

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7878	4 CR	CHRISTIAN	23	1
		ILLINOIS	CONTRACT NO. 72E49	

INDEX OF SHEETS

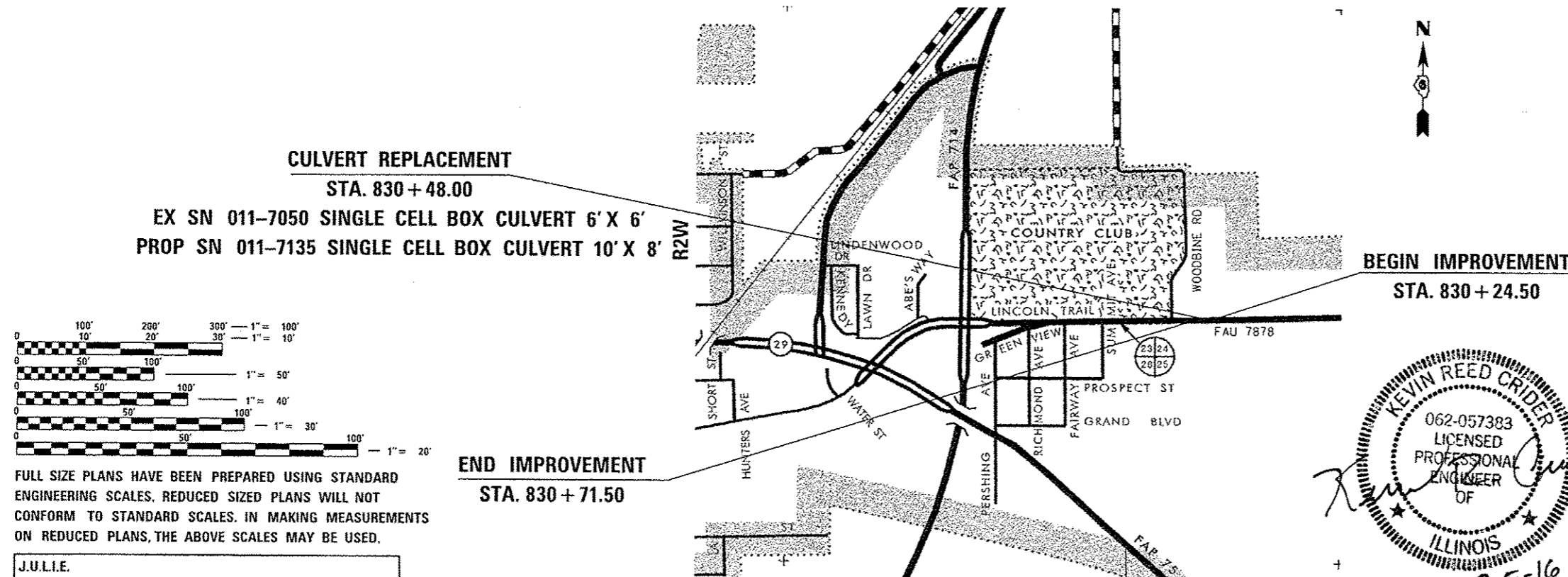
SHEET NO.	DESCRIPTION
1	COVER SHEET
2	INDEX OF SHEETS, GENERAL NOTES, & COMMITMENTS
3 - 5	SUMMARY OF QUANTITIES
6 - 7	SCHEDULES OF QUANTITIES
8	TYPICAL SECTIONS
9	ALIGNMENT, TIES, AND BENCHMARKS
10	TRAFFIC CONTROL PLAN FOR ROAD CLOSURE
11	PLAN & PROFILE
12	TREE REMOVAL PLAN
13 - 14	EROSION CONTROL PLAN
15	PRECAST BOX CULVERT DETAILS
16	WINGWALL DETAILS
17	SOIL BORINGS
18 - 20	DETAILS
21 - 23	CROSS SECTIONS

PROPOSED HIGHWAY PLANS

FAU ROUTE 7878 (LINCOLN TRAIL)
SECTION 4 CR
PROJECT : ACM-7878(003)
CULVERT REPLACEMENT
CHRISTIAN COUNTY



C-96-080-11
T13N

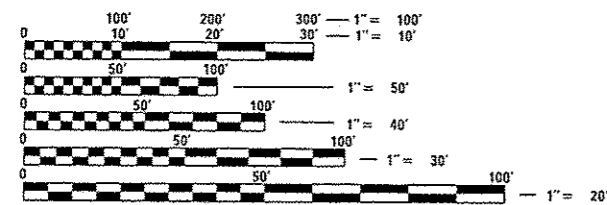


CULVERT REPLACEMENT
STA. 830 + 48.00

EX SN 011-7050 SINGLE CELL BOX CULVERT 6' X 6'
PROP SN 011-7135 SINGLE CELL BOX CULVERT 10' X 8' R2W

BEGIN IMPROVEMENT
STA. 830 + 24.50

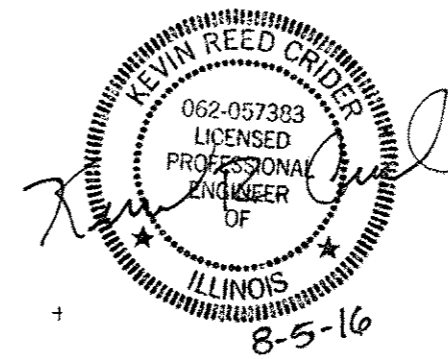
END IMPROVEMENT
STA. 830 + 71.50



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

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

LOCATION MAP
NOT TO SCALE



FUNCTIONAL CLASSIFICATION
RURAL MINOR ARTERIAL
2014 ADT=3050
P.V.=89.4% S.U.=8.6% M.U.=2.0%

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED August 9, 2016

REGIONAL ENGINEER

Sept 30, 2016
Maureen M. Addis, P.E., B.C.
ENGINEER OF DESIGN AND ENVIRONMENT

Sept 30, 2016
Director of Program Development

PROJECT ENGINEER KEITH DONOVAN 217-782-4761
PROJECT MANAGER ED KERN 217-524-7547

CONTRACT NO. 72E49

GROSS LENGTH = 47.00 FT. = 0.009 MILE
NET LENGTH = 47.00 FT. = 0.009 MILE



BACON | FARMER | WORKMAN
ENGINEERING & TESTING, INC.

1215 DILIGARD DRIVE MURRAY, KENTUCKY 40371 • 500 SOUTH 17th STREET PADUCAH, KENTUCKY 42003 • 463 NORTH COURT STREET MARION, ILLINOIS 62959
PHONE - 270-753-7307 PHONE - 270-443-1605 PHONE - 618-997-9199

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

GENERAL NOTES

- ALL ELEVATIONS REFER TO U.S.G.S. MEAN SEA LEVEL DATUM.
- 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 WILL BE RESPONSIBLE FOR HAVING AN AUTHORIZED SURVEYOR RE-ESTABLISH ANY SECTION OR SUBSECTION MONUMENTS DESTROYED BY HIS OPERATIONS.
- ANY REFERENCE TO A STANDARD IN THESE PLANS SHALL BE INTERPRETED TO MEAN THE EDITION AS INDICATED BY THE SUB-NUMBER LISTED OR THE COPY OF STANDARD INCLUDED IN THESE PLANS.
- ALL DISTURBED UNSURFACED AREAS WITHIN THE RIGHT-OF-WAY AND EASEMENTS SHALL BE SEEDED, FERTILIZED, AND MULCHED, AS SHOWN IN THE PLANS, SPECIAL PROVISIONS, AND AS DIRECTED BY THE ENGINEER. SEEDING WILL NOT BE PERMITTED AT ANY TIME WHEN THE GROUND IS FROZEN, WET OR IN AN UNTILLABLE CONDITION.
- FERTILIZER NUTRIENTS SHALL BE APPLIED TO BOTH THE SEEDED AREAS AND THE AREAS COVERED WITH EROSION CONTROL BLANKET.
- DO NOT INCLUDE MULCH OR EMULSIFIED ASPHALT ON EROSION CONTROL BLANKET AREAS.
- ALL TREES, BRUSH, AND SHRUBS WITHIN THE CONSTRUCTION LIMITS WILL BE REMOVED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS. TREES ALONG THE EDGE OF RIGHT-OF-WAY, OUTSIDE THE CONSTRUCTION LIMITS SHALL BE SAVED IF, IN THE OPINION OF THE ENGINEER, THEY DO NOT INTERFERE WITH CONSTRUCTION OPERATIONS. THE CONTRACTOR WILL PROTECT ALL REMAINING TREES FROM DAMAGE DUE TO HIS OPERATIONS.
- TREE REMOVAL, ACRES AS SHOWN IN THE TREE REMOVAL SCHEDULE HAVE BEEN MEASURED AS SHOWN IN THE TREE REMOVAL PLAN SHEETS. THE ACTUAL QUANTITY REMOVED SHALL BE ADJUSTED AS NECESSARY SO THAT TREES BEYOND THE CONSTRUCTION LIMITS WHICH ARE OUTSIDE OF THE CLEAR ZONE CAN BE LEFT IN PLACE AS DIRECTED BY THE ENGINEER.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING UTILITY PROPERTY FROM CONSTRUCTION OPERATIONS AS OUTLINED IN ARTICLE 107.31 OF THE STANDARD SPECIFICATIONS. THE J.U.L.I.E. NUMBER IS 1-800-892-0123. A MINIMUM OF 48 HOURS ADVANCE NOTICE IS REQUIRED. ANY DAMAGE TO THE UNDERGROUND FACILITIES, CAUSED BY THE CONTRACTOR SHALL BE REPAIRED TO THE SATISFACTION OF THE DEPARTMENT AT THE CONTRACTOR'S EXPENSE. INCLUDING TEMPORARY REPAIRS WHICH MAY BE REQUIRED TO KEEP THE FACILITY OPERATIONAL WHILE MATERIAL IS BEING OBTAINED TO MAKE PERMANENT REPAIRS.
- ALL EXISTING FENCE WITHIN THE PROPOSED RIGHT-OF-WAY SHALL BE REMOVED. THE COST OF THE FENCE REMOVAL WILL BE INCLUDED IN THE COST OF EARTH EXCAVATION.
- ANY EXISTING ROAD SIGNS THAT INTERFERE WITH CONSTRUCTION WILL BE REMOVED OR RELOCATED AS DIRECTED BY THE ENGINEER. AFTER THE CONSTRUCTION IS COMPLETED, THE CONTRACTOR WILL REPLACE THE SIGNS AS DIRECTED BY THE ENGINEER. THIS WORK WILL NOT BE PAID SEPARATELY BUT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND NO COMPENSATION ALLOWED.
- THE LOCATION OF BURIED AND ABOVE GROUND UTILITIES SHOWN ARE APPROXIMATE, AND ARE SHOWN FOR THE CONTRACTOR INFORMATIONAL USE ONLY. AND ARE NOT TO BE REFERENCED FOR CONSTRUCTION PURPOSES. THE IMPLIED PRESENCE OR ABSENCE OF UTILITIES IS NOT TO BE CONSTRUED BY THE OWNER, ENGINEER, CONTRACTOR, OR SUBCONTRACTORS TO BE AN ACCURATE AND COMPLETE REPRESENTATION OF UTILITIES THAT MAY OR MAY NOT EXIST ON THE CONSTRUCTION SITE. BURIED AND ABOVE GROUND UTILITY LOCATIONS, IDENTIFICATION, AND MARKING ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. REROUTING, DISCONNECTION, PROTECTION, ETC. OF ANY UTILITIES MUST BE COORDINATED BETWEEN THE CONTRACTOR, UTILITY COMPANY, AND OWNER. SITE SAFETY, INCLUDING THE AVOIDANCE OF HAZARDS ASSOCIATED WITH BURIED AND ABOVE GROUND UTILITIES, REMAINS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- GROUND IMPROVEMENTS MAY BE REQUIRED PRIOR TO PLACING PRECAST BOX CULVERT SECTIONS. SEE SCHEDULE OF QUANTITIES. THE ENGINEER WILL DETERMINE THE NEED FOR GROUND IMPROVEMENTS AFTER EXCAVATION TO THE THEORETICAL BOTTOM BEDDING ELEVATION.
- 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 SPECIFICATION AND AS DIRECTED BY THE ENGINEER. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION.

