

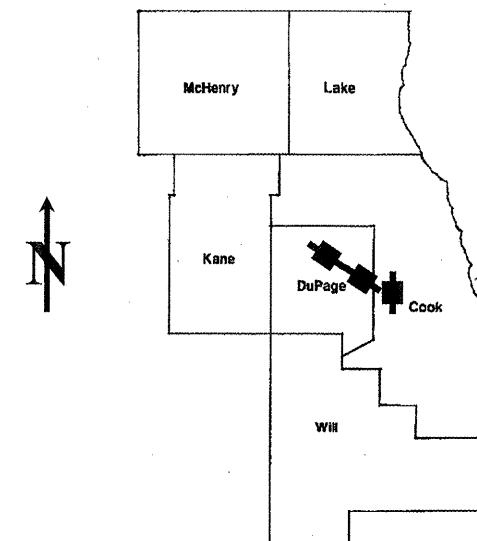
ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
FAI 290	2011-061-BR	COOK & DUPAGE	29	1

FOR INDEX OF SHEETS SEE SHEET 2

CONTRACT NO. 60P79

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
DISTRICT ONE
PROPOSED HIGHWAY PLANS

D-91-616-11



LOCATION OF IMPROVEMENT INDICATED THUS:

IMPROVEMENTS ARE LOCATED IN THE VILLAGES OF ELMHURST, ADDISON AND HILLSIDE.

FAI RTE 290: I-290
 VARIOUS LOCATIONS
 SECTION: 2011-061-BR
 SUBSTRUCTURE REPAIRS
 C-91-616-11

- LOCATION 1: I-290 RAMP A- OVER IL 64 (NORTH AVE.), (SN 022-0015)
- LOCATION 2: MILL ROAD OVER I-290, 2.6 MILES WEST OF IL 83 (SN 022-0109)
- LOCATION 3: I-290 OVER HILLSIDE ROAD, 0.7 MILES WEST US 12 (SN 016-0986)

FOR LOCATION MAPS, SEE SHEET 2

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS

SUBMITTED: September 7, 2011
Diane M. O'Keefe DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

October 14, 2011
Scott E. Stillpe acting ENGINEER OF DESIGN AND ENVIRONMENT

October 14, 2011
William R. Frey interim DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

J.U.L.I.E.: JOINT UTILITY LOCATION
 INFORMATION FOR EXCAVATION
 (800) 892-0123 OR 811

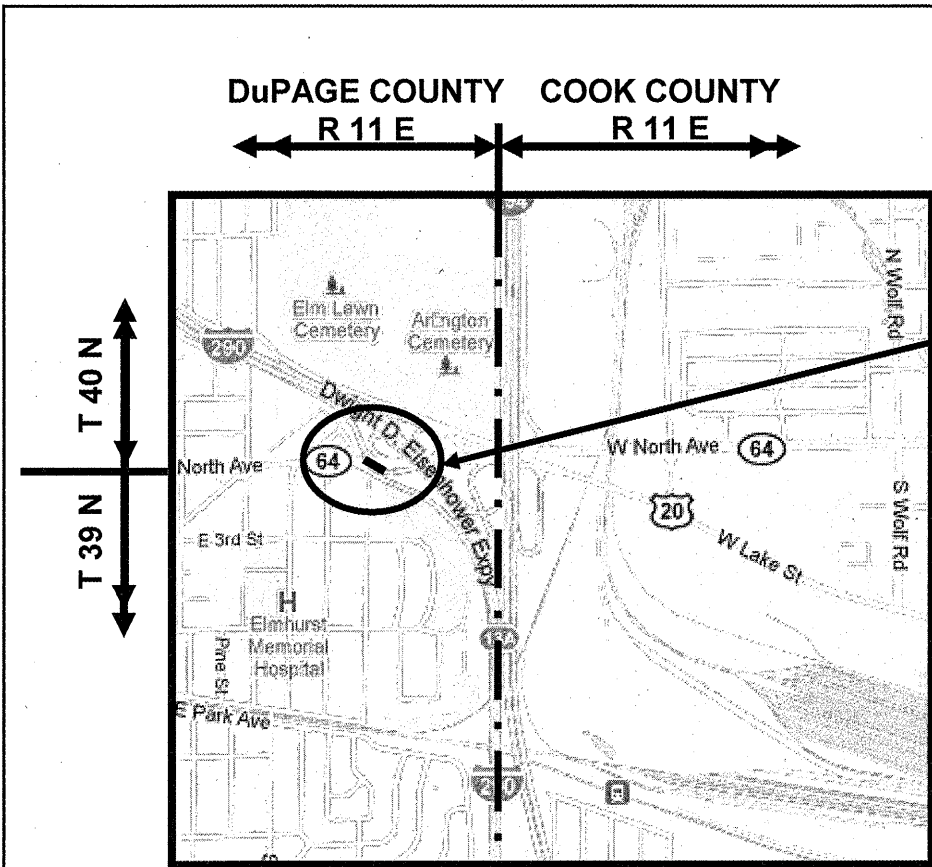
Rev.

PROJECT ENGINEER ROBERT BORO (847) 705-4178
 PROJECT MANAGER ISSAM RAYYAN

CONTRACT NO. 60P79

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
FAI 290	2011-061-BR	COOK & DUPAGE	29	2

Contract 60P79



VILLAGE OF ELMHURST
YORK TOWNSHIP
DuPAGE COUNTY

LOCATION 1: SN 022-0015
I-290 RAMP A-OVER IL 64 (NORTH AVE.), ONE MILE WEST OF I-290.

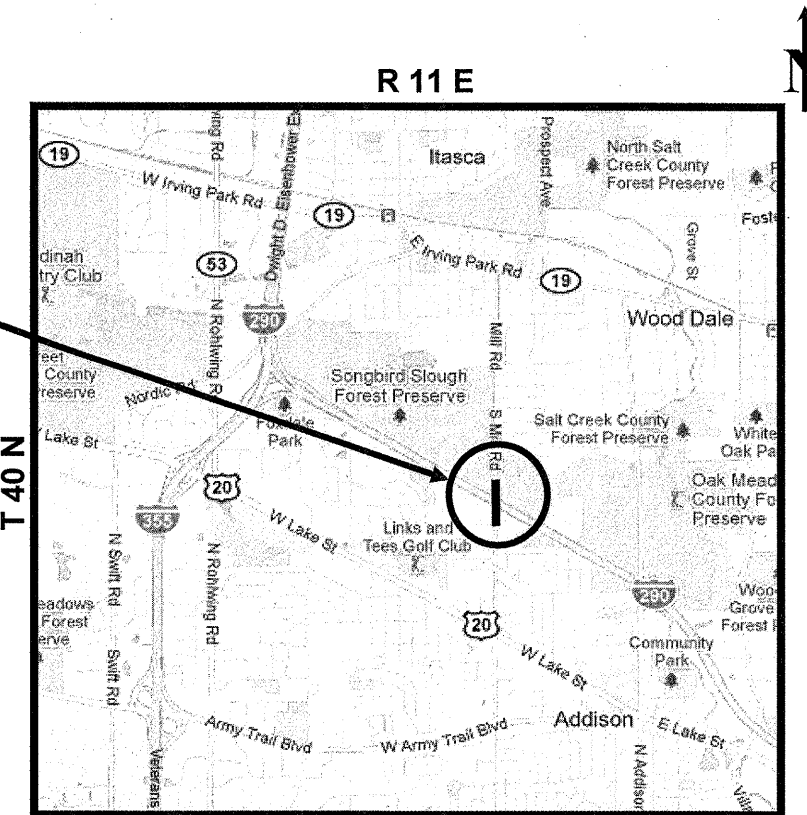
TRAFFIC DATA:

I-290: SPEED LIMIT = 55 MPH
2002 ADT = 23,400
IL 64 (NORTH AVE.): SPEED LIMIT = 45 MPH
2009 ADT = 31,700

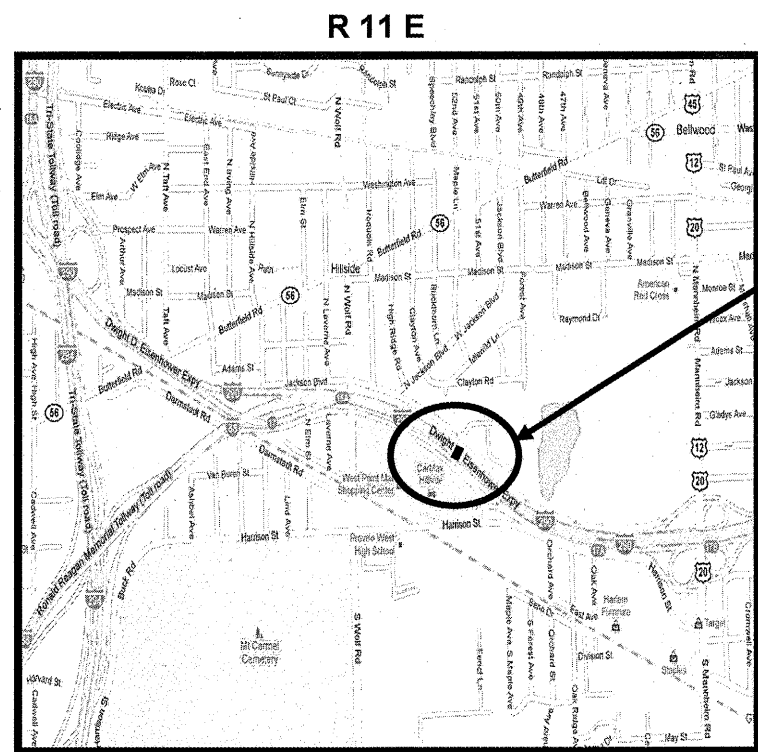
LOCATION 2: SN 022-0109
MILL ROAD OVER I-290, 2.6 MILES
WEST OF IL 83.

TRAFFIC DATA:

MILL ROAD: SPEED LIMIT = 25 MPH
2008 ADT = 1,350
I-290: SPEED LIMIT = 55 MPH
2009 ADT = 155,800



VILLAGE OF ADDISON
ADDISON TOWNSHIP
DuPAGE COUNTY



VILLAGE OF HILLSIDE
PROVISO TOWNSHIP
COOK COUNTY

LOCATION 3: SN 016-0986
I-290 OVER HILLSIDE ROAD, 0.7 MILE WEST US 12.

TRAFFIC DATA:

I-290: SPEED LIMIT = 55 MPH
2009 ADT = 206,800
HILLSIDE DR: SPEED LIMIT = 40 MPH
2009 ADT = 206,800

ILLINOIS DEPARTMENT OF
TRANSPORTATION

LOCATION MAPS

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
VARIOUS	2011-061 BR	COOK & DUPAGE	29	3

INDEX OF SHEETS

CONTRACT NO. 60P79

SHEET NO DESCRIPTION

1	TITLE SHEET
2	LOCATION: 1, 2 AND 3
3	INDEX OF SHEETS, STATE STANDARDS AND GENERAL NOTES
4-5	SUMMARY OF QUANTITIES
6-15	STRUCTURAL REPAIRS – LOCATION 1, (SN 022-0015)
16-21	STRUCTURAL REPAIRS – LOCATION 1, (SN 022-0015)
22-24	STRUCTURAL REPAIRS – LOCATION 1, (SN 022-0015)
25-27	ELECTRICAL PLANS
28	TRAFFIC CONTROL & PROTECTION FOR SITE ROADS, INTERSECTION AND DRIVEWAYS (TC-10)
29	ARTERIAL ROAD INFORMATION SIGN (TC-22)

STATE STANDARDS

<u>STD NO</u>	<u>DESCRIPTION</u>
701101-02	OFF-ROAD OPERATIONS, MULTILANE, 15' TO 24" FROM PAVEMENT EDGE
701427	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPERATIONS FOR SPEEDS ≤ 40 MPH
701400-05	APPROACH TO LANE CLOSURE, FREEWAY/EXPRESSWAY
701401-06	LANE CLOSURE, FREEWAY/EXPRESSWAY
701411-07	LANE CLOSURE, MULTILANE, AT ENTRANCE OR EXIT RAMP, FOR SPEEDS ≥ 45 MPH
701501-06	URBAN LANE CLOSURE, 2L, 2W UNDIVIDED
701606-07	URBAN LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN
701901-01	TRAFFIC CONTROL DEVICES

GENERAL NOTES

BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "J.U.L.I.E." AT (800) 892-0123 OR 811. FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS UTILITIES. 48 HOURS NOTIFICATION IS REQUIRED.

PLAN DIMENSIONS AND DETAILS RELATIVE TO EXISTING PLANS ARE SUBJECT TO NOMINAL CONSTRUCTION VARIATIONS. THE CONTRACTOR SHALL FIELD VERIFY EXISTING DIMENSIONS AND DETAILS AFFECTING NEW CONSTRUCTION AND MAKE NECESSARY APPROVED ADJUSTMENTS PRIOR TO CONSTRUCTION OR ORDERING OF MATERIALS. SUCH VARIATIONS SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION FOR A CHANGE IN SCOPE OF THE WORK, HOWEVER, THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED BASED AT THE UNIT PRICE BID FOR THE WORK.

THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.

THE CONTRACTOR SHALL CONTACT THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 FOR ARTERIALS OR (847)705-4151 FOR EXPRESSWAYS. A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.

THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES AND VILLAGE OF ELMHURST, HILLSIDE AND ADDISON.

THESE PLANS HAVE BEEN PREPARED FROM FIELD NOTES RECEIVED FROM THE BUREAU OF MAINTENANCE.

THE "ARTERIAL ROAD INFORMATION SIGN (TC-22)" IS APPLICABLE ONLY TO ARTERIAL ROADS AND SHALL NOT BE APPLIED TO EXPRESSWAYS.

THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT.

DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.

**ILLINOIS DEPARTMENT OF
TRANSPORTATION**

**INDEX OF SHEETS, STATE STANDARDS
AND GENERAL NOTES**

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
FAI 290	2011-061 BR	COOK & DUPAGE	29	4

CONTRACT NO. 60P79

SUMMARY OF QUANTITIES

CODE NO	DESCRIPTION	UNITS	URBAN 100% STATE TOTAL QUANTITY	CONSTRUCTION TYPE CODE: SFTY - 0014		
				DuPAGE COUNTY	DuPAGE COUNTY	COOK COUNTY
				LOC. NO. 1 SN:022-0015	LOC. NO. 2 SN:022-0109	LOC NO. 3 SN 016-0986
50300225	CONCRETE STRUCTURES	CU YD	8.3		8.3	
50800205	REINFORCEMENT BAR, EPOXY COATED	POUND	1550		1550	
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	4	1.5	2	0.5
67100100	MOBILIZATION	L SUM	1	0.34	0.33	0.33
70102620	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	L SUM	1			1
70102625	TRAFFIC CONTROL AND PROTECTION, STANDARD 701606	LSUM	1	1		
70102630	TRAFFIC CONTROL AND PROTECTION, STANDARD 701601	L SUM	1	1		
* 81100320	CONDUIT ATTACHED TO STRUCTURE, 1" DIA., PVC COATED GALVANIZED STEEL	FT	350		350	
* 81100805	CONDUIT ATTACHED TO STRUCTURE, 3" DIA., PVC COATED GALVANIZED STEEL	FT	100		100	
* 81300220	JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 6" X 6" X 4"	EACH	4		4	
* 81300530	JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 12" X 10" X 6"	EACH	4		4	
* 81300730	JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 16" X 14" X 6"	EACH	4		4	

* Special

ILLINOIS DEPARTMENT OF
TRANSPORTATION
SUMMARY OF QUANTITIES

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
FAI 290	2011-061 BR	COOK & DUPAGE	29	5

CONTRACT NO. 60P79

SUMMARY OF QUANTITIES

CODE NO	DESCRIPTION	UNITS	URBAN 100% STATE TOTAL QUANTITY	CONSTRUCTION TYPE CODE: SFTY - 0014		
				DuPAGE COUNTY	DuPAGE COUNTY	COOK COUNTY
				LOC. NO. 1 SN:022-0015	LOC. NO. 2 SN:022-0109	LOC NO. 3 SN 016-0986
* 81603080	UNIT DUCT, 600V, 3-1C NO.2, 1/C NO.4 GROUND, (XLP-TYPE USE), 1 1/4" DIA. POLYETHYLENE	FT	600		600	
* 82107200	UNDERPASS LUMINAIRE, 100 WATT, HIGH PRESSURE SODIUM VAPOR	EACH	4		4	
* X0326592	FLEXIBLE LIQUID TIGHT STAINLESS STEEL CONDUIT, 3/4" DIAMETER, 6 FOOT LENGTH	EACH	4		4	
X7011015	TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS)	L SUM	1		1	
Z0012754	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5")	SQ FT	2073	1040	881	152
Z0012755	STRUCTURAL REPAIR OF CONCRETE (DEPTH GREATER THAN 5")	SQ FT	25	17	8	
Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	102.8	51.4		51.4
Z0073200	TEMPORARY SHORING AND CRIBBING	EACH	9	7		2

* Specialty Items

ILLINOIS DEPARTMENT OF
TRANSPORTATION
SUMMARY OF QUANTITIES

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
FAI 290	2011-061-BR	COOK & DUPAGE	29	6

Contract 60P79

DESIGN DATA

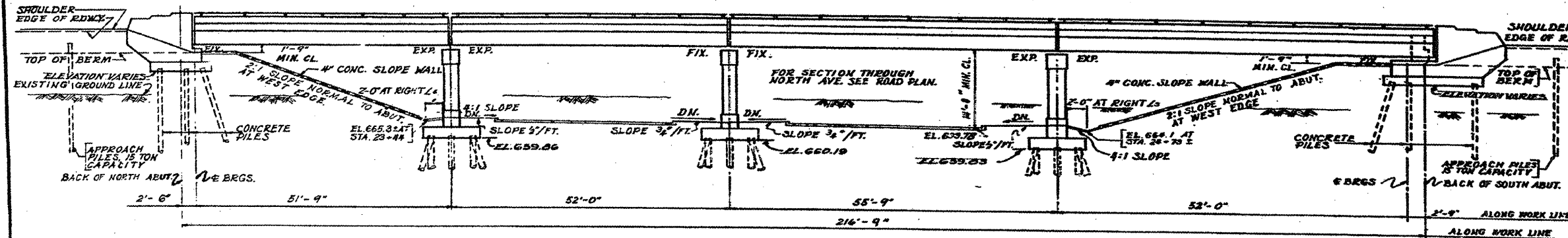
DESIGN LOADS
 LL: H20-S16-44
 1% FUTURE WEARING SURFACE

DESIGN STRESSES
 CONCRETE:
 $f_c = 3500$ R.S.I.
 $f_t = 1800$ R.S.I.
 $f_s = 1000$ R.S.I. (WITH EARTH PRESSURE)
 $f_y = 75$ R.S.I. (FOOTINGS)
 $n = 10$

REINFORCING STEEL
 $f_s = 20,000$ R.S.I.
 STRUCTURAL STEEL
 $f_s = 10,000$ R.S.I.

