

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
**PLANS FOR PROPOSED
SURFACE TRANSPORTATION RURAL PROGRAM**

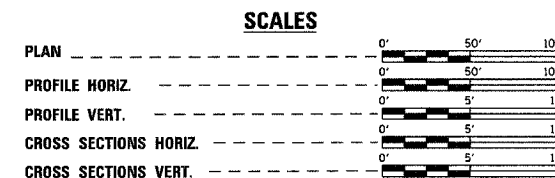
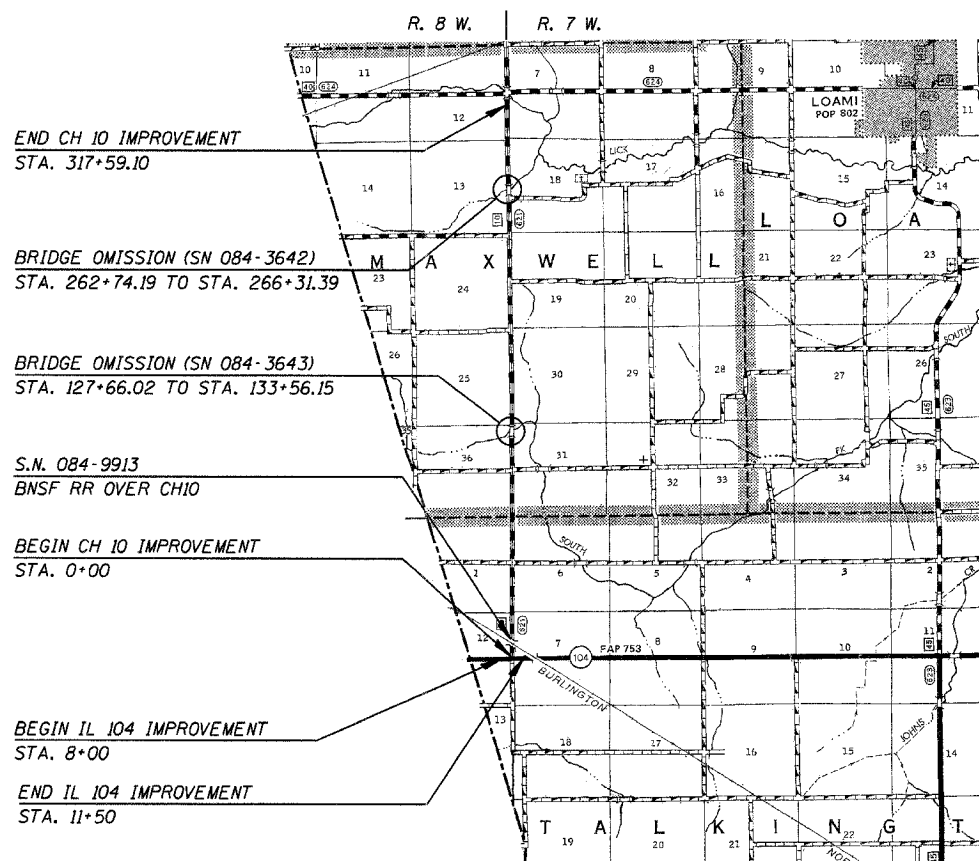
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 621	05-00075-05-RS	SANGAMON	72	1

CONTRACT NO. 93439

INDEX OF SHEETS

SEE SHEET NO. 2 FOR INDEX OF SHEETS
SEE SHEET NO. 2 FOR LIST OF ILLINOIS D.O.T. HIGHWAY STANDARDS

**FAS ROUTE 621 (CH 10)
SECTION 05-00075-05-RS
SANGAMON COUNTY
PROJECT NO: RS-621 (105)
JOB NO: C-96-207-07**



TOLL FREE JOINT UTILITY LOCATING
INFORMATION FOR EXCAVATORS (J.U.L.I.E.)
TELEPHONE NUMBER 1-800-892-0123

UTILITY CONTACT LIST:

**BURIED & OVERHEAD
TELEPHONE
VERIZON NORTH, INC.
ATTN: BRENT HINTHORNE
217-243-0259**

**GAS, OVERHEAD ELECTRIC
AMEREN CIPS
ATTN: JOE CAMERER
217-965-2420**

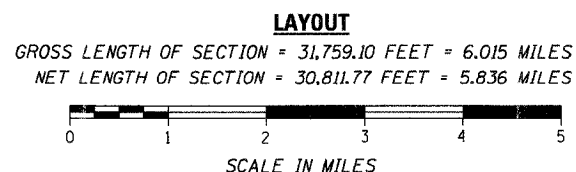
**FIBER OPTIC
MEDIACOM
ATTN: DAVID BRUST
217-243-6920**

**OVERHEAD ELECTRIC
RURAL ELECTRIC CONVENIENCE COOP
ATTN: THOMAS JONES
217-438-6197**

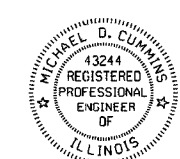
**BURIED GAS
PANHANDLE EASTERN
ATTN: MIKE COX
217-625-2841**

CONTRACT NO. 93439

CUMMINS ENGINEERING CORPORATION SPRINGFIELD, ILLINOIS



CH 10: MAJOR COLLECTOR : DESIGN SPEED 50 MPH; ADT = 1990 (2026)
IL 104: MAJOR COLLECTOR : DESIGN SPEED 55 MPH; ADT = 3350



Michael D. Cummins (5/25/07)

ILLINOIS PROFESSIONAL NO. 43244
(Expires 11/30/07)

APPROVED	<i>5/25</i>	20	07
	<i>DC2</i>		
	COUNTY ENGINEER		
PASSED	<i>JUNE 1</i>	20	07
	<i>Tom Jones</i>		
	DISTRICT ENGINEER OF LOCAL ROADS AND STREETS		
PASSED	<i>June 1</i>	20	07
	<i>John Salas</i>		
	DISTRICT ENGINEER OF CONSTRUCTION		
RELEASED FOR BID BASED ON LIMITED REVIEW	<i>JUNE 1</i>	20	07
	<i>Christine M Reed</i>		
	DEPUTY DIRECTOR OF HIGHWAYS REGION FOUR ENGINEER		
	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION		

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 621	05-00075-05-RS	SANGAMON	72	2

CONTRACT NO. 93439

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LIST OF ILLINOIS DOT HIGHWAY STANDARDS:

280001-03	TEMPORARY EROSION CONTROL SYSTEMS
442201-02	CLASS C AND D PATCHES
542301-01	PRECAST REINFORCED CONCRETE FLARED END SECTION
602401-01	MANHOLE, TYPE A
602601-01	PRECAST REINFORCED CONCRETE FLAT SLAB TOP
604001-02	FRAME AND LIDS, TYPE 1
604036-01	GRATE, TYPE 8
666001	RIGHT-OF-WAY MARKERS
701011-01	OFF-ROAD MOVING OPERATIONS, 2L, 2W, DAY ONLY
701201-02	LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS 45 MPH OR GREATER
701306-01	LANE CLOSURE, 2L, 2W, SLOW MOVING OPERATIONS DAY ONLY, FOR SPEEDS 45 MPH OR GREATER
701326-02	LANE CLOSURE, 2L, 2W, PAVEMENT WIDENING, FOR SPEEDS 45 MPH OR GREATER
702001-06	TRAFFIC CONTROL DEVICES
BLR 21-6	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS

GENERAL NOTES

- WHERE SECTION OR SUBSECTION MONUMENTS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE ANY SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL PROPERTY MARKS AND MONUMENTS UNTIL THE OWNER, AN AUTHORIZED SURVEYOR OR AGENT HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION.
- THE AREA TO BE SEEDDED SHALL CONSIST OF ALL DISTURBED EARTH SURFACES WITHIN THE RIGHT OF WAY AS DIRECTED BY THE ENGINEER.
SEEDING CLASS 2 (SPECIAL) = 2.9 ACRES
- ALL ELEVATIONS SHOWN ON THE PLANS ARE BASED ON NAVD 88 DATUM.
- THE LOCATIONS OF EXISTING WATER MAINS, GAS MAINS, 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 ARE NOT GUARANTEED. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ASCERTAIN THEIR EXACT LOCATION FROM THE UTILITY COMPANIES, MUNICIPALITIES AND FIELD INSPECTION. SEE STANDARD SPECIFICATIONS.
- FINAL PAVEMENT MARKING/STRIPING, AS WELL AS ANY REMAINING TEMPORARY MARKING REMOVAL SHALL BE DONE BY OTHERS IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.
- THE FOLLOWING MIXTURE REQUIREMENTS ARE APPLICABLE FOR THIS PROJECT:

MIXTURE USES	HOT-MIX ASPHALT SURFACE COURSE MIX "C" N50	HOT-MIX ASPHALT BINDER COURSE N50
ADPG:	PG 64-22	PG 64-22
DESIGN AIR VOIDS (%)	4.0 @ NDESIGN = 50	4.0 @ NDESIGN = 50
MIXTURE COMPOSITION (GRADATION MIXTURE)	IL 9.5	IL 19.0
FRICTION AGGREGATE	MIX "C"	N/A

APPLICATION RATES USED IN QUANTITY CALCULATIONS

Granular Materials	2.05 Tons/Cu. Yd.
Aggregate (Prime Coat)	4 lbs/Sq. Yd.
Bituminous Materials (Prime Coat)	0.10 Gallon/Sq. Yd. (Bit. Bases)
	0.35 Gallon/Sq. Yd. (Agg. Bases)
Hot-Mix Asphalt	112#/Sq. Yd./Inch
Riprap	1.5 Tons/Cu. Yd.

**INDEX OF SHEETS
HIGHWAY STANDARDS
GENERAL NOTES**

FAS 621 (CH 10)
SECTION 05-00075-05-RS
SANGAMON COUNTY

CUMMINS ENGINEERING CORPORATION

JOB #: 2171
FILE: 2171INDEX
DATE: 5/3/07

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 621	05-00075 05-RS	SANGAMON	72	3

CONTRACT NO. 93439

SUMMARY OF QUANTITIES			CONSTRUCTION TYPE CODE
CODE NO.	ITEM	UNIT	1000
20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	18
20200100	EARTH EXCAVATION	CU YD	2,075
20300100	CHANNEL EXCAVATION	CU YD	160
* 20400800	FURNISHED EXCAVATION	CU YD	1,085
21301052	EXPLORATION TRENCH 52" DEPTH	FOOT	405
* 25001000	SEEDING, CLASS 2 (SPECIAL)	ACRE	2.9
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	290
28000300	TEMPORARY DITCH CHECKS	EACH	48
28000400	PERIMETER EROSION BARRIER	FOOT	215
28000500	INLET AND PIPE PROTECTION	EACH	8
* 28101700	RIPRAP, SPECIAL	TON	537
31101000	SUB-BASE GRANULAR MATERIAL, TYPE B	TON	215
* 35101400	AGGREGATE BASE COURSE, TYPE B	TON	56
* 35501312	HOT-MIX ASPHALT BASE COURSE, 7"	SQ YD	607
* 40200800	AGGREGATE SURFACE COURSE, TYPE B	TON	785
40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	9,103
40600300	AGGREGATE (PRIME COAT)	TON	177
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	1,508
40600990	TEMPORARY RAMP	SQ YD	421
40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	11,852
* 40603310	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50	TON	7,081
* 40800050	INCIDENTAL HOT-MIX ASPHALT SURFACING	TON	489
44000100	PAVEMENT REMOVAL	SQ YD	394
44004250	PAVED SHOULDER REMOVAL	SQ YD	56
* 48101200	AGGREGATE SHOULDERS, TYPE B	TON	4,297
* 48203021	HOT-MIX ASPHALT SHOULDERS, 6"	SQ YD	139
* 48203100	HOT-MIX ASPHALT SHOULDERS	TON	50
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1
50102400	CONCRETE REMOVAL	CU YD	5.4
50105220	PIPE CULVERT REMOVAL	FOOT	386
* 50800105	REINFORCEMENT BARS	POUND	18,370
54001001	BOX CULVERT END SECTIONS, CULVERT NO.1	EACH	2
54001005	BOX CULVERT END SECTIONS, CULVERT NO.5	EACH	2
54001014	BOX CULVERT END SECTIONS, CULVERT NO.14	EACH	2
54002060	EXPANSION BOLTS 3/4 INCH X 12 INCH	EACH	64
54003000	CONCRETE BOX CULVERTS	CU YD	99.9
54020504	PRECAST CONCRETE BOX CULVERTS 5' X 4' (M273)	FOOT	63
54020603	PRECAST CONCRETE BOX CULVERTS 6' X 3' (M273)	FOOT	50
54010604	PRECAST CONCRETE BOX CULVERTS 6' X 4'	FOOT	57
542A0223	PIPE CULVERTS, CLASS A, TYPE 1 18"	FOOT	8
542A0241	PIPE CULVERTS, CLASS A, TYPE 1 36"	FOOT	16

SUMMARY OF QUANTITIES			CONSTRUCTION TYPE CODE
CODE NO.	ITEM	UNIT	1000
542A0253	PIPE CULVERTS, CLASS A, TYPE 1 48"	FOOT	56
550A0120	STORM SEWERS, CLASS A, TYPE 1 24"	FOOT	184
54213663	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 18"	EACH	4
54213669	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 24"	EACH	8
54213681	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 36"	EACH	2
54213693	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 48"	EACH	1
* 54215448	CAST-IN-PLACE REINFORCED CONCRETE END SECTIONS 48"	EACH	1
* 54248515	CONCRETE COLLAR	EACH	12
59300100	CONTROLLED LOW-STRENGTH MATERIAL	CU YD	551
* 60225400	RESTRICTED DEPTH MANHOLES, 5' -DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	4
* 60225900	RESTRICTED DEPTH MANHOLES, 5' -DIAMETER, TYPE 8 GRATE	EACH	1
60247310	JUNCTION BOX, SPECIAL 24"	EACH	2
60500060	REMOVING INLETS	EACH	1
61140000	STORM SEWERS, (SPECIAL) 8"	FOOT	60
61140200	STORM SEWERS, (SPECIAL) 12"	FOOT	20
61140400	STORM SEWERS, (SPECIAL) 15"	FOOT	100
63200310	GUARDRAIL REMOVAL	FOOT	138
66600105	FURNISHING AND ERECTING RIGHT-OF-WAY MARKERS	EACH	33
67100100	MOBILIZATION	L SUM	1
* 70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1
* 70100460	TRAFFIC CONTROL AND PROTECTION, STANDARD 701306	L SUM	1
* 70100500	TRAFFIC CONTROL AND PROTECTION, STANDARD 701326	L SUM	1
* 70101830	TRAFFIC CONTROL AND PROTECTION, STANDARD BLR 21	L SUM	1
70300100	SHORT-TERM PAVEMENT MARKING	FOOT	9,336
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	69,800
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	1,042
* X0392300	DITCH CHECK REMOVAL	EACH	1
* X4420132	CLASS D PATCHES (SPECIAL)	SQ YD	363

* SEE SPECIAL PROVISIONS

SUMMARY OF QUANTITIES

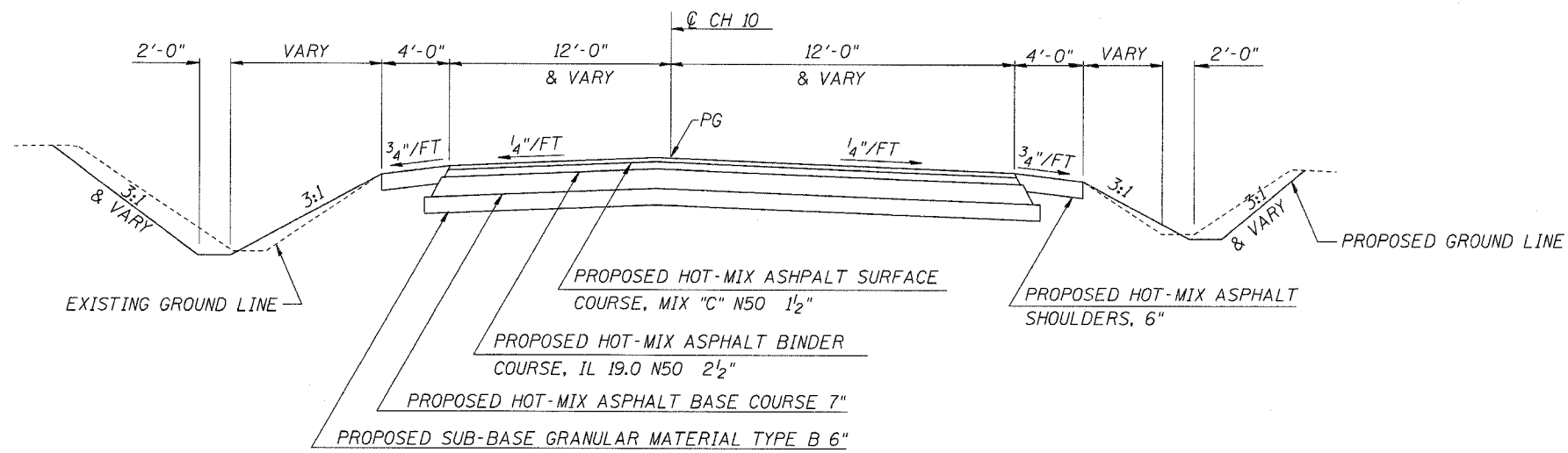
FAS 621 (CH 10)
SECTION 05-00075-05-RS
SANGAMON COUNTY

CUMMINS ENGINEERING CORPORATION

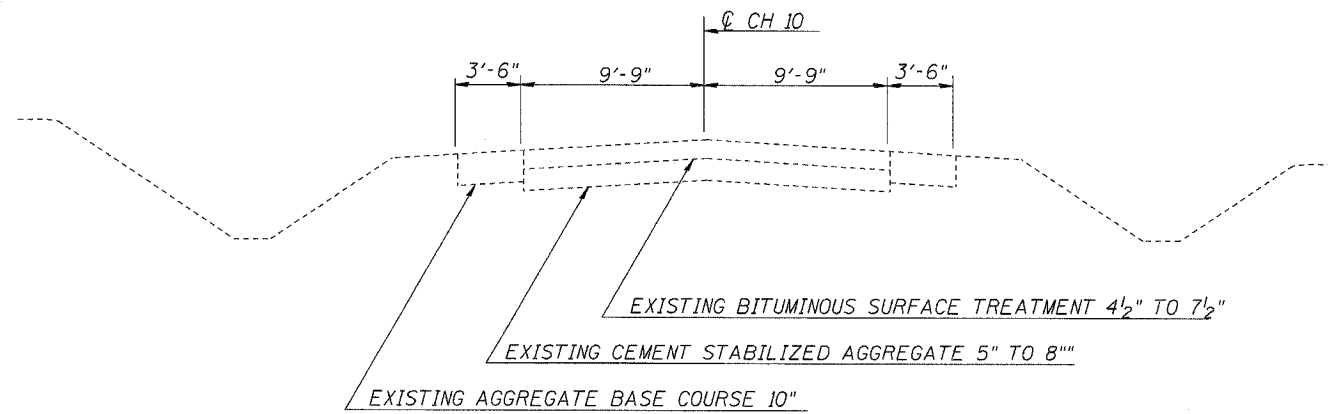
JOB #: 2171
FILE: 2171GENNOTES
DATE: 4/30/07

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 621	05-00075-05-RS	SANGAMON	72	4

CONTRACT NO. 93439



CH 10. TYPICAL PROPOSED ROADWAY CROSS SECTION
STA 0+00 TO STA 1+06.71



CH 10. TYPICAL EXISTING ROADWAY CROSS SECTION

PAVEMENT DESIGN
STA 0+00 TO STA 1+06.71
STRUCTURAL DESIGN TRAFFIC YEAR: 2016
PV=1.352 SU=107 MU=77
IBR=2.0 (ASSUMED) TRAFFIC FACTOR=0.42
PERCENT OF SDT FOR TWO LANES
PV=88% SU=7% MU=5%
STRUCTURAL NUMBER DT=4.0

PAVEMENT COMPOSITION
1 1/2" HOT-MIX ASPHALT SURFACE COURSE, MIX "C" N50 A₁=0.40
2 1/2" HOT-MIX ASPHALT BINDER COURSE, IL 19.0 N50 A₁=0.40
7" HOT-MIX ASPHALT BASE COURSE A₂=0.30
6" SUB-BASE GRANULAR MATERIAL TYPE B A₃=0.12

TYPICAL CROSS SECTIONS

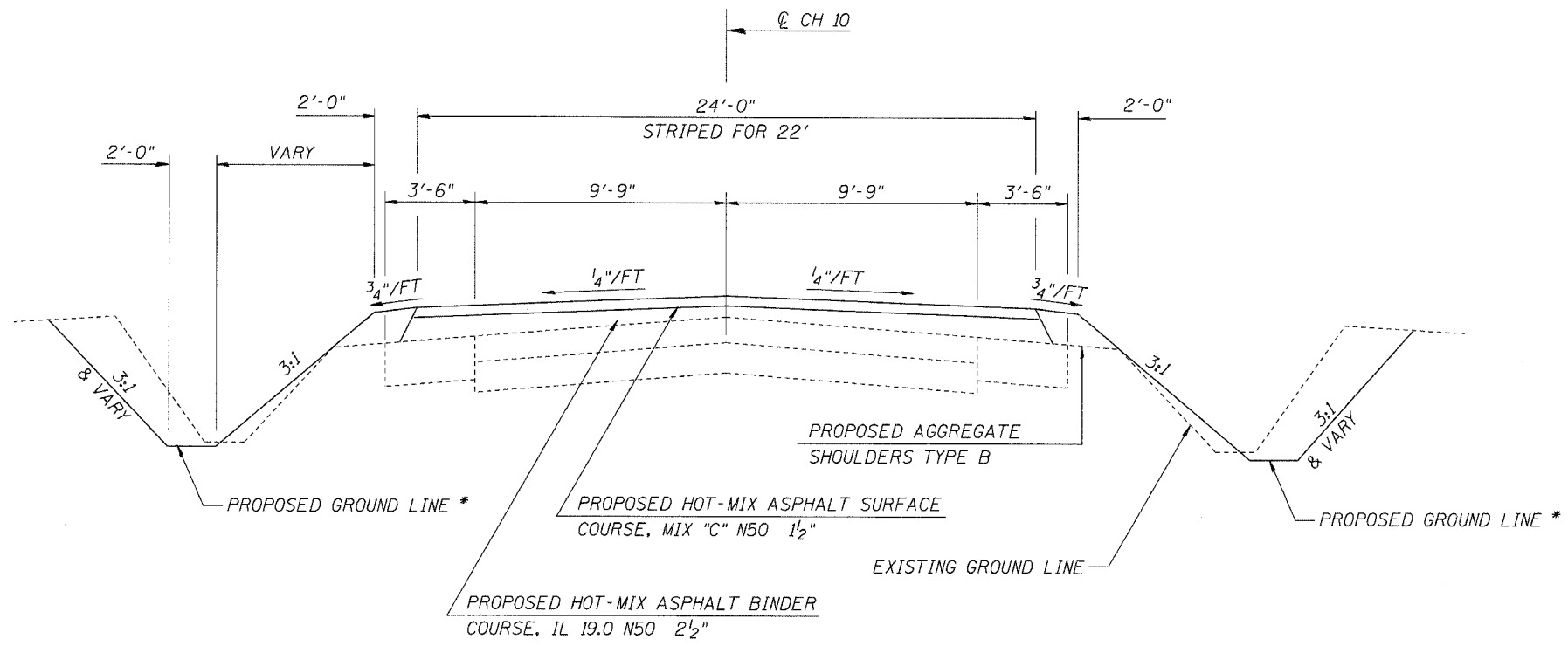
FAS 621 (CH 10)
SECTION 05-00075-05-RS
SANGAMON COUNTY

CUMMINS ENGINEERING CORPORATION

JOB #: 2171
FILE: 2171TYP
DATE: 4/30/07

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 621	05-00075-05-RS	SANGAMON	72	5

CONTRACT NO. 93439



CH 10. TYPICAL PROPOSED ROADWAY CROSS SECTION

STA 1+06.71 TO STA 126+66.02
 STA 134+56.15 TO STA 261+74.19
 STA 267+31.39 TO STA 317+59.10

* PROPOSED EARTHWORK AT LOCATIONS 2-14

PAVEMENT DESIGN
 STA 1+06.71 TO STA 317+59.10
 STRUCTURAL DESIGN TRAFFIC YEAR: 2016
 PV=1,753 SU=139 MU=100
 IBV=4.0 (ASSUMED) TRAFFIC FACTOR=0.54
 PERCENT OF SDT FOR TWO LANES
 PV=88% SU=7% MU=5%
 STRUCTURAL NUMBER $SN_e = 3.6$

PAVEMENT COMPOSITION
 EXISTING $SN_e = 2.0$
 5 1/2" CHIP SEAL $A_2 = 0.16$
 7" CEMENT STABILIZED AGGREGATE BASE $A_3 = 0.17$

PROPOSED $SN_{pr} = 1.6$
 1 1/2" HOT-MIX ASPHALT SURFACE COURSE, MIX "C" N50 $A_1 = 0.40$
 2 1/2" HOT-MIX ASPHALT BINDER COURSE, IL 19.0 N50 $A_1 = 0.40$

TYPICAL CROSS SECTIONS

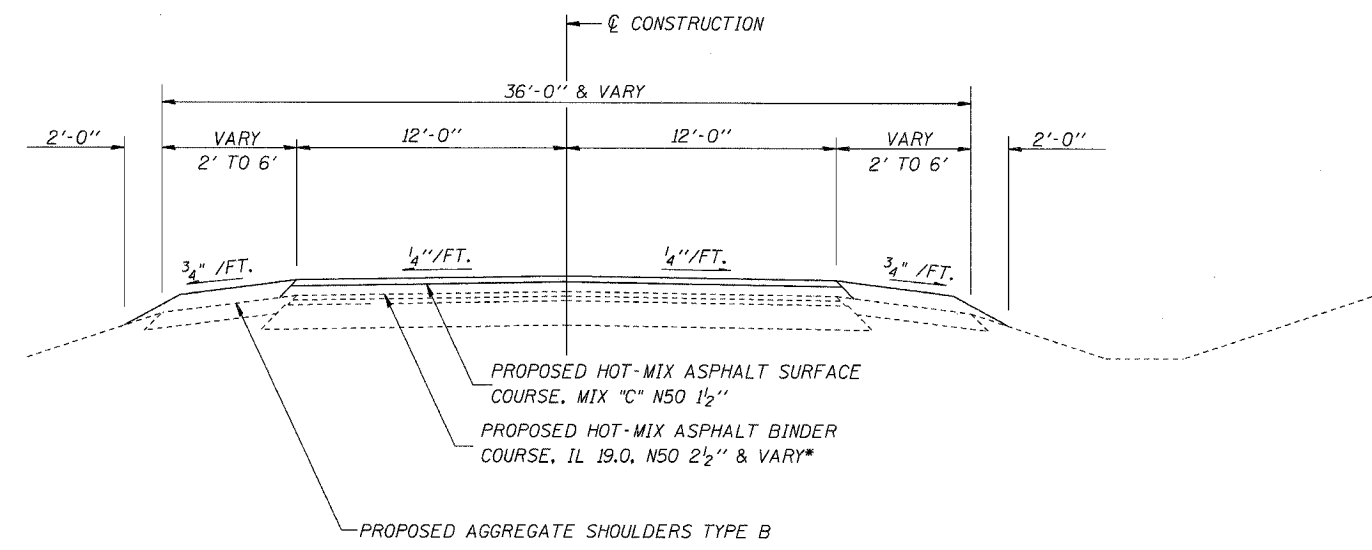
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 SANGAMON COUNTY

CUMMINS ENGINEERING CORPORATION

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ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 621	05-00075-05-RS	SANGAMON	72	6

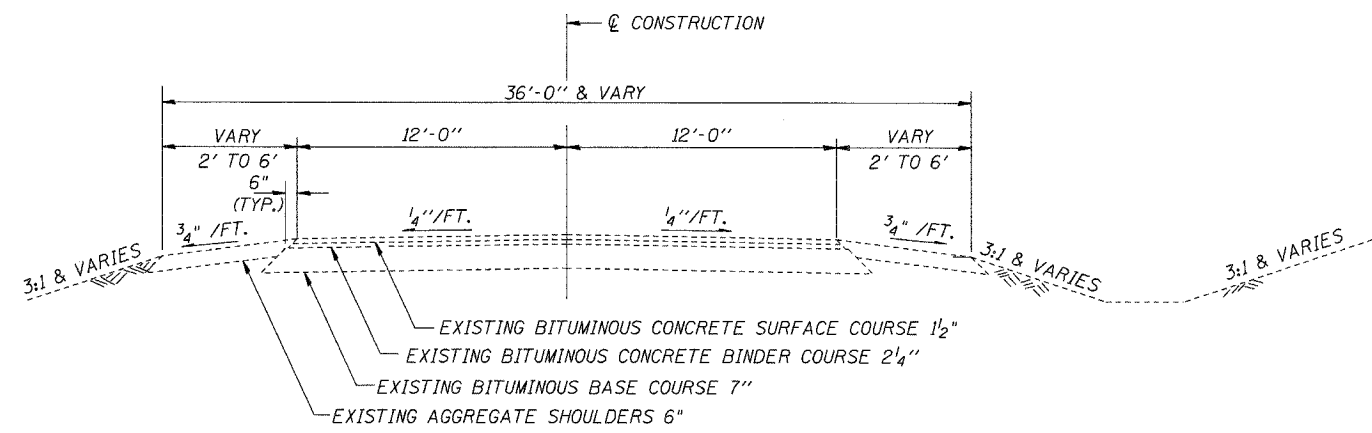
CONTRACT NO. 93439



CH 10 TYPICAL PROPOSED ROADWAY CROSS SECTION

STA 126+66.02 TO STA 127+16.02
 STA 134+06.15 TO STA 134+56.15
 STA 261+74.19 TO STA 262+24.19
 STA 266+81.39 TO STA 267+31.39

* SEE BUTT JOINT DETAIL SHEET 41



CH 10 TYPICAL EXISTING ROADWAY CROSS SECTION

STA 126+66.02 TO STA 127+16.02
 STA 134+06.15 TO STA 134+56.15
 STA 261+74.19 TO STA 262+24.19
 STA 266+81.39 TO STA 267+31.39

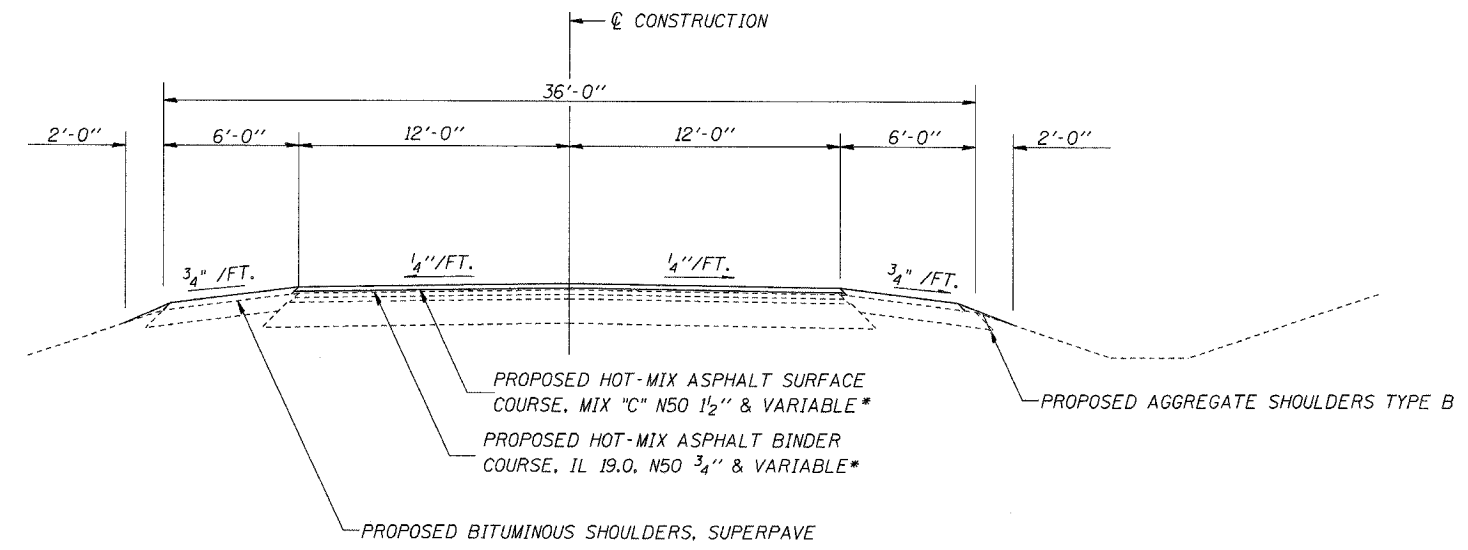
TYPICAL CROSS SECTIONS

FAS 621 (CH 10)
 SECTION 05-00075-05-RS
 SANGAMON COUNTY

CUMMINS ENGINEERING CORPORATION	JOB #: 2171
	FILE: 2171TYP
	DATE: 4/30/07

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 621	05-00075 -05-RS	SANGAMON	72	7

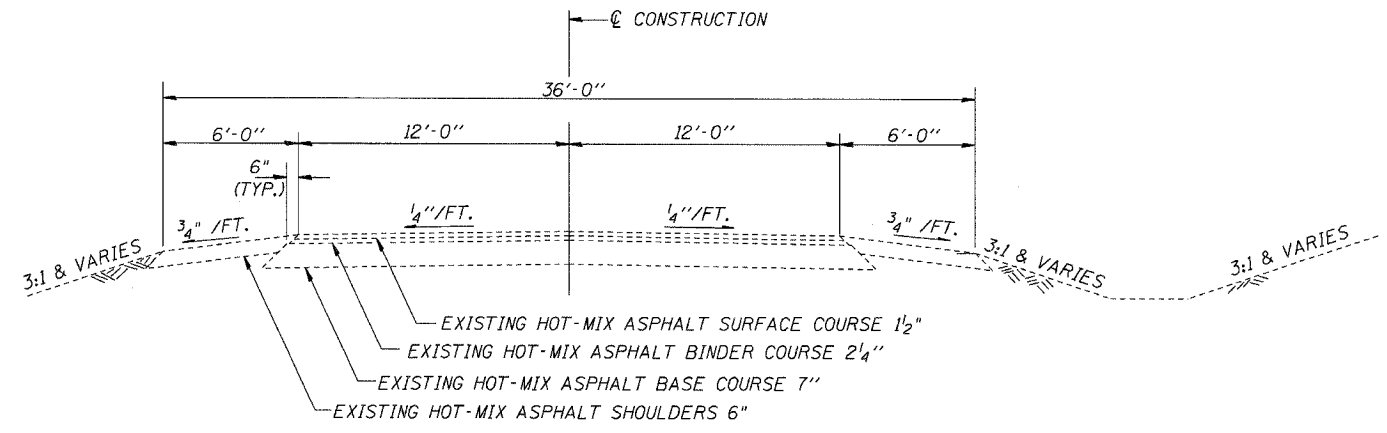
CONTRACT NO. 93439



CH 10 TYPICAL PROPOSED ROADWAY CROSS SECTION

STA 127+16.02 TO STA 127+66.02
 STA 133+56.15 TO STA 134+06.15
 STA 262+24.19 TO STA 262+74.19
 STA 266+31.39 TO STA 266+81.39

* SEE BUTT JOINT DETAIL SHEET 41



CH 10 TYPICAL EXISTING ROADWAY CROSS SECTION

STA 127+16.02 TO STA 127+66.02
 STA 133+56.15 TO STA 134+06.15
 STA 262+24.19 TO STA 262+74.19
 STA 266+31.39 TO STA 266+81.39

OMISSIONS:
 STA 127+66.02 TO STA 133+56.15
 STA 262+74.19 TO STA 266+31.39

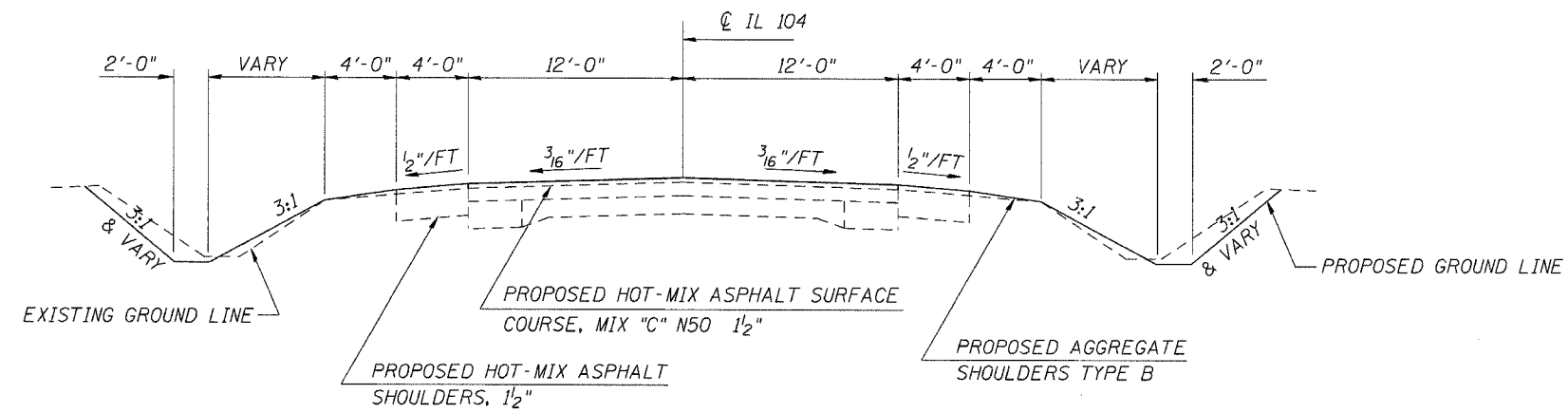
TYPICAL CROSS SECTIONS

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 SANGAMON COUNTY

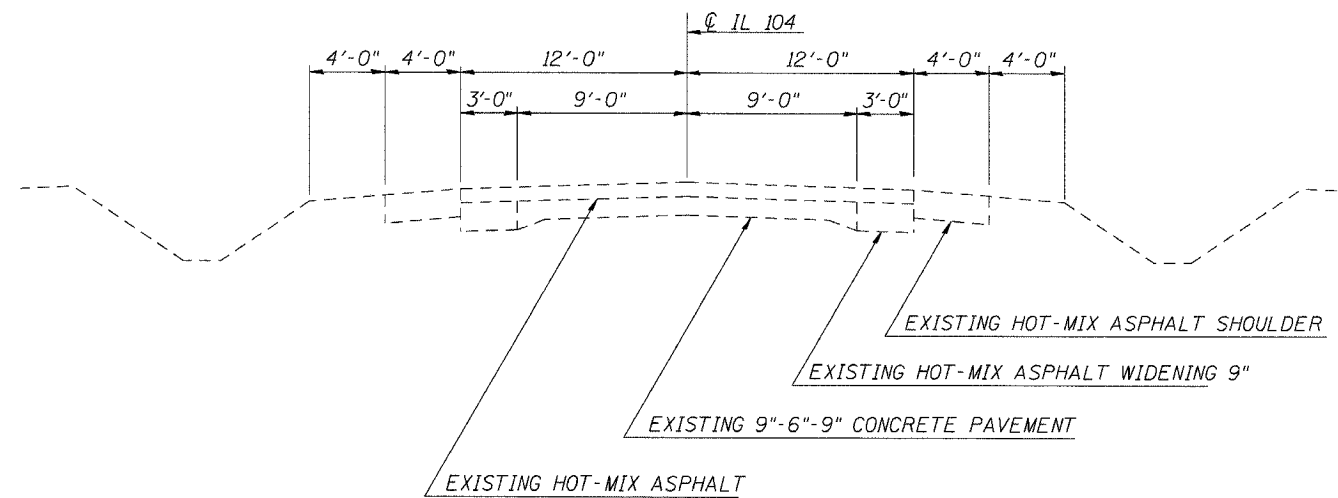
CUMMINS ENGINEERING CORPORATION	JOB #: 2171 FILE: 2171TYP DATE: 4/30/07
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ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 621	05-00075-05-RS	SANGAMON	72	8

CONTRACT NO. 93439



IL 104 TYPICAL PROPOSED ROADWAY CROSS SECTION
STA 8+00 TO STA 11+50



IL 104 TYPICAL EXISTING ROADWAY CROSS SECTION

TYPICAL CROSS SECTIONS

FAS 621 (CH 10)
SECTION 05-00075-05-RS
SANGAMON COUNTY

CUMMINS ENGINEERING CORPORATION

JOB #: 2171
FILE: 2171TYP
DATE: 4/30/07

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 621	05-00075-05-RS	SANGAMON	72	9

CONTRACT NO. 93439

EARTHWORK

LOCATION	STATION		EARTH EXCAVATION	EARTH EXCAVATION	EMBANKMENT	EARTHWORK
			(CUT)	(SHRINKAGE)		BALANCE WASTE (+) SHORTAGE (-)
			CU YD	CU YD	CU YD	CU YD
IL 104						
1	STA 8+00 TO STA 11+50	TR 24	515	390	170	220
1	STA 999+00 TO STA 999+50	CH 10	115	90	45	45
1	STA 0+25 TO STA 1+20		520	390	40	350
2	STA 3+75 TO STA 4+25		15	15	30	-15
3	STA 6+50 TO STA 12+50		175	135	180	-45
4	STA 39+75 TO STA 40+75		35	30	15	15
5	STA 44+50 TO STA 46+25		225	170	60	110
6	STA 9+25 TO STA 11+25		30	25	45	-20
7	STA 67+00 TO STA 69+25		120	90	300	-210
8	STA 107+25 TO STA 109+75		105	80	420	-340
9	STA 143+50 TO STA 145+75		45	35	145	-110
10	STA 170+00 TO STA 171+70		55	45	125	-80
11	STA 176+35 TO STA 177+65		15	15	400	-385
12	STA 195+75 TO STA 197+60		75	60	305	-245
13	STA 219+92 TO STA 220+92		20	15	45	-30
14	STA 292+56 TO STA 294+56		10	10	355	345
TOTAL			2075	1595	2680	-1085

SHRINKAGE = 25% FURNISHED EXCAVATION = 1085 CU YD

PIPE CULVERTS, CLASS A, TYPE 1

LOCATION	STATION	18"	36"	48"
		FT	FT	FT
2	RT STA 3+96	8		
6	RT STA 53+32		8	
6	LT STA 53+35		8	
7	AR STA 68+14			56
TOTAL		8	16	56

PRECAST, REINFORCED CONCRETE FLARED END SECTIONS

LOCATION	STATION	18"	24"	36"	48"
		EACH	EACH	EACH	EACH
2	LT & RT STA 3+96	2			
3	LT STA 8+60		1		
3	LT STA 10+50		1		
4	LT & RT STA 40+24		2		
6	RT STA 53+32			1	
6	LT STA 53+35			1	
7	RT STA 68+14				1
9	LT & RT STA 144+63		2		
10	LT & RT STA 170+70		2		
13	LT & RT STA 220+42	2			
TOTAL		4	8	2	1

CONCRETE COLLAR

LOCATION	STATION	EACH
2	LT & RT STA 3+96	2
4	LT & RT STA 40+24	2
6	RT STA 53+32	1
6	LT STA 53+35	1
9	LT & RT STA 144+63	2
10	LT & RT STA 170+70	2
13	LT & RT STA 220+42	2
TOTAL		12

CONCRETE REMOVAL

LOCATION	STATION	CU YD
7	LT STA 68+14	2.2
7	RT STA 68+14	2.2
11	RT STA 177+13	0.1
12	LT STA 196+79	0.9
TOTAL		5.4

REMOVAL OF EXISTING STRUCTURES

LOCATION	STATION	EACH
8	STA 108+74	1
TOTAL		1

PRECAST CONCRETE BOX CULVERT (SEE SHEET 34 FOR DETAILS)

LOCATION	STATION	5' x 4' FOOT	6' x 3' FOOT	6' x 4' FOOT
IL 104				
1	STA 9+25			57
CH 10				
5	STA 45+34		50	
14	STA 293+56	63		
TOTAL		63	50	57

BOX CULVERT END SECTION (FOR CAST-IN-PLACE SEE SHEET 33 FOR PRECAST SEE SHEET 34)

LOCATION	STATION	SIZE	CULVERT	CULVERT	CULVERT
			NO.1 EACH	NO.5 EACH	NO.14 EACH
IL 104					
1	* STA 9+25	6'x4'	2		
CH 10					
5	** STA 45+34	6'x3'		2	
14	** STA 293+56	5'x4'			2
TOTAL			2	2	2

* CAST-IN-PLACE ** PRECAST

CAST-IN-PLACE REINFORCED CONCRETE END SECTIONS 48" (SEE SHEET 32 FOR DETAILS)

LOCATION	STATION	EACH
7	LT STA 68+14	1
TOTAL		1

GUARDRAIL REMOVAL

LOCATION	STATION	FOOT
6	LT STA 53+10 TO STA 53+40	63
6	RT STA 53+00 TO STA 53+40	75
TOTAL		138

DITCH CHECK REMOVAL

LOCATION	STATION	EACH
7	LT STA 68+14	1
TOTAL		1

PIPE CULVERT REMOVAL

LOCATION	STATION	TYPE	FOOT
IL 104			
1	RT STA 9+58	15" CMP	20
1	RT STA 9+75	56"x72" CMP	20
CH 10			
2	LT STA 3+96	18" CONC	8
3	LT STA 8+62 TO STA 10+39	24" CMP	190
4	LT STA 40+24	24" CONC	5
5	AR STA 45+34	36" CMP	48
7	AR STA 68+14	36" ARCH CMP	38
13	LT STA 220+14	18" CONC	4
14	AR STA 293+56	60" CONC	53
TOTAL			386

REMOVING INLETS

LOCATION	STATION	EACH
IL 104		
1	RT STA 9+58	1
TOTAL		1

SEE SHEET 40 FOR CONTROLLED LOW-STRENGTH MATERIAL, CLASS D PATCHES, AND AGGREGATE SHOULDER SCHEDULES.
 SEE SHEET 16 FOR STORM SEWER SCHEDULES
 SEE SHEETS 26-29 FOR SEEDING AND EROSION CONTROL QUANTITIES.

