

F.A.J. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3531	1515.1-I	COOK	35	1
FED. ROAD DIST. NO.	ILLINOIS	CONTRACT NO.	60J58	

FOR INDEX OF SHEETS, SEE SHEET NO. 2.

PROJECT LOCATED IN THE CITY OF CHICAGO

**TRAFFIC DATA**

ADT = 21,700 VEHICLES  
POSTED SPEED LIMIT = 30 MPH

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

**PROPOSED  
HIGHWAY PLANS**

FAU 3531: IL 72 (HIGGINS ROAD) WB

SECTION 1515.1-I

OVER I-90 EB RAMP TO IL 43 (HARLEM AVENUE)

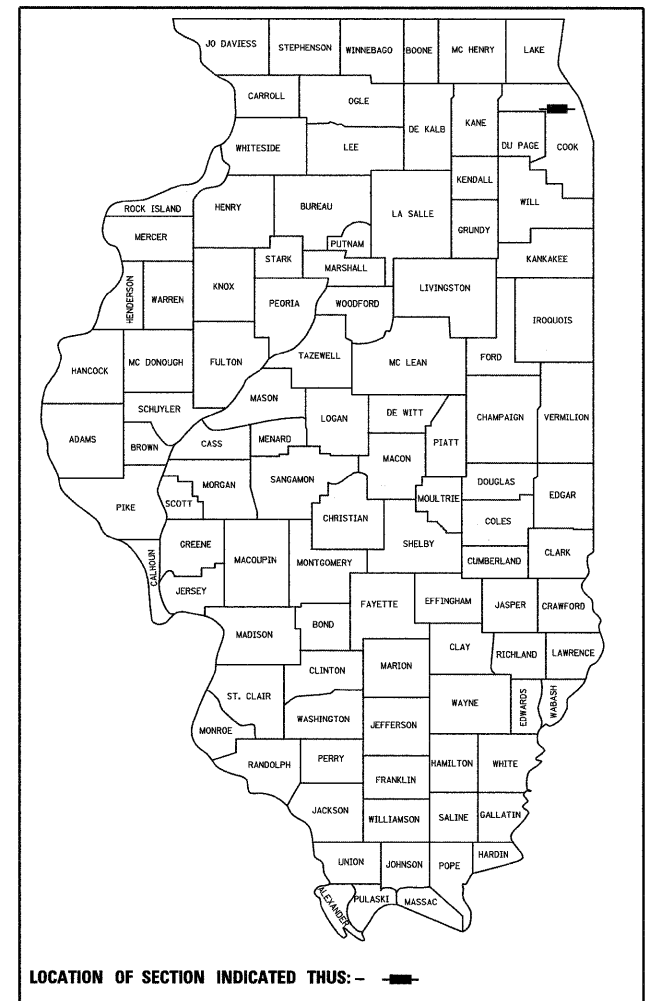
AT I-90 (KENNEDY EXPRESSWAY)

BRIDGE DECK OVERLAY & JOINT REPAIRS

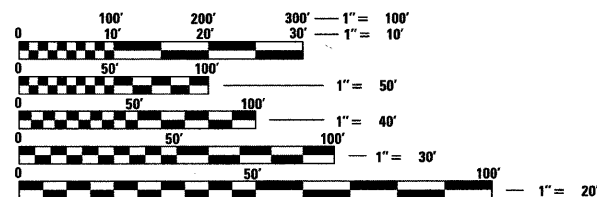
COOK COUNTY

C-91-248-10

D-91-248-10



LOCATION OF SECTION INDICATED THUS: - ■ -



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.

C.U.A.N.  
CHICAGO UTILITY AREA NETWORK  
1-312-744-7000  
OR 811

PROJECT ENGINEER: CRAIG BAUER (847) 705-4265  
PROJECT MANAGER: LONG TRAN (847) 705-4232

CONTRACT NO. 60J58

SN 016-2519  
WB HIGGINS ROAD OVER  
RAMP FROM EB I-90  
STA. 45 + 49.00

PROJECT BEGINS  
STA. 42 + 10.50



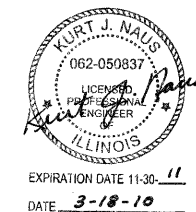
PROJECT ENDS  
STA. 48 + 87.50

LEYDEN TOWNSHIP

LAYOUT MAP

SCALE: 1 IN = 0.25 MI

GROSS LENGTH OF PROJECT = 677 LIN FT = 0.128 MILES  
NET LENGTH OF PROJECT = 677 LIN FT = 0.128 MILES



STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

SUBMITTED MARCH 18, 2010  
Diana M. O'Keefe DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER  
April 9, 2010  
Scott E. Stitt, P.E. ENGINEER OF DESIGN AND ENVIRONMENT  
April 9, 2010  
Christine M. Reed DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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alfred benesch & company  
Engineers • Surveyors • Planners  
205 North Michigan Avenue, Suite 2400  
Chicago, Illinois 60601  
312-565-0450

**INDEX OF SHEETS**

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1	COVER SHEET
2	INDEX OF SHEETS, IDOT STANDARDS, DISTRICT 1 DETAILS, GENERAL NOTES & HMA REQUIREMENTS
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4	DETOUR PLAN
5	MAINTENANCE OF TRAFFIC PLAN
6	ROADWAY REMOVAL PLAN
7	ROADWAY & PAVEMENT MARKING PLAN
8-10	EXISTING LIGHTING PLANS
11	UNDERPASS LIGHTING REPLACEMENT PLAN
12-25	STRUCTURAL PLANS
26-35	DISTRICT 1 DETAILS

**IDOT STANDARDS**

STD. NO.	DESCRIPTION
000001-05	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
420001-07	PAVEMENT JOINTS
420401-08	BRIDGE APPROACH PAVEMENT CONNECTOR
421001-02	BAR REINFORCEMENT FOR CRC PAVEMENT
606001-04	COMBINATION CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
630001-08	STEEL PLATE BEAM GUARDRAIL
631031-08	TRAFFIC BARRIER TERMINAL, TYPE 6
635006-03	REFLECTOR AND TERMINAL MARKER PLACEMENT
635011-02	REFLECTOR MARKER AND MOUNTING DETAILS
701901-01	TRAFFIC CONTROL DEVICES
704001-06	TEMPORARY CONCRETE BARRIER

**DISTRICT 1 DETAILS (INCLUDED AS PLAN SHEETS 26-35)**

DETAIL	DESCRIPTION
BD600-06 (BD-24)	CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT
BD600-10 (BD-34)	DETAILS FOR DEPRESSED CURB & GUTTER AND SHOULDER TREATMENT AT TBT TY 1 SPL.
BE-900	SUSPENDED MOUNT UNDERPASS LUMINAIRE INSTALLATION DETAILS
TC-8	FREEWAY ENTRANCE AND EXIT RAMP CLOSURE DETAILS
TC-11	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)
TC-16	PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING
TC-17	TRAFFIC CONTROL DETAILS FOR FREEWAY SHOULDER CLOSURES PARTIAL RAMP CLOSURES
TC-22	ARTERIAL ROAD INFORMATION SIGN
TC-24	CITY OF CHICAGO TYPICAL PAVEMENT MARKINGS

**GENERAL NOTES**

- BEFORE STARTING WORK, THE CONTRACTOR SHALL CALL CHICAGO UTILITY AREA NETWORK (C.U.A.N.) AT (312) 744-7000 OR 811 FOR FIELD LOCATIONS OF BURIED UTILITIES. 72 HOUR ADVANCE NOTIFICATION IS REQUIRED.
- THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES AS REQUIRED.
- THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
- THE CONTRACTOR SHALL SWEEP AND CLEAN THE PAVEMENT SURFACE PER ARTICLE 107.15 OF THE STANDARD SPECIFICATIONS AND AS DIRECTED BY THE ENGINEER.
- DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS. STATIONS ARE SHOWN FOR REFERENCE ONLY AND ARE APPROXIMATE.
- BEFORE BEGINNING WORK, THE CONTRACTOR SHALL RETAIN AND RECORD (FOR FUTURE REFERENCES), ALL EXISTING PAVEMENT MARKING LINES IN ORDER THAT THESE LOCATIONS CAN BE RE-ESTABLISHED FOR STRIPING. EXACT LOCATIONS OF ALL STRIPING SHALL BE AS DIRECTED BY THE ENGINEER.
- ALL PAVEMENT MARKINGS SHALL BE PLACED THROUGHOUT THE PROJECT ACCORDING TO CITY OF CHICAGO TYPICAL PAVEMENT MARKINGS.
- ALL CURB AND GUTTER, BARRIER TRANSITION AND SIDEWALK REPLACEMENT LIMITS WILL BE VERIFIED IN THE FIELD BY THE ENGINEER.
- SAW CUTTING PRIOR TO ANY REMOVAL ITEMS NOTED ON THE PLANS OR DIRECTED BY THE ENGINEER SHALL BE CONSIDERED INCLUDED IN THE COST OF THE ITEMS BEING REMOVED.
- THE CONTRACTOR SHALL USE CARE IN REMOVING OR EXCAVATING NEAR ALL EXISTING ITEMS WHICH WILL REMAIN. ANY DAMAGE DONE TO EXISTING ITEMS BY THE CONTRACTOR SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
- TRAFFIC CONTROL AND PROTECTION ON THE I-90 EB EXIT RAMP REQUIRED FOR PROTECTIVE SHIELD INSTALLATION, REMOVAL AND REPLACEMENT OF UNDERPASS LIGHTING, RIPRAP PLACEMENT OR SUBSTRUCTURE CONCRETE REPAIR IS INCLUDED IN "TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS)".
- THE RESIDENT ENGINEER SHALL CONTACT WALTER CZARNY, AREA TRAFFIC FIELD ENGINEER AT (847) 705-8419 AT LEAST (2) WEEKS PRIOR TO PLACING PERMANENT PAVEMENT MARKINGS.
- THE CONTRACTOR SHALL CONTACT THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 IN ADVANCE OF BEGINNING WORK.

**HOT-MIX ASPHALT REQUIREMENTS**

(FOR RESURFACING WB HIGGINS ROAD ADJACENT TO BRIDGE APPROACH PAVEMENT CONNECTORS)

MIXTURE TYPE	THICKNESS	VOIDS
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70 (IL 9.5 mm)	1 1/2"	4% @ 70 GYR

THE UNIT WEIGHT USED TO CALCULATE THE HMA SURFACE MIXTURE QUANTITY IS 112 LBS/SQ YD/IN.

THE "AC TYPE" FOR NON-POLYMERIZED HMA MIXES SHALL BE "PG 64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS.

FOR "PERCENT OF RAP", SEE DISTRICT ONE SPECIAL PROVISIONS.

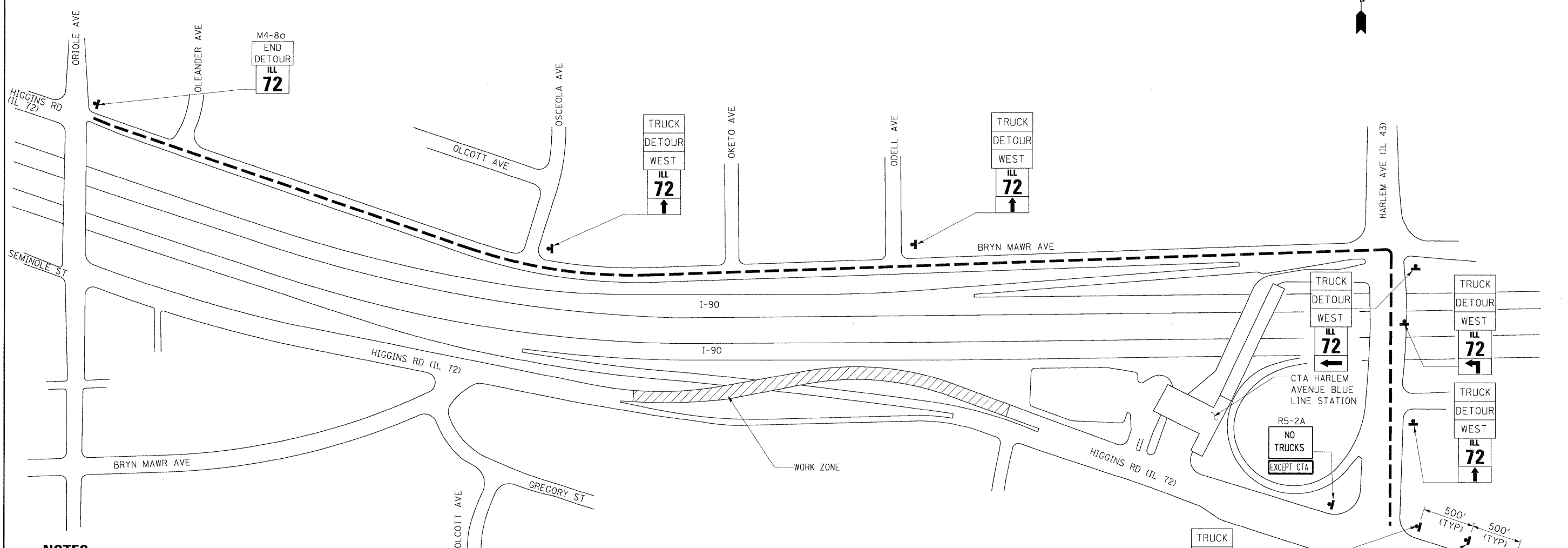
FILE NAME =	DESIGNED - EJA	REVISED -	<b>benesch</b>	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>INDEX OF SHEETS, IDOT STANDARDS, DISTRICT 1 DETAILS, GENERAL NOTES &amp; HMA REQUIREMENTS</b>	F.A.J. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
USER NAME =	DRAWN - EJA	REVISED -				3531	1515.1-I	COOK	35	2
PLOT DATE = 04/13/2010	CHECKED - AJP	REVISED -				CONTRACT NO. 60J58				
	DATE - 3/19/10	REVISED -				FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				
SCALE: N.T.S.						SHEET NO. 1 OF 1 SHEETS		STA. TO STA.		

**SUMMARY OF QUANTITIES**

SPECIALTY ITEM	CODE NUMBER	ITEM	UNIT	ROADWAY		BRIDGE		
				URBAN TOTAL QUANTITY	100% STATE	100% STATE	CONSTRUCTION TYPE CODE 1000-2A	X271-2A
	20200100	EARTH EXCAVATION	CU YD	25	25			
	28000510	INLET FILTERS	EACH	5	5			
	28100107	STONE RIPRAP, CLASS A4	SQ YD	30		30		
	28200200	FILTER FABRIC	SQ YD	30		30		
	40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	18	18			
	40603340	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70	TON	15	15			
	42001300	PROTECTIVE COAT	SQ YD	396	396			
	42001420	BRIDGE APPROACH PAVEMENT CONNECTOR (PCC)	SQ YD	116	116			
	42100800	PAVEMENT REINFORCEMENT 9"	SQ YD	116	116			
	42400200	PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH	SQ FT	300.0	300.0			
	44000155	HOT-MIX ASPHALT SURFACE REMOVAL, 1 1/2"	SQ YD	207	207			
	44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	87	87			
	44001700	COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	100	100			
	48101620	AGGREGATE SHOULDERS, TYPE B 10"	SQ YD	42	42			
	50102400	CONCRETE REMOVAL	CU YD	13.0		13.0		
	50157300	PROTECTIVE SHIELD	SQ YD	1,435		1,435		
	50300255	CONCRETE SUPERSTRUCTURE	CU YD	14.3		14.3		
	50300260	BRIDGE DECK GROOVING	SQ YD	1,609		1,609		
	50300300	PROTECTIVE COAT	SQ YD	2,343		2,343		
	50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	1190		1190		
	50800515	BAR SPLICERS	EACH	22		22		
	52000110	PREFORMED JOINT STRIP SEAL	FOOT	66.0		66.0		
	58700300	CONCRETE SEALER	SQ FT	315		315		
	60600605	CONCRETE CURB, TYPE B	FOOT	63.0	63.0			
	60603800	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	87.0	87.0			
*	63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	1	1			
*	63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	1	1			
	67000200	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	4	4			
	67100100	MOBILIZATION	L SUM	1	1			
	70101700	TRAFFIC CONTROL AND PROTECTION	L SUM	1	1			
	70102550	TRAFFIC CONTROL AND PROTECTION FOR TEMPORARY DETOUR	EACH	1	1			
	70106800	CHANGEABLE MESSAGE SIGN	CAL MO	3	3			
	70300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	1,544	1,544			
	70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	950	950			
	70400100	TEMPORARY CONCRETE BARRIER	FOOT	840	840			

SPECIALTY ITEM	CODE NUMBER	ITEM	UNIT	ROADWAY		BRIDGE		
				URBAN TOTAL QUANTITY	100% STATE	100% STATE	CONSTRUCTION TYPE CODE 1000-2A	X271-2A
	70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	840	840			
*	78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	140	140			
*	78008210	POLYUREA PAVEMENT MARKING TYPE I - LINE 4"	FOOT	930	930			
*	78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	2	2			
*	78100105	RAISED REFLECTIVE PAVEMENT MARKER (BRIDGE)	EACH	15	15			
*	78200410	GUARDRAIL MARKERS, TYPE A	EACH	1	1			
*	78200530	BARRIER WALL MARKERS, TYPE C	EACH	68	68			
*	78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	1	1			
	78300100	PAVEMENT MARKING REMOVAL	SQ FT	1,550	1,550			
	78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	17	17			
*	81100320	CONDUIT ATTACHED TO STRUCTURE, 1" DIA., PVC COATED GALVANIZED STEEL	FOOT	209	209			
*	81300220	JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 6" X 6" X 4"	EACH	5	5			
*	81300530	JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 12" X 10" X 6"	EACH	2	2			
*	81702110	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 10	FOOT	861	861			
*	84200600	REMOVAL OF LIGHTING UNIT, NO SALVAGE	EACH	4	4			
	X0322185	BRIDGE DECK LATEX CONCRETE OVERLAY, 2 1/4"	SQ YD	1,714		1,714		
	X0322256	TEMPORARY INFORMATION SIGNING	SQ FT	77	77			
*	X0323574	MAINTENANCE OF LIGHTING SYSTEM	CAL MO	3	3			
	X0324848	LIGHT POLE HANDHOLE COVER	EACH	1	1			
	X0325305	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	264		264		
	X0325775	WET REFLECTIVE TEMPORARY TAPE, TYPE III, 4 INCH	FOOT	3,000	3,000			
*	X0326323	UNDERPASS LUMINAIRE, 70 WATT, HIGH PRESSURE SODIUM VAPOR, STAINLESS STEEL HOUSING	EACH	7	7			
	X0326765	CLEANING AND PAINTING EXPOSED REBAR (SPECIAL)	SQ FT	297		297		
	X7011015	TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS)	L SUM	1	1			
	X8210305	PROTECTION AND MAINTENANCE OF EXISTING UNDERPASS LIGHTING	L SUM	1	1			
	Z0001700	APPROACH SLAB REPAIR (FULL DEPTH)	SQ YD	10.0		10.0		
	Z0006204	BRIDGE DECK HYDRO-SCARIFICATION, 1/2"	SQ YD	1,714		1,714		
	Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1			
	Z0016001	DECK SLAB REPAIR (FULL DEPTH, TYPE I)	SQ YD	9.8		9.8		
	Z0016002	DECK SLAB REPAIR (FULL DEPTH, TYPE II)	SQ YD	12.5		12.5		
	Z0018500	DRAINAGE STRUCTURES TO BE CLEANED	EACH	5	5			
	Z0053750	RETROFIT CONCRETE PARAPET	FOOT	525		525		
	Z0073200	TEMPORARY SHORING AND CRIBBING	EACH	2		2		
	Z0080255	IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW)	EACH	1	1			
	44-000700	APPROACH SLAB REMOVAL TEST LEVEL 2	SQ YD	13		13		
	Z0030320	IMPACT ATTENUATORS, RELOCATE (FULLY REDIRECTIVE), TEST LEVEL 2	EACH	1	1			

\* Specialty Items



**NOTES**

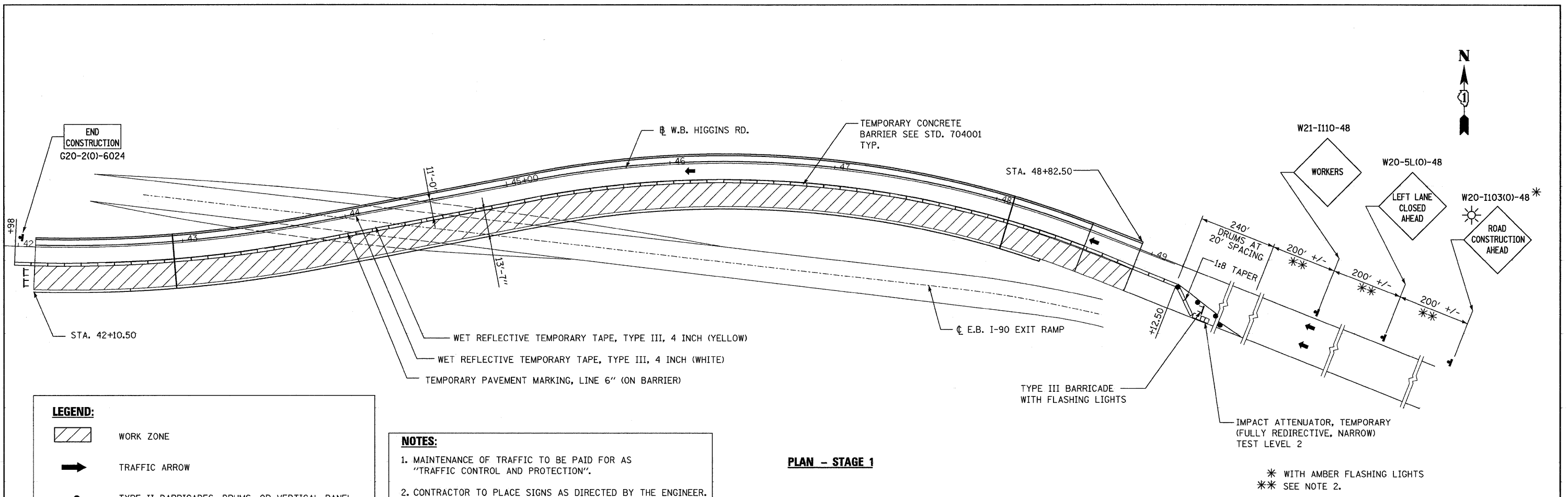
1. CHANGEABLE MESSAGE SIGNS ARE TO BE PLACED TWO (2) WEEKS PRIOR TO THE START OF THE DETOUR. CHANGEABLE MESSAGE SIGNS TO BE PAID FOR SEPARATELY - NOT COVERED UNDER THE COST OF THE DETOUR.
2. ANY EXISTING SIGNS THAT CONTRADICT THE DETOUR SIGNAGE AS SHOWN ON THE PLANS SHALL BE COVERED PRIOR TO THE OPENING OF THE DETOUR ROUTE. COVERS SHALL BE REMOVED AT THE TIME THE DETOUR SIGNS ARE REMOVED. COST IS INCLUDED IN "TRAFFIC CONTROL AND PROTECTION FOR TEMPORARY DETOUR".
3. ALL SIGNAGE SHALL BE IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF THE STATE OF ILLINOIS "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION ADOPTED JANUARY 1, 2007", "THE QUALITY STANDARD FOR WORK ZONE TRAFFIC CONTROL DEVICES REVISED 6/8/05", THE DETAILS OF THESE PLANS, THE "2009 MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES" AND THE SPECIAL PROVISION FOR "TRAFFIC CONTROL AND PROTECTION FOR TEMPORARY DETOUR".
4. IF DEEMED NECESSARY BY THE ENGINEER, A PRE-CONSTRUCTION MEETING WITH THE CONTRACTOR SHALL BE HELD AT LEAST TWO WEEKS PRIOR TO THE DAY THE DETOUR IS TO BE IN EFFECT. THE ROAD SHALL NOT BE CLOSED UNTIL ALL DETOUR SIGNAGE IS IN PLACE.
5. THE SIGNAGE AS SHOWN ON THE PLANS IS DEEMED TO BE THE MINIMUM REQUIRED. THE CONTRACTOR SHALL MAKE ALL CHANGES DEEMED NECESSARY BY THE ENGINEER. ADDITIONS AND DELETIONS OF TRAFFIC CONTROL FOR THIS DETOUR SHALL BE CONSIDERED INCLUDED IN "TRAFFIC CONTROL AND PROTECTION FOR TEMPORARY DETOUR".
6. ALL DETOUR SIGNS SHALL BE REMOVED ONCE CONSTRUCTION IS COMPLETE AND THE AREA IS REOPENED TO THRU TRAFFIC.
7. ALL SIGNS SHOWN SHALL BE FURNISHED, ERECTED, AND MAINTAINED BY THE CONTRACTOR.

**LEGEND**

ROUTE MARKERS		CARDINAL DIRECTION & DETOUR SIGNS	
	FOR U.S. ROUTES M1-40-2424		M3-1-219
	FOR ILLINOIS ROUTES M1-50-2424		M3-2-219
	R.R. UNMARKED ROUTES SPECIAL 24" x 18" VARIABLE 4" BLACK LETTERS ON WHITE REFLECTIVE BACKGROUND		M3-3-219
			M3-4-219
			M1-7-219
			M4-4-219
ARROW SIGNS			
	M5-1L-2115		
	M5-1R-2115		
	M6-1L-2115		
	M6-1R-2115		
	M6-3-2115		

\* WITH AMBER FLASHING LIGHT  
 \*\* CHANGEABLE MESSAGE SIGN  
 SEE NOTE 1.

FILE NAME =	DESIGNED - EJA	REVISED -	<b>benesch</b>	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>WB HIGGINS ROAD DETOUR PLAN</b>	F.A.J. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
USER NAME =	DRAWN - EJA	REVISED -				3531	1515.1-1	COOK	35	4
PLOT DATE = 03/22/2010	CHECKED - AJP	REVISED -				CONTRACT NO. 60J58				
	DATE - 3/19/10	REVISED -	SCALE: N.T.S.	SHEET NO. 1 OF 1 SHEETS	STA. TO STA.	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			



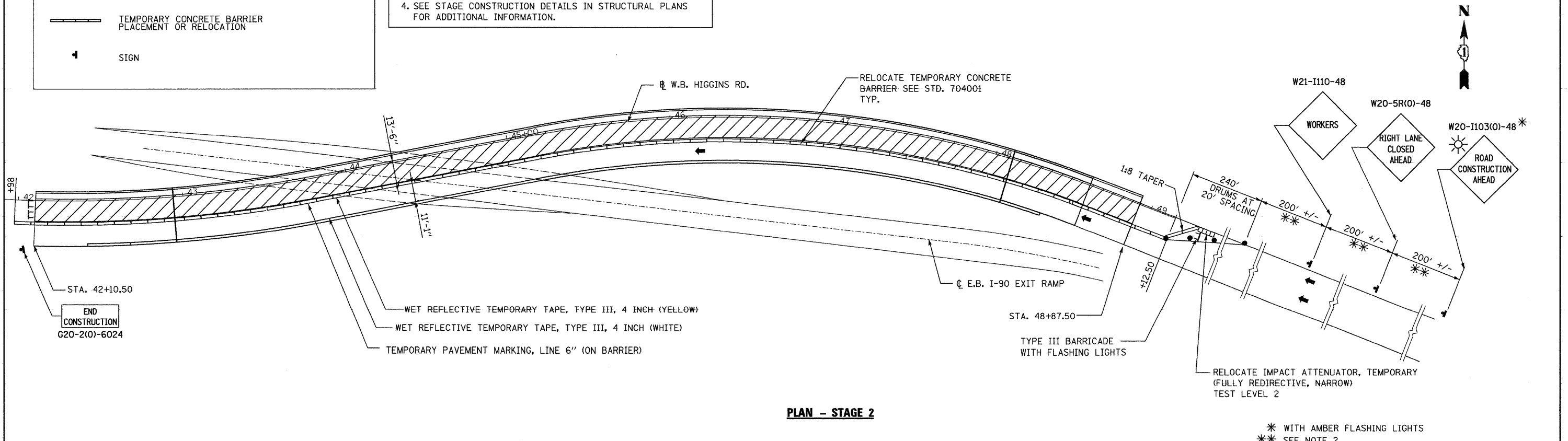
**PLAN - STAGE 1**

\* WITH AMBER FLASHING LIGHTS  
\*\* SEE NOTE 2.

**LEGEND:**

- WORK ZONE
- TRAFFIC ARROW
- TYPE II BARRICADES, DRUMS, OR VERTICAL PANEL W/ STEADY BURNING MONODIRECTIONAL LIGHT
- TYPE III BARRICADE
- TEMPORARY CONCRETE BARRIER PLACEMENT OR RELOCATION
- SIGN

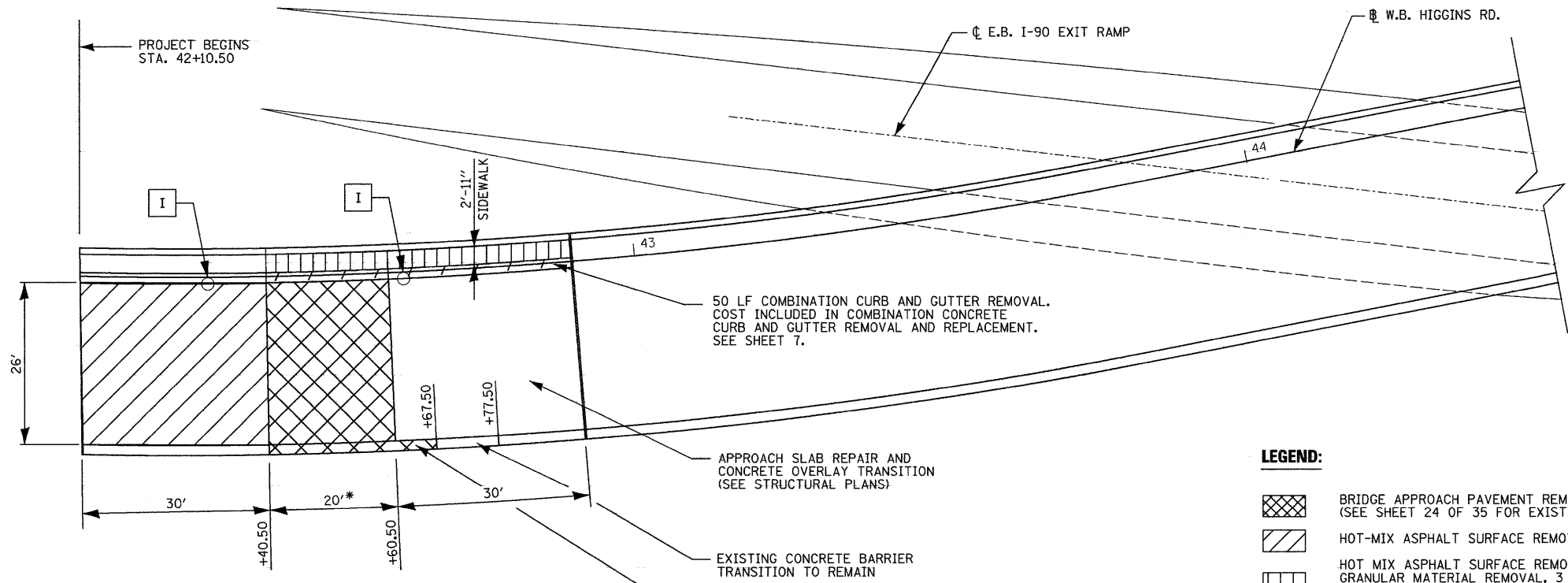
- NOTES:**
1. MAINTENANCE OF TRAFFIC TO BE PAID FOR AS "TRAFFIC CONTROL AND PROTECTION".
  2. CONTRACTOR TO PLACE SIGNS AS DIRECTED BY THE ENGINEER.
  3. WORK ZONE ENTRANCES AND EXITS TO BE DETERMINED IN THE FIELD BY THE ENGINEER.
  4. SEE STAGE CONSTRUCTION DETAILS IN STRUCTURAL PLANS FOR ADDITIONAL INFORMATION.



