9 TO 204+97
-  GUARDRAIL REMOVAL
-  COMB. CONC. C&G REMOVAL
-  PROPOSED HMA BUTT JOINT REMOVAL  
SEE BUTT JOINTS AND HMA TAPER  
DETAILS (BD 32)



 HMA BUTT JOINT REMOVAL

FILE NAME = P:\2010\ME10012-PTB155-16-Galena\CADD\Shets\160K76-Shetrem01.dgn  
 PLOT SCALE = 50.0000 / 1 IN.  
 USER NAME = Millennium Professional Services



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DATE - 8/29/2011	REVISED -

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**GALENA BOULEVARD**





**REMOVAL PLANS**

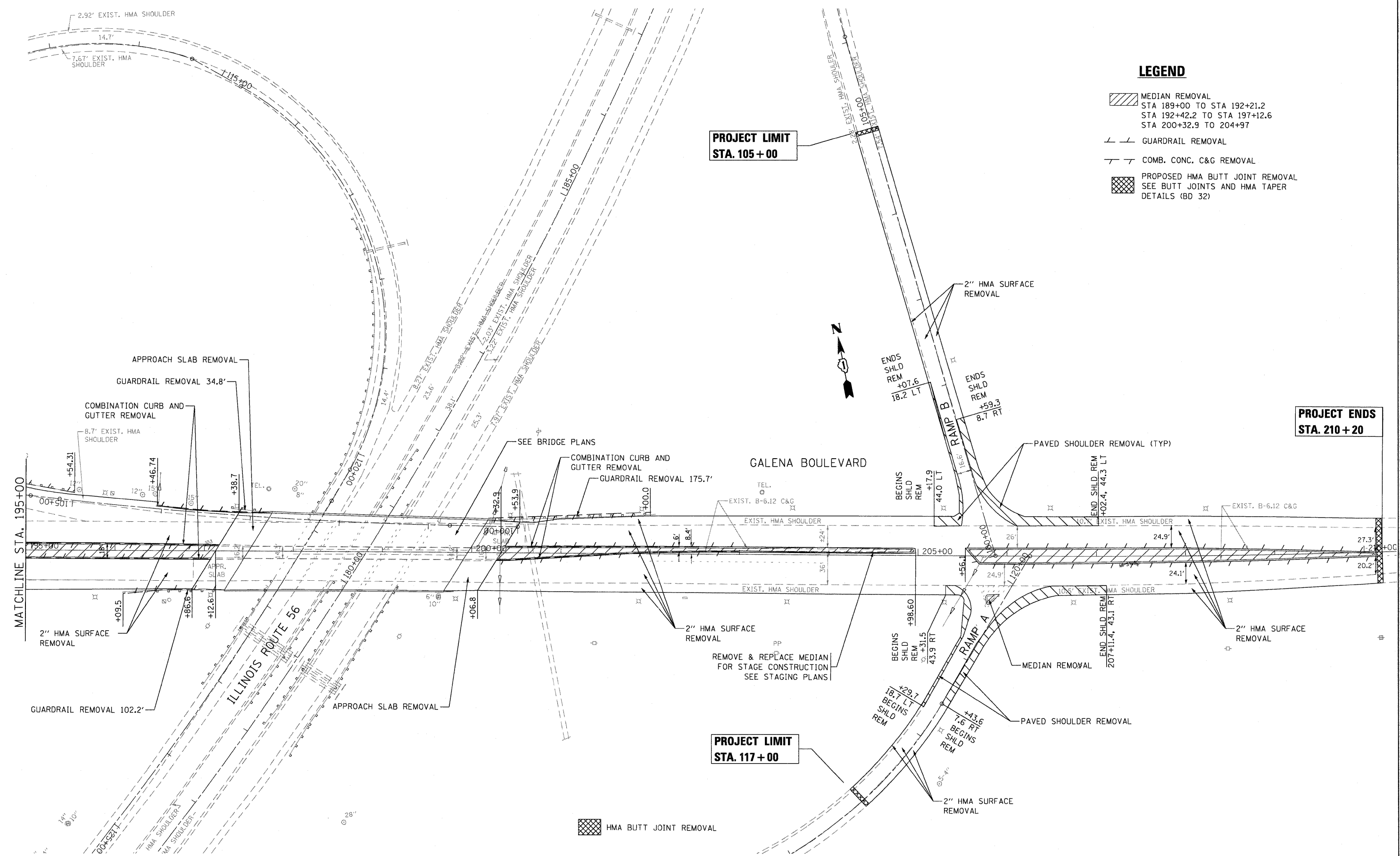
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F.A.P. RTE. 573	SECTION 61HB-1-R	COUNTY KANE	TOTAL SHEETS 110	SHEET NO. 11
CONTRACT NO. 60K76				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

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**LEGEND**

-  MEDIAN REMOVAL  
STA 189+00 TO STA 192+21.2  
STA 192+42.2 TO STA 197+12.6  
STA 200+32.9 TO 204+97
-  GUARDRAIL REMOVAL
-  COMB. CONC. C&G REMOVAL
-  PROPOSED HMA BUTT JOINT REMOVAL  
SEE BUTT JOINTS AND HMA TAPER  
DETAILS (BD 32)




**PROJECT LIMIT  
STA. 105 + 00**

**PROJECT ENDS  
STA. 210 + 20**

**PROJECT LIMIT  
STA. 117 + 00**

FILE NAME = P:\2010\ME\10012.PT8156-16.Galena\CADD\Shets\160676-Sht-r-em02.dgn  
 PLOT SCALE = 50.0000 / 1 IN.  
 USER NAME = Millennium Professional Services



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DATE - 8/29/2011	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

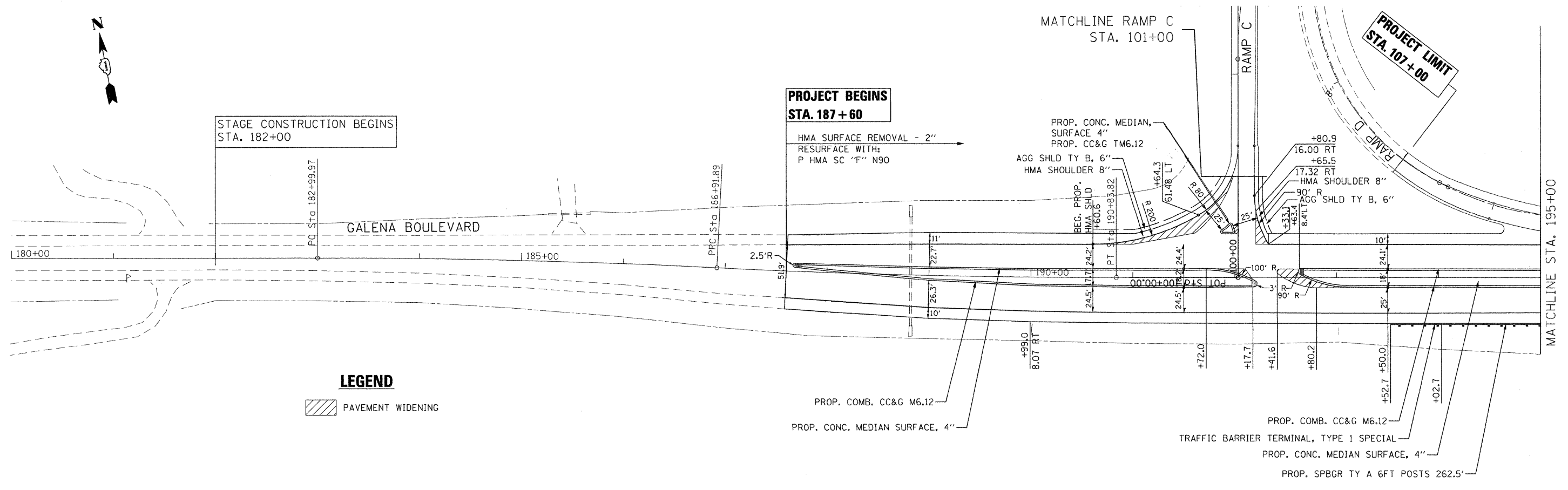
**GALENA BOULEVARD**

**REMOVAL PLANS**

SCALE: 1"=50' SHEET NO. 2 OF 2 SHEETS STA. 195+00 TO STA. 209+00

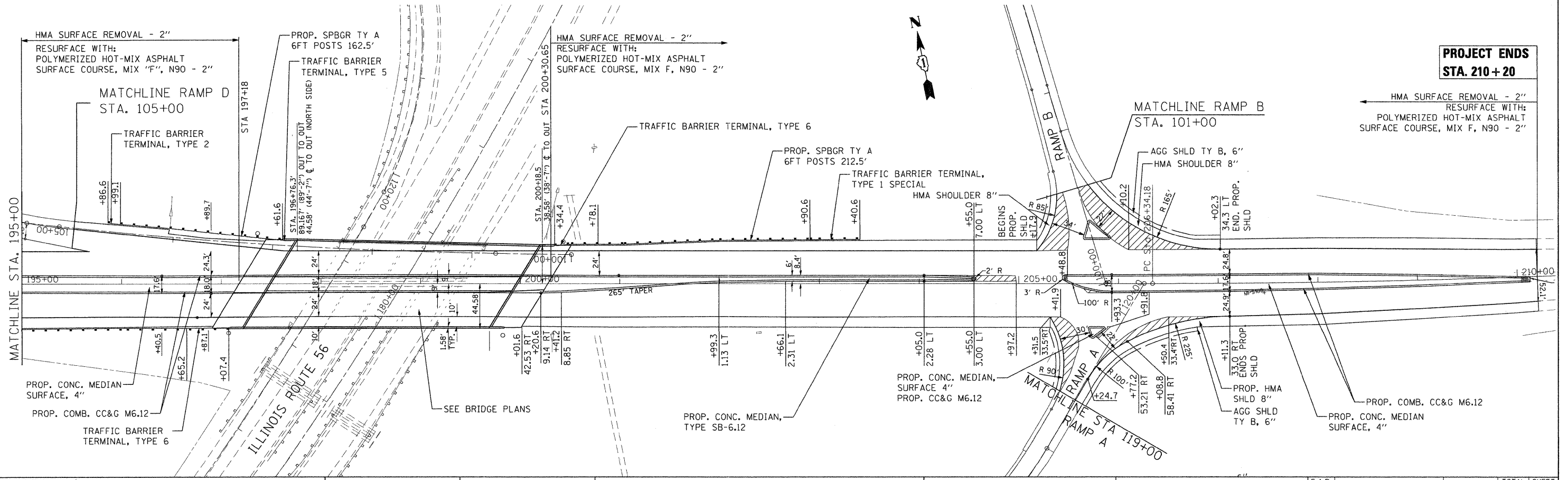
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
573	61HB-1-R	KANE	110	12
CONTRACT NO. 60K76				

FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT  
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**LEGEND**

PAVEMENT WIDENING



FILE NAME = P:\2010\MEI0012\_PTB156-16\_Galena\CADD\Shs\1060K76-Shs-plan01.dgn  
 USER NAME = Millennium Professional Services



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DRAWN - CJD	REVISED -
CHECKED - TVN	REVISED -
DATE - 9/22/2011	REVISED -

**STATE OF ILLINOIS**  
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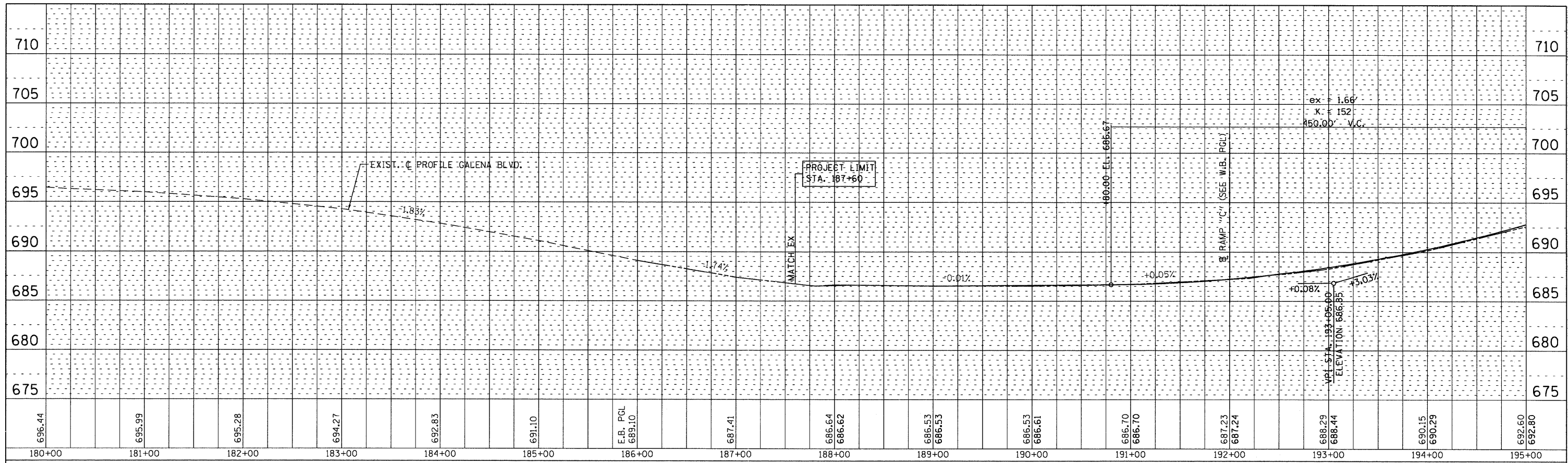
**GALENA BOULEVARD**  
**MAINLINE PROPOSED PLAN**

SCALE: 1"=50'    SHEET NO. 1 OF 1 SHEETS    STA. 189+00 TO STA. 209+00

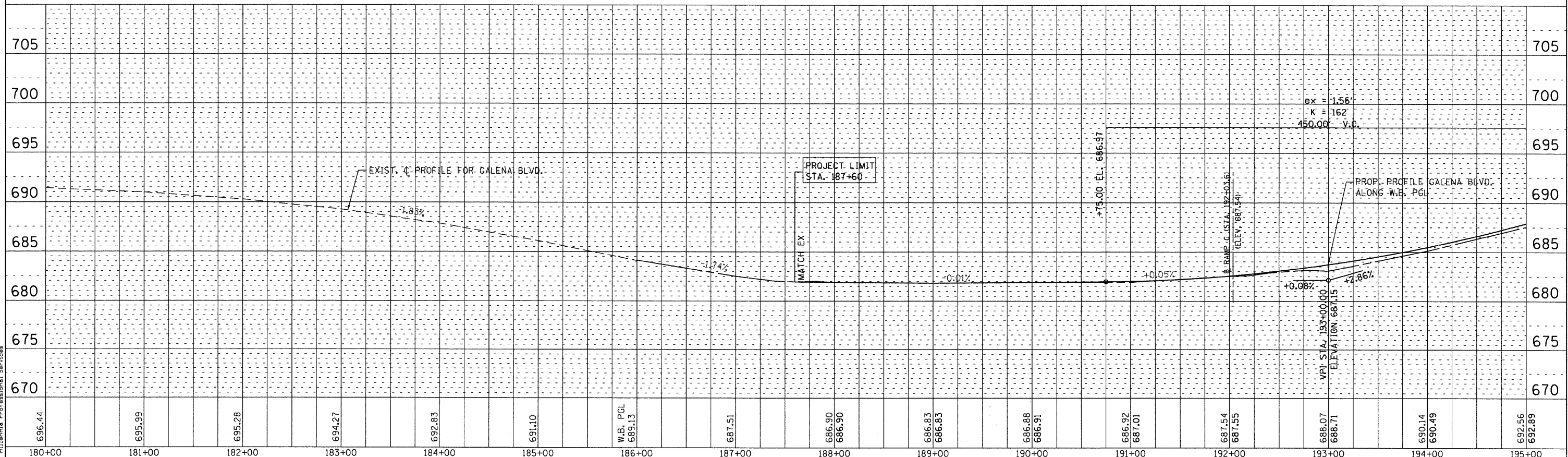
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CONTRACT NO. 60K76				
FED. ROAD DIST. NO. 1   ILLINOIS FED. AID PROJECT				

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PLAN	DATE
NO.	BY
CHECKED	DATE
DATE	BY



PROFILE	DATE
NO.	BY
CHECKED	DATE
DATE	BY



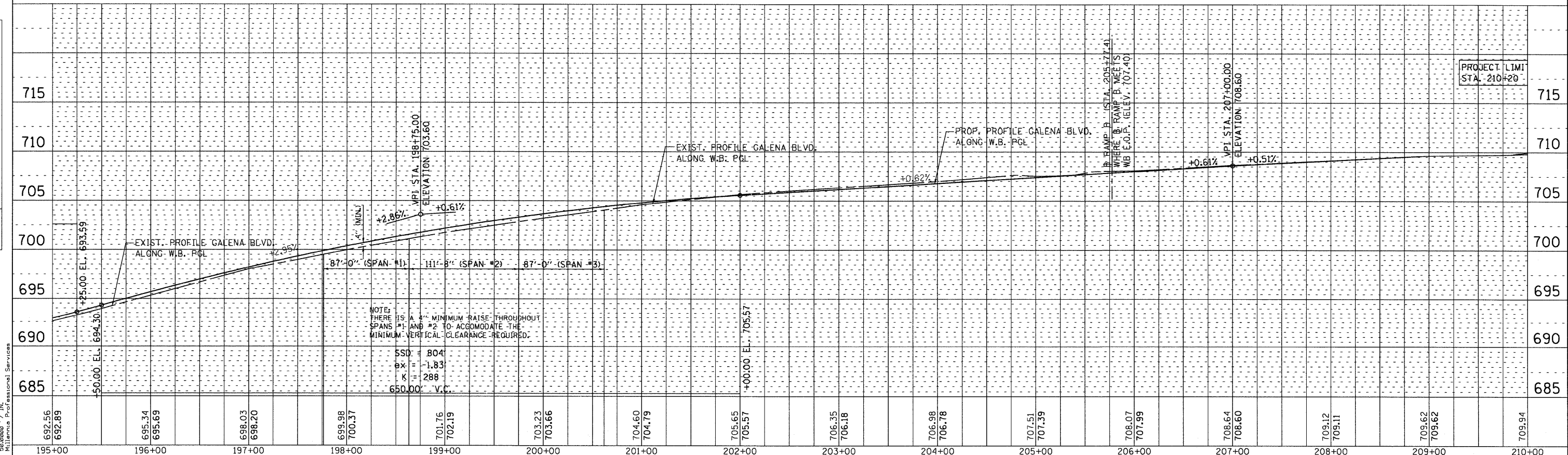
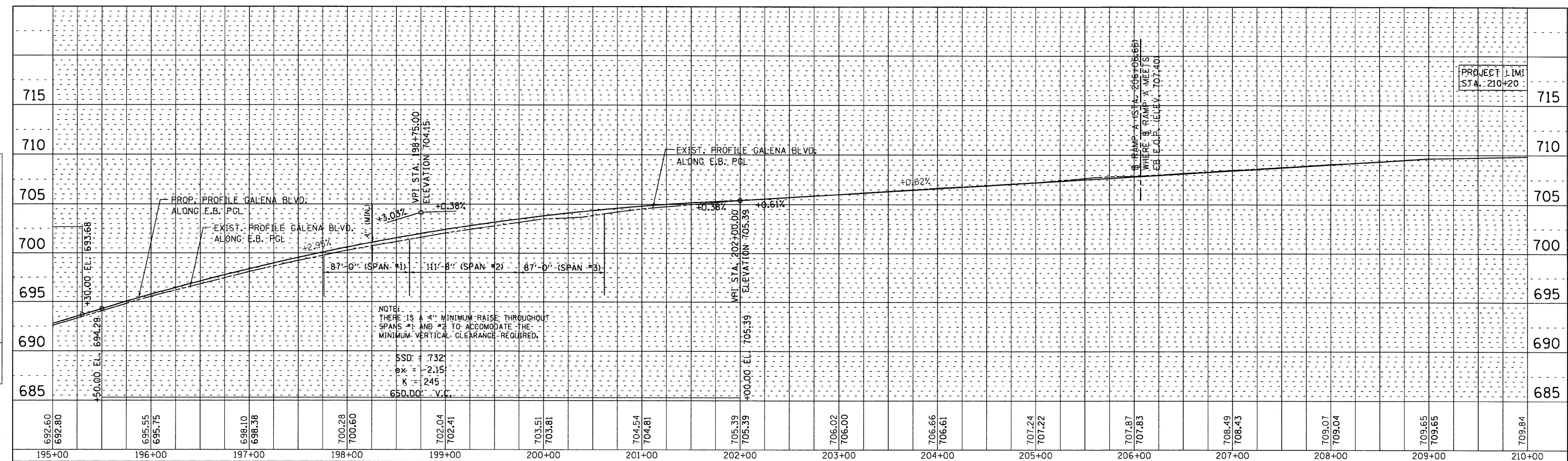
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 PLOT SCALE = 50.0000' / IN.  
 USER NAME = Millennium Professional Services

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DRAWN - CJD	REVISED -				CONTRACT NO. 60K76				
CHECKED - TVN	REVISED -				FED. ROAD DIST. NO. 1 [ILLINOIS] FED. AID PROJECT				
DATE - 8/29/2011	REVISED -				SCALE: 1"=50' SHEET NO. 1 OF 2 SHEETS STA. 189+00 TO STA. 195+00				

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PLAN	SURVEYED	BY	DATE
NOTE BOOK	ALIGNED		
NO.	RT. OF WAY CHECKED		
	DWG. FILE NAME		

PROFILE	SURVEYED	BY	DATE
NOTE BOOK	GRADES CHECKED		
NO.	BLK. NOTED		
	STRUCTURE NOTATIONS		



FILE NAME: P:\2010\ME\0812\_P18156-16\_Galena\CADD\Shots\18156-16\_Sht-Profile.dgn  
 PLOT SCALE: 5/8"=1'-0"  
 USER NAME: Millennium Professional Services

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DESIGNED	-	CJD	REVISED	-
DRAWN	-	CJD	REVISED	-
CHECKED	-	TVN	REVISED	-
DATE	-	8/29/2011	REVISED	-

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**GALENA BOULEVARD**

**PROFILE PLAN  
EB & WB PGL**

SCALE: 1"=50' SHEET NO. 2 OF 2 SHEETS STA. 195+00 TO STA. 209+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
573	61HB-1-R	KANE	110	15
CONTRACT NO. 60K76				

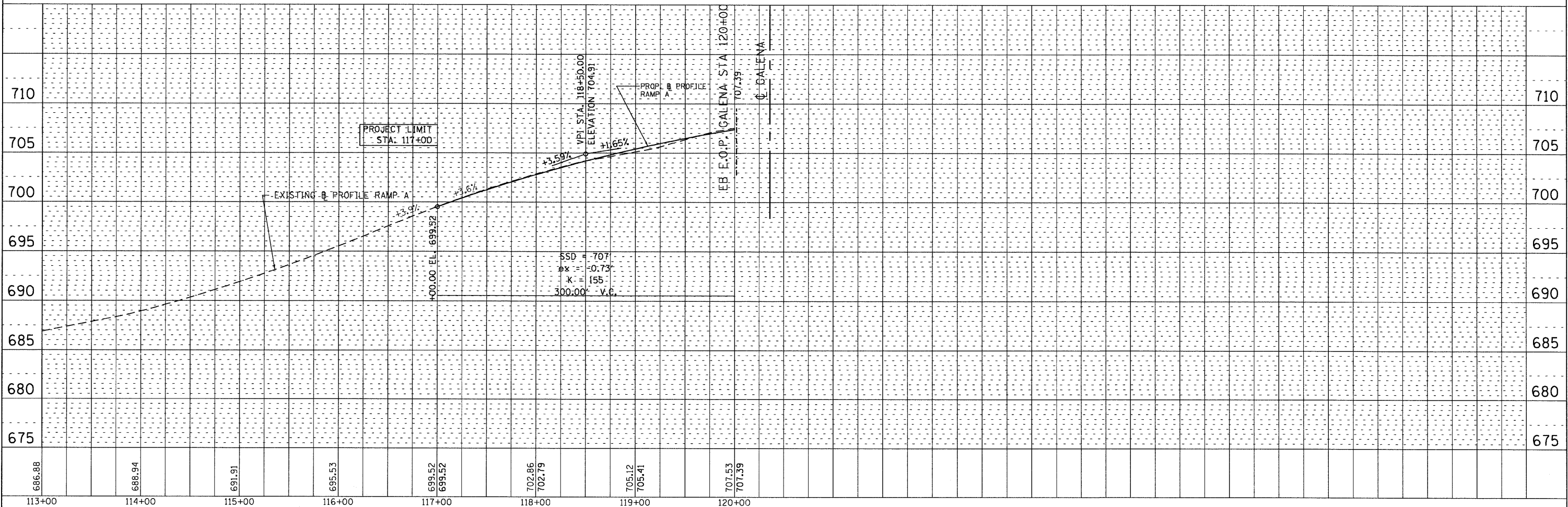
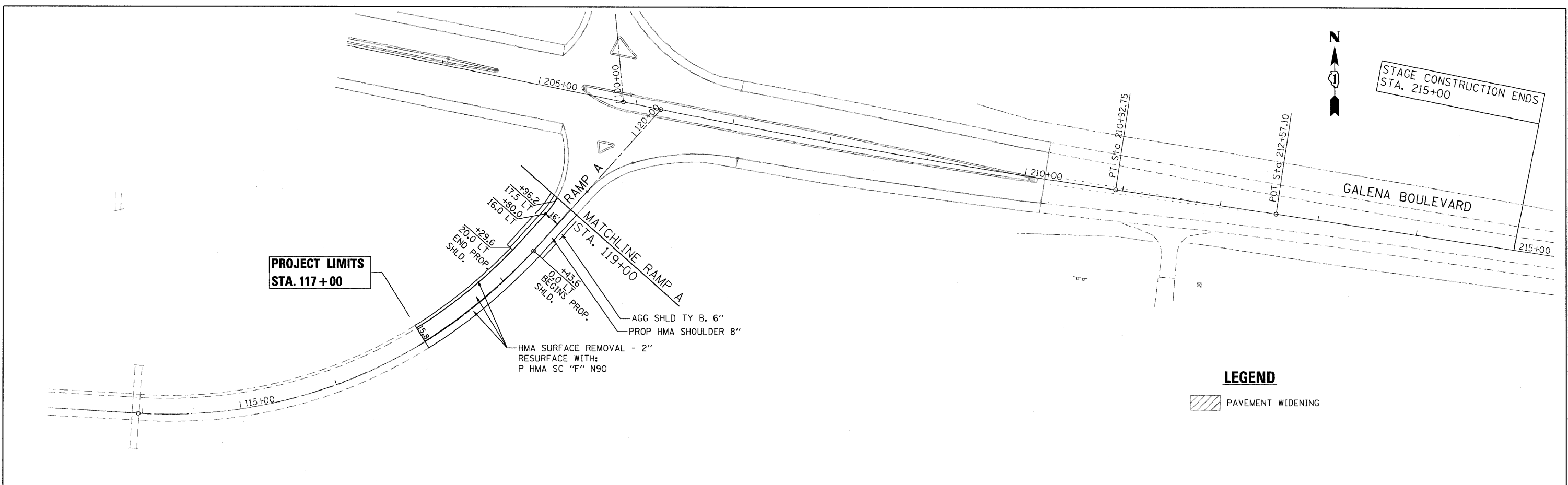
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PLAN	NO.	BY	DATE
SURVEYED			
ALIGNED			
CHECKED			
BY			
DATE			

PROFILE	NO.	BY	DATE
DESIGNED			
CHECKED			
BY			
DATE			

FILE NAME = P:\210\ME10012\_P1B156-16\Galena\CADD\Shets\1160K76-Sht-p1.dgn  
 USER NAME = Millennium Professional Services



DESIGNED - CJD	REVISED -	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>GALENA BOULEVARD</b>	<b>PLAN &amp; PROFILE</b> <b>RAMP A</b>	F.A.P. RTE. 573	SECTION 61B-1-R	COUNTY KANE	TOTAL SHEETS 110	SHEET NO. 16	
DRAWN - CJD	REVISED -				CONTRACT NO. 60K76					
CHECKED - TVN	REVISED -				FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT					
DATE - 8/29/2011	REVISED -				P:\210\ME10012_P1B156-16\Galena\CADD\Shets\1160K76-Sht-p1.dgn					



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DESIGNED - CJD	REVISED -
DRAWN - CJD	REVISED -
CHECKED - TVN	REVISED -
DATE - 8/29/2011	REVISED -

SCALE: 1"=50'  
 SHEET NO. 1 OF 4 SHEETS  
 STA. 117+00 TO STA. 119+00

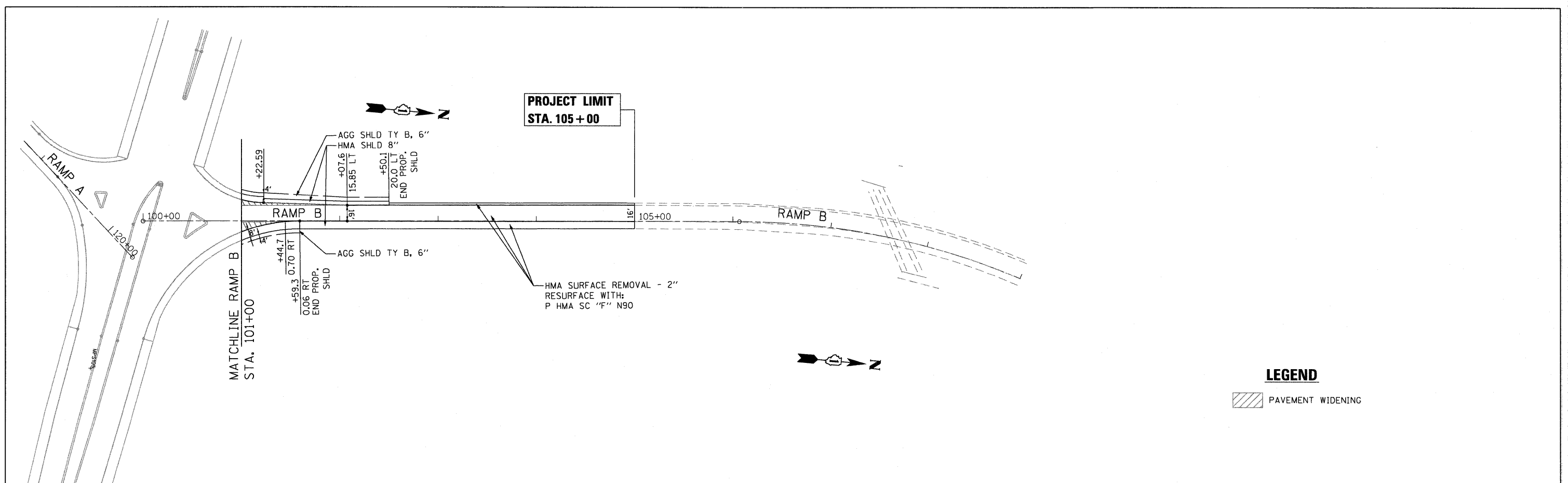
F.A.P. RTE. 573	SECTION 61B-1-R	COUNTY KANE	TOTAL SHEETS 110	SHEET NO. 16
CONTRACT NO. 60K76				

FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT  
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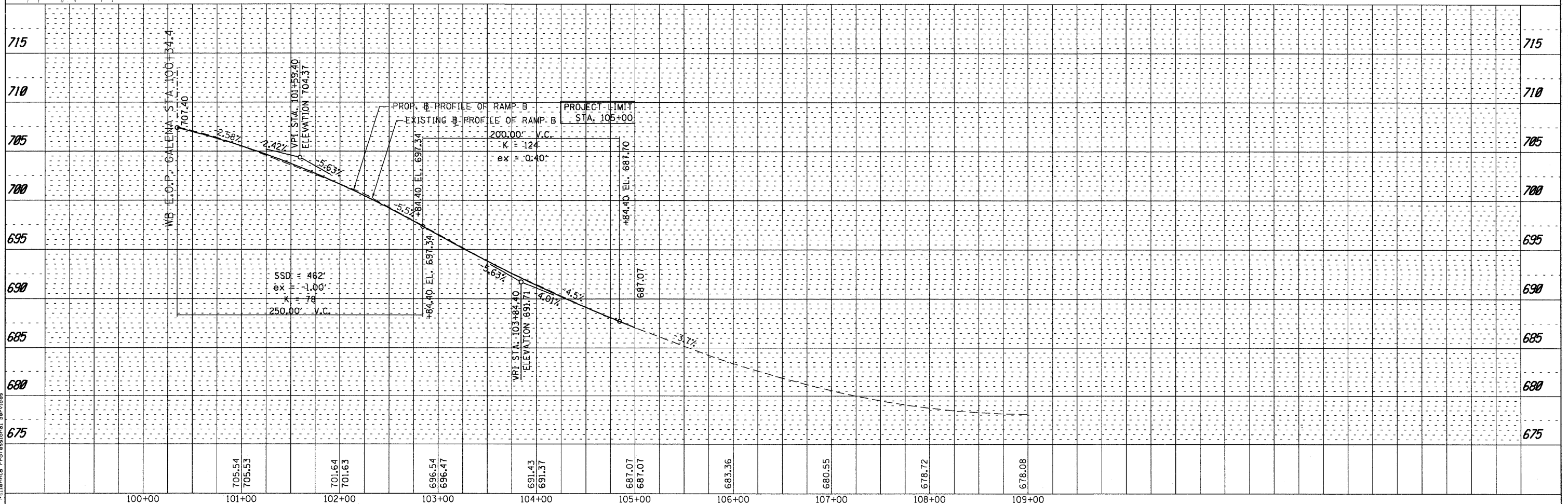
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	ALIGNED		
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	CADD FILE NAME		

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	ALIGNED		
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 FILE NAME =  
 PLOT FILE NAME =  
 USER NAME = Millennium Professional Services



**LEGEND**  
 PAVEMENT WIDENING



DESIGNED - CJD	REVISED -	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>GALENA BOULEVARD</b>		<b>PLAN &amp; PROFILE</b>		F.A.P. RTE. 573	SECTION 61HB-1-R	COUNTY KANE	TOTAL SHEETS 110	SHEET NO. 17
DRAWN - CJD	REVISED -		SCALE: 1"=50'		SHEET NO. 2 OF 4 SHEETS		CONTRACT NO. 60K76		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT		
CHECKED - TVN	REVISED -		STA. 101+00 TO STA. 106+00						P:\2010\ME10012.PTB156-16.Galena\CADD\SHS\11606K76-Sht-p1nprf02.dgn		
DATE - 8/29/2011	REVISED -										

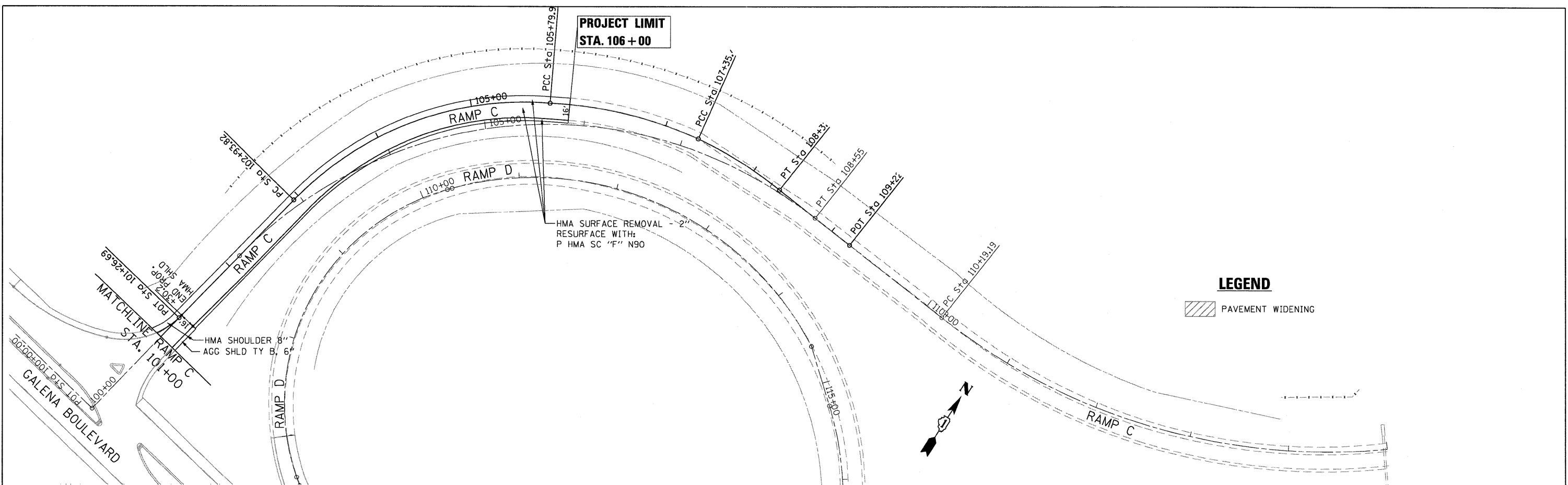
**MILLENNIA PROFESSIONAL SERVICES**  
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 630.705.8118 voice, 630.839.2566 fax  
 WWW.MPS-IL.COM



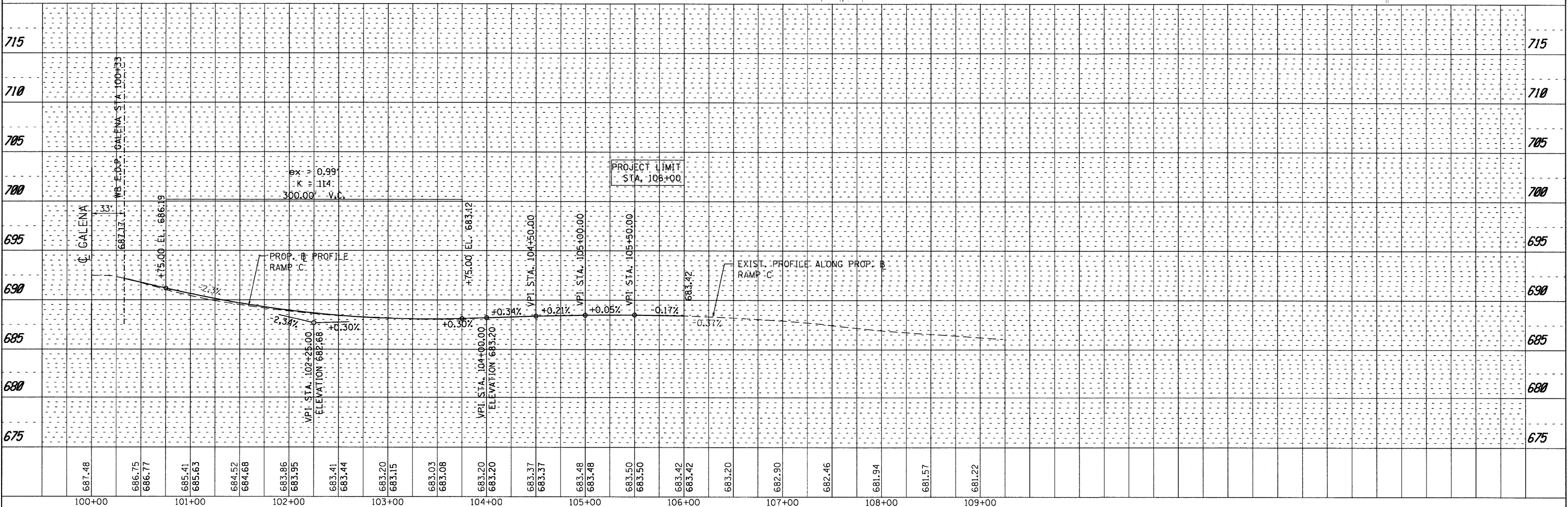
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NOTE BOOK	PLOTTED	BY
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PROFILE	DESIGNED	DATE
NOTE BOOK	PLOTTED	BY
NO.	GRADES	CHECKED
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	DATE	

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 PLOT SCALE = 50'@1" / IN.  
 USER NAME = Millennium Professional Services



**LEGEND**  
 PAVEMENT WIDENING

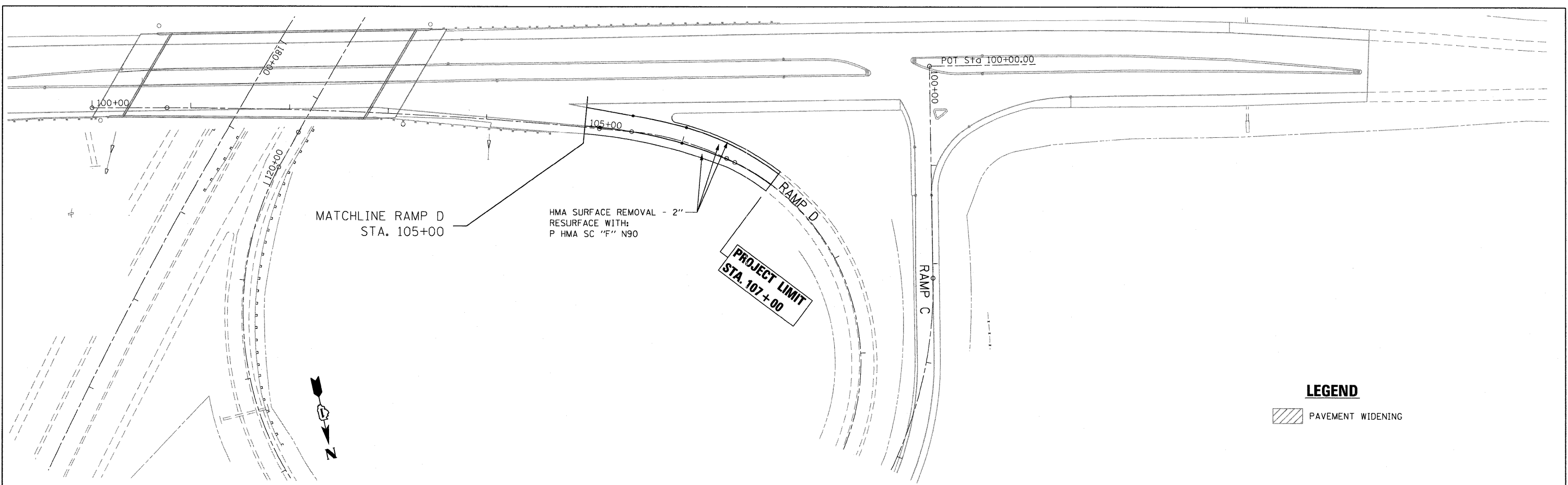


DESIGNED - CJD	REVISED -	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>GALENA BOULEVARD</b>	<b>PLAN &amp; PROFILE</b> <b>RAMP C</b>	F.A.P. RTE. 573	SECTION 61HB-1-R	COUNTY KANE	TOTAL SHEETS 110	SHEET NO. 18
DRAWN - CJD	REVISED -				CONTRACT NO. 60K76				
CHECKED - TVN	REVISED -				FED. ROAD DIST. NO. 1 [ILLINOIS] FED. AID PROJECT				
DATE - 8/29/2011	REVISED -				P:\2101\ME\0812_PTB156-16_Galena\CADD\Shets\160K76-Shet\p1.npr f03.dgn				

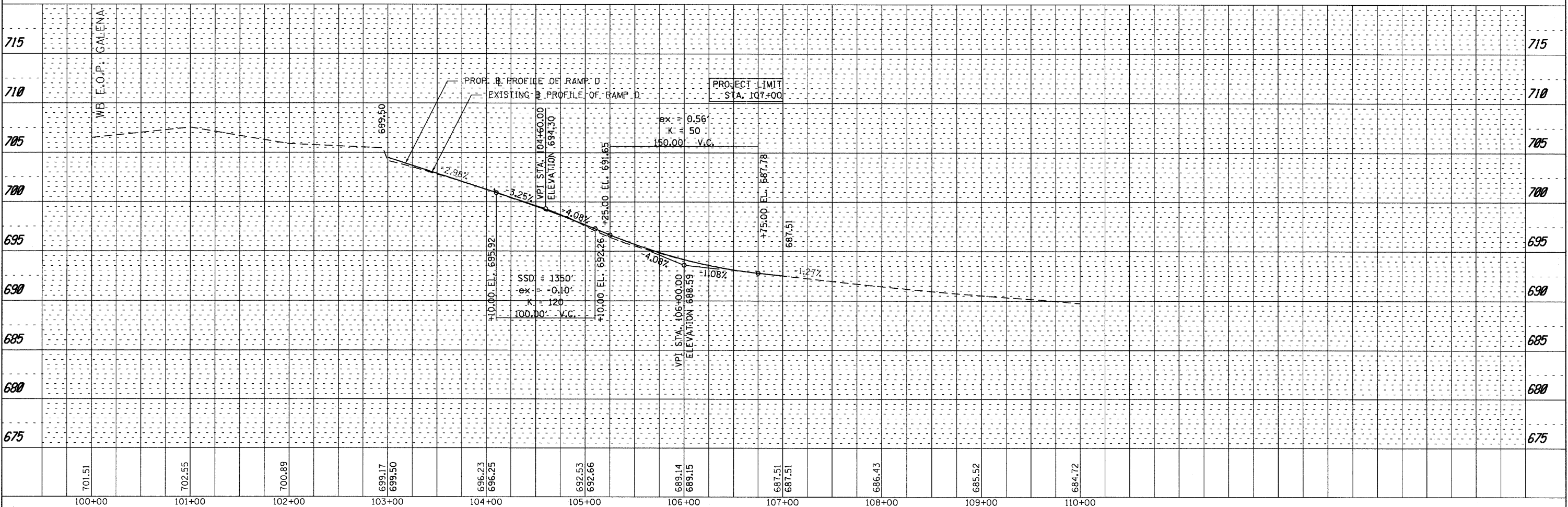
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NO.	BY	
	NOTED	
	CHECKED	
	DATE	

PROFILE	REVISIONS	DATE
NO.	BY	
	NOTED	
	CHECKED	
	DATE	

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 PLOT SCALE = 50'@1" / IN.  
 USER NAME = Millennium Professional Services



**LEGEND**  
 PAVEMENT WIDENING



DESIGNED - CJD	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>GALENA BOULEVARD</b>	<b>PLAN &amp; PROFILE RAMP D</b>	F.A.P. RTE. 573	SECTION 61HB-1-R	COUNTY KANE	TOTAL SHEETS 110	SHEET NO. 19
DRAWN - CJD	REVISED -				CONTRACT NO. 60K76				
CHECKED - TVN	REVISED -				FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
DATE - 8/29/2011	REVISED -				P:\2010\ME10012_P1B156-16.Galena\CADD\Shets\160K76-Sht-p\p184.dgn				

**MAINTENANCE OF TRAFFIC GENERAL NOTES**

1. THE SUGGESTED STAGES OF CONSTRUCTION AND TRAFFIC CONTROL PLANS SHALL SERVE AS A GUIDE FOR SAFE DIVERSION OF TRAFFIC DURING EXECUTION OF THIS CONTRACT. HOWEVER, THE CONTRACTOR MAY IMPROVE OR MODIFY THE TRAFFIC CONTROL PLANS TO MEET CONSTRUCTION NEEDS BUT NOT AT THE EXPENSE OF PUBLIC SAFETY OR CONVENIENCE. ANY CHANGES TO THE TRAFFIC CONTROL PLAN SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.
2. THE CONTRACTOR SHALL BE REQUIRED TO MAINTAIN TRAFFIC IN ACCORDANCE WITH THE TRAFFIC CONTROL PLANS, SPECIAL PROVISIONS, APPLICABLE STATE STANDARDS, AND AS DIRECTED BY THE ENGINEER.
3. CONTRACTOR SHALL MAINTAIN A MINIMUM OF ONE THROUGH LANE IN EACH DIRECTION THROUGH OUT THE PROJECT AREA AT ALL TIMES.
4. THE CONTRACTOR SHALL BE REQUIRED TO MAINTAIN ACCESS TO ALL ENTRANCES, APPROACHES, AND TEMPORARY ROADS WITHIN THE PROJECT LIMITS. THIS WORK IS TO BE PAID FOR AT THE CONTRACT UNIT PRICE PER TON, "AGGREGATE SURFACE COURSE, TYPE B."
5. THE ENGINEER SHALL BE INFORMED 48 HOURS IN ADVANCE OF ANY CHANGE TO THE SUGGESTED STAGES OF CONSTRUCTION AND TRAFFIC CONTROL PLANS
6. TYPE II BARRICADES SHALL BE PROVIDED AS SHOWN IN THE PLANS AND SPACED 50 FEET CENTER TO CENTER ON TANGENT, AND 15 FEET CENTER TO CENTER ON TAPERS AND CURVES.
7. THE CONTRACTOR SHALL PROVIDE ADEQUATE TEMPORARY DRAINAGE AND EROSION & SEDIMENT CONTROL PLAN PROTECTION DURING ALL PHASES OF CONSTRUCTION.
8. ALL EXISTING SIGNS THAT CONFLICT WITH THE TRAFFIC CONTROL PLAN SHALL BE COVERED OR REMOVED IN ACCORDANCE WITH ARTICLE 107.25 OF THE STANDARD SPECIFICATIONS.
9. THE CONTRACTOR SHALL PROVIDE, INSTALL, MAINTAIN AND REMOVE ALL SIGNS AND SIGN SUPPORTS REQUIRED FOR TRAFFIC CONTROL AND PROTECTION.
10. THE CONTRACTOR SHALL PLACE A CHANGEABLE MESSAGE SIGN AT EACH END OF THE PROJECT AND/OR AS DIRECTED BY THE ENGINEER TO INFORM MOTORISTS OF UPCOMING CONSTRUCTION ACTIVITIES. THE MESSAGE SIGNS WITH THE APPROPRIATE INFORMATION SHALL BE IN PLACED TWO WEEKS BEFORE START OF CONSTRUCTION ACTIVITY. THIS WORK IS TO BE PAID FOR AT THE CONTRACT UNIT PRICE PER CALENDAR MONTH, "CHANGEABLE MESSAGE SIGN".
11. THE CONTRACTOR SHALL PLACE "DRIVEWAY ENTRANCE" SIGNS AT EVERY COMMERCIAL ENTRANCE WITHIN THE PROJECT LIMITS WHERE ENTRANCE IS OBSTRUCTED DUE TO CONSTRUCTION AND/OR AS DIRECTED BY THE ENGINEER. SEE TEMPORARY INFORMATION SIGNS SHEET.
12. ALL TEMPORARY INFORMATION SIGNS SHALL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE PER LUMP SUM FOR "TRAFFIC CONTROL AND PROTECTION SPECIAL".

**PRE-STAGE CONSTRUCTION**

1. STRAIGHTEN BEAMS PRIOR TO DECK REMOVAL, MAINTAIN ONE THROUGH TRAFFIC LANE EACH DIRECTION ON ILLINOIS ROUTE 56 UTILIZING HIGHWAY STANDARD 701421.
2. REMOVE EXISTING MEDIAN AND CONSTRUCT TEMPORARY PAVEMENT PER PLANS.
3. INSTALL TEMPORARY PAVEMENT MARKING MARKINGS FOR STAGE I CONSTRUCTION.
4. UTILIZE IDOT TRAFFIC CONTROL STANDARDS FOR LANE CLOSURES ALONG GALENA BOULEVARD.

**STAGE I CONSTRUCTION**

1. PLACE TEMPORARY PAVEMENT MARKINGS FOR STAGE I CONSTRUCTION AND SHIFT TRAFFIC TO THE STAGE I CONFIGURATION PER PLAN.
2. REMOVE AND REPLACE EXISTING BRIDGE DECK AND APPROACH SLABS AT SOUTH SIDE OF THE BRIDGE SEE STRUCTURAL PLANS FOR ADDITIONAL INFO.
3. REPAIR SUBSTRUCTURE ELEMENTS PER STRUCTURAL PLANS.
4. CONSTRUCT PAVEMENT WIDENING AND PAVED SHOULDERS ALONG RAMP A RADIUS RETURNS PER PLAN.
5. REMOVE CONFLICTING PAVEMENT MARKINGS AND PLACE STAGE II TEMPORARY PAVEMENT MARKINGS FOR STAGE II CONSTRUCTION.
6. SEE SUGGESTED STAGES OF CONSTRUCTION AND TRAFFIC CONTROL PLANS FOR TRAFFIC CONTROL ALONG GALENA BOULEVARD. UTILIZE IDOT TRAFFIC CONTROL STANDARD 701421 FOR LANE CLOSURES ALONG ILLINOIS ROUTE 56 DURING THE SUBSTRUCTURE AND BEAM REPAIRS.

**STAGE II CONSTRUCTION**

1. SHIFT TRAFFIC TO THE STAGE II CONFIGURATION.
2. REMOVE AND REPLACE EXISTING BRIDGE DECK AND APPROACH SLABS AT NORTH SIDE OF THE BRIDGE SEE STRUCTURAL PLANS FOR ADDITIONAL INFO.
3. REPAIR SUBSTRUCTURE ELEMENTS PER STRUCTURAL PLANS.
4. CONSTRUCT PAVEMENT WIDENING, CURB & GUTTER AND PAVED SHOULDERS ALONG RAMPS B, C AND D RADIUS RETURNS PER PLAN.
5. SEE SUGGESTED STAGES OF CONSTRUCTION AND TRAFFIC CONTROL PLANS FOR TRAFFIC CONTROL ALONG GALENA BOULEVARD. UTILIZE IDOT TRAFFIC CONTROL STANDARD 701421 FOR LANE CLOSURES ALONG ILLINOIS ROUTE 56 DURING THE SUBSTRUCTURE AND BEAM REPAIRS.

**STAGE III CONSTRUCTION**

1. INSTALL PROPOSED TRAFFIC SIGNALS AND LIGHT SYSTEM PER PLAN.
2. REMOVE TEMPORARY PAVEMENT AND CONSTRUCT PROPOSED MEDIAN PER PLAN.
3. PERFORM HMA SURFACE REMOVAL. PLACE HMA BINDER AND SURFACE COURSE PER PLAN.
4. PLACE FINAL PAVEMENT MARKINGS AND PERMANENT SEEDING PER PLAN.
5. UTILIZE IDOT TRAFFIC CONTROL STANDARDS FOR LANE CLOSURES ALONG GALENA BOULEVARD.

FILE NAME = P:\2010\MEI0012.PTBI56-16.Galena\CADD\Shets\160K76-sh-t-5tg-Notel.dgn  
 USER NAME = Millennium Professional Services



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DRAWN	CJD	REVISED	-
CHECKED	TVN	REVISED	-
DATE	9/30/2011	REVISED	-

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

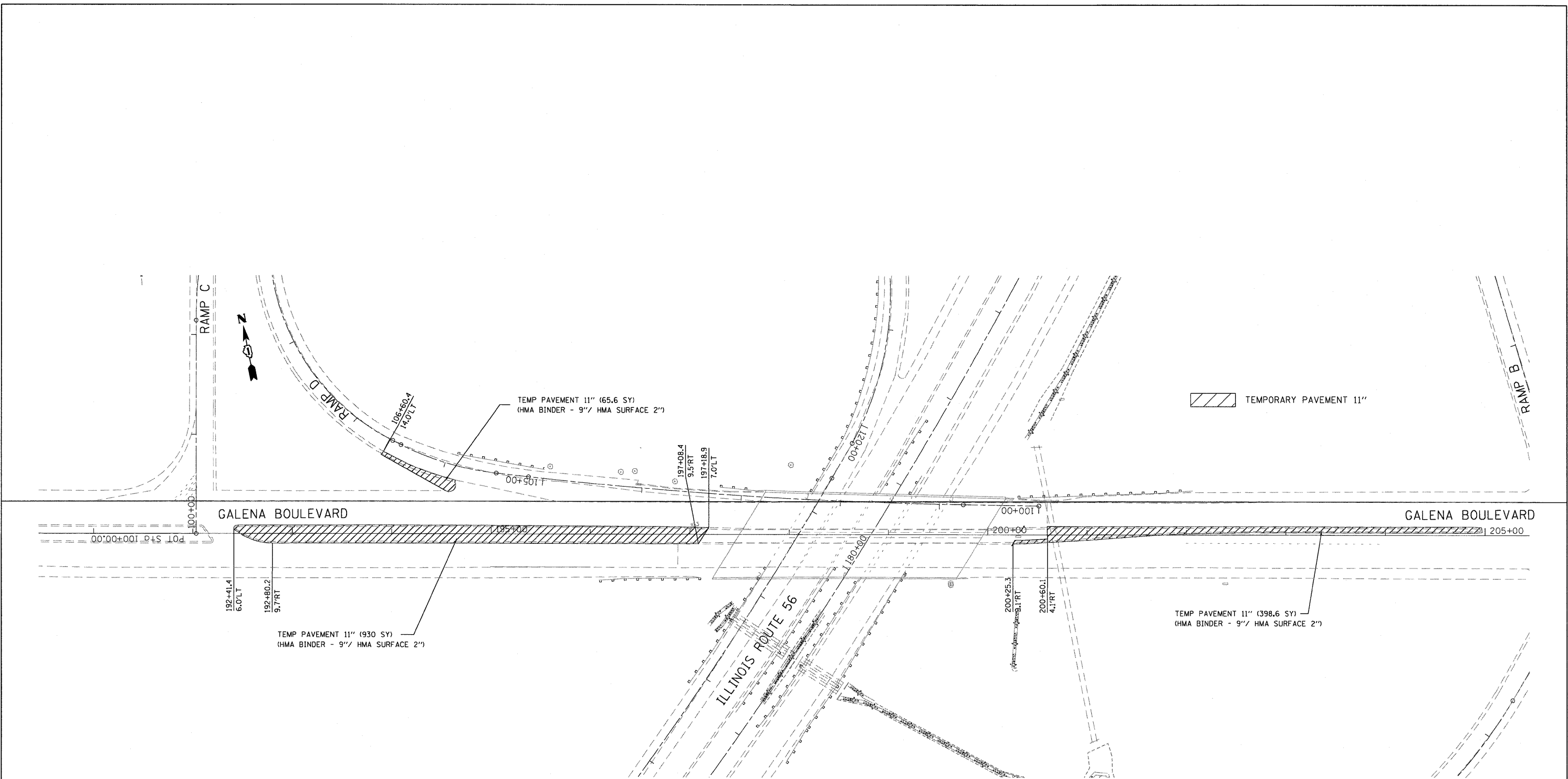
**GALENA BOULEVARD**

**SUGGESTED STAGES OF CONSTRUCTION  
 AND TRAFFIC CONTROL  
 GENERAL NOTES AND DESCRIPTION**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
573	61HB-1-R	KANE	110	20
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			CONTRACT NO. 60K76	

SCALE: N/A SHEET NO. 1 OF 1 SHEETS STA. TO STA.

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NOTE: TEMPORARY CONCRETE PAVEMENT IS OPTIONAL (SEE SHT 9 NOTE 3)

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 PLOT SCALE = 50.0046' / IN.  
 USER NAME = Millennia Professional Services



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DRAWN	- CJD	REVISED	-
CHECKED	- TVN	REVISED	-
DATE	- 8/29/2011	REVISED	-

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

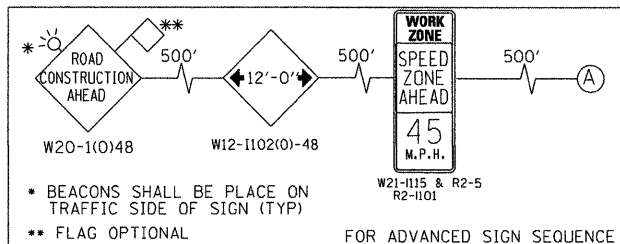
**GALENA BOULEVARD**

**SUGGESTED STAGES OF CONSTRUCTION  
 & TRAFFIC CONTROL  
 PRE-STAGE 1**

SCALE: 1"=50' SHEET NO. 1 OF 1 SHEETS STA. TO STA.

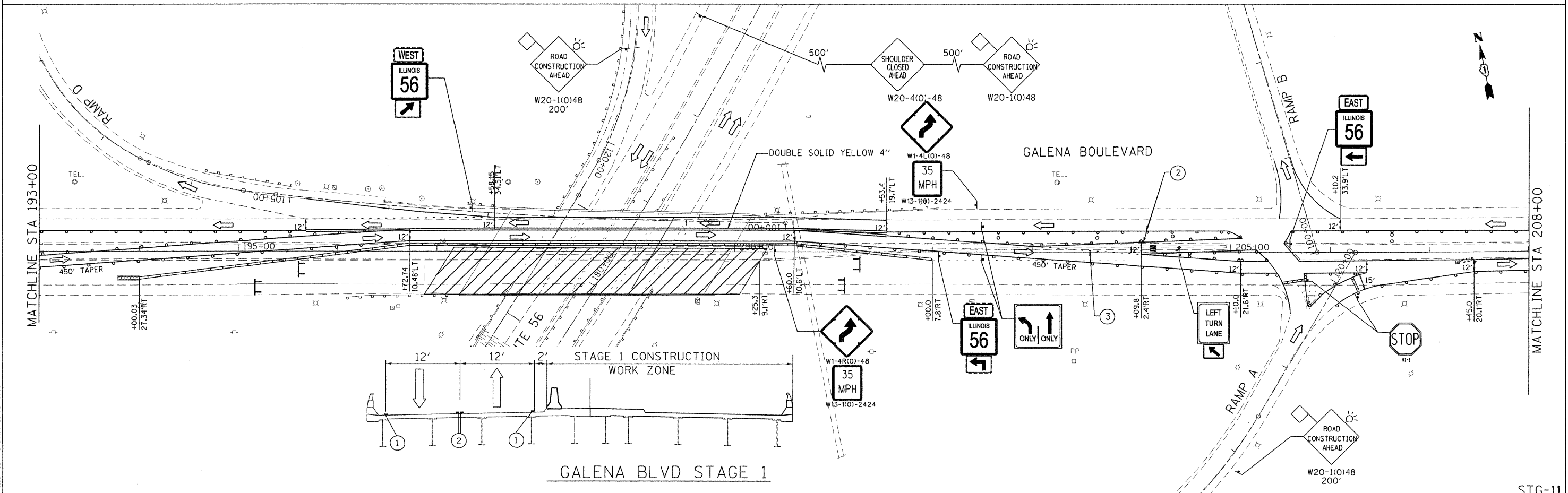
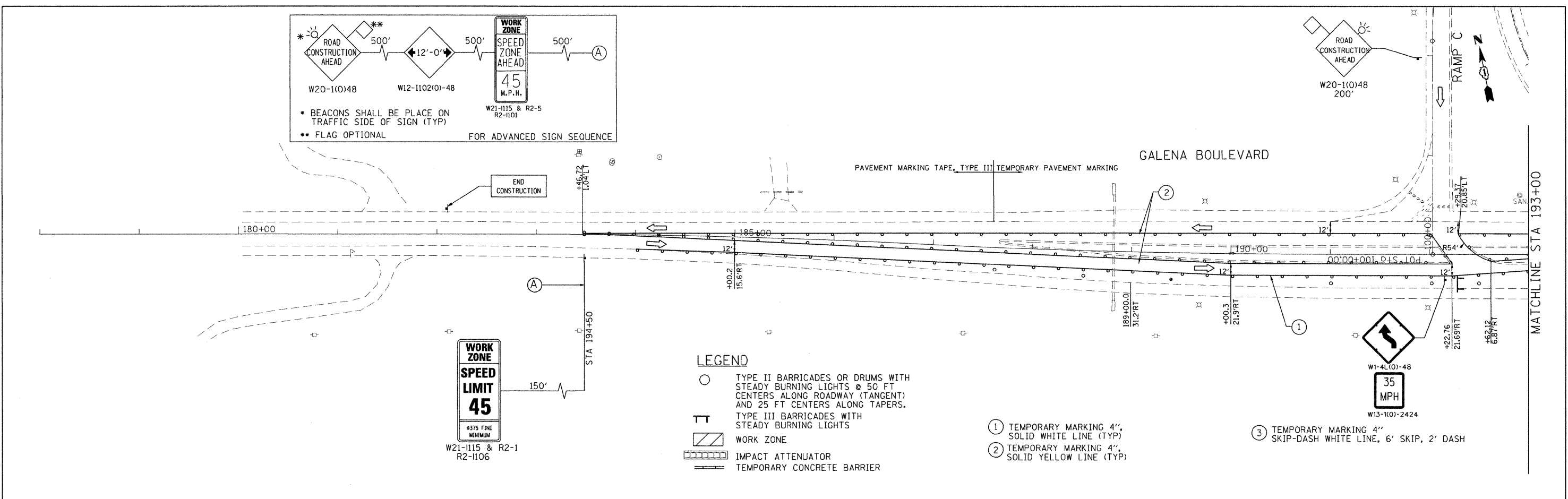
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
573	61HB-1-R	KANE	110	21
CONTRACT NO. 60K76				

FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT  
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**LEGEND**

- TYPE II BARRICADES OR DRUMS WITH STEADY BURNING LIGHTS @ 50 FT CENTERS ALONG ROADWAY (TANGENT) AND 25 FT CENTERS ALONG TAPERS.
  - ⊥ TYPE III BARRICADES WITH STEADY BURNING LIGHTS
  - ▨ WORK ZONE
  - ▩ IMPACT ATTENUATOR
  - ▬ TEMPORARY CONCRETE BARRIER
- ① TEMPORARY MARKING 4" SOLID WHITE LINE (TYP)
  - ② TEMPORARY MARKING 4" SOLID YELLOW LINE (TYP)
  - ③ TEMPORARY MARKING 4" SKIP-DASH WHITE LINE, 6' SKIP, 2' DASH



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 USER NAME = Millennium Professional Services

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DRAWN - CJD	REVISED -
CHECKED - TVN	REVISED -
DATE - 9/30/2011	REVISED -

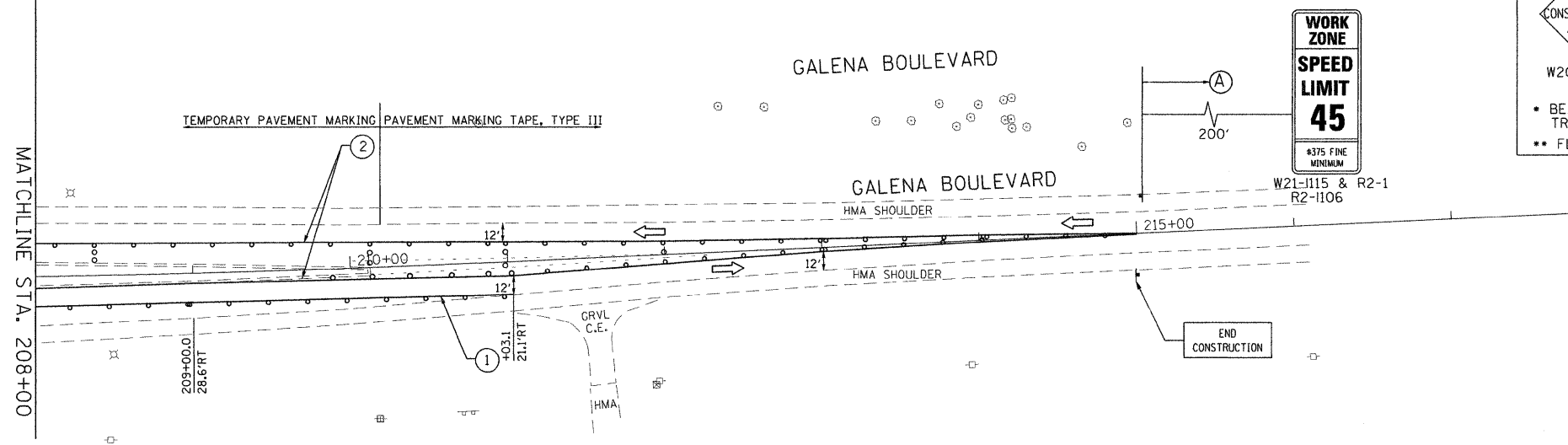
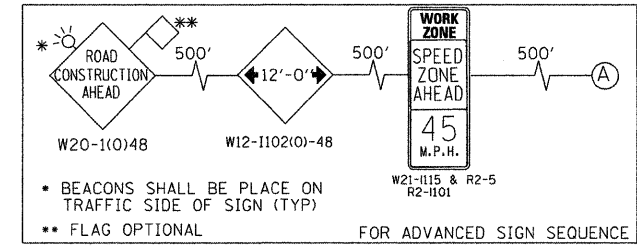
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**GALENA BOULEVARD**  
 SCALE: 1"=50'      SHEET NO. 1 OF 2 SHEETS      STA. 182+00 TO STA. 208+00

**SUGGESTED STAGES OF CONSTRUCTION  
& TRAFFIC CONTROL  
STAGE 1**

F.A.P. RTE. 573	SECTION 61HB-1-R	COUNTY KANE	TOTAL SHEETS 110	SHEET NO. 22
FED. ROAD DIST. NO. 1 [ILLINOIS] FED. AID PROJECT P:\2010\ME10012.PT8156-16.Galena\CADD\Shas\0168K76-Sht-5.dgn				

STG-11



**LEGEND**

- TYPE II BARRICADES OR DRUMS WITH STEADY BURNING LIGHTS @ 50 FT CENTERS ALONG ROADWAY (TANGENT) AND 25 FT CENTERS ALONG TAPERS.
- ⊥ TYPE III BARRICADES WITH STEADY BURNING LIGHTS
- ▨ WORK ZONE
- ▩ IMPACT ATTENUATOR
- ▬ TEMPORARY CONCRETE BARRIER
- ① TEMPORARY MARKING 4", SOLID WHITE LINE (TYP)
- ② TEMPORARY MARKING 4", SOLID YELLOW LINE (TYP)
- ③ TEMPORARY MARKING 4" SKIP-DASH WHITE LINE, 6' SKIP, 2' DASH

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 PLOT SCALE = 50.0124 / IN.  
 USER NAME = Millennium Professional Services

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DRAWN -	CJD	REVISED -	
CHECKED -	TVN	REVISED -	
DATE -	9/30/2011	REVISED -	

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

**GALENA BOULEVARD**  
**SUGGESTED STAGES OF CONSTRUCTION & TRAFFIC CONTROL**  
**STAGE I**

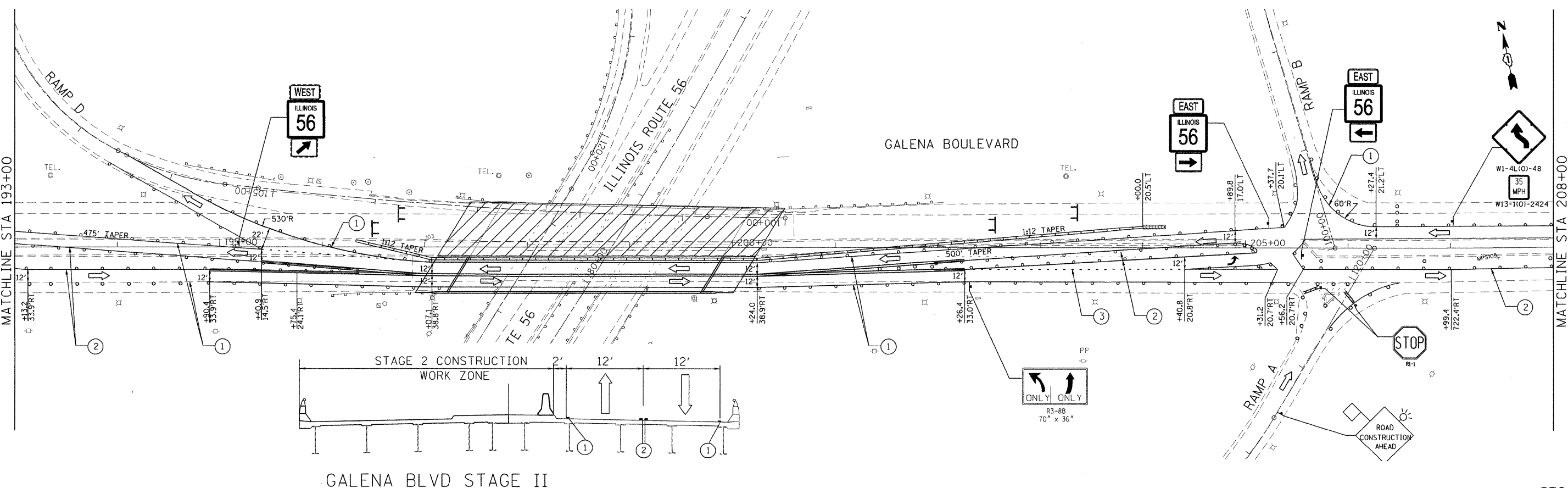
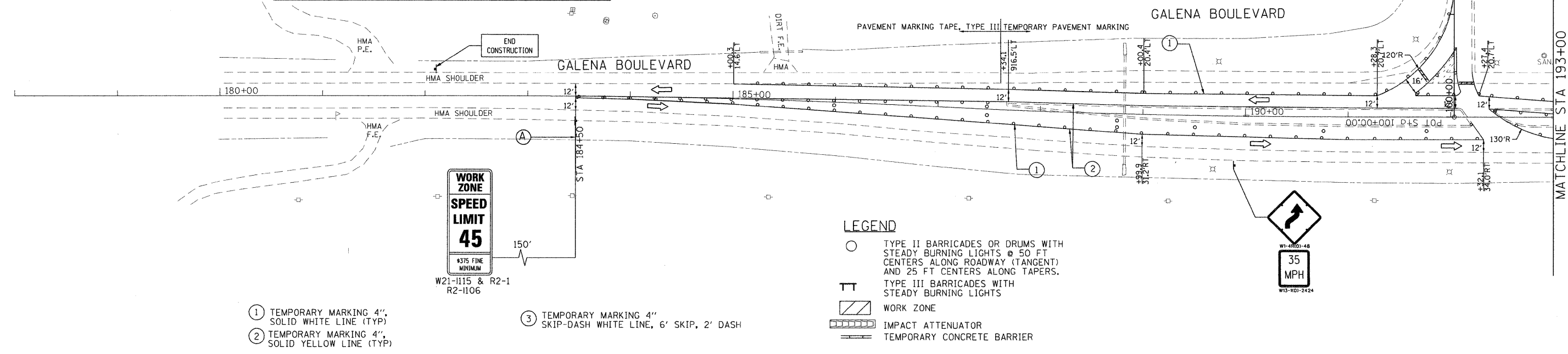
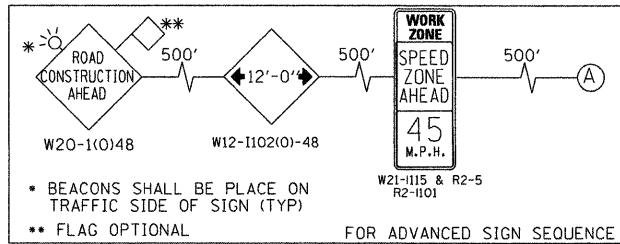
SCALE: 1"=50'    SHEET NO. 2 OF 2 SHEETS    STA. 208+00 TO STA. 215+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
573	61HB-1-R	KANE	110	23
FED. ROAD DIST. NO. 1 [ILLINOIS] FED. AID PROJECT			CONTRACT NO. 60K76	

STG-12

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CHECKED - TVN	REVISED -
DATE - 9/30/2011	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**GALENA BOULEVARD**

SCALE: 1"=50'      SHEET NO. 1 OF 2 SHEETS

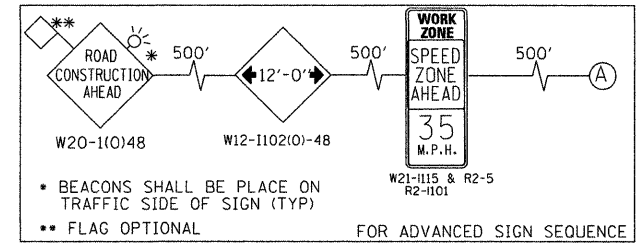
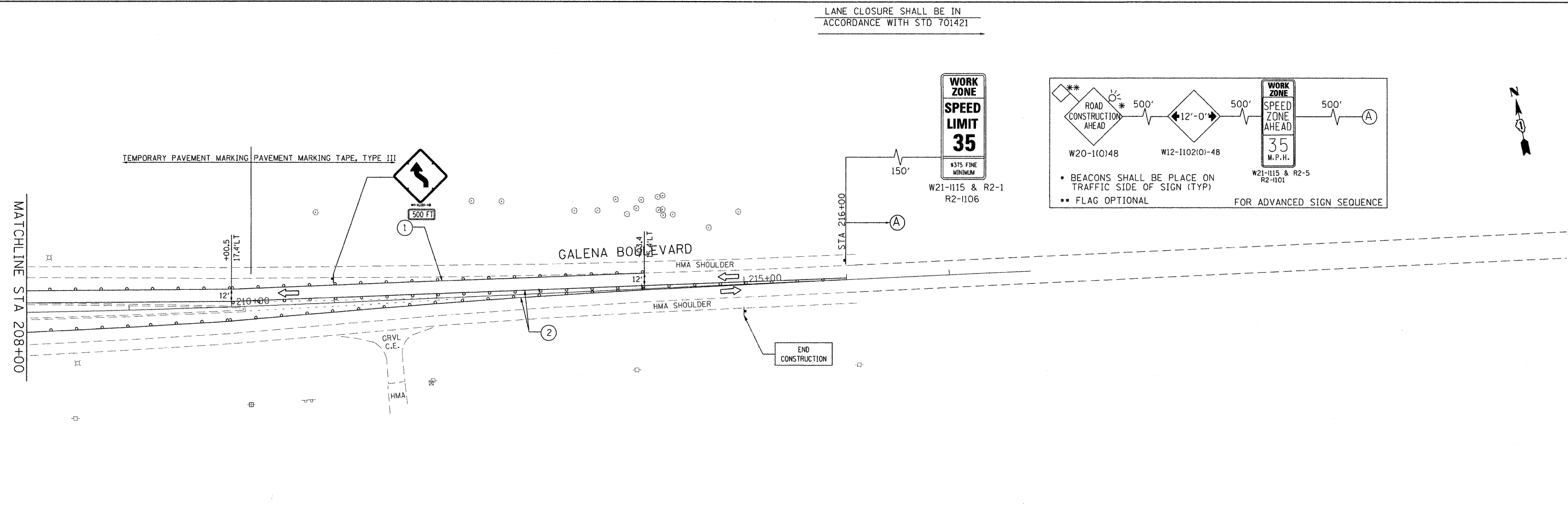
**SUGGESTED STAGES OF CONSTRUCTION  
& TRAFFIC CONTROL  
STAGE II**

F.A.P. RTE. 573	SECTION 61HB-1-R	COUNTY KANE	TOTAL SHEETS 110	SHEET NO. 24
CONTRACT NO. 60K76			STG-21	

FED. ROAD DIST. NO. 1 [ILLINOIS] FED. AID PROJECT  
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LANE CLOSURE SHALL BE IN ACCORDANCE WITH STD 701421



**LEGEND**

- TYPE II BARRICADES OR DRUMS WITH STEADY BURNING LIGHTS @ 50 FT CENTERS ALONG ROADWAY (TANGENT) AND 25 FT CENTERS ALONG TAPERS.
- TT TYPE III BARRICADES WITH STEADY BURNING LIGHTS
- ▨ WORK ZONE
- ▩ IMPACT ATTENUATOR
- ▬ TEMPORARY CONCRETE BARRIER
- ① TEMPORARY MARKING 4", SOLID WHITE LINE (TYP)
- ② TEMPORARY MARKING 4", SOLID YELLOW LINE (TYP)
- ④ TEMPORARY PAVEMENT 4", SKIP-DASH WHITE LINE, 25' SKIP, 25' DASH (TYP)
- ③ TEMPORARY MARKING 4", SKIP-DASH WHITE LINE, 6' SKIP, 2' DASH

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DRAWN -	CJD	REVISED -	
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DATE -	8/29/2011	REVISED -	

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

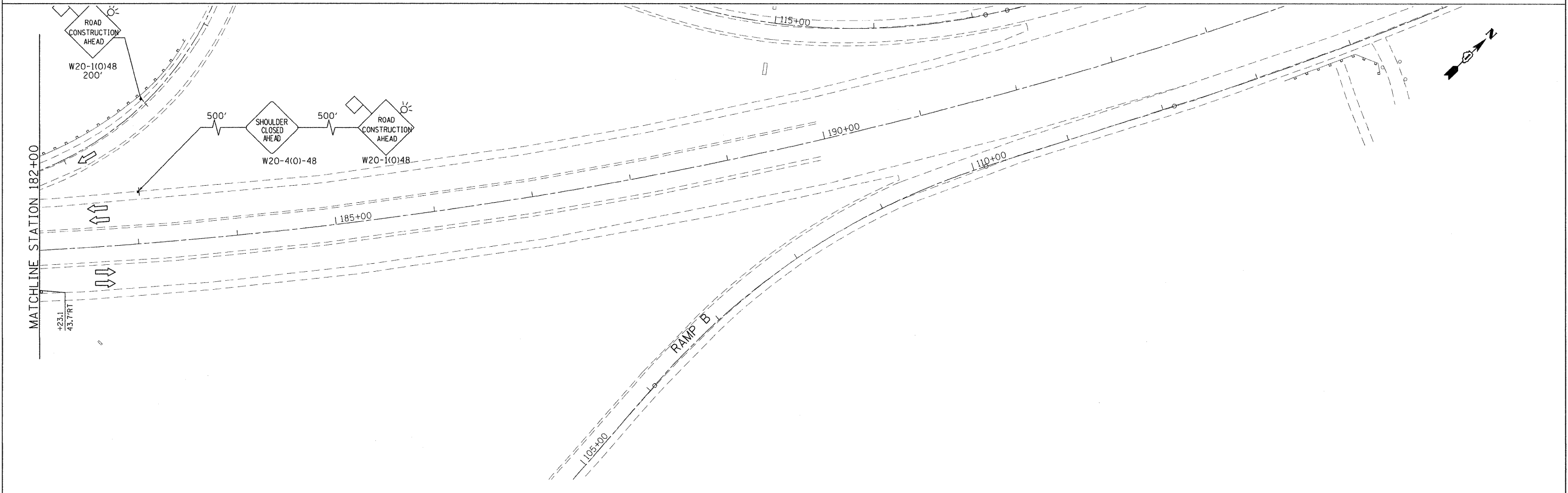
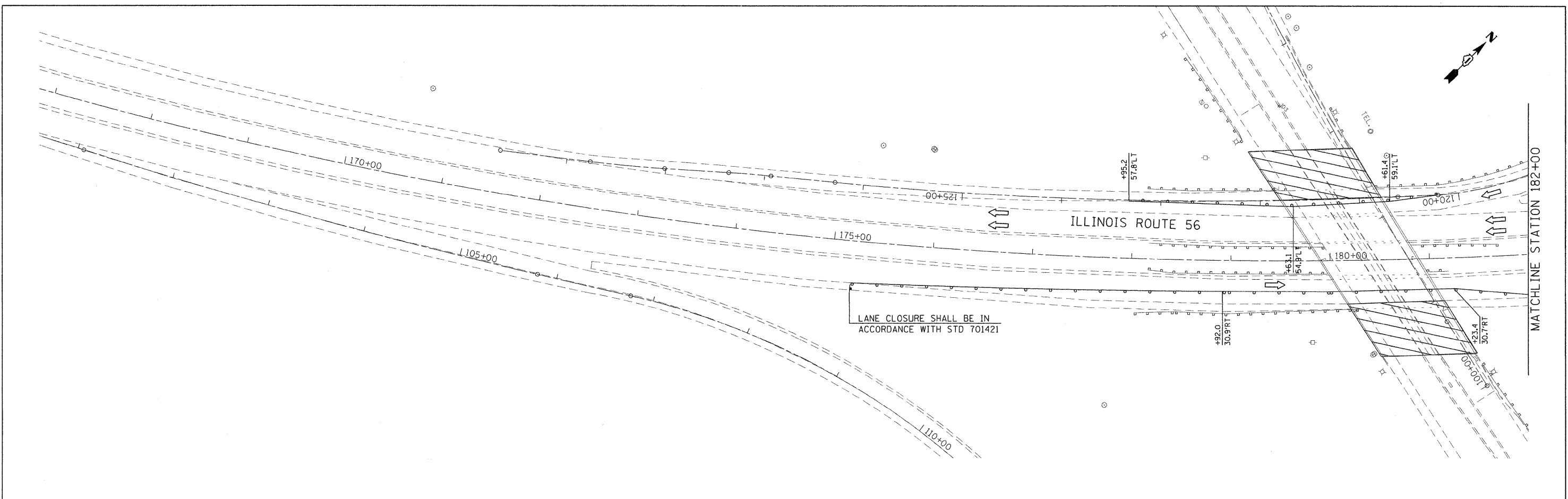
**GALENA BOULEVARD**  
**SUGGESTED STAGES OF CONSTRUCTION & TRAFFIC CONTROL**  
**STAGE II**

