

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH D56	08-00041-02-BR	PEORIA	25	1
FED. ROAD DIST. NO. -	ILLINOIS	CONTRACT NO. 89479		

INDEX OF SHEETS

1. COVER
2. GENERAL NOTES AND LEGEND
3. SUMMARY AND SCHEDULE OF QUANTITIES
4. TYPICAL SECTIONS
5. PLAN & PROFILE
6. REMOVAL PLAN
7. EROSION CONTROL PLAN
8. GUARDRAIL PLAN
- 9.-19. BRIDGE PLANS
20. TRAFFIC DETOUR PLAN
- 21.-25. CROSS SECTIONS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PLANS FOR PROPOSED TODD SCHOOL ROAD BRIDGE

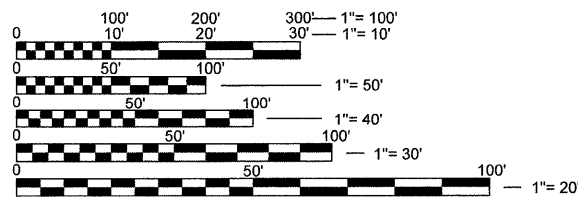
TODD SCHOOL ROAD (C.H. D56)
PEORIA COUNTY
SECTION 08-00041-02-BR
JOB NO. C-94-081-07
PROJECT NO. BROS-0143(048)

LIST OF STANDARDS

- | | |
|-------------|--|
| 000001-05 | STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS |
| 280001-04 | TEMPORARY EROSION CONTROL SYSTEMS |
| 285001-02 | FABRIC FORMED CONCRETE REVETMENT MATS |
| 515001-03 | NAME PLATE FOR BRIDGES |
| 630001-08 | STEEL PLATE BEAM GUARDRAIL |
| 630301-05 | SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS |
| 631032-04 | TRAFFIC BARRIER TERMINAL, TYPE 6A |
| 635006-03 | REFLECTOR AND TERMINAL MARKER PLACEMENT |
| 666001-01 | RIGHT-OF-WAY MARKERS |
| 701006-0 | OFF-RD OPERATIONS, 2L, 2W, 15' TO 24" FROM PAVEMENT EDGE |
| 701901-01 | TRAFFIC CONTROL DEVICES |
| 720001-01 | SIGN PANEL MOUNTING DETAILS |
| 720006-02 | SIGN PANEL ERECTION DETAILS |
| 728001-01 | TELESCOPING STEEL SIGN SUPPORT |
| 731001-01 | BASE FOR TELESCOPING STEEL SIGN SUPPORT |
| 780001-02 | TYPICAL PAVEMENT MARKINGS |
| B.L.R. 21-8 | TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS |
| B.L.R. 22-6 | TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS (TWO-LANE TWO WAY RURAL TRAFFIC) (ROAD CLOSED TO THRU TRAFFIC) |
| BLP23-3 | TRAFFIC BARRIER TERMINAL TYPE 1 |

DISTRICT STANDARDS

- | | |
|-----------|--------------------|
| 205001-D4 | SLOPE STEPS DETAIL |
|-----------|--------------------|



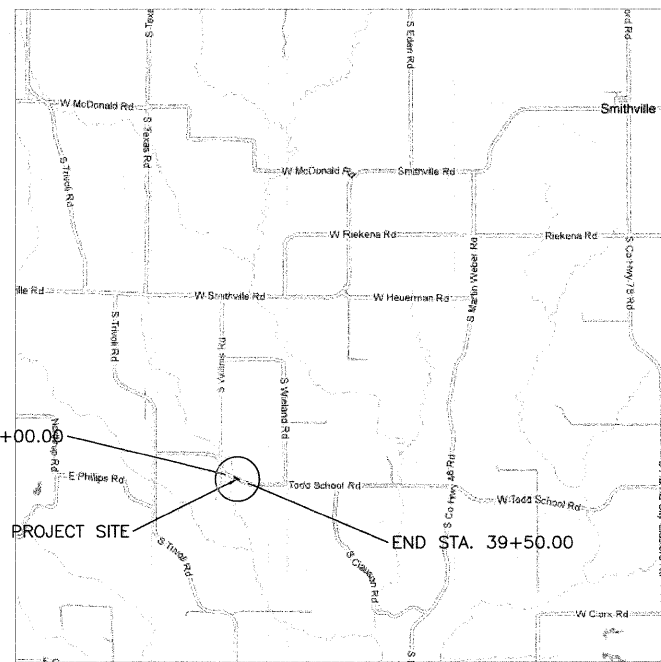
FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-892-0123
OR 811

CATALOG NO. 033524-00D

ADT (2002) = 125, MU = 12%
HIGHWAY CLASS: IV
FUNCTIONAL CLASSIFICATION: MINOR COLLECTOR
DESIGN SPEED: 25 MPH
DESIGN POLICY: BLR MANUAL
VARIANCES GRANTED: 25 MPH
COMMITMENTS: NONE

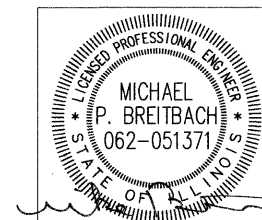
TOTAL AND NET LENGTH OF IMPROVEMENT: 350.0 FT = 0.066 MILES



SECTION 6 T7N R6E 4TH PM



LOCATION OF SECTION INDICATED THIS: - [Black Box] -



DATE SIGNED : 05/21/2009
LIC. EXP. DATE : 11/30/2009

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

APPROVED May 22 2009
Donna J. McFarland
COUNTY ENGINEER

PASSED 5-26 2009
D. McCoy
DISTRICT FOUR ENGINEER OF LOCAL ROADS & STREETS

Releasing For Bid Based on Limited Review May 29 2009
[Signature]
DEPUTY DIRECTOR OF HIGHWAYS, REGION THREE ENGINEER

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DATE: 05/21/09

Hanson Professional Services Inc.
2900 W. Willow Knolls Road
Peoria, Illinois 61614-1129

GENERAL NOTES

1. THE CONSTRUCTION SHALL BE GOVERNED BY THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION IN ILLINOIS", CURRENT EDITION.
2. ALL REFERENCES TO THE "DEPARTMENT" OR "ENGINEER" IN THE I.D.O.T. STANDARD SPECIFICATIONS SHALL BE CONSTRUED TO MEAN THE OWNER OR HIS AGENT.
3. WHERE SECTION, SUB-SECTION, SUBDIVISION, OR PROPERTY MONUMENTS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL PROTECT AND PRESERVE ALL PROPERTY MARKERS UNTIL AN OWNER OR AUTHORIZED SURVEYOR HAS WITNESSED OR REFERENCED THEIR LOCATION.
4. THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER OF ANY DISCREPANCY IMMEDIATELY.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRS TO ANY UTILITY LINES AND EXISTING IMPROVEMENTS TO REMAIN THAT ARE DAMAGED AS A RESULT OF THE WORK.
6. ALL SECTIONS, DETAILS AND NOTES SHOWN ON THE DRAWINGS ARE INTENDED TO BE TYPICAL AND SHALL APPLY TO SIMILAR SITUATIONS ELSEWHERE, UNLESS OTHERWISE SHOWN.
7. ALL THE ELEVATIONS, STATIONS, AND OFFSETS SHOWN ON THE PLANS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.
8. ALL PAVEMENT REMOVALS SHALL BE FULL DEPTH SAW CUT AT THE LIMITS TO BE REMOVED.
9. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS.
10. ACCESS SHALL BE MAINTAINED TO ALL PROPERTIES DURING ALL STAGES OF CONSTRUCTION.
11. EXCESS MATERIAL, IF NOT USED FOR OTHER ON-SITE PURPOSES, SHALL BE HAULED OFF-SITE AT CONTRACTOR'S EXPENSE.
12. THE WORK AREA SHALL BE POSITIVELY DRAINED DURING CONSTRUCTION. FINAL GRADES SHALL BE PROTECTED AGAINST DAMAGE FROM EROSION, SEDIMENTATION, AND TRAFFIC.
13. THE OWNER RESERVES THE RIGHT TO REDUCE ANY QUANTITY OR DELETE PAY ITEMS FROM THIS CONTRACT. NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
14. APPLICATION RATES:
 BITUMINOUS MATERIALS (PRIME COAT): 0.50 GAL/SQ YD (GRAVEL SURFACE)
 BITUMINOUS MATERIALS (PRIME COAT): 0.05 GAL/SQ YD (EXISTING PAVEMENT)
 BITUMINOUS MATERIAL (PRIME COAT): 0.1 GAL/SQ YD (MILLED SURFACE)
 BITUMINOUS MATERIAL (PRIME COAT): 0.03 GAL/SQ YD (PAVED SURFACE)
 NUTRIENTS: 90 LB/ACRE
15. THE CONTRACTOR SHALL USE ANY ON SITE MATERIAL DEEMED SUITABLE BY THE ENGINEER BEFORE ANY NEW FILL IS HAULED TO THE SITE.
16. CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL EXISTING UNDERGROUND UTILITIES PRIOR TO EXCAVATION.
17. CONTRACTORS BIDDING THIS PROJECT SHALL VISIT THE SITE BEFORE BIDDING.

UTILITIES

T-L RURAL WATER DISTRICT
 10625 S GLASFORD RD.
 GLASFORD, IL 61533
 ATTENTION: ROBERT A. MEYER 309-389-3368

GLASFORD TELEPHONE
 209 E MAIN ST.
 GLASFORD, IL 61533
 ATTENTION: STAN BROWN 309-389-2111

SPOON RIVER ELECTRIC COOP
 930 S 5TH AVE
 CANTON, IL 61520
 ATTENTION: MARK BALBINOT 309-647-2700 EXT.230

UTILITY NOTE

THE LOCATIONS OF THOSE BURIED AND ABOVEGROUND UTILITIES SHOWN ARE APPROXIMATE, ARE SHOWN FOR CONTRACTOR INFORMATIONAL USE ONLY, AND ARE NOT TO BE REFERENCED FOR CONSTRUCTION PURPOSES. THE IMPLIED PRESENCE OR ABSENCE OF UTILITIES IS NOT TO BE CONSTRUED BY THE OWNER, ENGINEER, CONTRACTOR, OR SUBCONTRACTORS TO BE AN ACCURATE AND COMPLETE REPRESENTATION OF UTILITIES THAT MAY OR MAY NOT EXIST ON THE CONSTRUCTION SITE. BURIED AND ABOVEGROUND UTILITY LOCATION, IDENTIFICATION, AND MARKING ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. REROUTING, DISCONNECTION, PROTECTION, ETC. OF ANY UTILITIES MUST BE COORDINATED AMONG THE CONTRACTOR, UTILITY COMPANY, AND OWNER. SITE SAFETY, INCLUDING THE AVOIDANCE OF HAZARDS, ASSOCIATED WITH BURIED AND ABOVEGROUND UTILITIES REMAIN THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

FILE NAME =	USER NAME = \$USER\$	DESIGNED --	REVISED --	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GENERAL NOTES AND LEGEND TODD SCHOOL ROAD BRIDGE REPLACEMENT			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
\$FILEL\$		DRAWN -- DLC 1/26/09	REVISED --					CH 056	08-00041-02-BR	PEORIA	25	2
	PLOT SCALE = \$SCALE\$	CHECKED -- MPB 5/15/09	REVISED --		SCALE: SHEET NO. OF SHEETS STA. TO STA.			FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT				
	PLOT DATE = \$DATE\$	DATE --	REVISED --		CONTRACT NO. 89479							

SUMMARY OF QUANTITIES

ITEM NUMBER	ITEM	UNIT	QUANTITY
20100500	TREE REMOVAL, ACRES	ACRE	0.26
20200100	EARTH EXCAVATION	CU YD	640
21101625	TOPSOIL FURNISH AND PLACE, 6"	SQ YD	1268
25000300	SEEDING, CLASS 3	ACRE	0.27
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	25
25000500	PHOSPHOROUS FERTILIZER NUTRIENT	POUND	25
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	25
25100120	MULCH METHOD 2	TON	0.41
25100635	HEAVY DUTY EROSION CONTROL BLANKET	SQ YD	317
28000300	TEMPORARY DITCH CHECKS	EACH	8
28000400	PERIMETER EROSION BARRIER	FOOT	200
28100101	STONE RIPRAP, CLASS A1	SQ YD	681
28100107	STONE RIPRAP, CLASS A4	SQ YD	681
28200200	FILTER FABRIC	SQ YD	681
28500100	FABRIC FORMED CONCRETE REVETMENT MAT	SQ YD	481
35101400	AGGREGATE BASE COURSE, TYPE B	TON	416
40600100	BITUMINOUS MATERIALS (PRIME COAT)	GAL	340
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	101
40603100	HOT MIX ASPHALT BINDER COURSE, IL-19.0L, N30	TON	138
40603305	HOT MIX ASPHALT SURFACE COURSE, MIX "C", N30	TON	80
44000100	PAVEMENT REMOVAL	SQ YD	587
48101200	AGGREGATE SHOULDERS, TYPE B	TON	188
50100200	REMOVAL OF EXISTING STRUCTURES	L SUM	1
50200100	STRUCTURE EXCAVATION	CU YD	238
50300225	CONCRETE STRUCTURES	CU YD	60.2
50300260	BRIDGE DECK GROOVING	SQ YD	262
50300300	PROTECTIVE COAT	SQ YD	292
50301200	CONCRETE WEARING SURFACE	SQ YD	279
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	12,060
51200959	FURNISHING METAL SHELL PILES 14" X 0.312"	FOOT	720
51202305	DRIVING PILES	FOOT	720
51203200	TEST PILE METAL SHELLS	EACH	2
51500100	NAME PLATES	EACH	1
59300100	CONTROLLED LOW-STRENGTH MATERIAL	CU YD	128
* 63000003	STEEL PLATE GUARDRAIL, TYPE A 9 FOOT POSTS	FOOT	25
* 63100087	TRAFFIC BARRIER TERMINAL, TYPE 6A	EACH	4
66600105	FURNISH AND ERECTING RIGHT-OF-WAY MARKERS	EACH	10
67100100	MOBILIZATION	LSUM	1
70101700	TRAFFIC CONTROL AND PROTECTION	LSUM	1
72000100	SIGN PANEL - TYPE 1	SQ FT	10
72900100	METAL POST - TYPE A	FOOT	26
* 78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	1400
* 78201000	TERMINAL MARKERS-DIRECT APPLIED	EACH	4
* LR631020	TRAFFIC BARRIER TERMINAL, TYPE 1	EACH	4
XX003515	PRECAST PRESTRESSED CONCRETE DECK BEAMS (42" DEPTH)	SQ FT	2,513
* XX006199	STEEL BRIDGE RAIL, TYPE SM SPECIAL	FOOT	164

* SPECIALTY ITEMS

BITUMINOUS PAVEMENT

STATION	AGGREGATE BASE COURSE, TYPE B (TON)	HOT MIX ASPHALT BINDER COURSE, IL-19.0L, N30 (TON)	HOT MIX ASPHALT SURFACE COURSE, MIX "C", N30 (TON)	BITUMINOUS MATERIALS (PRIME COAT) (GALLON)	AGGREGATE SHOULDERS, TYPE B (TON)
STA. 36+00.00 TO STA. 37+14.00	172	57	34	140	91
STA. 37+96.00 TO STA. 39+50.00	244	81	46	200	97
TOTALS	416 TON	138 TON	80 TON	340 GALLON	188 TON

HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT

STATION	TON
STA. 36+00.00 TO STA. 36+20.00	49
STA. 39+30.00 TO STA. 39+50.00	52
TOTALS	101 SQ. YD.

PAVEMENT REMOVAL

STATION	TON
STA. 36+20.00 TO STA. 37+48.60	259
STA. 37+69.50 TO STA. 39+30.00	328
TOTALS	587 SQ. YD.

EARTHWORK

EARTH EXCAVATION	640 CU. YD.
FILL	275 CU. YD.
FILL X 1.25 (25% SHRINKAGE FACTOR APPLIED)	340 CU. YD.

TREE REMOVAL, ACRES

STA. 36+07.80 TO STA. 37+28.01 LT.	0.08 ACRES
STA. 36+20.58 TO STA. 37+67.10 RT.	0.05 ACRES
STA. 37+33.27 TO STA. 39+28.06 LT.	0.11 ACRES
STA. 38+33.38 TO STA. 38+93.41 RT.	0.02 ACRES
TOTALS	0.26 ACRES

PAVEMENT MARKING

STATION	PAINT PAVEMENT MARKING LINE (FOOT)	WHITE	YELLOW
STA. 36+00.00 TO STA. 39+50.00 LT.	350		
STA. 36+00.00 TO STA. 39+50.00			700
STA. 36+00.00 TO STA. 39+50.00 RT.	350		
TOTALS	1,400 FOOT		

FURNISH AND ERECTING RIGHT-OF-WAY MARKERS, EACH

STA. 36+00.00	45' LT.	1 EACH
STA. 36+00.00	65' LT.	1 EACH
STA. 37+00.00	45' RT.	1 EACH
STA. 37+00.00	65' RT.	1 EACH
STA. 37+70.45	65' LT.	1 EACH
STA. 37+72.82	60' LT.	1 EACH
STA. 39+35.00	45' RT.	1 EACH
STA. 39+35.00	65' RT.	1 EACH
STA. 39+50.00	60' LT.	1 EACH
STA. 39+50.00	45' LT.	1 EACH
TOTALS		10 EACH

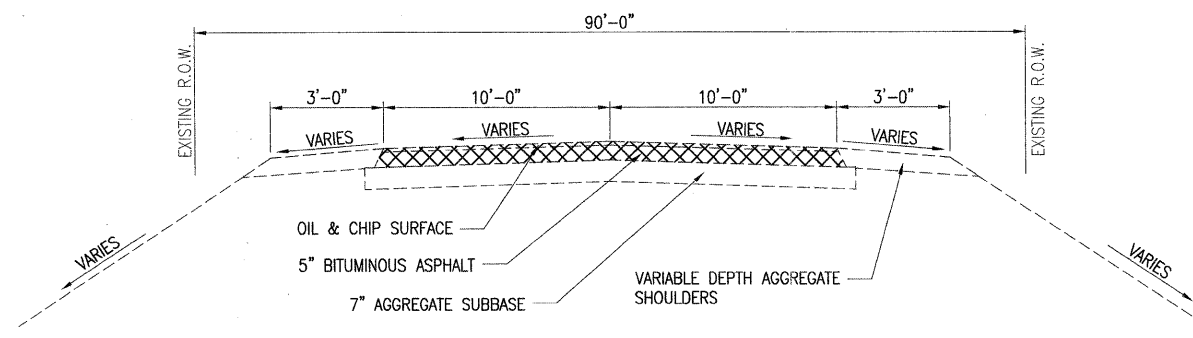
SIGN PANEL AND POSTS

STATION	SIGN PANEL-TYPE 1 (SQ. FT.) *	METAL POST-TYPE A (FOOT)
STA. 35+85.00 19' RT.	5	13
STA. 39+30.00 25' LT.	5	13
TOTALS	10 SQ. FT.	26 FOOT

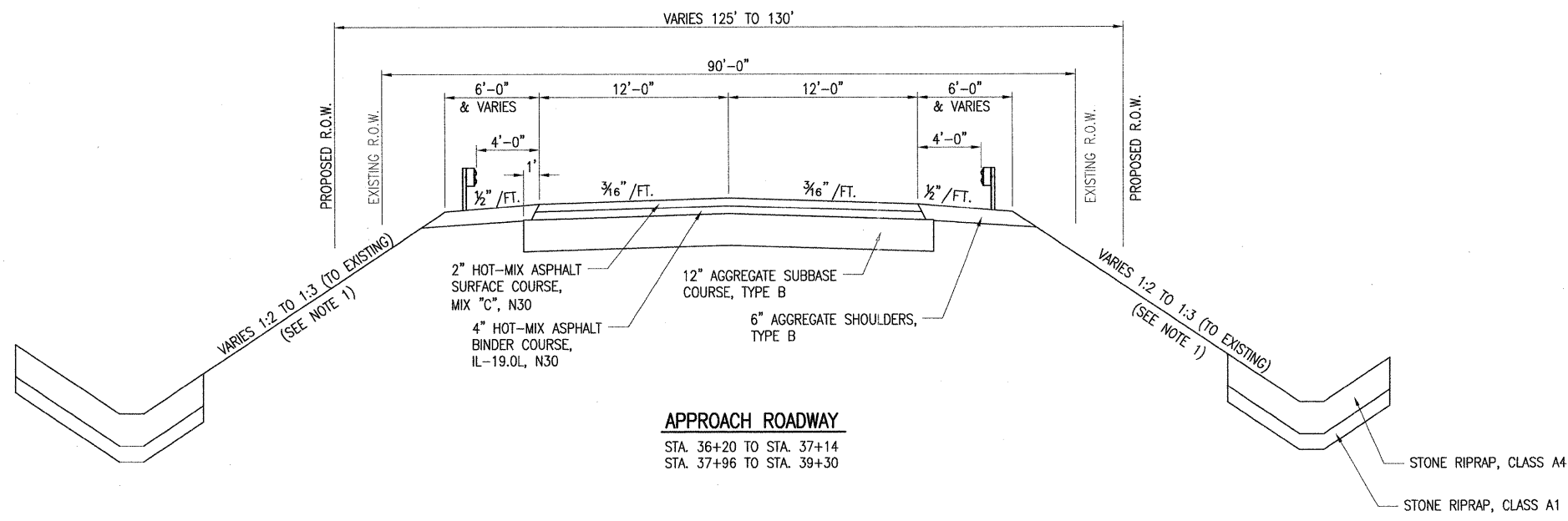
* SPEED LIMIT SIGN (MUTCD R2-1)

TOPSOIL, SEEDING, FERTILIZER

STATION	TOPSOIL FURNISH AND PLACE, 6" (SQ. YD.)	SEEDING, CLASS 3 (ACRE)	NITROGEN FERTILIZER NUTRIENT (POUND)	PHOSPHOROUS FERTILIZER NUTRIENT (POUND)	POTASSIUM FERTILIZER NUTRIENT (POUND)
STA. 35+71.92 TO STA. 37+00.00, LT	303	0.07	6.7	6.7	6.7
STA. 35+86.56 TO STA. 37+25.00, RT	162	0.04	3.7	3.7	3.7
STA. 37+85.61 TO STA. 39+50.00, LT	427	0.08	7.4	7.4	7.4
STA. 38+06.39 TO STA. 39+50.00, RT	376	0.08	6.8	6.8	6.8
TOTALS	1268 SQ. YD.	0.27 ACRE	25 POUND	25 POUND	25 POUND

