

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.S. 06-00169 267 01-BR		LIVINGSTON	25	1
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

Contract #87450

STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

PLANS FOR PROPOSED

HIGHWAY BRIDGE PROGRAM

SECTION 06-00169-01-BR
F.A.S. ROUTE 267 \ COUNTY HIGHWAY 35
LIVINGSTON COUNTY
PROJECT BRS-0267(106)

C-93-076-10

SHEET NO.	TITLE
1	Cover Sheet
2	Summary of Quantities & General Notes
3	Typical Cross Sections
4	Plan & Profile
5	Erosion Control Plan
6	Channel Modification Plan
7	Culvert Details
8-17	Bridge Plans
18-19	Boring Logs
20-25	Roadway Cross Sections

Standards	000001-06
	280001-05
	515001-03
	630001-09
	630301-05
	631032-05
	635006-03
	701901-01
	BLR 21-8

SCALES

Plan & Profile
Hor. 1" = 50'
Vert. 1" = 5'

Cross Sections
Hor. 1" = 10'
Vert. 1" = 5'

Scales are for full size plans.

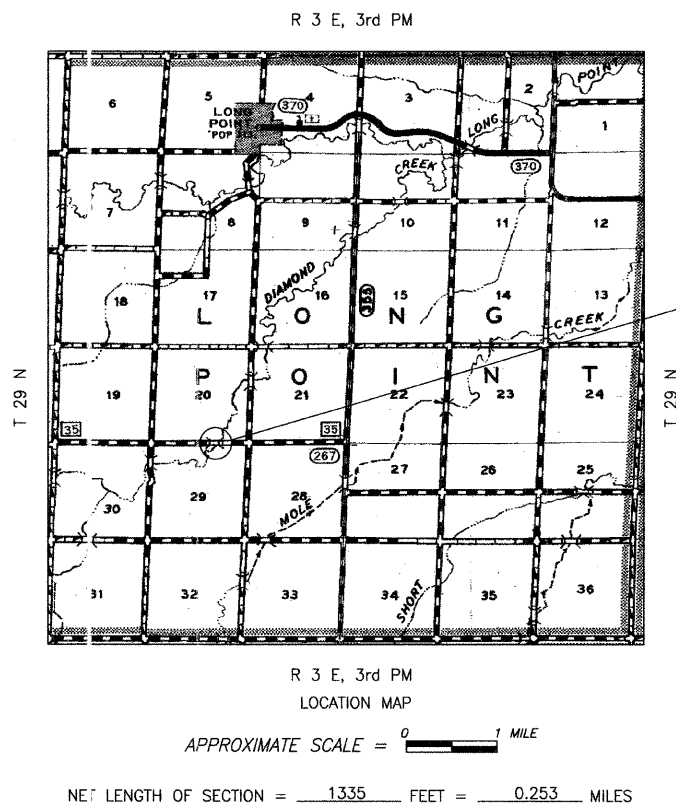
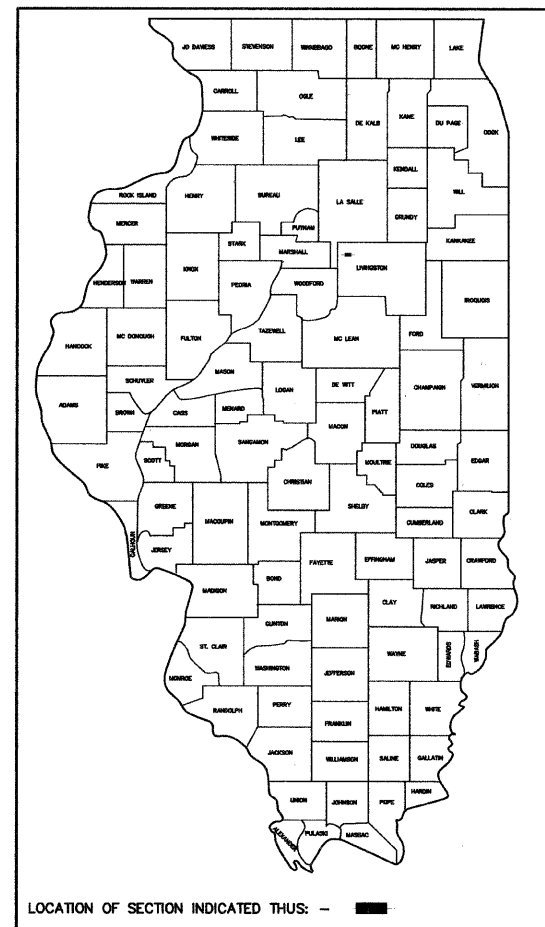
UTILITIES

J.U.L.I.E. System - Toll free telephone number for Joint Utility Location Information for Excavators is: 1-800-892-0123.

DESIGN FUNCTIONAL CLASSIFICATION
MAJOR COLLECTOR (NON-URBAN) 0-400 ADT
DESIGN TRAFFIC: 300
DESIGN SPEED: 3R GUIDELINES

CONTRACT NO. 87450

COOMBE-BLOXDORF P.C.
Consulting Engineers • Land Surveyors • Planners
755 South Grand Avenue West
Springfield, Illinois 62704
Phone: 217/544-8477
Design Firm License No. 184-002703



EXISTING STRUCTURE - ONE SPAN RC THRU GIRDER, CLOSED CONCRETE ABUTMENTS, 47.2' FC-FC OF ABUTMENTS, 24.0' CL ROADWAY, 30' SKEW LT. FWD, CL STA. 10+00.00
EXISTING STRUCTURE NUMBER 053-3041

PROPOSED STRUCTURE - THREE SPAN RC SLAB, 38'-6", 48'-1½" & 38'-6" CTR-CTR OF BEARING, 128'-8" BK-BK OF ABUTMENTS, 30'-0" CL ROADWAY, 45' SKEW LT. FWD, CL STA. 10+30.00
PROPOSED STRUCTURE NUMBER 053-3456

Improvement Begins Sta. 6+30
Improvement Ends Sta. 19+65



Mary H. Bloxdorf
Illinois Professional No. 43208
(expires 11-30-2011)
Date: 3-30-11

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS	
APPROVED	04/04 20 11
<i>[Signature]</i>	OFFICIAL
PASSED	04/06 20 11
<i>[Signature]</i>	DISTRICT THREE IMPLEMENTATION ENGINEER
Releasing for Bid Based on Limited Review	04/06 20 11
<i>[Signature]</i>	DEPUTY DIRECTOR OF HIGHWAYS, REGION TWO ENGINEER

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.S. 267	06-00169 01-BR	LIVINGSTON	25	2
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

Contract #87450

TREE REMOVAL

TREES WITHIN THE R.O.W. THAT INTERFERE WITH CONSTRUCTION SHALL BE REMOVED ONLY AT THE DIRECTION OF THE ENGINEER.

(6 TO 15 UNITS DIAMETER)

LT. STA. 8+84 = 4 UNITS
LT. STA. 9+11 = 4 UNITS
LT. STA. 9+35 = 4 UNITS
LT. STA. 9+64 = 4 UNITS
LT. STA. 10+46 = 15 UNITS
LT. STA. 10+93 = 12 UNITS
LT. STA. 11+70 = 15 UNITS
LT. STA. 12+73 = 12 UNITS
LT. STA. 12+90 = 10 UNITS
LT. STA. 12+93 = 10 UNITS
LT. STA. 12+98 = 14 UNITS

TOTAL = 104 UNITS

(OVER 15 UNITS DIAMETER)

LT. STA. 10+77 = 18 UNITS
LT. STA. 11+70 = 20 UNITS
LT. STA. 12+14 = 16 UNITS
LT. STA. 12+50 = 18 UNITS

TOTAL = 72 UNITS

PERIMETER EROSION BARRIER

LT. STA. 6+30 TO 14+70 = 865 FOOT
RT. STA. 6+30 TO 9+56 = 305 FOOT
LT. STA. 15+01 TO 19+65 = 582 FOOT
RT. STA. 9+43 TO 19+65 = 1118 FOOT
TOTAL = 2870 FOOT

PIPE CULVERT REMOVAL

LT. STA. 8+44 46 FOOT
RT. STA. 11+44 26 FOOT
STA. 12+00 39 FOOT
LT. STA. 16+26 50 FOOT
RT. STA. 16+35 25 FOOT
TOTAL = 186 FOOT

GENERAL NOTES

WHERE SECTION AND SUBSECTION MONUMENTS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL PROPERTY MARKS AND MONUMENTS UNTIL THE OWNER, AN AUTHORIZED SURVEYOR OR AGENT HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION.

THE AREA TO BE SEEDED SHALL CONSIST OF ALL DISTURBED EARTH SURFACES WITHIN THE RIGHT OF WAY AND EASEMENTS AS DIRECTED BY THE ENGINEER.

SEEDING, CLASS 2 (SPECIAL) = 1.4 ACRES

ALL TREES THAT INTERFERE WITH CONSTRUCTION WITHIN THE R.O.W. AND EASEMENTS SHALL BE REMOVED ONLY AT THE DIRECTION OF THE ENGINEER.

THE COST OF REMOVAL OF ANY OBSTRUCTIONS OR CULVERTS NOT OTHERWISE INCLUDED IN REMOVAL OF EXISTING STRUCTURES WHICH INTERFERE WITH CONSTRUCTION WILL BE CONSIDERED INCIDENTAL TO THE COST OF EARTH EXCAVATION.

ALL PLAN ELEVATIONS REPRESENT ASSUMED DATUM.

SUMMARY OF QUANTITIES				CONSTRUCTION CODE	
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	ROADWAY 000+ RURAL	BRIDGE 001+ RURAL
20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	104	104	
20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	72	72	
20200100	EARTH EXCAVATION	CU YD	4285	4285	
20300100	CHANNEL EXCAVATION	CU YD	870		870
20400800	FURNISHED EXCAVATION	CU YD	2795	2795	
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	165	165	
* 28000305	TEMPORARY DITCH CHECKS	FOOT	150	150	
28000400	PERIMETER EROSION BARRIER	FOOT	2870	2870	
* 28100109	STONE RIPRAP, CLASS A5	SQ YD	4601		4601
28200200	FILTER FABRIC	SQ YD	4601		4601
35100100	AGGREGATE BASE COURSE, TYPE A	TON	2437	2437	
40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	1365	1365	
40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	372	372	
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	248	248	
48203100	HOT-MIX ASPHALT SHOULDERS	TON	478	478	
* 50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1		1
50105220	PIPE CULVERT REMOVAL	FOOT	186	186	
50200100	STRUCTURE EXCAVATION	CU YD	188		188
* 50300225	CONCRETE STRUCTURES	CU YD	52.3		52.3
50300255	CONCRETE SUPERSTRUCTURE	CU YD	260.6		260.6
50300260	BRIDGE DECK GROOVING	SQ YD	396		396
50300280	CONCRETE ENCASEMENT	CU YD	26.4		26.4

* SEE SPECIAL PROVISIONS

SUMMARY OF QUANTITIES				CONSTRUCTION CODE	
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	ROADWAY 000+ RURAL	BRIDGE 001+ RURAL
50300300	PROTECTIVE COAT	SQ YD	424		424
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	60905		60905
Δ 50901050	STEEL RAILING, TYPE SM	FOOT	255		255
5 201600	FURNISHING STEEL PILES HP12X53	FOOT	979		979
* 5 202305	DRIVING PILES	FOOT	979		979
5 203600	TEST PILE STEEL HP12X53	EACH	2		2
5 500100	NAME PLATES	EACH	1		1
* 5 200220	PIPE CULVERTS, CLASS D, TYPE 1 15"	FOOT	444	444	
50100100	GEOCOMPOSITE WALL DRAIN	SQ YD	36		36
Δ 60000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	363	363	
Δ 60000005	STEEL PLATE BEAM GUARDRAIL, TYPE B	FOOT	25	25	
Δ 60100087	TRAFFIC BARRIER TERMINAL, TYPE 6A	EACH	4	4	
* Δ 60100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	4	4	
* 60200310	GUARDRAIL REMOVAL	FOOT	789	789	
60100100	MOBILIZATION	L SUM	1	1	
70101830	TRAFFIC CONTROL AND PROTECTION, STANDARD BLR 21	L SUM	1	1	
Δ 70201000	TERMINAL MARKER - DIRECT APPLIED	EACH	4		4
* Z0046304	PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	144		144
* X0070304	POROUS GRANULAR EMBANKMENT, SPECIAL	CU YD	85		85
* X0501000	SEEDING, CLASS 2 (SPECIAL)	ACRE	1.4	1.4	
* X020501	UNDERWATER STRUCTURE EXCAVATION PROTECTION - LOCATION	EACH	1		1
* X020502	UNDERWATER STRUCTURE EXCAVATION PROTECTION - LOCATION	EACH	1		1

* SEE SPECIAL PROVISIONS

Δ SPECIALTY ITEMS

GUARDRAIL SCHEDULE

TRAFFIC BARRIER TERMINAL, TY. 6A

LT. STA. 9+36.92 TO 9+83.50 = 1 EACH
RT. STA. 9+06.92 TO 9+53.50 = 1 EACH
LT. STA. 11+06.50 TO 11+53.08 = 1 EACH
RT. STA. 10+76.50 TO 11+23.08 = 1 EACH
TOTAL = 4 EACH

TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT

LT. STA. 8+86.92 TO 9+36.92 = 1 EACH
RT. STA. 8+56.92 TO 9+06.92 = 1 EACH
LT. STA. 15+40.58 TO 15+90.58 = 1 EACH
RT. STA. 11+23.08 TO 11+73.08 = 1 EACH
TOTAL = 4 EACH

STEEL PLATE BEAM GUARDRAIL, TYPE A

LT. STA. 11+78.08 TO 15+40.58 = 362.5 FOOT
TOTAL = 363 FOOT

STEEL PLATE BEAM GUARDRAIL, TYPE B

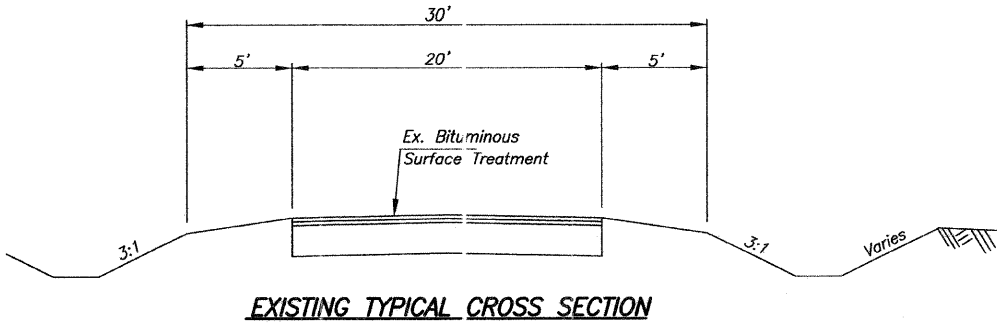
LT. STA. 11+53.08 TO 11+78.08 = 25 FOOT
TOTAL = 25 FOOT

NOTE: GUARDRAIL REFLECTORS THAT ATTACH TO THE RAIL ELEMENT BY USE OF THE POST BOLT WILL BE SUPPLIED BY THE COUNTY. THESE SHALL BE INSTALLED BY THE CONTRACTOR AND CONSIDERED INCIDENTAL TO ALL GUARDRAIL PAY ITEMS. LAYOUT OF THE REFLECTORS WILL BE AS DETERMINED BY THE ENGINEER.

GUARDRAIL REMOVAL

LT. STA. 9+08.0 TO 9+83.0 = 75 FOOT
RT. STA. 8+92.0 TO 9+68.0 = 76 FOOT
LT. STA. 10+32.5 TO 15+94.5 = 562 FOOT
RT. STA. 10+17.6 TO 10+93.6 = 76 FOOT
TOTAL = 789 FOOT

SHEET TITLE		SUMMARY OF QUANTITIES & GENERAL NOTES	
PROJECT	SECTION 06-00169-01-BR COUNTY HIGHWAY 35 LIVINGSTON COUNTY STATION 10+30	PROJECT NO.	06079
SCALE		DATE	3/30/11
DRAWN BY	PPW	CHECKED BY	MRL
DRAWING NO.			2
Coombe-Bloxdorf P.C. -CIVIL ENGINEERS- -STRUCTURAL ENGINEERS- -LAND SURVEYORS- Phone: 217/544-8477 Design Firm License No. 184-002703 755 South Grand Ave. W, Springfield, IL 62704		OF 25 SHTS	



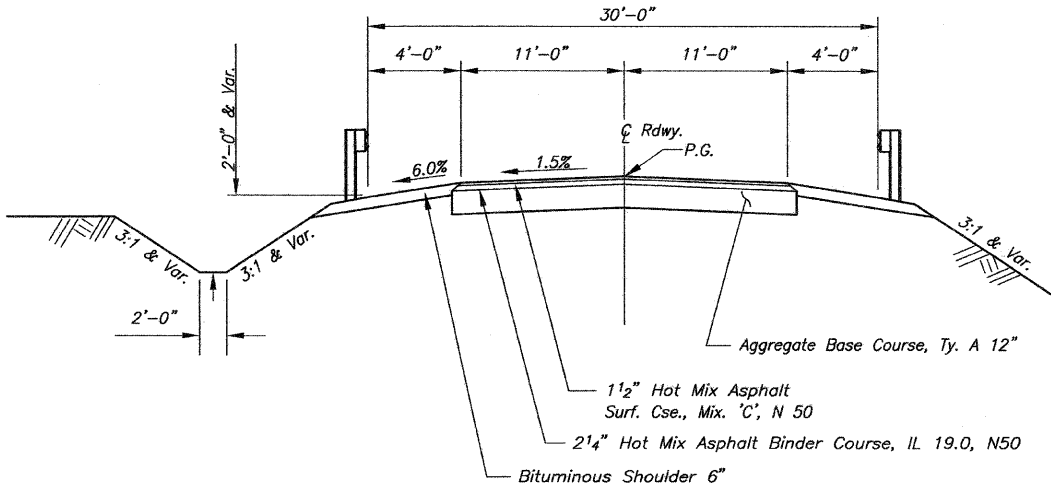
APPLICATION RATES USED IN QUANTITY CALCULATIONS

GRANULAR MATERIALS	2.05 TON/CU. YD.
BITUMINOUS MATERIALS (PRIME COAT)	0.40 GALLON/SQ. YD.
HOT MIX ASPHALT (BINDER, SURFACE COURSE AND SHOULDERS)	112 LBS./SQ. YD./INCH

