

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
301	21T	STEPHENSON	49	1

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS

**PROPOSED
 HIGHWAY PLANS**

FAP 301 (US 20)
 SECTION 21T

STEPHENSON COUNTY

SEE PAGE 2 FOR INDEX OF SHEETS

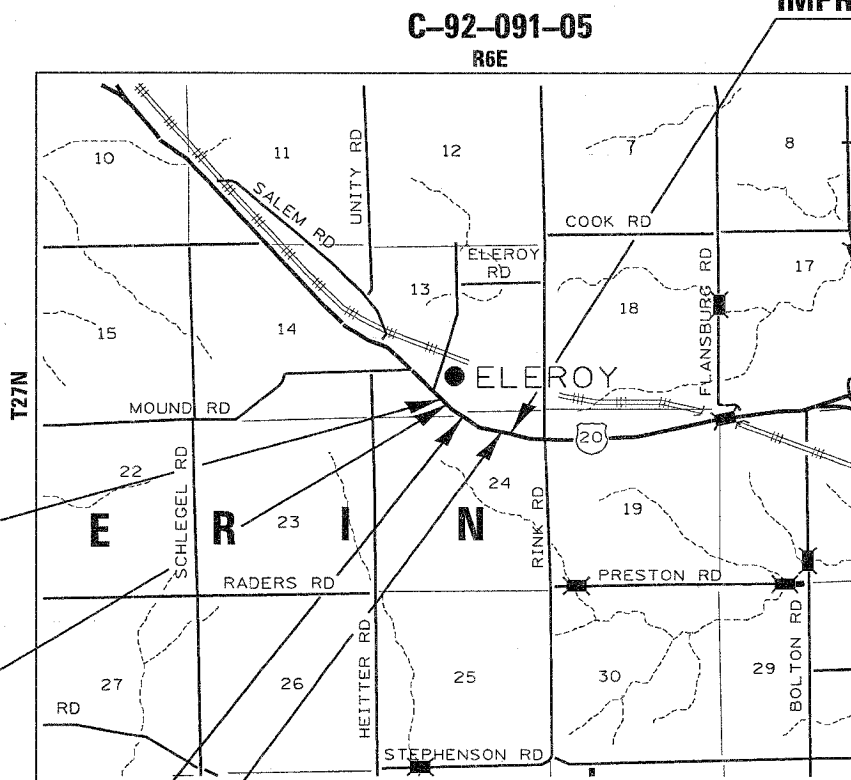


P-92-049-03



IMPROVEMENT & SECTION BEGINS
 STA 466 + 50

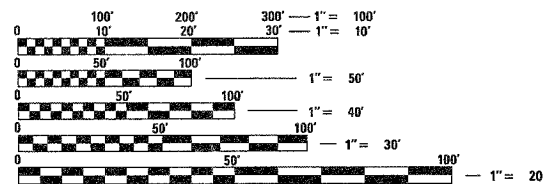
IMPROVEMENT & SECTION ENDS
 STA 500 + 50



CULVERT # 3
 STA 467 + 70.16

CULVERT # 2
 STA 477 + 43.65

CULVERT # 1
 STA 498 + 59.03



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

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

ERIN TOWNSHIP 13,24
 CONTRACT NO. 64896

GROSS LENGTH OF PROJECT = 3400 LIN. FT. = .64 MI.
 NET LENGTH = 1167 LIN. FT. = .22 MI.

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS

SUBMITTED SEPT 2 2005

Gregory Mounts
 DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

October 14, 2005
Mike Hine
 ENGINEER OF DESIGN AND ENVIRONMENT

October 14, 2005
Eric E. Havel
 DEPUTY DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY
 OF THE STATE OF ILLINOIS

DISTRICT 2
 DIXON

SQUAD LEADER: JENNIFER LUBBS (815) 284-5958

PROJECT ENGINEER: ROBERT WAGNER

F.A.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
301	21T	STEPHENSON	49	2
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

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22	GRATED CULVERT EXTENSION
23	INLET STAND PIPE
24	WITNESS MARKER FOR PERMANENT SURVEY MARKERS TYPE II (DIST STD 38.4) INFORMATIONAL WARNING SIGN (FOR NARROW TRAVEL LANES) (DIST STD 39.4) EROSION CONTROL DETAILS FOR SILT FENCE (DIST STD 29.2)
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27	BITUMINOUS APPROACHES & MAILBOX RETURNS (DIST STD 20.1)
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29	DETAIL OF PRECAST CONCRETE BOX CULVERTS AND END SECTIONS (DIST STD 71.1)
30	DETAILS OF PLANTING AND BRACING TREES & TREE REPLACEMENT SCHEDULE (DIST STD 92.1)
31-49	CROSS SECTIONS

STATE STANDARDS

000001-04	STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
001001	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT
280001-02	TEMPORARY EROSION CONTROL SYSTEMS
420701-01	PAVEMENT FABRIC
442101-05	CLASS B PATCHES
542401	METAL END SECTIONS FOR PIPE CULVERTS
666001	RIGHT-OF-WAY MARKERS
667101	PERMANENT SURVEY MARKERS
701006-02	OFF-ROAD OPERATIONS, 2L, 2W, 15' TO 24" FROM EDGE OF PAVEMENT
701201-02	LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS ≥ 45 MPH
701301-02	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701311-02	LANE CLOSURE, 2L, 2W, MOVING OPERATIONS - DAY ONLY
701326-02	LANE CLOSURE, 2L, 2W, PAVEMENT WIDENING, FOR SPEEDS > 45 MPH
702001-05	TRAFFIC CONTROL DEVICES
780001-01	TYPICAL PAVEMENT MARKINGS

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SUMMARY OF QUANTITIES

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
301	ZIT	STEPHENSON	49	3
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

