INDEX OF SHEETS

LIST OF ILLINOIS DOT HIGHWAY STANDARDS

STANDARD NO.	DESCRIPTION
000001-06	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT
280001-07	TEMPORARY EROSION CONTROL SYSTEMS
442201-03	CLASS C AND D PATCHES
515001-03	NAME PLATE FOR BRIDGES
542301-03	PRECAST REINFORCED CONCRETE FLARED END SECTION
602401-03	MANHOLE, TYPE A
602601-02	PRECAST REINFORCED CONCRETE FLAT SLAB TOP
604001-03	FRAMES AND LIDS, TYPE 1
630001-10	STEEL PLATE BEAM GUARDRAIL
630101-09	GUARDRAIL MOUNTED ON EXISTING CULVERTS
631011-09	TRAFFIC BARRIER TERMINAL, TYPE 2
635011-02	REFLECTOR MARKER AND MOUNTING DETAILS
666001-01	RIGHT-OF-WAY MARKERS
701001-02	OFF-RD OPERATIONS, 2L, 2W, MORE THAN 15' (4.5 m) AWAY
701006-04	OFF-RD OPERATIONS, 2L, 2W, 15' (4.5 m) TO 24" (600 mm) FROM PAVEMENT EDGE
701011-03	OFF-RD MOVING OPERATIONS, 2L, 2W, DAY ONLY
701201-04	LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS ≥ 45 MPH
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701306-03	LANE CLOSURE, 2L, 2W, SLOW MOVING OPERATIONS DAY ONLY, FOR SPEEDS ≥ 45 MPH
701311-03	LANE CLOSURE, 2L, 2W, MOVING OPERATIONS - DAY ONLY
701321-13	LANE CLOSURE, 2L, 2W, BRIDGE REPAIR WITH BARRIER
701326-04	LANE CLOSURE, 2L, 2W, PAVEMENT WIDENING, FOR SPEEDS ≥ 45 MPH
701901-02	TRAFFIC CONTROL DEVICES
704001-07	TEMPORARY CONCRETE BARRIER
720001-01	SIGN PANEL MOUNTING DETAILS
720006-03	SIGN PANEL ERECTION DETAILS
720011-01	METAL POSTS FOR SIGNS, MARKERS & DELINEATORS
729001-01	APPLICATIONS OF TYPES A & B METAL POSTS (FOR SIGNS & MARKERS)
780001-03	TYPICAL PAVEMENT MARKINGS
781001-03	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS

1 REVISED 2-28-2013

GENERAL NOTES

1. THE ENGINEER SHALL BE THE SOLE JUDGE CONCERNING CURING TIME FOR THE VARIOUS HMA LIFTS.
2. EXCEPT AS NOTED ON THE PLANS, PAVEMENT GRADES SHOWN ARE AT THE TOP OF PAVEMENT SURFACES.
3. CONTRACTOR SHALL VERTICALLY SAW CUT EDGES OF EXISTING HOT MIX ASPHALT SURFACE FLUSH WITH EXISTING PAVEMENT PRIOR TO CONSTRUCTING NEW BASE COURSE WIDENING. COST TO BE INCLUDED IN HMA BASE COURSE WIDENING.
4. AT ALL LOCATIONS WHERE THE PROPOSED HOT MIX ASPHALT OR CONCRETE PAVEMENT JOINS AN EXISTING HOT MIX ASPHALT OR CONCRETE PAVEMENT, A FULL DEPTH SAWED JOINT SHALL BE CONSTRUCTED. THE COST OF THIS JOINT WILL BE INCLUDED IN THE COST OF THE TYPE OF PAVEMENT BEING CONSTRUCTED.
5. ACTUAL SIZE AND LOCATIONS OF ADDITIONAL PATCHES, OTHER THAN THOSE NOTED IN THE PLANS, WILL BE DETERMINED IN THE FIELD BY THE RESIDENT ENGINEER.
6. IN ADDITION TO FIELD SURVEYS AND AERIAL SURVEYS, PLAN DIMENSIONS AND DETAILS RELATIVE TO THE EXISTING FACILITIES HAVE BEEN TAKEN FROM EXISTING PLANS AND ARE SUBJECT TO CONSTRUCTION VARIATIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY SUCH DIMENSIONS AND DETAILS IN THE FIELD. SUCH VARIATIONS SHALL NOT BE A CAUSE FOR ADDITIONAL COMPENSATION. HOWEVER, THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED AT THE BID UNIT PRICE FOR THE WORK.
7. WHERE SECTION OR SUBSECTION MONUMENTS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL MONUMENTS UNTIL AN AUTHORIZED SURVEYOR OR AGENT HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR HAVING AN AUTHORIZED SURVEYOR REESTABLISH ANY SECTION OR SUBSECTION MONUMENTS DESTROYED BY HIS OPERATIONS.
8. THE THICKNESS OF HMA MIXTURES SHOWN ON THE PLANS IS THE NOMINAL THICKNESS. DEVIATIONS FROM THE NOMINAL THICKNESS WILL BE PERMITTED WHEN SUCH DEVIATIONS OCCUR DUE TO IRREGULARITIES IN THE EXISTING SURFACE OR BASE ON WHICH THE HMA MIXTURE IS PLACED.
9. ANY REFERENCE TO A STANDARD IN THESE PLANS SHALL BE INTERPRETED TO MEAN THE EDITION AS INDICATED BY THE SUBNUMBER LISTED ON THE INDEX OF SHEETS OR THE COPY OF THE STANDARD INCLUDED IN THESE PLANS.
10. FACTORS USED FOR ESTIMATING PLAN QUANTITIES ARE AS FOLLOWS AND SHALL NOT BE USED FOR THE BASIS OF FINAL QUANTITIES:

ALL HOT-MIX ASPHALT	0.056 TONS/SQ YD•IN
AGGREGATE SHOULDERS, TYPE B	2.05 TONS/CU YD
BITUMINOUS MATERIALS:	
PRIME COAT (PAVEMENT)	0.00038 TONS/SQ YD
PRIME COAT (AGGREGATE)	0.002 TONS/SQ YD
FERTILIZER NUTRIENTS	90 LB/ACRE
AGRICULTURAL GROUND LIMESTONE	2 TONS/ACRE
TEMPORARY EROSION CONTROL SEEDING	100 LB/ACRE
MULCH, METHOD 2	2 TONS/ACRE

11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING UTILITY PROPERTY FROM CONSTRUCTION OPERATIONS AS OUTLINED IN ARTICLE 107.31 OF THE STANDARD SPECIFICATIONS. THE JULIE NUMBER IS 800-892-0123. A MINIMUM OF 48 HOURS ADVANCE NOTICE IS REQUIRED PRIOR TO THE START OF ANY EXCAVATION OR DEMOLITION.
12. ALL UTILITIES TO BE RELOCATED BY OTHERS.
13. ABANDONED UNDERGROUND UTILITIES THAT CONFLICT WITH CONSTRUCTION SHALL BE DISPOSED OF OUTSIDE THE LIMITS OF THE RIGHT OF WAY ACCORDING TO ARTICLE 202.03 OF THE STANDARD SPECIFICATIONS AND AS DIRECTED BY THE ENGINEER. THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION.
14. ALL DISTURBED AREAS WITHIN THE R.O.W. AND EASEMENTS SHALL BE SEEDED, FERTILIZED AND MULCHED, AS DIRECTED BY THE ENGINEER. SEEDING SHALL BE ACCORDING TO THE APPLICABLE ARTICLES OF SECTION 250 OF THE STANDARD SPECIFICATIONS. SEEDING SHALL NOT BE PERMITTED AT ANY TIME WHEN THE GROUND IS FROZEN, WET, OR IN AN UNTILLABLE CONDITION.
15. THE QUANTITY OF SHORT TERM PAVEMENT MARKING SHOWN IN THE PLANS IS BASED ON ONE APPLICATION FOR THE INITIAL OPENING OF THE COMPLETED STRUCTURE TO TWO LANE TRAFFIC, AND ONE ADDITIONAL APPLICATION.
16. FOR STABILIZATION, ALL TYPE III BARRICADES SHALL REQUIRE A MINIMUM OF FOUR SANDBAGS PER BARRICADE.
17. ALL ELEVATIONS REFERRING TO U.S.G.S. MEAN SEA LEVEL DATUM.
18. EARTHWORK COMPACTION SHALL BE IN ACCORDANCE WITH ARTICLE 205.06 OF THE STANDARD SPECIFICATIONS.
19. ATTAINMENT OF PROPER CROWN OR SUPERELEVATION SHALL BE FULLY ACCOMPLISHED WITH THE HOT MIX ASPHALT BINDER COURSE OR LEVELING BINDER, WHEN SPECIFIED.
20. EXISTING ROAD SIGNS THAT INTERFERE WITH CONSTRUCTION WILL BE REMOVED OR RELOCATED AS DIRECTED BY THE ENGINEER. AFTER CONSTRUCTION IS COMPLETED, THE CONTRACTOR WILL REPLACE THE SIGNS AS DIRECTED BY THE ENGINEER. THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE CONTRACT AND NO COMPENSATION WILL BE ALLOWED.
21. THE LOCATION OF ANY NO PASSING ZONES WILL BE DOCUMENTED PRIOR TO RESURFACING. NOTIFY THE BUREAU OF OPERATIONS SO THE NO PASSING ZONES CAN BE FIELD VERIFIED (217) 785-5312.
22. PRIOR TO PLACEMENT OF THE FINAL PAVEMENT MARKINGS THE RESIDENT ENGINEER SHOULD CONTACT THE BUREAU OF OPERATIONS AND ARRANGE FOR INSPECTION AND APPROVAL OF THE FINAL PAVEMENT MARKING LAYOUT.
23. IF SO DIRECTED BY THE ENGINEER, DITCHES ADJACENT TO EMBANKMENTS SHALL BE CONSTRUCTED PRIOR TO STARTING THE CONSTRUCTION OF THE EMBANKMENT FILL.

COMMITMENTS

1. THE FIELD/RESIDENT ENGINEER SHALL CONTACT DISTRICT 6 STUDIES AND PLANS AT CONCERNING ANY MAJOR PLAN CHANGES TO ENSURE THAT ANY PREVIOUS COMMITMENTS (NOT LISTED) THAT WERE MADE AFFECTING THE DESIGN ARE MET, AND TO ALLOW IMPROVEMENTS TO THE DESIGN FOR FUTURE PROJECTS.
2. TO ACCOMMODATE THE OWNER OF PARCELS 6288101 A & B, THE 14 FOOT WIDE RESTRICTION ON THE TEMPORARY RUNAROUND WILL ONLY BE IN FORCE BETWEEN JUNE 1, 2013 AND SEPTEMBER 15, 2013. THE OWNER WILL BE PROVIDED ACCESS AT ALL TIMES TO HIS FIELDS AND HAS BEEN ADVISED THAT ACCESS WILL INVOLVE ADVERSE TRAVEL UTILIZING TOWNSHIP ROADS BETWEEN JUNE 1, 2013 AND SEPTEMBER 15, 2013.