RIPRAP (SPECIAL)

LOCATION	STATION	A3 TON	A4 TON
1	STA 999+00 TO STA 1+25		110
2	STA 3+75 TO STA 4+25	17	
5	STA 44+50 TO STA 46+25	24	
7	STA 67+00 TO STA 69+25	5	
8	STA 106+25 TO STA 109+75		310
11	STA 176+35 TO STA 177+65		28
12	STA 195+75 TO STA 197+60		28
14	STA 292+56 TO STA 294+56	15	
TOTAL		61	476

EXPLORATION TRENCH 52" DEPTH

LOCATION	STATION	FOOT
8	LT STA 107+82	50
8	LT STA 108+45	50
8	LT STA 109+15	50
8	LT STA 107+82 TO STA 108+54	77 *
8	LT STA 107+82 TO STA 108+54	77 *
8	LT STA 108+45 TO STA 108+60	43 *
8	LT STA 109+15 TO STA 108+60	58 *
TOTAL		405

* INCLUDES REMOVAL OF EXISTING TILE

JUNCTION BOX SPECIAL 24"

LOCATION	STATION	EACH
8	LT STA 108+45	1
8	LT STA 109+15	1
TOTAL		2

STORM SEWERS (SPECIAL) 8"

LOCATION	STATION	FOOT
8	LT STA 108+55 TO STA 109+15	60
TOTAL		60

STORM SEWERS (SPECIAL) 12"

LOCATION	STATION	FOOT
8	LT STA 108+35 TO STA 108+45	20
TOTAL		20

STORM SEWERS (SPECIAL) 15"

LOCATION	STATION	FOOT
8	LT STA 107+85 TO STA 108+30	50
8	LT STA 107+85 TO STA 108+30	50
TOTAL		100

RESTRICTED DEPTH MANHOLE 5' DIAMETER TYPE I FRAME, CLOSED LID

LOCATION	STATION	EACH
8	LT STA 107+85	1
* TOTAL		1

* SEE SHEET 16 FOR ADDITIONAL QUANTITIES

SCHEDULE OF QUANTITIES	
FAS 621 (CH 10) SECTION 05-00075-05-RS SANGAMON COUNTY	
CUMMINS ENGINEERING CORPORATION	JOB #: 2171 FILE: 2171SCHED DATE: 4/30/07

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 621	05-00075 -05-R5	SANGAMON	72	10

CONTRACT NO. 93439

LOCATION	SQ YD
PAVED SHOULDER REMOVAL	
IL 104	
STA 8+79.28 TO STA 9+57.72	35
STA 10+34.26 TO STA 10+80.71	21
TOTAL	56

LOCATION	SQ YD
PAVEMENT REMOVAL	
CH 10	
STA 0+00.00 TO STA 1+06.71	394
TOTAL	394

LOCATION	THICKNESS	TON
SUB-BASE GRANULAR MATERIAL, TYPE B		
CH 10		
STA 0+00.00 TO STA 1+06.71	6"	215
TOTAL		215

LOCATION	APPLICATION RATE (gal/sq yd)	GALLON
BITUMINOUS MATERIALS (PRIME COAT)		
CH 10		
STA 0+00.00 TO STA 1+06.71	0.35	213
STA 1+06.71 TO STA 127+66.02	0.1	3,493
STA 133+56.15 TO STA 262+74.19	0.1	3,564
STA 266+31.59 TO STA 317+59.10	0.1	1,415
IL 104		
STA 8+00.00 TO STA 11+50.00	0.1	125
SIDE ROADS	0.1	109
ENTRANCES	0.35	184
TOTAL		9,103

LOCATION	TON
AGGREGATE (PRIME COAT)	
CH 10	
STA 0+00.00 TO STA 1+06.71	2
STA 1+06.71 TO STA 127+66.02	70
STA 133+56.15 TO STA 262+74.19	72
STA 266+31.59 TO STA 317+59.10	29
IL 104	
STA 8+00.00 TO STA 11+50.00	3
SIDE ROADS	1
TOTAL	177

LOCATION	SEEDING CLASS 2 (SPECIAL) ACRE	TEMPORARY EROSION CONTROL SEEDING POUND	TEMPORARY DITCH CHECK EACH	INLET & PIPE PROTECTION EACH	PERIMETER EROSION BARRIER FOOT
SEEDING & EROSION CONTROL					
NO. 1	0.4	40	4		
NO. 2&3	0.5	50	10	3	50
NO. 4	0.1	10	4	1	
NO. 5	0.2	20	4		
NO. 6	0.1	10	1	1	
NO. 7	0.2	20	4		
NO. 8	0.4	40	4		35
NO. 9	0.2	20	2	1	
NO. 10	0.2	20	2	1	
NO. 11	0.1	10	4		50
NO. 12	0.2	20	4		80
NO. 13	0.1	10	1	1	
NO. 14	0.2	20	4		
TOTAL	2.9	290	48	8	215

LOCATION	THICKNESS	TON
HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50		
CH 10		
STA 0+00.00 TO STA 1+06.71	2½"	86
STA 1+06.71 TO STA 127+66.02	2½"	4,851
STA 133+56.15 TO STA 262+74.19	2½"	4,950
STA 266+31.59 TO STA 317+59.10	2½"	1,965
TOTAL		11,852

LOCATION	THICKNESS	TON
HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50		
CH 10		
STA 0+00.00 TO STA 1+06.71	1.5	50
STA 1+06.71 TO STA 127+66.02	1.5	2,866
STA 133+56.15 TO STA 262+74.19	1.5	2,924
STA 266+31.59 TO STA 317+59.10	1.5	1,161
IL 104		
STA 8+00.00 TO STA 11+50.00	1.5	80
TOTAL		7,081

LOCATION	LENGTH	SQ YD
HOT-MIX ASPHALT SHOULDERS 6"		
CH 10		
LT STA 0+00.00 TO STA 1+06.71	174.96	78
RT STA 0+00.00 TO STA 1+06.71	136.30	61
TOTAL		139

LOCATION	THICKNESS	TON
HOT-MIX ASPHALT SHOULDERS		
CH 10		
LT & RT STA 127+16.02 TO STA 127+66.02	2½" - 1½"	8
LT & RT STA 133+56.15 TO STA 134+06.15	2½" - 1½"	8
LT & RT STA 262+24.19 TO STA 262+74.19	2½" - 1½"	8
LT & RT STA 266+31.59 TO STA 266+81.59	2½" - 1½"	8
IL 104		
LT STA 8+00.00 TO STA 8+79.28	1½"	3
LT STA 10+80.71 TO STA 11+50.00	1½"	3
RT STA 8+00.00 TO STA 9+75.00	1½"	7
RT STA 10+34.00 TO STA 11+50.00	1½"	5
TOTAL		50

LOCATION	TON
AGGREGATE SHOULDERS TYPE B	
CH 10	
LT & RT STA 1+06.71 TO STA 127+66.02	1,731
LT & RT STA 133+56.15 TO STA 262+74.19	1,766
LT & RT STA 266+31.39 TO STA 317+59.10	701

IL 104	
LT STA 8+00.00 TO STA 8+79.28	3
LT STA 10+80.71 TO STA 11+50.00	3
RT STA 8+00.00 TO STA 9+75.00	7
RT STA 10+34.00 TO STA 11+50.00	4

SIDE ROADS	56
AT CLASS D PATECHES (SEE SHEET --)	26
TOTAL	4297

LOCATION	APPLICATIONS	FOOT
SHORT-TERM PAVEMENT MARKING		
CH 10		
STA 0+00.00 TO STA 127+66.02	3	3,840
STA 133+56.15 TO STA 262+74.19	3	3,876
STA 266+31.59 TO STA 317+59.10	3	1,548
IL 104		
STA 8+00.00 TO STA 11+50.00	2	72
TOTAL		9,336

LOCATION	SQ FT
WORK ZONE PAVEMENT MARKING REMOVAL	
CH 10	
STA 0+00.00 TO STA 127+66.02	427
STA 133+56.15 TO STA 262+74.19	431
STA 266+31.59 TO STA 317+59.10	172
IL 104	
STA 8+00.00 TO STA 11+50.00	12
TOTAL	1,042

LOCATION	SQ YD
HOT-MIX ASPHALT BASE COURSE 7"	
CH 10	
STA 0+00.00 TO STA 1+06.71	607
TOTAL	607

LOCATION	HMA SURFACE REMOVAL - BUTT JOINT SQ YD	TEMPORARY RAMP SQ YD
BUTT JOINTS		
OMISSIONS (SEE SHEET)	480	80
NORTH END (SEE SHEET)	51	14
IL 104 (SEE SHEET)	214	36
SIDE ROADS (SEE SHEET)	517	291
ENTRANCES (SEE SHEET)	246	
TOTAL	1,508	421

LOCATION	CONCRETE BOX CULVERTS CU YD	REINFORCEMENT BARS POUNDS	EXPANSION BOLTS EACH
CONCRETE BOX CULVERT SUMMARY			
NO. 8	65.9	12,190	
NO. 11	11.5	1,790	24
NO. 12	22.5	4,390	40
TOTAL	99.9	18,370	64

LOCATION	INCIDENTAL HMA SURFACING TON	AGGREGATE SURFACE COURSE TYPE B TON	AGGREGATE BASE COURSE TYPE B TON
ENTRANCE & SIDE ROAD PAVING			
ENTRANCES (PE & CE)	295	35	56
ENTRANCES (FE)		750	
SIDE ROADS	194		
TOTAL	489	785	56

SCHEDULE OF QUANTITIES

FAS 621 (CH 10)
SECTION 05-00075-05-R5
SANGAMON COUNTY

CUMMINS ENGINEERING CORPORATION

JOB #: 2171
FILE: 2171SCHED
DATE: 4/30/07

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 621	05-00075-05-RS	SANGAMON	72	11

CONTRACT NO. 93439

* OFFSETS FROM \odot SURVEY

CH 10 - \odot SURVEY ALIGNMENT COORDINATES

STATION	*OFFSET	DESCRIPTION	NORTHING	EASTING
0+11.71	-	SCHD PI 113	1063650.38	2364263.17
3+96.00	-	PI	1064057.99	2364253.78
7+51.31	-	PI	1064413.23	2364246.80
10+50.62	-	PI	1064712.51	2364242.80
15+00.72	-	PI	1065162.56	2364236.13
26+69.79	-	SCHD PI 111	1066331.54	2364222.43

CH 10 - \odot CONSTRUCTION ALIGNMENT COORDINATES

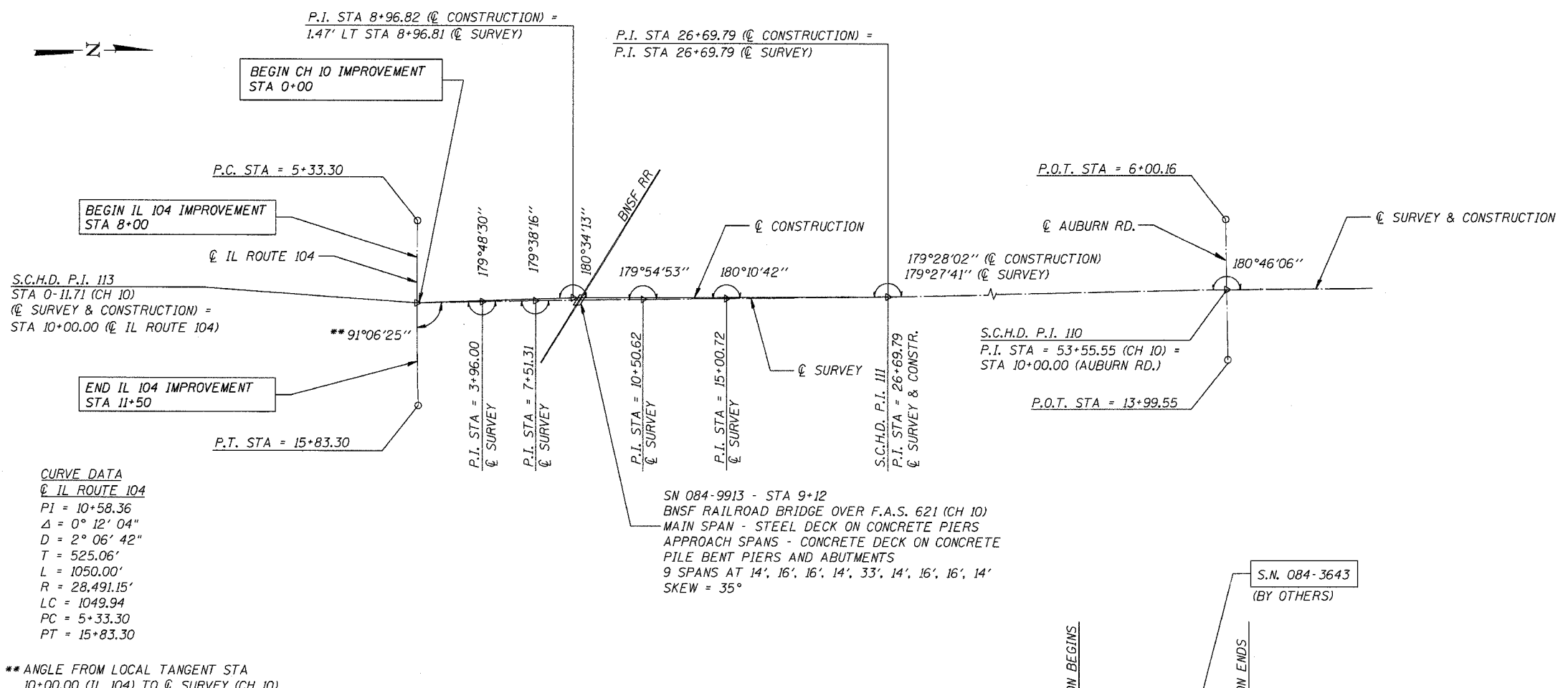
STATION	*OFFSET	DESCRIPTION	NORTHING	EASTING
0+11.71	-	SCHD PI 113	1063650.38	2364263.17
8+96.82	1.47' LT	PI	1064558.69	2364243.39
26+69.79	-	SCHD PI 111	1066331.54	2364222.43

CH 10 - \odot SURVEY & CONSTRUCTION ALIGNMENT COORDINATES

STATION	*OFFSET	DESCRIPTION	NORTHING	EASTING
26+69.79	-	SCHD PI 111	1066331.54	2364222.43
53+55.55	-	SCHD PI 110	1069016.70	2364165.71
79+83.67	-	SCHD PI 108	1071644.74	2364145.45
106+32.40	-	PI	1074293.39	2364124.53
140+65.70	-	SCHD PI 107	1077726.48	2364086.75
186+91.66	-	SCHD PI 106	1082352.04	2364026.05
227+67.70	-	SCHD PI 105	1086427.81	2363978.51
259+57.02	-	SCHD PI 103	1089617.10	2363965.67
272+22.56	-	SCHD PI 102	1090882.06	2363927.17
309+18.61	-	SCHD PI 101	1094577.74	2363875.46
319+71.44	-	SCHD PI 128	1095630.51	2363863.74

SIDE ROAD ALIGNMENT COORDINATES

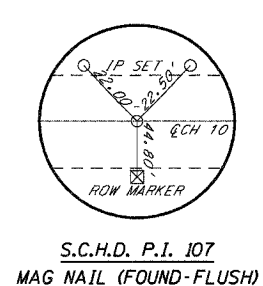
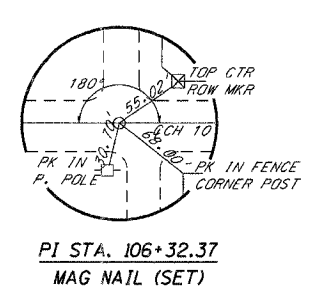
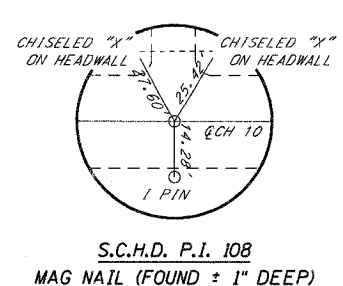
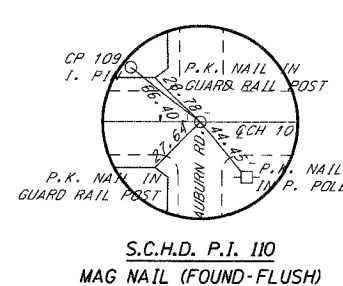
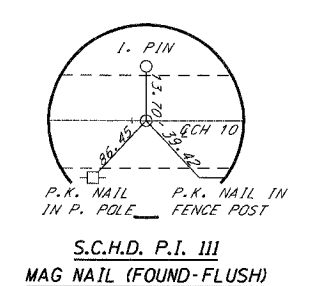
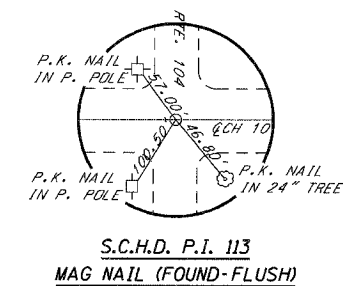
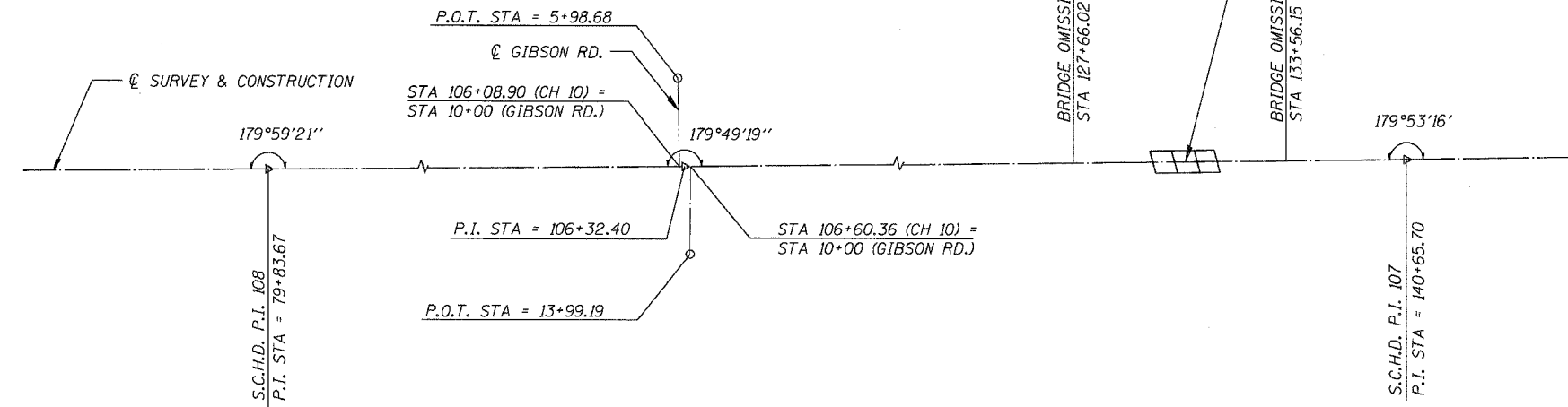
STATION	DESCRIPTION	NORTHING	EASTING
IL ROUTE 104			
5+33.30	PC	1063653.08	2363796.46
10+58.36	PI	1063645.76	2364321.47
15+83.30	PT	1063657.8	2364846.4
AUBURN ROAD			
6+00.16	POT	1069010.4	2363765.92
13+99.55	POT	1069023	2364565.21
GIBSON ROAD WEST			
5+98.68	POT	1074262.26	2363723.47
10+00.00	POT	1074269.92	2364124.72
GIBSON ROAD EAST			
10+00.00	POT	1074321.38	2364124.22
13+99.19	POT	1074318.42	2364523.4



CURVE DATA
 \odot IL ROUTE 104
 PI = 10+58.36
 Δ = 0° 12' 04"
 D = 2° 06' 42"
 T = 525.06'
 L = 1050.00'
 R = 28,491.15'
 LC = 1049.94
 PC = 5+33.30
 PT = 15+83.30

** ANGLE FROM LOCAL TANGENT STA 10+00.00 (IL 104) TO \odot SURVEY (CH 10)

SN 084-9913 - STA 9+12
 BNSF RAILROAD BRIDGE OVER F.A.S. 621 (CH 10)
 MAIN SPAN - STEEL DECK ON CONCRETE PIERS
 APPROACH SPANS - CONCRETE DECK ON CONCRETE PILE BENT PIERS AND ABUTMENTS
 9 SPANS AT 14', 16', 16', 14', 33', 14', 16', 16', 14'
 SKEW = 35°



ALIGNMENT

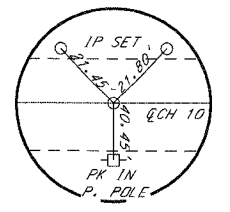
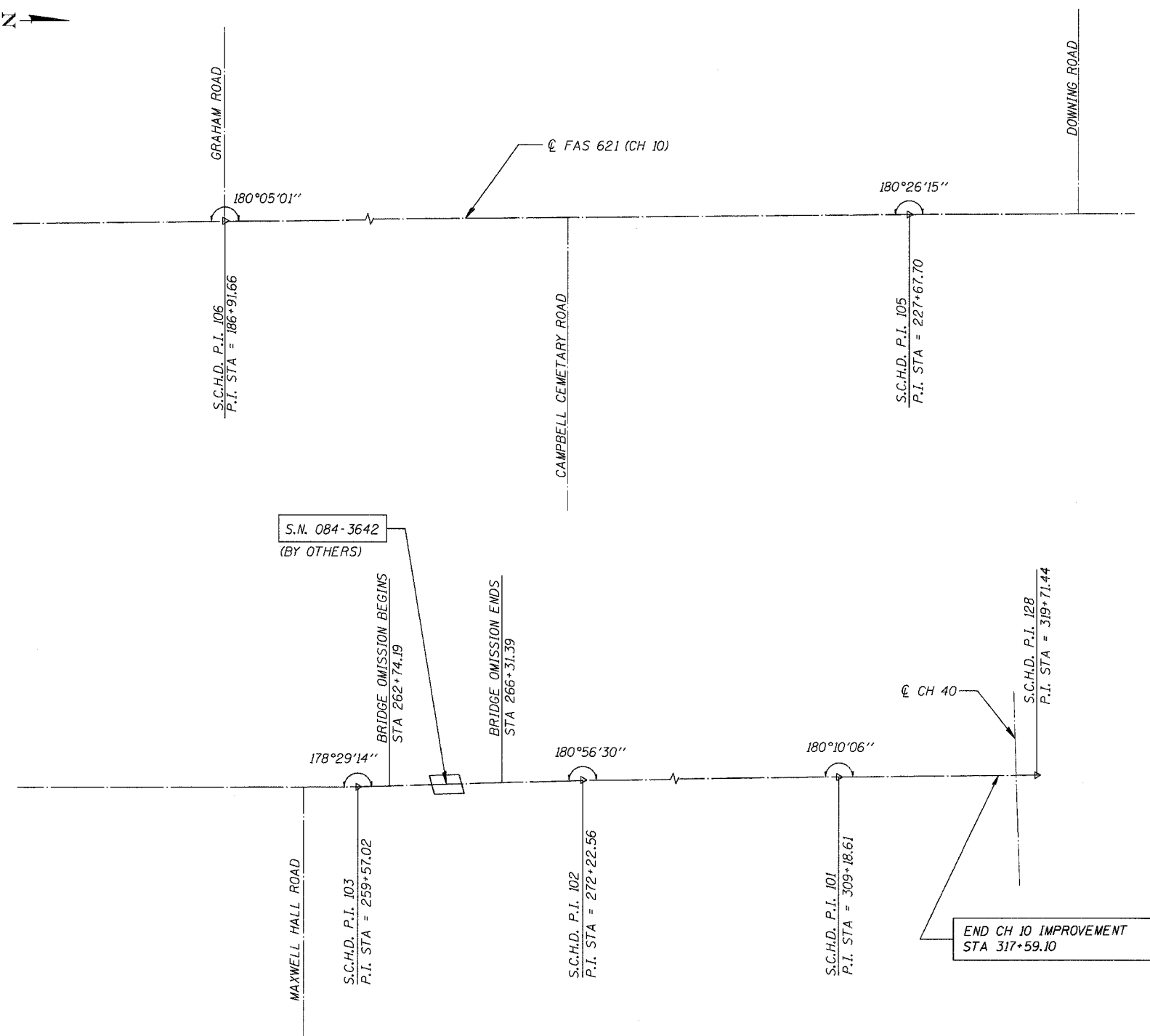
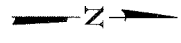
FAS 621 (CH 10)
SECTION 05-00075-05-RS
SANGAMON COUNTY

CUMMINS ENGINEERING CORPORATION

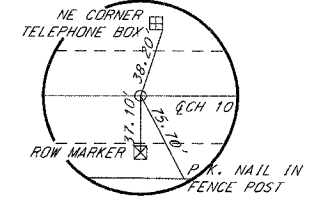
JOB #: 2171
FILE: 2171ALIGN
DATE: 4/30/07

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 621	05-00075-05-RS	SANGAMON	72	12

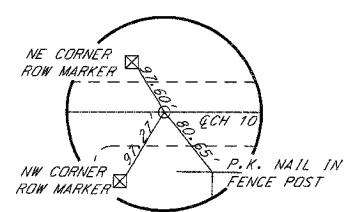
CONTRACT NO. 93439



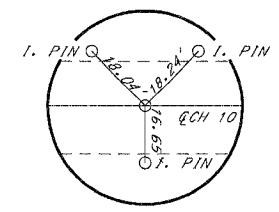
S.C.H.D. P.I. 106
MAG NAIL (FOUND-FLUSH)



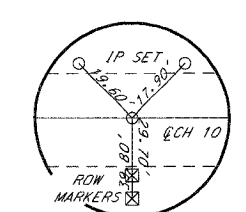
S.C.H.D. P.I. 105
MAG NAIL (FOUND-FLUSH)



S.C.H.D. P.I. 103
MAG NAIL (FOUND-FLUSH)



S.C.H.D. P.I. 102
MAG NAIL (FOUND-FLUSH)



S.C.H.D. P.I. 101
MAG NAIL (FOUND-FLUSH)

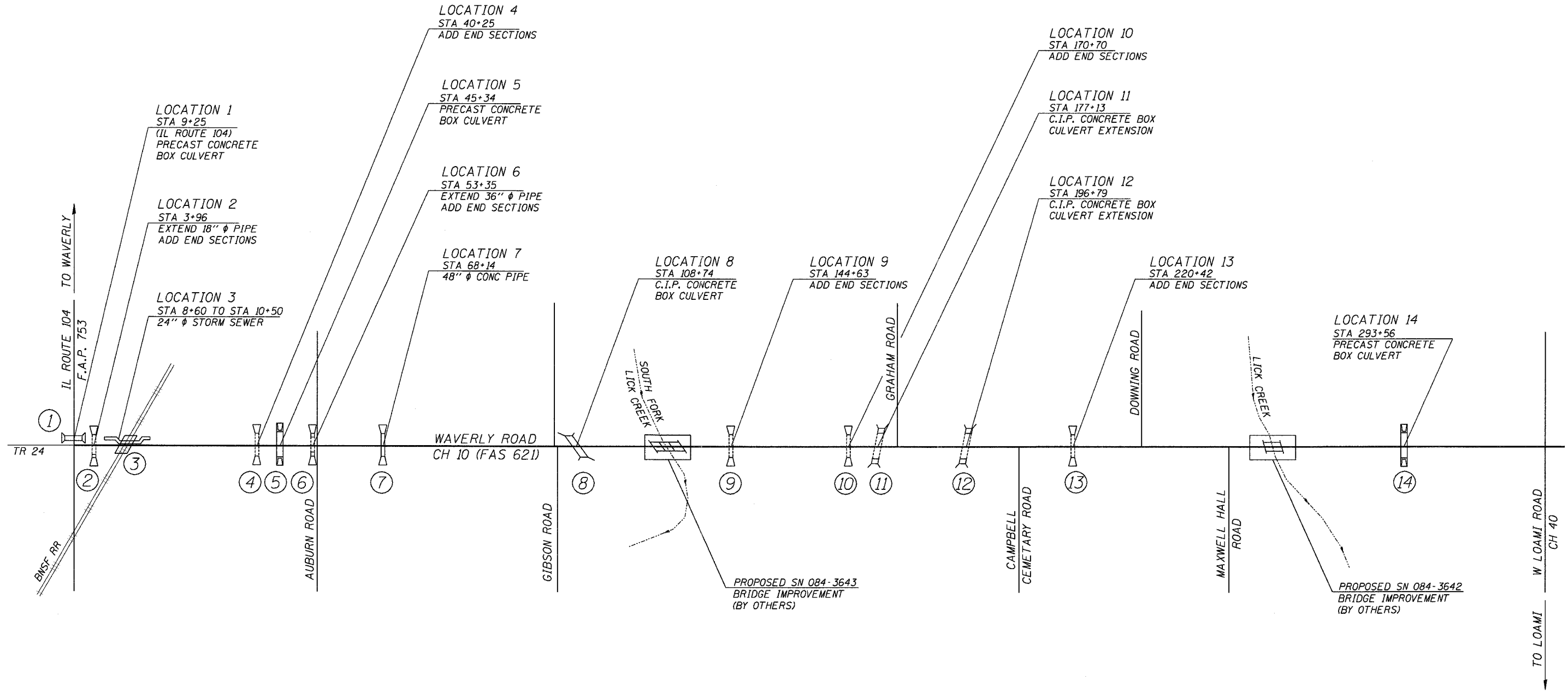
ALIGNMENT

FAS 621 (CH 10)
SECTION 05-00075-05-RS
SANGAMON COUNTY

CUMMINS ENGINEERING CORPORATION	JOB #: 2171
	FILE: 2171ALIGN
	DATE: 4/30/07

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 621	05-00075-05-RS	SANGAMON	72	13

CONTRACT NO. 93439



LAYOUT

LEGEND

① LOCATION NUMBER

NOTE: REFER TO BOTTOM RIGHT MARGIN OF DETAIL SHEETS FOR APPLICABLE LOCATION NUMBER

LAYOUT OF SPOT IMPROVEMENTS

FAS 621 (CH 10)
SECTION 05-00075-05-RS
SANGAMON COUNTY

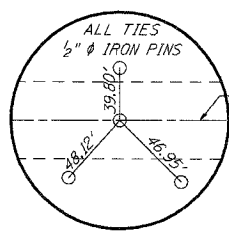
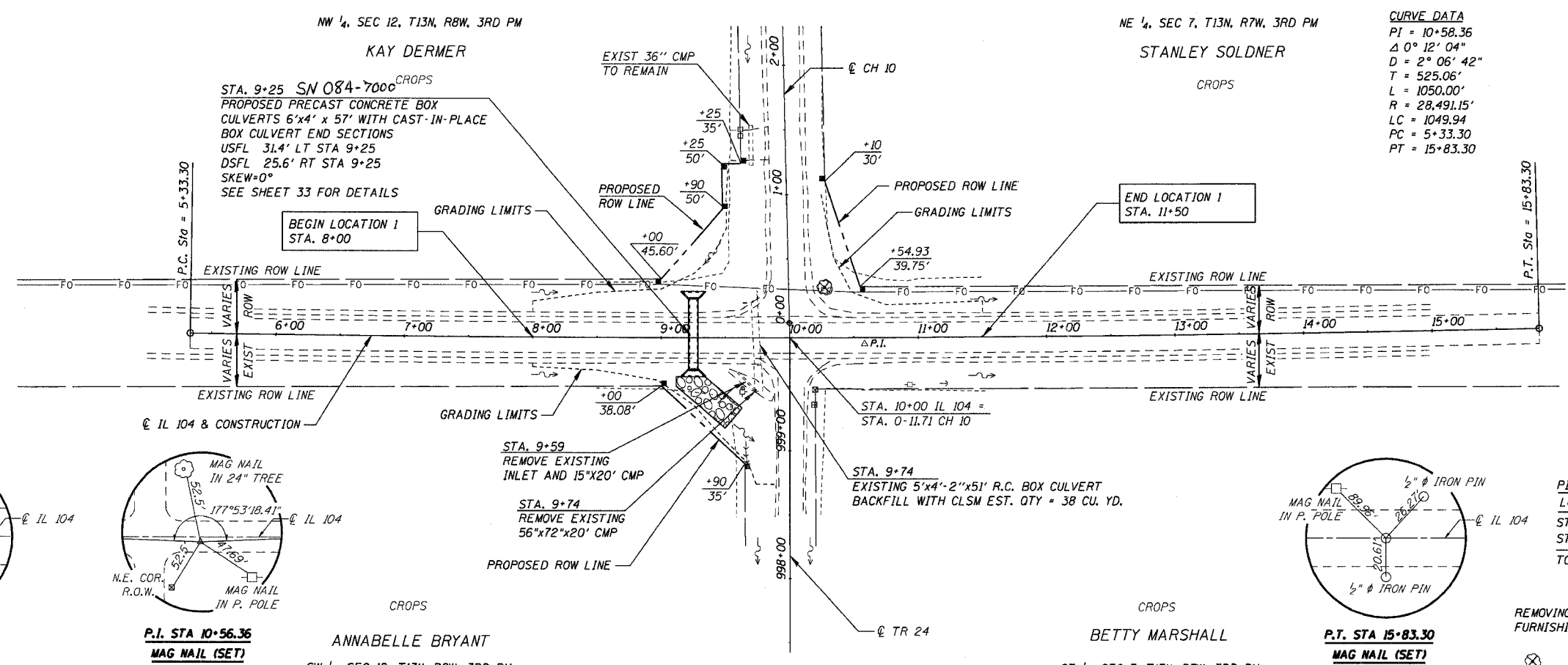
CUMMINS ENGINEERING CORPORATION	JOB #: 2171
	FILE: 2171LAYOUT
	DATE: 4/30/07

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
IL 104	05-00075-05-RS	SANGAMON	72	14

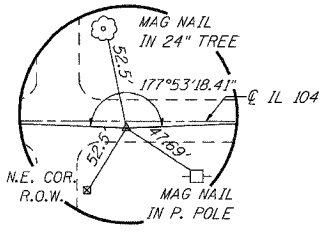
CONTRACT NO. 93439

CURVE DATA
 PI = 10+58.36
 Δ = 2° 06' 42"
 D = 525.06'
 L = 1050.00'
 R = 28,491.15'
 LC = 1049.94'
 PC = 5+33.30
 PT = 15+83.30

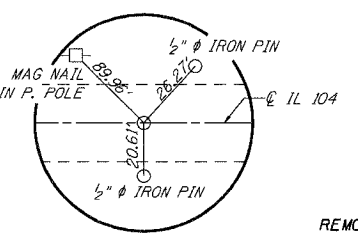
WATERWAY INFORMATION - LOCATION 1
 Drainage Area 160 acres
 50 year Design Discharge 100 c.f.s.
 100 year Discharge 115 c.f.s.
 50 year Design Headwater Elev. 627.7
 100 year Headwater Elev. 627.9



P.C. STA 5+33.30
MAG NAIL (SET)



P.I. STA 10+56.36
MAG NAIL (SET)



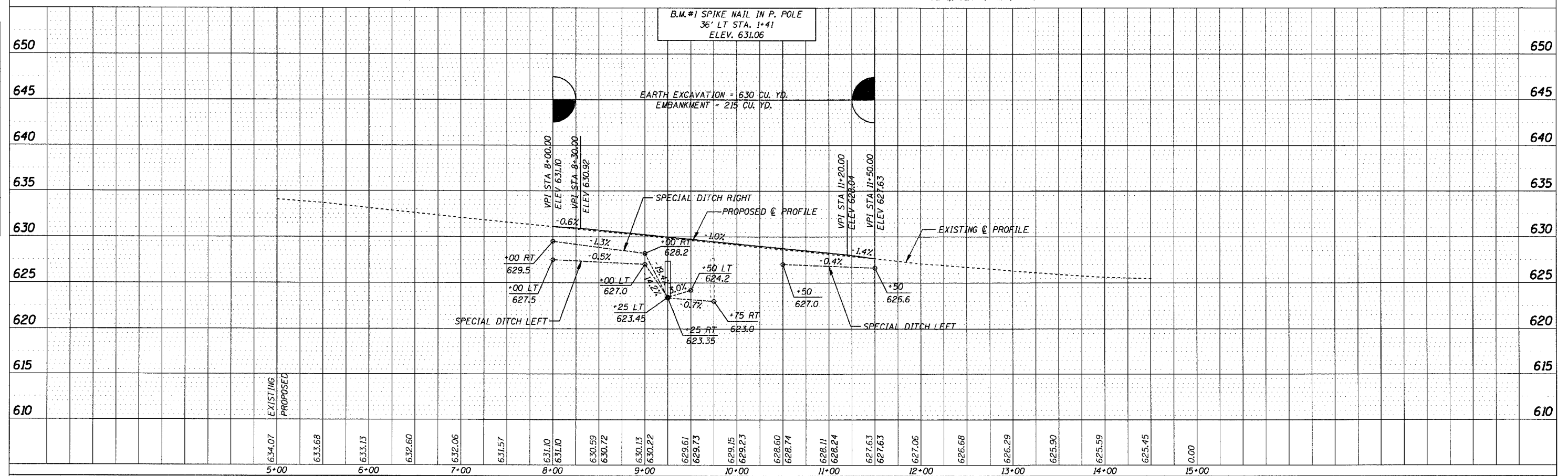
P.T. STA 15+83.30
MAG NAIL (SET)

PIPE CULVERT REMOVAL

LOCATION	TYPE	SIZE	FOOT
STA 8+62 TO 9+08	CMP	15"	20
STA 10+11 TO 10+39	CMP	56"x72"	20
TOTAL			40

REMOVING INLETS
FURNISHING AND ERECTING RIGHT-OF-WAY MARKERS 1 EACH
8 EACH

⊗ TREE TO BE REMOVED



LOCATION 1 - IL 104 - STA 5+00 TO STA 15+00

PLAN

DATE	
BY	
SURVEYED	
ALIGNED	
CHECKED	
NO. 1	

PROFILE

DATE	
BY	
SURVEYED	
GRADES CHECKED	
NO. 1	

SE 1/4, NE 1/4, SEC 12, T13N, R8W, 3RD PM

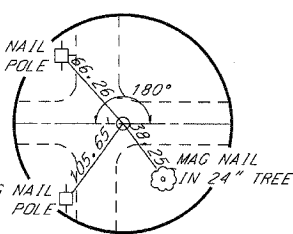
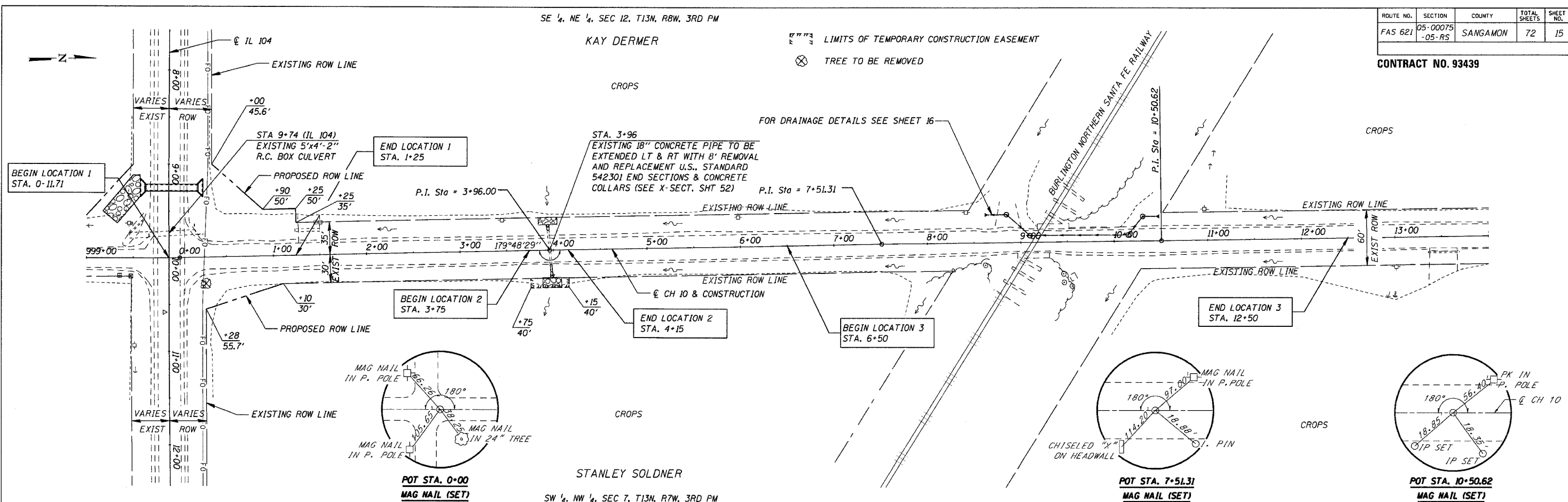
KAY DERMER

LIMITS OF TEMPORARY CONSTRUCTION EASEMENT

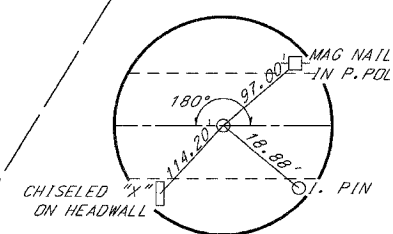
TREE TO BE REMOVED

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 621	05-00075-05-RS	SANGAMON	72	15

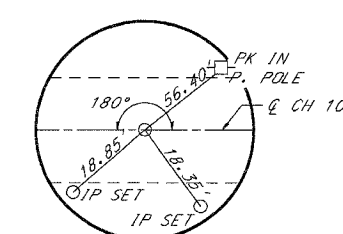
CONTRACT NO. 93439



POT STA. 0+00
MAG NAIL (SET)



POT STA. 7+51.31
MAG NAIL (SET)



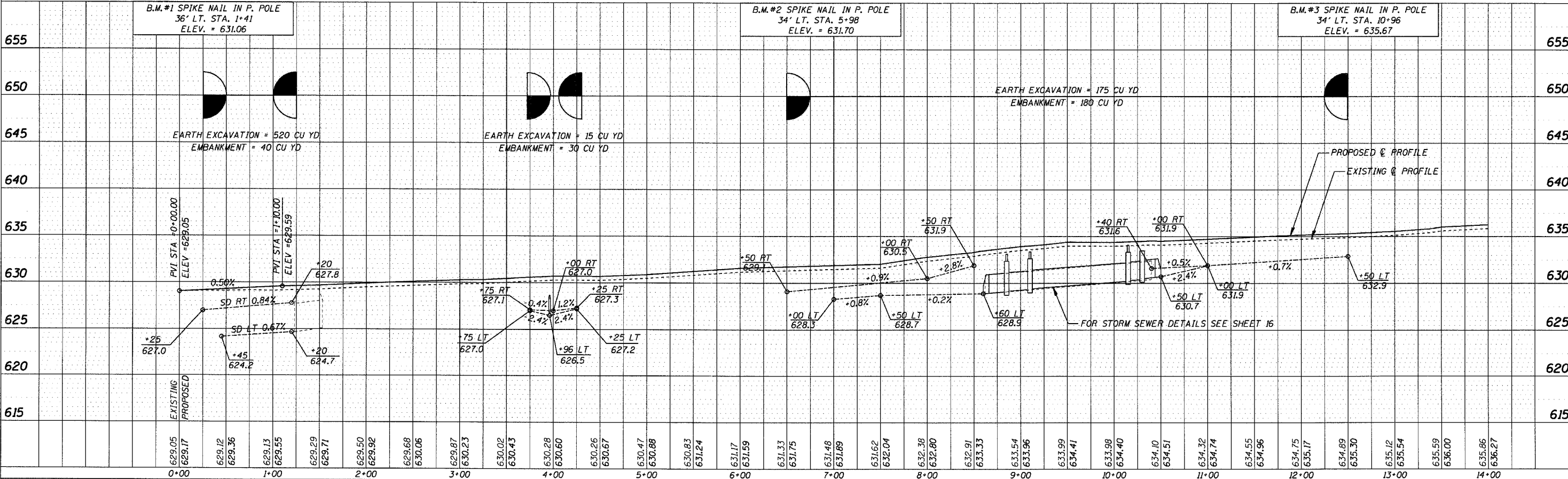
POT STA. 10+50.62
MAG NAIL (SET)

SW 1/4, NW 1/4, SEC 7, T13N, R7W, 3RD PM

STANLEY SOLDNER

DATE	BY

DATE	BY



LOCATIONS 2 & 3 - CH 10 - STA 0+00 TO STA 14+00

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 621	05-00075 05-R5	SANGAMON	72	16

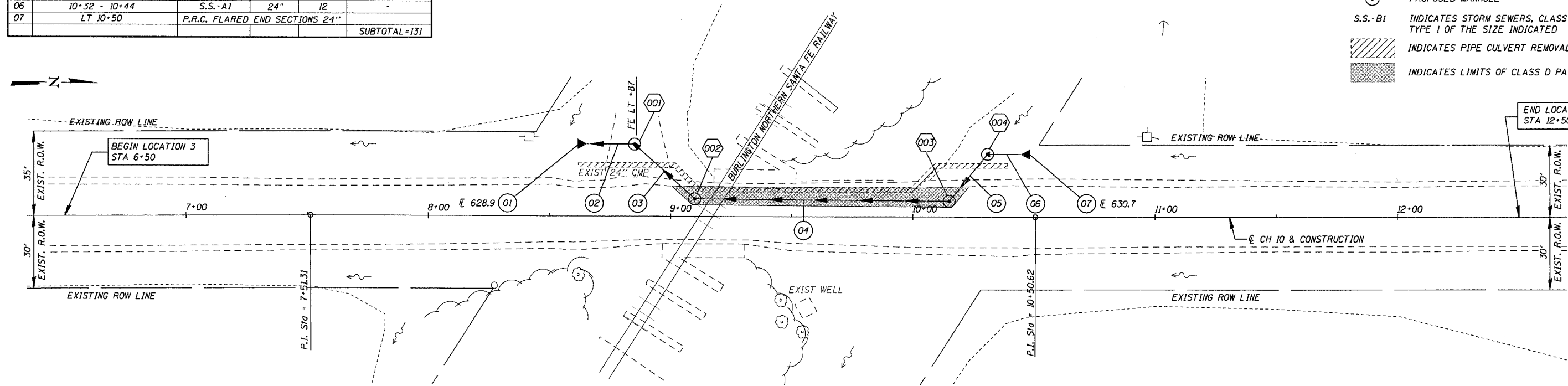
CONTRACT NO. 93439

NO.	STATION - STATION	TYPE	DIA.	FOOT	C.L.S.M. CU. YD.
01	LT 8+60	P.R.C. FLARED END SECTIONS 24"			
02	8+66 - 8+84	S.S.-A1	24"	18	5
03	8+87 - 9+09	S.S.-A1	24"	30	14
04	9+12 - 10+14	S.S.-A1	24"	102	107
05	10+16 - 10+29	S.S.-A1	24"	22	5
06	10+32 - 10+44	S.S.-A1	24"	12	-
07	LT 10+50	P.R.C. FLARED END SECTIONS 24"			
					SUBTOTAL=131

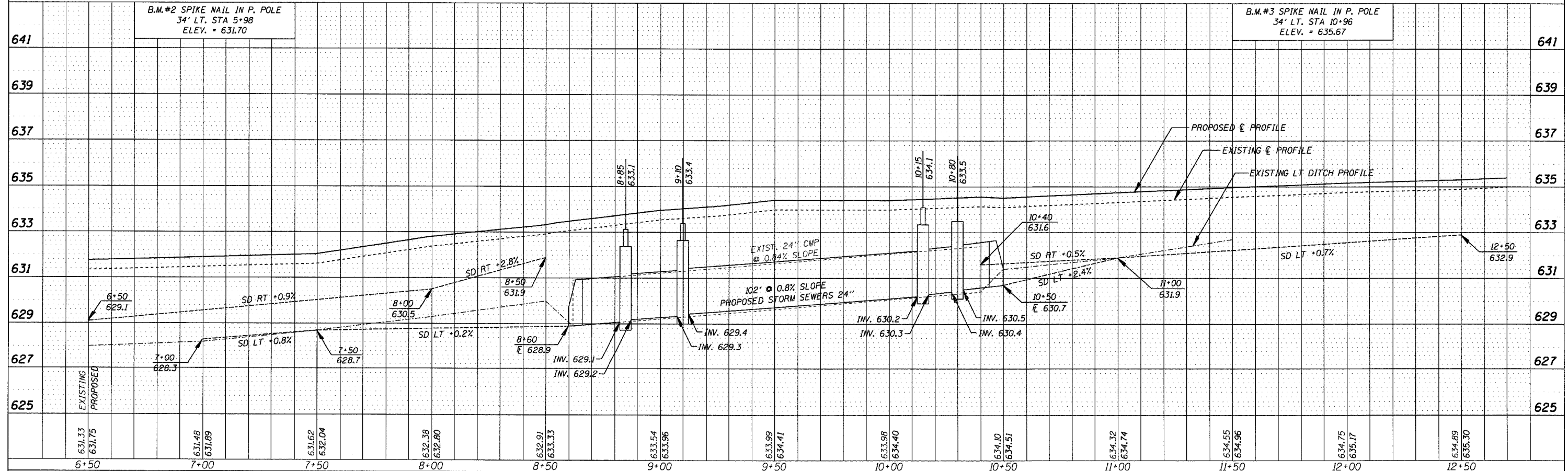
NO.	STATION	OFFSET	STRUCTURE TYPE			DIA.	FRAME	TOP OF GRATE	INVERT	INVERT	INVERT
			MH	CB	INLET						
001	8+85	30' LT	RD			5'	T1 CL	633.1	629.1 (S)	629.2 (N)	
002	9+10	7.4' LT	RD			5'	T1 CL	633.4	629.3 (S)	629.4 (N)	
003	10+15	6.5' LT	RD			5'	T1 CL	634.1	630.2 (S)	630.3 (N)	
004	10+30	26' LT	RD			5'	T8 GRATE	633.5	630.4 (S)	630.5 (N)	

LOCATION	TYPE	24" FOOT
STA 8+62 TO 10+39	CMP	190
SUBTOTAL		190

- ⊙ DRAINAGE STRUCTURES
- STORM SEWER PIPE
- PROPOSED MANHOLE
- S.S.-B1 INDICATES STORM SEWERS, CLASS B, TYPE I OF THE SIZE INDICATED
- ▨ INDICATES PIPE CULVERT REMOVAL
- ▩ INDICATES LIMITS OF CLASS D PATCHES



SW 1/4, NW 1/4, SEC 7, T13N, R7W, 3rd P.M.



