

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1360	21(B&C)NRM-4-BR-1	COOK	29	1
		ILLINOIS	CONTRACT NO. 60W73	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

**PROPOSED
HIGHWAY PLANS**

F.A.U. ROUTE 1360: FOSTER AVE.
OVER NORTH SHORE CHANNEL (SN 016-0251)
SECTION: 21(B&C)NRM-4-BR-1
SUBSTRUCTURE REPAIRS, BRIDGE REPAIRS
COOK COUNTY

C-91-366-13

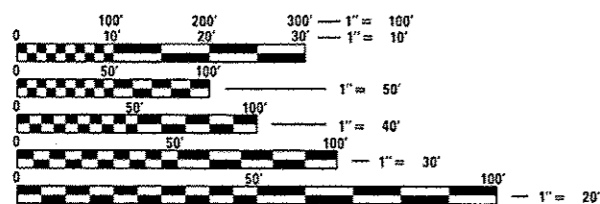
R 13 E R 14 E

FOR INDEX OF SHEETS, SEE SHEET NO. 2

PROJECT IS LOCATED IN THE CITY
OF CHICAGO.

TRAFFIC DATA

2010 ADT = 19,900
POSTED SPEED LIMIT = 30 MPH

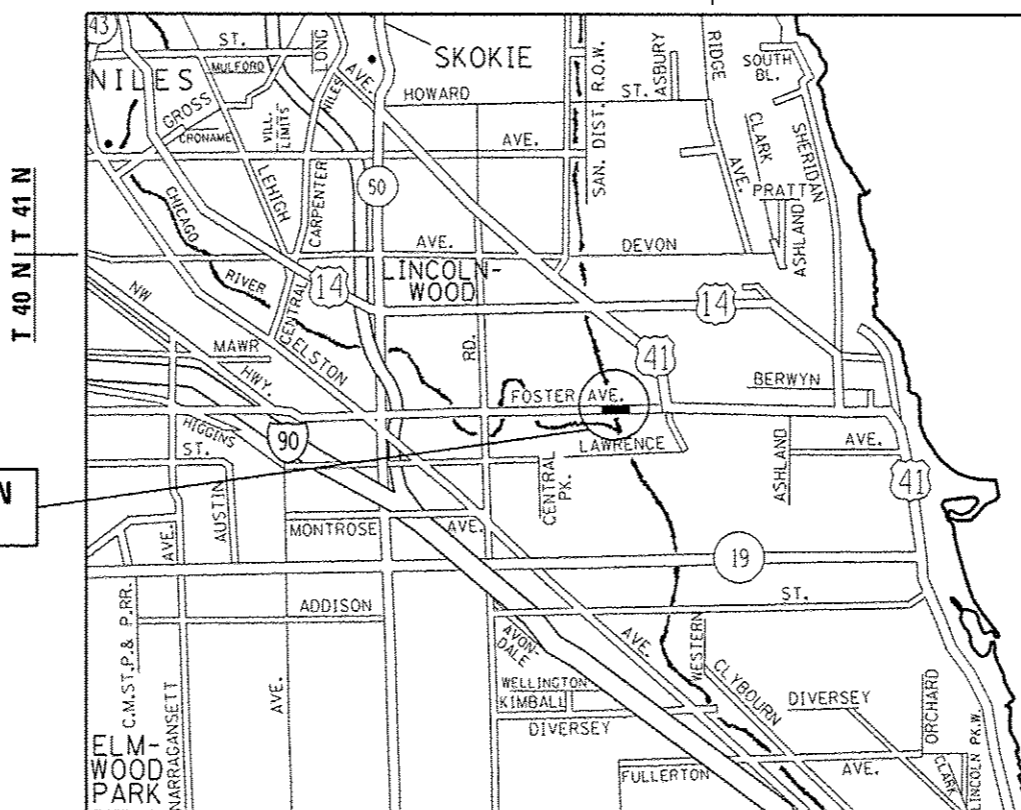


FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD
ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT
CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS
ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

C.U.A.N.
CHICAGO UTILITY ALERT NETWORK
1-312-744-7000

PROJECT ENGINEER J. ALAIN MIDY (847) 221-3056
PROJECT MANAGER ISSAM RAYYAN (847) 705-4178

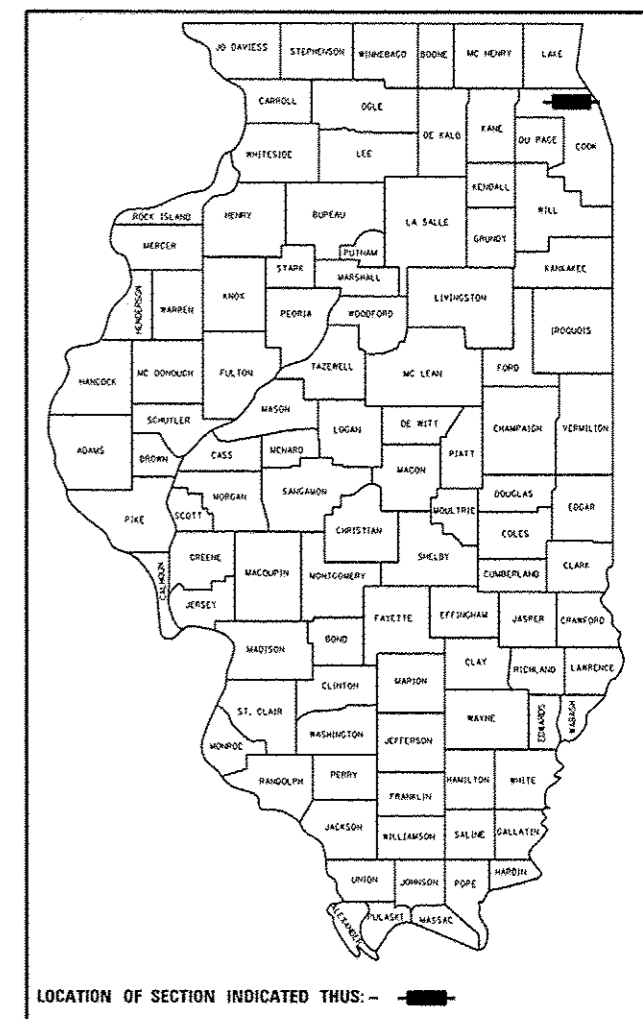
CONTRACT NO. 60W73



PROJECT LOCATION
SN 016-0251



D-91-366-13



LOCATION OF SECTION INDICATED THUS: - [black rectangle]

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED December 15 2014

John F. Furtman
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

Jan 30 2015
John D. Baranzelli, P.E.
ENGINEER OF DESIGN AND ENVIRONMENT

Jan 30 2015
Omer Osman, P.E.
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

INDEX OF SHEETS

STATE STANDARDS

GENERAL NOTES

	<u>STANDARD NO.</u>	<u>DESCRIPTION</u>
1. TITLE SHEET		
2. INDEX OF SHEETS, STATE STANDARDS, AND GENERAL NOTES	701101-04	OFF ROAD OPERATIONS, MULTILANE, 15' TO 24" FROM PAVEMENT EDGE
3. SUMMARY OF QUANTITIES	701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
4-16. BRIDGE REHABILITATION PLANS (SN 016-0251)	701311-03	LANE CLOSURE, 2L, 2W, MOVING OPERATIONS DAY ONLY
17-23. TRAFFIC CONTROL STAGING PLANS	701427-03	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPERATIONS ≤ 40 MPH
24. TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTION, AND DRIVEWAYS (TC-10)	701606-10	URBAN SINGLE LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN
25. ARTERIAL ROAD INFORMATION SIGN (TC-22)	701801-05	SIDEWALK, CORNER, OR CROSSWALK CLOSURE
26-28. CITY OF CHICAGO TYPICAL PAVEMENT MARKINGS (TC-24)	701901-04	TRAFFIC CONTROL DEVICES
29. DRIVEWAY ENTRANCE SIGNING (TC-26)		

BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "C.U.A.N." AT (312) 744-7000 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS FACILITIES. (48 HOUR NOTIFICATION REQUIRED).

THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES AND THE CITY OF CHICAGO.

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

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 MATERIALS. SUCH VARIATIONS SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION FOR A CHANGE IN SCOPE OF WORK. HOWEVER, THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED BASED AT THE UNIT PRICE BID FOR THE WORK.

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

DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.

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

ALL CRIBBING AT THE EAST ABUTMENT SHALL BE INSTALLED TWO (2) FEET AWAY FROM THE WALL TO INSURE NO ADDITIONAL LOADING ON THE CULVERT THAT COMPROMISES THE PATH.

ALL WORK AFFECTING THE NORTH SHORE CHANNEL TRAIL SHALL BE DONE FOLLOWING STANDARD 701801 AND THE TRAIL SHALL REMAIN OPEN DURING DAYTIME.

THE DEPARTMENT HAS DETERMINED THAT IN STREAM WORK IS NOT REQUIRED FOR THE WORK SPECIFIED IN THIS CONTRACT. THE DEPARTMENT HAS NOT OBTAINED A 404 PERMIT. IF THE CONTRACTOR CHOOSES TO USE ACTIVITIES REQUIRING AN USACE 404 PERMIT IT IS THE CONTRACTOR'S RESPONSIBILITY TO SECURE THE PROPER USACE PERMITS.

THE CONTRACTOR SHALL OBTAIN COAST GUARD APPROVAL FOR ANY WORK THAT MAY INTERFERE WITH NAVIGATIONAL OPERATIONS OF THE NAVIGABLE WATERS. A WORK PLAN SHALL BE PREPARED BY THE CONTRACTOR, REVIEWED AND APPROVED BY THE ENGINEER AND BE SUBMITTED BY THE ENGINEER TO THE COAST GUARD AT THE ADDRESS LISTED BELOW FOR APPROVAL.

SCOTT STRIFFLER (216) 902-6085
 US COAST GUARD
 NINTH COAST GUARD DISTRICT
 1240 E. NINTH ST
 CLEVELAND, OH 44199-2060

FILE NAME =	USER NAME = pyzanoskirb	DESIGNED =	REVISED =	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	INDEX OF SHEETS, STATE STANDARDS, AND GENERAL NOTES				F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.		
c:\p\work\p1dot\pyzanoskirb\0345538	0136613-eh1-plan.dgn	DRAWN =	REVISED =		SCALE:	SHEET	OF	SHEETS	STA.	TO STA.	1360	2118&CINRM-4-BR-1	COOK	29	2
Default		CHECKED =	REVISED =						CONTRACT NO. 60W73						
		DATE =	REVISED =						ILLINOIS FED. AID PROJECT						

SUMMARY OF QUANTITIES			LIRBAN		CONSTRUCTION TYPE CODE 0014				
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	100% STATE 0014					
50500405	FURNISHING AND ERECTING STRUCTURAL STEEL	POUND	6520	6520					
52100010	ELASTOMERIC BEARING ASSEMBLY, TYPE I	EACH	33	33					
52100520	ANCHOR BOLTS, 1"	EACH	66	66					
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	3	3					
67100100	MOBILIZATION	L SUM	1	1					
70200100	NIGHTTIME WORK ZONE LIGHTING	L SUM	1	1					
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SO FT	2534	2534					
* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	2800	2800					
78300100	PAVEMENT MARKING REMOVAL	SO FT	934	934					
X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1	1					
X7030030	WET REFLECTIVE REMPORARY TAPE TYPE III, 4 INCH	FOOT	7600	7600					
X8210305	PROTECTION AND MAINTENANCE OF EXISTING UNDERPASS LIGHTING	L SUM	1	1					
Z0001899	JACK AND REMOVE EXISTING BEARINGS	EACH	26	26					
Z0001905	STRUCTURAL STEEL REPAIR	POUND	10780	10780					
Z0012754	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SO FT	1514	1514					
Z0012755	STRUCTURAL REPAIR OF CONCRETE (DEPTH GREATER THAN 5 INCHES)	SO FT	96	96					

SUMMARY OF QUANTITIES			LIRBAN		CONSTRUCTION TYPE CODE				
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	100% STATE					
Z0030850	TEMPORARY INFORMATION SIGNING	SO FT	51.4	51.4					
Z0073200	TEMPORARY SHORING AND CRIBBING	EACH	14	14					
Z0073351	TEMPORARY SLAB SUPPORT SYSTEM	L SUM	1	1					
19									

* Specialty Items

FILE NAME :	USER NAME :	DESIGNED :	REVISED :
PLT SCALE :	CHECKED :	DRAWN :	REVISED :
PLT DATE :	DATE :		REVISED :

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE:	SHEET NO.	OF	SHEETS	STA.	TO STA.
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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1360	21(B&C)NRM-4-BR-1	COOK	29	3
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			CONTRACT NO. 60W73	

GENERAL NOTES

All structural steel shall conform to AASHTO Classification M-270 Gr. 36, unless otherwise noted.

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

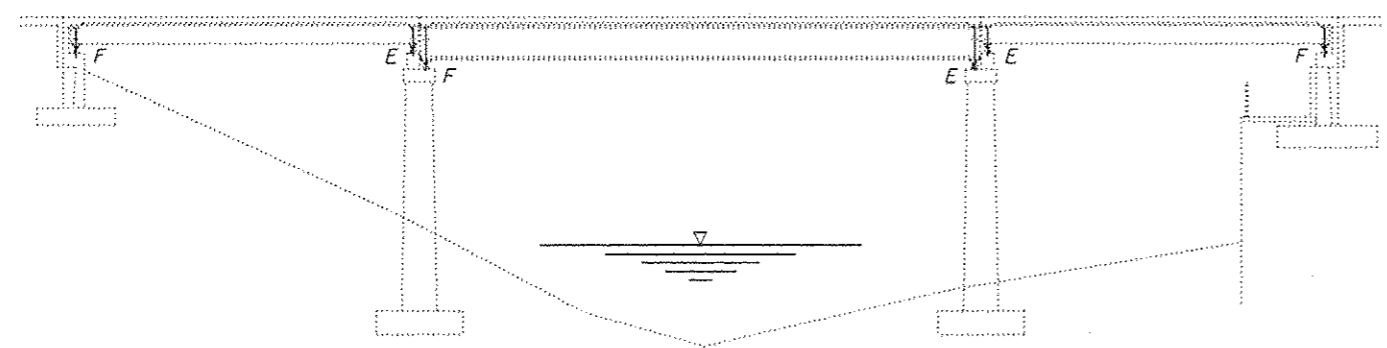
Fasteners shall be high strength bolts. Bolts 7/8"φ, open holes 5/16"φ, unless otherwise noted.

Cost of removal and reinstallation of all members necessary to complete the work as detailed on the plans and as specified in the Special Provisions shall be included with Structural Steel Repair.

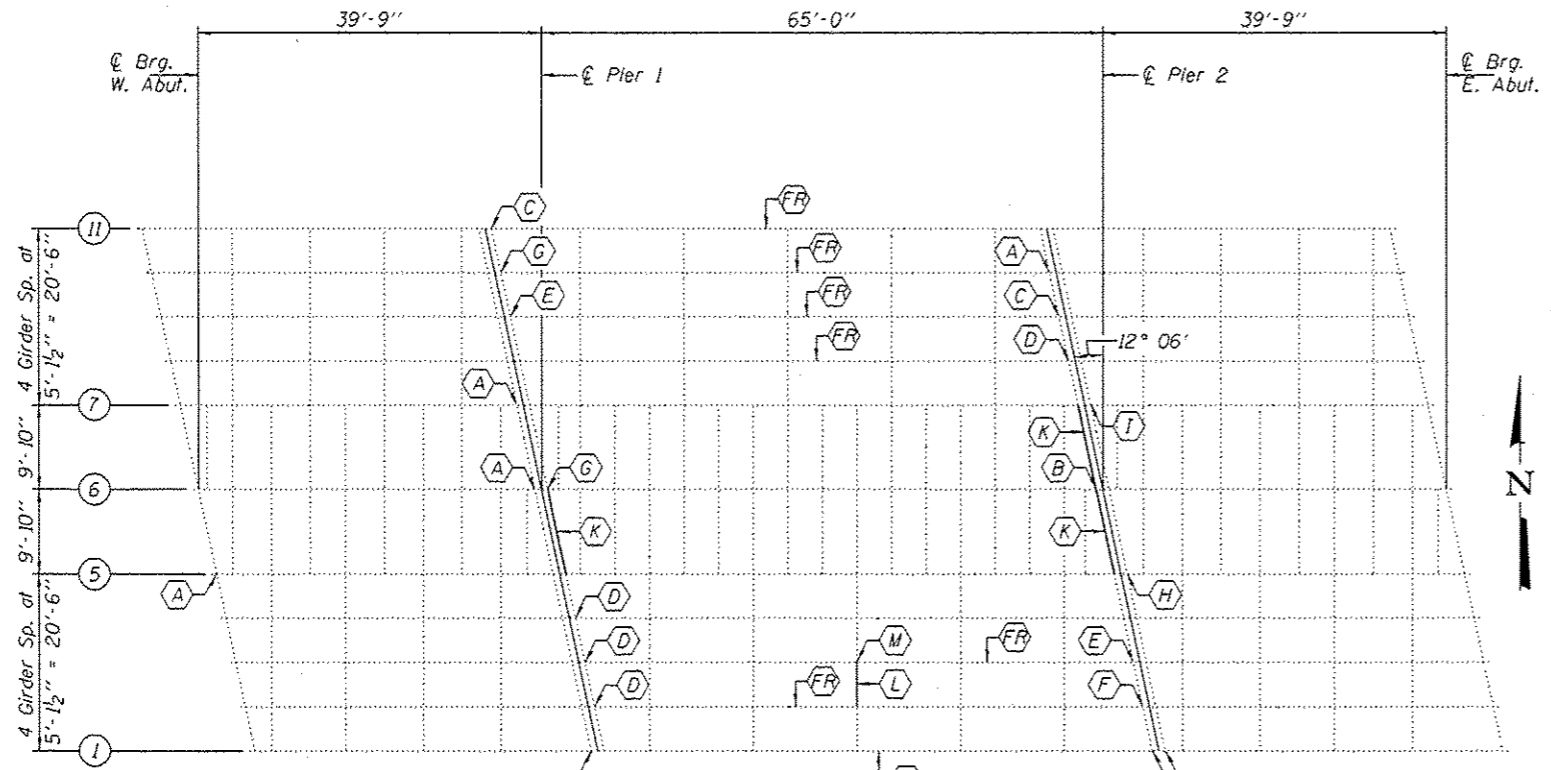
The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.

Existing structural steel that will be in contact with new structural steel shall be cleaned and painted prior to erection as required by the GBSP "Cleaning and Painting Contact Surface Areas of Existing Steel Structures".

The Inorganic Zinc Rich Primer / Acrylic / Acrylic Paint System shall be used for shop and field painting of new structural steel except where otherwise noted. The color of the final finish coat for all interior steel surfaces shall be gray, Munsell No. 5B 7/1. The color of the final finish coat for the exterior and bottom flange of the fascia beams shall be Reddish Brown, Munsell No. 2.5YR 3/4.



ELEVATION



PLAN

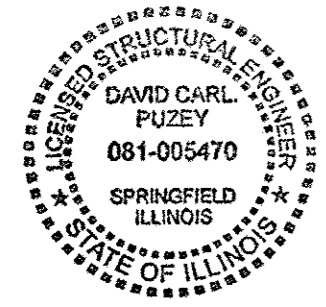
○ - Repair Type & Location.