CODE NUMBER	ITEM	UNITS	ROADWAY Y007
X0325135	FIELD TILE 6"	FOOT	22
20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	6
20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	32
20200100	EARTH EXCAVATION	CU. YD.	892
20400800	FURNISHED EXCAVATION	CU. YD.	174
20800150	TRENCH BACKFILL	CU. YD.	43
25000310	SEEDING, CLASS 4	ACRE	0.13
25000910	SEEDING, CLASS 1 (MODIFIED)	ACRE	0.37
25001830	SEEDING, CLASS 6 (MODIFIED)	ACRE	0.55
25100115	MULCH, METHOD 2	ACRE	1.05
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	365
28000300	TEMPORARY DITCH CHECKS	EACH	13
28000400	PERIMETER EROSION BARRIER	FOOT	321
28100107	STONE RIPRAP, CLASS A4	SQ. YD.	81
28200200	FILTER FABRIC	SQ. YD.	81
35100100	AGGREGATE BASE COURSE, TYPE A	TON	108
35101400	AGGREGATE BASE COURSE, TYPE B	TON	273
40600200	BITUMINOUS MATERIALS (PRIME COAT)	TON	0.4
42001200	PAVEMENT FABRIC	SQ. YD.	114
44000600	SIDEWALK REMOVAL	SQ. FT.	27
44201013	CLASS B PATCHES, TYPE IV, 13 INCH	SQ. YD.	114
44213200	SAW CUTS	FOOT	317
48101200	AGGREGATE SHOULDERS, TYPE B	TON	243
50100300	REMOVAL OF EXISTING STRUCTURES NO. 1	EACH	1
50100400	REMOVAL OF EXISTING STRUCTURES NO. 2	EACH	1

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SUMMARY OF QUANTITIES

F.A. P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
301	21T	STEPHENSON	49	4
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CODE NUMBER	ITEM	UNITS	ROADWAY Y007
50100500	REMOVAL OF EXISTING STRUCTURES NO. 3	EACH	1
54010502	PRECAST CONCRETE BOX CULVERT 5' X 2'	FOOT	120
542A5485	PIPE CULVERTS, CLASS A, TYPE 1 EQUIVALENT ROUND-SIZE 30"	FOOT	60
542D0223	PIPE CULVERTS, CLASS D, TYPE 1 18"	FOOT	42
5421D018	PIPE CULVERTS, CLASS D, TYPE 1 18" (TEMPORARY)	FOOT	36
54213453	END SECTIONS 18"	EACH	2
54214515	PRECAST REINFORCED CONCRETE FLARED END SECTIONS, EQUIVALENT ROUND-SIZE 30"	EACH	2
61100500	EXPLORATION TRENCH 52" DEPTH	FOOT	10
61133100	FIELD TILE JUNCTION VAULTS, 2' DIA.	EACH	1
63200310	GUARDRAIL REMOVAL	FOOT	384
66600105	FURNISHING AND ERECTING RIGHT-OF-WAY MARKERS	EACH	30
66700305	PERMANENT SURVEY MARKERS, TYPE II	EACH	2
67100100	MOBILIZATION	L. SUM	1
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L. SUM	1
70100500	TRAFFIC CONTROL AND PROTECTION, STANDARD 701326	L. SUM	1
* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	122
Z0005400	BREAKER-RUN CRUSHED STONE	TON	174
Z0013798	CONSTRUCTION LAYOUT	L. SUM	1
Z0017100	DOWEL BARS	EACH	144
Z0029001	GRATED CULVERT EXTENSION, NO. 1	EACH	2
Z0029002	GRATED CULVERT EXTENSION, NO. 2	EACH	2
A2006514	TREE, QUERCUS BICOLOR (SWAMP WHITE OAK), 1-3/4" CALIPER, BALLED AND BURLAPPED	EACH	3
X0301794	INLET, STAND PIPE	EACH	1
X4080020	INCIDENTAL BITUMINOUS SURFACING, SUPERPAVE, N50	TON	43

*SPECIALTY ITEMS

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GENERAL NOTES

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
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Contract #64896				

See cross sections for special ditches and backslopes.

The removal of Bituminous Surfacing not on a rigid type base removed in conjunction with the base shall be removed as EARTH EXCAVATION. The removal of Bituminous Surfacing on a rigid type base removed in conjunction with the base shall be included in the contract unit price for CLASS B PATCHES of the type specified.

The final top 100 mm (four inches) of soil in any right-of-way area disturbed by the Contractor must be capable of supporting vegetation. The soil must be from the A horizon (zero to 2' deep) of soil profiles of local soils.

It is estimated that 174.1 cubic yards of earth will be hauled to the job from outside the project limits. A shrinkage factor of 25% has been used.

The Contractor shall seed all disturbed areas within the project limits. Seeding Class 4 or 6 (modified) shall be used, except in front of properties where the grass will be mowed, then use Seeding, Class 1 (modified). Class 6 (modified) shall be used on front slopes and ditch bottoms. Class 4 shall be used on all backslopes and areas behind the backslope, and beyond the toe of front slope on fill sections without ditches.

Fertilizer Nutrients shall be applied at the rate specified in Sections 250 and 252 of the Standard Specifications. This shall be included in the cost of the SEEDING.

Mulch on temporary seeding shall be MULCH METHOD 2.

Previously pugmilled stockpiles of "Type A" older than 1 month will not be approved for use until a moisture check is run to verify moisture content. Material shipped to projects without being tested will not be accepted.

Placement and compaction of Trench Backfill for AR culverts shall conform to Section 502.10 of the Standard Specifications except that the material shall be compacted to a minimum of 95% of standard laboratory density. The entire excavation within 2' outside of each shoulder shall be backfilled with Trench Backfill material. The pay limits for Trench Backfill shall extend from 2' outside each vertical culvert wall at the base of the culvert floor and shall extend vertically to the bottom of the proposed subgrade. This work shall be included in the unit price per Cubic Yard for TRENCH BACKFILL.

All mandatory joint sealing for Class B patches as shown on the plans will not be measured for payment. Optional sawing of the joint for the sealant reservoir will not be measured for payment.

For all concrete patching that will not be resurfaced, the concrete shall be struck off flush with the existing pavement surface at each end of the patch.

The Engineer reserves the right to check all patches for smoothness by the use of a 10' rolling straight edge set to a 3/16" tolerance in the wheel paths. Any patch areas higher than 3/16" must be ground smooth with an approved grinding device consisting of multiple saws. The use of bushhammer or other impact devices will not be permitted. Any patch with depressions greater than 3/16" shall be repaired in a manner approved by the Engineer.

The mandatory saw cuts for pavement patching are:

Class B Patch: Cut two transverse saw cuts outlining the patch and one transverse pressure relief saw cut. The longitudinal edges of the patch shall be cut full depth. When the patch is adjacent to a pcc shoulder, two saw cuts along the shoulder will be required.

The mandatory saw cuts will be paid for at the contract unit price per Meter (Foot) for SAW CUTS.

Cost of removal and disposal of material from the temporary patch, including the 9" of Aggregate Base Course, Type B for the temporary patch, shall be included in the cost of the Aggregate Base Course, Type B.

The existing bituminous surface on private and commercial entrances shall be bladed off or milled and disposed of outside the project limits. The cost of the blading, milling, rolling, and disposal is included in the contract unit price for INCIDENTAL BITUMINOUS SURFACING.