LOCATION 3 - DRAINAGE DETAILS - CH 10 - STA 6+50 TO STA 12+50

DATE: _____ BY: _____
 SURVEYED: _____
 PLAN: _____
 CHECKED: _____
 NO. _____

DATE: _____ BY: _____
 SURVEYED: _____
 PROFILE: _____
 CHECKED: _____
 NO. _____

SE 1/4, SEC 1, T13N, R8W, 3RD PM

RICHARD SHERMAN

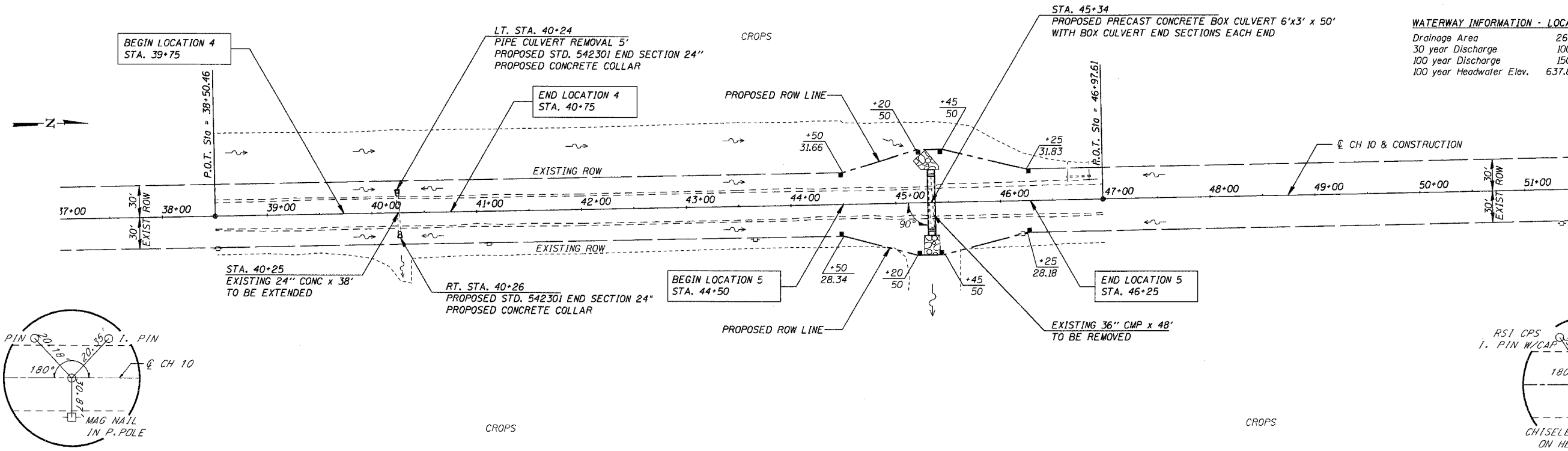
FURNISHING AND ERECTING RIGHT-OF-WAY MARKERS 8 EACH

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 621	05-00075 -05-RS	SANGAMON	72	17

CONTRACT NO. 93439

WATERWAY INFORMATION - LOCATION 5
 Drainage Area 261 acres
 30 year Discharge 100 c.f.s.
 100 year Discharge 150 c.f.s.
 100 year Headwater Elev. 637.8

PLAN	DATE	BY
SUBMITTED		
PLOTTED		
NOTED		
NO. OF WAY CHECKED		
PAID FILE NAME		



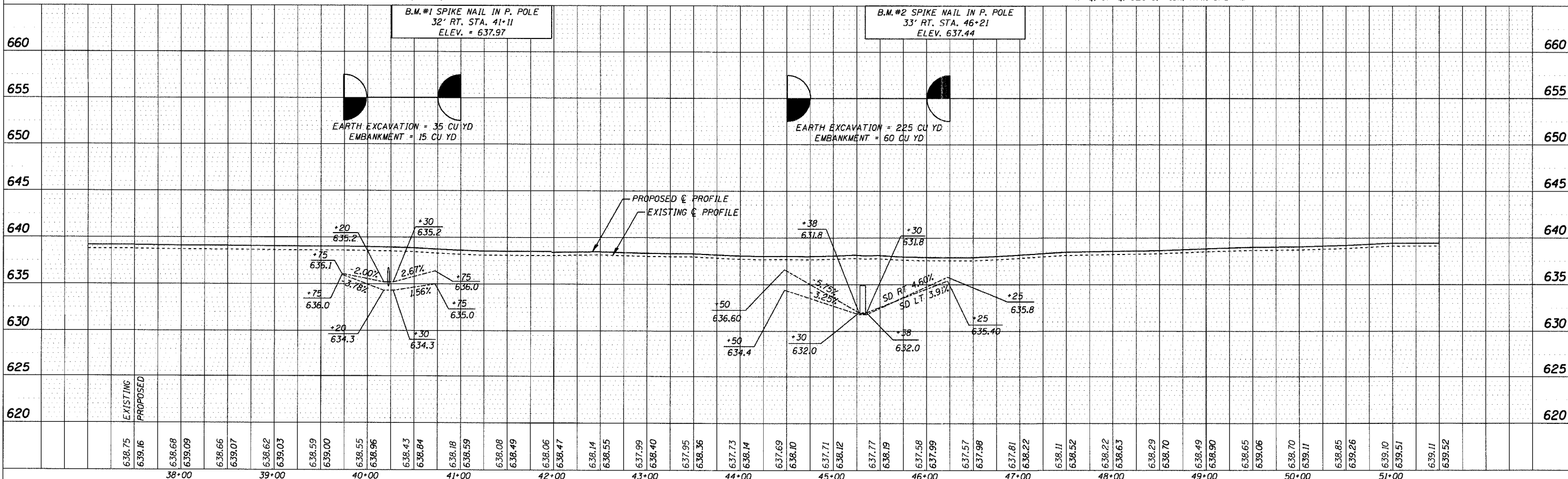
POT STA. 38+50.46
MAG NAIL (SET)

RONALD BROWN
SW 1/4, SW 1/4, SEC 6, T13N, R7W, 3RD PM

JOHN SCHMIDT
NW 1/4, SW 1/4, SEC 6, T13N, R7W, 3RD PM

POT STA. 46+97.61
MAG NAIL (SET)

PROFILE	DATE	BY
SUBMITTED		
PLOTTED		
NOTED		
NO. OF WAY CHECKED		
STRUCTURE NOTATIONS CHECKED		



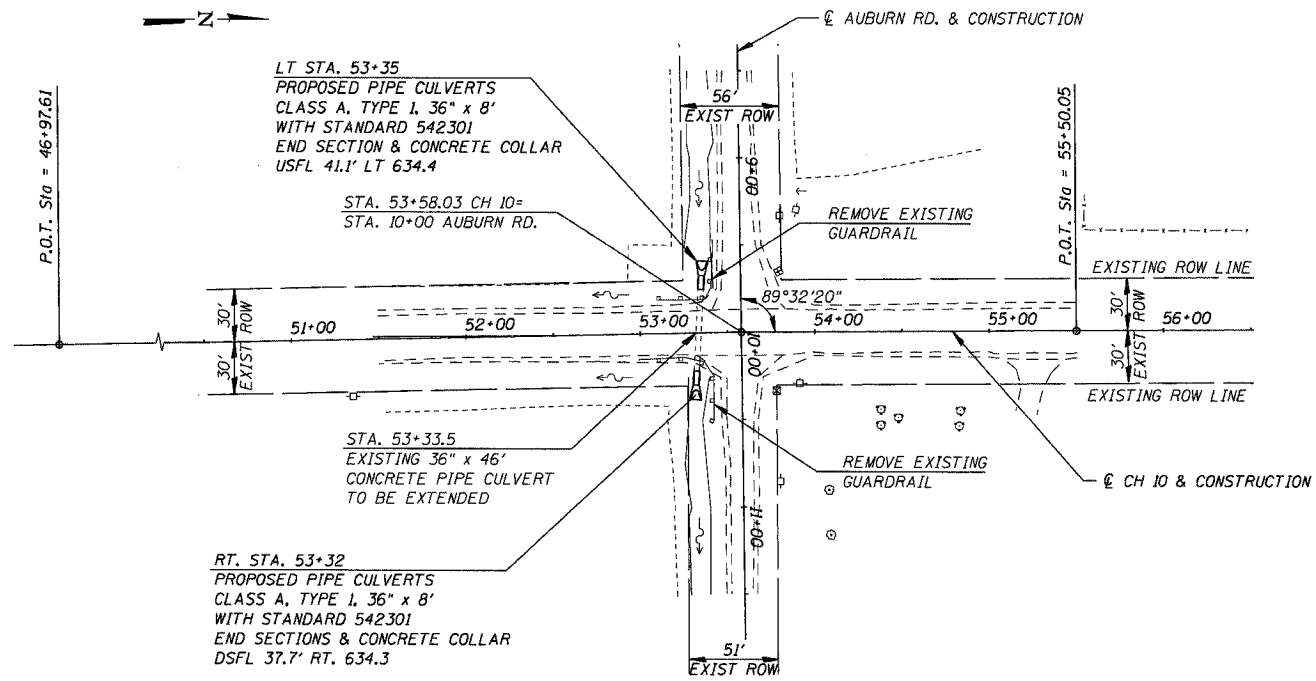
LOCATIONS 4 & 5 - CH 10 STA. 37+00 TO STA. 51+00

SE 1/4, SEC 1, T13N, R8W, 3RD PM
LOUISE KUMLER

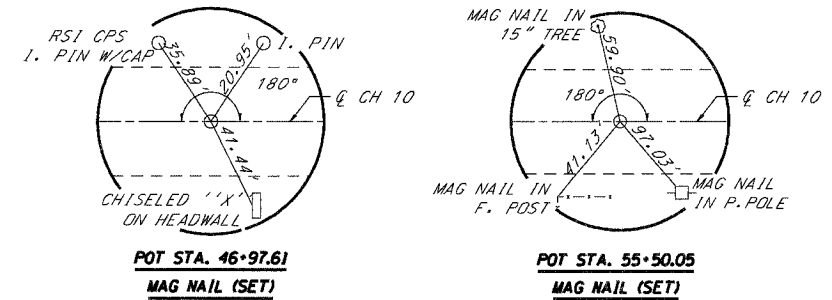
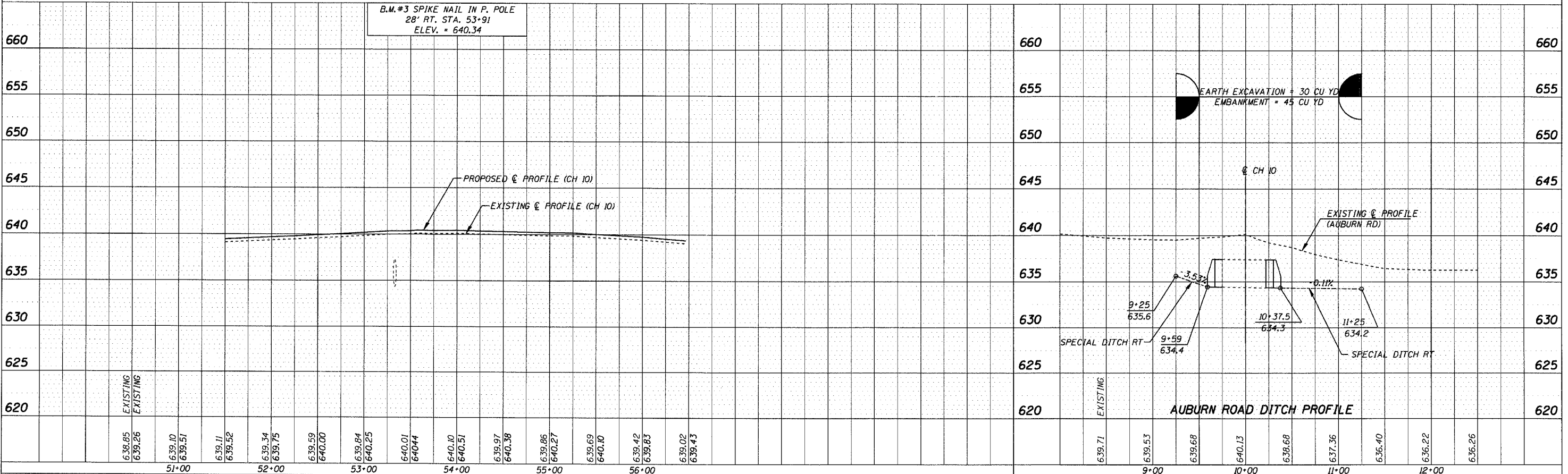
ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 621	05-00075 -05-R5	SANGAMON	72	18

CONTRACT NO. 93439

PLAN	DATE	BY
SUPP'D		
PLOTT'D		
NOTED		
NO.		



PROFILE	DATE	BY
SUPP'D		
PLOTT'D		
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NO.		



LOUISE KUMLER
SW 1/4, SEC 6, T13N, R7W, 3RD PM

LOCATION 6 - CH 10 STA. 51+00 TO STA. 56+50

NE 1/4, SEC 1, T13N, R8W, 3RD PM

LOUISE RICKARD KUMLER
& DORIS RICKARD

FURNISHING AND ERECTING RIGHT-OF-WAY MARKERS 9 EACH

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 621	05-00075 -05-RS	SANGAMON	72	19

CONTRACT NO. 93439

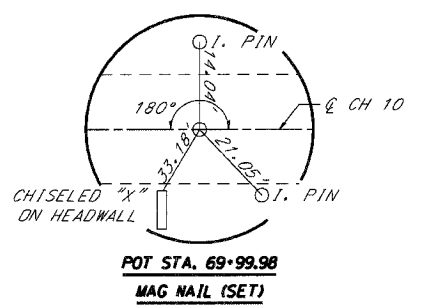
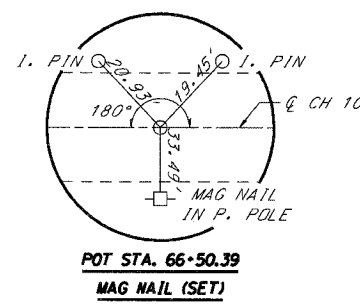
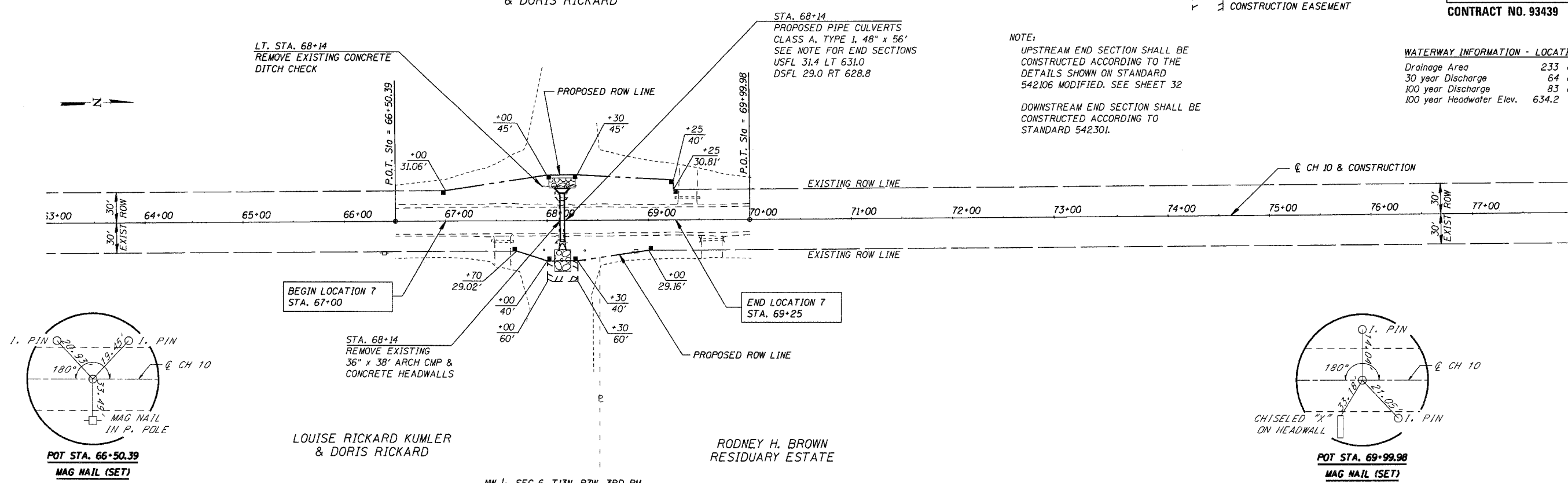
INDICATES LIMITS OF TEMPORARY
CONSTRUCTION EASEMENT

WATERWAY INFORMATION - LOCATION 7
 Drainage Area 233 acres
 30 year Discharge 64 c.f.s.
 100 year Discharge 83 c.f.s.
 100 year Headwater Elev. 634.2

NOTE:
 UPSTREAM END SECTION SHALL BE
 CONSTRUCTED ACCORDING TO THE
 DETAILS SHOWN ON STANDARD
 542106 MODIFIED. SEE SHEET 32
 DOWNSTREAM END SECTION SHALL BE
 CONSTRUCTED ACCORDING TO
 STANDARD 542301.

DATE	
BY	
PLANNED	
NOTED	
NO.	

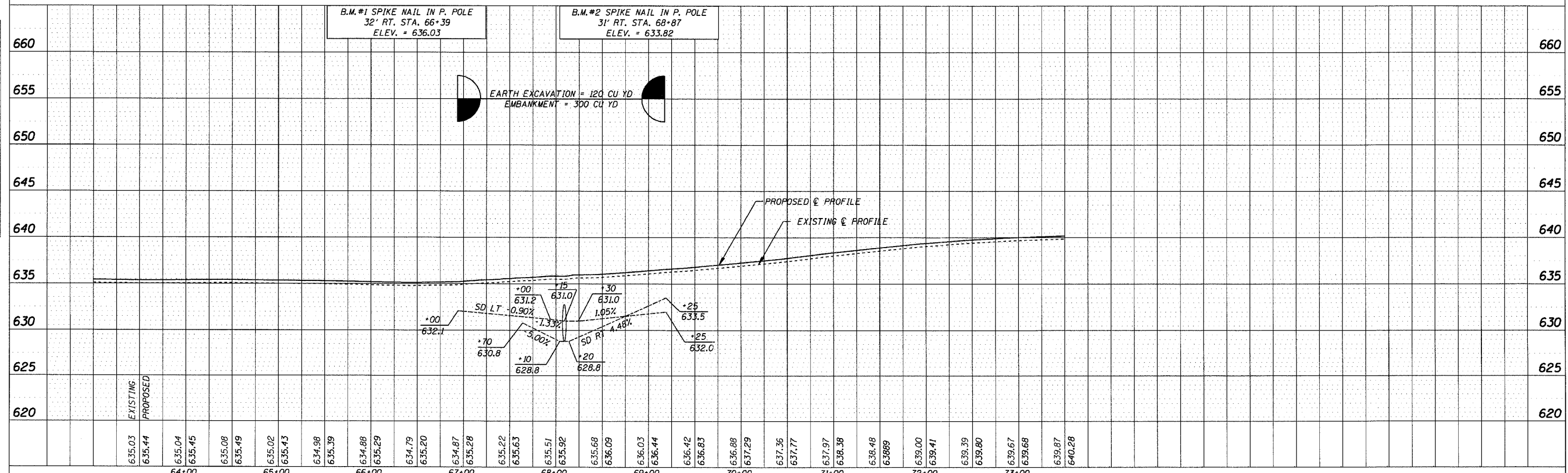
DATE	
BY	
PROFILING	
GRADES CHECKED	
STRUCTURE NOTATIONS CHECKED	
NO.	



LOUISE RICKARD KUMLER
& DORIS RICKARD

RODNEY H. BROWN
RESIDUARY ESTATE

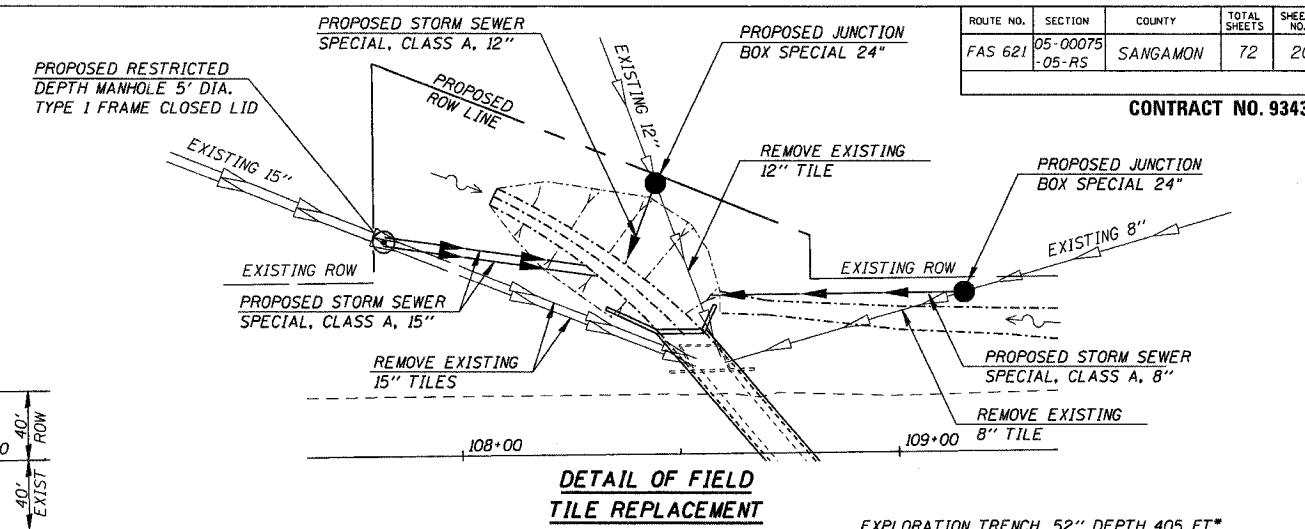
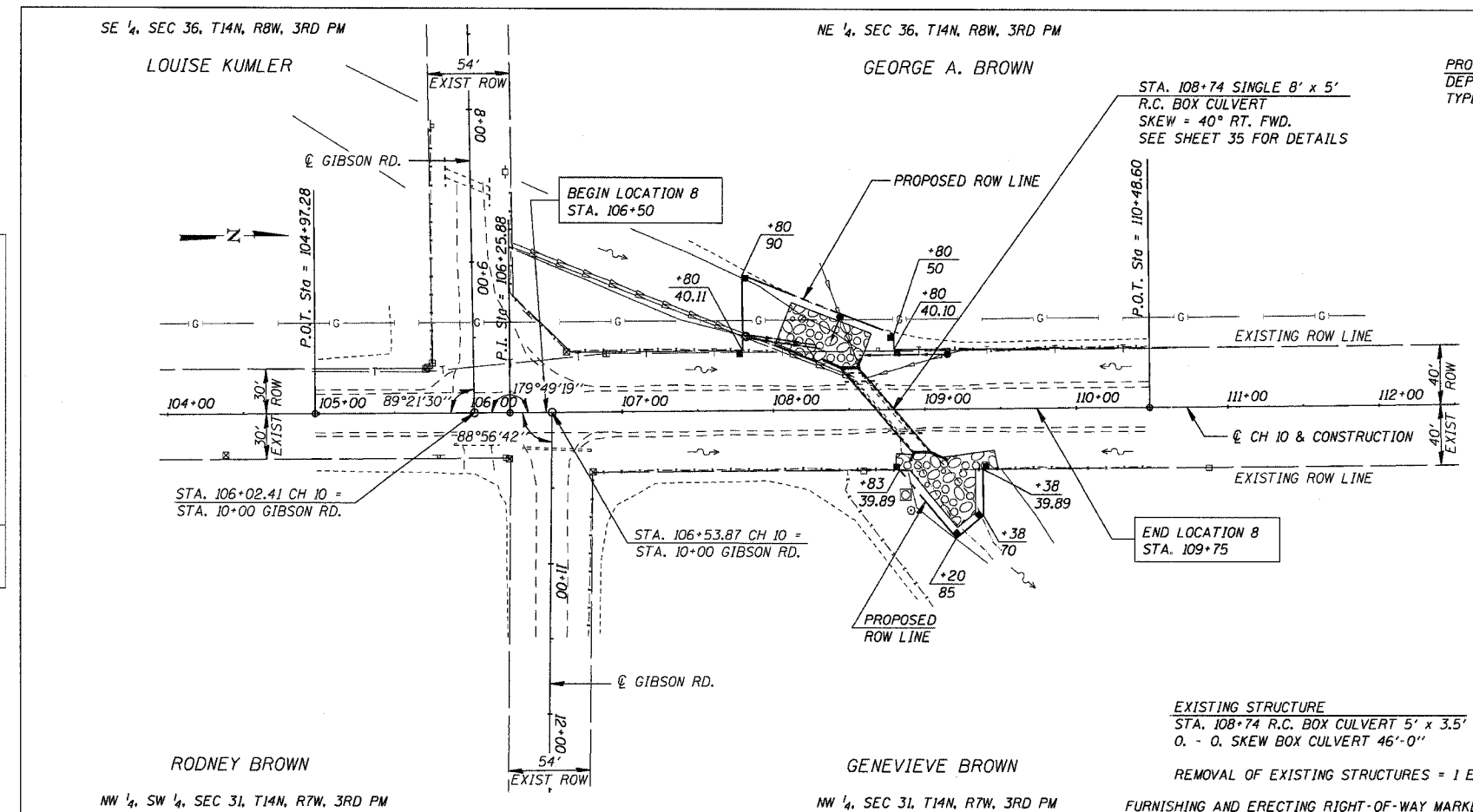
NW 1/4, SEC 6, T13N, R7W, 3RD PM



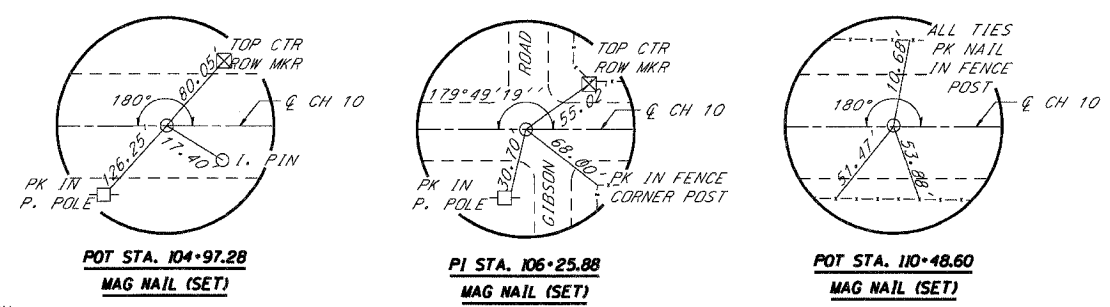
LOCATION 7 - CH 10 STA. 64+00 TO STA. 78+00

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 621	05-00075 -05-R5	SANGAMON	72	20

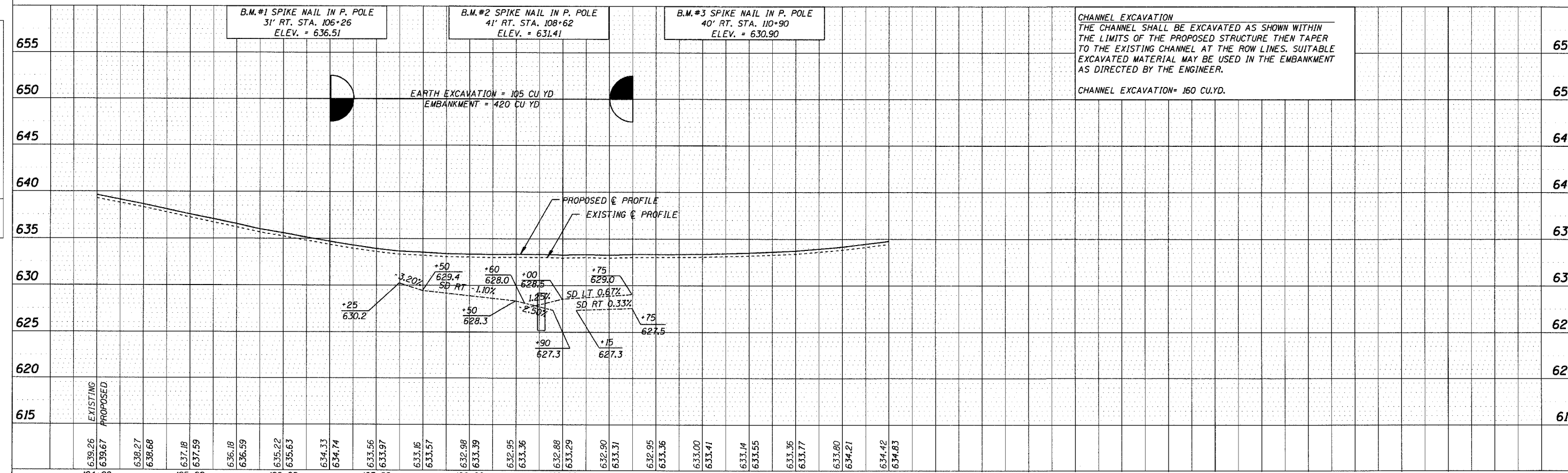
CONTRACT NO. 93439



EXPLORATION TRENCH, 52" DEPTH 405 FT*
* INCLUDES QUANTITY TO REMOVE EXISTING TILES



EXISTING STRUCTURE
STA. 108+74 R.C. BOX CULVERT 5' x 3.5'
0 - 0 SKEW BOX CULVERT 46'-0"
REMOVAL OF EXISTING STRUCTURES = 1 EACH
FURNISHING AND ERECTING RIGHT-OF-WAY MARKERS 8 EACH



CHANNEL EXCAVATION
THE CHANNEL SHALL BE EXCAVATED AS SHOWN WITHIN THE LIMITS OF THE PROPOSED STRUCTURE THEN TAPER TO THE EXISTING CHANNEL AT THE ROW LINES. SUITABLE EXCAVATED MATERIAL MAY BE USED IN THE EMBANKMENT AS DIRECTED BY THE ENGINEER.
CHANNEL EXCAVATION = 160 CU.YD.

LOCATION 8 - CH 10 STA. 104+00 TO STA. 112+00

PLAN	DATE
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CHECKED: _____	
NO. _____	

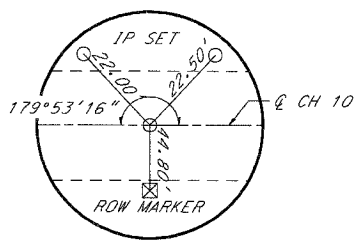
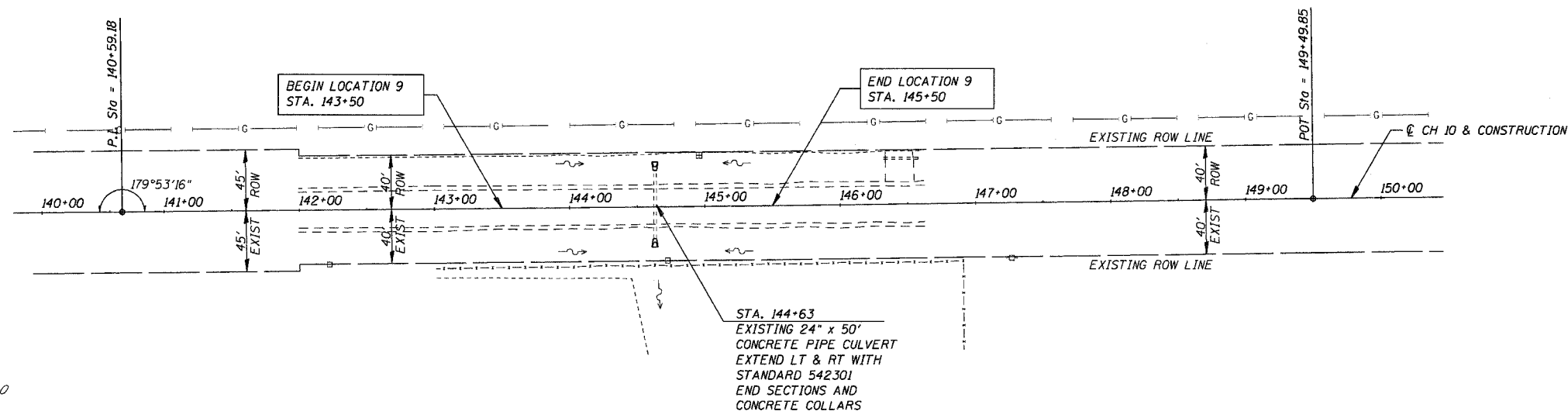
PROFILE	DATE
BY: _____	DATE: _____
CHECKED: _____	
NO. _____	

SE 1/4, SEC 25, T14N, R8W, 3RD PM

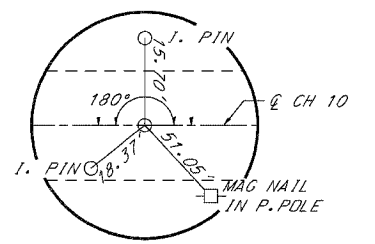
LOUIS WERRIES

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 621	05-00075 -05-R5	SANGAMON	72	21

CONTRACT NO. 93439



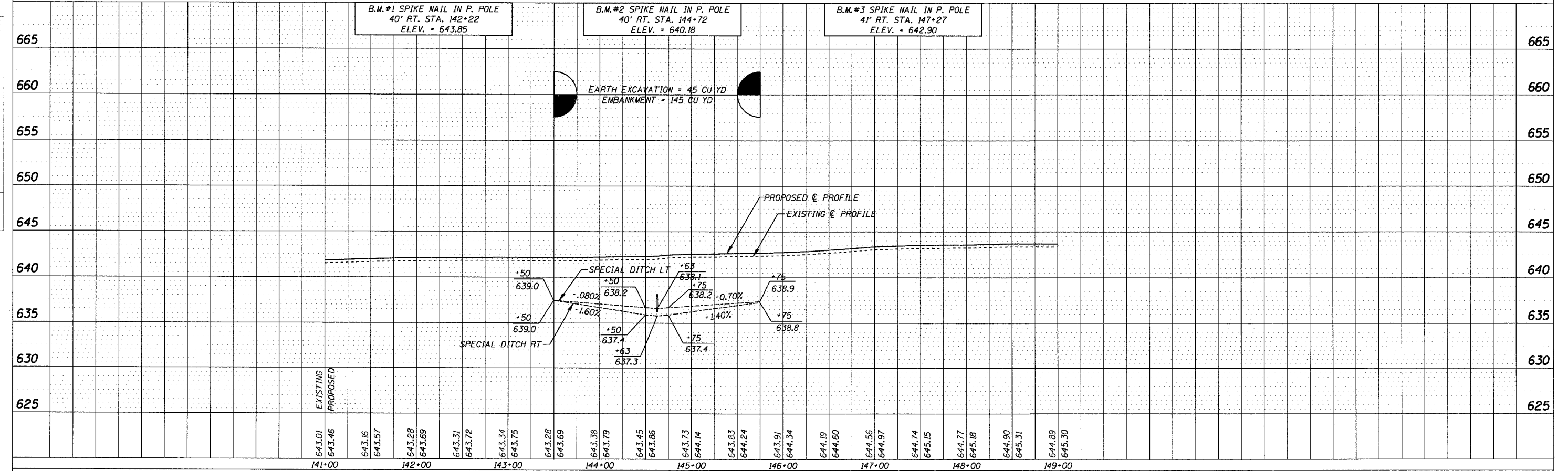
PI STA. 140+59.18
MAG NAIL (FOUND-FLUSH)



POT STA. 149+49.85
MAG NAIL (SET)

RODNEY BROWN

SW 1/4, SW 1/4, SEC 30, T14N, R7W, 3RD PM



LOCATION 9 - CH 10 STA. 140+00 TO STA. 154+00

DATE	
BY	
PLAN	
SURVEYED	
PLOTTED	
NOTED	
REVISIONS	
NO. OF WAY CHECKED	
ADD. FILE NAME	
NO.	

DATE	
BY	
PROFILE	
SURVEYED	
PLOTTED	
NOTED	
REVISIONS	
NO. OF WAY CHECKED	
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NO.	

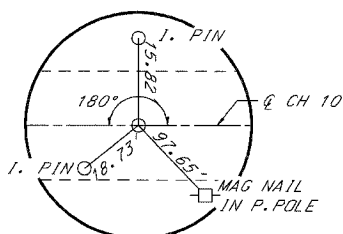
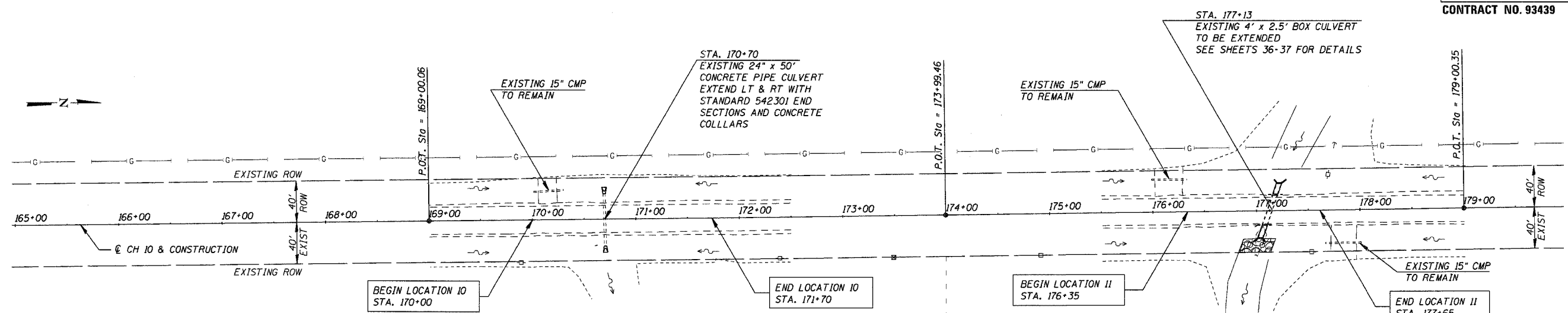
NE 1/4, SEC 25, T14N, R8W, 3RD PM

ROBERT JOHNSON

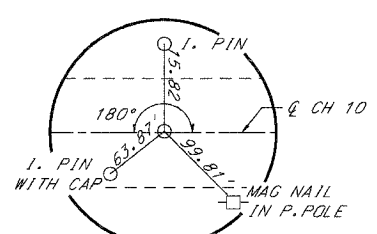
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 621	05-00075 -05-RS	SANGAMON	72	22

CONTRACT NO. 93439

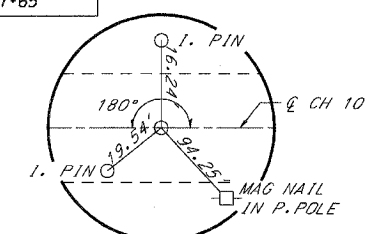
PLAN
SURVEYED BY
PLOTTED BY
CHECKED BY
NOTE BOOK NO.
FILE NAME



POT STA. 169+00.06
SET MAG NAIL



POT STA. 173+99.46
SET MAG NAIL



POT STA. 179+00.35
SET MAG NAIL

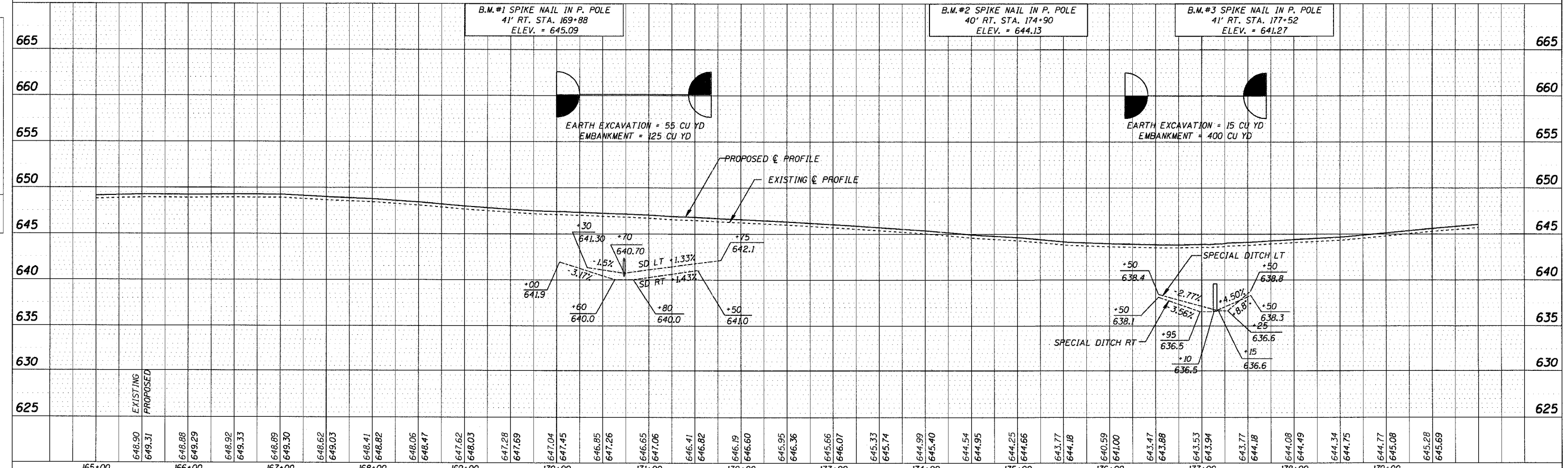
LOUIS WERRIES

SW 1/4, NW 1/4, SEC 30, T14N, R7W, 3RD PM

CHARLES ROBBINS

NW 1/4, NW 1/4, SEC 30, T14N, R7W, 3RD PM

PROFILE
SURVEYED BY
PLOTTED BY
CHECKED BY
NOTE BOOK NO.
STRUCTURE NOTATION CORD

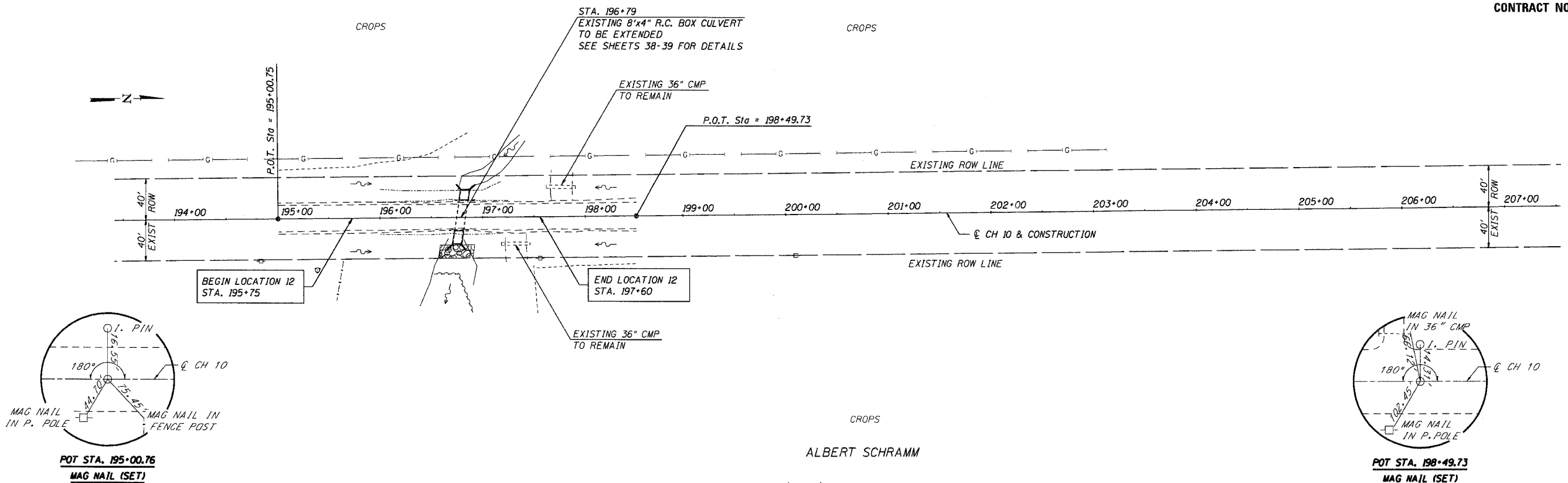


LOCATION 10 & 11 - CH 10 STA. 165+00 TO STA. 179+00

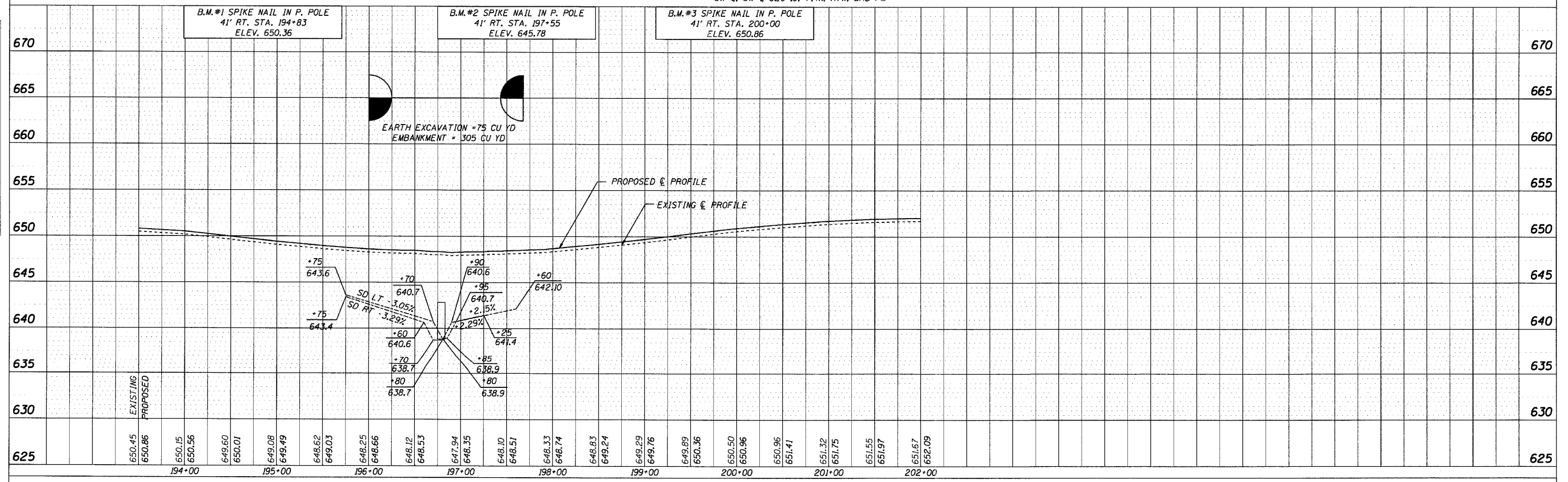
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 621	05-00075-05-RS	SANGAMON	72	23

CONTRACT NO. 93439

DATE	BY	SURVEYED	ALIGNED	CHECKED	PAID FILE
PLAN	NO.	NO.	NO.	NO.	NO.



DATE	BY	SURVEYED	GRADES	CHECKED	BLANK	NOTATION	CPND
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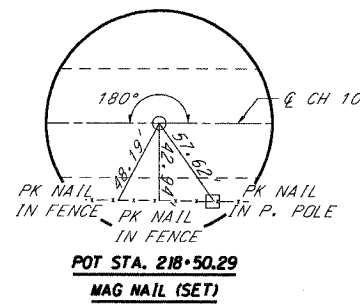
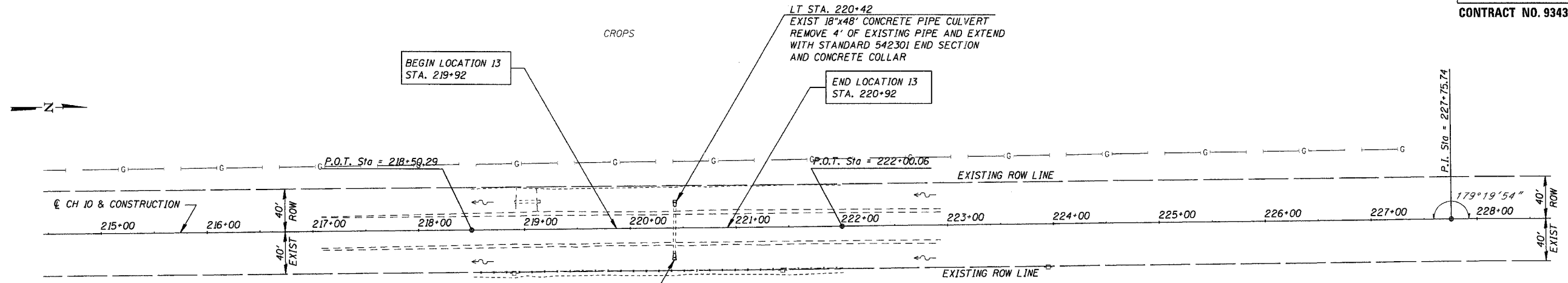


NE 1/4, SEC 24, T14N, R8W, 3RD PM

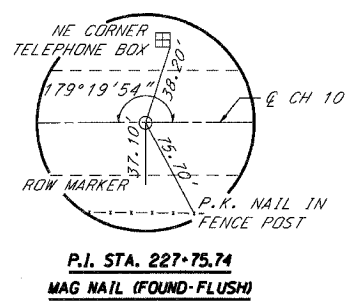
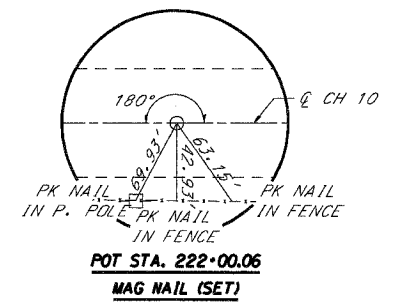
JANET KELLY

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 621	05-00075 -05-RS	SANGAMON	72	24

CONTRACT NO. 93439



STA. 220+42
EXISTING 18"x48" CONCRETE PIPE CULVERT
EXTEND ON RIGHT WITH STANDARD 542301
END SECTION AND CONCRETE COLLAR

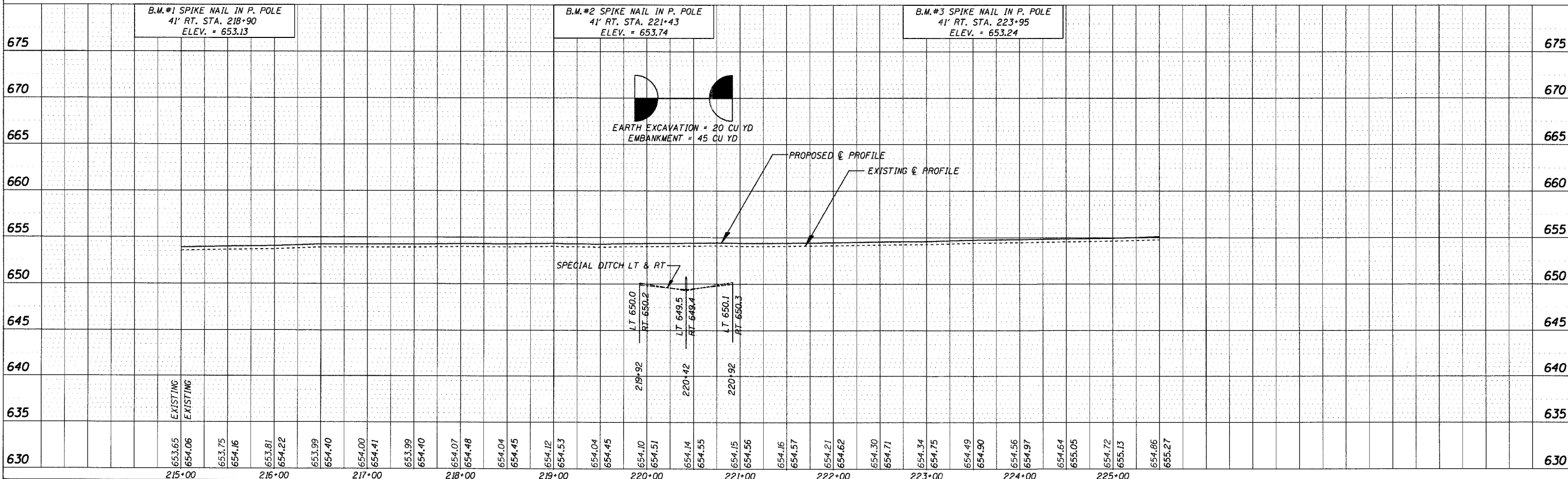


BRUCE BROWN
SW 1/4, NW 1/4, SEC19, T14N, R7W, 3RD PM

B.M.#1 SPIKE NAIL IN P. POLE
41' RT. STA. 218+90
ELEV. = 653.13

B.M.#2 SPIKE NAIL IN P. POLE
41' RT. STA. 221+43
ELEV. = 653.74

B.M.#3 SPIKE NAIL IN P. POLE
41' RT. STA. 223+95
ELEV. = 653.24



LOCATION 13 - CH 10 STA. 215+00 TO STA. 229+00

PLAN	DATE
SURVEYED	BY
PLOTTED	BY
NOTE BOOK	NO.
PAID FILE NAME	

PROFILE	DATE
SURVEYED	BY
PLOTTED	BY
NOTE BOOK	NO.
STRUCTURE NOTATION CHFD	

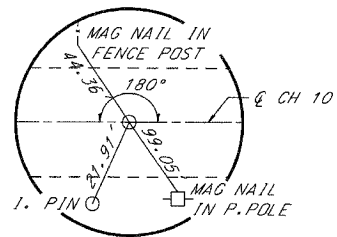
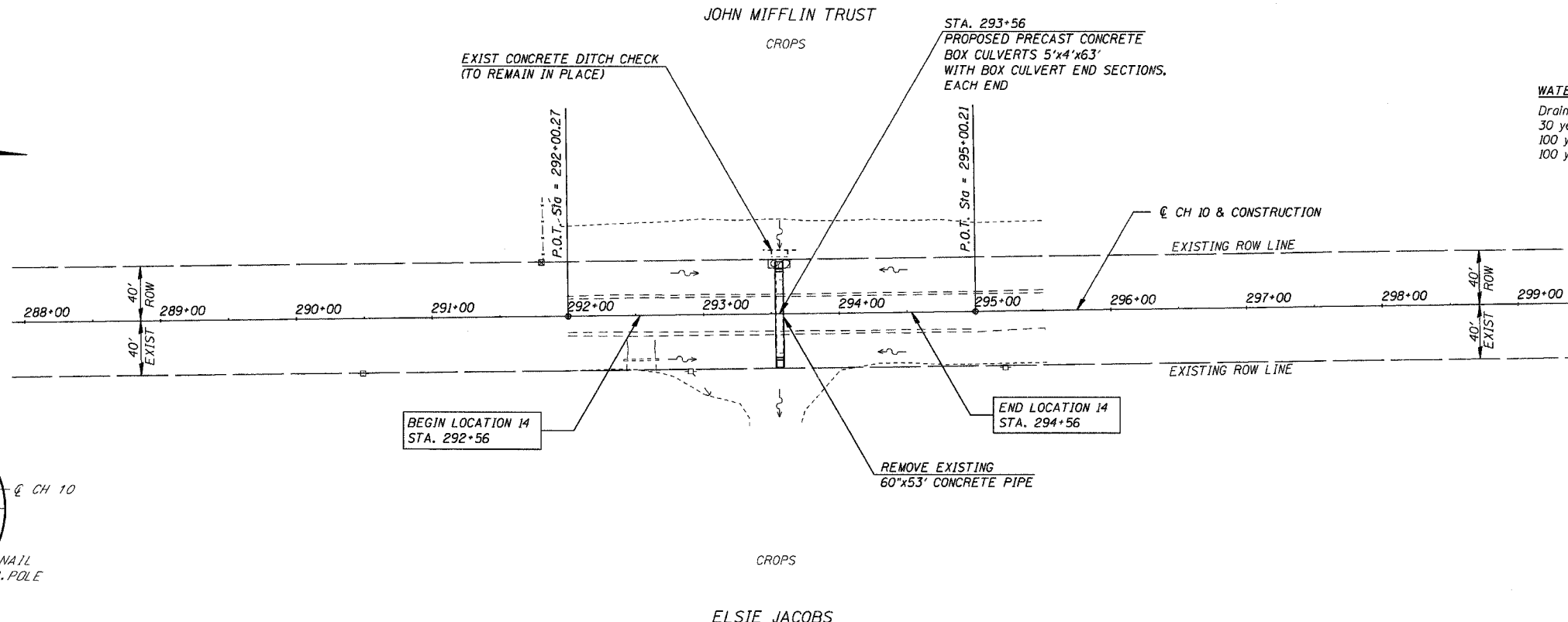
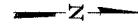
SE 1/4, SE 1/4, SEC 12, T14N, R8W, 3RD PM

