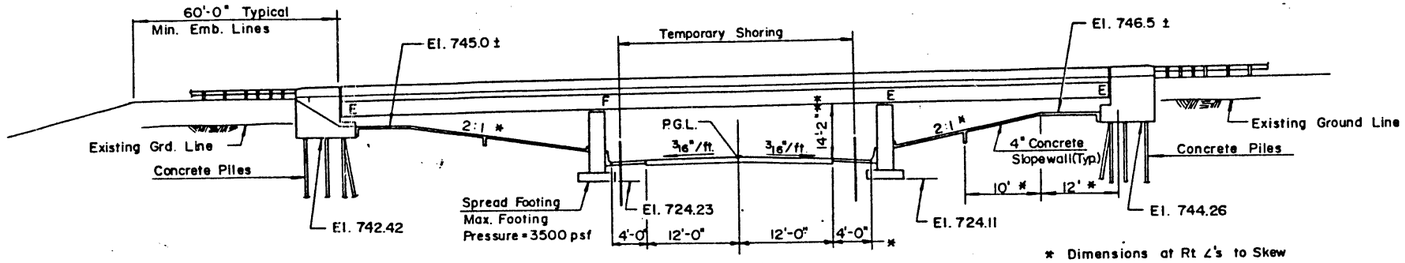
Bench Mark: Painted spot on north side of light standard AE-3, South of East Bound Lane Structure, Elevation 751.76

Existing Structure: The existing superstructure three span, non-composite, and continuous with W36 beams and reinforced concrete deck. The existing substructure consists of open concrete abutments on piles and solid concrete piers on spread footings. The structure length is 210'-8" back to back of abutments. The total structure width is 109'-10". Existing S.N. 099-0028



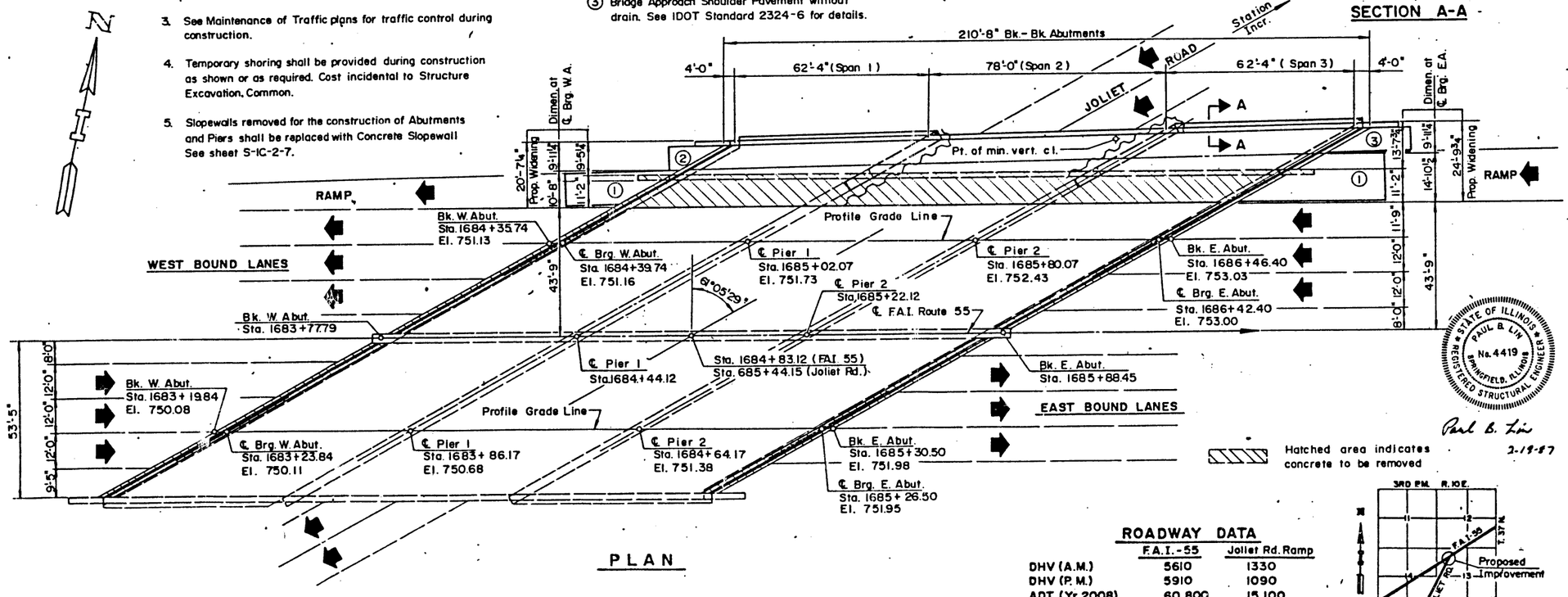
ELEVATION

NOTES

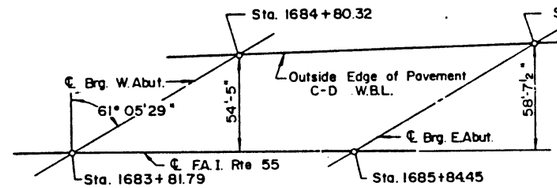
1. All existing bearings at abutments only shall be replaced with Elastomeric bearings. See sheet S-IC-2-3.
2. The 1" longitudinal joint along the median parapet shall be resealed as shown on sheet S-IC-2-13.
3. See Maintenance of Traffic plans for traffic control during construction.
4. Temporary shoring shall be provided during construction as shown or as required. Cost incidental to Structure Excavation, Common.
5. Slopewalls removed for the construction of Abutments and Piers shall be replaced with Concrete Slopewall See sheet S-IC-2-7.

① Special Bridge Approach Slab Widening See Sheet S-IC-2-22 for details.
② Bridge Approach Shoulder Pavement with drain. See IDOT Standard 2324-6 for details.
③ Bridge Approach Shoulder Pavement without drain. See IDOT Standard 2324-6 for details.

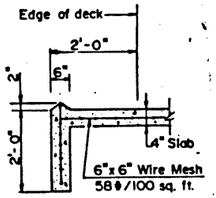
* Dimensions at Rt ∠'s to Skew
** Existing Joliet Road profile shall be lowered in order to maintain existing clearance. See roadway plans for details.



PLAN

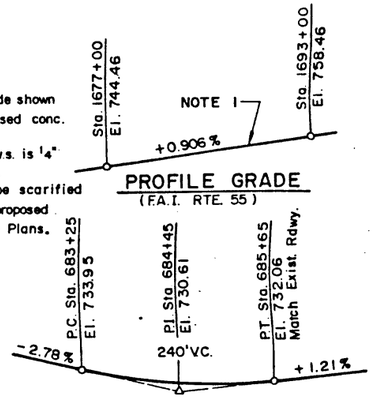


WIDENING ALIGNMENT LAYOUT



SECTION A-A

NOTE 1: Profile grade shown at top of proposed conc. overlay. Profile of existing w.s. is ¼" below proposed w.s. Approaches shall be scarified & tapered to meet proposed grade. See Roadway Plans.



PROFILE GRADE (F.A.I. RTE. 55)

PROFILE GRADE (JOLIET ROAD)

DESIGN CRITERIA (Widened Portion Only)

DESIGN SPECIFICATIONS:
AASHTO 1983 Standard Specifications for Highway Bridges and all subsequent interims.

1987 Standard Specifications for the Illinois State Toll Highway Authority.

1983 Standard Specifications for Road and Bridge Construction, Illinois Department of Transportation.

DESIGN LOADING:
Live Load for Highway Bridges - HS20-44 and the Alternate Military Loading.

Surfacing or Future Surfacing 25 psf (minimum).

DESIGN STRESSES:
Service Load Design Methods shall be used in the design of all structural elements.

Reinforced Concrete
f'c - Compressive Strength @ 28 days = 4,000 psi
n = 8

Reinforcement
fy - Yield Strength (Grade 60) = 60,000 psi
fs - Tension (Grade 60) = 24,000 psi

Structural Steel
fy - Yield Strength (AASHTO M-183) = 36,000 psi

LIVE LOAD DEFLECTION
Maximum deflection due to live load plus impact shall not exceed the following:

Span Length	
800.	S-IC-2-1

STATE OF ILLINOIS * REGISTERED STRUCTURAL ENGINEER * PAUL B. LIN No. 4419 SPRINGFIELD, ILLINOIS

Paul B. Lin 2-19-87

Hatched area indicates concrete to be removed

ROADWAY DATA

	F.A.I.-55	Joliet Rd. Ramp
DHV (A.M.)	5610	1330
DHV (P.M.)	5910	1090
ADT (Yr. 2008)	60,800	15,100
Class	Trunk	Area Service
Design Speed	70	45

LOCATION SKETCH

Issued	Date
Designed or Checked by	DRB PRB PRB
Drawn or Corrected by	GMG GMG GRDL

DRAWN ... G.M.G. ... DATE ... FEB. 1987 ...
CHECKED ... D.B. ... SCALE ... NO SCALE ...

MTA, INCORPORATED
CONSULTING ENGINEERS
CHICAGO – SPRINGFIELD – INDIANAPOLIS

THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY
EAST-WEST TOLLWAY AND MIDWEST ROAD
OAK BROOK, ILLINOIS 60521

REVISIONS		
NO.	DATE	DESCRIPTION

CONTRACT CIP-611
F.A.I. ROUTE 55 OVER JOLIET ROAD
BRIDGE NO.
GENERAL PLAN AND ELEVATION

DRAWING NO. 436 OF 527

GENERAL NOTES

CONCRETE:

ALL BRIDGE DECK SLABS, CURBS AND PARAPETS AND ALL OTHER SUPERSTRUCTURE CONCRETE SHALL BE CLASS D. CONCRETE FOR CURB AND PARAPET SHALL BE CHERT FREE. ALL SUBSTRUCTURE CONCRETE SHALL BE CLASS P.

ALL EXPOSED CONCRETE EDGES SHALL HAVE A $\frac{3}{4}$" x 45° CHAMFER, EXCEPT WHERE SHOWN OTHERWISE. CHAMFER ON VERTICAL EDGES SHALL BE CONTINUED A MINIMUM OF ONE FOOT BELOW FINISHED GROUND LEVEL.

REINFORCEMENT BARS:

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

COVER FROM THE FACE OF CONCRETE TO FACE OF REINFORCEMENT BARS SHALL BE 3" FOR SURFACES FORMED AGAINST EARTH AND 2" FOR ALL OTHER SURFACES UNLESS OTHERWISE SHOWN.

REINFORCEMENT BAR BENDING DIMENSIONS ARE OUT TO OUT.

REINFORCEMENT BENDING DETAILS SHALL BE IN ACCORDANCE WITH "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES", ACI LATEST EDITION.

REINFORCEMENT BARS DESIGNATED "(E)" SHALL BE EPOXY COATED.

REINFORCEMENT BAR SPLICES SHALL BE IN ACCORDANCE WITH THE FOLLOWING TABLE UNLESS SHOWN OTHERWISE ON THE DRAWING.

CLASS "C" SPLICE (F'C = 4000 PSI)

SIZE	LAP (GRADE 60)
#4	1'-9"
#5	2'-2"
#6	2'-7"
#7	3'-3"
#8	4'-3"
#9	5'-5"
#10	6'-10"

BARS INDICATED THUS 31x5-#5, ETC. INDICATES 31 LINES OF BARS WITH 5 LENGTHS PER LINE OF #5 BARS.

SLOPE WALLS SHALL BE REINFORCED WITH WELDED WIRE FABRIC, 6" x 6" - W4.0 x W4.0, WEIGHING 58 LBS. PER 100 SQ. FT.

STRUCTURAL STEEL:

ALL STRUCTURAL STEEL SHALL BE AASHTO M183, EXCEPT WHERE OTHERWISE NOTED.

FASTENERS SHALL BE HIGH STRENGTH BOLTS. BOLTS $\frac{7}{8}$" DIAMETER, OPEN HOLES $\frac{15}{16}$" DIAMETER, UNLESS OTHERWISE NOTED.

CALCULATED WEIGHT OF STRUCTURAL STEEL = 84,240 LBS.

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

ALL HIGH STRENGTH BOLT CONNECTIONS SHALL CONFORM TO THE REQUIREMENTS OF THE LATEST ISSUE OF THE SPECIFICATIONS FOR STRUCTURAL JOINTS USING A.S.T.M. A325(M164) OR A490(M253) BOLTS FOR SLIP-CRITICAL CONNECTIONS. EXCEPT TIGHTENING METHODS USING EITHER THE LOAD INDICATING WASHERS OR THE CALIBRATED WRENCH ARE NOT ALLOWED.

GENERAL NOTES (con't.)

FIELD WELDING OF CONSTRUCTION ACCESSORIES WILL NOT BE PERMITTED TO THE BOTTOM FLANGE OF BEAMS OR GIRDERS NOR TO THE TOP FLANGE OF CONTINUOUS BEAMS OR GIRDERS 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.

ANCHOR BOLTS SHALL BE SET BEFORE BOLTING DIAPHRAGMS OVER SUPPORTS.

THE MAIN LOAD CARRYING MEMBER COMPONENTS SUBJECT TO TENSILE STRESS SHALL CONFORM TO THE SUPPLEMENTAL REQUIREMENTS FOR NOTCH TOUGHNESS ZONE 2. THESE COMPONENTS ARE THE FLANGES, WEBS AND ALL SPLICE PLATE MATERIAL OF THE STEEL WIDE FLANGE BEAMS.

CONSTRUCTION:

DO NOT SCALE DIMENSIONS FOR CONSTRUCTION, SCALE APPLIES ONLY TO FULL SIZE DRAWINGS.

NO CONSTRUCTION JOINTS EXCEPT THOSE SHOWN ON THE PLANS WILL BE ALLOWED UNLESS ORDERED BY THE ENGINEER.

RAISED BEARING AREAS SHALL BE CAST MONOLITHICALLY WITH THE REST OF THE STRUCTURE AND GROUND TO THE ELEVATIONS SHOWN.

TEMPORARY SHEETING, BRACING OR COFFERDAMS SHALL BE CONSTRUCTED AS REQUIRED FOR THE EXCAVATION TO PROTECT THE ADJACENT AREAS FROM SETTLING OR FALLING INTO THE EXCAVATED AREAS. THIS WORK SHALL BE INCIDENTAL TO STRUCTURE EXCAVATION, COMMON.

EMBANKMENT CONFIGURATION SHOWN SHALL BE THE MINIMUM EMBANKMENT THAT MUST BE CONSTRUCTED PRIOR TO CONSTRUCTION OF THE ABUTMENTS.

BACKFILL SHALL BE PLACED BEHIND THE ABUTMENT AFTER THE SUPERSTRUCTURE HAS BEEN POURED AND THE FALSEWORK REMOVED. SEE ARTICLE 207.4 OF THE STANDARD SPECIFICATIONS.

AFTER THE BEAMS OR GIRDERS ARE SET, ALL ELEVATIONS FOR DETERMINING FILLET HEIGHTS SHALL BE TAKEN AT ONE TIME.

AN APPLICATION OF SEALANT SHALL BE APPLIED TO THE SURFACES OF ALL EXPOSED ABUTMENT SEATS

BEARING SEAT SURFACES SHALL BE CONSTRUCTED OR ADJUSTED TO THE DESIGNATED ELEVATIONS WITHIN A TOLERANCE OF $\frac{1}{8}$ INCH. ADJUSTMENT SHALL BE MADE EITHER BY GRINDING THE SURFACE OR BY SHIMMING THE BEARING. TWO $\frac{1}{8}$" ADJUSTING SHIMS, OF THE DIMENSIONS OF THE TOP BEARING PLATE AT THE ABUTMENTS, AND THE BOTTOM PLATE AT THE PIER, SHALL BE PROVIDED FOR EACH BEARING IN ADDITION TO ALL OTHER PLATES OR SHIMS.

CONCRETE PILES AT ABUTMENTS SHALL BE DRIVEN IN HOLES PRECORED THROUGH THE EMBANKMENT IN ACCORDANCE WITH ARTICLE 505.7.2 OF THE STANDARD SPECIFICATIONS.

THE CONTRACTOR SHALL DRIVE TWO TEST PILES IN A PERMANENT LOCATION, ONE AT EACH ABUTMENT, AS DIRECTED BY THE ENGINEER BEFORE ORDERING THE REMAINDER OF THE PILES.

REFERENCES TO "STANDARD SPECIFICATIONS" INDICATES 1987 STANDARD SPECIFICATIONS FOR THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY. REFERENCES TO "I.D.O.T. SPECIFICATIONS" INDICATES 1983 STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION, ILLINOIS DEPARTMENT OF TRANSPORTION.

ALL ELECTRICAL CONDUIT TO BE MOUNTED ON THE BRIDGE SHALL BE ATTACHED TO THE CONCRETE BY EXPANSION ANCHORS. NO CONDUIT WILL BE ATTACHED TO THE STRUCTURAL STEEL.

LEGEND

P.G.L. - Profile Grade Line
N.B.L. — North Bound Lane
S.B.L. — South Bound Lane
E.B.L. — East Bound Lane
W.B.L. — West Bound Lane
N.A. — North Abutment
S.A. — South Abutment
E.F — Each Face
F.F. — Front Face
B.F. — Back Face
I.F. — Inside Face
O.F — Outside Face
E.E. — Each End
P.J.F — Preformed Joint Filler
P.J.S. — Preformed Joint Sealer
Bk./ — Back of
B/ — Bottom of
T/ — Top of

(1) Indicates items to be constructed and paid for in accordance with 1983 Standard Specifications For Road & Bridge Construction, Illinois Department of Transportation.

ANY EXISTING REINFORCEMENT TO BE LAPPED, SPLICED, OR OTHERWISE INCORPORATED INTO NEW CONSTRUCTION, IF DAMAGED BY THE CONTRACTOR'S OPERATIONS, SHALL BE SUPPLEMENTED WITH ADDITIONAL REINFORCEMENT OR EXPANSION ANCHORS AS DIRECTED BY THE ENGINEER AT THE CONTRACTOR'S EXPENSE.

ESTIMATED QUANTITIES FOR F.A.I. RTE. 55 OVER JOLIET ROAD

	NO.	ITEM	UNIT	ESTIMATED QUANTITIES
	206C	Structure Excavation, Common	Cu. Yd.	472
	501A	Concrete for Bridges and Drainage Structures (Class D)	Cu. Yd.	246.3
	501B	Concrete for Bridges and Drainage Structures (Class P)	Cu. Yd.	203.1
	503A3	Furnishing Structural Steel (Beam Spans)	Lbs.	84,390
	503B3	Erecting Structural Steel (Beam Spans)	Lbs.	84,390
	504A	Reinforcing Steel	Lbs.	23,040
	504B	Reinforcing Steel, Epoxy Coated	Lbs.	50,880
	505F	Furnishing Steel Shells for Cast-in-Place Concrete Piles	Lin. Ft.	160
	505G	Driving and Filling Steel Shells for Cast-in-Place Concrete Piles	Lin. Ft.	160
	505J	Splices of Steel Piles or Steel Shells	Ea.	3
	505K	Test Piles	Lin. Ft.	52
	507	Concrete Removal	Cu. Yd.	253.9
	508	Bituminous Bridge Deck Overlay Removal	Sq. Yd.	2380
	509A	Bridge Deck Scarification, $1\frac{1}{2}$"	Sq. Yd.	1943
**	510	Class A Bridge Deck Removal	Sq. Yd.	120
**	511	Class B Bridge Deck Repair	Sq. Yd.	20
*	513A	Concrete for Bridge Deck Overlay		
		(a) Class L (Latex Modified Concrete)	Cu. Yd.	235
		(b) Class L-S (Low-Slump Dense Concrete)	Cu. Yd.	235
		(c) Class L-S Mod. (Plasticized Concrete)	Cu. Yd.	235
	514	Placing Concrete for Bridge Deck Overlay	Sq. Yd.	2651
**	516	Pneumatically Applied Concrete	Sq. Ft.	41
	518A	Elastomeric Bearings, Type A	Ea.	20
	518B	Elastomeric Bearings, Type B	Ea.	20
	519	Bridge Expansion Bearing Removal	Ea.	36
	523	Clean Bridge Seats	Sq. Ft.	2115
	524	Apply Bridge Seat Sealant	Sq. Ft.	2218
	525A2	Bridge Expansion Joint Closure — Neoprene 2"	Lin. Ft.	500
	526	Bridge Approach Slab	Sq. Yd.	29.2
**	530	Formed Concrete Repair	Cu. Ft.	36
**	533	Low Pressure Epoxy Injection	Lin. Ft.	413
	574	Reseal Longitudinal Joint	Lin. Ft.	207
	617	Concrete Slope Wall	Sq. Yd.	108
(1)	40801500	P.C. Concrete Bridge Approach Shoulder Pavement	Sq. Yd.	34.2

PLAN DIMENSIONS AND DETAILS RELATIVE TO 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 THE WORK, HOWEVER, THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED AT THE UNIT PRICE BID FOR THE WORK.

EXPANSION BOLTS SHALL CONSIST OF APPROVED EXPANSION ANCHORS, PROVIDING MINIMUM CERTIFIED PROOF LOAD = 4,080 LBS., AND 3/4" Ø X 12" HOOKED BOLTS.

* Bid for either (a), (b), or (c) but not more than one.

** Repair quantities are based on visual inspections performed October 1986.

ISTHA STANDARD DRAWINGS
ST-86-105
ST-86-107

IDOT STANDARD DRAWINGS
2382-2
2324-6

INDEX OF SHEETS

F.A.I. ROUTE 55 OVER JOLIET ROAD

S-IC-2-2

	1st	2nd	3rd
Designed or Checked by	DRB	DRB	WH
Drawn or Corrected by	RHH	RHH	GSA

DRAWN R.H.H. DATE FEB. 1987
CHECKED D.R.B. SCALE NO SCALE

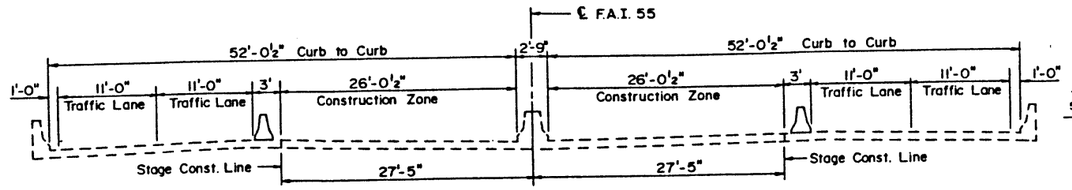
MTA, INCORPORATED
CONSULTING ENGINEERS
CHICAGO — SPRINGFIELD — INDIANAPOLIS

THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY
EAST-WEST TOLLWAY AND MIDWEST ROAD
OAK BROOK, ILLINOIS 60521

REVISIONS		
NO.	DATE	DESCRIPTION

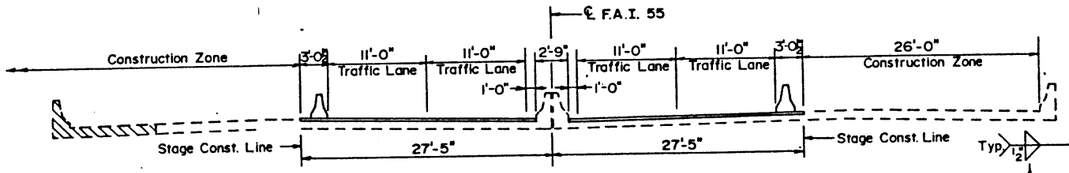
CONTRACT CIP-611
F.A.I. RTE. 55 OVER JOLIET ROAD
BRIDGE NOS.
GENERAL NOTES & INDEX

DRAWING NO.
437 OF 527



STAGE ONE

1. REMOVE BITUMINOUS SURFACING FROM DECK AND APPROACH SLABS IN CONSTRUCTION ZONE.
2. SCARIFY DECK IN CONSTRUCTION ZONE.
3. PARTIAL DEPTH AND FULL DEPTH REPAIRS IN CONSTRUCTION ZONE.
4. ADJUST APPROACHES WITHIN CONSTRUCTION ZONE. SEE ROADWAY PLAN.
5. MODIFY NEOPRENE EXPANSION JOINTS AT ABUTMENTS.
6. PLACE CONCRETE OVERLAY.