**PLAN - STAGE 2**






\* WITH AMBER FLASHING LIGHTS  
\*\* SEE NOTE 2.

FILE NAME =	DESIGNED - EJA	REVISED -	<b>benesch</b>	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>WB HIGGINS ROAD MAINTENANCE OF TRAFFIC PLAN</b>		F.A.U. RTE. 3531	SECTION 1515.1-1	COUNTY COOK	TOTAL SHEETS 35	SHEET NO. 5	
USER NAME =	DRAWN - EJA	REVISED -			SCALE: 1" = 30'	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT	CONTRACT NO. 60J58	
PLOT DATE = 04/13/2010	CHECKED - AJP	REVISED -										
	DATE - 3/19/10	REVISED -										



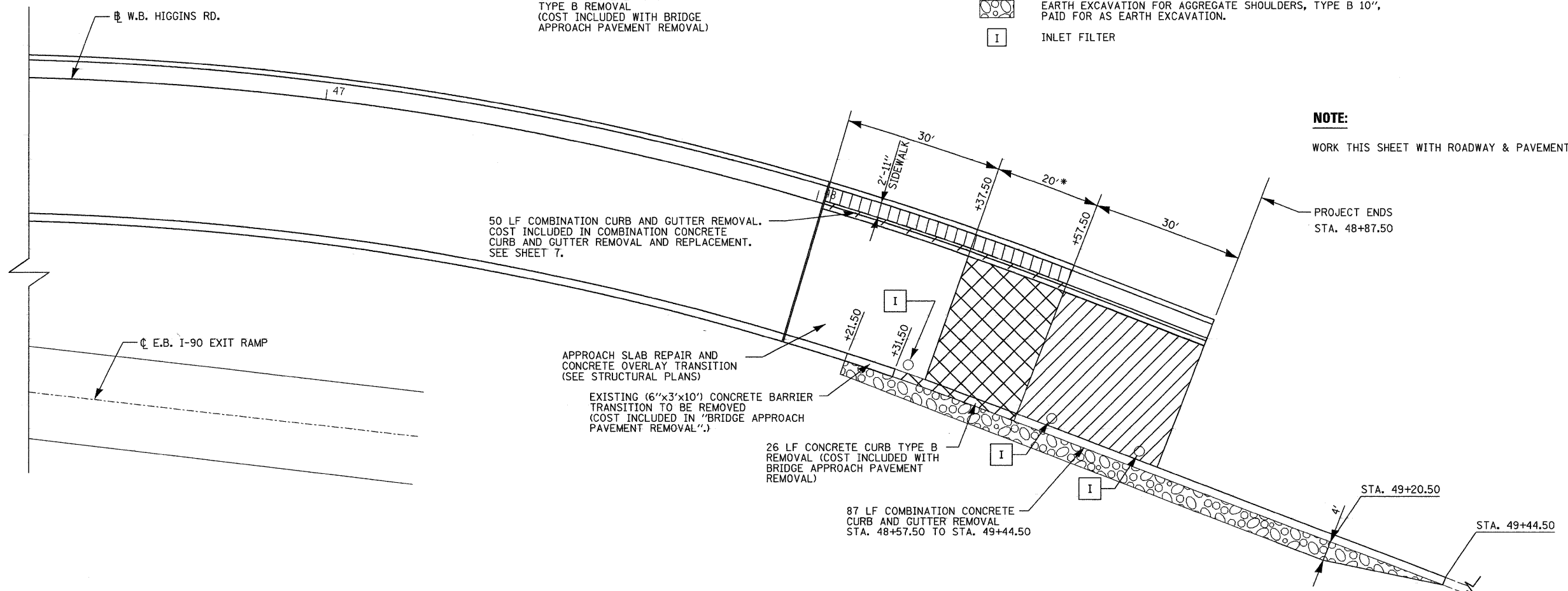
\* THE EXISTING REINFORCEMENT BARS CONNECTING THE EXISTING APPROACH CONNECTOR TO THE 30' APPROACH SLAB ARE TO REMAIN. THE EXISTING BOTTOM LONGITUDINAL BARS EXTENDING FROM THE APPROACH SLAB INTO THE CONNECTOR PAVEMENT ARE #5 BARS AT 12" CTS. AND EXTEND 3'-0" INTO THE CONNECTOR PAVEMENT. THE TOP BARS ARE #4 BARS AT 7" CTS. AND CAN BE CUT OFF 3'-0" INTO THE PROPOSED CONNECTOR PAVEMENT. COST INCLUDED IN BRIDGE APPROACH PAVEMENT REMOVAL.

**LEGEND:**

-  BRIDGE APPROACH PAVEMENT REMOVAL (DEPTH = 9 INCHES) (SEE SHEET 24 OF 35 FOR EXISTING APPROACH SLAB DETAILS)
-  HOT-MIX ASPHALT SURFACE REMOVAL, 1 1/2"
-  HOT MIX ASPHALT SURFACE REMOVAL, 1 1/2" AND SUBBASE GRANULAR MATERIAL REMOVAL, 3 1/2" AND VARIES TO ACCOMMODATE PCC SIDEWALK, 5 INCH (SUBBASE REMOVAL PAID FOR AS EARTH EXCAVATION).
-  EARTH EXCAVATION FOR AGGREGATE SHOULDERS, TYPE B 10", PAID FOR AS EARTH EXCAVATION.
-  INLET FILTER

**NOTE:**

WORK THIS SHEET WITH ROADWAY & PAVEMENT MARKING PLAN SHEET.



FILE NAME =	DESIGNED - EJA	REVISED -
USER NAME =	DRAWN - EJA	REVISED -
PLOT DATE = 04/13/2010	CHECKED - AJP	REVISED -
	DATE - 3/19/10	REVISED -

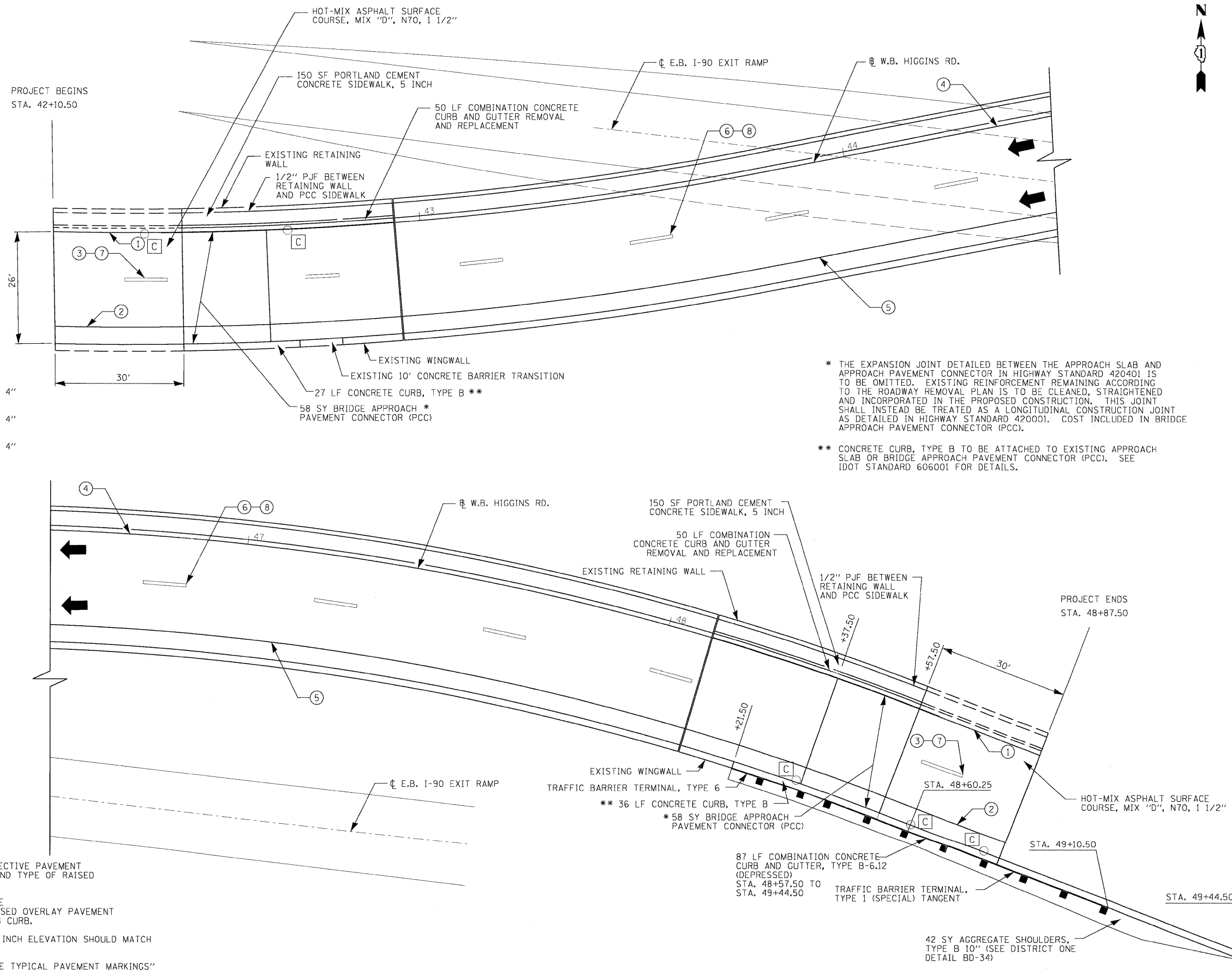
**benesch**

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**WB HIGGINS ROAD  
ROADWAY REMOVAL PLAN**

SCALE: 1" = 20' SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3531	1515.1-I	COOK	35	6
FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT			CONTRACT NO. 60J58	



**LEGEND:**

- ① THERMOPLASTIC PAVEMENT MARKING TYPE 1 - LINE 4" (WHITE EDGE LINES)
- ② THERMOPLASTIC PAVEMENT MARKING TYPE 1 - LINE 4" (YELLOW EDGE LINES)
- ③ THERMOPLASTIC PAVEMENT MARKING TYPE 1 - LINE 4" (WHITE, 10' DASH, 30' SKIP)
- ④ POLYUREA PAVEMENT MARKING TYPE 1 - LINE 4" (WHITE EDGE LINES)
- ⑤ POLYUREA PAVEMENT MARKING TYPE 1 - LINE 4" (YELLOW EDGE LINE)
- ⑥ POLYUREA PAVEMENT MARKING TYPE 1 - LINE 4" (WHITE, 10' DASH, 30' SKIP)
- ⑦ RAISED REFLECTIVE MARKERS
- ⑧ RAISED REFLECTIVE MARKERS (BRIDGE)
- C DRAINAGE STRUCTURE TO BE CLEANED

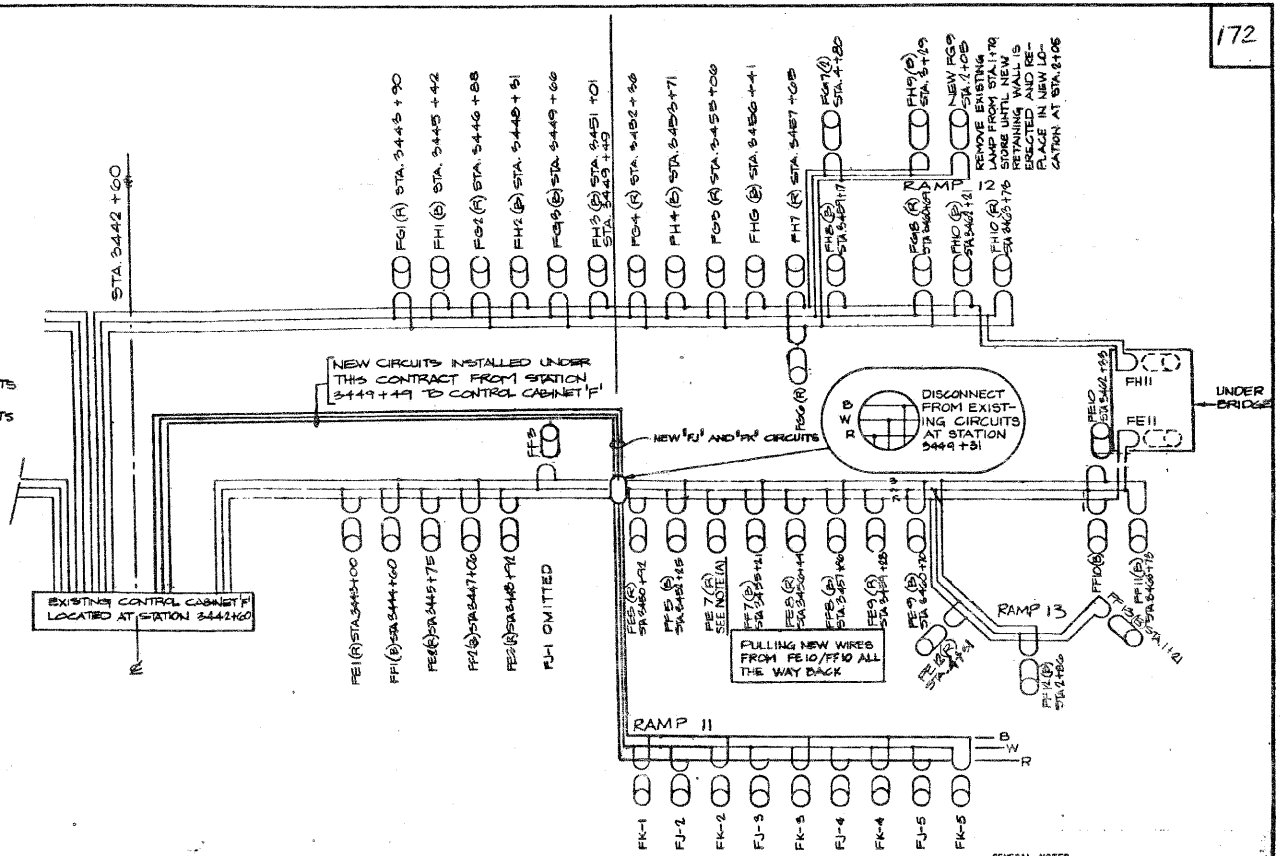
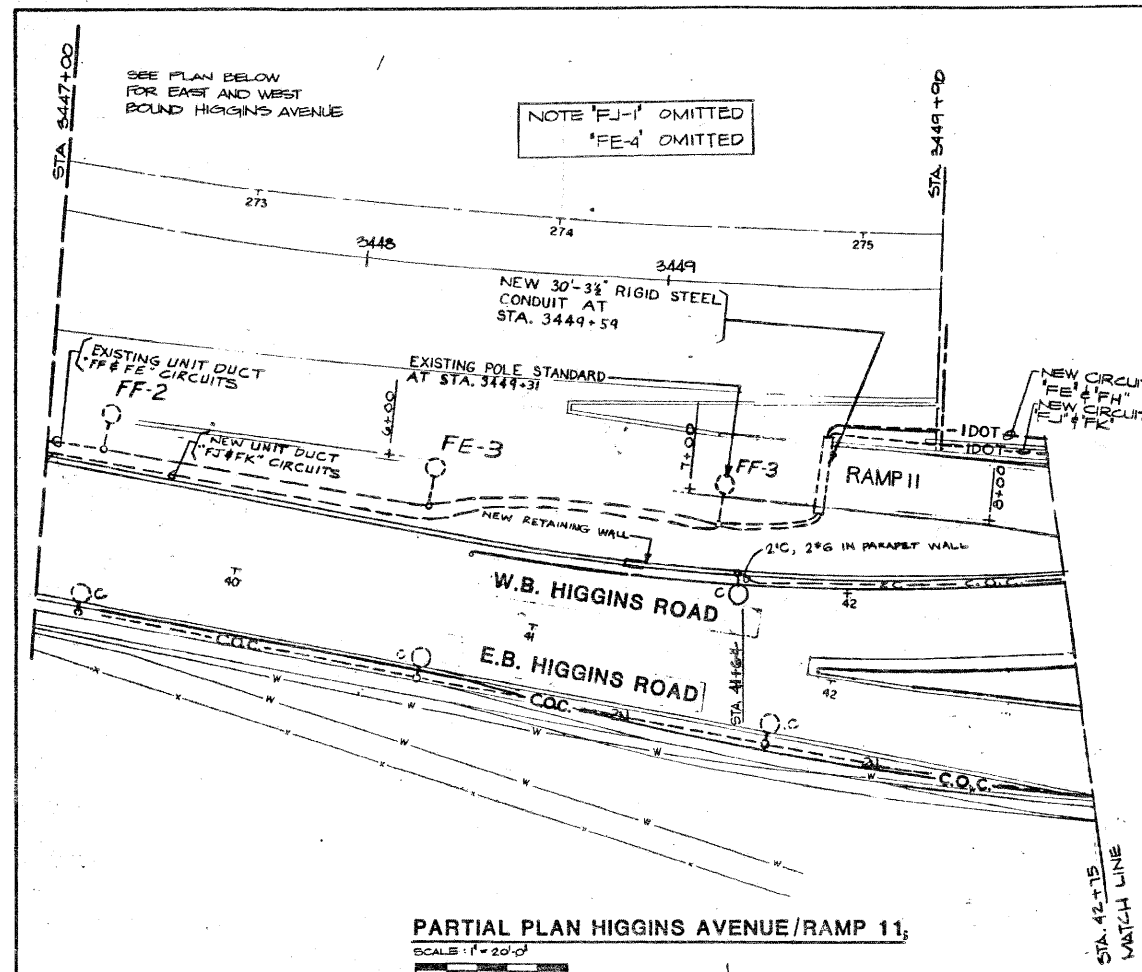
**NOTES:**

1. SEE IDOT DISTRICT 1 STANDARD TC-11 "RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)" FOR PLACEMENT AND TYPE OF RAISED REFLECTIVE PAVEMENT MARKERS.
2. COMBINATION CONCRETE CURB AND GUTTER SHOULD BE CONSTRUCTED SO GUTTER ELEVATION MATCHES PROPOSED OVERLAY PAVEMENT ELEVATION AND CURB ELEVATION TIES INTO EXISTING CURB.
3. PROPOSED PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH ELEVATION SHOULD MATCH THAT OF THE ADJACENT PROPOSED CURB.
4. SEE IDOT DISTRICT 1 STANDARD TC-13 "DISTRICT ONE TYPICAL PAVEMENT MARKINGS" FOR ADDITIONAL PAVEMENT MARKING INFORMATION.

\* THE EXPANSION JOINT DETAILED BETWEEN THE APPROACH SLAB AND APPROACH PAVEMENT CONNECTOR IN HIGHWAY STANDARD 420401 IS TO BE OMITTED. EXISTING REINFORCEMENT REMAINING ACCORDING TO THE ROADWAY REMOVAL PLAN IS TO BE CLEANED, STRAIGHTENED AND INCORPORATED IN THE PROPOSED CONSTRUCTION. THIS JOINT SHALL INSTEAD BE TREATED AS A LONGITUDINAL CONSTRUCTION JOINT AS DETAILED IN HIGHWAY STANDARD 420001. COST INCLUDED IN BRIDGE APPROACH PAVEMENT CONNECTOR (PCC).

\*\* CONCRETE CURB, TYPE B TO BE ATTACHED TO EXISTING APPROACH SLAB OR BRIDGE APPROACH PAVEMENT CONNECTOR (PCC). SEE IDOT STANDARD 606001 FOR DETAILS.

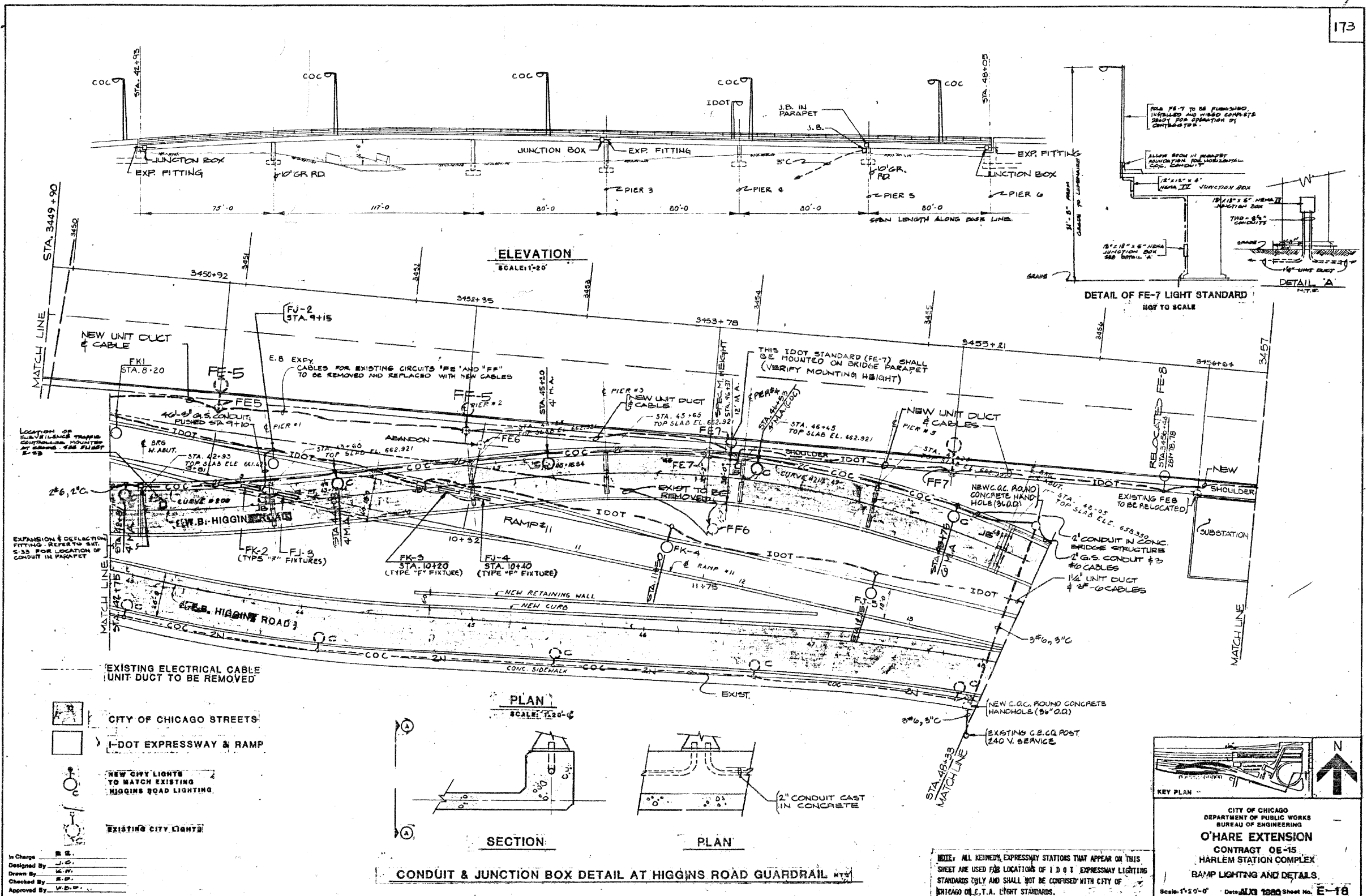
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USER NAME =	DRAWN - EJA	REVISED -			3531	1515.1-1	COOK	35	7		
PLOT DATE = 03/22/2010	CHECKED - AJP	REVISED -			SCALE: 1" = 20'		SHEET NO. 1 OF 1 SHEETS		STA. 42+10.50 TO STA. 48+87.50		CONTRACT NO. 60J58
DATE = 3/19/10	DATE = 3/19/10	REVISED -			FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT				



FOR INFORMATION ONLY

FILE NAME =	DESIGNED - EJA	REVISIONS -	<b>benesch</b>	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>EXISTING LIGHTING PLANS</b>	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
USER NAME =	DRAWN - EJA	REVISIONS -				3531	1515.1-1	COOK	35	8
CHECKED - AJP	REVISIONS -	CONTRACT NO. 60J58								
PLOT DATE = 03/22/2010	DATE - 3/19/10	REVISIONS -				FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT				
SCALE: N.T.S. SHEET NO. 1 OF 3 SHEETS STA. TO STA.										



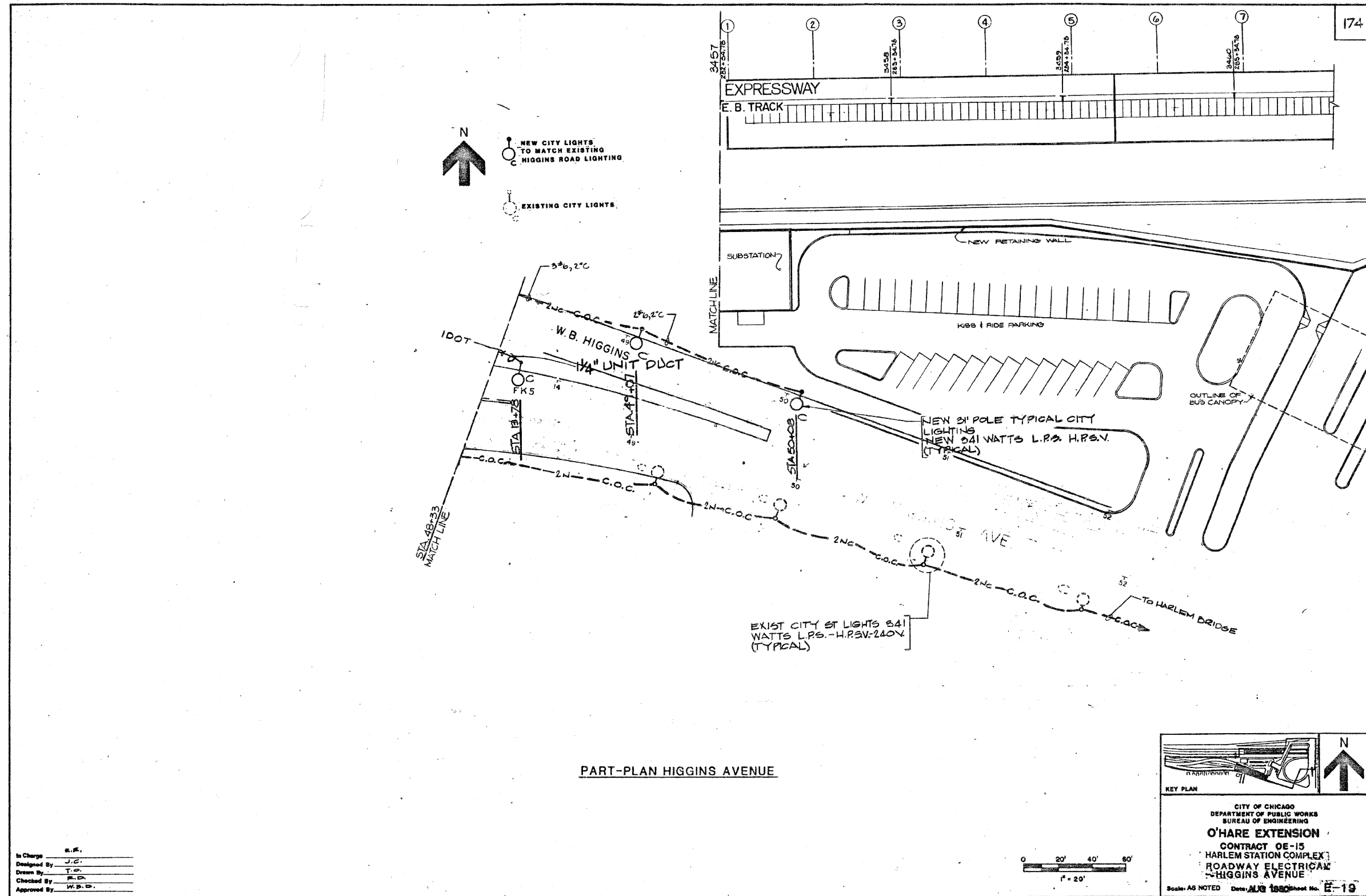


In Charge: [Signature]  
 Designed By: [Signature]  
 Drawn By: [Signature]  
 Checked By: [Signature]  
 Approved By: [Signature]

- CITY OF CHICAGO STREETS
- I-DOT EXPRESSWAY & RAMP
- NEW CITY LIGHTS TO MATCH EXISTING HIGGINS ROAD LIGHTING
- EXISTING CITY LIGHTS

FOR INFORMATION ONLY

FILE NAME =	DESIGNED - EJA	REVISED -	<b>benesch</b>	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING LIGHTING PLANS	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
USER NAME =	DRAWN - EJA	REVISED -				3531	1515.1-1	COOK	35	9
PLOT DATE = 03/22/2010	CHECKED - AJP	REVISED -				CONTRACT NO. 60J58				
DATE = 3/19/10	DATE =	REVISED -	SCALE: N.T.S. SHEET NO. 2 OF 3 SHEETS STA. TO STA.			FED. ROAD DIST. NO. - [ILLINOIS] FED. AID PROJECT				



In Charge \_\_\_\_\_  
 Designed By J.C.  
 Drawn By T.O.  
 Checked By R.D.  
 Approved By W.D.

PART-PLAN HIGGINS AVENUE

FOR INFORMATION ONLY

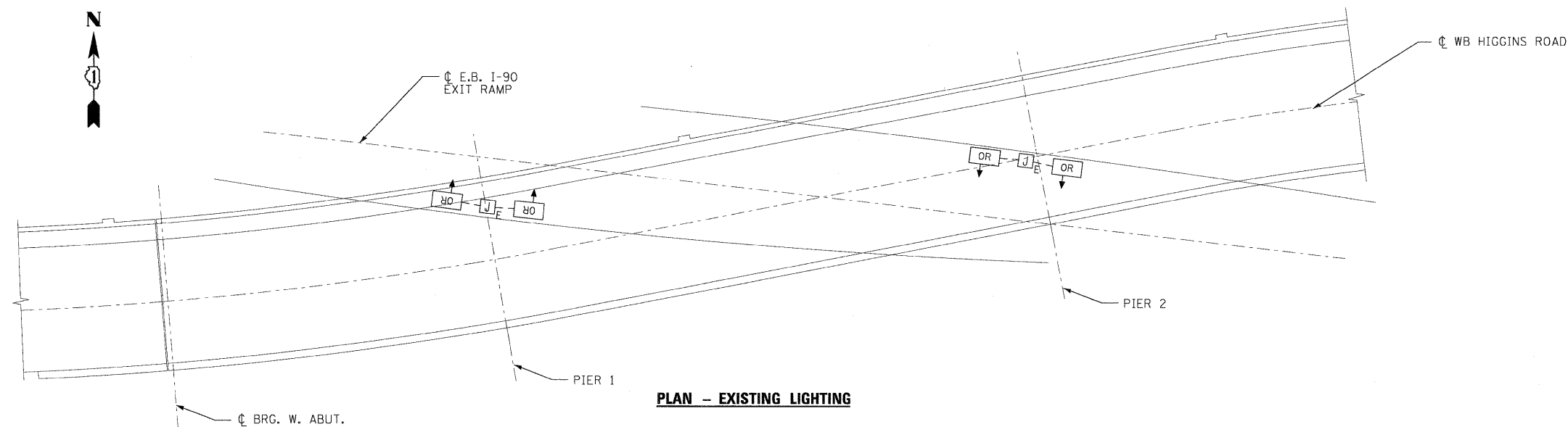
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PLOT DATE = 03/22/2010	CHECKED - AJP	REVISED -
	DATE - 3/19/10	REVISED -

**benesch**

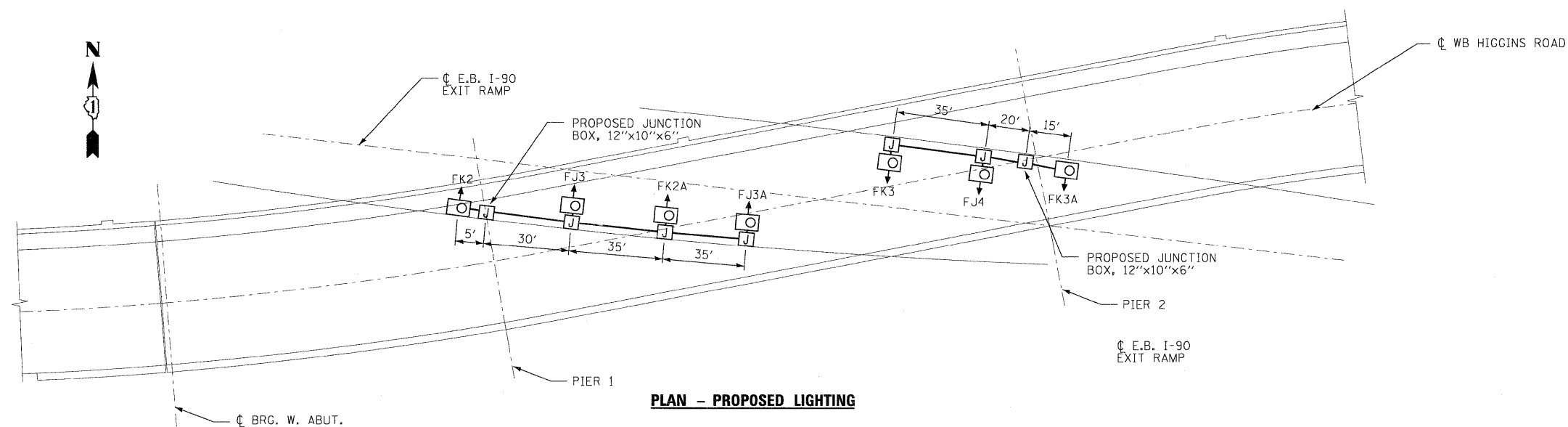
STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

EXISTING LIGHTING PLANS		
SCALE: N.T.S.	SHEET NO. 3 OF 3 SHEETS	STA. TO STA.