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 621	05-00075-05-RS	SANGAMON	72	25

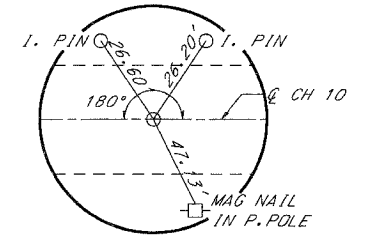
CONTRACT NO. 93439

WATERWAY INFORMATION - LOCATION 14

Drainage Area	200 acres
30 year Discharge	80 c.f.s.
100 year Discharge	104 c.f.s.
100 year Headwater Elev.	640.9

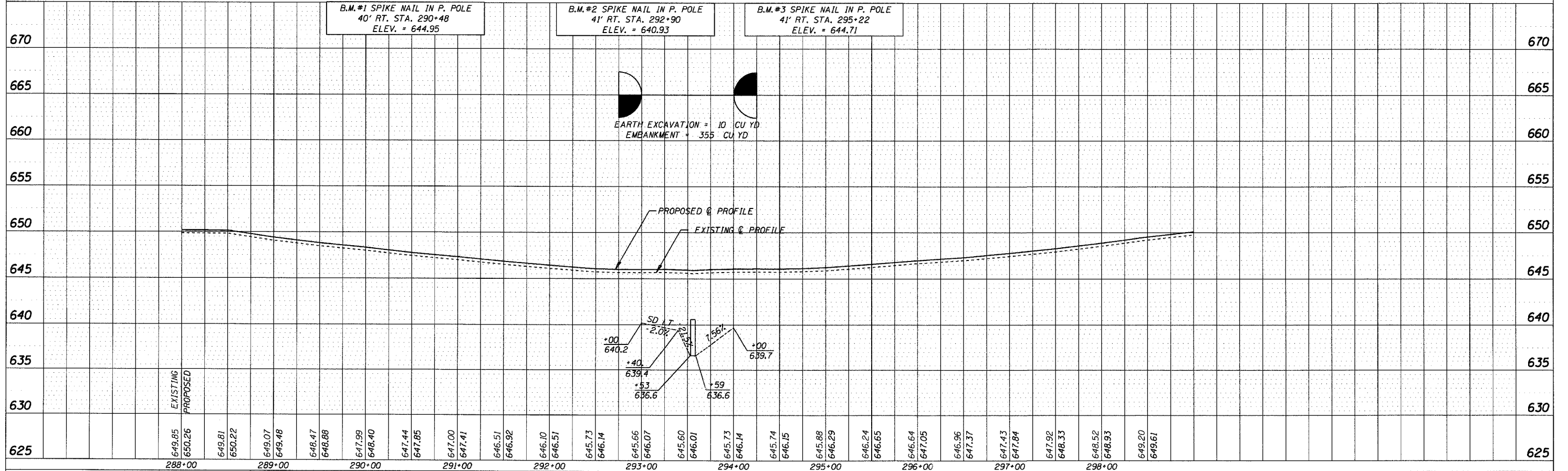


POT STA. 292+00.27
MAG NAIL (SET)



POT STA. 295+00.22
P.K. NAIL (SET)

SW 1/4, SW 1/4, SEC 7, T14N, R7W, 3RD PM



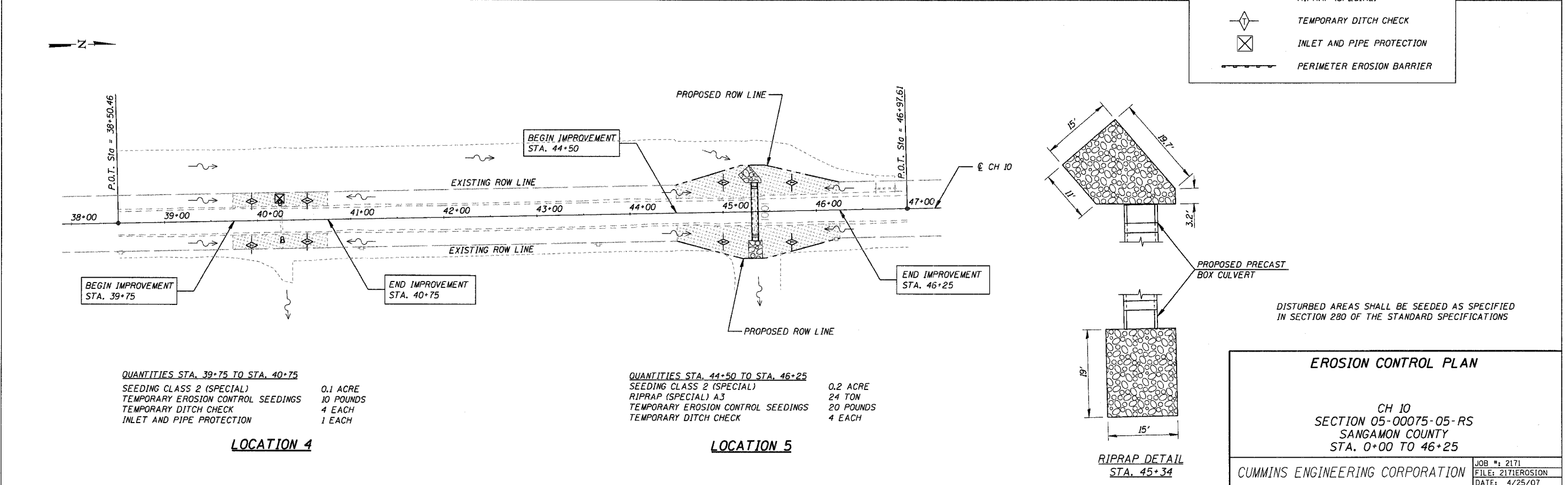
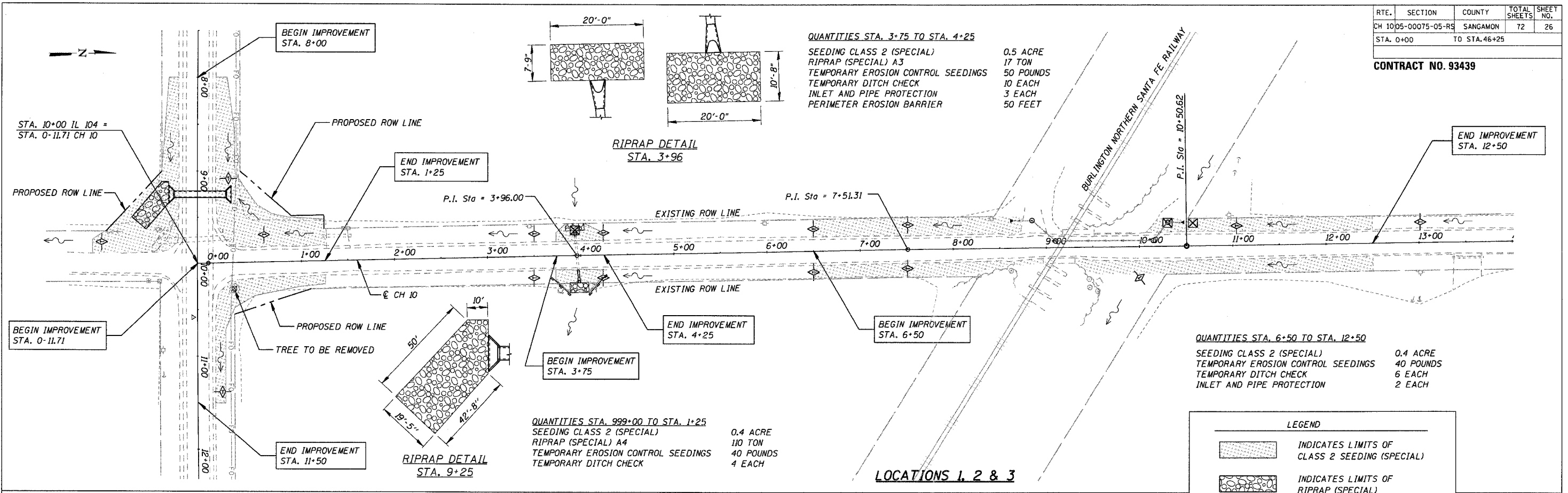
LOCATION 14 - CH 10 STA. 288+00 TO STA. 299+00

DATE	BY

DATE	BY

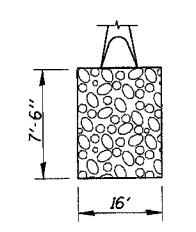
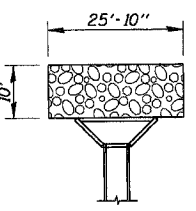
RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 1005-00075-05-RS		SANGAMON	72	26
STA. 0+00 TO STA. 46+25				

CONTRACT NO. 93439



RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 10	05-00075-05-RS	SANGAMON	72	27
STA. 51+00 TO STA. 111+00				

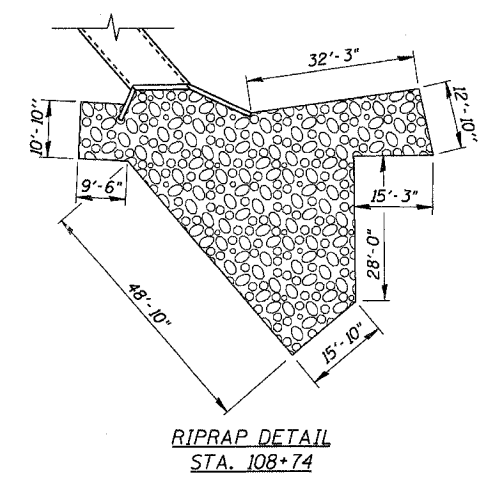
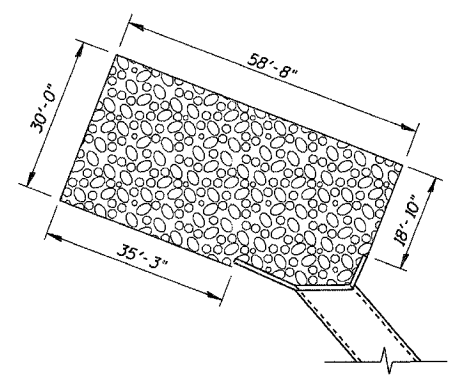
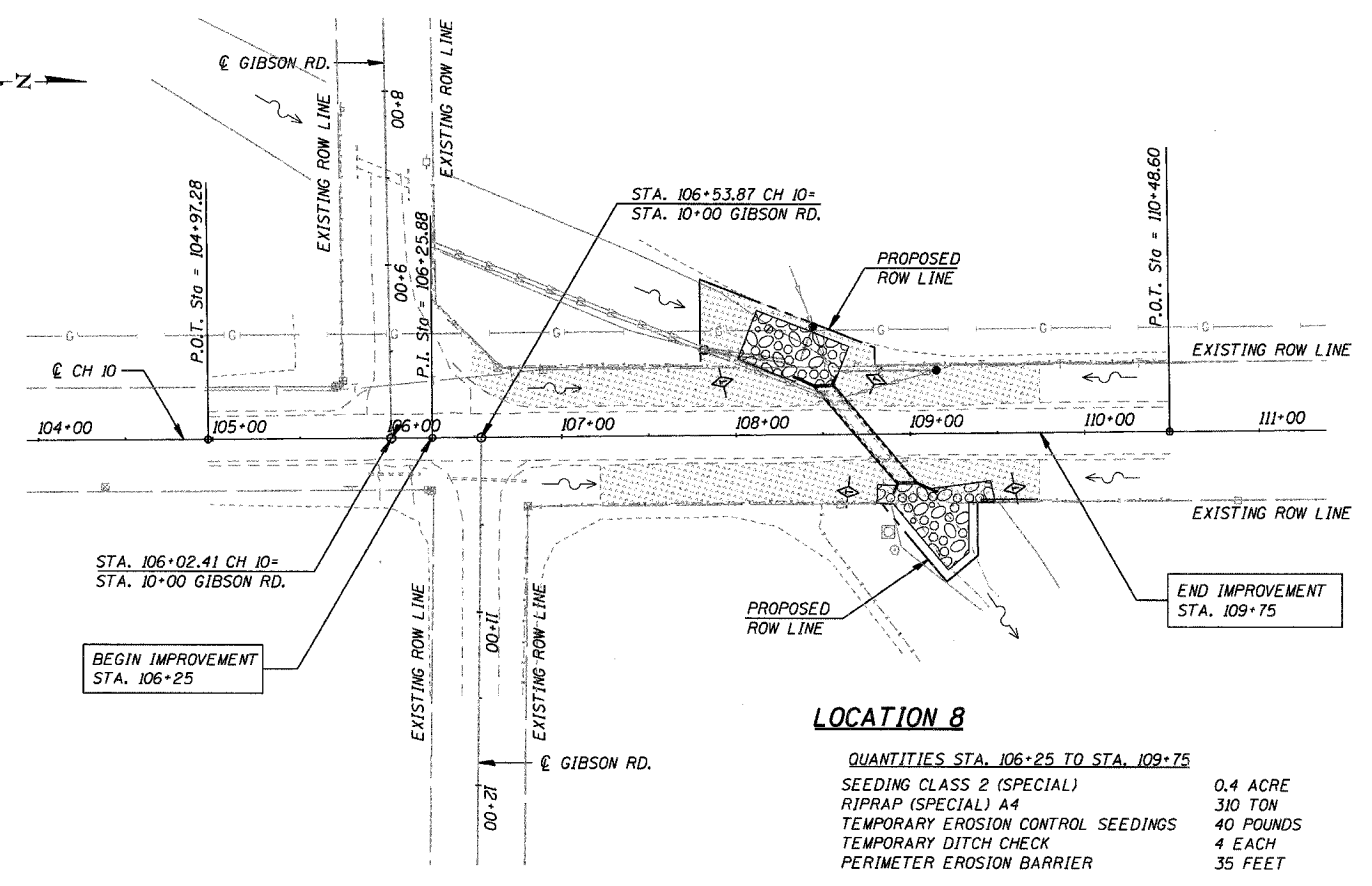
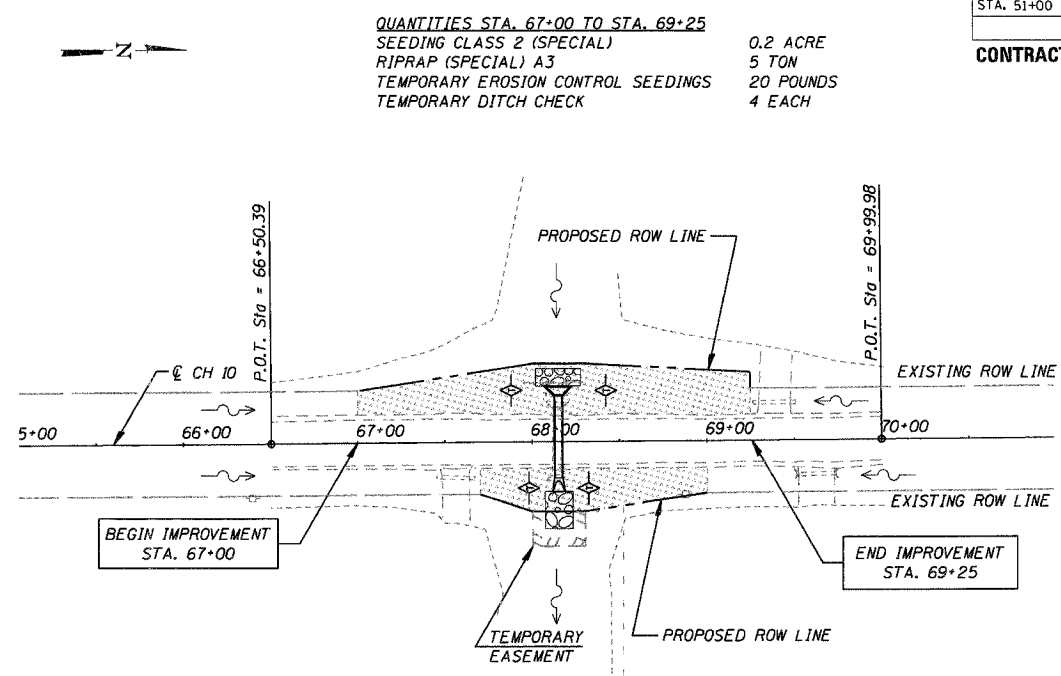
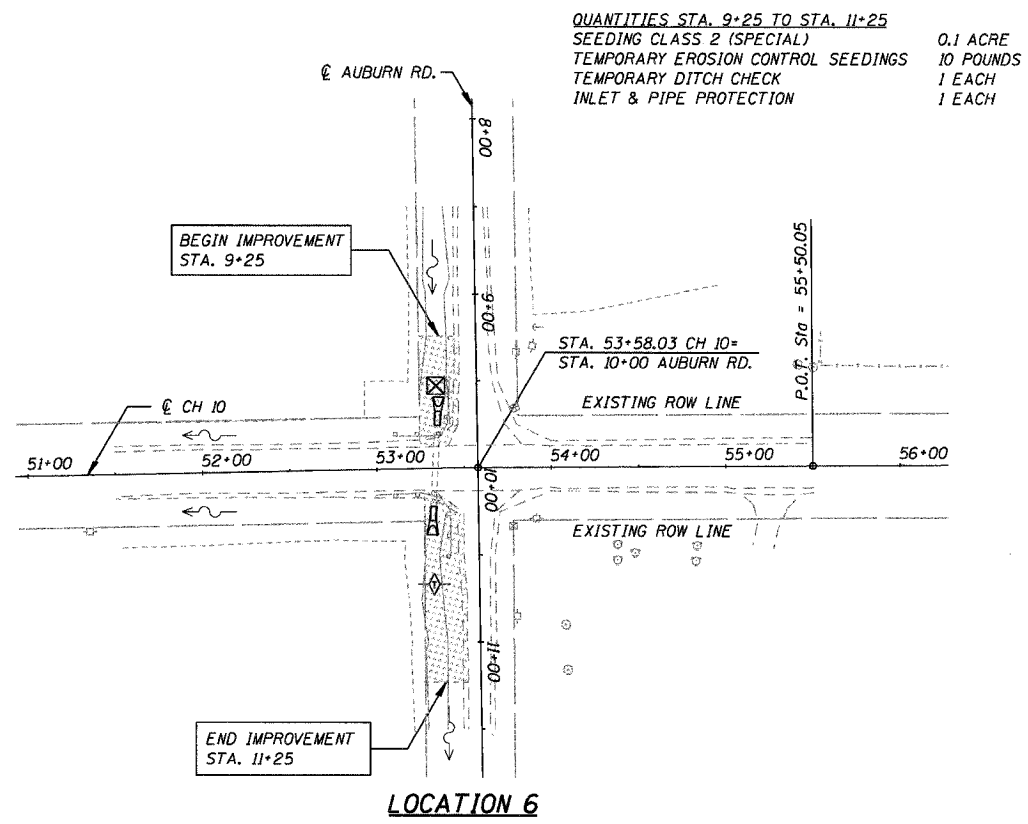
CONTRACT NO. 93439



RIPRAP DETAIL
STA. 68+14

LEGEND

	INDICATES LIMITS OF CLASS 2 SEEDING (SPECIAL)
	INDICATES LIMITS OF RIPRAP (SPECIAL)
	TEMPORARY DITCH CHECK
	INLET AND PIPE PROTECTION
	PERIMETER EROSION BARRIER



RIPRAP DETAIL
STA. 108+74

EROSION CONTROL PLAN

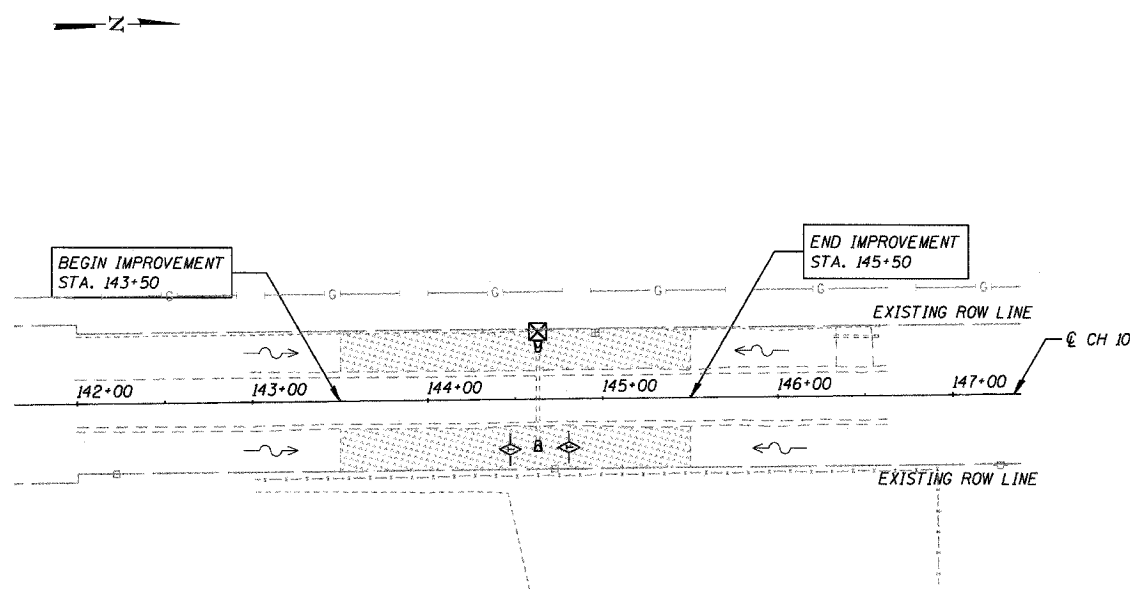
CH 10
SECTION 05-00075-05-RS
SANGAMON COUNTY
STA. 51+00 TO 111+00

CUMMINS ENGINEERING CORPORATION

JOB #: 2171
FILE: 2171EROSION
DATE: 4/25/07

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 10	05-00075-05-RS	SANGAMON	72	28
STA. 143+50 TO STA. 177+65				

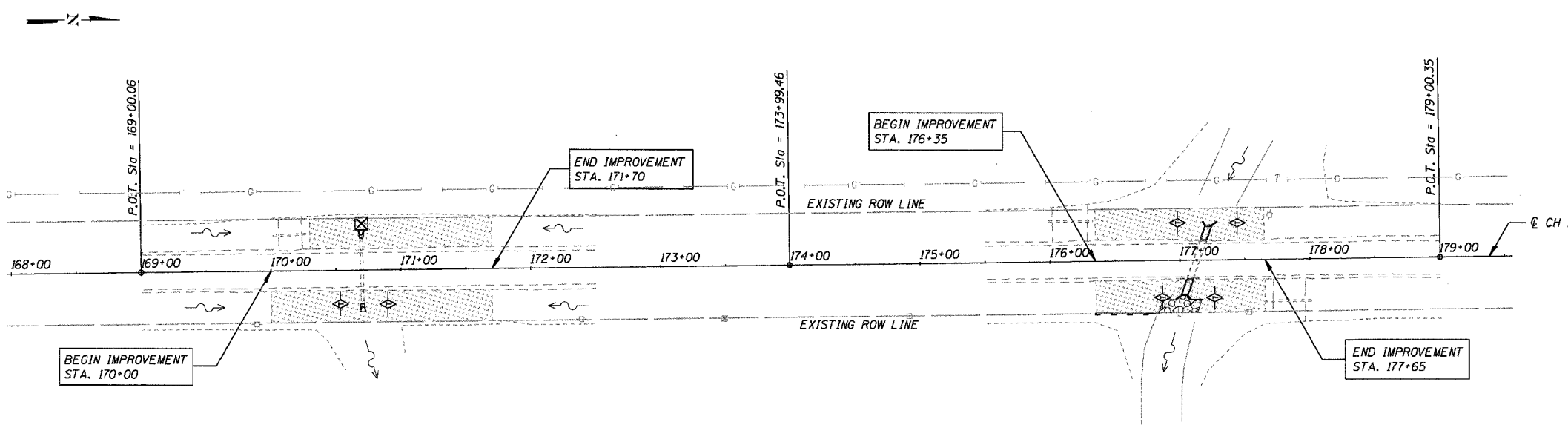
CONTRACT NO. 93439



QUANTITIES STA. 143+50 TO STA. 145+50
 SEEDING CLASS 2 (SPECIAL) 0.2 ACRE
 TEMPORARY EROSION CONTROL SEEDINGS 20 POUNDS
 TEMPORARY DITCH CHECKS 2 EACH
 INLET AND PIPE PROTECTION 1 EACH

LOCATION 9

LEGEND	
	INDICATES LIMITS OF CLASS 2 SEEDING (SPECIAL)
	INDICATES LIMITS OF RIPRAP (SPECIAL)
	TEMPORARY DITCH CHECK
	INLET AND PIPE PROTECTION
	PERIMETER EROSION BARRIER

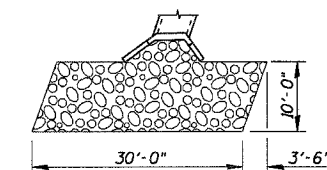


QUANTITIES STA. 170+00 TO STA. 171+70
 SEEDING CLASS 2 (SPECIAL) 0.2 ACRE
 TEMPORARY EROSION CONTROL SEEDINGS 20 POUNDS
 TEMPORARY DITCH CHECKS 2 EACH
 INLET AND PIPE PROTECTION 1 EACH

LOCATION 10

QUANTITIES STA. 176+35 TO STA. 177+65
 SEEDING CLASS 2 (SPECIAL) 0.1 ACRE
 RIPRAP (SPECIAL) A4 28 TONS
 TEMPORARY EROSION CONTROL SEEDINGS 10 POUNDS
 TEMPORARY DITCH CHECKS 4 EACH
 PERIMETER EROSION BARRIER 50 FEET

LOCATION 11



RIPRAP DETAIL
 STA. 177+13

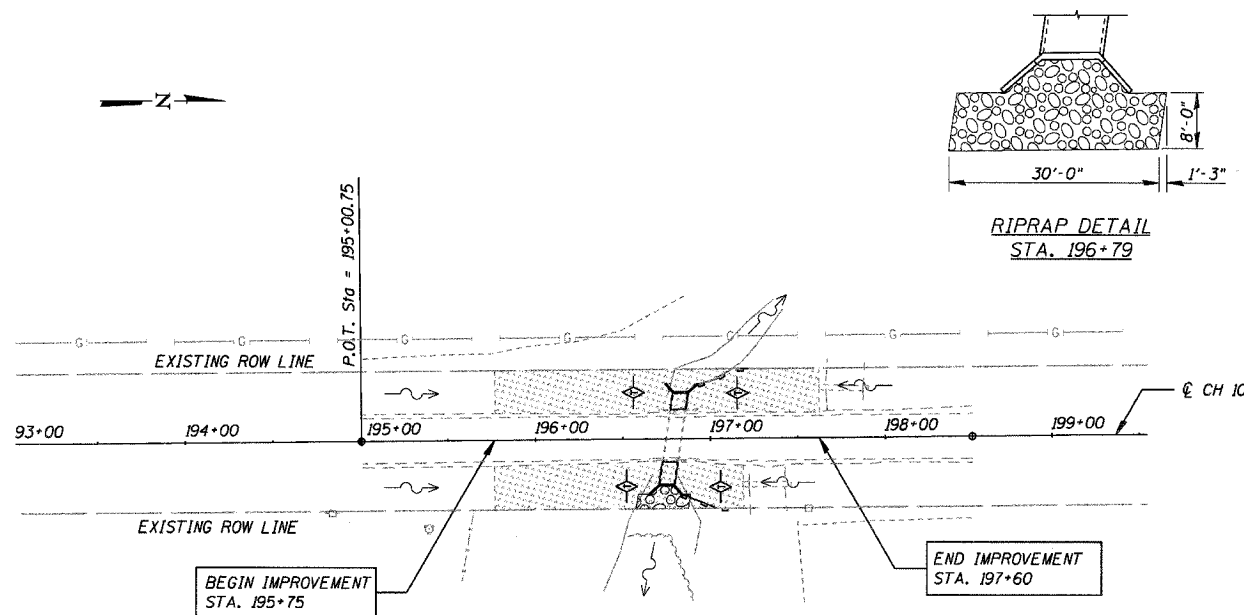
EROSION CONTROL PLAN

CH 10
 SECTION 05-00075-05-RS
 SANGAMON COUNTY
 STA. 143+50 TO 177+65

CUMMINS ENGINEERING CORPORATION
 JOB #: 2171
 FILE: 2171EROSION
 DATE: 4/25/07

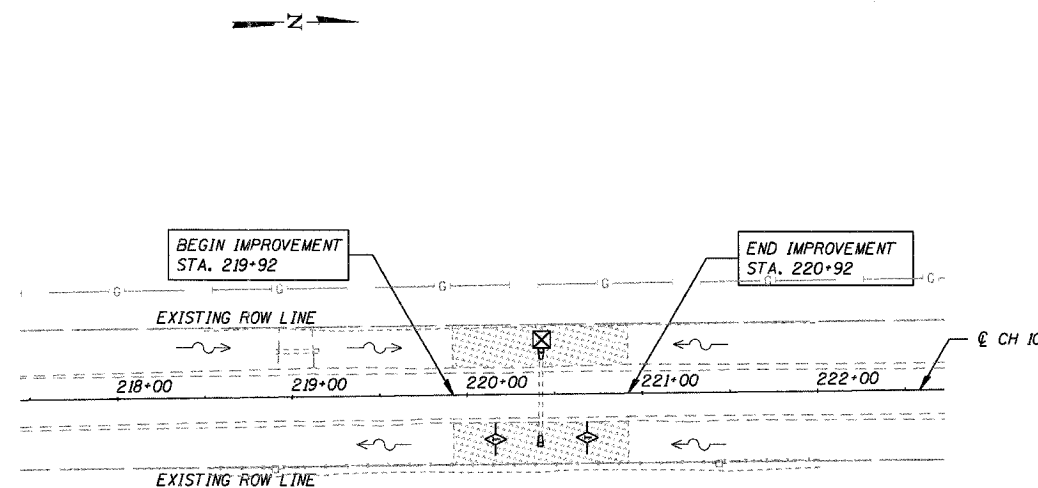
RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 10	05-00075-05-RS	SANGAMON	72	29
STA. 195+75 TO STA. 294+56				

CONTRACT NO. 93439



LOCATION 12

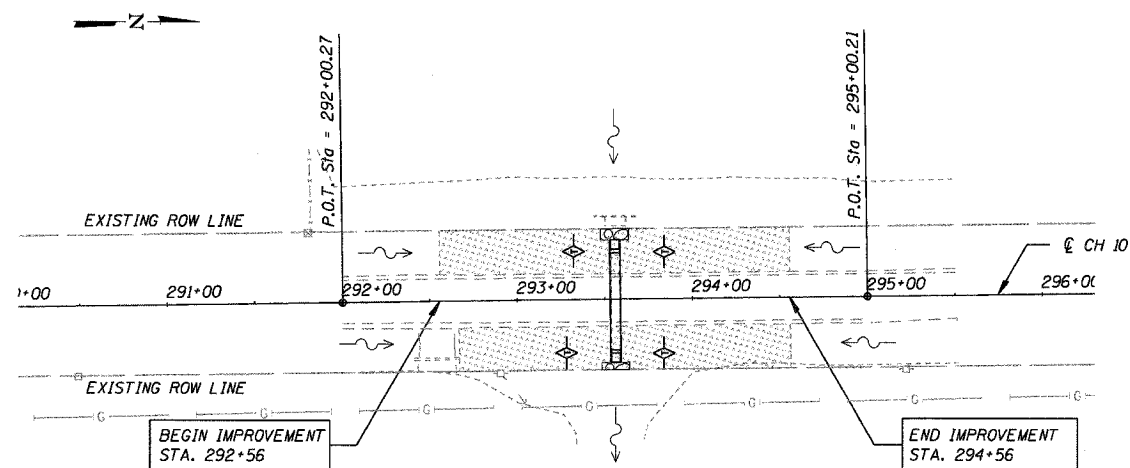
QUANTITIES STA. 195+75 TO STA. 197+60
 SEEDING CLASS 2 (SPECIAL) 0.2 ACRE
 RIPRAP (SPECIAL) A4 28 TONS
 TEMPORARY EROSION CONTROL SEEDINGS 20 POUNDS
 TEMPORARY DITCH CHECKS 4 EACH
 PERIMETER EROSION BARRIER 80 FEET



LOCATION 13

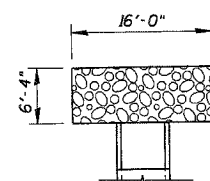
QUANTITIES STA. 219+92 TO STA. 220+92
 SEEDING CLASS 2 (SPECIAL) 0.1 ACRE
 TEMPORARY EROSION CONTROL SEEDINGS 10 POUNDS
 TEMPORARY DITCH CHECKS 1 EACH
 INLET AND PIPE PROTECTION 1 EACH

LEGEND	
	INDICATES LIMITS OF CLASS 2 SEEDING (SPECIAL)
	INDICATES LIMITS OF RIPRAP (SPECIAL)
	TEMPORARY DITCH CHECK
	INLET AND PIPE PROTECTION
	PERIMETER EROSION BARRIER



LOCATION 14

QUANTITIES STA. 292+56 TO STA. 294+56
 SEEDING CLASS 2 (SPECIAL) 0.2 ACRE
 RIPRAP (SPECIAL) A3 15 TON
 TEMPORARY EROSION CONTROL SEEDINGS 20 POUNDS
 TEMPORARY DITCH CHECKS 4 EACH



RIPRAP DETAIL
STA. 293+56

EROSION CONTROL PLAN

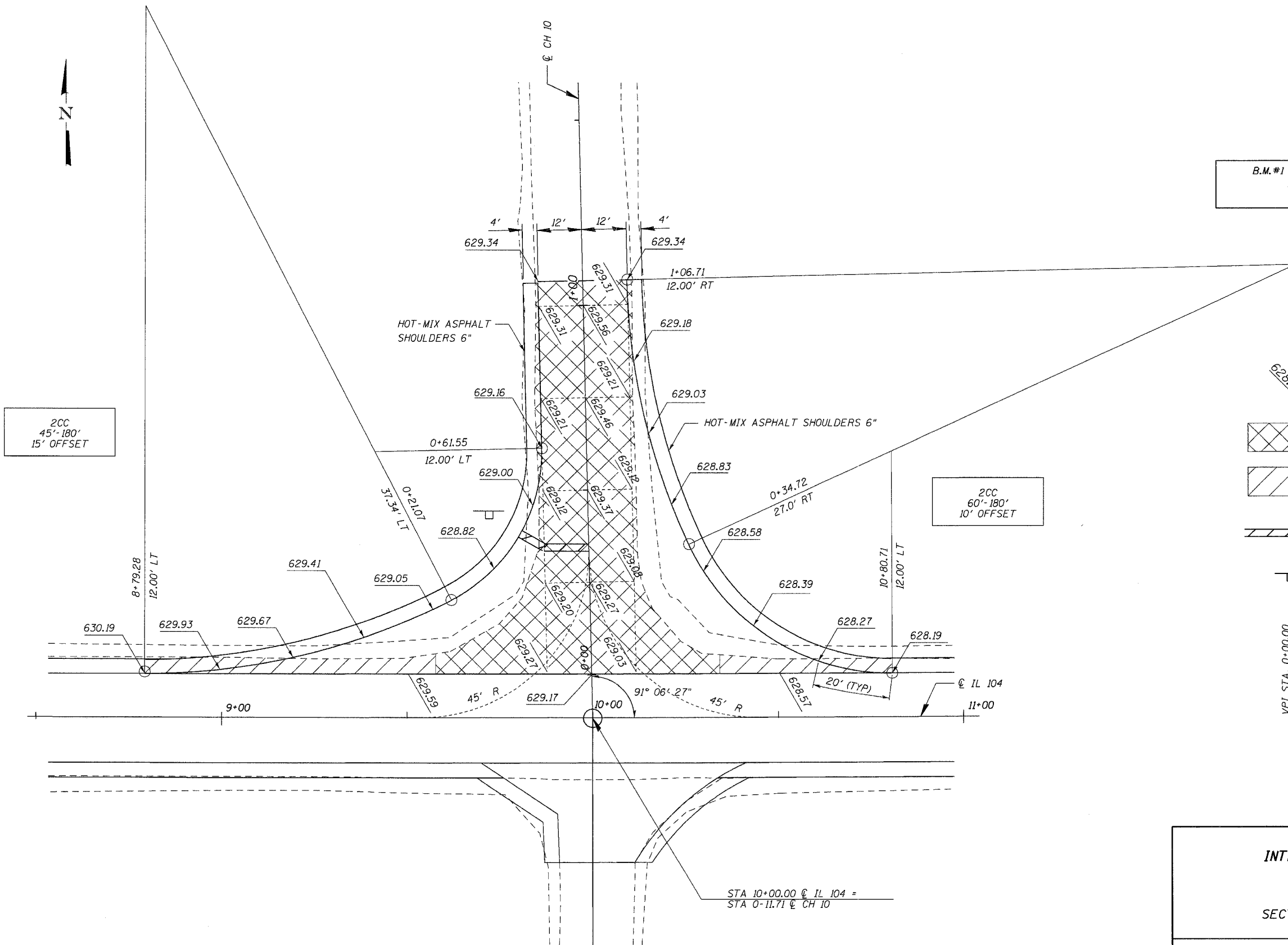
CH 10
 SECTION 05-00075-05-RS
 SANGAMON COUNTY
 STA. 195+75 TO 294+56

CUMMINS ENGINEERING CORPORATION

JOB #: 2171
 FILE: 2171EROSION
 DATE: 4/25/07

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 621	#	SANGAMON	72	30

* 05-00075-05-RS
CONTRACT NO. 93439

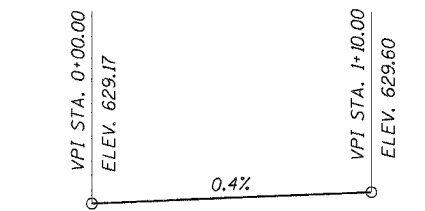


B.M. #1 SPIKE NAIL IN P. POLE
 36' LT STA. 1+41
 ELEV. 631.06

2CC
 45'-180'
 15' OFFSET

2CC
 60'-180'
 10' OFFSET

- LEGEND**
- 628.60 INDICATES PROPOSED TOP OF PAVEMENT ELEVATION
 - INDICATES LIMITS OF PAVEMENT REMOVAL
 - INDICATES LIMITS OF PAVED SHOULDER REMOVAL
 - 24" STOP BAR (BY OTHERS)
 - STOP SIGN (BY OTHERS)



PROFILE GRADE
 (ALONG ϕ CH 10)

STA 10+00.00 ϕ IL 104 =
 STA 0-11.71 ϕ CH 10

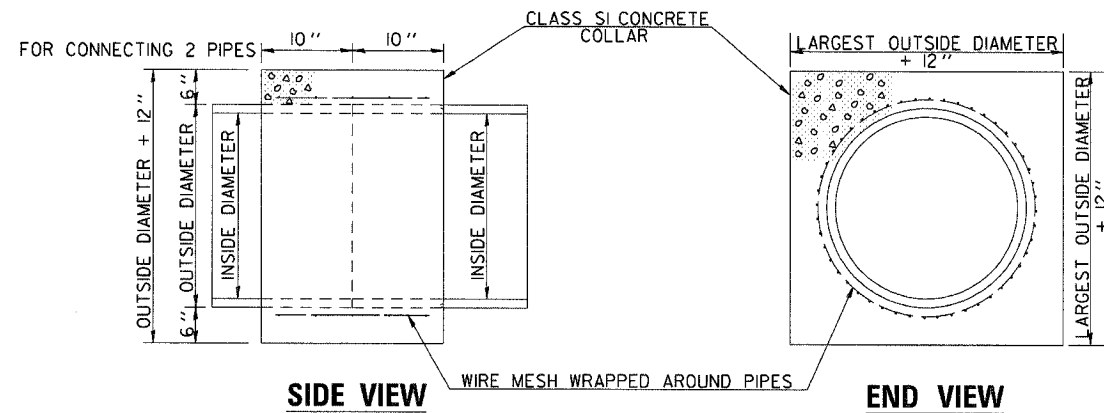
**IL 104/CH 10
 INTERSECTION DETAIL**

FAS 621 (CH 10)
 SECTION 05-00075-05-RS
 SANGAMON COUNTY

CUMMINS ENGINEERING CORPORATION	JOB #: 2171
	FILE: 2171INT
	DATE: 4/25/07

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 621	05-00075-05-RS	SANGAMON	72	31

CONTRACT NO. 93439

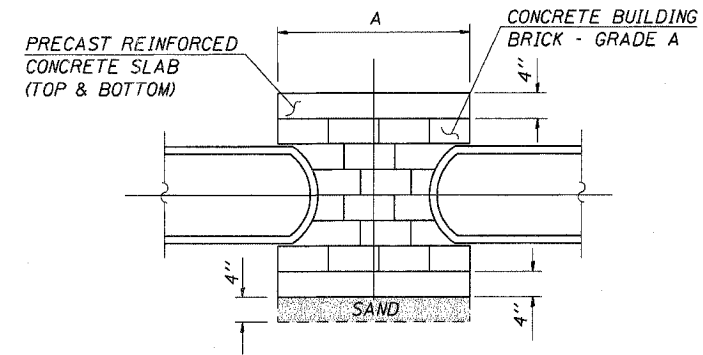


DETAIL OF CONCRETE COLLARS

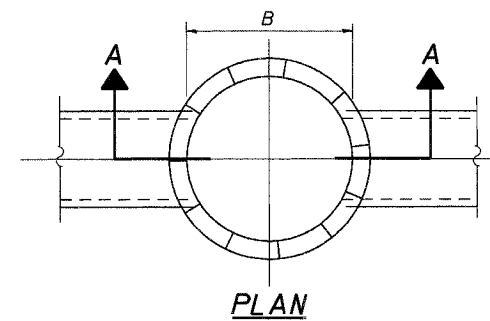
QUANTITIES FOR METAL PIPES		QUANTITIES FOR CONCRETE PIPES	
INSIDE DIAMETER OF PIPE	ESTIMATED CLASS SI CONCRETE REQUIRED (20" WIDTH)	INSIDE DIAMETER OF PIPE	ESTIMATED CLASS SI CONCRETE REQUIRED (20" WIDTH)
(in)	(yd ³)	(in)	(yd ³)
4	0.12	4	0.14
6	0.14	6	0.16
8	0.16	8	0.19
10	0.19	10	0.22
12	0.21	12	0.25
15	0.25	15	0.30
18	0.29	18	0.35
24	0.38	24	0.45
30	0.47	30	0.57
36	0.59	36	0.69
42	0.69	42	0.83
48	0.81	48	0.97
54	0.93	54	1.12
60	1.05	60	1.28

GENERAL NOTES

- CLASS SI CONCRETE SHALL BE USED THROUGHOUT.
- WHEN CONCRETE COLLARS ARE USED TO CONNECT PIPES OF DIFFERENT OUTSIDE DIAMETERS, THE CONCRETE COLLAR SHALL BE FORMED USING THE LARGEST OUTSIDE DIAMETER (SEE END VIEW).
- THE WIRE MESH SHALL WEIGH NOT LESS THAN 54#/100 SQ. FT.
- WHEN CONCRETE COLLARS ARE CONSTRUCTED ADJACENT TO AN EXISTING CONCRETE STRUCTURE (HEADWALLS, ETC.) EXPANSION BOLTS SHALL BE USED AND WILL BE PAID FOR AT THE CONTRACT UNIT PRICE, EACH, FOR EXPANSION BOLTS OF THE SIZE SPECIFIED IN THE PLANS.
- CONCRETE COLLARS WILL BE PAID FOR AT THE CONTRACT UNIT PRICE, EACH, FOR CONCRETE COLLARS INCLUDING ALL MATERIAL AND LABOR SPECIFIED TO COMPLETE THE WORK IN PLACE.
- FOR PIPE SIZES 10" AND LARGER, CONCRETE COLLARS SHALL BE REQUIRED. FOR PIPE SIZES SMALLER THAN 10", THE PROPOSED DRAINAGE PIPES MAY BE CONNECTED TO EXISTING PIPES USING PREFABRICATED, COMMERCIALY AVAILABLE COUPLERS OR CONCRETE COLLARS. COUPLERS SHALL CONSIST OF A CASING PIPE WITH FLEXIBLE TUBING BANDS AT EACH END. THE CASING PIPE SHALL COMPLETELY COVER THE JOINT AREA AND TUBING SHALL BE DRAWN TIGHT AROUND EACH PIPE WITH CORROSION AND RUST PROOF BANDS OR HOSE CLAMPS. COUPLERS WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF THE PROPOSED STORM SEWER.



SECTION A-A



PLAN

JUNCTION BOX, SPECIAL

TABLE FOR DIMENSIONS

J. BOX	A	B
24"	3'-0"	2'-0"
36"	4'-0"	3'-0"
48"	5'-0"	4'-0"

24" DIAMETER JUNCTION BOX FOR USE WITH STORM SEWERS HAVING INSIDE DIAMETERS OF 6" THROUGH 12".
 36" DIAMETER JUNCTION BOX FOR USE WITH STORM SEWERS HAVING INSIDE DIAMETERS OF 15" THROUGH 18".
 48" DIAMETER JUNCTION BOX FOR USE WITH STORM SEWERS HAVING INSIDE DIAMETER OF 21" AND 24".

THE PRECAST CONCRETE SLAB SHALL BE CONSTRUCTED OF CLASS PC CONCRETE IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF SECTION 504 OF THE STANDARD SPECIFICATIONS.

THIS WORK WILL BE PAID FOR AT THE CONTRACT BID PRICE EACH FOR JUNCTION BOX SPECIAL OF THE DIAMETER SPECIFIED.

CONCRETE COLLAR & JUNCTION BOX DETAILS

FAS 621 (CH 10)
 SECTION 05-00075-05-RS
 SANGAMON COUNTY

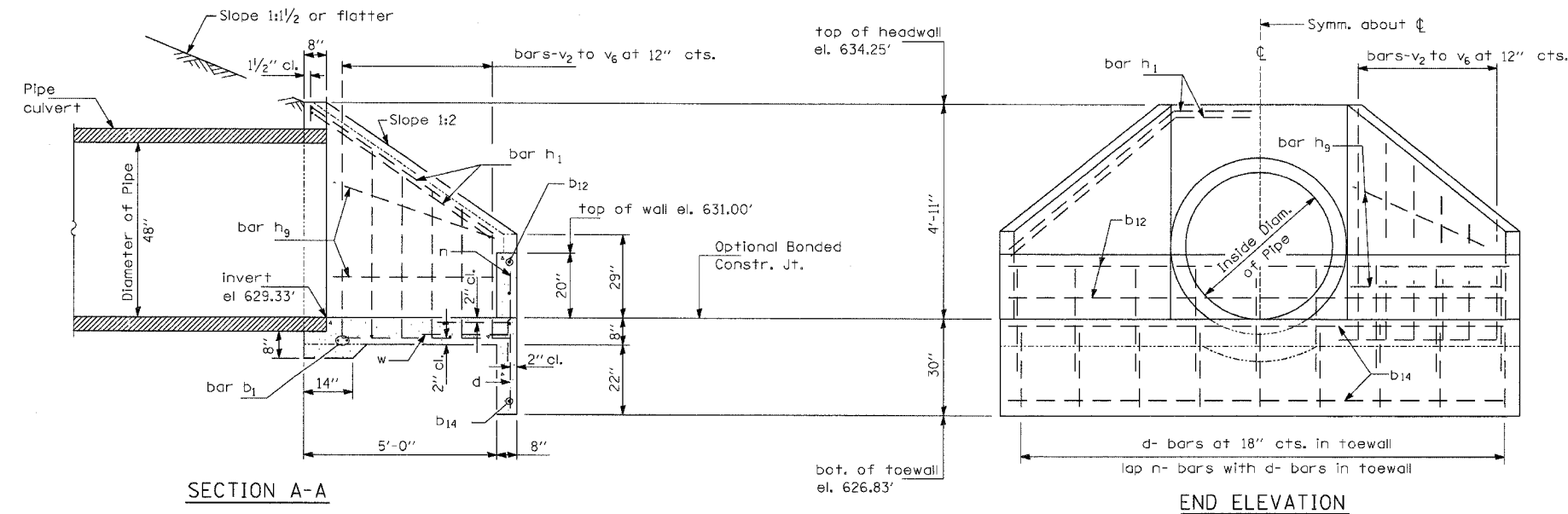
CUMMINS ENGINEERING CORPORATION
 JOB #: 2171
 FILE: 2171COLLAR
 DATE: 5/3/07

LOCATIONS 2, 4, 6, 8, 9, 10 & 13

DETAIL OF REINFORCED CONCRETE END SECTIONS FOR PIPE CULVERT 48" DIA. AT RIGHT ANGLES WITH ROADWAY

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 621	05-00075 05-RS	SANGAMON	72	32

CONTRACT NO. 93439



GENERAL NOTES

All slope ratios are expressed as units of vertical displacement to units of horizontal displacement (V:H).