The following Mixture Requirements are applicable for this project:

Mixture Uses(s):	Inc. Bit. Surf. SP N50		
PG:	PG 58-22		
RAP%: (Max)	25%		
Design Air Voids	4.2 @ N50		
Mixture Composition (Gradation Mixture)	IL 9.5 or 12.5		
Friction Aggregate	C		
20 Year ESAL	N/A		

Culvert & bridge flows must be maintained throughout the project. Normal flow shall be allowed to pass at the rate it enters the jobsite. High flows shall be allowed to pass without causing damage to upstream properties.

The material necessary to backfill the culvert extensions shall be obtained from Grading and Shaping Ditches and shall be included in the contract unit price for EARTH EXCAVATION.

The Contractor shall remove all entrance culverts in condition for reuse which are not to be left in place. They shall be cleaned and stored along the right of way as directed. In no case shall they be roughly handled or shoved by heavy machinery. Unusable material shall be disposed of by the Contractor at his expense. Cost of the work to be included in the contract unit price for EARTH EXCAVATION.

The proposed pipes for entrances and side roads shall be placed in line with the existing or proposed ditch line.

It is anticipated that several mailboxes will require relocation to the approach side of the entrances. When this is done, the contractor shall be required to mount the mailbox on a 100 mm x 100 mm (4" x 4") wood post 1 m (40 inches) above the shoulder surface and extending to a minimum of 0.6 m (24 inches) into the embankment. This work shall be included in the contract unit price for the EARTH EXCAVATION. There are an estimated one (1) mailbox to be relocated.

If, during the grinding or resurfacing operations, the existing mailboxes become a hindrance, the Contractor shall be required to carefully remove and reinstall the mailboxes as directed by the Engineer. This work shall be included in the contract unit price for the INCIDENTAL BITUMINOUS SURFACING.

PERMANENT SURVEY MARKERS, TYPE II, shall be set at intervals of 1.6 Km (1 mile) or as directed by the Engineer. Bridge or culvert projects shall have one survey marker placed near the structure. Estimated: 2 Each.

Permanent Survey Markers, Type II shall be cast-in-place as shown on Highway Standard 667101.

The Contractor shall place a PERMANENT SURVEY MARKER, Type II, using the USGS table provided at the location directed by the Engineer.

The Contractor shall submit to the Engineer a description of location, elevation, and coordinates for each permanent survey marker. The Engineer shall submit this information to the Survey Crew.

Right-of-way markers will be erected with the back face of the marker on the right-of-way line unless the new right-of-way line has been surveyed and pinned, in which instance the right-of-way markers will be erected 300 mm (12 inches) inside the new right-of-way line.

Program #6
(Arch. Size)
Enlarge
200%
Enlarge 107%

GENERAL NOTES

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 301 (US 20)	21-T	Stephenson	49	6
FED ROAD DIST. NO.	ILLINOIS	PROJECT		

Contract #64896

The Contractor shall be responsible for protecting utility property during construction operations as outlined in Article 107.31 of the Standard Specifications. A minimum of 48 hours advance notice is required for non-emergency work. The JULIE number is 800-892-0123. The following listed utilities located within the project limits or immediately adjacent to the project construction limits are members of JULIE:

Commonwealth Edison Verizon

Following are the known utilities located within the project limits or immediately adjacent to the project construction limits which are not members of JULIE and should be notified individually by the contractor:

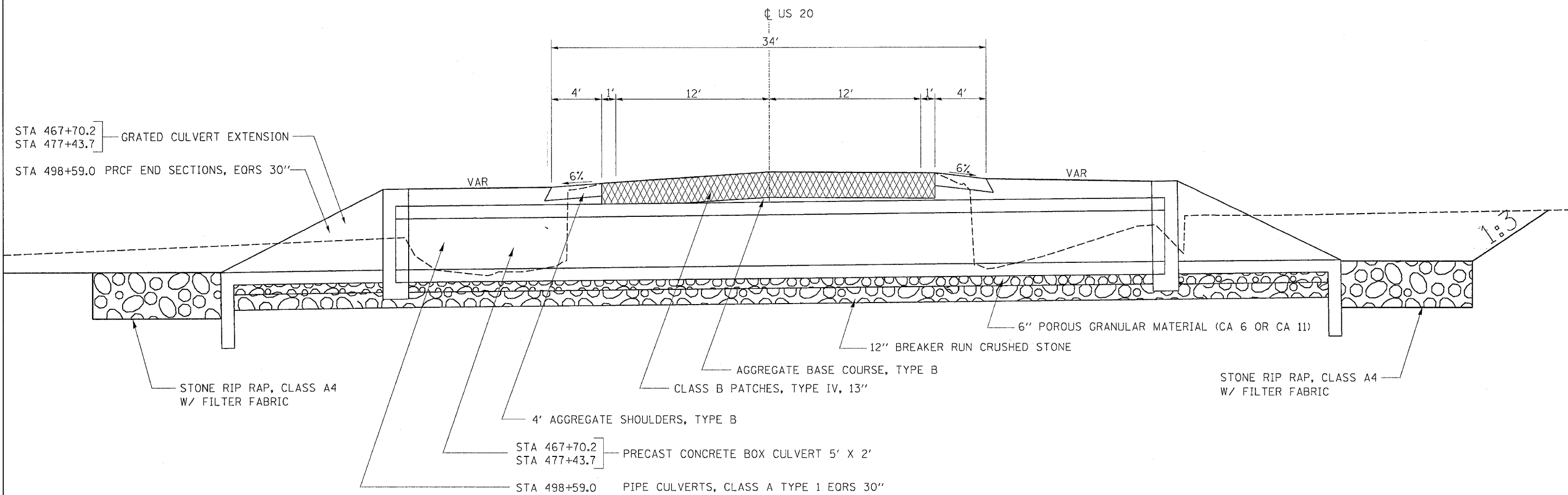
Mr. Dennis Schultz
IDOT - District 2
819 Depot Avenue
Dixon, IL 61021
Ph. 815/284-5469

CADD data will be available to Contractors and Consultants working on this project. This information will be provided upon request as MicroStation CADD files and Geopak coordinate geometry files ONLY. If data is required in other formats it will be your responsibility to make these conversions. If any discrepancy or inconsistency arises between the electronic data and the information on the hard copy, the information on the hard copy should be used. Contact the District's Project Engineer to request these files.