(Repairs A thru I are bearing stiffener replacements, K is a diaphragm replacement, M is web plating, L is a crossframe & stiffener replacement, FR is bottom flange replacement)

MAXIMUM REACTIONS	
Span 1 Pier 1	Span 2 Pier 2
Q = 33.5k	Q = 58.2k
L = 49.0k	L = 54.9k
Imp. = 14.7k	Imp. = 14.6k
Total = 97.2k	Total = 127.7k

TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Structural Steel Repair	Pound	10780
Temporary Slab Support System	L. Sum	1
Temporary Shoring & Cribbing	Each	11
Elastomeric Bearing Assembly, Type I	Each	33
Jack and Remove Existing Bearings	Each	26
Furnishing and Erecting Structural Steel	Pound	6520
Anchor Bolts 1"φ	Each	66



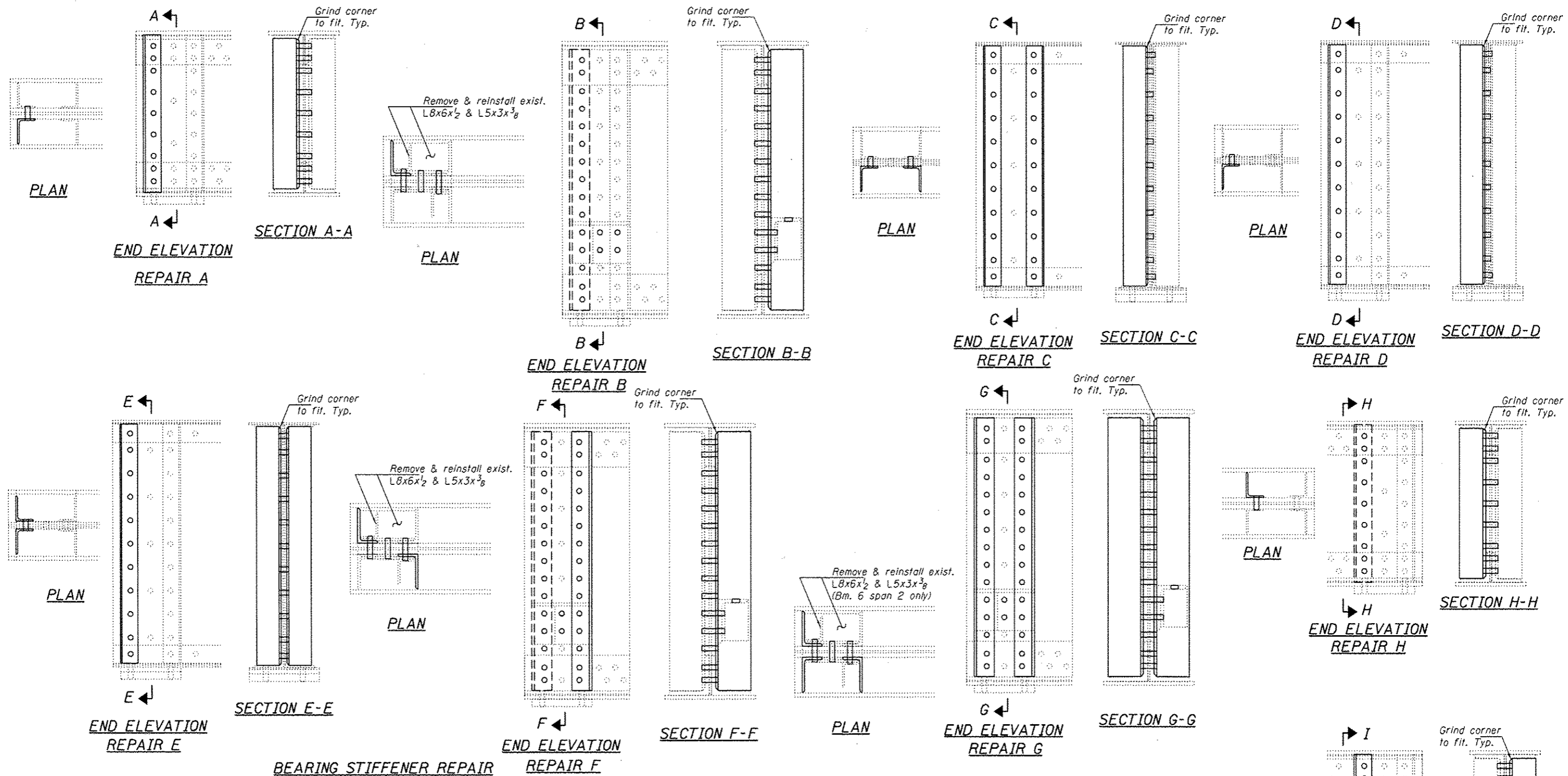
EXPIRES 11-30-2016

DESIGNED <i>Alvan T. Holloway</i>	EXAMINED <i>Timothy A. ...</i>	DATE <u>JANUARY 20, 2015</u>
CHECKED <i>Stephen M. Ryan</i>	PASSED <i>David Carl Puzey</i>	REVISED
DRAWN <i>baliva</i>		REVISED
CHECKED <i>ATH</i> <i>SMR</i>		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN & ELEVATION
FAU 1360 (FOSTER AVE.) OVER NORTH SHORE CHANNEL
SN 016-0251

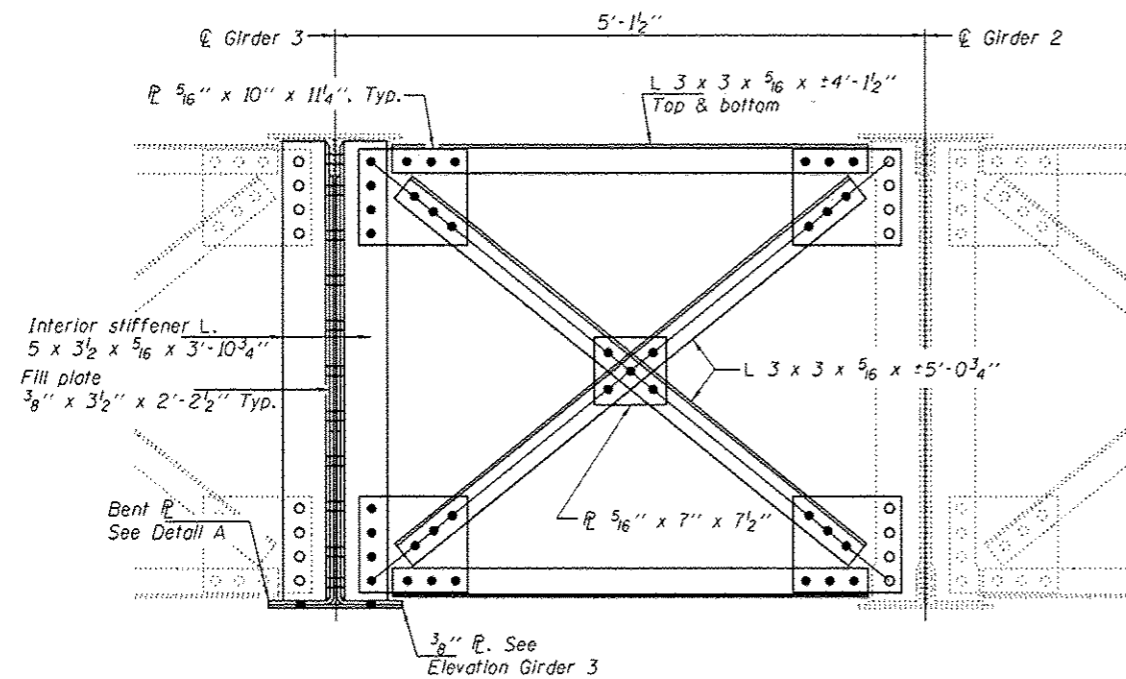
F.A.U. RTE. 1360	SECTION 210BACHRM-4-BR-1	COUNTY COOK	TOTAL SHEETS 29	SHEET NO. 4
SHEET NO. 1 OF 10 SHEETS			CONTRACT NO. 60W73	
ILLINOIS FED. AID PROJECT				



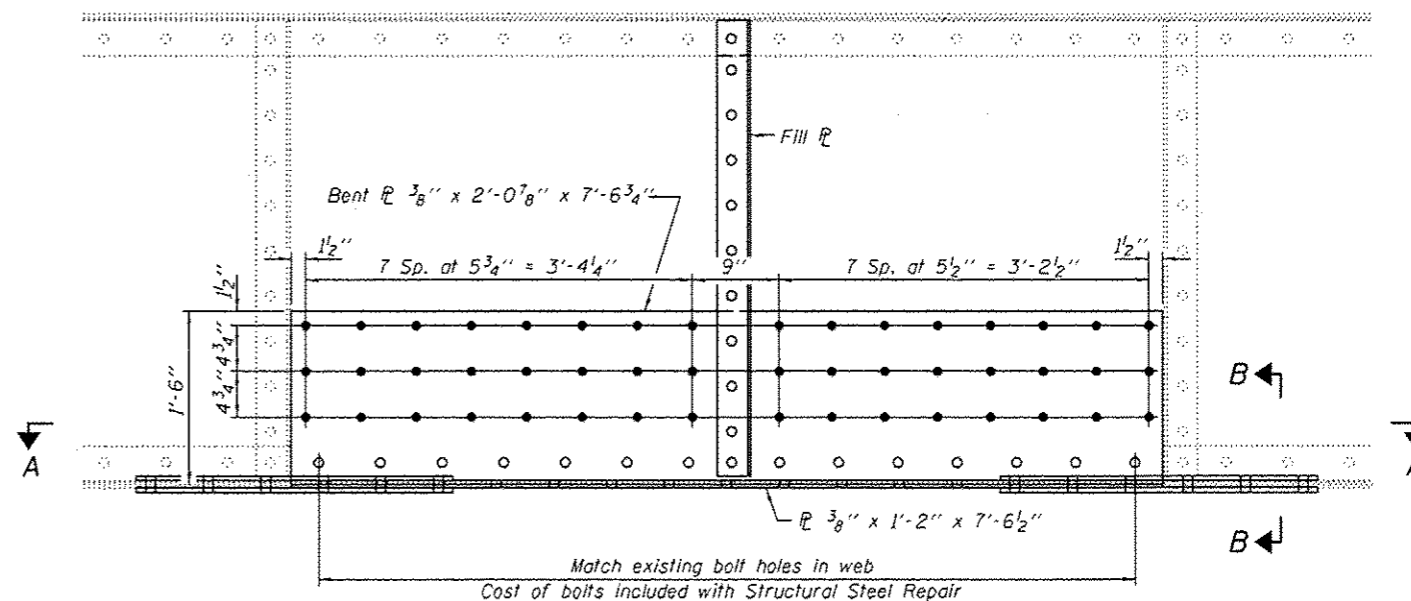
BEARING STIFFENER REPAIR

Beam	W. Abut.		Pier 1				Pier 2			
	Repair	Angle	W. Side		E. Side		W. Side		E. Side	
			Repair	Angle	Repair	Angle	Repair	Angle	Repair	Angle
11	-	-	-	-	C	5x3 1/2 x 5/16 x 3'-11 3/4"	-	-	-	-
10	-	-	-	-	G	5x3 1/2 x 5/16 x 3'-11 3/4"	A	5x3 1/2 x 5/16 x 3'-11 3/4"	-	-
9	-	-	-	-	E	5x3 1/2 x 5/16 x 3'-11 3/4"	C	5x3 1/2 x 5/16 x 3'-11 3/4"	-	-
8	-	-	-	-	-	-	D	5x3 1/2 x 5/16 x 3'-11 3/4"	-	-
7	-	-	A	5x3 1/2 x 3/8 x 2'-6"	-	-	-	-	I	5x3 1/2 x 3/8 x 2'-6"
6	-	-	A	5x3 1/2 x 3/8 x 2'-6"	G	5x3 1/2 x 5/16 x 4'-3 3/4"	B	5x3 1/2 x 5/16 x 4'-3 3/4"	-	-
5	A	5x3 1/2 x 3/8 x 2'-6"	-	-	-	-	-	-	H	5x3 1/2 x 3/8 x 2'-6"
4	-	-	-	-	D	5x3 1/2 x 5/16 x 3'-11 3/4"	-	-	-	-
3	-	-	-	-	D	5x3 1/2 x 5/16 x 3'-11 3/4"	E	5x3 1/2 x 5/16 x 3'-11 3/4"	-	-
2	-	-	-	-	D	5x3 1/2 x 5/16 x 3'-11 3/4"	F	5x3 1/2 x 5/16 x 3'-11 3/4"	-	-
1	-	-	-	-	-	-	-	-	-	-

o - Use holes in existing member as template for drilling holes in new members.

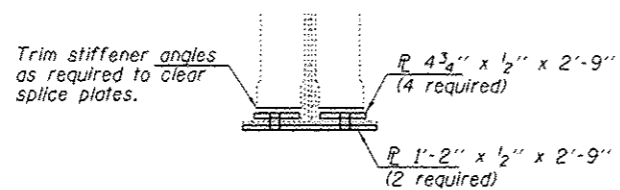


INTERIOR CROSS FRAME REPAIR
(See sheet 1 of 10 for location)

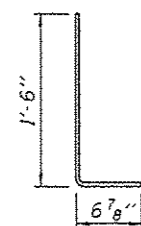


ELEVATION GIRDER 3

Cost of removal of existing bottom flange angles and flange plate is included with Structural Steel Repair. Contractor must ensure that no damage is done to the existing web during removal operations.

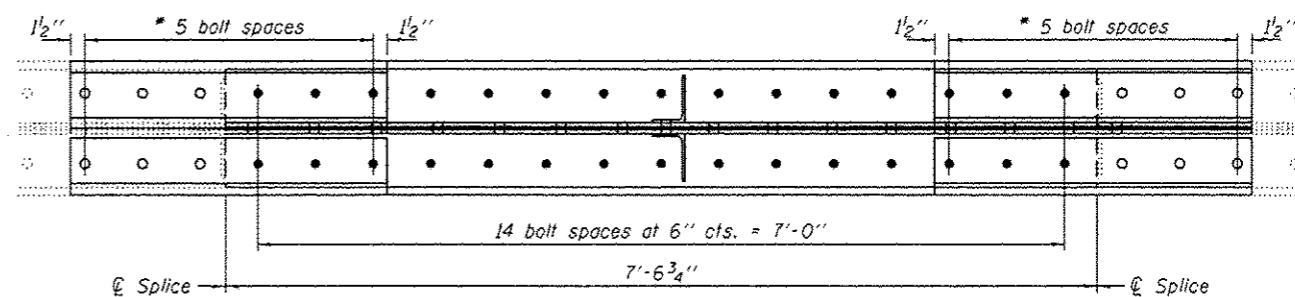


SECTION B-B



BENT PLATE

R 3/8" x 2'-0 7/8" x 7'-6 3/4" (2 Required)

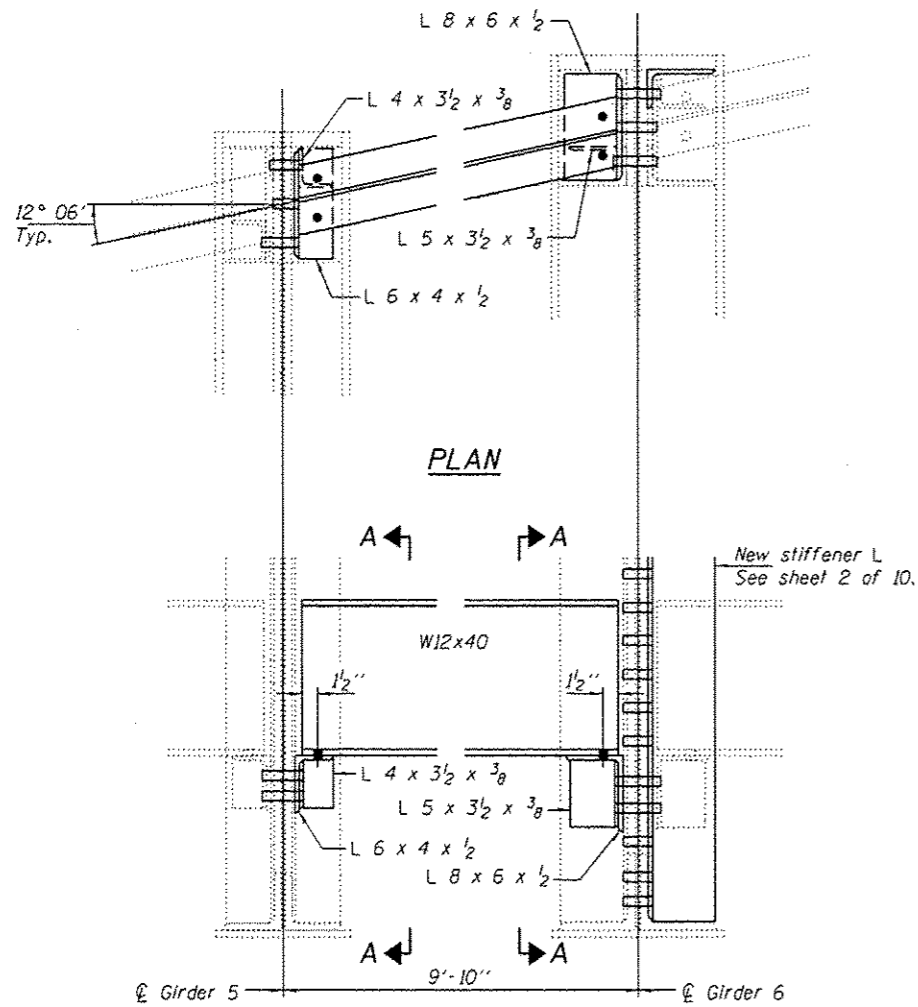


SECTION A-A

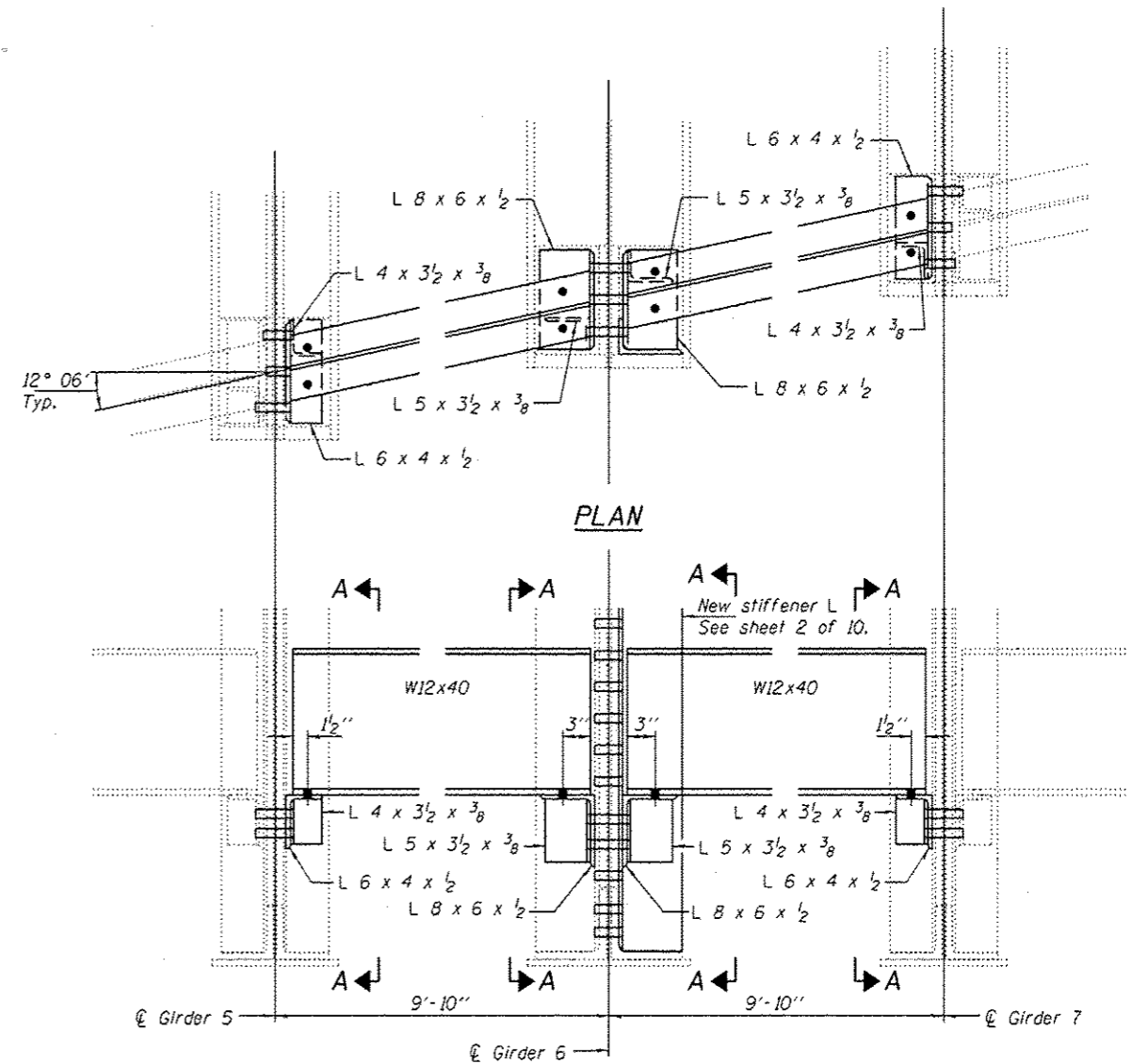
- Use holes in existing member as template for drilling holes in new members.
- Shop drill.

* Same spacing as flange plate.