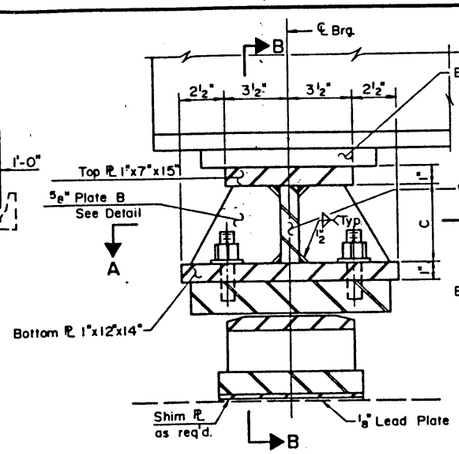
STAGE TWO

1. REMOVE BITUMINOUS SURFACING FROM DECK AND APPROACH SLABS IN CONSTRUCTION ZONE.
2. SCARIFY DECK IN CONSTRUCTION ZONE.
3. PARTIAL DEPTH AND FULL DEPTH REPAIRS IN CONSTRUCTION ZONE.
4. ADJUST APPROACHES WITHIN CONSTRUCTION ZONE. SEE ROADWAY PLAN.
5. MODIFY NEOPRENE EXPANSION JOINTS AT ABUTMENTS.
6. WIDEN W.B.L. SUBSTRUCTURE & SUPERSTRUCTURE.
7. PLACE CONCRETE OVERLAY.

STAGE CONSTRUCTION DETAILS

See Roadway Plans for Additional Details

NOTE: Construction vehicles traveling on the existing concrete deck after scarification shall be limited to 12 kips per axle. All vehicles traveling on the scarified surface shall be limited to speeds less than 10 m.p.h. Any variences to these limitations must be approved by the Engineer.

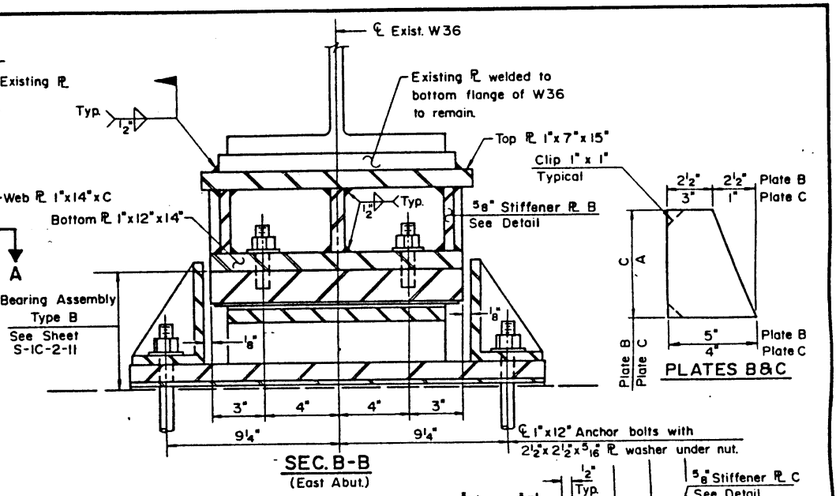


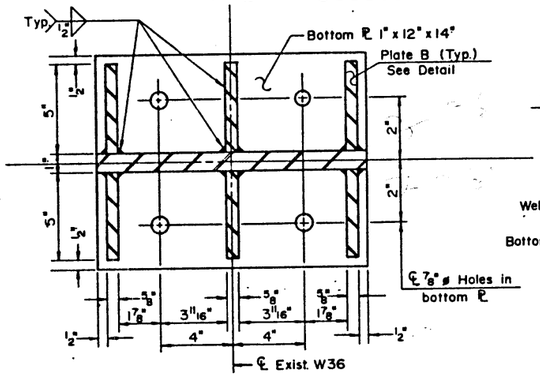
BOLSTER AT EAST ABUT.

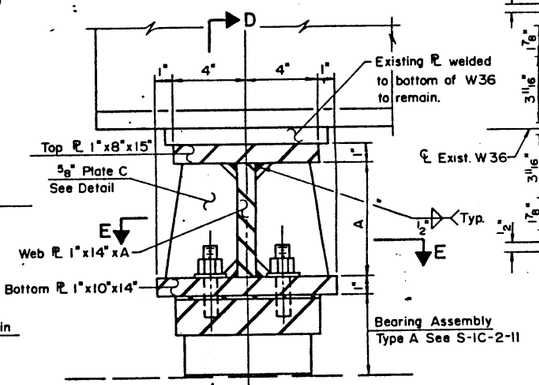
(Existing Beams Only - 18 Req'd.)

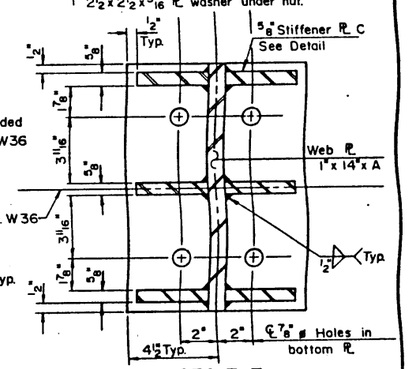
C = 2 13/16" Bms. (B)(C)(D)(E)(F)(G)(L)(M)(N)(O)(P)(Q)

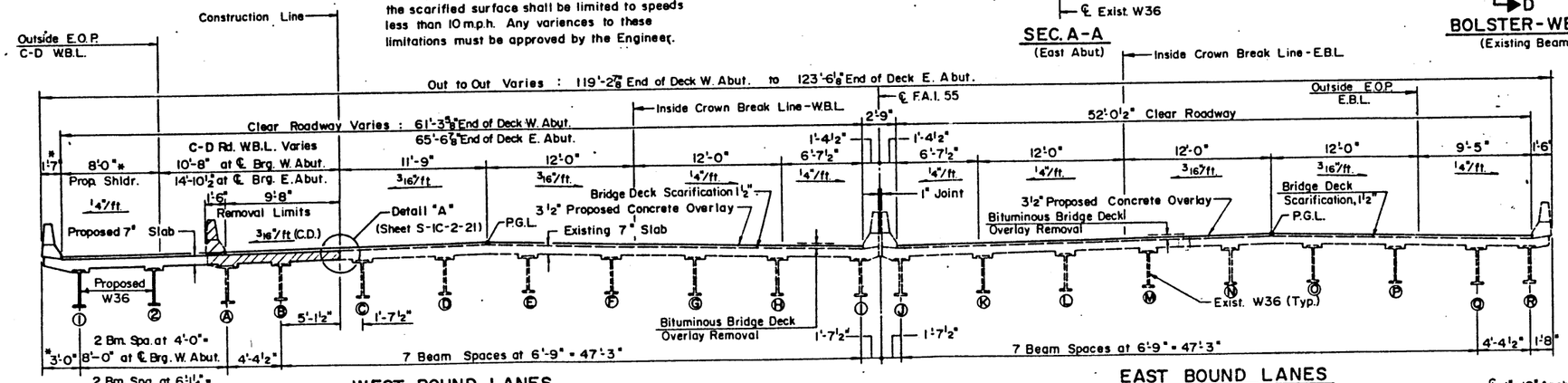
C = 4 5/16" Bms. (A)(H)(I)(J)(K)(R)





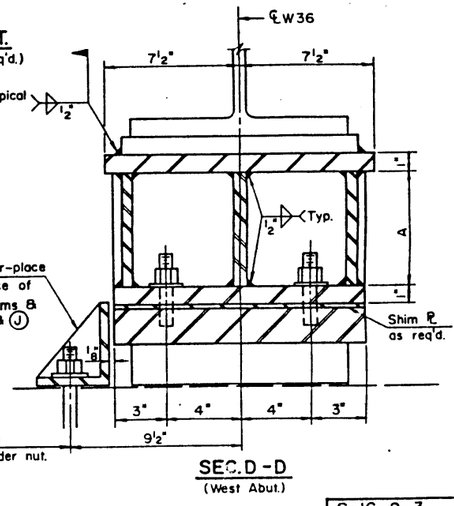






CROSS SECTION
Looking East

* Indicates dimensions given perpendicular to Outside E.O.P. C-D W.B.L.



	1st	2nd	3rd
Designed or Checked by	DRB	DRB	DRB
Drawn or Corrected by	GMG	T.G.	RDL

DRAWN.. G.M.G.....
CHECKED.. D.B.....
DATE.. FEB. 1987...
SCALE.. NO. SCALE.

MTA, INCORPORATED
CONSULTING ENGINEERS
CHICAGO — SPRINGFIELD — INDIANAPOLIS

THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY
EAST-WEST TOLLWAY AND MIDWEST ROAD
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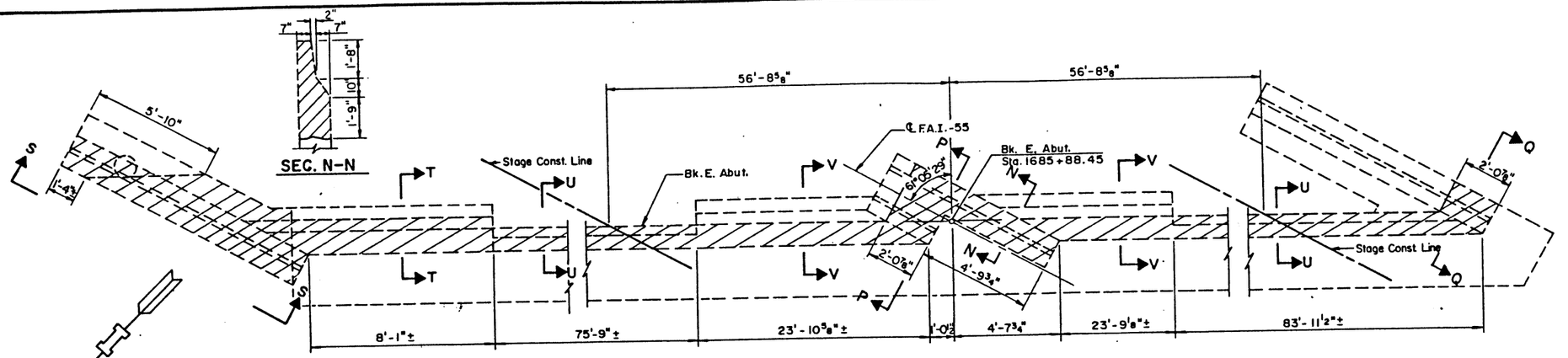
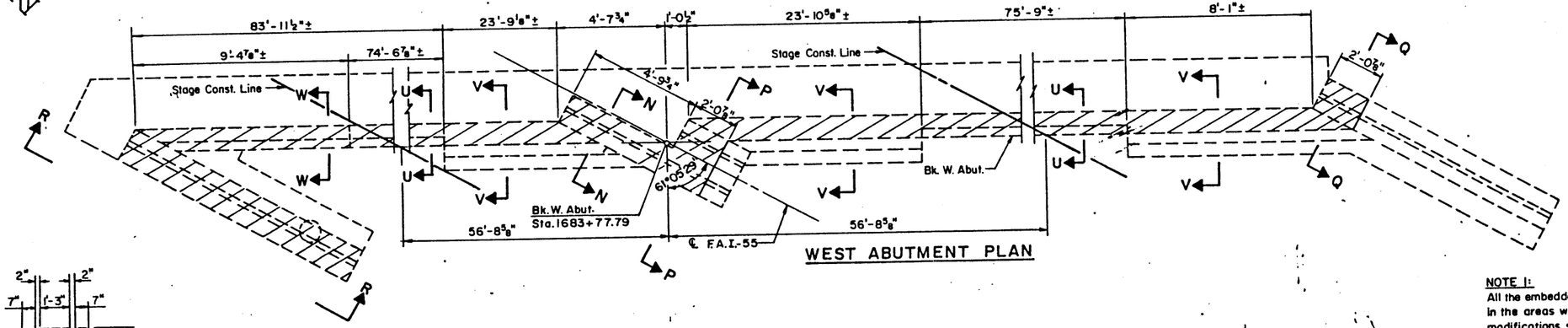
REVISIONS		
NO.	DATE	DESCRIPTION

CONTRACT CIP-611
F.A.I. ROUTE 55 OVER JOLIET ROAD
BRIDGE NO.
STAGE CONSTRUCTION DETAILS

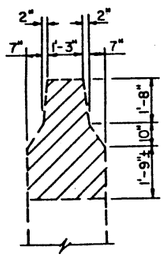
S-1C-2-3
DRAWING NO.
438 OF 527

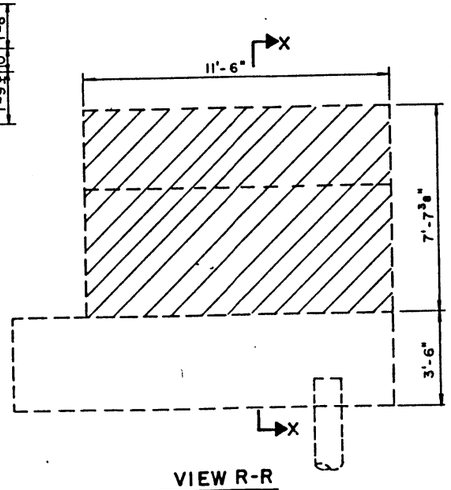


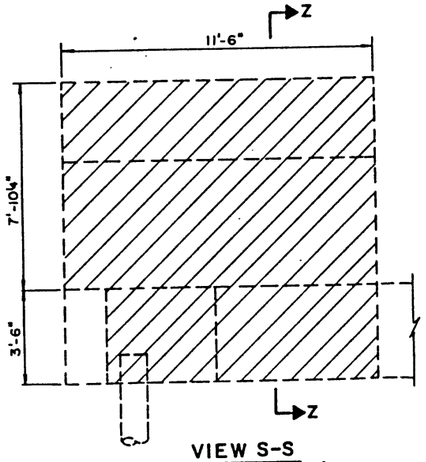
EAST ABUTMENT PLAN

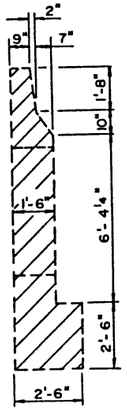


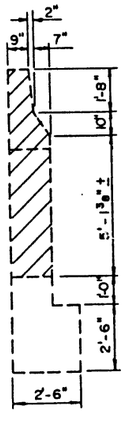
WEST ABUTMENT PLAN

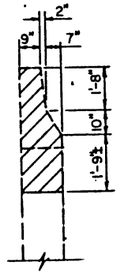


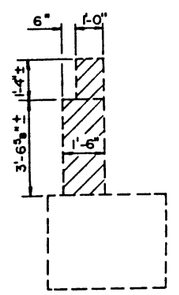


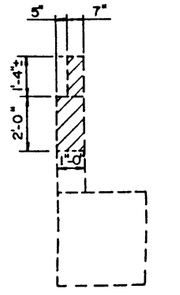


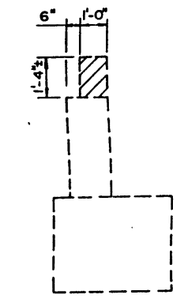


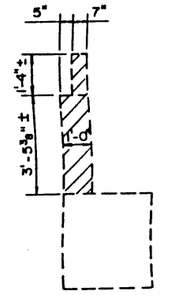












NOTE 1:
All the embedded reinforcement exposed by Concrete Removal in the areas where surfaces shall remain exposed after the modifications shall be cut flush with the concrete surface and the surface shall be covered by a layer of Roofing Tar. Cost shall be incidental to Concrete Removal.

NOTE 2:
Quantites estimated for Structure Excavation, Common are calculated based on the following:
Horizontal Limits: 2'-0" Outside of the edges of footings.
Vertical Limits: Same depth as concrete removal.

ITEM	UNIT	QUANTITY
Concrete Removal	Cu.Yd.	55.1
Structure Excavation, Common	Cu.Yd.	69

Indicates Existing Concrete to be removed.

No.	1st	2nd	3rd
Designed or Checked by	DRB	DRB	WH
Drawn or Corrected by	JH	RDL	GSA

DRAWN J.H.
CHECKED D.R.B.
DATE FEB 1987
SCALE NO SCALE

MTA, INCORPORATED
CONSULTING ENGINEERS
CHICAGO – SPRINGFIELD – INDIANAPOLIS

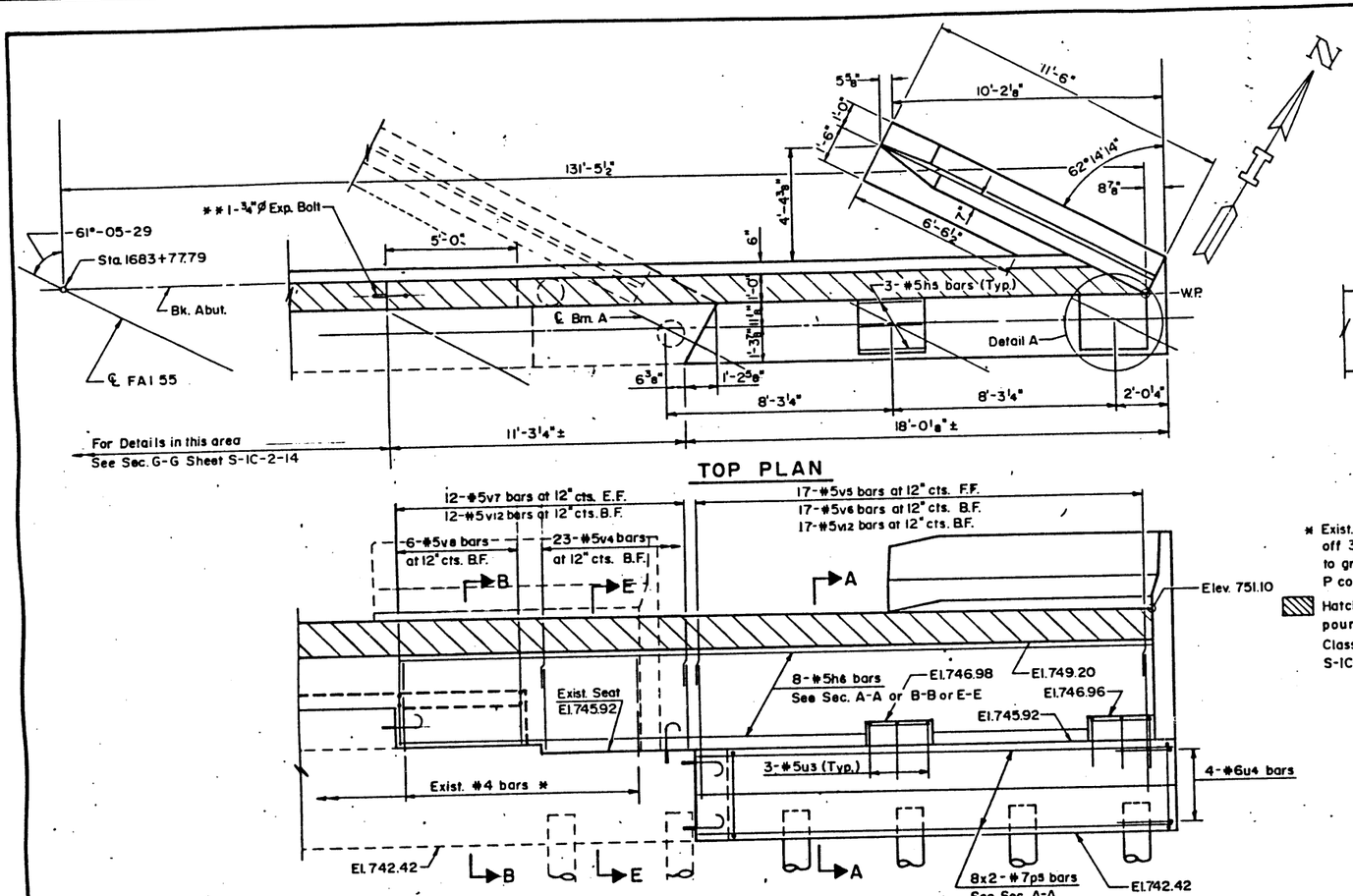
THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY
EAST-WEST TOLLWAY AND MIDWEST ROAD
OAK BROOK, ILLINOIS 60521

REVISIONS		
NO.	DATE	DESCRIPTION

CONTRACT CIP-611
F.A.I. ROUTE 55 OVER JOLIET ROAD
BRIDGE NO.
ABUTMENT REMOVAL

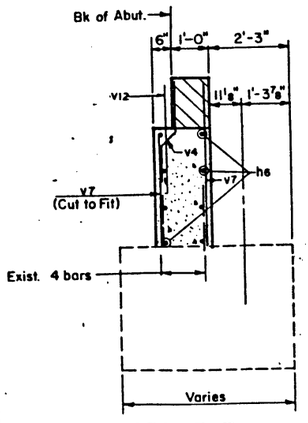
S-IC-2-4

DRAWING NO. 439 OF 527

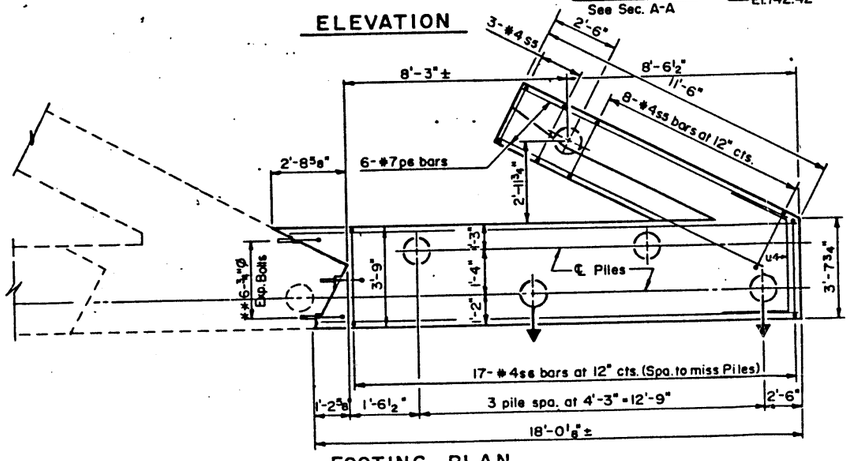


TOP PLAN

ELEVATION



SEC. E-E

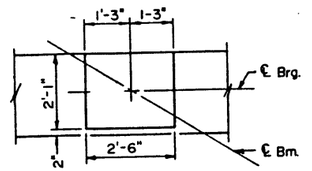


FOOTING PLAN

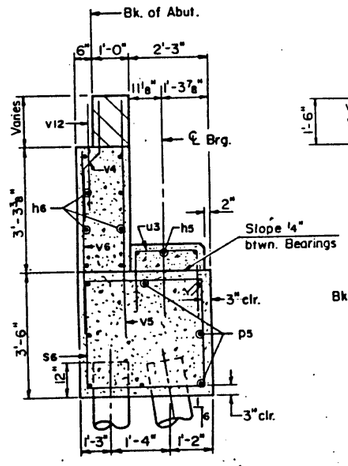
See Sheet S-IC-2-14 for Expansion Joint Modification.

