

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
10-00091-00-BT	EFFINGHAM	17	1
CONTRACT NO. 95646			

Joint Utility Locating Information for Excavators  
JULIE 1-800-892-0123

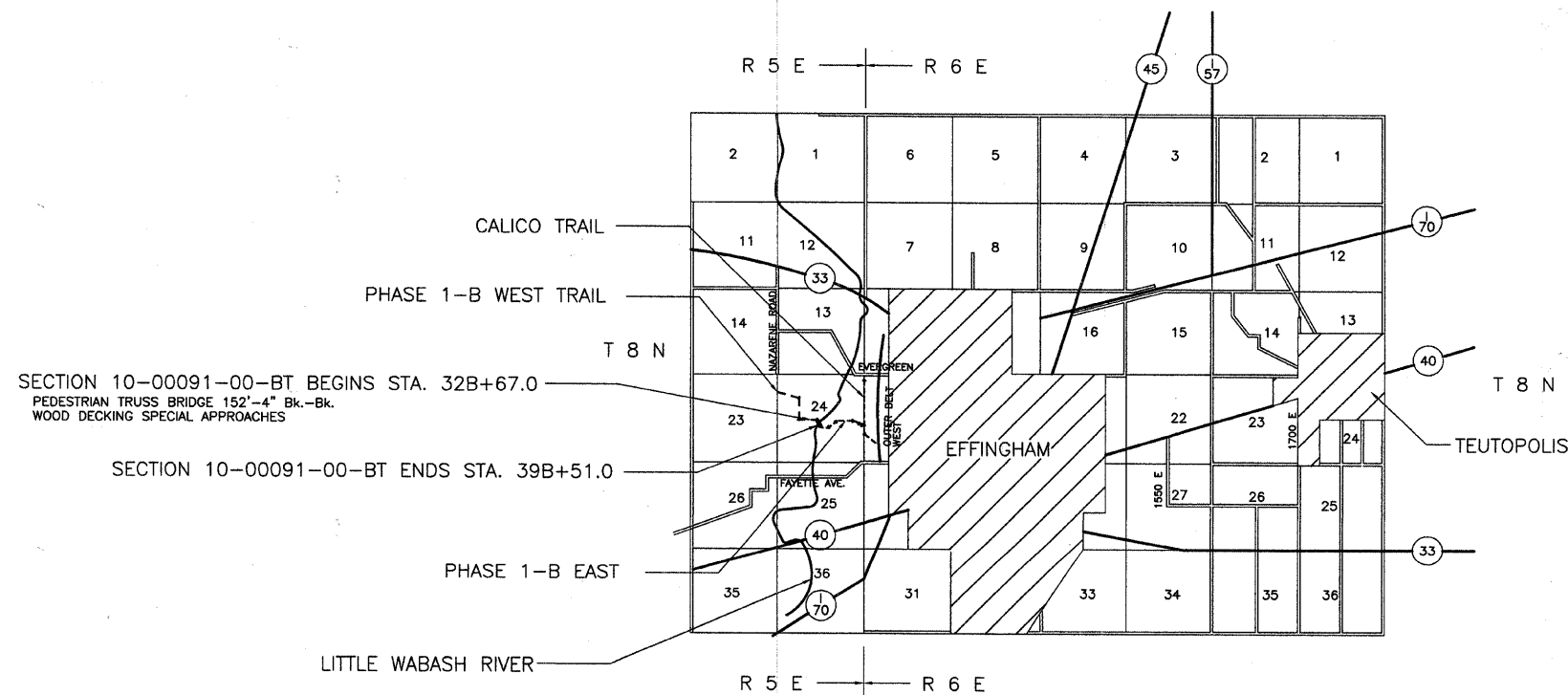
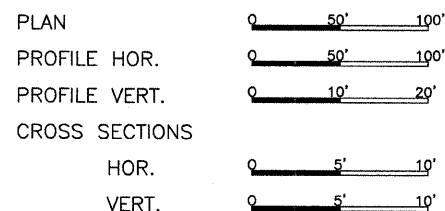
PLANS FOR PROPOSED  
TRANSPORTATION, COMMUNITY, AND SYSTEM PRESERVATION PROJECT  
PEDESTRIAN TRUSS BRIDGE AND APPROACH WALKWAYS

SECTION 10-00091-00-BT  
PROJECT TCSP-IL09(029)  
JOB NO. C-97-033-11  
EFFINGHAM COUNTY

INDEX OF SHEETS

SHEET	ITEM
1	COVER SHEET
2	SUMMARY OF QUANTITIES/TYPICAL SECTIONS
3	OVERALL PLAN AND PROFILE
4	GENERAL PLAN AND ELEVATION
5	BRIDGE DETAILS
6	ABUTMENT AND WINGWALL PLAN - DIMENSIONS
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10	EAST WOOD DECKING SPECIAL, PLAN AND PROFILE
11	WOOD DECKING SPECIAL, ABUTMENT DETAILS
12-13	WOOD DECKING SPECIAL, DETAILS
14-17	CROSS SECTIONS

- STANDARD DRAWINGS
- STANDARD 000001-06
  - STANDARD 280001-05
  - STANDARD 515001-03
  - STANDARD 542401-01
  - STANDARD 701901-01



NET LENGTH SECTION 10-00091-00-BT = 684.0 Ft. = 0.129 Mi.

*John A. Charlton*  
Ill. Reg. Prof. Eng. #29175  
11/1/2011  
Lic Expires 11/30/2011

CHARLESTON ENGINEERING INC.  
105 N. KITCHELL  
P.O. BOX 397  
OLNEY, ILLINOIS 62450  
PH. 618-392-0736

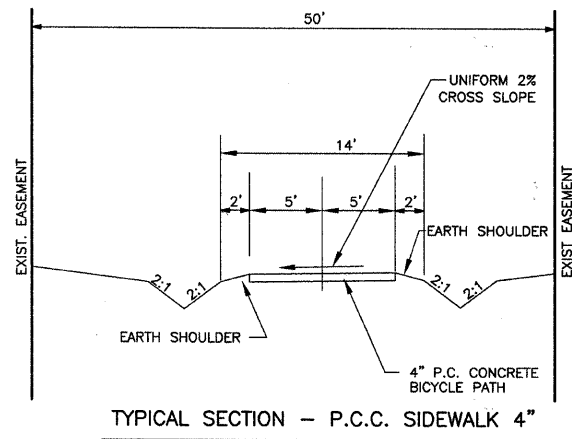
APPROVED *John A. Charlton* 2011  
COUNTY ENGINEER

PASSED *Maureen Koehl* 1-18 2011  
DISTRICT SEVEN ENGINEER OF  
LOCAL ROADS AND STREETS

Releasing For  
Bid Based on  
Limited Review

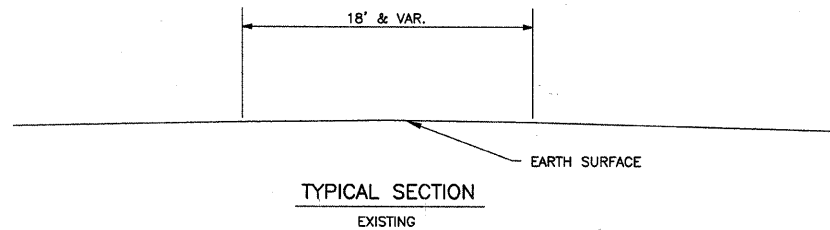
*Roger L. Dishell* 1-18 2011  
DEPUTY DIRECTOR OF HIGHWAYS  
REGION FOUR ENGINEER

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
10-00091-00-BT	EFFINGHAM	17	2
CONTRACT NO. 95646			



TYPICAL SECTION - P.C.C. SIDEWALK 4"

PROPOSED  
STA. 32B+67 TO 33B+10  
STA. 39B+40 TO 39B+51  
THE DIRECTION OF THE CROSS SLOPE  
VARIES THROUGHOUT THE PROJECT



TYPICAL SECTION  
EXISTING

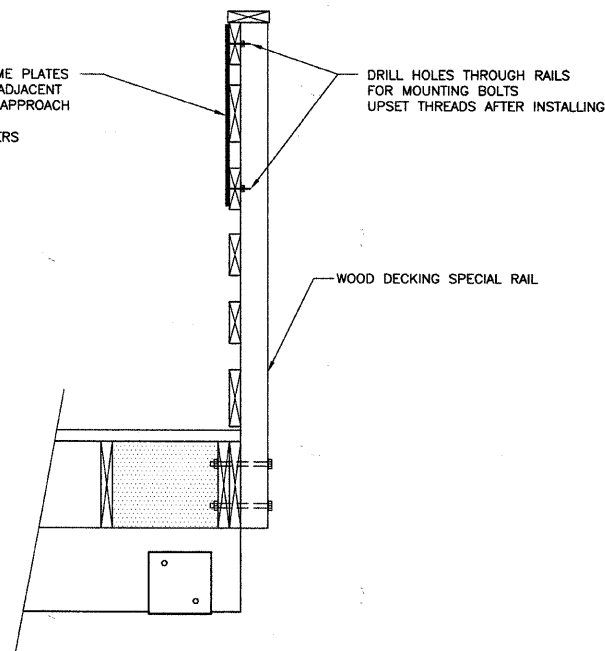
GENERAL NOTES

- SEEDING: THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF SECTION 250 OF THE STANDARD SPECIFICATIONS AND SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR SEEDING.
  - FERTILIZER NUTRIENTS SHALL BE APPLIED AT THE RATE OF 100 LB/ACRE
  - MULCHING SHALL BE DONE IN ACCORDANCE WITH ARTICLE 251 OF THE STANDARD SPECIFICATIONS AND SHALL BE DONE BY METHOD 2, PROCEDURE 1 AT THE RATE OF 2 TONS PER ACRE.
- NO PAYMENT FOR OVERHAUL WILL BE MADE ON THIS SECTION.

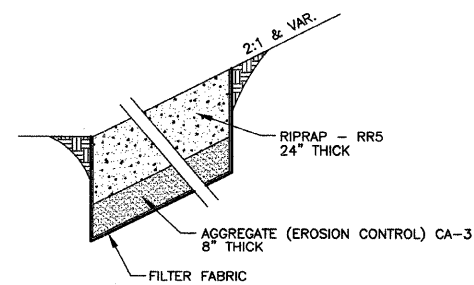
SUMMARY OF QUANTITIES

CODE NO.	ITEM	UNIT	QUANTITY
X0321317	GRANULAR BACKFILL	CU YD	60
X0322508	PEDESTRIAN TRUSS SUPERSTRUCTURE	SQ FT	1500
X2501000	SEEDING, CLASS 2 (SPECIAL)	ACRE	0.70
X5150110	NAME PLATES (SPECIAL)	EACH	2
XX008266	WOOD DECKING SPECIAL	SQ FT	4780
Z0077740	WOOD GUARD RAIL	FOOT	50
20300100	CHANNEL EXCAVATION	CU YD	130
20400800	FURNISHED EXCAVATION	CU YD	430
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	100
28001000	AGGREGATE (EROSION CONTROL)	TON	320
28100209	STONE RIPRAP, CLASS A5	TON	775
28100807	STONE DUMPED RIPRAP, CLASS A4	TON	60
28200200	FILTER FABRIC	SQ YD	775
42400100	PORTLAND CEMENT CONCETE SIDEWALK 4 INCH	SQ FT	550
50300225	CONCRETE STRUCTURES	CU YD	76.7
50800105	REINFORCEMENT BARS	POUND	10,515
51200956	FURNISHING METAL SHELL PILES 12" X 0.129"	FOOT	880
51202305	DRIVING PILES	FOOT	880
51203200	TEST PILE METAL SHELLS	EACH	2
51500100	NAME PLATES	EACH	1
67100100	MOBILIZATION	L SUM	1

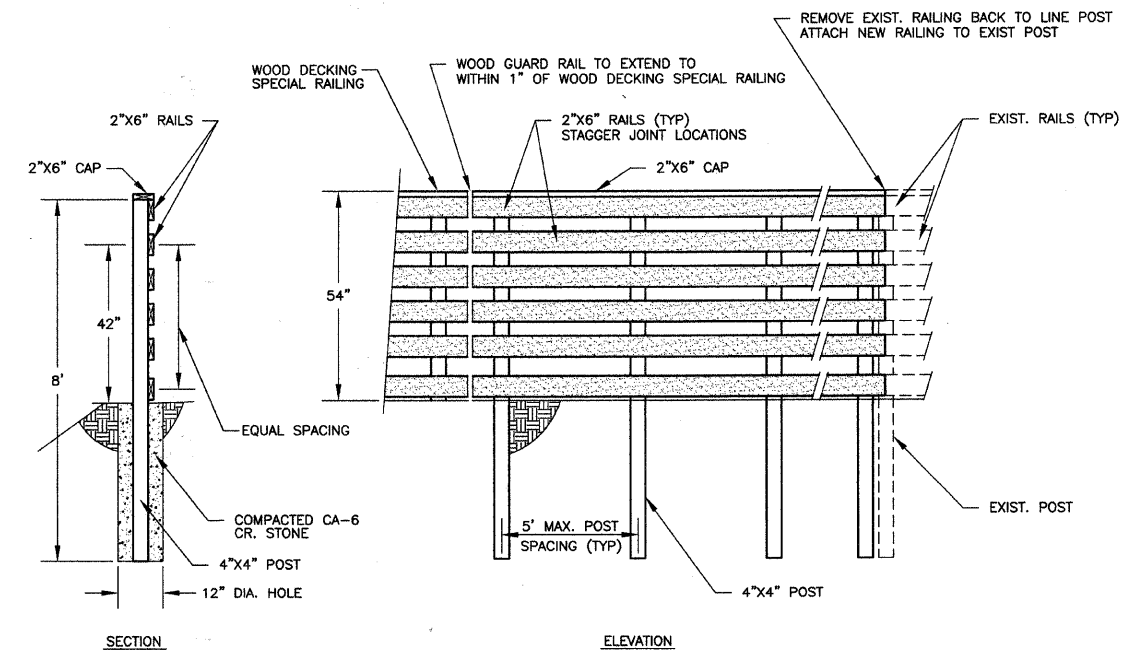
INSTALL 2 EA. 2' X 3' BRASS NAME PLATES ON WOOD DECKING SPECIAL RAIL ADJACENT TO THE BRIDGE - ONE ON EACH APPROACH AS DIRECTED BY THE ENGINEER NAME PLATES FURNISHED BY OTHERS



NAME PLATES (SPECIAL) MOUNTING DETAILS



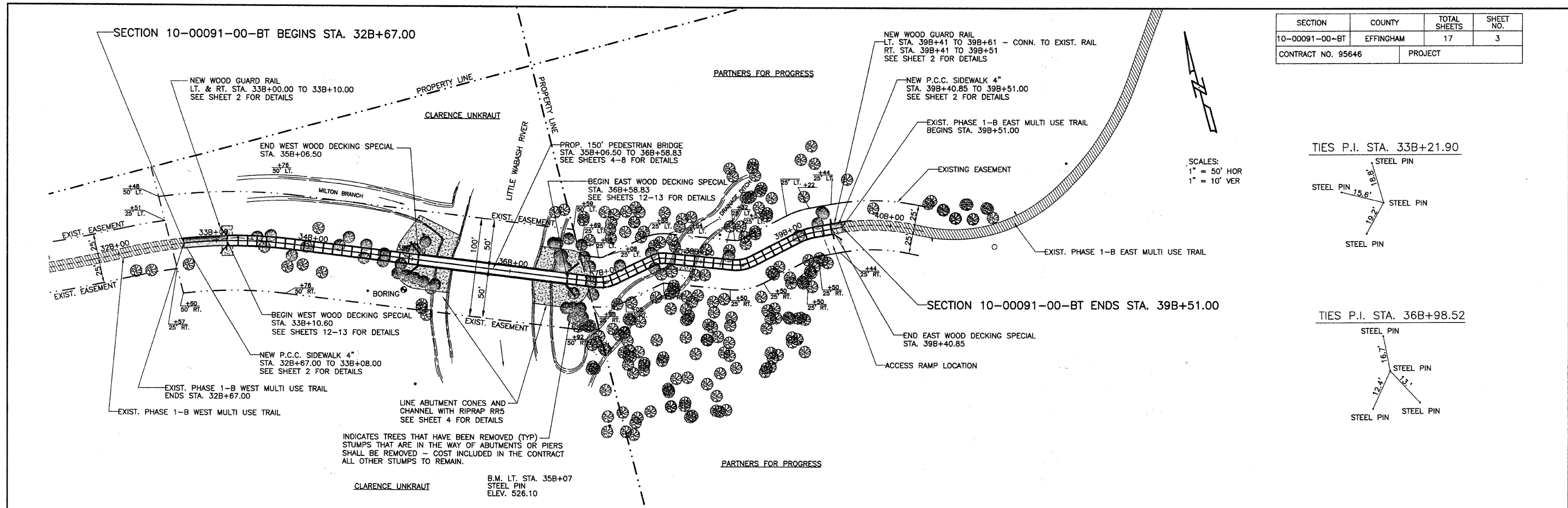
STONE RIPRAP, CLASS A5 DETAIL



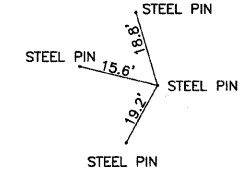
WOOD GUARD RAIL DETAIL

- ALL LUMBER USED IN THE RAILING SHALL BE PRESSURE TREATED.
- ALL FASTENERS SHALL BE GALVANIZED OR STAINLESS STEEL. NO EXCEPTIONS.
- ALL EXTERIOR CORNERS ON THE RAILS SHALL BE ROUNDED - 1 1/2" RADIUS.
- ALL RAIL JOINTS SHALL BE FLUSH.
- ALL LUMBER DIMENSIONS ARE NOMINAL.

