

F.A.P. RTE. 559/341	SECTION 2008-007 B	COUNTY COOK	TOTAL SHEETS 39	SHEET NO. 1
FED. ROAD DIST. NO. 1	ILLINOIS	CONTRACT NO. 60D55		

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS**

**PROPOSED
HIGHWAY PLANS**

FOR INDEX OF SHEETS, SEE SHEET NO. 2

- 1) **DESIGN DESIGNATION IL. RTE. 58 - ARTERIAL:**
DESIGN SPEED : 40 M.P.H.
2007 ADT = 37,000
- 2) **DESIGN DESIGNATION IL. RTE 72 - ARTERIAL:**
DESIGN SPEED : 50 M.P.H.
2007 ADT = 37,600

1) F.A.P. RTE. 559 / IL. RTE. 58 & 2) F.A.P. RTE. 341 / IL. RTE. 72
SECTION: 2008-007 B
1) OVER SALT CREEK (S.N. 016-0349)
2) OVER SALT CREEK / 1 MILE EAST OF I-290 (S.N. 016-0504)
BRIDGE PPC BEAMS AND BRIDGE DECK REPLACEMENT
COOK COUNTY
C-91-043-08

MUNICIPALITIES INVOLVED:
1) ROLLING MEADOWS
2) ELK GROVE VILLAGE



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

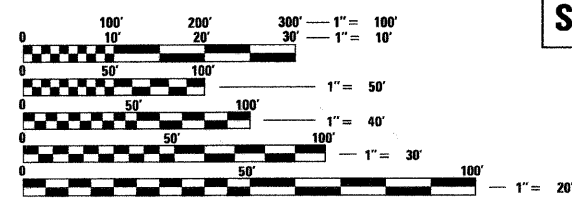
SUBMITTED MAY 5, 2008

Diana M. O'Keefe
DEPUTY DIRECTOR OF HIGHWAYS, REGION ONE ENGINEER

June 27, 2008
Eric E. Harn
ENGINEER OF DESIGN AND ENVIRONMENT

June 27, 2008
Christine M. Reed
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

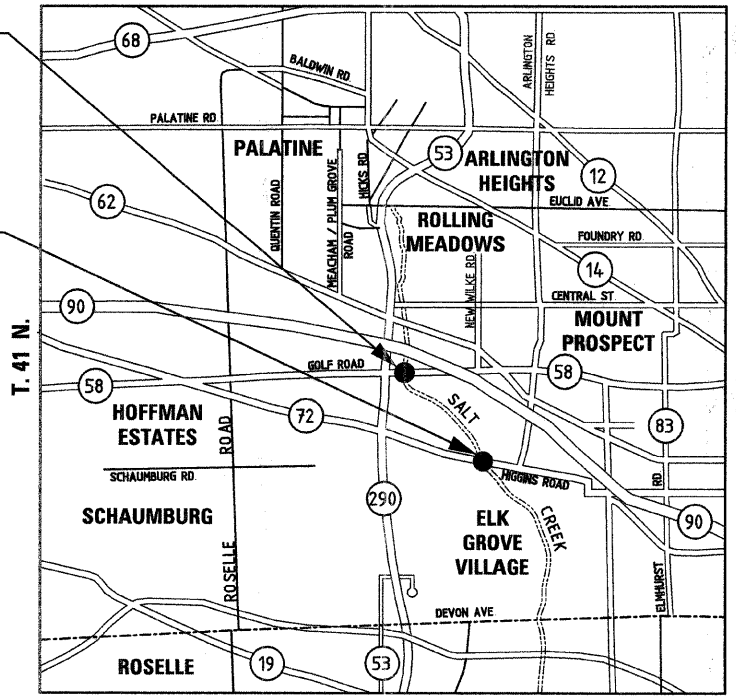
DISTRICT ONE - DESIGN PROJECT MANAGER: ISAAC KWARTENG (847) 705-4230



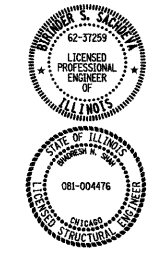
FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-892-0123

- 1) LOCATION:
IL. RTE. 58 (GOLF ROAD)
OVER SALT CREEK
S.N. 016-0349
- 2) LOCATION:
IL. RTE. 72 (HIGGINS ROAD)
OVER SALT CREEK
S.N. 016-0504



1) GROSS & NET LENGTH OF IMPROVEMENT = 770.00 FEET = 0.146 MILES
2) GROSS & NET LENGTH OF IMPROVEMENT = 880.00 FEET = 0.167 MILES



Birinder S. Sachdeva 4-30-08
BIRINDER S. SACHDEVA, P.E. DATE
EXPIRES: 11-30-2009

Bhadresh N. Shah 04/30/2008
BHADRESH N. SHAH, S.E., P.E. DATE
EXPIRES: 11-30-2008

CR & A
CHRISTIAN-ROGE & ASSOCIATES, INC.
ENGINEERS / PLANNERS / SURVEYORS
211 W. WACKER DRIVE CHICAGO, IL 60606
TELEPHONE: 312-372-2023

**PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS**

CONTRACT NO. 60D55

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LIST OF STATE STANDARDS

STANDARD NO.	DESCRIPTION
000001-05	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
515001-02	NAME PLATE FOR BRIDGES
606001-03	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
606301-03	PC CONCRETE ISLANDS AND MEDIANS
630001-07	STEEL PLATE BEAM GUARDRAIL
631006-05	TRAFFIC BARRIER TERMINAL, TYPE 1B
631031-04	TRAFFIC BARRIER TERMINAL, TYPE 6
631046-03	TRAFFIC BARRIER TERMINAL, TYPE 10
635006-02	REFLECTOR AND TERMINAL MARKER PLACEMENT
635011-01	REFLECTOR MARKER AND MOUNTING DETAILS
701601-05	URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTRAVERSABLE MEDIAN
701606-05	URBAN LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN
701901	TRAFFIC CONTROL DEVICES
704001-04	TEMPORARY CONCRETE BARRIER

SCOPE OF WORK

THE SCOPE OF WORK FOR THIS PROJECT CONSIST OF:

- REMOVE AND REPLACE MEDIAN AS NEEDED FOR CONSTRUCTION STAGING RUN-AROUND.
- SUPERSTRUCTURE REPLACEMENT INCLUDING THE REMOVAL AND THE REPLACEMENT OF THE PPC DECK BEAMS.
- CONSTRUCT NEW PARAPETS AND CONCRETE WEARING SURFACE.
- GUARDRAIL IMPROVEMENTS AT THE BRIDGE PARAPETS.

GENERAL NOTES

1. FORTY-EIGHT HOURS BEFORE STARTING EXCAVATION, THE CONTRACTOR WILL CALL J.U.L.I.E. AT 1-800-892-0123 OR 811 TO HAVE THE LOCATION OF EXISTING UTILITIES STAKED.
2. THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
3. THE CONTRACTOR SHALL PROTECT EXISTING AND NEW UTILITIES AND SHALL BRACE AND SUPPORT THE UTILITIES PROPERLY IN ORDER TO PREVENT SETTLEMENT, DISPLACEMENT, OR DAMAGE TO THE UTILITIES. THE PROTECTION OF THE UTILITIES AS SPECIFIED HEREIN WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED AS INCLUDED IN THE CONTRACT.
4. LOCATIONS OF EXISTING UTILITIES SHOWN ON THE PLANS ARE FROM BEST AVAILABLE RECORD INFORMATION AND MUST BE FIELD VERIFIED BY THE CONTRACTOR.
5. SAW CUTTING PRIOR TO THE REMOVAL OF ANY ITEMS NOTED ON THE PLANS OR AS DIRECTED BY THE ENGINEER SHALL BE INCLUDED IN THE COST OF THE ITEMS BEING REMOVED.
6. DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.
7. THE CONTRACTOR SHALL USE CARE IN REMOVING OR EXCAVATING NEAR ALL EXISTING ITEMS WHICH WILL REMAIN. ANY DAMAGE DONE TO EXISTING ITEMS BY THE CONTRACTOR SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
8. POLLUTION CONTROL: THE CONTRACTOR SHALL BE REQUIRED TO COMPLY WITH STATE REGULATIONS REGARDING AIR, WATER AND NOISE POLLUTION.
9. WHEN ARTIFICIAL LIGHTING IS UTILIZED IN NIGHT OPERATIONS, THE CONTRACTOR SHALL EXERCISE THE UTMOST PRECAUTIONS IN PREVENTING ADVERSE VISIBILITY TO THE MOTORING PUBLIC AS WELL AS ADJOINING RESIDENTIAL AREAS.
10. 10-FOOT TRANSITIONS SHALL BE USED TO MATCH PROPOSED ITEMS OF WORK TO EXISTING ITEMS IN THE FIELD, UNLESS OTHERWISE SHOWN. THE TRANSITIONS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR THE PROPOSED ITEM OF WORK SPECIFIED.
11. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS, AS REQUIRED, PRIOR TO COMMENCING WITH CONSTRUCTION.
12. WHERE SECTION OR SUB-SECTION MARKERS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL PROPERTY MARKERS AND MONUMENTS UNTIL THE OWNER, AN AUTHORIZED AGENT OR LAND SURVEYOR HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION.
13. THE CONTRACTOR SHALL TAKE ALL NECESSARY MEASURES TO ASSURE THAT NO DEBRIS FALLS IN THE CREEK. THE COST OF THIS WORK SHALL BE INCLUDED AS PART OF REMOVAL OF EXISTING STRUCTURE.
14. THE CONTRACTOR SHALL CONTACT THE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 A MINIMUM OF 72 HOURS PRIOR TO THE PLACEMENT OF ANY TEMPORARY TRAFFIC CONTROL DEVICES.
15. AT LEAST TWO (2) WEEKS PRIOR TO THE PLACEMENT OF PERMANENT PAVEMENT MARKINGS, THE CONTRACTOR SHALL CONTACT THE AREA TRAFFIC FIELD ENGINEER, WALTER CZARNY (773) 685-8386.
16. THE CONTRACTOR SHALL BE RESTRICTED TO WORKING ON IL. RTE. 58 FIRST AND IL. RTE. 72 SECOND. NO LANE CLOSURES WILL BE ALLOWED ON IL. RTE. 72 UNTIL ALL LANES ON IL. RTE. 58 ARE OPEN TO TRAFFIC.
17. THE CONTRACTOR SHALL COORDINATE THE MAINTENANCE OF TRAFFIC ON IL. RTE. 58 WITH THE NEW WILKE ROAD IMPROVEMENT. THE SUGGESTED TRAFFIC CONTROL AND STAGING SHALL BE MODIFIED AS NEEDED TO ACCOMMODATE THE NEW WILKE ROAD IMPROVEMENT. THE COST OF THIS WORK SHALL BE INCLUDED IN THE CONTRACT PRICE FOR TRAFFIC CONTROL AND PROTECTION (SPECIAL).

NOTE: BOXED ITEMS ARE INCIDENTAL.

FILE NAME = 68055 index.dgn
PLOT DATE = 6/25/2008



DESIGNED - S.J.P.	REVISED -
DRAWN - A.C.S.	REVISED -
CHECKED - E.J.M.	REVISED -
DATE - APRIL 21, 2008	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**INDEX OF SHEETS, LIST OF STATE STANDARDS, SCOPE OF WORK
AND GENERAL NOTES IL. RTE. 58 & IL. RTE. 72**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
559/541	2008-007 B	COOK	39	2
CONTRACT NO. 60D55				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

SUMMARY OF QUANTITIES			LABAN		
CODE NO	ITEM	UNIT	100% STATE TOTAL QUANTITIES	CONSTRUCTION TYPE CODE	
				IL. RTE. 58 BRIDGE SFTY-2A	IL. RTE. 72 BRIDGE SFTY-2A
40600200	BITUMINOUS MATERIALS (PRIME COAT)	TON	0.4	0.1	0.3
40603340	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70	TON	74	27	47
44000100	PAVEMENT REMOVAL	SQ YD	2,365	1,048	1,317
44000155	HOT-MIX ASPHALT SURFACE REMOVAL, 1 1/2"	SQ YD	873	321	552
44001700	COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	2,946	1,446	1,500
44002020	CONCRETE MEDIAN SURFACE REMOVAL	SQ FT	18,706	9,254	9,452
50101500	REMOVAL OF EXISTING SUPERSTRUCTURES	EACH	2	1	1
50300100	FLOOR DRAINS	EACH	22	18	4
50300255	CONCRETE SUPERSTRUCTURES	CU YD	90.8	56.6	34.2
50300260	BRIDGE DECK GROOVING	SQ YD	724	466	258
50300300	PROTECTIVE COAT	SQ YD	1,152	766	386
50400205	PRECAST PRESTRESSED CONCRETE DECK BEAMS (11" DEPTH)	SQ FT	3,236		3,236
50400605	PRECAST PRESTRESSED CONCRETE DECK BEAMS (33" DEPTH)	SQ FT	6,300	6,300	
50500405	FURNISHING AND ERECTING STRUCTURAL STEEL	POUND	3,500	1,500	2,000
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	24,480	17,540	6,940
50800515	BAR SPLICERS	EACH	115	71	44
51500100	NAME PLATES	EACH	2	1	1
50901720	BICYCLE RAILING	FOOT	70	70	
50901750	PARAPET RAILING	FOOT	70	70	
60255500	MANHOLES TO BE ADJUSTED	EACH	4	3	1
60618300	CONCRETE MEDIAN SURFACE, 4 INCH	SQ FT	18,706	9,254	9,452
* 63000000	STEEL PLATE BEAM GUARD RAIL, TYPE A	FOOT	37.5	37.5	
* 63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	3	1	2
* 63100105	TRAFFIC BARRIER TERMINAL, TYPE 10	EACH	1	1	
* 63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	1		1
63200310	GUARDRAIL REMOVAL	FOOT	180	78	102
63300575	REMOVE AND RE-ERECT RAIL ELEMENT OF EXISTING GUARD RAIL	FOOT	58	58	

SUMMARY OF QUANTITIES			LABAN		
CODE NO	ITEM	UNIT	100% STATE TOTAL QUANTITIES	CONSTRUCTION TYPE CODE	
				IL. RTE. 58 BRIDGE SFTY-2A	IL. RTE. 72 BRIDGE SFTY-2A
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	3	3
67100100	MOBILIZATION	L SUM	1	0.5	0.5
70101800	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1	0.5	0.5
70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	60	30	30
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	4,395	2,054	2,341
70400100	TEMPORARY CONCRETE BARRIER	FOOT	2,387.5	1,275	1,112.5
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	2,387.5	1,275	1,112.5
* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	3,675	1,263	2,412
* 78008210	POLYUREA PAVEMENT MARKING TYPE I - LINE 4"	FOOT	1,083	907	176
* 78100105	RAISED REFLECTIVE PAVEMENT MARKER (BRIDGE)	EACH	8	4	4
* 78100300	REPLACEMENT REFLECTOR	EACH	100	50	50
78300100	PAVEMENT MARKING REMOVAL	SQ FT	1,800	790	1,010
X0321743	SILICONE JOINT SEALER, 1"	FOOT	102	102	
X0322467	TEMPORARY INFORMATION SIGNING FOR LANE CLOSURE	SQ FT	120.8	69.4	51.4
X0323076	SILICONE JOINT SEALER, 1 3/4"	FOOT	176	102	74
X0325303	STRUCTURAL REPAIR OF CONCRETE (DEPTH GREATER THAN 5 INCHES)	SQ FT	14	5	9
X0325305	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	164	25	139
X0325775	WET REFLECTIVE TEMPORARY TAPE, TYPE III, 4 INCH	FOOT	13,186	6,162	7,024
X0712400	TEMPORARY PAVEMENT	SQ YD	2,365	1,048	1,317
X5030304	CONCRETE WEARING SURFACE, 4"	SQ YD	572	572	
X5030305	CONCRETE WEARING SURFACE, 5"	SQ YD	292		292
Z0001900	ASBESTOS BEARING PAD REMOVAL	EACH	46	46	
Z0013798	CONSTRUCTION LAYOUT	L SUM	1	0.5	0.5
Z0030240	IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 2	EACH	4	2	2
Z0030340	IMPACT ATTENUATORS RELOCATE (NON-REDIRECTIVE), TEST LEVEL 2	EACH	4	2	2
Z0073700	TEMPORARY WALL BRACING SYSTEM	L SUM	1		1

* SPECIALTY ITEM

FILE NAME = 60D55 summary.dgn
PLOT DATE = 6/25/2008

CHRISTIAN-ROGE & ASSOCIATES, INC.
ENGINEERS-PLANNERS-SURVEYORS
211 WEST WACKER DRIVE
CHICAGO, ILLINOIS 60606
PHONE: (312)372-2023 FAX: (312)372-5274

DESIGNED -	S.J.P.	REVISED -	
DRAWN -	A.C.S.	REVISED -	
CHECKED -	E.J.M.	REVISED -	
DATE -	APRIL 21, 2008	REVISED -	

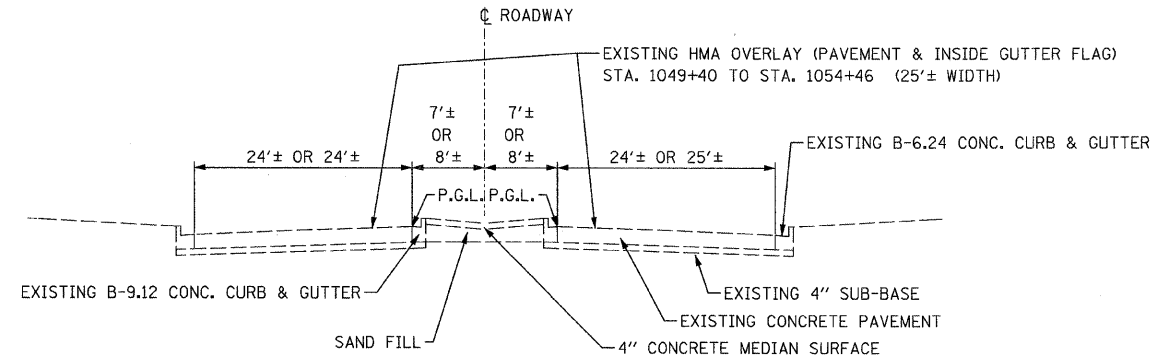
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SUMMARY OF QUANTITIES
IL. RTE. 58 & IL. RTE. 72**

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

F.A.P. RTE. 58/541	SECTION 2008-007 B	COUNTY COOK	TOTAL SHEETS 39	SHEET NO. 3
FED. ROAD DIST. NO. 1 (ILLINOIS) FED. AID PROJECT			CONTRACT NO. 60D55	

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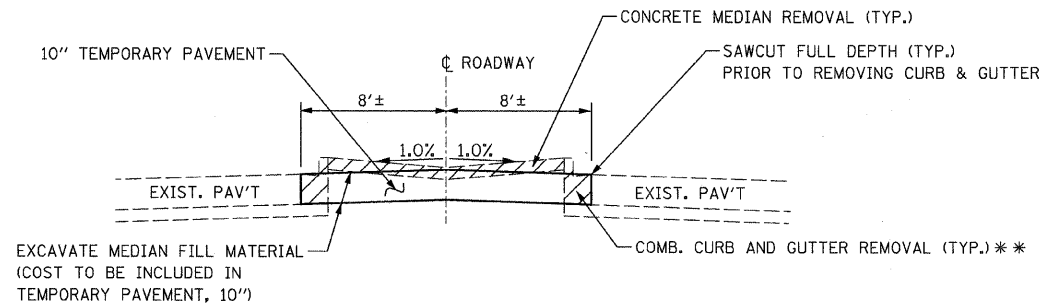


IL. RTE. 58 EXISTING TYPICAL SECTION

STA. 1049+40 TO STA. 1052+82
STA. 1053+53 TO STA. 1057+10

IL. RTE. 72 EXISTING TYPICAL SECTION

STA. 223+55 TO STA. 227+71
STA. 228+65 TO STA. 232+65

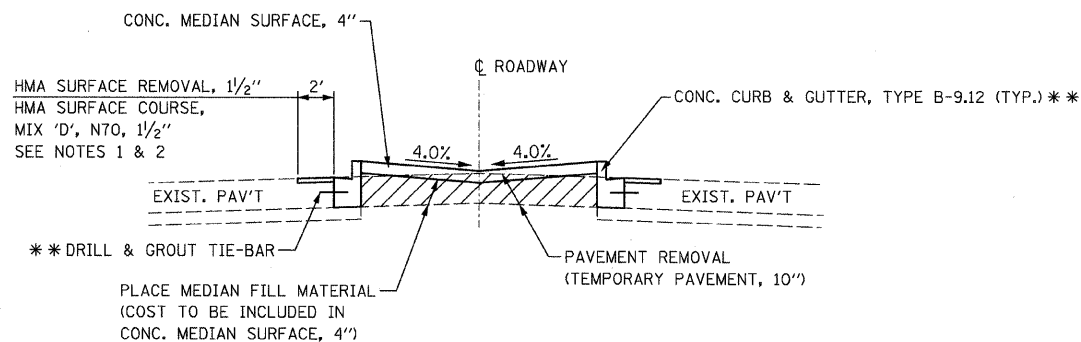


IL. RTE. 58 TEMPORARY PAVEMENT TYPICAL SECTION

STA. 1049+40 TO STA. 1052+30
STA. 1054+10 TO STA. 1057+10

IL. RTE. 72 TEMPORARY PAVEMENT TYPICAL SECTION

STA. 223+55 TO STA. 227+35
STA. 228+65 TO STA. 232+35



IL. RTE. 58 MEDIAN RESTORATION TYPICAL SECTION

STA. 1049+40 TO STA. 1052+82
STA. 1053+53 TO STA. 1057+10

IL. RTE. 72 MEDIAN RESTORATION TYPICAL SECTION

STA. 223+55 TO STA. 227+35
STA. 228+65 TO STA. 232+35

HOT-MIX ASPHALT MIXTURE REQUIREMENTS		
MIXTURE TYPE	AC TYPE	AIR VOIDS
PAVEMENT OVERLAY		
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70 (IL 9.5mm); 1.5"	PG 64-22	4% @ 70 GYR.
TEMPORARY PAVEMENT		
HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50; 10"	PG 64-22*	4% @ 50 GYR.

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

* WHEN RAP EXCEEDS 20%, THE NEW ASPHALT BINDER IN THE MIX SHALL BE PG 58-22.

NOTES

- EXISTING PAVEMENT TO BE OVERLAID WILL BE CLEANED AND PRIMED PER ARTICLE 407.06 OF THE 2007 STANDARD SPECIFICATIONS.
- USE THESE ITEMS FOR IL. RTE. 58 E.B. AND W.B. LANES IN HMA OVERLAY AREAS.

** THE COST OF CURB & GUTTER REMOVAL, COMB. CONC. CURB & GUTTER AND DRILL & GROUT TIE-BARS SHALL BE INCLUDED IN THE CONTRACT PRICE FOR "COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT".

FILE NAME = 60D55 typ.dgn
PLOT DATE = 4/30/2008



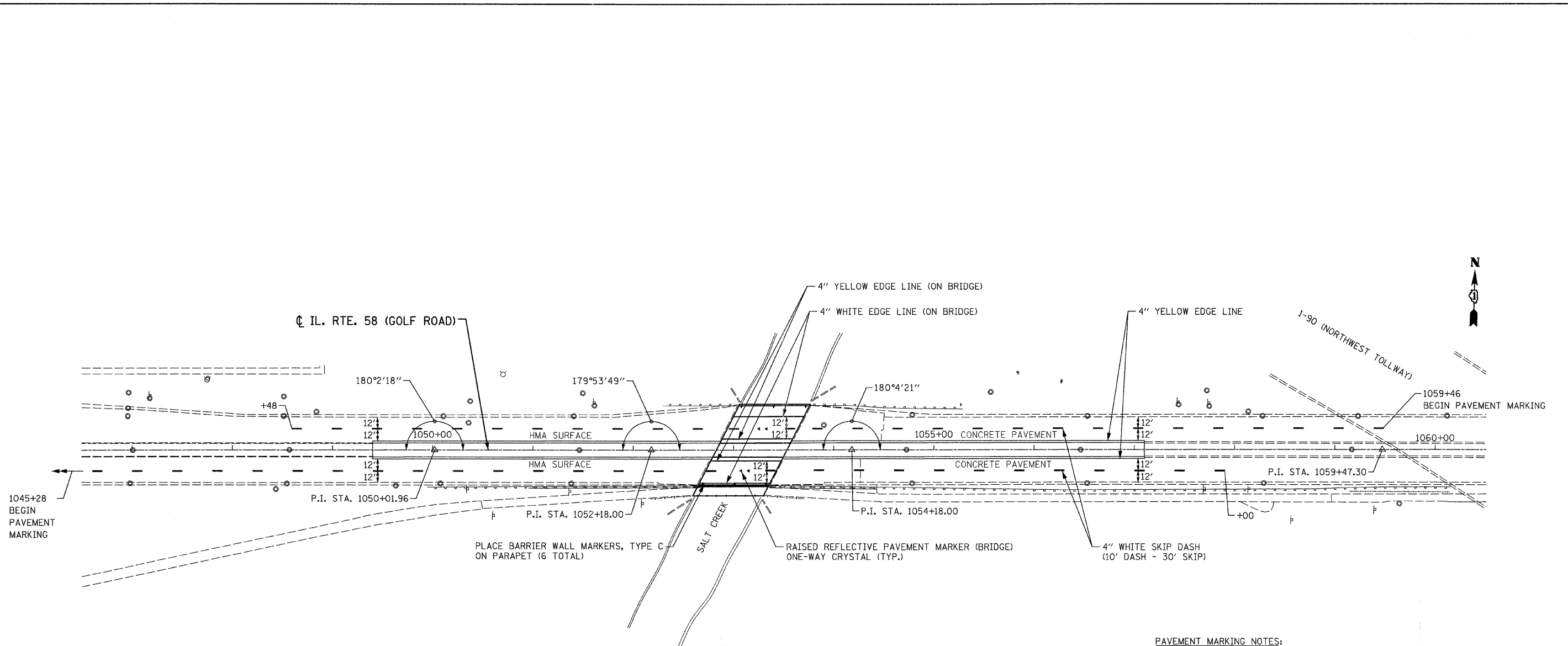
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CHECKED - E.J.M.	REVISED -
DATE - APRIL 21, 2008	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

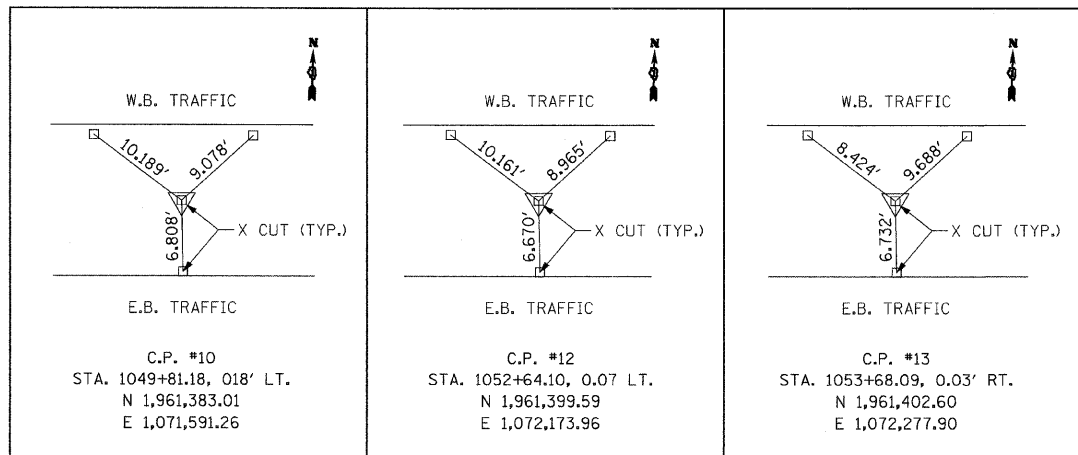
**TYPICAL SECTIONS & DETAILS
IL. RTE. 58 & IL. RTE. 72**

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

F.A.P. RTE. 559/341	SECTION 2008-007 B	COUNTY COOK	TOTAL SHEETS 39	SHEET NO. 4
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
CONTRACT NO. 60D55				



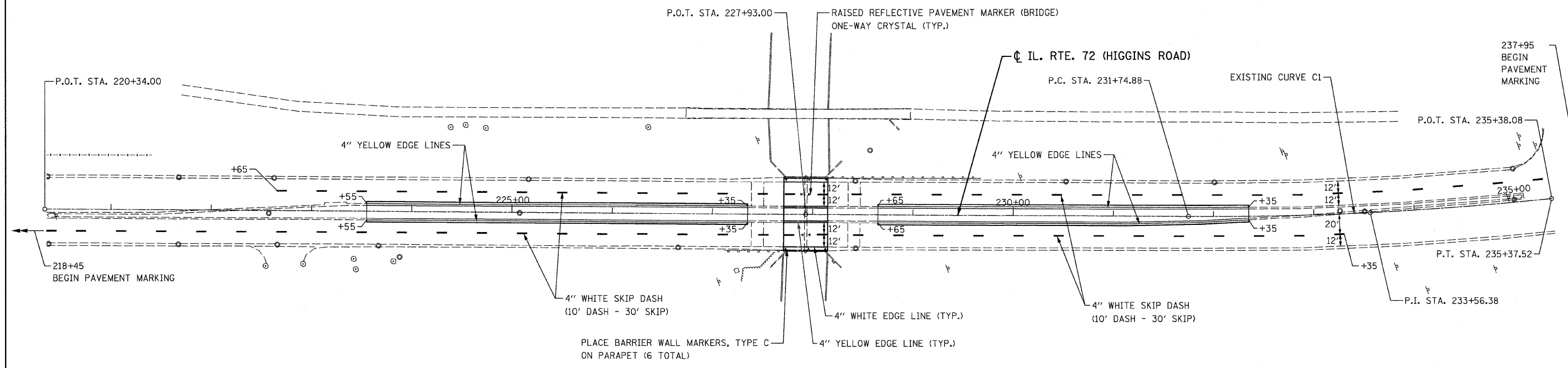
- PAVEMENT MARKING NOTES:**
1. ALL PAVEMENT MARKINGS ON BRIDGE DECK SHALL BE POLYUREA, TYPE I.
 2. ALL PAVEMENT MARKINGS ON CONCRETE PAVEMENT SHALL BE POLYUREA, TYPE I.
 3. ALL PAVEMENT MARKINGS ON HOT-MIX ASPHALT SHALL BE THERMOPLASTIC.



CENTERLINE ALIGNMENT			
	NORTHING	EASTING	STATION
P. I.	1,961,379.37	1,071,471.25	1045+61.10
P. I.	1,961,392.06	1,071,911.92	1050+01.96
P. I.	1,961,398.14	1,072,127.88	1052+18.00
P. I.	1,961,404.12	1,072,327.79	1054+18.00
P. I.	1,961,419.29	1,072,856.87	1059+47.30



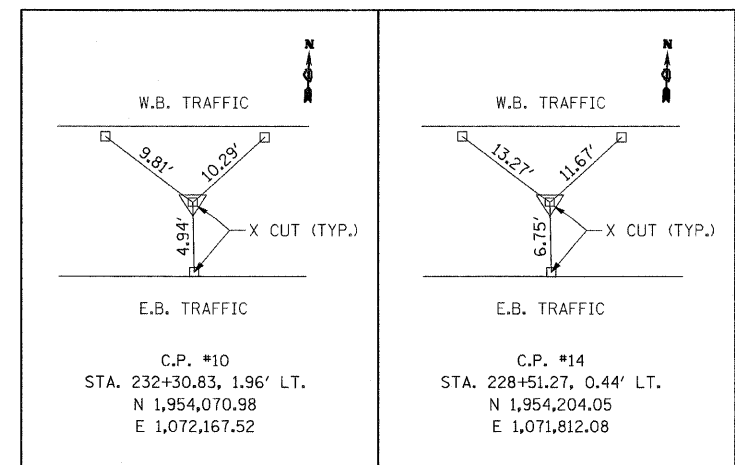
EXIST. CURVE C1
 PI STA. = 233+56.38
 $\Delta = 6^\circ 17' 46''$ (LT)
 $D = 1^\circ 44' 10''$
 $R = 3,300.00'$
 $T = 181.50'$
 $L = 362.64'$
 $E = 4.99'$
 $\theta = \text{-----}$
 $T.R. = \text{-----}$
 $S.E. \text{ RUN} = \text{-----}$
 $P.C. \text{ STA.} = 231+74.88$
 $P.T. \text{ STA.} = 235+37.52$



PLACE BARRIER WALL MARKERS, TYPE C ON PARAPET (6 TOTAL)

PAVEMENT MARKING NOTES:

1. ALL PAVEMENT MARKINGS ON BRIDGE DECK SHALL BE POLYUREA.
2. ALL PAVEMENT MARKINGS ON HOT-MIX ASPHALT SHALL BE THERMOPLASTIC.
3. SEE SHEET NO. 24 & 25 FOR DETAILS AND SPACING.



