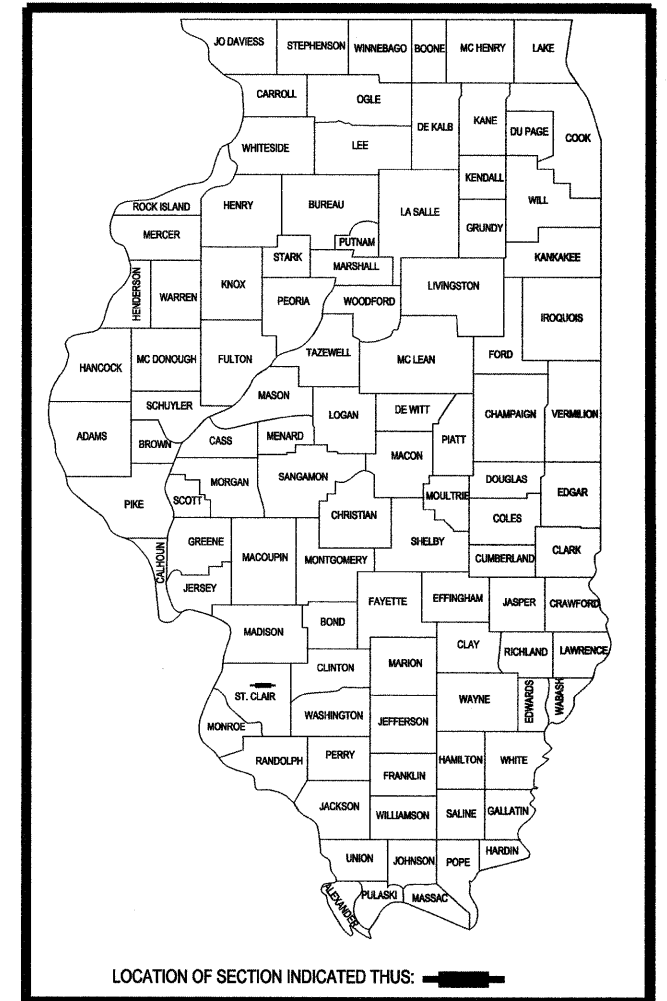


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROPOSED HIGHWAY PLANS

LOCAL AGENCY IMPROVEMENT
TOWNSHIP ROAD 113, KECK ROAD
OVER ASH CREEK
SECTION 97-17114-00-BR
FEDERAL PROJECT NO. BROS-0163(033)
SHILOH VALLEY ROAD DISTRICT
ST. CLAIR COUNTY
CONSTRUCTION JOB NO. C-98-335-09

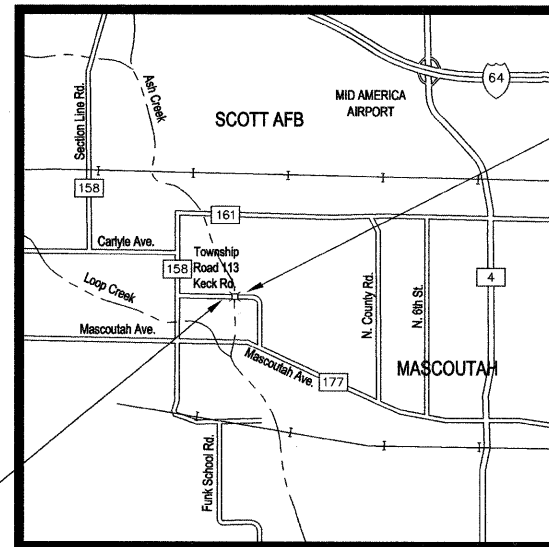
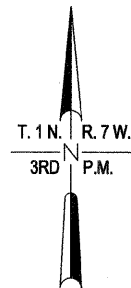
SECTION NO.	ROAD DISTRICT	COUNTY	SHEET OF SHEETS
97-17114-00-BR	SHILOH VALLEY	ST. CLAIR	1 OF 6
FHWA REG NO. 7		PROJECT NO. BROS-0163(033)	
FEDERAL AID PROJECT		CONTRACT NO. 97381	



- INDEX TO SHEETS -
- 1 COVER SHEET
 - 2 GENERAL NOTES \ TYPICAL SECTIONS
 - 3 PLAN AND PROFILE
 - 4-5 BRIDGE PLANS
 - 6 CROSS SECTIONS

CODE NO.	ITEM	UNIT	QUANTITY
20100500	TREE REMOVAL ACRES	ACRE	0.03
20200100	EARTH EXCAVATION	CU YD	423
20300100	CHANNEL EXCAVATION	CU YD	293
25000200	SEEDING, CLASS 2	ACRE	0.5
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	45
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	45
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	45
25100115	MULCH, METHOD 2	ACRE	0.5
28000300	TEMPORARY DITCH CHECK	EACH	4
28100705	STONE DUMPED RIPRAP, CLASS A3	SQ YD	69
28200200	FILTER FABRIC	SQ YD	69
35100700	AGGREGATE BASE COURSE, TYPE A 8"	SQ YD	633
35101500	AGGREGATE BASE COURSE, TYPE B	CU YD	29
40300100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	237
40300300	BITUMINOUS MATERIALS (COVER AND SEAL COATS)	GALLON	222
40300500	COVER COAT AGGREGATE	TON	6.3
40300600	SEAL COAT AGGREGATE	TON	6.3
44004400	PAVEMENT REMOVAL (SPECIAL)	SQ YD	416
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1
50800105	REINFORCEMENT BARS	POUND	19990
51500100	NAME PLATES	EA	1
54003000	CONCRETE BOX CULVERTS	CU YD	70
63200310	GUARDRAIL REMOVAL	FOOT	24
67100100	MOBILIZATION	L SUM	1
70101830	TRAFFIC CONTROL AND PROTECTION, STANDARD BLR 21	L SUM	1
* 20076600	TRAINEES	HOUR	500

X028-ZA



SECTION 97-17114-00-BR
ENDS STATION 12+12.76

SECTION 97-17114-00-BR INCLUDES A 2 BARREL 12' X 5' CAST-IN-PLACE REINFORCED CONCRETE BOX CULVERT AND END SECTIONS WITH CAST-IN-PLACE WINGWALLS AT STA. 10+10.04

SECTION 97-17114-00-BR
BEGINS STATION 7+79.68

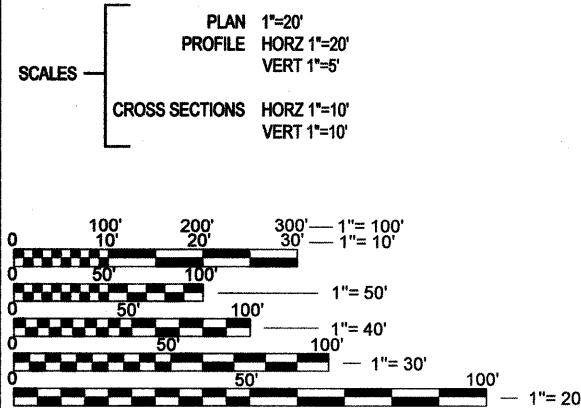
TOTAL LENGTH OF PROJECT = 433.08 FT (0.082 MI)



SCALE IN MILES

DESIGN DESIGNATION
ROADWAY CLASSIFICATION: LOCAL ROAD
BRIDGE CLASSIFICATION: LOCAL ROAD
CURRENT ADT: 85
DESIGN SPEED: 30
DESIGN FREQUENCY: 10 YEARS

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	
APPROVED <u>June 29</u> , 2009 <i>Brian Ellison</i> SHILOH VALLEY ROAD DISTRICT HIGHWAY COMMISSIONER	PASSED <u>7/1</u> , 2009 <i>[Signature]</i> DISTRICT 8 ENGINEER OF LOCAL ROAD AND STREETS
APPROVED <u>June 29</u> , 2009 <i>[Signature]</i> COUNTY ENGINEER	RELEASING FOR BID BASED ON LIMITED REVIEW <u>7/1</u> , 2009 <i>[Signature]</i> DEPUTY DIRECTOR OF HIGHWAYS, REGION 5 ENGINEER



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.