DESIGNED ATH	EXAMINED Timothy A. Daulton	DATE JANUARY 20, 2015	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	REPAIRS M & L SN 016-0251	F.A.U. RTE. 1360	SECTION 2116&CNRM-4-BR-1	COUNTY COOK	TOTAL SHEETS 29	SHEET NO. 6	
CHECKED SMR	PASSED Carl Perry	REVISED			CONTRACT NO. 60W73			ILLINOIS FED. AID PROJECT		
DRAWN baliva	ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED			SHEET NO. 3 OF 10 SHEETS					
CHECKED ATH SMR	ACTING ENGINEER OF STRUCTURAL SERVICES	REVISED								

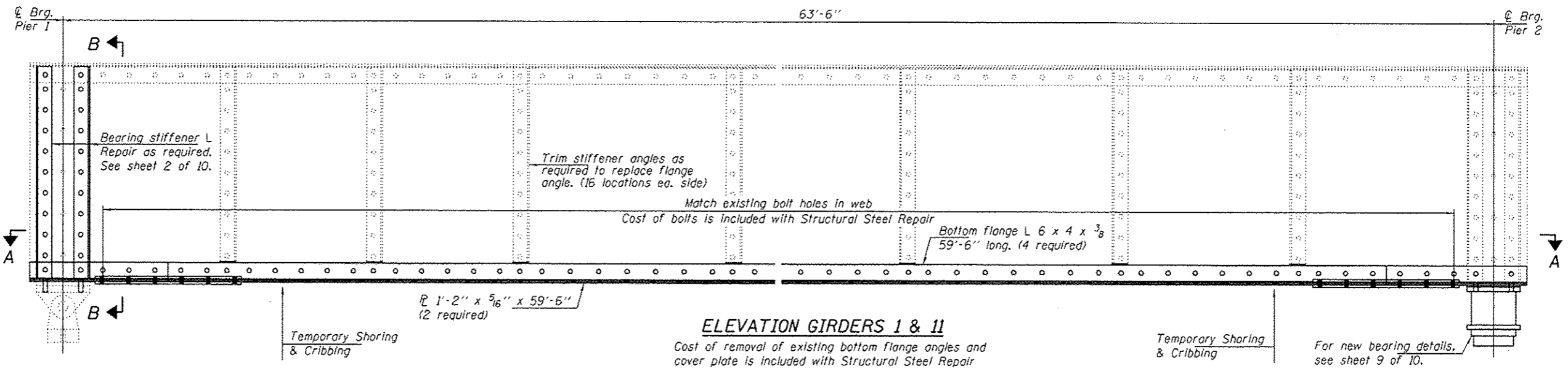


ELEVATION
(Pier 1, Span 2)
(Looking West)



ELEVATION
(Pier 2, Span 2)
(Looking West)

DESIGNED <i>ATH</i>	EXAMINED <i>Timothy A. ...</i>	DATE <i>JANUARY 20, 2015</i>	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	REPAIR K SN 016-0251	F.A.U. RTE. 1360	SECTION 218BCNRN-4-BR-1	COUNTY COOK	TOTAL SHEETS 39	SHEET NO. 7	
CHECKED <i>SMR</i>	PASSED <i>...</i>	REVISED			CONTRACT NO. 60W73					
DRAWN <i>baliva</i>	ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED			SHEET NO. 4 OF 10 SHEETS					
CHECKED <i>ATH SMR</i>	ACTING ENGINEER OF STRUCTURAL SERVICES	REVISED			ILLINOIS FED. AID PROJECT					

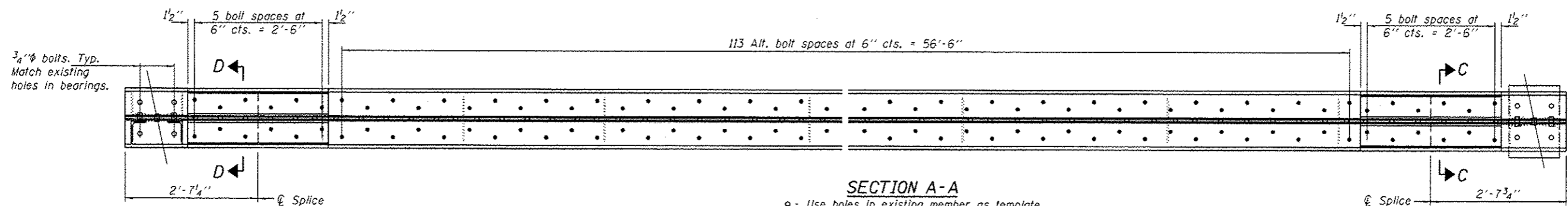


Note:

See sheet 6 or 9 for reactions at temporary & cribbing.

Note A:

Cost of removal of existing bearings for Girders 1 & 11 at Pier 2 is included with Temporary Shoring & Cribbing.

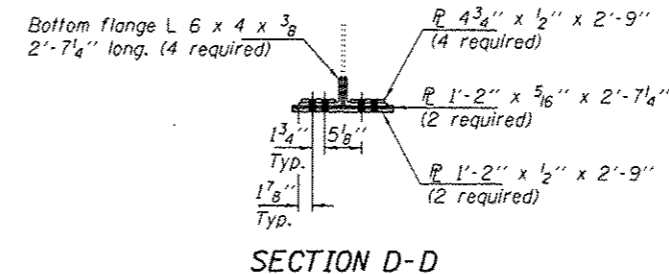
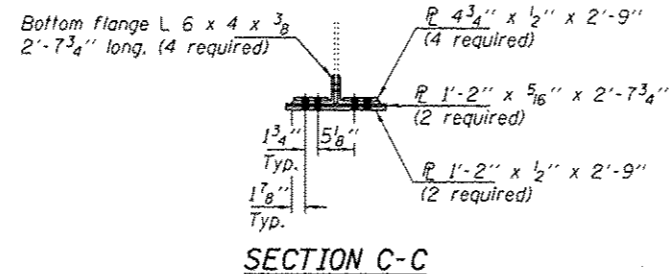
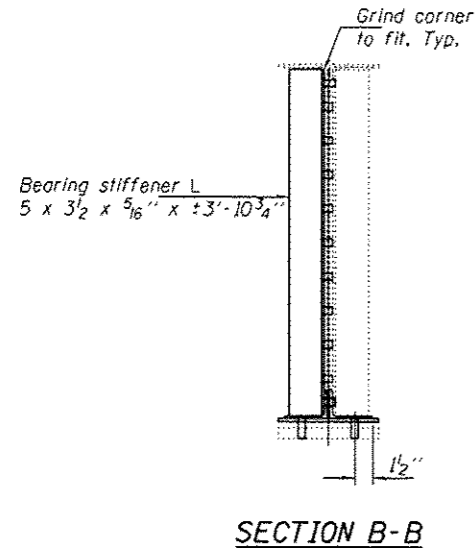


SECTION A-A

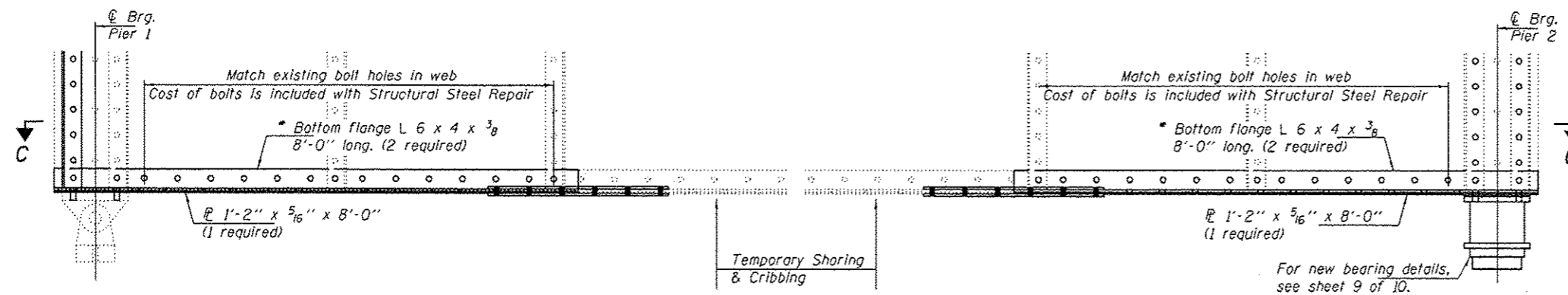
- Use holes in existing member as template for drilling holes in new members.
- Shop drill.

Construction Sequence:

1. Install Temporary Slab Support System.
2. Remove and replace angles and plate to splices.
3. Install Temporary Shoring and Cribbing.
4. Remove and replace remainder of angles and plate and replace bearings.

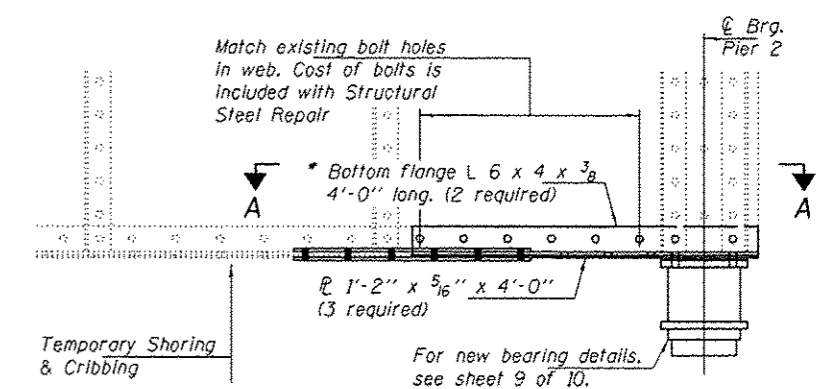


DESIGNED <i>ATH</i>	EXAMINED <i>Timothy A. ...</i>	DATE <u>JANUARY 20, 2015</u>	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	REPAIR FR AT GIRDERS 1 & 11 SN 016-0251	F.A.I. RTE. 1360	SECTION 210B/C/R/W-4-BR-1	COUNTY COOK	TOTAL SHEETS 29	SHEET NO. 8	
CHECKED <i>SMR</i>	PASSED <i>...</i>	REVISED			CONTRACT NO. 60W73					
DRAWN <i>baliva</i>	ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED			SHEET NO. 5 OF 10 SHEETS					
CHECKED <i>ATH SMR</i>	ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED	ILLINOIS FED. AID PROJECT							



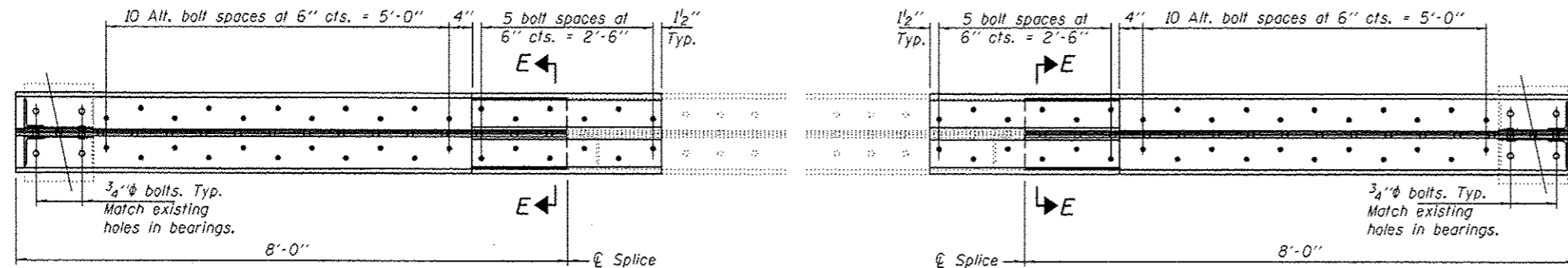
PARTIAL ELEVATION GIRDER 9

* Slide new angles behind stiffeners. Typ.

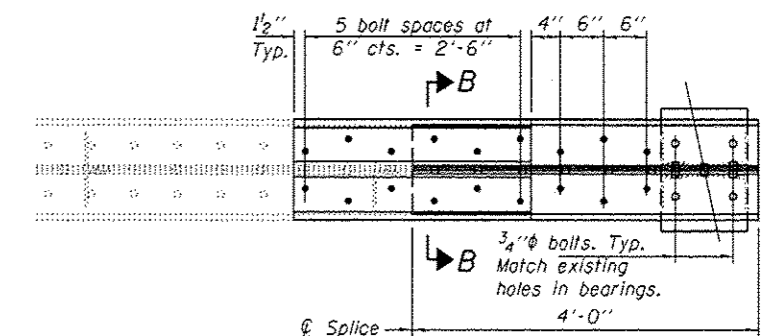


PARTIAL ELEVATION GIRDERS 2, 3 & 8

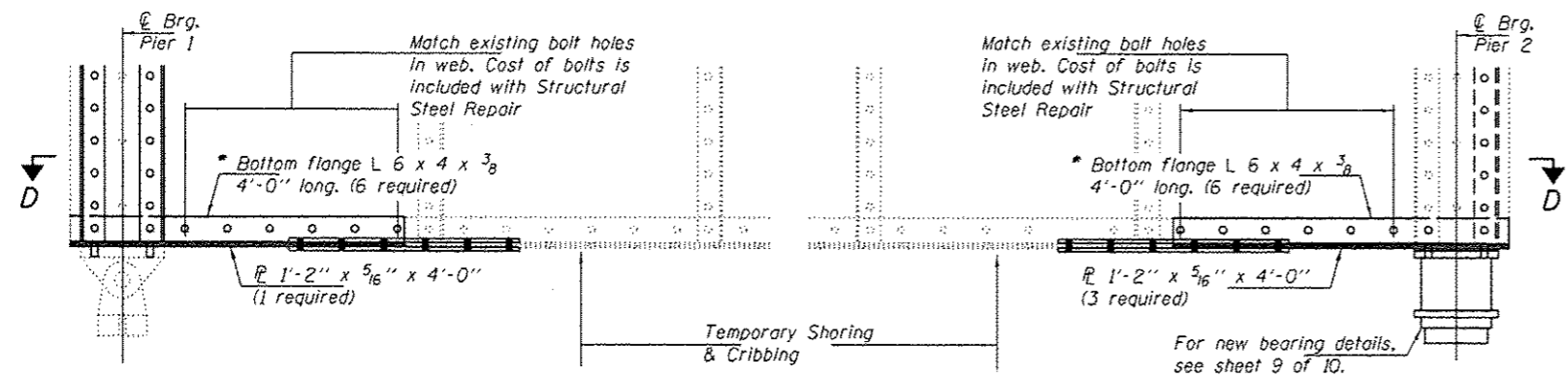
See sheets 1 & 2 of 10 for end stiffener repairs



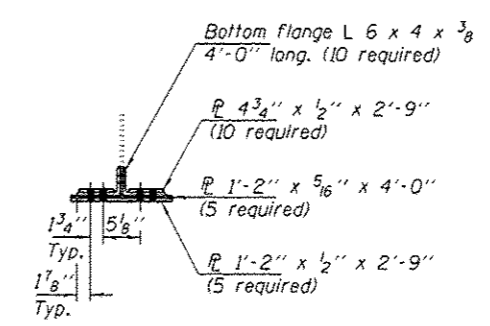
SECTION C-C



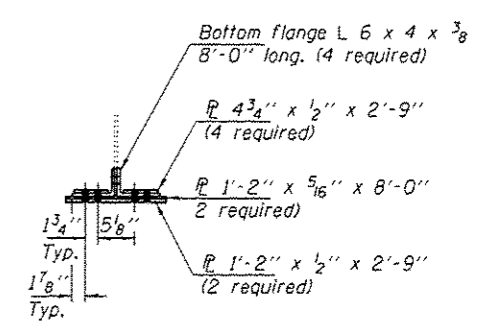
SECTION A-A



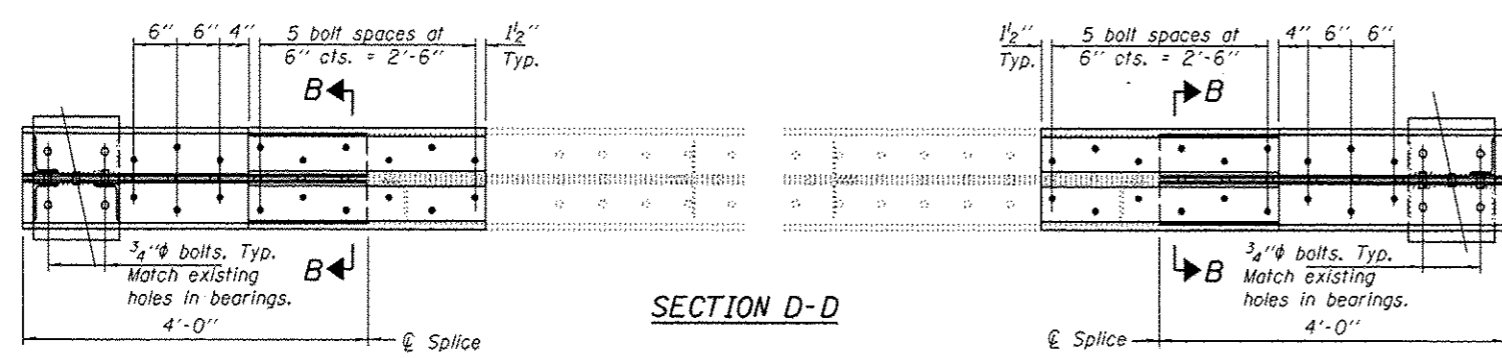
PARTIAL ELEVATION GIRDER 10



SECTION B-B



SECTION E-E



SECTION D-D

Note A: Cost of removal of existing bearings for Girders 2, 3, 8, 9 & 10 at Pier 2 is included with Temporary Shoring & Cribbing.

BILL OF MATERIAL

- o - Use holes in existing member as template for drilling holes in new members.
- - Shop drill.

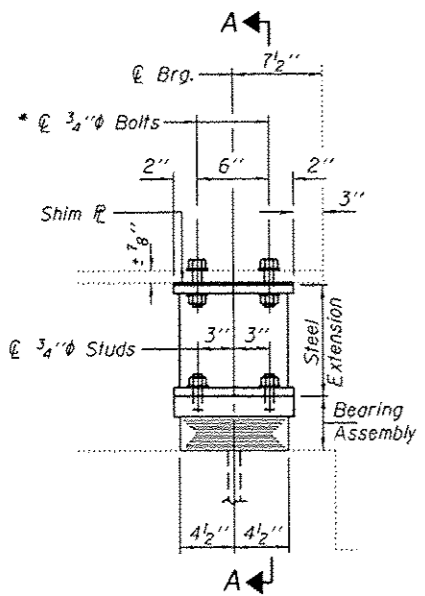
ITEM	UNIT	QUANTITY
Structural Steel Repair	Pound	10780

DESIGNED <i>ATH</i>	EXAMINED <i>Timothy A. ...</i>	DATE <i>JANUARY 20, 2015</i>
CHECKED <i>SMR</i>	PASSED <i>...</i>	REVISED
DRAWN <i>baliva</i>		REVISED
CHECKED <i>ATH SMR</i>		

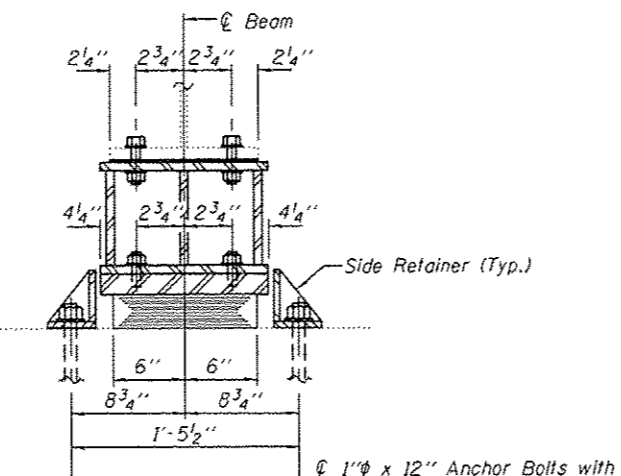
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

REPAIR FR AT GIRDERS 2, 3, 8, 9 & 10
SN 016-0251

F.A.D. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1360	218&CHRM-4-BR-1	COOK	29	9
CONTRACT NO. 60W73				
ILLINOIS FED. AID PROJECT				

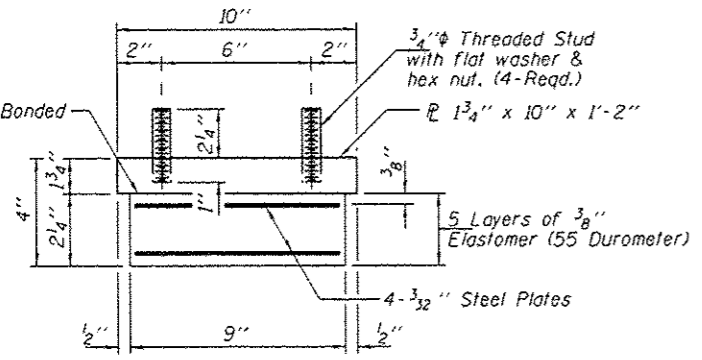


ELEVATION



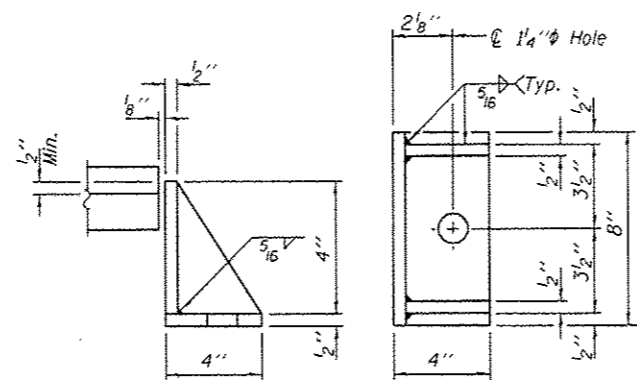
SECTION A-A

TYPE I ELASTOMERIC EXP. BRG.