CENTERLINE ALIGNMENT			
	STATION	N	E
P.O.T.	220+34.00	1,954,494.22	1,071,048.06
P.O.T.	227+93.00	1,954,224.36	1,071,757.46
P.C.	231+74.88	1,954,088.58	1,072,114.39
P.I.	233+56.38	1,954,024.05	1,072,284.03
P.T.	235+37.52	1,953,978.51	1,072,459.72

PAVEMENT MARKING REMOVAL:
 4" YELLOW, LT. & RT.
 STA. 223+55 TO STA. 227+35
 STA. 228+65 TO STA. 232+35

FILE NAME = 60055 align pm 72.dgn
 PLOT DATE = 4/30/2008

CHRISTIAN-ROGE & ASSOCIATES, INC.
 ENGINEERS-PLANNERS-SURVEYORS
 211 WEST WACKER DRIVE
 CHICAGO, ILLINOIS 60606
 PHONE: (312)372-2023 FAX: (312)372-5274

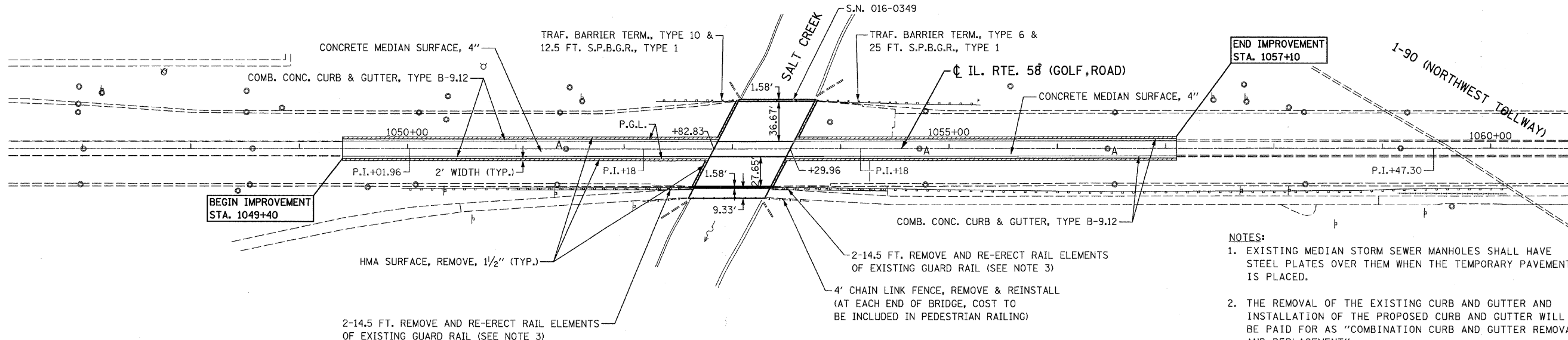
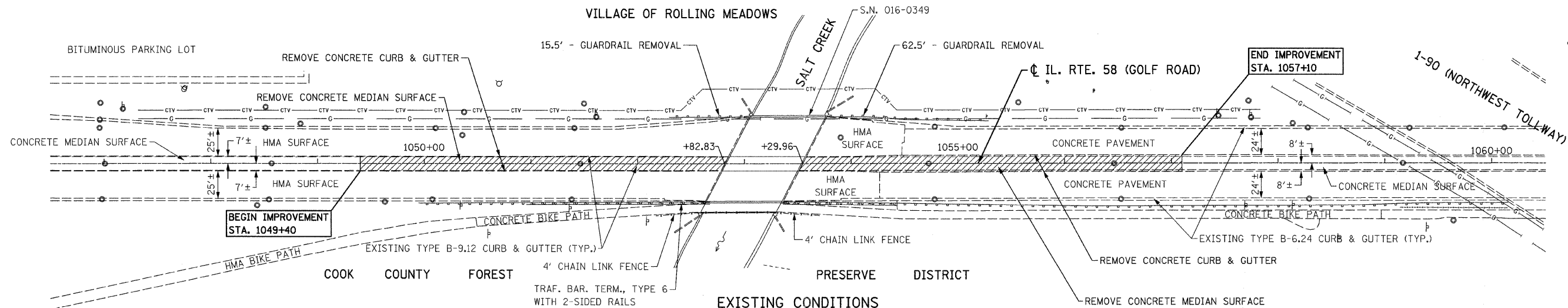
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DATE - APRIL 21, 2008	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**ALIGNMENT, TIES AND PAVEMENT MARKINGS
 IL. RTE. 72**

SCALE: 1" = 50' SHEET NO. 2 OF 2 SHEETS STA. 221+00 TO STA. 235+00

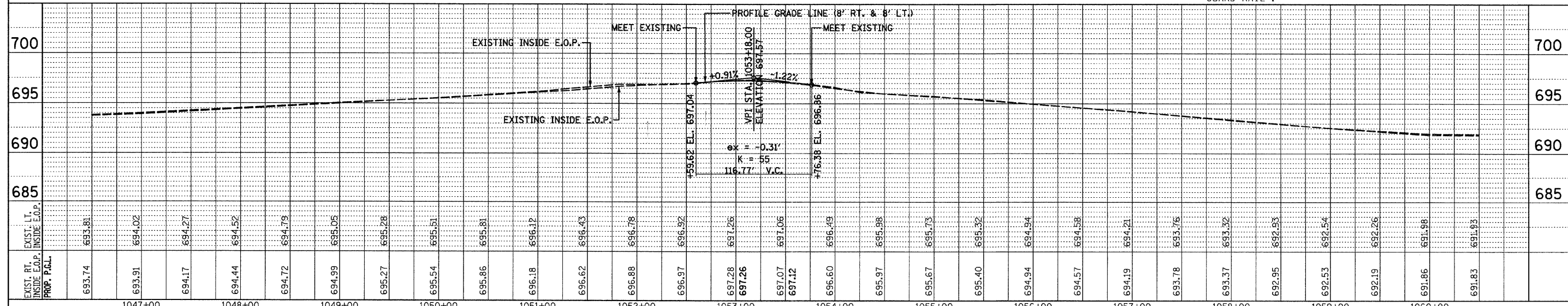
F.A.P. RTE. 559341	SECTION 2008-007 B	COUNTY COOK	TOTAL SHEETS 39	SHEET NO. 6
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
CONTRACT NO. 60D55				



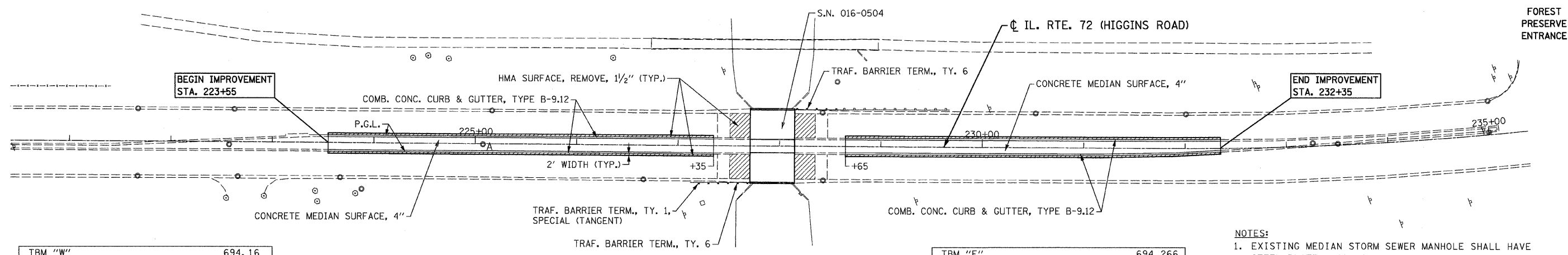
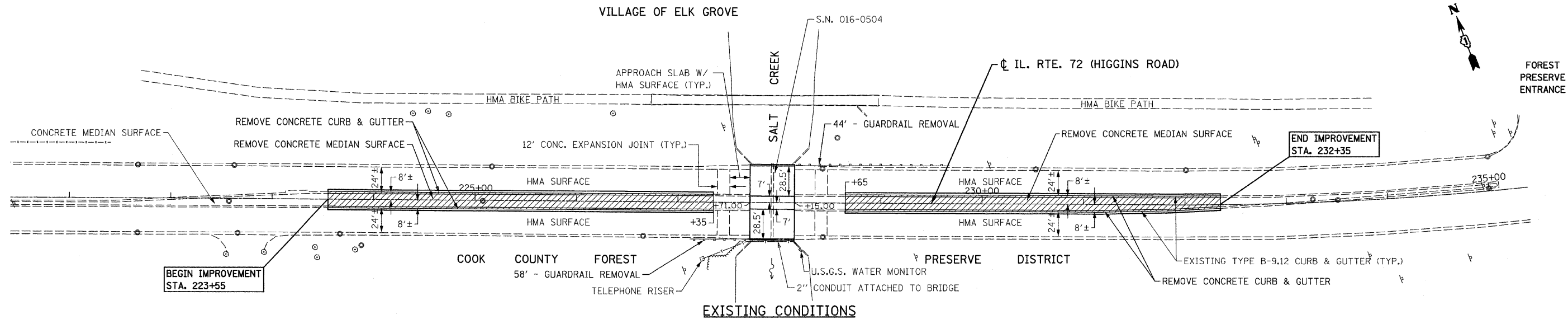
TBM "W" 696.726
BOX CUT ON TOP OF CURB
STA. 1052+63.99, 41.3' LT.

TBM "E" 696.70
BOX CUT ON CONC. BIKE PATH
STA. 1053+44.39, 44.93' RT.

- NOTES:**
- EXISTING MEDIAN STORM SEWER MANHOLES SHALL HAVE STEEL PLATES OVER THEM WHEN THE TEMPORARY PAVEMENT IS PLACED.
 - THE REMOVAL OF THE EXISTING CURB AND GUTTER AND INSTALLATION OF THE PROPOSED CURB AND GUTTER WILL BE PAID FOR AS "COMBINATION CURB AND GUTTER REMOVAL AND REPLACEMENT".
 - THE RE-ATTACHMENT OF THE EXISTING END SHOES TO THE PROPOSED PARAPET WALL SHALL BE INCLUDED IN THE COST OF "REMOVE AND RE-ERECT RAIL ELEMENTS OF EXISTING GUARD RAIL".



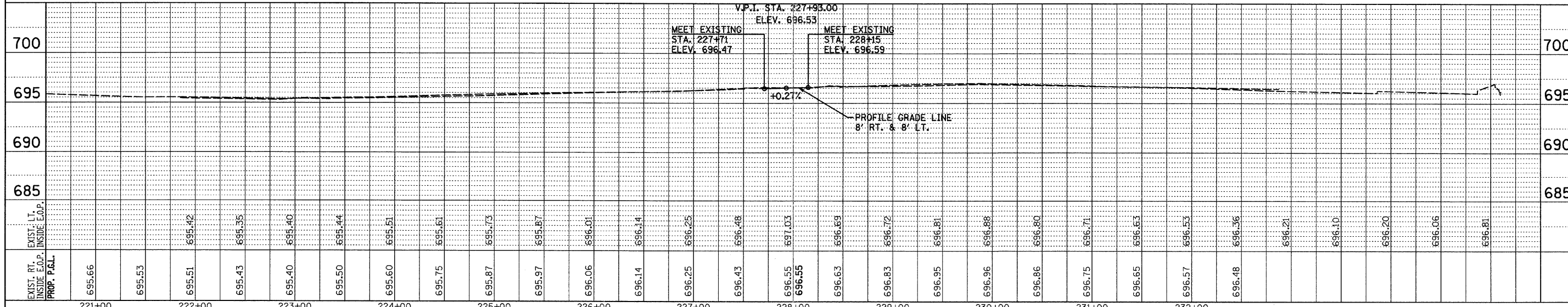
FILE NAME = 60055 pp 58.dgn PLOT DATE = 4/30/2008		DESIGNED - S.J.P.	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING CONDITIONS AND PROPOSED PLAN AND PROFILE IL. RTE. 58	F.A.P. RTE. 559341	SECTION 2008-007 B	COUNTY COOK	TOTAL SHEETS 39	SHEET NO. 7
		DRAWN - A.C.S.	REVISED -			SCALE: 1" = 50'	SHEET NO. 1 OF 2 SHEETS	STA. 1046+00 TO STA. 1060+00	FED. ROAD DIST. NO. 1	ILLINOIS FED. AID PROJECT
		CHECKED - E.J.M.	REVISED -							
		DATE - APRIL 21, 2008	REVISED -							



TBM "W" 694.16
 BOX CUT 2' ± E. OF THE W. EDGE OF THE W. APPROACH SLAB OF A BICYCLE BRIDGE THAT RUNS NORTH OF AND PARALLEL TO THE HIGGINS RD. BRIDGE OVER SALT CREEK STA. 226+79.65, 94.81' LT.

TBM "E" 694.266
 BOX CUT 2' ± W. OF THE E. EDGE OF THE E. APPROACH SLAB OF A BICYCLE BRIDGE THAT RUNS NORTH OF AND PARALLEL TO THE HIGGINS RD. BRIDGE OVER SALT CREEK STA. 228+95.40, 95.86' LT.

- NOTES:**
- EXISTING MEDIAN STORM SEWER MANHOLE SHALL HAVE STEEL PLATE OVER IT WHEN THE TEMPORARY PAVEMENT IS PLACED.
 - THE REMOVAL OF THE EXISTING CURB AND GUTTER AND INSTALLATION OF THE PROPOSED CURB AND GUTTER WILL BE PAID FOR AS "COMBINATION CURB AND GUTTER, REMOVAL AND REPLACEMENT".



FILE NAME = 60055 pp 72.dgn PLOT DATE = 4/30/2008		DESIGNED - S.J.P.	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING CONDITIONS AND PROPOSED PLAN AND PROFILE IL. RTE. 72			F.A.P. RTE. 559341	SECTION 2008-007 B	COUNTY COOK	TOTAL SHEETS 39	SHEET NO. 8
		DRAWN - A.C.S.	REVISED -					CONTRACT NO. 60D55				
	CHECKED - E.J.M.	REVISED -										
	DATE - APRIL 21, 2008	REVISED -										

SUGGESTED STAGING AND MAINTENANCE OF TRAFFIC - IL. RTE 58

CONSTRUCTION STAGING - IL. RTE. 58

PRE-STAGE

- REMOVE CURB AND GUTTER AND MEDIAN AND PLACE TEMPORARY PAVEMENT.

STAGE I

- BEGIN AND COMPLETE THE WESTBOUND HALF OF THE BRIDGE AND INSTALL GUARD RAIL TERMINALS.

STAGE II

- BEGIN AND COMPLETE THE EASTBOUND HALF THE BRIDGE AND RE-INSTALL GUARD RAIL ELEMENTS.
- REMOVE THE TEMPORARY PAVEMENT AND REPLACE THE CURB AND GUTTER AND CONC. MED. SURFACE.
- PLACE FINAL PAVEMENT MARKING AND RPM'S.

MAINTENANCE OF TRAFFIC - IL. RTE. 58

PRE-STAGE

- PLACE ADVANCED SIGNING AS SHOWN ON STAGE I SUGGESTED STAGING PLAN.
- USE DAILY LANE CLOSURES TO PERFORM PRE-STAGE WORK. SEE IDOT STANDARD:
701601 URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NON-TRAVERSABLE MEDIAN

STAGE I

- CLOSE INSIDE LANES, REMOVE CONFLICTING PAVEMENT MARKINGS,
PLACE TEMPORARY PAVEMENT MARKINGS AND TEMPORARY CONCRETE BARRIER.
- SHIFT W.B. TRAFFIC TO LANE CONFIGURATION FOR STAGE I.

STAGE II

- SHIFT W.B. LANE TO OUTSIDE LANE OF W.B. BRIDGE DECK.
PLACE TEMPORARY PAVEMENT MARKINGS AND TEMPORARY CONCRETE BARRIER FOR STAGE II CONSTRUCTION.
- SHIFT E.B. TRAFFIC TO LANE CONFIGURATION FOR STAGE II.
- PLACE BARRICADES AND TEMPORARY FENCE ACROSS BIKE PATH.
- USE DAILY LANE CLOSURES TO DURING THE RECONSTRUCTION OF
THE MEDIAN AND OTHER END OF CONTRACT WORK. SEE IDOT STANDARD:
701601 URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTRAVERSABLE MEDIAN

TRAFFIC CONTROL GENERAL NOTES

1. THE CONTRACTOR SHALL NOT MOUNT SIGNS ON EXISTING SIGNS.
2. THE CONTRACTOR SHALL MAINTAIN SATISFACTORY INGRESS AND EGRESS TO ADJACENT PROPERTIES THROUGHOUT THE CONSTRUCTION.
3. INSTALL TEMPORARY SIGN PANEL ASSEMBLY AS SHOWN IN PLANS AND AS DIRECTED BY THE ENGINEER. TO BE PAID FOR BY ITEM "TEMPORARY INFORMATION SIGNING FOR LANE CLOSURE".
4. ALL TEMPORARY PAVEMENT MARKING SHALL BE WET REFLECTIVE TEMPORARY TAPE, TYPE III, 4".
5. THE FIRST TWO SIGNS ENTERING THE WORK ZONE SHALL HAVE MONO-DIRECTIONAL FLASHING BEACONS.
6. ALL RAISED REFLECTIVE PAVEMENT MARKER REFLECTORS CONFLICTING WITH THE LANE TAPERS SHALL BE REMOVED. AT THE END OF THE PROJECT, THESE WILL BE REPLACED. THIS WORK WILL BE PAID FOR AS "REPLACEMENT REFLECTOR".
7. BIKE PATH CLOSURE: WHEN THE BRIDGE CARRYING THE BIKE PATH OVER SALT CREEK IS CLOSED TO BIKE PATH USE, THE FOLLOWING SIGNS SHALL BE PLACED AT THE TRAIL HEADS USING BLACK LETTERS ON AN ORANGE BACKGROUND. THE MATERIAL, INSTALLATION, MOUNTING AND REMOVAL OF THESE SIGNS SHALL BE PAID FOR PER SQ. FT. OF "TEMPORARY INFORMATION SIGNING FOR LANE CLOSURE".

SUGGESTED STAGING AND MAINTENANCE OF TRAFFIC - IL. RTE 72

CONSTRUCTION STAGING - IL. RTE. 72

PRE-STAGE

- REMOVE CURB AND GUTTER AND MEDIAN AND PLACE TEMPORARY PAVEMENT.

STAGE III

- BEGIN AND COMPLETE THE EASTBOUND HALF OF THE BRIDGE AND INSTALL GUARD RAIL TERMINALS.

STAGE IV

- BEGIN AND COMPLETE THE WESTBOUND HALF THE BRIDGE AND RE-INSTALL GUARD RAIL ELEMENTS.
- REMOVE THE TEMPORARY PAVEMENT AND REPLACE THE CURB AND GUTTER AND CONC. MED. SURFACE.
- PLACE FINAL PAVEMENT MARKING AND RPM'S.

MAINTENANCE OF TRAFFIC - IL. RTE. 72

PRE-STAGE

- PLACE ADVANCED SIGNING AS SHOWN ON STAGE III SUGGESTED STAGING PLAN.
- USE DAILY LANE CLOSURES TO PERFORM PRE-STAGE WORK. SEE IDOT STANDARD:
701601 URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NON-TRAVERSABLE MEDIAN

STAGE III

- CLOSE INSIDE LANES, REMOVE CONFLICTING PAVEMENT MARKINGS,
PLACE TEMPORARY PAVEMENT MARKINGS AND TEMPORARY CONCRETE BARRIER.
- SHIFT E.B. TRAFFIC TO LANE CONFIGURATION FOR STAGE III.

STAGE IV

- SHIFT E.B. LANE TO OUTSIDE LANE OF E.B. BRIDGE DECK.
PLACE TEMPORARY PAVEMENT MARKINGS AND TEMPORARY CONCRETE BARRIER FOR STAGE IV CONSTRUCTION.
- SHIFT W.B. TRAFFIC TO LANE CONFIGURATION FOR STAGE IV.
- USE DAILY LANE CLOSURES DURING THE RECONSTRUCTION OF
THE MEDIAN AND OTHER END OF CONTRACT WORK. SEE IDOT STANDARD:
701601 URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTRAVERSABLE MEDIAN

BRIDGE OUT
OVER SALT CREEK
FROM
(DATE)
TO
(DATE)

36" x 36"

TRAIL CLOSURE SIGN

FILE NAME = 68055 stagenotes.dgn
PLOT DATE = 6/30/2008

CR
CHRISTIAN-ROGE & ASSOCIATES, INC.
ENGINEERS-PLANNERS-SURVEYORS
211 WEST WACKER DRIVE
CHICAGO, ILLINOIS 60606
PHONE: (312)372-2023 FAX: (312)372-5274

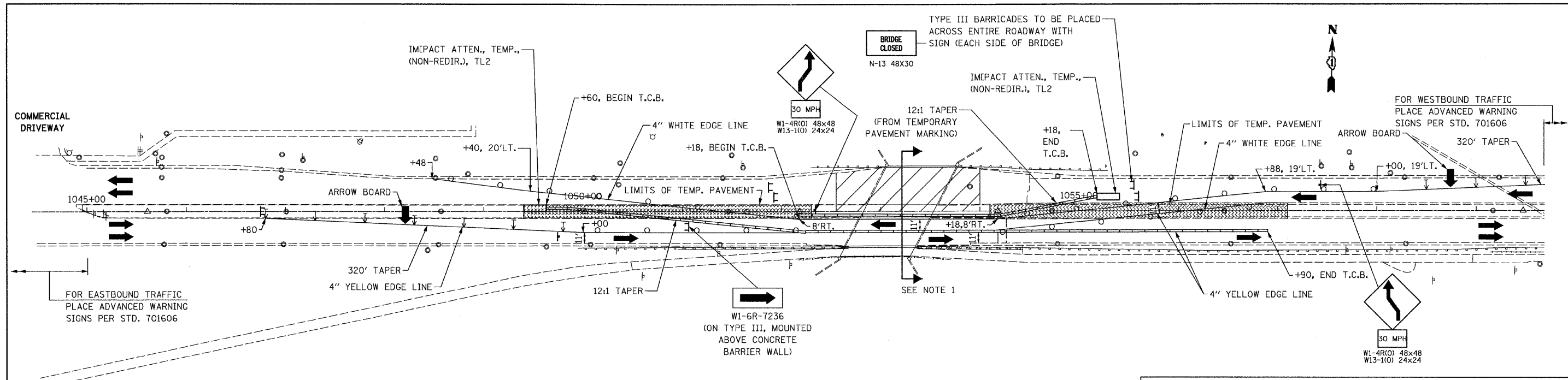
DESIGNED - S.J.P.	REVISED -
DRAWN - A.C.S.	REVISED -
CHECKED - E.J.M.	REVISED -
DATE - JUNE 30, 2008	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SUGGESTED MAINTENANCE OF TRAFFIC NOTES
IL. RTE. 58 & IL. RTE. 72**

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

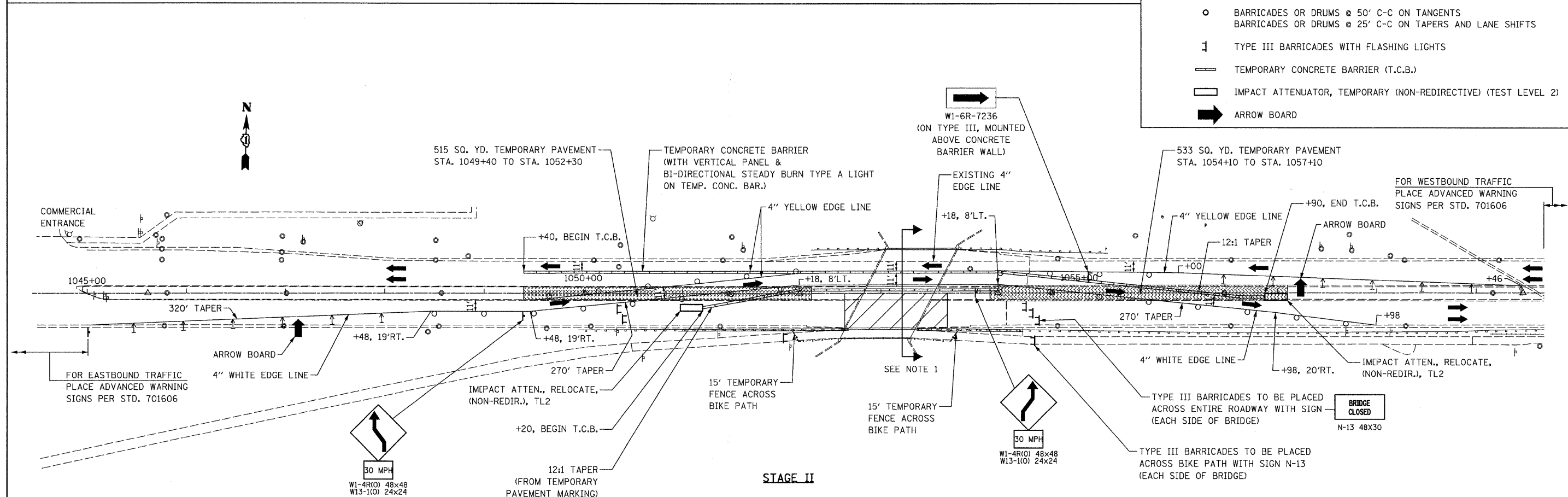
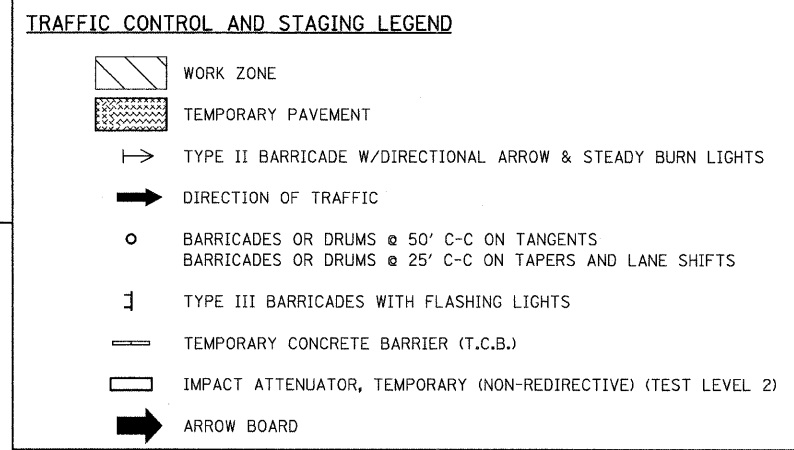
F.A.P. RTE. 58/341	SECTION 2008-007 B	COUNTY COOK	TOTAL SHEETS 39	SHEET NO. 9
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			CONTRACT NO. 60D55	



NOTES:

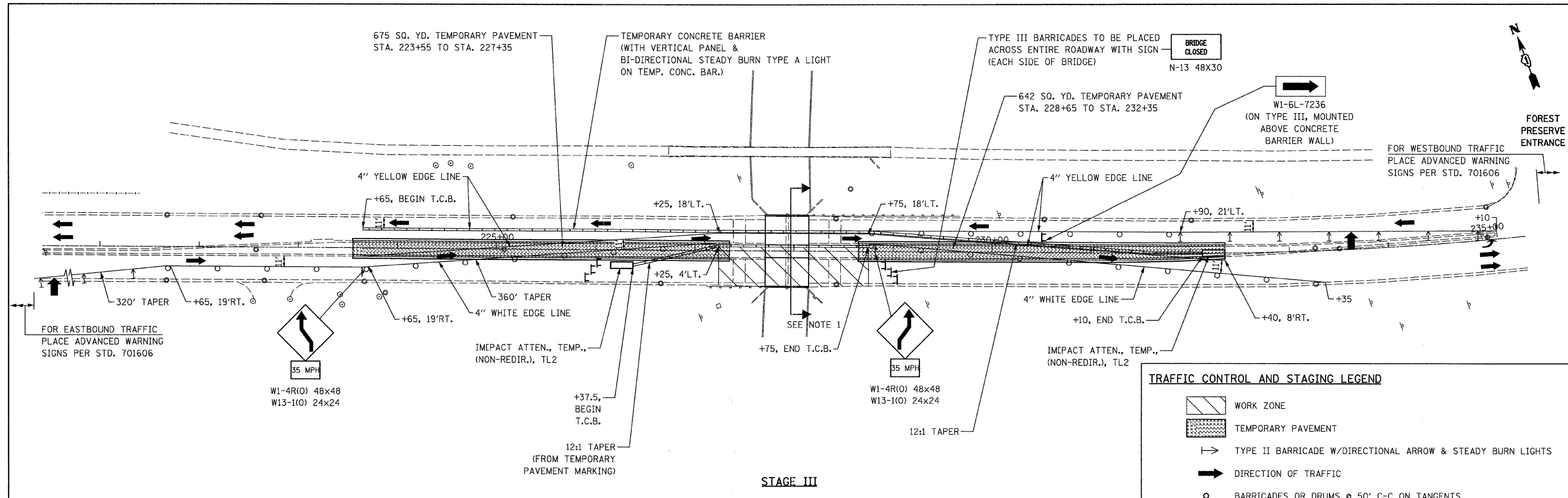
1. FOR SECTION THROUGH BRIDGE SEE SHEET NO. 14 & 15.
2. APPLY TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTION AND DRIVEWAY, SHEET NO. 37, TO THE COMMERCIAL ENTRANCE.
3. THE COST OF THE TEMPORARY FENCE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR "TRAFFIC CONTROL AND PROTECTION (SPECIAL)".

STAGE I



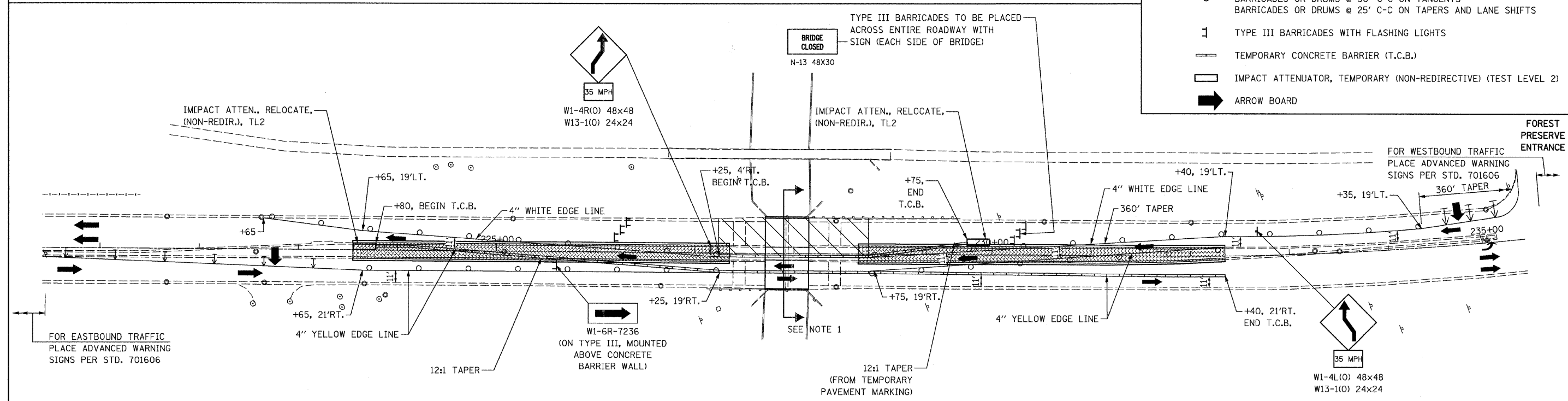
STAGE II

FILE NAME = 60055 staging 58.dgn PLOT DATE = 4/30/2008		DESIGNED - S.J.P.	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUGGESTED TRAFFIC CONTROL - STAGE I & STAGE II IL. RTE. 58			F.A.P. RTE. 559341	SECTION 2008-007 B	COUNTY COOK	TOTAL SHEETS 39	SHEET NO. 10
		DRAWN - A.C.S.	REVISED -		SCALE: 1" = 50'			SHEET NO. 2 OF 3 SHEETS	STA. 1046+00 TO STA. 1060+00	CONTRACT NO. 60D55		
	CHECKED - E.J.M.	REVISED -	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT									
	DATE - APRIL 21, 2008	REVISED -										



TRAFFIC CONTROL AND STAGING LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT
- TYPE II BARRICADE W/DIRECTIONAL ARROW & STEADY BURN LIGHTS
- DIRECTION OF TRAFFIC
- BARRICADES OR DRUMS @ 50' C-C ON TANGENTS
BARRICADES OR DRUMS @ 25' C-C ON TAPERS AND LANE SHIFTS
- TYPE III BARRICADES WITH FLASHING LIGHTS
- TEMPORARY CONCRETE BARRIER (T.C.B.)
- IMPACT ATTENUATOR, TEMPORARY (NON-REDIRECTIVE) (TEST LEVEL 2)
- ARROW BOARD



- NOTES:**
- FOR SECTION THROUGH BRIDGE SEE SHEET NO. 26 & 27.
 - APPLY TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTION AND DRIVEWAY, SHEET NO. 37, TO THE FOREST PRESERVE ENTRANCE.

BENCH MARK:

Existing Structure: S.N. 016-0349, was originally built in 1968 as S.B.I. Route 58, Section 582-R-1. In 1994 the Structure was repaired, at that time the Bituminous Concrete Surface was removed and replaced. In 2002 the Structure was patched and the Existing Bituminous Surface was removed and replaced with Concrete Wearing Surface, 4". In 2006 Beams 26 thru 30 were removed and replaced and a Bike Path with a Bicycle Railing were added. The Existing single span structure consists of Precast Prestressed Concrete Deck Beams supported by closed abutments. Dimensions are 71'-11" bk. to bk. Abutments and 90'-3" out to out with a 27°-30' Skew.

PROPOSED IMPROVEMENT:

The existing Precast Concrete Deck Beams and Concrete Overlay shall be removed and replaced utilizing Stage Construction. While maintaining the existing Alignment & Profile. Substructure repairs as shown shall be performed.