GENERAL NOTES

- REMOVAL OF EXISTING RAISED REFLECTIVE PAVEMENT MARKERS SHALL BE INCLUDED IN THE COST FOR REMOVAL OF EXISTING STRUCTURES OR PAVEMENT REMOVAL. PROPOSED RAISED REFLECTIVE PAVEMENT MARKERS SHALL BE INCLUDED IN THE COST OF THE PAY ITEM HOT-MIX ASPHALT BASE COURSE, 9".
- NO PASSING ZONES SHALL BE FIELD VERIFIED BY OPERATIONS, (217) 785-5312, 14 DAYS PRIOR TO FINAL PAVEMENT MARKINGS.
- UNLESS NOTED OTHERWISE, STATIONS AND OFFSETS REFER TO CENTERLINE OF PROJECT.
- 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 DUE TO 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.
- ALL SAW CUTS NECESSARY TO COMPLETE THE WORK DETAILED IN THESE PLANS, SHALL BE INCLUDED IN THE COST FOR THE VARIOUS PAY ITEMS INVOLVED. SAW CUTS TO REMOVE EXISTING PAVEMENT SHALL BE FULL DEPTH.
- THE ENGINEER SHALL BE THE SOLE JUDGE CONCERNING CURING TIME FOR THE VARIOUS BITUMINOUS LIFTS.

MIXTURES TABLE

THE FOLLOWING MIXTURE REQUIREMENT IS APPLICABLE FOR THIS PROJECT:

	HMA BASE COURSE
PG GRADE	PG 64-22
DESIGN AIR VOIDS	4.0% @ N50
MIXTURE COMPOSITION	IL-19.0
FRICTION AGGREGATE	N/A
QUALITY MANAGEMENT	QC/OA
SUBLOT	N/A

COMMITMENTS

SUITABLE TREE REPLACEMENT AREAS HAVE NOT BEEN IDENTIFIED WITHIN THE PROJECT LIMITS. SUITABLE REPLACEMENT LOCATIONS WILL BE IDENTIFIED BY THE DISTRICT'S TREE REMOVAL/REPLACEMENT EVALUATION TEAM WHEN PREPARING THE DISTRICT'S LANDSCAPING CONTRACTS FOR MULTIPLE ROADWAY PROJECTS. THE NUMBER OF TREES TO BE INCLUDED IN THE LANDSCAPING CONTRACT TO FULFILL THE COMMITMENT FOR THIS PROJECT WILL BE DETERMINED BY THE BUREAU OF STUDIES AND PLANS FROM THE FINAL PROJECT PLANS.

THE FIELD/RESIDENT ENGINEER SHALL CONTACT STUDIES & PLANS CONCERNING ANY MAJOR PLAN CHANGES AND TO MAKE SURE NO PREVIOUS COMMITMENTS (NOT LISTED) WERE MADE AFFECTING THE DESIGN, AND TO ALLOW IMPROVEMENTS IN THE DESIGN FOR FUTURE PROJECTS.

RATES OF APPLICATION TABLE

THE FOLLOWING RATES OF APPLICATION HAVE BEEN ASSUMED IN CALCULATING PLAN QUANTITIES:

AGGREGATE (SURFACE, BASE, SUBBASE, OR BACKFILL)	2.05 TON/CUBIC YARD
STONE RIPRAP	1.50 TON/CUBIC YARD
HOT-MIX ASPHALT	
BITUMINOUS MATERIALS (TACK COAT)	0.025 POUND/SQUARE FOOT (ON HMA BETWEEN LIFTS)
BITUMINOUS MATERIALS (PRIME COAT)	0.25 POUND/SQUARE FOOT (ON AGGREGATE)
BITUMINOUS BINDER (112 LBS)	0.056 TON/SQUARE YARD INCH
SEEDING	
NITROGEN FERTILIZER NUTRIENT	90 LBS/ACRE
PHOSPHOROUS FERTILIZER NUTRIENT	90 LBS/ACRE
POTASSIUM FERTILIZER NUTRIENT	90 LBS/ACRE
AGRICULTURAL GROUND LIMESTONE	2.0 TON/ACRE
MULCH	2.0 TON/ACRE
TEMPORARY EROSION CONTROL SEEDING	100 LB/ACRE

HIGHWAY STANDARDS

000001-06	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001006	DECIMAL OF AN INCH AND OF A FOOT
001001-02	AREAS OF REINFORCEMENT BARS
280001-07	TEMPORARY EROSION CONTROL SYSTEMS
688001-01	RIGHT OF WAY MARKERS
701201-04	LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS ≥ 45 MPH
701901-06	TRAFFIC CONTROL DEVICES
780001-05	TYPICAL PAVEMENT MARKINGS
781001-04	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS
B.L.R. 21-9	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS
B.L.R. 22-7	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS (TWO-LANE TWO WAY RURAL TRAFFIC) (ROAD CLOSED TO THRU TRAFFIC)

DISTRICT SIX	
EXAMINED	JULY 15 th 20 16
<i>John C. Kuykendall</i>	
OPERATIONS ENGINEER	
EXAMINED	July 1 20 16
<i>John P. Myers</i>	
PROGRAM DEVELOPMENT ENGINEER	
EXAMINED	June 29 20 16
<i>Ron Duchambeau</i>	
PROJECT IMPLEMENTATION ENGINEER	

FILE NAME	USER NAME	DESIGNED	REVISED	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	LINCOLN TRAIL INDEX OF SHEETS, GENERAL NOTES, & COMMITMENTS	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0672E49-ent-gennote.dgn	bemery	DRAWN	REVISED			7878	4 CR	CHRISTIAN	23	2
Default		CHECKED	REVISED		SCALE: N.T.S.					
	PLOT SCALE = 40,0000' / in.	DATE	REVISED		SHEET OF SHEETS STA. TO STA.					
	PLOT DATE = 8/3/2016									
										ILLINOIS FED. AID PROJECT CONTRACT NO. 72E49

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	6-00515-0000	
				80% FED 20% STATE	80% FED 20% STATE
				ROADWAY 0004 URBAN	BOX CULVERT 0004 S.N. 011-7135
20100500	TREE REMOVAL, ACRES	ACRE	0.25	0.25	
20200100	EARTH EXCAVATION	CU YD	795	795	
20300100	CHANNEL EXCAVATION	CU YD	195		195
20400800	FURNISHED EXCAVATION	CU YD	360	360	
25000200	SEEDING, CLASS 2	ACRE	0.50	0.50	
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	11	11	
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	11	11	
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	11	11	
25000700	AGRICULTURAL GROUND LIMESTONE	TON	0.3	0.3	
25100115	MULCH, METHOD 2	ACRE	0.50	0.50	
25100630	EROSION CONTROL BLANKET	SQ YD	520	520	
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	34	34	
28000315	AGGREGATE DITCH CHECKS	TON	8	8	
28000400	PERIMETER EROSION BARRIER	FOOT	274	274	

FILE NAME = 0672E49-sh1-500.dgn	USER NAME = barmy	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES				F.A.U. RTE. 7878	SECTION 4 CR	COUNTY CHRISTIAN	TOTAL SHEETS 23	SHEET NO. 3
Default	PLOT SCALE = 2.0000' / 1" /	DRAWN -	REVISED -						SCALE: N.T.S.	SHEET	OF	SHEETS	STA.
	PLOT DATE = 7/28/2016	CHECKED -	REVISED -								ILLINOIS FED. AID PROJECT		
		DATE -	REVISED -										

8/25/16

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	6-00515-0000	
				80% FED 20% STATE	80% FED 20% STATE
				ROADWAY 0004 URBAN	BOX CULVERT 0004 S.N. 011-7135
67100100	MOBILIZATION	LSUM	1	1	
70106800	CHANGEABLE MESSAGE SIGN	CAL MO	9	9	
70300100	SHORT TERM PAVEMENT MARKING	FOOT	4	4	
70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	2	2	
* 78000300	THERMOPLASTIC PAVEMENT MARKING - LINE 5"	FOOT	153	153	
X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	LSUM	1	1	
Z0013798	CONSTRUCTION LAYOUT	LSUM	1	1	
Z0023602	GRANULAR CULVERT BACKFILL	CU YD	140		140

8 *Specialty Items

FILE NAME : 0672E49-shi-500.dgn	USER NAME : benary	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES				F.A.U. RTE. 7878	SECTION 4 CR	COUNTY CHRISTIAN	TOTAL SHEETS 23	SHEET NO. 5
		DRAWN -	REVISED -		SCALE: N.T.S.	SHEET	OF	SHEETS	STA.	TO STA.	CONTRACT NO. 72E49		
		CHECKED -	REVISED -		ILLINOIS FED. AID PROJECT								
		DATE -	REVISED -										

EARTHWORK

LOCATION STATION TO STATION	EARTH EXCAVATION CU YD	CHANNEL EXCAVATION CU YD	FURNISHED EXCAVATION CU YD	FOR INFORMATION ONLY			
				AVERAGE SHRINKAGE FACTOR	EMBANKMENT CU YD	EARTH EXCAVATION REQUIRED FOR EMBANKMENT CU YD	EARTHWORK BALANCE IN EXCESS (+) BORROW (-) CU YD
CHRISTIAN COUNTY							
STA. 830+24.50 TO STA. 830+90.00	795		360	1.3	890	1155	-360
STA. 830+31.95 TO STA. 830+64.08		195					
PROJECT TOTAL	795	195	360				

TREE REMOVAL

LOCATION STATION TO STATION	TREE REMOVAL, ACRES
CHRISTIAN COUNTY	
STA. 830+10.00 TO STA. 830+85.00	0.25
PROJECT TOTALS	0.25

SEE TREE REMOVAL PLAN SHEET FOR EXACT REMOVAL LOCATIONS.

EROSION CONTROL

LOCATION STATION TO STATION	LT/RT	MULCH, METHOD 2	TEMPORARY EROSION CONTROL SEEDING	AGGREGATE DITCH CHECKS	PERMETER EROSION BARRIER
		ACRE	POUND	TON	FOOT
CHRISTIAN COUNTY					
830+09.51 TO 830+73.31	LT	0.25	15		136
830+09.63 TO 830+90.00	RT	0.25	19	8	138
PROJECT TOTAL		0.50	34	8	274

NOTE: TEMPORARY EROSION CONTROL SEEDING INCLUDES 3 APPLICATIONS, APPLICATION RATE = 100 LB/ACRE
THE TEMPORARY EROSION CONTROL SEEDING AREA WAS CALCULATED BASED ON THE
ACTUAL ACREAGE MEASURED (NOT THE ROUNDED UP ACREAGE).

RIPRAP

LOCATION STATION TO STATION	LT/RT	*STONE RIPRAP, CLASS A1	STONE RIPRAP, CLASS A4	FILTER FABRIC
		SQ YD	SQ YD	SQ YD
CHRISTIAN COUNTY				
830+31.95 TO 830+60.00	LT	69	69	69
830+31.92 TO 830+60.00	RT	63	63	63
830+60.00 TO 830+90.00	RT	25	25	25
PROJECT TOTAL		157	157	157

*INCLUDED IN COST OF STONE RIPRAP CLASS A4

SEEDING

LOCATION STATION TO STATION	LT/RT	SEEDING, CLASS 2	EROSION CONTROL BLANKET	NITROGEN FERTILIZER NUTRIENT	PHOSPHORUS FERTILIZER NUTRIENT	POTASSIUM FERTILIZER NUTRIENT	AGRICULTURAL GROUND LIMESTONE
		ACRE	SQ YD	POUND	POUND	POUND	TON
CHRISTIAN COUNTY							
830+09.51 TO 830+73.31	LT	0.25	230	5	5	5	0.1
830+09.63 TO 830+90.00	RT	0.25	290	6	6	6	0.2
PROJECT TOTAL		0.50	520	11	11	11	0.3

NOTE: FERTILIZER APPLICATION RATE = 90 LB/ACRE
AGRICULTURAL GROUND LIMESTONE RATE = 2 TONS/ACRE
THE SEEDING AREAS WERE ROUNDED UP TO THE NEAREST 0.25 ACRES, FERTILIZER AND LIMESTONE QUANTITIES
WERE CALCULATED BASED ON THE ACTUAL ACREAGE MEASURED (NOT THE ROUNDED UP ACREAGE).