Call Joint Utility Locating Information for Excavators (J.U.L.I.E.) before digging 800-892-0123

SHILOH VALLEY TOWNSHIP T.1N., R.7W. NW. 1/4, NW 1/4, SECTION 26 & SW. 1/4, SW. 1/4, SECTION 23

STANDARDS

000001-05 701901-01
280001-04 BLR 21-8
515001-03

Kuhlmann Design Group, Inc.
15 E. Washington St.
Bellaire, IL 62220-2149
Tel: (618) 234-8898

kdg

Ronald T. Stuckel
Ronald T. Stuckel
P.E. 062-056789
Exp. 11/30/2009

6/12/09
DATE

SECTION NO.	ROAD DISTRICT	COUNTY	SHEET OF SHEETS
97-17114-00-BR	SHILOH VALLEY	ST. CLAIR	2 OF 6
FHWA REG NO. 7		PROJECT NO. BROS-0163(033)	
FEDERAL AID PROJECT		CONTRACT NO. 97381	

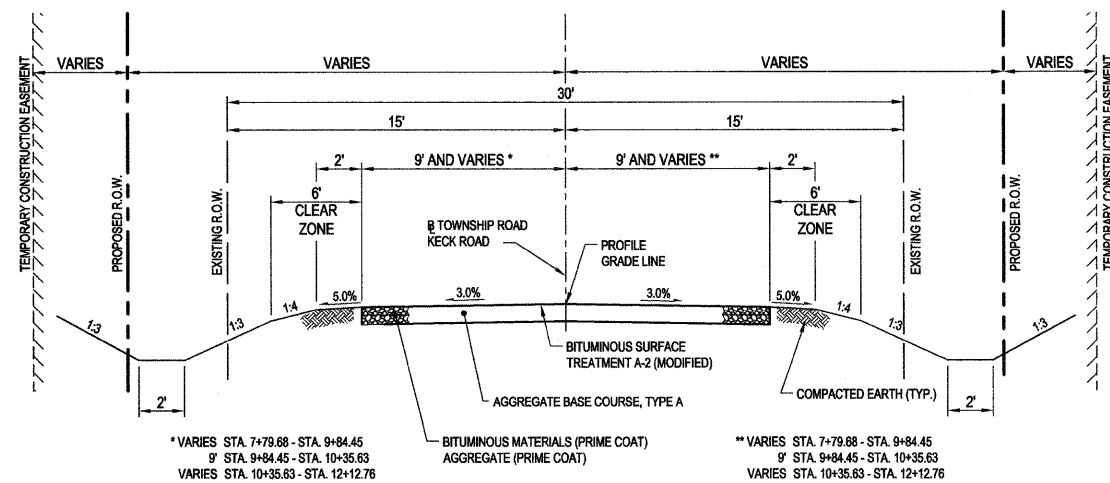
- ALL MATERIALS DEEMED SALVAGEABLE BY THE ENGINEER SHALL REMAIN THE PROPERTY OF THE ROAD DISTRICT. ALL OTHER MATERIALS SHALL BE DISPOSED OF BY THE CONTRACTOR, AT HIS OWN EXPENSE.
- SEEDING DATES: SPRING - APRIL 1 TO JUNE 1; FALL - AUGUST 15 TO SEPTEMBER 30
SEEDING WILL NOT BE PERMITTED OUTSIDE THE LIMITS SHOWN ABOVE WITHOUT THE WRITTEN APPROVAL OF THE ENGINEER.
- THE FOLLOWING FACTORS WERE USED TO DETERMINE THE REQUIRED AMOUNT OF MATERIALS NEEDED:

NITROGEN FERTILIZER NUTRIENT	90 LB. / ACRE
PHOSPHORUS FERTILIZER NUTRIENT	90 LB. / ACRE
POTASSIUM FERTILIZER NUTRIENT	90 LB. / ACRE
BITUMINOUS MATERIALS (PRIME COAT)	0.375 GAL. / SQ.YD.
BITUMINOUS MATERIALS (COVER AND SEAL COATS)	0.35 GAL. / SQ.YD.
COVER COAT AGGREGATES	20 LB. / SQ.YD.
SEAL COAT AGGREGATES	20 LB. / SQ.YD.

- THE FOLLOWING UTILITY COMPANIES MAY HAVE FACILITIES LOCATED WITHIN THE LIMITS OF CONSTRUCTION.

VERIZON TELEPHONE
111 EAST STATE STREET
MASCOUTAH, IL 62258
(618) 566-9815

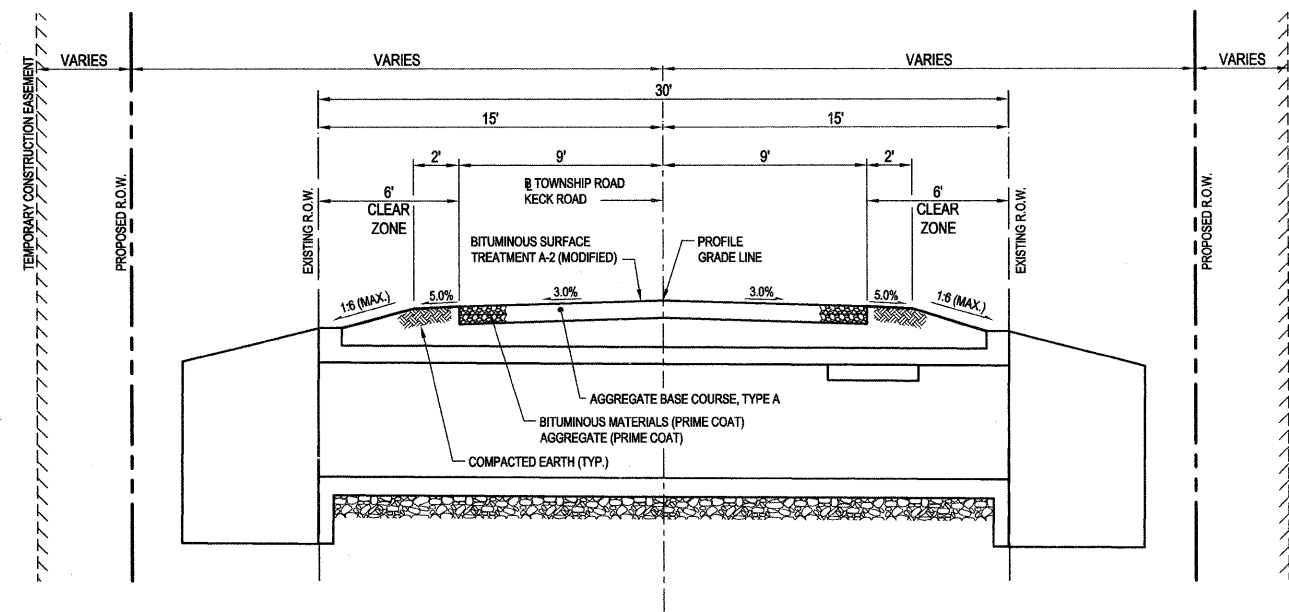
AMEREN IP
1050 WEST BLVD.
BELLEVILLE, IL 62221
(800) 755-5000