BEARING ASSEMBLY

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



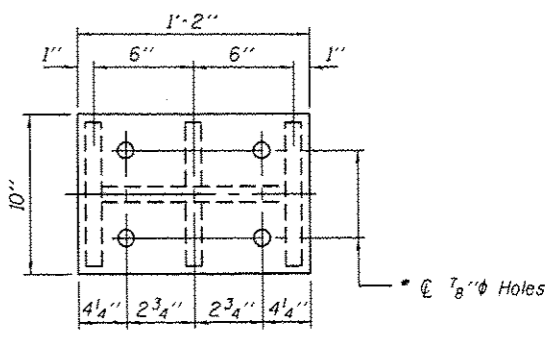
SIDE RETAINER

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

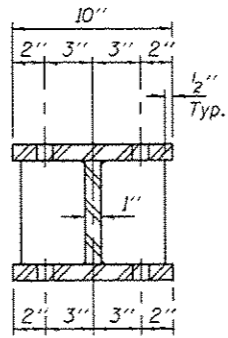
BEAM REACTIONS

R ₁	(K)	33.5
R ₂	(K)	49.0
Imp.	(K)	14.7
R (Total)	(K)	97.2

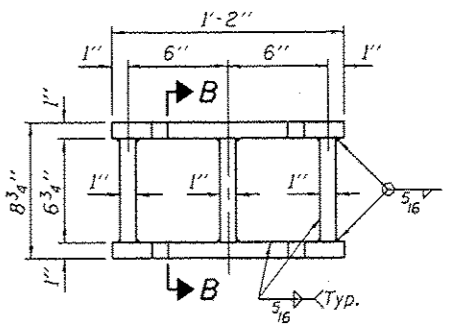
Notes:
Diaphragm removal and reinstallation may be required to facilitate drilling holes. Cost included with Furnishing and Erecting Structural Steel.
New steel extensions, shim plates and connection bolts are included with Furnishing and Erecting Structural Steel.
Prior to ordering any material, the Contractor shall verify in the field all bearing height and shim thickness dimensions. Min. jack capacity = 50 Tons.
Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. ASTM A307 Grade C anchor bolts may be used in lieu of ASTM F1554 Grade 36 (F_y=36ksi). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.
Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.
Side retainers shall be included in the cost of Elastomeric Bearing Assembly, Type I.



PLAN TOP AND BOTTOM PLATE

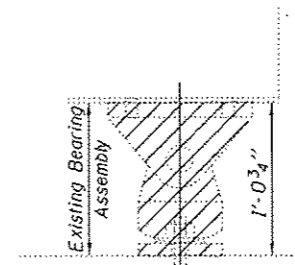


SECTION B-B



STEEL EXTENSION DETAIL

* Use holes in existing flange as template for drilling holes in top extension plate.



EXISTING BEARING REMOVAL DETAIL

Cost included with Jack and Remove Existing Bearings.

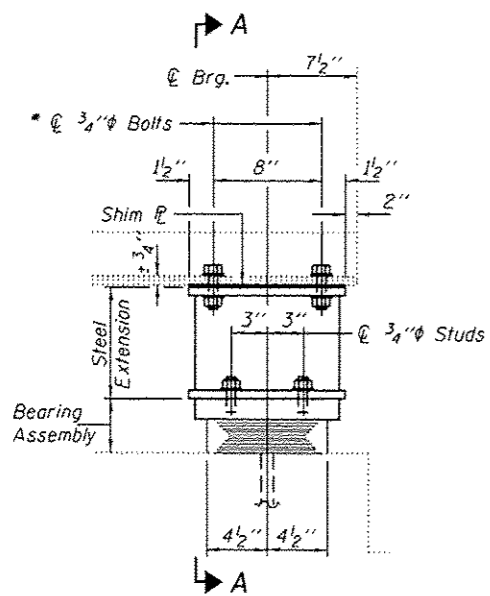
Burn existing anchor bolts flush with existing concrete surface. Grind existing anchor bolt smooth and seal with epoxy.

BILL OF MATERIAL

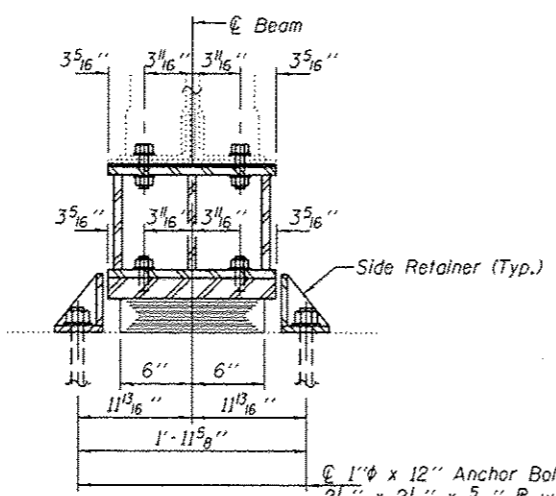
Item	Unit	Total
Elastomeric Bearing Assembly, Type I	Each	16
Jack and Remove Existing Bearings	Each	16
Furnishing and Erecting Structural Steel	Pound	2440
Anchor Bolts 1"φ	Each	32

TYI/REPS 12-03-2008

DESIGNED ATH	EXAMINED	DATE JANUARY 20, 2015	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BEARING REPLACEMENT PIER 1, SPAN 1 & PIER 2, SPAN 3 BEAMS 1 THRU 4 & 8 THRU 11 SN 016-0251 SHEET NO. 7 OF 10 SHEETS	F.A.U. RTE. 1360	SECTION 21BACHRM-4-BR-1	COUNTY COOK	TOTAL SHEETS	SHEET NO.
CHECKED SMR	PASSED	REVISED						29	10
DRAWN baliva	ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED						CONTRACT NO. 60W73	
CHECKED ATH SMR	ACTING ENGINEER OF STRUCTURAL SERVICES	REVISED						ILLINOIS FED. AID PROJECT	



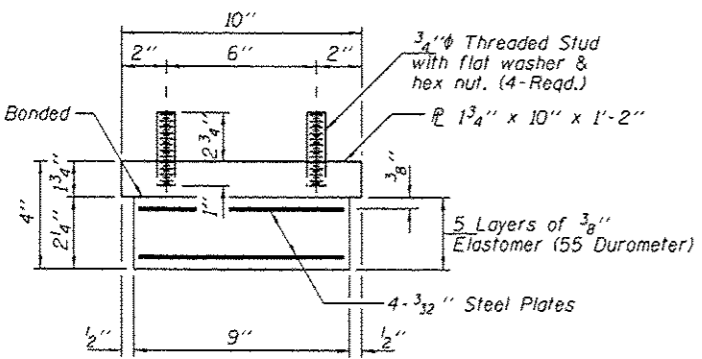
ELEVATION



SECTION A-A

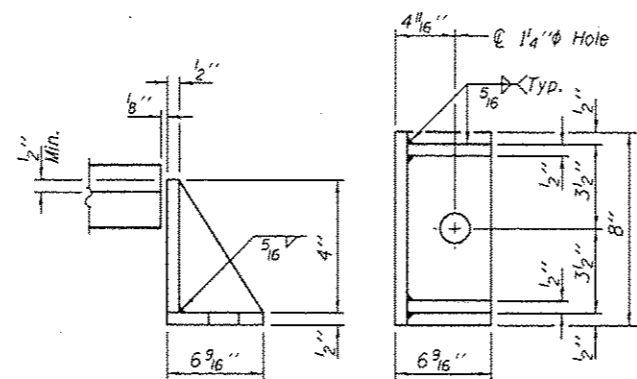
1" x 12" Anchor Bolts with 2 1/4" x 2 1/4" x 5/16" washer under nut.

TYPE I ELASTOMERIC EXP. BRG.



BEARING ASSEMBLY

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



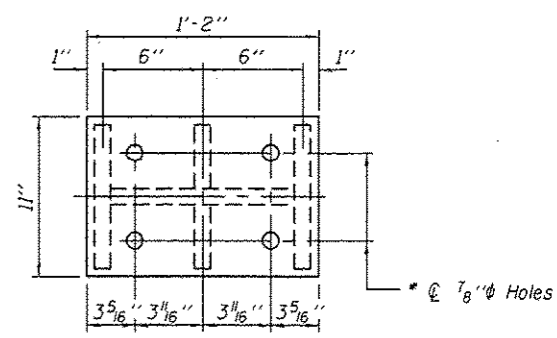
SIDE RETAINER

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

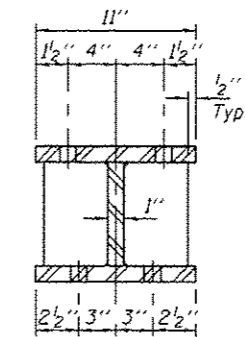
BEAM REACTIONS

RP	(K)	33.5
R ₁	(K)	49.0
Imp.	(K)	14.7
R (Total)	(K)	97.2

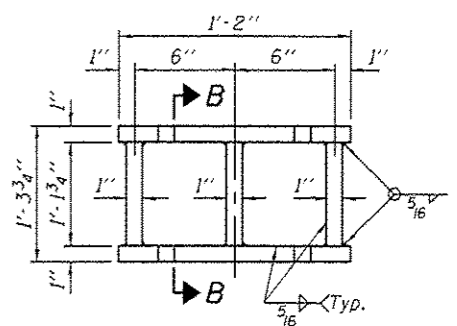
Notes:
 Diaphragm removal and reinstallation may be required to facilitate drilling holes. Cost included with Furnishing and Erecting Structural Steel.
 New steel extensions, shim plates and connection bolts are included with Furnishing and Erecting Structural Steel.
 Prior to ordering any material, the Contractor shall verify in the field all bearing height and shim thickness dimensions. Min. jack capacity = 50 Tons.
 Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. ASTM A307 Grade C anchor bolts may be used in lieu of ASTM F1554 Grade 36 (Fy=36ksi). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.
 Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.
 Side retainers shall be included in the cost of Elastomeric Bearing Assembly, Type I.



PLAN TOP AND BOTTOM PLATE

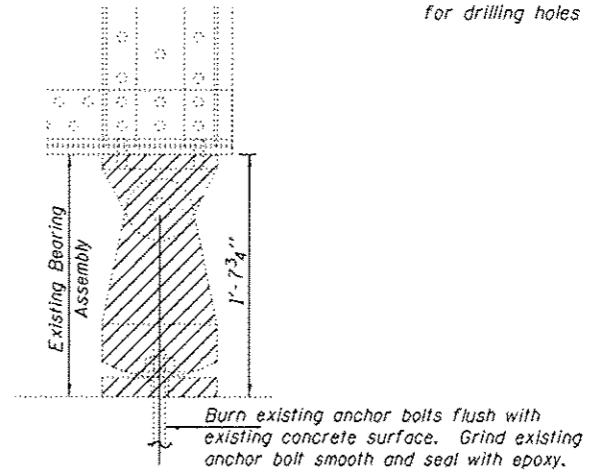


SECTION B-B



STEEL EXTENSION DETAIL

Use holes in existing flange as template for drilling holes in top extension plate.



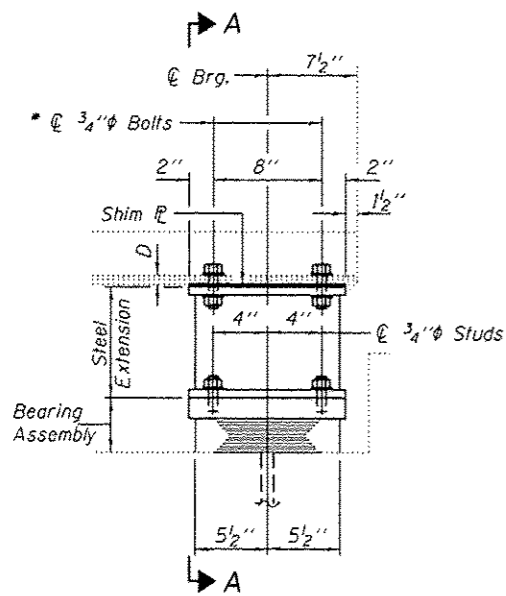
EXISTING BEARING REMOVAL DETAIL

Cost Included with Jack and Remove Existing Bearings.

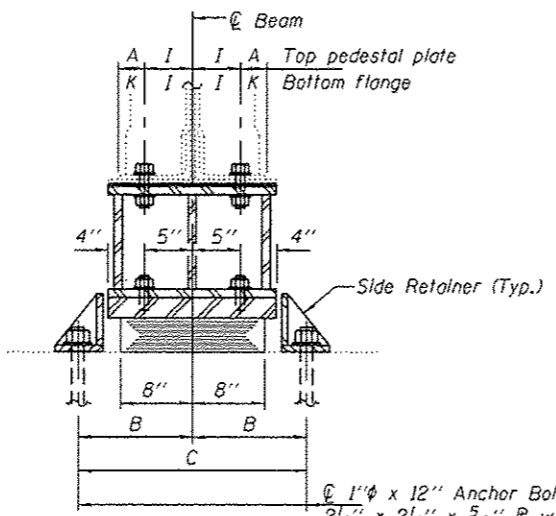
BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly, Type I	Each	6
Jack and Remove Existing Bearings	Each	6
Furnishing and Erecting Structural Steel	Pound	1470
Anchor Bolts 1"φ	Each	12

TYI/REPS 12-03-2008



ELEVATION

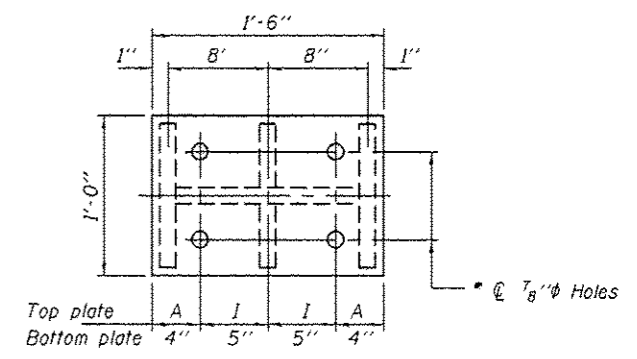


SECTION A-A

BEAM REACTIONS

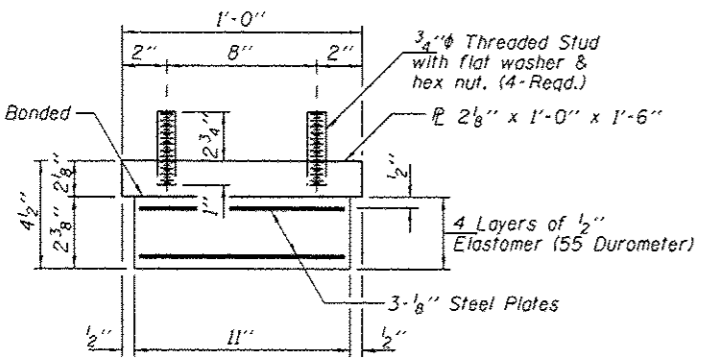
R ₁	(K)	58.2
R ₂	(K)	54.9
Imp.	(K)	16.6
R (Total)	(K)	127.7

Notes:
 Diaphragm removal and reinstallation may be required to facilitate drilling holes. Cost included with Furnishing and Erecting Structural Steel.
 New steel extensions, shim plates and connection bolts are included with Furnishing and Erecting Structural Steel.
 Prior to ordering any material, the Contractor shall verify in the field all bearing height and shim thickness dimensions. Min. jack capacity = 70 Tons.
 Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. ASTM A307 Grade C anchor bolts may be used in lieu of ASTM F1554 Grade 36 (Fy=36ksi). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.
 Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.
 Side retainers shall be included in the cost of Elastomeric Bearing Assembly, Type I.



PLAN TOP AND BOTTOM PLATE

TYPE I ELASTOMERIC EXP. BRG.
 (Pier 2, Span 2)

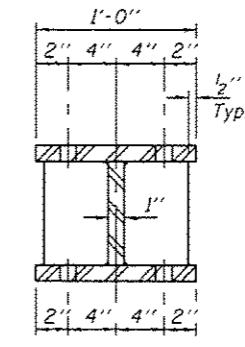


BEARING ASSEMBLY

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

BEARING DIMENSIONS

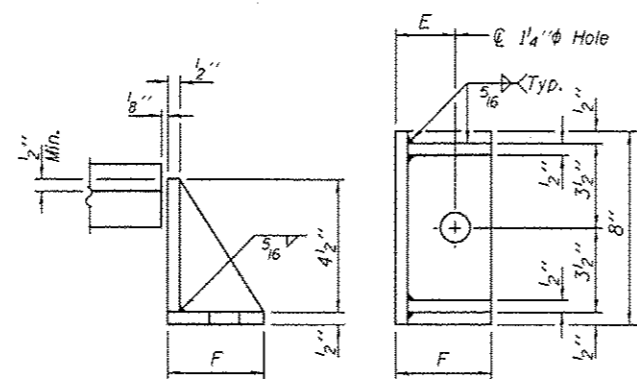
MARK	BEAMS 1 THRU 4 & 8 THRU 11	BEAMS 5 & 7	BEAM 6
A	5 ⁵ / ₁₆ "	5 ⁵ / ₁₆ "	5 ²⁵ / ₃₂ "
B	10 ⁵ / ₄ "	11 ¹ / ₈ "	1'-1 ³ / ₈ "
C	1'-9 ¹ / ₂ "	1'-11 ³ / ₄ "	2'-2 ³ / ₄ "
D	5 ⁹ / ₈ "	1 ¹ / ₈ "	1 ⁵ / ₈ "
E	2 ³ / ₈ "	2 ³ / ₄ "	4 ¹ / ₄ "
F	4"	4 ⁵ / ₈ "	6 ³ / ₈ "
G	8 ¹ / ₄ "	1'-3 ¹ / ₄ "	1'-7"
H	6 ¹ / ₄ "	1'-1 ¹ / ₄ "	1'-5"
I	3 ¹ / ₁₆ "	3 ¹ / ₁₆ "	3 ¹ / ₃₂ "
J	1'-0 ³ / ₄ "	1'-7 ³ / ₄ "	1'-11 ¹ / ₂ "
K	3 ⁵ / ₁₆ "	3 ⁵ / ₁₆ "	5 ²⁵ / ₃₂ "



SECTION B-B

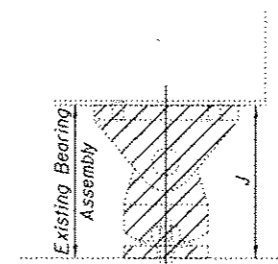
STEEL EXTENSION DETAIL

* Use holes in existing flange of beams 2 thru 10 as template for drilling holes in top extension plate. Field drill holes in beams 1 & 11 using holes in top plate as template.