FOUNDATION
 ABUTS: 30 TON CONCRETE PILES
 PIERS: 30 TON TIMBER PILES

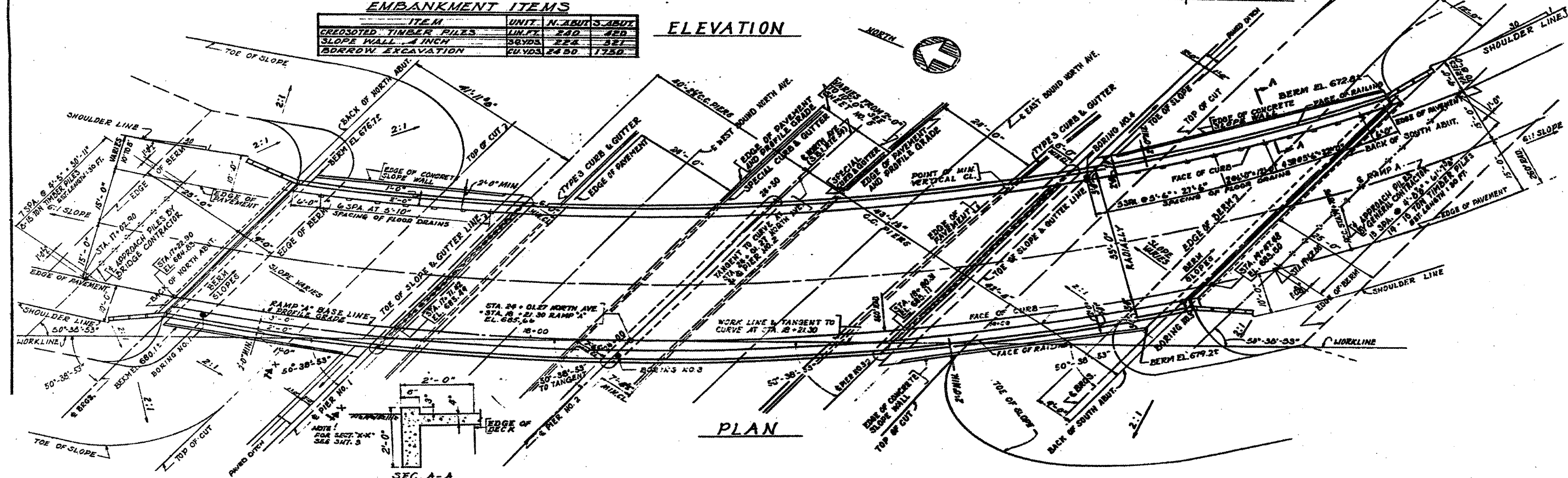
DESIGN DESIGNATION
 RAMP "A" 2630-T-30
 NORTH AVE. 4357-T-40



EMBANKMENT ITEMS

ITEM	UNIT	N. ABUT.	S. ABUT.
CREOSOTED TIMBER PILES	LN. FT.	240	420
SLOPE WALL - 4 INCH	SQ. YDS.	224	321
BORROW EXCAVATION	CU. YDS.	2450	1750

ELEVATION



PLAN

FOR INFORMATION ONLY

ILLINOIS DEPARTMENT OF
 TRANSPORTATION
 SN 022-0015
 LOCATION NO. 1
 I-290 RAMP A-OVER IL 64 (NORTH AVE.)
 GENERAL PLAN AND ELEVATION

SHEET 1 OF 10

ROUTE

FAI 290

SECTION

2011-061-BR

COUNTY

COOK & DUPAGE

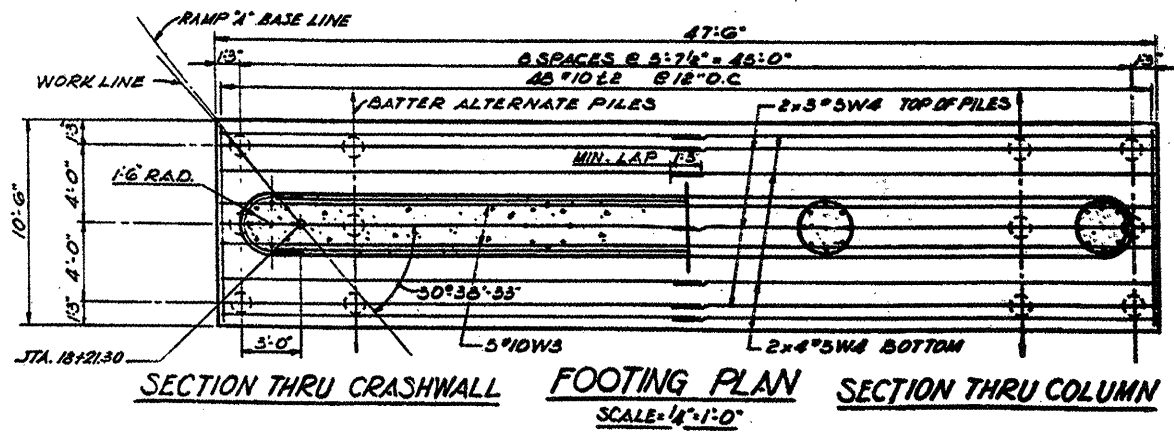
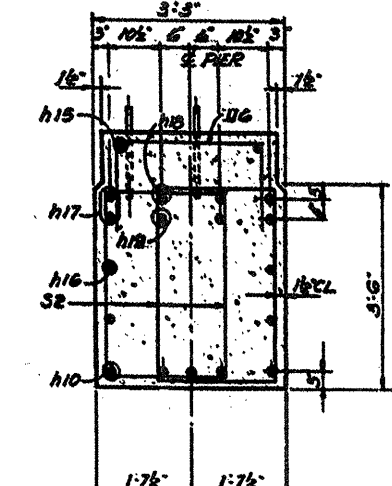
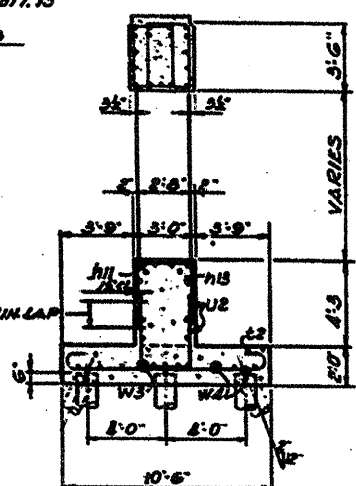
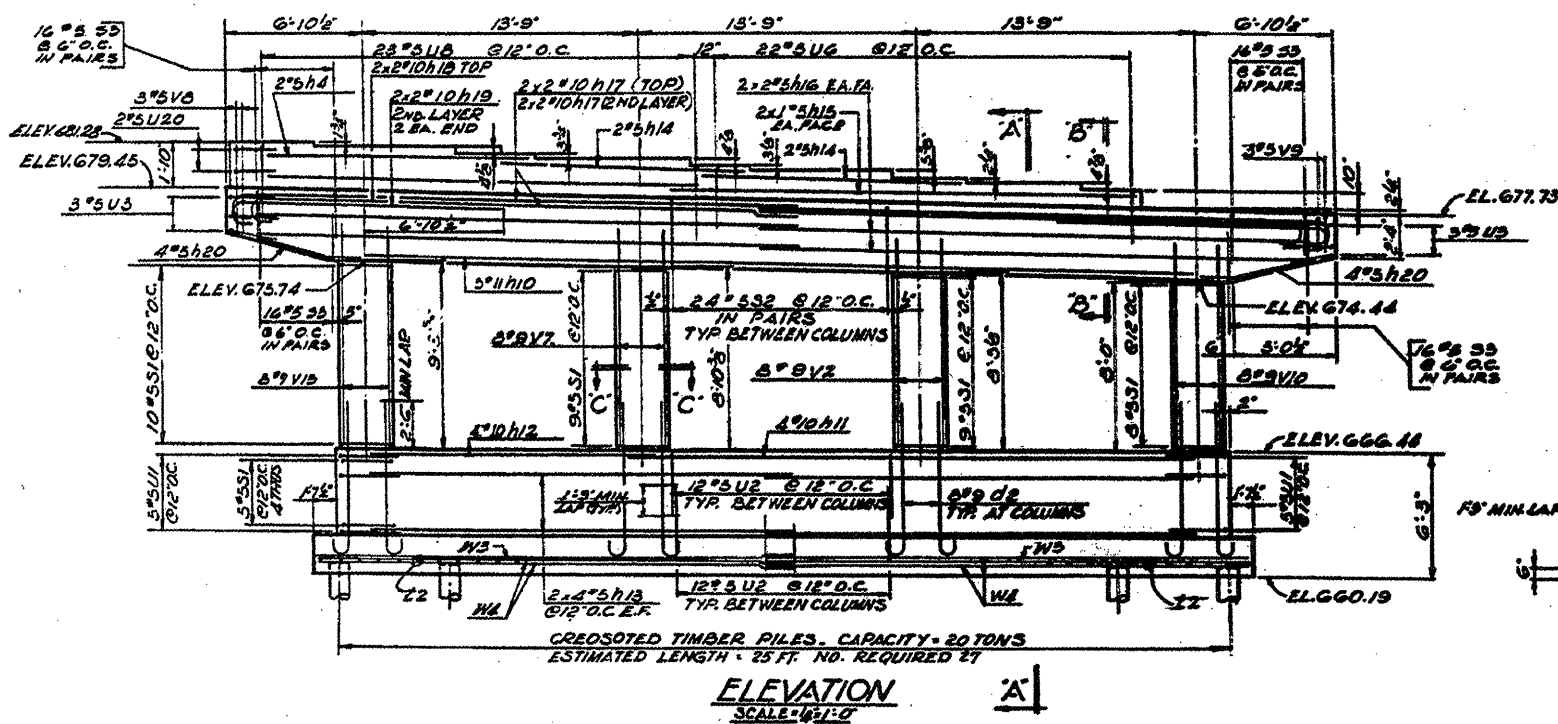
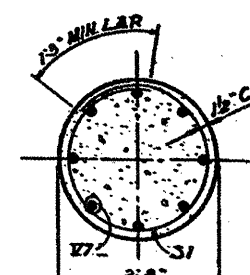
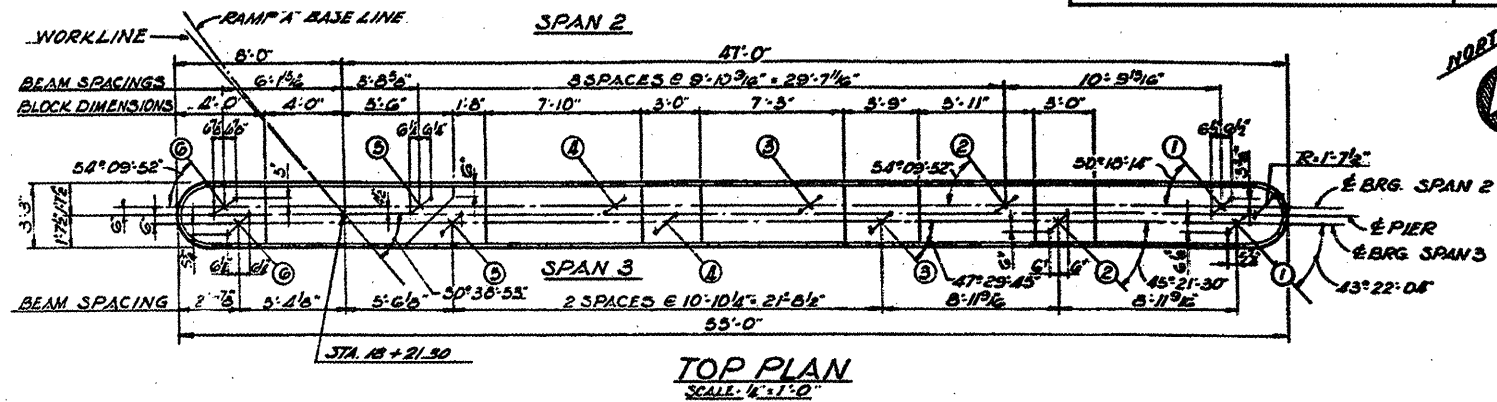
TOTAL SHEETS

29

SHEET NUMBER

8

Contract 60P79



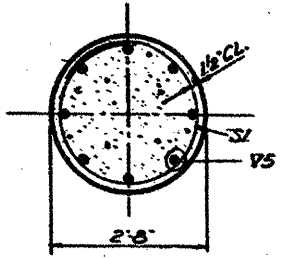
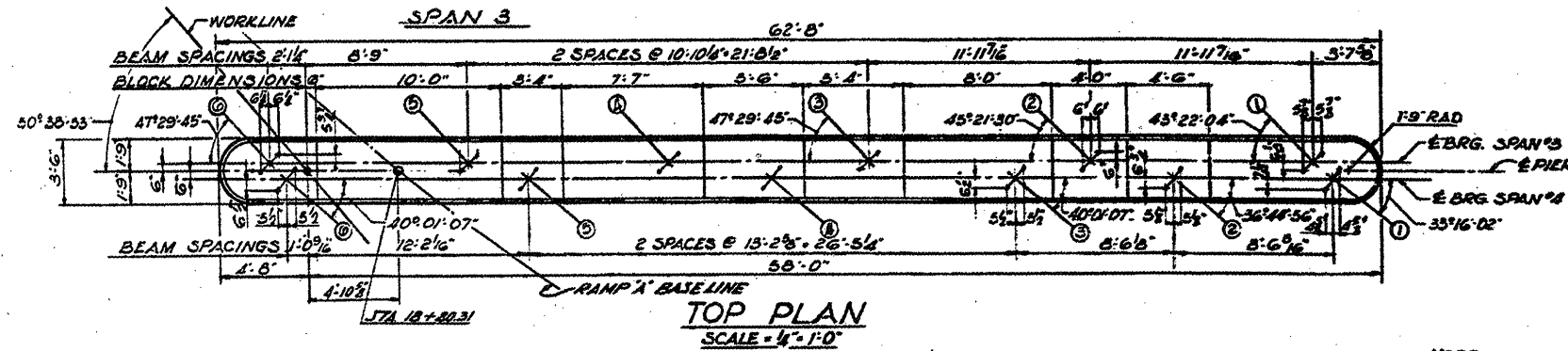
FOR INFORMATION ONLY

ILLINOIS DEPARTMENT OF
TRANSPORTATION
SN 022-0015
LOCATION NO. 1
I-290 RAMP A-OVER IL 64 (NORTH AVE.)
PIER 2

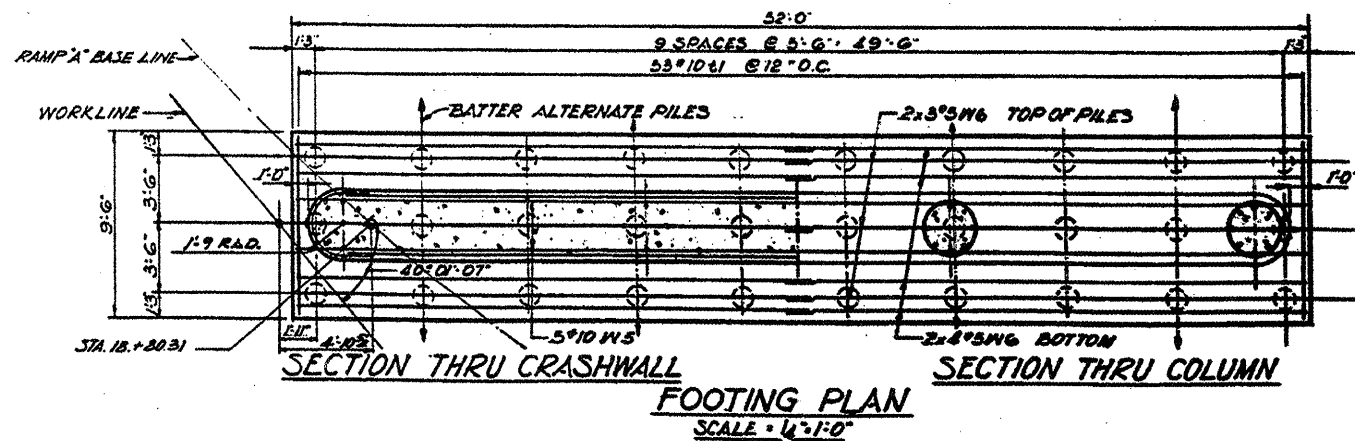
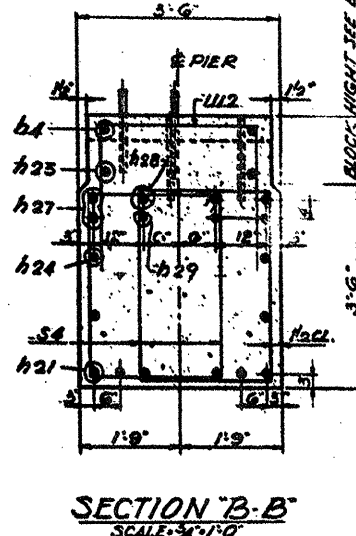
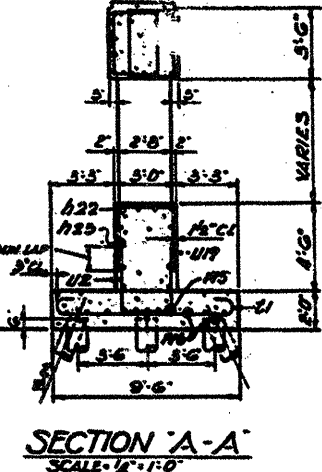
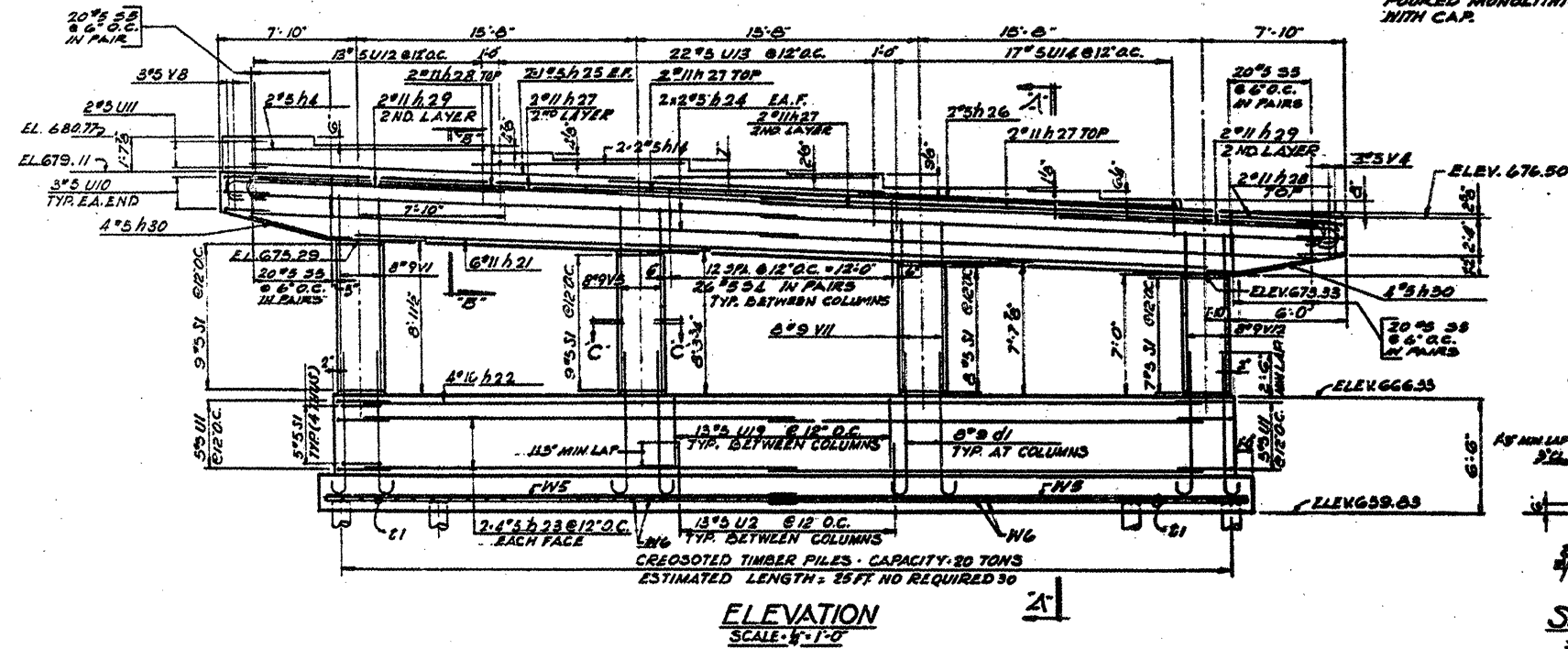
SHEET 3 OF 10

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
FAI 290	2011-061-BR	COOK & DUPAGE	29	9

Contract 60P79



NOTE
PEDESTAL BLOCKS TO BE
FOURRD MONOLITHICALLY
WITH CAP.