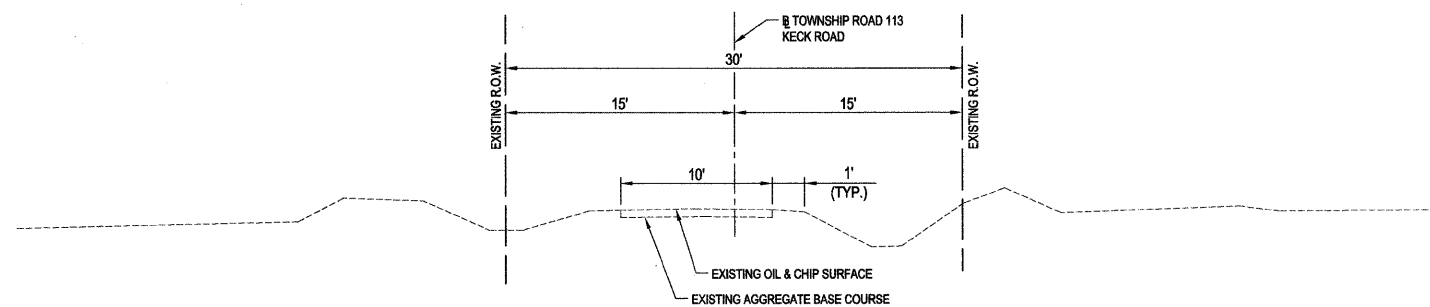
* VARIES STA. 7+79.68 - STA. 9+84.45
9' STA. 9+84.45 - STA. 10+35.63
VARIES STA. 10+35.63 - STA. 12+12.76

** VARIES STA. 7+79.68 - STA. 9+84.45
9' STA. 9+84.45 - STA. 10+35.63
VARIES STA. 10+35.63 - STA. 12+12.76

PROPOSED TYPICAL SECTION
STA. 7+79.68 - STA. 9+97.09
STA. 10+22.99 - STA. 12+12.76



PROPOSED TYPICAL SECTION AT CULVERT
STA. 9+97.09 - STA. 10+22.99



EXISTING TYPICAL SECTION

STATION	AREAS Square Feet		VOLUMES Cubic Yards		CUMULATIVE VOLUMES Cubic Yards	
	CUT	FILL	CUT	FILL	CUT	FILL
	7+79.68	6.48	0.00	6	0	6
8+00.00	9.12	0.00	13	1	19	1
8+50.00	4.59	0.68	13	17	32	18
9+00.00	9.53	17.20	41	61	73	79
9+50.00	4.32	48.36	60	84	133	163
9+97.09 (BACK)	34.32	48.36	0	0	133	163
9+97.09 (AHEAD)	0.00	20.64	0	20	133	183
10+22.99 (BACK)	0.00	20.66	0	0	133	183
10+22.99 (AHEAD)	59.80	41.33	60	41	193	224
10+50.00	59.8	41.33	108	65	301	289
11+00.00	57.02	28.55	83	36	384	325
11+50.00	33.15	10.68	36	10	420	335
12+00.00	6.23	0.28	3	0	423	335
12+12.76	6.56	0.00				

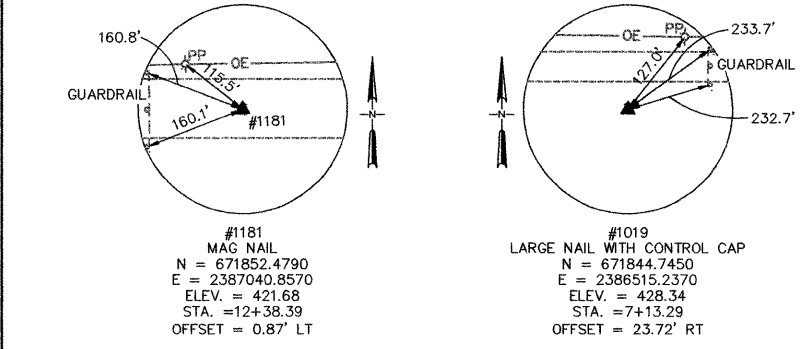
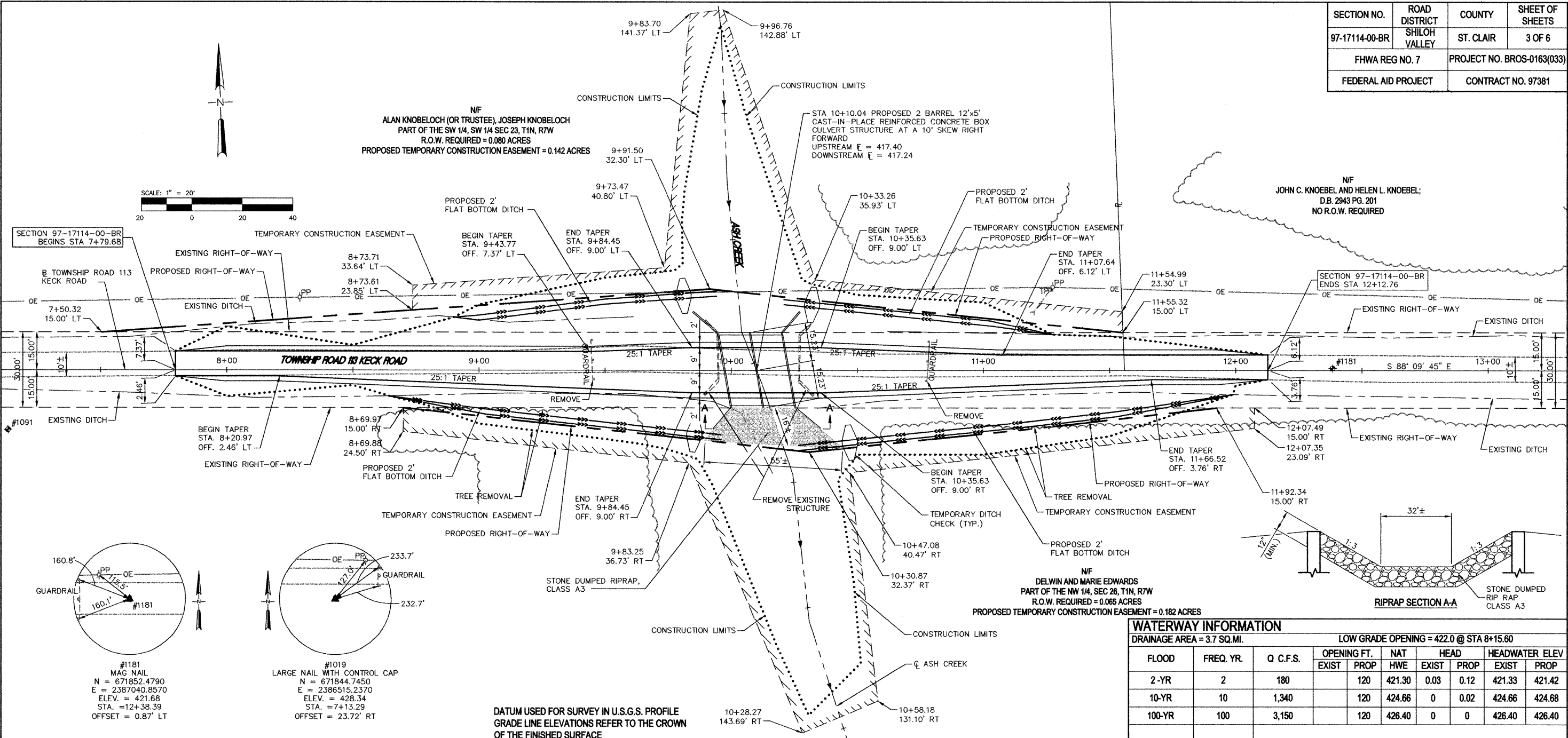
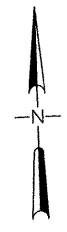
**FLEXIBLE PAVEMENT STRUCTURAL
DESIGN INFORMATION**