** Expansion bolts shall consist of approved expansion anchors providing minimum certified proof load = 4080 Lbs. and ¾"ø hooked bolts. Bolts shall extend 12" into new concrete.

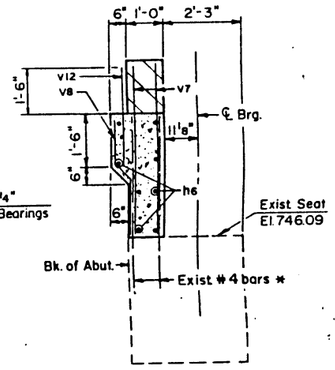
Expansion bolts shall be located in the field so that proposed expansion bolts are placed a minimum of 3" from existing expansion bolts. Cost of expansion bolts shall be incidental to REINFORCING STEEL.



DETAIL A



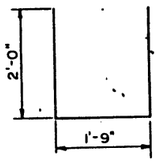
SECTION A-A



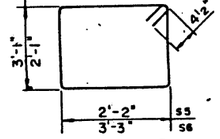
SECTION B-B

* Exist. #4 bars to be re-used shall be cut off 3'-0" from Abut. seat & sandblasted to gray metal. Cost incidental to Class P concrete in structures.

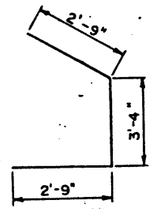
▨ Hatched area indicates concrete poured after deck is in place. Class D concrete billed on sheet S-IC-2-14



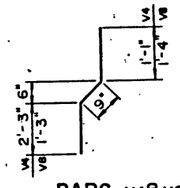
BARS u3



BAR s5 & s6



BAR u4



BARS v4&v8

BILL OF MATERIALS

	Bar	No.	Size	Length	Shape
	h5	6	#5	2'-3"	—
	h6	8	#5	28'-6"	—
***	h8	6	#4	11'-0"	—
***	h9	6	#4	11'-0"	—
***	h10(E)	1	#4	11'-0"	—
***	h11(E)	5	#4	11'-0"	—
***	n2	12	#6	10'-4"	⊏
***	n3	6	#6	5'-5"	⊏
	p5	16	#7	11'-3"	—
***	p6	6	#7	11'-0"	—
	s5	11	#4	9'-3"	⊐
	s6	17	#4	13'-5"	⊐
	u3	6	#5	5'-9"	⊏
	u4	4	#6	8'-10"	⊐
	v4	23	#5	4'-1"	⌒
	v5	17	#5	6'-9"	—
	v6	17	#5	5'-6"	—
	v7	24	#5	4'-6"	—
	v8	6	#5	3'-4"	⌒
***	v9(E)	9	#6	6'-8"	⌒
***	v10(E)	3	#6	6'-5"	⌒
***	v11(E)	12	#6	7'-0"	—
	v12	29	#5	3'-0"	—

ITEM	UNIT	QUANTITY
Class P Concrete	Cu.Yd.	32.6
Reinforcing Steel	Lbs.	1,930
Furnishing Conc. Piles	Lin. Ft.	80
Drive & Fill Conc. Piles	Lin. Ft.	80
Struct. Ex., Common	Cu. Yd.	67
Class D Concrete	Cu. Yd.	1.4
Test Piles	Lin. Ft.	26
Reinforcing Steel, Epoxy Coated	Lbs.	290

NOTE: Work this sheet with sheet S-IC-2-7

*** See Sheet S-IC-2-7

PILE DATA

Type	Metal Shell Concrete Piles
Capacity	40 Ton
Est. Length	16'
No. Req'd.	5 (Including one Test Pile)

Revs	1st	2nd	3rd
Designed or Checked by	DRB	DRB	WH
Drawn or Corrected by	RDL	RDL	G.C.

DRAWN G.M.G.
CHECKED D.R.B.
DATE FEB. 1987
SCALE NO SCALE

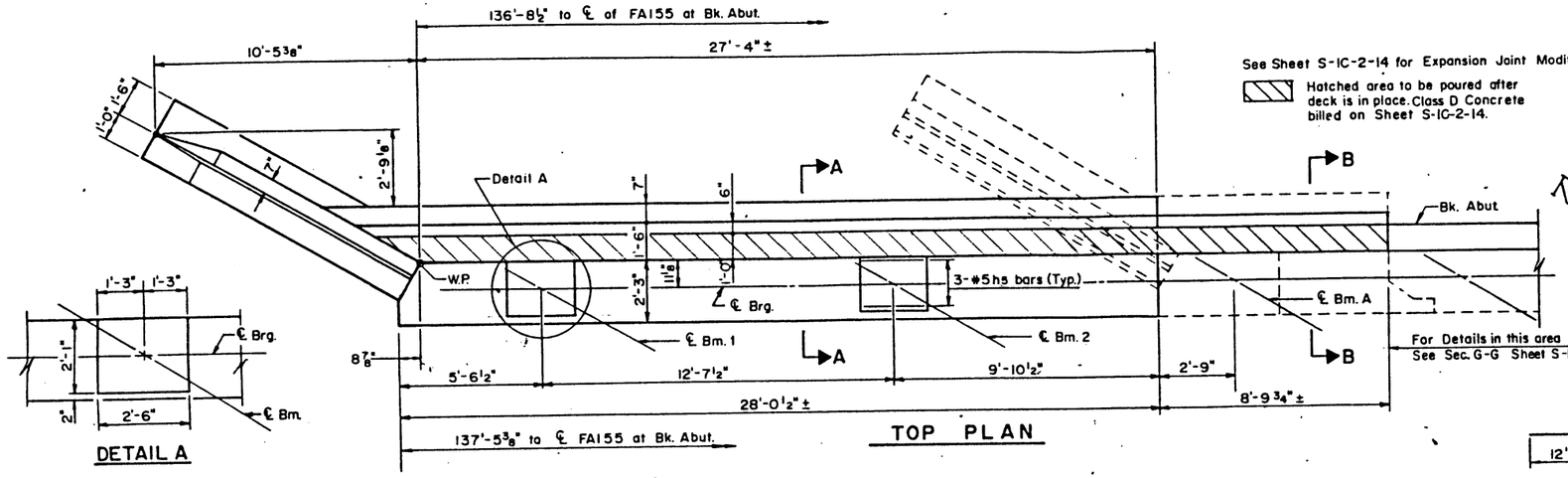
MTA, INCORPORATED
CONSULTING ENGINEERS
CHICAGO – SPRINGFIELD – INDIANAPOLIS

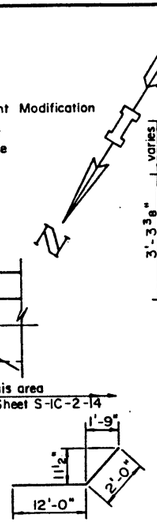
THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY
EAST-WEST TOLLWAY AND MIDWEST ROAD
OAK BROOK, ILLINOIS 60521

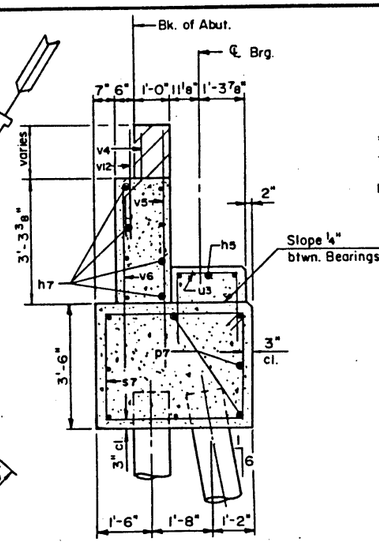
REVISIONS		
NO.	DATE	DESCRIPTION

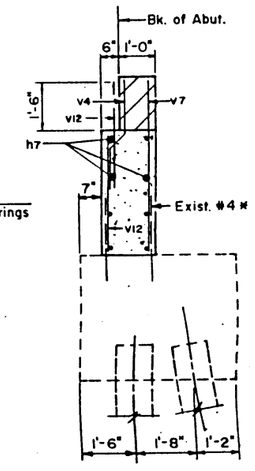
CONTRACT CIP-611
F.A.I. ROUTE 55 OVER JOLIET ROAD
BRIDGE NO.
WEST ABUTMENT WIDENING

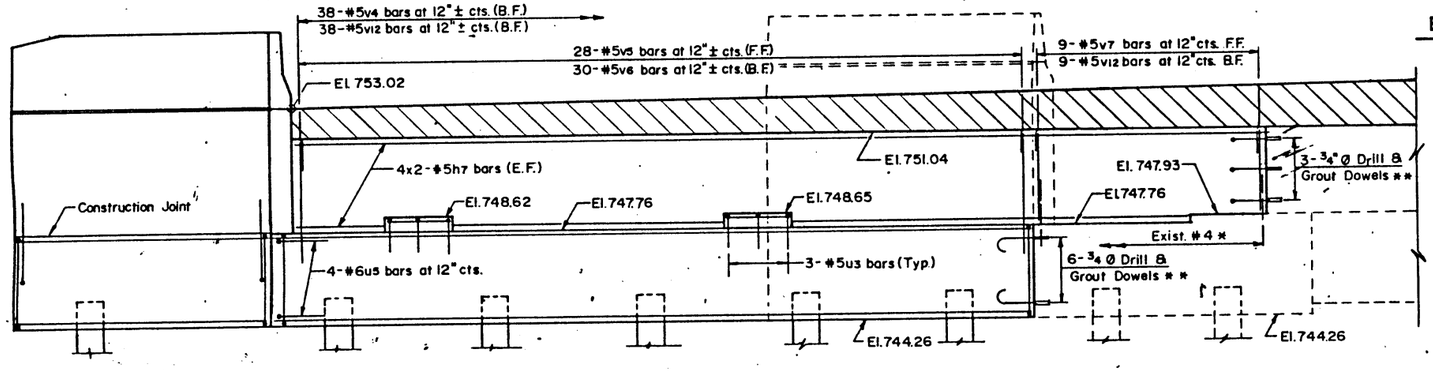
S-IC-2-5
DRAWING NO.
440 OF 527

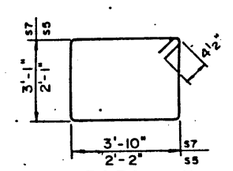


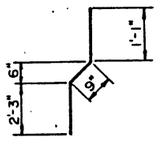


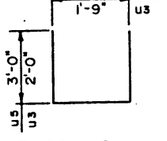








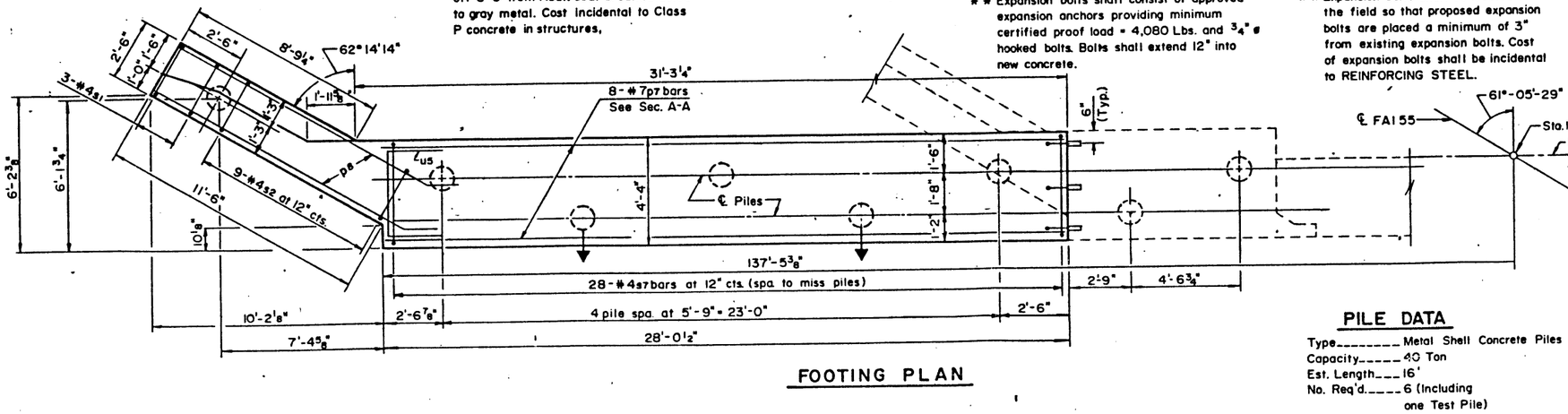




* Exist. #4 bars to be re-used shall be cut off 3'-0" from Abut. seat & sandblasted to gray metal. Cost incidental to Class P concrete in structures.

* * Expansion bolts shall consist of approved expansion anchors providing minimum certified proof load = 4,080 Lbs. and ¾" ø hooked bolts. Bolts shall extend 12" into new concrete.

* * Expansion bolts shall be located in the field so that proposed expansion bolts are placed a minimum of 3" from existing expansion bolts. Cost of expansion bolts shall be incidental to REINFORCING STEEL.



PILE DATA

Type_____ Metal Shell Concrete Piles
Capacity_____ 40 Ton
Est. Length___ 16'
No. Req'd._____ 6 (Including one Test Pile)

BILL OF MATERIAL

	Bar	No.	Size	Length	Shape
	h5	6	#5	2'-3"	
	h7	16	#5	19'-6"	
***	h8	6	#4	11'-0"	
***	h9	6	#4	11'-0"	
***	h10(E)	1	#4	11'-0"	
***	h11(E)	5	#4	11'-0"	
***	n2	12	#6	10'-4"	
***	n3	6	#6	5'-5"	
	p7	8	#7	27'-6"	
***	p8	6	#7	14'-0"	
	s5	12	#4	9'-3"	
	s7	28	#4	14'-7"	
	u3	6	#5	5'-9"	
	u5	4	#6	9'-9"	
	v4	38	#5	4'-1"	
	v5	28	#5	6'-9"	
	v6	30	#5	5'-6"	
	v7	9	#5	4'-6"	
***	v9(E)	9	#6	6'-8"	
***	v10(E)	3	#6	6'-5"	
***	v11(E)	12	#6	7'-0"	
	v12	47	#5	3'-0"	

Class D Concrete	Cu.Yd.	14
Class P Concrete	Cu. Yd.	44.7
Reinforcing Steel	Lbs.	2,450
Furnishing Conc. Piles	Lin. Ft.	80
Drive & Fill Conc. Piles	Lin. Ft.	80
Test Piles	Lin. Ft.	26
Structure Excav., Common	Cu. Yd.	91
Reinforcing Steel, Epoxy Coated	Lbs.	290

*** See Sheet S-IC-2-7 for Location
NOTE: Work this sheet with sheet S-IC-2-7

	1st	2nd	3rd
Designed or Checked by	DRB	DRB	W.H.
Drawn or Corrected by	RDL	A.F.	A.F.

DRAWN G.M.G.
CHECKED D.R.B.
DATE FEB. 1987
SCALE NO SCALE

MTA, INCORPORATED
CONSULTING ENGINEERS
CHICAGO—SPRINGFIELD—INDIANAPOLIS

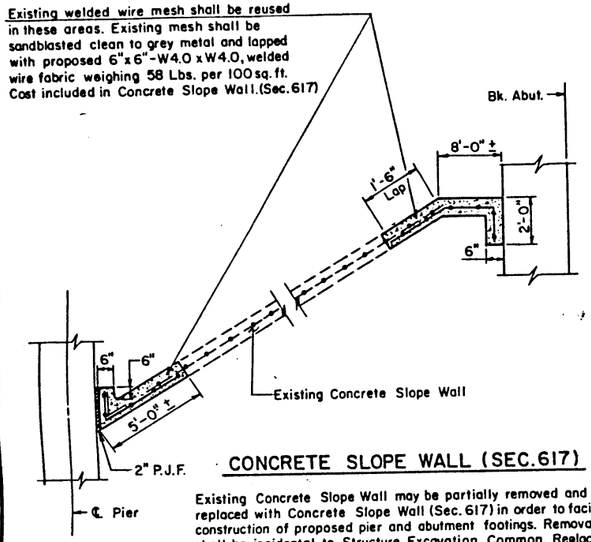
THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY
EAST-WEST TOLLWAY AND MIDWEST ROAD
OAK BROOK, ILLINOIS 60521

REVISIONS		
NO.	DATE	DESCRIPTION

CONTRACT CIP-611
F.A.I. ROUTE 55 OVER JOLIET ROAD
BRIDGE NOS.
EAST ABUTMENT WIDENING

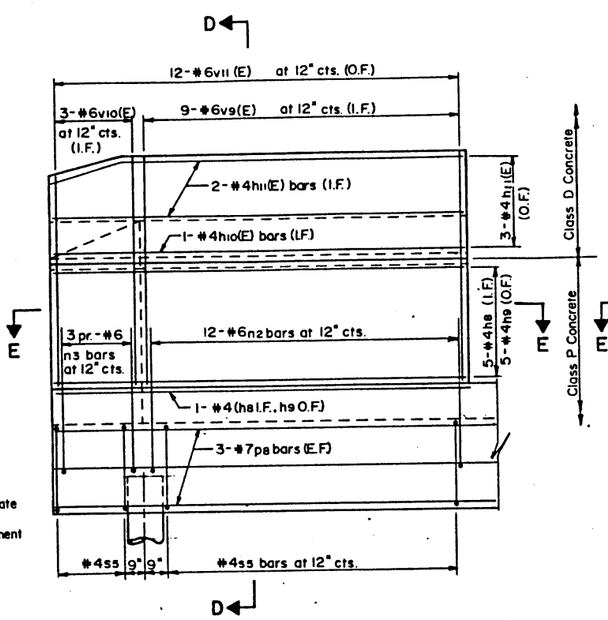
S-IC-2-6
DRAWING NO.
441 OF 527

Existing welded wire mesh shall be reused in these areas. Existing mesh shall be sandblasted clean to grey metal and lapped with proposed 6"x6"-W4.0 x W4.0, welded wire fabric weighing 58 Lbs. per 100 sq. ft. Cost included in Concrete Slope Wall (Sec. 617)

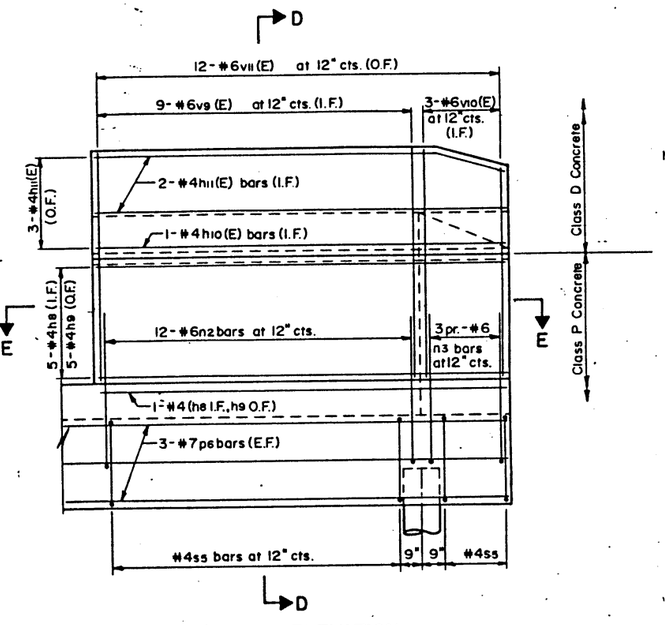


CONCRETE SLOPE WALL (SEC. 617)

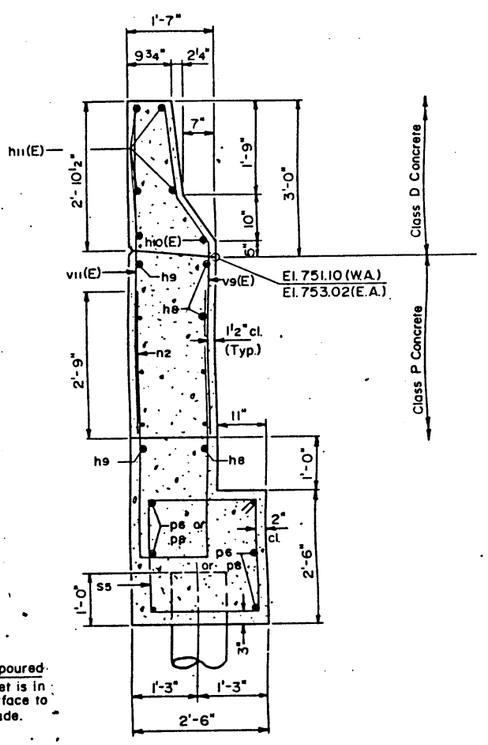
Existing Concrete Slope Wall may be partially removed and replaced with Concrete Slope Wall (Sec. 617) in order to facilitate construction of proposed pier and abutment footings. Removal shall be incidental to Structure Excavation, Common. Replacement shall be paid for as Concrete Slope Wall (Sec. 617). Estimated quantity of Concrete Slope Wall = 108 Sq. Yds.



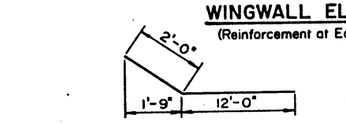
WINGWALL ELEVATION
(Reinforcement at East Abut.)



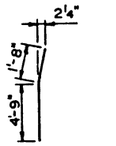
WINGWALL ELEVATION
(Reinforcement at West Abut.)



