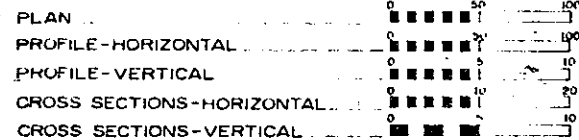


INDEX OF SHEETS ON SHEET NUMBER 2

SCALE IN FEET



LARAMIE AVENUE

DESCRIPTION OF WORK: THE IMPROVEMENT CONSISTS OF THE FOLLOWING ITEMS TO BE APPLIED TO THE EXISTING BRIDGE: REMOVE EXISTING BRIDGE DECK AND INSTALL A NEW CONCRETE DECK, PARAPET, AND PEDESTRIAN SAFETY FENCE. THE LONGITUDINAL DECK JOINT SHALL BE ELIMINATED IN THE REPLACEMENT DECK AND EXISTING EXPANSION JOINTS AT ABUTMENTS SHALL BE REMOVED AND REPLACED WITH A NEOPRENE EXPANSION JOINT OR 2 1/2" PREMOULDED JOINT SEAL, AS DETAILED. THE ABUTMENT BACKWALLS WILL BE REPAIRED OR REBUILT AS DETAILED. THE EXISTING STRUCTURAL STEEL AND FIXED PIER BEARINGS SHALL BE CLEANED AND PAINTED AND THE ABUTMENT ROLLER BEARINGS AND EXPANSION PIER ROLLER BEARINGS REPLACED WITH ELASTOMERIC BEARING PADS AND STEEL BOLSTERS. INSTALL FOUR INCH TRANSVERSE EXPANSION JOINT FILLER AT THE END OF THE APPROACH SLABS AND REPAIR DAMAGED CURBS AND SIDEWALKS. REMOVE AND REPLACE BITUMINOUS SURFACE COURSE ON THE APPROACH SLABS. THE BRIDGE SUBSTRUCTURE UNITS SHALL BE REPAIRED AS DETAILED IN THE PLANS. ALL OF THE WORK DESCRIBED SHALL BE ACCOMPLISHED UTILIZING STAGED CONSTRUCTION TO MAINTAIN TRAFFIC FLOW AT ALL TIMES.

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS PLANS FOR PROPOSED FEDERAL AID INTERSTATE HIGHWAY

F.A.I. ROUTE 290
SECTION: 3030.2 BR (80)
PROJECT: IR-290-4 (87)92
COOK COUNTY
REHABILITATION OF LARAMIE AVENUE BRIDGE OVER
EISENHOWER EXPRESSWAY

C-91-048-80

*Fence Co. Co.
C. Clay-R.E.*

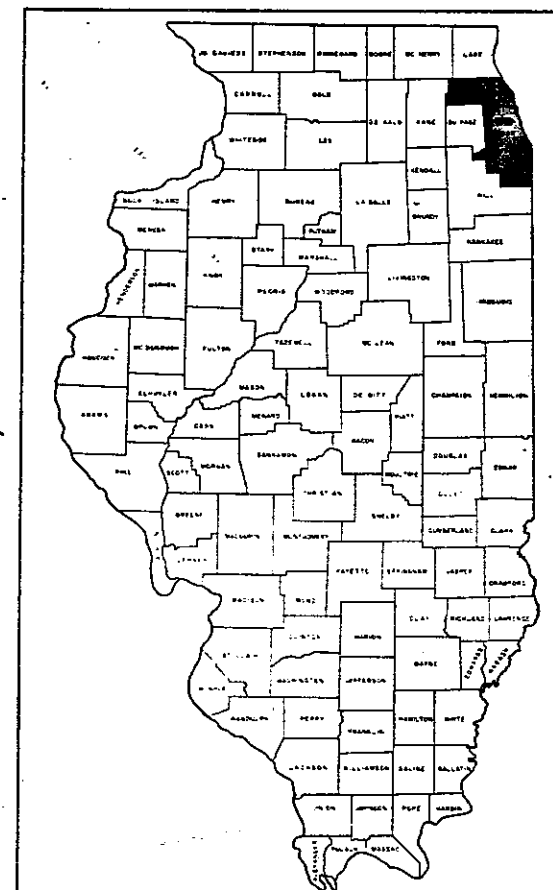
New Deck

Start 6-1-87

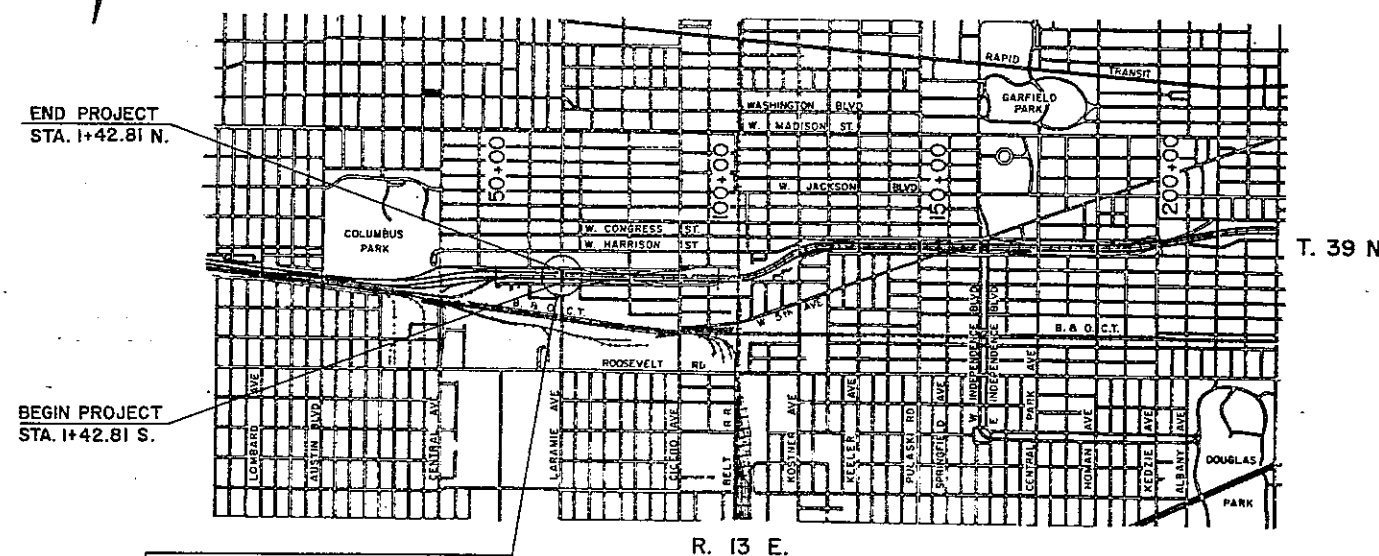
105 Work Days

ROUTE NO	SEC	COUNTY	TOTAL SHEETS	SHEET NO
FAI 290	*	COOK	32	1
STA		TO STA		
FED ROAD DIST NO 7		ILLINOIS	PROJECT -IR-290-	
* 3030.2 BR(80)		(87) 92		

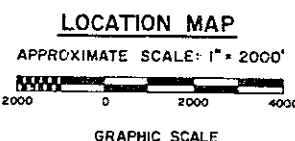
p-91-048-80



LOCATION OF SECTION INDICATED THUS: —



LARAMIE AVENUE BRIDGE
Bridge No. 016-2064
Three span continuous steel wide
flange beam bridge (Three 66'-7 1/2"
Spans) with approach slabs, abutments
and piers at Station 64+51.18
on the eastbound Baseline of the
Eisenhower Expressway (I-290)



NET LENGTH OF PROJECT (ALONG LARAMIE AVE.)=285.62 FT.=0.054 MI.
NET LENGTH OF PROJECT (ALONG I-290)=0.0 FT.=0.0 MI.



William Gentry
WILLIAM GENTRY
REGISTERED PROFESSIONAL ENGINEER
STATE OF ILLINOIS NO. 62-29876
DATE *July 31, 1986*

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	
SUBMITTED: <i>8-6</i>	1986
EXAMINED: <i>Ralph A. Weber</i>	DISTRICT ENGINEER
PASSED: <i>[Signature]</i>	ENGINEER OF PLANS AND CONTRACTS
APPROVED: <i>[Signature]</i>	ENGINEER IN DESIGN
	DIRECTOR OF HIGHWAYS

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION	
APPROVED	DATE
DIVISION ADMINISTRATOR	

Revised Set 12-9-86

REV. 2-11-87 (PROJ.)

CONTRACT NO. 42239

COOK COUNTY SECTION 3030.2 BR(80) F.A.I. ROUTE 290

PLANS PREPARED BY
AMERICAN ENGINEERING COMPANY

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 290	*	COOK	32	2
STA.		TO STA.		
FED ROAD DIST NO 7		ILLINOIS	PROJECT: I-IR-290-4	
* 3030.2 BR(80)				

GENERAL PLAN NOTES

- ALL ELEVATIONS ARE BASED ON UNITED STATES COAST & GEODETIC SURVEY DATUM.
- THE CONTRACTOR SHALL INSPECT THE SITE OF THE PROJECT, AND FAMILIARIZE HIMSELF WITH ALL EXISTING CONDITIONS, TRAFFIC AND OTHER ITEMS THAT EFFECT THE CONTRACT AND THE DETAILED REQUIREMENTS OF CONSTRUCTION.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS IN THE FIELD PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION.
- ALL SAW CUT OF EXISTING CONCRETE SHALL BE CONSIDERED INCIDENTAL TO THE REMOVAL ITEM INVOLVED.
- REPAIR AREAS AND CRACKS WERE OBSERVED DURING A FIELD INSPECTION MADE FEB, 1983. SIZE AND LOCATION OF CRACKS AND REPAIR AREAS SHOWN ON THE DRAWINGS ARE APPROXIMATE ONLY AND ARE SUBJECT TO FIELD VERIFICATION.
- THE ATTENTION OF THE CONTRACTOR IS DIRECTED TO THE FACT THAT OTHER SEPARATE CONTRACTS ARE, OR MAY BE, IN FORCE THAT INTERSECTS THE LIMITS OF THIS PROJECT. THE CONTRACTOR SHALL COOPERATE WITH THE OTHER CONTRACTOR IN THE PHASING AND PERFORMANCE OF HIS WORK SO AS NOT TO DELAY, INTERRUPT OR HINDER THE PROGRESS OR COMPLETION OF THE WORK BEING PERFORMED BY OTHER CONTRACTORS. NO ADDITIONAL COMPENSATION WILL BE ALLOWED THIS CONTRACTOR FOR COMPLIANCE WITH THE ABOVE REQUIREMENTS NOR ANY DELAYS OR INCONVENIENCES RESULTING FROM THE ACTIVITIES OF OTHER CONTRACTORS.
- WHEN ARTIFICIAL LIGHTING IS UTILIZED IN NIGHT OPERATIONS THE CONTRACTOR SHALL EXERCISE THE UTMOST PRECAUTION IN PREVENTING ADVERSE VISIBILITY TO THE MOTORING PUBLIC AS WELL AS THE ADJOINING RESIDENTIAL AREAS.
- ALL CONSTRUCTION PERSONNEL WILL BE REQUIRED TO WEAR FLUORESCENT ORANGE VEST AT ALL TIMES WHILE ON THE CONSTRUCTION SITE. COMPLIANCE WITH THIS REQUIREMENT SHALL BE CONSIDERED AS INCIDENTAL TO THE CONTRACT.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO ASCERTAIN EXISTING FIELD CONDITIONS BEFORE BIDDING ON THE PROJECT SPECIFICALLY AS THEY RELATE TO LUMP SUM ITEMS.
- DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.
- THE STANDARD DRAWINGS LISTED IN THE PLAN INDEX IS INTENDED TO BE THE LATEST REVISION. IT SHALL HOLD PRECEDENCE OVER EARLIER REVISIONS THAT MAY BE REFERRED TO ELSEWHERE IN THE PLANS OR IN THE SPECIAL PROVISIONS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING UTILITIES FOR THE DURATION OF THE CONTRACT AT HIS OWN COST.
- ALL FRAMES AND GRATES DAMAGED BY THE CONTRACTOR DURING CONSTRUCTION WILL BE REPLACED BY THE CONTRACTOR AT HIS EXPENSE.
- EXISTING FENCE THAT HAS TO BE DISCONNECTED AND/OR REMOVED FOR THE CONTRACTOR'S OPERATIONS OR DAMAGED BY THE CONTRACTOR SHALL BE RECONNECTED AND/OR REPLACED IN KIND AT NO ADDITIONAL COST TO THE CONTRACT.
- WHEN REMOVING PAVEMENT, CURB AND GUTTER, OR ANY OTHER STRUCTURES, THE USE OF ANY TYPE OF CONCRETE BREAKERS WHICH MIGHT DAMAGE THE UNDERGROUND PUBLIC OR PRIVATE UTILITIES WILL NOT BE PERMITTED. UNDER NO CIRCUMSTANCES WILL THE USE OF A FROST BALL BE PERMITTED.
- ALL DISTRIBUTORS FOR BITUMINOUS PRIMING OPERATIONS SHALL BE EQUIPPED WITH SHIELDS TO PREVENT CONTAMINATION OF ADJACENT HIGHWAY APPURTENANCES. SHIELDS SHALL MEET WITH THE ENGINEER'S APPROVAL.
- WHEN RESURFACING ADJACENT TO JOINT MODIFICATION, THE CONTRACTOR WILL BE REQUIRED TO TAKE SPECIAL CARE WHEN COMPACTING THE BITUMINOUS MATERIALS. THE METHODS USED FOR COMPACTING SHALL MEET THE APPROVAL OF THE ENGINEER.
- EXISTING UNDERPASS LUMINAIRES WHICH ARE ATTACHED TO THE UNDERSIDE OF THE BRIDGES SHALL BE MAINTAINED OPERATIONAL THROUGHOUT THE DURATION OF THE CONTRACT AND SHALL BE PROTECTED FROM DAMAGE. FOR DETAILS, SEE SPECIAL PROVISIONS.

- EXISTING LIGHT STANDARDS SHALL BE REMOVED AND REINSTALLED IN NEW LOCATION BY THE CITY OF CHICAGO. THE CITY OF CHICAGO SHALL ALSO FURNISH AND INSTALL THE WIRING TO MAKE THE RELOCATED LIGHT STANDARDS FULLY OPERATIONAL.
- THE CONTRACTOR SHALL FURNISH AND INSTALL A GROUNDING CONDUCTOR (TYPE XHHW-GREEN SOLID COLOR INSULATION) IN EXISTING CONDUITS AS FOLLOWS:
 - INSTALL 1-1/2 #6 AWG GROUNDING CONDUCTOR IN EXISTING 2 1/2" DIAM. CONDUITS.
 - INSTALL 1-1/2 #10 AWG GROUNDING CONDUCTOR IN EXISTING 1" DIAM. CONDUITS (SEE SPECIAL PROVISIONS).

INDEX OF SHEETS

- TITLE SHEET
- INDEX OF SHEETS, STATE STANDARDS, GENERAL PLAN NOTES
- SUMMARY OF QUANTITIES
- DELETED
- DELETED
- DISTRICT ONE FREEWAY STANDARD, ONE LANE CLOSURE
- DISTRICT ONE FREEWAY STANDARD, TWO LANE CLOSURE
- TEMPORARY CONCRETE BARRIER
- TRAFFIC CONTROL
- PERMANENT PAVEMENT MARKINGS
- APPROACH SLAB
- SIDEWALK RAMPS FOR THE HANDICAPPED
- SIDEWALK, CURB AND GUTTER REPLACEMENT
- GENERAL PLAN AND ELEVATION
- GENERAL NOTES AND TOTAL BILL OF MATERIALS
- CONSTRUCTION STAGING
- TOP OF SLAB ELEVATIONS
- TOP OF SLAB ELEVATIONS
- SUPERSTRUCTURE
- SUPERSTRUCTURE DETAILS
- SUPERSTRUCTURE DETAILS
- UTILITY CONDUIT DETAILS
- NEOPRENE EXPANSION JOINTS
- PEDESTRIAN RAILING (R-28)
- STRUCTURAL STEEL DETAILS
- ABUTMENT BEARING ASSEMBLIES
- PIER 1 BEARING ASSEMBLIES
- SOUTH ABUTMENT
- NORTH ABUTMENT
- ABUTMENT DETAILS
- PIER 1
- PIER 2

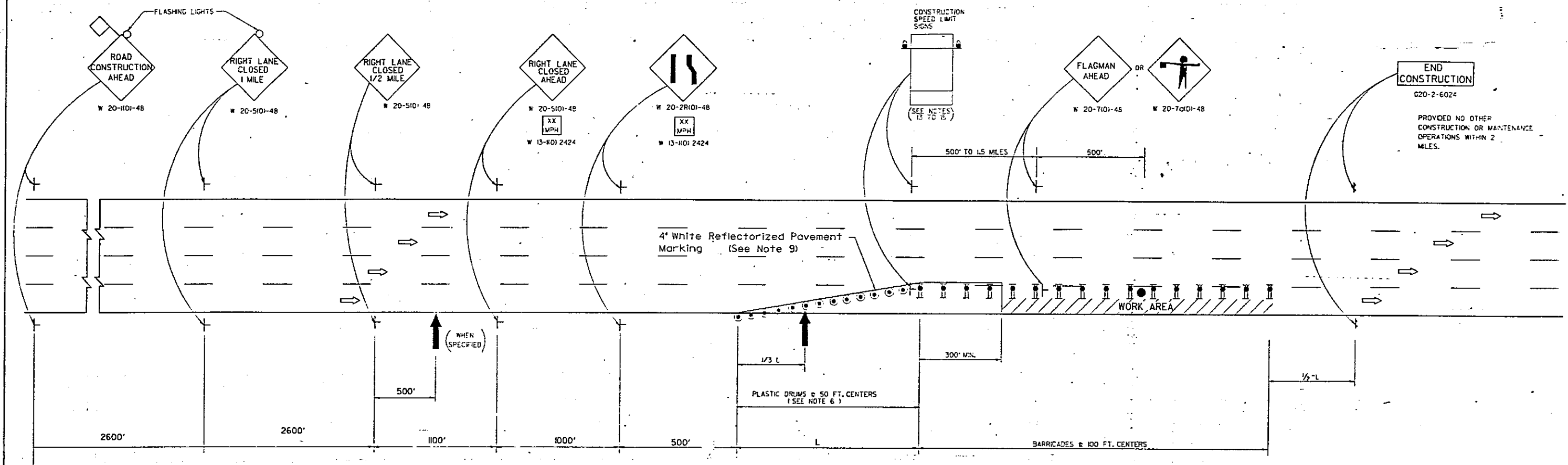
STATE STANDARDS

- 1686-4 SYMBOLS AND ABBREVIATIONS
- 2116-2 PATCHING DETAILS (pcc)
- 2130-9 CONCRETE CURB AND COMBINATION CONCRETE CURB AND GUTTER
- 2298-7 TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES
- 2299-10 DESIGN OF TRAFFIC CONTROL DEVICES
- 2300-3 FLAGMAN TRAFFIC CONTROL SIGN
- 2307-6 TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES
- 2314-5 TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES
- 2323-7 PAVEMENT JOINTS
- 2356 SIDEWALK RAMPS FOR THE HANDICAPPED
- 2383-1 TEMPORARY CONCRETE BARRIER
- U-2,U-5 TRAFFIC CONTROL

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
EISENHOWER EXPRESSWAY
INDEX OF SHEETS,
STATE STANDARDS
AND GENERAL PLAN NOTES

SCALE: NONE DRAWN BY: AEF
DATE: 2/22/84 CHECKED BY: MVM



SYMBOLS

- BARRICADES WITH MONO-DIRECTIONAL STEADY BURNING LIGHTS
- ARROWBOARD
- WORK AREA
- SIGN WITH 18" BY 18" (MINIMUM) ORANGE FLAG ATTACHED
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- FLAGGER WITH CONTROL SIGN
- DRUM WITH MONO-DIRECTIONAL STEADY BURNING LIGHT

GENERAL NOTES

- THE "L" DISTANCE EQUALS THE LANE WIDTH TIMES THE TAPER RATIO.

NORMAL POSTED SPEED (M.P.H.)	TAPER RATIO (FT./FT.)
55	55/1
50	50/1
45 OR LESS	45/1
- WHEN THERE IS NO WORK BEING PERFORMED, THE FLAGGER SIGNS WILL NOT BE REQUIRED.
- THIS CASE ALSO APPLIES WHEN WORK IS BEING PERFORMED IN THE LEFT LANE. UNDER THESE CONDITIONS LEFT LANE CLOSED SIGNS SHALL BE SUBSTITUTED FOR RIGHT LANE CLOSED SIGNS.
- CONES MAY BE SUBSTITUTED FOR BARRICADES AND DRUMS AT HALF SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28" IN HEIGHT.
- STEADY BURNING LIGHTS WILL NOT BE REQUIRED FOR DAY OPERATIONS.
- PLASTIC DRUMS WITH HIGH PERFORMANCE REFLECTIVE SHEETING AND STEADY BURNING LIGHTS ARE REQUIRED ALONG ALL NIGHTTIME LANE CLOSURE TAPERS AND RUNAROUNDS.
- ALL SIGNS SHALL BE POST MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR DAYS.
- FLASHING LIGHTS SHALL BE USED DURING THE HOURS OF DARKNESS AND SHALL BE INSTALLED ABOVE THE FIRST TWO SETS OF SIGNS.
- REFLECTORIZED TEMPORARY PAVEMENT MARKING TAPE SHALL BE PLACED THROUGHOUT THE TAPER AND FOR 300' ALONG SIDE THE WORK AREA WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN DAYS. THE EDGE LINE SHALL BE YELLOW FOR LEFT LANE CLOSURES. RAISED REFLECTORIZED PAVEMENT MARKERS AT 25 FT. CENTERS MAY BE USED IN LIEU OF TAPE.
- WHEN A RAMP INTERSECTS THE HIGHWAY WORK AREA, ADDITIONAL TRAFFIC CONTROL DEVICES SHALL BE ERECTED AS DIRECTED BY THE ENGINEER.
- LONGITUDINAL DIMENSIONS MAY BE ADJUSTED SLIGHTLY TO FIT FIELD CONDITIONS. THE LATERAL PLACEMENT OF THE FLAGGER MAY BE VARIED FROM THAT SHOWN. THE FLAGGER SHALL BE STATIONED APPROXIMATELY 100' TO 200' IN ADVANCE OF EACH WORK PARTY.
- ALL VEHICLES, EQUIPMENT, MEN AND THEIR ACTIVITIES ARE RESTRICTED AT ALL TIMES TO ONE SIDE OF THE PAVEMENT UNLESS OTHERWISE AUTHORIZED BY THE ENGINEER.
- THE CONSTRUCTION SPEED LIMIT SIGNS AND THE FLAGGER SIGNS SHALL BE MOVED AS NECESSARY TO MAINTAIN A SPACING OF 500 FEET TO 1.5 MILES BETWEEN THE FLAGGER AND THE FLAGGER SIGNS.
- THE SPEED LIMIT TO BE SHOWN ON THE CONSTRUCTION SPEED LIMIT SIGNS AND ADVISORY SPEED PLATES SHALL BE 10 MILES PER HOUR BELOW THE NORMAL POSTED SPEED LIMIT. THE SIGNS SHALL NOT BE USED WHERE THE NORMAL POSTED SPEED IS BELOW 45 MILES PER HOUR.
- FOR DAYTIME LANE CLOSURES, LASTING 6 HOURS OR LESS, THE CONTRACTOR MAY ELIMINATE THE "ROAD CONSTRUCTION AHEAD" SIGNS AND THE "CONSTRUCTION SPEED LIMIT" SIGNS.
- AUTHORIZATION FROM THE DISTRICT'S BUREAU OF TRAFFIC IS REQUIRED FOR ALL FREEWAY LANE CLOSURES.

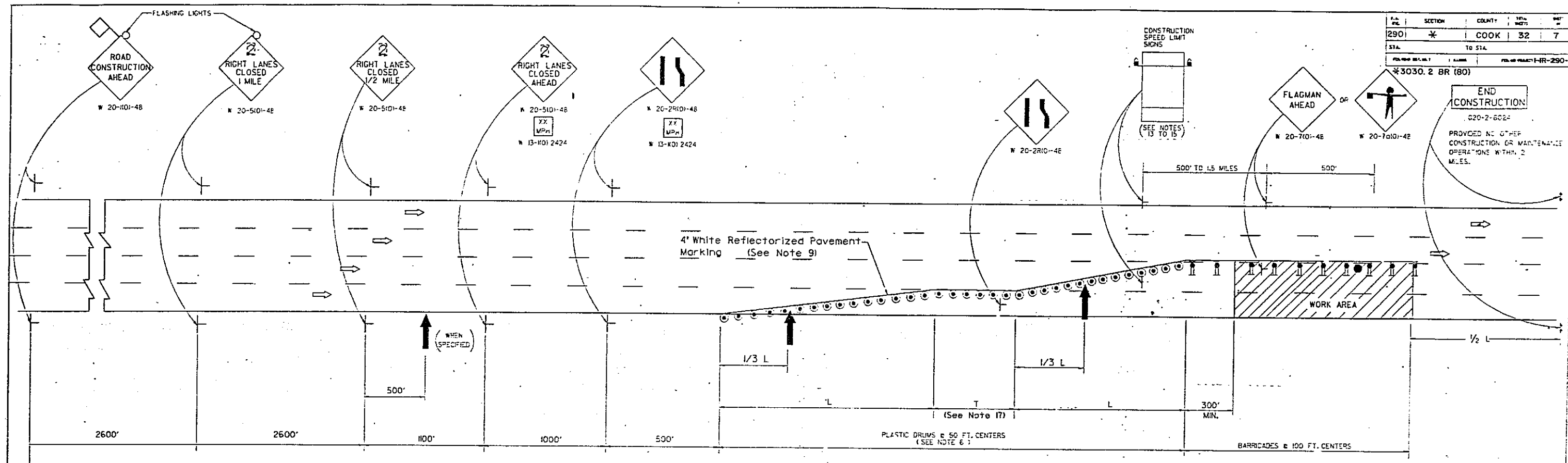
ILLINOIS DEPARTMENT OF TRANSPORTATION
DISTRICT 1

APPROVED _____
DISTRICT ENGINEER

REVISIONS	
NAME	DATE
DWS	1-1-85

DISTRICT ONE
FREEWAY STANDARD
ONE LANE CLOSURE

SCALE: VERT. NONE
DATE: _____
DRAWN BY: _____
CHECKED BY: _____



SYMBOLS

- BARRICADES WITH MONO-DIRECTIONAL STEADY BURNING LIGHTS
- ARROWBOARD
- WORK AREA
- SIGN WITH 18" BY 18" (MINIMUM) ORANGE FLAG ATTACHED
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- FLAGGER WITH CONTROL SIGN
- DRUM WITH MONO-DIRECTIONAL STEADY BURNING LIGHT

GENERAL NOTES

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- ALL VEHICLES, EQUIPMENT, MEN AND THEIR ACTIVITIES ARE RESTRICTED AT ALL TIMES TO ONE SIDE OF THE PAVEMENT UNLESS OTHERWISE AUTHORIZED BY THE ENGINEER.
- THE CONSTRUCTION SPEED LIMIT SIGNS AND THE FLAGGER SIGNS SHALL BE MOVED AS NECESSARY TO MAINTAIN A SPACING OF 500 FEET TO 1.5 MILES BETWEEN THE FLAGGER AND THE FLAGGER SIGNS.
- THE SPEED LIMIT TO BE SHOWN ON THE CONSTRUCTION SPEED LIMIT SIGNS AND ADVISORY SPEED PLATES SHALL BE 10 MILES PER HOUR BELOW THE NORMAL POSTED SPEED LIMIT. THE SIGNS SHALL NOT BE USED WHERE THE NORMAL POSTED SPEED IS BELOW 45 MILES PER HOUR.
- FOR DAYTIME LANE CLOSURES, LASTING 6 HOURS OR LESS, THE CONTRACTOR MAY ELIMINATE THE "ROAD CONSTRUCTION AHEAD" SIGNS AND THE "CONSTRUCTION SPEED LIMIT" SIGNS.
- AUTHORIZATION FROM THE DISTRICT'S BUREAU OF TRAFFIC IS REQUIRED FOR ALL FREEWAY LANE CLOSURES.
- THE "TANGENT" SECTION SHALL BE OMITTED WHEN CLOSURE TIME IS 4 DAYS, OR LESS. TANGENT LENGTH "T" SHALL BE EQUAL TO "L" FOR CLOSURE TIMES GREATER THAN 4 DAYS BUT LESS THAN 14 DAYS. TANGENT LENGTH "T" SHALL BE EQUAL TO "2L" FOR CLOSURE TIMES OF 14 DAYS OR GREATER.

ILLINOIS DIVISION OF HIGHWAYS
DEPARTMENT OF TRANSPORTATION
DISTRICT

APPROVED _____

DISTRICT ENGINEER

REVISIONS	
NAME	DATE
DNS	3/85

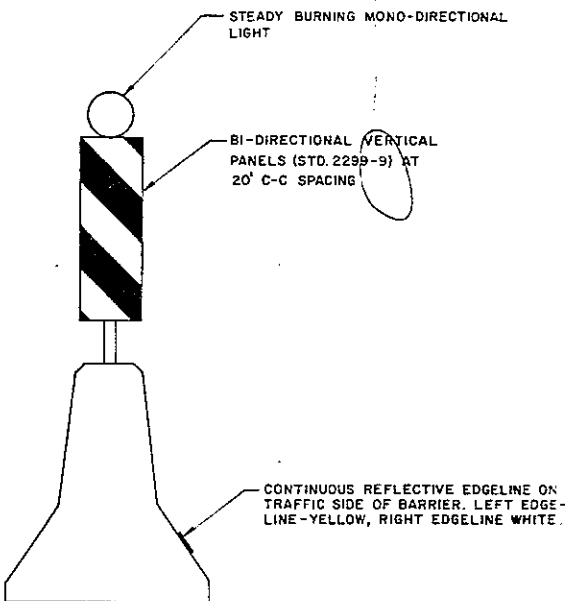
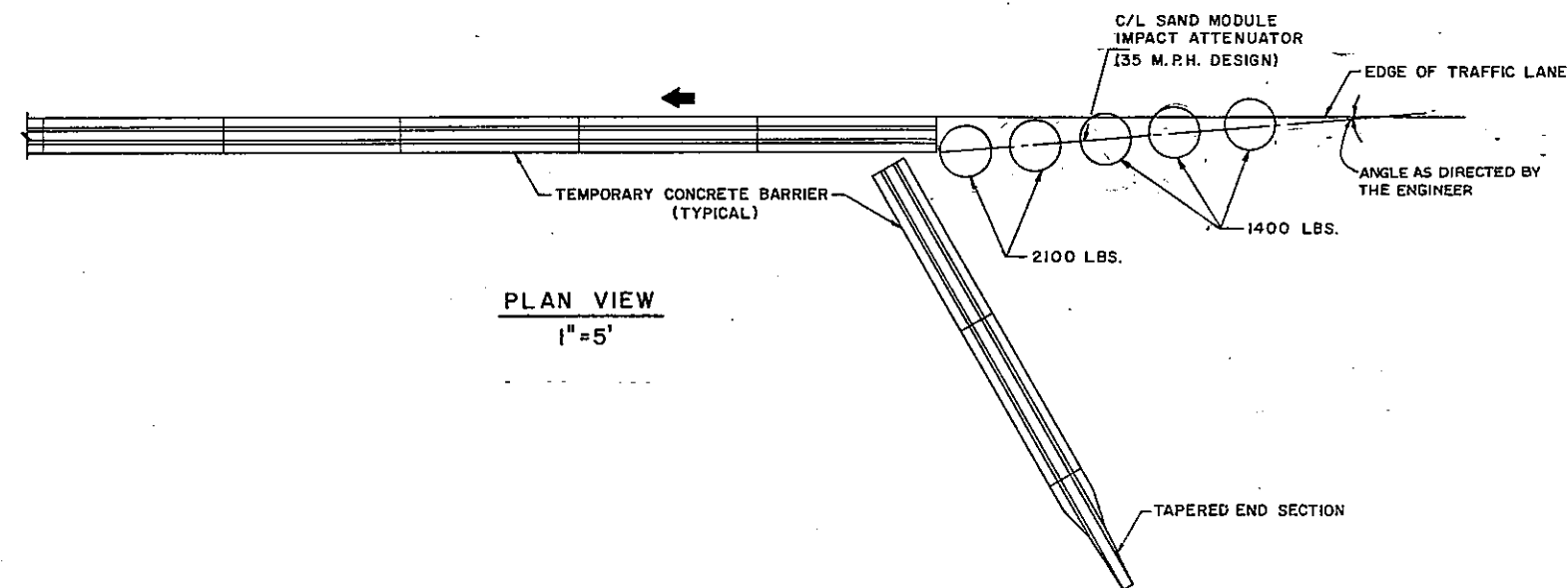
DISTRICT ONE
FREEWAY STANDARD
TWO LANE CLOSURE

SCALE: VERT. NONE
HORIZ. DATE

DRAWN BY
CHECKED BY

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-290	*	COOK	32	8
FED. ROAD DIST. NO. 1				
FED. AID PROJECT NO. IR-290-4				

* 3030.2 BR (80)



TYPICAL SECTION THRU BARRIER
N.T.S.

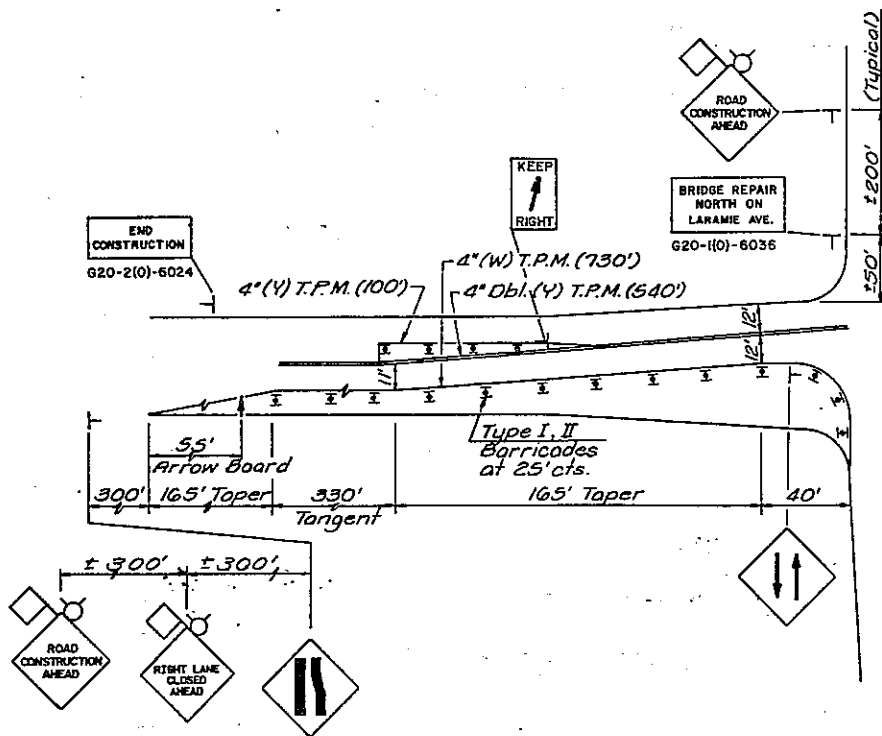
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
EISENHOWER EXPRESSWAY
LARAMIE AVENUE OVER I-290
TEMPORARY CONCRETE BARRIER

SCALE: DRAWN BY:
DATE: CHECKED BY:

Rev. 10-24-86

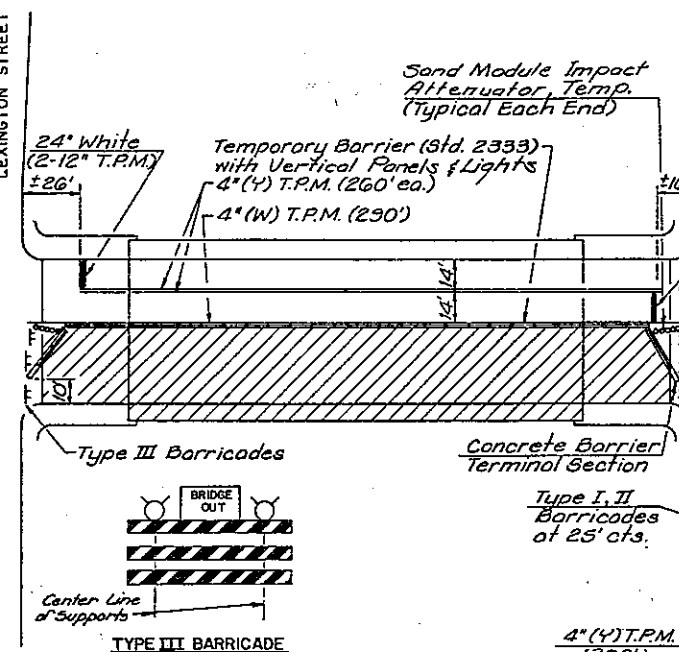
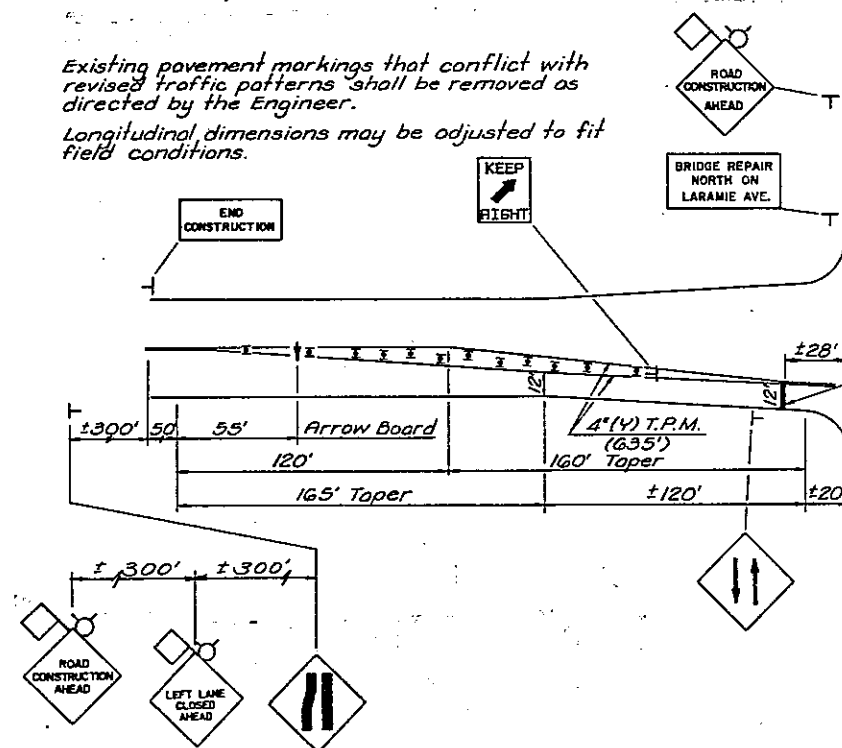
ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 290	*	COOK	32	9
STA. TO STA.				
FED ROAD DIST NO 7 ILLINOIS PROJECT: I-IR-290-4				
* 3030.2 BR(80)				



NOTES:

T.P.M. denotes Temporary Pavement Marking Tape, Type III; (W) = White; (Y) = Yellow
For General Notes relating to Traffic Control, see Case U-2, Sheet # 4.

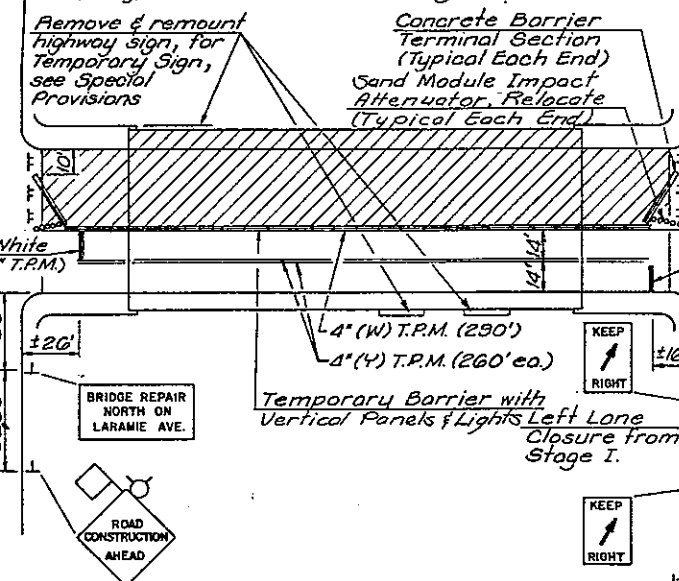
Existing pavement markings that conflict with revised traffic patterns shall be removed as directed by the Engineer.
Longitudinal dimensions may be adjusted to fit field conditions.