DRAINAGE REMOVAL

LOCATION STATION TO STATION	REMOVAL OF EXISTING STRUCTURES
CHRISTIAN COUNTY	
STA. 830+48.00	1
PROJECT TOTAL	1

R.O.W. MARKERS

LOCATION	FURNISHING AND ERECTING R.O.W. MARKERS
	EACH
CHRISTIAN COUNTY	
STA. 830+10.00 30.00' LT	1
STA. 830+20.00 75.00' LT	1
STA. 830+75.00 75.00' LT	1
STA. 830+95.00 30.00' LT	1
STA. 830+15.00 34.13' RT	1
STA. 830+25.00 75.00' RT	1
STA. 830+70.00 75.00' RT	1
STA. 830+95.00 36.67' RT	1
PROJECT TOTAL	8

PAVEMENT

LOCATION STATION TO STATION	HOT-MIX ASPHALT BASE COURSE, 9"	BITUMINOUS MATERIALS (PRIME COAT)	BITUMINOUS MATERIALS (TACK COAT)
	SQ YD	POUND	POUND
CHRISTIAN COUNTY			
STA. 830+24.50 TO STA. 830+71.50	110	500	30
PROJECT TOTAL	110	500	30

SHOULDERS

LOCATION STATION TO STATION	AGGREGATE WEDGE SHOULDERS, TYPE B
	TON
CHRISTIAN COUNTY	
STA. 829+17.29 TO STA. 830+24.50 LT	1
STA. 829+49.92 TO STA. 830+24.50 RT	1
STA. 830+24.50 TO STA. 830+71.50 LT	1
STA. 830+24.50 TO STA. 830+71.50 RT	1
STA. 830+71.50 TO STA. 831+68.76 LT	1
STA. 830+71.50 TO STA. 831+68.76 RT	2
PROJECT TOTAL	7

PAVEMENT MARKINGS

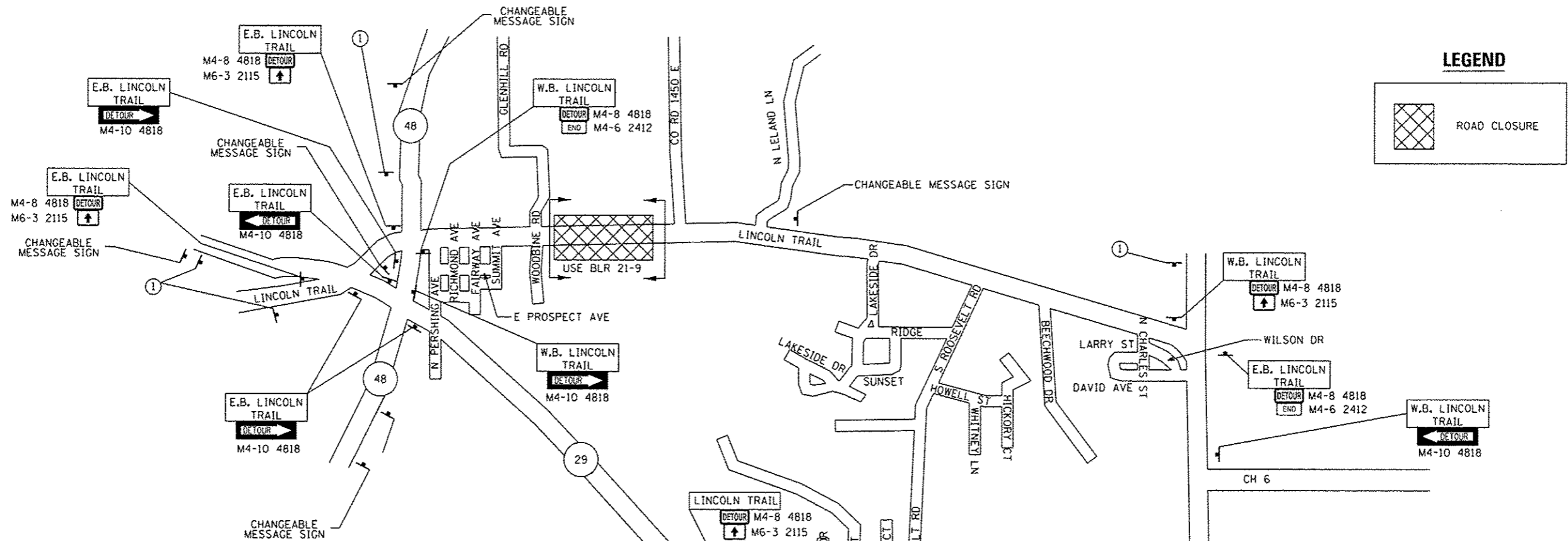
LOCATION STATION TO STATION	SIDE	LOCATION	DESCRIPTION	THERMOPLASTIC PAVEMENT MARKING		SHORT TERM PAVEMENT MARKING	SHORT TERM PAVEMENT MARKING REMOVAL
				LINE 5"	LINE 5"	LINE 4"	LINE 4"
				WHITE	YELLOW	YELLOW	YELLOW
				FOOT	FOOT	FOOT	SQ FT
CHRISTIAN COUNTY							
STA. 830+24.50 TO STA. 830+71.50		CL	SKIP DASH		12	4	2
STA. 830+24.50 TO STA. 830+71.50		CL	SOLID		47		
STA. 830+24.50 TO STA. 830+71.50	LT		EDGE	47			
STA. 830+24.50 TO STA. 830+71.50	RT		EDGE	47			
PROJECT TOTALS					153	4	2

PAVEMENT REMOVAL

LOCATION STATION TO STATION	PAVEMENT REMOVAL
	SQ YD
CHRISTIAN COUNTY	
STA. 830+24.50 TO STA. 830+71.50	110
PROJECT TOTALS	110

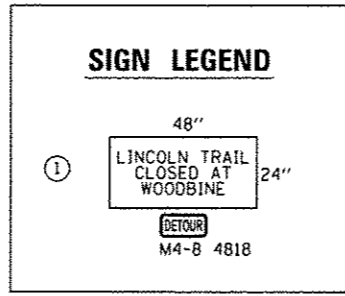
PRECAST BOX CULVERT SCHEDULE (ASTM C 1577)

CULVERT NUMBER	STATION	PRECAST CONCRETE BOX CULVERTS	ES DESIGN FILL			GRANULAR CULVERT BACKFILL
		10' X 8'	SKEW	MIN	MAX	CU YD
		FOOT				
1	830+48.00	82	0	3.86	4.36	140
PROJECT TOTAL		82				140



NOTES

1. PRIOR TO INSTALLING POST MOUNTED SIGNS, THE CONTRACTOR SHALL CONTACT J.U.L.I.E.
2. ALL SIGN MESSAGES AND SIZES SHALL BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.
3. ALL LINCOLN TRAIL SIGNS (DETOUR) SHALL BE ORANGE BACKGROUND WITH 6" BLACK LETTERS.
4. THE CONTRACTOR SHALL FURNISH THE POSTS AND ERECT THE SIGNS AT THE LOCATIONS DIRECTED BY THE ENGINEER. ALL THE SIGNS SHALL BE POST MOUNTED.
5. THE ABOVE NOTED WORK, INCLUDING SIGNS, POSTS, HARDWARE AND LABOR SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE, LUMP SUM, FOR TRAFFIC CONTROL AND PROTECTION, (SPECIAL) AND NO OTHER COMPENSATION WILL BE ALLOWED.
6. ANY IDOT SIGN THAT IS COVERED OR CHANGED SHALL BE DONE IN A MANNER WHICH DOES NOT DAMAGE ANY SIGNS OR POSTS. ANY SIGN OR POST WHICH THE ENGINEER DETERMINES HAS BEEN DAMAGED BY THE CONTRACTOR SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S OWN EXPENSE.
7. THE CHANGEABLE MESSAGE SIGNS SHALL STATE THE DAY THE ROAD CLOSURE WILL BEGIN AND SHALL BE LOCATED AS DIRECTED BY THE ENGINEER. ONCE CONSTRUCTION BEGINS THE SIGNS SHOULD STATE ROAD CLOSED AHEAD. THE EXACT MESSAGES SHALL BE APPROVED BY THE ENGINEER. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE OF CAL MO FOR CHANGEABLE MESSAGE SIGN.
8. CONTRACTOR SHALL NOTIFY IDOT DISTRICT 6 OPERATIONS (217)-782-7314 21 DAYS IN ADVANCE OF ROAD CLOSURE.
9. SEE STANDARDS 701201 AND BLR 21-9 FOR ADDITIONAL INFORMATION.



**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**LINCOLN TRAIL
TRAFFIC CONTROL PLAN FOR ROAD CLOSURE**

FILE NAME :
D672E49-ahs-detour.dgn

USER NAME : bomey
DESIGNED -
DRAWN -
CHECKED -
DATE -

DESIGNED -
DRAWN -
CHECKED -
DATE -

REVISED -
REVISED -
REVISED -
REVISED -

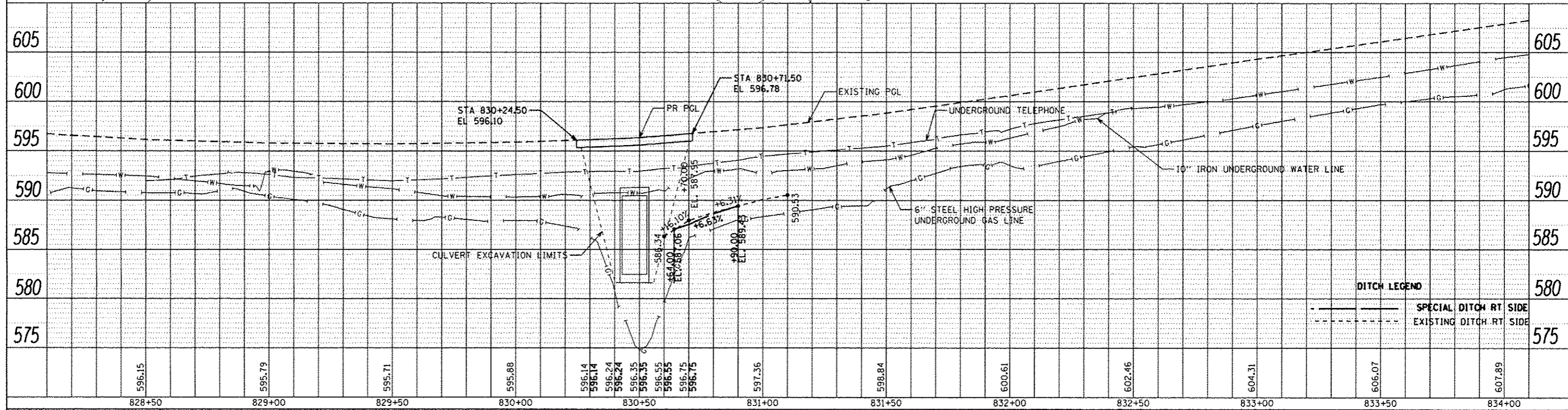
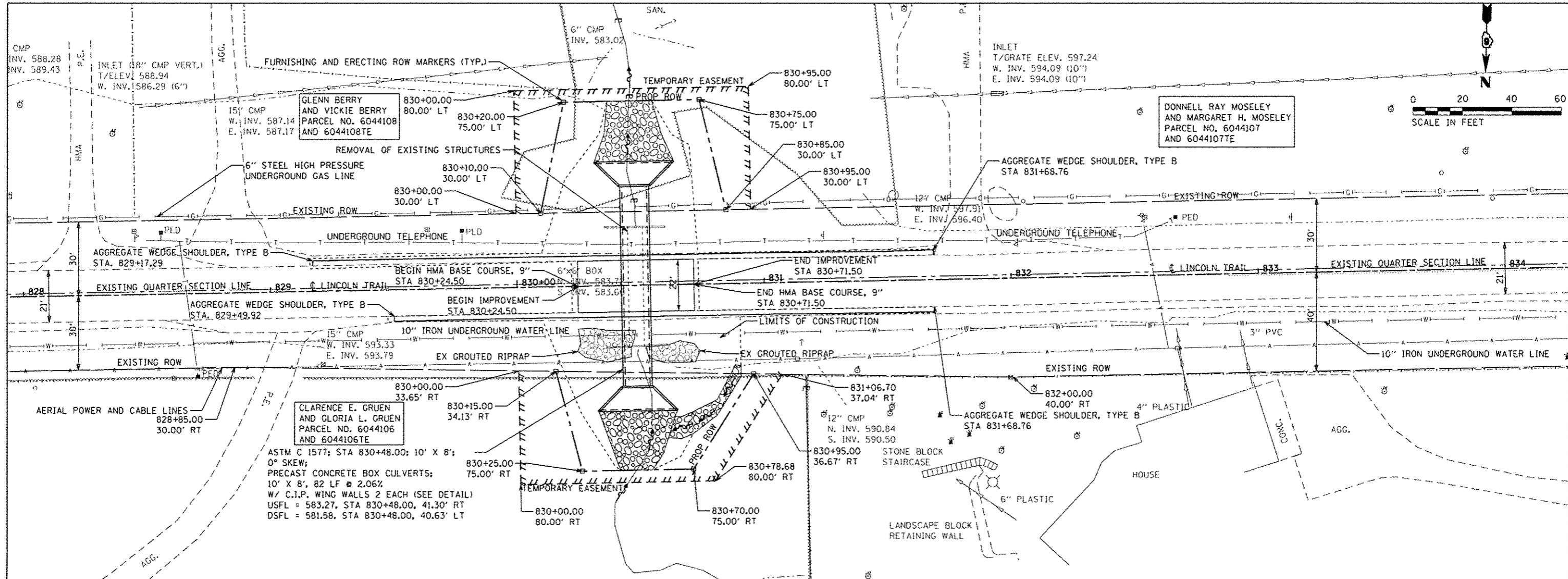
SCALE: N.T.S. SHEET OF SHEETS STA. TO STA.