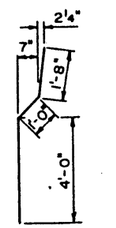
SECTION D-D



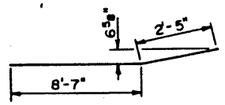
BAR p8



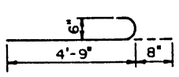
BAR v10(E)



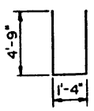
BAR v9(E)



BAR h8 & h10(E)

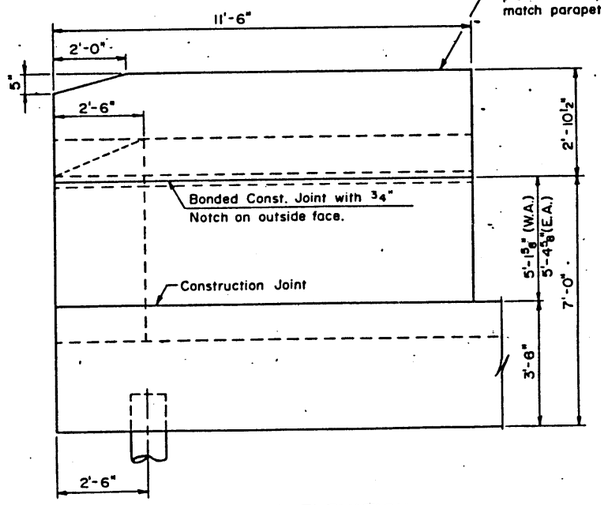


BAR n

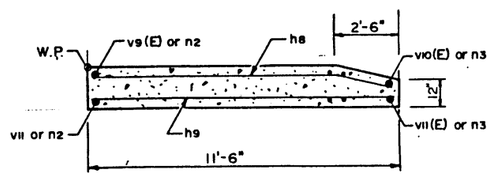


BAR n2

End Post shall be poured after bridge parapet is in place. Form top surface to match parapet grade.



WINGWALL ELEVATION
(Outside View)



SECTION E-E

Work this Sheet with Sheets S-IC-2-5 & S-IC-2-6.

	1st	2nd	3rd
Designed or Checked by	DRB	DRB	WH.
Drawn or Corrected by	RDL	GSA	GC.

DRAWN R.D.L.
CHECKED D.R.B.
DATE FEB 1987
SCALE NO SCALE

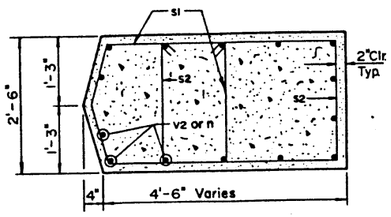
MTA, INCORPORATED
CONSULTING ENGINEERS
CHICAGO – SPRINGFIELD – INDIANAPOLIS

THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY
EAST-WEST TOLLWAY AND MIDWEST ROAD
OAK BROOK, ILLINOIS 60521

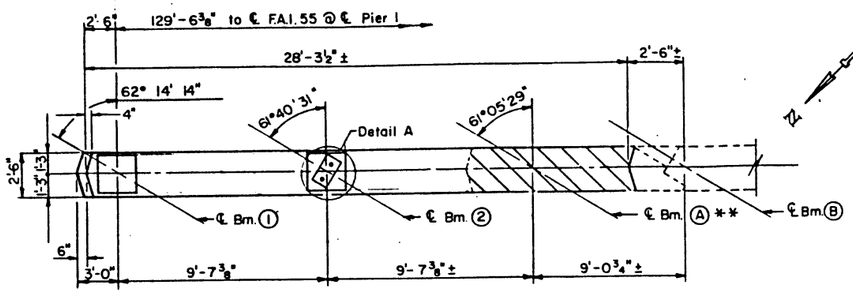
REVISIONS		
NO.	DATE	DESCRIPTION

CONTRACT CIP-611
F.A.I. ROUTE 55 OVER JOLIET ROAD
BRIDGE NO.
WINGWALL DETAILS

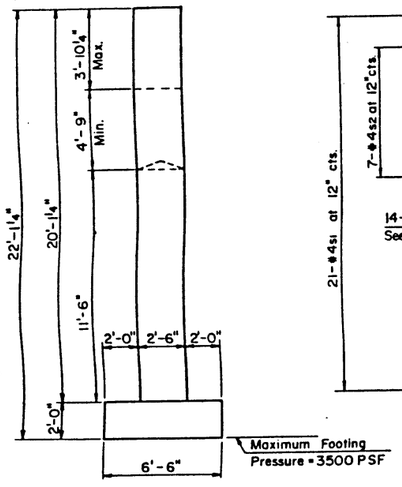
S-IC-2-7
DRAWING NO.
442 OF 527



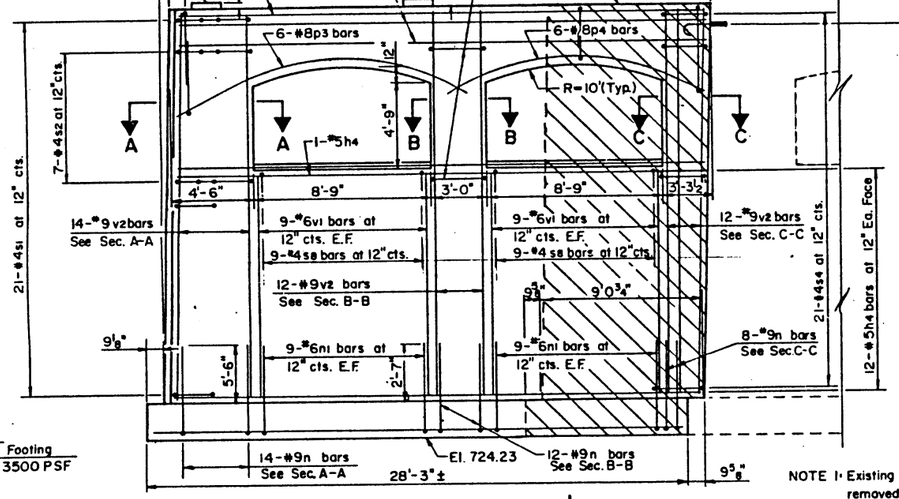
SEC. A-A



TOP PLAN



END VIEW

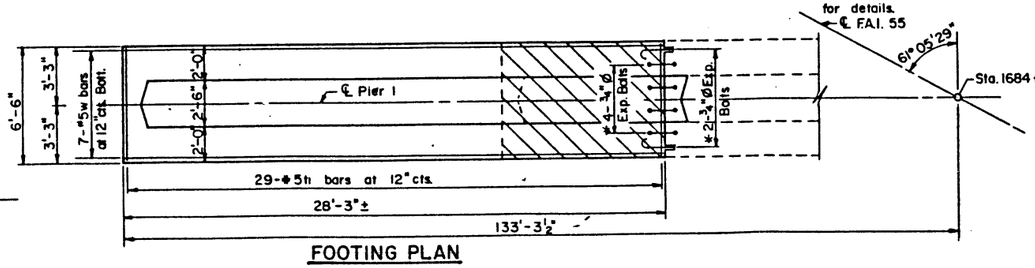


ELEVATION

DETAIL A
Typical Each Beam

NOTE 1. Existing Concrete slopewall shall be removed as required. Cost incidental to STRUCTURE EXCAVATION, COMMON-Concrete Slopewall shall be replaced as shown on Sheet S-IC-2-7.

NOTE 2. Existing barrier to be removed and replaced. See Roadway Plans for details.

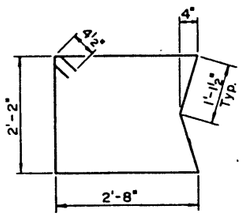


FOOTING PLAN

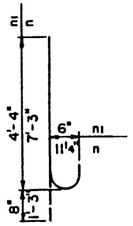
** Temporary supports shall be provided under Beam A. Supports shall be placed after Concrete deck is removed and shall remain in place until the pier is rebuilt and concrete is cured. Bolts in diaphragms adjacent to piers shall be loosened to finger tight prior to raising beams and retightened after beams are in final position. Temporary supports shall be in accordance with Section 503.5.3 of the Standard Specifications. Cost incidental to 503B1 Erecting Structural Steel (Beam Spans).

* Expansion bolts shall consist of approved expansion anchors providing minimum certified proof load = 4080 Lbs. and 3/4" ø hooked bolts. Bolts shall extend 12" into new concrete.

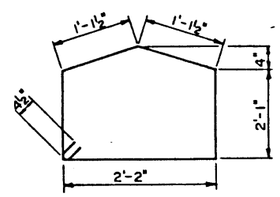
* Expansion bolts shall be located in the field so that proposed expansion bolts are placed a minimum of 3" from existing expansion bolts. Cost of expansion bolts shall be incidental to REINFORCING STEEL.



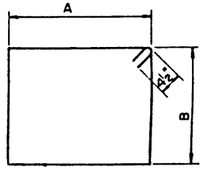
BAR s4



BAR n & n1

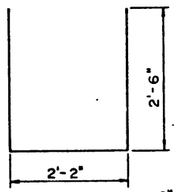


BAR s1

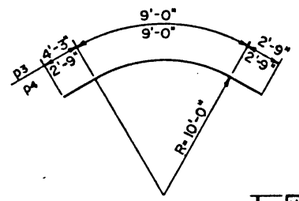


BAR s2 & s3

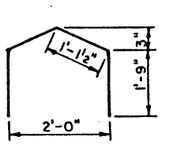
BAR	A	B
s2	3'-1 1/2"	2'-2"
s3	2'-8"	2'-2"



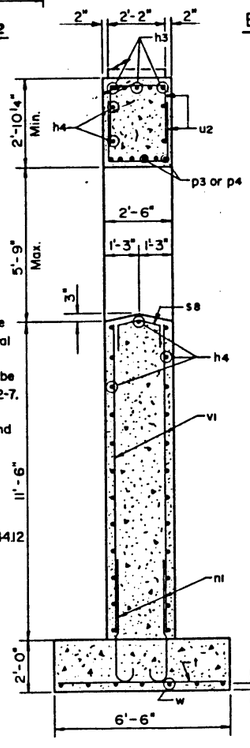
BAR u2



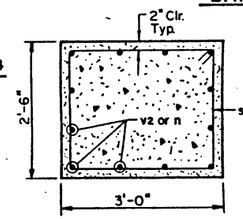
BARS p3 & p4



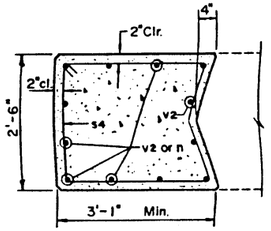
BAR s6



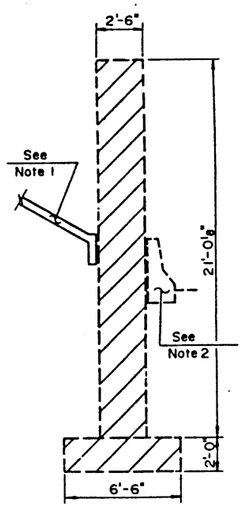
SEC. D-D
(For Proposed Improvement)



SEC. B-B



SEC. C-C



SEC. D-D
(For Removal of Existing Pier)

BILL OF MATERIALS

Bar	No.	Size	Length	Shape
h3	5	#8	27'-9"	
h4	29	#5	27'-9"	
n	34	#9	8'-6"	
n1	36	#6	5'-0"	
p3	6	#8	16'-0"	
p4	6	#8	14'-6"	
s1	21	#4	9'-4"	
s2	7	#4	11'-4"	
s3	7	#4	10'-4"	
s4	21	#4	10'-6"	
s6	18	#4	5'-9"	
t1	29	#5	6'-0"	
u2	58	#5	7'-[illegible]"	
v1	36	#6	11'-3"	
v2	38	#9	19'-9"	
w	7	#5	27'-9"	
Structure Excav. Common			Cu. Yd.	117
Class P Conc.			Cu Yd.	585
Reinforcing Steel			Lbs.	7380
Concrete Removal			Cu. Yd.	22.0

	1st	2nd	3rd
Designed or Checked by	DRB	DRB	W.H.
Drawn or Corrected by	R.D.L.	F.J.	F.J.

DRAWN R.D.L.
CHECKED D.R.B.
DATE FEB. 1987
SCALE NO SCALE

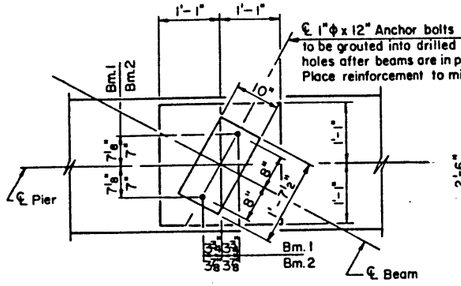
MTA, INCORPORATED
CONSULTING ENGINEERS
CHICAGO – SPRINGFIELD – INDIANAPOLIS

THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY
EAST-WEST TOLLWAY AND MIDWEST ROAD
OAK BROOK, ILLINOIS 60521

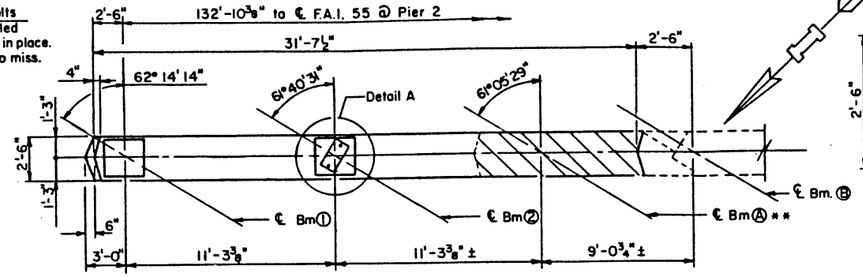
REVISIONS		
NO.	DATE	DESCRIPTION

CONTRACT CIP-611
F.A.I. ROUTE 55 OVER JOLIET ROAD
BRIDGE NO.
PIER 1 WIDENING

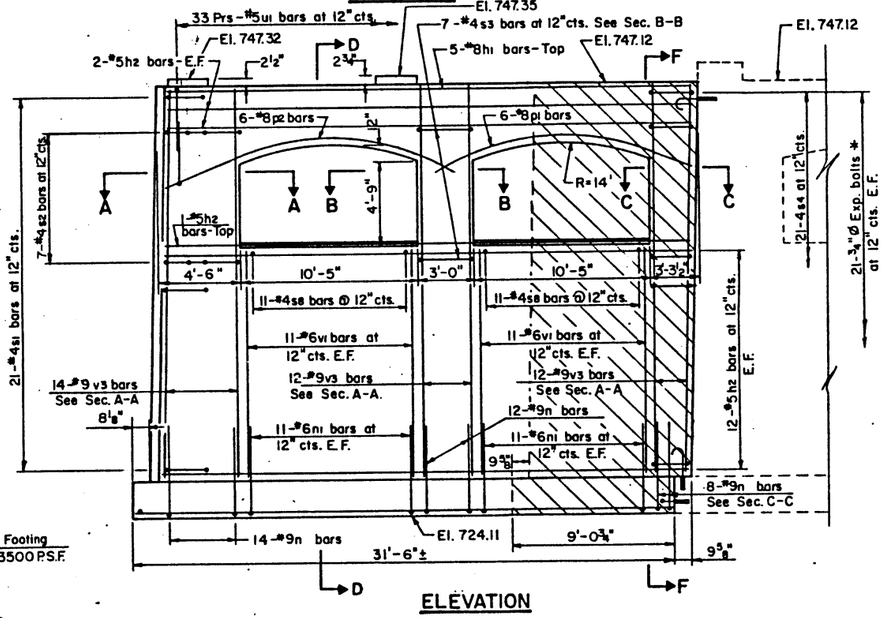
S-IC-2-8
DRAWING NO.
443 OF 527



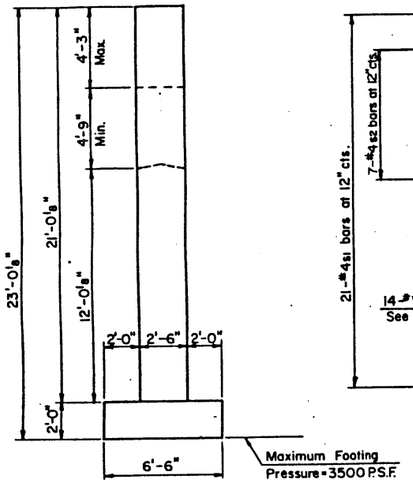
DETAIL A
(Typical Beam 1 & 2)



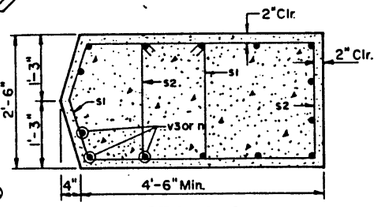
TOP PLAN



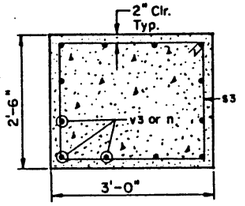
ELEVATION



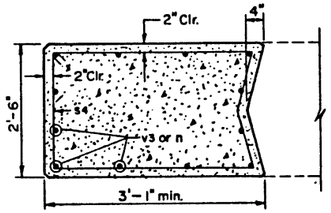
END VIEW



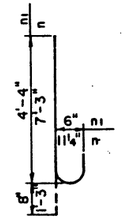
SEC. A-A



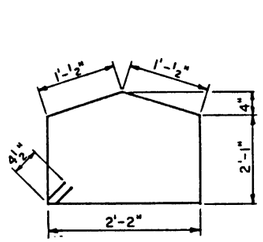
SEC. B-B



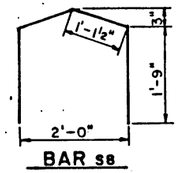
SEC. C-C



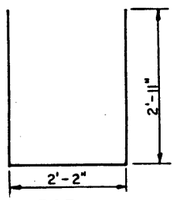
BAR n & n1



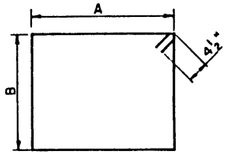
BAR s1



BAR s8

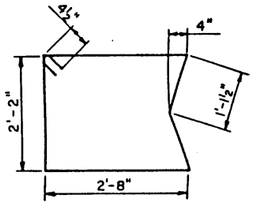


BAR u1

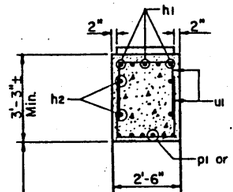


BAR s2 & s3

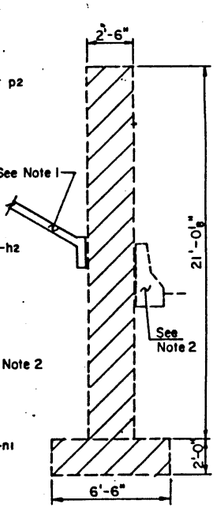
BAR	A	B
s2	3'-11½"	2'-2"
s3	2'-8"	2'-2"



BAR s4



SEC. D-D
(For Proposed Improvement)



SEC. D-D
(For Removal of Existing Pier)

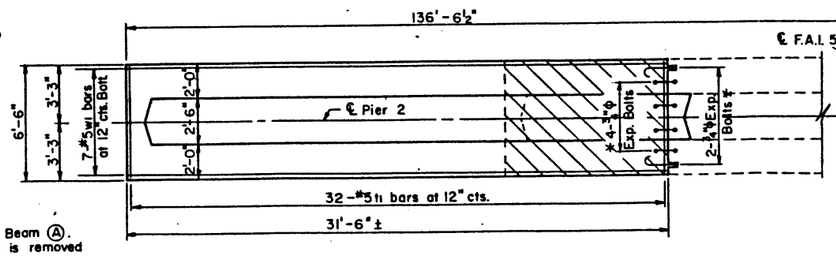
NOTE 1: Existing Concrete slopewall shall be removed as required. Cost incidental to STRUCTURE EXCAVATION, COMMON. Concrete Slopewall shall be replaced as shown on Sheet S-IC-2-7.

NOTE 2: Existing barrier to be removed and replaced. See Roadway Plans for details.

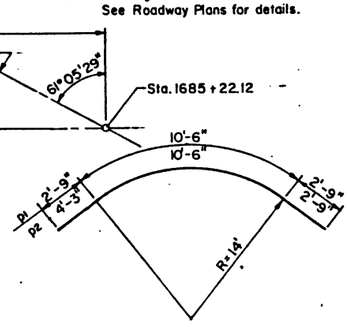
* Expansion bolts shall consist of approved expansion anchors providing minimum certified proof load = 4080 Lbs. and ¾"ϕ hooked bolts. Bolts shall extend 12" into new concrete.

Expansion bolts shall be located in the field so that proposed expansion bolts are placed a minimum of 3" from existing expansion bolts. Cost of expansion bolts shall be incidental to REINFORCING STEEL.

** Temporary supports shall be provided under Beam Ⓐ. Supports shall be placed after concrete deck is removed and shall remain in place until the pier is rebuilt and concrete is cured. Bolts in diaphragms adjacent to piers shall be loosened to finger tight prior to raising beams and retightened after beams are in final position. Temporary supports shall be in accordance with Section 503.5.3 of the Standard Specifications. Cost incidental to 503BI Erecting Structural Steel (Beam Spans).



FOOTING PLAN



BAR p1 & p2

BILL OF MATERIALS

Bar	No.	Size	Length	Shape
h1	5	#8	31'-3"	
h2	29	#5	31'-3"	
n	34	#9	8'-6"	
n1	44	#6	5'-0"	
p1	6	#8	16'-0"	
p2	6	#8	17'-6"	
s1	21	#4	9'-4"	
s2	7	#4	11'-4"	
s3	7	#4	10'-5"	
s4	21	#4	10'-6"	
s8	22	#4	5'-9"	
t1	32	#5	6'-0	
u1	66	#5	8'-0"	
v1	44	#6	11'-3"	
v3	38	#9	20'-9"	
w1	7	#5	31'-0"	
Reinforcing Steel			Lbs.	8080
Class P Concrete			Cu. Yds.	67.3
Conc. Removal			Cu. Yds.	22.0
Struc. Ex., Common			Cu. Yds.	128

	1st	2nd	3rd
Designed or Checked by	DRB	DRB	W.H.
Drawn or Corrected by	RDL	RDL	F.J.

