

PROJECT ENGINEER: M. ADDIS (309) 671-3454

DESIGNER: D. SWISHER (309) 671-3459

68379

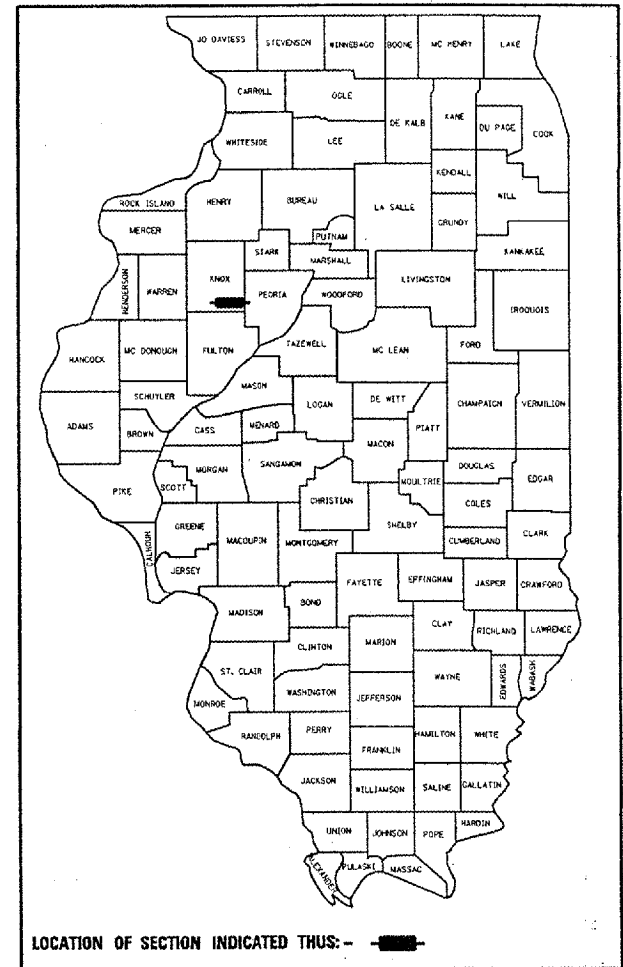
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
380	D4 CULVERT EXT/REPAIR 2006	KNOX	35	1

36

D-94-012-04

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS
**PLANS FOR PROPOSED
 FEDERAL AID HIGHWAY**

F.A.S. ROUTE 380 (IL ROUTE 8)
 D4 CULVERT EXT/REPAIR 2006
 KNOX COUNTY
 C-94-020-04



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LIST OF STANDARDS

- 280001-02
- 442201-01
- 542301
- 602401-01
- 666001
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- 701011-01
- 701201-02
- 702001-06

DESIGN DESIGNATION

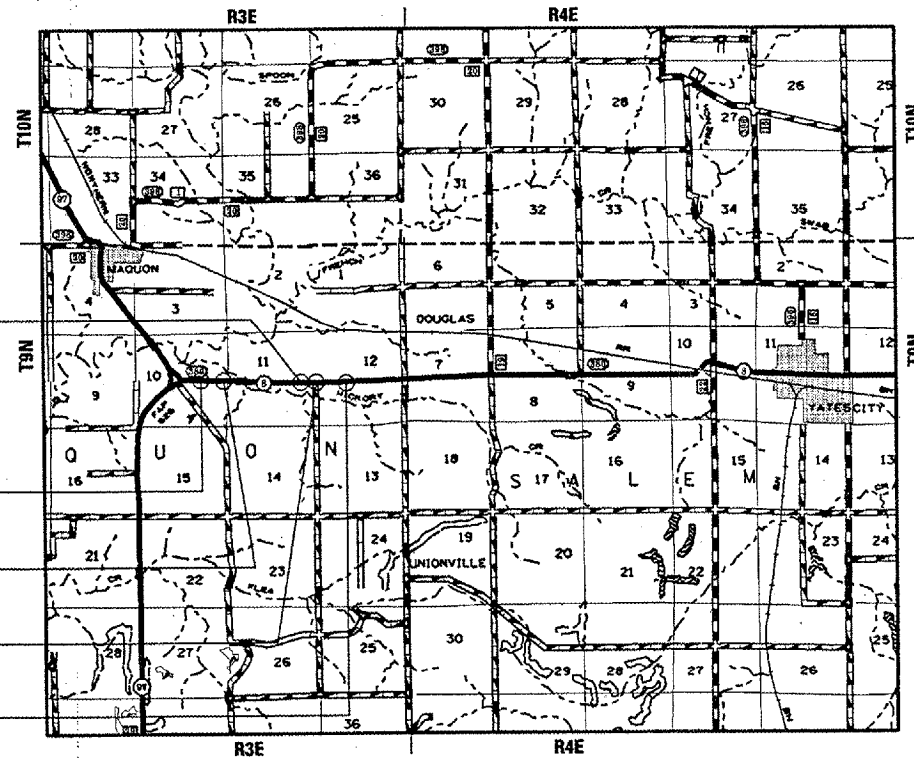
- ADT = 950
- MU = 4.2%
- SU = 6.3%

SCALES

SEE INDIVIDUAL SHEETS

STATION EQUATION
 STA. 1876 + 41.50 (BK) =
 STA. 1876 + 62.80 (AH)

- LOCATION #1
STA. 1935 + 45.20
- LOCATION #2
STA. 1922 + 04.71
- LOCATION #3
STA. 1867 + 47.76
- LOCATION #4
STA. 1850 + 03.98



DESCRIPTION OF WORK: THIS IMPROVEMENT CONSISTS OF THE EXTENSION OF FOUR CROSS ROAD CULVERTS. IN ADDITION, EXISTING GUARDRAIL WILL BE REMOVED, ROADWAY EMBANKMENTS WILL BE WIDENED AND DITCHES REGRADED.

LOCATION MAP (NOT TO SCALE)

GROSS LENGTH OF IMPROVEMENT = 8,768.70 FEET = 1.66 MILES
 NET LENGTH OF IMPROVEMENT = 1,085.00 FEET = 0.21 MILES

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

CONTRACT NO. 68379
 CATALOG NO. 032836-00D

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS

SUBMITTED FEB 10 20 04

[Signature]
 DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

March 24, 20 06
[Signature]
 ENGINEER OF DESIGN AND ENVIRONMENT

March 24, 20 06
[Signature]
 DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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 OF THE STATE OF ILLINOIS**

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
380		KNOX	35	2
• 04 CULVERT EXT/REPAIR 2006				

COMMITMENTS

THE CONTRACTOR SHALL NOTIFY MR. STEPHEN J. MOSHER, MS. MARY BETH MURPHY, AND MS. CHRISTINA J. WILSON AT LEAST 30 DAYS PRIOR TO STARTING ANY CONSTRUCTION ALONG THE PROPERTY LINE OF PARCEL NO. 404W001 AT THE FOLLOWING ADDRESS:

STEPHEN J. MOSHER
 MARY BETH MURPHY
 CHRISTINA J. WILSON
 C/O R.R. #1
 MAQUON, IL 61458

ANY WORK ON THE PROPERTY OF MR. AND MRS. MICHAEL D. THURMAN, PARCEL NO. 404W004 IS TO BE STARTED AND COMPLETED BY THE CONTRACTOR BETWEEN THE MONTHS OF JUNE AND SEPTEMBER.

GENERAL NOTES

PLAN ELEVATIONS - U.S.G.S. MEAN SEA LEVEL DATUM

ALL ELEVATIONS SHOWN ON THE PLANS ARE ESTABLISHED FROM U.S.G.S. MEAN SEA LEVEL DATUM.

ENVIRONMENTAL REVIEWS

PRIOR TO THE USE OF ANY PROPOSED BORROW AREAS, USE AREAS (TEMPORARY ACCESS ROADS, DETOURS, RUN-AROUNDS, ETC.) AND/OR WASTE AREAS, THE CONTRACTOR SHALL FILE THE REQUIRED ENVIRONMENTAL RESOURCE REQUEST SURVEYS ACCORDING TO SECTION 107.22 OF THE STANDARD SPECIFICATIONS. THESE SURVEYS ARE REQUIRED IN ORDER FOR THE DEPARTMENT TO CONDUCT CULTURAL AND BIOLOGICAL RESOURCE SURVEYS FOR THE PROPOSED SITE.

PRIOR TO ANY WASTE MATERIALS BEING REMOVED FROM THE CONSTRUCTION SITE THE REQUIRED ENVIRONMENTAL RESOURCE SURVEYS WILL NEED TO BE OBTAINED AND FILED BY THE CONTRACTOR. EXCESS WASTE PRODUCTS REMOVED FROM THE SITE SHALL BE DISPOSED OF AS REQUIRED IN SECTION 202.03 OF THE STANDARD SPECIFICATIONS.

ANY PROTRUDING METAL BARS SHALL BE REMOVED PRIOR TO THE DISPOSAL OF BROKEN CONCRETE AT APPROVED DISPOSAL SITES.

THE REQUIRED ENVIRONMENTAL RESOURCE DOCUMENTATION SHALL INCLUDE THE FOLLOWING:

- * BDE FORM 2289 (ENVIRONMENTAL SURVEY REQUEST)
- * A LOCATION MAP SHOWING THE SIZE LIMITS AND LOCATION OF THE USE AREA
- * SIGNED PROPERTY OWNER AGREEMENT FORM
- * COLOR PHOTOGRAPHS DEPICTING THE USE AREA

PLEASE NOTE THAT A MINIMUM OF TWO WEEKS SHALL BE ALLOWED FOR THE DISTRICT TO OBTAIN THE REQUIRED ENVIRONMENTAL CLEARANCES.

ORDERING LENGTH CONFIRMATION - DRAINAGE ITEMS

THE CONTRACTOR SHALL CONSULT WITH THE ENGINEER IN REGARD TO THE EXACT LENGTH OF THE BOX/PIPE CULVERTS PRIOR TO ORDERING THESE ITEMS.

ENGINEER'S FIELD OFFICE

ADD THE FOLLOWING SENTENCE TO THE END OF PARAGRAPH 670.02 (1) AND 670.04 (e):
 ALL OF THE TELEPHONE LINES PROVIDED SHALL HAVE UNPUBLISHED NUMBERS.

UTILITIES - LOCATIONS/INFORMATION ON PLANS

THE LOCATIONS OF EXISTING WATER MAINS, GAS MAINS, SEWERS, ELECTRIC POWER LINES, TELEPHONE LINES AND OTHER UTILITIES AS SHOWN ON THE PLANS ARE BASED ON CAREFUL FIELD INVESTIGATION AND THE BEST INFORMATION AVAILABLE, BUT THEY ARE NOT GUARANTEED. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ASCERTAIN THEIR EXACT LOCATION FROM THE UTILITY COMPANIES AND BY FIELD INSPECTION.

TREE REMOVAL - UTILITY RELOCATION

TREE REMOVAL MAY BE NECESSARY PRIOR TO UTILITY COMPANIES BEING ABLE TO RELOCATE THEIR FACILITIES OUTSIDE THE CONSTRUCTION LIMITS. THE CONTRACTOR SHOULD COORDINATE ANY CONTRACT TREE REMOVAL ACTIVITIES WITH THE UTILITY COMPANIES TO ELIMINATE CONFLICTS AND POTENTIAL DELAYS CAUSED BY UTILITY TREE REMOVAL ACTIVITIES OR INCOMPLETE UTILITY RELOCATIONS.

STATIONING

STATIONS STAMPED IN THE PAVEMENT AT THE PROJECT LOCATION ARE METRIC AND CORRESPOND TO THE PLAN LOCATIONS AS LISTED IN THE TABLE BELOW (STATIONS ARE APPROXIMATE):

LOCATION #1	STA. 0+500
LOCATION #2	STA. 0+960
LOCATION #3	STA. 2+600
LOCATION #4	STA. 3+100

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

COMMITMENTS AND
GENERAL NOTES

68379

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
380	*	KNOX	35	3
* D4 CULVERT EXT/REPAIR 2006				

GENERAL NOTES

BITUMINOUS CONCRETE MIXTURE REQUIREMENTS

THE FOLLOWING MIXTURE REQUIREMENTS ARE APPLICABLE TO THIS PROJECT:

MIXTURE USES	CLASS D PATCH (BOTTOM LIFTS)	CLASS D PATCH (SURFACE LIFT)
AC/PG:	PG 64-22	PG 64-22
RAP% (MAX):	25%	15%
DESIGN AIR VOIDS:	4.2% @ N=50	4.2% @ N=50
MIXTURE COMPOSITION: (GRADATION MIXTURE)	IL 19.0	IL 9.5 OR 12.5
FRICITION AGGREGATE:	N. A.	MIX D

STATUS OF UTILITIES TO BE ADJUSTED

Mid-Century Telephone

ROUTE	OFFSET	LOCATION	TYPE OF UTILITY	TYPE OF CONFLICT	DISPOSITION
LOCATION 1	45' RT TO 42' LT	1935+10 TO 1936+25	12 PAIR COPPER CABLE	BOX CULVERT/RIPRAP	RELOCATE
LOCATION 3	38' RT TO 38' RT	1867+30 TO 1867+60	FIBER OPTIC	DITCH	RELOCATE
LOCATION 4	39' RT TO 39' RT	1850+00 TO 1850+50	FIBER OPTIC	BOX CULVERT	CAUTION

Geneseo Telephone Co.