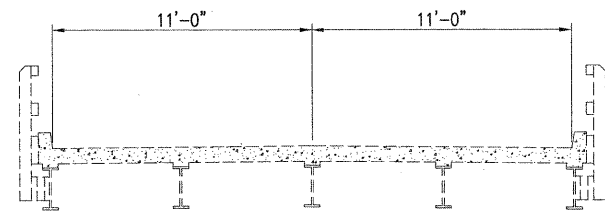


EXISTING ROADWAY

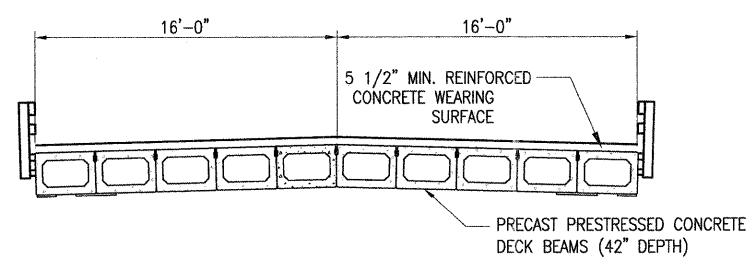


APPROACH ROADWAY

STA. 36+20 TO STA. 37+14
STA. 37+96 TO STA. 39+30

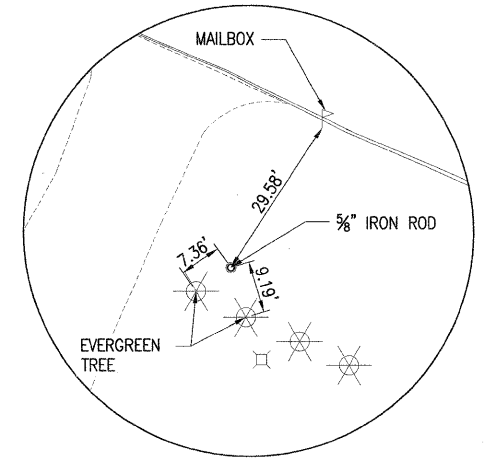


EXISTING BRIDGE SECTION

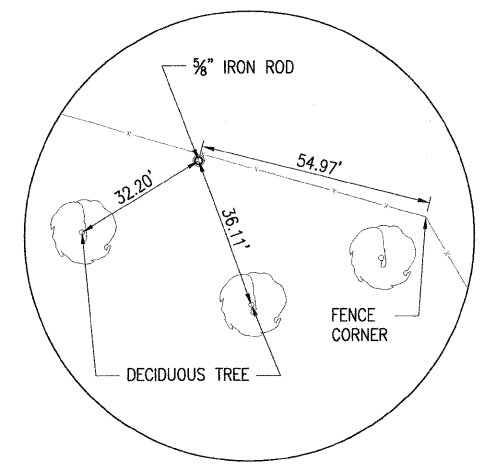


PROPOSED BRIDGE SECTION

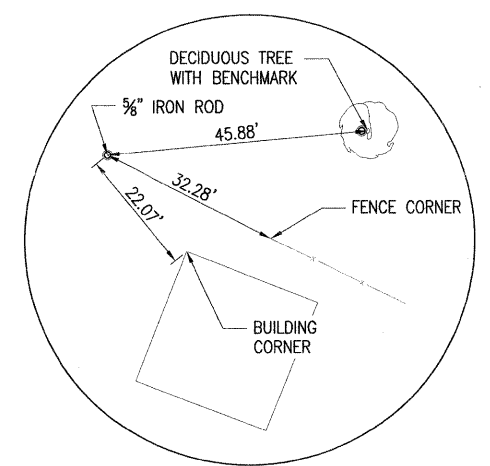
STA. 37+14 TO STA. 37+96



CONTROL POINT #59
STA. 39+89.42, 43.91' RT.
N = 1,439,049.76
E = 2,381,799.52



CONTROL POINT #60
STA. 39+41.46, 72.38' LT.
N = 1,439,175.52
E = 2,381,802.23



CONTROL POINT #61
STA. 38+61.75, 91.24' RT.
N = 1,439,057.61
E = 2,381,663.59

NOTE:
1. PROVIDE GUARDRAIL FOR LOCATIONS WITH 1:2 FORESLOPE.

HOT-MIX ASPHALT MIXTURE REQUIREMENTS:

	PG	RAP (MAX)**	VOIDS	DEPTH	MIXTURE COMPOSITION
SURFACE COURSE	64-28	15%	N30	2"	IL-9.5L
BINDER COURSE	64-28	25%	N30	4"	IL-19.0L

** IF >15% RAP IS USED, THE CONTRACTOR MAY BE REQUIRED TO USE A SOFTER GRADE OF ASPHALT AS DETERMINED BY THE MATERIALS ENGINEER.

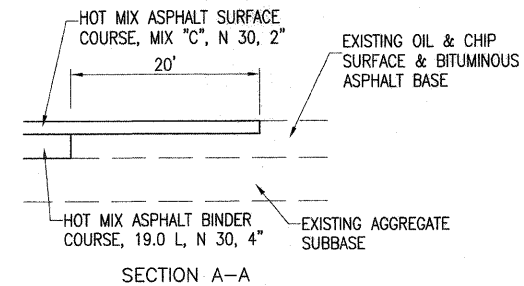
STATION EQUATIONS

STA. 35+67.75 BACK = *
STA. 35+61.15 AHEAD **
STA. 43+83.10 BACK = **
STA. 43+89.70 AHEAD *

* BASED ON EXISTING RIGHT OF WAY PLANS
** BASED ON PROPOSED BASELINE THIS PROJECT

FILE NAME =	USER NAME = \$USER\$	DESIGNED - DLC 1/26/09	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TYPICAL SECTIONS AND RECOVERY TIES TODD SCHOOL ROAD BRIDGE REPLACEMENT	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
\$FILE\$		DRAWN - DLC 1/30/09	REVISED -			CH D56	08-00041-02-BR	PEORIA	25	4	
		CHECKED - MPB 5/15/09	REVISED -			CONTRACT NO. 89479					
		DATE -	REVISED -			FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

PROP. CURVE C3
 PI STA. = 34+42.56
 Δ = 20° 02' 43" (LT)
 D = 8° 21' 52"
 R = 685.00'
 T = 121.06'
 L = 239.65'
 E = 10.62'
 P.C. STA. = 33+21.50
 P.T. STA. = 35+61.15



LEGEND

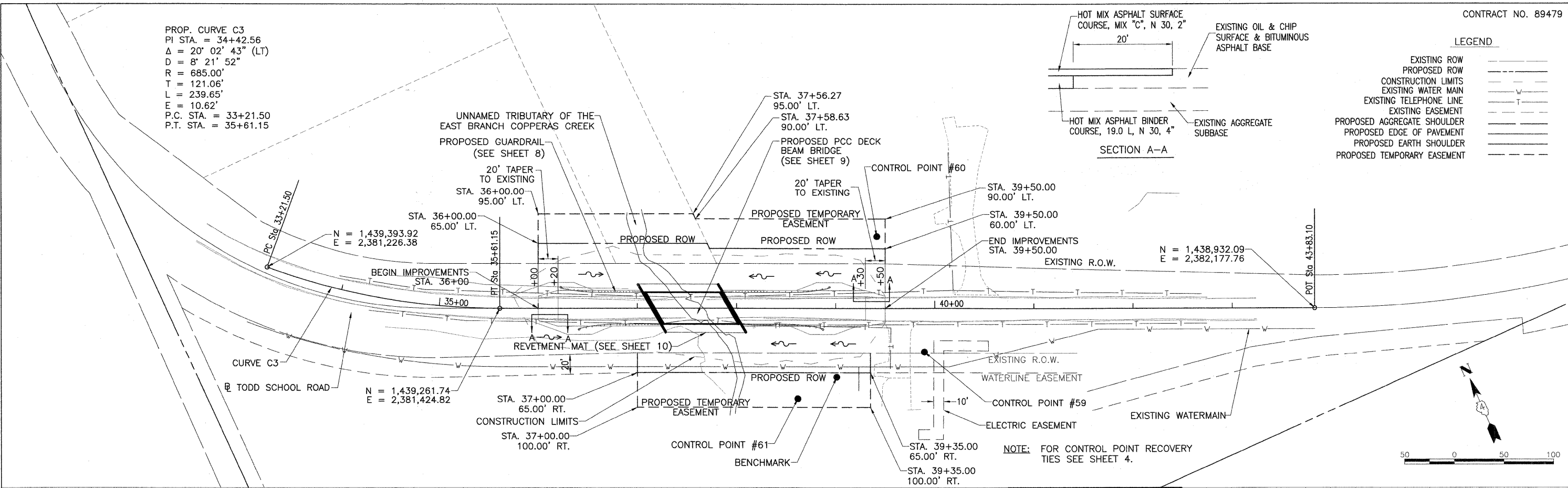
EXISTING ROW	---
PROPOSED ROW	---
CONSTRUCTION LIMITS	---
EXISTING WATER MAIN	W---
EXISTING TELEPHONE LINE	T---
EXISTING EASEMENT	---
PROPOSED AGGREGATE SHOULDER	---
PROPOSED EDGE OF PAVEMENT	---
PROPOSED EARTH SHOULDER	---
PROPOSED TEMPORARY EASEMENT	---

PLAN

DESIGNED	DATE
PLOTTED	BY
CHECKED	
NO.	

PROFILE

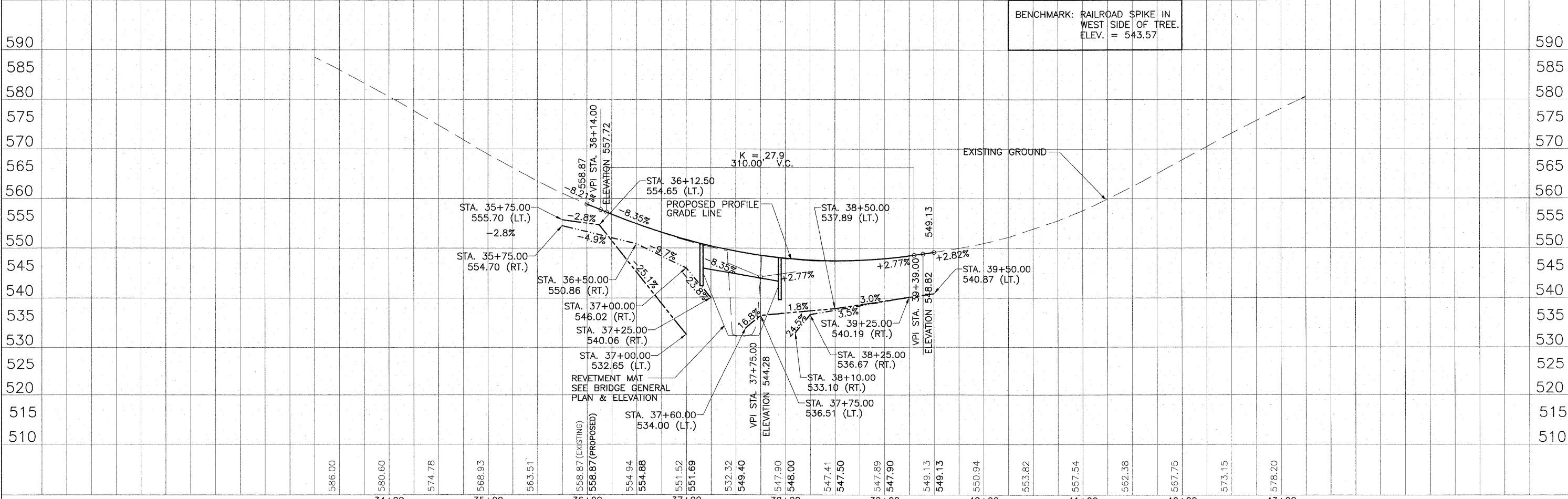
DESIGNED	DATE
PLOTTED	BY
CHECKED	
NO.	



NOTE: FOR CONTROL POINT RECOVERY TIES SEE SHEET 4.








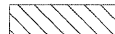
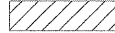


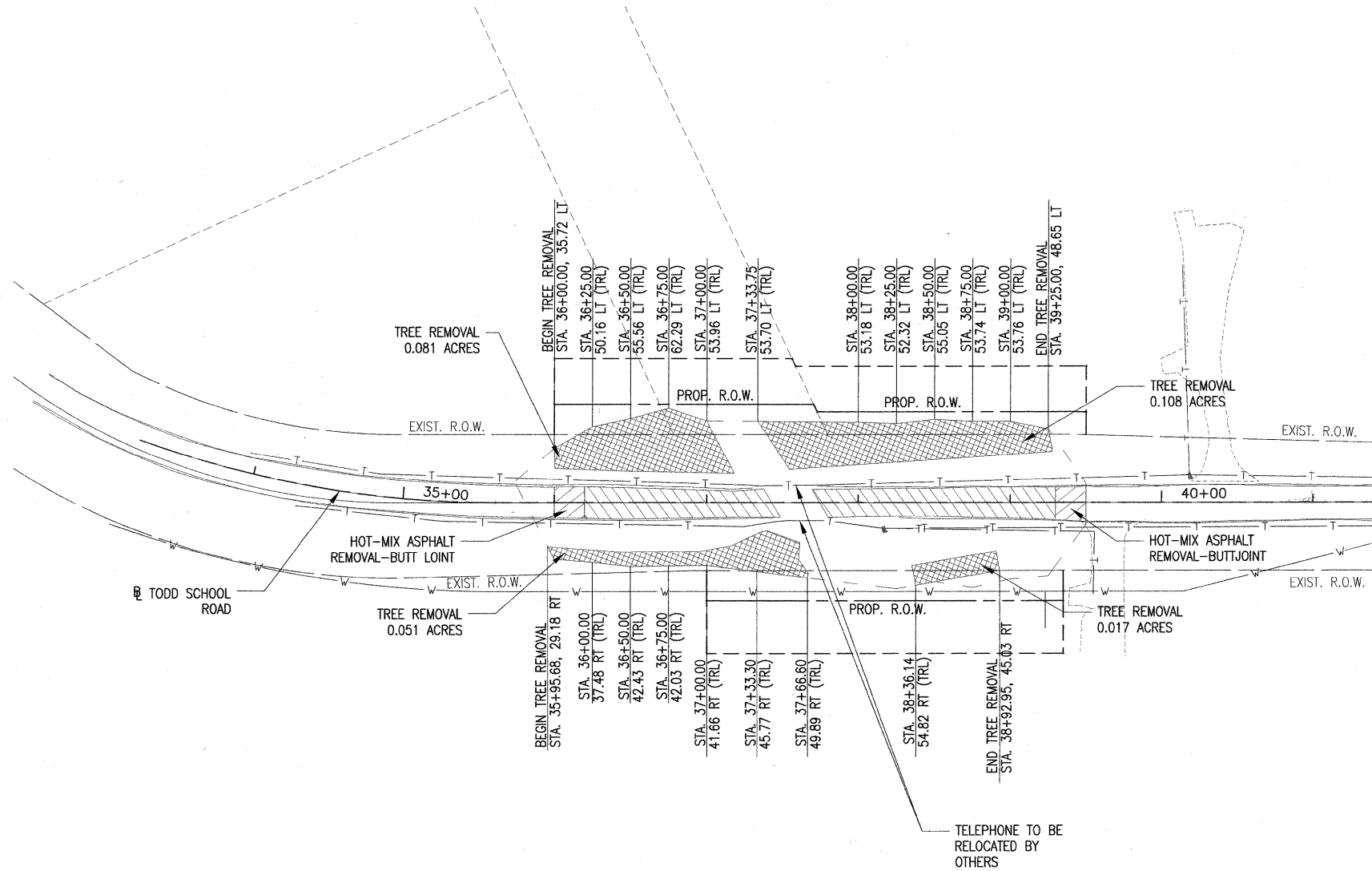
BENCHMARK: RAILROAD SPIKE IN WEST SIDE OF TREE. ELEV. = 543.57



FILE NAME =	USER NAME = \$USER\$	DESIGNED	DLC 11/24/08	REVISED		STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PLAN & PROFILE		F.A. RTE. CH 056	SECTION 08-00041-02-BR	COUNTY PEORIA	TOTAL SHEETS 25	SHEET NO. 5
\$FILE\$		DRAWN	DLC 1/15/09	REVISED			TODD SCHOOL ROAD BRIDGE REPLACEMENT						
		CHECKED	MPB 5/15/09	REVISED			SCALE: V 1:10 H 1:50 SHEET NO. 1 OF 1 SHEETS STA. 36+00.00 TO STA. 39+50.00						
		PLOT DATE = \$DATE\$		REVISED			FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT						

LEGEND

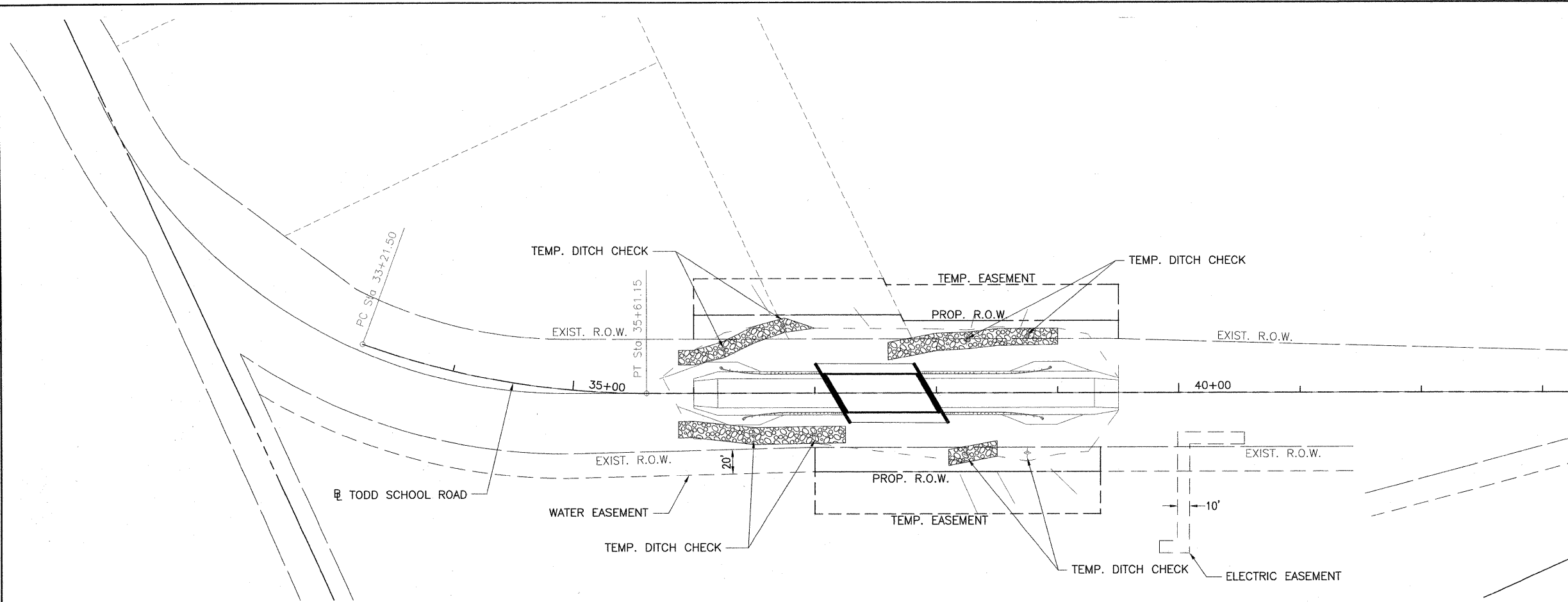
- EXISTING ROW 
- PROPOSED ROW 
- CONSTRUCTION LIMITS 
- EXISTING WATER MAIN 
- EXISTING TELEPHONE LINE 
- EXISTING EASEMENT 
- TREE REMOVAL 
- PAVEMENT REMOVAL 
- HOT-MIX ASPHALT REMOVAL-BUTT JOINT 



FILE NAME = \$FILEL\$	USER NAME = \$USER\$	DESIGNED - DLC 12/20/08	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	REMOVAL PLAN TODD SCHOOL ROAD BRIDGE REPLACEMENT			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = \$SCALE\$	DRAWN - DLC 1/28/09	REVISED -		CH D56	08-00041-02-BR	PEORIA	25	6			
	PLOT DATE = \$DATE\$	CHECKED - MPB 5/15/09	REVISED -		SCALE: 1"=50'			SHEET NO. OF SHEETS STA. TO STA.		FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT	CONTRACT NO. 89479	

LEGEND

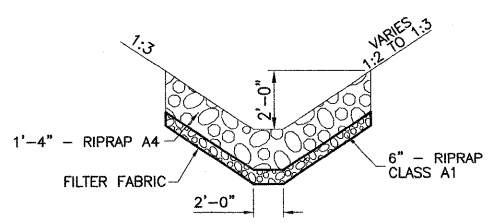
- EXISTING ROW
- PROPOSED ROW
- CONSTRUCTION LIMITS
- EXISTING WATER MAIN
- EXISTING TELEPHONE LINE
- EXISTING EASEMENT
- RIPRAP TYPE A4
- PERIMETER EROSION BARRIER
- TEMPORARY DITCH CHECKS



MULCH METHOD 2

LOCATION	QUANTITY
STA. 35+71.92 TO STA. 37+00.00, LT	0.07
STA. 35+86.56 TO STA. 37+25.00, LT	0.08
STA. 37+85.61 TO STA. 39+50.00, LT	0.11
STA. 38+06.39 TO STA. 39+50.00, LT	0.15
TOTALS	0.41 TON

NOTE:
 *MULCH SHALL BE APPLIED TO ALL SEEDED AREAS AT A RATE OF 2 TONS PER ACRE. USE METHOD 2, ONLY.



SECTION AT RIPRAP DITCH

- STA. 35+87.50 TO STA. 37+00.00 LT.
- STA. 35+87.50 TO STA. 37+25.00 RT.
- STA. 37+60.00 TO STA. 39+00.00 LT.
- STA. 38+10.00 TO STA. 38+50.00 RT.

RIPRAP, FILTER FABRIC

HEAVY DUTY EROSION CONTROL BLANKET

LOCATION	QUANTITY
STA. 36+50.00 TO STA. 37+07.07, LT	187.9
STA. 38+00.00 TO STA. 38+50.00, LT	129.4
TOTALS	317 SQ. YD.

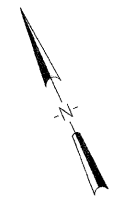
LOCATION	RIPRAP CLASS A4 (SQ. YD.)	FILTER FABRIC FOR USE WITH RIPRAP (SQ. YD.)
STA. 35+87.50 TO STA. 37+00.00 LT.	177.8	177.8
STA. 35+87.50 TO STA. 37+25.00 RT.	223.7	223.7
STA. 37+60.00 TO STA. 39+00.00 LT.	214.4	214.4
STA. 38+10.00 TO STA. 38+50.00 RT.	65.1	65.1
TOTALS	681 SQ. YD.	681 SQ. YD.