F.A.U. RTE. 7878 SECTION 4 CR COUNTY CHRISTIAN TOTAL SHEETS 23 SHEET NO. 10

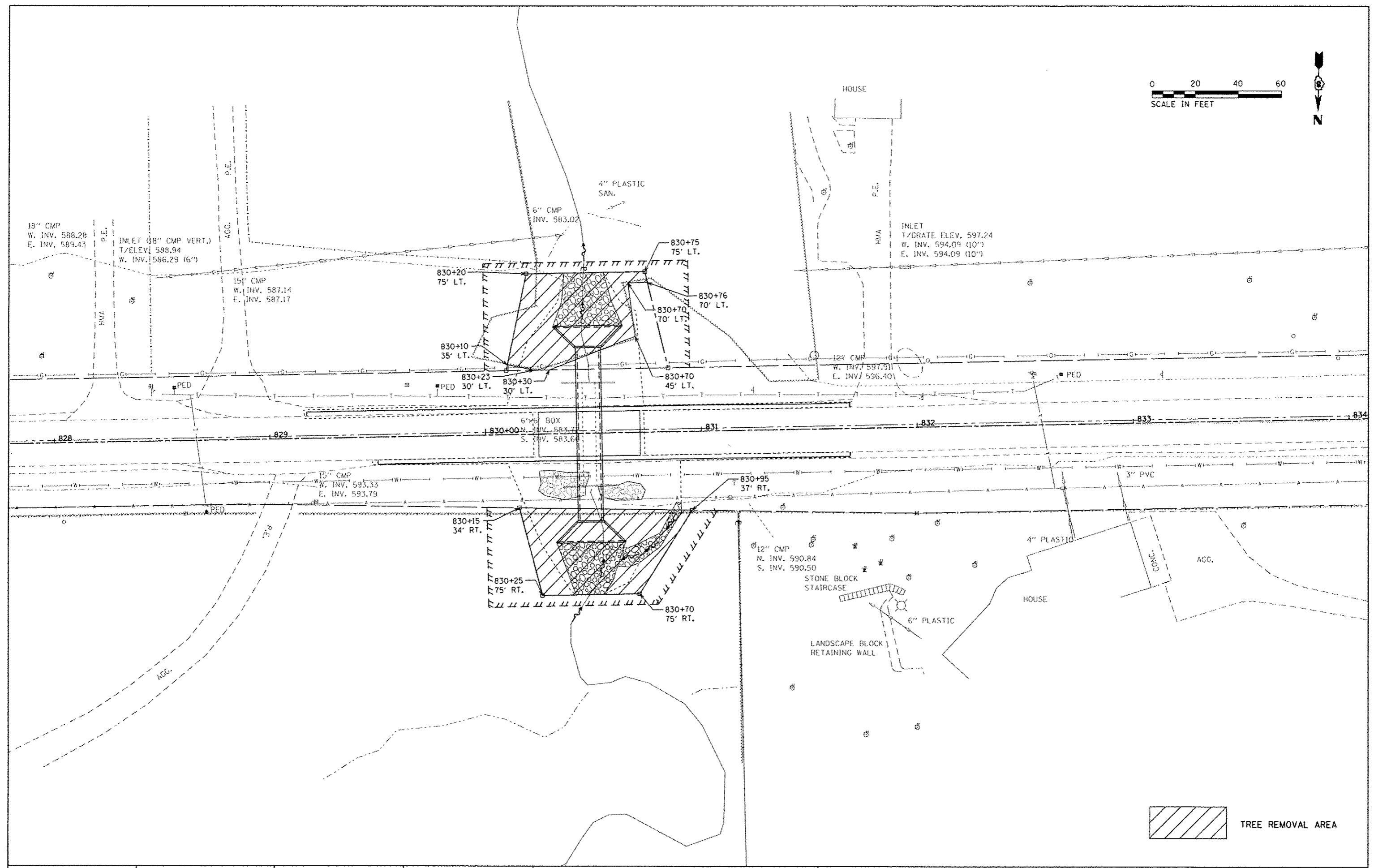
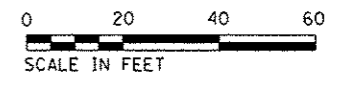
CONTRACT NO. 72E49 ILLINOIS FED. AID PROJECT

DATE	
BY	
REVISIONS	
NO.	
DESCRIPTION	
DATE	
BY	
REVISIONS	
NO.	
DESCRIPTION	
DATE	
BY	
REVISIONS	
NO.	
DESCRIPTION	

DATE	
BY	
REVISIONS	
NO.	
DESCRIPTION	
DATE	
BY	
REVISIONS	
NO.	
DESCRIPTION	
DATE	
BY	
REVISIONS	
NO.	
DESCRIPTION	



FILE NAME : D672E49-shs-plnprof.dgn	USER NAME : bamary	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	LINCOLN TRAIL PLAN & PROFILE		F.A.U. RTE. 7878	SECTION 4 CR	COUNTY CHRISTIAN	TOTAL SHEETS 23	SHEET NO. 11	
PLOT SCALE = 40.0000 / in.	CHECKED -	REVISED -	REVISED -		SCALE: 1" = 20'	SHEET OF SHEETS	STA. 828+00.00 TO STA. 834+00.00	CONTRACT NO. 72E49		ILLINOIS FED. AID PROJECT		
PLOT DATE = 7/28/2016	DATE -	REVISED -	REVISED -									
Default												



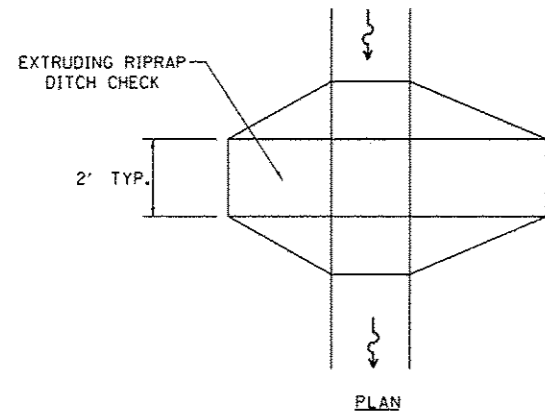
TREE REMOVAL AREA

FILE NAME = 0672E49-shr-treeremov.dgn	USER NAME = bemory	DESIGNED -	REVISED -
Default	PLOT SCALE = 40.0000' / 1\"/>		
	PLOT DATE = 7/28/2016	CHECKED -	REVISED -
	DATE -	REVISED -	REVISED -

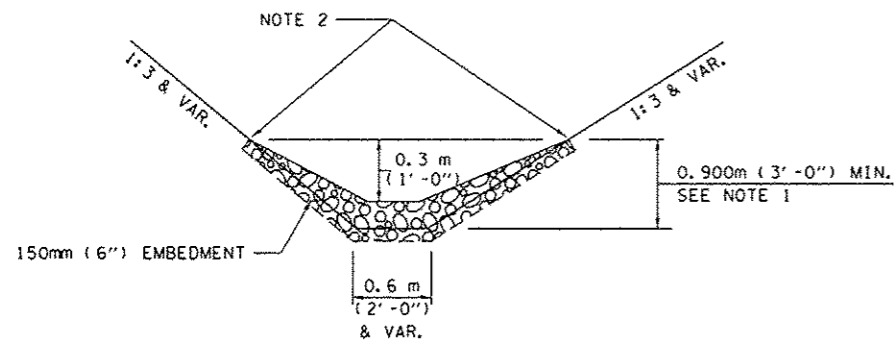
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

LINCOLN TRAIL TREE REMOVAL PLAN	
SCALE: 1" = 20'	SHEET OF SHEETS STA. 828+00.00 TO STA. 834+00.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7878	4 CR	CHRISTIAN	23	12
CONTRACT NO. 72E49				
ILLINOIS FED. AID PROJECT				



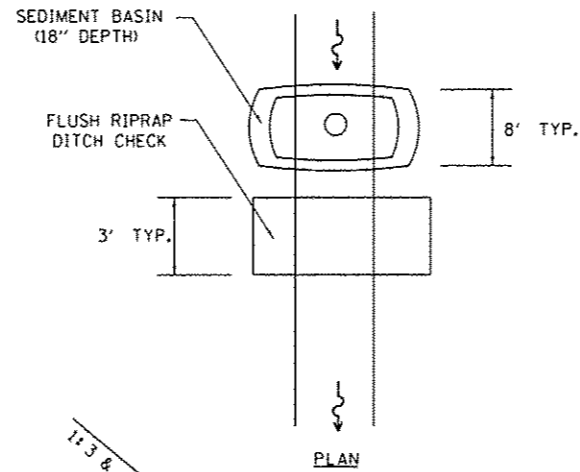
PLAN



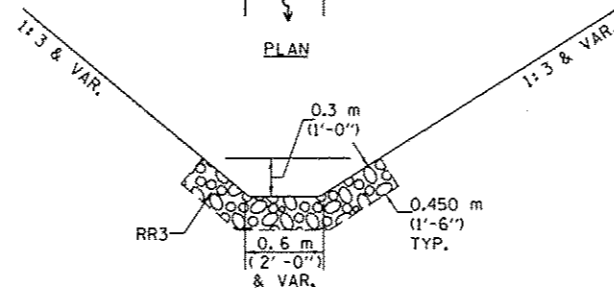
ELEVATION

OPTION 1

(EXTRUDING DITCH CHECK)
RECOMMENDED FOR AREAS
W/ RIPRAP DITCH LINING



PLAN



ELEVATION

OPTION 2

(FLUSH DITCH CHECK)
RECOMMENDED FOR AREAS
W/O RIPRAP DITCH LINING

AGGREGATE DITCH CHECK

OPTIONS 1 & 2 OR
AS DIRECTED BY THE ENGINEER

NOTE 1: RIPRAP SHALL EXTEND FAR ENOUGH UP THE SLOPES TO ALLOW 0.3m (1') OVERTOPPING TO AVOID ERODING AROUND THE EDGES OF THE RIPRAP.

NOTE 2: ENDS SHALL BE TIED INTO SLOPES.