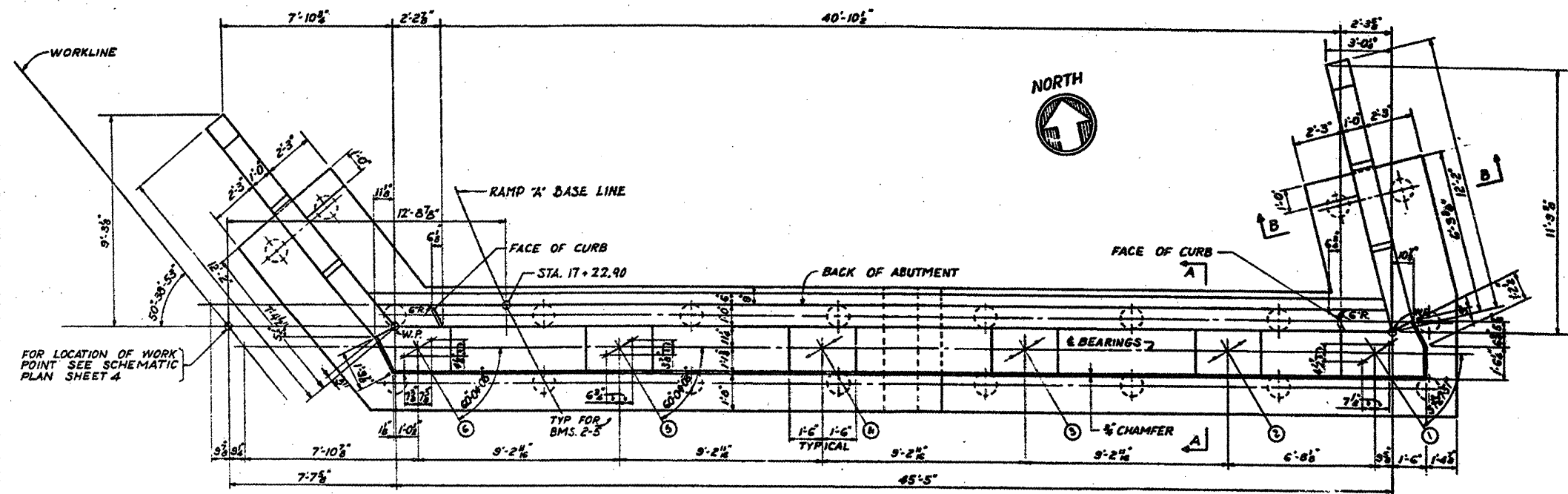
FOR INFORMATION ONLY

ILLINOIS DEPARTMENT OF
TRANSPORTATION
SN 022-0015
LOCATION NO. 1
I-290 RAMP A-OVER IL 64 (NORTH AVE.)
PIER 3

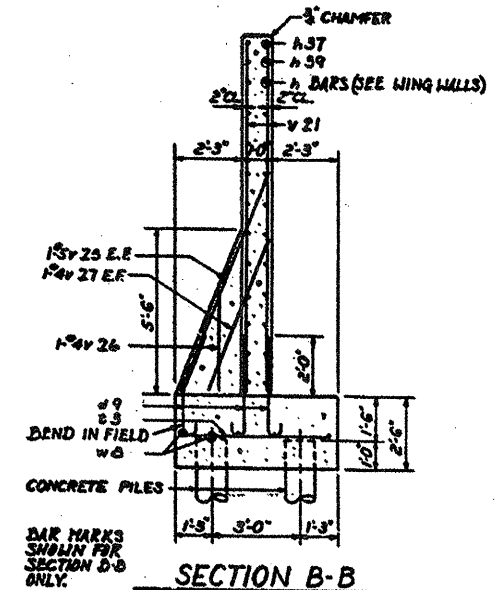
SHEET 4 OF 10

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
FAI 290	2011-061-BR	COOK & DUPAGE	29	10

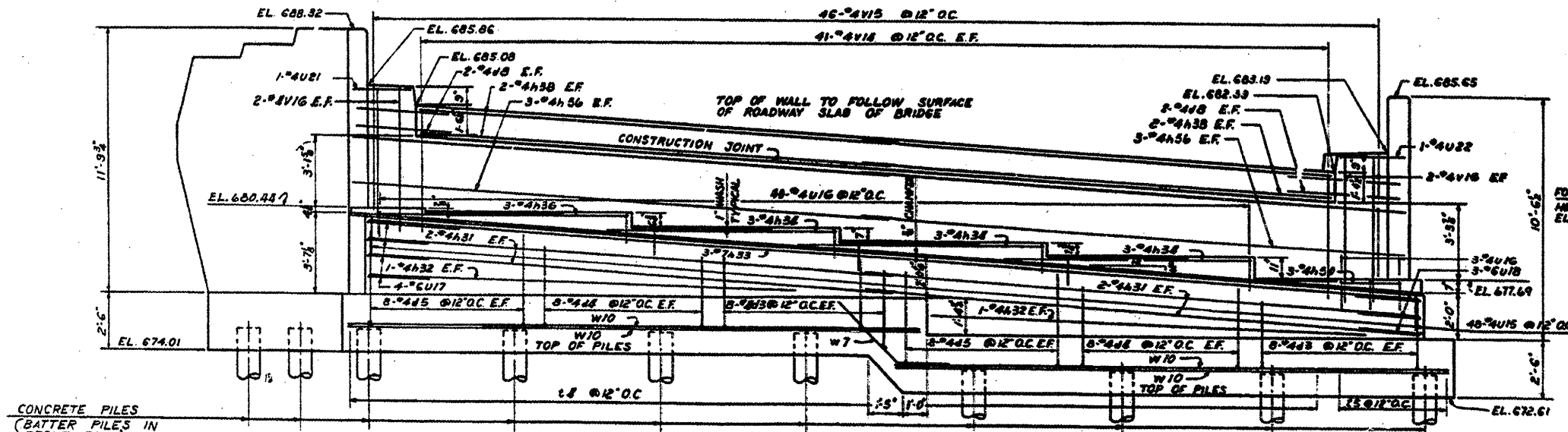
Contract 60P79



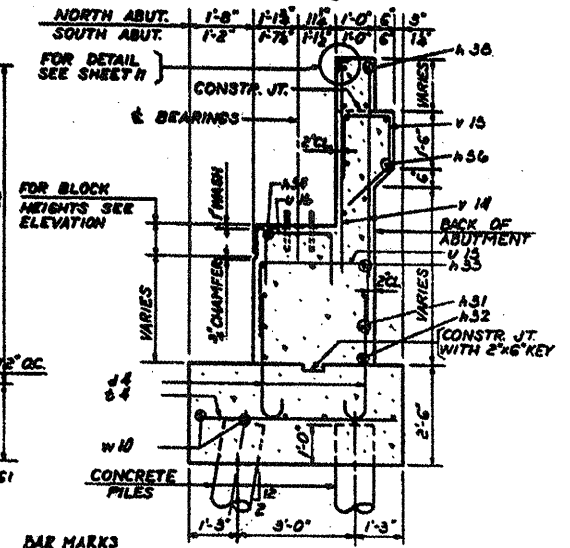
PLAN
SCALE: 1/8"=1'-0"



SECTION B-B
SECTION D-D SIMILAR
SCALE: 1/8"=1'-0"



ELEVATION
SCALE: 1/8"=1'-0"



SECTION A-A
SECTION C-C SIMILAR
SCALE: 1/8"=1'-0"

NOTES-
ADJUST SPACING OF REINFORCEMENT TO AVOID INTERFERENCE WITH DRILLING OF HOLES FOR ANCHOR BOLTS.
PEDESTAL STEPS TO BE POURED MONOLITICALLY WITH BRIDGE SEAT.
WALL ABOVE CONSTR. JOINT TO BE POURED AFTER SUPERSTRUCTURE SLAB IS IN PLACE.
FOR FOOTING DIMENSIONS AND PILE LOCATIONS SEE FOOTING PLAN SHEETS.

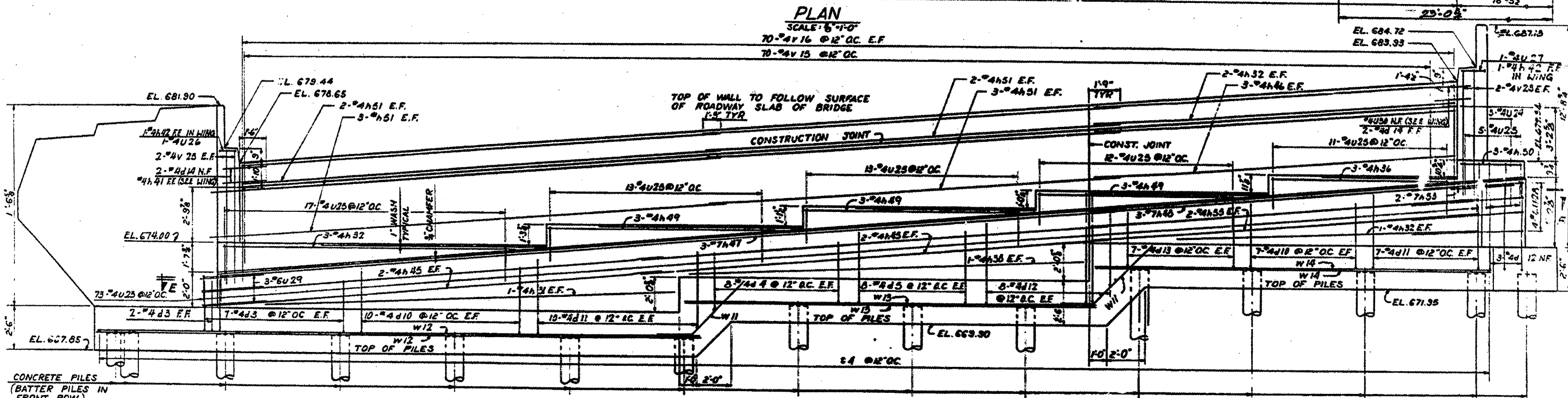
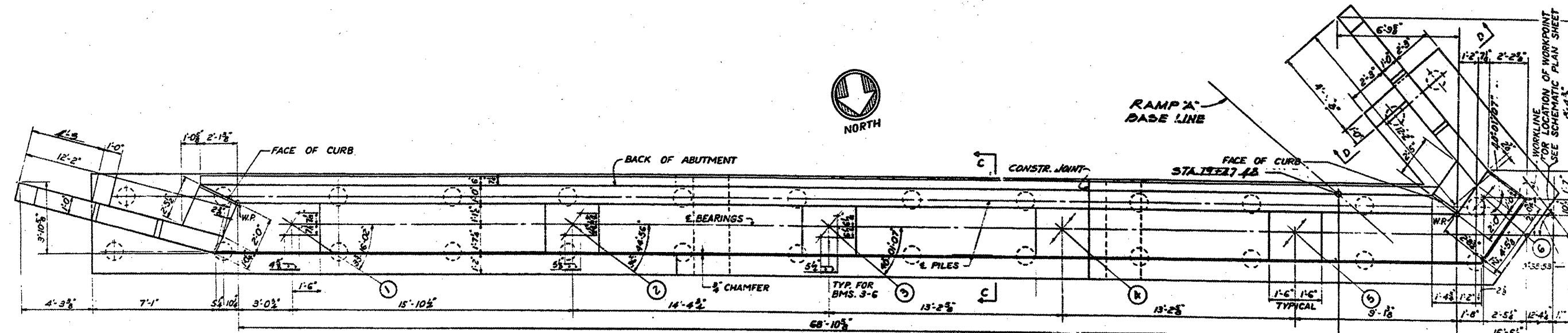
FOR INFORMATION ONLY

SHEET 5 OF 10

ILLINOIS DEPARTMENT OF
TRANSPORTATION
SN 022-0015
LOCATION NO. 1
I-290 RAMP A-OVER IL 64 (NORTH AVE.)
NORTH ABUTMENT

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
FAI 290	2011-061-BR	COOK & DUPAGE	29	11

Contract 60P79



NOTES:
 ADJUST SPACING OF REINFORCEMENT TO AVOID INTERFERENCE WITH DRILLING OF HOLES FOR ANCHOR BOLTS.
 PEDESTAL STEPS TO BE POURED MONOLITHICALLY WITH BRIDGE SEAT.
 WALL ABOVE CONST. JOINT TO BE POURED AFTER SUPERSTRUCTURE SLAB IS IN PLACE.
 FOR ALL SECTIONS SEE SHT. 17.
 FOR FOOTING DIMENSIONS AND PILE LOCATIONS SEE FOOTING PLAN SHEET 16.

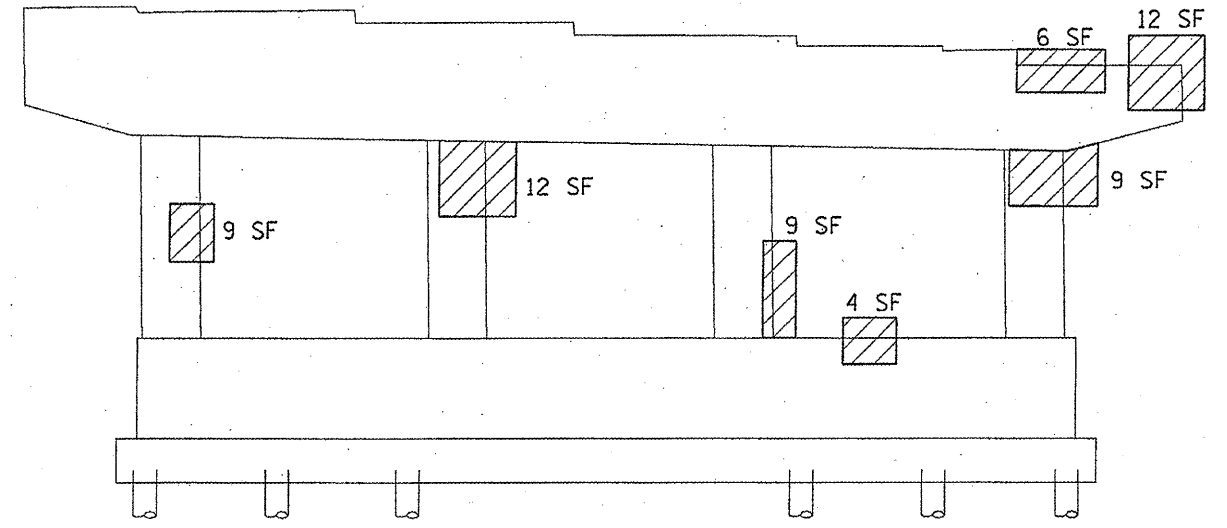
FOR INFORMATION ONLY

ILLINOIS DEPARTMENT OF
 TRANSPORTATION
 SN 022-0015
 LOCATION NO. 1
 I-290 RAMP A-OVER IL 64 (NORTH AVE.)
 SOUTH ABUTMENT

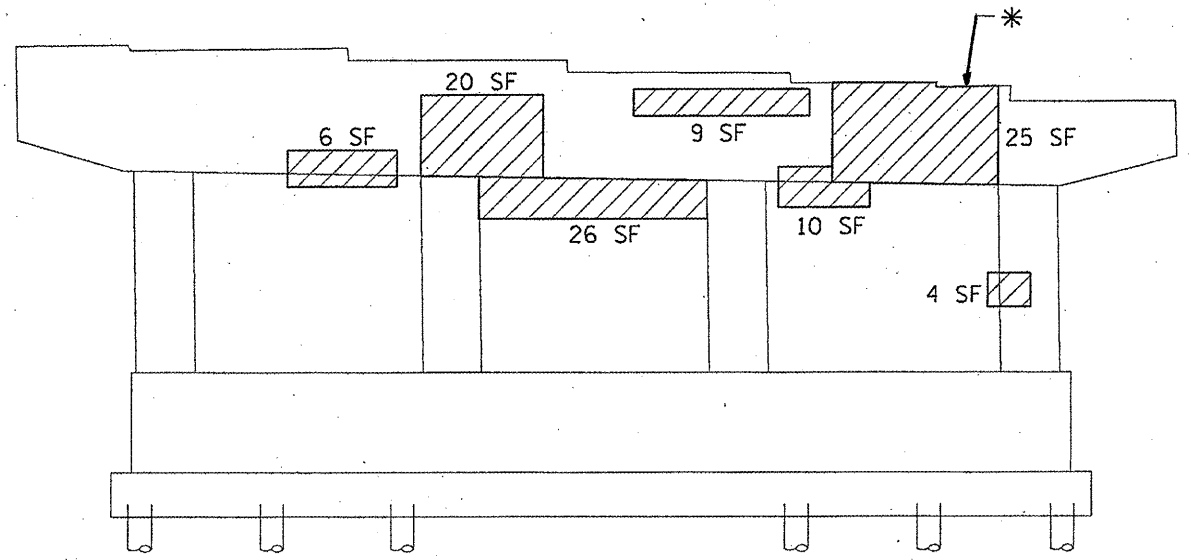
SHEET 6 OF 10

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
FAI 290	2011-061-BR	COOK & DUPAGE	29	12

Contract 60P79



PIER 1 (SOUTH FACE)



PIER 1 (NORTH FACE)

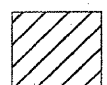
* TEMPORARY SUPPORT SYSTEM

TOTAL BILL OF MATERIAL SN 022-0115	UNIT	QUANTITY
STRUCTURAL REPAIR OF CONCRETE ≤ 5"	SQ. FT.	1040
STRUCTURAL REPAIR OF CONCRETE > 5"	SQ. FT.	17
TEMPORARY SHORING AND CRIBBING	EACH	7

TABLE OF REACTIONS (SN 022-0115)