ROUTE	OFFSET	LOCATION	TYPE OF UTILITY	TYPE OF CONFLICT	DISPOSITION
LOCATION 3	20' RT TO 20' RT	1867+30 TO 1867+60	BURIED TELEPHONE	BOX CULVERT	CAUTION
LOCATION 4	30' RT TO 30' RT	1850+00 TO 1850+50	BURIED TELEPHONE	BOX CULVERT	RELOCATE

AmerenCILCO

ROUTE	OFFSET	LOCATION	TYPE OF UTILITY	TYPE OF CONFLICT	DISPOSITION
LOCATION 3	30' RT TO 30' RT	1867+00 TO 1868+00	AERIAL ELECTRIC	EARTH EXCAVATION	CAUTION

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 GENERAL NOTES AND
 STATUS OF UTILITIES
 TO BE ADJUSTED

68379

F.A.S. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
380	-	KNOX	35	4

SUMMARY OF QUANTITIES

100% STATE

CODE NO.	PAY ITEM	UNIT	Y007 TOTAL QUANTITY
20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	459
20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	123
20200100	EARTH EXCAVATION	CU YD	1,013
20400800	FURNISHED EXCAVATION	CU YD	466
20800150	TRENCH BACKFILL	CU YD	13
* 21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	3,858
* 25000200	SEEDING, CLASS 2	ACRE	0.8
* 25000400	NITROGEN FERTILIZER NUTRIENTS	POUND	72
* 25000500	PHOSPHORUS FERTILIZER NUTRIENTS	POUND	72
* 25000600	POTASSIUM FERTILIZER NUTRIENTS	POUND	72
* 25100115	MULCH, METHOD 2	ACRE	0.8
* 28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	80
28000300	TEMPORARY DITCH CHECKS	EACH	10
28000400	PERIMETER EROSION BARRIER	FOOT	410
28100107	STONE RIPRAP, CLASS A4	SQ YD	140
28100125	STONE RIPRAP, CLASS B3	SQ YD	229
28200200	FILTER FABRIC	SQ YD	140
44200144	CLASS D PATCHES, TYPE II, 12 INCH	SQ YD	14
48101200	AGGREGATE SHOULDERS, TYPE B	TON	81
50102400	CONCRETE REMOVAL	CU YD	16
50105200	REMOVE EXISTING CULVERTS	EACH	1
50800105	REINFORCEMENT BARS	POUND	3,641
54002020	EXPANSION BOLTS 3/4 INCH	EACH	36

CODE NO.	PAY ITEM	UNIT	Y007 TOTAL QUANTITY
54003000	CONCRETE BOX CULVERTS	CU YD	12
54201273	PIPE CULVERTS, TYPE 2 RCCP 18"	FOOT	48
54201285	PIPE CULVERTS, TYPE 2 RCCP 30"	FOOT	66
54213663	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 18"	EACH	2
54213675	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 30"	EACH	4
54248500	CONCRETE HEADWALLS	CU YD	5.9
54248510	CONCRETE COLLAR	CU YD	4.1
60221100	MANHOLES, TYPE A, 5'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	1
63200310	GUARDRAIL REMOVAL	FOOT	950
66600105	FURNISH AND ERECT RIGHT OF WAY MARKERS	EACH	27
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	2
67100100	MOBILIZATION	L SUM	1.0
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1.0
* A2001216	TREE, ACER RUBRUM RED SUNSET (RED SUNSET RED MAPLE), 2" CALIPER, BALLED AND BURLAPPED	EACH	5
* A2002816	TREE, CATALPA SPECIOSA (NORTHERN CATALPA), 2" CALIPER, BALLED AND BURLAPPED	EACH	5
* A2006916	TREE, QUERCUS PALUSTRIS (PIN OAK), 2" CALIPER, BALLED AND BURLAPPED	EACH	5
Z0013798	CONSTRUCTION LAYOUT	L SUM	1.0
Z0022800	FENCE REMOVAL	FOOT	1,334
Z0073100	TEMPORARY SHORING	EACH	2

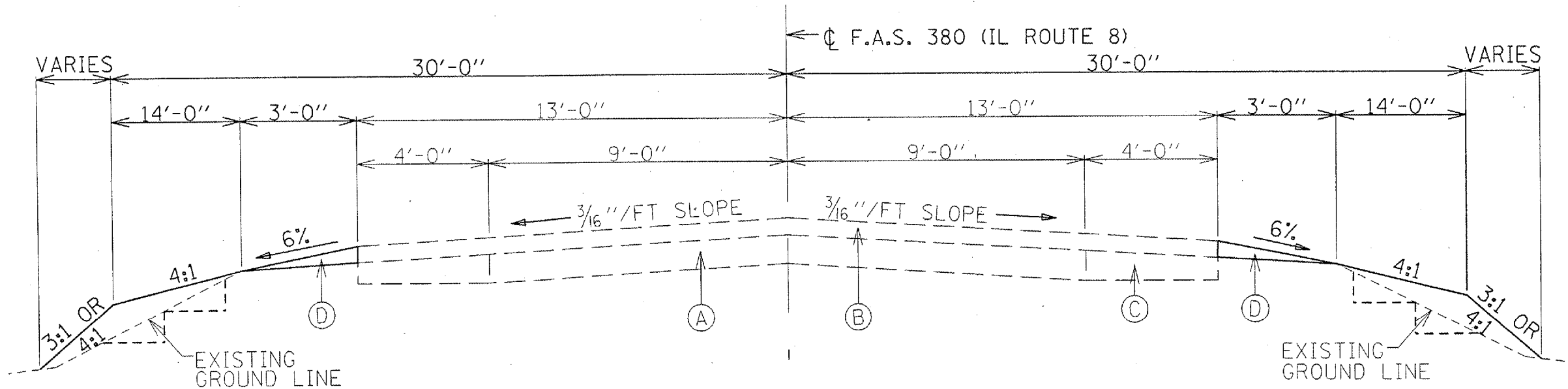
* SPECIALTY ITEMS

REVISIONS	DATE
NAME	

ILLINOIS DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
380		KNOX	35	5
• D4 CULVERT EXT/REPAIR 2006				



**IL ROUTE 8 TYPICAL SECTION
(EXISTING AND PROPOSED)**

NOTE

THE CONTRACTOR SHALL RIP (BENCH) THE EXISTING GROUND LINE BEFORE THE PLACEMENT OF ANY EMBANKMENT MATERIAL. TYPICAL EACH SIDE.
(SEE DISTRICT STANDARD 205001-D4 FOR DETAILS)

LEGEND

- (A) EXISTING P.C.C. PAVEMENT
- (B) EXISTING BITUMINOUS OVERLAY
- (C) EXISTING BITUMINOUS CONCRETE BASE COURSE WIDENING
- (D) PROPOSED AGGREGATE SHOULDER, TYPE B (WEDGE)

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

TYPICAL SECTION

68379

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
380	*	KNOX	35	6
* D4 CULVERT EXT/REPAIR 2006				

SCHEDULE OF QUANTITIES

EARTHWORK	20200100	EARTH EXCAVATION ADJUSTED FOR SHRINKAGE	EMBANKMENT	EARTHWORK BALANCE WASTED (+) OR SHORTAGE (-)	20400800	21101615	25000200	25000200	25000400	25000500	25000600
	EARTH EXCAVATION				FURNISHED EXCAVATION	TOPSOIL FURNISH AND PLACE, 4"	SEEDING, CLASS 2	MULCH, METHOD 2	NITROGEN FERTILIZER NUTRIENTS	PHOSPHORUS FERTILIZER NUTRIENTS	POTASSIUM FERTILIZER NUTRIENTS
LOCATION	CU YD	CU YD	CU YD	CU YD	CU YD	SQ YD	ACRE	ACRE	POUND	POUND	POUND
LOCATION 1 STA. 1934+50 TO STA. 1937+00	261.0	195.75	598.0	-402.25		1103.4	0.23	0.23	20.7	20.7	20.7
LOCATION 2 STA. 1921+50 TO STA. 1923+50	83.0	62.25	50.0	12.25		302.4	0.06	0.06	5.4	5.4	5.4
LOCATION 3 STA. 1866+50 TO STA. 1869+00	71.0	53.25	180.0	-125.75		469.6	0.10	0.10	9.0	9.0	9.0
LOCATION 4 STA. 1848+50 TO STA. 1853+50	598.0	448.50	398.0	50.50		1982.4	0.41	0.41	36.9	36.9	36.9
TOTAL	1,013	760	1,226	-466	* 466	3,858	0.80	0.80	72.0	72.0	72.0

*TOTAL FURNISHED EXCAVATION FOUND BY APPLYING A 25% SHRINKAGE FACTOR TO THE QUANTITY FOR EARTH EXCAVATION AND SUBTRACTING THAT AMOUNT FROM THE CALCULATED EMBANKMENT

20100110	
TREE REMOVAL (6 TO 15 UNITS DIAMETER)	
LOCATION	UNIT
LOCATION 1	
RT 29' STA. 1935+16	9.0
RT 31' STA. 1935+26	7.0
RT 31' STA. 1935+26	9.0
RT 50' STA. 1935+50	10.0
RT 59' STA. 1935+58	8.0
RT 59' STA. 1935+58	9.0
RT 30' STA. 1935+63	7.0
LOCATION 2	
RT 34' STA. 1921+70	10.5
RT 34' STA. 1921+82	3.3
RT 35' STA. 1921+97	7.0
RT 34' STA. 1922+28	11.5
LOCATION 4	
LT 26-45' STA. 1849+62 TO 1853+00	364.4
TOTAL	459

20100210	
TREE REMOVAL (OVER 15 UNITS DIAMETER)	
LOCATION	UNIT
LOCATION 4	
LT 26-45' STA. 1849+62 TO 1853+00	123.0
TOTAL	123

A2001216	
TREE, ACER RUBRUM RED SUNSET (RED SUNSET RED MAPLE), 2" CALIPER, BALLED AND BURLAPPED	
LOCATION	UNIT
JOBSITE	5
TOTAL	5

A2002816	
TREE, CATALPA SPECIOSA (NORTHERN CATALPA), 2" CALIPER, BALLED AND BURLAPPED	
LOCATION	UNIT
JOBSITE	5
TOTAL	5

A2006916	
TREE, QUERCUS PALUSTRIS (PIN OAK), 2" CALIPER, BALLED AND BURLAPPED	
LOCATION	UNIT
JOBSITE	5
TOTAL	5

28000250	
TEMPORARY EROSION CONTROL SEEDING	
LOCATION	POUND
LOCATION 1	
STA. 1934+50 TO STA. 1937+00	23
LOCATION 2	
STA. 1921+50 TO STA. 1923+50	6
LOCATION 3	
STA. 1866+50 TO STA. 1869+00	10
LOCATION 4	
STA. 1848+50 TO STA. 1853+50	41
TOTAL	80

28000300		
TEMPORARY DITCH CHECKS		
LOCATION	EACH	SPACING
LOCATION 1		
LT STA. 1935+00 TO STA. 1936+00	3	25 FT
RT STA. 1934+50 TO STA. 1935+50	3	25 FT
LOCATION 4		
LT STA. 1849+83 TO STA. 1850+12	2	25 FT
RT STA. 1849+00 TO STA. 1849+71	2	25 FT
TOTAL	10	

28000400	
PERIMETER EROSION BARRIER	
LOCATION	FOOT
LOCATION 1	
RT STA. 1935+90 TO STA. 1936+60	81
LOCATION 3	
LT STA. 1867+51 TO STA. 1868+60	152
LOCATION 4	
LT STA. 1852+00 TO STA. 1853+50	177
TOTAL	410

28100107	
STONE RIPRAP, CLASS A4	
LOCATION	SQ YD
LOCATION 1	
LT STA. 1935+45.20	13
RT STA. 1934+65.26	19
LOCATION 2	
LT STA. 1922+04.71	10
RT STA. 1922+04.71	10
LOCATION 4	
LT STA. 1850+27	48
RT STA. 1850+27	40
TOTAL	140

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES

68379

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
380		KNOX	35	7
• D4 CULVERT EXT/REPAIR 2006				

SCHEDULE OF QUANTITIES

STRUCTURES	20800150	50102400	50800105	54002020	54003000	54201273	54201285	54213663	54213675	54248500	54248510	60221100
	TRENCH BACKFILL	CONCRETE REMOVAL	REINFORCEMENT BARS	EXPANSION BOLTS 3/4"	CONCRETE BOX CULVERTS	PIPE CULVERTS, TYPE 2, RCCP 18"	PIPE CULVERTS, TYPE 2, RCCP 30"	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 18"	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 30"	CONCRETE HEADWALLS	CONCRETE COLLAR	MANHOLES, TYPE A, 5'-DIAMETER, TYPE I FRAME, CLOSED LID
LOCATION	CU YD	CU YD	POUND	EACH	CU YD	FOOT	FOOT	EACH	EACH	CU YD	CU YD	EACH
LOCATION 1									1			
Lt 35.43' Sta. 1935+44.75												
From Lt 35.43' Sta. 1935+44.75 To Lt 23.27' Sta. 1935+44.91							12					
Lt 23.27' Sta. 1935+44.91				4							0.4	
Rt 24.78' Sta. 1935+45.52		2.5	41								0.7	
From Rt 24.78' Sta. 1935+45.52 To Rt 43.48' Sta. 1935+45.75							19					
Rt 45.82' Sta. 1935.45.78												1
From Rt 47.59' Sta. 1935+47.30 To Rt 63.60' Sta. 1935+60.90							21					
Rt 63.60' Sta. 1935+60.90									1			
LOCATION 2									1			
Lt 17.70' Sta. 1922+04.77												
From Lt 17.70' Sta. 1922+04.77 To Lt 13.89' Sta. 1922+04.75							4					
Lt 13.89' Sta. 1922+04.75		2.2	42								0.8	
Rt 23.37' Sta. 1922+04.64			20	4							0.4	
From Rt 23.37' Sta. 1922+04.64 To Rt 32.92' Sta. 1922+04.61							10					
Rt 32.92' Sta. 1922+04.61									1			
LOCATION 3		1.3						1				
Lt 29.83' Sta. 1867+47.87												
From Lt 29.83' Sta. 1867+47.87 To Lt 16.92' Sta. 1867+47.95							48					
Sta. 1867+47.76	13											
From Rt 15.70' Sta. 1867+47.67 To Rt 18.04' Sta. 1867+47.65												
Rt 18.04' Sta. 1867+47.65		2.7						1				
LOCATION 4										2.95		
Lt 31.04' Sta. 1850+21.95												
From Lt 31.04' Sta. 1850+21.95 To Lt 18.54' Sta. 1850+14.60					5							
Lt 18.54' Sta. 1850+14.60		4.4	1586	14							0.9	
Rt 14.32' Sta. 1849+95.29		2.9	1932	14							0.9	
From Rt 14.32' Sta. 1849+95.29 To Rt 31.03' Sta. 1849+85.47					7							
Rt 31.03' Sta. 1849+85.47										2.95		
TOTAL	13	16	3,641	36	12	48	66	2	4	5.9	4.1	1