AVERAGE ESTIMATED ADT UPON COMPLETION (2008) = 85
ROADWAY CLASSIFICATION - CLASS IV

REQUIRED MATERIALS:
AGGREGATE BASE COURSE, TYPE A
BITUMINOUS SURFACE TREATMENT A-2

PROPOSED MATERIALS:
AGGREGATE BASE COURSE, TYPE A, 8"
BITUMINOUS SURFACE TREATMENT A-2 (MODIFIED)

SECTION NO.	ROAD DISTRICT	COUNTY	SHEET OF SHEETS
97-17114-00-BR	SHILOH VALLEY	ST. CLAIR	3 OF 6
FHWA REG NO. 7		PROJECT NO. BROS-0163(033)	
FEDERAL AID PROJECT		CONTRACT NO. 97381	

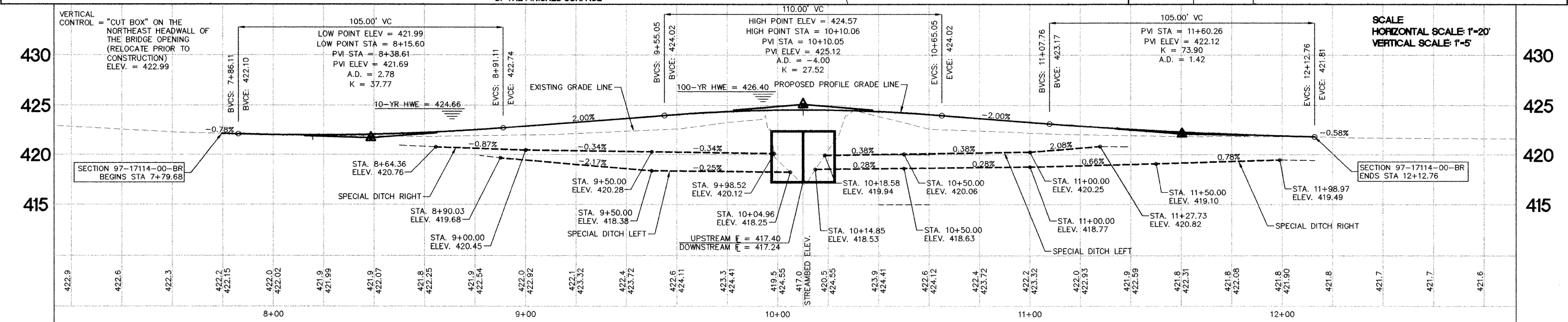


WATERWAY INFORMATION

DRAINAGE AREA = 3.7 SQ.MI.

LOW GRADE OPENING = 422.0 @ STA 8+15.60

FLOOD	FREQ. YR.	Q C.F.S.	OPENING FT.				HEAD		HEADWATER ELEV	
			EXIST	PROP	HWE	EXIST	PROP	EXIST	PROP	
2-YR	2	180	120	421.30	0.03	0.12	421.33	421.42		
10-YR	10	1,340	120	424.66	0	0.02	424.66	424.68		
100-YR	100	3,150	120	426.40	0	0	426.40	426.40		



SCALE
HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'

PLAN & PROFILE

BENCHMARK:

Magnetic Nail in Existing Pavement
12+38.39 - 0.87' Left - Elevation 421.68

EXISTING STRUCTURE: #082-4038

THE STRUCTURE IS A CAST-IN-PLACE, MULTI-BEAM, SINGLE SPAN BRIDGE. THE TOTAL LENGTH OF THE BRIDGE IS 31 FEET-4 INCHES. THE BRIDGE ROADWAY WIDTH IS 19 FROM CONCRETE BARRIER TO BARRIER AND AN OVERALL WIDTH OF APPROXIMATELY 21 FEET. THE APPROACH ROADWAY IS GRAVEL PAVEMENT WITH A WIDTH OF ABOUT 11 FEET. THE SUPERSTRUCTURE CONSIST OF 5 BEAMS 20 INCHES DEEP AND 12 INCHES WIDE, SPACES AT 3 FEET-3 INCHES. REFER TO ATTACHED EXISTING CROSSSECTION.

No salvage.

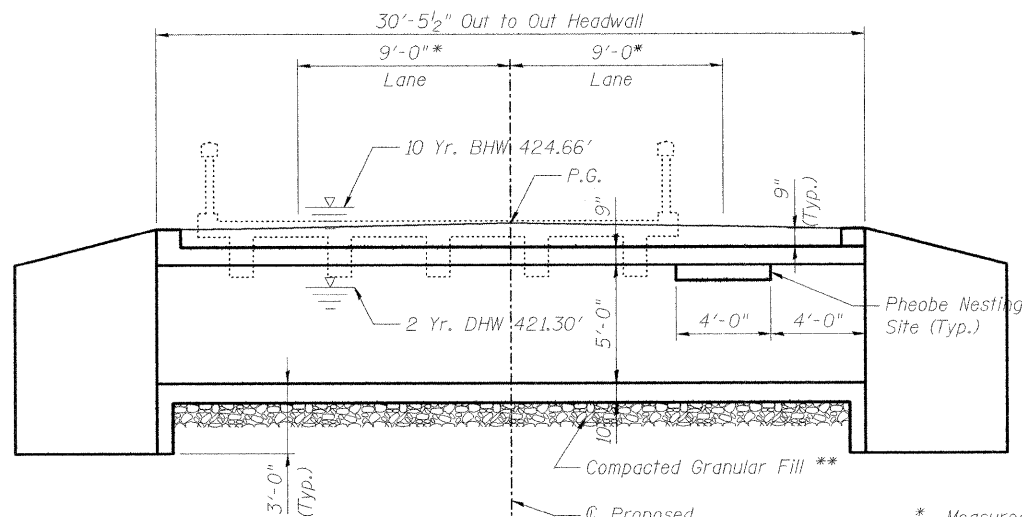
PROPOSED IMPROVEMENTS:

Existing structure to be removed and replaced
With a Double Box Culvert - 12'-0" x 5'-0"
Structure No. 082-4142

Note: Precast Alternate Not Allowed.