SCALE: 1"=50'    SHEET NO. 2 OF 2 SHEETS    STA. 208+00 TO STA. 216+00


F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
573	61HB-1-R	KANE	110	25
CONTRACT NO. 60K76				

FED. ROAD DIST. NO. 1 [ILLINOIS] FED. AID PROJECT

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FILE NAME = P:\2010\ME10012.PT8156-16.Galena\CADD\Shs\160K76-Shs-Stg-231L56.dgn  
 PLOT SCALE = 50.0000 / IN.  
 USER NAME = Millennium Professional Services



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DESIGNED -	CJD	REVISED -	
DRAWN -	CJD	REVISED -	
CHECKED -	TVN	REVISED -	
DATE -	9/30/2011	REVISED -	

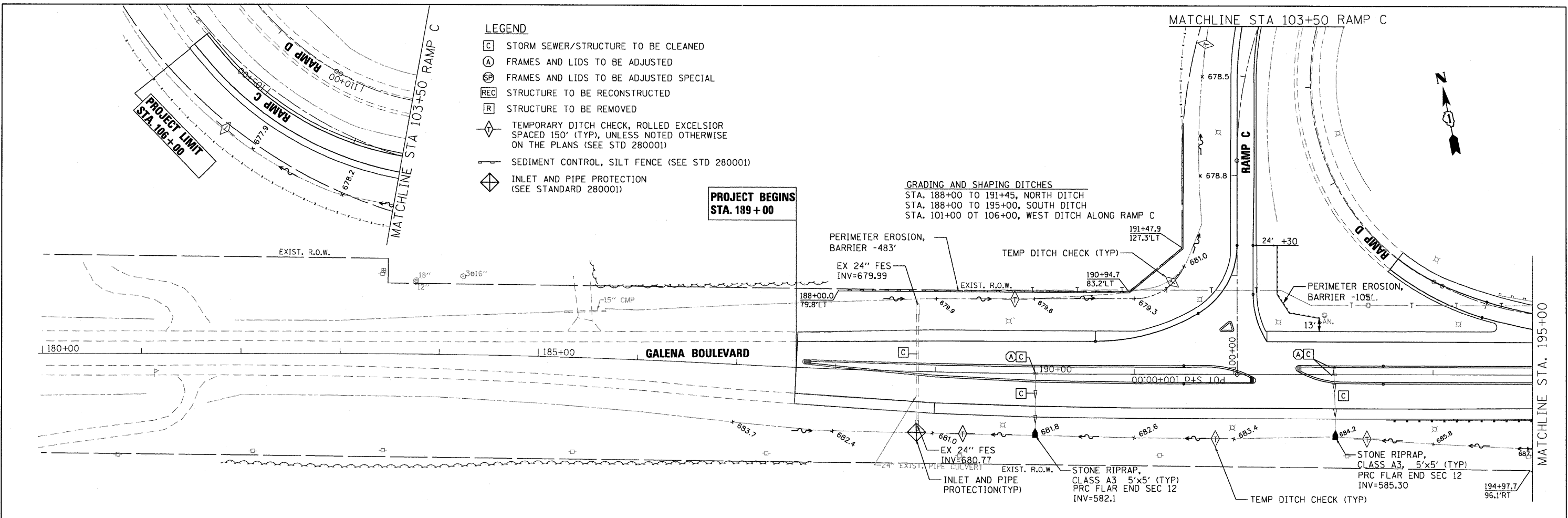
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**GALENA BOULEVARD**  
 SCALE: 1"=50'

**SUGGESTED STAGES OF CONSTRUCTION**  
**& TRAFFIC CONTROL**  
**STAGE I & II - IL RTE 56**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
573	61HB-1-R	KANE	110	26
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			CONTRACT NO. 60K76	

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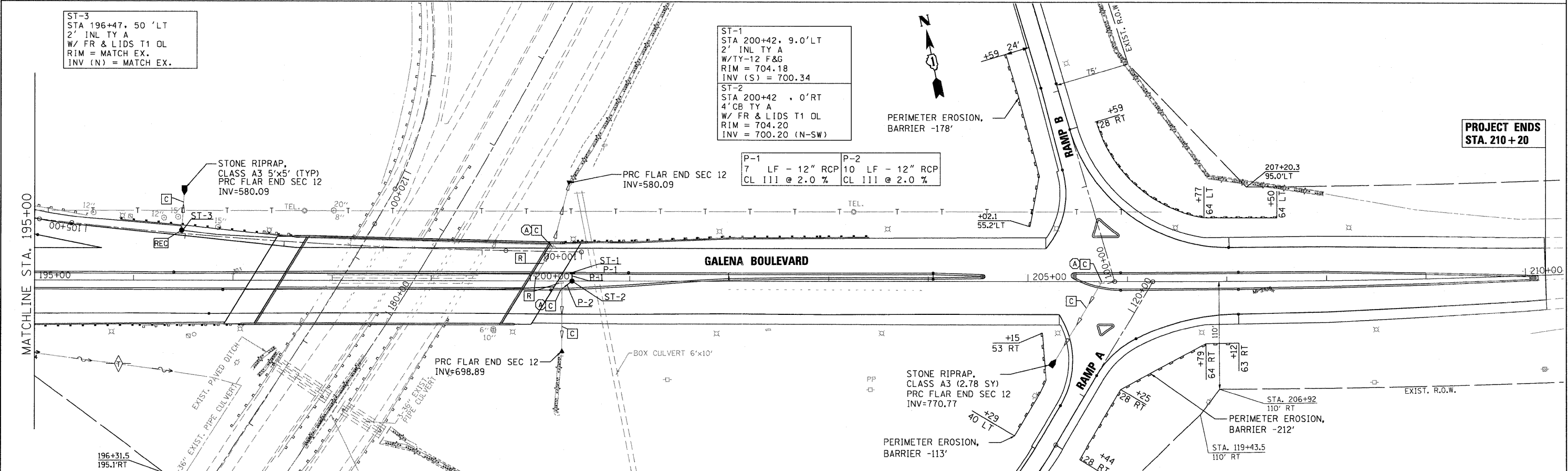
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- [C] STORM SEWER/STRUCTURE TO BE CLEANED
  - [A] FRAMES AND LIDS TO BE ADJUSTED
  - [SP] FRAMES AND LIDS TO BE ADJUSTED SPECIAL
  - [REC] STRUCTURE TO BE RECONSTRUCTED
  - [R] STRUCTURE TO BE REMOVED
  - ◇ TEMPORARY DITCH CHECK, ROLLED EXCELSIOR SPACED 150' (TYP), UNLESS NOTED OTHERWISE ON THE PLANS (SEE STD 280001)
  - SEDIMENT CONTROL, SILT FENCE (SEE STD 280001)
  - ◇ INLET AND PIPE PROTECTION (SEE STANDARD 280001)

**PROJECT BEGINS STA. 189+00**

**GRADING AND SHAPING DITCHES**  
 STA. 188+00 TO 191+45, NORTH DITCH  
 STA. 188+00 TO 195+00, SOUTH DITCH  
 STA. 101+00 TO 106+00, WEST DITCH ALONG RAMP C


MATCHLINE STA 103+50 RAMP C

MATCHLINE STA. 195+00



**PROJECT ENDS STA. 210+20**

FILE NAME = P:\2010\ME10012-PT18156-16-Galena\CADD\SHS\160676-Sht-dra-01.dgn  
 PLOT SCALE = 1/4" = 1'-0"  
 USER NAME = Millennium Professional Services


**MILLENNIA PROFESSIONAL SERVICES**  
 200 22ND Street, Suite 216, Lombard, IL 60148  
 630.705.0110 voice, 630.839.2566 fax  
 www.mps-il.com

DESIGNED - CJD	REVISED -
DRAWN - CJD	REVISED -
CHECKED - TVN	REVISED -
DATE - 8/29/2011	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

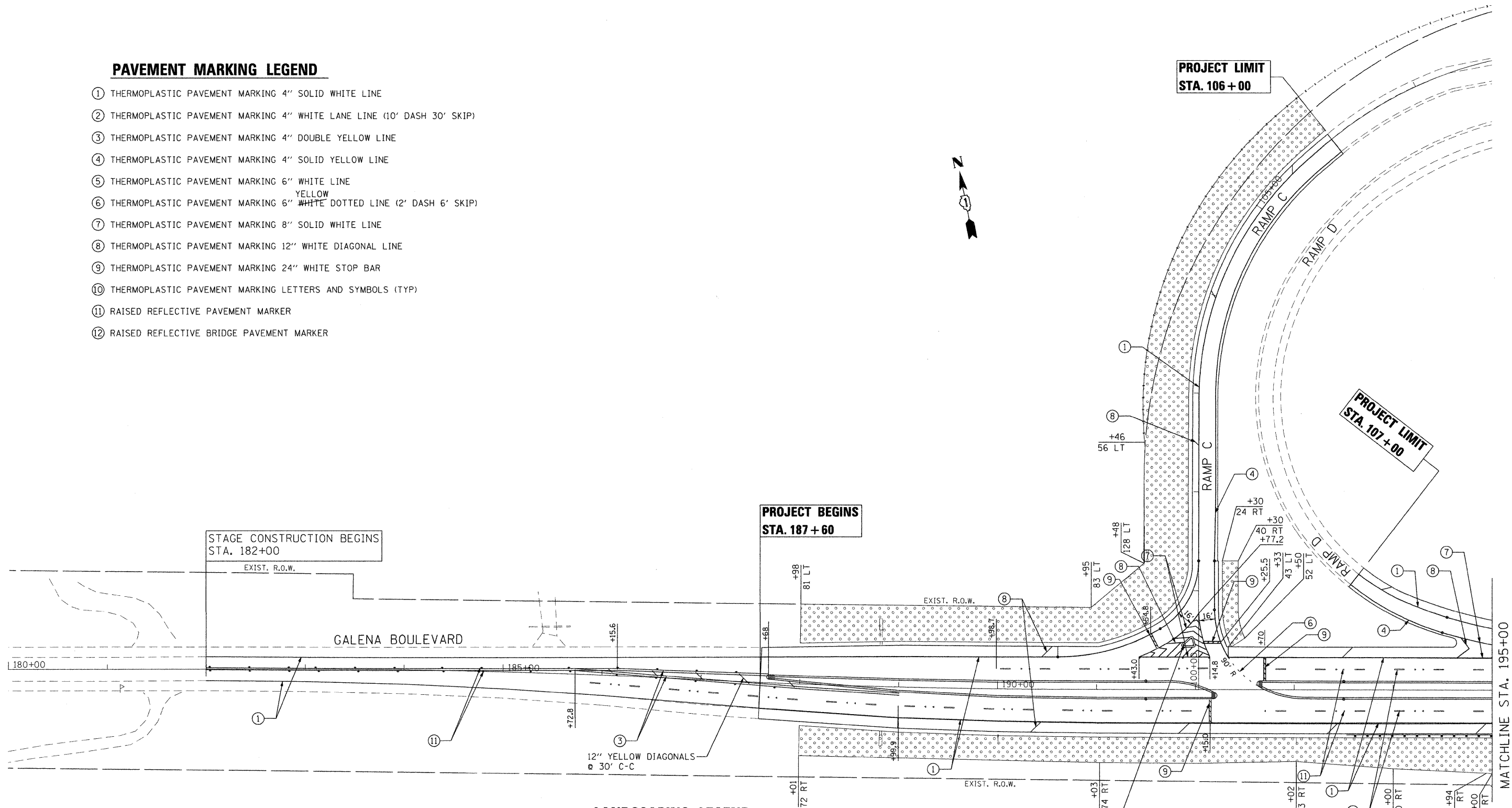
<b>GALENA BOULEVARD</b>	<b>DRAINAGE AND UTILITIES PLAN</b>
SCALE: 1"=50'	SHEET NO. 1 OF 1 SHEETS
STA. 189+00 TO STA. 209+00	

F.A.P. RTE. 573	SECTION 61HB-1-R	COUNTY KANE	TOTAL SHEETS 110	SHEET NO. 27
CONTRACT NO. 60K76				
FED. ROAD DIST. NO. 1 [ILLINOIS] FED. AID PROJECT				

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**PAVEMENT MARKING LEGEND**

- ① THERMOPLASTIC PAVEMENT MARKING 4" SOLID WHITE LINE
- ② THERMOPLASTIC PAVEMENT MARKING 4" WHITE LANE LINE (10' DASH 30' SKIP)
- ③ THERMOPLASTIC PAVEMENT MARKING 4" DOUBLE YELLOW LINE
- ④ THERMOPLASTIC PAVEMENT MARKING 4" SOLID YELLOW LINE
- ⑤ THERMOPLASTIC PAVEMENT MARKING 6" WHITE LINE
- ⑥ THERMOPLASTIC PAVEMENT MARKING 6" ~~WHITE~~ YELLOW DOTTED LINE (2' DASH 6' SKIP)
- ⑦ THERMOPLASTIC PAVEMENT MARKING 8" SOLID WHITE LINE
- ⑧ THERMOPLASTIC PAVEMENT MARKING 12" WHITE DIAGONAL LINE
- ⑨ THERMOPLASTIC PAVEMENT MARKING 24" WHITE STOP BAR
- ⑩ THERMOPLASTIC PAVEMENT MARKING LETTERS AND SYMBOLS (TYP)
- ⑪ RAISED REFLECTIVE PAVEMENT MARKER
- ⑫ RAISED REFLECTIVE BRIDGE PAVEMENT MARKER



**LANDSCAPING LEGEND**

TOPSOIL FURNISH AND PLACE, 4" SEEDING, CLASS 2A NITROGEN FERTILIZER NUTRIENT PHOSPHORUS FERTILIZER NUTRIENT POTASSIUM FERTILIZER NUTRIENT

FLEXIBLE DELINEATORS (TYP) (AT ISLAND NOSE)

**NOTES:**

- 1. REFER TO DISTRICT 1 TYPICAL PAVEMENT MARKINGS (TC-13) FOR ADDITIONAL INFORMATION.
- 2. REFER TO DISTRICT 1 RAISED REFLECTIVE PAVEMENT MARKERS (TC-11) FOR ADDITIONAL INFORMATION.

FILE NAME : F:\2010\ME\0012\_PTB156-16\Galena\CADD\Shsta\1616K76-Shr-PMK01.dgn  
 USER NAME : Millennium Professional Services



200 22ND Street, Suite 216, Lombard, IL 60148  
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**MILLENNIA PROFESSIONAL SERVICES**

DESIGNED - CJD	REVISED -
DRAWN - CJD	REVISED -
CHECKED - TVN	REVISED -
DATE - 9/22/2011	REVISED -

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

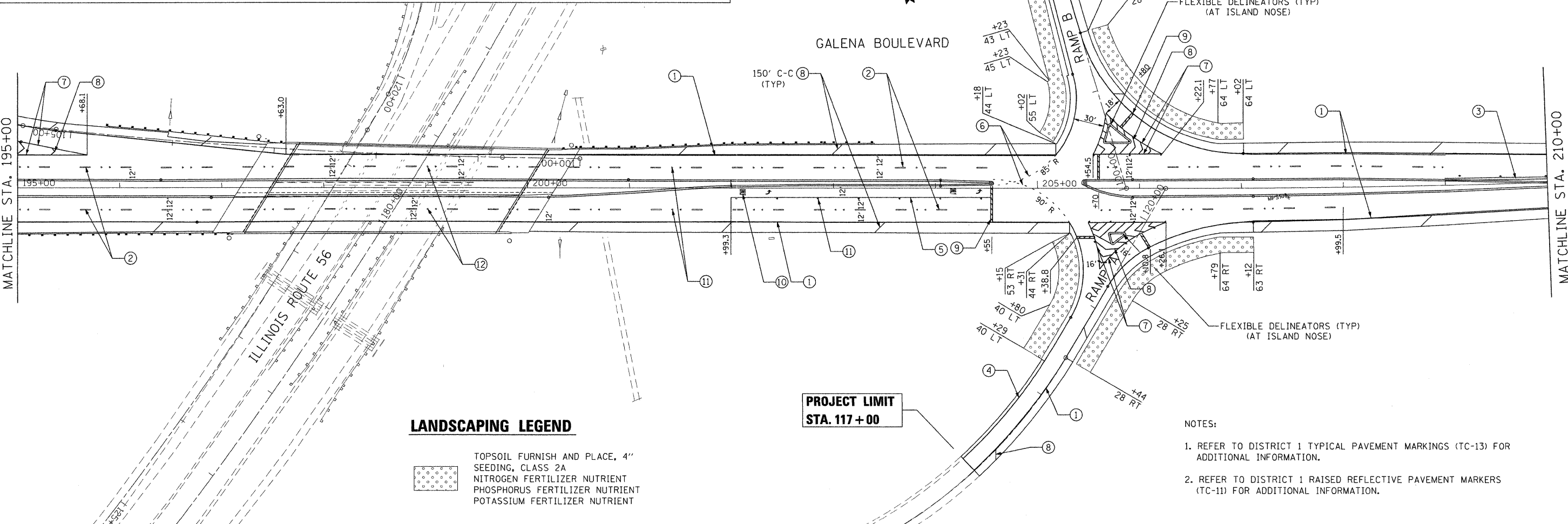
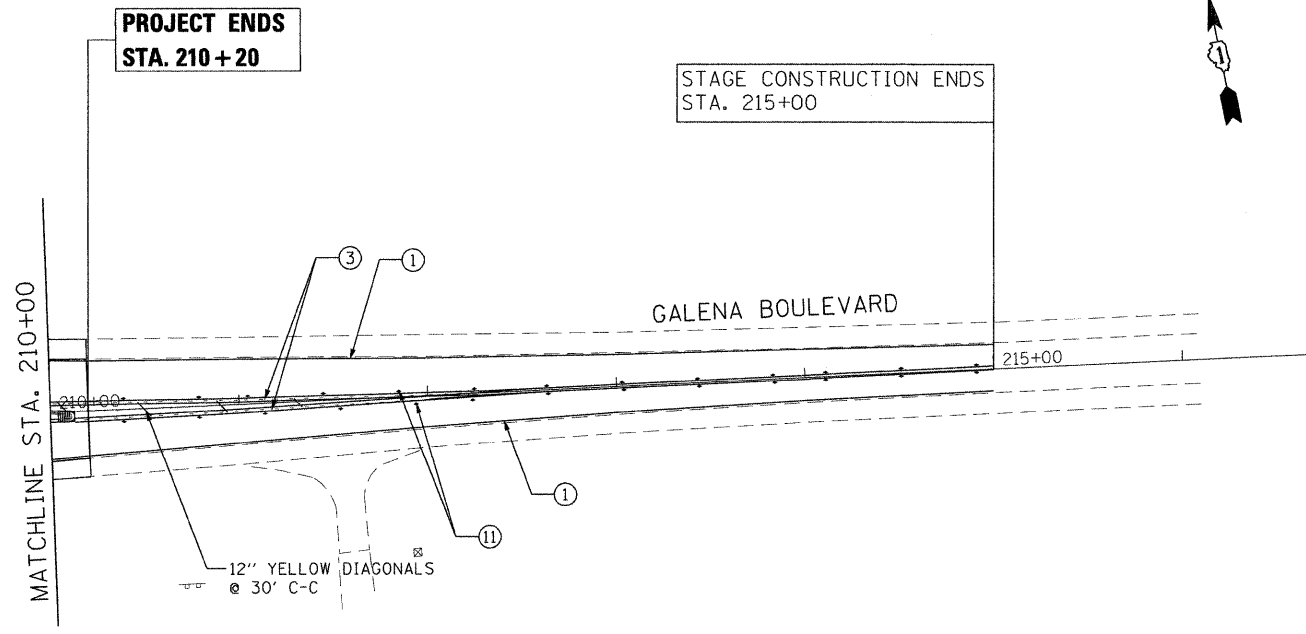
**GALENA BOULEVARD**

**PAVEMENT MARKING PLAN**  
**& LANDSCAPING PLAN**

SCALE: 1"=50' SHEET NO. 1 OF 2 SHEETS STA. 182+00 TO STA. 215+00

F.A.P. RTE. 573	SECTION 61HB-1-R	COUNTY KANE	TOTAL SHEETS 110	SHEET NO. 28
CONTRACT NO. 60K76				
FED. ROAD DIST. NO. 1   ILLINOIS FED. AID PROJECT				

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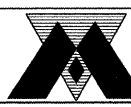


- PAVEMENT MARKING LEGEND**
- ① THERMOPLASTIC PAVEMENT MARKING 4" SOLID WHITE LINE
  - ② THERMOPLASTIC PAVEMENT MARKING 4" WHITE LANE LINE (10' DASH 30' SKIP)
  - ③ THERMOPLASTIC PAVEMENT MARKING 4" DOUBLE YELLOW LINE
  - ④ THERMOPLASTIC PAVEMENT MARKING 4" SOLID YELLOW LINE
  - ⑤ THERMOPLASTIC PAVEMENT MARKING 6" WHITE LINE
  - ⑥ THERMOPLASTIC PAVEMENT MARKING 6" YELLOW WHITE DOTTED LINE (2' DASH 6' SKIP)
  - ⑦ THERMOPLASTIC PAVEMENT MARKING 8" SOLID WHITE LINE
  - ⑧ THERMOPLASTIC PAVEMENT MARKING 12" WHITE DIAGONAL LINE
  - ⑨ THERMOPLASTIC PAVEMENT MARKING 24" WHITE STOP BAR
  - ⑩ THERMOPLASTIC PAVEMENT MARKING LETTERS AND SYMBOLS (TYP)
  - ⑪ RAISED REFLECTIVE PAVEMENT MARKER
  - ⑫ RAISED REFLECTIVE BRIDGE PAVEMENT MARKER

- LANDSCAPING LEGEND**
- TOPSOIL FURNISH AND PLACE, 4" SEEDING, CLASS 2A
  - NITROGEN FERTILIZER NUTRIENT
  - PHOSPHORUS FERTILIZER NUTRIENT
  - POTASSIUM FERTILIZER NUTRIENT

- NOTES:**
- 1. REFER TO DISTRICT 1 TYPICAL PAVEMENT MARKINGS (TC-13) FOR ADDITIONAL INFORMATION.
  - 2. REFER TO DISTRICT 1 RAISED REFLECTIVE PAVEMENT MARKERS (TC-11) FOR ADDITIONAL INFORMATION.

FILE NAME: F:\2010\ME\10012\_PTB156-16\_Galena\CADD\Shs\1616K76-Shs-PMK02.dgn  
 USER NAME: Millennium Professional Services


**MILLENNIA PROFESSIONAL SERVICES**  
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 www.mps-il.com

DESIGNED - CJD	REVISED -
DRAWN - CJD	REVISED -
CHECKED - TVN	REVISED -
DATE - 9/22/2011	REVISED -

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

**GALENA BOULEVARD**  
**PAVEMENT MARKING PLAN**  
**& LANDSCAPING PLAN**

SCALE: 1"=50'    SHEET NO. 2 OF 2 SHEETS    STA. 195+00 TO STA. 210+00

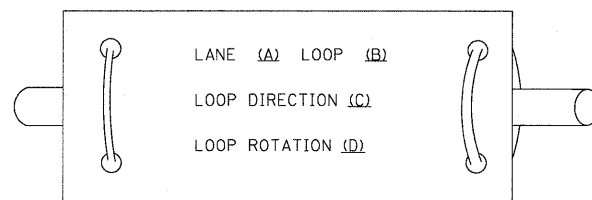
F.A.P. RTE. 573	SECTION 61HB-1-R	COUNTY KANE	TOTAL SHEETS 110	SHEET NO. 29
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			CONTRACT NO. 60K76	

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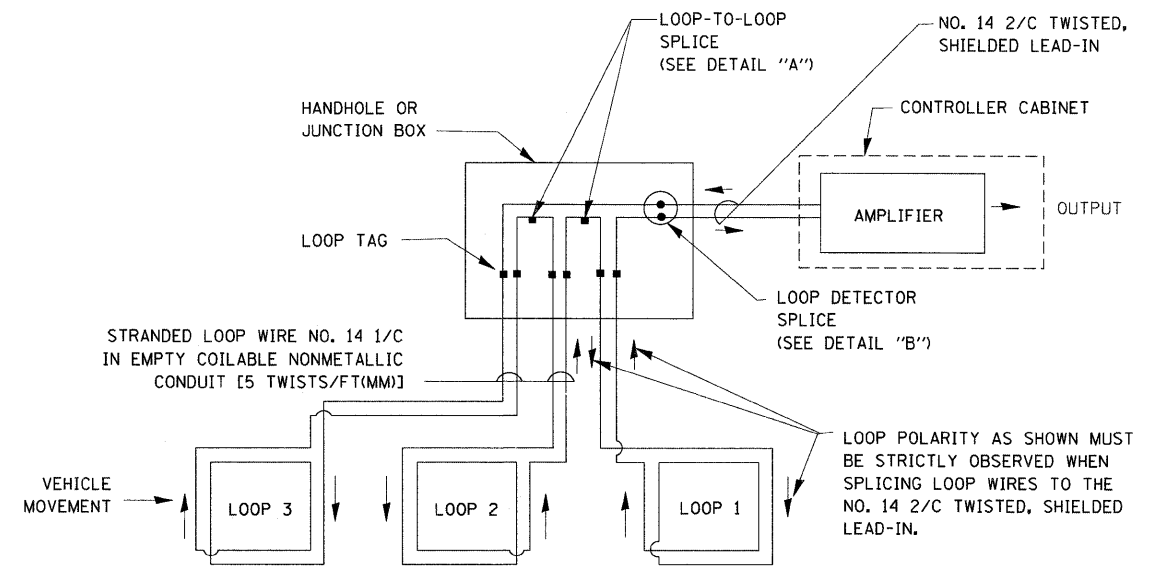
**LOOP DETECTOR NOTES**

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 DIVESHOLES 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**

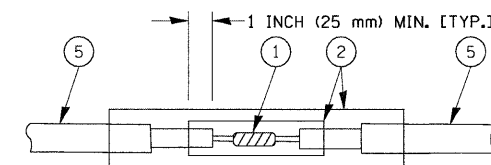


- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

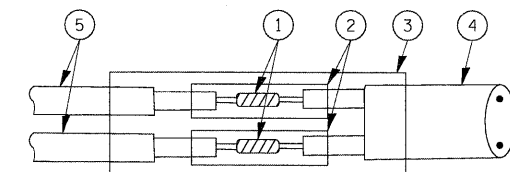


**DETECTOR LOOP WIRING SCHEMATIC**

- 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.

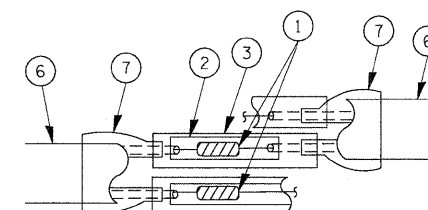


**DETAIL "A" LOOP-TO-LOOP SPLICE**

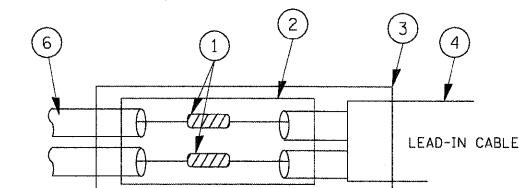


**DETAIL "B" LOOP-TO-CONTROLLER SPLICE**

**TYPE I LOOP**



**DETAIL "A" LOOP-TO-LOOP SPLICE**



**DETAIL "B" LOOP-TO-CONTROLLER SPLICE**

**LOOP DETECTOR SPLICE**

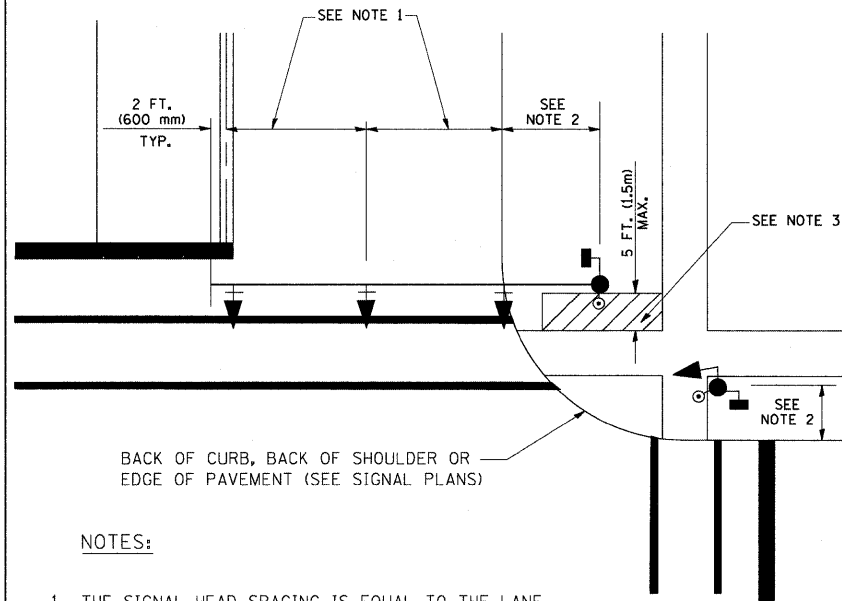
- 1 WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH.
- 2 WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE.
- 3 WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGTH 6" (150 mm), UNDERWATER GRADE.
- 4 NO. 14 2/C TWISTED, SHIELDED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

FILE NAME = c:\px_work\pwi\DOT\BAUERDL\d0108315\ts05.dgn	USER NAME = bauerdl	DESIGNED - DAD	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS</b>			F.A.P. RTE. 573	SECTION 61HB-1-R	COUNTY KANE	TOTAL SHEETS 110	SHEET NO. 30
PLOT SCALE = 50.0000' / IN.	CHECKED - DAD	REVISED -	REVISED -		SCALE: NONE	SHEET NO. 1 OF 6 SHEETS	STA.	TO STA.	<b>TS-05</b>		CONTRACT NO. <b>60K76</b>	
PLOT DATE = 11/4/2009	DATE - 10-28-09	REVISED -	REVISED -		FED. ROAD DIST. NO. 1   ILLINOIS   FED. AID PROJECT							



**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.

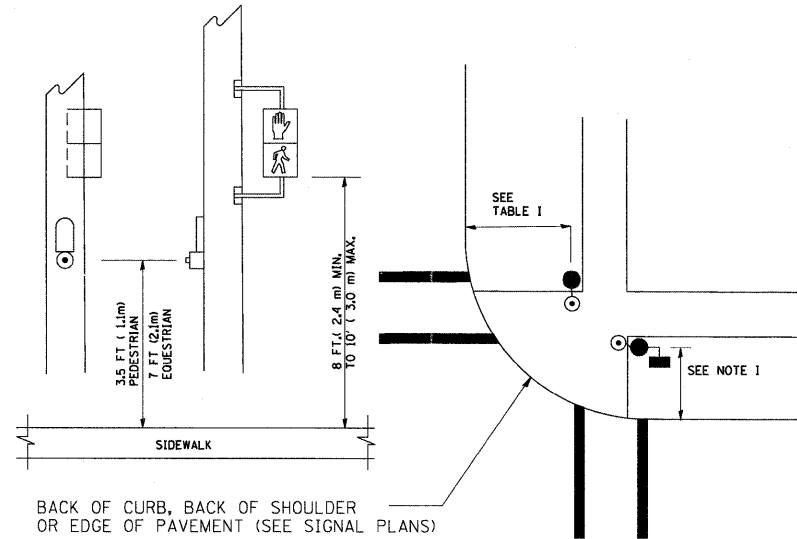


BACK OF CURB, BACK OF SHOULDER OR EDGE OF PAVEMENT (SEE SIGNAL PLANS)

**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**

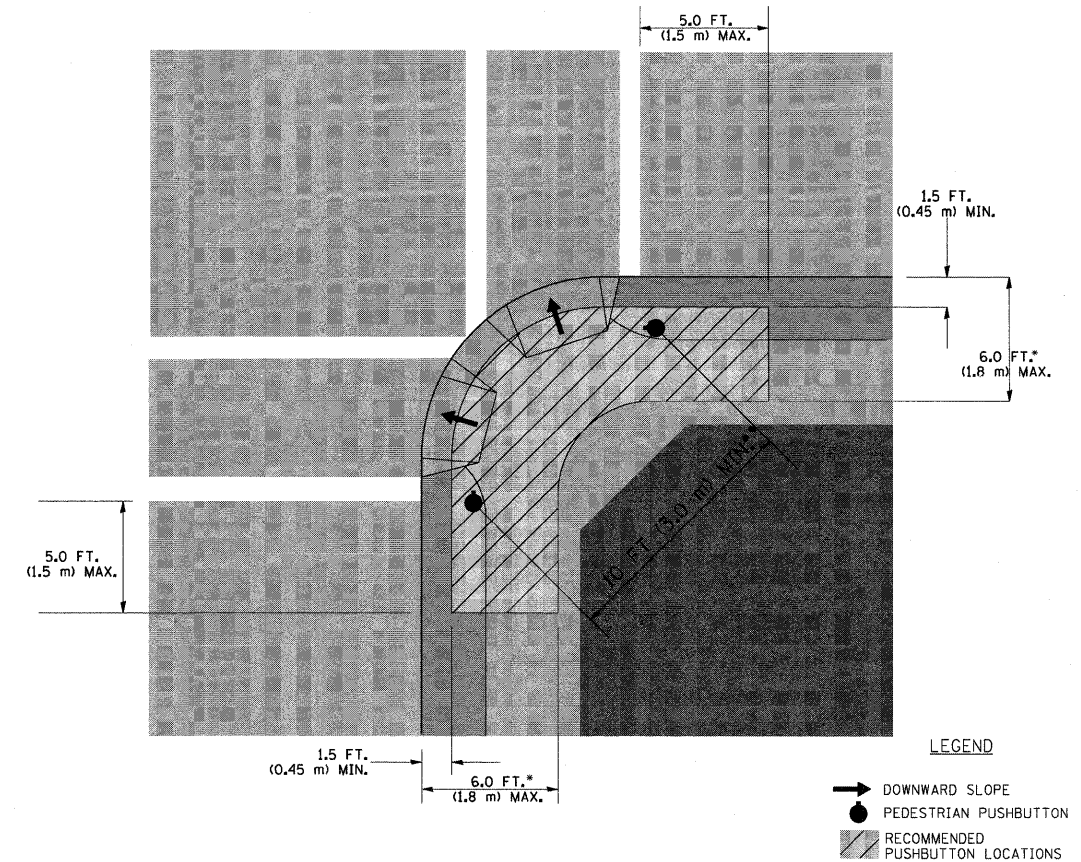


BACK OF CURB, BACK OF SHOULDER OR EDGE OF PAVEMENT (SEE SIGNAL PLANS)

**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**



- 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.

FILE NAME =	USER NAME = bauerdl	DESIGNED - DAD	REVISED -
cr:\pwork\p\WIDOT\BAUERDL\dl0108315\ts05.dgn		DRAWN - BCK	REVISED -
	PLOT SCALE = 50.0000" / IN.	CHECKED - DAD	REVISED -
	PLOT DATE = 11/4/2009	DATE - 10-28-09	REVISED -

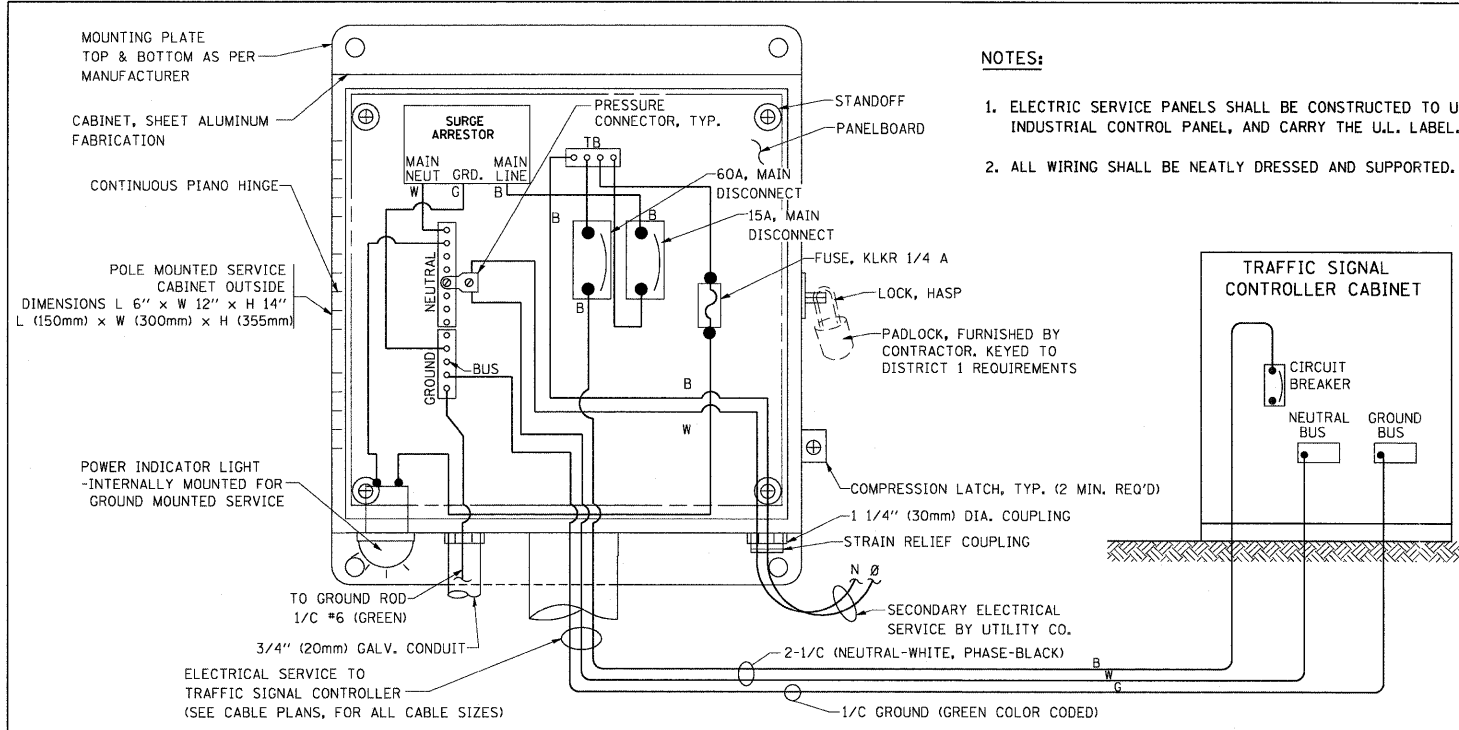
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**DISTRICT ONE  
STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

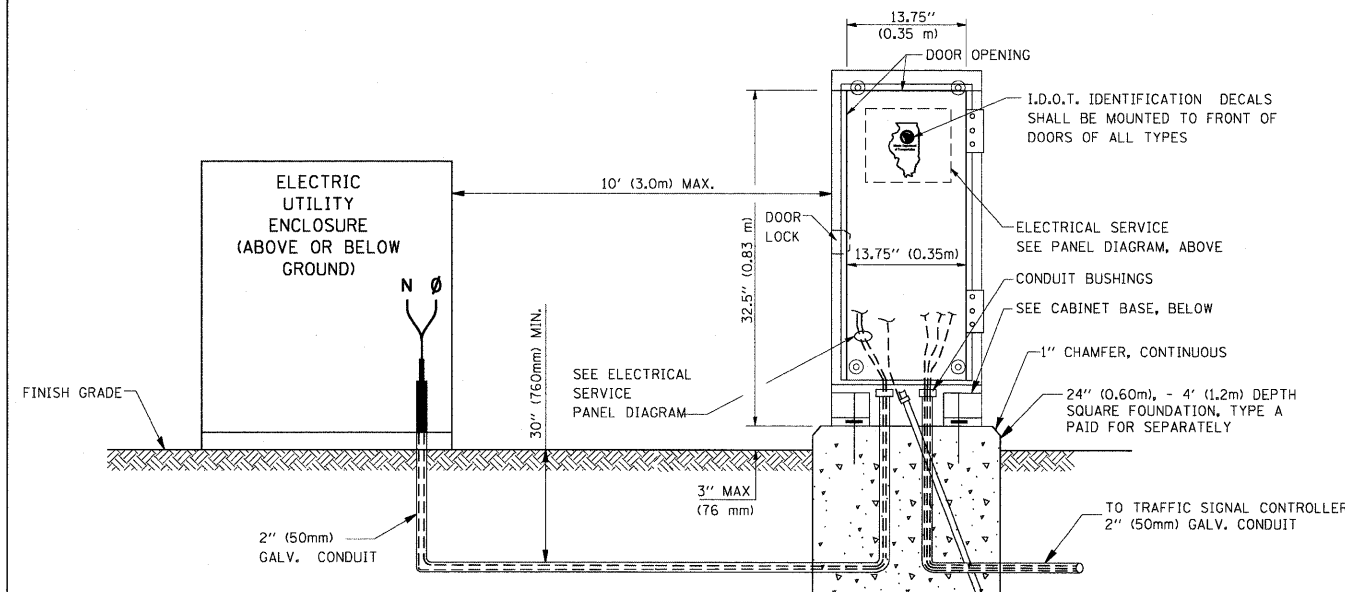
SCALE: NONE SHEET NO. 2 OF 6 SHEETS STA. TO STA.

F.A.P. RTE. 573	SECTION 61HB-1-R	COUNTY KANE	TOTAL SHEETS 110	SHEET NO. 31
TS-05		CONTRACT NO. 60K76		
FED. ROAD DIST. NO. 1 [ILLINOIS] FED. AID PROJECT				



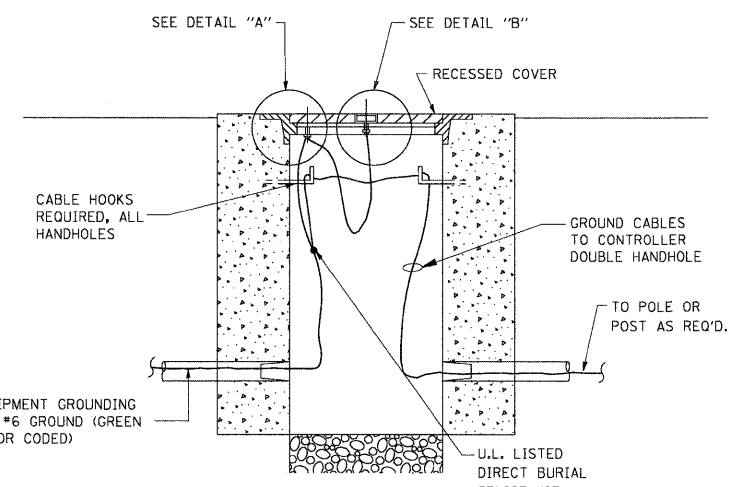
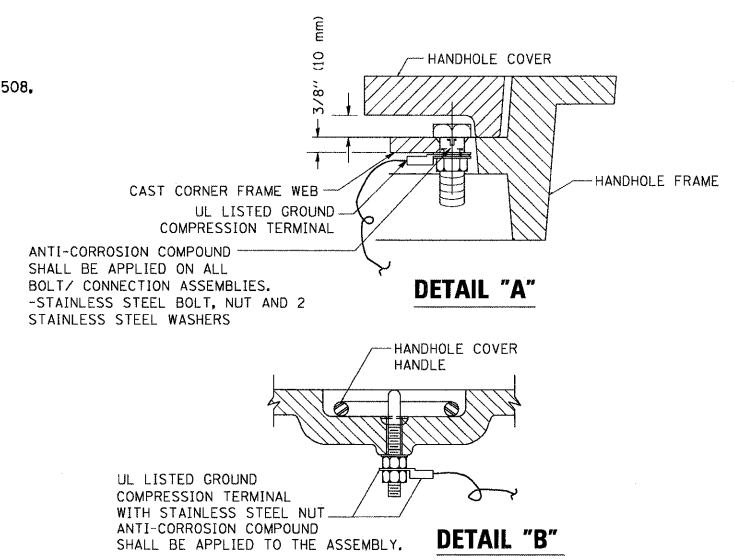
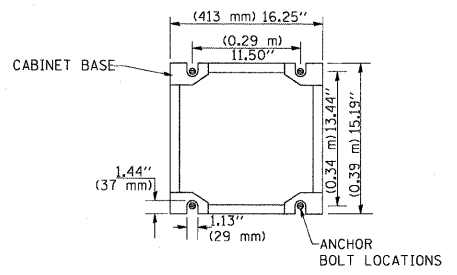


**ELECTRICAL SERVICE – PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)**  
**SERVICE INSTALLATION POLE MOUNT (SHOWN)**  
 (NOT TO SCALE)

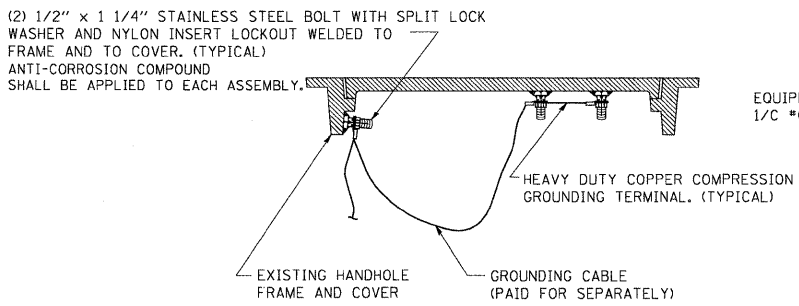


**SERVICE INSTALLATION GROUND MOUNT**  
 (NOT TO SCALE)

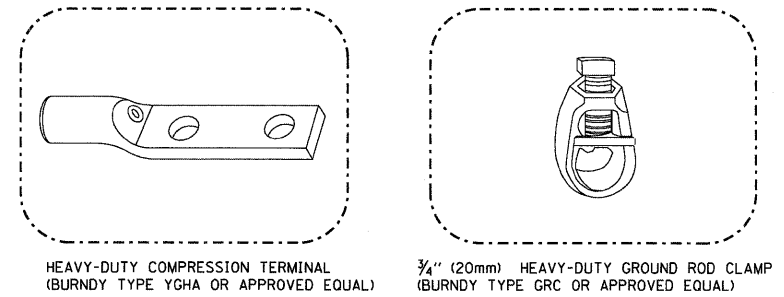
**CABINET – BASE BOLT PATTERN**  
 (NOT TO SCALE)



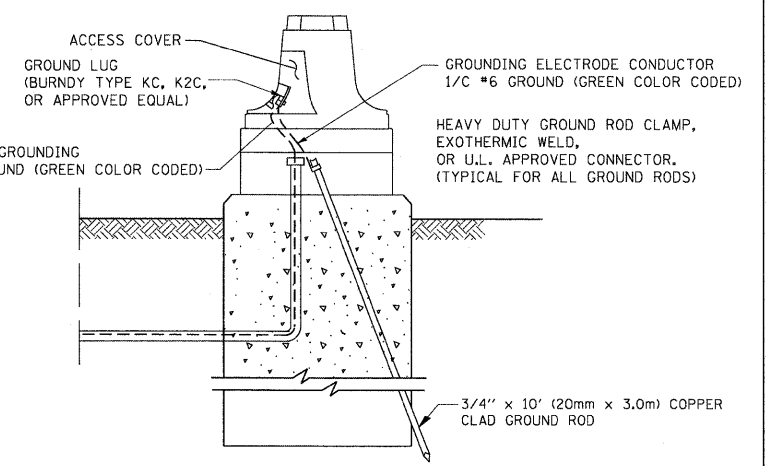
**HANDHOLE COVER & FRAME – GROUNDING DETAIL**  
 (NOT TO SCALE)



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

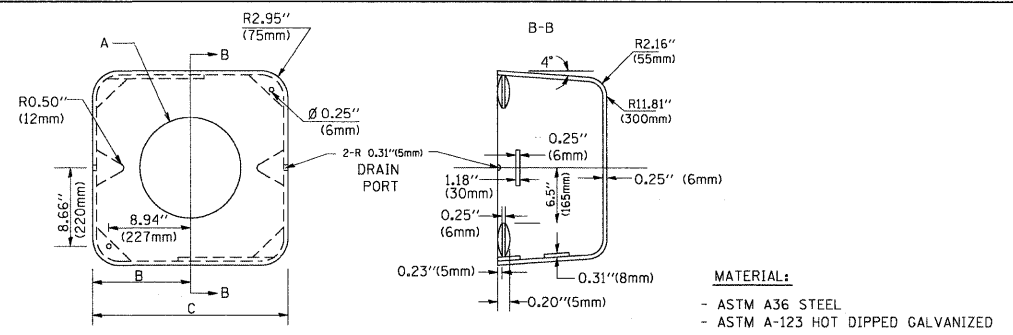
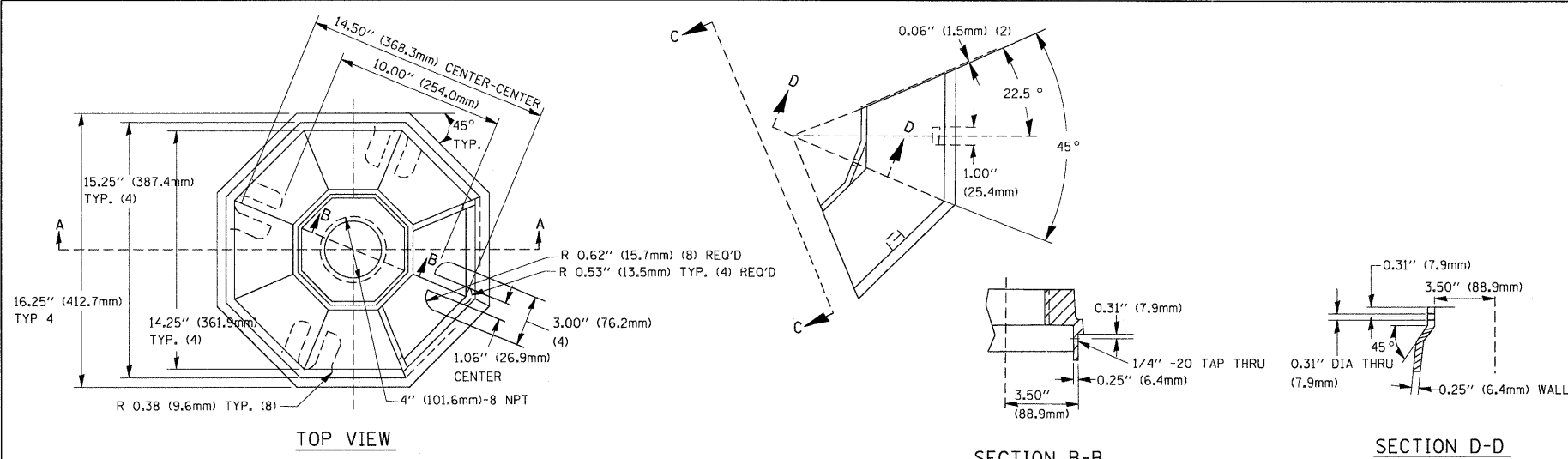


- NOTES:**
- ALL CLAMPS SHALL BE BRONZE OR COPPER, UL APPROVED.
  - GROUND CABLE SHALL BE LOOPED OVER HOOKS IN THE HANDHOLES. 6.5' (2.0m) SLACK SHALL BE PROVIDED IN SINGLE HANDHOLES. 13' (4.0m) OF SLACK SHALL BE PROVIDED IN DOUBLE HANDHOLES. 5' (1.4m) OF SLACK SHALL BE PROVIDED BETWEEN FRAME AND COVER.



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

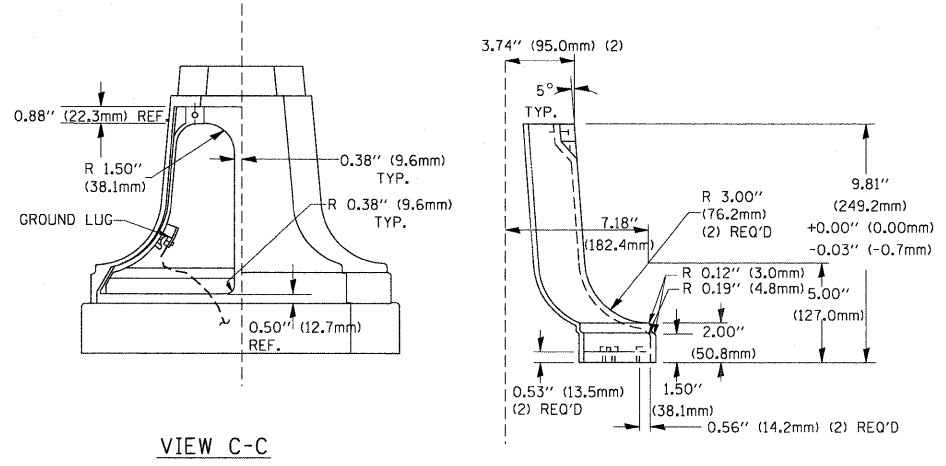
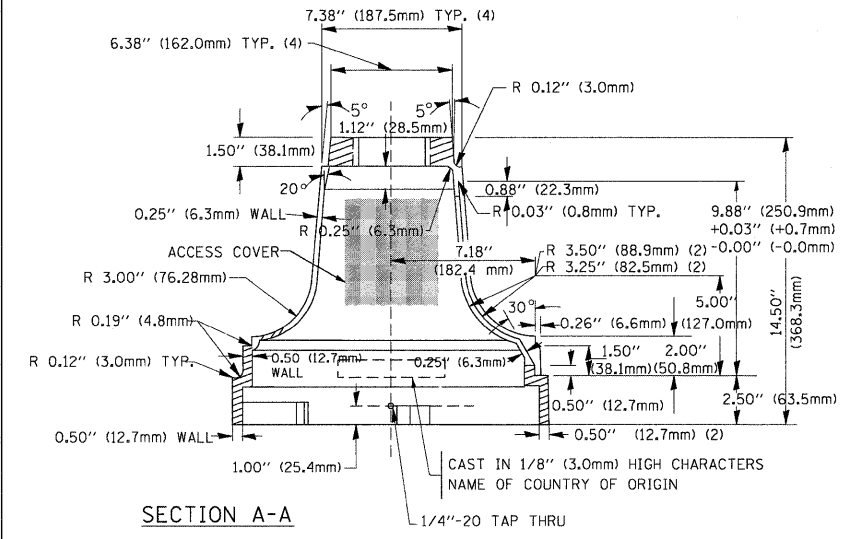
- NOTES:**
- GROUNDING SYSTEM**
1. THE GROUNDING SYSTEM SHALL CONSIST OF AN INSULATED CONDUCTOR TYPE XLP, NO. 6 A.W.G., STRANDED COPPER TO BE INSTALLED IN RACEWAYS. THE GROUNDING CABLE SHALL BE INSTALLED IN A CONTINUOUS MANNER AS SHOWN ON THE CABLE PLAN PROVIDED. ALL GROUNDING CONDUCTORS SHALL BE BONDED 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.



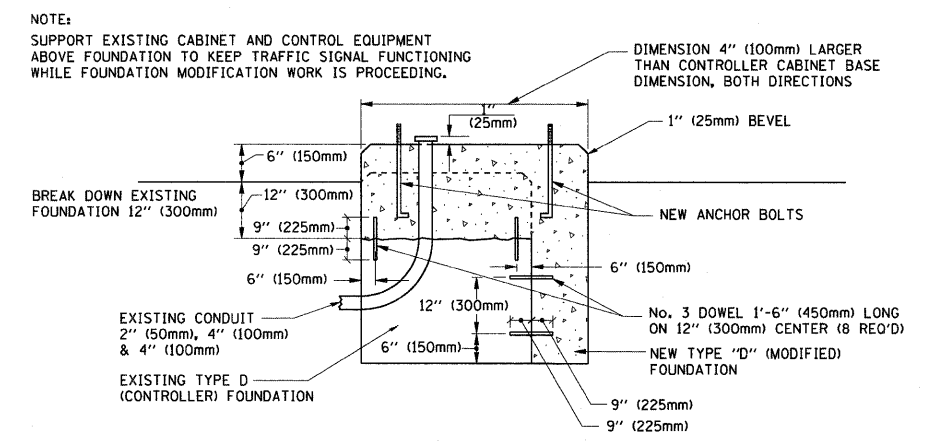
A	B	C	HEIGHT	WEIGHT
VARIES	9.5"(241mm)	19"(483mm)	7" (178mm) - 12" (300mm)	53 lbs (24kg)
VARIES	10.75"(273mm)	21.5"(546mm)	7" (178mm) - 12" (300mm)	68 lbs (31 kg)
VARIES	13.0"(330mm)	26"(660mm)	7" (178mm) - 12" (300mm)	81 lbs (37 kg)
VARIES	18.5"(470mm)	37"(940mm)	7" (178mm) - 12" (300mm)	126 lbs (57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

**SHROUD**

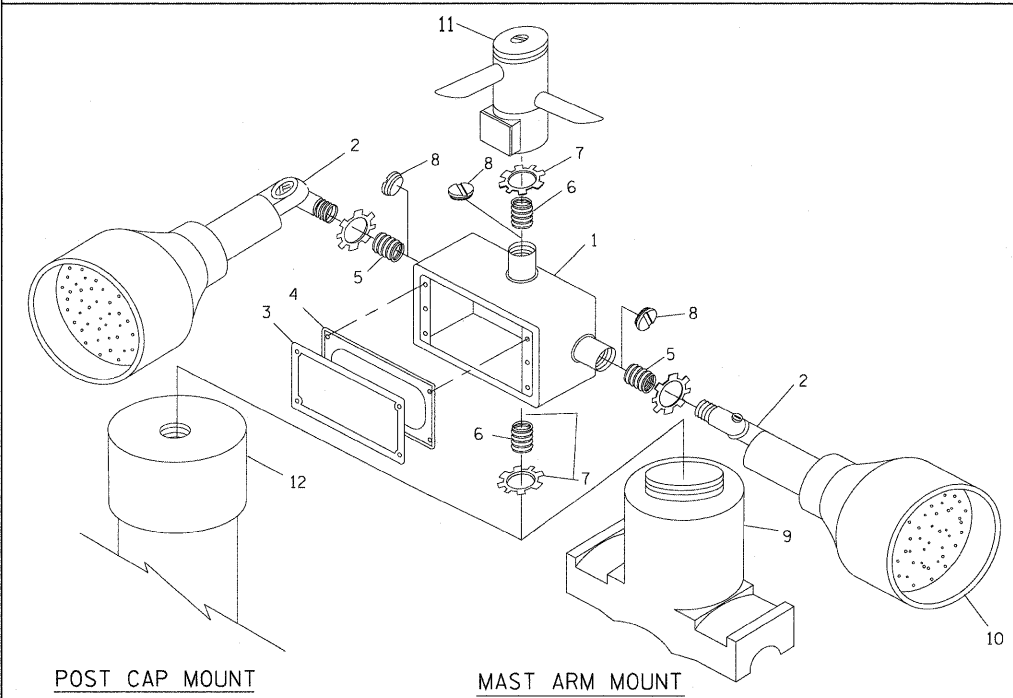
- NOTES:**
- DIMENSION "A" IS EQUAL TO THE DIAMETER OF THE MAST ARM POLE AT THE TOP OF THE SHROUD. THE SHROUD SHALL BE TIGHT TO THE MAST ARM POLE.
  - THE SUPPLIER SHALL VERIFIED THE ABOVE DIMENSIONS BASED ON MAST ARM REQUIREMENTS.
  - THE HEIGHT OF THE SHROUD SHALL COVER THE ANCHOR BOLTS, NUTS AND MAST ARM POLE BASE.



**TRAFFIC SIGNAL POST - MOUNTING BASE - TYPE A**

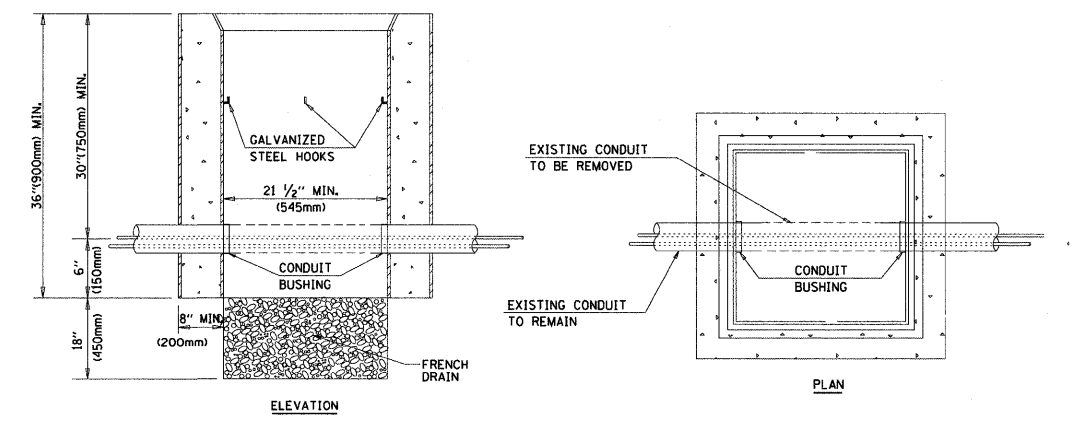


**MODIFY EXISTING TYPE "D" FOUNDATION**



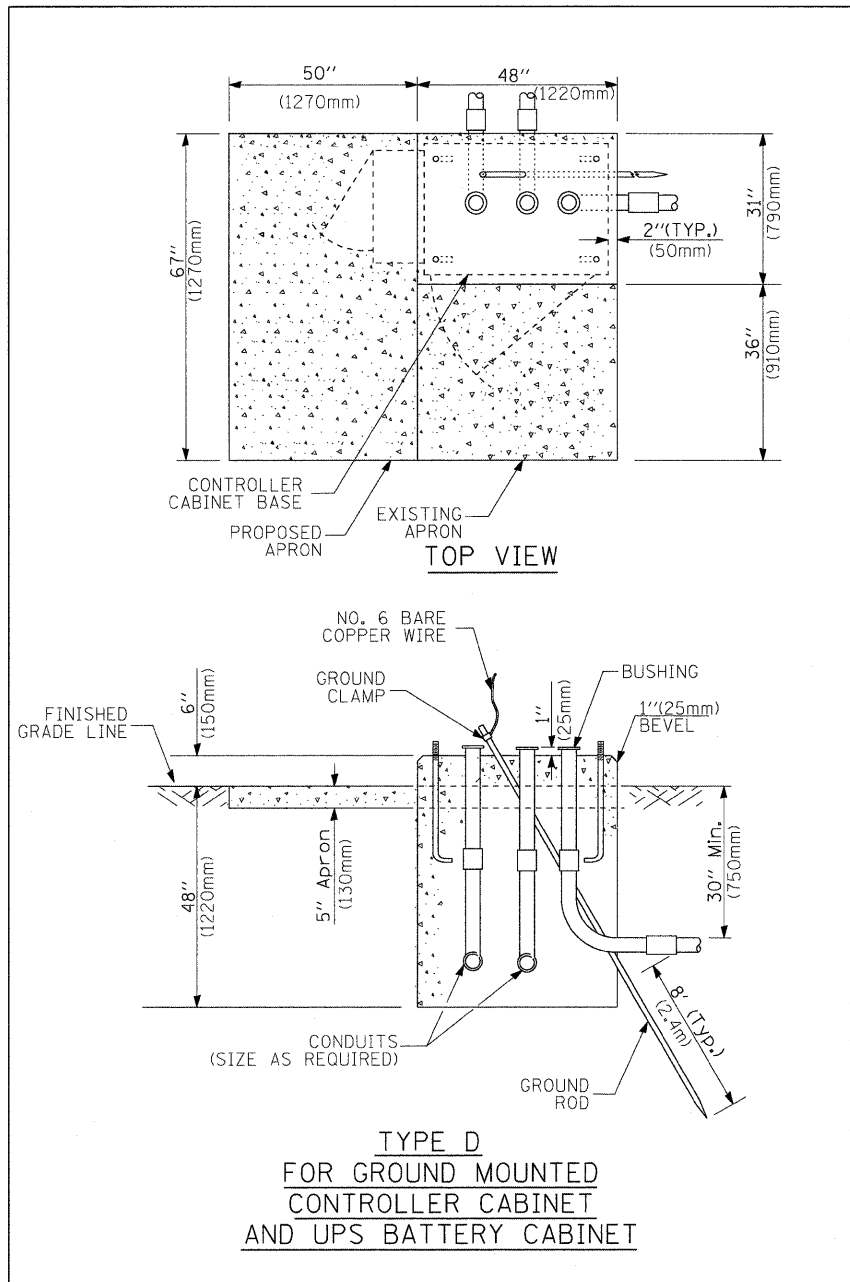
ITEM NO.	IDENTIFICATION
1	OUTLET BOX- GALV. 21 CU.IN. (0.000344 CU-M)
2	LAMP HOLDER AND COVER
3	OUTLET BOX COVER
4	RUBBER COVER GASKET
5	REDUCING BUSHING
6	3/4"(19 mm) CLOSE NIPPLE
7	3/4"(19 mm) LOCKNUT
8	3/4"(19 mm) HOLE PLUG
9	SADDLE BRACKET - GALV.
10	6 WATT PAR 38 LED FLOOD LAMP
11	DETECTOR UNIT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

- NOTES:**
- ALL ELECTRICAL ITEMS, EXCEPT ITEMS #2 AND #11 SHALL BE ALUMINUM OR GALVANIZED
  - ITEM #1- OZ/GEONEY FSX-1-50 OR EQUIVALENT  
ITEM #2- MULBERRY CON-O-SHADE LAMP SHIELD OR EQUIVALENT  
ITEM #9- "BAND-IT" SADDLE BRACKET OR EQUIVALENT
  - 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.

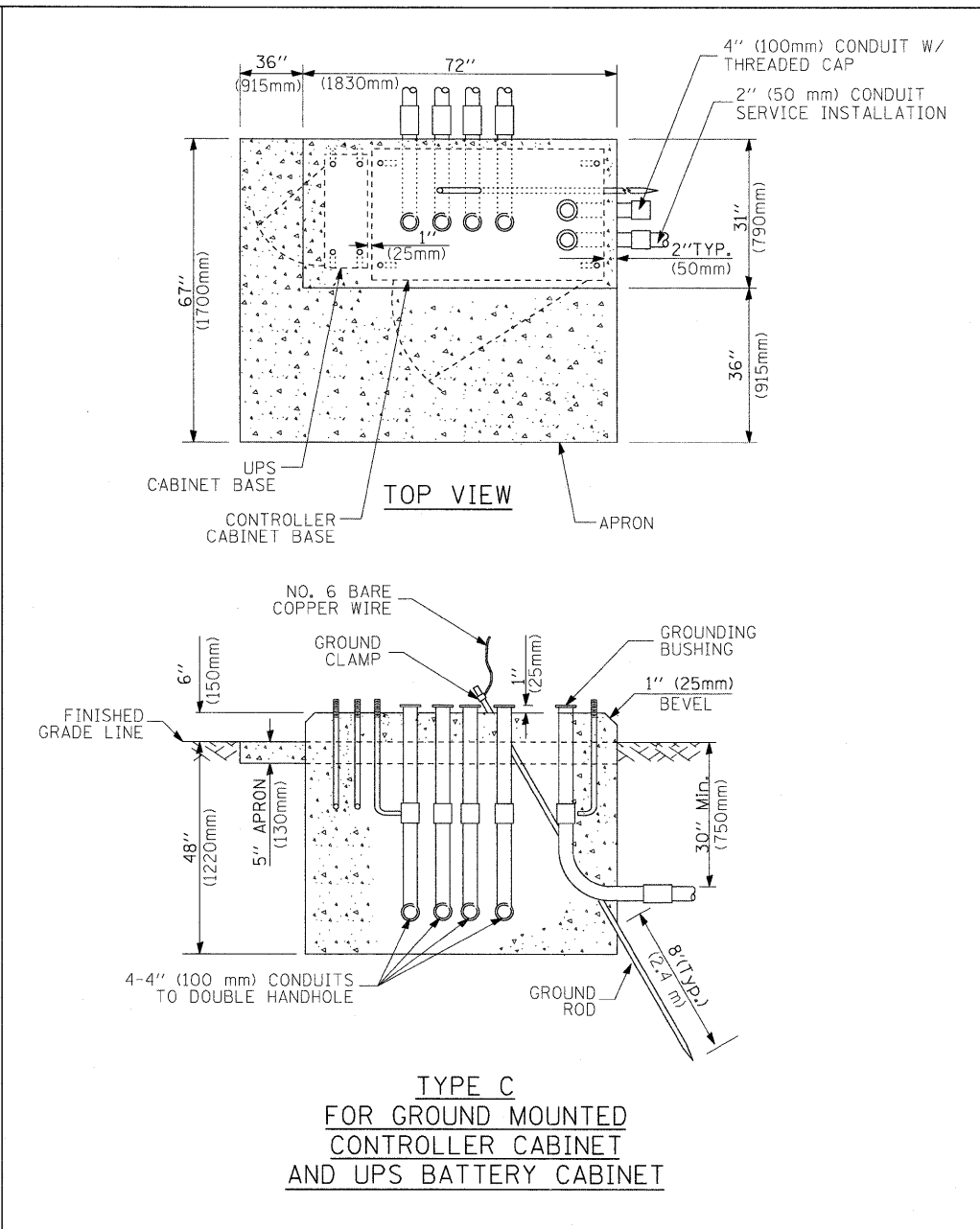


- NOTES:**
- HANDHOLE CONSTRUCTED PER STATE STANDARD 814001.
  - REMOVAL OF THE EXISTING CONDUIT FROM THE HANDHOLE AND THE INSTALLATION OF THE CONDUIT BUSHINGS SHALL BE INCIDENTAL TO THE HANDHOLE.

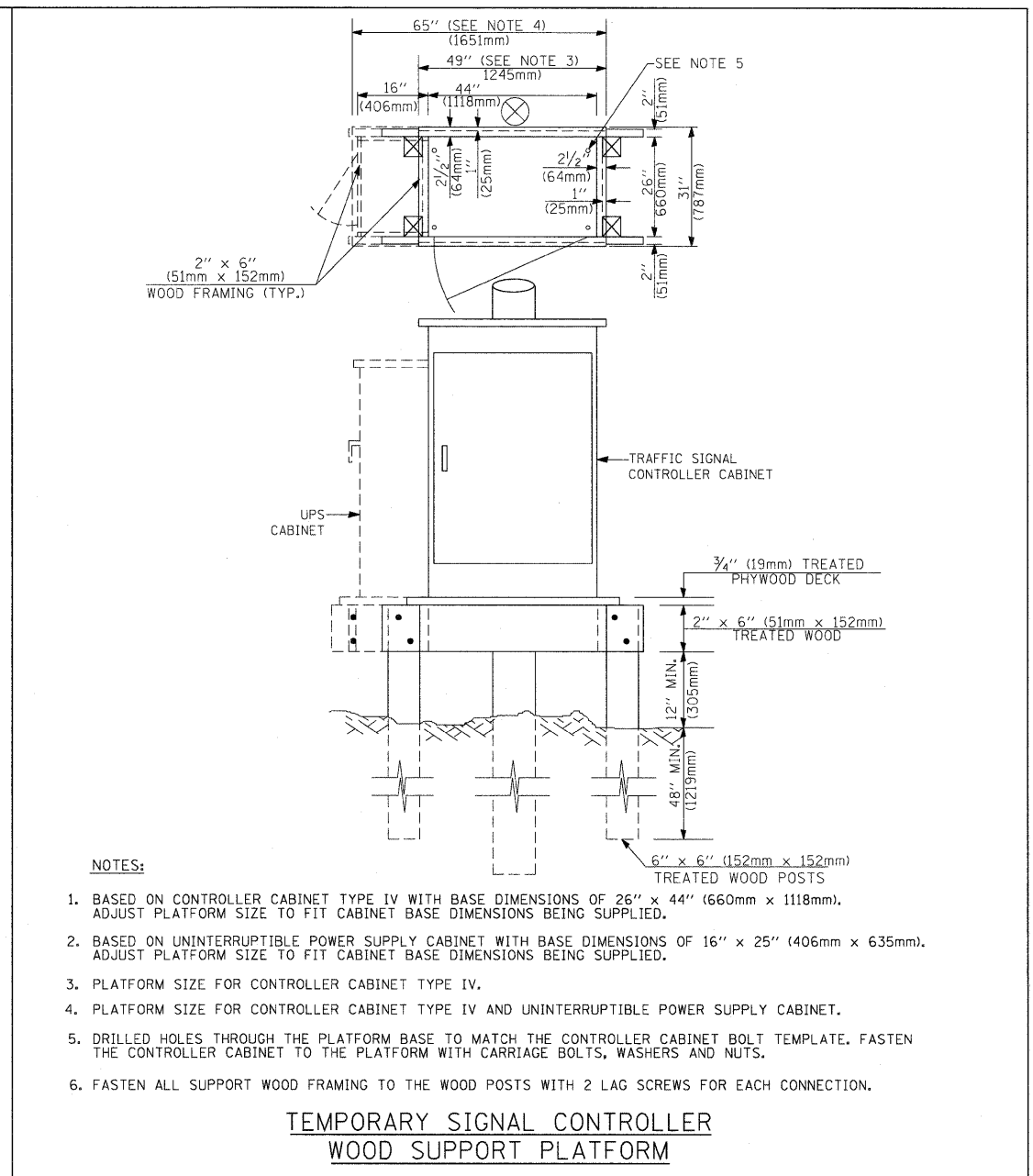
**HANDHOLE TO INTERCEPT EXISTING CONDUIT**



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



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



- 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	① 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)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to 40' (12.2 m) and less than 50' (15.2 m)	13'-0" (3.4 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 50' (15.2 m) and up to 55' (16.8 m)	13'-0" (4.0 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 55' (16.8 m) and less than 65' (19.8 m)	15'-0" (4.6 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 65' (19.8 m) and up to 75' (22.9 m)	21'-0" (6.4 m)	42" (1060mm)	36" (900mm)	16	8(25)
Greater than or equal to 75' (22.9 m) and up to 85' (25.9 m)	25'-0" (7.6 m)	42" (1060mm)	36" (900mm)	16	8(25)

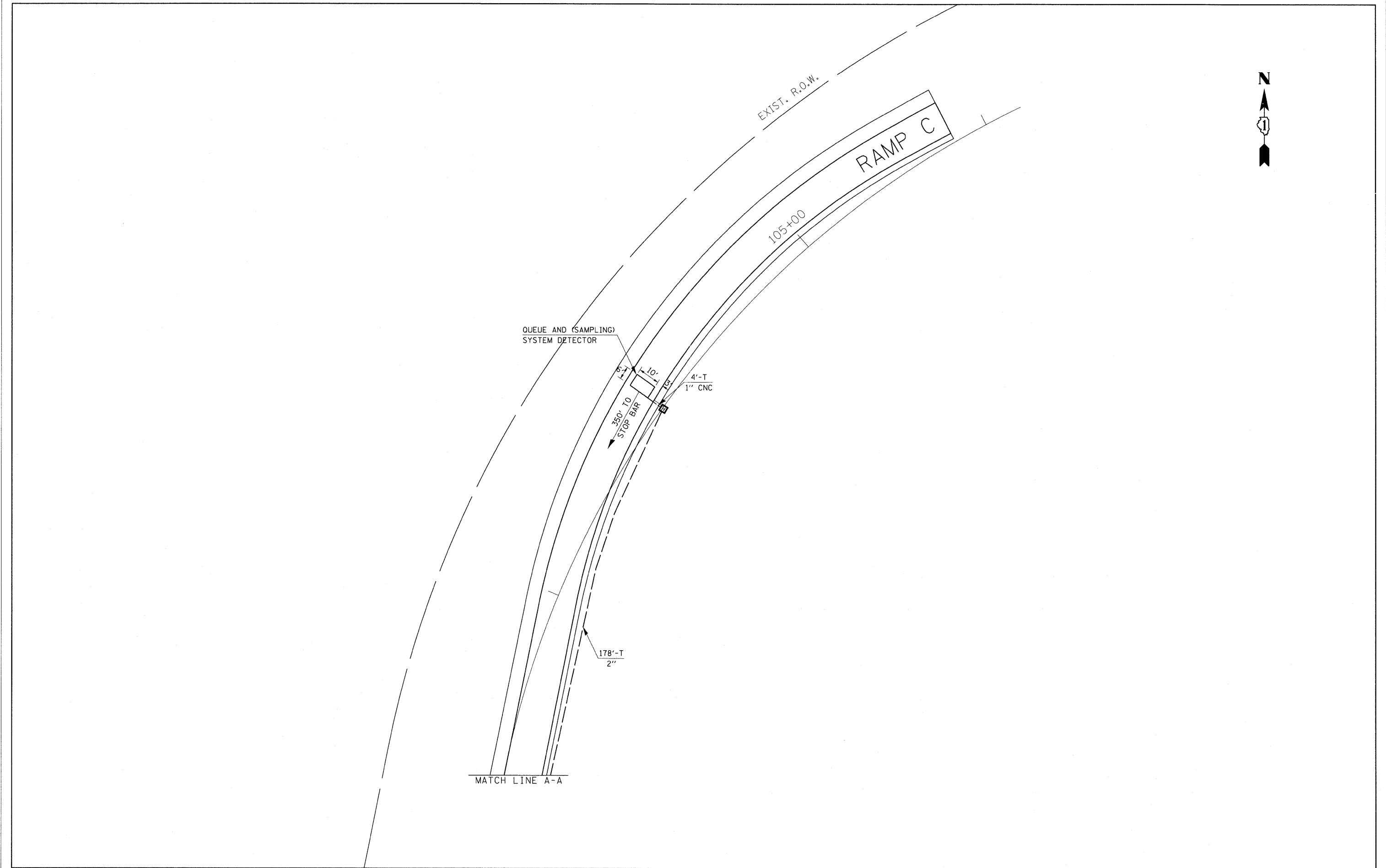
- NOTES:**
1. These foundation depths are for sites which have cohesive soils (clayey silt, sandy clay, etc.) along the length of the shaft, with an average Unconfined Compressive Strength (Qu) > 1.0 tsf (100 kpa). This strength shall be verified by boring data prior to construction or with testing by 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**

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





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PLOT DATE = 8/25/2011

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CHECKED - DAG	REVISED -
DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

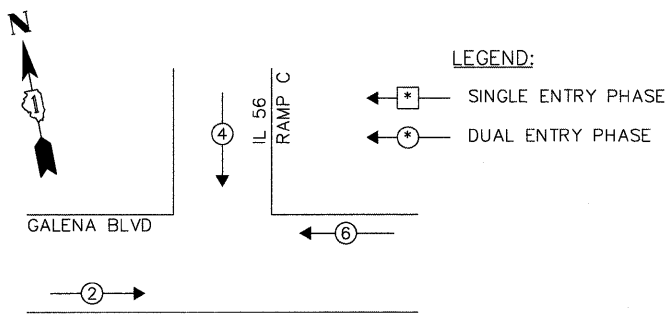
**TRAFFIC SIGNAL INSTALLATION PLAN  
GALENA BLVD AND IL 56 WEST RAMPS (2 OF 2)**

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
573	61HB-1-R	KANE	110	37
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 60K76	

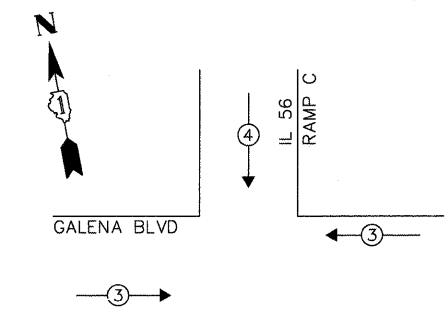


CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM

EMERGENCY VEHICLE PREEMPTION SEQUENCE



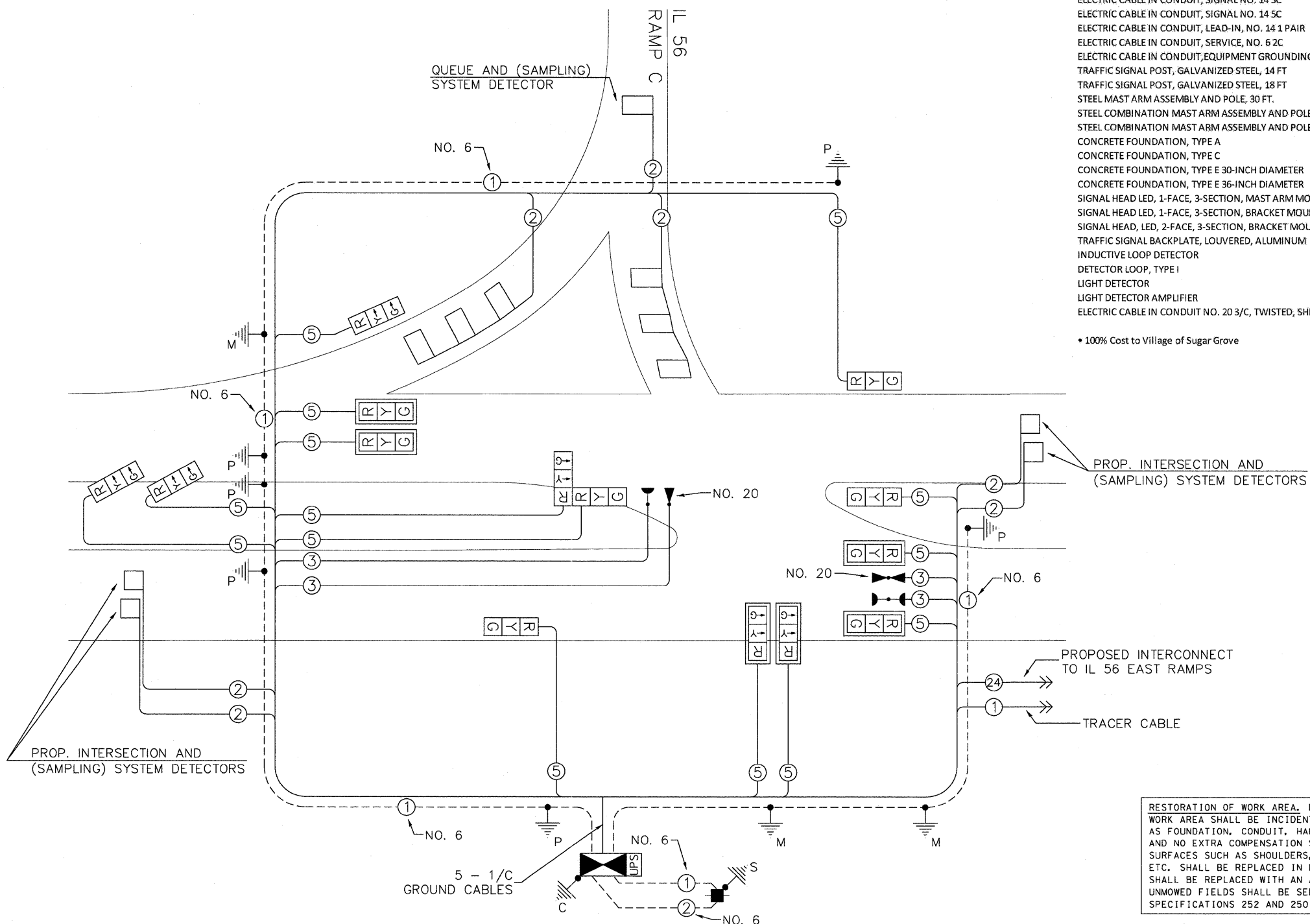
PROPOSED EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	→	↓

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	INCAND.	LED	% OPERATION	
SIGNAL (RED)	14		17	0.50	119.00
(YELLOW)	14		25	0.25	87.50
(GREEN)	14		15	0.25	52.50
ARROW	-		12	0.10	-
PED. SIGNAL	-		25	1.00	-
CONTROLLER	1		100	1.00	100.00
ILLUM. SIGN	-		25	0.05	-
VIDEO SYSTEM	-		-	1.00	-
FLASHER				0.50	
ENERGY COSTS TO:					TOTAL = 359.00

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS / DISTRICT 1  
 201 WEST CENTER COURT / SCHAUMBURG, ILLINOIS 60196-1096  
 ENERGY SUPPLY: CONTACT: TOM PERKINS  
 PHONE: (847) 894-7968  
 COMPANY: COMMONWEALTH EDISON

FILE NAME =	USER NAME = plascencia	DESIGNED - IP	REVISED -
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	PLOT SCALE = 20,000,000 // 1in.	CHECKED - DAG	REVISED -
	PLOT DATE = 8/25/2011	DATE -	REVISED -

CABLE PLAN



SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
CHANGEABLE MESSAGE SIGN	CAL MO	1
SERVICE INSTALLATION, POLE MOUNTED	EACH	1
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	700
CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	45
CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL	FOOT	35
CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	120
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	200
CONDUIT PUSHED, 2 1/2" DIA., GALVANIZED STEEL	FOOT	135
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	245
HANDHOLE	EACH	4
HEAVY-DUTY HANDHOLE	EACH	5
DOUBLE HANDHOLE	EACH	1
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	875
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET	EACH	1
UNINTERRUPTIBLE POWER SUPPLY	EACH	1
TRANSCIVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	300
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	2320
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	2170
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	125
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	890
TRAFFIC SIGNAL POST, GALVANIZED STEEL, 14 FT	EACH	5
TRAFFIC SIGNAL POST, GALVANIZED STEEL, 18 FT	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 30 FT.	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 30 FT	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 46 FT	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	24
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	20
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	13
SIGNAL HEAD LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	6
SIGNAL HEAD LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	6
SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	6
INDUCTIVE LOOP DETECTOR	EACH	7
DETECTOR LOOP, TYPE I	FOOT	385
LIGHT DETECTOR	EACH	2
LIGHT DETECTOR AMPLIFIER	EACH	1
ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED	FOOT	300

\* 100% Cost to Village of Sugar Grove

PROP. INTERSECTION AND (SAMPLING) SYSTEM DETECTORS

PROPOSED INTERCONNECT TO IL 56 EAST RAMPS

TRACER CABLE

THE END OF THE TRACER CABLE SHALL BE CONTINUOUS AND EXTEND INTO THE CONTROLLER CABINET.

RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

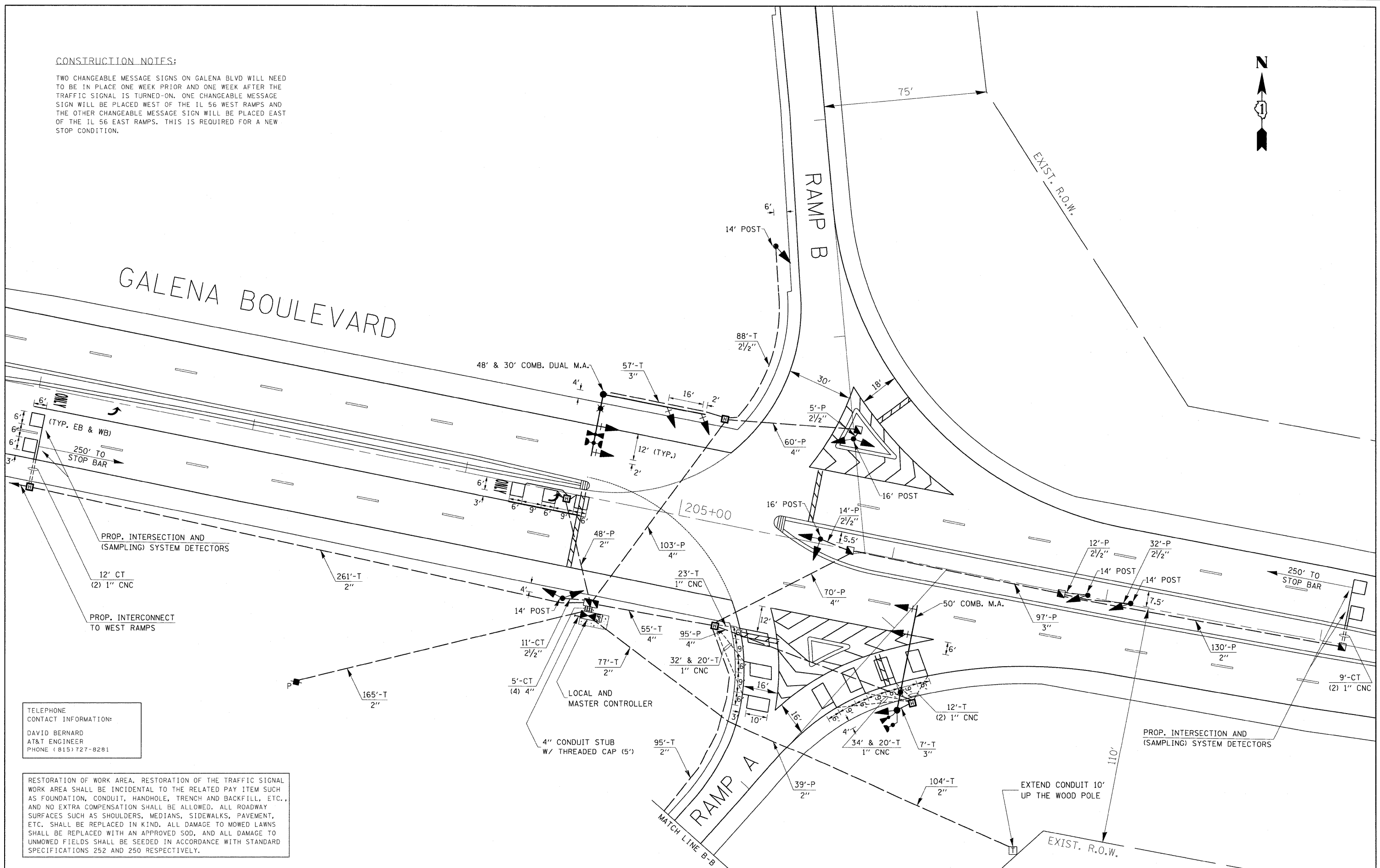
SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE  
 GALENA BLVD AND IL 56 WEST RAMPS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
573	61HB-1-R	KANE	110	38
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
			CONTRACT NO. 60K76	

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

**CONSTRUCTION NOTES:**

TWO CHANGEABLE MESSAGE SIGNS ON GALENA BLVD WILL NEED TO BE IN PLACE ONE WEEK PRIOR AND ONE WEEK AFTER THE TRAFFIC SIGNAL IS TURNED-ON. ONE CHANGEABLE MESSAGE SIGN WILL BE PLACED WEST OF THE IL 56 WEST RAMPS AND THE OTHER CHANGEABLE MESSAGE SIGN WILL BE PLACED EAST OF THE IL 56 EAST RAMPS. THIS IS REQUIRED FOR A NEW STOP CONDITION.



TELEPHONE CONTACT INFORMATION:  
 DAVID BERNARD  
 AT&T ENGINEER  
 PHONE (815) 727-8281

RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

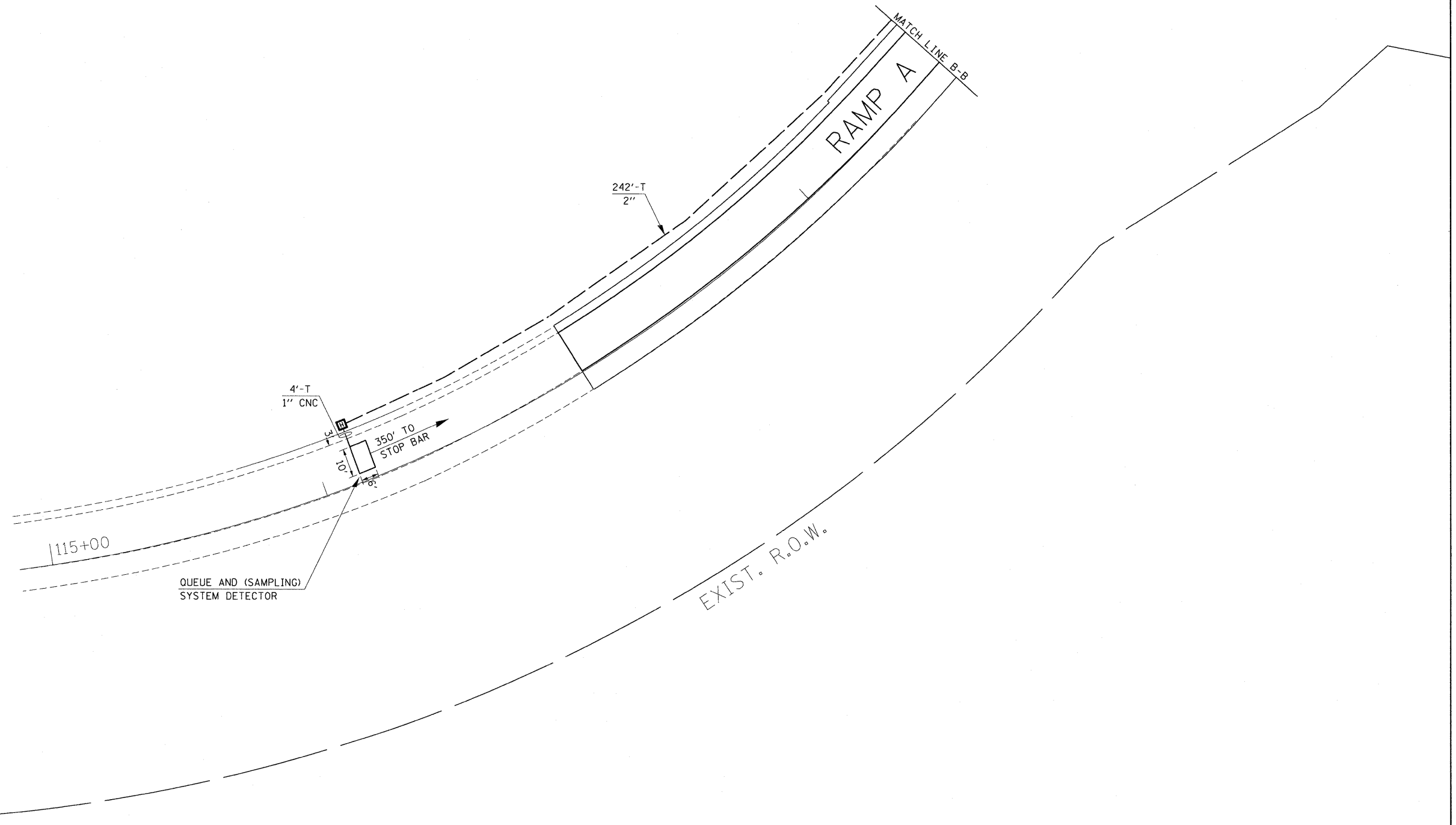
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		CHECKED - DAG	REVISED -
		DATE -	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**TRAFFIC SIGNAL INSTALLATION PLAN  
 GALENA BLVD AND IL 56 EAST RAMPS (1 OF 2)**

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
573	61HB-1-R	KANE	110	39
CONTRACT NO. 60K76				
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			

SCALE: 1" = [ ] SHEET NO. [ ] OF [ ] SHEETS STA. [ ] TO STA. [ ]



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	PLOT DATE = 8/25/2011	DATE -	REVISED -

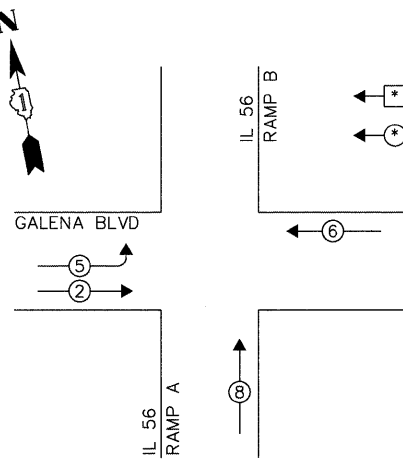
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**TRAFFIC SIGNAL INSTALLATION PLAN  
GALENA BLVD AND IL 56 EAST RAMPS (2 OF 2)**

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
573	61HB-1-R	KANE	110	40
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
			CONTRACT NO. 60K76	

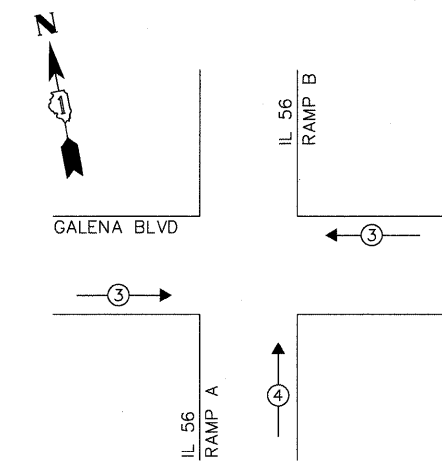
CONTROLLER SEQUENCE



LEGEND:  
 \* SINGLE ENTRY PHASE  
 \* DUAL ENTRY PHASE

PHASE DESIGNATION DIAGRAM

EMERGENCY VEHICLE PREEMPTION SEQUENCE



PROPOSED EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	←	↑

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE INCAND.	LED	% OPERATION	
SIGNAL (RED)	16		17	0.50	136.00
(YELLOW)	16		25	0.25	100.00
(GREEN)	16		15	0.25	60.00
ARROW	4		12	0.10	4.80
PED. SIGNAL	-		25	1.00	-
CONTROLLER	1		100	1.00	100.00
ILLUM. SIGN	-		25	0.05	-
VIDEO SYSTEM	-		-	1.00	-
FLASHER				0.50	
ENERGY COSTS TO:					TOTAL = 400.80

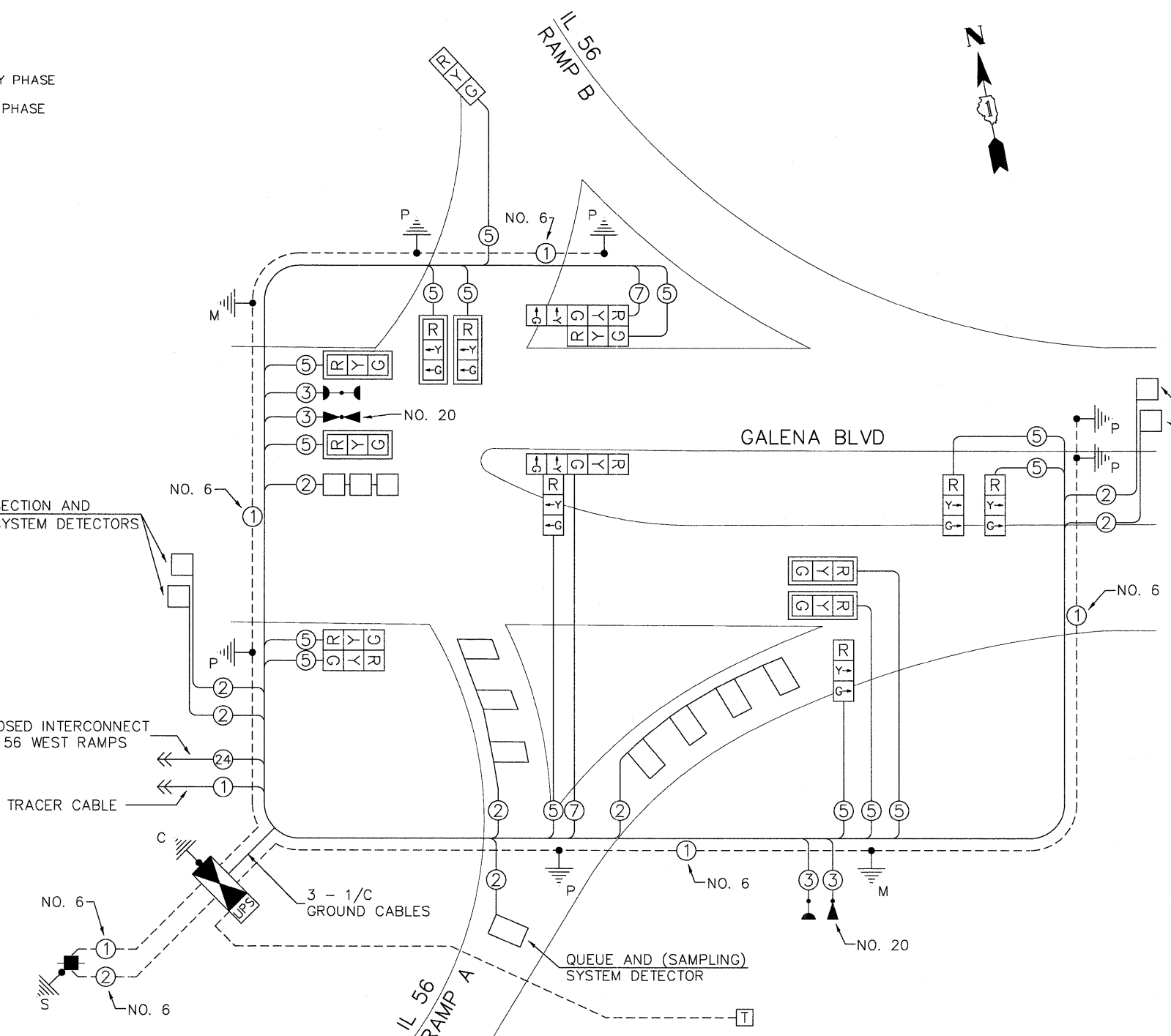
ILLINOIS DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS / DISTRICT 1  
 201 WEST CENTER COURT / SCHAUMBURG, ILLINOIS 60196-1096  
 ENERGY SUPPLY: CONTACT: TOM PERKINS  
 PHONE: (847) 894-7968  
 COMPANY: COMMONWEALTH EDISON

PROPOSED INTERCONNECT TO IL 56 WEST RAMPS

TRACER CABLE

3 - 1/2" GROUND CABLES

CABLE PLAN



RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

THE END OF THE TRACER CABLE SHALL BE CONTINUOUS AND EXTEND INTO THE CONTROLLER CABINET.

PROP. INTERSECTION AND (SAMPLING) SYSTEM DETECTORS

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
CHANGEABLE MESSAGE SIGN	CAL MO	1
SERVICE INSTALLATION, POLE MOUNTED	EACH	1
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	950
CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	110
CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL	FOOT	65
CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	80
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	220
CONDUIT PUSHED, 2 1/2" DIA., GALVANIZED STEEL	FOOT	60
CONDUIT PUSHED, 3" DIA., GALVANIZED STEEL	FOOT	100
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	330
HANDHOLE	EACH	4
HEAVY-DUTY HANDHOLE	EACH	6
DOUBLE HANDHOLE	EACH	1
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	1120
FULL-ACTUATED CONTROLLER AND TYPE V CABINET	EACH	1
UNINTERRUPTIBLE POWER SUPPLY	EACH	1
TRANSCEIVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	460
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	3080
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	410
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	2170
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	190
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	1080
TRAFFIC SIGNAL POST, GALVANIZED STEEL, 14 FT	EACH	4
TRAFFIC SIGNAL POST, GALVANIZED STEEL, 16 FT	EACH	2
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 50 FT	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 48 FT. AND 30 FT	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	24
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	29
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	6
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	4
SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1
SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	2
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	6
INDUCTIVE LOOP DETECTOR	EACH	8
DETECTOR LOOP, TYPE I	FOOT	510
LIGHT DETECTOR	EACH	2
LIGHT DETECTOR AMPLIFIER	EACH	1
ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED	FOOT	460

\* 100% COST TO VILLAGE OF SUGAR GROVE

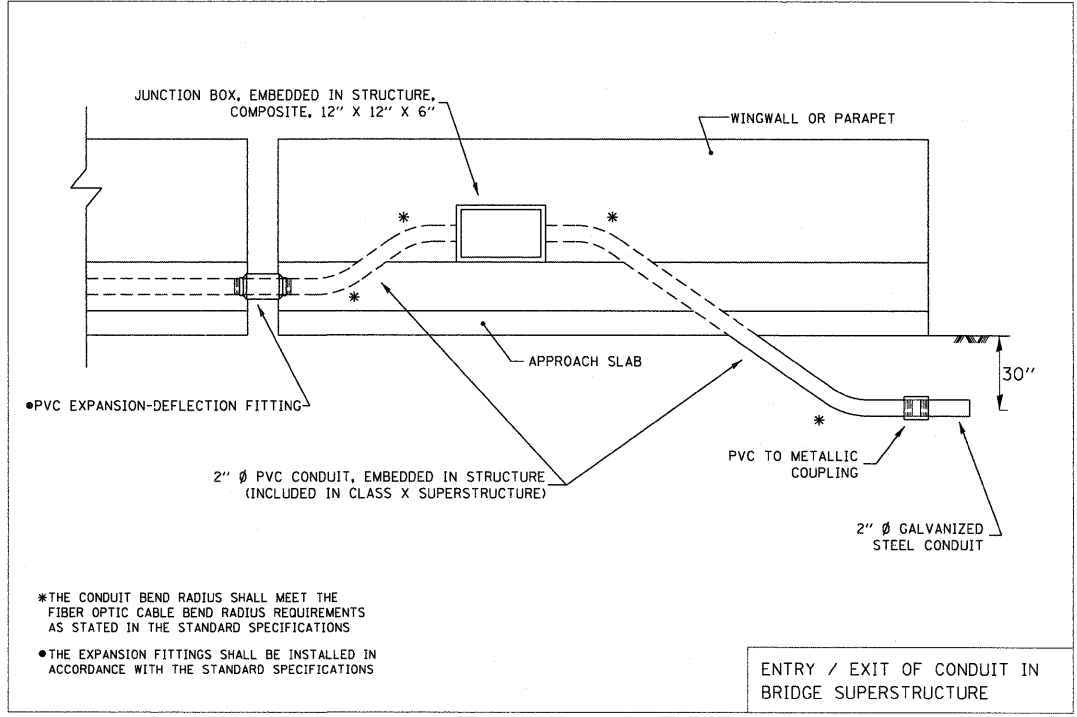
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	PLOT DATE = 8/25/2011	DATE -	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

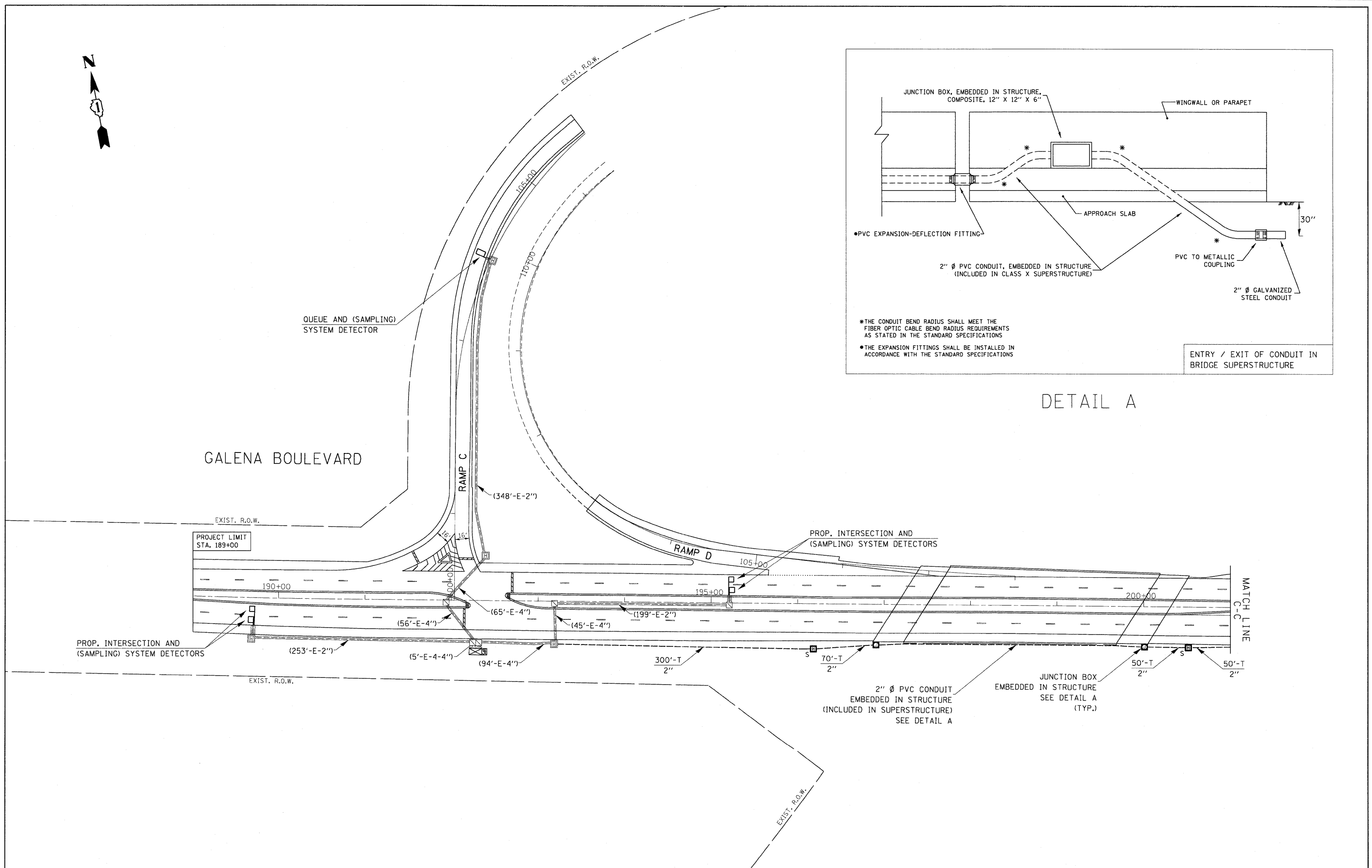
SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE  
 GALENA BLVD AND IL 56 EAST RAMPS

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

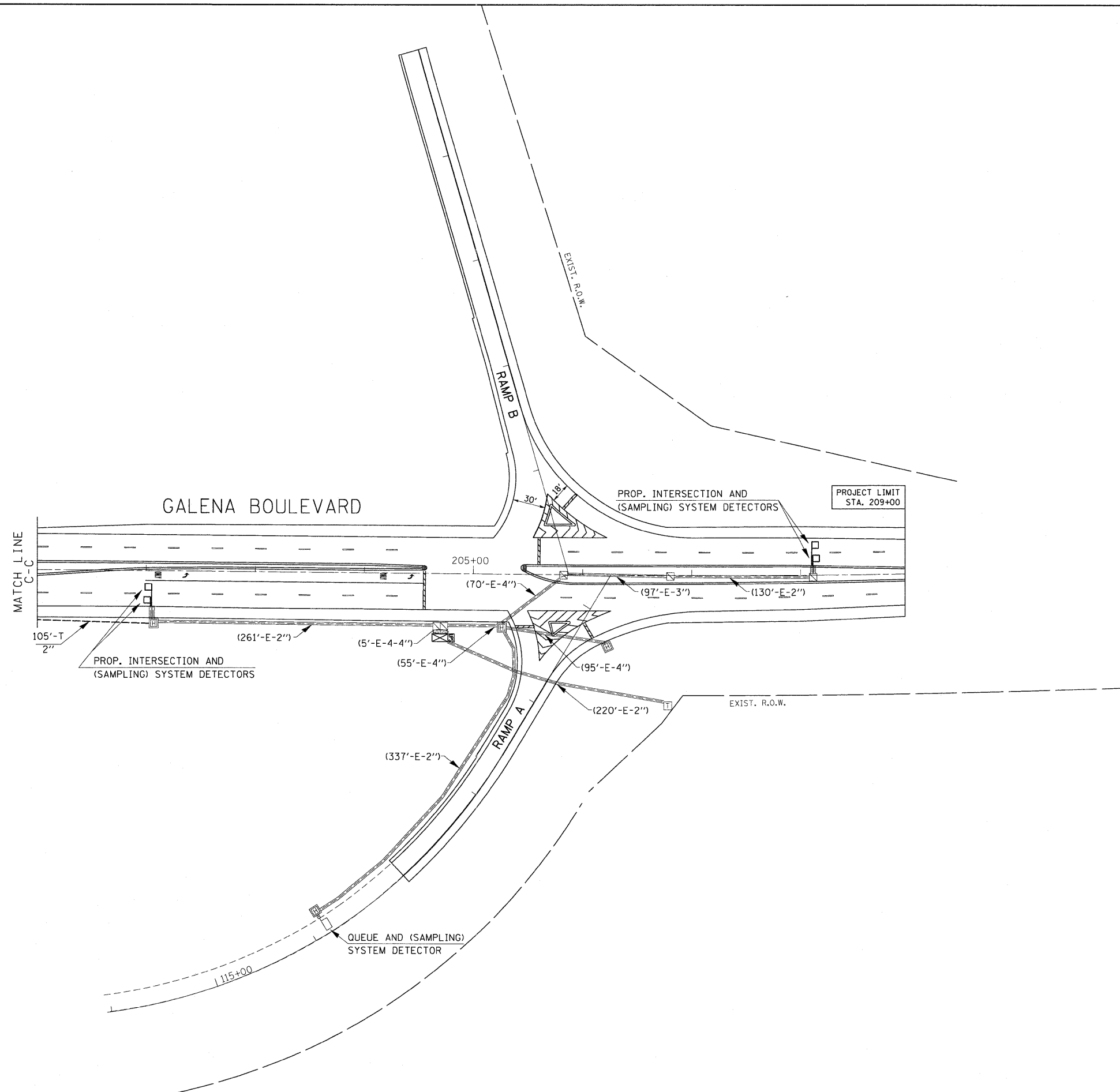
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
573	61HB-1-R	KANE	110	41
CONTRACT NO. 60K76			ILLINOIS FED. AID PROJECT	



DETAIL A



FILE NAME = \$FILEABBREV\$	USER NAME = plascencia	DESIGNED - IP	REVISED -	<b>STATE OF ILLINOIS          DEPARTMENT OF TRANSPORTATION</b>	<b>INTERCONNECT PLANS          GALENA BLVD          FROM IL 56 WEST RAMPS TO IL 56 EAST RAMPS (1 OF 2)</b>			F.A.U. RTE. 573	SECTION 6IHB-1-R	COUNTY KANE	TOTAL SHEETS 110	SHEET NO. 42	
	PLOT SCALE = 50.000000' / in.	CHECKED - DAG	REVISED -		SCALE: 1" =			SHEET NO.	OF	SHEETS	STA.	TO STA.	CONTRACT NO. 60K76
	PLOT DATE = 8/25/2011	DATE -	REVISED -		FED. ROAD DIST. NO.			ILLINOIS	FED. AID PROJECT				



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		DATE -	REVISED -
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PLOT DATE = 8/25/2011			

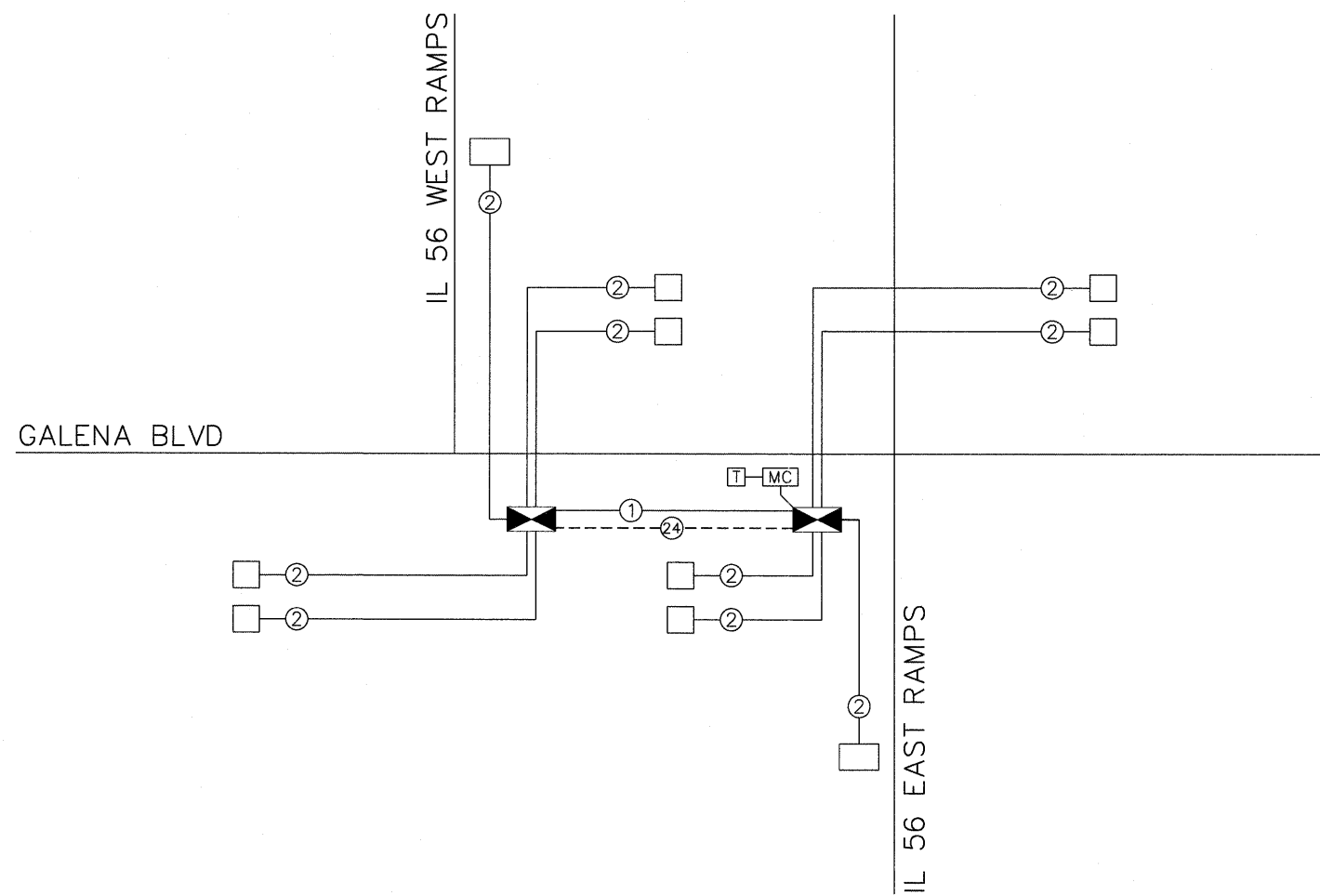
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**INTERCONNECT PLANS**  
**GALENA BLVD**  
**FROM IL 56 WEST RAMPS TO IL 56 EAST RAMPS (2 OF 2)**

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
573	61HB-1-R	KANE	110	43
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
			CONTRACT NO. 60K76	





**SCHEDULE OF QUANTITIES**

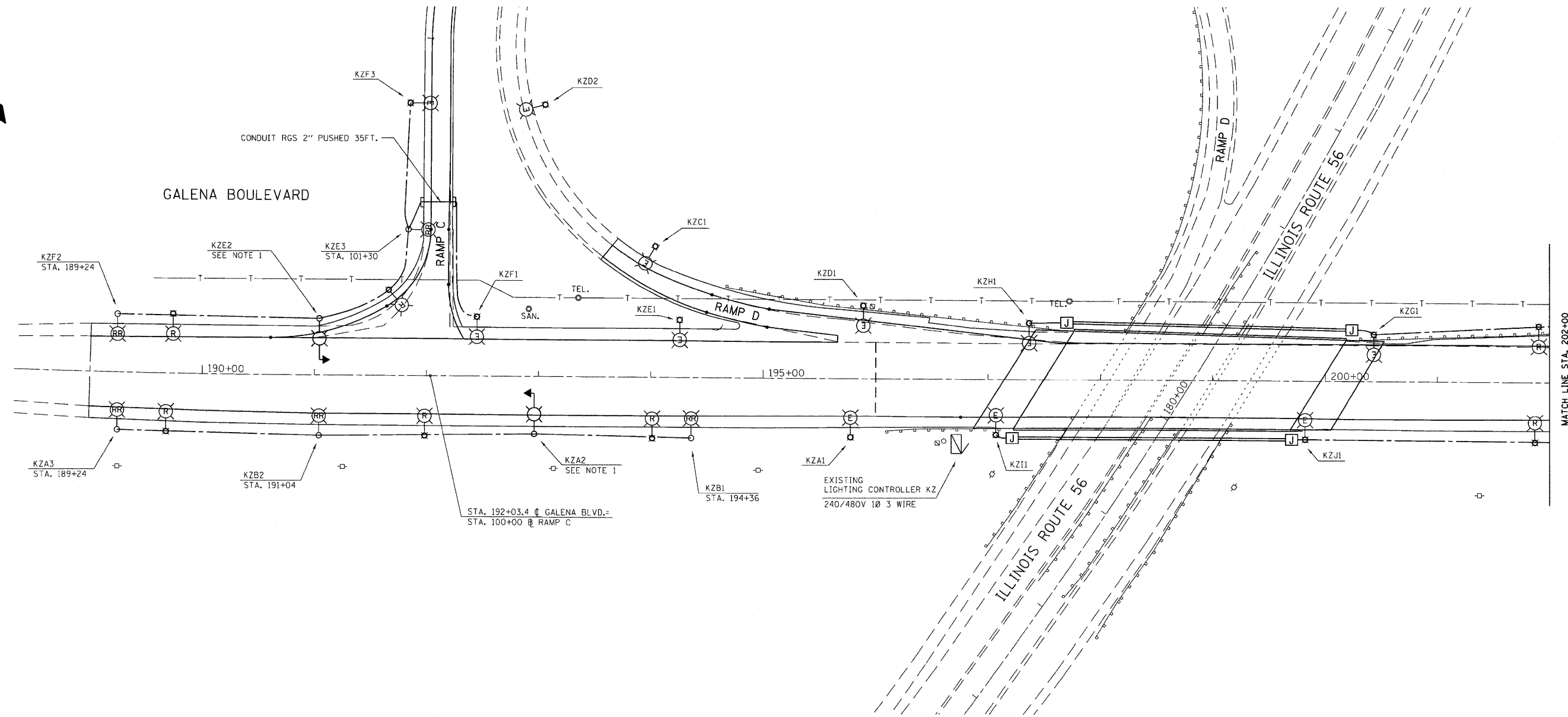
ITEM	UNIT	QUANTITY
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	575
JUNCTION BOX EMBEDDED IN STRUCTURE, 12" x 12" x 6"	EACH	2
HEAVY-DUTY HANDHOLE	EACH	2
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	575
MASTER CONTROLLER	EACH	1
FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F	FOOT	1350
ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	1350
OPTIMIZE TRAFFIC SIGNAL SYSTEM	EACH	1

FILE NAME =	USER NAME = plascencia	DESIGNED - IP	REVISED -
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		CHECKED - DAG	REVISED -
		DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**INTERCONNECT SCHEMATIC  
GALENA BLVD  
FROM IL 56 WEST RAMPS TO IL 56 EAST RAMPS**

SCALE: 1" =	SHEET NO. OF SHEETS	STA. TO STA.	F.A.U. RTE. 573	SECTION 61HB-1-R	COUNTY KANE	TOTAL SHEETS 110	SHEET NO. 44
			CONTRACT NO. 60K76				
			FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT				



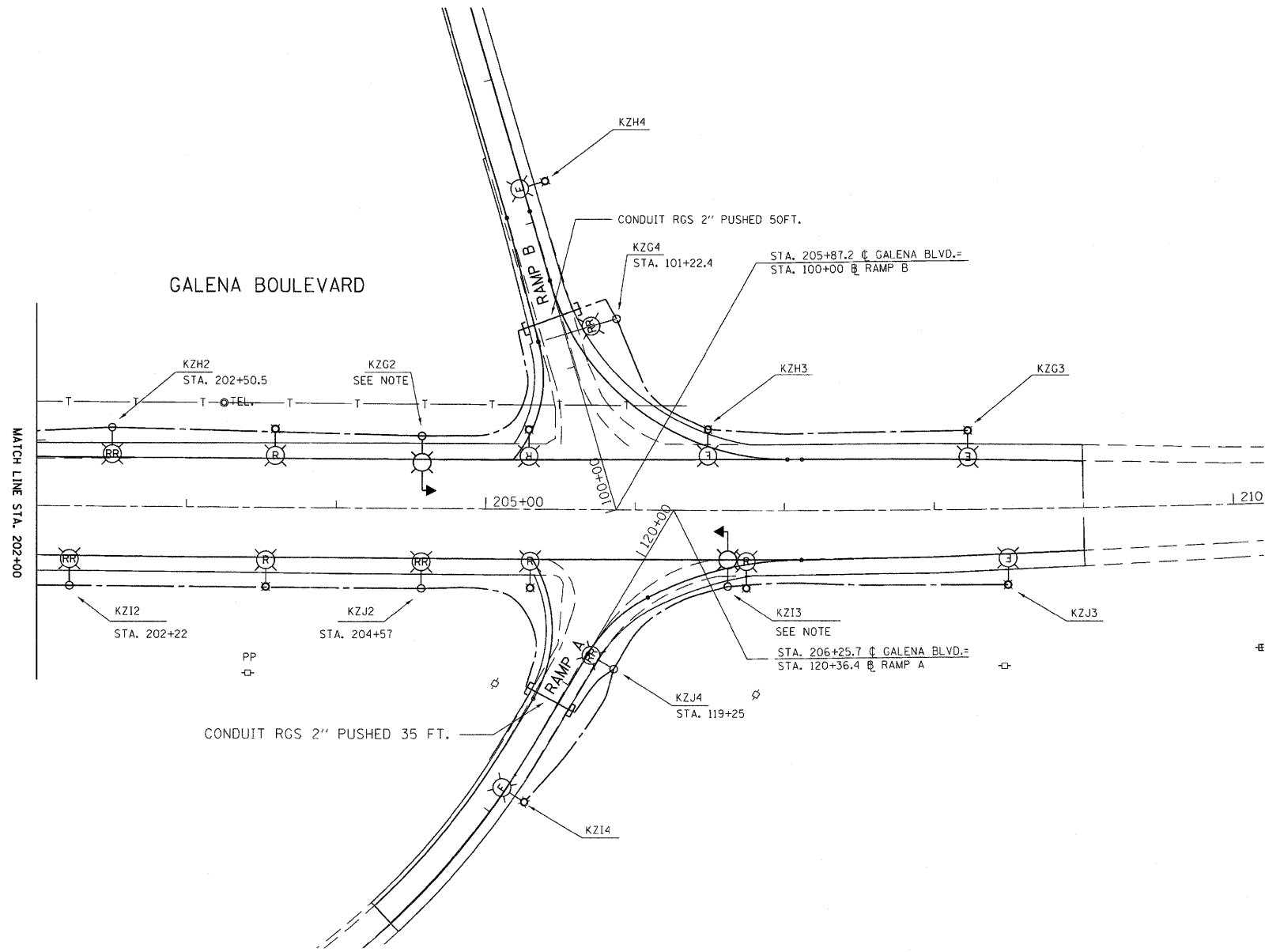
**LEGEND**

- EXISTING LIGHTING CONTROLLER
- EXISTING LIGHTING UNIT
- EXISTING LIGHTING UNIT TO BE REMOVED
- PROPOSED LOCATION OF RE-INSTALLED LIGHTING UNIT
- PROPOSED LIGHTING UNIT COMBO POLE, 12' MAST ARM, 200 WATT LUMINAIRE
- PROPOSED JUNCTION BOX EMBEDDED IN STRUCTURE 20" X 18" X 10"
- PROPOSED CONDUIT EMBEDDED IN STRUCTURE 2" DIAMETER
- PROPOSED CONDUIT RGS 2" DIA. LENGTH AS NOTED
- PROPOSED UNIT DUCT, 600V, 3-1C NO.4, 1/C NO.6 GROUND, (XPL-TYPE USE), 1 1/4" DIA. POLYETHYLENE

**NOTES:**

1. SEE TRAFFIC SIGNAL PLANS FOR LOCATION OF COMBO POLES.
2. ALL LIGHT POLES SET BACK 20FT FROM EDGE OF TRAVELED PAVEMENT, UNLESS OTHERWISE NOTED.
3. ALL CONDUIT RSG PUSHED SHALL EXTEND 2' (MIN.) BEYOND SHOULDER OR GUARD RAIL.
4. AT THE COMPLETION OF THE PROJECT THE POLE LABELS SHOULD MATCH THE CALL OUTS ABOVE
5. WHERE POSSIBLE EXISTING METAL LIGHT POLE FOUNDATIONS SHOULD BE REUSED FOR RELOCATED LIGHT POLES AS APPROVED BY THE ENGINEER.

FILE NAME = c:\pwork\pwork\pou\terma\d0245439\PI	USER NAME = pou\terma	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>IL 56 AT GALENA BLVD LIGHTING PLAN</b>	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 50.0000' / 1"	DRAWN -	REVISED -			573	61HB-1-R	KANE	110	45
	PLOT DATE = 8/11/2011	CHECKED -	REVISED -			CONTRACT NO. 60K76				
	DATE -	REVISED -	ILLINOIS FED. AID PROJECT							
SCALE: 1"=50'					SHEET NO. 1 OF 2 SHEETS	STA. 189+00 TO STA. 202+00				



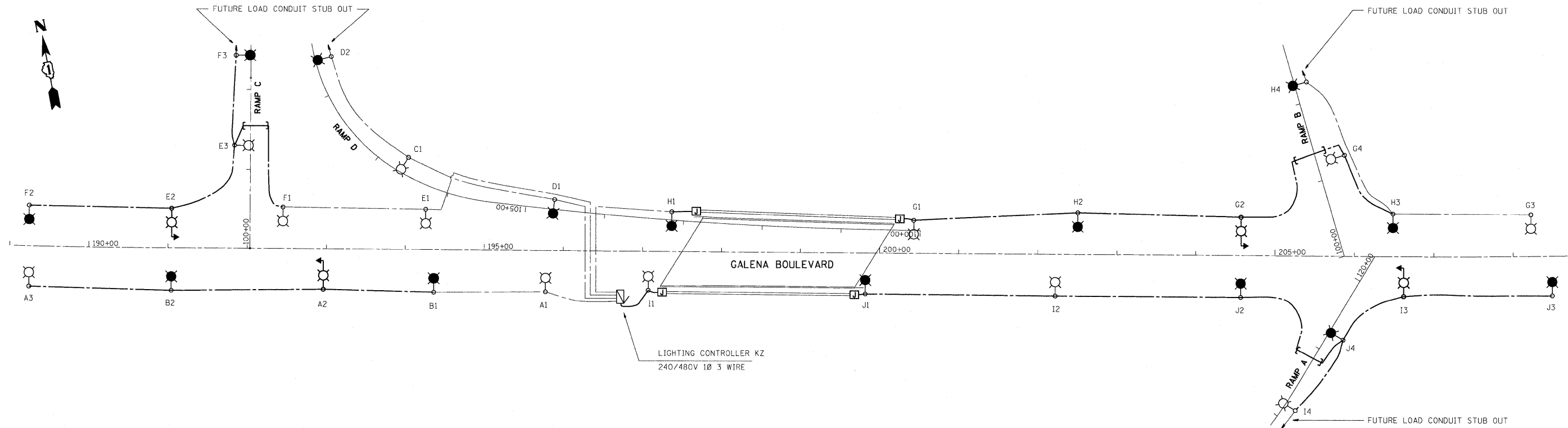
**LEGEND**

- EXISTING LIGHTING UNIT
- EXISTING LIGHTING UNIT TO BE REMOVED
- PROPOSED LOCATION OF RE-INSTALLED LIGHTING UNIT
- PROPOSED LIGHT UNIT COMBO POLE, 12' MAST ARM, 200 WATT LUMINAIRE
- PROPOSED CONDUIT RGS 2" DIA. LENGTH AS NOTED
- PROPOSED UNIT DUCT, 600V, 3-1C NO.4, 1/C NO.6 GROUND, (XPL-TYPE USE), 1 1/4" DIA. POLYETHYLENE

**NOTES:**

1. SEE TRAFFIC SIGNAL PLANS FOR LOCATION OF COMBO POLES.
2. ALL LIGHT POLES SET BACK 20FT FROM EDGE OF TRAVELED PAVEMENT. UNLESS OTHERWISE NOTED.
3. ALL CONDUIT RSG PUSHED SHALL EXTEND 2' (MIN.) BEYOND SHOULDER OR GUARD RAIL.
4. AT THE COMPLETION OF THE PROJECT THE POLE LABELS SHOULD MATCH THE CALL OUTS ABOVE
5. WHERE POSSIBLE EXISTING METAL LIGHT POLE FOUNDATIONS SHOULD BE REUSED FOR RELOCATED LIGHT POLES AS APPROVED BY THE ENGINEER.

FILE NAME =	USER NAME = paulterma	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>IL 56 AT GALENA BLVD LIGHTING PLANS</b>			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
c:\pwwork\pwwork\paulterma\0245439\PI-6809-light.dgn		DRAWN -	REVISED -		SCALE: 1"=50'	SHEET NO. 2 OF 2 SHEETS	STA. 202+00 TO STA. 210+00	573	61HB-1-R	KANE	110	46
		CHECKED -	REVISED -		CONTRACT NO. 60K76							
		DATE -	REVISED -		ILLINOIS FED. AID PROJECT							



**ONE -- LINE DIAGRAM  
NOT TO SCALE**

**LEGEND**

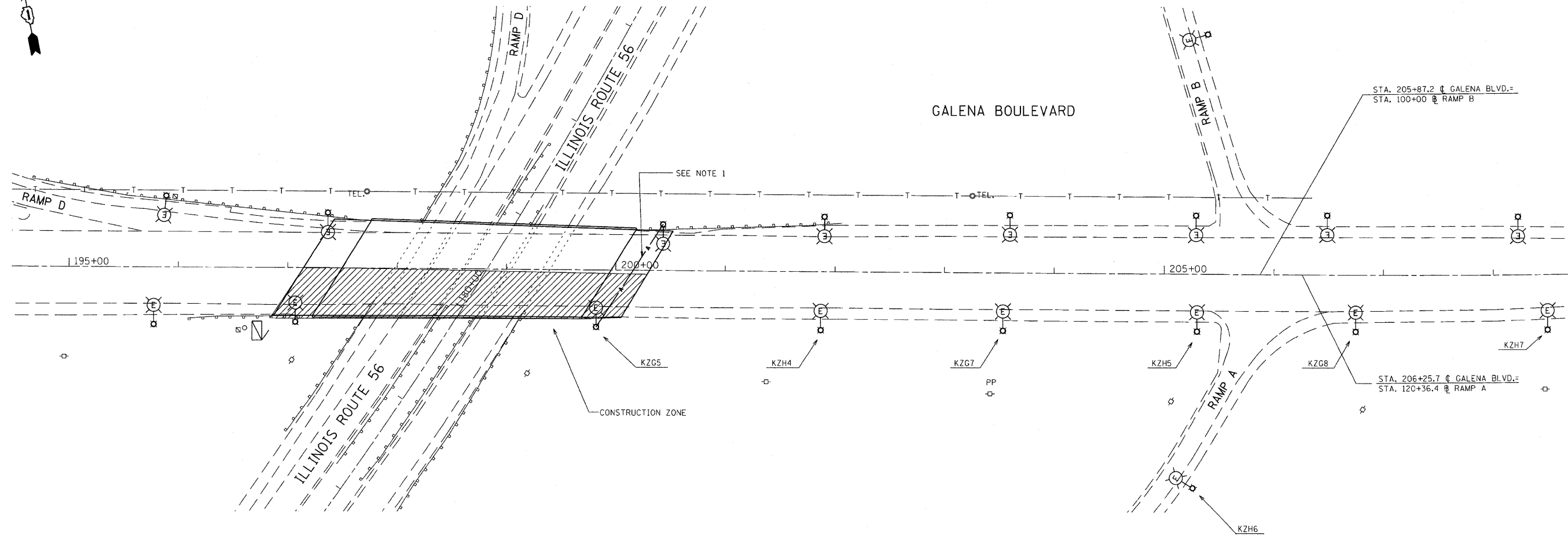
- LIGHTING UNIT RED PHASE
- LIGHTING UNIT BLACK PHASE
- COMBO LIGHTING UNIT RED PHASE
- COMBO LIGHTING UNIT BLACK PHASE
- JUNCTION BOX EMBEDDED IN STRUCTURE
- EXISTING UNIT DUCT
- PROPOSED UNIT DUCT
- CONDUIT RGS 2" DIA.
- PROPOSED CONDUIT EMBEDDED IN STRUCTURE

**NOTES:**







1. ALL LAMPS 200 WATT
2. ALL BALLASTS 240V SINGLE PHASE

**LOAD TABULATION FOR LIGHTING CONTROLLER K2**

RED PHASE		BLACK PHASE			
CIRCUIT	WATTS	AMPS	CIRCUIT	WATTS	AMPS
A	750	3.13	B	500	2.08
C	500	2.08	D	250	1.04
E	750	3.13	F	750	3.13
G	1000	4.17	H	1000	4.17
I	1000	4.17	J	1000	4.17
TOTAL	4000	16.67	TOTAL	3500	14.58



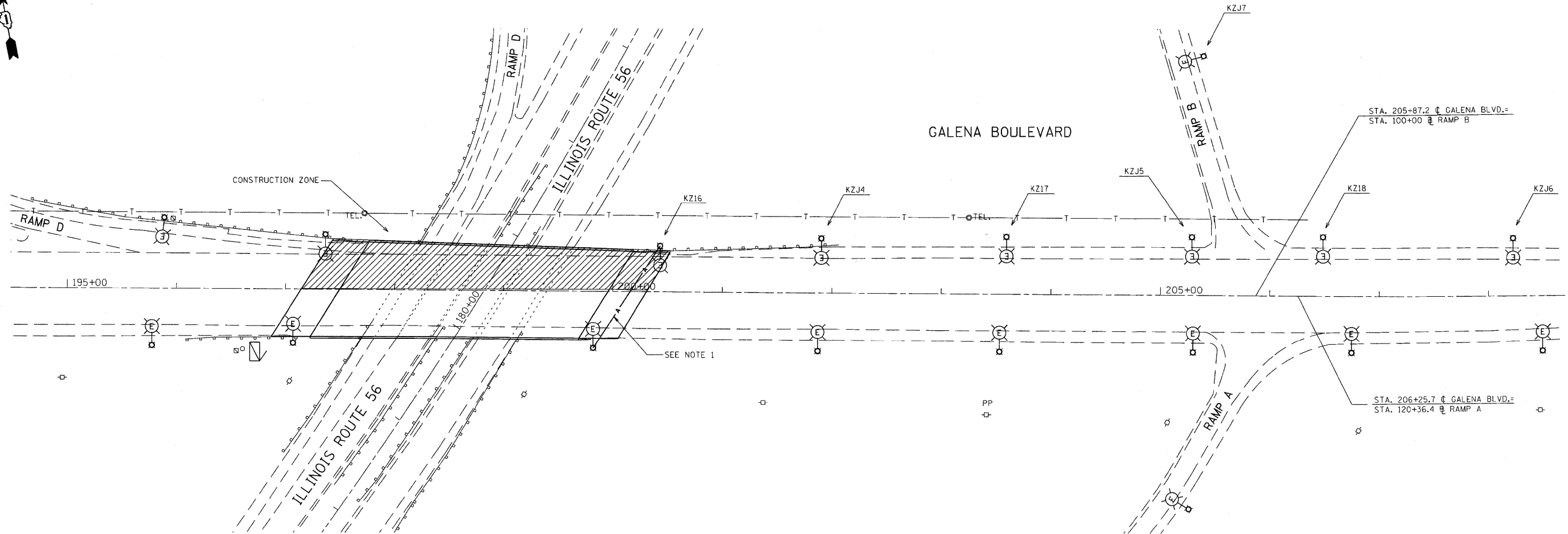
**LEGEND**

-  EXISTING LIGHTING CONTROLLER
-  EXISTING LIGHT UNIT
-  EXISTING LIGHT UNIT TO BE REMOVED
-  PROPOSED LOCATION OF RE-INSTALLED LIGHTING UNIT
-  PROPOSED LIGHT UNIT COMBO POLE
-  PROPOSED TEMPORARY AERIAL CABLE

**NOTES:**

1. DURING CONSTRUCTION OF THE SOUTH SIDE OF THE BRIDGE, CIRCUITS "I" AND "J" ARE CUT OFF. TEMPORARY AERIAL CABLE WILL EXTEND CIRCUITS "G" AND "H" TO POWER THE LIGHTING BEYOND THE BRIDGE ALONG WEST BOUND GALENA BLVD.
2. TEMPORARY LIGHT POLE LABELS TO BE PROVIDED ON THE LIGHT POLES SOUTH OF GALENA BLVD. WEST OF THE BRIDGE AS SHOWN ON THE CALL OUTS ABOVE.

FILE NAME =	USER NAME = poulerma	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>IL 56 AT GALENA BLVD TEMPORARY LIGHTING PLANS STAGE 1</b>			F.A. RTE. 573	SECTION 61HB-1-R	COUNTY KANE	TOTAL SHEETS 110	SHEET NO. 48
ci:\pw\work\pwidot\poulerma\d0245439\PI	6809-light.dgn	DRAWN -	REVISED -		SCALE: 1"=50'	SHEET NO. 1 OF 2 SHEETS	STA. 195+00 TO STA. 209+00	CONTRACT NO. 60K76				
	PLOT SCALE = 50.0000' / in.	CHECKED -	REVISED -		ILLINOIS FED. AID PROJECT							
	PLOT DATE = 8/11/2011	DATE -	REVISED -									



**LEGEND**

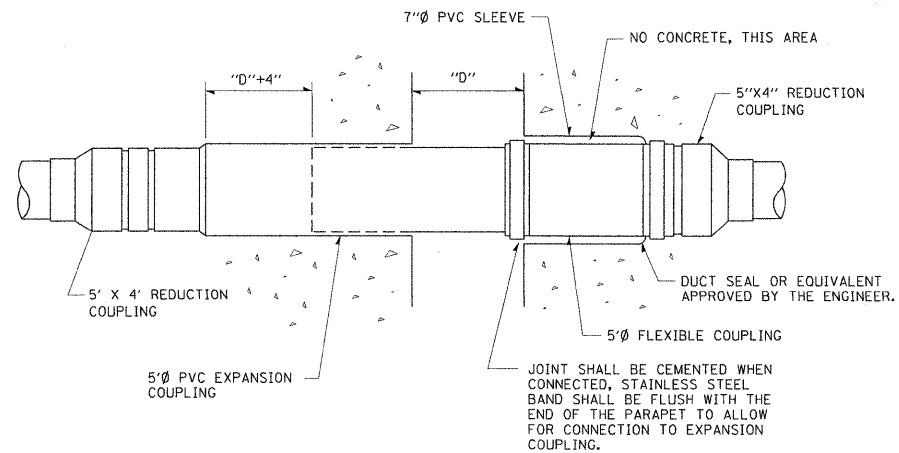
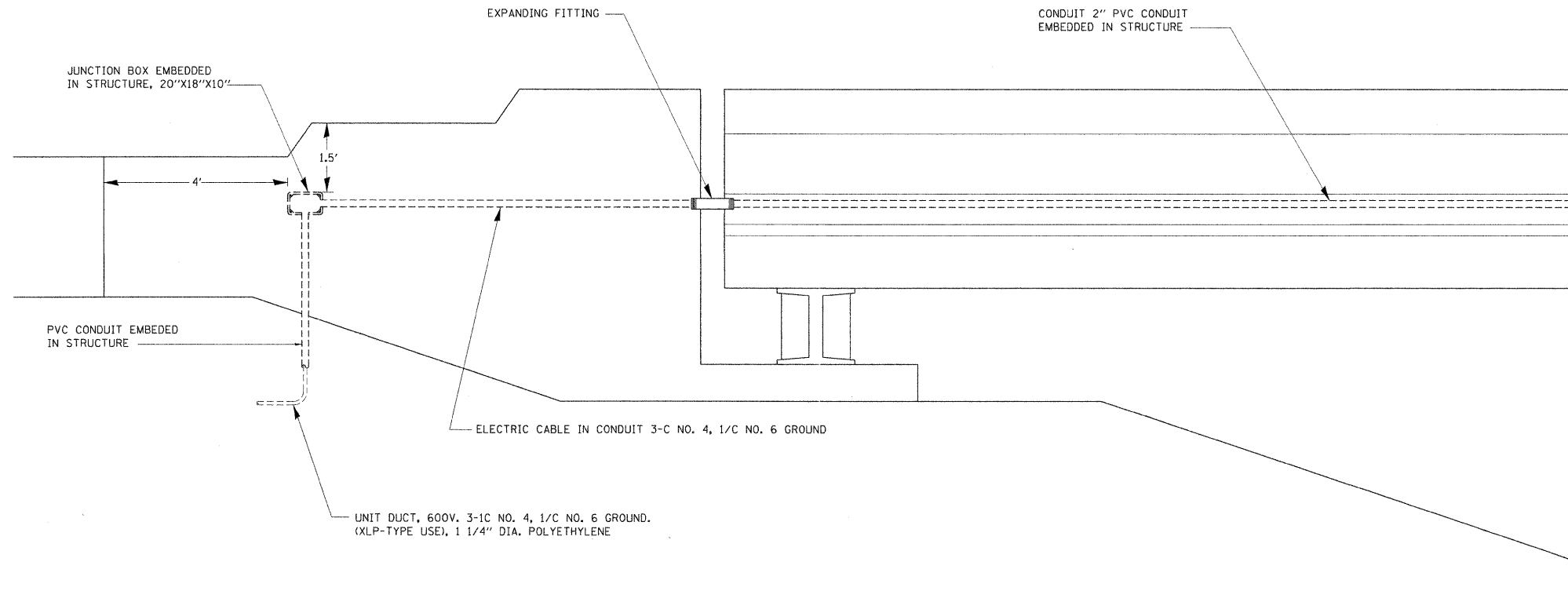
- EXISTING LIGHTING CONTROLLER
- EXISTING LIGHTING UNIT
- EXISTING LIGHTING UNIT TO BE REMOVED
- PROPOSED LOCATION OF RE-INSTALLED LIGHTING UNIT
- PROPOSED LIGHTING UNIT COMBO POLE
- PROPOSED TEMPORARY AERIAL CABLE

**NOTES:**

1. DURING CONSTRUCTION OF THE NORTH SIDE OF THE BRIDGE, CIRCUITS "G" AND "H" ARE CUT OFF. TEMPORARY AERIAL CABLE WILL EXTEND CIRCUITS "I" AND "J" TO POWER THE LIGHTING BEYOND THE BRIDGE ALONG EAST BOUND GALENA BLVD.
2. TEMPORARY STAGE ONE LIGHT POLE LABELS TO BE REMOVED WHEN THE LIGHTING IS SWITCHED OVER TO STAGE TWO.
3. TEMPORARY LIGHT POLE LABELS TO BE PROVIDED ON THE NORTH SIDE OF GALENA BLVD. WEST OF THE BRIDGE AS SHOWN IN THE CALL OUTS ABOVE.

FILE NAME =	USER NAME = poultarma	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>IL 56 AT GALENA BLVD TEMPORARY LIGHTING PLANS STAGE 2</b>	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ci:\pw\work\pwsdot\poultarma\0245439\PI-68091-light.dgn		DRAWN -	REVISED -			573	61HB-1-R	KANE	110	49
PLOT SCALE = 50.0000' / in.		CHECKED -	REVISED -			CONTRACT NO. 60K76				
PLOT DATE = 8/11/2011		DATE -	REVISED -			ILLINOIS FED. AID PROJECT				
					SCALE: 1"=50'	SHEET NO. 2 OF 2 SHEETS		STA. 195+00 TO STA. 209+00		E5





**INSTALLATION OF CONDUIT  
IN BRIDGE PARAPET EXPANSION JOINT  
(N.T.S.)**

**NOTES:**

1. UNDERGROUND SPLICING OF LIGHTING CONDUCTORS IS NOT ACCEPTABLE. ALL SPLICING SHALL BE DONE IN LIGHT POLES AND IN ABOVE THE GROUND JUNCTIONS BOXES.
2. PULL STRING SHALL BE INSTALLED IN CONDUIT.

FILE NAME =  
c:\pw\work\pwidot\poulterma\0245439\PI

USER NAME = poulterma  
6809-1ght.dgn  
PLOT SCALE = 50.0000' / in.  
PLOT DATE = 8/11/2011

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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**INSTALLATION OF CONDUIT  
IN BRIDGE PARAPET EXPANSION JOINT**

SCALE: 1"=50' SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
573	61HB-1-R	KANE	110	50
CONTRACT NO. 60K76			ILLINOIS FED. AID PROJECT	

Bench Mark: Cut "X" in concrete median at Sta. 189+63.83, 79' Right. Elevation 686.34.

Existing Structure: Structure Number 045-0037, originally built in 1961 as FA Rte 141 under Section 61-HB-1. In 1969, the structure was widened to the South as FA Route 141 Section 61-K. In 1992, as FAU 1521 under Section 61(HB-18K)I-DL, the concrete slope walls were removed and replaced with bituminous coated aggregate slope walls. The structure is a four span continuous steel beam bridge supported by stub abutments and multi-column piers on pile supported footings. The back to back abutment length is 248'-10" and the out to out width varies 82'-10" to 88'-10 1/4". The steel beams have cover plates at Piers 1 and 2 and the newer south portion is composite. Staged construction shall be utilized to maintain one lane of traffic in each direction at all times. Salvage existing bridge rail.

\* Transverse limit shall be out to out of superstructure.

**INDEX OF SHEETS**

1. General Plan and Elevation
2. General Data
3. Slope Wall Details
4. Stage Construction Details
5. Temporary Concrete Barrier for Stage Construction
- 6.-11. Top of Slab Elevations
- 12.-13. Top of Approach Slab Elevations
14. Superstructure
- 15.-17. Superstructure Details
- 18.-21. Bridge Approach Slab Details
22. Preformed Joint Strip Seal
23. Drainage Scupper, DS-11
24. Drainage Scupper, DS-12
25. Framing Plan and Design Data
- 26.-27. Steel Details
28. Bearing Removal Details
29. Abutment Bearing Details
- 30.-31. Pier Bearing Details
32. Concrete Removal Details
33. West Abutment Details
34. East Abutment Details
35. Abutment Details
- 36.-37. Pier 2 Pedestal Details
38. Pier Repairs
39. Bar Splice Assembly Details

**DESIGN STRESSES**

**FIELD UNITS**

**NEW CONSTRUCTION**

$f'_c = 3,500$  psi  
 $f_y = 60,000$  psi (Reinforcement)  
 $f_y = 36,000$  psi (Structural Steel) (M270 Gr. 36)

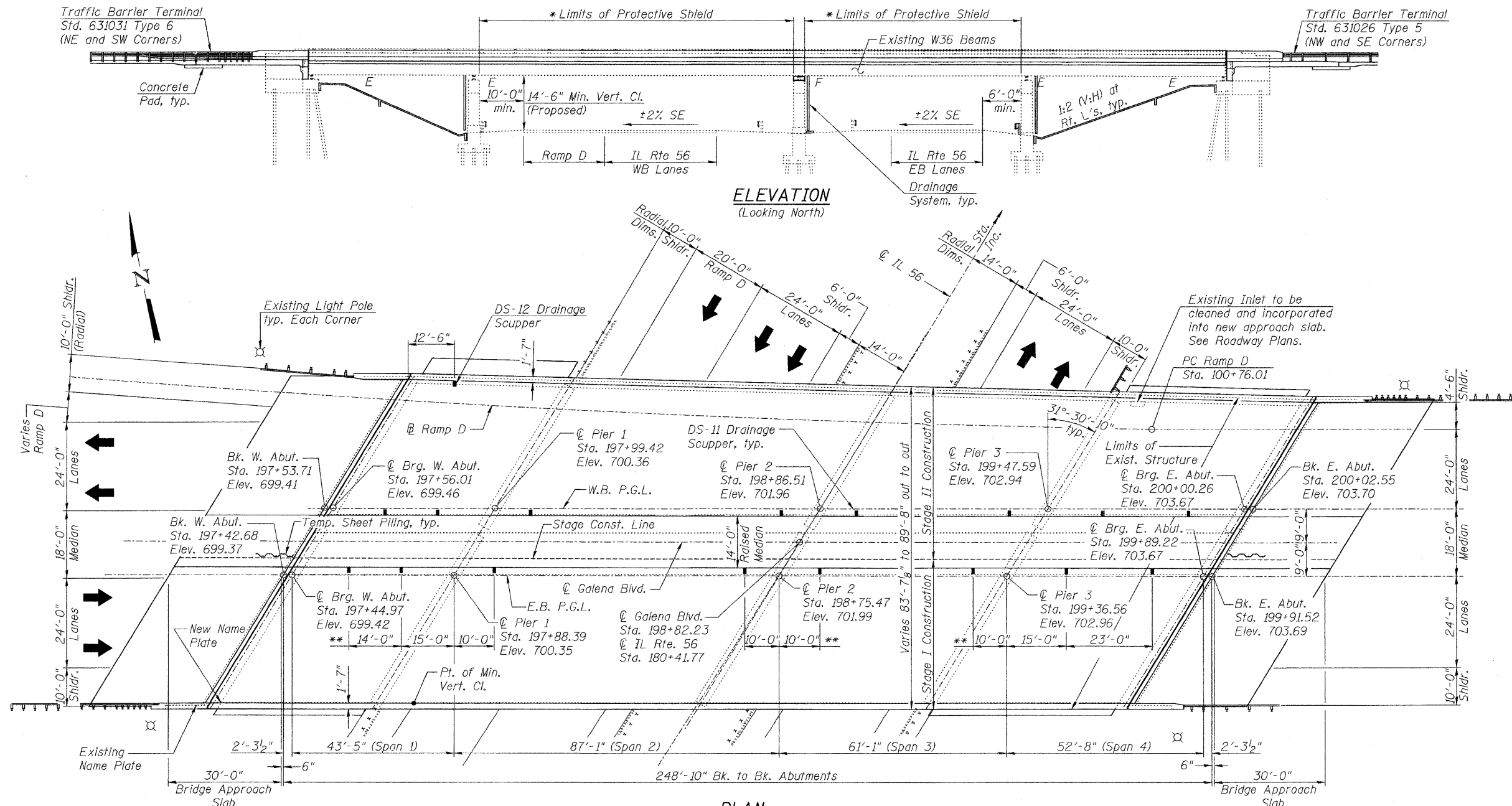
**EXISTING W.B. CONSTRUCTION**

$f_c = 1,400$  psi  
 $f_s = 20,000$  psi (Reinforcement)  
 $f_s = 18,000$  psi (Structural Steel)

**EXISTING E.B. CONSTRUCTION**

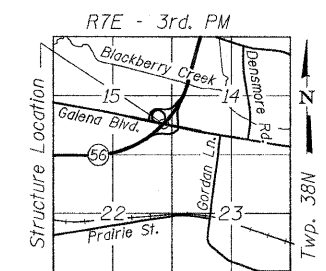
$f_c = 1,200$  psi (Slab)  
 $f_c = 1,400$  psi (Sub, Parapet & Curb)  
 $f_s = 20,000$  psi (Reinforcement)  
 $f_s = 20,000$  psi (Structural Steel)

Note:  
 Scuppers in Spans 1 & 4 shall be free falling while scuppers in Spans 2 & 3 shall be connected to a closed drainage system.



**PLAN**

\*\* DS-11 Scupper spacing, typ. each side of median.



**LOCATION SKETCH**

**DESIGN SPECIFICATIONS**

(New Construction)  
 2002 AASHTO "Standard Specifications for Highway Bridges"

**LOADING HS 20-44**

Allow 25 psf for future wearing surface.

**SEISMIC DATA**

Seismic Performance Category (SPC) = A  
 Bedrock Acceleration Coefficient (A) = 0.037 g  
 Site Coefficient (S) = 1.0

**CURVE DATA**

(IL Rte. 56)  
 $\Delta = 74^\circ-45'-12''$  LT.  
 $D = 1^\circ-14'-59''$   
 $T = 3502.37'$   
 $L = 5981.73'$   
 $E = 1184.69'$   
 $R = 4584.79'$   
 P.C. = Sta. 143+51.79  
 P.T. = Sta. 203+33.52  
 P.I. = Sta. 178+54.16

**CURVE DATA**

(Ramp D)  
 $\Delta = 5^\circ-22'-41''$  RT.  
 $D = 1^\circ-13'-33''$   
 $T = 219.51'$   
 $L = 438.69'$   
 $E = 5.15'$   
 $R = 4673.76'$   
 P.C. = Sta. 100+76.01  
 P.T. = Sta. 105+14.70  
 P.I. = Sta. 102+95.52

**APPROVED**  
 FOR STRUCTURAL ADEQUACY ONLY

*Michael T. Haley*  
 ENGINEER OF BRIDGES AND STRUCTURES



*Michael T. Haley* 8-26-2011 Date  
 Michael T. Haley  
 Licensed Structural Engineer  
 State of Illinois No. 81-5991  
 Expires 11/30/2012

**GENERAL PLAN AND ELEVATION  
 GALENA BOULEVARD OVER IL 56**

**FAP 573 - SECTION 61HB-1-R**

**KANE COUNTY**

**STATION 198+82.23**

**STRUCTURE NO. 045-0037**



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**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
573	61HB-1-R	KANE	110	51
			CONTRACT NO. 60K76	

**GENERAL NOTES**

Fasteners shall be AASHTO M164 Type 1, mechanically galvanized bolts. Bolts 7/8 in.  $\phi$ , holes 15/16 in.  $\phi$ , unless otherwise noted. No field welding is permitted except as specified in the contract documents. The Contractor shall test the existing welds by non-destructive methods within 2 ft. of the end of the existing cover plates for cracks after removal of the existing concrete deck. Dye penetrant (PT), magnetic particle (MT), or other approved testing method shall be performed by qualified personnel approved by the Engineer. If cracks are found, report them to the Bureau of Bridges and Structures for disposition. The cost of testing is included in Removal of Existing Concrete Deck. The cost of crack repair, if necessary, will be paid for according to Article 109.04 of the Standard Specifications.

Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions. Reinforcement bars designated (E) shall be epoxy coated.

Prior to pouring the new concrete deck, all heavy or loose rust, loose mill scale, and other loose or potentially detrimental foreign material shall be removed from the surfaces in contact with concrete. Tightly adhered paint may remain unless otherwise noted. Removal shall be accomplished by methods that will not damage the steel and the cost will be included in the pay item covering removal of the existing concrete.

As directed by the Engineer, existing construction accessories welded to the top flange of beams shall be removed. The weld areas shall be ground flush and inspected for cracks using magnetic particle testing (MT) or dye penetrant testing (PT) by qualified personnel approved by the Engineer. Any cracks that cannot be removed by grinding 1/4 inch deep shall be identified and reported to the Bureau of Bridges and Structures for further disposition. The cost of removing welded accessories, grinding and inspecting weld areas and grinding cracks will be paid for according to Article 109.04 of the Standard Specifications.

If the Contractor elects to use cantilever forming brackets on the north exterior beams, the brackets shall be placed at the same locations as required for the hardwood blocks in Article 503.06(b) of the Standard Specifications. If additional cantilever forming brackets are required, hardwood blocking shall be wedged between the exterior and first interior beam at each of these additional bracket locations.

Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

Bearing seat surfaces at Pier 2 shall be constructed or adjusted to the designated elevations within a tolerance of 1/8 inch (0.01 ft).

Concrete Sealer shall be applied to the new concrete surfaces at the front face of new abutment backwalls.

The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.

Cleaning and painting of the existing structural steel shall be as specified in the special provision for "Cleaning and Painting Existing Steel Structures". All beams, bearings and other structural steel within 5 ft (measured along the beam) of either side of deck joints shall be cleaned per Near White Blast Cleaning - SSPC-SP10. The exterior surfaces and bottom of the bottom flange of the fascia beams shall be cleaned per Commercial Grade Power Tool Cleaning - SSPC-SP15.

The designated areas cleaned per Near White Blast Cleaning and per Commercial Grade Power Tool Cleaning shall be painted according to the requirements of Paint System 1 - OZ/E/U. The color of the final finish coat for all interior steel surfaces shall be Gray, Munsell No 5B 7/1. The color of the final finish coat for the exterior and bottom flange of the fascia beams shall be Reddish Brown, Munsell No 2.5YR 3/4.

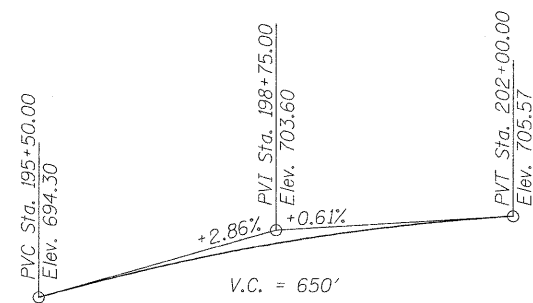
All new structural steel for end diaphragms and bearings shall be shop painted with an inorganic zinc rich primer per AASHTO M 300, Type1.

The Organic Zinc Rich Primer / Epoxy / Urethane Paint System shall be used for painting of new Intermediate Diaphragms and Strengthening Plates. The entire system shall be shop applied, with the exception that masked off connection surfaces, field installed fasteners and damaged areas shall be touched up in the field. The color of the final finish coat for all interior steel surfaces shall be Gray, Munsell No. 5B 7/1. The color of the final finish coat for Strengthening Plates on the exterior of the fascia beams shall be Reddish Brown, Munsell No. 2.5YR 3/4. See Special Provision for "Cleaning and Painting New Metal Structures".

The Contractor shall resurvey the IL Route 56 vertical clearance over each lane and shoulder following the deck replacement. This work will not be paid for separately, but shall be included with the contract lump sum price for "Construction Layout".

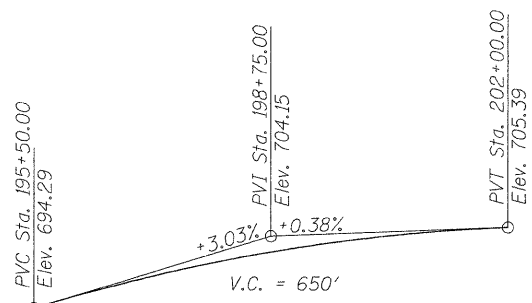
Slipforming of the parapets is not allowed.

Existing Bridge Railing (including splices and posts) shall be salvaged by the Contractor and delivered to the IDOT District Bridge Maintenance Yard located at 1101 Biesterfield Road, Elk Grove Village, Illinois, 60007. Telephone number: (847) 956-1444 (48 hours advance notice required). This work shall include removing, transporting and unloading the Bridge Railing at the above yard, which cost shall be included in the cost of Removal of Existing Concrete Deck.



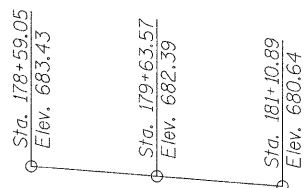
**PROPOSED PROFILE GRADE**

(Along W.B. P.G.L. Galena Blvd.)



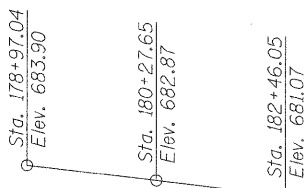
**PROPOSED PROFILE GRADE**

(Along E.B. P.G.L. Galena Blvd.)



**EXISTING PROFILE GRADE**

(Along West EOP IL 56 WB Lanes from survey)



**EXISTING PROFILE GRADE**

(Along East EOP IL 56 EB Lanes from survey)

**TOTAL BILL OF MATERIAL**

ITEM	UNIT	SUPER	SUB	TOTAL
Concrete Removal	Cu. Yd.	-	52.1	52.1
Removal of Existing Concrete Deck	Each	1	-	1
Protective Shield	Sq. Yd.	1360	-	1360
Structure Excavation	Cu. Yd.	-	312	312
Concrete Structures	Cu. Yd.	-	108.1	108.1
Concrete Superstructure	Cu. Yd.	981.0	-	981.0
* Bridge Deck Grooving	Sq. Yd.	2259	-	2259
* Protective Coat	Sq. Yd.	3145	-	3145
Furnishing and Erecting Structural Steel	Pound	24950	-	24950
Stud Shear Connectors	Each	8211	-	8211
Reinforcement Bars, Epoxy Coated	Pound	223930	18000	241930
Bar Splicers	Each	940	315	1255
Slope Wall 4 Inch	Sq. Yd.	-	991	991
Name Plates	Each	1	-	1
Preformed Joint Strip Seal	Foot	202.0	-	202.0
Elastomeric Bearing Assembly, Type I	Each	-	26	26
Elastomeric Bearing Assembly, Type II	Each	-	26	26
Anchor Bolts, 1"	Each	-	104	104
Anchor Bolts, 1 1/4"	Each	-	26	26
Concrete Sealer	Sq. Ft.	-	987	987
Epoxy Crack Injection	Foot	-	154	154
Geocomposite Wall Drain	Sq. Yd.	-	154	154
Porous Granular Embankment, Special	Cu. Yd.	-	312	312
Jack and Remove Existing Bearings	Each	-	65	65
Structural Steel Removal	Pound	7980	-	7980
Beam Straightening	Each	3	-	3
Containment and Disposal of Lead Paint Cleaning Residues	L. Sum	1	-	1
Cleaning and Painting Steel Bridge No. 1	L. Sum	1	-	1
** Structural Repair of Concrete (Depth Equal to or Less Than 5 Inches)	Sq. Ft.	-	292	292
*** Structural Repair of Concrete (Depth Greater Than 5 Inches)	Sq. Ft.	-	20	20
Drainage Scupper, DS-11	Each	16	-	16
Drainage Scupper, DS-12	Each	1	-	1
Drainage System	L. Sum	1	-	1
Temporary Sheet Piling	Sq. Ft.	-	336	336
Pipe Underdrains for Structures, 4"	Foot	-	233	233
Jacking and Cribbing	Each	-	4	4

\* Includes Approach Slab

\*\* An increase of 80 square feet of Structural Repair of Concrete (Depth Equal to or Less Than 5 Inches) has been added to the field measured areas shown in the plans.

\*\*\* An amount of 16 square feet of Structural Repair of Concrete (Depth Greater Than 5 Inches) has been added to the field measured areas shown in the plans.

**SCOPE OF WORK**

1. Remove and replace existing concrete deck slab utilizing stage construction.
2. Provide new expansion joints at the abutments.
3. Remove and replace existing approach slabs.
4. Remove and reconstruct abutment back walls and wingwalls.
5. Make new deck composite by installing shear stud connectors entire length of beams, except over cover plates.
6. Jack existing beams.
7. Replace steel end diaphragms at abutments.
8. Perform steel repair at beam ends and at locations of collision damage.
9. Add new diaphragms between eastbound and westbound framing systems.
10. Clean and paint existing structural steel adjacent to expansion joints and entire exterior face and bottom of bottom flange of the fascia beams.
11. Remove and replace existing bearings utilizing steel extensions and concrete pedestals at Pier 2.
12. Remove conduit along outside bridge deck and provide new conduit embedded in new parapets.
13. Install deck drainage system.
14. Repair the spalled and unsound concrete areas of the abutments, wing walls and piers. Seal cracks wider than 1/8" with epoxy crack sealing.
15. Remove existing bituminous aggregate slope walls and replace with concrete slope walls.
16. Add guardrail in front of Pier 3.

STATION 198+82.23  
REBUILT 20 BY  
STATE OF ILLINOIS  
F.A.P. RT. 573 SECTION 61HB-1-R  
LOADING HS 20  
STRUCTURE NO. 045-0037

**NAME PLATE**

See Std. 515001  
Existing Name Plate shall be cleaned and relocated next to new Name Plate. Cost included with Name Plates.