LEGEND FOR EROSION CONTROL PLAN

ITEM	SYMBOL
AGGREGATE DITCH CHECKS	
INLET PIPE PROTECTION	
PERIMETER EROSION BARRIER	
SEDIMENT BASINS	
EARTH EXCAVATION FOR EROSION CONTROL AGGREGATE (EROSION CONTROL)	
PRESERVE EXISTING TREES, WOODLANDS, AND UNDERSTORY (OUTSIDE CONSTRUCTION LIMITS)	
ITEM PLACED AT BEGINNING OF CONSTRUCTION (Requirement)	* ITEM *
ITEM PLACED AS DIRECTED BY ENGINEER (When required by situation)	ITEM
DIRECTION OF OVERLAND FLOW	

GENERAL NOTES:

All items shall be constructed as shown on this sheet, on Standard 280001, and as directed by the Engineer.

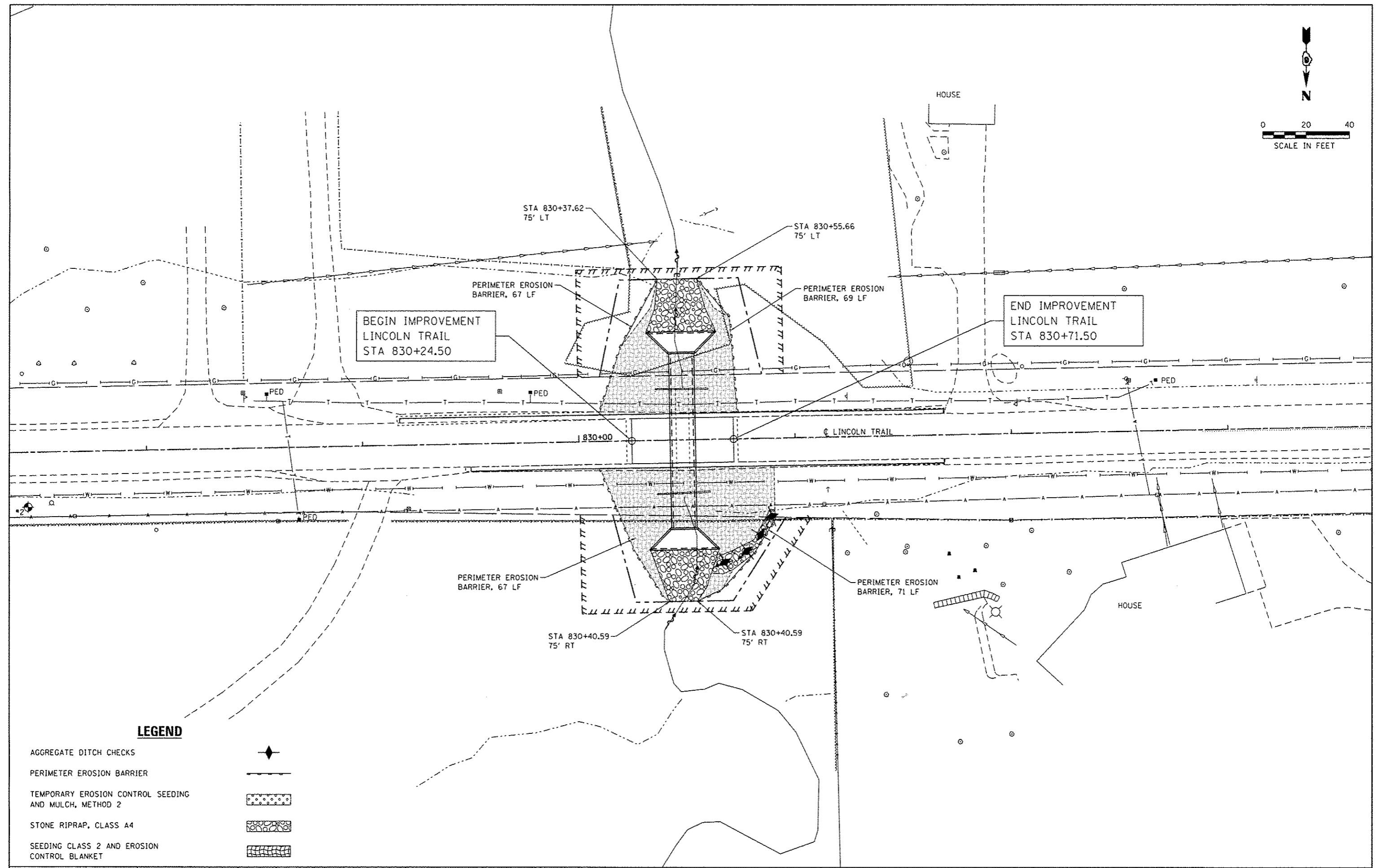
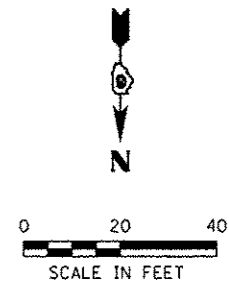
FILE NAME = D672E49-shr-explendgn	USER NAME = bamery	DESIGNED -	REVISED - AUG 2007 (JCN)
		DRAWN - CADD	REVISED - OCT 2010 (JCN)
		CHECKED - JCN	REVISED - MAY 2012 (JPM)
		DATE - APRIL 5, 1999	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**LINCOLN TRAIL
EROSION CONTROL PLAN**

SCALE: N.T.S. SHEET OF SHEETS STA. TO STA.

F.A.U. RTE. 7878	SECTION 4 CR	COUNTY CHRISTIAN	TOTAL SHEETS 25	SHEET NO. 13
			CONTRACT NO. 72E49	
ILLINOIS FED. AID PROJECT				



LEGEND

- AGGREGATE DITCH CHECKS
- PERIMETER EROSION BARRIER
- TEMPORARY EROSION CONTROL SEEDING AND MULCH, METHOD 2
- STONE RIPRAP, CLASS A4
- SEEDING CLASS 2 AND EROSION CONTROL BLANKET

FILE NAME =	USER NAME = #USER#	DESIGNED - TKW	REVISED -
#FILE#		DRAWN - TKW	REVISED -
	PLOT SCALE = #SCALE#	CHECKED - LMS	REVISED -
#MODELNAME#	PLOT DATE = #DATE#	DATE - 6/2016	REVISED -

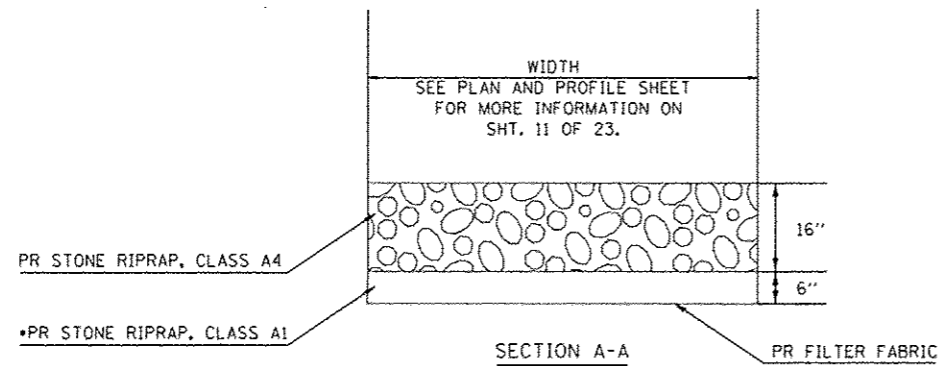
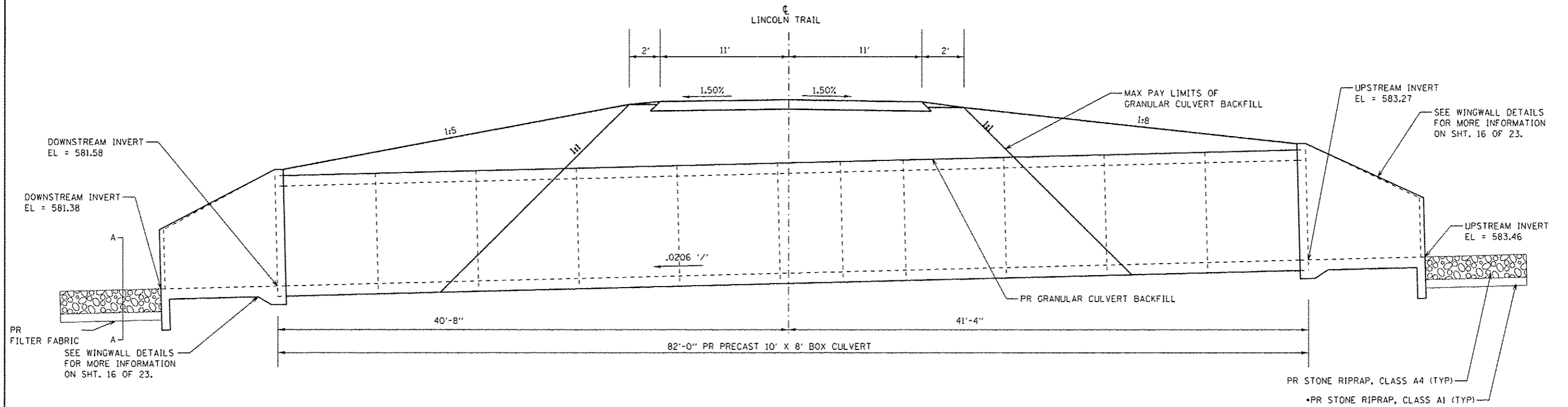
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**LINCOLN TRAIL
EROSION CONTROL PLAN**

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
787B	4 CR	CHRISTIAN	23	14
CONTRACT NO. 72E49				
ILLINOIS FED. AID PROJECT				

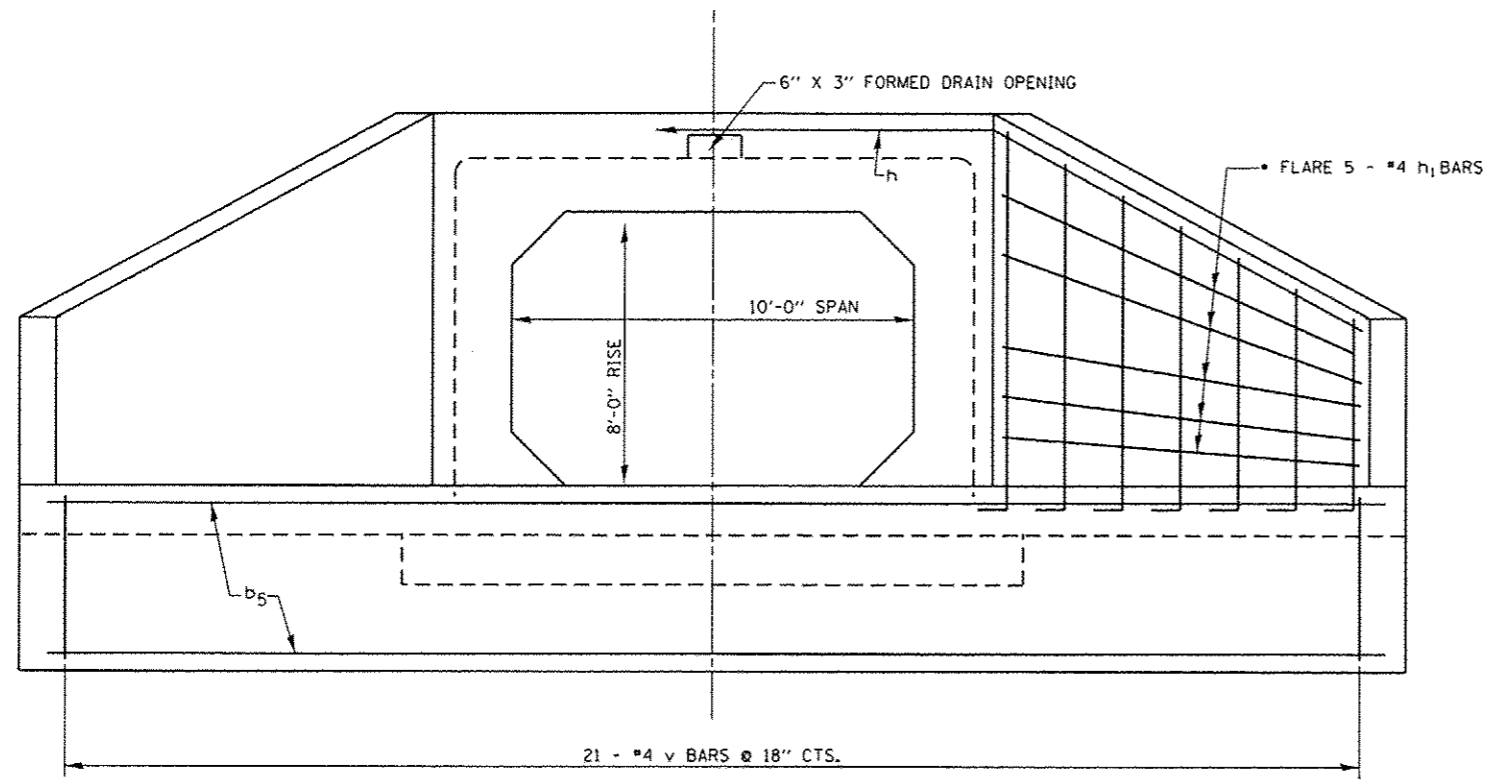
SCALE: SHEET OF SHEETS STA. TO STA.