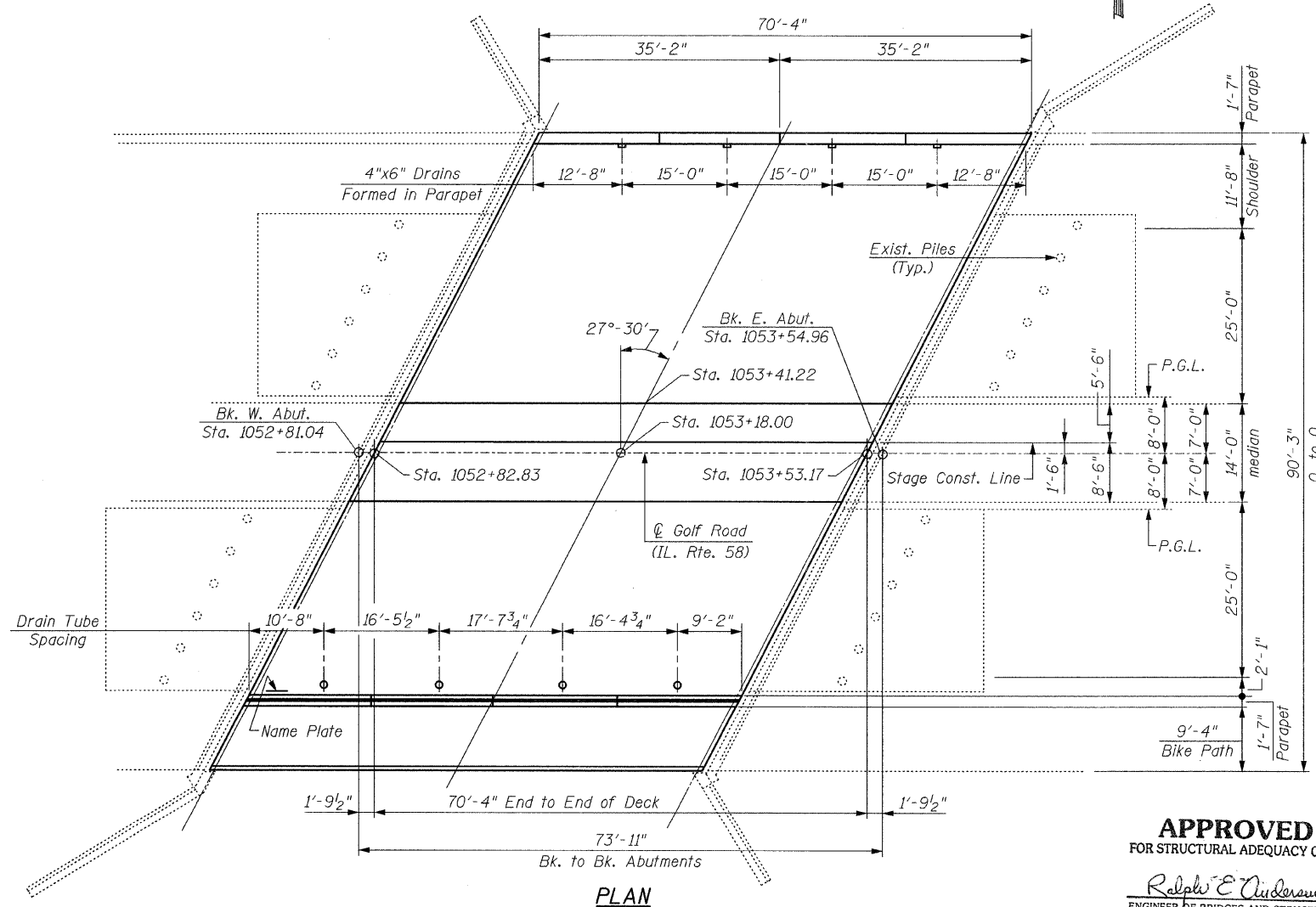
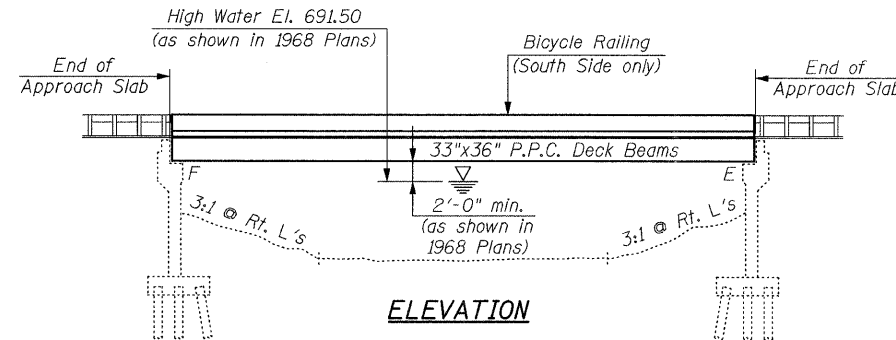
Salvage: None

SCOPE OF WORK:

Remove and replace the P.P.C. Deck Superstructure and the Concrete Wearing Surface, 4" and perform any needed repairs to the Substructure

INDEX OF SHEETS

- S1 GENERAL PLAN & ELEVATION
- S2 GENERAL NOTES & TOTAL BILL OF MATERIAL
- S3 CONSTRUCTION STAGING-I
- S4 CONSTRUCTION STAGING-II
- S5 REINFORCEMENT PLAN
- S6 NORTH PARAPET DETAILS
- S7 SOUTH PARAPET DETAILS & JOINT DETAILS
- S8 BICYCLE & PARAPET RAILING
- S9 P.P.C. DECK BEAM DETAILS
- S10 ABUTMENT REPAIR
- S11 BAR SPLICER ASSEMBLY DETAILS
- S12 TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION



LOADING HS20-44
Allow 50#/sq. ft. for Future Wearing Surface

DESIGN SPECIFICATIONS
2002 AASHTO

DESIGN STRESSES

FIELD UNITS

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

EXISTING CONDITIONS
(SERVICE DESIGN)

f'c = 1,400 psi
fy = 20,000 psi (Reinforcement)

PRECAST PRESTRESSED UNITS

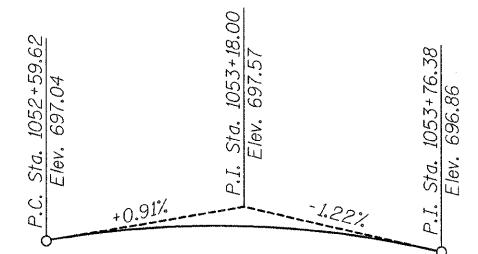
f'c = 5,000 psi
f'ci = 4,000 psi
f's = 270,000 psi (1/2"φ Low Relax Strands)
fsi = 201,960 psi (1/2"φ Low Relax Strands)

WATERWAY INFORMATION
(AS SHOWN IN 1968 PLANS)

Drainage Area 21,760 acres
Character Level
Required Opening 50 yr flood
Present Opening
Future Prop. Opening 548 Sq. Ft.
Q = 1,050 cfs

SEISMIC DATA

Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 0.04g
Site Coefficient (S) = 1.2



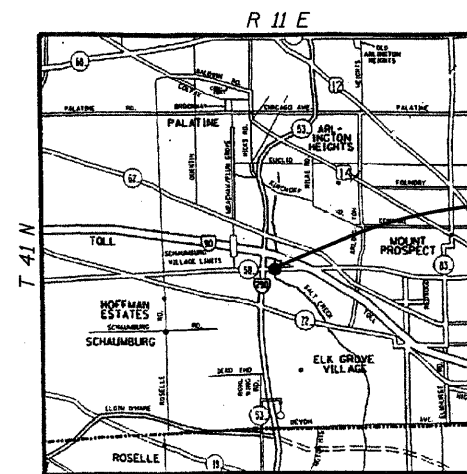
PROFILE
GOLF ROAD
(@ Median Edge)

STATION 1053+18.00
REBUILT 2008 BY
STATE OF ILLINOIS
F.A.P. RTE. 559 SEC. 2008-007-B
LOADING HS20
STRUCTURE NO. 016-0349

NAME PLATE

See Std. 515001

Existing Name Plate shall be cleaned and relocated next to new Name Plate. Cost included with Name Plates



LOCATION SKETCH



Bhadresh N. Shah
BHADRESH N. SHAH
LICENSED STRUCTURAL ENGINEER
STATE OF ILLINOIS LIC. No. 081-004476
EXPIRES: 11-30-08

APPROVED
FOR STRUCTURAL ADEQUACY ONLY

Ralph E. Oudersma (TSO)
ENGINEER OF BRIDGES AND STRUCTURES

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN & ELEVATION
GOLF ROAD (IL. RTE. 58) OVER SALT CREEK S.N. 016-0349

FILE NAME = plan.elev.sht	USER NAME = IDOT	DESIGNED - B.N.S.	REVISED -
		DRAWN - D.L. / F.M.	REVISED -
	PLOT SCALE = 1/8" = 1'-0"	CHECKED - B.N.S. / J.C.N.	REVISED -
	PLOT DATE = 6/30/2008	DATE - JUNE 30, 2008	REVISED -

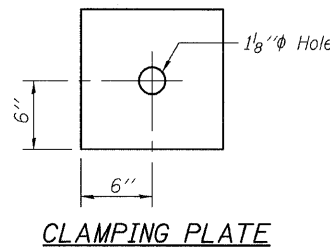
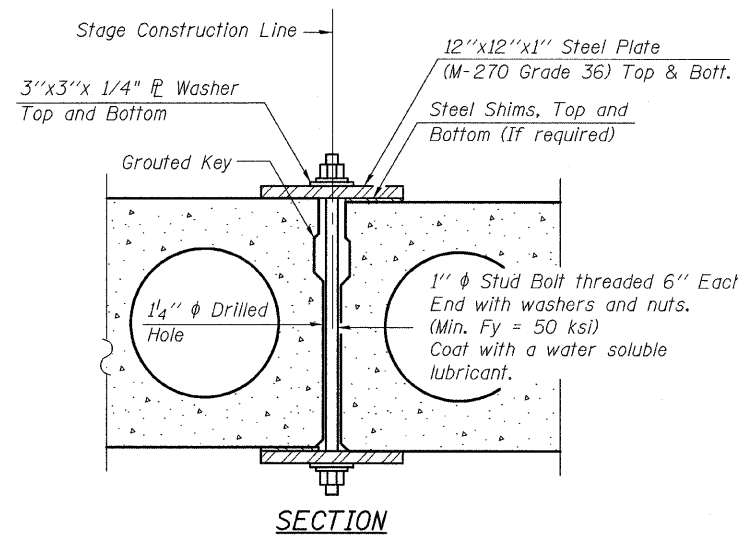
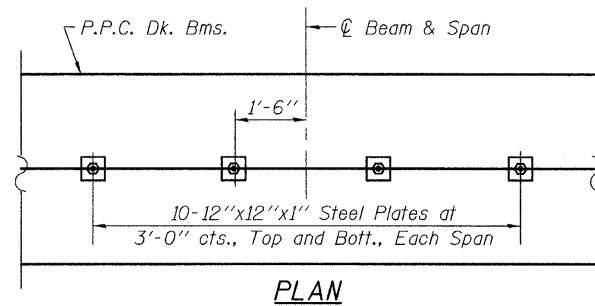
SCALE: NONE	SHEET NO. S1 OF S12 SHEETS	STA. TO STA.	F.A.P. RTE. 559/341	SECTION 2008-007 B	COUNTY COOK	TOTAL SHEETS 39	SHEET NO. 12
			CONTRACT NO. 60D55		ILLINOIS FED. AID PROJECT		

TOTAL BILL OF MATERIAL

DESCRIPTION	UNIT	SUPER.	SUB.	TOTAL
Removal of Existing Superstructures	Each	1	-	1
Floor Drains	Each	18	-	18
Concrete Superstructure	Cu. Yd.	56.6	-	56.6
Bridge Deck Grooving	Sq. Yd.	466	-	466
Protective Coat	Sq. Yd.	766	-	766
Concrete Wearing Surface, 4"	Sq. Yd.	572	-	572
Precast Prestressed Concrete Deck Beams (33" Depth)	Sq. Ft.	6,300	-	6,300
Furnishing & Erecting Structural Steel	Pound	1,500	-	1,500
Reinforcement Bars, Epoxy Coated	Pound	17,540	-	17,540
Bar Splicers	Each	71	-	71
Bicycle Railing	Foot	70	-	70
Parapet Railing	Foot	70	-	70
Silicone Joint Sealer, 1 In.	Foot	102	-	102
Silicone Joint Sealer, 1 3/4 In.	Foot	102	-	102
Structural Repair of Concrete (Depth Greater than 5 In.)	Sq. Ft.	-	5	5
Structural Repair of Concrete (Depth Equal to or Less than 5 In.)	Sq. Ft.	-	25	25
Asbestos Bearing Pad Removal	Each	46	-	46
Name Plates	Each	1	-	1

GENERAL NOTES:

- Plan dimensions and details relative to existing plans are subject to routine 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 the scope of work, however, the Contractor will be paid for the quantity actually furnished based upon the unit price bid for the work.
- The Reinforced Concrete Overlay, as specified on the plan details, shall be paid for at the Contract Unit Price Bid per Square Yard for Concrete Wearing Surface and pounds for Reinforcement Bars, Epoxy Coated.
- Reinforcement Bars shall conform to the requirements of ASTM A 706, Grade 60 (IL. Modified). See Special Provisions.
- Reinforcement Bars designated (E) shall be Epoxy Coated.
- The minimum thickness of the Concrete Overlay shall be 4 inches and varies as required to adjust for the new Profile Grade and Beam Camber.
- The Contractor is advised that the existing PPC Deck Beams are in a deteriorated condition with reduced load carrying capacity. It is the Contractor's responsibility to account for the condition of the Beams when developing Construction Procedures for Removal and Replacement of the Superstructure.
- If the Contractor's procedures for existing Beam Removal or placement of new Beams involves placement of heavy equipment on the new Deck Beams, a detailed procedure shall be submitted to the Engineer for approval. The procedure shall include calculations, sealed by an Illinois Licensed Structural Engineer, verifying the structural adequacy of the Beams for the proposed loads.
- Any damage done to the Bridge during Beam removal shall be repaired by the Contractor. Cost to be included with Removal of Existing Superstructures.
- All Structural Steel shall be Shop Painted with the Inorganic Zinc Rich Primer per AASHTO M300, Type 1. Cost included with Furnishing and Erecting Structural Steel.
- No in-stream work will be allowed on this Project.
- Slipforming of the Parapets is not allowed.
- Repair of the abutments shall be completed prior to placement of the new deck beams.



* Based on the Field Notes from I.D.O.T. Maintenance Engineers, dated September, 2007

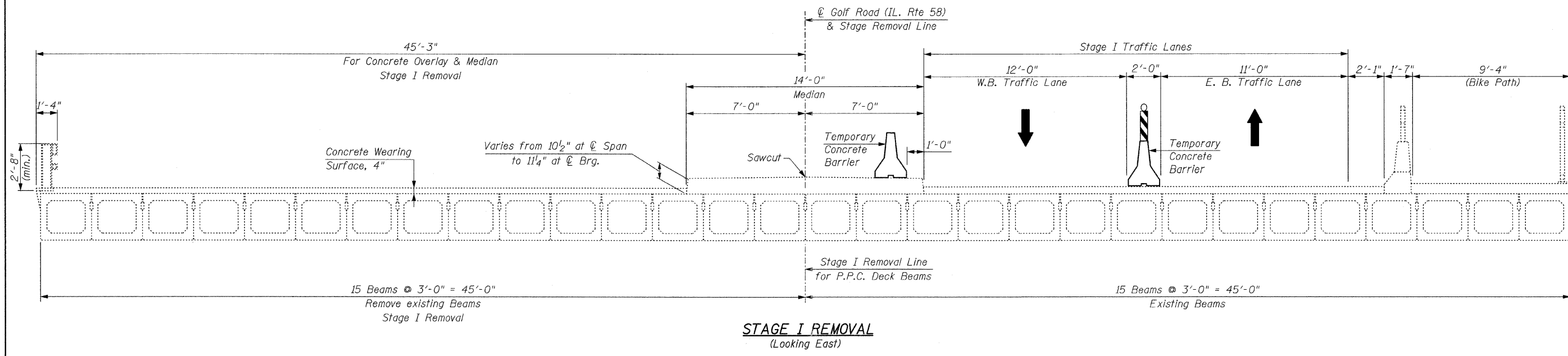
NOTES:
 As an alternate to Drilled Holes, the Contractor may request the Fabricator to cast 2" Dia. Semi-Circular Recesses in the side of each Beam adjacent to the Stage Construction Line. These Recesses must align to form a hole at the correct location for the Clamping Device Bolts. If the Contractor elects to use this Alternate, a Detail of the 2" Dia. Semi-Circular Recesses must be shown on the Shop Drawings.

SHEAR KEY CLAMPING DETAILS AT STAGE CONST. JT.

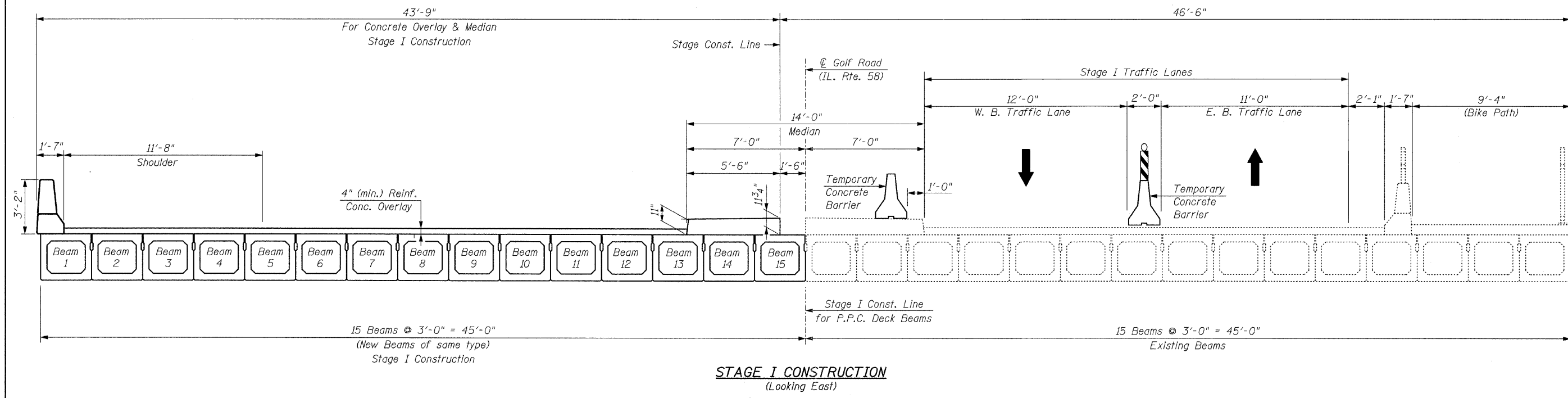
Cost included with Precast Prestressed Concrete Deck Beams. See Stage Construction Details for traffic lanes.

FILE NAME = gen_notes.sht	USER NAME = IDOT	DESIGNED - B.N.S.	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GENERAL NOTES & TOTAL BILL OF MATERIAL GOLF ROAD (IL. RTE. 58) OVER SALT CREEK S.N. 016-0349	F.A.P. RTE. 559/341	SECTION 2008-007 B	COUNTY COOK	TOTAL SHEETS 39	SHEET NO. 13	
PLOT SCALE = 1/8" = 1' IN.	CHECKED - B.N.S. / J.C.N.	REVISED -	SCALE: NONE			SHEET NO. S2 OF S12 SHEETS	STA. TO STA.	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT	CONTRACT NO. 60D55	
PLOT DATE = 6/30/2008	DATE - JUNE 30, 2008	REVISED -									

CR & A CHRISTIAN-ROGE & ASSOCIATES, INC.
 ENGINEERS / PLANNERS / SURVEYORS
 211 W. WACKER DRIVE CHICAGO, IL. 60606
 PHONE: (312)372-2023 FAX: (312)372-5274



STAGE I REMOVAL
(Looking East)



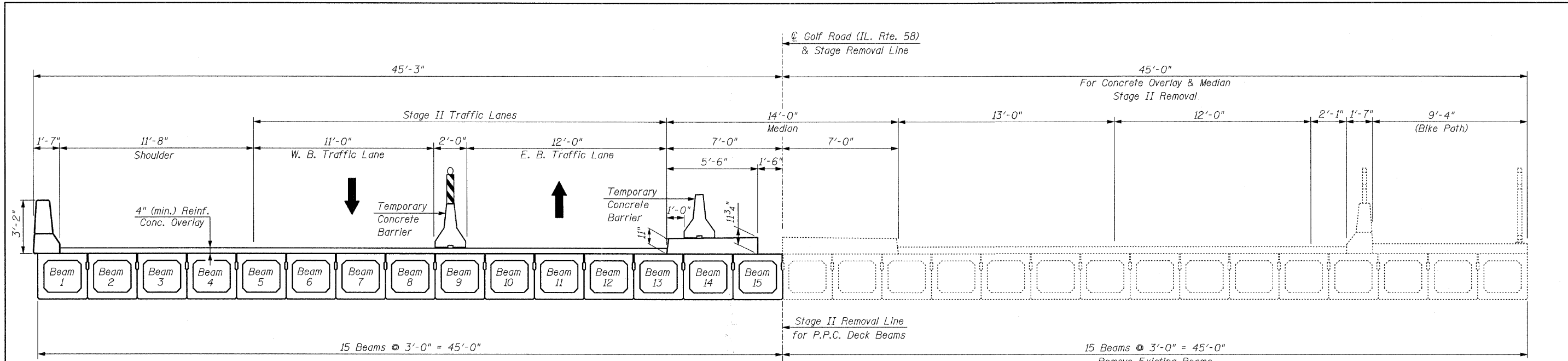
STAGE I CONSTRUCTION
(Looking East)

CONSTRUCTION STAGING

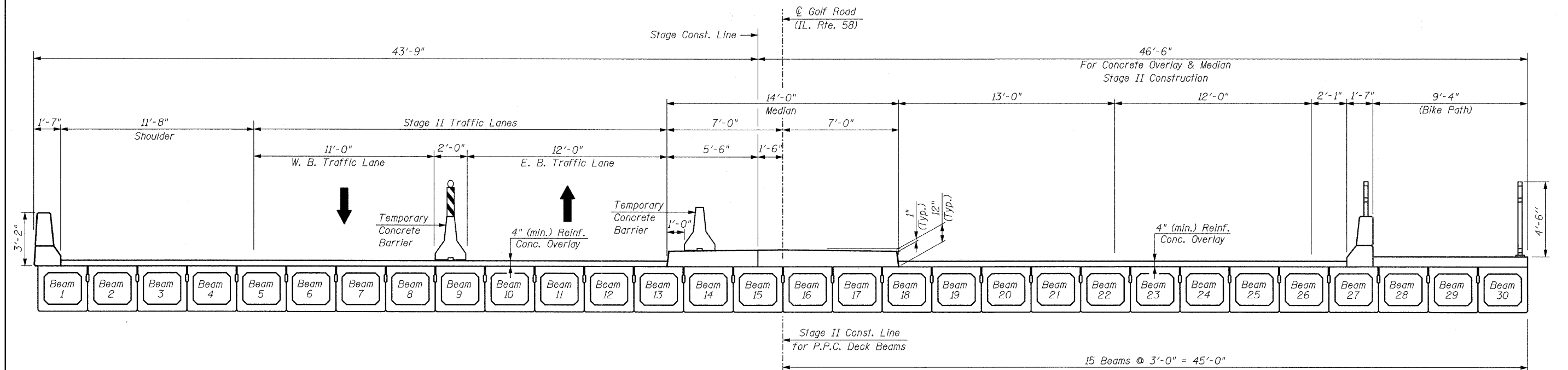
NOTE:
Quantity for Temporary Barrier is included with Roadway Plans

CHRISTIAN-ROGE & ASSOCIATES, INC.
ENGINEERS / PLANNERS / SURVEYORS
211 W. WACKER DRIVE CHICAGO, IL. 60606
PHONE: (312)372-2023 FAX: (312)372-5274

FILE NAME = staging sheet.Lsht	USER NAME = IDOT	DESIGNED - B.N.S.	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CONSTRUCTION STAGING - I GOLF ROAD (IL. RTE. 58) OVER SALT CREEK S.N. 016-0349		F.A.P. RTE. 559/341	SECTION 2008-007 B	COUNTY COOK	TOTAL SHEETS 39	SHEET NO. 14	
	PLOT SCALE = 1:8000 / IN.	DRAWN - D.L. / F.M.	REVISED -		SCALE: NONE	SHEET NO. S3 OF S12 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT	CONTRACT NO. 60D55	
	PLOT DATE = 4/30/2008	CHECKED - B.N.S. / J.C.N.	REVISED -									
		DATE - APRIL 21, 2008	REVISED -									



STAGE II REMOVAL
(Looking East)



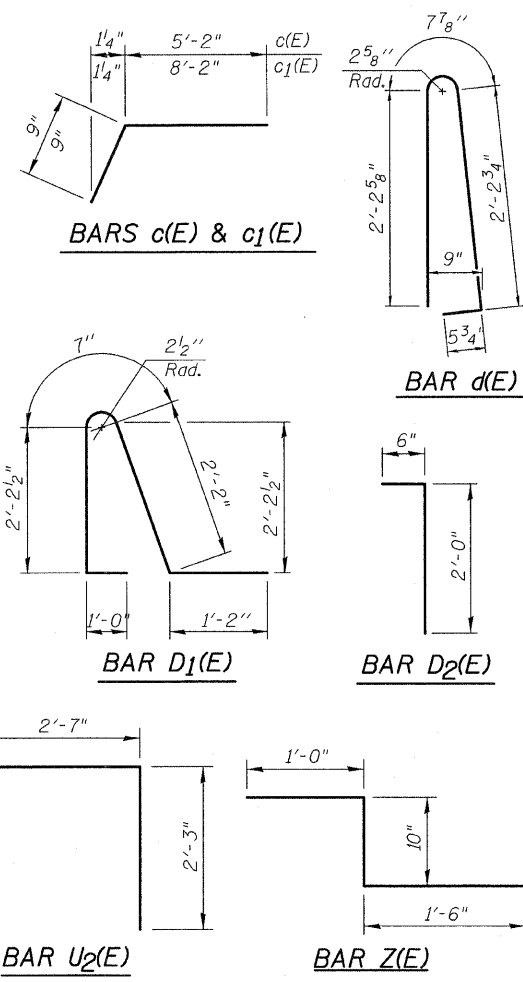
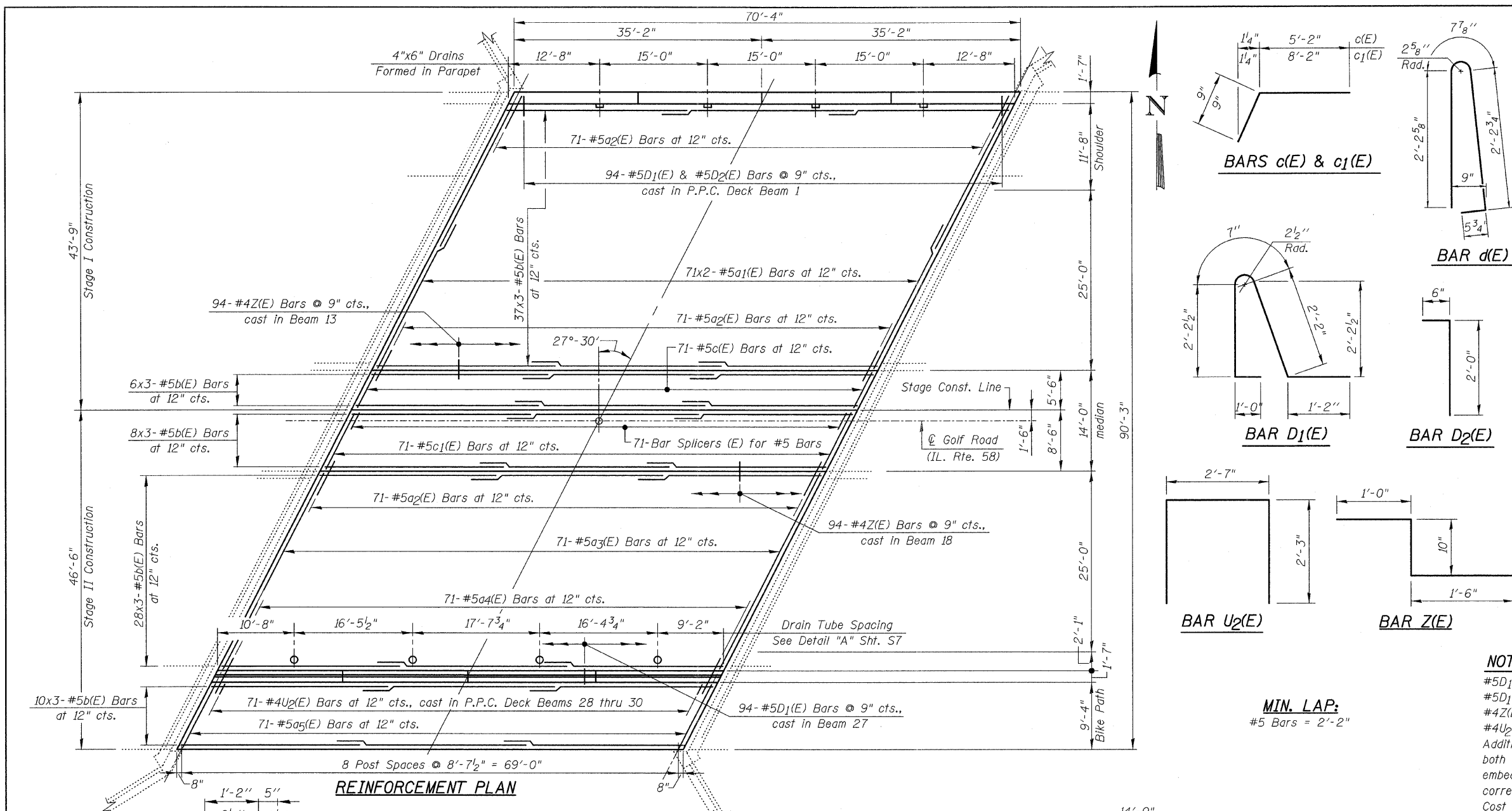
STAGE II CONSTRUCTION
(Looking East)

NOTE:
Quantity for Temporary Barrier is included with Roadway Plans

CONSTRUCTION STAGING

CHRISTIAN-ROGE & ASSOCIATES, INC.
ENGINEERS / PLANNERS / SURVEYORS
211 W. WACKER DRIVE CHICAGO, IL. 60606
PHONE: (312)372-2023 FAX: (312)372-5274

FILE NAME = staging sheet.II.sht	USER NAME = IDOT	DESIGNED - B.N.S.	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CONSTRUCTION STAGING - II GOLF ROAD (IL. RTE. 58) OVER SALT CREEK S.N. 016-0349		F.A.P. RTE. 559/341	SECTION 2008-007 B	COUNTY COOK	TOTAL SHEETS 39	SHEET NO. 15	
	PLOT SCALE = 1/8" = 1' / IN.	DRAWN - D.L. / F.M.	REVISED -		SCALE: NONE	SHEET NO. S4 OF S12 SHEETS	STA.	ILLINOIS FED. AID PROJECT	CONTRACT NO. 60D55			
	PLOT DATE = 4/30/2008	CHECKED - B.N.S. / J.C.N.	REVISED -									
		DATE - APRIL 21, 2008	REVISED -									

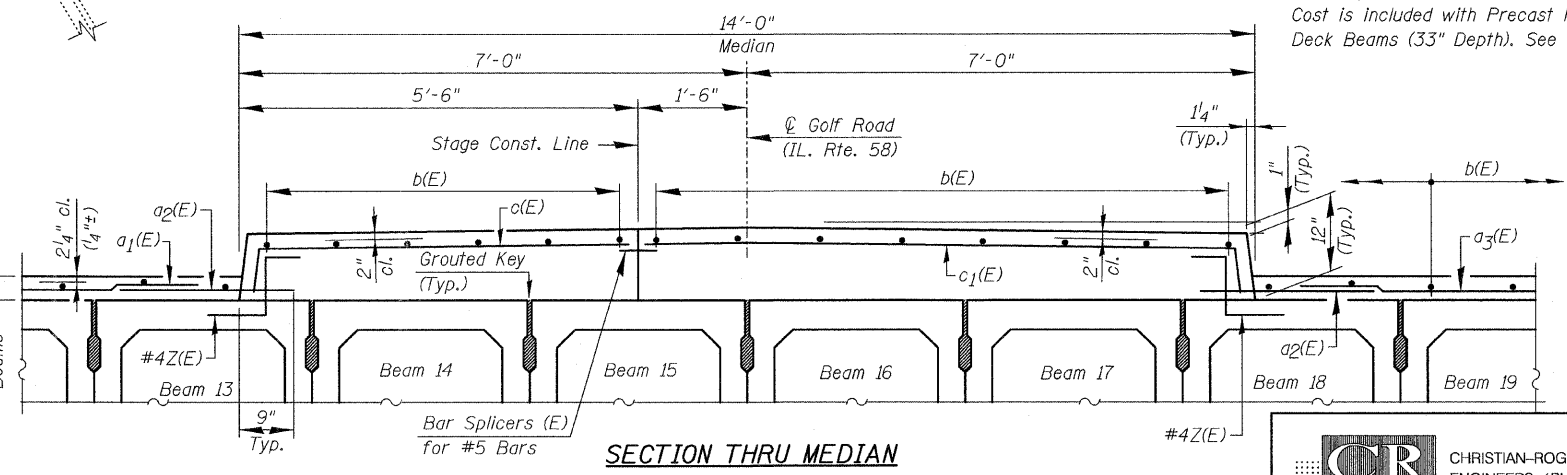
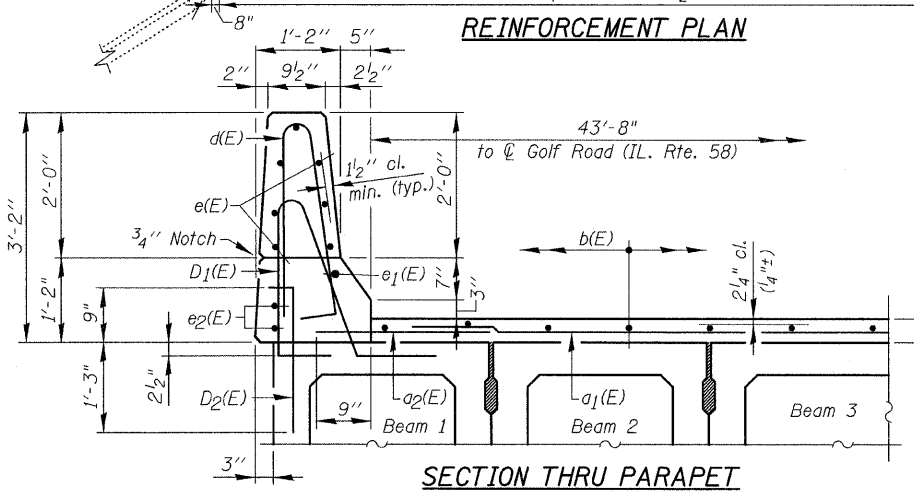


BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a1(E)	142	#5	21'-7"	—
a2(E)	213	#5	3'-9"	—
a3(E)	71	#5	30'-3"	—
a4(E)	71	#5	5'-7"	—
a5(E)	71	#5	10'-2"	—
b(E)	267	#5	24'-9"	—
c(E)	71	#5	5'-11"	┌
c1(E)	71	#5	8'-11"	┌
d(E)	154	#5	5'-7"	U
e(E)	56	#4	17'-3"	—
e1(E)	6	#8	26'-4"	—
e2(E)	9	#4	24'-6"	—
Concrete Superstructure			Cu. Yd.	56.6
Reinforcement Bars, Epoxy Coated			Pound	17,540
Silicone Joint Sealer 1 In.			Foot	102
Silicone Joint Sealer 1 3/4 In.			Foot	102
Bar Splicers			Each	71
Concrete Wearing Surface, 4"			Sq. Yd.	572
Bridge Deck Grooving			Sq. Yd.	466
Floor Drains			Each	18
Protective Coat			Sq. Yd.	766

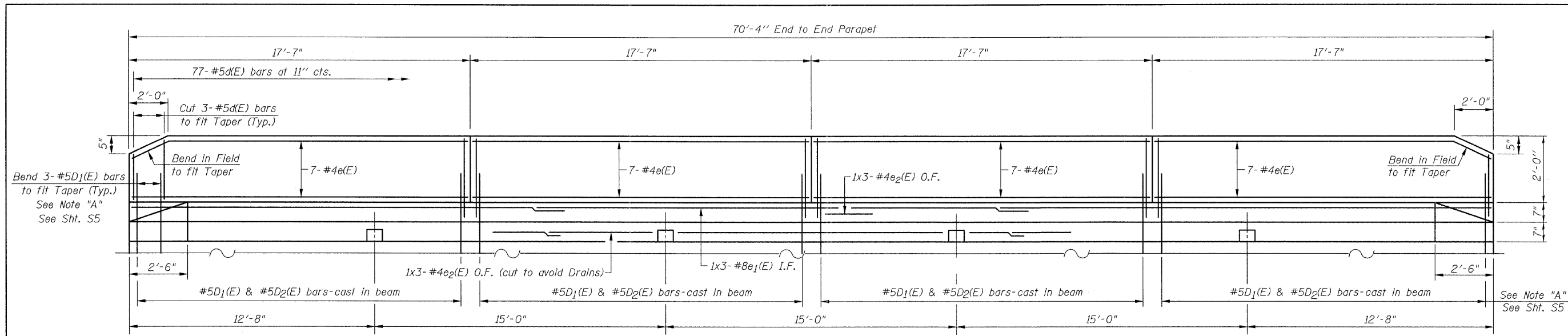
NOTE "A":
 #5D1(E) & #5D2(E) Bars are to be cast with Beam 1.
 #5D1(E) Bars are to be cast with Beam 27.
 #4Z(E) Bars are to be cast with Beams 13 & 18.
 #4U2(E) Bars are to be cast with Beams 28 thru 30.
 Additional 3-#5D1(E) Bars will be bent to fit taper at both ends of the North Parapet. These Bars will be embedded in Deck Beam 1. The Fabricator must correctly install these Bars.
 Cost is included with Precast Prestressed Concrete Deck Beams (33" Depth). See Sht. S9.

MIN. LAP:
 #5 Bars = 2'-2"



NOTE:
 Bars indicated thus 71x2-#5 etc., indicates 71 lines of Bars with 2 lengths per line.