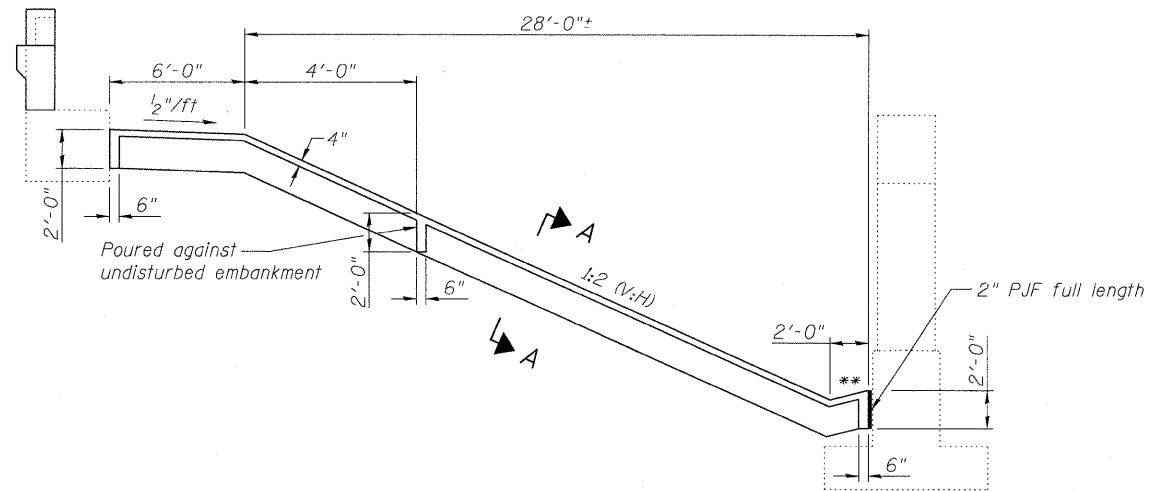
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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

GENERAL DATA  
STRUCTURE NO. 045-0037

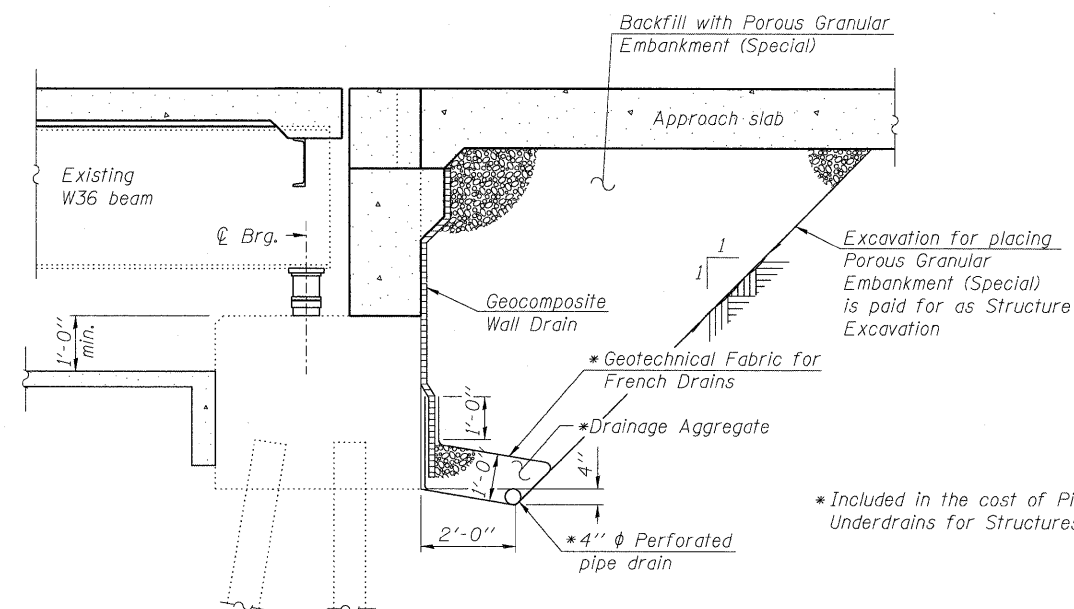
SHEET NO. 2 OF 39 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
573	61HB-1-R	KANE	52	52
				CONTRACT NO. 60K76
ILLINOIS FED. AID PROJECT				



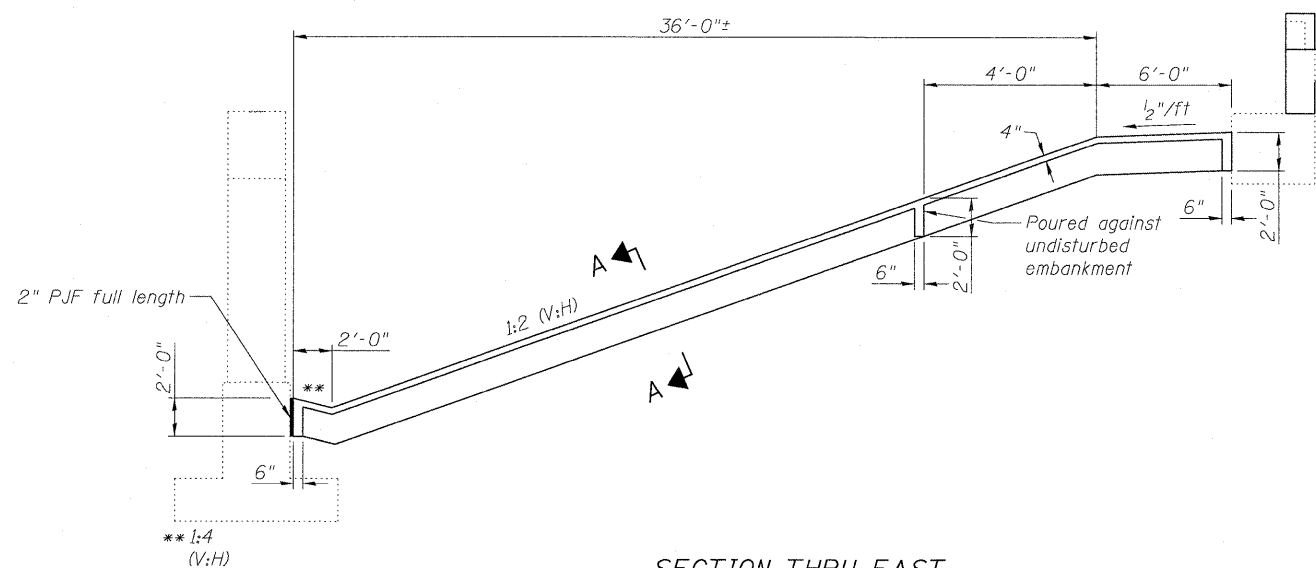
**SECTION THRU WEST  
CONCRETE SLOPE WALL**  
(Horiz. dim. @ Rt. L's)

\*\* 1:4  
(V:H)



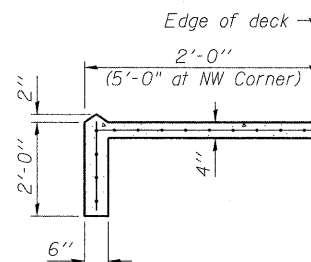
**SECTION THRU ABUTMENT**  
(Horiz. dim. @ Rt. L's)

Note:  
All drainage system components shall extend parallel to the abutment backwall until they intersect the wingwalls or 2'-0" from the end of the wingwalls when the wings are parallel to the abutment. The pipe shall extend under the wingwall, if necessary, until intersecting the side slopes. The pipes shall drain into concrete headwalls. (See Article 601.05 of the Standard Specifications and Highway Standard 60110).



**SECTION THRU EAST  
CONCRETE SLOPE WALL**  
(Horiz. dim. @ Rt. L's)

\*\* 1:4  
(V:H)



**SECTION A-A**

Slope wall shall be reinforced with welded wire fabric, 6" x 6" - W4.0 x W4.0, weighing 58 lbs. per 100 sq. ft.  
Removal of existing Bituminous Coated Aggregate Slope Wall and excavation for new concrete slope wall shall be included with pay item Slope Wall 4".



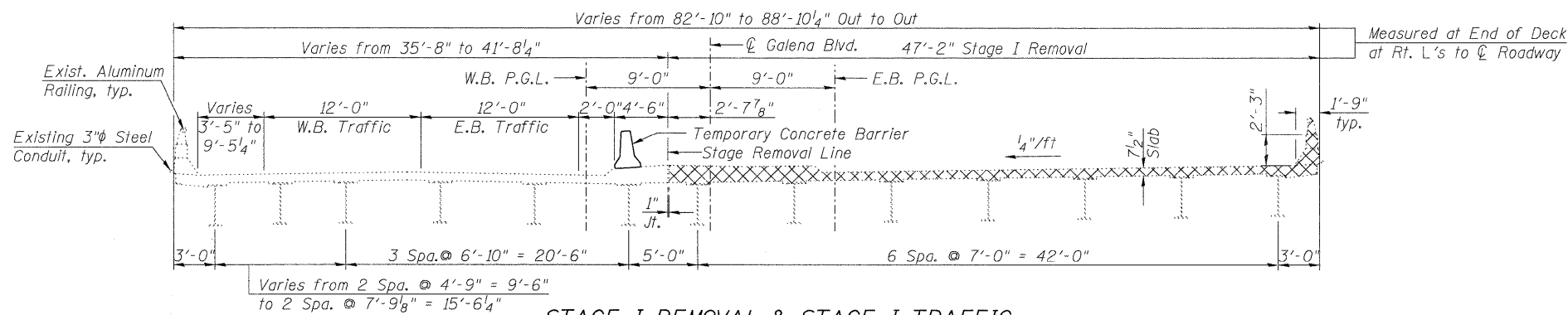
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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

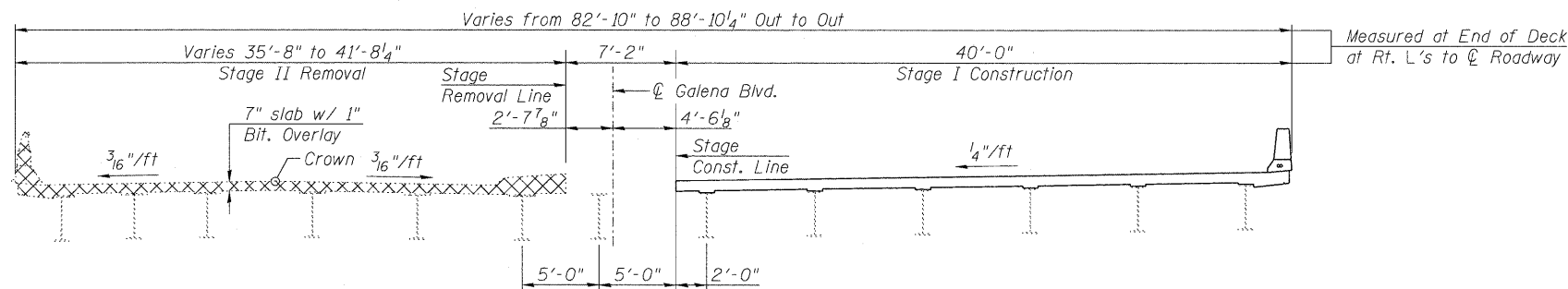
**SLOPE WALL DETAILS  
STRUCTURE NO. 045-0037**

SHEET NO. 3 OF 39 SHEETS

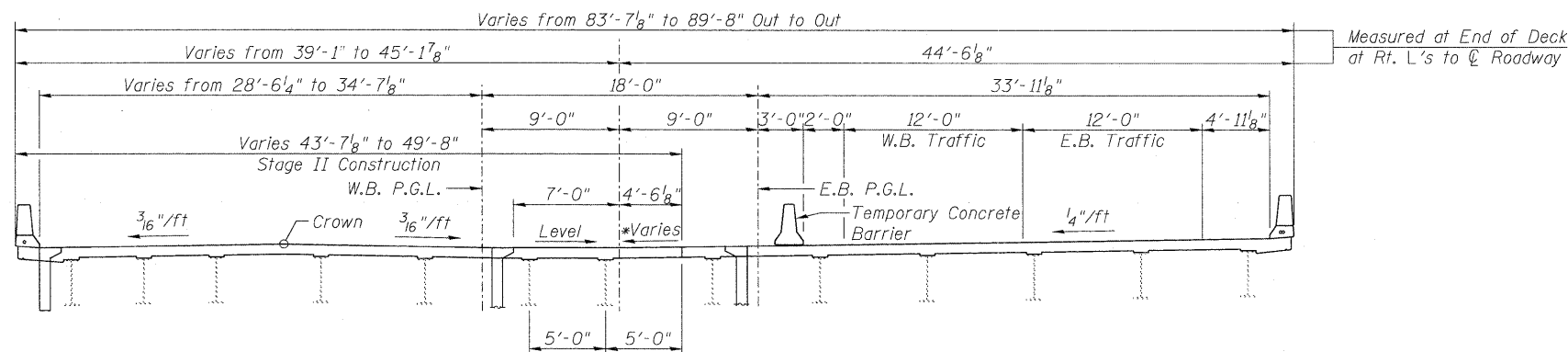
F.A.P. RTE. 573	SECTION 61HB-1-R	COUNTY KANE	TOTAL SHEETS 110	SHEET NO. 53
				CONTRACT NO. 60K76
ILLINOIS FED. AID PROJECT				



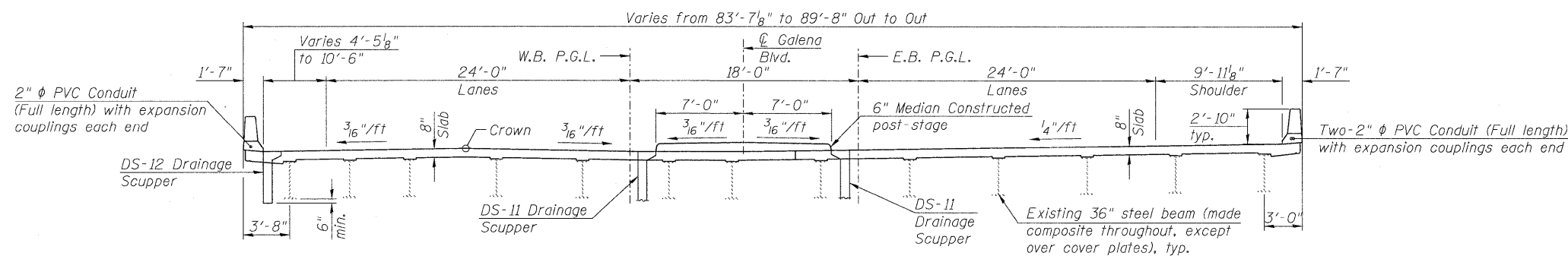
**STAGE I REMOVAL & STAGE I TRAFFIC**  
(Looking East)



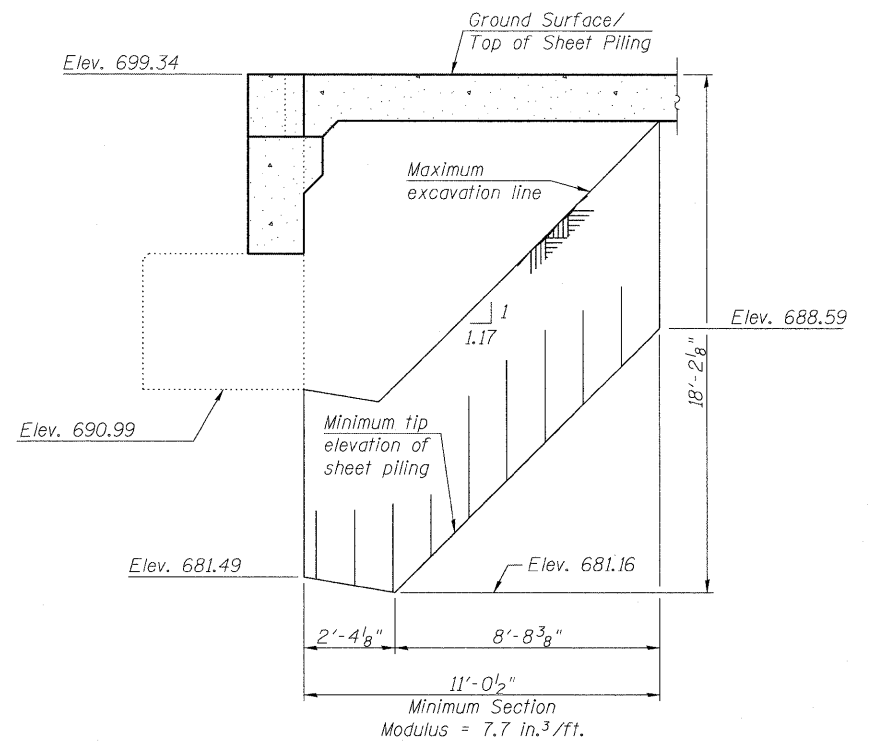
**STAGE I CONST. & STAGE II REMOVAL**  
(Looking East)



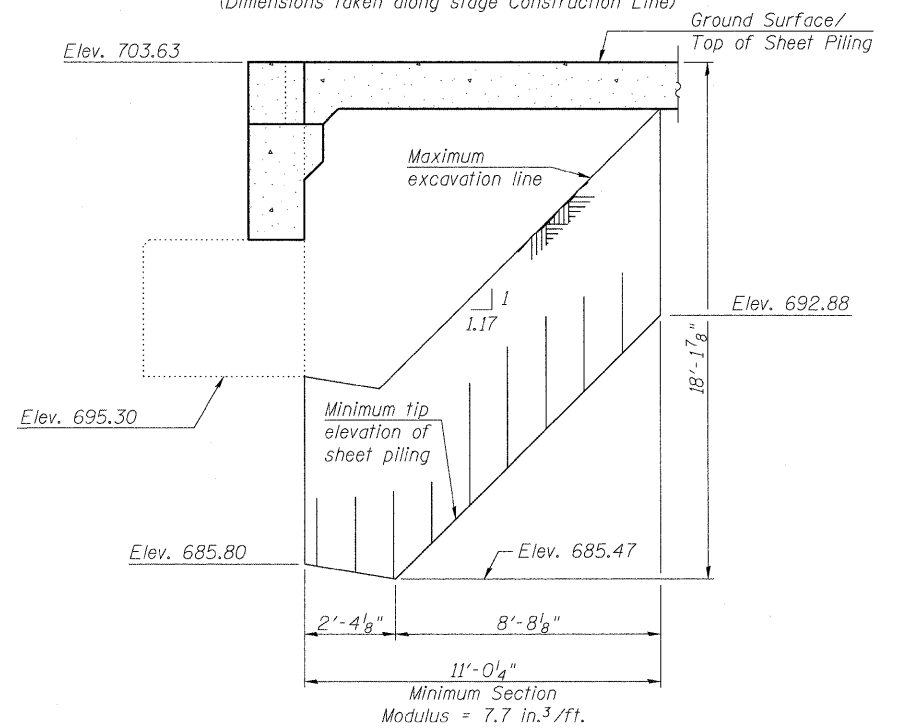
**STAGE II CONST. & STAGE II TRAFFIC**  
(Looking East)



**PROPOSED CROSS SECTION**  
(Looking East)



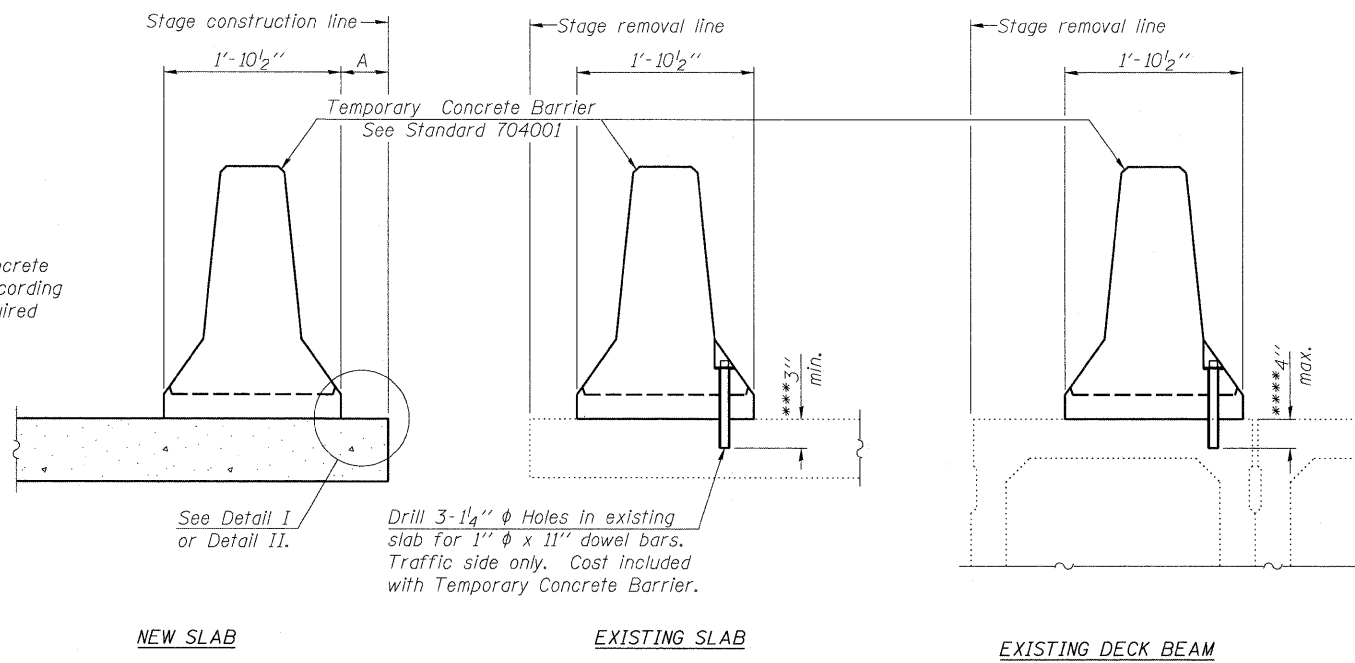
**TEMPORARY SHEET PILING-WEST ABUT.**  
(Dimensions taken along stage Construction Line)



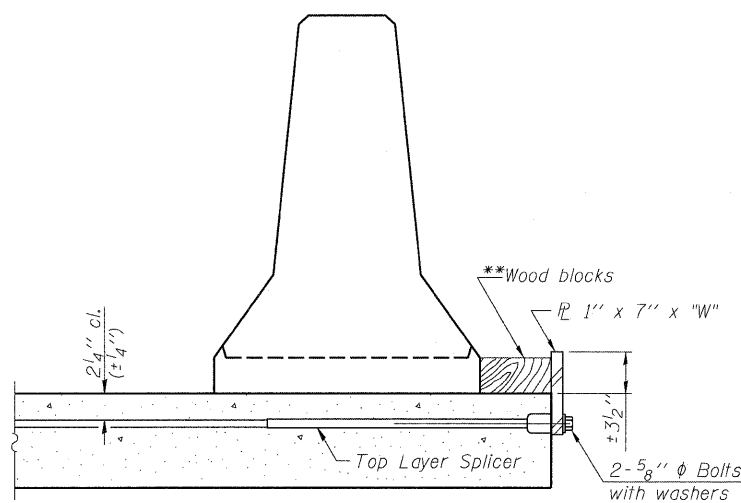
**TEMPORARY SHEET PILING-EAST ABUT.**  
(Dimensions taken along stage Construction Line)

Notes:  
See Sheet 5 of 39 for Details of Temporary Concrete Barrier.  
See Roadway Plans for quantity of Temporary Concrete Barrier.  
Cost of removal of existing steel conduit, wearing surface, and aluminum railing are included with Removal of Existing Concrete Deck.  
The existing steel conduit shall be temporarily supported in place during construction.  
If the Contractor chooses to alter the temporary cantilevered sheet piling design requirements shown on the plans, a design submittal including plan details and calculations will be required for review and acceptance by the Engineer.  
\* Hand finishing of concrete required between C Galena Blvd. and stage construction line. This portion has a warped cross slope due to the non-parallel profile grades.

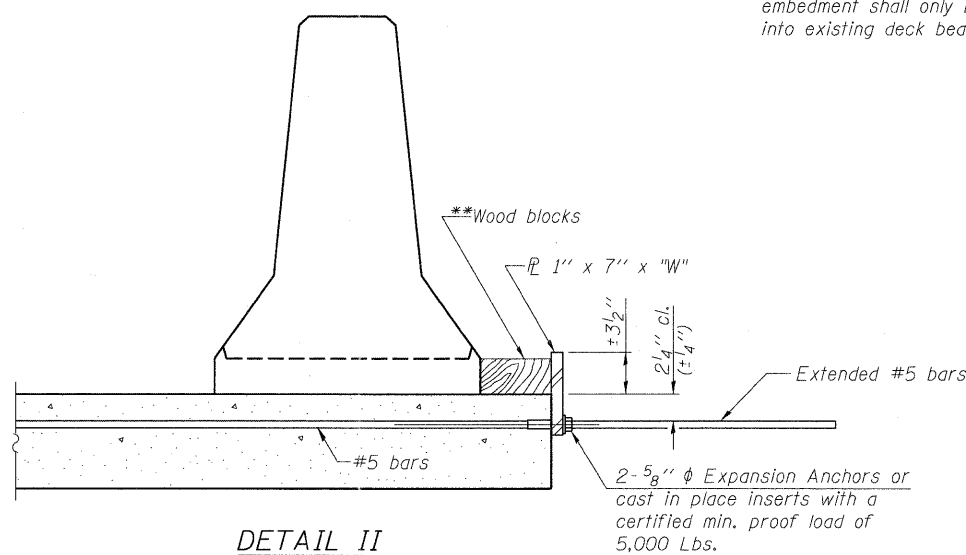
When "A" is 3'-6" or less, the temporary concrete barrier shall be anchored to the new slab according to Detail I or Detail II. No anchorage is required when "A" is greater than 3'-6".



**SECTIONS THRU SLAB OR DECK BEAM**



**DETAIL I**



**DETAIL II**

\*\* Wood blocks may be omitted when required to provide minimum stage traffic lane width. When the wood blocks are omitted, the concrete barrier shall be in direct contact with the steel retainer plate.

"W" = Top bars spacing + 4"

\*\*\* Dimension shown is minimum required embedment into concrete. If hot-mix asphalt wearing surface is present, minimum embedment shall be in addition to wearing surface depth.

\*\*\*\* If existing deck beam is to remain in place after stage construction, embedment shall only be into wearing surface and not into existing deck beam concrete.

**NOTES**

Detail I - With Bar Splicer or Couplers:

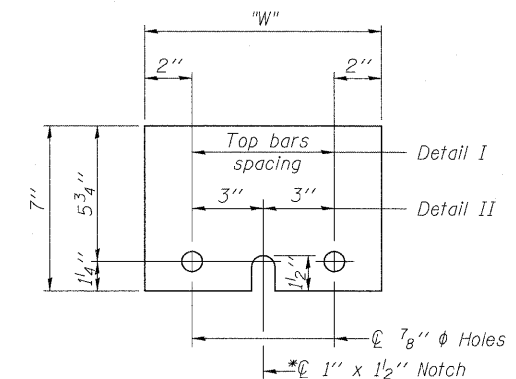
Connect one (1) 1" x 7" x "W" steel PL to the top layer of couplers with 2-5/8" φ bolts screwed to coupler at approximate C of each barrier panel.

Detail II - With Extended Reinforcement Bars:

Connect one (1) 1" x 7" x "W" steel PL to the concrete slab or concrete wearing surface with 2-5/8" φ Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate C of each barrier panel.

Cost of anchorage is included with Temporary Concrete Barrier.

The 1" x 7" x "W" plate shall not be removed until stage II construction forms and all reinforcement bars are in place and the concrete is ready to be placed.



**STEEL RETAINER PL 1" x 7" x "W"**

\* Required only with Detail II

R-27

7-1-10



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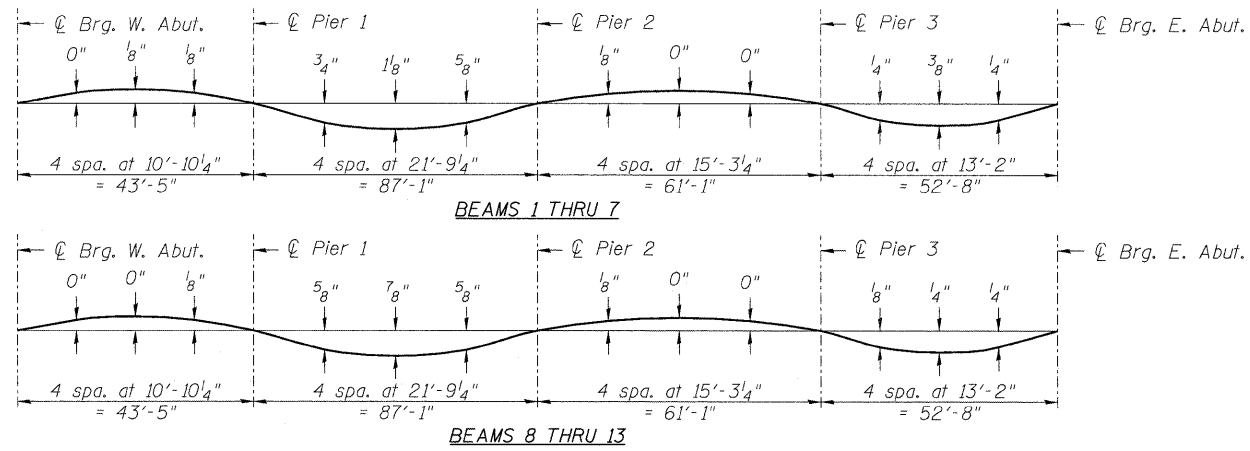
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION  
STRUCTURE NO. 045-0037**

SHEET NO. 5 OF 39 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
573	61HB-1-R	KANE	110	55
CONTRACT NO. 60K76			ILLINOIS FED. AID PROJECT	



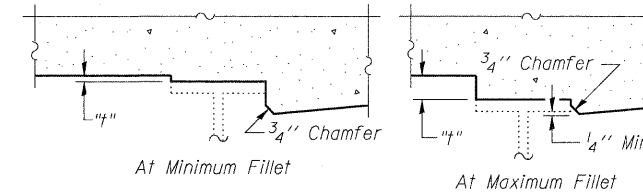


**DEAD LOAD DEFLECTION DIAGRAMS**

(Includes weight of concrete only.)

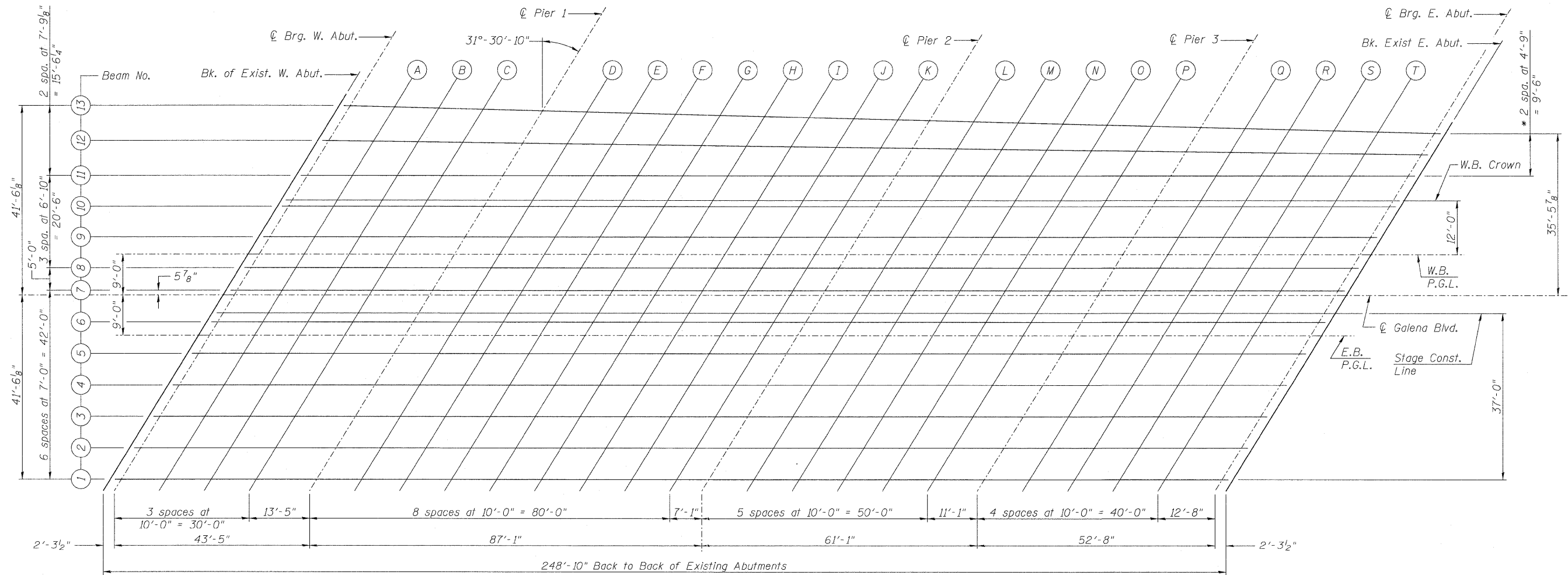
Note:

The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown on sheets 7 thru 11 of 39.



To determine "t": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown below. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown on sheets 7 thru 11 of 39, minus slab thickness, equals the fillet heights "t" above top flange of beams.

**FILLET HEIGHTS**



**PLAN**

\* Measured at right angles to Beam 11 at  $\angle$  Bearing.

(Sheet 1 of 6)



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FILE NAME =	CHECKED - ADB	REVISED -
PLOT SCALE =	DRAWN - AJF	REVISED -
PLOT DATE =	CHECKED - MTH	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**TOP OF SLAB ELEVATIONS  
STRUCTURE NO. 045-0037**

SHEET NO. 6 OF 39 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
573	6IHB-1-R	KANE	110	56
				CONTRACT NO. 60K7E

ILLINOIS FED. AID PROJECT

**BEAM 1**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	197+22.75	41.51	699.59	699.59
☉ Brg. W. Abut.	197+25.05	41.51	699.65	699.65
A	197+35.05	41.51	699.88	699.87
B	197+45.05	41.51	700.10	700.10
C	197+55.05	41.51	700.32	700.31
☉ Pier 1	197+68.47	41.51	700.61	700.61
D	197+78.47	41.51	700.83	700.85
E	197+88.47	41.51	701.03	701.08
F	197+98.47	41.51	701.24	701.31
G	198+08.47	41.51	701.44	701.52
H	198+18.47	41.51	701.63	701.71
I	198+28.47	41.51	701.82	701.89
J	198+38.47	41.51	702.01	702.05
K	198+48.47	41.51	702.19	702.21
☉ Pier 2	198+55.55	41.51	702.32	702.32
L	198+65.55	41.51	702.50	702.49
M	198+75.55	41.51	702.67	702.66
N	198+85.55	41.51	702.84	702.84
O	198+95.55	41.51	703.00	703.00
P	199+05.55	41.51	703.16	703.16
☉ Pier 3	199+16.63	41.51	703.34	703.34
Q	199+26.63	41.51	703.49	703.50
R	199+36.63	41.51	703.64	703.66
S	199+46.63	41.51	703.78	703.80
T	199+56.63	41.51	703.92	703.94
☉ Brg. E. Abut.	199+69.30	41.51	704.09	704.09
Bk. E. Abut.	199+71.60	41.51	704.12	704.12

**BEAM 2**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	197+27.04	34.51	699.55	699.55
☉ Brg. W. Abut.	197+29.34	34.51	699.60	699.60
A	197+39.34	34.51	699.83	699.83
B	197+49.34	34.51	700.05	700.05
C	197+59.34	34.51	700.27	700.26
☉ Pier 1	197+72.76	34.51	700.56	700.56
D	197+82.76	34.51	700.77	700.79
E	197+92.76	34.51	700.98	701.03
F	198+02.76	34.51	701.18	701.25
G	198+12.76	34.51	701.38	701.47
H	198+22.76	34.51	701.57	701.66
I	198+32.76	34.51	701.76	701.83
J	198+42.76	34.51	701.94	701.99
K	198+52.76	34.51	702.13	702.14
☉ Pier 2	198+59.84	34.51	702.25	702.25
L	198+69.84	34.51	702.43	702.42
M	198+79.84	34.51	702.60	702.59
N	198+89.84	34.51	702.76	702.76
O	198+99.84	34.51	702.93	702.92
P	199+09.84	34.51	703.09	703.08
☉ Pier 3	199+20.92	34.51	703.26	703.26
Q	199+30.92	34.51	703.41	703.42
R	199+40.92	34.51	703.55	703.57
S	199+50.92	34.51	703.69	703.72
T	199+60.92	34.51	703.83	703.85
☉ Brg. E. Abut.	199+73.59	34.51	704.00	704.00
Bk. E. Abut.	199+75.89	34.51	704.03	704.03

**BEAM 3**


Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	197+31.33	27.51	699.50	699.50
☉ Brg. W. Abut.	197+33.63	27.51	699.55	699.55
A	197+43.63	27.51	699.78	699.78
B	197+53.63	27.51	700.00	699.99
C	197+63.63	27.51	700.22	700.21
☉ Pier 1	197+77.05	27.51	700.50	700.50
D	197+87.05	27.51	700.71	700.74
E	197+97.05	27.51	700.92	700.97
F	198+07.05	27.51	701.12	701.19
G	198+17.05	27.51	701.31	701.40
H	198+27.05	27.51	701.51	701.59
I	198+37.05	27.51	701.69	701.76
J	198+47.05	27.51	701.88	701.92
K	198+57.05	27.51	702.06	702.07
☉ Pier 2	198+64.13	27.51	702.18	702.18
L	198+74.13	27.51	702.36	702.35
M	198+84.13	27.51	702.52	702.52
N	198+94.13	27.51	702.69	702.68
O	199+04.13	27.51	702.85	702.85
P	199+14.13	27.51	703.01	703.00
☉ Pier 3	199+25.21	27.51	703.17	703.17
Q	199+35.21	27.51	703.32	703.33
R	199+45.21	27.51	703.47	703.49
S	199+55.21	27.51	703.61	703.63
T	199+65.21	27.51	703.74	703.76
☉ Brg. E. Abut.	199+77.88	27.51	703.91	703.91
Bk. E. Abut.	199+80.18	27.51	703.94	703.94

**BEAM 4**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	197+35.62	20.51	699.45	699.45
☉ Brg. W. Abut.	197+37.92	20.51	699.50	699.50
A	197+47.92	20.51	699.73	699.73
B	197+57.92	20.51	699.95	699.94
C	197+67.92	20.51	700.16	700.15
☉ Pier 1	197+81.34	20.51	700.45	700.45
D	197+91.34	20.51	700.66	700.68
E	198+01.34	20.51	700.86	700.91
F	198+11.34	20.51	701.06	701.13
G	198+21.34	20.51	701.25	701.34
H	198+31.34	20.51	701.44	701.53
I	198+41.34	20.51	701.63	701.70
J	198+51.34	20.51	701.81	701.85
K	198+61.34	20.51	701.99	702.00
☉ Pier 2	198+68.42	20.51	702.11	702.11
L	198+78.42	20.51	702.28	702.27
M	198+88.42	20.51	702.45	702.44
N	198+98.42	20.51	702.61	702.61
O	199+08.42	20.51	702.77	702.77
P	199+18.42	20.51	702.93	702.92
☉ Pier 3	199+29.50	20.51	703.09	703.09
Q	199+39.50	20.51	703.24	703.25
R	199+49.50	20.51	703.38	703.40
S	199+59.50	20.51	703.52	703.55
T	199+69.50	20.51	703.65	703.67
☉ Brg. E. Abut.	199+82.17	20.51	703.82	703.82
Bk. E. Abut.	199+84.47	20.51	703.85	703.85

Notes:  
Work this sheet with sheet 6 of 39.  
Stations and offsets measured along ☉ Galena Blvd.

(Sheet 2 of 6)

	USER NAME =	DESIGNED - MTH	REVISED -	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>TOP OF SLAB ELEVATIONS</b> <b>STRUCTURE NO. 045-0037</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	FILE NAME =	CHECKED - ADB	REVISED -			573	61HB-1-R	KANE	110	57
	PLOT SCALE =	DRAWN - AJF	REVISED -			CONTRACT NO. 60K76				
	PLOT DATE =	CHECKED - MTH	REVISED -			ILLINOIS FED. AID PROJECT				
					SHEET NO. 7 OF 39 SHEETS					

**BEAM 5**

**E.B. P.G.L.**

**BEAM 6**

**STAGE CONSTRUCTION LINE**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection	Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection	Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection	Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	197+39.91	13.51	699.40	699.40	Bk. W. Abut.	197+42.68	9.00	699.37	699.37	Bk. W. Abut.	197+44.20	6.51	699.35	699.35	Bk. W. Abut.	197+45.43	4.51	699.34	699.34
☉ Brg. W. Abut.	197+42.21	13.51	699.45	699.45	☉ Brg. W. Abut.	197+44.97	9.00	699.42	699.42	☉ Brg. W. Abut.	197+46.50	6.51	699.40	699.40	☉ Brg. W. Abut.	197+47.73	4.51	699.39	699.39
A	197+52.21	13.51	699.68	699.68	A	197+54.97	9.00	699.64	699.64	A	197+56.50	6.51	699.63	699.62	A	197+57.73	4.51	699.61	699.61
B	197+62.21	13.51	699.90	699.89	B	197+64.97	9.00	699.86	699.86	B	197+66.50	6.51	699.84	699.84	B	197+67.73	4.51	699.83	699.82
C	197+72.21	13.51	700.11	700.10	C	197+74.97	9.00	700.07	700.07	C	197+76.50	6.51	700.06	700.05	C	197+77.73	4.51	700.04	700.03
☉ Pier 1	197+85.63	13.51	700.39	700.39	☉ Pier 1	197+88.39	9.00	700.35	700.35	☉ Pier 1	197+89.92	6.51	700.33	700.33	☉ Pier 1	197+91.14	4.51	700.32	700.32
D	197+95.63	13.51	700.60	700.62	D	197+98.39	9.00	700.56	700.58	D	197+99.92	6.51	700.54	700.56	D	198+01.14	4.51	700.52	700.54
E	198+05.63	13.51	700.80	700.85	E	198+08.39	9.00	700.76	700.81	E	198+09.92	6.51	700.74	700.79	E	198+11.14	4.51	700.72	700.77
F	198+15.63	13.51	700.99	701.07	F	198+18.39	9.00	700.95	701.03	F	198+19.92	6.51	700.93	701.01	F	198+21.14	4.51	700.91	700.99
G	198+25.63	13.51	701.19	701.28	G	198+28.39	9.00	701.15	701.23	G	198+29.92	6.51	701.12	701.21	G	198+31.14	4.51	701.10	701.19
H	198+35.63	13.51	701.38	701.46	H	198+38.39	9.00	701.33	701.42	H	198+39.92	6.51	701.31	701.40	H	198+41.14	4.51	701.29	701.38
I	198+45.63	13.51	701.56	701.63	I	198+48.39	9.00	701.52	701.59	I	198+49.92	6.51	701.49	701.56	I	198+51.14	4.51	701.47	701.54
J	198+55.63	13.51	701.74	701.78	J	198+58.39	9.00	701.70	701.74	J	198+59.92	6.51	701.67	701.71	J	198+61.14	4.51	701.65	701.69
K	198+65.63	13.51	701.92	701.93	K	198+68.39	9.00	701.87	701.89	K	198+69.92	6.51	701.85	701.86	K	198+71.14	4.51	701.82	701.84
☉ Pier 2	198+72.71	13.51	702.04	702.04	☉ Pier 2	198+75.47	9.00	701.99	701.99	☉ Pier 2	198+77.00	6.51	701.97	701.97	☉ Pier 2	198+78.23	4.51	701.95	701.95
L	198+82.71	13.51	702.21	702.20	L	198+85.47	9.00	702.16	702.15	L	198+87.00	6.51	702.13	702.12	L	198+88.23	4.51	702.11	702.10
M	198+92.71	13.51	702.37	702.37	M	198+95.47	9.00	702.32	702.32	M	198+97.00	6.51	702.30	702.29	M	198+98.23	4.51	702.28	702.27
N	199+02.71	13.51	702.54	702.53	N	199+05.47	9.00	702.49	702.48	N	199+07.00	6.51	702.46	702.45	N	199+08.23	4.51	702.43	702.43
O	199+12.71	13.51	702.69	702.69	O	199+15.47	9.00	702.64	702.64	O	199+17.00	6.51	702.61	702.61	O	199+18.23	4.51	702.59	702.59
P	199+22.71	13.51	702.85	702.84	P	199+25.47	9.00	702.79	702.79	P	199+27.00	6.51	702.76	702.76	P	199+28.23	4.51	702.74	702.74
☉ Pier 3	199+33.80	13.51	703.01	703.01	☉ Pier 3	199+36.56	9.00	702.96	702.96	☉ Pier 3	199+38.09	6.51	702.93	702.93	☉ Pier 3	199+39.31	4.51	702.90	702.90
Q	199+43.80	13.51	703.15	703.17	Q	199+46.56	9.00	703.10	703.11	Q	199+48.09	6.51	703.07	703.08	Q	199+49.31	4.51	703.05	703.06
R	199+53.80	13.51	703.30	703.32	R	199+56.56	9.00	703.24	703.26	R	199+58.09	6.51	703.21	703.23	R	199+59.31	4.51	703.18	703.21
S	199+63.80	13.51	703.43	703.46	S	199+66.56	9.00	703.37	703.40	S	199+68.09	6.51	703.34	703.37	S	199+69.31	4.51	703.32	703.35
T	199+73.80	13.51	703.56	703.58	T	199+76.56	9.00	703.51	703.53	T	199+78.09	6.51	703.47	703.49	T	199+79.31	4.51	703.45	703.47
☉ Brg. E. Abut.	199+86.46	13.51	703.73	703.73	☉ Brg. E. Abut.	199+89.22	9.00	703.67	703.67	☉ Brg. E. Abut.	199+90.75	6.51	703.63	703.63	☉ Brg. E. Abut.	199+91.98	4.51	703.61	703.61
Bk. E. Abut.	199+88.76	13.51	703.75	703.75	Bk. E. Abut.	199+91.52	9.00	703.69	703.69	Bk. E. Abut.	199+93.05	6.51	703.66	703.66	Bk. E. Abut.	199+94.27	4.51	703.63	703.63

Notes:  
Work this sheet with sheet 6 of 39.  
Stations and offsets measured along ☉ Galena Blvd.

(Sheet 3 of 6)



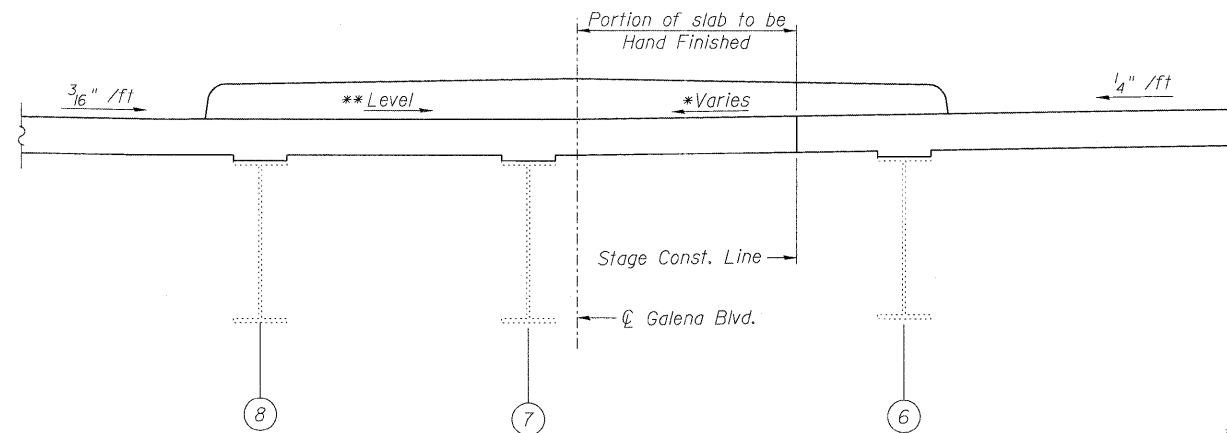
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FILE NAME =	CHECKED - ADB	REVISED -
PLOT SCALE =	DRAWN - AJF	REVISED -
PLOT DATE =	CHECKED - MTH	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS  
STRUCTURE NO. 045-0037

SHEET NO. 8 OF 39 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
573	61HB-1-R	KANE	110	58
CONTRACT NO. 60K76			ILLINOIS FED. AID PROJECT	



\* Hand finishing of concrete required between  $\text{CL Galena Blvd.}$  and stage construction line. This portion has a warped cross slope due to the non-parallel profile grades.  
 \*\* Portion from north edge of median to  $\text{CL Galena Blvd.}$  shall be constructed level.

**DETAIL AT MEDIAN**  
 Elevations at Beams 6, 7, and 8 are given at Theoretical Top of Slab below the median.

$\text{CL GALENA BLVD.}$					<b>BEAM 7</b>				<b>BEAM 8</b>				<b>W.B. P.G.L.</b>						
Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection	Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection	Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection	Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	197+48.19	0.00	699.26	699.26	Bk. W. Abut.	197+48.49	-0.49	699.26	699.26	Bk. W. Abut.	197+51.56	-5.49	699.33	699.33	Bk. W. Abut.	197+53.71	-9.00	699.41	699.41
$\text{CL Brg. W. Abut.}$	197+50.49	0.00	699.31	699.31	$\text{CL Brg. W. Abut.}$	197+50.79	-0.49	699.31	699.31	$\text{CL Brg. W. Abut.}$	197+53.86	-5.49	699.38	699.38	$\text{CL Brg. W. Abut.}$	197+56.01	-9.00	699.46	699.46
A	197+60.49	0.00	699.52	699.52	A	197+60.79	-0.49	699.53	699.53	A	197+63.86	-5.49	699.59	699.59	A	197+66.01	-9.00	699.67	699.67
B	197+70.49	0.00	699.73	699.73	B	197+70.79	-0.49	699.74	699.73	B	197+73.86	-5.49	699.80	699.80	B	197+76.01	-9.00	699.88	699.88
C	197+80.49	0.00	699.94	699.93	C	197+80.79	-0.49	699.95	699.94	C	197+83.86	-5.49	700.01	700.00	C	197+86.01	-9.00	700.09	700.08
$\text{CL Pier 1}$	197+93.91	0.00	700.21	700.21	$\text{CL Pier 1}$	197+94.21	-0.49	700.22	700.22	$\text{CL Pier 1}$	197+97.27	-5.49	700.28	700.28	$\text{CL Pier 1}$	197+99.42	-9.00	700.36	700.36
D	198+03.91	0.00	700.41	700.44	D	198+04.21	-0.49	700.42	700.44	D	198+07.27	-5.49	700.48	700.50	D	198+09.42	-9.00	700.55	700.57
E	198+13.91	0.00	700.61	700.66	E	198+14.21	-0.49	700.62	700.66	E	198+17.27	-5.49	700.68	700.72	E	198+19.42	-9.00	700.75	700.79
F	198+23.91	0.00	700.80	700.87	F	198+24.21	-0.49	700.81	700.88	F	198+27.27	-5.49	700.87	700.92	F	198+29.42	-9.00	700.94	701.00
G	198+33.91	0.00	700.99	701.07	G	198+34.21	-0.49	701.00	701.08	G	198+37.27	-5.49	701.06	701.12	G	198+39.42	-9.00	701.13	701.20
H	198+43.91	0.00	701.18	701.26	H	198+44.21	-0.49	701.18	701.26	H	198+47.27	-5.49	701.24	701.31	H	198+49.42	-9.00	701.31	701.38
I	198+53.91	0.00	701.36	701.42	I	198+54.21	-0.49	701.37	701.43	I	198+57.27	-5.49	701.42	701.47	I	198+59.42	-9.00	701.49	701.55
J	198+63.91	0.00	701.54	701.58	J	198+64.21	-0.49	701.55	701.58	J	198+67.27	-5.49	701.60	701.63	J	198+69.42	-9.00	701.67	701.71
K	198+73.91	0.00	701.72	701.73	K	198+74.21	-0.49	701.72	701.74	K	198+77.27	-5.49	701.77	701.79	K	198+79.42	-9.00	701.84	701.86
$\text{CL Pier 2}$	198+80.99	0.00	701.84	701.84	$\text{CL Pier 2}$	198+81.29	-0.49	701.84	701.84	$\text{CL Pier 2}$	198+84.36	-5.49	701.90	701.90	$\text{CL Pier 2}$	198+86.51	-9.00	701.96	701.96
L	198+90.99	0.00	702.01	702.00	L	198+91.29	-0.49	702.01	702.01	L	198+94.36	-5.49	702.06	702.06	L	198+96.51	-9.00	702.13	702.13
M	199+00.99	0.00	702.17	702.17	M	199+01.29	-0.49	702.18	702.17	M	199+04.36	-5.49	702.23	702.23	M	199+06.51	-9.00	702.30	702.29
N	199+10.99	0.00	702.34	702.33	N	199+11.29	-0.49	702.34	702.34	N	199+14.36	-5.49	702.39	702.39	N	199+16.51	-9.00	702.46	702.46
O	199+20.99	0.00	702.50	702.50	O	199+21.29	-0.49	702.50	702.50	O	199+24.36	-5.49	702.55	702.55	O	199+26.51	-9.00	702.61	702.62
P	199+30.99	0.00	702.65	702.65	P	199+31.29	-0.49	702.66	702.66	P	199+34.36	-5.49	702.70	702.70	P	199+36.51	-9.00	702.77	702.77
$\text{CL Pier 3}$	199+42.07	0.00	702.82	702.82	$\text{CL Pier 3}$	199+42.38	-0.49	702.83	702.83	$\text{CL Pier 3}$	199+45.44	-5.49	702.87	702.87	$\text{CL Pier 3}$	199+47.59	-9.00	702.94	702.94
Q	199+52.07	0.00	702.97	702.98	Q	199+52.38	-0.49	702.97	702.98	Q	199+55.44	-5.49	703.02	703.03	Q	199+57.59	-9.00	703.08	703.09
R	199+62.07	0.00	703.12	703.14	R	199+62.38	-0.49	703.12	703.14	R	199+65.44	-5.49	703.16	703.18	R	199+67.59	-9.00	703.22	703.24
S	199+72.07	0.00	703.26	703.28	S	199+72.38	-0.49	703.26	703.29	S	199+75.44	-5.49	703.30	703.32	S	199+77.59	-9.00	703.36	703.39
T	199+82.07	0.00	703.39	703.41	T	199+82.38	-0.49	703.40	703.42	T	199+85.44	-5.49	703.44	703.46	T	199+87.59	-9.00	703.50	703.52
$\text{CL Brg. E. Abut.}$	199+94.74	0.00	703.56	703.56	$\text{CL Brg. E. Abut.}$	199+95.04	-0.49	703.57	703.57	$\text{CL Brg. E. Abut.}$	199+98.11	-5.49	703.61	703.61	$\text{CL Brg. E. Abut.}$	200+00.26	-9.00	703.67	703.67
Bk. E. Abut.	199+97.04	0.00	703.60	703.60	Bk. E. Abut.	199+97.34	-0.49	703.60	703.60	Bk. E. Abut.	200+00.40	-5.49	703.64	703.64	Bk. E. Abut.	200+02.55	-9.00	703.70	703.70

Notes:  
 Work this sheet with sheet 6 of 39.  
 Stations and offsets measured along  $\text{CL Galena Blvd.}$

(Sheet 4 of 6)



USER NAME =	DESIGNED - MTH	REVISED -
FILE NAME =	CHECKED - ADB	REVISED -
PLOT SCALE =	DRAWN - AJF	REVISED -
PLOT DATE =	CHECKED - MTH	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS  
 STRUCTURE NO. 045-0037

SHEET NO. 9 OF 39 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
573	61HB-1-R	KANE	110	59
CONTRACT NO. 60K76			ILLINOIS FED. AID PROJECT	

**BEAM 9**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	197+55.75	-12.33	699.50	699.50
☉ Brg. W. Abut.	197+58.04	-12.33	699.55	699.55
A	197+68.04	-12.33	699.77	699.76
B	197+78.04	-12.33	699.97	699.97
C	197+88.04	-12.33	700.18	700.17
☉ Pier 1	198+01.46	-12.33	700.45	700.45
D	198+11.46	-12.33	700.65	700.67
E	198+21.46	-12.33	700.84	700.88
F	198+31.46	-12.33	701.03	701.09
G	198+41.46	-12.33	701.22	701.29
H	198+51.46	-12.33	701.40	701.47
I	198+61.46	-12.33	701.58	701.64
J	198+71.46	-12.33	701.76	701.79
K	198+81.46	-12.33	701.93	701.94
☉ Pier 2	198+88.54	-12.33	702.05	702.05
L	198+98.54	-12.33	702.22	702.21
M	199+08.54	-12.33	702.38	702.38
N	199+18.54	-12.33	702.54	702.54
O	199+28.54	-12.33	702.70	702.70
P	199+38.54	-12.33	702.85	702.85
☉ Pier 3	199+49.63	-12.33	703.02	703.02
Q	199+59.63	-12.33	703.16	703.17
R	199+69.63	-12.33	703.31	703.32
S	199+79.63	-12.33	703.44	703.47
T	199+89.63	-12.33	703.58	703.60
☉ Brg. E. Abut.	200+02.29	-12.33	703.75	703.75
Bk. E. Abut.	200+04.59	-12.33	703.78	703.78

**BEAM 10**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	197+59.94	-19.16	699.70	699.70
☉ Brg. W. Abut.	197+62.23	-19.16	699.75	699.75
A	197+72.23	-19.16	699.96	699.96
B	197+82.23	-19.16	700.17	700.16
C	197+92.23	-19.16	700.37	700.36
☉ Pier 1	198+05.65	-19.16	700.64	700.64
D	198+15.65	-19.16	700.83	700.85
E	198+25.65	-19.16	701.03	701.07
F	198+35.65	-19.16	701.22	701.28
G	198+45.65	-19.16	701.40	701.48
H	198+55.65	-19.16	701.58	701.66
I	198+65.65	-19.16	701.76	701.82
J	198+75.65	-19.16	701.94	701.97
K	198+85.65	-19.16	702.11	702.12
☉ Pier 2	198+92.73	-19.16	702.23	702.23
L	199+02.73	-19.16	702.39	702.39
M	199+12.73	-19.16	702.56	702.55
N	199+22.73	-19.16	702.71	702.72
O	199+32.73	-19.16	702.87	702.87
P	199+42.73	-19.16	703.02	703.02
☉ Pier 3	199+53.82	-19.16	703.19	703.19
Q	199+63.82	-19.16	703.33	703.34
R	199+73.82	-19.16	703.47	703.49
S	199+83.82	-19.16	703.61	703.63
T	199+93.82	-19.16	703.74	703.76
☉ Brg. E. Abut.	200+06.48	-19.16	703.91	703.91
Bk. E. Abut.	200+08.78	-19.16	703.94	703.94

**W.B. CROWN**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	197+61.06	-21.00	699.75	699.75
☉ Brg. W. Abut.	197+63.36	-21.00	699.80	699.80
A	197+73.36	-21.00	700.01	700.01
B	197+83.36	-21.00	700.22	700.22
C	197+93.36	-21.00	700.42	700.42
☉ Pier 1	198+06.78	-21.00	700.69	700.69
D	198+16.78	-21.00	700.89	700.91
E	198+26.78	-21.00	701.08	701.12
F	198+36.78	-21.00	701.27	701.33
G	198+46.78	-21.00	701.45	701.52
H	198+56.78	-21.00	701.63	701.70
I	198+66.78	-21.00	701.81	701.87
J	198+76.78	-21.00	701.99	702.02
K	198+86.78	-21.00	702.16	702.17
☉ Pier 2	198+93.86	-21.00	702.28	702.28
L	199+03.86	-21.00	702.44	702.44
M	199+13.86	-21.00	702.60	702.60
N	199+23.86	-21.00	702.76	702.76
O	199+33.86	-21.00	702.92	702.92
P	199+43.86	-21.00	703.07	703.07
☉ Pier 3	199+54.94	-21.00	703.23	703.23
Q	199+64.94	-21.00	703.37	703.38
R	199+74.94	-21.00	703.52	703.53
S	199+84.94	-21.00	703.65	703.68
T	199+94.94	-21.00	703.79	703.80
☉ Brg. E. Abut.	200+07.61	-21.00	703.95	703.95
Bk. E. Abut.	200+09.91	-21.00	703.98	703.98

**BEAM 11**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	197+64.12	-25.99	699.74	699.74
☉ Brg. W. Abut.	197+66.42	-25.99	699.79	699.79
A	197+76.42	-25.99	700.00	700.00
B	197+86.42	-25.99	700.20	700.20
C	197+96.42	-25.99	700.41	700.40
☉ Pier 1	198+09.84	-25.99	700.67	700.67
D	198+19.84	-25.99	700.87	700.89
E	198+29.84	-25.99	701.06	701.10
F	198+39.84	-25.99	701.24	701.31
G	198+49.84	-25.99	701.43	701.50
H	198+59.84	-25.99	701.61	701.68
I	198+69.84	-25.99	701.79	701.84
J	198+79.84	-25.99	701.96	702.00
K	198+89.84	-25.99	702.13	702.14
☉ Pier 2	198+96.92	-25.99	702.25	702.25
L	199+06.92	-25.99	702.41	702.41
M	199+16.92	-25.99	702.57	702.57
N	199+26.92	-25.99	702.73	702.73
O	199+36.92	-25.99	702.88	702.89
P	199+46.92	-25.99	703.03	703.03
☉ Pier 3	199+58.00	-25.99	703.20	703.20
Q	199+68.00	-25.99	703.34	703.35
R	199+78.00	-25.99	703.48	703.50
S	199+88.00	-25.99	703.62	703.64
T	199+98.00	-25.99	703.75	703.76
☉ Brg. E. Abut.	200+10.67	-25.99	703.91	703.91
Bk. E. Abut.	200+12.97	-25.99	703.94	703.94

Notes:  
Work this sheet with sheet 6 of 39.  
Stations and offsets measured along ☉ Galena Blvd.

(Sheet 5 of 6)



USER NAME =	DESIGNED - MTH	REVISED -
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PLOT DATE =	CHECKED - MTH	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**TOP OF SLAB ELEVATIONS  
STRUCTURE NO. 045-0037**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
573	61HB-1-R	KANE	110	60
SHEET NO. 10 OF 39 SHEETS			CONTRACT NO. 60K76	
ILLINOIS FED. AID PROJECT				

**BEAM 12**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	197+68.90	-33.78	699.72	699.72
☉ Brg. W. Abut.	197+71.18	-33.75	699.77	699.77
A	197+81.10	-33.63	699.98	699.98
B	197+91.02	-33.51	700.18	700.18
C	198+00.95	-33.38	700.38	700.38
☉ Pier 1	198+14.26	-33.22	700.65	700.65
D	198+24.19	-33.09	700.84	700.86
E	198+34.11	-32.97	701.03	701.07
F	198+44.04	-32.85	701.22	701.28
G	198+53.96	-32.72	701.40	701.47
H	198+63.89	-32.60	701.58	701.65
I	198+73.81	-32.48	701.75	701.81
J	198+83.74	-32.36	701.93	701.96
K	198+93.66	-32.23	702.10	702.11
☉ Pier 2	199+00.69	-32.14	702.21	702.21
L	199+10.61	-32.02	702.38	702.37
M	199+20.54	-31.90	702.54	702.53
N	199+30.46	-31.77	702.70	702.69
O	199+40.39	-31.65	702.85	702.85
P	199+50.31	-31.53	703.00	703.00
☉ Pier 3	199+61.31	-31.39	703.16	703.16
Q	199+71.24	-31.27	703.30	703.31
R	199+81.16	-31.15	703.44	703.46
S	199+91.09	-31.02	703.58	703.60
T	200+01.01	-30.90	703.71	703.72
☉ Brg. E. Abut.	200+13.58	-30.74	703.87	703.87
Bk. E. Abut.	200+15.86	-30.71	703.90	703.90

**BEAM 13**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	197+73.67	-41.57	699.70	699.70
☉ Brg. W. Abut.	197+75.93	-41.51	699.75	699.75
A	197+85.78	-41.27	699.95	699.95
B	197+95.63	-41.02	700.16	700.15
C	198+05.48	-40.77	700.36	700.35
☉ Pier 1	198+18.69	-40.44	700.62	700.62
D	198+28.54	-40.20	700.81	700.83
E	198+38.39	-39.95	701.00	701.04
F	198+48.24	-39.70	701.19	701.25
G	198+58.09	-39.46	701.37	701.44
H	198+67.94	-39.21	701.55	701.62
I	198+77.79	-38.96	701.72	701.78
J	198+87.64	-38.72	701.89	701.93
K	198+97.48	-38.47	702.06	702.08
☉ Pier 2	199+04.46	-38.30	702.18	702.18
L	199+14.31	-38.05	702.34	702.34
M	199+24.16	-37.80	702.50	702.50
N	199+34.01	-37.56	702.66	702.66
O	199+43.86	-37.31	702.81	702.81
P	199+53.71	-37.06	702.96	702.96
☉ Pier 3	199+64.62	-36.79	703.12	703.12
Q	199+74.47	-36.54	703.27	703.27
R	199+84.32	-36.30	703.41	703.42
S	199+94.17	-36.05	703.54	703.56
T	200+04.02	-35.80	703.67	703.69
☉ Brg. E. Abut.	200+16.49	-35.49	703.84	703.84
Bk. E. Abut.	200+18.75	-35.44	703.87	703.87

Notes:  
 Work this sheet with sheet 6 of 39.  
 Stations and offsets measured along ☉ Galena Blvd.

(Sheet 6 of 6)



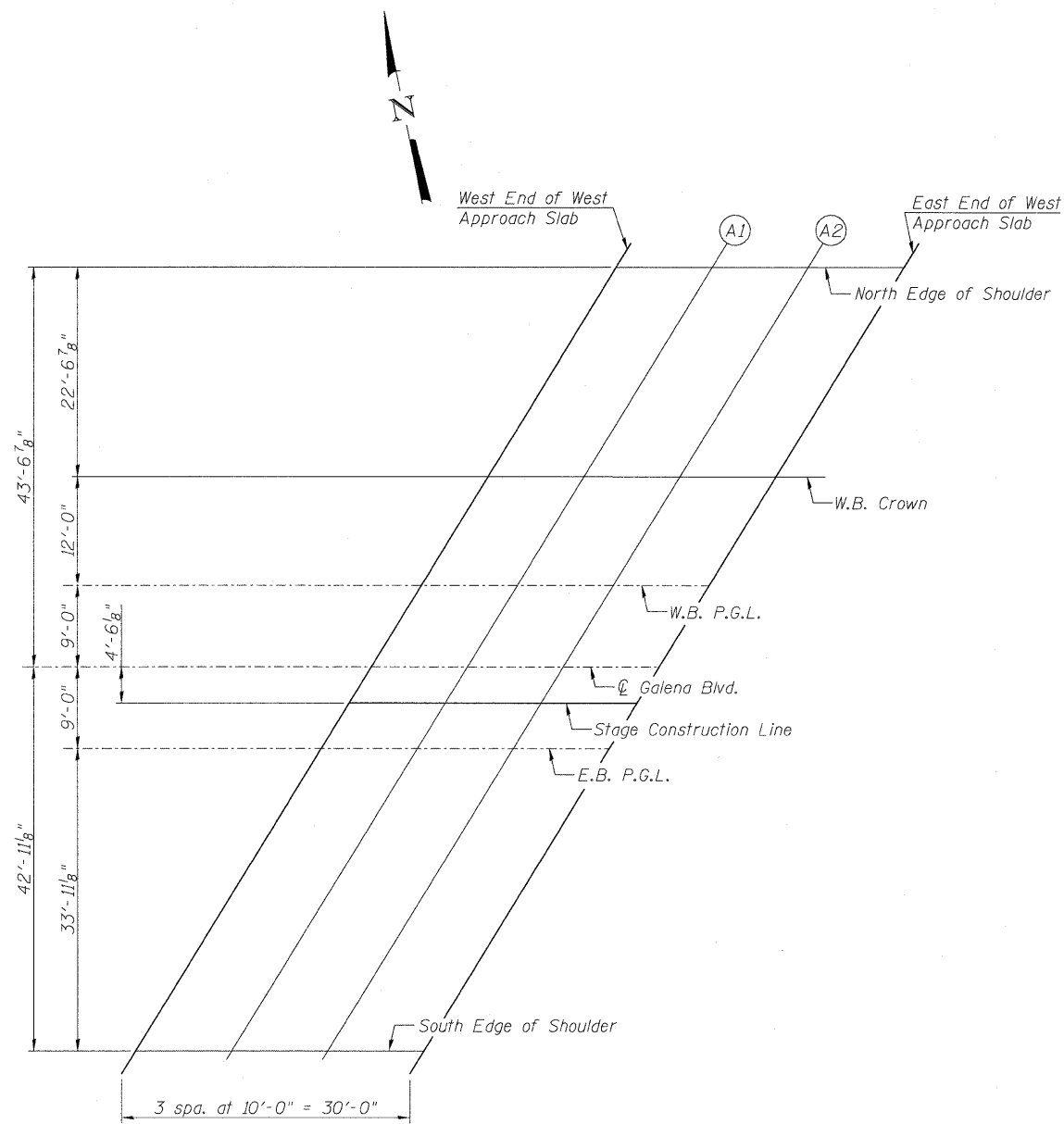
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PLOT DATE =	CHECKED - MTH	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**TOP OF SLAB ELEVATIONS  
 STRUCTURE NO. 045-0037**

SHEET NO. 11 OF 39 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
573	61HB-1-R	KANE	110	61
CONTRACT NO. 60K76			ILLINOIS FED. AID PROJECT	



WEST APPROACH PLAN

NORTH EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
W. End W. Appr. Slab	197+44.31	-43.57	699.04
A1	197+54.31	-43.57	699.26
A2	197+64.31	-43.57	699.47
E. End W. Appr. Slab	197+74.31	-43.57	699.68

STAGE CONSTRUCTION LINE

Location	Station	Offset	Theoretical Grade Elevations
W. End W. Appr. Slab	197+14.84	4.51	698.64
A1	197+24.84	4.51	698.87
A2	197+34.84	4.51	699.10
E. End W. Appr. Slab	197+44.84	4.51	699.33

W.B. CROWN

Location	Station	Offset	Theoretical Grade Elevations
W. End W. Appr. Slab	197+30.47	-21.00	699.09
A1	197+40.47	-21.00	699.31
A2	197+50.47	-21.00	699.53
E. End W. Appr. Slab	197+60.47	-21.00	699.74

E.B. P.G.L.

Location	Station	Offset	Theoretical Grade Elevations
W. End W. Appr. Slab	197+12.09	9.00	698.67
A1	197+22.09	9.00	698.90
A2	197+32.09	9.00	699.13
E. End W. Appr. Slab	197+42.09	9.00	699.36

W.B. P.G.L.

Location	Station	Offset	Theoretical Grade Elevations
W. End W. Appr. Slab	197+23.12	-9.00	698.73
A1	197+33.12	-9.00	698.96
A2	197+43.12	-9.00	699.18
E. End W. Appr. Slab	197+53.12	-9.00	699.40

SOUTH EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
W. End W. Appr. Slab	196+91.29	42.93	698.87
A1	197+01.29	42.93	699.11
A2	197+11.29	42.93	699.35
E. End W. Appr. Slab	197+21.29	42.93	699.59

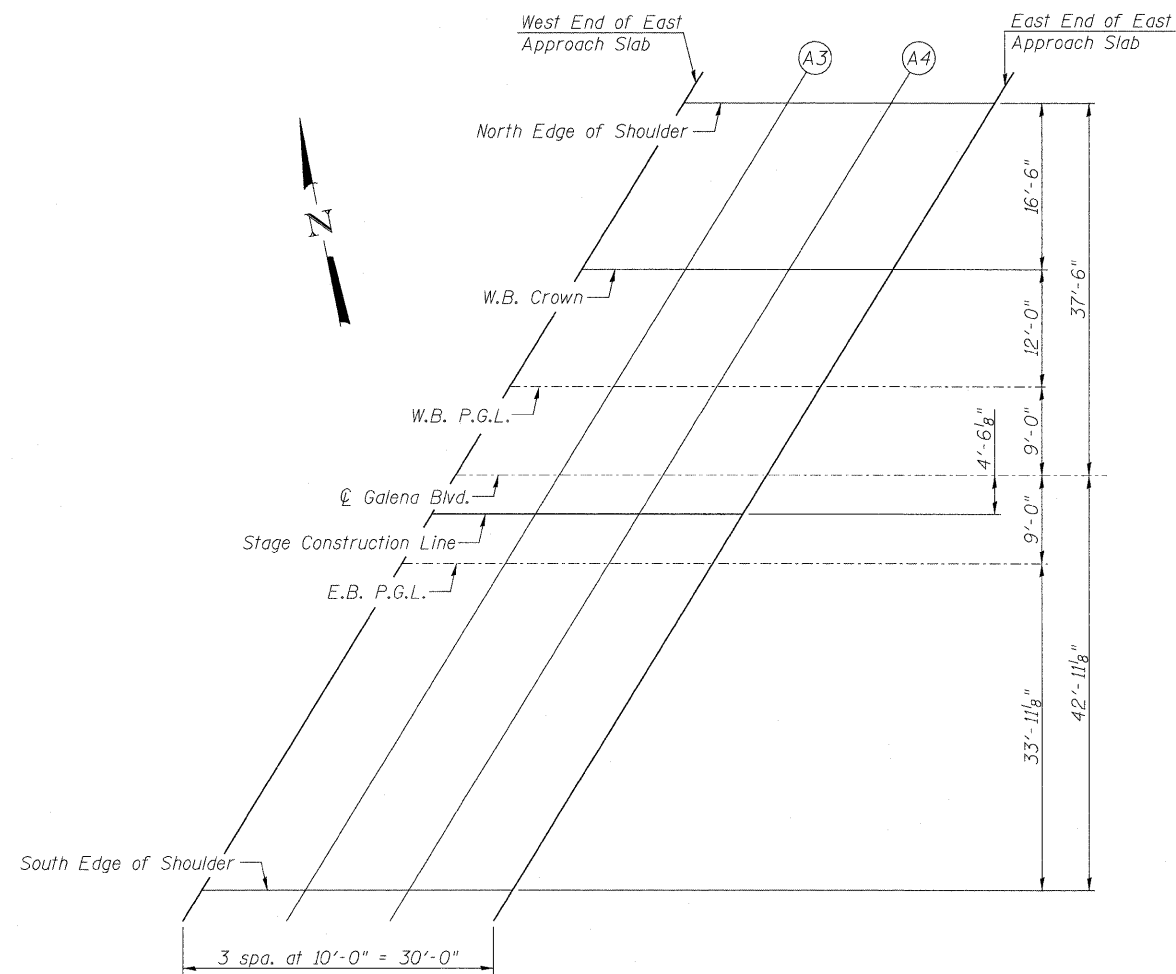
$\text{C GALENA BLVD.}$

Location	Station	Offset	Theoretical Grade Elevations
W. End W. Appr. Slab	197+17.60	0.00	698.58
A1	197+27.60	0.00	698.80
A2	197+37.60	0.00	699.03
E. End W. Appr. Slab	197+47.60	0.00	699.24

Note:  
Stations and offsets measured along  $\text{C Galena Blvd.}$

(Sheet 1 of 2)





**EAST APPROACH PLAN**

**NORTH EDGE OF SHOULDER**

Location	Station	Offset	Theoretical Grade Elevations
W. End E. Appr. Slab	200+20.61	-37.50	703.86
A3	200+30.61	-37.50	703.98
A4	200+40.61	-37.50	704.10
E. End E. Appr. Slab	200+50.61	-37.50	704.21

**STAGE CONSTRUCTION LINE**

Location	Station	Offset	Theoretical Grade Elevations
W. End E. Appr. Slab	199+94.86	4.51	703.64
A3	200+04.86	4.51	703.76
A4	200+14.86	4.51	703.88
E. End E. Appr. Slab	200+24.86	4.51	703.99

**W.B. CROWN**

Location	Station	Offset	Theoretical Grade Elevations
W. End E. Appr. Slab	200+10.50	-21.00	703.99
A3	200+20.50	-21.00	704.11
A4	200+30.50	-21.00	704.23
E. End E. Appr. Slab	200+40.50	-21.00	704.35

**E.B. P.G.L.**

Location	Station	Offset	Theoretical Grade Elevations
W. End E. Appr. Slab	199+92.11	9.00	703.70
A3	200+02.11	9.00	703.82
A4	200+12.11	9.00	703.94
E. End E. Appr. Slab	200+22.11	9.00	704.05

**W.B. P.G.L.**

Location	Station	Offset	Theoretical Grade Elevations
W. End E. Appr. Slab	200+03.14	-9.00	703.71
A3	200+13.14	-9.00	703.83
A4	200+23.14	-9.00	703.96
E. End E. Appr. Slab	200+33.14	-9.00	704.08

**SOUTH EDGE OF SHOULDER**

Location	Station	Offset	Theoretical Grade Elevations
W. End E. Appr. Slab	199+71.32	42.93	704.14
A3	199+81.32	42.93	704.27
A4	199+91.32	42.93	704.40
E. End E. Appr. Slab	200+01.32	42.93	704.52

**Galena Blvd.**

Location	Station	Offset	Theoretical Grade Elevations
W. End E. Appr. Slab	199+97.63	0.00	703.60
A3	200+07.63	0.00	703.73
A4	200+17.63	0.00	703.86
E. End E. Appr. Slab	200+27.63	0.00	703.98

Note: Stations and offsets measured along Galena Blvd.

(Sheet 2 of 2)



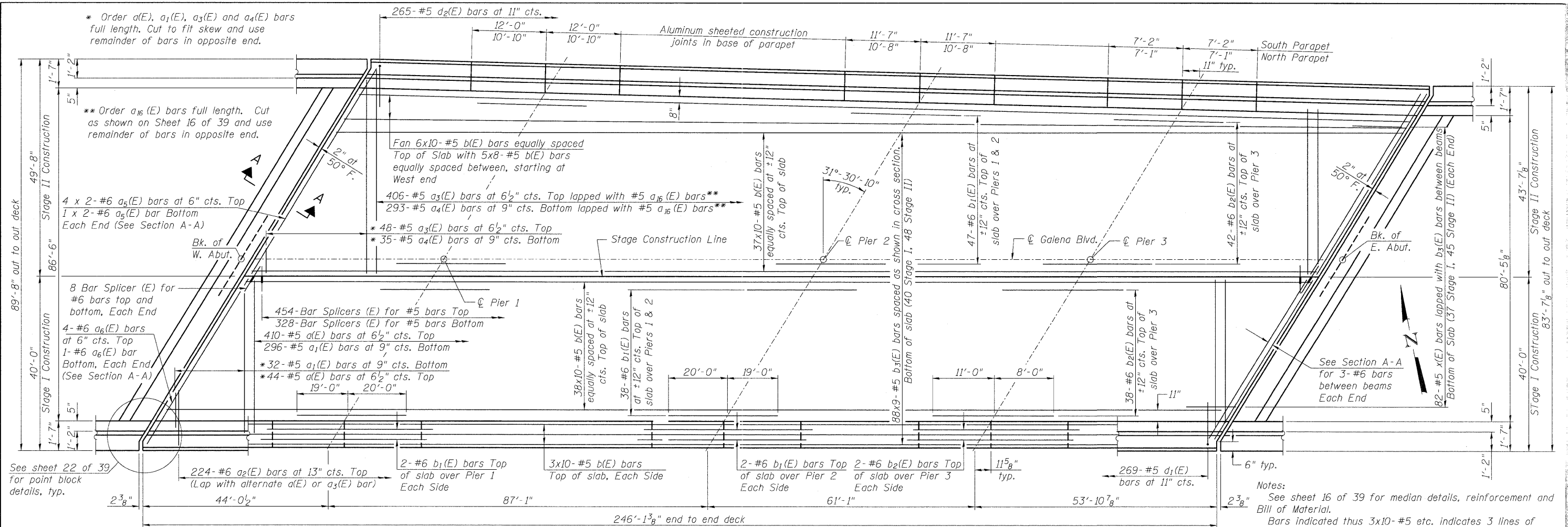
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PLOT DATE =	CHECKED - MTH	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TOP OF APPROACH SLAB ELEVATIONS  
STRUCTURE NO. 045-0037

SHEET NO. 13 OF 39 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
573	61HB-1-R	KANE	110	63
CONTRACT NO. 60K76			ILLINOIS FED. AID PROJECT	



**PLAN**

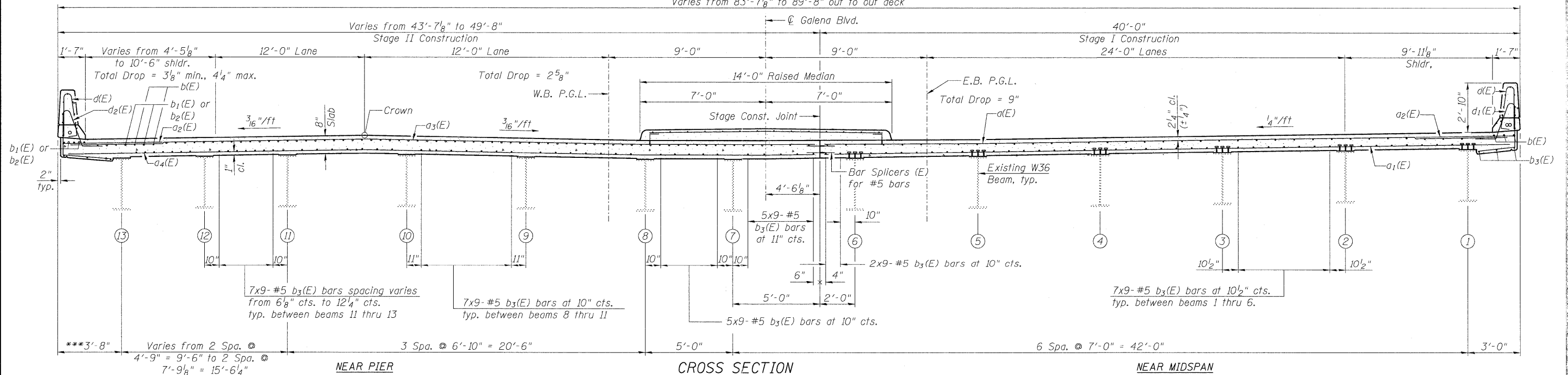
(Median not shown for clarity)

Varies from 83'-7 7/8" to 89'-8" out to out deck

**MIN. BAR LAP**

#5 Bar = 2'-7"  
#6 Bar = 3'-1"

Notes:  
See sheet 16 of 39 for median details, reinforcement and Bill of Material.  
Bars indicated thus 3x10-#5 etc. indicates 3 lines of bars with 10 lengths per line.  
See Sheet 15 of 39 for Section A-A and parapet details.  
See Sheet 39 of 39 for Bar Splicer Details.  
See Sheet 1 of 39 for location of Drainage Scuppers.



**CROSS SECTION**

(Looking East)  
(Scuppers not shown for clarity)

NEAR PIER

NEAR MIDSPAN

\*\*\*Measured at right angles to Beam 13.