28200200	
FILTER FABRIC	
LOCATION	SQ YD
LOCATION 1	
LT STA. 1935+45.20	13
RT STA. 1934+65.26	19
LOCATION 2	
LT STA. 1922+04.71	10
RT STA. 1922+04.71	10
LOCATION 4	
LT STA. 1850+27	48
RT STA. 1850+27	40
TOTAL	140

44200144	
CLASS D PATCHES, TYPE II, 12"	
LOCATION	SQ YD
LOCATION 3	
LT. STA. 1867+47.87	7
RT. STA. 1867+47.87	7
TOTAL	14

REVISIONS	
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ILLINOIS DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
380	.	KNOX	35	8
• D4 CULVERT EXT/REPAIR 2006				

SCHEDULE OF QUANTITIES

28100125	
STONE RIPRAP, CLASS B3	
LOCATION	SQ YD
LOCATION 1	
LT STA. 1935+00 TO STA. 1935+33.68	48
LT STA. 1935+46.55 TO STA. 1936+00	29
RT STA. 1934+50 TO STA. 1935+60.18	100
LOCATION 2	
LT STA. 1921+92.66 TO STA. 1922+02.64	14
LT STA. 1920+10.64 TO STA. 1922+25.64	9
RT STA. 1921+91.64 TO STA. 1922+01.98	10
RT STA. 1922+07.96 TO STA. 1922+17.80	10
LOCATION 3	
LT STA. 1867+47.76	4
RT STA. 1867+47.76	5
TOTAL	229

48101200	
AGGREGATE SHOULDERS, TYPE B	
LOCATION	TON
LOCATION 1	
LT STA. 1934+40 TO STA. 1936+60	9
RT STA. 1933+90 TO STA. 1936+60	13
LOCATION 2	
LT STA. 1921+40 TO STA. 1922+60	6
RT STA. 1921+40 TO STA. 1923+10	8
LOCATION 3	
LT STA. 1867+00 TO STA. 1868+60	8
RT STA. 1866+90 TO STA. 1868+10	6
LOCATION 4	
LT STA. 1849+25 TO STA. 1853+45	20
RT STA. 1848+70 TO STA. 1851+10	11
TOTAL	81

63200310	
GUARDRAIL REMOVAL	
LOCATION	FOOT
LOCATION 1	
STA. 1934+50 TO STA. 1936+20	325
LOCATION 2	
STA. 1921+50 TO STA. 1922+50	75
LOCATION 3	
STA. 1867+00 TO STA. 1868+30	150
LOCATION 4	
STA. 1849+50 TO STA. 1853+00	400
TOTAL	950

67000200	
ENGINEER'S FIELD OFFICE, TYPE A	
LOCATION	CAL MO
JOBSITE	2
TOTAL	2

67100100	
MOBILIZATION	
LOCATION	EACH
JOBSITE	1
TOTAL	1

50105200	
REMOVE EXISTING CULVERTS	
LOCATION	EACH
STA. 1867+47.76	1
TOTAL	1

66600105	
FURNISH AND ERECT RIGHT OF WAY MARKERS	
LOCATION	EACH
LOCATION 1	
RT 30' STA. 1934+25	1
LT 30' STA. 1934+50	1
LT 60' STA. 1935+25	1
RT 90' STA. 1935+50	1
RT 90' STA. 1935+90	1
LT 60' STA. 1936+00	1
RT 30' STA. 1936+60	1
LT 30' STA. 1936+75	1
LOCATION 2	
RT 35' STA. 1921+50	1
RT 60' STA. 1921+96	1
RT 60' STA. 1922+16	1
RT 35' STA. 1922+60	1
LOCATION 3	
RT 30' STA. 1866+85	1
LT 50' STA. 1867+01.24	1
RT 50' STA. 1867+25	1
RT 50' STA. 1867+60	1
LT 50' STA. 1868+00	1
RT 30' STA. 1867+00	1
LT 30' STA. 1868+50	1
LOCATION 4	
RT 30' STA. 1848+85	1
LT 30' STA. 1849+40	1
RT 50' STA. 1849+40	1
LT 60' STA. 1850+15	1
RT 45' STA. 1850+45	1
RT 30' STA. 1850+90	1
LT 50' STA. 1853+00	1
LT 30' STA. 1853+45	1
TOTAL	27

70100450	
TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	
LOCATION	L SUM
JOBSITE	1
TOTAL	1

Z0022800	
FENCE REMOVAL	
LOCATION	FOOT
LOCATION 1	
RT. STA. 1934+00 TO STA. 1936+58	258
LOCATION 2	
LT. STA. 1921+50 TO STA. 1923+00	150
RT. STA. 1921+50 TO STA. 1922+60	110
LOCATION 3	
RT. STA. 1867+07.13 , 30.42'-60.00'	30
RT. STA. 1867+0713 TO STA. 1868+78.30	171
LT. STA. 1867+31.40 TO STA. 1868+78.30	73
LOCATION 4	
RT. STA. 1848+70 TO STA. 1850+90	220
LT. STA. 1850+65, 33' TO STA. 1850+65, 75'	42
LT. STA. 1850+65 TO STA. 1853+45	280
TOTAL	1,334

Z0013798	
CONSTRUCTION LAYOUT	
LOCATION	L SUM
JOBSITE	1
TOTAL	1

Z0073100	
TEMPORARY SHORING	
LOCATION	EACH
LOCATION 1	
RT. STA. 1935+45.20	1
LOCATION 4	
LT. STA. 1850+03.98	1
TOTAL	2

REVISIONS	
NAME	DATE

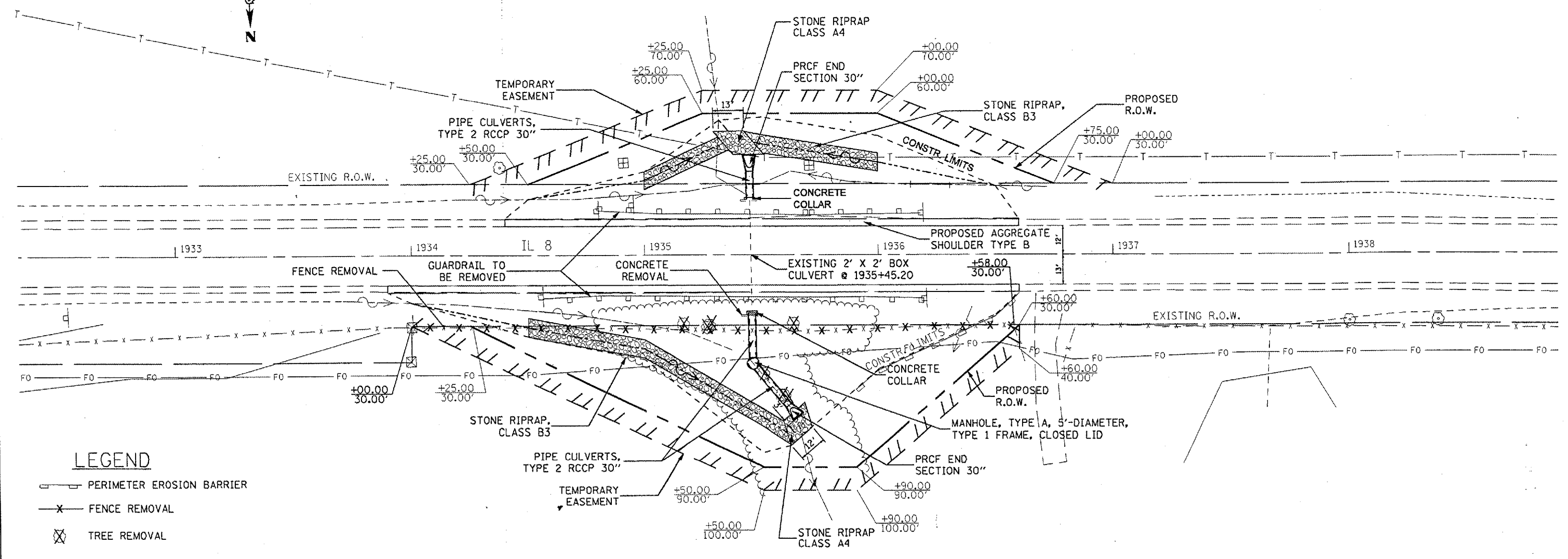
ILLINOIS DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
380		KNOX	35	9
STA. 1932+50		TO STA. 1938+50		
• D4 CULVERT EXT/REPAIR 2006				

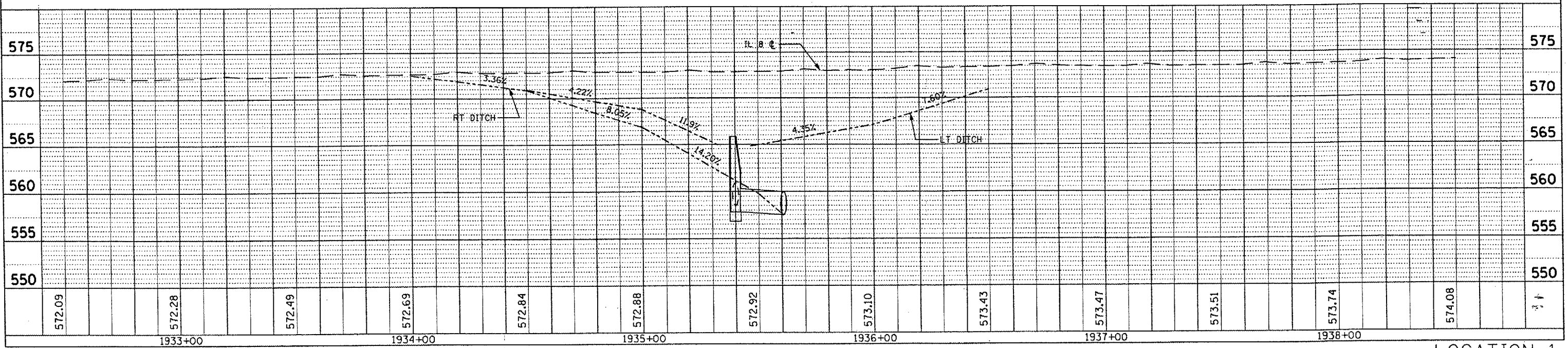
PLAN	DATE
NO.	
BY	
DATE	
REVISIONS	
NO.	
DATE	
BY	
DATE	

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

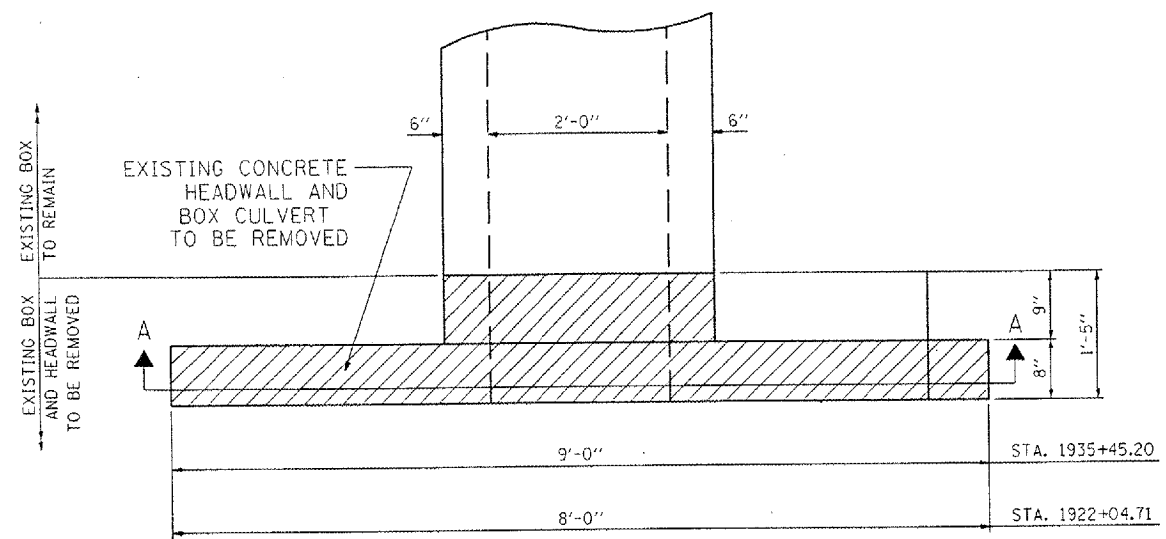


LEGEND

- PERIMETER EROSION BARRIER
- FENCE REMOVAL
- TREE REMOVAL



F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
380		KNOX	35	13
• D4 CULVERT EXT/REPAIR 2006				