BITUMINOUS CONCRETE MIXTURE REQUIREMENTS				
ITEM	ASPHALT GRADE	COMPOSITION	VOIDS	DENSITY
HOT MIX ASPHALT BINDER CSE. IL 19.0, N50	PG 4-22	IL 19.0	4.0% @ N50	CORES
HOT MIX ASPHALT SURF. CSE. MIX "C", N50	PG 4-22	IL 9.5 or IL 12.5 MIX "C"	4.0% @ N50	CORES
HOT MIX ASPHALT SHOULDERS	PG 4-22	IL 19.0	2.0% @ N30	CORES

EARTHWORK SCHEDULE						
LOCATION	EARTH EXCAVATION (CU YD)	SHRINKAGE FACTOR	PERCENT USED	AVAILABLE* EXCAVATION (CU YD)	EMBANKMENT REQUIRED (CU YD)	EARTHWORK BALANCE (CU YD)
STA. 6+30 TO STA. 9+65.67	75	25%	100%	56	1075	1019
STA. 9+65.67 TO STA. 10+94.33	0	25%	100%	0	0	0
STA. 10+94.33 TO STA. 19+65	4100	25%	100%	3075	3985	910
STA. 9+00 TO STA. 12+00	110	25%	100%	83	490	407
CHANNEL EXCAVATION	870	25%	70%	457		-457
ENTRANCES					455	455
TOTAL	4285			3671	6005	2334
USE:	4285				6005	2335

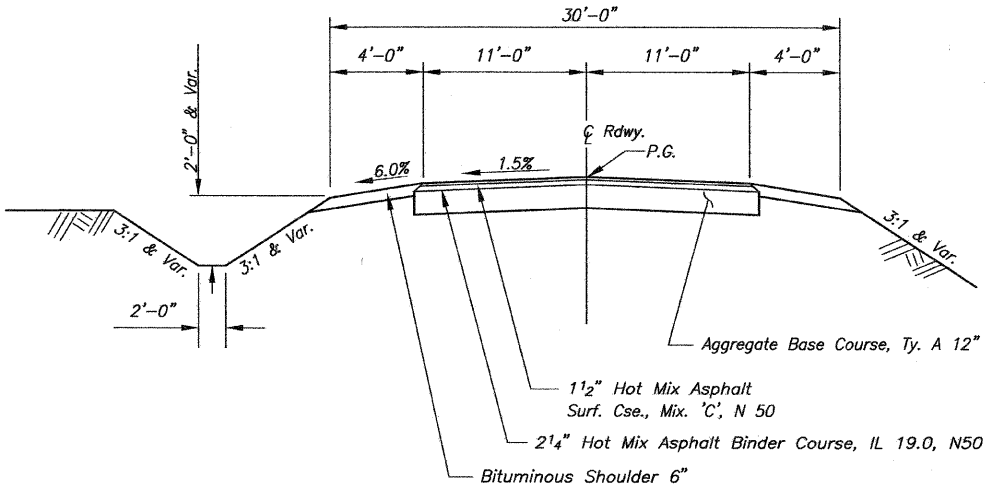
* AVAILABLE EXCAVATION = EXC. x (1-SHRINKAGE FACTOR) x % USED



Road Classification: Collector ADT over 0-400 ADT
Current ADT 250

PROPOSED TYPICAL CROSS SECTION

Sta. 8+50 to Sta. 15+30 and
See sheet 6 for transition at the bridge.

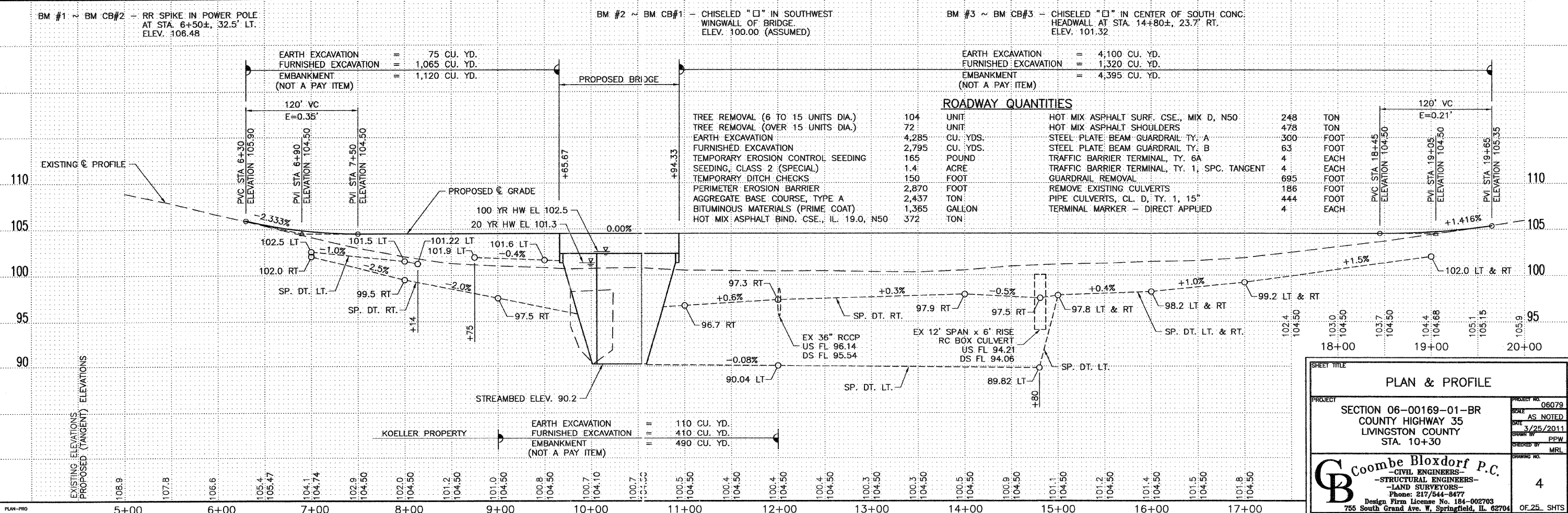
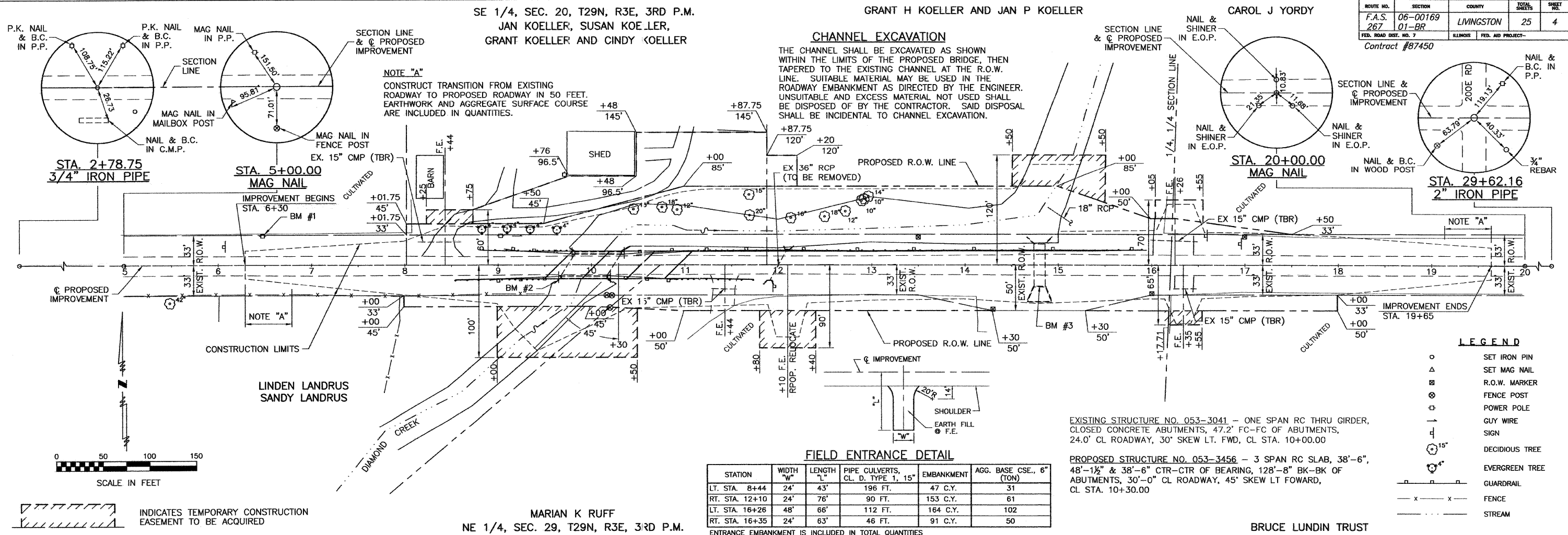


PROPOSED TYPICAL CROSS SECTION

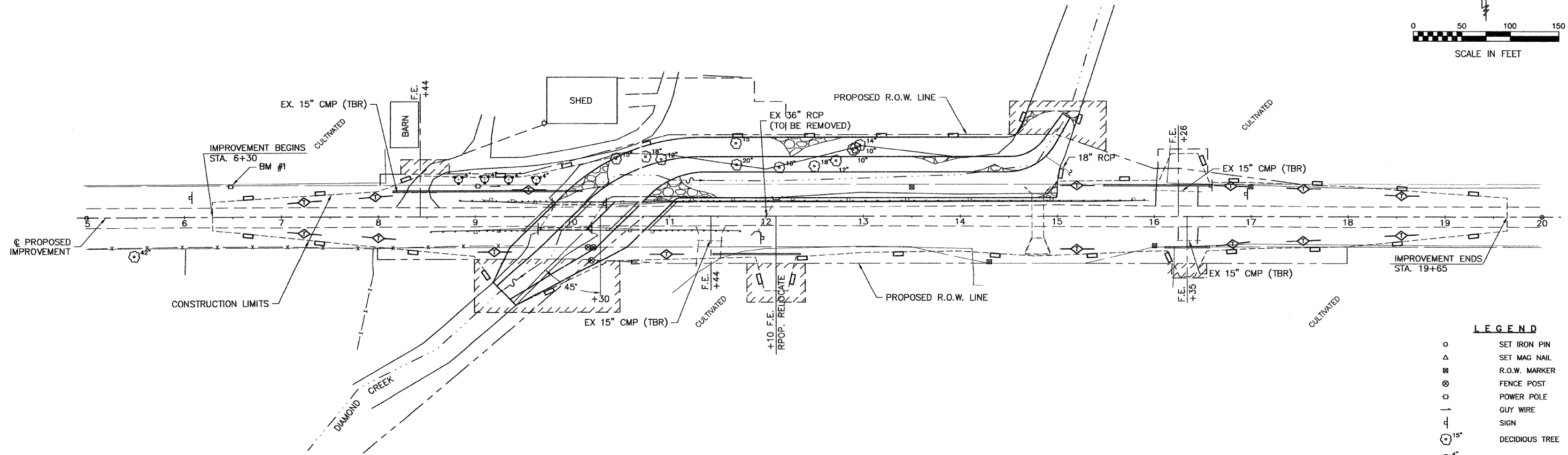
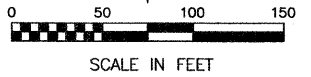
Sta. 6+30 to Sta. 8+50 and
Sta. 15+30 to Sta. 19+65

Transition from the proposed roadway to the existing roadway to be constructed from Sta. 6+30 to 6+80 and from Sta. 19+15 to 19+65.

SHEET TITLE		TYPICAL CROSS SECTIONS	
PROJECT	SECTION 06-00169-01-BR COUNTY HIGHWAY 35 LIVINGSTON COUNTY STATION 10+30	PROJECT NO.	06079
SCALE		DATE	3/30/11
DRAWN BY	MRL	CHECKED BY	MCB
Coombe-Bloxdorf P.C. -CIVIL ENGINEERS- -STRUCTURAL ENGINEERS- -LAND SURVEYORS- Phone: 217/544-8477 Design Firm License No. 184-002703 755 South Grand Ave. W. Springfield, IL 62704		3	



ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.S. 267	06-00169 01-BR	LIVINGSTON	25	5
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	
Contract #87450				



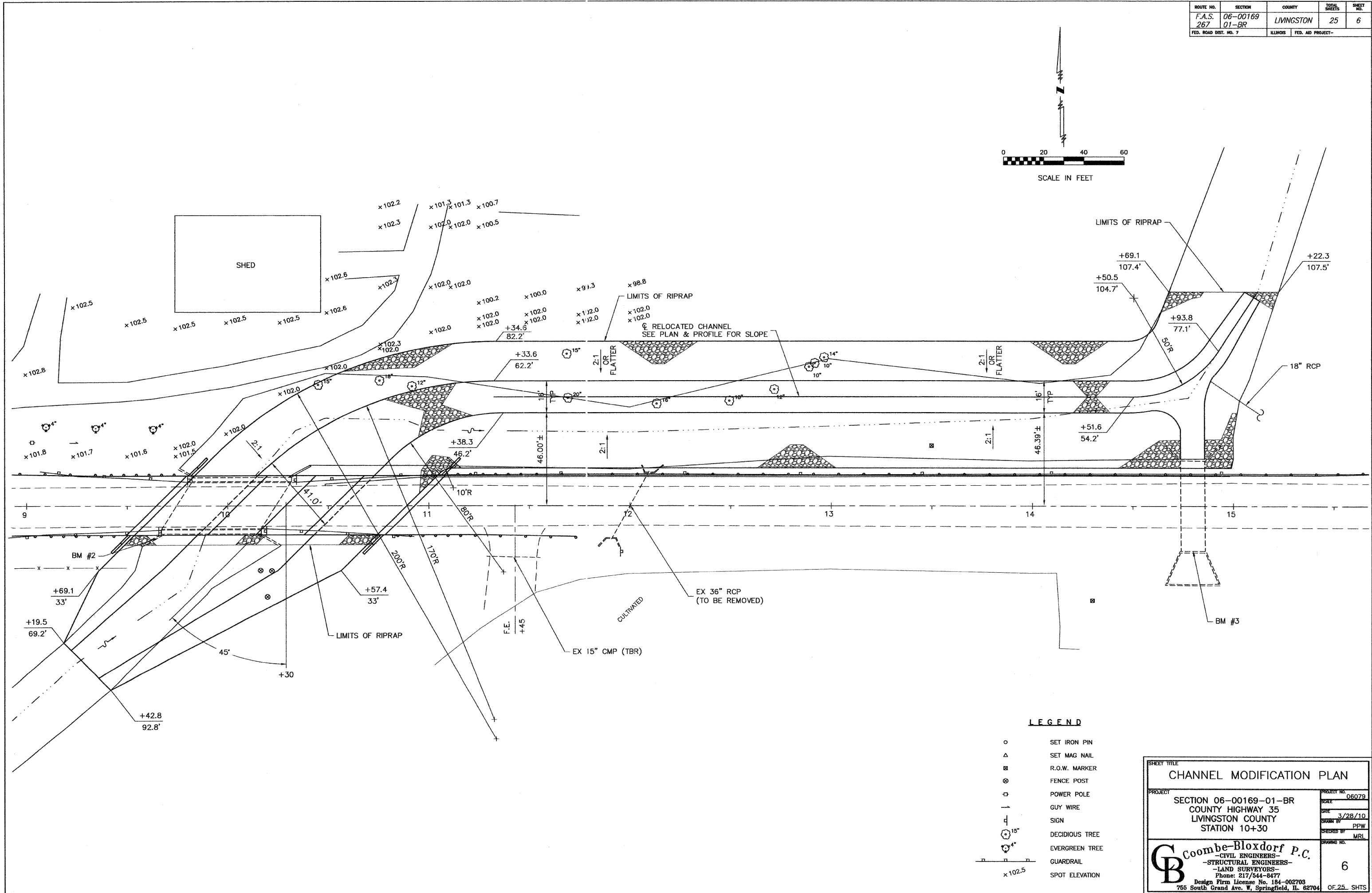
- NOTES:**
1. THE CONSTRUCTION LIMITS SHALL BE STAKED BY THE ENGINEER PRIOR TO COMMENCING CONSTRUCTION. THE CONSTRUCTION LIMITS MAY BE ADJUSTED BY THE ENGINEER TO PRESERVE TREES AND NO ADDITIONAL COMPENSATION WILL BE PAID TO THE CONTRACTOR FOR CHANGED CONSTRUCTION LIMITS.
 2. THE ENGINEER SHALL HAVE FINAL DETERMINATION OF THE PLACEMENT AND LOCATION OF THE PERIMETER EROSION BARRIER.

LEGEND

○	SET IRON PIN
△	SET MAG NAIL
⊗	R.O.W. MARKER
⊙	FENCE POST
⊕	POWER POLE
— —	GUY WIRE
⊥	SIGN
⊙ 15"	DECIDUOUS TREE
⊙ 4"	EVERGREEN TREE
— — —	GUARDRAIL
— x — x —	FENCE
— · · · —	STREAM
— — — —	PERIMETER EROSION BARRIER
—◇—	TEMPORARY DITCH CHECK
⊗	STONE RIPRAP

SHEET TITLE		EROSION CONTROL PLAN	
PROJECT	SECTION 06-00169-01-BR COUNTY HIGHWAY 35 LIVINGSTON COUNTY STA. 10+30	PROJECT NO.	08079
		SCALE	AS NOTED
		DATE	3/28/2011
		DRAWN BY	MRL
		CHECKED BY	MRL
Coombe-Bloxdorf P.C. -CIVIL ENGINEERS- -STRUCTURAL ENGINEERS- -LAND SURVEYORS- Phone: 217/544-8477 Design Firm License No. 184-002703 755 South Grand Ave. W. Springfield, IL 62704		DRAWING NO.	5
		OF 25	SHTS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.S. 267	06-00169 01-BR	LIVINGSTON	25	6
FED. ROAD DIST. NO. 7		ILLINOIS FED. AID PROJECT-		



SHEET TITLE

CHANNEL MODIFICATION PLAN

PROJECT

SECTION 06-00169-01-BR
COUNTY HIGHWAY 35
LIVINGSTON COUNTY
STATION 10+30

PROJECT NO.

06079

SCALE

3/28/10

DRAWN BY

PPW

CHECKED BY

MRL

DRAWING NO.

6

Coombe-Bloxdorf P.C.