HMA MIXTURES REQUIREMENTS

MIXTURE USE(S):	HMA SURFACING, INCIDENTAL SURFACING	LEVELING BINDER	HMA BINDER, HMA BASE COURSE, BASE COURSE WIDENING & PATCHING
AC/PG GRADE:	PG64-22	PG64-22	PG64-22
DESIGN AIR VOIDS	4.0%, N50	4.0%, N50	4.0%, N50
MIXTURE COMPOSITION: (GRADATION MIXTURE)	IL-9.5	IL-9.5	IL-19.0
FRICTION AGGREGATE:	MIX "C"	NONE	NONE

DISTRICT SIX

EXAMINED 12/7/ 20 12

William an Burgess

OPERATIONS ENGINEER

EXAMINED Dec 12 20 12

JRM L.I

PROGRAM DEVELOPMENT ENGINEER

EXAMINED Dec 10 20 12

PROJECT IMPLEMENTATION ENGINEER

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MODEL NAME = Default
PLOT DRIVER = V8_PDF.ilst7.plotcfg

QUIGG ENGINEERING INC

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FILE NAME = 0672862-sht-gennote.dgn	DRAWN - CMM	REVISED -
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PLOT DATE = 12/17/2012	DATE - 12/12	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

SCALE: | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

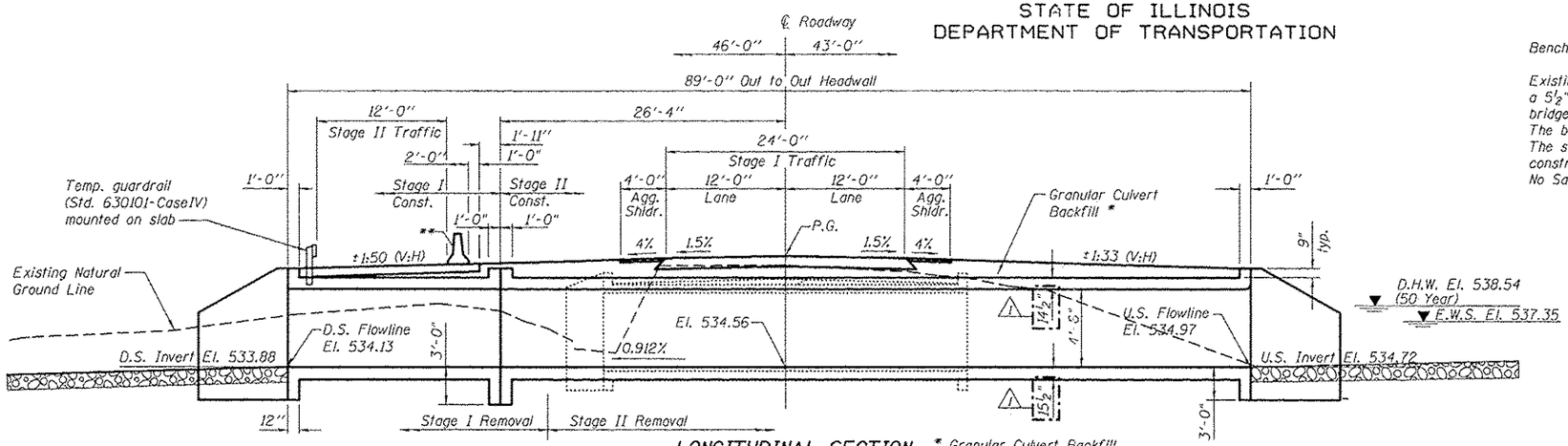
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	113B-4	HANCOCK	57	2
		CONTRACT NO. 72B62		
	ILLINOIS FED. AID PROJECT			

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FOR INDEX OF SHEETS, SEE SHEET NO. 2

Bench Mark: Chiseled "Square" in west end of the north headwall 17.6' Lt. STA 152+42.3 Elev=540.97

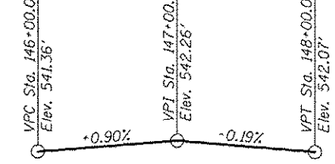
Existing Structure: S.N. 034-0050 was built in 1928 as SBI 95, Section 113-B. In 1991 a 5½" concrete wearing surface was added. The structure is a single span concrete slab bridge. The substructure is composed of the original closed abutments on spread footings. The back-to-back dimension measures 20'-0" while the out-to-out deck width is 36'-2". The structure is to be replaced with a 2-cell box culvert on a 15 degree skew. Stage construction with on-site run around will be utilized.
No Salvage



** Temporary Concrete Barrier, typ.

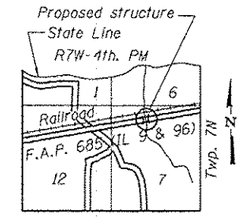
LONGITUDINAL SECTION
(Dim. at Rt. L's to ℄ Rdwy.)

* Granular Culvert Backfill to extend 2'-0" beyond all sides of the box culvert.



LVC=200.00'

PROFILE GRADE
(along ℄ roadway)



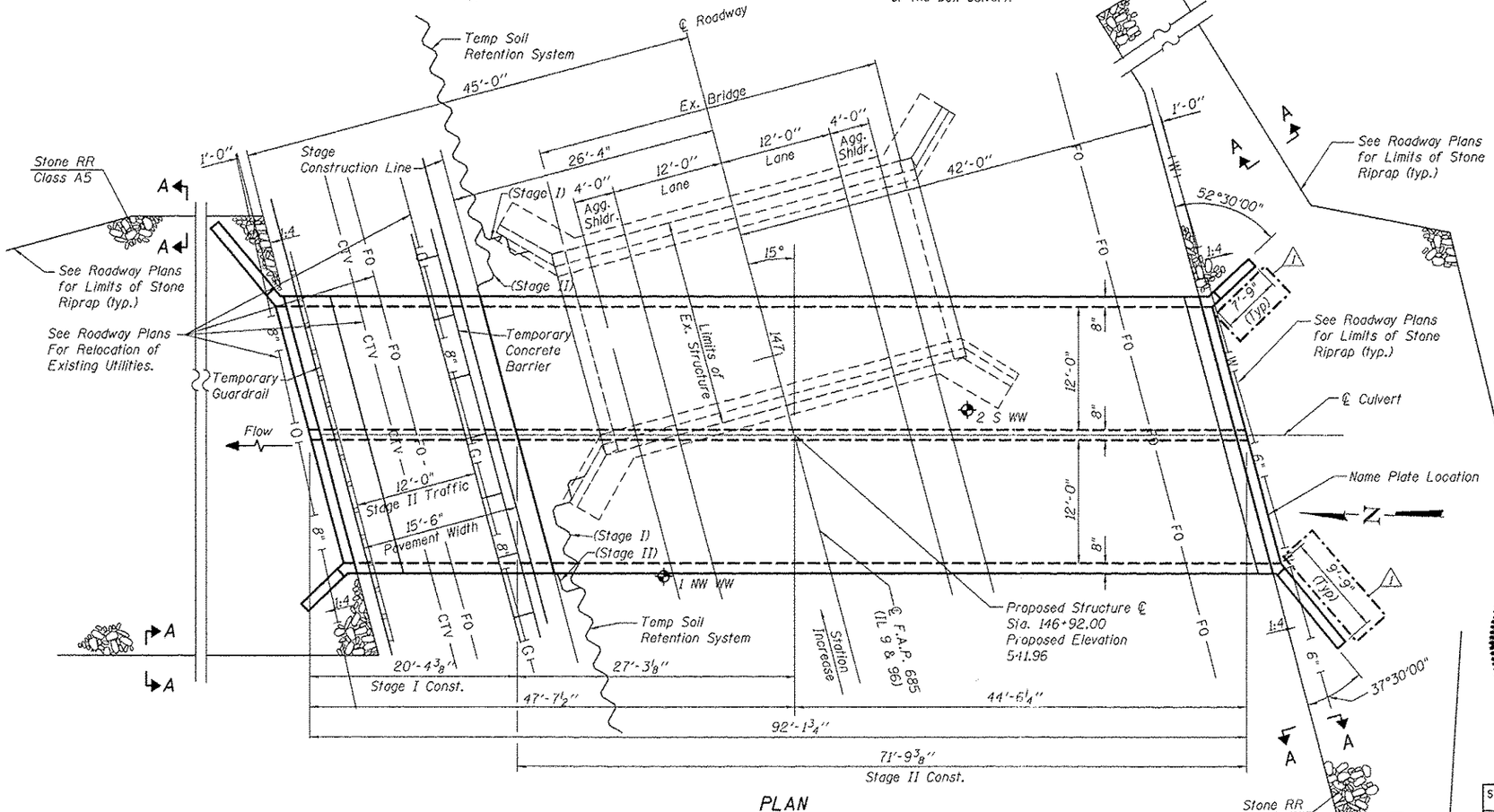
LOCATION SKETCH

HIGHWAY CLASSIFICATION
F.A.P. ROUTE 685 - IL 9 & 96
Functional Class: Minor Arterial (Non-Urban)
ADT: 2,200 (2012); 2,650 (2032)
ADTT: 8%
DHV: 330 (2012); 398 (2032)
Design Speed: 60 m.p.h.
Posted Speed: 55 m.p.h.

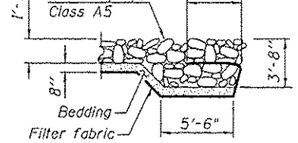
DESIGN SPECIFICATIONS
2012 AASHTO LRFD
Bridge Design Specifications

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

DESIGN STRESSES
FIELD UNITS
f'_c = 3,500 psi
f_y = 60,000 psi (reinforcement)



PLAN



SECTION A-A

APPROVED
For Structural Adequacy Only
Engineer of Bridges & Structures

LICENSED STRUCTURAL ENGINEER
KARA C. MARFELL
081-005859
STATE OF ILLINOIS

SIGN: Kara Marfell
DATE: 2/25/13
LICENSE EXP: 11-30-2014
DAVID MASON & ASSOC, INC.

GENERAL PLAN
IL 9 & 96 OVER DRAINAGE DITCH
F.A.P. ROUTE 685 SECT. 113 (B-4)
HANCOCK COUNTY
STATION 146+92.00
STRUCTURE NO. 034-2527

THE VOLKERT/DMA Joint Venture

USER NAME = $USER$	DESIGNED BLM	REVISED ⚠ 2/21/2013 TJR	
	DRAWN TJR	REVISED	
PLOT SCALE = $SCALE$	CHECKED JEK	REVISED	
PLOT DATE = $DATE$	DATE 02-04-2013	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

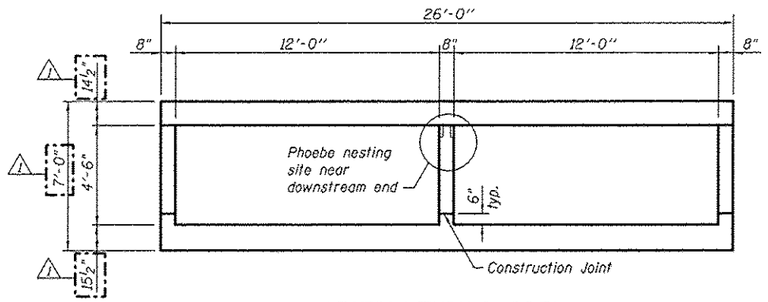
SCALE: NTS | SHEET 1 OF 9 SHEETS | STA. 146+92.00

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	113 (B-4)	HANCOCK	62	37
		CONTRACT NO. 72B62		
	ILLINOIS FED. AID PROJECT			

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTE:

Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.



SECTION THRU BARREL

INDEX OF SHEETS

TOTAL BILL OF MATERIALS

Item	Unit	Total
Granular Culvert Backfill	Cu. Yd.	207
Stone RipRap, Class A5	Sq. Yd.	486
Filter Fabric	Sq. Yd.	486
Removal of Existing Structures	Each	1
Reinforcement Bars	Pound	46,430
Bar Splicers	Each	128
Concrete Box Culverts	Cu. Yd.	272
Temporary Soil Retention System	Sq. Ft.	253
Name Plates	Each	1

1

DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (ft.)	D.S. Invert	U.S. Invert
	530.88	531.72

WATERWAY INFORMATION

Drainage Area = 0.45 mi^2
Exist. Low Grade Elev. 541.10 ft. @ Sta. 147+05.05
Prop. Low Grade Elev. 541.10 ft. @ Sta. 147+05.05

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Exist.	Opening Sq. Ft. Prop.	Nat. H.W.E.	Head - Ft. Exist.	Head - Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
	10	390	60	70	537.77	1.4	1.4	539.19	539.21
Design	50	650	70	90	538.54	4.4	1.9	542.93	540.41
Base	100	770	80	90	538.79	4.5	1.7	543.28	540.50
Max. Calc.	500	1,080	80	108	540.42	3.7	1.5	544.13	541.87