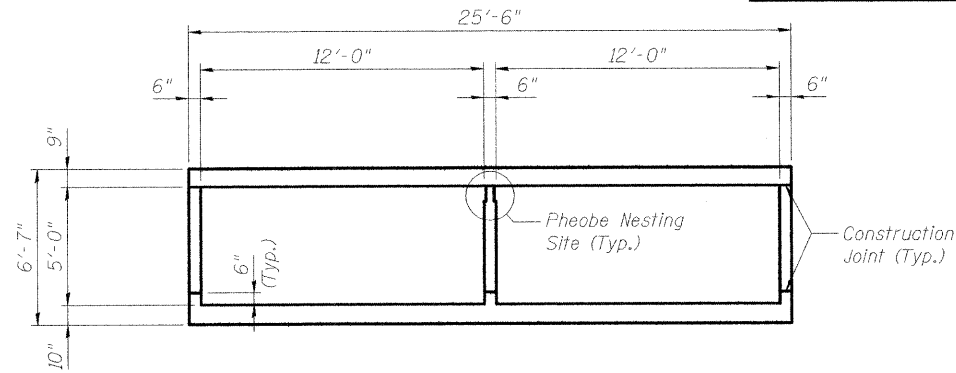
Note: It shall be the responsibility of the contractor to divert the stream flow during construction areas free of water. The method of diversion shall meet approval of the engineer. The cost of this work shall be considered incidental to the contract.

ST. CLAIR COUNTY

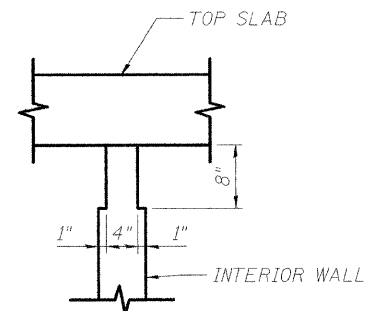


ELEVATION

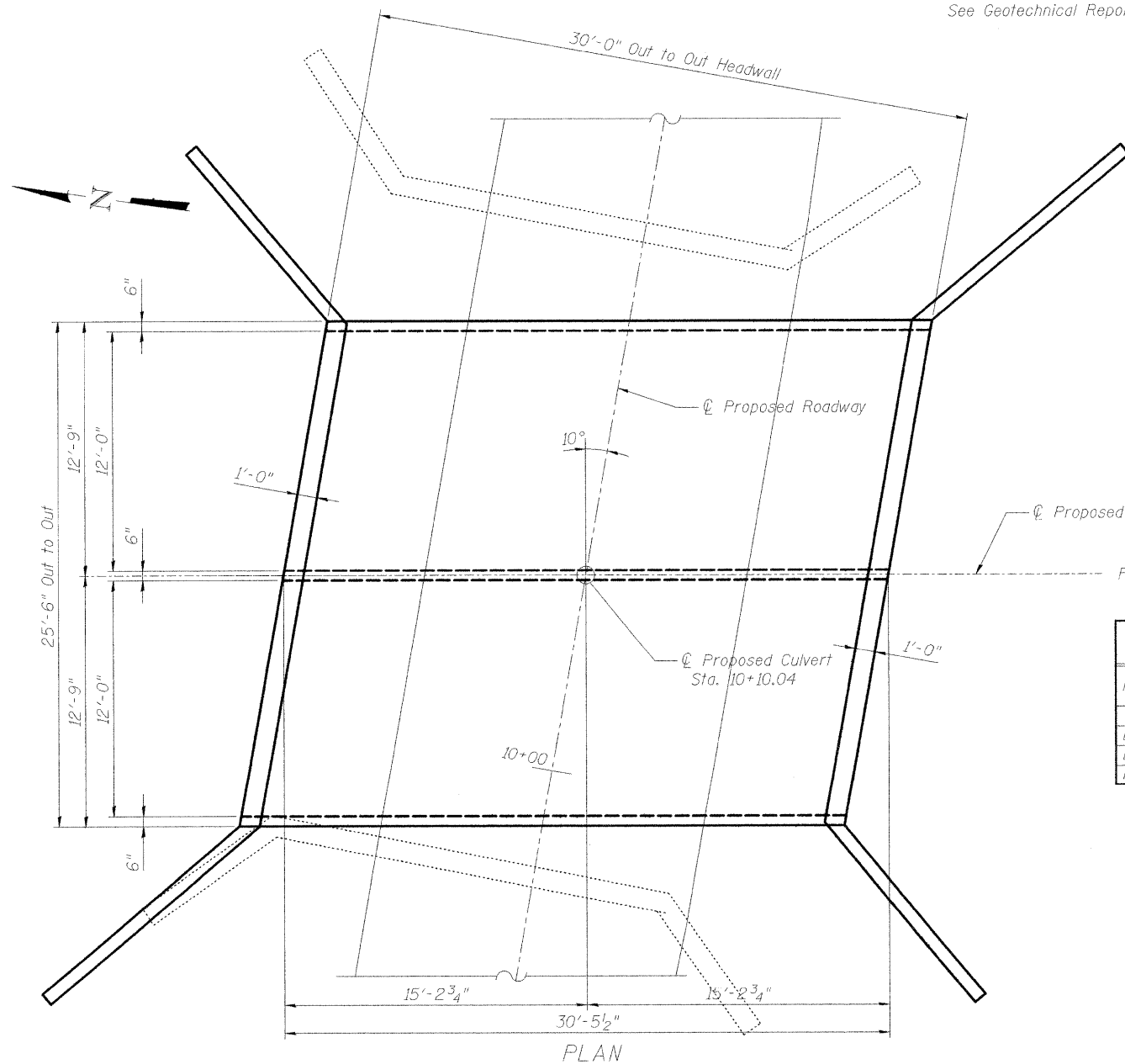
* Measured Perpendicular to Centerline of Roadway
** 1'-0" Compacted Granular Fill and Undercut Minimum 2'-0". See Geotechnical Report