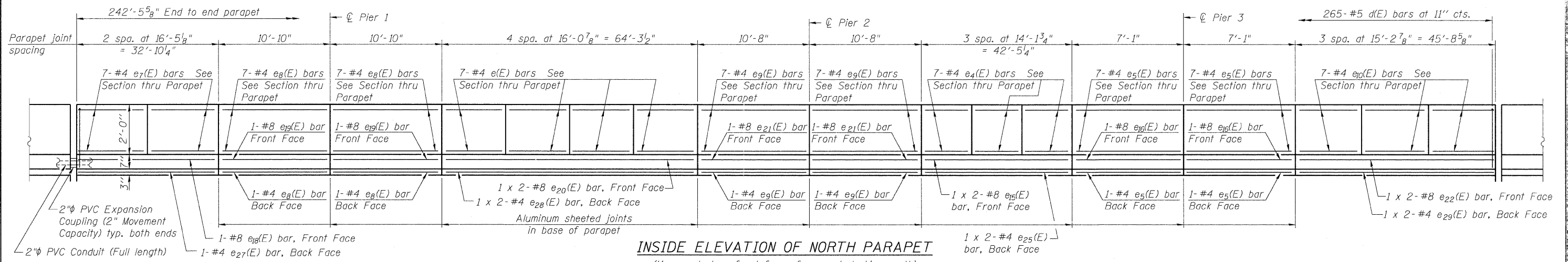
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**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

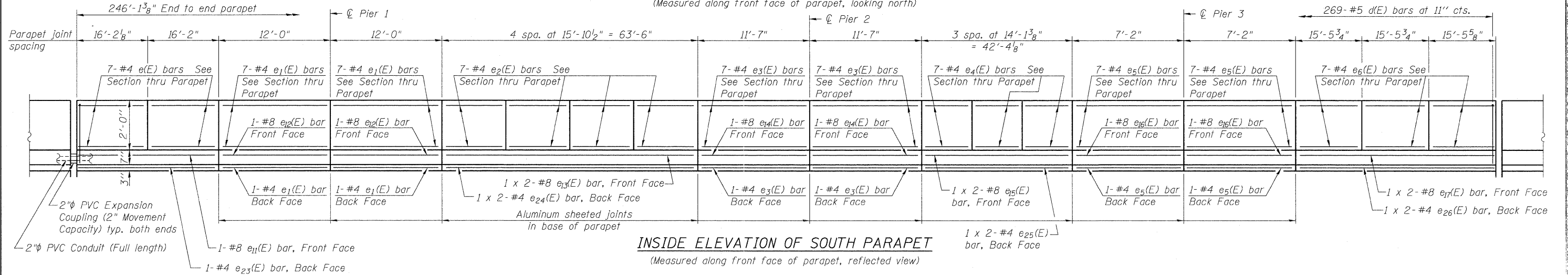
**SUPERSTRUCTURE**  
**STRUCTURE NO. 045-0037**

SHEET NO. 14 OF 39 SHEETS

F.A.P. RTE. 573	SECTION 61HB-1-R	COUNTY KANE	TOTAL SHEETS 110	SHEET NO. 64
				CONTRACT NO. 60K76
ILLINOIS FED. AID PROJECT				

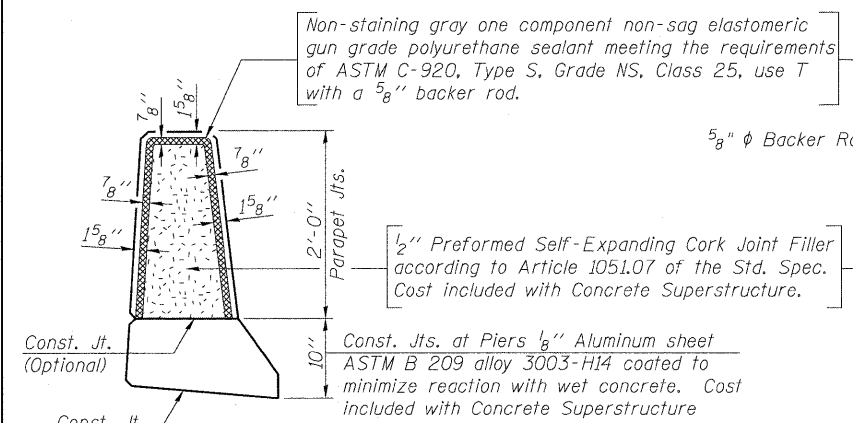


**INSIDE ELEVATION OF NORTH PARAPET**  
(Measured along front face of parapet, looking north)

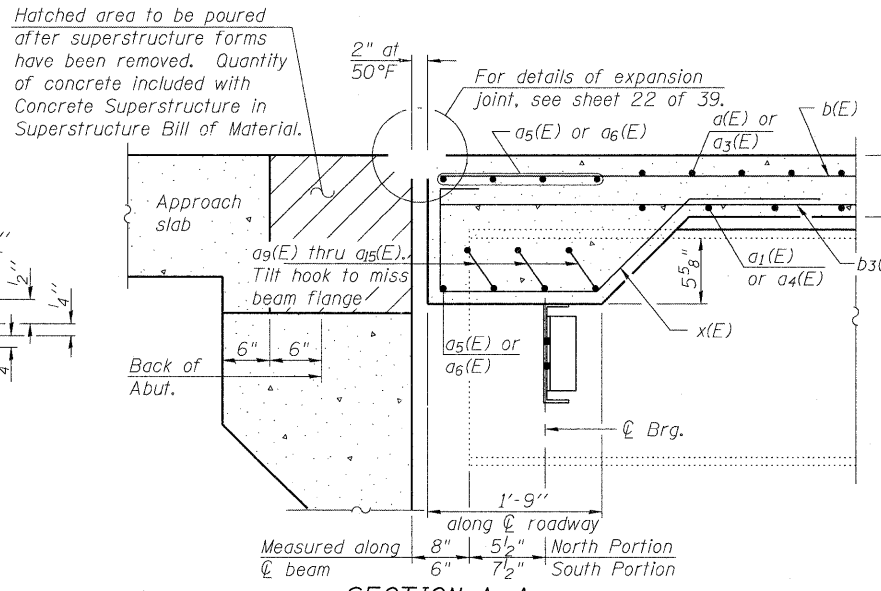


**INSIDE ELEVATION OF SOUTH PARAPET**  
(Measured along front face of parapet, reflected view)

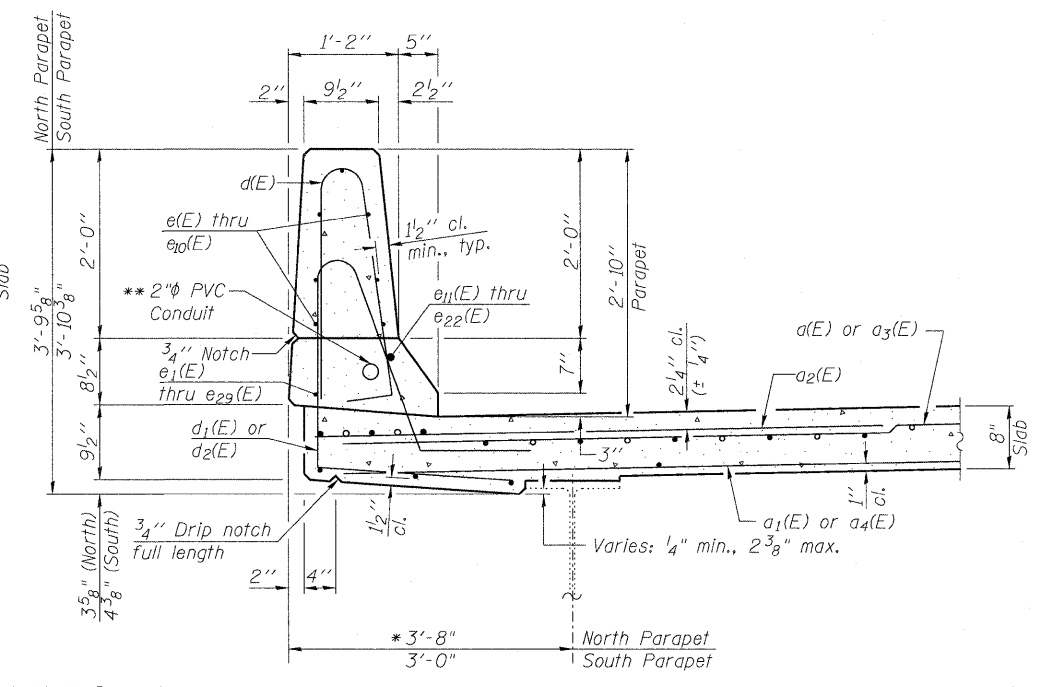
**MINIMUM BAR LAP**  
(Parapet)  
#4 bar = 2'-0"  
#8 bar = 5'-2"



**PARAPET JOINT DETAILS**

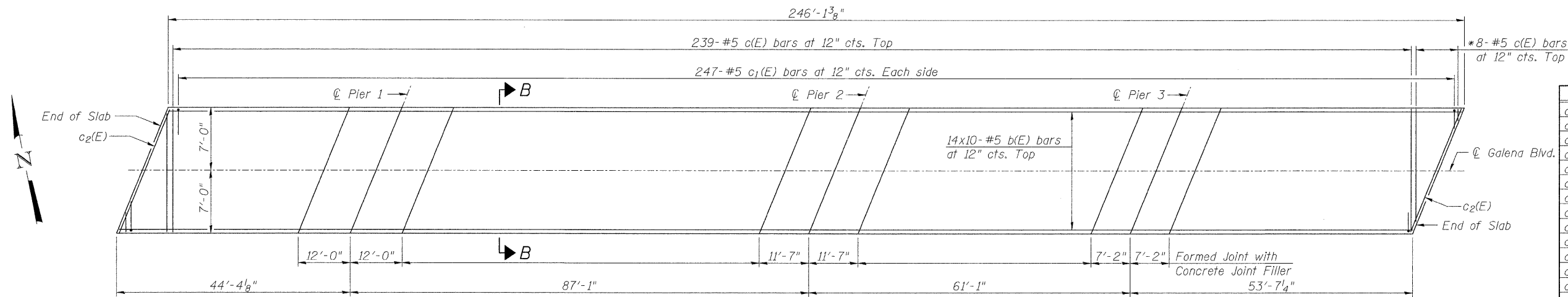


**SECTION A-A**

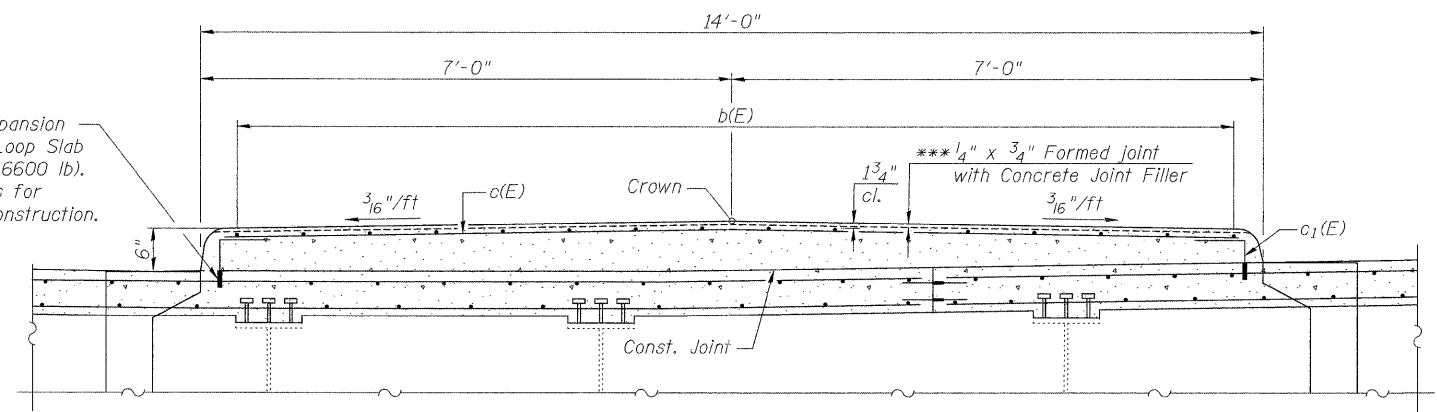


**SECTION THRU PARAPET**  
\* Measured at right angles to beam

(Sheet 1 of 3)



MEDIAN PLAN



SECTION B-B

MIN. BAR LAP  
#5 Bar = 2'-7"

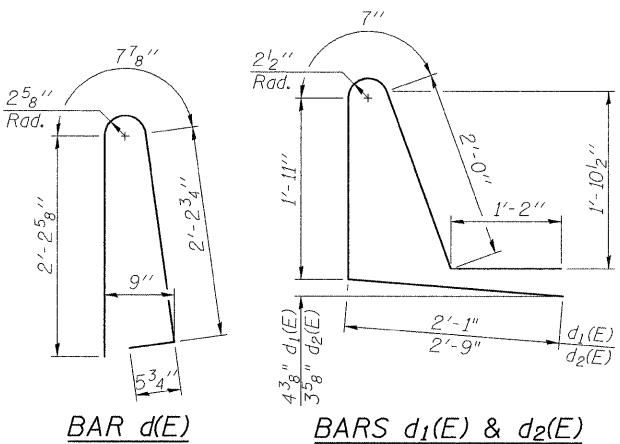
\* Order c(E) bars full length. Cut to fit skew and use remainder of bars in opposite end.  
\*\* The cost of expansion anchors/inserts is included in the cost of Reinforcement Bars, Epoxy Coated.  
\*\*\* Full width - backer rod not required.

\*\*\* 3/4" φ Galvanized expansion anchor or Ferrule Loop Slab Insert (Proof Load 6600 lb). Provide plastic caps for protection during construction.

**SUPERSTRUCTURE  
BILL OF MATERIAL**

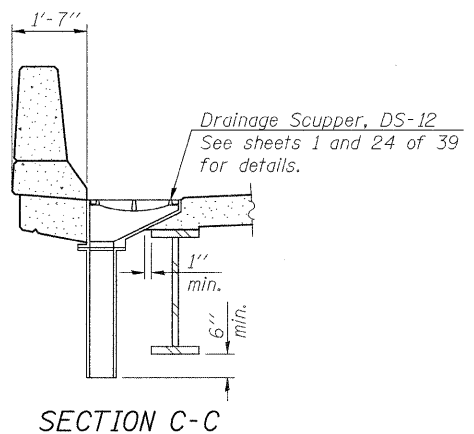
Bar	No.	Size	Length	Shape
a(E)	454	#5	39'-6"	
a1(E)	328	#5	39'-2"	
a2(E)	448	#6	6'-6"	
a3(E)	454	#5	43'-2"	
a4(E)	328	#5	42'-10"	
a5(E)	20	#6	30'-3"	
a6(E)	10	#6	43'-2"	
a7(E)	128	#5	1'-6"	
a8(E)	8	#5	2'-0"	
a9(E)	30	#6	9'-3"	
a10(E)	6	#6	6'-11"	
a11(E)	18	#6	9'-1"	
a12(E)	6	#6	10'-2"	
a13(E)	6	#6	6'-7"	
a14(E)	6	#6	2'-9"	
a15(E)	6	#6	6'-3"	
a16(E)	384	#5	11'-4"	
b(E)	1050	#5	26'-11"	
b1(E)	178	#6	39'-0"	
b2(E)	84	#6	19'-0"	
b3(E)	792	#5	29'-8"	
c(E)	247	#5	13'-6"	
c1(E)	494	#5	1'-4"	
c2(E)	2	#5	15'-10"	
d(E)	534	#5	5'-7"	
d1(E)	269	#5	7'-9"	
d2(E)	265	#5	8'-5"	
e(E)	42	#4	15'-10"	
e1(E)	16	#4	11'-8"	
e2(E)	28	#4	15'-7"	
e3(E)	16	#4	11'-3"	
e4(E)	42	#4	13'-10"	
e5(E)	32	#4	6'-10"	
e6(E)	21	#4	15'-2"	
e7(E)	14	#4	16'-2"	
e8(E)	16	#4	10'-6"	
e9(E)	16	#4	10'-4"	
e10(E)	21	#4	14'-11"	
e11(E)	1	#8	32'-1"	
e12(E)	2	#8	11'-8"	
e13(E)	2	#8	34'-4"	
e14(E)	2	#8	11'-3"	
e15(E)	4	#8	23'-9"	
e16(E)	4	#8	6'-10"	
e17(E)	2	#8	25'-9"	
e18(E)	1	#8	32'-7"	
e19(E)	2	#8	10'-6"	
e20(E)	2	#8	34'-8"	
e21(E)	2	#8	10'-4"	
e22(E)	2	#8	25'-5"	
e23(E)	1	#4	32'-1"	
e24(E)	2	#4	32'-9"	
e25(E)	4	#4	22'-2"	
e26(E)	2	#4	24'-2"	
e27(E)	1	#4	32'-7"	
e28(E)	2	#4	33'-1"	
e29(E)	2	#4	23'-10"	
x(E)	164	#5	6'-5"	
Reinforcement Bars, Epoxy Coated		Pound	162500	
Concrete Superstructure		Cu. Yd.	699.6	

Bars indicated thus 1 x 2-#8 etc. indicates 1 line of bars with 2 lengths per line.

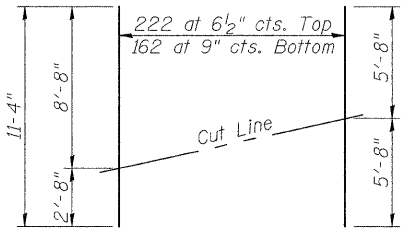


BAR d(E)

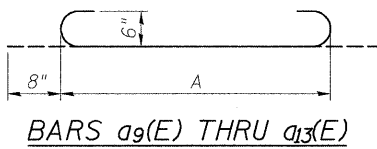
BARS d1(E) & d2(E)



SECTION C-C

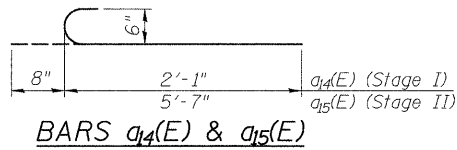


FIELD CUTTING DIAGRAM FOR a6(E) BAR



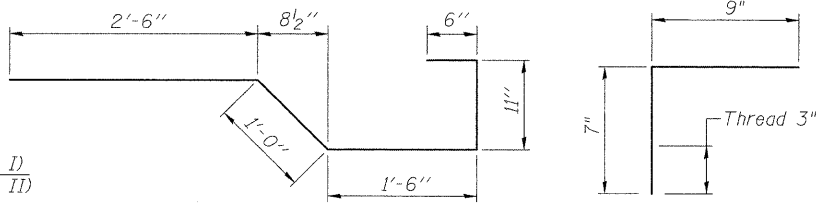
BARS a9(E) THRU a13(E)

Location	Bar	A
Bms. 1 thru 6	a9(E)	7'-11"
Bms. 7 thru 8	a10(E)	5'-7"
Bms. 8 thru 11	a11(E)	7'-9"
Bms. 11 thru 13 (W)	a12(E)	8'-10"
Bms. 11 thru 13 (E)	a13(E)	5'-3"



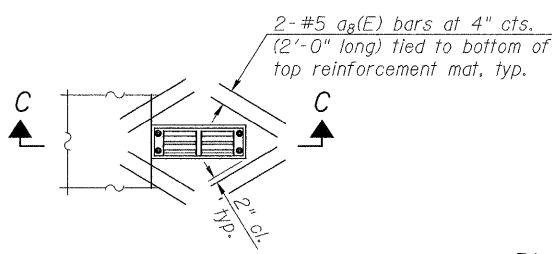
BARS a14(E) & a15(E)

(At Stage Line between beams 6 and 7)

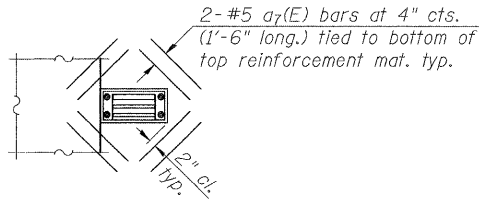


BAR x(E)

BARS c1(E)



PLAN AT DS-12 SCUPPERS



PLAN AT DS-11 SCUPPERS

Note: Cut longitudinal reinforcement to clear drainage scuppers.

(Sheet 2 of 3)



USER NAME =  
FILE NAME =  
PLOT SCALE =  
PLOT DATE =

DESIGNED - MTH  
CHECKED - ADB  
DRAWN - AJF  
CHECKED - MTH

REVISED -  
REVISED -  
REVISED -  
REVISED -

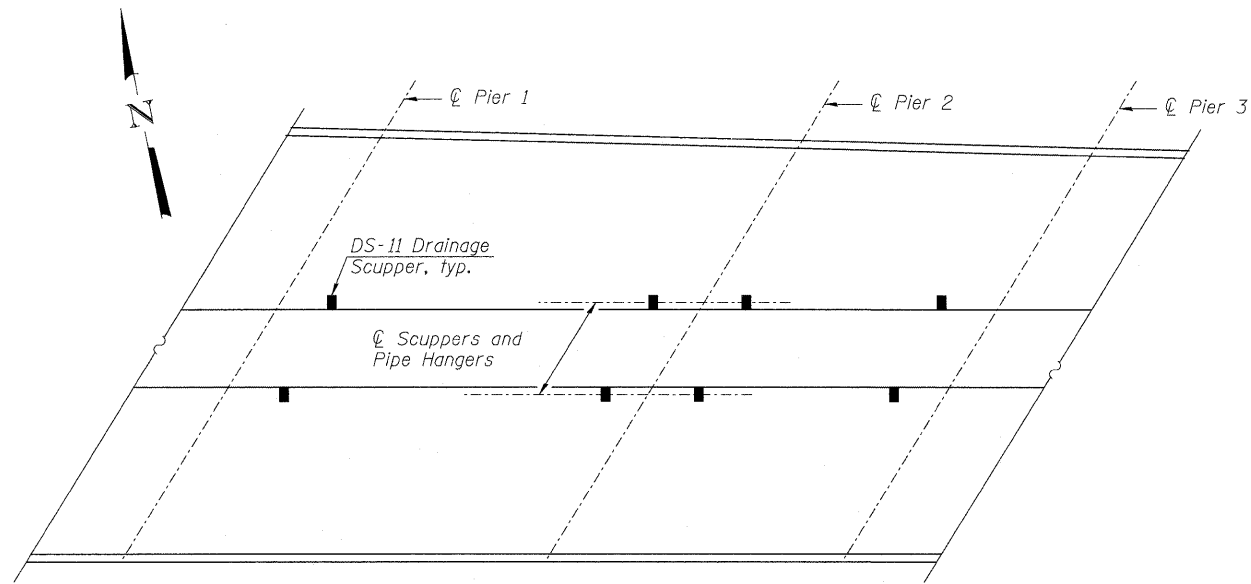
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS  
STRUCTURE NO. 045-0037

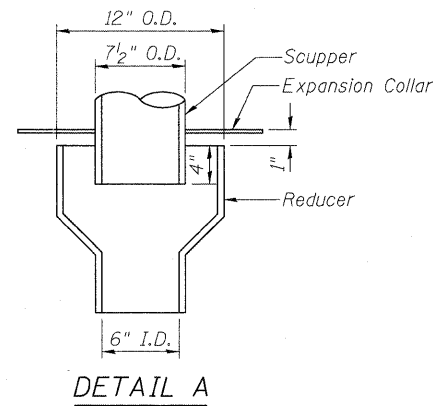
SHEET NO. 16 OF 39 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
573	61HB-1-R	KANE	66	66

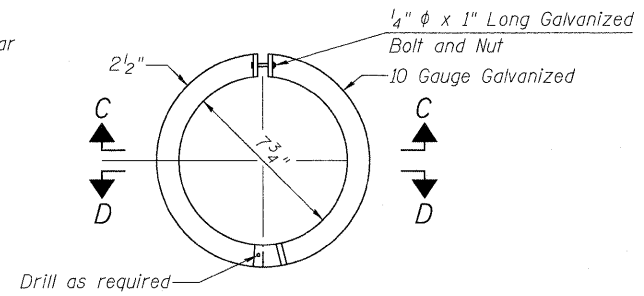
CONTRACT NO. 60K76  
ILLINOIS FED. AID PROJECT



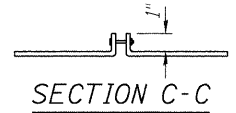
**DRAINAGE SYSTEM PLAN**



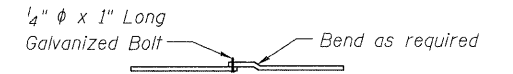
**DETAIL A**



**EXPANSION COLLAR PLAN**

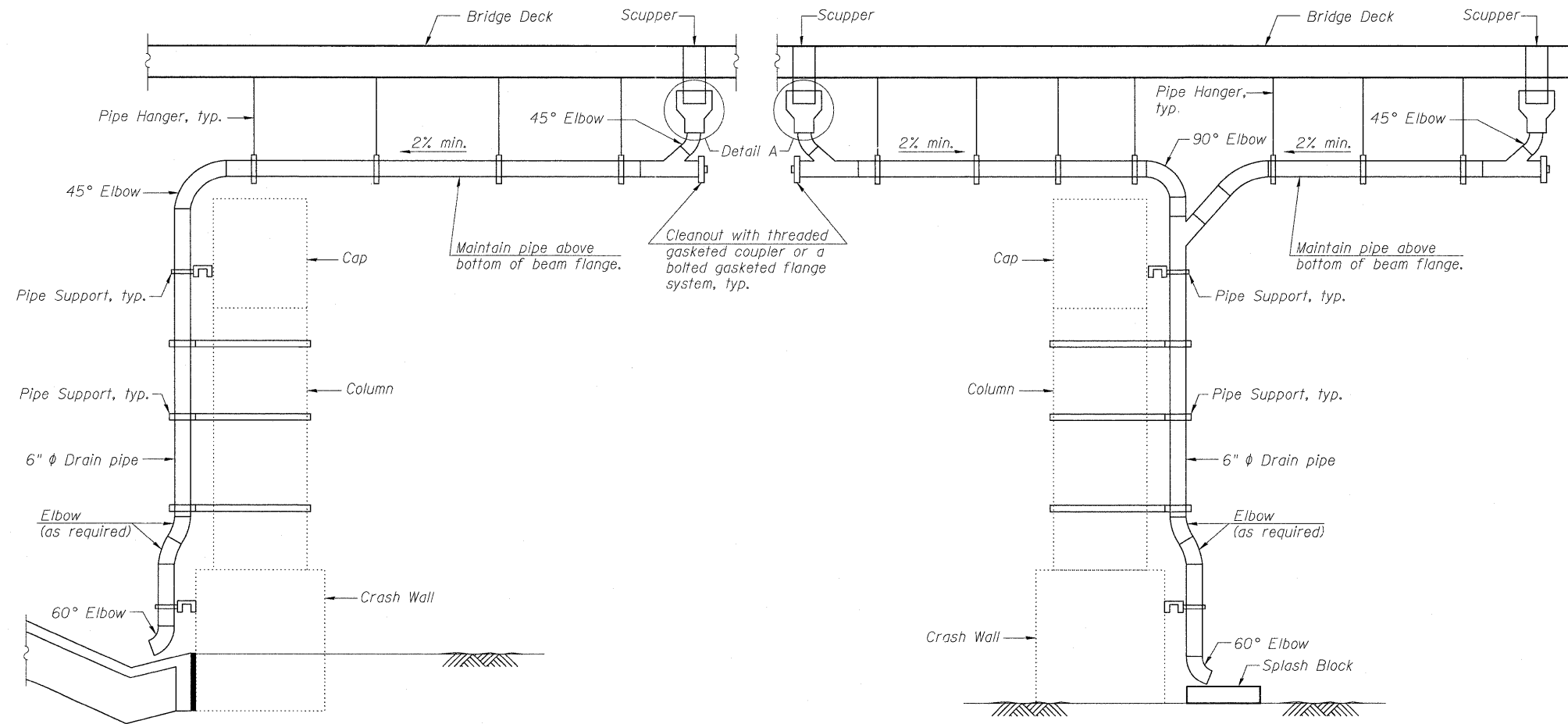


**SECTION C-C**



**SECTION D-D**

**Notes:**  
See Special Provisions for Drainage System installation and material.  
See Sheet 1 of 39 for locations of Scupprs.



**DRAIN PIPE DETAILS AT PIER 1**

(Drain pipes at Pier 3 similar)

**DRAIN PIPE DETAILS AT PIER 2**

(Looking North)

**Note:**  
Collector drain pipes and fittings shall be 6" Schedule 80 PVC conforming to ASTM Standards D1785, D2464 or D2467.

(Sheet 3 of 3)



USER NAME =	DESIGNED - MTH	REVISED -
FILE NAME =	CHECKED - ADB	REVISED -
PLOT SCALE =	DRAWN - AJF	REVISED -
PLOT DATE =	CHECKED - MTH	REVISED -

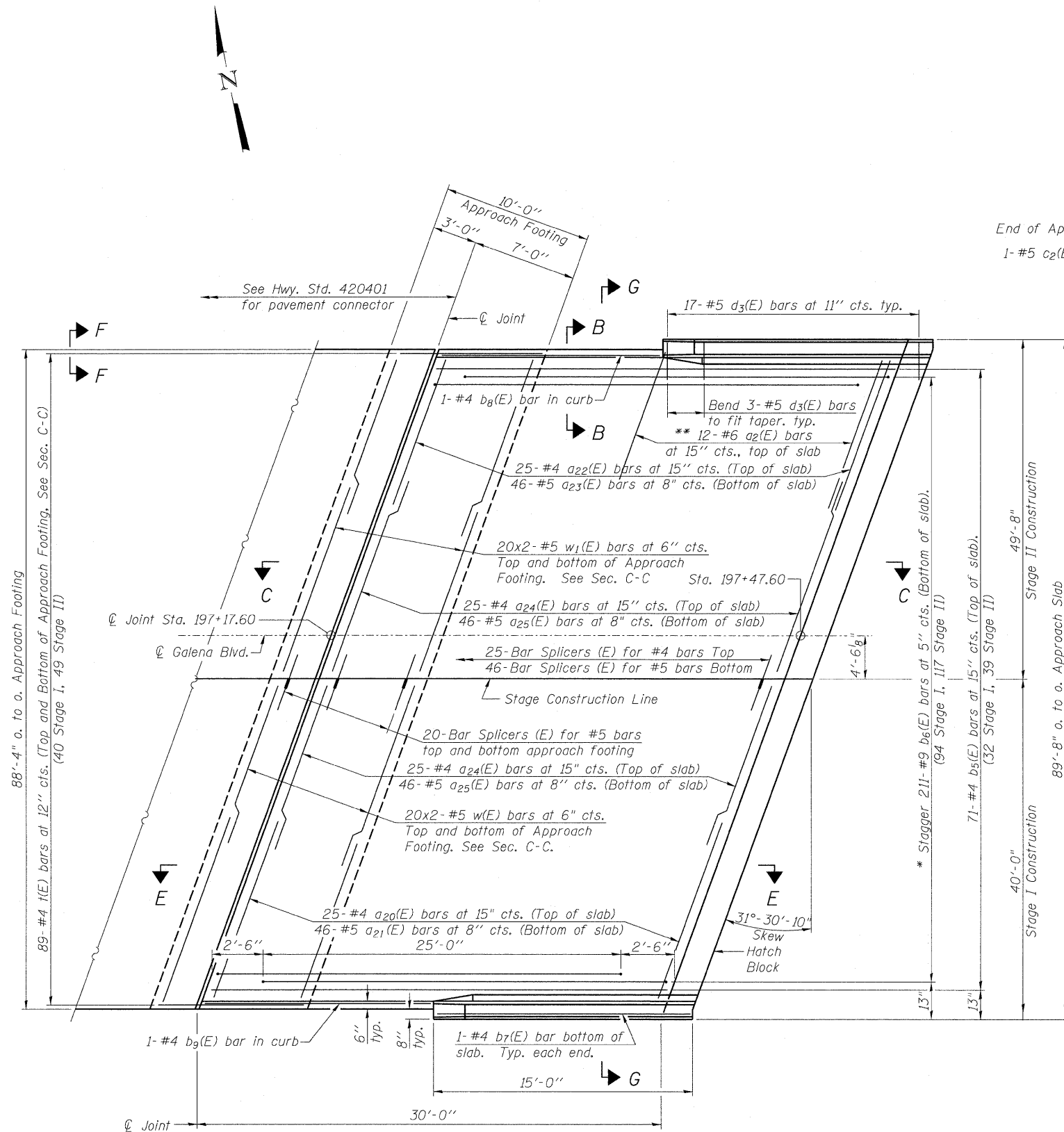
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**SUPERSTRUCTURE DETAILS  
STRUCTURE NO. 045-0037**

SHEET NO. 17 OF 39 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
573	61HB-1-R	KANE	110	67
CONTRACT NO. 60K76			ILLINOIS FED. AID PROJECT	

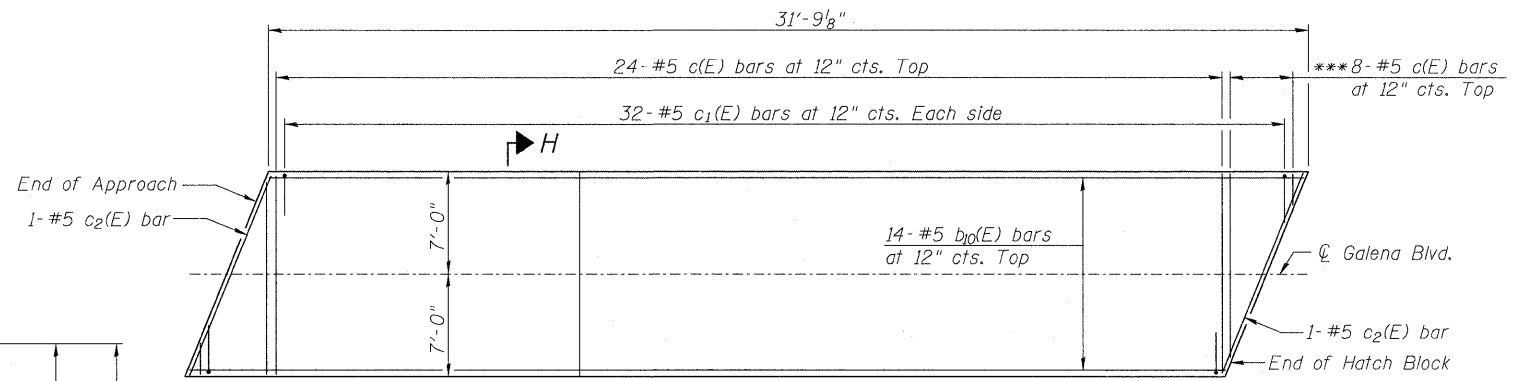
Notes:  
 See sheet 20 of 39 for Sections C-C & G-G.  
 See sheet 21 of 39 for Views B-B, E-E, and F-F.  
 $a_{20}(E)$  thru  $a_{25}(E)$ ,  $w(E)$  and  $w_1(E)$  bar spacings  
 measured along  $\text{CL}$  Rdwy.



**PLAN-WEST APPROACH**

(Median not shown for clarity)

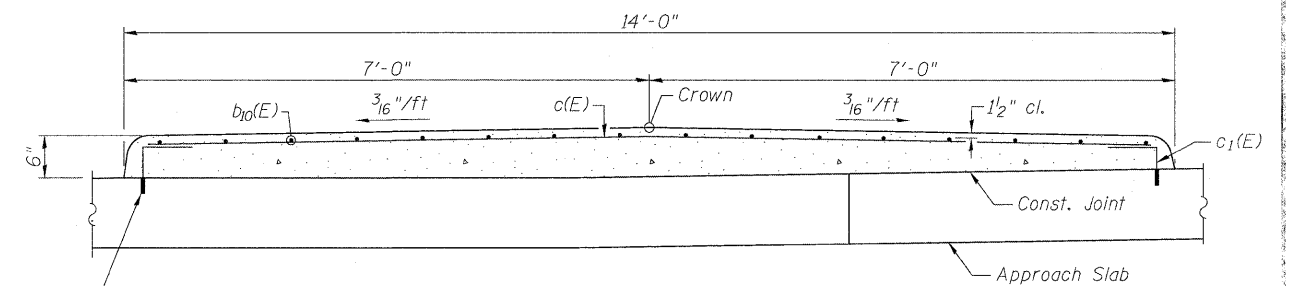
- \* Tilt #9  $b_6(E)$  bars as required to maintain clearance.
- \*\* Space between  $a_{20}(E)$  or  $a_{22}(E)$  bars, typ. each parapet.



**MEDIAN PLAN**

(West Approach Median shown, East Approach Median similar)

\*\*\* Order c(E) bars full length. Cut to fit skew and use remainder of bars in opposite end.



**SECTION H-H**

3/4"  $\phi$  Galvanized expansion anchor or Ferrule Loop Slab Insert (Proof Load 6600 lb). Provide plastic caps for protection during construction. The cost of expansion anchors/inserts is included in the cost of Reinforcement Bars, Epoxy Coated.

**MIN. BAR LAP**

- #4 Bar = 2'-4"
- #5 Bar = 2'-7"

(Sheet 1 of 4)



USER NAME =	DESIGNED - MTH	REVISED -
FILE NAME =	CHECKED - ADB	REVISED -
PLOT SCALE =	DRAWN - AJF	REVISED -
PLOT DATE =	CHECKED - MTH	REVISED -

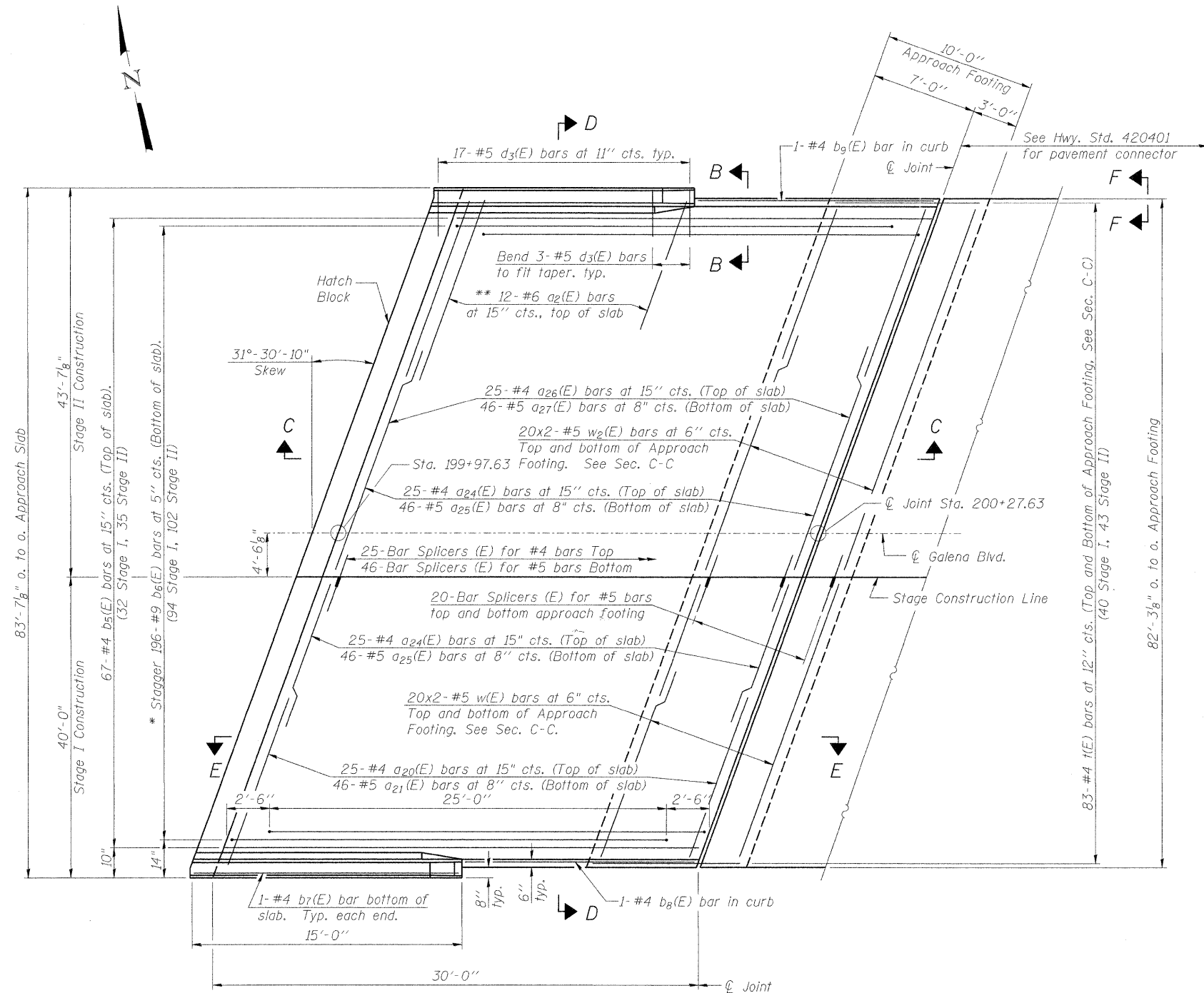
**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**BRIDGE APPROACH SLAB DETAILS  
 STRUCTURE NO. 045-0037**

SHEET NO. 18 OF 39 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
573	61HB-1-R	KANE	110	68
CONTRACT NO. 60K76			ILLINOIS FED. AID PROJECT	

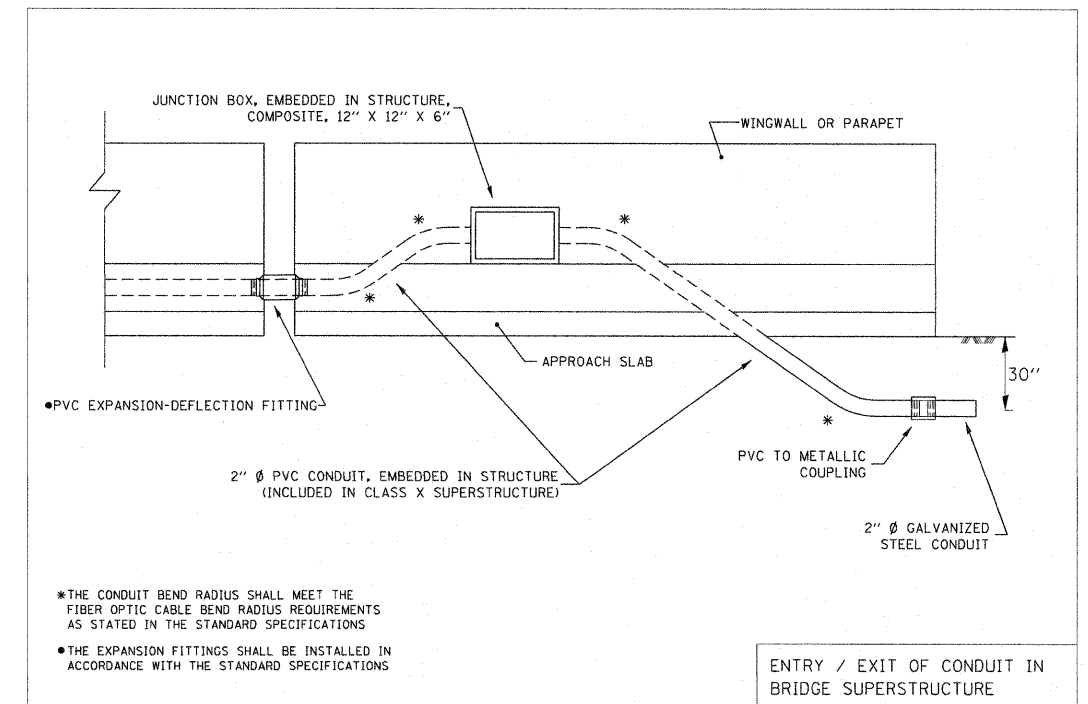
Notes:  
 See sheet 20 of 39 for Sections C-C & D-D.  
 See sheet 21 of 39 for Views B-B, E-E, and F-F.  
 $a_{20}(E)$ ,  $a_{21}(E)$ ,  $a_{24}(E)$ ,  $a_{25}(E)$ ,  $a_{26}(E)$ ,  $a_{27}(E)$ ,  $w(E)$   
 and  $w_2(E)$  bar spacings measured along  $\phi$  Rdwy.  
 See sheet 18 of 39 for Median details.



**PLAN-EAST APPROACH**  
 (Median not shown for clarity)

\* Tilt #9  $b_6(E)$  bars as required to maintain clearance.  
 \*\* Space between  $a_{20}(E)$  or  $a_{26}(E)$  bars, typ. each parapet.

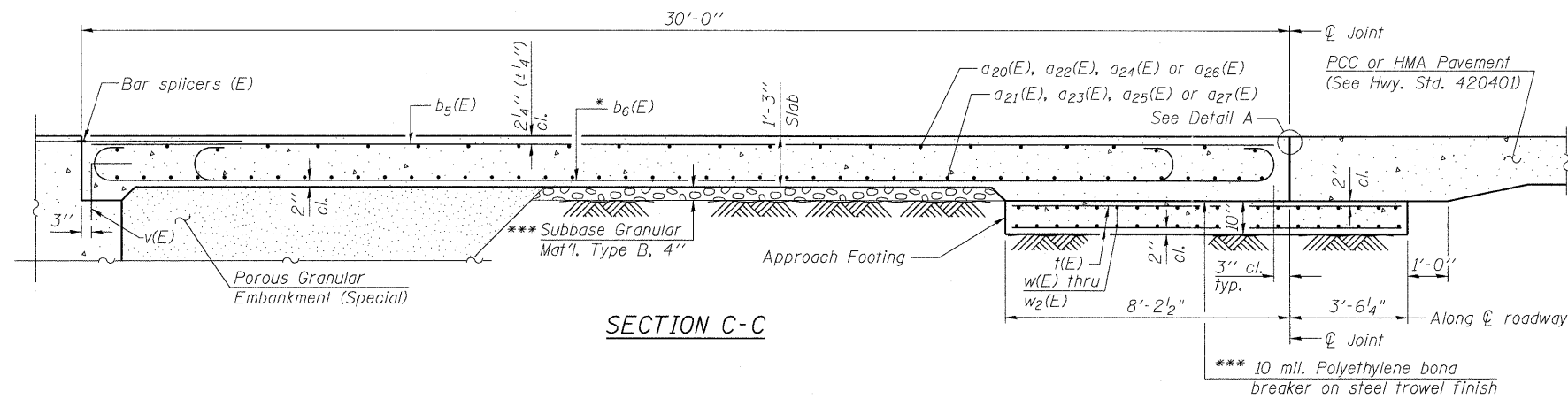
**MIN. BAR LAP**  
 #4 Bar = 2'-4"  
 #5 Bar = 2'-7"



**ENTRY/EXIT OF CONDUIT IN BRIDGE SUPERSTRUCTURE**  
 (Located at Each Corner)

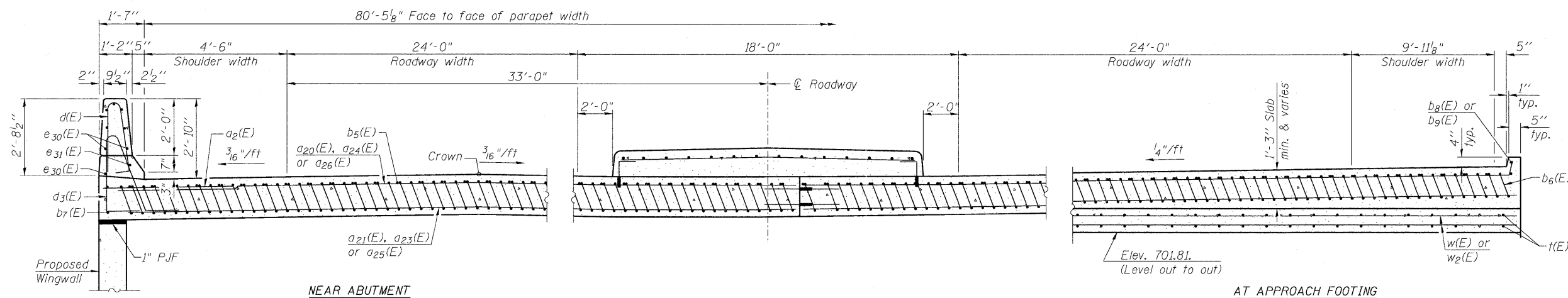
(Sheet 2 of 4)



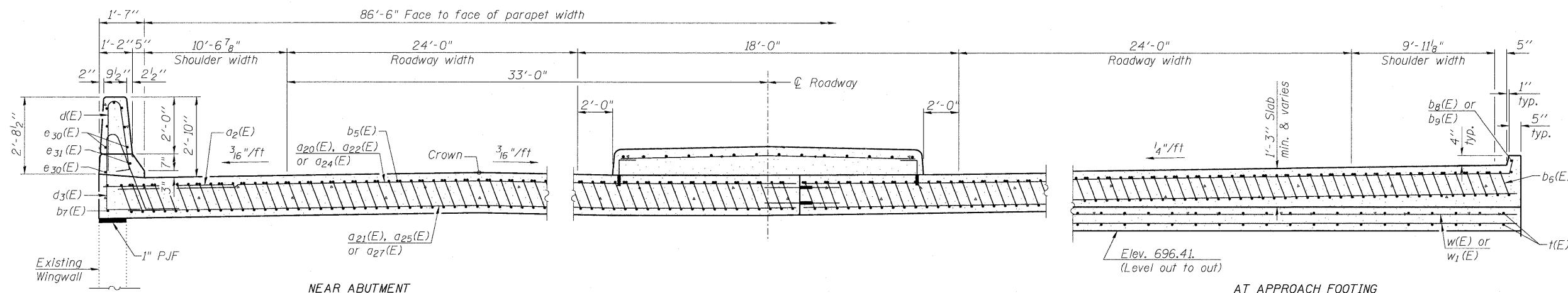


Notes:  
 See sheet 21 of 39 for Detail A and View B-B.  
 For v(E) bar details, see sheet 35 of 39.  
 The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.  
 For bar splicer details, see sheet 39 of 39.  
 Cost of excavation for approach footing included with Concrete Structures.  
 For Porous Granular Embankment (Special) and drainage treatment details, see sheet 3 of 39.

\* Tilt #9 b6(E) bars as required to maintain clearance.  
 \*\*\* Cost included with Concrete Superstructure.



SECTION D-D  
 (See Plan for dimensions not shown)



SECTION G-G  
 (See Plan for dimensions not shown)

(Sheet 3 of 4)



USER NAME =	DESIGNED - MTH	REVISED -
FILE NAME =	CHECKED - ADB	REVISED -
PLOT SCALE =	DRAWN - AJF	REVISED -
PLOT DATE =	CHECKED - MTH	REVISED -

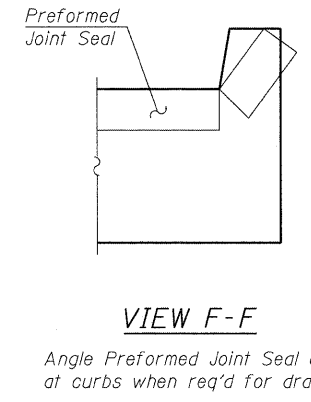
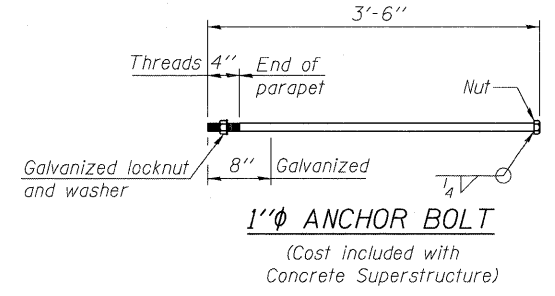
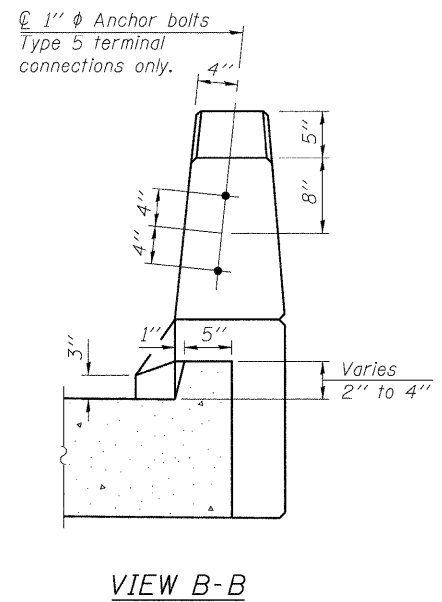
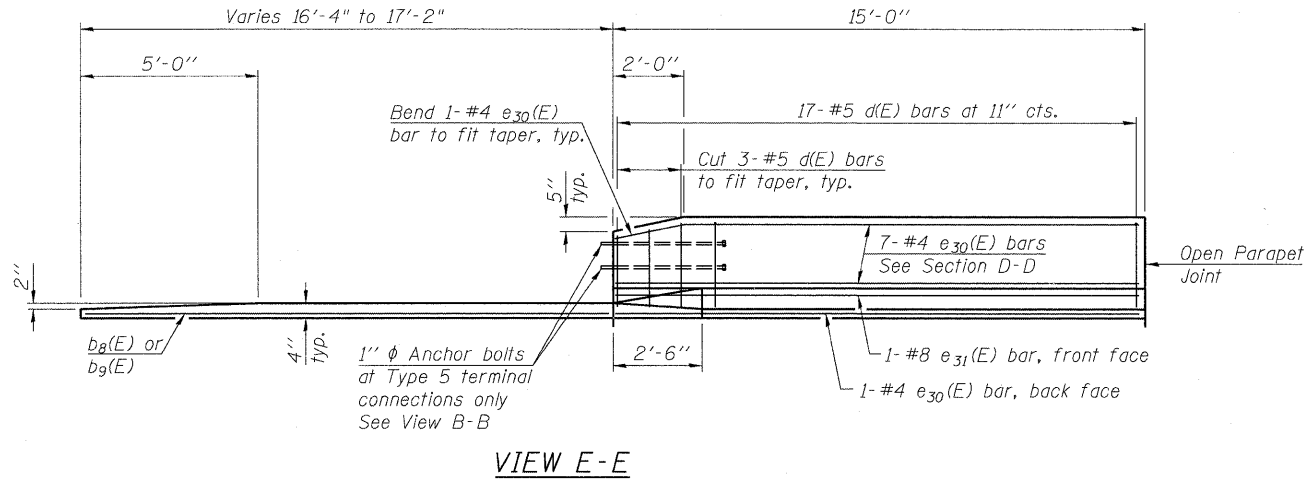
STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

BRIDGE APPROACH SLAB DETAILS  
 STRUCTURE NO. 045-0037

SHEET NO. 20 OF 39 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
573	61HB-1-R	KANE	110	70
			CONTRACT NO. 60K76	
ILLINOIS FED. AID PROJECT				

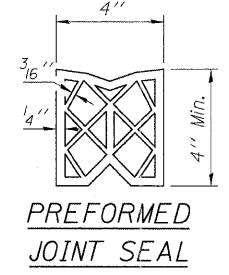
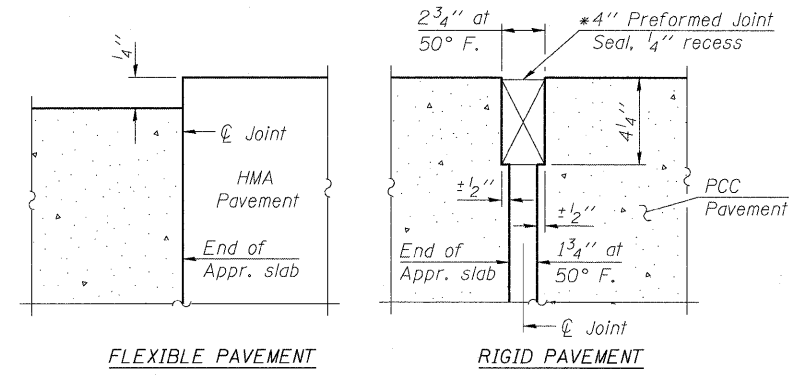
Notes:  
 Approach slab, median and parapet concrete shall be paid for as Concrete Superstructure.  
 Approach footing concrete shall be paid for as Concrete Structures.  
 Reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.  
 For additional parapet details, see sheet 15 of 39.  
 For detail of c<sub>1</sub>(E) bars, see sheet 16 of 39.



VIEW E-E

VIEW B-B

\*Cost included with Concrete Superstructure.

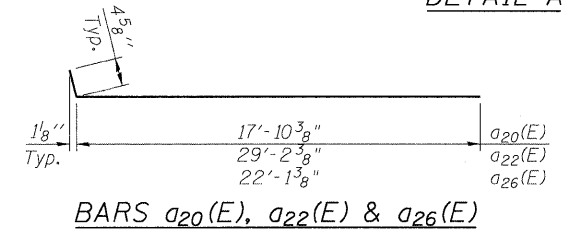


FLEXIBLE PAVEMENT

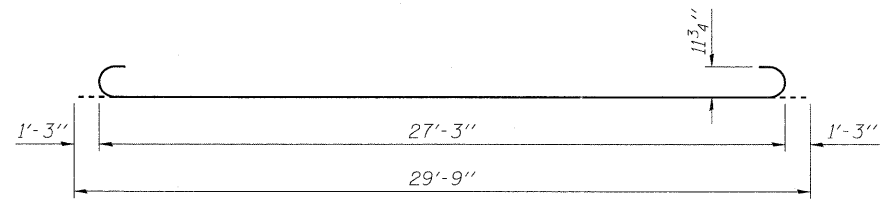
RIGID PAVEMENT

PREFORMED JOINT SEAL

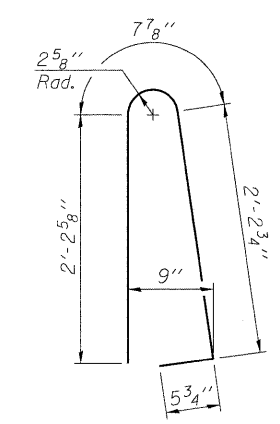
DETAIL A



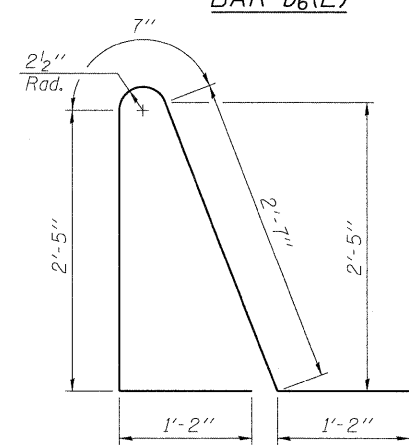
BARS a<sub>20</sub>(E), a<sub>22</sub>(E) & a<sub>26</sub>(E)



BAR b<sub>6</sub>(E)



BAR d(E)



BAR d<sub>3</sub>(E)

WEST APPROACH  
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a <sub>2</sub> (E)	24	#6	6'-6"	—
a <sub>20</sub> (E)	25	#4	18'-3"	—
a <sub>21</sub> (E)	46	#5	18'-8"	—
a <sub>22</sub> (E)	25	#4	29'-7"	—
a <sub>23</sub> (E)	46	#5	30'-2"	—
a <sub>24</sub> (E)	50	#4	30'-0"	—
a <sub>25</sub> (E)	92	#5	30'-0"	—
b <sub>5</sub> (E)	71	#4	29'-8"	—
b <sub>6</sub> (E)	211	#9	29'-9"	—
b <sub>7</sub> (E)	2	#4	14'-8"	—
b <sub>8</sub> (E)	1	#4	16'-7"	—
b <sub>9</sub> (E)	1	#4	16'-1"	—
b <sub>10</sub> (E)	14	#5	31'-6"	—
c(E)	32	#5	13'-6"	—
c <sub>1</sub> (E)	32	#5	1'-4"	—
c <sub>2</sub> (E)	2	#5	15'-10"	—
d(E)	34	#5	5'-7"	—
d <sub>3</sub> (E)	34	#5	7'-11"	—
e <sub>30</sub> (E)	16	#4	14'-5"	—
e <sub>31</sub> (E)	2	#8	14'-5"	—
t(E)	89	#4	11'-5"	—
w(E)	80	#5	24'-4"	—
w <sub>1</sub> (E)	80	#5	30'-0"	—
Concrete Superstructure		Cu. Yd.	145.3	
Concrete Structures		Cu. Yd.	32.0	
Reinforcement Bars, Epoxy Coated		Pound	36960	

EAST APPROACH  
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a <sub>2</sub> (E)	24	#6	6'-6"	—
a <sub>20</sub> (E)	25	#4	18'-3"	—
a <sub>21</sub> (E)	46	#5	18'-8"	—
a <sub>24</sub> (E)	50	#4	30'-0"	—
a <sub>25</sub> (E)	92	#5	30'-0"	—
a <sub>26</sub> (E)	25	#4	22'-6"	—
a <sub>27</sub> (E)	46	#5	22'-11"	—
b <sub>5</sub> (E)	67	#4	29'-8"	—
b <sub>6</sub> (E)	196	#9	29'-9"	—
b <sub>7</sub> (E)	2	#4	14'-8"	—
b <sub>8</sub> (E)	1	#4	16'-7"	—
b <sub>9</sub> (E)	1	#4	16'-1"	—
b <sub>10</sub> (E)	14	#5	31'-6"	—
c(E)	32	#5	13'-6"	—
c <sub>1</sub> (E)	32	#5	1'-4"	—
c <sub>2</sub> (E)	2	#5	15'-10"	—
d(E)	34	#5	5'-7"	—
d <sub>3</sub> (E)	34	#5	7'-11"	—
e <sub>30</sub> (E)	16	#4	14'-5"	—
e <sub>31</sub> (E)	2	#8	14'-5"	—
t(E)	83	#4	11'-5"	—
w(E)	80	#5	24'-4"	—
w <sub>2</sub> (E)	80	#5	26'-6"	—
Concrete Superstructure		Cu. Yd.	136.1	
Concrete Structures		Cu. Yd.	29.8	
Reinforcement Bars, Epoxy Coated		Pound	34560	

(Sheet 4 of 4)



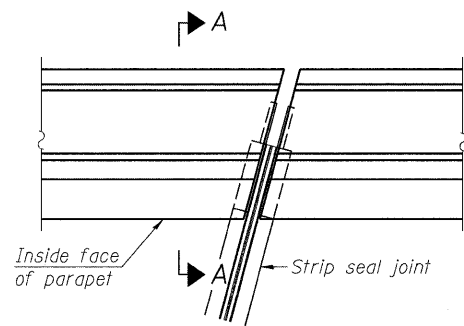
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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

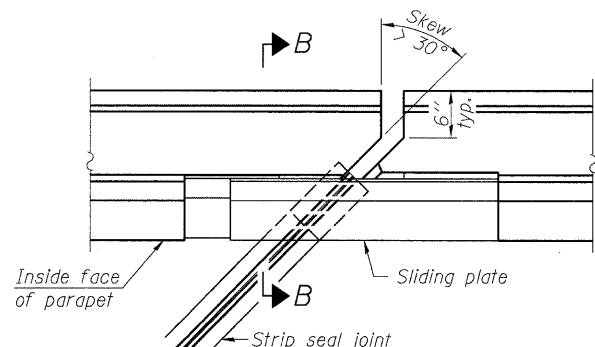
BRIDGE APPROACH SLAB DETAILS  
STRUCTURE NO. 045-0037

SHEET NO. 21 OF 39 SHEETS

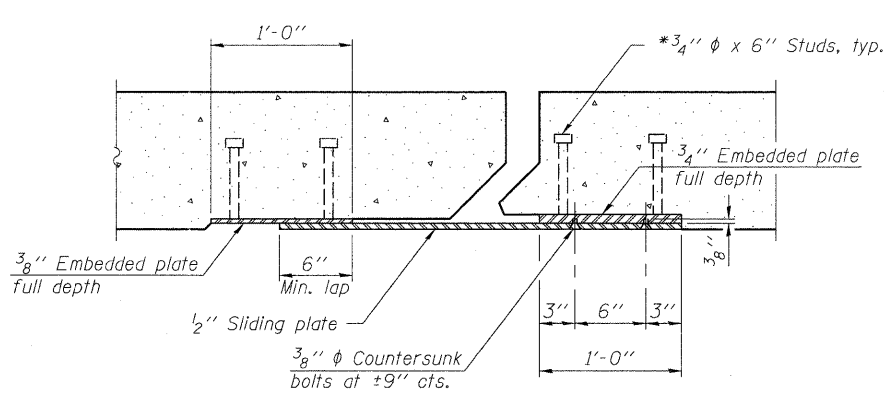
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573	61HB-1-R	KANE	110	71
				CONTRACT NO. 60K76
ILLINOIS FED. AID PROJECT				



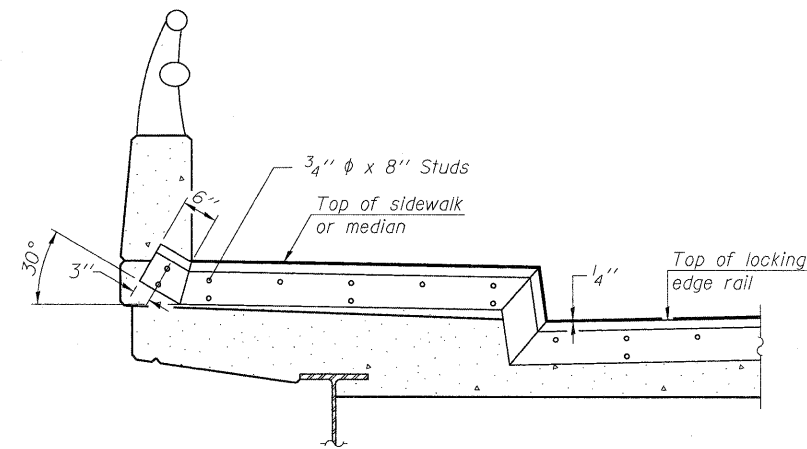
PLAN  
(For skews  $\le 30^\circ$ )



PLAN  
(For skews  $> 30^\circ$ )  
Showing point block

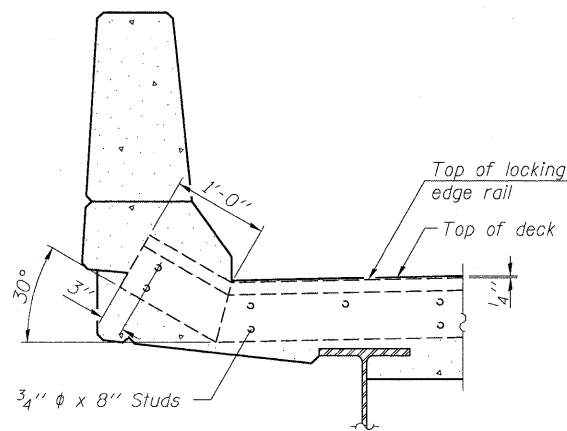


SECTION C-C

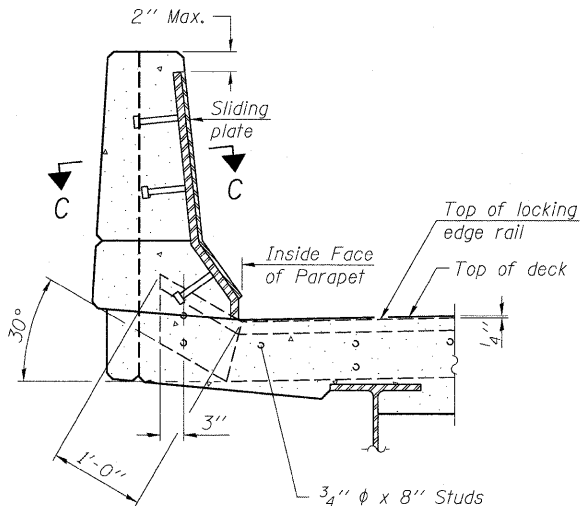


TYPICAL END TREATMENT  
AT SIDEWALK OR MEDIAN

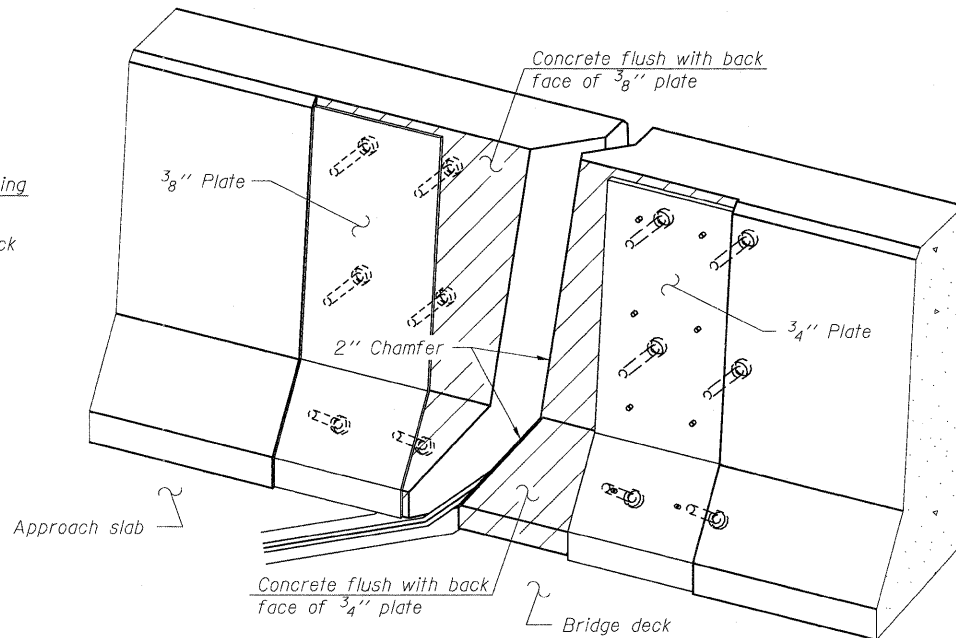
Shorter plates with a single row of studs at 12" cts. may be necessary on medians which are shallower than 9". See manufacturer's recommendation.



SECTION A-A



SECTION B-B



TRIMETRIC VIEW  
(Showing back plates only)

Notes:

The strip seal shall be made continuous and shall have a minimum thickness of 1/4". The configuration of the strip seal shall match the configuration of the Locking Edge Rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches.

The Locking Edge Rails depicted are conceptual only, except for the minimum dimensions shown. The actual configuration of the Locking Edge Rails and matching strip seal may vary from manufacturer to manufacturer. Flanged edge rails will not be allowed. Locking Edge Rails may be spliced at slope discontinuities.

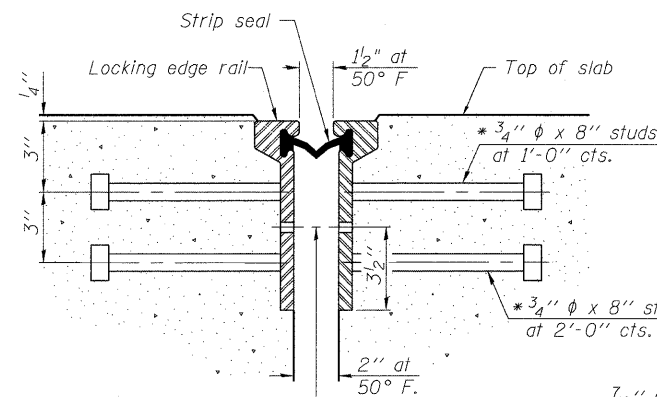
The manufacturer's recommended installation methods shall be followed.

The joint opening and deck dimensions detailed on the superstructure are based on a rolled rail expansion joint. If the Contractor elects to use the welded rail expansion joint, the opening and deck dimensions shall be modified according to the dimensions detailed on this sheet. Required modifications shall be made at no additional cost to the State.

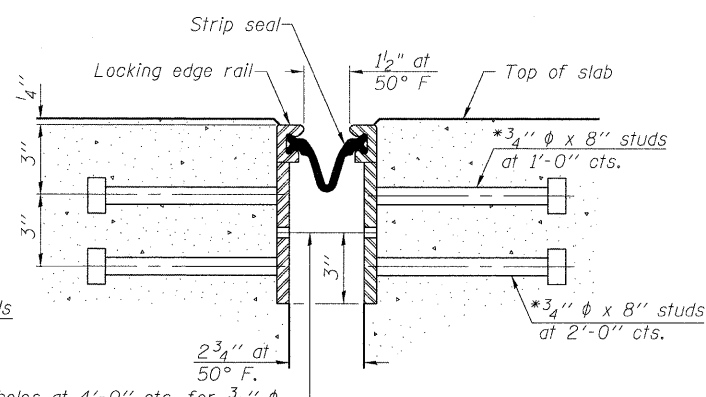
All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.

Maximum space between rail segments at stage lines shall be 3/16", sealed with a suitable sealant.

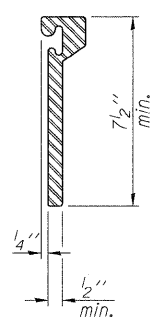
Parapet plates and anchorage studs for skews  $> 30^\circ$  included in the cost of Preformed Joint Strip Seal.



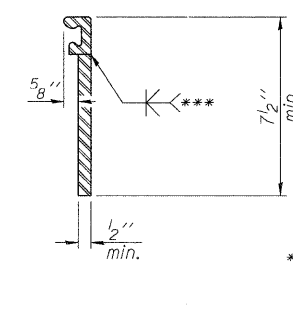
SECTION THRU  
ROLLED RAIL JOINT



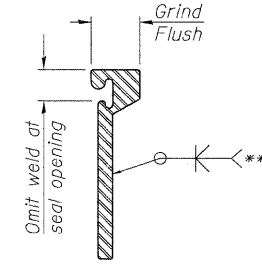
SECTION THRU  
WELDED RAIL JOINT



ROLLED  
EXTRUDED RAIL



WELDED RAIL



LOCKING EDGE  
RAIL SPLICE

The inside of the locking edge rail groove shall be free of weld residue.

Rolled rail shown, welded rail similar.

\*\*\* Back gouge not required if complete joint penetration is verified by mock-up.

LOCKING EDGE RAILS

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	202

\* Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.

EJ-SSJ

7-1-10

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Consulting Engineers  
Chatham, Illinois

USER NAME =  
FILE NAME =  
PLOT SCALE =  
PLOT DATE =

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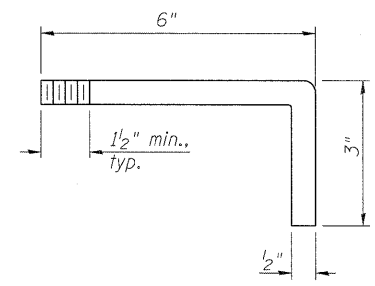
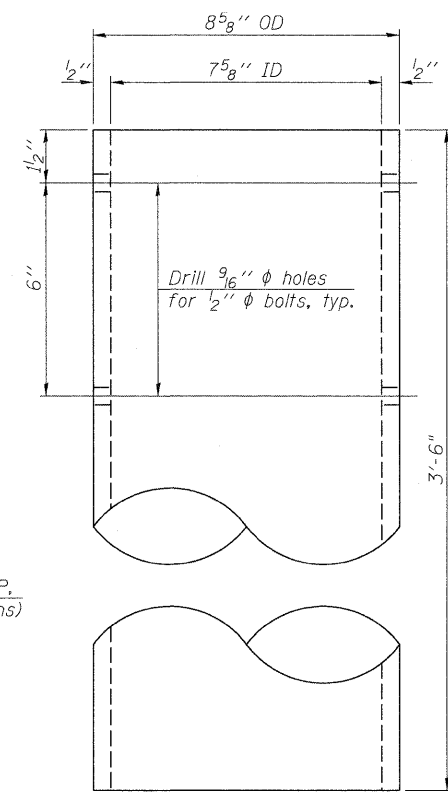
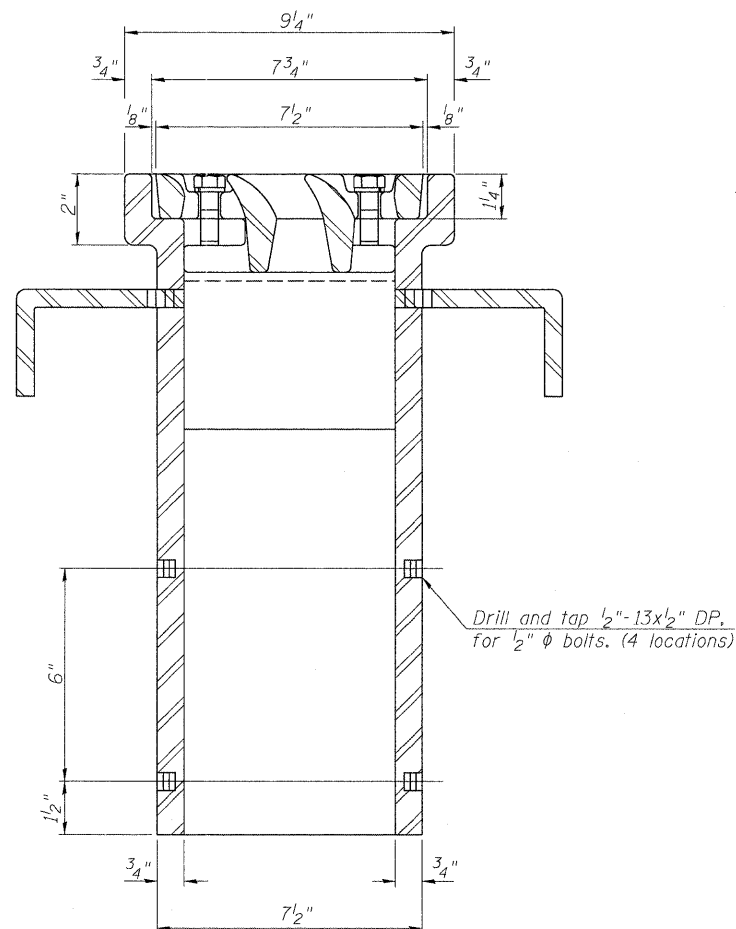
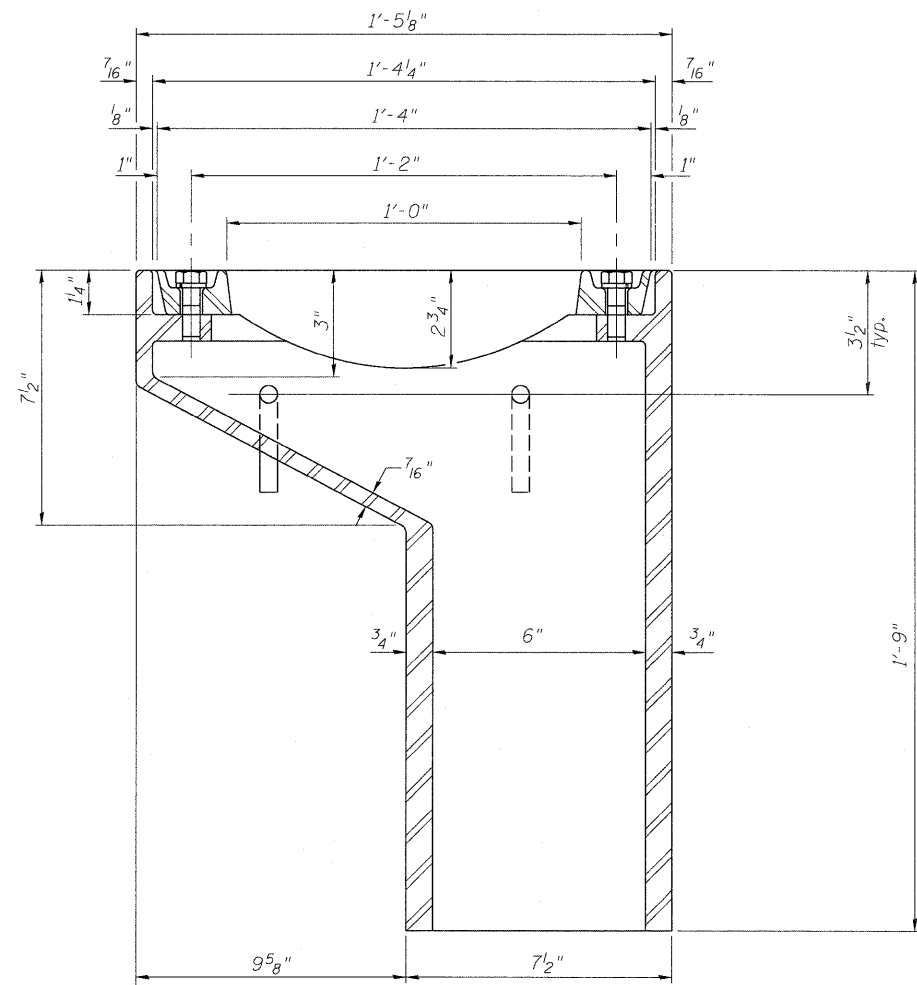
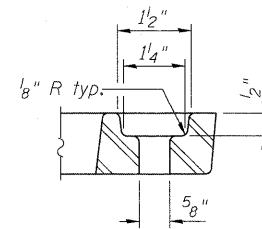
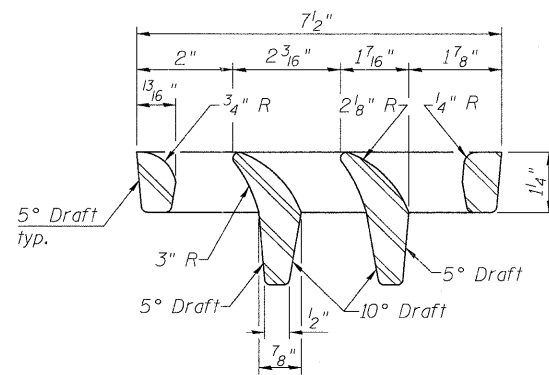
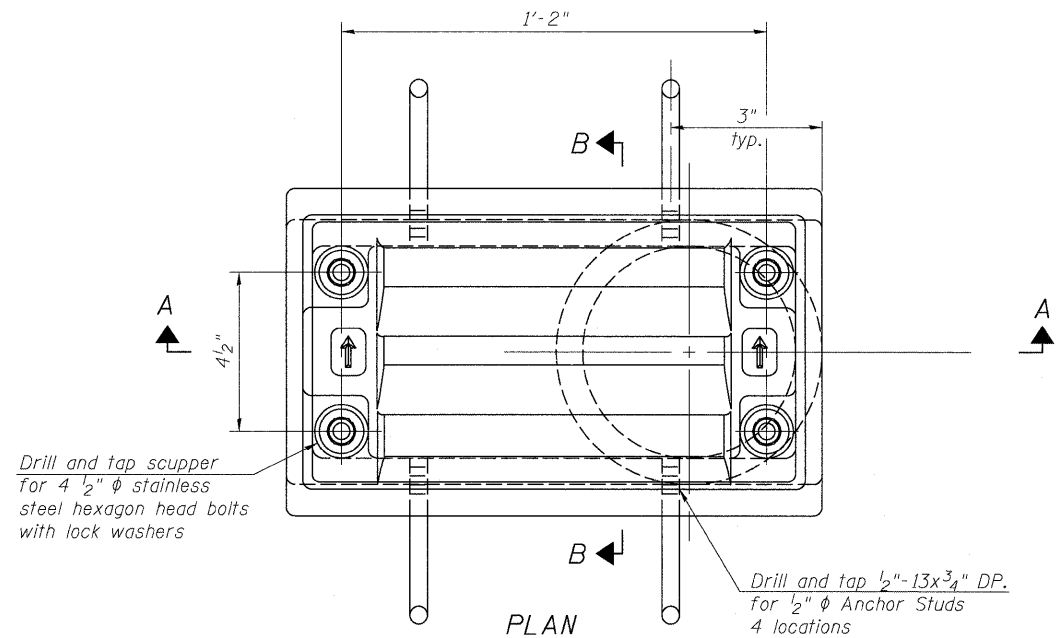
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

PREFORMED JOINT STRIP SEAL  
STRUCTURE NO. 045-0037

SHEET NO. 22 OF 39 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
573	61HB-1-R	KANE	110	72
				CONTRACT NO. 60K76

ILLINOIS FED. AID PROJECT



See sheet 16 of 39 for scupper location relative to median.

Notes:  
 All cast iron parts shall be gray iron conforming to the requirements of AASHTO M 105, Class 35B.  
 Bolts, anchor studs, washers and nuts shall conform to the requirements of ASTM A 307 and shall be galvanized according to AASHTO M 232.  
 Downspouts located on the exterior side of a painted steel fascia beam shall be painted with the finish coat specified for the exterior side of the fascia beam.  
 As an alternate, bolts, anchor studs, washers and nuts may be stainless steel according to Article 1006.29(d) of the Standard Specifications.  
 Structural steel weldments of equal sections and of the same configuration may be substituted for the cast iron scupper frame. Fillet or full penetration welds shall be used for the weldments. Details shall be submitted to the Engineer for approval. Structural steel weldments shall not be substituted for the cast iron scupper grate. Structural steel frames and downspouts shall be galvanized according to AASHTO M 111.  
 The Contractor shall take appropriate measures to assure that Protective Coat is not applied to the scupper.  
 Cost of the Grate, Frame, Downspout, Anchor Studs, Bolts, Washers and Nuts including complete installation of the scupper shall be paid for at the contract unit price each for Drainage Scupper, DS-11.  
 Alternate fiberglass downspout conforming to ASTM D 2996 with a short-time rupture strength hoop tensile stress of 30,000 psi min. may be used in lieu of the cast iron or steel equivalent.