PRECAST 10' X 8' BOX CULVERT

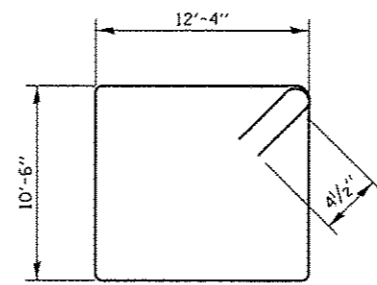


• INCLUDED IN COST OF STONE RIPRAP, CLASS A4

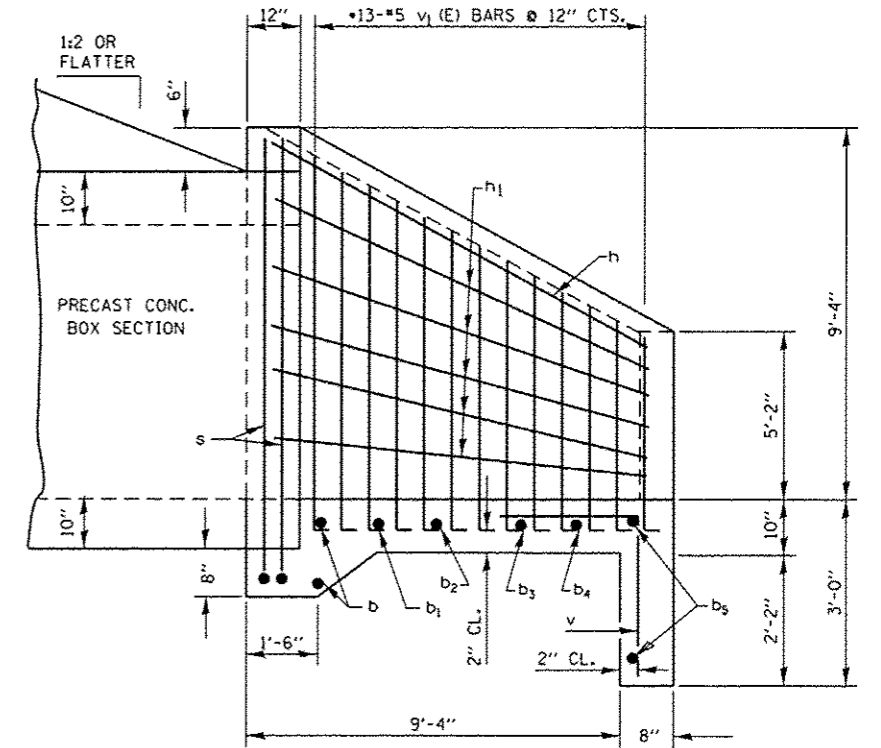
FILE NAME D672E49-shr-structure.dgn	USER NAME bamery	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PRECAST BOX CULVERT DETAILS		F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 48,0000' / 1" =	CHECKED -	REVISED -		SN 011-7135	7878	4 CR	CHRISTIAN	23	15	
Default	PLOT DATE = 7/28/2016	DATE -	REVISED -	SCALE: N.T.S.	SHEET	OF	SHEETS	STA.	TO STA.	CONTRACT NO. 72E49	
ILLINOIS FED. AID PROJECT											



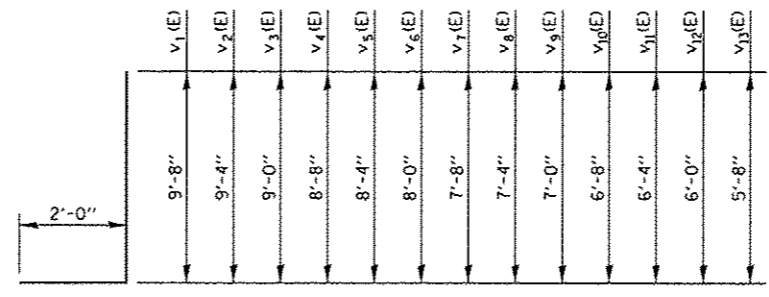
END ELEVATION



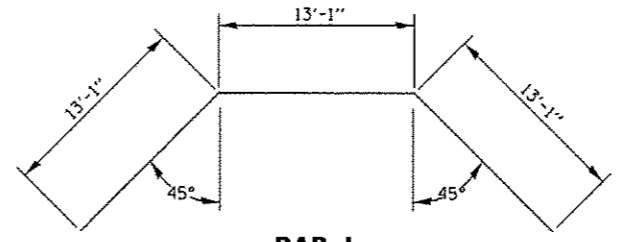
BAR s



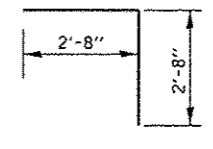
HALF SIDE ELEVATION



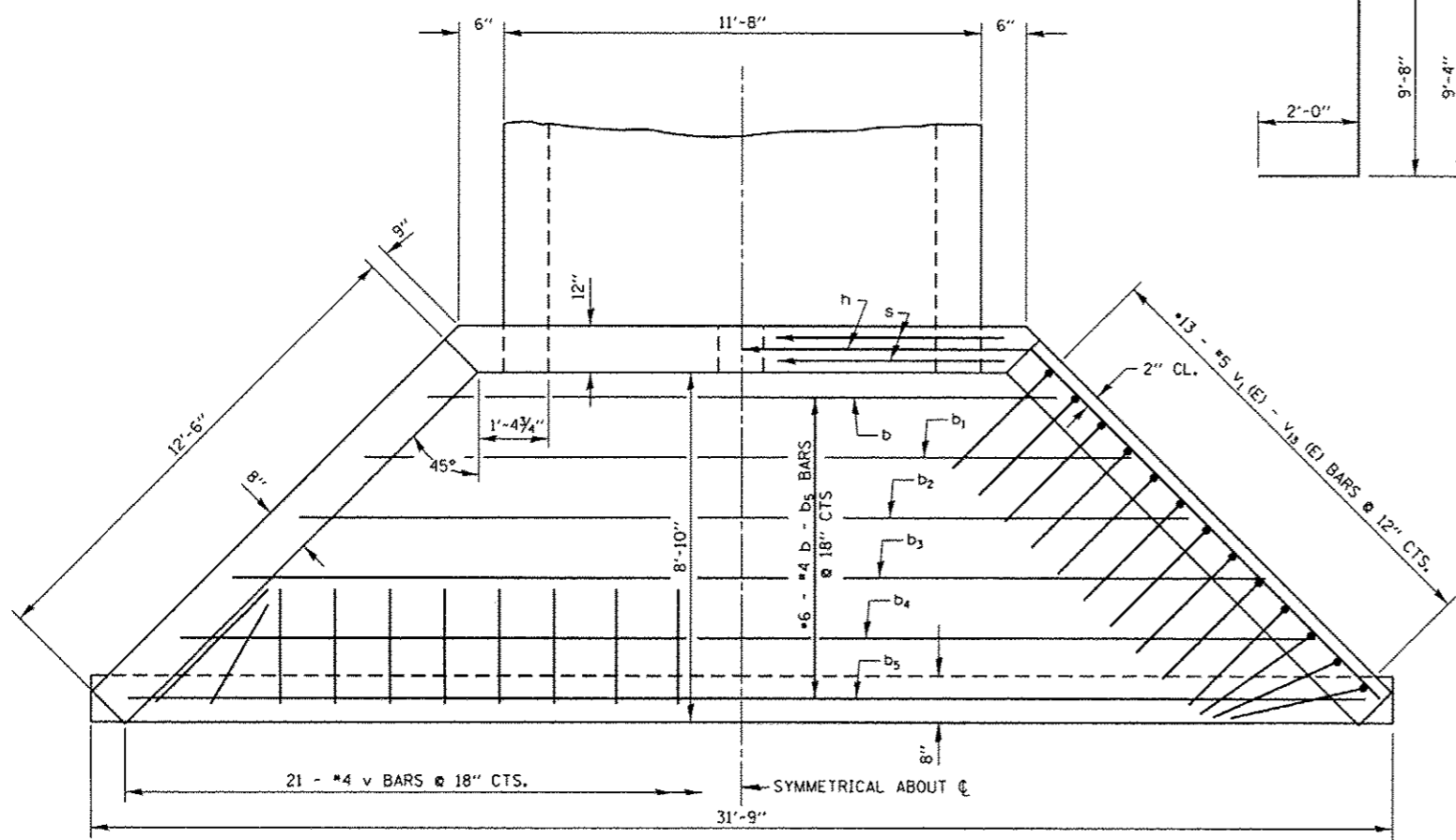
BARS v₁(E) - v₁₃(E)



BAR h



BAR v



PLAN

GENERAL NOTES

EXPOSED EDGES SHALL BE BEVELED 3/4".
 CUT OR BEND REINFORCEMENT BARS TO FIT IN FIELD.
 REINFORCEMENT BARS DESIGNATED (E) SHALL BE EPOXY COATED.

BILL OF MATERIAL				
BAR	SIZE	NO.	LENGTH	SHAPE
b	#4	2	16'-3"	—
b ₁	#4	1	19'-3"	—
b ₂	#4	1	22'-3"	—
b ₃	#4	1	25'-3"	—
b ₄	#4	1	28'-3"	—
b ₅	#4	2	31'-3"	—
h	#5	1	37'-10"	—
h ₁	#4	10	13'-3"	—
s	#4	2	46'-5"	—
v	#4	21	5'-4"	—
v ₁ (E)	#5	2	11'-8"	J
v ₂ (E)	#5	2	11'-4"	J
v ₃ (E)	#5	2	11'-0"	J
v ₄ (E)	#5	2	10'-8"	J
v ₅ (E)	#5	2	10'-4"	J
v ₆ (E)	#5	2	10'-0"	J
v ₇ (E)	#5	2	9'-8"	J
v ₈ (E)	#5	2	9'-4"	J
v ₉ (E)	#5	2	9'-0"	J
v ₁₀ (E)	#5	2	8'-8"	J
v ₁₁ (E)	#5	2	8'-4"	J
v ₁₂ (E)	#5	2	8'-0"	J
v ₁₃ (E)	#5	2	7'-8"	J
			CONCRETE BOX CULVERTS	C.Y. 14.4
			REINFORCEMENT BARS	LBS. 390
			REIN. BARS (EPOXY CTD.)	LBS. 260