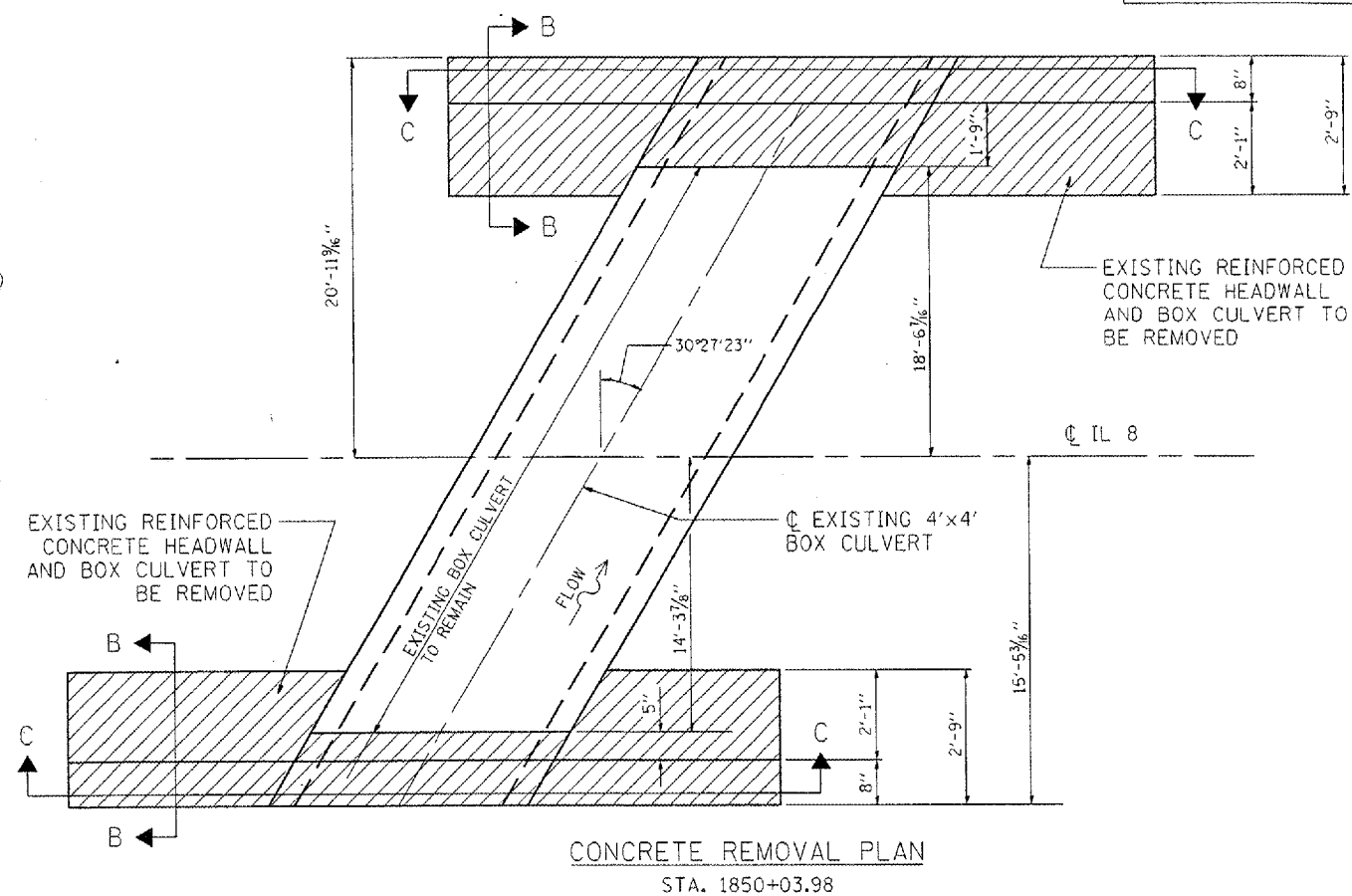
CONCRETE REMOVAL PLAN

RT STA. 1935+45.20
LT STA. 1922+04.71

		STA. 1935+45.20	STA. 1922+04.71
	5'-0"	5'-0"	5'-0"
	3'-0"	3'-0"	3'-0"
	3'-0"	3'-0"	3'-0"
9'-0"		STA. 1935+45.20	
8'-0"		STA. 1922+04.71	

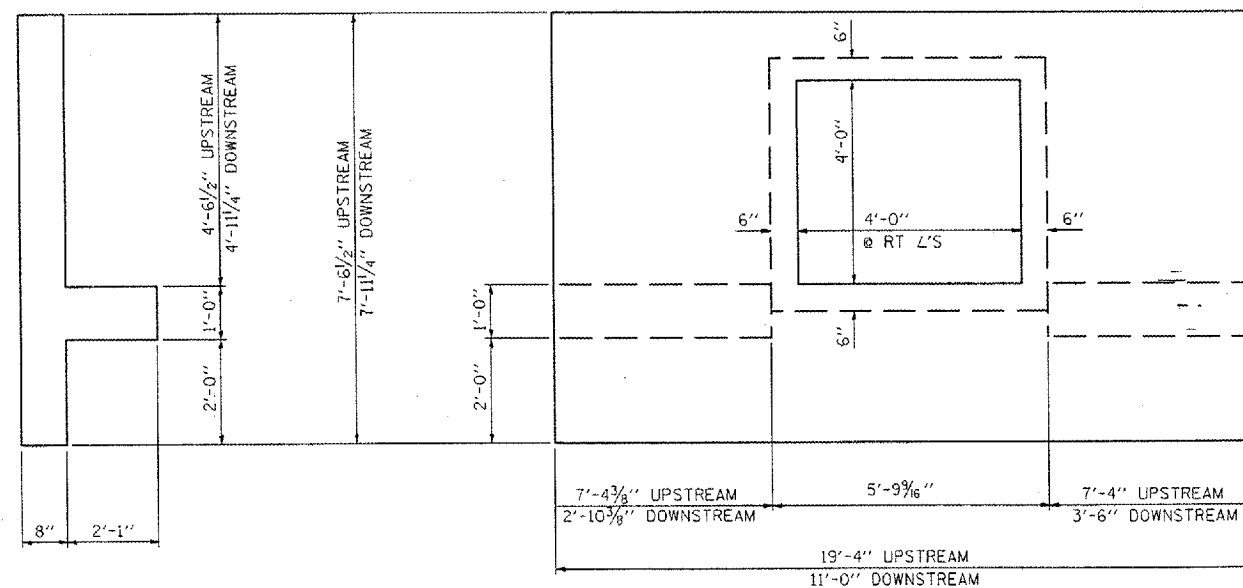
SECTION A-A

NOTE:
HATCHED AREAS
TO BE REMOVED



CONCRETE REMOVAL PLAN

STA. 1850+03.98



SECTION B-B

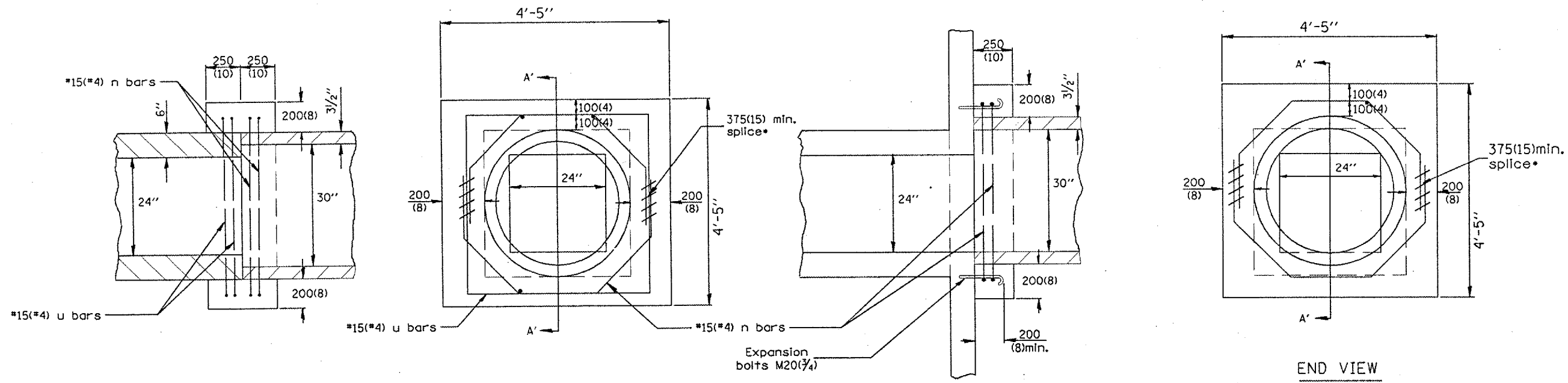
SECTION C-C

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

CONCRETE REMOVAL
DETAILS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
380	-	KNOX	35	14
• 04 CULVERT EXT/REPAIR 2006				



SECTION A'-A'

END VIEW

SECTION A'-A'

END VIEW

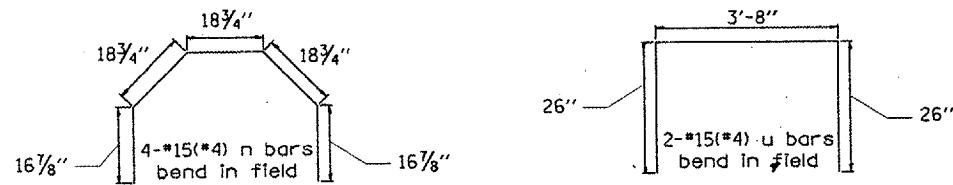
DOWN STREAM

UP STREAM

* A 15" minimum splice is required for both n and u bars

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
n	8	#4	7'-6"	U
u	4	#4	8'-0"	U
Concrete Collars			Cu. Yd.	1.0
Reinforcement Bars			Pound	62



GENERAL NOTES

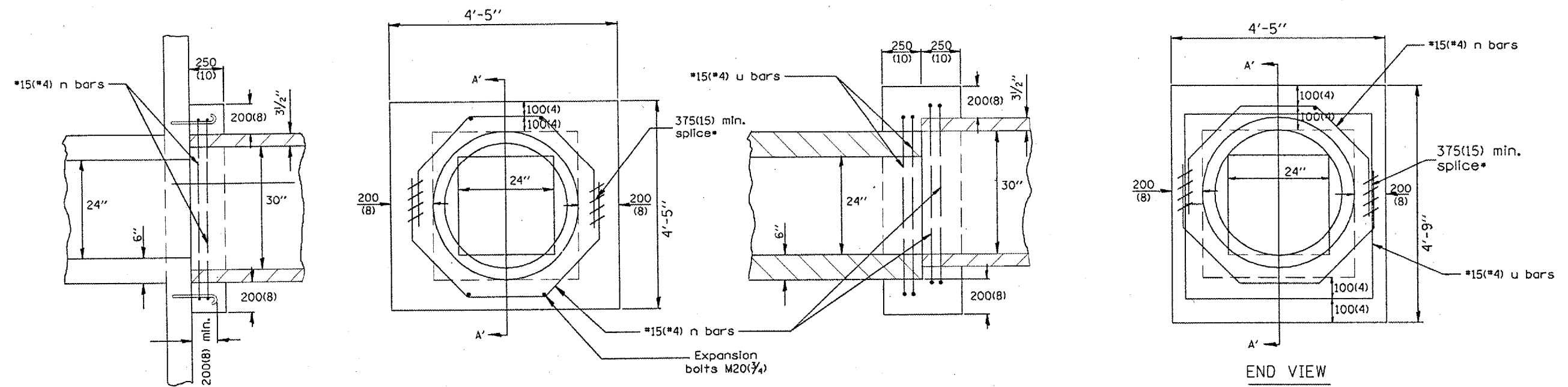
1. The collar shall be constructed entirely of CLASS SI CONCRETE and in accordance with the applicable portions of Section 503 of the Standard Specifications. Reinforcement Bars shall conform to Section 508.
2. Expansion Bolts shall consist of approved Expansion Anchors, and M20(3/4) Hook Bolts which conform to Section 1006.09. These Bolts shall extend at least 200(8) into the new Concrete.

All dimensions are in millimeters (inches) unless otherwise noted.

ILLINOIS DEPARTMENT OF TRANSPORTATION

COLLAR DETAIL
STA. 1935+45.20
LOCATION 1

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
380		KNOX	35	15
• 04 CULVERT EXT/REPAIR 2006				



SECTION A'-A'

END VIEW

SECTION A'-A'

END VIEW

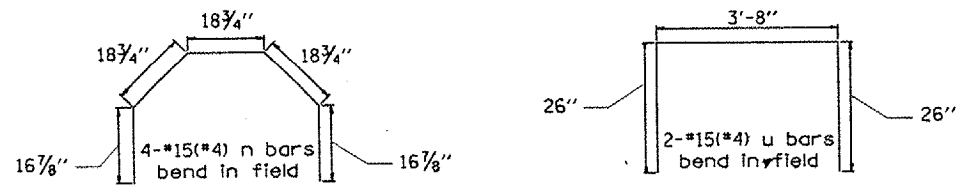
DOWN STREAM

UP STREAM

* A 15" minimum splice is required for both n and u bars

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
n	8	#4	7'-6"	U
u	4	#4	8'-0"	L
Concrete Collars			Cu. Yd.	1.2
Reinforcement Bars			Pound	62



GENERAL NOTES

1. The collar shall be constructed entirely of CLASS SI CONCRETE and in accordance with the applicable portions of Section 503 of the Standard Specifications. Reinforcement Bars shall conform to Section 508.
2. Expansion Bolts shall consist of approved Expansion Anchors, and M20(3/4) Hook Bolts which conform to Section 1006.09. These Bolts shall extend at least 200(8) into the new Concrete.