This work will be paid for at the contract bid price each for CAST-IN-PLACE REINFORCED CONCRETE END SECTIONS 48"

BILL OF MATERIAL

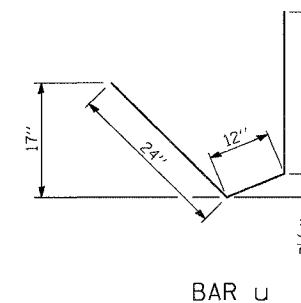
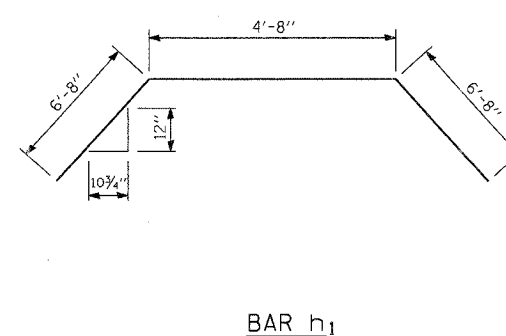
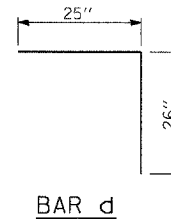
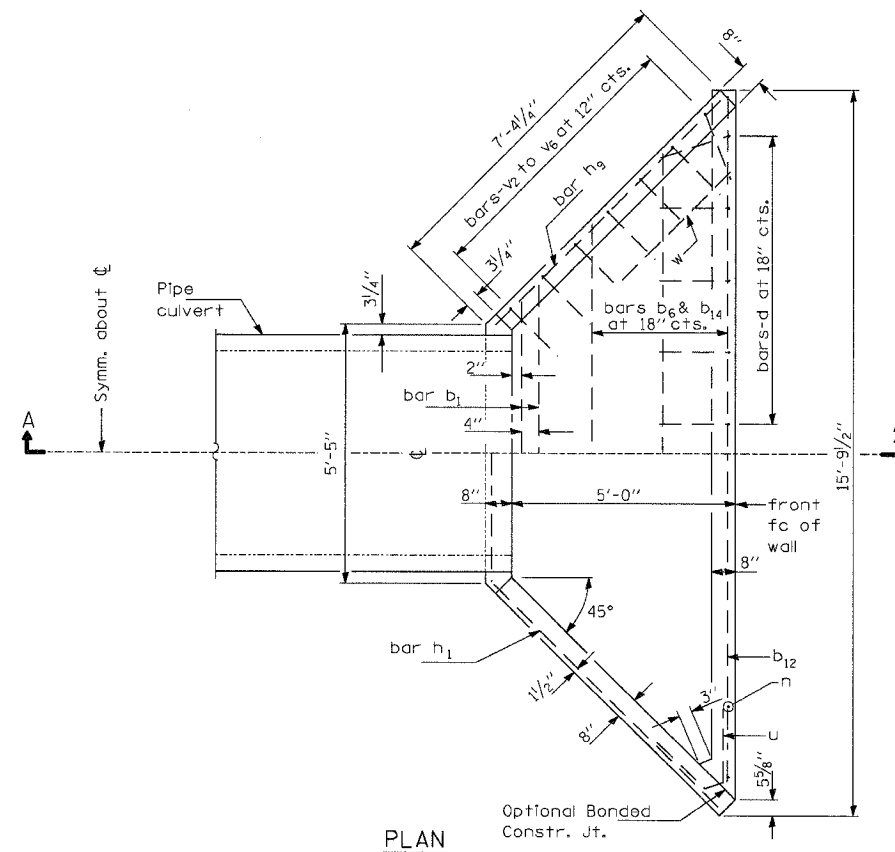
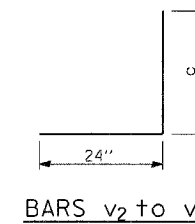
ITEM	UNIT	QUANTITY
CAST-IN-PLACE REINFORCED CONCRETE END SECTIONS 48"	EACH	1

BAR LIST - 1 END SECTION FOR INFORMATION ONLY

Bar	No.	Size	Length	Shape
d	10	#5	4'-3"	┌
b1	2	#5	6'-9"	—
b6	1	#4	10'-0"	—
b10	1	#4	13'-0"	—
b12	2	#4	14'-3"	—
b14	2	#4	15'-6"	—
h1	2	#5	18'-0"	┘
h9	4	#4	6'-3"	—
n	10	#5	3'-6"	—
u	4	#5	5'-0"	┘
v2	2	#5	7'-0"	┘
v3	4	#5	6'-6"	┘
v4	2	#5	6'-0"	┘
v5	2	#5	5'-6"	┘
v6	4	#5	5'-0"	┘
w	2	#4	4'-0"	—
Reinforcement Bars			Pound	320
Concrete Structures			Cu. Yd.	4.4

DIMENSIONS OF BENT BARS

No. 5-bars v2 to v6		
BARS	c	TOTAL LENGTH
v2	5'-0"	7'-0"
v3	4'-6"	6'-6"
v4	4'-0"	6'-0"
v5	3'-6"	5'-6"
v6	36"	5'-0"



CONCRETE END SECTION DETAILS STANDARD 542106 (MODIFIED)

LOCATION 7
FAS 621 (CH 10)
SECTION 05-00075-05-RS
SANGAMON COUNTY

CUMMINS ENGINEERING CORPORATION
JOB #: 2171
FILE: 2171endsec
DATE: 5/3/07

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 621	05-00075 05-RS	SANGAMON	72	33

CONTRACT NO. 93439

BOX CULVERT END SECTION, LOCATION 1

GENERAL NOTES

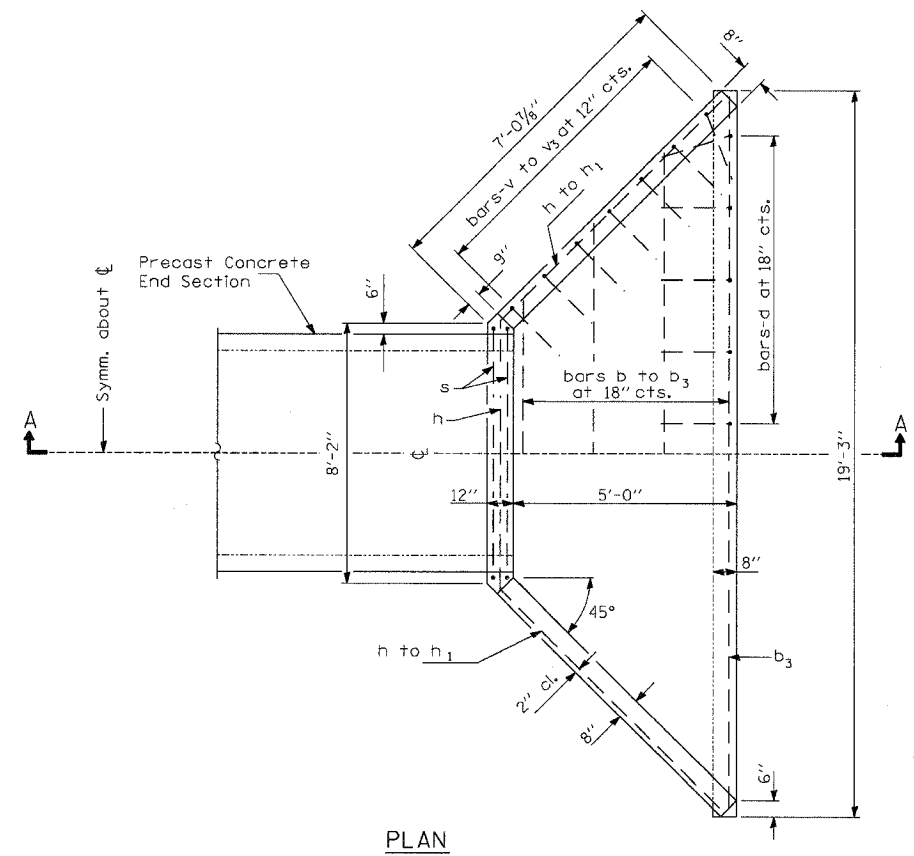
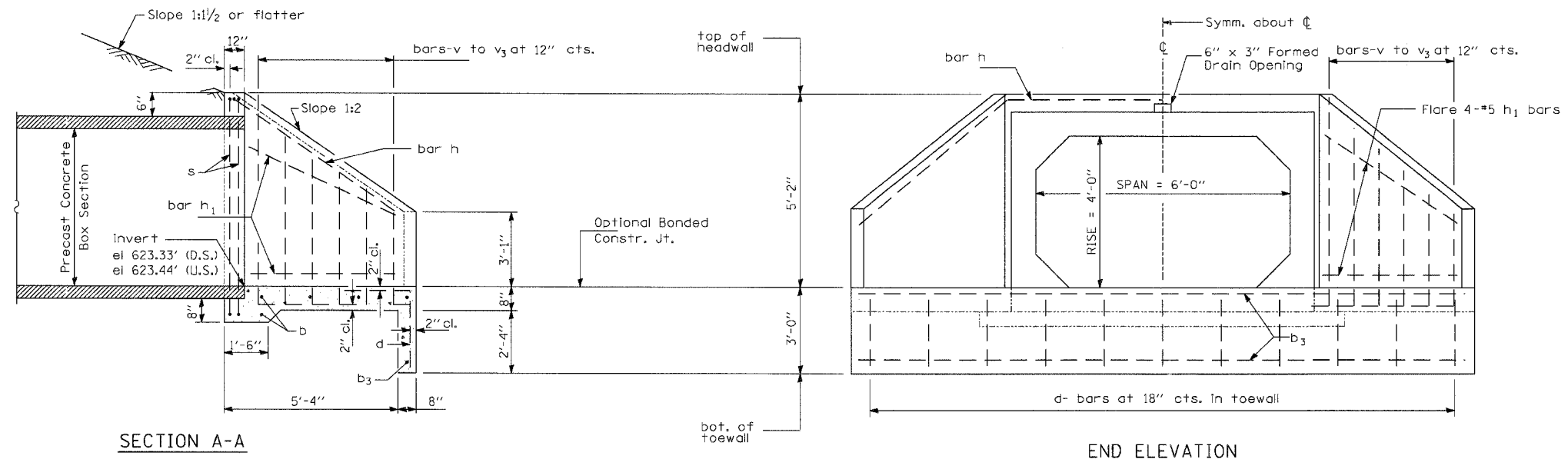
All slope ratios are expressed as units of vertical displacement to units of horizontal displacement (V:H).

Cut or bend h_1 bars to fit.

This work will be paid for at the contract bid price each for BOX CULVERT END SECTION, CULVERT NO. 1

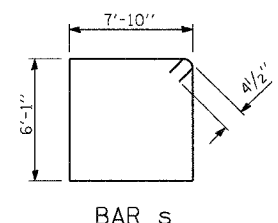
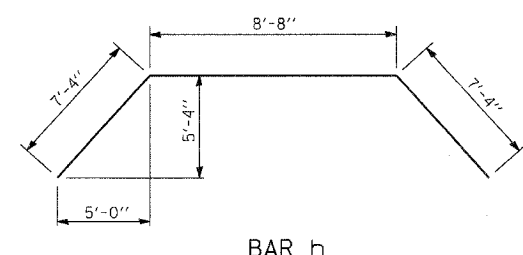
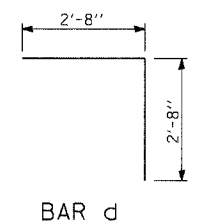
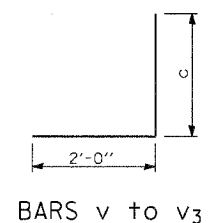
BILL OF MATERIAL

ITEM	UNIT	QUANTITY
BOX CULVERT END SECTION, CULVERT NO. 1	EACH	2



DIMENSIONS OF BENT BARS

No. 5 -bars v to v ₃		
BARS	c	TOTAL LENGTH
v	5'-2"	7'-2"
v ₁	4'-7"	6'-7"
v ₂	4'-0"	6'-0"
v ₃	3'-5"	5'-5"



BAR LIST - 1 END SECTION FOR INFORMATION ONLY

Bar	No.	Size	Length	Shape
b	2	#4	10'-4"	—
b ₁	1	#4	13'-4"	—
b ₂	1	#4	16'-4"	—
b ₃	2	#4	18'-10"	—
d	13	#4	5'-4"	┌
h	1	#5	23'-4"	∩
h ₁	8	#5	7'-3"	—
s	2	#4	28'-7"	□
v	4	#5	7'-2"	┘
v ₁	4	#5	6'-7"	┘
v ₂	4	#5	6'-0"	┘
v ₃	4	#5	5'-5"	┘
Reinforcement Bars		Pound	340	
Concrete Structures		Cu. Yd.	5.3	

BOX CULVERT END SECTION, LOCATION 1

FAS 621 (CH 10)
SECTION 05-00075-05-RS
SANGAMON COUNTY

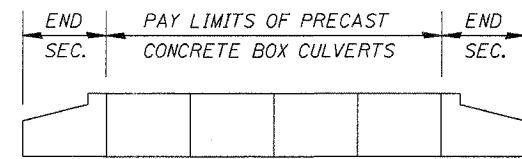
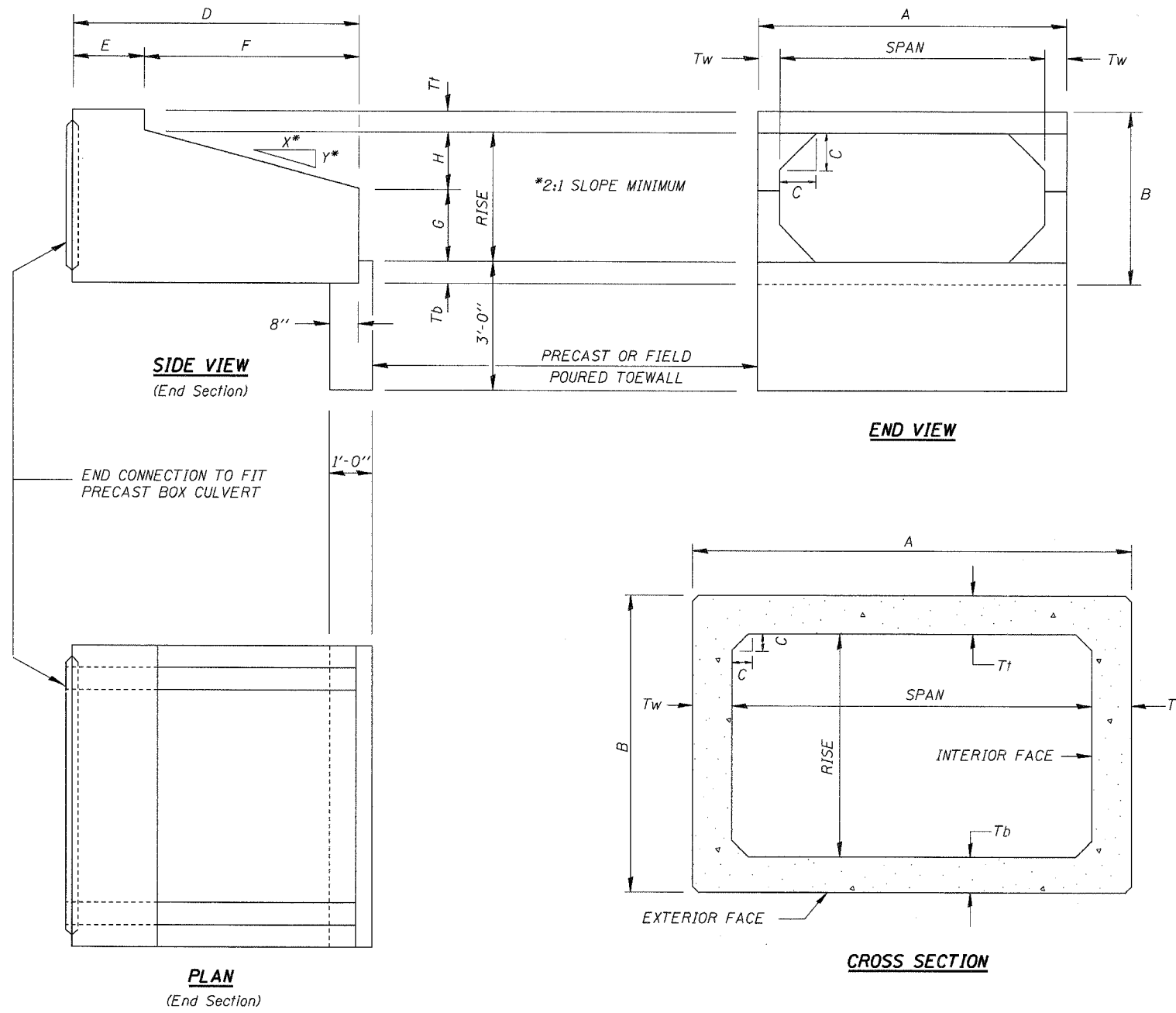
CUMMINS ENGINEERING CORPORATION

JOB #: 2171
FILE: 2171endsec
DATE: 5/3/07

DETAIL OF PRECAST CONCRETE BOX CULVERTS AND END SECTIONS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 621	05-00075-05-RS	SANGAMON	72	34

CONTRACT NO. 93439



ELEVATION VIEW

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
BOX CULVERT END SECTION, CULVERT NO. 5	EACH	2
BOX CULVERT END SECTION, CULVERT NO. 14	EACH	2
PRECAST CONCRETE BOX CULVERT, 5'x4'	FOOT	63
PRECAST CONCRETE BOX CULVERT, 6'x3'	FOOT	50
PRECAST CONCRETE BOX CULVERT, 6'x4'	FOOT	57

NOTE: PRECAST END SECTION DETAILS APPLY ONLY TO LOCATIONS 5 AND 14. SEE CAST-IN-PLACE END SECTION DETAIL ON SHEET 33 FOR LOCATION 1.

DESIGN SPECIFICATIONS
2002 AASHTO

LOADING HS20-44
Allow 50 psf for future wearing surface

DESIGN STRESSES (PRECAST)
f'c = 5,000 psi
fy = 65,000 psi (welded wire fabric)
fy = 60,000 psi (reinforcement)

Notes:
All precast concrete box culvert sections shall conform to the requirements of Article 540 of the Standard Specifications, and shall be constructed in accordance with the Bureau of Materials and Physical Research (BMPR) Policy Memorandum 07-22 for the Quality Control/Quality Assurance Program for Precast Concrete Products. In addition, the precast culverts shall be designed in accordance with the AASHTO Specification designated in the Design Details table.
Reinforcement bars shall conform to the requirements of ASTM A 706 Grade 60 (IL Modified). See Special Provisions. Lifting holes shall be filled with concrete plugs and mastic after box sections are in place.

PRECAST CONCRETE BOX CULVERT DETAILS

LOCATION	Rte.	Station	Span	Rise	AASHTO Designation	Design Fill Height	Interstate Loading	THICKNESS			A	B	C	D	E	F	G	H	SLOPE X:Y
								T1 (top slab)	T2 (bot. slab)	Tw (wall)									
1	IL 104	9+25	6'	4'	M 273	< 2'	No	8"	7"	7"	7'-2"	5'-3"	8"	-	-	-	-	-	-
5	CH 10	45+34	6'	3'	M 273	< 2'	No	8"	7"	7"	7'-2"	4'-3"	8"	6'-0"	2'-0"	4'-0"	1'-0"	2'-0"	2:1
14	CH 10	293+56	5'	4'	M 259	3'	No	6"	6"	6"	6'-0"	5'-0"	6"	6'-0"	2'-0"	4'-0"	2'-0"	2'-0"	2:1

PRECAST CONCRETE BOX CULVERT DETAILS

FAS 621 (CH 10)
SECTION 05-00075-05-RS
SANGAMON COUNTY

CUMMINS ENGINEERING CORPORATION
JOB #: 2171
FILE: 2171PRECAST
DATE: 5/3/07

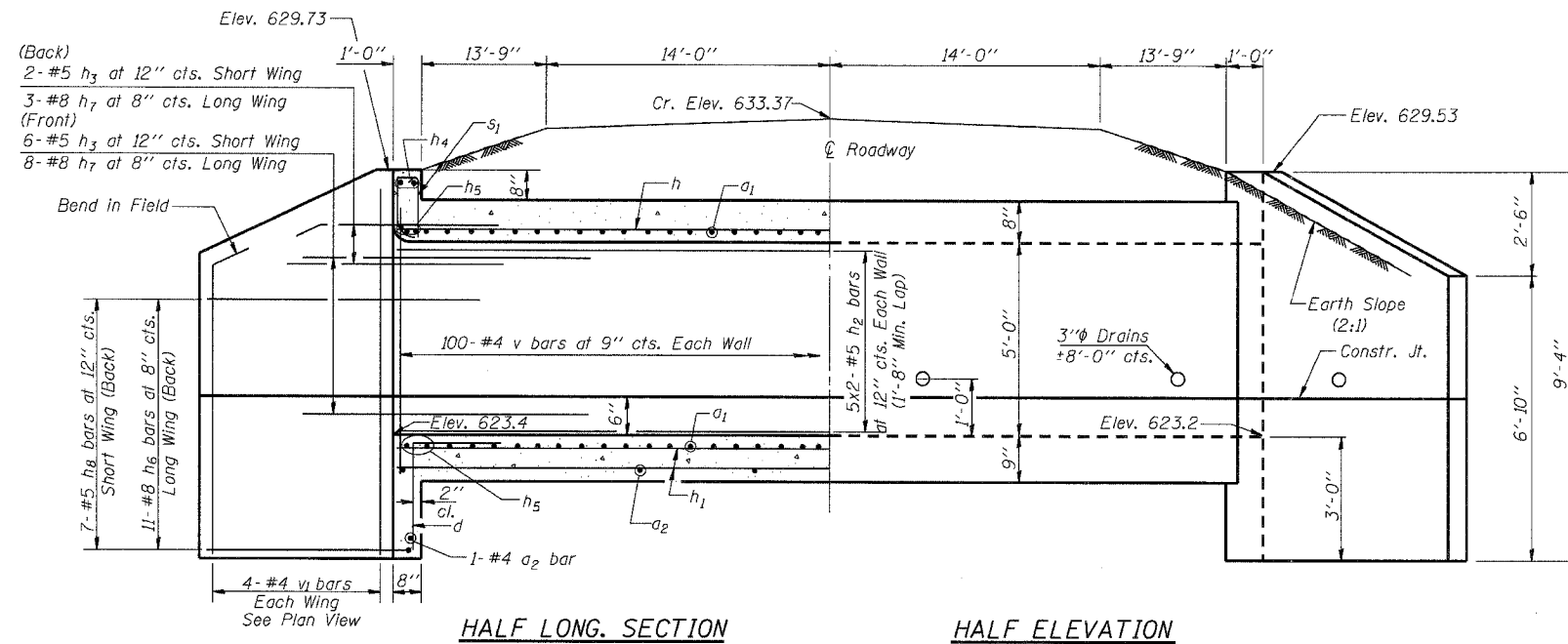
BM #2 Spike Nail in Power Pole 41' Rt. Sta. 108+62 Elev. 631.41

WATERWAY INFORMATION - LOCATION 8

Drainage Area 400 acres
 30 year Design Discharge 327 c.f.s.
 100 year Discharge 444 c.f.s.
 30 year Design Headwater Elev. 629.8
 100 year Headwater Elev. 632.0

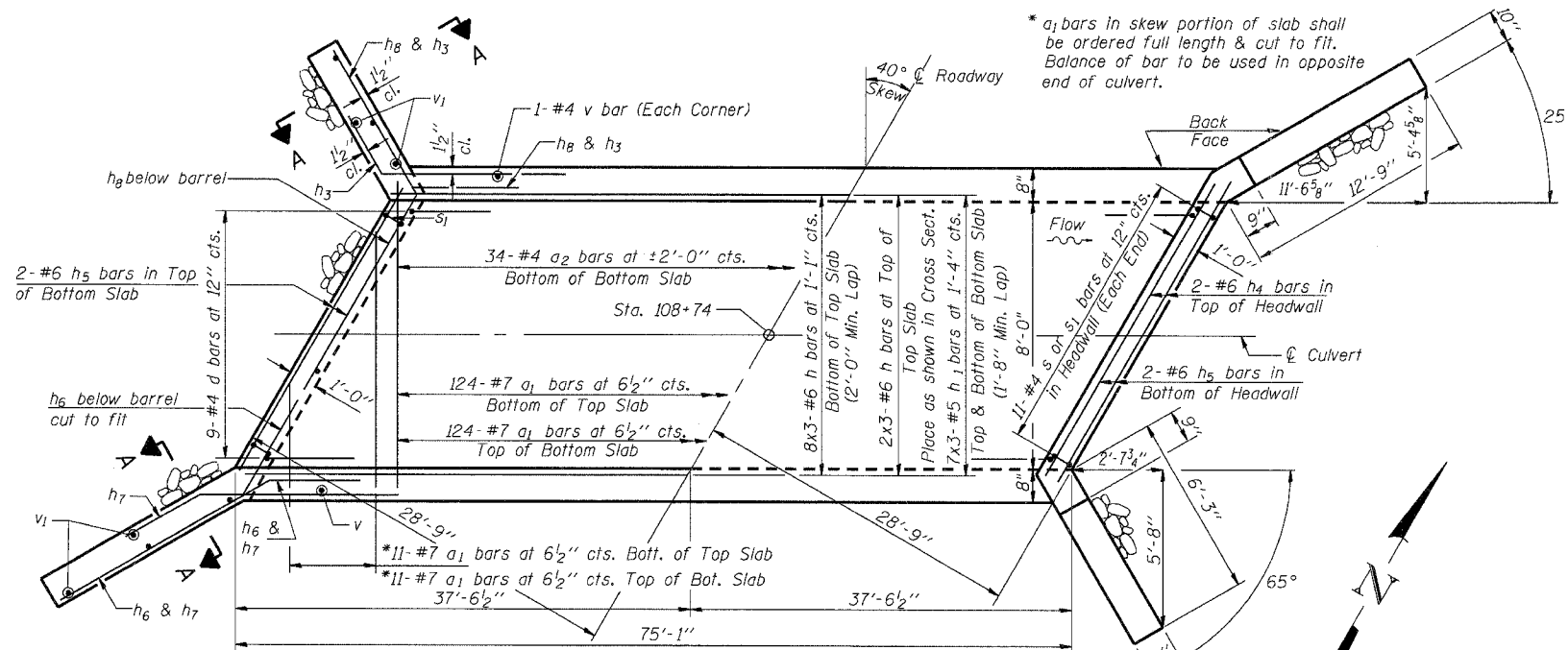
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 621	05-00075-05-RS	SANGAMON	72	35
ROAD DIST.		ILLINOIS PROJECT		

CONTRACT NO. 93439



HALF LONG. SECTION HALF ELEVATION

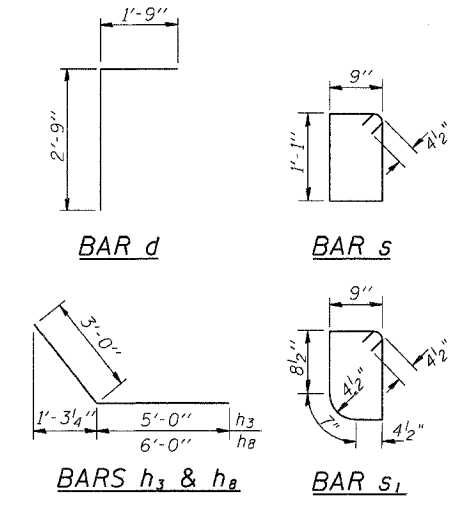
Dimensions at Rt. L's to \varnothing Roadway



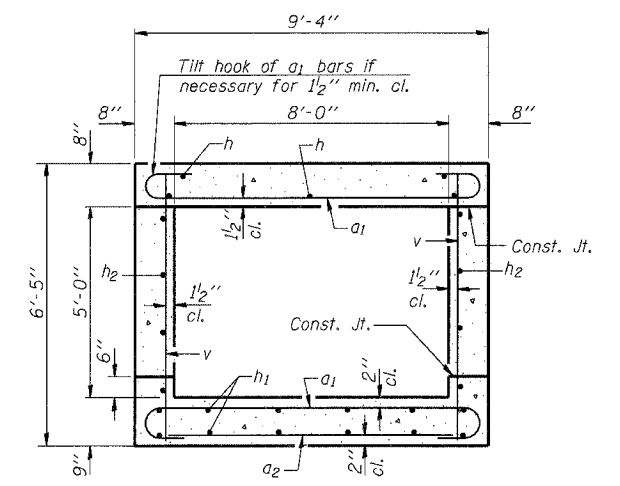
SHOWING REINFORCEMENT SHOWING OUTLINES
PLAN

NOTES

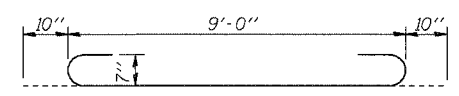
A distance of half the length of the wingwall but not less than six feet of the barrel shall be poured monolithically with the wingwalls.
 Reinforcement Bars shall conform to the requirements of ASTM A 706 Grade 60 (IL Modified). See Special Provisions.
 Bars indicated thus 8 x 3-#6 etc. indicates 8 lines of bars with 3 lengths per line.
 All construction joints shall be bonded.
 The precast option for the culvert will not be allowed.



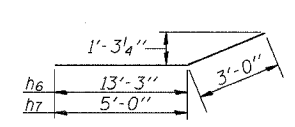
BAR d BAR s
BARS h₃ & h₈ BAR s₁



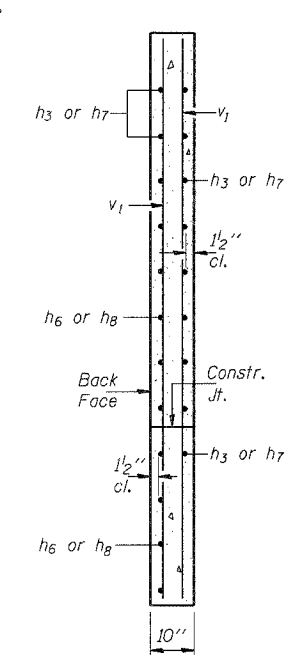
SECTION THRU BARREL



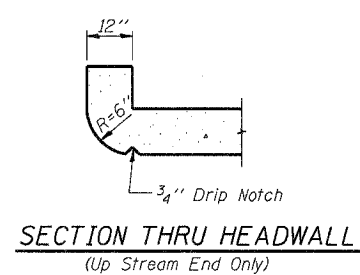
BAR a₁



BARS h₆ & h₇



SECTION A-A



SECTION THRU HEADWALL
 (Up Stream End Only)

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a ₁	270	#7	10'-8"	U
a ₂	36	#4	8'-7"	—
d	18	#4	4'-6"	L
h	30	#6	26'-3"	—
h ₁	42	#5	26'-0"	—
h ₂	20	#5	38'-2"	—
h ₃	16	#5	8'-0"	—
h ₄	4	#6	10'-9"	—
h ₅	8	#7	10'-9"	—
h ₆	22	#8	16'-3"	—
h ₇	22	#8	8'-0"	—
h ₈	14	#5	9'-0"	—
s	11	#4	4'-5"	U
s ₁	11	#4	4'-3"	U
v	204	#4	6'-1"	—
v ₁	16	#4	9'-0"	—
Concrete Box Culverts			Cu. Yd.	65.9
Reinforcement Bars			Pound	12190

DESIGNED	Tim S. Howard
CHECKED	Ruben V. Boehler
DRAWN	Tim S. Howard
CHECKED	Michael D. Cummins

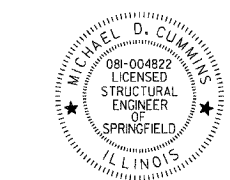
SSB-H-R 10-22-04

DESIGN STRESSES

f_y = 60,000 psi
 f'_c = 3,500 psi

LOADING HS 20-44 & ALT.

Design Fill Height = 2'



Michael D. Cummins 5/25/09
 (Expires 11/30/2008)

CULVERT DETAILS
 LOCATION 8
 FAS 621 (CH 10)
 SECTION 05-00075-05-RS
 SANGAMON COUNTY
 STA. 108+74

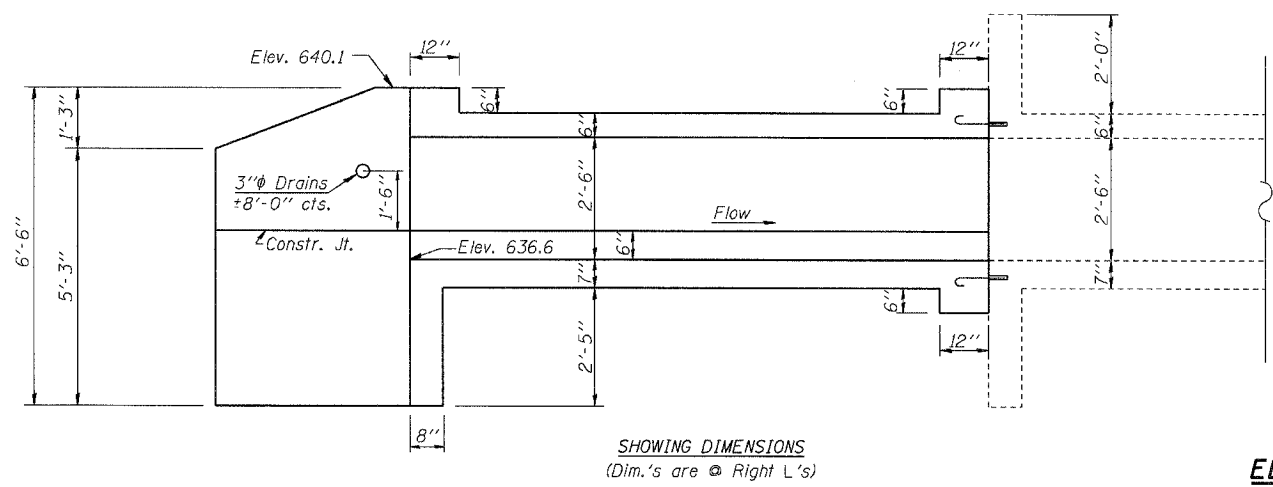
CUMMINS ENGINEERING CORPORATION JOB #: 2171
 FILE: 2171sn8 DATE: 5/21/07

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 621	05-00075-05-RS	SANGAMON	72	36
ROAD DIST.	ILLINOIS PROJECT			

CONTRACT NO. 93439

GENERAL NOTES

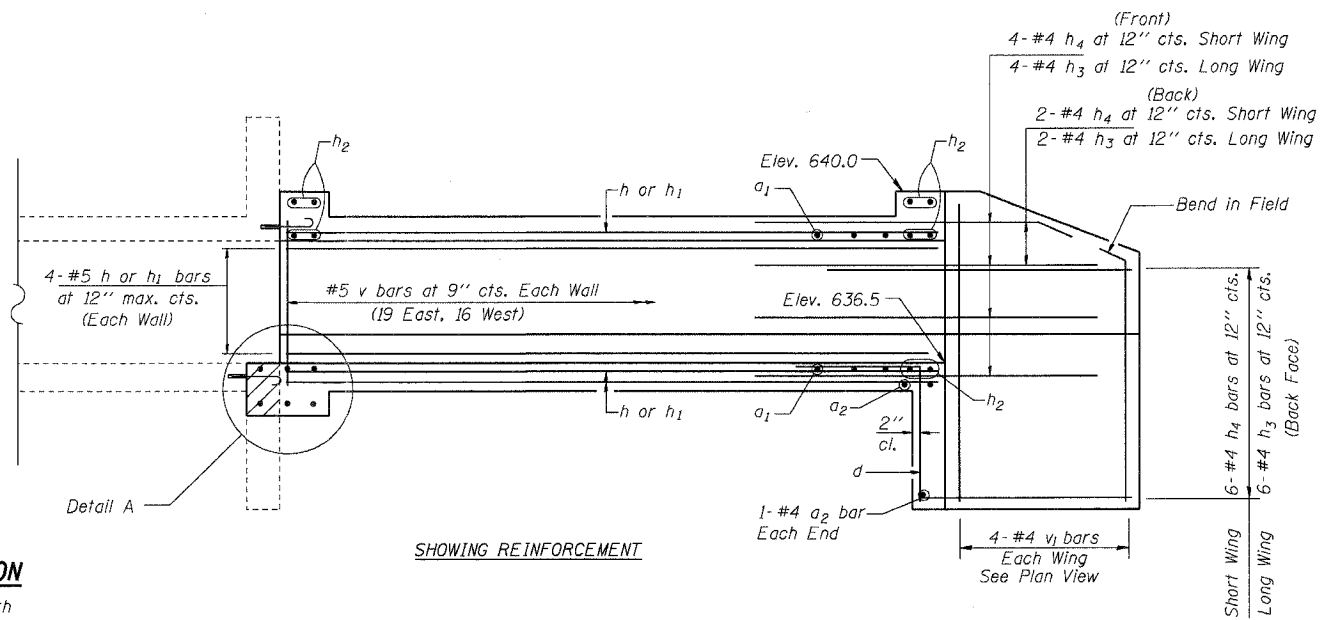
See next sheet for general notes.



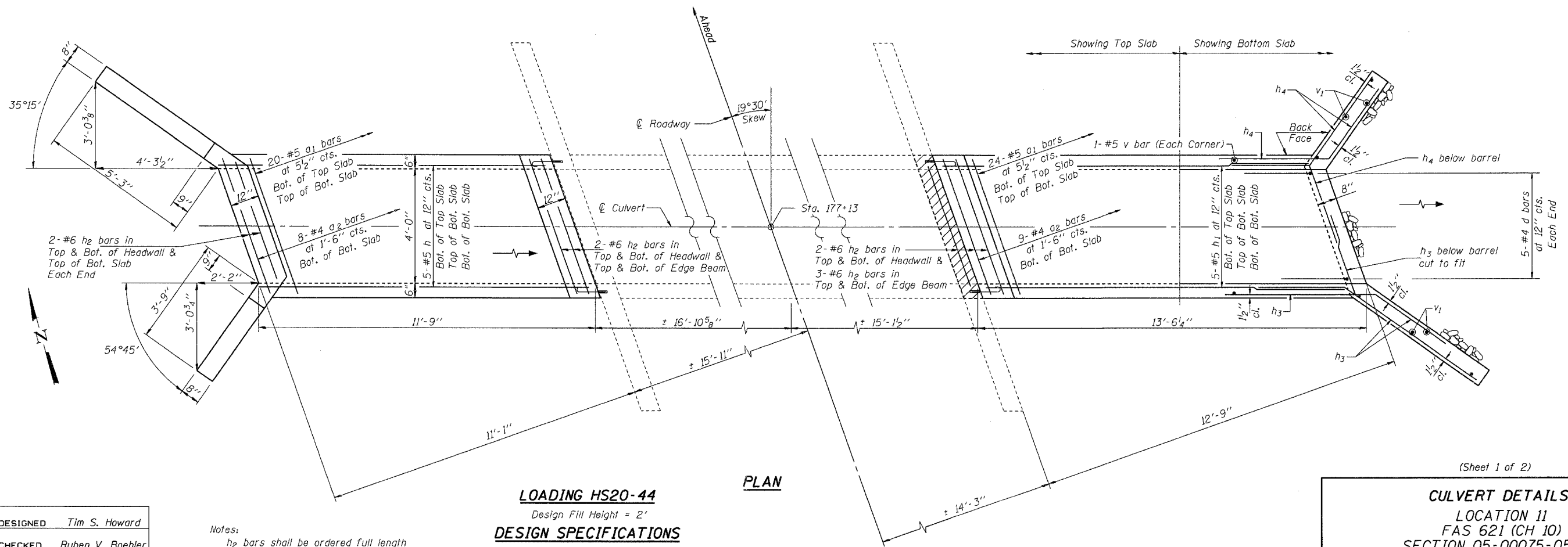
SHOWING DIMENSIONS
(Dim.'s are @ Right L's)

ELEVATION

Looking North



SHOWING REINFORCEMENT



PLAN

LOADING HS20-44
Design Fill Height = 2'
DESIGN SPECIFICATIONS
2002 AASHTO
DESIGN STRESSES

$f_y = 60,000 \text{ psi}$
 $f_c = 3,500 \text{ psi}$

Notes:
 h_2 bars shall be ordered full length and cut to fit in headwalls at ends of box culvert extensions.
Hatched areas indicate limits of Concrete Removal.

DESIGNED	Tim S. Howard
CHECKED	Ruben V. Boehler
DRAWN	Nicole L. Darling
CHECKED	Michael D. Cummins

(Sheet 1 of 2)

CULVERT DETAILS
LOCATION 11
FAS 621 (CH 10)
SECTION 05-00075-05-RS
SANGAMON COUNTY
STA. 177+13

CUMMINS ENGINEERING CORPORATION

JOB #: 2171
FILE: 2171sm11
DATE: 4/10/07

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 621	05-00075-05-RS	SANGAMON	72	37
ROAD DIST.	ILLINOIS PROJECT			

CONTRACT NO. 93439

GENERAL NOTES

Hatched areas indicate limits of Concrete Removal.

The barrel extension shall be poured monolithically with the wingwalls.

Exposed edges shall be beveled 3/4".

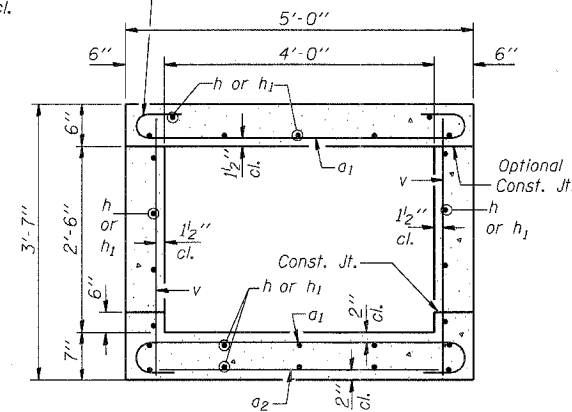
Reinforcement Bars shall conform to the requirements of ASTM A 706 Grade 60 (IL Modified). See Special Provisions

Existing reinforcement bars extending into the removal area shall be cleaned, straightened and incorporated into the new construction. All reinforcement bars that are damaged during concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost included in the cost of Concrete Removal.

All construction joints shall be bonded.

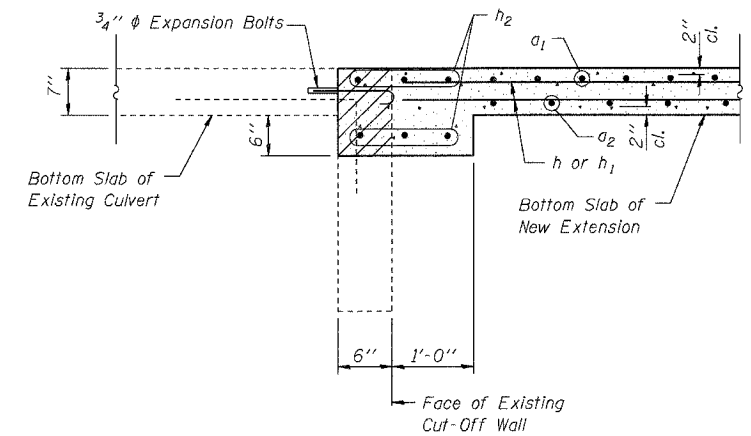
Plan dimensions and details relative to the existing structure are subject to nominal variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in the scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price for the work.

Tilt hook of a₁ bars if necessary to maintain 1/2" min. cl.



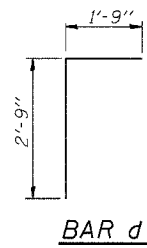
SECTION THRU BARREL

(Dim.'s are @ Right L's)

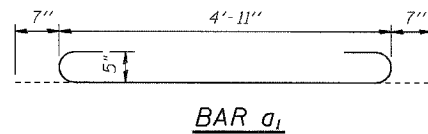


DETAIL A

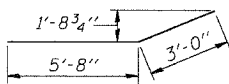
(Dim.'s are @ Right L's)



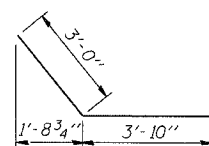
BAR d



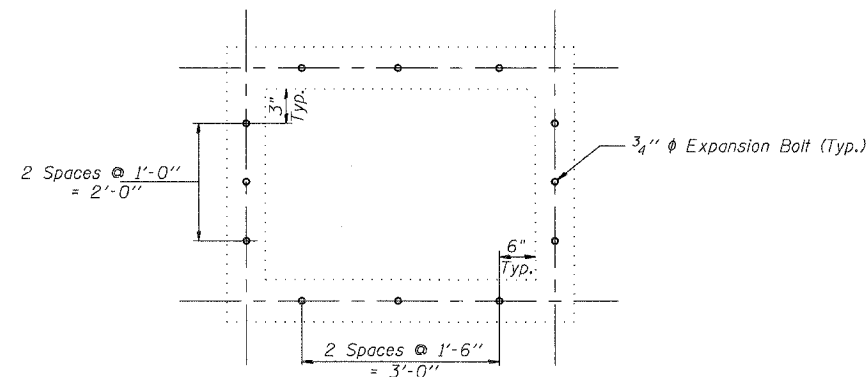
BAR a1



BAR h3



BAR h4



SECTION THRU BARREL

(Location of Expansion Bolts)
(Dim.'s are @ Right L's)

Note:
Expansion bolts shall be 3/4" hooked bolts. Hooked bolts shall extend a minimum of 9" into new concrete.

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a ₁	88	#5	6'-1"	U
a ₂	19	#4	5'-0"	—
d	10	#4	4'-6"	L
h	17	#5	11'-5"	—
h ₁	17	#5	13'-2"	—
h ₂	30	#6	5'-0"	—
h ₃	24	#4	8'-8"	L
h ₄	24	#4	6'-10"	L
v	74	#4	3'-3"	—
v ₁	16	#4	6'-2"	—
Concrete Box Culverts			Cu. Yd.	11.5
Reinforcement Bars			Pound	1790
Expansion Bolts 3/4 Inch			Each	24
Concrete Removal			Cu. Yd.	0.1

(Sheet 2 of 2)

DESIGNED	Tim S. Howard
CHECKED	Ruben V. Boehler
DRAWN	Nicole L. Darling
CHECKED	Michael D. Cummins

CULVERT DETAILS
LOCATION 11
FAS 621 (CH 10)
SECTION 05-00075-05-RS
SANGAMON COUNTY
STA. 177+13

CUMMINS ENGINEERING CORPORATION

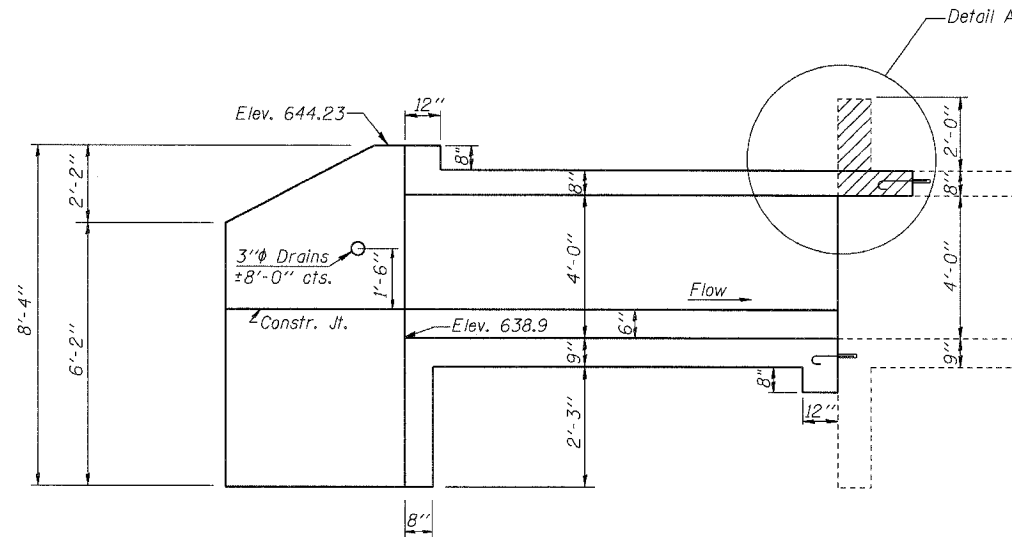
JOB #:	2171
FILE:	2171sn11
DATE:	4/10/07

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 621	05-00075-05-RS	SANGAMON	72	38
ROAD DIST.	ILLINOIS PROJECT			

CONTRACT NO. 93439

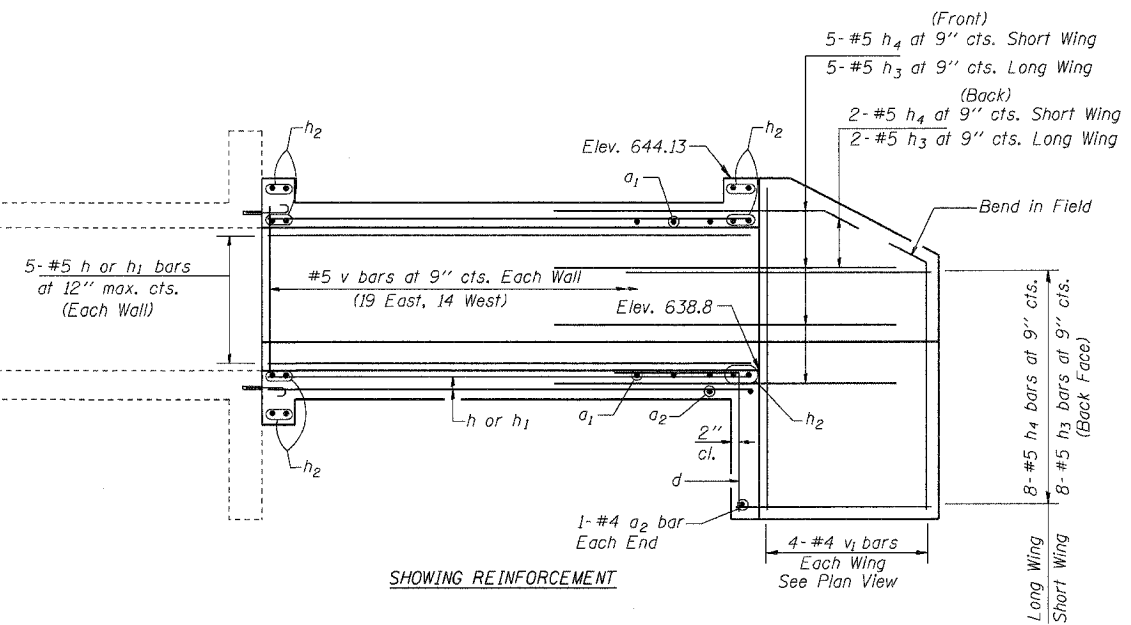
GENERAL NOTES

See next sheet for general notes.