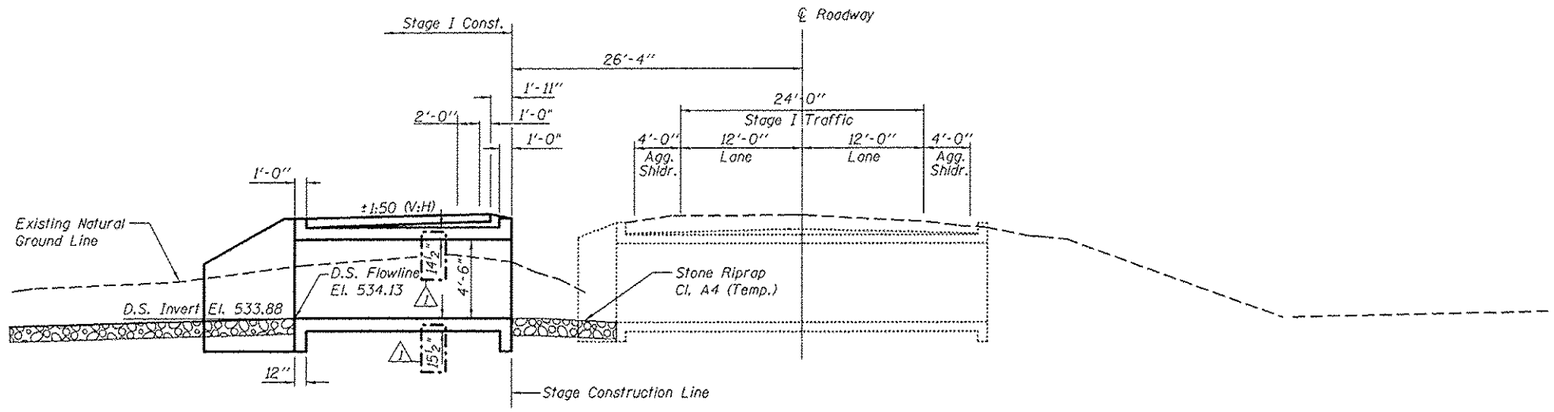
NAME PLATE

STATION 146+92.00
BUILT 20__ BY
STATE OF ILLINOIS
F.A.P. ROUTE 685
SECTION 113 (B-4)
LOADING HL93
STR. NO. 034-2527

See Std. 515001

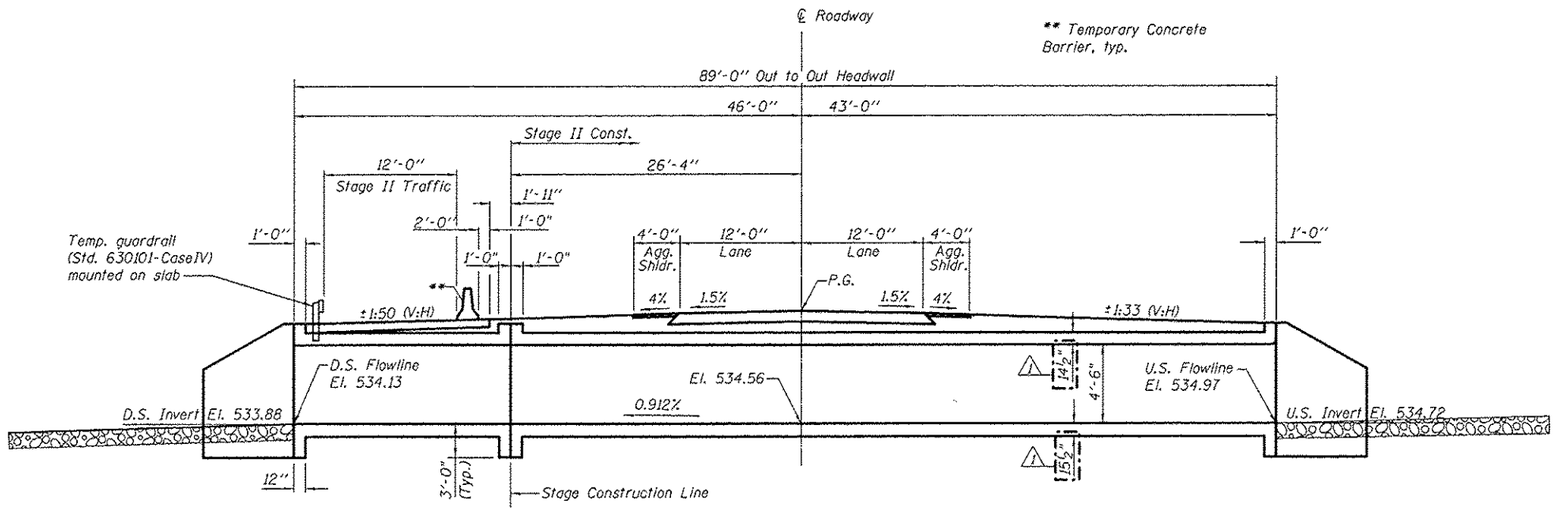
The VOLKERT/DMA Joint Venture	USER NAME = @USER@	DESIGNED BLM	REVISED 1 2/21/2013 TJR	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GENERAL NOTES, SECTION, AND BILL OF MATERIALS STRUCTURE NO. 034-2527	F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN TJR	REVISED			685	113 (B-4)	HANCOCK	62	38
	PLOT SCALE = @SCALE@	CHECKED JEK	REVISED					CONTRACT NO. 72B62		
	PLOT DATE = @DATE@	DATE 02-04-2013	REVISED		SCALE: NTS SHEET 2 OF 9 SHEETS STA. 146+92.00			ILLINOIS FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



STAGE I TRAFFIC AND CONSTRUCTION

(Looking Eastbound)
Dimensions are at right angles to CL roadway

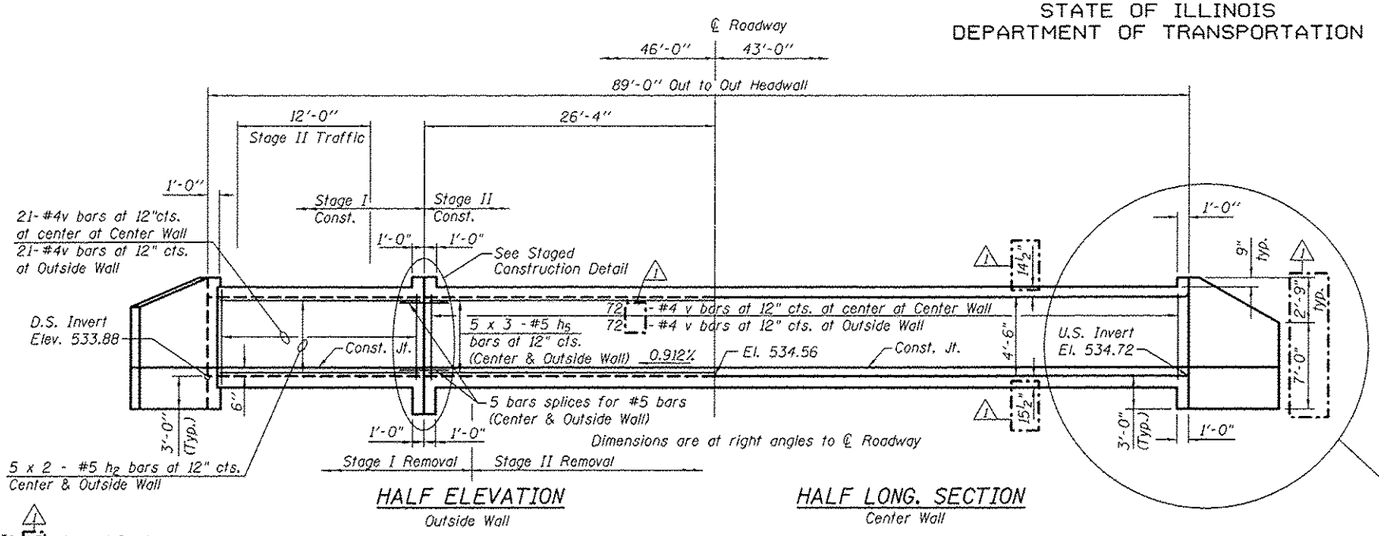


STAGE II TRAFFIC AND CONSTRUCTION

(Looking Eastbound)
Dimensions are at right angles to CL roadway

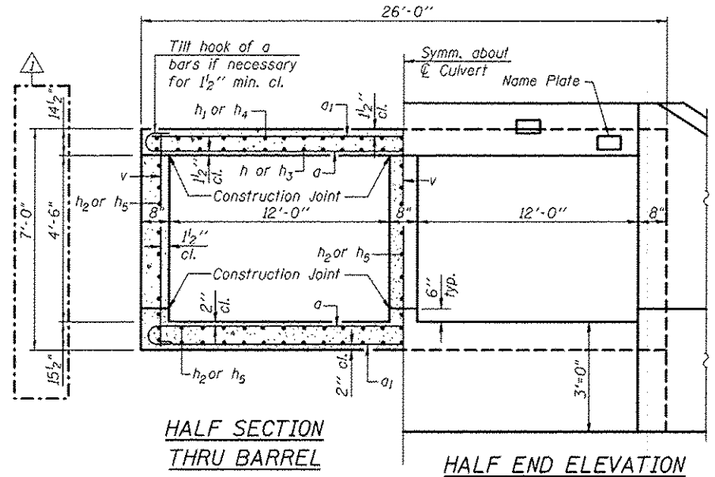
The VOLKERT/DMA Joint Venture	USER NAME = *USER*	DESIGNED BLM	REVISED ⚠ 2/21/2013 TJR	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CONSTRUCTION STAGING DETAILS STRUCTURE NO. 034-2527				F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN TJR	REVISED						685	113 (B-4)	HANCOCK	62	39
	PLOT SCALE = *SCALE*	CHECKED JEK	REVISED								CONTRACT NO. 72B62		
	PLOT DATE = *DATE*	DATE 02-04-2013	REVISED		SCALE: NTS	SHEET 3 OF 9 SHEETS	STA. 146+92.00				ILLINOIS FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



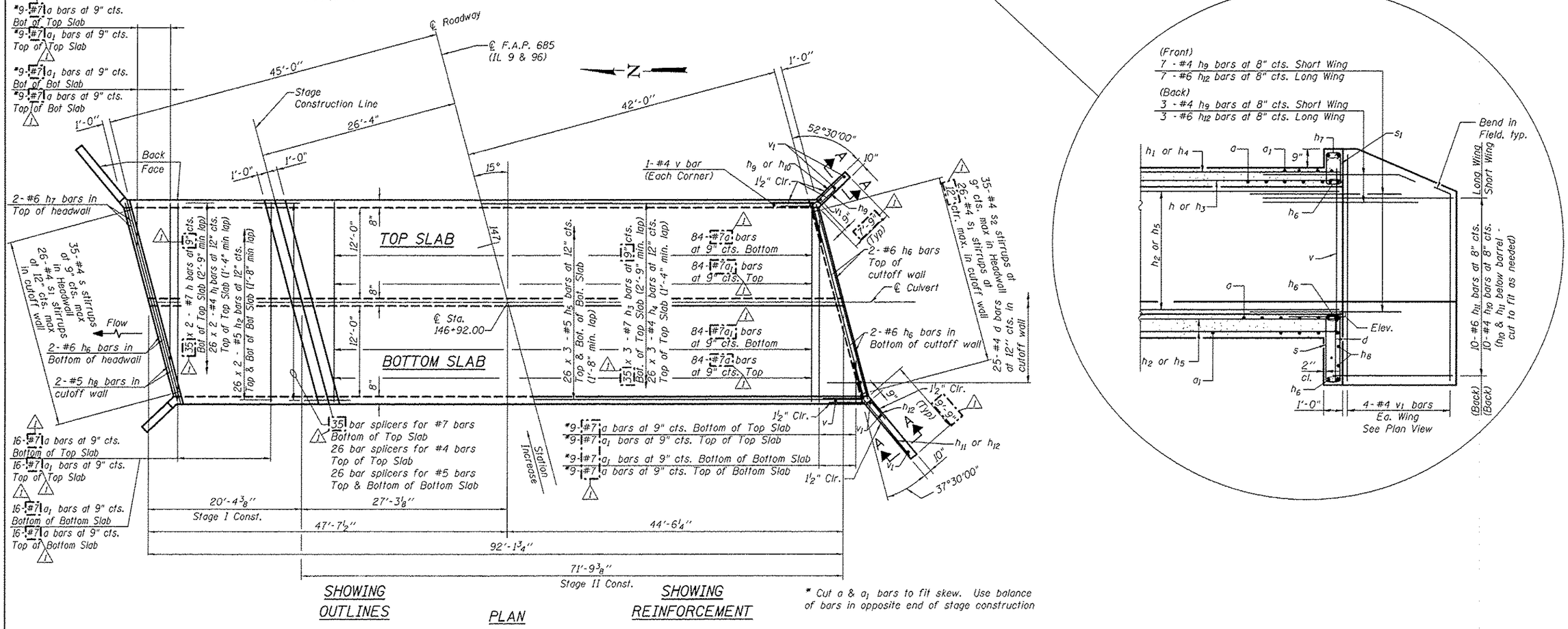
HALF ELEVATION
Outside Wall

HALF LONG. SECTION
Center Wall



HALF SECTION THRU BARREL

HALF END ELEVATION



SHOWING OUTLINES

PLAN

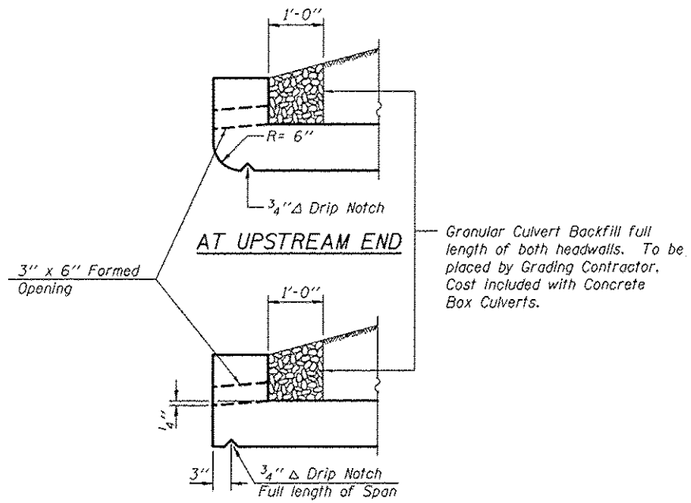
SHOWING REINFORCEMENT

* Cut a & a1 bars to fit skew. Use balance of bars in opposite end of stage construction