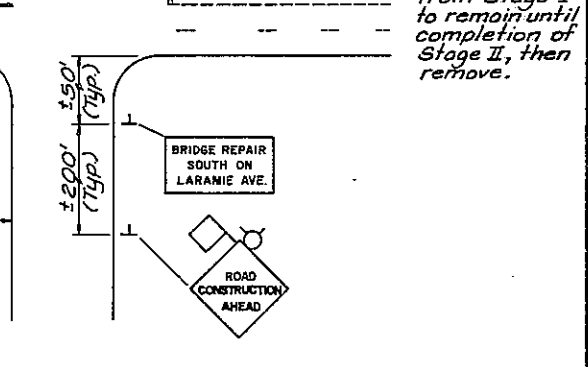
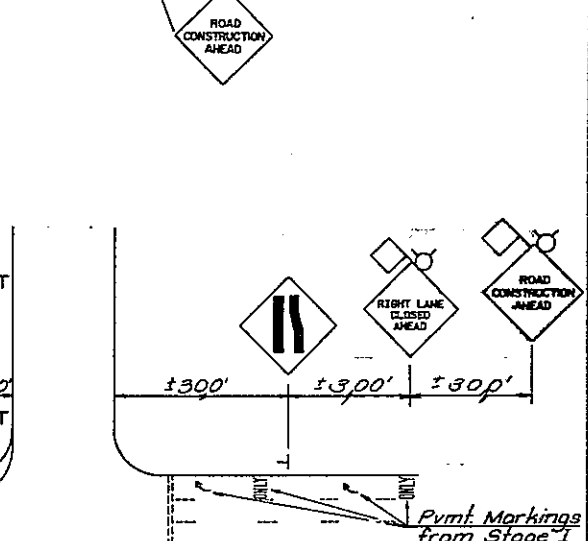
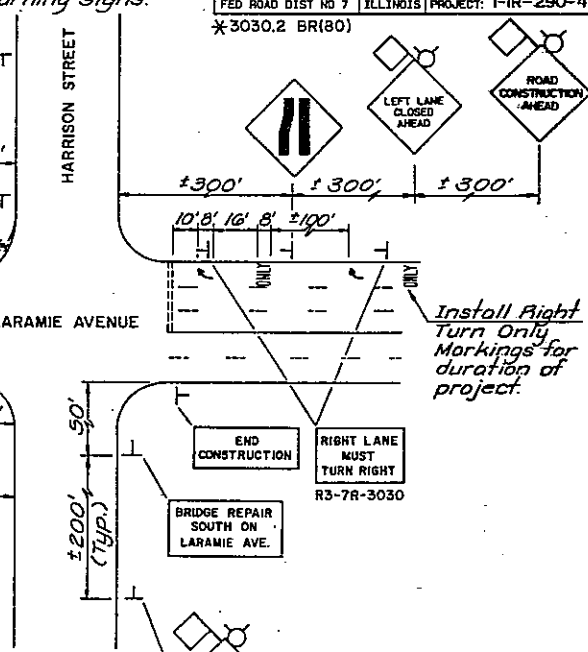
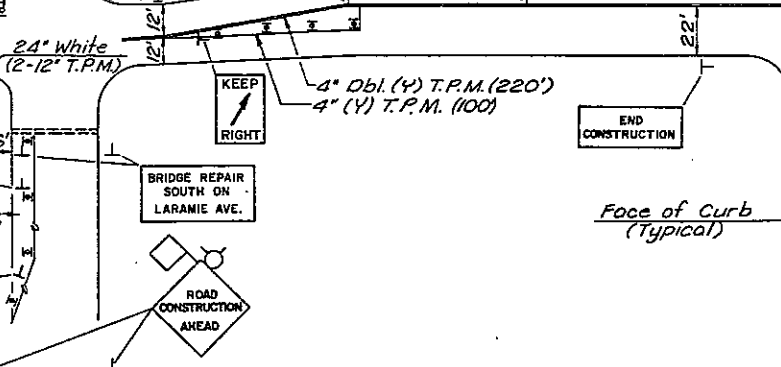
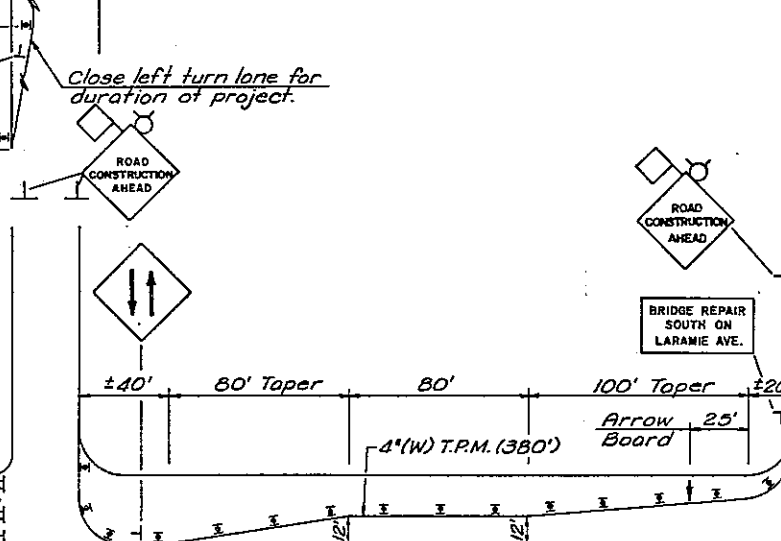
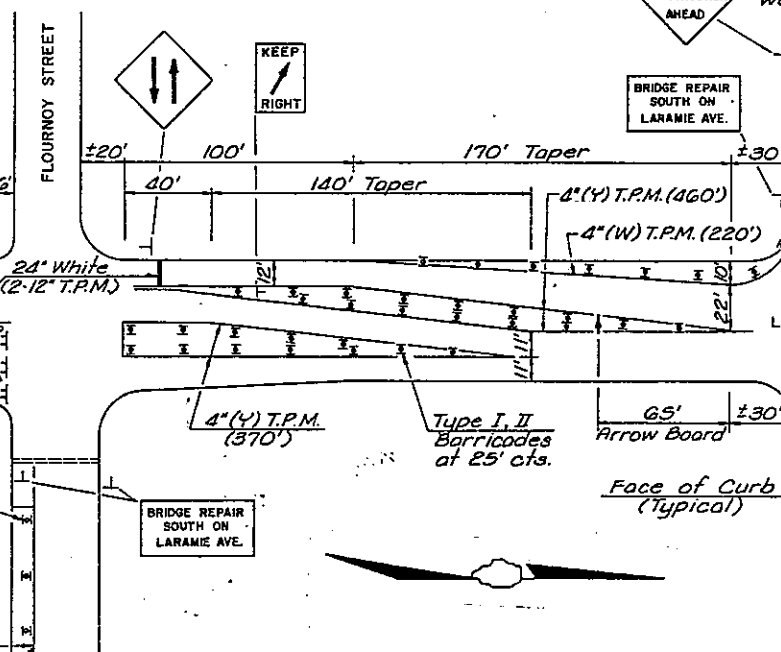
STAGE I

LEGEND:

- ▨ Indicates Construction Area
- ⚡ Flashing Amber Light
- ⊥ Sign on portable or permanent support
- ◇ 18" by 18" (min.) orange flag
- ⊥ Type I or II Barricades with steady burning light (See Std. Dwg. 2299)
- ⊥ Type III Barricades (See Std. Dwg. 2299)



STAGE II



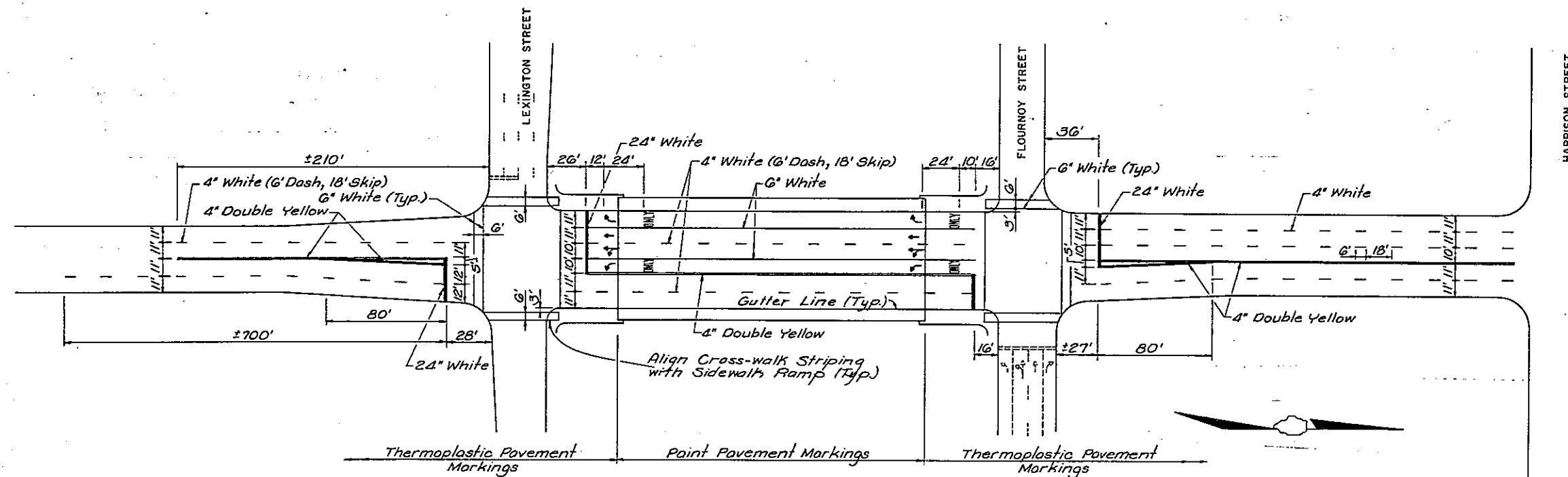
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
EISENHOWER EXPRESSWAY
LARAMIE AVENUE Over
I-290
TRAFFIC CONTROL

SCALE: 1" = 40'
DATE: 2/21/84

DRAWN BY: ALF
CHECKED BY: MVM

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 290	*	COOK	32	10
STA.		TO STA.		
FED ROAD DIST NO 7		ILLINOIS PROJECT: I-IR-290-4		
* 3030.2 BR(80)				



PERMANENT PAVEMENT MARKINGS

NOTES:

All Pavement Markings on bituminous surface shall be Thermoplastic.

All Pavement Markings on Concrete surface shall be Paint.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
EISENHOWER EXPRESSWAY
LARAMIE AVENUE Over
I-290
PERMANENT PAVEMENT MARKINGS
SCALE: 1" = 40'
DATE: 2/21/84
DRAWN BY: ALF
CHECKED BY: MVM

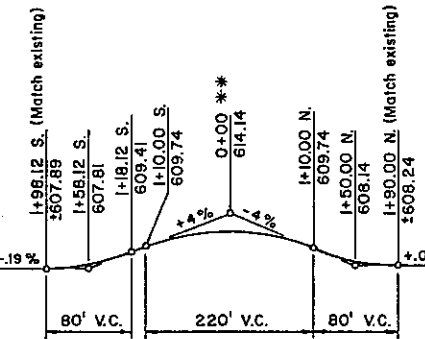
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA.I. 290	*	COOK	32	11
FED. ROAD DIST. NO. 7 ILLINOIS				
FED. AID PROJECT I-IR-290-4				

*3030.2 BR(80)

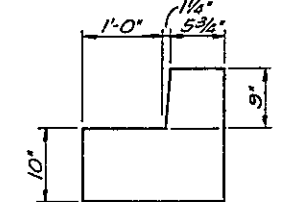
BILL OF MATERIAL

Item	Unit	Quantity
BIT CONC SURF REM	SQ YD	533
COMB C & G REM & REPL	LIN FT	212
BIT CONC SC MIX D CL I	TON	37
PVT REM PCC REP SP 10"	SQ YD	60
INSTALL 4" RELIEF JOINT	LIN FT	124
SIDEWALK REMOVAL & REPLACEMENT	SQ FT	181
EXP TIE ANCHORS 3/4"	EACH	80
PROTECTIVE COAT	SQ YD	113
BIT MATLS PR CT	GALLON	54
EXP TIE ANCHORS 3/8"	EACH	72

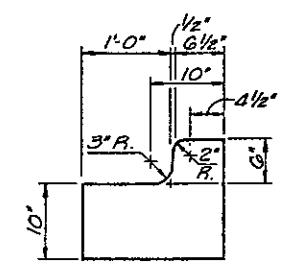
NOT A PAY ITEM - INCIDENTAL TO INSTALL 4" RELIEF JOINT (SEE SPEC. PROVS.)



PROFILE GRADE

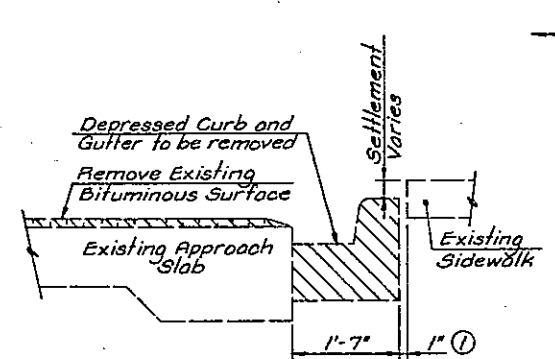


TYPICAL CURB SECTION AT ABUTMENT

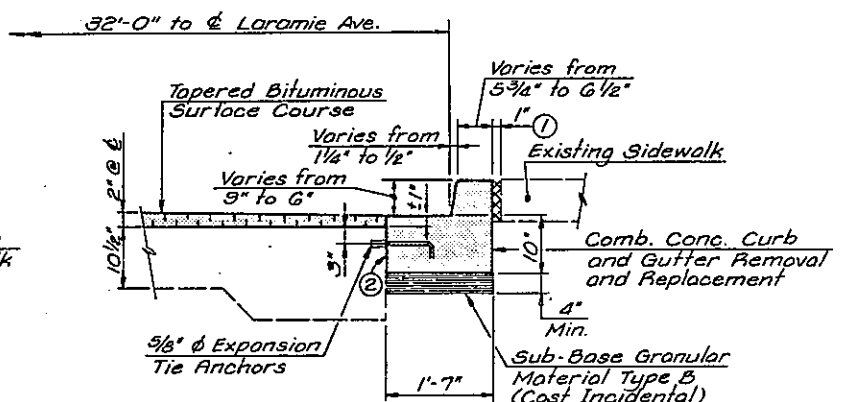


TYPICAL CURB SECTION AT END OF TRANSITION

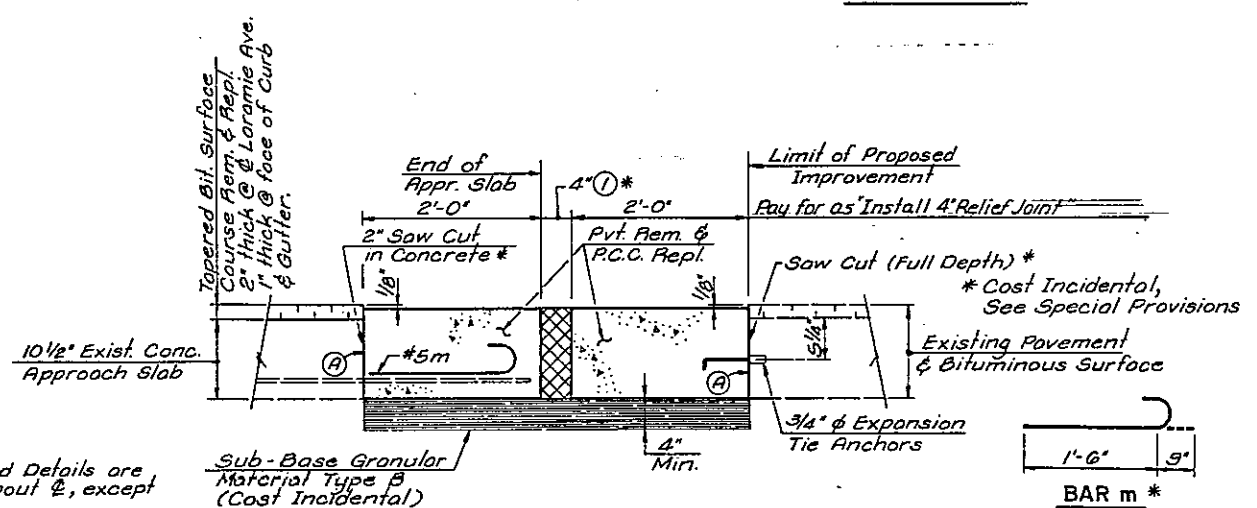
DETAIL "A"



SECTION B-B (EXISTING)



SECTION B-B



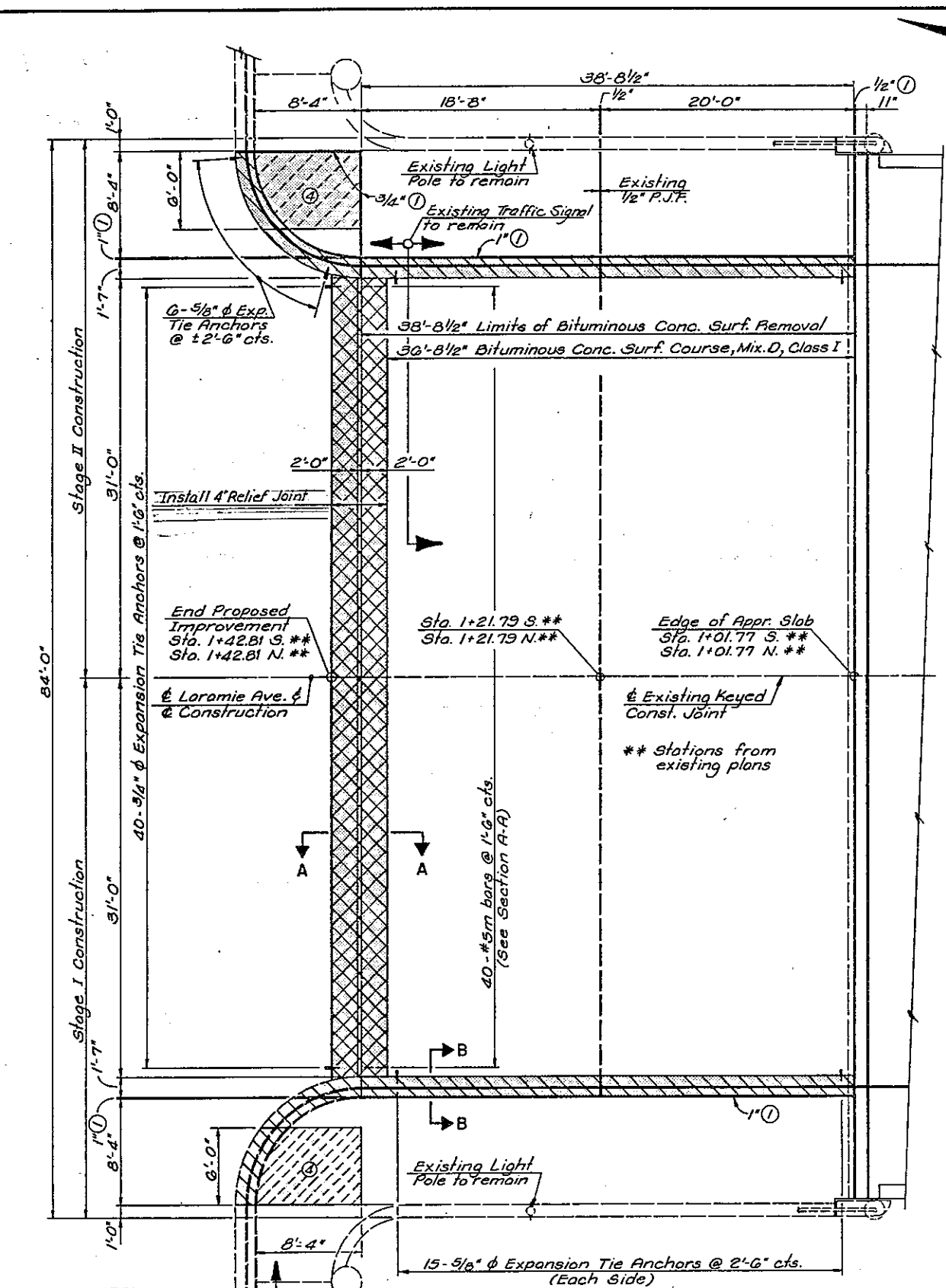
SECTION A-A
DETAIL OF 4" RELIEF JOINT

NOTE (A): Bond New Concrete to Existing with Epoxy Resin Concrete Adhesive conforming to Article 718.08 of the Standard Specifications and placed in accordance with Article 504.13.

- Indicates Sidewalk Rem. & Repl.
- Indicates Comb. Curb & Gutter Removal & Replacement
- Indicates Install 4" Relief Joint
- Preformed Expansion Joint Filler
- Construction Joint

(5) Access ramp for the Handicapped, See City of Chicago Details, Sheet #11 and #12, and Std. Dwg. 2356.

APPROACH SLAB
LARAMIE AVENUE Over
I-290
FA.I. RTE. 290, SECTION 3030.2 BR (80)
COOK COUNTY
STA. 64+51.18 FA.I. 290 (E.B. 1)



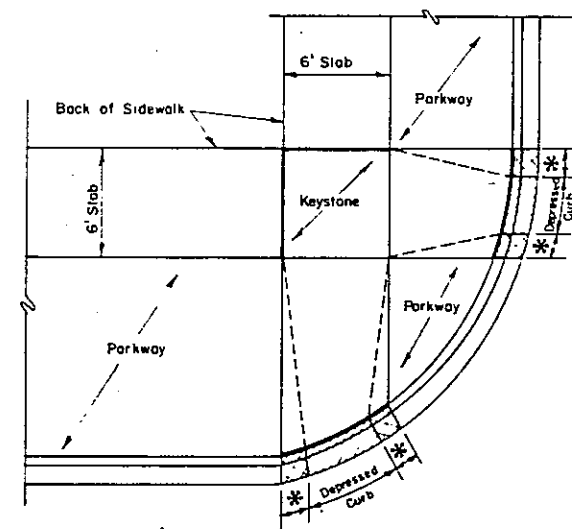
PLAN - APPROACH SLAB

South Approach Slab shown, North Approach Slab symmetrical by 180° rotation. See Detail "A" for Sidewalk Repair at North Approach Slab.

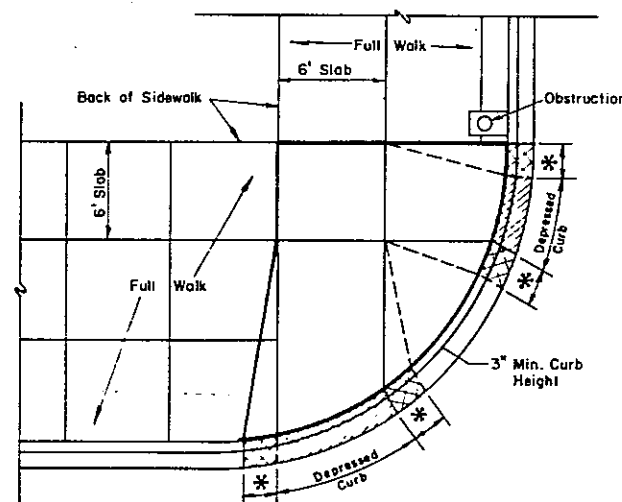
DESIGNED	ALF
CHECKED	MVM
DRAWN	ALF
CHECKED	MVM

NOTE: Dimensions and Details are symmetrical about C, except where noted.

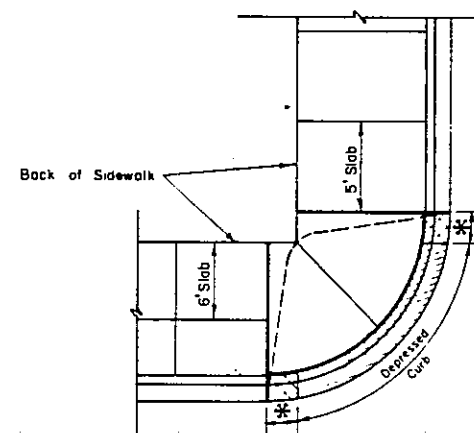
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.L. 290	*	COOK	32	12
FED. ROAD DIST. NO. 7 ILLINOIS PROJECT 1-IR-290-4				
* 3030.2 BR(80)				



TYPICAL RAMP ADJACENT TO PARKWAY



TYPICAL RAMP WITH FULL WALK
GREATER THAN 10 FEET WIDE



TYPICAL RAMP WITH FULL WALK
10 FEET WIDE OR LESS

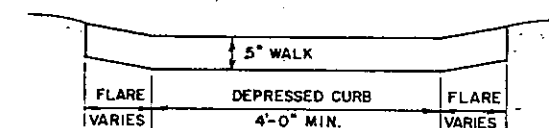
RAMPED SIDEWALK

RAMP SLOPE

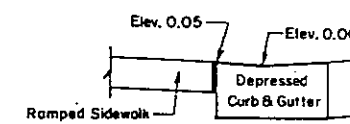
DESIRABLE	MAXIMUM	1" PER FOOT
ABSOLUTE	MAXIMUM	1-1/2" PER FOOT

* FLARE SLOPE

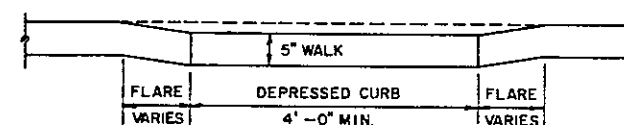
DESIRABLE	MAXIMUM	3" PER FOOT
MINIMUM WIDTH OF FLARE		1 FOOT



FRONT VIEW



TYPICAL SECTION AT GUTTER



FRONT VIEW

LEGEND

- Preformed Joint Filler
- Dummy Joint
- Slope Breakpoint
- * Flared Curb

NOTE: Preformed Joint Filler shall be placed as noted in standard details for sidewalk construction.

NOTE: THIS STANDARD SHOULD BE CONSIDERED TYPICAL FOR MOST LOCATIONS. THERE MAY BE SPECIAL INSTANCES WHERE DESIGN CHANGES WILL BE REQUIRED. CONSTRUCTION OF THE HANDICAP RAMP SHALL BE INCLUDED IN THE COST PER SQUARE FOOT FOR "SIDEWALK REMOVAL AND REPLACEMENT." THE CURB AND GUTTER REQUIRED TO BE REPLACED FOR THE HANDICAP RAMP WILL BE PAID FOR PER LINEAL FOOT OF "COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT."

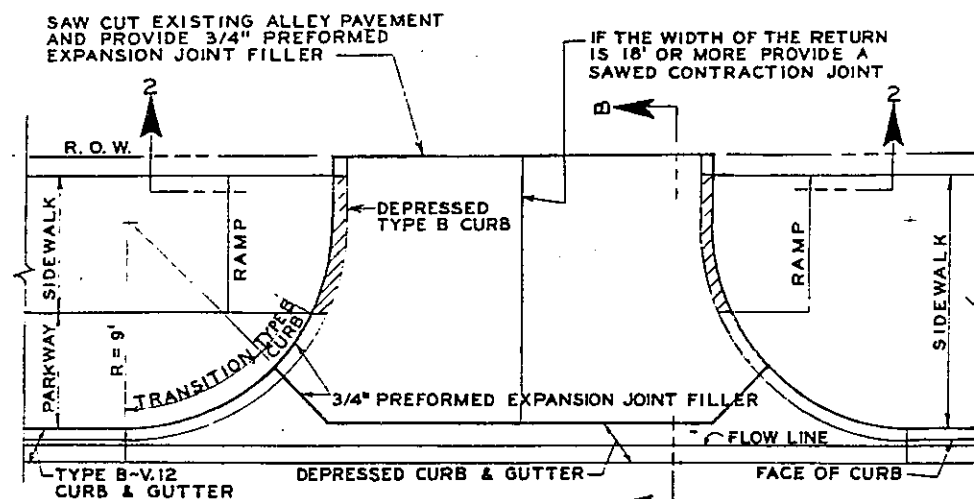
CITY OF CHICAGO
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING

SIDEWALK RAMPS FOR THE HANDICAPPED
PLAN AND DETAILS

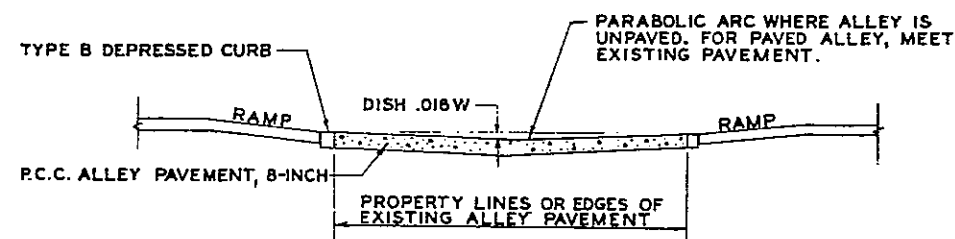
SCALE NONE DATE: JAN., 1984
SHEET NO. OF SHEETS

E. H. PRATSCHER
REPRO

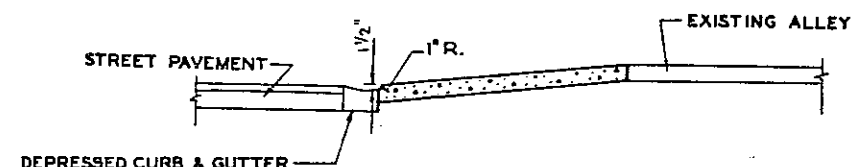
ROUTE NO. SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI-280	* COOK	32	13
IFSD ROAD DIST. NO. 71 ILLINOIS PROJECT - I-IR-290-4			
*3030.2 BR(80)			



PLAN



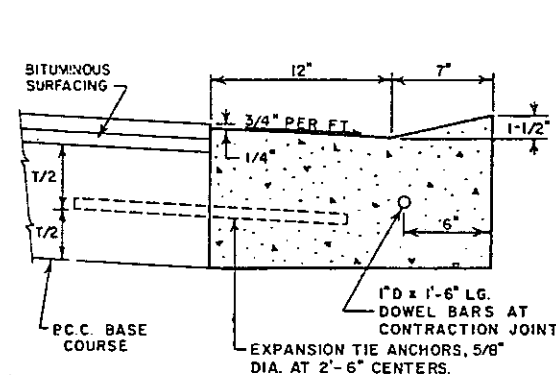
SECTION 2-2



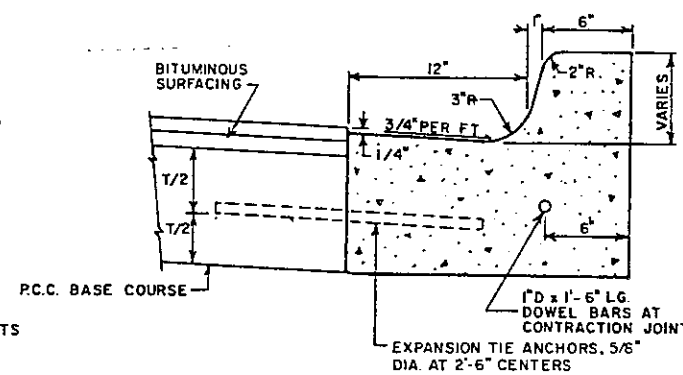
SECTION B-B

NOTE: BASIS OF PAYMENT
TYPE B-V12 COMBINATION CONCRETE CURB AND GUTTER SHALL BE MEASURED STRAIGHT ACROSS THE ALLEY RETURN OR DRIVEWAY. NO EXTRA COMPENSATION SHALL BE ALLOWED FOR THE TRANSITION CURB AND GUTTER.

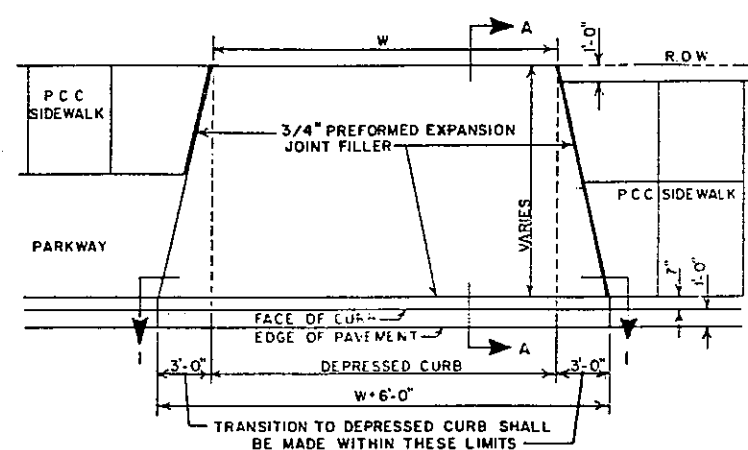
DETAIL OF ALLEY RETURN



DEPRESSED CURB

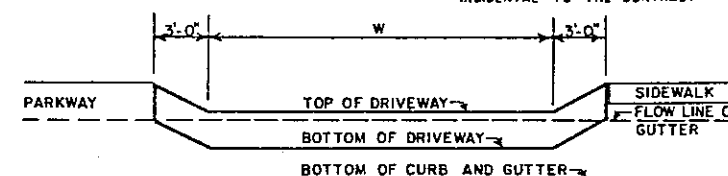


BARRIER CURB

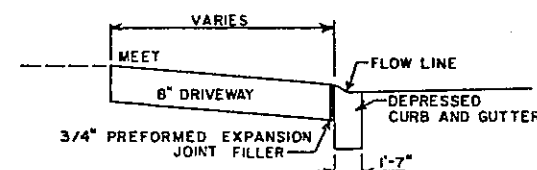


PLAN VIEW

NOTE
EXPANSION JOINTS SHALL BE CONSTRUCTED AS SHOWN ON THE DETAILS FOR P.C.C. SIDEWALK AND SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.

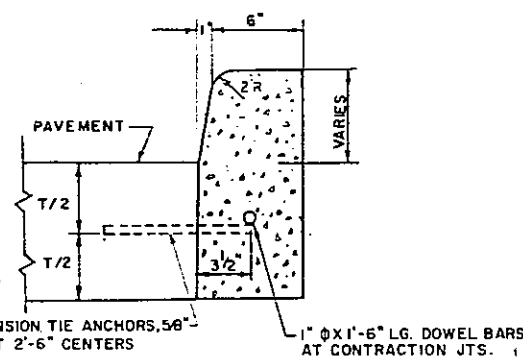


SECTION 1-1



SECTION A-A

DETAIL OF DRIVEWAY CONSTRUCTION



EXPANSION TIE ANCHORS, 5/8\"/>

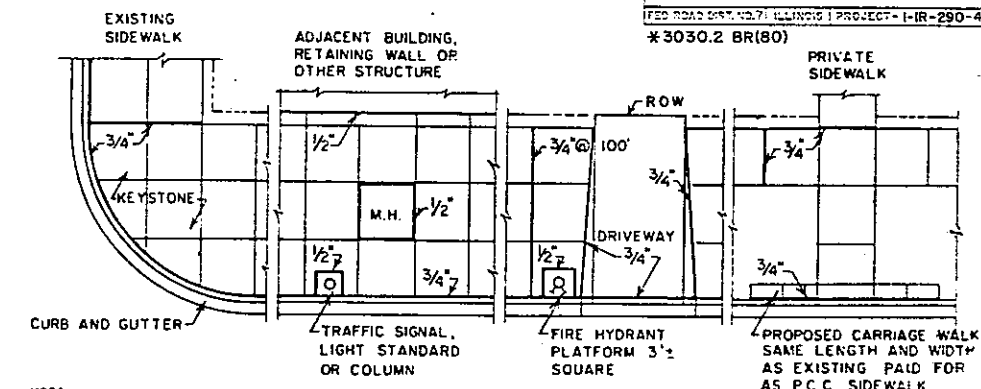
1\"/>

NOTE
\"/>

CURB AND GUTTER TRANSITIONS SHALL BE MEASURED AND PAID FOR AS COMBINATION CONCRETE CURB AND GUTTER, TYPE B-V12. THE COST OF CONTRACTION JOINTS, INCLUDING DOWEL BARS, AND THE COST OF FURNISHING AND INSTALLING EXPANSION TIE ANCHORS 5/8\"/>

TYPE B-V12

PORTLAND CEMENT CONCRETE SIDEWALK DETAIL (SIDEWALK WILL BE PAID FOR PER SQUARE FOOT FOR SIDEWALK REMOVAL AND REPLACEMENT)



NOTE
FOR DETAILS OF SIDEWALK RAMPS FOR THE HANDICAPPED SEE SHEET 8
PREFORMED EXPANSION JOINT FILLER SHALL BE PLACED AS INDICATED BY INCH WIDTH SIZE ON DETAIL PLAN AND CONSIDERED INCIDENTAL TO THE CONTRACT.

CITY OF CHICAGO
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING

SIDEWALK, CURB AND GUTTER REPLACEMENT

CONSTRUCTION DETAILS

In Charge E.H. PRATSCHER
Designed By _____
Drawn By REPRO
Checked By _____
Approved By _____

COMBINATION CONCRETE CURB AND GUTTER, TYPE B-V12
(PAID FOR PER LINEAL FOOT FOR COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT.)

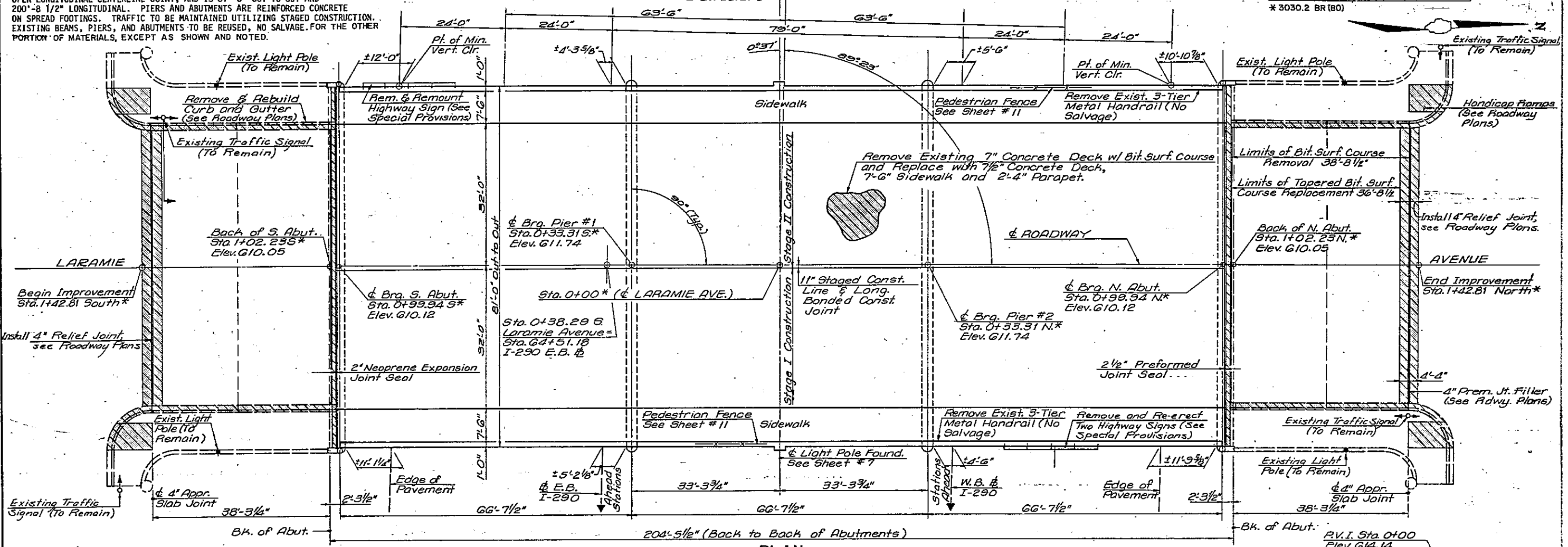
CONCRETE CURB, TYPE B

DATE: JAN., 1984 SCALE: NONE SHEET NO. 13 OF 32

THE EXISTING BRIDGE NO. 016-2064 AT STA. 64+51.18 (F.A.I. 290 EASTBOUND BASELINE) WAS BUILT IN 1954 AS F.A. ROUTE 131 - PROJECT U.I. 261(66), SECTION 062-3030.2-M.F.T. THE BRIDGE CONSISTS OF EIGHT 36 WF 150 AND EIGHT 36 WF 160 BEAMS, A NON-COMPOSITE 7" CONCRETE DECK WITH A 1" OPEN LONGITUDINAL CENTERLINE JOINT, AND IS 81'-0" OUT TO OUT AND 200'-8 1/2" LONGITUDINAL. PIERS AND ABUTMENTS ARE REINFORCED CONCRETE ON SPREAD FOOTINGS. TRAFFIC TO BE MAINTAINED UTILIZING STAGED CONSTRUCTION. EXISTING BEAMS, PIERS, AND ABUTMENTS TO BE REUSED, NO SALVAGE FOR THE OTHER PORTION OF MATERIALS, EXCEPT AS SHOWN AND NOTED.

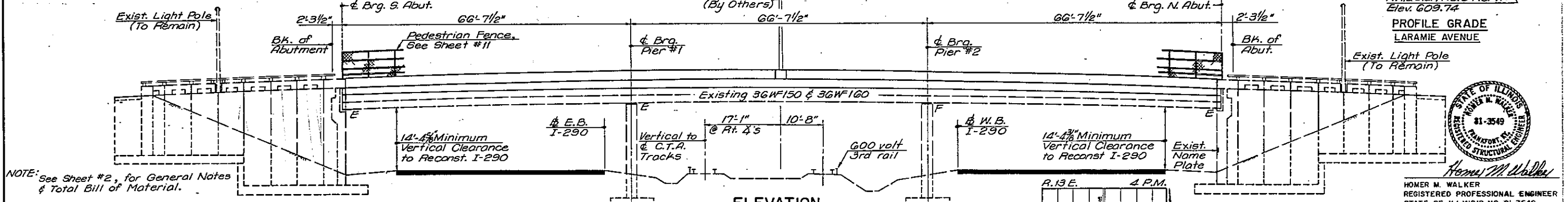
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. J
F.A.I. 290	*	COOK	32	14	19 SHEETS
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT I-IR-290-4					
* 3030.2 BR(80)					



B.M. #8B - A chiseled square on the S.E. corner of the South abutment of the Laramie Avenue Bridge. Elev. 612.54

PLAN
* Stations from Existing Plans



ELEVATION

NOTE: See Sheet #2, for General Notes & Total Bill of Material.

Indicates Concrete Removal and Replacement

DESIGN LOADING HS20-44

Allow 25 p.s.f. for future Wearing Surface
Design Specifications 1983 AA9HTO and 1984-1985
Interims as applicable. (New Construction Only)

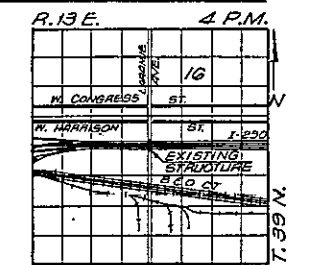
DESIGN STRESSES

- $f'_c = 3,500$ p.s.i. - Concrete
- $f_y = 60,000$ p.s.i. - Reinforcement
- $f_u = 18,000$ p.s.i. - (A.S.T.M. A7) - Existing Beams
- $f_u = 36,000$ p.s.i. - New Diaphragms, Misc. Steel
- $f_t = 3,500$ p.s.i. - Concrete (Existing)

APPROVED
FOR STRUCTURAL ADEQUACY ONLY

James J. Rayburn
Engineer of Bridges and Structures

PROFILE GRADE
I-290



LOCATION SKETCH

GENERAL PLAN & ELEVATION

LARAMIE AVENUE Over
I-290
F.A.I. RTE. 290, SECTION 3030.2 BR(80)
COOK COUNTY
STA. 64+51.18 F.A.I. 290 E.B.
PLANS PREPARED BY AMERICAN ENGINEERING CO.