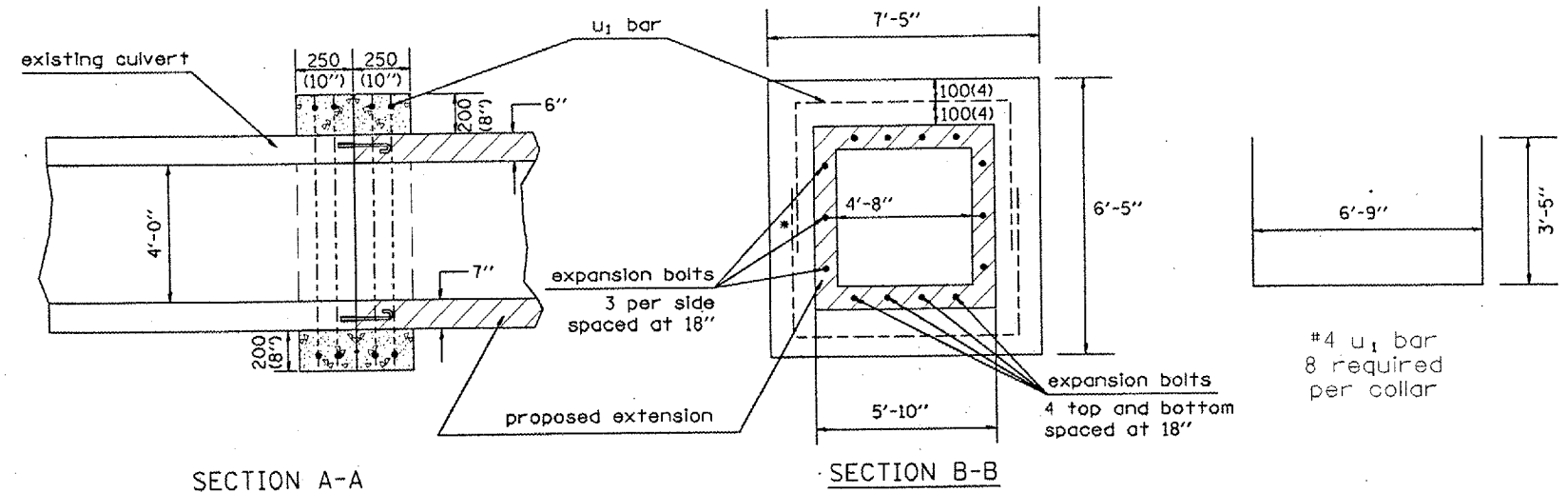
All dimensions are in millimeters (inches) unless otherwise noted.

ILLINOIS DEPARTMENT OF TRANSPORTATION
COLLAR DETAIL
 STA. 1922+04.71
 LOCATION 2

68379

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
380		KNOX	35	16
• 04 CULVERT EXT./REPAIR 2006				

• minimum 1' lap on u₁ bars



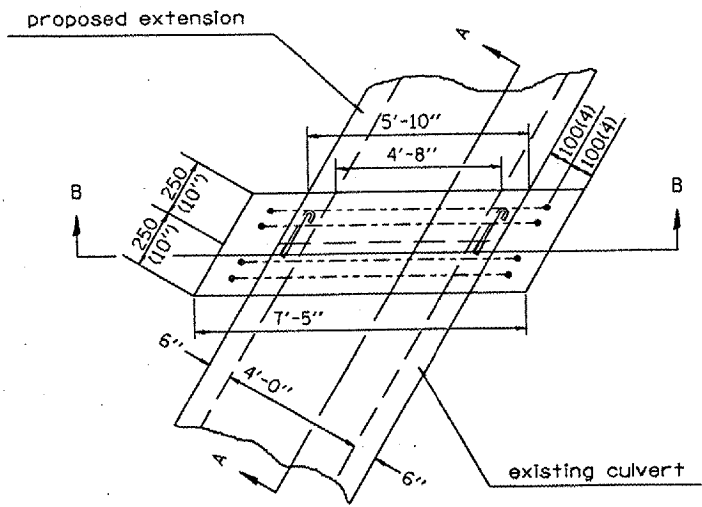
GENERAL NOTES

1. The collar shall be constructed entirely of CLASS SI CONCRETE and in accordance with the applicable portions of section 503 of the Standard Specifications. REINFORCEMENT BARS shall conform to section 508.
2. Expansion bolts shall consist of approved expansions anchors, and M20(3/4) hook bolts which conform to Section 1006.09. These bolts shall extend at least 225 (9) into the new concrete.
 - Dimensions for ASTM C789.

#4 u₁ bar
8 required
per collar

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
u ₁	16	#4	13'-9"	L
Concrete Collars			Cu. Yd.	1.9
Reinforcement Bars			Pound	147



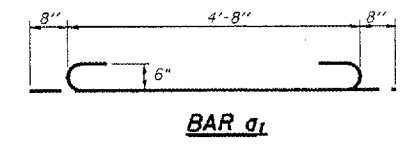
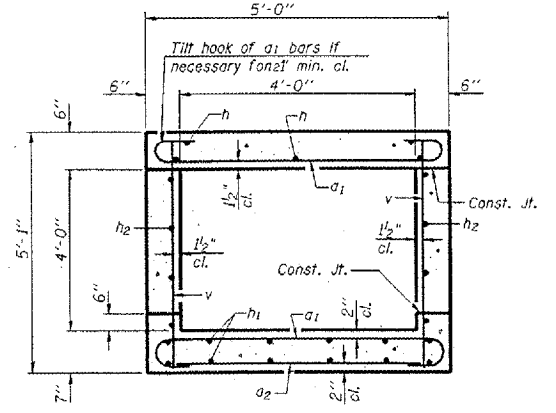
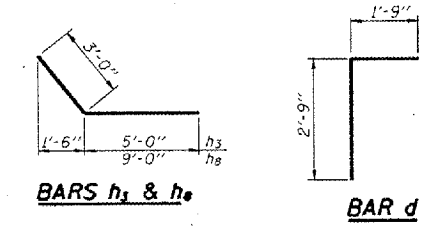
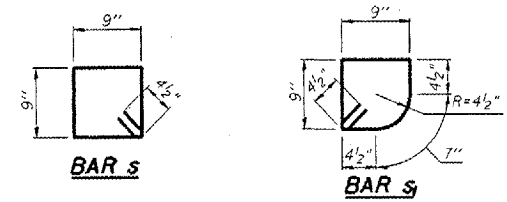
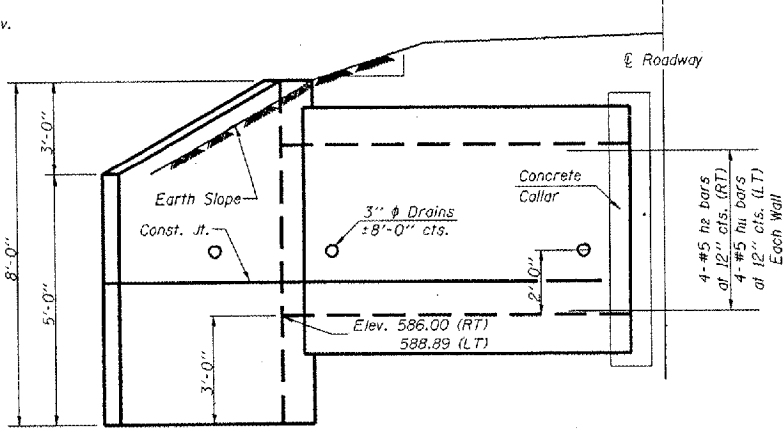
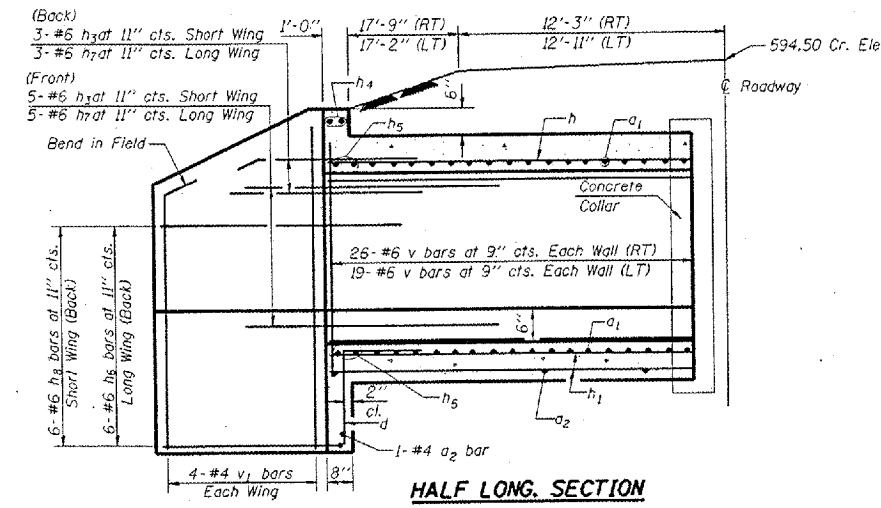
CONCRETE COLLAR PLAN

All dimensions are in millimeters (Inches) unless otherwise noted.

ILLINOIS DEPARTMENT OF TRANSPORTATION

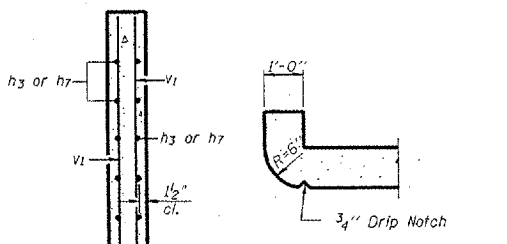
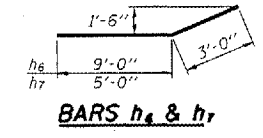
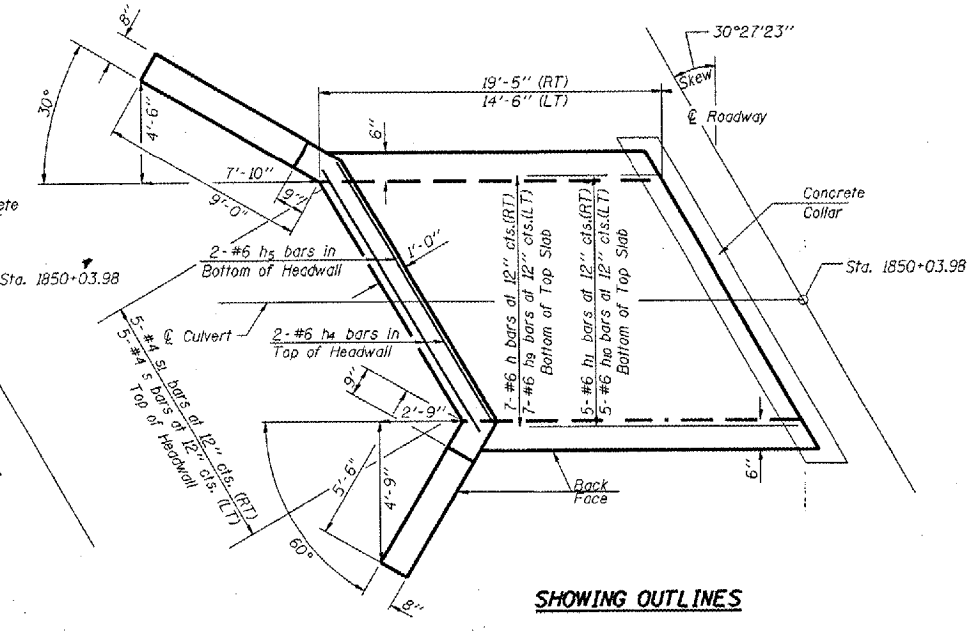
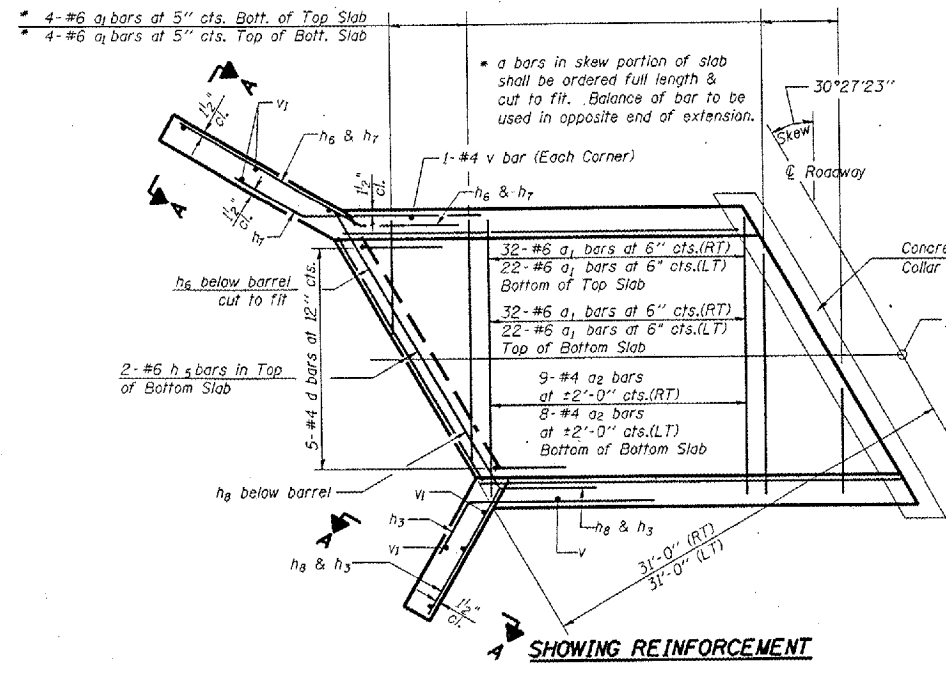
COLLAR DETAIL
STA. 1850+03.98
LOCATION 4

F.A.S. RTEL	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
380		KNOX	35	17
D4 CULVERT EXT/REPAIR 2006				

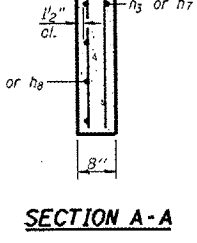


BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a1	124	#6	6'-0"	C
a2	18	#4	4'-6"	—
d	10	#4	4'-6"	—
h	7	#6	19'-0"	—
h1	10	#4	19'-0"	—
h2	8	#5	19'-0"	—
h3	16	#6	8'-0"	—
h4	4	#6	4'-6"	—
h5	8	#6	4'-6"	—
h6	12	#6	12'-0"	—
h7	16	#6	8'-0"	—
h8	12	#6	12'-0"	—
h9	7	#6	14'-0"	—
h10	10	#6	14'-0"	—
h11	8	#5	14'-0"	—
s	5	#4	3'-9"	□
s1	5	#4	3'-7"	□
v	102	#4	4'-9"	—
v1	16	#4	7'-6"	—
Concrete Box Culverts			Cu. Yd.	11.8
Reinforcement Bars			Pound	3370



DESIGN STRESSES
 $f_y = 60,000 \text{ psi}$
 $f'_c = 3,500 \text{ psi}$



LOADING HS 20-44 & ALT.