SIDE RETAINER

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



EXISTING BEARING REMOVAL DETAIL

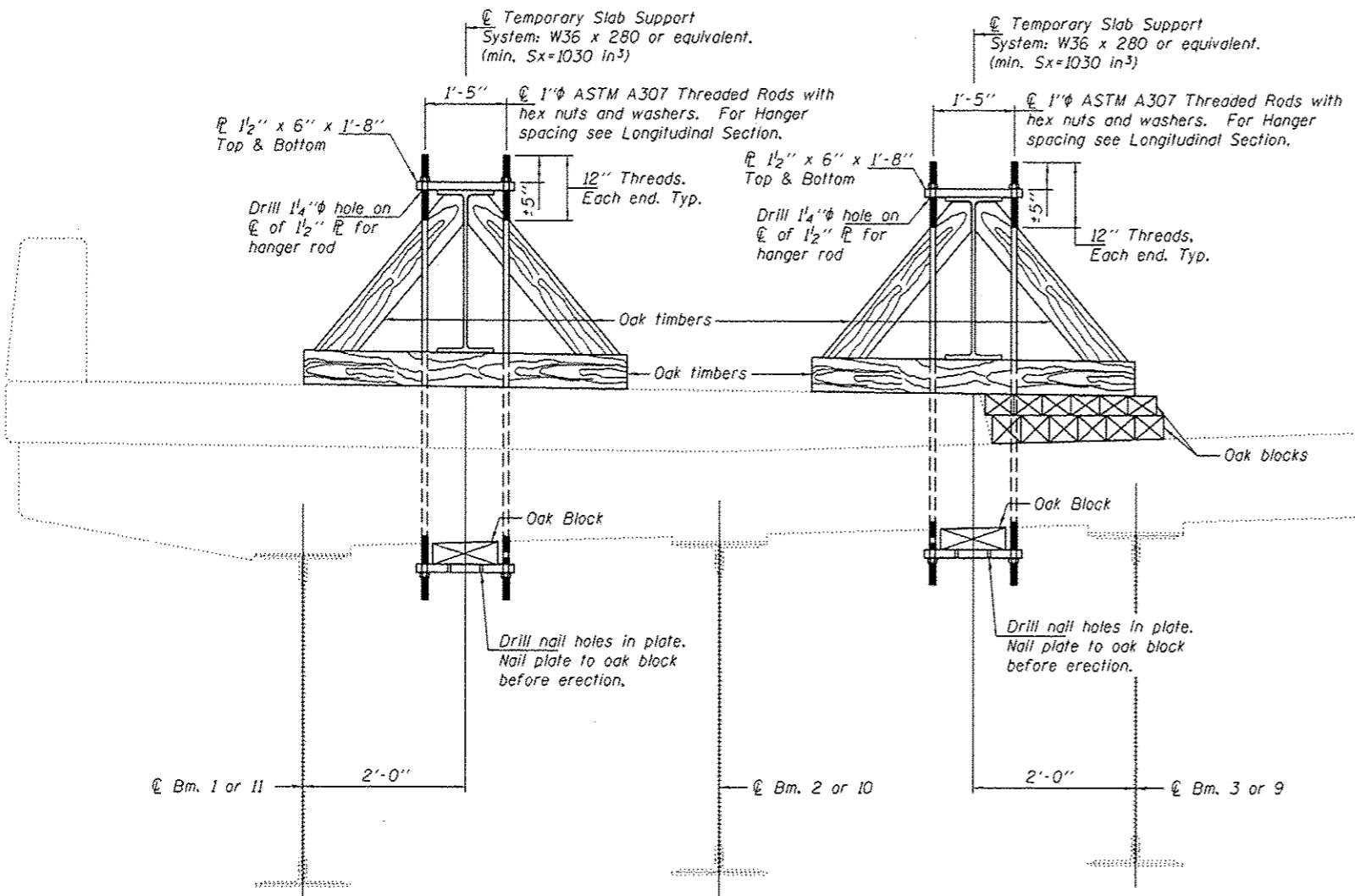
Cost included with Jack and Remove Existing Bearings.

BILL OF MATERIAL

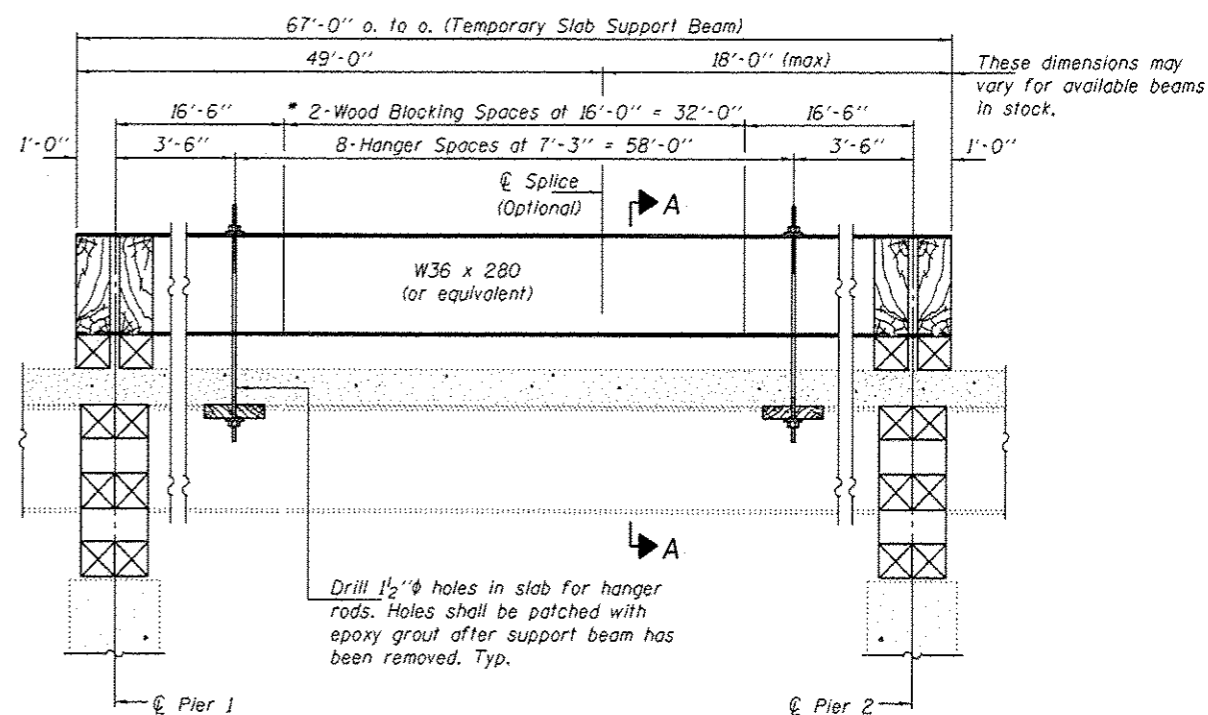
Item	Unit	Total
Elastomeric Bearing Assembly, Type I	Each	11
Jack and Remove Existing Bearings	Each	4
Furnishing and Erecting Structural Steel	Pound	2610
Anchor Bolts 1"φ	Each	22

** See Note A on sheet 5 of 10.

TYI/REPS 12-03-2008



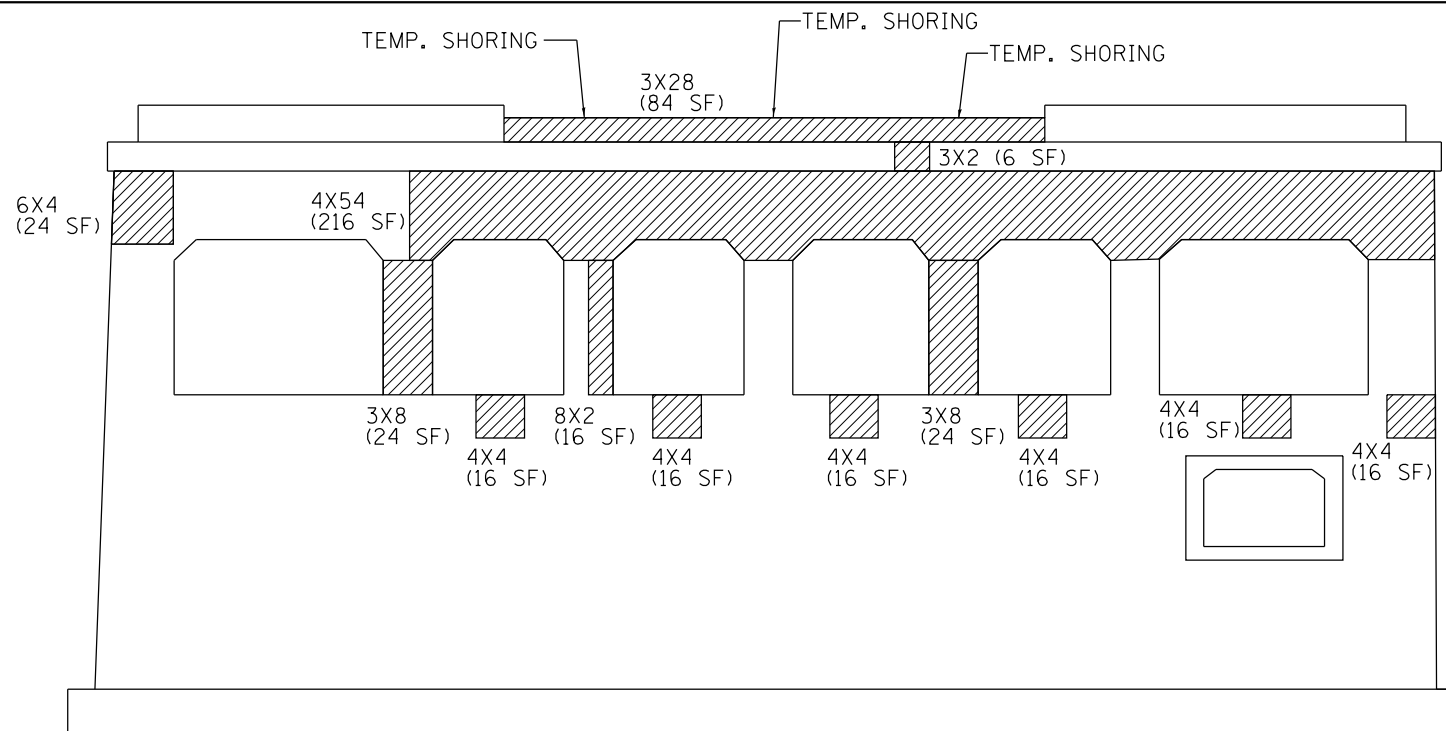
SECTION A-A



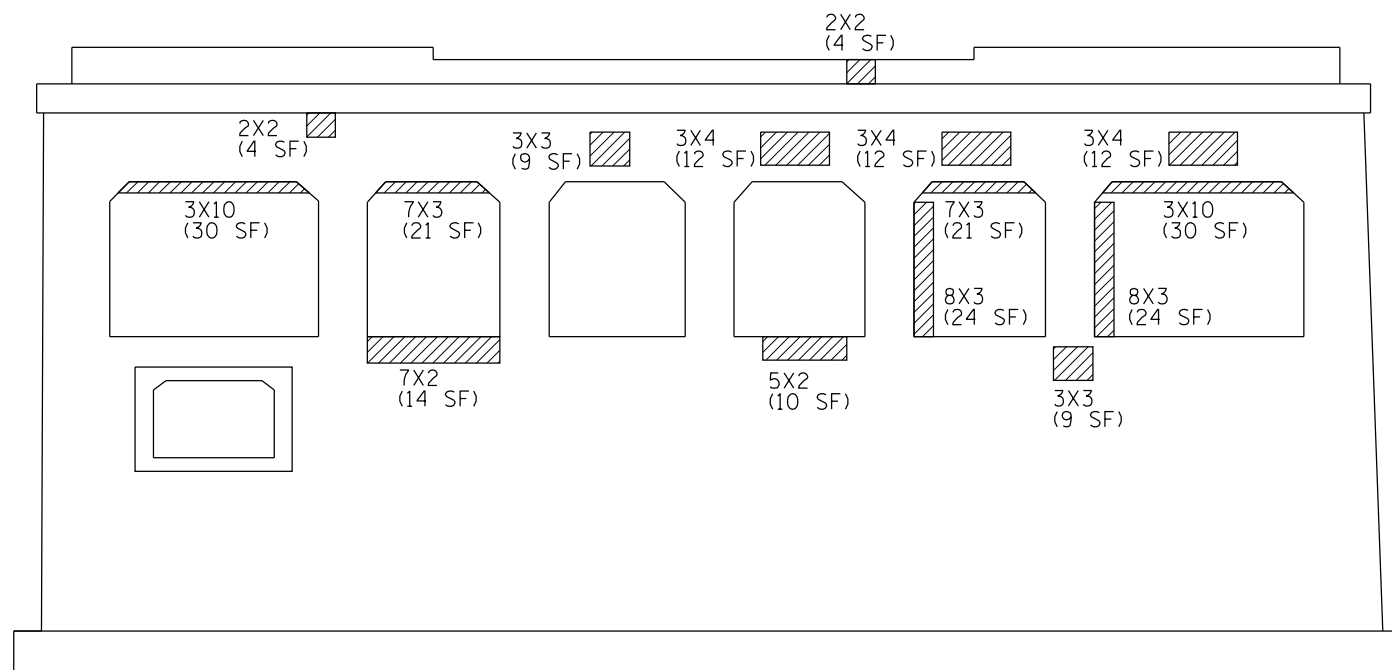
LONGITUDINAL SECTION
SUGGESTED TEMPORARY SLAB SUPPORT SYSTEM
(Looking North)

* Wood blocking to be placed after support beam is allowed to deflect under its own weight.

DESIGNED ATH	EXAMINED	DATE	STATE OF ILLINOIS	REPAIR DETAILS	F.A.U. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CHECKED SMR	<i>Timothy A. Dalket</i>	JANUARY 20, 2015	DEPARTMENT OF TRANSPORTATION	SN 016-0251	1360	2118&CHRM-4-BR-1	COOK	29	13
DRAWN <i>bativa</i>	PASSED							CONTRACT NO. 60W73	
CHECKED ATH SMR	ACTING ENGINEER OF BRIDGES AND STRUCTURES				SHEET NO. 10 OF 10 SHEETS				
					ILLINOIS FED. AID PROJECT				



PIER 1 ELEVATION
(EAST FACE)




PIER 1 ELEVATION
(WEST FACE)

BILL OF MATERIALS – EAST FACE OF PIER 1

ITEM	UNIT	QUANTITY
STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5")	SQ. FT.	490

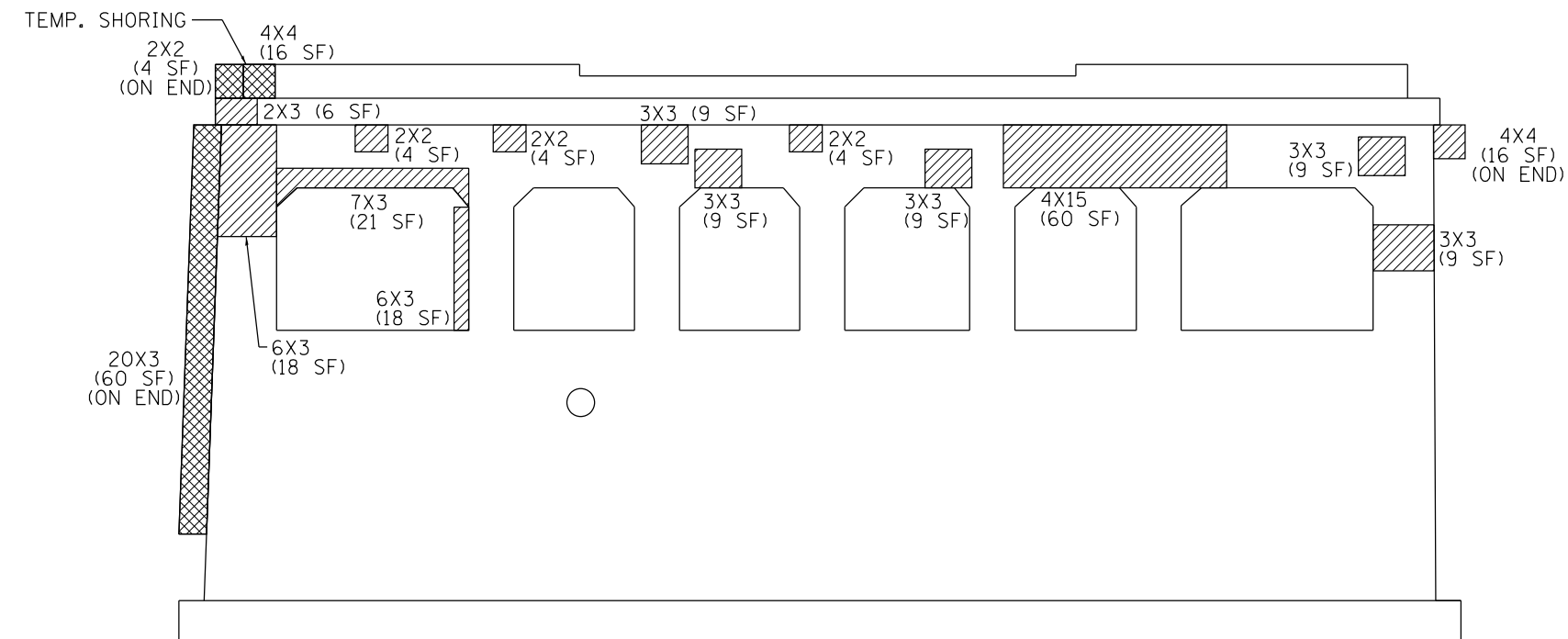
LEGEND:

 STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5")

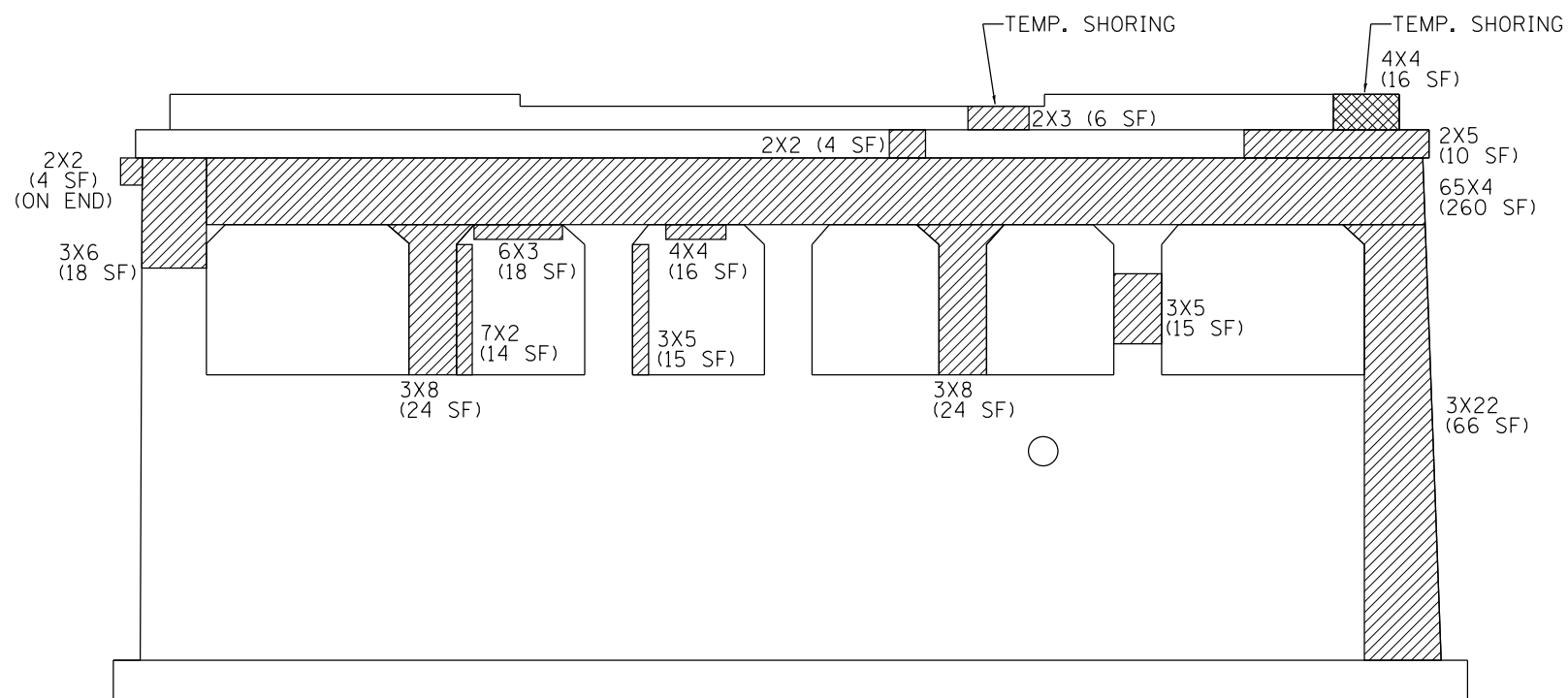
BILL OF MATERIALS – WEST FACE OF PIER 1

ITEM	UNIT	QUANTITY
STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5")	SQ. FT.	236

NOTE:
TEMPORARY SHORING FOR STRUCTURAL REPAIR OF CONCRETE SHALL BE DONE AT THE SAME TIME WHEN PERFORMING STRUCTURAL STEEL REPAIR AT THIS LOCATION.