-CIVIL ENGINEERS-

-STRUCTURAL ENGINEERS-

-LAND SURVEYORS-

Design Firm License No. 184-002703

755 South Grand Ave. W, Springfield, IL 62704

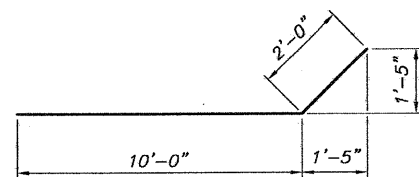
OF 25 SHTS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.S. 267	06-00169 01-BR	LIVINGSTON	25	7
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

Contract #87450

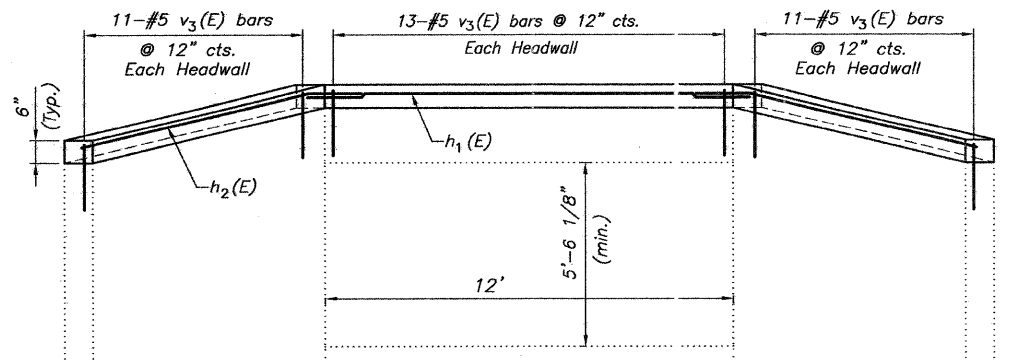
NOTES

Epoxy Grout v(E) bars into drilled 1"Ø x 9" holes in headwall.
The epoxy grout and method of application shall be in accordance with Section 584 of the Standard Specifications and approved by the Engineer.
The cost of drilling and epoxy grouting the v(E) bars shall be included in Reinforcement Bars, Epoxy Coated.
Reinforcement bars shall conform to the requirements ASTM A706 Grade 60 (IL Modified). See special provisions.
All reinforcement bars shall be epoxy coated.
Plan dimensions and details relative to existing structure have been taken from existing plans and are subject to nominal construction variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation or a change in the scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

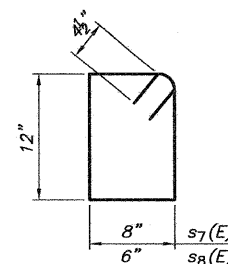


BAR $h_2(E)^*$

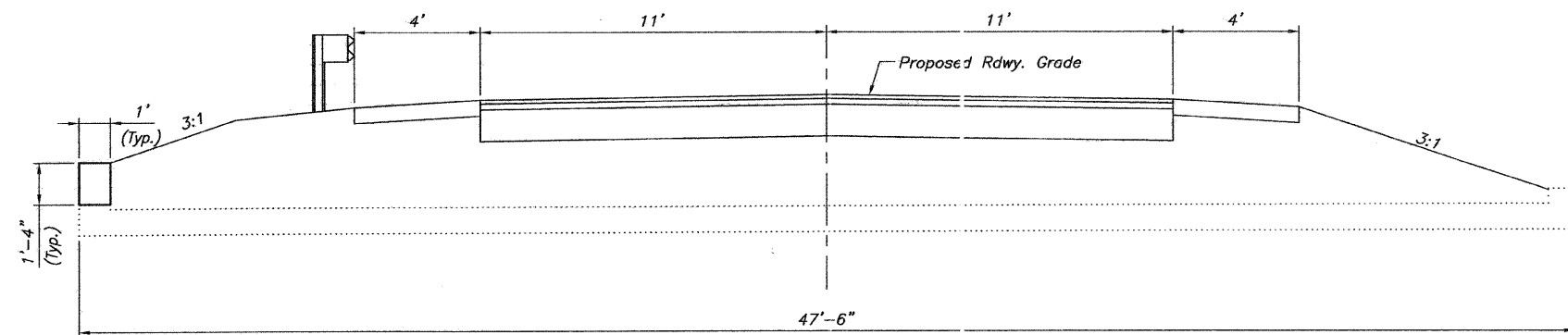
* $h_2(E)$ bars shall be bent in the field to match the existing wingwall slope.



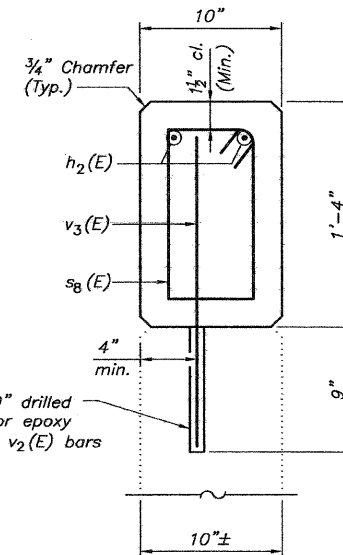
ELEVATION



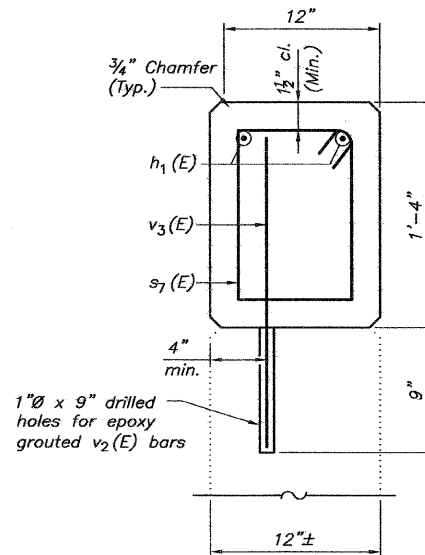
BAR $s_7(E)$ & $s_8(E)$



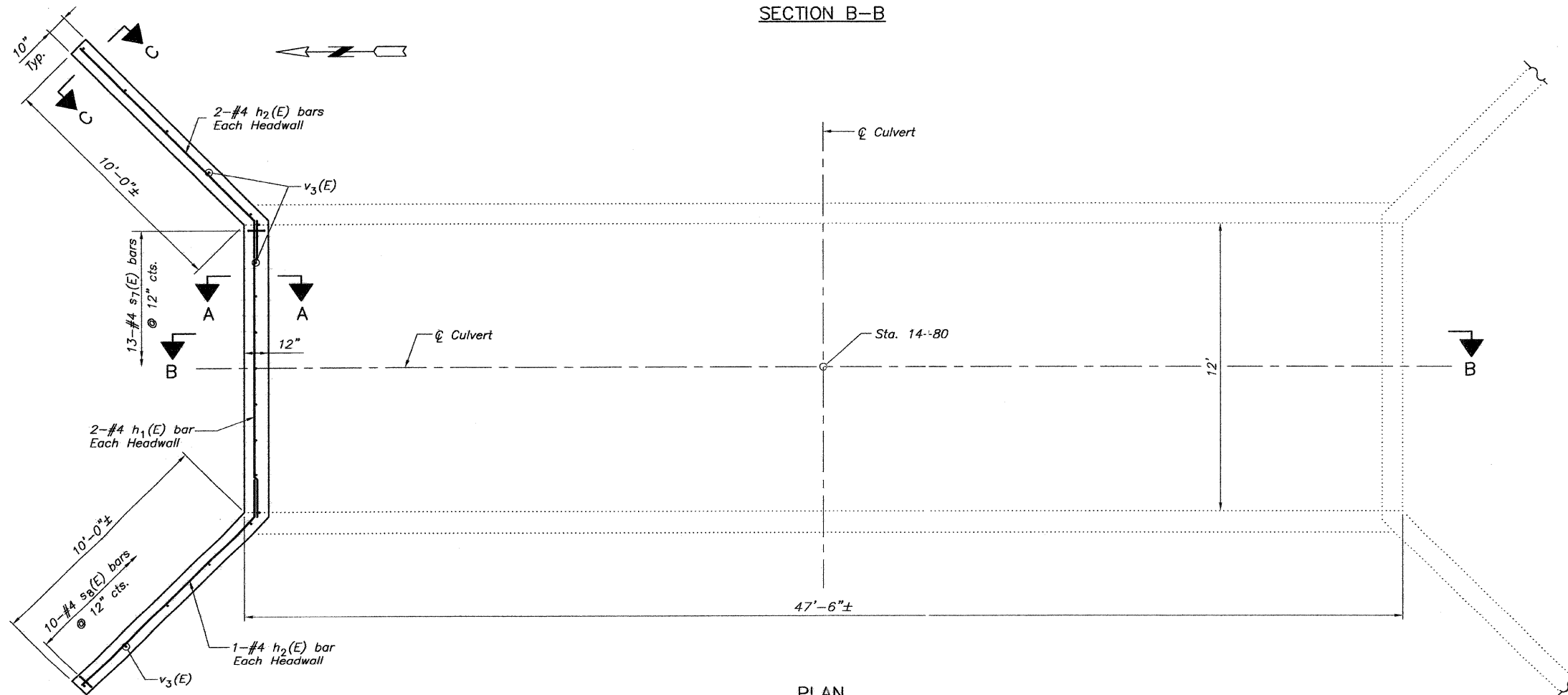
SECTION B-B



SECTION C-C



SECTION A-A



PLAN

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
$h_1(E)$	2	#4	12'-6"	—
$h_2(E)$	4	#4	12'-0"	—
$s_7(E)$	13	#4	4'-1"	□
$s_8(E)$	20	#4	3'-9"	□
$v_3(E)$	35	#5	1'-11"	—
Concrete Structures			Cu. Yd.	1.4
Reinforcement Bars, Epoxy Coated			Cu. Yds.	205

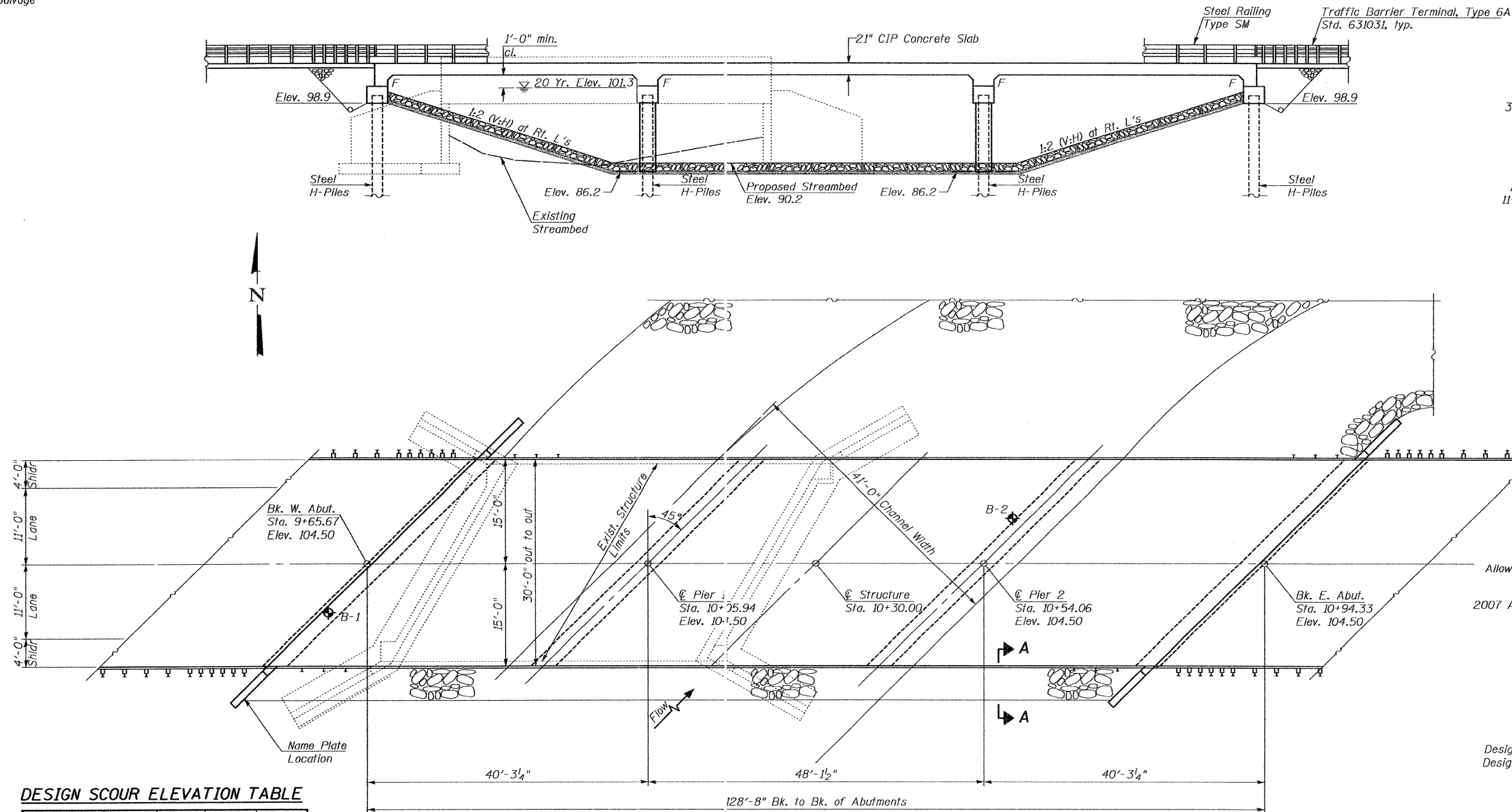
SHEET TITLE		CULVERT DETAILS	
PROJECT	SECTION 06-00169-01-BR	PROJECT NO.	06079
	COUNTY HIGHWAY 35	SCALE	
	LIVINGSTON COUNTY	DATE	3/29/11
	STATION 14+80	DRAWN BY	MML
		CHECKED BY	MRL
		DRAWING NO.	7
-CIVIL ENGINEERS- -STRUCTURAL ENGINEERS- -LAND SURVEYORS- Phone: 217/544-8477 Design Firm License No. 184-002703 755 South Grand Ave. W. Springfield, IL 62704		OF 25 SHTS	

Bench Mark: CB-1, BM Elev. 100.00 (assumed), chiseled "C" in southwest wingwall of existing SN 053-3041

Existing Structure: SN 053-3041 built in 1924 as the Camelin Bridge in the Long Point Township at Station 10+00.00. The existing structure is a single span RC thru Girder supported by closed abutments which is 47.3' back to back of abutments and 24.1' face to face of existing concrete parapets. Traffic will be detoured during construction.

No Salvage

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 267	*	LIVINGSTON	25	8
SHEET NO. 1				
12 SHEETS				
Contract #87450 *06-00169-01-BR				



INDEX OF SHEETS

- 1 General Data
- 2 General Data
- 3-4 Top of Slab Elevations
- 5 Superstructure
- 6 Superstructure Details
- 7 Steel Railing, Type SM
- 8 Abutments
- 9 Piers
- 10 HP Pile Details
- 11-12 Boring Logs

LOADING HL-93
Allow 50#/sq. ft. for future wearing surface.

DESIGN SPECIFICATIONS
2007 AASHTO LRFD Bridge Design Specifications
with 2008 and 2009 Interims

DESIGN STRESSES FIELD UNITS

$f'_c = 3,500$ psi
 $f_y = 60,000$ psi (Reinforcement)

SEISMIC DATA
Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (S_{D1}) = 0.078 g
Design Spectral Acceleration at 0.2 sec. (S_{D5}) = 0.14 g
Soil Site Class = C

See Sheet 2 of 12 for Section A-A and Section B-B

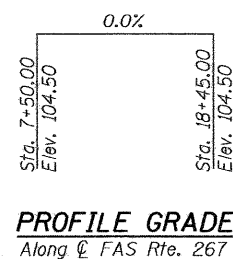
PLAN

DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (ft)	W. Abut.	Pier 1	Pier 2	E. Abut.
	98.9	86.02	86.02	98.9

DIAMOND CREEK
BUILT 201. BY
LIVINGSTON COUNTY
SEC. 06-00169-01-BR
F.A.S. RTE. 267 STA. 10+30.00
STR. NO. 053-3456 LOADING HL93

NAME PLATE
See Std. 515001

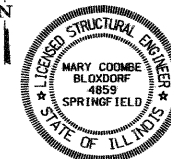
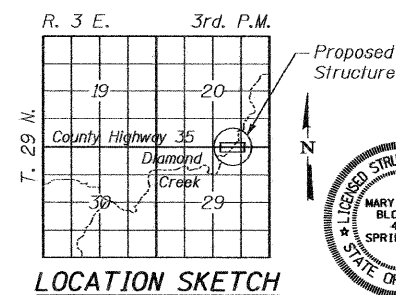


PROFILE GRADE
Along FAS Rte. 267

WATERWAY INFORMATION

Drainage Area = 17.0 Sq. Mi. Low Grade Elev. 100.3 @ Sta. 13+00									
Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		H.W.E.		Head - Ft.		Headwater El.
			Exist.	Prop.	Exist.	Prop.	Exist.	Prop.	
Design	20	2335	269	669	101.34	0.57	0.62	101.91	101.96
Base	100	3744	269	786	102.46	0.26	0.96	102.72	103.42
Overtopping									
Max. Calc.	500	5060	269	786	103.31	0.24	0.93	103.55	104.24

Max. Rec. H.W.E. = 102.3 ft.