PLAN

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.
 Reinforcement Bars shall conform to the requirements of AASHTO M-31, M-42 or M-53, Grade 60.
 Bars indicated thus 12 x 4-#5 etc. indicates 12 lines of bars with 4 lengths per line.
 All construction joints shall be bonded.

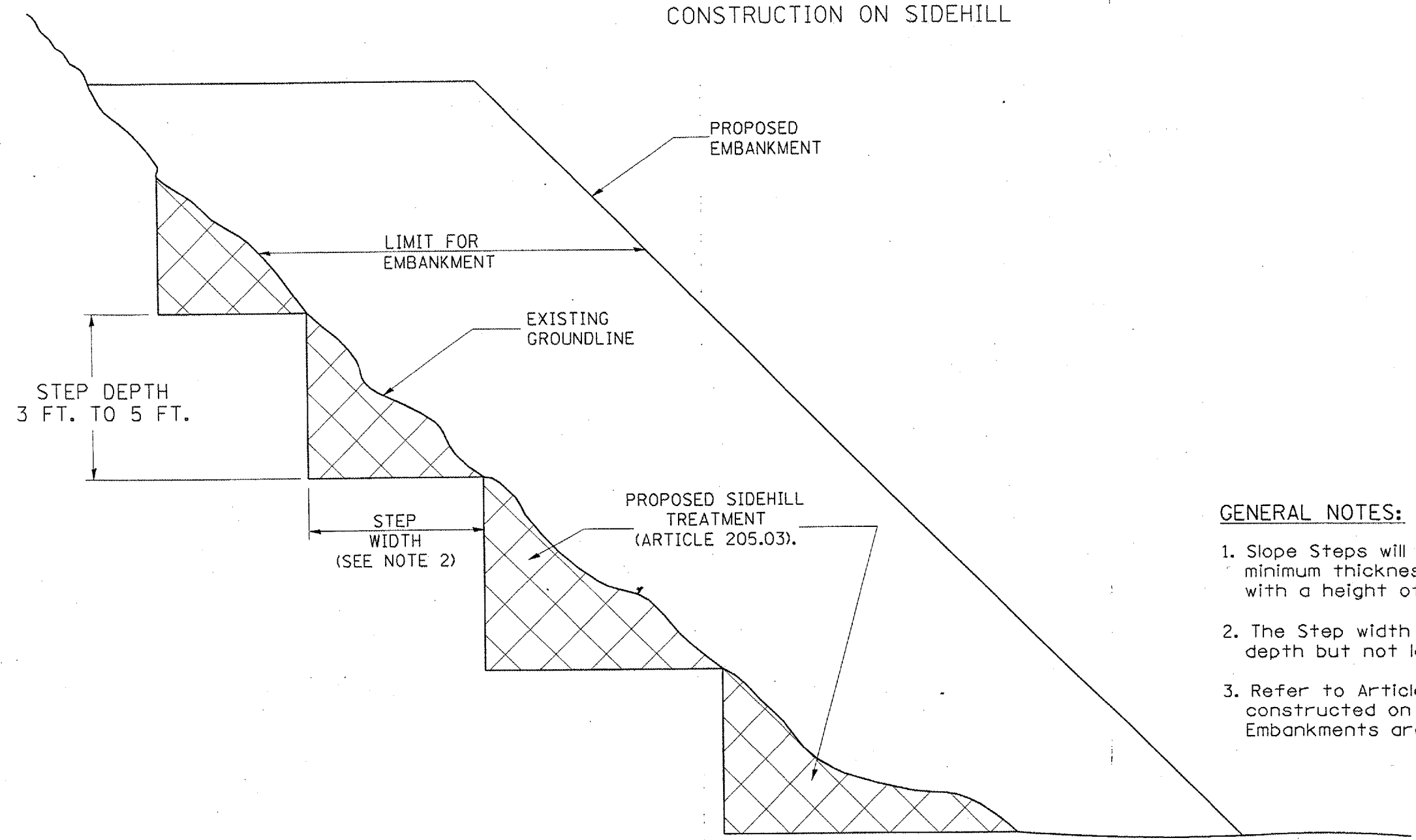
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 4' X 4' CULVERT
 DETAILS
 STA. 1850+03.98

68379

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
380		KNOX	35	18
• D4 CULVERT EXT/REPAIR 2006				

SLOPE STEPS DETAIL TYPICAL CROSS-SECTION EMBANKMENT CONSTRUCTION ON SIDEHILL



GENERAL NOTES:

1. Slope Steps will be required for all 300(12) minimum thickness "sliver fills" and on fills with a height of 3.0m(10').
2. The Step width shall be twice the Step depth but not less than 6 feet.
3. Refer to Article 205.03 for Embankment to be constructed on Hillside or Slopes, or if existing Embankments are to be widened.

REPLACEMENT MATERIAL:

STANDARD EMBANKMENT
(IN ACCORDANCE WITH
205 OF THE STANDARD SPECIFICATION).

All dimensions are in millimeters (inches) unless otherwise noted.

ILLINOIS DEPARTMENT OF TRANSPORTATION
DISTRICT CADD STANDARD

DATE	REVISIONS	BY
1-1-97	RENUM. L-5.03, NEW REVISION BOX, REVISED TITLE BOX, REVISED GENERAL NOTES.	T.P.

**SLOPE STEPS
DETAIL**

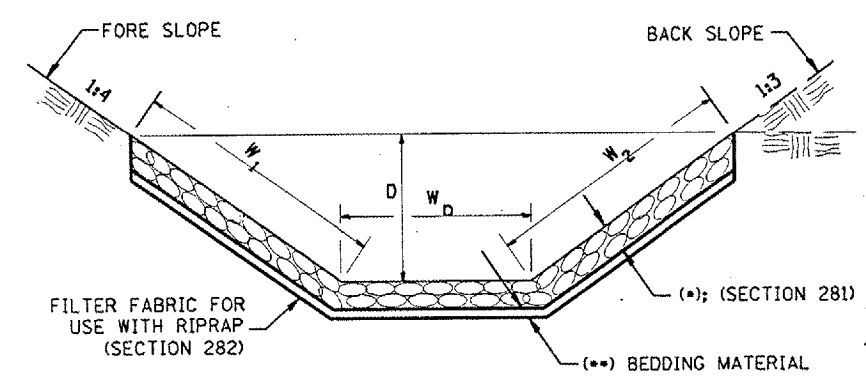
CADD STD. NO. 205001-04
SCALE: NOT DRAWN TO SCALE

DRAWN BY CADD
CHECKED BY

68379

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
380		KNOX	35	19
• D4 CULVERT EXT/REPAIR 2006				

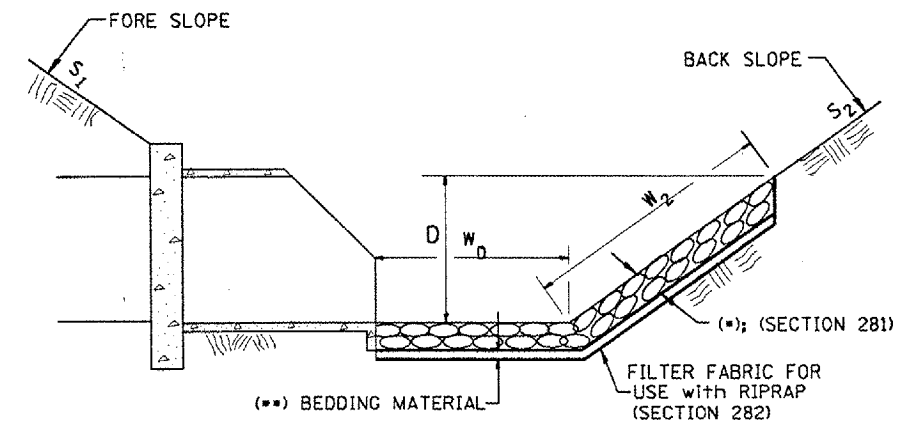
**CASE 1
(DITCH)**



LOCATION	WIDTH (1)	LENGTH	RIPRAP CLASS A4	RIPRAP CLASS B3	FABRIC
STA TO STA	m (lin ft)	m (lin ft)	sq m (sq yd)	sq m (sq yd)	sq m (sq yd)
1849+59 TO 1850+43	VARIABLE	15.77	22.24	0	22.24
1921+92 TO 1922+26	VARIABLE	47.63	0	21.84	0
1934+50 TO 1936+00	VARIABLE	211.84	168.08	0	168.08
TOTAL			190.32	21.84	190.32

(1) WIDTH = $W_1 + \frac{W}{2} + D$

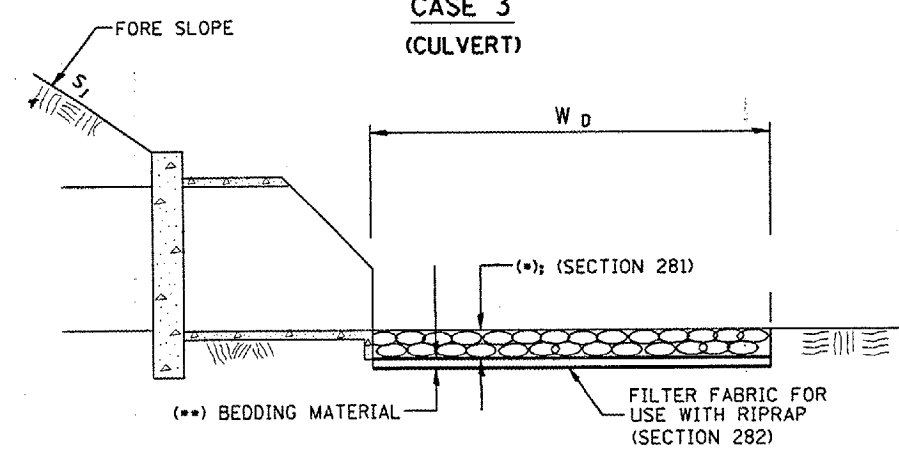
**CASE 2
(CULVERT & SLOPE)**



LOCATION	WIDTH (1)	LENGTH	RIPRAP CLASS A4	RIPRAP CLASS B3	FABRIC
OFFSET STA	m (lin ft)	m (lin ft)	sq m (sq yd)	sq m (sq yd)	sq m (sq yd)
RT 40' STA 1849+75	10.0	15.5	22.81	0	22.81
LT 41' STA 1850+24	17.0	16	26.69	0	26.69
RT 28' STA 1867+50	6.0	9.0	0	2.25	0
LT 29' STA 1922+07	10.0	8.0	0	5.00	0
LT 48' STA 1935+40	10.0	13.0	14.49	0	14.49
TOTAL			64.00	7.25	64.00

(1) WIDTH = $W_2 + D$

**CASE 3
(CULVERT)**



LOCATION	WIDTH (1)	LENGTH	RIPRAP CLASS A4	RIPRAP CLASS B3	FABRIC
OFFSET STA	m (lin ft)	m (lin ft)	sq m (sq yd)	sq m (sq yd)	sq m (sq yd)
LT 39' STA 1867+48	6.0	6.0	0	2.24	0
RT 47' STA 1922+04	15.0	6.0	0	5.63	0
RT 73' STA 1935+65	10.0	12.0	11.65	0	11.65
TOTAL			11.65	7.87	11.65

(1) WIDTH = W

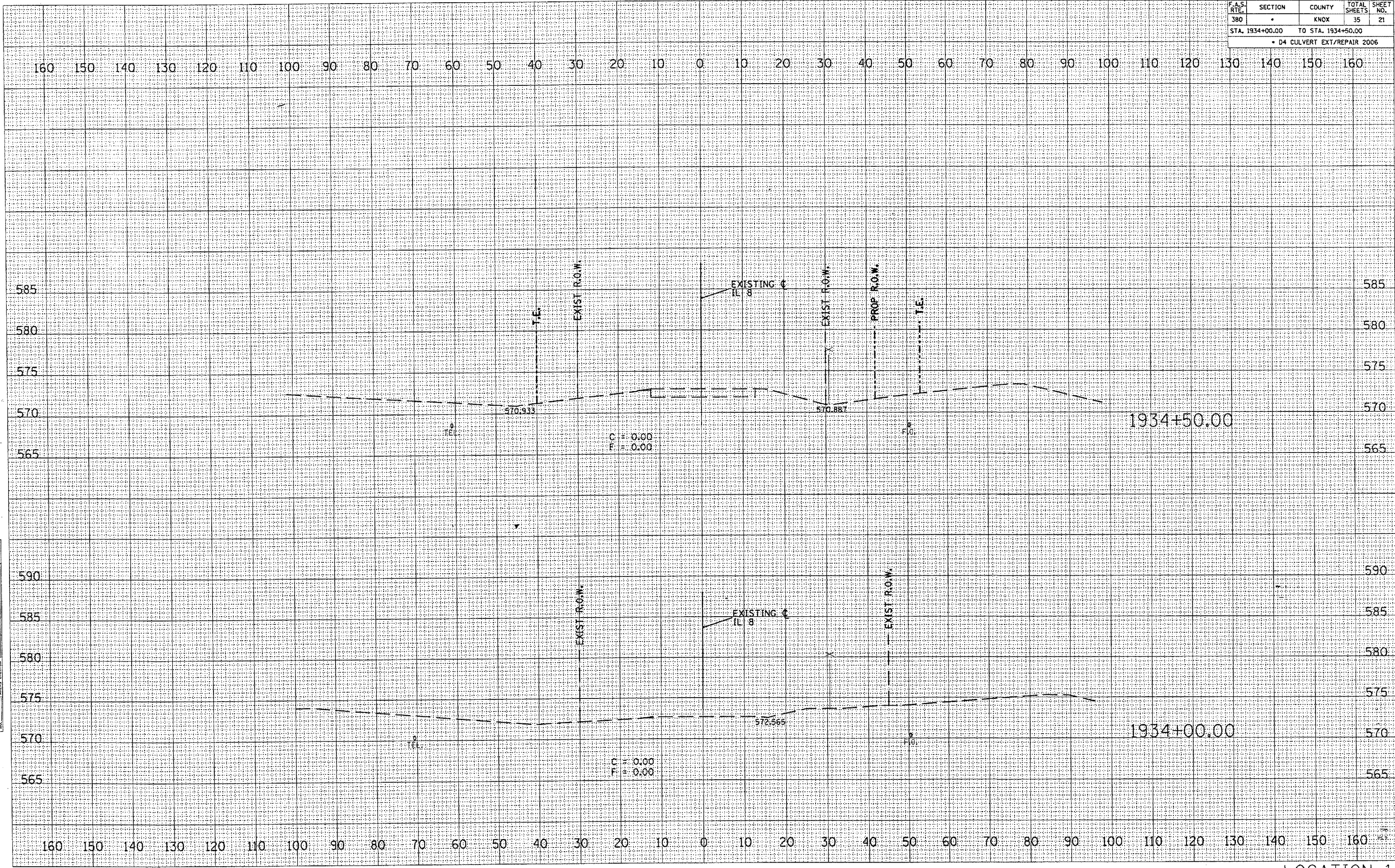
All slope ratios are expressed as units of vertical displacement to units of horizontal displacement (V:H).
All dimensions are in millimeters (inches) unless otherwise noted.