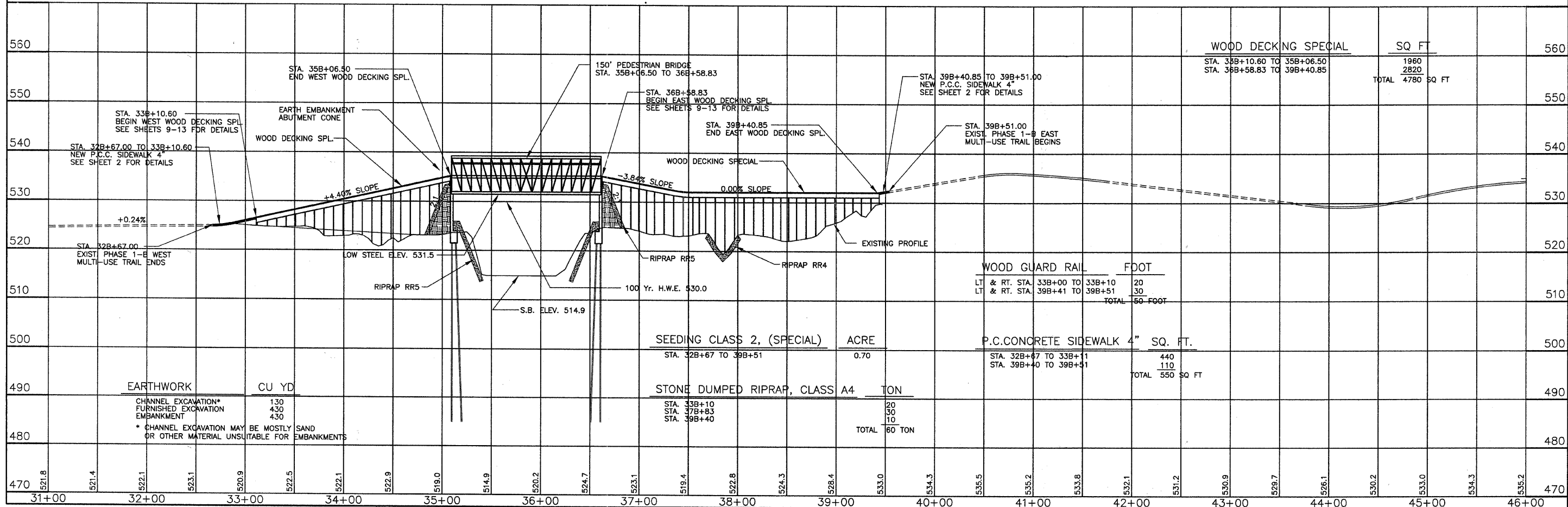
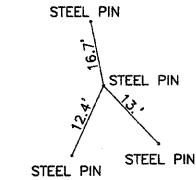
SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
10-00091-00-BT	EFFINGHAM	17	3
CONTRACT NO. 95646		PROJECT	

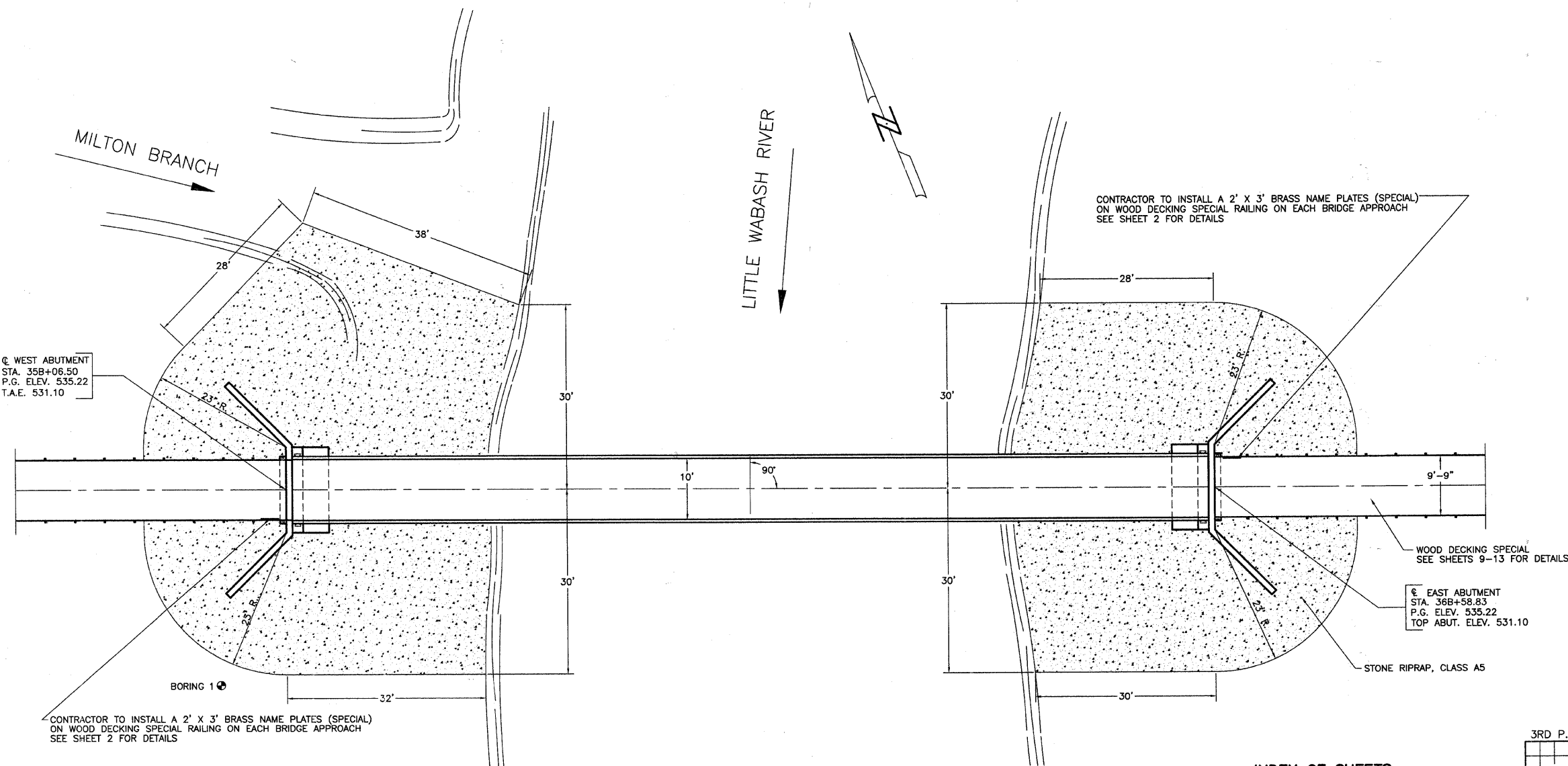


TIES P.I. STA. 33B+21.90



TIES P.I. STA. 36B+98.52





W. WEST ABUTMENT  
STA. 35B+06.50  
P.G. ELEV. 535.22  
T.A.E. 531.10

E. EAST ABUTMENT  
STA. 36B+58.83  
P.G. ELEV. 535.22  
TOP ABUT. ELEV. 531.10

**PLAN VIEW**  
SKEW ANGLE = 0°

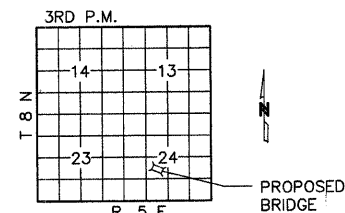
CONTRACTOR TO INSTALL A 2' X 3' BRASS NAME PLATES (SPECIAL) ON WOOD DECKING SPECIAL RAILING ON EACH BRIDGE APPROACH SEE SHEET 2 FOR DETAILS

WOOD DECKING SPECIAL SEE SHEETS 9-13 FOR DETAILS

STONE RIPRAP, CLASS A5

CONTRACTOR TO INSTALL A 2' X 3' BRASS NAME PLATES (SPECIAL) ON WOOD DECKING SPECIAL RAILING ON EACH BRIDGE APPROACH SEE SHEET 2 FOR DETAILS

- INDEX OF SHEETS**
1. General Plan & Elevation
  2. Bridge Details, Boring
  3. Abutment Plan - Dimensions
  4. Abutment Plan - Reinforcement
  5. Abutment - Sections and Details

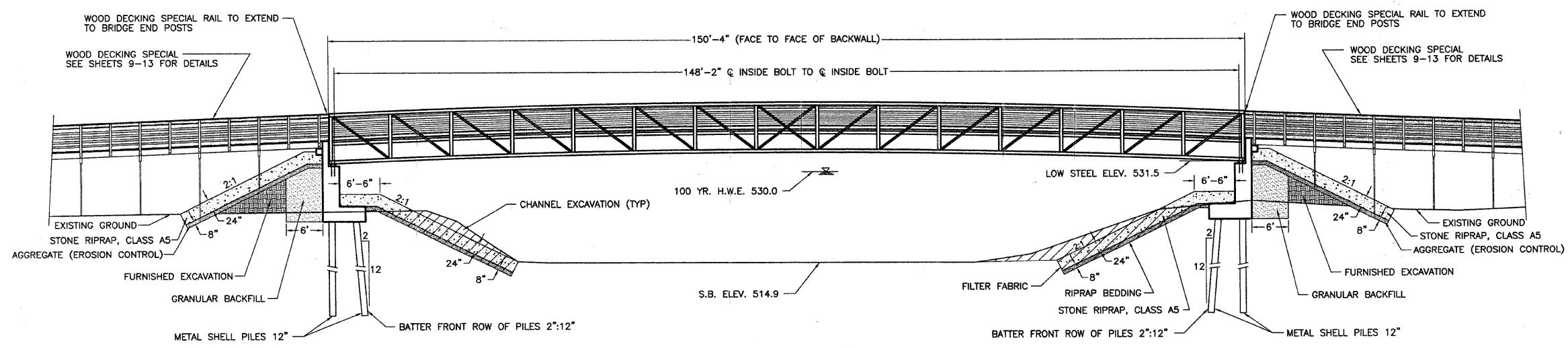


**LOCATION SKETCH**

THIS STRUCTURAL SEAL COVERS THE PEDESTRIAN TRUSS SUPERSTRUCTURE ABUTMENTS AND THE TIMBER ITEMS OF THE WOOD DECKING SPECIAL



A SEPARATE STRUCTURAL SEAL WILL BE PROVIDED BY THE PEDESTRIAN TRUSS SUPERSTRUCTURE MANUFACTURER.  
A SEPARATE STRUCTURAL SEAL WILL BE PROVIDED BY THE HELICAL PILE MANUFACTURER FOR THE WOOD DECKING SPECIAL.



**PROFILE VIEW**

**PILE DATA (2-ABUTS.)**

B.M. RT. STA. 35B+07  
STEEL PIN  
ELEV. 526.10

Type	Metal Shell Piles 12"
Nominal Required Bearing	223 kips
Factored Resistance Available	122 kips
Estimated Pile Length	40 Feet
Number of Production Piles	22
Number of Test Piles	2 (1 Each Abutment)

**WATERWAY INFORMATION**

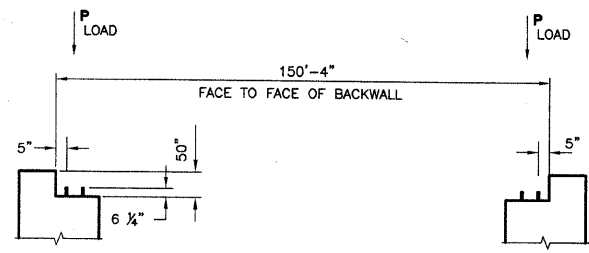
Drainage Area = 224.0 SQ MI									
Flood	Freq. Yr.	Q. C.F.S.	Opening	Sq. Ft.	Nat. H.W.E.	Head - Ft.	Headwater El.	Prop. Exist.	Prop. Exist.
Design	20	17,200	N/A	1477	527.9	N/A	0.10	N/A	528.0
Base	100	28,785	N/A	1800	530.0	N/A	0.07	N/A	530.1
Max. Record		31,500	N/A	1860	530.4	N/A	0.05	N/A	530.4
Max. Calc.	500	38,200	N/A	2005	531.4	N/A	0.05	N/A	531.4

STATION 35B+82.66  
LITTLE WABASH RIVER  
SEC. 10-00091-00-BT BUILT 20  
EFFINGHAM COUNTY  
PROJECT NO. TCSP-IL09(029)

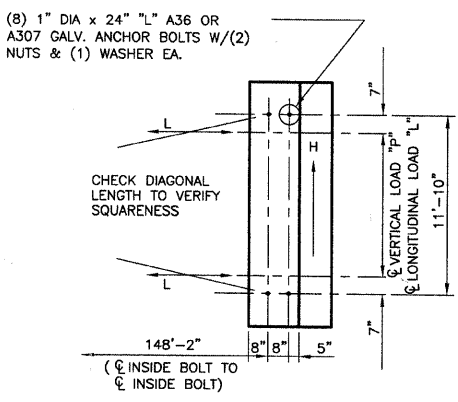
**LETTERING FOR NAME PLATE**  
Locate Name Plate at N.W. corner of Bridge. Contractor to coordinate permanent mounting on the bridge with the bridge manufacturer.