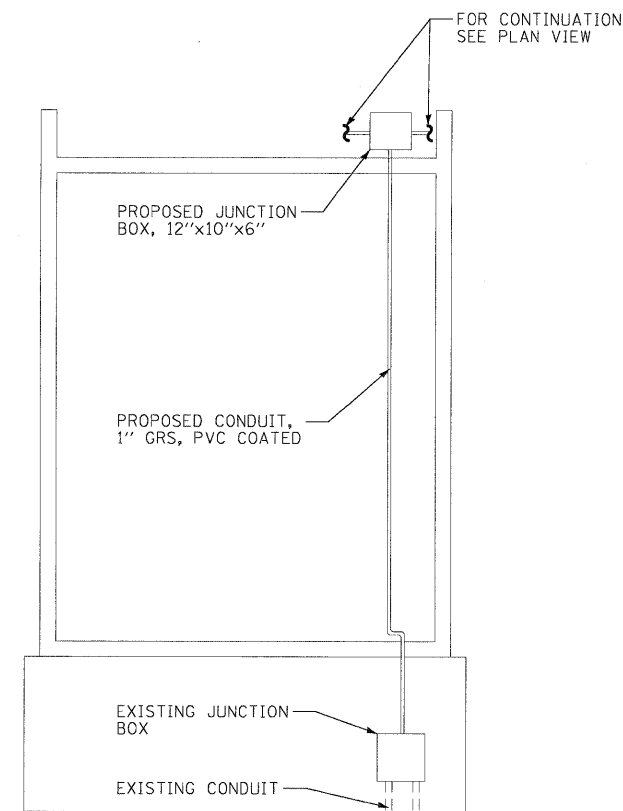
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3531	1515.1-I	COOK	35	10
CONTRACT NO. 60J58			ISSUED FOR BID 12-17-80	



**PLAN - EXISTING LIGHTING**



**PLAN - PROPOSED LIGHTING**



**PIER DETAIL  
(TYPICAL FOR PIER 1 & 2)**

**LEGEND - THIS SHEET**

- EXISTING LUMINAIRE TO BE REMOVED
- PROPOSED LUMINAIRE, 70W, HPS, (WITH LUMINAIRE DESIGNATION)
- EXISTING JUNCTION BOX
- PROPOSED JUNCTION BOX, 6"x6"x4" STAINLESS STEEL ATTACHED TO STRUCTURE, UNLESS OTHERWISE NOTED
- EXISTING CONDUIT TO BE REMOVED
- PROPOSED CONDUIT, 1" PVC COATED, GRS WITH 3-1/2" NO. 10 AND 1-1/2" NO. 10 GROUND (GREEN)

**NOTES:**

1. CONTRACTOR SHALL ASSUME CONTROL AND MAINTENANCE OF CONTROLLER 'F' LOCATED ON HIGGINS AVE. (ON WEST HIGGINS AVE. WEST OF WEST BRYN MAWR AVE.). COST FOR MAINTENANCE OF CONTROLLER SHALL BE INCLUDED IN "MAINTENANCE OF LIGHTING SYSTEM".
2. THE CONTRACTOR SHALL REPLACE THE EXISTING LUMINAIRES AT THE EXISTING LOCATIONS AS SHOWN ON THE PLANS. THIS SHALL INCLUDE ALL CONDUIT AND CABLE, AS WELL AS A NEW JUNCTION BOX AT THE TOP OF THE CONDUIT RISER AS SHOWN ON THE TYPICAL PIER DETAIL.
3. FOR MAINTENANCE OF LIGHTING SYSTEM AND PROTECTION AND MAINTENANCE OF EXISTING UNDERPASS LIGHTING, SEE SPECIAL PROVISIONS.
4. SEE EXISTING LIGHTING PLANS FOR LIGHTING INFORMATION.

**ESTIMATED BILL OF MATERIAL - THIS SHEET**

ITEM	UNIT	TOTAL
CONDUIT ATTACHED TO STRUCTURE, 1" DIA., PVC COATED GALVANIZED STEEL	FOOT	209
JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 6" x 6" x 4"	EACH	5
JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 12" x 10" x 6"	EACH	2
ELECTRICAL CABLE CONDUIT, 600V (XLP-TYPE USE) 1/2" NO. 10	FOOT	861
REMOVAL OF LIGHTING UNIT, NO SALVAGE	EACH	4
MAINTENANCE OF LIGHTING SYSTEM	CAL MO	3
LIGHT POLE HANDHOLE COVER	EACH	1
UNDERPASS LUMINAIRE, 70 WATT, HIGH PRESSURE SODIUM VAPOR, STAINLESS STEEL HOUSING	EACH	7
PROTECTION AND MAINTENANCE OF EXISTING UNDERPASS LIGHTING	L SUM	1

\*SEE BRIDGE GENERAL PLAN AND ELEVATION FOR LOCATION.

FILE NAME =	DESIGNED - GHT	REVISED -
USER NAME =	DRAWN - BDW	REVISED -
PLOT DATE = 03/22/2010	CHECKED - GHT	REVISED -
	DATE - 3/19/10	REVISED -

**benesch**

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>WB HIGGINS ROAD</b>		F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
<b>UNDERPASS LIGHTING REPLACEMENT PLAN</b>		3531	1515.1-1	COOK	35	11
SCALE: 1" = 50'	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	CONTRACT NO. 60J58		
		FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			

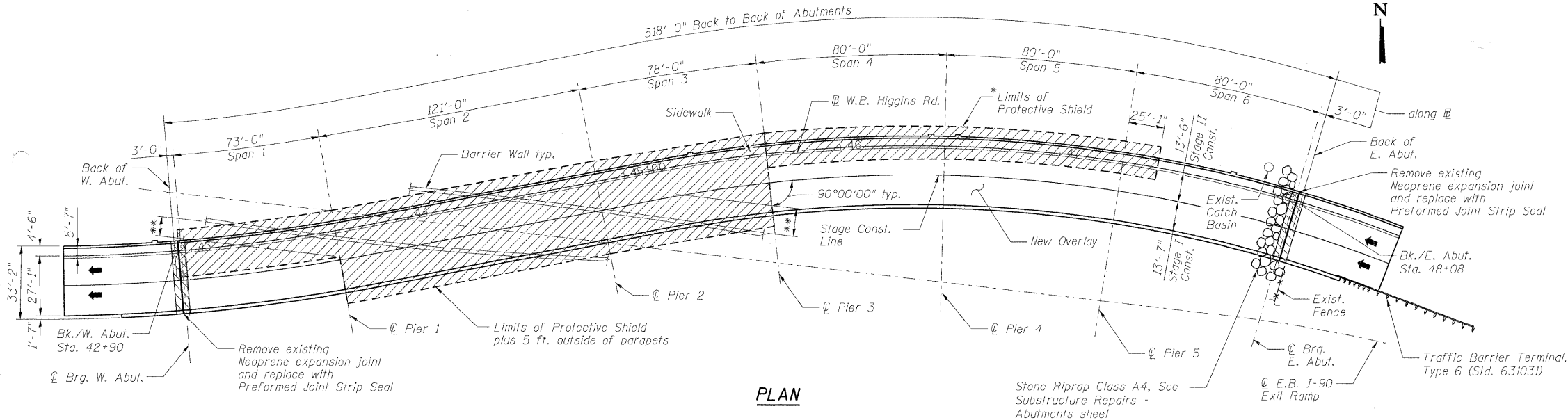
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

Existing Structure:  
The structure is a six-span continuous, composite plate girder structure with a 7 1/2" cast-in-place reinforced concrete deck and no overlay. The fixed pier is a built up steel plate box section, and the four expansion piers are built up I-sections with four 8" diameter pins per pier. The original structure was built in 1980.

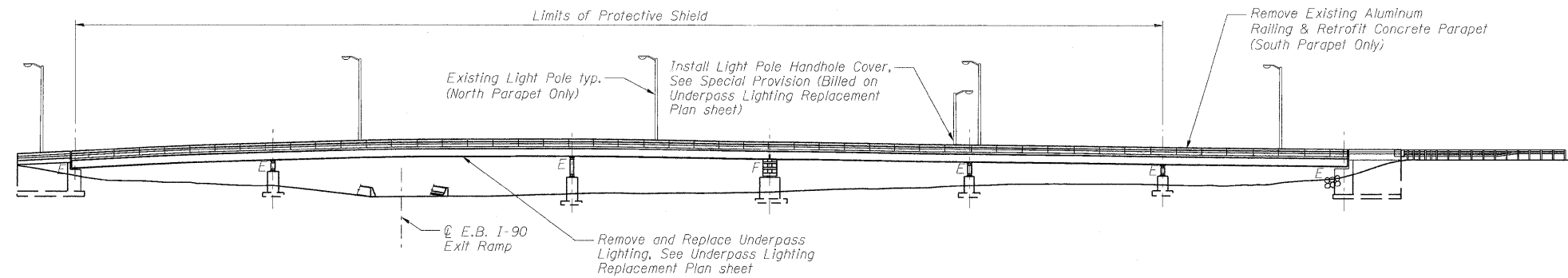
Stage construction shall be utilized to maintain passenger vehicle traffic during construction. A detour route shall be used for truck traffic.

No salvage.

\* Protective Shield to extend from 5 ft. past outside face of bridge deck parapet into the first interior bay of the bridge.



\*\* Protective Shield to extend a minimum of 10'-0" past exit ramp barrier wall of E.B. I-90 Exit Ramp or 5'-0" past outside face of bridge deck parapet.



ELEVATION

DESIGN SPECIFICATIONS

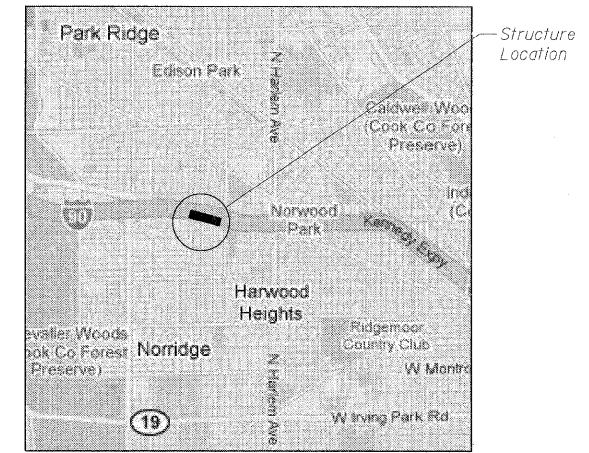
2002 AASHTO Standard Specifications for Highway Bridges, 17th Edition

DESIGN STRESSES

f'c = 3,500 psi  
fy = 60,000 psi (reinforcement)

SCOPE OF WORK

1. Bridge deck hydro-scarification.
2. Bridge deck patching and parapet repair.
3. Approach slab patching.
4. Reconstruct deck joints at each abutment with preformed joint strip seals.
5. Remove existing aluminum railing and retrofit concrete parapet along south parapet.
6. Place new latex concrete overlay on deck and approaches.
7. Structural repair of concrete at abutments.
8. Place riprap at East Abutment.
9. Apply protective coat to parapets, sidewalk, approach slabs and deck.
10. Apply concrete sealer to abutment seats and backwalls.
11. Remove and reconstruct concrete curb and gutter along the sides of each approach slab.
12. Remove and reconstruct the bridge approach pavement connectors.
13. Install traffic barrier terminals and guardrail.

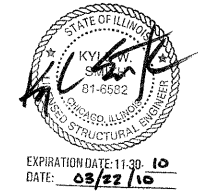


LOCATION SKETCH

GENERAL PLAN AND ELEVATION  
IL 72 (HIGGINS ROAD) WB OVER  
I-90 EB RAMP TO IL 43 (HARLEM AVENUE)  
COOK COUNTY  
STATION 45+49  
STRUCTURE NO. 016-2519

DESIGNED -	JLS
CHECKED -	KWS
DRAWN -	RMG
CHECKED -	KWS

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Engineers • Surveyors • Planners  
205 North Michigan Avenue, Suite 2400  
Chicago, Illinois 60601  
312-565-0450 Job No. 10032.13



SHEET NO. 1 14 SHEETS	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	3531	1515.1-1	COOK	35	12
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT		
CONTRACT NO. 60J58					

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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

**GENERAL NOTES**

1. Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions.
2. Reinforcement bars designated (E) shall be epoxy coated.
3. 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 and girders 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.
4. 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.
5. Concrete Sealer shall be applied to abutment seats and backwalls. All surfaces to be sealed shall be cleaned thoroughly prior to sealer application. Cost included with Concrete Sealer.
6. The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.
7. Stage construction shall be utilized to maintain traffic during construction.
8. The Contractor shall exercise care during removal of existing joints to ensure that the slab, beams and diaphragms' integrity will not be detrimentally impacted. The Contractor shall repair any damage(s) to the slab, beams and diaphragms caused by his operation as directed by the Engineer at no additional cost to the Department.
9. Protective Coat shall be applied to the new Latex Concrete Overlay on the deck and approach slabs. Protective Coat shall also be applied to the top and inside faces of the parapets and sidewalk.
10. Joint openings shall be adjusted according to Article 520.04 of the Std. Specs. when the deck is poured at an ambient temperature other than 50°F.
11. In the event that Structural Repair of Concrete takes place at a light pole foundation, the Contractor may be required to temporarily shore or remove and reinstall the light pole if deemed necessary by the Engineer. If necessary, this work shall be performed according to Article 109.04 of the Standard Specifications.
12. The final grades and cross-slopes for the latex concrete overlay and expansion joint reconstruction shall conform to the existing grades plus the net increase in deck thickness specified in the plans. Any preliminary survey required for the Contractor to conform to these grades and to fabricate the preformed joint strip seal expansion joints shall not be paid for separately but shall be included in the cost of the major items of work involved.

**INDEX OF SHEETS**

- 1 General Plan and Elevation
- 2 General Notes, Bill of Material and Index of Sheets
- 3 Stage Construction Details
- 4 Bridge Deck, Parapet and Approach Slab Repairs
- 5 Parapet Retrofit Details
- 6 Expansion Joint Repairs
- 7 Expansion Joint Details
- 8 Preformed Joint Strip Seal
- 9 Substructure Repairs - Abutments
- 10 Bar Splicer Assembly and Mechanical Splicer Details
- 11-14 Existing Plan Information

**TOTAL BILL OF MATERIAL**

ITEM	UNIT	SUPER	SUB	TOTAL
Stone Riprap, Class A4	Sq Yd		30	30
Filter Fabric	Sq Yd		30	30
Concrete Removal	Cu Yd	13.0		13.0
Protective Shield	Sq Yd	1,435		1,435
Concrete Superstructure	Cu Yd	14.3		14.3
Bridge Deck Grooving	Sq Yd	1,609		1,609
Protective Coat	Sq Yd	2,343		2,343
Reinforcement Bars, Epoxy Coated	Pound	1,190		1,190
Bar Splicers	Each	22		22
Preformed Joint Strip Seal	Foot	66.0		66.0
Concrete Sealer	Sq Ft		315	315
Bridge Deck Latex Concrete Overlay, 2 1/4"	Sq Yd	1,714		1,714
Structural Repair of Concrete (Depth Equal to or Less Than 5 Inches)	Sq Ft	159	105	264
Cleaning and Painting Exposed Rebar (Special)	Sq Ft	297		297
Approach Slab Repair (Full Depth)	Sq Yd	10.0		10.0
Bridge Deck Hydro-Scarification, 1/2"	Sq Yd	1,714		1,714
Deck Slab Repair (Full Depth, Type I)	Sq Yd	9.8		9.8
Deck Slab Repair (Full Depth, Type II)	Sq Yd	12.5		12.5
Retrofit Concrete Parapet	Foot	525		525
Temporary Shoring and Cribbing	Each		2	2

DESIGNED -	JLS
CHECKED -	KWS
DRAWN -	RMG
CHECKED -	KWS

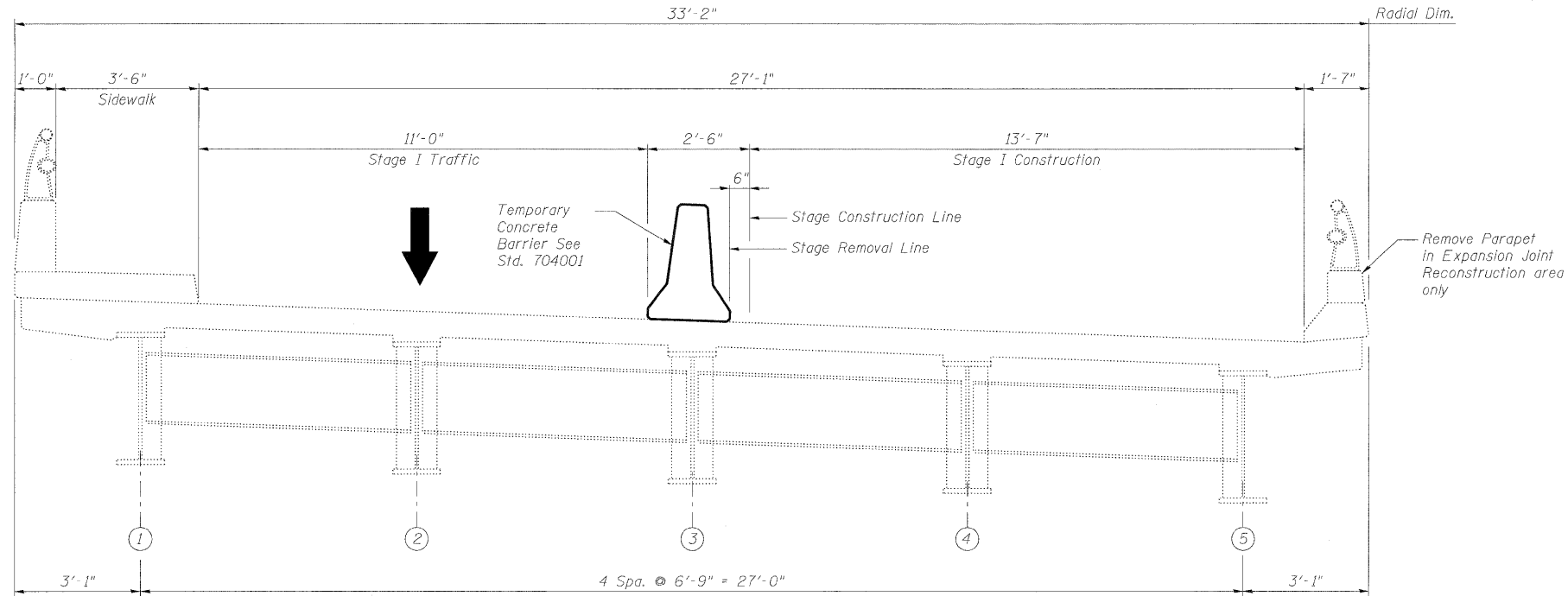
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Engineers • Surveyors • Planners  
205 North Michigan Avenue, Suite 2400  
Chicago, Illinois 60601  
312-565-0450 Job No. 10032.13

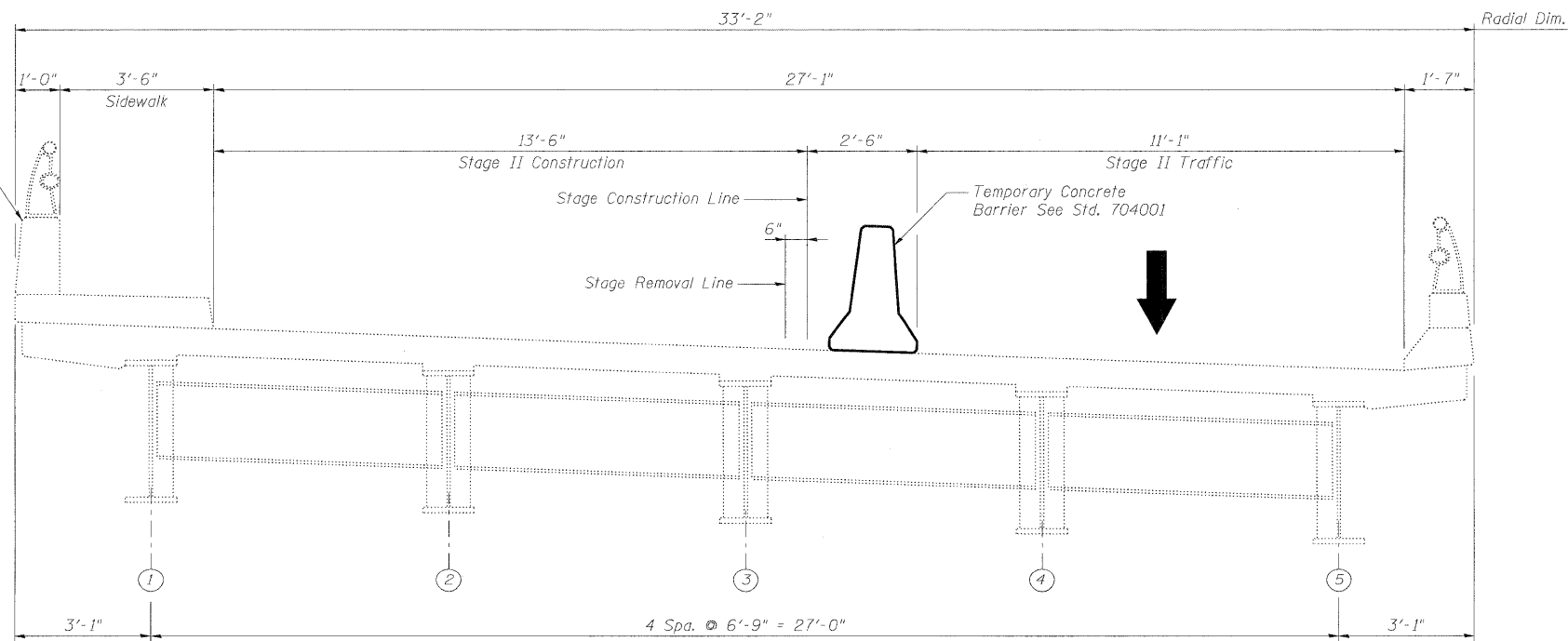
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	3531	1515.1-I	COOK	35	13
			CONTRACT NO. 60J58		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT		

**GENERAL NOTES, BILL OF MATERIAL  
AND INDEX OF SHEETS  
STRUCTURE NO. 016-2519**

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION



**STAGE I CROSS SECTION**  
(Looking East)



**STAGE II CROSS SECTION**  
(Looking East)

**Note:**

For quantity of Temporary Concrete Barrier, see Roadway Plans.

DESIGNED	JLS
CHECKED	KJN
DRAWN	RMG
CHECKED	KWS

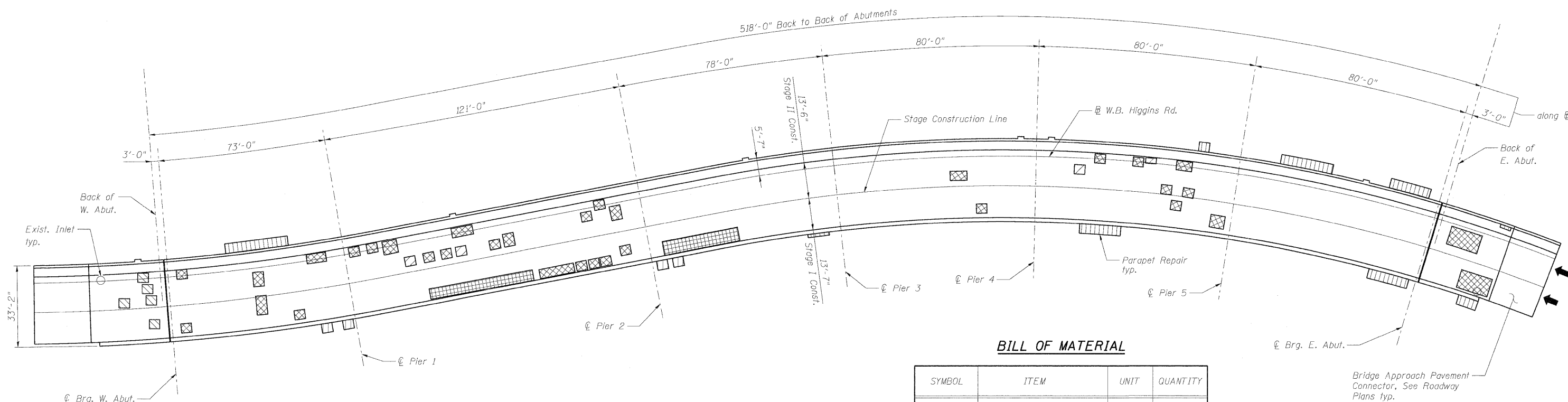
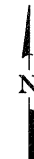
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312-565-0450 Job No. 10032.13

SHEET NO. 3 14 SHEETS	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	3531	1515.1-1	COOK	35	14
FED. ROAD DIST. NO.			ILLINOIS	FED. AID PROJECT	
CONTRACT NO. 60J58					

**STAGE CONSTRUCTION DETAILS**  
**STRUCTURE NO. 016-2519**

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

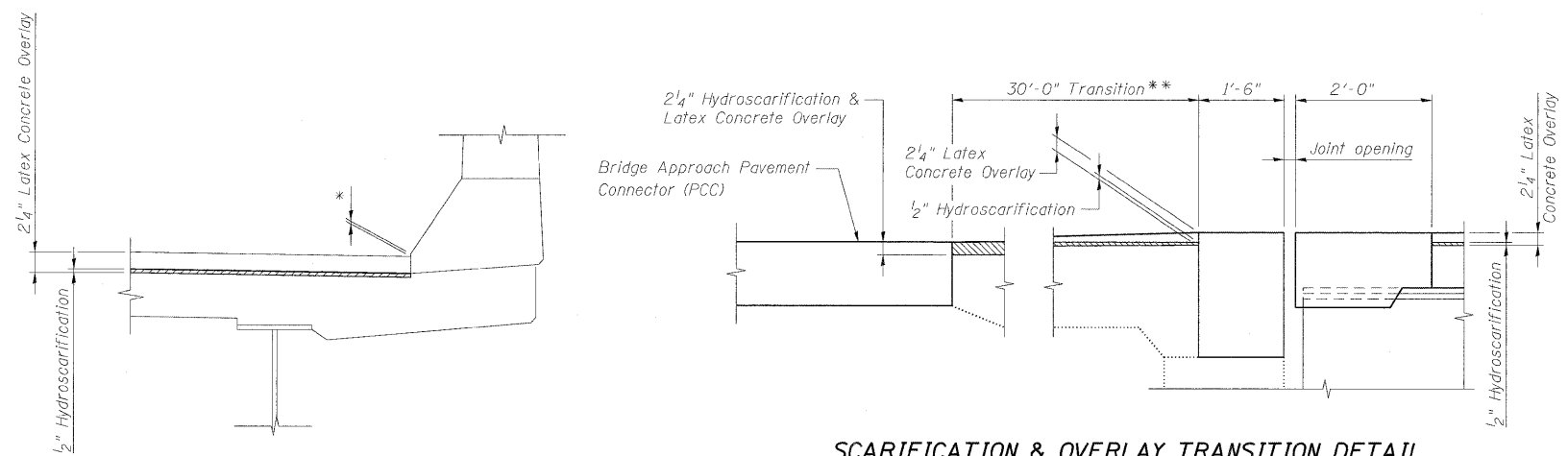


**BILL OF MATERIAL**

SYMBOL	ITEM	UNIT	QUANTITY
	Deck Slab Repair (Partial)	Sq. Yd.	5.0 ▲
	Deck Slab Repair (Full Depth, Type I)	Sq. Yd.	9.8
	Deck Slab Repair (Full Depth, Type II)	Sq. Yd.	12.5
	Cleaning and Painting Exposed Rebar (Special)	Sq. Ft.	297
	Approach Slab Repair (Partial Depth)	Sq. Yd.	10.0 ▲
	Approach Slab Repair (Full Depth)	Sq. Yd.	10.0
	Structural Repair of Concrete (Depth equal to or Less Than 5 Inches)	Sq. Ft.	159
	Protective Shield	Sq. Yd.	1,435
	Bridge Deck Grooving	Sq. Yd.	1,609
	Protective Coat	Sq. Yd.	2,343
	Bridge Deck Latex Concrete Overlay, 2 1/4"	Sq. Yd.	1,714
	Bridge Deck Hydro-Scarification, 1/2"	Sq. Yd.	1,714

**Notes:**

- Deck and approach slab repair areas are estimated based on an IDOT field inspection conducted in October of 2009. Actual repair areas and locations shall be determined by the Engineer and shown on As-Built plans.
- Protective Shield required for scarification operations, deck slab and/or parapet repairs shall be installed according to Article 501.03 of the Standard Specifications. For limits of Protective Shield, see General Plan and Elevation sheet.
- The Contractor shall exhibit extreme care not to damage the existing inlets on the approach slabs during scarification and patching processes. Any damage incurred to the inlets shall be repaired at no additional cost to the Department.
- The overlay transition will result in nominal grade change at approach slab inlets. No height adjustment is necessary and the overlay may be hand finished around the inlet for a smooth transition.
- See Roadway Plans for Inlet protection, approach connector pavement replacement, and curb and gutter replacement details.



**SCARIFICATION & OVERLAY TRANSITION DETAIL**

**SCARIFICATION & OVERLAY DETAIL AT SOUTH PARAPET**

\* Contractor shall increase scarification thickness or reduce overlay thickness as directed by the Engineer to ensure this dimension is never less than 0".

\*\* Cost of increased hydroscarification depth over length of transition shall be included with "Bridge Deck Hydro-Scarification, 1/2".

DESIGNED -	JLS/MFB
CHECKED -	KWS
DRAWN -	RMG
CHECKED -	KWS

▲ For information only to assist the Contractor in bidding. See Special Provisions for "Bridge Deck Latex Concrete Overlay" and "Approach Slab Repair".