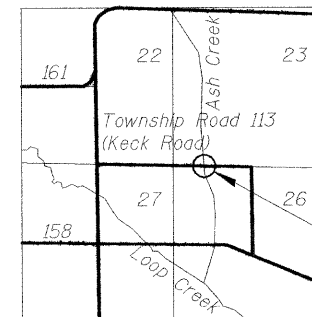
SECTION THRU BARREL



PHOEBE NESTING SITE



PLAN



LOCATION SKETCH

SHILOH VALLEY TOWNSHIP T.IN., R.7W.
NW 1/4, NW 1/4, SECTION 26 & SW 1/4, SW 1/4, SECTION 23

WATERWAY INFORMATION

Drainage Area = 3.7 sq. miles		Exist. Low Grade Elev. 421.8 @ Sta. 8+60.92 Prop. Low Grade Elev. 422.0 @ Sta. 8+15.60							
Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Exist.	Prop.	Nat. H.W.E.	Head - Ft. Exist.	Prop.	Headwater El. Exist.	Prop.
Design	2	180	51	120	421.30	0.03	0.12	421.33	421.42
Base	10	1,340	72	120	424.66	0	0.02	424.66	424.68
Max. Calc.	100	3,150	72	120	426.40	0	0	426.40	426.40

ASH CREEK
BUILT 20 BY
SHILOH VALLEY
SAINT CLAIR COUNTY
SEC. 97-17114-00-BR
STATION 10+10.04
STRUCTURE NO. 082-4142
LOADING HS20-44

NAME PLATE
See Std. 515001

HIGHWAY CLASSIFICATION

Functional Class: Local Road
ADT: 85
Design Speed: 30 mph

DESIGN SPECIFICATIONS

2002 AASHTO

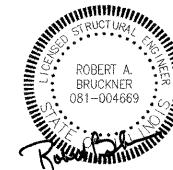
LOADING HS20-44

DESIGN STRESSES

f'c = 3,500 psi (Concrete -- Field Units)
fy = 60,000 psi (Reinf. Bars -- Field Units)

Reinforcement bars shall conform to requirements of ASTM A 706 Gr 60.

All exposed edges of concrete shall be beveled 3/4", unless otherwise noted.