**CHARLESTON ENGINEERING, INC.**  
CONSULTING ENGINEERS  
106 NORTH KITCHELL  
P.O. BOX 397  
OLNEY, ILLINOIS 62450  
(618) 392-0736  
ILLINOIS DEPARTMENT OF PROFESSIONAL REGULATION REGISTRATION #184-003513

**GENERAL PLAN & ELEVATION**  
**PEDESTRIAN BRIDGE OVER LITTLE WABASH RIVER**  
**SEC. 10-00091-00-BT**  
**EFFINGHAM COUNTY**  
**STATION 35B+82.66**



**ANCHOR BOLT ELEVATION**  
NOT TO SCALE



**ANCHOR BOLT PLAN**  
NOTE: ALL DIMENSIONS AND VALUES ARE SUBJECT TO CHANGE AFTER FINAL DESIGN  
BRIDGE LIFTING WEIGHT: 85,000 LBS

**DESIGN LOADINGS**

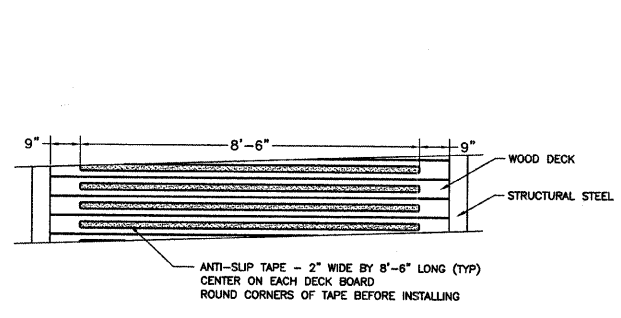
- BRIDGE LENGTH = 150.00'
- BRIDGE WIDTH = 10.00'
- LIVE LOAD = 90 psf
- VEHICLE LOAD = 10,000 lb
- WIND LOAD = 35 psf

**REACTIONS**

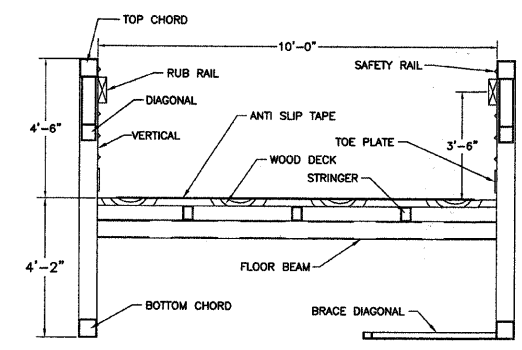
COMBINE REACTIONS AS PER LOCAL OR GOVERNING BUILDING CODES AS REQUIRED

BRIDGE REACTIONS	+ DOWNWARD LOAD - UPWARD LOAD		
	P (LBS)	H (LBS)	L (LBS)
DEAD LOAD	21,250		
UNIFORM LIVE LOAD	24,375		
VEHICLE LOAD	5,000		
WIND UPLIFT 20 PSF	-12,750		
WIND	± 12,460	23,625	
THERMAL			3,190

"P" - VERTICAL LOAD EACH BASE PLATE (4 PER BRIDGE)  
"H" - HORIZONTAL LOAD EACH FOOTING (2 PER BRIDGE)  
"L" - LONGITUDINAL LOAD EACH BASE PLATE (4 PER BRIDGE)



**ANTI SLIP TAPE DETAIL**

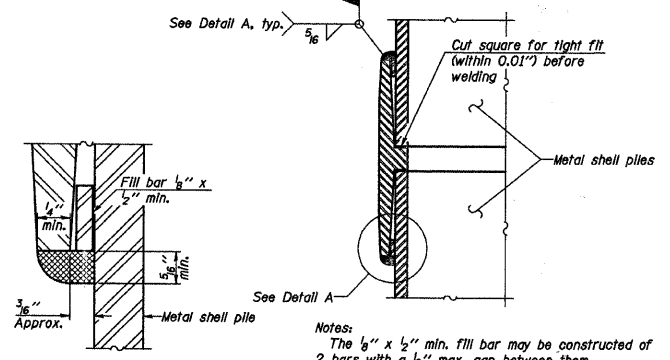


**BRIDGE CROSS-SECTION**



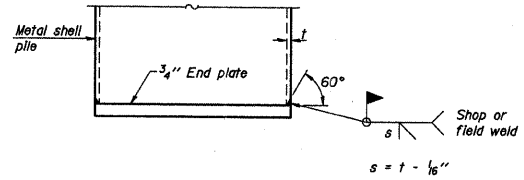
**METAL SHELL PILE TABLE**

Designation and outside diameter	Wall thickness t	Weight per foot (Lbs./ft.)	Inside volume (yd <sup>3</sup> /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

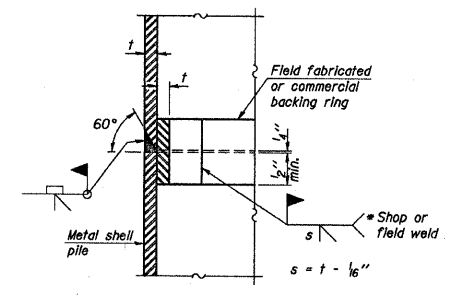


**DETAIL A**

**WELDED COMMERCIAL SPLICE**

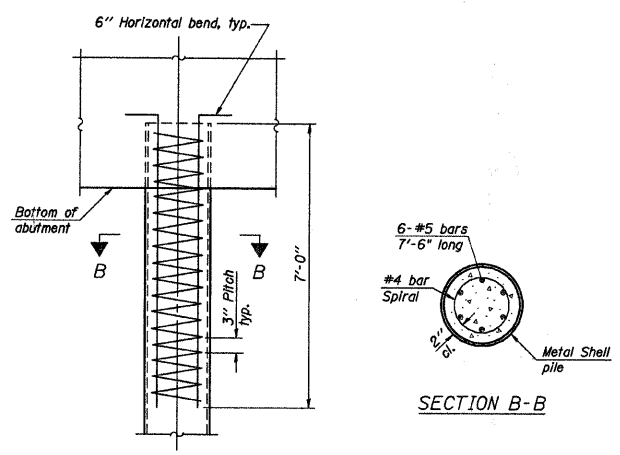


**END PLATE ATTACHMENT**



**COMPLETE PENETRATION WELD SPLICE**

\* Field fabricated backing ring may be made from pile shell by removing segment to allow reducing circumference and vertically rejoin with partial joint penetration weld.

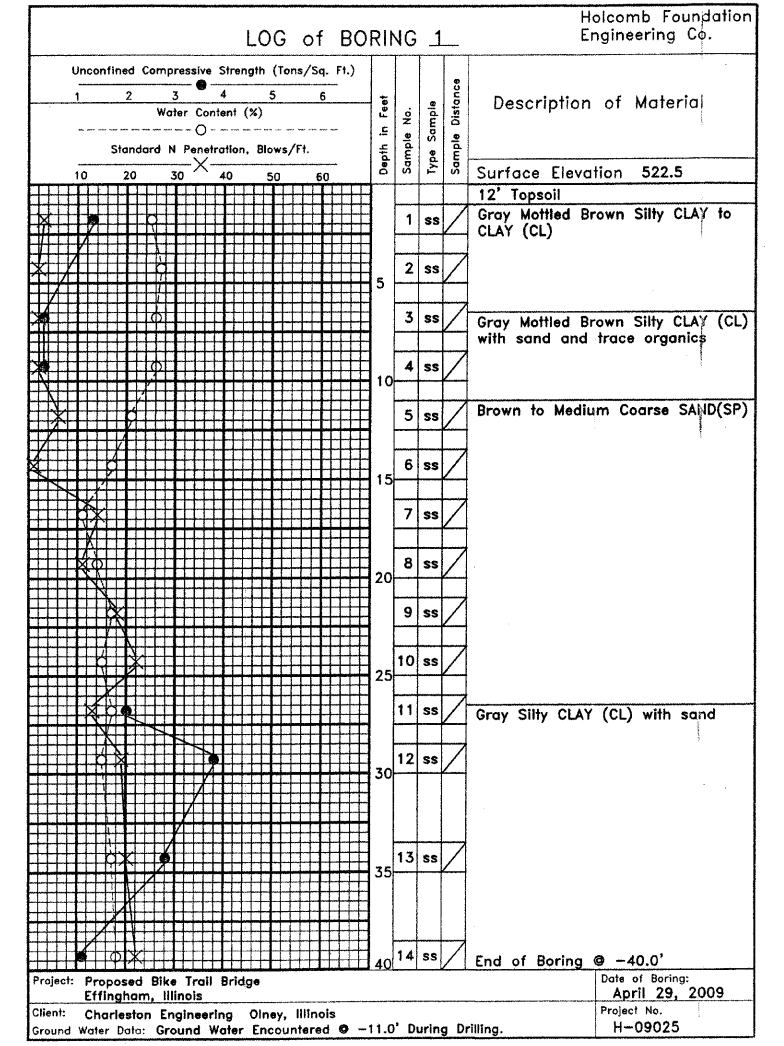


**ELEVATION**

**METAL SHELL REINFORCEMENT AT ABUTMENTS**

**METAL SHELL PILE DETAILS**

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



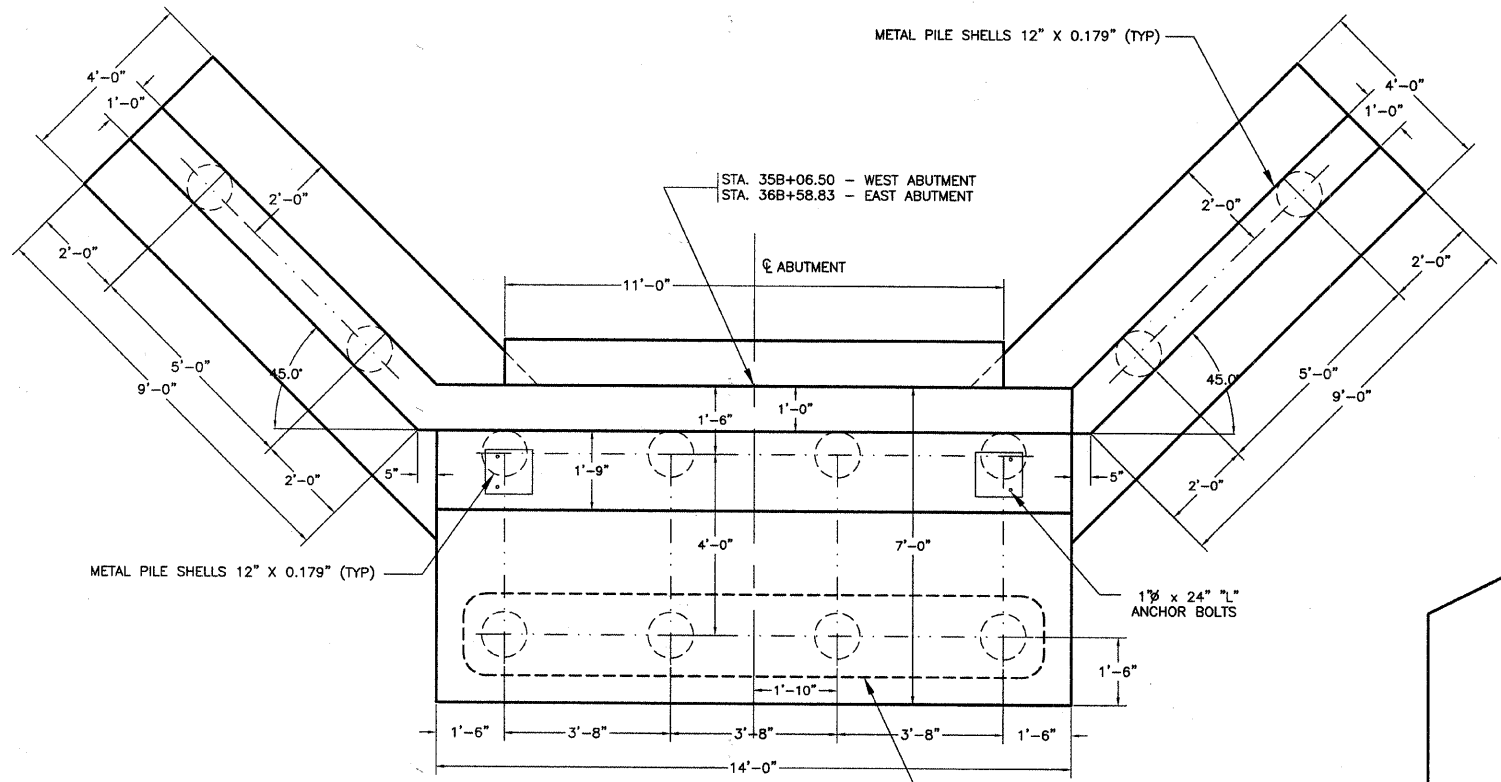
Project: Proposed Bike Trail Bridge  
Effingham, Illinois  
Client: Charleston Engineering Olney, Illinois  
Ground Water Data: Ground Water Encountered @ -11.0' During Drilling.  
Date of Boring: April 29, 2009  
Project No: H-09025

**CHARLESTON ENGINEERING, INC.**  
CONSULTING ENGINEERS  
105 NORTH KITCHELL  
P.O. BOX 387  
OLNEY, ILLINOIS 62450  
(618) 352-0736  
ILLINOIS DEPARTMENT OF PROFESSIONAL REGULATION REGISTRATION #184.00513

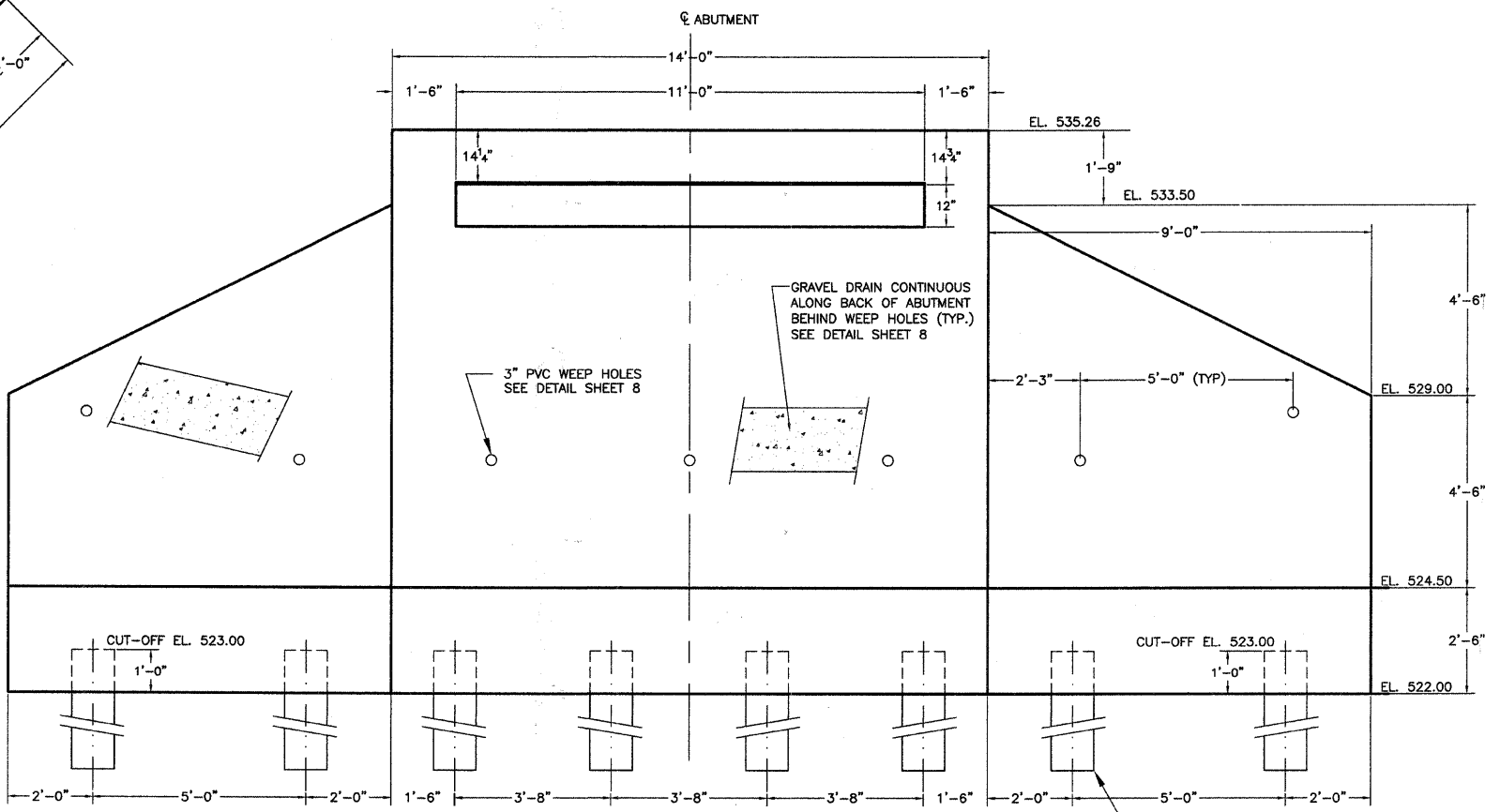
**BRIDGE DETAILS**  
**PEDESTRIAN BRIDGE**  
**OVER LITTLE WABASH RIVER**