Program #5
(Arch. Size)
Enlarge
200%
Enlarge 107%

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
301	21-T	STEPHENSON	49	7
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

TYPICAL SECTION



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REVISIONS	
NAME	DATE

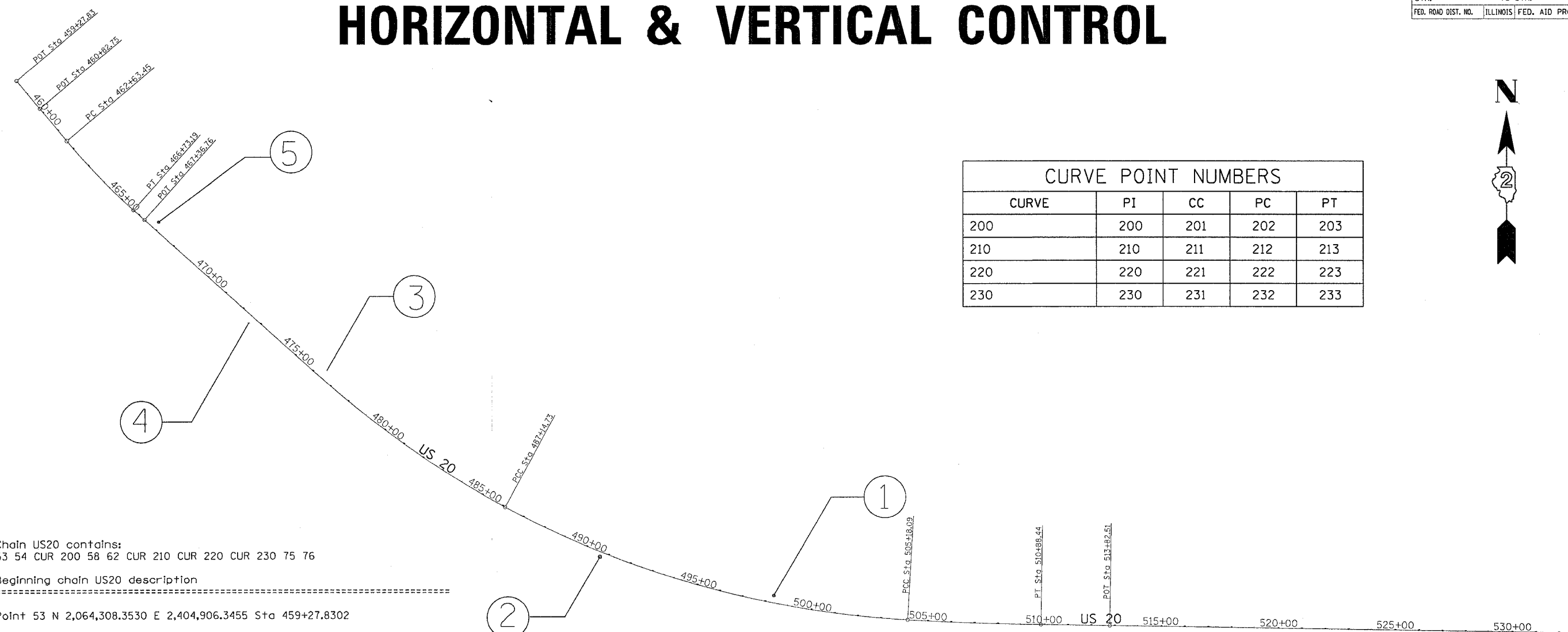
ILLINOIS DEPARTMENT OF TRANSPORTATION

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DATE _____ DRAWN BY _____
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
301	21T	STEPHENSON	49	8
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

HORIZONTAL & VERTICAL CONTROL



CURVE	PI	CC	PC	PT
200	200	201	202	203
210	210	211	212	213
220	220	221	222	223
230	230	231	232	233

Chain US20 contains:
53 54 CUR 200 58 62 CUR 210 CUR 220 CUR 230 75 76

Beginning chain US20 description
=====

Point 53 N 2,064,308.3530 E 2,404,906.3455 Sta 459+27.8302
COURSE FROM 53 TO 54 140° 04' 10.578" DIST 154.9194'
Point 54 N 2,064,189.5570 E 2,405,005.7815 Sta 460+82.7496
COURSE FROM 54 TO PC 200 140° 04' 10.578" DIST 180.6965'

Curve Data

Curve 200
P.I. Station 464+68.6680 N 2,063,893.6252 E 2,405,253.4858
DELTA = 8° 11' 40.115" (LT)
DEGREE = 1° 59' 59.646"
Tangent = 205.2219'
Length = 409.7440'
Radius = 2,864.9300'
External = 7.3409'
Long Chord = 409.3949'
Mid. Ord. = 7.3221'
P.C. Station 462+63.4461 N 2,064,050.9944 E 2,405,121.7627
P.T. Station 466+73.1901 N 2,063,756.6376 E 2,405,406.2943
C.C. N 2,065,889.8684 E 2,407,318.6620
COURSE FROM PT 200 TO 58 131° 52' 30.463" DIST 63.5745'
Point 58 N 2,063,714.2010 E 2,405,453.6320 Sta 467+36.7646
COURSE FROM 58 TO 62 131° 52' 30.463" DIST 865.4597'
Point 62 N 2,063,136.4985 E 2,406,098.0545 Sta 476+02.2243
COURSE FROM 62 TO PC 210 131° 52' 30.463" DIST 139.8292'

Curve Data

Curve 210
P.I. Station 482+30.6089 N 2,062,717.0459 E 2,406,565.9505
DELTA = 13° 21' 56.921" (LT)
DEGREE = 1° 22' 26.862"
Tangent = 488.5554'
Length = 972.6756'
Radius = 4,169.6091'
External = 28.5246'
Long Chord = 970.4717'
Mid. Ord. = 28.3308'
P.C. Station 477+42.0535 N 2,063,043.1612 E 2,406,202.1715
P.T. Station 487+14.7292 N 2,062,483.8576 E 2,406,995.2634
C.C. N 2,066,147.8579 E 2,408,985.4247

Curve Data

Curve 220
P.I. Station 496+31.3045 N 2,062,046.3747 E 2,407,800.6943
DELTA = 25° 15' 39.786" (LT)
DEGREE = 1° 24' 02.798"
Tangent = 916.5753'
Length = 1,803.3596'
Radius = 4,090.2847'
External = 101.4380'
Long Chord = 1,788.7891'
Mid. Ord. = 98.9832'
P.C. Station 487+14.7292 N 2,062,483.8576 E 2,406,995.2634
P.T. Station 505+18.0887 N 2,061,994.4392 E 2,408,715.7970
C.C. N 2,066,078.1524 E 2,408,947.5631