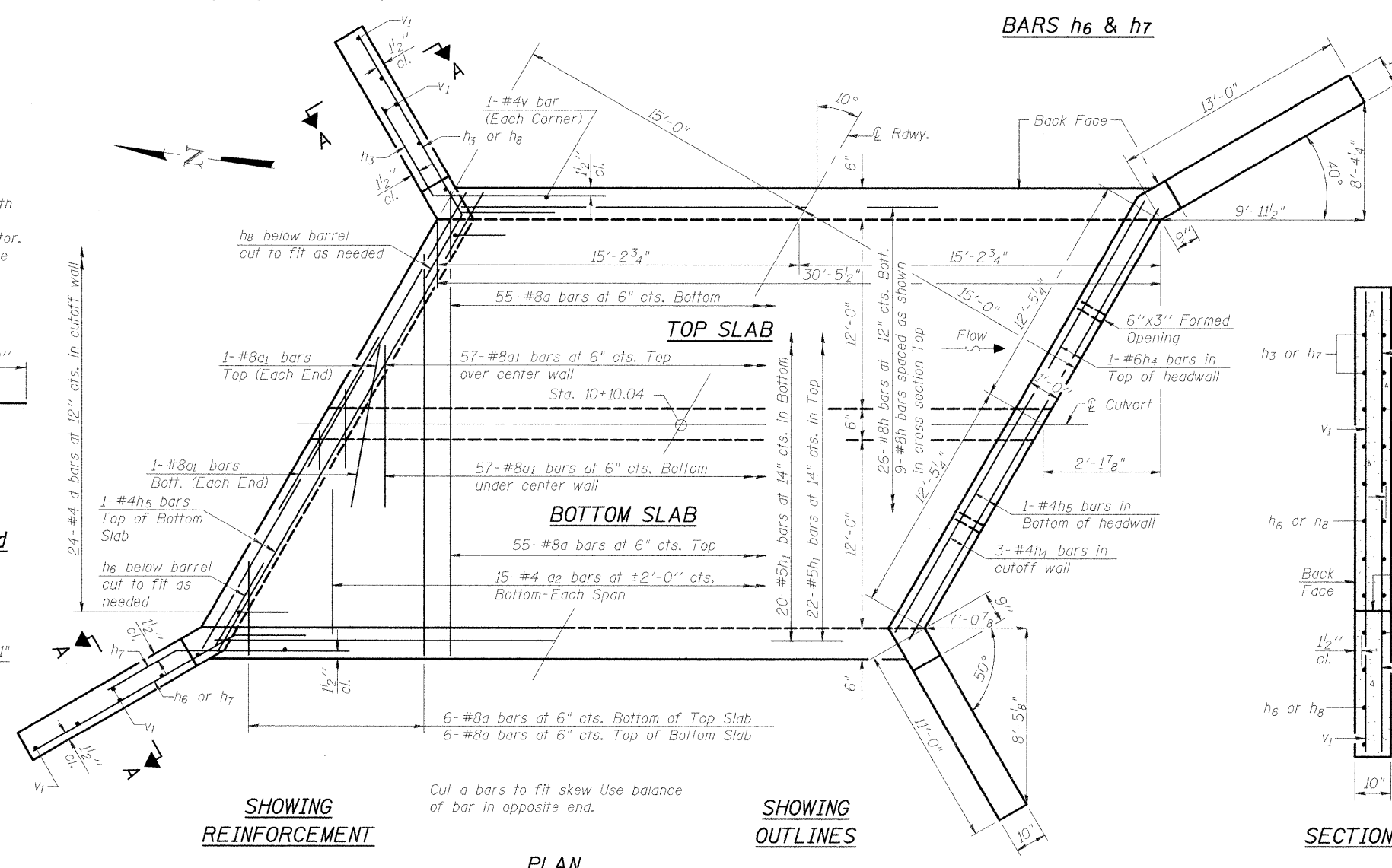
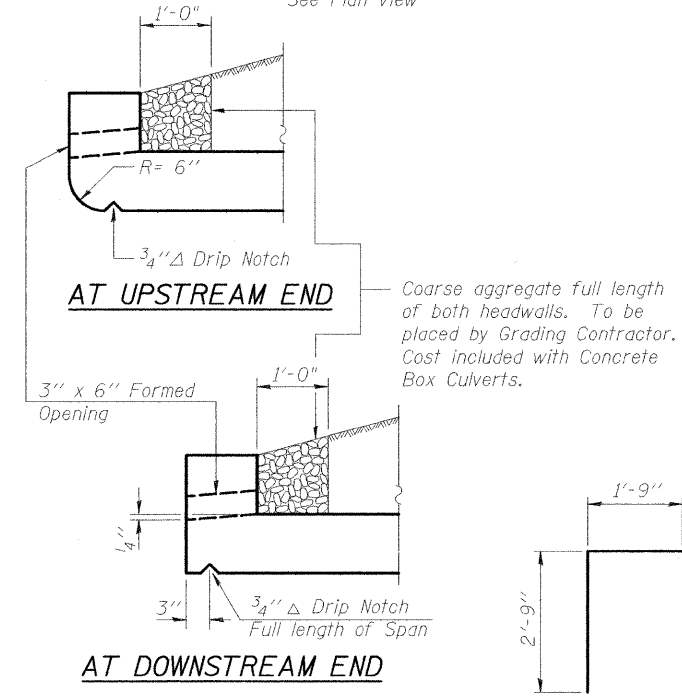
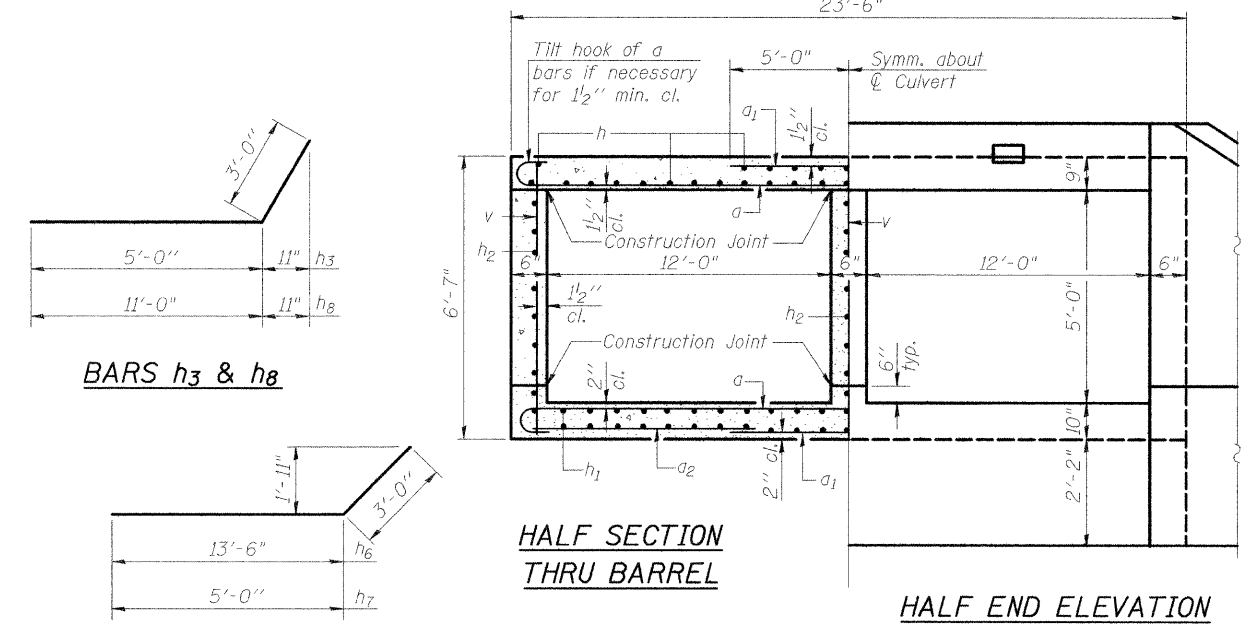
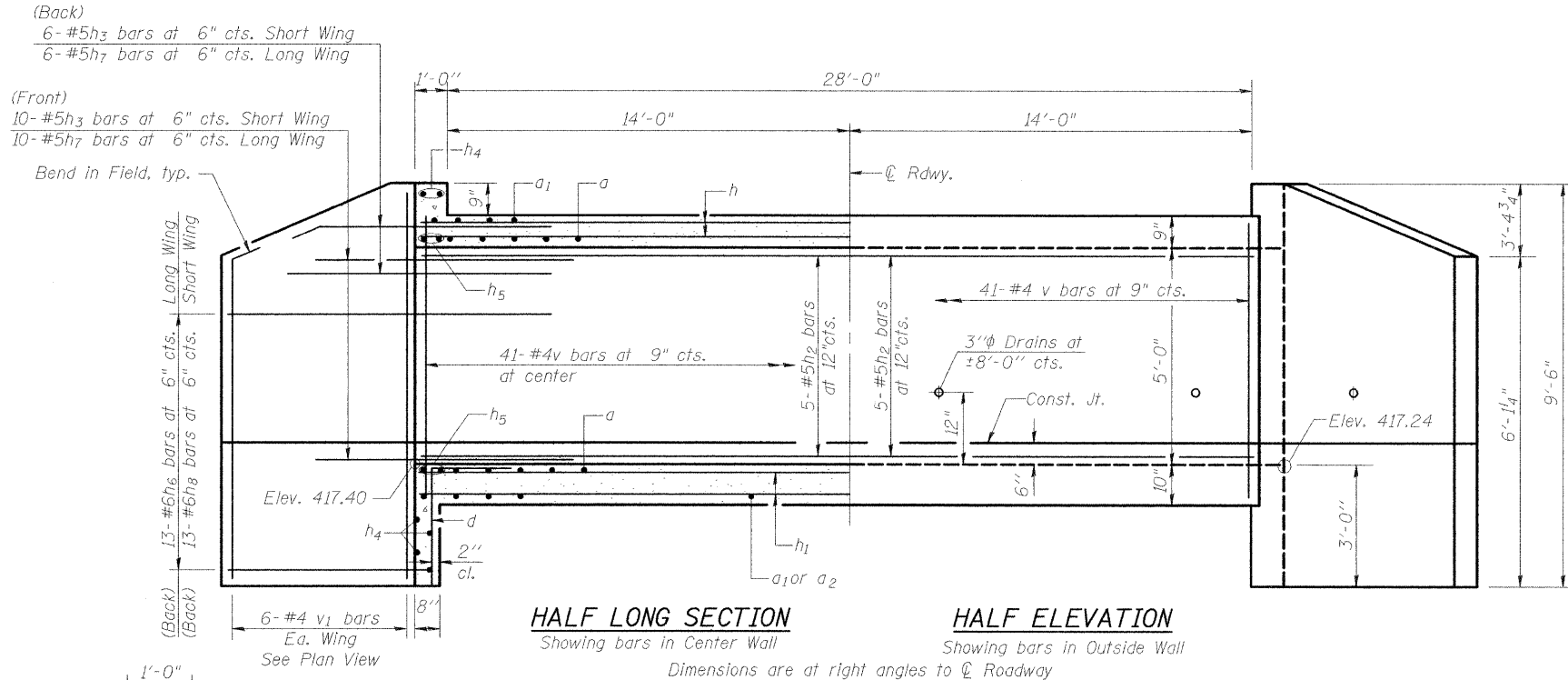
5-11-2009
License Expires 11-30-2010

GENERAL PLAN AND ELEVATION
TOWNSHIP ROAD 113 KECK ROAD OVER ASH CREEK
ST. CLAIR COUNTY
STATION 10+10.04
STRUCTURE NUMBER 082-4142

DESIGNED	RAB
CHECKED	AMC
DRAWN	JAS
CHECKED	RAB

ST. CLAIR COUNTY

SECTION NO.	ROAD DISTRICT	COUNTY	SHEET OF SHEETS
97-17114-00-BR	SHILOH VALLEY	ST. CLAIR	5 OF 6
FHWA REG NO. 7		PROJECT NO. BROS-0163(033)	
FEDERAL AID PROJECT		CONTRACT NO. 97381	



Notes: A distance of half the length of the wingwall but not less than six feet of the barrel shall be poured monolithically with the wingwalls.
Bars indicated thus 12x4-#5 etc. indicates 12 lines of bars with 4 lengths per line.