SEC. 10-00091-00-BT  
EFFINGHAM COUNTY  
STATION 35B+82.66

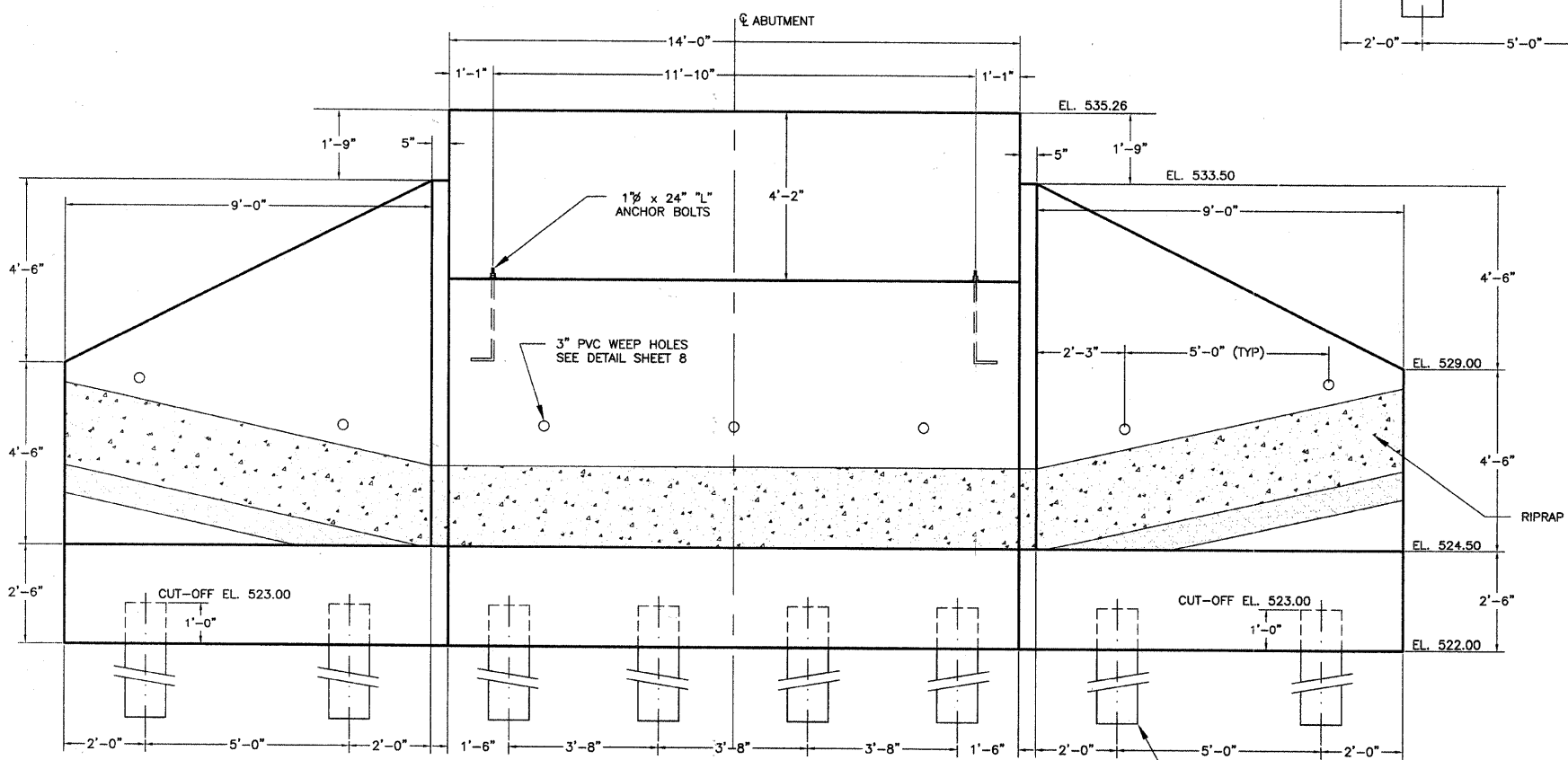
SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
10-00091-00-BT	EFFINGHAM	17	6
CONTRACT NO. 95646			



**PLAN VIEW**  
SHOWING DIMENSIONS



**BACK ELEVATION VIEW**  
SHOWING DIMENSIONS



**FRONT ELEVATION VIEW**  
SHOWING DIMENSIONS

NOTES:  
1. Wingwalls are rotated 45° in elevations for clarity.

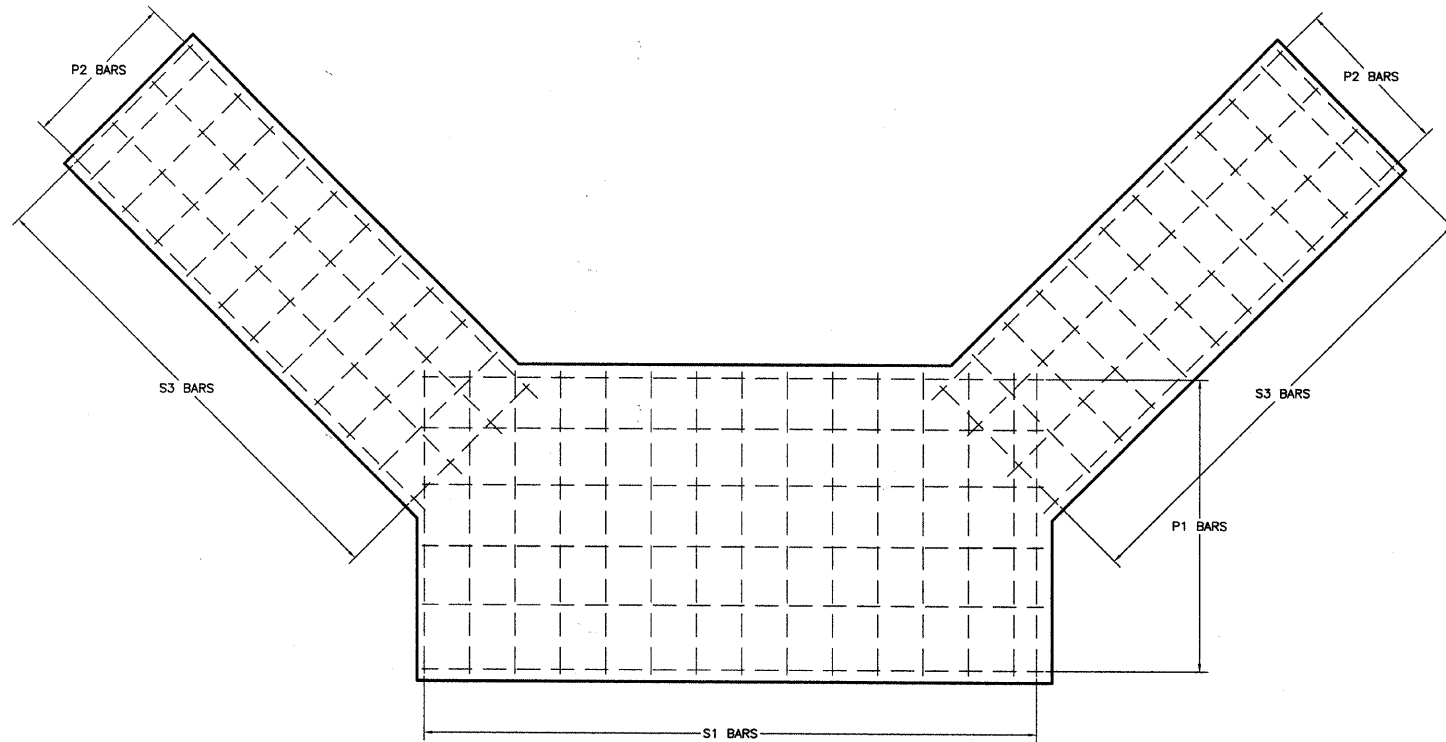
CHARLESTON ENGINEERING, INC.  
CONSULTING ENGINEERS  
105 NORTH KITCHELL  
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OLNEY, ILLINOIS 62450  
(618) 392-0736  
ILLINOIS DEPARTMENT OF PROFESSIONAL REGULATION REGISTRATION #184.003513

**ABUTMENT AND WINGWALL  
PLAN - DIMENSIONS**

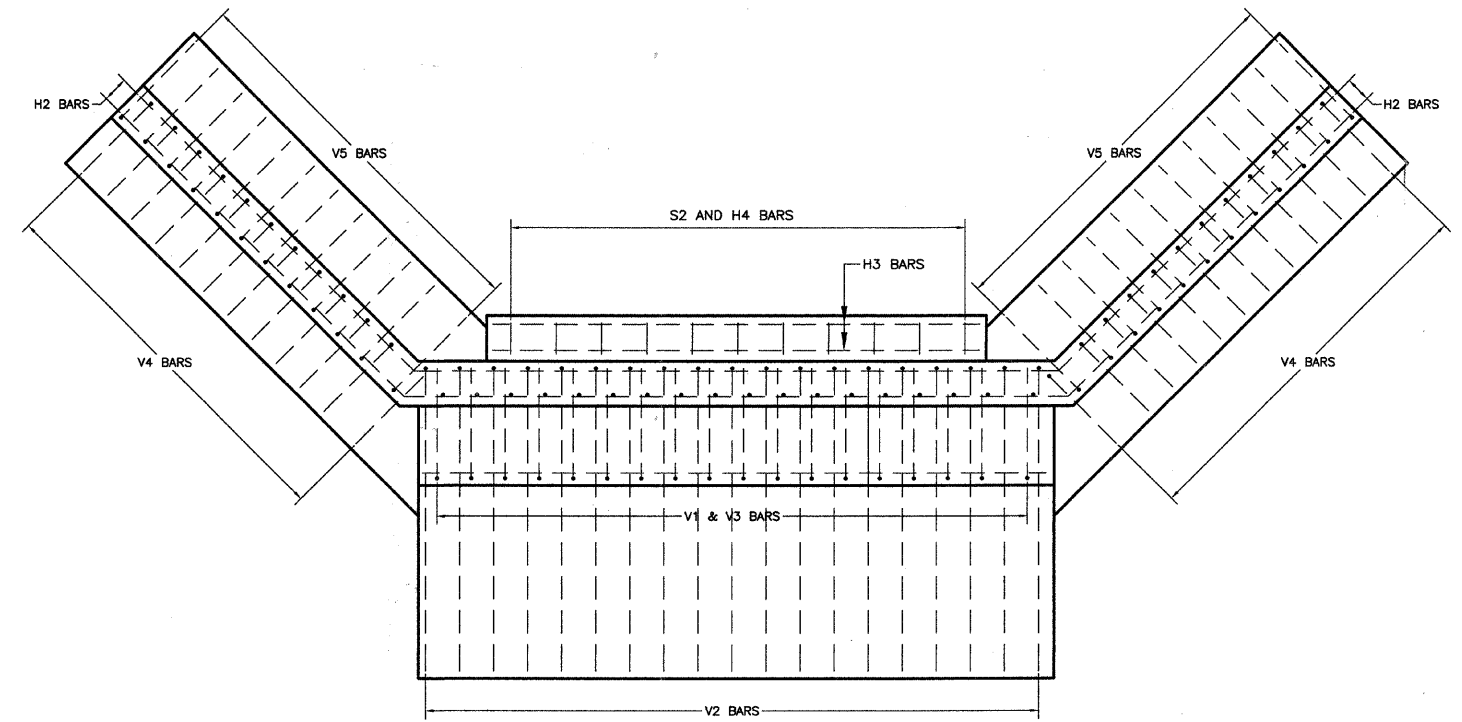
**PEDESTRIAN BRIDGE  
OVER LITTLE WABASH RIVER**

SEC. 10-00091-00-BT  
EFFINGHAM COUNTY  
STATION 35B+82 66

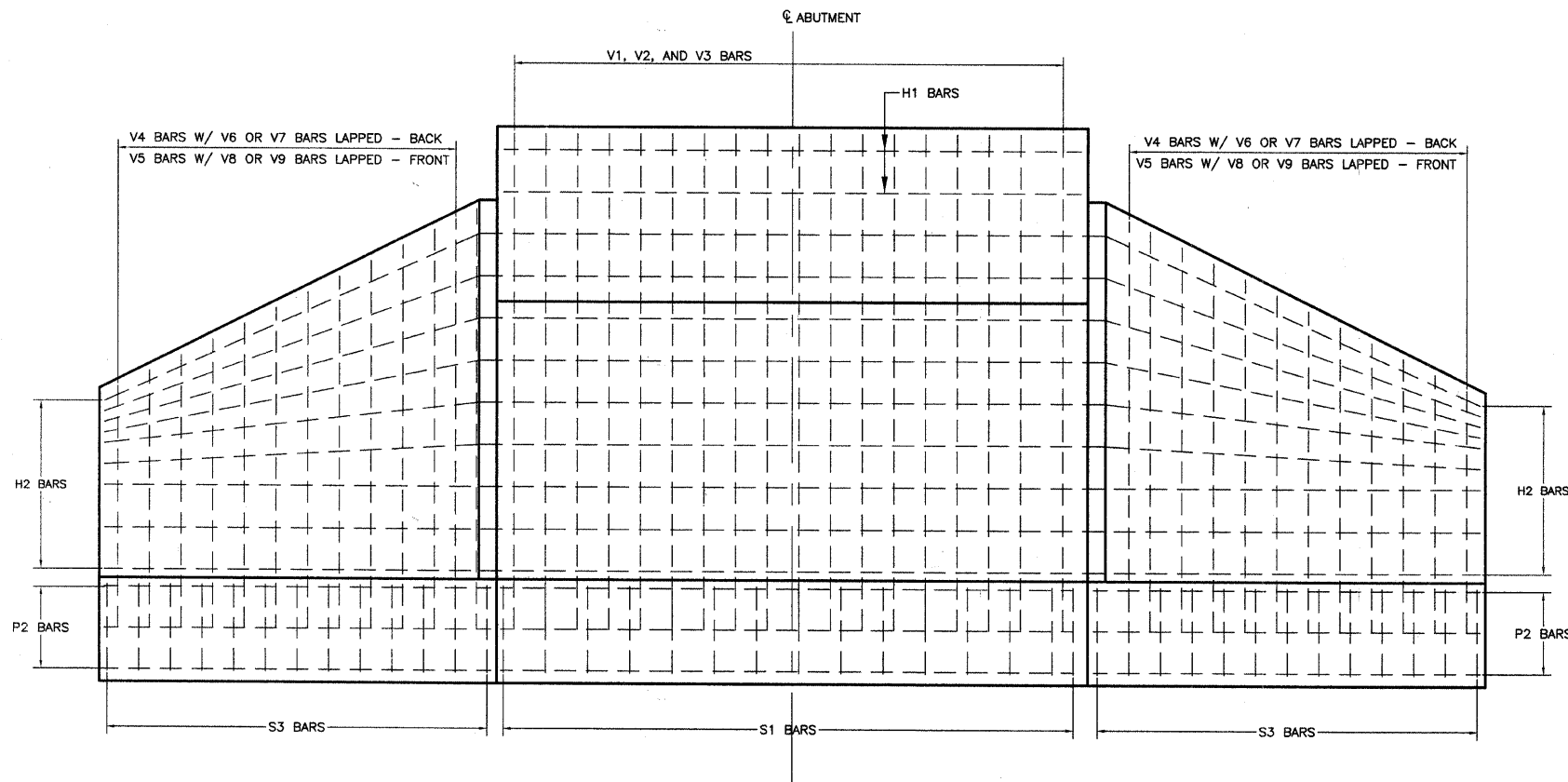
SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
10-00091-00-BT	EFFINGHAM	17	7
CONTRACT NO. 95646			