**BRIDGE DECK, PARAPET AND APPROACH SLAB REPAIRS  
STRUCTURE NO. 016-2519**

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205 North Michigan Avenue, Suite 2400  
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SHEET NO. 4 14 SHEETS	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	3531	1515.1-I	COOK	35	15
CONTRACT NO. 60J58					
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT					

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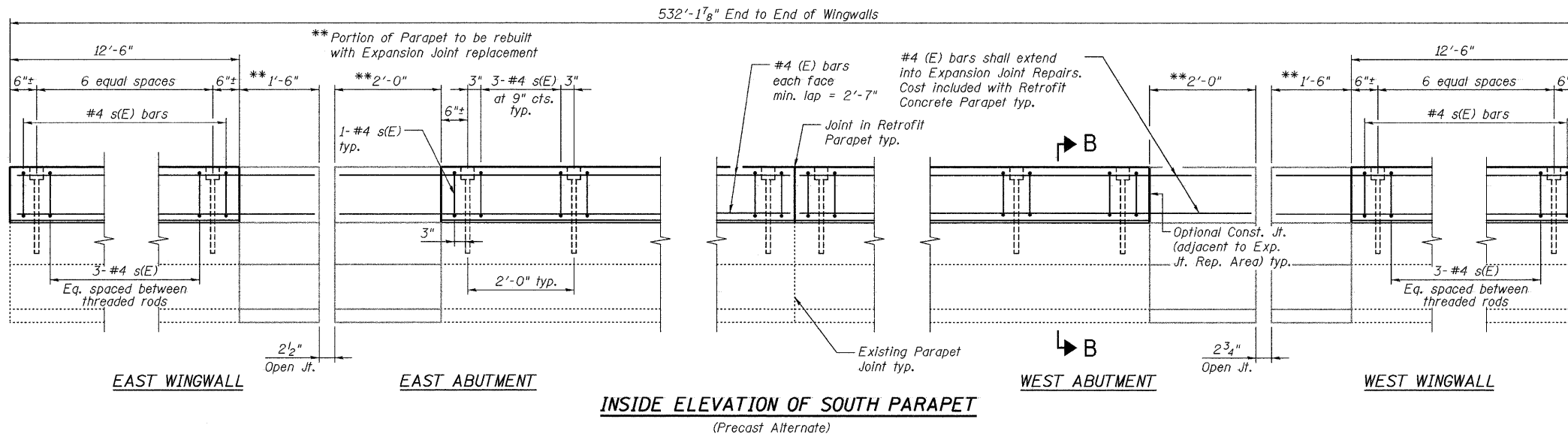
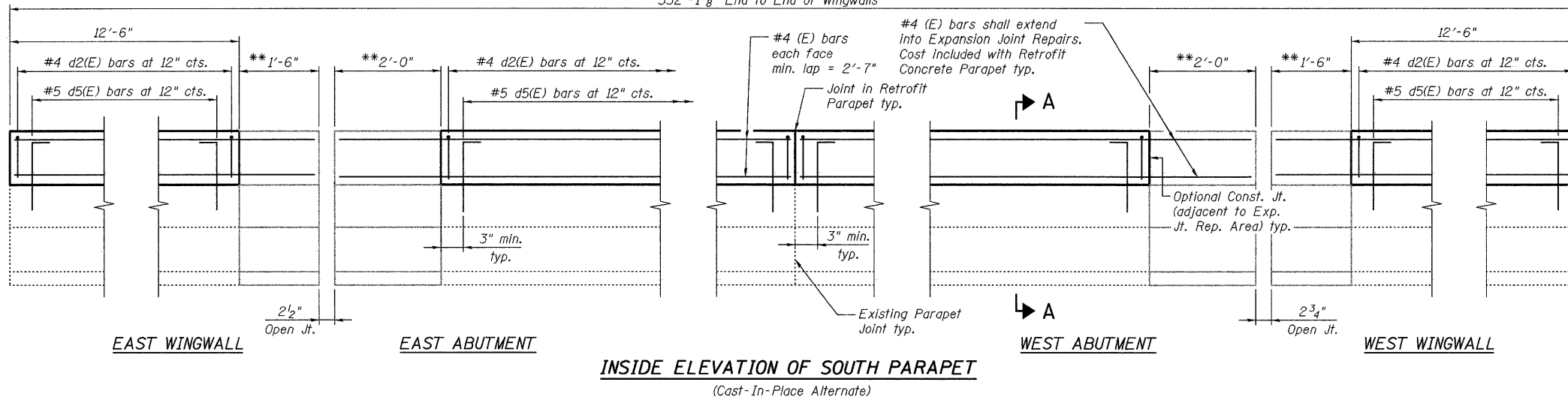
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03/22/2010

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

\*\* Portion of Parapet to be rebuilt with Expansion Joint replacement

532'-1 7/8" End to End of Wingwalls



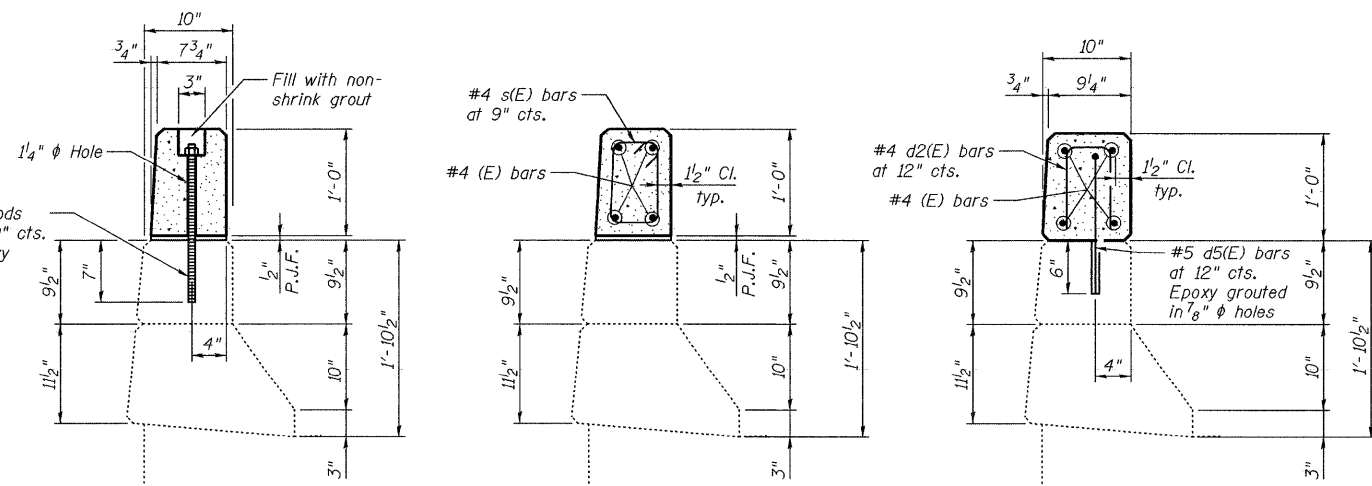
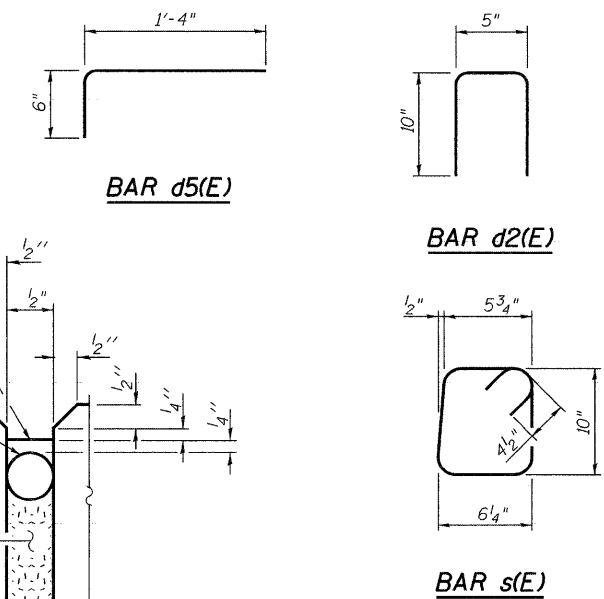
Notes:

- Class SI Concrete shall be used throughout for Cast-in-Place option.
- Class PC Concrete shall be used throughout for Precast option.
- All exposed edges shall be chamfered 3/4".
- Cost of all materials, labor and equipment to complete the work as detailed and as specified in the Special Provisions shall be included in the cost of "Retrofit Concrete Parapet".
- The Contractor shall use the capsule or adhesive cartridge type anchor rods that have been previously tested and given a prior approval by the Department. The Contractor shall install these rods in pre-drilled holes according to the manufacturer's recommendations and procedures.
- The capsule or adhesive cartridge shall be sealed glass capsule or a sealed glass adhesive cartridge containing premeasured amount of adhesive chemical. The threaded rod stud with nut & washers shall conform to ASTM A307.
- Epoxy grout d5(E) bars in 7/8"  $\phi$  x 6" (min.) holes. The grout and the method of application shall be approved by the Department. (See Section 584 of the Standard Specifications). Cost included with "Retrofit Concrete Parapet".
- Retrofit Concrete Parapet shall be used on the south side over the full length of the bridge less portions poured with expansion joint repairs.
- The existing railing shall be removed along the entire length of the south parapet and disposed of according to Article 501.05 of the Standard Specifications. Cost included with Retrofit Concrete Parapet.
- Work this sheet with Expansion Joint Details sheet.
- See Existing Plan Information sheets for existing parapet and aluminum railing details.

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Retrofit Concrete Parapet	Foot	525 ▲

▲ Includes removal of 59 railing posts. (For Information only)



DESIGNED -	MFB
CHECKED -	KWS
DRAWN -	RMG
CHECKED -	KWS

PRECAST ALTERNATE  
(Showing Attachment)

PRECAST ALTERNATE  
(Showing Reinforcement)

CAST-IN-PLACE ALTERNATE

SECTION B-B

SECTION A-A

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312-565-0450 Job No. 10032.13

SHEET NO. 5 14 SHEETS	F.A.U. RTE. 3531	SECTION 1515.1-I	COUNTY COOK	TOTAL SHEETS 35	SHEET NO. 16
	CONTRACT NO. 60J58				
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT		

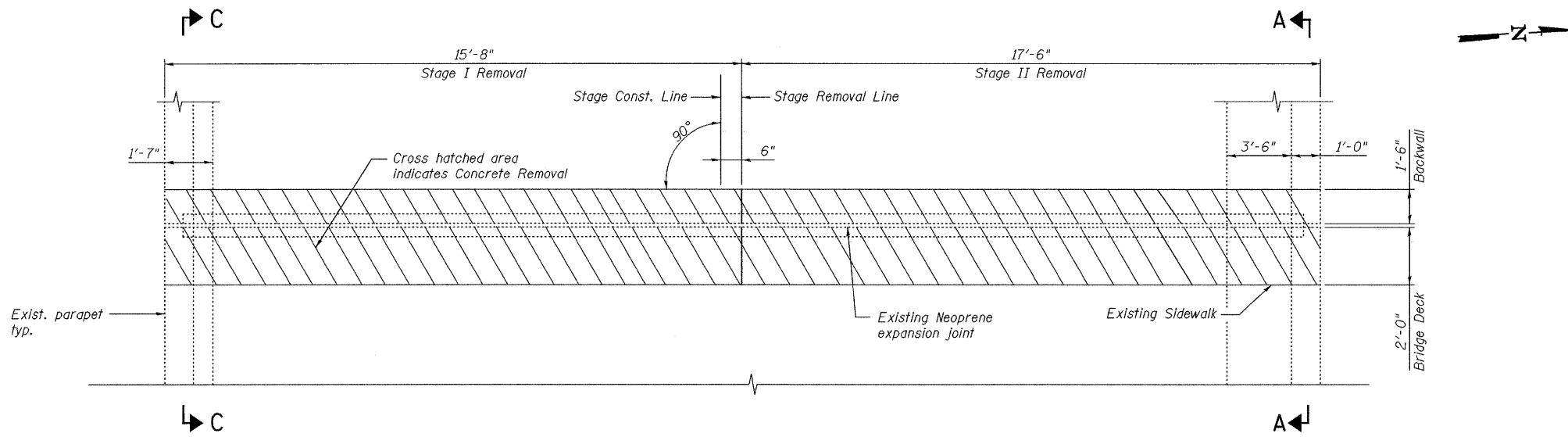
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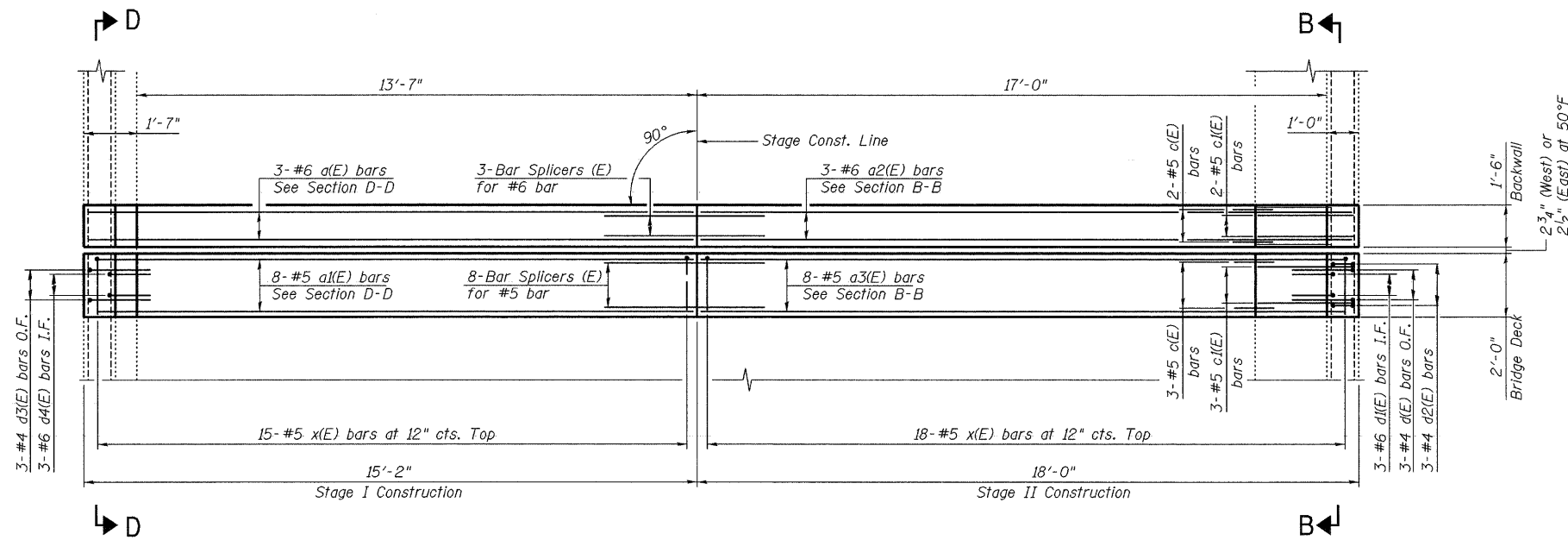
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

BILL OF MATERIAL

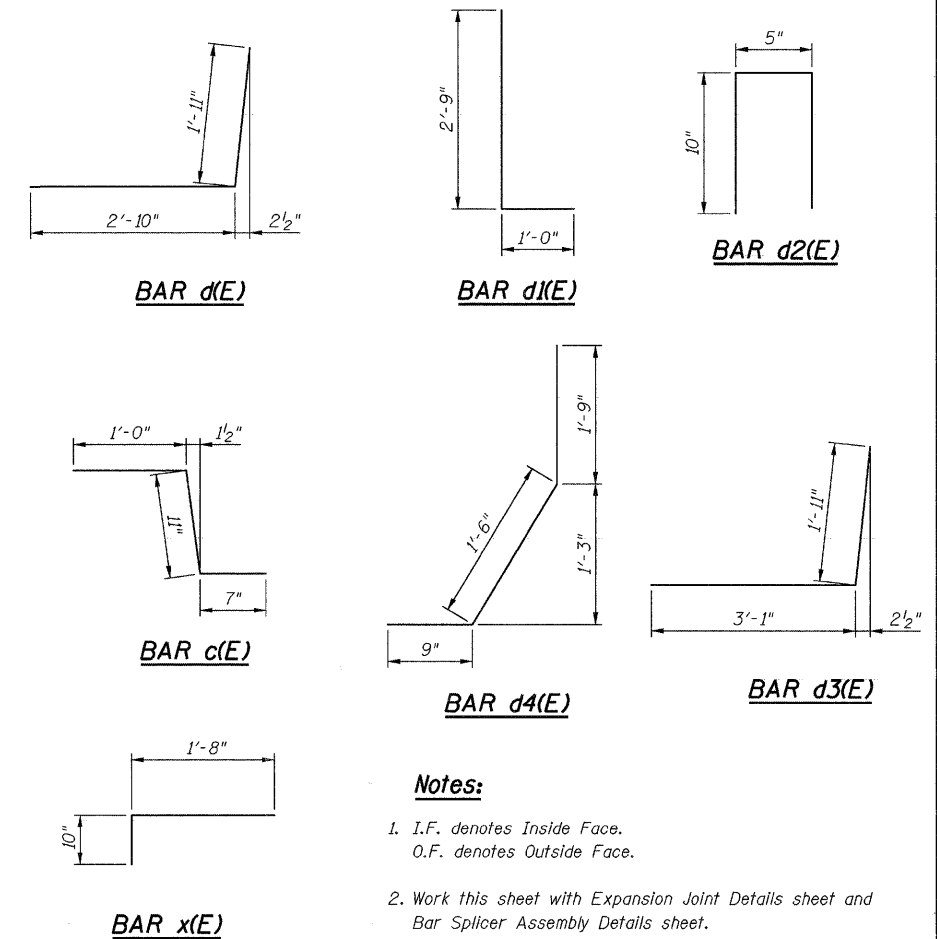
Bar	No.	Size	Length	Shape
a(E)	6	#6	14'-8"	—
a1(E)	16	#5	14'-8"	—
a2(E)	6	#6	17'-6"	—
a3(E)	16	#5	17'-6"	—
c(E)	10	#5	2'-6"	┌
c1(E)	10	#5	4'-0"	—
d(E)	6	#4	4'-9"	└
d1(E)	6	#6	3'-9"	└
d2(E)	6	#4	2'-1"	└
d3(E)	6	#4	5'-0"	└
d4(E)	6	#6	4'-0"	└
x(E)	66	#5	2'-6"	└
Item		Unit	Total	
Concrete Removal		Cu. Yd.	13.0	
Concrete Superstructure		Cu. Yd.	14.3	
Reinforcement Bars, Epoxy Coated		Pound	1,190	



EXISTING PARTIAL PLAN AT WEST ABUTMENT  
(Opposite Hand for East Abutment)



PROPOSED PARTIAL PLAN AT WEST ABUTMENT  
(Opposite Hand for East Abutment)



Notes:

- I.F. denotes Inside Face.  
O.F. denotes Outside Face.
- Work this sheet with Expansion Joint Details sheet and Bar Splicer Assembly Details sheet.

DESIGNED -	MFB
CHECKED -	KWS
DRAWN -	RMG
CHECKED -	KWS

**benesch**

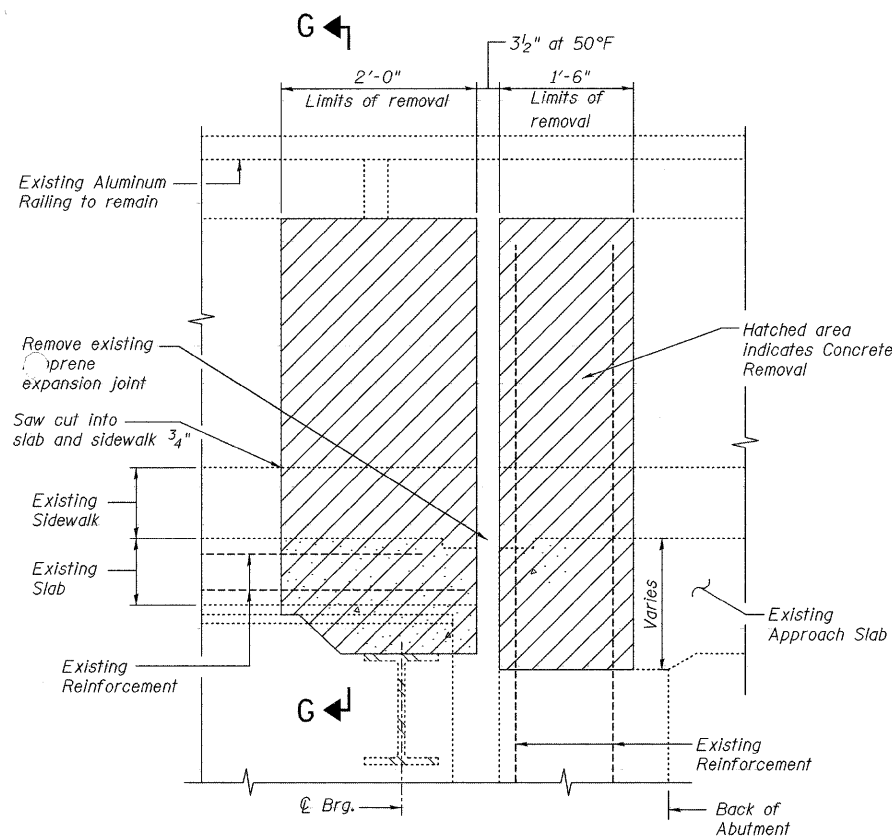
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205 North Michigan Avenue, Suite 2400  
Chicago, Illinois 60601  
312-565-0450 Job No. 10032.13

SHEET NO. 6 14 SHEETS	F.A.U. RTE. 3531	SECTION 1515.1-I	COUNTY COOK	TOTAL SHEETS 35	SHEET NO. 17
	CONTRACT NO. 60J58			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT	

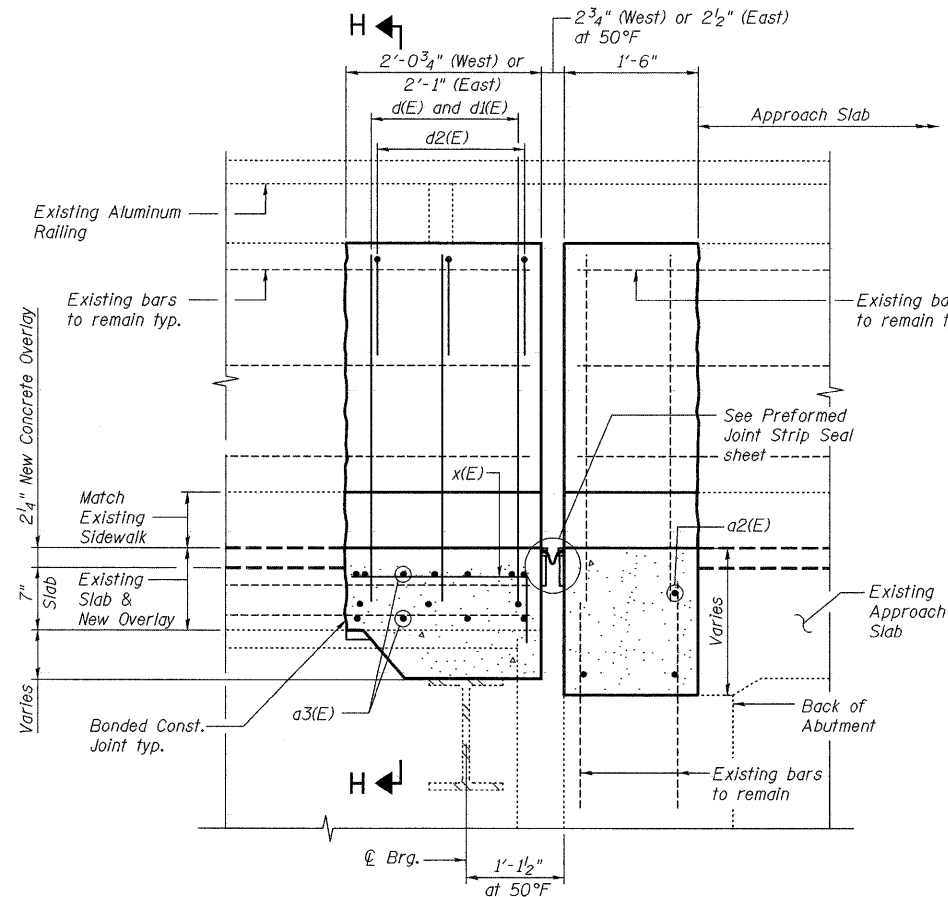
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

Notes:

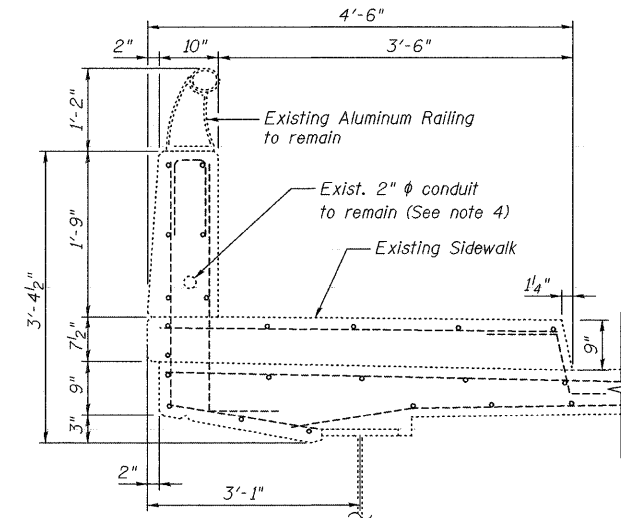
- Existing reinforcement bars extending into the concrete removal area shall be cleaned, straightened and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost included with Concrete Removal.
- Existing reinforcement bars in the concrete removal area parallel to the expansion joints shall be removed.
- Removal and disposal of the existing expansion joints will not be paid for separately, but shall be included with the cost of Concrete Removal.
- The Contractor shall exercise extreme care with the existing conduits in sections of the parapet to be removed and to protect and support the conduit. The Contractor will be required to repair any damage done to the conduit to the satisfaction of the Engineer. No splicing will be allowed to any cable damage resulting from this work, instead the Contractor will be required to repair the entire span of any damaged cable at no additional cost to the Department.
- Existing railing and posts in areas of parapet reconstruction on the north parapet shall be supported and reattached to the new parapet concrete. Anchors, nuts and washers shall be reused. Cost included with Concrete Superstructure.
- Work this sheet with Expansion Joint Repairs, Preformed Joint Strip Seal and Parapet Retrofit Details sheets.



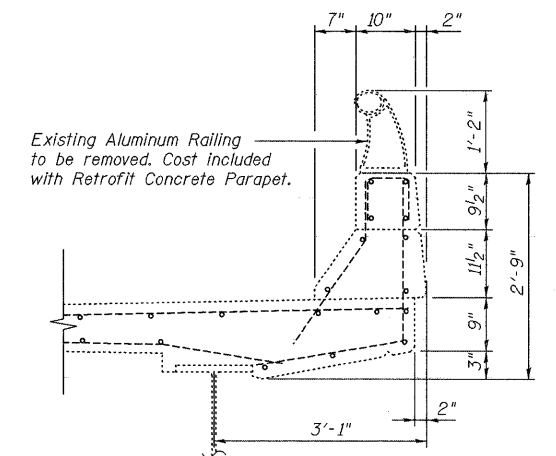
SECTION A-A



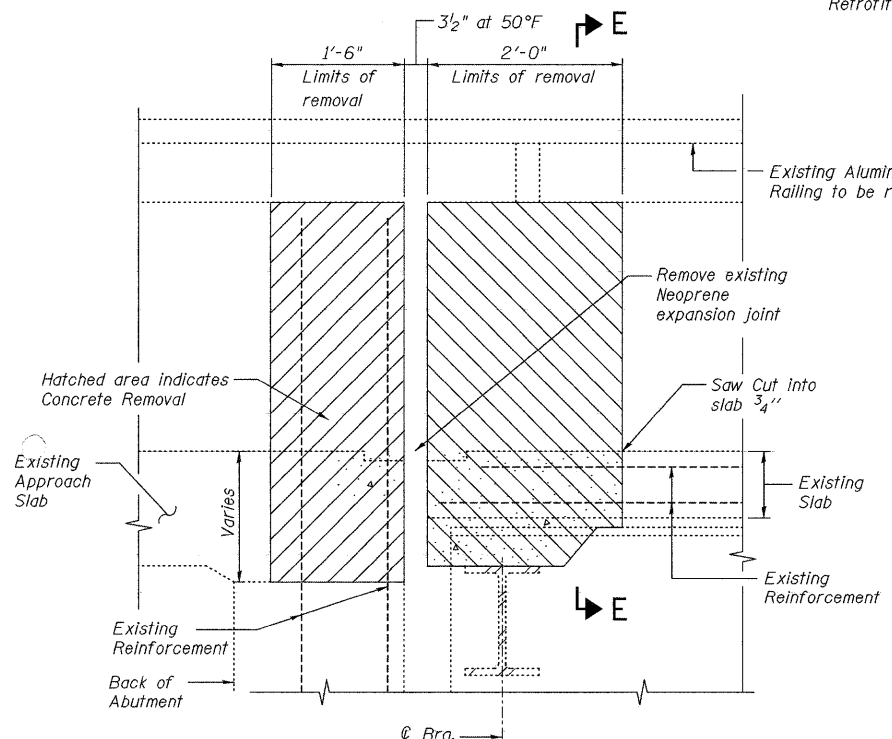
SECTION B-B



SECTION G-G

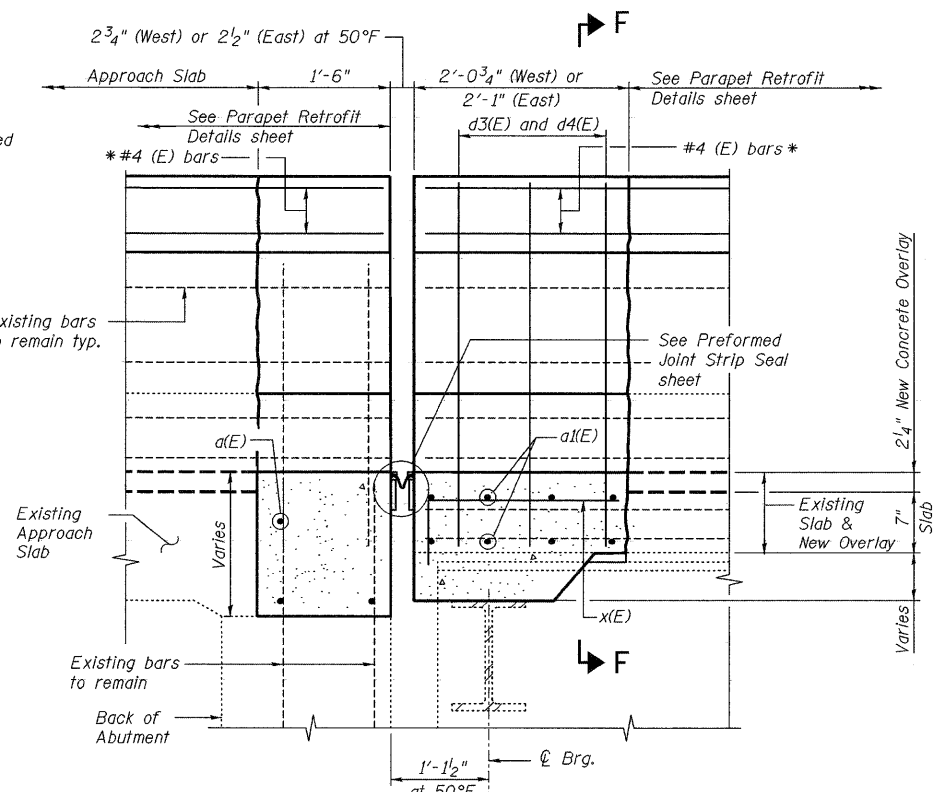


SECTION E-E

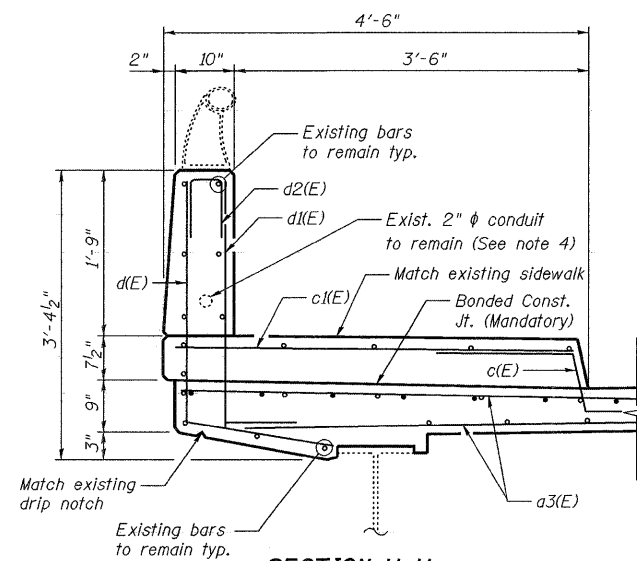


SECTION C-C

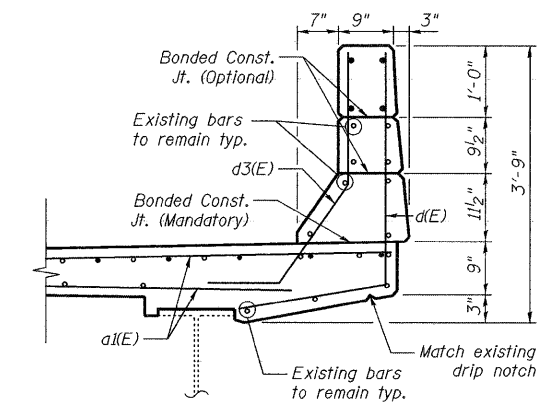
\*Bars extending from/to  
Retrofit Concrete Parapet