HOMER M. WALKER
REGISTERED PROFESSIONAL ENGINEER
STATE OF ILLINOIS NO. 81-3549
DATE: 7-31-86

Revised

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
F.A.I. 290	*	COOK	32	15
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT - IR-290-4	
*3030.2 BR(80)				

GENERAL NOTES

PLAN DIMENSIONS AND DETAILS RELATIVE TO THE EXISTING STRUCTURE HAVE BEEN TAKEN FROM EXISTING PLANS AND ARE SUBJECT TO NOMINAL CONSTRUCTION VARIATIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY SUCH DIMENSIONS AND DETAILS IN THE FIELD 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 THE SCOPE OF WORK, HOWEVER; THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED AT THE UNIT PRICE BID FOR THE WORK.

THE BASIC LEAD-SILICO PAINT SYSTEM SHALL BE USED FOR SHOP AND FIELD PAINTING OF NEW STRUCTURAL STEEL, EXCEPT WHERE OTHERWISE NOTED.

ALL EXISTING STRUCTURAL STEEL SHALL BE CLEANED BY METHOD II, EXCEPT AREAS AND LOCATIONS NOTED IN THE SPECIAL PROVISIONS SHALL BE CLEANED BY METHOD I. (ARTICLE 509.06)

PAINTING OF EXISTING STRUCTURAL STEEL SHALL BE IN ACCORDANCE WITH THE "SPECIAL PROVISIONS."

FIELD WELDING OF CONSTRUCTION ACCESSORIES WILL NOT BE PERMITTED TO THE BOTTOM FLANGE OF THE BEAMS NOR TO THE TOP FLANGE FOR A DISTANCE EQUAL TO ONE-FOURTH THE SPAN LENGTH EACH WAY FROM THE PIER SUPPORTS. FIELD WELDING IN OTHER AREAS WILL BE PERMITTED ONLY WHEN APPROVED BY THE ENGINEER.

NEW REINFORCEMENT BARS SHALL CONFORM TO THE REQUIREMENTS OF THE AASHTO M-31 OR M-53 GRADE 60.

EXPANSION BOLTS SHALL CONSIST OF APPROVED EXPANSION ANCHORS PROVIDING MINIMUM CERTIFIED PROOF LOAD = 4,000 POUNDS AND 3/4" DIA. x 12" HOOKED BOLTS.

TWO LANES OF TRAFFIC SHALL BE MAINTAINED AT ALL TIMES UTILIZING STAGE CONSTRUCTION.

ALL EXISTING BEAM TOP FLANGE SURFACES WHICH WILL BE IN CONTACT WITH NEW CONCRETE SHALL BE CLEANED TO SATISFY ARTICLE 509.06(b) METHOD II OF THE SPEC. PROVISIONS. COST SHALL BE INCIDENTAL TO "REMOVAL OF EXISTING CONCRETE DECK".

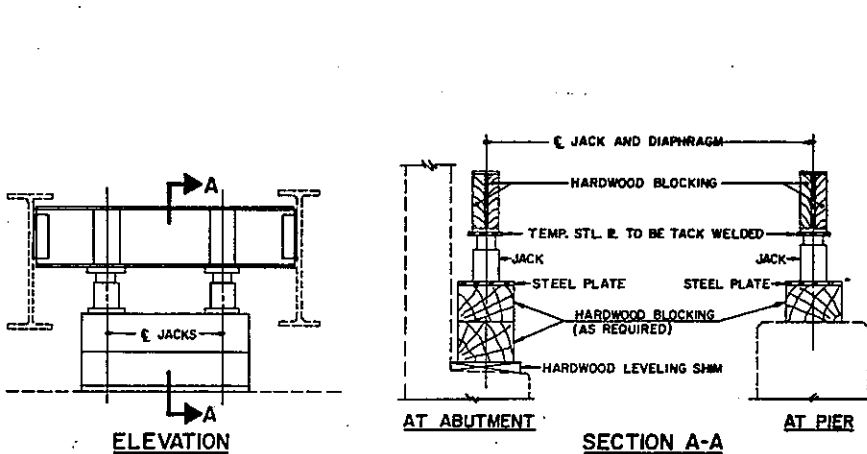
TOTAL BILL OF MATERIALS

ITEM	UNIT	SUPER.	SUBST.	TOTAL
ELASTOMERIC BEARING ASSEMBLY, TYPE I	EACH	48		48
CONCRETE REMOVAL	CU YD		10	10
REMOVAL OF EXISTING CONCRETE DECK	LUMP SUM	1		1
PROTECTIVE COAT	SQ YD	1,932		1,932
CLASS X CONCRETE	CU YD	477.2	9.3	486.5
STRUCTURAL STEEL	POUND	16,460		16,460
CLEANING AND PAINTING STEEL BRIDGE	LUMP SUM	1		1
REINFORCEMENT BARS	POUND		270	270
REINFORCEMENT BARS (EPOXY COATED)	POUND	100,690		100,690
PROTECTIVE SHIELD	SQ YD	1,800		1,800
NEOPRENE EXPANSION JOINT 2"	LIN FT	83		83
REPAIR CONCRETE STRUCTURES*	SQ FT		305	305
REMOVE & RE-ERECT BRIDGE MOUNTED SIGNS	EACH	3		3
PREFORMED JOINT SEAL 2 1/2"	LIN FT	83		83
PREFORMED JOINT SEAL 1 3/4"	LIN FT		60	60
EXPANSION BOLTS, 3/4"	EACH		44	44
CHAIN LINK FENCE 6" (BRIDGE)	LIN FT	399		399
JACKING & REMOVING EXISTING BEARING	EACH	48		48
CLEANING AND PAINTING PIPE HANDRAIL	LIN. FT.	192		192
NAME PLATES	EACH	1		1
BRIDGE DECK GROVING	SQ. YD.	1,385		1,385
PROTECT & MAINTAIN EXISTING UNDERPASS LUMINAIRE	LUMP SUM		1	1
INSTALL & REMOVE TEMPORARY CONCRETE BARRIER	UNIT	30		30
RELOCATE TEMPORARY CONCRETE BARRIER	LIN. FT.	346		346

* QUANTITIES SHOWN ARE ESTIMATES AND SHOULD NOT BE TAKEN AS MAXIMUM LIMITS

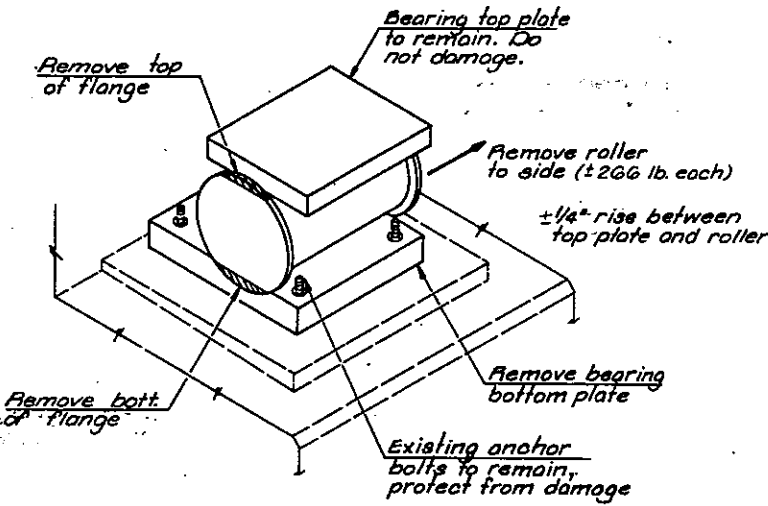
STATION 0+00.0 REPAIRED 1984 BY STATE OF ILLINOIS F.A.I. RT. 1-290 SEC 3030.2 BR(80) FA. PROJ. IR-290-4(87) LOADING HS-20 STR. NO. 016-2064

NAME PLATE
SEE STD. 2113



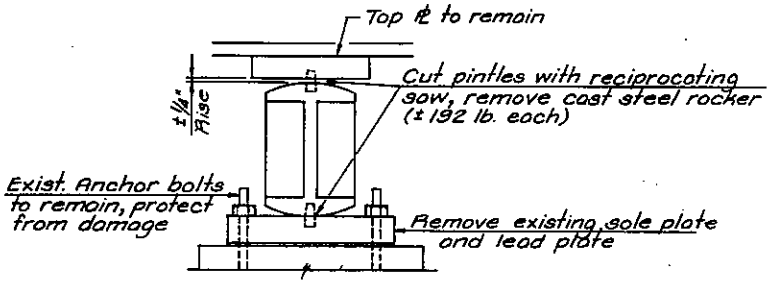
SUGGESTED JACKING DETAIL

DESIGNED RAY
CHECKED MVM
DRAWN RAY
CHECKED MVM



BEARING REMOVAL DETAIL

AT ABUTMENT
NOTE: See Sheet #13 for Replacement Details.



BEARING REMOVAL DETAIL

AT PIER
NOTE: See Sheet #14 for Replacement Details.

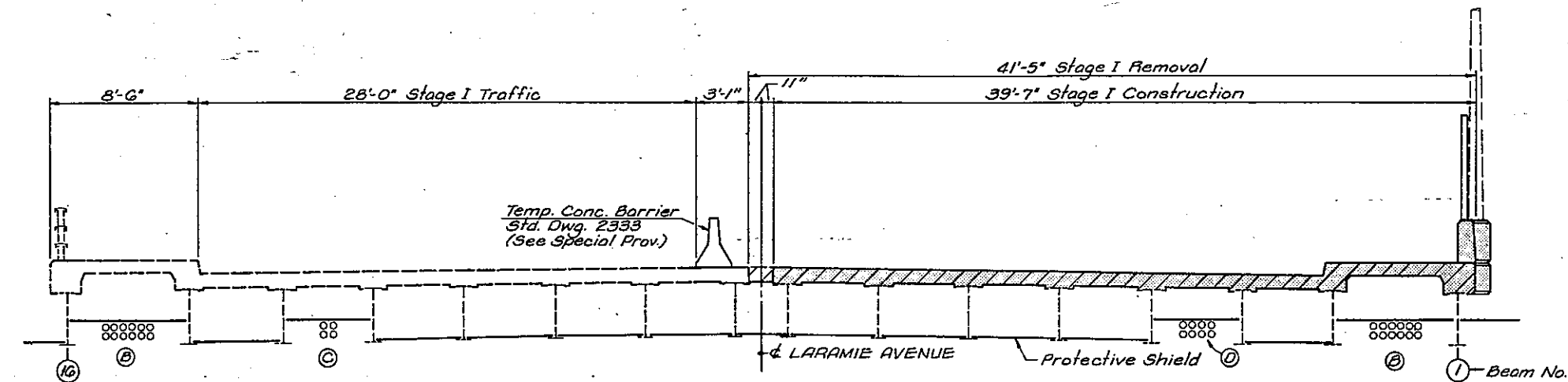
GENERAL NOTES AND
TOTAL BILL OF MATERIALS
LARAMIE AVENUE Over
I-290
F.A.I. RTE. 290, SECTION 3030.2 BR(80)
COOK COUNTY
STA. 64+51.18 F.A.I. 290 (E.B. 8)

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

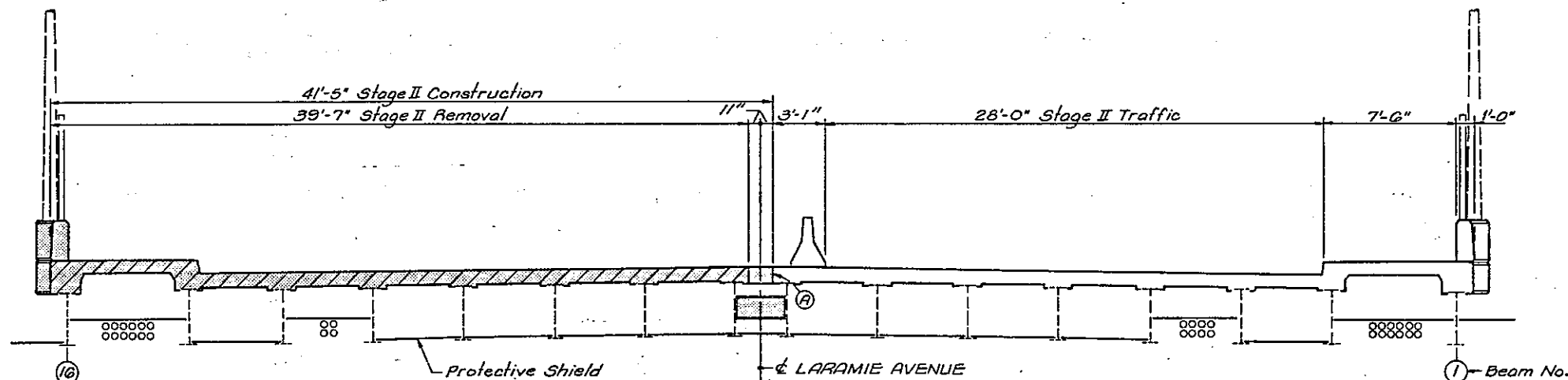
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA.I. 290	*	COOK	32	16
FED. ROAD DIST. NO. 7 ILLINOIS				
FED. AID PROJECT I-IR-290-4				

SHEET NO. 3
19 SHEETS

* 3030.2 BR(80)



STAGE I CONSTRUCTION
(LOOKING NORTH)



STAGE II CONSTRUCTION
(LOOKING NORTH)

- ▨ Indicates Concrete Removal
- ▤ Indicates New Construction
- (A) Bonded Longitudinal Joint
- (B) Commonwealth Edison conduits
- (C) Bell Telephone Conduits
- (D) City of Chicago, Bureau of Electricity Conduits

STAGE I:

1. DIVERT TRAFFIC TO WESTERN HALF OF BRIDGE, INSTALL TEMPORARY CONCRETE BARRIER, STD. 2333 AND TYPE 1 OR 2 TEMPORARY BARRICADES, AND CLOSE THE EASTERN HALF OF THE BRIDGE FOR REPAIRS.
2. INSTALL TEMPORARY LANE CLOSURES ON I-290 TO INSTALL UNDERBRIDGE CONDUIT SUPPORT AND PROTECTION SYSTEMS AND PROTECTIVE SHIELD. NOTIFY AND ALLOW COMMONWEALTH EDISON AND ILLINOIS BELL TELEPHONE TO SUPPORT AND PROTECT THEIR UTILITY CONDUITS. CONTRACTOR WILL SUPPORT AND PROTECT THE UTILITY SYSTEM OWNED BY THE CITY OF CHICAGO, BUREAU OF ELECTRICITY.
3. REMOVE EXISTING HANDRAIL AND BRIDGE DECK WITHIN LIMITS SHOWN.
4. INSTALL JACKING AND RAISE BEAMS 1 THROUGH 8 TO ALLOW REMOVAL OF EXISTING ABUTMENT ROLLER BEARINGS AND SOLE PLATES, AND EXPANSION PIER ROCKERS AND SOLE PLATES. INSTALL ELASTOMERIC BEARINGS AND STEEL BOLSTERS, REMOVE JACKS.
5. BEGIN REPAIRS TO SUBSTRUCTURE, ABUTMENT BACKWALL MODIFICATIONS, APPROACH SLAB REPAIRS, CURB AND GUTTER REPAIRS AND BEGIN CLEANING AND PAINTING STRUCTURAL STEEL. BEGIN INSTALLATION OF STEEL DIAPHRAGMS, ANGLES.
6. FORM AND PLACE CONCRETE FOR NEW BRIDGE DECK, SIDEWALK, AND PARAPET WITHIN LIMITS SHOWN.
7. INSTALL PEDESTRIAN FENCE ON PARAPET.

STAGE II:

1. WHEN NEW CONCRETE DECK HAS ACQUIRED ADEQUATE STRENGTH, RELOCATE TEMPORARY CONCRETE BARRIER AND BARRICADES TO EASTERN HALF OF BRIDGE AND DIVERT TRAFFIC TO EASTERN HALF OF BRIDGE.
2. REMOVE EXISTING HANDRAIL AND BRIDGE DECK WITHIN LIMITS SHOWN.
3. INSTALL JACKING AND RAISE BEAMS 9 THROUGH 16 TO ALLOW REMOVAL OF EXISTING ABUTMENT ROLLER BEARINGS AND SOLE PLATES, AND EXPANSION PIER ROCKERS AND SOLE PLATES. INSTALL ELASTOMERIC BEARINGS AND STEEL BOLSTERS, REMOVE JACKS.
4. COMPLETE INSTALLATION OF STEEL DIAPHRAGMS.
5. FORM AND PLACE CONCRETE FOR REMAINDER OF NEW BRIDGE DECK, SIDEWALK, AND PARAPET WITHIN LIMITS SHOWN. INSTALL PEDESTRIAN FENCE ON PARAPET.
6. COMPLETE REPAIRS TO SUBSTRUCTURE, APPROACHES, SIDEWALK MODIFICATIONS FOR HANDICAP RAMPS, SUPERSTRUCTURE PAINTING AND ALL OTHER WORK REQUIRED BY THE CONTRACT.
7. REMOVE TEMPORARY CONCRETE BARRIERS AND RELOCATE TRAFFIC CONTROL BARRICADES IN ACCORDANCE WITH DISTRICT 1 STANDARD U-2 TO ALLOW APPLICATION OF FINAL PAVEMENT MARKINGS AS DETAILED IN THE PLANS.

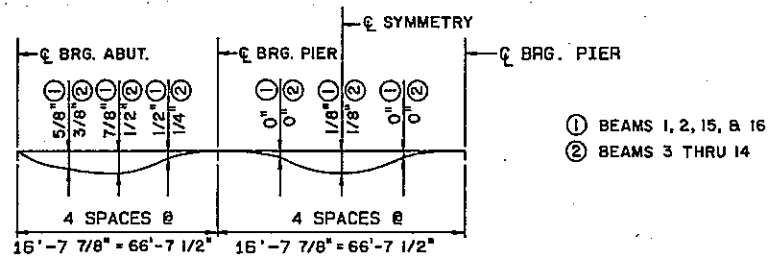
DESIGNED	ARY
CHECKED	MVM
DRAWN	ARY
CHECKED	MVM

STAGE CONSTRUCTION
LARAMIE AVENUE Over
I-290
FA.I. RTE.290, SECTION 3030.2 BR (80)
COOK COUNTY
STA.64+51.18 FA.I.290 (E.B. 6)

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

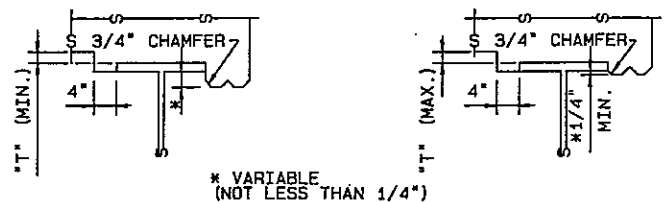
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 290	K	COOK	32	17
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT I-IR-290-4	
* 3030.2 BR (80)				

SHEET NO. 4
19 SHEETS



DEAD LOAD DEFLECTION DIAGRAM
(INCLUDES WEIGHT OF CONCRETE ONLY)

NOTE: THE ABOVE DEFLECTIONS ARE NOT TO BE USED IN THE FIELD IF THE ENGINEER IS WORKING FROM THE GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTIONS, AS SHOWN ON SHEET #5.

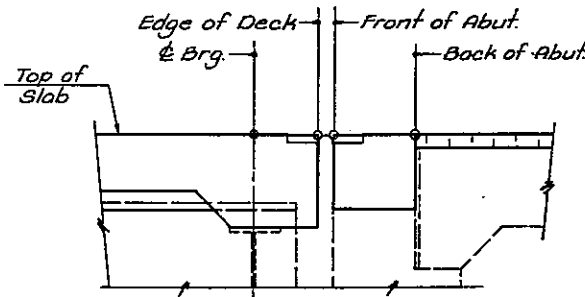


AT MINIMUM FILLET

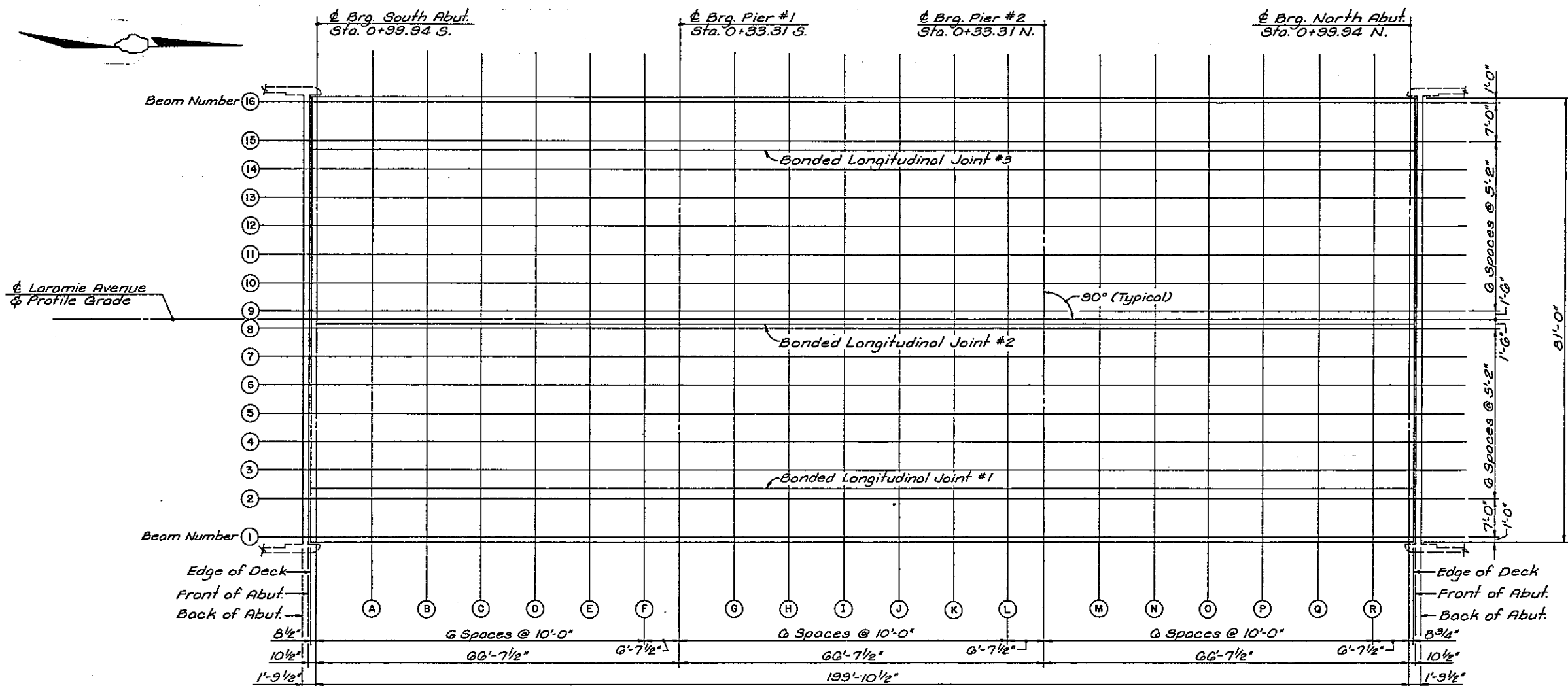
AT MAXIMUM FILLET

TO DETERMINE "T": AFTER ALL STRUCTURAL STEEL HAS BEEN ERECTED, ELEVATIONS OF THE TOP FLANGES OF THE BEAMS SHALL BE TAKEN AT THE INTERVALS SHOWN BELOW. THESE ELEVATIONS SUBTRACTED FROM THE "THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION" ON SHEET NO. 5 MINUS SLAB THICKNESS, EQUALS THE FILLET HEIGHTS "T" ABOVE TOP FLANGE OF THE BEAMS.

FILLET HEIGHTS



SECTION AT EDGE OF DECK



PLAN

DESIGNED	MVM
CHECKED	BLW
DRAWN	ALF
CHECKED	BLW

TOP OF SLAB ELEVATIONS
LARAMIE AVENUE Over
I-290

F.A.I. RTE. 290, SECTION 3030.2 BR (80)
COOK COUNTY
STA. 64+51.18 F.A.I. 290 (E.B.8)

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 290	K	COOK	32	18
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT	I-19-290-4
* 3030.2 BR (80)				

SHEET NO. 5
19 SHEETS

TOP OF SIDEWALK, BEAMS 1 & 16				
LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	ELEV. ADJUST. FOR DEAD LOAD DEFLECTION
BK.S.ABUT	-101.728	39.500	610.445	610.445
FT.S.ABUT	-100.812	39.500	610.479	610.479
EDGE DECK	-100.645	39.500	610.485	610.485
CL BRG.	-99.937	39.500	610.511	610.511
A	-89.937	39.500	610.856	610.892
B	-79.937	39.500	611.165	611.227
C	-69.937	39.500	611.438	611.507
D	-59.937	39.500	611.674	611.735
E	-49.937	39.500	611.874	611.913
F	-39.937	39.500	612.037	612.050
CL PIER 1	-33.312	39.500	612.125	612.125
G	-23.312	39.500	612.228	612.226
H	-13.312	39.500	612.295	612.296
I	-3.312	39.500	612.325	612.330
J	6.688	39.500	612.319	612.323
K	16.688	39.500	612.276	612.276
L	26.688	39.500	612.198	612.195
CL PIER 2	33.313	39.500	612.125	612.125
M	43.313	39.500	611.986	612.007
N	53.313	39.500	611.810	611.857
O	63.313	39.500	611.598	611.663
P	73.313	39.500	611.350	611.419
Q	83.313	39.500	611.065	611.119
R	93.313	39.500	610.744	610.769
CL BRG	99.938	39.500	610.511	610.511
EDGE DECK	100.667	39.500	610.484	610.484
FT.N.ABUT	100.813	39.500	610.479	610.479
BK.N.ABUT	101.729	39.500	610.445	610.445

TOP OF SIDEWALK, BEAMS 2 & 15				
LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	ELEV. ADJUST. FOR DEAD LOAD DEFLECTION
BK.S.ABUT	-101.728	32.500	610.368	610.368
FT.S.ABUT	-100.812	32.500	610.401	610.401
EDGE DECK	-100.645	32.500	610.408	610.408
CL BRG.	-99.937	32.500	610.433	610.433
A	-89.937	32.500	610.779	610.815
B	-79.937	32.500	611.087	611.149
C	-69.937	32.500	611.360	611.429
D	-59.937	32.500	611.596	611.657
E	-49.937	32.500	611.796	611.835
F	-39.937	32.500	611.959	611.972
CL PIER 1	-33.312	32.500	612.048	612.048
G	-23.312	32.500	612.150	612.148
H	-13.312	32.500	612.217	612.218
I	-3.312	32.500	612.247	612.252
J	6.688	32.500	612.241	612.245
K	16.688	32.500	612.199	612.199
L	26.688	32.500	612.120	612.117
CL PIER 2	33.313	32.500	612.048	612.048
M	43.313	32.500	611.908	611.929
N	53.313	32.500	611.733	611.780
O	63.313	32.500	611.520	611.585
P	73.313	32.500	611.272	611.341
Q	83.313	32.500	610.987	611.041
R	93.313	32.500	610.666	610.691
CL BRG	99.938	32.500	610.433	610.433
EDGE DECK	100.667	32.500	610.407	610.407
FT.N.ABUT	100.813	32.500	610.401	610.401
BK.N.ABUT	101.729	32.500	610.368	610.368

BONDED LONGITUDINAL CONST. JOINTS 1 & 3				
LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	ELEV. ADJUST. FOR DEAD LOAD DEFLECTION
BK.S.ABUT	-101.728	30.729	609.628	609.628
FT.S.ABUT	-100.812	30.729	609.662	609.662
EDGE DECK	-100.645	30.729	609.668	609.668
CL BRG.	-99.937	30.729	609.694	609.694
A	-89.937	30.729	610.039	610.075
B	-79.937	30.729	610.348	610.410
C	-69.937	30.729	610.620	610.689
D	-59.937	30.729	610.857	610.918
E	-49.937	30.729	611.056	611.095
F	-39.937	30.729	611.220	611.233
CL PIER 1	-33.312	30.729	611.308	611.308
G	-23.312	30.729	611.411	611.409
H	-13.312	30.729	611.478	611.479
I	-3.312	30.729	611.508	611.513
J	6.688	30.729	611.502	611.506
K	16.688	30.729	611.459	611.459
L	26.688	30.729	611.380	611.377
CL PIER 2	33.313	30.729	611.308	611.308
M	43.313	30.729	611.169	611.190
N	53.313	30.729	610.993	611.040
O	63.313	30.729	610.781	610.845
P	73.313	30.729	610.533	610.602
Q	83.313	30.729	610.248	610.302
R	93.313	30.729	609.927	609.952
CL BRG	99.938	30.729	609.694	609.694
EDGE DECK	100.667	30.729	609.667	609.667
FT.N.ABUT	100.813	30.729	609.662	609.662
BK.N.ABUT	101.729	30.729	609.628	609.628

TOP OF DECK, BEAMS 3 & 14				
LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	ELEV. ADJUST. FOR DEAD LOAD DEFLECTION
BK.S.ABUT	-101.728	27.333	609.676	609.676
FT.S.ABUT	-100.812	27.333	609.709	609.709
EDGE DECK	-100.645	27.333	609.715	609.715
CL BRG.	-99.937	27.333	609.741	609.741
A	-89.937	27.333	610.087	610.105
B	-79.937	27.333	610.396	610.428
C	-69.937	27.333	610.668	610.704
D	-59.937	27.333	610.904	610.935
E	-49.937	27.333	611.104	611.124
F	-39.937	27.333	611.267	611.273
CL PIER 1	-33.312	27.333	611.356	611.356
G	-23.312	27.333	611.459	611.458
H	-13.312	27.333	611.525	611.526
I	-3.312	27.333	611.555	611.558
J	6.688	27.333	611.549	611.551
K	16.688	27.333	611.507	611.507
L	26.688	27.333	611.428	611.427
CL PIER 2	33.313	27.333	611.356	611.356
M	43.313	27.333	611.216	611.227
N	53.313	27.333	611.041	611.065
O	63.313	27.333	610.829	610.863
P	73.313	27.333	610.580	610.616
Q	83.313	27.333	610.295	610.323
R	93.313	27.333	609.974	609.987
CL BRG	99.938	27.333	609.741	609.741
EDGE DECK	100.667	27.333	609.715	609.715
FT.N.ABUT	100.813	27.333	609.709	609.709
BK.N.ABUT	101.729	27.333	609.676	609.676

TOP OF DECK, BEAMS 4 & 13				
LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	ELEV. ADJUST. FOR DEAD LOAD DEFLECTION
BK.S.ABUT	-101.728	22.166	609.748	609.748
FT.S.ABUT	-100.812	22.166	609.782	609.782
EDGE DECK	-100.645	22.166	609.788	609.788
CL BRG.	-99.937	22.166	609.814	609.814
A	-89.937	22.166	610.159	610.177
B	-79.937	22.166	610.468	610.500
C	-69.937	22.166	610.740	610.776
D	-59.937	22.166	610.976	611.007
E	-49.937	22.166	611.176	611.196
F	-39.937	22.166	611.340	611.346
CL PIER 1	-33.312	22.166	611.428	611.428
G	-23.312	22.166	611.531	611.530
H	-13.312	22.166	611.597	611.598
I	-3.312	22.166	611.628	611.631
J	6.688	22.166	611.622	611.624
K	16.688	22.166	611.579	611.579
L	26.688	22.166	611.500	611.499
CL PIER 2	33.313	22.166	611.428	611.428
M	43.313	22.166	611.289	611.300
N	53.313	22.166	611.113	611.137
O	63.313	22.166	610.901	610.935
P	73.313	22.166	610.652	610.688
Q	83.313	22.166	610.368	610.396
R	93.313	22.166	610.047	610.060
CL BRG	99.938	22.166	609.814	609.814
EDGE DECK	100.667	22.166	609.787	609.787
FT.N.ABUT	100.813	22.166	609.782	609.782
BK.N.ABUT	101.729	22.166	609.748	609.748

TOP OF DECK, BEAMS 5 & 12				
LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	ELEV. ADJUST. FOR DEAD LOAD DEFLECTION
BK.S.ABUT	-101.728	17.000	609.820	609.820
FT.S.ABUT	-100.812	17.000	609.854	609.854
EDGE DECK	-100.645	17.000	609.860	609.860
CL BRG.	-99.937	17.000	609.886	609.886
A	-89.937	17.000	610.231	610.249
B	-79.937	17.000	610.540	610.572
C	-69.937	17.000	610.813	610.849
D	-59.937	17.000	611.049	611.080
E	-49.937	17.000	611.249	611.269
F	-39.937	17.000	611.412	611.418
CL PIER 1	-33.312	17.000	611.500	611.500
G	-23.312	17.000	611.603	611.602
H	-13.312	17.000	611.670	611.671
I	-3.312	17.000	611.700	611.703
J	6.688	17.000	611.694	611.696
K	16.688	17.000	611.651	611.651
L	26.688	17.000	611.573	611.572
CL PIER 2	33.313	17.000	611.500	611.500
M	43.313	17.000	611.361	611.372
N	53.313	17.000	611.185	611.209
O	63.313	17.000	610.973	611.007
P	73.313	17.000	610.725	610.761
Q	83.313	17.000	610.440	610.468
R	93.313	17.000	610.119	610.132
CL BRG	99.938	17.000	609.886	609.886
EDGE DECK	100.667	17.000	609.859	609.859
FT.N.ABUT	100.813	17.000	609.854	609.854
BK.N.ABUT	101.729	17.000	609.820	609.820

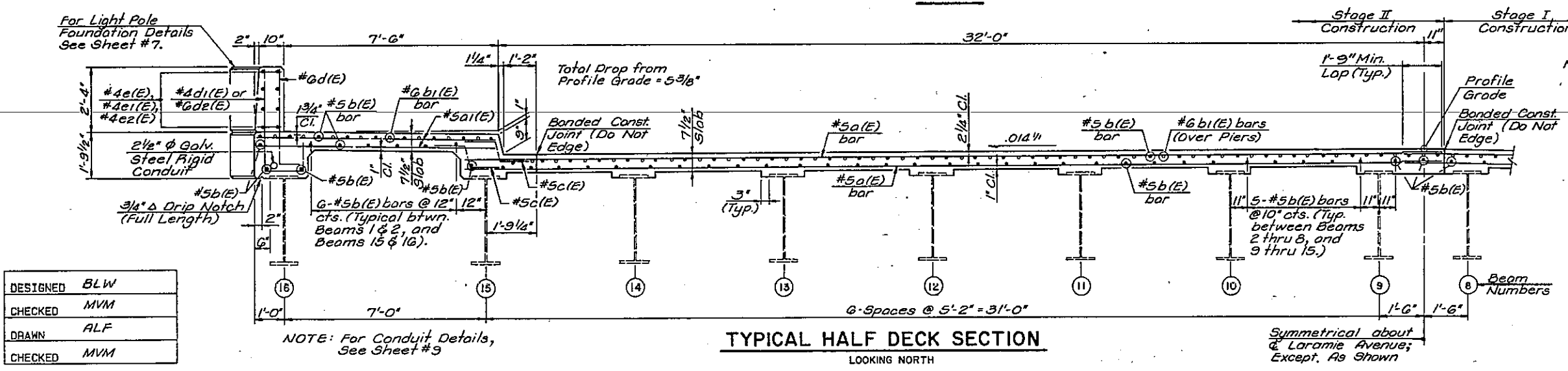
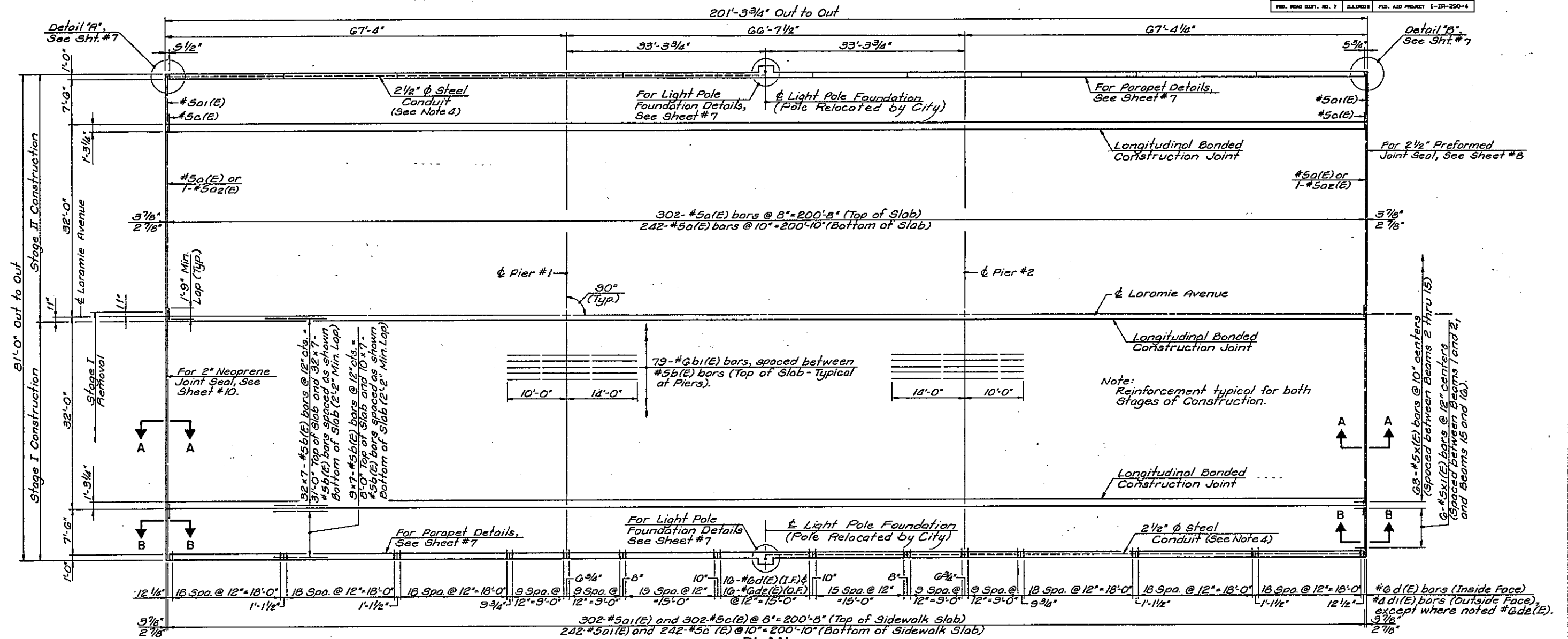
TOP OF DECK, BEAMS 6 & 11				
LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	ELEV. ADJUST. FOR DEAD LOAD DEFLECTION
BK.S.ABUT	-101.728	11.833	609.893	609.893
FT.S.ABUT	-100.812	11.833	609.926	609.926
EDGE DECK	-100.645	11.833	609.933	609.933
CL BRG.	-99.937	11.833	609.958	609.958
A	-89.937	11.833	610.304	610.322
B	-79.937	11.833	610.613	610.645
C	-69.937	11.833	610.885	610.921
D	-59.937	11.833	611.121	611.152
E	-49.937	11.833	611.321	611.341
F	-39.937	11.833	611.484	611.490
CL PIER 1	-33.312	11.833	611.573	611.573
G	-23.312	11.833	611.676	611.675
H	-13.312	11.833	611.742	611.743
I	-3.312	11.833	611.772	611.775
J	6.688	11.833	611.766	611.768
K	16.688	11.833	611.724	611.724
L	26.688	11.833	611.645	611.644
CL PIER 2	33.313	11.833	611.573	611.573
M	43.313	11.833	611.433	611.444
N	53.313	11.833	611.258	611.282
O	63.313	11.833	611.046	611.080
P	73.313	11.833	610.797	610.833
Q	83.313	11.833	610.512	610.540
R	93.313	11.833	610.191	610.204
CL BRG	99.938	11.833	609.958	609.958
EDGE DECK	100.667	11.833	609.932	609.932
FT.N.ABUT	100.813	11.833	609.926	609.926
BK.N.ABUT	101.729	11.833	609.893	609.893

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

* 3030.2 BR(80)

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 290	*	COOK	32	19
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT	I-19-290-4	

SHEET NO. 6
19 SHEETS



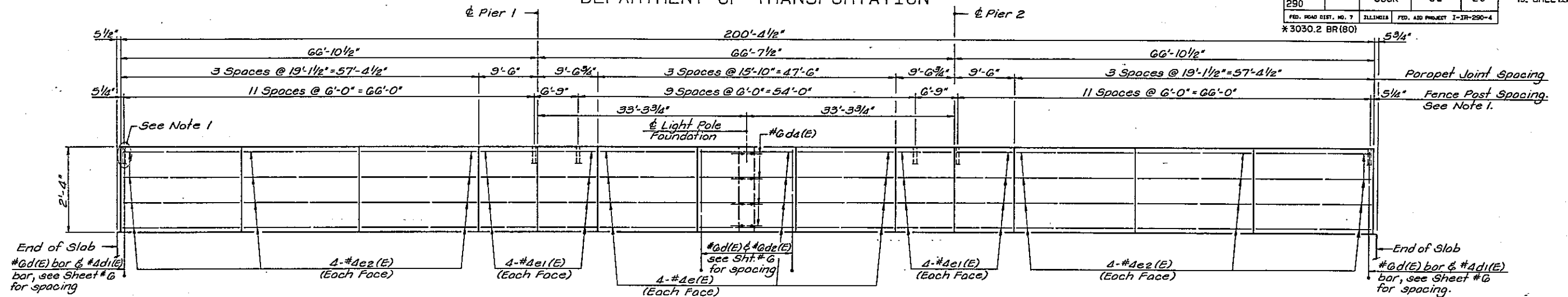
- NOTES:
- 1) Work this Sheet with Sheet #7 and #8.
 - 2) Bars designated (E) shall be Epoxy Coated, in accordance with Art. 512 of the Std. Spec.
 - 3) See Sheet #8 for Section A-A & Section B-B.
 - 4) All 2 1/2" Galvanized Steel Rigid Conduit, Fittings, Expansion Couplings and Labor to install shall be incidental to Class "X" Concrete.