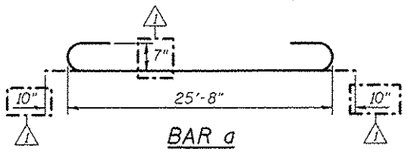
The VOLKERT/DMA Joint Venture	USER NAME • •USER•	DESIGNED BLM	REVISED ⚠ 2/21/2013 TJR	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CULVERT DETAILS STRUCTURE NO. 034-2527
		DRAWN TJR	REVISED		
	PLOT SCALE • •SCALE•	CHECKED JEK	REVISED		
	PLOT DATE • •DATE•	DATE 02-04-2013	REVISED		SCALE: NTS SHEET 4 OF 9 SHEETS STA. 146+92.00

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	113 (B-4)	HANCOCK	62	40
		CONTRACT NO. 72B62		
	ILLINOIS FED. AID PROJECT			

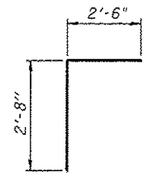
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



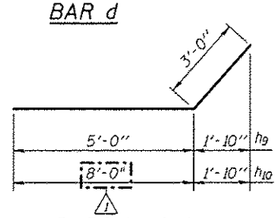
DRAIN DETAIL



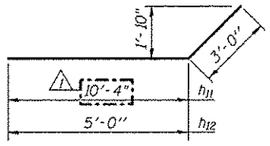
BAR a



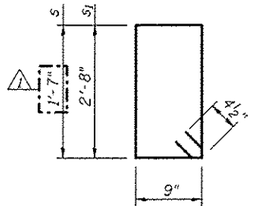
BAR d



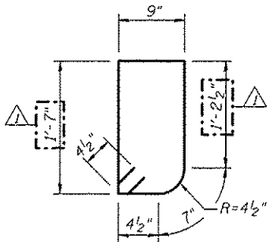
BARS h9 & h10



BARS h11 & h12



BAR s & s1

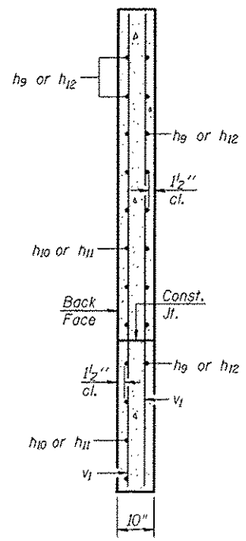


BAR s2

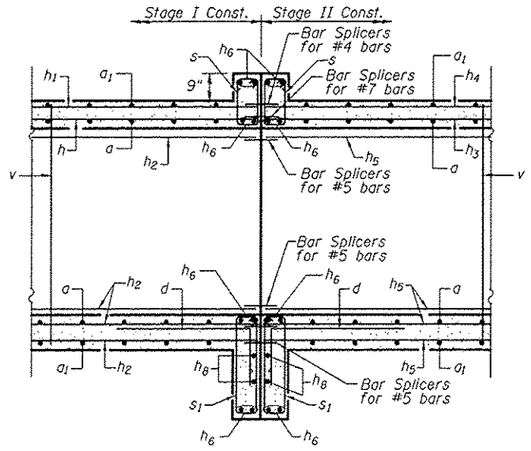
BILL OF MATERIALS

Bar	No.	Size	Length	Shape
a	236	#7	27'-4"	
a1	236	#7	25'-8"	
d	100	#4	5'-2"	
h	70	#7	11'-7"	
h1	52	#4	10'-11"	
h2	134	#5	11'-1"	
h3	105	#7	26'-0"	
h4	78	#4	25'-0"	
h5	201	#5	25'-3"	
h6	24	#6	26'-2"	
h7	8	#6	25'-10"	
h8	8	#5	26'-2"	
h9	20	#4	8'-0"	
h10	20	#4	11'-0"	
h11	20	#6	13'-4"	
h12	20	#6	8'-0"	
v	283	#4	6'-8"	
v1	16	#4	9'-1"	
s	105	#4	5'-5"	
s1	104	#4	7'-7"	
s2	35	#4	5'-3"	
Reinforcement Bars			Pound	46,430
Concrete Box Culverts			Cu. Yd.	272

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.



SECTION A-A



STAGED CONSTRUCTION DETAIL

⚠1 SHEET ADDED 2-28-2013

The VOLKERT/DMA Joint Venture	USER NAME = #USER#	DESIGNED BLM	REVISED
		DRAWN TJR	REVISED
	PLOT SCALE = #SCALE#	CHECKED JEK	REVISED
	PLOT DATE = #DATE#	DATE 02-04-2013	REVISED

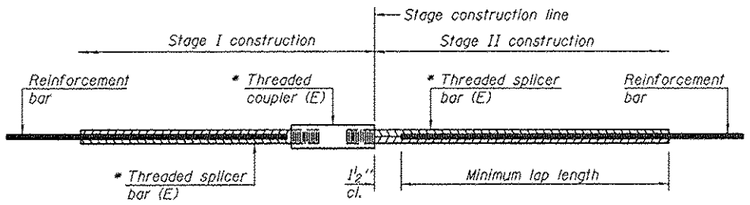
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CULVERT DETAILS & BILL OF MATERIALS
STRUCTURE NO. 034-2527

SCALE: NTS | SHEET 5 OF 9 SHEETS | STA. 146+92.00

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	113 (B-4)	HANCOCK	62	40A ⚠1
		CONTRACT NO. 72B62		
	ILLINOIS FED. AID PROJECT			

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



STANDARD BAR SPLICER ASSEMBLY

Minimum Lap Lengths						
Bar size to be spliced	Table 1	Table 2	Table 3	Table 4	Table 5	Table 6
3, 4	1'-5"	1'-11"	2'-1"	2'-4"	2'-7"	2'-11"
5	1'-9"	2'-5"	2'-7"	2'-11"	3'-3"	3'-8"
6	2'-1"	2'-11"	3'-1"	3'-6"	3'-10"	4'-5"
7	2'-9"	3'-10"	4'-2"	4'-8"	5'-2"	5'-10"
8	3'-8"	5'-1"	5'-5"	6'-2"	6'-9"	7'-8"
9	4'-7"	6'-5"	6'-10"	7'-9"	8'-7"	9'-8"

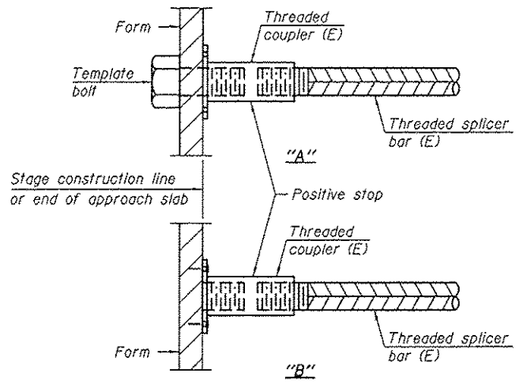
Table 1: Black bar, 0.8 Class C
Table 2: Black bar, Top bar lap, 0.8 Class C
Table 3: Epoxy bar, 0.8 Class C
Table 4: Epoxy bar, Top bar lap, 0.8 Class C
Table 5: Epoxy bar, Class C
Table 6: Epoxy bar, Top bar top, Class C

Threaded splicer bar length = min. lap length + 1½" + thread length

* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

BILL OF MATERIALS

Location	Bar size	No. assemblies required	Table for minimum lap length
Top Slab	#4	26	1
Bottom Slab	#5	52	1
Top Slab	#7	△1 35	1
Walls	#5	15	2
Total Bar Splicers		△1 128	



INSTALLATION AND SETTING METHODS

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

NOTES

1. Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.
2. All reinforcement shall be lapped and tied to the splicer bars.
3. Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.
4. See approved list of bar splicer assemblies and mechanical splicers for alternatives.

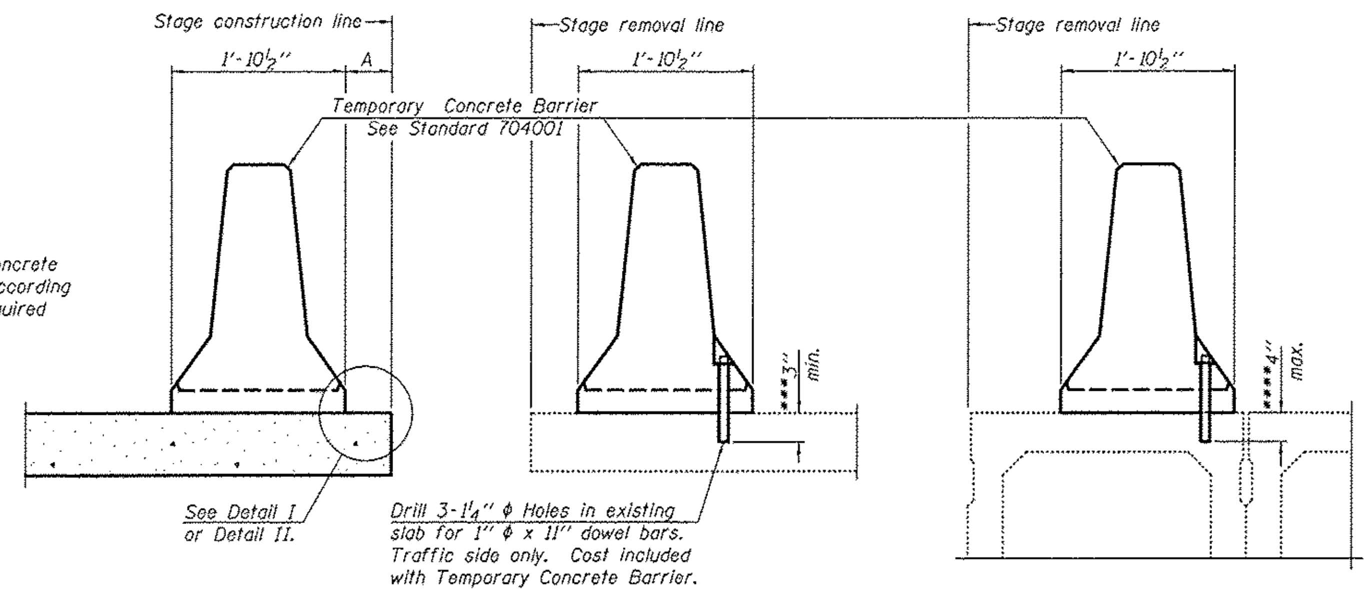
△1 SHEET ADDED 2-28-2013

The VOLKERT/DMA Joint Venture	USER NAME = #USER#	DESIGNED BLM	REVISED	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS STRUCTURE NO. 034-2527
		DRAWN TJR	REVISED		
	PLOT SCALE = #SCALE#	CHECKED JEK	REVISED		
	PLOT DATE = #DATE#	DATE 02-04-2013	REVISED		SCALE: NTS | SHEET 6 OF 9 SHEETS | STA. 146+92.00

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	113 (B-4)	HANCOCK	62	406
		CONTRACT NO. 72B62		
	ILLINOIS FED. AID PROJECT			

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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



SECTIONS THRU SLAB OR DECK BEAM

NOTES

Detail I - With Bar Splicer or Couplers:
Connect one (1) 1" x 7" 'x "W" steel ℙ to the top layer of couplers with 2-⅝" φ bolts screwed to coupler at approximate ℄ of each barrier panel.