TABLE FOR ONE (1) HEADWALL

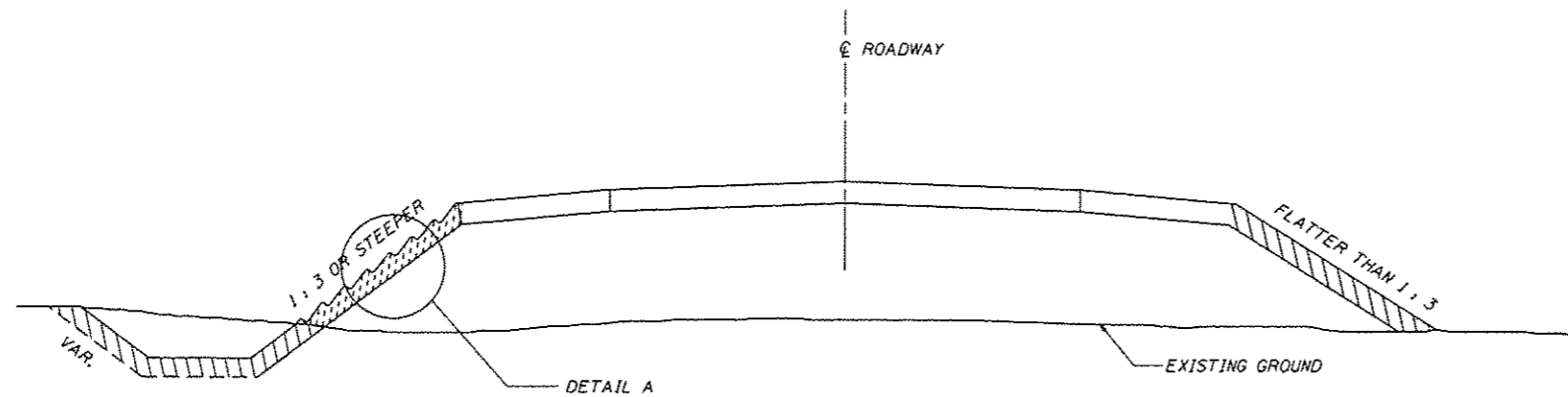
FILE NAME: 0672E49-shr-structures.dgn
 USER NAME: bamery
 PLOT SCALE: 100.0000 / in.
 PLOT DATE: 7/28/2016

DESIGNED -	REVISED -
DRAWN -	REVISED -
CHECKED -	REVISED -
DATE -	REVISED -

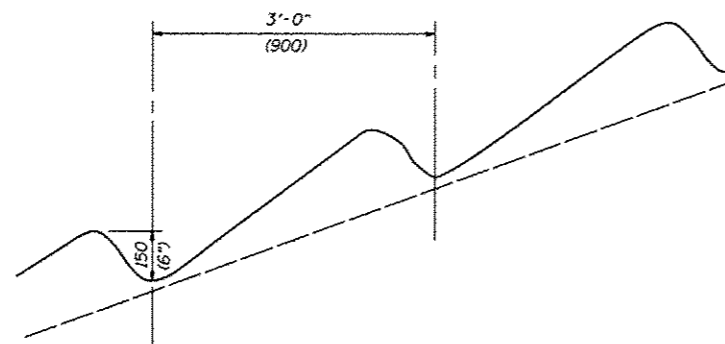
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

WINGWALL DETAILS
 SN 011-7135
 SCALE: N.T.S. SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7876	4 CR	CHRISTIAN	23	16
ILLINOIS FED. AID PROJECT			CONTRACT NO. 72E49	



SEEDING DETAIL



DETAIL A



NOTES:

AREAS WHERE THE SLOPE HEIGHTS EXCEED 5' (1.5 m) IN DEPTH AND THE SLOPES ARE 1 : 3 OR STEEPER, THE SLOPES SHALL BE PLOWED WITH 6" (150 mm) DEEP TRENCHES APPROXIMATELY 3' (900 mm) ON CENTER PARALLEL TO THE CONTOUR LINES OF THE CUT OR FILL AND SEEDED WITH CLASS 2 MIXTURE AND EROSION CONTROL BLANKET.

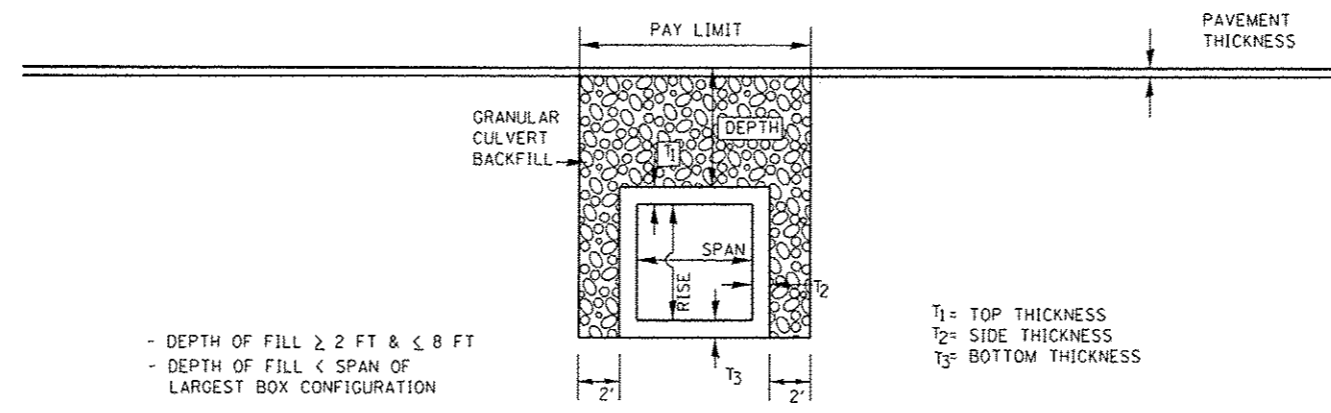
ALL OTHER AREAS DISTURBED WITHIN THE RIGHT-OF-WAY OR CONSTRUCTION LIMITS SHALL BE SEEDED WITH CLASS 2 AND MULCH IN ACCORDANCE WITH METHOD 2, PROCEDURE 2 AS SPECIFIED IN ARTICLE 251.03(b) OF THE STANDARD SPECIFICATIONS.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

LEGEND

-  CLASS 2 SEEDING
MULCH METHOD 2 (SEE NOTES)
-  CLASS 2 SEEDING AND
EROSION CONTROL BLANKET

FILE NAME * D672E49-shd-prjtdetails.dgn	USER NAME * benery	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	LINCOLN TRAIL DETAILS			F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE * 48,000' / in.	CHECKED -	REVISED -					7878	4 CR	CHRISTIAN	23	18
Default	PLOT DATE * 7/28/2016	DATE - 6/21/96	REVISED -	SCALE: N.T.S. SHEET OF SHEETS STA. TO STA.			CONTRACT NO. 72E49 ILLINOIS FED. AID PROJECT					

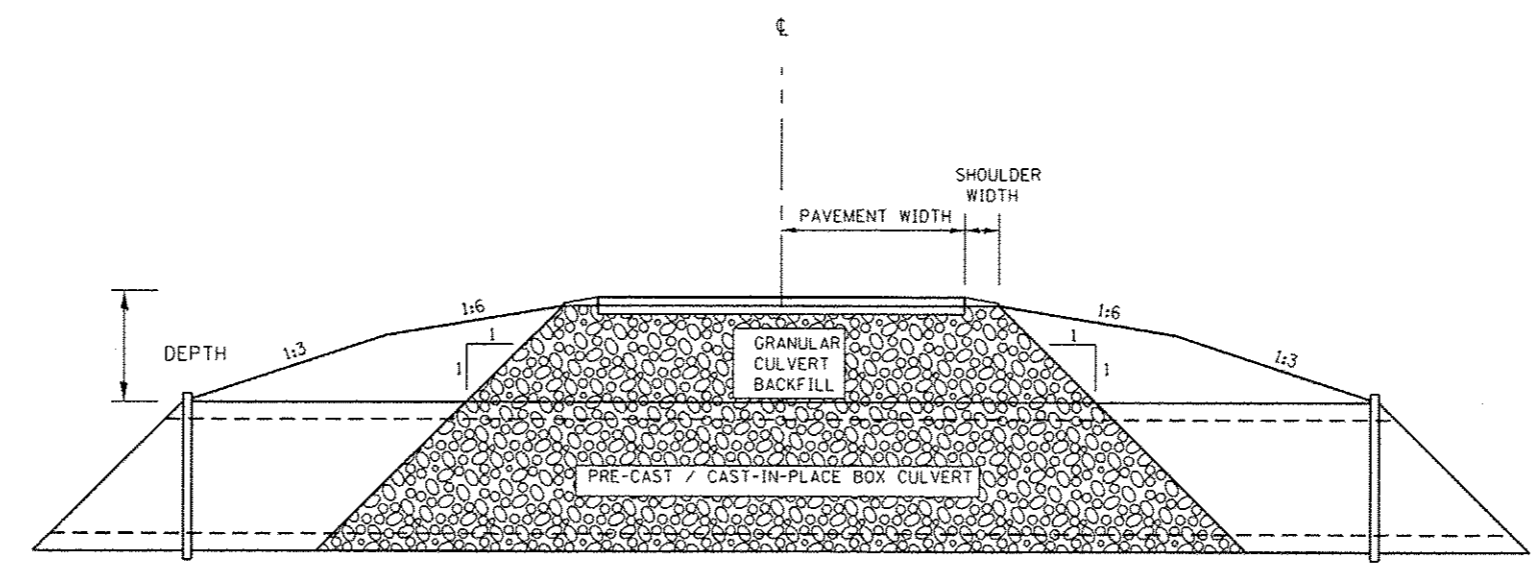


- DEPTH OF FILL \geq 2 FT & \leq 8 FT
- DEPTH OF FILL < SPAN OF LARGEST BOX CONFIGURATION

T₁ = TOP THICKNESS
 T₂ = SIDE THICKNESS
 T₃ = BOTTOM THICKNESS

• NOTE: WILL NEED MODIFICATION FOR MULTICELL BOX CULVERTS

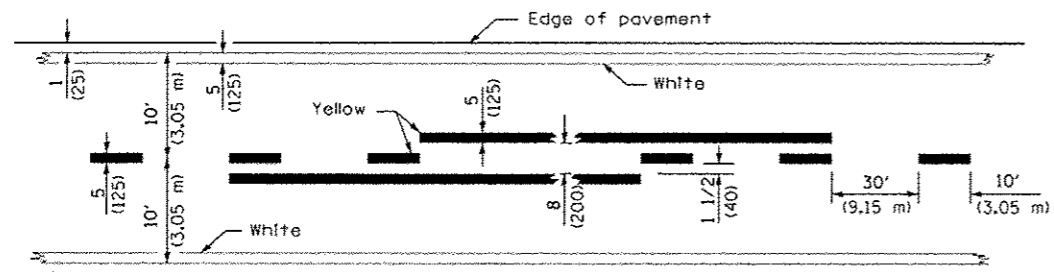
**PROFILE GRANULAR BACKFILL DETAIL
 FOR EXISTING ALIGNMENTS & CONSTRUCTION**



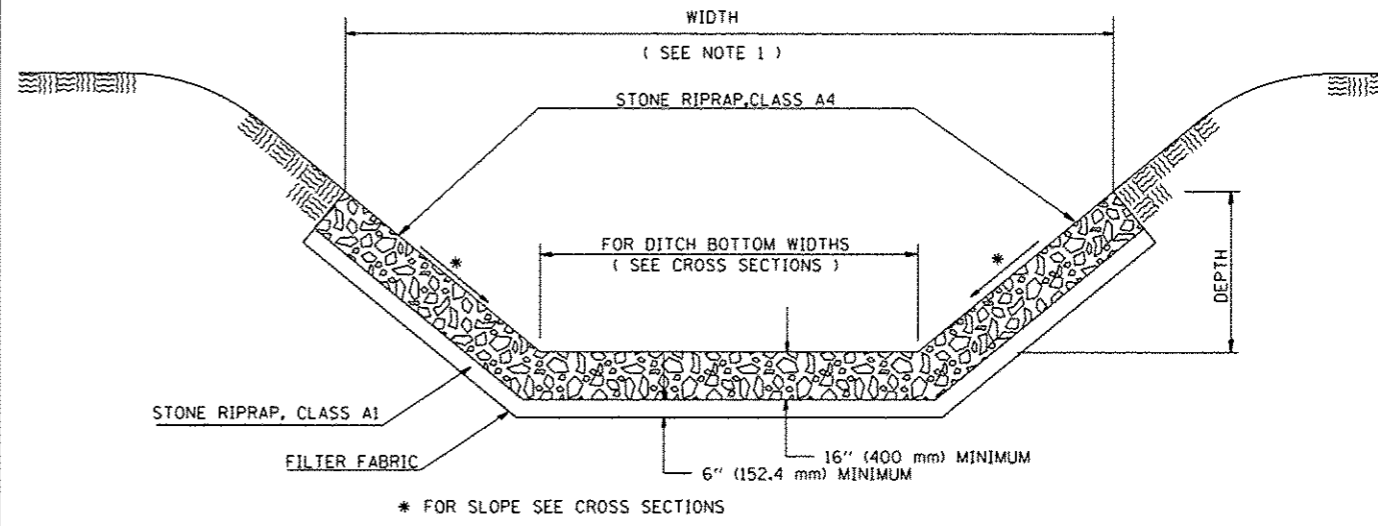
- DEPTH OF FILL \geq 2 FT & \leq 8 FT
- DEPTH OF FILL < SPAN OF LARGEST BOX CONFIGURATION