SUPERSTRUCTURE
LARAMIE AVENUE Over
I-290
F.A.I. RTE. 290, SECTION 3030.2 BR(80)
COOK COUNTY
STA. 64+51.18 F.A.I. 290 (E.B. 1)

DESIGNED	BLW
CHECKED	MVM
DRAWN	ALF
CHECKED	MVM

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

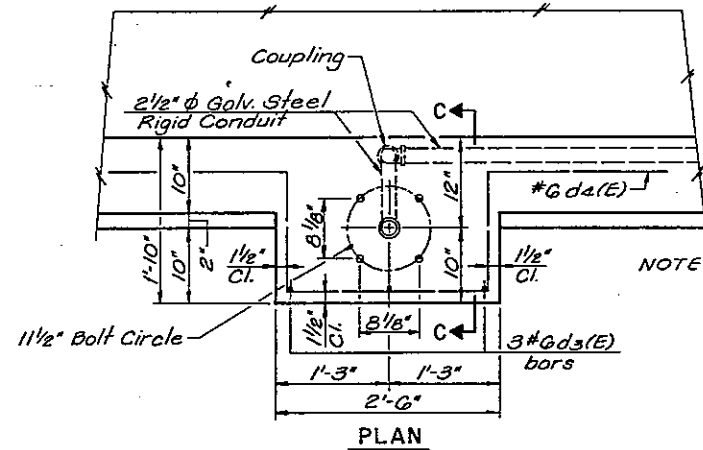
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 7
F.A.I. 290	X	COOK	32	20	19. SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT	I-IR-290-4		
			* 3030.2 BR(80)		



INSIDE ELEVATION OF PARAPET
(WEST PARAPET SHOWN, EAST PARAPET SIMILAR)

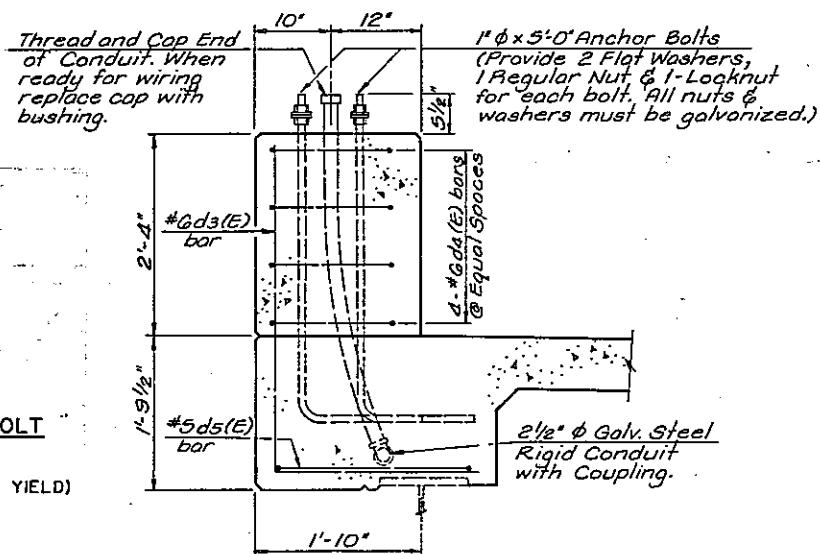
Notes:

- 1) Cast-in-place Fence Anchor Bolts located in parapet wall, spaced as shown. See Sheet #11 for details.
- 2) Work this Sheet with Sheet #6 and #8.



NOTE: Contractor shall confirm Bolt Circle Diameter with City of Chicago prior to placement of Anchor Bolts.

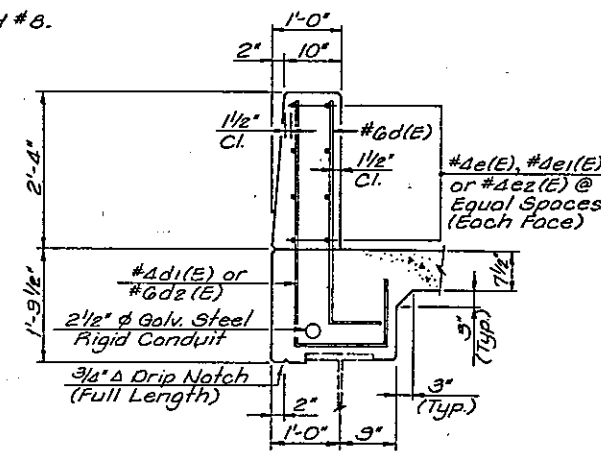
NOTE: Bending Radius of Conduits & Fittings shall conform to N.E.C. Requirements & shall be Approved by City of Chicago prior to installation of Class X Concrete.



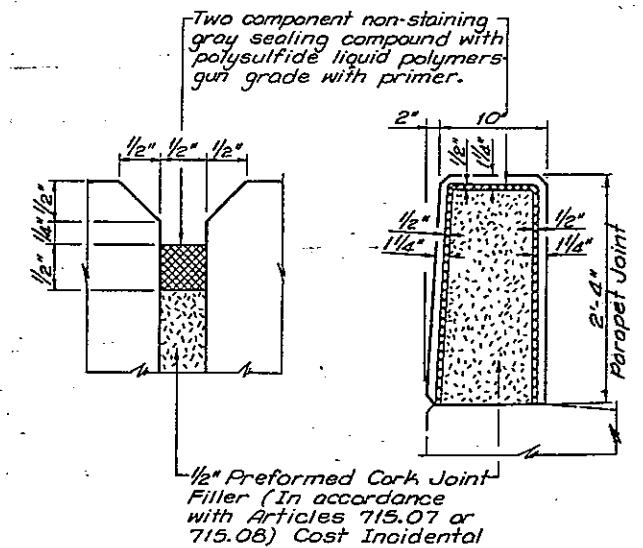
LIGHT POLE FOUNDATION DETAILS

1" ANCHOR BOLT
DETAIL
(50,000 P.S.I. MIN. YIELD)

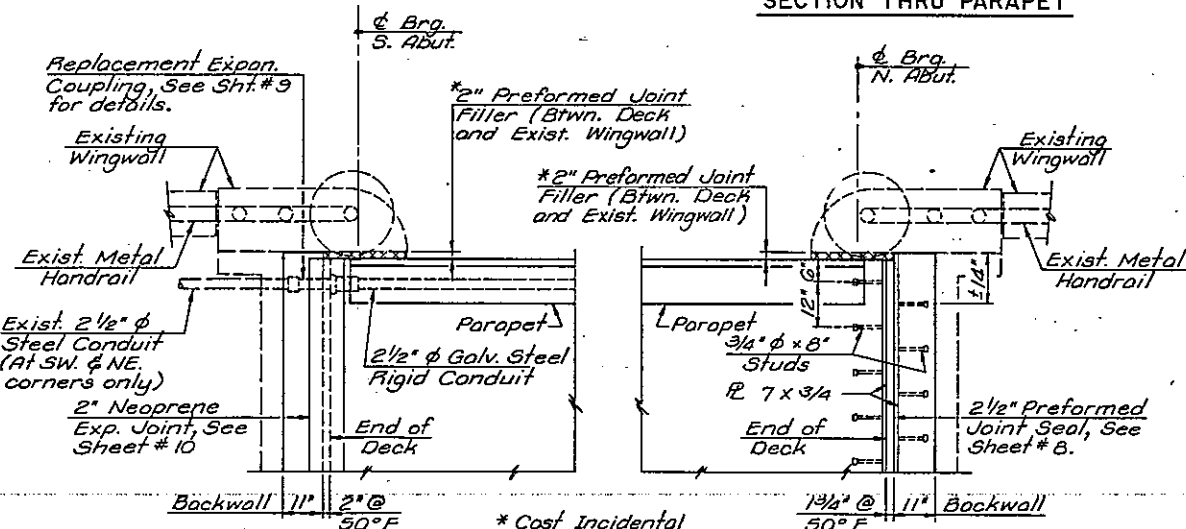
DESIGNED	ALF
CHECKED	MVM
DRAWN	ALF
CHECKED	MVM



SECTION THRU PARAPET



PARAPET JOINT DETAIL



DETAIL "A"

(SW. CORNER SHOWN, SE. CORNER SIMILAR)

DETAIL "B"

(NW. CORNER SHOWN, NE. CORNER SIMILAR)

SUPERSTRUCTURE DETAILS
LARAMIE AVENUE Over
I-290

F.A.I. RTE. 290, SECTION 3030.2 BR (80)

COOK COUNTY

STA. 64+51.18 F.A.I. 290 (E.B. 1/2)

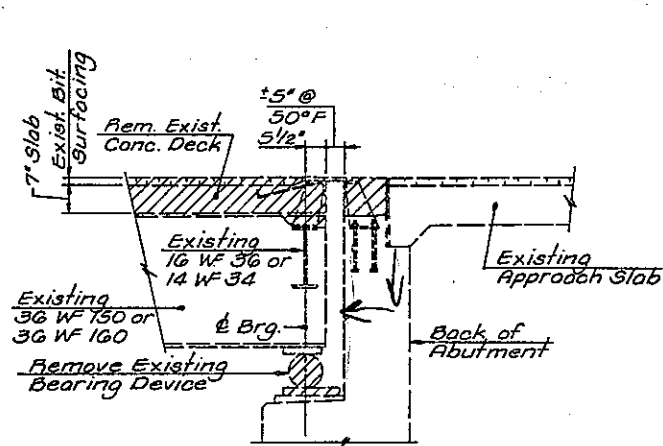
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 290	*	COOK	32	21
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT I-IR-290-4		
*3030.2 BR(80)				

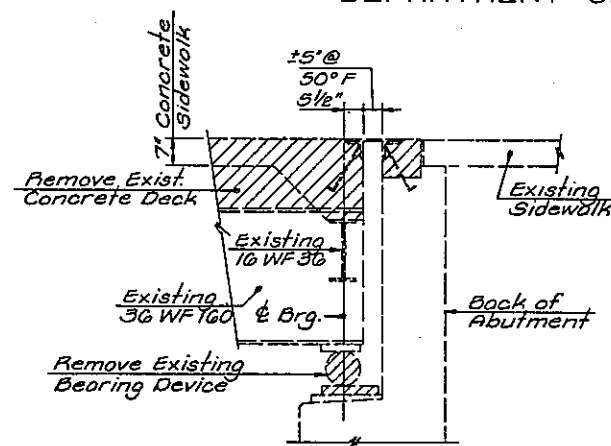
SHEET NO. 8
19 SHEETS

BILL OF MATERIAL

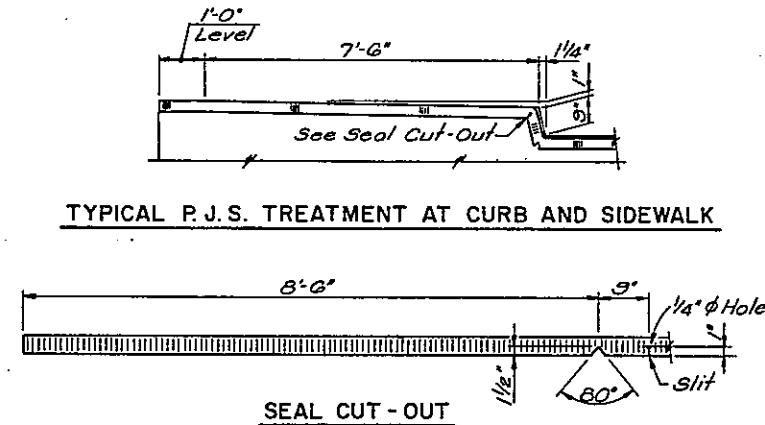
Bar	Number	Size	Length	Shape
a(E)	1088	#5	33'-10"	—
a1(E)	1088	#5	8'-3"	—
a2(E)	4	#5	41'-1"	—
b(E)	1155	#5	30'-7"	—
b1(E)	158	#6	24'-0"	—
c(E)	1088	#5	2'-10"	—
d(E)	404	#6	4'-0"	L
d1(E)	372	#4	5'-8"	L
d2(E)	32	#6	5'-8"	L
d3(E)	0	#6	6'-2"	L
d4(E)	8	#6	8'-11"	—
d5(E)	2	#6	10'-7"	—
e(E)	48	#4	15'-7"	—
e1(E)	64	#4	9'-3"	—
e2(E)	96	#4	18'-10"	—
x(E)	126	#5	3'-7"	—
x1(E)	24	#5	5'-6"	—
REM EXIST CONC DECK L SUM 1				
CLASS X CONCRETE CU YD 477.2				
REIN BARS (EPOXY CTD) POUND 100,690				
NEOPRENE EXP JT 2" LIN FT 83				
PREF JOINT SEAL 2 1/2" LIN FT 83				
CLEAN PAINT STEEL BR L SUM 1				
PROTECTIVE COAT SQ YD 1,932				



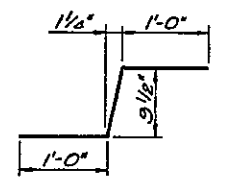
SECTION A-A
(EXISTING)



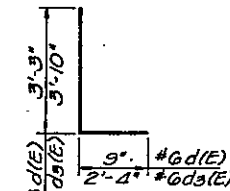
SECTION B-B
(EXISTING)



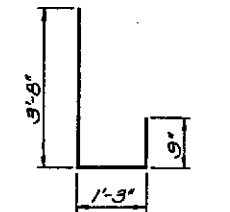
TYPICAL P.J.S. TREATMENT AT CURB AND SIDEWALK



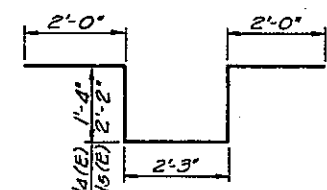
BAR c(E)



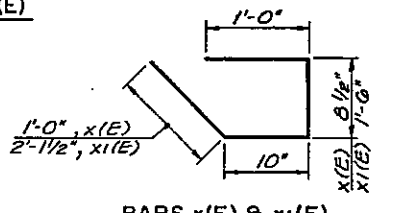
BARS d(E) & d3(E)



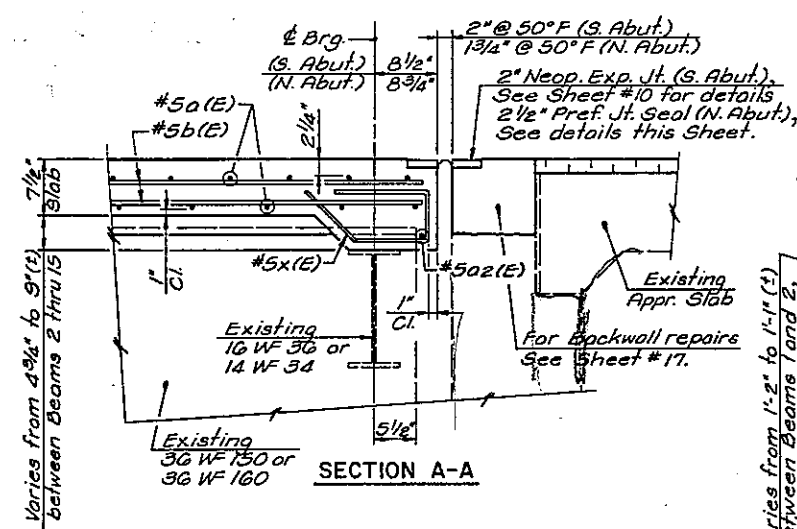
BARS d1(E) & d2(E)



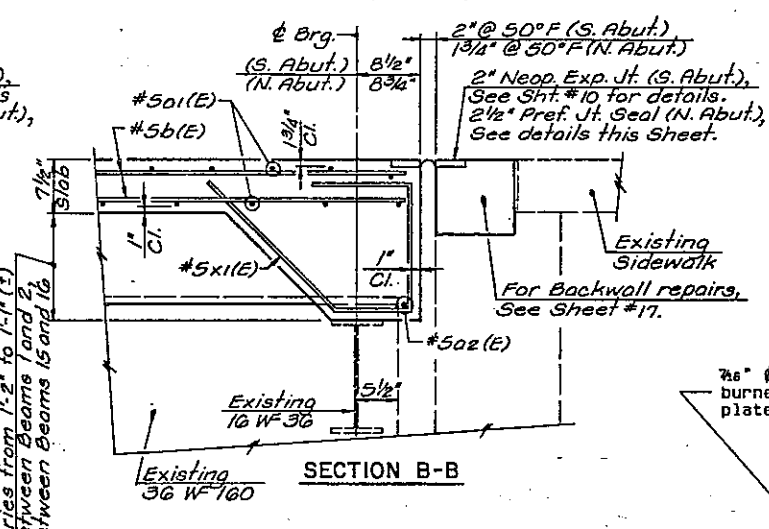
BARS d4(E) & d5(E)



BARS x(E) & x1(E)



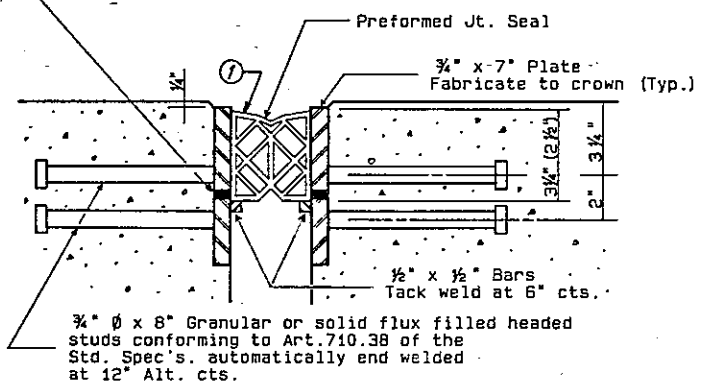
SECTION A-A



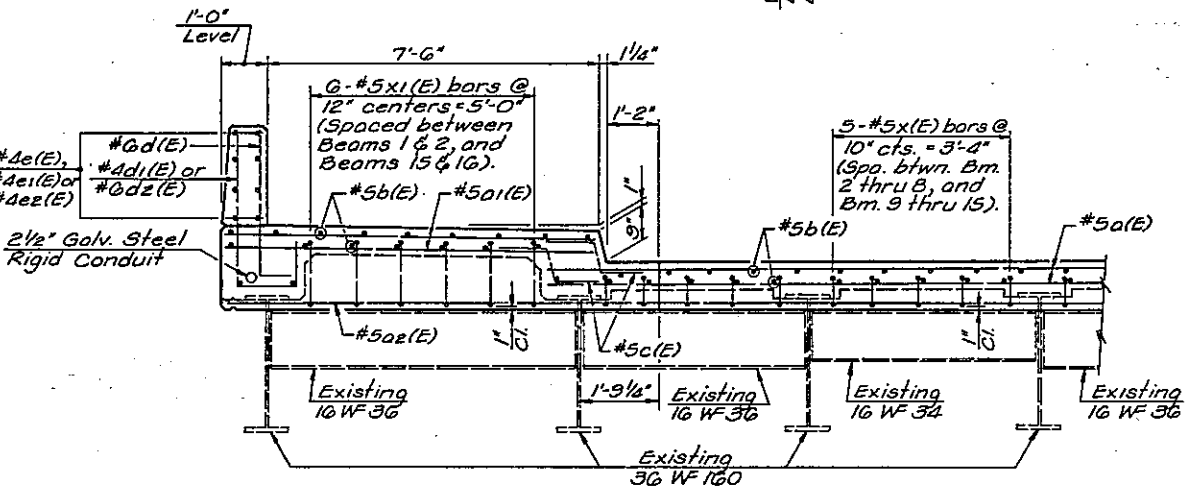
SECTION B-B

PREFORMED JOINT SEAL (2 1/2")

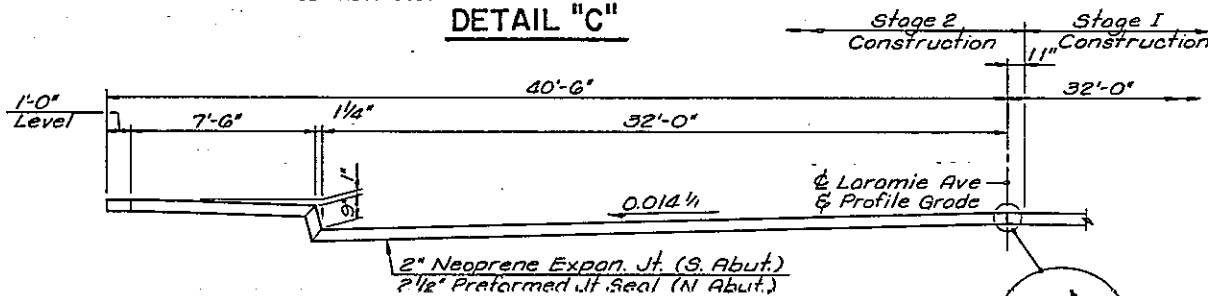
3/8" Ø Holes at 12" cts. for 3/8" Ø bolts. All bolts shall be burned, sawed or chipped off flush with the plates after forms are removed. (Typ.)



DETAIL 'C'



PART SECTION THRU DECK AT ABUTMENT



ELEVATION AT EXPANSION DEVICE

(LOOKING NORTH)

R 7 x 3/4"
N. Abut. Only

SUPERSTRUCTURE DETAILS
LARAMIE AVENUE Over
I-290

F.A.I. RTE.290, SECTION 3030.2 BR (80)

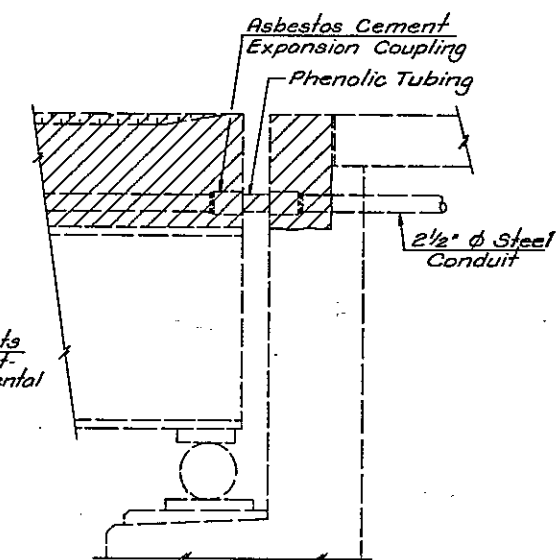
COOK COUNTY

STA.64+51.18 F.A.I.290 (E.B. 8)

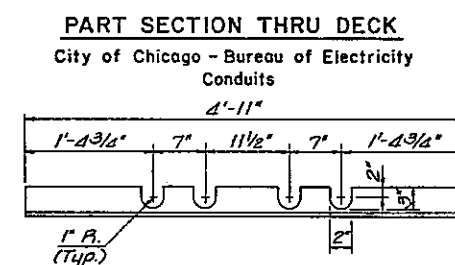
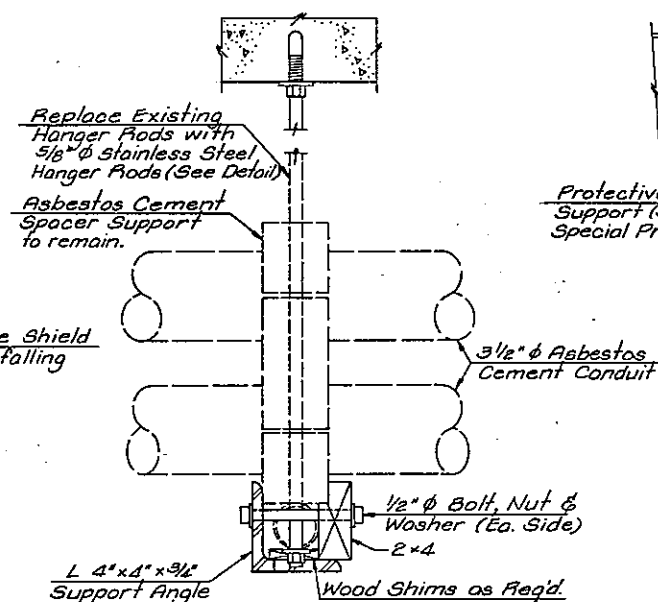
DESIGNED	ALF
CHECKED	MVM
DRAWN	ALF
CHECKED	MVM

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

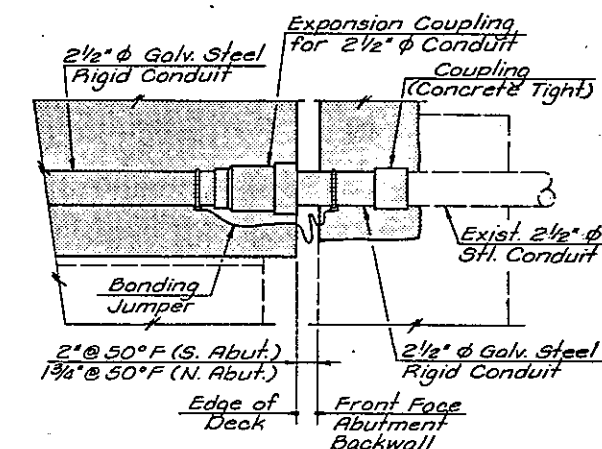
SHEET NO. 9
19 SHEETS



PART SECTION THRU DECK AT END DIAPHRAGMS
LOOKING NORTH-SHOWING UTILITY CONDUITS
(EXISTING)



SUPPORT ANGLE COPING DETAIL



REPLACEMENT EXPANSION COUPLING*

 Indicates Concrete Removal
 Indicates New Construction

STA. 64+51.18 F.A.L 290 (E.B. 11)

Note: Hanger spacing from original plans,
Contractor shall field verify before ordering materials.

DESIGNED	MVM
CHECKED	ALF
DRAWN	ALF
CHECKED	MVM

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	AMOUNT	TOTAL SHEETS	SHEET NO.	SHEET NO. 10
F.A.I. 290	*	COOK	32	23	19 SHEETS
* 3030.2 BR(80)					

Joint Size	"C" at 50°F	"D" at 50°F
2	2"	1 1/2" min.
2 1/2	2 1/2"	1 3/4" min.
3	3"	2" min.

INSTALLATION NOTES

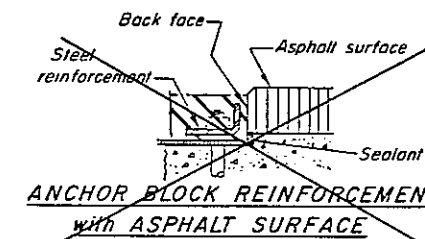
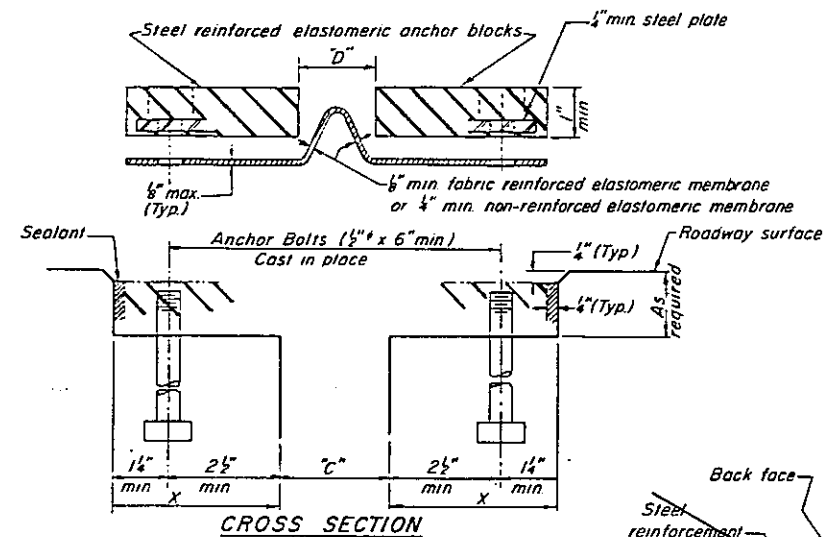
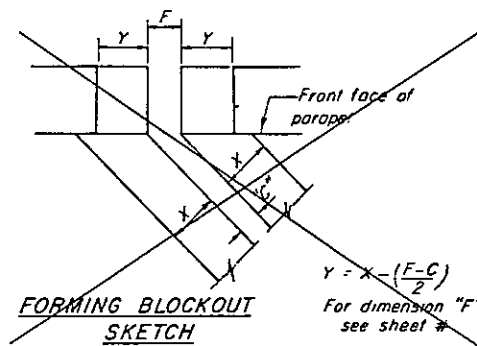
1. Install sponge mandrels into positions shown to form flap convolution.
2. Install parapet or sidewalk piece (trim roadway flap to fit before applying epoxy).
3. Install continuous seal in roadway.
4. Install anchor blocks as indicated.

NOTE A—Maximum spacing of anchor bolts shall be 12" centers

SKREW LIMITATIONS

The details of the anchor blocks and the elastomeric membrane in the parapet, as shown, are for up to 50° skews.

For skews greater than 50°, the anchor blocks and the elastomeric membrane, installed in accordance with dimension "D", might require modifications to insure a minimum clearance of 1 1/2" from centerline of anchor studs to edge of parapet opening. The anchor blocks and the elastomeric membrane shall also be installed to the top of the parapet with the anchor studs spaced at 12" cts.



GENERAL NOTES

Continuous Seal Neoprene Expansion Joint shall consist of molded anchor blocks of elastomer and steel, field assembled over continuous lengths of elastomeric membrane. See Bridge Special Provision No. 9.

The elastomeric membrane shall be premolded with a single or a double upward convolution that will have a "memory" to return to its molded position upon joint closure.

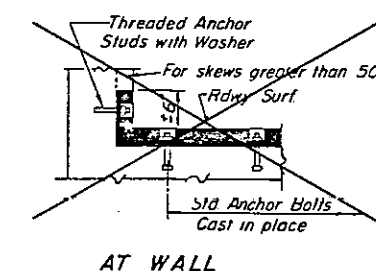
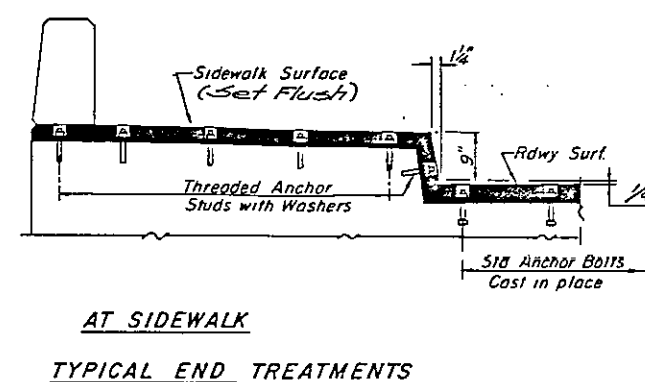
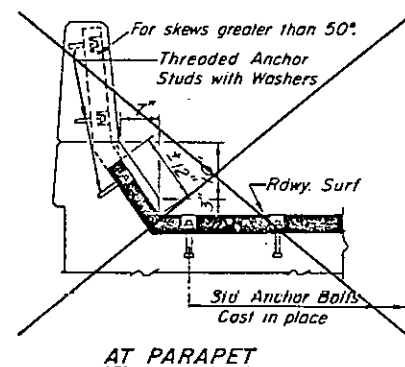
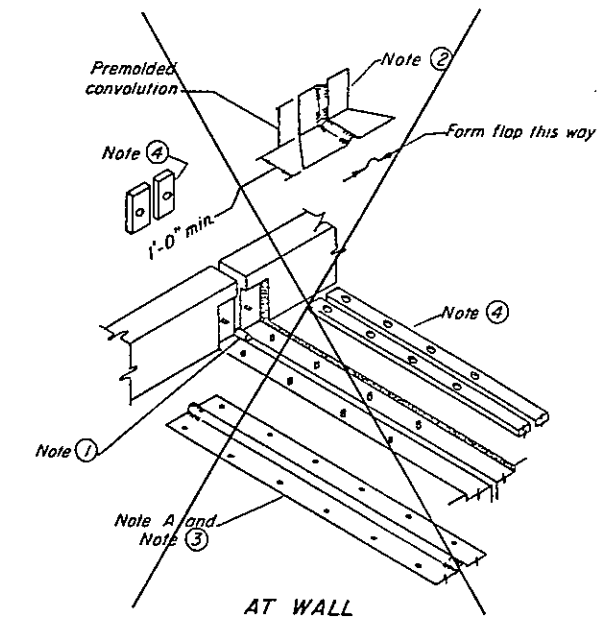
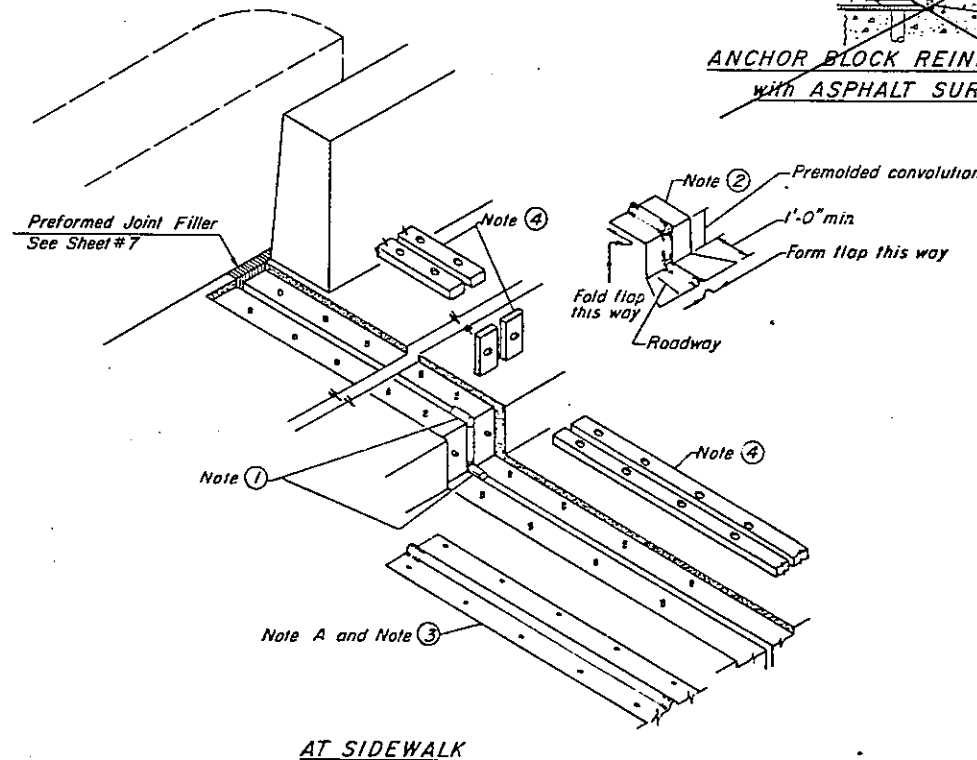
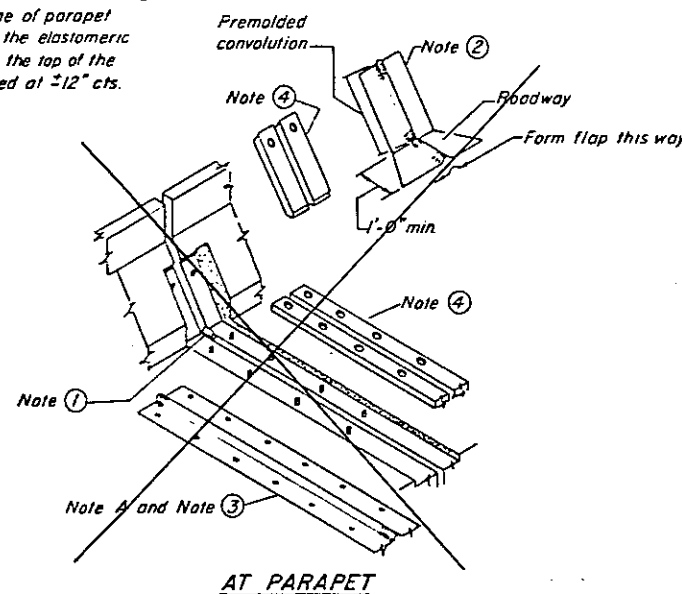
The steel reinforcement must extend up the back face of anchor blocks when asphalt surfaces are used but is optional in concrete blockout.

The convolution length shall be such that the extended length will not be greater than the manufactured length when the joint is fully expanded in its design range and will not protrude above the anchor blocks when the joint is fully compressed.

Joint openings shall be adjusted in accordance with Article 503.07(c) of the Standard Specifications when the deck is poured at an ambient temperature other than 50°F.

The parapet and sidewalk flaps may be furnished factory vulcanized to the roadway membrane provided the centerline of the convolution is maintained and the process and method meet the approval of the Engineer.

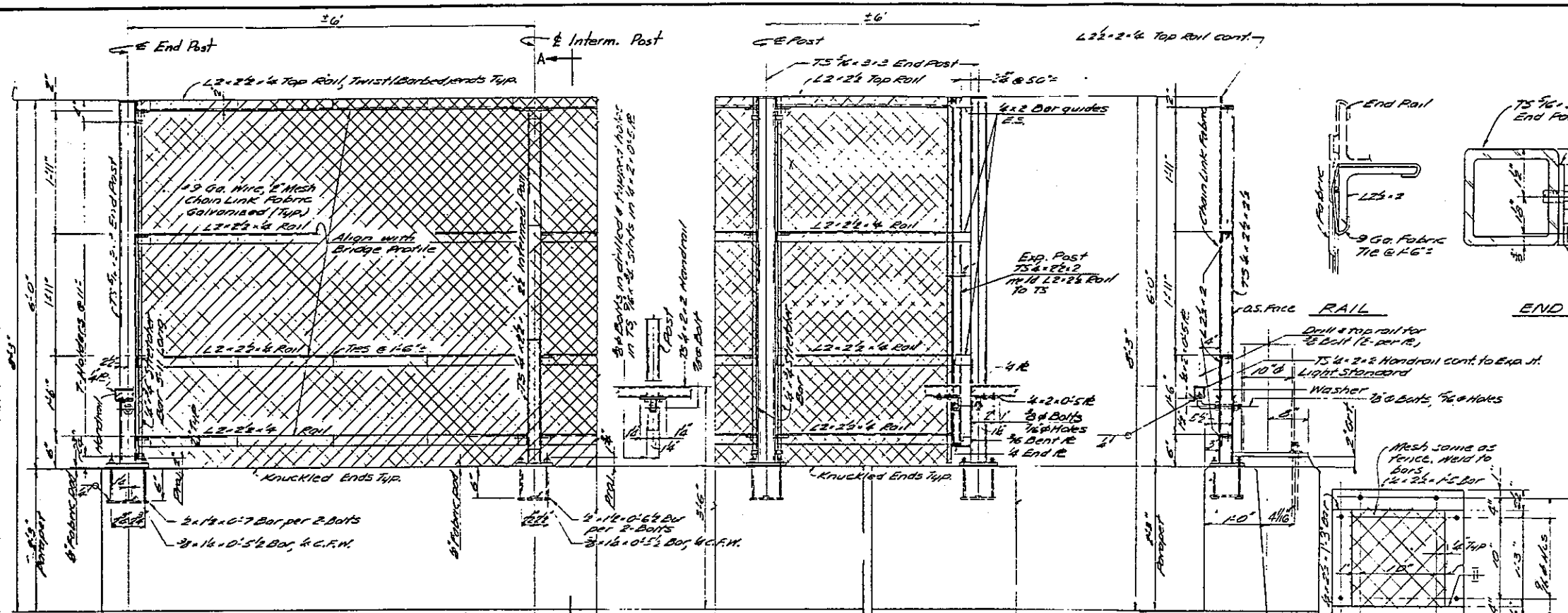
Anchor bolts, washers and nuts, to be plated against corrosion in accordance with the special provisions, shall be zinc-coated by the mechanical plating method conforming to ASTM B695, class 50. Zinc-coated nuts shall be tapped oversize in accordance with the requirements of AASHTO M291 and shall meet the supplementary requirements S1.1 thru S1.2.1 of the same specifications for lubricant and testing.