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 ENGINEERS / PLANNERS / SURVEYORS
 211 W. WACKER DRIVE CHICAGO, IL. 60606
 PHONE: (312)372-2023 FAX: (312)372-5274

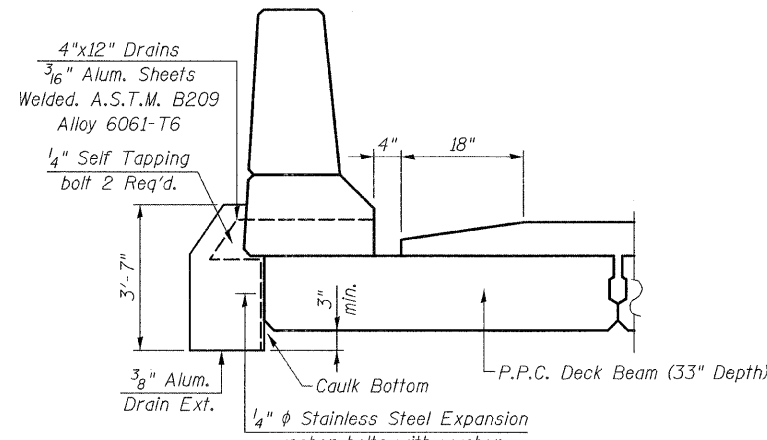
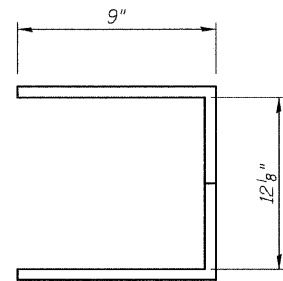


INSIDE ELEVATION OF NORTH PARAPET
(Looking North)

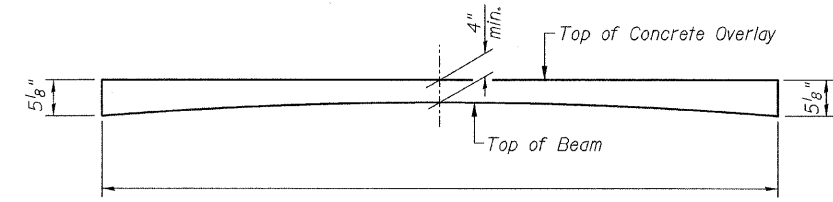
NOTE:
See Sheet S5 for Bill Of Material

MIN. LAP
(Parapet)
#4 bar = 1'-8"
#8 bar = 4'-6"

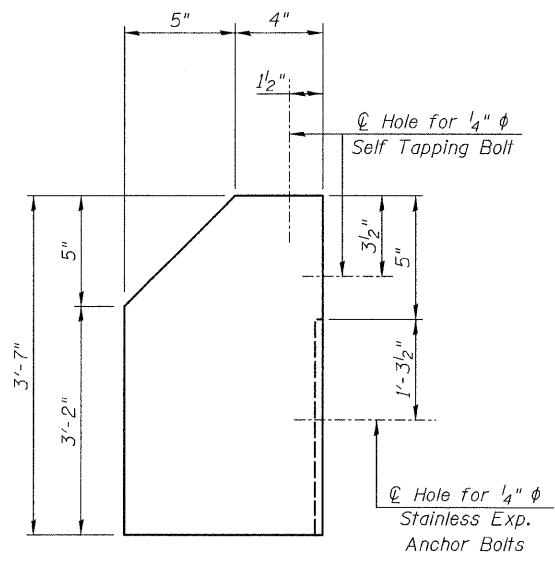
LEGEND:
I.F. = Inside Face
O.F. = Outside Face
E.F. = Each Face



SECTION THRU NORTH PARAPET
SHOWING DRAIN

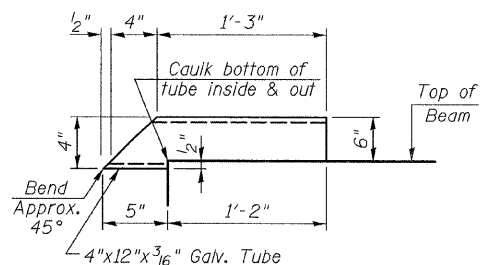


REINFORCED CONCRETE WEARING SURFACE PROFILE
(Proposed)

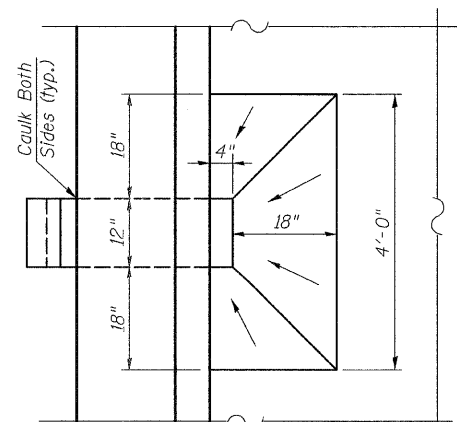


FLOOR DRAIN EXTENSION DETAILS

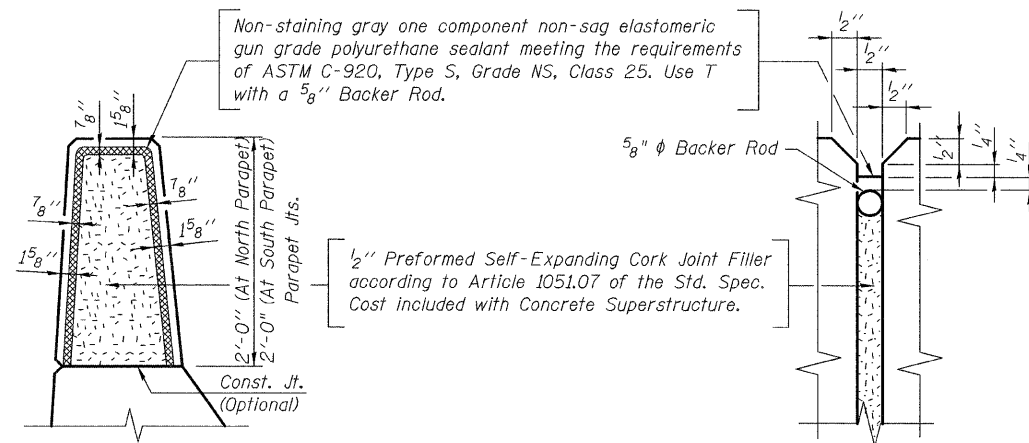
Cost of Floor Drains and Floor Drain Extensions are included in the cost of Floor Drains.




DRAIN DETAIL

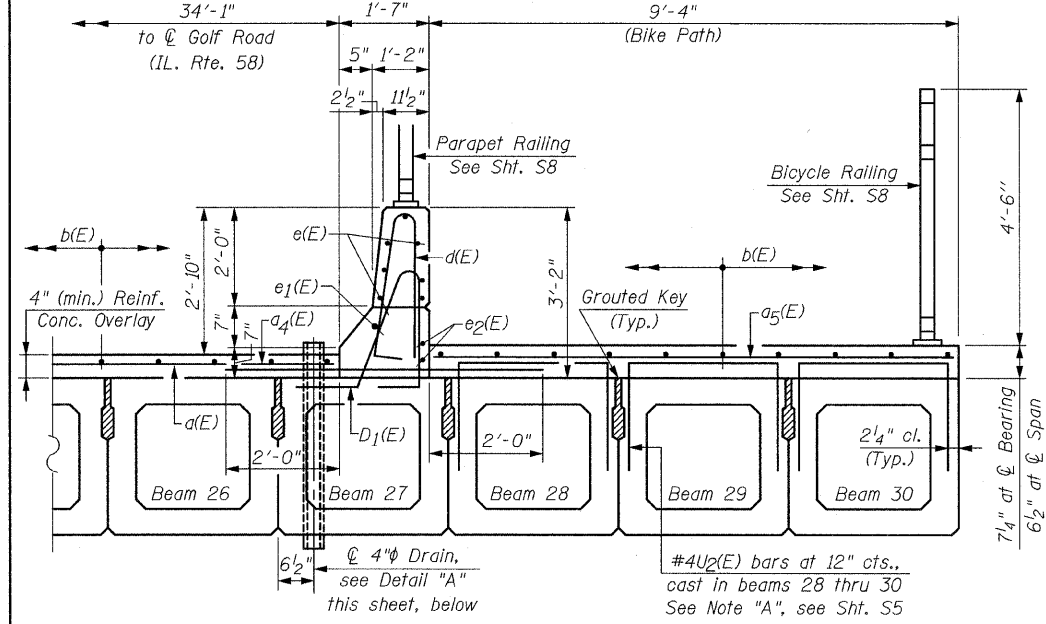
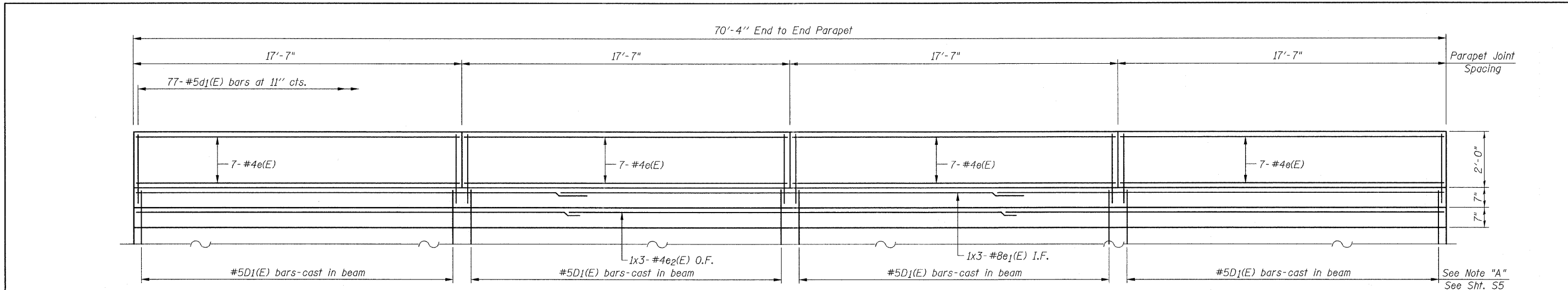


PLAN AT FLOOR DRAINS AT NORTH PARAPET

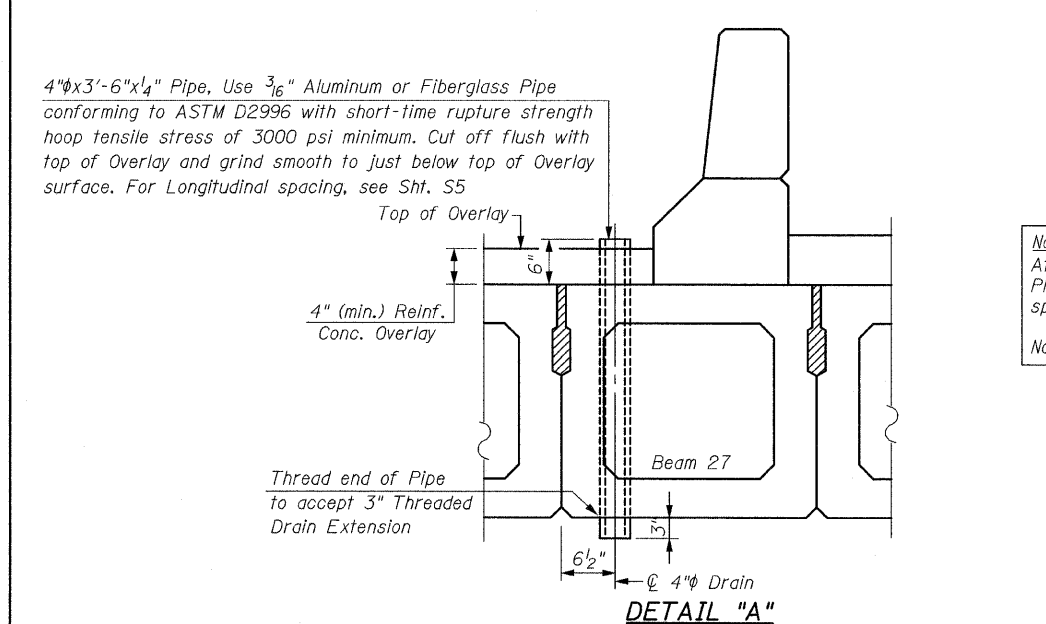


PARAPET JOINT DETAILS

FILE NAME = parapet.north.dwg	USER NAME = IDDT	DESIGNED - B.N.S.	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	NORTH PARAPET DETAILS GOLF ROAD (IL. RTE. 58) OVER SALT CREEK S.N. 016-0349			F.A.P. R.T.E. 559/341	SECTION 2008-007 B	COUNTY COOK	TOTAL SHEETS 39	SHEET NO. 17
PLOT SCALE = 1/8" = 1'-0"	CHECKED - B.N.S. / J.C.N.	DATE - JUNE 30, 2008	REVISED -		SCALE: NONE	SHEET NO. S6 OF S12 SHEETS	STA. TO STA.	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT	CONTRACT NO. 60055		
PLOT DATE = 6/30/2008	DATE - JUNE 30, 2008	REVISED -	REVISED -									
<div style="text-align: right;">  CHRISTIAN-ROGE & ASSOCIATES, INC. ENGINEERS / PLANNERS / SURVEYORS 211 W. WACKER DRIVE CHICAGO, IL. 60606 PHONE: (312)372-2023 FAX: (312)372-5274 </div>												

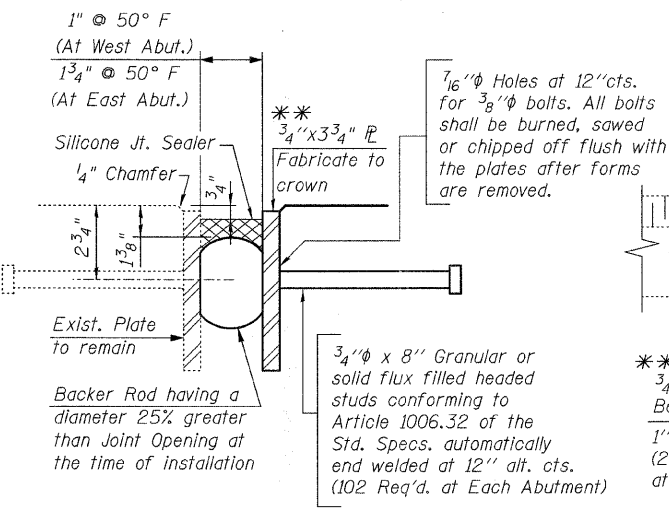


SECTION AT SOUTH SIDE OF STRUCTURE



DETAIL "A"

INSIDE ELEVATION OF SOUTH PARAPET
(Looking South)



SILICONE JOINT SEAL
(At Abutments)

*** Furnish in segments of 20 ft. maximum length. Maximum space between installed segments shall be 3/16". Seal space with Silicone Sealant suitable for Structural Steel.

Cut retainer bars in sidewalk or median 6" short of the sidewalk or median face.

*** Existing Dowel Rods are to be cut off flush, ground smooth & sealed with Epoxy. Cost is included with Removal of Existing Superstructures.

Notes:
After fabrication all surfaces of the Steel Plates shall be given one Shop Coat of paint specified for Structural Steel.
No field painting required.

Notes:
After beams have been erected, holes shall be drilled into substructure and anchor dowels placed. Dowel holes shall be filled with non-shrink grout to top of beam and allowed to cure min. 24 hrs. prior to grouting the shear keys.
All horizontal dimensions are at right angles to beam ends.
See Sheet S8 for bearing pad details.

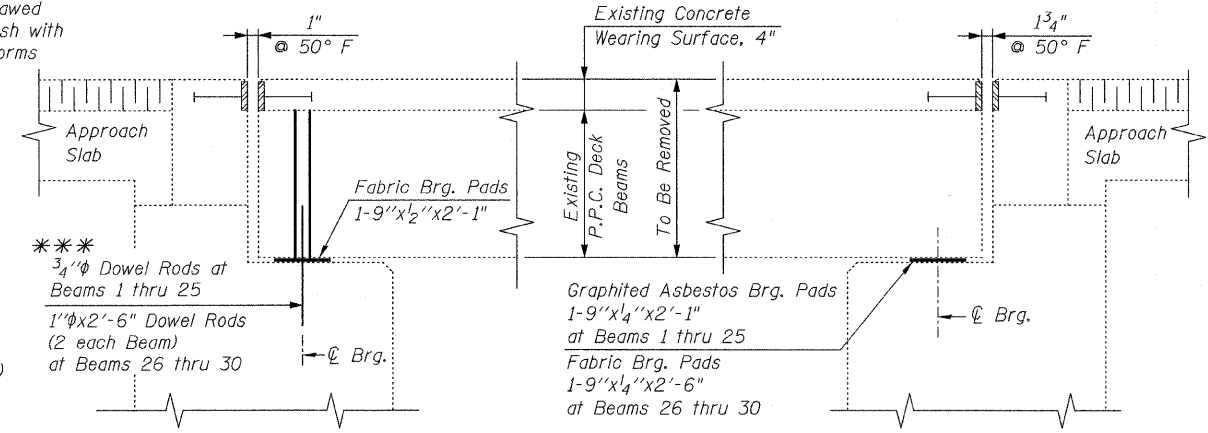
MINIMUM BAR LAP
(Parapet)

- #4 bar = 1'-8"
- #5 bar = 2'-2"
- #8 bar = 4'-6"

LEGEND:

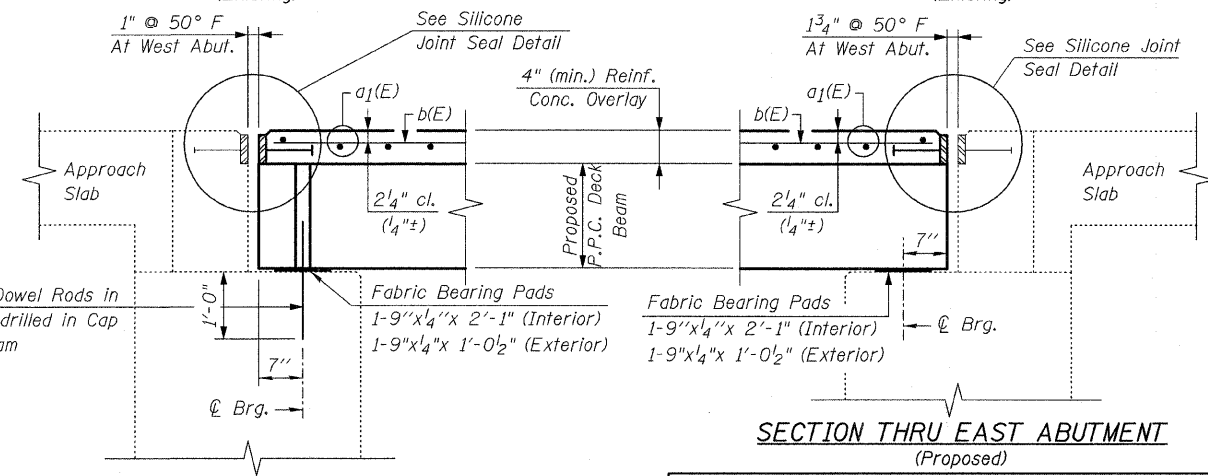
- I.F. = Inside Face
- O.F. = Outside Face
- E.F. = Each Face

NOTE:
For Bill of Material, See Sheet S5



SECTION THRU WEST ABUTMENT
(Existing)

SECTION THRU EAST ABUTMENT
(Existing)



SECTION THRU WEST ABUTMENT
(Proposed)

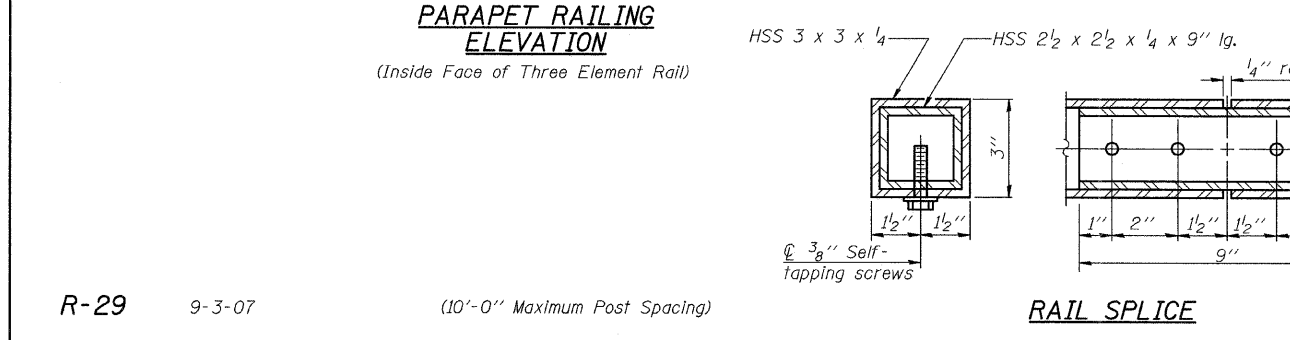
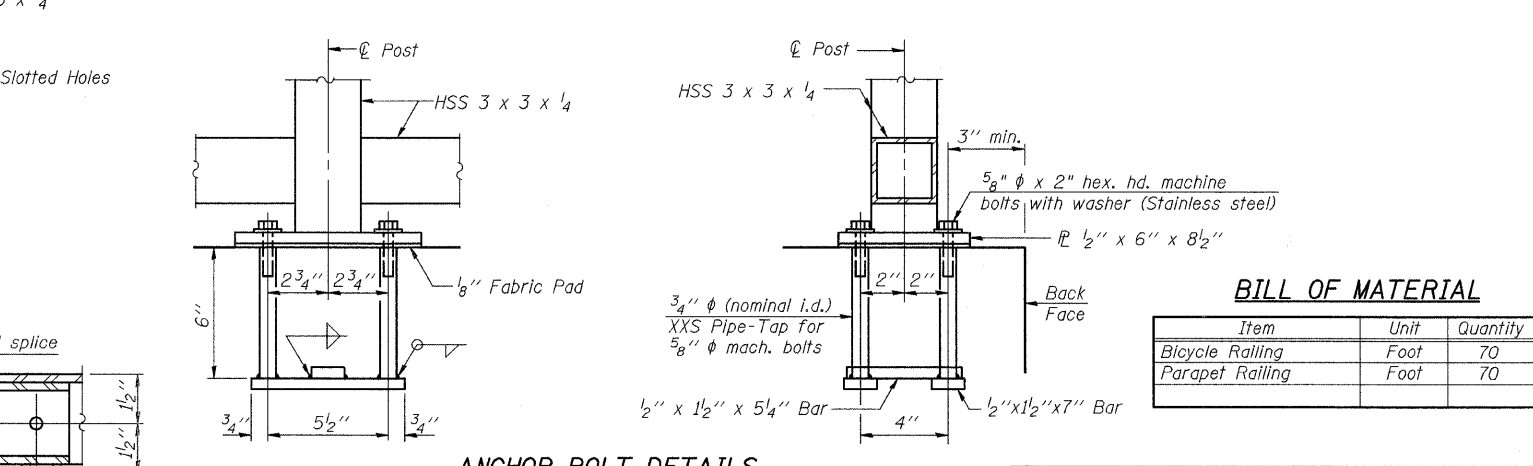
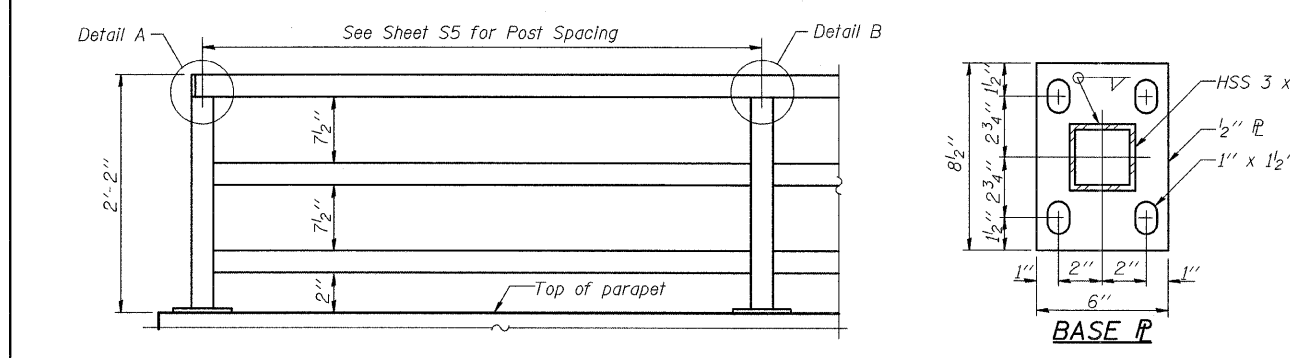
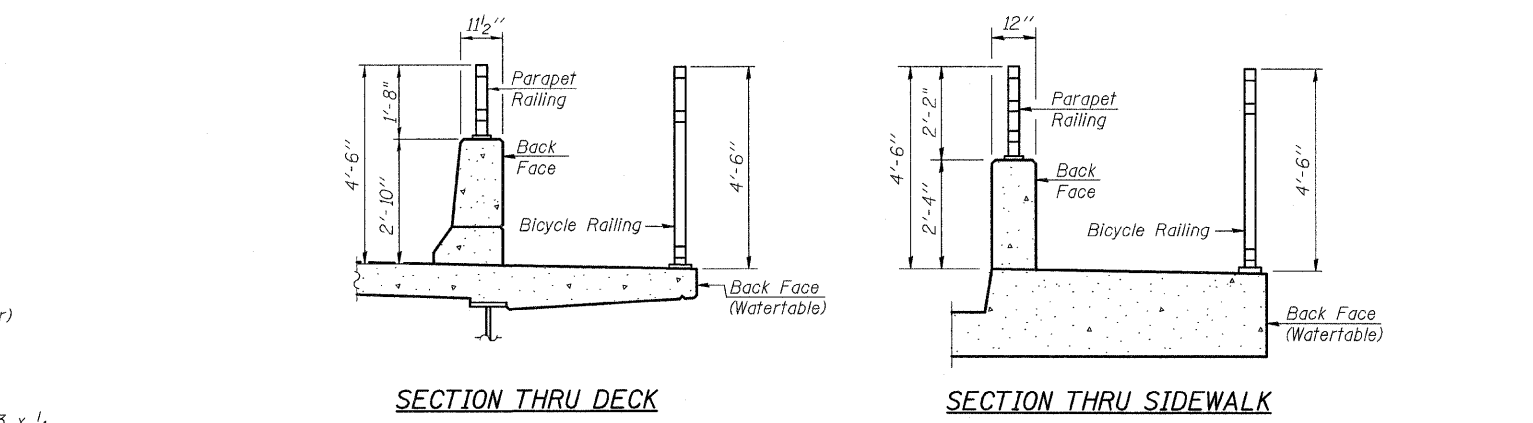
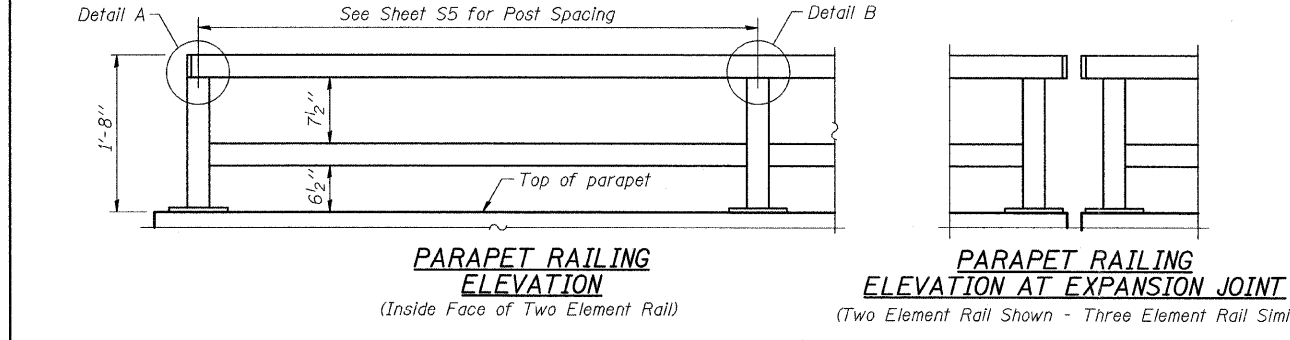
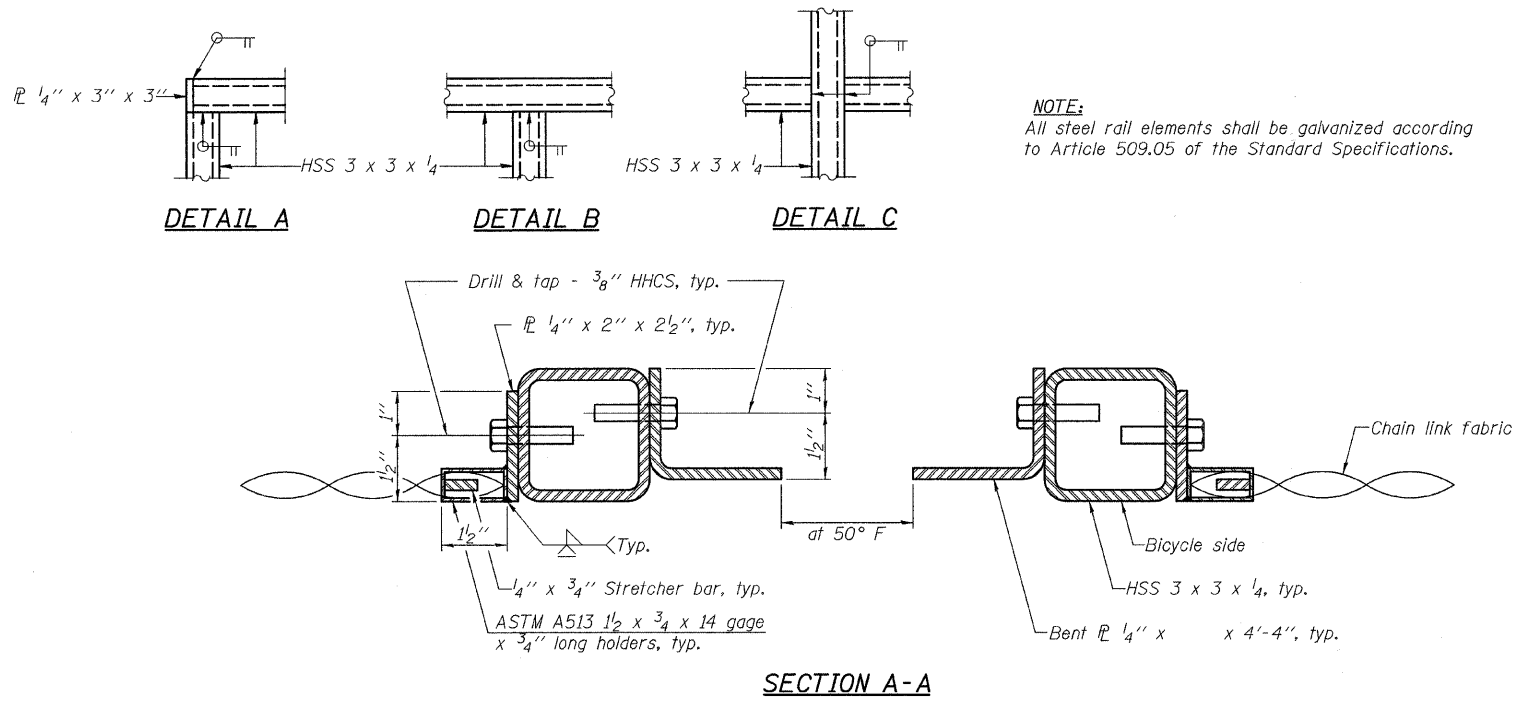
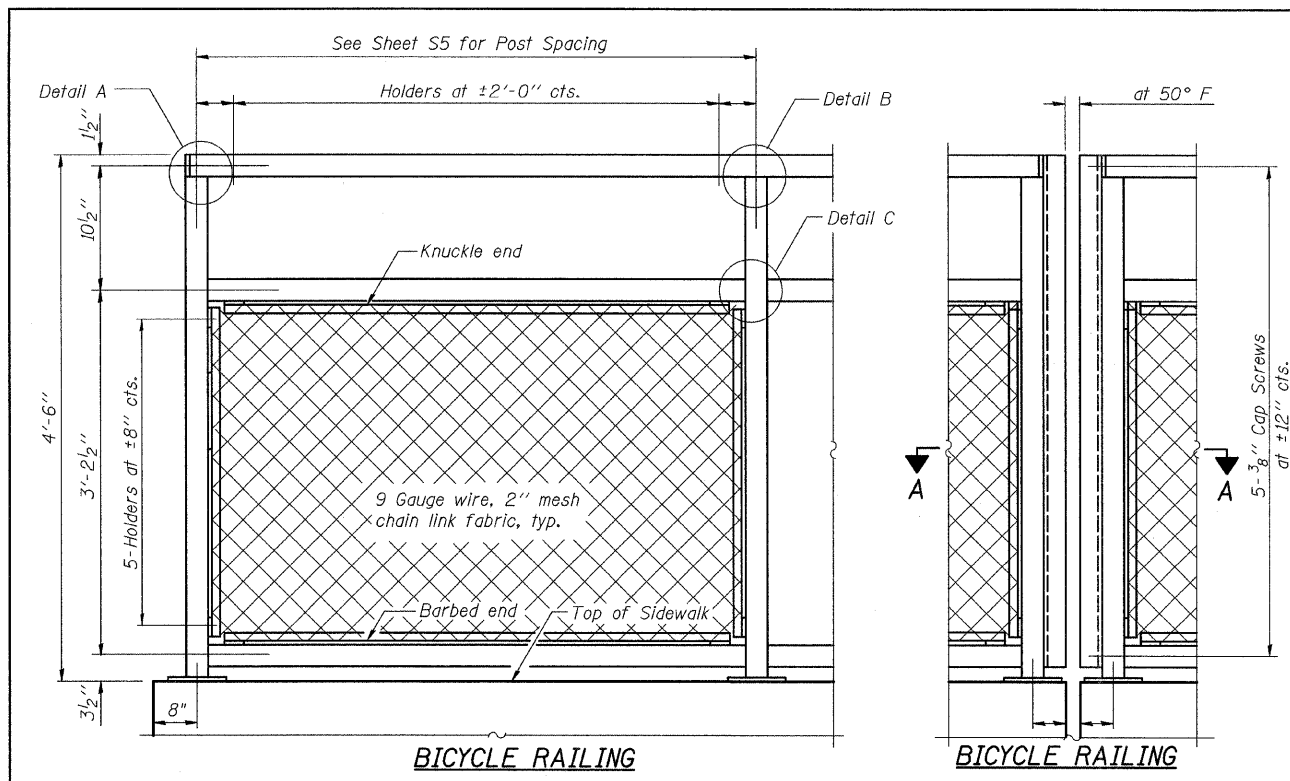
SECTION THRU EAST ABUTMENT
(Proposed)

FILE NAME = parapet_south.sht	USER NAME = IDDT	DESIGNED - B.N.S.	REVISED -
		DRAWN - D.L. / F.M.	REVISED -
		CHECKED - B.N.S. / J.C.N.	REVISED -
		DATE - APRIL 21, 2008	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOUTH PARAPET DETAILS & JOINT DETAILS
GOLF ROAD (IL. RTE. 58) OVER SALT CREEK S.N. 016-0349