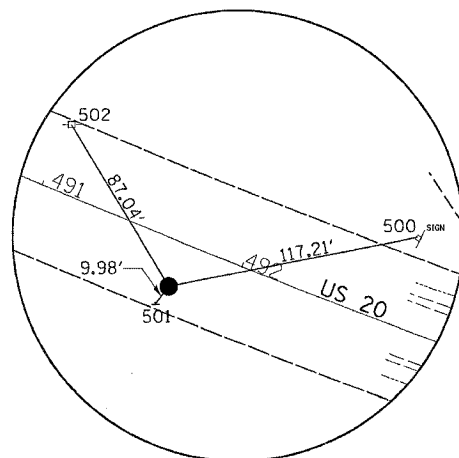
Curve Data

Curve 230
P.I. Station 508+03.3040 N 2,061,978.2782 E 2,409,000.5541
DELTA = 2° 22' 45.352" (LT)
DEGREE = 0° 25' 01.775"
Tangent = 285.2153'
Length = 570.3486'
Radius = 13,734.7346'
External = 2.9611'
Long Chord = 570.3076'
Mid. Ord. = 2.9604'
P.C. Station 505+18.0887 N 2,061,994.4392 E 2,408,715.7970
P.T. Station 510+88.4373 N 2,061,973.9525 E 2,409,285.7366
C.C. N 2,075,707.1074 E 2,409,494.0423
COURSE FROM PT 230 TO 75 90° 52' 08.403" DIST 294.0722'
Point 75 N 2,061,969.4925 E 2,409,579.7750 Sta 513+82.5096
COURSE FROM 75 TO 76 90° 52' 08.404" DIST 1,996.5256'
Point 76 N 2,061,939.2125 E 2,411,576.0710 Sta 533+79.0352
Ending chain US20 description

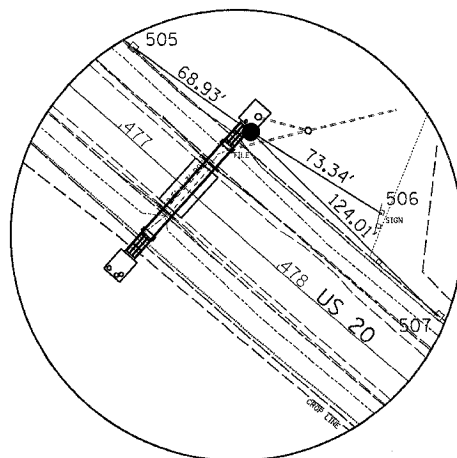
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
301	21T	STEPHENSON	49	9
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

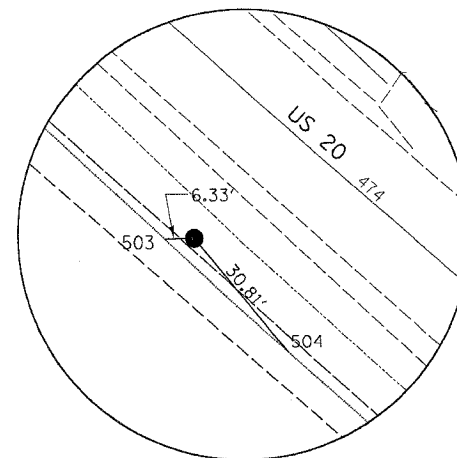
HORIZONTAL & VERTICAL CONTROL



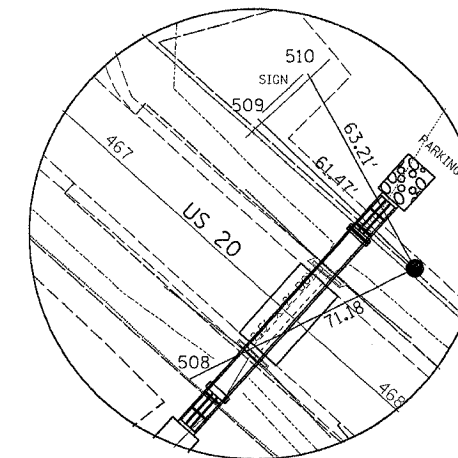
HORIZONTAL CONTROL POINT NO. 2



HORIZONTAL CONTROL POINT NO. 3



HORIZONTAL CONTROL POINT NO. 4



HORIZONTAL CONTROL POINT NO. 5

HORIZONTAL CONTROL POINTS

POINT	NORTH	EAST	ELEVATION	CHAIN	STATION	OFFSET	DESCRIPTION
1	2062100.4770	2408143.7270	914.9230	us20	499+34.3705	32.1997' LT	GPS CONTROL POINT
2	2062269.0740	2407400.4270	922.5150	us20	491+71.8874	21.0056' RT	GPS CONTROL POINT
3	2063069.3270	2406233.5700	912.7480	us20	477+48.0249	40.4376' LT	GPS CONTROL POINT
4	2063272.8540	2405899.4520	917.6470	us20	473+63.3261	31.0385' RT	GPS CONTROL POINT
5	2063704.8740	2405514.3780	914.9080	us20	467+88.2220	33.6036' LT	GPS CONTROL POINT

BENCH MARKS

POINT	NORTH	EAST	ELEVATION	CHAIN	STATION	OFFSET	DESCRIPTION
402	2062344.7580	2407355.9090	924.0070	us20	491+01.6117	31.7632' LT	POWER POLE W/T TRANSFORMER
404	2063293.1160	2405973.2670	917.7400	us20	474+04.7637	33.3208' LT	SIGN
405	2063784.0730	2405335.5800	917.4750	us20	466+02.8939	27.6447' RT	HEADWALL : FEET
416	2067950.2944	2409408.9485	884.2975	us20	460+25.1244	5790.3113' LT	FENCE
450	2066481.2665	2409383.4387	835.9748	us20	511+17.7687	4508.2774' LT	HEADWALL : FEET
451	2066438.9847	2408784.7812	841.8476	us20	473+98.3242	4252.4511' LT	HEADWALL : FEET

SURVEY WORK POINTS

POINT	NORTH	EAST	ELEVATION	CHAIN	STATION	OFFSET	DESCRIPTION
100	2063527.4310	2405701.2050	915.3730	us20	470+45.7785	26.1881' LT	TOPO SURVEY POINT
101	2063787.5140	2405326.8410	918.0400	us20	465+94.2666	31.1441' RT	TOPO SURVEY POINT