CONTINUOUS SEAL TYPE
NEOPRENE EXPANSION JOINTS
For 2" Movement

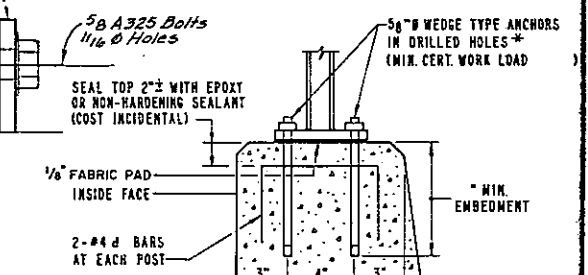
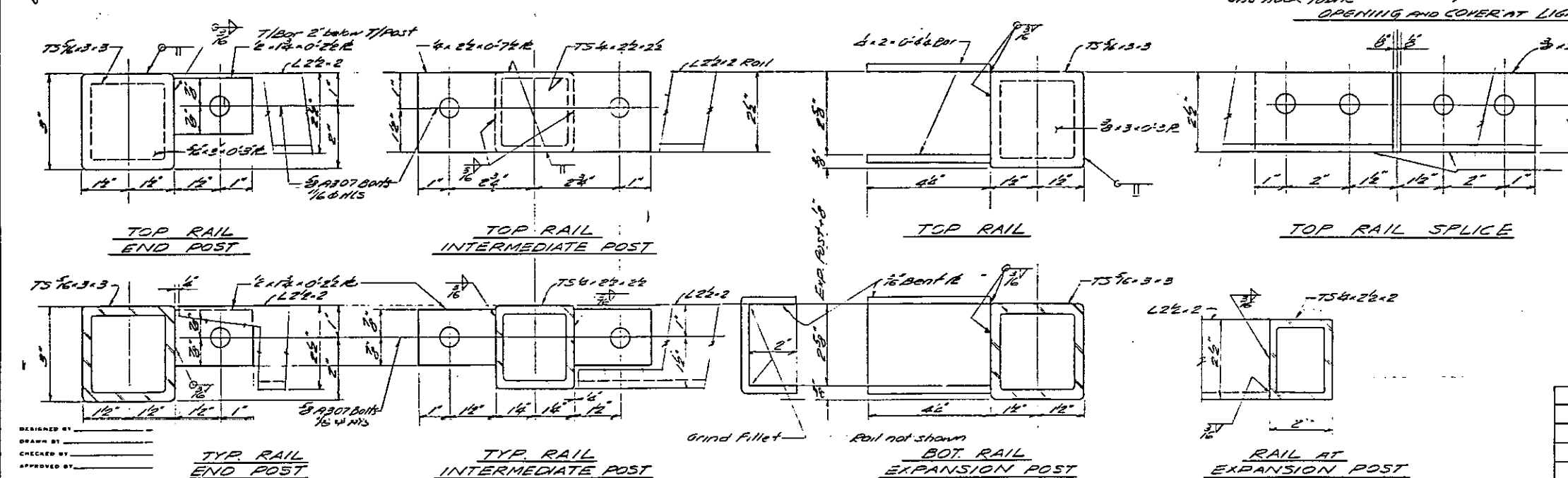
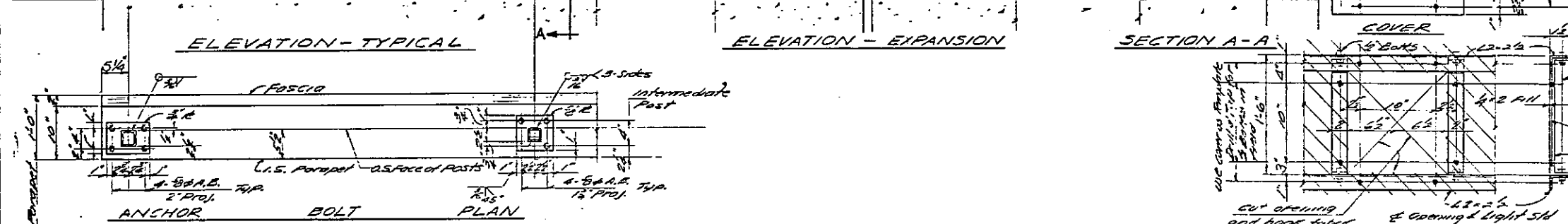
LARAMIE AVENUE Over
I-290
F.A.I. RTE. 290, SECTION 3030.2 BR(80)
COOK COUNTY
STA. 64+51.18 F.A.I. 290 (E.B. 1)

DESIGNED	ALF
CHECKED	MVM
DRAWN	ALF
CHECKED	MVM



FASTENING OF WIRE FABRIC

- NOTES**
- Railing shall be in accordance with Section 508 of the Standard Specifications, except as noted, and shall be paid for at the Contract Unit Price per lineal foot.
 - The 9 gauge fabric ties shall be in accordance with Article 710.33(f) of the Standard Specifications.
 - Hollow structural steel tubing shall conform to the requirements of ASTM designation A 500, Grade B, structural steel tubing galvanized to ASTM-A385 & AASHTO M-111.
 - All other steel shapes and plates shall conform to the requirements of AASHTO M183.
 - Provide 1-1/8" and 2-1/8" galvanized sheet steel shims for 25% of the posts. Rail elements shall be parallel to grade-high spots shall be ground and low spots shimmed.
 - If any of the galvanized coat is damaged or removed during erection, the affected area shall be painted with one coat of zinc paint in accordance with Mil. Specs. MIL-P-26915 Type 1, air dry cure.
 - All fabrication shall be complete and ready for assembly before galvanizing. No punching, drilling cutting or welding shall be permitted after galvanizing.
 - Vent holes for galvanizing shall be placed in the posts and rails at locations that will not allow the accumulation of moisture in these members.
 - Installation of the chain link fabric shall be in accordance Section 629 of the Standard Specifications.
 - All bolts and washers shall conform to the requirements of ASTM designation A-307 and shall be galvanized in accordance with AASHTO designation K-232.



OPTIONAL FENCE ANCHORAGE
 *HOLES SHALL BE DRILLED IN A MANNER NOT TO DAMAGE ADJACENT CONCRETE.

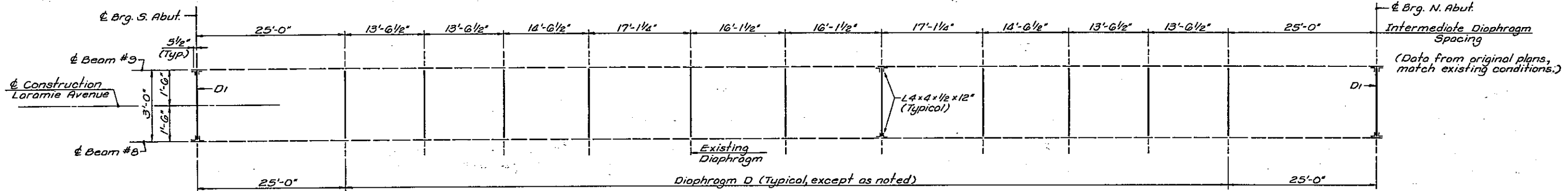
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 FENCE DETAILS
 LARAMIE AVENUE Over I-290
 FAI RTE 290, SECTION 3030.2 BR(80)
 COOK COUNTY
 STA. 64+51.18 FAI:290 (E.B. 6)
 SCALE: DRAWN BY I.D.O.T.
 DATE: JUNE 1983 CHECKED BY: C.W.W.

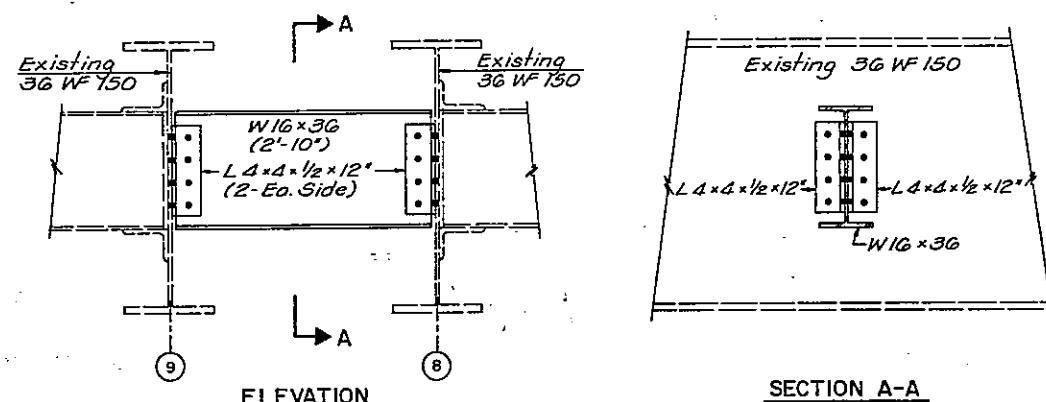
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 290	* -	COOK	32	25
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT I-IR-290-4				
* 3030.2 BR(80)				

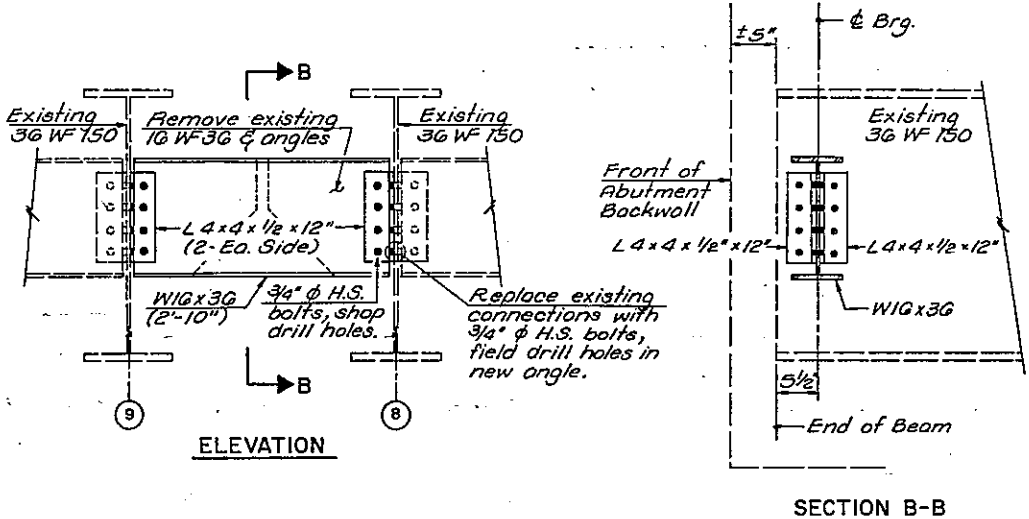
SHEET NO. 12
19 SHEETS



DIAPHRAGM FRAMING PLAN



INTERMEDIATE DIAPHRAGM (D) DETAILS



END DIAPHRAGM (D1) DETAILS

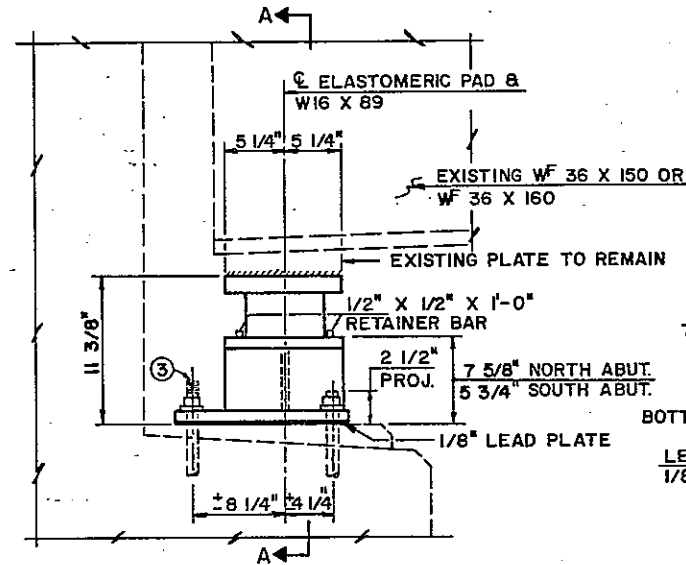
- NOTES:
- 1) All diaphragm connection fasteners are 3/4" phi H.S. (M104) bolts in 15/16" phi holes, except where noted. 7/8" phi holes in existing beams to be drilled in field.
 - 2) All contact surfaces of joints for diaphragms shall be free of paint and lacquer.
 - 3) Diaphragm angles L 4 x 4 x 1/2 installation to be done during Stage I Construction and shall be completed prior to placing deck slab during Stage II Construction.

DESIGNED	ALF
CHECKED	MVM
DRAWN	ALF
CHECKED	MVM

STRUCTURAL STEEL
LARAMIE AVENUE Over
I- 290
F.A.I. RTE. 290, SECTION 3030.2 BR(80)
COOK COUNTY
STA. 64+51.18 F.A.I. 290 (E.B. 1/2)

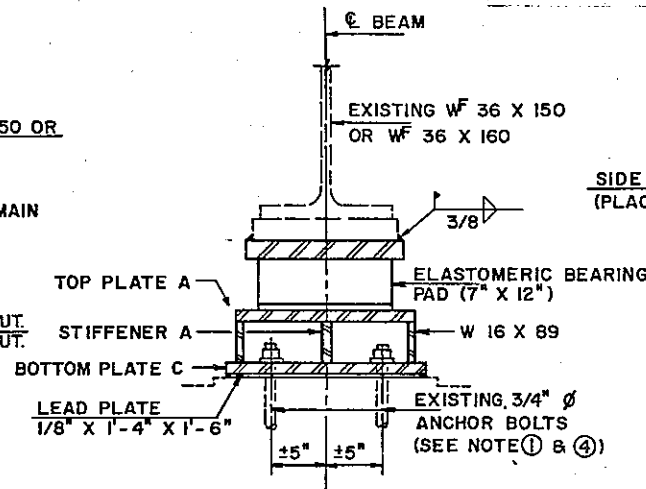
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 13
EAL 290	*	COOK	32	26	19 SHEETS
* 3030.2 BR (80)					



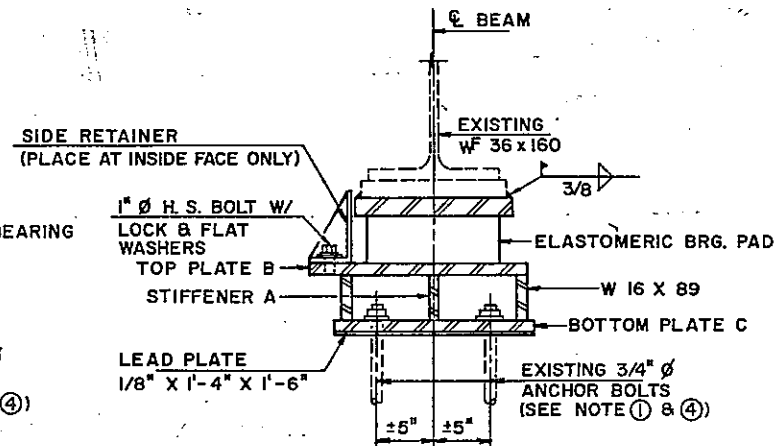
ELEVATION

NORTH ABUT. - 16 BOLSTERS REQUIRED
SOUTH ABUT. - 16 BOLSTERS REQUIRED



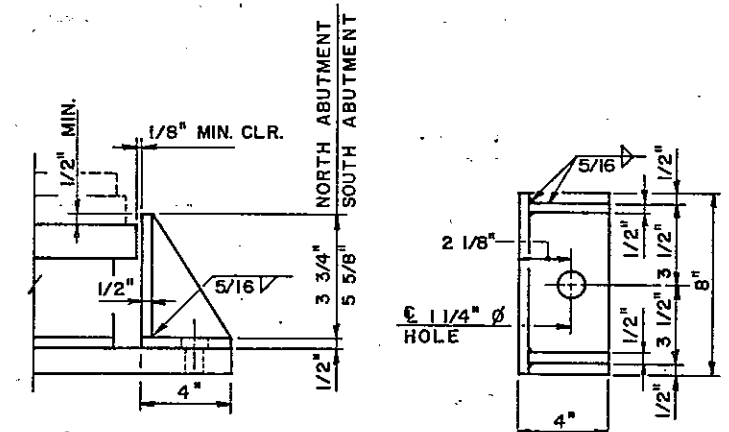
SECTION A-A

(BEAMS 3-14)
SEE DETAIL B FOR WELDS



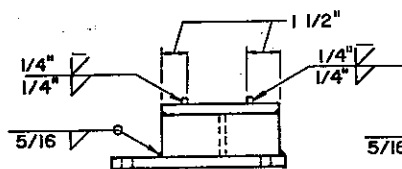
SECTION A-A

(BEAMS 1, 2, 15 & 16)
SEE DETAIL C FOR WELDS



SIDE RETAINER

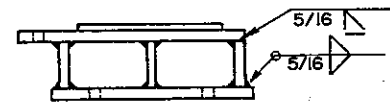
NORTH ABUT. - 4 REQUIRED
SOUTH ABUT. - 4 REQUIRED



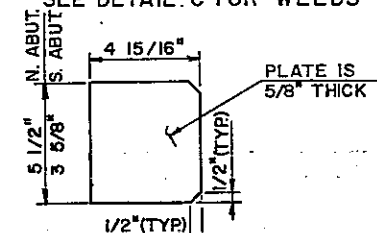
DETAIL "A"



DETAIL "B"



DETAIL "C"



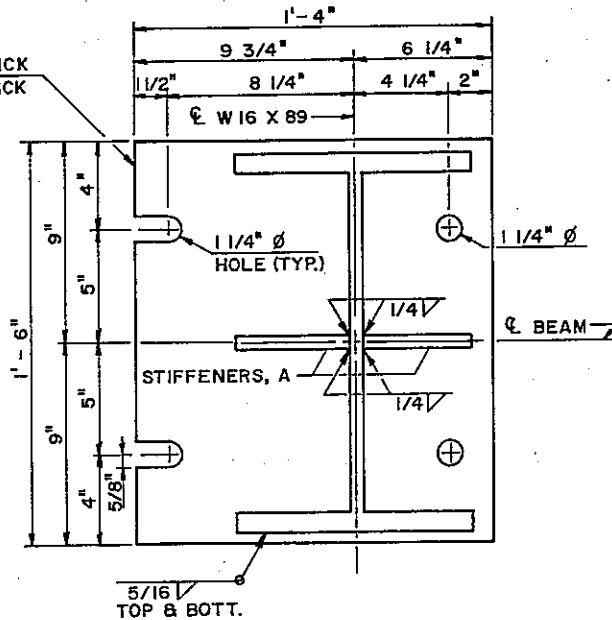
STIFFENER A

NORTH ABUT. - 32 REQUIRED
SOUTH ABUT. - 32 REQUIRED

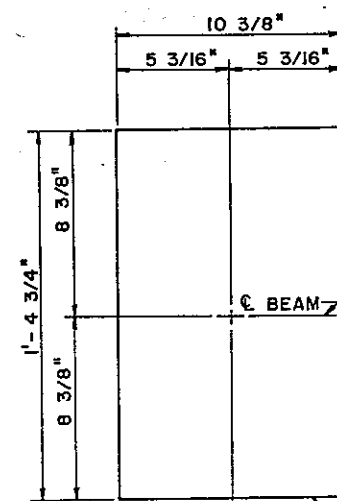
NOTES:

- PROVIDE NEW NUT & HARDENED 2" X 2" X 5/16" E. WASHER FOR EACH ANCHOR BOLT (128 REQ'D.)
- SEE SHEET NO. 2 FOR STRUCTURAL STEEL QUANTITY.
- CUT AND RETHREAD EXISTING 3/4" Ø ANCHOR BOLTS.
- BROKEN, RUSTED OUT, OR MISALIGNED EXISTING BOLTS TO BE REALIGNED OR REPLACED, INCIDENTAL TO NEW BEARINGS.

BOTTOM PLATE IS 1" THICK
LEAD PLATE IS 1/8" THICK

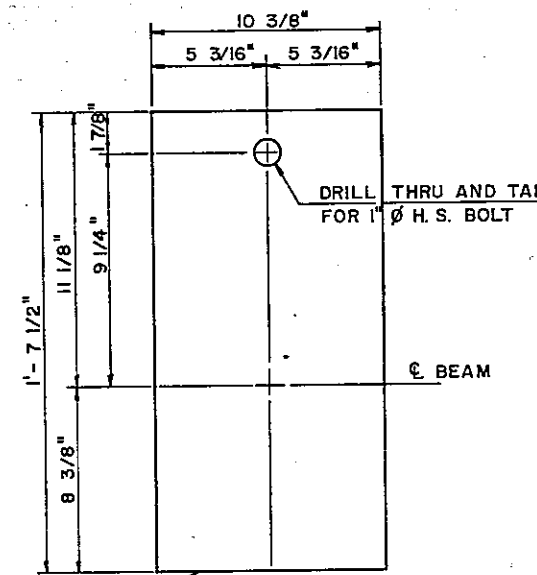


BOTTOM PLATE C & W16 X 89



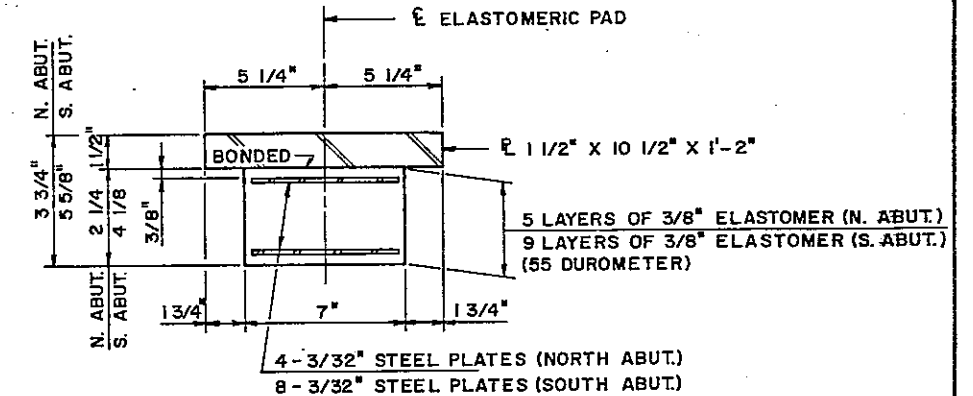
TOP PLATE A

24 REQUIRED



TOP PLATE B

8 REQUIRED



7" X 12" TYPE I ELASTOMERIC BEARINGS

NORTH ABUT. - 16 REQUIRED
SOUTH ABUT. - 16 REQUIRED

ABUTMENT BEARING ASSEMBLIES
LARAMIE AVENUE OVER
I-290

F.A.I. RTE. 290, SECTION 3030.2 BR (80)

COOK COUNTY

STA. 64+51.18 - F.A.I. 290 (E.B. 8)

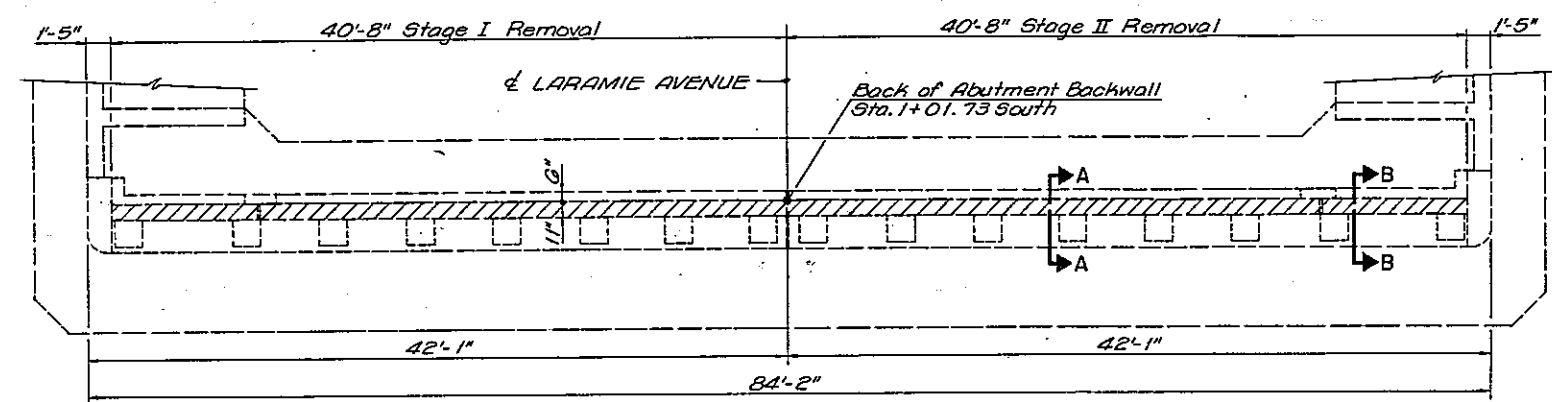
DESIGNED	MYM
CHECKED	BLW
DRAWN	BSB
CHECKED	MYM

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

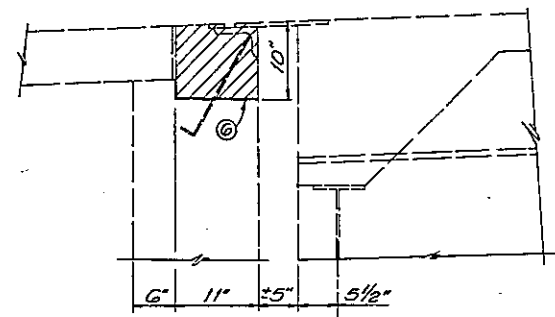
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 290	*	COOK	32	28
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT 1-10-290-4		

SHEET NO. 15
19 SHEETS

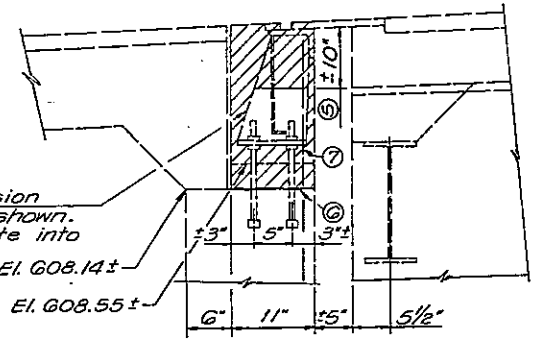
* 3030.2 BR(80)



PLAN

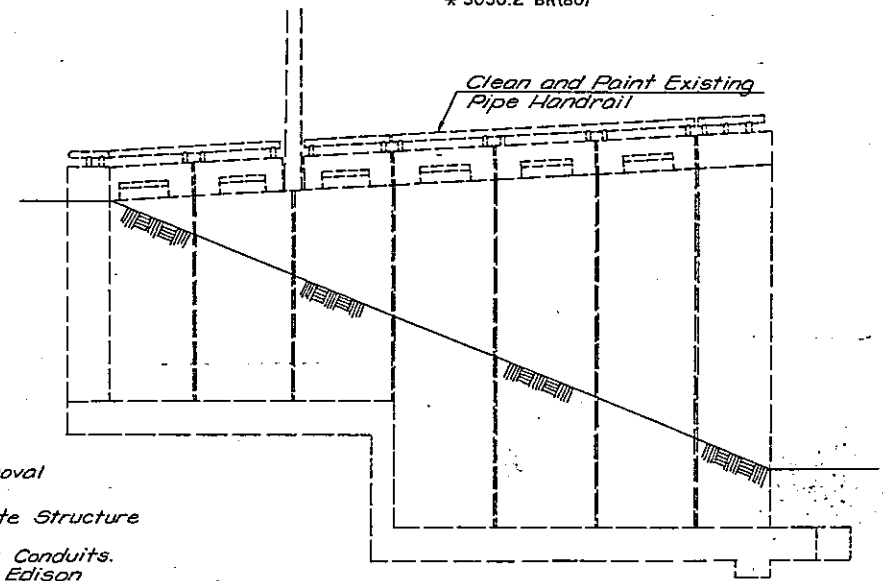


SECTION B-B

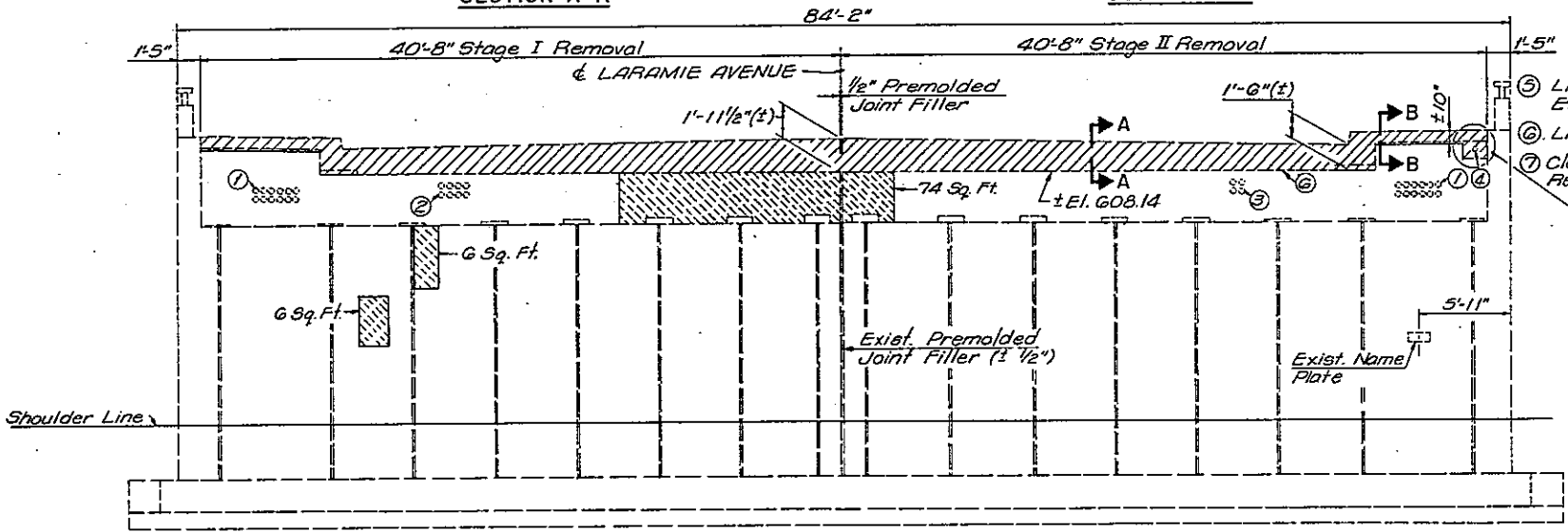


SECTION A-A

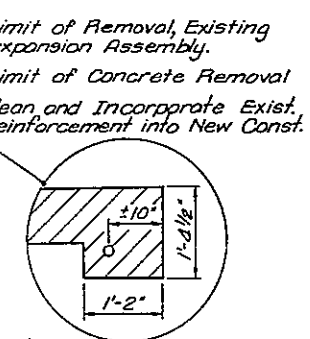
- LEGEND**
- Indicates Concrete Removal
 - Indicates Repair Concrete Structure
 - ① 12-4" Asbestos Cement Conduits. Owned by Commonwealth Edison Company.
 - ② 8-3 1/2" Asbestos Cement Conduits. Owned by City of Chicago - Bureau of Electricity.
 - ③ 4-3 1/2" Asbestos Cement Conduits. Owned by Illinois Bell Telephone Company.
 - ④ 2 1/2" Rigid Steel Conduit. Owned by City of Chicago - Bureau of Electricity.



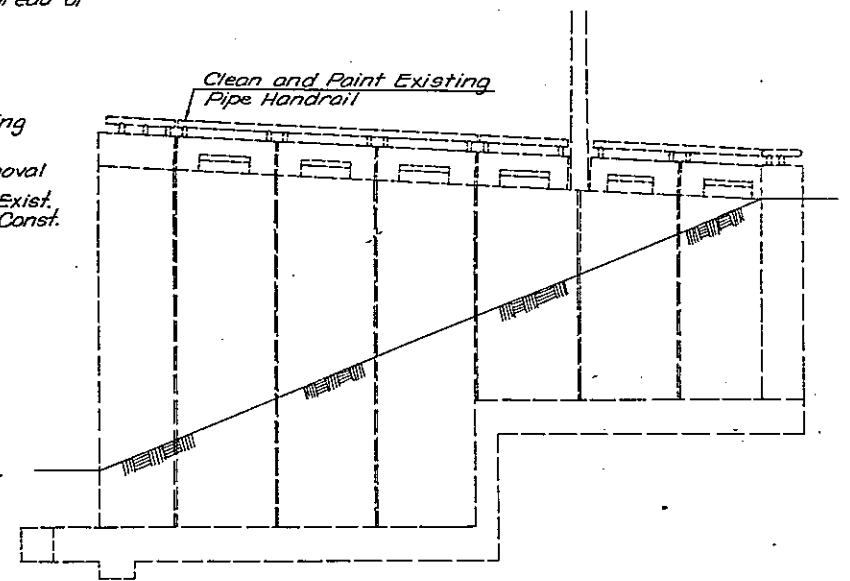
EAST WINGWALL ELEVATION
(No Repairs)



ELEVATION



REMOVAL DETAIL



WEST WINGWALL ELEVATION
(No Repairs)

NOTE: See Sheet #18, for Repair Concrete Structure Detail.
See Sheet #19, for Chamfer Detail.
Work this Sheet with Sheets #16, and #17.

DESIGNED	ARY
CHECKED	MVM
DRAWN	ARY
CHECKED	MVM

UTILITY CONDUIT NOTE
CARE SHALL BE TAKEN DURING "ABUTMENT REPAIR PROCEDURE", SO AS NOT TO DAMAGE UTILITY CONDUITS OR CONDUIT EXPANSION COUPLINGS THROUGH BACKWALL. ANY PART OF THE UTILITY CONDUIT SYSTEM DAMAGED DURING CONCRETE REMOVAL SHALL BE REPAIRED OR REPLACED, AS APPROVED BY THE ENGINEER. PROTECTION COST INCIDENTAL TO CONCRETE REMOVAL, REPAIRS WILL BE AT THE CONTRACTOR'S EXPENSE.

NOTE:
COMMONWEALTH EDISON AND ILLINOIS BELL TELEPHONE WILL PROVIDE ASSISTANCE AND SUPERVISION FOR THE PROTECTION OF THEIR UTILITY CONDUITS. THE CONTRACTOR IS RESPONSIBLE FOR INSURING THE PROTECTION OF THE BUREAU OF ELECTRICITY, CITY OF CHICAGO UTILITY CONDUITS.

SOUTH ABUTMENT
LARAMIE AVENUE Over
1-290
F.A.I. RTE.290, SECTION 3030.2 BR (80)
COOK COUNTY
STA.64+51.18 F.A.I.290 (E.B. 1)

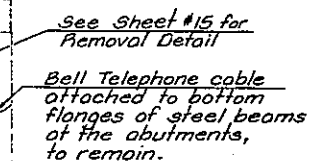
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 290	K	COOK	32	29
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT 1-IP-290-4	

* 3030.2 BR(80)

* 3030.2 BR (80)



-  Indicates Concrete Removal
 Indicates New Construction
 Indicates Repair Concrete Structure
- ① 12-4" ϕ Asbestos Cement Conduits. Owned by Commonwealth Edison Company.
 - ② 8-3/2" ϕ Asbestos Cement Conduits. Owned by City of Chicago ~ Bureau of Electricity
 - ③ 4-3/2" ϕ Asbestos Cement Conduits. Owned by Illinois Bell Telephone Company.
 - ④ 2 1/2" ϕ Rigid Steel Conduit. Owned by City of Chicago ~ Bureau of Electricity.



*NOTE: See Sheet #18, for Repair
Concrete Structure Detail.
See Sheet #19, for Chamfer
Detail.
See Sheet #15, for Section
A-A and Section B-B.
Work this Sheet with Sheet
#15, and #17.*

NORTH ABUTMENT
LARAMIE AVENUE Over
I-290
F.A.I. RTE.290, SECTION 3030.2 BR (80)
COOK COUNTY
STA.64+51.18 F.A.I.290 (E.B. #)

1" Joint (Existing)

1" Preformed Joint Filler

(Typ.) 4 1/2" 9" 4"

3/4"φ Expansion Bolts

v2 bar

Exist. horizontal reinf. shall be cleaned and incorporated into New Construction.

1" 1'-6" 1" 1'-6"

SECTION C - C

UTILITY CONDUIT NOTE

CARE SHALL BE TAKEN DURING "ABUTMENT REPAIR PROCEDURE"; SO AS NOT TO DAMAGE UTILITY CONDUITS OR CONDUIT EXPANSION COUPLINGS THROUGH BACKFALL. ANY PART OF THE UTILITY CONDUIT SYSTEM DAMAGED DURING CONCRETE REMOVAL SHALL BE REPAIRED OR REPLACED, AS APPROVED BY THE ENGINEER. PROTECTION COST INCIDENTAL TO CONCRETE REMOVAL, REPAIRS WILL BE AT THE CONTRACTOR'S EXPENSE.

NOTE:

COMMONWEALTH EDISON AND ILLINOIS BELL TELEPHONE WILL PROVIDE ASSISTANCE AND SUPERVISION FOR THE PROTECTION OF THEIR UTILITY CONDUITS. THE CONTRACTOR IS RESPONSIBLE FOR INSURING THE PROTECTION OF THE BUREAU OF ELECTRICITY, CITY OF CHICAGO UTILITY CONDUITS.

DESIGNED	RAY
CHECKED	MVM
DRAWN	RAY
CHECKED	MVM

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 290	*	COOK	32	30
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT	I-1R-290-4	

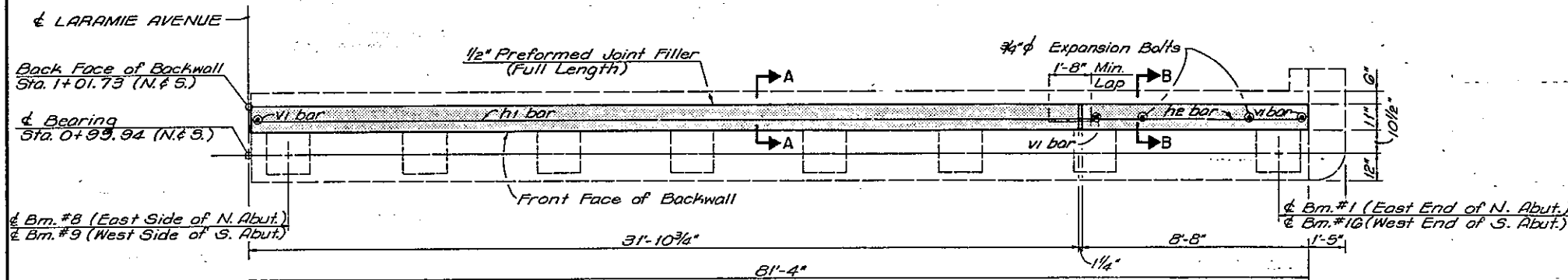
* 3030.2 BR(80)

SHEET NO. 17
19 SHEETS

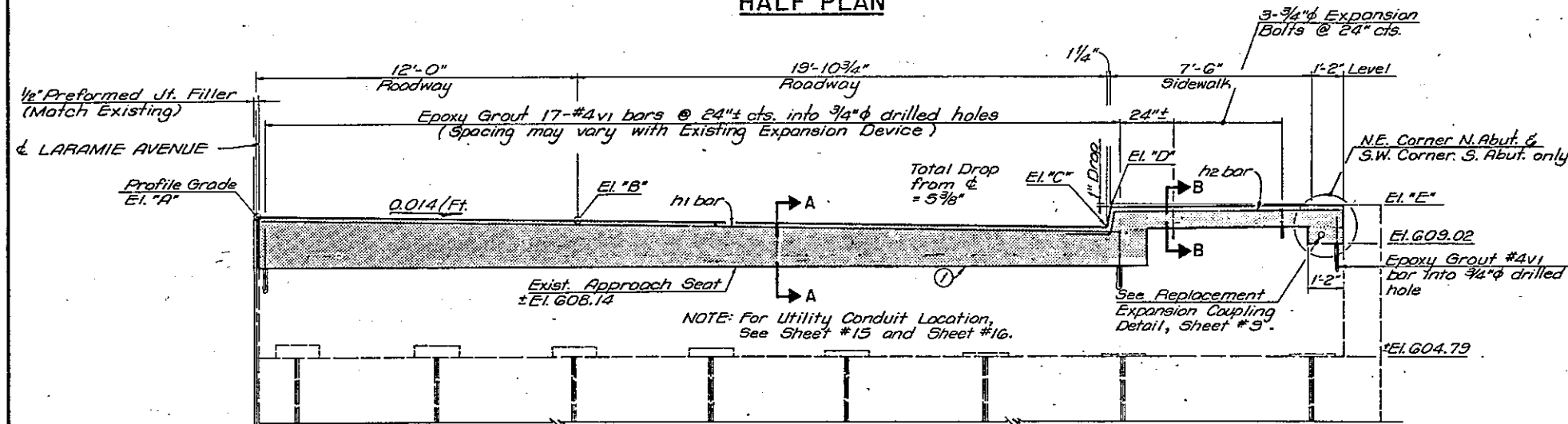
TABLE OF ELEVATIONS		
ELEVATION	BACK FACE OF BACKWALL	FRONT FACE OF BACKWALL
A	610.06	610.09
B	609.89	609.92
C	609.61	609.65
D	610.36	610.40
E	610.45	610.48

BILL OF MATERIAL

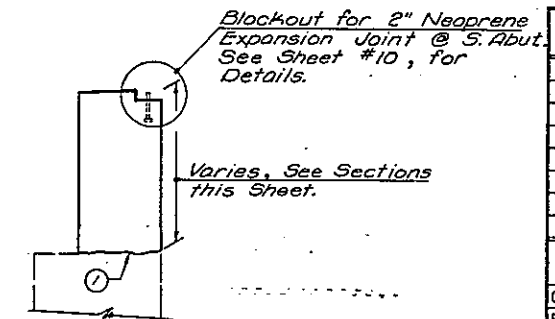
Bar	Number	Size	Length	Shape
h1	2	#4	32'-6"	
h2	2	#4	10'-10"	
v1	35	#4	2'-2"	
v2	4	#5	11'-8"	
ITEM		UNIT	QUANTITY	
CLASS X CONCRETE		CU YD	4.2	5.1
REINFORCEMENT		POUND	110	160
CONCRETE REMOVAL		CU YD	4.3	5.1
REPAIR CONC. STRUCT.		SQ YD	86	41
EXPAN. BOLTS	3/4"	EACH	6	38



HALF PLAN



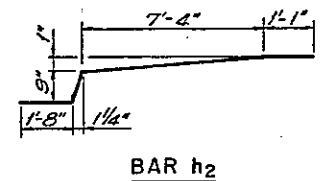
HALF ELEVATION



DETAIL "A"
(@ South Abutment)

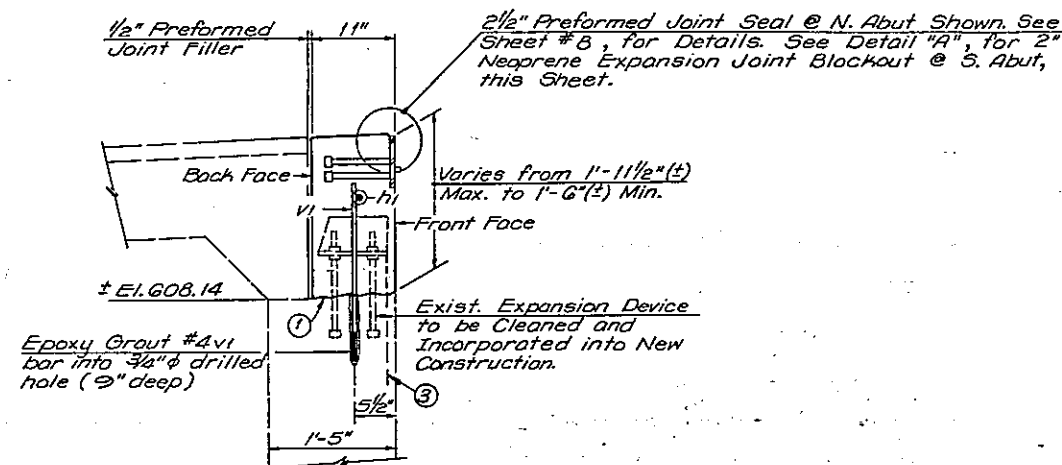
LEGEND

- Indicates New Construction
- Banded Construction Joint, See Special Provisions.
- 3/4" Expansion Bolt (7 3/4" Min. Projection)
- Existing Reinforcement shall be Cleaned and Incorporated into New Construction. Bend reinforcement to miss expansion device if necessary.