TEMPORARY DITCH CHECKS

LOCATION	QUANTITY
STA. 36+25.00, LT	1
STA. 36+50.00, RT	1
STA. 36+75.00, LT	1
STA. 37+00.00, RT	1
STA. 38+25.00, LT	1
STA. 38+25.00, RT	1
STA. 38+75.00, LT	1
STA. 38+75.00, RT	1
TOTALS	8 EACH

PERIMETER EROSION BARRIER

LOCATION	QUANTITY
STA. 36+48.16 TO STA. 36+88.95, LT	55
STA. 37+31.81 TO STA. 37+44.36, LT	20
STA. 38+19.39 TO STA. 38+33.42, RT	35
STA. 38+28.54 TO STA. 38+32.10, LT	15
STA. 38+50.00 TO STA. 38+64.52, RT	30
STA. 38+69.60 TO STA. 38+75.14, LT	15
STA. 38+94.20 TO STA. 39+15.55, RT	30
TOTALS	200 SQ. YD.



B.M.- Railroad spike set in west side of tree. Sta. 39+00.96, 69.5' Rt. Elev. 543.57

Existing Structure - Structure No. 072-3048. Existing structure was constructed in 1939 and consists of a single span supported on closed abutments. Superstructure consists of five lines of wide flange steel beams supporting a reinforced concrete deck with a bituminous overlay. Abutments consist of tied-back timber pile bents with timber logging. The road will be closed during construction with a signed detour route.

Salvage- None

DESIGN SPECIFICATIONS

2007 AASHTO LRFD Bridge Design Specifications - 4th edition

LOADING HL-93

Allow 50 #/sq. ft. for future wearing surface.

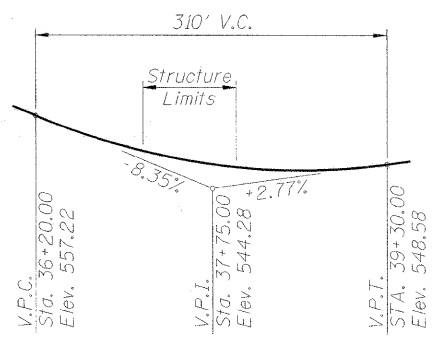
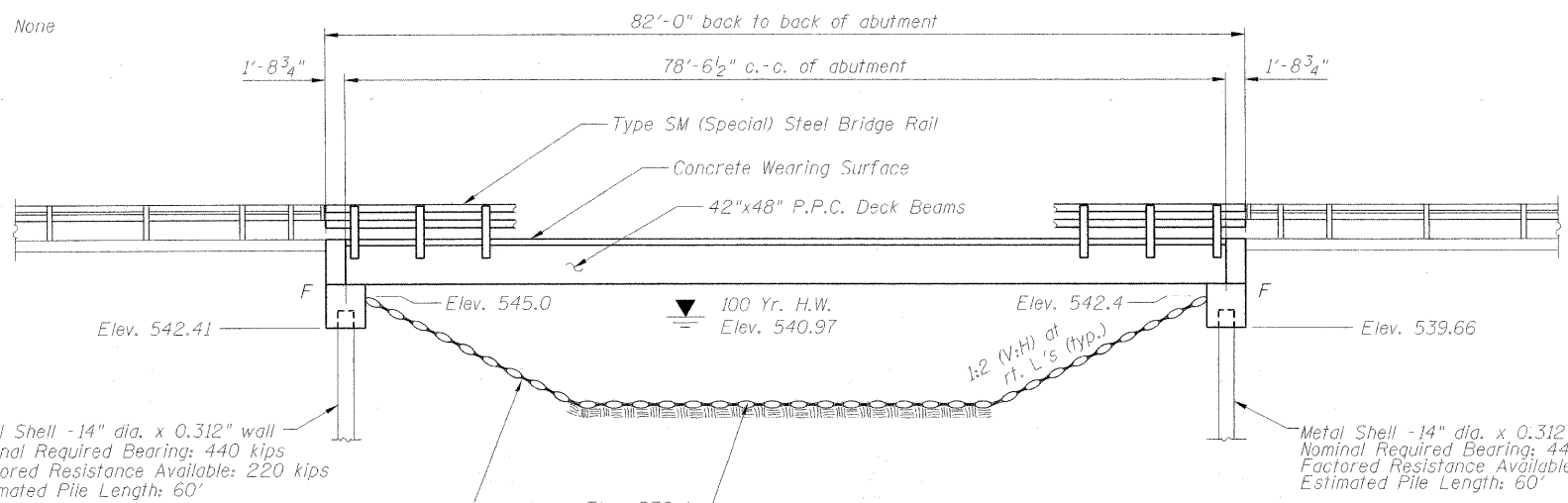
DESIGN STRESSES

Super: $f'_c = 6,000$ p.s.i. (P.P.C. Deck Beams)
 $f'_{ci} = 5,000$ p.s.i.
 $f'_s = 270,000$ p.s.i. ($\frac{1}{2}$ " ϕ Strand)
 $f'_{si} = 201,960$ p.s.i. ($\frac{1}{2}$ " ϕ Strand)
 $f_y = 60,000$ p.s.i.
 Sub: $f'_c = 3,500$ p.s.i.
 $f_y = 60,000$ p.s.i.

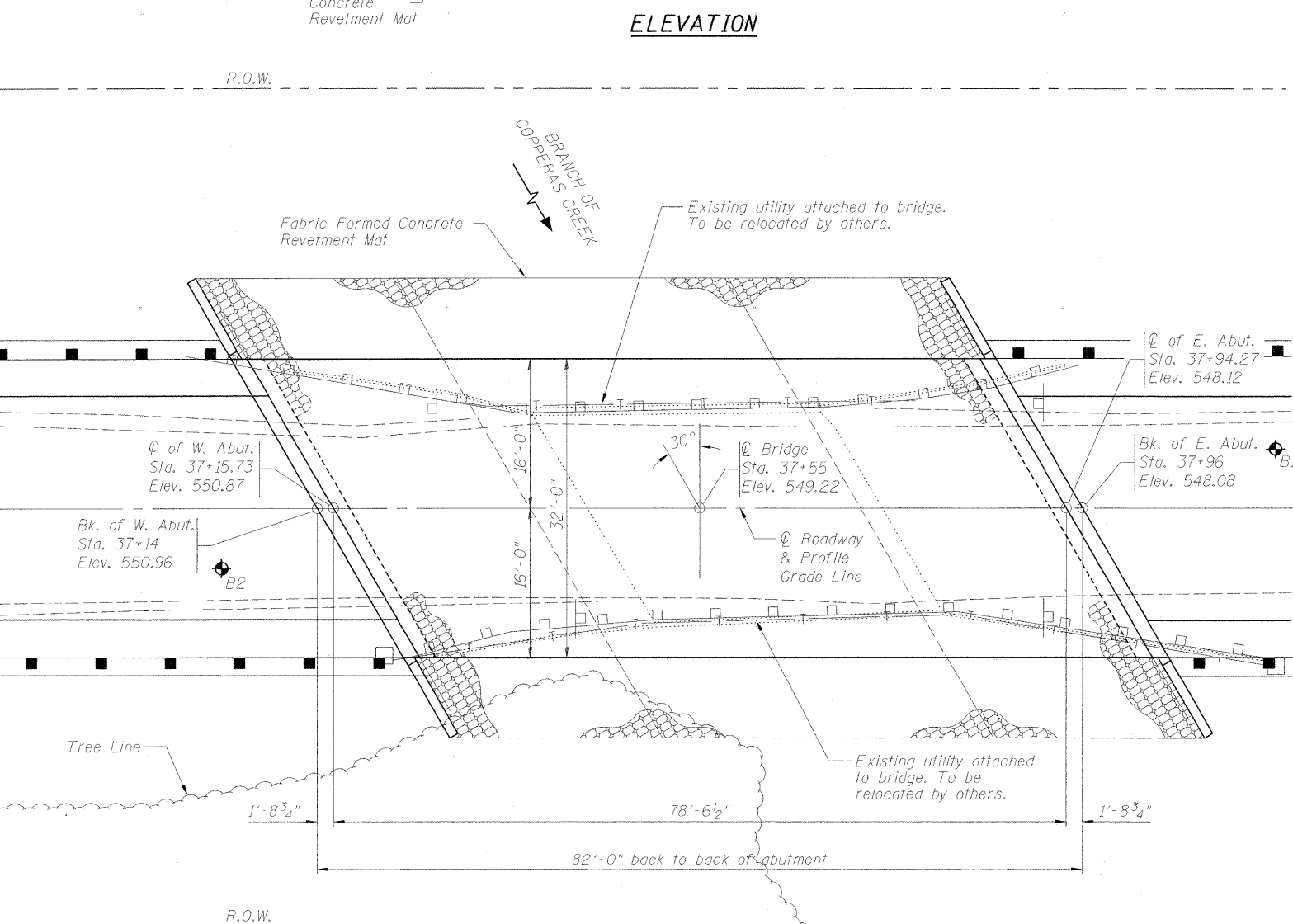
SEISMIC DATA

Seismic Performance Zone (SPZ) = 1
 Design Spectral Acceleration at 1.0 sec (SD1) = 0.113
 Design Spectral Acceleration at 0.2 sec (SDs) = 0.177
 Soil Site Class = D

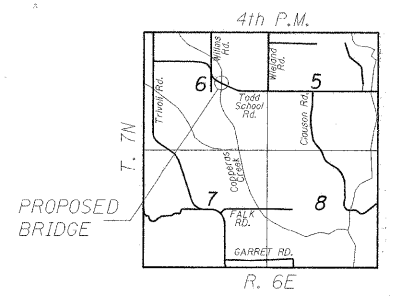
CONTRACT NO. 89479



PROFILE GRADE
 (Along ϕ Roadway)



BRANCH OF COPPERAS CREEK
 BUILT 20__ BY
 PEORIA COUNTY
 SEC. 08-00041-02-BR
 CH D56 STATION 37+55
 STR. NO. 072-3144 LOADING HL-93



LETTERING FOR NAME PLATE

Locate Name Plate at Southwest Corner of Bridge (See Std. 515001)

LOCATION SKETCH

DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (ft.)	W. Abut.	E. Abut.
	542.41	539.66

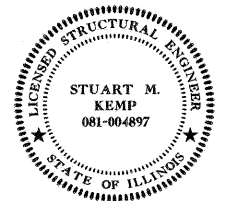
INDEX OF SHEETS

1. General Plan & Elevation
2. General Notes, Total Bill of Materials and General Details
3. P.P.C. Deck Beam Superstructure
4. P.P.C. Deck Beam Details
5. P.P.C. Deck Beam Details
6. Concrete Wearing Surface
7. Steel Railing, Type SM (Special) with Concrete Wearing Surface
8. West Abutment
9. East Abutment
10. Metal Shell Pile Details
11. Boring Logs

WATERWAY INFORMATION

Drainage Area = 2.11 Sq. Mi. Low Grade Elev. = 545.33

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Nat. H.W.E.	Head - Ft.		Headwater El.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
Design	15	794	208	263	539.9	0.46	0.12	540.36	540.02
Base	100	1302	240	318	540.97	1.07	0.27	542.04	541.24



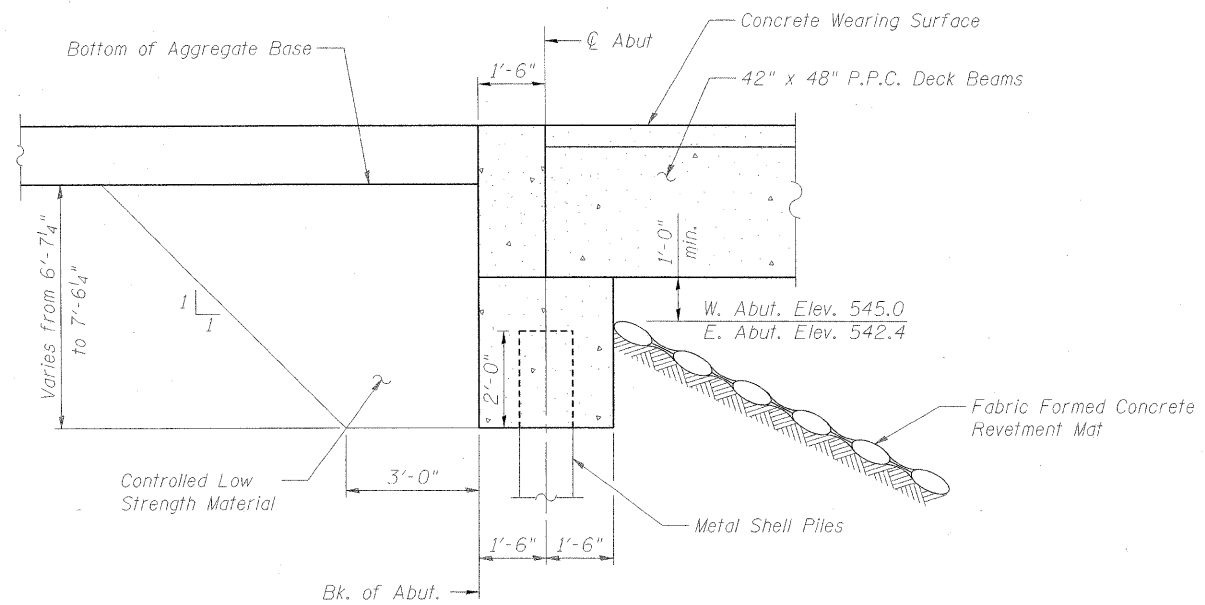
Stuart M. Kemp
 SIGNATURE
 5/11/2009
 DATE
 LIC. EXP. DATE : 11/30/2010

GENERAL PLAN & ELEVATION
TODD SCHOOL ROAD BRIDGE
OVER BRANCH OF COPPERAS CREEK
CH D56
SEC. 08-00041-02-BR
PEORIA COUNTY, ILLINOIS
STATION 37+55
STRUCTURE NO. 072-3144

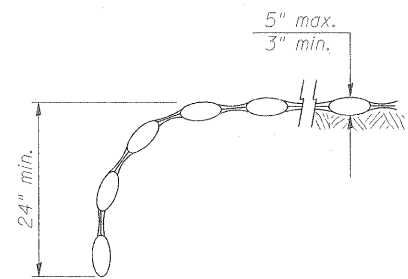
CH	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
D56	08-00041-02-BR	PEORIA	25	9
CONTRACT NO. 89479				

FED. ROAD DIST. NO. 2 [ILLINOIS] FED. AID PROJECT

05/22/2009
 10:08:00 AM
 05/21/09
 05/21/09
 05/21/09



SECTION A-A
SECTION THRU ABUTMENT
(Horiz. dim. @ Rt. L's)



SECTION B-B
CUT OFF WALL DETAIL
(Horiz. dim. @ Rt. L's)

GENERAL NOTES

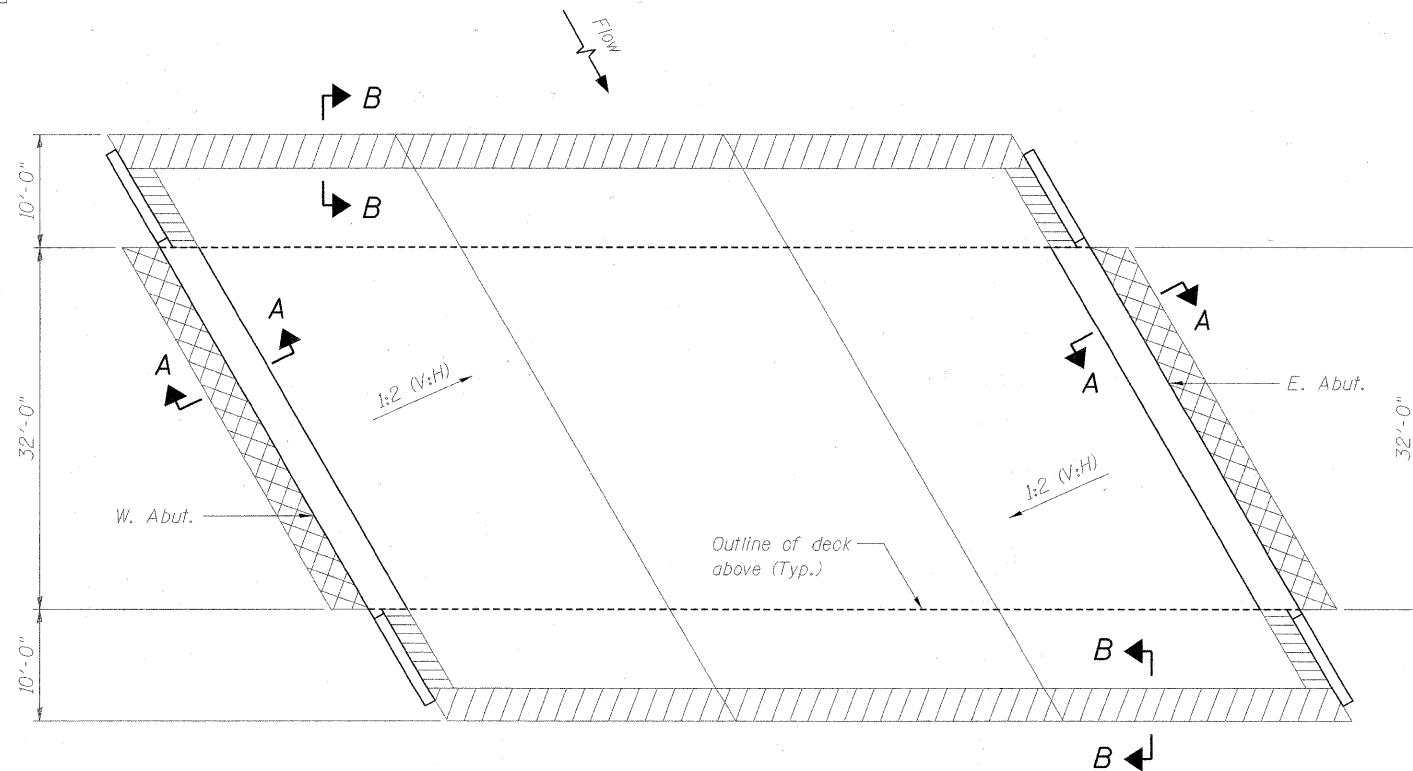
The Contractor shall drive 2 test piles, as specified, in a permanent location as directed by the Engineer before ordering the remaining piles.
A Corrosion inhibitor, as covered in the Special Provisions, shall be used in the concrete for precast prestressed concrete deck beams.
Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.

TOTAL BILL OF MATERIAL

Item	Unit	Super	Sub.	Total
Removal of Existing Structures	L. Sum	1	—	1
Fabric Formed Concrete Revetment Mat	Sq. Yd.	—	481	481
Structure Excavation	Cu. Yd.	—	238	238
Concrete Structures	Cu. Yd.	—	60.2	60.2
Bridge Deck Grooving	Sq. Yd.	262	—	262
Protective Coat	Sq. Yd.	292	—	292
Controlled Low Strength Material	Cu. Yd.	—	128	128
Concrete Wearing Surface	Sq. Yd.	279	—	279
Precast Prestressed Concrete Deck Beams (42" Depth)	Sq. Ft.	2513	—	2513
Steel Bridge Rail, Type SM (Special)	Foot	164	—	164
Reinforcement Bars, Epoxy Coated	Pound	3460	8600	12060
Furnishing Metal Shell Piles 14"x0.312"	Foot	—	720	720
Driving Piles	Foot	—	720	720
Test Pile Metal Shells	Each	—	2	2
Name Plates	Each	1	—	1

LEGEND

- Revetment Mat Cut Off Wall
- Controlled Low Strength Material
- Level Berm



REVTMENT MAT LAYOUT PLAN

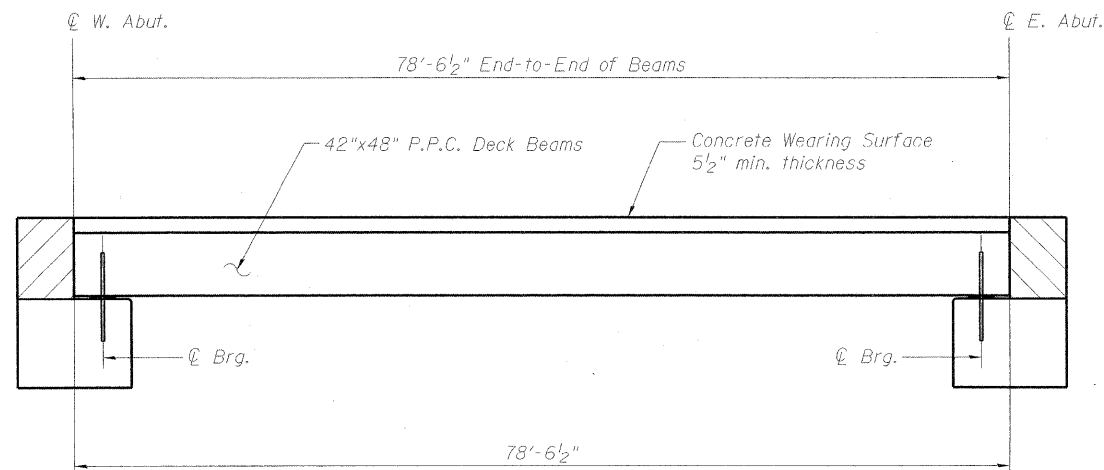
GENERAL NOTES, TOTAL BILL OF MATERIAL AND GENERAL DETAILS

TODD SCHOOL ROAD BRIDGE
OVER BRANCH OF COPPERAS CREEK
CH D56
SEC. 08-00041-02-BR
PEORIA COUNTY, ILLINOIS
STATION 37+55
STRUCTURE NO. 072-3144

05/21/09
I:\08\00041-02-BR\072-3144\072-3144-02-01-01.dwg

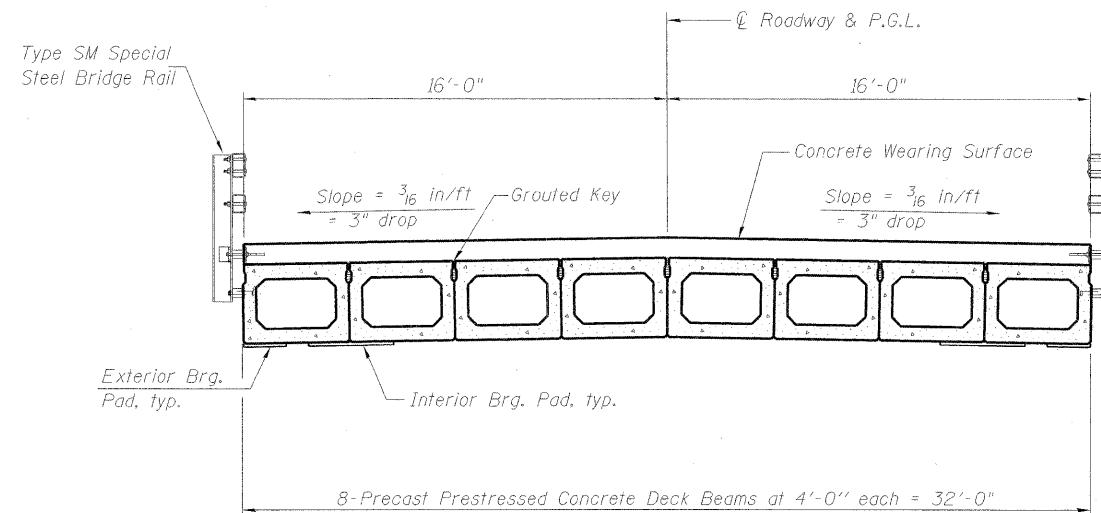
LAYOUT
DRAWN
REVIEWED
JKR
MEV
SHK
01/14/09
05/21/09
05/21/09