Mary Coombe Bloxdorf
ILLINOIS STRUCTURAL NO. 4859
EXPIRES 11/30/10
DATE: 3/30/11

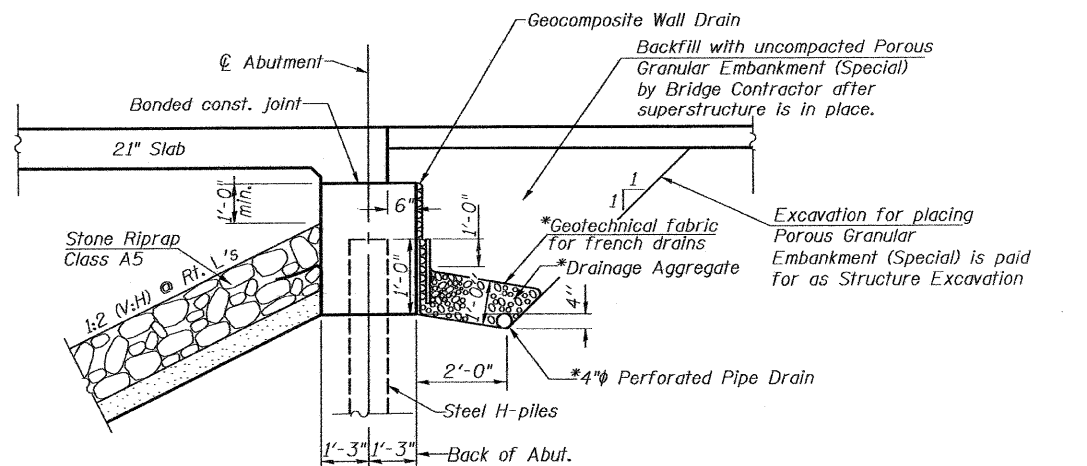
SHEET TITLE			
GENERAL PLAN & ELEVATION			
PROJECT	C.H. 35 OVER DIAMOND CREEK	PROJECT NO.	06079
	FAS RTE. 267 SEC. 06-00169-01-BR	DATE	3/29/11
	LIVINGSTON COUNTY	DESIGN BY	CME/MCB
	STATION 10+30.00	DRAWN BY	TFG/CFC
	STRUCTURE NUMBER 053-3456	CHECKED BY	CME/MCB
		1	
Coombe-Bloxdorf P.C. -CIVIL ENGINEERS- -STRUCTURAL ENGINEERS- -LAND SURVEYORS- Design Firm License No. 184-002703		OF 12 SHTS	

GENERAL NOTES

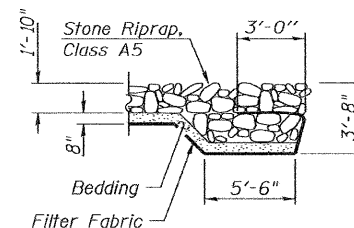
Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions.
Reinforcement bars designated (E) shall be epoxy coated.
Layout of slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.
The Contractor shall make allowance for the deflection of forms, shrinkage and settlement of falsework, in addition to allowance for dead load deflection. Forms for deck slab shall be removed prior to placement of bridge approach slab.
Excavation behind existing abutment walls shall be performed to balance front and back soil pressure before removing the existing superstructure.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Channel Excavation	Cu. Yd.		870	870
Porous Granular Embankment (Special)	Cu. Yd.		85	85
Stone Riprap Class A5	Sq. Yd.		4601	4601
Filter Fabric	Sq. Yd.		4601	4601
Removal of Existing Structures	Each	1		1
Structure Excavation	Cu. Yd.		188	188
Concrete Structures	Cu. Yd.		52.3	52.3
Concrete Superstructure	Cu. Yd.	260.6		260.6
Bridge Deck Grooving	Sq. Yd.	396		396
Concrete Encasement	Cu. Yd.		26.4	26.4
Protective Coat	Sq. Yd.	424		424
Reinforcement Bars, Epoxy Coated	Pound	51,590	9110	60,700
Steel Railing, Type SM	Foot	255		255
Furnishing Steel Piles, HP 12x53	Foot		979	979
Driving Piles	Foot		979	979
Test Pile Steel HP 12x53	Each		2	2
Name Plates	Each	1		1
Geocomposite Wall Drain	Sq. Yd.		36	36
Pipe Underdrain for Structures, 4"	Foot		144	144
Underwater Structure Excavation Protection Location 1	Each		1	1
Underwater Structure Excavation Protection Location 2	Each		1	1



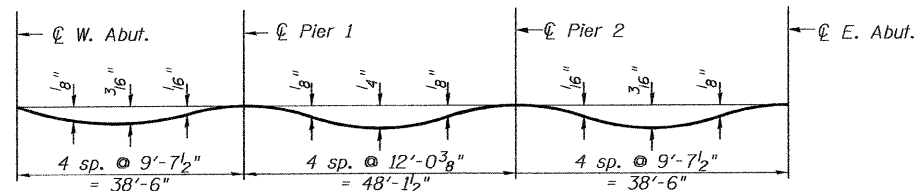
SECTION THRU ABUTMENT
(Horiz. Dimensions at Right Angles)



SECTION A-A

All drainage system components shall extend to 2'-0" from the end of each wingwall except on outlet pipe shall extend until intersecting with the side slopes. The pipes shall drain into concrete headwalls. (See Article 601.05 of the Standard Specifications and Highway Standard 601101).

SHEET TITLE		GENERAL DATA	
PROJECT		PROJECT NO.	
C.H. 35 OVER DIAMOND CREEK		06079	
FAS RTE.267 SEC. 06-00169-01-BR		DATE 3/29/11	
LIVINGSTON COUNTY		DESIGN BY CME/MCB	
STATION 10+30.00		DRAWN BY TFG/CFC	
STRUCTURE NUMBER 053-3456		CHECKED BY CME/MCB	
DRAWING NO.		2	
Design Firm License No. 184-002703		OF 12 SHTS	

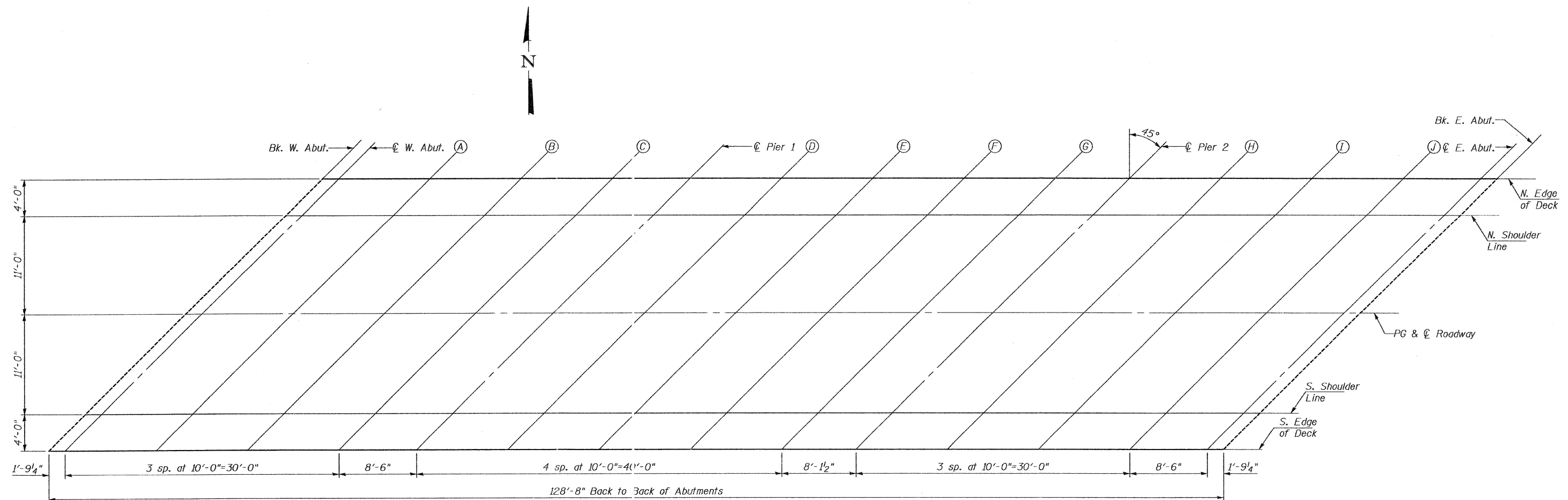


DEAD LOAD DEFLECTION DIAGRAM

(Includes weight of slab only.)

Note:

The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown on Sheet 4 of 12.



PLAN

NORTH EDGE OF DECK

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk W Abut	980.67	-15.00	104.28	104.28
CL W Abut	982.44	-15.00	104.28	104.28
A	992.44	-15.00	104.28	104.29
B	1002.44	-15.00	104.28	104.29
C	1012.44	-15.00	104.28	104.28
CL Pier 1	1020.94	-15.00	104.28	104.28
D	1030.94	-15.00	104.28	104.28
E	1040.94	-15.00	104.28	104.29
F	1050.94	-15.00	104.28	104.29
G	1060.94	-15.00	104.28	104.28
CL Pier 2	1069.07	-15.00	104.28	104.28
H	1079.07	-15.00	104.28	104.28
I	1089.07	-15.00	104.28	104.29
J	1099.07	-15.00	104.28	104.28
CL E Abut	1107.57	-15.00	104.28	104.28
Bk E Abut	1109.34	-15.00	104.28	104.28

NORTH SHOULDER LINE

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk W Abut	976.67	-11.00	104.33	104.33
CL W Abut	978.44	-11.00	104.33	104.33
A	988.44	-11.00	104.33	104.35
B	998.44	-11.00	104.33	104.35
C	1008.44	-11.00	104.33	104.34
CL Pier 1	1016.94	-11.00	104.33	104.33
D	1026.94	-11.00	104.33	104.34
E	1036.94	-11.00	104.33	104.35
F	1046.94	-11.00	104.33	104.35
G	1056.94	-11.00	104.33	104.34
CL Pier 2	1065.07	-11.00	104.33	104.33
H	1075.07	-11.00	104.33	104.34
I	1085.07	-11.00	104.33	104.35
J	1095.07	-11.00	104.33	104.34
CL E Abut	1103.57	-11.00	104.33	104.33
Bk E Abut	1105.34	-11.00	104.33	104.33

PG AND C ROADWAY

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk W Abut	965.67	0.00	104.50	104.50
CL W Abut	967.45	0.00	104.50	104.50
A	977.45	0.00	104.50	104.51
B	987.45	0.00	104.50	104.52
C	997.45	0.00	104.50	104.50
CL Pier 1	1005.94	0.00	104.50	104.50
D	1015.94	0.00	104.50	104.51
E	1025.94	0.00	104.50	104.52
F	1035.94	0.00	104.50	104.52
G	1045.94	0.00	104.50	104.50
CL Pier 2	1054.07	0.00	104.50	104.50
H	1064.07	0.00	104.50	104.51
I	1074.07	0.00	104.50	104.52
J	1084.07	0.00	104.50	104.51
CL E Abut	1092.57	0.00	104.50	104.50
Bk E Abut	1094.34	0.00	104.50	104.50

SOUTH SHOULDER LINE

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk W Abut	954.67	11.00	104.33	104.33
CL W Abut	956.45	11.00	104.33	104.33
A	966.45	11.00	104.33	104.35
B	976.45	11.00	104.33	104.35
C	986.45	11.00	104.33	104.34
CL Pier 1	994.94	11.00	104.33	104.33
D	1004.94	11.00	104.33	104.34
E	1014.94	11.00	104.33	104.35
F	1024.94	11.00	104.33	104.35
G	1034.94	11.00	104.33	104.34
CL Pier 2	1043.07	11.00	104.33	104.33
H	1053.07	11.00	104.33	104.34
I	1063.07	11.00	104.33	104.35
J	1073.07	11.00	104.33	104.34
CL E Abut	1081.57	11.00	104.33	104.33
Bk E Abut	1083.34	11.00	104.33	104.33

SOUTH EDGE OF DECK

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk W Abut	950.67	15.00	104.28	104.28
CL W Abut	952.45	15.00	104.28	104.28
A	962.45	15.00	104.28	104.29
B	972.45	15.00	104.28	104.29
C	982.45	15.00	104.28	104.28
CL Pier 1	990.94	15.00	104.28	104.28
D	1000.94	15.00	104.28	104.28
E	1010.94	15.00	104.28	104.29
F	1020.94	15.00	104.28	104.29
G	1030.94	15.00	104.28	104.28
CL Pier 2	1039.07	15.00	104.28	104.28
H	1049.07	15.00	104.28	104.28
I	1059.07	15.00	104.28	104.29
J	1069.07	15.00	104.28	104.28
CL E Abut	1077.57	15.00	104.28	104.28
Bk E Abut	1079.34	15.00	104.28	104.28

SHEET NO. 5
12 SHEETS

*Back of East Abutment at Sta. 10+94.33
**C Pier 2 at Sta. 10+54.06

***Order $a(E)$ and $a_2(E)$ bars full length, cut to fit and use remainder in opposite end.



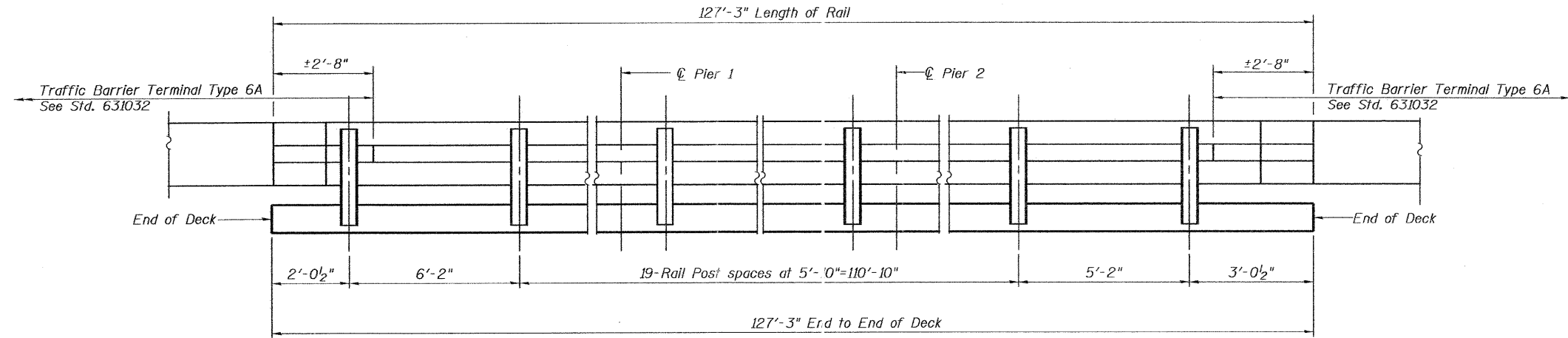
See Sheet 6 of 12 for Section A-A, Section B-B, Section C-C,
Railing Elevation, Bar Details and Bill of Material.

SHEET TITLE		PROJECT NO.	
SUPERSTRUCTURE		060	
PROJECT		DATE	
C.H. 35 OVER DIAMOND CREEK		3/29	
FAS RTE.267 SEC. 06-00169-01-BR		DESIGN BY	
LIVINGSTON COUNTY		CME/M	
STATION 10+30.00		DRAWN BY	
STRUCTURE NUMBER 053-3456		TFG/C	
		CHECKED BY	
		CME/M	
		DRAWING NO.	
 Coombe-Bloxdorf P.C. -CIVIL ENGINEERS- -STRUCTURAL ENGINEERS- -LAND SURVEYORS- Design Firm License No. 184-002703		5 OF 12 SHEETS	

```

PLOT DATE      = 3/30/2011
FILE NAME      = ...00533456-87450-005-superstructure.dgn
PLOT SCALE     = 0.1,000000 '1" / IN.
USER NAME      = CFC.

```

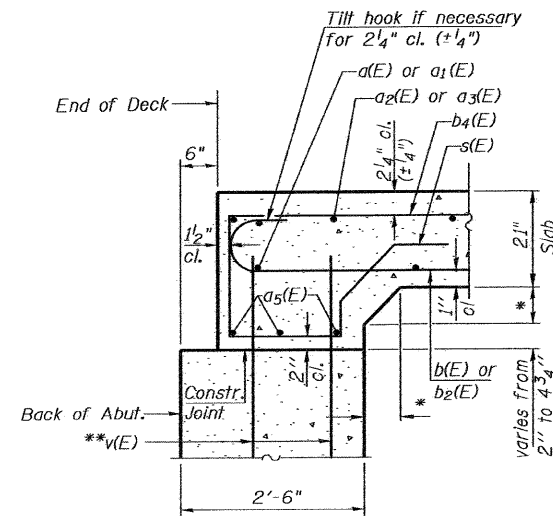


RAILING ELEVATION

**SUPERSTRUCTURE
BILL OF MATERIAL**

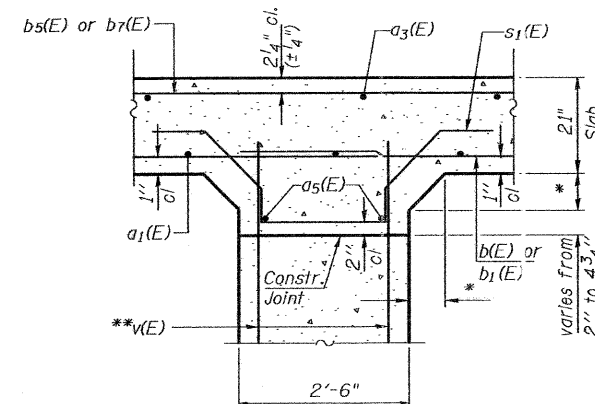
Bar	No.	Size	Length	Shape
a(E)	27	#5	30'-8"	
a1(E)	98	#5	29'-8"	
a2(E)	16	#5	27'-6"	
a3(E)	64	#5	26'-6"	
a4(E)	154	#6	6'-6"	
a5(E)	10	#5	42'-1"	
b(E)	48	#9	41'-3"	C
b1(E)	24	#9	49'-2"	
b2(E)	46	#9	31'-9"	C
b3(E)	23	#9	31'-0"	
b4(E)	60	#6	22'-10"	
b5(E)	60	#9	37'-9"	
b6(E)	30	#6	16'-6"	
b7(E)	58	#9	20'-0"	
b8(E)	12	#10	48'-7"	C
b9(E)	22	#10	49'-3"	
b10(E)	16	#10	28'-3"	
s(E)	84	#4	5'-8"	L
s1(E)	84	#4	6'-4"	
s2(E)	252	#4	6'-10"	□
Reinforcement Bars, Epoxy Coated			Pound	51,590
Concrete Superstructure			Cu. Yds.	260.6

See Sheet 7 of 12 for Railing Details



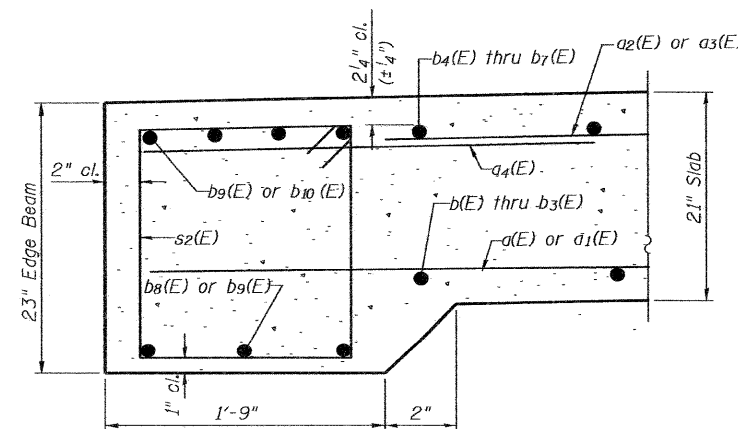
SECTION A-A
at Rt. L's

* 5" typ.
3" @ edge beam

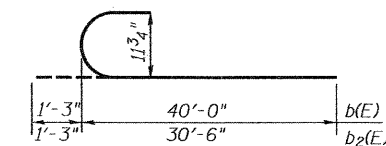


SECTION B-B
at Rt. L's

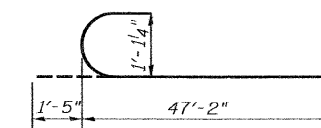
**v(E) bars are billed with abutments and piers. See Sheets 8 and 9 of 12.