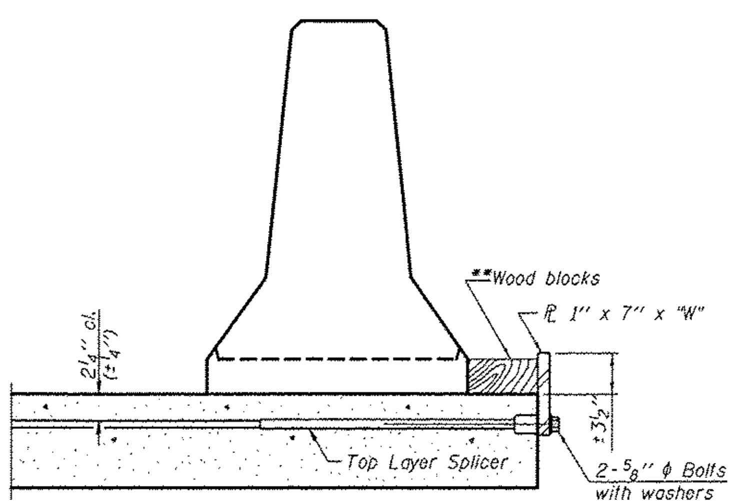
Detail II - With Extended Reinforcement Bars:
Connect one (1) 1" x 7" x "W" steel ℙ to the concrete slab or concrete wearing surface with 2-⅝" φ Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate ℄ of each barrier panel.

Cost of anchorage is included with Temporary Concrete Barrier.

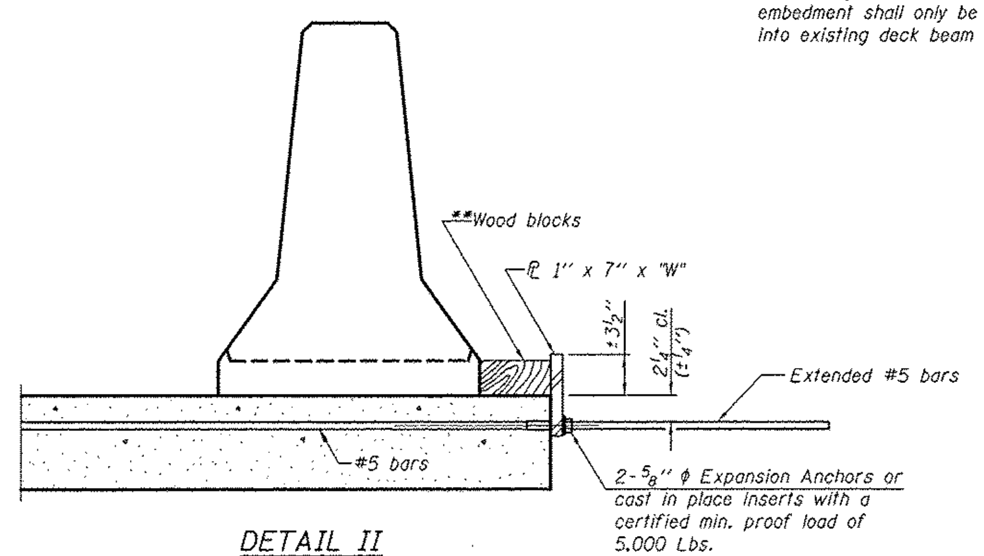
The 1" x 7" x "W" plate shall not be removed until stage II construction forms and all reinforcement bars are in place and the concrete is ready to be placed.

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

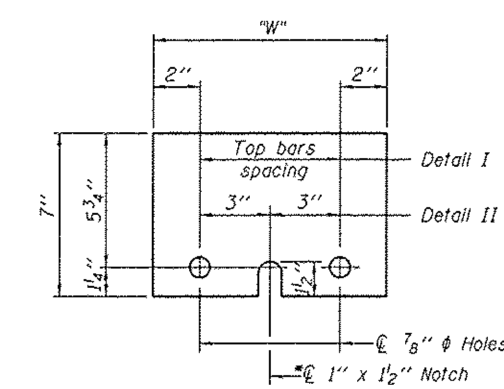
**** If existing deck beam is to remain in place after stage construction, embedment shall only be into wearing surface and not into existing deck beam concrete.



DETAIL I



DETAIL II



STEEL RETAINER ℙ 1" x 7" x "W"

* Required only with Detail II

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

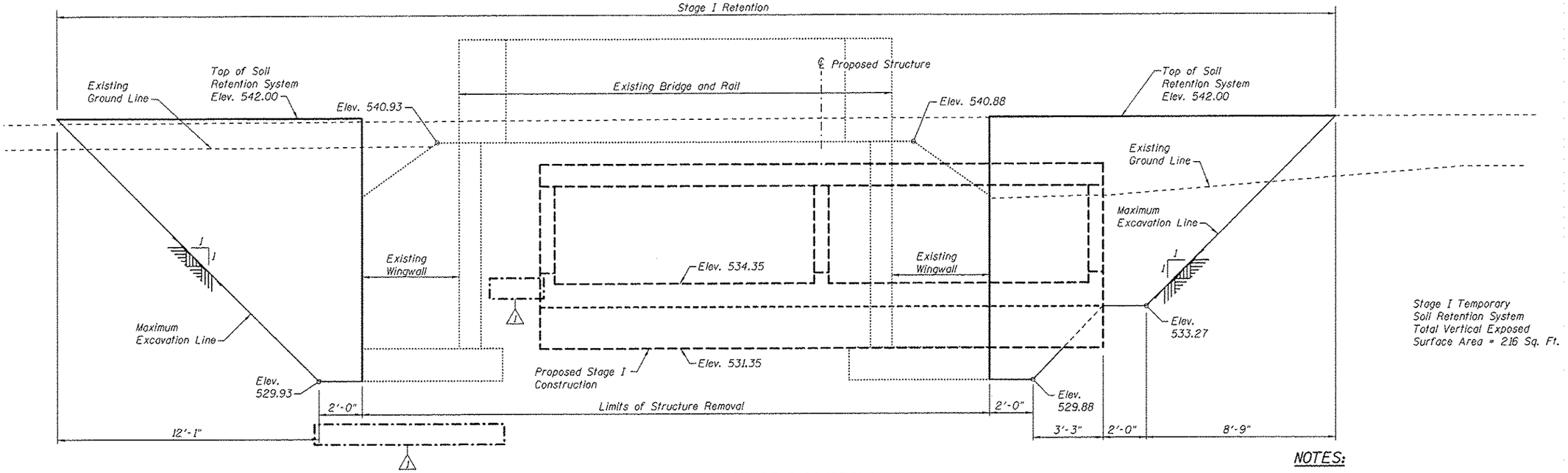
"W" = Top bars spacing + 4"

R-27 7-1-10

⚠1 SHEET ADDED 2-28-2013

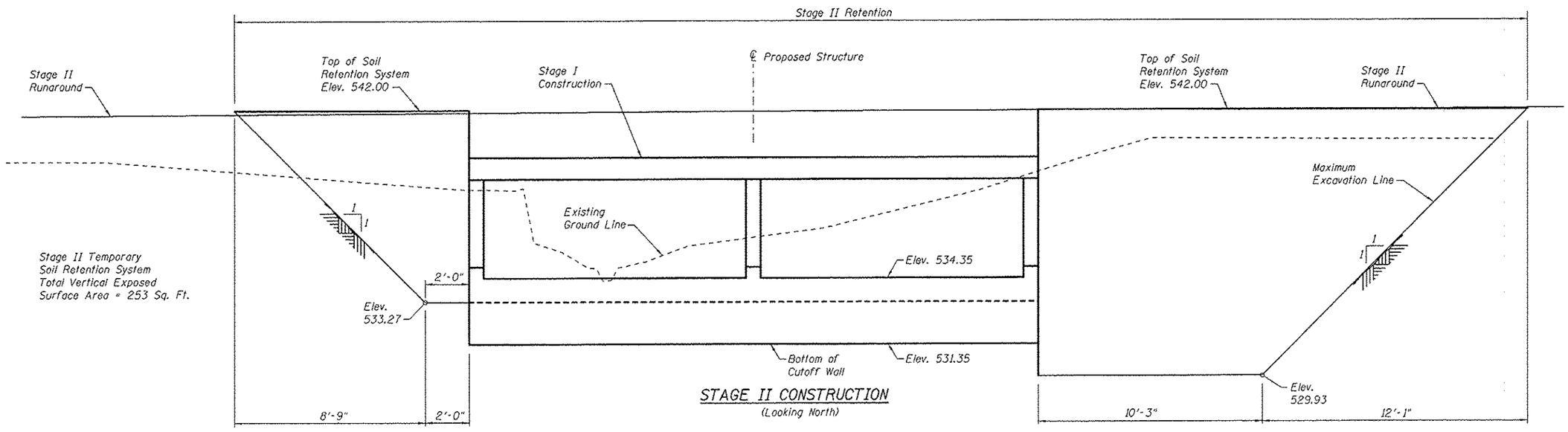
The VOLKERT/DMA Joint Venture	USER NAME = #USER#	DESIGNED BLM	REVISED	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION STRUCTURE NO. 034-2527	F.A.P RTE. 685	SECTION 113 (B-4)	COUNTY HANCOCK
		DRAWN TJR	REVISED					TOTAL SHEETS 62
	PLOT SCALE = #SCALE#	CHECKED JEK	REVISED		SCALE: NTS	SHEET 7 OF 9 SHEETS	STA. 146+92.00	SHEET NO. 40C
	PLOT DATE = #DATE#	DATE 02-04-2013	REVISED				ILLINOIS FED. AID PROJECT	CONTRACT NO. 72862

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



Stage I Temporary Soil Retention System Total Vertical Exposed Surface Area = 216 Sq. Ft.

STAGE I CONSTRUCTION
(Looking South)



Stage II Temporary Soil Retention System Total Vertical Exposed Surface Area = 253 Sq. Ft.

STAGE II CONSTRUCTION
(Looking North)

NOTES:

1. A cantilevered sheet piling design does not appear feasible and additional members or other retention systems may be necessary. The Contractor shall submit a temporary soil retention system design including plan details and calculations for review and acceptance by the Engineer.