OBL0071	Corporate License Number 184-001-084		SHEET NO. 2	CH	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	© Copyright Hanson Professional Services Inc. 2009			D56	08-00041-02-BR	PEORIA	25	10
DATE	5/21/09		11 SHEETS	CONTRACT NO. 89479		FED. ROAD DIST. NO. 2 ILLINOIS FED. AID PROJECT		

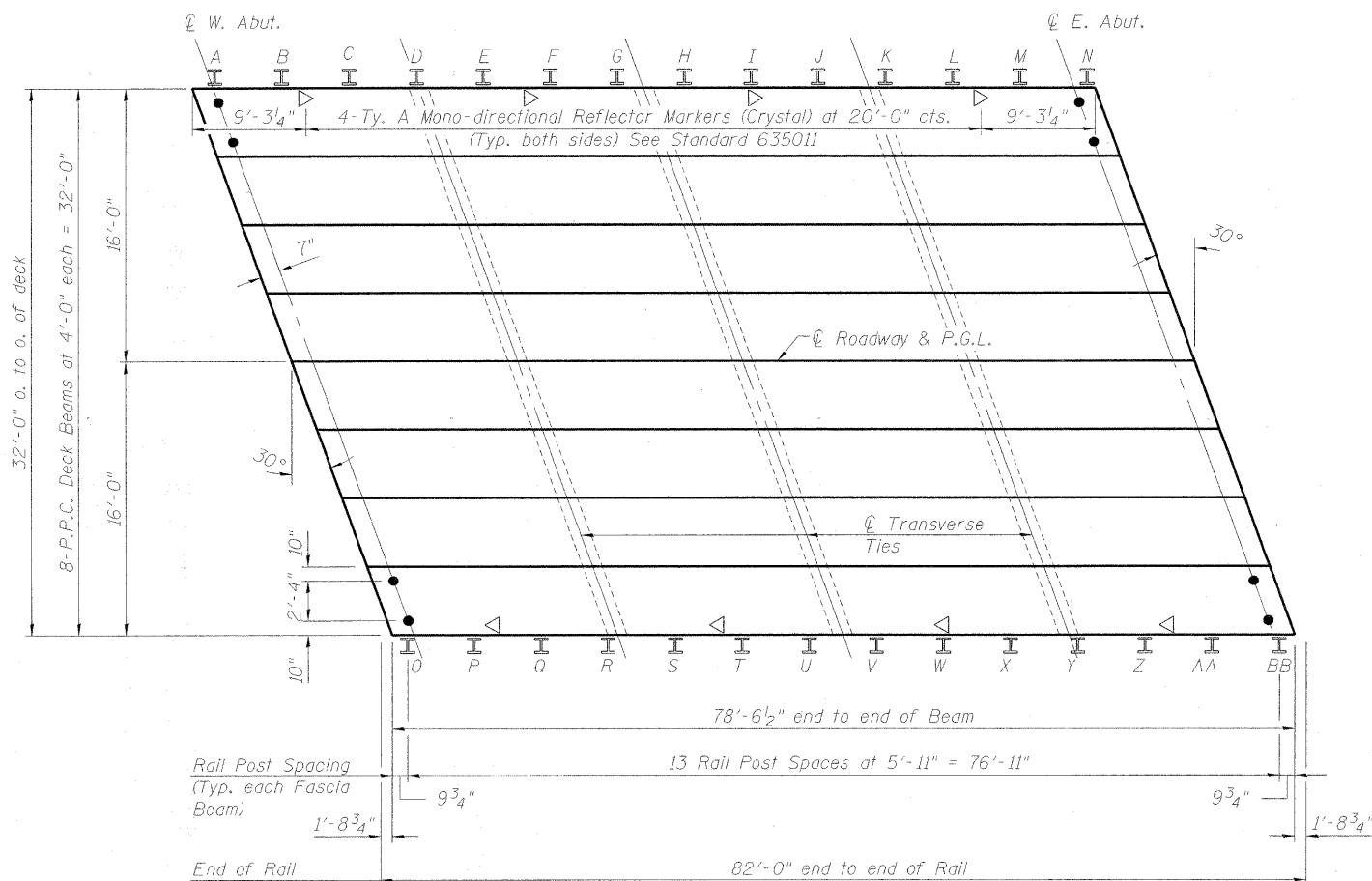


ELEVATION

All dimensions along \varnothing roadway



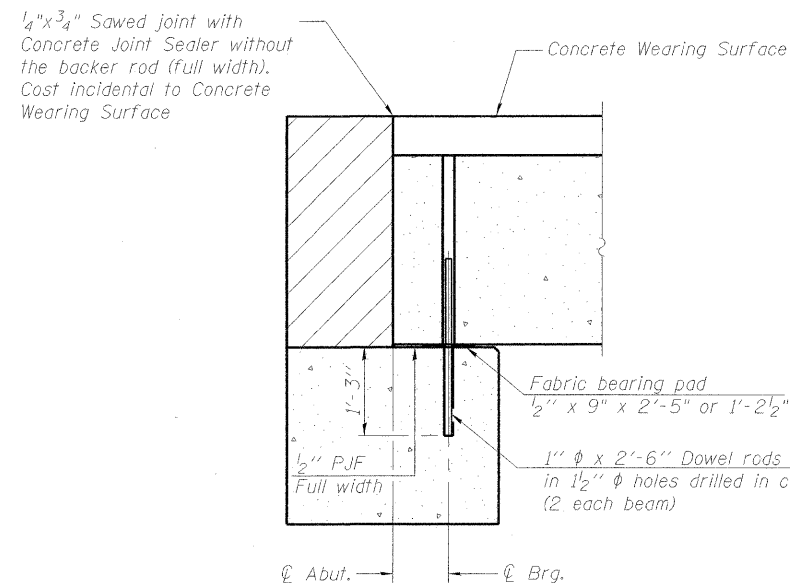
CROSS SECTION



PLAN

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 hours prior to grouting the shear keys. Longitudinal keys shall be grouted.
- The bearing seat surfaces shall be adjusted by shimming to assure firm and even bearing. See sheet 5 of 11 for bearing pad details.
- Hatched area to be poured after Concrete Wearing Surface is in place, and will be paid for as Concrete Structures.
- See Sheet 7 of 11 for location of rail post anchor devices.
- See Sheet 6 of 11 for Section at Rail Post.
- Cost of Reflector Markers shall be considered incidental to Steel Bridge Rail, Type SM (Special).
- Theoretical weight of one PPC deck beam is 90,070 lbs.



SECTION THRU ABUTMENT

All dimensions along \varnothing roadway

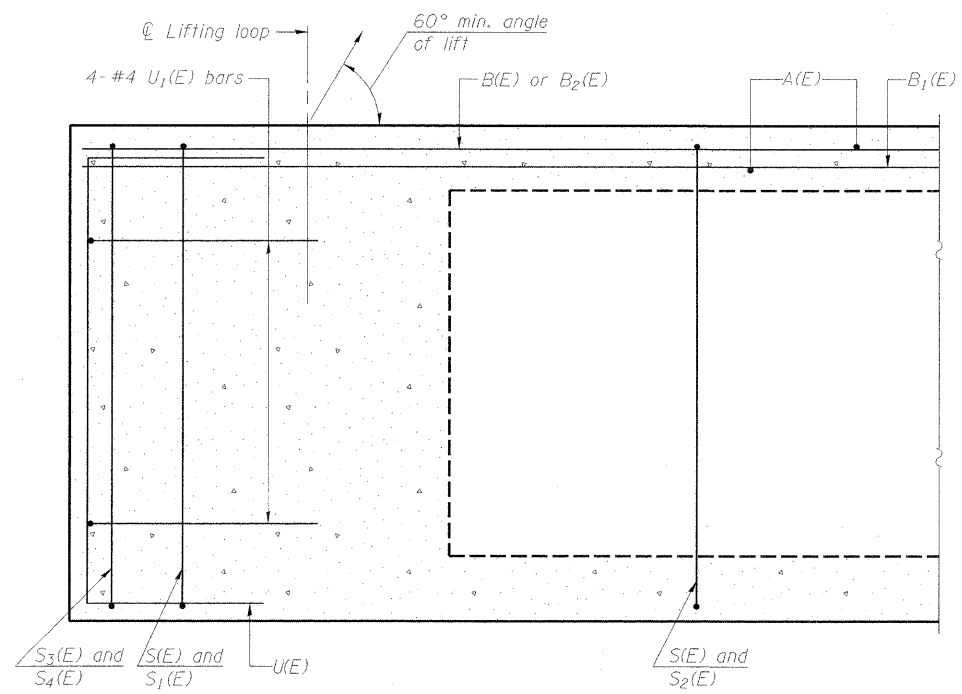
P.P.C. DECK BEAM SUPERSTRUCTURE

TODD SCHOOL ROAD BRIDGE
OVER BRANCH OF COPPERAS CREEK
CH D56
SEC. 08-00041-02-BR
PEORIA COUNTY, ILLINOIS
STATION 37+55
STRUCTURE NO. 072-3144

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		HANSON			
SHEET NO. 3	CH	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
11 SHEETS	D56	08-00041-02-BR	PEORIA	25	11
			CONTRACT NO. 89479		
FED. ROAD DIST. NO. 2 ILLINOIS FED. AID PROJECT					

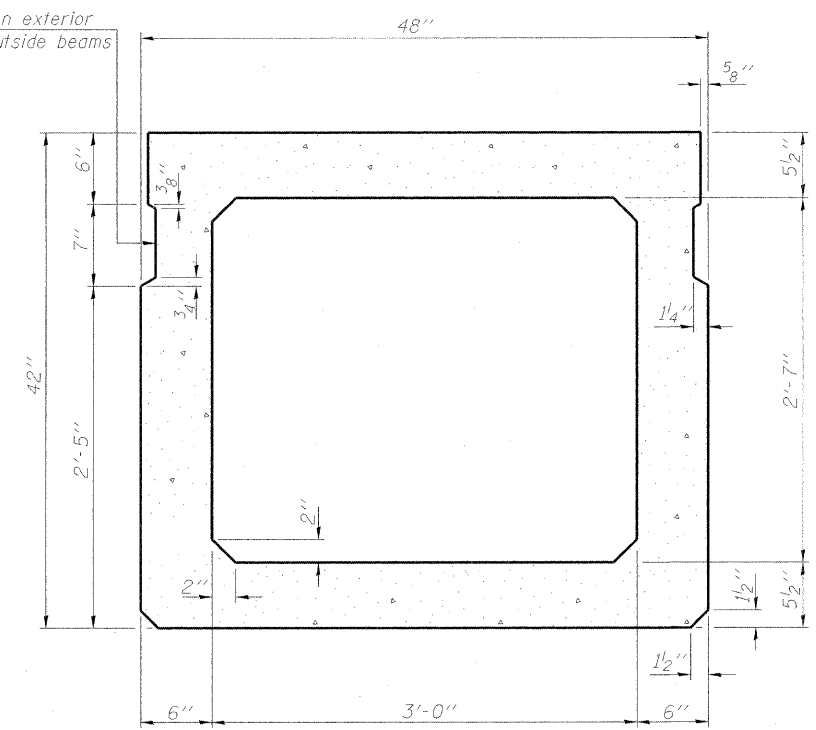
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DRAWN	MSM	02/27/03
REVIEWED	SMK	05/27/09

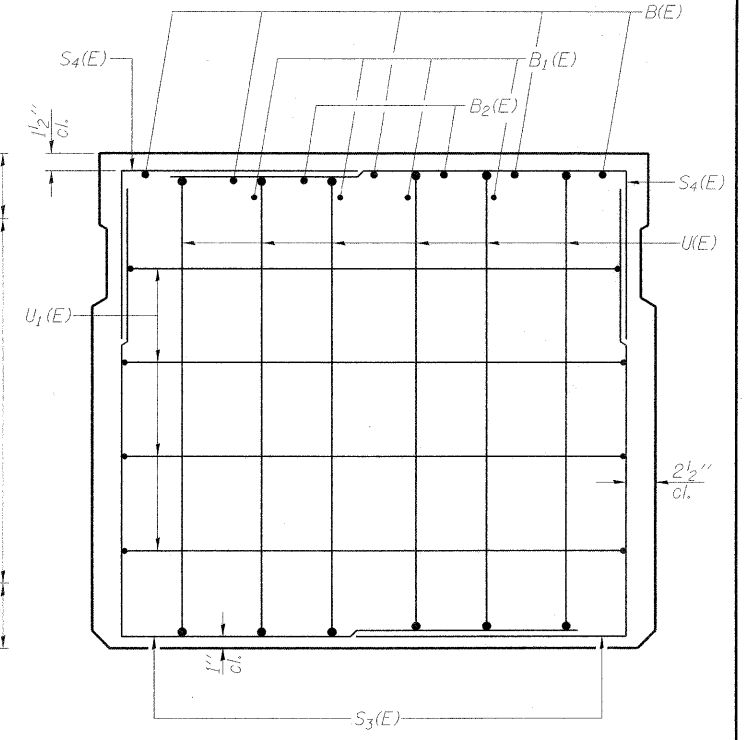


SECTION C-C

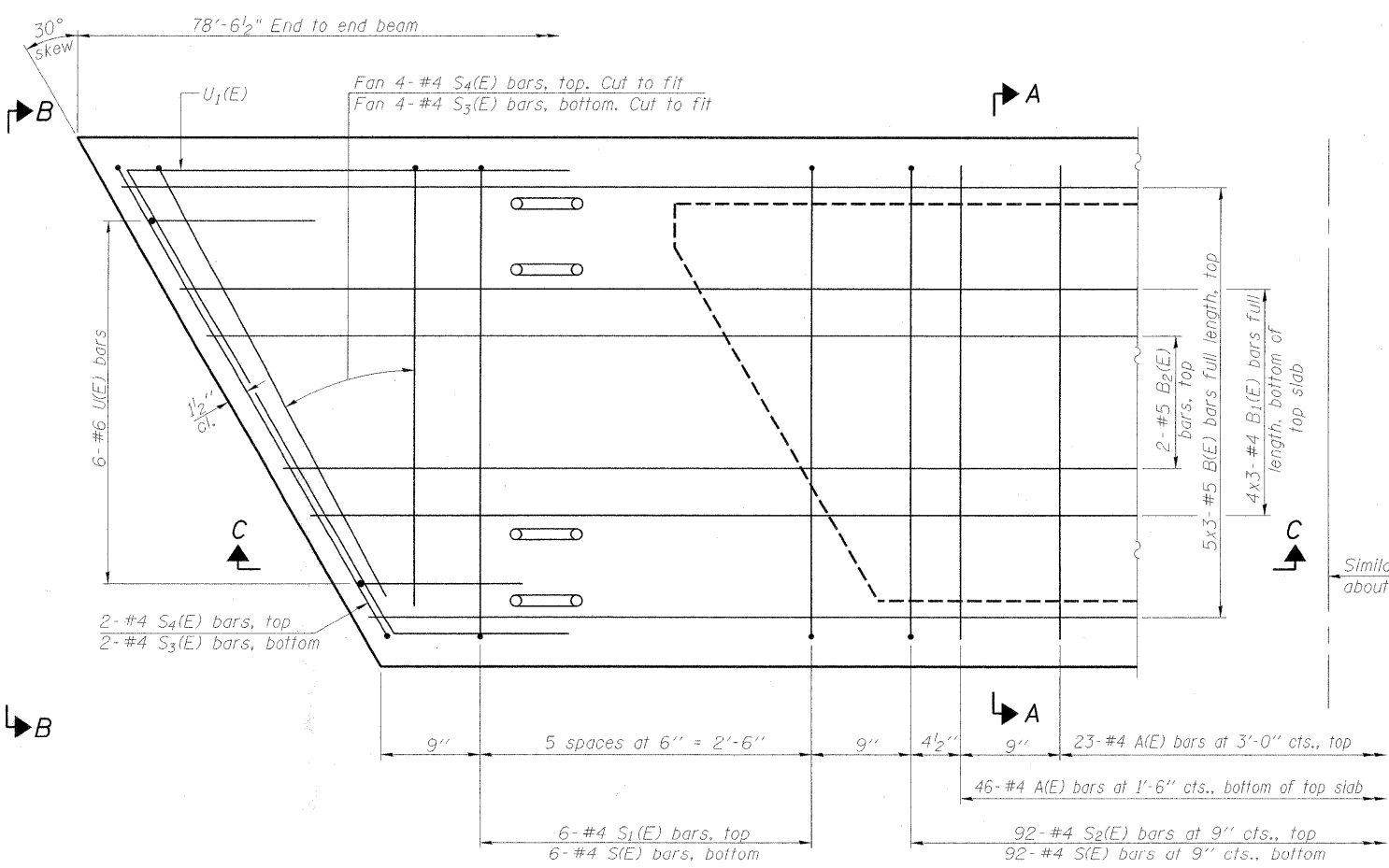
Omit key on exterior face of outside beams



SECTION A-A
(Showing dimensions)

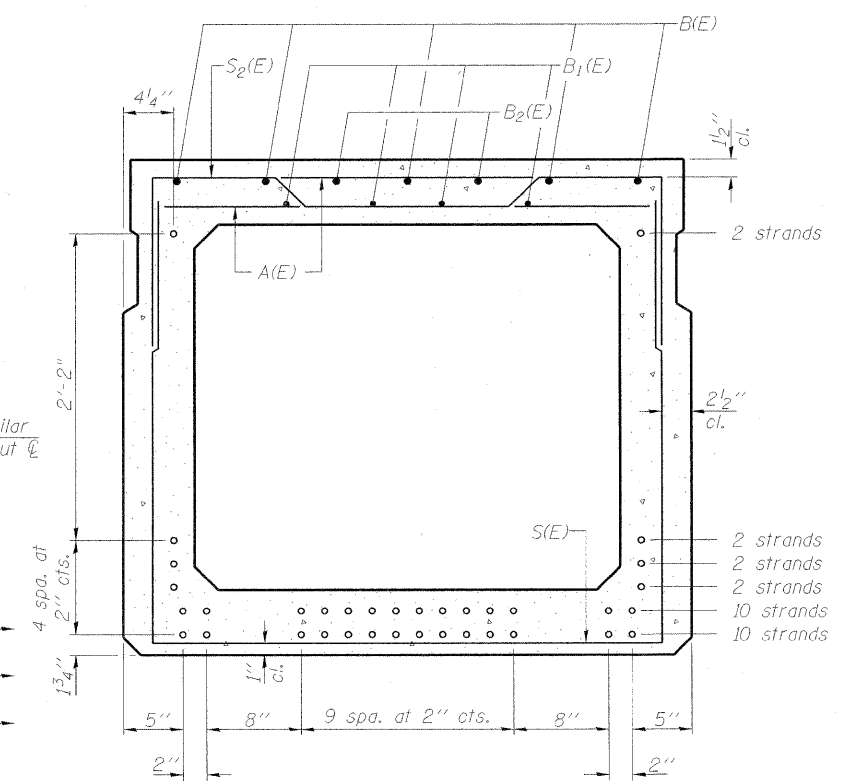


VIEW B-B



PLAN VIEW

Note: Spacing of S(E) and S2(E) bars may be adjusted up to 4" in the immediate area of the transverse tie diaphragms to miss the block outs for the transverse ties.



SECTION A-A
(Showing reinforcement and permissible strand locations)

Note: Place the number of strands specified in each row symmetrically about the centerline of beam in the permissible strand locations shown.

BAR LIST
ONE BEAM ONLY
(For information only)

Bar	No.	Size	Length	Shape
A(E)	69	#4	3'-7"	—
B(E)	15	#5	28'-2"	—
B1(E)	12	#4	27'-9"	—
B2(E)	4	#5	16'-0"	—
D(E)	28	#4	4'-4"	—
S(E)	104	#4	9'-11"	U
S1(E)	12	#4	7'-3"	U
S2(E)	92	#4	7'-6"	U
S3(E)	12	#4	7'-2"	U
S4(E)	12	#4	5'-10"	U
U(E)	12	#6	5'-9"	U
U1(E)	8	#4	8'-7"	U

* Fascia Beam only. See Sheet 6 of 11 for bar detail.

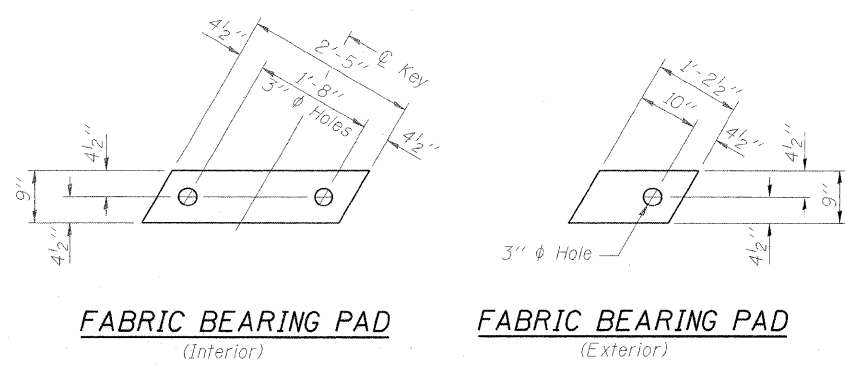
Note: See sheet 5 of 11 for additional details and Bill of Material.