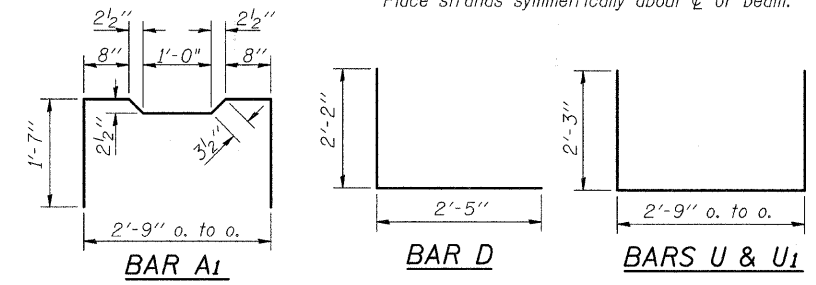
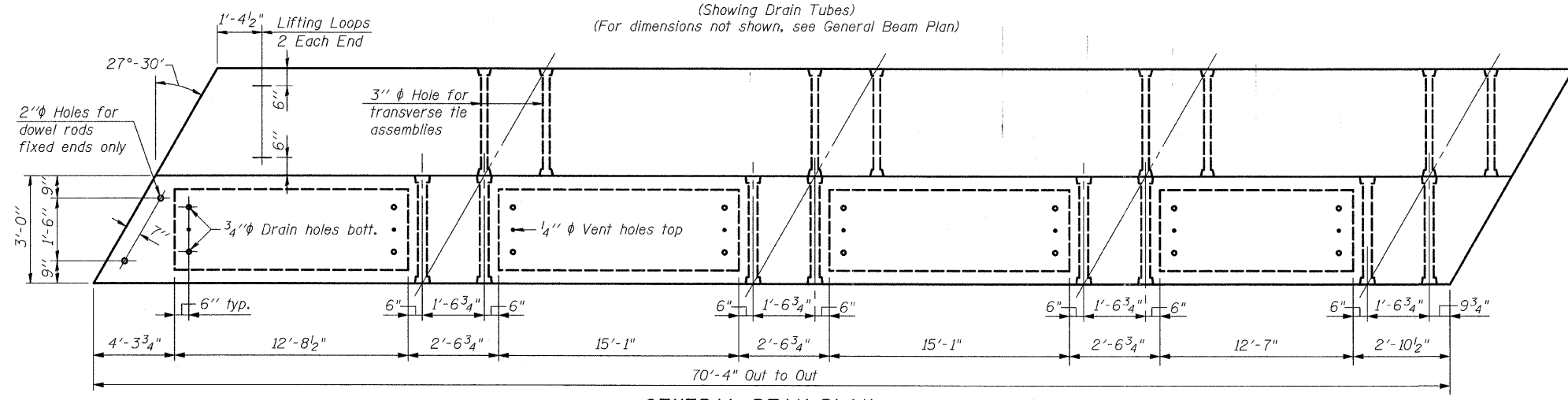
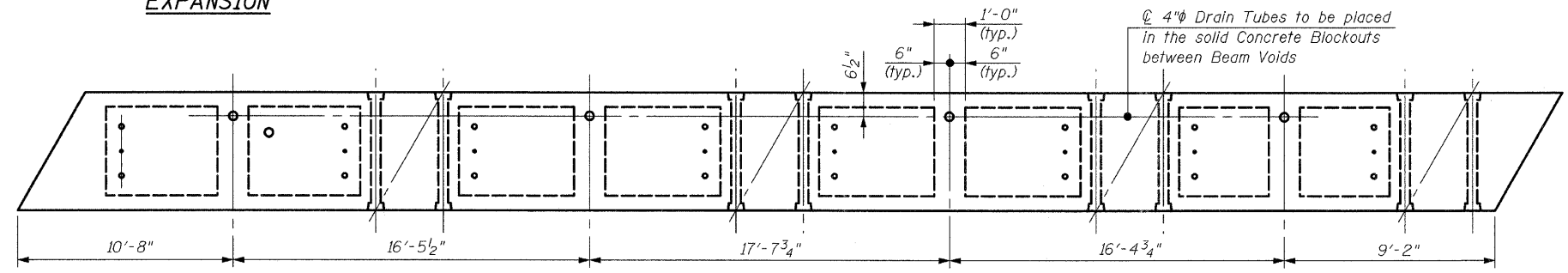
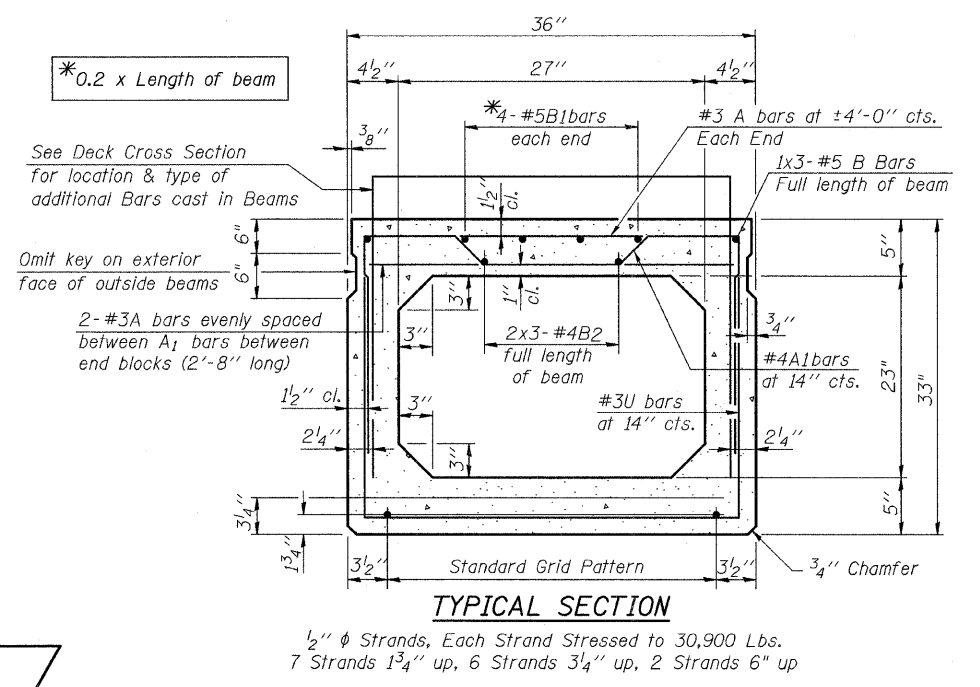
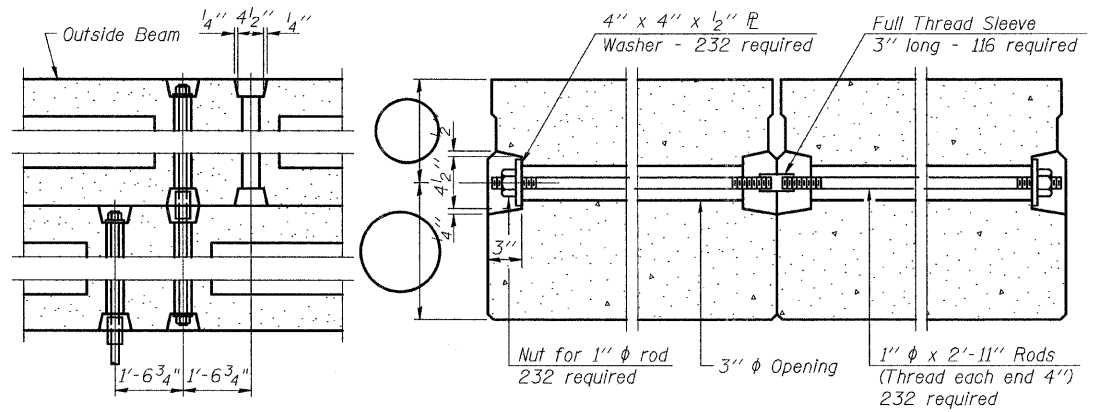
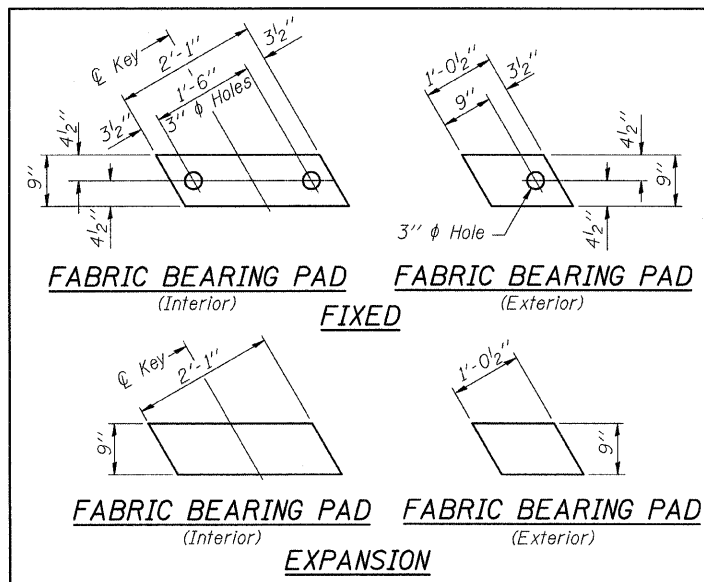
F.A.P. RTE. 559/341	SECTION 2008-007 B	COUNTY COOK	TOTAL SHEETS 39	SHEET NO. 18
CONTRACT NO. 60D55			ILLINOIS FED. AID PROJECT	



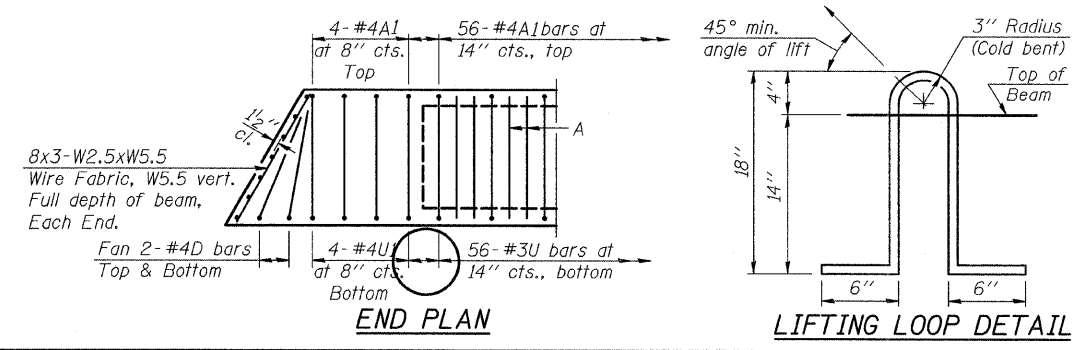
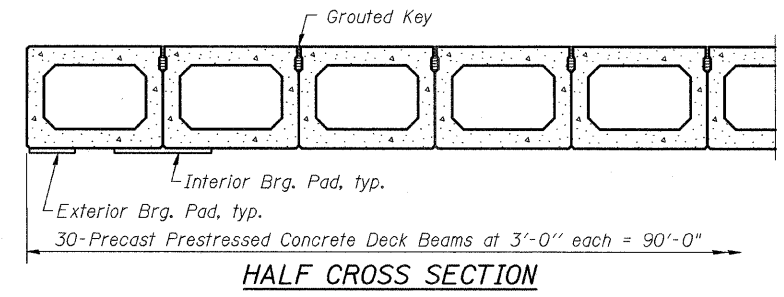
R-29 9-3-07 (10'-0" Maximum Post Spacing)

FILE NAME = bicycle.parapet railingsht	USER NAME = IDOT	DESIGNED - B.N.S.	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BICYCLE & PARAPET RAILING GOLF ROAD (IL. RTE. 58) OVER SALT CREEK S.N. 016-0349			F.A.P. RTE. 559/341	SECTION 2008-007 B	COUNTY COOK	TOTAL SHEETS 39	SHEET NO. 19
PLOT SCALE = 1:8000' / IN.	CHECKED - B.N.S. / J.C.N.	REVISOR -	REVISOR -		SCALE: NONE	SHEET NO. 58 OF 512 SHEETS	STA. TO STA.	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT	CONTRACT NO. 60D55		
PLOT DATE = 4/30/2008	DATE - APRIL 21, 2008	REVISOR -	REVISOR -									

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 CHRISTIAN-ROGE & ASSOCIATES, INC.
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 211 W. WACKER DRIVE CHICAGO, IL. 60606
 PHONE: (312)372-2023 FAX: (312)372-5274



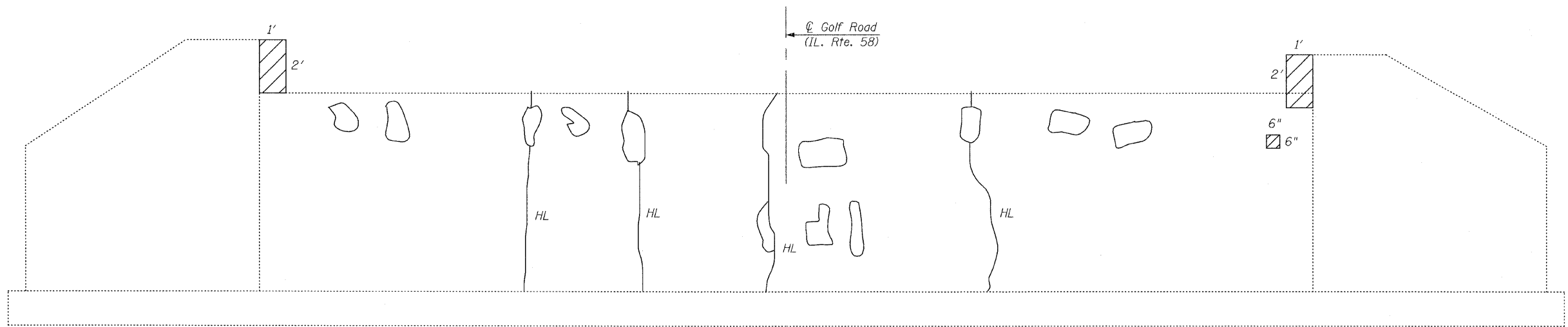
NOTES:
 #4D1(E) & #5D2(E) Bars are to be cast with Beam 1.
 #5D3(E) Bars are to be cast with Beam 27.
 #4Z(E) Bars are to be cast with Beams 28 thru 30.
 (Cost is included with Precast Prestressed Concrete Deck Beams, (33" Depth))



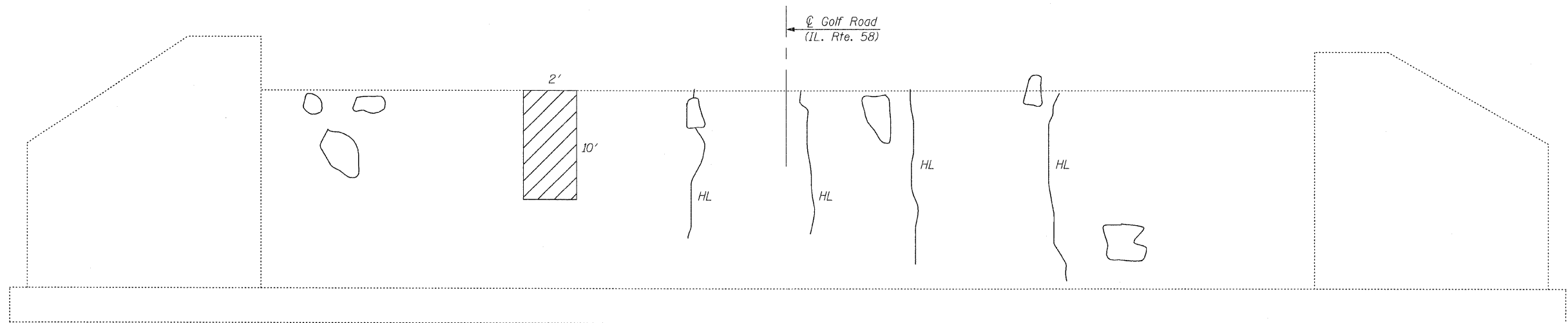
NOTES:
 Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter shall be 1/2" and the nominal cross-sectional area shall be 0.153 sq. in. Lifting loops shall be 3-1/2" φ-270 ksi strands, as shown. The 1" φ rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets that receive transverse tie bar on outside shall be filled with grout after transverse tie assembly is in place. The bearing seat surfaces shall be adjusted by shimming to assure firm and even bearing. Two 1/8" fabric adjusting shims of the dimensions of the Exterior Bearing Pad shall be provided for each bearing. Keyway surfaces shall be cleaned to remove form oil or other bond breaking material prior to shipment of the beams. Cleaning shall be done by sandblasting the keyway areas between top of the beam and the bottom edge of the key. Corrosion Inhibitor, per Article 1020.05(b)(12) of the Standard Specifications, shall be used in the concrete for precast prestressed concrete deck beams. Required Release Strength, f'ci, shall be 4,000 p.s.i. Reinforcement Bars indicated thus 2x3-#4 ect., indicates 2 lines of Bars with 3 lengths per Line.

BILL OF MATERIAL

Precast Prestressed Concrete Deck Beams (33" Depth)	Sq. Ft.	6,300
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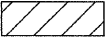


WEST ABUTMENT
(Looking West)



EAST ABUTMENT
(Looking East)

LEGEND:

 Structural Repair of Concrete
(Depth equal to or less than 5 In.)

 Rust Stain

 Hairline

TOTAL BILL OF MATERIAL

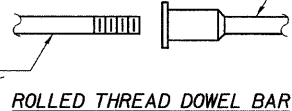
ITEM	UNIT	TOTAL
Structural Repair of Concrete (Depth Equal to or Less Than 5 In.)	Sq. Ft.	25
Structural Repair of Concrete (Depth Greater Than 5 In.)	Sq. Ft.	5

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ENGINEERS / PLANNERS / SURVEYORS
211 W. WACKER DRIVE CHICAGO, IL 60606
PHONE: (312)372-2023 FAX: (312)372-5274

FILE NAME = abutment repair.sht	USER NAME = IDOT	DESIGNED - B.N.S.	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	ABUTMENT REPAIR GOLF ROAD (IL. RTE. 58) OVER SALT CREEK S.N. 016-0349			F.A.P. RTE. 559/341	SECTION 2008-007 B	COUNTY COOK	TOTAL SHEETS 39	SHEET NO. 21
	PLOT SCALE = 1/8000' / IN.	DRAWN - D.L. / F.M.	REVISED -		SCALE: NONE	SHEET NO. S10 OF S12 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT	CONTRACT NO. 60D55	
	PLOT DATE = 4/30/2008	CHECKED - B.N.S. / J.C.N.	REVISED -									

The diameter of this part is equal or larger than the diameter of bar spliced.

The diameter of this part is the same as the diameter of the bar spliced.

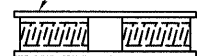


ROLLED THREAD DOWEL BAR



**** ONE PIECE**

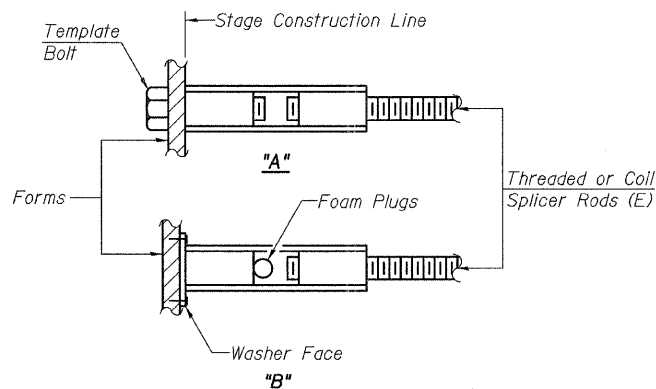
Wire Connector



WELDED SECTIONS

BAR SPLICER ASSEMBLY ALTERNATIVES

**Heavy Hex Nuts conforming to ASTM A 563, Grade C, D or DH may be used.



INSTALLATION AND SETTING METHODS

"A" : Set bar splicer assembly by means of a template bolt.
 "B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.
 (E) : Indicates epoxy coating.

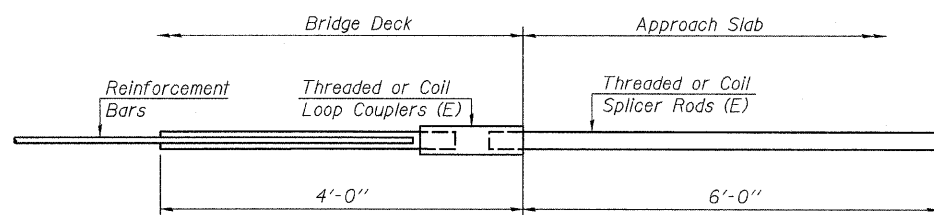
NOTES

Bar splicer assemblies shall be of an approved type and shall develop in tension at least 125 percent of the yield strength of the lapped reinforcement bars.
 Splicer rods shall be of minimum 60 ksi yield strength, threaded or coiled full length.
 All reinforcement bars shall be lapped and tied to the splicer rods or dowel bars.
 Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars.
 Other systems of similar design may be submitted to the Engineer for approval. Approval shall be based on certified test results from an approved testing laboratory that the proposed bar splicer assembly satisfies the following requirements:

- ① Minimum Capacity (Tension in kips) = $1.25 \times f_y \times A_t$
- ② Minimum *Pull-out Strength (Tension in kips) = $0.66 \times f_y \times A_t$

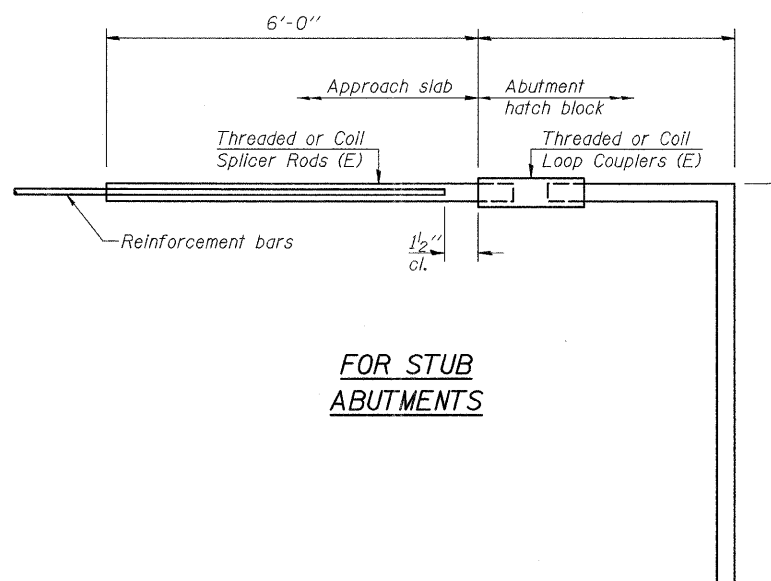
Where f_y = Yield strength of lapped reinforcement bars in ksi.
 A_t = Tensile stress area of lapped reinforcement bars.
 * = 28 day concrete

BAR SPLICER ASSEMBLIES			
Bar Size to be Spliced	Splicer Rod or Dowel Bar Length	Strength Requirements	
		Min. Capacity kips - tension	Min. Pull-Out Strength kips - tension
#4	1'-8"	14.7	7.9
#5	2'-0"	23.0	12.3
#6	2'-7"	33.1	17.4
#7	3'-5"	45.1	23.8
#8	4'-6"	58.9	31.3
#9	5'-9"	75.0	39.6
#10	7'-3"	95.0	50.3
#11	9'-0"	117.4	61.8



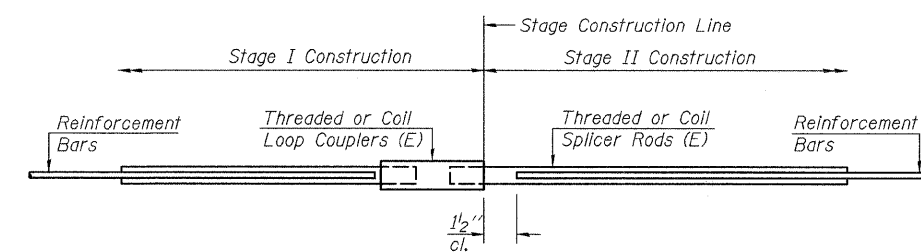
FOR INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

Bar Splicer for #5 bar
Min. Capacity = 23.0 kips - tension
Min. Pull-out Strength = 12.3 kips - tension
No. Required = -



FOR STUB ABUTMENTS

Bar Splicer for #5 bar
Min. Capacity = 23.0 kips - tension
Min. Pull-out Strength = 12.3 kips - tension
No. Required = -

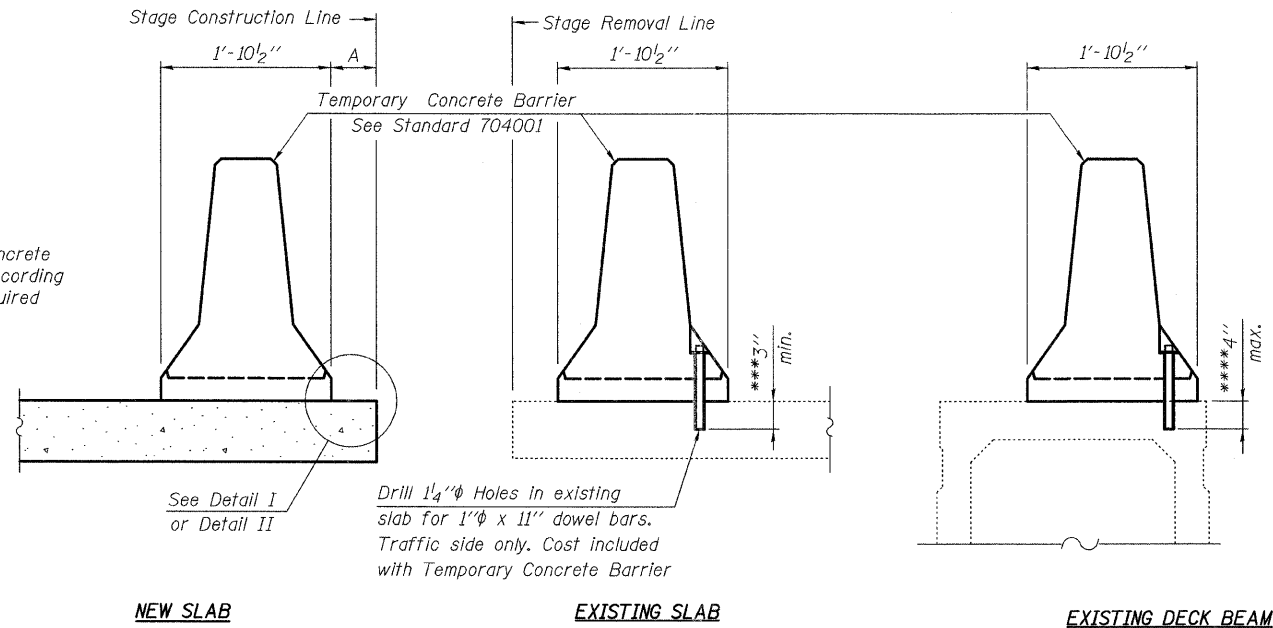


STANDARD

Bar Size	No. Assemblies Required	Location
#5	71	Median
Total	71	

BSD-1

When "A" is 3'-6" or less, the temporary concrete barrier shall be anchored to the new slab according to Detail I or Detail II. No anchorage is required when "A" is greater than 3'-6".



SECTIONS THRU SLAB OR DECK BEAM

NOTES

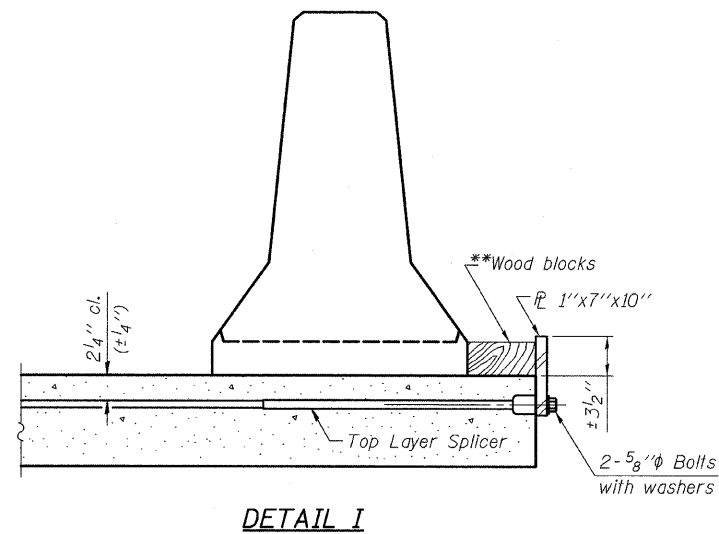
Detail I - With Bar Splicer or Couplers:
Connect one (1) 1"x7"x10" Steel P to the top layer of Couplers with 2-5/8"φ Bolts screwed to Coupler at approximate C of each Barrier Panel.

Detail II - With Extended Reinforcement Bars:
Connect one (1) 1"x7"x10" Steel P to the Concrete Slab or Concrete Wearing Surface with 2-5/8"φ Expansion Anchors or Cast In Place Inserts spaced between the top layer of Reinforcement at approximate C of each Barrier Panel.

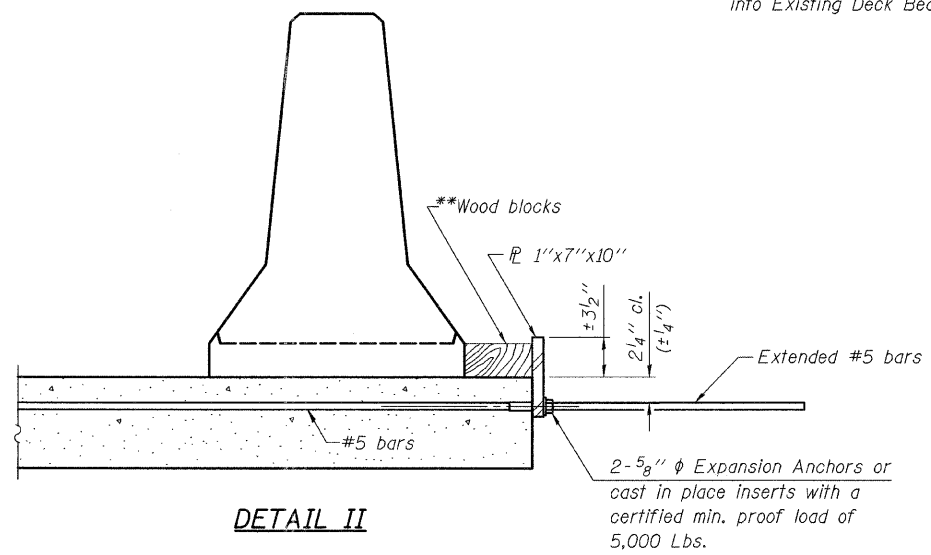
Cost of Anchorage is included with Temporary Concrete Barrier. The 1"x7"x10" Plate shall not be removed until Stage II Construction Forms and all Reinforcement Bars are in place and the Concrete is ready to be placed.

***Dimension shown is minimum required embedment into Concrete. If Hot-Mix Asphalt Wearing Surface is present, minimum embedment shall be in addition to wearing surface depth.

****If Existing Deck Beam is to remain in place after Stage Construction, embedment shall only be into Wearing Surface and not into Existing Deck Beam Concrete.

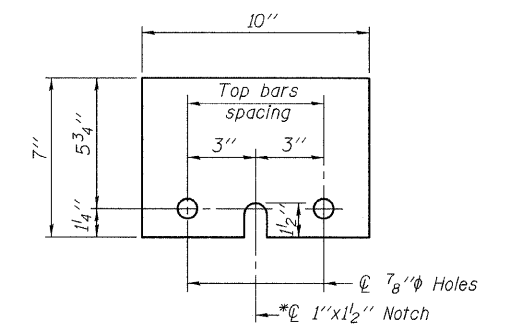


DETAIL I



DETAIL II

**Wood blocks may be omitted when required to provide minimum stage traffic lane width. When the wood blocks are omitted, the concrete barrier shall be in direct contact with the steel retainer plate.



STEEL RETAINER P 1" x 7" x 10"
* Required only with Detail II

R-27

FILE NAME = temp conc barrier.sht	USER NAME = IDOT	DESIGNED - B.N.S.	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION GOLF ROAD (IL. RTE. 58) OVER SALT CREEK	F.A.P. RT. 559/341	SECTION 2008-007 B	COUNTY COOK	TOTAL SHEETS 39	SHEET NO. 23	
PLOT SCALE = 1:8000' / IN.	CHECKED - B.N.S. / J.C.N.	REVISED -	SCALE: NONE			SHEET NO. 512 OF 512 SHEETS	STA. TO STA.	FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT		CONTRACT NO. 60D55	
PLOT DATE = 4/30/2008	DATE - APRIL 21, 2008	REVISED -									
-0349											

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BENCH MARK:

Existing Structure: S.N. 016-0504, was originally built in 1900 and reconstructed in 1970 as S.B.I. Route 63, Section 31-IR. In 1985, the Structure was repaired, at that time the Bituminous Concrete Surface was removed and replaced. In 1997 the Structure rehabilitation was done due to deterioration, Bituminous Concrete Surface was replaced with a reinforced concrete overlay. In 2005 many concrete deck beams were removed and replaced. The existing two span Structure consists of Precast Prestressed Concrete Deck Beams supported on closed abutments and a solid pier. Dimensions are 44'-0" Back to Back Abutments and 74'-2" out to out deck width with a 0° skew.

PROPOSED IMPROVEMENT:

The existing Precast Prestressed Concrete Deck Beams and Concrete Overlay shall be removed and replaced utilizing Stage Construction, while maintaining the existing Alignment & Profile. Substructure repairs shall be performed as shown.

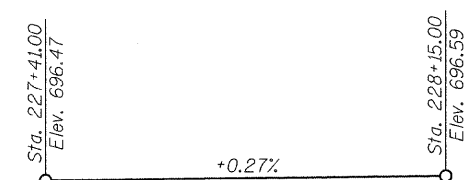
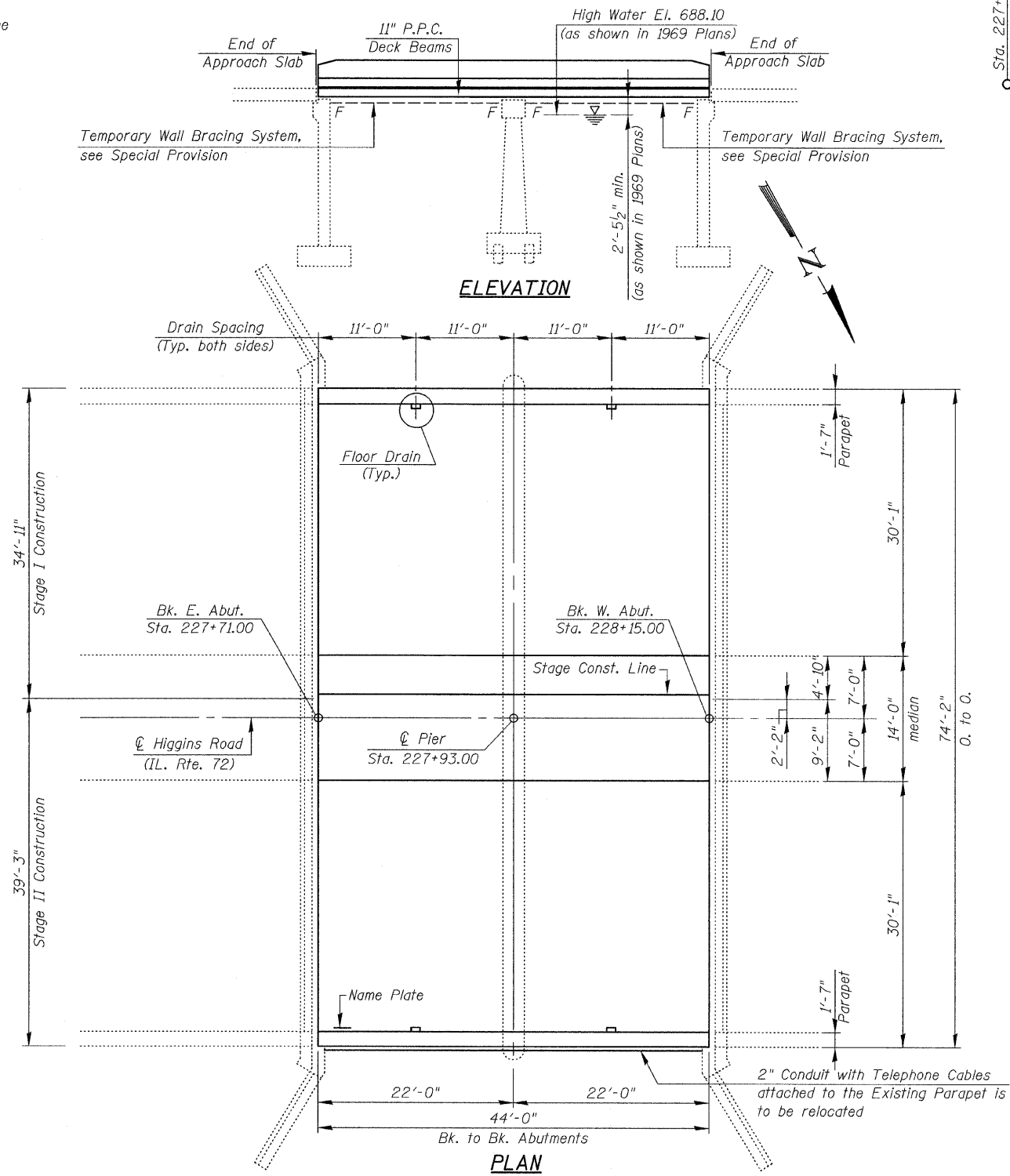
Salvage: None

SCOPE OF WORK:

Remove and replace the P.P.C. Deck Beam Superstructure and the Concrete Wearing Surface, 5" (min.) and perform any needed repairs to the Substructure

INDEX OF SHEETS

- S1 GENERAL PLAN & ELEVATION
- S2 GENERAL NOTES & TOTAL BILL OF MATERIAL
- S3 CONSTRUCTION STAGING-I
- S4 CONSTRUCTION STAGING-II
- S5 REINFORCEMENT PLAN
- S6 PARAPET DETAILS
- S7 JOINT DETAILS
- S8 P.P.C. DECK BEAM DETAILS
- S9 ABUTMENT REPAIR
- S10 PIER REPAIR
- S11 BAR SPLICER ASSEMBLY DETAILS
- S12 TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION



**PROFILE
HIGGINS ROAD**

LOADING HS20-44
Allow 50#/sq. ft. for Future Wearing Surface
DESIGN SPECIFICATIONS
2002 AASHTO

DESIGN STRESSES

FIELD UNITS
f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)
EXISTING CONDITIONS
(SERVICE DESIGN)
f'c = 1,400 psi
fy = 20,000 psi (Reinforcement)

PRECAST PRESTRESSED UNITS

f'c = 5,000 psi
f'ci = 4,000 psi
f's = 270,000 psi (1/2"φ Low Relax Strands)
f'si = 201,960 psi (1/2"φ Low Relax Strands)

WATERWAY INFORMATION

(AS SHOWN IN 1969 PLANS)
Drainage Area 2,040 acres
Required Opening 295 s.f.
Present Opening 325 s.f.
Future Prop. Opening 325 s.f.
Ordinary Water El. Low Water El. 678.2
High Water El. 688.10
Q = 1140 cfs (50 yrs.)