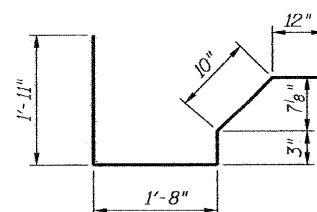
SECTION C-C



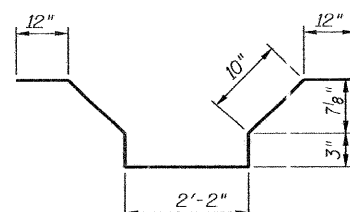
BARS b(E) & b2(E)



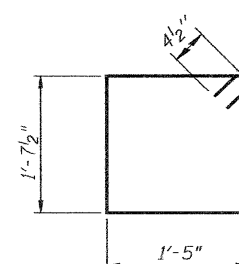
BAR b8(E)



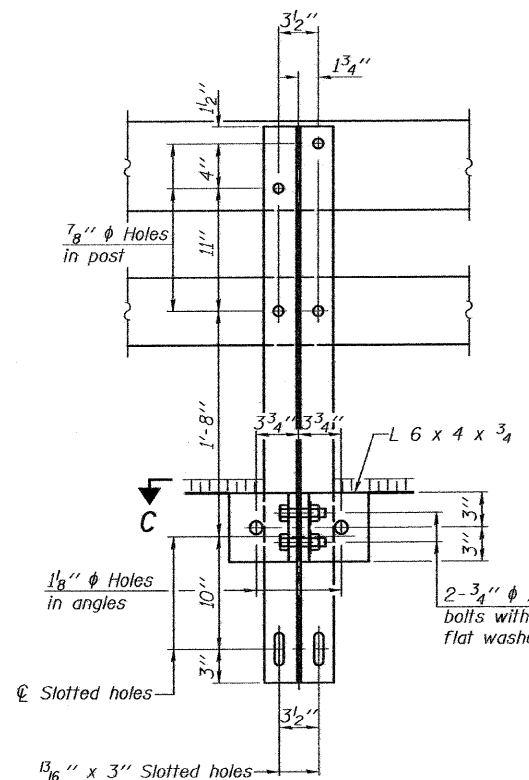
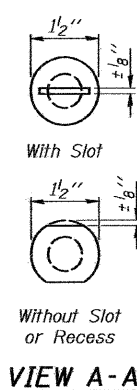
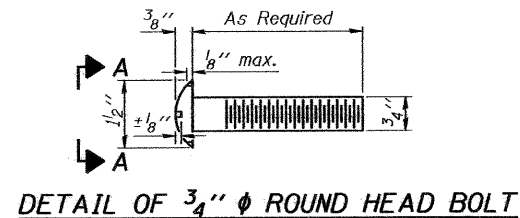
BAR s(E)



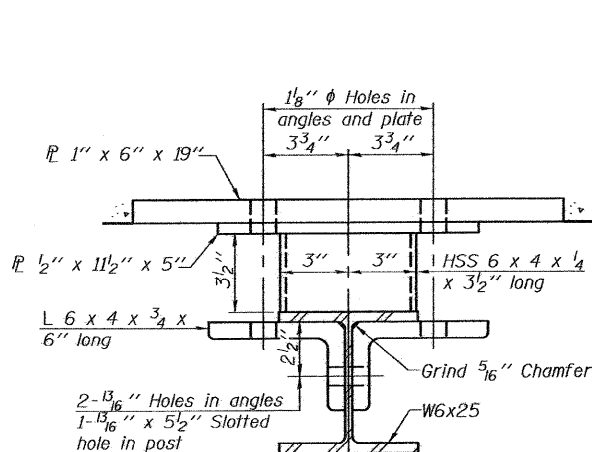
BAR s1(E)



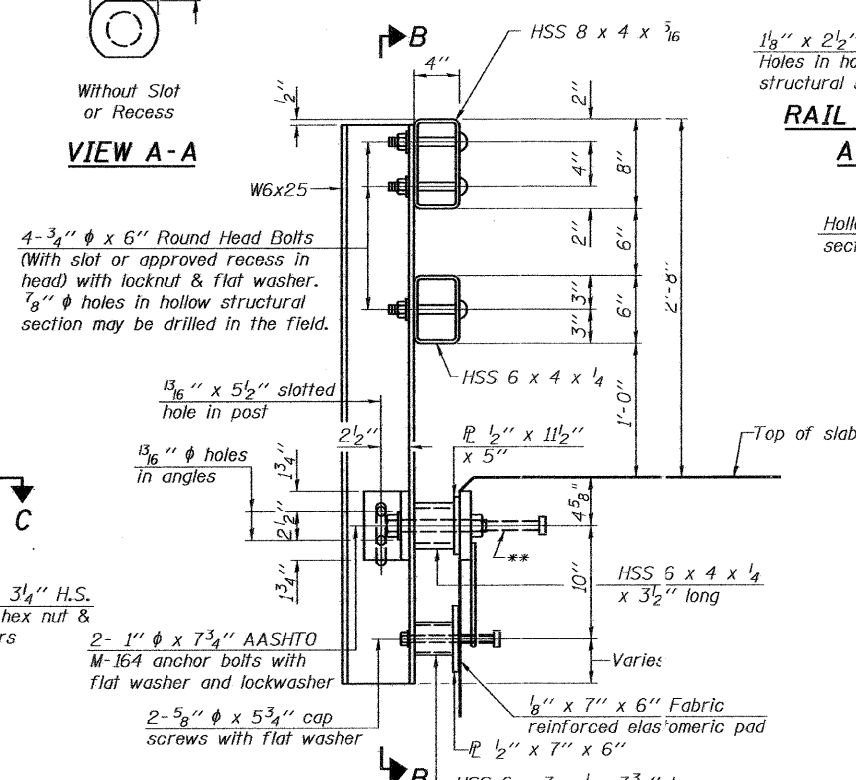
BAR s2(E)



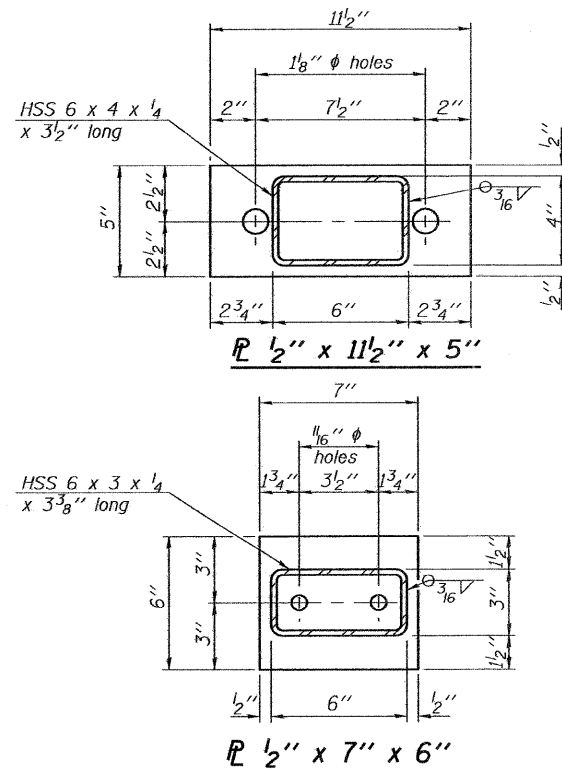
SECTION B-B



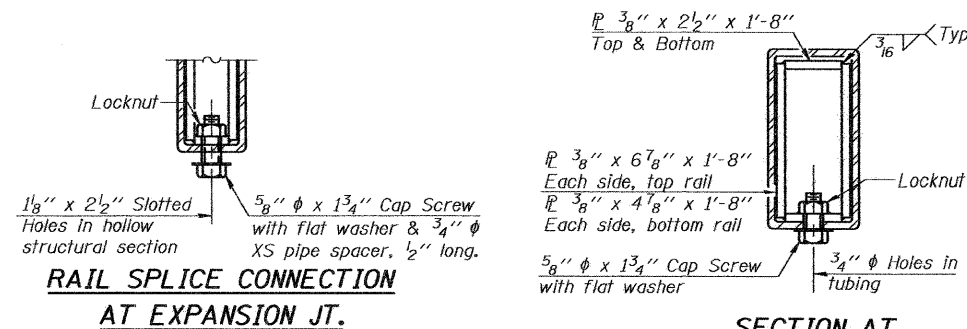
SECTION C-C



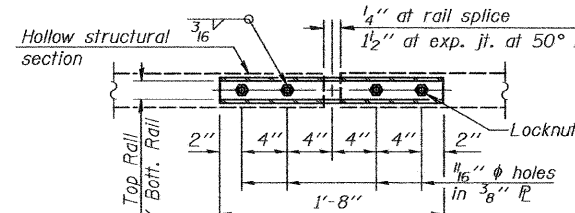
SECTION AT RAIL POST



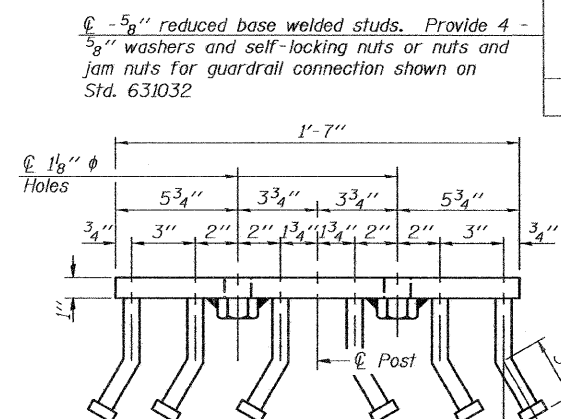
ANCHOR DEVICE



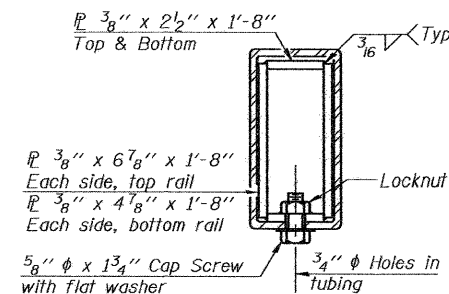
RAIL SPLICE CONNECTION
AT EXPANSION JT.



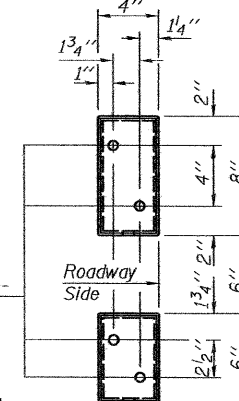
PLAN-BOTT. SPLICE R
TYPICAL



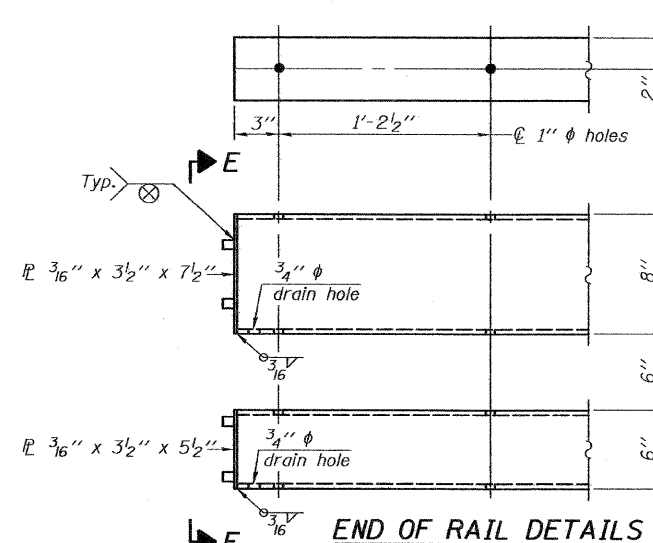
VIEW D-D



SECTION AT
RAIL SPLICE



VIEW E-E



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.

All steel rail members shall be galvanized according to Article 509.05 of the Standard Specifications.

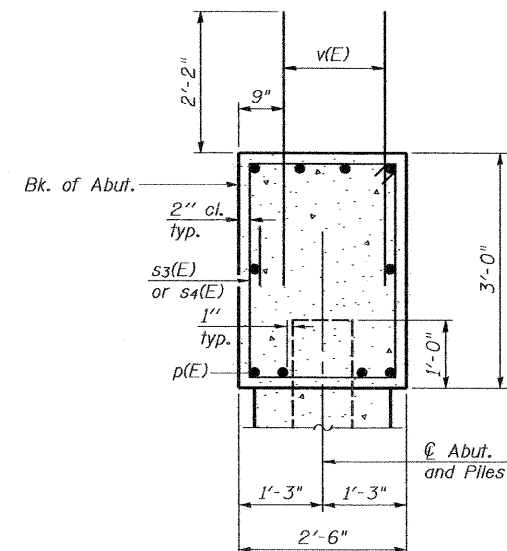
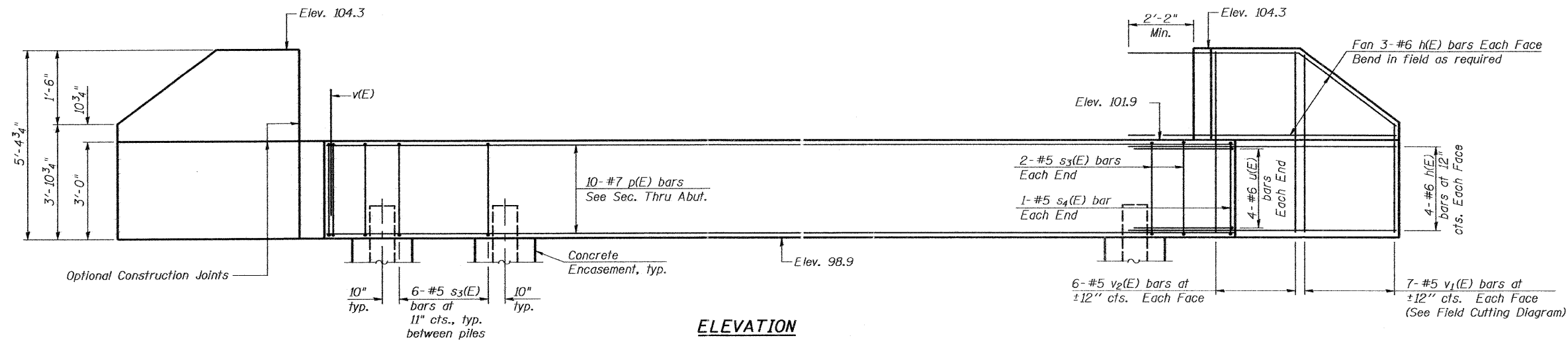
*The studs of the anchor devices shall be placed below the top reinforcement bars of the edge beam.

BILL OF MATERIAL

Item	Unit	Quantity
Steel Railing, Type SM	Foot	255

SHEET TITLE		STEEL RAILING TYPE SM	
PROJECT	C.H. 35 OVER DIAMOND CREEK FAS RTE.267 SEC. 06-00169-01-BR LIVINGSTON COUNTY STATION 10+30.00 STRUCTURE NUMBER 053-3456	PROJECT NO.	06079
DATE	3/29/11	DESIGN BY	CME/MCB
DRAWN BY	TFG	CHECKED BY	CME/MCB
Coombe-Bloxdorf P.C. -CIVIL ENGINEERS- -STRUCTURAL ENGINEERS- -LAND SURVEYORS- Design Firm License No.184-002703		DRAWING NO.	7
		OF 12 SHTS	

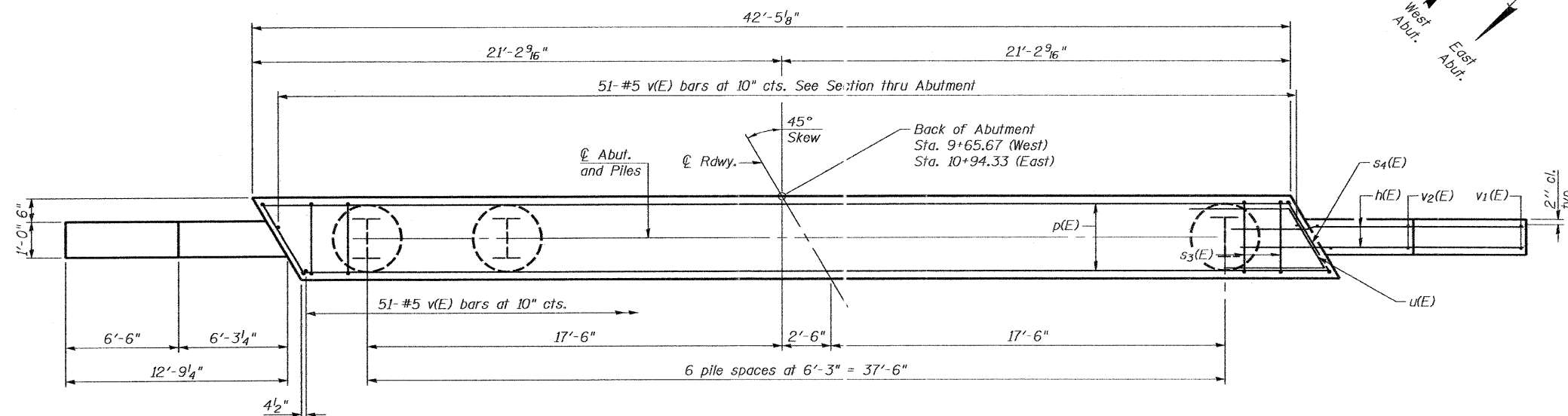
*Threaded areas shall be plugged or blocked off during casting of beam. Galvanized after fabrication.



**TWO ABUTMENTS
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h(E)	56	#6	13'-9"	
p(E)	20	#7	42'-1"	
s3(E)	80	#5	10'-7"	
s4(E)	4	#5	12'-5"	
u(E)	16	#6	8'-1"	
v(E)	204	#5	4'-4"	
v1(E)	28	#5	8'-7"	
v2(E)	48	#5	5'-0"	
Structure Excavation		Cu. Yd.	188	
Concrete Structures		Cu. Yd.	32.7	
Reinforcement Bars, Epoxy Coated		Pound	5430	
Furnishing Piles, HP 12x53		Foot	377	
Driving Piles		Foot	377	
Test Pile, HP 12x53		Each	1	
Concrete Encasement		Cu. Yd.	4.9	

For details of piles and Concrete Encasement, see sheet 10 of 12.