PPC DECK BEAM DETAILS
TODD SCHOOL ROAD BRIDGE
OVER BRANCH OF COPPERAS CREEK
CH D56
SEC. 08-00041-02-BR
PEORIA COUNTY, ILLINOIS
STATION 37+55
STRUCTURE NO. 072-3144

05/21/2009
 I:\08\08106\08106\08106\Struct\Sheet\S-004-deck beam.dgn
 LAYOUT: JMR 01/14/09
 DRAWN: MDM 02/06/09
 REVIEWED: SAK 02/06/09

Corporate License Number 184-001-084
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 OBL0071
 DATE 02/06/09

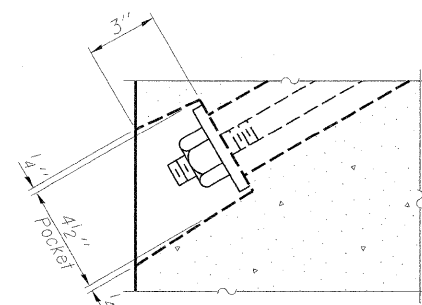
SHEET NO. 4	CH D56	SECTION 08-00041-02-BR	COUNTY PEORIA	TOTAL SHEETS 25	SHEET NO. 12
11 SHEETS	CONTRACT NO. 89479				
FED. ROAD DIST. NO. 2 ILLINOIS FED. AID PROJECT					



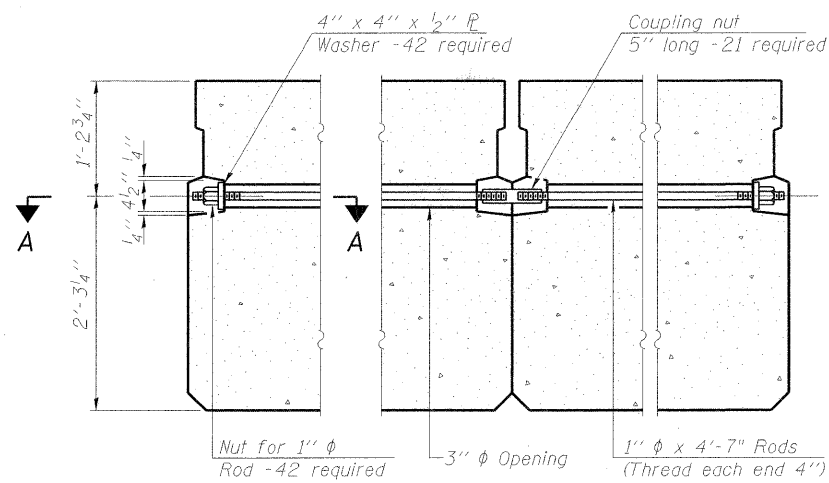
FABRIC BEARING PAD
(Interior)

FABRIC BEARING PAD
(Exterior)

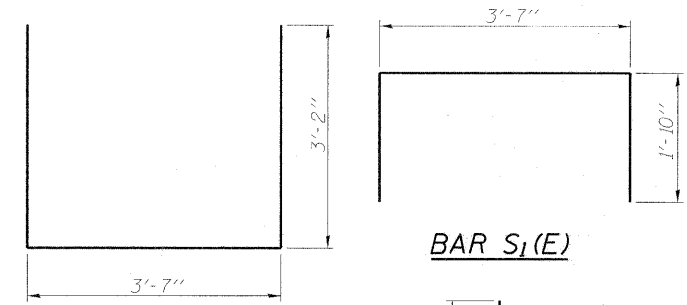
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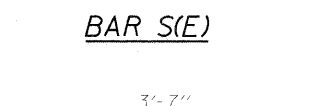
SECTION A-A



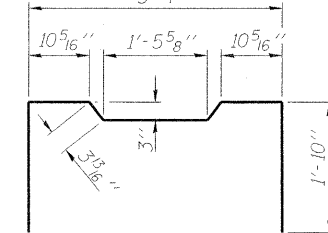
TYPICAL TRANSVERSE TIE ASSEMBLY



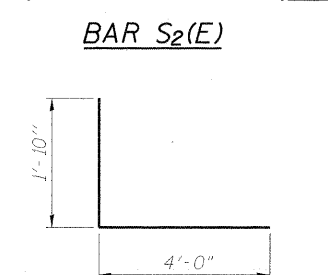
BAR S1(E)



BAR S(E)



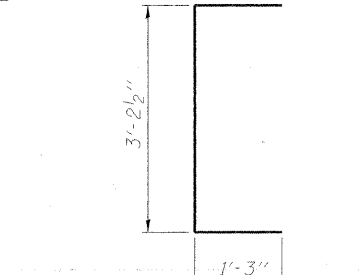
BAR S2(E)



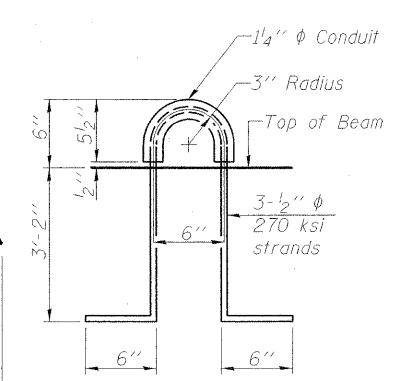
BAR S3(E)



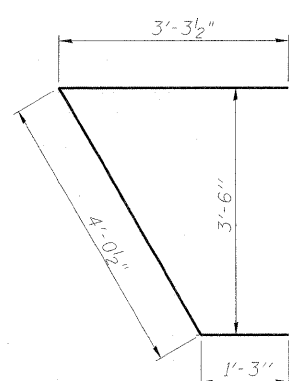
BAR S4(E)



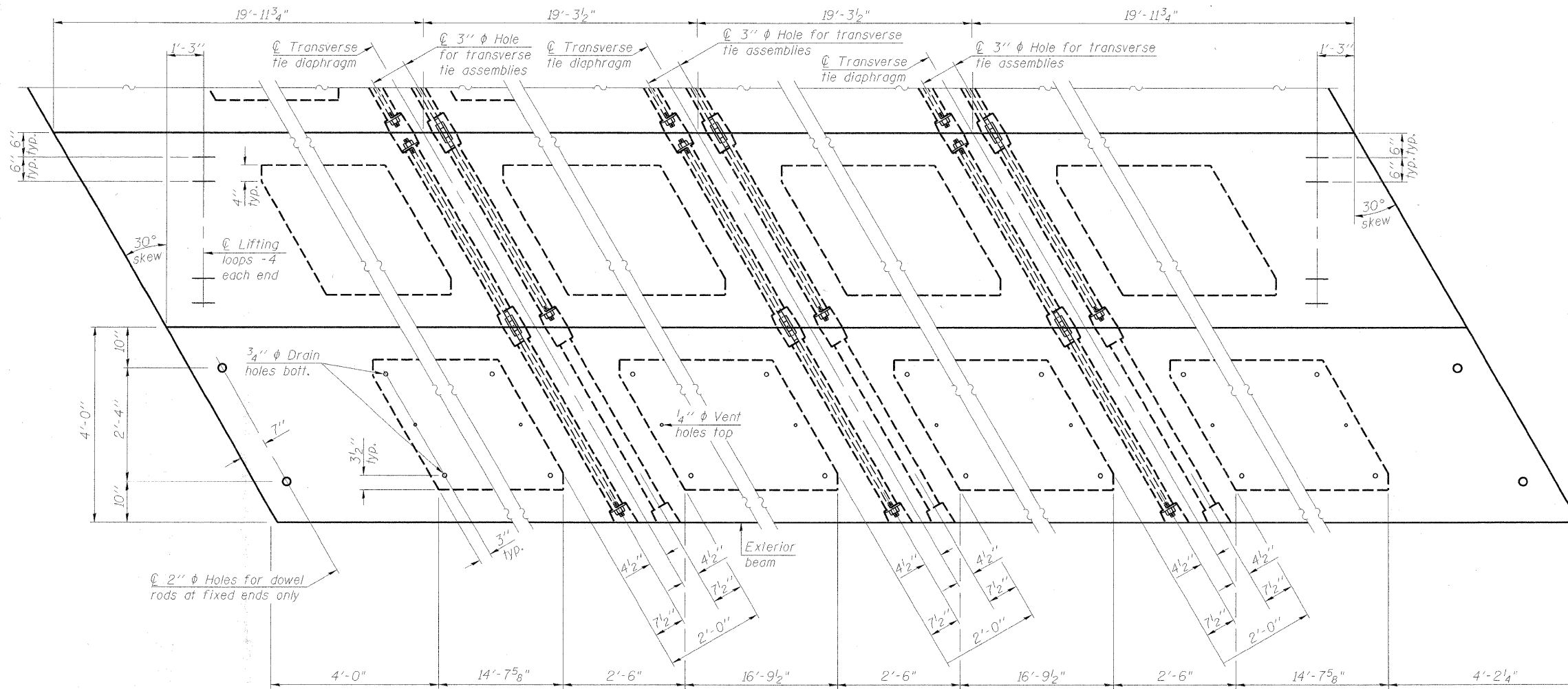
BAR U(E)



LIFTING LOOP DETAIL



BAR U1(E)



PLAN VIEW

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. The 1" rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets on exterior faces of bridge shall be filled with grout after transverse tie assembly is in place.

Reinforcement bars shall conform to ASTM A 706 (IL MOD), Grade 60. (See Special Provisions)

Two 1/8" fabric adjusting shims of the dimensions of the exterior bearing pad shall be provided for each bearing pad location.

A minimum 2 1/2" diameter lifting pin shall be used to engage the lifting loops during handling.

Corrosion Inhibitor, per Article 1020.05(b)(12) and 1021.06 of the Standard Specifications, shall be used in the concrete for precast prestressed concrete deck beams.

Compressive strength of prestressed concrete, f'c, shall be 6000 psi.

Compressive strength of prestressed concrete at release, f'ci, shall be 5000 psi.

Note: Connect beams in pairs with the transverse tie configuration shown.

BILL OF MATERIAL

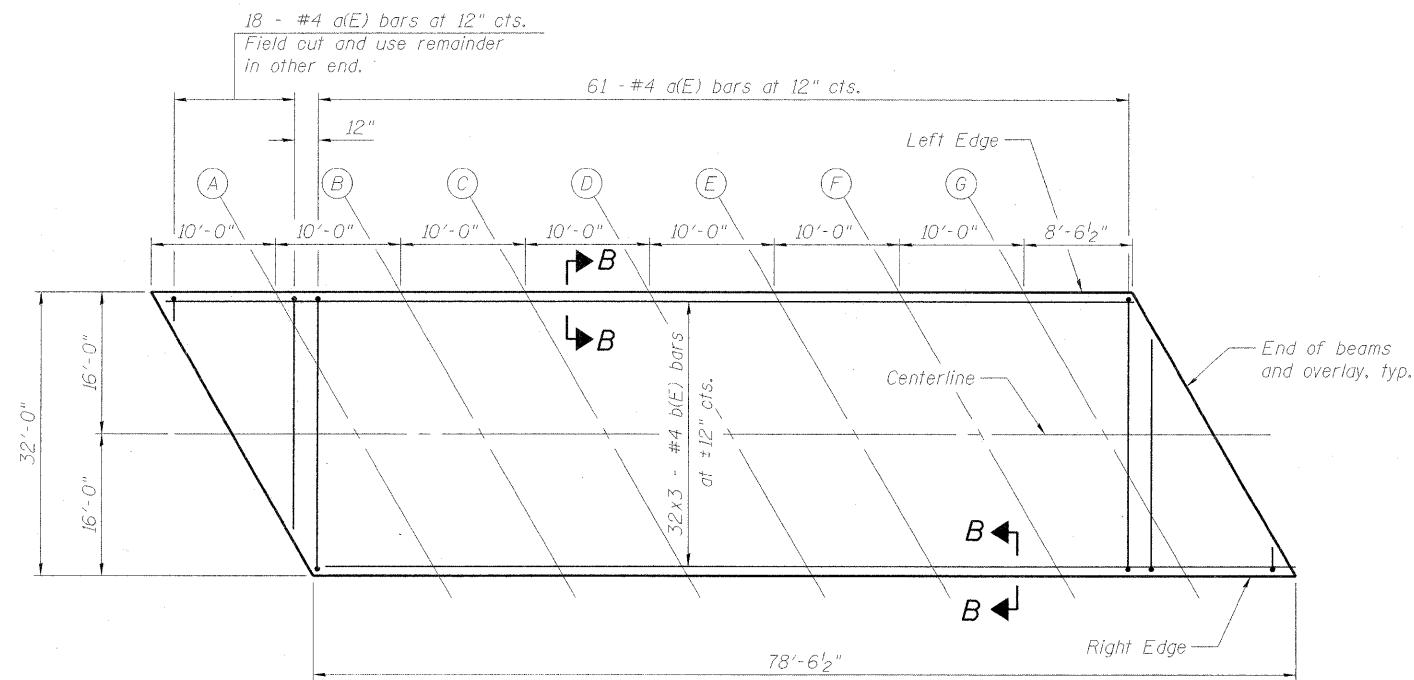
Precast Prestressed Conc. Deck Bms. (42" depth)	Sq. Ft.	2513
---	---------	------

PPC DECK BEAM DETAILS
TODD SCHOOL ROAD BRIDGE
OVER BRANCH OF COPPERAS CREEK
CH D56
SEC. 08-00041-02-BR
PEORIA COUNTY, ILLINOIS
STATION 37+55
STRUCTURE NO. 072-3144

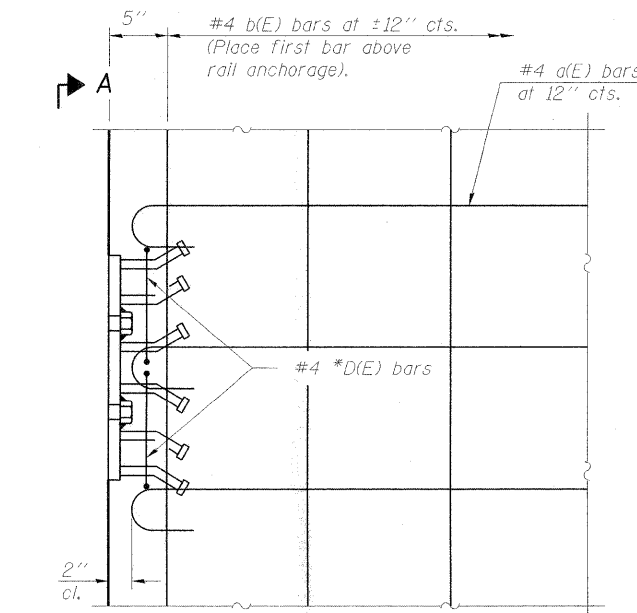
SHEET NO. 5 11 SHEETS	CH	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	D56	08-00041-02-BR	PEORIA	25	13
FED. ROAD DIST. NO. 2 ILLINOIS FED. AID PROJECT				CONTRACT NO. 89479	



05/24/2009
 01/14/09
 02/06/09
 02/26/09
 LAYOUT
 DRAWN
 CHECKED
 08/08/07
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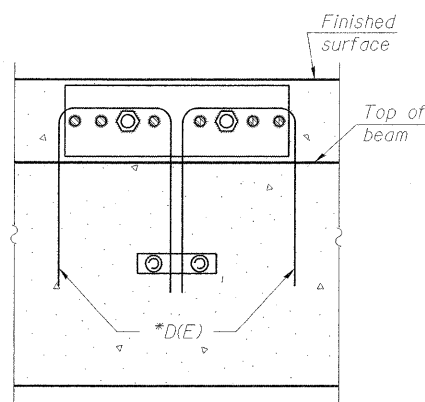


PLAN

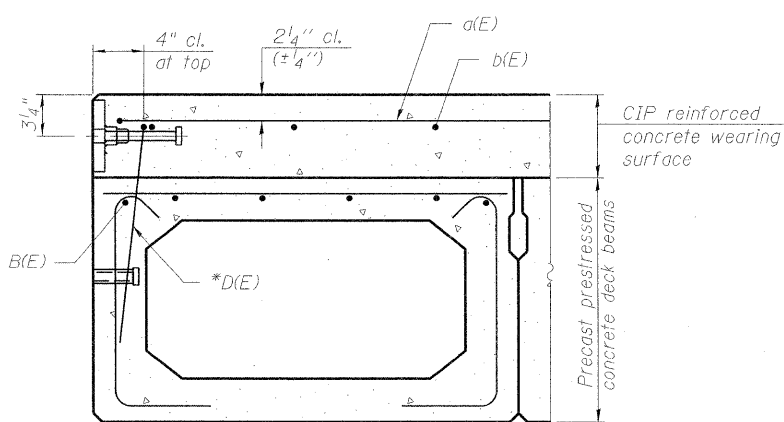


PLAN

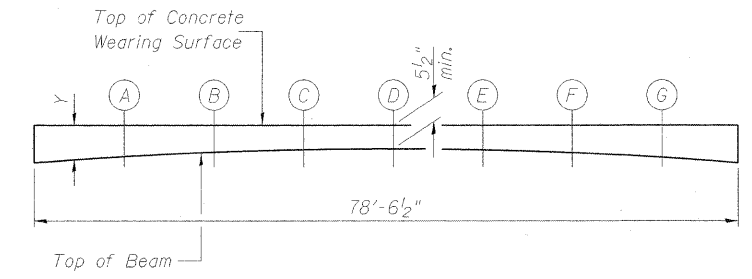
The rail anchorage shall be cast with the beam and the wearing surface shall be cast in the field. Formwork necessary for the wearing surface may be secured utilizing the bottom rail anchorage inserts and/or additional inserts cast into the beam. Drilling into the beam will not be permitted.



SECTION A-A



SECTION B-B

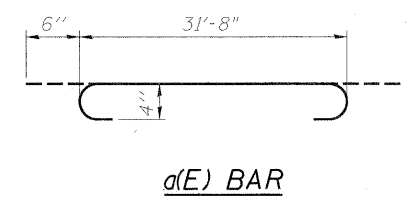
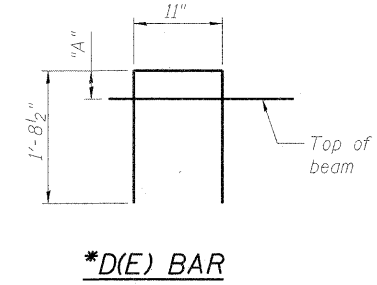


REINFORCED CONCRETE WEARING SURFACE PROFILE

Y = the profile grade minus the top of beam elevation. The seat elevations are based on the geometry of the structure and the expected camber of the beam. A minimum concrete wearing surface thickness of 5 1/2" is required at all locations.

Rail Post Location	Dimension "A" of D(E) bars
A & BB	8 5/8"
B & AA	7 1/4"
C & Z	6 1/8"
D & Y	5 1/8"
E & X	4 3/8"
F & W	3 3/4"
G & V	3 3/8"
H & U	3 1/8"
I & T	3 1/8"
J & S	3 1/4"
K & R	3 1/2"
L & Q	4"
M & P	4 3/4"
N & O	5 1/2"

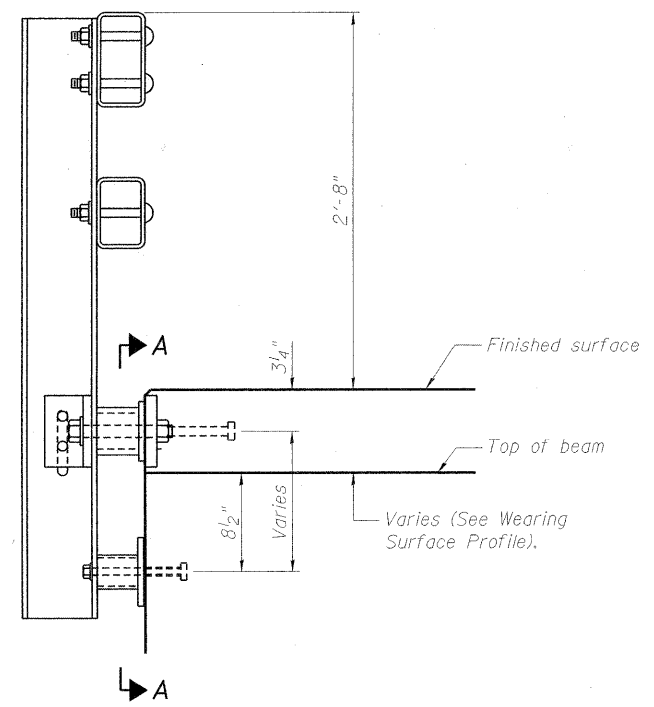
See Sheet 3 of 11 for rail post locations.



THEORETICAL CONCRETE WEARING SURFACE THICKNESS

Location	Y*		
	Left Edge	Centerline	Right Edge
W. End of Beam	10 3/4"	9 1/4"	7 3/4"
A	9"	7 7/8"	6 5/8"
B	7 1/4"	6 1/2"	5 3/4"
C	6 1/8"	5 3/4"	5 1/2"
D	5 1/2"	5 1/2"	5 1/2"
E	5 1/2"	5 7/8"	6 3/8"
F	5 7/8"	6 5/8"	7 1/2"
G	6 1/8"	8 1/8"	9 1/4"
E. End of Beam	7 3/4"	9 1/4"	10 3/4"

*Theoretical Y value provided for Contractor's use in estimating concrete volume. Actual Y may vary based on actual beam camber.



SECTION AT RAIL POST

BILL OF MATERIAL

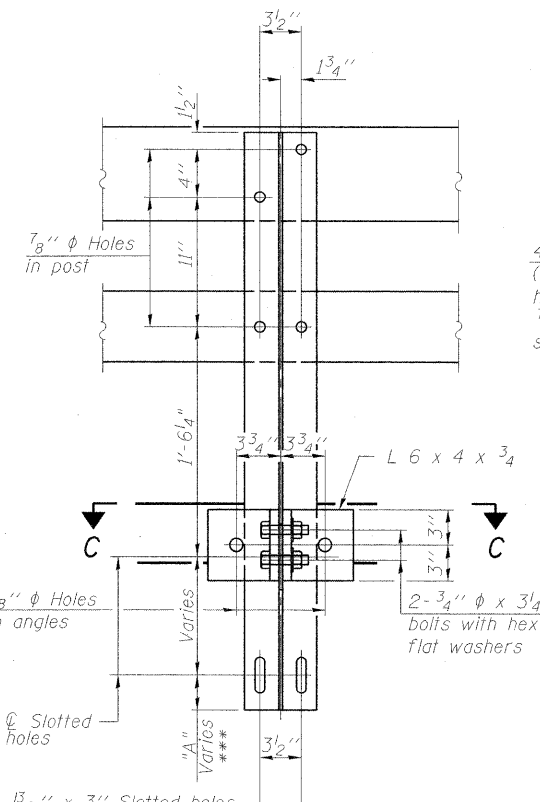
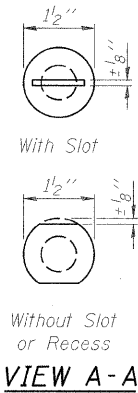
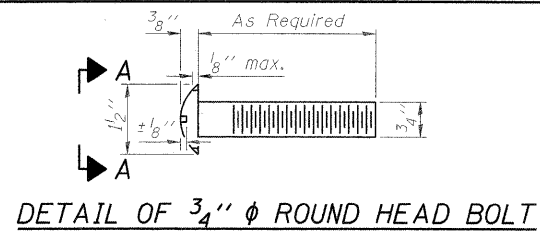
Bar	No.	Size	Length	Shape
a(E)	79	#4	32'-8"	—
b(E)	96	#4	27'-0"	—
Concrete Wearing Surface		Sq. Yd.	279	
Reinforcement Bars, Epoxy Coated		Pound	3460	

*D(E) bar included with PPC deck beam. See Sheet 4 of 11.