SEISMIC DATA

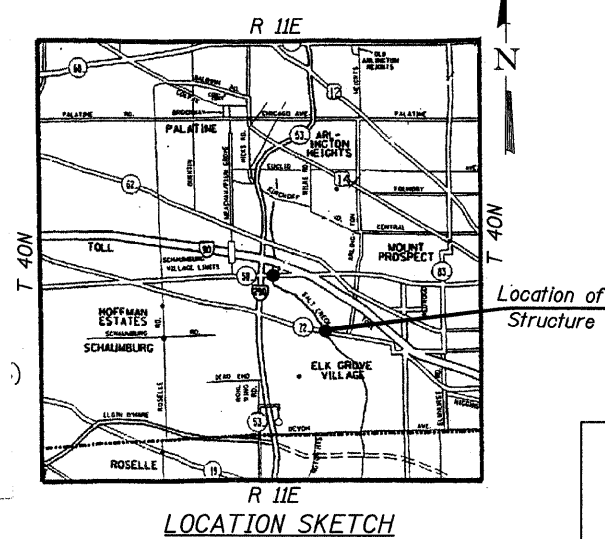
Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 0.04g
Site Coefficient (S) = 1.2

STATION 227+93.00
REBUILT 2008 BY
STATE OF ILLINOIS
F.A.P. RTE. 341 SEC. 2008-007-B
LOADING HS20
STRUCTURE NO. 016-0504

NAME PLATE

See Std. 515001

Existing Name Plate shall be cleaned and relocated next to new Name Plate. Cost included with Name Plates



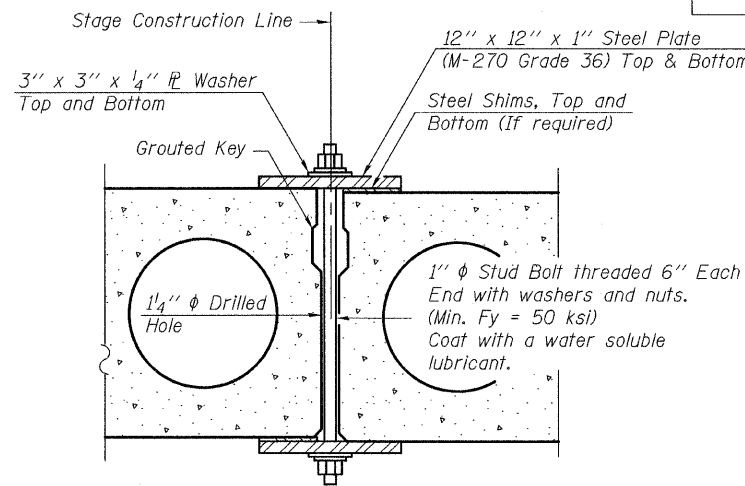
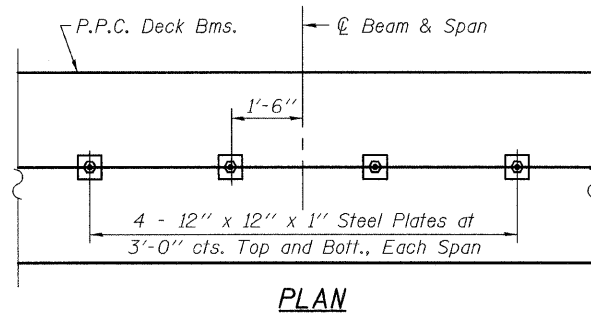
Bhadesh N. Shah
BHADRESH N. SHAH
LICENSED STRUCTURAL ENGINEER
STATE OF ILLINOIS LIC. No. 081-004476
EXPIRES: 11-30-08

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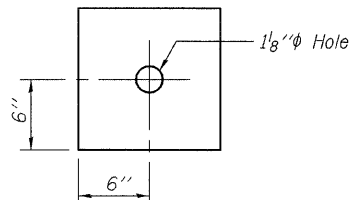
FILE NAME = plan.elev.sht	USER NAME = 1001	DESIGNED - B.N.S.	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GENERAL PLAN & ELEVATION HIGGINS ROAD (IL. RTE. 72) OVER SALT CREEK S.N. 016-0504				F.A.P. RTE. 559/341	SECTION 2008-007 B	COUNTY COOK	TOTAL SHEETS 39	SHEET NO. 24
	PLOT SCALE = 1/8000' / IN.	DRAWN - D.L. / F.J.M.	REVISED -		SCALE: NONE	SHEET NO. S1 OF S12 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT	CONTRACT NO. 60D55		
	PLOT DATE = 6/30/2008	CHECKED - B.N.S. / J.C.N.	REVISED -										
		DATE - JUNE 30, 2008	REVISED -										

TOTAL BILL OF MATERIAL

DESCRIPTION	UNIT	SUPER.	SUB.	TOTAL
Removal of Existing Superstructures	Each	1	-	1
Floor Drains	Each	4	-	4
Concrete Superstructure	Cu. Yd.	34.2	-	34.2
Bridge Deck Grooving	Sq. Yd.	258	-	258
Protective Coat	Sq. Yd.	386	-	386
Concrete Wearing Surface, 5"	Sq. Yd.	292	-	292
Precast Prestressed Concrete Deck Beams (11" Depth)	Sq. Ft.	3,236	-	3,236
Furnishing & Erecting Structural Steel	Pound	2,000	-	2,000
Reinforcement Bars, Epoxy Coated	Pound	6,940	-	6,940
Bar Splicers	Each	44	-	44
Silicone Joint Sealer, 1 ³ / ₄ "	Foot	74	-	74
Structural Repair of Concrete (Depth Greater Than 5 In.)	Sq. Ft.	-	9	9
Structural Repair of Concrete (Depth Equal to or Less Than 5 In.)	Sq. Ft.	-	139	139
Name Plates	Each	1	-	1
Temporary Wall Bracing System	Lump Sum	1	-	1



SECTION



CLAMPING PLATE

SHEAR KEY CLAMPING DETAILS AT STAGE CONST. JT.

Cost included with Precast Prestressed Concrete Deck Beams.
See Stage Construction Details for traffic lanes.

*
Based on the Field Notes from I.D.O.T. Maintenance Engineers, dated September, 2007

NOTES:

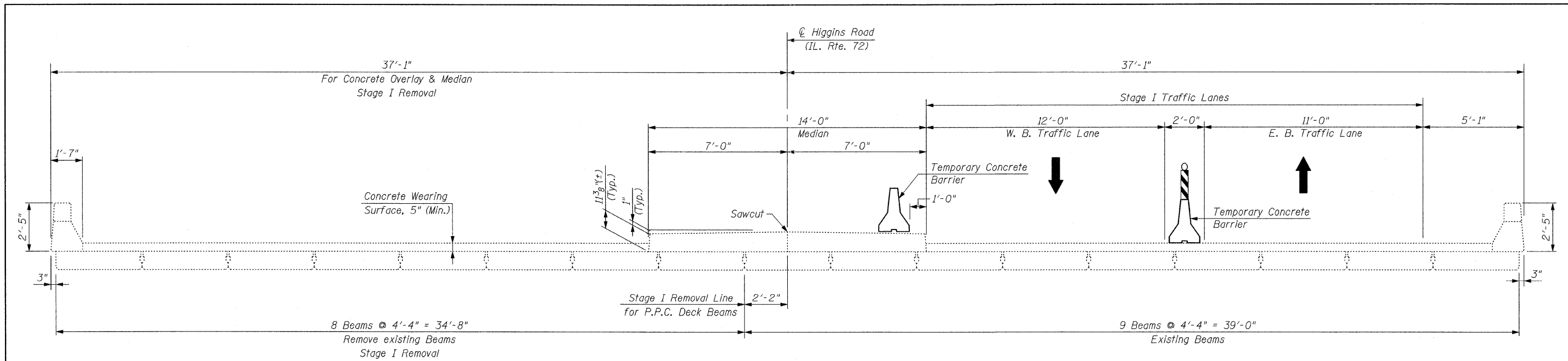
As an alternate to Drilled Holes, the Contractor may request the Fabricator to cast 2" Dia. Semi-Circular Recesses in the side of each Beam adjacent to the Stage Construction Line.
These Recesses must align to form a hole at the correct location for the Clamping Device Bolts.
If the Contractor elects to use this Alternate, a Detail of the 2" Dia. Semi-Circular Recesses must be shown on the Shop Drawings.

GENERAL NOTES:

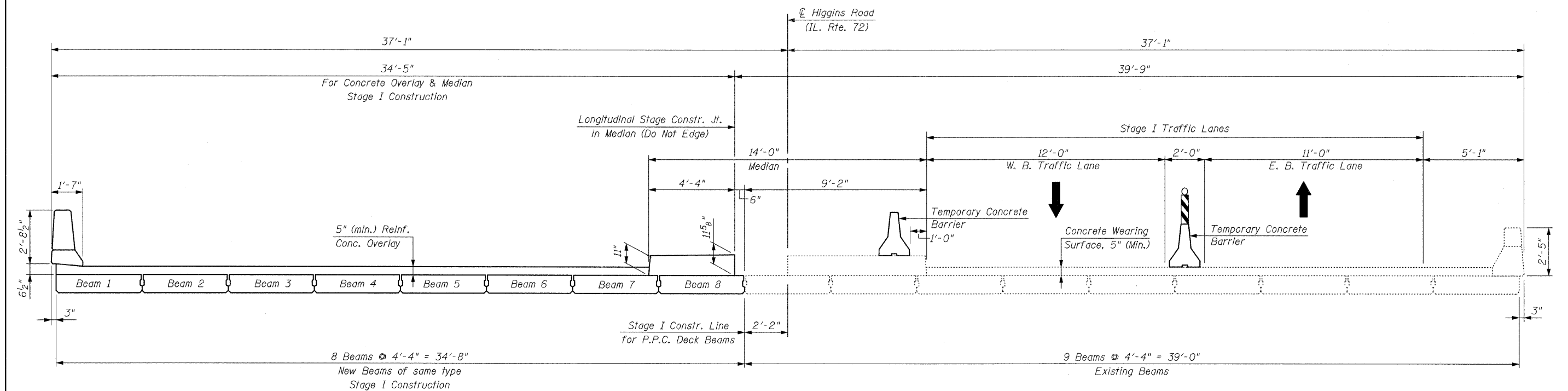
- Plan dimensions and details relative to existing plans are subject to routine variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in the scope of work, however, the Contractor will be paid for the quantity actually furnished based upon the unit price bid for the work.
- The Reinforced Concrete Overlay, as specified on the plan details, shall be paid for at the Contract Unit Price Bid per Square Yard for "Concrete Wearing Surface" and pounds for "Reinforcement Bars, Epoxy Coated".
- Reinforcement Bars shall conform to the requirements of ASTM A 706, Grade 60 (IL. Modified). See Special Provisions.
- Reinforcement Bars designated (E) shall be Epoxy Coated.
- The minimum thickness of the Concrete Overlay shall be 5 inches and varies as required to adjust for the new Profile Grade and Beam Camber.
- The Contractor is advised that the existing PPC Deck Beams are in a deteriorated condition with reduced load carrying capacity. It is the Contractor's responsibility to account for the condition of the Beams when developing Construction Procedures for Removal and Replacement of the Superstructure.
- If the Contractor's procedure for existing Beam Removal or Placement of new Beams involves placement of heavy equipment on the new Deck Beams, a detailed procedure shall be submitted to the Engineer for approval. The procedure shall include calculations, sealed by an Illinois Licensed Structural Engineer, verifying the Structural adequacy of the Beams for the Proposed Load.
- Any damage done to the Bridge during Beam removal shall be repaired by the Contractor. Cost is to be included with "Removal of Existing Superstructures".
- Temporary Concrete Barrier shall only be anchored into the Concrete Overlay and not into the Precast Prestressed Concrete Deck Beams.
- All Structural Steel shall be Shop Painted with the Inorganic Zinc Rich Primer per AASHTO M300, Type 1. Cost included with "Furnishing and Erecting Structural Steel".
- No in-stream work will be allowed on this Project.
- Slipforming of the Parapets is not allowed.
- Repair of the abutments and piers shall be completed prior to placement of the new deck beams.

FILE NAME = gen_notes.sht	USER NAME = IDOT	DESIGNED - B.N.S.	REVISIONS -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GENERAL NOTES & TOTAL BILL OF MATERIAL HIGGINS ROAD (IL. RTE. 72) OVER SALT CREEK S.N. 016-0504				F.A.P. RTE. 559/341	SECTION 2008-007 B	COUNTY COOK	TOTAL SHEETS 39	SHEET NO. 25
	PLOT SCALE = 1:2000' / IN.	DRAWN - D.L. / F.M.	REVISIONS -		SCALE: NONE	SHEET NO. S2 OF S12 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT	CONTRACT NO. 60D55		
	PLOT DATE = 4/30/2008	CHECKED - B.N.S. / J.C.N.	REVISIONS -										
		DATE - APRIL 21, 2008	REVISIONS -										

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STAGE I REMOVAL



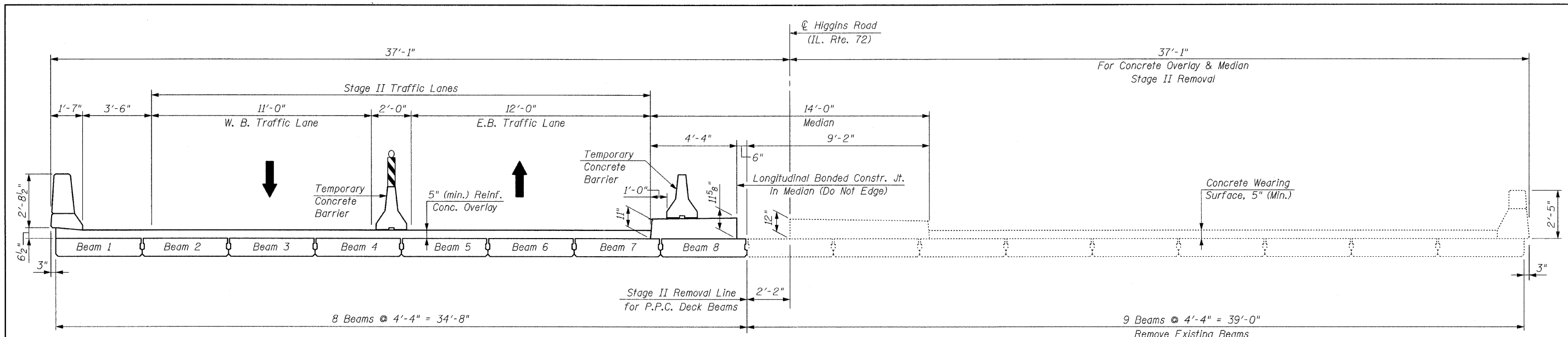
STAGE I CONSTRUCTION
(Looking West)

NOTE:
Quantity for Temporary Barrier is included with the Roadway Plans

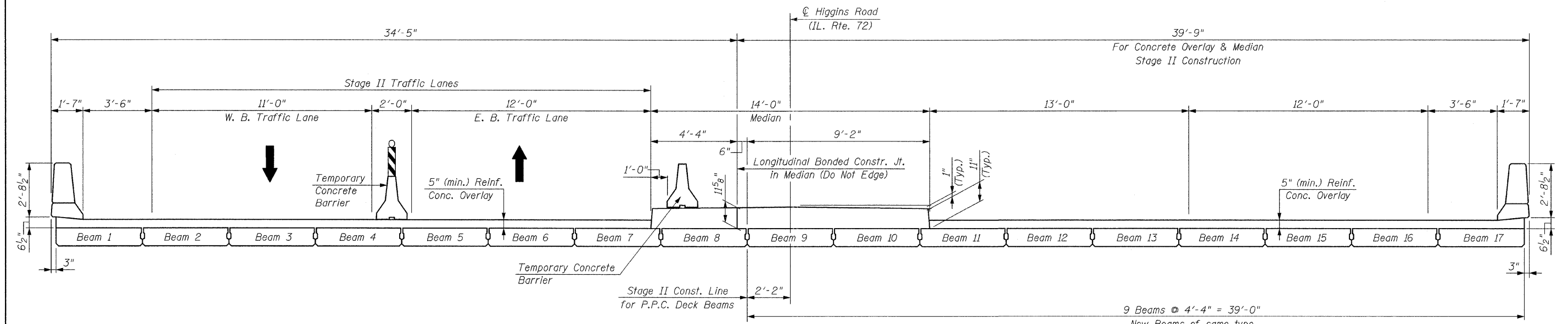
CONSTRUCTION STAGING

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FILE NAME = staging sheet.Lsht	USER NAME = IDOT	DESIGNED - B.N.S.	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CONSTRUCTION STAGING - I HIGGINS ROAD (IL RTE. 72) OVER SALT CREEK S.N. 016-0504			F.A.P. RTE. 559/341	SECTION 2008-007 B	COUNTY COOK	TOTAL SHEETS 39	SHEET NO. 26
	PLOT SCALE = 1:8000' / IN.	DRAWN - D.L. / F.M.	REVISED -		SCALE: NONE	SHEET NO. S3 OF S12 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT	CONTRACT NO. 60D55	
	PLOT DATE = 4/30/2008	CHECKED - B.N.S. / J.C.N.	REVISED -									
		DATE - APRIL 21, 2008	REVISED -									



STAGE II REMOVAL
(Looking West)



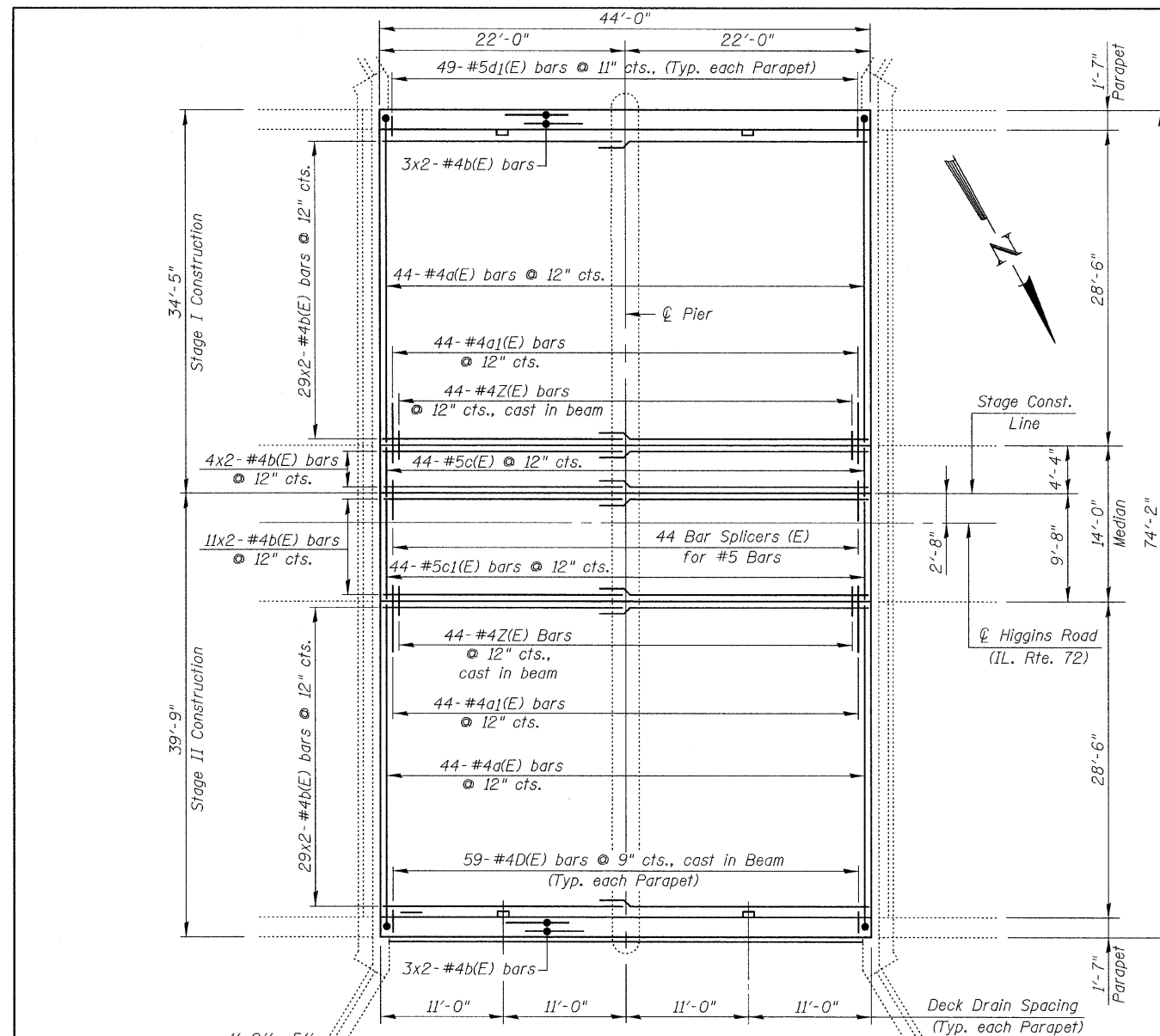
STAGE II CONSTRUCTION
(Looking West)

CONSTRUCTION STAGING

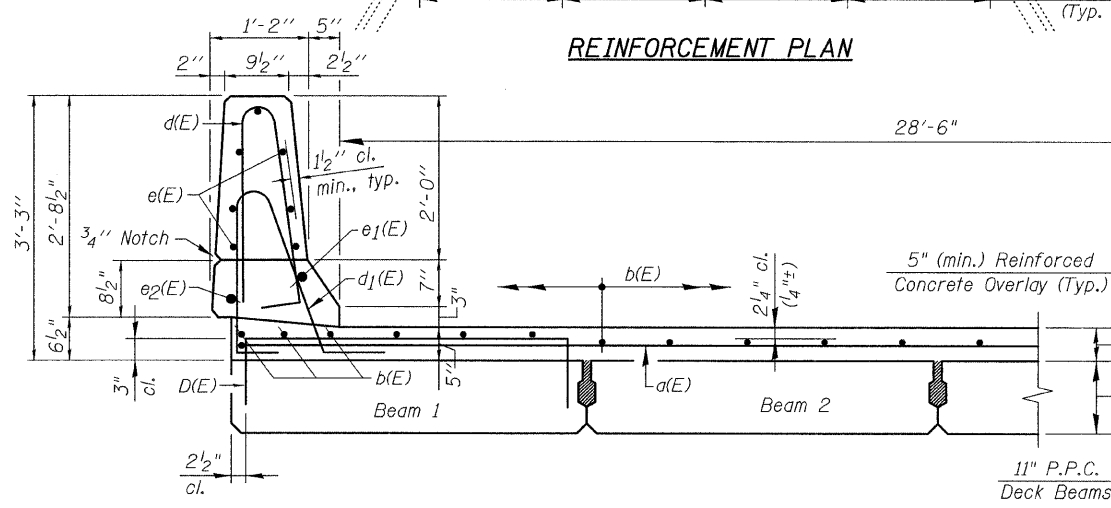
NOTE:
Quantify for Temporary Barrier is included with the Roadway Plans

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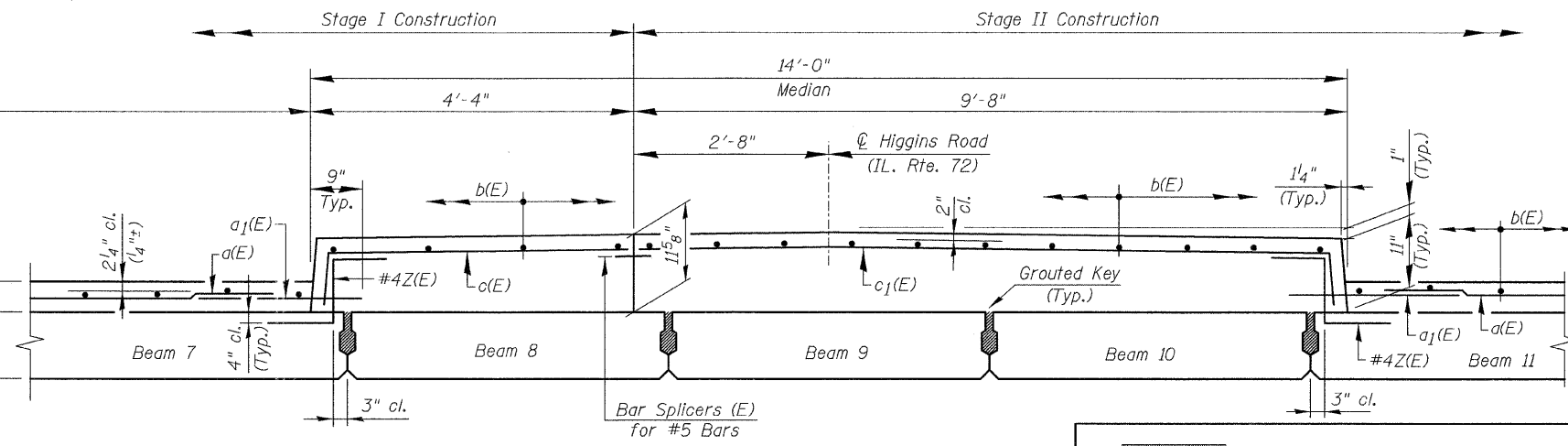
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	PLOT SCALE = 1/8" = 1' / IN.	DRAWN - D.L. / F.M.	REVISED -		SCALE: NONE	SHEET NO. S4 OF S12 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT	CONTRACT NO. 60D55	
	PLOT DATE = 4/30/2008	CHECKED - B.N.S. / J.C.N.	REVISED -									
		DATE - APRIL 21, 2008	REVISED -									



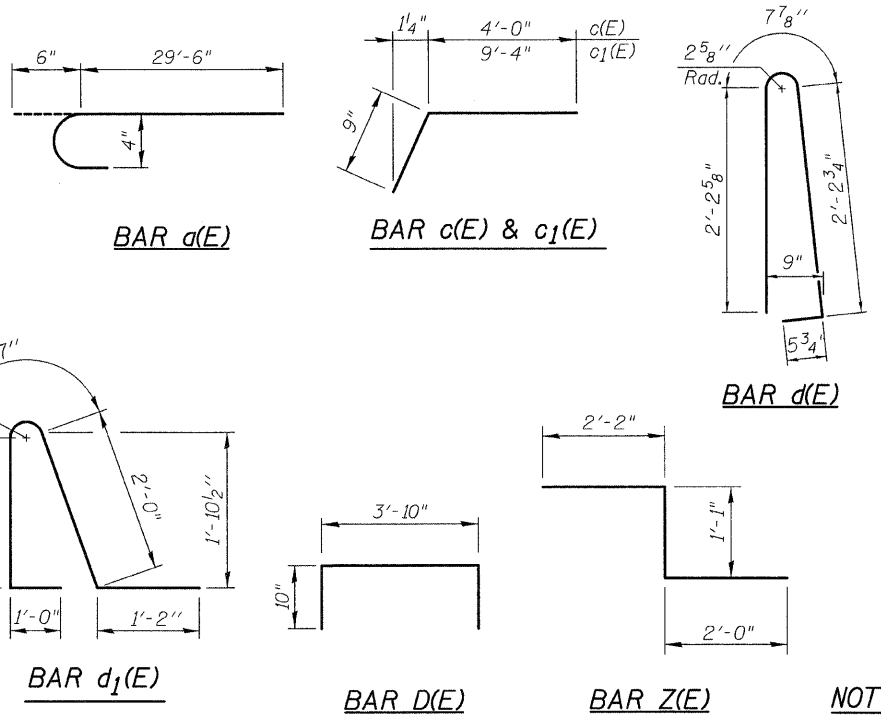
REINFORCEMENT PLAN



SECTION THRU PARAPET



SECTION THRU MEDIAN



MIN. LAP:
#5 Bars = 2'-2"

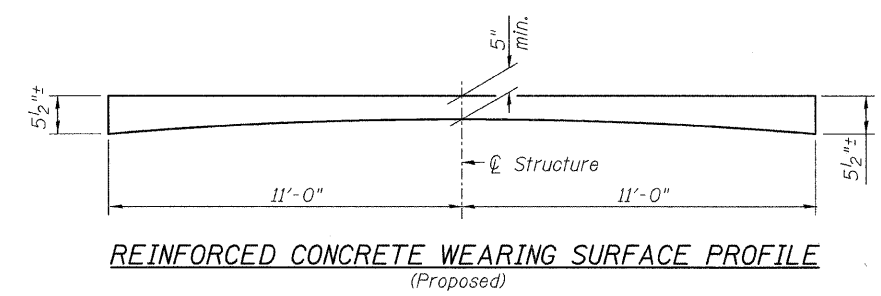
NOTE:
Bars indicated thus 29x2-#5 ect., indicates 29 lines of Bars with 2 lengths per line.

BILL OF MATERIAL

Bar	No.	Size	Length	Shape	
d(E)	88	#4	30'-0"	U	
a1(E)	88	#4	3'-9"	—	
b(E)	152	#4	23'-0"	—	
c(E)	44	#5	4'-9"	—	
c1(E)	44	#5	10'-1"	—	
d(E)	98	#5	5'-7"	—	
d1(E)	98	#5	6'-8"	—	
e(E)	56	#4	10'-8"	—	
e1(E)	4	#8	21'-9"	—	
e2(E)	4	#4	21'-9"	—	
Concrete Superstructure				Cu. Yd.	34.2
Reinforcement Bars, Epoxy Coated				Pound	6,940
Silicone Joint Sealer, 1 3/4"				Foot	74
Bar Splicers				Each	44
Concrete Wearing Surface, 5"				Sq. Yd.	292

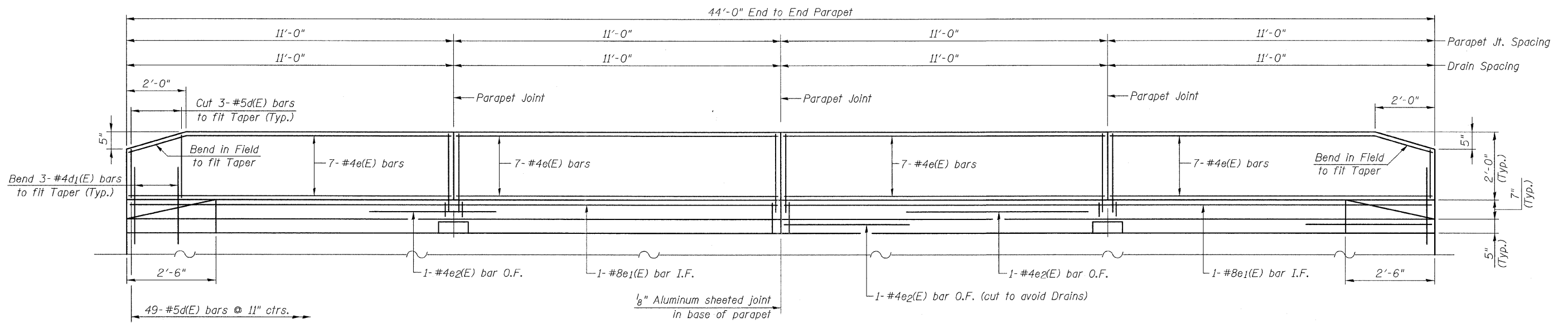
NOTES:

#4D(E) Bars are to be cast with Beams 1 & 17. See Sht. S5 for Details. Cost is included with Precast Prestressed Concrete Deck Beams (11" Depth).
#4Z(E) Bars are to be cast with Beams 7 & 11. See Sht. S5 for Details. Cost is included with Precast Prestressed Concrete Deck Beams (11" Depth).