**PIER 2 ELEVATION
(EAST FACE)**



**PIER 2 ELEVATION
(WEST FACE)**

BILL OF MATERIALS – EAST FACE OF PIER 2

ITEM	UNIT	QUANTITY
STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5")	SQ. FT.	210
STRUCTURAL REPAIR OF CONCRETE (DEPTH GREATER THAN 5")	SQ. FT.	80

LEGEND:

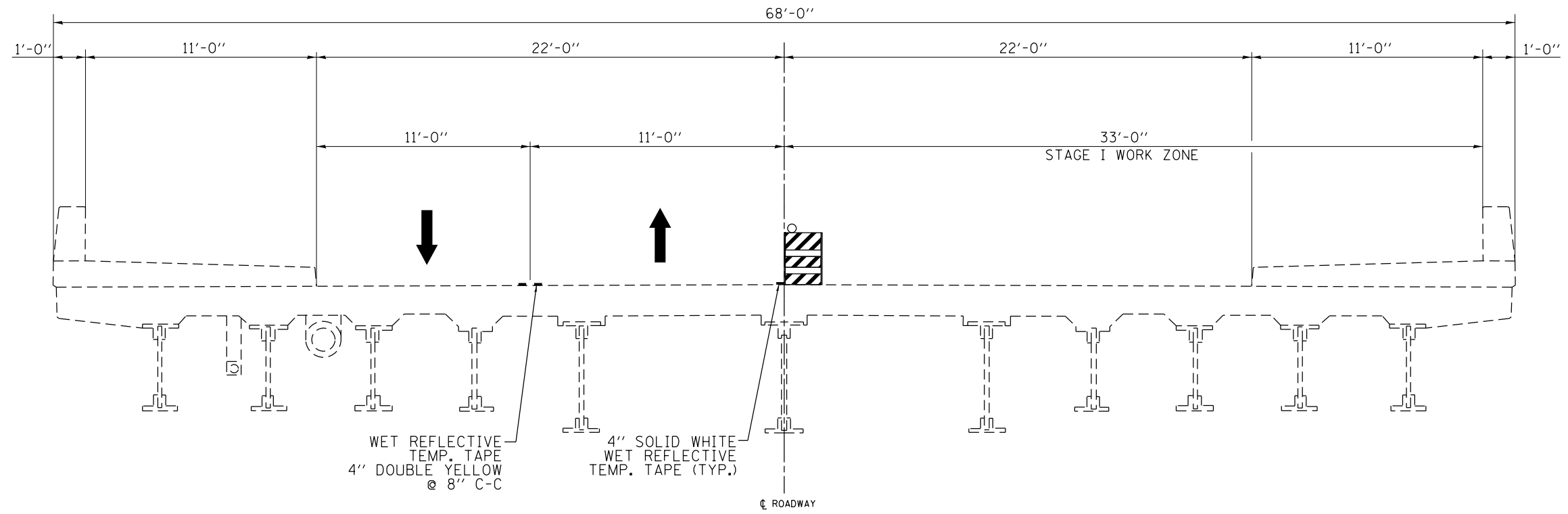
- STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5")
- STRUCTURAL REPAIR OF CONCRETE (DEPTH GREATER THAN 5")

BILL OF MATERIALS – WEST FACE OF PIER 2

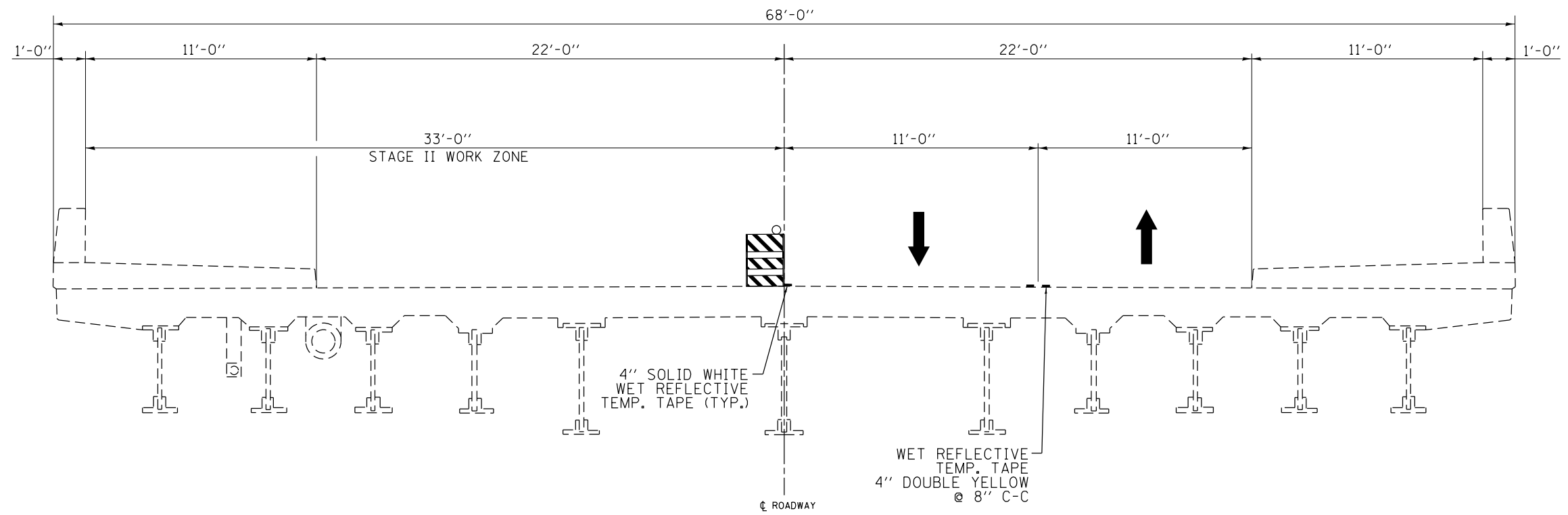
ITEM	UNIT	QUANTITY
STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5")	SQ. FT.	504
STRUCTURAL REPAIR OF CONCRETE (DEPTH GREATER THAN 5")	SQ. FT.	16

NOTE:

THE TEMPORARY SHORING AND CRIBBING SHALL BE INCLUDED IN THE COST OF JACK AND REMOVE EXISTING BEARINGS. THE SUBSTRUCTURE REPAIRS SHALL BE COMPLETE PRIOR TO REMOVING THE BEARING.



**STAGE I
CROSS SECTION**
(LOOKING EAST)



**STAGE II
CROSS SECTION**
(LOOKING EAST)

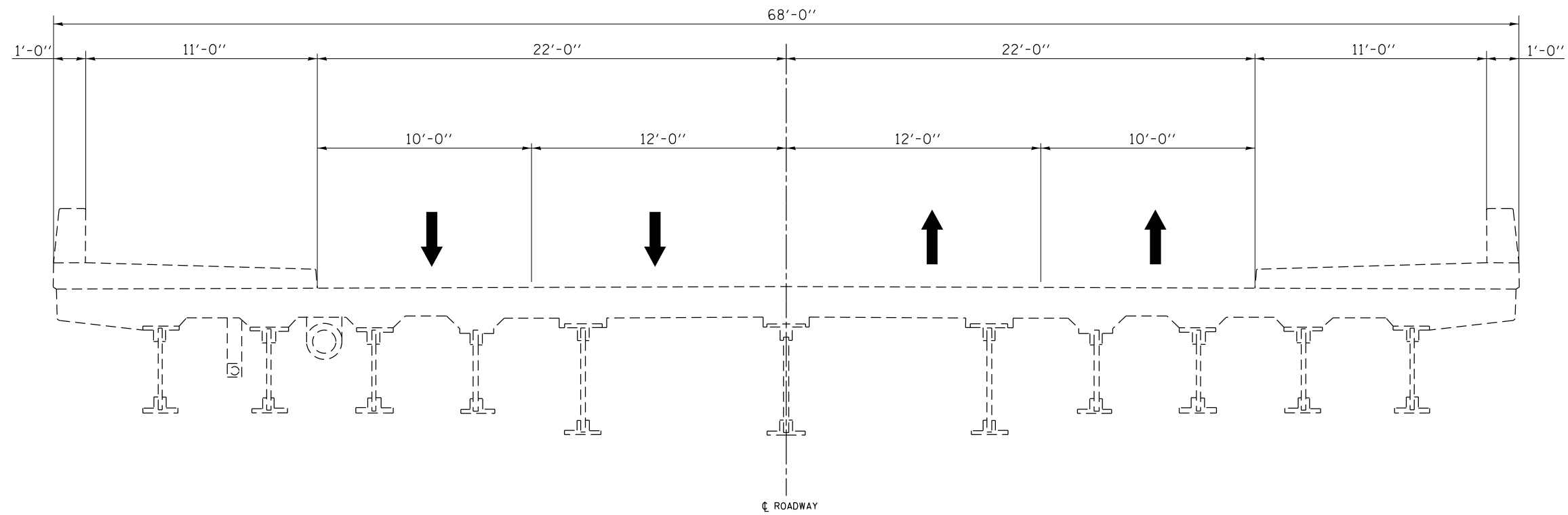
FILE NAME =	USER NAME = pyrzenowski	DESIGNED -	REVISED -
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Default	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -
	PLOT DATE = 12/18/2014	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**STAGE CONSTRUCTION CROSS SECTIONS
FOSTER AVENUE OVER NORTH SHORE CHANNEL**

SCALE: 1" = 50' SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1360	21(B&C)NRM-4-BR-1	COOK	29	17
ILLINOIS FED. AID PROJECT			CONTRACT NO. 60W73	



CROSS SECTION
(LOOKING EAST)

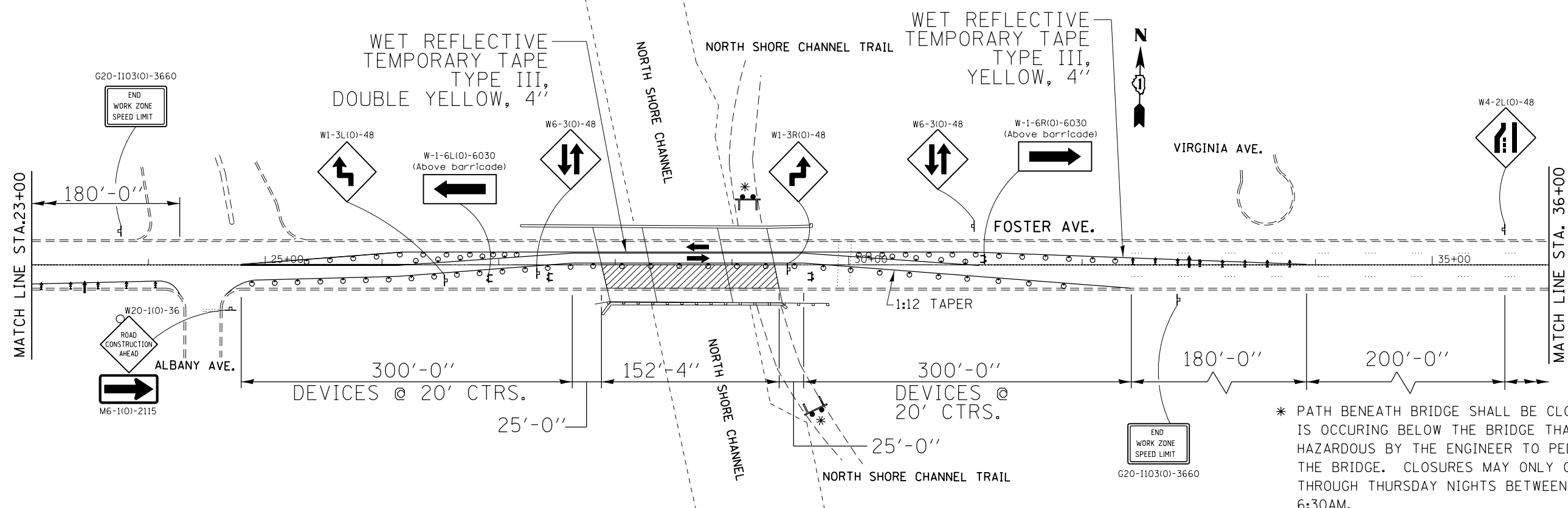
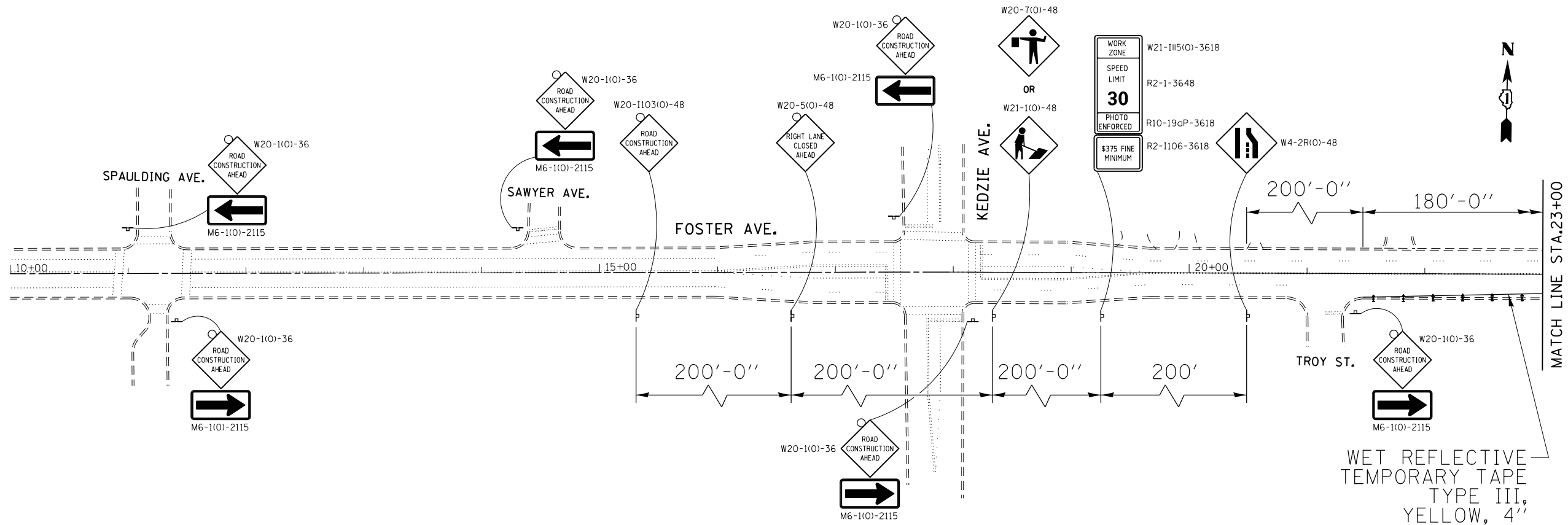
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Default	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -
	PLOT DATE = 12/18/2014	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**STAGE CONSTRUCTION CROSS SECTIONS
FOSTER AVENUE OVER NORTH SHORE CHANNEL**

SCALE: 1" = 50' SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1360	21(B&C)NRM-4-BR-1	COOK	29	18
ILLINOIS FED. AID PROJECT			CONTRACT NO. 60W73	



* PATH BENEATH BRIDGE SHALL BE CLOSED WHEN WORK IS OCCURRING BELOW THE BRIDGE THAT MAY BE DEEMED HAZARDOUS BY THE ENGINEER TO PEDESTRIANS BELOW THE BRIDGE. CLOSURES MAY ONLY OCCUR SUNDAY THROUGH THURSDAY NIGHTS BETWEEN SUNSET AND 6:30AM.

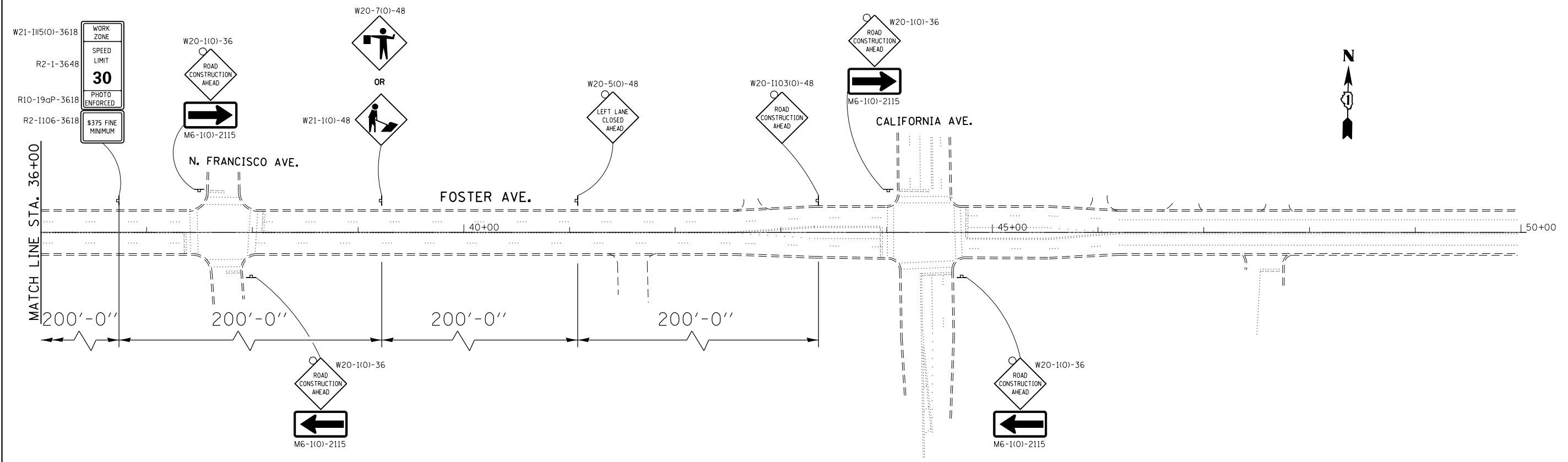
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Default	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -
	PLOT DATE = 12/18/2014	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**








**STAGE I CONSTRUCTION
FOSTER AVENUE OVER NORTH SHORE CHANNEL**

SCALE: 1" = 50' SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1360	21(B&C)NRM-4-BR-1	COOK	29	19
CONTRACT NO. 60W73				
ILLINOIS FED. AID PROJECT				



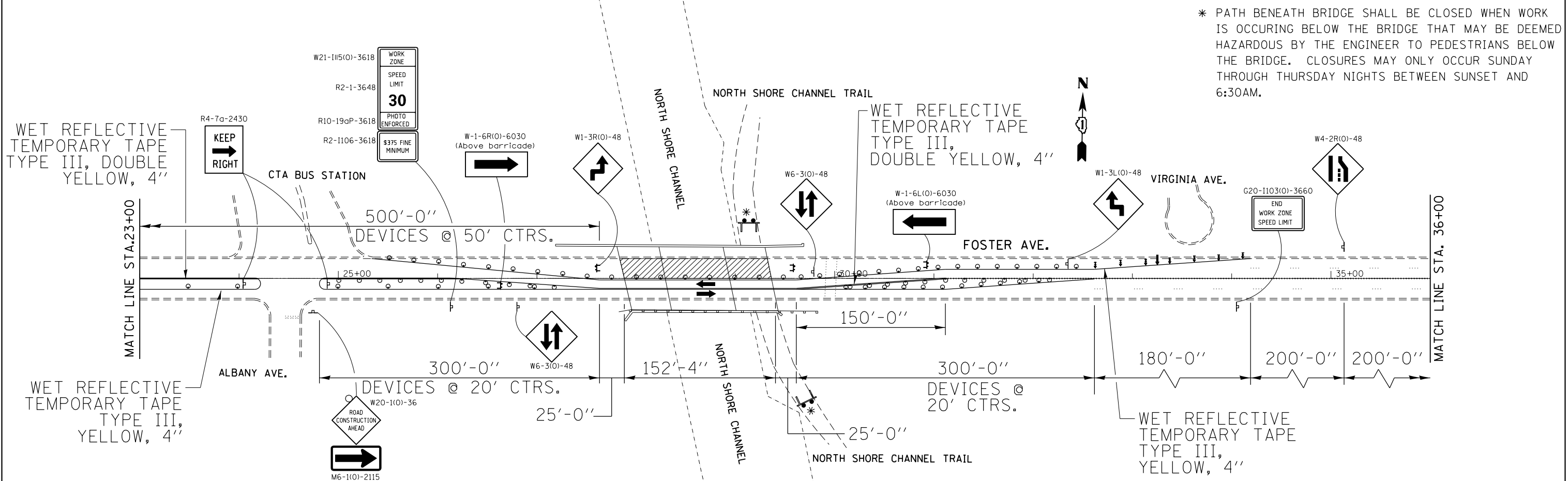
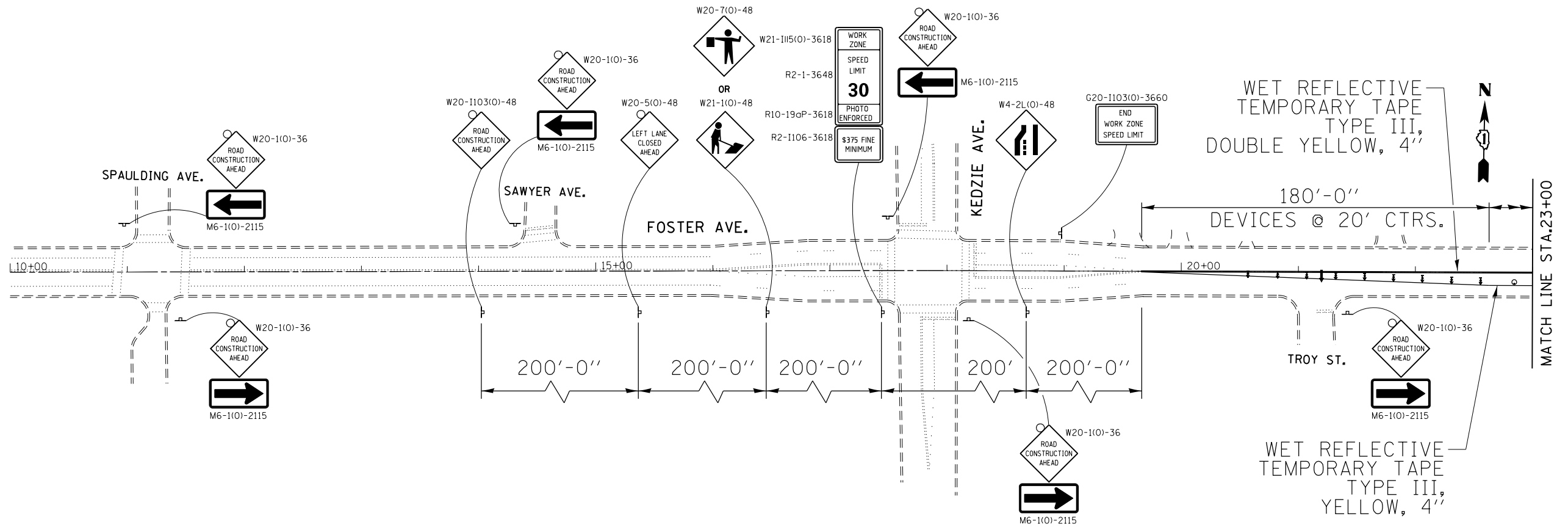
LEGEND