CONCRETE WEARING SURFACE

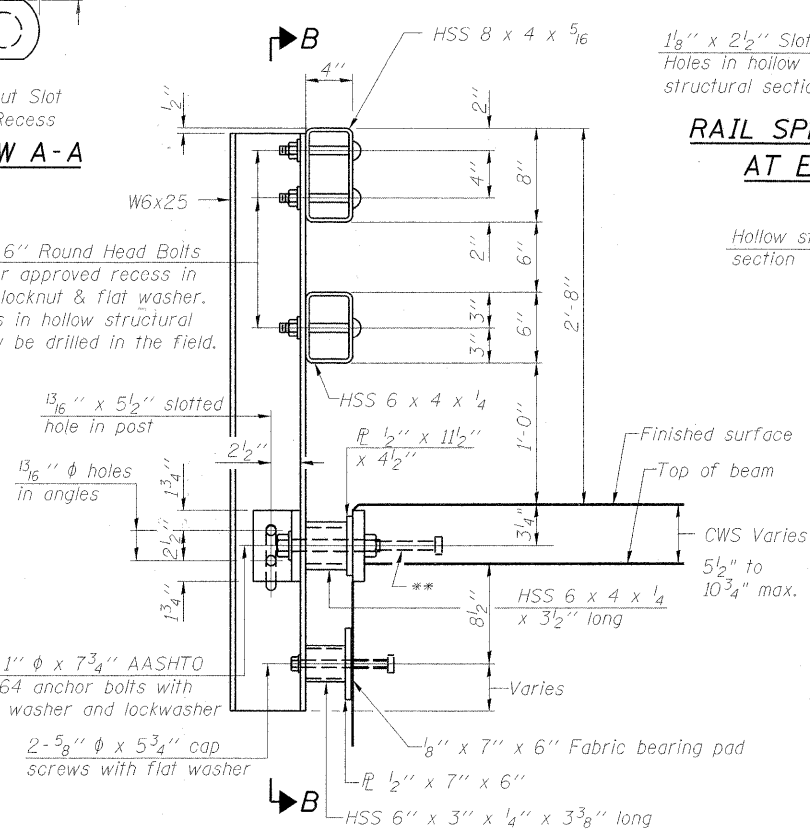
TODD SCHOOL ROAD BRIDGE
OVER BRANCH OF COPPERAS CREEK
CH D56
SEC. 08-00041-02-BR
PEORIA COUNTY, ILLINOIS
STATION 37+55
STRUCTURE NO. 072-3144

05/21/09 JKR 01/14/09 JKR 05/21/09 JKR 05/21/09 JKR

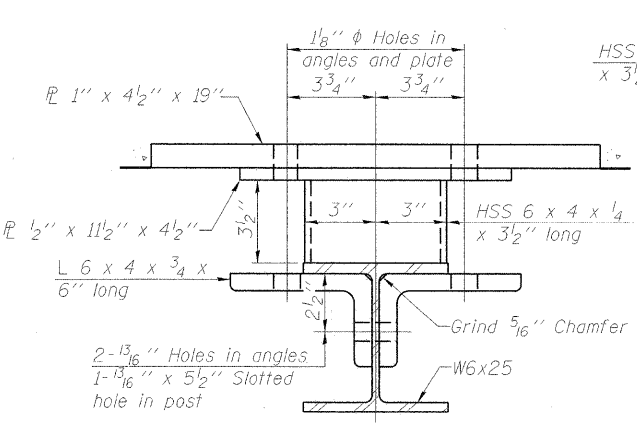


SECTION B-B

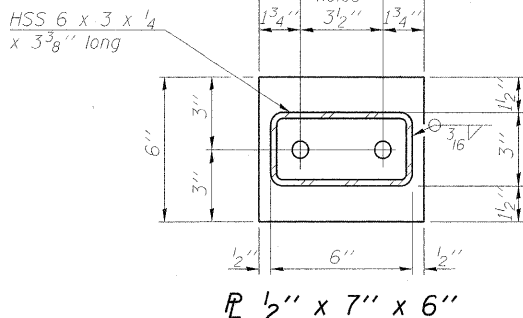
4-3/4" ϕ x 6" Round Head Bolts (With slot or approved recess in head) with locknut & flat washer. 7/8" ϕ holes in hollow structural section may be drilled in the field.



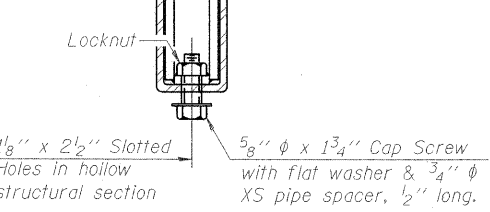
SECTION AT RAIL POST



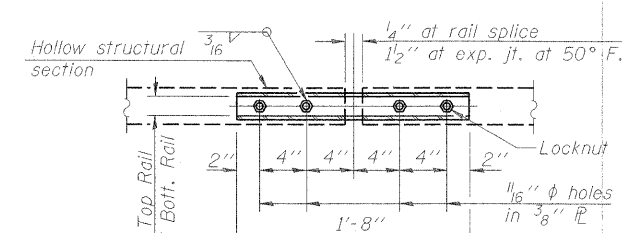
SECTION C-C



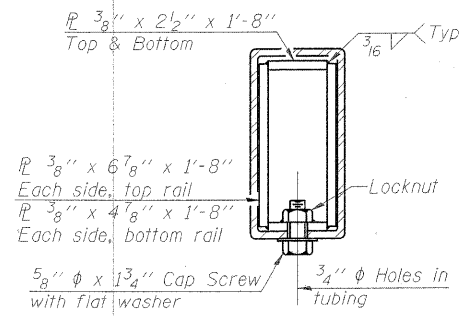
ANCHOR DEVICES



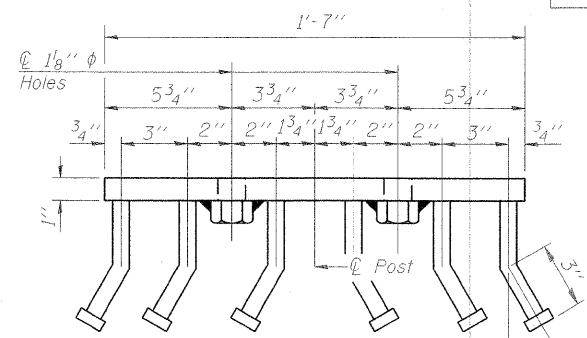
RAIL SPLICE CONNECTION AT EXPANSION JT.



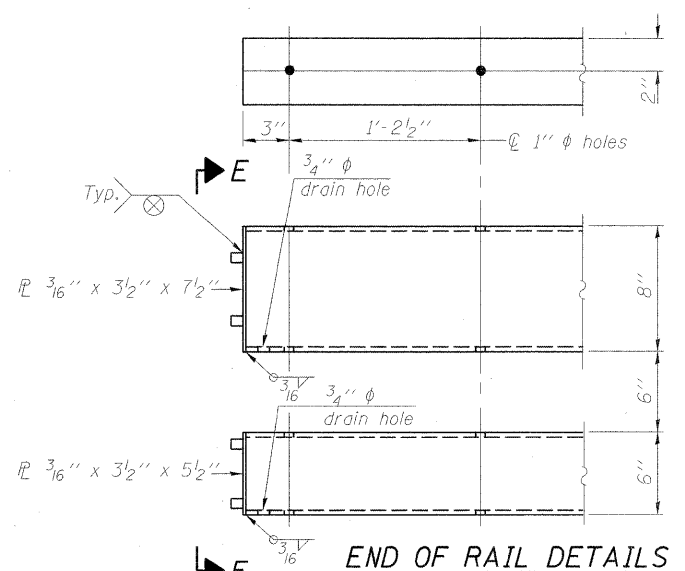
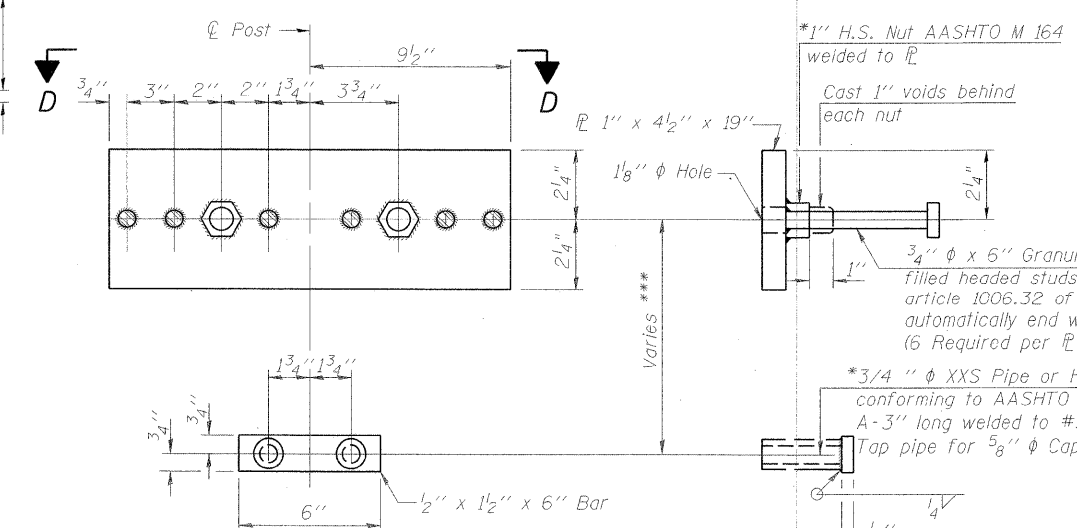
PLAN-BOTT. SPLICE AT TYPICAL



SECTION AT RAIL SPLICE



VIEW D-D



END OF RAIL DETAILS

Notes:
 All field drilled holes shall be coated with an approved zinc rich paint before erection.
 For multi-span bridges, sufficient 1/4" x 6" x 1'-2" galvanized steel shims shall be provided to align rail between adjacent spans. Cost included with Steel Railing, Type SM Special.
 Steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.
 ***The studs of the anchor devices shall be placed below the top reinforcement bars and the outermost longitudinal reinforcement bar shall be placed directly above the studs of the rail post anchor device.

***All rail posts shall be 4'-6" long. See table below for dimension "A" from bottom of rail post to center of slotted hole in flange. See Sheet 3 of 11 for rail post locations.

RAIL POST TABLE

Rail Post Location	Dimension "A"
A, BB	3"
B, C, Z, AA	5"
D, E, M, N, O, P, X, Y	6 5/8"
F, G, H, I, J, K, L, Q, R, S, T, U, V, W	8"

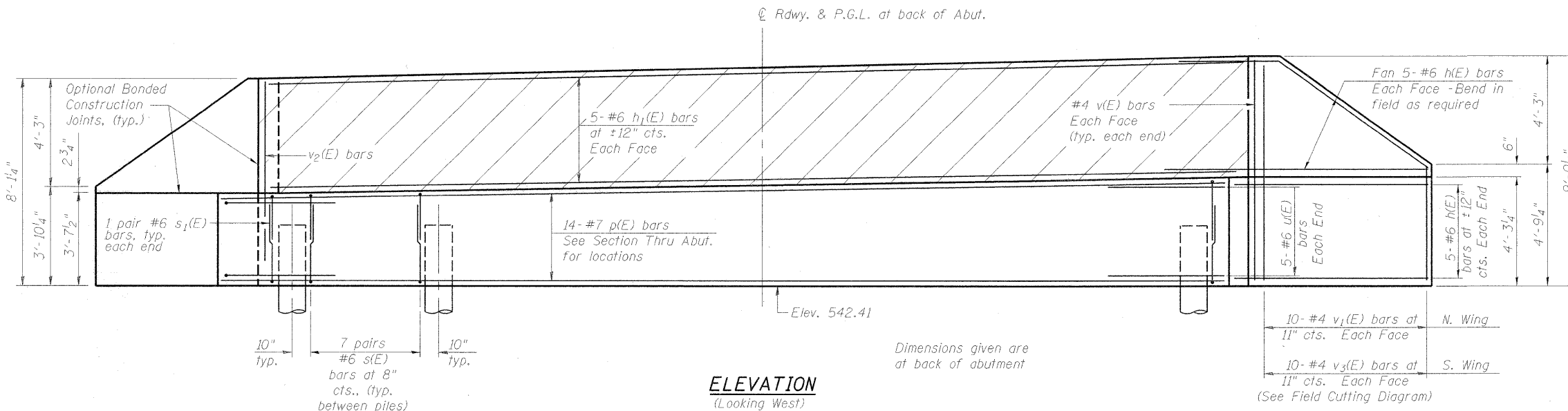
BILL OF MATERIAL

Item	Unit	Quantity
Steel Railing, Type SM (Special)	Foot	164

STEEL RAILING, TYPE SM (SPECIAL) WITH CONCRETE WEARING SURFACE
 TODD SCHOOL ROAD BRIDGE OVER BRANCH OF COPPERAS CREEK CH D56
 SEC. 08-00041-02-BR
 PEORIA COUNTY, ILLINOIS
 STATION 37+55
 STRUCTURE NO. 072-3144

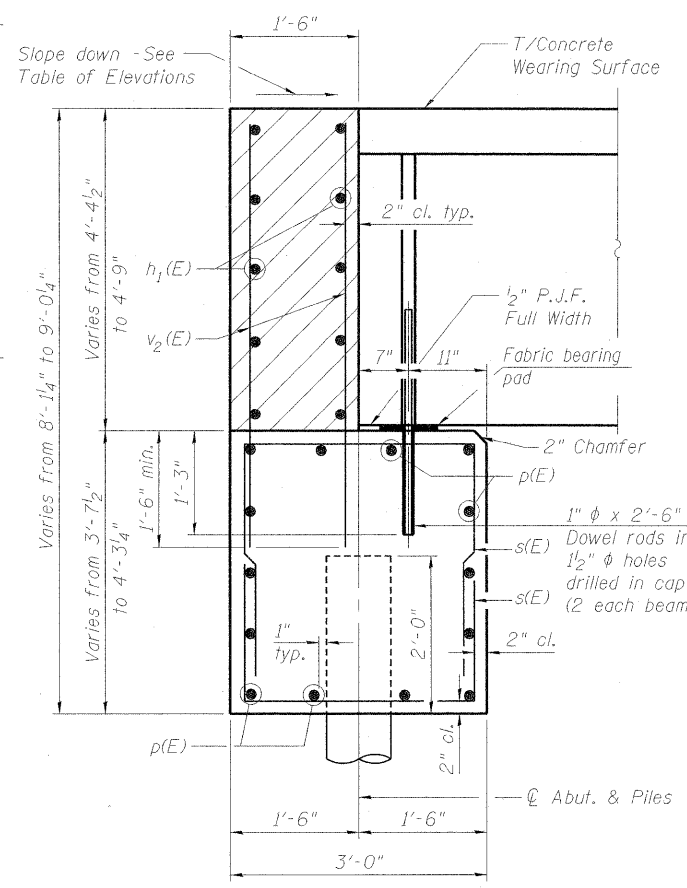
Corporate License Number 184-001-084
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HANSON
 SHEET NO. 7
 CH SECTION COUNTY TOTAL SHEETS SHEET NO.
 D56 08-00041-02-BR PEORIA 25 15
 11 SHEETS CONTRACT NO. 89479
 FED. ROAD DIST. NO. 2 ILLINOIS FED. AID PROJECT

05/21/09 JKR 01/14/09
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 DRAWN: MGM 05/21/09
 REVIEWED: SAK 05/21/09



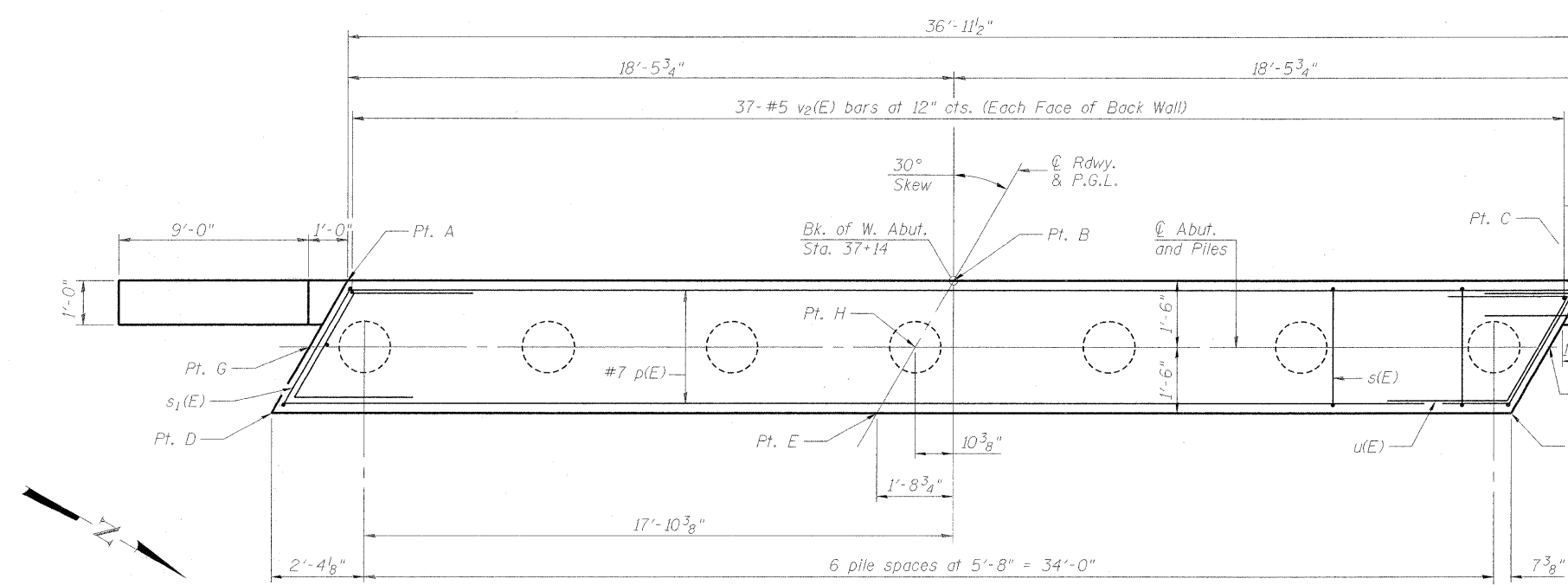
ELEVATION
(Looking West)

Dimensions given are at back of abutment



SECTION THRU ABUTMENT

All dimensions at Rt. L to cap.



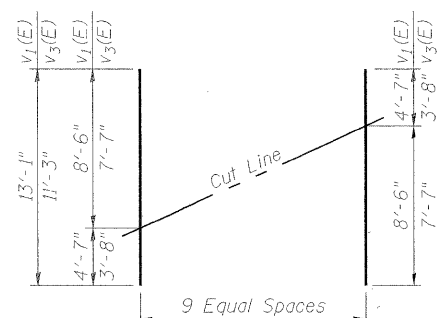
PLAN

TABLE OF ELEVATIONS - WEST ABUTMENT

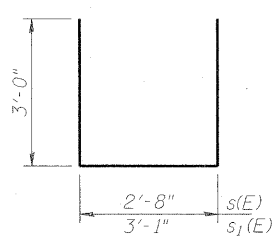
	Pt. A	Pt. B	Pt. C	Pt. D	Pt. E	Pt. F	Pt. G	Pt. H	Pt. I
T/Cap	546.03	546.59	546.68	545.91	546.47	546.56	—	—	—
T/Bk. Wall	550.51	550.96	551.43	—	—	—	549.43	550.87	551.34

PILE DATA

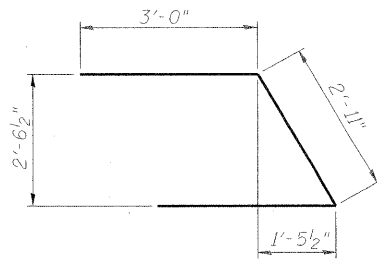
Type: Metal Shell - 14 in. dia. x 0.312 in. walls
 Nominal Required Bearing: 440 Kips
 Factored Resistance Available: 220 Kips
 Est. Length: 60 ft.
 No. Production Piles: 6
 No. Test Piles: 1



BARS v₁(E) & v₃(E)



BARS s(E) & s₁(E)



BAR u(E)

**BILL OF MATERIAL
WEST ABUTMENT**

Bar	No.	Size	Length	Shape
h(E)	40	#6	13'-0"	—
h ₁ (E)	10	#6	36'-7"	—
p(E)	14	#7	36'-7"	—
s(E)	84	#6	8'-8"	U
s ₁ (E)	4	#6	9'-1"	U
u(E)	10	#6	8'-11"	—
v(E)	4	#4	8'-8"	—
v ₁ (E)	10	#4	13'-1"	—
v ₂ (E)	74	#5	6'-0"	—
v ₃ (E)	10	#4	11'-3"	—

Structure Excavation	Cu. Yd.	119
Concrete Structures	Cu. Yd.	29.9
Reinforcement Bars, Epoxy Coated	Pound	4320
Furnishing Metal Shell Piles	Foot	360
Driving Piles	Foot	360
Test Pile, Metal Shell	Each	1

* Field cut as required in fit in S. Wing.

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. Hatched area to be poured after Concrete Wearing Surface is in place. See Section Thru Abutment on sheet 3 of 11. See sheet 5 of 11 for bearing pad details.
 Space cap reinforcement to miss Dowel Rods.