ILLINOIS DEPARTMENT OF TRANSPORTATION
SPECIAL DETAIL SHEET
RIPRAP DITCH FOR EROSION PROTECTION
CADD DETAIL 281001-D4
SCALE: NOT DRAWN TO SCALE
DRAWN BY CADD
CHECKED BY

DATE	REVISIONS	BY
1-1-97	RENJUM, A-12.02, NEW REVISION BOX	T.P.
12-1-97	CORRECT FILTER FABRIC LEADER ARROW	J.A.

68379

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
380	-	KNOX	35	21
STA. 1934+00.00		TO STA. 1934+50.00		
- D4 CULVERT EXT/REPAIR 2006				

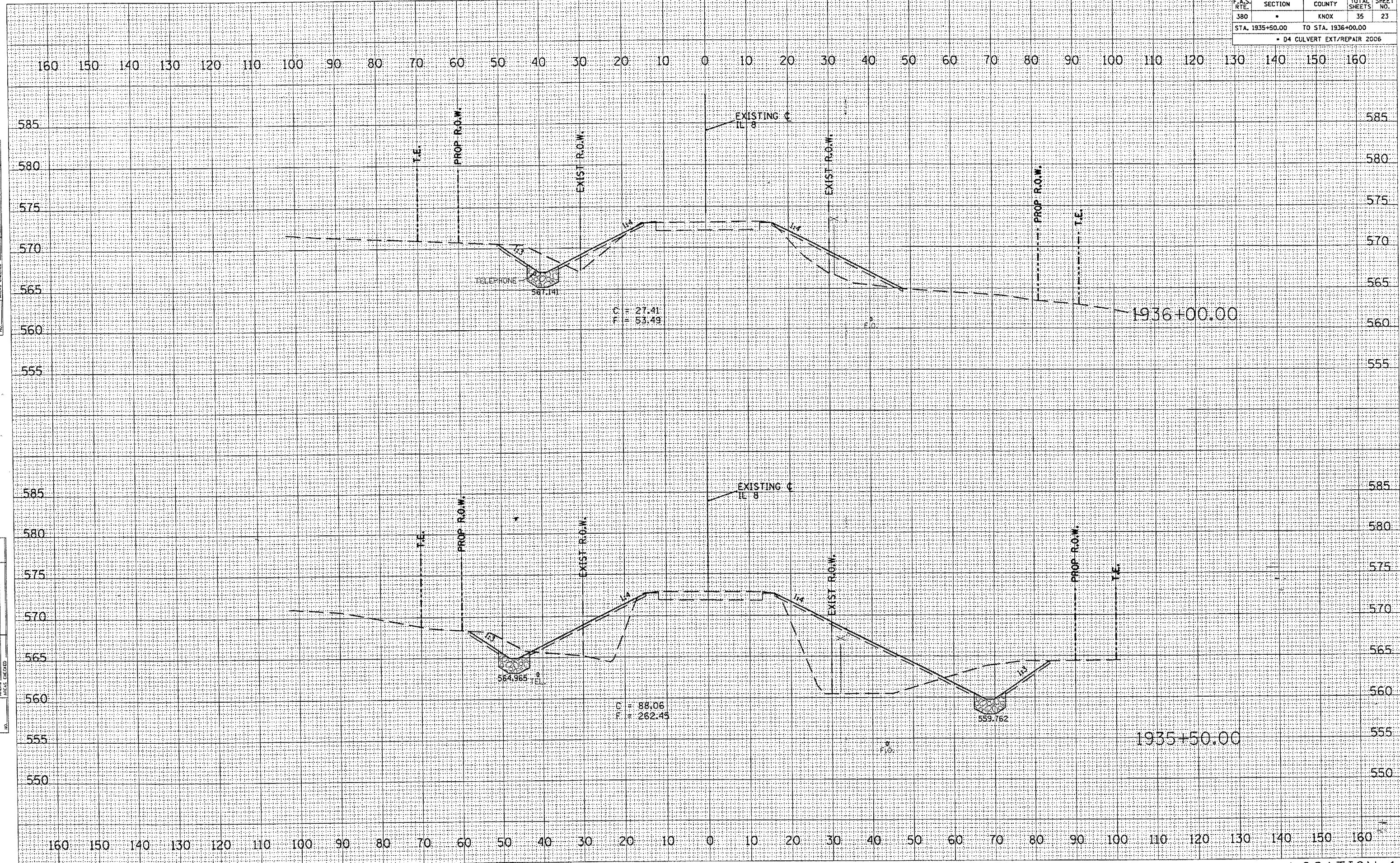


DATE	
BY	
FINAL SURVEY	
PLANNED	
NOTED	
NO. 1	
AREAS CHECKED	

DATE	
BY	
ORIGINAL SURVEY	
PLANNED	
NOTED	
NO. 1	
AREAS CHECKED	

68379

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
380	*	KNOX	35	23
STA. 1935+50.00 TO STA. 1936+00.00				
* D4 CULVERT EXT/REPAIR 2006				



DATE	BY

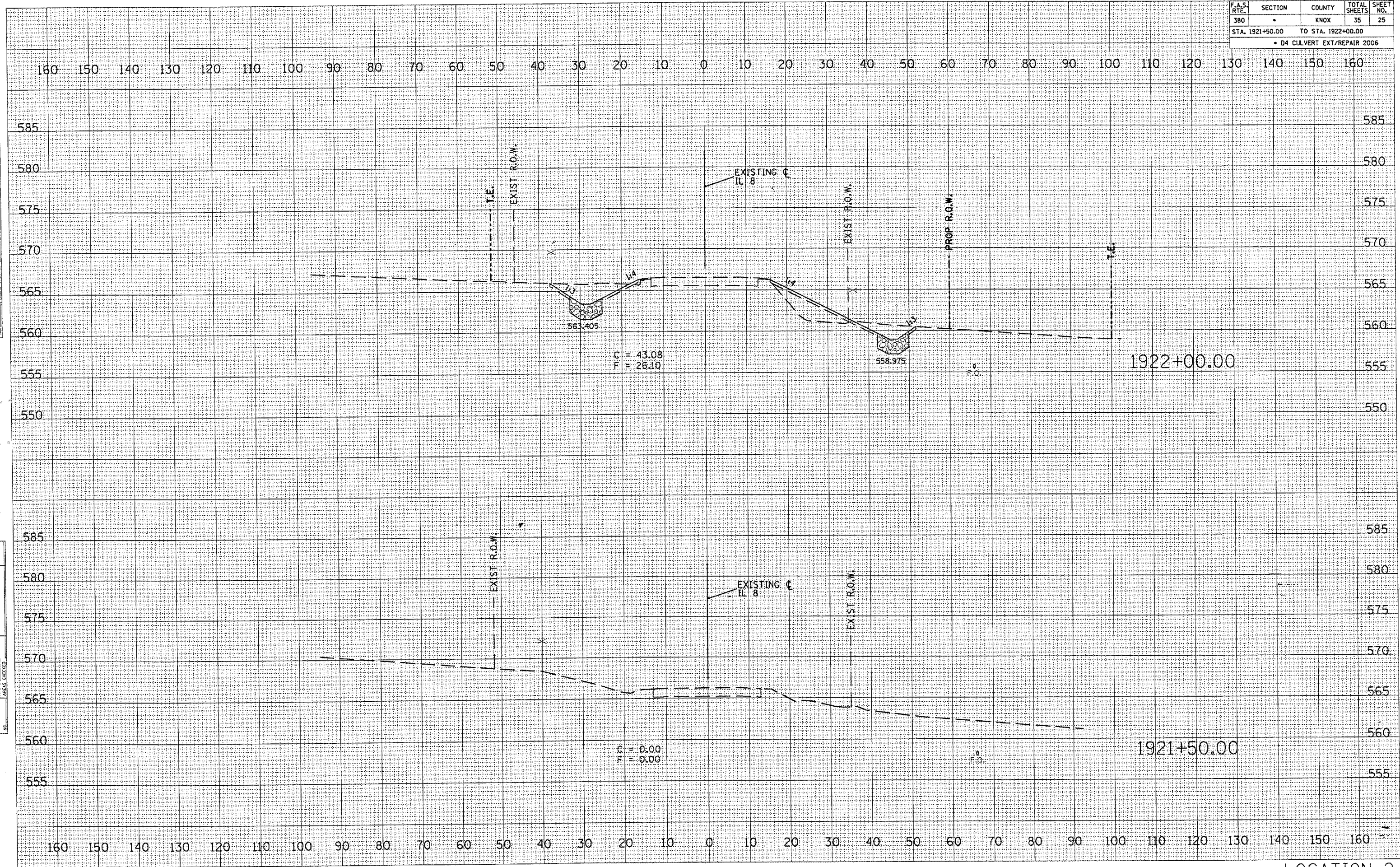
DATE	BY

68379

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
380	*	KNOX	35	25
STA. 1921+50.00		TO STA. 1922+00.00		
* D4 CULVERT EXT/REPAIR 2006				

DATE	
BY	
SURVEYED	
PLOTTED	
RECALCULATED	
NOTE BOOK	
AREAS CHECKED	
NO.	

DATE	
BY	
SURVEYED	
PLOTTED	
RECALCULATED	
NOTE BOOK	
AREAS CHECKED	
NO.	

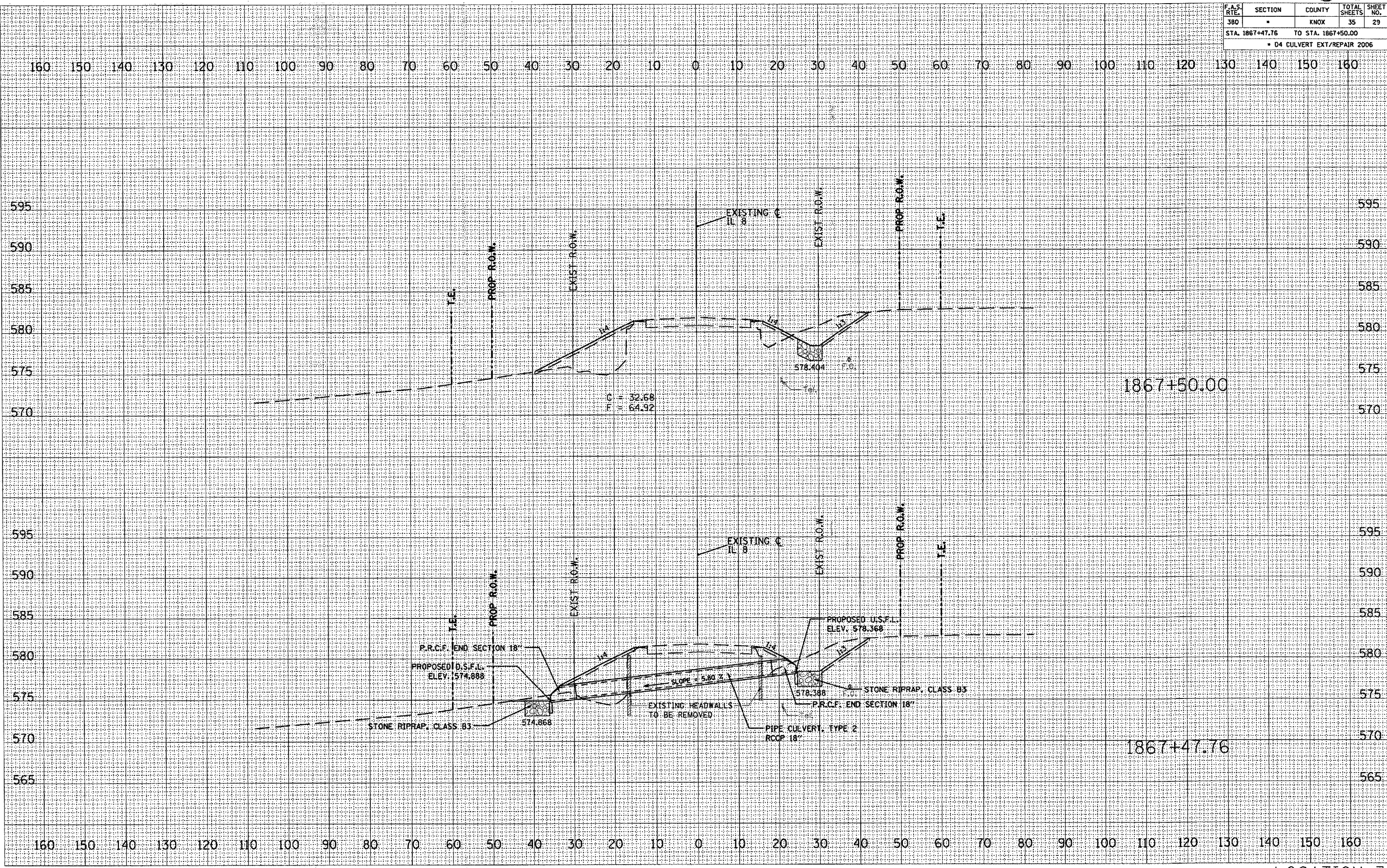


68379

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
380		KNOX	35	29
STA. 1867+47.76		TO STA. 1867+50.00		
D4 CULVERT EXT/REPAIR 2006				

DATE	
BY	
FINAL SURVEY	
REVISED	
NOTED	
NOTE BOOK	
AREAS CHECKED	
NO.	