**ANCHOR STUD DETAIL**

**DOWNSPOUT**

**BILL OF MATERIAL**

ITEM	UNIT	QUANTITY
Drainage Scupper, DS-11	Each	16

DS-11 7-1-10



USER NAME =  
 FILE NAME =  
 PLOT SCALE =  
 PLOT DATE =

DESIGNED - MTH  
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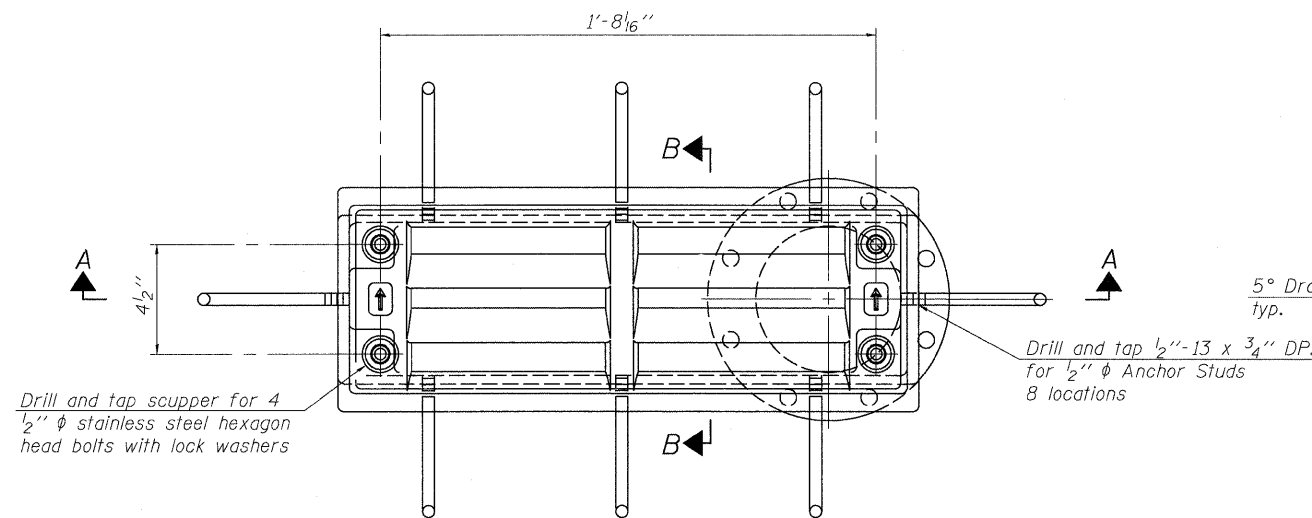
STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

DRAINAGE SCUPPER, DS-11  
 STRUCTURE NO. 045-0037

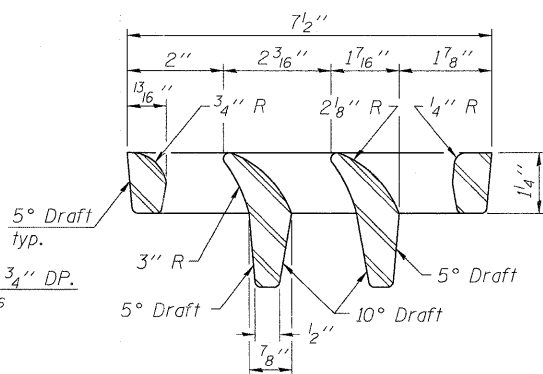
SHEET NO. 23 OF 39 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
573	61HB-1-R	KANE	110	73

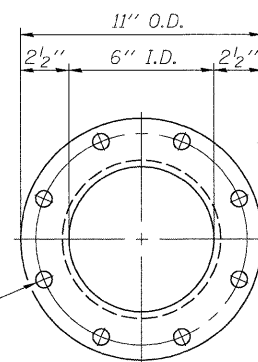
CONTRACT NO. 60K76  
 ILLINOIS FED. AID PROJECT



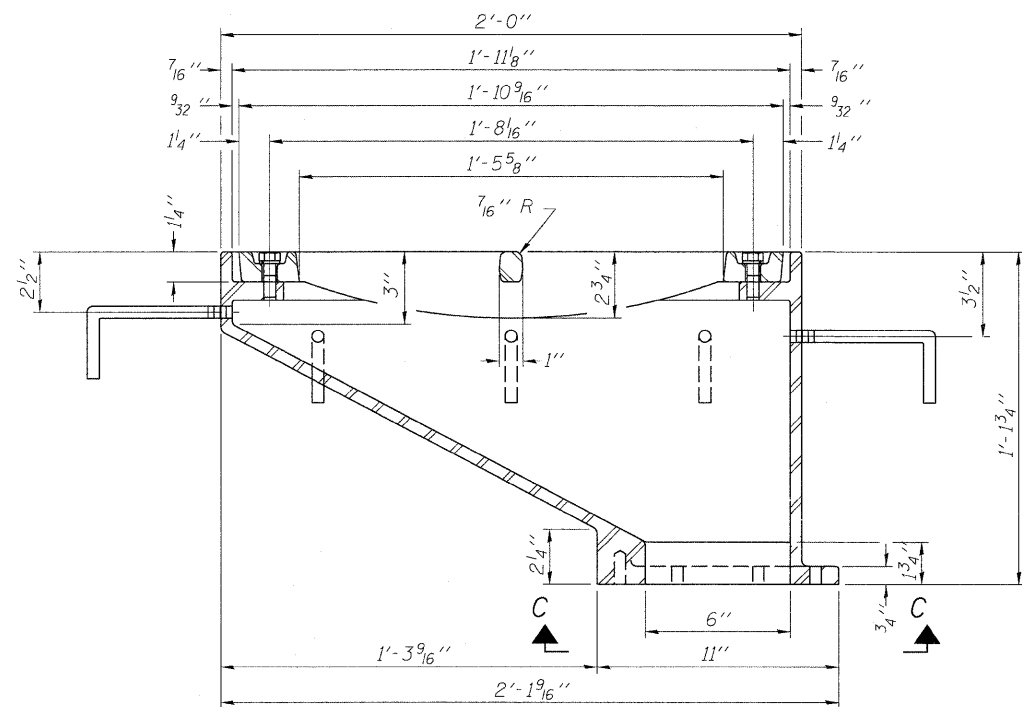
PLAN



VANE GRATE DETAIL

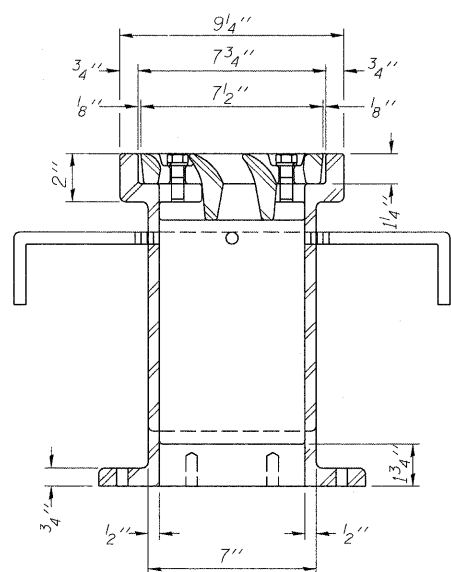


VIEW C-C

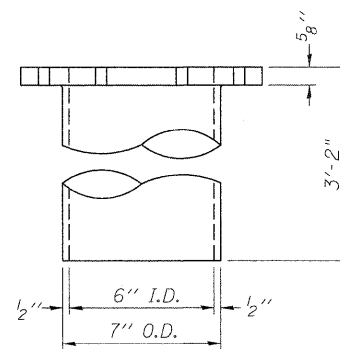


SECTION A-A

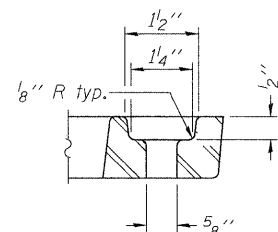
See sheet 16 of 39 for scupper location relative to parapet.



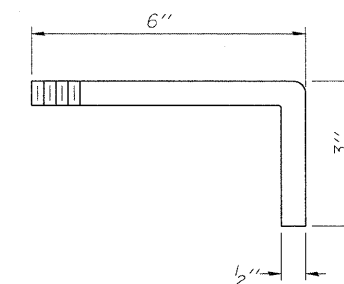
SECTION B-B



DOWNSPOUT



BOLT HOLE DETAIL



ANCHOR STUD DETAIL

Drill and tap 8 holes for 1/2"-13 bolts on a 9<sup>1</sup>/<sub>2</sub>" φ bolt circle. (2 blind holes are 1<sup>1</sup>/<sub>4</sub>" deep, 6 thru holes)

VIEW C-C

Notes:

- All cast iron parts shall be gray iron conforming to the requirements of AASHTO M 105, Class 35B.
- Bolts, anchor studs, washers and nuts shall conform to the requirements of ASTM A 307 and shall be galvanized according to AASHTO M 232.
- Downspouts located on the exterior side of a painted steel fascia beam shall be painted with the finish coat specified for the exterior side of the fascia beam.
- As an alternate, bolts, anchor studs, washers and nuts may be stainless steel according to Article 1006.29(d) of the Standard Specifications.
- Structural steel weldments of equal sections and of the same configuration may be substituted for the cast iron scupper frame. Fillet or full penetration welds shall be used for the weldments. Details shall be submitted to the Engineer for approval. Structural steel weldments shall not be substituted for the cast iron scupper grate. Structural steel frames and downspouts shall be galvanized according to AASHTO M111.
- The Contractor shall take appropriate measures to assure that Protective Coat is not applied to the scupper.
- Cost of the Grate, Frame, Downspout, Anchor Studs, Bolts, Washers and Nuts including complete installation of the scupper shall be paid for at the contract unit price each for Drainage Scupper, DS-12.
- Alternate fiberglass downspout conforming to ASTM D 2996 with a short-time rupture strength hoop tensile stress of 30,000 psi min. may be used in lieu of the cast iron or steel equivalent.

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Drainage Scupper, DS-12	Each	1

DS-12

7-1-10

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Consulting Engineers  
Chatham, Illinois

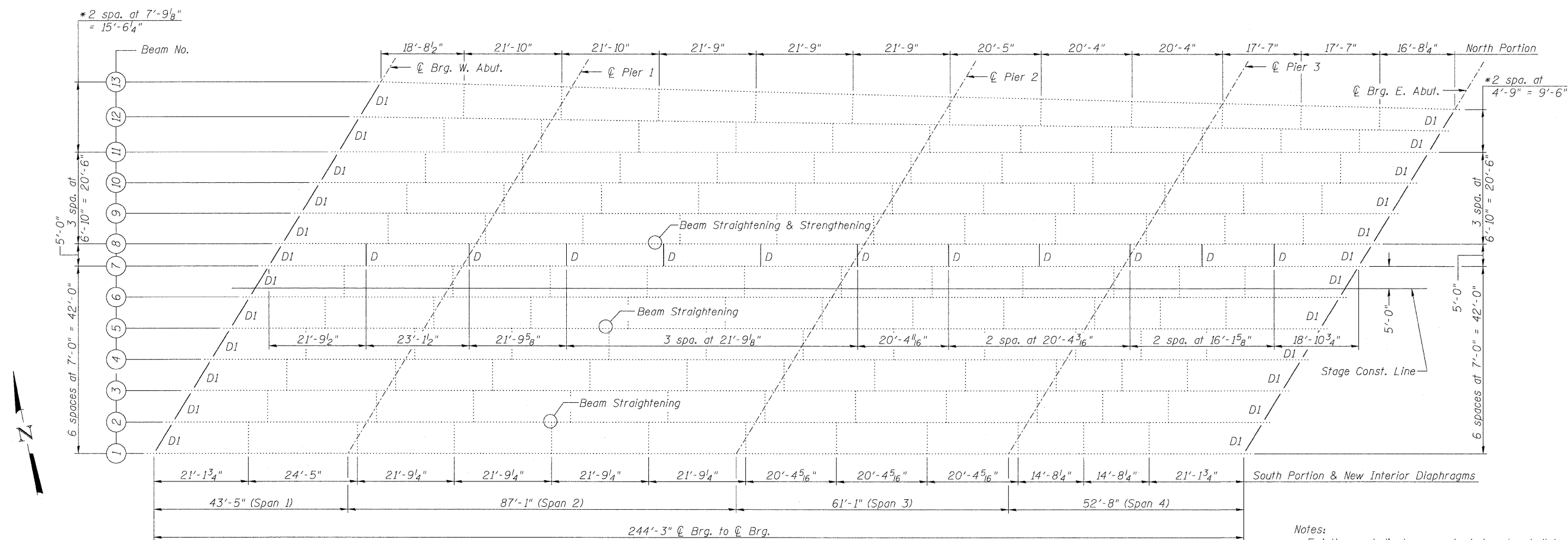
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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

DRAINAGE SCUPPER, DS-12  
STRUCTURE NO. 045-0037

SHEET NO. 24 OF 39 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
573	61HB-1-R	KANE	110	74
				CONTRACT NO. 60K76
ILLINOIS FED. AID PROJECT				



**FRAMING PLAN**

\* Measured at right angles to Beam 11 at  $\phi$  Bearing.

**Notes:**

- Existing end diaphragms at abutments shall be removed and replaced. New diaphragms shall be added between Beams 7 and 8. See Sheet 26 of 39 for diaphragm details.
- See Sheet 27 of 39 for Beam Straightening and Strengthening details.

		0.4 Sp. 1	Pier 1	0.5 Sp. 2	Pier 2	0.5 Sp. 3	Pier 3	0.6 Sp. 4
$I_s$	(in <sup>4</sup> )	9040	11877	15000	11877	9040	9040	9040
$I_c(n)$	(in <sup>4</sup> )	23921	-	33861	-	23921	23921	23921
$I_c(3n)$	(in <sup>4</sup> )	17427	-	24543	-	17427	17427	17427
$S_s$	(in <sup>3</sup> )	504	648	836	648	504	504	504
$S_c(n)$	(in <sup>3</sup> )	742	-	1134	-	742	742	742
$S_c(3n)$	(in <sup>3</sup> )	668	-	1022	-	668	668	668
$\phi$	(k/')	0.876	0.906	0.958	0.906	0.876	0.876	0.876
$M\phi$	(k)	14	453	447	460	62	234	195
$s\phi$	(k/')	0.291	0.291	0.291	0.291	0.291	0.291	0.291
$M_s\phi$	(k)	14	130	144	135	27	83	64
$M_L$	(k)	271	277	558	301	338	265	337
$M_{IM}$	(k)	80	73	132	76	91	73	95
$^5_3[M_L + i]$	(k)	585	583	1150	628	715	563	720
$M_a$	(k)	797	1516	2263	1590	1045	1144	1273
$M_u$	(k)	2792	1951	3761	1951	2792	2142	2792
$f_s \phi$ non-comp	(ksi)	0.3	8.4	6.4	8.5	1.5	5.6	4.6
$f_s \phi$ (comp)	(ksi)	0.3	2.4	1.7	2.5	0.5	1.5	1.1
$f_s ^5_3[M_L + M_I]$	(ksi)	9.5	10.8	12.2	11.6	11.6	9.1	11.6
$f_s$ (Overload)	(ksi)	10.0	21.6	20.3	22.7	13.5	16.2	17.4
$f_s$ (Total)	(ksi)	-	-	-	-	-	-	-
VR	(k)	58.0	-	49.3	-	52.6	63.2	56.7

\* Compact section  
\*\* Braced non-compact and partially braced section

	W. Abut.	Pier 1	Pier 2	Pier 3	E. Abut.	
$R\phi$	(k)	12.7	92.4	94.4	67.9	25.6
$R_L$	(k)	38.5	48.2	48.7	47.2	39.8
$R_I$	(k)	11.5	9.4	8.9	9.9	11.3
$R_{Total}$	(k)	62.7	150.0	152.0	125.0	76.7

		0.4 Sp. 1	Pier 1	0.5 Sp. 2	Pier 2	0.5 Sp. 3	Pier 3	0.6 Sp. 4
$I_s$	(in <sup>4</sup> )	7800	12299	10500	13236	7800	7800	7800
$I_c(n)$	(in <sup>4</sup> )	12642	-	26897	-	21642	21642	21642
$I_c(3n)$	(in <sup>4</sup> )	15868	-	19506	-	15868	15868	15868
$S_s$	(in <sup>3</sup> )	439	668	580	715	439	439	439
$S_c(n)$	(in <sup>3</sup> )	663	-	843	-	663	663	663
$S_c(3n)$	(in <sup>3</sup> )	598	-	757	-	598	598	598
$\phi$	(k/')	0.880	0.927	0.916	0.937	0.880	0.880	0.880
$M\phi$	(k)	1	488	378	499	47	226	200
$s\phi$	(k/')	0.291	0.291	0.291	0.291	0.291	0.291	0.291
$M_s\phi$	(k)	11	138	134	145	23	80	65
$M_L$	(k)	282	308	545	325	348	274	345
$M_{IM}$	(k)	84	81	129	82	93	75	97
$^5_3[M_L + i]$	(k)	610	648	1123	678	735	582	737
$M_a$	(k)	809	1657	2126	1719	1047	1154	1302
$M_u$	(k)	2128	-	3385	2402	2801	2129	2801
$f_s \phi$ non-comp	(ksi)	0.0	8.8	7.8	8.4	1.3	6.2	5.5
$f_s \phi$ (comp)	(ksi)	0.2	2.5	2.1	2.4	0.5	1.6	1.3
$f_s ^5_3[M_L + M_I]$	(ksi)	11.0	11.6	16.0	11.4	13.3	10.5	13.3
$f_s$ (Overload)	(ksi)	11.3	22.9	25.9	22.2	15.0	18.3	20.1
$f_s$ (Total)	(ksi)	-	29.7	-	-	-	-	-
VR	(k)	60.5	-	47.2	-	54.7	65.5	58.1

- $I_s, S_s$ : Non-composite moment of inertia and section modulus of the steel section used for computing  $f_s$  (Total and Overload) due to non-composite dead loads (in<sup>4</sup> and in<sup>3</sup>).
- $I_c(n), S_c(n)$ : Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing  $f_s$  (Total and Overload) due to short-term composite live loads (in<sup>4</sup> and in<sup>3</sup>).
- $I_c(3n), S_c(3n)$ : Composite moment of inertia and section modulus of the steel and deck based upon 3 times the modular ratio, "3n", used for computing  $f_s$  (Total and Overload) due to long-term composite (superimposed) dead loads (in<sup>4</sup> and in<sup>3</sup>).
- $\phi$ : Un-factored non-composite dead load (kips/ft.).
- $M\phi$ : Un-factored moment due to non-composite dead load (kip-ft.).
- $s\phi$ : Un-factored long-term composite (superimposed) dead load (kips/ft.).
- $M_s\phi$ : Un-factored moment due to long-term composite (superimposed) dead load (kip-ft.).
- $M_L$ : Un-factored live load moment (kip-ft.).
- $M_I$ : Un-factored moment due to impact (kip-ft.).
- $M_a$ : Factored design moment (kip-ft.).
- $M_u$ : Compact composite moment capacity according to AASHTO LFD 10.50.1.1 or compact non-composite moment capacity according to AASHTO LFD 10.48.1 (kip-ft.).
- $f_s$  (Overload): Sum of stresses as computed from the moments below (ksi).
- $f_s \phi$ :  $M\phi + M_s\phi + \frac{5}{16}(M_L + M_I)$
- $f_s$  (Total): Sum of stresses as computed from the moments below on non-compact section (ksi).
- $f_s$ :  $1.3[M\phi + M_s\phi + \frac{5}{16}(M_L + M_I)]$
- VR: Maximum  $\phi$  + impact shear range within the composite portion of the span for stud shear connector design (kips).

	W. Abut.	Pier 1	Pier 2	Pier 3	E. Abut.	
$R\phi$	(k)	11.8	92.7	94.9	66.8	25.8
$R_L$	(k)	39.6	49.8	50.2	48.4	40.8
$R_I$	(k)	11.7	9.8	9.2	10.1	11.5
$R_{Total}$	(k)	63.1	152.3	154.3	125.3	78.1



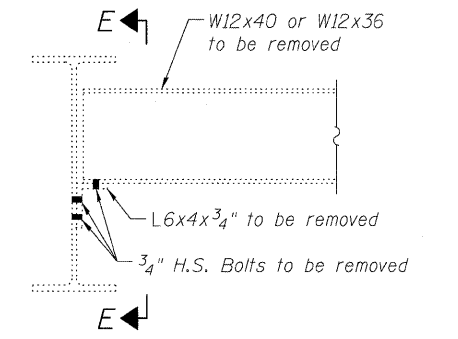
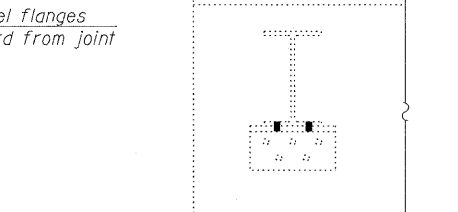
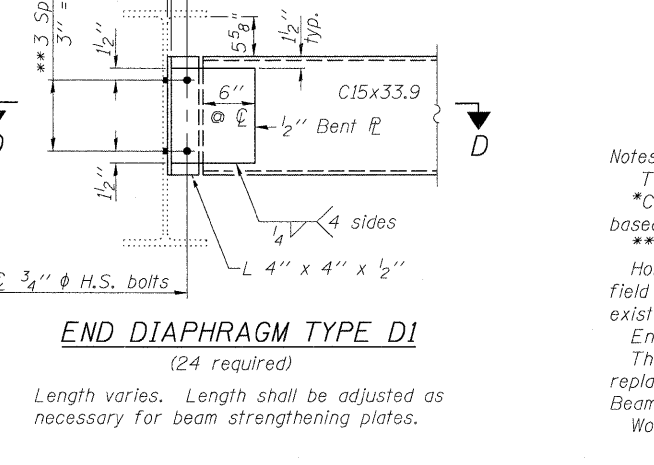
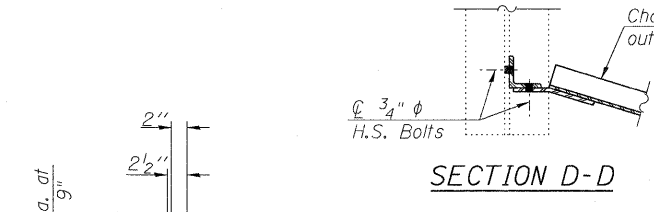
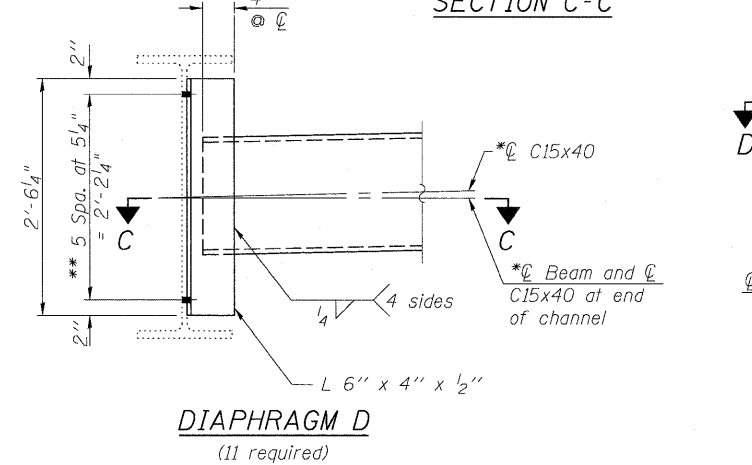
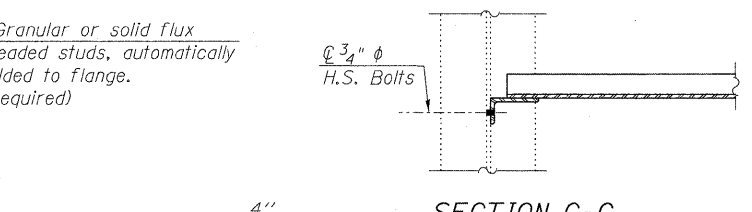
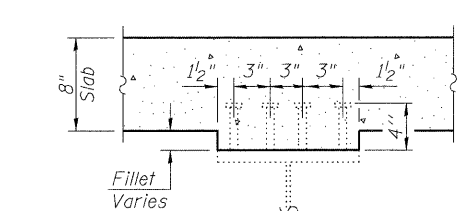
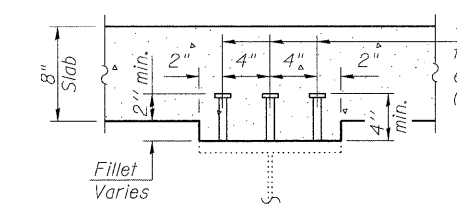
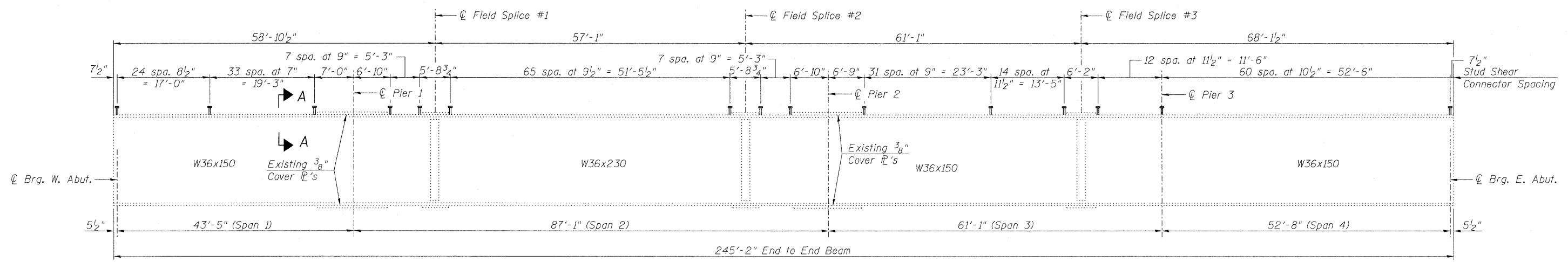
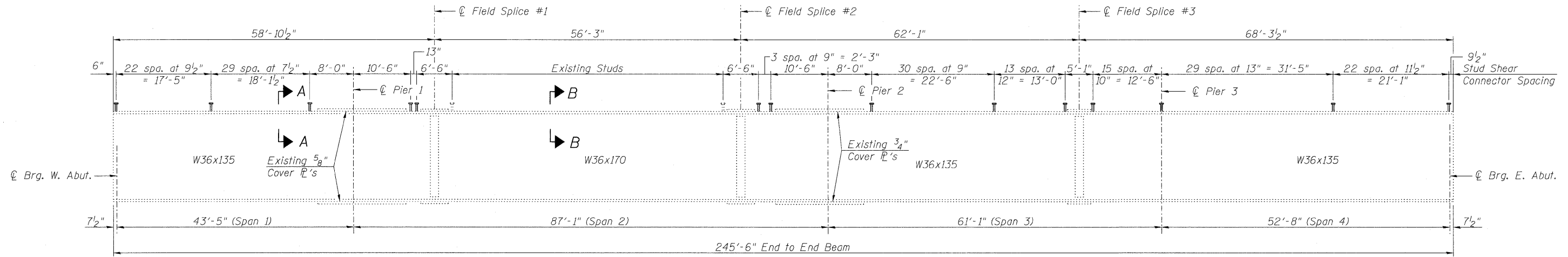
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FILE NAME =	CHECKED - ADB	REVISED -
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PLOT DATE =	CHECKED - MTH	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

FRAMING PLAN AND DESIGN DATA  
STRUCTURE NO. 045-0037

SHEET NO. 25 OF 39 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
573	61HB-1-R	KANE	110	75
				CONTRACT NO. 60K76
ILLINOIS FED. AID PROJECT				



**Notes:**

Two hardened washers required for each set of oversized holes.

\*C15x50 are permitted to facilitate material acquisition. Calculated weight of structural steel is based on the C15x40. The alternate, if utilized, shall be provided at no additional cost to the Department.

\*\*3/4" φ HS bolts, 1 5/8" φ holes.

Holes shall be subpunched or subdrilled 1/4" smaller than the diameter specified and reamed in the field to specified diameter. Contractor shall field verify that proposed bolt locations do not conflict with existing holes from end diaphragm connection.

End Diaphragms at stage construction line shall be replaced during Stage I Construction.

The nuts of the existing diaphragms between Beams 6 & 7 shall be loosened during Stage I Removal and replaced after the completion of Stage II Construction. The nuts of the new end diaphragms between Beams 6 & 7 shall be finger tightened until after the completion of Stage II Construction.

Work this sheet with Sheet 27 of 39.

**LIN ENGINEERING, LTD.**  
 Consulting Engineers  
 Chatham, Illinois

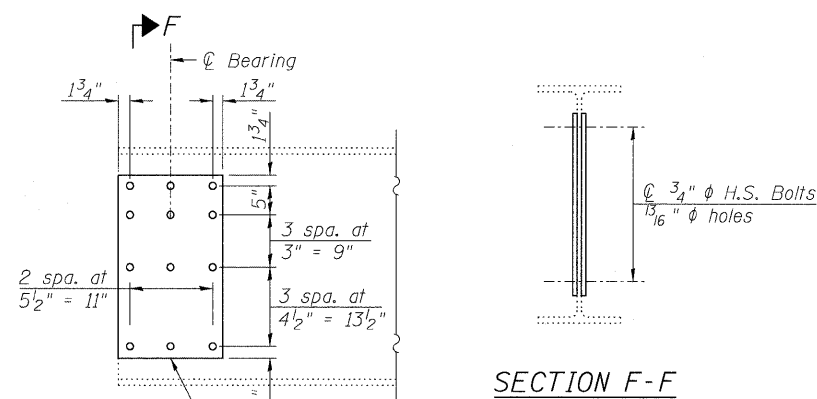
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PLOT SCALE =	DRAWN - AJF	REVISED -
PLOT DATE =	CHECKED - MTH	REVISED -

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

**STEEL DETAILS**  
**STRUCTURE NO. 045-0037**  
 SHEET NO. 26 OF 39 SHEETS

F.A.P. RTE. 573	SECTION 61HB-1-R	COUNTY KANE	TOTAL SHEETS 110	SHEET NO. 76
				CONTRACT NO. 60K76
ILLINOIS FED. AID PROJECT				



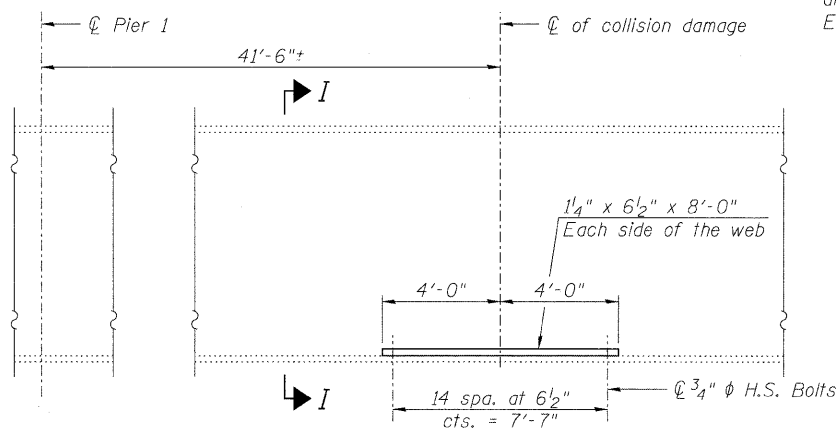


SECTION F-F

**BEAM STRENGTHENING AT ABUTMENT BEARINGS**

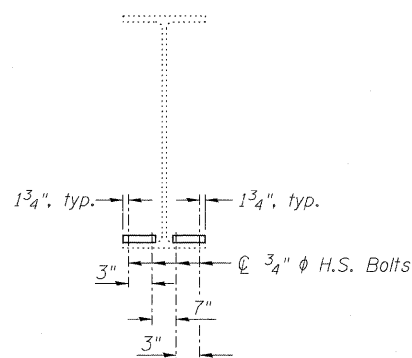
(8 Locations)

Strengthening required at west end of Beams 9 thru 13 and east end of Beams 8, 10 and 13. Cost included with Furnishing and Erecting Structural Steel.

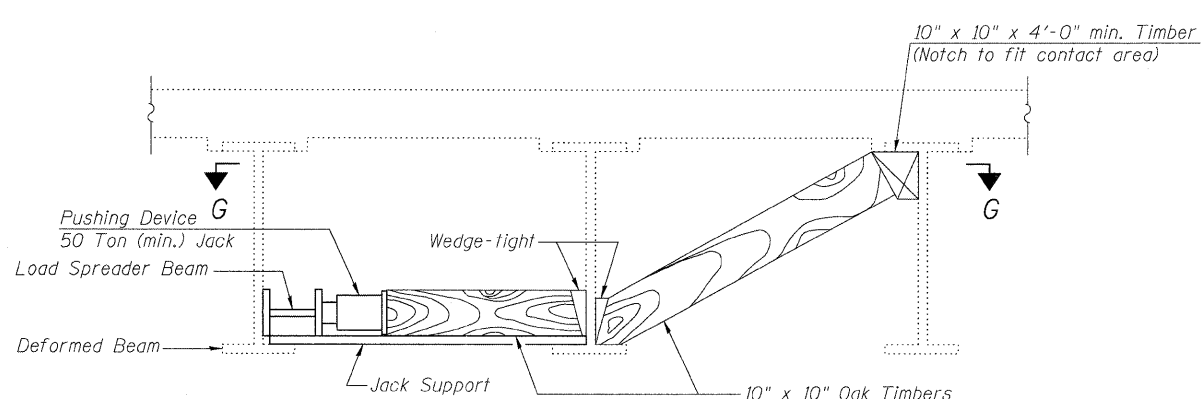


**BEAM STRENGTHENING DETAIL AT BEAM 8**

(Looking North)

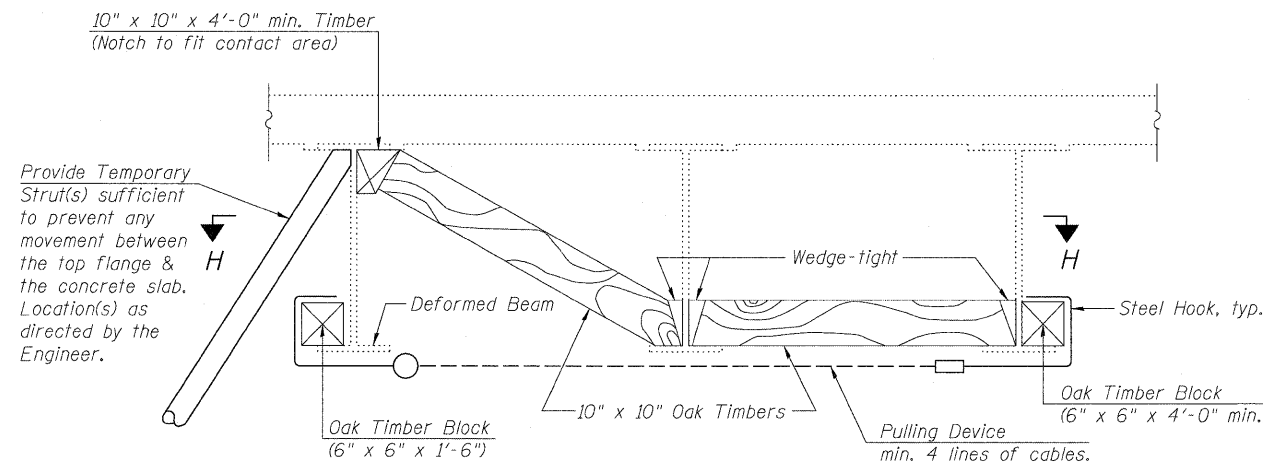


SECTION I-I



**HORIZONTAL STRAIGHTENING DETAIL**

(Pushing Device)

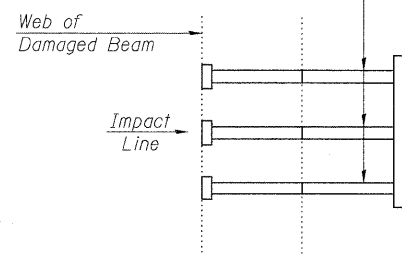


**HORIZONTAL STRAIGHTENING DETAIL**

(Pulling Device)

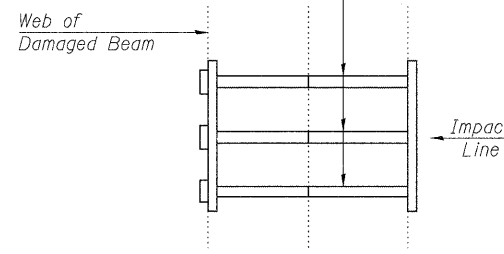
Note: Straightening force shall be maintained on all load transfer blocking during beam straightening.

10" x 10" Oak Timber Load Transfer Blocking between existing beams - wedge tight. Place blocking in line with the Straightening Device.

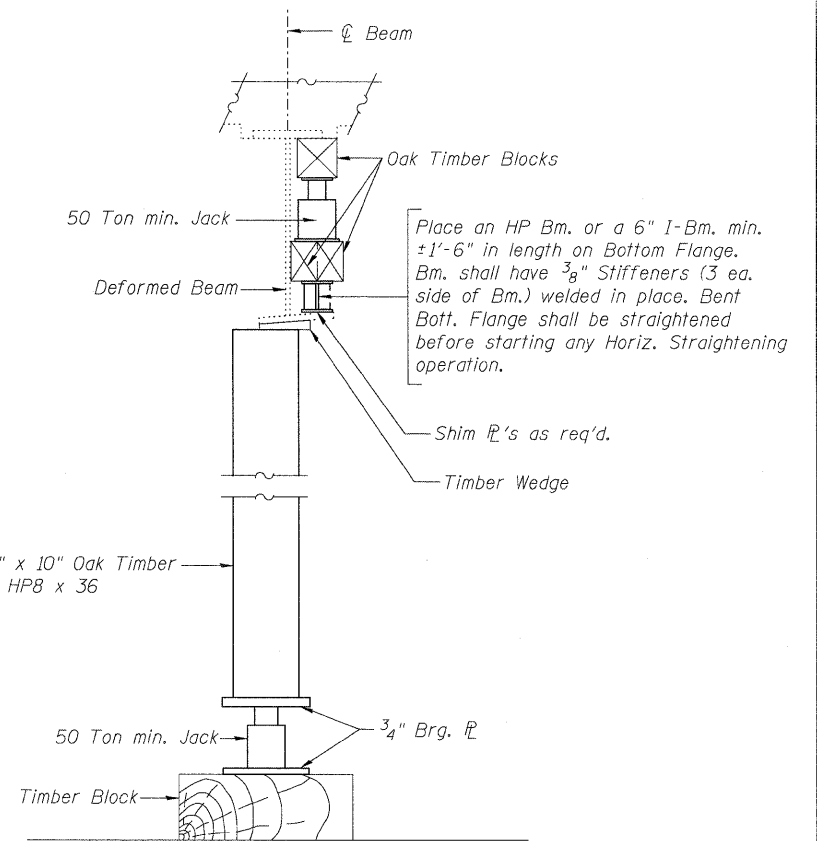


SECTION G-G

10" x 10" Oak Timber Load Transfer Blocking between existing beams - wedge tight. Place blocking in line with the Straightening Device.



SECTION H-H



**VERTICAL STRAIGHTENING DETAIL**

(Cost included with pay item Beam Straightening.)

Note: Beam straightening operations shall be performed prior to removal of existing deck slab.

**BILL OF MATERIAL**

ITEM	UNIT	QUANTITY
Furnishing and Erecting Structural Steel	Pound	12180
Structural Steel Removal	Pound	7980
Beam Straightening	Each	3

Notes:  
All new fasteners shall be high strength bolts. Holes shall be subpunched or subdrilled 1/4" smaller than the diameter specified and reamed in the field to specified diameter. Contractor shall field verify that proposed bolt locations do not conflict with existing holes from end diaphragm connection.  
Beam straightening operations shall be performed prior to pouring new bridge deck.  
Work this sheet with Sheet 26 of 39.

(Sheet 2 of 2)



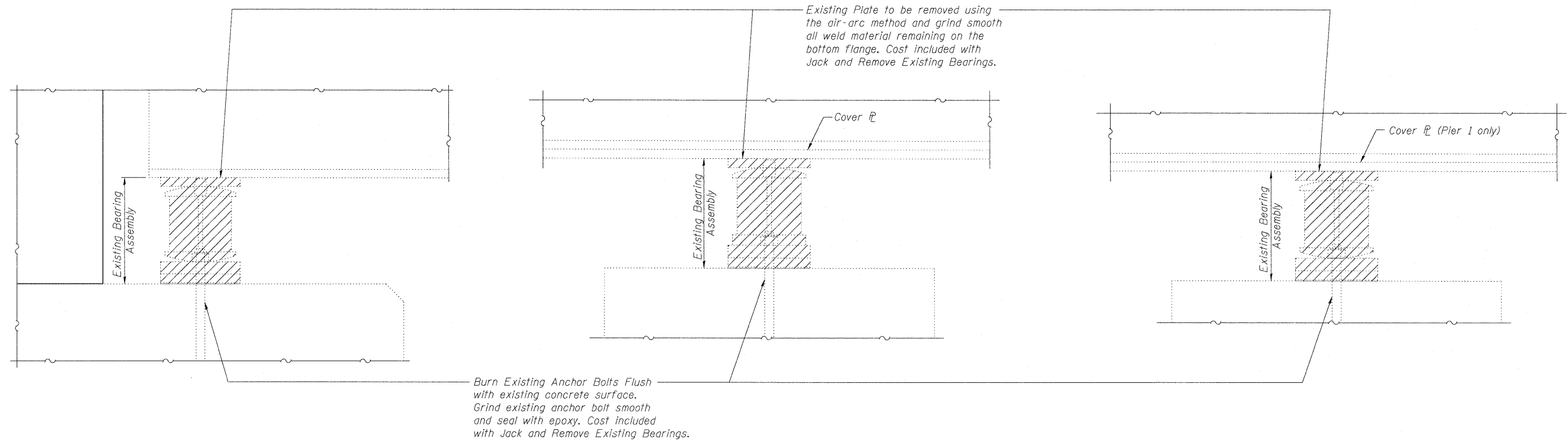
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FILE NAME =	CHECKED - ADB	REVISED -
PLOT SCALE =	DRAWN - AJF	REVISED -
PLOT DATE =	CHECKED - MTH	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

STEEL DETAILS  
STRUCTURE NO. 045-0037

SHEET NO. 27 OF 39 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
573	61HB-1-R	KANE	110	77
			CONTRACT NO. 60K76	
ILLINOIS FED. AID PROJECT				



ABUTMENTS

PIER 2

PIERS 1 & 3

EXISTING BEARING REMOVAL DETAILS

Notes:  
 Hatch area indicates Bearing removal. See Special Provision for Jack and Remove Existing Bearings.  
 Existing bearing dimensions are taken from the original plans.

EXISTING BEARING ASSEMBLY HEIGHTS

	Beam 1	Beam 2	Beam 3	Beam 4	Beam 5	Beam 6	Beam 7	Beam 8	Beam 9	Beam 10	Beam 11	Beam 12	Beam 13
W. Abut.	13 <sup>5</sup> / <sub>8</sub> "	13 <sup>7</sup> / <sub>8</sub> "	14 <sup>1</sup> / <sub>4</sub> "	13 <sup>5</sup> / <sub>8</sub> "	14 <sup>1</sup> / <sub>4</sub> "	13 <sup>5</sup> / <sub>8</sub> "	13 <sup>7</sup> / <sub>8</sub> "	13 <sup>5</sup> / <sub>8</sub> "	13 <sup>5</sup> / <sub>8</sub> "	13 <sup>5</sup> / <sub>8</sub> "	14 <sup>3</sup> / <sub>8</sub> "	14 <sup>3</sup> / <sub>8</sub> "	14"
Pier 1	15 <sup>3</sup> / <sub>8</sub> "	14 <sup>7</sup> / <sub>8</sub> "	15 <sup>1</sup> / <sub>2</sub> "	14 <sup>7</sup> / <sub>8</sub> "	15 <sup>1</sup> / <sub>2</sub> "	14 <sup>7</sup> / <sub>8</sub> "	14 <sup>7</sup> / <sub>8</sub> "	14 <sup>7</sup> / <sub>8</sub> "	14 <sup>7</sup> / <sub>8</sub> "	14 <sup>7</sup> / <sub>8</sub> "	15 <sup>3</sup> / <sub>8</sub> "	15 <sup>5</sup> / <sub>8</sub> "	15 <sup>1</sup> / <sub>8</sub> "
Pier 2	14 <sup>1</sup> / <sub>2</sub> "	14 <sup>1</sup> / <sub>2</sub> "	14 <sup>1</sup> / <sub>2</sub> "	14 <sup>1</sup> / <sub>2</sub> "	14 <sup>7</sup> / <sub>8</sub> "	14 <sup>1</sup> / <sub>2</sub> "	14 <sup>1</sup> / <sub>2</sub> "	14 <sup>1</sup> / <sub>2</sub> "	14 <sup>1</sup> / <sub>2</sub> "	14 <sup>1</sup> / <sub>2</sub> "	14 <sup>3</sup> / <sub>4</sub> "	15 <sup>1</sup> / <sub>4</sub> "	15"
Pier 3	14 <sup>1</sup> / <sub>2</sub> "	14 <sup>1</sup> / <sub>2</sub> "	14 <sup>1</sup> / <sub>2</sub> "	14 <sup>1</sup> / <sub>2</sub> "	14 <sup>1</sup> / <sub>2</sub> "	14 <sup>1</sup> / <sub>2</sub> "	14 <sup>1</sup> / <sub>2</sub> "	14 <sup>1</sup> / <sub>2</sub> "	14 <sup>1</sup> / <sub>2</sub> "	14 <sup>1</sup> / <sub>2</sub> "	14 <sup>7</sup> / <sub>8</sub> "	15 <sup>3</sup> / <sub>8</sub> "	15"
E. Abut.	13 <sup>5</sup> / <sub>8</sub> "	13 <sup>5</sup> / <sub>8</sub> "	13 <sup>5</sup> / <sub>8</sub> "	13 <sup>5</sup> / <sub>8</sub> "	14 <sup>1</sup> / <sub>8</sub> "	13 <sup>5</sup> / <sub>8</sub> "	14 <sup>1</sup> / <sub>4</sub> "	13 <sup>5</sup> / <sub>8</sub> "	13 <sup>5</sup> / <sub>8</sub> "	14 <sup>1</sup> / <sub>8</sub> "	14 <sup>1</sup> / <sub>2</sub> "	14 <sup>1</sup> / <sub>8</sub> "	13 <sup>5</sup> / <sub>8</sub> "

REQUIRED JACK CAPACITY

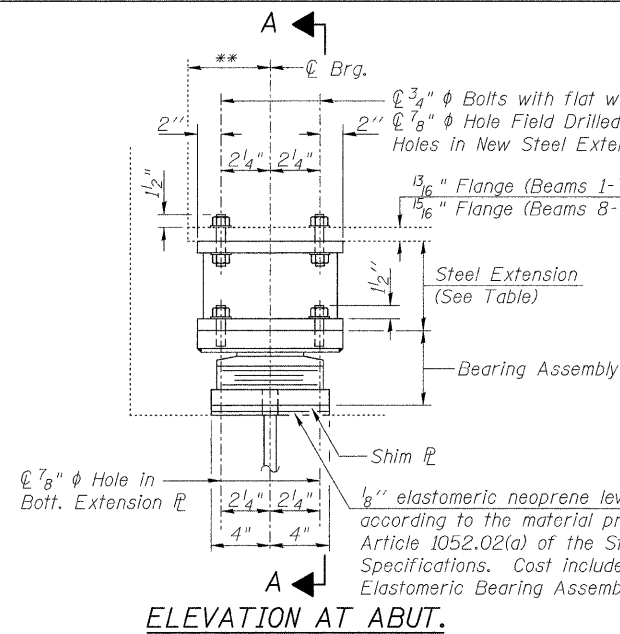
(Per Bearing)

	W. Abut.	Pier 1	Pier 2	Pier 3	E. Abut.
*Dead Load (k)	2.0	16.4	17.3	10.4	4.1
Min. Jack Capacity (Tons)	1.5	12.5	13.0	8.0	3.5

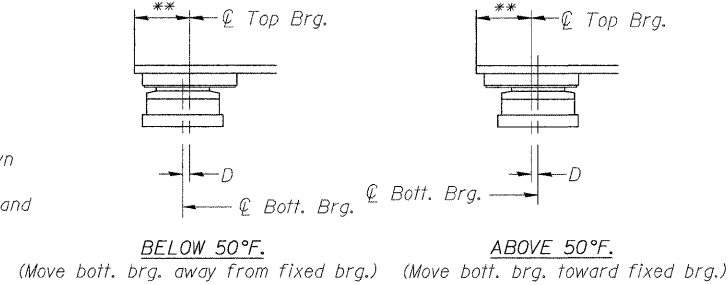
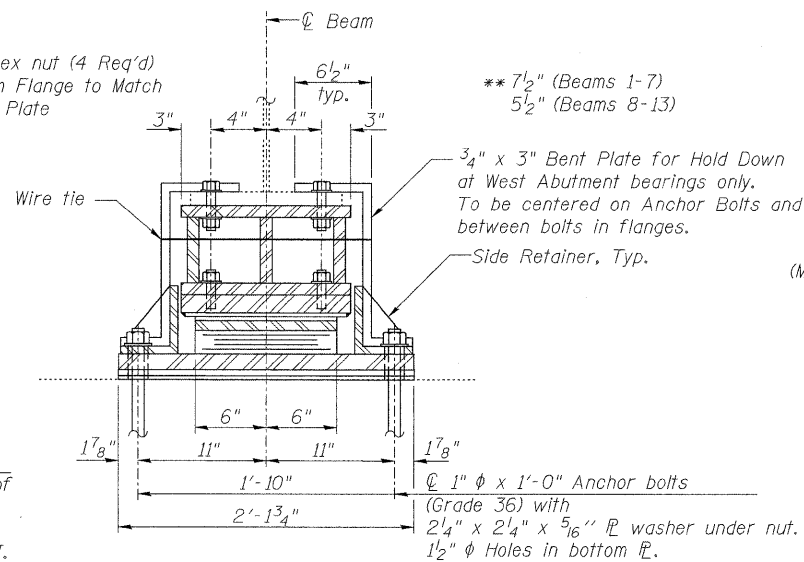
\*Superstructure steel only

BILL OF MATERIAL

Item	Unit	Total
Jack and Remove Existing Bearings	Each	65

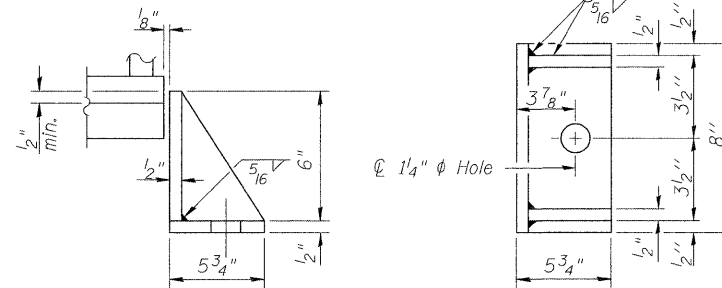


**TYPE II ELASTOMERIC EXP. BRG.**  
(Both Abutments)



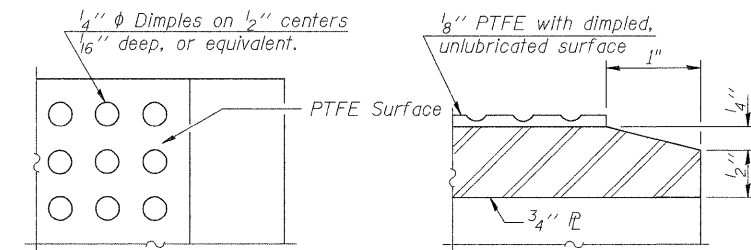
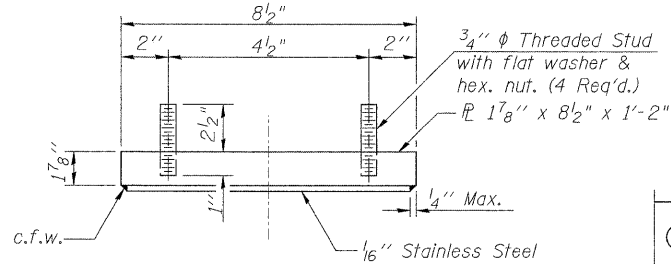
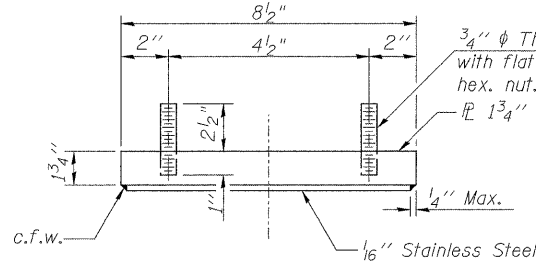
**SETTING ANCHOR BOLTS AT EXP. BRG.**

D = 1/8" per each 100' of expansion for every 15° temp. change from the normal temp. of 50°F.



**SIDE RETAINER**

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.

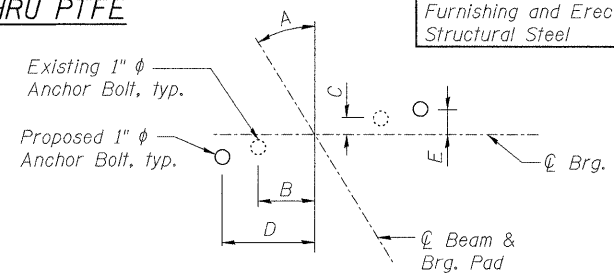
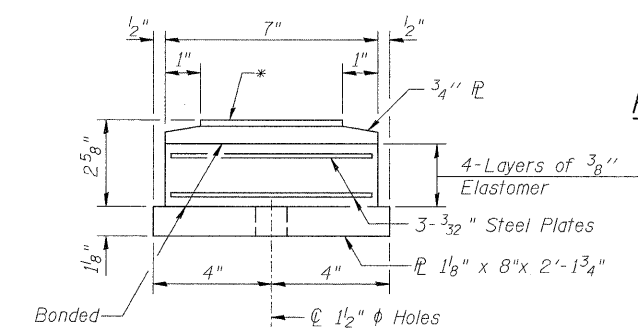
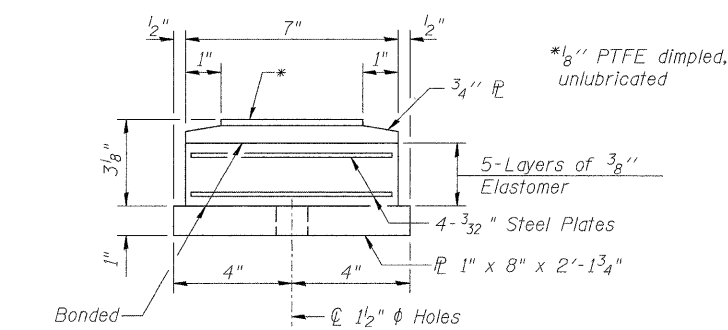


**PLAN-PTFE SURFACE**

**SECTION THRU PTFE**

**BILL OF MATERIAL**

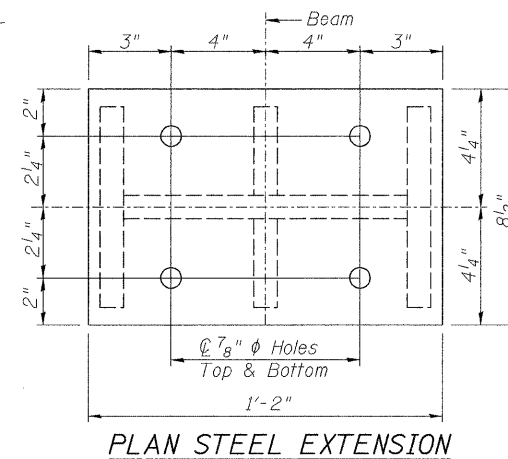
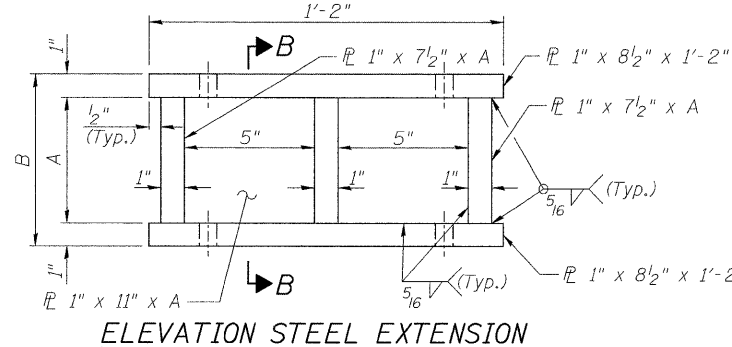
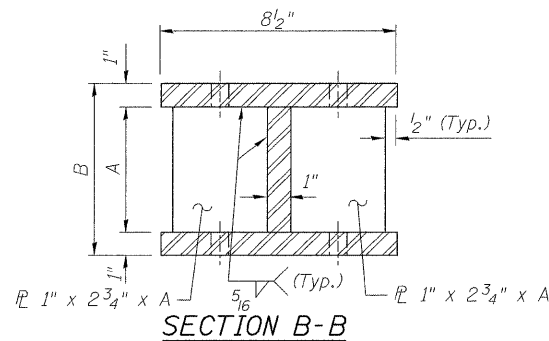
Item	Unit	Total
Elastomeric Bearing Assembly Type II	Each	26
Anchor Bolts, 1"	Each	52
Furnishing and Erecting Structural Steel	Pound	3650



**ANCHOR BOLT LOCATION**

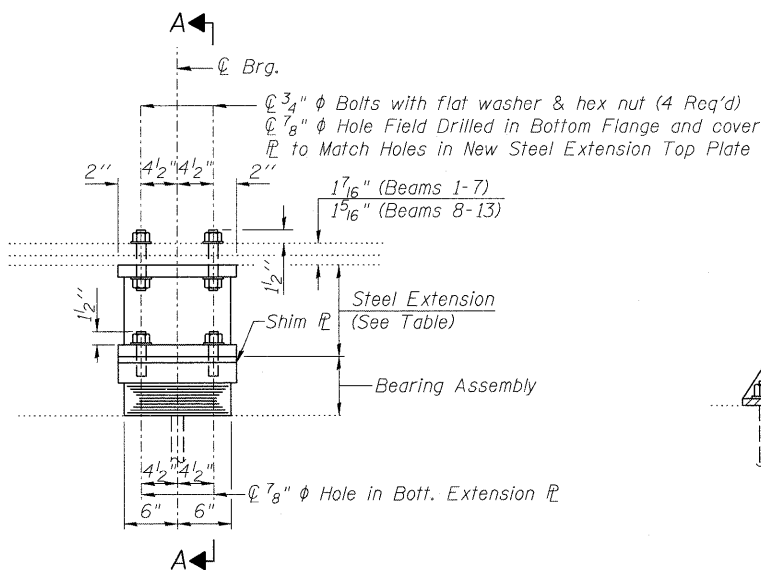
Beams	1 thru 7	8 thru 11	12	13
A	31°-30'-10"	31°-30'-10"	30°-47'-29"	30°-04'-09"
B	7 1/4"	7 1/2"	7 1/2"	7 5/8"
C	4 1/2"	4 5/8"	4 1/2"	4 3/8"
D	9 3/8"	9 3/8"	9 1/2"	9 1/2"
E	5 3/4"	5 3/4"	5 5/8"	5 1/2"

**STEEL EXTENSION DIMENSIONS**



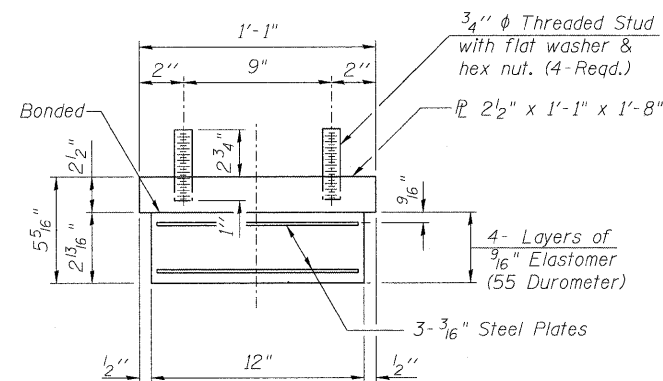
**PLAN STEEL EXTENSION**

East Abutment													
	Beam 1	Beam 2	Beam 3	Beam 4	Beam 5	Beam 6	Beam 7	Beam 8	Beam 9	Beam 10	Beam 11	Beam 12	Beam 13
A	6 1/8"	6 3/4"	6 5/8"	6 5/8"	7 1/8"	5 1/8"	5 1/8"	8 1/8"	7 3/4"	9"	9"	8 1/2"	8 1/8"
B	8 7/8"	8 3/4"	8 5/8"	8 5/8"	9 1/8"	7 7/8"	7 1/8"	10 1/8"	9 3/4"	11"	11"	10 1/2"	10 1/8"
West Abutment													
A	7 3/8"	6 3/4"	7 1/4"	6 5/8"	7 3/8"	6 3/4"	4 1/2"	8 3/8"	7 1/8"	8 5/8"	9 1/8"	8 3/4"	8 1/2"
B	9 3/8"	8 3/4"	9 1/4"	8 5/8"	9 3/8"	8 3/4"	6 1/8"	10 3/8"	9 1/8"	10 3/8"	11 1/8"	10 3/4"	10 1/2"



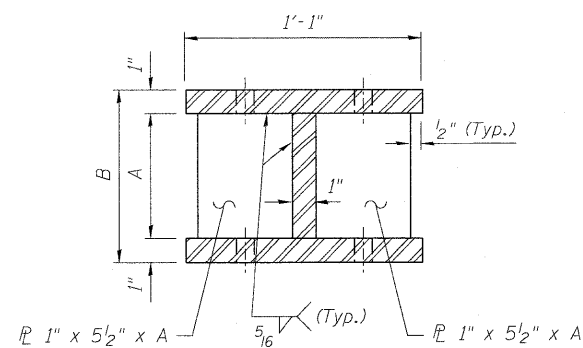
ELEVATION AT PIER 1

TYPE I ELASTOMERIC EXP. BRG.

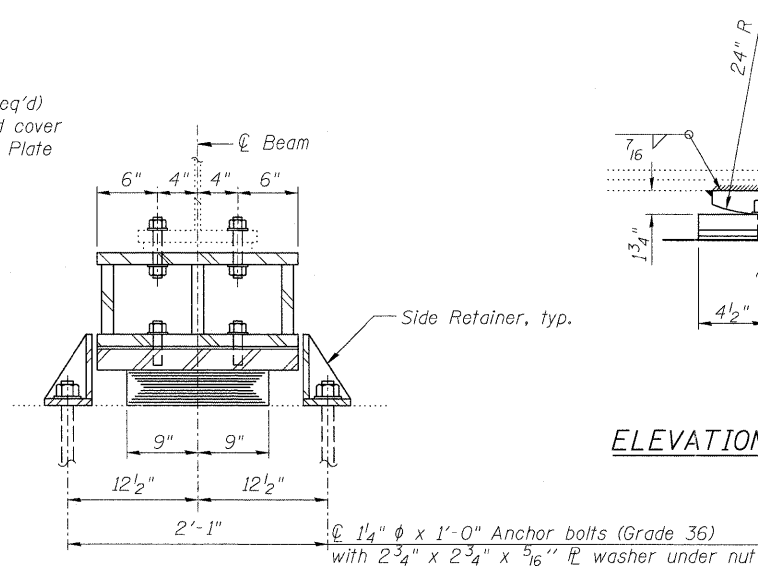


BEARING ASSEMBLY - PIER 1

Note:  
Shim plates shall not be placed under Bearing Assembly.

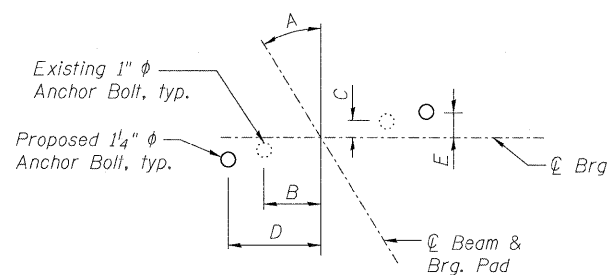


SECTION C-C



ELEVATION AT PIER 2

SECTION A-A



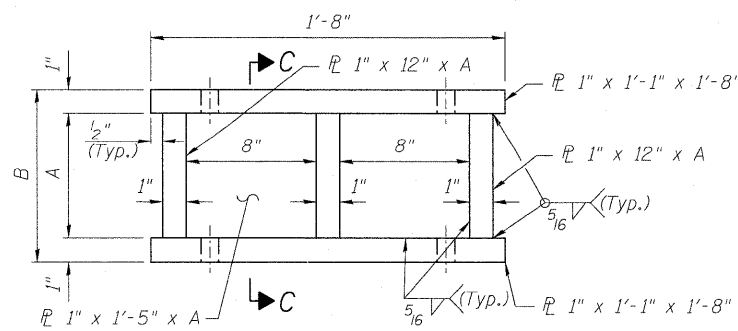
ANCHOR BOLT LOCATION

(Pier 1)

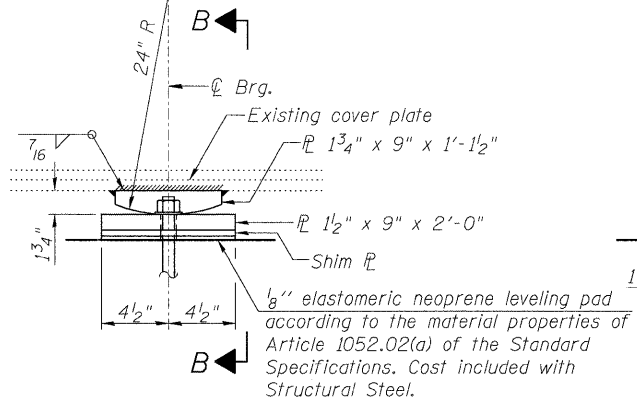
Beams	1 thru 11	12	13
A	31°-30'-10"	30°-47'-29"	30°-04'-09"
B	6 7/8"	6 7/8"	6 7/8"
C	4 1/8"	4 1/8"	4"
D	10 5/8"	10 3/4"	10 7/8"
E	6 1/2"	6 3/8"	6 1/4"

BILL OF MATERIAL

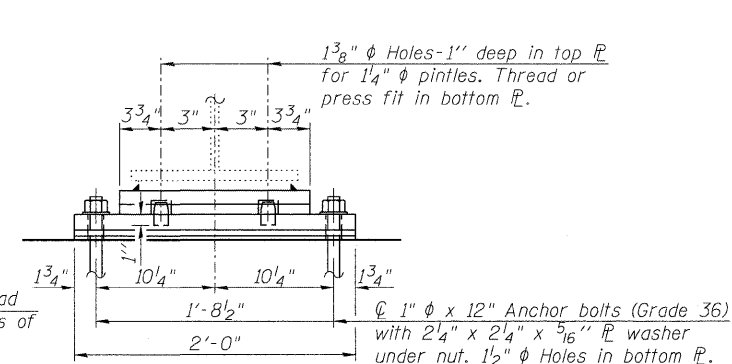
Item	Unit	Total
Elastomeric Bearing Assembly Type I	Each	13
Anchor Bolts, 1"	Each	26
Anchor Bolts, 1 1/4"	Each	26
Furnishing and Erecting Structural Steel	Pound	5830



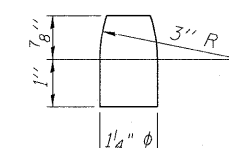
ELEVATION STEEL EXTENSION



FIXED BEARING



SECTION C-C



PINTLE

Notes:  
Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. ASTM A307 Grade C anchor bolts may be used in lieu of ASTM F1554 Grade 36 (Fy=36ksi). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.

Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.

Side retainers and other steel members required for the elastomeric bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type I.

Two 1/8 in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.

Steel Extensions and fasteners shall be included in the cost of Furnishing and Erecting Structural Steel.

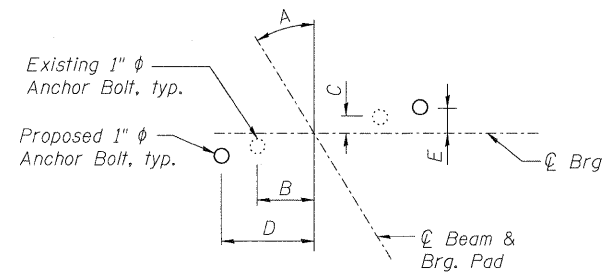
The Contractor is to verify the existing dimensions prior to fabricating the steel extensions.

Anchor bolts at fixed bearings may be either cast in place or installed in holes drilled after the supported member is in place.

Fasteners shall be AASHTO M164 Type 1, mechanically galvanized bolts.

The bearings shall be in place and the jacks lowered before the new concrete deck is poured.

Hardwood timbers shall be installed tightly between top and bottom flanges directly over the jack location to prevent rotation.



ANCHOR BOLT LOCATION

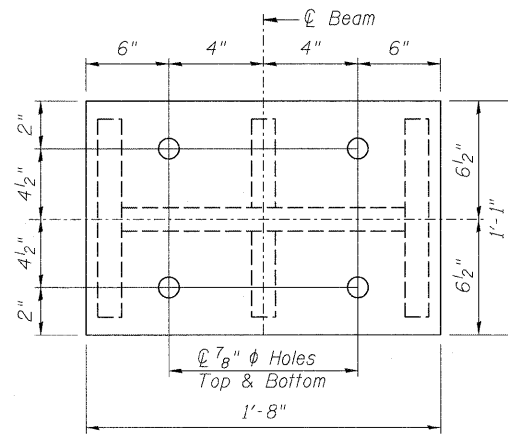
(Pier 2)

Beams	1 thru 11	12	13
A	31°-30'-10"	30°-47'-29"	30°-04'-09"
B	6 7/8"	6 7/8"	6 7/8"
C	4 1/8"	4 1/8"	4"
D	10 5/8"	10 3/4"	10 7/8"
E	6 1/2"	6 3/8"	6 1/4"

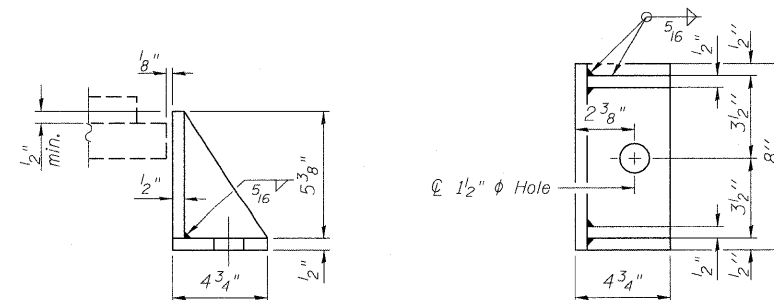
STEEL EXTENSION DIMENSIONS

(Pier 1)

	Beam 1	Beam 2	Beam 3	Beam 4	Beam 5	Beam 6	Beam 7	Beam 8	Beam 9	Beam 10	Beam 11	Beam 12	Beam 13
A	9 3/8"	8 5/8"	9 8/8"	8 5/8"	8 3/4"	8"	5 5/8"	10"	9 1/2"	10 1/4"	10 5/8"	10 3/8"	10"
B	11 3/8"	10 5/8"	11 1/8"	10 5/8"	10 3/4"	10"	7 5/8"	12"	11 1/2"	12 1/4"	12 5/8"	12 3/8"	12"



PLAN STEEL EXTENSION

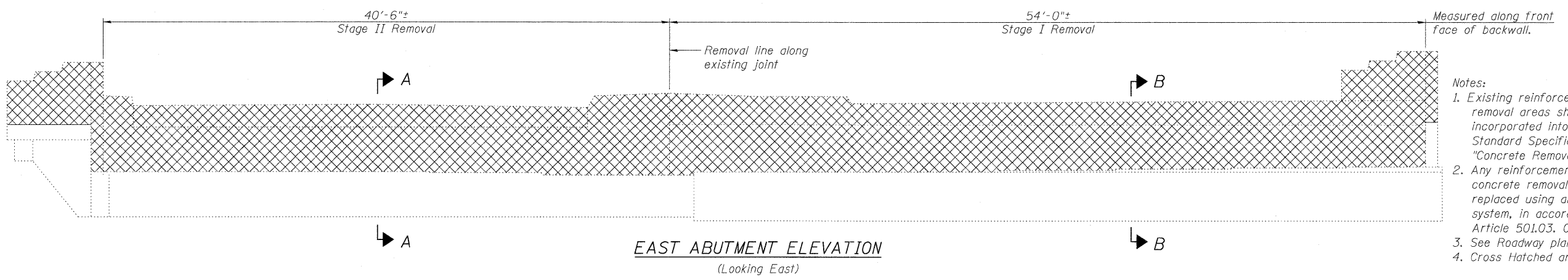
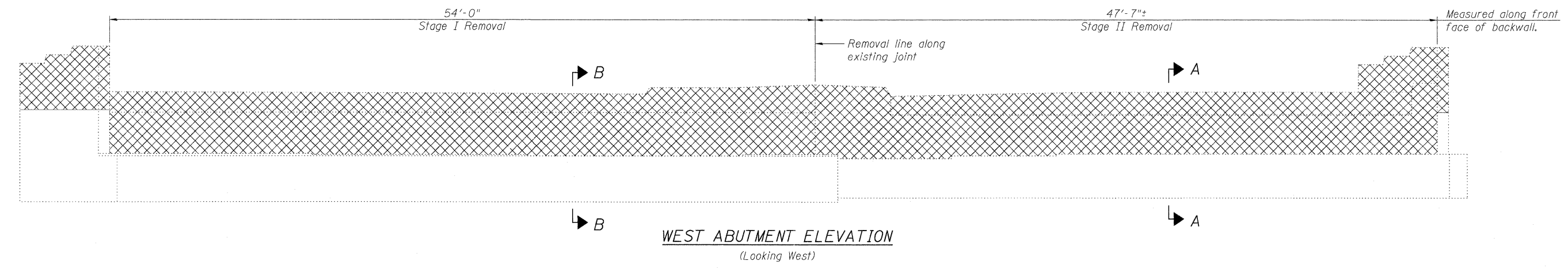


SIDE RETAINER

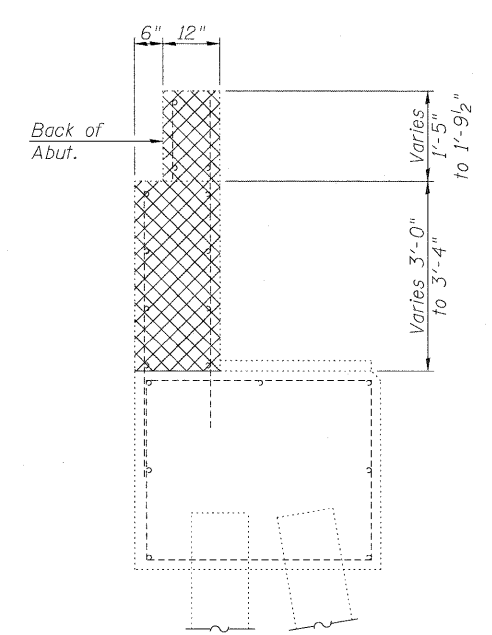
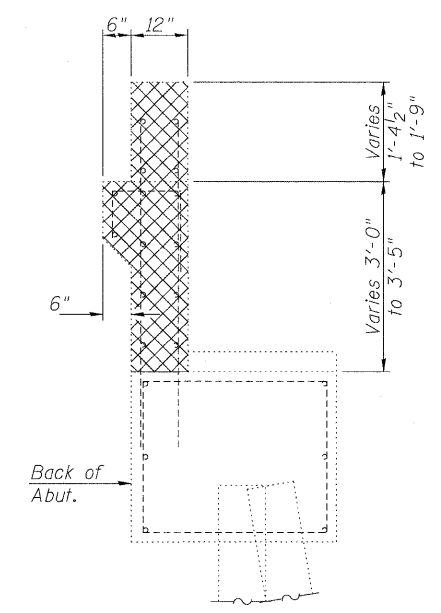
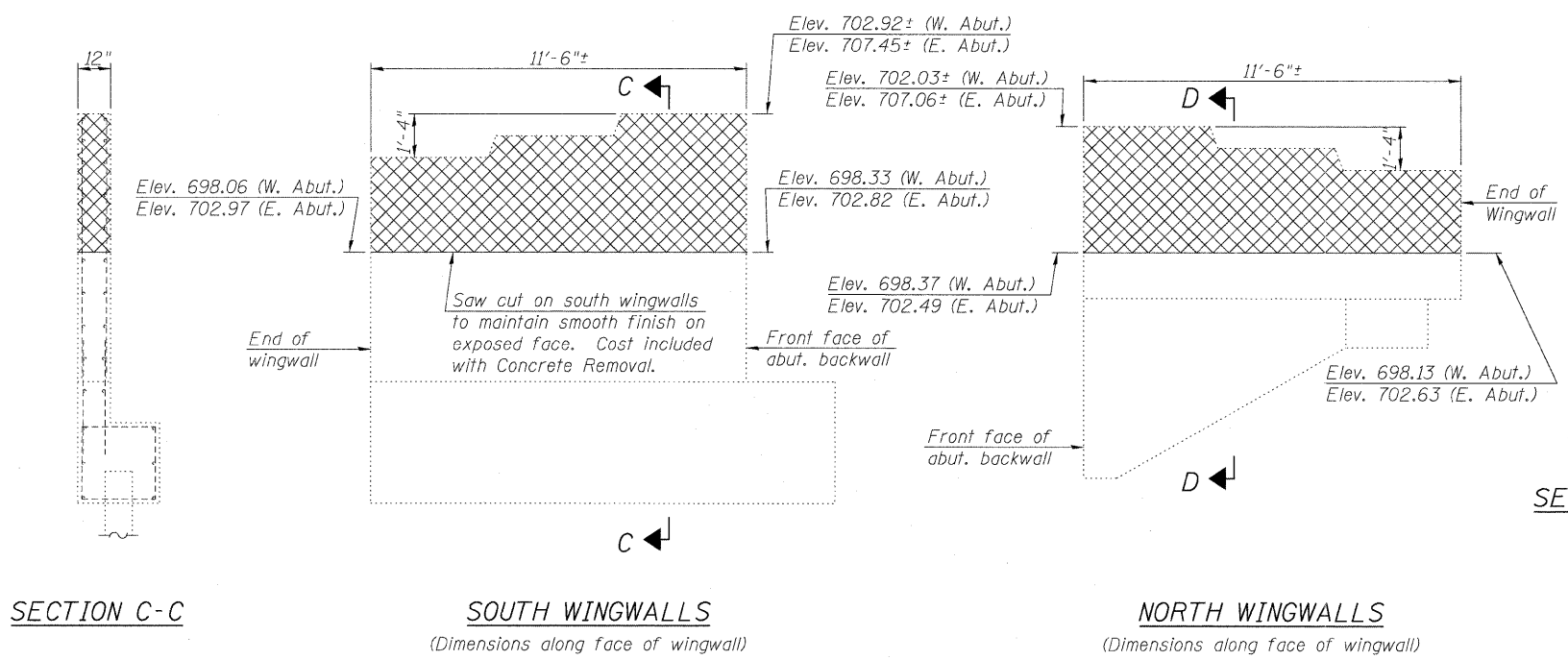
Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.

(Sheet 1 of 2)





- Notes:
- Existing reinforcement bars extending into concrete removal areas shall be cleaned, straightened and incorporated into new concrete, in accordance with IDOT Standard Specifications Article 501.03. Cost included in "Concrete Removal".
  - Any reinforcement bars that are damaged during concrete removal operations shall be repaired or replaced using an approved bar splicer or anchorage system, in accordance with IDOT Standard Specifications Article 501.03. Cost included in "Concrete Removal".
  - See Roadway plans for Approach Slab Removal pay item.
  - Cross Hatched areas indicate limits of Concrete Removal.



**BILL OF MATERIAL**

Item	Unit	Quantity
Concrete Removal	Cu. Yd.	52.1



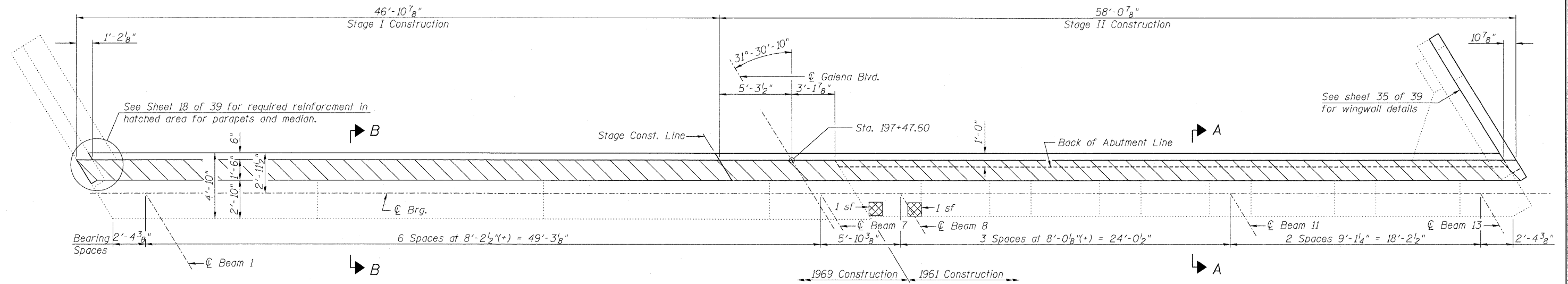
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PLOT DATE =	CHECKED - MTH	REVISED -

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

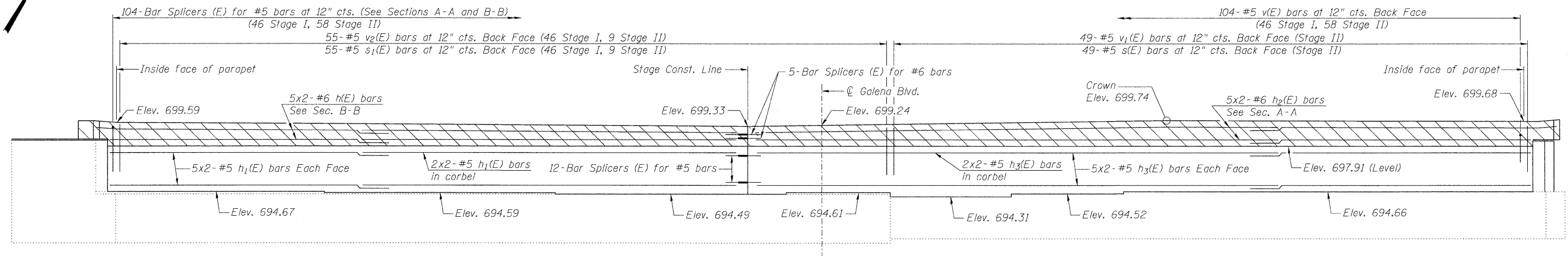
**CONCRETE REMOVAL DETAILS**  
**STRUCTURE NO. 045-0037**

SHEET NO. 32 OF 39 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
573	61HB-1-R	KANE	110	82
CONTRACT NO. 60K76			ILLINOIS FED. AID PROJECT	



PLAN - WEST ABUTMENT



ELEVATION - WEST ABUTMENT

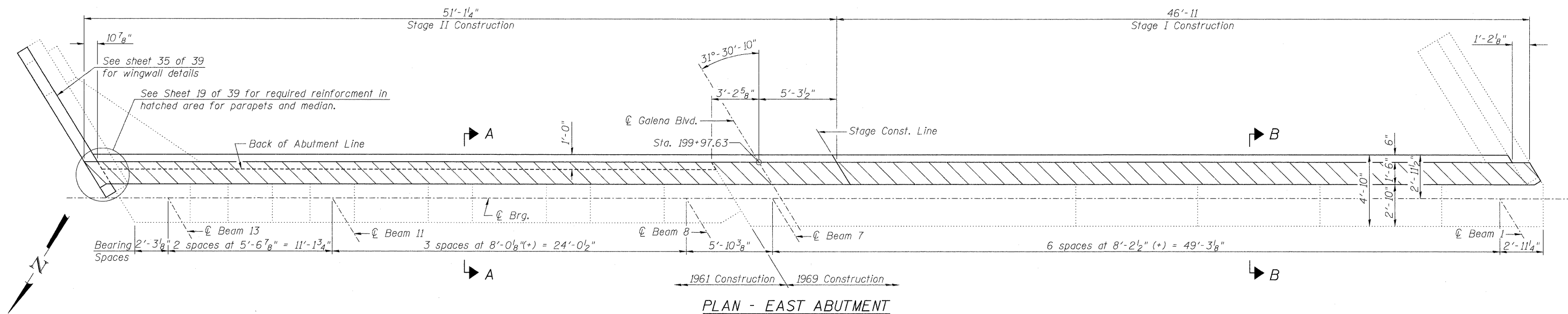
**LEGEND**

- Structural Repair of Concrete (Depth equal to or less than 5 in.)
- sf Square Feet

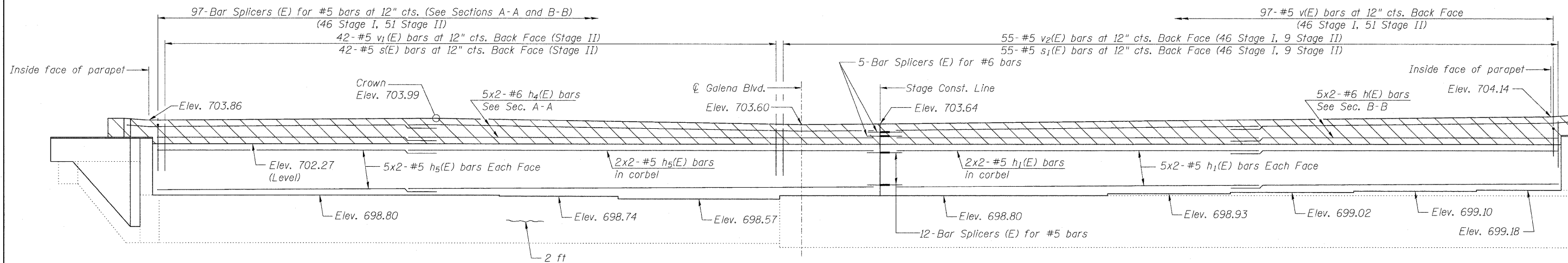
**MIN. BAR LAP**  
 #5 Bar = 2'-6"  
 #6 Bar = 3'-0"

**Notes:**  
 Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included with Concrete Removal.  
 Hatched area to be poured after superstructure false work has been removed. Quantity of concrete included with Concrete Superstructure.  
 See sheet 35 of 39 for Section A-A and B-B, wingwall details and Bill of Material.  
 Bars indicated thus 4x2-#5 etc. indicates 4 lines of bars with 2 lengths per line.  
 Repair of the existing abutment cap shall include but may not be limited to the areas shown. The actual area to be repaired will be determined by the Engineer at the time of construction.  
 See Sheet 18 of 39 for median details.





PLAN - EAST ABUTMENT



ELEVATION - EAST ABUTMENT

**LEGEND**

~ Epoxy Crack Injection

**MIN. BAR LAP**

#5 Bar = 2'-6"  
#6 Bar = 3'-0"

Notes:  
Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included with Concrete Removal.  
Hatched area to be poured after superstructure false work has been removed. Quantity of concrete included with Concrete Superstructure.  
See sheet 35 of 39 for Section A-A and B-B, wingwall details and Bill of Material.  
Bars indicated thus 4x2-#5 etc. indicates 4 lines of bars with 2 lengths per line.  
Repair of the existing abutment cap shall include but may not be limited to the areas shown. The actual area to be repaired will be determined by the Engineer at the time of construction.  
See Sheet 18 of 39 for median details.