REINFORCED CONCRETE WEARING SURFACE PROFILE (Proposed)

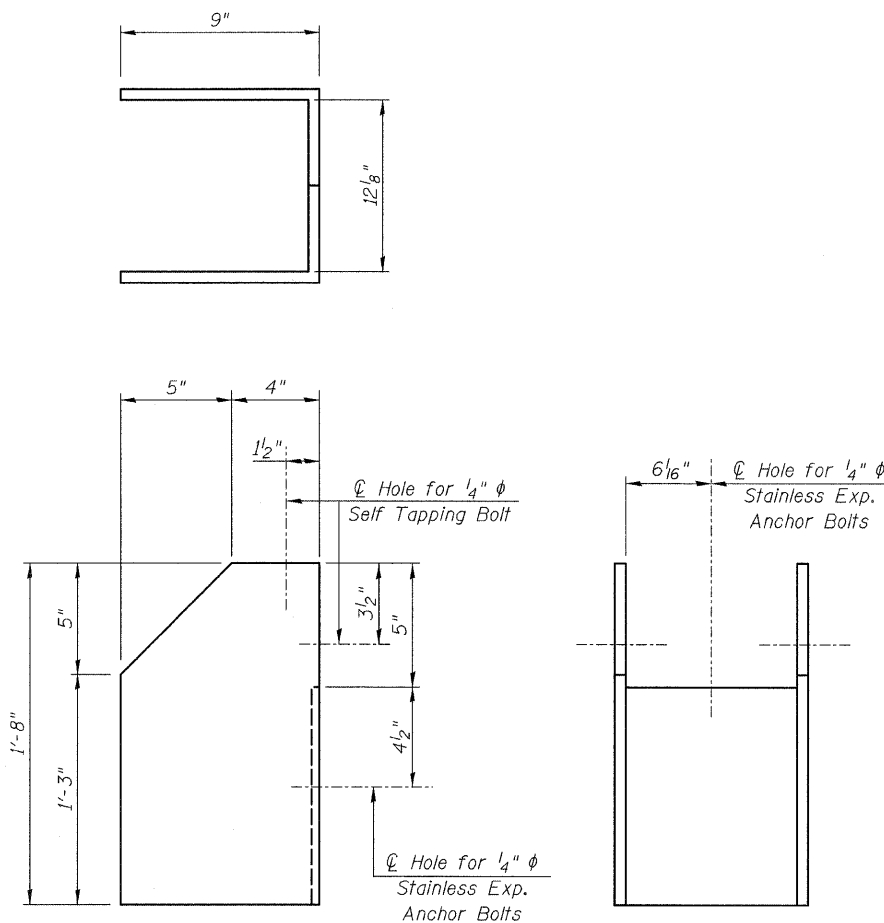
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INSIDE ELEVATION OF NORTH PARAPET - SHOWN
(LOOKING NORTH)

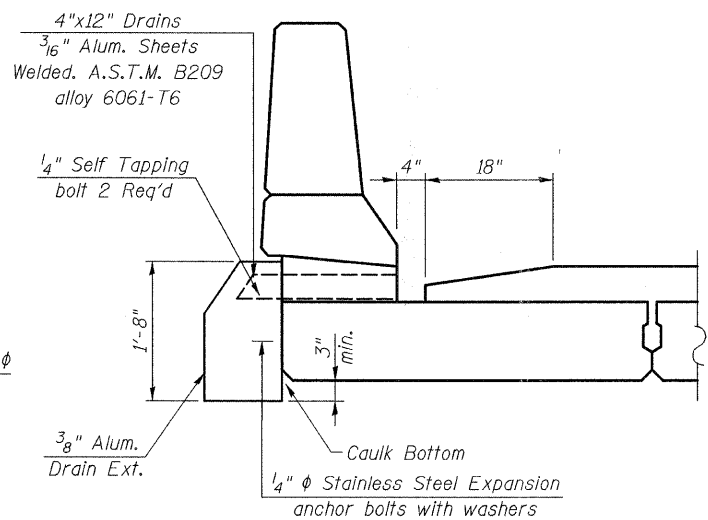
LEGEND:
I.F. = Inside Face
O.F. = Outside Face

INSIDE ELEVATION OF SOUTH PARAPET - OPPOSITE HAND

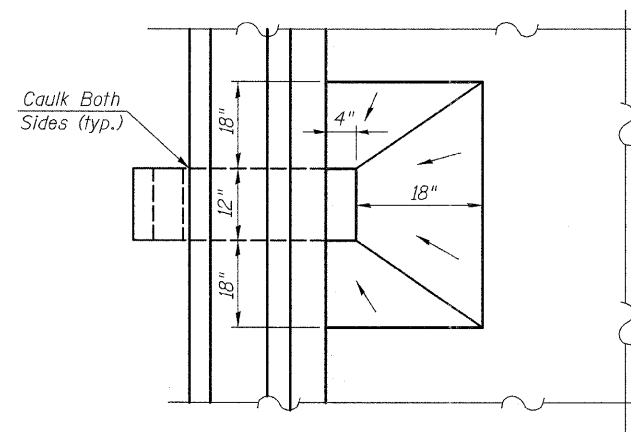


FLOOR DRAIN EXTENSION DETAILS

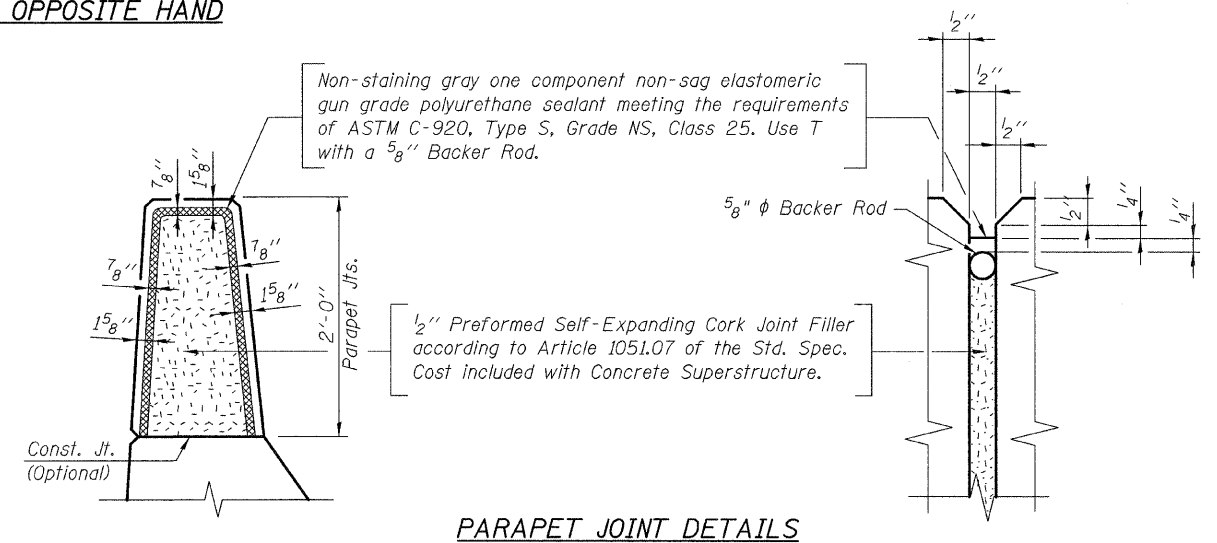
Cost of Floor Drains and Floor Drain Extensions are included in the cost of Floor Drains.



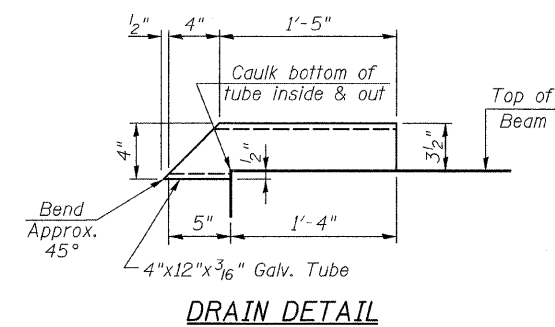
SECTION THRU PARAPET SHOWING DRAIN



PLAN AT FLOOR DRAINS



PARAPET JOINT DETAILS



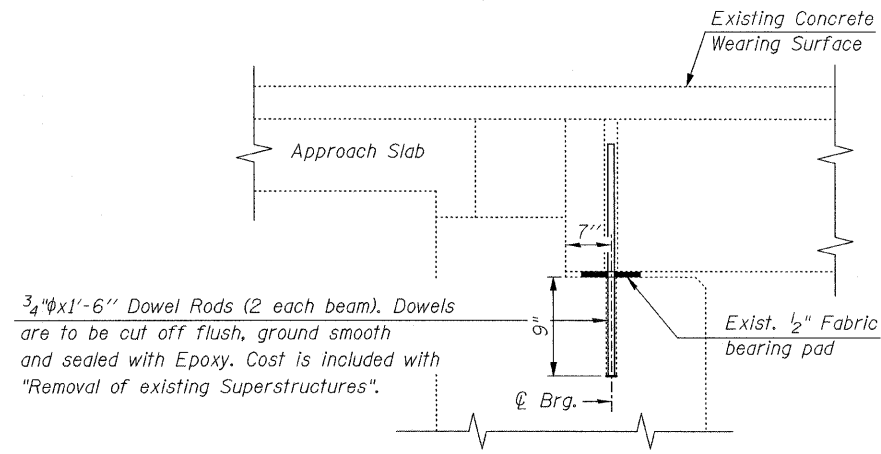
DRAIN DETAIL

NOTE:
See Sheet S5 for Bill of Material

FILE NAME = parapet.sht	USER NAME = IDOT	DESIGNED - B.N.S.	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PARAPET DETAILS HIGGINS ROAD (IL RTE. 72) OVER SALT CREEK S.N. 016-0504			F.A.P. RTE. 559/341	SECTION 2008-007 B	COUNTY COOK	TOTAL SHEETS 39	SHEET NO. 29
	PLOT SCALE = 1/8" = 1'-0"	DRAWN - D.L. / F.M.	REVISED -		SCALE: NONE	SHEET NO. S6 OF S12 SHEETS	STA. TO STA.	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT	CONTRACT NO. 60D55		
	PLOT DATE = 4/30/2008	CHECKED - B.N.S. / J.C.N.	REVISED -									
		DATE - APRIL 21, 2008	REVISED -									

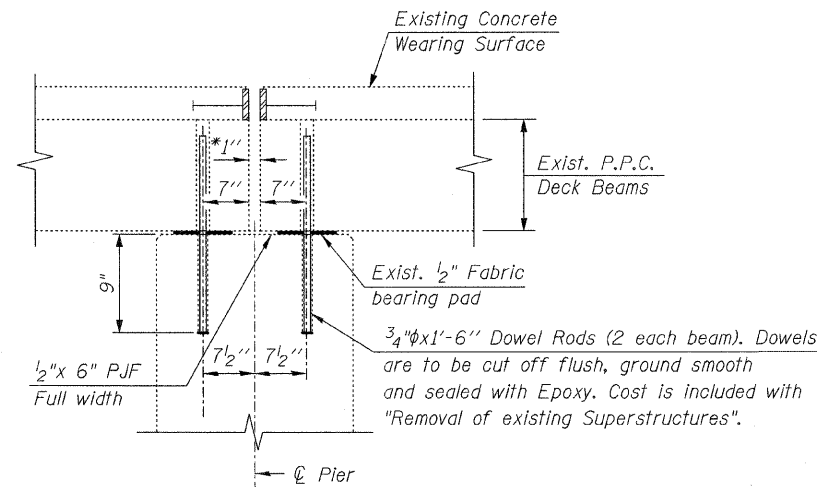


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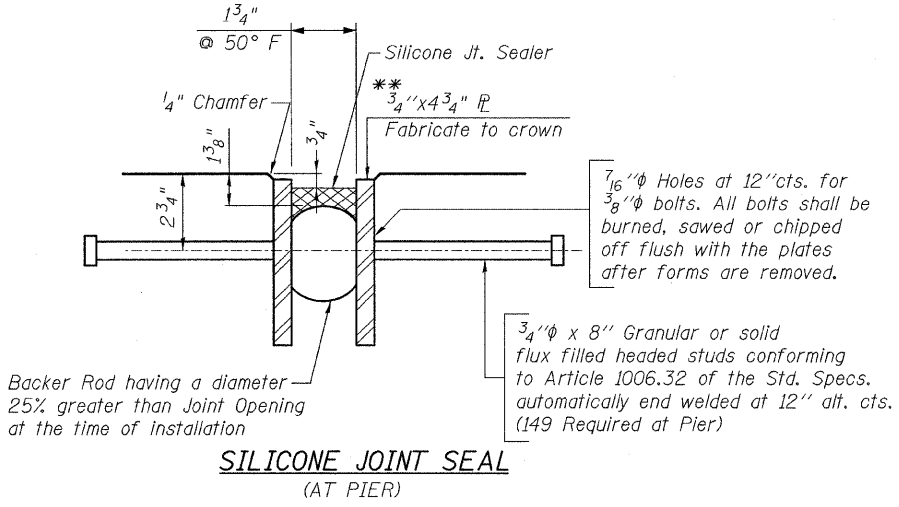
3/4"φx1'-6" Dowel Rods (2 each beam). Dowels are to be cut off flush, ground smooth and sealed with Epoxy. Cost is included with "Removal of existing Superstructures".

SECTION THRU ABUTMENT
(EXISTING)



3/4"φx1'-6" Dowel Rods (2 each beam). Dowels are to be cut off flush, ground smooth and sealed with Epoxy. Cost is included with "Removal of existing Superstructures".

SECTION THRU FIXED PIER
(EXISTING)



Backer Rod having a diameter 25% greater than Joint Opening at the time of installation

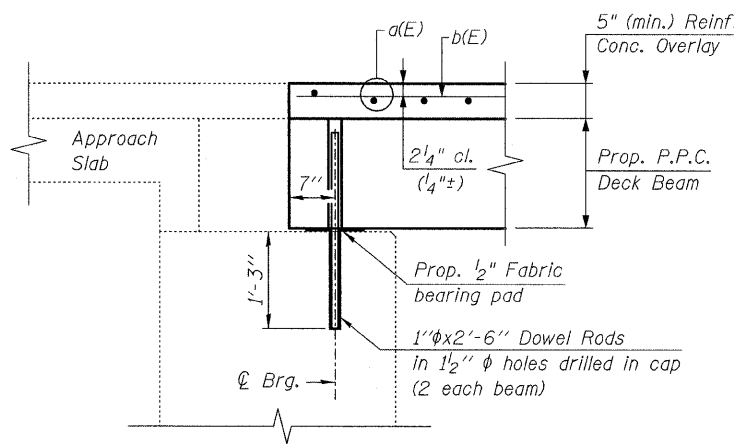
SILICONE JOINT SEAL
(AT PIER)

7/16"φ Holes at 12"cts. for 3/8"φ bolts. All bolts shall be burned, sawed or chipped off flush with the plates after forms are removed.

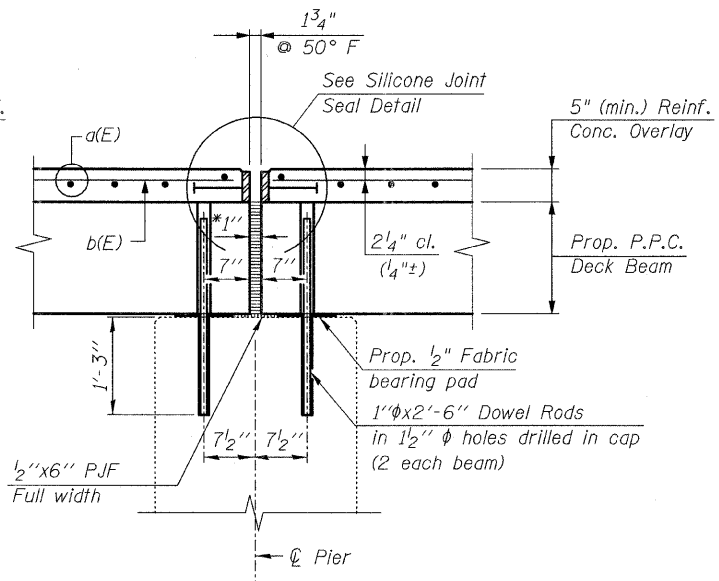
3/4"φ x 8" Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs. automatically end welded at 12" alt. cts. (149 Required at Pier)

NOTE:
Exist. P.P.C. Deck Beams & Concrete Wearing Surface to be removed

* Furnish in segments of 20 ft. maximum length. Maximum space between installed segments shall be 3/16". Seal space with Silicone Sealant suitable for Structural Steel.
** Cut retainer bars in sidewalk or median 6" short of the sidewalk or median face.



SECTION THRU ABUTMENT
(PROPOSED)



SECTION THRU FIXED PIER NO. 1
(PROPOSED)

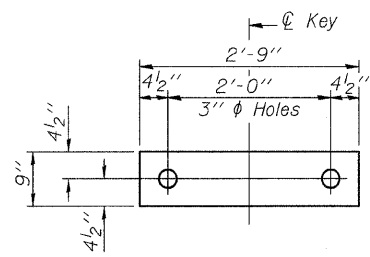
Notes:
After fabrication all surfaces of the Steel Plates shall be given one Shop Coat of paint specified for Structural Steel.
No field painting required.

Notes:
After beams have been erected, holes shall be drilled into substructure and anchor dowels placed. Dowel holes shall be filled with non-shrink grout to top of beam and allowed to cure min. 24 hrs. prior to grouting the shear keys.
All horizontal dimensions are at right angles to beam ends. See Sheet S8 for bearing pad details.

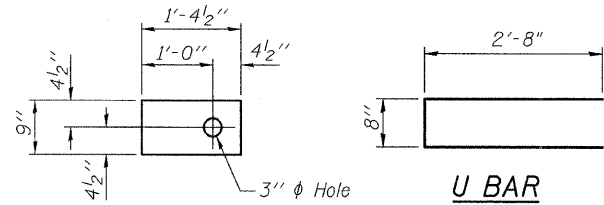
* 1" Jt. shall be filled with non-shrink grout. 1" dimension may vary to accommodate tolerance in beam lengths. Cost included with Concrete Wearing Surface, 5"

FILE NAME = joint_details.sht	USER NAME = IDOT	DESIGNED - B.N.S.	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	JOINT DETAILS HIGGINS ROAD (IL RTE. 72) OVER SALT CREEK S.N. 016-0504		F.A.P. RTE. 559/341	SECTION 2008-007 B	COUNTY COOK	TOTAL SHEETS 39	SHEET NO. 30	
PLOT SCALE = 1:2000' / IN.	CHECKED - B.N.S. / J.C.N.	DATE - APRIL 21, 2008	REVISED -		SCALE: NONE	SHEET NO. S7 OF S12 SHEETS	STA. TO STA.	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT	CONTRACT NO. 60D55		
PLOT DATE = 4/30/2008	DATE - APRIL 21, 2008	REVISED -	REVISED -									

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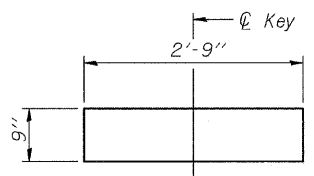


FABRIC BEARING PAD
(Interior)



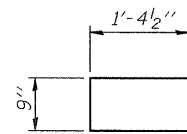
FABRIC BEARING PAD
(Exterior)

U BAR



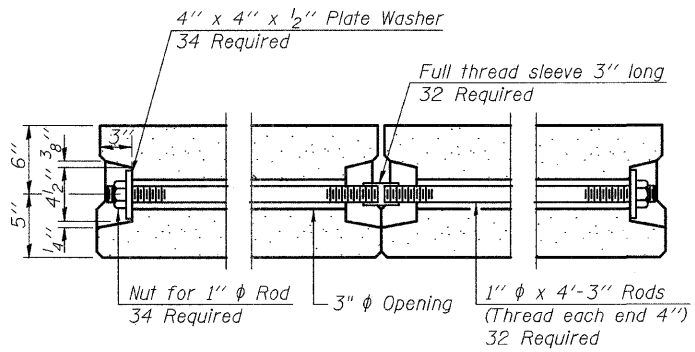
FABRIC BEARING PAD
(Interior)

FIXED

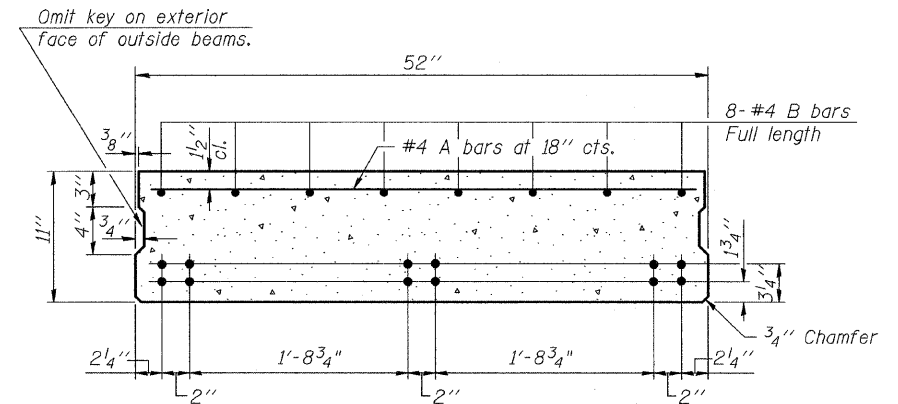


FABRIC BEARING PAD
(Exterior)

EXPANSION



TYPICAL TRANSVERSE TIE ASSEMBLY
(If Required)



TYPICAL SECTION

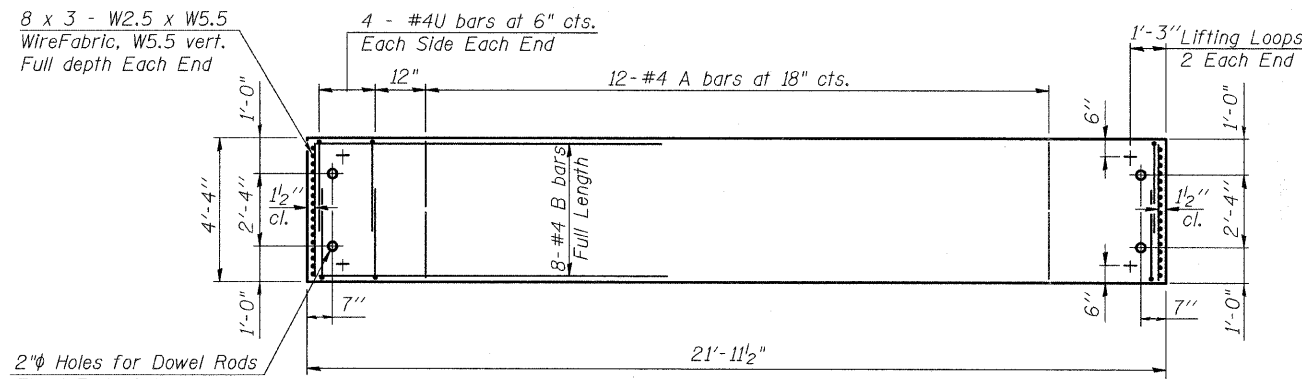
1/2" ϕ Strands, Each Strand Stressed to 30,900 Lbs.
6 Strands 1 3/4" up, 6 Strands 3 1/4" up

Note:
Place strands symmetrically about ϕ beam.

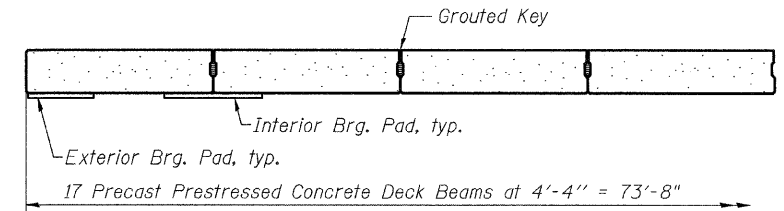
NOTES:

#4D(E) Bars are to be cast with Beams 1 & 17.
See Sht. S5 for Details. Cost is included with
Precast Prestressed Concrete Deck Beams (11" Depth).

#4Z(E) Bars are to be cast with Beams 7 & 11.
See Sht. S5 for Details. Cost is included with
Precast Prestressed Concrete Deck Beams (11" Depth).



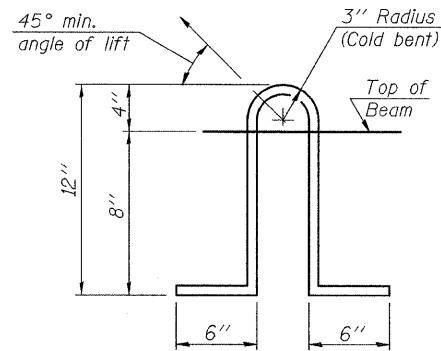
PLAN



HALF CROSS SECTION

NOTES

Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter shall be 1/2" and the nominal cross-sectional area shall be 0.153 sq. in. Lifting loops shall be 2-1/2" ϕ -270 ksi strands, as shown. The 1" ϕ rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets that receive transverse tie bar on outside shall be filled with grout after transverse tie assembly is in place. Non prestressing steel shall conform to ASTM A 706 (IL MOD), Grade 60. The bearing seat surfaces shall be adjusted by shimming to assure firm and even bearing. Two 1/8" fabric adjusting shims of the dimensions of the Exterior Bearing Pad shall be provided for each bearing. Keyway surfaces shall be cleaned to remove form oil or other bond breaking material prior to shipment of the beams. Cleaning shall be done by sandblasting the keyway areas between top of the beam and the bottom edge of the key. Corrosion Inhibitor, per Article 1020.05(b)(12) of the Standard Specifications, shall be used in the concrete for precast prestressed concrete deck beams. Required Release Strength, f'ci, shall be 4,000 p.s.i. A Concrete Sealer meeting the requirements of Section 587 of the Standard Specifications shall be applied to the exterior face and 9" in on the underside of the fascia beams. The Sealer shall be applied after visible crack growth has subsided. This work shall be performed by the producer and included in the cost of the beams.



LIFTING LOOP DETAIL

BILL OF MATERIAL

Material	Sq. Ft.	Total
Precast Prestressed Concrete Deck Beams (11" Depth)	3,236	31

PD-2-S 11-1-06

FILE NAME = p.p.c. deck beam details.sht	USER NAME = IDOT	DESIGNED - B.N.S.	REVISED -
		DRAWN - D.L. / F.M.	REVISED -
		CHECKED - B.N.S. / J.C.N.	REVISED -
		DATE - APRIL 21, 2008	REVISED -

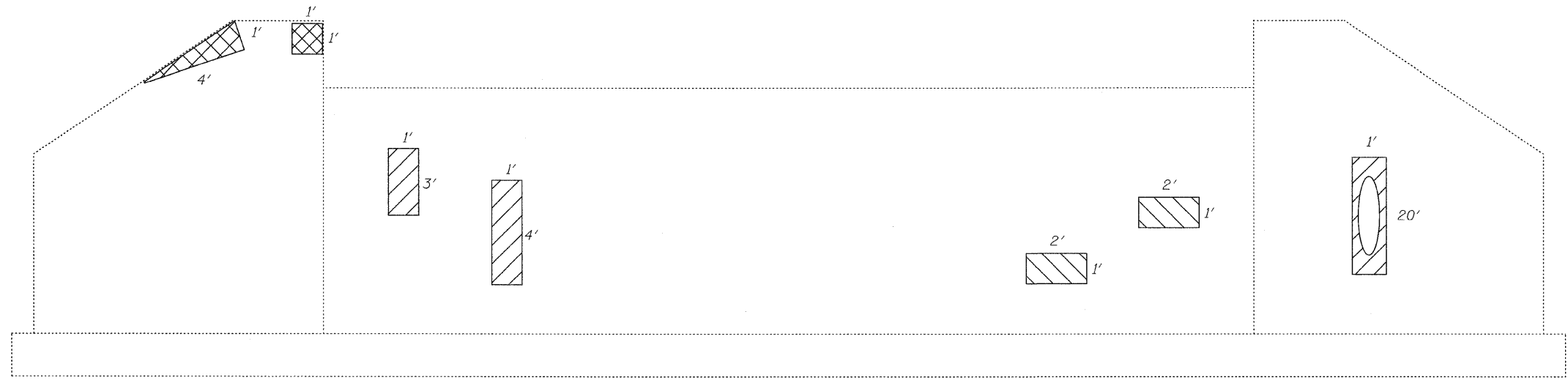
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

P.P.C. DECK BEAM DETAILS
HIGGINS ROAD (IL RTE. 72) OVER SALT CREEK S.N. 016-0504

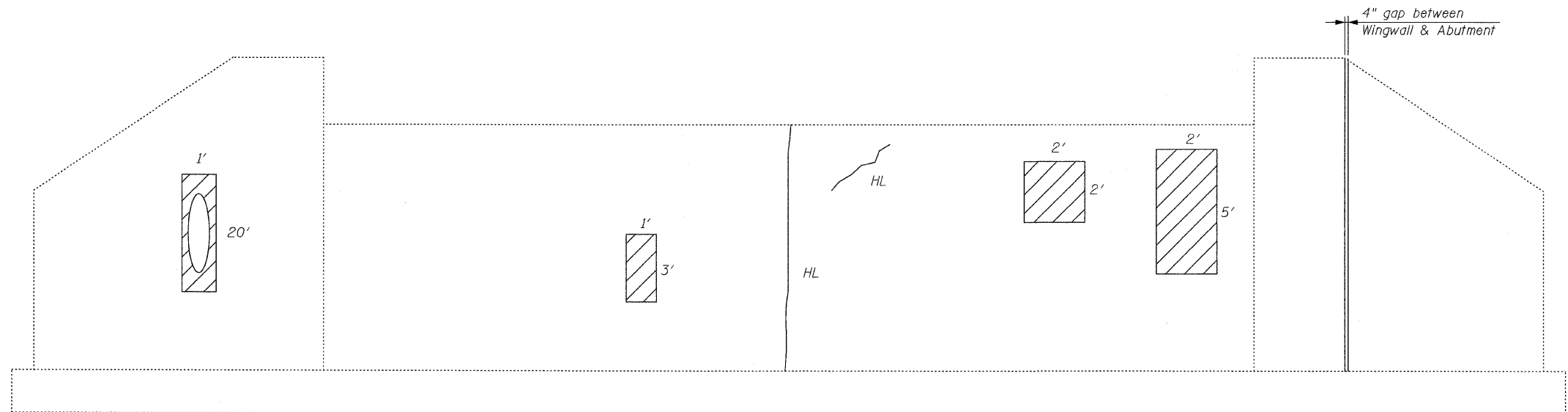
SCALE: NONE	SHEET NO. S8 OF S12 SHEETS	STA. TO STA.	F.A.P. RTE. 559/341	SECTION 2008-007 B	COUNTY COOK	TOTAL SHEETS 39	SHEET NO. 31
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CR & A
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211 W. WACKER DRIVE CHICAGO, IL 60606
PHONE: (312)372-2023 FAX: (312)372-5274

FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT CONTRACT NO. 60D55



EAST ABUTMENT
(LOOKING EAST)

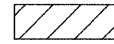
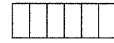

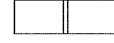


WEST ABUTMENT
(LOOKING WEST)

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Structural Repair of Concrete (Depth Equal to or Less than 5 In.)	Sq. Ft.	68
Structural Repair of Concrete (Depth Greater than 5 In.)	Sq. Ft.	5

LEGEND:

-  Spalls with exposed Rebars
Structural Repair of Concrete
(Depth less than 5 In.)
-  Delamination
-  Structural Repair of Concrete
(Depth greater than 5 In.)
-  Gap
- HL Hair Line



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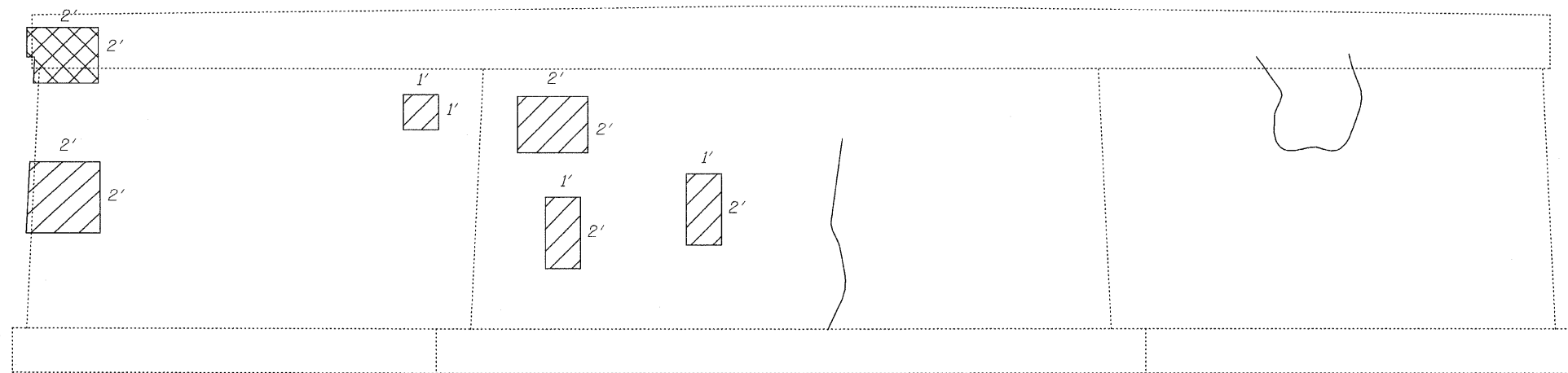
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	PLOT DATE = 4/30/2008	DATE - APRIL 21, 2008	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

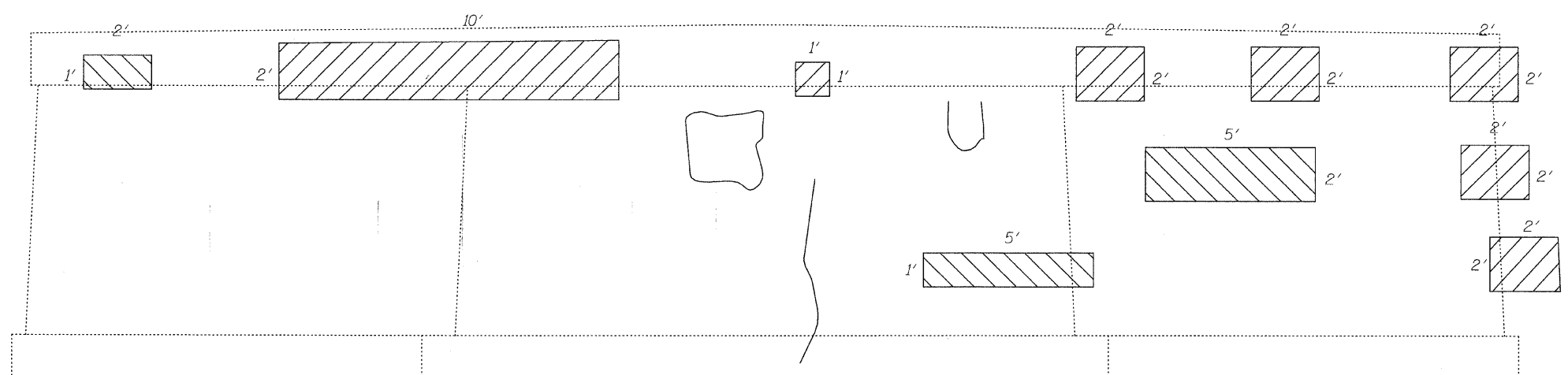
ABUTMENT REPAIR
HIGGINS ROAD (IL RTE. 72) OVER SALT CREEK S.N. 016-0504

SCALE: NONE SHEET NO. S9 OF S12 SHEETS STA. TO STA.

F.A.P. RTE. 559/341	SECTION 2008-007 B	COUNTY COOK	TOTAL SHEETS 39	SHEET NO. 32
CONTRACT NO. 60D55				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				








ELEVATION
(Looking East)



ELEVATION
(Looking West)

LEGEND:

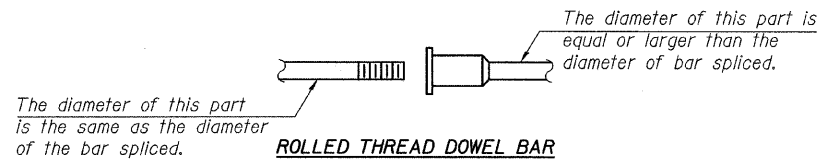
-  Spall
-  Structural Repair of Concrete (Depth less than 5 In.)
-  Crack
-  Rust Stain
-  Structural Repair of Concrete (Depth greater than 5 In.)

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Structural Repair of Concrete (Depth Equal to or Less than 5 In.)	Sq. Ft.	71
Structural Repair of Concrete (Depth Greater than 5 In.)	Sq. Ft.	4



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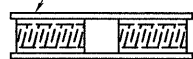


ROLLED THREAD DOWEL BAR



**** ONE PIECE**

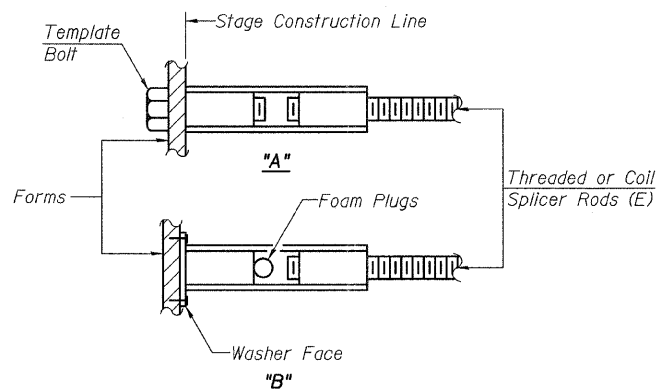
Wire Connector



WELDED SECTIONS

BAR SPLICER ASSEMBLY ALTERNATIVES

**Heavy Hex Nuts conforming to ASTM A 563, Grade C, D or DH may be used.



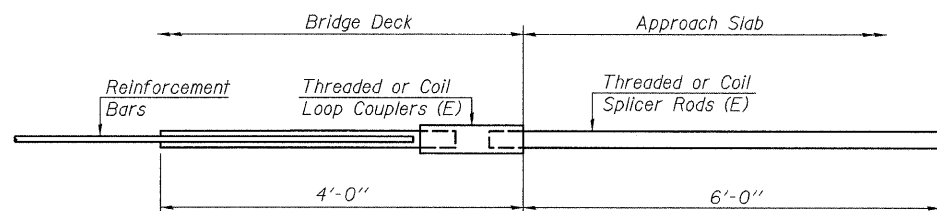
INSTALLATION AND SETTING METHODS

"A" : Set bar splicer assembly by means of a template bolt.
 "B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.
 (E) : Indicates epoxy coating.