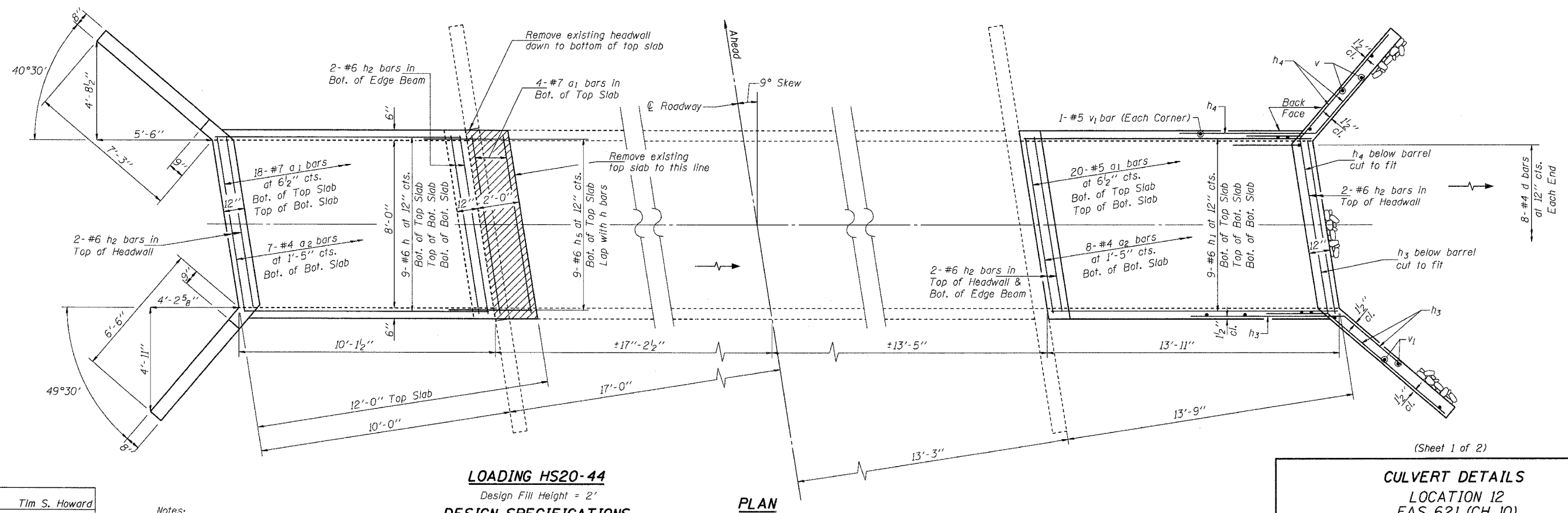


SHOWING DIMENSIONS
(Dim.'s are @ Right L's)

ELEVATION
Looking North



SHOWING REINFORCEMENT



PLAN

LOADING HS20-44
Design Fill Height = 2'
DESIGN SPECIFICATIONS
2002 AASHTO
DESIGN STRESSES
 $f_y = 60,000$ psi
 $f'_c = 3,500$ psi

Notes:
 h_2 bars shall be ordered full length and cut to fit in headwalls at ends of box culvert extensions.
Hatched areas indicate limits of Concrete Removal.

DESIGNED	Tim S. Howard
CHECKED	Ruben V. Boehler
DRAWN	Nicole L. Darling
CHECKED	Michael D. Cummins

CULVERT DETAILS
LOCATION 12
FAS 621 (CH 10)
SECTION 05-00075-05-RS
SANGAMON COUNTY
STA. 196+79

CUMMINS ENGINEERING CORPORATION
JOB #: 2171
FILE: 2171en12
DATE: 4/10/07

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 621	05-00075-05-RS	SANGAMON	72	39
ROAD DIST.	ILLINOIS PROJECT			

CONTRACT NO. 93439

GENERAL NOTES

Hatched areas indicate limits of Concrete Removal.

The barrel extension shall be poured monolithically with the wingwalls.

Exposed edges shall be beveled $\frac{3}{4}$ ".

Reinforcement Bars shall conform to the requirements of ASTM A 706 Grade 60 (IL Modified). See Special Provisions.

Existing reinforcement bars extending into the removal area shall be cleaned, straightened and incorporated into the new construction. All reinforcement bars that are damaged during concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost included in the cost of Concrete Removal.

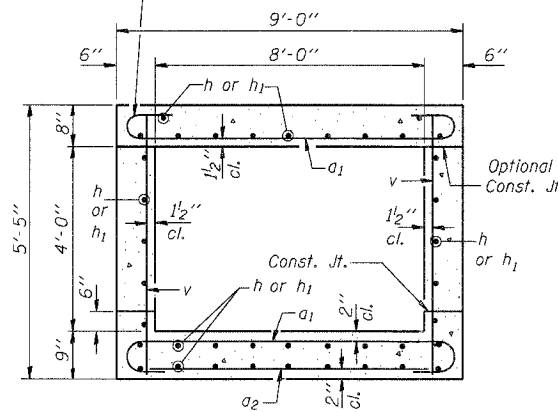
All construction joints shall be bonded.

Plan dimensions and details relative to the existing structure are subject to nominal variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in the scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price for the work.

MIN. BAR LAP

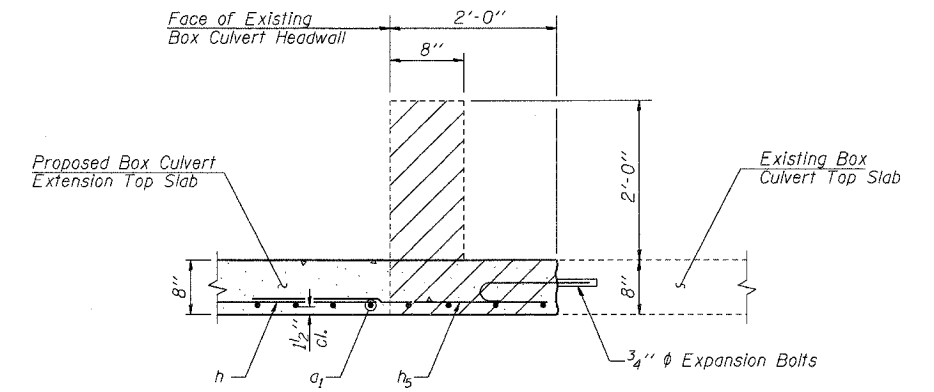
#6 Bar = 2'-0"

Tilt hook of a_1 bars if necessary to maintain $\frac{1}{2}$ " min. cl.



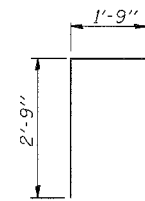
SECTION THRU BARREL

(Dim.'s are @ Right L's)

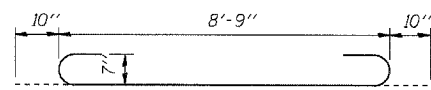


DETAIL A

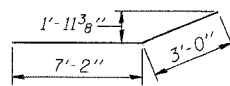
(Dim.'s are @ Right L's)



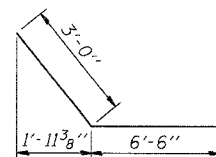
BAR d



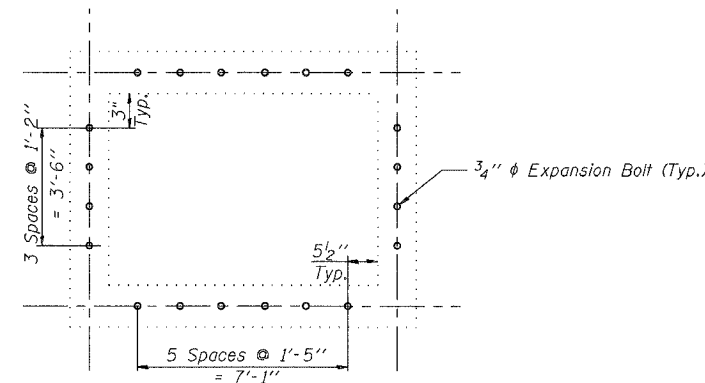
BAR a1



BAR h3



BAR h4



SECTION THRU BARREL

(Location of Expansion Bolts)
(Dim.'s are @ Right L's)

BILL OF MATERIAL

Bar	No.	Size	Length	Shape	
a_1	84	#7	10'-5"	U	
a_2	19	#4	8'-9"	—	
d	18	#4	4'-6"	L	
h	27	#6	9'-9"	—	
h_1	27	#6	13'-7"	—	
h_2	24	#6	8'-9"	—	
h_3	32	#5	10'-2"	—	
h_4	32	#5	9'-6"	—	
h_5	9	#6	4'-0"	—	
v	70	#5	5'-1"	—	
v_1	16	#4	8'-0"	—	
Concrete Box Culverts				Cu. Yd.	22.5
Reinforcement Bars				Pound	4390
Expansion Bolts $\frac{3}{4}$ Inch				Each	40
Concrete Removal				Cu. Yd.	0.9

Note:
Expansion bolts shall be $\frac{3}{4}$ " ϕ hooked bolts. Hooked bolts shall extend a minimum of 9" into new concrete.

(Sheet 2 of 2)

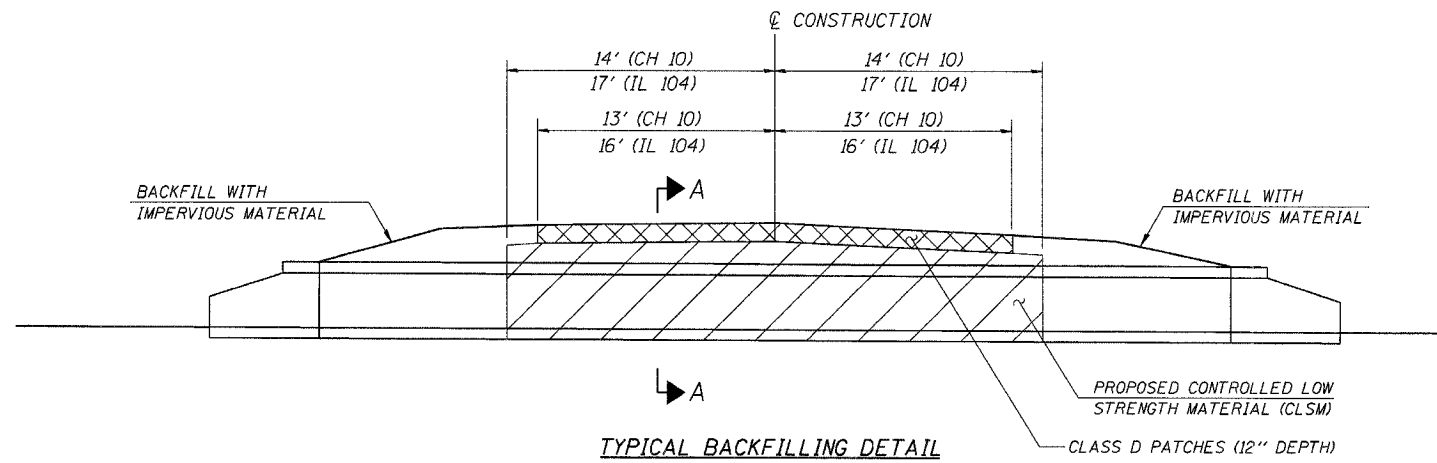
DESIGNED	Tim S. Howard
CHECKED	Ruben V. Boehler
DRAWN	Nicole L. Darling
CHECKED	Michael D. Cummins

CULVERT DETAILS
LOCATION 12
FAS 621 (CH 10)
SECTION 05-00075-05-RS
SANGAMON COUNTY
STA. 196+79

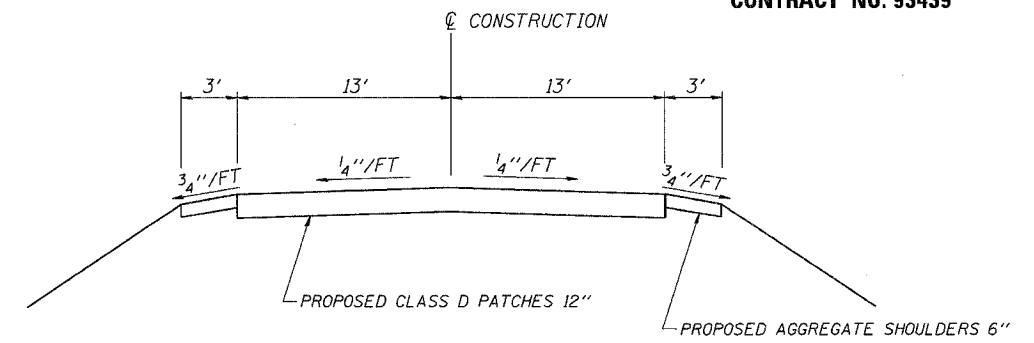
CUMMINS ENGINEERING CORPORATION	JOB #: 2171
	FILE: 2171sm12
	DATE: 4/10/07

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 621	05-00075 05-RS	SANGAMON	72	40

CONTRACT NO. 93439

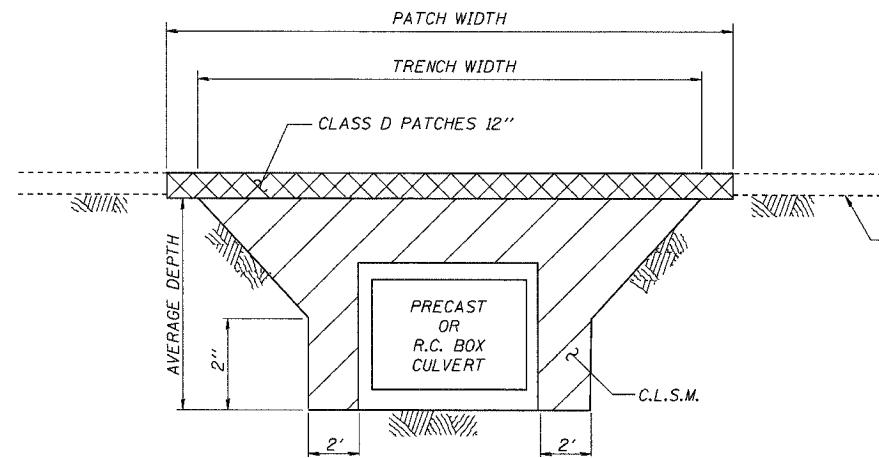


TYPICAL BACKFILLING DETAIL



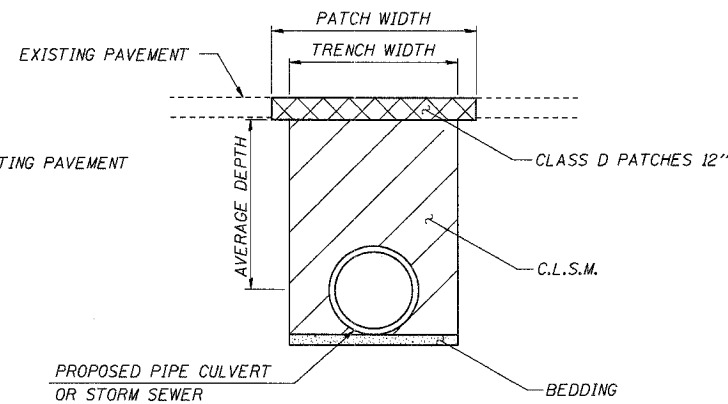
CH 10 PROPOSED TYPICAL CROSS SECTION AT CLASS D PATCHES

LOCATION 3, 5, 7, 8 & 14



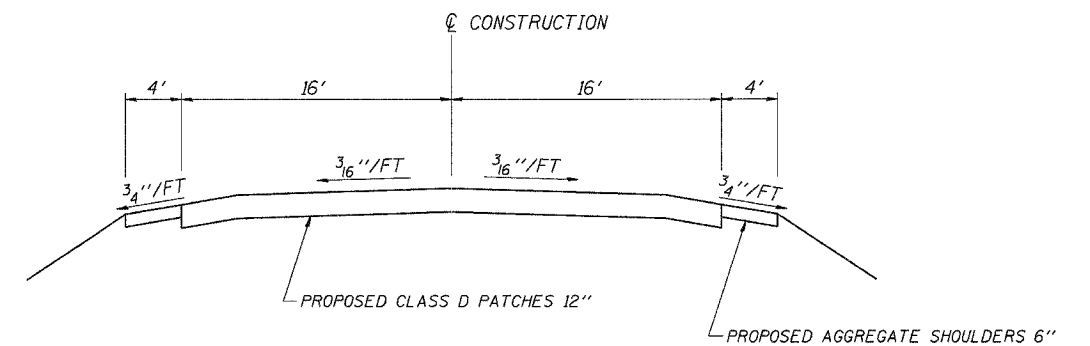
SECTION A-A
AT PRECAST OR R.C. BOX CULVERT

LOCATION 1, 5, 8 & 14



SECTION A-A
AT PIPE CULVERT & STORM SEWER

LOCATION 3 & 7



IL 104 PROPOSED TYPICAL CROSS SECTION AT CLASS D PATCHES

LOCATION 1

CULVERT BACKFILL SCHEDULE

LOCATION	STATION	STRUCTURE SIZE	STRUCTURE TYPE	AVERAGE TRENCH		PATCH WIDTH FT.	CLSM CU. YD.	CLASS D PATCHES 12" SQ. YD.	AGGREGATE SHOULDERS TON
				DEPTH FT.	WIDTH FT.				
CH 10									
3	LT STA. 8+73 TO STA. 10+20	24"φ	STORM SEWER	2.0	4.0	4.0	131	55	2
5	STA. 45+34	6'x3'	PRECAST BOX CULVERT	5.0	17.2	18.2	47	53	4
7	STA. 68+14	48"φ	PIPE CULVERT	5.5	6.8	7.8	16	23	2
8	STA. 108+74	8'x4'	R.C. BOX CULVERT	7.0	23.0	24.0	120	91	6
14	STA. 293+56	5'x4'	PRECAST BOX CULVERT	8.3	22.6	23.6	124	69	6
IL 104									
1	STA. 9+25	6'x4'	PRECAST BOX CULVERT	6.0	19.3	20.3	75	72	6
1	STA. 9+74	5'x4'-2"	R.C. BOX CULVERT (EXIST)	-	-	-	38	-	-
TOTAL							551	363	26

BACKFILL, CLASS D PATCHES,
& RIPRAP DETAILS

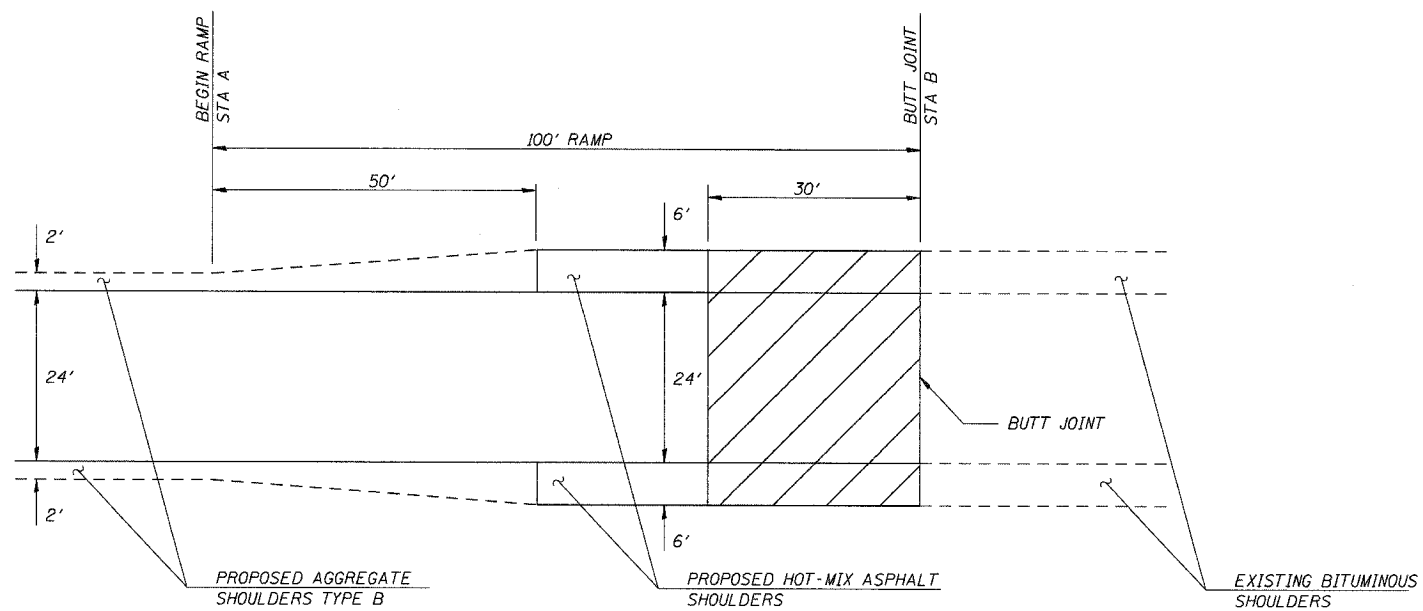
FAS 621 (CH 10)
SECTION 05-00075-05-RS
SANGAMON COUNTY

CUMMINS ENGINEERING CORPORATION

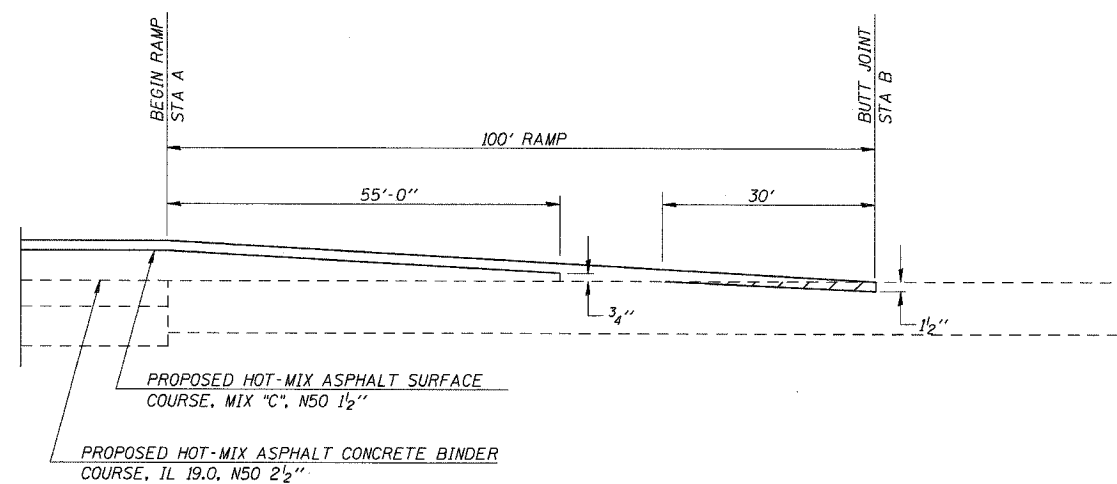
JOB #: 2171
FILE: 2171PATCH
DATE: 4/30/07

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 621	05-00075 -05-RS	SANGAMON	72	41

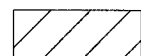
CONTRACT NO. 93439



PLAN



BUTT JOINT DETAIL A

 LIMITS OF HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT

BUTT JOINT DETAIL A

LOCATION	STA "A"	STA "B"	WIDTH FOOT	HOT-MIX ASPHALT SURFACE	TEMPORARY
				REMOVAL - BUTT JOINT SQ YD	RAMP SQ YD
CH 10	126+66.02	127+66.02	36	120	20
CH 10	134+56.15	133+56.15	36	120	20
CH 10	261+74.19	262+74.19	36	120	20
CH 10	267+31.39	266+31.39	36	120	20
TOTAL				480	80

BUTT JOINT DETAILS

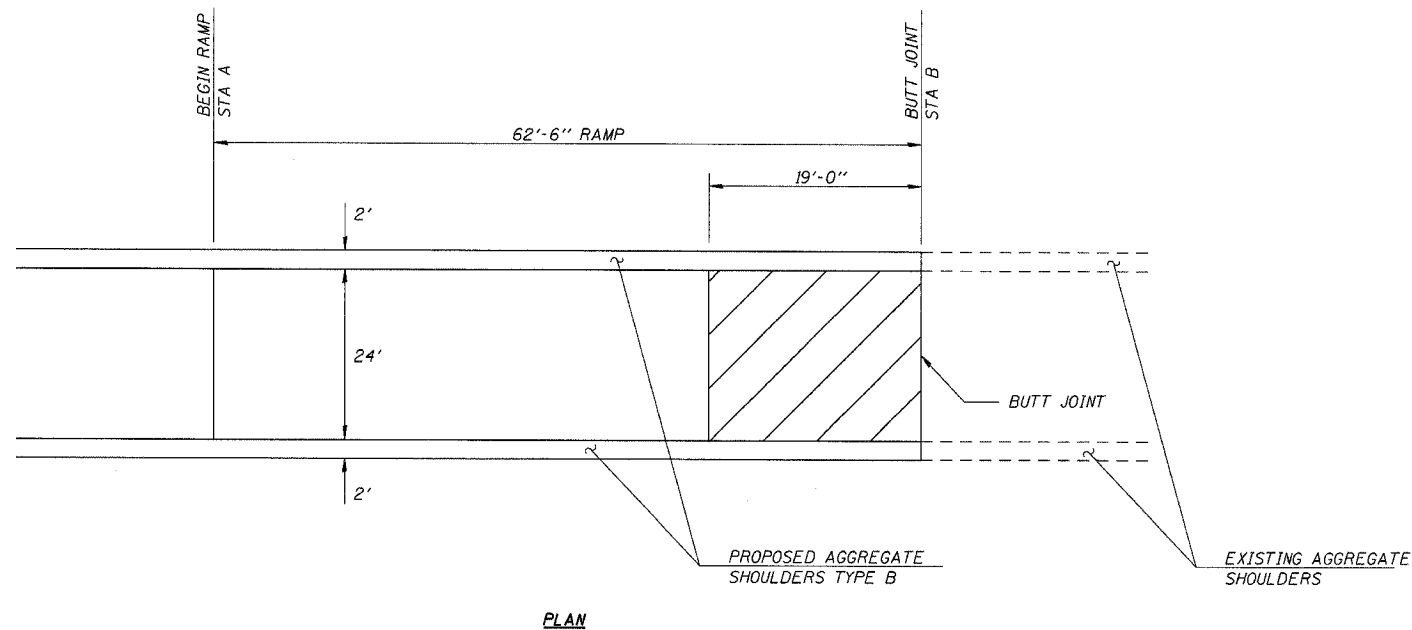
FAS 621 (CH 10)
SECTION 05-00075-05-RS
SANGAMON COUNTY

CUMMINS ENGINEERING CORPORATION

JOB #: 2171
FILE: 2171BUTTJT
DATE: 4/30/07

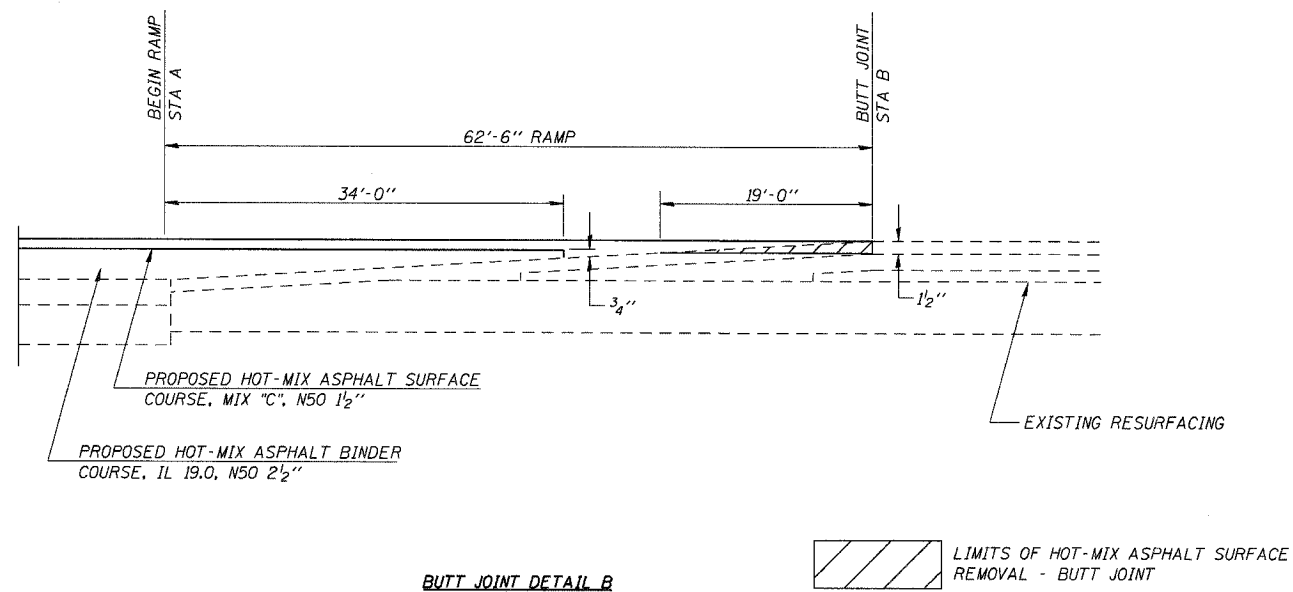
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 621	05-00075-05-RS	SANGAMON	72	42

CONTRACT NO. 93439



BUTT JOINT DETAIL B

LOCATION	STA "A"	STA "B"	WIDTH FOOT	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT SQ YD	TEMPORARY RAMP SQ YD
CH 10	316+96.60	317+59.10	24	51	14
TOTAL				51	14



BUTT JOINT DETAILS

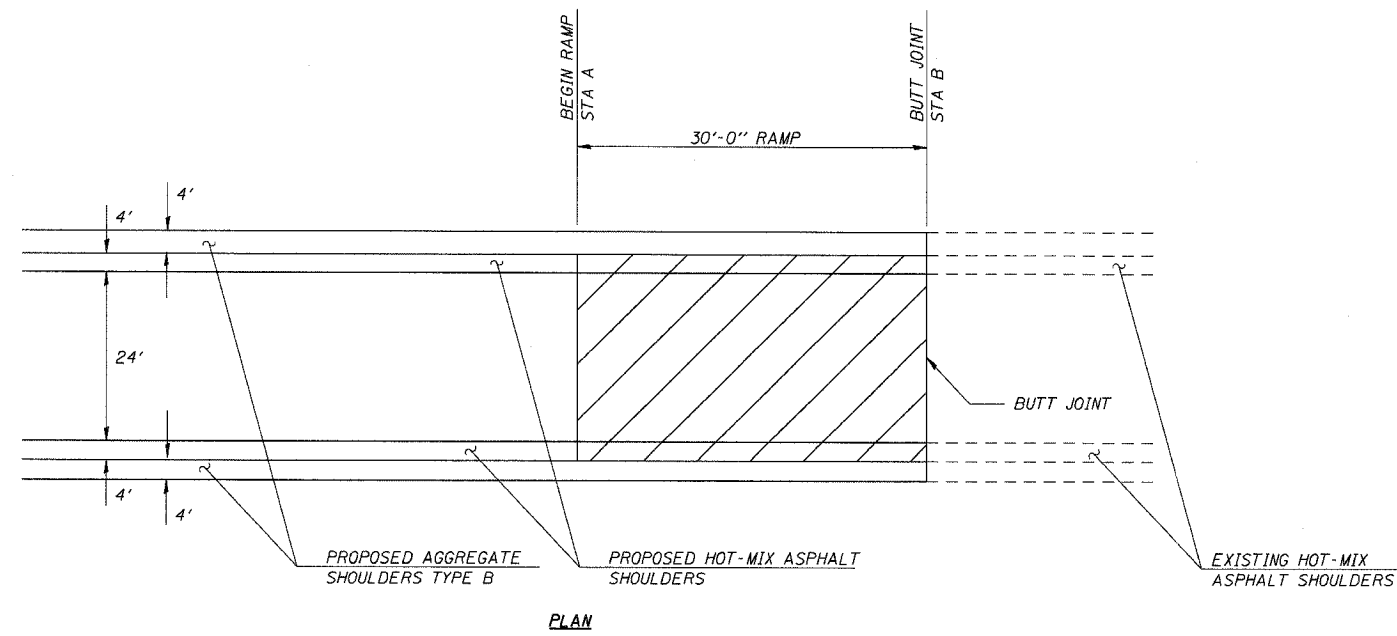
FAS 621 (CH 10)
SECTION 05-00075-05-RS
SANGAMON COUNTY

CUMMINS ENGINEERING CORPORATION

JOB #: 2171
FILE: 2171BUTTJT
DATE: 4/30/07

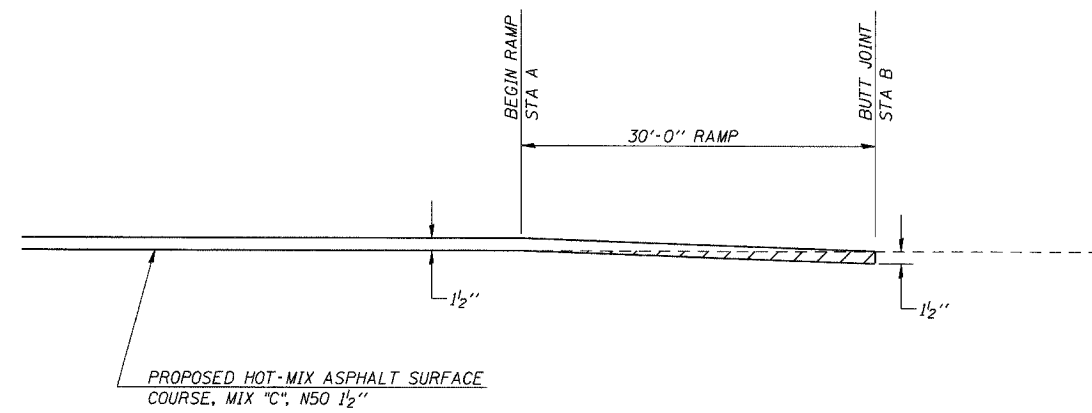
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 621	05-00075 -05-RS	SANGAMON	72	43

CONTRACT NO. 93439

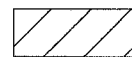


BUTT JOINT DETAIL C

LOCATION	STA "A"	STA "B"	WIDTH FOOT	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT SQ YD	TEMPORARY RAMP SQ YD
IL 104	8+30	8+00	32	107	18
IL 104	11+20	11+50	32	107	18
TOTAL				214	36



BUTT JOINT DETAIL C

 LIMITS OF HOT-MIX ASPHALT SURFACE
REMOVAL - BUTT JOINT

BUTT JOINT DETAILS

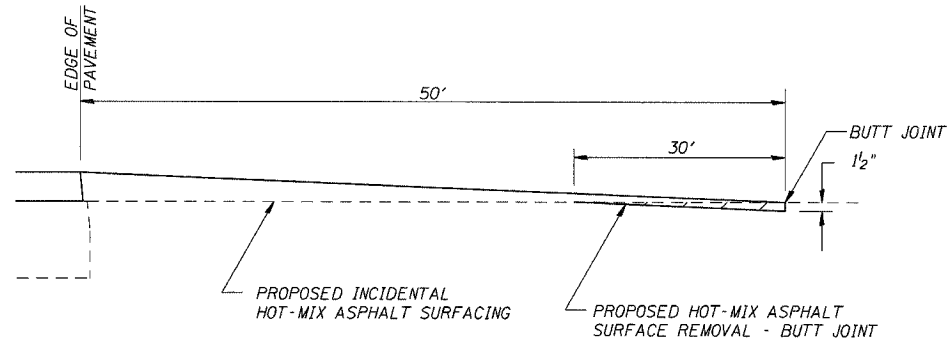
FAS 621 (CH 10)
SECTION 05-00075-05-RS
SANGAMON COUNTY

CUMMINS ENGINEERING CORPORATION

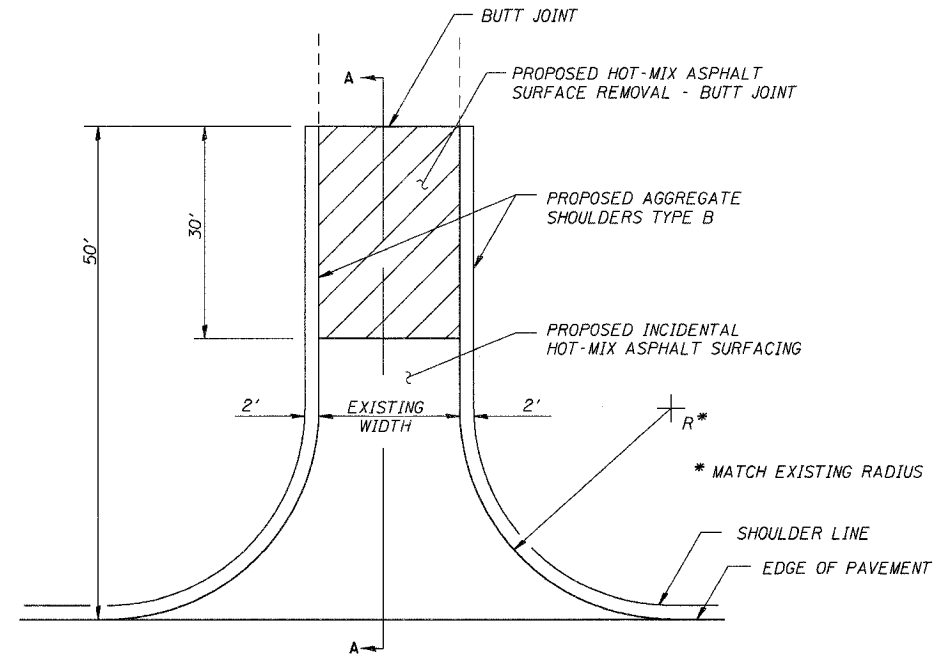
JOB #: 2171
FILE: 2171BUTTJT
DATE: 4/30/07

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 621	05-00075-05-RS	SANGAMON	72	44

CONTRACT NO. 93439



SECTION A-A



PLAN - SIDE ROAD

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.

HOT-MIX ASPHALT 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 HOT-MIX ASPHALT PROPOSED FOR THE IMPROVEMENT IS THICKER THAN 3 INCHES AND REQUIRE PLACEMENT IN MORE THAN ONE LIFT. THE BOTTOM LIFT(S) SHALL MEET THE REQUIREMENTS OF HOT-MIX ASPHALT BASE COURSE IN SECTION 406 OF THE STANDARD SPECIFICATIONS AND THE TOP LIFT OF 2 INCHES SHALL MEET THE REQUIREMENTS OF HOT-MIX ASPHALT CONCRETE SURFACE COURSE.

THIS WORK WILL BE PAID FOR IN ACCORDANCE WITH SECTIONS 351, 358, 402, 408, 423 AND 440 OF THE STANDARD SPECIFICATIONS.

SIDE ROADS

LOCATION	SURFACE TYPE	EXISTING WIDTH FEET	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	BITUMINOUS MATERIALS (PRIME COAT) GALLON	TEMPORARY RAMP SQ YD	INCIDENTAL HOT-MIX ASPHALT SURFACING TON
			SQ YD			
LT 53+58 AUBURN ROAD	OIL & CHIP	16	54	12	30	21
LT 106+02 GIBSON ROAD	OIL & CHIP	20	67	14	38	25
LT 184+93 GRAHAM ROAD	OIL & CHIP	20	67	14	38	25
LT 238+71 DOWNING ROAD	OIL & CHIP	22	74	15	41	27
RT 53+58 AUBURN ROAD	OIL & CHIP	16	54	12	30	21
RT 106+54 GIBSON ROAD	OIL & CHIP	20	67	14	38	25
RT 213+60 CAMPBELL CEM. ROAD	OIL & CHIP	20	67	14	38	25
RT 258+46 MAXWELL HALL ROAD	OIL & CHIP	20	67	14	38	25
TOTAL			517	109	291	194

APPLICATION RATES USED IN QUANTITY CALCULATIONS

Granular Materials 2.05 Tons/Cu. Yd.
 Bituminous Materials (Prime Coat) 0.10 Gallons/Sq. Yd. (Bit. Bases)
 Hot-Mix Asphalt 112 lbs./Sq. Yd./1" Thickness

DETAILS FOR SIDE ROADS

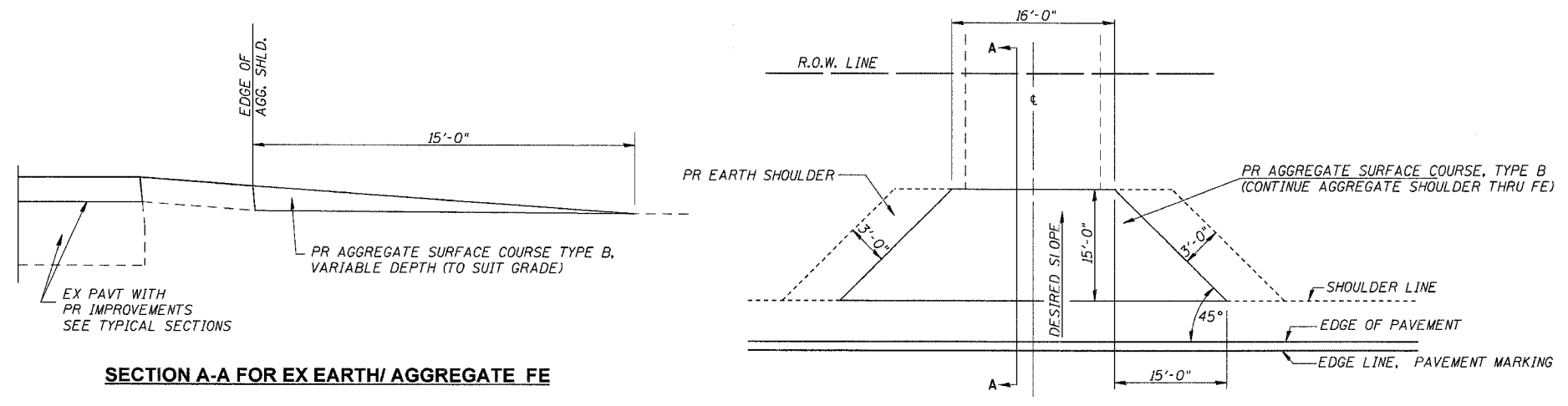
FAS 621 (CH 10)
 SECTION 05-00075-05-RS
 SANGAMON COUNTY

CUMMINS ENGINEERING CORPORATION

JOB #: 2171
 FILE: 2171ENT
 DATE: 4/30/07

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 621	05-00075-05-RS	SANGAMON	72	45

CONTRACT NO. 93439



SECTION A-A FOR EX EARTH/ AGGREGATE FE

PLAN

FIELD ENTRANCES

ENTRANCE TYPE	SURFACE TYPE	WIDTH FEET	AGGREGATE SURFACE COURSE TYPE B TON
FE	Aggregate	16	15/each
TOTAL NUMBER OF FIELD ENTRANCES = 50			x 50
TOTALS =			750

APPLICATION RATES USED IN QUANTITY CALCULATIONS

Granular Materials 2.05 Tons/Cu. Yd.

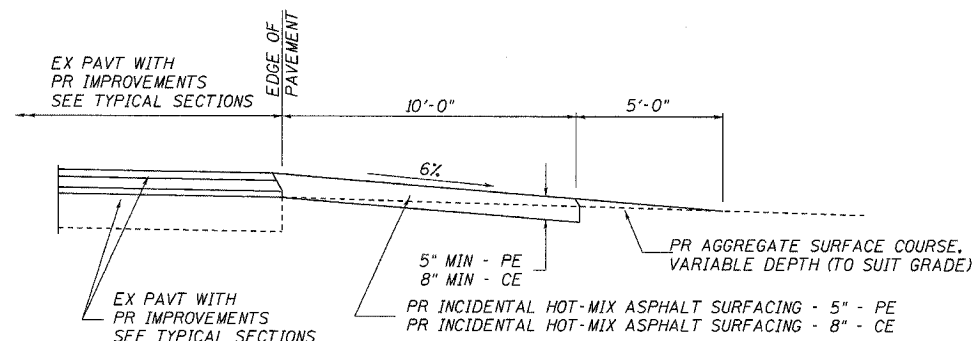
DETAILS FOR FIELD ENTRANCES

FAS 621 (CH 10)
SECTION 05-00075-05-RS
SANGAMON COUNTY

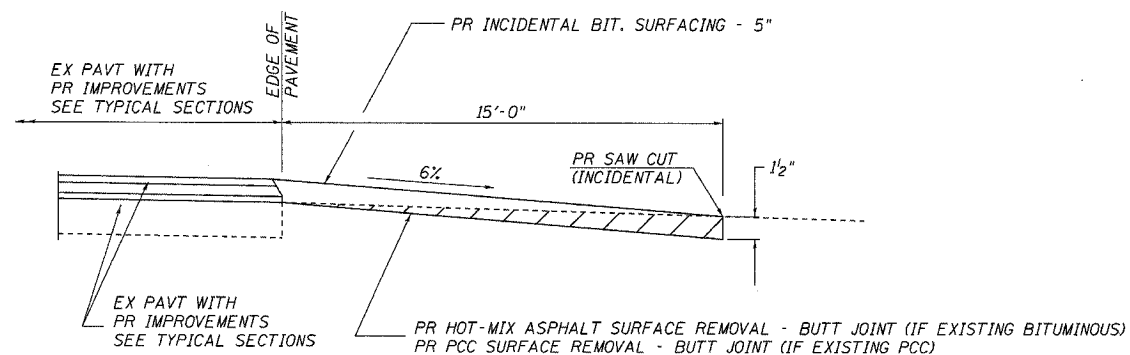
CUMMINS ENGINEERING CORPORATION	JOB #: 2171
	FILE#: 2171ENT
	DATE: 4/30/07

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 621	05-00075 -05-RS	SANGAMON	72	46

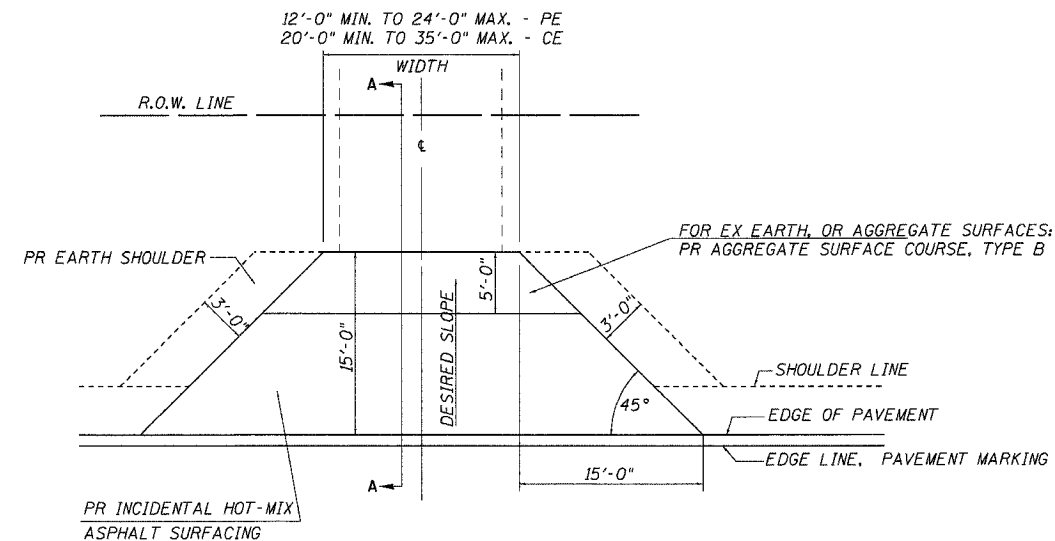
CONTRACT NO. 93439



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



SECTION A-A FOR EX BITUMINOUS/PCC CONCRETE PE



PLAN

APPLICATION RATES USED IN QUANTITY CALCULATIONS

Granular Materials	2.05 Tons/Cu. Yd.
Bituminous Materials (Prime Coat)	0.10 Gallons/Sq. Yd. (Bit. Bases)
	0.35 Gallons/Sq. Yd. (Agg. Bases)
HOT-MIX ASPHALT	112 lbs./Sq. Yd./1" Thickness

LEGEND

PE = PRIVATE ENTRANCE
 CE = COMMERCIAL ENTRANCE
 MB = MAILBOX TURNOUT
 (SEE SHEET 18 FOR DETAILS)

PRIVATE AND COMMERCIAL ENTRANCES

LOCATION	ENTRANCE TYPE	SURFACE TYPE	WIDTH FEET	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT SQ YD	BITUMINOUS MATERIALS (PRIME COAT) GALLON	INCIDENTAL HOT-MIX ASPHALT SURFACING TON	AGGREGATE SURFACE COURSE TYPE B TON	AGGREGATE BASE COURSE TYPE B TON
LT 289+96	PE/MB	AGGREGATE	12		13	21	3	8
LT 304+90	CE	AGGREGATE	30		20	25	6	
LT 313+47	PE	AGGREGATE	12		13	10	2	
RT 55+80	PE	AGGREGATE	14		14	11	2	
RT 56+80	PE	AGGREGATE	16		14	12	3	
RT 116+13	PE/MB	AGGREGATE	18		15	24	4	8
RT 118+00	PE	OIL & CHIP	16	52	6	15		
RT 173+64	PE	OIL & CHIP	12	45	5	13		
RT 193+91	PE/MB	AGGREGATE	12		13	21	3	8
RT 211+36	PE/MB	AGGREGATE	12		13	21	3	8
RT 229+24	PE/MB	AGGREGATE	12		13	21	3	8
RT 238+61	PE/MB	OIL & CHIP	20	59	6	32		
RT 238+81	PE	OIL & CHIP	12	45	5	13		
RT 280+00	CE	AGGREGATE	20		16	20	4	
RT 298+77	PE/MB	BITUMINOUS	12	45	5	26		8
RT 309+30	PE	AGGREGATE	12		13	10	2	
TOTAL				246	184	295	35	56

DETAILS FOR PRIVATE AND COMMERCIAL ENTRANCES

FAS 621 (CH 10)
 SECTION 05-00075-05-RS
 SANGAMON COUNTY

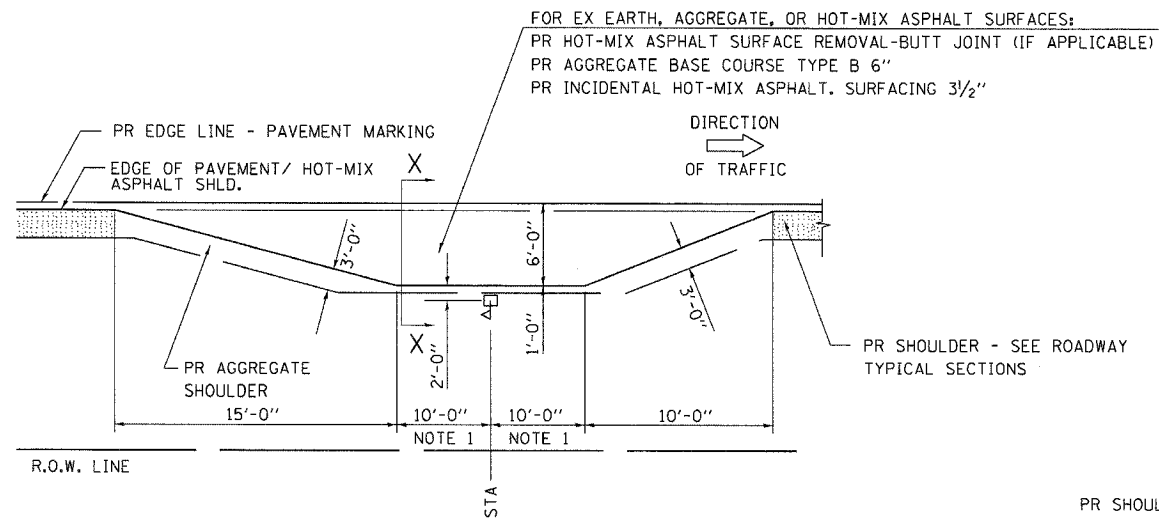
CUMMINS ENGINEERING CORPORATION

JOB #: 2171
 FILE: 2171ENT
 DATE: 4/30/07

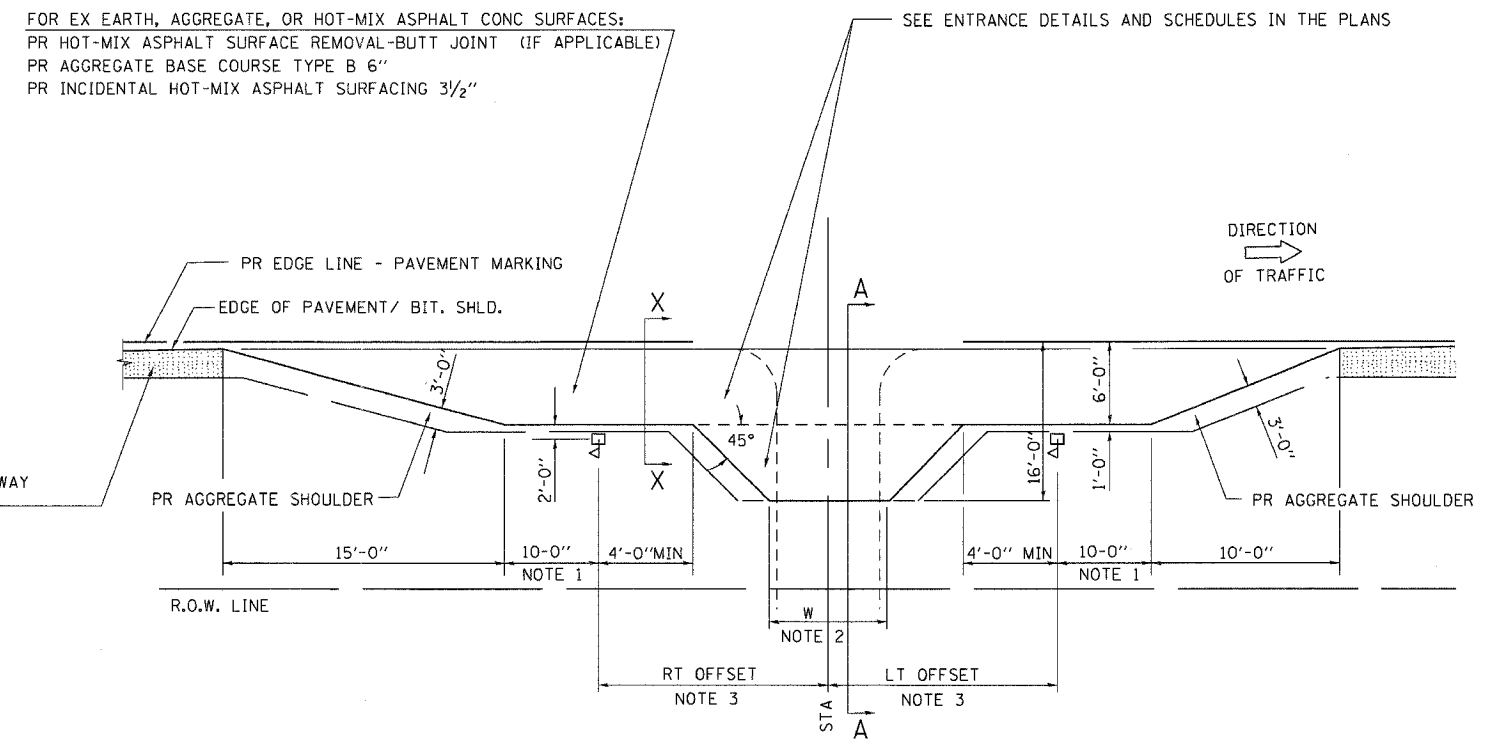
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 621	05-00075 -05-RS	SANGAMON	72	47

CONTRACT NO. 93439

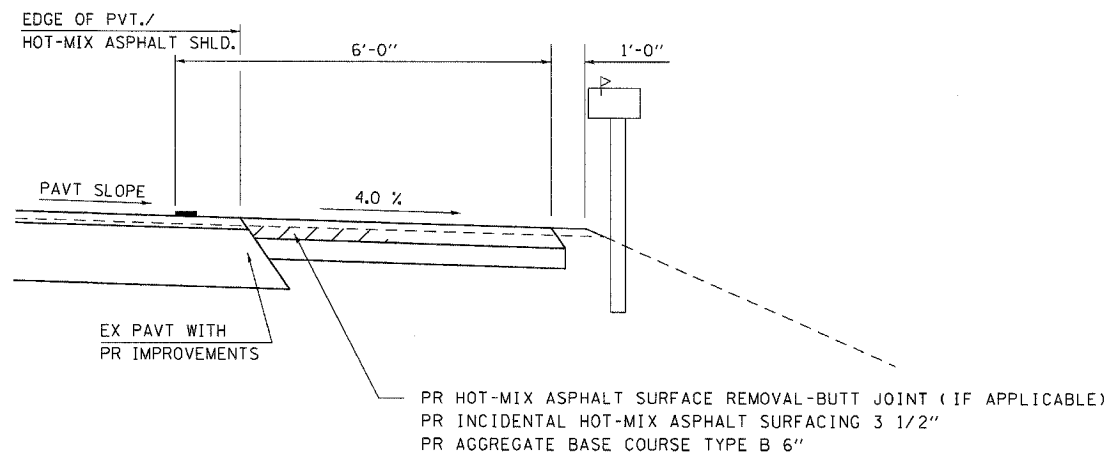
DETAILS OF MAILBOX TURNOUTS



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 HOT-MIX ASPHALT PE & FE

(DETAIL APPLIES WHEN M.B. TURNOUT DOES NOT EXIST.
 IF EXISTING, TREAT SAME AS ENTRANCE.)