DRAWN R.D.L.
CHECKED D.R.B.
DATE FEB. 1987
SCALE NO SCALE

MTA, INCORPORATED
CONSULTING ENGINEERS
CHICAGO – SPRINGFIELD – INDIANAPOLIS

THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY
EAST-WEST TOLLWAY AND MIDWEST ROAD
OAK BROOK, ILLINOIS 60521

REVISIONS		
NO.	DATE	DESCRIPTION

CONTRACT CIP-611
F.A.I. ROUTE 55 OVER JOLIET ROAD
BRIDGE NO.
PIER 2 WIDENING

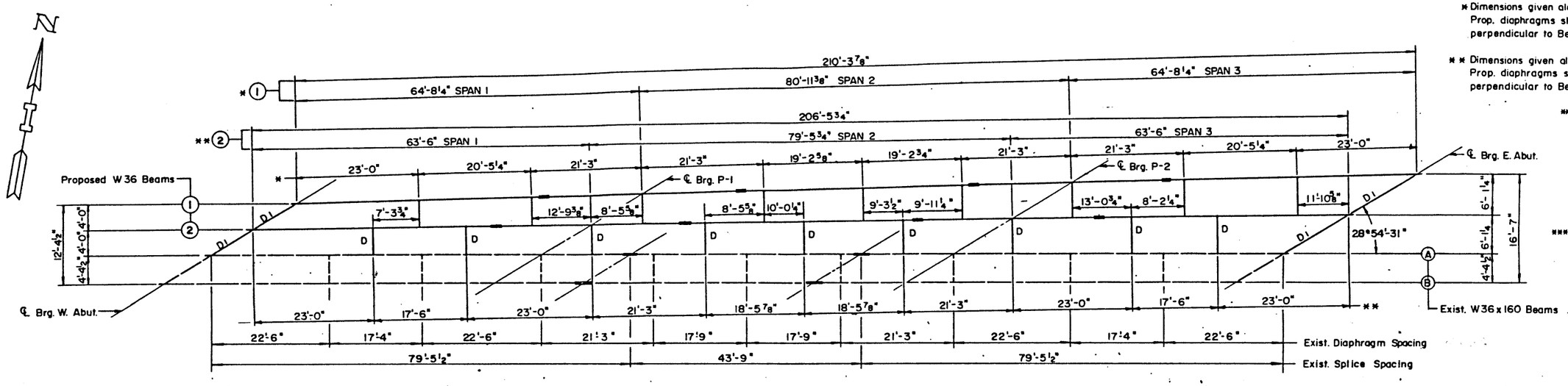
S-IC-2-9
DRAWING NO.
444 527
OF

* Dimensions given along ℄ Beam ①. Prop. diaphragms shall be placed perpendicular to Beam ②.

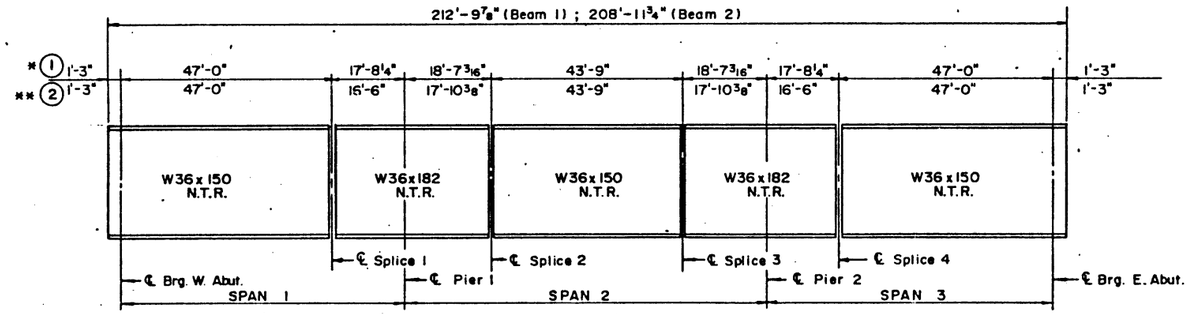
** Dimensions given along ℄ Beam ②. Prop. diaphragms shall be placed perpendicular to Beam ②.

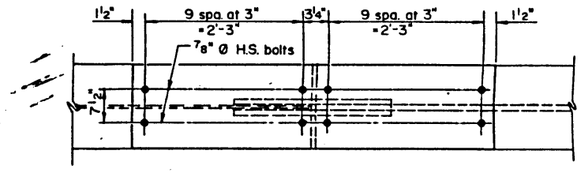
*** Estimated quantity for Structural Steel includes the weight of all proposed beams, diaphragms, splices, bolts, fixed bearings and bolsters. Metal component parts of Elastomeric Bearings are not included in the quantity for Structural Steel.

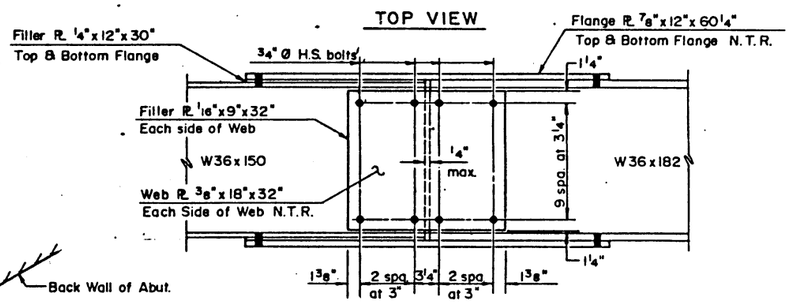
**** Adjusting shim Pls (2-⅛", 2-⅛", 2-¼") shall be provided for each Brg. Max. Jacking Load = 60 kip



FRAMING PLAN

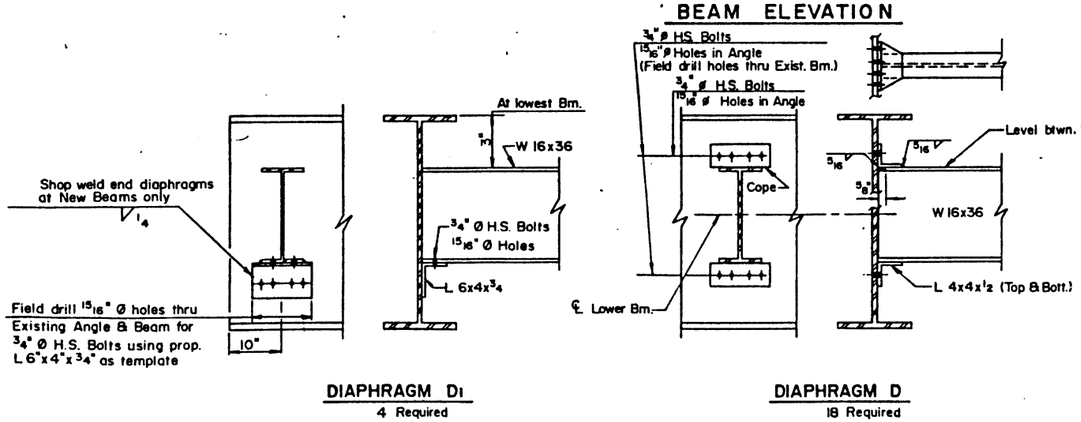






FIELD SPLICE DETAILS

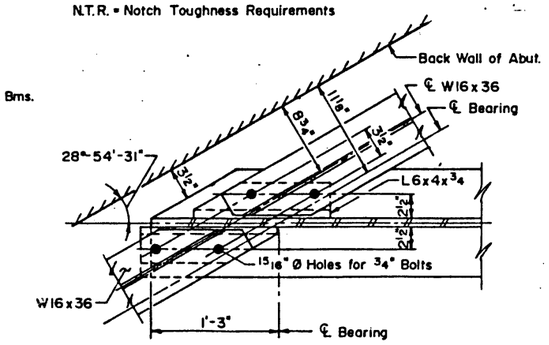
(Typical All Locations)



DIAPHRAGM D1
4 Required

DIAPHRAGM D
18 Required

N.T.R. = Notch Toughness Requirements



CONN. FOR END DIAPHRAGM

BILL OF MATERIALS

	ITEM	UNIT	ESTIMATED QUANTITIES
***	Structural Steel	Lbs.	84,390
	Elastomeric Bearings, Type A	Ea.	20
	Elastomeric Bearings, Type B	Ea.	20
****	Bridge Expansion Brg. Removal	Ea.	36

	1st	2nd	3rd
Designed or Checked by	DRB	DRB	WH
Drawn or Corrected by	GMG	RDL	RBL

DRAWN G.M.G.
CHECKED D.R.B.
DATE FEB 1987
SCALE NO SCALE

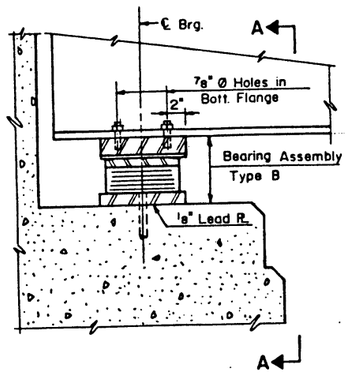
MTA, INCORPORATED
CONSULTING ENGINEERS
CHICAGO – SPRINGFIELD – INDIANAPOLIS

THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY
EAST-WEST TOLLWAY AND MIDWEST ROAD
OAK BROOK, ILLINOIS 60521

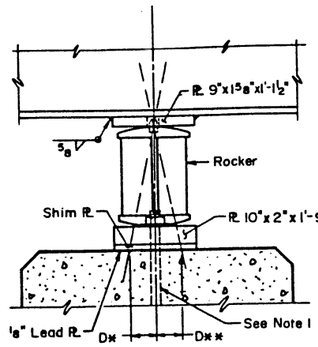
REVISIONS		
NO.	DATE	DESCRIPTION

CONTRACT CIP-611
F.A.I. ROUTE 55 OVER JOLIET ROAD
BRIDGE NOS.
FRAMING PLAN

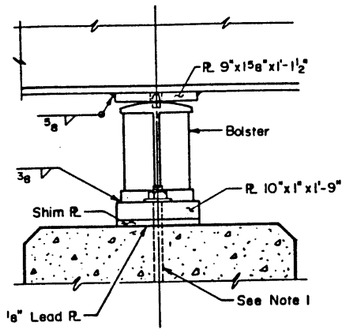
S-IC-2-10
DRAWING NO.
445 OF 527



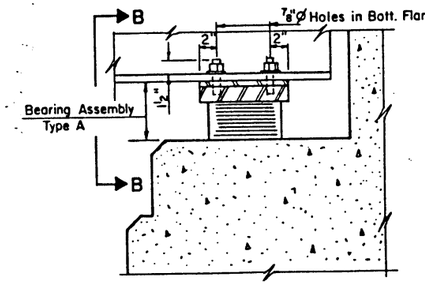
SEC. AT EAST ABUT.
(Beams 1 & 2)



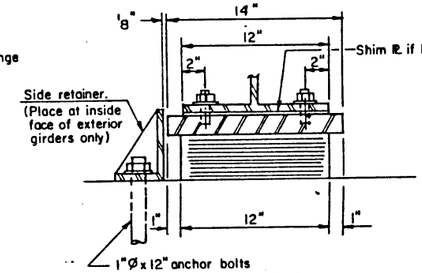
SECTION AT PIER 2



SECTION AT PIER 1



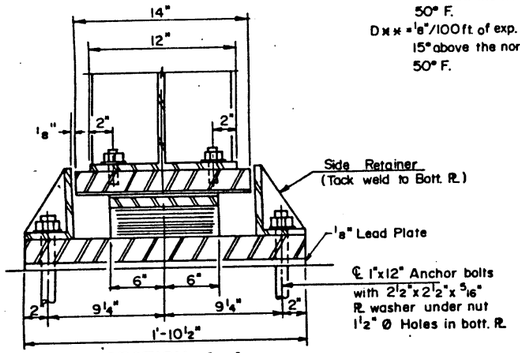
SEC. AT WEST ABUT.
(Beams 1 & 2)



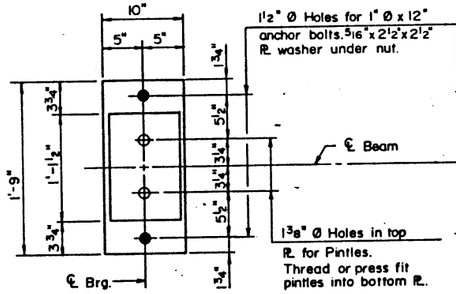
SEC. B-B

D* = ⅛"/100 ft. of exp. for every 15° below the normal temp. 50° F.
D** = ⅛"/100 ft. of exp. for every 15° above the normal temp. 50° F.

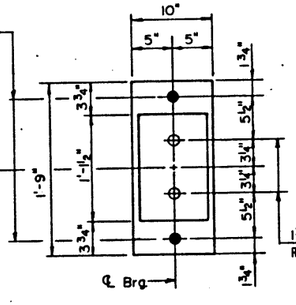
Note 1: 1"Øx 12" Anchor Bolts to be grouted into drilled holes after beams are in place, or bolts at fixed pier may be built into the masonary.



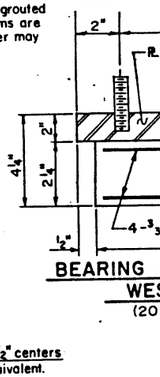
SECTION A-A



PLAN
Pier 2

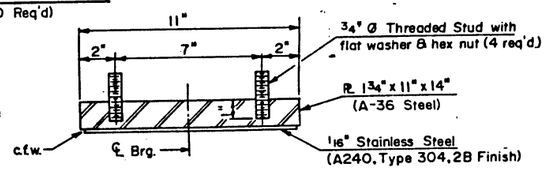


PLAN
Pier 1

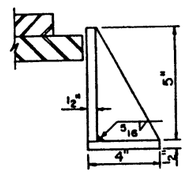


BEARING ASSEMBLY-TYPE A
WEST ABUT.
(20 Req'd)

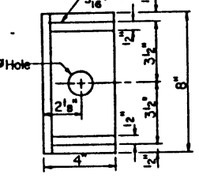
For Bolster Details at Existing Bearings, See Sheet S-1C-2-3



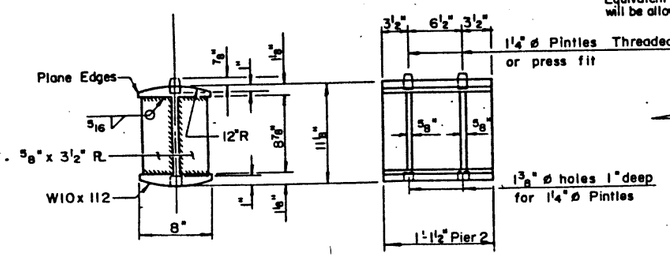
TOP



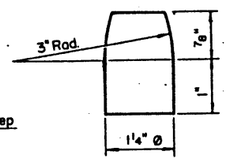
SIDE RETAINER
Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.



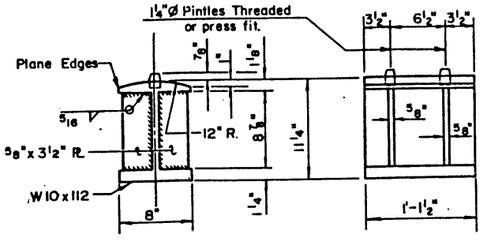
PLAN-TFE SURFACE



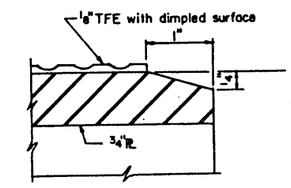
ROCKER DETAILS
PIER 2
(2 Req'd.)



PINTLE DETAIL



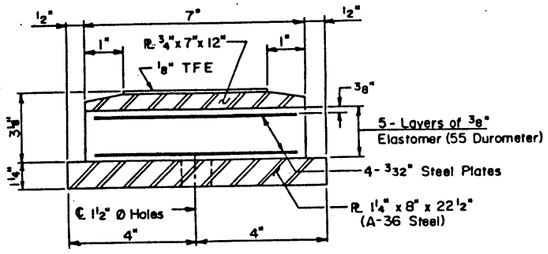
BOLSTER DETAILS
PIER 1
(2 Req'd)



SECTION THRU TFE

Note: The ⅛" TFE sheet shall be bonded directly to the top steel plate with a two-component, medium viscosity epoxy resin, conforming to the requirements of the Federal Specification MMM-A-134, Type I. The bond agent shall be applied on the full area of the contact surfaces.

Bonding of ⅛" TFE during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.



BOTTOM

BEARING ASSEMBLY-TYPE B
EAST ABUT.
(20 Req'd.)

Designed or Checked by	DRB	WH
Drawn or Corrected by	ROL	F.G.
	1st	2nd

DRAWN G.M.G. | DATE FEB 1987 | CHECKED D.R.B. | SCALE NO SCALE

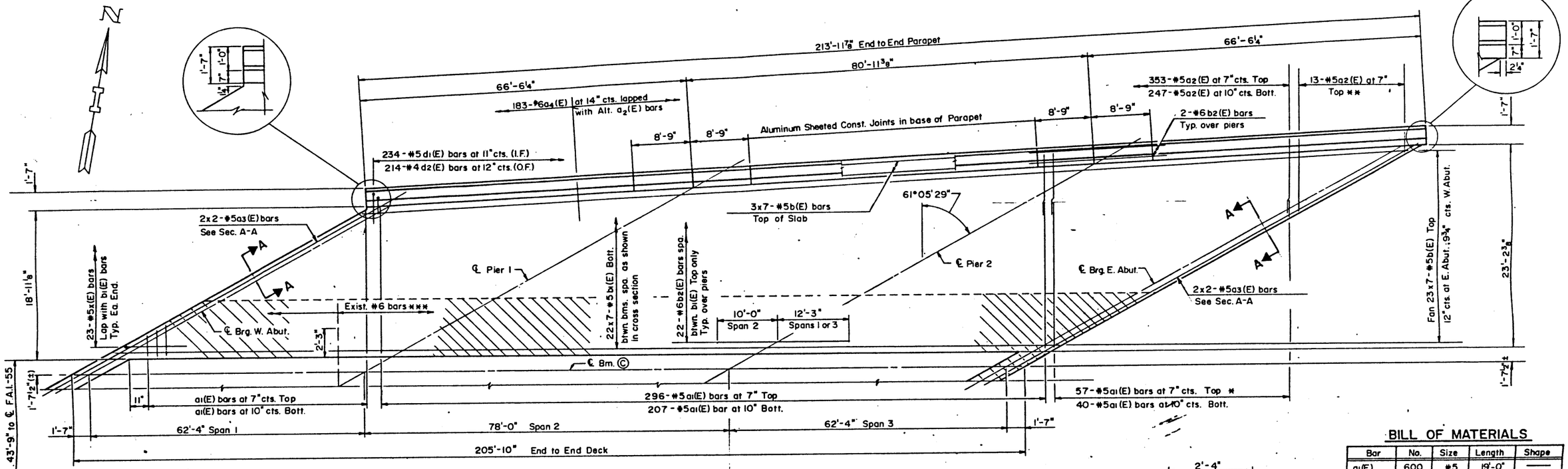
MTA, INCORPORATED
CONSULTING ENGINEERS
CHICAGO – SPRINGFIELD – INDIANAPOLIS

THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY
EAST-WEST TOLLWAY AND MIDWEST ROAD
OAK BROOK, ILLINOIS 60521

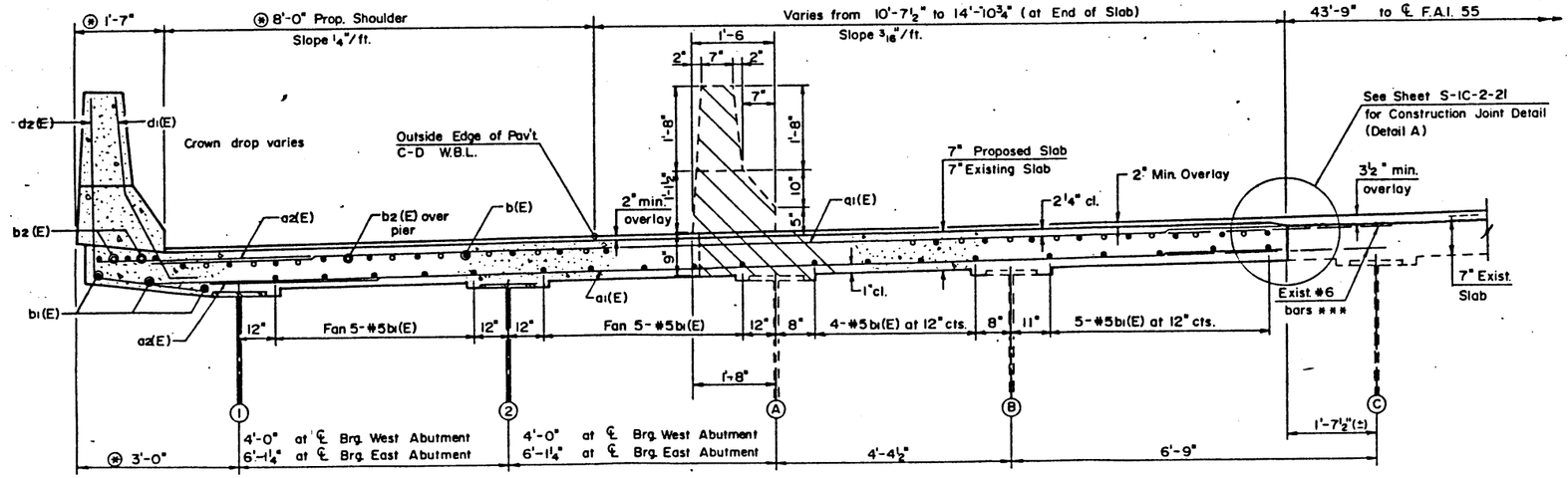
REVISIONS		
NO.	DATE	DESCRIPTION

CONTRACT CIP-611
F.A.I. ROUTE 55 OVER JOLIET ROAD
BRIDGE NO.
BEARING DETAILS

S-1C-2-11
DRAWING NO.
446 OF 527



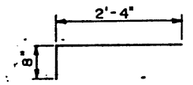
PLAN



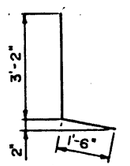
CROSS SECTION THRU SUPERSTRUCTURE

℗ Indicates dimensions given perpendicular to Outside Edge of Pav't. C-D W.B.L.

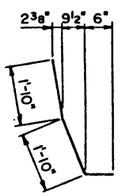
Hatched area indicates Concrete Removal



BAR x(E)



BAR d2(E)



BAR d1(E)

BILL OF MATERIALS

Bar	No.	Size	Length	Shape
a1(E)	600	#5	19'-0"	——
a2(E)	613	#5	7'-3"	——
a3(E)	8	#5	25'-3"	——
a4(E)	183	#6	4'-0"	——
b(E)	182	#5	32'-6"	——
b1(E)	154	#5	32'-3"	——
b2(E)	48	#6	22'-3"	——
d1(E)	234	#5	4'-2"	L
d2(E)	214	#4	4'-8"	L
x(E)	46	#5	3'-0"	⌐

ITEM	UNIT	QUANTITY
Class D Concrete	Cu.Yd.	109.3
Reinf. Steel, Epoxy Coated	Lbs.	32,660
Concrete Removal	Cu. Yds.	73

* Cut a1(E) bars in the field to fit skew and use remainder of bars in opposite end.

** Cut a2(E) bars in field to fit skew and use remainder of bars in bottom of slab at 10" cts.

*** Exist. #6 bars at 7" cts. Top & Bott. Cut off 2'-3" from removal line. Clean by sandblasting to gray metal & incorporate into new constr. Cost incidental to Reinforcing Steel.

See Sheet S-1C-2-13 For Sec. A-A.