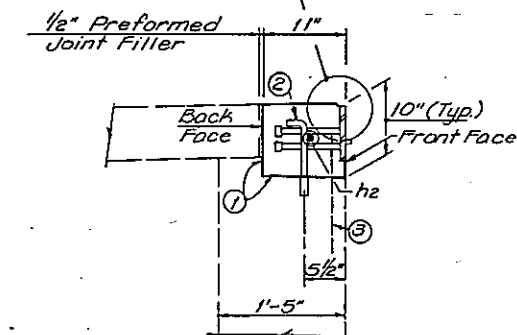


BAR h2

- NOTES:
- Concrete to be placed after deck forms have been removed.
 - Work this Sheet with Sheet #15 and Sheet #16.
 - For Chamfer Detail, See Sheet #19.



SECTION A-A



SECTION B-B

DESIGNED	RAY
CHECKED	MVM
DRAWN	RAY
CHECKED	MVM

ABUTMENT DETAILS
LARAMIE AVENUE Over
I-290

F.A.I. RTE.290, SECTION 3030.2 BR (80)

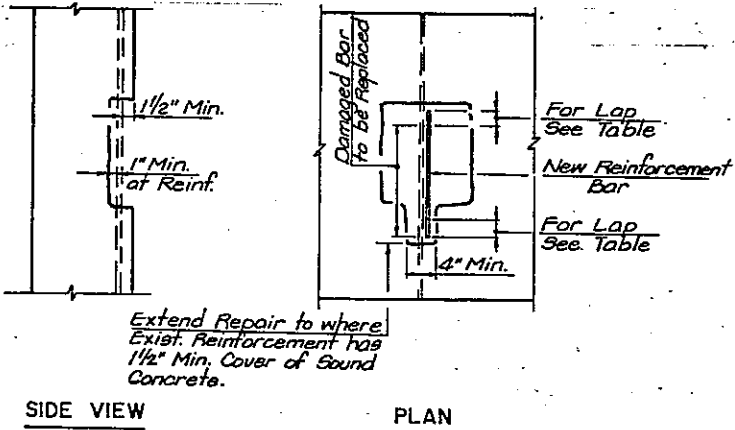
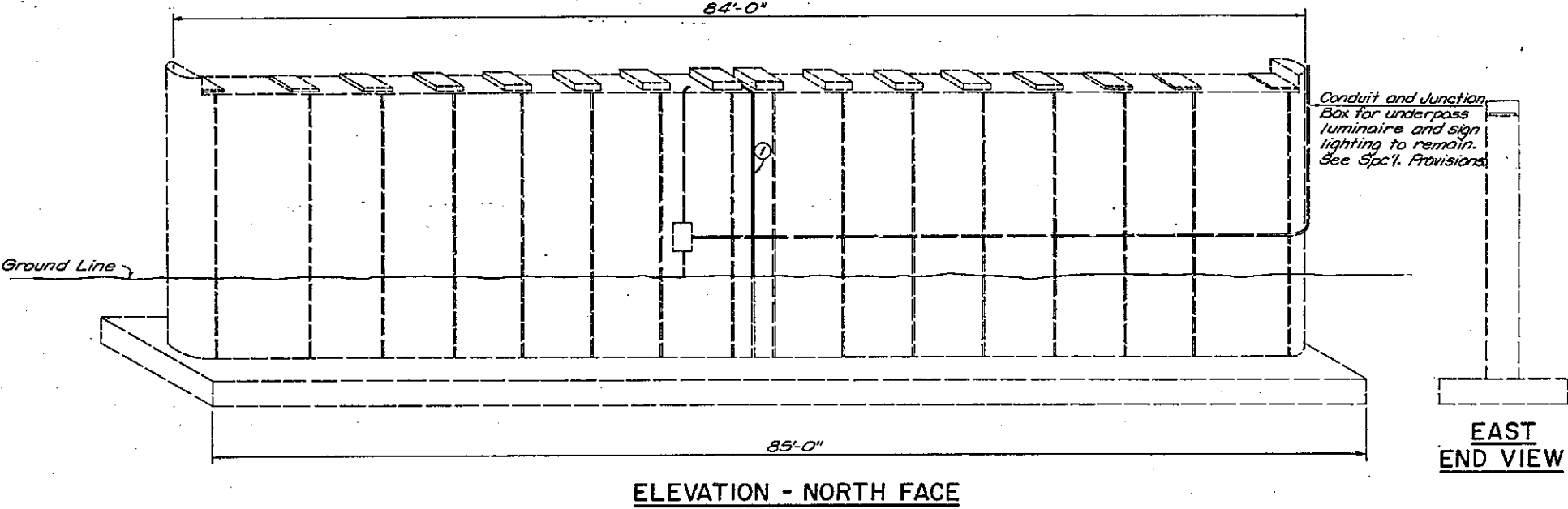
COOK COUNTY

STA.64+51.18 F.A.I.290 (E.B. 6)

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 290	*	COOK	32	31
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT I-TR-290-4				
* 3030.2 BR(80)				

SHEET NO. 18
19 SHEETS

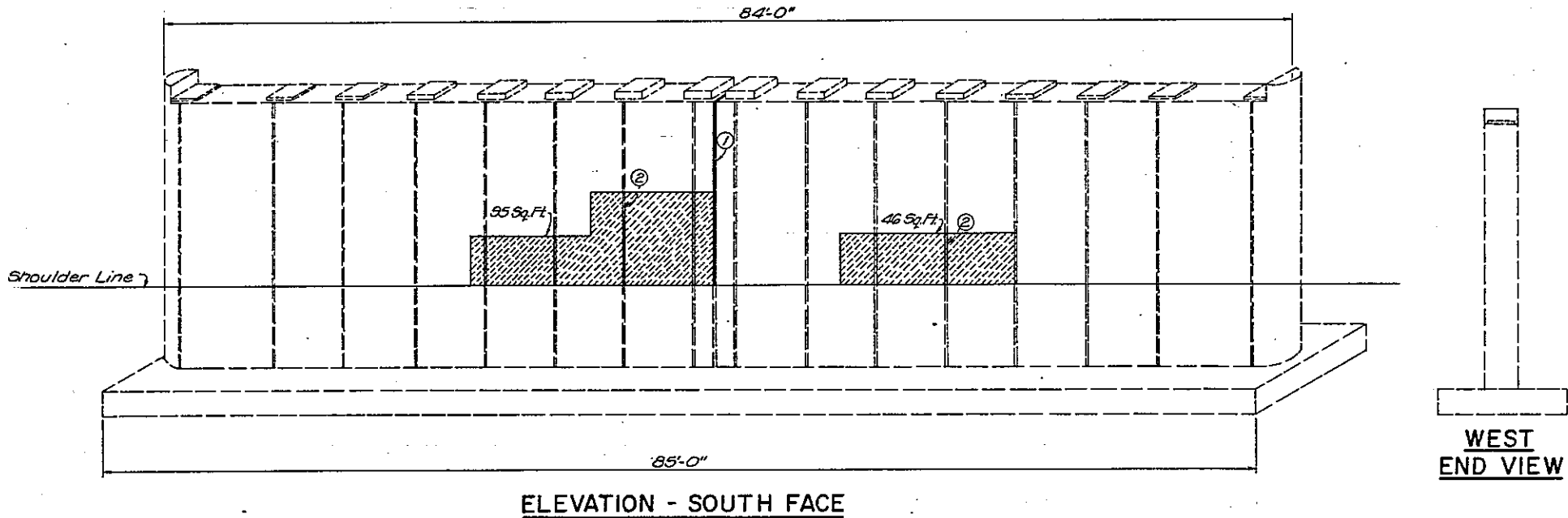


VERTICAL CONCRETE REPAIR

NOTE: Existing reinforcement having 25% or more of cross sectional area lost due to corrosion or damaged during concrete removal shall be replaced by new reinforcement, lapped as shown or noted. Cost of Reinforcement included in "REPAIR CONCRETE STRUCTURE."

LAP DIMENSIONS	
BAR SIZE	LAP LENGTH
#4	15"
#5	19"
#6	23"
#7	26"

NOTES: ① See Sheet #19, for Joint Seal at Open Joint.
② See Sheet #19, for Typical Rustication Groove Detail.



BILL OF MATERIAL		
ITEM	UNIT	QUANTITY
REPAIR CONCRETE STRUCTURE	SQ. FT.	141
1 1/2" PREFORMED JOINT SEAL	LIN. FT.	30

LEGEND

Indicates Repair Concrete Structures

DESIGNED	RRY
CHECKED	MVM
DRAWN	RRY
CHECKED	MVM

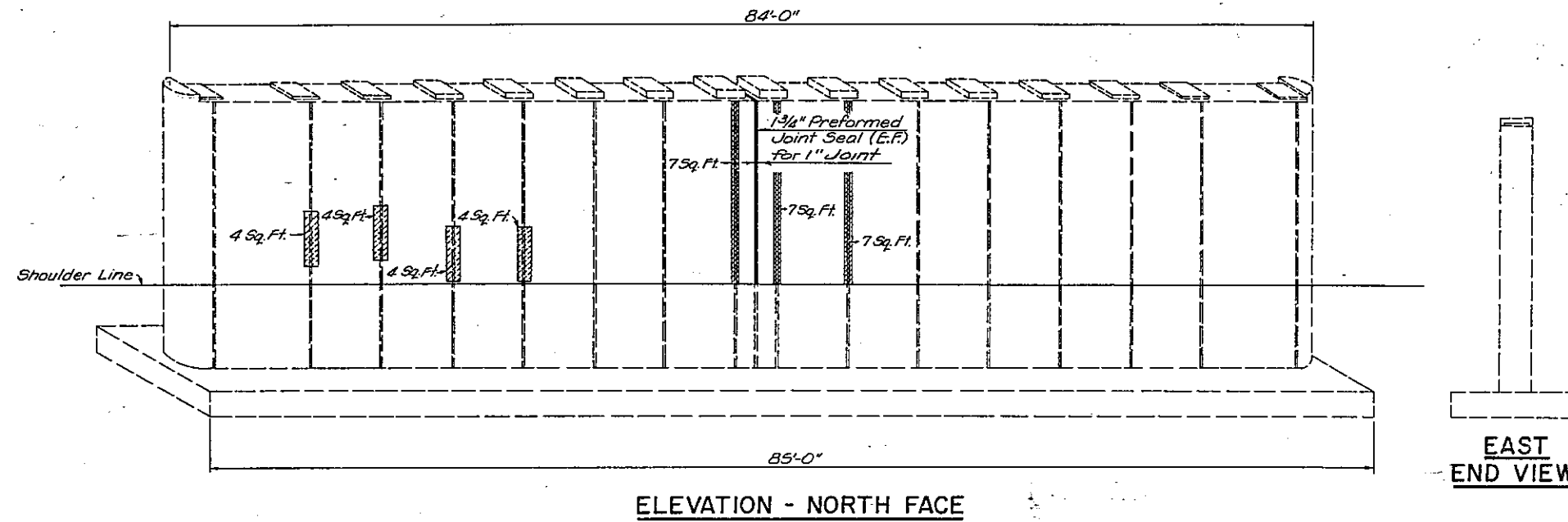
PIER 1
LARAMIE AVENUE Over
I-290
F.A.I. RTE. 290, SECTION 3030.2 BR(80)
COOK COUNTY
STA. 64+51.18 F.A.I. 290 (E.B. ②)

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

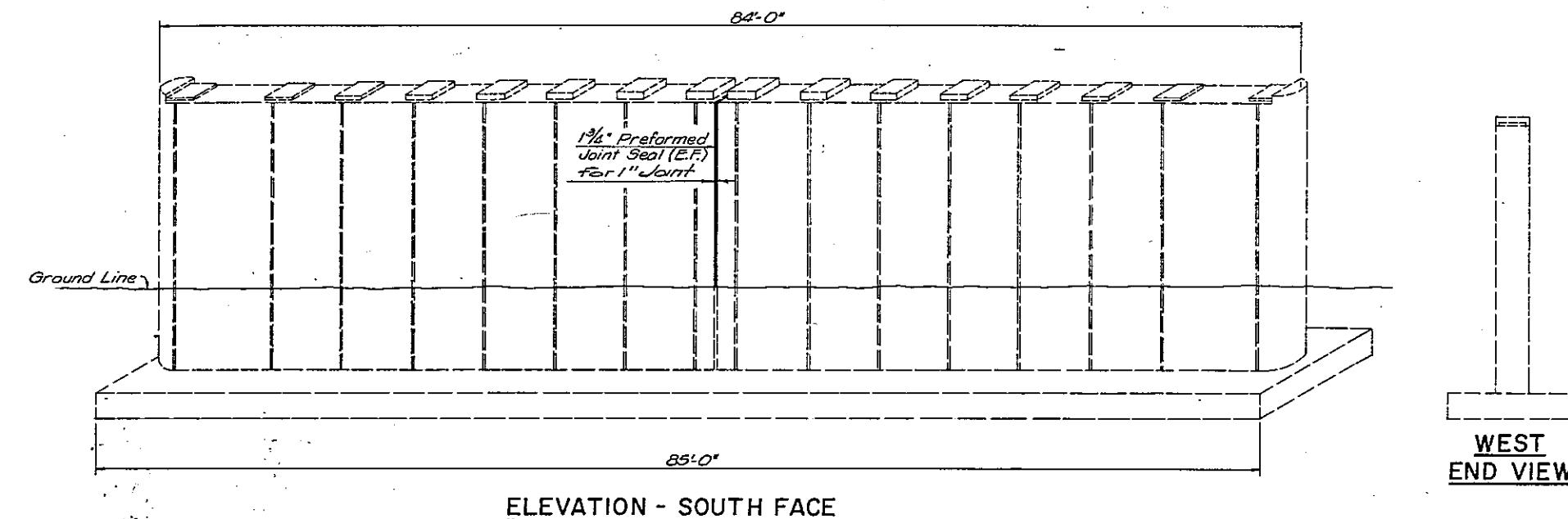
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 290	*	COOK	32	32
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT	I-IR-290-4	

SHEET NO. 19
19 SHEETS

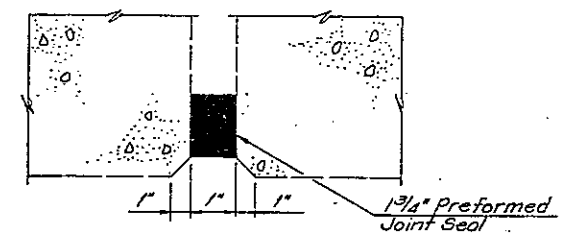
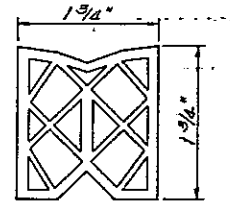
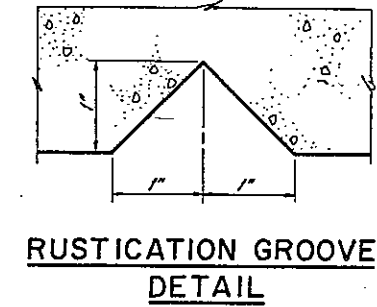
*3030.2 BR (80)



ELEVATION - NORTH FACE



ELEVATION - SOUTH FACE



BILL OF MATERIAL		
ITEM	UNIT	QUANTITY
REPAIR CONCRETE STRUCTURE	SQ. FT.	37
1 3/4" PREFORMED JOINT SEAL	LIN. FT.	30

LEGEND

Indicates Repair Concrete Structures
E.F. Denotes Each Face

NOTE: For Vertical Concrete Repair
Detail, See Sheet #18.
Work this Sheet with Sheet #18.

PIER 2
LARAMIE AVENUE Over
I-290
F.A.I. RTE. 290, SECTION 3030.2 BR (80)
COOK COUNTY
STA. 64+51.18 F.A.I. 290 (E.B. 6)

DESIGNED	RRY
CHECKED	MVM
DRAWN	RRY
CHECKED	MVM

X-1.00 a

STANDARD SYMBOLS AND ABBREVIATIONS

THESE SYMBOLS AND ABBREVIATIONS ARE USED THROUGHOUT THESE PLANS UNLESS OTHERWISE NOTED

SYMBOLS

North Arrow	SS or SANS Existing Storm or Sanitary Sewer	Catch Basin to be filled with Sand & Connection Sealed
State Line	Railroad or Utility Tracks	Existing Manhole, Manhole to be Adjusted, or Manhole to be Reconstructed
County Line	Curb Wall	Manhole to be Constructed
Township Line	Retaining Wall	Manhole to be filled with Sand & Connection Sealed
City, Village or Town Limits	Existing Drive or Traveled Way	Existing Valve Vault, Valve Vault to be Adjusted, or Valve Vault to be Reconstructed
Section or Grant Line	Pipe Lines Gas Water Oil	Valve Vault to be Constructed
Section Corner	Longitudinal Joint with Tie Bars	Valve Vault to be filled with Sand & Connection Sealed
Quarter Corner	(Sawed or Poly.)	Existing Fire Hydrant, or Fire Hydrant to be Adjusted
Some Ownership	Longitudinal Joint with Tie Bars and Keyway	Fire Hydrant & Auxiliary Valve to be Moved (Symbol with Letter Indicates New Location)
Unfenced Property Line	Longitudinal Joint with Keyway only	Existing Light Standard, or Light Standard to be Adjusted
Fenced Property Line	Contraction Joint with Dowels	Light Standard to be Moved (Symbol with Letter Indicates New Location)
Fence Line	Contraction Joint without Dowels	Existing Traffic Signal, or Traffic Signal to be Adjusted
Construction Identification Sign	Expansion Joint with capped Dowels	Traffic Signal to be Moved (Symbol with Letter Indicates New Location)
Right of Way Marker	Expansion Joint without Dowels	Existing Traffic Sign, or Traffic Sign to be Adjusted
Existing Right of Way Line	Wide Flange Beam Terminal Joint	Traffic Sign to be Moved (Symbol with Letter Indicates New Location)
Existing Fenced Right of Way Line	Guard Rail	Existing House Service Box or House Meter Vault, or House Service Box or House Meter Vault to be Adjusted
Proposed Right of Way Line	Existing Pavement, Curb & Gutter, Driveway Pavement & Sidewalk to be removed	House Service Box or House Meter Vault to be Moved (Symbol with Letter Indicates New Location)
Proposed Right of Way Line coincident with access control line	Existing Culvert	Existing Main Service Box or Main Meter Vault, or Main Service Box or Main Meter Vault to be Adjusted
Access Control Line (Not coincident with Right of Way Line)	Culvert to be Constructed	Main Service Box or Main Meter Vault to be Moved (Symbol with Letter Indicates New Location)
Proposed Right of Way Dimension	Culvert with Drop Inlet	
Construction Limits	Elevation of Surface of Finished Pavement at Point Indicated	Trolley Pole
Base or Survey Line	Elevation of Top of Curb at Point Indicated	Telephone or Telegraph Pole
Channel Change Easement	Elevation of Flow Line of Gutter at Point Indicated	Power Line Pole
Temporary Easement (Detour, Grading etc.)	Storm Sewer (Direction of Flow & Invert Elevation Indicated)	House
Stream	Tile Drain (Direction of Flow & Invert Elevation Indicated)	Church
Lake or Pond	Existing Inlet, Inlet to be Adjusted, or Inlet to be Reconstructed	Shed
Marsh	Inlet to be Constructed	Commercial Building
Levee	Inlet to be filled with Sand & Connection Sealed	Barn
Summit	Existing Catch Basin, Catch Basin to be Adjusted, or Catch Basin to be Reconstructed	School
Deciduous Trees	Catch Basin to be Constructed	Town Hall
Evergreen Trees	Underground Electric Cable	Roadway
Hedge	Underground Telephone Cable	Traffic Direction Arrow
Centerline		

ABBREVIATIONS

T.D.	Tile Drain	Centerline to Back of Curb	R.P.S.	Reference Point Stake	Sec.	Section
S.S.	Storm Sewer (Existing)	Central Angle	I.P.	Iron Pipe	Sta.	Station
S.S.	Storm Sewer 18"x24" (Size, Length and Type)	Degree of Curve	N&W	Nail and Washer	P.L.	Property Line
S.S.	Storm Sewer 18"x24" (Size, Length, Type and Material)	Tangent Length	T.P.	Telephone Pole	F.E.	Field Entrance
C.M.P.	Corrugated Metal Pipe	Curve Length	P.P.	Power Pole	P.E.	Private Entrance
C.I.P.	Cast Iron Pipe	Radius of Curve	F.P.	Fence Post	F.A.I.	Federal-aid Interstate
P.C.	Pipe Culvert (Existing)	External Distance	F.H.	Fire Hydrant	F.A.	Federal-aid
P.	Pipe Culvert 18"x24" (Size, Length and Type)	Super-elevation (ft. per ft. of width)	B.M.	Bench Mark	F.A.S.	Federal-aid Secondary
P.	Pipe Culvert 18"x24" (Size, Length, Type and Material)	Point of Curvature	R.R.S.	Railroad Spike	S.B.I.	State Bond Issue
P.C.C.	Portland Cement Concrete	Point of Intersection	R.O.W.	Right of Way	M.F.T.	Motor Fuel Tax
F-F	Face to Face of Curb	Point of Tangency	Inv.	Invert	S.R.	State Route
B-B	Back to Back of Curb	Point on Tangent	F.L.	Flow Line	C.H.	County Highway
Centerline to Face of Curb	Point of Compound Curvature	Point of Reverse Curvature	S.M.	State of Illinois Survey Marker	T.R.	Township Road
	Vertical Curve	USC&GS. U.S. Coast & Geodetic Survey			C.S.	City Street
	External Distance of Vertical Curve	USGS. U.S. Geological Survey			Proj.	Project
	Sanitary Sewer	Elev.	Rt.	Route	A.C.	Access Control
					FAUS.	Federal-aid Urban System

Illinois Department of Transportation

PASSED... July 15, 1977

APPROVED... July 15, 1977

REVISIONS

BY	DATE
J.F.L.	11-18-58
W.F.	9-9-59
W.F.	11-19-62
W.F.	5-12-66
D.W.W.	7-15-77

If it is definitely known that adjustment or reconstruction is required, place A or R inside the symbol. If a new casting is required, show the casting number. Use P for open, C for closed lid. Example - Catch Basin to be reconstructed with new type 5 frame, open lid = (R) 5P.

First character denotes type of structure. Use Sp. for special design. Second character denotes number of frame or grate. Example - Type A manhole with type I frame and closed lid = (R) A-1C

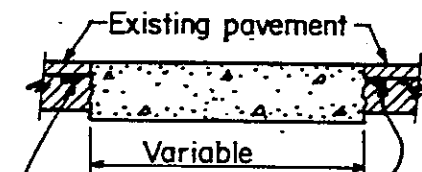
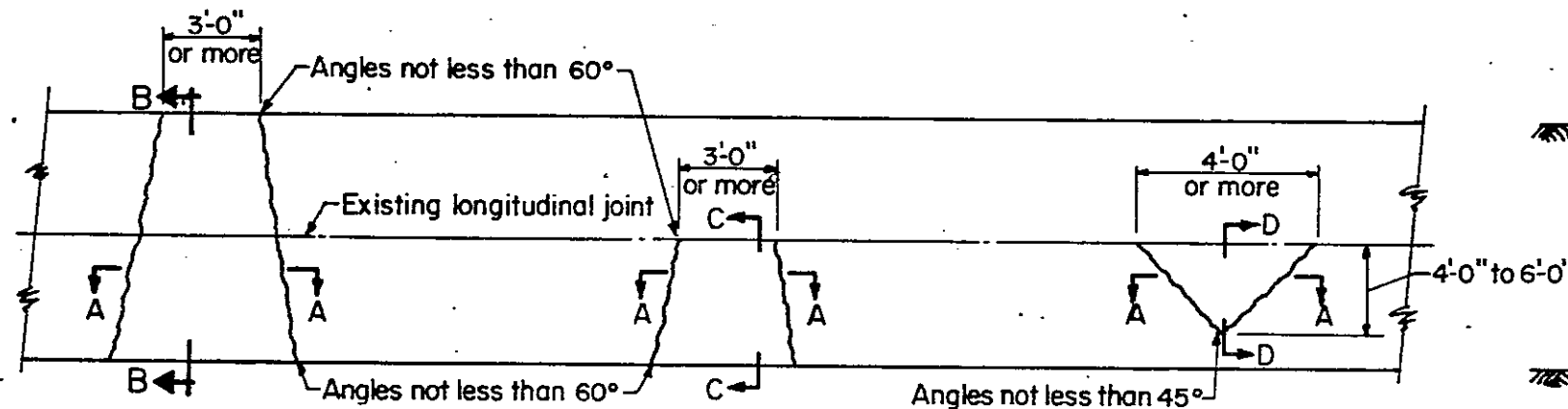
STANDARD 1686-4

Drawn 3-17-53 Redrawn 11-19-62

W.F.

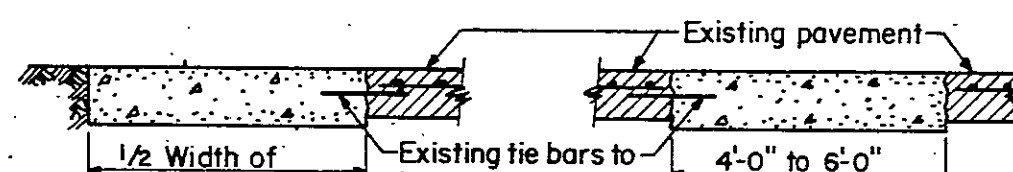
(Half Size)

STANDARD DESIGN P.C.C. PATCHING DETAILS



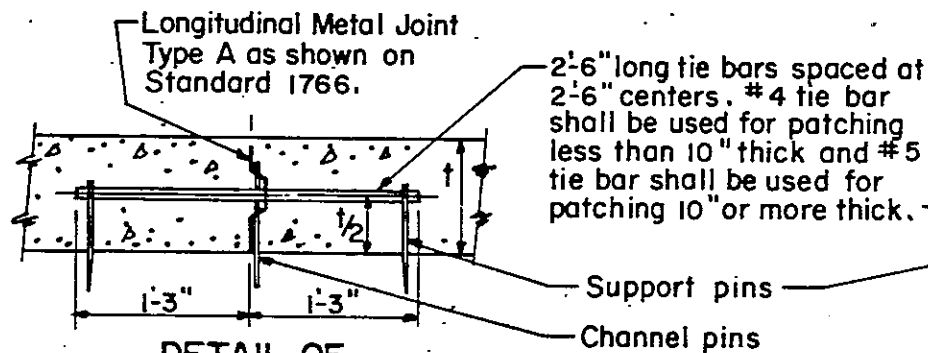
SECTION A-A

Existing marginal bars or pavement reinforcement to be cut at the patch face in the scoring operation.

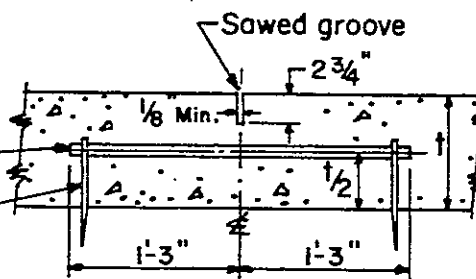


SECTION C-C

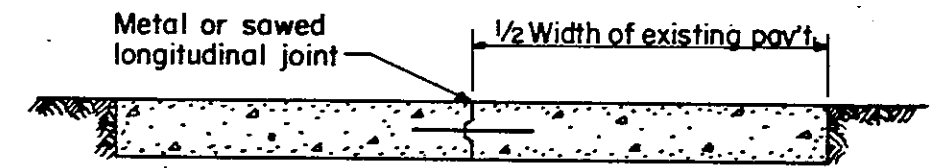
SECTION D-D



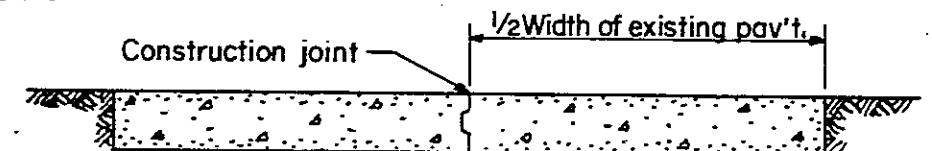
DETAIL OF
METAL LONGITUDINAL JOINT



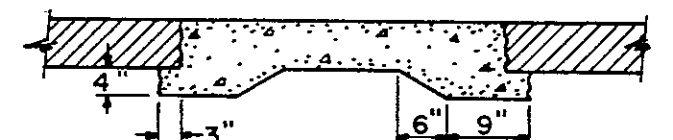
DETAIL OF
SAWED LONGITUDINAL JOINT



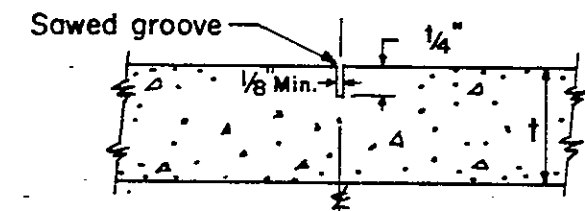
SECTION B-B
(Built in one operation)



SECTION B-B
(Built in two operations)



DETAIL OF UNDERCUTTING
(When specified in the Special Provisions)



DETAIL OF
SAWED CONTRACTION JOINT

NOTES

- For thickness of patches see special provisions or summary of quantities.
- CONTRACTION JOINTS: When the patched pavement is not to be resurfaced, transverse contraction joints shall be sawed in all 20-foot, or longer, patches:
1. At approximate 15 to 20-foot centers,
 2. In prolongation of existing contraction or construction joints in the adjacent lane,
 3. In accordance with the procedures specified in Art. 408.12 (c) of the Standard Specifications,
 4. And be sealed in accordance with Articles 408.02 (h) and 408.17 (a) of the Standard Specifications.
- Where expansion joints exist in the portion of pavement to remain in place, the adjacent new pavement shall provide the same width and type of joint and joint filler in prolongation with the existing joint.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PASSED Jan 8 1976

Engineer of Design Operations

APPROVED Jan 8 1976

Engineer of Design

ISSUED 8-12-54

REVISIONS

W.F. 12-9-66

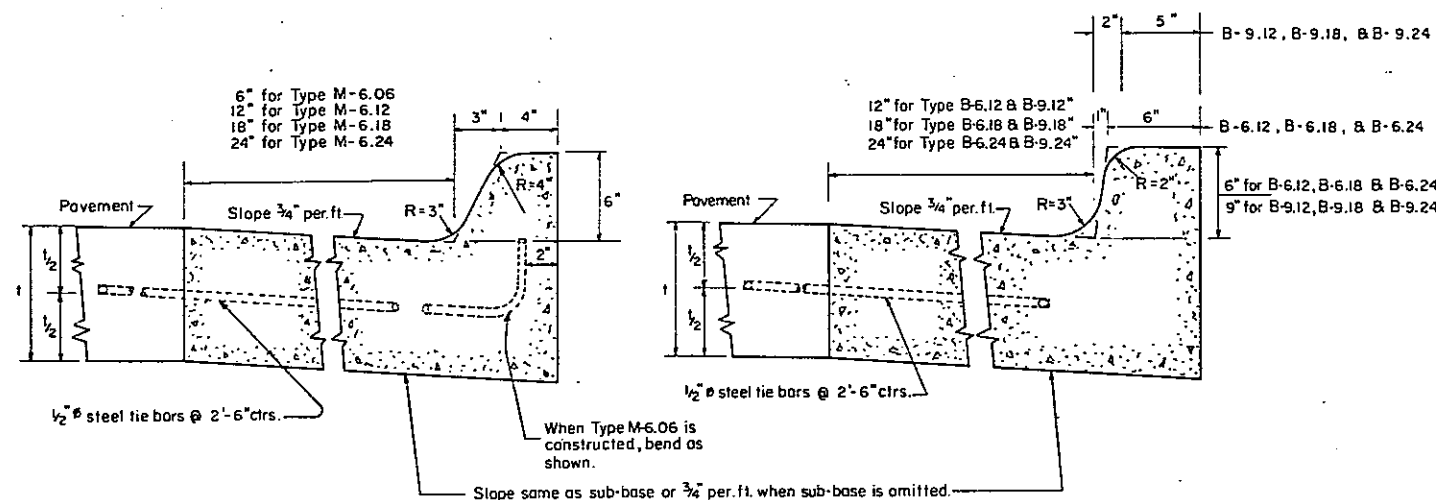
D.W.W. 1-8-76

STANDARD 2116-2

(1/4 Size)

Redrawn W.F.

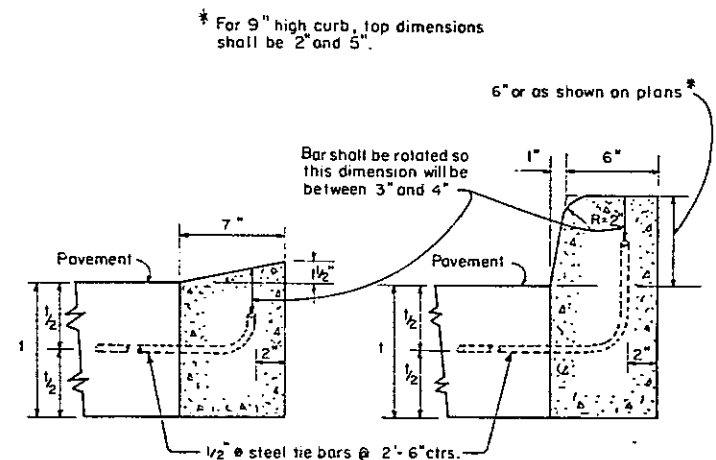
C-75.6 g



MOUNTABLE CURB

BARRIER CURB

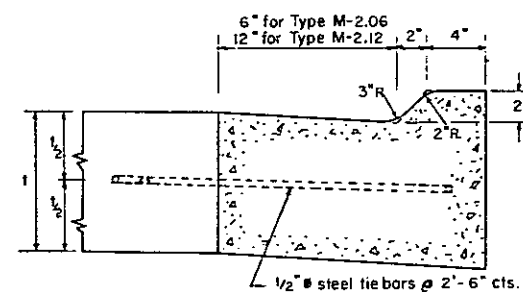
COMBINATION CONCRETE CURB AND GUTTER



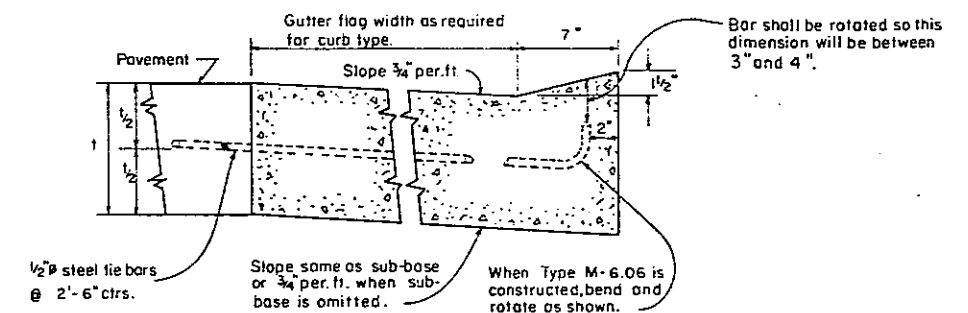
DEPRESSED CURB

BARRIER CURB

CONCRETE CURB TYPE B
ADJACENT TO P.C.C. PAVEMENT OR P.C.C. BASE COURSE



COMBINATION CONCRETE CURB AND GUTTER
TYPE M-2.06 or M-2.12



DEPRESSED CURB

COMBINATION CONCRETE CURB AND GUTTER

GENERAL NOTES

DEPRESSED CURBS - The top of curbs shall be depressed where the curb and gutter is constructed across alleys and for private drives or where directed by Engineer.

THICKNESS - "t" = Thickness of pavement.

DRAINAGE OPENINGS - At all locations where castings are to be incorporated in the curb and gutter, a 1" expansion joint shall be installed in the curb and gutter a distance of 5 ft. from each side of the casting. At least 2 tie bars shall be placed in the 5 ft. portion and the bars shall be at least 9" from the joint or casting. Any extra bars required shall be considered incidental. When the width of the casting is less than the width of the curb and gutter, 2-No. 4 re-bars (L = 12" + casting length + 12") shall be incorporated in the continuous portion of concrete gutter in front of the casting.

TIE BARS - Tie bars shall be in accordance with details for Bulkhead Longitudinal Construction Joint shown on Standard 2323. When curb and gutter is constructed adjacent to flexible pavement, tie bars shall be omitted.

JOINTS - In addition to the requirements of Article 616.08 of the Standard Specifications, joints shall be constructed as follows:

Contraction joints and expansion joints shall be installed in the curb or curb and gutter in prolongation with joints in adjacent P.C.C. pavement or base course except that dowel bars will not be required in contraction joints. Contraction joints, when sawed or template formed, shall be sealed in accordance with Article 408.17(a) of the Standard Specifications.

When curb and gutter is constructed adjacent to flexible pavement, a 1" expansion joint shall be installed at points of curvature for short-radius curves and at construction joints. Contraction joints shall be placed between expansion joints at distances not to exceed 25 ft.

All expansion joints shall be constructed with a minimum 1" thick preformed expansion joint filler conforming to the cross section of the curb and gutter and shall be provided with a 1-1/4" diameter x 18" coated smooth dowel bar conforming to Article 710.14(b) of the Standard Specifications. The dowel bar shall be fitted with a cap having a pinched stop that will provide a minimum 1" of expansion.

Construction joints constructed in curb and gutter adjacent to P.C.C. pavement and P.C.C. base course shall be provided with No. 4 deformed steel tie bars 30" long. Tie bars shall be placed on 9" ± centers (minimum 2 per joint).

TRANSITIONS - The transition from full height curb to depressed curb shall be made at the rate of 3" per foot of length or flatter.

ADJACENT P.C.C. PAVEMENT - Adjacent P.C.C. pavement or base course less than 1' in width shall be constructed monolithically with the curb and gutter. This area of pavement will be included in the measured area of the adjacent pavement.

MONOLITHIC CONSTRUCTION - Curbs and combination curb and gutter may be constructed monolithically with P.C.C. pavement at the option of the Contractor. Tie bars will not be required. Pavement reinforcement shall be extended laterally to within 3" to 5" from the back of the curb.

Curbs and combination curb and gutter may be constructed monolithically with P.C.C. base course. Tie bars will be required. Tie bars shall be held in the proper location by support pins or approved mechanical means.

Longitudinal joints between the P.C.C. pavement or P.C.C. base course and curb or combination curb and gutter will not be required.

SLIPFORM CONSTRUCTION - Vertical faces may be battered at the rate of 3/4" per foot of height to aid in slipform operations.

Illinois Department of Transportation

PASSED Nov. 14, 1984

John E. Jones Jr.
Engineer of Policy and Procedures

APPROVED Nov. 14, 1984

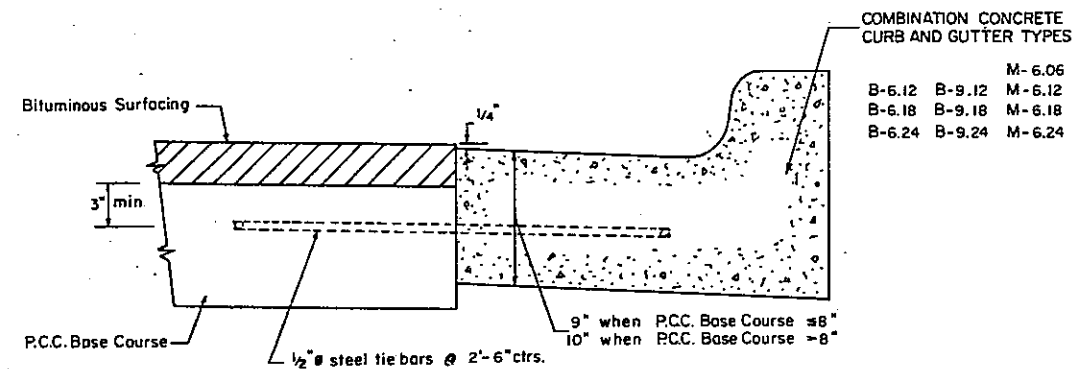
John E. Jones Jr.
Engineer of Design

ISSUED 11/27/81

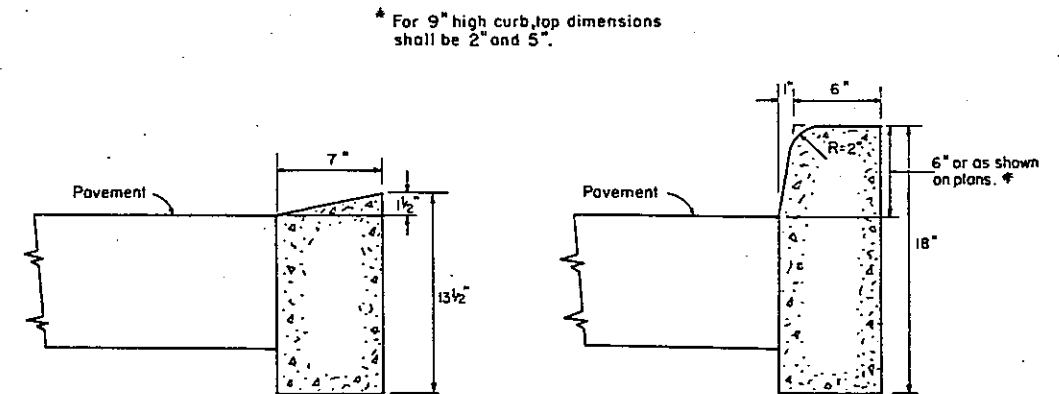
CONCRETE CURB
AND
COMBINATION CONCRETE CURB AND GUTTER

STANDARD 2130-9 (Shl. 1 of 2)

(Full Size) D.W.W. Sr.