WEST ABUTMENT

**TODD SCHOOL ROAD BRIDGE
OVER BRANCH OF COPPERAS CREEK
CH D56
SEC. 08-00041-02-BR
PEORIA COUNTY, ILLINOIS
STATION 37+55
STRUCTURE NO. 072-3144**

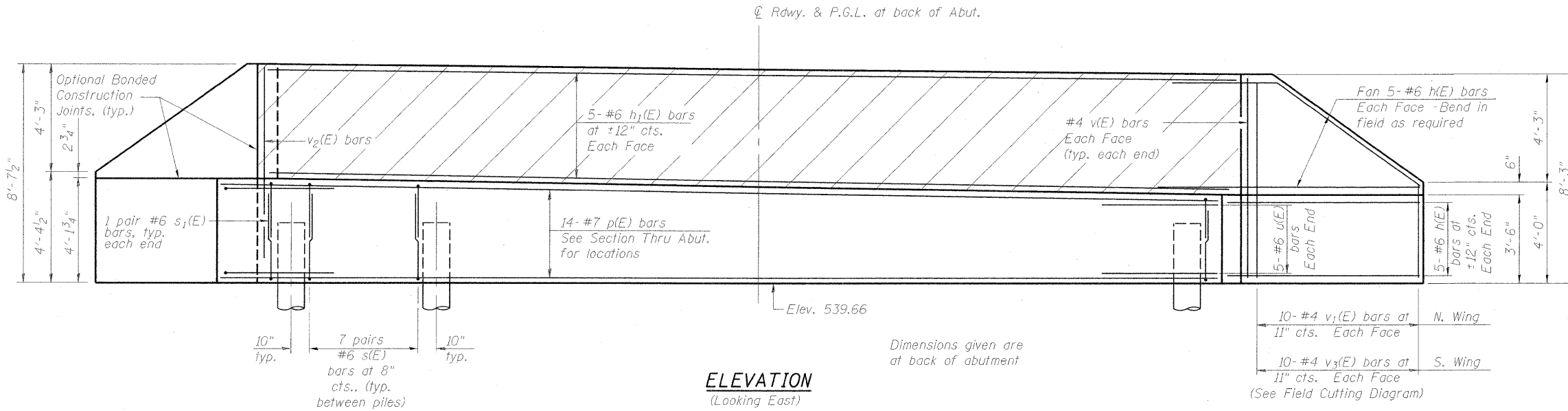
08L0071
02/06/09

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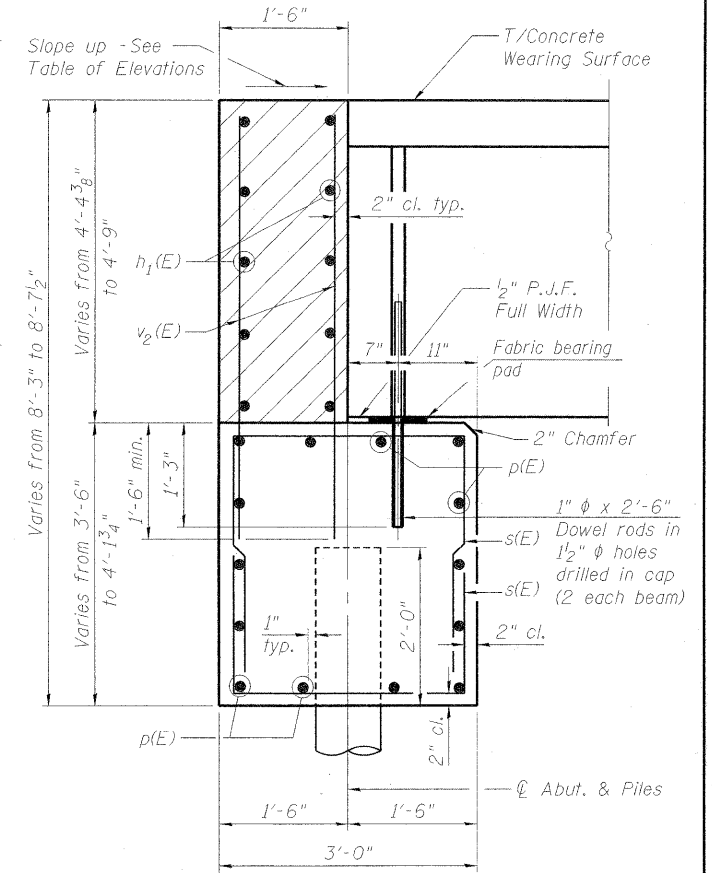
SHEET NO.	CH	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
8	D56	08-00041-02-BR	PEORIA	25	16
11 SHEETS			CONTRACT NO. 89479		

FED. ROAD DIST. NO. 2 ILLINOIS FED. AID PROJECT

05/24/2009
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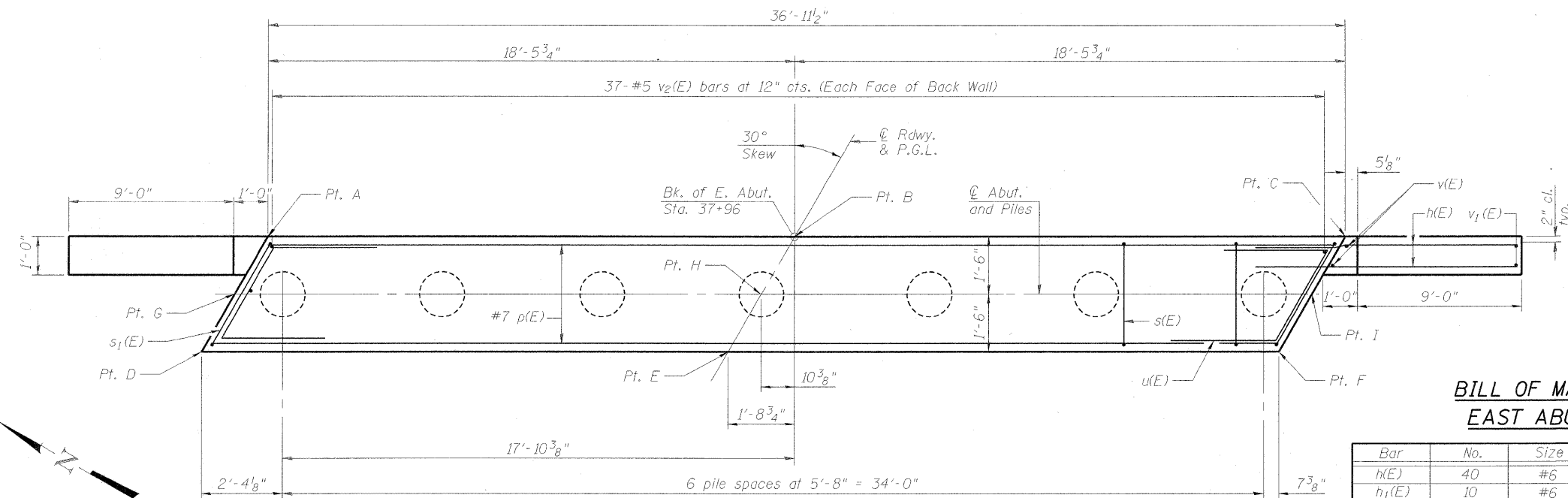


ELEVATION
(Looking East)



SECTION THRU ABUTMENT

All dimensions at Rt. L to cap



PLAN

**BILL OF MATERIAL
EAST ABUTMENT**

Bar	No.	Size	Length	Shape
h(E)	40	#6	13'-0"	—
h1(E)	10	#6	36'-7"	—
p(E)	14	#7	36'-7"	—
s(E)	84	#6	8'-8"	U
s1(E)	4	#6	9'-1"	U
u(E)	10	#6	8'-11"	∩
v(E)	4	#4	8'-4"	—
v1(E)	10	#4	12'-5"	—
v2(E)	74	#5	5'-8"	—
v3(E)	10	#4	11'-7"	—
Structure Excavation		Cu. Yd.	119	
Concrete Structures		Cu. Yd.	30.3	
Reinforcement Bars, Epoxy Coated		Pound	4280	
Furnishing Metal Shell Piles		Foot	360	
Driving Piles		Foot	360	
Test Pile, Metal Shell		Each	1	

* Field cut as required in fit in S. Wing.

NOTES:

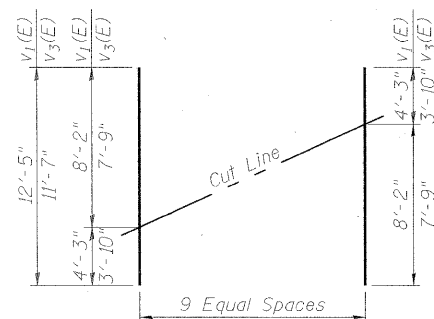
After beams have been erected, holes shall be drilled into substructure and anchor dowels placed. Dowel holes shall be filled with non-shrink grout to top of beam and allowed to cure min. 24 hrs. prior to grouting the shear keys. All horizontal dimensions are at right angles to beam ends. Hatched area to be poured after Concrete Wearing Surface is in place. See Section Thru Abutment on sheet 3 of 11. See sheet 5 of 11 for bearing pad details. Space cap reinforcement to miss Dowel Rods.

PILE DATA

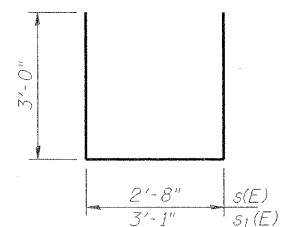
Type: Metal Shell - 14 in. dia. x 0.312 in. walls
Nominal Required Bearing: 440 Kips
Factored Resistance Available: 220 Kips
Est. Length: 60 ft.
No. Production Piles: 6
No. Test Piles: 1

TABLE OF ELEVATIONS - EAST ABUTMENT

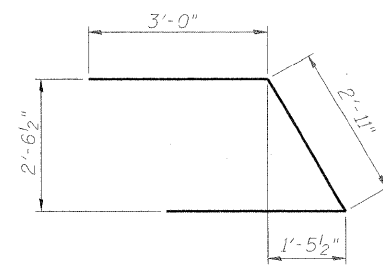
	Pt. A	Pt. B	Pt. C	Pt. D	Pt. E	Pt. F	Pt. G	Pt. H	Pt. I
T/Cap	543.81	543.72	543.16	543.93	543.84	543.28	—	—	—
T/Bk. Wall	548.29	548.08	547.91	—	—	—	548.33	548.12	547.94



BARS v1(E) & v3(E)



BARS s(E) & s1(E)



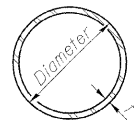
BAR u(E)

05/21/2009
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JMR 01/14/09
MEM 02/06/09
REVIEWED SAJ 02/06/09

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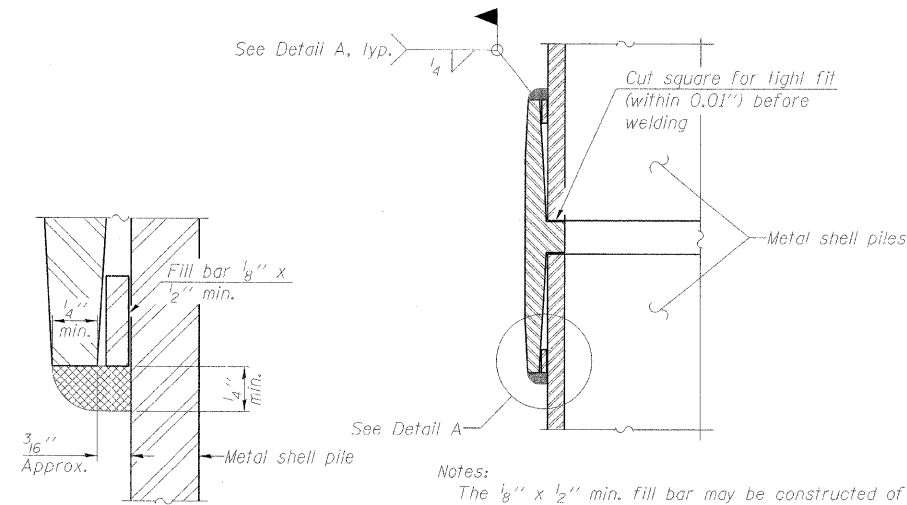
HANSON

SHEET NO. 9	CH	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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11 SHEETS	CONTRACT NO. 89479			FED. ROAD DIST. NO. 2 ILLINOIS FED. AID PROJECT	



METAL SHELL PILE TABLE

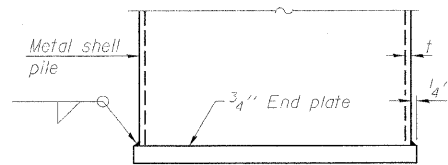
Designation and outside diameter	Wall thickness t	Weight per Foot (Lbs./ft.)	Inside volume (yd. ³ /ft.)
PP12	0.179"	22.60	0.0274
PP12	0.250"	31.37	0.0267
PP14	0.250"	36.71	0.0368
PP14	0.312"	45.61	0.0361



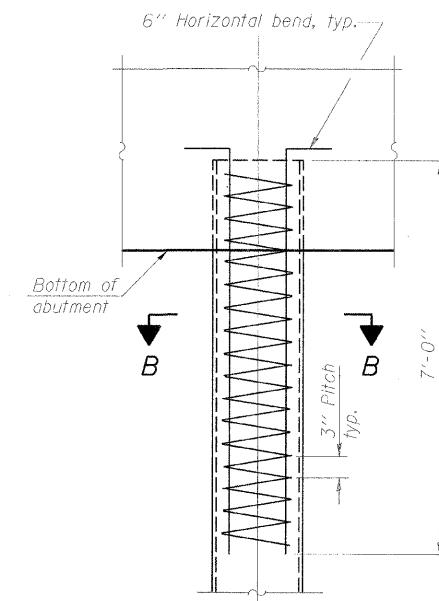
DETAIL A

Notes:
 The 1/8" x 1/2" min. fill bar may be constructed of 2 bars with a 1/8" max. gap between them.
 Pile segments shall be driven to solid contact with splicer before welding.

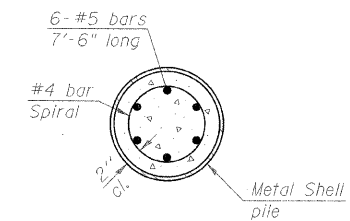
WELDED COMMERCIAL SPLICE



END PLATE ATTACHMENT



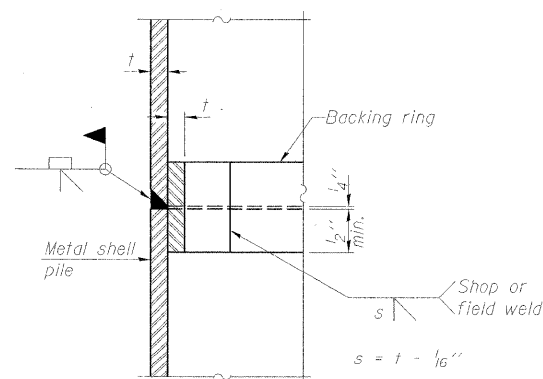
ELEVATION



SECTION B-B

METAL SHELL REINFORCEMENT AT ABUTMENTS

Cost incidental to Furnishing Metal Shell Piles.



COMPLETE PENETRATION WELD SPLICE

Backing ring made from pile shell. Remove segment to allow reducing circumference and vertically rejoin with partial joint penetration weld.

Note:
 The metal shell piles shall be according to ASTM A 252 Grade 3.

METAL SHELL PILE DETAILS

TODD SCHOOL ROAD BRIDGE
 OVER BRANCH OF COPPERAS CREEK
 CH D56

SEC. 08-00041-02-BR
 PEORIA COUNTY, ILLINOIS
 STATION 37+55
 STRUCTURE NO. 072-3144

Corporate License Number 184-001-084

08L0071
 02/06/09

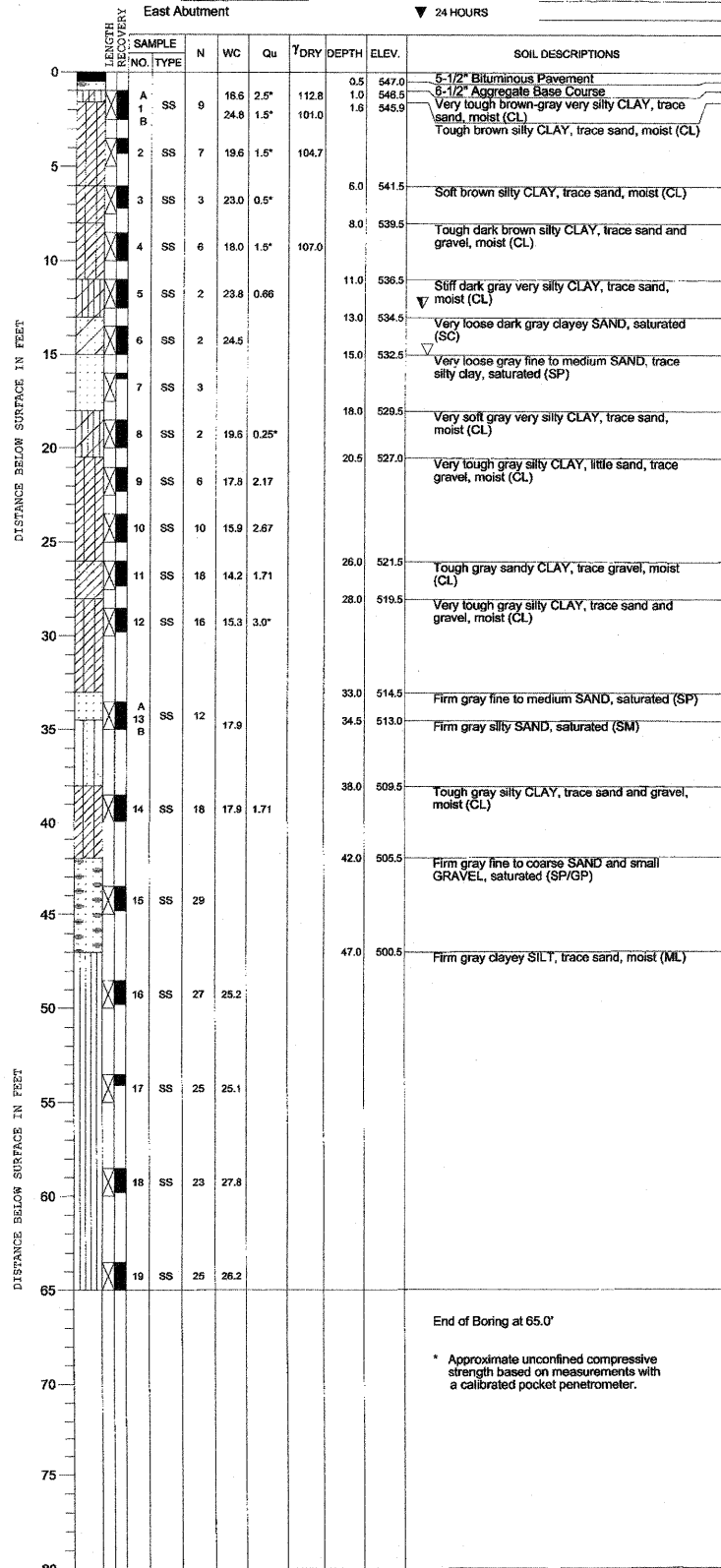


SHEET NO. 10 11 SHEETS	CH	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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				CONTRACT NO. 89479	

FED. ROAD DIST. NO. 2 ILLINOIS FED. AID PROJECT

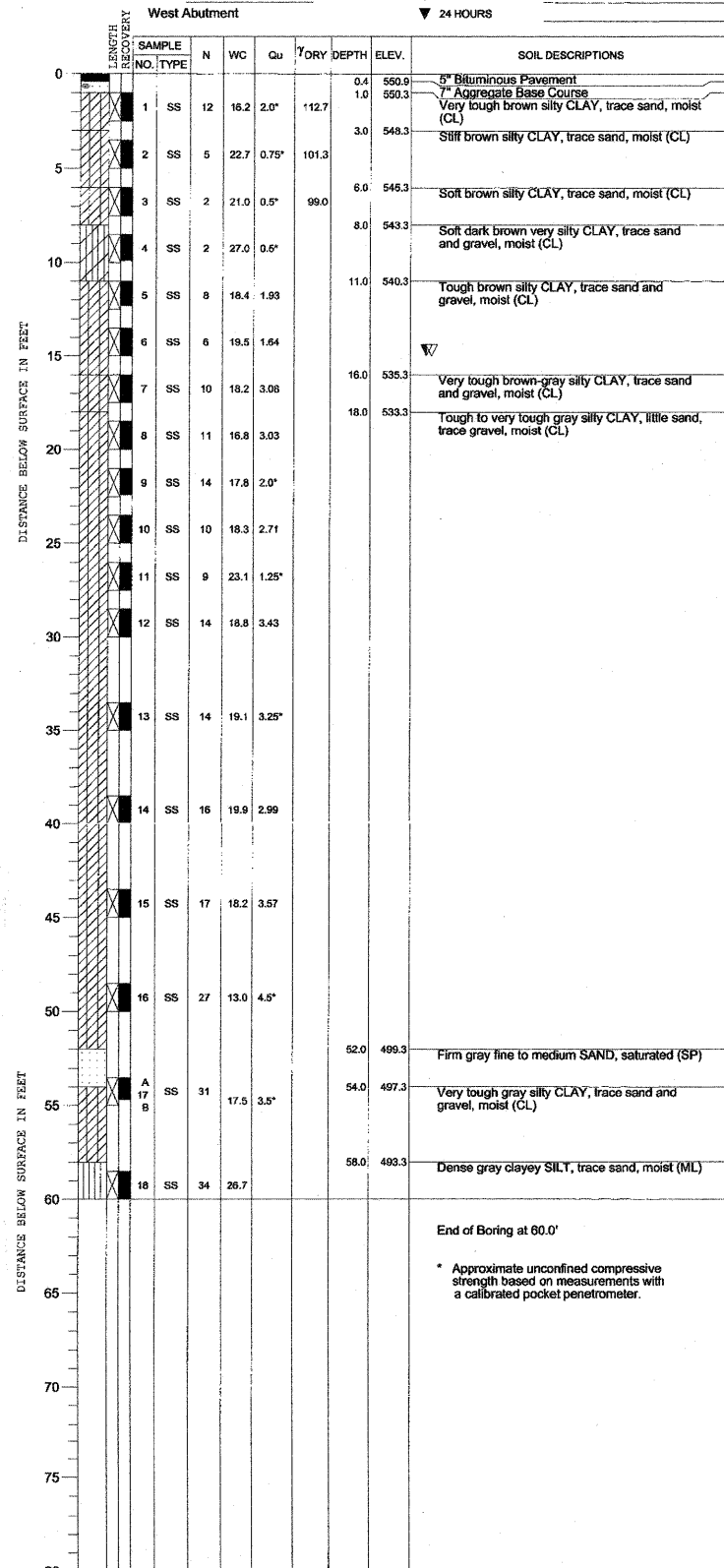
05/21/2009
 I:\02\08\08\08L0071\CADD\Struct\Steel\00-metal pile.dwg
 01/14/09
 02/06/09
 02/06/09

PROJECT **Todd School Road Bridge, Timber Township, Peoria County, Illinois**
 CLIENT **Hanson Professional Services, Inc., 2900 W. Willow Knolls Rd., Peoria, IL 61611**
 BORING **B-1** DATE STARTED **10-16-08** DATE COMPLETED **10-16-08** JOB **L-72,523**
 ELEVATIONS WATER TABLE
 GROUND SURFACE **547.5** WHILE DRILLING **12.5'**
 END OF BORING **482.5** AT END OF BORING **15.0'**
 East Abutment



DRILL RIG NO. **242** Division lines between deposits represent approximate boundaries between soil types; in-situ, the transition may be gradual. Page 2 of 2

PROJECT **Todd School Road Bridge, Timber Township, Peoria County, Illinois**
 CLIENT **Hanson Professional Services, Inc., 2900 W. Willow Knolls Rd., Peoria, IL 61611**
 BORING **B-2** DATE STARTED **10-16-08** DATE COMPLETED **10-16-08** JOB **L-72,523**
 ELEVATIONS WATER TABLE
 GROUND SURFACE **551.3** WHILE DRILLING **15.0'**
 END OF BORING **491.3** AT END OF BORING **15.0'**
 West Abutment



DRILL RIG NO. **242** Division lines between deposits represent approximate boundaries between soil types; in-situ, the transition may be gradual. Page 2 of 2

BORING LOGS
TODD SCHOOL ROAD BRIDGE
OVER BRANCH OF COPPERAS CREEK
CH D56
SEC. 08-00041-02-BR
PEORIA COUNTY, ILLINOIS
STATION 37+55
STRUCTURE NO. 072-3144