**TYPICAL PLAN VIEW**  
ABUTMENT FOOTING



**TYPICAL PLAN VIEW**  
ABUTMENT WALL AND WINGWALLS



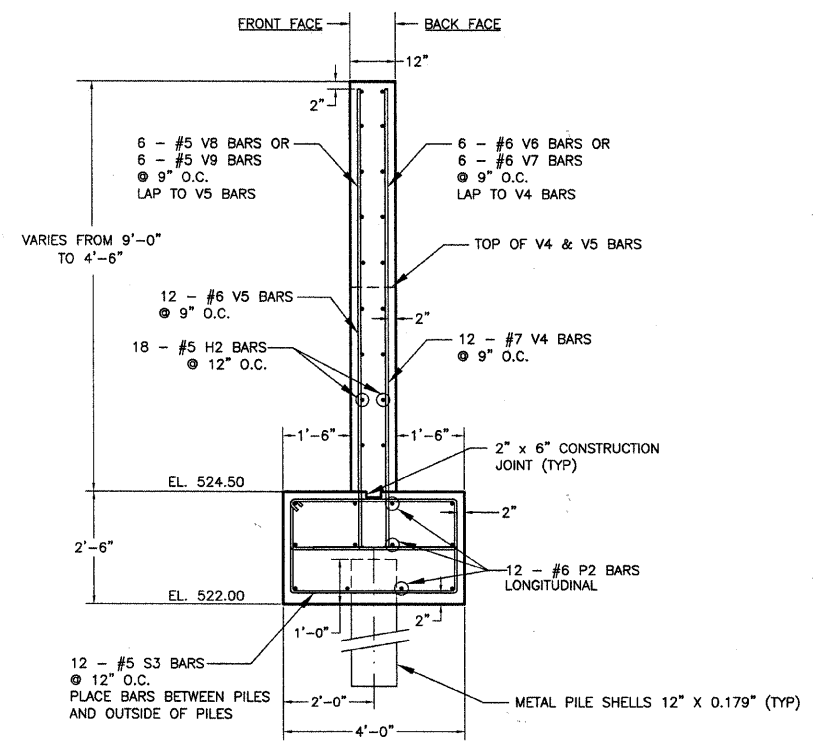
**TYPICAL ELEVATION VIEW**  
SHOWING REINFORCEMENT

**CHARLESTON ENGINEERING, INC.**  
CONSULTING ENGINEERS  
105 NORTH KITCHELL  
P.O. BOX 397  
OLNEY, ILLINOIS 62450  
(618) 352-0738  
ILLINOIS DEPARTMENT OF PROFESSIONAL REGULATION REGISTRATION #184.003513

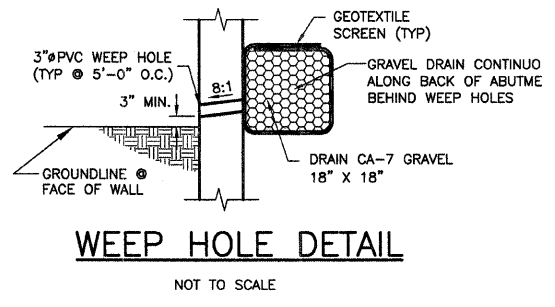
**ABUTMENT AND WINGWALL  
PLAN - REINFORCEMENT**

**PEDESTRIAN BRIDGE  
OVER LITTLE WABASH RIVER**

**SEC. 10-00091-00-BT  
EFFINGHAM COUNTY  
STATION 35B+82.66**



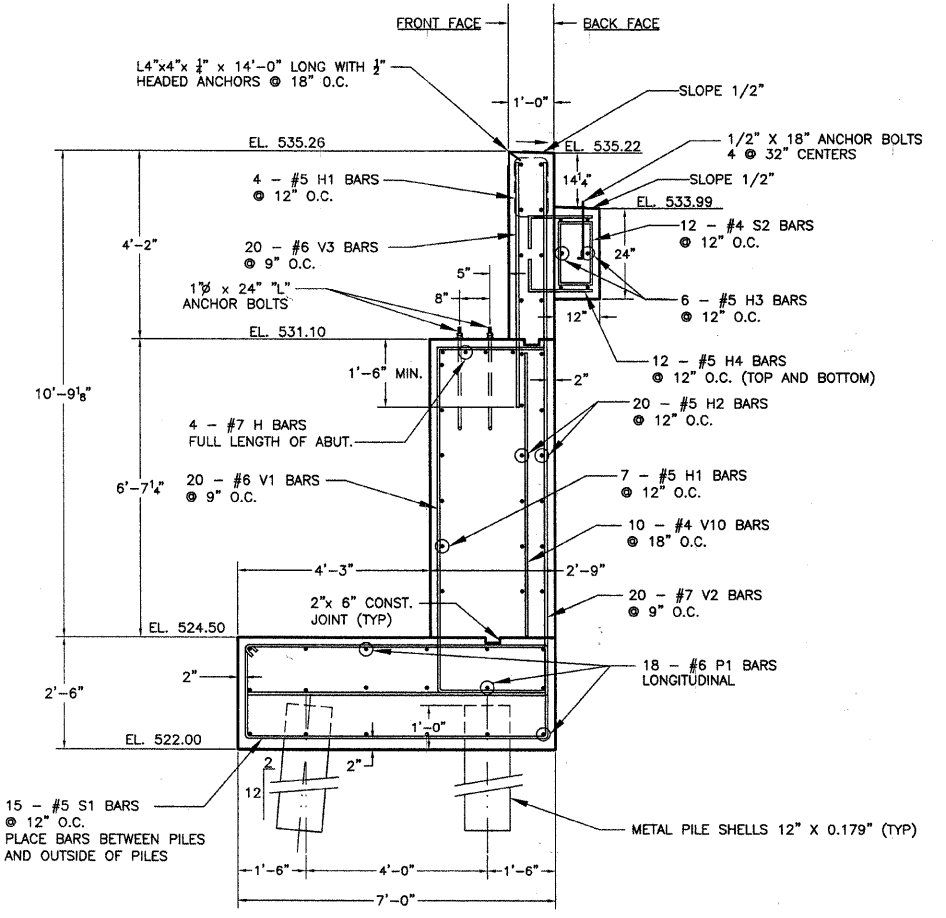
**TYPICAL WINGWALL SECTION**



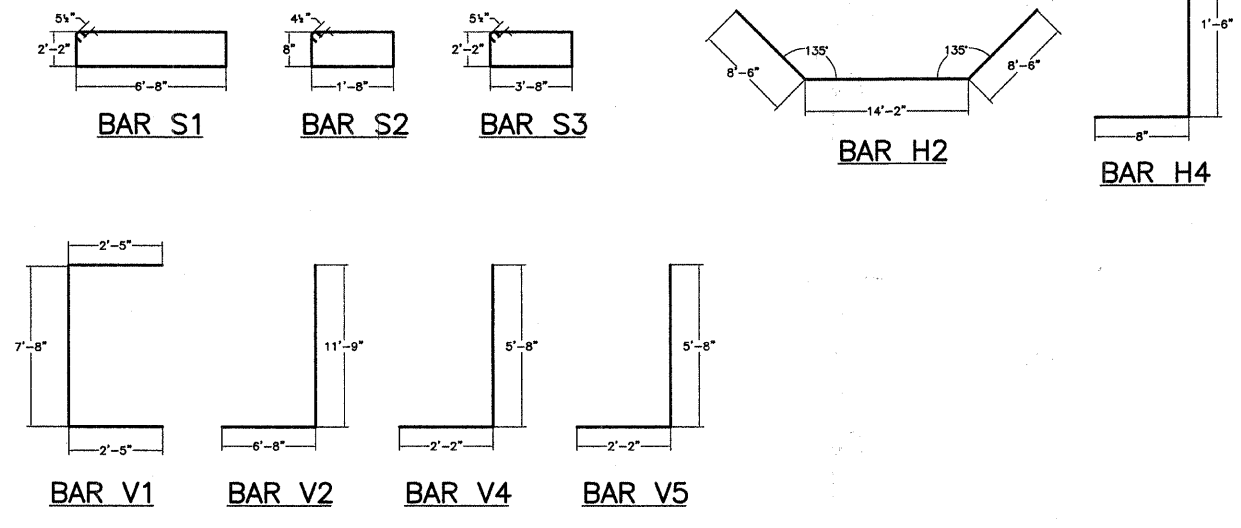
**WEEP HOLE DETAIL**

**BILL OF MATERIAL**  
For One Abutment

Bar	No.	Size	Length	Shape
H	4	#7	13'-8"	—
H1	11	#5	13'-8"	—
H2	20	#5	31'-2"	—
H3	6	#5	10'-8"	—
H4	24	#5	2'-2"	—
P1	18	#6	13'-8"	—
P2	24	#6	11'-0"	—
S1	15	#5	18'-7"	□
S2	12	#4	5'-5"	□
S3	24	#5	12'-7"	□
V1	20	#6	12'-6"	□
V2	20	#7	18'-5"	□
V3	20	#6	5'-6"	□
V4	24	#7	7'-10"	□
V5	24	#6	7'-10"	□
V6	12	#6	7'-3"	□
V7	12	#6	5'-3"	□
V8	12	#5	7'-0"	□
V9	12	#5	5'-0"	□
V10	10	#4	6'-3"	□
Concrete Structures	Cu. Yd.	34.0		
Reinforcement Bars	Pound	4840		



**TYPICAL ABUTMENT SECTION**



**BENT BAR DETAILS**

- NOTES:
- All concrete shall be  $f'c = 4000$  psi
  - All reinforcement shall be ASTM A-615, Grade 60.
  - Minimum Bar Laps Are As Follows:  
#5 = 2'-0"  
#6 = 2'-6"  
#7 = 2'-9"
  - Bend H2 Bars in Field As Required

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105 NORTH KITCHELL  
P.O. BOX 397  
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(618) 392-0736  
ILLINOIS DEPARTMENT OF PROFESSIONAL REGULATION REGISTRATION #134.003513

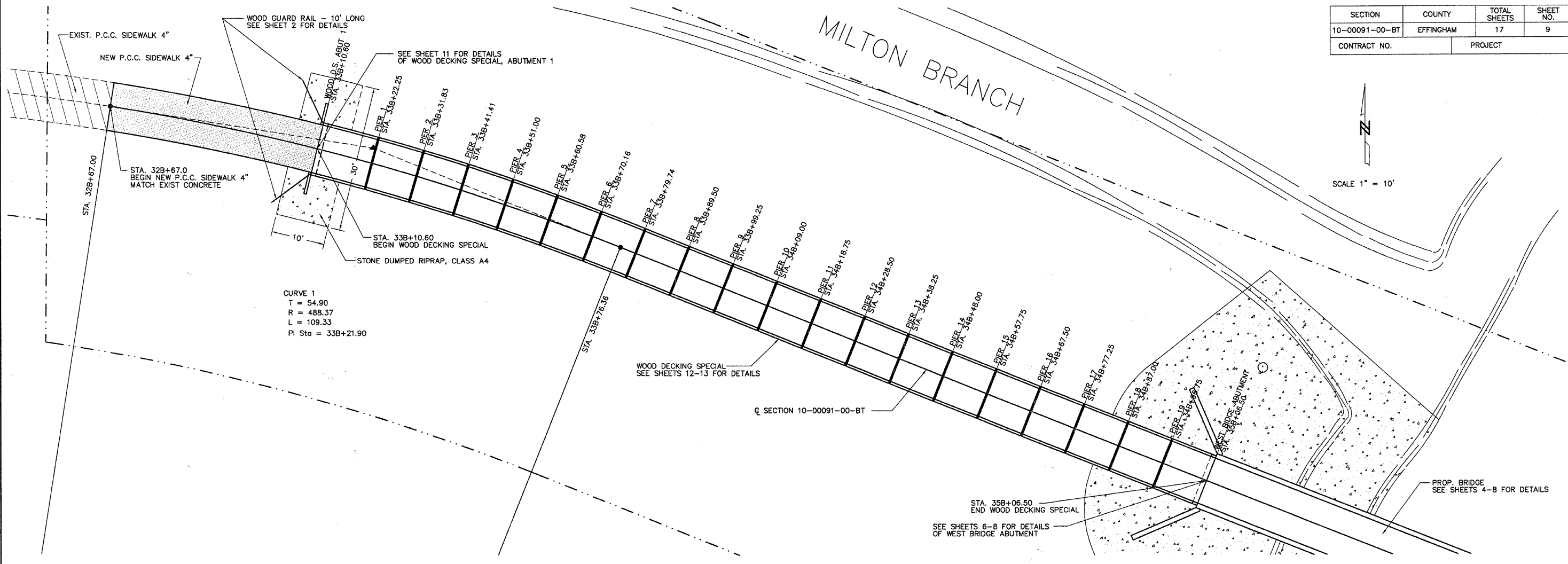
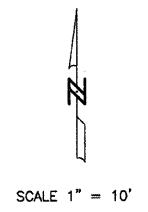
**ABUTMENT AND WINGWALL SECTIONS AND DETAILS**

**PEDESTRIAN BRIDGE OVER LITTLE WABASH RIVER**  
SEC. 10-00091-00-BT  
EFFINGHAM COUNTY  
STATION 35B+82.66

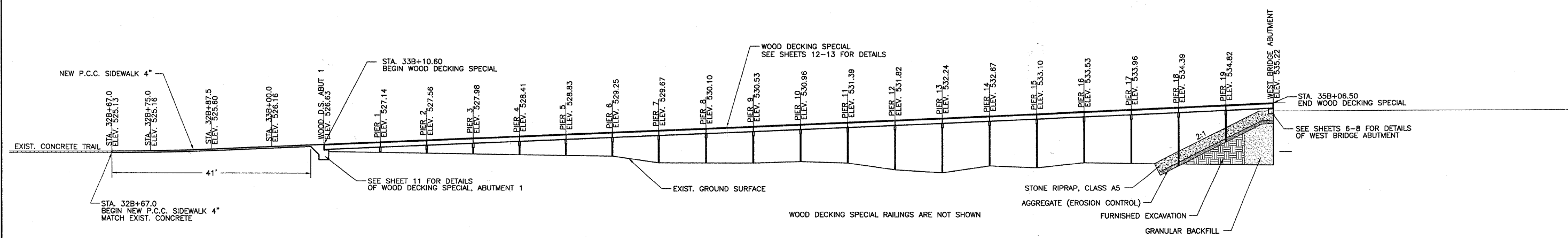


SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
10-00091-00-BT	EFFINGHAM	17	9
CONTRACT NO.		PROJECT	