SECTION D-D



SECTION H-H



SECTION F-F

EXPANSION JOINT DETAILS  
STRUCTURE NO. 016-2519

DESIGNED -	MFB
CHECKED -	KWS
DRAWN -	RMG/MFB
CHECKED -	KWS

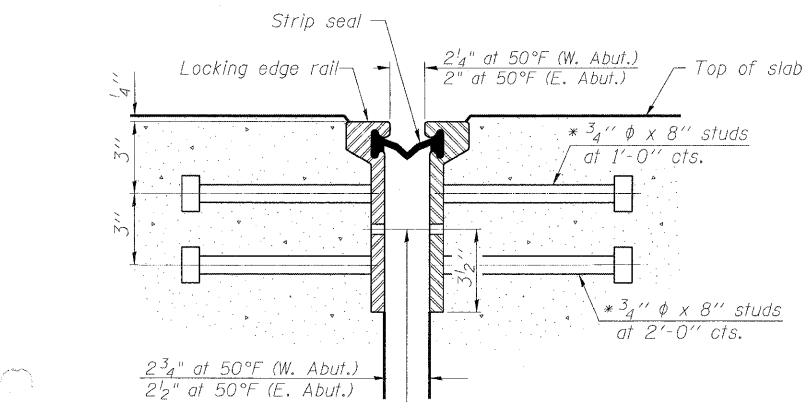
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312-665-0450 Job No. 10032.13

SHEET NO. 7 14 SHEETS	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	3531	1515.1-I	COOK	35	18
FED. ROAD DIST. NO.			ILLINOIS	CONTRACT NO. 60J58	
			FED. AID PROJECT		

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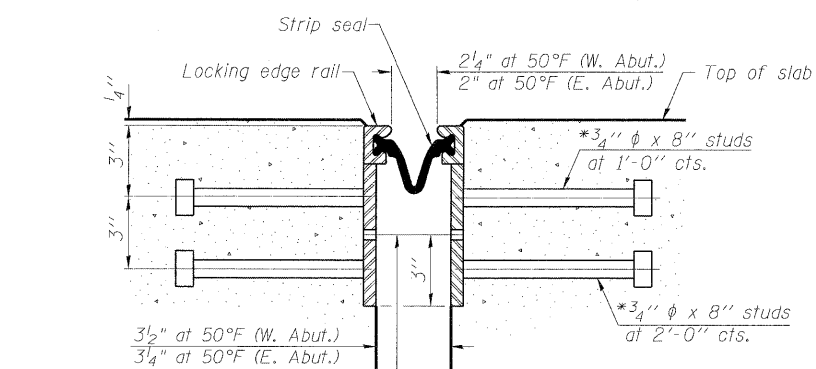
\* Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION



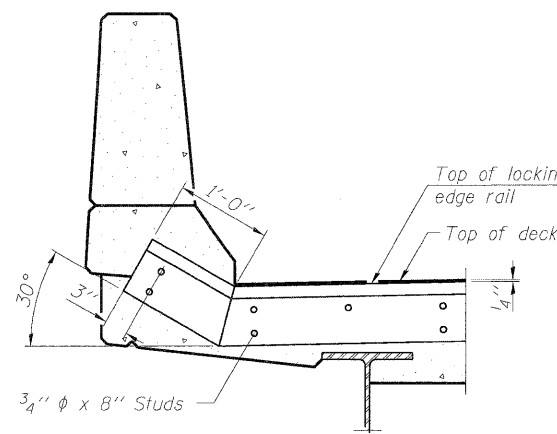
7/16" φ holes at 4'-0" cts. for 3/8" φ bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.

SECTION THRU  
ROLLED RAIL JOINT



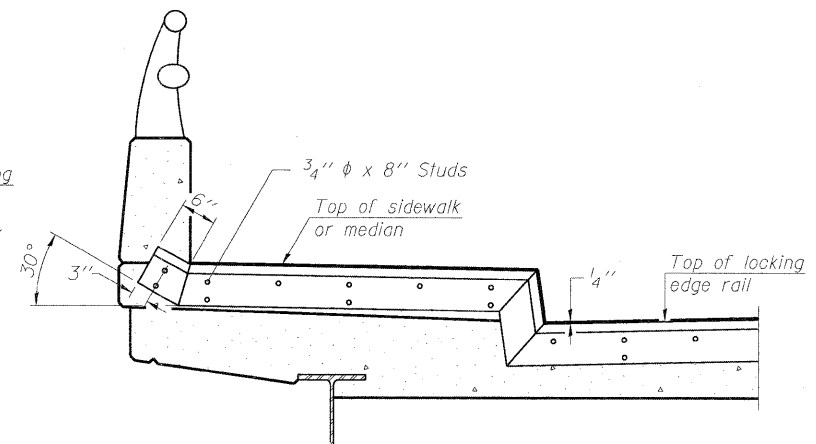
7/16" φ holes at 4'-0" cts. for 3/8" φ bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.

SECTION THRU  
WELDED RAIL JOINT



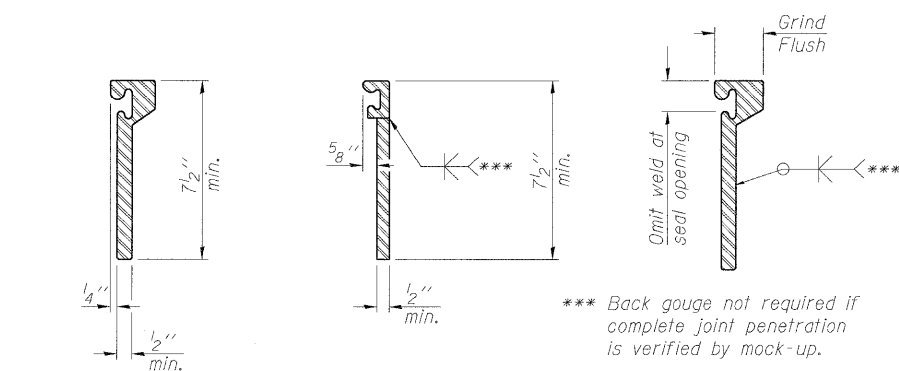
AT PARAPET

See Section A-A for end treatment of skews > 30°.



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.



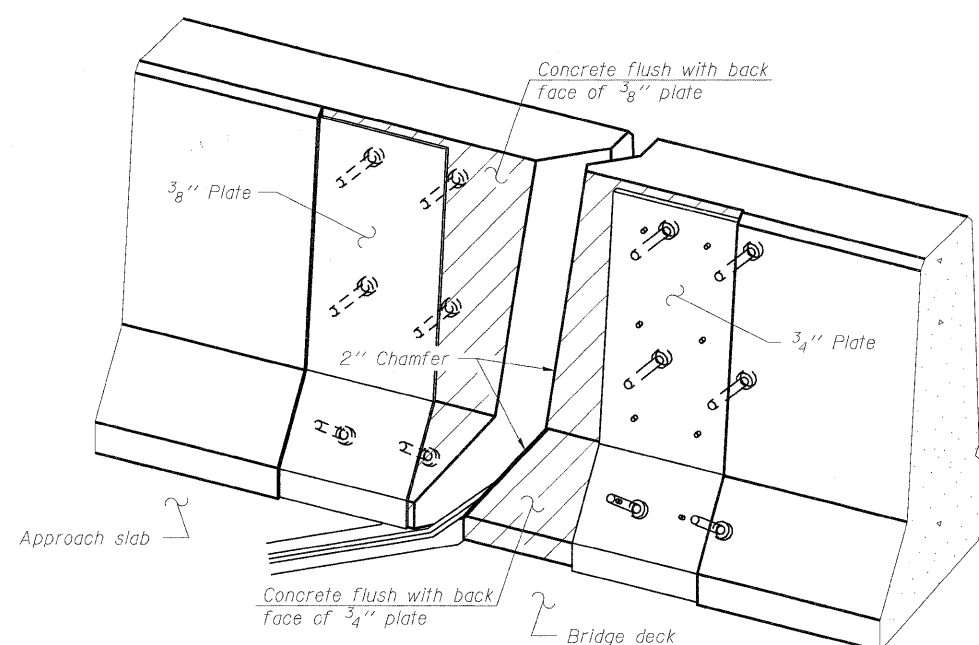
ROLLED  
EXTRUDED RAIL

WELDED RAIL

LOCKING EDGE  
RAIL SPLICE

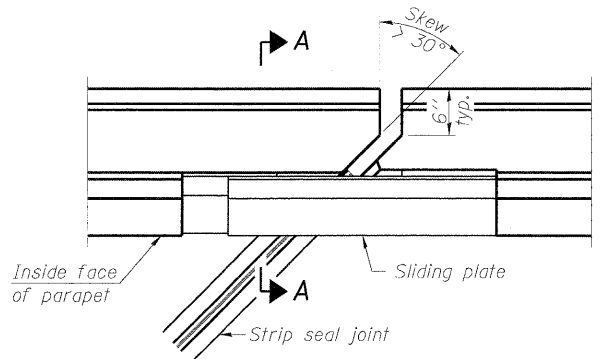
The inside of the locking edge rail groove shall be free of weld residue.  
Rolled rail shown, welded rail similar.

LOCKING EDGE RAILS

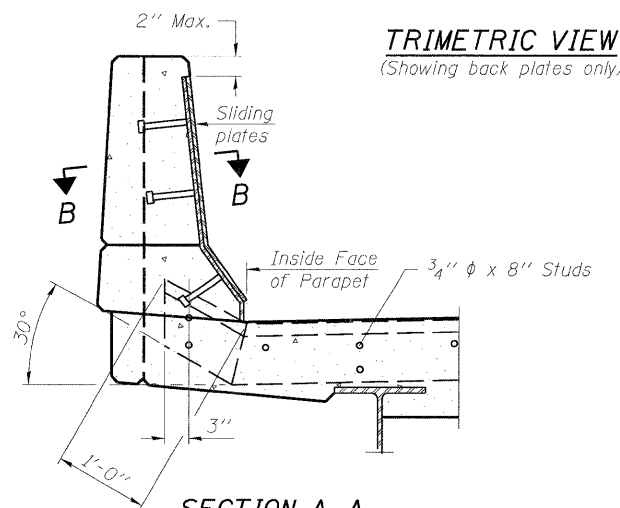


TYPICAL END TREATMENTS

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.

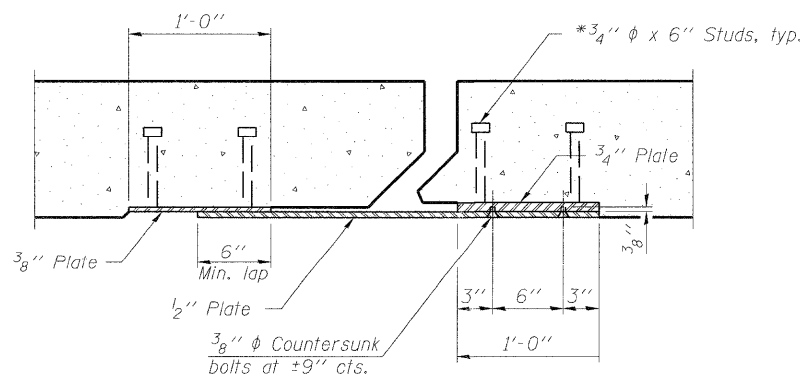


PLAN



SECTION A-A

POINT BLOCK DETAILS  
(for skews > 30°)



SECTION B-B

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	66.0

PREFORMED JOINT STRIP SEAL  
STRUCTURE NO. 016-2519

DESIGNED	JLS
CHECKED	KWS
DRAWN	RMG
CHECKED	KWS

EJ-SSJ 11-1-09

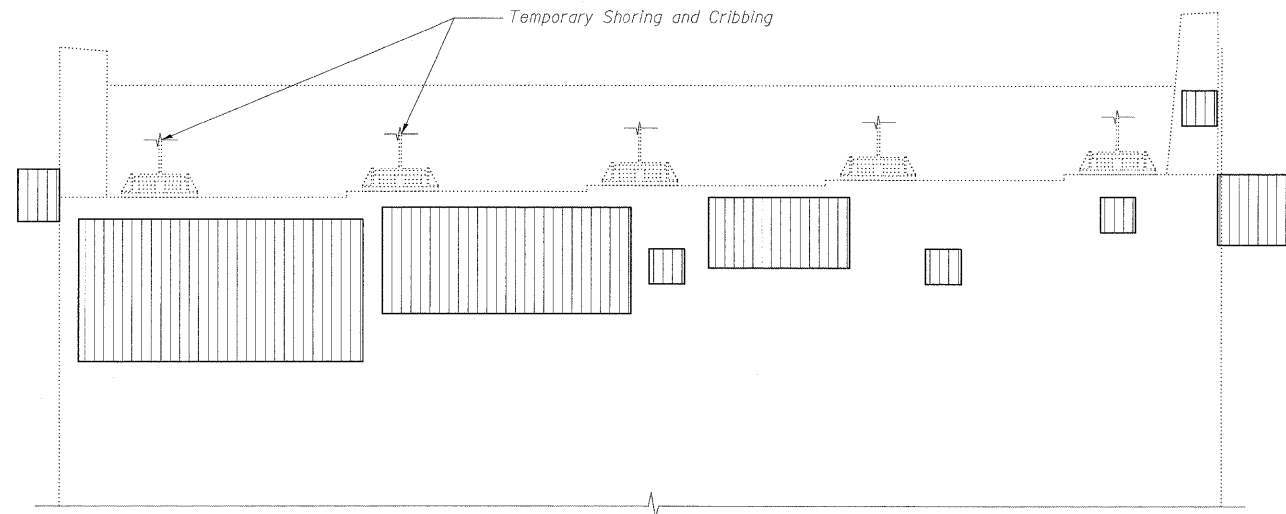
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Chicago, Illinois 60601  
312-565-0450 Job No. 10032.13

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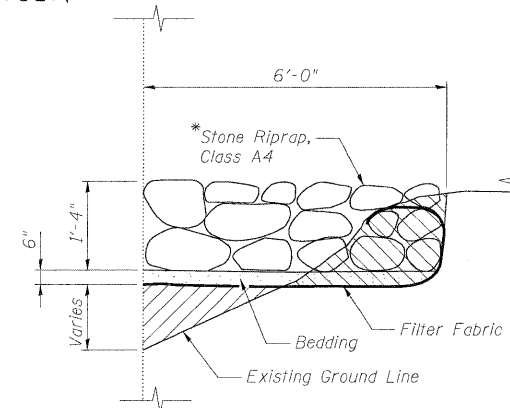
SHEET NO. 8 14 SHEETS	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	3531	1515.1-1	COOK	35	19
FED. ROAD DIST. NO.			ILLINOIS	FED. AID PROJECT	
CONTRACT NO. 60J58					

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 03/22/2010

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION



**ELEVATION - WEST ABUTMENT REPAIRS**  
(Looking West)



**SECTION C-C**

\* Due to varying erosion levels, excavate and grade slope to create a uniform 1'-10' deep by 6'-0" wide trench along the abutment. Excess soil shall be spread across adjacent slope. Cost included with Stone Riprap, Class A4.

**BILL OF MATERIAL**

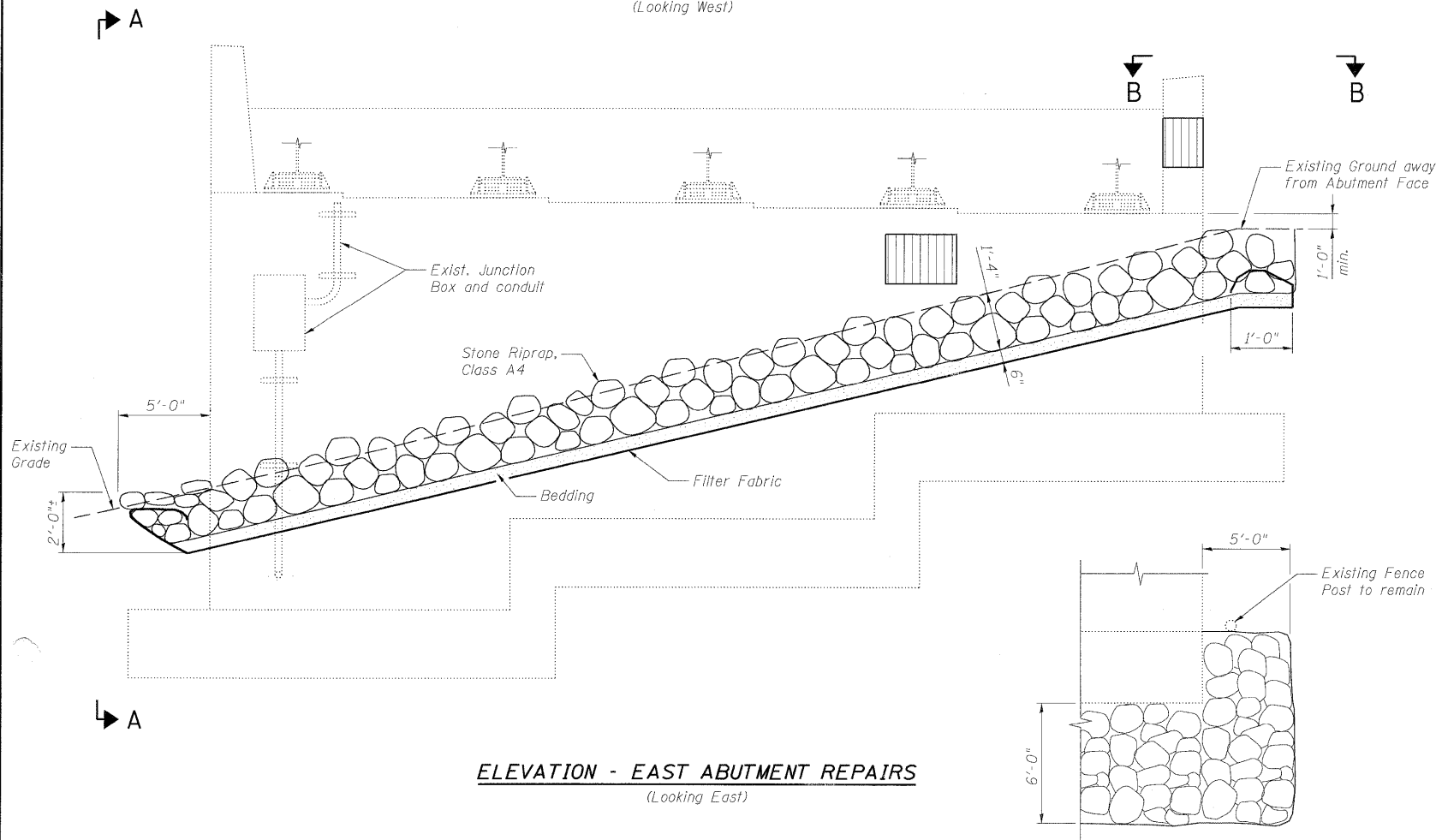
SYMBOL	ITEM	UNIT	QUANTITY
	Structural Repair of Concrete (Depth Equal to or Less Than 5 Inches)	Sq. Ft.	105
	Temporary Shoring and Cribbing	Each	2
	Stone Riprap, Class A4	Sq. Yd.	30
	Filter Fabric	Sq. Yd.	30
	Concrete Sealer	Sq. Ft.	315

**MAXIMUM BEAM REACTIONS (KIPS)**

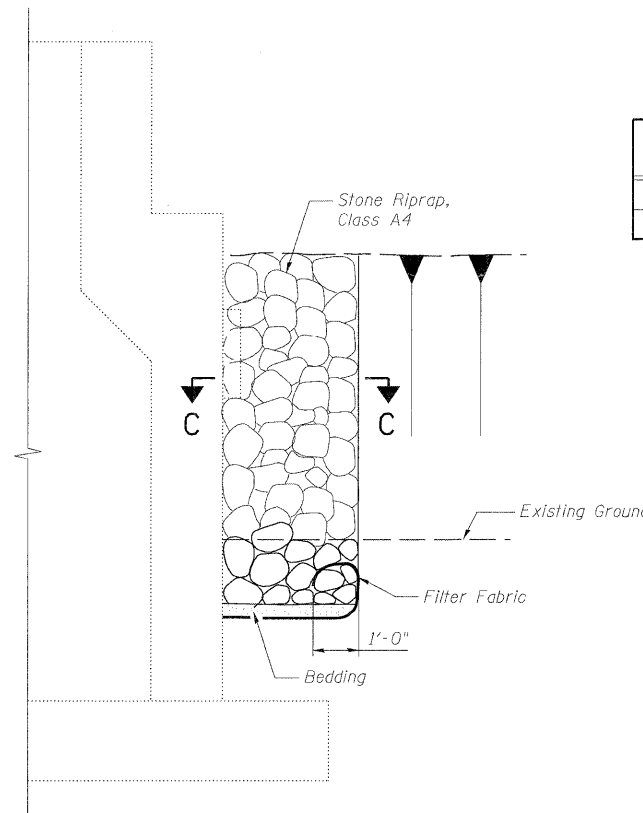
LOCATION	DEAD LOAD	LIVE LOAD	IMPACT LOAD	TOTAL
W. Abut.	25.0	40.0	13.0	78.0
E. Abut.	35.0	40.0	13.0	88.0

**Notes:**

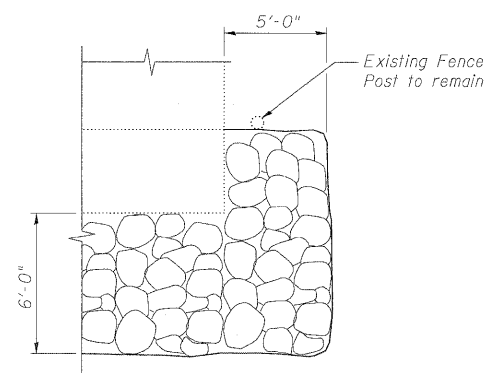
- Substructure repair areas are estimated based on IDOT field notes from October of 2009. Actual repair areas and locations shall be determined by the Engineer and shown on the As-Built plans.
- There is a potential for interference from existing conduits. The Contractor shall remove and reerect or temporarily support the existing conduits to complete the work as detailed. When the work is completed the conduits shall be reconnected to the reconstructed abutment or pier utilizing the existing mounting brackets or new mounting brackets. See Special Provision for "Protection and Maintenance of Existing Underpass Lighting".
- The tabulated beam reactions were taken from the existing construction plans. The Contractor shall verify that the equipment used to support the beams is sufficient to carry these loads in addition to any temporary construction loads.



**ELEVATION - EAST ABUTMENT REPAIRS**  
(Looking East)



**VIEW A-A**



**VIEW B-B**

DESIGNED -	JLS/MFB
CHECKED -	KWS
DRAWN -	RMG
CHECKED -	KWS

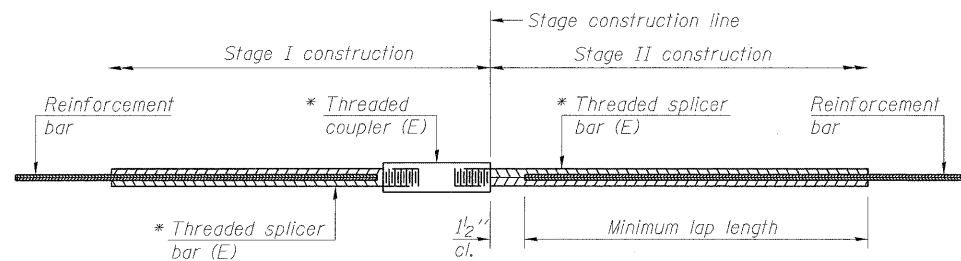
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312-565-0450 Job No. 10032.13

SHEET NO. 9 14 SHEETS	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	3531	1515.1-1	COOK	35	20
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT		
CONTRACT NO. 60J58					

**SUBSTRUCTURE REPAIRS - ABUTMENTS**  
**STRUCTURE NO. 016-2519**

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION



**STANDARD BAR SPLICER ASSEMBLY**

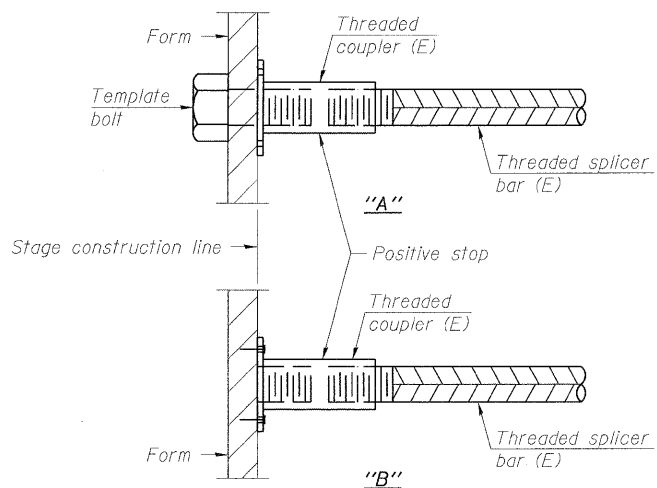
Minimum Lap Lengths				
Bar size to be spliced	Table 1	Table 2	Table 3	Table 4
3, 4	1'-5"	1'-11"	2'-1"	2'-4"
5	1'-9"	2'-5"	2'-7"	2'-11"
6	2'-1"	2'-11"	3'-1"	3'-6"
7	2'-9"	3'-10"	4'-2"	4'-8"
8	3'-8"	5'-1"	5'-5"	6'-2"
9	4'-7"	6'-5"	6'-10"	7'-9"

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

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

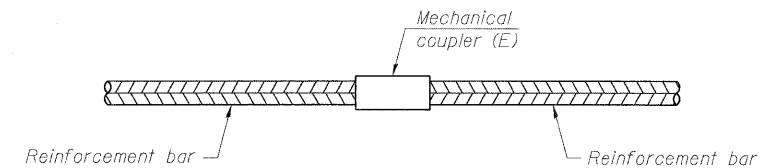
\* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Table for minimum lap length
Deck	#5	16	Table 3
Deck	#6	6	Table 3



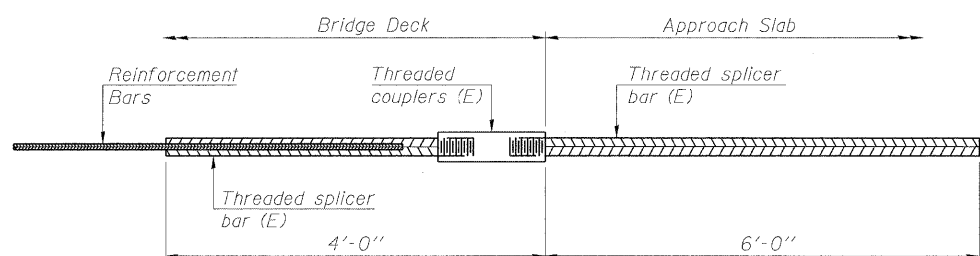
**INSTALLATION AND SETTING METHODS**

"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.