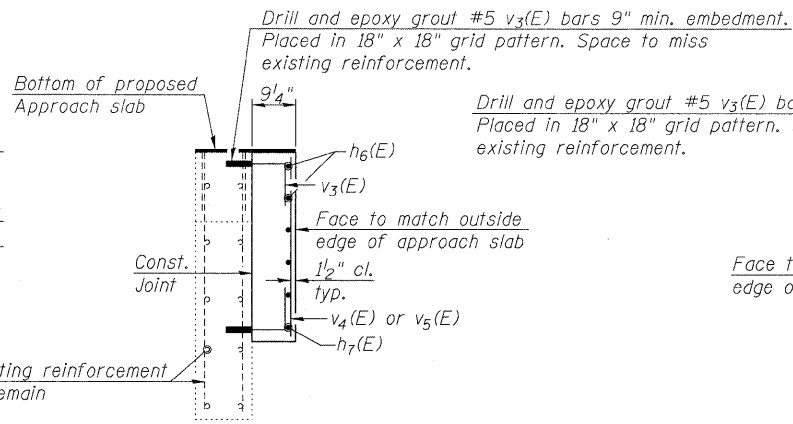
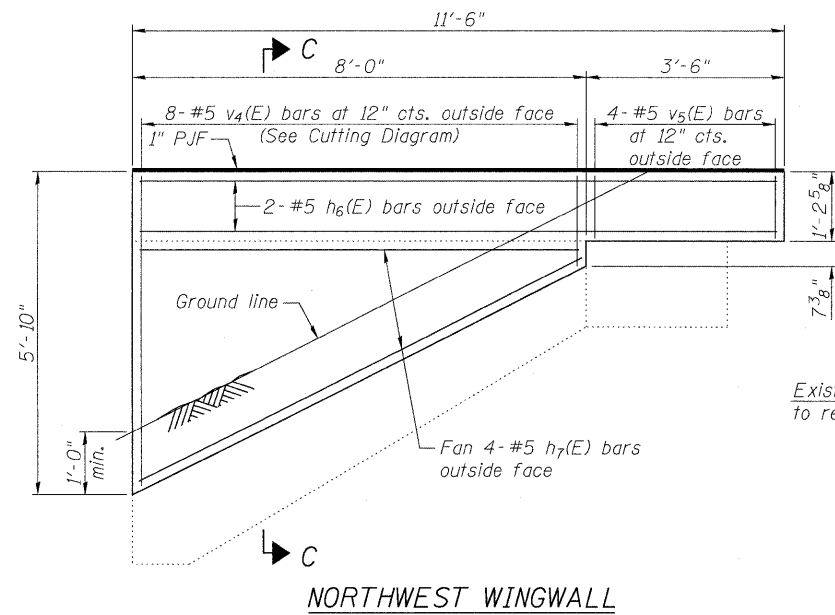
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PLOT DATE =	CHECKED - MTH	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

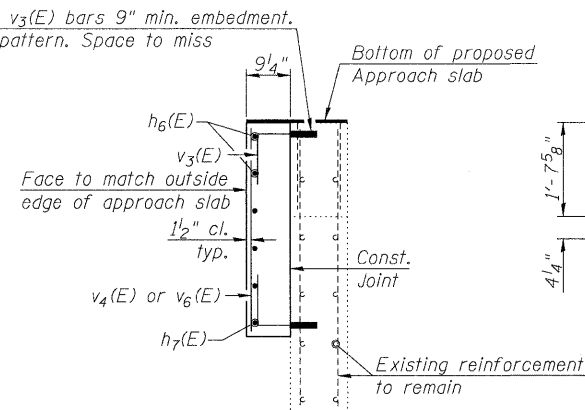
EAST ABUTMENT DETAILS  
STRUCTURE NO. 045-0037

SHEET NO. 34 OF 39 SHEETS

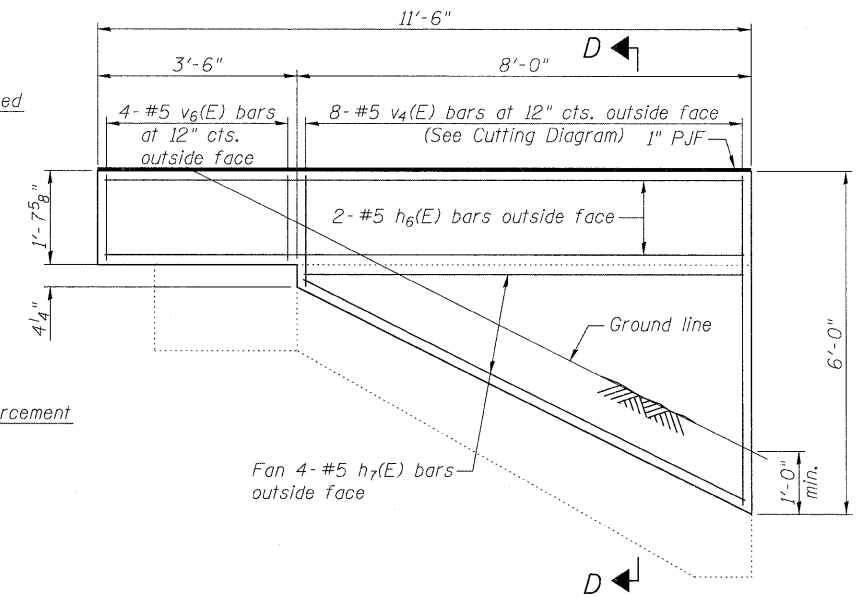
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
573	61HB-1-R	KANE	110	84
CONTRACT NO. 60K76			ILLINOIS FED. AID PROJECT	



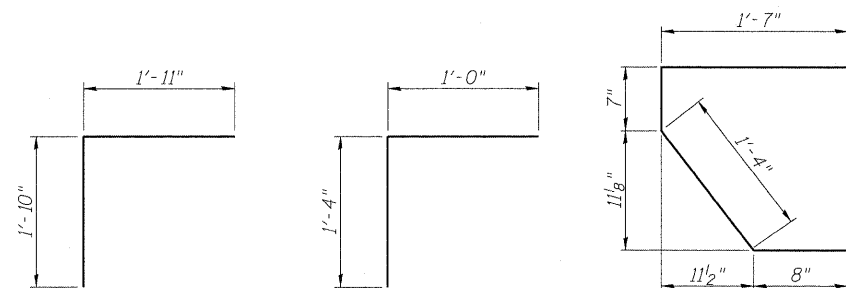
SECTION C-C



SECTION D-D



NORTHEAST WINGWALL

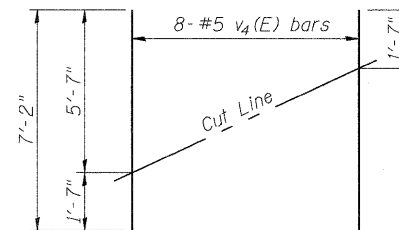


BAR v(E)

BAR v3(E)

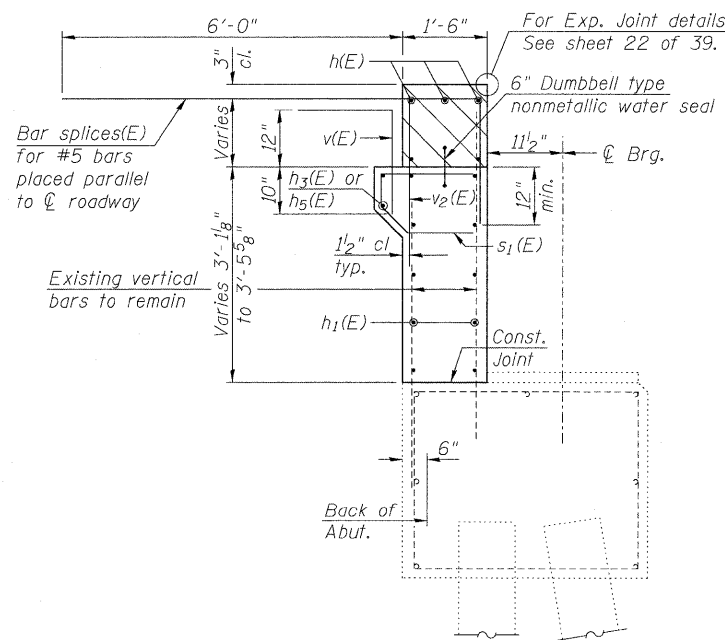
BAR s(E)

BAR s1(E)

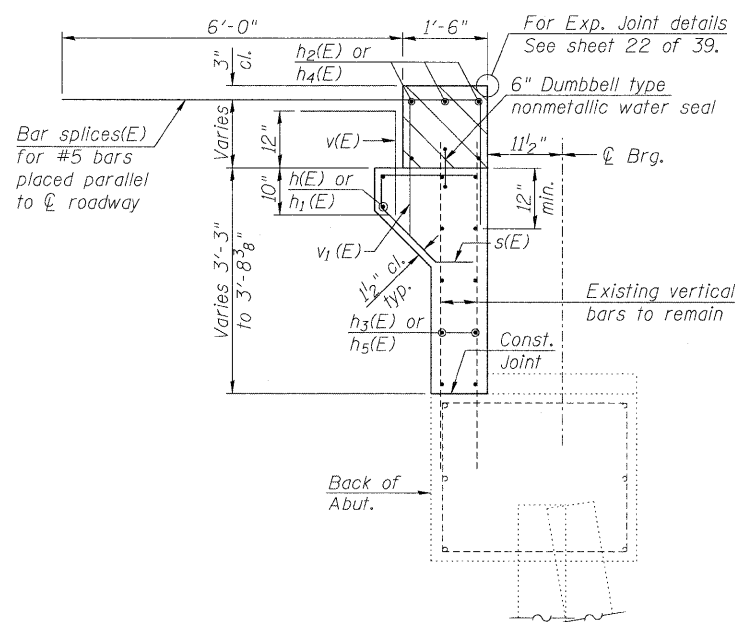


FIELD CUTTING DIAGRAM

Order v4(E) full length. Cut as shown and use remainder in other wingwall.



SECTION B-B  
(Dimensions at Right Angles)



SECTION A-A  
(Dimensions at Right Angles)

WEST ABUTMENT  
BILL OF MATERIAL

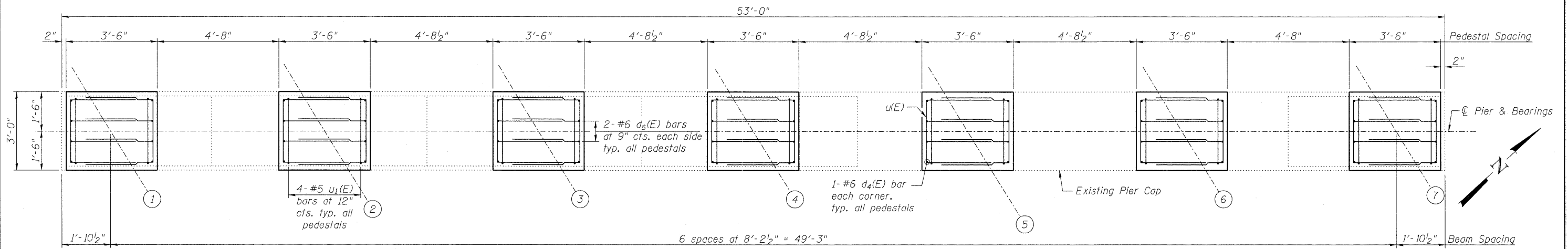
Bar	No.	Size	Length	Shape
h(E)	10	#6	25'-0"	—
h1(E)	24	#5	24'-0"	—
h2(E)	10	#6	30'-6"	—
h3(E)	24	#5	29'-9"	—
h6(E)	2	#5	11'-2"	—
h7(E)	4	#5	7'-9"	—
s(E)	49	#5	4'-2"	┌
s1(E)	55	#5	4'-0"	┌
v(E)	104	#5	3'-9"	┌
v1(E)	49	#5	2'-5"	—
v2(E)	55	#5	3'-0"	—
v3(E)	24	#5	2'-4"	┌
v4(E)	8	#5	7'-2"	—
v5(E)	4	#5	11"	—
Structure Excavation		Cu. Yd.	161.0	
Concrete Structures		Cu. Yd.	20.7	
Reinforcement Bars, Epoxy Coated		Pound	3510	
Concrete Sealer		Sq. Ft.	509	
Structural Repair of Concrete (Depth Equal to or Less than 5")		Sq. Ft.	2	

EAST ABUTMENT  
BILL OF MATERIAL

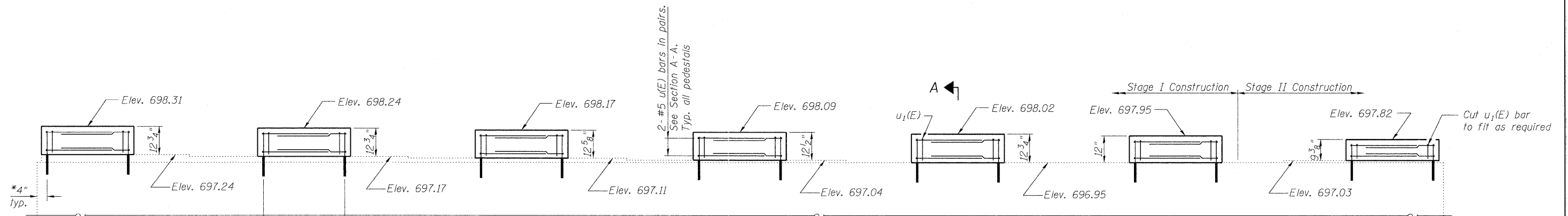
Bar	No.	Size	Length	Shape
h(E)	10	#6	25'-0"	—
h1(E)	24	#5	24'-0"	—
h4(E)	10	#6	27'-1"	—
h5(E)	24	#5	26'-3"	—
h6(E)	2	#5	11'-2"	—
h7(E)	4	#5	7'-9"	—
s(E)	42	#5	4'-2"	┌
s1(E)	55	#5	4'-0"	┌
v(E)	97	#5	3'-9"	┌
v1(E)	42	#5	2'-5"	—
v2(E)	55	#5	3'-0"	—
v3(E)	24	#5	2'-4"	┌
v4(E)	*	#5	7'-2"	—
v6(E)	4	#5	1'-4"	—
Structure Excavation		Cu. Yd.	151.0	
Concrete Structures		Cu. Yd.	20.4	
Reinforcement Bars, Epoxy Coated		Pound	3230	
Concrete Sealer		Sq. Ft.	478	
Epoxy Crack Injection		Foot	2	

\* See West Abutment bar list.

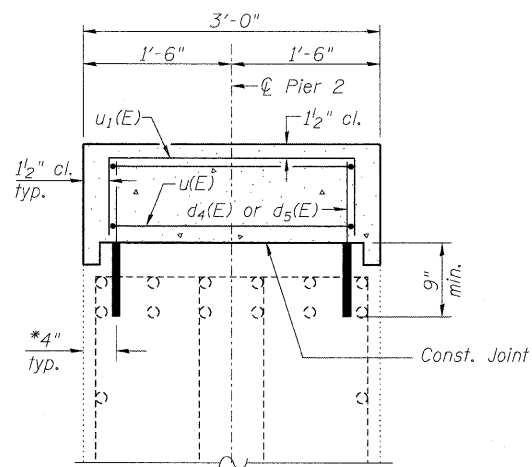
Notes:  
Hatched area to be poured after superstructure false work has been removed. Quantity of concrete included with Concrete Superstructure.  
For details of Bar Splicers, see sheet 39 of 39.



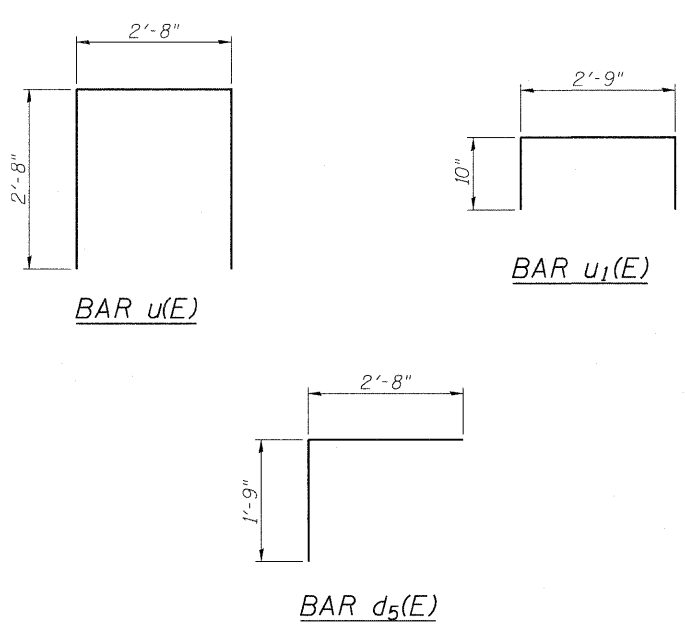
TOP PLAN OF PIER 2 (SOUTH PORTION)



ELEVATION  
(Looking West)



SECTION A-A



MIN. BAR LAP  
#5 = 2'-0"

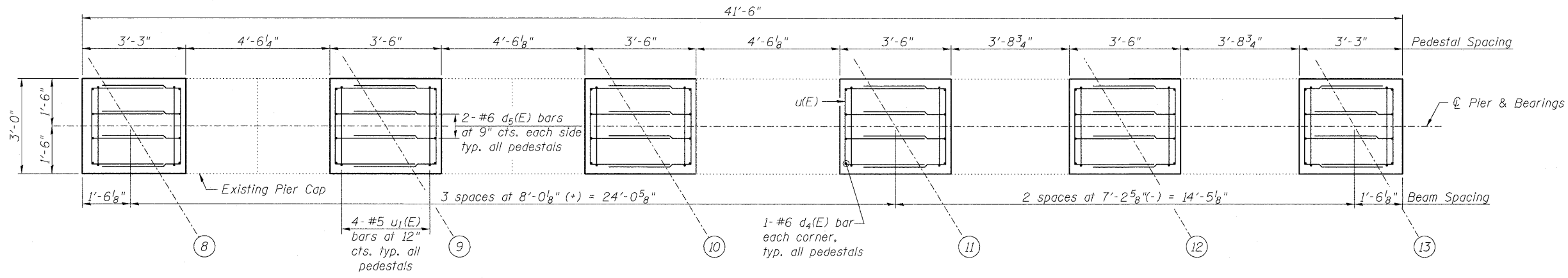
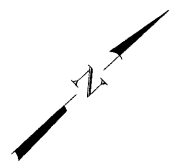
BILL OF MATERIAL  
(Pier 2-South Portion)

Bar	No.	Size	Length	Shape
d <sub>4</sub> (E)	28	#6	1'-9"	—
d <sub>5</sub> (E)	28	#6	4'-5"	—
u(E)	28	#5	8'-0"	—
u <sub>1</sub> (E)	28	#5	4'-5"	—
Concrete Structures		Cu. Yd.	2.7	
Reinforcement Bars, Epoxy Coated		Pound	630	

\* Adjust as necessary to miss existing reinforcement in cap.

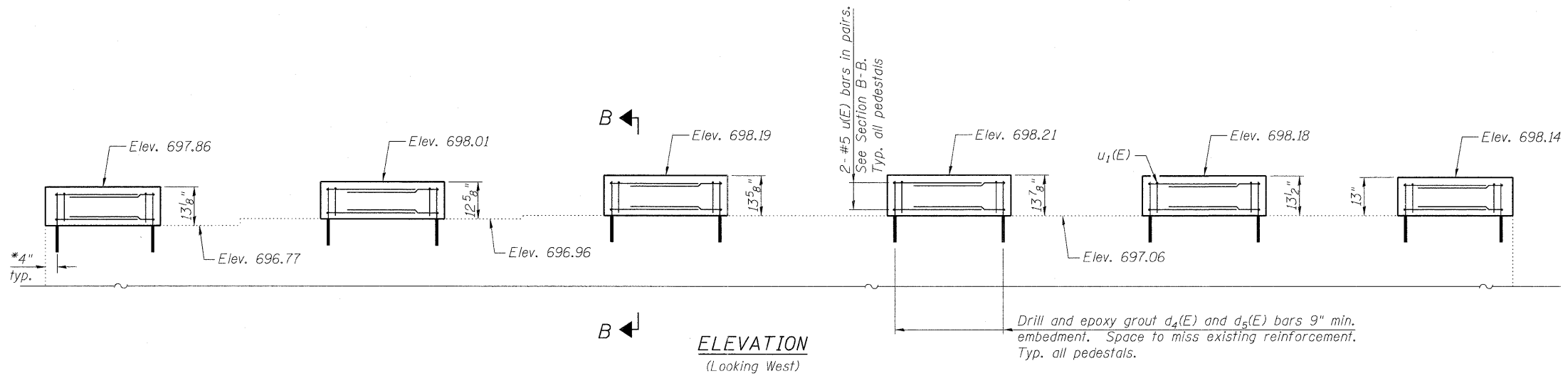
Notes:  
See sheet 30 of 39 for Anchor Bolt Layout.  
Space pedestal reinforcement to miss proposed anchor bolts.  
Prior to ordering any material, the Contractor shall verify in the field all bearing height dimensions.

(Sheet 1 of 2)



TOP PLAN OF PIER 2 (NORTH PORTION)

Stage II Construction

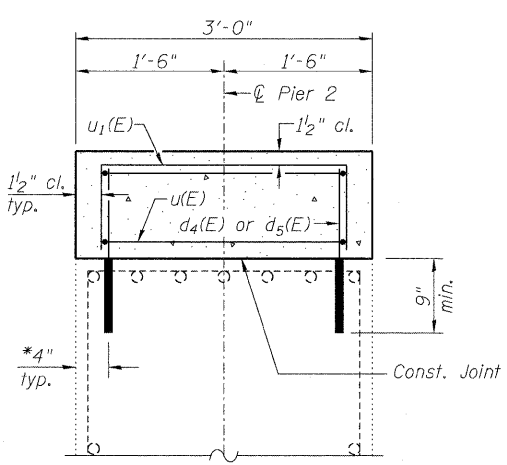


ELEVATION  
(Looking West)

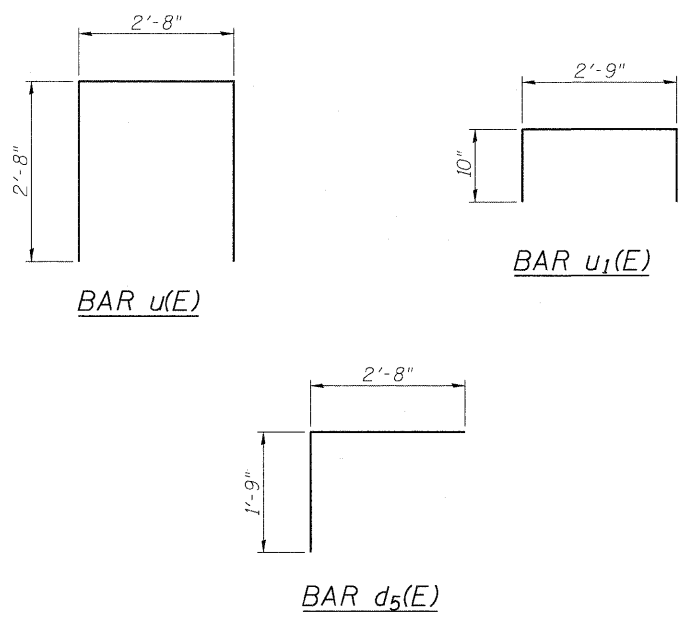
MIN. BAR LAP  
#5 = 2'-0"

BILL OF MATERIAL  
(Pier 2-North Portion)

Bar	No.	Size	Length	Shape
d <sub>4</sub> (E)	24	#6	1'-9"	—
d <sub>5</sub> (E)	24	#6	4'-5"	┘
u(E)	24	#5	8'-0"	┘
u <sub>1</sub> (E)	24	#5	4'-5"	┘
Concrete Structures			Cu. Yd.	2.5
Reinforcement Bars, Epoxy Coated			Pound	540



SECTION B-B

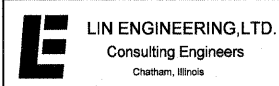


BAR u<sub>1</sub>(E)

BAR d<sub>5</sub>(E)

\* Adjust as necessary to miss existing reinforcement in cap.  
Notes:  
See sheet 30 of 39 for Anchor Bolt Layout.  
Space pedestal reinforcement to miss proposed anchor bolts.  
Prior to ordering any material, the Contractor shall verify in the field all bearing height dimensions.

(Sheet 2 of 2)



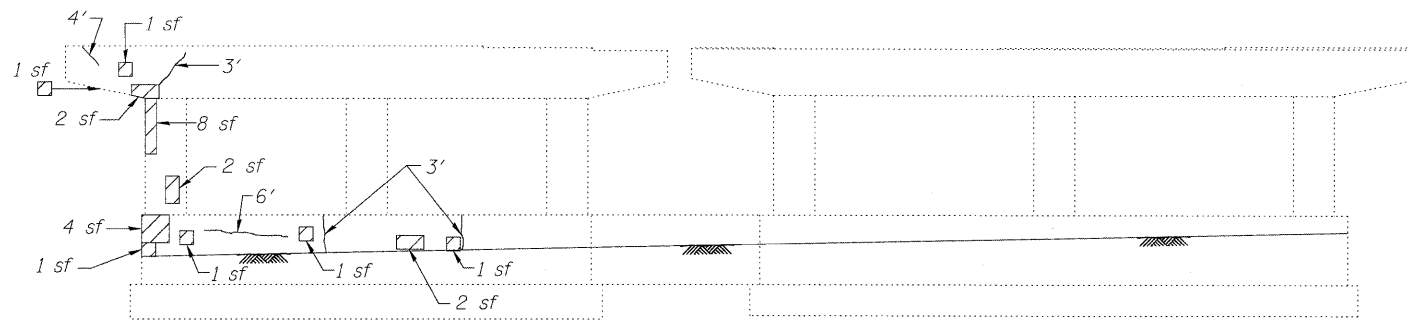
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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

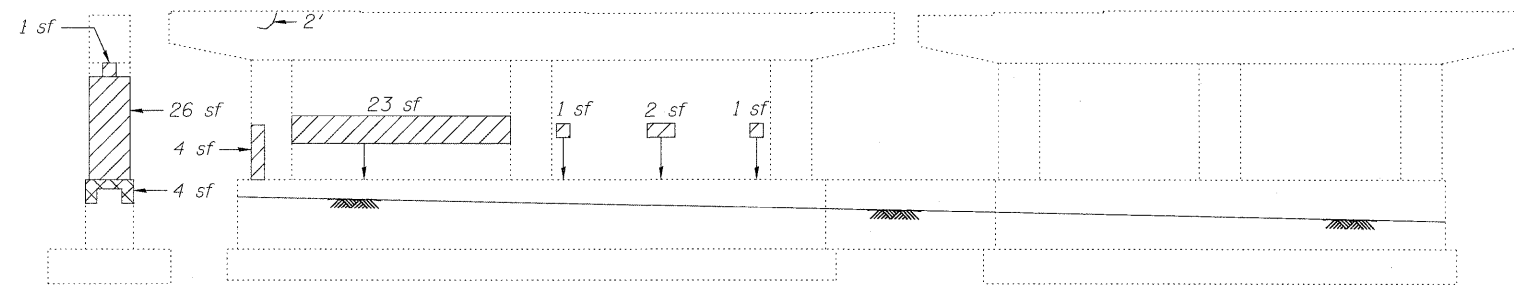
PIER 2 PEDESTAL DETAILS  
STRUCTURE NO. 045-0037

SHEET NO. 37 OF 39 SHEETS

F.A.P. RTE. = 573	SECTION = 61HB-1-R	COUNTY = KANE	TOTAL SHEETS = 110	SHEET NO. = 87
				CONTRACT NO. 60K76
ILLINOIS FED. AID PROJECT				

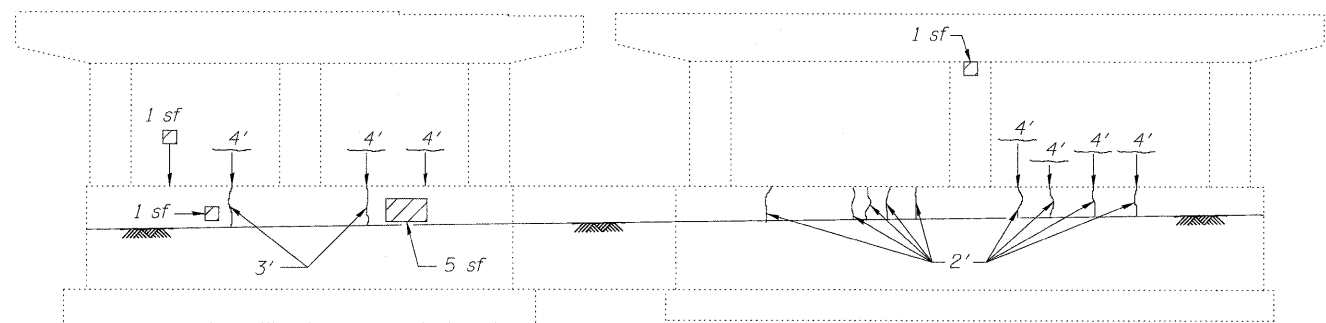


**PIER 1**  
(Looking East)

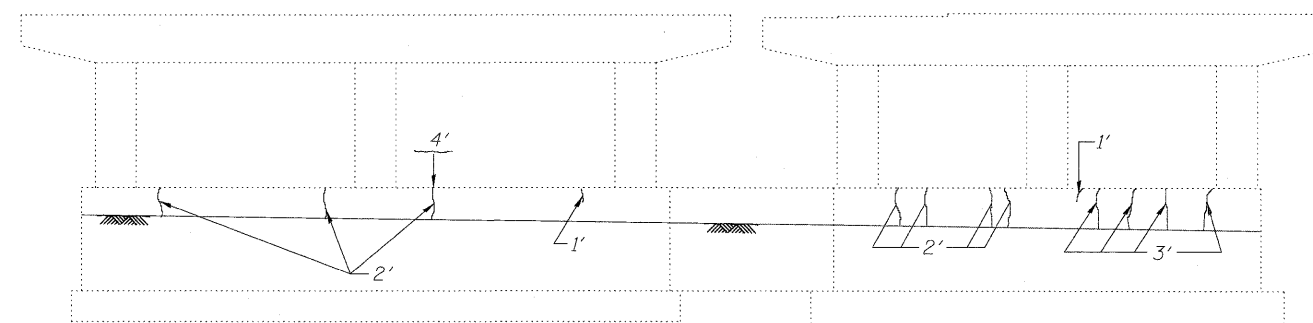


**SOUTH END**

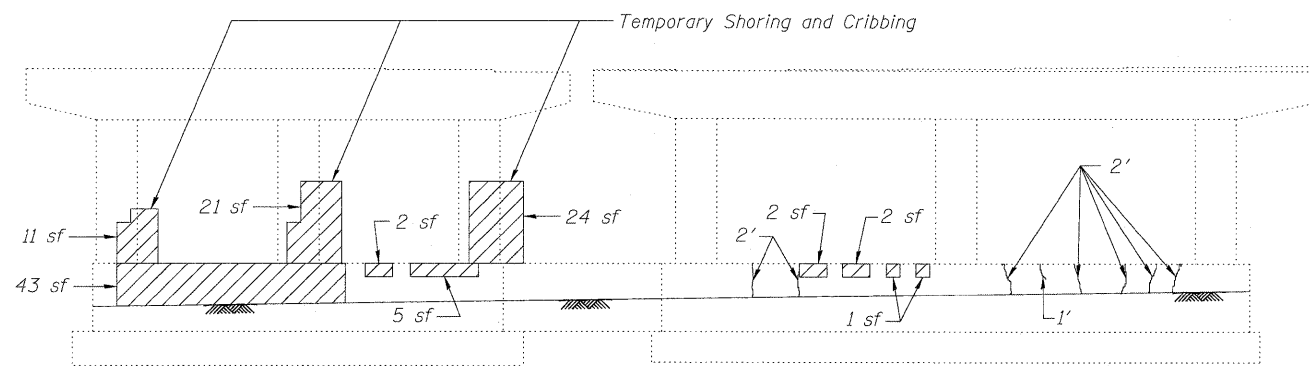
**PIER 1**  
(Looking West)



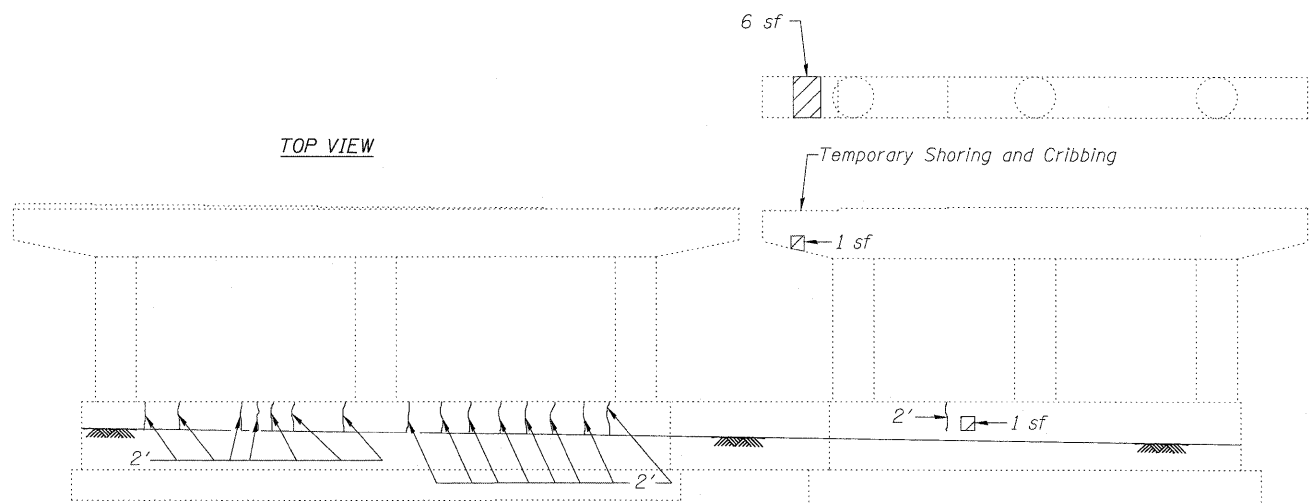
**PIER 2**  
(Looking East)



**PIER 2**  
(Looking West)



**PIER 3**  
(Looking East)



**TOP VIEW**

**PIER 3**  
(Looking West)

**LEGEND**

- Structural Repair of Concrete (Depth equal to or less than 5 in.)
- Structural Repair of Concrete (Depth greater than 5 in.)
- Epoxy Crack Injection
- sf Square Feet

**Notes:**

Temporary Shoring and Cribbing required to complete Structural Repair of Concrete shall be paid under Jacking and Cribbing. When performing the pier repair and bearing replacement at the same time, the structure shall not be jacked up from the pier. The weight must be taken off the pier in the area of the pier repair. Concrete must be cured to minimum strength for the repair before bearing can be replaced and weight put back on the pier, according to special provisions.

Repair of the existing piers shall include but may not be limited to the areas shown. The actual area to be repaired will be determined by the Engineer at the time of construction.

**BILL OF MATERIAL**

ITEM	UNIT	TOTAL
Structural Repair of Concrete (Depth equal to or less than 5 in.)	Sq. Ft.	210
Structural Repair of Concrete (Depth greater than 5 in.)	Sq. Ft.	4
Epoxy Crack Injection	Foot	152
Jacking and Cribbing	Each	4



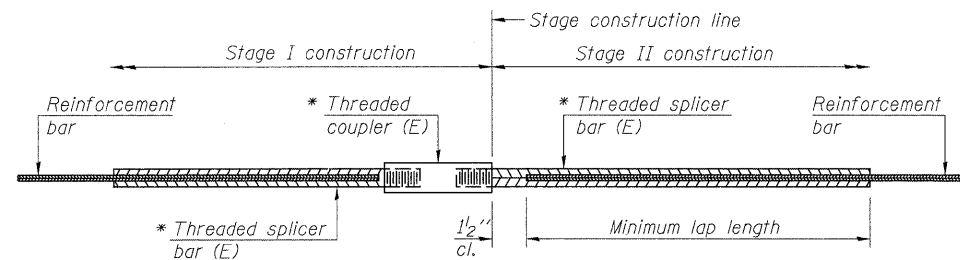
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PLOT DATE =	CHECKED - MTH	REVISED -

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

**PIER REPAIRS**  
**STRUCTURE NO. 045-0037**

SHEET NO. 38 OF 39 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
573	61HB-1-R	KANE	110	88
				CONTRACT NO. 60K76
ILLINOIS FED. AID PROJECT				



**STANDARD BAR SPLICER ASSEMBLY**

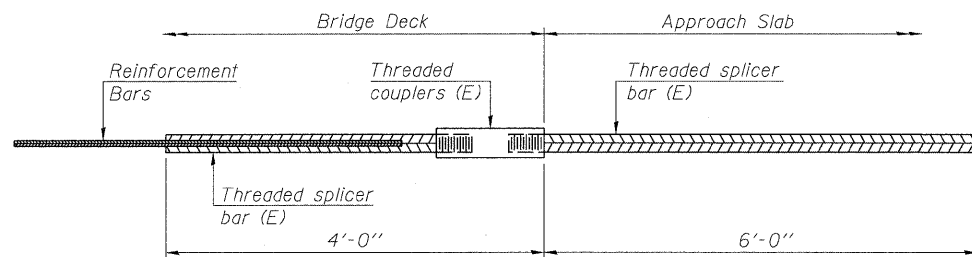
Minimum Lap Lengths					
Bar size to be spliced	Table 1	Table 2	Table 3	Table 4	Table 5
3, 4	1'-5"	1'-11"	2'-1"	2'-4"	2'-3"
5	1'-9"	2'-5"	2'-7"	2'-11"	2'-10"
6	2'-1"	2'-11"	3'-1"	3'-6"	3'-4"
7	2'-9"	3'-10"	4'-2"	4'-8"	4'-6"
8	3'-8"	5'-1"	5'-5"	6'-2"	5'-10"
9	4'-7"	6'-5"	6'-10"	7'-9"	7'-5"

- Table 1: Black bar, 0.8 Class C
- Table 2: Black bar, Top bar lap, 0.8 Class C
- Table 3: Epoxy bar, 0.8 Class C
- Table 4: Epoxy bar, Top bar lap, 0.8 Class C
- Table 5: Epoxy bar, Top bar lap, Class B

Threaded splicer bar length = min. lap length + 1/2" + thread length

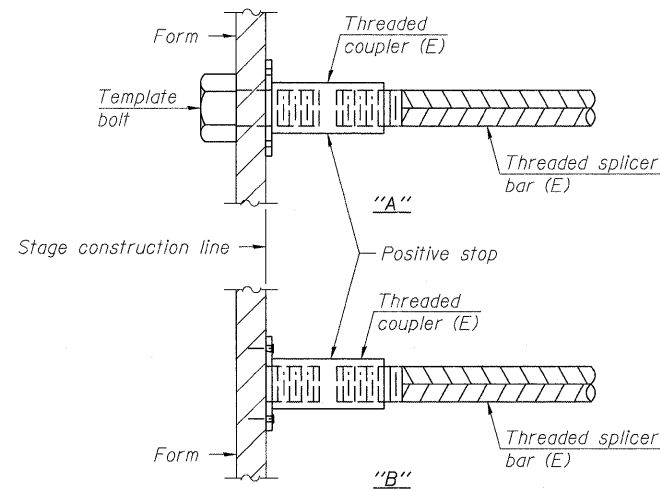
\* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Table for minimum lap length
Deck Slab	#6	16	Table 3
Deck Slab	#5	782	Table 3
Approach Slab	#4	50	Table 4
Approach Slab	#5	92	Table 3
Approach Footing	#5	80	Table 3
Abutments	#5	24	Table 3
Abutments	#6	10	Table 3



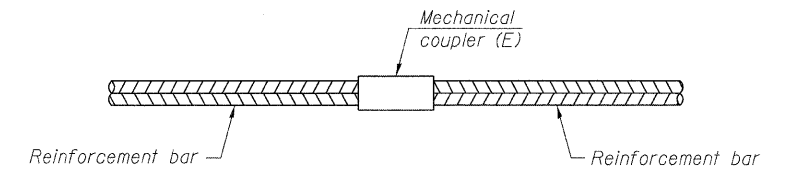
**BAR SPLICER ASSEMBLY FOR #5 BAR ON INTEGRAL OR SEMI-INTEGRAL ABUTMENTS**

No. required =



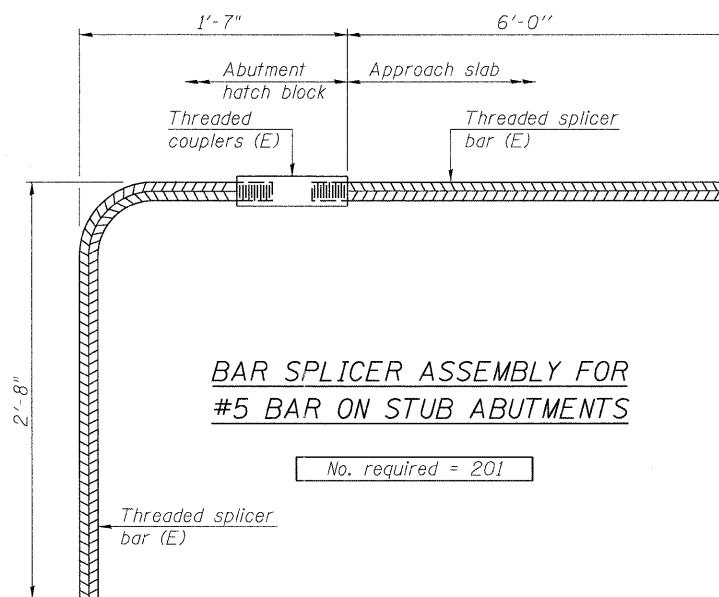
**INSTALLATION AND SETTING METHODS**

- "A" : Set bar splicer assembly by means of a template bolt.
- "B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.
- (E) : Indicates epoxy coating.



**STANDARD MECHANICAL SPLICER**

Location	Bar size	No. assemblies required



**BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS**

No. required = 201

**NOTES**

- Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.
- All reinforcement shall be lapped and tied to the splicer bars.
- Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.
- See special provision for Mechanical Splicers.
- See approved list of bar splicer assemblies and mechanical splicers for alternatives.

BSD-1 7-1-10



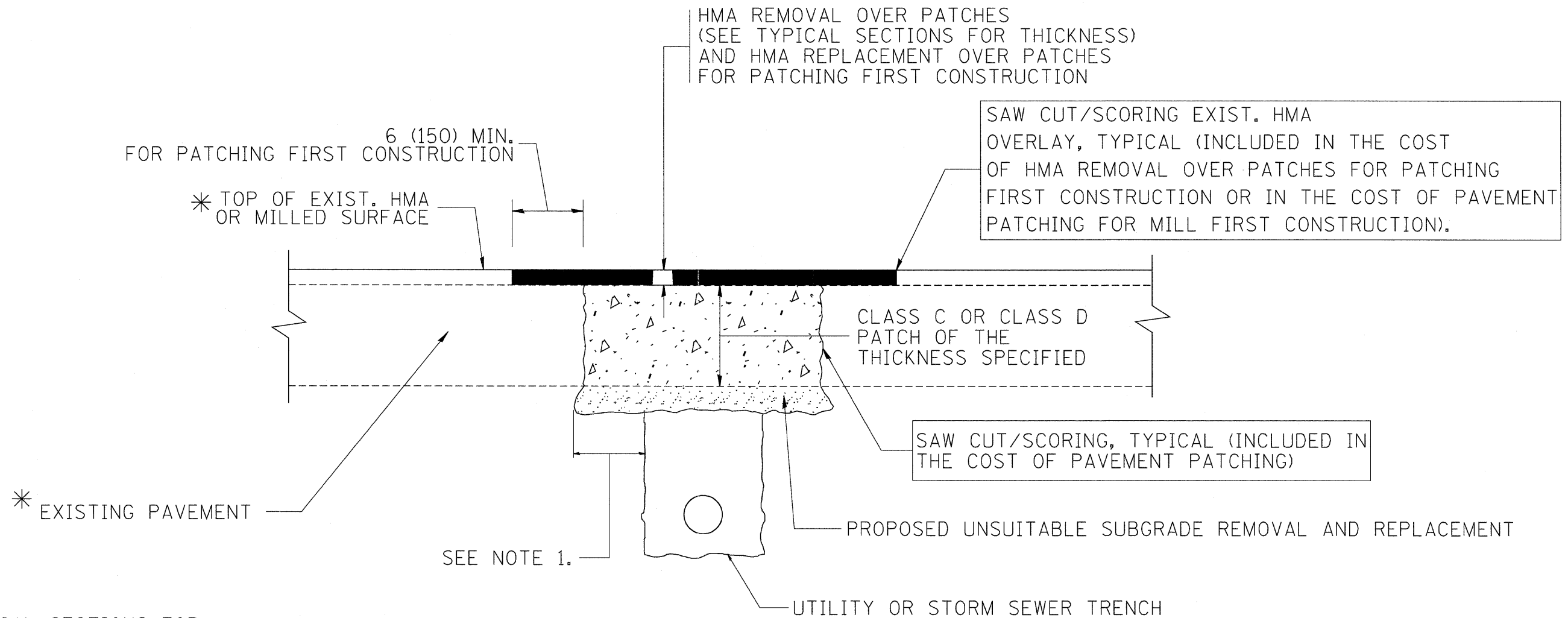
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FILE NAME =	CHECKED - ADB	REVISED -
PLOT SCALE =	DRAWN - AJF	REVISED -
PLOT DATE =	CHECKED - MTH	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS  
STRUCTURE NO. 045-0037

SHEET NO. 39 OF 39 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
573	61HB-1-R	KANE	110	89
CONTRACT NO. 60K76				
ILLINOIS FED. AID PROJECT				



\* SEE TYPICAL SECTIONS FOR THICKNESS AND MATERIALS

**NOTES:**

1. THE WIDTH OF THE FULL DEPTH PATCH OVER A TRENCH SHALL BE 12 (300) WIDER ON EACH SIDE OF THE TRENCH.
2. FOR METHOD OF MEASUREMENT AND BASIS OF PAYMENT, SEE RECURRING SPECIAL PROVISION "PATCHING WITH HOT-MIX ASPHALT OVERLAY REMOVAL".

SEQUENCE OF CONSTRUCTION (PATCHING FIRST)

1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.
2. REMOVE AND REPLACE WITH CLASS C OR D PATCH.
3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

SEQUENCE OF CONSTRUCTION (MILLING FIRST)

1. MILL HMA FIRST IF THERE IS AT LEAST 4 1/2 INCHES OR MORE OF HMA MATERIAL ON TOP OF THE EXISTING PAVEMENT OR IF THE PAVEMENT IS FULL DEPTH HMA. A MINIMUM OF 2 INCHES OF HMA MATERIAL SHALL BE IN PLACE AFTER MILLING.
2. REMOVE AND REPLACE WITH FULL DEPTH CLASS D PATCHES TO TOP OF MILLED SURFACE.

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

FILE NAME = c:\projects\distatd22x34\bd22.dgn	USER NAME = bauerdl	DESIGNED - R. SHAH	REVISED - A. ABBAS 04-27-98
		DRAWN -	REVISED - R. BORO 01-01-07
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	PLOT DATE = 10/27/2008	DATE - 10-25-94	REVISED - K. ENG 10-27-08

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**PAVEMENT PATCHING FOR  
HMA SURFACED PAVEMENT**

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

F.A.P. RTE. 573	SECTION 61HB-1-R	COUNTY KANE	TOTAL SHEETS 110	SHEET NO. 90
BD400-04 (BD-22)			CONTRACT NO. 60K76	
FED. ROAD DIST. NO. 1   ILLINOIS FED. AID PROJECT				



VARIABLE - TO MEET EXISTING DIMENSIONS AND FIELD CONDITIONS (SEE NOTE ②)

PROP. CONC. CURB OR CURB AND GUTTER REPLACEMENT IN ACCORDANCE WITH STATE STANDARD 606001. (SEE NOTE ②)

SAW CUT FULL DEPTH - INCLUDED IN THE COST OF SIDEWALK, DRIVEWAY OR MEDIAN SURFACE REMOVAL PAY ITEM.

SEE STATE STANDARD 606001  
EXISTING OR PROPOSED HMA SURFACE (IF APPLICABLE)

1/4" (5) \*\*

18" (450) MAX.

EXISTING SIDEWALK, DRIVEWAY, MEDIAN SURFACE, SOD OR GROUND.

PROPOSED SIDEWALK, DRIVEWAY PAVEMENT, MEDIAN SURFACE OR SODDING SALT TOLERANT WITH TOP SOIL, 4" (100) SOD RESTORATION (SEE NOTE ①).

SUITABLE BACKFILL MATERIAL (INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT)

PROPOSED 3/4" (20) PREFORMED EXPANSION JOINT AT CONCRETE SIDEWALKS, DRIVEWAYS, AND MEDIANS. (INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.)

UNSUITABLE SUB-BASE MATERIAL TO BE REMOVED, IF DIRECTED BY THE ENGINEER, SHALL BE REPLACED WITH EITHER SUB-BASE GRANULAR MATERIAL, TYPE B OR ADDITIONAL THICKNESS OF CONCRETE.

REMOVAL AND REPLACEMENT 4" (100) OR LESS IS INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.

REMOVAL AND REPLACEMENT IN EXCESS OF 4" (100) WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS.

PROPOSED #6 (20) EPOXY COATED TIE BARS 24" (600) LONG AT 24" (600) CENTERS WILL NOT BE PAID FOR SEPARATELY. DELETE EPOXY COATED TIE BARS IF EXISTING TIE BARS ARE USUABLE AS DETERMINED BY THE ENGINEER. (SEE NOTE ③).

**BASIS OF PAYMENT:**

THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT (METER) FOR "CURB REMOVAL AND REPLACEMENT" OR "COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT".

3" (75) MIN.

\* 3" (75) MINIMUM FROM TOP AND BOTTOM OF THE CONCRETE PAVEMENT OR BASE COURSE.

\*\* IF THE FINAL SURFACE OF THE PAVEMENT IS CONCRETE, THE GUTTER IS TO BE FLUSH WITH THE PAVEMENT.

NOTE: ① SIDEWALK, DRIVEWAY PAVEMENT OR MEDIAN SURFACE SHALL BE SIMILAR TO THE MATERIAL BEING REMOVED AND WILL BE PAID FOR SEPARATELY.

SODDING, SALT TOLERANT AND TOP SOIL, FURNISH AND PLACE 4" WILL BE PAID FOR SEPARATELY,

② FERTILIZER FOR THE PLACEMENT OF THE SOD IS NOT REQUIRED

③ CURB OR CURB AND GUTTER REPLACEMENT SHALL MATCH THE SHAPE OF THE EXISTING CURB OR CURB AND GUTTER UNLESS OTHERWISE SPECIFIED.

④ FOR CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT ADJACENT TO FLEXIBLE PAVEMENT DELETE EPOXY COATED TIE BARS.

⑤ LONGITUDINAL BARS, IF ENCOUNTERED IN THE EXISTING CURB OR CURB AND GUTTER, ARE NOT TO BE REPLACED. CUTTING AND REMOVING LONGITUDINAL BARS SHALL BE INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.

⑥ THE COST OF HMA SURFACE REMOVAL IN THE EXISTING GUTTER FLAG SHALL BE INCLUDED IN THE COST OF THE CURB AND GUTTER REMOVAL AND REPLACEMENT.

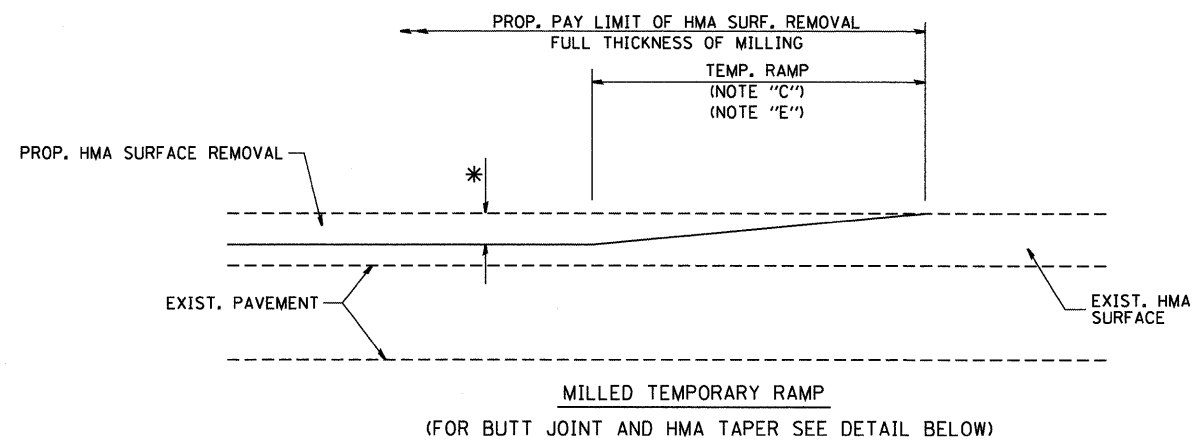
⑦ THE REMOVAL AND REPLACEMENT OF THE EXISTING CURB OR CURB AND GUTTER SHALL BE DONE IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF SECTION 440 AND 606 OF THE STANDARD SPECIFICATIONS.

⑧ THE LOCATIONS OF REMOVAL AND REPLACEMENT OF EXISTING CURB OR CURB AND GUTTER SHALL BE DETERMINED BY THE RESIDENT ENGINEER AT THE TIME OF CONSTRUCTION.

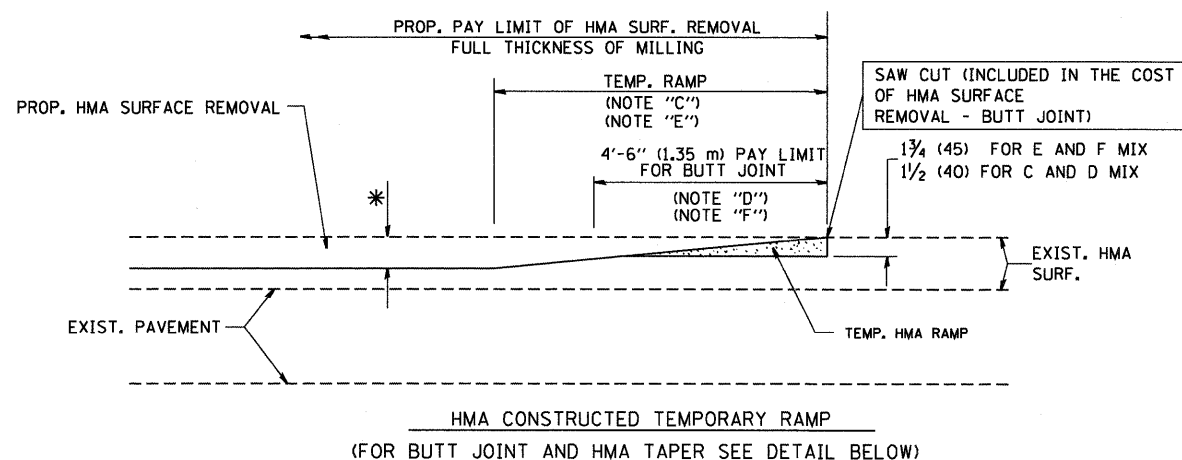
# CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

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

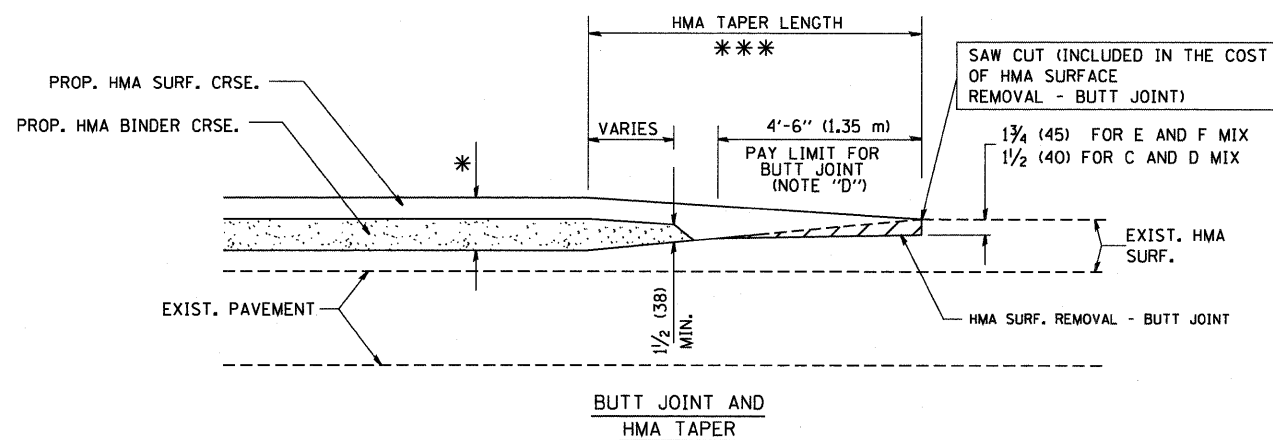
FILE NAME =	USER NAME = drivakosgn	DESIGNED - A. HOUSEH	REVISED - R. SHAH 10-03-96	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ci:\pwork\pwidot\drivakosgn\d0108315\bd24.dgn	DRAWN -	REVISED - A. ABBAS 03-21-97	573			61HB-1-R	KANE	110	91	
PLOT SCALE = 50.000' / IN.	CHECKED -	REVISED - M. GOMEZ 01-22-01	<b>BD600-06 (BD-24)</b>			<b>CONTRACT NO. 60K76</b>				
PLOT DATE = 12/15/2009	DATE - 03-11-94	REVISED - R. BORO 12-15-09	SCALE: NONE			SHEET NO. 1 OF 1 SHEETS	STA. TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT		



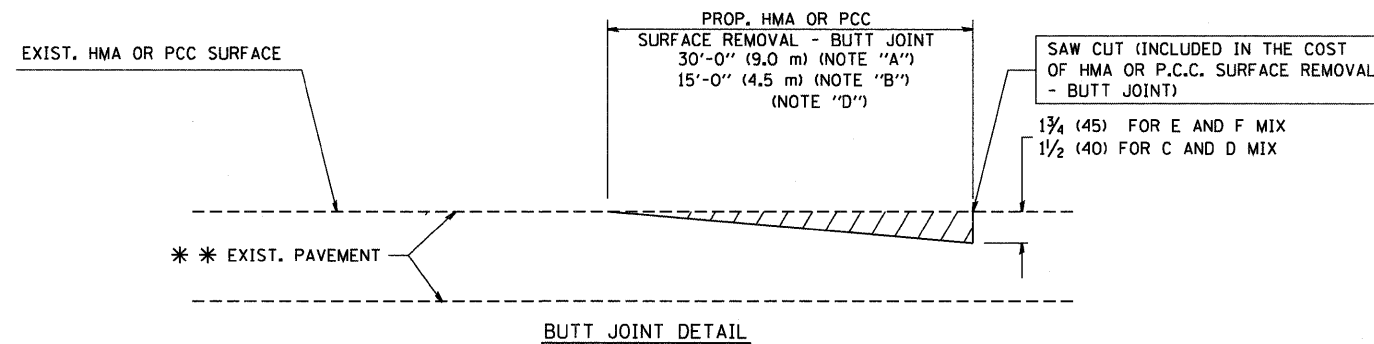
**OPTION 1**



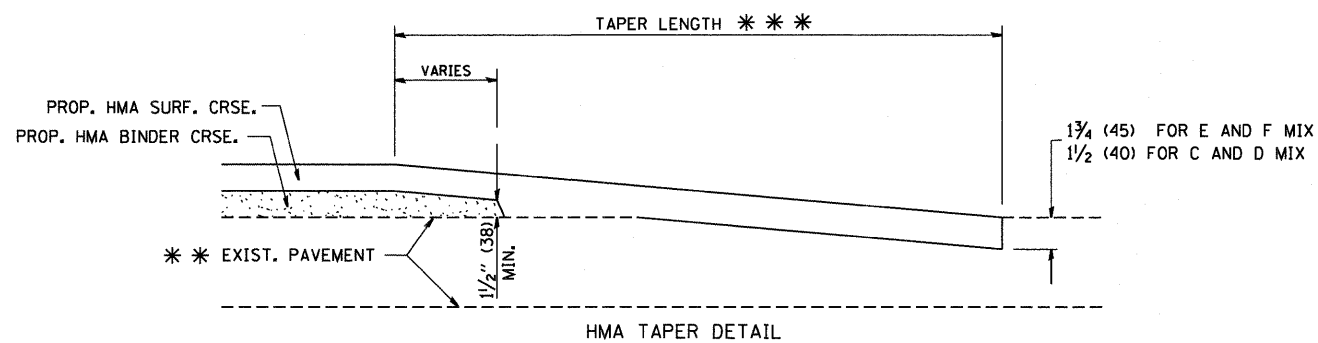
**OPTION 2  
TYPICAL TEMPORARY RAMP**



**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.

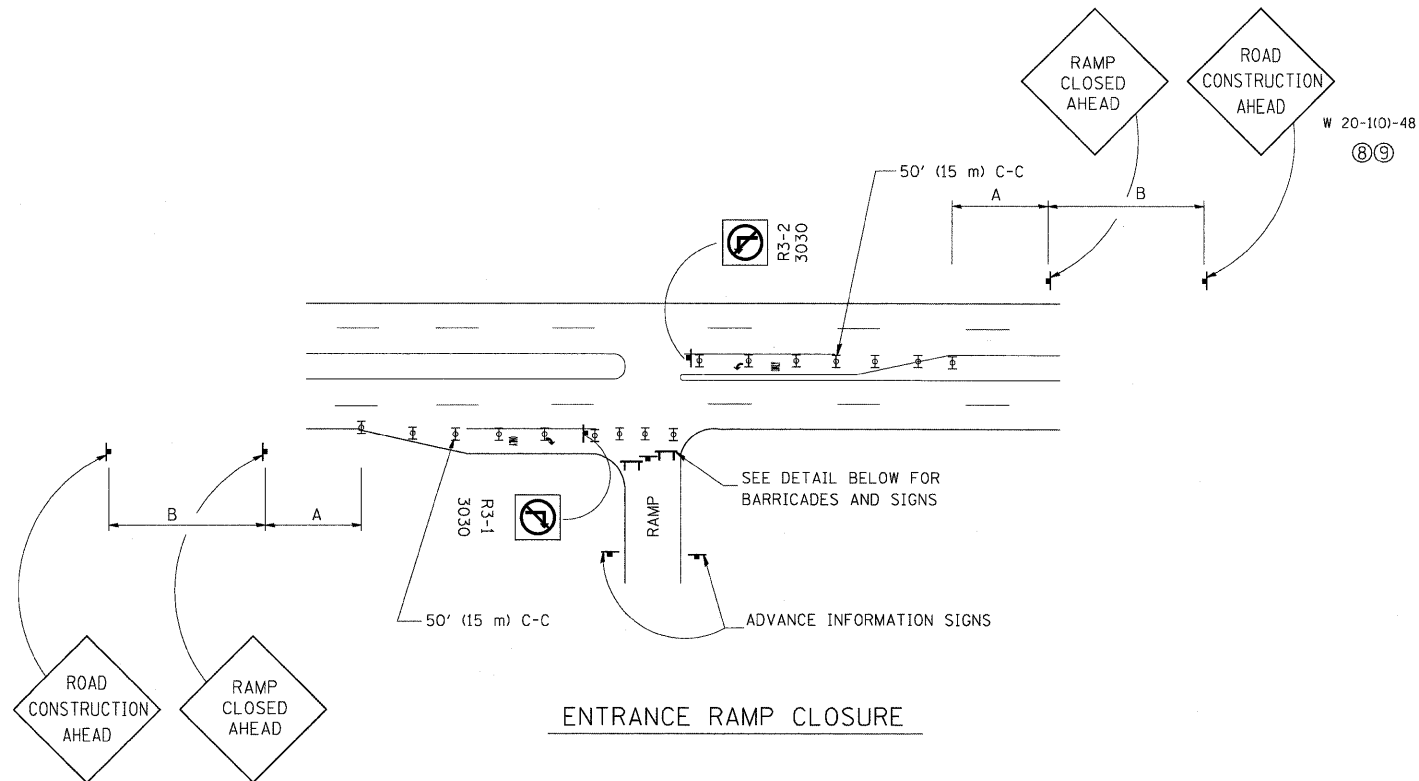
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		DRAWN -	REVISED - A. ABBAS 03-21-97
	PLOT SCALE = 50.0000 "/ IN.	CHECKED -	REVISED - M. GOMEZ 04-06-01
	PLOT DATE = 1/4/2008	DATE - 06-13-90	REVISED - R. BORO 01-01-07

**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.P. RTE. 573	SECTION 61HB-1-R	COUNTY KANE	TOTAL SHEETS 110	SHEET NO. 92
BD400-05 BD32			CONTRACT NO. 60K76	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

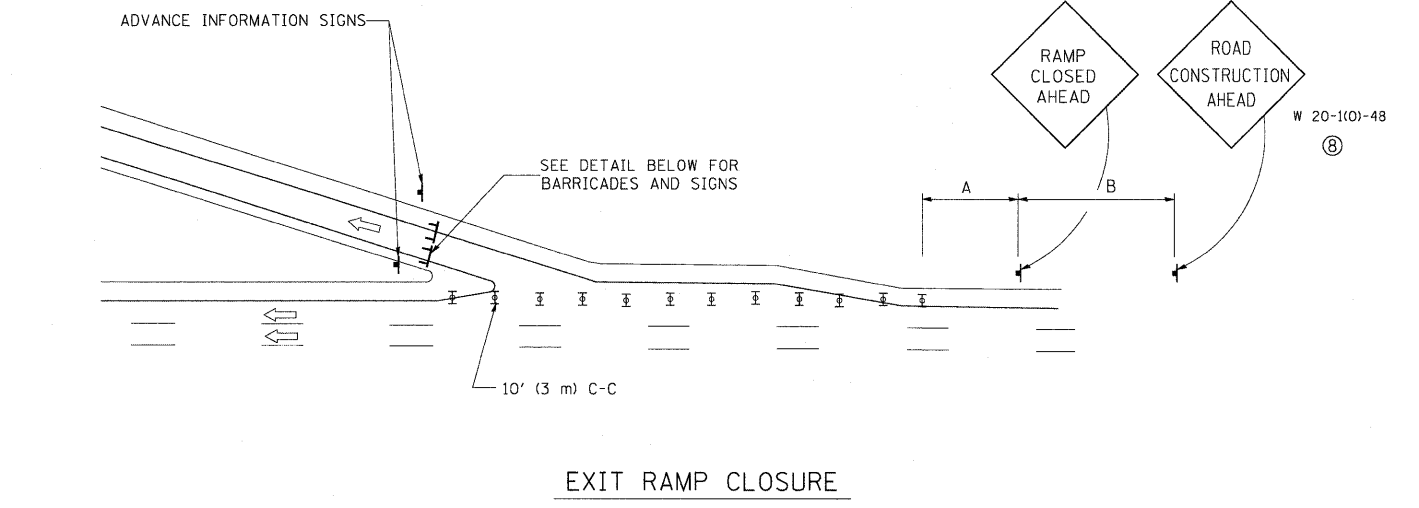


**ENTRANCE RAMP CLOSURE**

**SIGN SPACING TABLE**

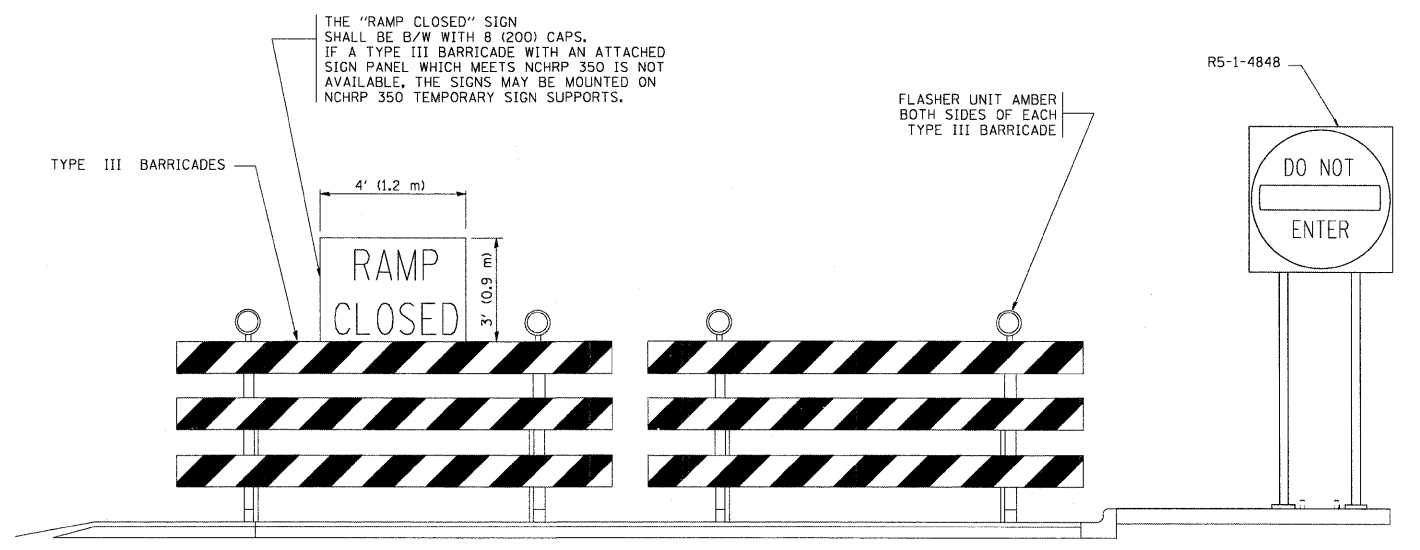
FACILITY	DISTANCE BETWEEN SIGNS	
	A	B
EXPRESSWAY >24 HOURS	1000' (300 m)	1500' (450 m)
EXPRESSWAY ≤24 HOURS	500' (150 m)	500' (150 m)
ARTERIAL ≥45 MPH	350' (100 m)	350' (100 m)
ARTERIAL <45 MPH	150' (45 m)	150' (45 m)

DISTANCES MAY BE SHORTENED DEPENDING UPON THE PROXIMITY OF ADJACENT RAMPS OR INTERSECTIONS.



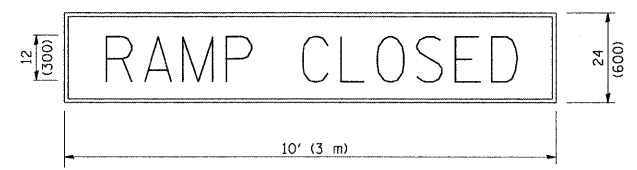
**EXIT RAMP CLOSURE**

- SYMBOLS**
- ⊥ TYPE II BARRICADE, DRUM OR VERTICAL BARRICADE WITH STEADY BURN MONO-DIRECTIONAL LIGHT
  - ⊥ TYPE III BARRICADE WITH FLASHING LIGHT



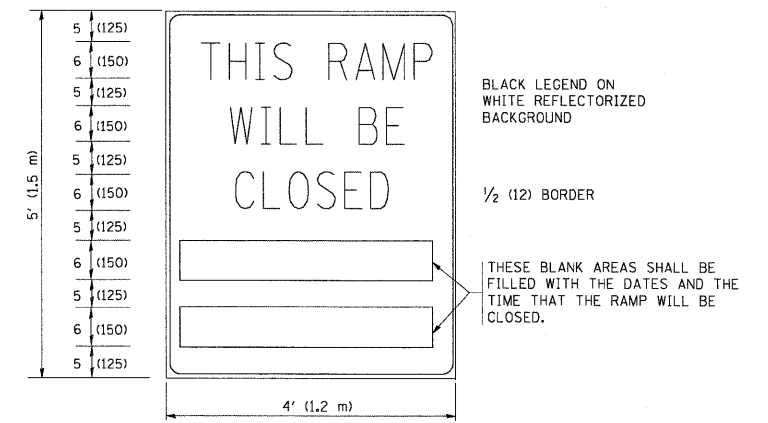
**DETAIL FOR REQUIRED BARRICADES & SIGNS**

**RAMP CLOSURE ADVANCE WARNING SIGN**



BLACK LEGEND ON ORANGE REFLECTORIZED BACKGROUND  
1 (25) BORDER  
THESE SIGNS ARE REQUIRED ON ALL THE EXIT GUIDE SIGNS FOR THE CLOSED EXIT RAMPS.

**RAMP CLOSURE ADVANCE INFORMATION SIGN**

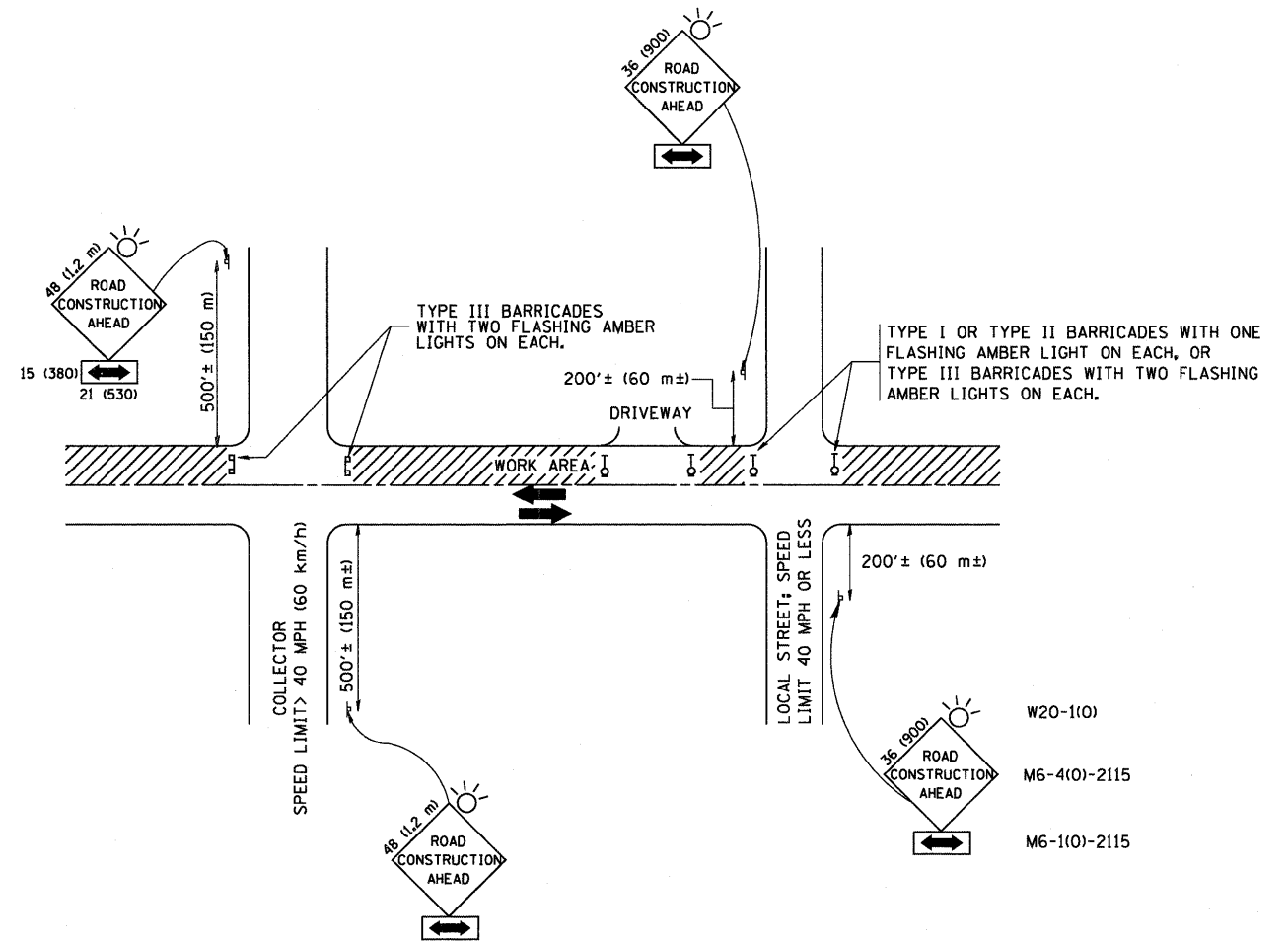


THESE SIGNS ARE REQUIRED ON BOTH SIDES OF THE RAMP, MINIMUM OF 1 WEEK IN ADVANCE OF THE CLOSURE.

**GENERAL NOTES:**

- ① CONES MAY BE SUBSTITUTED FOR DRUMS OR TYPE II BARRICADES DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (700) HIGH.
- ② STEADY BURN LIGHTS WILL NOT BE REQUIRED FOR DAY OPERATIONS.
- ③ A FLAGGER SHALL BE POSITIONED AT EACH CLOSED RAMP THAT IS OPEN TO CONSTRUCTION VEHICLES.
- ④ ALL ROUTE MARKERS AND TRAILBLAZER ASSEMBLIES WHICH DIRECT MOTORISTS TO A CLOSED ENTRANCE RAMP SHALL BE COVERED.
- ⑤ THE SIGNING AND BARRICADING WHICH IS REQUIRED BY THIS DETAIL SHALL BE INCLUDED IN THE COST OF TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS).
- ⑥ AUTHORIZATION FROM THE DISTRICT'S BUREAU OF TRAFFIC IS REQUIRED FOR ALL RAMP CLOSURES.
- ⑦ THE RAMP CLOSURE ADVANCE INFORMATION SIGNS SHALL BE ERECTED IF THE CLOSURE TIME EXCEEDS TWENTY-FOUR (24) HOURS. ADDITIONAL ADVANCE WARNING SIGNS ON EXIT GUIDE SIGNING WILL BE REQUIRED FOR EXIT RAMP CLOSURES THAT EXCEED TWENTY-FOUR (24) HOURS IN LENGTH.
- ⑧ ROAD CONSTRUCTION AHEAD SIGNS MAY BE OMITTED WHEN THIS DETAIL IS USED IN CONJUNCTION WITH OTHER TRAFFIC CONTROL THAT ALREADY INCLUDES A ROAD CONSTRUCTION AHEAD SIGN.
- ⑨ ARTERIAL ROAD CONSTRUCTION AHEAD SIGNS MAY BE OMITTED ON CLOSURES LESS THAN 24 HOURS IN DURATION.

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



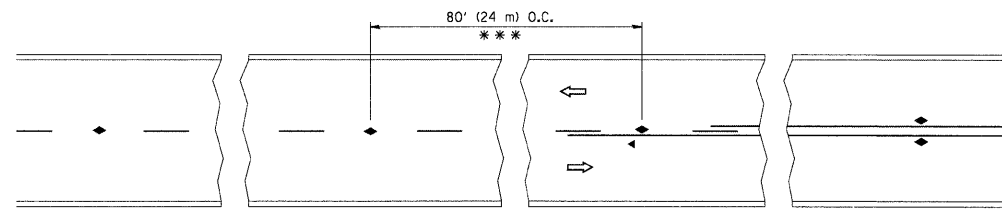
TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

NOTES:

- A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS
- 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:
    - ONE ROAD CONSTRUCTION AHEAD SIGN 36 x 36 (900x900) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
    - 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.
  - SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
    - 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.
    - 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. 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).
- B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:
- USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.
- C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.
- D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

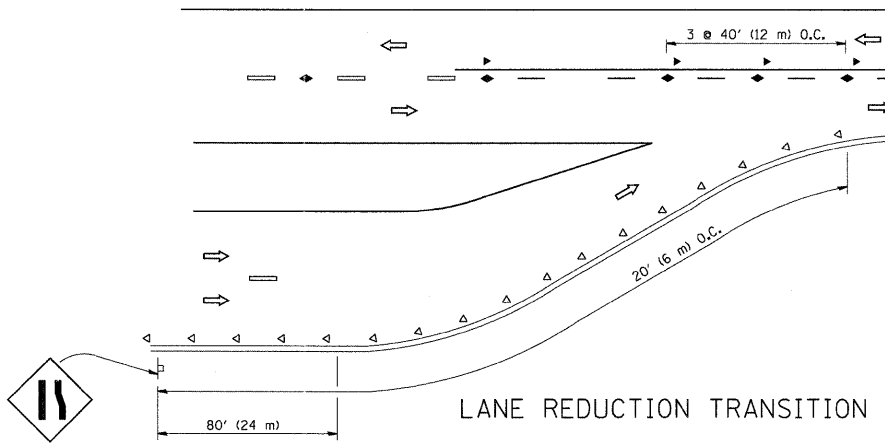
All dimensions are in millimeters (inches) unless otherwise shown.

FILE NAME = M:\dststd\22x34\tc10.dgn	USER NAME = gegljanobt	DESIGNED - LHA	REVISED - J. OBERLE 10-18-95	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS</b>			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 50.000' / IN.	DRAWN -	REVISED - A. HOUSEH 03-06-96		573	61HB-1-R	KANE	110	94			
	PLOT DATE = 1/4/2008	CHECKED -	REVISED - A. HOUSEH 10-15-96		TC-10			CONTRACT NO. 60K76				
	DATE - 06-89	REVISED - T. RAMMACHER 01-06-00		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

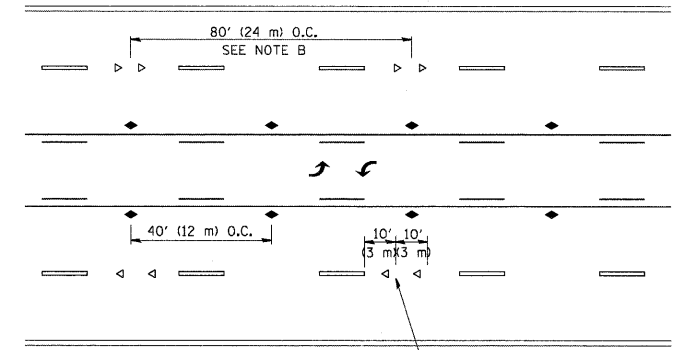


\*\*\* REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

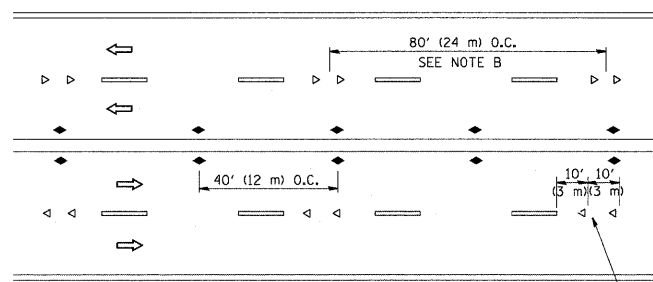
TWO-LANE/TWO-WAY



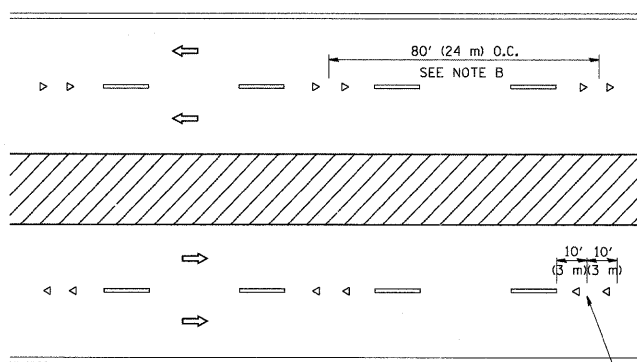
LANE REDUCTION TRANSITION



TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

GENERAL NOTES

1. MARKERS USED WITH DASHED LINES SHALL BE CENTERED IN THE GAP BETWEEN SEGMENTS.
2. MARKERS USED ADJACENT TO SOLID LINES SHALL BE OFFSET 2 TO 3 (50 TO 75) TOWARD TRAFFIC AS SHOWN.
3. MARKERS THROUGH TANGENTS LESS THAN 500' (150 m) IN LENGTH BETWEEN CURVES SHALL BE INSTALLED AT THE LESSER OF THE TWO CURVE SPACINGS.

SYMBOLS

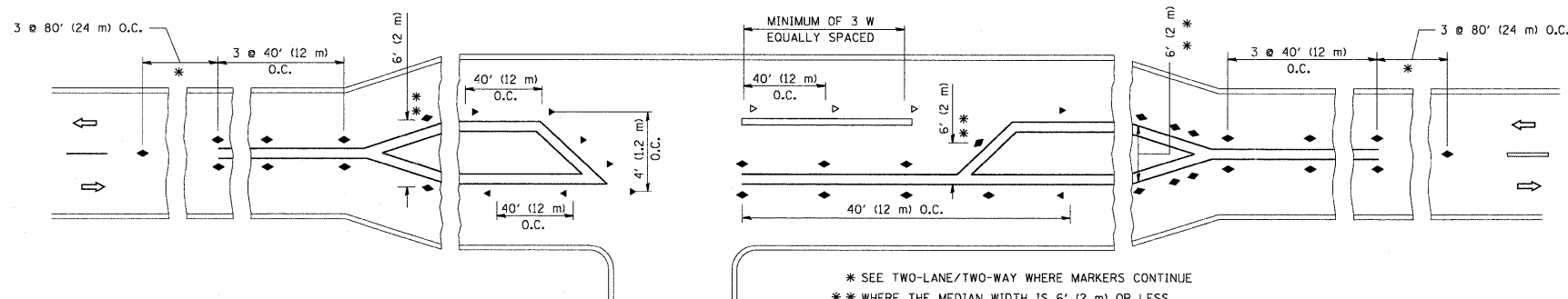
- YELLOW STRIPE
- WHITE STRIPE
- ◀ ONE-WAY AMBER MARKER
- ◁ ONE-WAY CRYSTAL MARKER (W/O)
- ◆ TWO-WAY AMBER MARKER

LANE MARKER NOTES

- A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.
- B. REDUCE TO 40' (12 m) O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 10 M.P.H. (20 km/h) LOWER THAN POSTED SPEEDS.