MILTON BRANCH

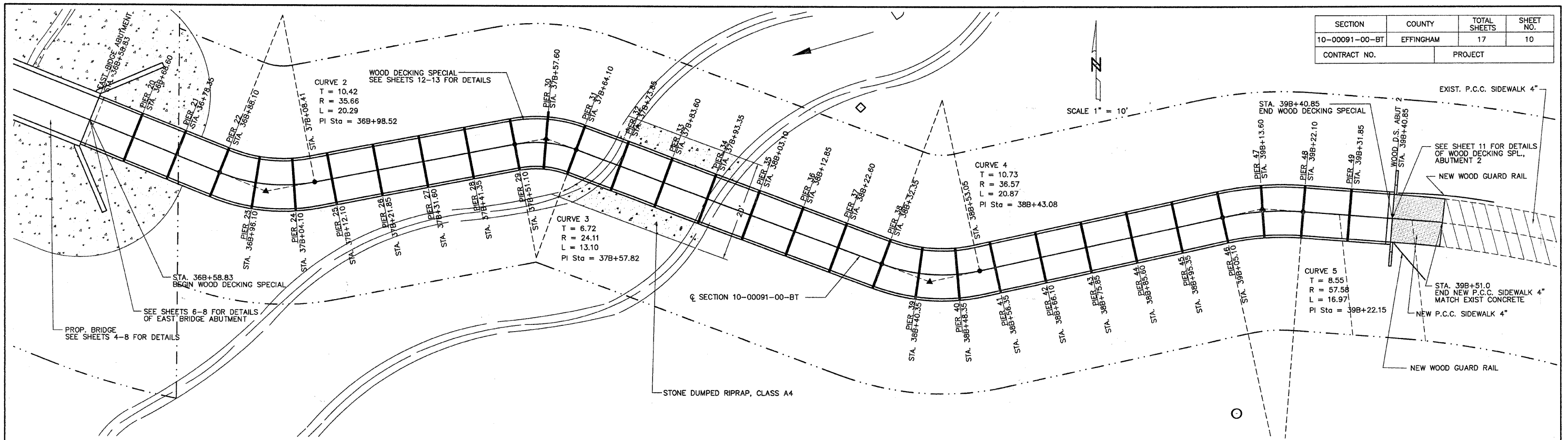


WEST WOOD DECKING SPECIAL PLAN

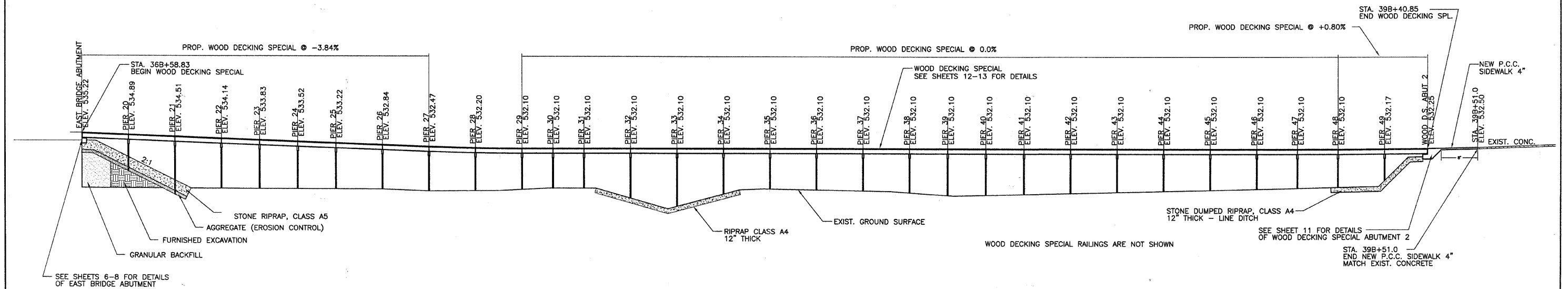


WEST WOOD DECKING SPECIAL PROFILE

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
10-00091-00-BT	EFFINGHAM	17	10
CONTRACT NO.		PROJECT	



## EAST WOOD DECKING SPECIAL PLAN



## EAST WOOD DECKING SPECIAL PROFILE

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
10-00091-00-BT	EFFINGHAM	17	11
CONTRACT NO. 95646			

### BILL OF MATERIAL

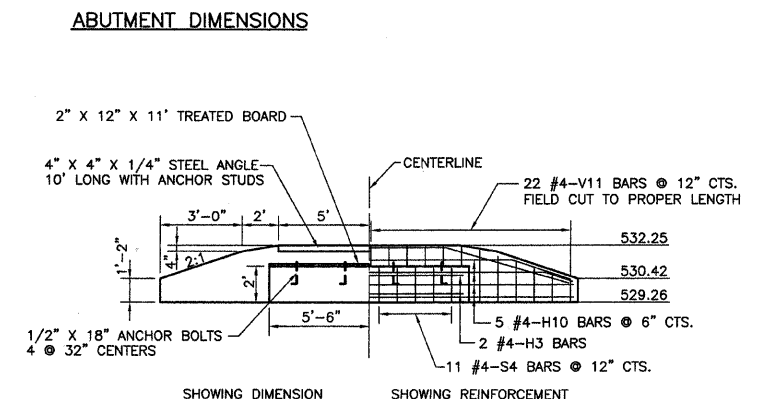
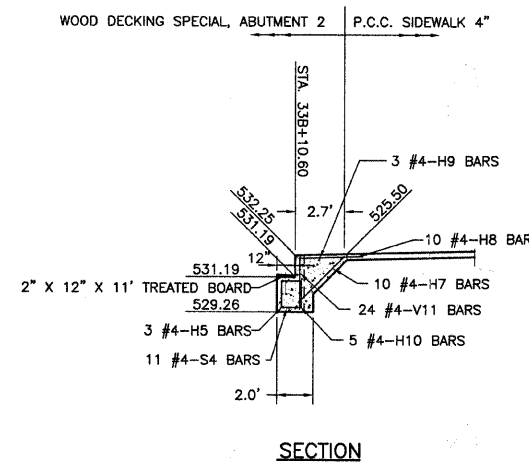
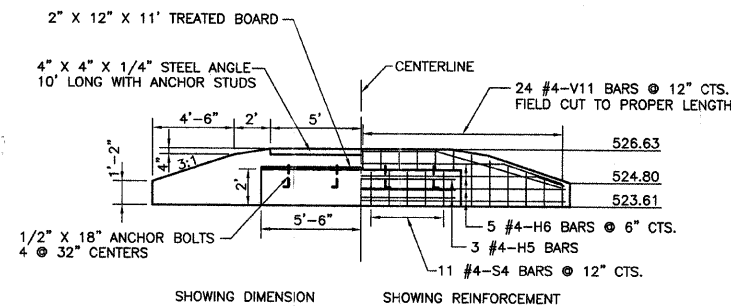
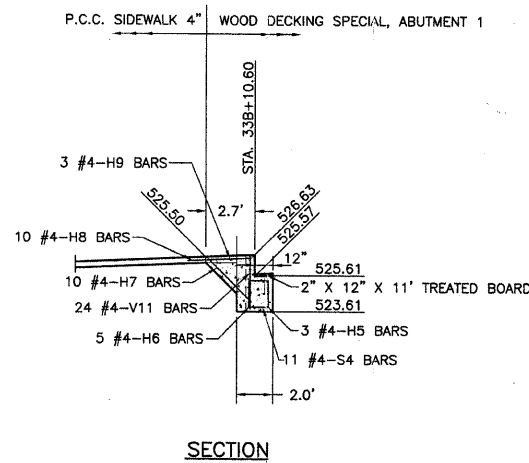
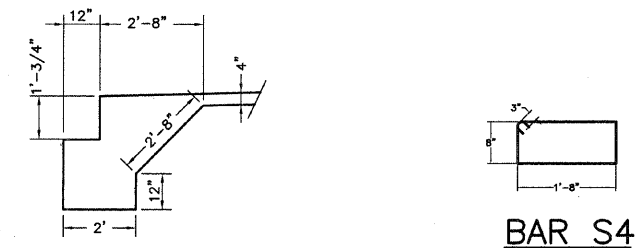
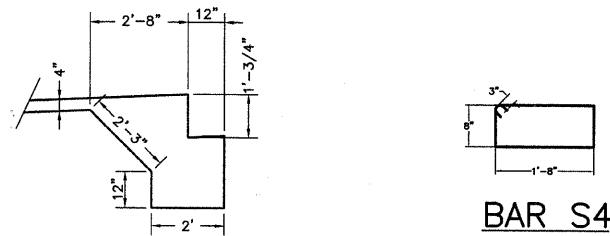
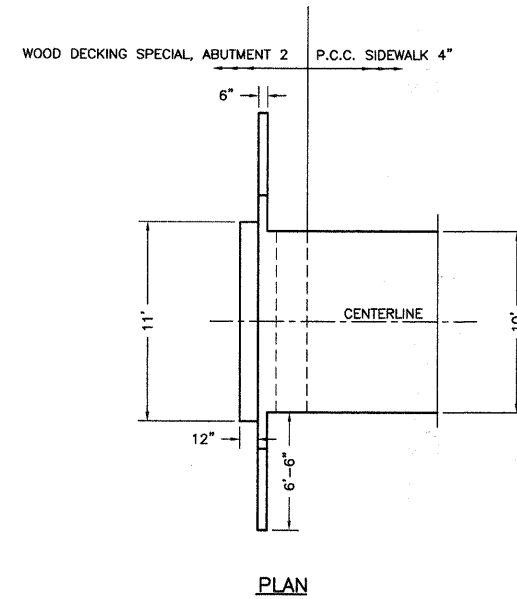
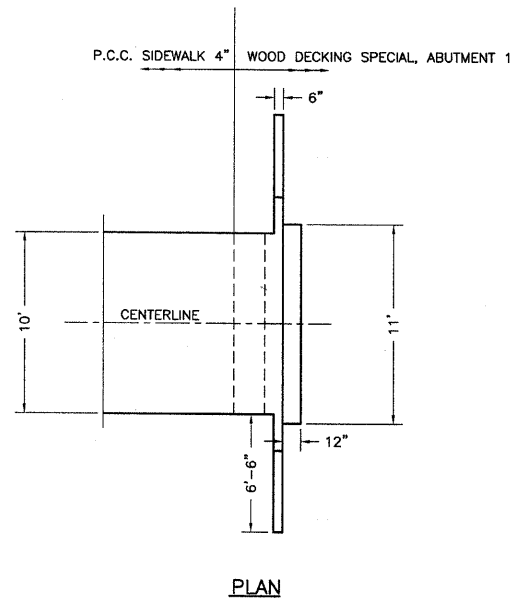
Wood Decking Special, Abutment 1

Bar	No.	Size	Length	Shape
H5	3	#5	10'-8"	—
H6	5	#5	22'-8"	—
H7	10	#5	3'-8"	—
H8	10	#5	4'-0"	—
H9	3	#5	9'-8"	—
S4	11	#5	5'-0"	□
V11	24	#5	4'-4"	—
Concrete Structures			Cu. Yd.	4.4
Reinforcement Bars			Pound	430

### BILL OF MATERIAL

Wood Decking Special, Abutment 2

Bar	No.	Size	Length	Shape
H5	3	#5	10'-8"	—
H10	5	#5	19'-8"	—
H7	10	#5	3'-8"	—
H8	10	#5	4'-0"	—
H9	3	#5	9'-8"	—
S4	11	#5	5'-0"	□
V11	22	#5	4'-4"	—
Concrete Structures			Cu. Yd.	4.3
Reinforcement Bars			Pound	405



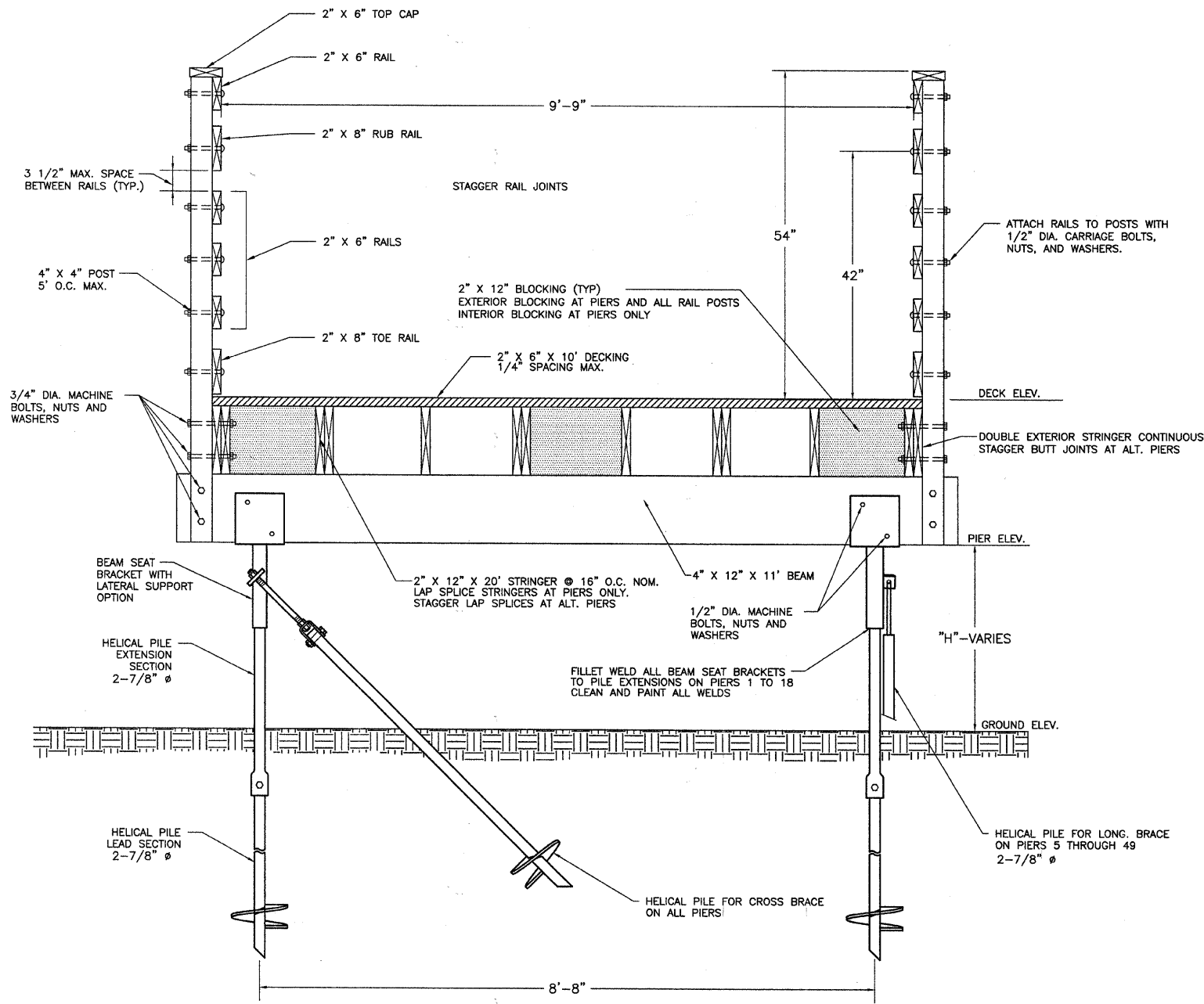
## WOOD DECKING SPECIAL, ABUTMENT 1 DETAILS

LUMBER DIMENSIONS ARE NOMINAL

## WOOD DECKING SPECIAL, ABUTMENT 1 DETAILS

LUMBER DIMENSIONS ARE NOMINAL

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
10-00091-00-BT	EFFINGHAM	17	12
CONTRACT NO. 95646			



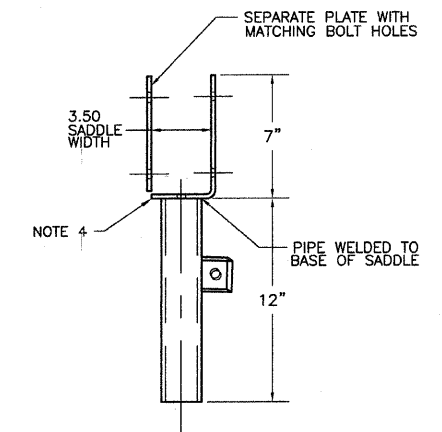
**ELEVATION - WOOD DECKING SPECIAL AND PIER**

PIERS TO BE SPACED 9'-9" O.C. MAX.