DATE	
BY	
ORIGINAL SURVEY	
REVISED	
NOTED	
NOTE BOOK	
AREAS CHECKED	
NO.	

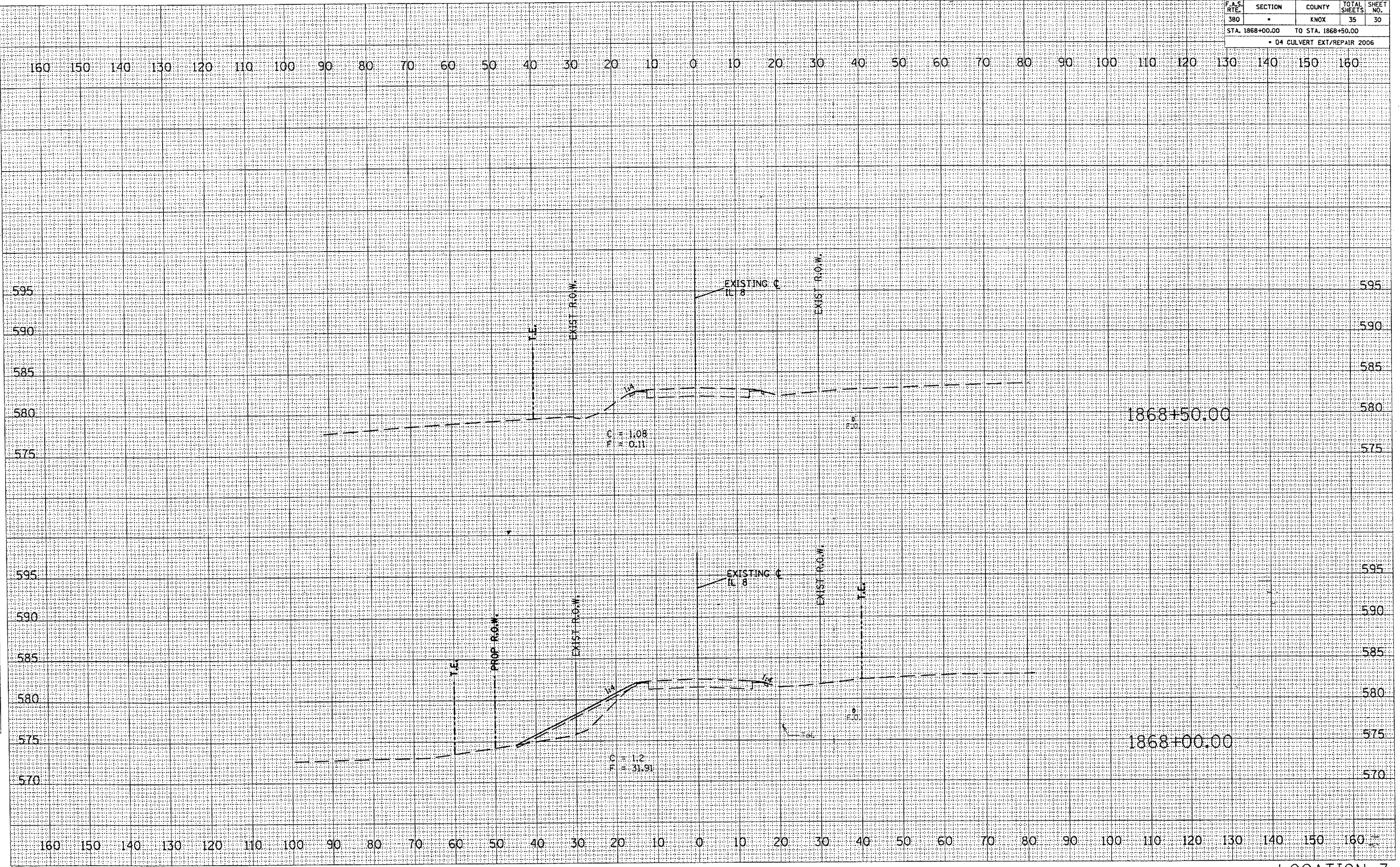


68379

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
380		KNOX	35	30
STA. 1868+00.00 TO STA. 1868+50.00				
• D4 CULVERT EXT/REPAIR 2006				

DATE	BY

DATE	BY

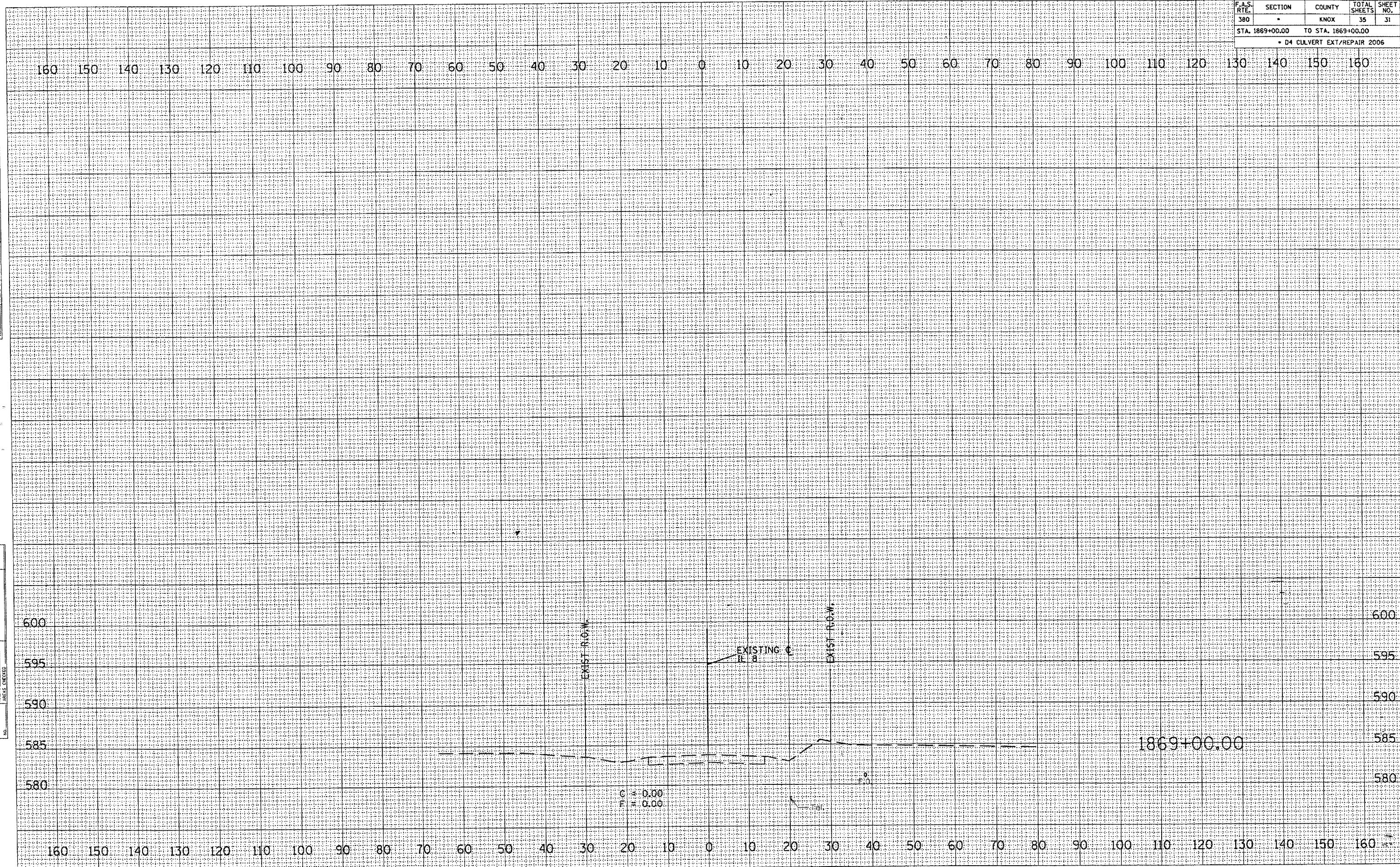


68379

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
380		KNOX	35	31
STA. 1869+00.00		TO STA. 1869+00.00		
• D4 CULVERT EXT/REPAIR 2006				

DATE	
BY	
STARTED	
PLOTTED	
REPLATE	
NOTE BOOK	
AREAS CHECKED	

DATE	
BY	
SURVEYED	
PLANNED	
AREAS CHECKED	
NOTE BOOK	
AREAS CHECKED	



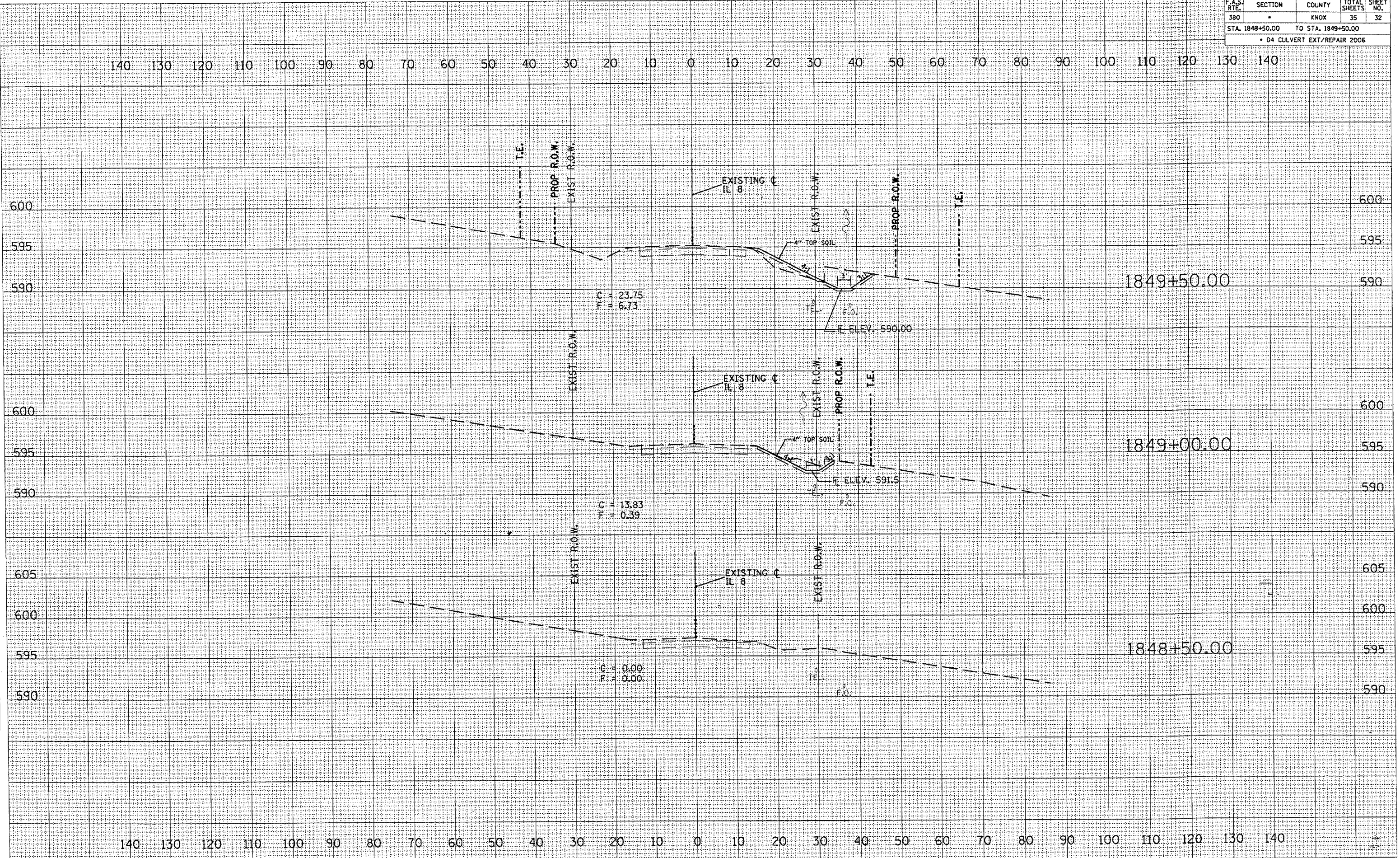
68379

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
380	-	KNOX	35	32
STA. 1848+50.00 TO STA. 1849+50.00				
• D4 CULVERT EXT/REPAIR 2006				

140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140

DATE	
BY	
FINISHED	
DATE	
BY	
NO.	

DATE	
BY	
ORIGINAL SURVEY	
DATE	
BY	
NO.	



140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140

68379

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
380	-	KNOX	35	35
STA. 1852+50.00 TO STA. 1853+50.00				
• D4 CULVERT EXT/REPAIR 2006				

DATE	BY

DATE	BY