-  TYPE III BARRICADE
-  DRUM WITH STEADY BURN MONO-DIRECTIONAL LIGHT
-  WORK ZONE
-  IMPACT ATTENUATOR, TEMPORARY, NON-REDIRECTIVE, TEST LEVEL 3
-  ARROW BOARD
-  TEMPORARY CONCRETE BARRIER
-  DIRECTION INDICATOR BARRICADE WITH STEADY BURN MONIDIRECTIONAL LIGHT @ 20' SPACING

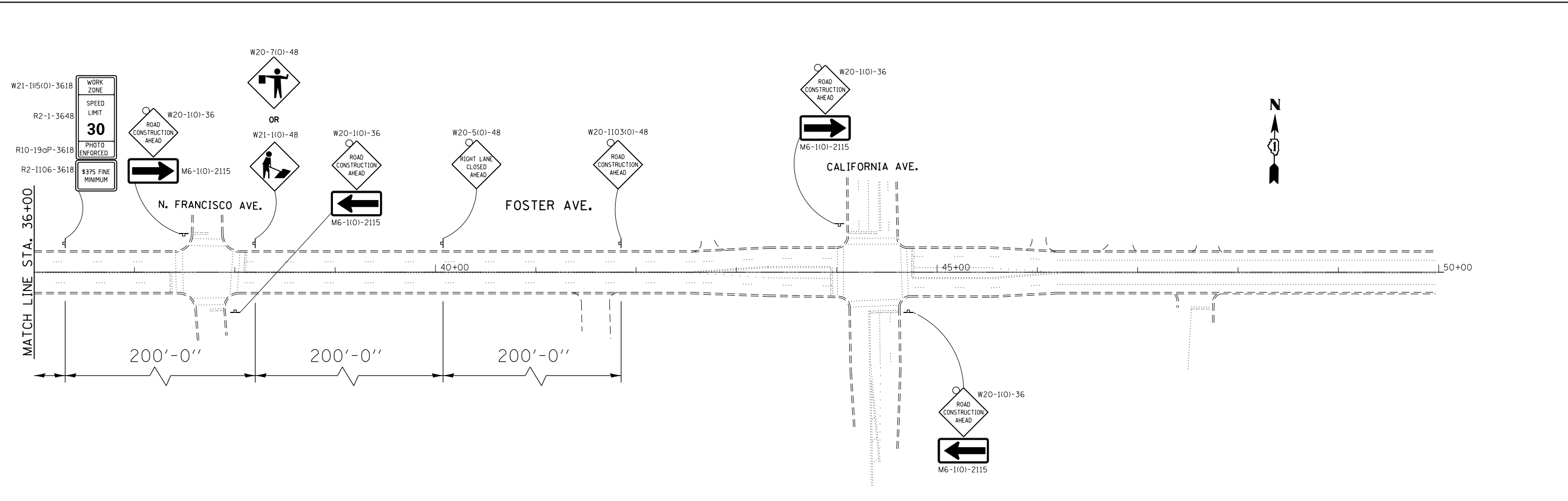
NOTES:

— TYPE III BARRICADES TO BE PLACED WHEN NO WORK IS BEING PERFORMED








FILE NAME =	USER NAME = pyrzenowskirb	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	STAGE I CONSTRUCTION FOSTER AVENUE OVER NORTH SHORE CHANNEL	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
c:\pw\work\p\dot\pyrzenowskirb\d0345538	ND136613-sht-plan.dgn	DRAWN -	REVISED -			1360	21(B&C)NRM-4-BR-1	COOK	29	20	
Default	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -			CONTRACT NO. 60W73					
	PLOT DATE = 12/18/2014	DATE -	REVISED -			ILLINOIS FED. AID PROJECT					



FILE NAME =	USER NAME = pyrzenowskirb	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	STAGE II CONSTRUCTION FOSTER AVENUE OVER NORTH SHORE CHANNEL	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
Default	ND136613-sht-plan.dgn	DRAWN -	REVISED -			1366	21(B&C)NRM-4-BR-1	COOK	29	21	
	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -			CONTRACT NO. 60W73					
	PLOT DATE = 12/18/2014	DATE -	REVISED -			ILLINOIS FED. AID PROJECT					



LEGEND

-  TYPE III BARRICADE
-  DRUM WITH STEADY BURN MONO-DIRECTIONAL LIGHT
-  WORK ZONE
-  IMPACT ATTENUATOR, TEMPORARY, NON-REDIRECTIVE, TEST LEVEL 3
-  ARROW BOARD
-  TEMPORARY CONCRETE BARRIER
-  DIRECTION INDICATOR BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT @ 20' SPACING

NOTES:

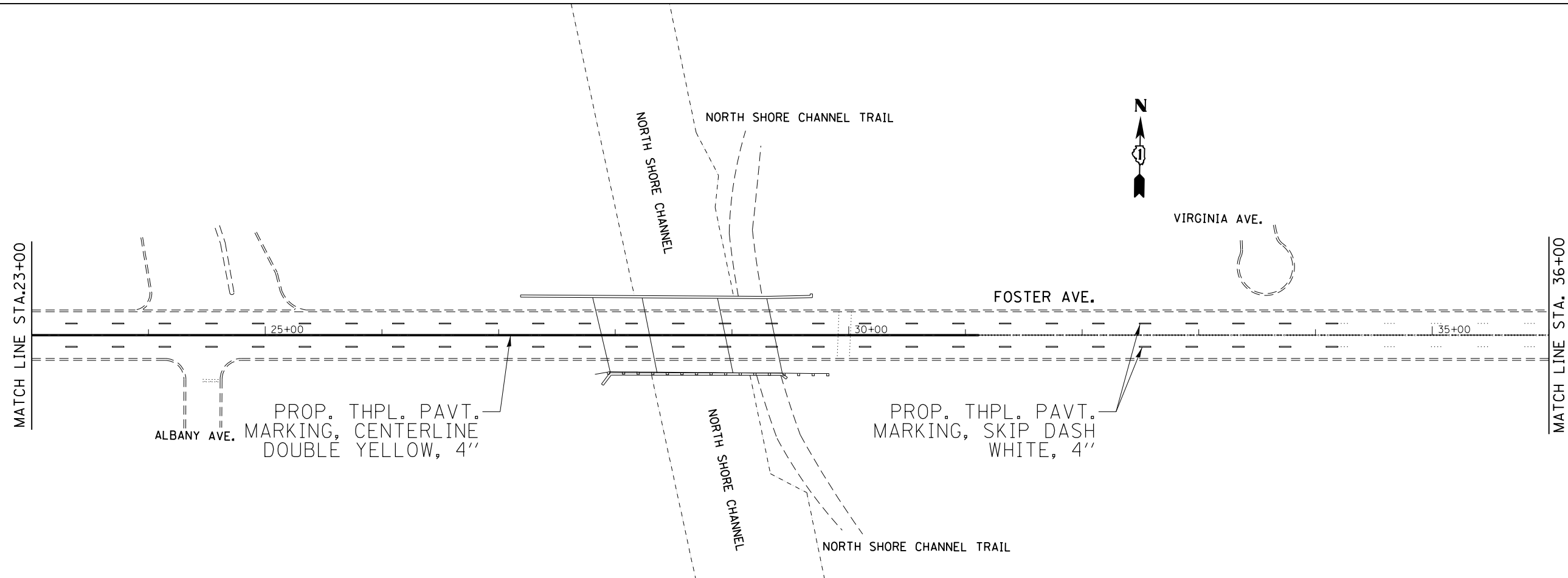
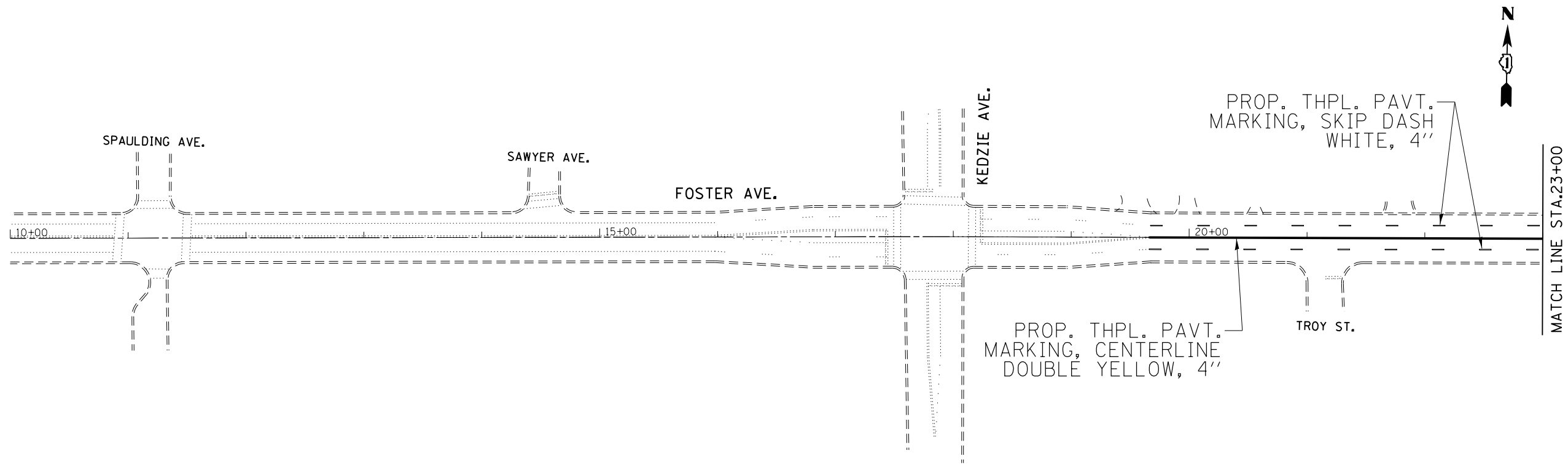
- TYPE III BARRICADES TO BE PLACED WHEN NO WORK IS BEING PERFORMED

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	PLOT DATE = 12/18/2014	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

STAGE II CONSTRUCTION FOSTER AVENUE OVER NORTH SHORE CHANNEL			
SCALE: 1" = 50'	SHEET	OF SHEETS	STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1360	21(B&C)NRM-4-BR-1	COOK	29	22
CONTRACT NO. 60W73				
ILLINOIS FED. AID PROJECT				



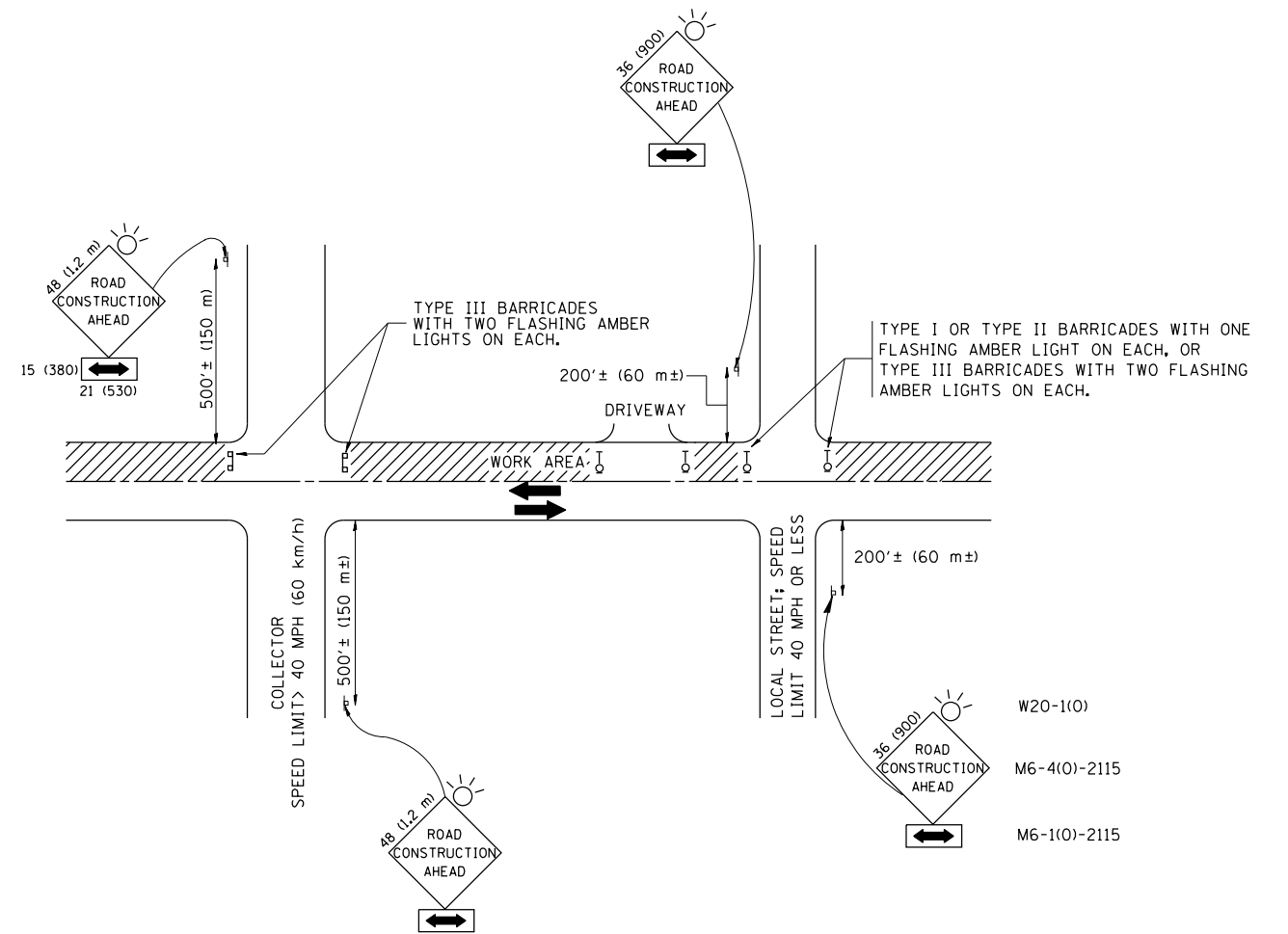
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Default	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -
	PLOT DATE = 12/18/2014	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**FINAL PAVEMENT MARKING PLAN
FOSTER AVENUE OVER NORTH SHORE CHANNEL**

SCALE: 1" = 50' SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1360	21(B&C)NRM-4-BR-1	COOK	29	23
CONTRACT NO. 60W73				
ILLINOIS FED. AID PROJECT				



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

NOTES:

A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS

1. 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:

a) 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.

b) 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.

2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:

a) 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.

b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.

3. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).

B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:

USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.

C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.

D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

FILE NAME =	USER NAME = pyrzenowski	DESIGNED - LHA	REVISED - J. OBERLE 10-18-95
et:\pw\work\p1dot\pyrzenowski\0345538	ND136613-sht-plan.dgn	DRAWN -	REVISED - A. HOUSEH 03-06-96
	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED - A. HOUSEH 10-15-96
	PLOT DATE = 12/18/2014	DATE - 06-89	REVISED - T. RAMMACH 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.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1360	21(B&C)NRM-4-BR-1	COOK	29	24
TC-10			CONTRACT NO. 60W73	
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.

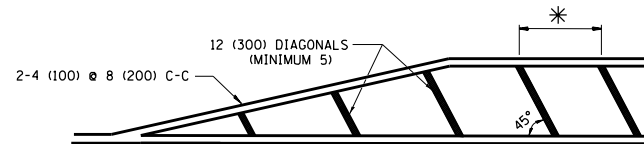
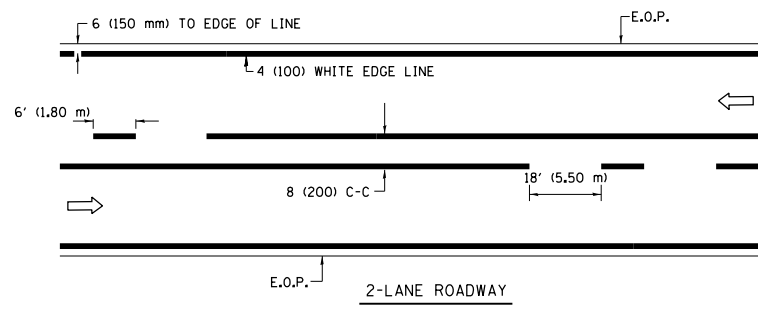
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	PLOT DATE = 12/18/2014	DATE -	REVISED - C. JUCIUS 01-31-07

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**ARTERIAL ROAD
INFORMATION SIGN**

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

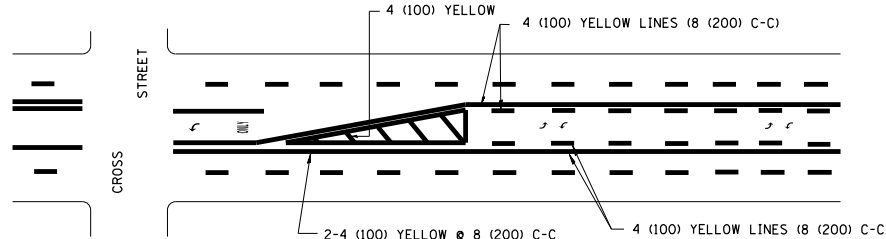
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1360	21(B&C)NRM-4-BR-1	COOK	29	25
TC-22			CONTRACT NO. 60W73	
<small>FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT</small>				



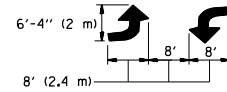
* FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.