	1st	2nd	3rd
Designed or Checked by	DRB	DRB	WH
Drawn or Corrected by	RDL	GSA	RDL

DRAWN G.M.G. DATE FEB 1987

CHECKED W.H. SCALE NO SCALE

MTA, INCORPORATED
CONSULTING ENGINEERS
CHICAGO – SPRINGFIELD – INDIANAPOLIS

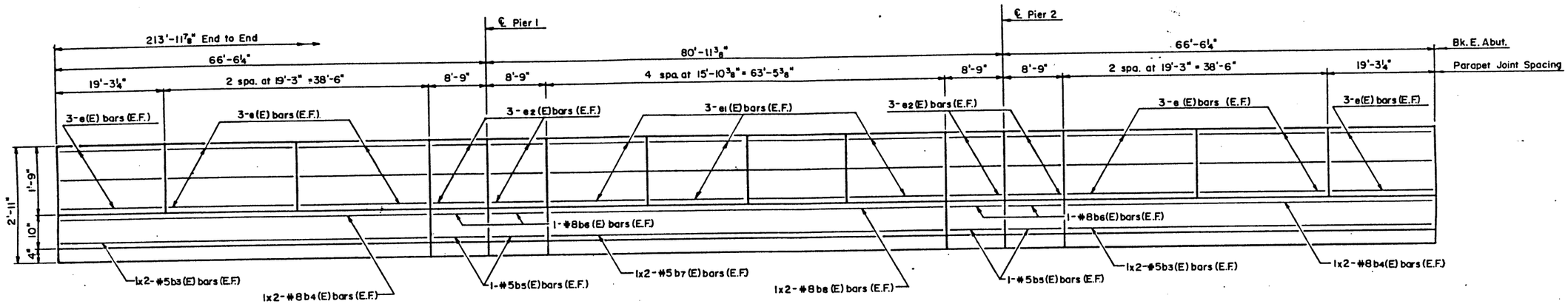
THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY
EAST-WEST TOLLWAY AND MIDWEST ROAD
OAK BROOK, ILLINOIS 60521

REVISIONS		
NO.	DATE	DESCRIPTION

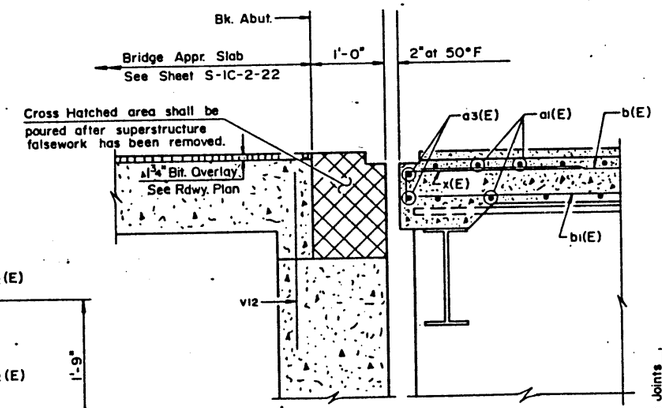
CONTRACT C1P-611
F.A.I. ROUTE 55 OVER JOLIET ROAD
BRIDGE NOS.
DECK WIDENING

S-1C-2-12
DRAWING NO.
447 OF 527

W3L

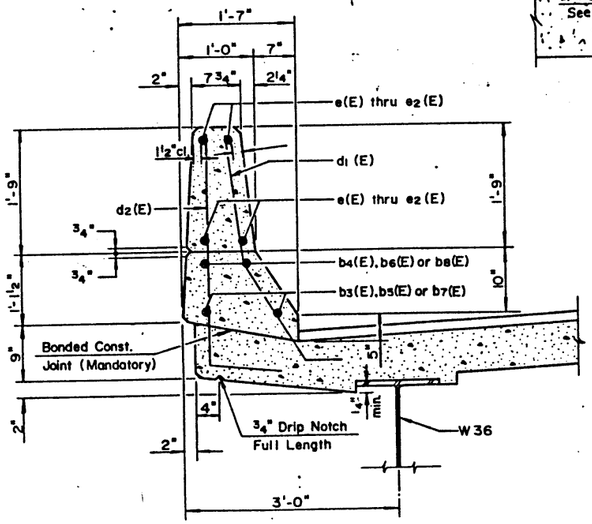


ELEVATION
(Inside View)

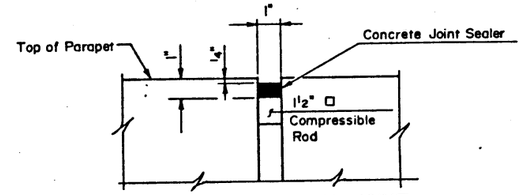


SEC. A-A

For location of Sec. A-A
See Sheet S-IC-2-12.

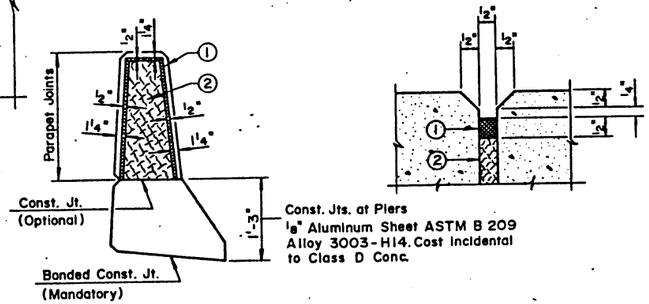


SECTION THRU OUTSIDE PARAPET



RESEAL LONGITUDINAL JOINT
(At existing Median Parapet)

Existing joint sealer shall be removed and new sealer and rod installed. Cost included in Reseal Longitudinal Joint (S.P. 574)



PARAPET JOINT DETAILS

① Two component non-staining gray sealing compound with polysulfide liquid polymer gun grade with primer.

② ½" Preformed Cork Jt. Filler (In accordance with Art. 715.07 or 715.08 of I.D.O.T. Std. Specs.) Cost incidental to Class D Concrete.

BILL OF MATERIALS

Bar	No.	Size	Length	Shape
b3(E)	8	#5	29'-9"	——
b4(E)	8	#8	31'-0"	——
b5(E)	8	#5	8'-6"	——
b6(E)	8	#8	8'-6"	——
b7(E)	4	#5	32'-9"	——
b8(E)	4	#8	33'-9"	——
e(E)	36	#4	19'-0"	——
e1(E)	24	#4	15'-6"	——
e2(E)	24	#4	8'-6"	——

ITEM	UNIT	QUANTITY
Reinf. Steel, Epoxy Coated	Lbs.	2,500
Class D Concrete	Cu.Yd.	237
Reseal Long. Joint	Lin. Ft	207

	1st	2nd	3rd
Designed or Checked by	DRB	DRB	W.H.
Drawn or Corrected by	RDL	RDL	G.C.

DRAWN R.D.L.
CHECKED D.R.B.
DATE FEB 1987
SCALE NO SCALE

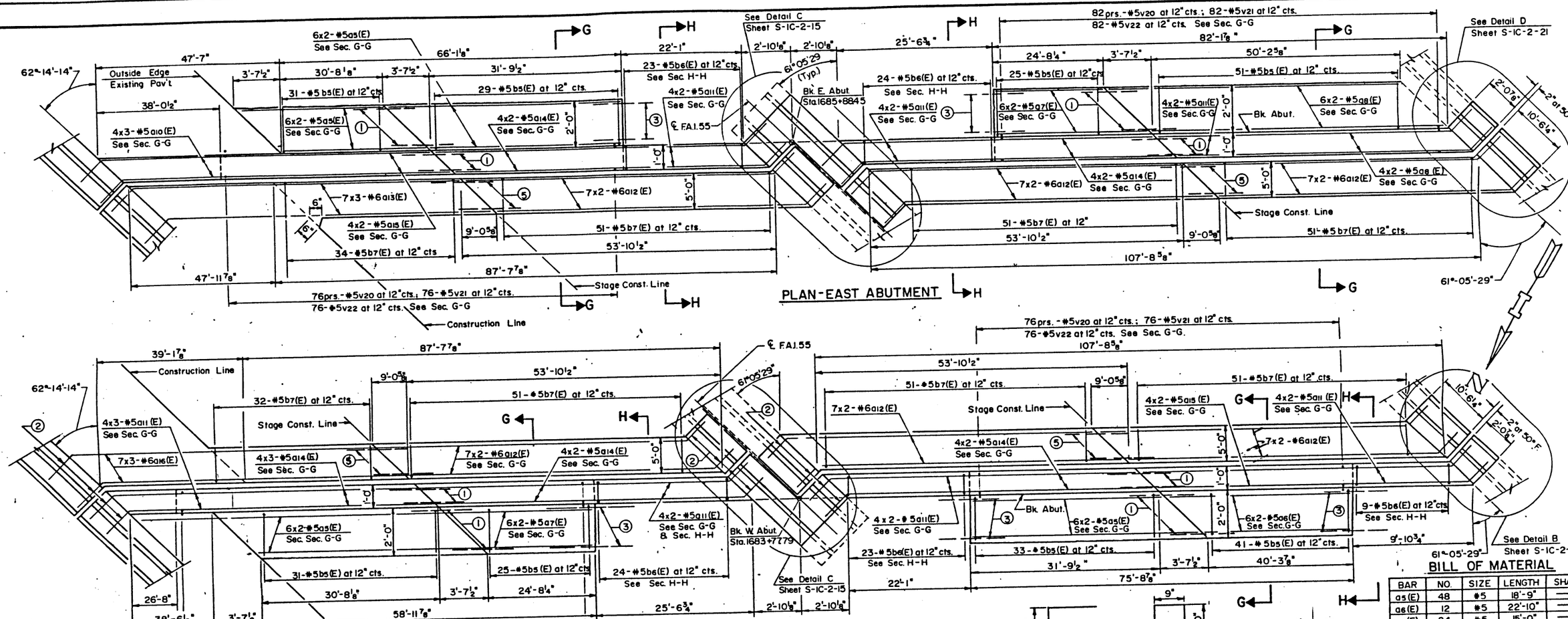
MTA, INCORPORATED
CONSULTING ENGINEERS
CHICAGO – SPRINGFIELD – INDIANAPOLIS

THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY
EAST-WEST TOLLWAY AND MIDWEST ROAD
OAK BROOK, ILLINOIS 60521

REVISIONS		
NO.	DATE	DESCRIPTION

CONTRACT CIP-611
F.A.I. ROUTE 55 OVER JOLIET ROAD
BRIDGE NOS.
PARAPET DETAILS

S-IC-2-13
DRAWING NO.
448 OF 527



Rev....	1st	2nd	3rd
Designed or Checked by	D.R.B.	D.R.B.	W.H.
Drawn or Corrected by	R.D.L.	R.D.L.	R.D.L.

BILL OF MATERIAL

BAR	NO.	SIZE	LENGTH	SHAPE
a5(E)	48	#5	18'-9"	
a6(E)	12	#5	22'-10"	
a7(E)	24	#5	15'-0"	
a8(E)	20	#5	28'-0"	
a10(E)	12	#5	30'-0"	
a11(E)	60	#5	28'-6"	
a12(E)	84	#6	28'-9"	
a13(E)	21	#6	30'-6"	
a14(E)	44	#5	17'-0"	
a15(E)	16	#5	25'-0"	
a16(E)	21	#6	26'-3"	
b5(E)	266	#5	4'-1"	
b6(E)	103	#5	2'-9"	
b7(E)	372	#5	5'-4"	
d10(E)	12	#5	5'-3"	
d11(E)	66	#4	4'-6"	
d12(E)	72	#5	4'-0"	
d13(E)	10	#5	4'-4"	
v20	618	#5	3'-0"	
v21	309	#5	1'-11"	
v22	309	#5	2'-0"	
Reinf. Steel			Lbs.	3200
Reinf. Steel, Epoxy Cld.			Lbs.	15140
Class D, Concrete			Cu. Yds.	110.5
Concrete Removal			Cu. Yds.	81.8
Bridge Exp. Jt Closure Neoprene 2"			Lin. Ft	500

(1) Existing Reinforcemt Bars shall be cleaned by sandblasting, cut 1'-9" from Stage Construction Line and incorporated into new construction as dowel bars. Cost incidental to Concrete Removal.

(2) Bend bars in field. (Typical)

(3) Existing longitudinal & transverse reinforcement which is embeded in the remaining concrete shall be cleaned by sandblasting to grey metal and incorporated into new construction. Cost incidental to Concrete Removal.

(4) Surfaces of existing beams and diaphragms in contact with prop. concrete shall be cleaned by sandblasting to gray metal. Beam & diaphragm surfaces shall be free of oil, moisture, or rust at the time the concrete is poured. Cost incidental to Concrete Removal.

(5) 7-$\frac{3}{4}$" Ø Mechanial splices lapped with a12(E) or a13(E) bars in deck See Detail D Sheet S-1C-2-15

(6)

Work this Sheet with Sheets S-1C-2-15 & S-1C-2-21

S-1C-2-14

DRAWN R.D.L.
CHECKED D.R.B.
DATE FEB 1987
SCALE NO SCALE

MTA, INCORPORATED
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CHICAGO — SPRINGFIELD — INDIANAPOLIS

THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY
EAST-WEST TOLLWAY AND MIDWEST ROAD
OAK BROOK, ILLINOIS 60521

REVISIONS		
NO.	DATE	DESCRIPTION

CONTRACT CIP-611
F.A.I. ROUTE 55 OVER JOLIET ROAD
BRIDGE NO.
EXPANSION JOINT MODIFICATION

DRAWING NO. 449 OF 527

Joint Size	"C" at 50°F	"D" at 50°F
2	2"	1⅝" min.
2½	2½"	1¾" min.
4	3"	2½" min.

INSTALLATION NOTES

Use anchor blocks and continuous seal as anchor bolt location templates.

Ⓐ Install sponge mandrels into positions shown to form flap convolution.

Ⓑ Install parapet or sidewalk piece (trim roadway flap to fit before applying epoxy).

Ⓒ Install continuous seal in roadway.

Ⓓ Install anchor blocks as indicated.

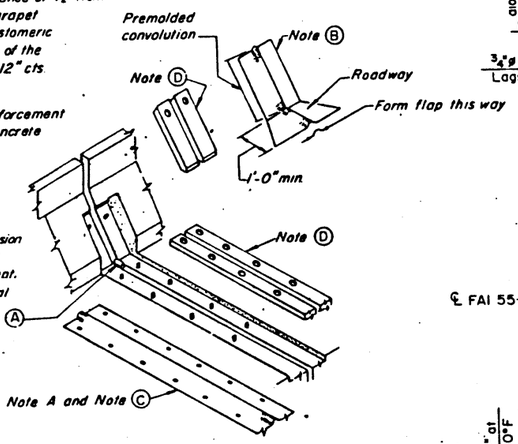
NOTE A - Maximum spacing of anchor bolts shall be 12" centers.

SKEW LIMITATIONS

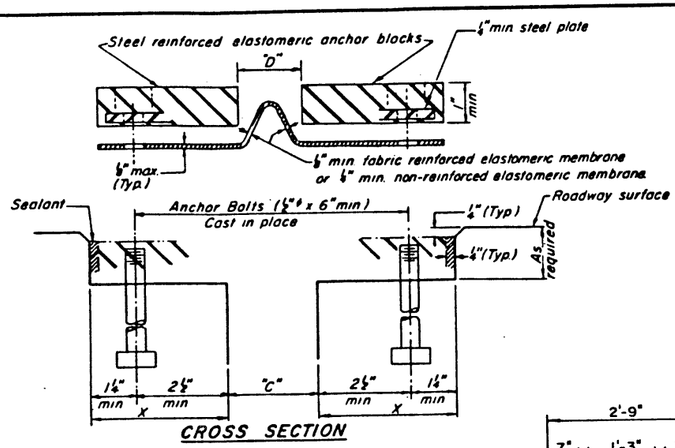
The details of the anchor blocks and the elastomeric membrane in the parapet, as shown, are for up to 50° skews.

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 1½" 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.

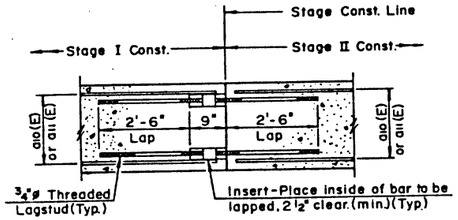
③ Existing longitudinal & transverse reinforcement which is embedded in the remaing concrete shall be cleaned by sandblasting to gray metal & incorporated into new construction. Cost incidental to Concrete Removal. Existing reinforcement having 25% or more of Cross Sectional area lost due to corrosion or damaged during Concrete Removal shall be replaced by new reinforcement. Cost of new rebars shall be incidental to Reinforcing Steel.



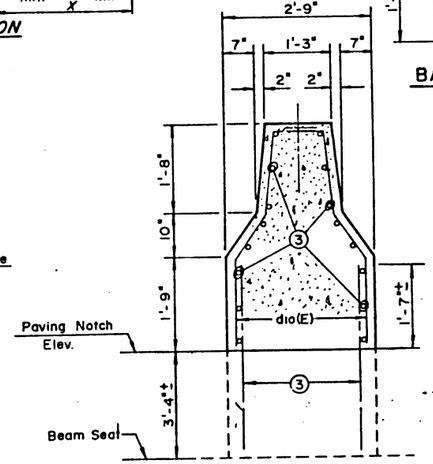
AT PARAPET



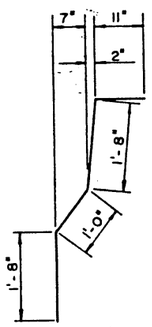
CROSS SECTION



DETAIL D
(MECHANICAL SPLICE)
Cost of Mechanical Splice Incidental to Reinf. Steel, Epoxy Coated.



SEC. M-M



BAR d10(E)

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 Special Provisions.

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.

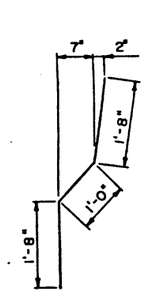
The steel reinforcement must extend up the back face of anchor blocks when asphalt surfaces are used but is optional in concrete blockout.

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.

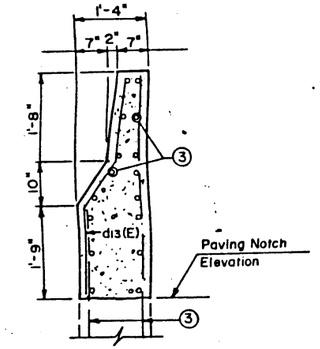
Joint openings shall be adjusted in accordance with Article 503.07(c) of the Standard Specifications when the deck is poured at an ambient temperature other than 50° F.

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.



BAR d13(E)

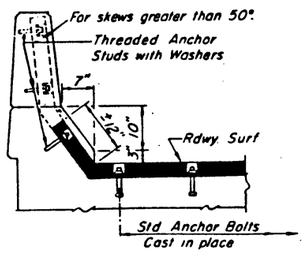


SEC. K-K

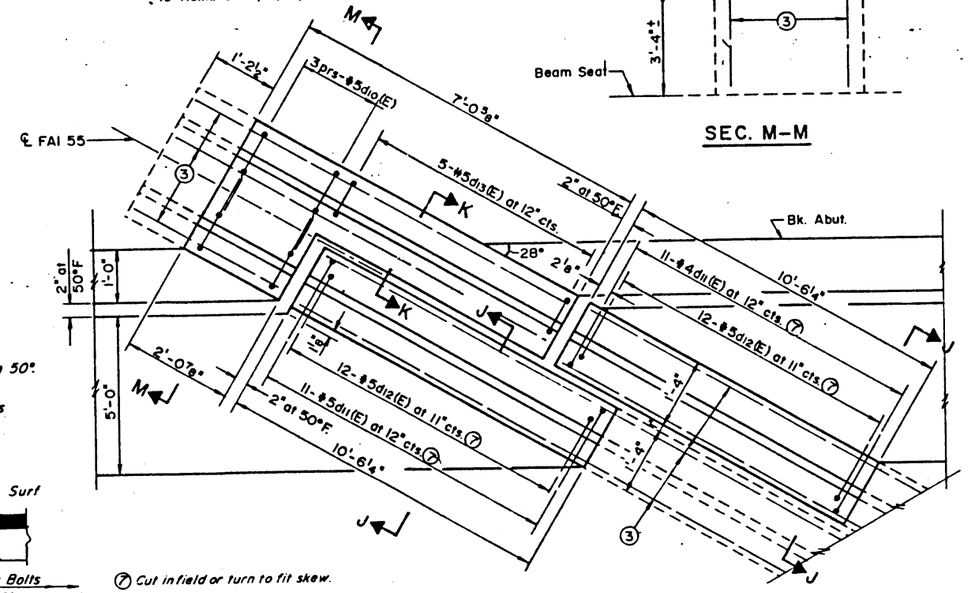
** ALTERNATE NEOPRENE EXP. JT. (2")

MODEL	SUPPLIER
Onflex E-LAST-ON 25	Structural Accessories Inc.
Fel-Span-CS Model T-20-CS	Fel-Pro, Inc.
Wabo Elastoflex	Watson - Bowman Associates, Inc.
Acme Trojan TR300	Acme Highway Prod. Corp.
Gen - Strip CCL, 2"	General Tire Company

** Other Equivalent or better alternates may be submitted for approval. Dimensions A, B, X & T to be in accordance with manufacturer's recommendations and shown on the shop drawings.

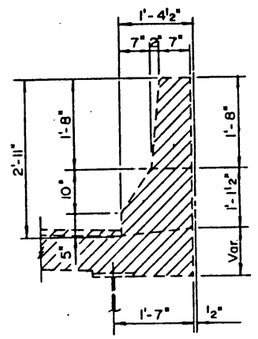


AT PARAPET

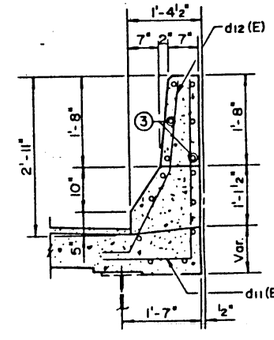


(7) Cut in field or turn to fit skew.