- NOTE 1 IF MORE THAN ONE MAILBOX IS PRESENT, DIMENSION FROM CENTER OF END MAILBOX.
- NOTE 2 FOR ENTRANCE LAYOUT DIMENSIONS AND SECTION A-A REFER TO THE SCHEDULES IN THE PLANS.
- NOTE 3 BOTH LT OR RT OFFSETS FOR MAILBOX SHOWN USE OFFSET DIMENSION PER SCHEDULE AND REFER TO LAYOUT SHOWN ON THE PLAN.

DETAILS FOR MAILBOX TURNOUTS

FAS 621 (CH 10)
 SECTION 05-00075-05-RS
 SANGAMON COUNTY

CUMMINS ENGINEERING CORPORATION

JOB #: 2171
 FILE: 2171ENT
 DATE: 4/30/07

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
IL 104	05-00075-05-RS	SANGAMON	72	48
STA. 8+50 TO STA. 10+50				

DATE	BY

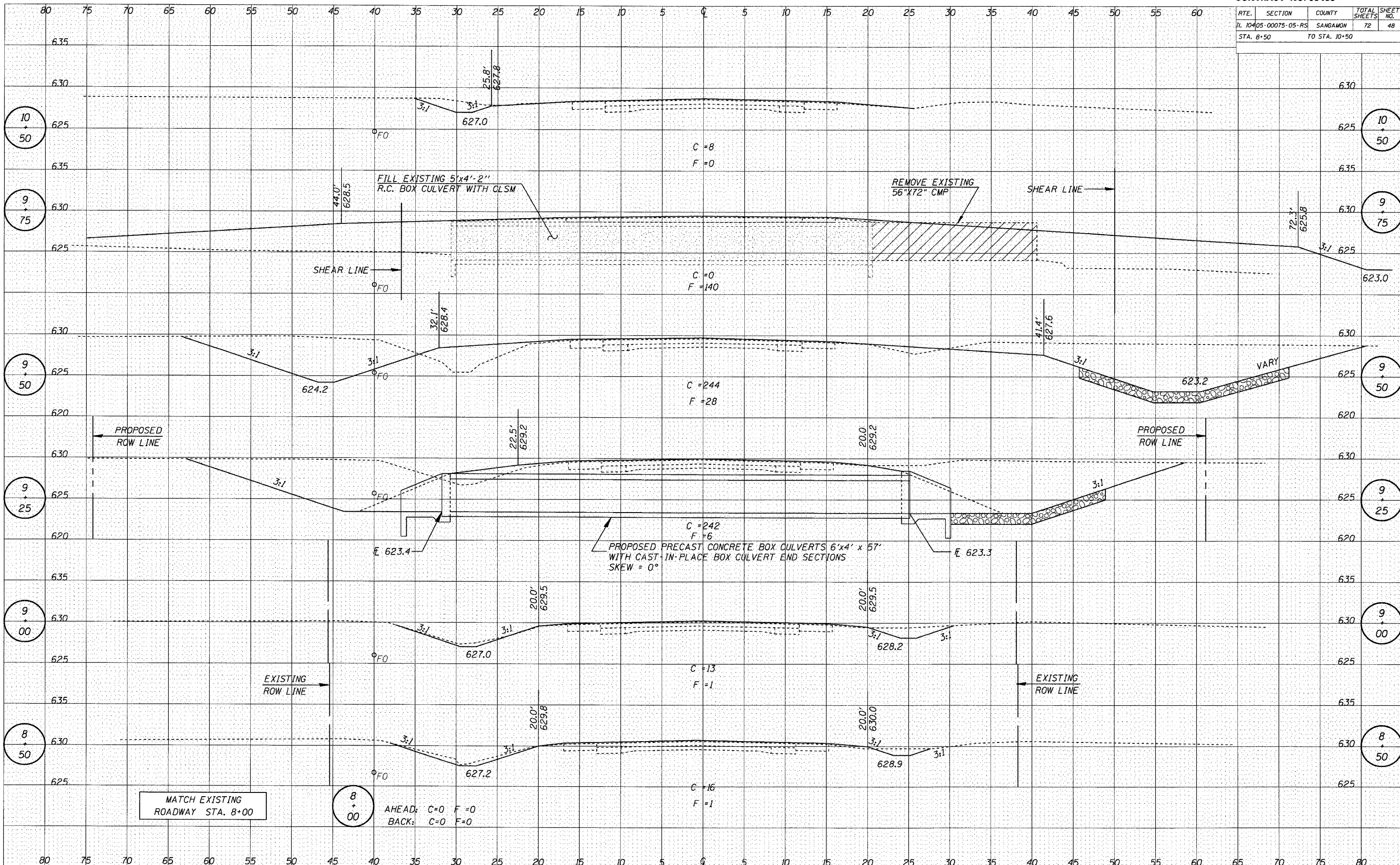
FINAL SURVEY
SURVEYED
PLOTTED
NOTE BOOK
NO.

TEMPLATE
AREAS CHECKED

DATE	BY

ORIGINAL SURVEY
SURVEYED
PLOTTED
NOTE BOOK
NO.

TEMPLATE
AREAS CHECKED



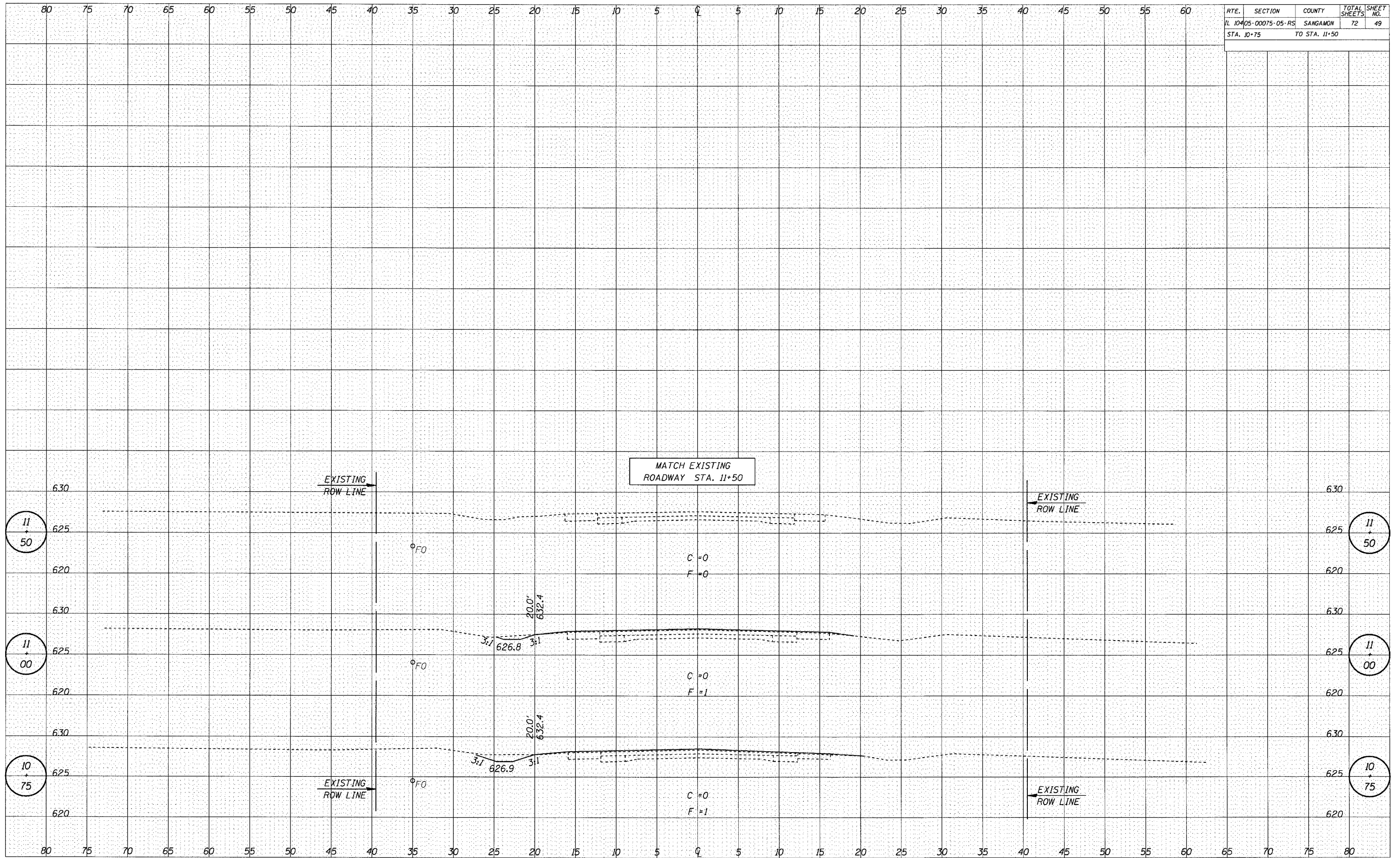
MATCH EXISTING ROADWAY STA. 8+00

8+00
AHEAD: C=0 F=0
BACK: C=0 F=0

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
IL 104	05-00075-05-RS	SANGAMON	72	49
STA. 10+75 TO STA. 11+50				

DATE	BY
SURVEYED	DATE
NOTE BOOK	NO.
AREAS CHECKED	

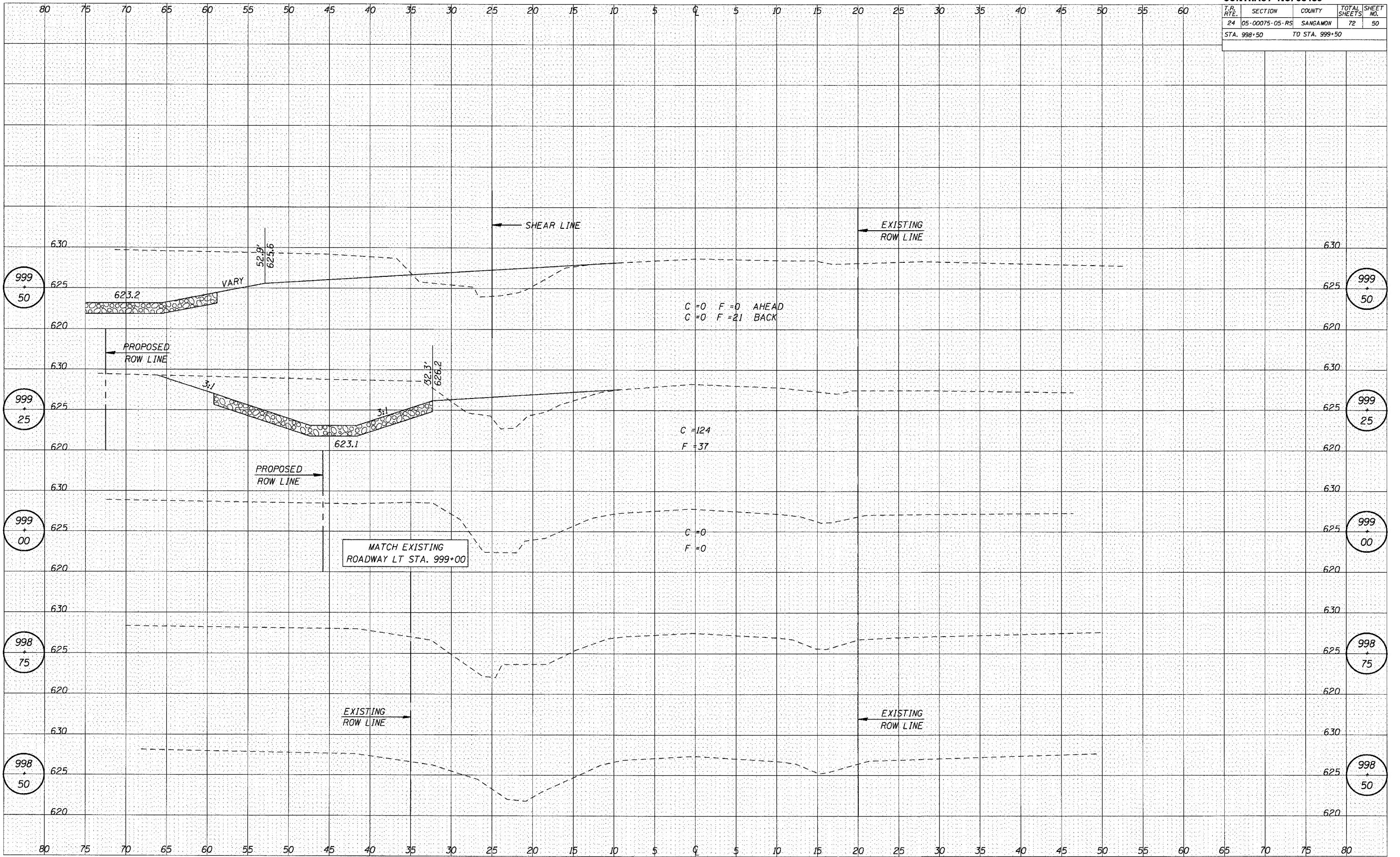
DATE	BY
SURVEYED	DATE
NOTE BOOK	NO.
AREAS CHECKED	



T.P. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
24	05-00075-05-RS	SANGAMON	72	50
STA. 998+50			TO STA. 999+50	

DATE	BY

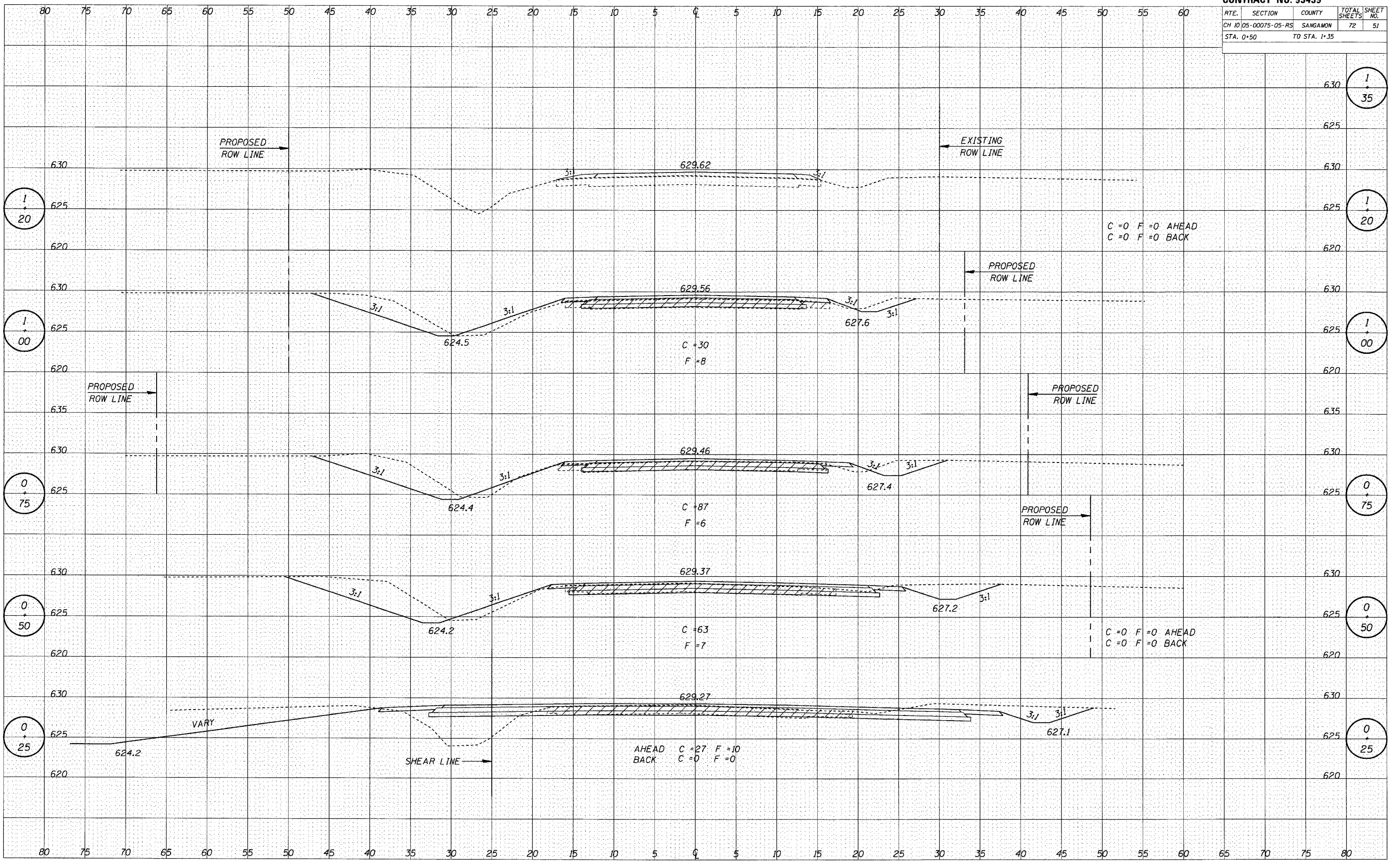
DATE	BY



RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 10	05-00075-05-RS	SANGAMON	72	51
STA. 0+50 TO STA. 1+35				

DATE	BY
SURVEYED	PLOTTED
NOTE BOOK	TEMPLATE
NO.	AREAS CHECKED

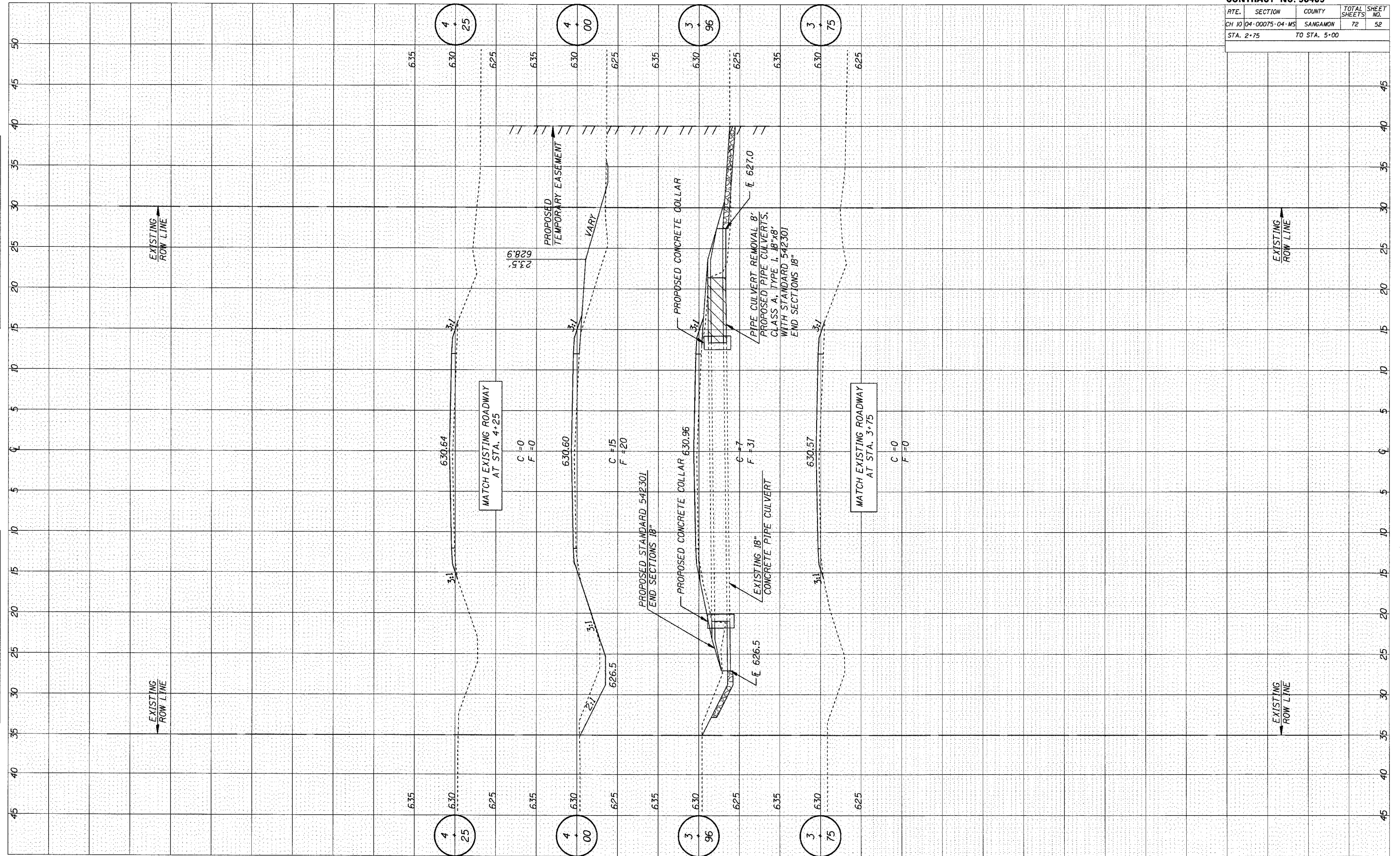
DATE	BY
SURVEYED	PLOTTED
NOTE BOOK	TEMPLATE
NO.	AREAS CHECKED



RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 10	04-00075-04-MS	SANGAMON	72	52
STA. 2+75 TO STA. 5+00				

FINAL SURVEY	BY	DATE
NOTE BOOK		
AREAS CHECKED		

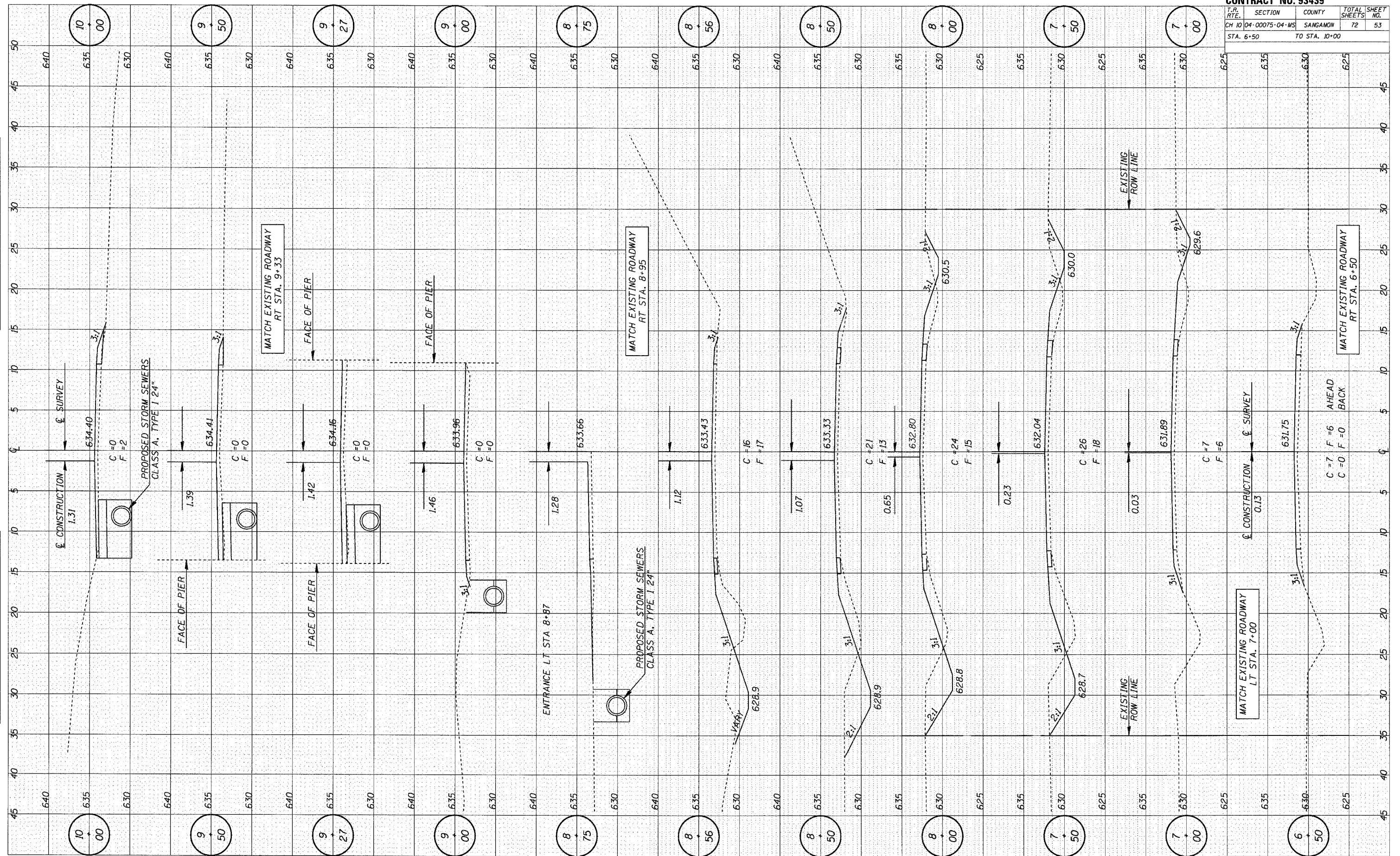
ORIGINAL SURVEY	BY	DATE
NOTE BOOK		
AREAS CHECKED		



T.P. RTE.	SECTION	COUNTY	TOTAL SHEET NO.
CH 10	04-00075-04-MS	SANGAMON	72
STA. 6+50 TO STA. 10+00			53

FINAL SURVEY	DATE
SURVEYED BY	
NOTE BOOK NO.	
AREAS CHECKED	

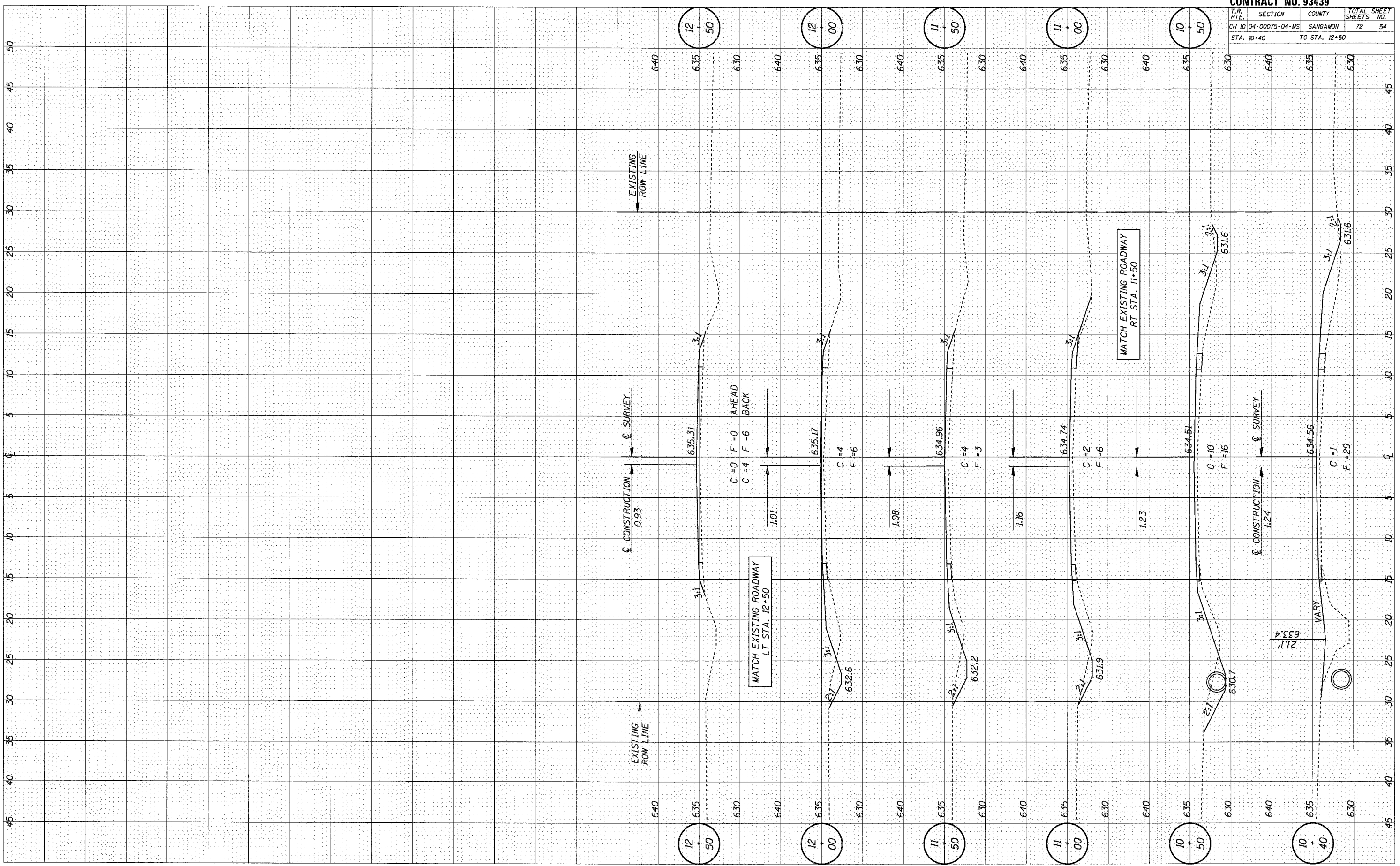
ORIGINAL SURVEY	DATE
SURVEYED BY	
NOTE BOOK NO.	
AREAS CHECKED	



T.P. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 10	04-00075-04-MS	SANGAMON	72	54
STA. 10+40 TO STA. 12+50				

FINAL SURVEY	SURVEYED	BY	DATE
NO.	NO.		

ORIGINAL SURVEY	SURVEYED	BY	DATE
NO.	NO.		



CONTRACT NO. 93439

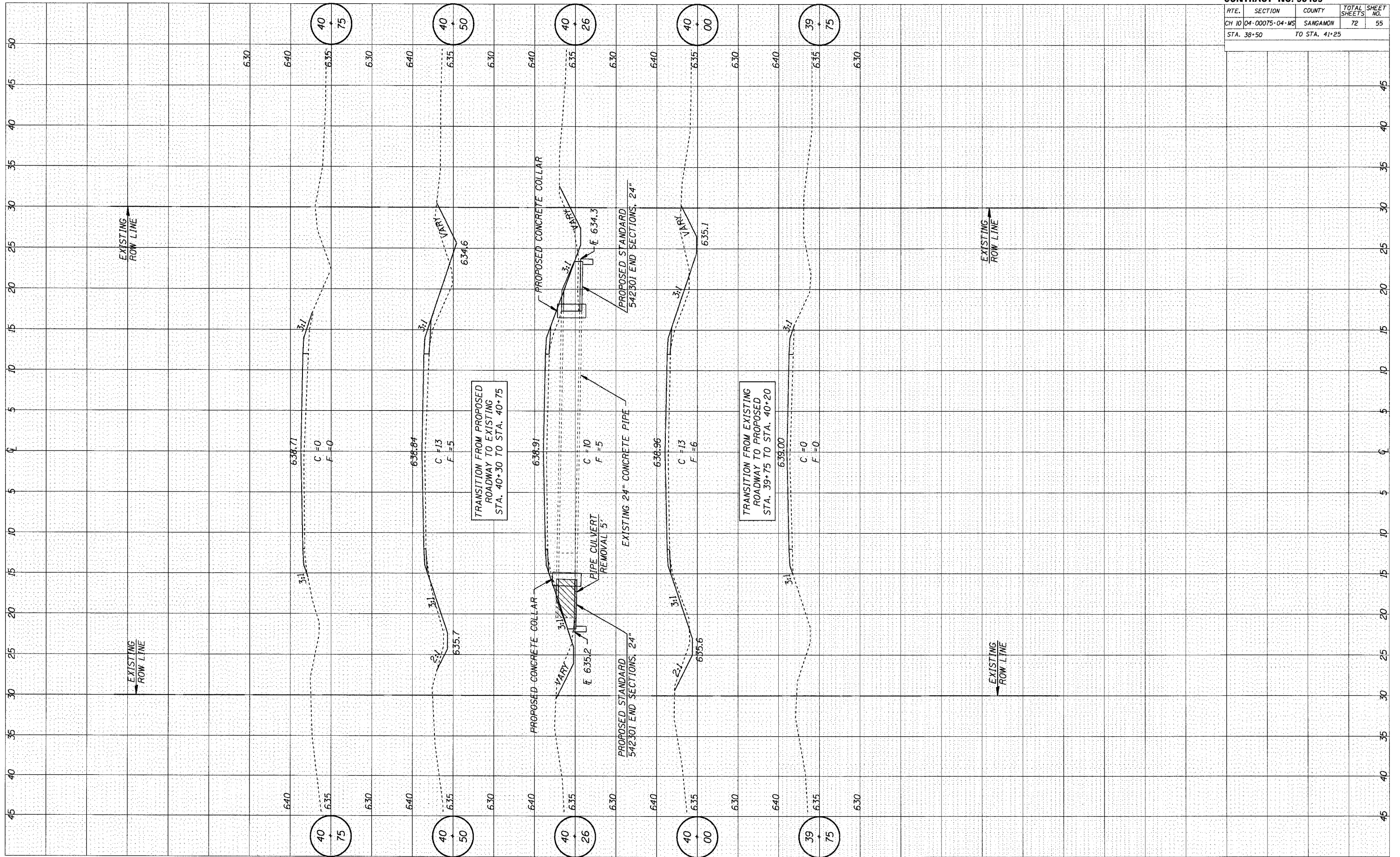
RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 10	04-00075-04-MS	SANGAMON	72	55
STA. 38+50			TO STA. 41+25	

FINAL SURVEY

BY	DATE
SURVEYED	
NOTE BOOK	
AREAS CHECKED	
NO.	

ORIGINAL SURVEY

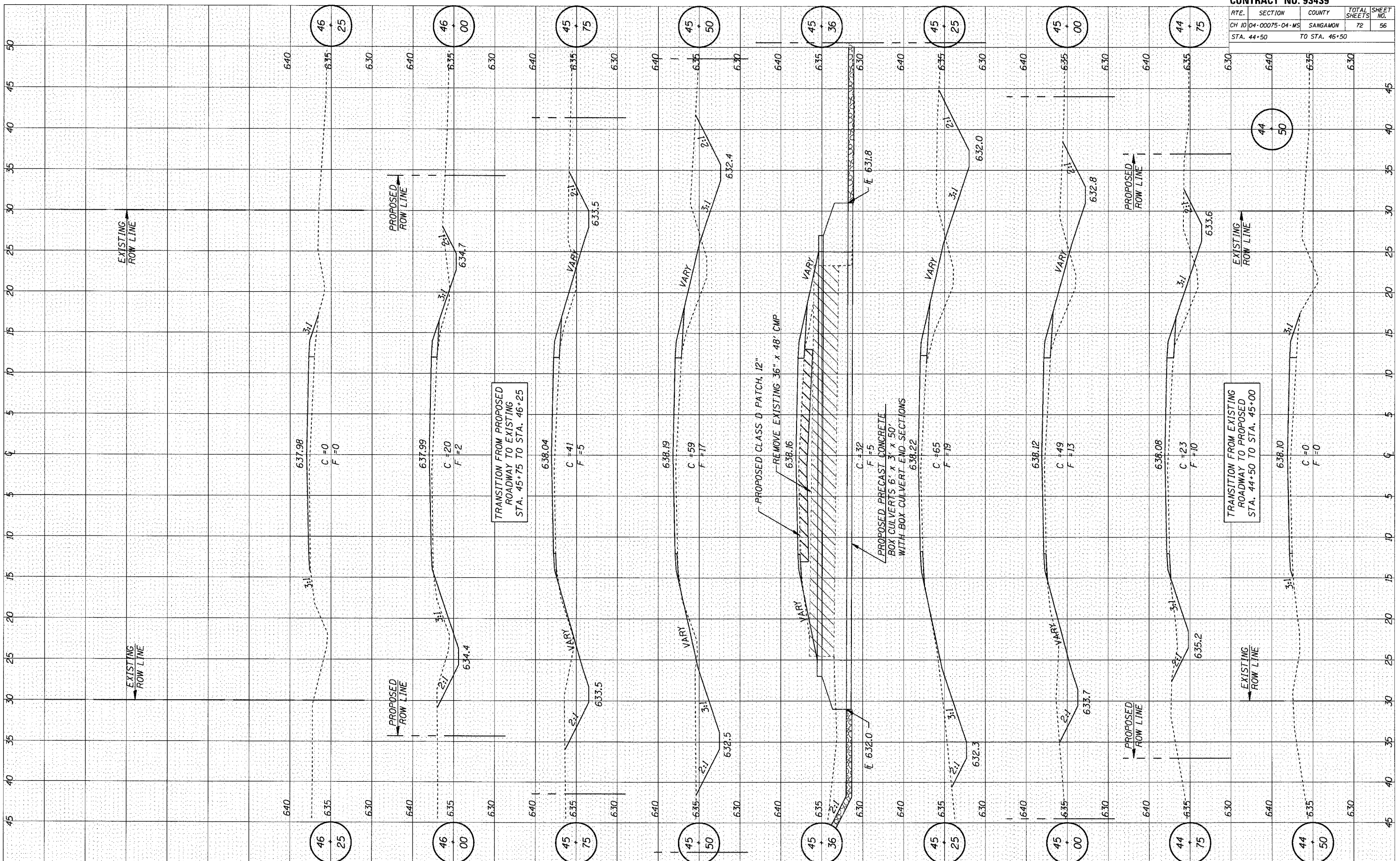
BY	DATE
SURVEYED	
NOTE BOOK	
AREAS CHECKED	
NO.	



RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 10	04-00075-04-MS	SANGAMON	72	56
STA. 44+50 TO STA. 46+50				

FINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
NO.	TEMPLATE		
	AREAS CHECKED		

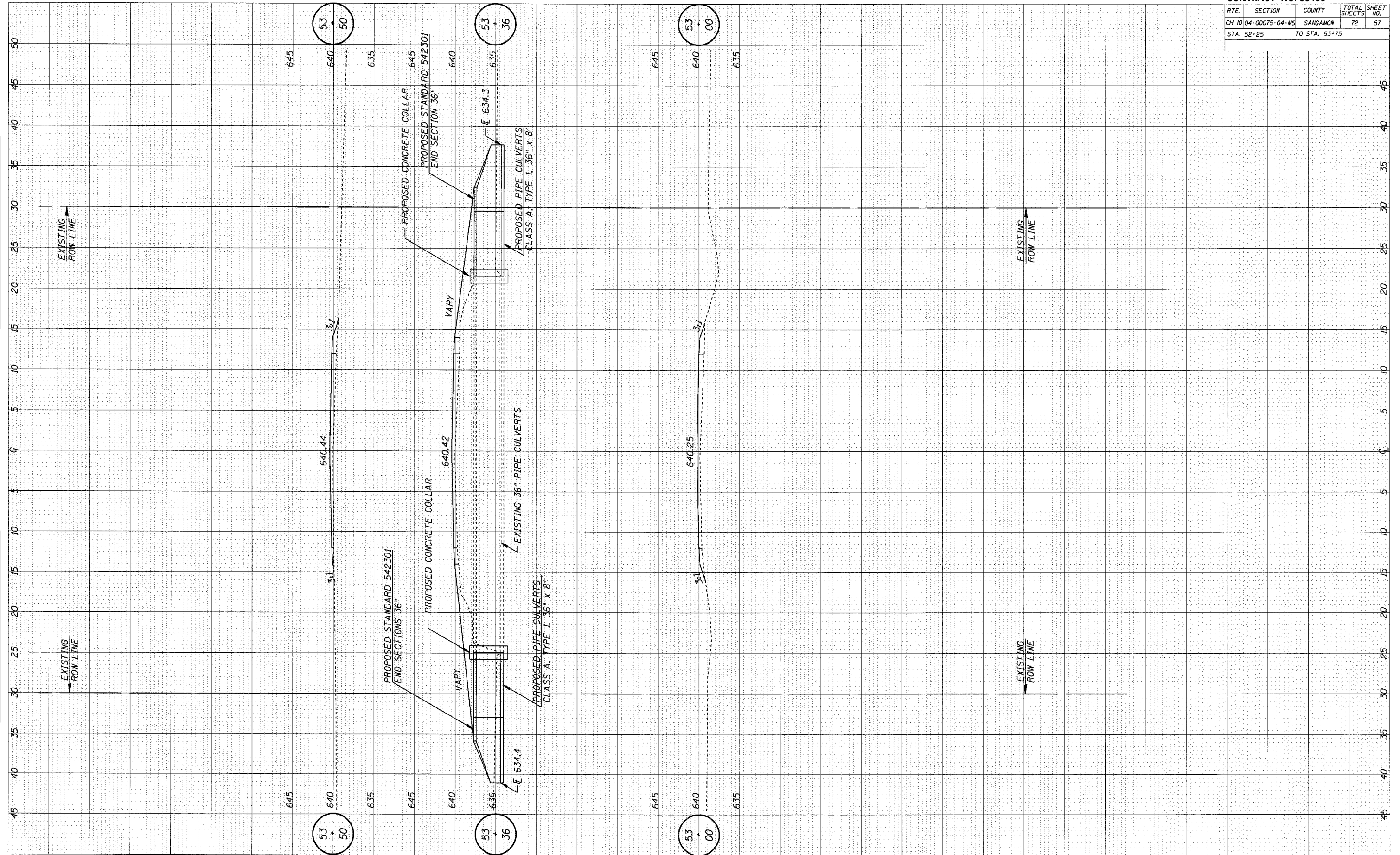
ORIGINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
NO.	TEMPLATE		
	AREAS CHECKED		



RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 10	04-00075-04-M5	SANGAMON	72	57
STA. 52+25 TO STA. 53+75				

FINAL SURVEY BY DATE
 SURVEYED BY
 NOTE BOOK NO.
 TEMPLATE
 AREAS CHECKED

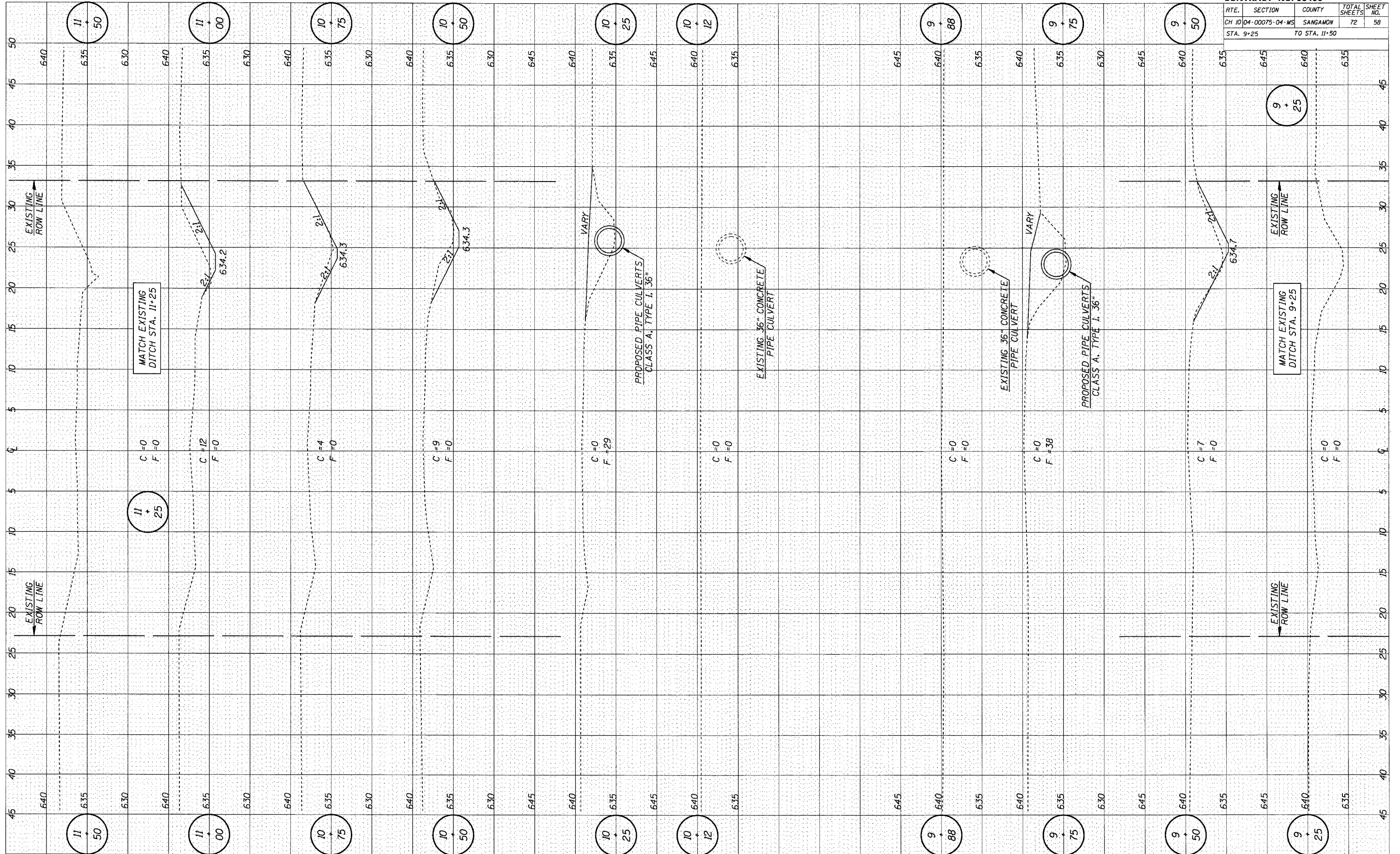
ORIGINAL SURVEY BY DATE
 SURVEYED BY
 NOTE BOOK NO.
 TEMPLATE
 AREAS CHECKED



RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 10	04-00075-04-MS	SANGAMON	72	58
STA. 9+25 TO STA. 11+50				

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

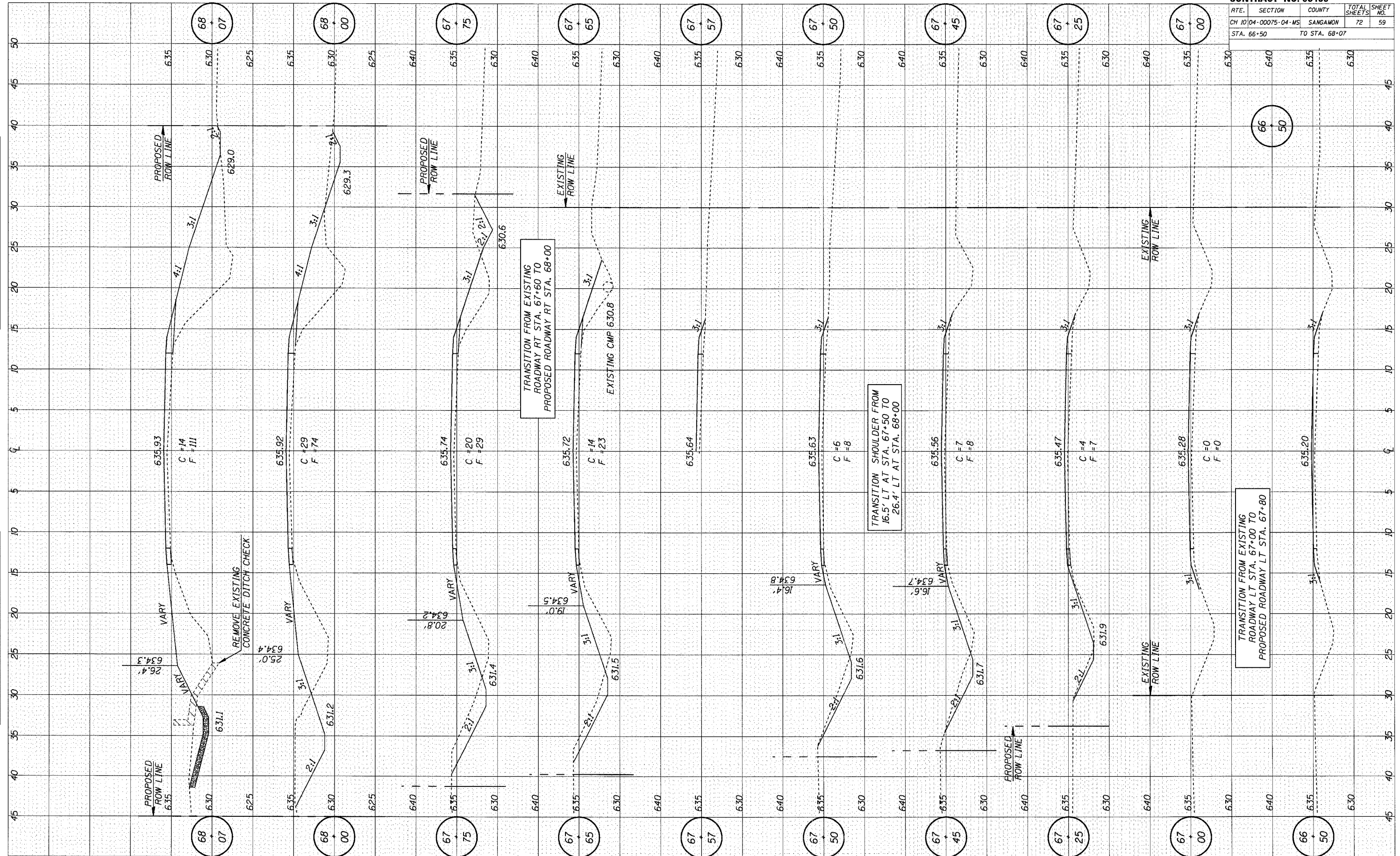
ORIGINAL SURVEY
 SURVEYED BY: _____
 DATE: _____
 NOTE BOOK NO.: _____
 AREAS CHECKED: _____



RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 10	04-00075-04-MS	SANGAMON	72	59
STA. 66+50 TO STA. 68+07				

FINAL SURVEY	DATE
SURVEYED	BY
PLOTTED	
TEMPLATE	
NOTE BOOK	
AREAS CHECKED	
NO.	