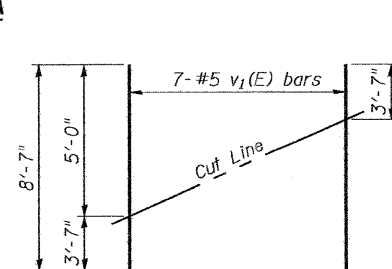


EAST ABUT. PILE DATA

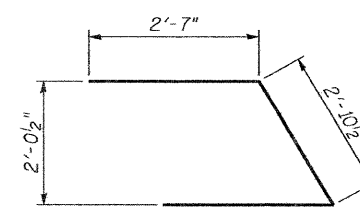
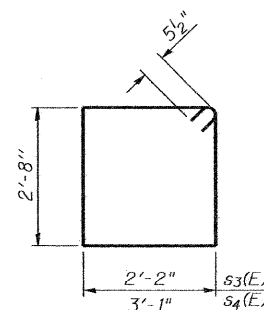
Type: HP 12x53
Nominal Required Bearing: 166 k
Factored Resistance Available: 83 k
Est. Length: 29 ft.
No. Production Piles: 7
No. Test Piles: None

WEST ABUT. PILE DATA

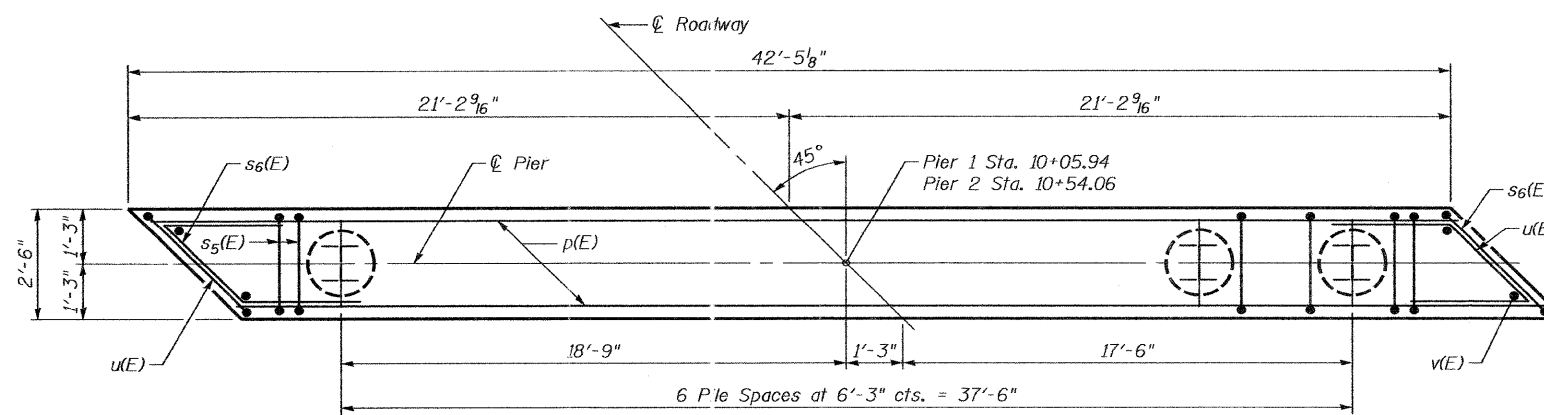
Type: HP 12x53
Nominal Required Bearing: 166 k
Factored Resistance Available: 83 k
Est. Length: 29 ft.
No. Production Piles: 6
No. Test Piles: 1



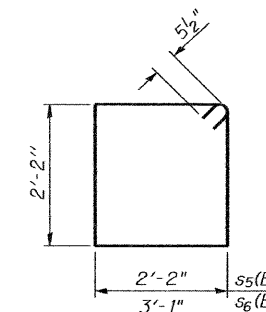
Order v1(E) full length. Cut as shown and use remainder of bars in opposite face.



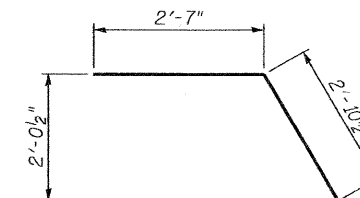
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO.
FAS 267	*	LIVINGSTON	25	16	12 SHEETS
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT-		
Contract #87450		*06-00169-01-BR			



PLAN



BARS s5(E) & s6(E)



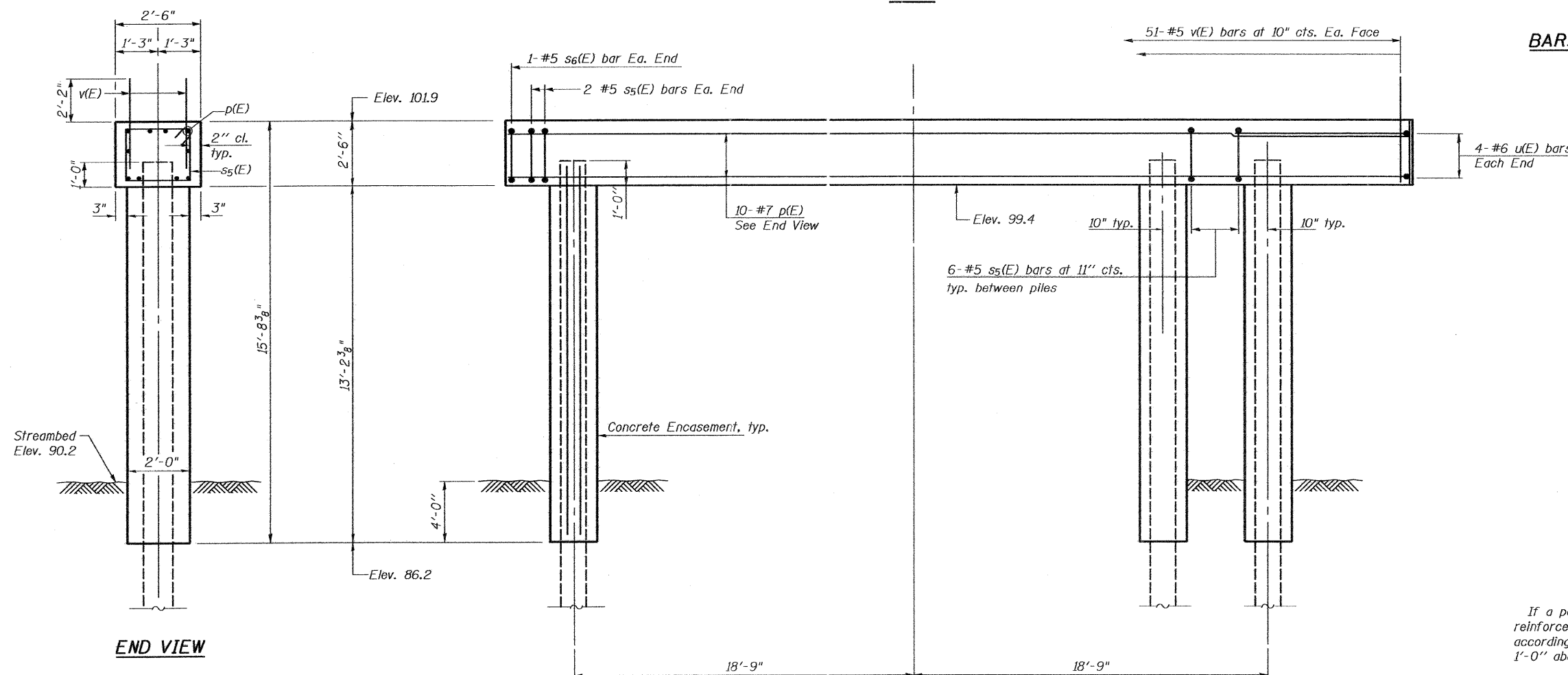
BAR u(E)

**TWO PIERS
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
p(E)	20	#7	42'-1"	—
s5(E)	80	#5	9'-7"	□
s6(E)	4	#5	11'-5"	□
u(E)	16	#6	8'-1"	—
v(E)	204	#5	4'-4"	—
Concrete Structures			Cu. Yd.	19.6
Reinforcement Bars, Epoxy Coated			Pound	3680
Furnishing Steel Piles HP 12x53			Foot	602
Driving Piles			Foot	602
Concrete Encasement			Cu. Yd.	21.5
Test Pile, HP 12X53			Each	1
Underwater Structure Excavation Protection Location 1			Each	1
Underwater Structure Excavation Protection Location 2			Each	1

For details of piles and Concrete Encasement, See Sheet 10 of 12.

If a portion of the pier wall or concrete encasement is under water, reinforcement may be placed underwater into forms. Concrete shall be tremied according to Article 503.08 of the Standard Specifications to an elevation of 1'-0" above the water line at the time of construction.



ELEVATION
(Looking East)

PILE DATA

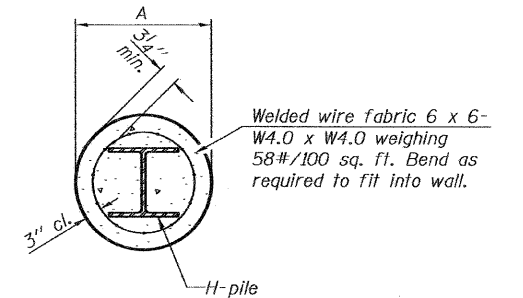
Type: HP 12x53
Nominal Required Bearing: 419 k
Factored Resistance Available: 209 k
Est. Length: 43 ft.
No. Production Piles: 7 (Each Pier) *
No. Test Piles: 1

* Includes one steel test pile to be driven in a permanent location at Pier #2. The test pile shall be driven to 110 percent of the Normal Required Bearing, indicated in the pile data information.

PLT DATE = 3/29/11
FILE NAME = 80333468-87450-003-pier-1.dgn
PLOT SCALE = 0.0100000 1" = 1'-0"
USER NAME = CFC

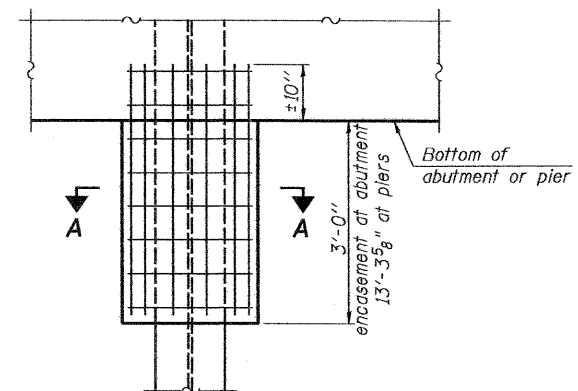
SHEET TITLE		PIERS	
PROJECT	C.H. 35 OVER DIAMOND CREEK FAS RTE.267 SEC. 06-00169-01-BR LIVINGSTON COUNTY STATION 10+30.00 STRUCTURE NUMBER 053-3456	PROJECT NO.	06079
DATE	3/29/11	DESIGN BY	CME/MCB
DRAWN BY	TFC/CFC	CHECKED BY	CME/MCB
DRAWING NO.			
Coombe Bloxdorf P.C. - CIVIL ENGINEERS - - STRUCTURAL ENGINEERS - - LAND SURVEYORS - Design Firm License No. 184-002703		9 OF 12 SHTS	

Contract #87450 *06-00169-01-BR



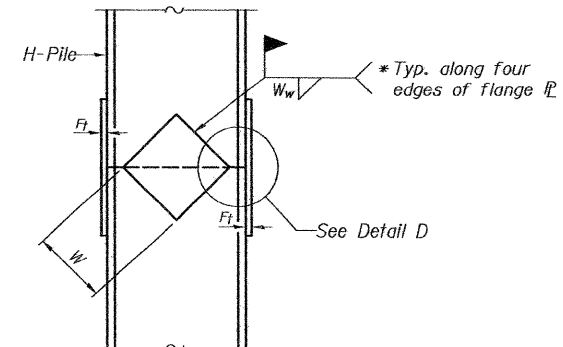
Note:
Forms for encasement may be omitted when soil conditions permit.

SECTION A-A

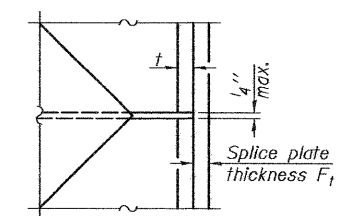


ELEVATION

PILE ENCASEMENT



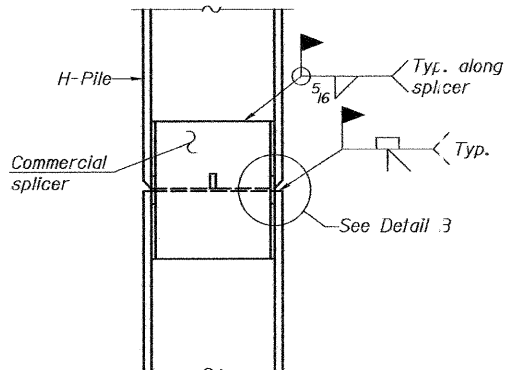
ELEVATION



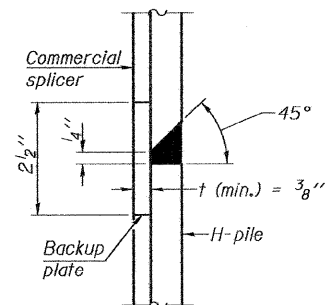
DETAIL D

WELDED PLATE FIELD SPLICE

Note:
The steel H-piles shall be according to AASHTO M270 Grade 50.

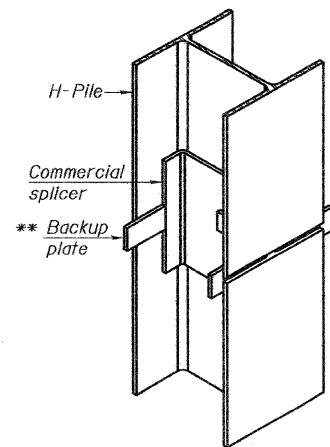


ELEVATION

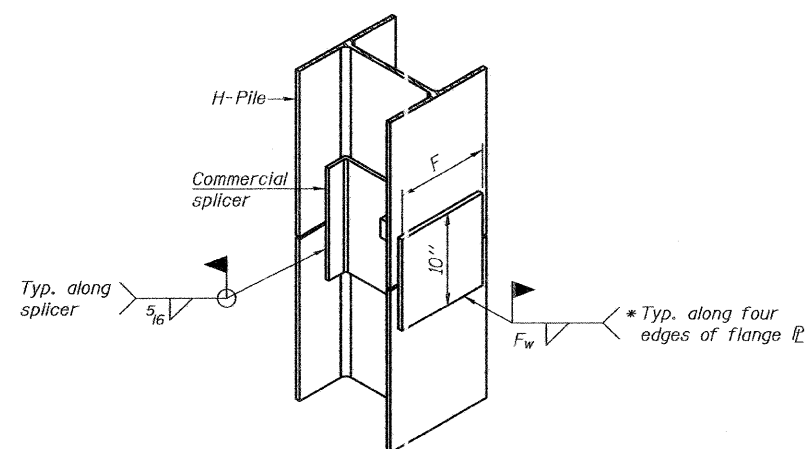


DETAIL "B"

WELDED COMMERCIAL SPLICE



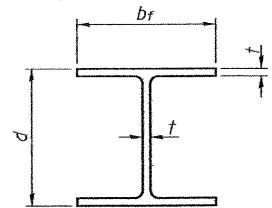
ISOMETRIC VIEW



ISOMETRIC VIEW

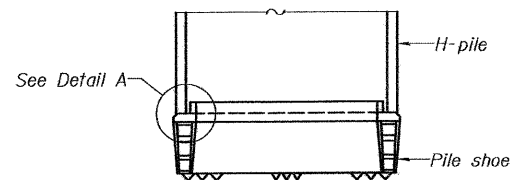
WELDED COMMERCIAL SPLICE ALTERNATE

- * Interrupt welds 1/4" from end of web and/or each flange.
- ** Remove portions of backup plates that extend outside the flanges.
- *** Weld size per pile shoe manufacturer (5/16" min.).

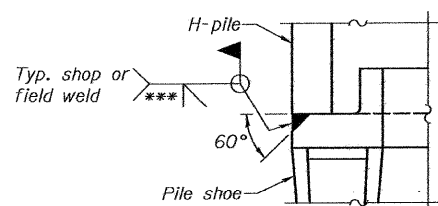


STEEL PILE TABLE

Designation	Depth d	Flange width bf	Web and Flange thickness t	Encasement diameter A
HP 14x117	14 1/4"	14 7/8"	13/16"	30"
x102	14"	14 3/4"	1/16"	30"
x89	13 7/8"	14 3/4"	5/8"	30"
x73	13 5/8"	14 5/8"	1/2"	30"
HP 12x84	12 1/4"	12 1/4"	1/16"	24"
x74	12 1/8"	12 1/4"	5/8"	24"
x63	12"	12 1/8"	1/2"	24"
x53	11 3/4"	12"	7/16"	24"
HP 10x57	10"	10 1/4"	9/16"	24"
x42	9 3/4"	10 1/8"	7/16"	24"
HP 8x36	8"	8 1/8"	7/16"	18"



ELEVATION



DETAIL A

H-PILE SHOE ATTACHMENT

Midwest Testing Services, Inc.
3705 Progress Blvd.
Peru, IL 61354
Phone: 815-223-6696
Fax: 815-223-6659
e-mail: mts37@comcast.net

Client: Coombe-Bloxdorf, P.C.
Project Name: Long Point Rd District Section 06-00169-01-BR CH-35
Project Site: Livingston County, Illinois
Boring No. B-1
Surface Elev. 100.40
Auger Depth 46' Rotary Depth NA
Start Date 10/10/09 Finish Date 10/10/09

Location: 7' Right of Station 9+61

(DEPTH) ELEV.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLES						DRILLED BY	REMARKS
				Sample No.	Sample Type	Qu (TSF)	N Value (Blows)	Bulge / Shear	Moisture (%)		
100.40										Randy Safranski Diedrich D-120	
99.40			1								
98.40			2								
97.40			3	1	SS	1.3	7	B	22		
96.40	Stiff Black And Brown Clay (Fill)		4								
95.40			5	2	SS	1.1	6	B	21		
94.40			6								
93.40			7								
92.40			8	3	SS	1.2	6	B	21		
91.40			9								
90.40	Stiff Brown Clay		10	4	SS	1.8	10	B	20		
89.40			11								
88.40			12								
87.40			13	5	SS	2.5	18	B	18		
86.40			14								
85.40			15								
84.40			16	6	SS	3.2	23	B	16		
83.40			17								
82.40			18	7	SS	2.9	21	B	17		
81.40			19								
80.40			20	8	SS	3.4	24	B	18		

Groundwater Data: Static water level after auger removal - elevation 90.0.
Comments: Bin southwest ringwall = 100.0.