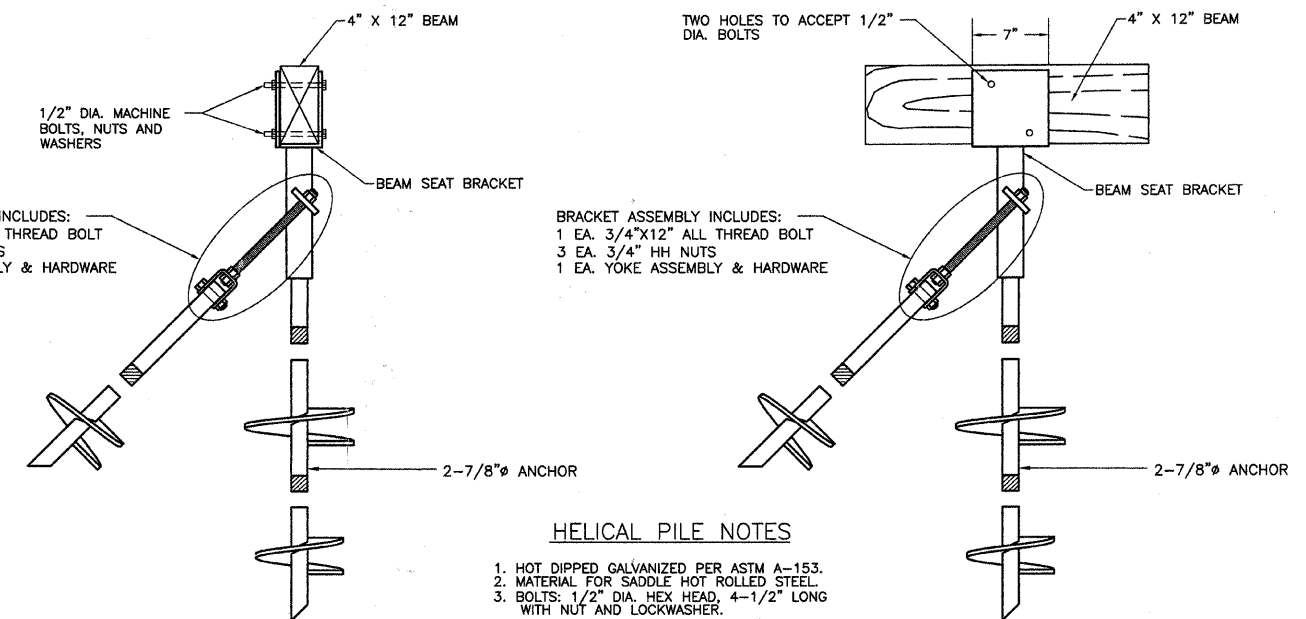
**GENERAL WOOD DECKING SPECIAL NOTES**

1. ALL FASTENERS ON THE WOOD DECKING SPECIAL SHALL BE HOT DIPPED GALVANIZED OR STAINLESS STEEL - NO EXCEPTIONS.
2. STAGGER RAILING JOINTS ON ALTERNATING RAIL POSTS.
3. TOP CAP JOINTS SHALL BE MADE OVER POSTS.
4. ALL LUMBER DIMENSIONS ARE NOMINAL.
5. INSTALL CROSS BRACES AND LONG BRACES ON ALTERNATING SIDES OF THE WOOD DECKING SPECIAL.
6. ALL LUMBER SHALL BE NO.1 GRADE, S DRY 19% OR LESS.

PIER NO.	STATION	DECK ELEV.	PIER ELEV.	GROUND ELEV.	"H"
1	33+22.25	527.14	525.14	525.00	0.14'
2	33+31.83	527.56	525.56	524.80	0.76'
3	33+41.41	527.98	525.98	524.70	1.28'
4	33+51.00	528.41	526.41	524.60	1.81'
5	33+60.58	528.83	526.83	524.50	2.33'
6	33+70.16	529.25	527.25	524.30	2.95'
7	33+79.74	529.67	527.67	523.00	4.67'
8	33+89.50	530.10	528.10	523.00	5.10'
9	33+99.25	530.53	528.53	523.00	5.53'
10	34+09.00	530.96	528.96	523.30	5.66'
11	34+18.75	531.19	529.19	523.00	6.19'
12	34+28.50	531.82	529.82	521.60	8.22'
13	34+38.25	532.24	530.24	521.00	9.24'
14	34+48.00	532.67	530.67	522.40	8.27'
15	34+57.75	533.10	531.10	522.00	9.10'
16	34+67.50	533.53	531.53	523.00	8.53'
17	34+77.25	533.96	531.96	522.90	9.06'
18	34+87.00	534.39	532.39	522.40	9.99'
19	34+96.75	534.82	532.82	527.20	5.62'
20	36+68.60	534.89	532.89	527.20	5.69'
21	36+78.35	534.51	532.51	522.30	10.21'
22	36+88.10	534.14	532.14	523.60	8.54'
23	36+96.10	533.83	531.83	523.60	8.23'
24	37+04.10	533.52	531.52	523.60	7.92'
25	37+12.10	533.22	531.22	523.50	7.72'
26	37+21.85	532.84	530.84	523.50	7.34'
27	37+31.60	532.47	530.47	523.10	7.37'
28	37+41.35	532.20	530.20	523.20	7.00'
29	37+51.10	532.10	530.10	523.50	6.60'
30	37+57.60	532.10	530.10	523.70	6.40'
31	37+64.10	532.10	530.10	523.70	6.40'
32	37+73.85	532.10	530.10	521.70	8.40'
33	37+83.60	532.10	530.10	519.90	10.20'
34	37+93.35	532.10	530.10	522.50	7.60'
35	38+03.10	532.10	530.10	523.60	6.50'
36	38+12.85	532.10	530.10	523.40	6.70'
37	38+22.60	532.10	530.10	523.20	6.90'
38	38+32.35	532.10	530.10	522.80	7.30'
39	38+40.35	532.10	530.10	522.30	7.80'
40	38+48.35	532.10	530.10	522.40	7.70'
41	38+56.35	532.10	530.10	522.60	7.50'
42	38+66.10	532.10	530.10	522.80	7.30'
43	38+75.85	532.10	530.10	523.00	7.10'
44	38+85.60	532.10	530.10	523.20	6.90'
45	38+95.35	532.10	530.10	523.50	6.60'
46	39+05.10	532.10	530.10	523.70	6.40'
47	39+13.60	532.10	530.10	523.90	6.20'
48	39+22.10	532.10	530.10	524.10	6.00'
49	39+31.85	532.17	530.17	525.40	4.77'



**BEAM SEAT BRACKET**



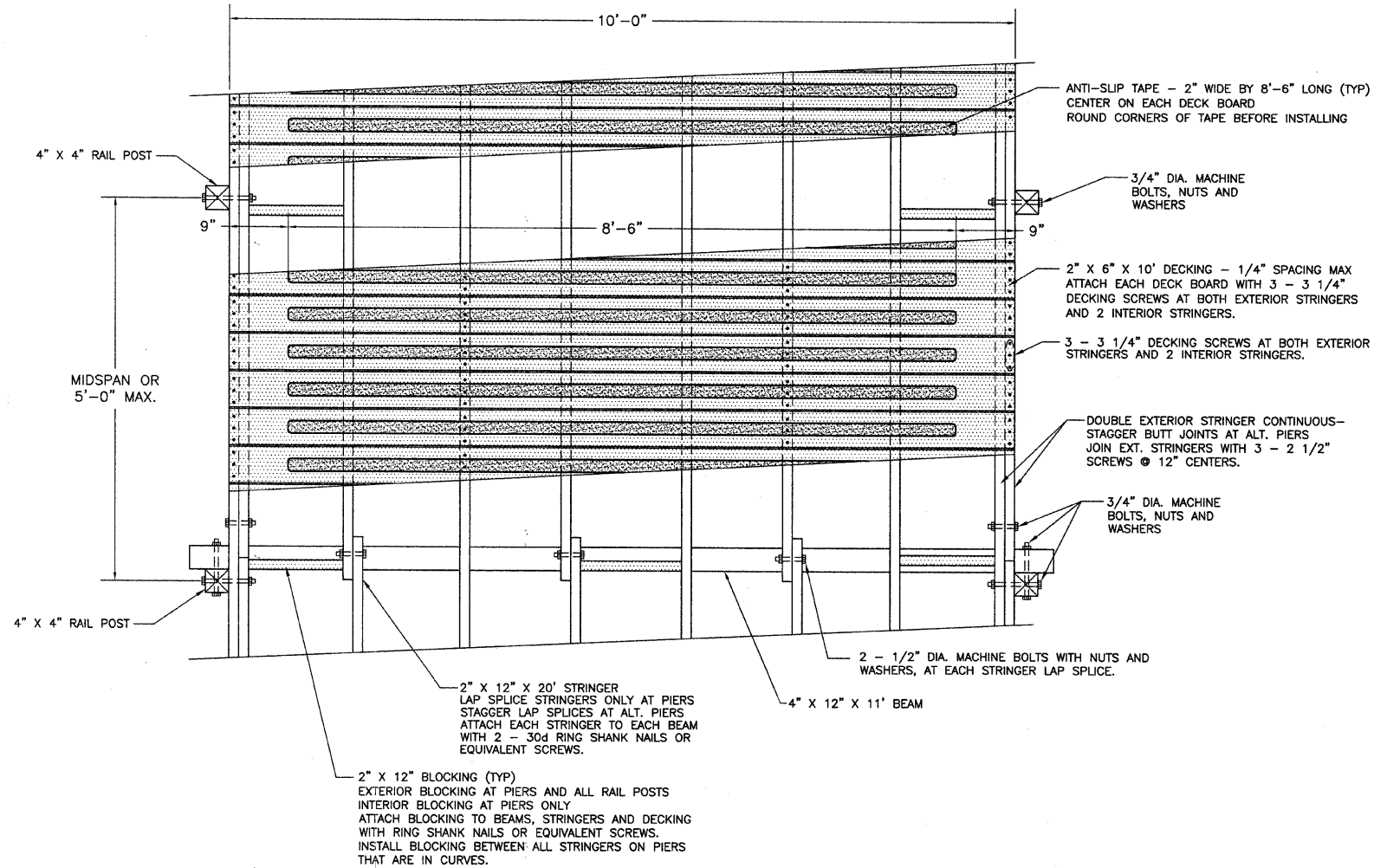
**LONGITUDINAL BRACE**

**CROSS BRACE**

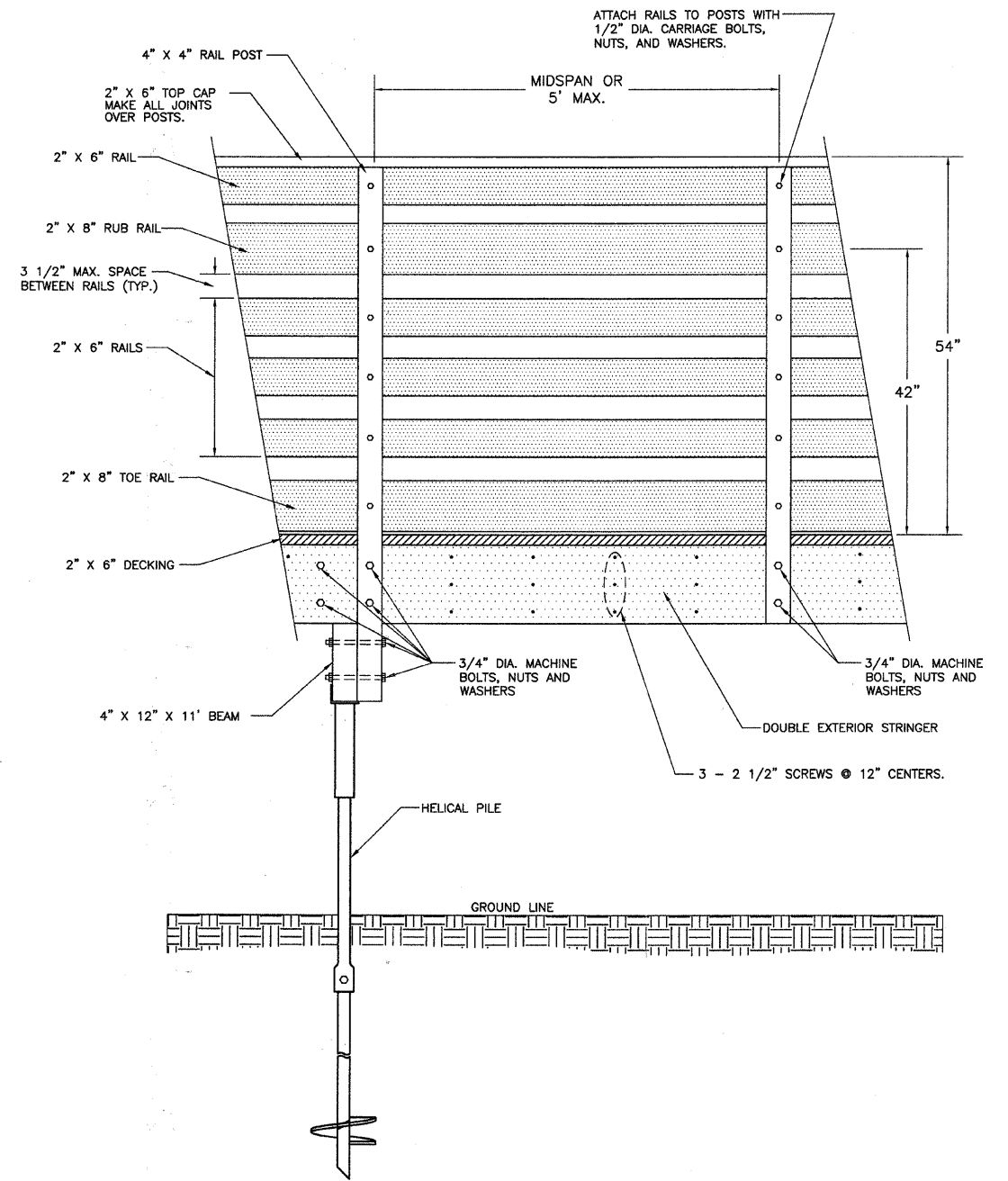
**HELICAL PILE DETAILS**

- HELICAL PILE NOTES**
1. HOT DIPPED GALVANIZED PER ASTM A-153.
  2. MATERIAL FOR SADDLE HOT ROLLED STEEL.
  3. BOLTS: 1/2" DIA. HEX HEAD, 4-1/2" LONG WITH NUT AND LOCKWASHER.
  4. BEAM SADDLE FORMED FROM 1/4" THICK STEEL PLATE.