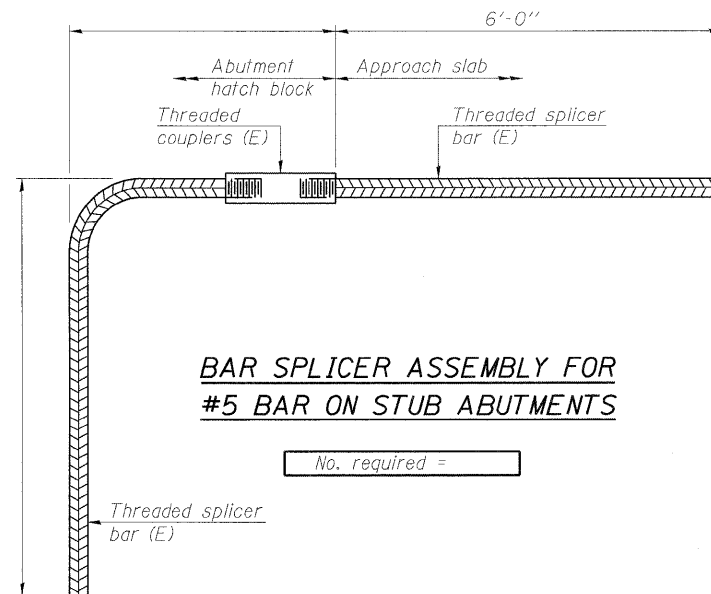
**STANDARD MECHANICAL SPLICER**

Location	Bar size	No. assemblies required



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

No. required =



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

No. required =

**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.

DESIGNED -	JLS
CHECKED -	KWS
DRAWN -	RMG
CHECKED -	KWS

BSD-1

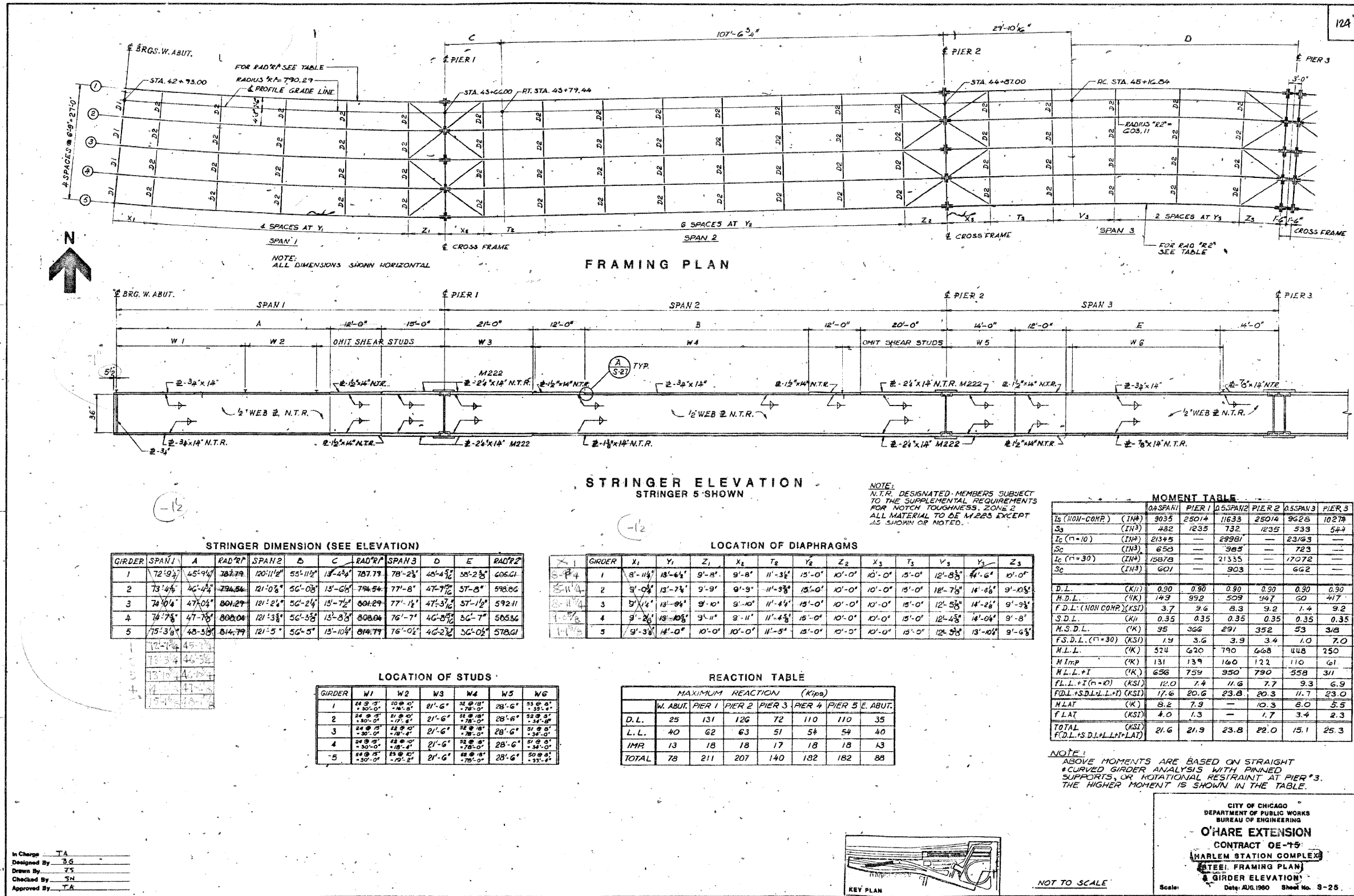
11-1-09

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Chicago, Illinois 60601  
312-565-0450 Job No. 10032.13

SHEET NO. 10 14 SHEETS	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	3531	1515.1-1	COOK	35	21
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT		
CONTRACT NO. 60J58					

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION



In Charge: TA  
Designed By: J.S.  
Drawn By: J.S.  
Checked By: S.N.  
Approved By: TA

FOR INFORMATION ONLY

benesch

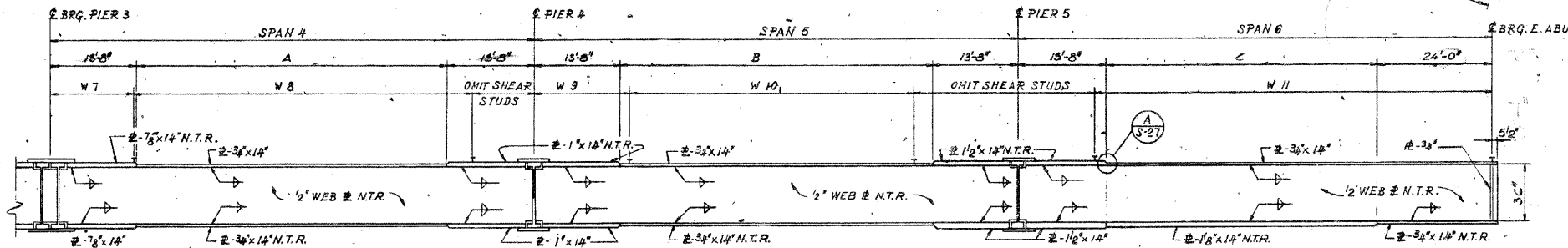
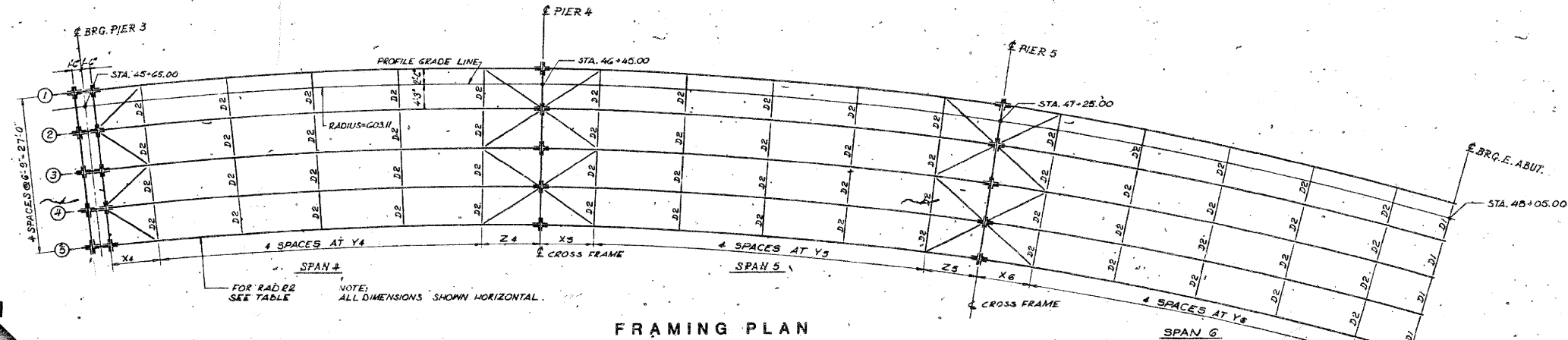
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Chicago, Illinois 60601  
312-565-0450 Job No. 10032.13

SHEET NO. 11	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	3531	1515.1-1	COOK	35	22
14 SHEETS	CONTRACT NO. 60J58				
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

EXISTING PLAN INFORMATION 1 OF 4  
STRUCTURE NO. 016-2519

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

125



STRINGER ELEVATION  
STRINGER 5 SHOWN

NOTE:  
N.T.R. DESIGNATES MEMBERS SUBJECT TO THE SUPPLEMENTAL REQUIREMENTS FOR NOTCH TOUGHNESS, ZONE 2 ALL MATERIAL TO BE M225 EXCEPT AS SHOWN OR NOTED.

STRINGER DIMENSION (SEE ELEVATION)

GIRDER	SPAN 4			SPAN 5			SPAN 6		
	W7	W8	RAD (R2)	W9	W10	RAD (R2)	W11	W12	RAD (R2)
1	80'-4"	55'-0"	605.G1	80'-4"	55'-0"	605.G1	80'-4"	42'-8"	606.G1
2	79'-5 1/2"	52'-1 1/4"	578.BG	79'-5 1/2"	52'-1 1/4"	578.BG	77'-7 3/4"	41'-7 1/4"	578.BG
3	78'-6 1/2"	51'-2 1/2"	572.H	78'-6 1/2"	51'-2 1/2"	572.H	77'-7 3/4"	40'-10 1/2"	572.H
4	77'-7 3/4"	50'-3 3/4"	565.SG	77'-7 3/4"	50'-3 3/4"	565.SG	77'-7 3/4"	39'-11 3/4"	565.SG
5	76'-9"	49'-0 1/2"	578.G1	76'-9"	49'-5"	578.G1	76'-9"	37'-1"	578.G1

LOCATION OF STUDS

GIRDER	W7	W8		W9		W10		W11	
		Start	End	Start	End	Start	End	Start	End
1	13'-4"	43 @ 15"	15'-0"	24 @ 10"	15'-0"	24 @ 10"	15'-0"	17 @ 10"	15'-0"
2	13'-4"	42 @ 15"	15'-0"	23 @ 10"	15'-0"	23 @ 10"	15'-0"	16 @ 10"	15'-0"
3	13'-4"	42 @ 15"	15'-0"	23 @ 10"	15'-0"	23 @ 10"	15'-0"	16 @ 10"	15'-0"
4	13'-4"	41 @ 15"	15'-0"	22 @ 10"	15'-0"	22 @ 10"	15'-0"	15 @ 10"	15'-0"
5	13'-4"	40 @ 15"	15'-0"	21 @ 10"	15'-0"	21 @ 10"	15'-0"	14 @ 10"	15'-0"

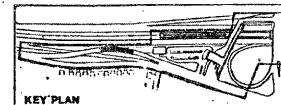
LOCATION OF DIAPHRAGMS

GIRDER	X4		Y4		Z4		X5		Y5		Z5		X6		Y6		Z6		
	Start	End	Start	End	Start	End	Start	End	Start	End	Start	End	Start	End	Start	End	Start	End	
1	10'-0"	15'-1"	10'-0"	10'-0"	15'-1"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"
2	9'-10 3/8"	14'-11"	9'-10 3/8"	9'-10 3/8"	14'-11"	9'-10 3/8"	9'-10 3/8"	9'-10 3/8"	9'-10 3/8"	14'-11"	9'-10 3/8"	9'-10 3/8"	9'-10 3/8"	14'-11"	9'-10 3/8"	9'-10 3/8"	9'-10 3/8"	9'-10 3/8"	9'-10 3/8"
3	9'-9 3/8"	14'-9"	9'-9 3/8"	9'-9 3/8"	14'-9"	9'-9 3/8"	9'-9 3/8"	9'-9 3/8"	9'-9 3/8"	14'-9"	9'-9 3/8"	9'-9 3/8"	9'-9 3/8"	14'-9"	9'-9 3/8"	9'-9 3/8"	9'-9 3/8"	9'-9 3/8"	9'-9 3/8"
4	9'-8"	14'-6 3/8"	9'-8"	9'-8"	14'-6 3/8"	9'-8"	9'-8"	9'-8"	9'-8"	14'-6 3/8"	9'-8"	9'-8"	9'-8"	14'-6 3/8"	9'-8"	9'-8"	9'-8"	9'-8"	9'-8"
5	9'-6 3/8"	14'-4 3/8"	9'-6 3/8"	9'-6 3/8"	14'-4 3/8"	9'-6 3/8"	9'-6 3/8"	9'-6 3/8"	9'-6 3/8"	14'-4 3/8"	9'-6 3/8"	9'-6 3/8"	9'-6 3/8"	14'-4 3/8"	9'-6 3/8"	9'-6 3/8"	9'-6 3/8"	9'-6 3/8"	9'-6 3/8"

	0.5 SPAN 4	PIER 4	0.5 SPAN 5	PIER 5	0.5 SPAN 6
I <sub>s</sub> (NON-COMP)	(I <sub>HA</sub> ) 9035	11529	9035	16717	10695
I <sub>s</sub>	(I <sub>HA</sub> ) 482	607	482	857	634
I <sub>o</sub> (n=10)	(I <sub>HA</sub> ) 21345	—	21345	—	26658
S <sub>c</sub>	(I <sub>HA</sub> ) 658	—	658	—	858
I <sub>o</sub> (n=30)	(I <sub>HA</sub> ) 15878	—	15878	—	19298
S <sub>c</sub>	(I <sub>HA</sub> ) 601	—	601	—	783
D.L.	(K') 0.90	0.90	0.90	0.90	0.90
M.D.L.	(K') 189	250	189	656	355
F.D.L. (NON COMP)	(KSI) 4.7	4.9	4.7	9.3	6.7
S.D.L.	(K') 0.35	0.35	0.35	0.35	0.35
M.S.D.L.	(K') 112	108	112	236	177
F.S.D.L. (n=30)	(KSI) 2.2	2.1	2.2	3.3	2.7
M.L.L.	(K') 489	336	489	423	606
M.I.M.P.	(K') 119	82	119	103	148
M.L.L.+I	(K') 608	418	608	526	754
F.L.L.+I (n=10)	(KSI) 11.1	8.3	11.1	7.4	10.6
F(D.L.+S.D.L.+L.L.+I)	(KSI) 18.0	15.3	18.0	20.0	20.0
M.L.A.T.	(K') 10.8	4.1	10.8	7.3	15.2
F.L.A.T.	(KSI) 5.3	1.5	5.3	1.8	5.0
TOTAL F(D.L.+S.D.L.+L.L.+M.L.A.T.)	(KSI) 23.3	16.8	23.3	21.8	25.0

SEE NOTE S-25

In Charge: T.A.  
Designed By: B.G.  
Drawn By: S.S.  
Checked By: S.H.  
Approved By: T.A.



NOT TO SCALE

CITY OF CHICAGO  
DEPARTMENT OF PUBLIC WORKS  
BUREAU OF ENGINEERING  
**C'HARE EXTENSION**  
CONTRACT 01-15  
(HARLEM STATION COMPLEX)  
STEEL FRAMING PLAN & GIRDER ELEVATION  
Date: AUG. 1960 Sheet No. 8-28  
ISSUED FOR BID 17 DEC 60

FOR INFORMATION ONLY

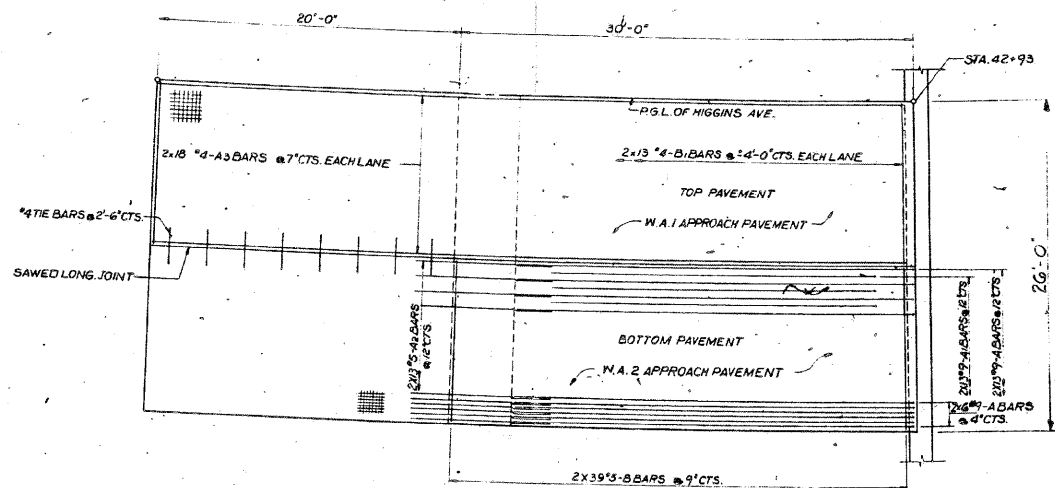
**benesch**  
Engineers • Surveyors • Planners  
205 North Michigan Avenue, Suite 2400  
Chicago, Illinois 60601  
312-565-0450 Job No. 10032.13

SHEET NO. 12	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	14 SHEETS				
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT		
CONTRACT NO. 60J58					

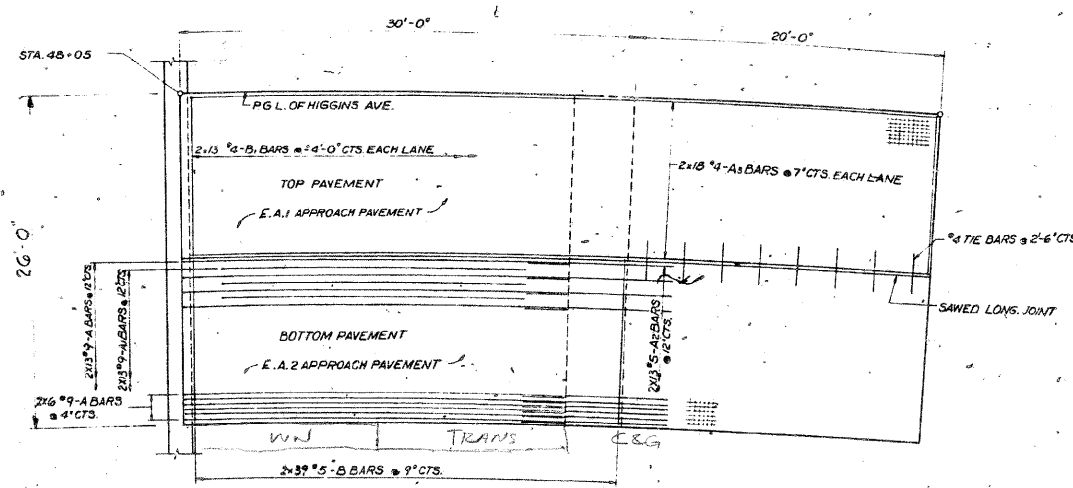
EXISTING PLAN INFORMATION 2 OF 4  
STRUCTURE NO. 016-2519

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

134



WEST APPROACH PAVEMENT  
SCALE: 1"=1'-0"

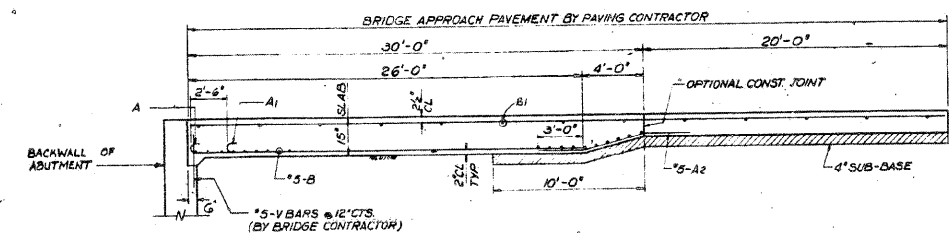
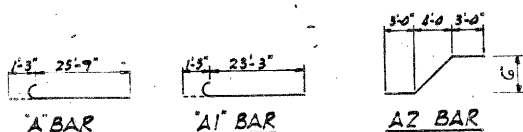


EAST APPROACH PAVEMENT  
SCALE: 1"=1'-0"

BILL OF MATERIALS

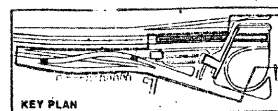
MARK	APPROACH PAVEMENT							
	REINF. BARS							
	TRANSVERSE				LONGITUDINAL			
	NO.	SIZE	LENGTH	NO.	SIZE	LENGTH		
E.A.1	B	39	#5	12'-6"	A	19	#9	27'-0"
	B1	13	#4	12'-6"	A2	13	#9	24'-6"
E.A.2	B	39	#5	12'-6"	A	19	#9	27'-0"
	B1	13	#4	12'-6"	A2	13	#9	24'-6"
W.A.1	B	39	#5	12'-6"	A	19	#9	27'-0"
	B1	13	#4	12'-6"	A2	13	#9	24'-6"
W.A.2	B	39	#5	12'-6"	A	19	#9	27'-0"
	B1	13	#4	12'-6"	A2	13	#9	24'-6"

BAR LISTS ARE FOR INFORMATION ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL BAR QUANTITIES AND DETAILS.



LONGITUDINAL CROSS SECTION  
VERTICAL SCALE: 1"=1'-0"  
HORIZONTAL SCALE: 1"=1'-0"

In Charge: T.A.  
Designed By: D.P.  
Drawn By: J.S.  
Checked By: S.G.  
Approved By: T.A.



CITY OF CHICAGO  
DEPARTMENT OF PUBLIC WORKS  
BUREAU OF ENGINEERING  
**O'HARE EXTENSION**  
CONTRACT OE-15  
HARLEM STATION COMPLEX  
APPROACH SLABS  
FOR WEST BOUND HIGGINS BRIDGE  
Scale: Date: AUG. 1990 Sheet No. 8-36

ISSUED FOR BID 17 DEC 80

FOR INFORMATION ONLY

**benesch**  
alfred benesch & company  
Engineers - Surveyors - Planners  
205 North Michigan Avenue, Suite 2400  
Chicago, Illinois 60601  
312-565-0450 Job No. 10032.13

SHEET NO. 13 14 SHEETS	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	3531	1515.1-1	COOK	35	24
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT		

EXISTING PLAN INFORMATION 3 OF 4  
STRUCTURE NO. 016-2519

CONTRACT NO. 60J58

x:\10000s\10032\engineering\_documents\_contract-60j58\SN\_016\_2519\_Higgins.Rd\2519-60J58-013-Existplan\_03.dgn 15:52:25 03/22/2010





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

18" (450) MAX.

EXISTING OR PROPOSED HMA SURFACE (IF APPLICABLE)

1/4" (5) \*\*

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).

EXISTING CONCRETE PAVEMENT, CONCRETE BASE COURSE OR FLEXIBLE PAVEMENT

T/2 \*

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

3" (75) MIN.

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.)

\* 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.

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:**

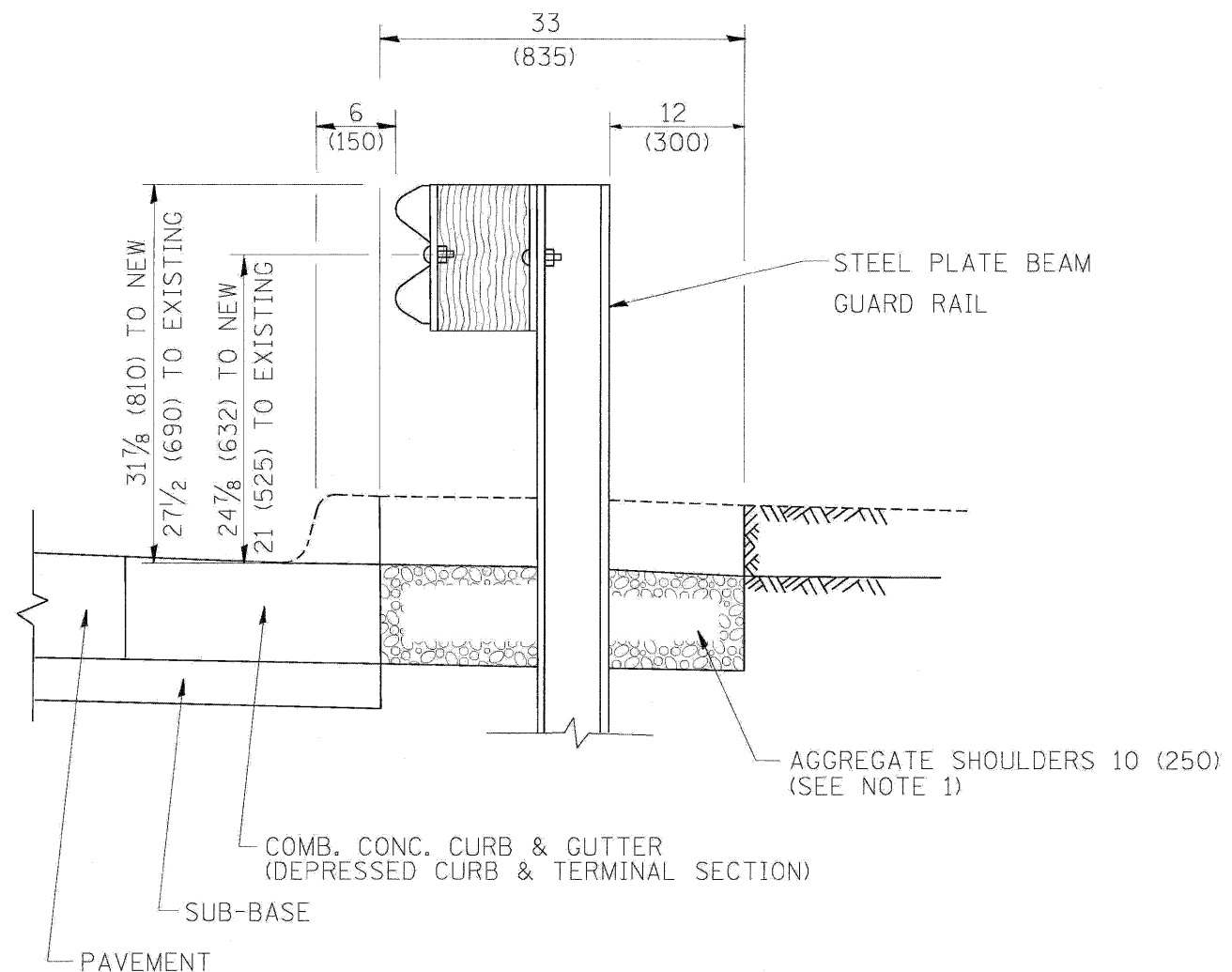
THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT (METER) FOR "CURB REMOVAL AND REPLACEMENT" OR "COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT".

# CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

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

BD-24

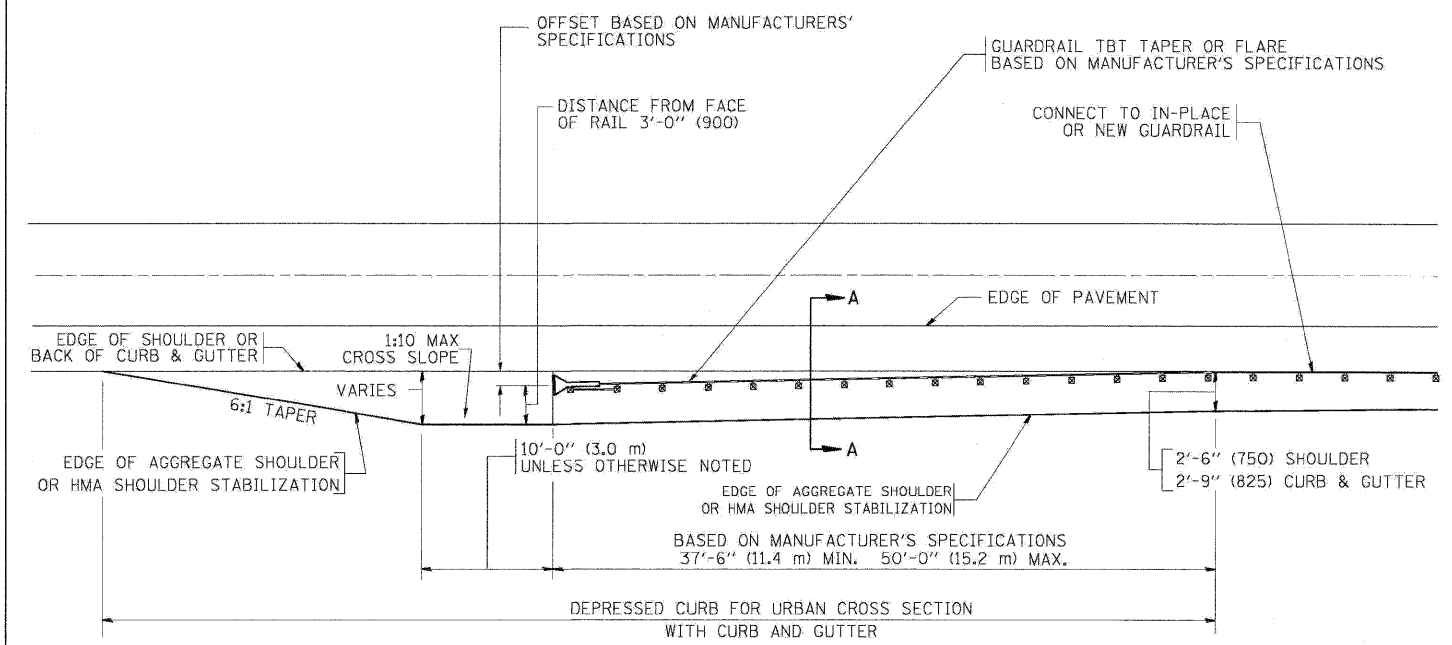
FILE NAME *	DESIGNED - AJP	REVISED -	<b>benesch</b>	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>DISTRICT 1 DETAILS</b>			F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
USER NAME *	DRAWN - AJP	REVISED -			<b>CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT</b>	3531	1515.1-I	COOK	35	26		
PLOT DATE * 03/22/2010	CHECKED - KJN	REVISED -			SCALE: N.T.S.	SHEET NO. 1 OF 10 SHEETS	STA.	TO STA.	CONTRACT NO. 60J58			
	DATE - 3/8/10	REVISED -					FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT				



SECTION A-A

- NOTES:
1. THE AGGREGATE SHOULDER, 10" OR HMA SHOULDER, 6" (IF REQUIRED) SHALL EXTEND UNDER THE TRAFFIC BARRIER TERMINAL.
  2. "EXISTING" GUARDRAIL REFERS TO CONNECTING TERMINAL SECTION TO GUARD RAILING PRIOR TO THE MIDWEST GUARDRAIL SYSTEM.
  3. THE CONTRACTOR SHALL VERIFY THE TYPE/HEIGHT OF GUARDRAIL IN-PLACE BEFORE ORDERING THE NEW TERMINAL SECTION. COST INCLUDED WITH THE COST OF THE TERMINAL. THE TERMINAL SECTION HEIGHT TO BE PLACED MUST MATCH THE HEIGHT OF THE IN-PLACE GUARDRAIL.

**DETAILS FOR STEEL PLATE BEAM  
GUARD RAIL ADJACENT TO CURB AND GUTTER**  
[FOR ROADWAY SPEED 35 MPH (60 kmh) TO 45 MPH (70 kmh)]



**DEPRESSED CURB AND GUTTER AND  
SHOULDER TREATMENT AT TBT TY. 1 SPL.**

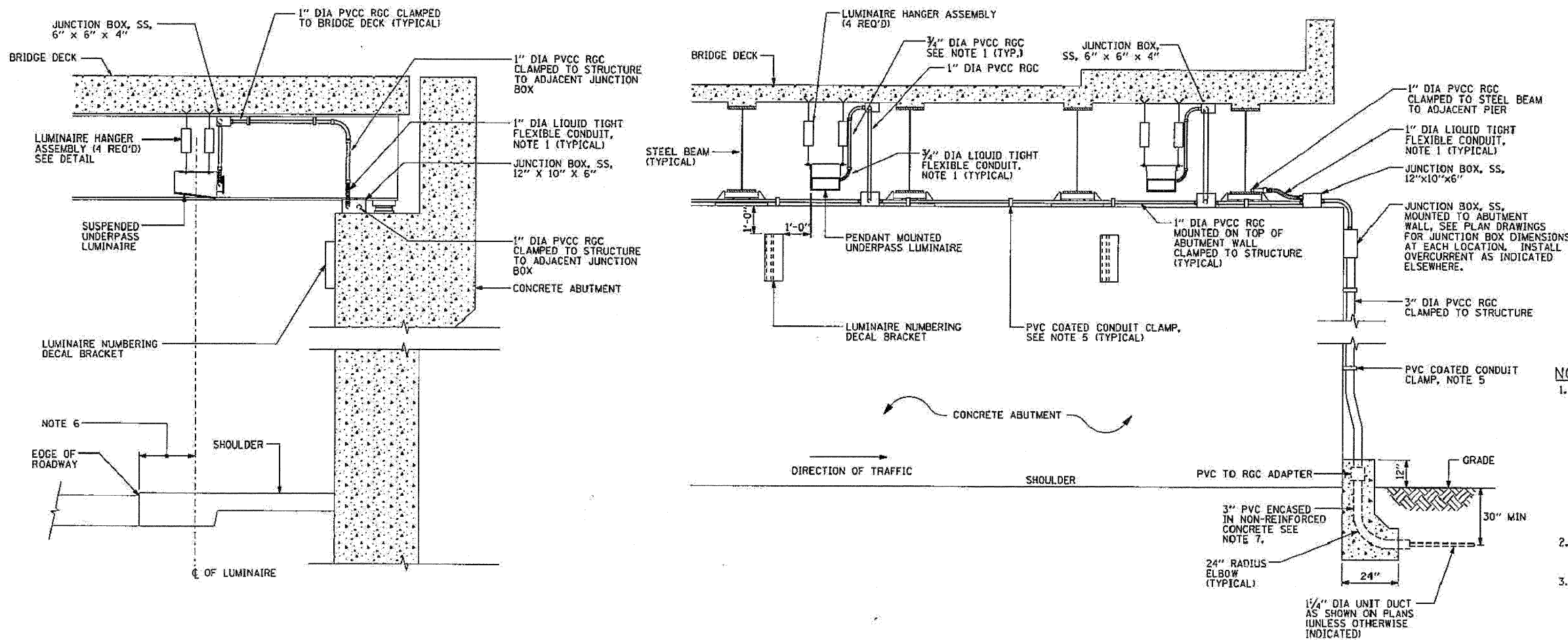
BASIS OF PAYMENT: HMA SHOULDERS 6 (150) (IF REQUIRED) WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD (SQUARE METER) FOR "HOT-MIX ASPHALT SHOULDERS 6" (150 mm)".