	D.L. (Kips)	S.D.L. (Kips)	L.L. (Kips)	Imp. (Kips)	TOTAL (Kips)
South Abutment	19.8	10.0	41.6	12.2	83.6
South Bridge Pier 1	19.8	10.0	41.6	12.2	83.6
North Bridge Pier 1	21.5	10.7	42.3	12.2	86.7
South Bridge Pier 2	21.5	10.7	42.3	12.2	86.7
North Bridge Pier 2	27.9	13.0	44.1	12.0	97.0
South Bridge Pier 3	27.9	13.0	44.1	12.0	97.0
North Bridge Pier 3	34.1	14.6	45.0	11.7	105.4
North Abutment	34.1	14.6	45.0	11.7	105.4

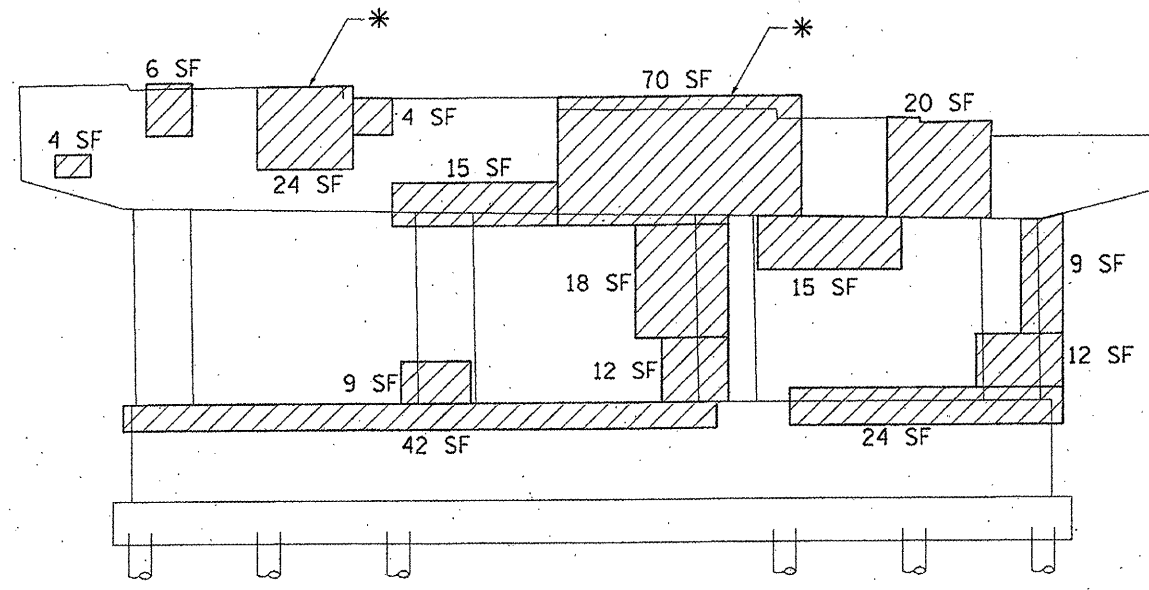
BILL OF MATERIAL PIER 1	UNIT	QUANTITY
STRUCTURAL REPAIR OF CONCRETE ≤ 5"	SQ. FT.	161
TEMPORARY SHORING AND CRIBBING	EACH	1

 STRUCTURAL REPAIR OF CONCRETE ≤ 5"

ILLINOIS DEPARTMENT OF
TRANSPORTATION
SN 022-0015
LOCATION NO. 1
RAMP A-OVER IL 64 (NORTH AVE.)
PIER 1

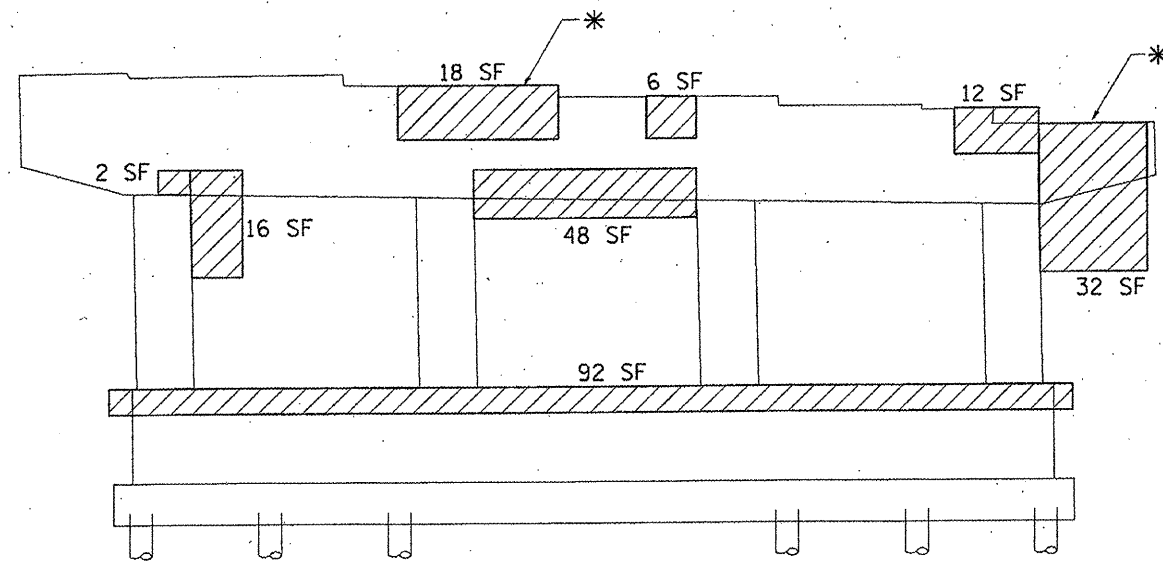
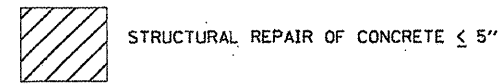
ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
FAI 290	2011-061-BR	COOK & DUPAGE	29	13

Contract 60P79



PIER 2 (SOUTH FACE)

BILL OF MATERIAL PIER 2	UNIT	QUANTITY
STRUCTURAL REPAIR OF CONCRETE \leq 5"	SO. FT.	510
TEMPORARY SHORING AND CRIBBING	EACH	4



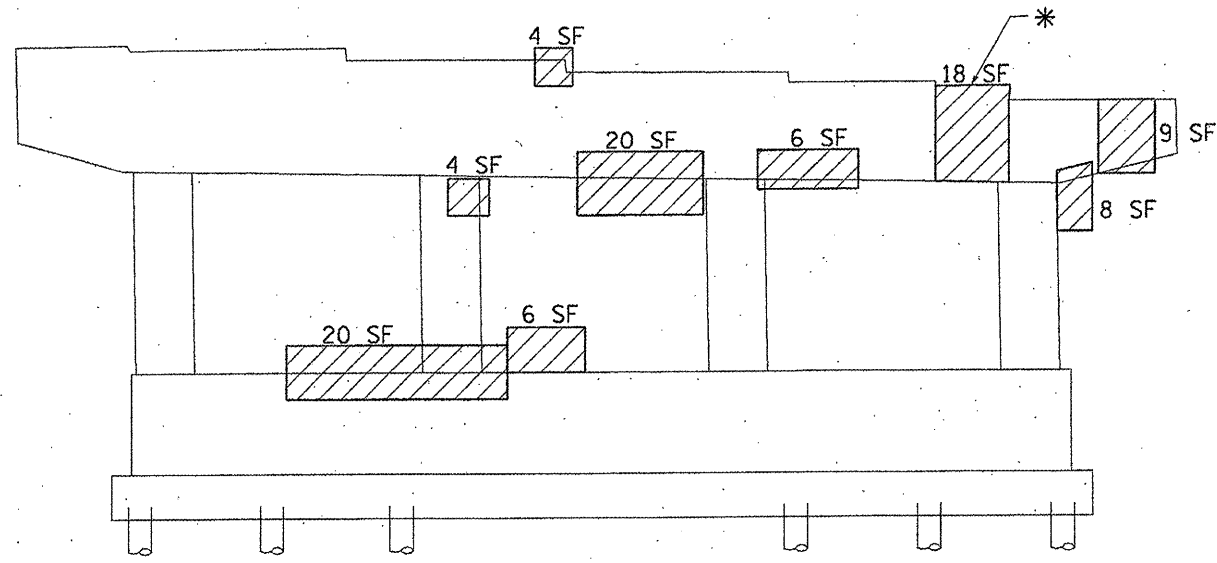
PIER 2 (NORTH FACE)

* TEMPORARY SUPPORT SYSTEM

ILLINOIS DEPARTMENT OF
TRANSPORTATION
SN 022-0015
LOCATION NO. 1
RAMP A-OVER IL 64 (NORTH AVE.)
PIER 2

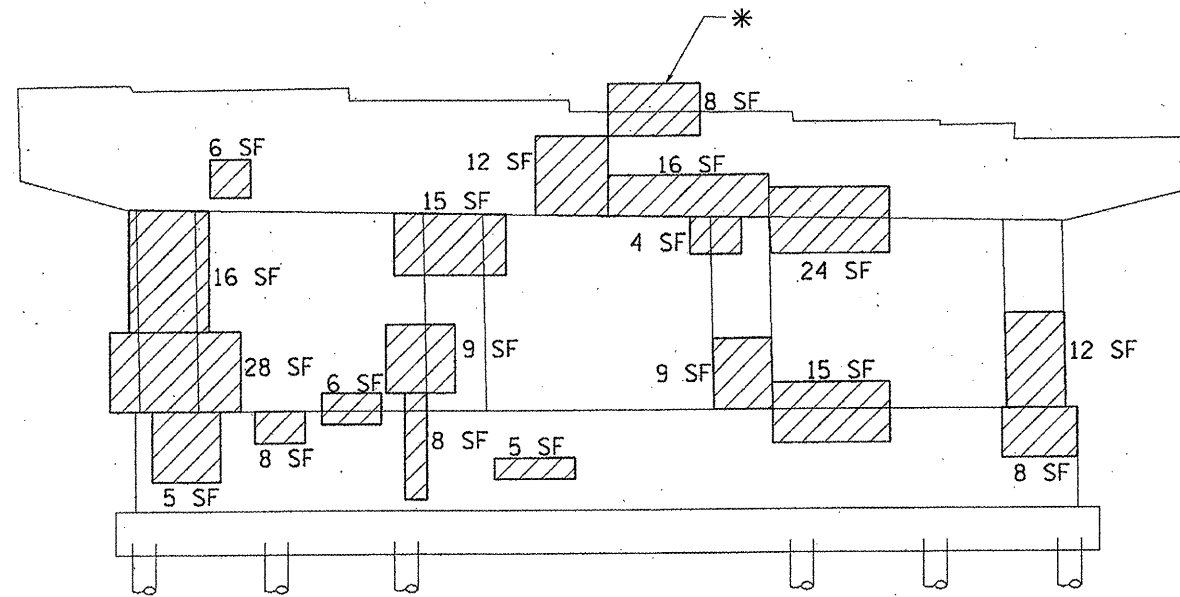
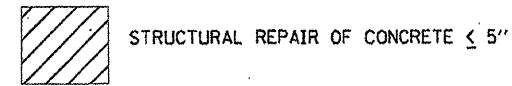
ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
FAI 290	2011-061-BR	COOK & DUPAGE	29	14

Contract 60P79



PIER 3 (SOUTH FACE)

TOTAL BILL OF MATERIAL PIER 3	UNIT	QUANTITY
STRUCTURAL REPAIR OF CONCRETE \leq 5"	SO. FT.	309
TEMPORARY SHORING AND CRIBBING	EACH	2



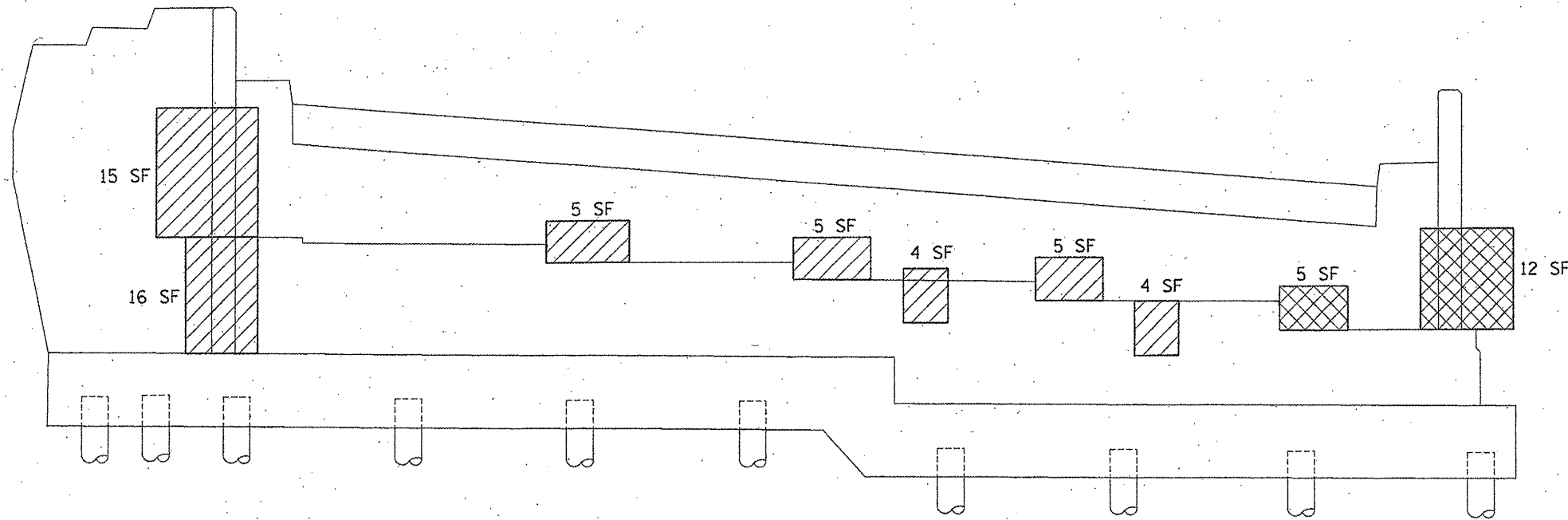
PIER 3 (NORTH FACE)

ILLINOIS DEPARTMENT OF
TRANSPORTATION
SN 022-0015
LOCATION NO. 1
RAMP A-OVER IL 64 (NORTH AVE.)
PIER 3

SHEET 9 OF 10

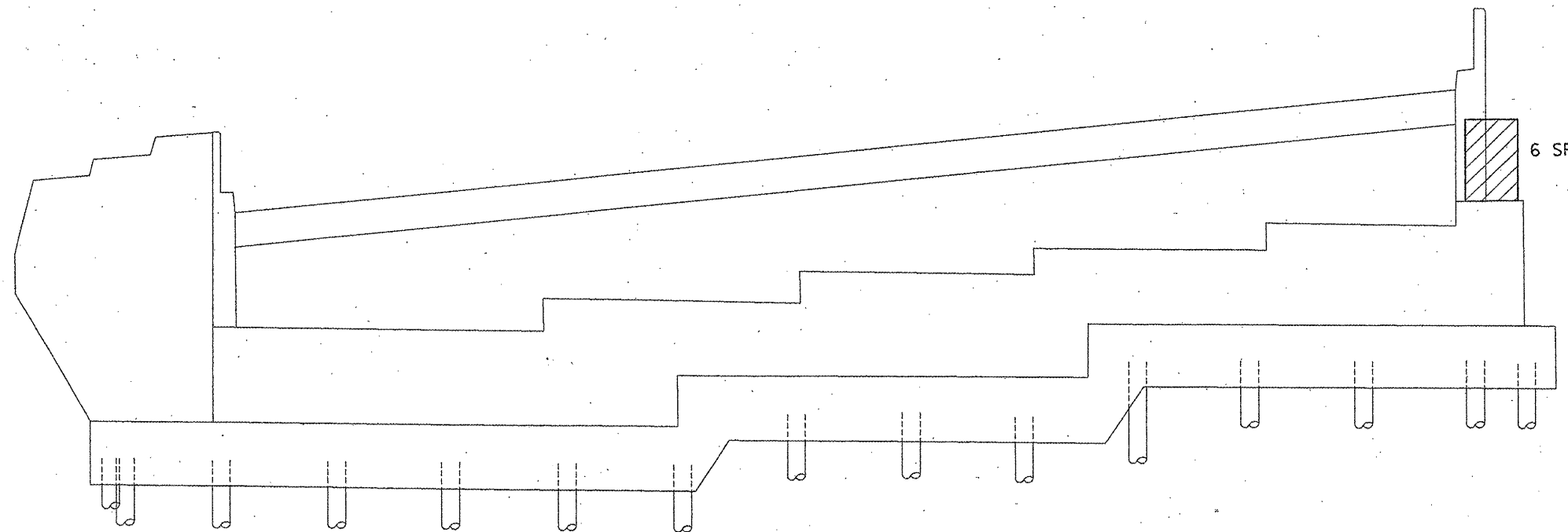
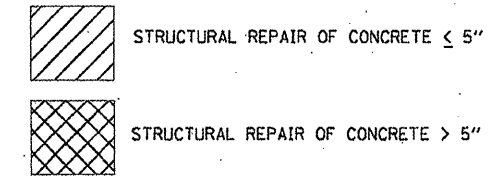
ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
FAI 290	2011-061-BR	COOK & DUPAGE	29	15

Contract 60P79



NORTH ABUTMENT

BILL OF MATERIAL (NORTH ABUTMENT)	UNIT	QUANTITY
STRUCTURAL REPAIR OF CONCRETE \leq 5"	SQ. FT.	54
STRUCTURAL REPAIR OF CONCRETE $>$ 5"	SQ. FT.	17