REFERENCE TIES

POINT	CHAIN	STATION	OFFSET	DESCRIPTION
500	us20	492+71.0853	41.8519' LT	SIGN
501	us20	491+69.3553	30.6514' RT	FENCE POST
502	us20	491+01.7606	30.6848' LT	POWER POLE W/T TRANSFORMER
503	us20	473+58.7051	35.3744' RT	FENCE POST
504	us20	473+93.7911	35.6038' RT	FENCE POST
505	us20	476+79.3932	33.3486' LT	POWER POLE W/T TRANSFORMER
506	us20	478+21.2386	52.1943' LT	SIGN
507	us20	478+72.8678	32.4115' LT	POWER POLE
508	us20	467+61.5295	32.3680' RT	FENCE POST
509	us20	467+26.7782	35.4646' LT	SIGN
510	us20	467+28.5956	54.5890' LT	SIGN

DATE-TIME
 DGN-SPEC
 REF01
 REF04
 REF05
 REF

F.A.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
301	21T	STEPHENSON	49	10
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

SCHEDULE OF QUANTITIES

FIELD TILE 6"					
<u>FOOT</u>	<u>LOCATION</u>				
22.0	LT Sta.	477+47.0	TO	477+66.4	
<u>22.0</u>	TOTAL				REMARKS
					From Inlet, Stand Pipe to Field Tile Junction Vault

20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)				
<u>UNIT</u>	<u>LOCATION</u>	<u>OFFSET (ft)</u>			<u>REMARKS</u>
6	RT	468+52.0			
<u>6</u>	TOTAL				

20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)				
<u>UNIT</u>	<u>LOCATION</u>	<u>OFFSET (ft)</u>			<u>REMARKS</u>
16	RT	468+86.0			
16	RT	468+86.0			
<u>32</u>	TOTAL				

20200100	EARTH EXCAVATION				
<u>CU. YD.</u>	<u>LOCATION</u>				<u>REMARKS</u>
349.2	LT & RT Sta.	467+00.0	TO	469+21.0	
330.2	LT & RT Sta.	475+50.0	TO	479+00.0	
212.4	LT & RT Sta.	497+00.0	TO	500+50.0	
<u>891.8</u>	TOTAL				

20400800	FURNISHED EXCAVATION				
<u>CU. YD.</u>	<u>LOCATION</u>				<u>REMARKS</u>
86.8	LT & RT Sta.	467+00.0	TO	469+21.0	Staging
34.6	LT & RT Sta.	475+50.0	TO	479+00.0	Staging
52.7	LT & RT Sta.	497+00.0	TO	500+50.0	Staging
<u>174.1</u>	TOTAL				

20800150	TRENCH BACKFILL				
<u>CU. YD.</u>	<u>LOCATION</u>				<u>REMARKS</u>
13.3	Sta.	467+70.2			CULVERT
13.3	Sta.	477+43.7			CULVERT
15.9	Sta.	498+59.0			CULVERT
<u>42.5</u>	TOTAL				

25000310	SEEDING, CLASS 4				
<u>ACRE</u>	<u>LOCATION</u>				<u>REMARKS</u>
0.04	RT Sta.	467+00.0	TO	469+21.0	
0.05	RT Sta.	475+50.0	TO	479+00.0	
0.04	RT Sta.	496+31.6	TO	501+00.8	
<u>0.13</u>	TOTAL				

25000910	SEEDING, CLASS 1 (MODIFIED)				
<u>ACRE</u>	<u>LOCATION</u>				<u>REMARKS</u>
0.12	LT Sta.	467+00.0	TO	469+21.0	
0.24	LT Sta.	475+50.0	TO	479+00.0	
<u>0.37</u>	TOTAL				

25001830	SEEDING, CLASS 6 (MODIFIED)				
<u>ACRE</u>	<u>LOCATION</u>				<u>REMARKS</u>
0.11	RT Sta.	467+00.0	TO	469+21.0	
0.17	RT Sta.	475+50.0	TO	479+00.0	
0.11	LT Sta.	497+00.0	TO	500+50.0	
0.16	RT Sta.	497+00.0	TO	500+50.0	
<u>0.55</u>	TOTAL				

25100115	MULCH, METHOD 2				
<u>ACRE</u>	<u>LOCATION</u>				<u>REMARKS</u>
0.12	LT Sta.	467+00.0	TO	469+21.0	
0.24	LT Sta.	475+50.0	TO	479+00.0	
0.04	RT Sta.	467+00.0	TO	469+21.0	
0.05	RT Sta.	475+50.0	TO	479+00.0	
0.04	RT Sta.	496+31.6	TO	501+00.8	
0.11	RT Sta.	467+00.0	TO	469+21.0	
0.17	RT Sta.	475+50.0	TO	479+00.0	
0.11	LT Sta.	497+00.0	TO	500+50.0	
0.16	RT Sta.	497+00.0	TO	500+50.0	
<u>1.05</u>	TOTAL				

28000250	TEMPORARY EROSION CONTROL SEEDING				
<u>POUND</u>	<u>LOCATION</u>				<u>REMARKS</u>
365.0	Entire Job				
<u>365.0</u>	TOTAL				

28000300	TEMPORARY DITCH CHECKS				
<u>EACH</u>	<u>LOCATION</u>				<u>REMARKS</u>
1	LT	467+49.7			
1	RT	467+50.4			
1	RT	468+00.7			
1	LT	468+00.8			
1	RT	469+00.2			
1	RT	476+00.3			
1	LT	477+00.3			
1	RT	477+00.4			
1	LT	477+99.6			
1	RT	478+00.9			
1	RT	498+00.6			
1	RT	499+01.3			
1	RT	500+00.7			
<u>13</u>	TOTAL				

28000400	PERIMETER EROSION BARRIER				
<u>FOOT</u>	<u>LOCATION</u>				<u>REMARKS</u>
320.7	LT	496+95.6	TO	500+54.6	
<u>320.7</u>	TOTAL				

28100107	STONE RIPRAP, CLASS A4				
<u>SQ. YD.</u>	<u>LOCATION</u>			<u>DIMENSION</u>	<u>REMARKS</u>
14.4	LT	467+70.2		13' x 10'	
14.4	RT	467+70.2		13' x 10'	
11.1	LT	477+43.7		10' x 10'	
11.1	RT	477+43.7		10' x 10'	
15.0	LT	498+59.0		15' x 9'	
15.0	RT	498+59.0		15' x 9'	
<u>81.1</u>	TOTAL				