DESIGN NOTES

1. DOUBLE LANE LINE MARKERS SHALL BE USED UNLESS SPECIFIED OTHERWISE.
2. EXCEPT AS SHOWN ON THE LANE REDUCTION TRANSITION AND FREEWAY EXIT RAMP DETAIL, MARKERS ARE NOT TO BE SPECIFIED ON RIGHT EDGE LINES.
3. THE EXACT MARKER LIMITS, SPACING, AND COLOR SHOULD BE INCLUDED IN THE PLANS.
4. MARKERS SHOULD NOT BE USED ALONGSIDE CURBS EXCEPT FOR EXTREMELY SHORT SECTIONS OF CURBS WHERE NOT MORE THAN TWO MARKERS WOULD BE INVOLVED.



LEFT TURN

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

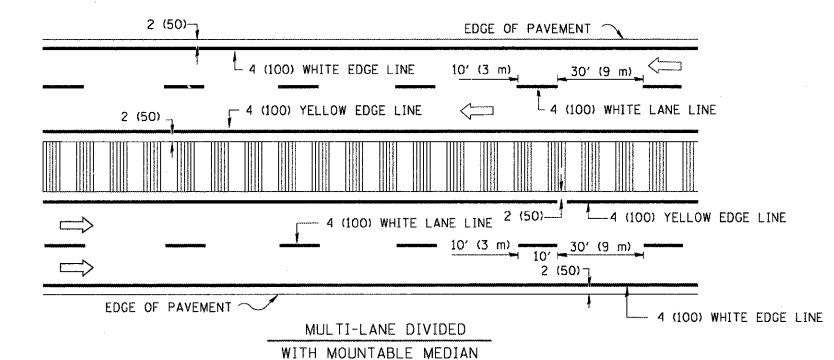
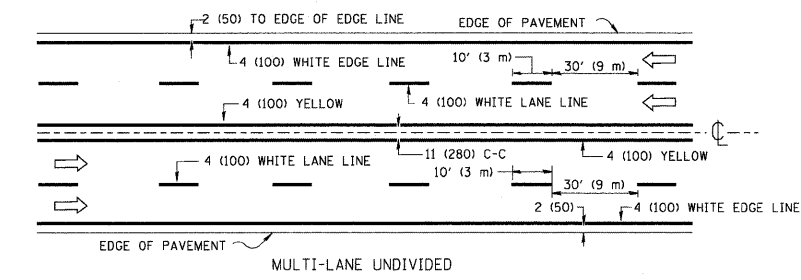
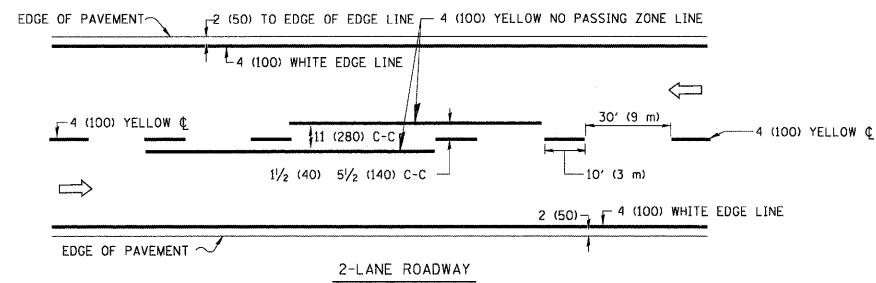
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	PLOT SCALE = 50.000' / IN.	CHECKED -	REVISED - T. RAMMACHER 01-06-00
	PLOT DATE = 9/9/2009	DATE -	REVISED - C. JUCIUS 09-09-09

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TYPICAL APPLICATIONS  
RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)

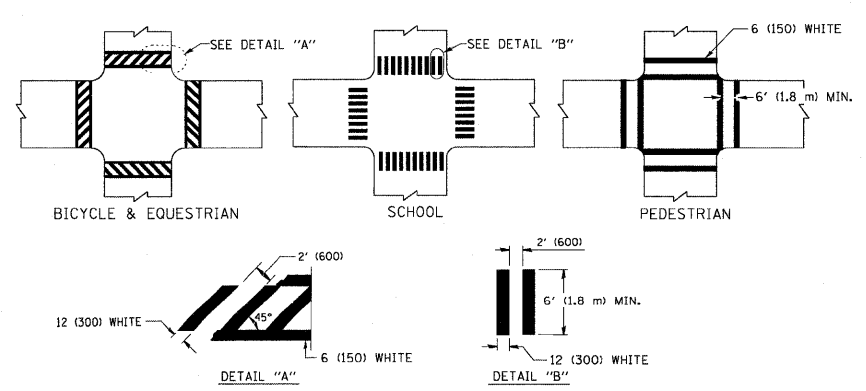
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
573	61HB-1-R	KANE	110	95
TC-11		CONTRACT NO. 60K76		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

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

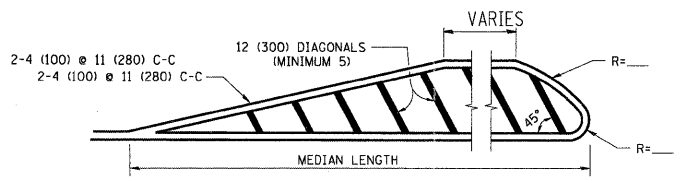
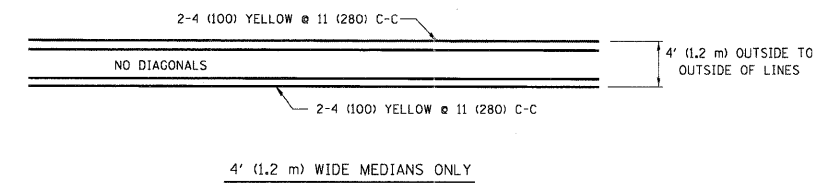


NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

TYPICAL LANE AND EDGE LINE MARKING

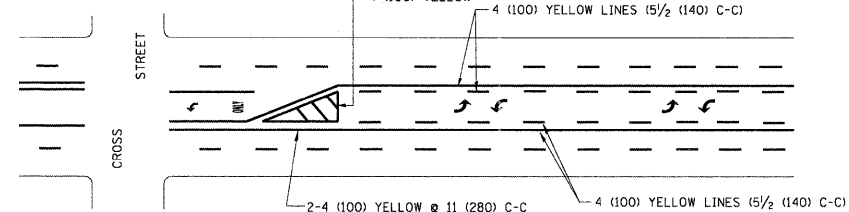


TYPICAL CROSSWALK MARKING

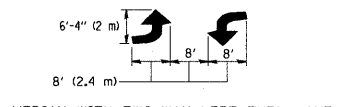


FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.  
 DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))  
 75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)  
 150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

MEDIANS OVER 4' (1.2 m) WIDE

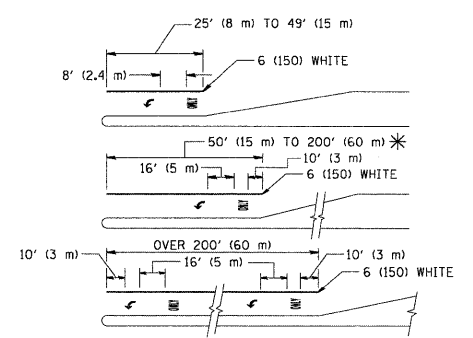


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

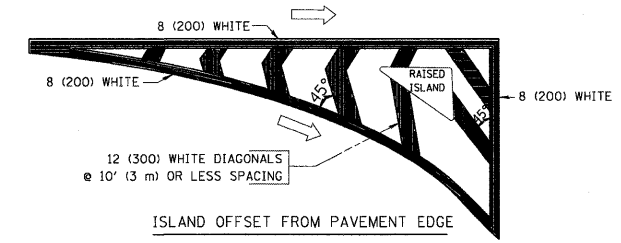


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.  
 \* AREA = 15.6 SQ. FT. (1.5 m<sup>2</sup>) ONLY AREA = 20.8 SQ. FT. (1.9 m<sup>2</sup>)

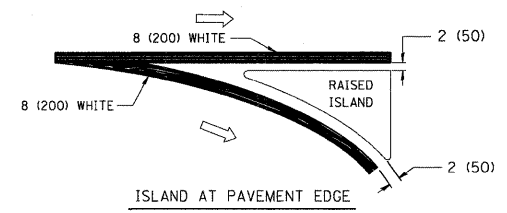
\* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING



ISLAND OFFSET FROM PAVEMENT EDGE



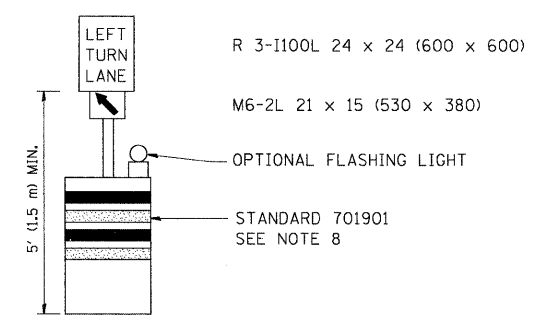
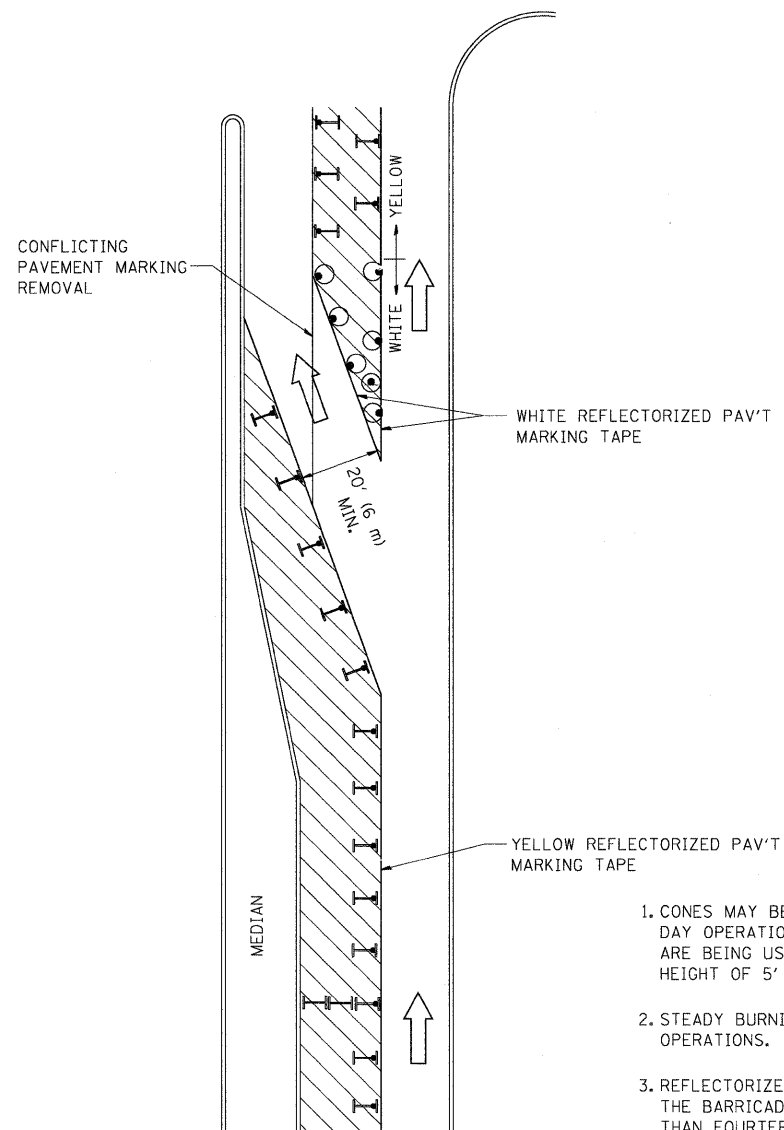
ISLAND AT PAVEMENT EDGE

TYPICAL ISLAND MARKING

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	5/2 (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 MOUNTABLE MEDIANS IN YELLOW; EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
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; 5/2 (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 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	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))

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.

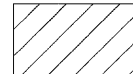







**GENERAL NOTES**

1. 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. WHEN CONES ARE BEING USED, THE "LEFT TURN LANE" SIGN MAY BE SKID MOUNTED AT A MINIMUM HEIGHT OF 5' (1.5 m).
2. STEADY BURNING LIGHTS WILL NOT BE REQUIRED ON BARRICADES OR DRUMS FOR DAY OPERATIONS. ALL LIGHTS SHALL BE MONODIRECTIONAL.
3. REFLECTORIZED TEMPORARY PAVEMENT MARKING TAPE SHALL BE PLACED THROUGHOUT THE BARRICADED AREA OF EACH TURN BAY WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN DAYS.
4. 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" R3-100 24 x 24 (600 x 600) AND M6-2R 21 x 15 (530 x 380) SHALL BE USED.
5. THESE CONTROLS SHALL SUPPLEMENT MAINLINE TRAFFIC CONTROL FOR LANE CLOSURES.
6. LONGITUDINAL DIMENSIONS MAY BE ADJUSTED TO FIT FIELD CONDITIONS.
7. FORM OPER 725 IS REQUIRED.
8. IF A DRUM OR TYPE II BARRICADE WITH AN ATTACHED SIGN PANEL WHICH MEETS NCHRP 350 REQUIREMENTS IS NOT AVAILABLE, THE SIGNS SHALL BE MOUNTED, ABOVE THE BARRICADES, ON SEPARATE SIGNS SUPPORTS THAT MEET NCHR 350 PREQUIREMENTS.
9. TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) SHALL BE INCLUDED IN THE COST SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

**LEGEND**

-  WORK AREA
-  LANE OPEN TO TRAFFIC
-  TYPE I OR II BARRICADE WITH STEADY BURN LIGHT
-  DRUM WITH STEADY BURN LIGHT
-  DRUM WITH SIGN (WITH OPTIONAL FLASHING LIGHT) SEE DETAIL
-  TYPE I OR II CHECK BARRICADE WITH FLASHING LIGHT

FILE NAME =	USER NAME = drvakosgn	REVISED -T. RAMMACHER 09-08-94	REVISED - R. BORO 09-14-09
es:\p\work\VPWIDOT\DRIVAKOSGN\08108315\14.dgn		REVISED - A. HOUSEH 11-07-95	REVISED -
PLOT SCALE = 49,9999 1/ IN.		REVISED - A. HOUSEH 10-12-96	REVISED -
PLOT DATE = 9/14/2009		REVISED -T. RAMMACHER 01-06-00	REVISED -

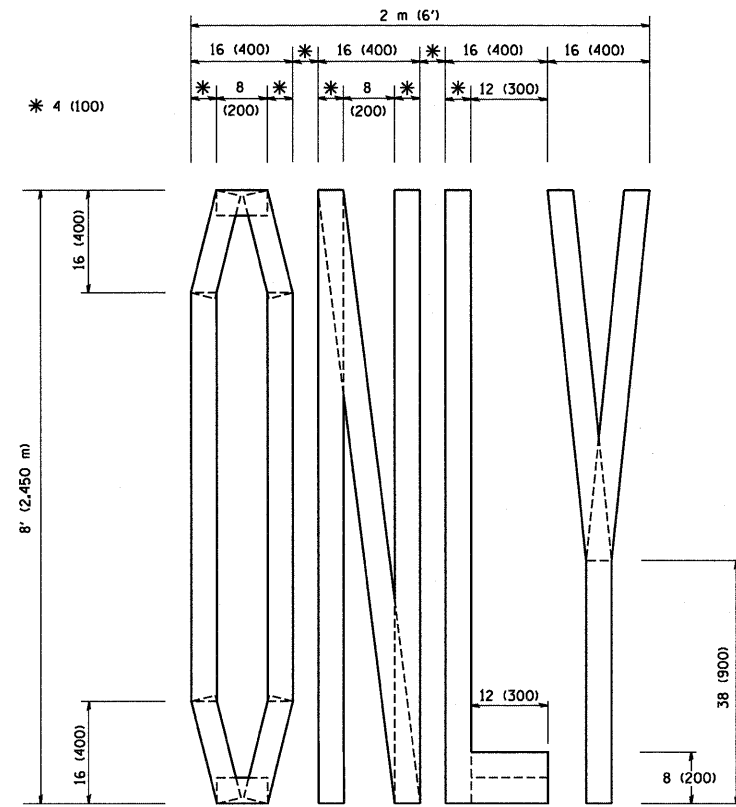
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**TRAFFIC CONTROL AND PROTECTION AT TURN BAYS  
(TO REMAIN OPEN TO TRAFFIC)**

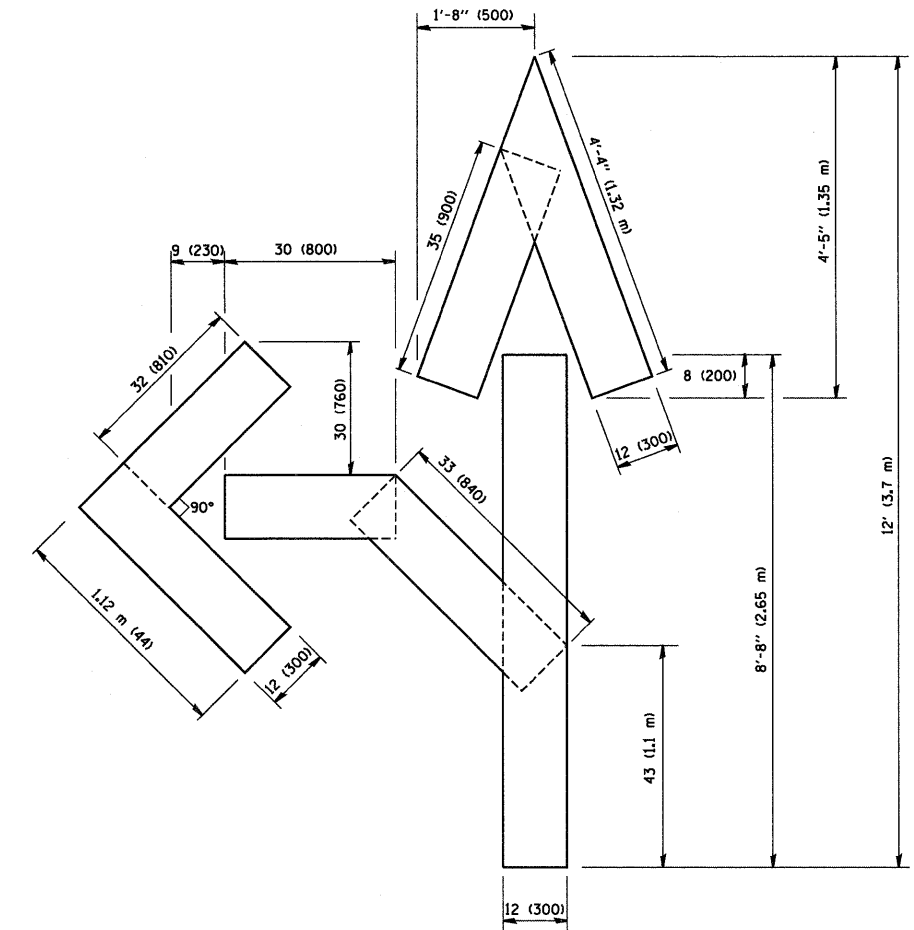
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
573	61HB-1-R	KANE	110	97
<b>TC-14</b>			<b>CONTRACT NO. 60K76</b>	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

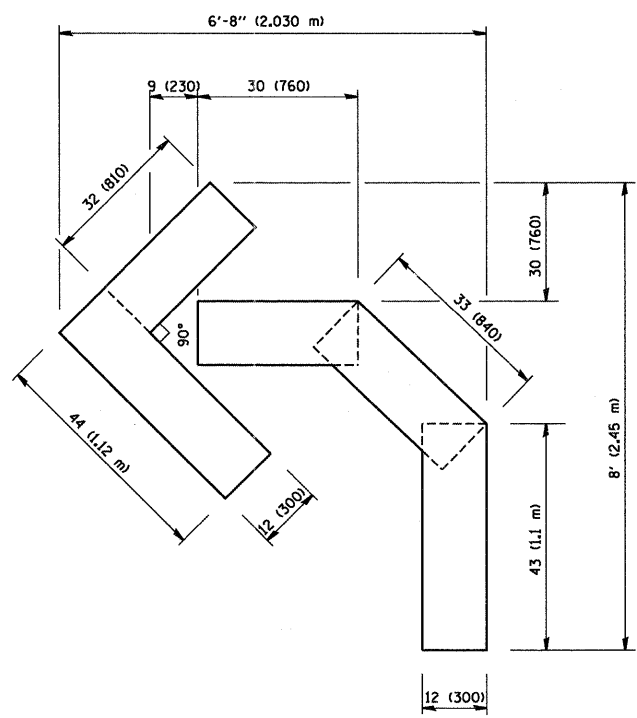




QUANTITY  
 4 (100) LINE = 64.1 ft. (19.7 m)  
 21.1 sq. ft. (1.97 sq. m)



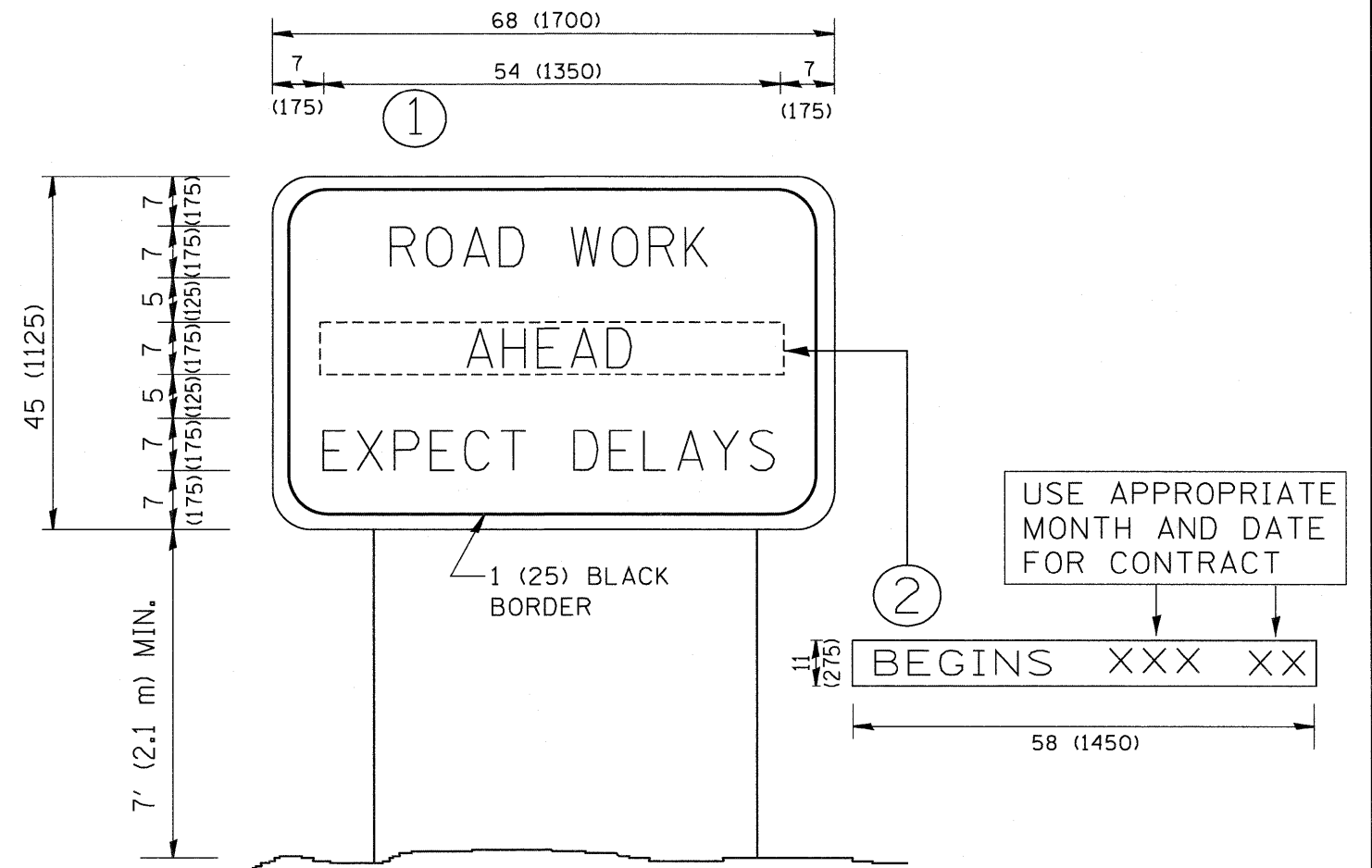
QUANTITY  
 4 (100) LINE = 82.5 ft. (25.3 m)  
 27.5 sq. ft. (2.53 sq. m)



QUANTITY  
 4 (100) LINE = 45.5 ft. (13.9 m)  
 15.2 sq. ft. (1.39 sq. m)

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

FILE NAME = W:\diststd\22x34\tc16.dgn	USER NAME = geglianobt	DESIGNED -	REVISED - T. RAMMACHER 06-05-96	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING</b>			F.A.P. RTE. 573	SECTION 61HB-1-R	COUNTY KANE	TOTAL SHEETS 110	SHEET NO. 98
	PLOT SCALE = 50.0000' / IN.	CHECKED -	REVISED - T. RAMMACHER 11-04-97					SCALE: NONE    SHEET NO. 1 OF 1 SHEETS    STA.    TO STA.			TC-16    CONTRACT NO. 60K76	
PLOT DATE = 1/4/2008	DATE = 09-18-94	REVISED - E. GOMEZ 08-28-00						FED. ROAD DIST. NO. 1   ILLINOIS   FED. AID PROJECT				

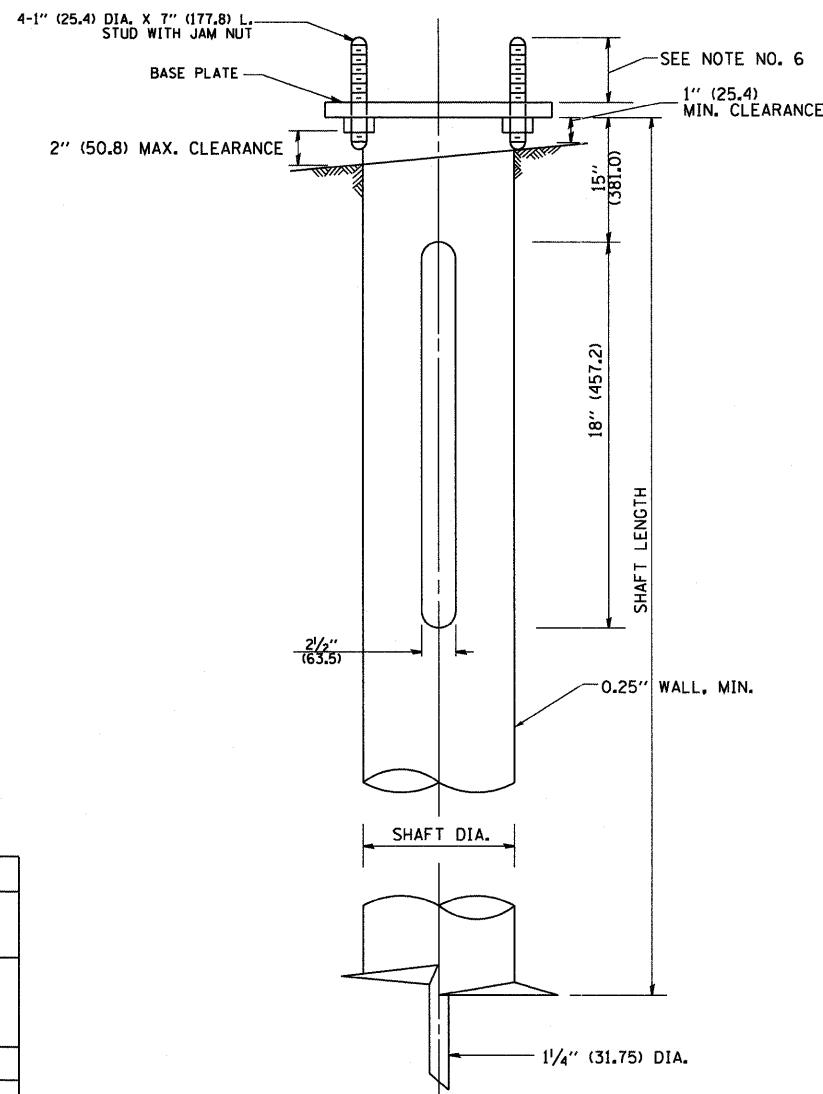
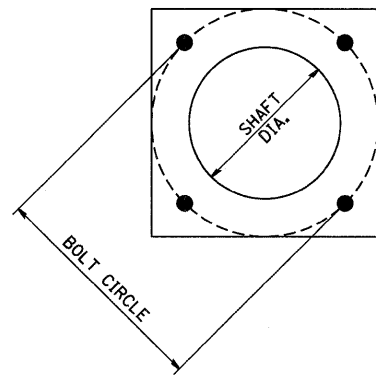


**NOTES:**

1. USE BLACK LETTERING ON ORANGE BACKGROUND.
2. ERECT SIGNS IN ADVANCE OF THE LOCATION FOR THE "ROAD CONSTRUCTION AHEAD" SIGN AT LOCATIONS AS DIRECTED BY THE ENGINEER.
3. ERECT SIGN ① WITH INSTALLED PANEL ② ONE WEEK PRIOR TO THE START OF CONSTRUCTION.
4. REMOVE PANEL ② SOON AFTER THE START OF CONSTRUCTION.
5. SEE SPECIAL PROVISION FOR "TEMPORARY INFORMATION SIGNING" FOR ADDITIONAL INFORMATION.
6. ONE SIGN ASSEMBLY EQUALS 25.70 SQ. FT. (2.3 SQ. M.)
7. SHALL BE PAID FOR AS TEMPORARY INFORMATION SIGNING.

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

FILE NAME = W:\diststd\22x34\te22.dgn	USER NAME = goglianobt	DESIGNED -	REVISED - R. MIRS 09-15-97	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>ARTERIAL ROAD INFORMATION SIGN</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 50.000' / IN.	DRAWN -	REVISED - R. MIRS 12-11-97		573	61HB-1-R	KANE	110	99			
	PLOT DATE = 1/4/2008	CHECKED -	REVISED - T. RAMMACHER 02-02-99		TC-22			CONTRACT NO. 60K76				
	DATE -	REVISED - C. JUCIUS 01-31-07		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 1   ILLINOIS   FED. AID PROJECT				



**NOTES:**

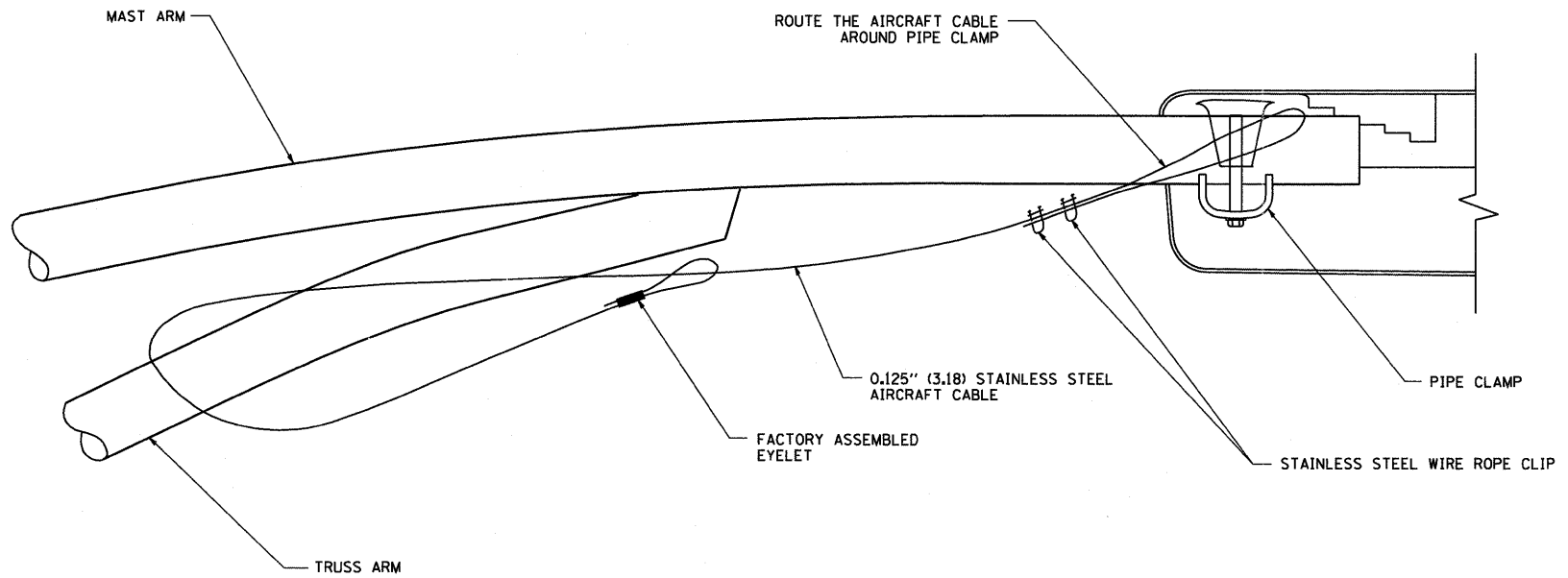
1. ALL DIMENSION IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
2. ALL MATERIAL SHALL BE GALVINIZED ACCORDING TO AASHTO M111, UNLESS OTHERWISE SPECIFIED.
3. ALL WELDS SHALL BE CONTINUOUS AND NOT LESS THAN 1/4" (6.35 mm) FILLET WELDS. THE WELDED FOUNDATION SHALL BE CAPABLE OF WITHSTANDING 10,000 FT/LBS (13558.18 n.m) OF INSTALLATION TORQUE APPLIED ABOUT THE AXIS OF THE FOUNDATION.
4. THE HELIX FOUNDATION SHAFT SHALL BE INSTALLED VERTICAL AND THE BASE PLATE SHALL BE IN LEVEL. THE BREAKAWAY COUPLINGS AND HARDWARE SHALL NOT BE USED TO ALIGN THE POLE INSTALLATION.
5. THE CABLE TRENCH SHALL BE BACKFILLED AND FIRMLY COMPACTED BEFORE THE INSTALLATION OF THE LIGHT POLE.
6. THE CONTRACTOR SHALL COORDINATE EXTENSION OF ANCHOR BOLTS ABOVE TOP OF THE BASE PLATE WITH THE BREAKAWAY DEVICE MANUFACTURER'S REQUIREMENTS.
7. ANY VOIDS WITHIN THE METAL FOUNDATION SHALL BE FILLED WITH FINE AGGREGATE.
8. METAL FOUNDATIONS SHALL BE INSTALLED IN UNDISTURBED SOIL. PREDRILLING A PILOT HOLE AND/OR BACKFILLING AROUND THE FOUNDATION IS NOT ALLOWED.
9. THE METAL FOUNDATION SHALL NOT BE INSTALLED TO A TORQUE WHICH EXCEEDS THE MANUFACTURER'S MAXIMUM TORQUE RATING NOR SHALL IT BE INSTALLED TO AN INSTALLATION TORQUE VALUE OF LESS THAN 3,500 FT LB (4,750 KNM). METAL FOUNDATIONS THAT ARE NOT INSTALLED TO FULL INSTALLATION DEPTH OR DO NOT ACHIEVE THE MINIMUM INSTALLATION TORQUE SHALL BE REMOVED AND REPLACED WITH A CONCRETE FOUNDATION AT NO ADDITIONAL COST.
10. THE BASEPLATE SHALL BE PERPENDICULAR TO THE SHAFT AXIS ( $\pm 1^\circ$ ) AND THE HOLE CENTERLINE SHALL BE CONCENTRIC ( $\pm 0.188$ ) TO THE SHAFT AXIS.
11. THE PILOT POINT AND SHAFT AXIS SHALL BE CONCENTRIC ( $\pm 0.125$ ) AND IN LINE ( $\pm 2^\circ$ ).
12. THE BASEPLATE SHALL BE STAMPED WITH THE MANUFACTURERS NAME AND DATE OF MANUFACTURE.

**HELIX FOUNDATION SIZE**

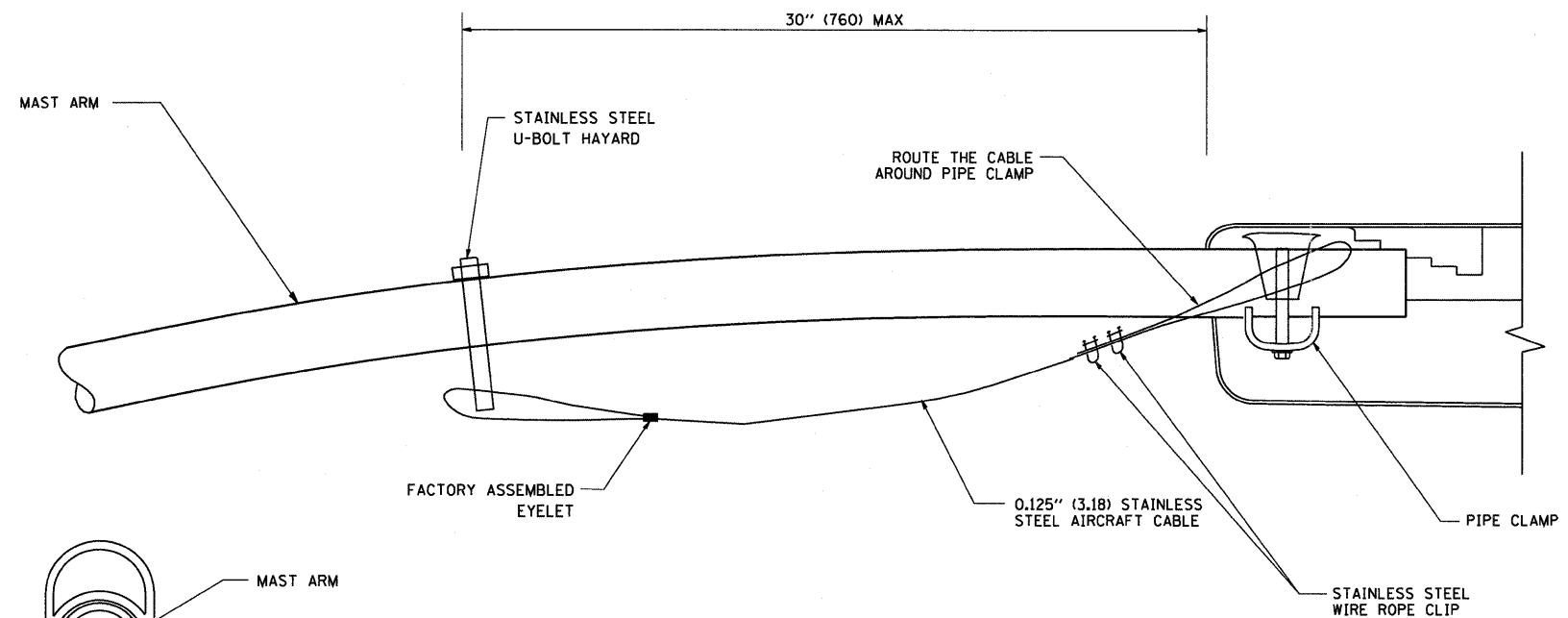
POLE MOUNTING HEIGHT	BOLT CIRCLE	SHAFT DIAMETER	SHAFT LENGTH	BASEPLATE
30 FT.	1 1/2"	8 5/8"	6 FT.	12"x12"x1"
31 FT.-35 FT.	1 1/2"	8 5/8"	6 FT.	12"x12"x1"
36 FT.-40 FT.	15"	8 5/8"	6 FT.	15"x15"x1 1/4"
41 FT.-45 FT.	15"	8 5/8"	6 FT.	15"x15"x1 1/4"
46 FT.-50 FT.	15"	10"	8 FT.	15"x15"x1 1/4"

**METAL HELIX FOUNDATION MATERIALS**

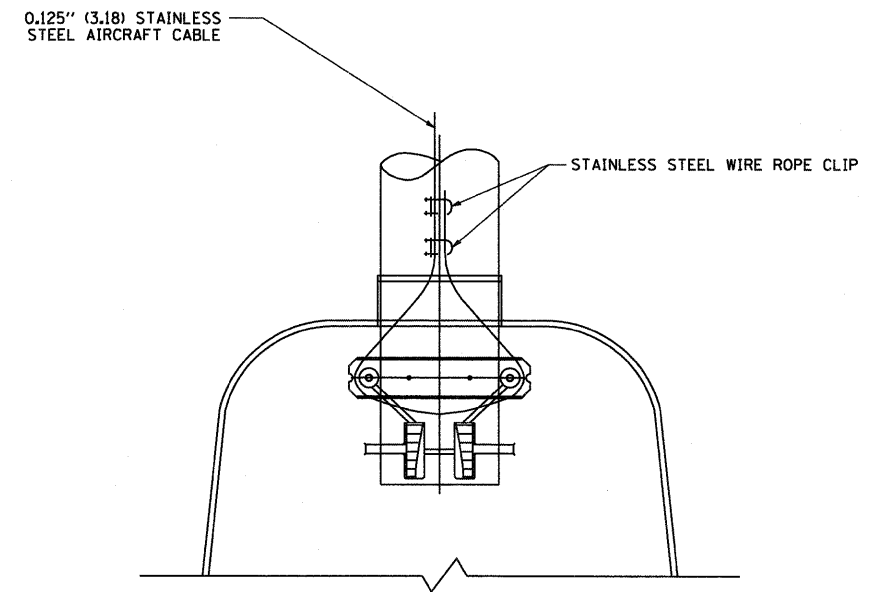
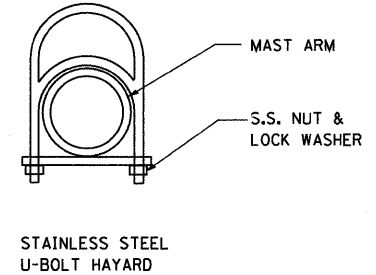
ITEM	MATERIAL REQUIREMENT
BASEPLATE	AASHTO M 270M, GRADE 36 (M270M, GRADE 250)
SHAFT	ASTM A 252, GRADE 2 (PHOSPHOROUS 0.04% MAXIMUM, SULFUR 0.05% MAXIMUM)
HELIX SCREW	AASHTO M 183 (ASTM A 635)
PILOT POINT	AASHTO M 270 (ASTM A 575)
ANCHOR RODS/STUDS	AASHTO M 314 (ASTM F 1554)
HEXAGON NUTS	AASHTO M 291M (ASTM A 563) GRADE DH, OR AASHTO M 292 (ASTM A 194) GRADE 2H
WASHERS	AASHTO M 293 (ASTM F 436)



**SIDE VIEW (TRUSS ARM)**  
N.T.S.



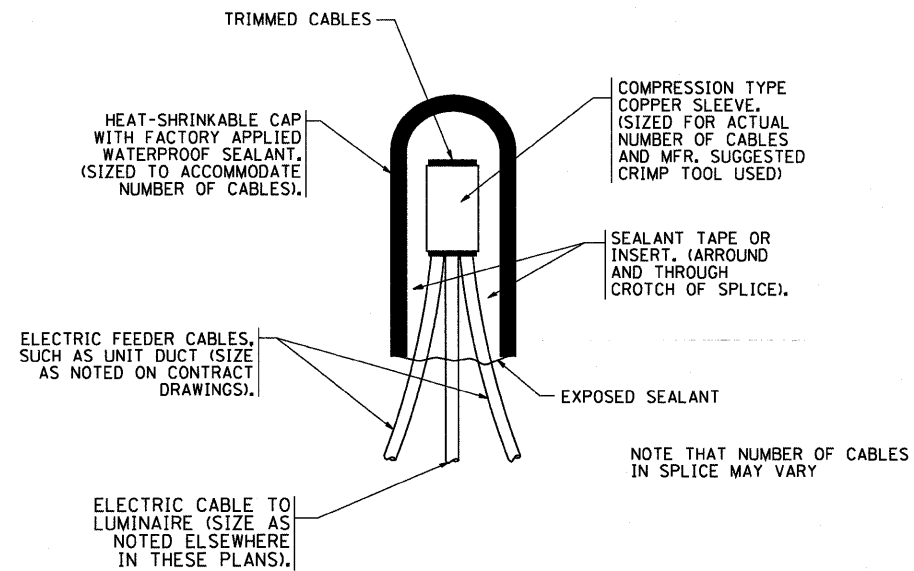
**SIDE VIEW (SINGLE MEMBER OR DAVIT ARM)**  
N.T.S.



**BOTTOM VIEW**  
N.T.S.

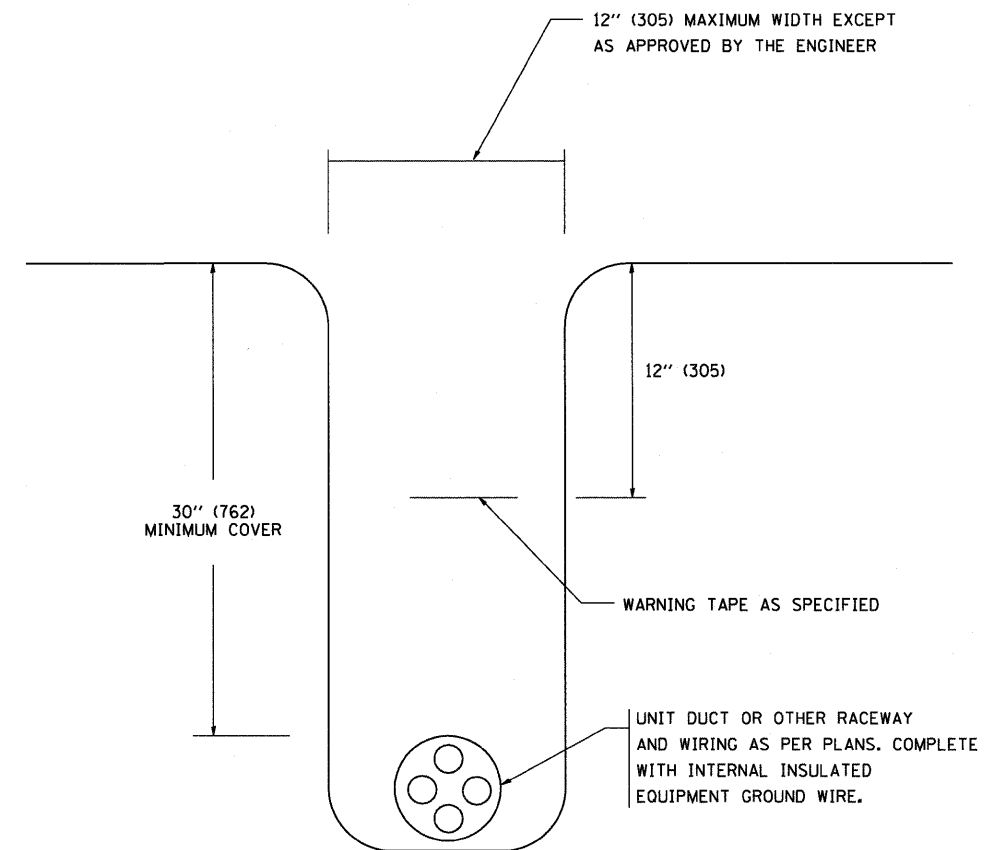
- NOTES:**
1. ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE SHOWN.
  2. CONTRACTOR SHALL ADJUST THE WIRE CLIP TO ELIMINATE ANY SLACK FROM THE WIRE ROPE.
  3. THE 0.125" (3.18) STAINLESS STEEL AIRCRAFT CABLE SHALL REMAIN VISIBLE FROM THE GROUND LEVEL.
  4. THE BREAKING STRENGTH OF THE CABLE SHALL BE 1700 LBS. MIN.

FILE NAME = W:\distatd\22x34\be701.dgn	USER NAME = geglienobt	DESIGNED -	REVISED - 08-08-03	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>LUMINAIRE SAFETY CABLE ASSEMBLY</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 50,000' / IN.	DRAWN -	REVISED -					573	61HB-1-R	KANE	110	101
	PLOT DATE = 1/4/2008	CHECKED -	REVISED -		SCALE: NONE    SHEET NO. 1 OF 1 SHEETS    STA.    TO STA.			<b>BE-701</b>		<b>CONTRACT NO. 60K76</b>		
		DATE -	REVISED -		FED. ROAD DIST. NO. 1   ILLINOIS FED. AID PROJECT							



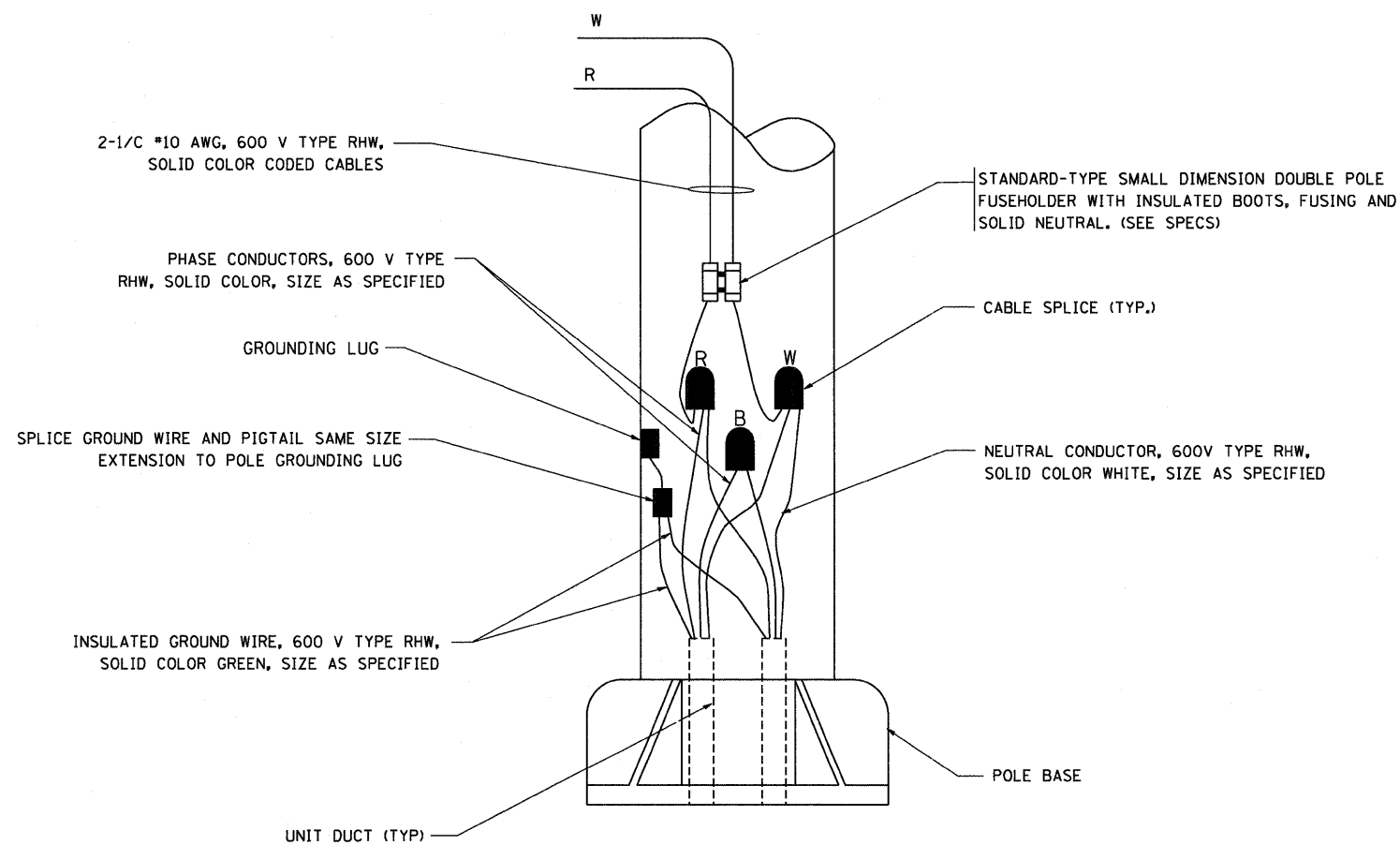
TYPICAL SPLICE DETAIL

N.T.S.



TYPICAL WIRING IN TRENCH DETAIL

N.T.S.



POLE WIRING DETAIL

N.T.S.

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DESIGNED -  
DRAWN -  
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CHECKED -  
PLOT DATE = 1/4/2008  
DATE -

REVISED - 08-08-03  
REVISED -  
REVISED -  
REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

MISC. ELECTRICAL DETAILS  
SHEET A  
SCALE: NONE  
SHEET NO. 1 OF 1 SHEETS  
STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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BE-702			CONTRACT NO. 60K76	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

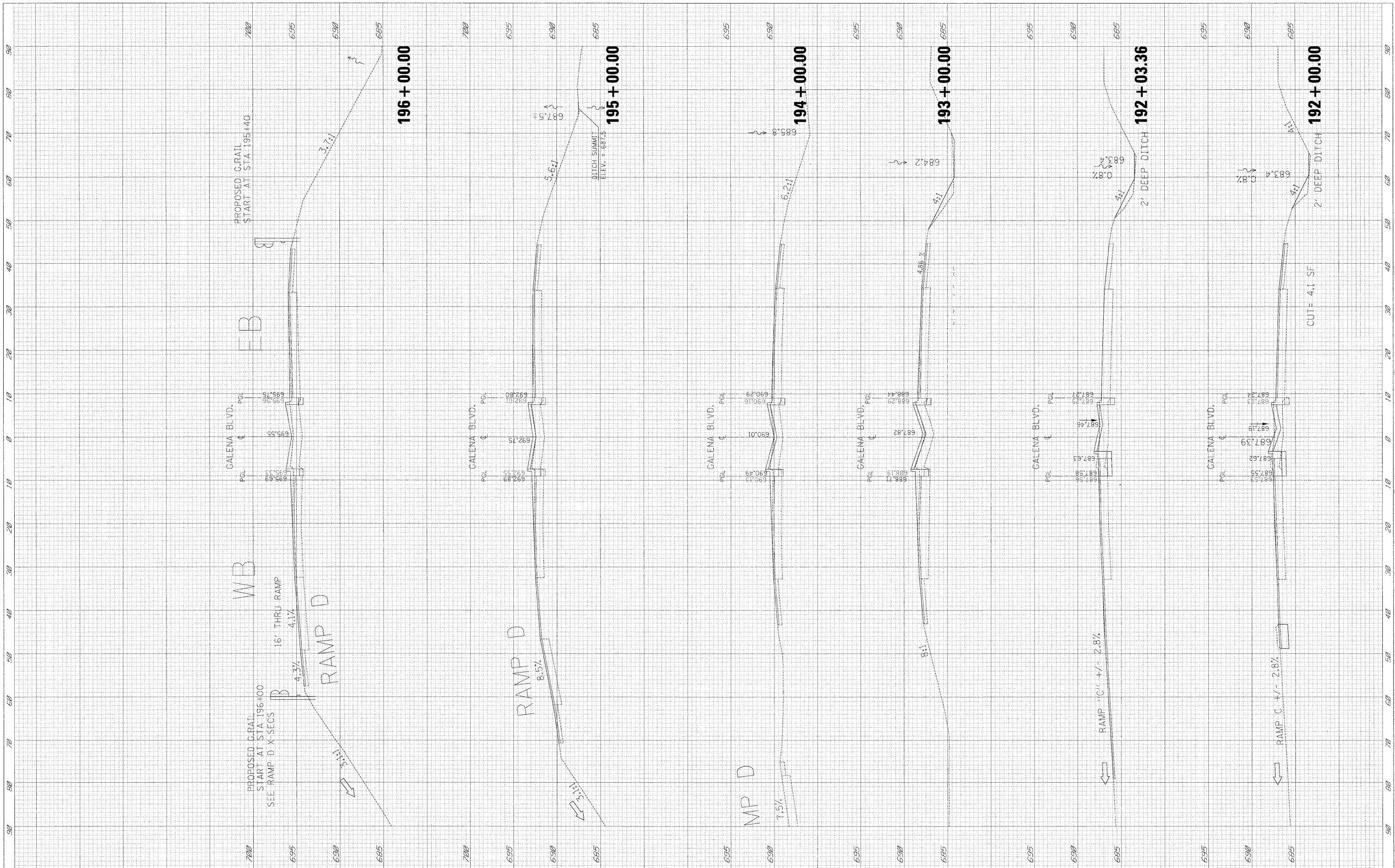
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT





FINAL SURVEY	SUPERVED	BY	DATE
NOTE BOOK	PLotted		
NO.	TEMPLATE		
	AREAS		
	CHECKED		

ORIGINAL SURVEY	SUPERVED	BY	DATE
NOTE BOOK	PLotted		
NO.	TEMPLATE		
	AREAS		
	CHECKED		



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 PLOT DATE = 8/29/2011

DESIGNED -  
 DRAWN -  
 CHECKED -  
 DATE -

REVISED -  
 REVISED -  
 REVISED -  
 REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**CROSS SECTIONS  
 GALENA BLVD. AT IL. RTE. 56 EAST & WEST RAMPS**

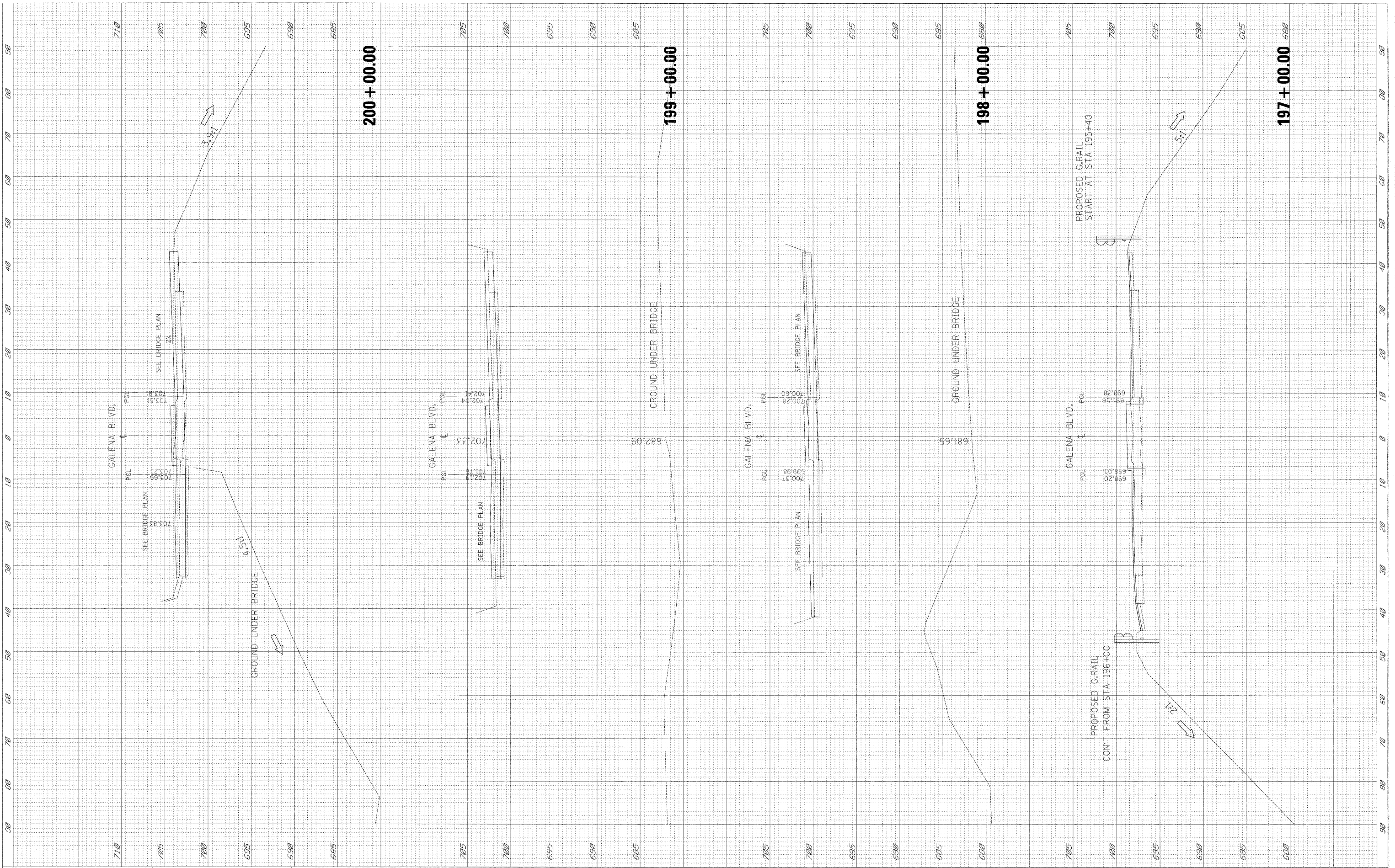
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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1521	61HB-1-R	KANE	110	104
CONTRACT NO. 60K76				
ILLINOIS FED. AID PROJECT				



FINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
NOTE BOOK		
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ORIGINAL SURVEY	BY	DATE
SURVEYED		
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REVISOR -  
 REVISED -  
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**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

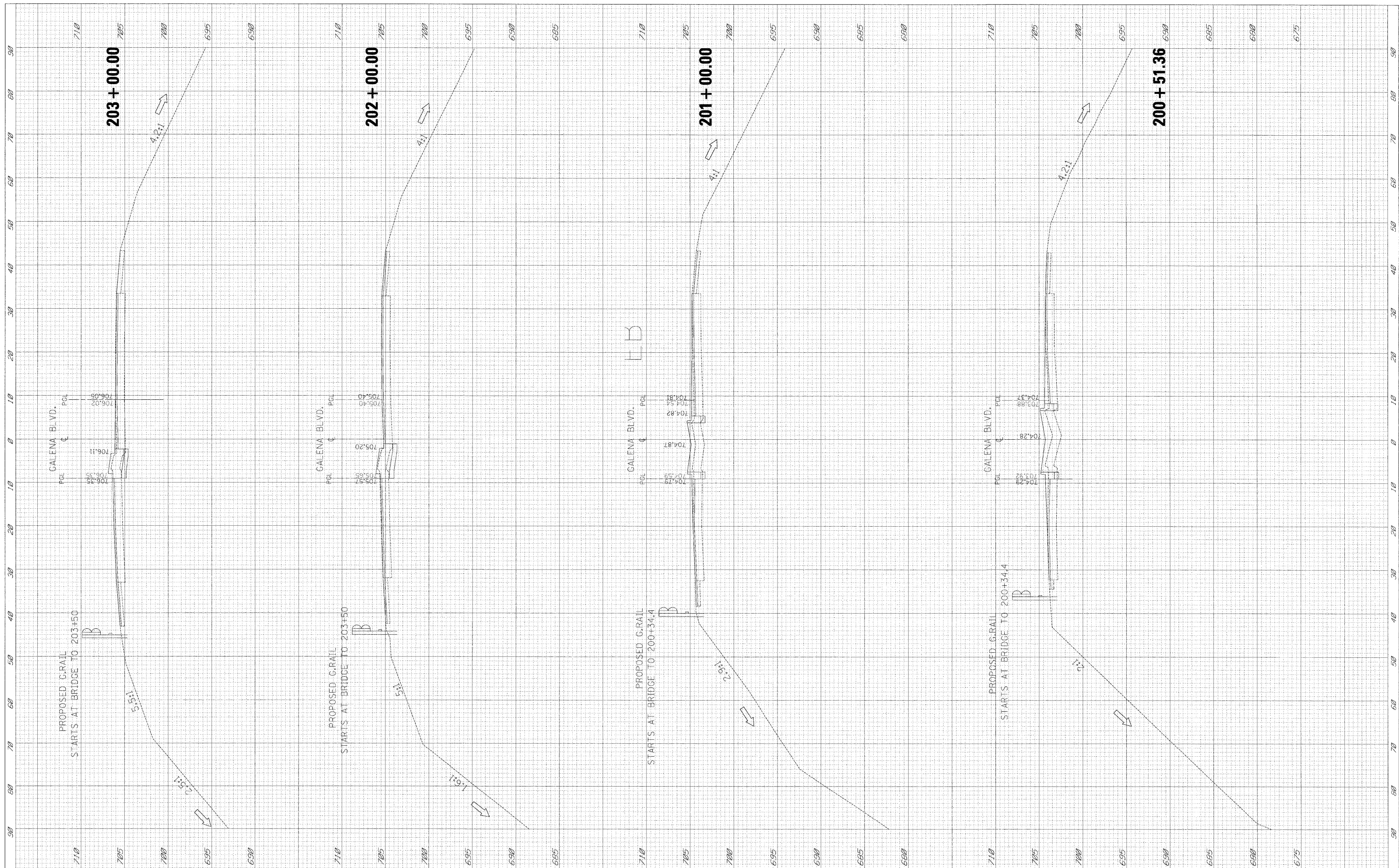
**CROSS SECTIONS  
 GALENA BLVD. AT IL. RTE. 56 EAST & WEST RAMPS**

SCALE: SHEET NO. OF SHEETS STA. 197+00.00 TO STA. 200+00.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1521	61HB-1-R	KANE	110	105
			CONTRACT NO. 60K76	
ILLINOIS FED. AID PROJECT				

FINAL	SURVEYED	BY	DATE
SUBJECT	TEMP. DATE		
NOTE BOOK	AREAS CHECKED		
NO.			

ORIGINAL	SURVEYED	BY	DATE
SUBJECT	TEMP. DATE		
NOTE BOOK	AREAS CHECKED		
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PLOT DATE = 8/29/2011	

DESIGNED -	REVISED -
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CHECKED -	REVISED -
DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

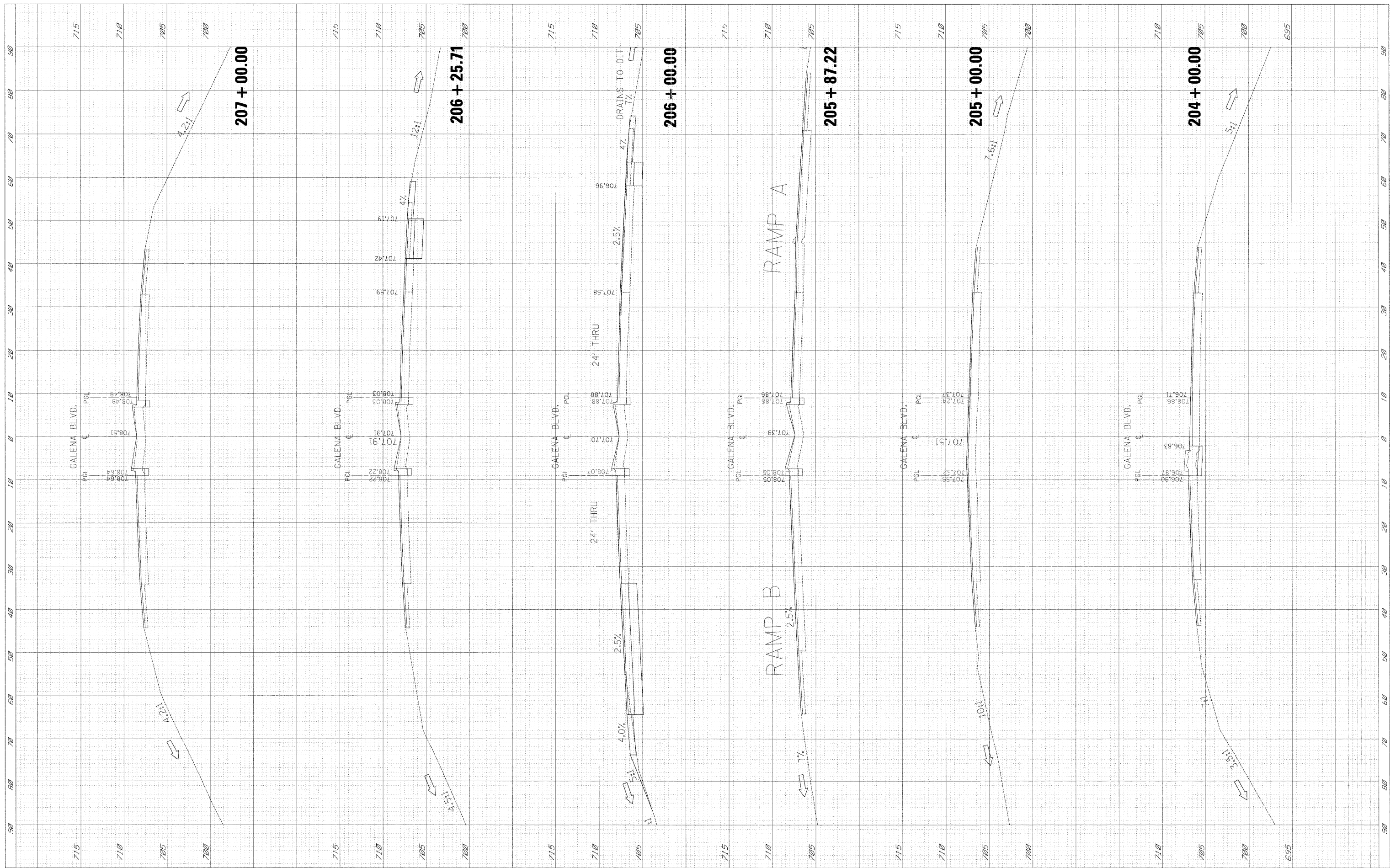
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<b>GALENA BLVD. AT IL. RTE. 56 EAST &amp; WEST RAMPS</b>			
SCALE:	SHEET NO.	OF SHEETS	STA. 200+51.36 TO STA. 203+00.00

F.A.J. RTE. 1521	SECTION 61HB-1-R	COUNTY KANE	TOTAL SHEETS 110	SHEET NO. 106
				CONTRACT NO. 60X76
ILLINOIS FED. AID PROJECT				



FINAL SURVEY	BY	DATE
NO. _____		
NO. _____		
NO. _____		
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ORIGINAL SURVEY	BY	DATE
NO. _____		
NO. _____		
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DRAWN	REVISED
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DATE	REVISED

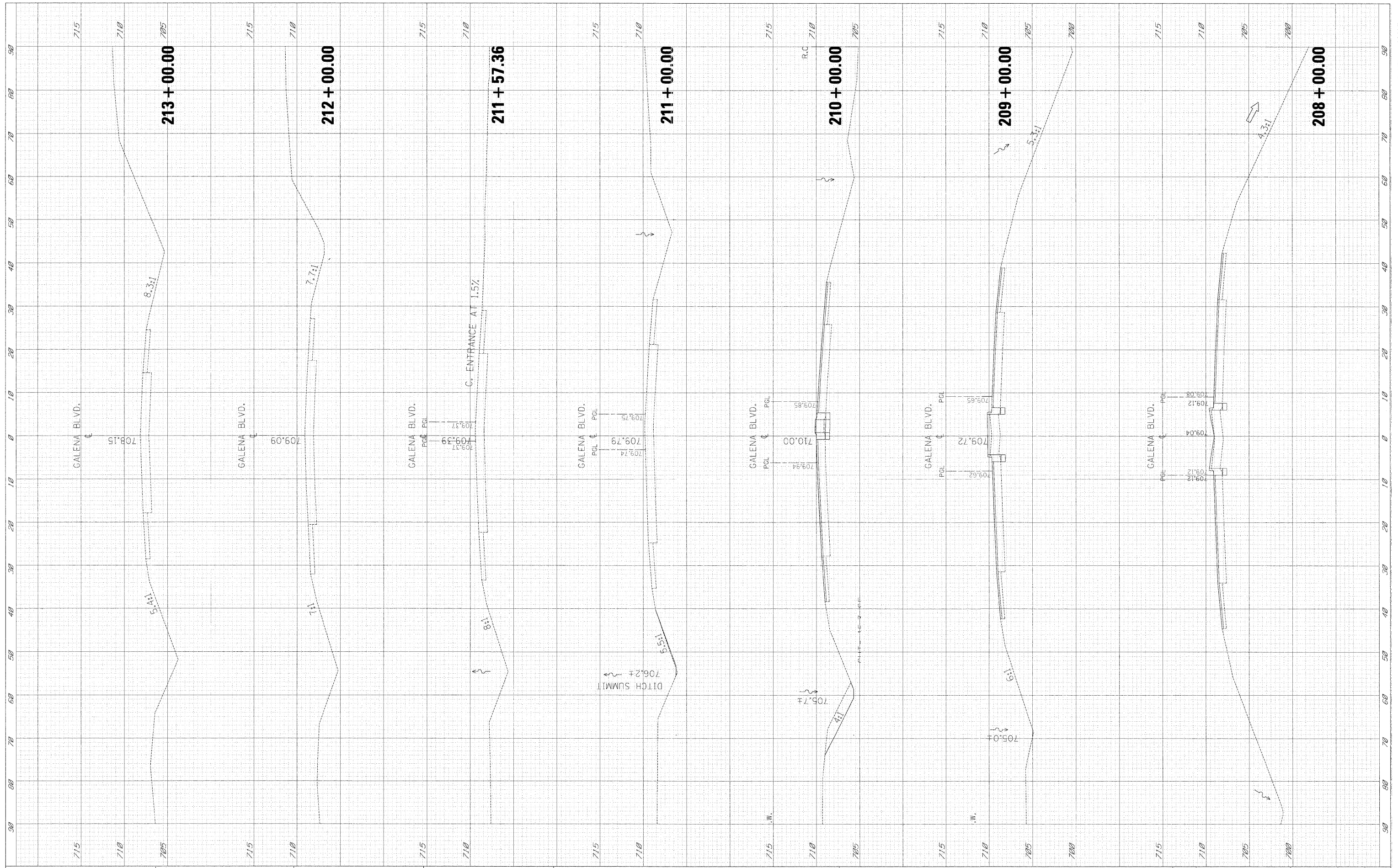
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

CROSS SECTIONS			
GALENA BLVD. AT IL. RTE. 56 EAST & WEST RAMPS			
SCALE:	SHEET NO.	OF SHEETS	STA. 204+00.00 TO STA. 207+00.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1521	61HB-1-R	KANE	110	107
CONTRACT NO. 60K76				
ILLINOIS FED. AID PROJECT				

FINAL SURVEY	BY	DATE
PLOTTED		
NOTE BOOK		
AREAS CHECKED		
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ORIGINAL SURVEY	BY	DATE
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NOTE BOOK		
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PLOT SCALE = 1/8" = 10'-0"	
PLOT DATE = 8/29/2011	

DESIGNED -	REVISED -
DRAWN -	REVISED -
CHECKED -	REVISED -
DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

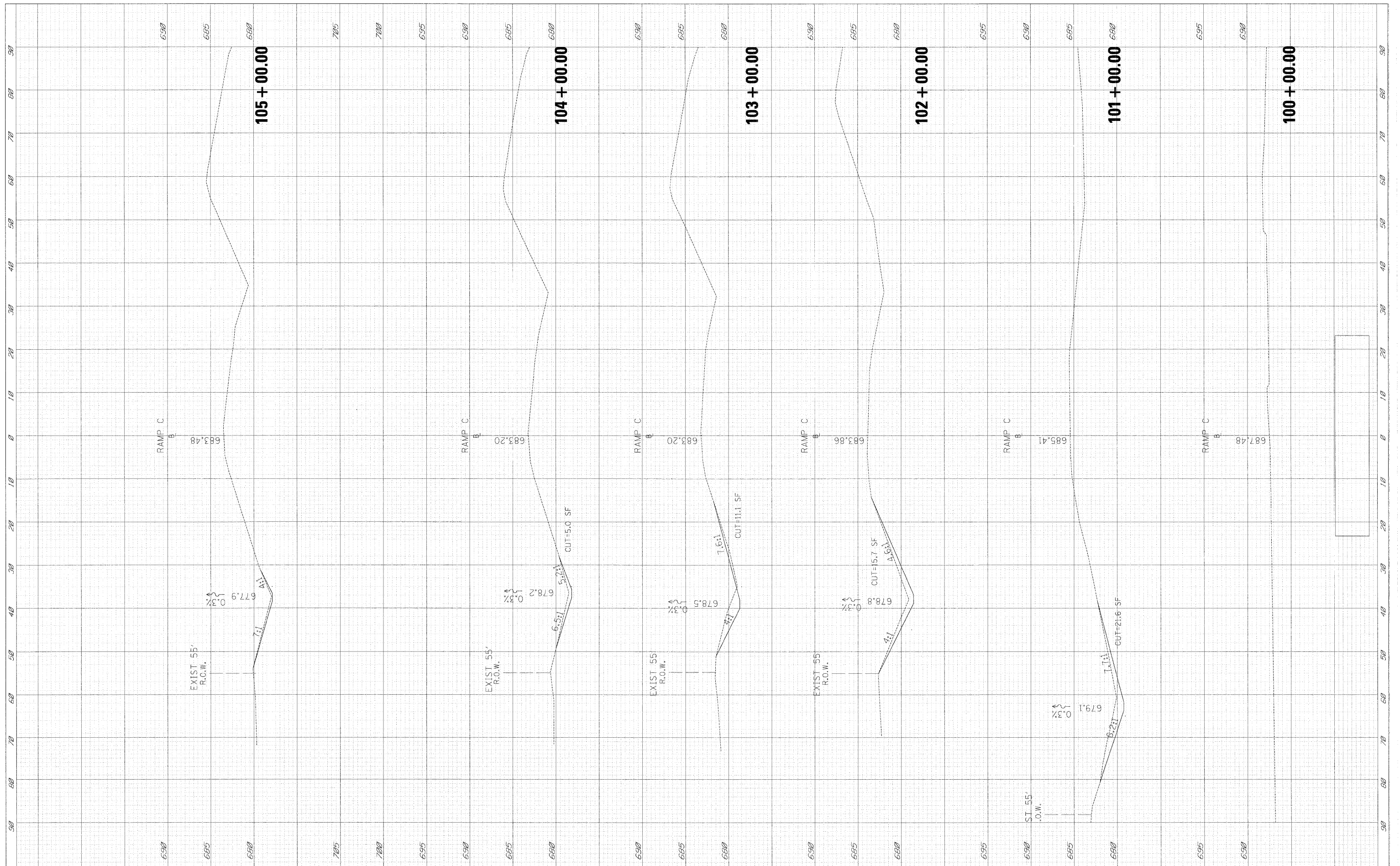
CROSS SECTIONS			
GALENA BLVD. AT IL. RTE. 56 EAST & WEST RAMPS			
SCALE:	SHEET NO.	OF SHEETS	STA. 208+00.00 TO STA. 213+00.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1521	61HB-1-R	KANE	110	108
				CONTRACT NO. 60K76
ILLINOIS FED. AID PROJECT				



FINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
NOTE BOOK		
AREAS CHECKED		
NO.		

ORIGINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
NOTE BOOK		
AREAS CHECKED		
NO.		



FILE NAME = P:\2010\ME10012\_PTB156-16\_Galena\CADD\Shets\10160076-xasht-xsc-RampC.dgn

USER NAME = Jeff  
 DESIGNED -  
 DRAWN -  
 CHECKED -  
 DATE = 9/29/2011

REVISIONS  
 REVISED -  
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 REVISED -

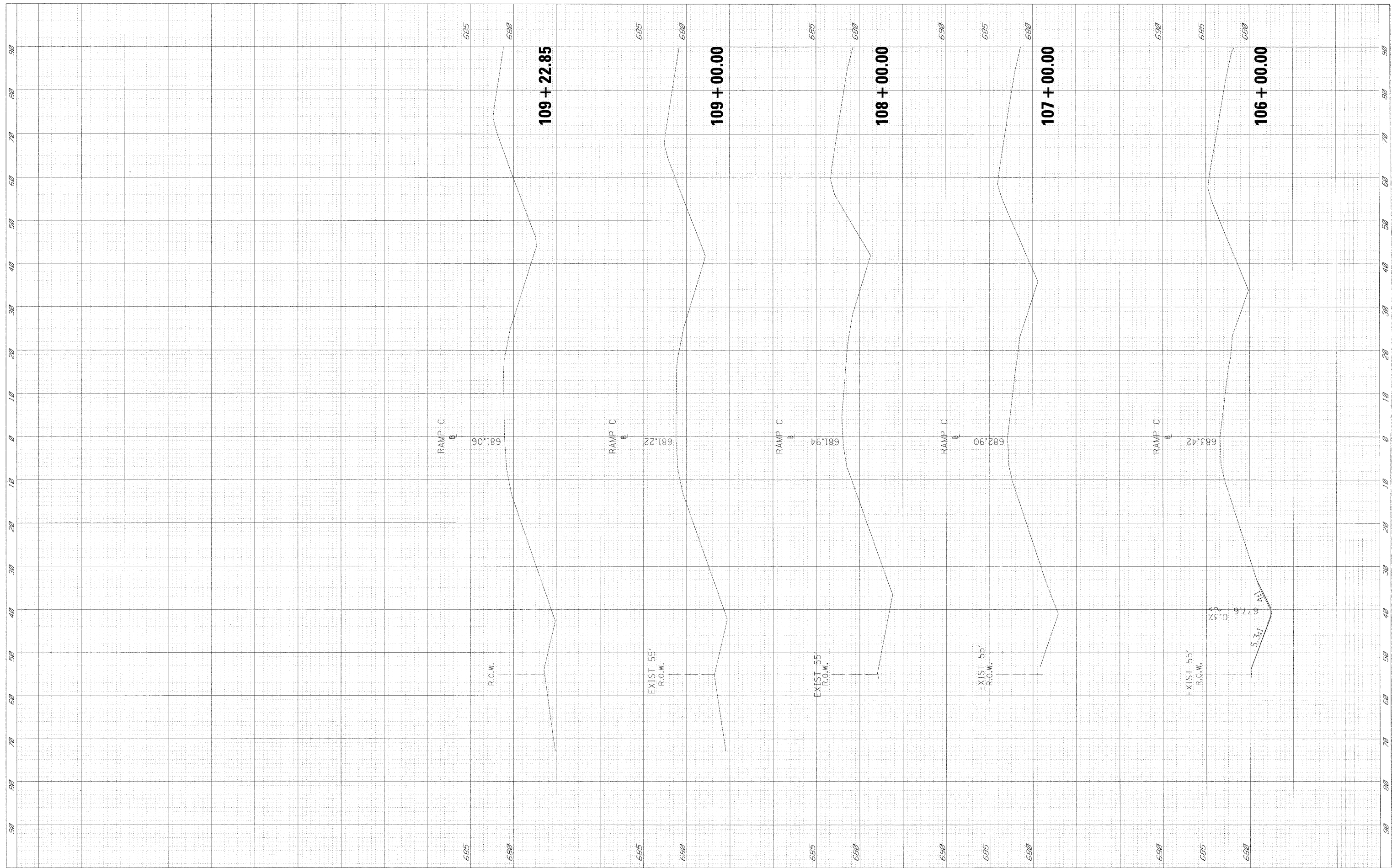
**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**CROSS SECTIONS**  
**GALENA BLVD. AT IL. RTE. 56 EAST & WEST RAMPS**  
 SCALE: SHEET NO. OF SHEETS STA. 100+00.00 TO STA. 105+00.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1521	61HB-1-R	KANE	110	109
			CONTRACT NO. 60K76	
ILLINOIS FED. AID PROJECT				

FINAL SURVEY NOTE BOOK NO.	SURVEYED TEMPLATE AREAS CHECKED	BY	DATE

ORIGINAL SURVEY NOTE BOOK NO.	SURVEYED TEMPLATE AREAS CHECKED	BY	DATE



FILE NAME = P:\2010\ME12012\_PTB156-16\_Galena\CADD\Shots\DI160K76-ssht-xso-RampC.dgn

USER NAME = Jeff  
 PLOT SCALE = 10.0000' / IN.  
 PLOT DATE = 8/29/2011

DESIGNED -  
 DRAWN -  
 CHECKED -  
 DATE -

REVISED -  
 REVISED -  
 REVISED -  
 REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**CROSS SECTIONS  
 GALENA BLVD. AT IL. RTE. 56 EAST & WEST RAMPS**

SCALE: SHEET NO. OF SHEETS STA. 106+00.00 TO STA. 109+22.85

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1521	61HB-1-R	KANE	110	110
CONTRACT NO. 60K76			ILLINOIS FED. AID PROJECT	