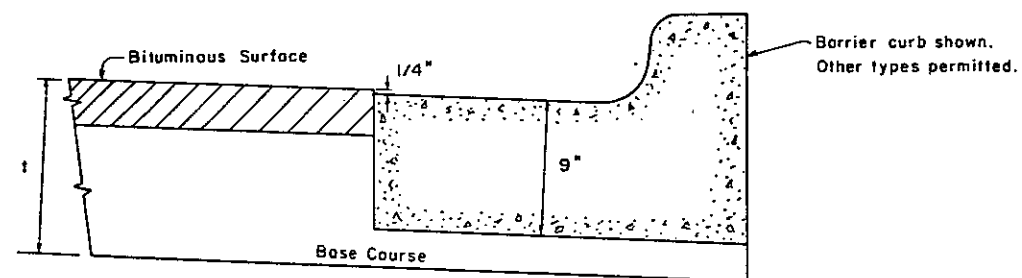
COMBINATION
CONCRETE CURB AND GUTTER ADJACENT TO P.C.C. BASE
COURSE AND BITUMINOUS SURFACING



DEPRESSED CURB

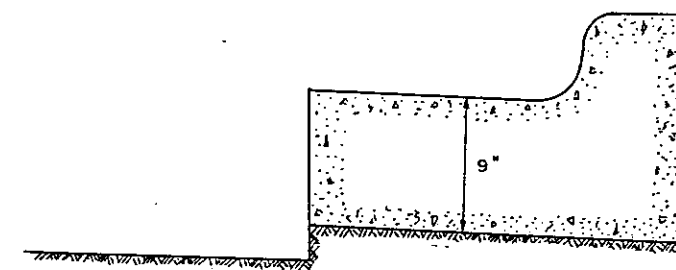
BARRIER CURB

CONCRETE CURB TYPE B
ADJACENT TO FLEXIBLE PAVEMENT



ON DISTURBED SUBGRADE

COMBINATION CONCRETE CURB AND GUTTER
ADJACENT TO FLEXIBLE PAVEMENT



ON UNDISTURBED SUBGRADE

NOTES

The base course located under the curb and gutter will not be measured for payment but shall be included in the unit price bid for COMBINATION CONCRETE CURB AND GUTTER of the type specified.

The dimensions of the curb and gutter, except the thickness, shall conform to those specified for curb and gutter adjacent to P.C.C. pavement.

In lieu of extending the base course under the curb and gutter the curb and gutter may be poured monolithic the full depth of the pavement.

Illinois Department of Transportation

PASSED Nov. 14, 1984
John E. Davis Jr.
Engineer of Policy and Procedures

APPROVED Nov. 19, 1984
John E. Davis Jr.
Engineer of Design

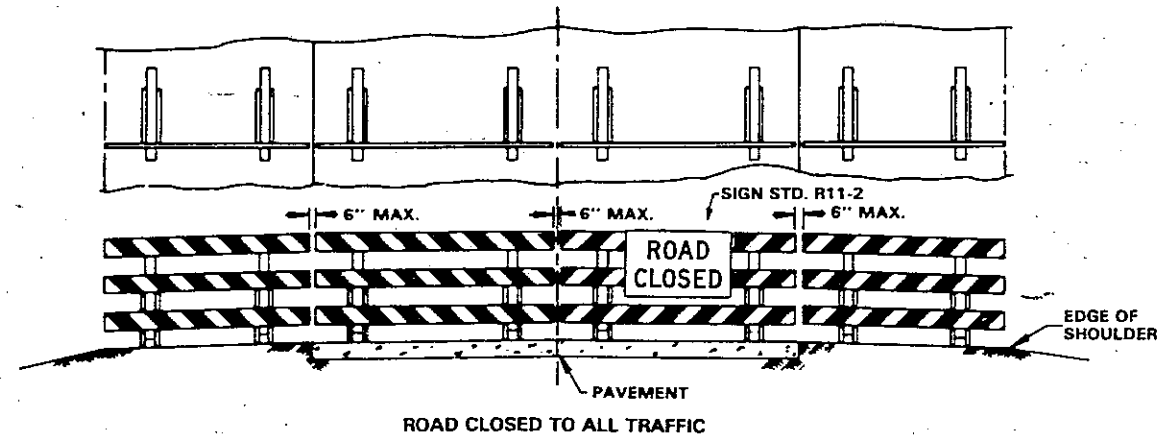
ISSUED 11-27-81

CONCRETE CURB
AND
COMBINATION CONCRETE CURB AND GUTTER

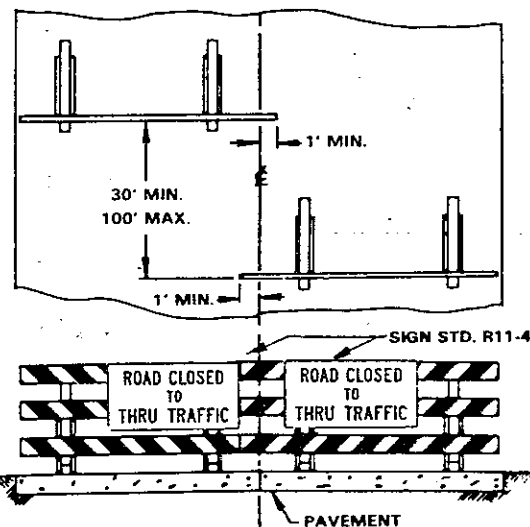
STANDARD 2130-9 (Shl. 2 of 2)

(Full Size) D.W.W. Sr.

TYPICAL APPLICATIONS OF TYPE III BARRICADES CLOSING A ROAD



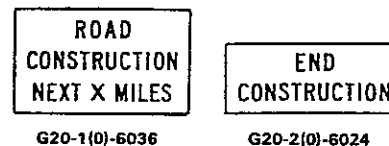
ReflectORIZED striping may be omitted on the back side of the barricades. The barricades shall be to the edge of the shoulders except when otherwise directed by the Engineer or shown on the detailed construction plans.



ROAD CLOSED TO ALL THRU TRAFFIC

ReflectORIZED striping shall appear on both sides of barricades. The barricades shall be to the edge of the pavement, except when otherwise directed by the Engineer or shown on the detailed construction plans.

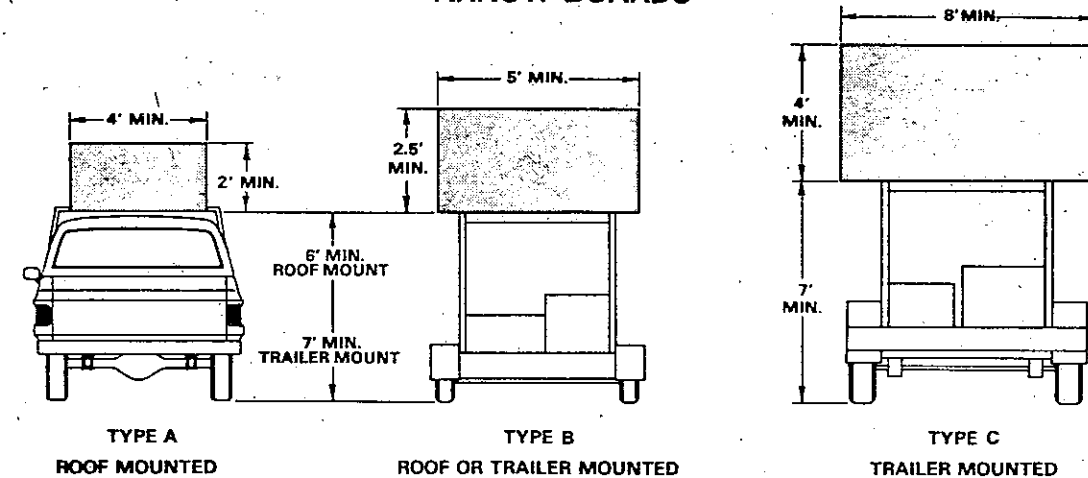
WORK LIMIT SIGNING



X = Distance to END CONSTRUCTION sign

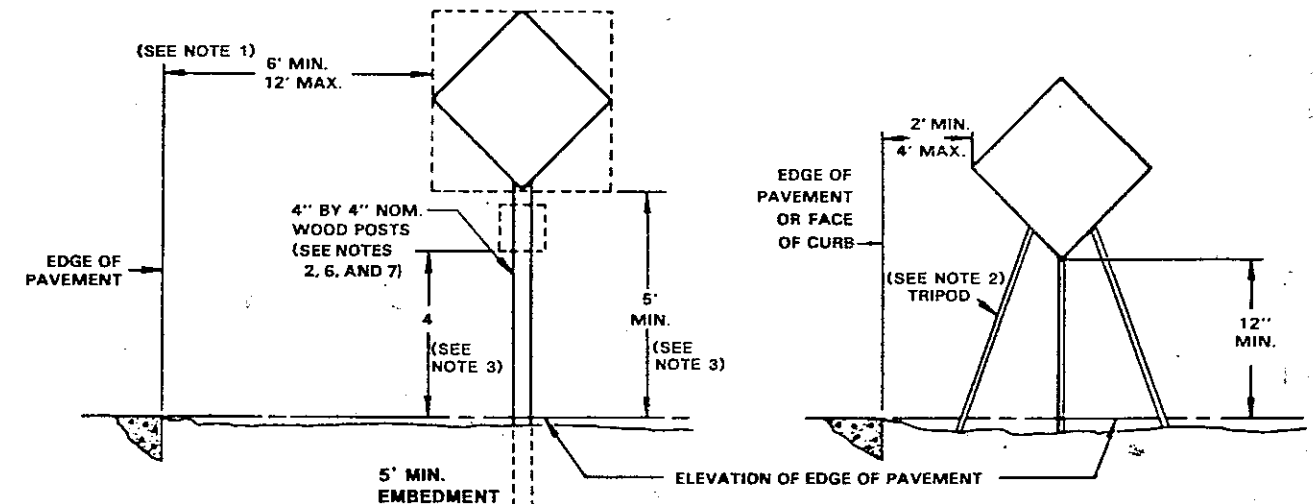
ROAD CONSTRUCTION NEXT X MILES and END CONSTRUCTION signs shall be erected at or near the limits of all projects over two miles in length. The signs shall be placed at least 500 feet from any other construction warning sign. The END CONSTRUCTION sign shall be omitted or covered when ever another project is within 2 miles beyond the end of the job.

ARROW BOARDS



Arrow boards shall conform to Article 718.22 of the Standard Specifications. On roads with speeds of 45 miles per hour and above, Type C units are to be used for all operations 24 hours or more in duration and Type B units may be used for operations less than 24 hours in duration. Type A, B or C units may be used for all operations on roads with speeds less than 45 miles per hour. Arrow boards shall not be used to direct passing moves into lanes used by opposing traffic.

TYPICAL SIGN INSTALLATIONS



- 2 ft. minimum to face of curb.
- Alternate designs and or materials may be permitted when authorized by the Engineer. All materials shall be substantial and durable.
- Add 2 ft. if parking exists within 200 ft. in advance of the sign location or if pedestrian movement is likely to occur at any time during the project.
- Signs on temporary supports shall be within 20° of a vertical position.
- Weights of concrete, stone, or brick will not be allowed and all weights used to stabilize signs other than sandbags must be rigidly attached to the sign support as close to the ground as possible.

- Two posts shall be used for signs greater than 16 sq. ft. in area or where the height between the sign and the ground exceeds 7 ft. Bracing no heavier than 2" x 4" wood may be used for added support. Any brace placed parallel to the road shall be sloped down toward approaching traffic.
- If approved by the Engineer, skids may be used to support signs where posts are impractical. If used, they shall not exceed the structural design of Type III barricades and shall be no greater than 4 ft. in length.

TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES
HIGHWAY CONSTRUCTION AND CONTRACT MAINTENANCE

SHEET 1 OF 2

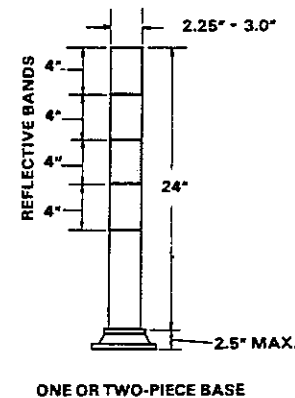
STANDARD 2298-7

FLEXIBLE DELINEATORS

Flexible delineators shall be tubular in shape and designed to bend under repeated impacts and return to an upright position without damage to the impacting vehicle or the tubes. They shall be attached to the pavement with epoxy meeting the recommendations of the delineator manufacturer. The use of studs will not be permitted without the approval of the Engineer.

The tubes shall be orange in color and have two reflectorized orange and two reflectorized white bands meeting the requirements for signs Article 718.17 of the Standard Specifications.

The tubes shall be readily removable from the bases to permit field replacement. All missing or severely damaged tubes shall be replaced prior to suspension of work each working day and once each non-working day on a schedule approved by the Engineer.



ONE OR TWO-PIECE BASE

The stripes shall be 6 inches wide, alternating reflectorized orange and reflectorized white, sloping downward at 45° toward the side on which traffic will pass. The reflective sheeting shall meet the requirements of Articles 718.17 and 718.18 of the Standard Specifications.

Sand bags may be placed on the legs for ballast. No other types of weights will be allowed.

Flashing lights shall be used during hours of darkness and shall be mounted above the top rail of the side nearest traffic.

Barricade rails shall be wood (no thicker than 1"), sheet aluminum, plastic or fiberglass.

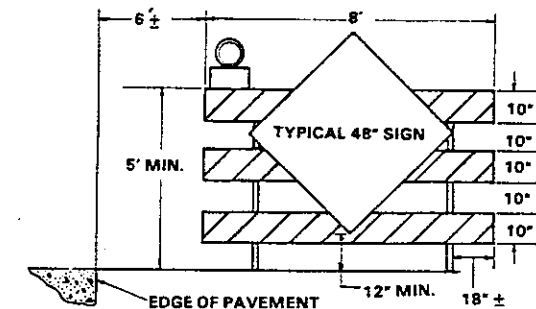
The optional back bracing shown on the wood or metal barricade may be used provided it attaches to the upright no higher than 12 inches above the bottom and provided that if wood is used, the bracing shall be no heavier than 2 inches by 4 inches in size.

Other light weight designs may be used with the approval of the Engineer.

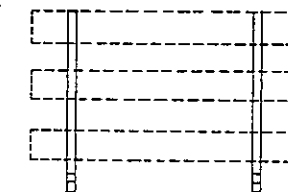
All heights shown shall be measured above the pavement surface.

The name of the agency, contractor, or supplier shall not be shown on the face parts of any barricades, whether such parts are striped or not. Identification markings may be placed only on the back side of the barricade rails.

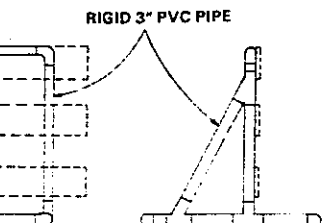
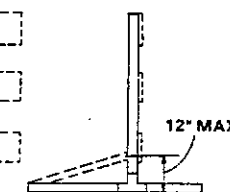
WING BARRICADES



FRAMES SHALL BE NO HEAVIER THAN:
4" x 4" WOOD OR
2" x 2" x 1/8" STEEL TUBING OR
2" x 2" x 3/16" STEEL ANGLES



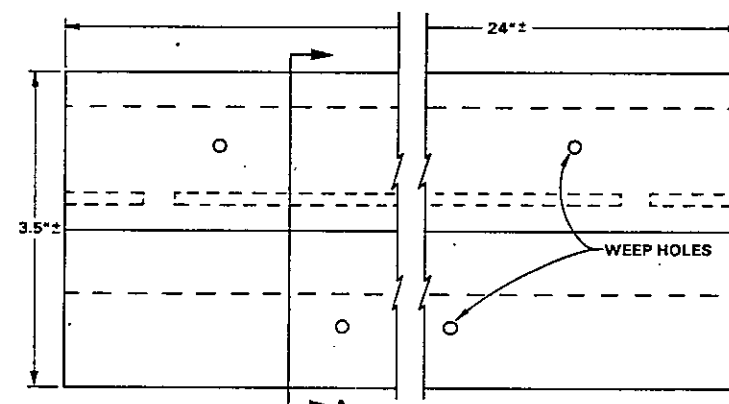
WOOD OR METAL SUPPORTS



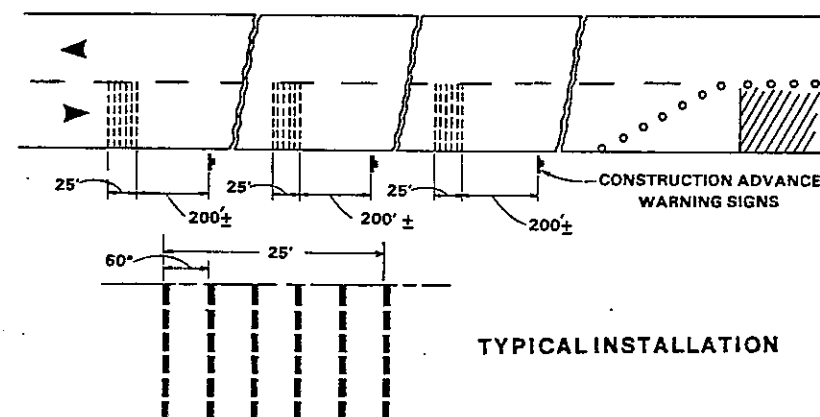
PVC PIPE SUPPORTS

TYPICAL DESIGNS

TEMPORARY RUMBLE STRIPS



TRAFFIC



TYPICAL INSTALLATION

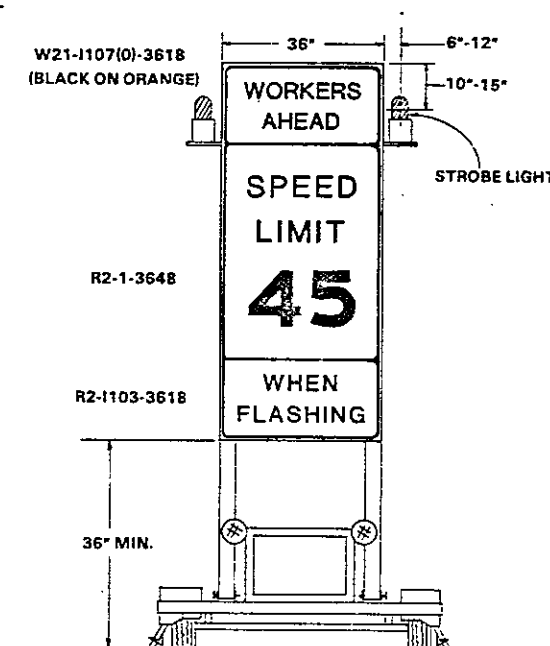
The rumble strip shall be black in color and formed of high strength formed polycarbonate. It shall be of one-piece construction with two channels on the underside for flexibility and proper epoxy bondage. The channels shall be interconnected at four or more locations to permit epoxy to flow from one channel to the other. There shall be at least six weep holes through one or both channels to the upper surface of the strip and at least four through the leading edge of the strip to prevent air voids between the strip and the epoxy.

The rumble strip shall support a load of 6,000 pounds. This shall be determined by placing a strip over the open end of a one-inch high vertically-positioned hollow metal cylinder having an internal diameter of 3 inches and a wall thickness of 0.25 inches. The load shall be applied slowly through a one-inch diameter by one-inch high metal rod centered on the top flat portion of the strip. (No weep holes shall be in the compression area.) Breakage or significant permanent deformation of the strip shall constitute failure.

The strips shall be placed end to end and extend completely across the traffic lane. They shall be attached to the pavement with an epoxy meeting the recommendations of the rumble strip manufacturer.

Other similar designs may be used with the approval of the Engineer.

CONSTRUCTION SPEED LIMIT SIGN



The sign assembly may be trailer, post, or skid-mounted. If trailer-mounted, the trailer shall conform to Article 718.23 of the Standard Specifications.

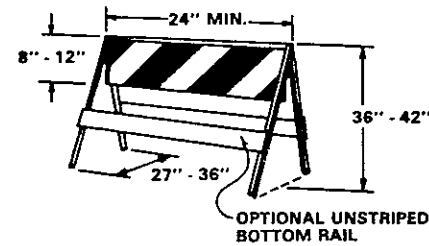
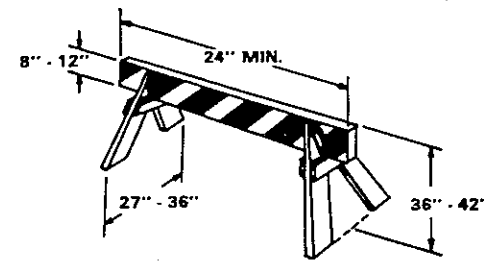
All signs shall be reflectorized meeting the requirements of Article 718.17 of the Standard Specifications. The signs may be combined on a single panel.

The strobe lights shall be 12 VDC, battery powered units with amber Fresnel lenses. The input current shall be less than 1.75 volts with a light intensity of 8 Joules (watt-seconds) at a flash rate of 70 to 80 flashes per minute. The lights shall have an operating range of -40° F to +140° F. Each light shall be fully visible through an arc of approximately 120° when viewed facing the sign. The lights shall be shielded so that they will not be directly visible from the rear.

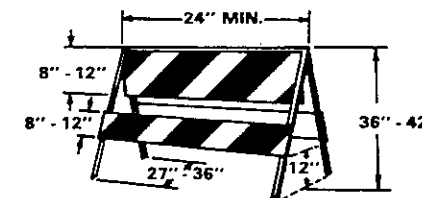
The assembly shall only be used where specified or when approved by the Engineer. The strobe lights shall be activated only when workers are present in a closed lane adjacent to one open to traffic. At all other times, the lights shall be turned off and the sign may be removed. The speed limit to be shown shall be 10 miles per hour below the normal posted speed limit. The sign shall not be used where the normal posted speed limit is below 45 miles per hour.

A-A
DETAIL OF RUMBLE STRIPS

TYPE I BARRICADES



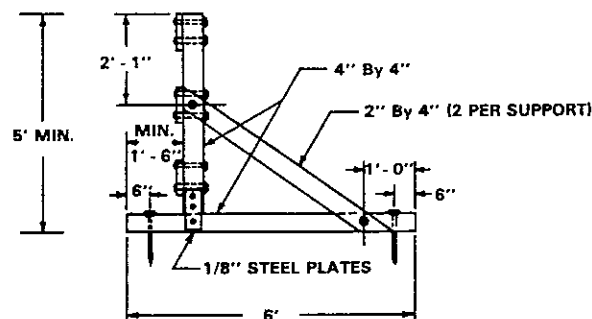
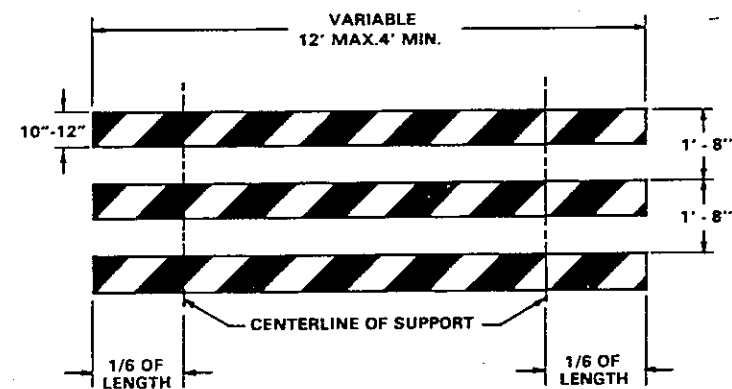
TYPE II BARRICADES



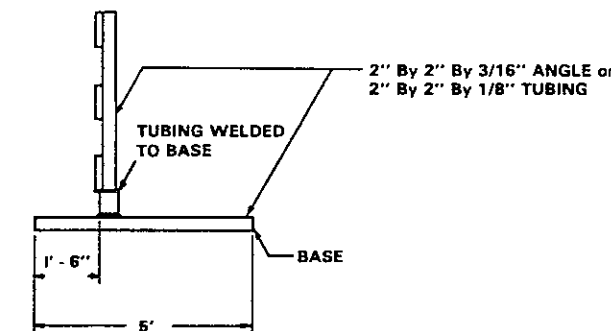
GENERAL NOTES

1. Type I Barricades are intended for use on lower speed roads and shall not be used where normal speeds are greater than 40 MPH unless the reflective area of the upper rail is at least 288 square inches.
2. Type I and Type II Barricades shall not be intermixed within an individual string of barricades.
3. Type III Barricades are intended for road and lane closures and shall not be used for channelization or delineation.
4. All heights shown shall be measured above the pavement surface.
5. The reflective sheeting used for barricades, drums, and vertical panels shall meet the requirements of Article 718.17 and 718.18 of the Standard Specifications for Road and Bridge Construction.
6. All barricades and vertical panels shall have alternating reflectorized white and reflectorized orange stripes sloping downward at 45° toward the side on which traffic will pass. Barricade stripes shall be 6 inches in width on barricades 36 inches or greater in length and 4 inches in width on barricades less than 36 inches in length. Type I and Type II Barricades shall be striped on both sides. Type III Barricades shall be striped on both sides where traffic approaches from either direction. Vertical panels placed on the outside of curves shall be striped on both sides.
7. Drums shall be non-metallic and have alternating reflectorized orange and reflectorized white horizontal, circumferential stripes 4 inches to 8 inches in width. There shall be at least two orange and at least two white stripes on each drum. If nonreflective spaces are left between the orange and white stripes, they shall be no more than 2 inches in width. All nonreflectorized portions of the drums shall be orange or white. Drums may be slightly conical in shape and may have one or more flat surfaces to minimize rolling when hit.
8. Frames for Type I and Type II Barricades shall be designed so as to provide a stable support and should be constructed of light weight steel or aluminum angles or tubing, wood, plastic, or rubber and have no rigid stay bracing for "A" frame designs. As Type III Barricades are only used at closures, they may be constructed of heavier materials than Type I or Type II Barricades. However, they should not have any vertical or sloping supports heavier than 4-inch by 4-inch lumber, 2-inch by 2-inch by 1/8-inch steel tubing, or 2-inch by 2-inch by 3/16-inch steel angles.
9. Barricade rails shall be no heavier than 1-inch thick lumber or plywood except for the "sawhorse" design Type I Barricade which may have a rail no heavier than 2-inch thick lumber. Other light weight weather resistant materials such as plastic, fiberglass or sheet aluminum may be used. Barricade rails may be sloping or vertical.
10. The name of agency, contractor, or supplier shall not be shown on the face parts of any barricades, whether such parts are striped or not. Identification markings may be placed only on the back side of the barricade rails.
11. When used, warning lights on barricades, drums, or vertical panels shall be mounted above the top of the device to the side on which traffic will pass and shall not obscure any reflectorized portion of the device.
12. Weights of concrete, stone, or brick will not be allowed and all weights used to stabilize barricades other than sandbags must be rigidly attached to the legs of the barricades as close to the ground as possible. No sandbags will be allowed on the top rail of barricades. Sandbags may be placed on barricade legs, over striped bottom rails not facing traffic, over unstriped bottom rails, or suspended from the barricade rail or frame in such a manner so that the bulk of the sand is at least 18 inches below the top of the barricade. Drums may be weighted internally with just enough sand, water, or other material to provide stability.
13. Cones shall be constructed of durable material able to withstand abuse by vehicular traffic. Minimum weights shall be 4 pounds for 18 inch, 7 pounds for 28 inch, and 10 pounds for 36 inch cones with a minimum of 60 percent of the total weight in the base. On fully access-controlled facilities, cones shall be a minimum of 20 inches in height.

TYPE III BARRICADES

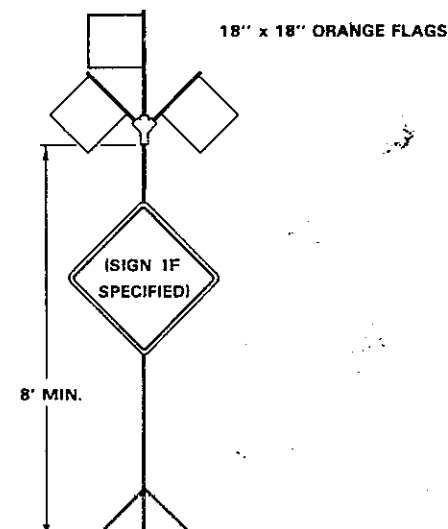


TYPICAL WOOD SUPPORT

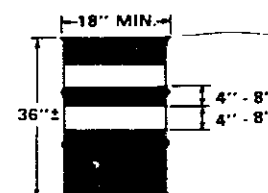


TYPICAL STEEL SUPPORT

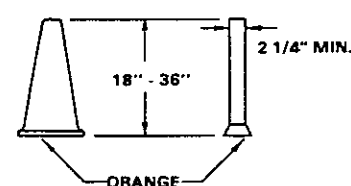
HIGH LEVEL WARNING DEVICE



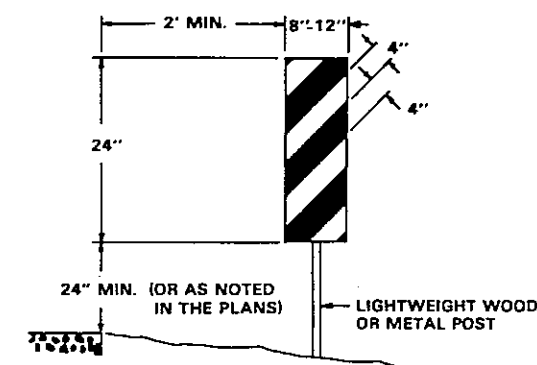
DRUMS

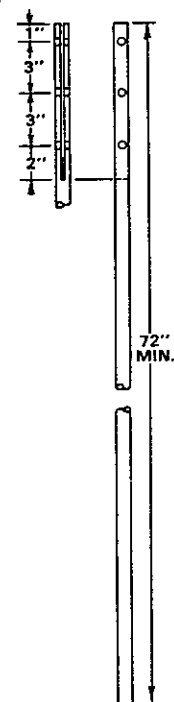


CONES

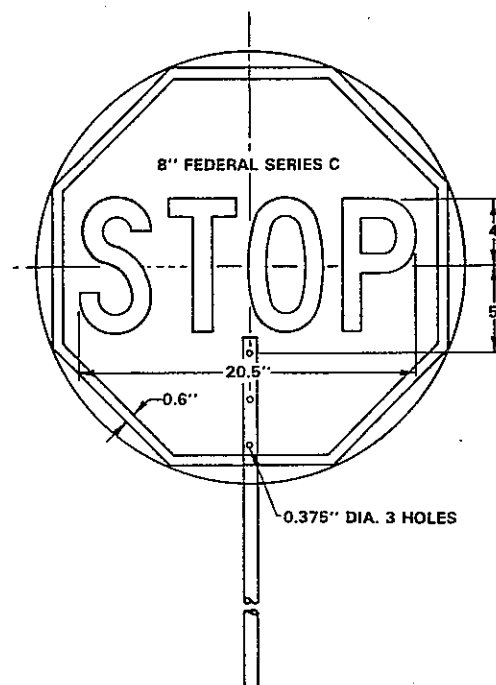


VERTICAL PANELS

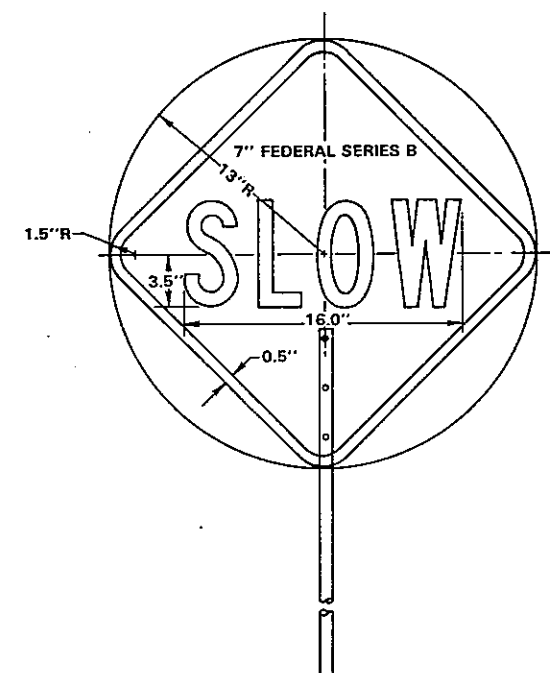




STAFF



FRONT SIDE

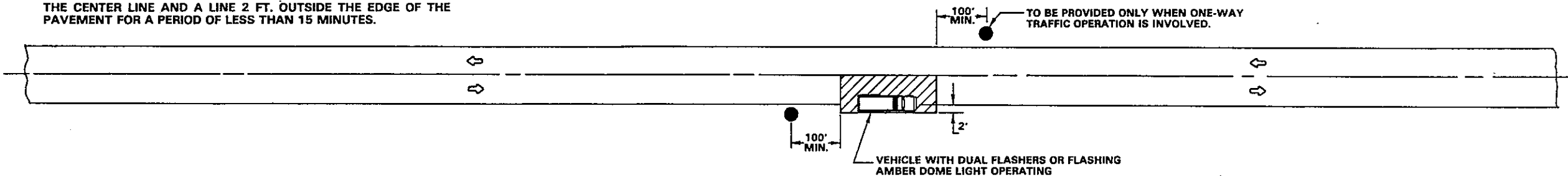


REVERSE SIDE

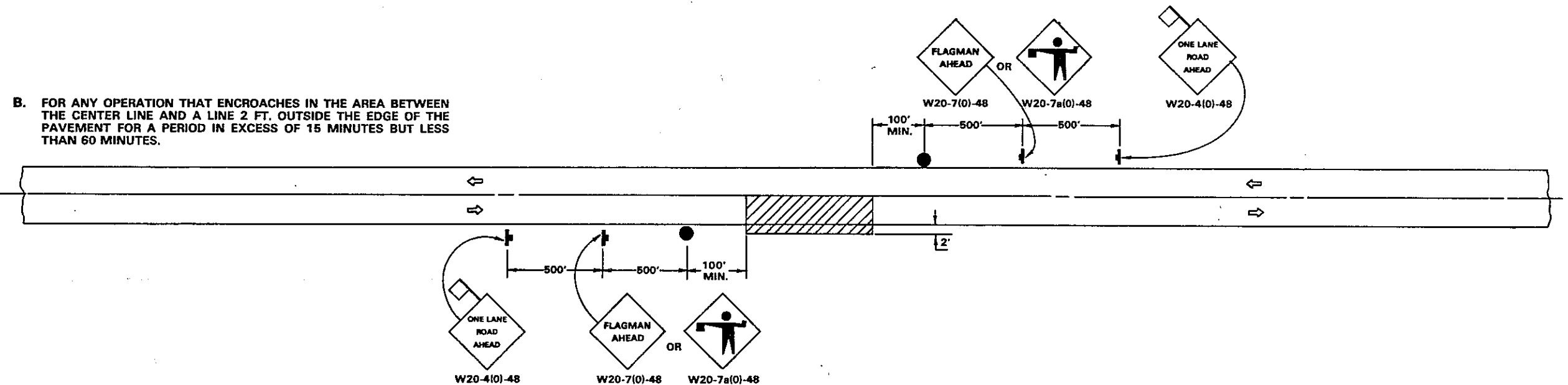
GENERAL NOTES

1. The "STOP" face shall consist of white letters and border on a red reflectorized background.
2. The "SLOW" face shall consist of black letters and border on an orange reflectorized background.
3. Areas outside sign borders shall be light blue or black.
4. The sign blank may be octagonal in shape in lieu of circular.
5. The portion of the staff within the sign face shall match the sign colors.
6. All colors and letters shall meet applicable federal standards.
7. The staff shall consist of two sections joined by a coupling located 60 in. from the bottom of the staff. Alternate designs may be used when approved by the Engineer. All materials shall be substantial and durable.
8. This sign shall be furnished by the contractor and shall be used by the flagger in lieu of flags or other signaling devices. The cost of furnishing and maintaining the sign shall be considered incidental to the contract and no additional compensation will be allowed.

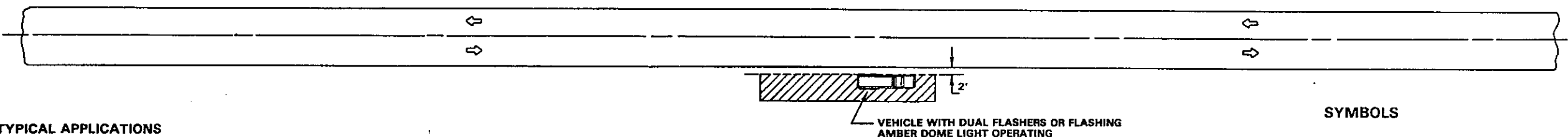
A. FOR ANY OPERATION THAT ENCROACHES IN THE AREA BETWEEN THE CENTER LINE AND A LINE 2 FT. OUTSIDE THE EDGE OF THE PAVEMENT FOR A PERIOD OF LESS THAN 15 MINUTES.



B. FOR ANY OPERATION THAT ENCROACHES IN THE AREA BETWEEN THE CENTER LINE AND A LINE 2 FT. OUTSIDE THE EDGE OF THE PAVEMENT FOR A PERIOD IN EXCESS OF 15 MINUTES BUT LESS THAN 60 MINUTES.



C. FOR ANY OPERATION THAT IS MORE THAN 2 FT. OUTSIDE THE EDGE OF THE PAVEMENT FOR A PERIOD OF LESS THAN 60 MINUTES.



TYPICAL APPLICATIONS

Marking Patches

Field Survey

String Line

Utility Operation

Cleaning Up Debris on Pavement

GENERAL NOTES

1. Construction operations shall be confined to one traffic lane. On two-lane roads, at least 500 ft. of both traffic lanes shall be available for traffic movement at intervals not greater than 1,000 ft. and a complete traffic control plan must be approved for any project expected to exceed 1,000 ft. in length.
2. The flaggers shall be in sight of each other or in direct communication at all times.
3. All signs are to be removed at completion of each operation.

4. For multilane roadways the flagger shown for traffic approaching from the opposite direction will be positioned as directed by the Engineer, the advance warning signs for traffic approaching from the opposite direction omitted, and the ONE LANE ROAD AHEAD sign changed to RIGHT (LEFT) LANE CLOSED AHEAD.

5. Longitudinal dimensions may be adjusted to fit field conditions. The lateral placement of the flaggers may be varied from that shown.

SYMBOLS

- Work Area
- 18 in. X 18 in. (minimum) Orange Flag
- Sign on Portable or Permanent Support
- Flagger with Traffic Control Sign

Illinois Department of Transportation

Approved October 21, 1983

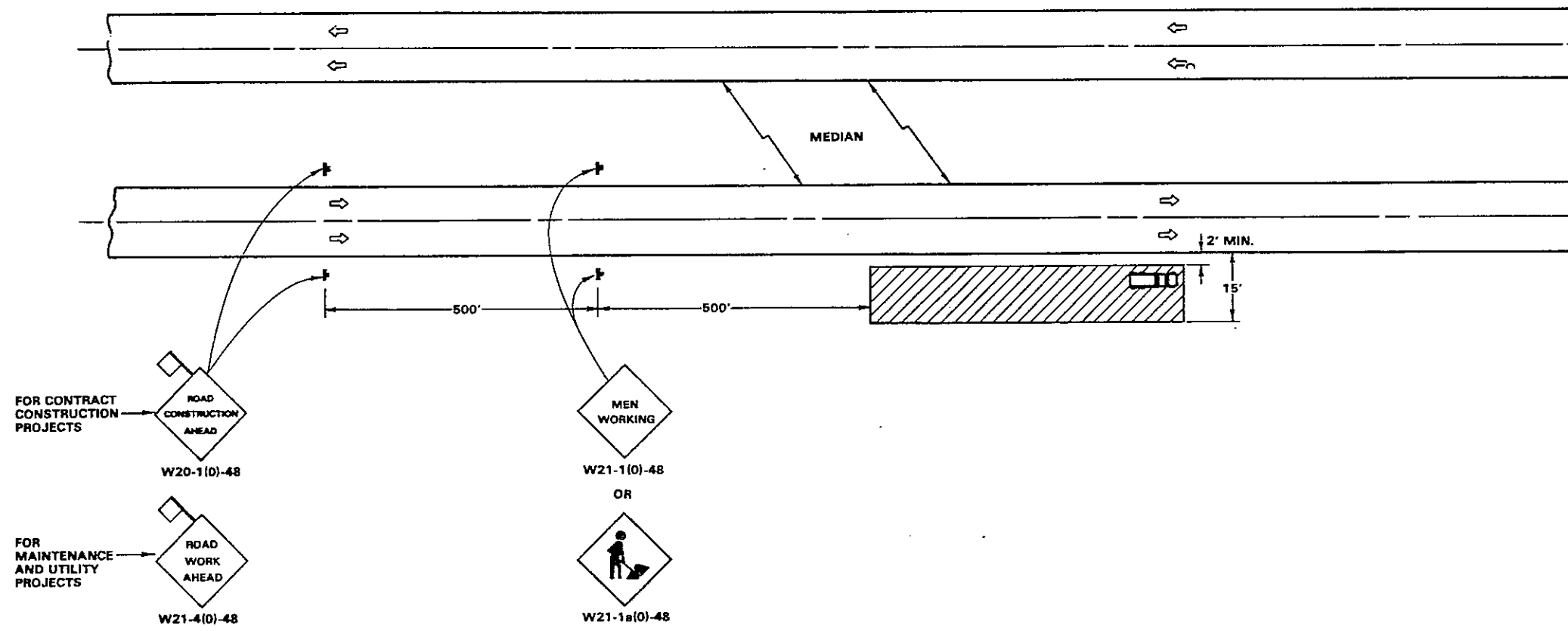
W.D. Schmidt
Engineer of Traffic

Issued 8-8-83

TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES HIGHWAY CONSTRUCTION AND CONTRACT MAINTENANCE

SHORT-TIME OPERATIONS
DAY OR NIGHT OPERATIONS

STANDARD 2307-6



TYPICAL APPLICATIONS

Utility Operations
Culvert Extensions
Side Slope Changes
Guard Rail Installation and Maintenance
Delineator Installation
Landscaping Operations
Sign Installation and Maintenance
Shoulder Repair

GENERAL NOTES

1. If the work operation does not exceed 60 minutes, traffic control may be in conformance with STANDARD 2307.
2. Worker signs are to be removed when no work is being performed. Any unattended obstacle or excavation in the work area which in the opinion of the Engineer constitutes a hazard shall be protected by barricades at 50 ft. centers, with flashing lights at night. If the hazard exceeds 100 ft. in length, steady burning lights shall be substituted for flashing lights. When the distance is greater than 250 ft., barricade spacing may be increased to 100 ft.
3. If the work operation requires that four or more work vehicles enter through traffic lanes in a one hour period, a flagger shall be provided and a Flagger sign shall be substituted for the Worker sign.
4. Signs mounted in the median may be omitted when the median is less than 10 feet wide.
5. This standard also applies when work is being performed on a multilane undivided highway. Under these conditions the signs normally mounted in the median shall be omitted.
6. Longitudinal dimensions may be adjusted to fit field conditions.