28200200	FILTER FABRIC				
<u>SQ. YD.</u>	<u>LOCATION</u>			<u>DIMENSION</u>	<u>REMARKS</u>
14.4	LT	467+70.2		13' x 10'	RIP RAP
14.4	RT	467+70.2		13' x 10'	RIP RAP
11.1	LT	477+43.7		10' x 10'	RIP RAP
11.1	RT	477+43.7		10' x 10'	RIP RAP
15.0	LT	498+59.0		15' x 9'	RIP RAP
15.0	RT	498+59.0		15' x 9'	RIP RAP
<u>81.1</u>	TOTAL				

35100100	AGGREGATE BASE COURSE, TYPE A				
<u>TON</u>	<u>LOCATION</u>				<u>REMARKS</u>
31.7	Sta.	467+70.2			Temporary run-around
42.5	Sta.	477+43.7			Temporary run-around
34.2	Sta.	498+59.0			Temporary run-around
<u>108.4</u>	TOTAL				

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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
301	21T	STEPHENSON	49	11
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SCHEDULE OF QUANTITIES

35101400 AGGREGATE BASE COURSE, TYPE B

TON	LOCATION	THICKNESS (in)	REMARKS
20.7	Sta. 467+70.2	9.0	14 x 26 - Temporary under incidental bituminous patch
7.8	Sta. 467+70.2	4.7	10 x 26 - Between top of culvert and bottom of CL B patch
20.7	Sta. 477+43.7	9.0	14 x 26 - Temporary under incidental bituminous patch
2.0	Sta. 477+43.7	1.2	10 x 26 - Between top of culvert and bottom of CL B patch
17.2	Sta. 498+59.0	9.0	11.6 x 26 - Temporary under incidental bituminous patch
6.9	Sta. 498+59.0	5.5	7.6 x 26 - Between top of culvert and bottom of CL B patch
49.8	LT Sta. 468+56.6	8.0	CE
29.3	RT Sta. 468+56.5	8.0	MB
62.7	LT Sta. 497+94.7	8.0	FE
56.4	LT Sta. 500+00.6	8.0	FE
273.4	TOTAL		

40600200 BITUMINOUS MATERIALS (PRIME COAT)

TON	LOCATION	THICKNESS (in)	REMARKS
0.03	LT Sta. 467+70.2	4.0	14 x 13 - One Lane - Temporary patch
0.03	RT Sta. 467+70.2	4.0	14 x 13 - One Lane - Temporary patch
0.14	LT Sta. 468+56.6	2.0	CE
0.07	RT Sta. 468+56.5	2.0	MB
0.03	LT Sta. 477+43.7	4.0	14 x 13 - One Lane - Temporary patch
0.03	RT Sta. 477+43.7	4.0	14 x 13 - One Lane - Temporary patch
0.02	LT Sta. 498+59.0	4.0	11.6 x 13 - One Lane - Temporary patch
0.02	RT Sta. 498+59.0	4.0	11.6 x 13 - One Lane - Temporary patch
0.38	TOTAL		

42001200 PAVEMENT FABRIC

SQ. YD.	LOCATION	REMARKS
20.2	LT Sta. 467+70.2	14 x 13 - One Lane
20.2	RT Sta. 467+70.2	14 x 13 - One Lane
20.2	LT Sta. 477+43.7	14 x 13 - One Lane
20.2	RT Sta. 477+43.7	14 x 13 - One Lane
16.8	LT Sta. 498+59.0	11.6 x 13 - One Lane
16.8	RT Sta. 498+59.0	11.6 x 13 - One Lane
114.4	TOTAL	

44000600 SIDEWALK REMOVAL

SQ. FT.	LOCATION	REMARKS
26.5	LT Sta. 468+50.5	BY CE
26.5	TOTAL	

44201013 CLASS B PATCHES, TYPE IV, 13 INCH

SQ. YD.	LOCATION	REMARKS
20.2	LT Sta. 467+70.2	14 x 13 - One Lane
20.2	RT Sta. 467+70.2	14 x 13 - One Lane
20.2	LT Sta. 477+43.7	14 x 13 - One Lane
20.2	RT Sta. 477+43.7	14 x 13 - One Lane
16.8	LT Sta. 498+59.0	11.6 x 13 - One Lane
16.8	RT Sta. 498+59.0	11.6 x 13 - One Lane
114.4	TOTAL	

44213200 SAW CUTS

FOOT	LOCATION	REMARKS
53.0	LT Sta. 467+70.2	14 x 13 - One Lane
53.0	RT Sta. 467+70.2	14 x 13 - One Lane
53.0	LT Sta. 477+43.7	14 x 13 - One Lane
53.0	RT Sta. 477+43.7	14 x 13 - One Lane
50.6	LT Sta. 498+59.0	11.6 x 13 - One Lane
50.6	RT Sta. 498+59.0	11.6 x 13 - One Lane
3.5	LT Sta. 468+50.5	Sidewalk by CE
316.7	TOTAL	

48101200 AGGREGATE SHOULDERS, TYPE B

TON	LOCATION	THICKNESS (in)	REMARKS
21.1	LT Sta. 467+00.0 TO 468+31.9	6	
2.5	LT Sta. 468+81.5 TO 469+00.0	6	
16.3	RT Sta. 467+00.0 TO 468+21.7	6	
44.3	LT Sta. 475+90.6 TO 479+00.0	6	
53.3	RT Sta. 475+50.0 TO 479+00.0	6	
52.1	LT Sta. 497+00.0 TO 500+49.8	6	
53.3	RT Sta. 497+00.0 TO 500+50.1	6	
242.8	TOTAL		

50100300 REMOVAL OF EXISTING STRUCTURES NO. 1

EACH	LOCATION	REMARKS
1	Sta. 467+70.0	
1	TOTAL	

50100400 REMOVAL OF EXISTING STRUCTURES NO. 2

EACH	LOCATION	REMARKS
1	Sta. 477+44.0	
1	TOTAL	

50100500 REMOVAL OF EXISTING STRUCTURES NO. 3

EACH	LOCATION	REMARKS
1	Sta. 498+59.0	
1	TOTAL	

54010502 PRECAST CONCRETE BOX CULVERT 5' X 2'

FOOT	LOCATION	REMARKS
60.0	Sta. 467+70.2	
60.0	Sta. 477+43.7	
120.0	TOTAL	

542A5485 PIPE CULVERTS, CLASS A, TYPE 1 EQUIVALENT ROUND-SIZE 30"

FOOT	LOCATION	REMARKS
60.0	Sta. 498+59.0	
60.0	TOTAL	

542D0223 PIPE CULVERTS, CLASS D, TYPE 1 18"