* DIAGONAL LINE SPACING: 20' (6.1 m) C-C

PAINTED MEDIANS

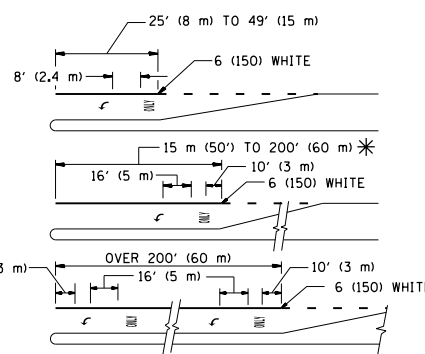
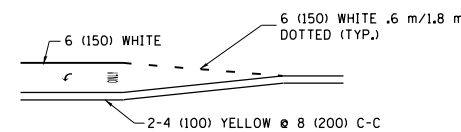


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

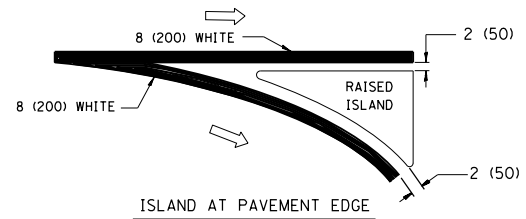
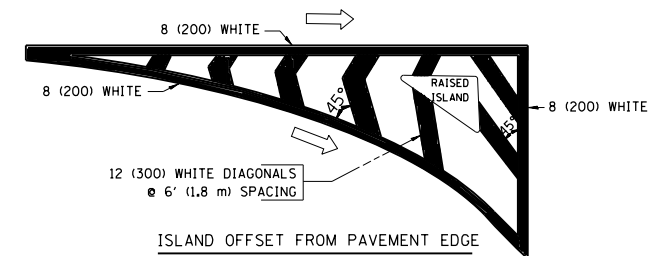


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED. AREA = 15.8 SQ. FT. (1.47 m²) ONLY AREA = 22.9 SQ. FT. (2.13 m²)

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

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING

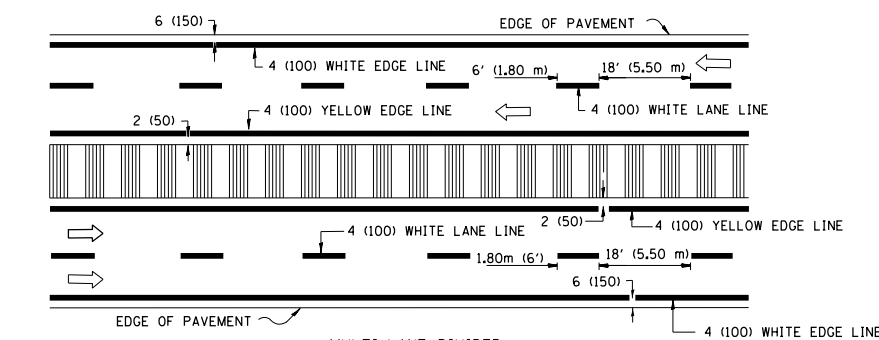
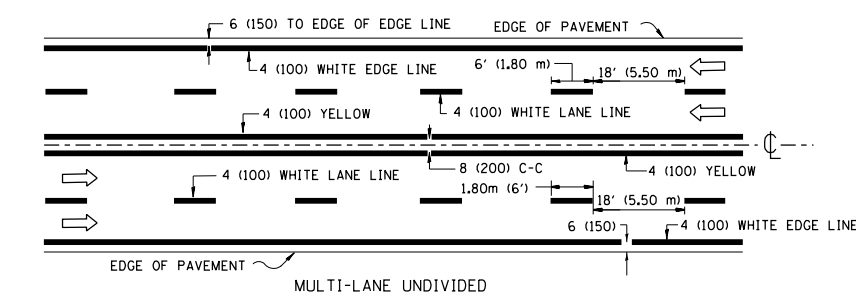


TYPICAL ISLAND MARKING

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	6' (1.80 m) LINE WITH 18' (5.50 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	8 (200) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 @ 4 (100)	SOLID SOLID	YELLOW YELLOW	8 (200) C-C
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	6' (1.80 m) LINE WITH 18' (5.50 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW; EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4 m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION 8' (2.4 m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	6' (1.8 m) LINE WITH 18' (5.50 m) SPACE FOR SKIP-DASH; 8 (200) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL & PEDESTRIAN)	12 (300) @ 45° 24 (600) @ 90°	SOLID SOLID	WHITE WHITE	2' (600) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45°	SOLID	YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC	8 (200) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 20' (6.1 m) (LESS THAN 30 MPH (50 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33m ²) EACH "X"=54.0 SQ. FT. (5.0 m ²)

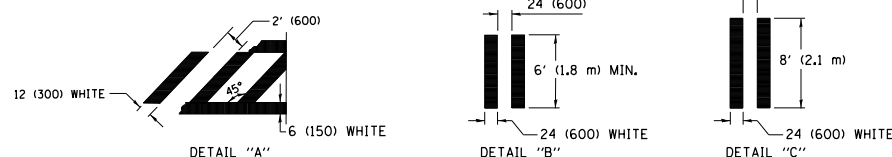
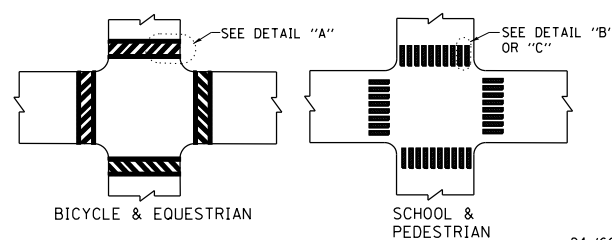
FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STREET MARKING STANDARDS, PRINTED BY CITY OF CHICAGO, DEPARTMENT OF TRANSPORTATION, BUREAU OF TRAFFIC.

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



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

TYPICAL LANE AND EDGE LINE MARKING



TYPICAL CROSSWALK MARKING

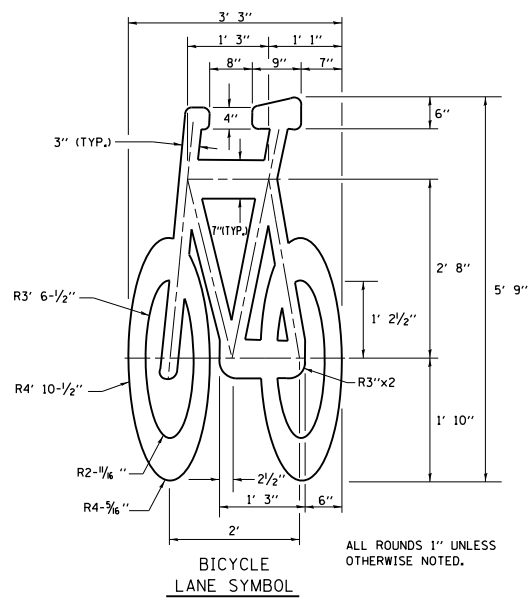
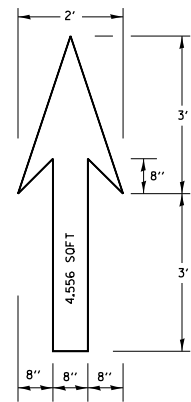
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	PLOT SCALE = 100.0000' / 1"	CHECKED -	REVISED -
	PLOT DATE = 12/18/2014	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**CITY OF CHICAGO
TYPICAL PAVEMENT MARKINGS**

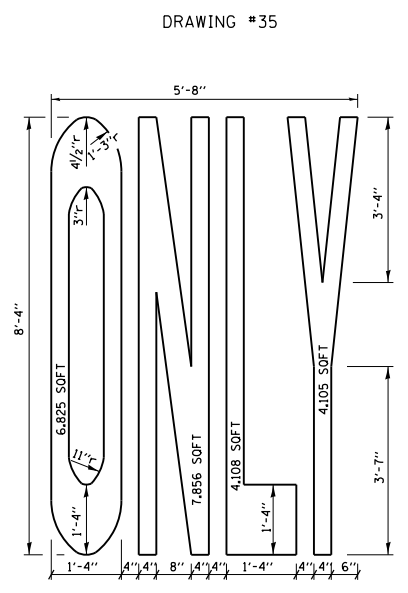
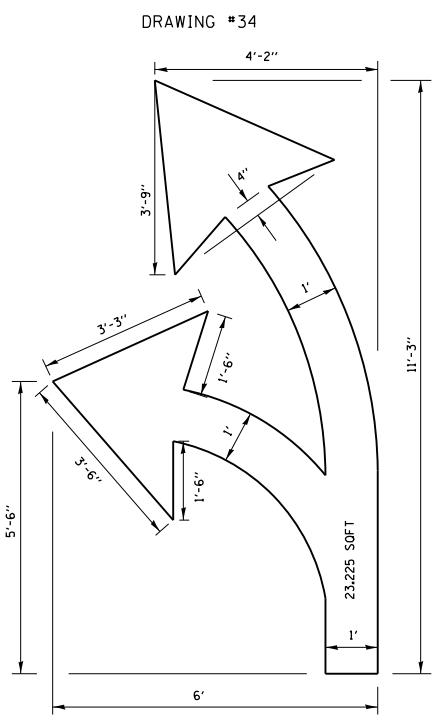
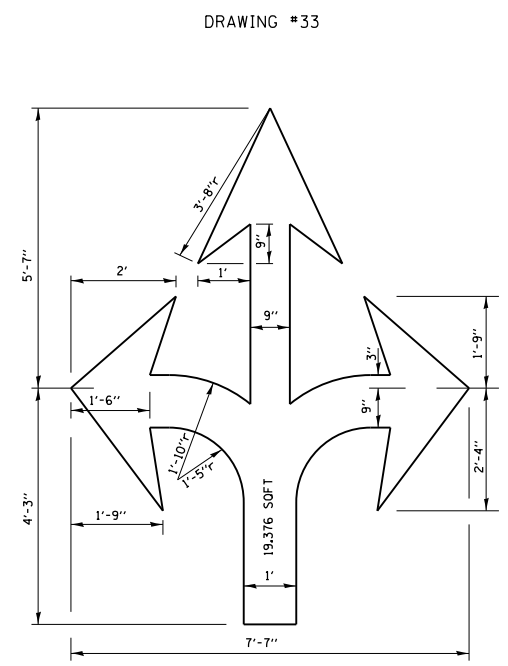
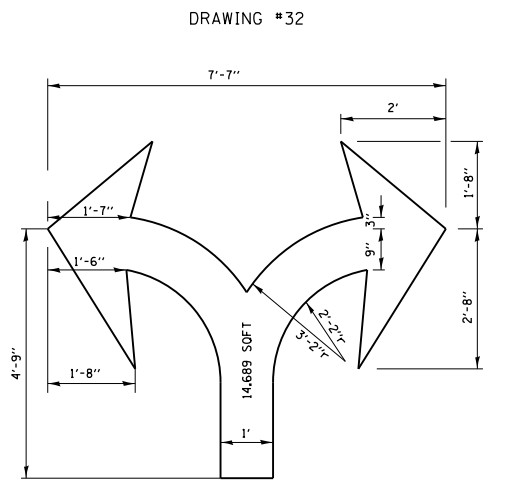
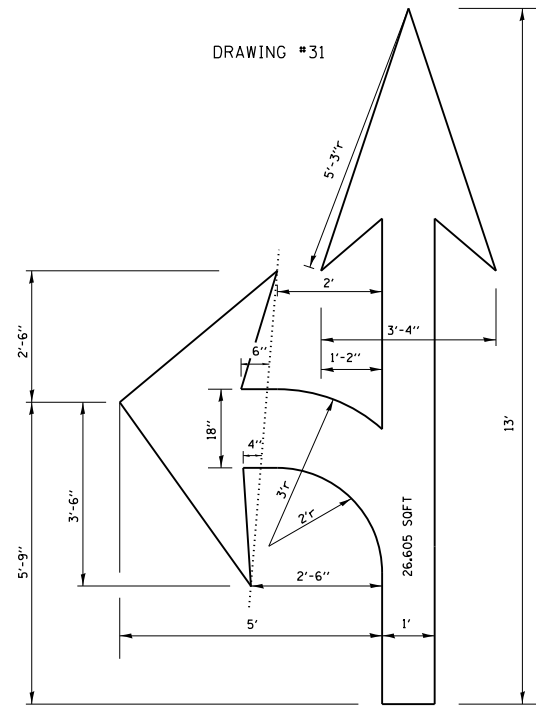
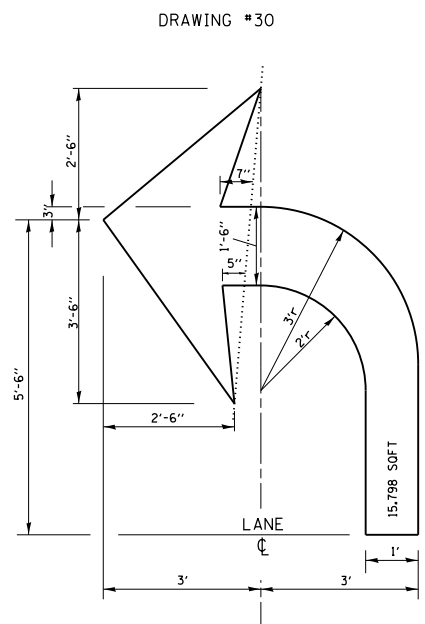
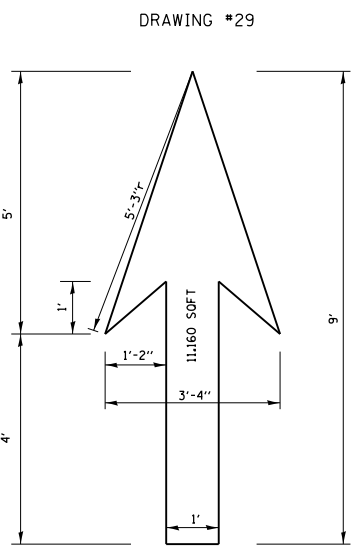
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1360	21(B&C)NRM-4-BR-1	COOK	29	26
TC-24		CONTRACT NO. 60W73		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

SCALE: NONE SHEET NO. 1 OF 3 SHEETS STA. TO STA.



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

TYPICAL BIKE LANE SYMBOLS
 DRAWING #28



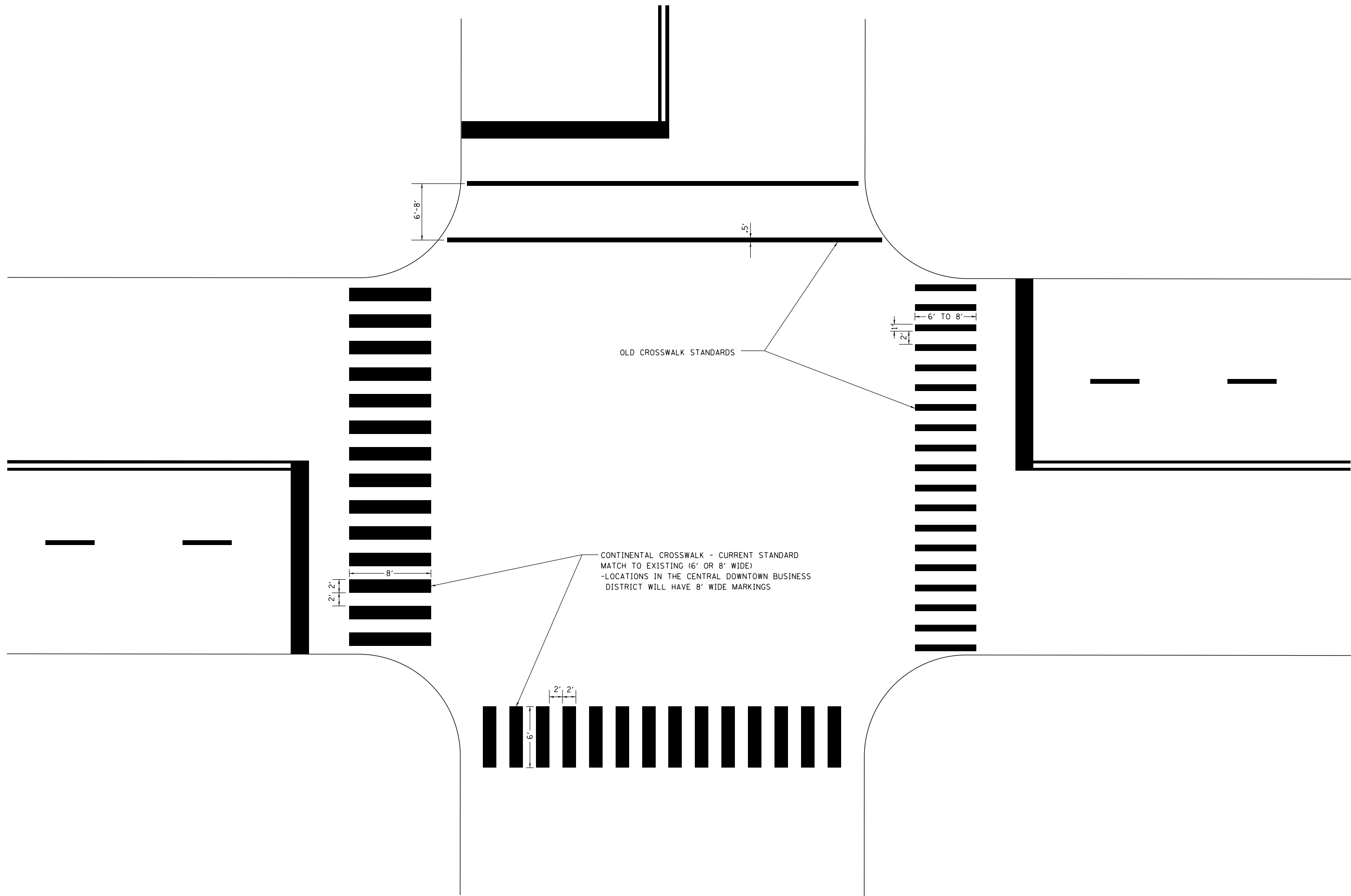
NOTE:
 ALL MARKINGS SHALL BE SOLID WHITE UNLESS OTHERWISE NOTED IN THE PLANS

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ca:\pwwork\pwwork\pyzzenowskirb\0345538\136613-sht.pln.dgn		DRAWN -	REVISED - K. ENG 01-12-12
	PLOT SCALE = 100.0000' / 1"	CHECKED -	REVISED -
	PLOT DATE = 12/18/2014	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CITY OF CHICAGO			
TYPICAL PAVEMENT MARKINGS			
SCALE: NONE	SHEET NO. 2 OF 3 SHEETS	STA.	TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1360	21(B&C)NRM-4-BR-1	COOK	29	27
TC-24			CONTRACT NO. 60W73	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



CONTINENTAL CROSSWALK - CURRENT STANDARD
 MATCH TO EXISTING (6' OR 8' WIDE)
 -LOCATIONS IN THE CENTRAL DOWNTOWN BUSINESS
 DISTRICT WILL HAVE 8' WIDE MARKINGS

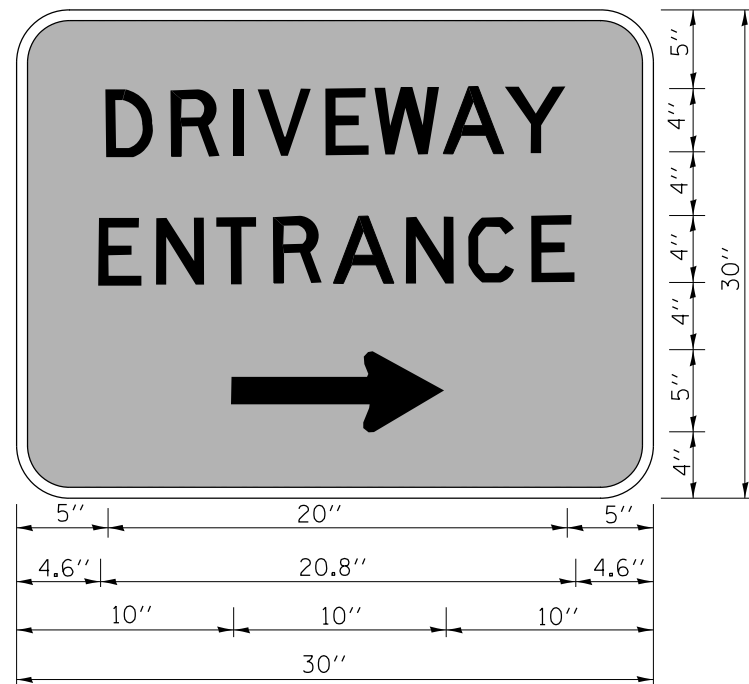
OLD CROSSWALK STANDARDS

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	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -
	PLOT DATE = 12/18/2014	DATE -	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

CITY OF CHICAGO			
TYPICAL PAVEMENT MARKINGS			
SCALE: NONE	SHEET NO. 3 OF 3 SHEETS	STA.	TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1360	21(B&C)NRM-4-BR-1	COOK	29	28
TC-24			CONTRACT NO. 60W73	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



3.0" RADIUS, 0.5" BORDER, WHITE ON GREEN; REFLECTORIZED
 "DRIVEWAY" D; "ENTRANCE" D; STANDARD ARROW CUSTOM 12.0" x 5.0"

NOTES:

1. HALF OF THE SIGNS WILL REQUIRE A LEFT HAND FACING ARROW.
2. TWO SIGNS SHALL BE USED AT EACH COMMERCIAL ENTRANCE
 PLACED BACK-TO-BACK; ONE WITH A RIGHT HAND ARROW (SHOWN)
 SHALL BE PLACED ON THE NEAR RIGHT SIDE THE DRIVEWAY
 AND ONE WITH A LEFT HAND ARROW SHALL BE PLACED ON THE
 FAR LEFT SIDE OF THE DRIVEWAY.
3. SIGNS TO BE PAID FOR AS ITEM "TEMPORARY INFORMATION SIGNING".

FILE NAME =	USER NAME = pyrzenowski	DESIGNED -	REVISED - C. JUCIUS 02-15-07
et:\pw\work\p\dot\pyrzenowski\0345538	ND136613-sht-plan.dgn	DRAWN -	REVISED -
	PLOT SCALE = 100.0000' / 1in.	CHECKED -	REVISED -
	PLOT DATE = 12/18/2014	DATE -	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

DRIVEWAY ENTRANCE SIGNING

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1360	21(B&C)NRM-4-BR-1	COOK	29	29
TC-26			CONTRACT NO. 60W73	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				