**CROSS SECTION GRANULAR BACKFILL DETAIL
 FOR EXISTING ALIGNMENTS & CONSTRUCTION**

FILE NAME = DB72E49-shc-prjtdetails.dgn	USER NAME = bomery	DESIGNED - BKL	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	LINCOLN TRAIL DETAILS		F.A.U. RTE. 7878	SECTION 4 CR	COUNTY CHRISTIAN	TOTAL SHEETS 23	SHEET NO. 19
	PLOT SCALE = 40,000' / 1" =	CHECKED -	REVISED -		SCALE: N.T.S.	SHEET	OF	SHEETS	STA.	TO STA.	CONTRACT NO. 72E49
	PLOT DATE = 7/20/2016	DATE -	REVISED -		ILLINOIS FED. AID PROJECT						



LANE AND EDGE LINES



STONE RIPRAP DITCH DETAIL

LOCATION	LENGTH	WIDTH (SEE NOTE 1)	DEPTH	STONE RIPRAP, CLASS A4
	ft. (meter)	ft. (meter)	ft. (meter)	sq. ft. (sq. m)
830+60 TO 830+90	39	8.83	1.53	344
TOTALS	39	8.83	1.53	344

NOTE 1: THE WIDTH SHOWN IS THE OUT TO OUT HORIZONTAL DIMENSION OF THE PROPOSED RIPRAP PLACEMENT. THE QUANTITY FOR THE STONE RIPRAP IS CALCULATED USING THE SUM OF THE DITCH BOTTOM WIDTH AND THE SLOPE DIMENSIONS OF THE FORESLOPE AND THE BACKSLOPE.

FILE NAME = 0672E49-rht-pr_details.dgn	USER NAME = bemanj	DESIGNED -	REVISED -
		DRAWN -	REVISED -
		CHECKED -	REVISED -
		DATE -	REVISED -

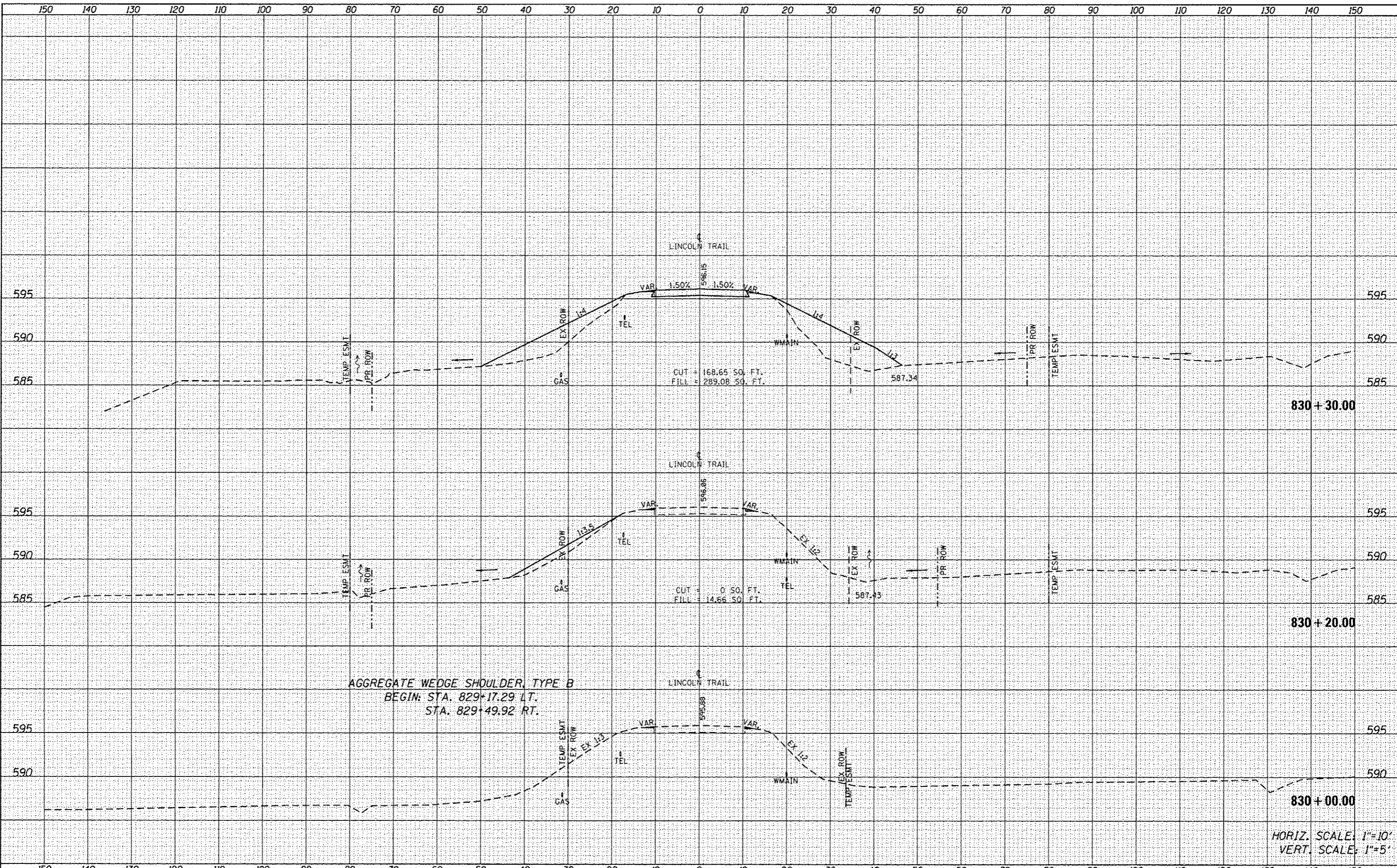
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**LINCOLN TRAIL
DETAILS**

F.A.U. RTE. 7878	SECTION 4 CR	COUNTY CHRISTIAN	TOTAL SHEETS 23	SHEET NO. 20
SCALE: N.T.S.	SHEET OF SHEETS	STA. TO STA.	CONTRACT NO. 72E49	
ILLINOIS FED. AID PROJECT				

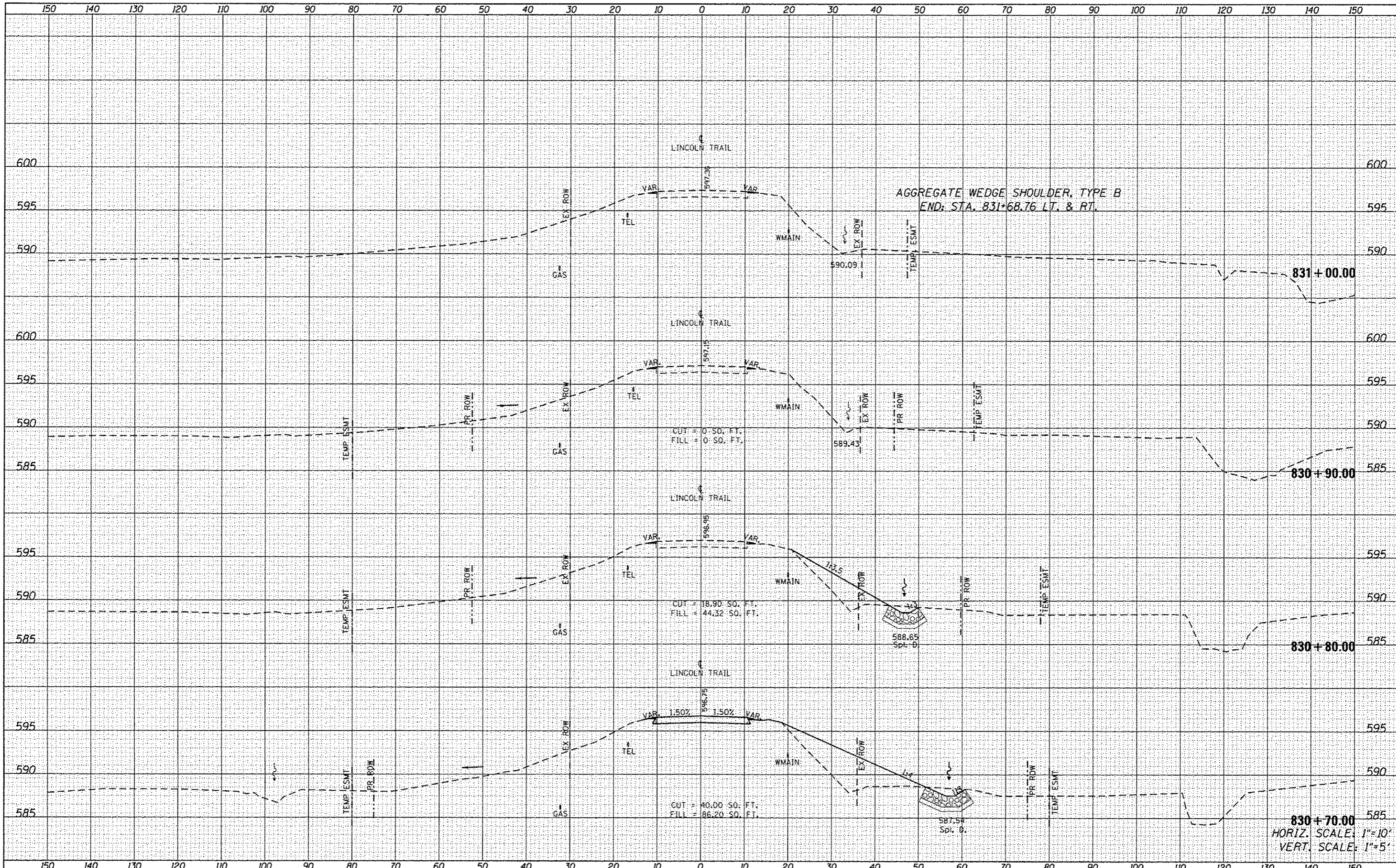
DATE	
BY	
REVISIONS	
NO.	
DATE	
BY	
REVISIONS	
NO.	
DATE	
BY	
REVISIONS	
NO.	
DATE	
BY	
REVISIONS	
NO.	

DATE	
BY	
REVISIONS	
NO.	
DATE	
BY	
REVISIONS	
NO.	
DATE	
BY	
REVISIONS	
NO.	



DATE: _____
 BY: _____
 ORIGINAL SURVEY NO. _____
 CHECKED BY: _____
 DATE: _____
 FINAL SURVEY NO. _____
 CHECKED BY: _____
 DATE: _____
 NOTE BOOK NO. _____
 AREAS CHECKED _____

DATE: _____
 BY: _____
 ORIGINAL SURVEY NO. _____
 CHECKED BY: _____
 DATE: _____
 FINAL SURVEY NO. _____
 CHECKED BY: _____
 DATE: _____
 NOTE BOOK NO. _____
 AREAS CHECKED _____



FILE NAME * D672E49-shr-xao.dgn	USER NAME * bamery	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	LINCOLN TRAIL CROSS SECTIONS		F.A.U. RTE. 7878	SECTION 4 CR	COUNTY CHRISTIAN	TOTAL SHEETS 23	SHEET NO. 23	
PLOT SCALE * 28.0000 / in.	CHECKED -	REVISED -	SCALE: SHEET OF SHEETS		STA. 830+70.00 TO STA. 831+00.00	CONTRACT NO. 72E49		ILLINOIS FED. AID PROJECT				
PLOT DATE * 7/28/2016	DATE -	REVISED -										
Default	DATE -	REVISED -										