DETAIL C



EXISTING CONDITION



PROPOSED CONDITION

SEC. J-J

Work this sheet with sheet S-IC-2-14 & S-IC-2-21

No.	Designed or Checked by	1st	2nd	3rd
	Drawn or Corrected by	DRB	DRB	WH
		RHH	RC.	RHH

DRAWN R.D.L.
CHECKED D.R.B.
DATE FEB 1987
SCALE NO SCALE

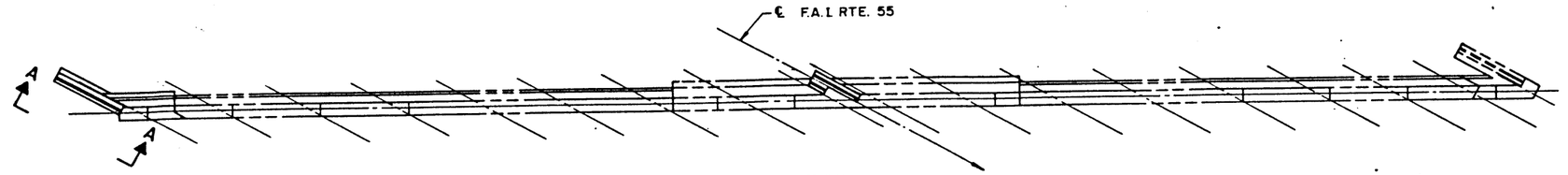
MTA, INCORPORATED
CONSULTING ENGINEERS
CHICAGO - SPRINGFIELD - INDIANAPOLIS

THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY
EAST-WEST TOLLWAY AND MIDWEST ROAD
OAK BROOK, ILLINOIS 60521

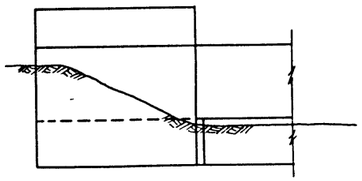
REVISIONS		
NO.	DATE	DESCRIPTION

CONTRACT CIP-611
F.A.I. RTE. 55 OVER JOLIET ROAD
BRIDGE NOS.
EXPANSION JOINT DETAILS

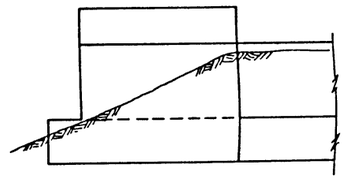
S-IC-2-15
DRAWING NO.
450 OF 527



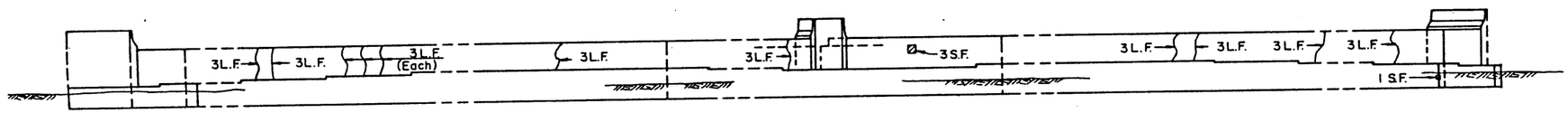
PLAN



SEC. A-A
No Repair Req'd.



SEC. B-B
No Repair Req'd.

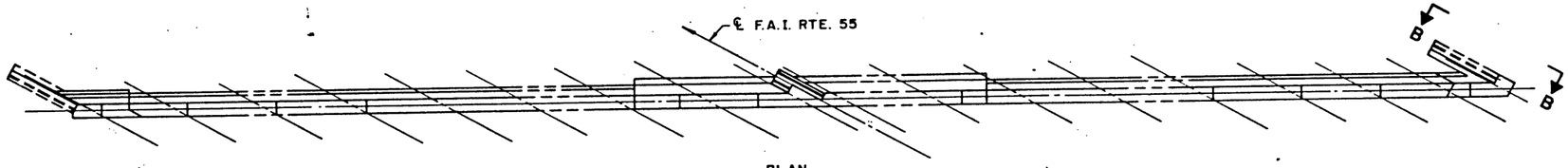


ELEVATION

EAST BOUND LANES

WEST BOUND LANES

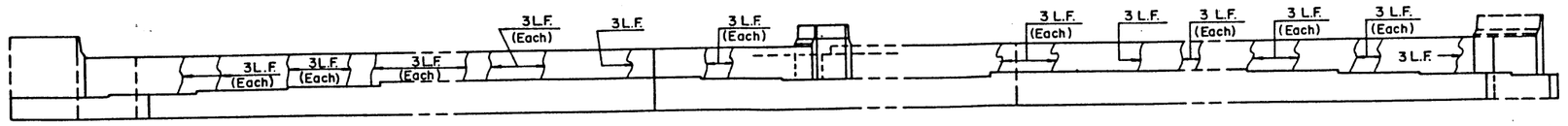
WEST ABUTMENT



PLAN

CONDITION KEY

REPAIR KEY



ELEVATION

WEST BOUND LANES

EAST BOUND LANES

EAST ABUTMENT

BILL OF MATERIALS

	ITEM	UNIT	TOTAL
*	Formed Concrete Repairs	Cu.Ft.	36
	Low Pressure Epoxy Injection	Lin.Ft.	413
	Pneumatically Applied Concrete	Sq. Ft	41

LEGEND OF REPAIRS

- Indicates LOW PRESSURE EPOXY INJECTION
- Indicates PNEUMATICALLY APPLIED CONCRETE
- Indicates FORMED CONCRETE REPAIR

NOTE: Work this Sheet with S-IC-2-17
All repair dimensions are approximate.
* All FORMED CONCRETE REPAIRS are assumed to be 6 inches in depth for the purpose of estimating quantities. Actual depths may vary.

S-IC-2-16

Revisions	1st	2nd	3rd
Designed or Checked by	DRB	DRB	WH
Drawn or Corrected by	RHH	GSA	RRH

DRAWN R.H.H.
CHECKED D.R.B.
DATE FEB 1987
SCALE NO SCALE

MTA, INCORPORATED
CONSULTING ENGINEERS
CHICAGO – SPRINGFIELD – INDIANAPOLIS

THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY
EAST-WEST TOLLWAY AND MIDWEST ROAD
OAK BROOK, ILLINOIS 60521

REVISIONS		
NO.	DATE	DESCRIPTION

CONTRACT CIP - 611
F.A.I. RTE. 55 OVER JOLIET ROAD
BRIDGE NO.
SUBSTRUCTURE REPAIR

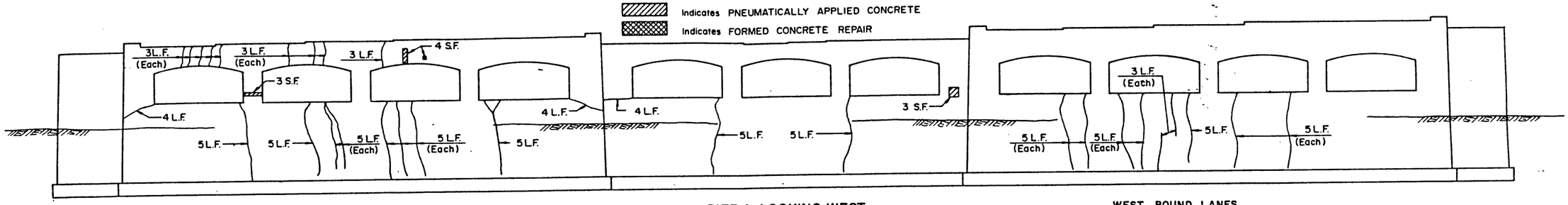
DRAWING NO.
451 OF 527

LEGEND OF REPAIRS

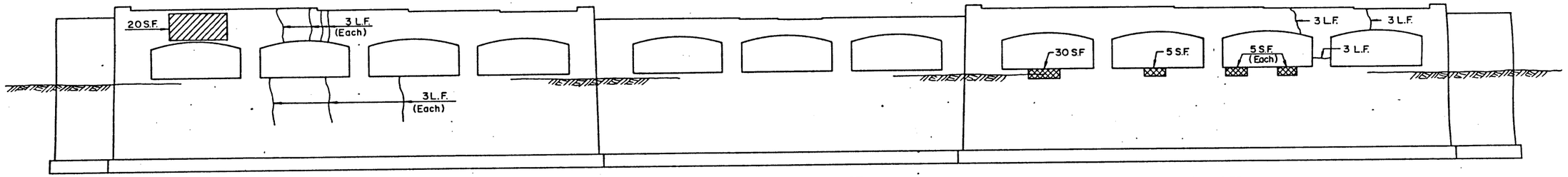
Indicates LOW PRESSURE EPOXY INJECTION

Indicates PNEUMATICALLY APPLIED CONCRETE

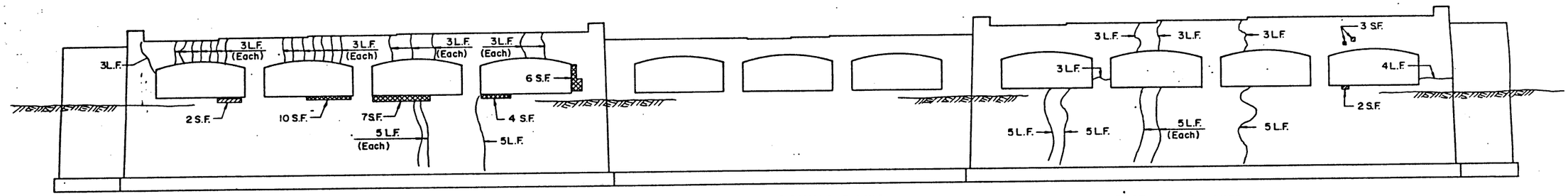
Indicates FORMED CONCRETE REPAIR



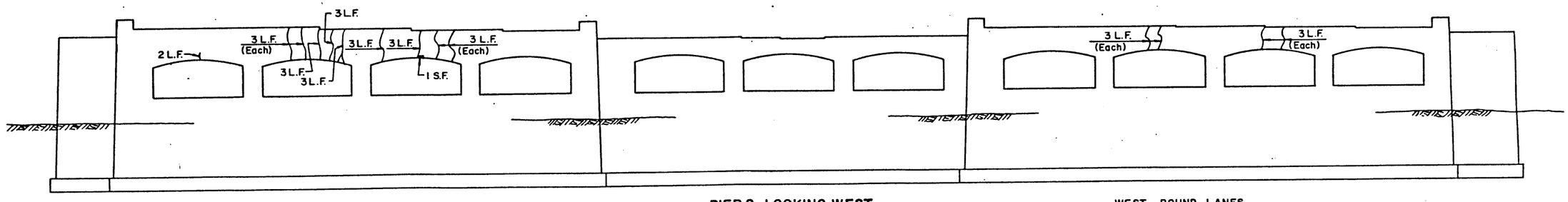
EAST BOUND LANES — PIER 1-LOOKING WEST — WEST BOUND LANES



WEST BOUND LANES — PIER 1-LOOKING EAST — EAST BOUND LANES



WEST BOUND LANES — PIER 2-LOOKING EAST — EAST BOUND LANES



EAST BOUND LANES — PIER 2-LOOKING WEST — WEST BOUND LANES

Work this Sheet with S-IC-2-16

S-IC-2-17

	1st	2nd	3rd
Designed or Checked by	DRB	DRB	W.H.
Drawn or Corrected by	RDL	G.S.A.	R.H.H.

DRAWN R.D.L.

CHECKED D.R.B.

DATE FEB 1987

SCALE NO SCALE

MTA, INCORPORATED
CONSULTING ENGINEERS
CHICAGO – SPRINGFIELD – INDIANAPOLIS

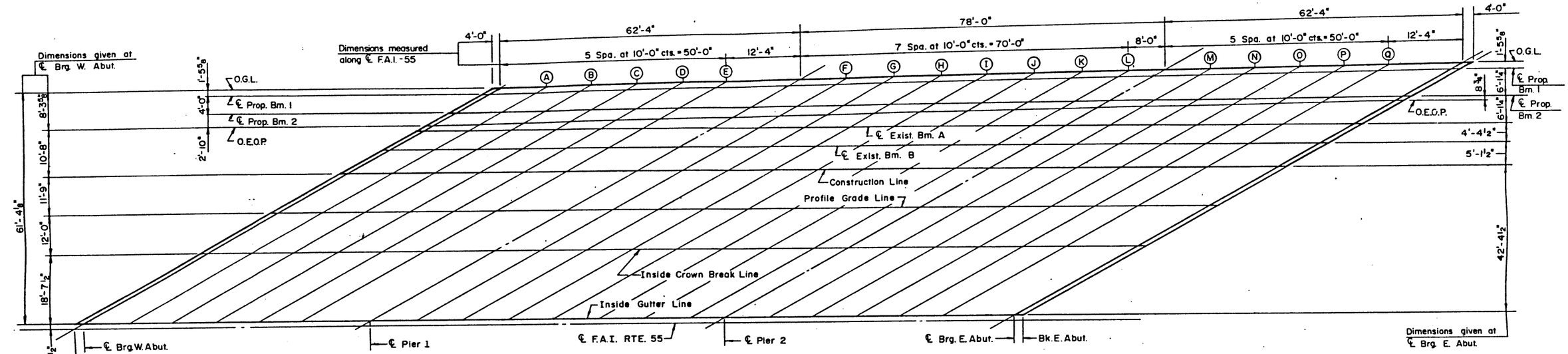
THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY
EAST-WEST TOLLWAY AND MIDWEST ROAD
OAK BROOK, ILLINOIS 60521

REVISIONS		
NO.	DATE	DESCRIPTION

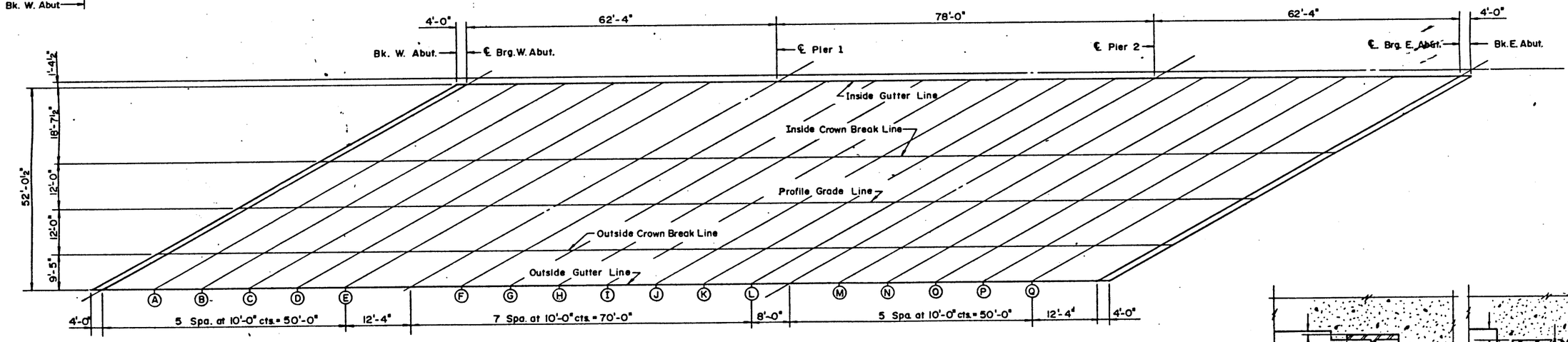
CONTRACT CIP-611

F.A.I. ROUTE 55 OVER JOLIET ROAD
BRIDGE NO.
SUBSTRUCTURE REPAIR

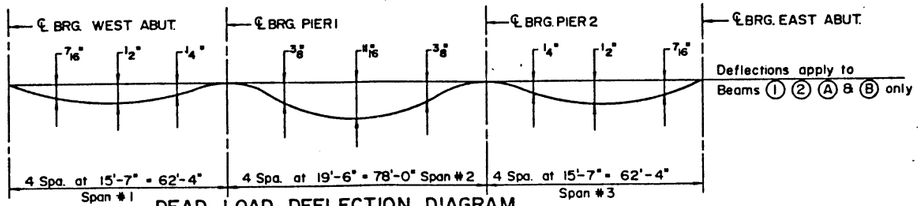
DRAWING NO.
452 OF 527



WEST BOUND LANES



EAST BOUND LANES



DEAD LOAD DEFLECTION DIAGRAM

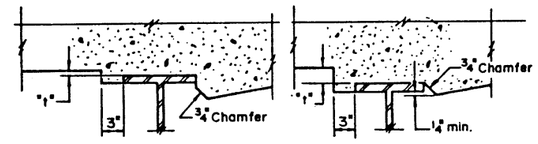
(Includes the weights of concrete & surfacing only)

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.

O.G.L. = Outside Gutter Line

O.E.O.P. = Outside Edge of Pavement

NOTE: All deck elevations are given to top of proposed W.S.



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 intervals shown in table above. These elevations subtracted from the "Theoretical Grade Elevations Adjusted For Dead Load Deflection" shown, minus slab thickness, equals the fillet height "t" above top flange of beams.

FILLET DETAILS

As Designed or Checked by	1st.	2nd	3rd
Drawn or Corrected by	DRB	DRB	WH.
	RHH	RDL	RDL

DRAWN R.H.H. DATE FEB 1987

CHECKED D.R.B. SCALE NO SCALE

MTA, INCORPORATED
CONSULTING ENGINEERS
CHICAGO — SPRINGFIELD — INDIANAPOLIS

THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY
EAST-WEST TOLLWAY AND MIDWEST ROAD
OAK BROOK, ILLINOIS 60521

REVISIONS		
NO.	DATE	DESCRIPTION

CONTRACT CIP-611
F.A.I. ROUTE 55 OVER JOLIET ROAD
BRIDGE NO.
DECK ELEVATIONS

S-IC-2-18

DRAWING NO. 453 OF 527

OUTSIDE GUTTER LINE-W.B.L.

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEV'S ADJ. FOR DL DEFLECTION
BK. W. ABUT.	1684+91.207	30.632	751.107	751.107
CL BRG. W. ABUT.	1684+95.358	30.715	751.143	751.143
A	1685+05.734	30.922	751.234	751.257
B	1685+16.112	31.130	751.324	751.362
C	1685+26.489	31.337	751.415	751.456
D	1685+36.866	31.545	751.505	751.535
E	1685+47.233	31.752	751.597	751.613
CL PIER 1	1685+60.030	32.008	751.709	751.709
F	1685+70.406	32.216	751.799	751.815
G	1685+80.784	32.423	751.89	751.922
H	1685+91.161	32.631	751.98	752.026
I	1686+01.538	32.838	752.071	752.127
J	1686+11.915	33.046	752.163	752.205
K	1686+22.292	33.253	752.253	752.282
L	1686+32.669	33.461	752.344	752.357
CL PIER 2	1686+40.960	33.627	752.416	752.416
M	1686+51.337	33.834	752.507	752.52
N	1686+61.714	34.042	752.598	752.624
O	1686+72.091	34.249	752.689	752.729
P	1686+82.468	34.457	752.78	752.818
Q	1686+92.845	34.664	752.87	752.899
CL BRG. E. ABUT.	1687+05.632	34.920	752.982	752.982
BK. E. ABUT.	1687+09.783	35.003	753.018	753.018

BEAM 1-W.B.L.

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEV'S ADJ. FOR DL DEFLECTION
BK. W. ABUT.	1684+88.545	29.162	751.114	751.114
CL BRG. W. ABUT.	1684+92.695	29.245	751.15	751.15
A	1685+03.072	29.452	751.24	751.264
B	1685+13.449	29.660	751.331	751.369
C	1685+23.826	29.867	751.422	751.463
D	1685+34.203	30.075	751.512	751.542
E	1685+44.58	30.282	751.604	751.62
CL PIER 1	1685+57.367	30.538	751.716	751.716
F	1685+67.744	30.746	751.806	751.822
G	1685+78.121	30.953	7511.897	7511.929
H	1685+88.498	31.161	751.987	752.033
I	1685+98.875	31.368	752.078	752.134
J	1686+09.252	31.576	752.17	752.212
K	1686+19.629	31.783	752.26	752.289
L	1686+30.006	31.991	752.351	752.364
CL PIER 2	1686+38.298	32.157	752.423	752.423
M	1686+48.675	32.364	752.514	752.527
N	1686+59.052	32.572	752.604	752.63
O	1686+69.429	32.779	752.696	752.736
P	1686+79.806	32.987	752.787	752.825
Q	1686+90.183	33.194	752.877	752.906
CL BRG. E. ABUT.	1687+02.97	33.450	752.99	752.989
BK. E. ABUT.	1687+07.12	33.533	753.026	753.022

BEAM 2-W.B.L.

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEV'S ADJ. FOR DL DEFLECTION
BK. W. ABUT.	1684+81.382	25.206	751.131	751.131
CL BRG. W. ABUT.	1684+85.452	25.250	751.167	751.167
A	1684+95.640	25.354	751.259	751.313
B	1685+05.828	25.458	751.349	751.387
C	1685+16.018	25.561	751.441	751.482
D	1685+26.206	25.665	751.532	751.561
E	1685+36.394	25.769	751.623	751.64
CL PIER 1	1685+48.952	25.894	751.74	751.74
F	1685+59.140	25.998	751.827	751.843
G	1685+69.328	26.102	751.918	751.95
H	1685+79.518	26.205	752.009	752.054
I	1685+89.706	26.309	752.101	752.157
J	1685+99.894	26.413	752.192	752.235
K	1686+10.083	26.516	752.283	752.311
L	1686+20.272	26.620	752.374	752.387
CL PIER 2	1686+28.417	26.704	752.447	752.447
M	1686+38.605	26.808	752.539	752.553
N	1686+48.794	26.912	752.629	752.656
O	1686+58.982	27.015	752.721	752.762
P	1686+69.171	27.119	752.812	752.851
Q	1686+79.360	27.223	752.903	752.931
CL BRG. E. ABUT.	1686+91.932	27.350	753.016	753.003
BK. E. ABUT	1686+96.002	27.391	753.052	753.04

OUTSIDE EDGE OF PAVEMENT-W.B.L.

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEV'S ADJ. FOR DL DEFLECTION
BK. W. ABUT.	1684+76.173	22.330	751.144	751.144
CL BRG. W. ABUT.	1684+80.324	22.413	751.18	751.18
A	1684+90.700	22.620	751.271	751.295
B	1685+01.076	22.828	751.362	751.4
C	1685+11.451	23.035	751.452	751.493
D	1685+21.827	23.243	751.543	751.573
E	1685+32.203	23.450	751.634	751.65
CL PIER 1	1685+44.996	23.706	751.746	751.746
F	1685+55.372	23.914	751.837	751.853
G	1685+65.748	24.121	751.927	751.959
H	1685+76.123	24.329	752.018	752.064
I	1685+86.499	24.536	752.109	752.165
J	1685+96.875	24.744	752.199	752.241
K	1686+07.251	24.951	752.291	752.32
L	1686+17.626	25.159	752.381	752.394
CL PIER 2	1686+25.926	25.323	752.454	752.454
M	1686+36.303	25.530	752.545	752.558
N	1686+46.680	25.738	752.635	752.661
O	1686+57.057	25.946	752.726	752.766
P	1686+67.434	26.153	752.817	752.855
Q	1686+77.811	26.360	752.908	752.937
CL BRG. E. ABUT.	1686+90.598	26.618	753.02	753.02
BK. E. ABUT.	1686+94.749	26.701	753.056	753.056

rev	1st	2nd	3rd
Designed or Checked by	DRB	DRB	DRB
Drawn or Corrected by	RDL	RDL	RDL

S-IC-3-19

DRAWN R.D.L.
CHECKED D.R.B.

DATE FEB. 1987
SCALE NO SCALE

MTA, INCORPORATED
CONSULTING ENGINEERS
CHICAGO – SPRINGFIELD – INDIANAPOLIS

THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY
EAST-WEST TOLLWAY AND MIDWEST ROAD
OAK BROOK, ILLINOIS 60521

REVISIONS		
NO.	DATE	DESCRIPTION

CONTRACT CIP-611
F.A.I. RTE. 55 OVER JOLIET ROAD
BRIDGE NOS.
DECK ELEVATIONS

DRAWING NO.
454 OF 527

EXISTING BEAM – W.B.L.