STEEL PLATE BEAM GUARD RAIL AND TRAFFIC BARRIER TERMINAL, OF THE TYPE SPECIFIED WILL BE PAID FOR SEPARATELY.

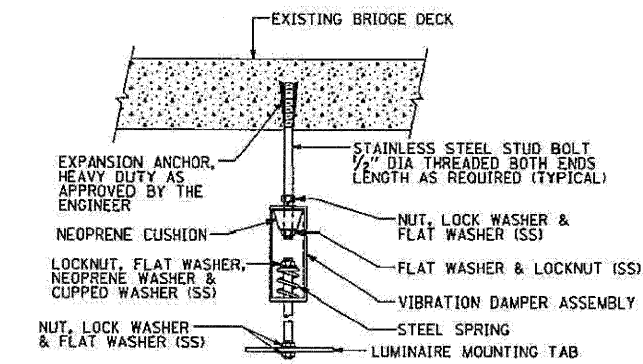
TBT = TRAFFIC BARRIER TERMINAL  
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

BD-34

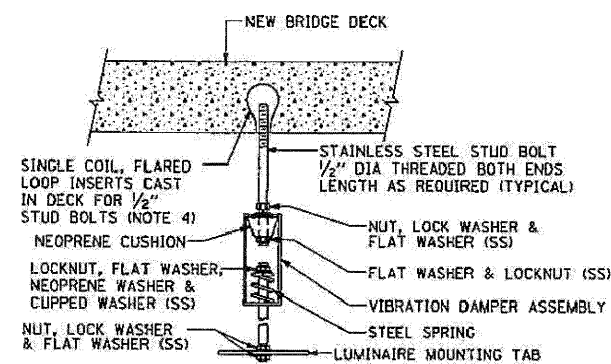
FILE NAME =	DESIGNED - AJP	REVISED -	<b>benesch</b>	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>DISTRICT 1 DETAILS DETAILS FOR DEPRESSED CURB &amp; GUTTER AND SHOULDER TREATMENT AT TBT TY 1 SPL.</b>	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
USER NAME =	DRAWN - AJP	REVISED -				3531	1515.1-1	COOK	35	27
PLOT DATE = 03/22/2010	CHECKED - KJN	REVISED -				CONTRACT NO. 60J58				
	DATE - 3/8/10	REVISED -	SCALE: N.T.S. SHEET NO. 2 OF 10 SHEETS STA. TO STA.		FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT					



- NOTES:**
- LIQUID TIGHT FLEXIBLE METAL CONDUIT, MAXIMUM LENGTH 6'-0", TYPICAL FOR EACH INSTANCE AS SHOWN. PROVIDE PVC COATED RIGID GALVANIZED STEEL CONDUIT AS REQUIRED NOT TO EXCEED 6'-0" OF FLEXIBLE LIQUID TIGHT METAL CONDUIT. LIQUID TIGHT FLEXIBLE METAL CONDUIT WILL BE INCLUDED IN THE COST OF THE CONDUIT ATTACHED TO STRUCTURE OF THE CORRESPONDING DIA. GALVANIZED STEEL, PVC COATED PAY ITEM EXCEPT THAT 3/4" DIA. CONDUIT AND 3/4" DIA. FLEXIBLE CONDUIT SHALL BE INCLUDED IN THE COST OF UNDERPASS LUMINAIRE INSTALLATION.
  - SEE UNDERPASS LIGHTING PLANS FOR INSTALLATION LOCATION OF UNDERPASS LIGHTING LUMINAIRES.
  - THE CONTRACTOR SHALL USE APPROVED SINGLE COIL FLARED LOOP INSERTS WHEN SUSPENDING MOUNTING AN UNDERPASS LUMINAIRE TO A NEW BRIDGE DECK. THE FLARED LOOP INSERTS MUST BE CAST INTO THE CONCRETE DECK. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING AND COORDINATING THE INSERT LOCATIONS FOR MOUNTING THE UNDERPASS LIGHTING SYSTEM AS SHOWN ON THE PLANS WITH THE BRIDGE DECK CONTRACTOR. SEE DETAIL.
  - THE UNDERPASS LUMINAIRE HANGER ASSEMBLY COMPLETE WITH HEAVY DUTY ANCHORS/INSERTS AND ALL APPLICABLE HARDWARE SHALL BE INCLUDED IN THE COST OF THE UNDERPASS LUMINAIRE PAY ITEM.
  - SECURE THE CONDUIT WITH PVC COATED CONDUIT CLAMPS OR CONDUIT BEAM CLAMPS AS SHOWN AT 5'-0" INTERVALS FOR LATERALS AND WITHIN 2'-0" MAXIMUM FROM ANY JUNCTION BOX, FLEXIBLE CONDUIT, OR CHANGE IN DIRECTION. ALL PVC COATED CONDUIT CLAMPS OR BEAM CLAMPS SHALL BE INCLUDED WITH THE COST OF THE CONDUIT ATTACHED TO STRUCTURE, OF THE CORRESPONDING DIA., GALVANIZED STEEL, PVC COATED PAY ITEM.
  - ALL UNDERPASS LUMINAIRES MUST BE CENTERED IN THE BEAM SPACE AS INDICATED ON THE PLANS UNLESS OTHERWISE DIRECTED BY THE ENGR. LUMINAIRE SETBACK SHALL BE AS INDICATED IN PLANS FOR EACH SPECIFIC UNDERPASS
  - THE CONCRETE ENCASED CONDUIT TRANSITION SHALL BE INCLUDED IN THE COST OF THE GALVANIZED RIGID STEEL CONDUIT PAY ITEMS.
  - ALL CONDUIT ATTACHED TO STRUCTURE SHALL BE PVC COATED RIGID STEEL CONDUIT (PVCC RGC) TYPICAL.

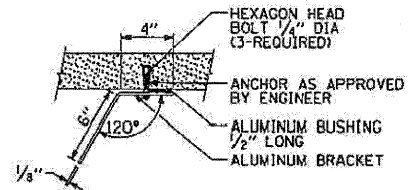


EXISTING BRIDGE DECK INSTALLATION

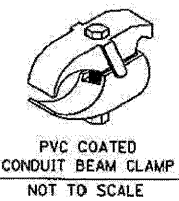
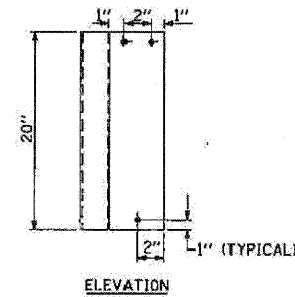


NEW BRIDGE DECK INSTALLATION

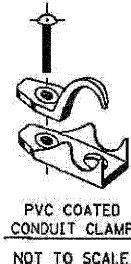
TYPICAL LUMINAIRE HANGER ASSEMBLY DETAILS



LUMINAIRE NUMBERING DECAL BRACKET NOT TO SCALE



PVC COATED CONDUIT BEAM CLAMP NOT TO SCALE



PVC COATED CONDUIT CLAMP NOT TO SCALE

FILE NAME =	DESIGNED - AJP	REVISED -
USER NAME =	DRAWN - AJP	REVISED -
PLOT DATE = 03/22/2010	CHECKED - KJN	REVISED -
	DATE - 3/8/10	REVISED -

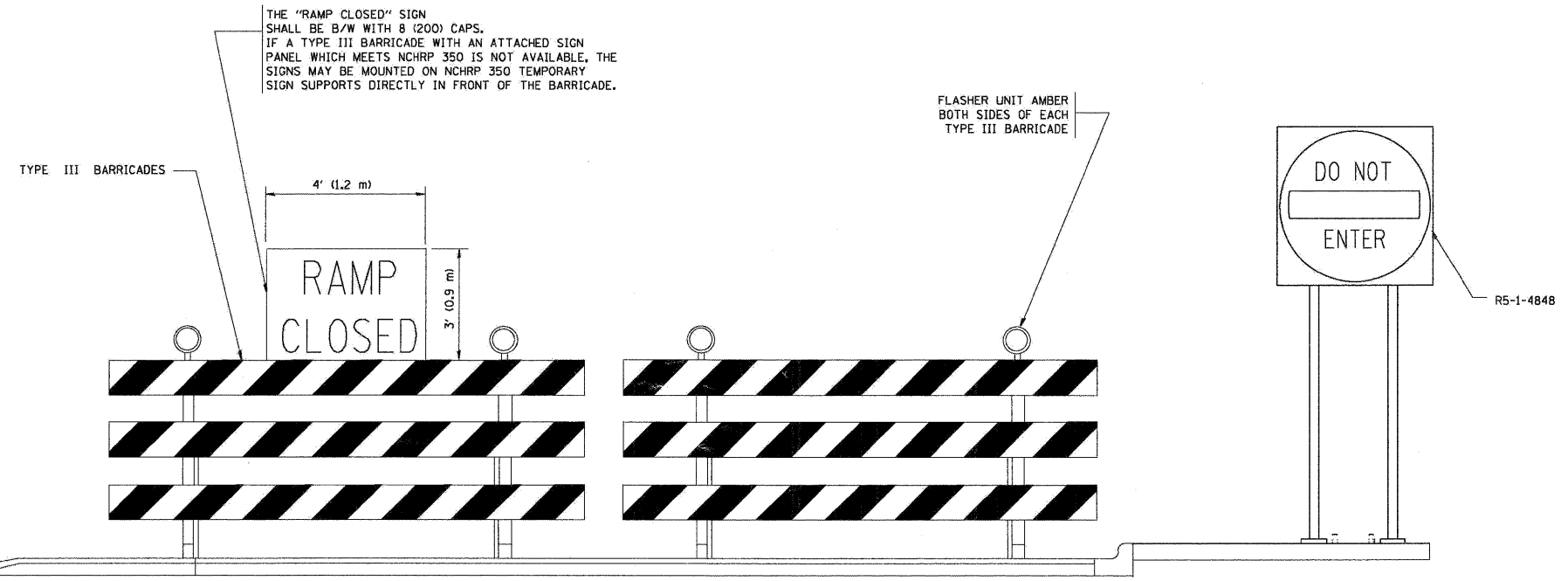
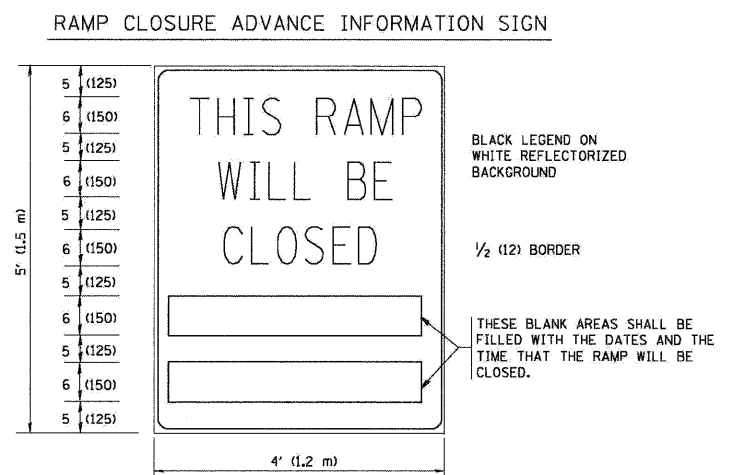
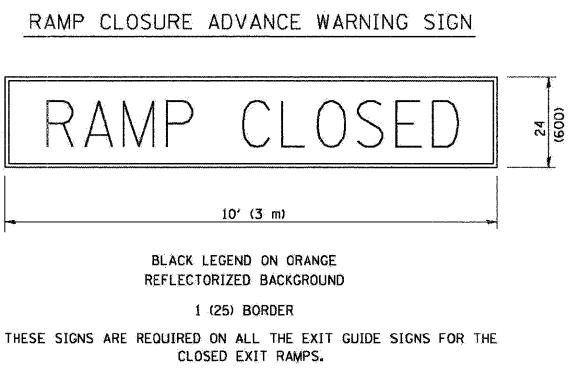
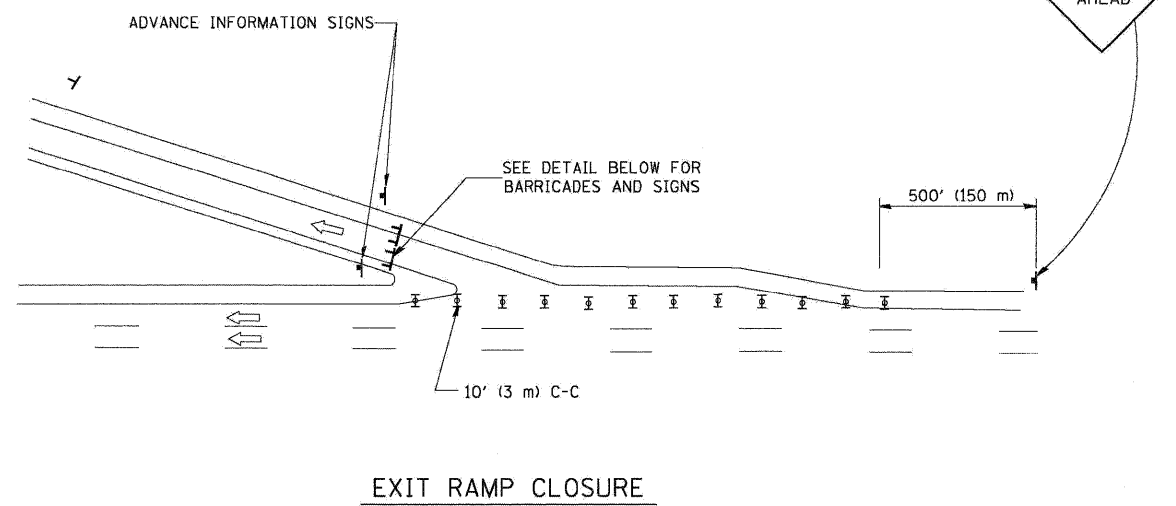
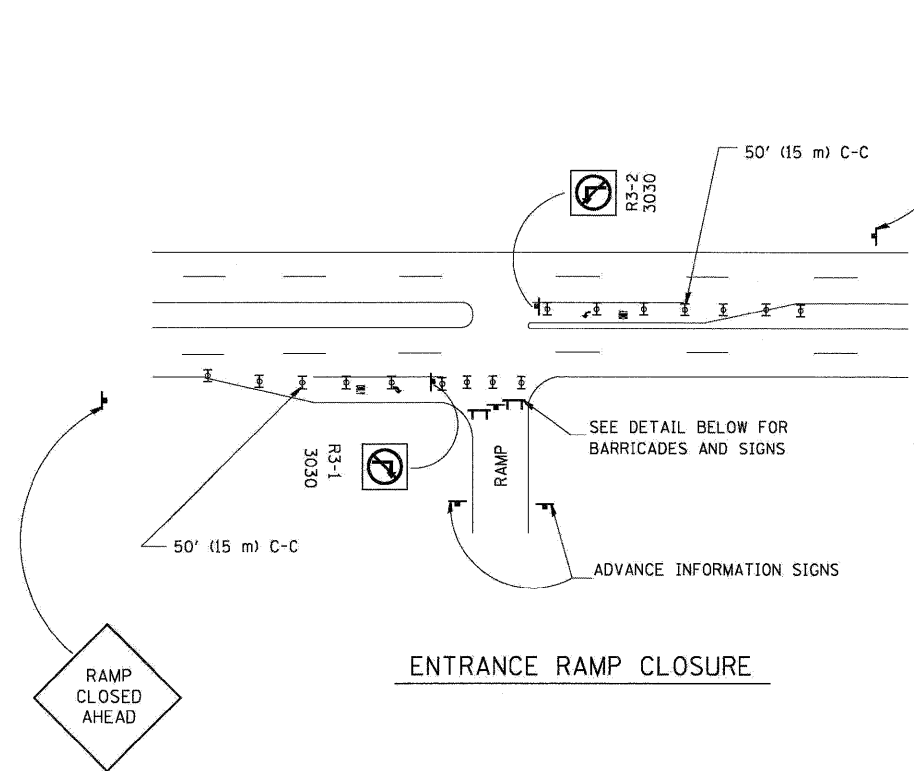
**benesch**

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**DISTRICT 1 DETAILS  
SUSPENDED MOUNT UNDERPASS  
LUMINAIRE INSTALLATION DETAILS**

SCALE: N.T.S. SHEET NO. 3 OF 10 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3531	1515.1-1	COOK	35	28
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 60J58	



THE "RAMP CLOSED" SIGN SHALL BE B/W WITH 8 (200) CAPS. IF A TYPE III BARRICADE WITH AN ATTACHED SIGN PANEL WHICH MEETS NCHRP 350 IS NOT AVAILABLE, THE SIGNS MAY BE MOUNTED ON NCHRP 350 TEMPORARY SIGN SUPPORTS DIRECTLY IN FRONT OF THE BARRICADE.

FLASHER UNIT AMBER BOTH SIDES OF EACH TYPE III BARRICADE

BLACK LEGEND ON WHITE REFLECTORIZED BACKGROUND

1/2 (12) BORDER

THESE BLANK AREAS SHALL BE FILLED WITH THE DATES AND THE TIME THAT THE RAMP WILL BE CLOSED.

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

GENERAL NOTES:

- CONES MAY BE SUBSTITUTED FOR DRUMS OR TYPE II BARRICADES DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (700) HIGH.
- STEADY BURN LIGHTS WILL NOT BE REQUIRED FOR DAY OPERATIONS.
- A FLAGGER SHALL BE POSITIONED AT EACH CLOSED RAMP THAT IS OPEN TO CONSTRUCTION VEHICLES.
- ALL ROUTE MARKERS AND TRAILBLAZER ASSEMBLIES WHICH DIRECT MOTORISTS TO A CLOSED ENTRANCE RAMP SHALL BE COVERED.
- THE SIGNING AND BARRICADING WHICH IS REQUIRED BY THIS DETAIL SHALL BE INCLUDED IN THE COST OF TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS).
- AUTHORIZATION FROM THE DISTRICT'S BUREAU OF TRAFFIC IS REQUIRED FOR ALL RAMP CLOSURES.
- 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.

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

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

FILE NAME =	DESIGNED - AJP	REVISED -
	DRAWN - AJP	REVISED -
	CHECKED - KJN	REVISED -
PLOT DATE = 03/22/2010	DATE - 3/8/10	REVISED -

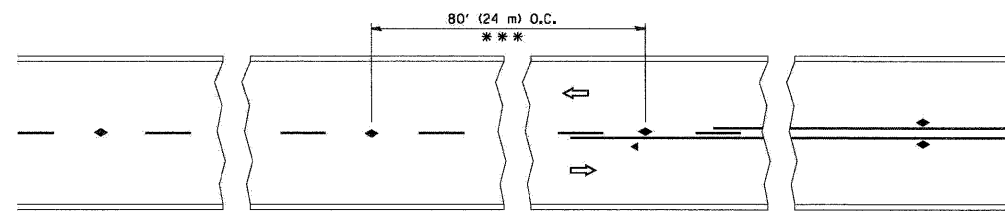
**benesch**

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

DISTRICT 1 DETAILS  
FREEWAY ENTRANCE AND EXIT RAMP CLOSURE DETAILS

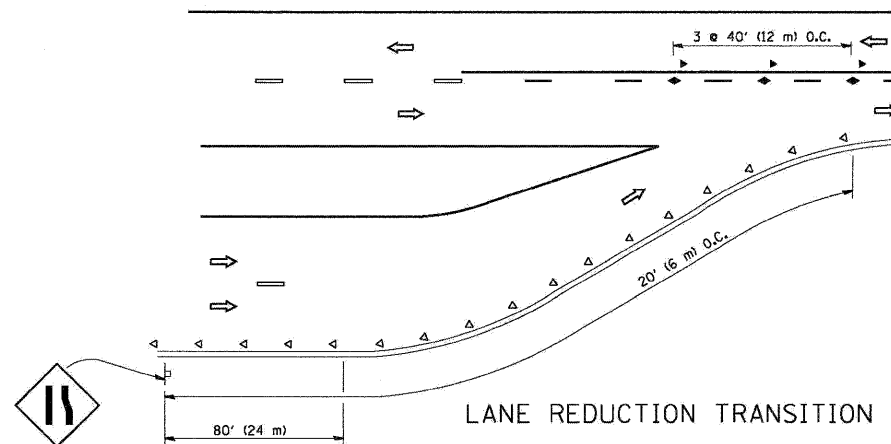
SCALE: N.T.S. SHEET NO. 4 OF 10 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3531	1515.1-1	COOK	35	29
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
		CONTRACT NO. 60J58		

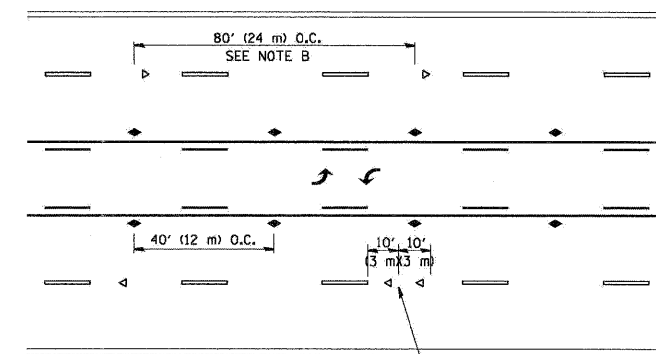


\*\*\* REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

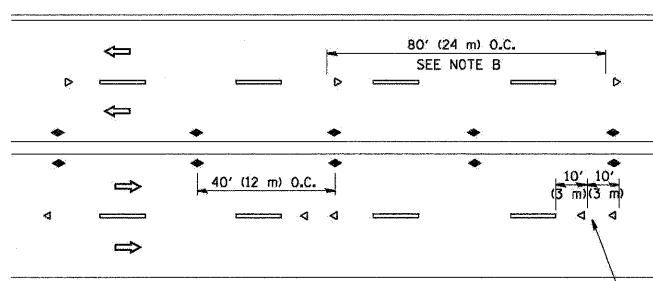
TWO-LANE/TWO-WAY



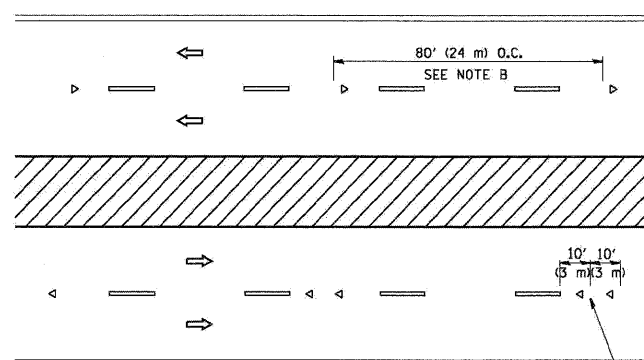
LANE REDUCTION TRANSITION



TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

GENERAL NOTES

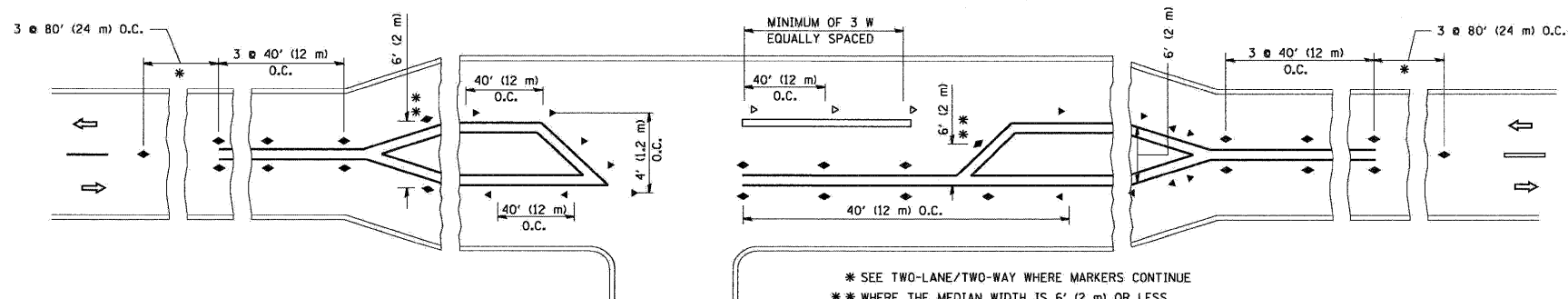
1. MARKERS USED WITH DASHED LINES SHALL BE CENTERED IN THE GAP BETWEEN SEGMENTS.
2. MARKERS USED ADJACENT TO SOLID LINES SHALL BE OFFSET 2 TO 3 (50 TO 75) TOWARD TRAFFIC AS SHOWN.
3. MARKERS THROUGH TANGENTS LESS THAN 500' (150 m) IN LENGTH BETWEEN CURVES SHALL BE INSTALLED AT THE LESSER OF THE TWO CURVE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

SYMBOLS

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

LANE MARKER NOTES

- 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.
- A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.



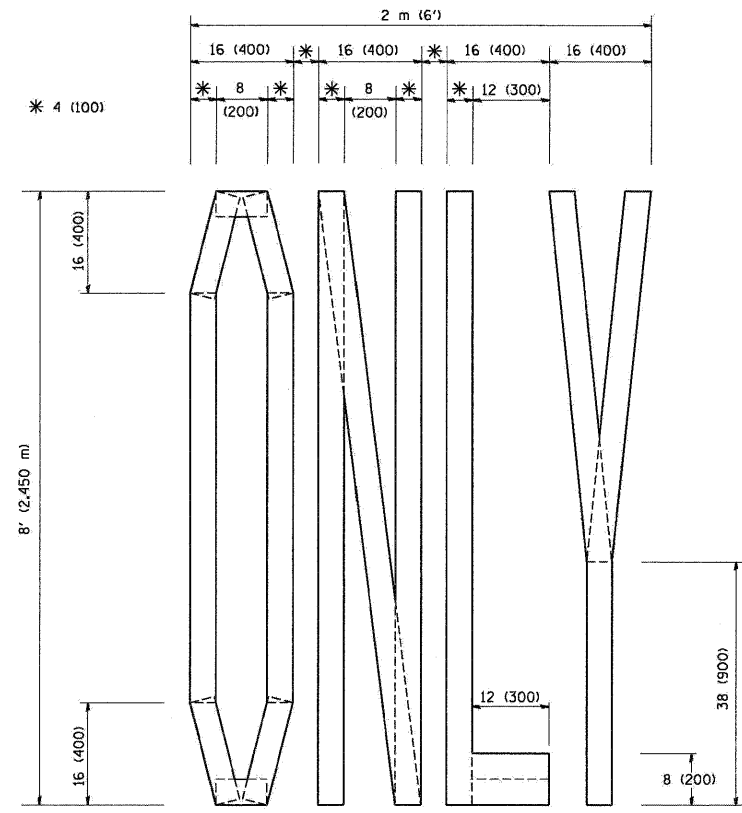
\* SEE TWO-LANE/TWO-WAY WHERE MARKERS CONTINUE  
 \*\* WHERE THE MEDIAN WIDTH IS 6' (2 m) OR LESS USE TWO-WAY MARKERS.

LEFT TURN

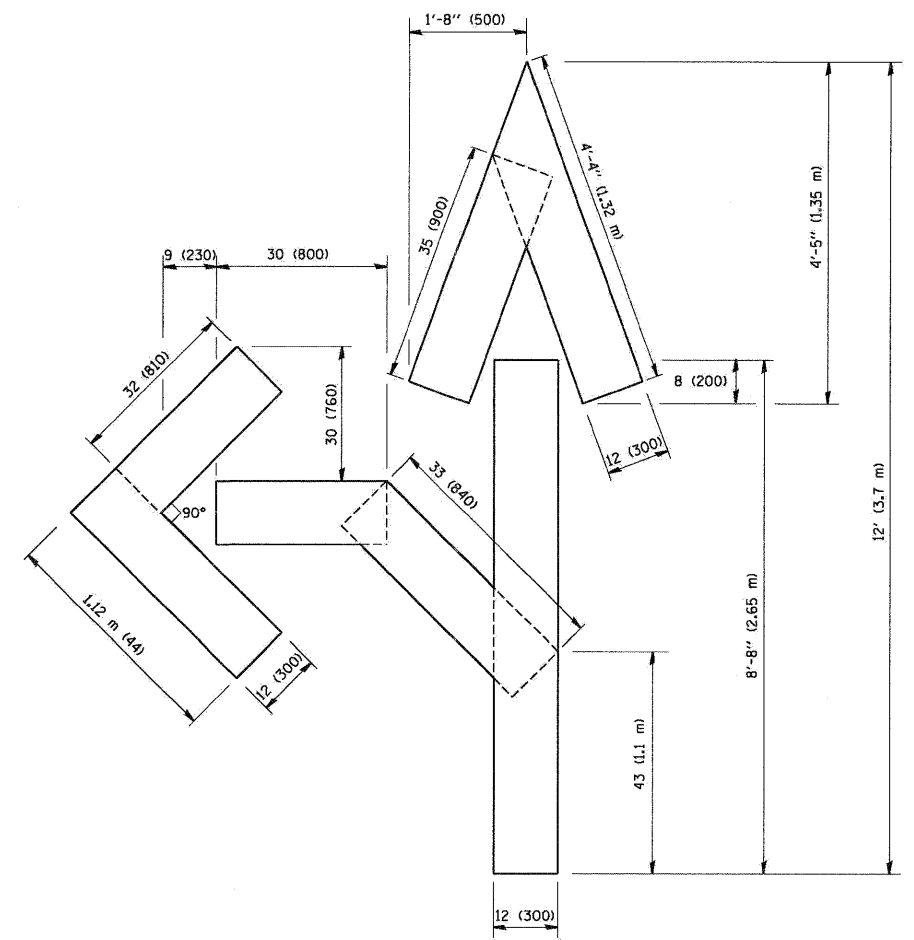
All dimensions are in inches (millimeters) unless otherwise shown.

TC-11

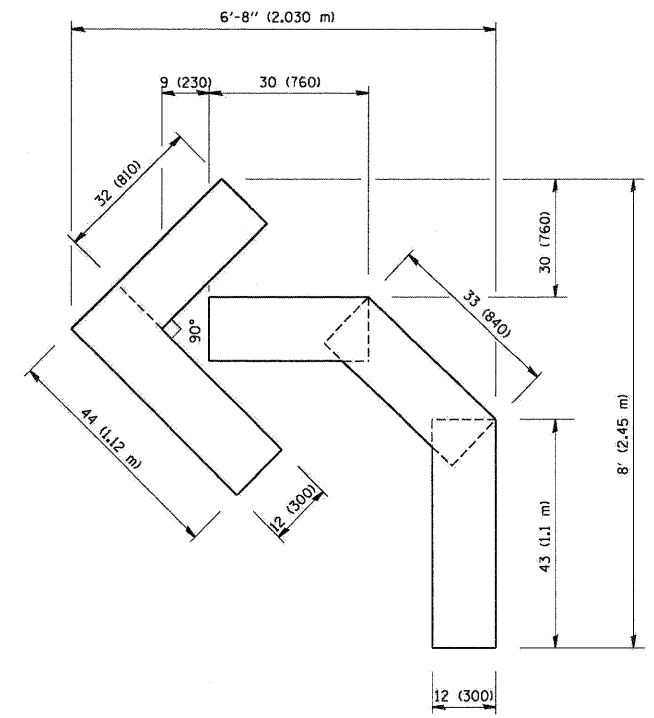
FILE NAME =	DESIGNED - AJP	REVISED -	<b>benesch</b>	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>DISTRICT 1 DETAILS TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)</b>	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
USER NAME =	DRAWN - AJP	REVISED -				3531	1515.1-1	COOK	35	30
PLOT DATE = 03/22/2010	CHECKED - KJN	REVISED -				CONTRACT NO. 60J58				
	DATE - 3/8/10	REVISED -				ILLINOIS FED. AID PROJECT				
						SCALE: N.T.S.	SHEET NO. 5 OF 10 SHEETS	STA.	TO STA.	



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.