Midwest Testing Services, Inc.
3705 Progress Blvd.
Peru, IL 61354
Phone: 815-223-6696
Fax: 815-223-6659
e-mail: mts37@comcast.net

Client: Coombe-Bloxdorf, P.C.
Project Name: Long Point Rd District Section 06-00169-01-BR
Project Site: Livingston County, Illinois
Boring No. B-1
Surface Elev. 100.40
Auger Depth 46' Rotary Depth NA
Start Date 10/10/09 Finish Date 10/10/09

Location: 7' Right of Station 9+61

(DEPTH) ELEV.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLES						DRILLED BY	REMARKS
				Sample No.	Sample Type	Qu (TSF)	N Value (Blows)	Bulge / Shear	Moisture (%)		
79.40										Randy Safranski Diedrich D-120	
78.40			22								
77.40			23	9	SS	3.1	26	S	16		
76.40	Very Stiff Brownish Gray Clay Till (Occasional Black Streaks)		24								
75.40			25								
74.40			26	10	SS	3.6	27	S	16		
73.40			27								
72.40			28	11	SS	--	38	--	17		
71.40	Dense Gray Silt		29								
70.40			30								
69.40			31	12	SS	--	46	--	17		
68.40			32								
67.40			33								
66.40			34								
65.40	Dense Olive Brown And Gray Clay Till		35								
64.40			36	13	SS	5.1	41	S	12		
63.40			37								
62.40			38								
61.40			39								
60.40	Very Dense Gray Weathered Shale		40	14	SS	--	57	--	16		
59.40			41								

Groundwater Data: Static water level after auger removal - elevation 90.0.
Comments: Bin south west ringwall = 100.0.

Midwest Testing Services, Inc.
3705 Progress Blvd.
Peru, IL 61354
Phone: 815-223-6696
Fax: 815-223-6659
e-mail: mts37@comcast.net

Client: Coombe-Bloxdorf, P.C.
Project Name: Long Point Rd District Section 06-00169-01-BR
Project Site: Livingston County, Illinois
Boring No. B-1
Surface Elev. 100.40
Auger Depth 46' Rotary Depth NA
Start Date 10/10/09 Finish Date 10/10/09

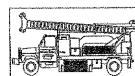
Location: 7' Right of Station 9+61

(DEPTH) ELEV.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLES						DRILLED BY	REMARKS
				Sample No.	Sample Type	Qu (TSF)	N Value (Blows)	Bulge / Shear	Moisture (%)		
58.40										Randy Safranski Diedrich D-120	
57.40			43								
56.40	Very Dense Gray Shale		44								
55.40			45								
54.40			46	15	SS	--	100	5"	8		
53.40	Bottom of Boring		47								
52.40			48								
51.40			49								
50.40			50								
49.40			51								
48.40			52								
47.40			53								
46.40			54								
45.40			55								
44.40			56								
43.40			57								
42.40			58								
41.40			59								
40.40			60								
39.40			61								
38.40			62								

Groundwater Data: Static water level after auger removal - elevation 90.0.
Comments: Bin southwest ringwall = 100.0.

SHEET TITLE	
BORING LOGS	
PROJECT	PROJECT NO.
C.H. 35 OVER DIAMOND CREEK	06079
FAS RTE.267 SEC. 06-00169-01-BR	DATE 3/29/11
LIVINGSTON COUNTY	DESIGN BY CME/MCB
STATION 10+30.00	DRAWN BY CFC
STRUCTURE NUMBER 053-3456	CHECKED BY CME/MCB
DRAWING NO.	
11	
OF 12 SHTS	

Coombe-Bloxdorf P.C.
-CIVIL ENGINEERS-
-STRUCTURAL ENGINEERS-
-LAND SURVEYORS-
Design Firm License No. 184-002703



Midwest Testing Services, Inc.
3705 Progress Blvd.
Peru, IL 61354

BORING LOG
Sheet 1 of 3
Phone: 815-223-6696
Fax: 815-223-6659
e-mail: mts37@comcast.net

Client: Coombe-Bloxdorf, P.C.
Project Name: Long Point Rd District Section 06-00169-01-BR CH-35
Project Site: Livingston County, Illinois

Boring No. B-2
Surface Elev. 100.60
Auger Depth 46' Rotary Depth NA
Start Date 10/10/09 Finish Date 10/10/09

Location: 6' Left of Station 10+58

(DEPTH) ELEV.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLES					DRILLED BY	
				Sample No.	Sample Type	Qu (TSF)	N Value (Blows)	Bulge / Shear	Moisture (%)	Dry Density (PCF)
100.60										
99.60			1							
98.60	Medium Brown Clay Mixed With Concrete Fragments (Fill)		2							
97.60			3	1	SS	---	28	---	18	
96.60			4							
95.60	Stiff Brown And Gray Clay (Fill)		5	2	SS	1.6	8	B	20	
94.60			6							
93.60			7							
92.60	Stiff Black Clay		8	3	SS	1.1	6	B	23	
91.60			9							
90.60	Medium Brownish Gray Clay		10	4	SS	0.8	5	B	25	
89.60			11							
88.60			12							
87.60			13	5	SS	2.3	16	B	18	
86.60			14							
85.60			15	6	SS	2.9	19	B	16	
84.60			16							
83.60	Very Stiff Brownish Gray Clay Till		17							
82.60			18	7	SS	3.0	20	B	16	
81.60			19							
80.60			20	8	SS	2.7	18	B	17	

Groundwater Data: Static water level after auger removal - elevation 90.0.
Comments: Bin southwest ringwall = 100.0.



Midwest Testing Services, Inc.
3705 Progress Blvd.
Peru, IL 61354

BORING LOG
Sheet 2 of 3
Phone: 815-223-6696
Fax: 815-223-6659
e-mail: mts37@comcast.net

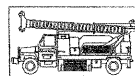
Client: Coombe-Bloxdorf, P.C.
Project Name: Long Point Rd District Section 06-00169-01-BR
Project Site: Livingston County, Illinois

Boring No. B-2
Surface Elev. 100.60
Auger Depth 46' Rotary Depth NA
Start Date 10/10/09 Finish Date 10/10/09

Location: 7' Right of Station 9+61

(DEPTH) ELEV.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLES					DRILLED BY	
				Sample No.	Sample Type	Qu (TSF)	N Value (Blows)	Bulge / Shear	Moisture (%)	Dry Density (PCF)
79.60										
78.60			22							
77.60	Very Stiff Brownish Gray Clay Till (Occasional Black Streaks)		23	9	SS	3.0	24	B	18	
76.60			24							
75.60			25							
74.60			26	10	SS	3.4	22	S	17	
73.60			27							
72.60	Dense Gray Silt		28	11	SS	---	35	---	18	
71.60			29							
70.60			30							
69.60			31	12	SS	---	48	---	17	
68.60			32							
67.60			33							
66.60	Dense Olive Brown And Gray Clay Till		34							
65.60			35							
64.60			36	13	SS	4.7	44	S	12	
63.60			37							
62.60			38							
61.60			39							
60.60	Very Dense Gray Weathered Shale		40	14	SS	---	62	---	14	
59.60			41							

Groundwater Data: Static water level after auger removal - elevation 90.0.
Comments: Bin southwest ringwall = 100.0.



Midwest Testing Services, Inc.
3705 Progress Blvd.
Peru, IL 61354

BORING LOG
Sheet 3 of 3
Phone: 815-223-6696
Fax: 815-223-6659
e-mail: mts37@comcast.net

Client: Coombe-Bloxdorf, P.C.
Project Name: Long Point Rd District Section 06-00169-01-BR
Project Site: Livingston County, Illinois

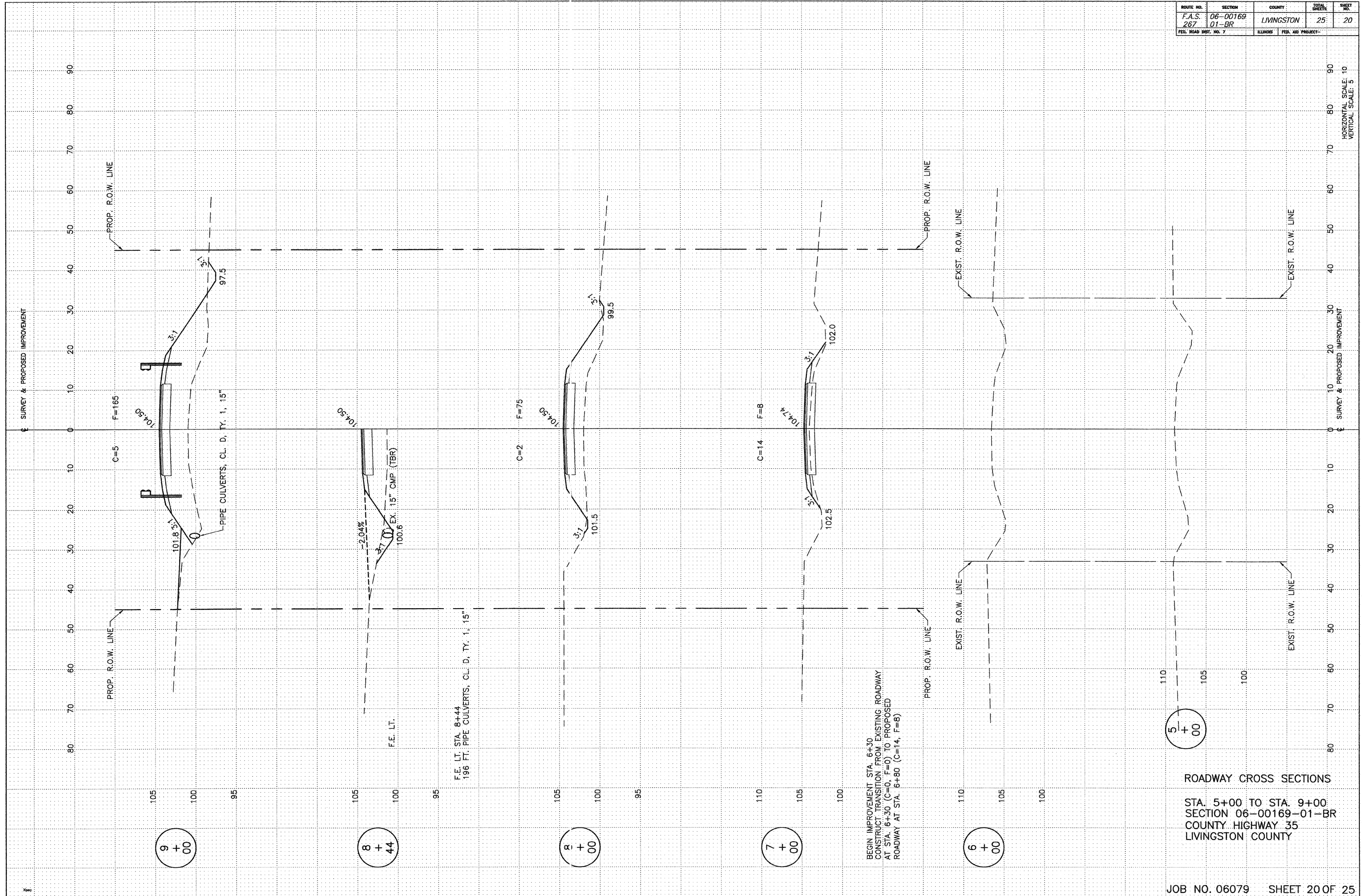
Boring No. B-2
Surface Elev. 100.60
Auger Depth 46' Rotary Depth NA
Start Date 10/10/09 Finish Date 10/10/09

Location: 7' Right of Station 9+61

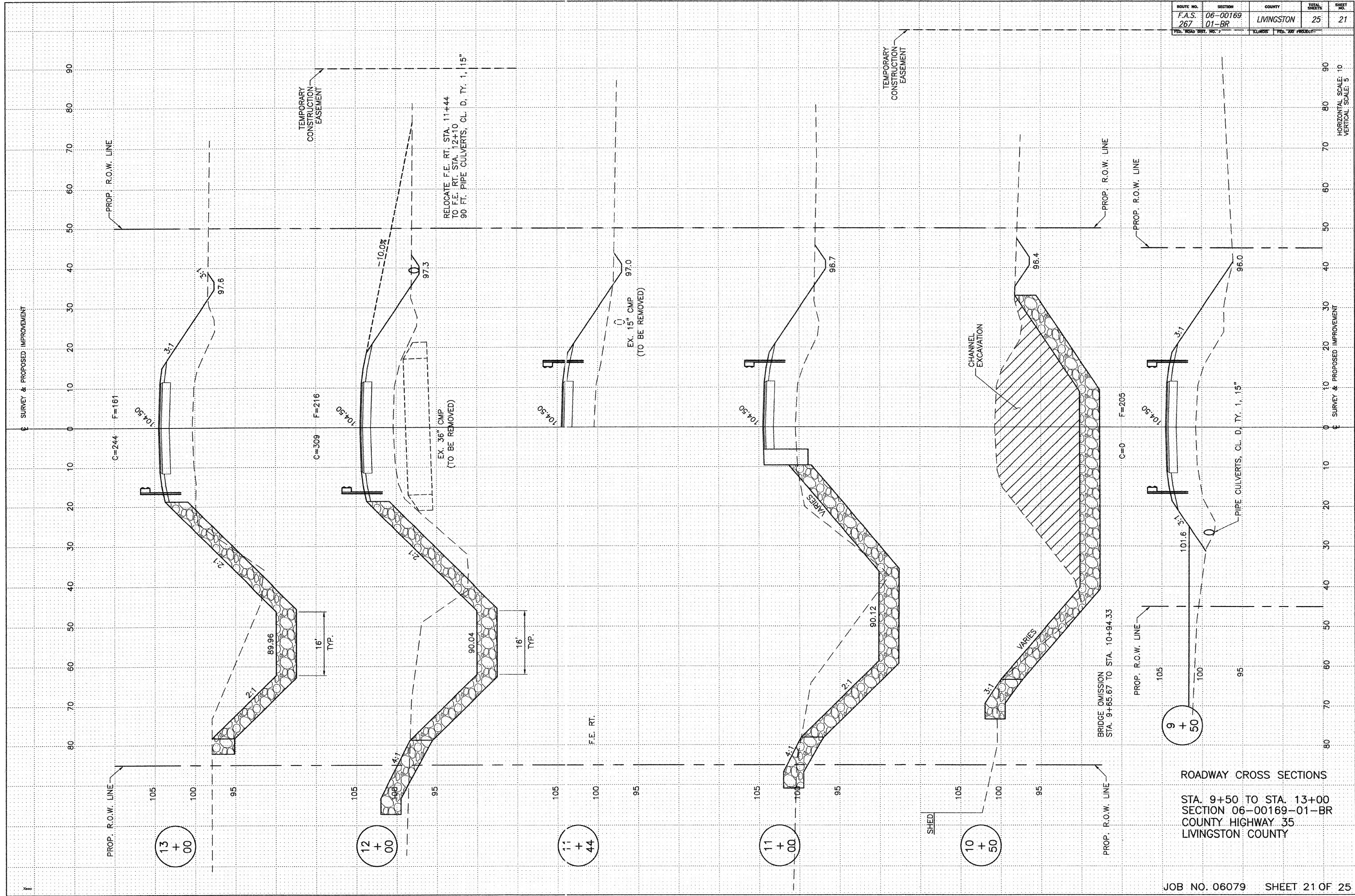
(DEPTH) ELEV.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLES					DRILLED BY	
				Sample No.	Sample Type	Qu (TSF)	N Value (Blows)	Bulge / Shear	Moisture (%)	Dry Density (PCF)
58.60										
57.60			43							
56.60	Very Dense Gray Shale		44							
55.60			45							
54.60			46	15	SS	---	100	---	9	
53.60	Bottom of Boring		47							
52.60			48							
51.60			49							
50.60			50							
49.60			51							
48.60			52							
47.60			53							
46.60			54							
45.60			55							
44.60			56							
43.60			57							
42.60			58							
41.60			59							
40.60			60							
39.60			61							
38.60			62							

Groundwater Data: Static water level after auger removal - elevation 90.0.
Comments: Bin southwest ringwall = 100.0.