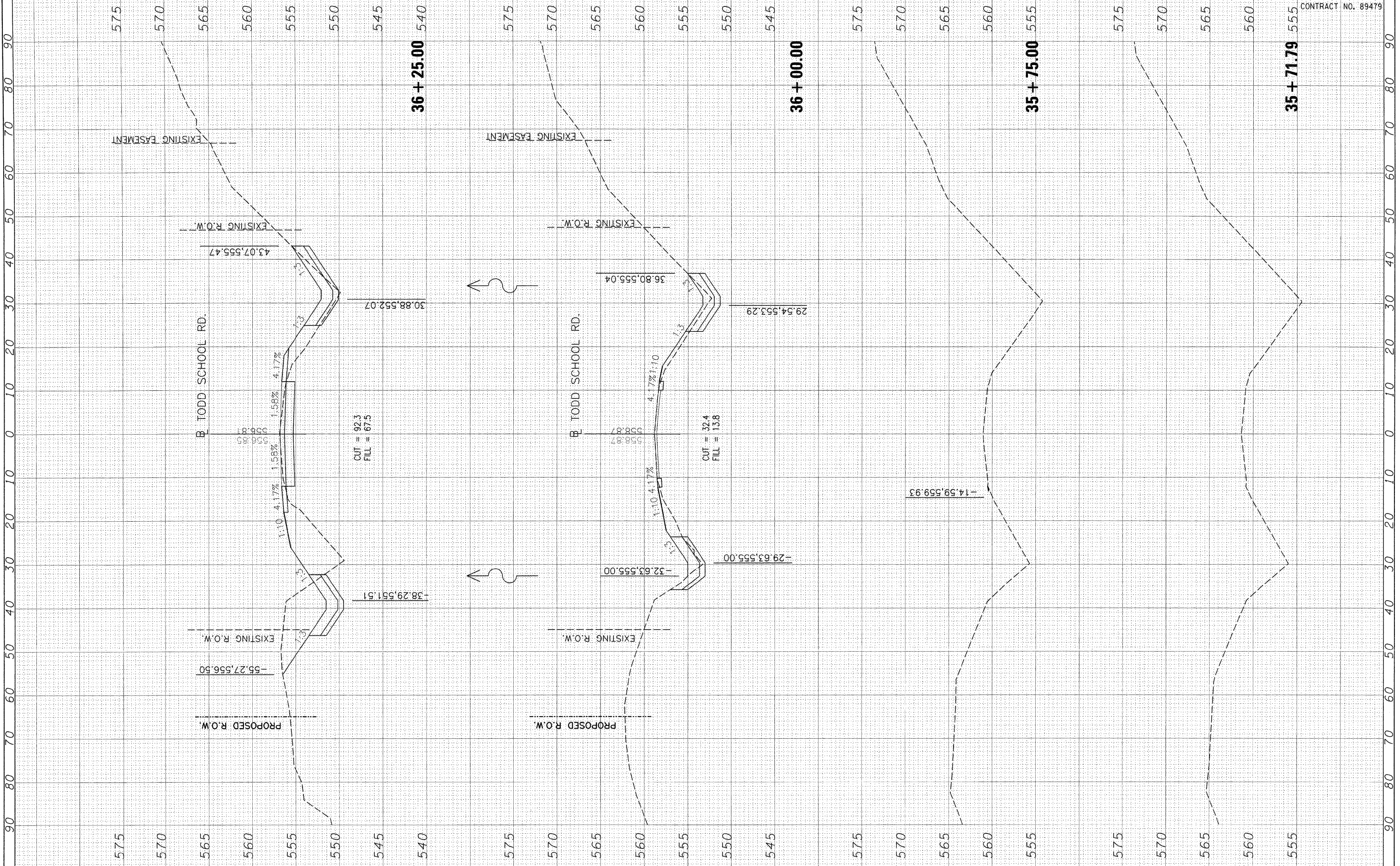
05-22-2009
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 LAYOUT: JAV 10/17/09
 DRAWN: MDM 05/21/09
 REVIEWED: SMK 05/21/09

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SHEET NO. 11	CH	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
11 SHEETS	D56	08-00041-02-BR	PEORIA	25	19
CONTRACT NO. 89479			FED. ROAD DIST. NO. 2 ILLINOIS FED. AID PROJECT		

FINAL SURVEY	DATE
SURVEYED	BY
PLOTTED	
NOTE BOOK	
AREAS CHECKED	
NO.	

ORIGINAL SURVEY	DATE
SURVEYED	BY
PLOTTED	
NOTE BOOK	
AREAS CHECKED	
NO.	



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 PLOT DATE = 05/21/2009

DESIGNED - DLC 11/24/08
 DRAWN - DLC 1/15/09
 CHECKED -
 DATE -

REVISED -
 REVISED - DLC 1/27/09
 REVISED -
 REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**CROSS SECTIONS
 TODD SCHOOL ROAD BRIDGE REPLACEMENT**

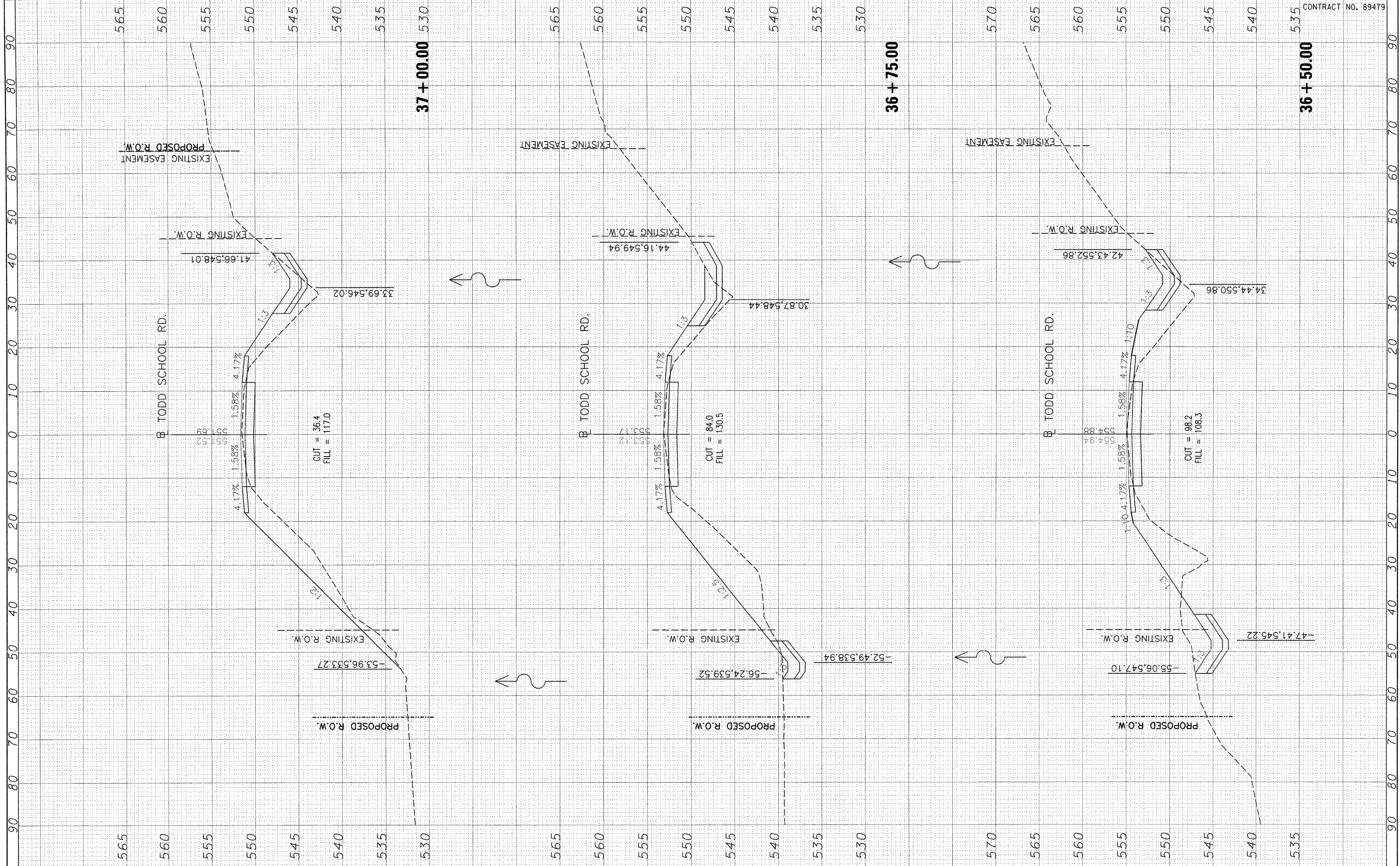
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F.A. RTE. CH D56	SECTION 08-00041-02-BR	COUNTY PEORIA	TOTAL SHEETS 25	SHEET NO. 21
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT			CONTRACT NO. 89479	

CONTRACT NO. 89479

FINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
NO.	TEMPLATE		
	AREAS CHECKED		

ORIGINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
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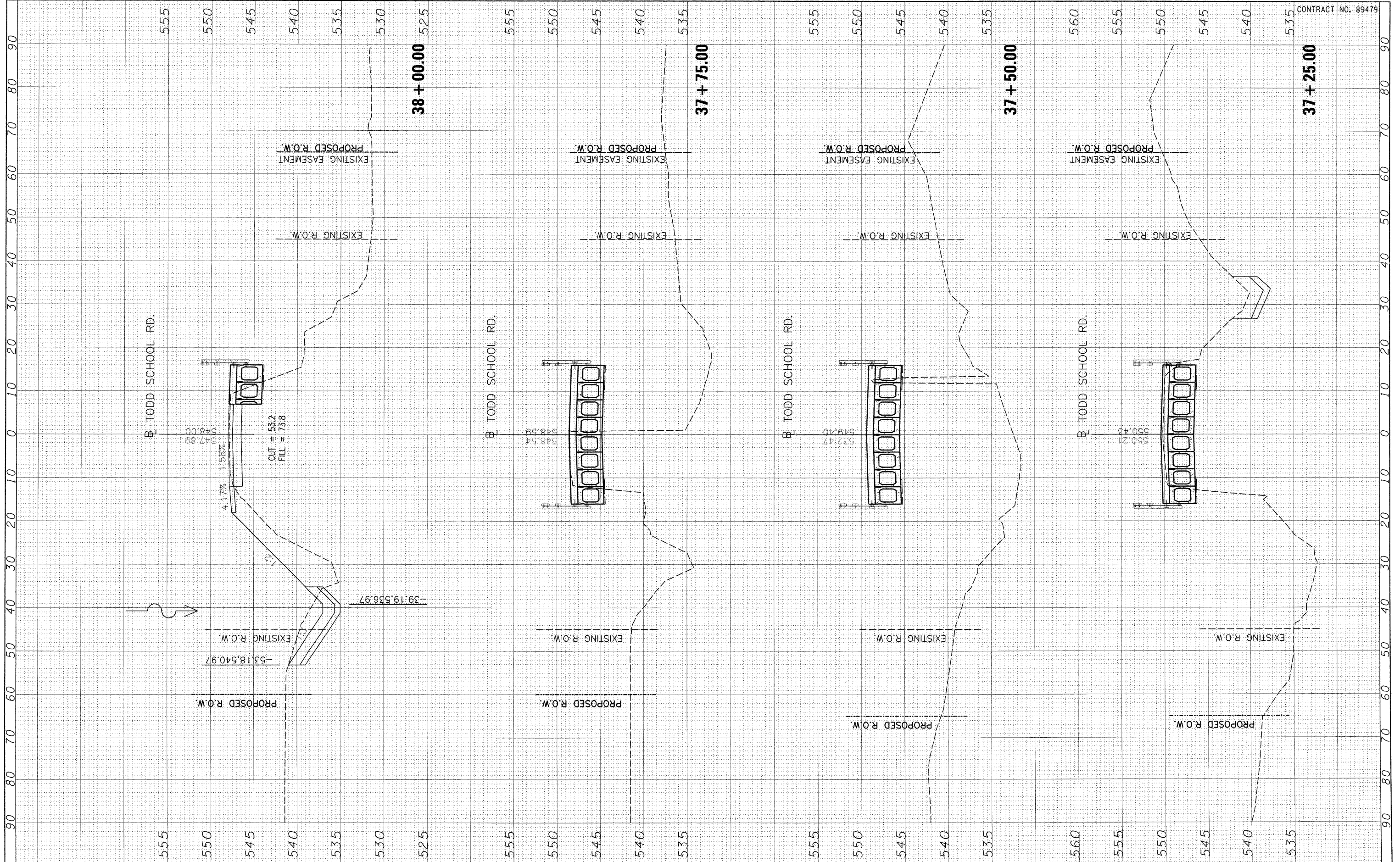


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PLOT SCALE = 10.0000 / 30.	CHECKED -	DRAWN - DLC 1/15/09	REVISED - DLC 1/27/09			SCALE: H=20:1 V=10:1	SHEET NO. 2 OF 5 SHEETS	STA. 36+50.00 TO STA. 37+00.00	CONTRACT NO. 89479			
PLOT DATE = 05/21/2009	DATE -	REVISOR -	REVISOR -			FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT						

CONTRACT NO. 89479

FINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
NO.	TEMPLATE		
	AREAS CHECKED		

ORIGINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
NO.	TEMPLATE		
	AREAS CHECKED		



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 USER NAME = Ander00046
 PLOT SCALE = 10,000 / in.
 PLOT DATE = 05/21/2009

DESIGNED -	DLC 11/24/08	REVISED -	
DRAWN -	DLC 1/15/09	REVISED -	DLC 1/27/09
CHECKED -		REVISED -	
DATE -		REVISED -	

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

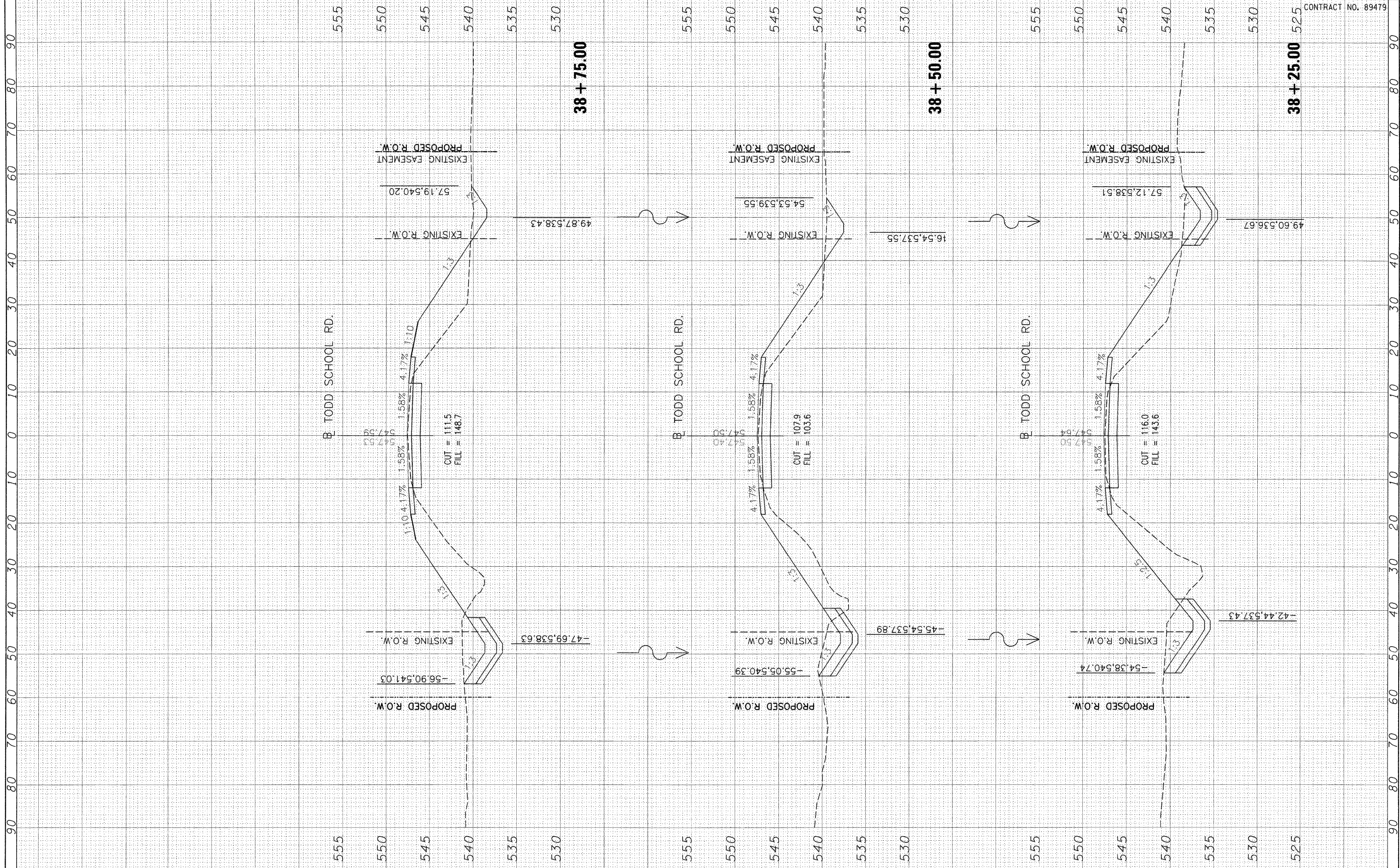
CROSS SECTIONS
TODD SCHOOL ROAD BRIDGE REPLACEMENT
SCALE: H=20:1 V=10:1 SHEET NO. 3 OF 5 SHEETS STA. 37+25.00 TO STA. 38+00.00

F.A. R.T.E. CH D56	SECTION 08-00041-02-BR	COUNTY PEORIA	TOTAL SHEETS 25	SHEET NO. 23
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT			CONTRACT NO. 89479	

CONTRACT NO. 89479

FINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
NO.	TEMPLATE		
	AREAS CHECKED		

ORIGINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
NO.	TEMPLATE		
	AREAS CHECKED		



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 USER NAME = Ander-00646
 PLOT SCALE = 10,0000 / 1in.
 PLOT DATE = 05\21\2009

DESIGNED - DLC 11/24/08
 DRAWN - DLC 1/15/09
 CHECKED -
 DATE -

REVISED -
 REVISED - DLC 1/27/09
 REVISED -
 REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

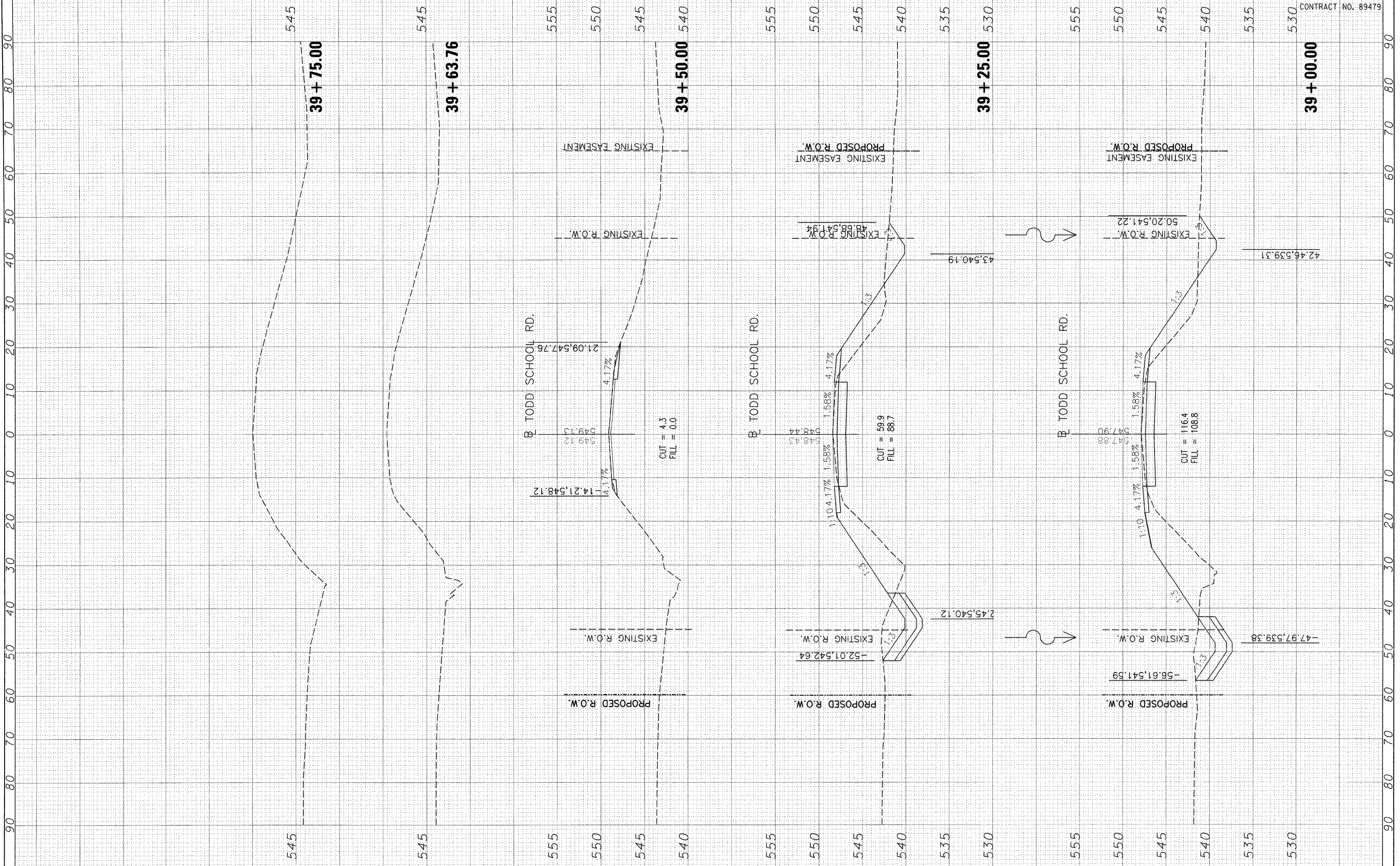
**CROSS SECTIONS
 TODD SCHOOL ROAD BRIDGE REPLACEMENT**

SCALE: H=20:1 = 10:1 SHEET NO. 4 OF 5 SHEETS STA. 38+25.00 TO STA. 38+75.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH D56	08-00041-02-BR	PEORIA	25	24
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT			CONTRACT NO. 89479	

FINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
NO.	AREAS CHECKED		

ORIGINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
NO.	AREAS CHECKED		



FILE NAME =	USER NAME = Ander00846	DESIGNED - DLC 11/24/08	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CROSS SECTIONS TODD SCHOOL ROAD BRIDGE REPLACEMENT	F.A. RT.:	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
fr:\08\Jobs\08\0871\CADD\Road\Sheet\C-38IT00.DWG		DRAWN - DLC 1/15/09	REVISED - DLC 1/27/09			CH D56	08-00041-02-BR	PEORIA	25	25	
PLOT SCALE = 10.0000 / in.		CHECKED -	REVISED -			CONTRACT NO. 89479					
PLOT DATE = 05/21/2009		DATE -	REVISED -			SCALE: H=20:1 V=10:1 SHEET NO. 5 OF 5 SHEETS STA. 39+00.00 TO STA. 39+75.00 FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					