SYMBOLS

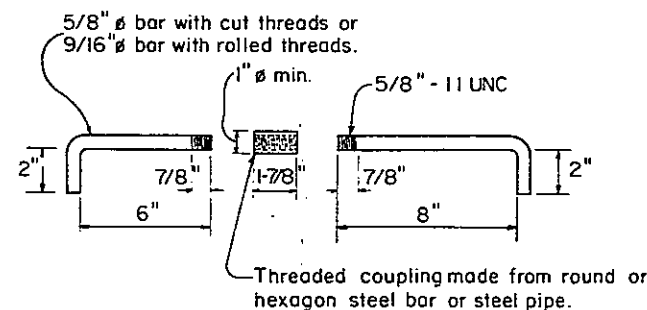
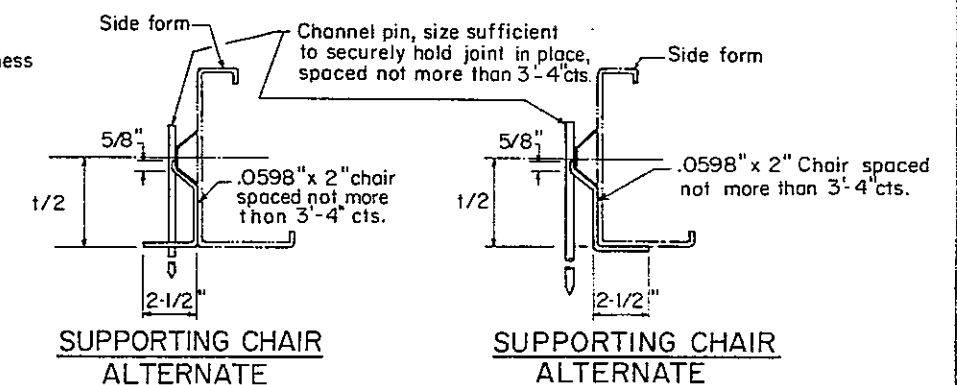
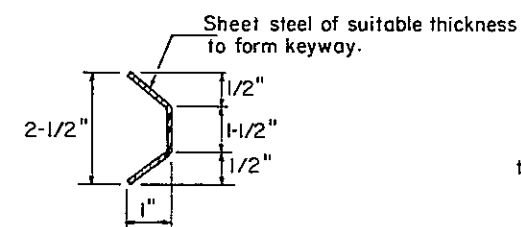
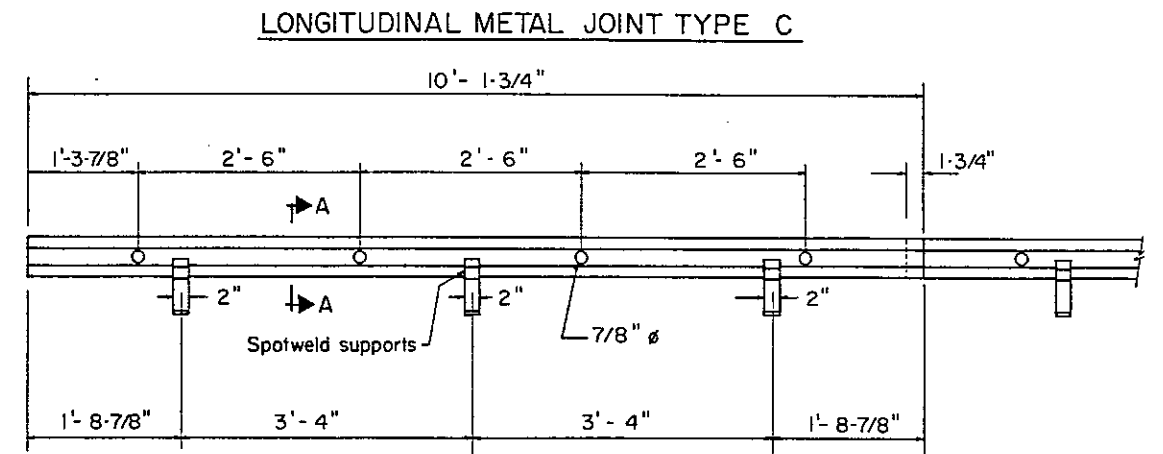
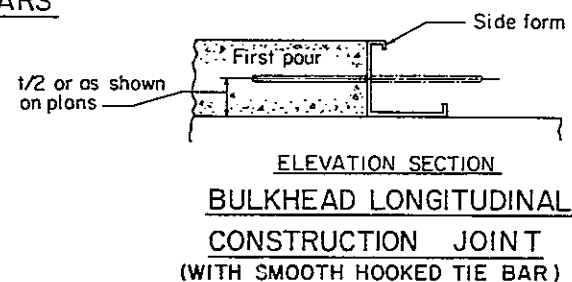
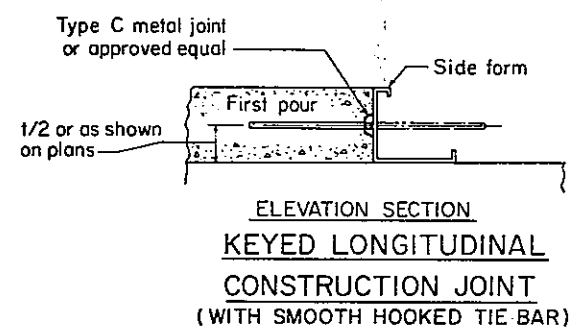
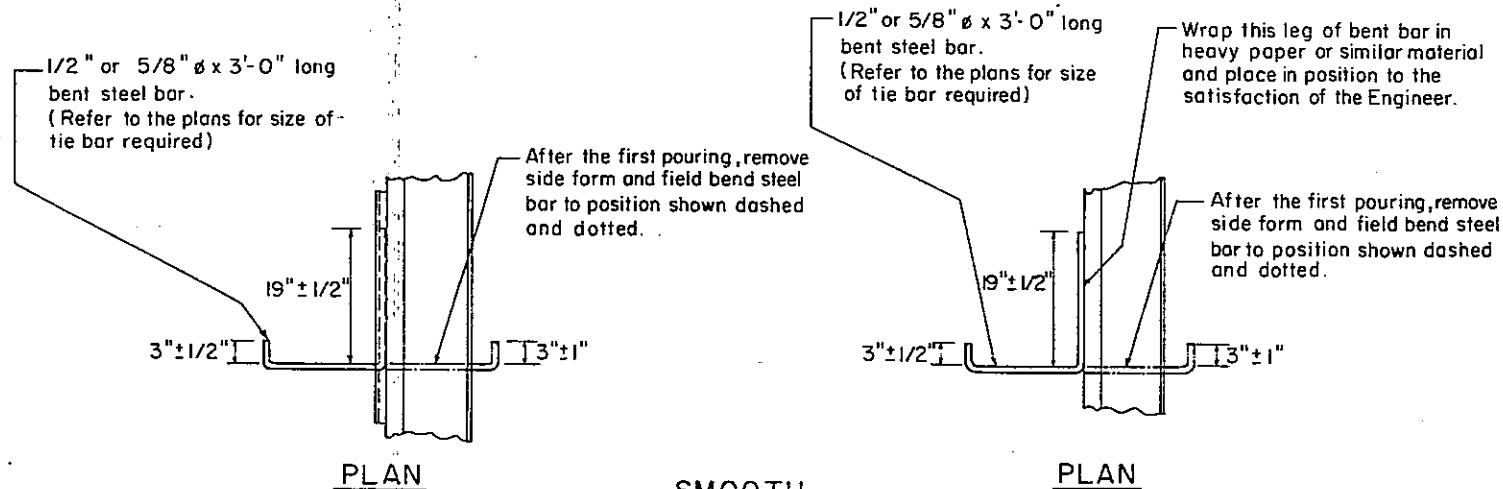
- Work Area
- 18 in. X 18 in. (minimum) Orange Flag
- Sign on Portable or Permanent Support

TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES HIGHWAY CONSTRUCTION AND CONTRACT MAINTENANCE

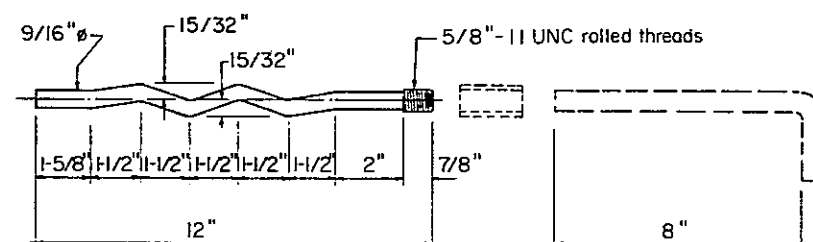
MULTILANE, DIVIDED AND UNDIVIDED,
RURAL DAY OR NIGHT OPERATIONS.

Where at any time, any vehicle, equipment, workers or their activities will encroach in the area closer than 15 ft. but not closer than 2 ft. to the edge of pavement.

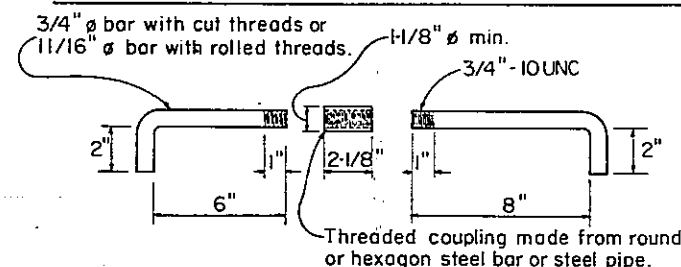
STANDARD 2314-5



DETAIL OF HOOKED BAR WITH 5/8" THREAD



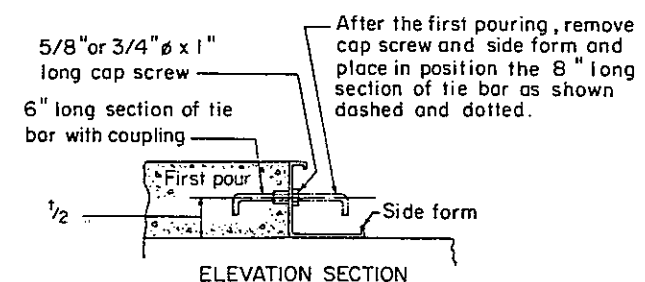
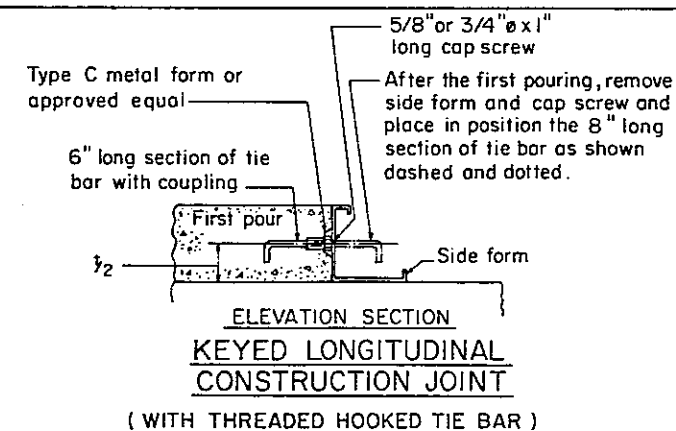
DETAIL OF OPTIONAL "W" BAR



DETAIL OF HOOKED BAR WITH 3/4" THREAD

THREADED HOOKED TIE BARS

NOTE:
Refer to the plans for size of tie bar required.
Use the hooked bars with 5/8" thread when 1/2" ϕ tie bars are specified and with 3/4" thread when 5/8" ϕ tie bars are specified.



GENERAL NOTES

The bent steel bars shall be plain, round bars conforming to the requirements of AASHTO M-31 or M-53 grade 40.

Hex head bolts meeting the requirements of Article 710.12 of the Standard Specifications may be used in lieu of the hooked tie bar. Minimum embedment shall be 4" for 5/8" bolts and 6" for 3/4" bolts.

The steel pipe for the threaded coupling shall be ASTM A-53, Types E or S, Grade A or equivalent.

The Contractor may use at his option for form paving or slip form paving, either the smooth hooked tie bars or the threaded hooked tie bars, as detailed, or deformed tie bars as noted below.

Deformed bar conforming to the requirements of AASHTO M-31 or M-53 may be used for tie bars in lieu of smooth or threaded hooked tie bars, except that the elongation shall not be less than .20%. Deformed tie bars shall be comparable in size to the smooth bar, 2'-6" long, without hooks at the ends.

Support pins for tie bars, when required, shall be of a size and strength sufficient to firmly hold the bar in place.

t = thickness.

Illinois Department of Transportation

PASSED July 29 1986
Engineer of Policy and Procedures

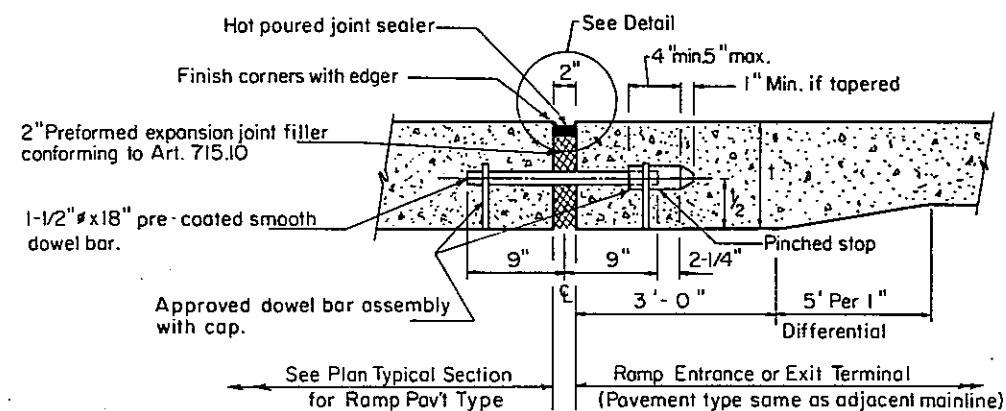
APPROVED July 29 1986
Engineer of Design

ISSUED 10-15-68

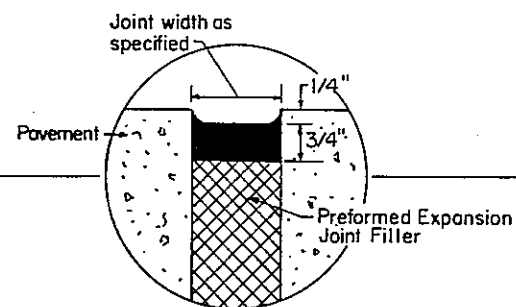
PAVEMENT JOINTS

STANDARD 2323-7

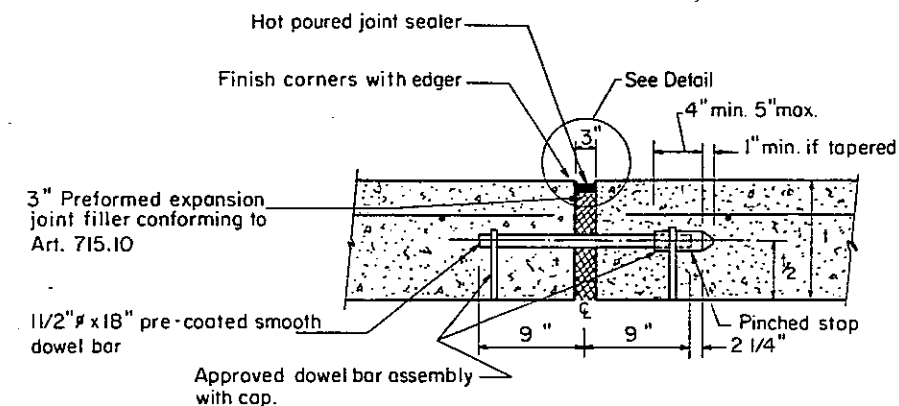
Full Size D.W.W. Sr



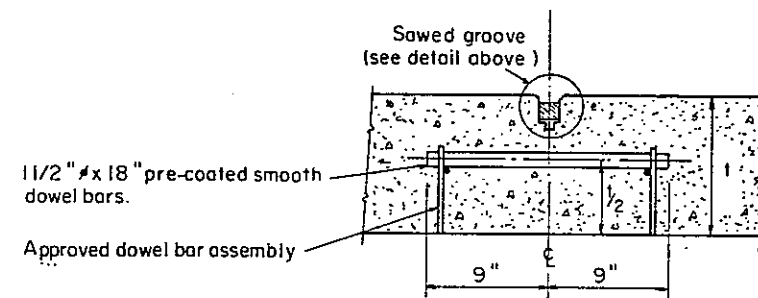
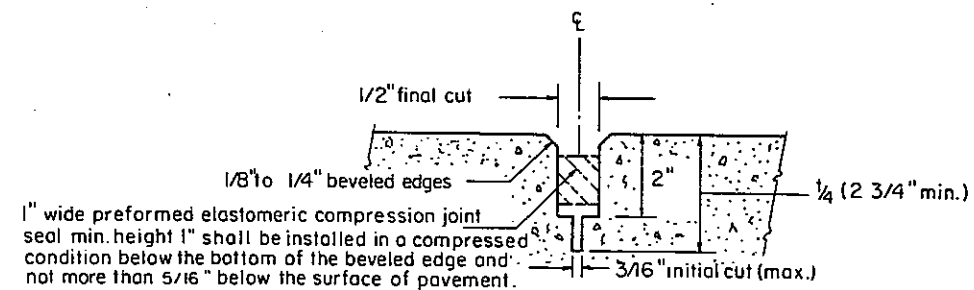
DETAIL OF EXPANSION JOINT
(AT Entrance and Exit Ramp Terminals)



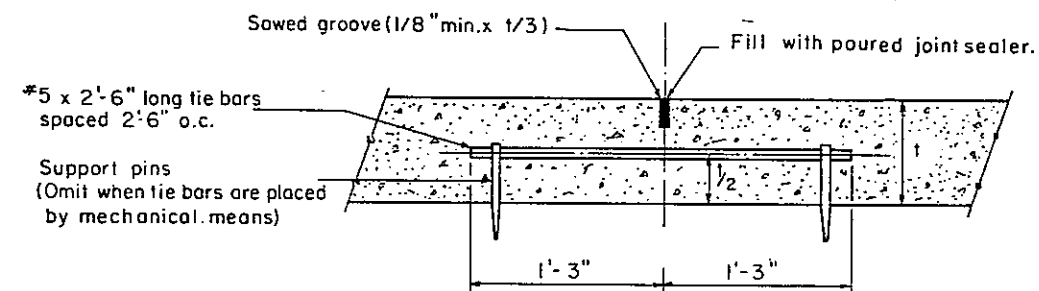
EXPANSION JOINT SEALING DETAIL



DETAIL OF EXPANSION JOINT
(At termination of CRC pavement)

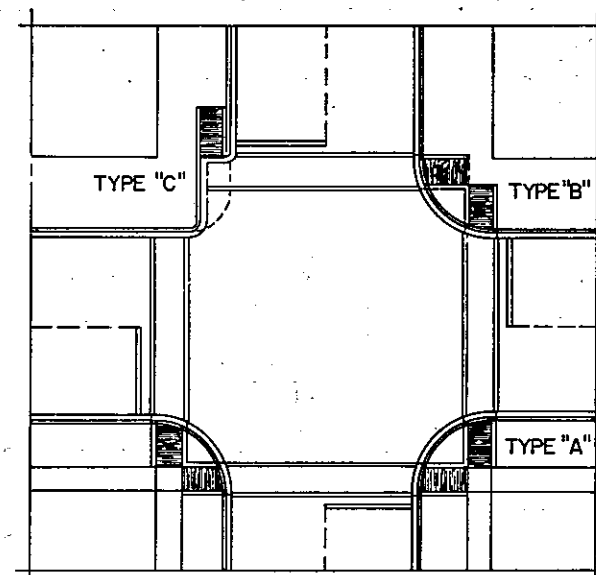


DETAIL OF SAWED CONTRACTION JOINT

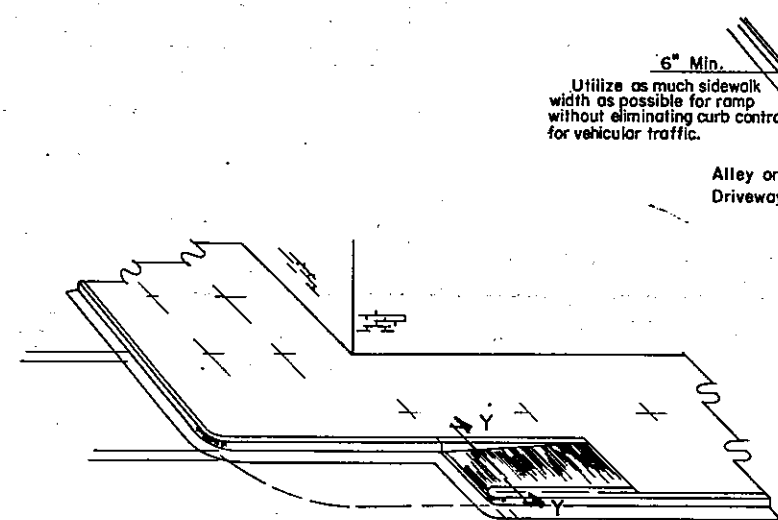


DETAIL OF SAWED LONGITUDINAL JOINT

SIDEWALK RAMPS FOR THE HANDICAPPED

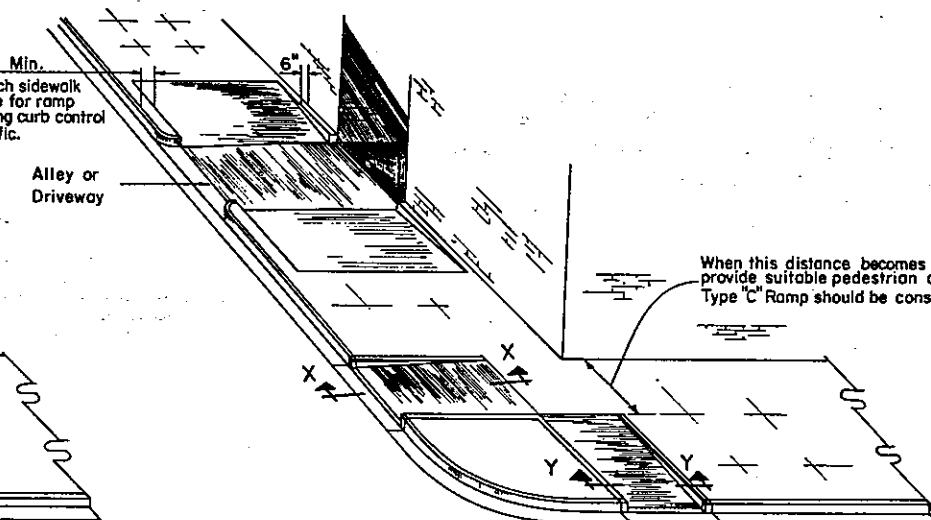


RECOMMENDED LOCATION OF
RAMPS

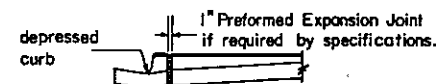


TYPE "C" RAMP

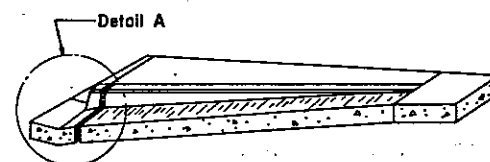
Gutter for Type "C" Ramp will be continued through ramp area unless field conditions do not warrant its use for drainage purposes.



TYPE "B" RAMP

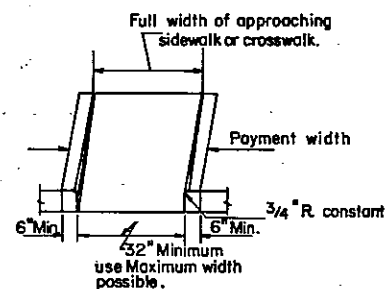
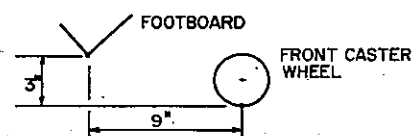


DETAIL A



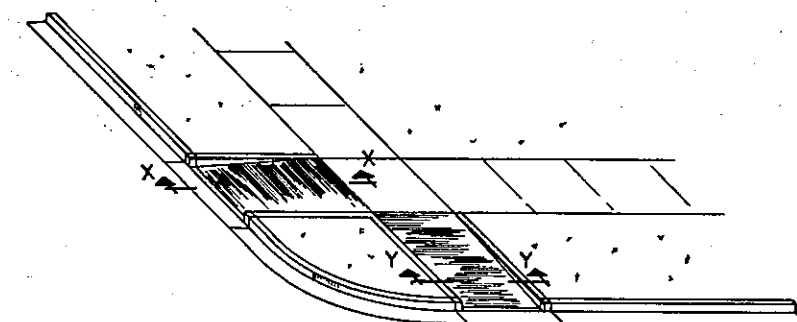
SECTION X-X

NOTE: Gradients of pavement and sidewalk ramps should be checked to insure that safe operation of a wheelchair at the point of gradient intersection is provided. The check shall be made by using the wheelchair control dimensions shown below.



VIEW Y-Y

Type "C" Ramp use 32" width



TYPE "A" RAMP

GENERAL NOTES

Ramps shall be located as shown on plans with consideration given to alignment with normal sidewalk or crosswalk and maintenance of sufficient curb length at corner radius to prevent vehicular encroachment.

Ramps shall not have a slope greater than 1" per ft. except where buildings or other restrictions will not permit.

Ramps shall be constructed of P.C. Concrete in accordance with Art. 624 of the Standard Specifications except a transverse rough broom finish will be provided.

Thickness of ramps will be the same as the adjacent sidewalk with a minimum of 4" and will be paid for at the unit price per square foot for P.C. Concrete Sidewalk of thickness specified. Price shall include all required expansion joints and variable height edge treatment.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

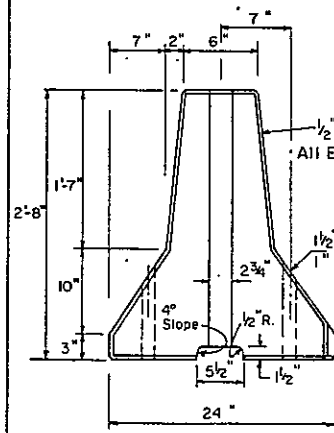
ISSUED 1-2-75
REVISIONS

PASSED 1975

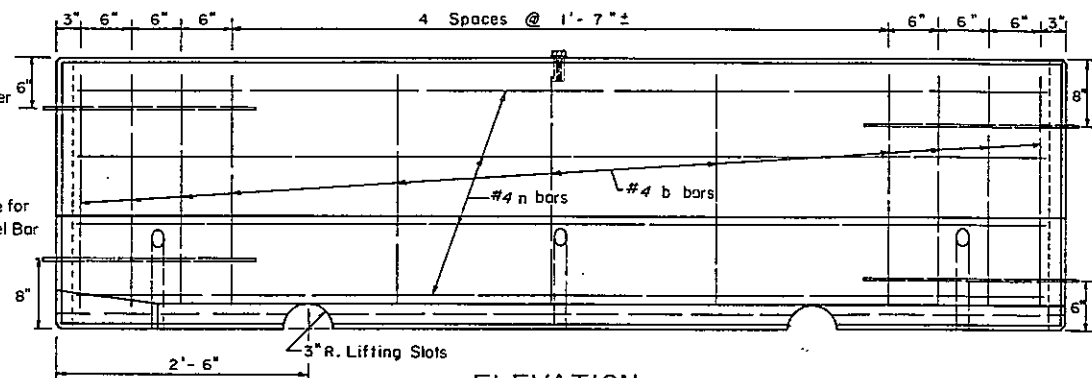
Engineer of Design Operations
APPROVED JAD 2 1975
Thomas A. Bright
Engineer of Design

STANDARD 2356

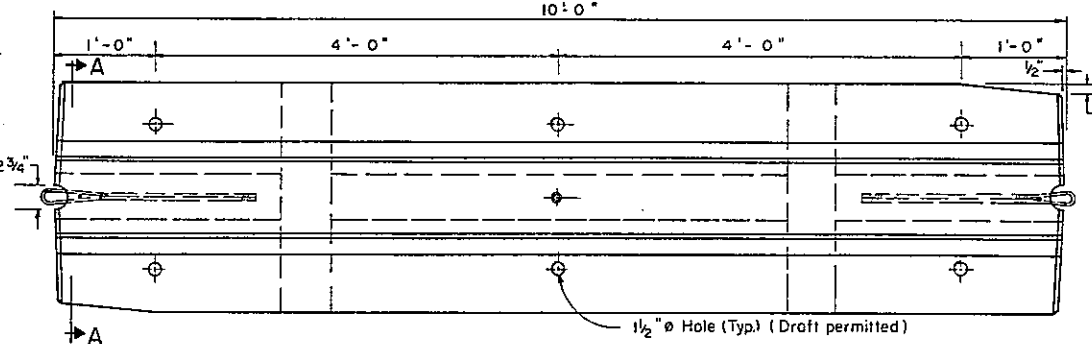
D.W.W. Sr. (full size)



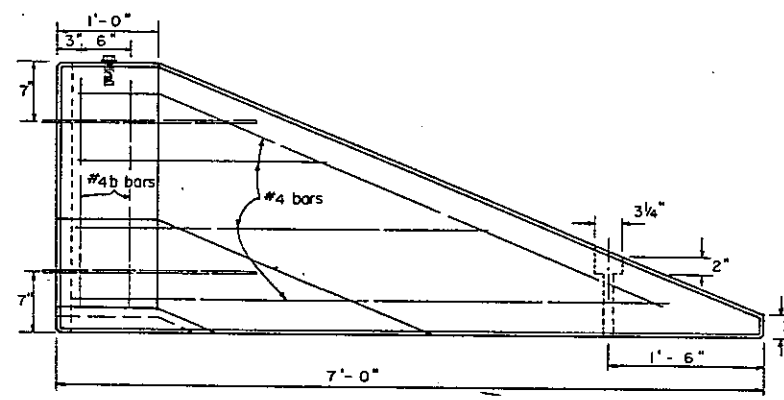
END VIEW



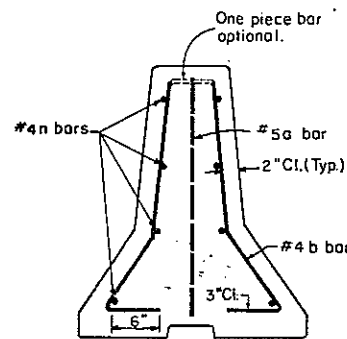
ELEVATION



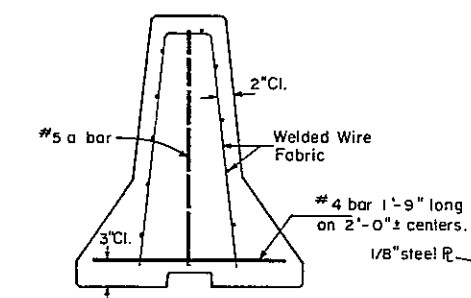
PLAN



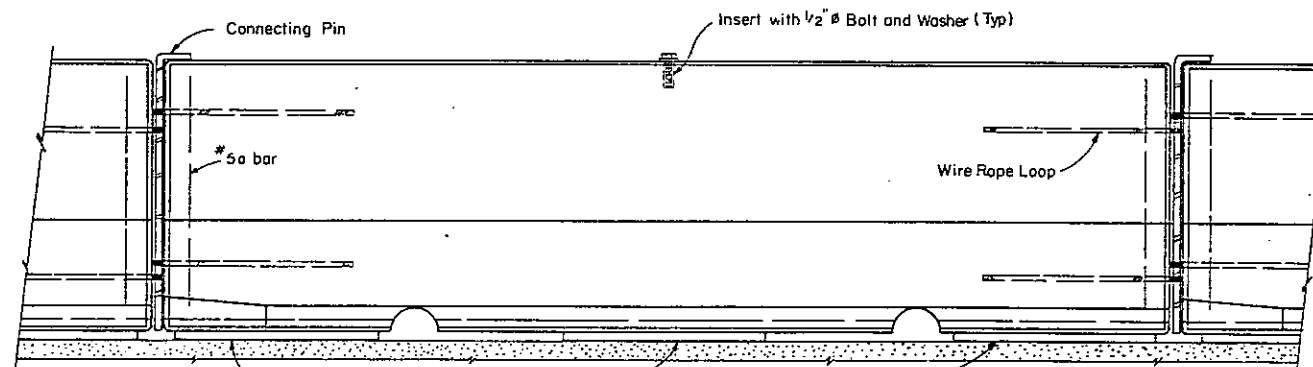
TERMINAL SECTION



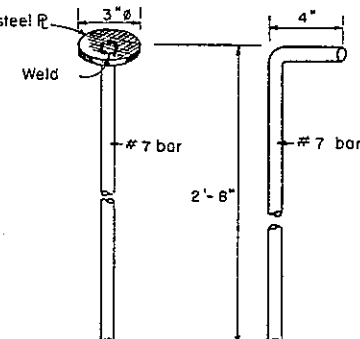
SECTION A-A
(Showing Bar Reinforcement)



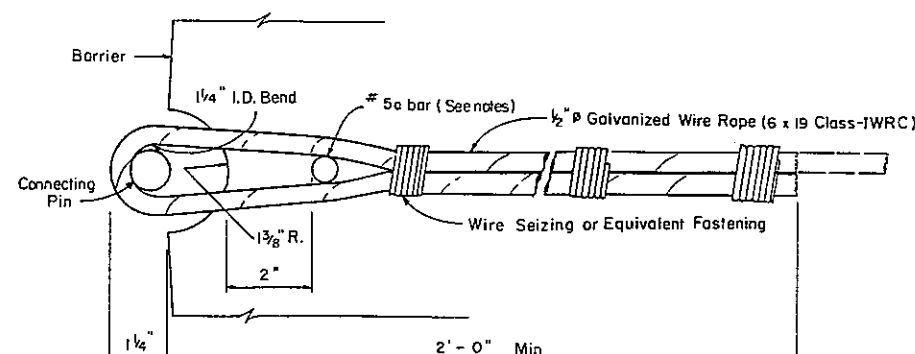
SECTION A-A
(Showing Alternate Welded Wire Reinforcement)



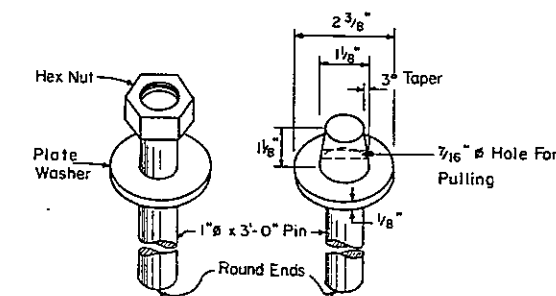
TYPICAL INSTALLATION WITH STYROFOAM PADS



ALTERNATE CONNECTING PINS



WIRE ROPE LOOP DETAIL
(20,000 lbs. min. breaking strength)



ALTERNATE DRIFT PINS

GENERAL NOTES

Barrier units shall be pinned one to another in continuous smooth line at the exact locations provided by the Engineer.

The wall units shall be reinforced with either bar reinforcement or welded wire fabric. Welded Wire Fabric shall be 6x6-W4xW4, weighing approximately 58lbs. per 100 sq. ft., conforming to the requirements of AASHTO M-55.

Barrier units placed on rigid pavement or median surfaces shall be seated with styrofoam pads. Units placed on flexible pavement or shoulders shall be secured with dowel bars. Dowel bars shall be one inch in diameter, at least 12 inches long, shall be embedded at least 8 inches into base material, and shall not project above the outer surface of the barrier. After pin removal all holes in the base shall be grout filled.

Alternate lifting devices meeting the approval of the Engineer may be substituted for the lifting slots shown.

When the Terminal Section is used, the hex nut on the drift pin shall be threaded half way onto the pin and tack welded, or a coupling nut tightened sufficiently to prevent loosening may be used. Fill nut with grease to exclude contaminants.

Inserts for 1/2" Ø bolts shall be capable of 3000 lbs. pull out strength and shall be furnished with a galvanized bolt and washer.

The #5 bar may be omitted if 2 continuous wire ropes are substituted for the 4 wire rope loops shown. The continuous ropes shall be looped and fastened on each end as shown in the wire rope loop detail.

Illinois Department of Transportation

PASSED: Feb. 5, 1980
Engineer of Design Operations

APPROVED: Feb. 5, 1980
Engineer of Design

ISSUED 6-18-79

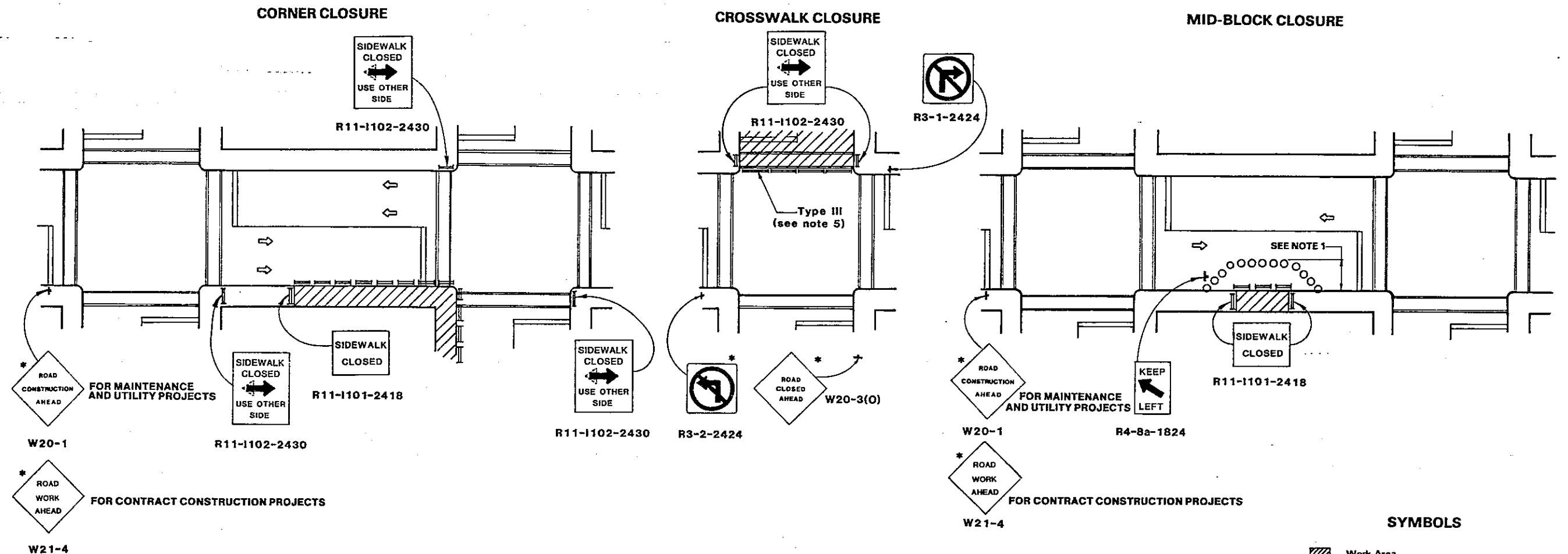
TEMPORARY CONCRETE BARRIER

STANDARD 2383 - 1

(Full Size) D.W.W. Sr.

Not to scale

F-705 D



* Omit whenever duplicated by road work traffic control.

DESIGN NOTES

1. See Design Memorandum No. 82-12/BLR & S Memorandum No. 82-05 Titled "Temporary Sidewalks During Construction."
2. Where a Handicapped Pedestrian ramp is restricted due to closure, temporary ramps should be considered.

GENERAL NOTES

1. A temporary walkway may encroach on an existing parking lane. If the temporary walkway encroaches on a traveled lane, the lane shall be closed in accordance with Case U-1, U-2, or U-3.
2. The SIDEWALK CLOSED / USE OTHER SIDE sign shall be placed at the nearest crosswalk or intersection to each end of the closure. Where the closure occurs at a corner, the signs shall be erected on the corners across the street from the closure. The SIDEWALK CLOSED signs shall be used at the ends of the actual closures.
3. All walkways shall be clearly identified, protected from motor vehicle traffic and free of any obstructions and hazards such as holes, debris, mud, construction equipment, stored materials, etc.
4. All hazards (ditches, trenches, excavations, etc.) near or adjacent to walkways shall be clearly delineated.
5. Type III Barricades and R11-2-4830 signs shall be positioned as shown in "Road Closed To All Traffic" detail on Highway Standard 2298.
6. When the posted speed limit is 35 M.P.H. or more, all warning signs shall have a minimum dimension of 48 in. by 48 in. or, with the approval of the Engineer, 36 in. by 36 in. If the posted speed limit is 30 M.P.H. or less, all warning signs shall have a minimum dimension of 36 in. by 36 in.

TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES HIGHWAY CONSTRUCTION AND CONTRACT MAINTENANCE

CROSSWALK OR SIDEWALK CLOSURES

Where, at any time, pedestrian traffic must be rerouted due to work being performed.

CASE U-5