⚠1 SHEET ADDED 2-28-2013

The VOLKERT/DMA Joint Venture	USER NAME = #USER#	DESIGNED BLM	REVISED
		DRAWN TJR	REVISED
	PLOT SCALE = #SCALE#	CHECKED JEK	REVISED
	PLOT DATE = #DATE#	DATE 02-04-2013	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY SOIL RETENTION SYSTEM DETAILS
STRUCTURE NO. 034-2527

SCALE: NTS | SHEET 8 OF 9 SHEETS | STA. 146+92.00

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	113 (B-4)	HANCOCK	62	400
		CONTRACT NO. 72862		
	ILLINOIS FED. AID PROJECT			

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Illinois Department of Transportation
Division of Highways
District 6

SOIL BORING LOG

Page 1 of 1

Date 12/29/10

ROUTE IL9/96 DESCRIPTION culvert over unnamed ditch LOGGED BY M. Tappan

SECTION 113B-4 LOCATION NW 1/4, SEC. 7, TWP. 7N, RNG. 7W, 4 PM

COUNTY Hancock DRILLING METHOD HSA HAMMER TYPE 140# Auto

STRUCT. NO. 034-2527
Station 146+92

BORING NO. 1 NW WW
Station 146+82
Offset 16.0ft LT
Ground Surface Elev. 540.7 ft

Surface Water Elev. 536.5 ft
Stream Bed Elev. 536.5 ft

Groundwater Elev.:
▽First Encountor 531.7 ft
▽Upon Completion 524.7 ft
▼After ____ Hrs. Plugged ft

	DEPTH (ft)	BLOWS /6"	UCS Qu (tsf)	MOIST (%)
Brown and Dk Gray Moist SILTY CLAY w/ Limestone Aggregate and Sand Seams (Fill)		1		
		2	0.7	17
		2	S-12	
		1		
V. Dark Gray Moist SILTY CLAY w/ Med Limestone Aggregate (Fill)	-5	2	1.2	17
		3	B	
535.20				
Brown Moist SANDY CLAY LOAM		1		
		2	1.2	14
		3	S-9	
		1		
▽ w/ Tan Moist Silty Shale Colluvium - Disturbed		2	1.0	15
FREE WATER 530.70	-10	4	S-10	
Yellowish Brown Dry SILTY SHALE Colluvium - Disturbed		8		
		31		8
		47		
527.70				
Tan Poorly Indurated Argilliceaous LIMESTONE V. Weathered Colluvium		35		
		72		
	-15	28/2"		
▽ 524.70				
Gray Med Dirty LIMESTONE Gravel		1		
		5		
		15		
		4		
Brown Med Sandy Gravel w/ 1" pieces of Angular Limestone 520.70	-20	12		
		5		

	DEPTH (ft)	BLOWS /6"	UCS Qu (tsf)	MOIST (%)
Gravel				
Boring Complete				
	-25			
	-30			
	-35			
	-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer, E-Estimated)
Abbreviations W.O.H - Sampler Advanced By Weight of Hammer, W.O.P - Advanced by Weight of Pipe, B.S. - Before Seating
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) BBS, from 137 (Rev. 8-99)

File Name S:\SOILS\GINT FILES\HANCOCK\034-2527.GPJ Data Template DSTEMPLT.GDT Data Printed 1/23/12
Latitude 400 37.380N Longitude 910 14.701W Datum NAD83 Job Number 72862

Illinois Department of Transportation
Division of Highways
District 6

SOIL BORING LOG

Page 1 of 1

Date 12/29/10

ROUTE IL9/96 DESCRIPTION culvert over unnamed ditch LOGGED BY M. Tappan

SECTION 113B-4 LOCATION NW 1/4, SEC. 7, TWP. 7N, RNG. 7W, 4 PM

COUNTY Hancock DRILLING METHOD HSA HAMMER TYPE 140# Auto

STRUCT. NO. 034-2527
Station 146+92

BORING NO. 2 S WW
Station 146+90
Offset 17.0ft RT
Ground Surface Elev. 541.1 ft

Surface Water Elev. 536.5 ft
Stream Bed Elev. 536.5 ft

Groundwater Elev.:
▽First Encountor 529.6 ft
▽Upon Completion 525.1 ft
▼After ____ Hrs. Plugged ft

	DEPTH (ft)	BLOWS /6"	UCS Qu (tsf)	MOIST (%)
V. Dk Gray Moist SILTY CLAY w/ Coarse Angular Limestone Gravel (Fill)		1		
		2	1.3	22
		4	B	
		1		
Brown and V. Dk Gray	-5	2	0.8	18
		2	B	
535.60				
Brown and Gray Dirty Medium LIMESTONE Gravel		2		
		8		
		9		
		4		
Brown Dirty Med SAND w/ Coarse Angular Cherty Limestone Gravel		9		
	-10	18		
▽		9		
FREE WATER		31		
		15		
		3		
Brown Med Sandy Gravel w/ Coarse Angular Limestone Gravel		21		
	-18	25		
▽		3		
		15		
		17		
		2		
521.10	-20	7		
		10		

	DEPTH (ft)	BLOWS /6"	UCS Qu (tsf)	MOIST (%)
Boring Complete				
	-25			
	-30			
	-35			
	-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer, E-Estimated)
Abbreviations W.O.H - Sampler Advanced By Weight of Hammer, W.O.P - Advanced by Weight of Pipe, B.S. - Before Seating
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) BBS, from 137 (Rev. 8-99)

File Name S:\SOILS\GINT FILES\HANCOCK\034-2527.GPJ Data Template DSTEMPLT.GDT Data Printed 1/23/12
Latitude 400 37.380N Longitude 910 14.696W Datum NAD83 Job Number 72862

⚠1 SHEET ADDED 2-28-2013

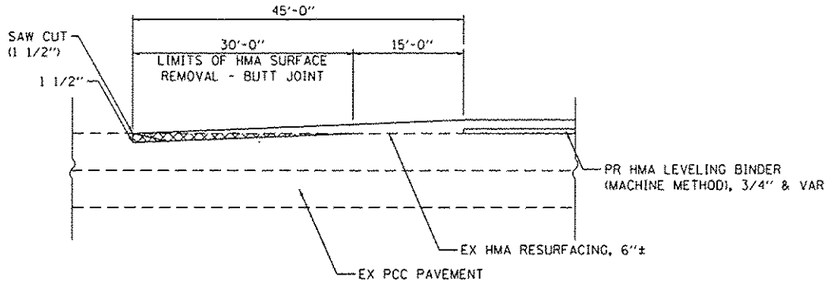
VOLKERT/DMA Joint Venture	USER NAME = #USER#	DESIGNED BLM	REVISED
		DRAWN TJR	REVISED
	PLOT SCALE = #SCALE#	CHECKED JEK	REVISED
	PLOT DATE = #DATE#	DATE 02-04-2013	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORINGS
STRUCTURE NO. 034-2527

SCALE: NTS | SHEET 9 OF 9 SHEETS | STA. 146+92.00

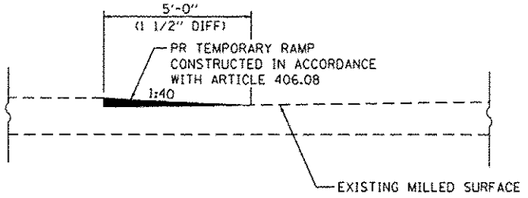
F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	113 (B-4)	HANCOCK	62	40E
		CONTRACT NO. 72B62		
	ILLINOIS FED. AID PROJECT			



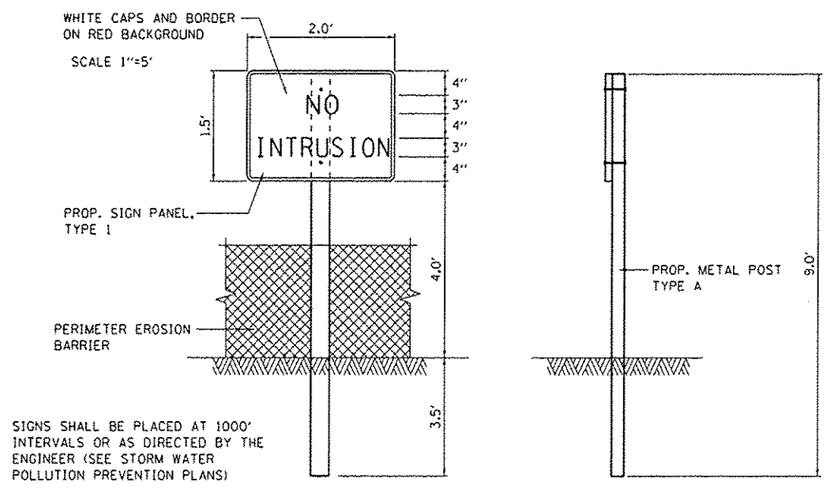
BUTT JOINT DETAIL

STA 140+00.00 TO STA 140+30.00
STA 153+70.00 TO STA 154+00.00

SCALE 1"=10'

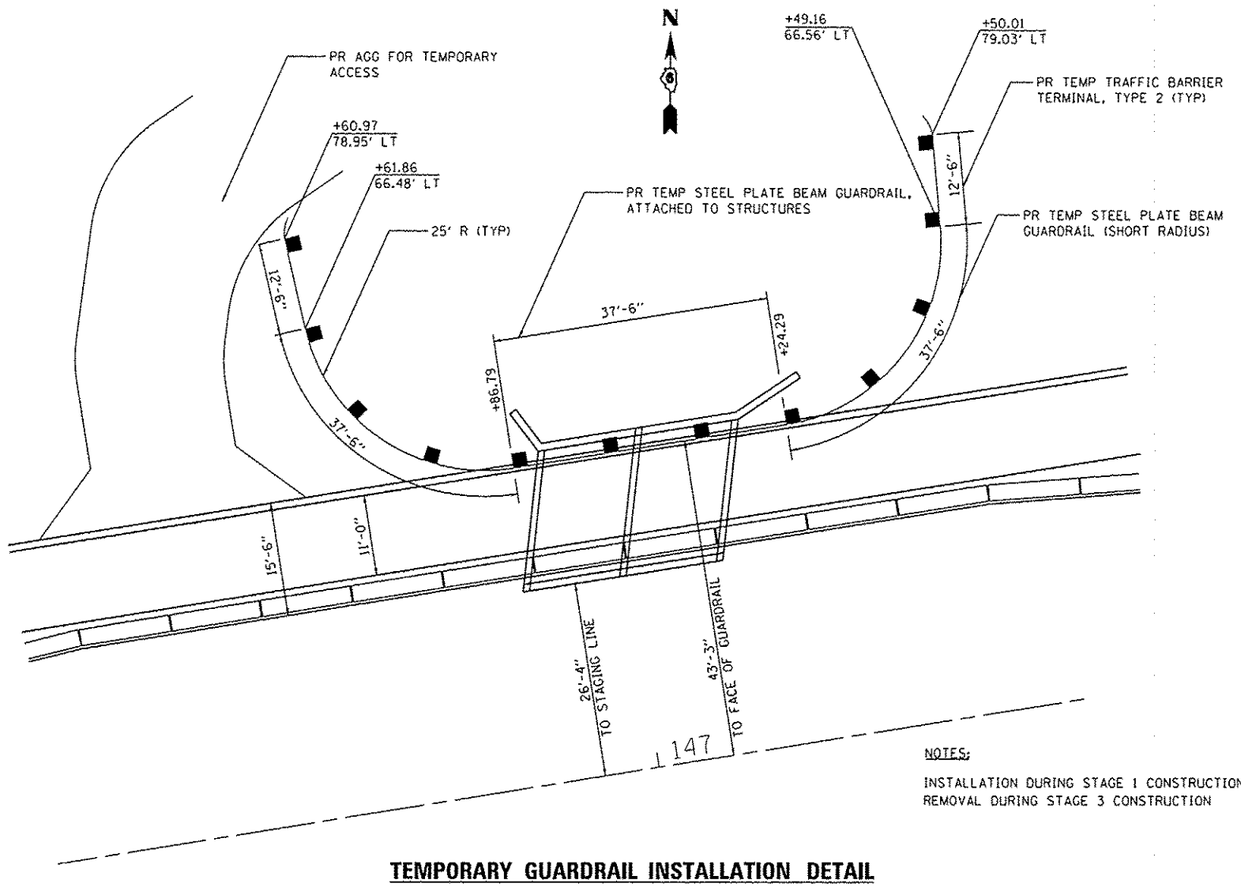


TEMPORARY RAMP DETAIL



TEMPORARY SIGN DURING CONSTRUCTION PROTECTED AREA SIGNING (PRAIRIE GRASS AREAS)

LOCATIONS AS SHOWN ON THE STORM WATER
POLLUTION PREVENTION PLANS



NOTES:

INSTALLATION DURING STAGE 1 CONSTRUCTION
REMOVAL DURING STAGE 3 CONSTRUCTION

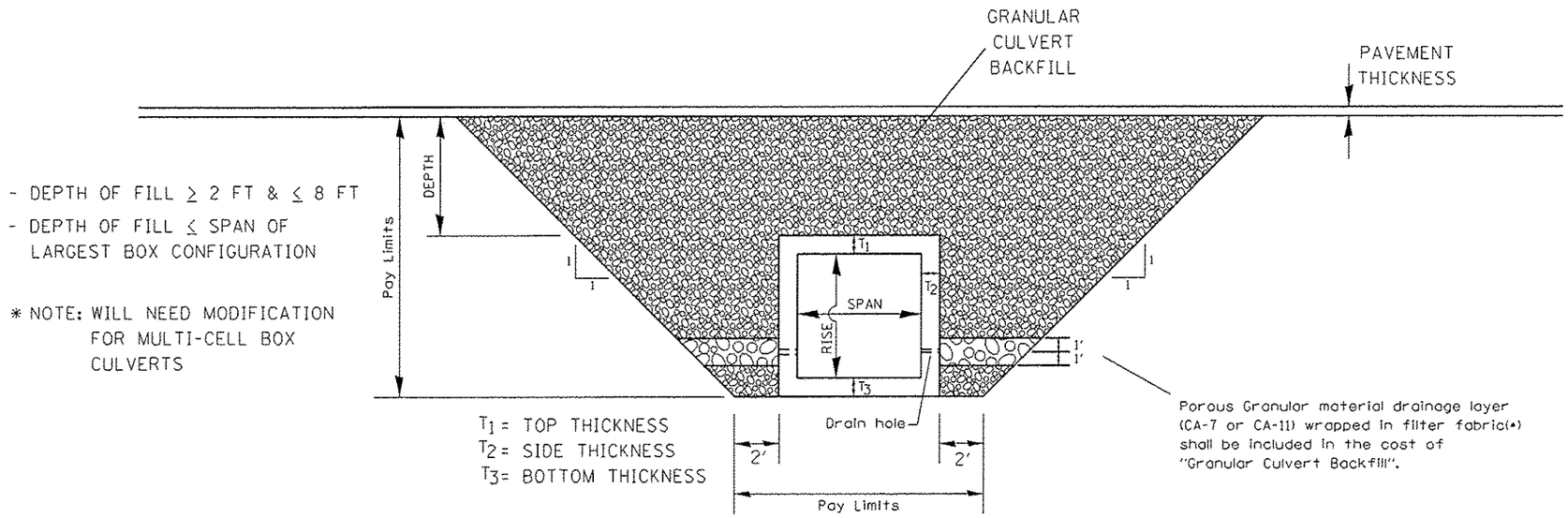
TEMPORARY GUARDRAIL INSTALLATION DETAIL

STA 146+60.97 TO STA 147+50.01
SCALE 1"=10'

FILE NAME = c:\Documents\projects\sperkag\d0329895\D672862-sht-details1.dgn
MODEL = $MODEL$
PLOT DRIVEN = $PLTDRV$$

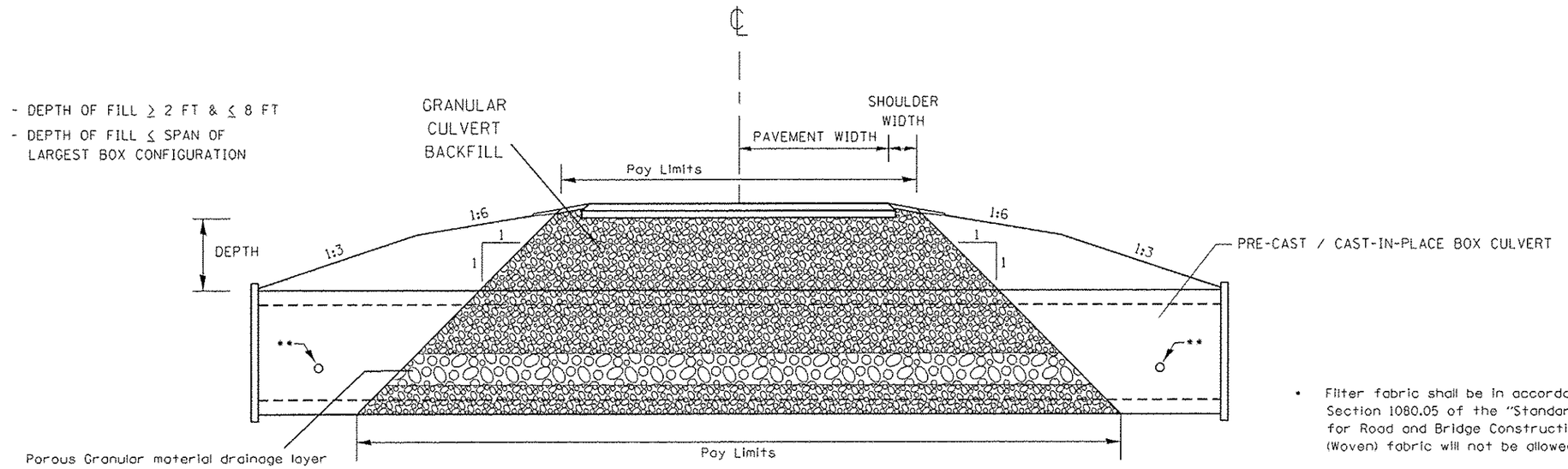
QUIGG ENGINEERING INC	USER NAME = sperkag	DESIGNED - MCV	REVISED - SHEET 1 2-28-2013	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	MISCELLANEOUS DETAILS
	FILE NAME = D672862-sht-details1.dgn	DRAWN - CMM	REVISED -		SCALE: SHEET NO. 1 OF 1 SHEETS STA. TO STA.
	PLOT SCALE = 100.0000 ' / in.	CHECKED - MTM	REVISED -		
	PLOT DATE = Dec-18-2012 10:20:06AM	DATE - 12/12	REVISED -		

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	113B-4	HANCOCK	57	41
		CONTRACT NO. 72B62		
		ILLINOIS FED. AID PROJECT		



PROFILE GRANULAR BACKFILL DETAIL

* Filter fabric shall be in accordance with Section 1080.05 of the "Standard Specification for Road and Bridge Construction", except that (Woven) fabric will not be allowed.



CROSS SECTION GRANULAR BACKFILL DETAIL

* Filter fabric shall be in accordance with Section 1080.05 of the "Standard Specification for Road and Bridge Construction", except that (Woven) fabric will not be allowed.

** Any Drain Holes outside the limits of the Porous Granular material drainage layer shall be backfilled in accordance with Section 502.10 of the "Standard Specification for Road and Bridge Construction".

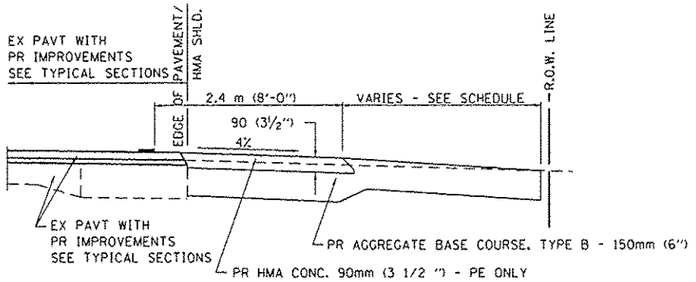
FILE NAME = c:\pw_work\pwidot\sparksg\d0329885\D672B62-sht-details2.dgn	USER NAME = sparksg	DESIGNED - BKL	REVISED SHEET 2-28-2013
Granular Backfill Details.dgn	PLOT SCALE = 40.0000 ' / in.	DRAWN - BKL	REVISED -
	PLOT DATE = Dec-18-2012 10:20:07AM	CHECKED -	REVISED -
		DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

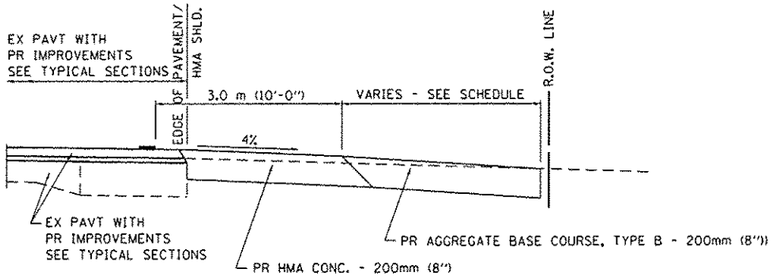
GRANULAR BACKFILL DETAIL TO BOTTOM OF BOX CULVERT

SCALE: | SHEET 1 OF 1 SHEETS | STA. | TO STA.

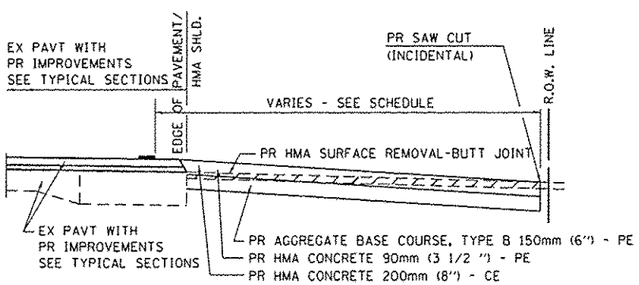
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	1138-4	HANCOCK	57	42
		CONTRACT NO. 72B62		
	ILLINOIS FED. AID PROJECT			



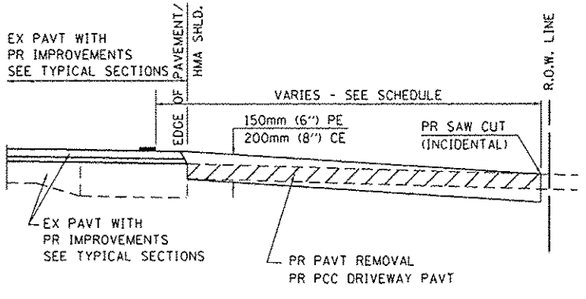
SECTION A-A FOR EX EARTH/AGGREGATE FE & PE



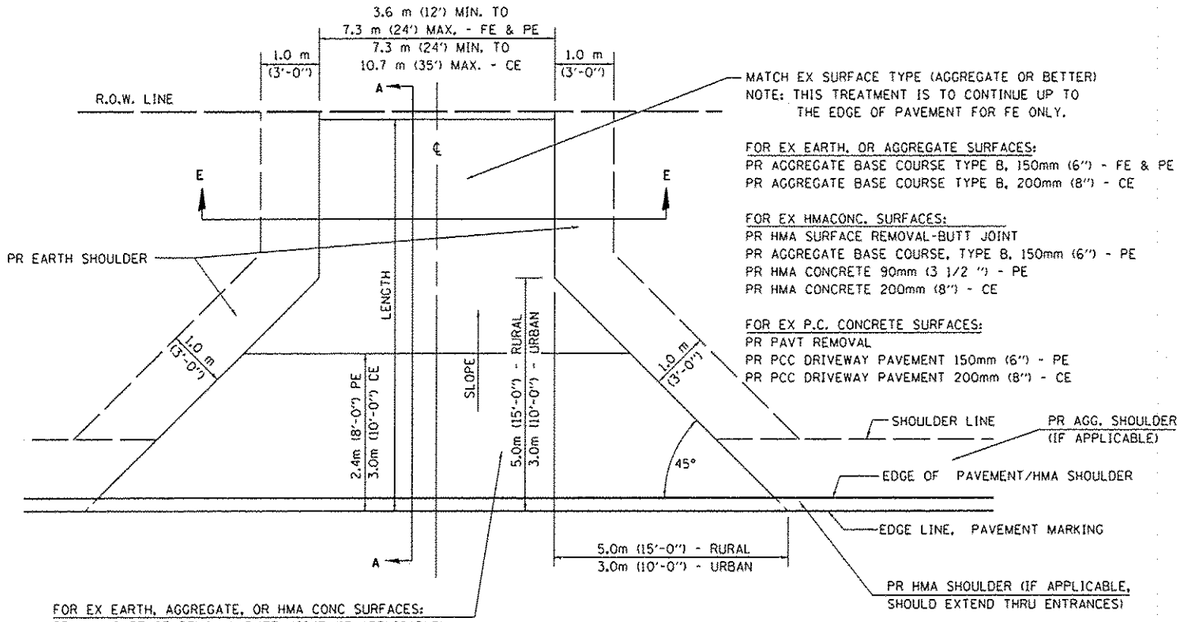
SECTION A-A FOR EX EARTH/AGGREGATE CE

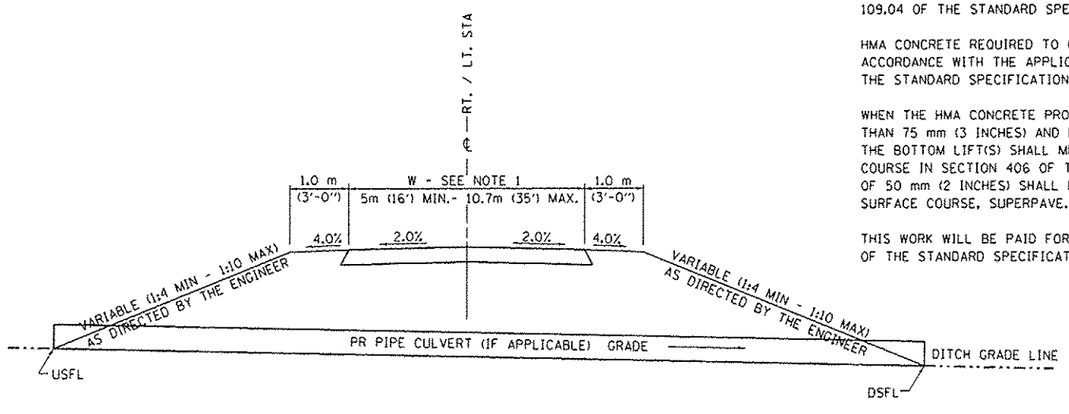


SECTION A-A FOR EX HMA PE & CE



SECTION A-A FOR EX P.C. CONC. PE & CE





SECTION E - E ENTRANCE TYPICAL SECTION

NOTE 1: WIDTH OF ENTRANCE MAY BE INCREASED AT THE PIPE CULVERT DUE TO THE DITCHLINE BEING LOCATED IN THE ENTRANCE FLARE AREA.