TC-16

FILE NAME =	DESIGNED - AJP	REVISED -
	DRAWN - AJP	REVISED -
USER NAME =	CHECKED - KJN	REVISED -
PLOT DATE = 03/22/2010	DATE - 3/8/10	REVISED -

**benesch**

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

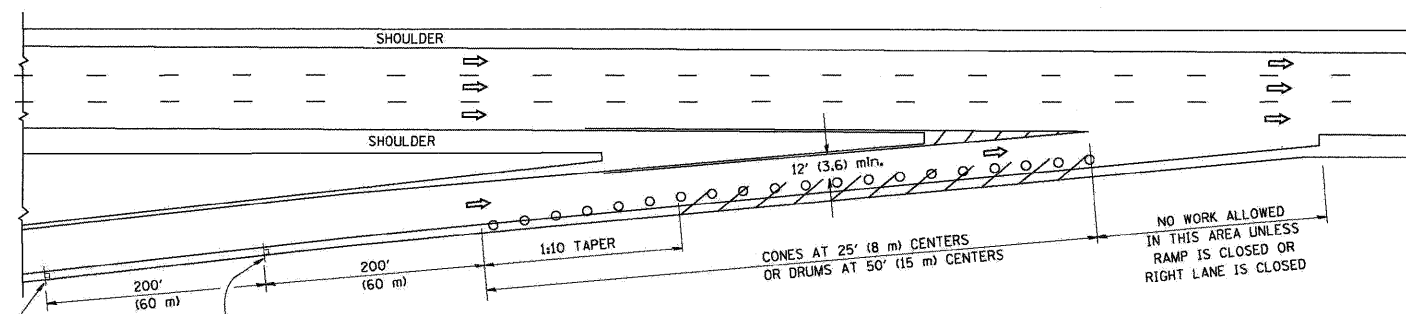
**DISTRICT 1 DETAILS  
 PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING**

SCALE: N.T.S. SHEET NO. 6 OF 10 SHEETS STA. TO STA.

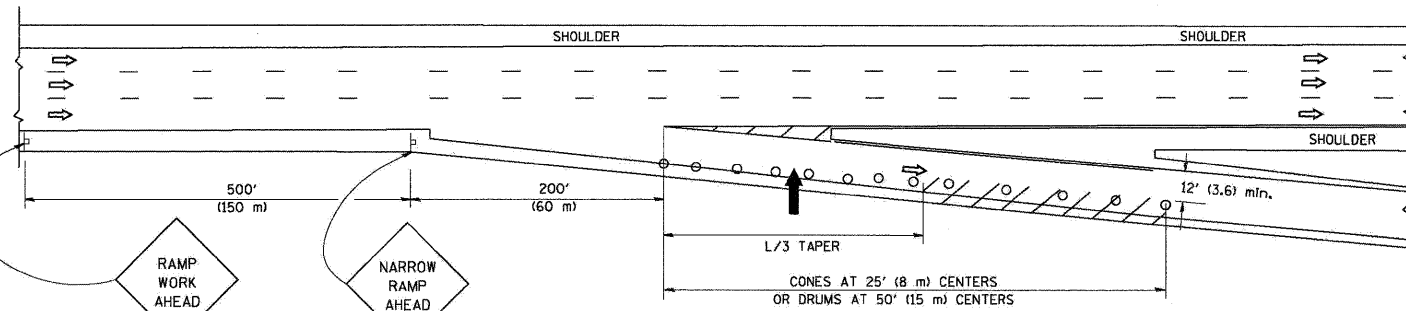
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3531	1515.1-1	COOK	35	31
FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT			CONTRACT NO. 60J58	

PARTIAL RAMP CLOSURE DETAILS

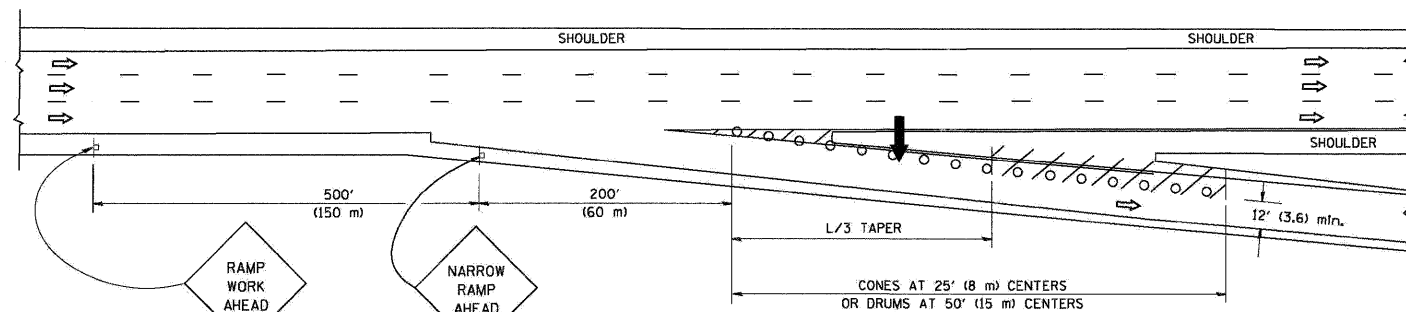
SHOULDER CLOSURE DETAILS



TYPICAL ENTRANCE RAMP



TYPICAL EXIT RAMP



TYPICAL EXIT RAMP

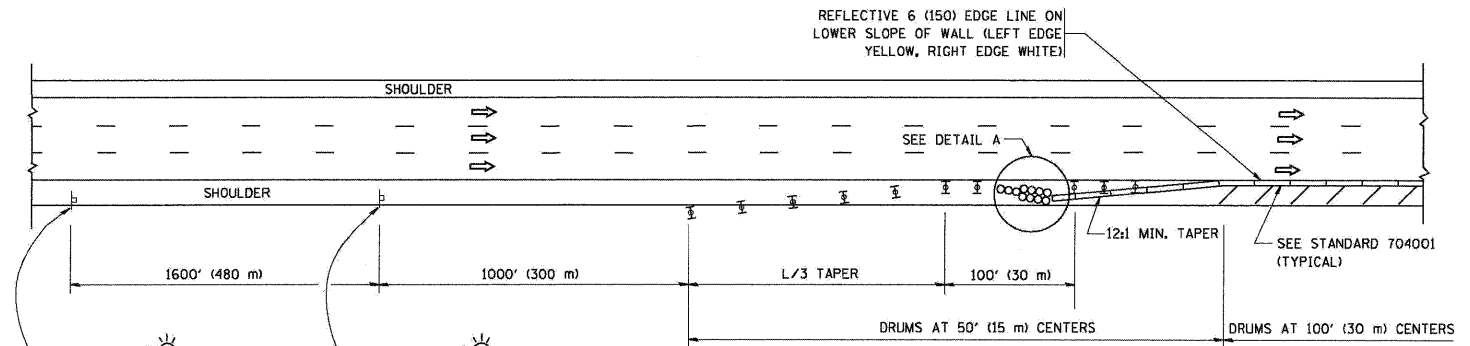
SYMBOLS

- ARROWBOARD
- WORK AREA
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- FLAGGER WITH CONTROL SIGN
- TYPE II BARRICADE, DRUM OR VERTICAL BARRICADE WITH STEADY BURN MONO-DIRECTIONAL LIGHT
- CONE, DRUM OR BARRICADE

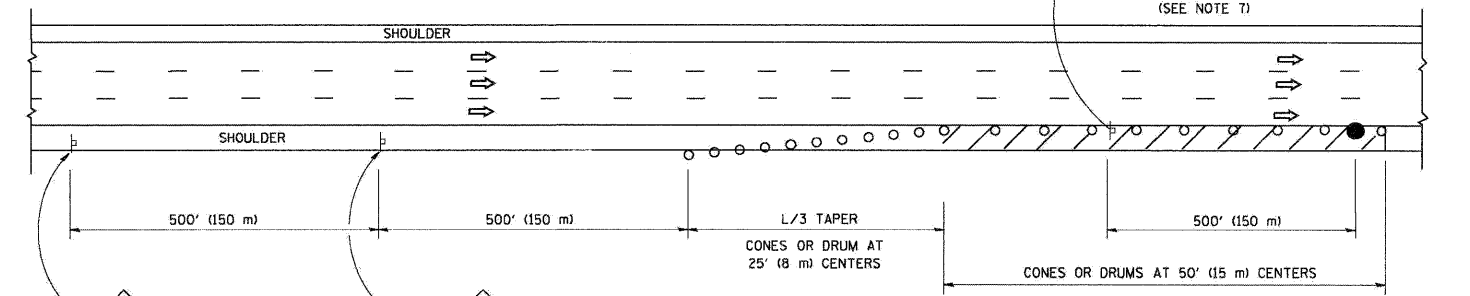
GENERAL NOTES

1. THE "L" DISTANCE EQUALS:
 

SPEED LIMIT	FORMULAS
45 mph (80 km/h) OR GREATER:	METRIC: $L=0.65(W)(S)$ ENGLISH: $L=(W)(S)$
	W = WIDTH OF OFFSET IN FEET (METERS) S = NORMAL POSTED SPEED MPH (KM/H)
2. PLASTIC DRUMS WITH HIGH PERFORMANCE REFLECTIVE SHEETING AND STEADY BURNING LIGHTS ARE REQUIRED FOR ALL NIGHTTIME CLOSURES.
3. ALL SIGNS SHALL BE POST MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR DAYS.
4. FLASHING LIGHTS SHALL BE USED DURING THE HOURS OF DARKNESS AND SHALL BE INSTALLED ABOVE THE FIRST TWO SETS OF SIGNS.

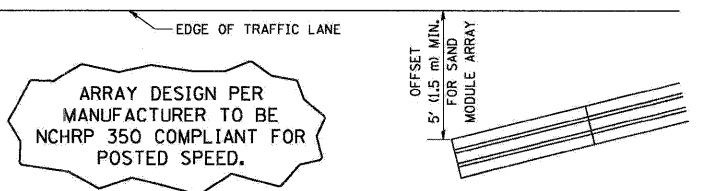


PERMANENT SHOULDER CLOSURE



DAYTIME SHOULDER CLOSURE

THIS DETAIL IS USED WHERE:  
1. VEHICLES, EQUIPMENT, WORKERS OR THEIR ACTIVITIES ENCROACH IN AN AREA CLOSER THAN 15' (4.5 m) TO THE EDGE OF PAVEMENT FOR A PERIOD IN EXCESS OF 15 MINUTES.



DETAIL "A"  
IMPACT ATTENUATOR, TEMPORARY (SEE NOTE 5)

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

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USER NAME =	DRAWN - AJP	REVISED -
PLOT DATE = 03/22/2010	CHECKED - KJN	REVISED -
	DATE - 3/8/10	REVISED -

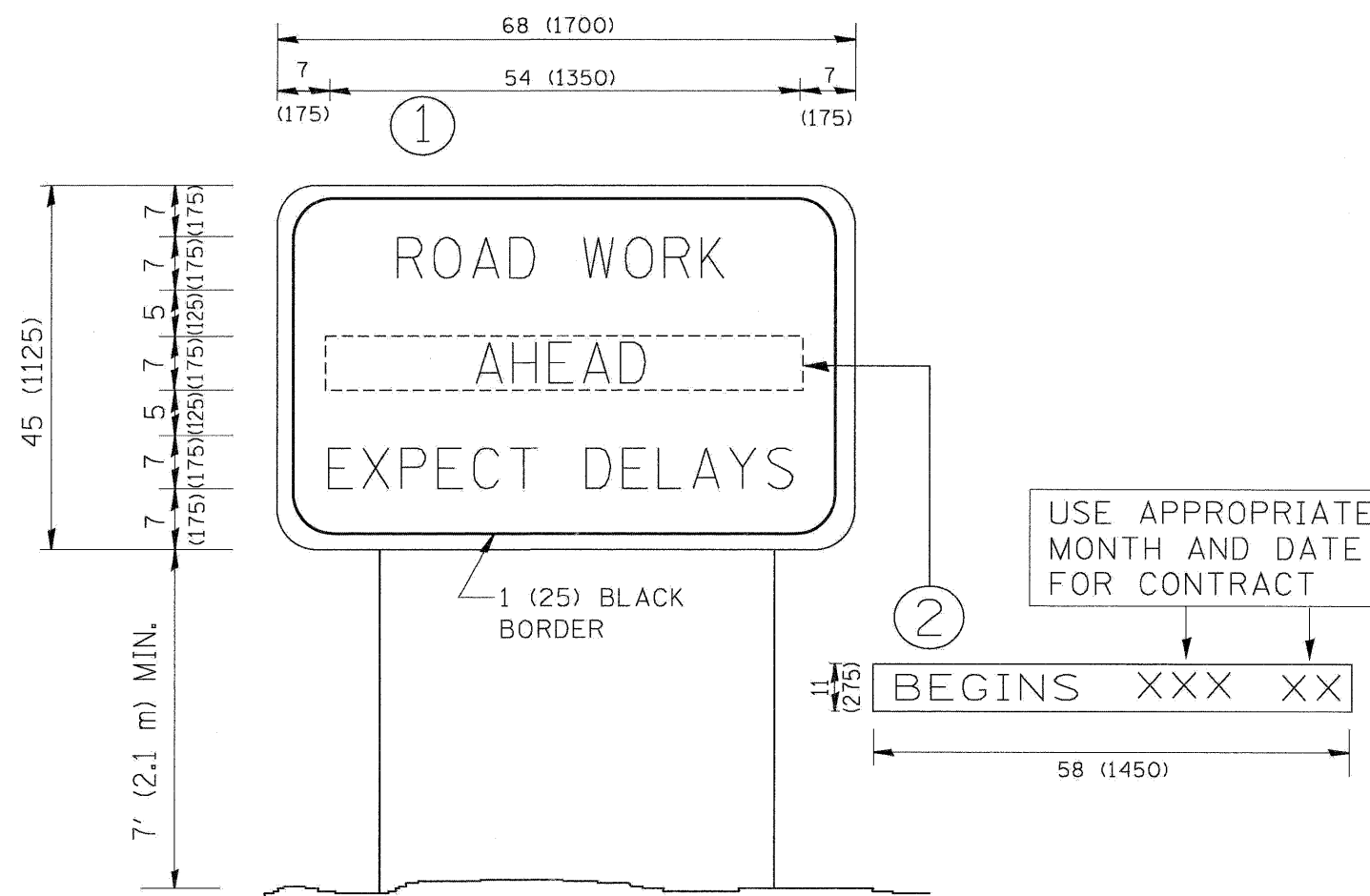
**benesch**

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

DISTRICT 1 DETAILS		
TRAFFIC CONTROL DETAILS FOR FREEWAY SHOULDER CLOSURES		
SCALE: N.T.S.	SHEET NO. 7 OF 10 SHEETS	STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3531	1515.1-1	COOK	35	32
CONTRACT NO. 60J58			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.

TC-22

FILE NAME =	DESIGNED - AJP	REVISED -
USER NAME =	DRAWN - AJP	REVISED -
PLOT DATE = 03/22/2010	CHECKED - KJN	REVISED -
	DATE - 3/8/10	REVISED -

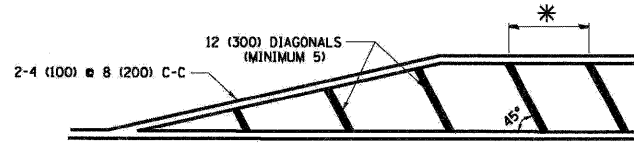
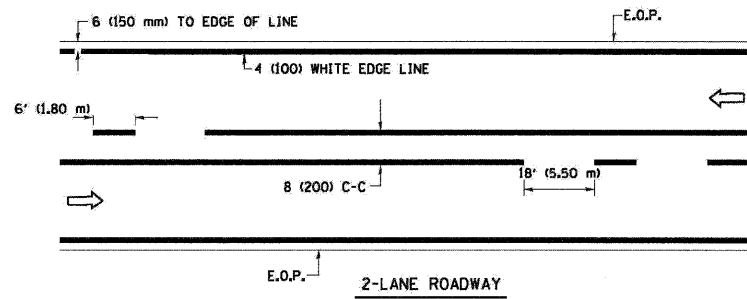
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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**DISTRICT 1 DETAILS  
ARTERIAL ROAD INFORMATION SIGN**

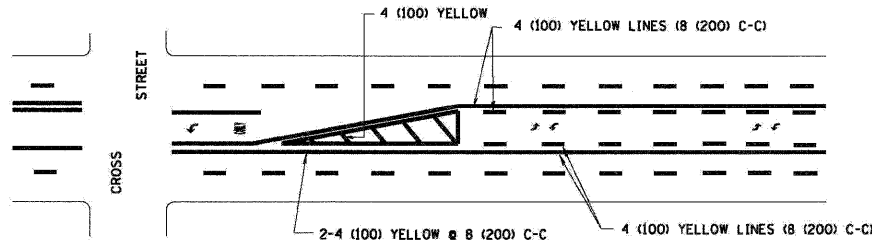
SCALE: N.T.S. SHEET NO. 8 OF 10 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3531	1515.1-I	COOK	35	33
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 60J58	

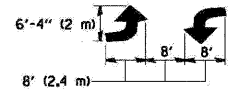


\* FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.  
\* DIAGONAL LINE SPACING: 20' (6.1 m) C-C

PAINTED MEDIANS

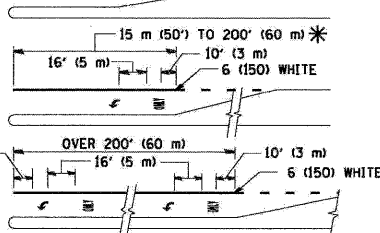
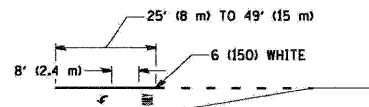
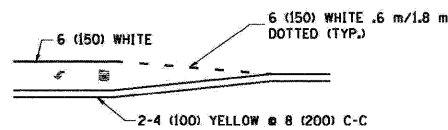


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

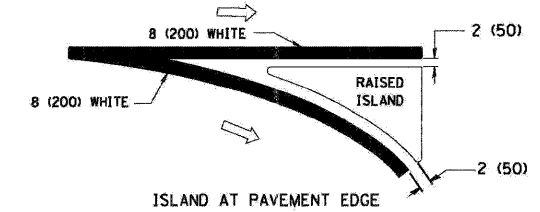
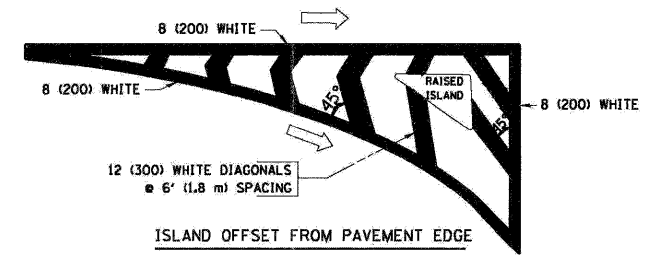


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.  
AREA = 15.8 SQ. FT. (1.47 m<sup>2</sup>) ONLY AREA = 22.9 SQ. FT. (2.13 m<sup>2</sup>)

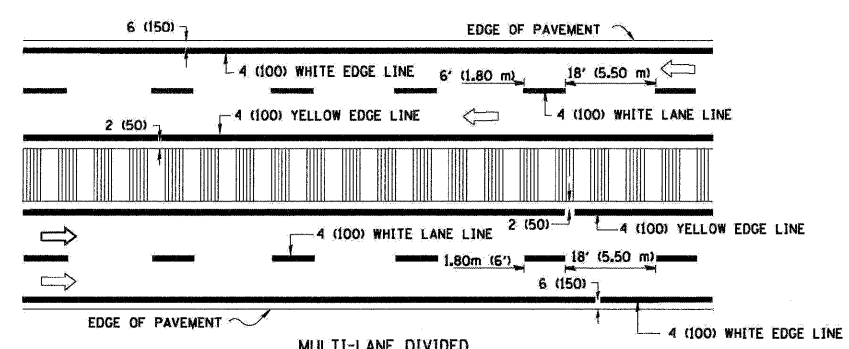
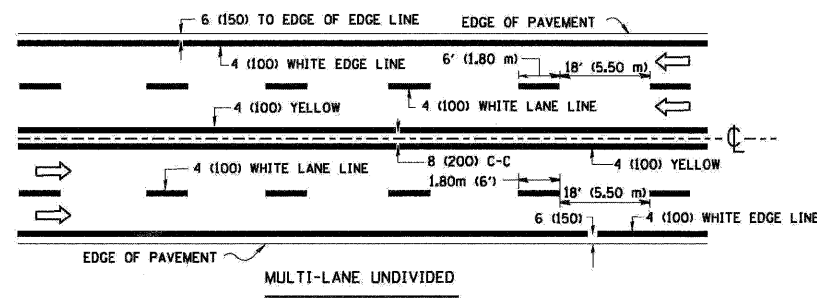
\* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING

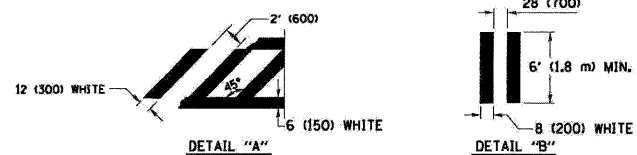
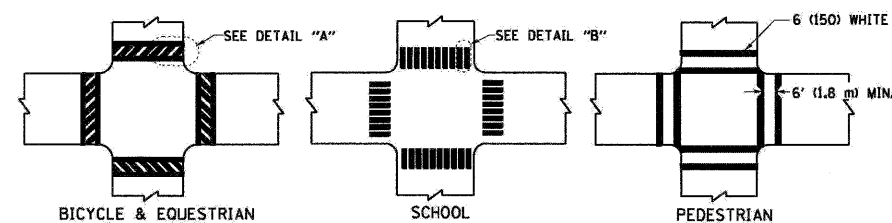


TYPICAL ISLAND MARKING



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

TYPICAL LANE AND EDGE LINE MARKING



TYPICAL CROSSWALK MARKING

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	6' (1.80 m) LINE WITH 18' (5.50 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	8 (200) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 @ 4 (100)	SOLID SOLID	YELLOW YELLOW	8 (200) C-C
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	6' (1.80 m) LINE WITH 18' (5.50 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) 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) LINES, FULL SIZE LETTERS & SYMBOLS (8' (2.4 m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION 8' (2.4 m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	6' (1.8 m) LINE WITH 18' (5.50 m) SPACE FOR SKIP-DASH; 8 (200) 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° 8 (200) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2'-4" (700) 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°	SOLID	YELLOW; TWO WAY TRAFFIC WHITE; ONE WAY TRAFFIC	8 (200) 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; 20' (6.1 m) (LESS THAN 30 MPH (50 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. (0.33m <sup>2</sup> ) EACH "X"=54.0 SQ. FT. (5.0 m <sup>2</sup> )

FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STREET MARKING STANDARDS. PRINTED BY CITY OF CHICAGO, DEPARTMENT OF TRANSPORTATION, BUREAU OF TRAFFIC.

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

FILE NAME =	DESIGNED - AJP	REVISED -
USER NAME =	DRAWN - AJP	REVISED -
PLOT DATE = 03/22/2010	CHECKED - KJN	REVISED -
	DATE - 3/8/10	REVISED -

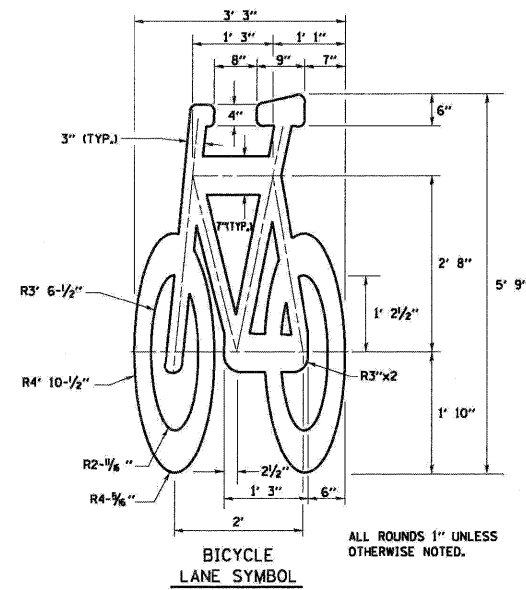
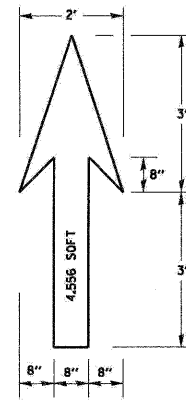
benesch

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

DISTRICT 1 DETAILS  
CITY OF CHICAGO TYPICAL PAVEMENT MARKINGS

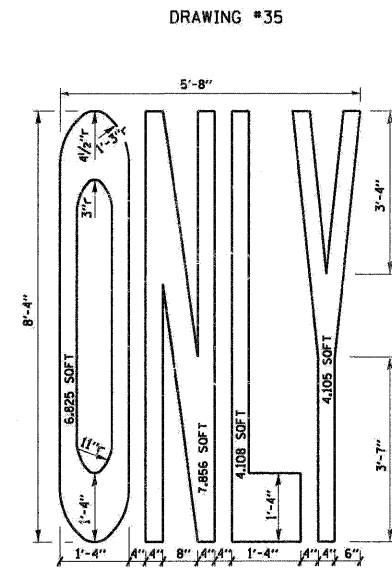
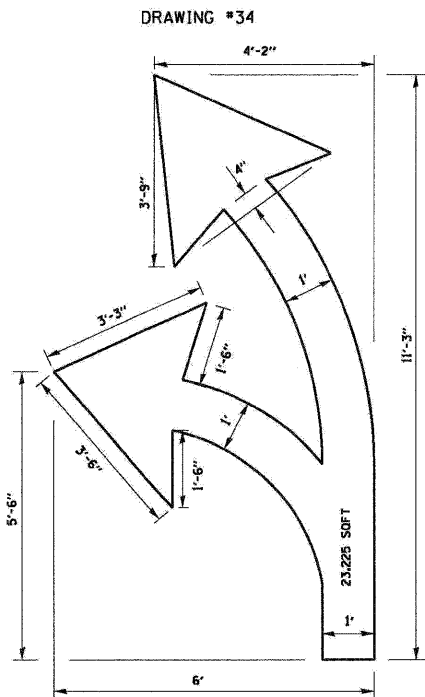
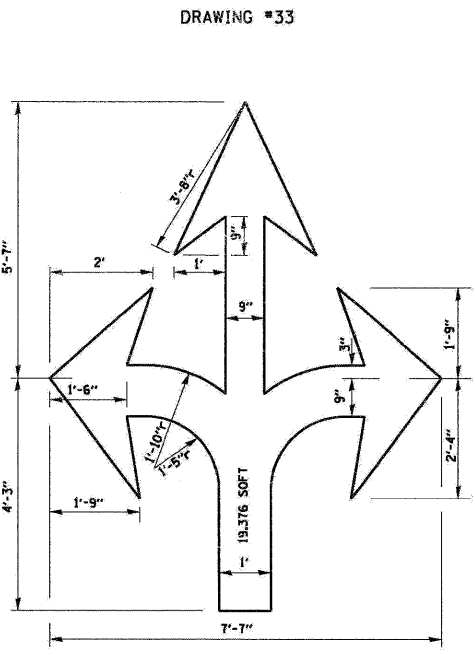
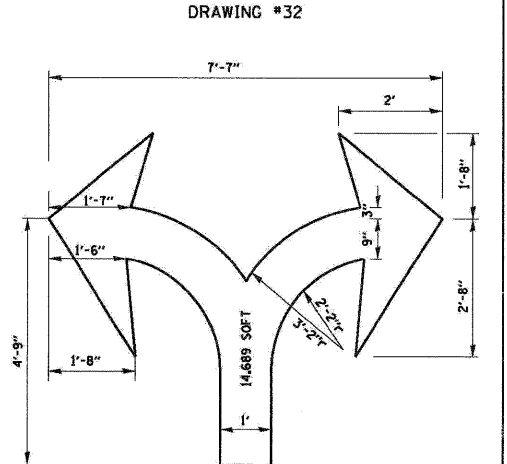
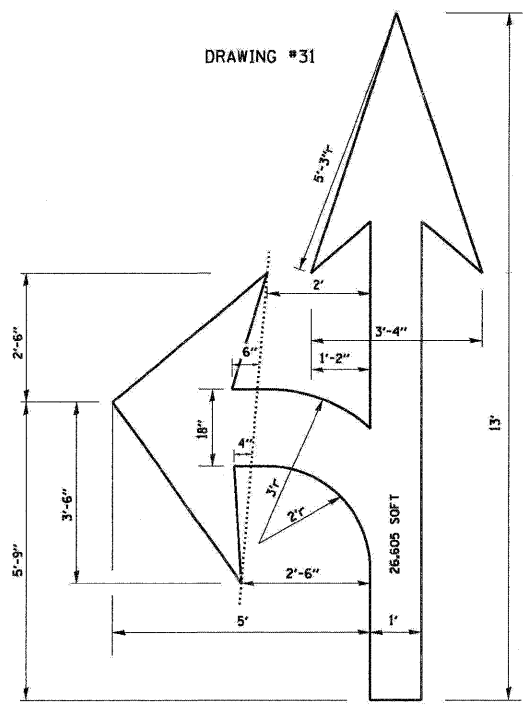
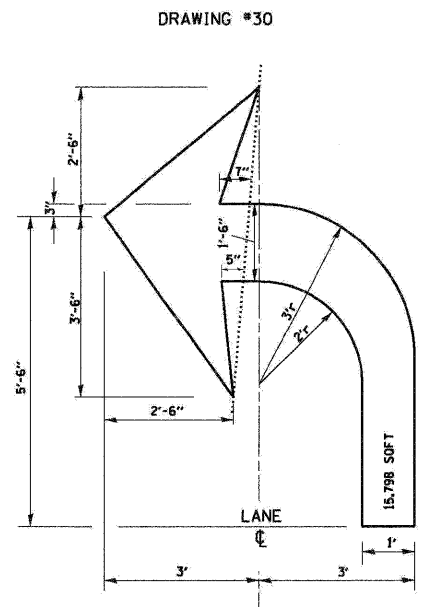
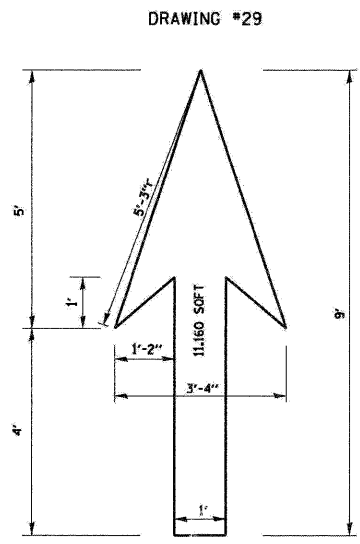
SCALE: N.T.S. SHEET NO. 9 OF 10 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3531	1515.1-I	COOK	35	34
CONTRACT NO. 60J58				
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		



**NOTE:**  
 1.) FOR BIKE LANE SYMBOLS ONLY, USE PRE-FORMED THERMOPLASTIC WITH A MINIMUM THICKNESS OF 90 MILS, MINIMUM SKID RESISTANCE VALUE OF 60 BPN, & A MINIMUM INDEX OF REFRACTION OF 1.50.  
 2.) THE RESIDENT ENGINEER SHALL CONTACT MR. BEN GOMBERG AT 312-744-8093 AT LEAST ONE CALENDAR WEEK PRIOR TO INSTALLING BIKE LANE SYMBOLS.

**TYPICAL BIKE LANE SYMBOLS**  
DRAWING #28



**NOTE:**  
 ALL MARKINGS SHALL BE SOLID WHITE UNLESS OTHERWISE NOTED IN THE PLANS

FILE NAME =	DESIGNED - AJP	REVISED -
USER NAME =	DRAWN - AJP	REVISED -
PLOT DATE = 03/22/2010	CHECKED - KJN	REVISED -
	DATE - 3/8/10	REVISED -

**benesch**

**STATE OF ILLINOIS**  
DEPARTMENT OF TRANSPORTATION

**DISTRICT 1 DETAILS**  
CITY OF CHICAGO TYPICAL PAVEMENT MARKINGS

SCALE: N.T.S. SHEET NO. 10 OF 10 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3531	1515.1-I	COOK	35	35
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
			CONTRACT NO. 60J58	