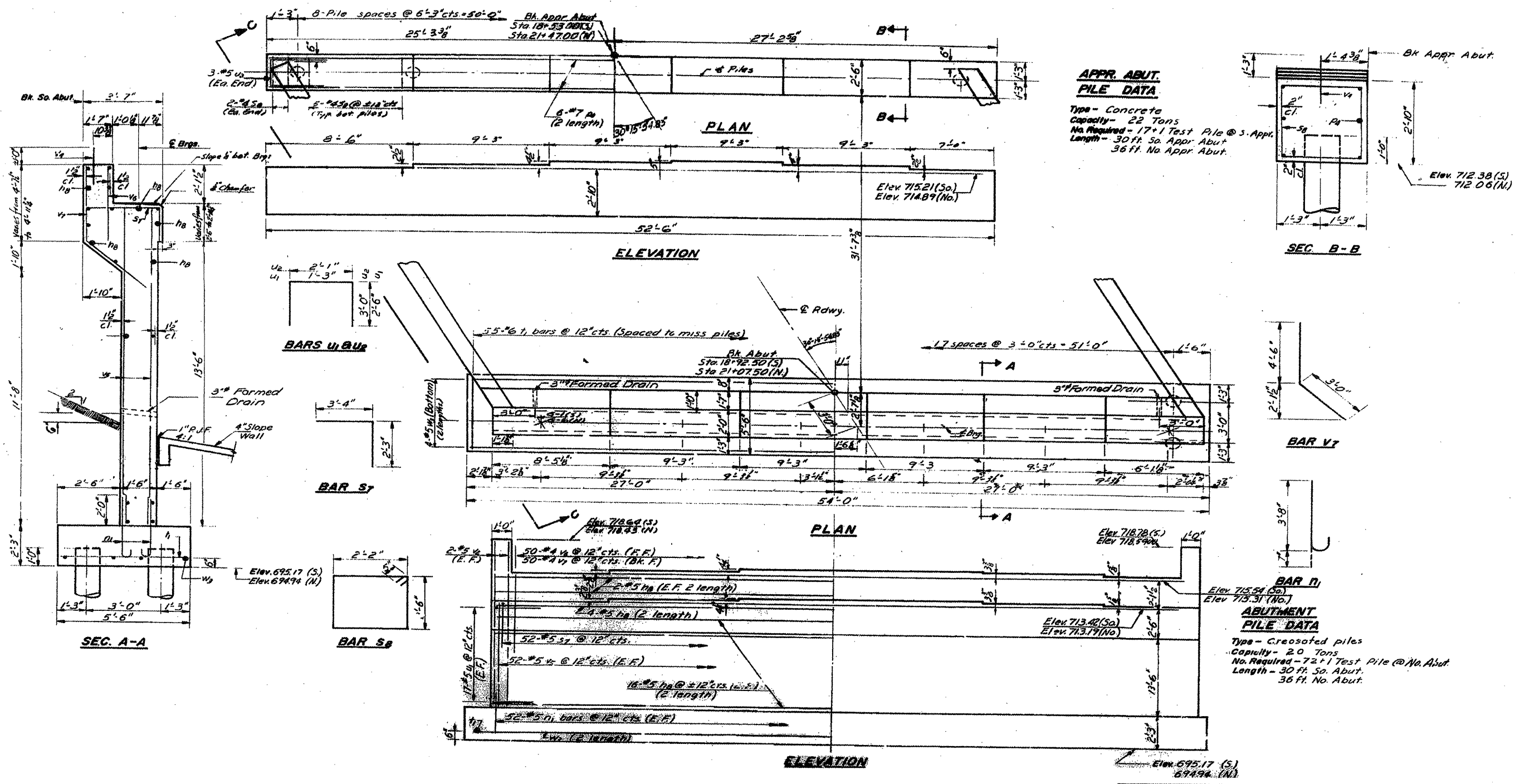
SOUTH ABUTMENT

BILL OF MATERIAL (SOUTH ABUTMENT)	UNIT	QUANTITY
STRUCTURAL REPAIR OF CONCRETE \leq 5"	SQ. FT.	6

ILLINOIS DEPARTMENT OF
TRANSPORTATION
SN 022-0015
LOCATION NO. 1
RAMP A-OVER IL 64 (NORTH AVE.)
(N & S) ABUTMENT

ROUTE FAI 290	SECTION 2011-061-BR	COUNTY COOK & DUPAGE	TOTAL SHEETS 29	SHEET NUMBER 17
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Contract 60P79



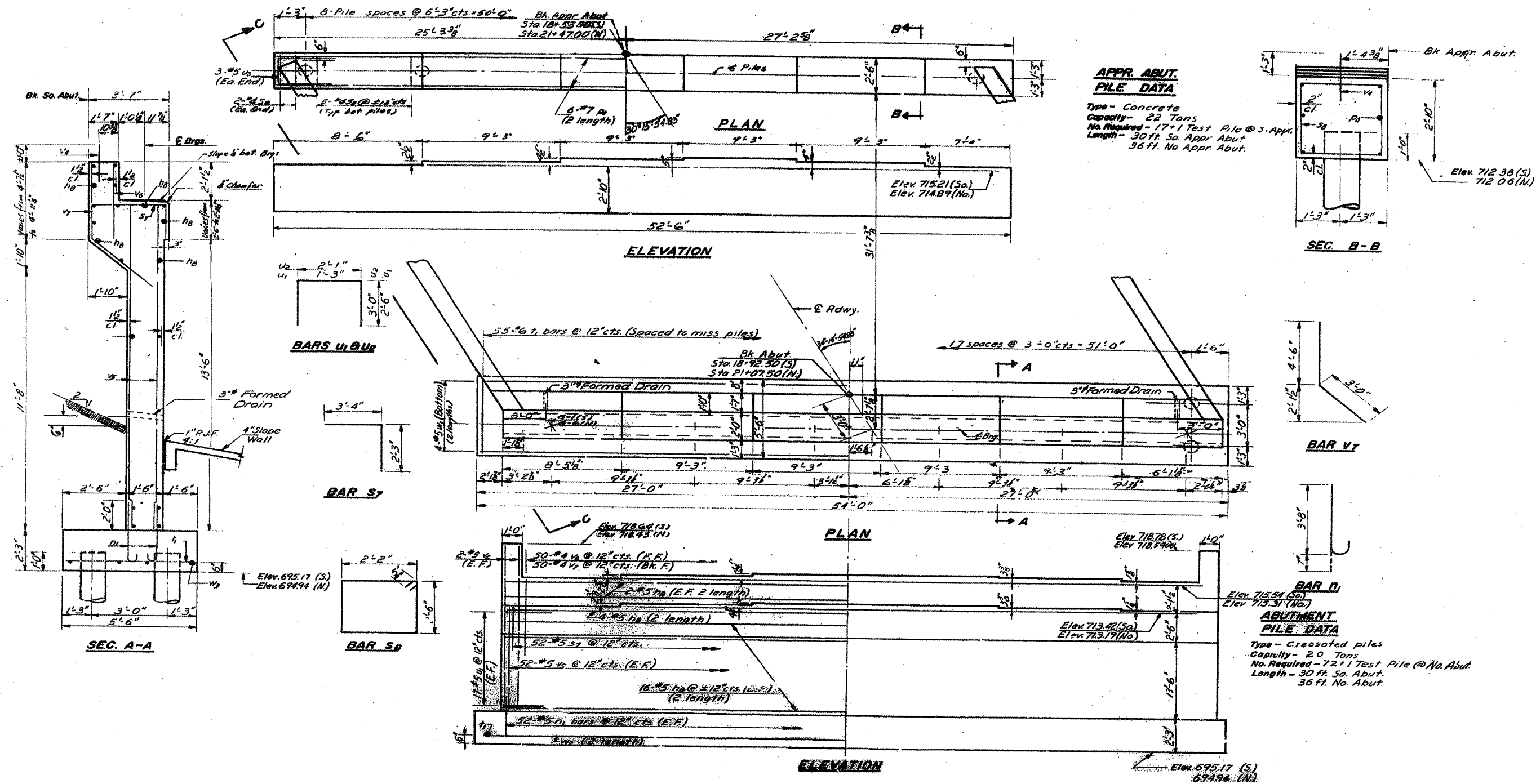
FOR INFORMATION ONLY

SHEET 2 OF 6

**ILLINOIS DEPARTMENT OF
 TRANSPORTATION
 SN 022-0109
 LOCATION NO. 2
 MILL ROAD OVER I-290
 NORTH ABUTMENT**

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
FAI 290	2011-061-BR	COOK & DUPAGE	29	18

Contract 60P79



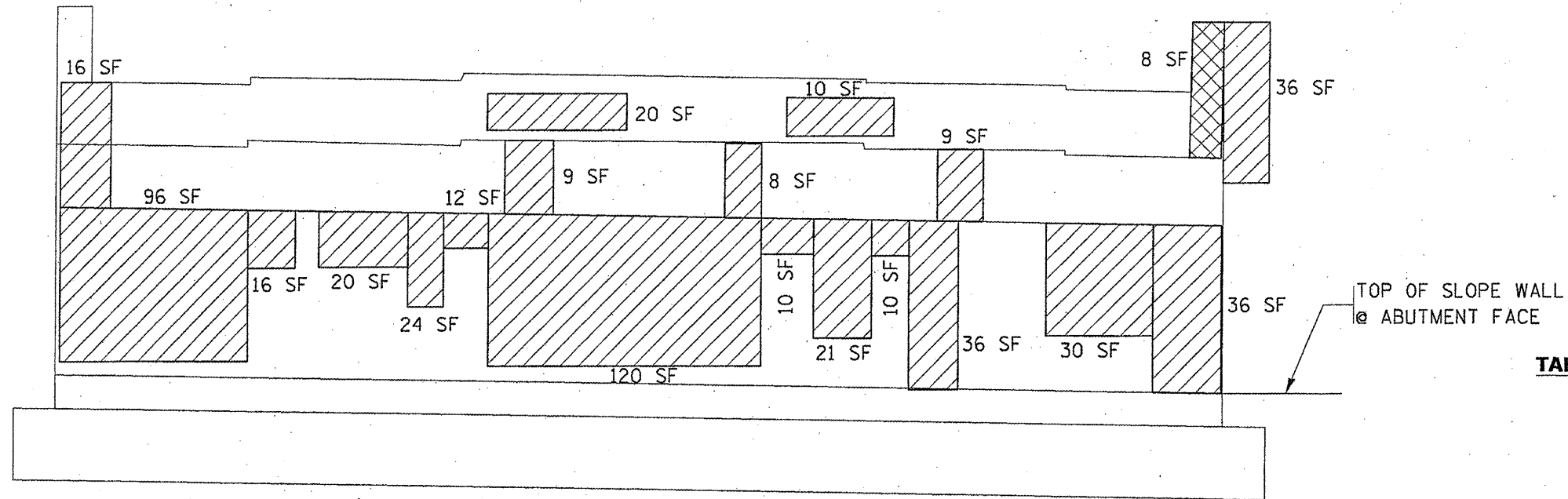
FOR INFORMATION ONLY

SHEET 3 OF 6

ILLINOIS DEPARTMENT OF
 TRANSPORTATION
 SN 022-0109
 LOCATION NO. 2
 MILL ROAD OVER I-290
 SOUTH ABUTMENT

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
FAI 290	2011-061-BR	COOK & DUPAGE	29	19

Contract 60P79

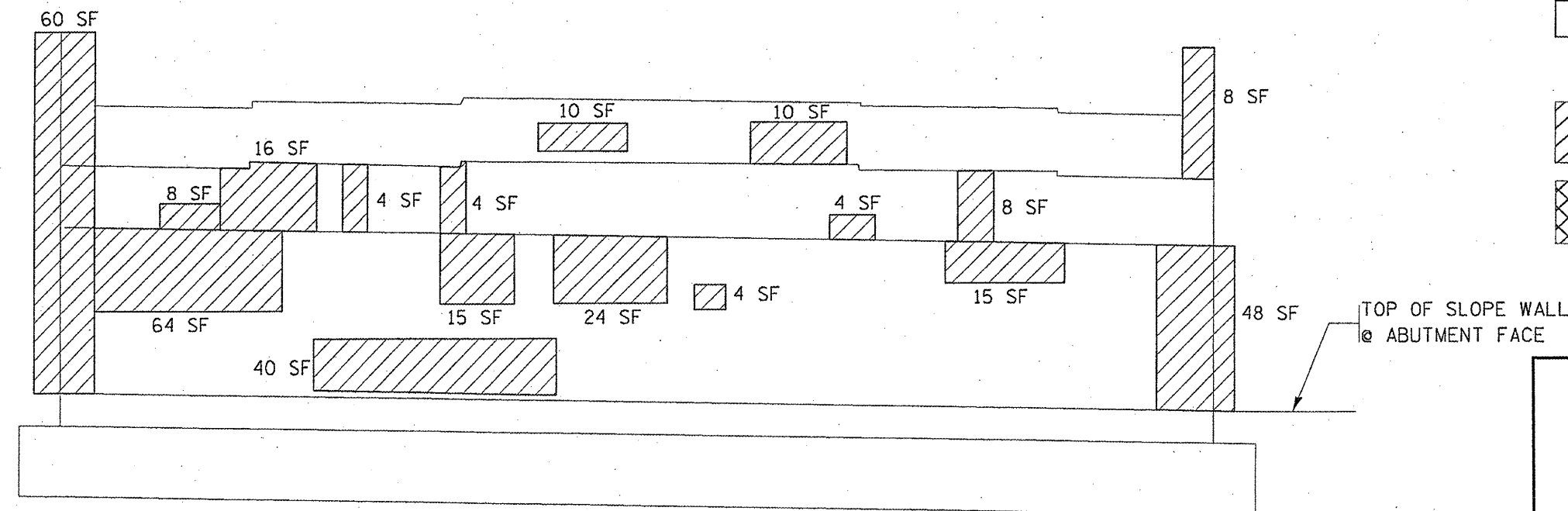


NORTH ABUTMENT
WORK WITH SHEET 5 OF 6

TOTAL BILL OF MATERIAL SN 022-0109	UNIT	QUANTITY
STRUCTURAL REPAIR OF CONCRETE \leq 5"	SO. FT.	881
STRUCTURAL REPAIR OF CONCRETE $>$ 5"	SO. FT.	8
REINFORCEMENT BARS, (EPOXY COATED)	LBS	1550
CONCRETE STRUCTURES	CU. YD.	8.3

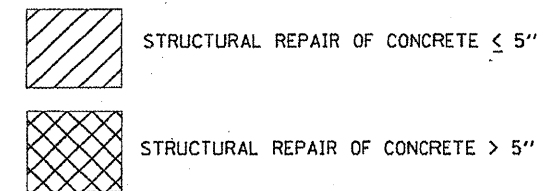
TABLE OF REACTIONS (SN 022-0109)

	REACTIONS (Kips)	
	Abut.	Pier
D.L.	39	140
S.D.L.	11	32
L.L.	45	78
Imp.	10	17
TOTAL	105	267



SOUTH ABUTMENT

BILL OF MATERIAL (SOUTH ABUTMENT)	UNIT	QUANTITY
STRUCTURAL REPAIR OF CONCRETE \leq 5"	SO. FT.	342

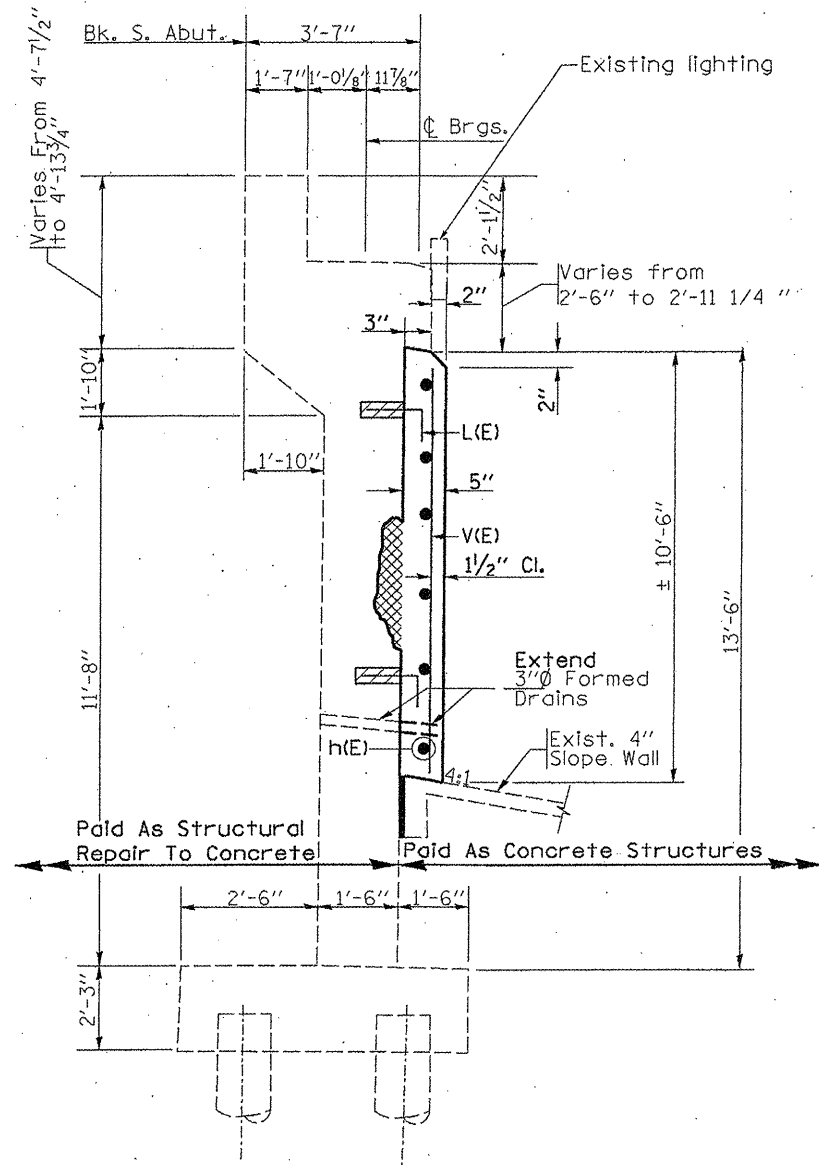


ILLINOIS DEPARTMENT OF
TRANSPORTATION
SN 022-0109
LOCATION NO. 2
MILL ROAD OVER I-290
(N & S) ABUTMENT

SHEET 4 OF 6

ROUTE FAI 290	SECTION 2011-061-BR	COUNTY COOK & DUPAGE	TOTAL SHEETS 29	SHEET NUMBER 20
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Contract 60P79

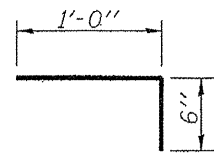


SECTION A-A

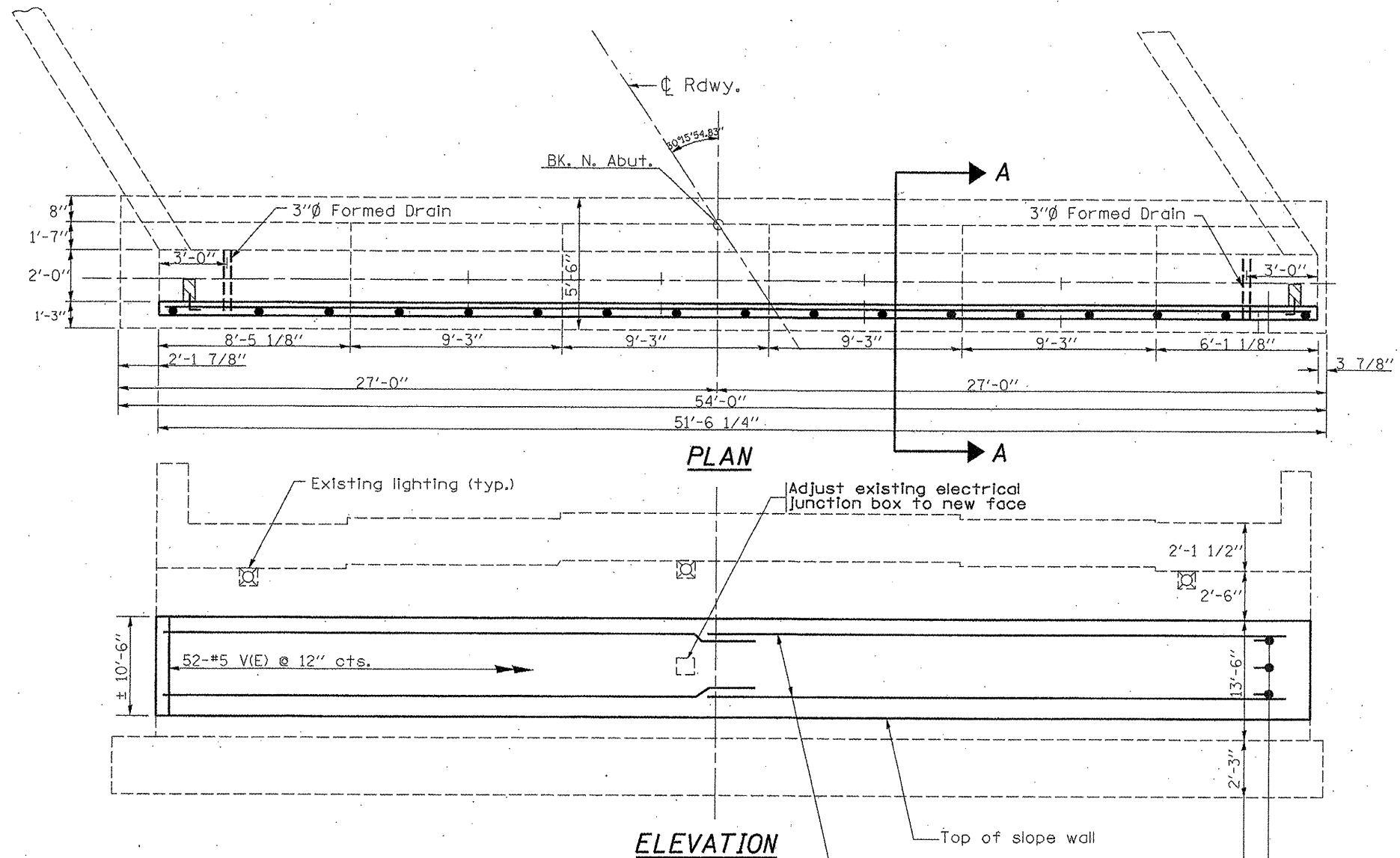
NOTE:
#5 L(E) bars shall be epoxy grouted according to Art. 584 of the Standard Specifications.