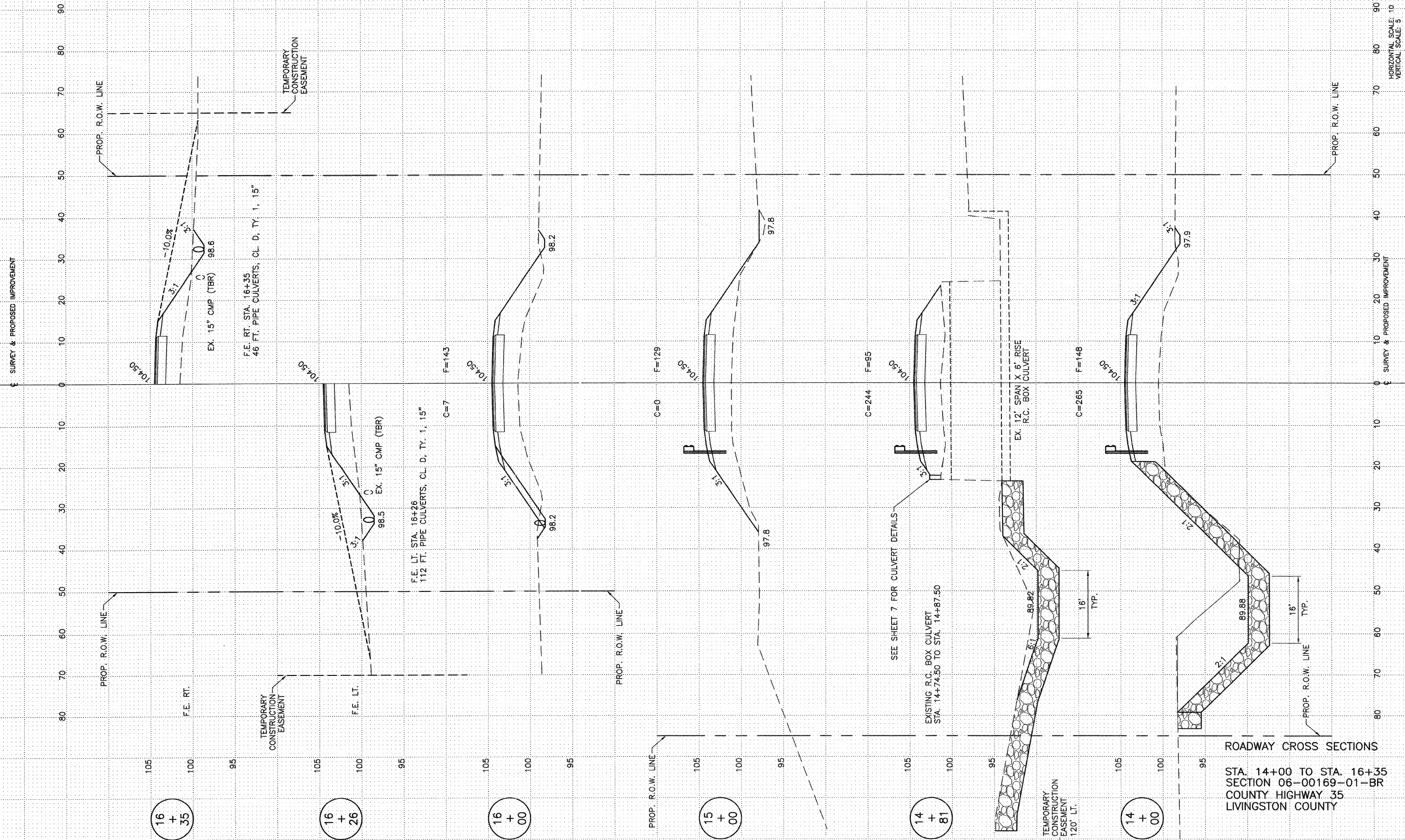
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.S. 267	06-00169 01-BR	LIVINGSTON	25	20
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT--	



ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.S. 267	06-00169 01-BR	LIVINGSTON	25	21
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT	



ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.S. 267	06-00169 01-BR	LIVINGSTON	25	22
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT	



ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.S. 267	06-00169 01-BR	LIVINGSTON	25	23
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT	

0 SURVEY & PROPOSED IMPROVEMENT

80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90

EXIST. R.O.W. LINE

EXIST. R.O.W. LINE

END IMPROVEMENT STA. 19+65
CONSTRUCT TRANSITION FROM PROPOSED ROADWAY
AT STA. 19+15 (C=18, F=7) TO EXISTING
ROADWAY AT STA. 19+65 (C=0, F=0)

C=18 F=7

19
+
00

104.86 102.2 102.2 100.7

C=7 F=34

18
+
00

104.50 100.7 100.7 100.7

EXIST. R.O.W. LINE

EXIST. R.O.W. LINE

C=9 F=99

17
+
00

104.50 99.2 99.2 99.2

PROP. R.O.W. LINE

PROP. R.O.W. LINE

ROADWAY CROSS SECTIONS

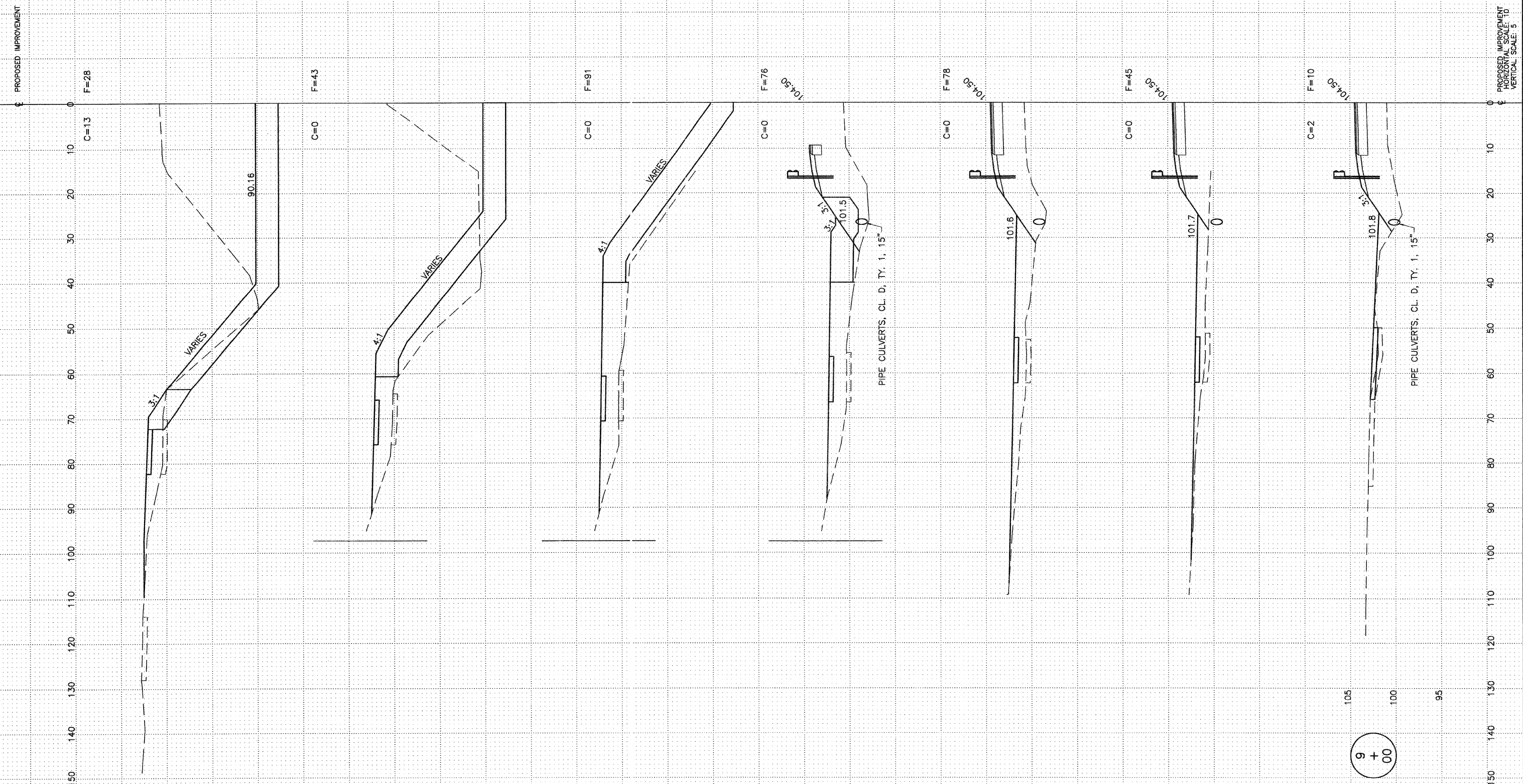
STA. 17+00 TO STA. 20+00
SECTION 06-00169-01-BR
COUNTY HIGHWAY 35
LIVINGSTON COUNTY

HORIZONTAL SCALE: 10
VERTICAL SCALE: 5

0 SURVEY & PROPOSED IMPROVEMENT

80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.S. 267	06-00169 01-BR	LIVINGSTON	25	24
FED. ROAD DIST. NO. 7		LENGTHS	FED. AID PROJECT-	

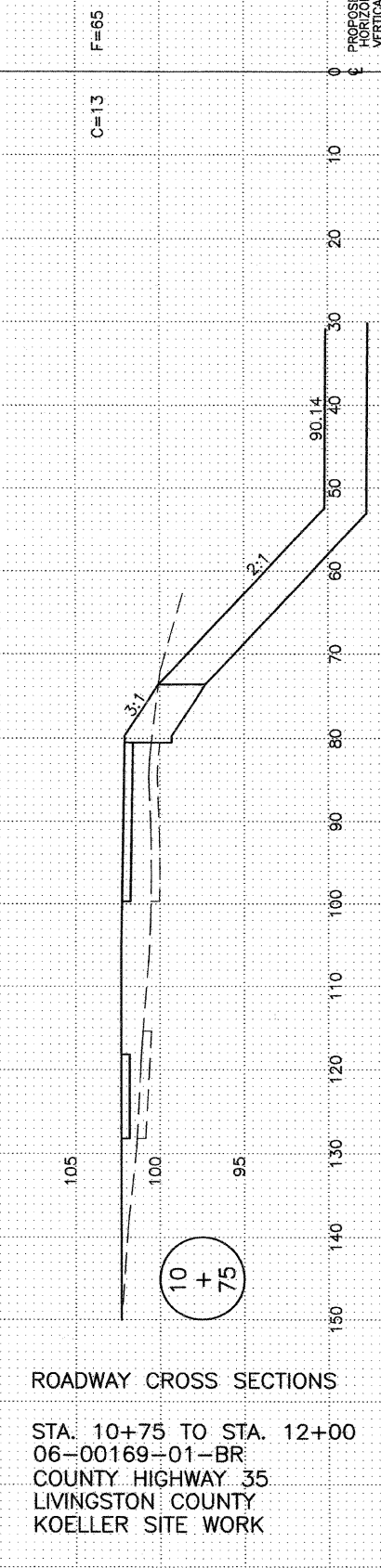
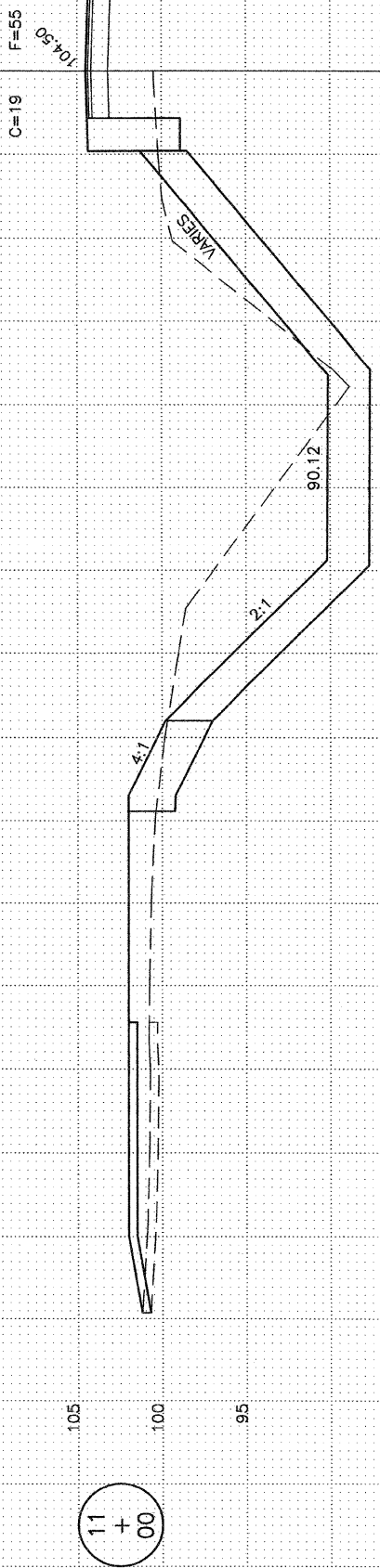
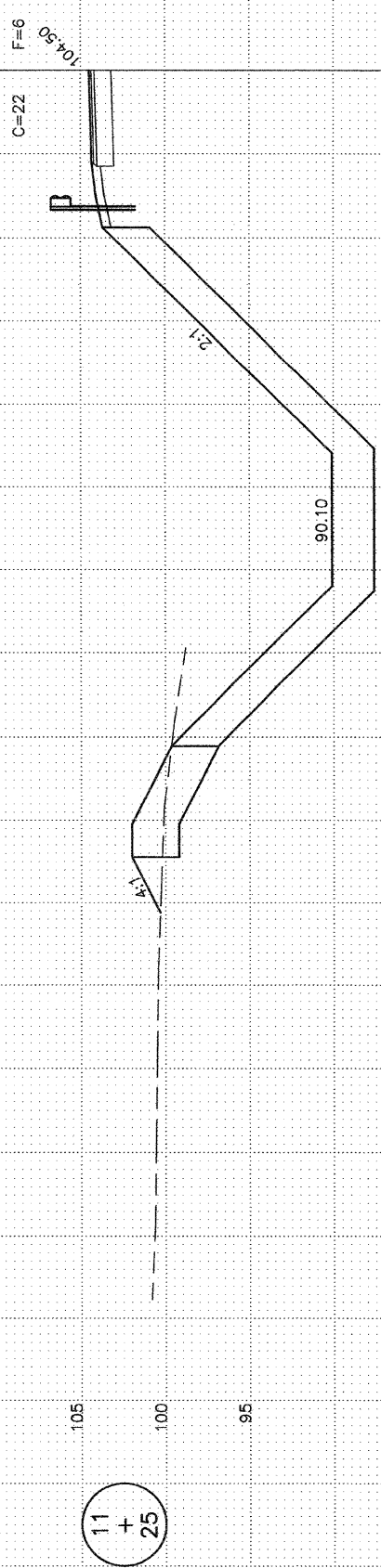
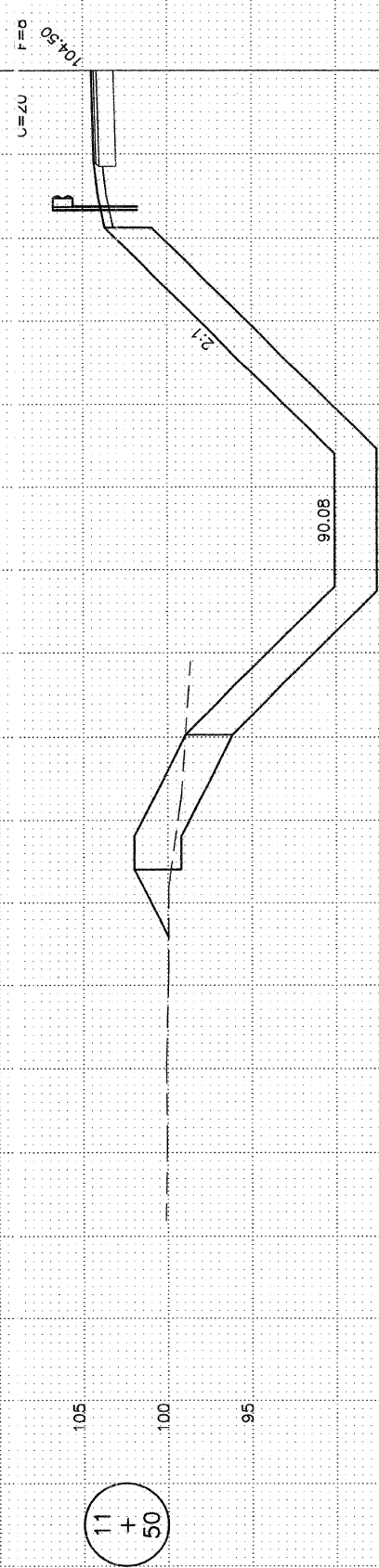
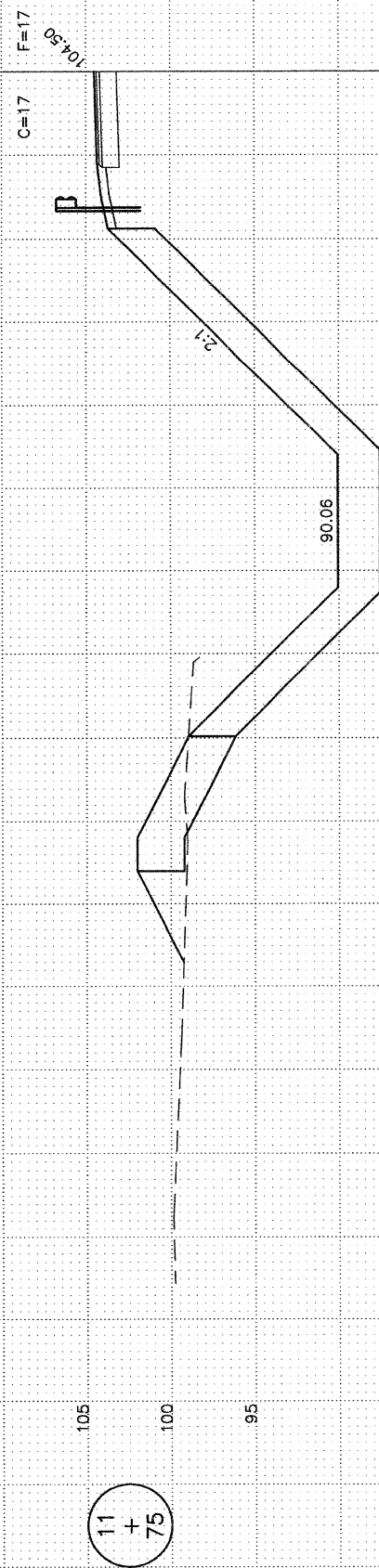
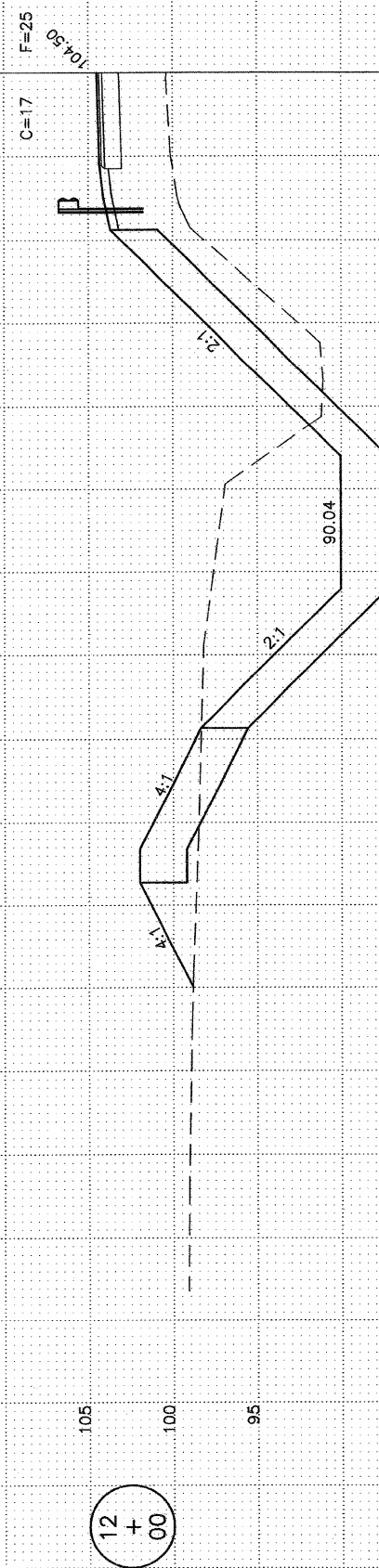


ROADWAY CROSS SECTIONS
 STA. 9+00 TO STA. 10+50
 06-00169-01-BR
 COUNTY HIGHWAY 35
 LIVINGSTON COUNTY
 KOELLER SITE WORK

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.S. 267	06-00169 01-BR	LIVINGSTON	25	25
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

PROPOSED IMPROVEMENT

PROPOSED IMPROVEMENT
HORIZONTAL SCALE: 1" = 10'
VERTICAL SCALE: 1" = 5'



ROADWAY CROSS SECTIONS
STA. 10+75 TO STA. 12+00
06-00169-01-BR
COUNTY HIGHWAY 35
LIVINGSTON COUNTY
KOELLER SITE WORK