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a	122	#8	26'-10"	C
a1	122	#8	10'-0"	C
a2	30	#4	8'-10"	C
d	48	#4	4'-6"	C
h	35	#8	30'-0"	C
h1	42	#5	30'-0"	C
h2	15	#5	30'-0"	C
h3	32	#5	8'-0"	C
h4	10	#6	25'-5"	C
h5	8	#6	25'-5"	C
h6	26	#6	16'-6"	C
h7	32	#5	8'-0"	C
h8	26	#6	14'-0"	C
v	127	#4	6'-3"	C
v1	24	#4	9'-2"	C
Concrete Box Culverts			Cu. Yd.	70.0
Reinforcement Bars			Pound	19,990

DESIGNED RAB
CHECKED AMC
DRAWN JAS
CHECKED RAB
DB-H-R

10-22-04



5-11-2009
License Expires 11-30-2010

SECTION NO.	ROAD DISTRICT	COUNTY	SHEET OF SHEETS
97-17114-00-BR	SHILOH VALLEY	ST. CLAIR	6 OF 6
FHWA REG NO. 7		PROJECT NO. BROS-0163(033)	
FEDERAL AID PROJECT		CONTRACT NO. 97381	

STA. 9+97.09 (NOT SHOWN)

AREAS (SQ FT)		VOLUMES (CU YD)	
CUT	FILL	CUT	FILL
BACK			
34.32	48.36	60	84
AHEAD			
0.00	20.84	0	0

STA. 10+22.99 (NOT SHOWN)

AREAS (SQ FT)		VOLUMES (CU YD)	
CUT	FILL	CUT	FILL
BACK			
0.00	20.66	0	20
AHEAD			
59.80	41.33	0	0

9 + 50

9 + 00

8 + 50

8 + 00

7 + 79.68

12 + 12.76

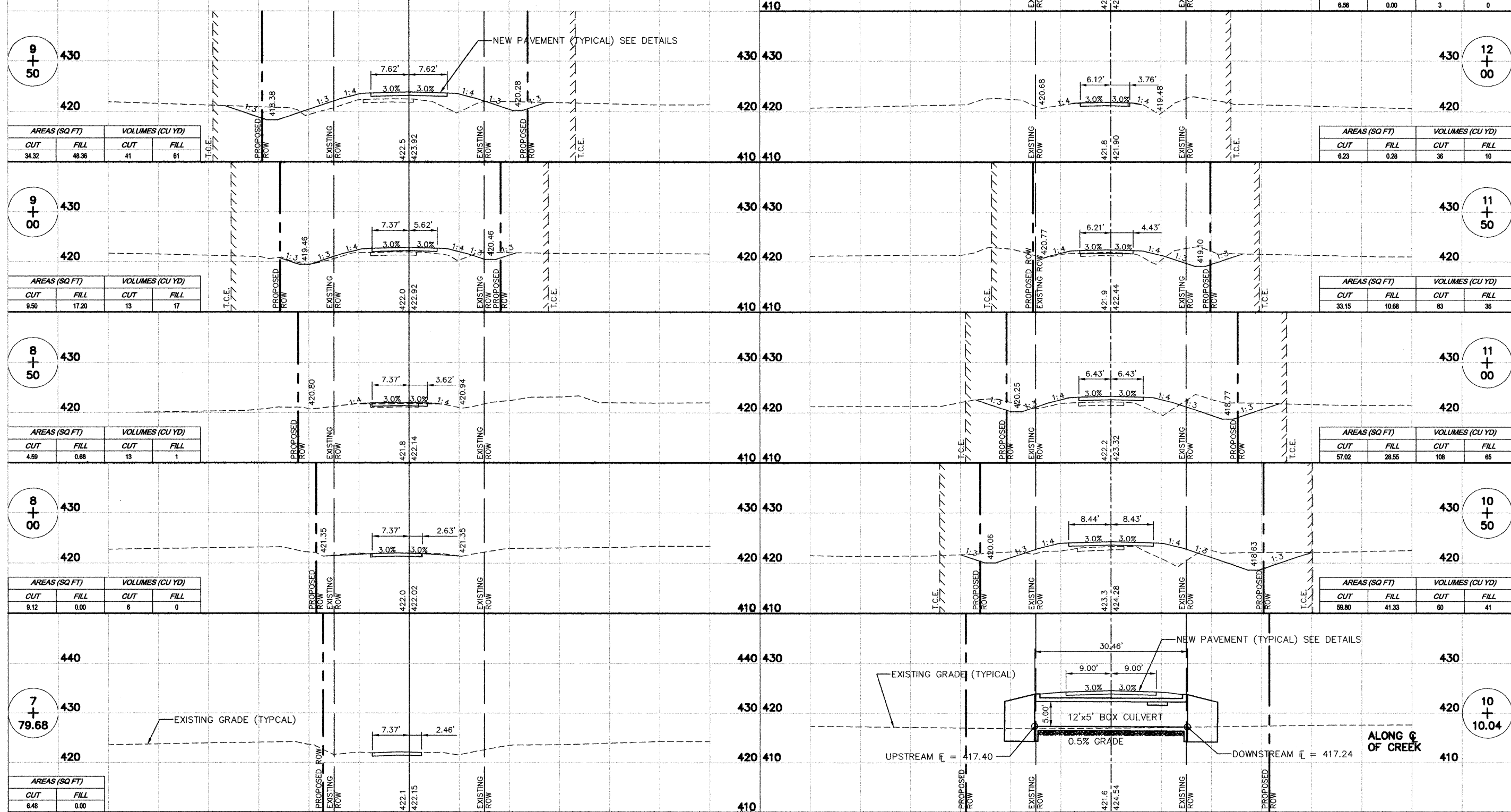
12 + 00

11 + 50

11 + 00

10 + 50

10 + 10.04



AREAS (SQ FT)		VOLUMES (CU YD)	
CUT	FILL	CUT	FILL
34.32	48.36	41	61

AREAS (SQ FT)		VOLUMES (CU YD)	
CUT	FILL	CUT	FILL
9.50	17.20	13	17

AREAS (SQ FT)		VOLUMES (CU YD)	
CUT	FILL	CUT	FILL
4.59	0.88	13	1

AREAS (SQ FT)		VOLUMES (CU YD)	
CUT	FILL	CUT	FILL
9.12	0.00	6	0

AREAS (SQ FT)	
CUT	FILL
6.48	0.00

AREAS (SQ FT)		VOLUMES (CU YD)	
CUT	FILL	CUT	FILL
6.56	0.00	3	0

AREAS (SQ FT)		VOLUMES (CU YD)	
CUT	FILL	CUT	FILL
6.23	0.28	36	10

AREAS (SQ FT)		VOLUMES (CU YD)	
CUT	FILL	CUT	FILL
33.15	10.68	83	36

AREAS (SQ FT)		VOLUMES (CU YD)	
CUT	FILL	CUT	FILL
57.02	28.55	108	65

AREAS (SQ FT)		VOLUMES (CU YD)	
CUT	FILL	CUT	FILL
59.80	41.33	60	41

Existing Grade Elevation (Typical) New CL of Pavement Elevation (Typical)

Existing Grade Elevation (Typical) New CL of Pavement Elevation (Typical)

SCALE: 1"=10'HORIZ.
1"=10' VERT.