GENERAL NOTES:

THE RESIDENT ENGINEER WILL DETERMINE THE EXACT TYPE OF IMPROVEMENT TO BE COMPLETED FOR ALL ENTRANCES, SIDEROADS AND MAILBOX TURNOUTS ON THIS PROJECT.

THE PLAN DETAILS AND SCHEDULES SHOULD BE USED AS A GUIDE FOR THE ENGINEER TO IMPLEMENT THE FINAL DESIGN. THE ENGINEER MAY DECIDE TO SALVAGE PORTIONS OF THE EXISTING ENTRANCE PAVEMENT STRUCTURE; THEREFORE, REDUCING PAY ITEM QUANTITIES. NO ADDITIONAL PAYMENT WILL BE ALLOWED FOR THIS REDUCTION IN QUANTITIES.

ANY WORK THE ENGINEER REQUIRES WHICH IS NOT COVERED BY A PAY ITEM CONTAINED IN THE PLANS WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS.

HMA CONCRETE REQUIRED TO CONSTRUCT THE ENTRANCES SHALL BE IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF SECTION 406 AND 408 OF THE STANDARD SPECIFICATIONS AND AS DIRECTED BY THE ENGINEER.

WHEN THE HMA CONCRETE PROPOSED FOR THE IMPROVEMENT IS THICKER THAN 75 mm (3 INCHES) AND REQUIRE PLACEMENT IN MORE THAN ONE LIFT. THE BOTTOM LIFT(S) SHALL MEET THE REQUIREMENTS OF HMA BASE COURSE IN SECTION 406 OF THE STANDARD SPECIFICATIONS AND THE TOP LIFT OF 50 mm (2 INCHES) SHALL MEET THE REQUIREMENTS OF HMA CONCRETE SURFACE COURSE, SUPERPAVE.

THIS WORK WILL BE PAID FOR IN ACCORDANCE WITH SECTIONS 351, 358, 408, 423 AND 440 OF THE STANDARD SPECIFICATIONS.

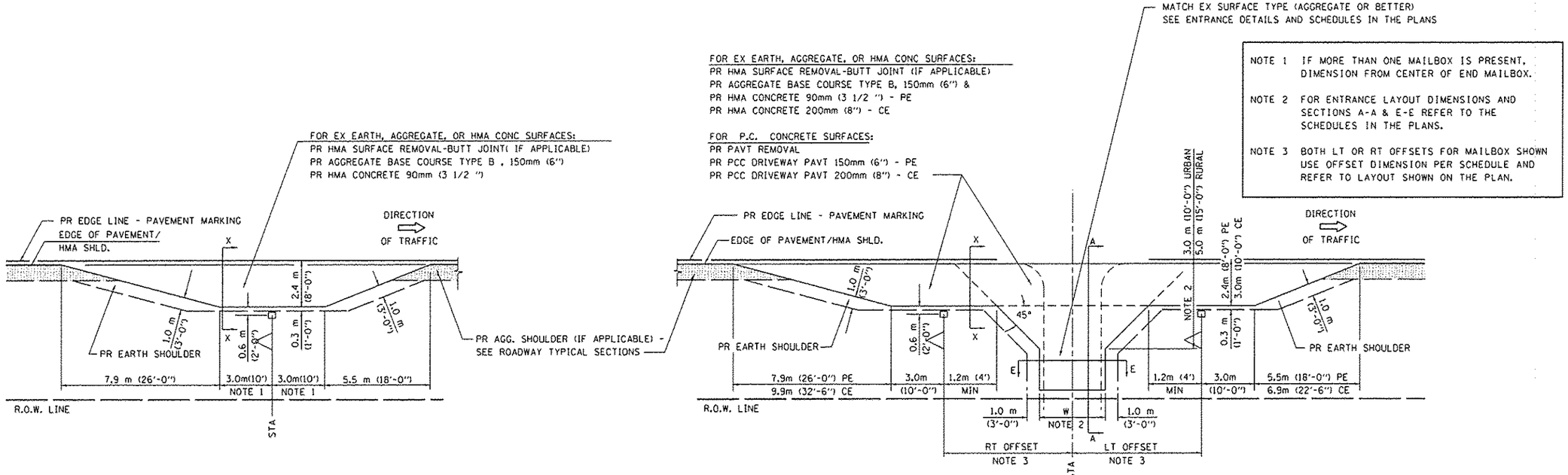
ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE SHOWN.

⚠1 REVISED SHEET 2-28-2013

FILE NAME = c:\pw_work\pwidot\sparksgw\d0329885\D672862-sht-details2.dgn	USER NAME = sparksgw	DESIGNED -	REVISED - 2/19/03 (JCN)	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT 6 DETAILS FOR RURAL /URBAN ENTRANCE & MAILBOX TURNOUT W/O CONC GUTTER (3R -- PROJECTS)
	PLOT SCALE = 40.0000 ' / in.	DRAWN - CADD	REVISED - 4/01/04 (JCN)		
ENT 3R.DGN	PLOT DATE = Dec-18-2012 10:20:00AM	CHECKED - JCN	REVISED - 8/01/07 (JCN)		SCALE: SHEET NO. 1 OF 3 SHEETS STA. TO STA.
		DATE - FEBRUARY 23, 1999	REVISED -		

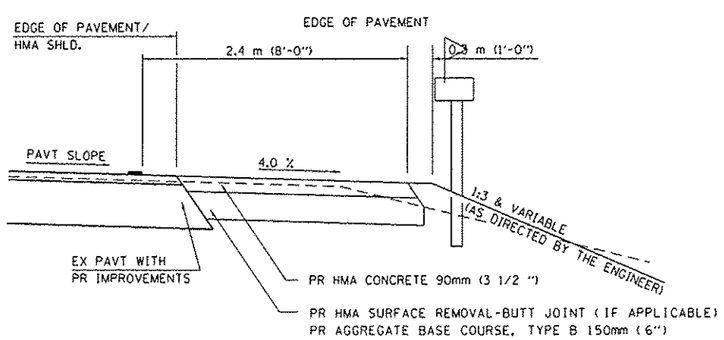
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	113B-4	HANCOCK	57	43
		CONTRACT NO. 72B62		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

DETAILS OF MAILBOX TURNOUTS

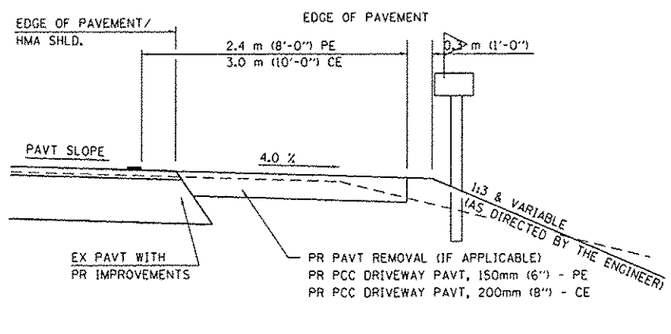


PLAN - MAILBOX TURNOUTS

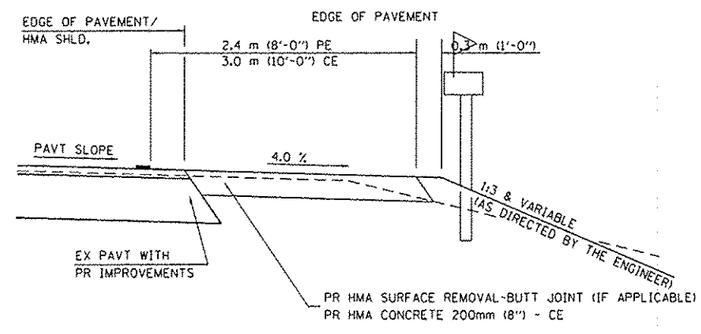
PLAN - COMBINED MAILBOX TURNOUT WITH TRAILING OR LEADING ENTRANCE



SECTION X-X THRU MAILBOX TURNOUT
ALSO APPLIES TO MAILBOX TURNOUTS COMBINED WITH EX EARTH, AGGREGATE, OR HMA PE & FE



SECTION X-X THRU MAILBOX TURNOUT
COMBINED WITH EX CONC PE OR CE



SECTION X-X THRU MAILBOX TURNOUT
COMBINED WITH EX EARTH, AGGREGATE, OR HMA CE

REVISED SHEET 2-28-2013

FILE NAME = c:\pw_work\pwidot\sparkagr\d0329805\D672862-sht-details2.dgn	USER NAME = sparkagr	DESIGNED -	REVISED - 2/19/03 (JCN)	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT 6 DETAILS FOR RURAL /URBAN ENTRANCE & MAILBOX TURNOUT W/O CONC GUTTER (3R – PROJECTS)
	PLOT SCALE = 40.0000 ' / in.	DRAWN - CADD	REVISED - 4/01/04 (JCN)		
ENT 3R.DGN	PLOT DATE = Dec-10-2012 10:20:08AM	CHECKED - JCN	REVISED - 8/01/07 (JCN)		SCALE: / SHEET NO. 2 OF 3 SHEETS / STA. / TO STA.
		DATE - FEBRUARY 23, 1999	REVISED -		

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	113B-4	HANCOCK	57	44
		CONTRACT NO. 72B62		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

ENTRANCE IMPROVEMENT SCHEDULE FOR RURAL / URBAN "3R" PROJECTS

LOCATION	TYPE OF ENTRANCE	EX MATERIAL TYPE	WIDTH	RT OFFSET	LT OFFSET	LENGTH (FROM EDGE OF PVT/ HMA SHLD TO LIMITS OF IMPROVEMENT)	PR HMA CONC. THICKNESS	HMA SURF. REM. - BUTT JOINT	PAVEMENT REMOVAL	PREP OF BASE	AGG. BASE REPAIR	AGGREGATE BASE COURSE TY - B 6"	HMA (P.C.)	AGG (P.C.	INCIDENTAL HMA SURF.	P.C.C. DRIVEWAY PAVEMENT 6"	P.C.C. DRIVEWAY PAVEMENT 8"
(LT / RT) (STA) (+)	(FE / PE / CE / MB) (RURAL / URBAN)	(EARTH / AGG. / HMA / P.C.C.)	FOOT	FOOT	FOOT	FOOT	INCH	SQ. YD.	SQ. YD.	SQ. YD.	TON	SQ YD	TON	TON	TON	SQ. YD.	SQ. YD.
RT STA 146+00.00	FE	EARTH	22	14		24.5						79					
LT STA 147+62.00	FE	AGG	22		14	95						251					
LT STA 147+62.00	FE	EARTH	22		14	94						248					
RT STA 147+69.00	PE	AGG	16	14		24.5						62					
RT STA 152+62.00	PE	EARTH	16	14		25.5						40					
TOTAL =												680					

⚠ REVISED SHEET 2-28-2013

FILE NAME : c:\pw_work\pwidot\sparkesg\d0329885\D672862-sht-details2.dgn	USER NAME = sparkesg	DESIGNED -	REVISED - 2/19/03 (JCN)	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT 6 DETAILS FOR RURAL /URBAN ENTRANCE & MAILBOX TURNOUT W/O CONC GUTTER (3R – PROJECTS)	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ENT 3R.DGN	PLOT SCALE = 40.0000 ' / in.	DRAWN - CADD	REVISED - 8/01/07 (JCN)			685	113B-4	HANCOCK	57	45
	PLOT DATE = Dec-18-2012 10:28:09AM	CHECKED - JCN	REVISED -					CONTRACT NO. 72B62		
		DATE - FEBRUARY 23, 1999	REVISED -		SCALE: SHEET NO. 3 OF 3 SHEETS STA. TO STA.	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		