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEV'S ADJ. FOR D.L. DEFLECTION
BK. W. ABUT.	1684+74.218	21.250	751.142	751.142
CL BRG. W. ABUT.	1684+78.218	21.250	751.179	751.179
A	1684+88.218	21.250	751.269	751.293
B	1684+98.218	21.250	751.360	751.398
C	1685+08.218	21.250	751.450	751.492
D	1685+18.218	21.250	751.541	751.571
E	1685+28.218	21.250	751.632	751.648
CL PIER 1	1685+40.548	21.250	751.743	751.743
F	1685+50.548	21.250	751.834	751.850
G	1685+60.548	21.250	751.925	751.957
H	1685+70.548	21.250	752.015	752.060
I	1685+80.548	21.250	752.106	752.162
J	1685+90.548	21.250	752.196	752.239
K	1686+00.548	21.250	752.287	752.316
L	1686+10.548	21.250	752.378	752.390
CL PIER 2	1686+18.548	21.250	752.450	752.450
M	1686+28.548	21.250	752.541	752.554
N	1686+38.548	21.250	752.631	752.658
O	1686+48.548	21.250	752.722	752.762
P	1686+58.548	21.250	752.812	752.851
Q	1686+68.548	21.250	752.903	752.932
CL BRG. E. ABUT.	1686+80.878	21.250	753.015	753.015
BK. E. ABUT.	1686+84.878	21.250	753.051	753.051

EXISTING BEAM – W.B.L.

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEV'S ADJ. FOR D.L. DEFLECTION
BK. W. ABUT.	1684+66.295	16.875	751.139	751.139
CL BRG. W. ABUT.	1684+70.295	16.875	751.175	751.175
A	1684+80.295	16.875	751.265	751.289
B	1684+90.295	16.875	751.356	751.394
C	1685+00.295	16.875	751.447	751.488
D	1685+10.295	16.875	751.537	751.567
E	1685+20.295	16.875	751.628	751.644
CL PIER 1	1685+32.625	16.875	751.740	751.740
F	1685+42.625	16.875	751.830	751.846
G	1685+52.625	16.875	751.921	751.953
H	1685+62.625	16.875	752.011	752.057
I	1685+72.625	16.875	752.102	752.158
J	1685+82.625	16.875	752.193	752.235
K	1685+92.625	16.875	752.283	752.312
L	1686+02.625	16.875	752.374	752.387
CL PIER 2	1686+10.625	16.875	752.446	752.446
M	1686+20.625	16.875	752.537	752.550
N	1686+30.625	16.875	752.627	752.654
O	1686+40.625	16.875	752.718	752.758
P	1686+50.625	16.875	752.809	752.847
Q	1686+60.625	16.875	752.899	752.928
CL BRG. E. ABUT.	1686+72.955	16.875	753.011	753.011
BK. E. ABUT.	1686+76.955	16.875	753.047	753.047

CONSTRUCTION LINE – W.B.L.

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS
BK. W. ABUT.	1684+57.015	11.750	751.135
CL BRG. W. ABUT.	1684+61.015	11.750	751.171
A	1684+71.015	11.750	751.261
B	1684+81.015	11.750	751.352
C	1684+91.015	11.750	751.443
D	1685+01.015	11.750	751.533
E	1685+11.015	11.750	751.624
CL PIER 1	1685+23.345	11.750	751.736
F	1685+33.345	11.750	751.826
G	1685+43.345	11.750	751.917
H	1685+53.345	11.750	752.007
I	1685+63.345	11.750	752.098
J	1685+73.345	11.750	752.189
K	1685+83.345	11.750	752.279
L	1685+93.345	11.750	752.370
CL PIER 2	1686+01.345	11.750	752.442
M	1686+11.345	11.750	752.533
N	1686+21.345	11.750	752.623
O	1686+31.345	11.750	752.714
P	1686+41.345	11.750	752.805
Q	1686+51.345	11.750	752.895
CL BRG. E. ABUT.	1686+63.675	11.750	753.007
BK. E. ABUT.	1686+67.675	11.750	753.043

PROFILE GRADE LINE – W.B.L.

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS
BK. W. ABUT.	1684+35.737	0.000	751.126
CL BRG. W. ABUT.	1684+39.737	0.000	751.162
A	1684+49.737	0.000	751.253
B	1684+59.737	0.000	751.343
C	1684+69.737	0.000	751.434
D	1684+79.737	0.000	751.524
E	1684+89.737	0.000	751.615
CL PIER 1	1685+02.067	0.000	751.727
F	1685+12.067	0.000	751.817
G	1685+22.067	0.000	751.908
H	1685+32.067	0.000	751.999
I	1685+42.067	0.000	752.089
J	1685+52.067	0.000	752.180
K	1685+62.067	0.000	752.270
L	1685+72.067	0.000	752.361
CL PIER 2	1685+80.067	0.000	752.433
M	1685+90.067	0.000	752.524
N	1686+00.067	0.000	752.615
O	1686+10.067	0.000	752.705
P	1686+20.067	0.000	752.796
Q	1686+30.067	0.000	752.886
CL BRG. E. ABUT.	1686+42.397	0.000	752.998
BK. E. ABUT.	1686+46.397	0.000	753.034

INSIDE CROWN BREAK LINE – W.B.L.

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS
BK. W. ABUT.	1684+14.007	-12.000	750.741
CL BRG. W. ABUT.	1684+18.007	-12.000	750.777
A	1684+28.007	-12.000	750.868
B	1684+38.007	-12.000	750.958
C	1684+48.007	-12.000	751.049
D	1684+58.007	-12.000	751.140
E	1684+68.007	-12.000	751.230
CL PIER 1	1684+80.337	-12.000	751.342
F	1684+90.337	-12.000	751.432
G	1685+00.337	-12.000	751.523
H	1685+10.337	-12.000	751.614
I	1685+20.337	-12.000	751.704
J	1685+30.337	-12.000	751.795
K	1685+40.337	-12.000	751.885
L	1685+50.337	-12.000	751.976
CL PIER 2	1685+58.337	-12.000	752.049
M	1685+68.337	-12.000	752.139
N	1685+78.337	-12.000	752.230
O	1685+88.337	-12.000	752.320
P	1685+98.337	-12.000	752.411
Q	1686+08.337	-12.000	752.502
CL BRG. E. ABUT.	1686+20.667	-12.000	752.613
BK. E. ABUT.	1686+24.667	-12.000	752.649

INSIDE GUTTER LINE – W.B.L.

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS
BK. W. ABUT.	1683+80.280	-30.625	750.047
CL BRG. W. ABUT.	1683+84.280	-30.625	750.084
A	1683+94.280	-30.625	750.174
B	1684+04.280	-30.625	750.265
C	1684+14.280	-30.625	750.355
D	1684+24.280	-30.625	750.446
E	1684+34.280	-30.625	750.537
CL PIER 1	1684+46.610	-30.625	750.648
F	1684+56.610	-30.625	750.739
G	1684+66.610	-30.625	750.829
H	1684+76.610	-30.625	750.920
I	1684+86.610	-30.625	751.011
J	1684+96.610	-30.625	751.101
K	1685+06.610	-30.625	751.192
L	1685+16.610	-30.625	751.282
CL PIER 2	1685+24.610	-30.625	751.355
M	1685+34.610	-30.625	751.446
N	1685+44.610	-30.625	751.536
O	1685+54.610	-30.625	751.627
P	1685+64.610	-30.625	751.717
Q	1685+74.610	-30.625	751.808
CL BRG. E. ABUT.	1685+86.940	-30.625	751.920
BK. E. ABUT.	1685+90.940	-30.625	751.956

INSIDE GUTTER LINE – E.B.L.

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS
BK. W. ABUT.	1683+75.300	30.625	750.002
CL BRG. W. ABUT.	1683+79.300	30.625	750.038
A	1683+89.300	30.625	750.129
B	1683+99.300	30.625	750.220
C	1684+09.300	30.625	750.310
D	1684+19.300	30.625	750.401
E	1684+29.300	30.625	750.491
CL PIER 1	1684+41.630	30.625	750.603
F	1684+51.630	30.625	750.694
G	1684+61.630	30.625	750.784
H	1684+71.630	30.625	750.875
I	1684+81.630	30.625	750.966
J	1684+91.630	30.625	751.056
K	1685+01.630	30.625	751.147
L	1685+11.630	30.625	751.237
CL PIER 2	1685+19.630	30.625	751.310
M	1685+29.630	30.625	751.400
N	1685+39.630	30.625	751.491
O	1685+49.630	30.625	751.582
P	1685+59.630	30.625	751.672
Q	1685+69.630	30.625	751.763
CL BRG. E. ABUT.	1685+81.960	30.625	751.875
BK. E. ABUT.	1685+85.960	30.625	751.911

INSIDE CROWN BREAK LINE – E.B.L.

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS
BK. W. ABUT.	1683+41.573	12.000	750.085
CL BRG. W. ABUT.	1683+45.573	12.000	750.121
A	1683+55.573	12.000	750.211
B	1683+65.573	12.000	750.302
C	1683+75.573	12.000	750.393
D	1683+85.573	12.000	750.483
E	1683+95.573	12.000	750.574
CL PIER 1	1684+07.903	12.000	750.686
F	1684+17.903	12.000	750.776
G	1684+27.903	12.000	750.867
H	1684+37.903	12.000	750.957
I	1684+47.903	12.000	751.048
J	1684+57.903	12.000	751.139
K	1684+67.903	12.000	751.229
L	1684+77.903	12.000	751.320
CL PIER 2	1684+85.903	12.000	751.392
M	1684+95.903	12.000	751.483
N	1685+05.903	12.000	751.573
O	1685+15.903	12.000	751.664
P	1685+25.903	12.000	751.755
Q	1685+35.903	12.000	751.845
CL BRG. E. ABUT.	1685+48.233	12.000	751.957
BK. E. ABUT.	1685+52.233	12.000	751.993

	1st	2nd	3rd
Designed or Checked by	R.D.L.	R.D.L.	R.D.L.
Drawn or Corrected by	R.D.L.	R.D.L.	R.D.L.

DRAWN R.D.L.
CHECKED R.D.L.
DATE FEB 1987
SCALE NO SCALE

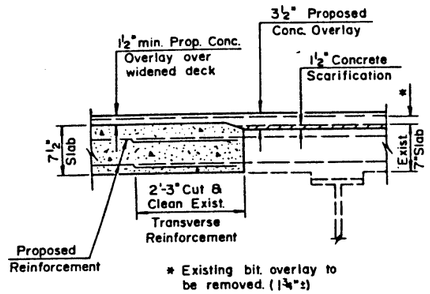
MTA, INCORPORATED
CONSULTING ENGINEERS
CHICAGO – SPRINGFIELD – INDIANAPOLIS

THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY
EAST-WEST TOLLWAY AND MIDWEST ROAD
OAK BROOK, ILLINOIS 60521

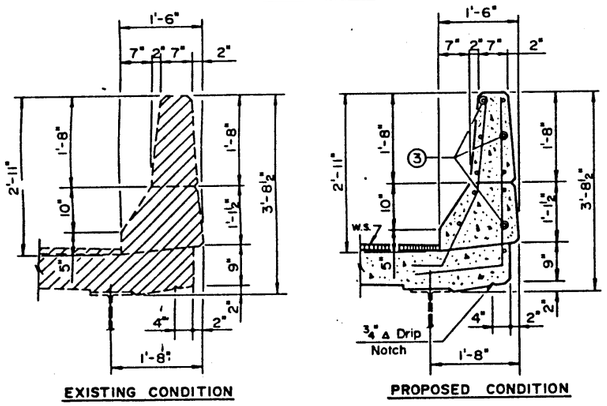
REVISIONS		
NO.	DATE	DESCRIPTION

CONTRACT CIP-611
F.A.I. ROUTE 55 OVER JOLIET ROAD
BRIDGE NO.
DECK ELEVATION

S-IC-2-20
DRAWING NO.
455 OF 527



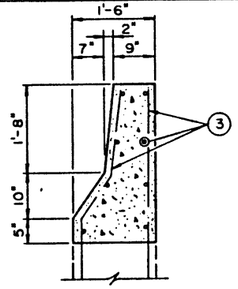
DETAIL "A"



SEC. N-N

PROFILE GRADE LINE – E.B.L.

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS
BK. W. ABUT.	1683+19.843	0.000	750.076
CL BRG. W. ABUT.	1683+23.843	0.000	750.112
A	1683+33.843	0.000	750.203
B	1683+43.843	0.000	750.293
C	1683+53.843	0.000	750.384
D	1683+63.843	0.000	750.474
E	1683+73.843	0.000	750.565
CL PIER 1	1683+86.173	0.000	750.677
F	1683+96.173	0.000	750.767
G	1684+06.173	0.000	750.858
H	1684+16.173	0.000	750.949
I	1684+26.173	0.000	751.039
J	1684+36.173	0.000	751.130
K	1684+46.173	0.000	751.220
L	1684+56.173	0.000	751.311
CL PIER 2	1684+64.173	0.000	751.383
M	1684+74.173	0.000	751.474
N	1684+84.173	0.000	751.565
O	1684+94.173	0.000	751.655
P	1685+04.173	0.000	751.746
Q	1685+14.173	0.000	751.836
CL BRG. E. ABUT.	1685+26.503	0.000	751.948
BK. E. ABUT.	1685+30.503	0.000	751.984



SEC. P-P

OUTSIDE CROWN BREAK LINE – E.B.L.

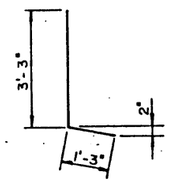
LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS
BK. W. ABUT.	1682+98.113	-12.000	749.691
CL BRG. W. ABUT.	1683+02.113	-12.000	749.727
A	1683+12.113	-12.000	749.818
B	1683+22.113	-12.000	749.908
C	1683+32.113	-12.000	749.999
D	1683+42.113	-12.000	750.090
E	1683+52.113	-12.000	750.180
CL PIER 1	1683+64.443	-12.000	750.292
F	1683+74.443	-12.000	750.382
G	1683+84.443	-12.000	750.473
H	1683+94.443	-12.000	750.564
I	1684+04.443	-12.000	750.654
J	1684+14.443	-12.000	750.745
K	1684+24.443	-12.000	750.835
L	1684+34.443	-12.000	750.926
CL PIER 2	1684+42.443	-12.000	750.999
M	1684+52.443	-12.000	751.089
N	1684+62.443	-12.000	751.180
O	1684+72.443	-12.000	751.270
P	1684+82.443	-12.000	751.361
Q	1684+92.443	-12.000	751.452
CL BRG. E. ABUT.	1685+04.773	-12.000	751.563
BK. E. ABUT.	1685+08.773	-12.000	751.599

OUTSIDE GUTTER LINE – E.B.L.

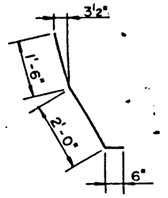
LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS
BK. W. ABUT.	1682+81.060	-21.417	749.340
CL BRG. W. ABUT.	1682+85.060	-21.417	749.377
A	1682+95.060	-21.417	749.467
B	1683+05.060	-21.417	749.558
C	1683+15.060	-21.417	749.648
D	1683+25.060	-21.417	749.739
E	1683+35.060	-21.417	749.830
CL PIER 1	1683+47.390	-21.417	749.941
F	1683+57.390	-21.417	750.032
G	1683+67.390	-21.417	750.123
H	1683+77.390	-21.417	750.213
I	1683+87.390	-21.417	750.304
J	1683+97.390	-21.417	750.394
K	1684+07.390	-21.417	750.485
L	1684+17.390	-21.417	750.576
CL PIER 2	1684+25.390	-21.417	750.648
M	1684+35.390	-21.417	750.739
N	1684+45.390	-21.417	750.829
O	1684+55.390	-21.417	750.920
P	1684+65.390	-21.417	751.010
Q	1684+75.390	-21.417	751.101
CL BRG. E. ABUT.	1684+87.720	-21.417	751.213
BK. E. ABUT.	1684+91.720	-21.417	751.249

③ Existing longitudinal & transverse reinforcement which is embedded in the remaining concrete shall be cleaned by sandblasting to grey metal and incorporated into new construction. Cost incidental to Concrete Removal. 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. Cost of new rebars shall be included in Reinforcing Steel.

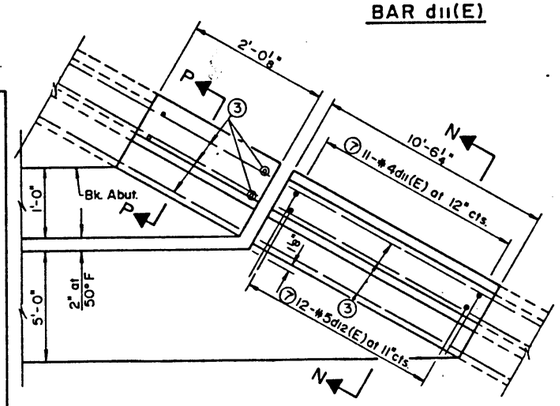
⑦ Cut in field or turn to fit skew.



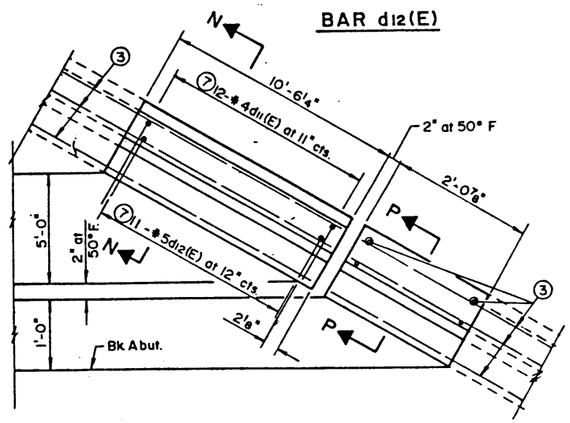
BAR d11(E)



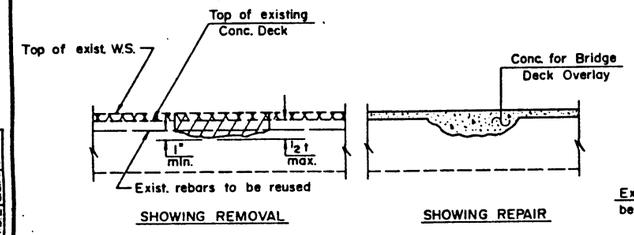
BAR d12(E)



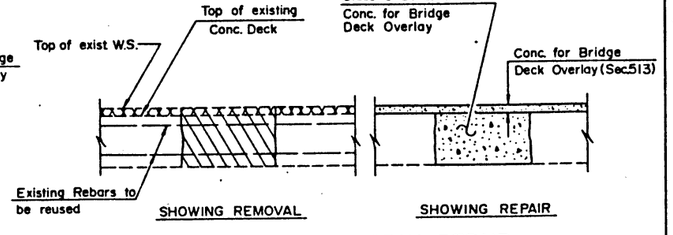
DETAIL D



DETAIL B



PARTIAL DEPTH DECK REPAIR



FULL DEPTH DECK REPAIR

Bituminous Bridge Deck Overlay Removal (Sec. 508)

Class A Bridge Deck Removal (Sec. 510)

Bituminous Bridge Deck Overlay Removal (Sec. 508)

Class B Bridge Deck Repair (Sec. 511)

	1st	2nd	3rd
Designed or Checked by	R.D.L.	D.R.B.	W.H.
Drawn or Corrected by	R.D.L.	G.S.A.	G.S.A.

Work this Sheet with Sheet S-1C-2-14 & S-1C-2-15.

S-1C-2-21

DRAWN R.D.L.
CHECKED R.D.L.
DATE FEB 1987
SCALE NO SCALE

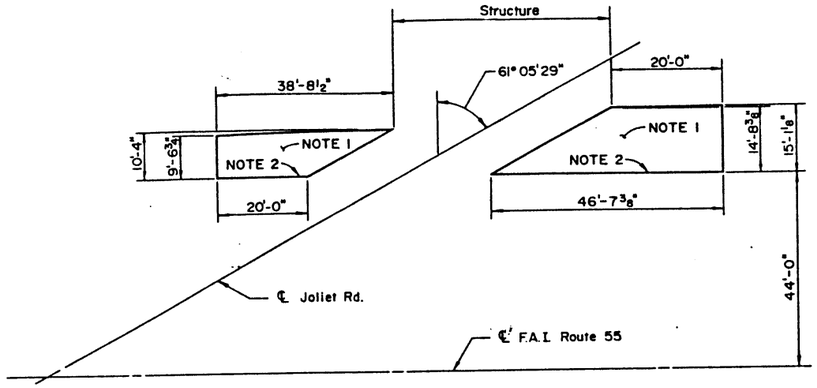
MTA, INCORPORATED
CONSULTING ENGINEERS
CHICAGO – SPRINGFIELD – INDIANAPOLIS

THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY
EAST-WEST TOLLWAY AND MIDWEST ROAD
OAK BROOK, ILLINOIS 60521

REVISIONS		
NO.	DATE	DESCRIPTION

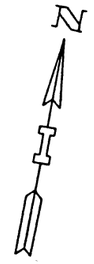
CONTRACT CIP-611
F.A.I. ROUTE 55 OVER JOLIET ROAD
BRIDGE NO.
DECK ELEVATIONS

DRAWING NO. 456 OF 527



WEST APPROACH EAST APPROACH

PAVING PLAN



BILL OF MATERIALS
WEST APPROACH SLAB

	No	Size	Length	
*	10	#5	20'-9"	Trans.
	28	#7	19'-0"	Long.
*	3	#4	20'-9"	Trans.
	11	#4	19'-6"	Long.
	Bridge Approach Slab		Sq. Yds.	10.8
	Reinforcing Steel		Lbs.	1,490

* Reinforcing Steel shall be cut to fit, balance of bar to be wasted.

BILL OF MATERIALS
EAST APPROACH SLAB

	No	Size	Length	
*	10x2	#5	16'-4"	Trans.
	42	#7	19'-0"	Long.
*	3x2	#4	16'-4"	Trans.
	12	#4	19'-6"	Long.
	Bridge Approach Slab		Sq. Yds.	18.4
	Reinforcing Steel		Lbs.	2,200

NOTES

1. Special Bridge Approach Pavements, See I.D.O.T. Std. 2382-2 for details, see bar list this sheet.
2. Longitudinal joint to be poured adjacent to existing approach slab and pavement.

	1st	2nd	3rd
Designed or Checked by	NLB	NL	NLB
Drawn or Corrected by	DDR	DDR	DDR

DRAWN D.D.R. DATE FEB 1987

CHECKED N.L.B. SCALE NO SCALE

MTA, INCORPORATED
CONSULTING ENGINEERS
CHICAGO – SPRINGFIELD – INDIANAPOLIS

THE ILLINOIS STATE TOLL HIGHWAY AUTHORITY
EAST-WEST TOLLWAY AND MIDWEST ROAD
OAK BROOK, ILLINOIS 60521

REVISIONS		
NO.	DATE	DESCRIPTION

CONTRACT CIP-611

F.A.I. ROUTE 55 OVER JOLIET ROAD
BRIDGE NO.
APPROACH SLAB DETAILS

S-IC-2-22

DRAWING NO. 457 OF 527