Structural repair to concrete (See sheet 1 of 2 for locations)

NOTE:
The concrete for the structural repair to concrete shall use the same material and be poured at the same time as the concrete structures. Cost included in structural repair to concrete.



BAR L(E)



PLAN

ELEVATION

BILL OF MATERIAL N. ABUT.

Bar	No.	Size	Length	Shape
h(E)	20	#5	26'-6"	—
L(E)	280	#5	1'-6"	—
V(E)	52	#5	10'-3"	—
Reinforcement Bars, (Epoxy Coated)		Lbs.		1550
Concrete Structures		Cu. Yd.		8.3
Structures repair to concrete ≤ 5"		Sq. Ft.		539
Structures repair to concrete > 5"		Sq. Ft.		8

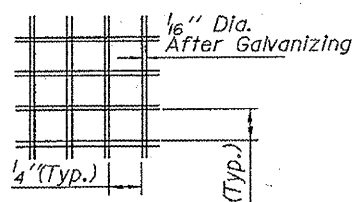
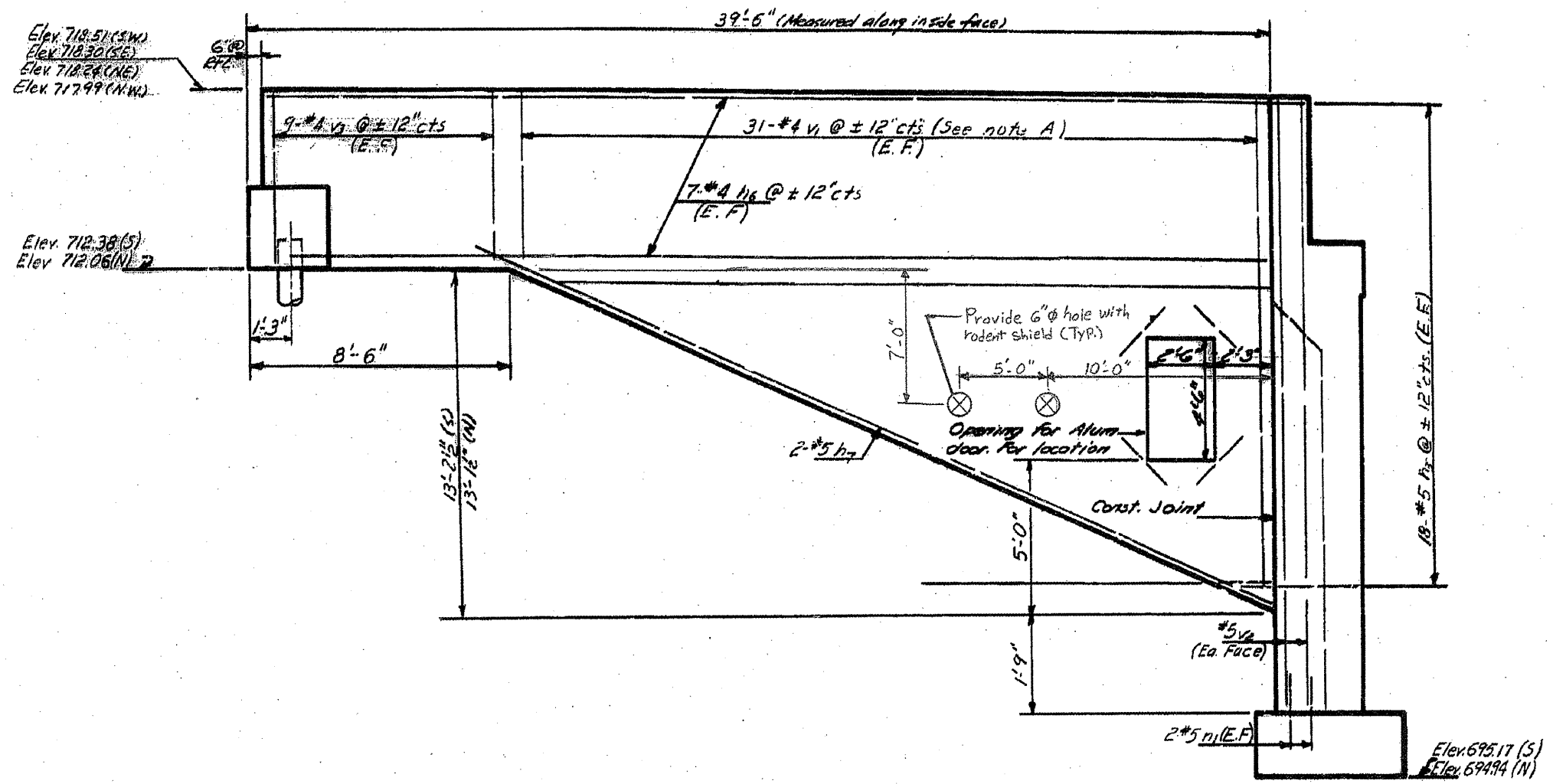
WORK WITH SHEET 4 OF 6

**ILLINOIS DEPARTMENT OF
TRANSPORTATION
SN 022-0109
LOCATION NO. 2
MILL ROAD OVER I-290
NORTH ABUTMENT**

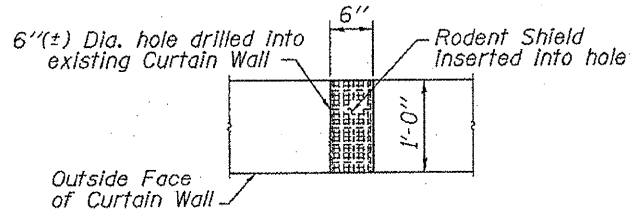
SHEET 5 OF 6

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
FAI 290	2011-061-BR	COOK & DUPAGE	29	21

Contract 60P79



SECTION A-A
DETAIL OF RODENT SHIELD
(8 Required)



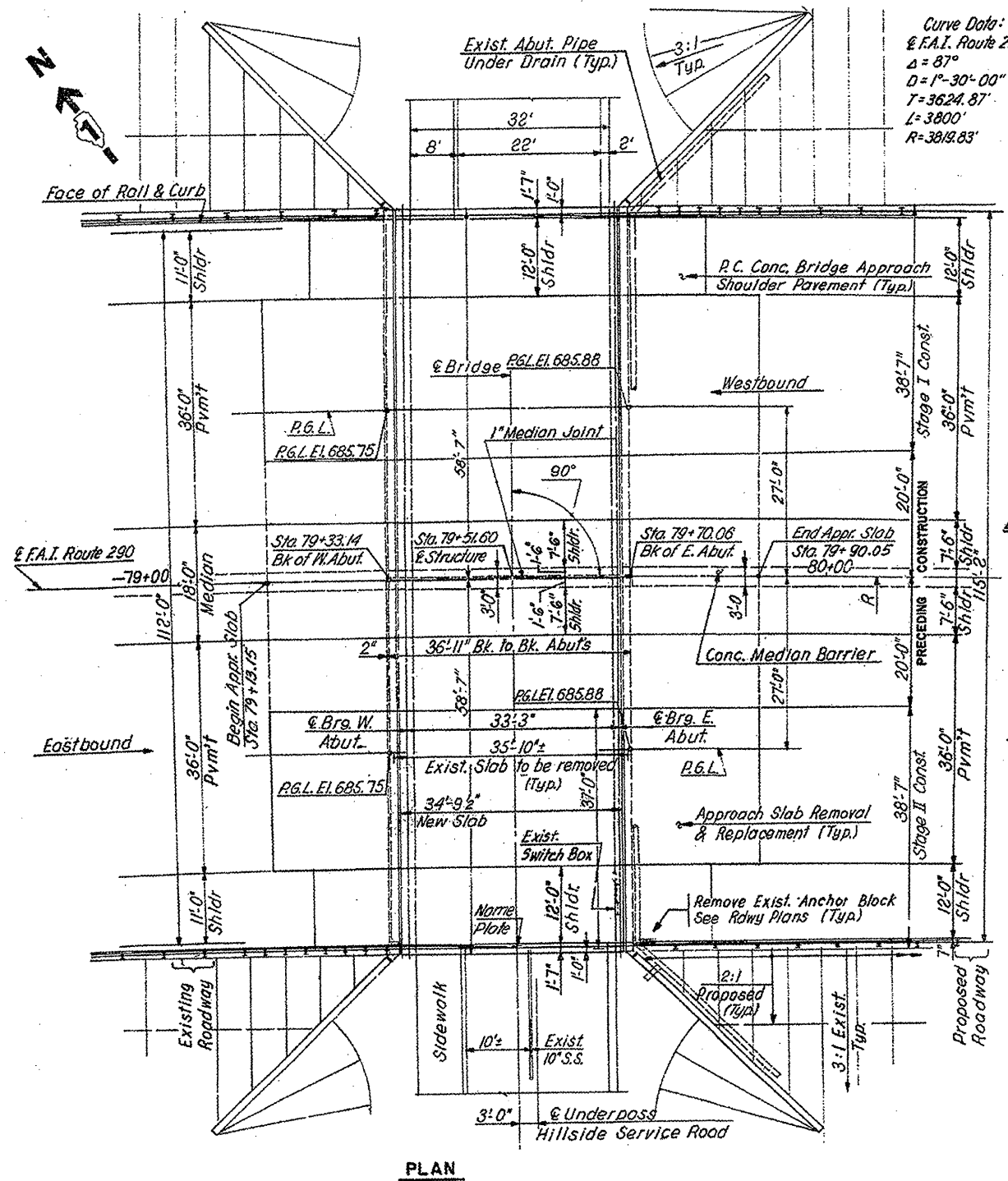
RODENT SHIELD PLACEMENT

NOTE:
COST OF CORING 8 HOLES (2 EACH SIDES AT EACH ABUTMENT)
AND SHIELDS INCLUDED WITH CONCRETE STRUCTURES.

ILLINOIS DEPARTMENT OF
TRANSPORTATION
SN 022-0109
LOCATION NO. 2
MILL ROAD OVER I-290
VENT HOLES AT (N & S) ABUTMENT

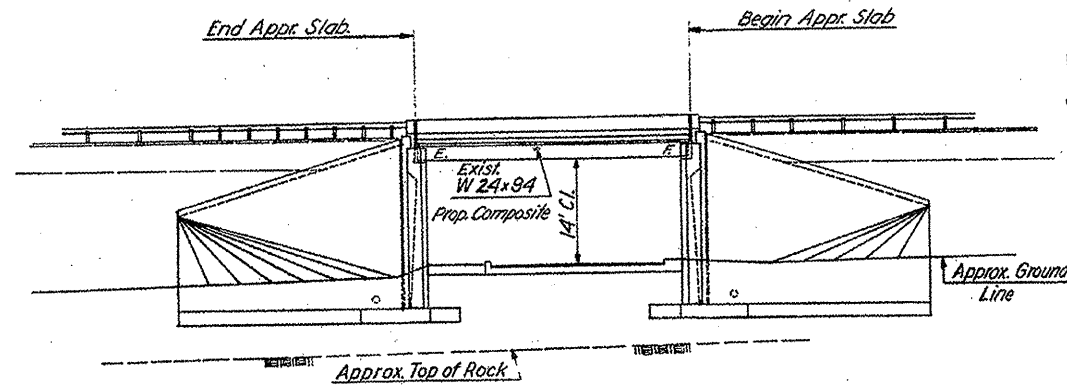
ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
FAI 290	2011-061-BR	COOK & DUPAGE	29	22

Contract 60P79



Curve Data:
 @ F.A.I. Route 290
 $\Delta = 87^\circ$
 $D = 1^\circ - 30' - 00''$
 $T = 3624.87'$
 $L = 3800'$
 $R = 3819.83'$

Existing Structure:
 Single Span W Beam Bridge, with Closed
 Abutments - Cantilever Type on Spread Footing
 114'-0" Wide by 36'-11" Long Built as F.A. Route
 131, Section 062-3737.2 M.F.T. Sta. 79+51.60 in 1955



ELEVATION

DESIGN LOADING:
 HS 20-44, Alternate and
 25 psf allowance for Future
 Wearing Surface.
 DESIGN STRESSES (New Construction)
 $f_s = 20,000$ p.s.i. M183 Struct. Steel.
 $f_s = 24,000$ p.s.i. Reinforcement Steel
 Deck Slab:
 $f_y = 60,000$ p.s.i. (Load Factor
 $f_c = 3,500$ p.s.i. Design)

DESIGN STRESSES (Exist. Construction)
 $f_s = 18,000$ p.s.i. A7 Structural Steel.
 DESIGN SPECIFICATIONS
 AASHTO 1977 and Interim
 Specifications 1978 thru 1983

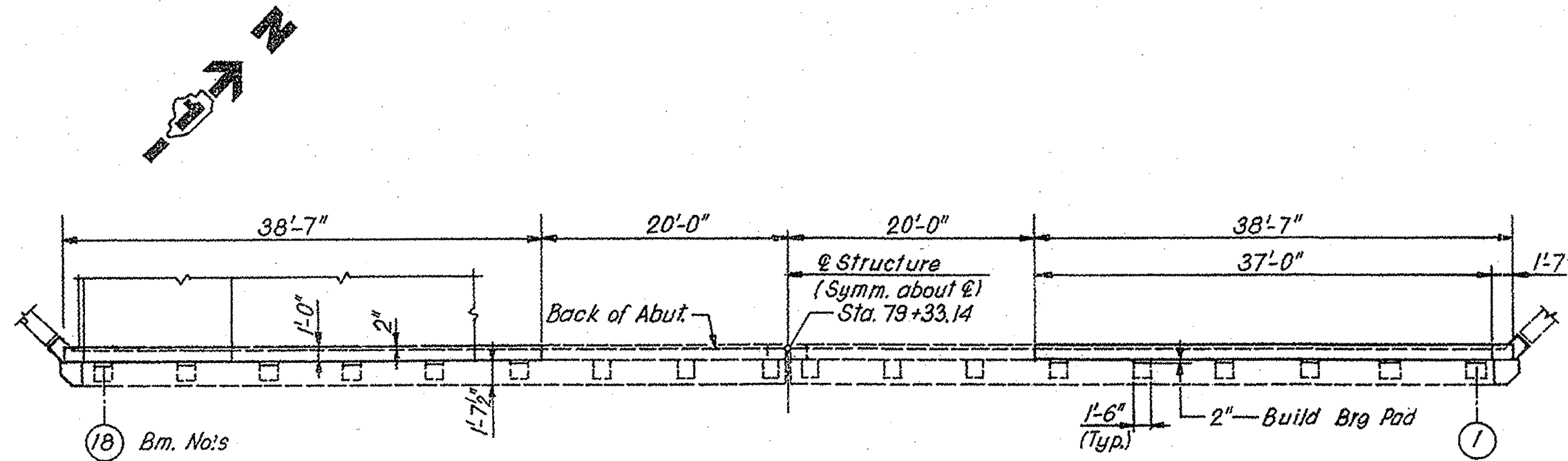
FOR INFORMATION ONLY

SHEET 1 OF 3

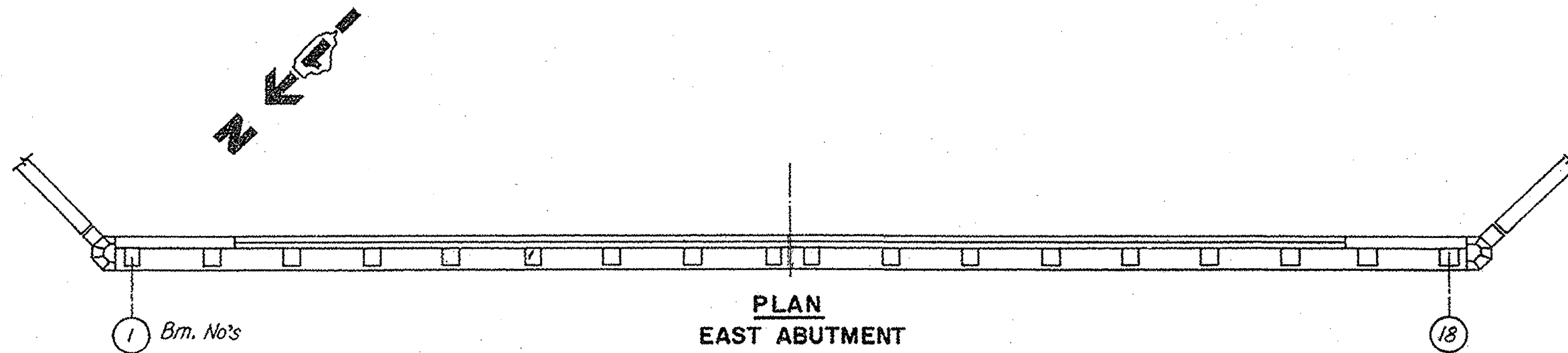
ILLINOIS DEPARTMENT OF
 TRANSPORTATION
 SN 016-0986
 LOCATION NO. 3
 INTERSTATE ROUTE 290 OVER HILLSIDE ROAD
 GENERAL PLAN AND ELEVATION

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
FAI 290	2011-061-BR	COOK & DUPAGE	29	23