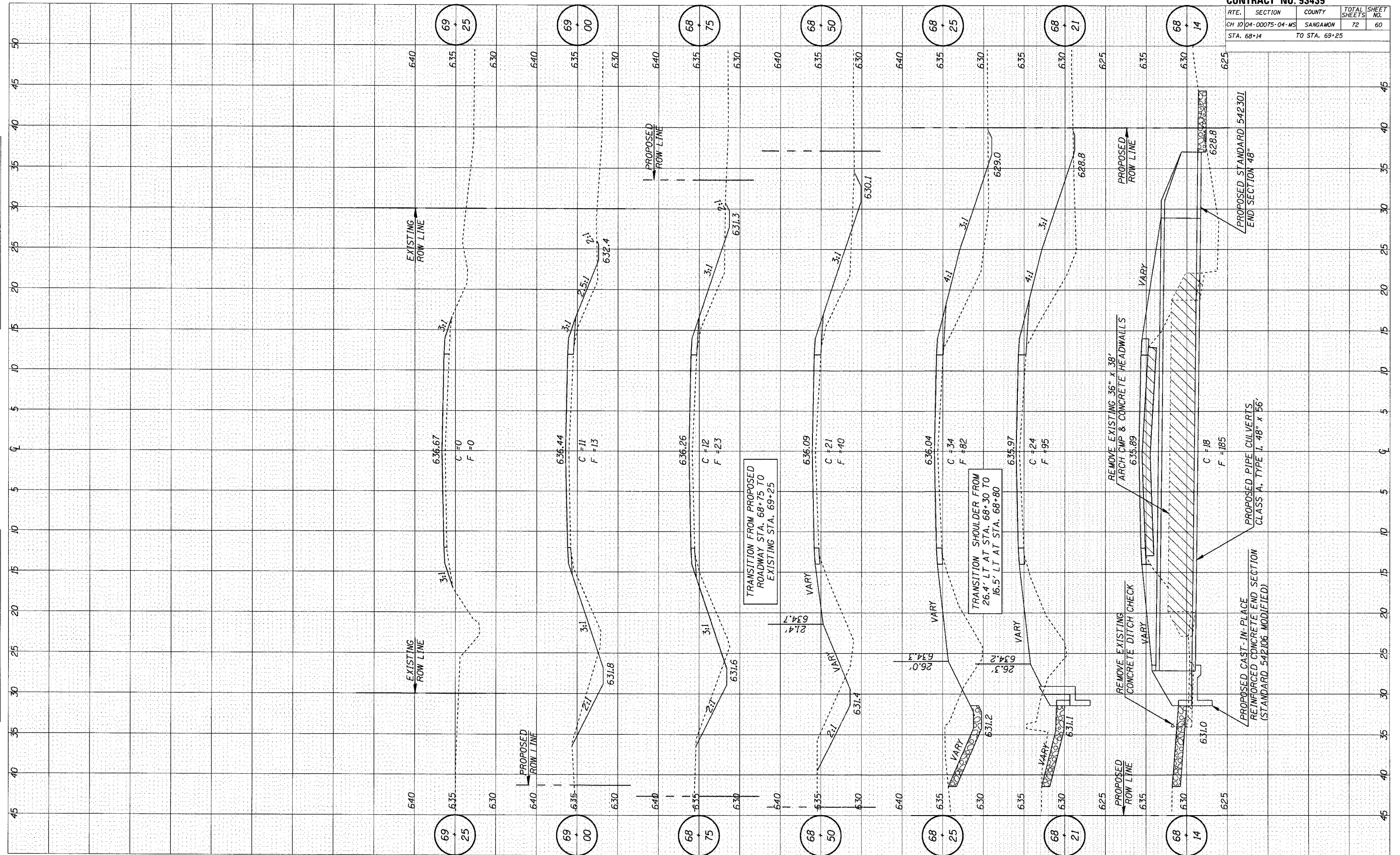
ORIGINAL SURVEY	DATE
SURVEYED	BY
PLOTTED	
TEMPLATE	
NOTE BOOK	
AREAS CHECKED	
NO.	



ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 10	04-00075-04-MS	SANGAMON	72	60
STA. 68+14		TO STA. 69+25		

FINAL SURVEY	BY	DATE
NOTE BOOK		
NO.		

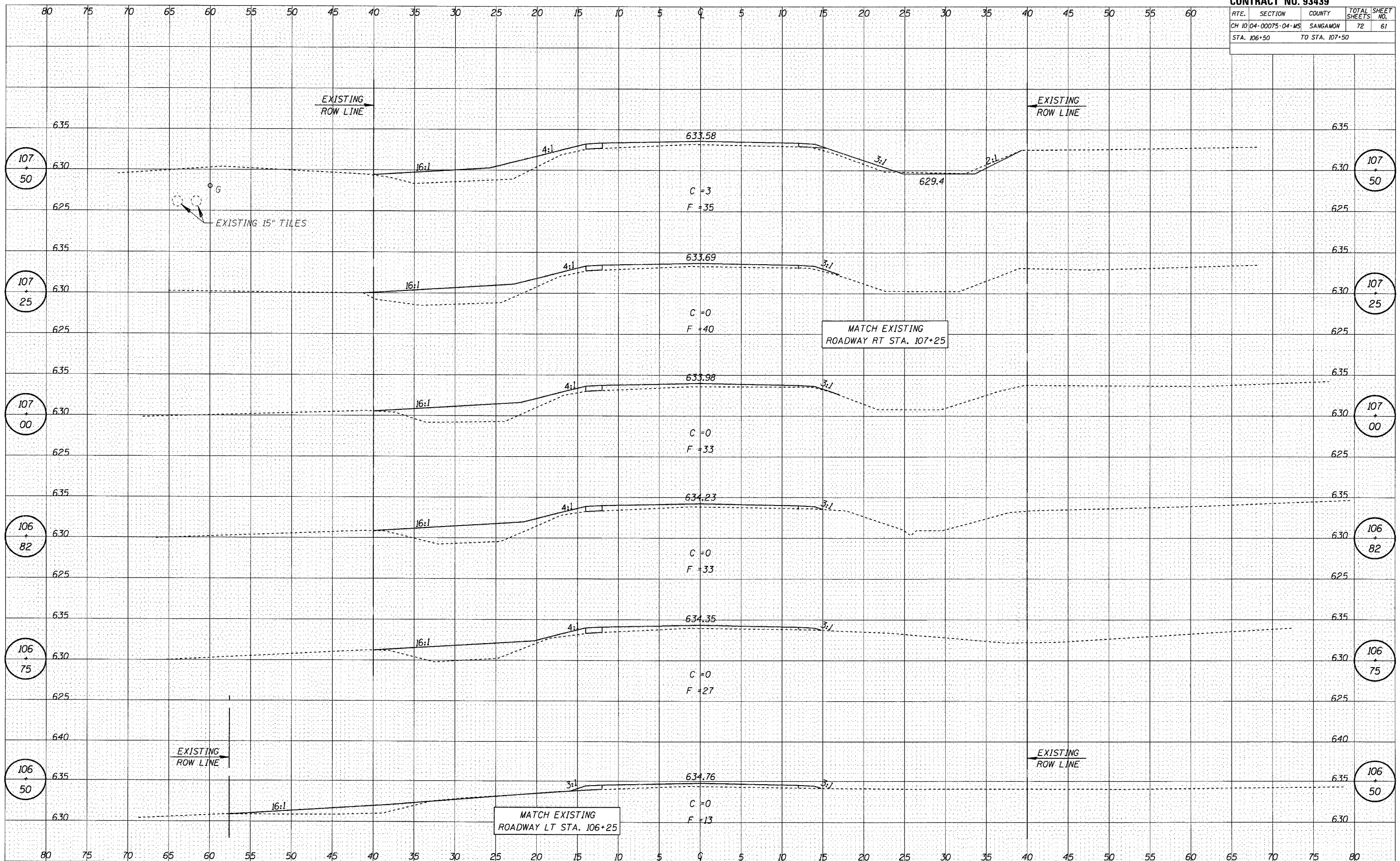
ORIGINAL SURVEY	BY	DATE
NOTE BOOK		
NO.		



DATE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 10 04-00075-04-MS	SANGAMON	72	61	
STA. 106+50	TO STA. 107+50			

DATE	BY
ORIGINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS CHECKED

DATE	BY
ORIGINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS CHECKED



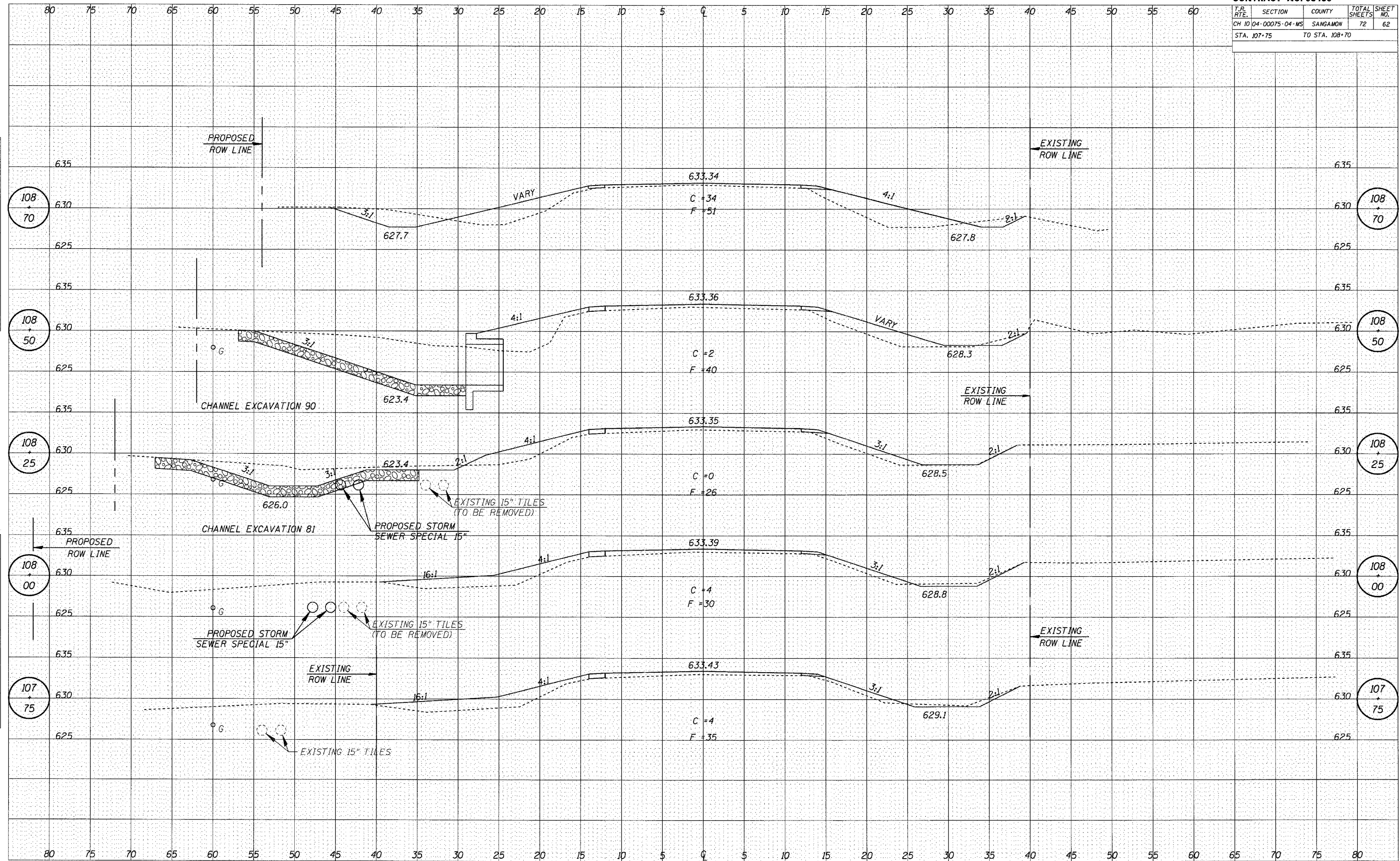
T.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 10 04	00075-04-M5	SANGAMON	72	62
STA. 107+75	TO STA. 108+70			

DATE	BY

SURVEYED
 PLANED
 TYPED
 AREAS CHECKED
 FINAL SURVEY NOTE BOOK NO.

DATE	BY

SURVEYED
 PLANED
 TYPED
 AREAS CHECKED
 ORIGINAL SURVEY NOTE BOOK NO.



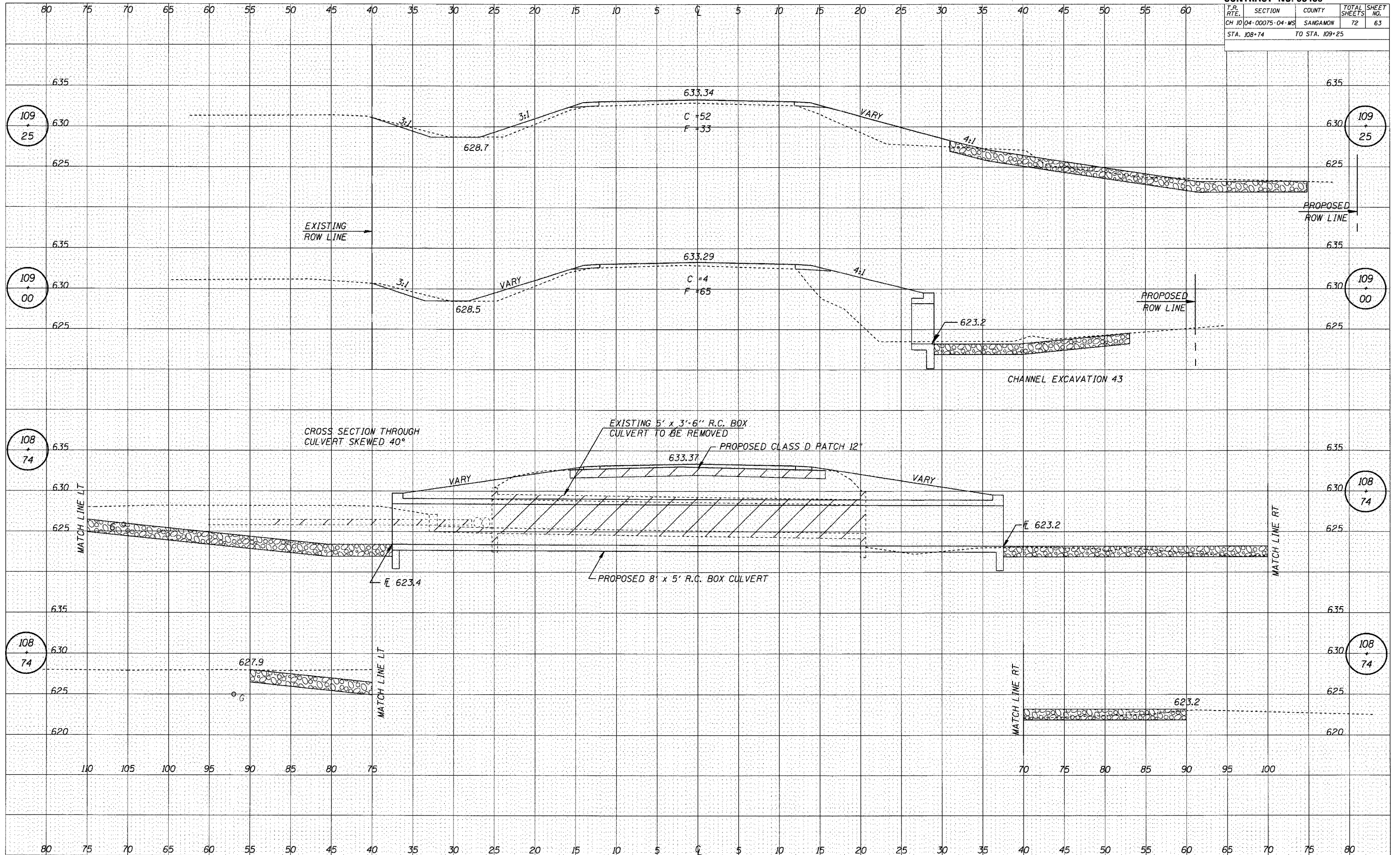
T.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 10	04-00075-04-MS	SANGAMON	72	63
STA. 108+74			TO STA. 109+25	

FINAL SURVEY

DATE	
BY	
SURVEYED	
TEMPERATURE	
NOTE BOOK	
AREAS CHECKED	
NO.	

ORIGINAL SURVEY

DATE	
BY	
SURVEYED	
TEMPERATURE	
NOTE BOOK	
AREAS CHECKED	
NO.	



T.R. RITE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 10	04-00075-04-MS	SANGAMON	72	64
STA. 109+50 TO STA. 110+50				

FINAL SURVEY NOTE BOOK NO. _____

DATE _____

BY _____

SURVEYED _____

TEMPERATURE _____

AREAS CHECKED _____

ORIGINAL SURVEY NOTE BOOK NO. _____

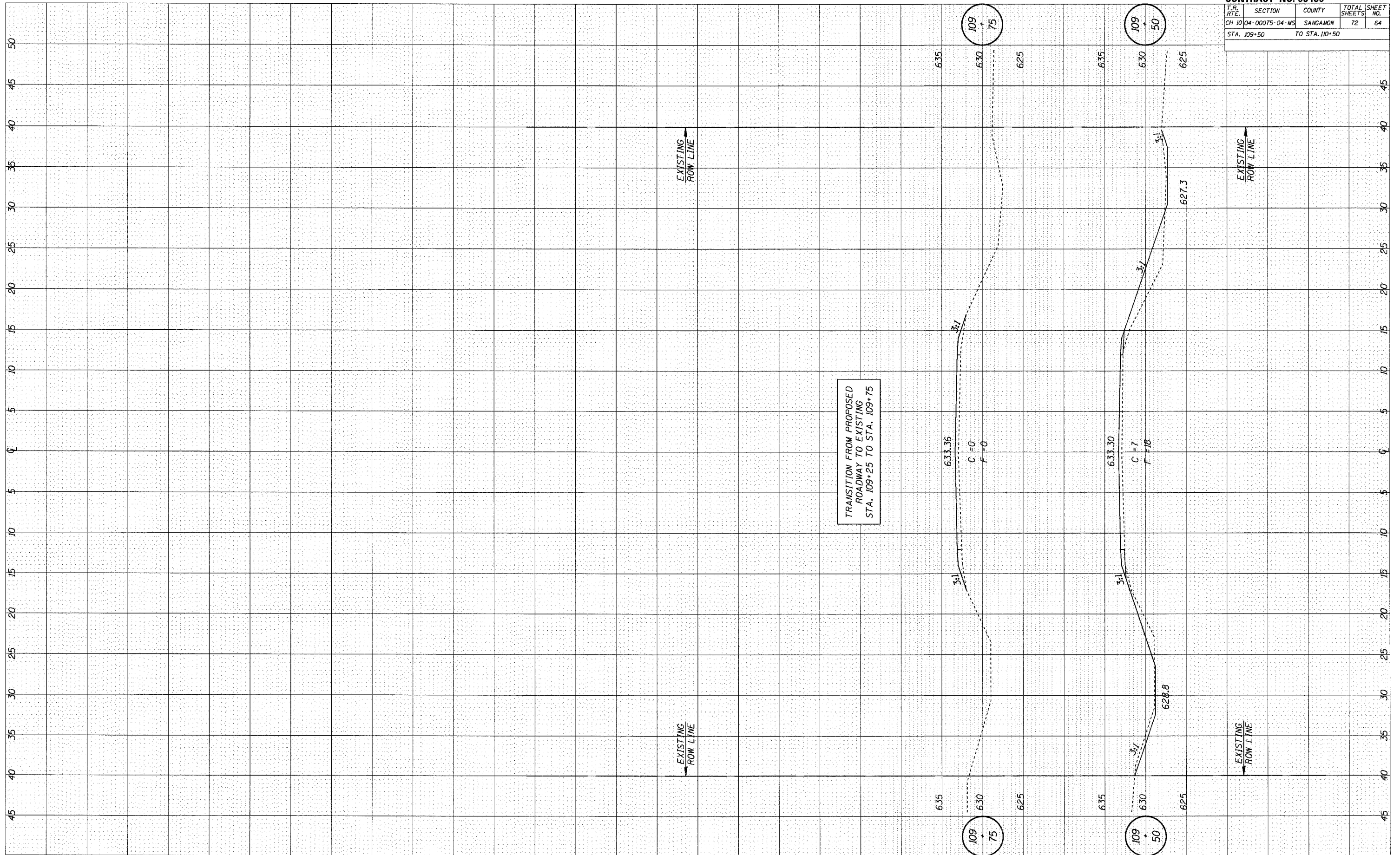
DATE _____

BY _____

SURVEYED _____

TEMPERATURE _____

AREAS CHECKED _____



RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 10	04-00075-04-M5	SANGAMON	72	65
STA. 143+50	TO STA. 145+75			

ORIGINAL SURVEY PLOTTED AREAS CHECKED

NO.	BY	DATE

FINAL SURVEY PLOTTED AREAS CHECKED

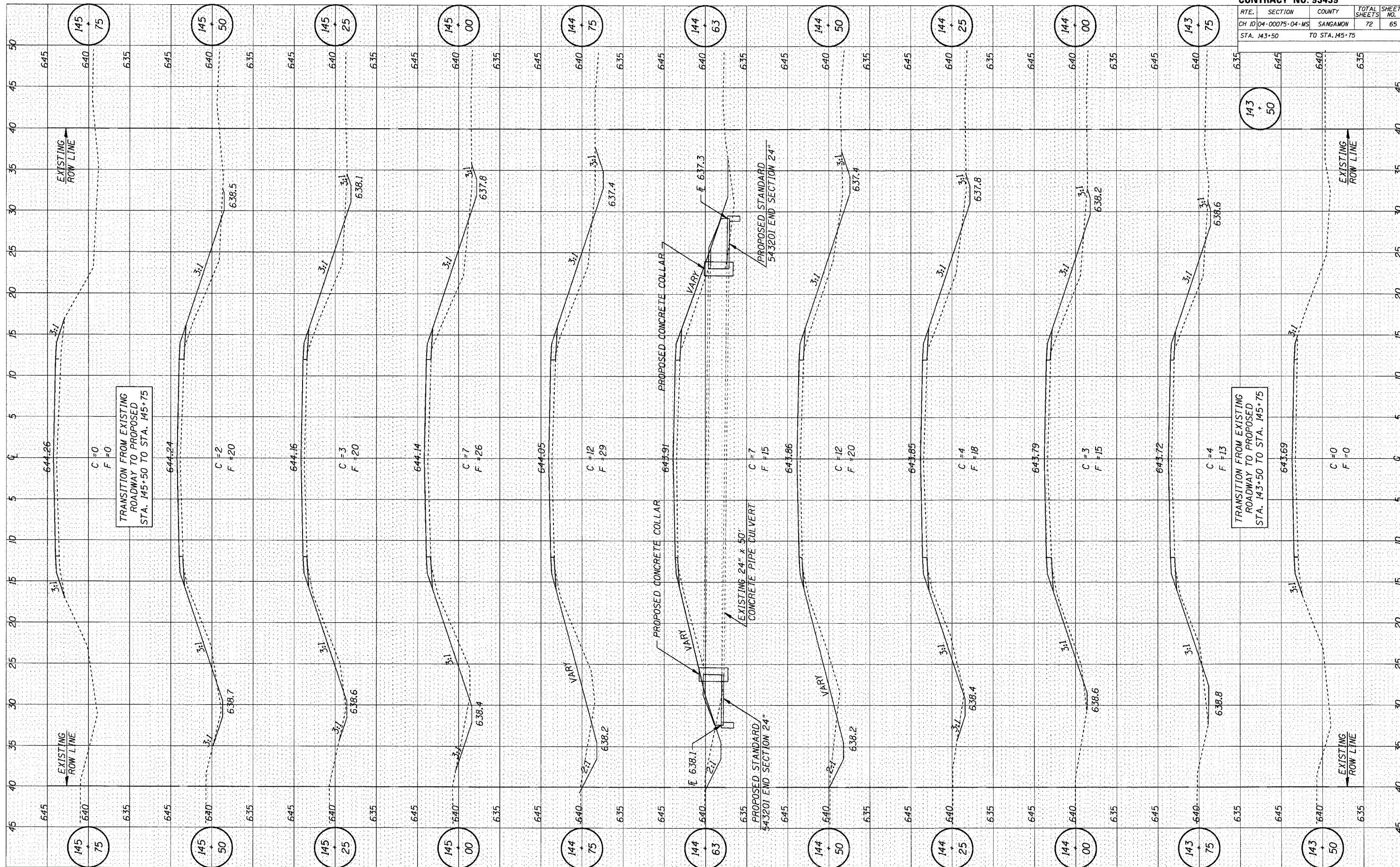
NO.	BY	DATE

ORIGINAL SURVEY PLOTTED AREAS CHECKED

NO.	BY	DATE

FINAL SURVEY PLOTTED AREAS CHECKED

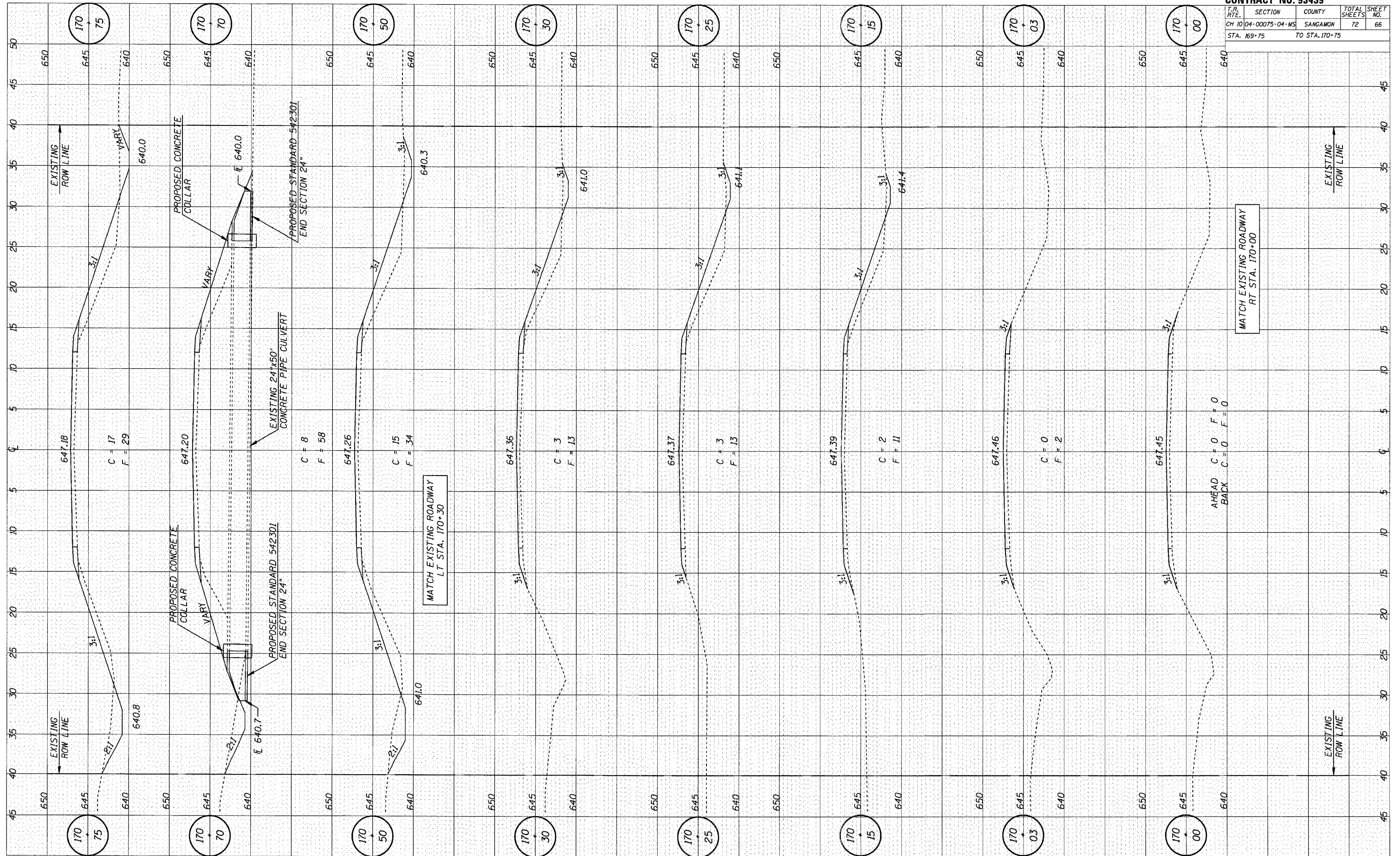
NO.	BY	DATE



T.R. R.F.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 10	04-00075-04-MS	SANGAMON	72	66
STA. 169+75 TO STA. 170+75				

FINAL SURVEY	BY	DATE
SURVEYED		
NOTE BOOK		
TEMPLATE		
AREAS CHECKED		
NO.		

ORIGINAL SURVEY	BY	DATE
SURVEYED		
NOTE BOOK		
TEMPLATE		
AREAS CHECKED		
NO.		

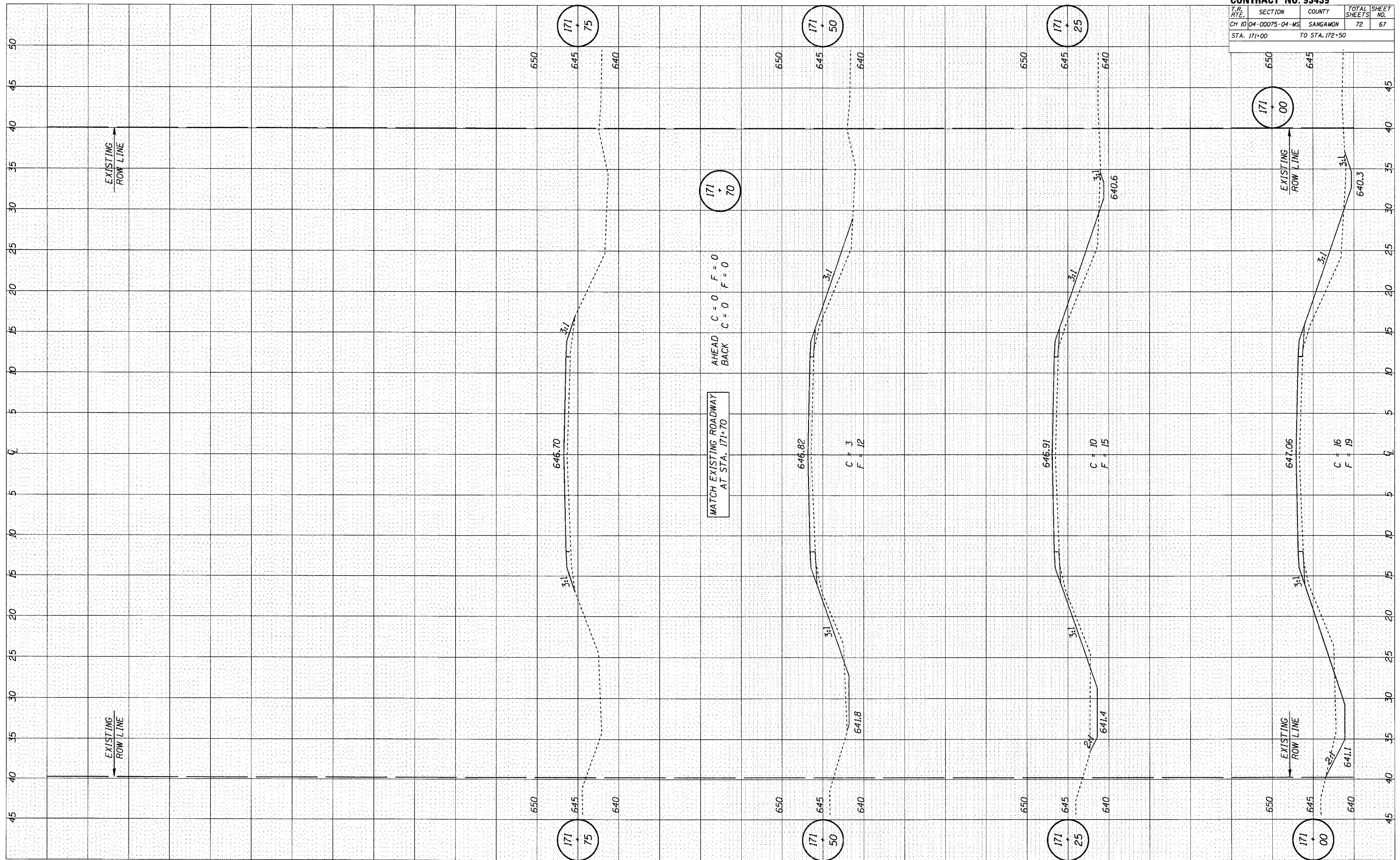


CONTRACT NO. 93439

T.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 10	04-00075-04-MS	SANGAMON	72	67
STA. 171+00			TO STA. 172+50	

FINAL SURVEY	DATE
NO.	

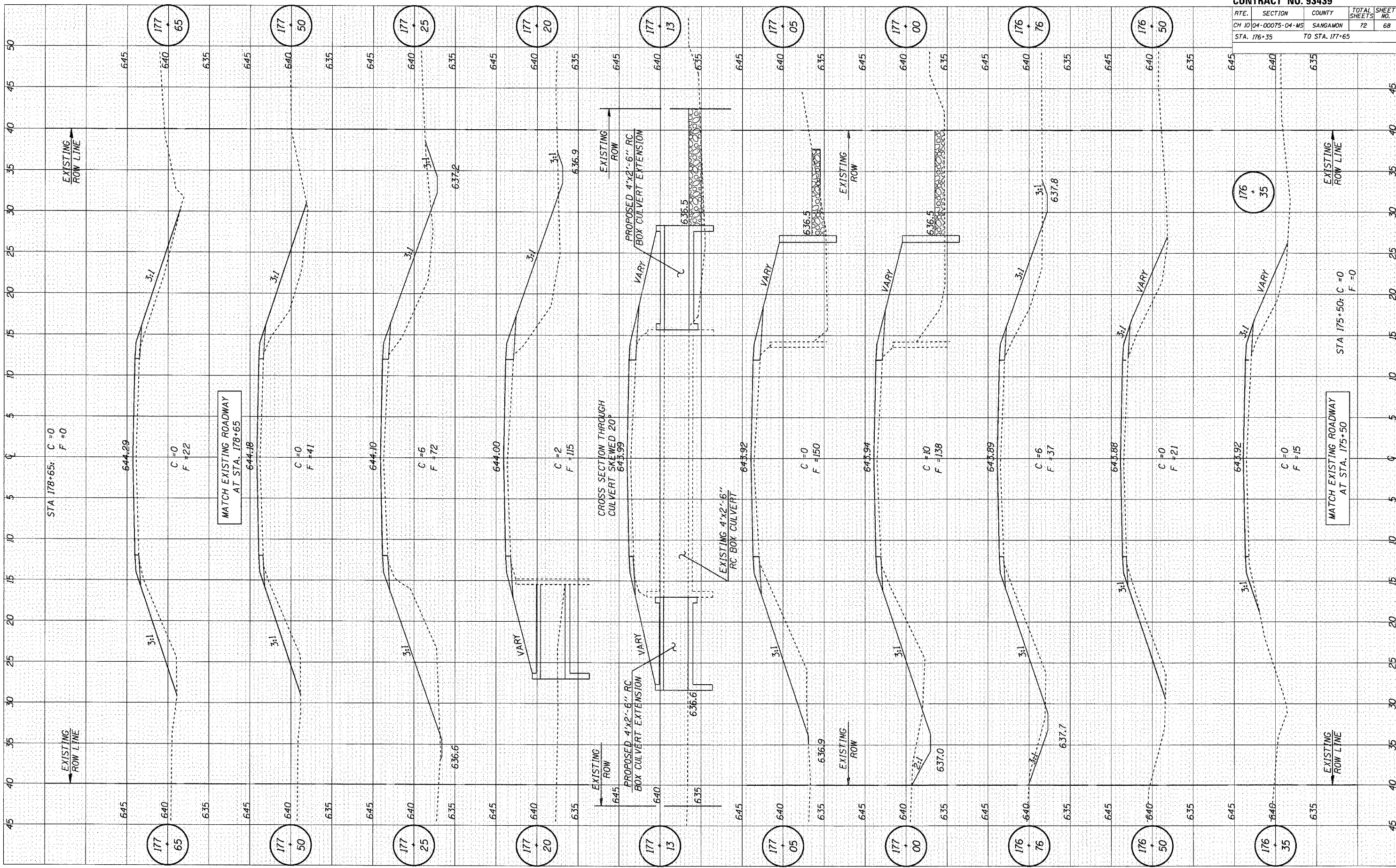
ORIGINAL SURVEY	DATE
NO.	



RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 10	04-00075-04-MS	SANGAMON	72	68
STA. 176+35 TO STA. 177+65				

FINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
NO.	TEMPLATE		
	AREAS CHECKED		

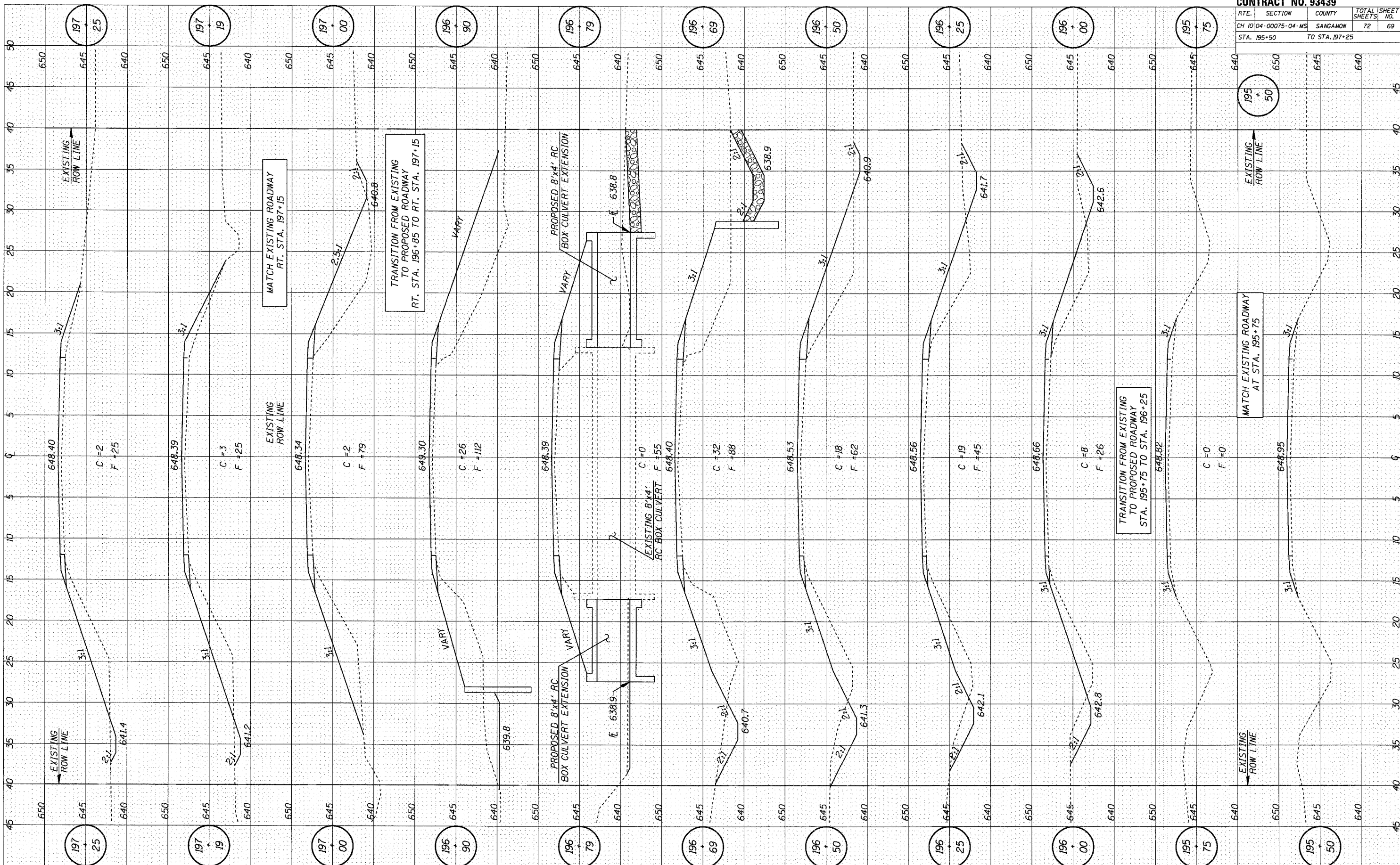
ORIGINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
NO.	TEMPLATE		
	AREAS CHECKED		



RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 10	04-00075-04-MS	SANGAMON	72	69
STA. 195+50 TO STA. 197+25				

FINAL SURVEY	SURVEYED	DATE
NOTE BOOK	PLOTTED	BY
NO.	TEMPLATE	
	AREAS CHECKED	

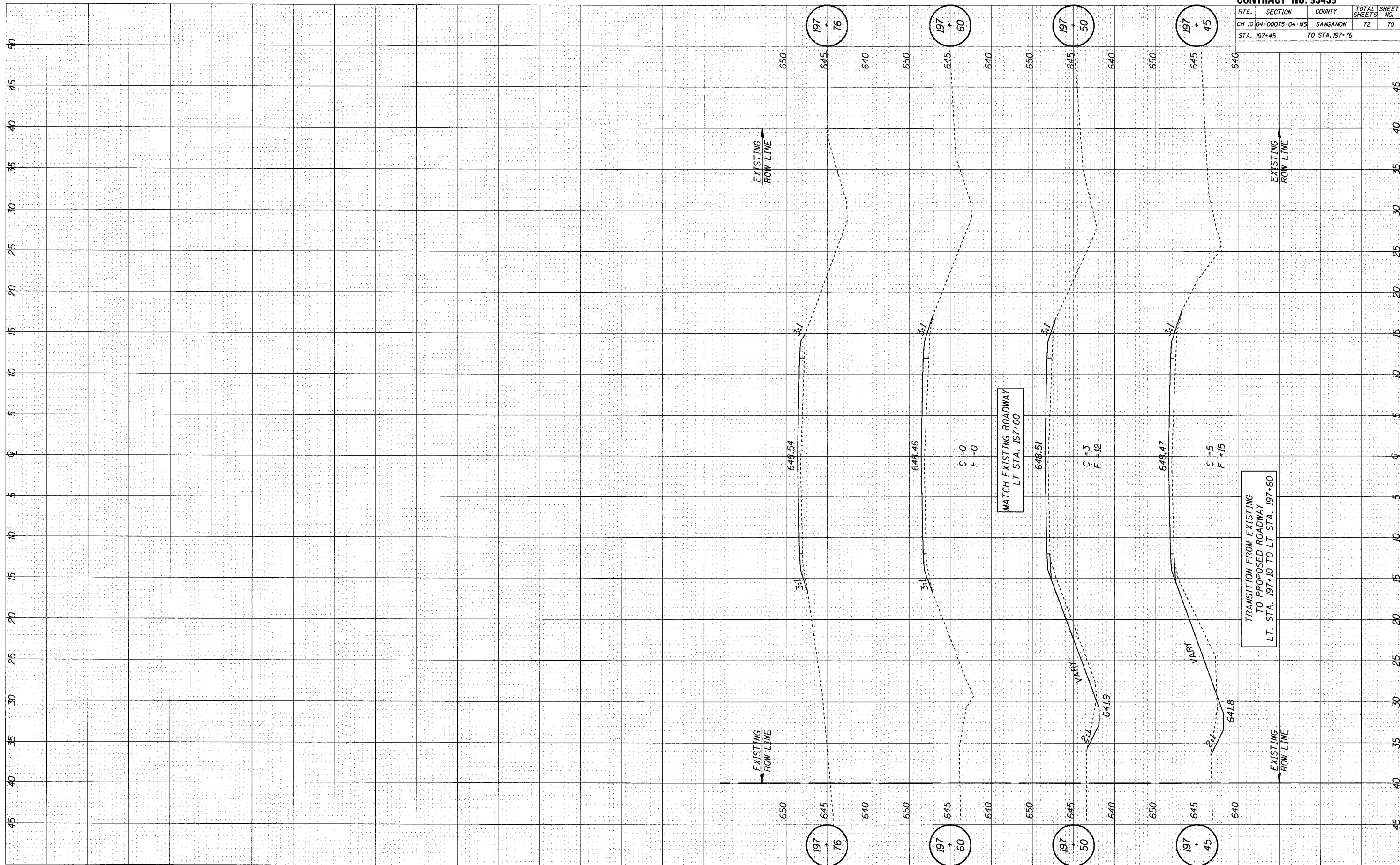
ORIGINAL SURVEY	SURVEYED	DATE
NOTE BOOK	PLOTTED	BY
NO.	TEMPLATE	
	AREAS CHECKED	



RT.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 10	04-00075-04-M5	SANGAMON	72	70
STA. 197+45		TO STA. 197+76		

FINAL SURVEY	BY	DATE
NOTE BOOK NO.		
AREAS CHECKED		

ORIGINAL SURVEY	BY	DATE
NOTE BOOK NO.		
AREAS CHECKED		



RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 10	04-00075-04-MS	SANGAMON	72	72
STA. 292+50 TO STA. 294+75				

FINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
NOTE BOOK		
AREAS CHECKED		
NO.		

ORIGINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
NOTE BOOK		
AREAS CHECKED		
NO.		