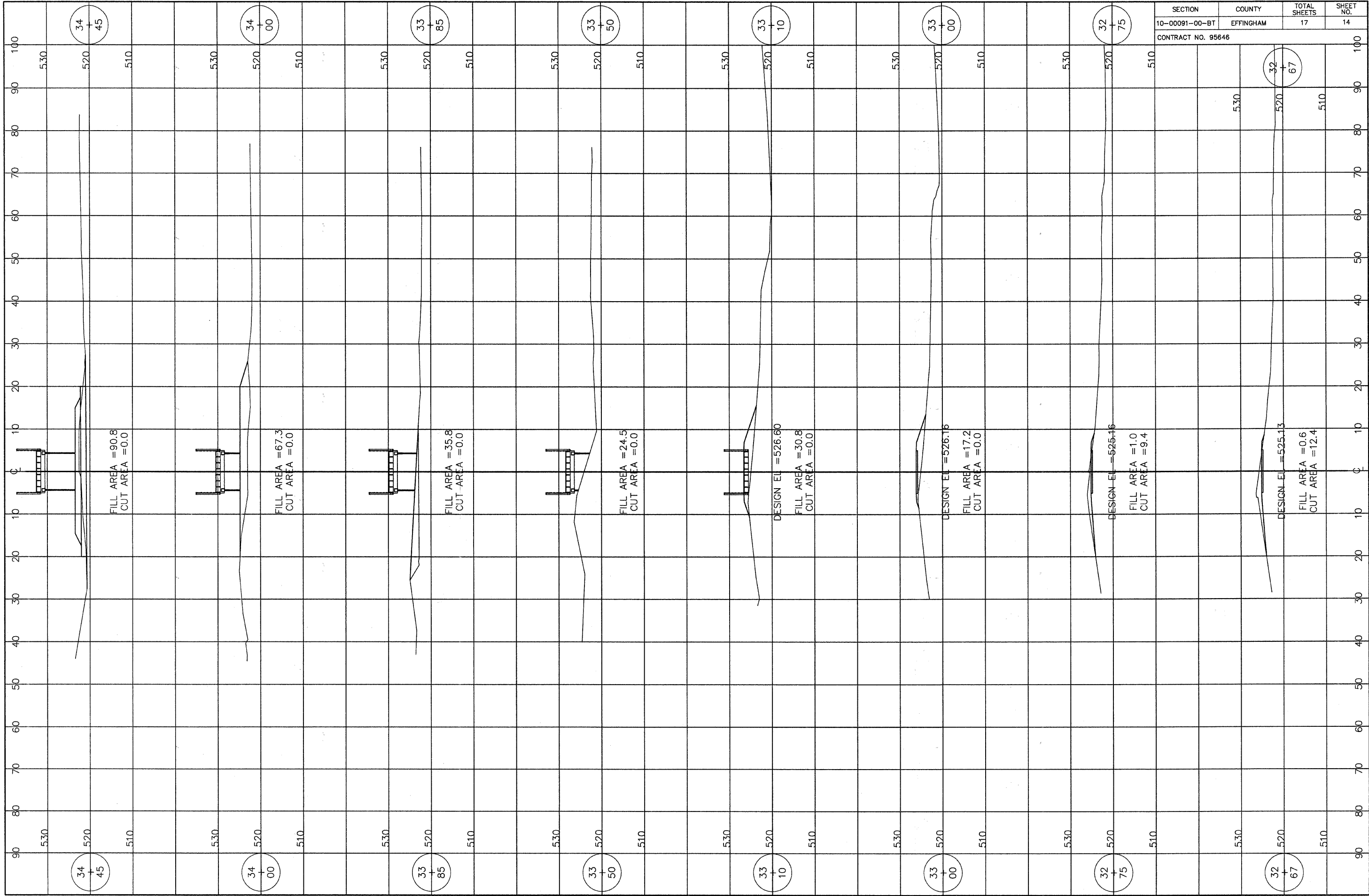
SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
10-00091-00-BT	EFFINGHAM	17	13
CONTRACT NO. 95646			



PLAN - WOOD DECKING SPECIAL



SIDE ELEVATION - WOOD DECKING SPECIAL



SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
10-00091-00-BT	EFFINGHAM	17	14

CONTRACT NO. 95646

FILL AREA = 90.8  
CUT AREA = 0.0

FILL AREA = 67.3  
CUT AREA = 0.0

FILL AREA = 35.8  
CUT AREA = 0.0

FILL AREA = 24.5  
CUT AREA = 0.0

DESIGN EL = 526.60  
FILL AREA = 30.8  
CUT AREA = 0.0

DESIGN EL = 526.16  
FILL AREA = 17.2  
CUT AREA = 0.0

DESIGN EL = 525.16  
FILL AREA = 1.0  
CUT AREA = 9.4

DESIGN EL = 525.13  
FILL AREA = 0.6  
CUT AREA = 12.4

34  
+  
45

34  
+  
00

33  
+  
85

33  
+  
50

33  
+  
10

33  
+  
00

32  
+  
75

32  
+  
67

34  
+  
45

34  
+  
00

33  
+  
85

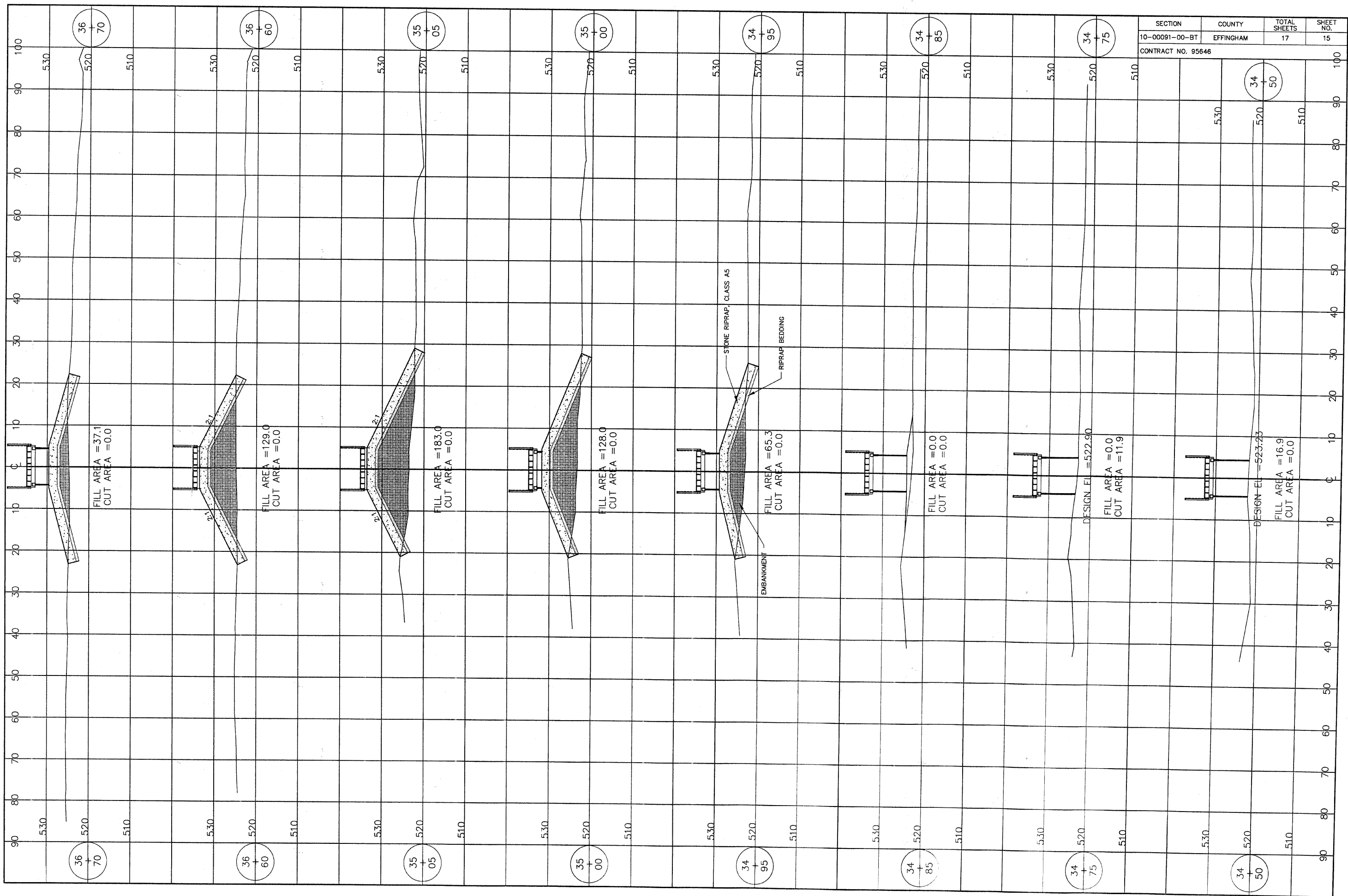
33  
+  
50

33  
+  
10

33  
+  
00

32  
+  
75

32  
+  
67



SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
10-00091-00-BT	EFFINGHAM	17	15

CONTRACT NO. 95646

FILL AREA = 37.1  
CUT AREA = 0.0

FILL AREA = 129.0  
CUT AREA = 0.0

FILL AREA = 183.0  
CUT AREA = 0.0

FILL AREA = 128.0  
CUT AREA = 0.0

FILL AREA = 65.3  
CUT AREA = 0.0

FILL AREA = 0.0  
CUT AREA = 0.0

FILL AREA = 0.0  
CUT AREA = 11.9

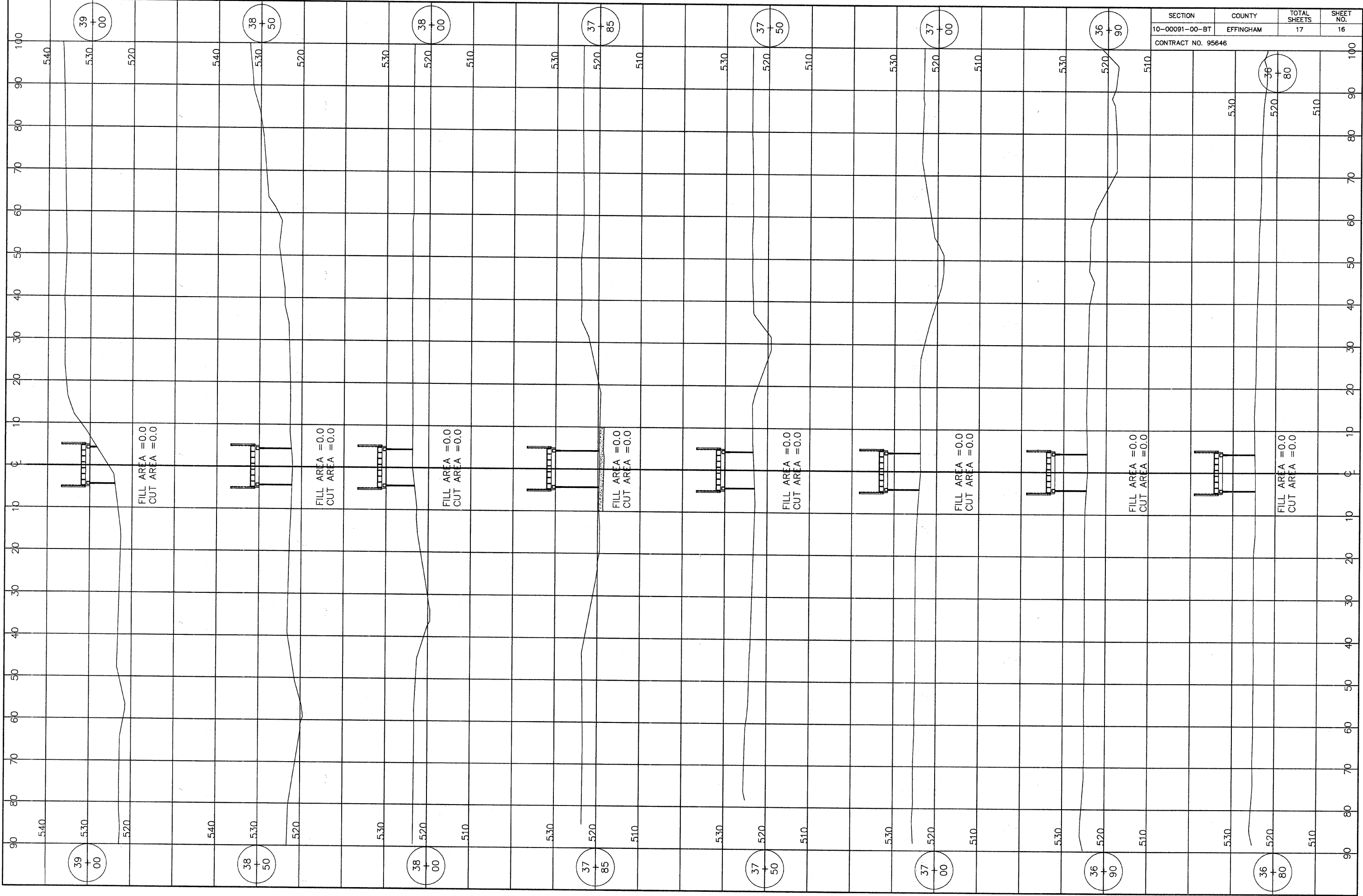
FILL AREA = 16.9  
CUT AREA = 0.0

STONE RIPRAP, CLASS A5

EMBANKMENT  
RIPRAP BEDDING

DESIGN-EL -522.90

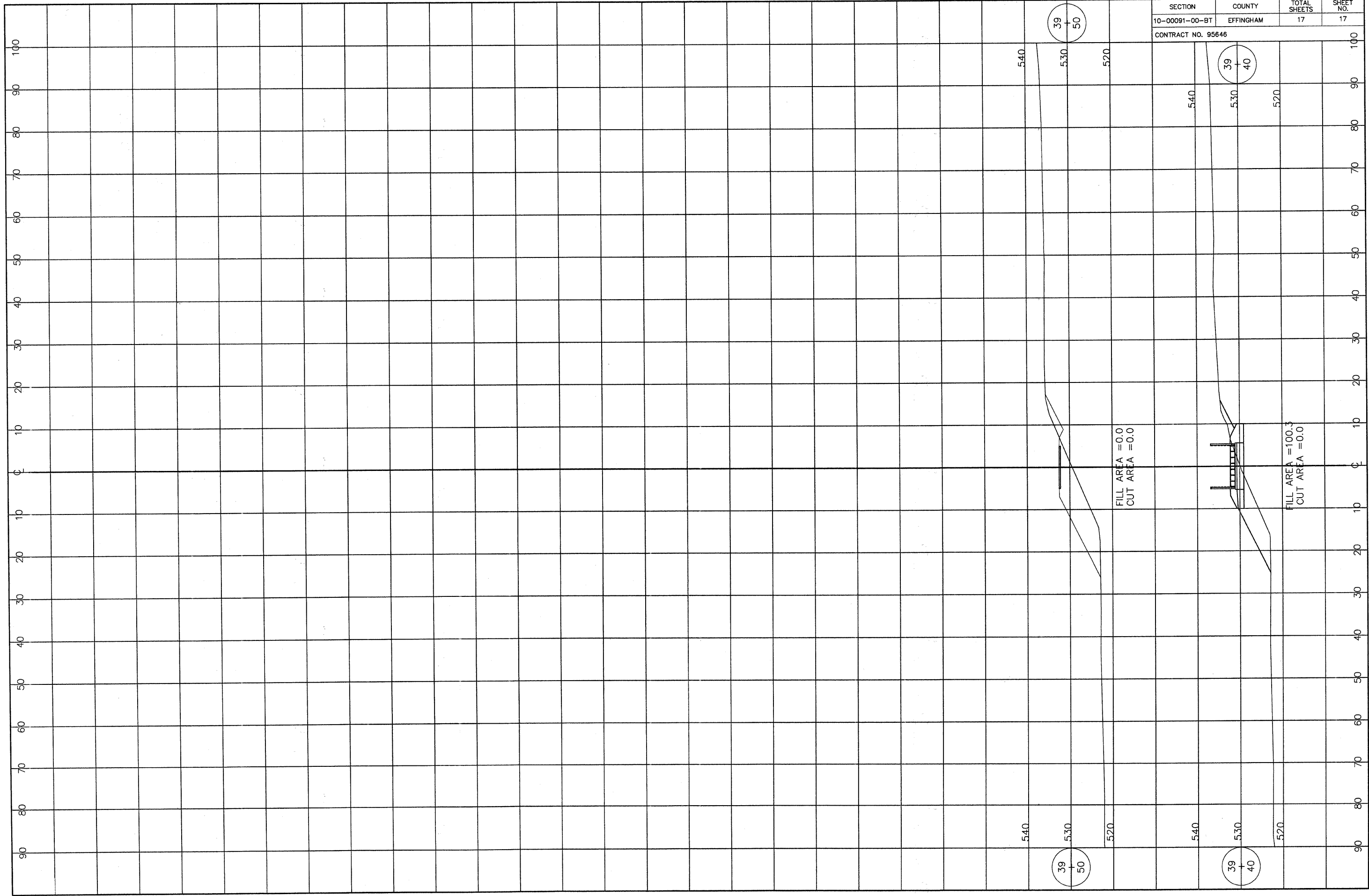
DESIGN-EL -523.23



SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
10-00091-00-BT	EFFINGHAM	17	16

CONTRACT NO. 95646





SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
10-00091-00-BT	EFFINGHAM	17	17

CONTRACT NO. 95646

39  
+  
50

39  
+  
40

FILL AREA = 0.0  
CUT AREA = 0.0

FILL AREA = 100.3  
CUT AREA = 0.0

39  
+  
50

39  
+  
40