NOTES
 Bar splicer assemblies shall be of an approved type and shall develop in tension at least 125 percent of the yield strength of the lapped reinforcement bars.
 Splicer rods shall be of minimum 60 ksi yield strength, threaded or coiled full length.
 All reinforcement bars shall be lapped and tied to the splicer rods or dowel bars.
 Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars.
 Other systems of similar design may be submitted to the Engineer for approval. Approval shall be based on certified test results from an approved testing laboratory that the proposed bar splicer assembly satisfies the following requirements:

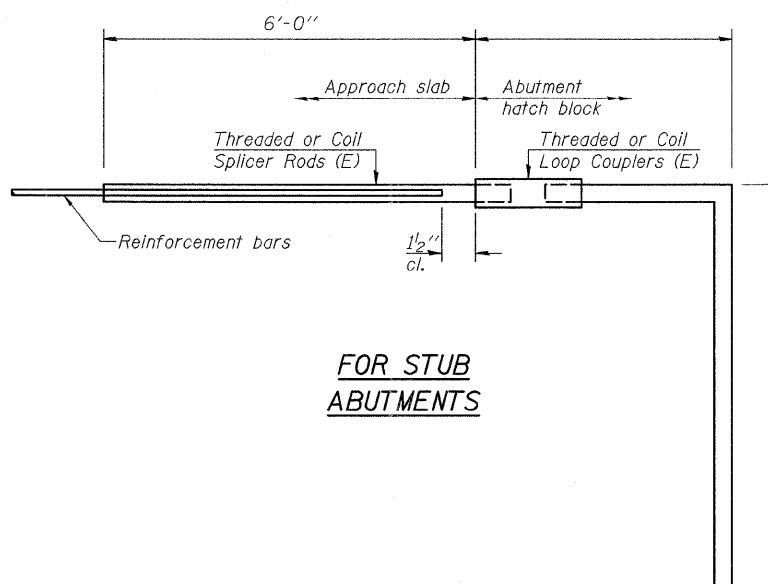
- ① Minimum Capacity (Tension in kips) = $1.25 \times f_y \times A_t$
 - ② Minimum *Pull-out Strength (Tension in kips) = $0.66 \times f_y \times A_t$
- Where f_y = Yield strength of lapped reinforcement bars in ksi.
 A_t = Tensile stress area of lapped reinforcement bars.
 * = 28 day concrete

Bar Size to be Spliced	Splicer Rod or Dowel Bar Length	Strength Requirements	
		Min. Capacity kips - tension	Min. Pull-Out Strength kips - tension
#4	1'-8"	14.7	7.9
#5	2'-0"	23.0	12.3
#6	2'-7"	33.1	17.4
#7	3'-5"	45.1	23.8
#8	4'-6"	58.9	31.3
#9	5'-9"	75.0	39.6
#10	7'-3"	95.0	50.3
#11	9'-0"	117.4	61.8



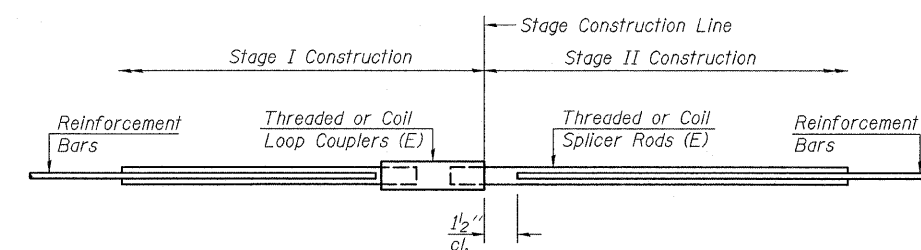
FOR INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

Bar Splicer for #5 bar
Min. Capacity = 23.0 kips - tension
Min. Pull-out Strength = 12.3 kips - tension
No. Required = -



FOR STUB ABUTMENTS

Bar Splicer for #5 bar
Min. Capacity = 23.0 kips - tension
Min. Pull-out Strength = 12.3 kips - tension
No. Required = -

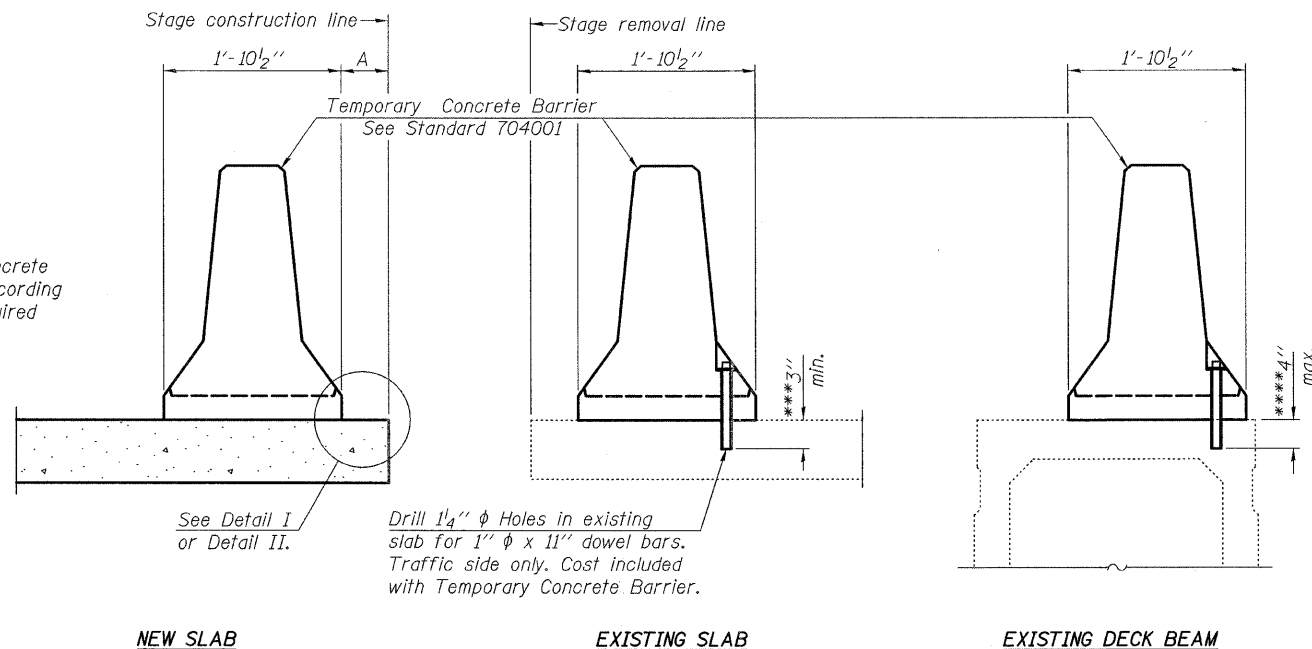


STANDARD

Bar Size	No. Assemblies Required	Location
#5	44	Median

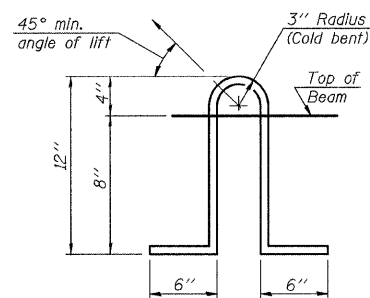
BSD-1

When "A" is 3'-6" or less, the temporary concrete barrier shall be anchored to the new slab according to Detail I or Detail II. No anchorage is required when "A" is greater than 3'-6".



Drill 1 1/4" ϕ Holes in existing slab for 1" ϕ x 11" dowel bars. Traffic side only. Cost included with Temporary Concrete Barrier.

SECTIONS THRU SLAB OR DECK BEAM



LIFTING LOOP DETAIL

NOTES

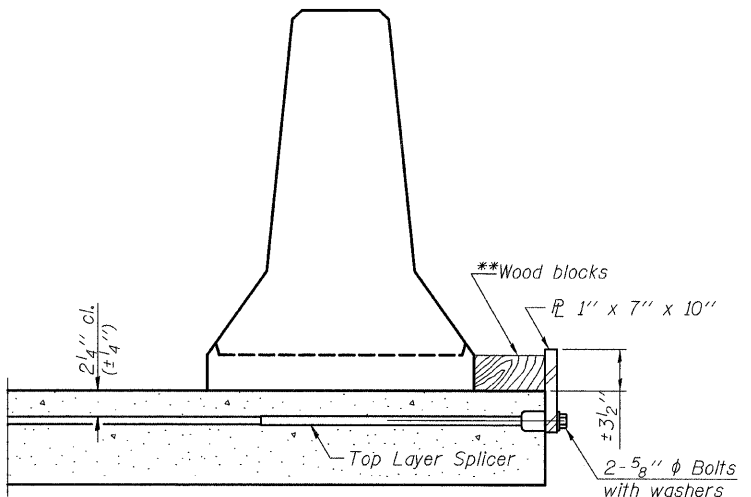
Detail I - With Bar Splicer or Couplers:
Connect one (1) 1"x7"x10" steel \bar{P} to the top layer of couplers with 2-5/8" ϕ bolts screwed to coupler at approximate \bar{C} of each barrier panel.

Detail II - With Extended Reinforcement Bars:
Connect one (1) 1"x7"x10" steel \bar{P} to the concrete slab or concrete wearing surface with 2-5/8" ϕ Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate \bar{C} of each barrier panel.

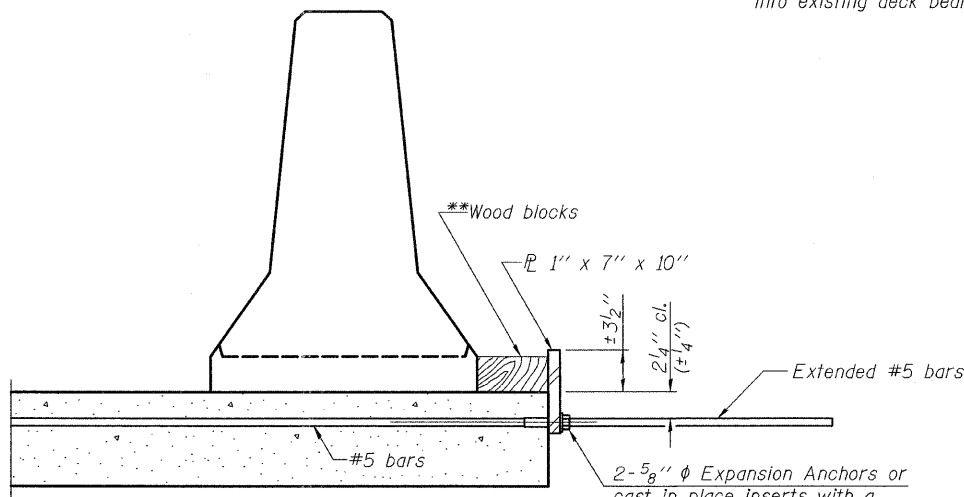
Cost of anchorage is included with Temporary Concrete Barrier. The 1" x 7" x 10" plate shall not be removed until stage II construction forms and all reinforcement bars are in place and the concrete is ready to be placed.

***Dimension shown is minimum required embedment into concrete. If hot-mix asphalt wearing surface is present, minimum embedment shall be in addition to wearing surface depth.

****If existing deck beam is to remain in place after stage construction, embedment shall only be into wearing surface and not into existing deck beam concrete.

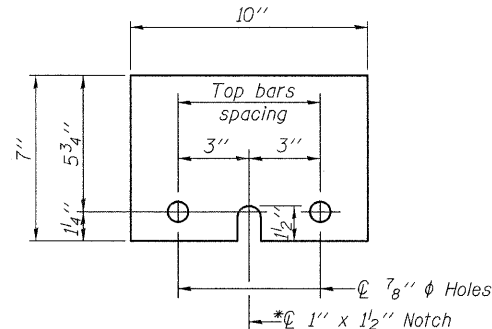


DETAIL I



DETAIL II

**Wood blocks may be omitted when required to provide minimum stage traffic lane width. When the wood blocks are omitted, the concrete barrier shall be in direct contact with the steel retainer plate.



STEEL RETAINER \bar{P} 1" x 7" x 10"
* Required only with Detail II

R-27

FILE NAME = temp cono barrier.sht	USER NAME = IDOT	DESIGNED - B.N.S.	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION HIGGINS ROAD (IL. RTE. 72) OVER SALT CREEK S.N. 016-0504	F.A.P. RTE. 559/341	SECTION 2008-007 B	COUNTY COOK	TOTAL SHEETS 39	SHEET NO. 35			
PLOT SCALE = 1:8000' / IN.	CHECKED - B.N.S. / J.C.N.	REVISED -	SCALE: NONE			SHEET NO. 512 OF 512 SHEETS	STA. TO STA.	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT	CONTRACT NO. 60D55			
PLOT DATE = 4/30/2008	DATE - APRIL 21, 2008	REVISED -											

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VARIABLE - TO MEET EXISTING DIMENSIONS AND FIELD CONDITIONS (SEE NOTE ②)

PROP. CONC. CURB OR CURB AND GUTTER REPLACEMENT IN ACCORDANCE WITH STATE STANDARD 606001. (SEE NOTE ②)

SAW CUT FULL DEPTH - INCLUDED IN THE COST OF SIDEWALK, DRIVEWAY OR MEDIAN SURFACE REMOVAL PAY ITEM.

SEE STATE STANDARD 606001

18" (450) MAX.

EXISTING OR PROPOSED HMA SURFACE (IF APPLICABLE)

1/4" (5) **

EXISTING SIDEWALK, DRIVEWAY, MEDIAN SURFACE OR GROUND.

PROPOSED SIDEWALK, DRIVEWAY PAVEMENT, MEDIAN SURFACE OR SALT TOLERANT SOD AND TOP SOIL, 4" (100) SOD RESTORATION (SEE NOTE ①).

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

3" (75) MIN.

PROPOSED 3/4" (20) PREFORMED EXPANSION JOINT AT CONCRETE SIDEWALKS, DRIVEWAYS, AND MEDIANS. (INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.)

UNSUITABLE SUB-BASE MATERIAL TO BE REMOVED, IF DIRECTED BY THE ENGINEER, SHALL BE REPLACED WITH EITHER SUB-BASE GRANULAR MATERIAL, TYPE B OR ADDITIONAL THICKNESS OF CONCRETE.

REMOVAL AND REPLACEMENT 4" (100) OR LESS IS INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.

REMOVAL AND REPLACEMENT IN EXCESS OF 4" (100) WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS.

PROPOSED #6 (20) EPOXY COATED TIE BARS 24" (600) LONG AT 24" (600) CENTERS WILL NOT BE PAID FOR SEPARATELY. DELETE EPOXY COATED TIE BARS IF EXISTING TIE BARS ARE USABLE AS DETERMINED BY THE ENGINEER. (SEE NOTE ③).

BASIS OF PAYMENT:

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

* 3" (75) MINIMUM FROM TOP AND BOTTOM OF THE CONCRETE PAVEMENT OR BASE COURSE.

** IF THE FINAL SURFACE OF THE PAVEMENT IS CONCRETE, THE GUTTER IS TO BE FLUSH WITH THE PAVEMENT.

NOTE: ① SIDEWALK, DRIVEWAY PAVEMENT OR MEDIAN SURFACE SHALL BE SIMILAR TO THE MATERIAL BEING REMOVED AND WILL BE PAID FOR SEPARATELY.

SALT TOLERANT SOD AND TOP SOIL, 4" (100) RESTORATION WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.

② CURB OR CURB AND GUTTER REPLACEMENT SHALL MATCH THE SHAPE OF THE EXISTING CURB OR CURB AND GUTTER UNLESS OTHERWISE SPECIFIED.

③ FOR CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT ADJACENT TO FLEXIBLE PAVEMENT DELETE EPOXY COATED TIE BARS.

④ LONGITUDINAL BARS, IF ENCOUNTERED IN THE EXISTING CURB OR CURB AND GUTTER, ARE NOT TO BE REPLACED. CUTTING AND REMOVING LONGITUDINAL BARS SHALL BE INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.

⑤ THE COST OF HMA SURFACE REMOVAL IN THE EXISTING GUTTER FLAG SHALL BE INCLUDED IN THE COST OF THE CURB AND GUTTER REMOVAL AND REPLACEMENT.

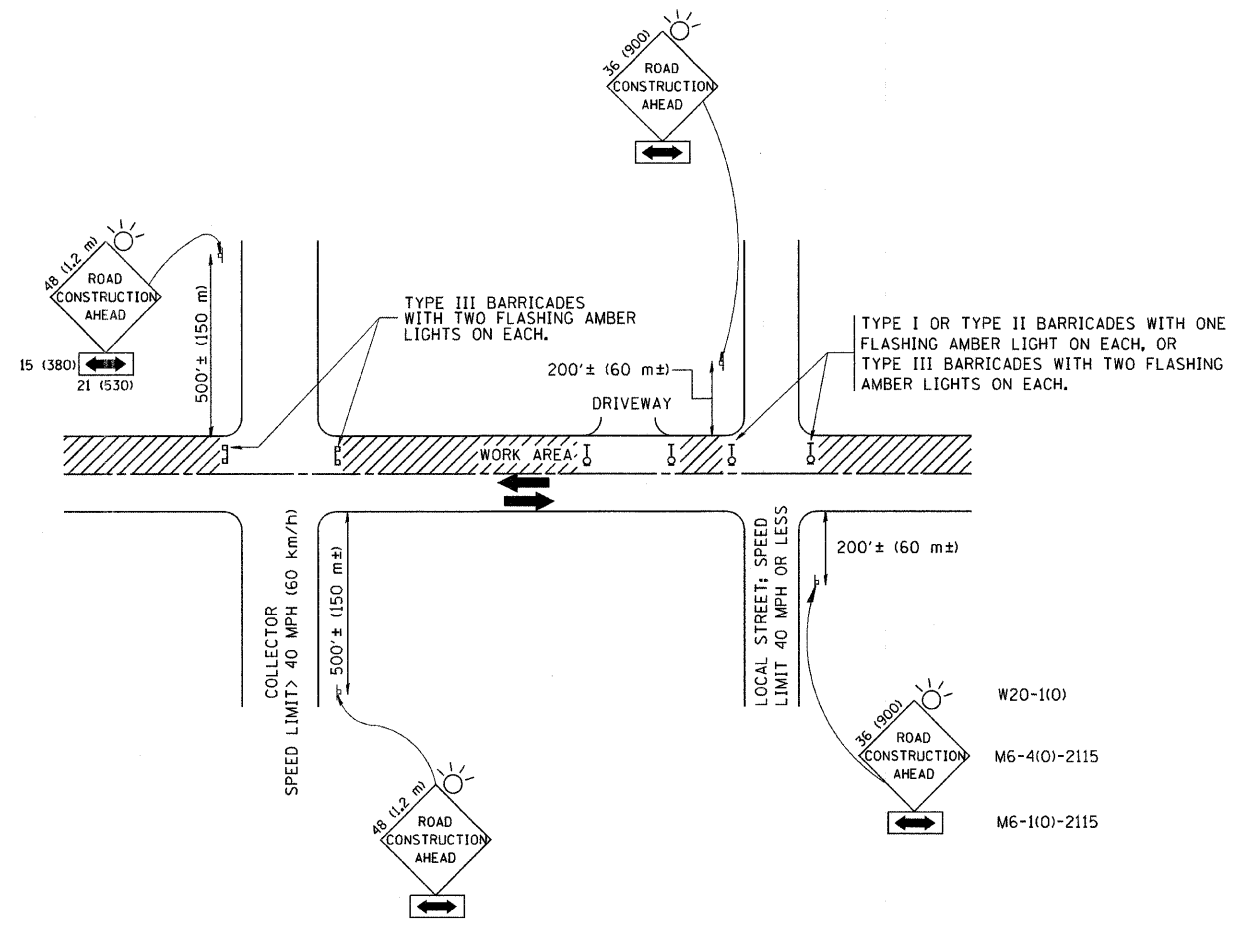
⑥ THE REMOVAL AND REPLACEMENT OF THE EXISTING CURB OR CURB AND GUTTER SHALL BE DONE IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF SECTION 440 AND 606 OF THE STANDARD SPECIFICATIONS.

⑦ THE LOCATIONS OF REMOVAL AND REPLACEMENT OF EXISTING CURB OR CURB AND GUTTER SHALL BE DETERMINED BY THE RESIDENT ENGINEER AT THE TIME OF CONSTRUCTION.

CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

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

FILE NAME = W:\diststd\22x34\bd24.dgn	USER NAME = gaglianobt	DESIGNED - A. HOUSEH	REVISED - R. SHAH 10-03-96	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT		F.A.P. RTE. 559/341	SECTION 2008-007 B	COUNTY COOK	TOTAL SHEETS 39	SHEET NO. 36	
	PLOT SCALE = 50.0000' / IN.	CHECKED -	REVISED - M. GOMEZ 01-22-01		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	BD600-06 (BD-24)		CONTRACT NO. 60D55	
	PLOT DATE = 1/4/2008	DATE - 03-11-94	REVISED - R. BORO 01-01-07		FED. ROAD DIST. NO. 1 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.

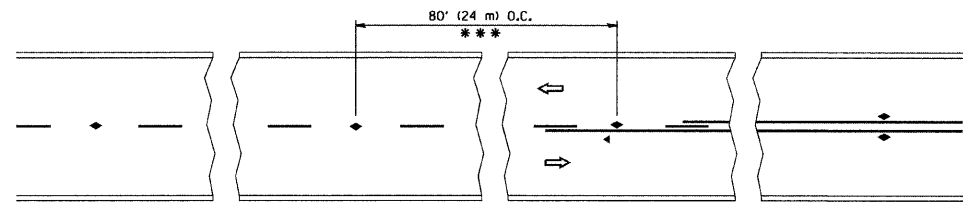
FILE NAME = W:\diststd\22x34\tc10.dgn	USER NAME = gaglianobt	DESIGNED - LHA	REVISED - J. OBERLE 10-18-95
		DRAWN -	REVISED - A. HOUSEH 03-06-96
	PLDT SCALE = 50,000' / IN.	CHECKED -	REVISED - A. HOUSEH 10-15-96
	PLOT DATE = 1/4/2008	DATE - 06-89	REVISED - T. RAMMACHER 01-06-00

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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

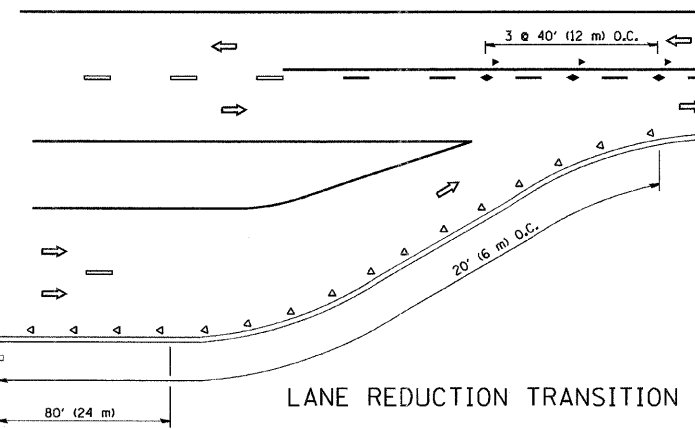
SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE. 559/341	SECTION 2008-007 B	COUNTY COOK	TOTAL SHEETS 39	SHEET NO. 37
TC-10			CONTRACT NO. 60D55	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

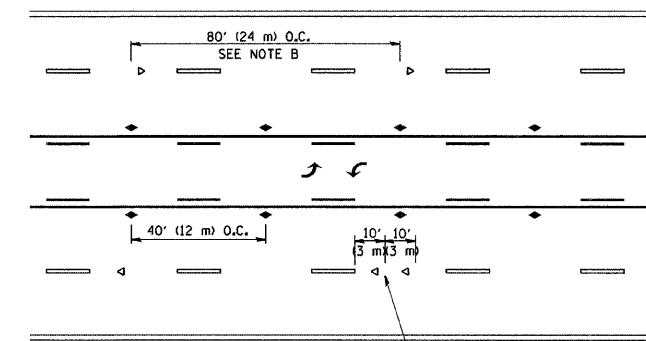


*** REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

TWO-LANE/TWO-WAY

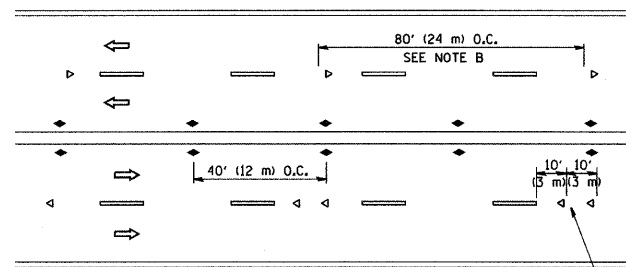


LANE REDUCTION TRANSITION



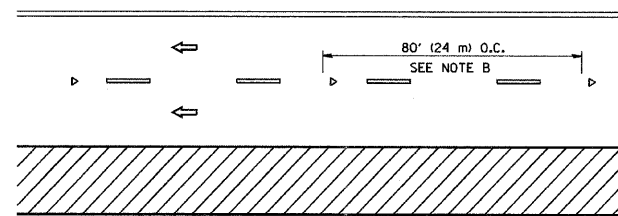
SEE NOTE A

TWO-WAY LEFT TURN



SEE NOTE A

MULTI-LANE/UNDIVIDED



SEE NOTE A

MULTI-LANE/DIVIDED

GENERAL NOTES

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

SYMBOLS

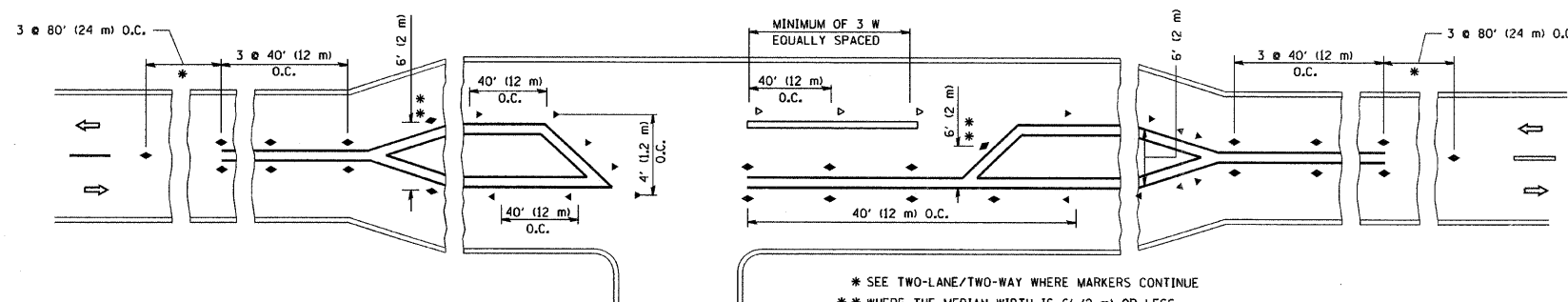
- YELLOW STRIPE
- WHITE STRIPE
- ◀ ONE-WAY AMBER MARKER
- ◄ ONE-WAY CRYSTAL MARKER (W/O)
- ◆ TWO-WAY AMBER MARKER

LANE MARKER NOTES

- A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.
- B. REDUCE TO 40' (12 m) O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 10 M.P.H. (20 km/h) LOWER THAN POSTED SPEEDS.

DESIGN NOTES

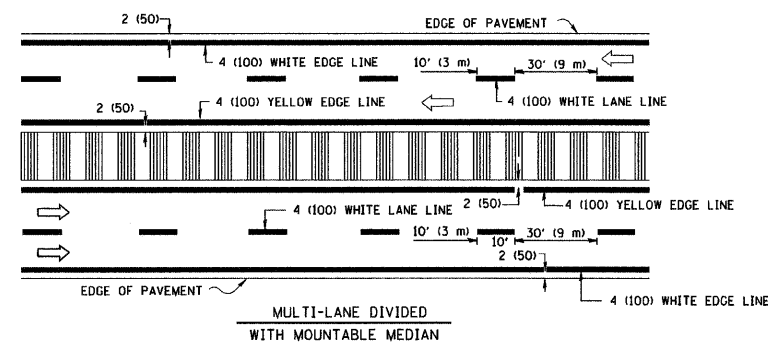
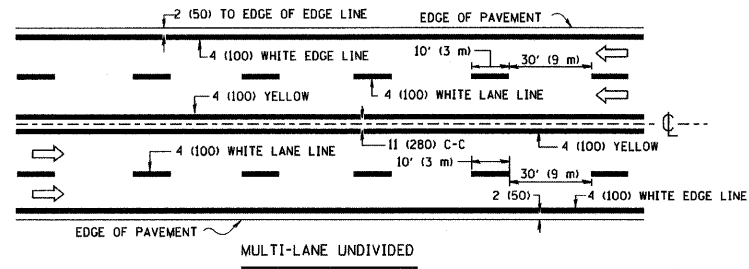
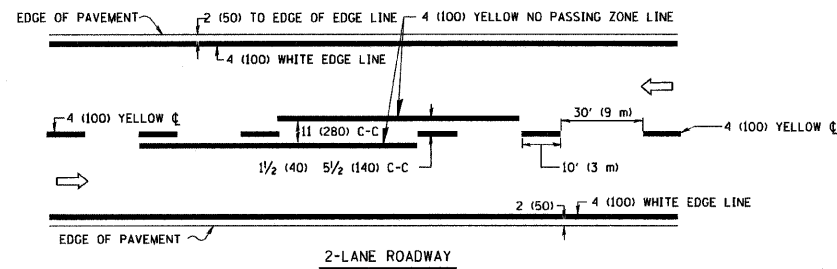
1. DOUBLE LANE LINE MARKERS SHALL BE USED UNLESS SPECIFIED OTHERWISE.
2. EXCEPT AS SHOWN ON THE LANE REDUCTION TRANSITION AND FREEWAY EXIT RAMP DETAIL, MARKERS ARE NOT TO BE SPECIFIED ON RIGHT EDGE LINES.
3. THE EXACT MARKER LIMITS, SPACING, AND COLOR SHOULD BE INCLUDED IN THE PLANS.
4. MARKERS SHOULD NOT BE USED ALONGSIDE CURBS EXCEPT FOR EXTREMELY SHORT SECTIONS OF CURBS WHERE NOT MORE THAN TWO MARKERS WOULD BE INVOLVED.



LEFT TURN

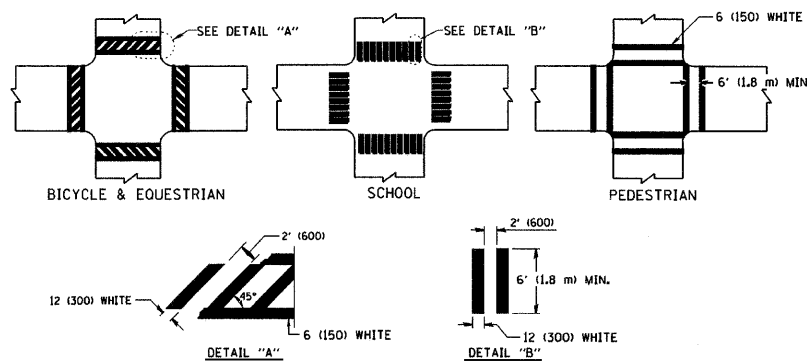
All dimensions are in inches (millimeters) unless otherwise shown.

FILE NAME = W:\dstatd\22x34\vc11.dgn	USER NAME = goglienobt	DESIGNED -	REVISED - T. RAMMACHER 09-19-94	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TYPICAL APPLICATIONS		F.A.P. RTE 559/341	SECTION 2008-007 B	COUNTY COOK	TOTAL SHEETS 39	SHEET NO. 38
	PLOT SCALE = 50.000' / IN.	DRAWN -	REVISED - T. RAMMACHER 03-12-99		RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)		TC-11		CONTRACT NO. 60D55		
	PLOT DATE = 1/4/2008	CHECKED -	REVISED - T. RAMMACHER 01-06-00		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 1 (ILLINOIS) FED. AID PROJECT		
		DATE -	REVISED -								

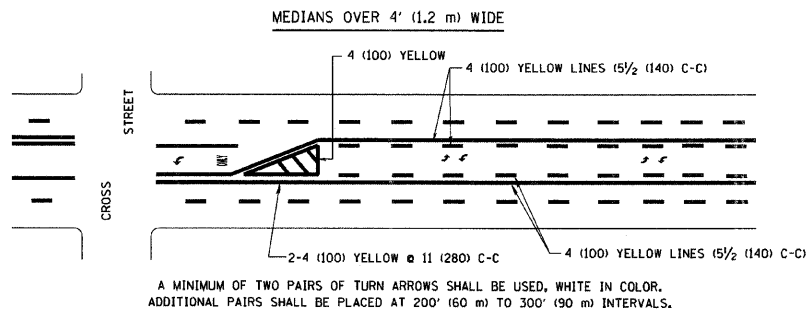
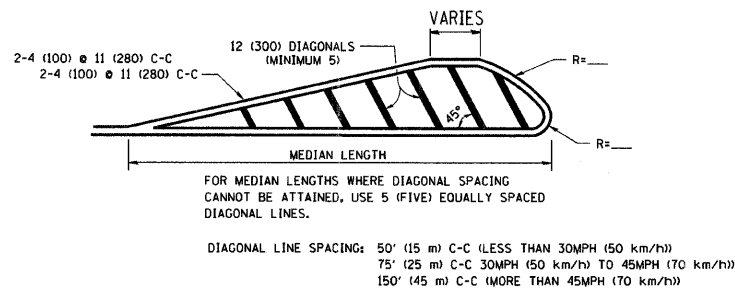
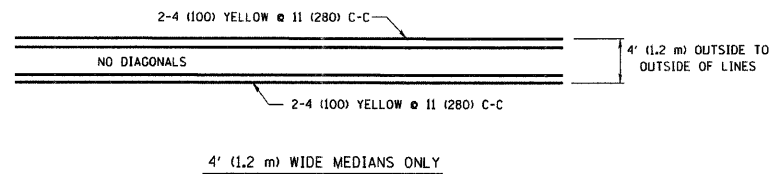


NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

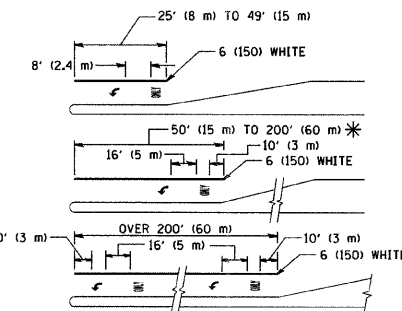
TYPICAL LANE AND EDGE LINE MARKING



TYPICAL CROSSWALK MARKING

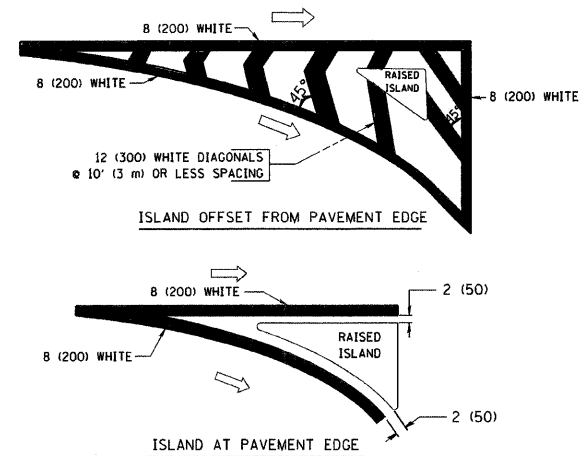


TYPICAL PAINTED MEDIAN MARKING



FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED. AREA = 15.6 SQ. FT. (1.5 m²) ONLY AREA = 20.8 SQ. FT. (1.9 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 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	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 @ 4 (100)	SOLID SOLID	YELLOW YELLOW	5/2 (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 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 m) 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' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION 8' (2.4m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5/2 (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 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° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW; TWO WAY TRAFFIC WHITE; ONE WAY TRAFFIC	11 (280) 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: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h) 30' (9 m) C-C (OVER 45MPH (70 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. (0.33 m ²) EACH "X"=54.0 SQ. FT. (5.0 m ²)
SHOULDER DIAGONALS	12 (300) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))

FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

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

FILE NAME = W:\dststd\22x34\td13.dgn	USER NAME = geglionbt	DESIGNED - EVERS	REVISED - T. RAMMACHER 10-27-94
		DRAWN -	REVISED - A. HOUSEH 10-09-96
	PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED - A. HOUSEH 10-17-96
	PLOT DATE = 1/4/2008	DATE - 03-19-90	REVISED - T. RAMMACHER 01-06-00

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DISTRICT ONE
TYPICAL PAVEMENT MARKINGS**

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

F.A.P. RITE 559/341	SECTION 2008-007 B	COUNTY COOK	TOTAL SHEETS 39	SHEET NO. 39
TC-13		CONTRACT NO. 60D55		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				