Contract 60P79



PLAN
WEST ABUTMENT



PLAN
EAST ABUTMENT

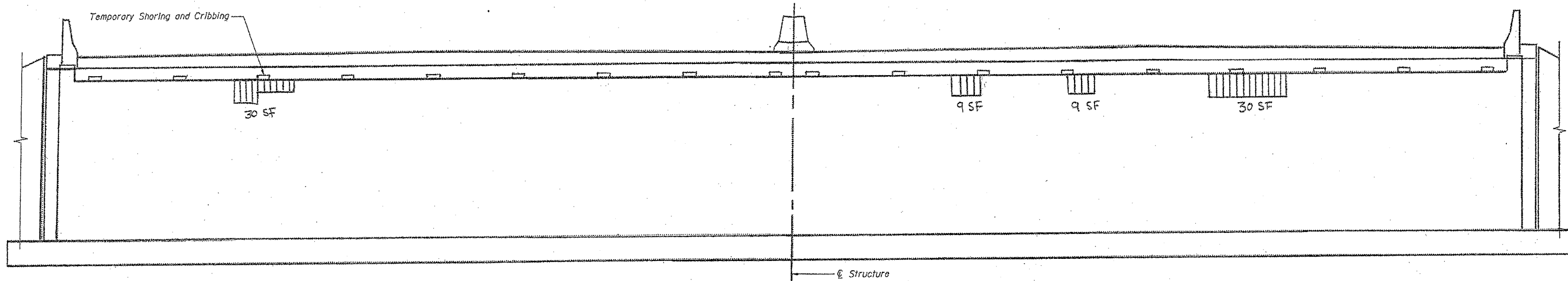
FOR INFORMATION ONLY

SHEET 2 OF 3

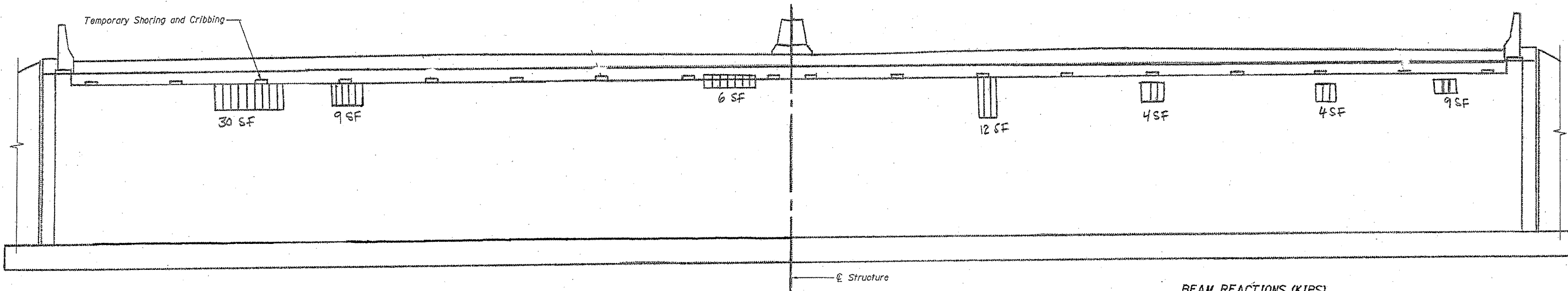
ILLINOIS DEPARTMENT OF
TRANSPORTATION
SN 016-0986
LOCATION NO. 3
INTERSTATE ROUTE 290 OVER HILLSIDE ROAD
(WEST/EAST) ABUTMENT PLAN

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
FAI 290	2011-061-BR	COOK & DUPAGE	29	24

Contract 60P79



EAST ABUTMENT ELEVATION
(Looking East)



WEST ABUTMENT ELEVATION
(Looking West)

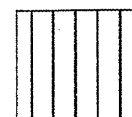
BEAM REACTIONS (KIPS)

DEAD LOAD	LIVE LOAD	IMPACT LOAD	TOTAL
17.5	32.0	9.6	59.1

BILL OF MATERIAL (EAST ABUTMENT)	UNIT	QUANTITY
STRUCTURAL REPAIR OF CONCRETE ≤ 5"	SQ. FT.	78
TEMPORARY SHORING AND CRIBBING	EACH	1

BILL OF MATERIAL (WEST ABUTMENT)	UNIT	QUANTITY
STRUCTURAL REPAIR OF CONCRETE ≤ 5"	SQ. FT.	74
TEMPORARY SHORING AND CRIBBING	EACH	1

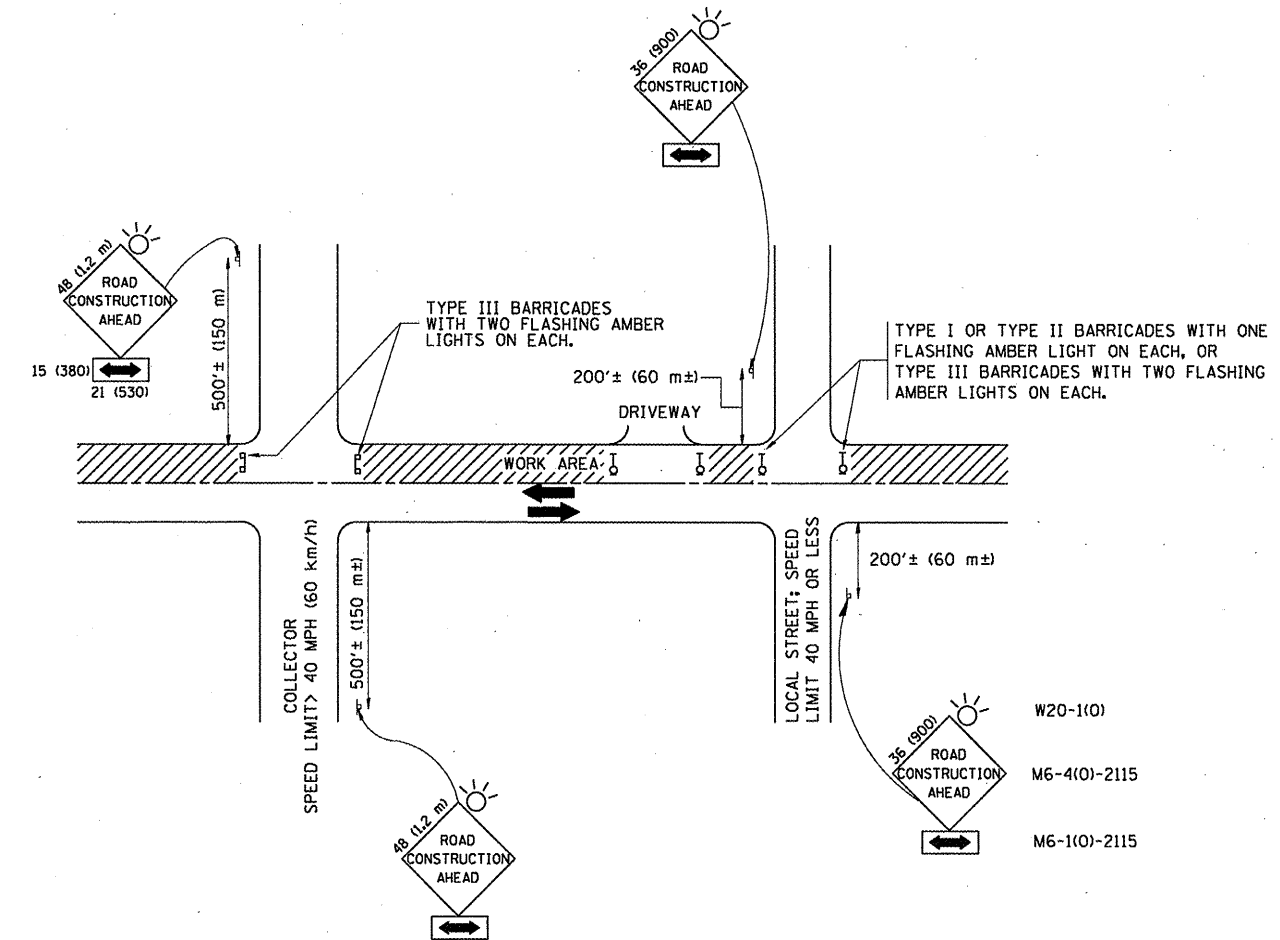
TOTAL BILL OF MATERIAL SN 016-0986	UNIT	QUANTITY
STRUCTURAL REPAIR OF CONCRETE ≤ 5"	SQ. FT.	152
TEMPORARY SHORING AND CRIBBING	EACH	2



STRUCTURAL REPAIR OF CONCRETE ≤ 5"

SHEET 3 OF 3

**ILLINOIS DEPARTMENT OF
TRANSPORTATION
SN 016-0986
LOCATION NO. 3
INTERSTATE ROUTE 290 OVER HILLSIDE ROAD
(WEST/EAST) ABUTMENT ELEVATION**



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

NOTES:

- A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS**
- SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - ONE ROAD CONSTRUCTION AHEAD SIGN 36 x 36 (900x900) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
 - THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
 - SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - ONE ROAD CONSTRUCTION AHEAD SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
 - THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
 - WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).
- B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:**
 USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.
- C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.**
- D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.**

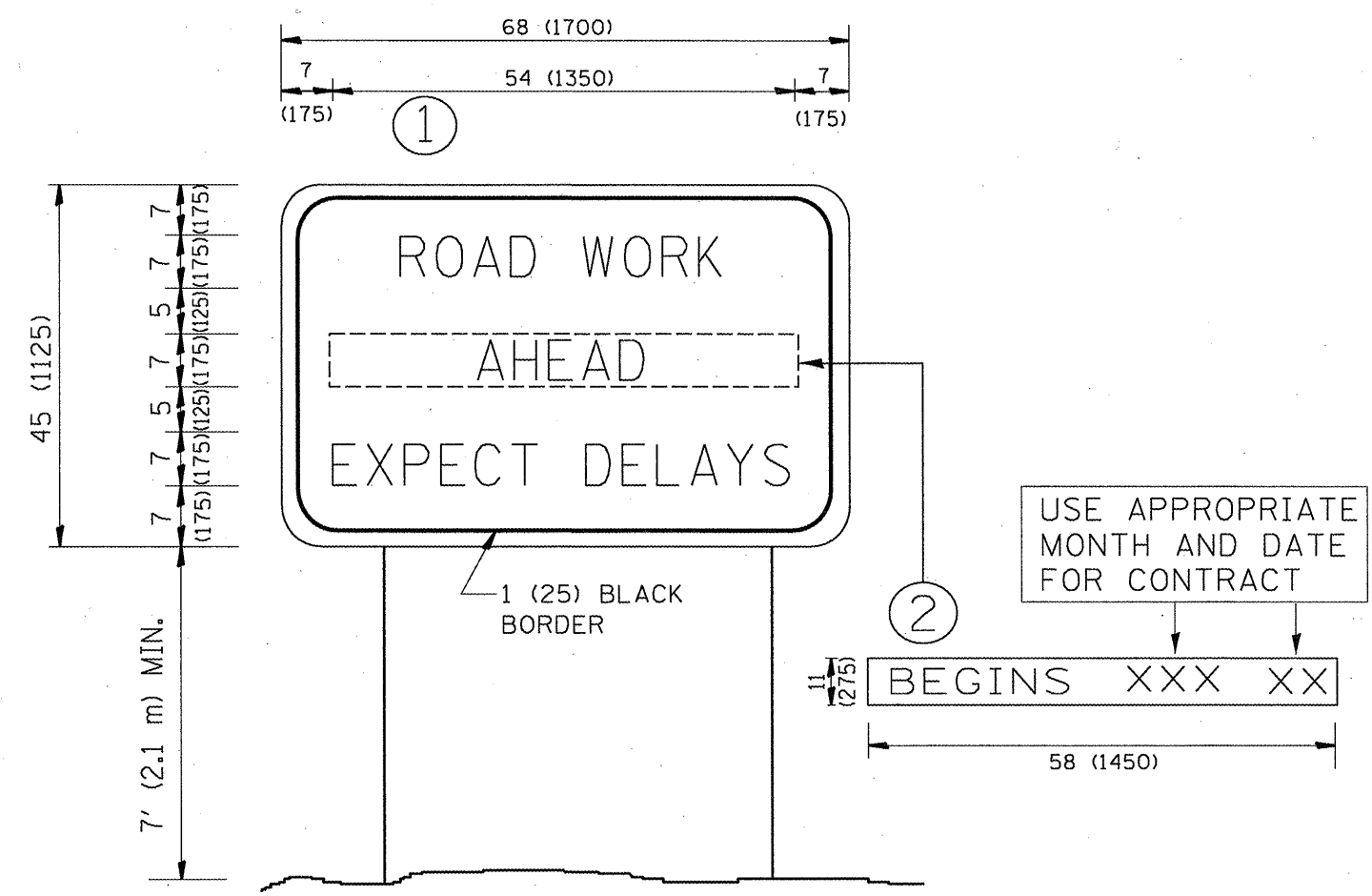
All dimensions are in millimeters (inches) unless otherwise shown.

FILE NAME =	USER NAME = hamdanah	DESIGNED - LHA	REVISED - J. OBERLE 10-18-95
c:\pwork\pwork\hamdanah\d0252916\01s	Std.dgn	DRAWN -	REVISED - A. HOUSEH 03-06-96
	PLOT SCALE = 103.1218 ' / in.	CHECKED -	REVISED - A. HOUSEH 10-15-96
	PLOT DATE = 9/9/2011	DATE - 06-89	REVISED - T. RAMMACHER 01-06-00

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS	
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-290	2011-061-BR	COOK & DUPAGE	29	25
TC-10			CONTRACT NO. 60P79	
FED. ROAD DIST. NO. 1 (ILLINOIS) FED. AID PROJECT				



NOTES:

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

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

FILE NAME =	USER NAME = hamdanah	DESIGNED -	REVISED - R. MIRS 09-15-97
es:\pwork\pwork\hamdanah\08252916\019	StdJdgn	DRAWN -	REVISED - R. MIRS 12-11-97
	PLOT SCALE = 1/8" = 1' / in.	CHECKED -	REVISED - T. RAMMACHER 02-02-99
	PLOT DATE = 9/9/2011	DATE -	REVISED - C. JUCIUS 01-31-07

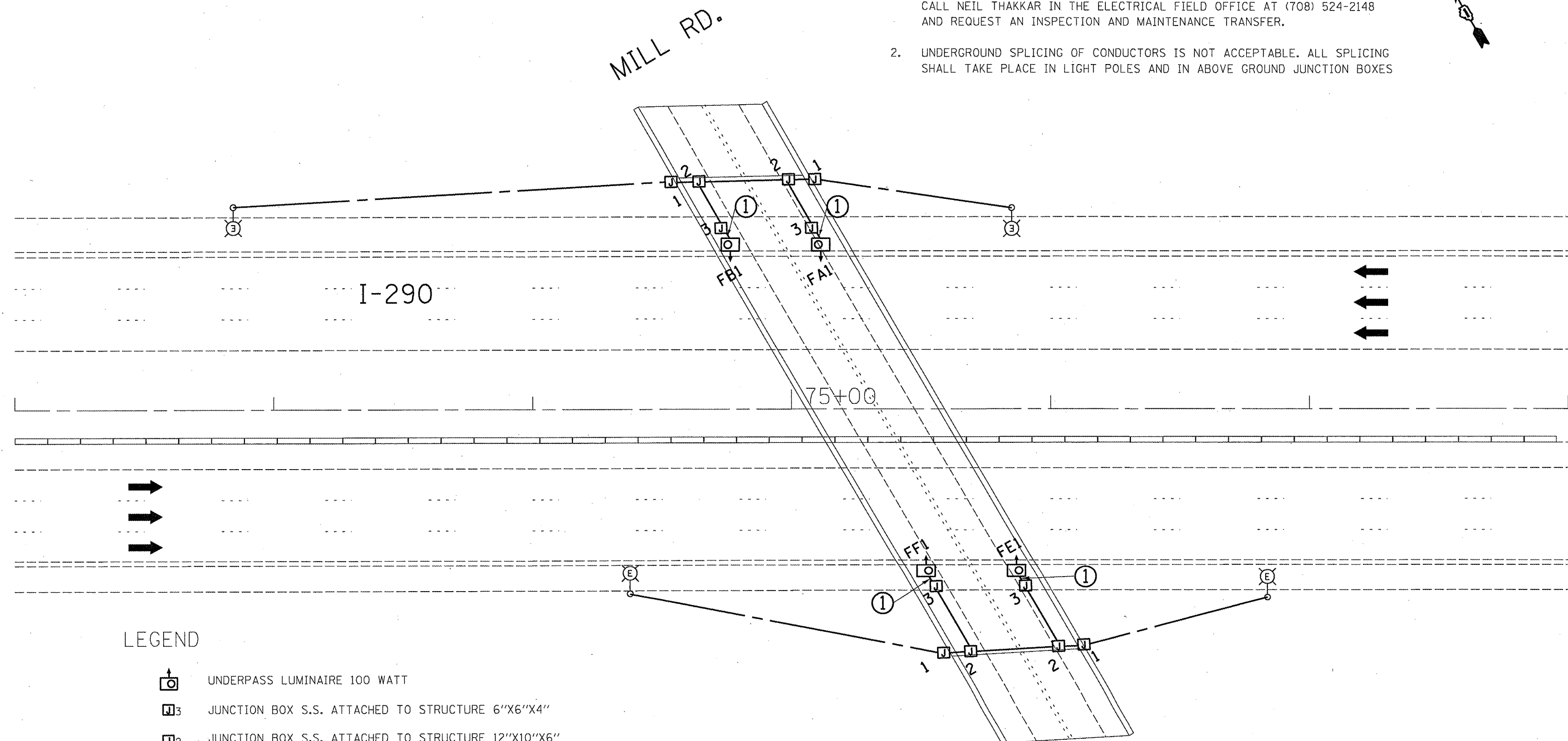
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

ARTERIAL ROAD INFORMATION SIGN			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1-290	2011-061-BR	COOK & DUPAGE	29	26
TC-22		CONTRACT NO. 60P79		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

NOTES:

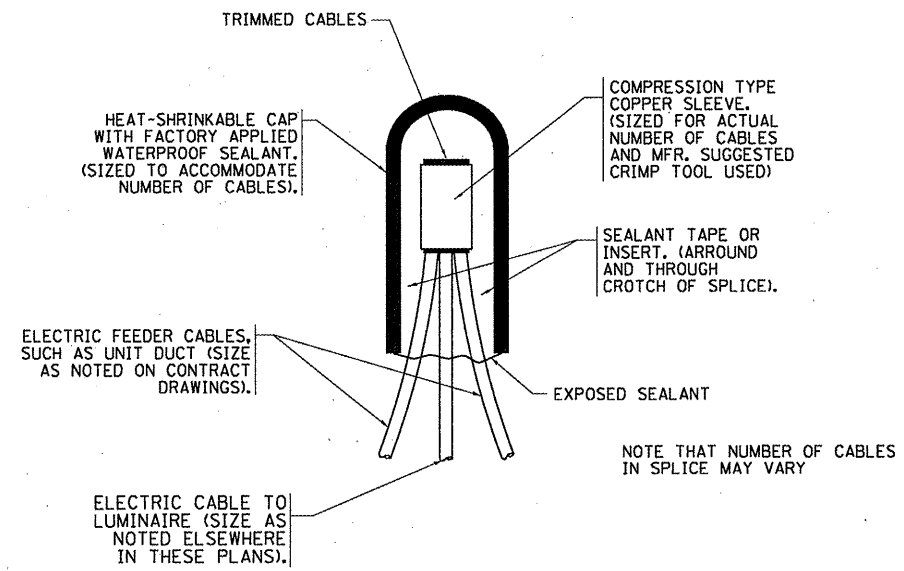
1. PRIOR TO ANY WORK ON THE LIGHTING SYSTEM, THE CONTRACTOR SHALL CALL NEIL THAKKAR IN THE ELECTRICAL FIELD OFFICE AT (708) 524-2148 AND REQUEST AN INSPECTION AND MAINTENANCE TRANSFER.
2. UNDERGROUND SPlicing OF CONDUCTORS IS NOT ACCEPTABLE. ALL SPlicing SHALL TAKE PLACE IN LIGHT POLES AND IN ABOVE GROUND JUNCTION BOXES



LEGEND

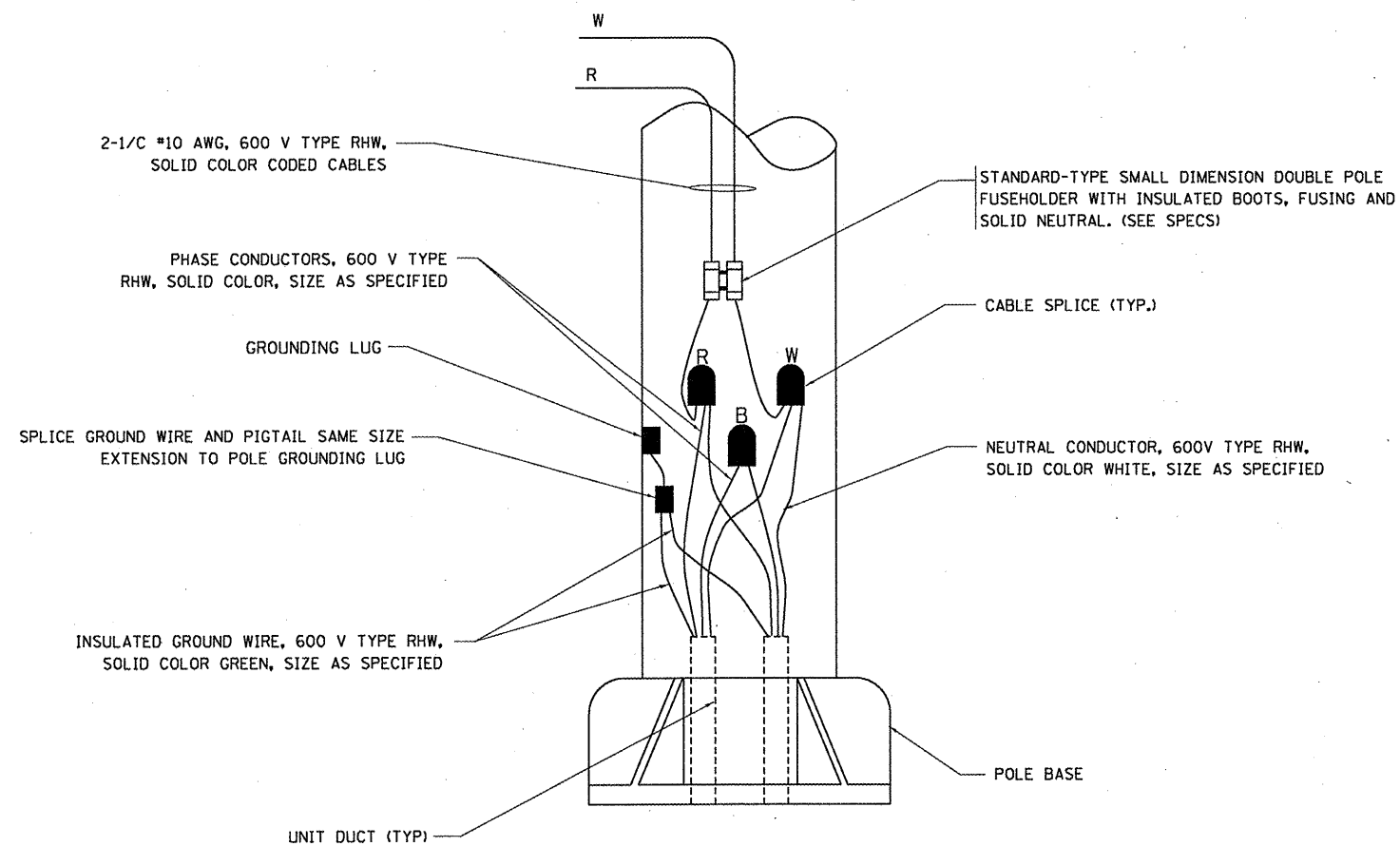
- UNDERPASS LUMINAIRE 100 WATT
- JUNCTION BOX S.S. ATTACHED TO STRUCTURE 6"X6"X4"
- JUNCTION BOX S.S. ATTACHED TO STRUCTURE 12"X10"X6"
- JUNCTION BOX S.S. ATTACHED TO STRUCTURE 12"X10"X6"
- PVC COATED RIGID GALVANIZED STEEL CONDUIT ATTACHED TO STRUCTURE 1" DIA.
- UNIT DUCT, 3-1C NO. 2, 1/C NO. 4 GROUND, (XLP-TYPE USE), 1 1/4" DIA. POLYETHYLENE
- FLEXIBLE LIQUID TIGHT STAINLESS STEEL CONDUIT, 3/4" DIA., 6 FOOT LENGTH

FILE NAME =	USER NAME = hamdaneh	DESIGNED - M.P.	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SN 022-0109, LOCATION NO. 2 MILL RD OVER I-290, (N & S) ABUTMENT	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
c:\pwwork\pwwid\hamdaneh\02252916\Dis	Std.dgn	DRAWN - G.M.	REVISED -			290	2011-061-BR	COOK & DUPAGE	29	27	
PLOT SCALE = 41.2487' / in.		CHECKED - M.P.	REVISED -			CONTRACT NO. 60P79					
PLOT DATE = 9/9/2011		DATE - 09/08/2011	REVISED -			ILLINOIS FED. AID PROJECT					
				SCALE: 1"=20'		SHEET OF SHEETS STA. TO STA.					



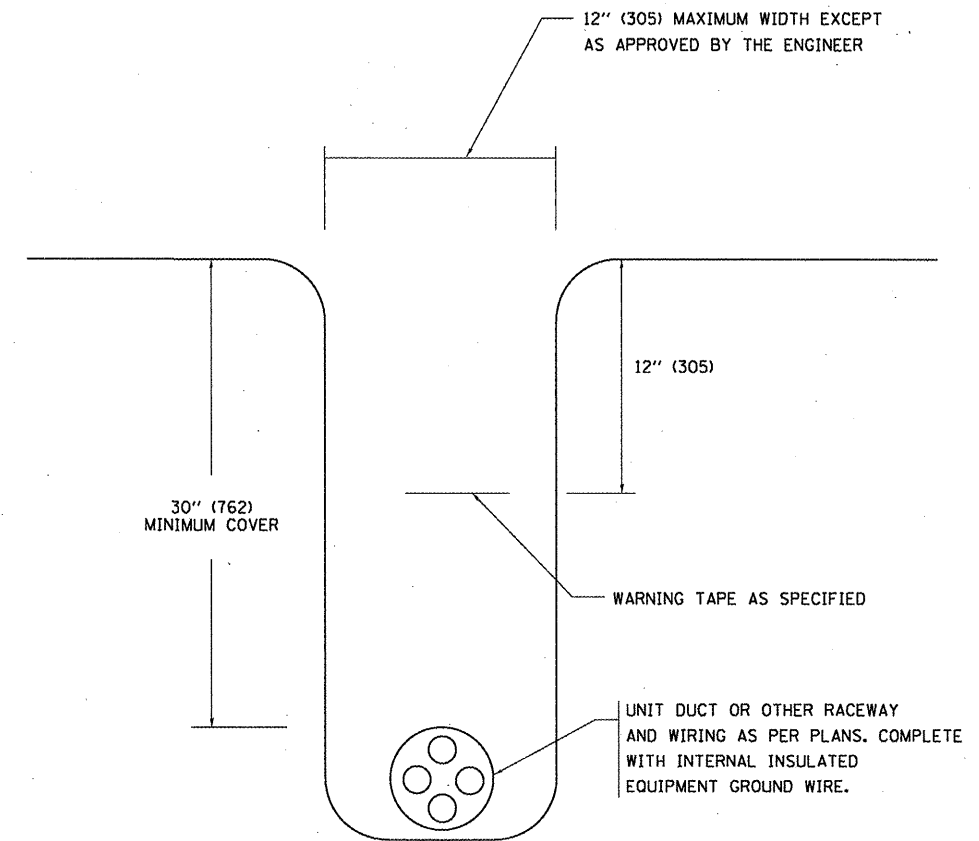
TYPICAL SPLICE DETAIL

N.T.S.



POLE WIRING DETAIL

N.T.S.



TYPICAL WIRING IN TRENCH DETAIL

N.T.S.

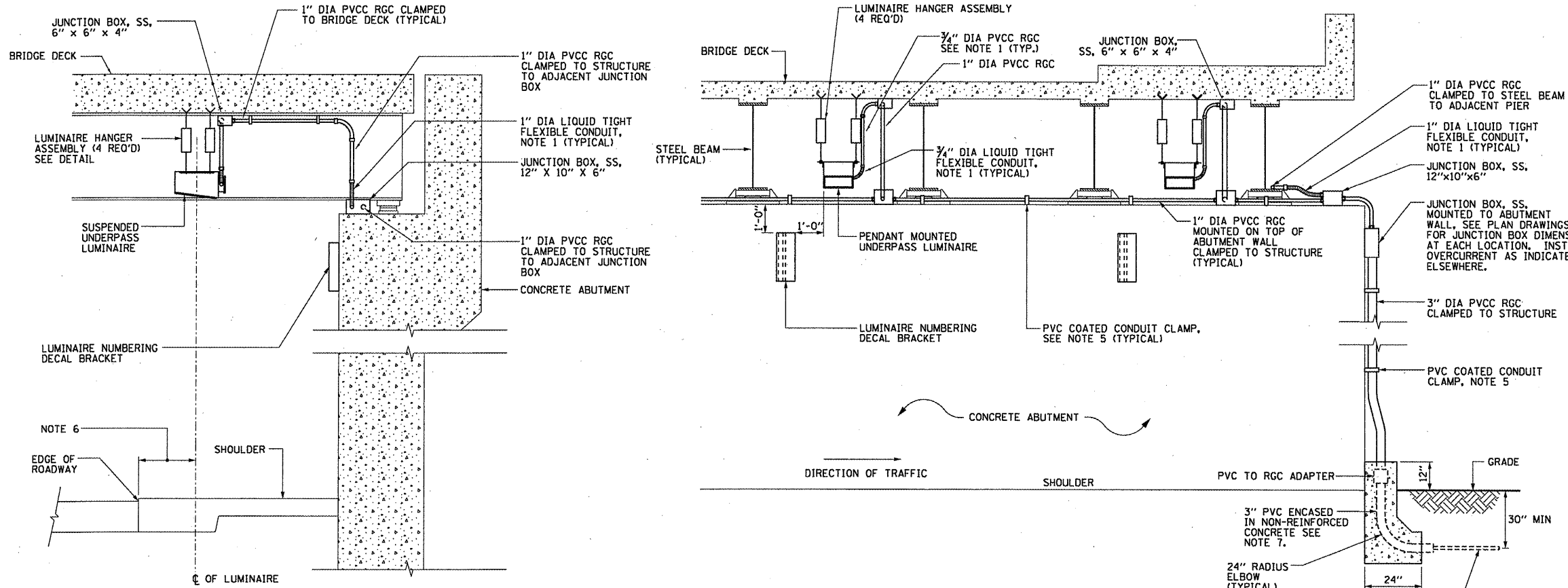
FILE NAME =	USER NAME = hmdeneh	DESIGNED -	REVISED - 08-08-03
as\pwork\pwork\hmdeneh\0252916\01s	Std.dgn	DRAWN -	REVISED -
	PLOT SCALE = 1/8" = 1' / in.	CHECKED -	REVISED -
	PLOT DATE = 9/9/2011	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

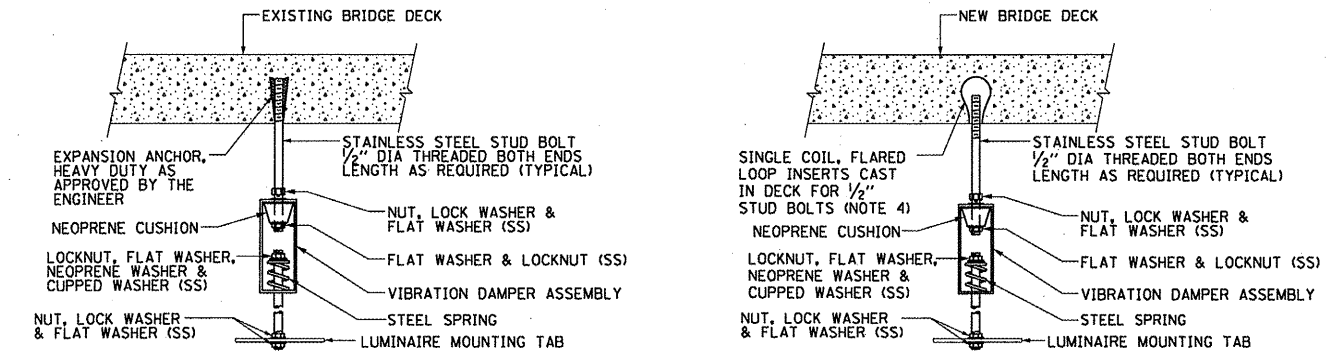
**MISC. ELECTRICAL DETAILS
SHEET A**

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

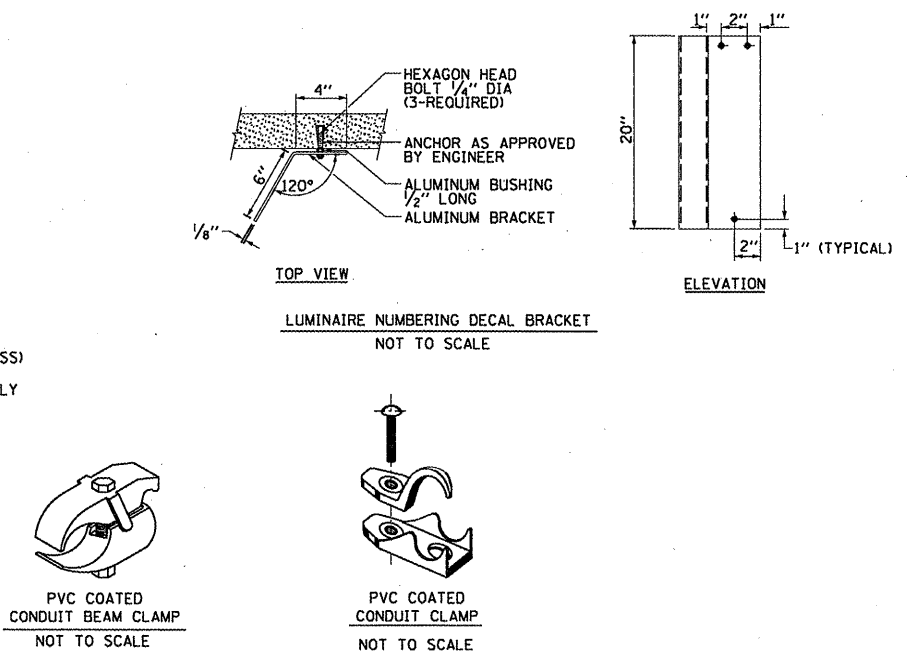
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-290	2011-061-BR	COOK & DUPAGE	29	28
BE-702			CONTRACT NO. 60P79	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



- NOTES:**
- LIQUID TIGHT FLEXIBLE METAL CONDUIT, MAXIMUM LENGTH 6'-0", TYPICAL FOR EACH INSTANCE AS SHOWN. PROVIDE PVC COATED RIGID GALVANIZED STEEL CONDUIT AS REQUIRED NOT TO EXCEED 6'-0" OF FLEXIBLE LIQUID TIGHT METAL CONDUIT. LIQUID TIGHT FLEXIBLE METAL CONDUIT WILL BE INCLUDED IN THE COST OF THE CONDUIT ATTACHED TO STRUCTURE, OF THE CORRESPONDING DIA., GALVANIZED STEEL, PVC COATED PAY ITEM EXCEPT THAT 3/4" DIA. CONDUIT AND 1/2" DIA. FLEXIBLE CONDUIT SHALL BE INCLUDED IN THE COST OF UNDERPASS LUMINAIRE INSTALLATION.
 - SEE UNDERPASS LIGHTING PLANS FOR INSTALLATION LOCATION OF UNDERPASS LIGHTING LUMINAIRES.
 - THE CONTRACTOR SHALL USE APPROVED SINGLE COIL FLARED LOOP INSERTS WHEN SUSPENDED MOUNTING AN UNDERPASS LUMINAIRE TO A NEW BRIDGE DECK. THE FLARED LOOP INSERTS MUST BE CAST INTO THE CONCRETE DECK. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING AND COORDINATING THE INSERT LOCATIONS FOR MOUNTING THE UNDERPASS LIGHTING SYSTEM AS SHOWN ON THE PLANS WITH THE BRIDGE DECK CONTRACTOR. SEE DETAIL.
 - THE UNDERPASS LUMINAIRE HANGER ASSEMBLY COMPLETE WITH HEAVY DUTY ANCHORS/INSERTS AND ALL APPLICABLE HARDWARE SHALL BE INCLUDED IN THE COST OF THE UNDERPASS LUMINAIRE PAY ITEM.
 - SECURE THE CONDUIT WITH PVC COATED CONDUIT CLAMPS OR CONDUIT BEAM CLAMPS AS SHOWN AT 5'-0" INTERVALS FOR LATERALS AND WITHIN 2'-0" MAXIMUM FROM ANY JUNCTION BOX, FLEXIBLE CONDUIT, OR CHANGE IN DIRECTION. ALL PVC COATED CONDUIT CLAMPS OR BEAM CLAMPS SHALL BE INCLUDED WITH THE COST OF THE CONDUIT ATTACHED TO STRUCTURE, OF THE CORRESPONDING DIA., GALVANIZED STEEL, PVC COATED PAY ITEM.
 - ALL UNDERPASS LUMINAIRES MUST BE CENTERED IN THE BEAM SPACE AS INDICATED ON THE PLANS UNLESS OTHERWISE DIRECTED BY THE ENGR. LUMINAIRE SETBACK SHALL BE AS INDICATED IN PLANS FOR EACH SPECIFIC UNDERPASS.
 - THE CONCRETE ENCASED CONDUIT TRANSITION SHALL BE INCLUDED IN THE COST OF THE GALVANIZED RIGID STEEL CONDUIT PAY ITEMS.
 - ALL CONDUIT ATTACHED TO STRUCTURE SHALL BE PVC COATED RIGID STEEL CONDUIT (PVCC RGC) TYPICAL.



TYPICAL LUMINAIRE HANGER ASSEMBLY DETAILS



PVC COATED CONDUIT BEAM CLAMP NOT TO SCALE

PVC COATED CONDUIT CLAMP NOT TO SCALE

FILE NAME =	USER NAME = hamdanah	DESIGNED -	REVISED - 12-12-05	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUSPENDED MOUNT UNDERPASS LUMINAIRE INSTALLATION DETAILS			F.A.I. RT#	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
02:\pw\work\pwsdot\hamdanah\0252916\015	5td.dgn	DRAWN -	REVISED -		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	1-290	2011-061-BR	COOK & DUPAGE	29	29
		CHECKED -	REVISED -							BE-900			
		DATE -	REVISED -										