FOOT	LOCATION	REMARKS
42.0	Sta. 468+56.6	CE
42.0	TOTAL	

5421D018 PIPE CULVERTS, CLASS D, TYPE 1 18" (TEMPORARY)

FOOT	LOCATION	REMARKS
12.0	LT Sta. 467+70.2	
12.0	LT Sta. 477+43.7	
12.0	LT Sta. 498+59.0	
36.0	TOTAL	

54213453 END SECTIONS 18"

EACH	LOCATION	REMARKS
2	Sta. 468+56.6	CE
2	TOTAL	

54214515 PRECAST REINFORCED CONCRETE FLARED END SECTIONS, EQUIVALENT ROUND-SIZE 30"

EACH	LOCATION	REMARKS
2	Sta. 498+59.0	
2	TOTAL	

61100500 EXPLORATION TRENCH 52" DEPTH

FOOT	LOCATION	OFFSET (ft)	REMARKS
10.0	LT Sta. 477+66.4	58.9	Field tile junction vault
10.0	TOTAL		

61133100 FIELD TILE JUNCTION VAULTS, 2' DIA.

EACH	LOCATION	OFFSET (ft)	REMARKS
1	LT Sta. 477+66.4	58.9	Field tile junction vault
1	TOTAL		

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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
301	21T	STEPHENSON	49	12
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

SCHEDULE OF QUANTITIES

63200310 GUARDRAIL REMOVAL

FOOT	LOCATION	REMARKS
63.0	LT Sta. 467+38.0 TO 468+01.0	
63.9	RT Sta. 467+39.0 TO 468+02.0	
64.0	LT Sta. 477+12.0 TO 477+75.0	
64.0	RT Sta. 477+11.0 TO 477+75.0	
64.0	LT Sta. 498+27.0 TO 498+91.0	
65.0	RT Sta. 498+27.0 TO 498+91.0	
383.9	TOTAL	

66600105 FURNISHING AND ERECTING RIGHT-OF-WAY MARKERS

EACH	LOCATION	OFFSET (ft)	REMARKS
1	LT Sta. 467+00.0	47	
1	LT Sta. 467+50.0	60	
1	LT Sta. 467+85.0	60	
1	LT Sta. 468+25.0	45	
1	LT Sta. 469+50.0	33	
1	RT Sta. 466+25.0	33	
1	RT Sta. 466+75.0	50	
1	RT Sta. 467+50.0	65	
1	RT Sta. 468+00.0	65	
1	RT Sta. 469+00.0	50	
1	RT Sta. 469+50.0	33	
1	LT Sta. 476+00.0	33	
1	LT Sta. 477+20.0	60	
1	LT Sta. 477+70.0	60	
1	LT Sta. 479+00.0	45	
1	LT Sta. 479+50.0	33	
1	RT Sta. 475+00.0	33	
1	RT Sta. 475+50.0	50	
1	RT Sta. 477+25.0	60	
1	RT Sta. 477+65.0	60	
1	RT Sta. 479+00.0	50	
1	RT Sta. 479+50.0	33	
1	LT Sta. 497+00.0	33	
1	LT Sta. 498+00.0	60	
1	LT Sta. 499+00.0	60	
1	LT Sta. 500+50.0	50	
1	LT Sta. 501+50.0	33	
1	RT Sta. 496+30.3	33	
1	RT Sta. 498+50.0	67	
1	RT Sta. 501+00.0	33	
30	TOTAL		

66700305 PERMANENT SURVEY MARKERS, TYPE II

EACH	LOCATION	REMARKS
2	ENTIRE JOB	
2	TOTAL	

78000200 THERMOPLASTIC PAVEMENT MARKING - LINE 4"

FOOT	LOCATION	PATCH LENGTH (ft)	REMARKS
10.0	Sta. 467+63.2 TO 467+77.2	14	1 yellow skip dash
28.0	Sta. 467+63.2 TO 467+77.2	14	2 white edge lines
10.0	Sta. 477+36.7 TO 477+50.7	14	1 yellow skip dash
28.0	Sta. 477+36.7 TO 477+50.7	14	2 white edge lines
23.2	Sta. 498+53.2 TO 498+64.8	11.6	Double Yellow
23.2	Sta. 498+53.2 TO 498+64.8	11.6	2 white edge lines
122.4	TOTAL		

Z0005400 BREAKER-RUN CRUSHED STONE

TON	LOCATION	REMARKS
66.3	Sta. 467+70.2	10 x 87.3 UNDER CULVERT & END SECTIONS
66.3	Sta. 477+43.7	10 x 87.3 UNDER CULVERT & END SECTIONS
41.5	Sta. 498+59.0	7.6 x 72 UNDER CULVERT & END SECTIONS
174.1	TOTAL	

Z0017100 DOWEL BARS

EACH	LOCATION	LANE WIDTH (ft)	REMARKS
24	LT Sta. 467+70.2	13.0	
24	RT Sta. 467+70.2	13.0	
24	LT Sta. 477+43.7	13.0	
24	RT Sta. 477+43.7	13.0	
24	LT Sta. 498+59.0	13.0	
24	RT Sta. 498+59.0	13.0	
144	TOTAL		

Z0029001 GRATED CULVERT EXTENSION, NO. 1

EACH	LOCATION	REMARKS
2	Sta. 467+70.2	
2	TOTAL	

Z0029002 GRATED CULVERT EXTENSION, NO. 2

EACH	LOCATION	REMARKS
2	Sta. 477+43.7	
2	TOTAL	

X0301794 INLET STAND PIPE

EACH	LOCATION	OFFSET (ft)	REMARKS
1	LT Sta. 477+45.9	48.0	
1	TOTAL		

X4080020 INCIDENTAL BITUMINOUS SURFACING, SUPERPAVE, N50

TON	LOCATION	THICKNESS (in)	REMARKS
4.5	LT Sta. 467+70.2	4.0	14 x 13 - One Lane - Temporary patch
4.5	RT Sta. 467+70.2	4.0	14 x 13 - One Lane - Temporary patch
11.1	LT Sta. 468+56.6	2.0	CE
5.8	RT Sta. 468+56.6	2.0	MB
4.5	LT Sta. 477+43.7	4.0	14 x 13 - One Lane - Temporary patch
4.5	RT Sta. 477+43.7	4.0	14 x 13 - One Lane - Temporary patch
3.8	LT Sta. 498+59.0	4.0	11.6 x 13 - One Lane - Temporary patch
3.8	RT Sta. 498+59.0	4.0	11.6 x 13 - One Lane - Temporary patch
42.5	TOTAL		

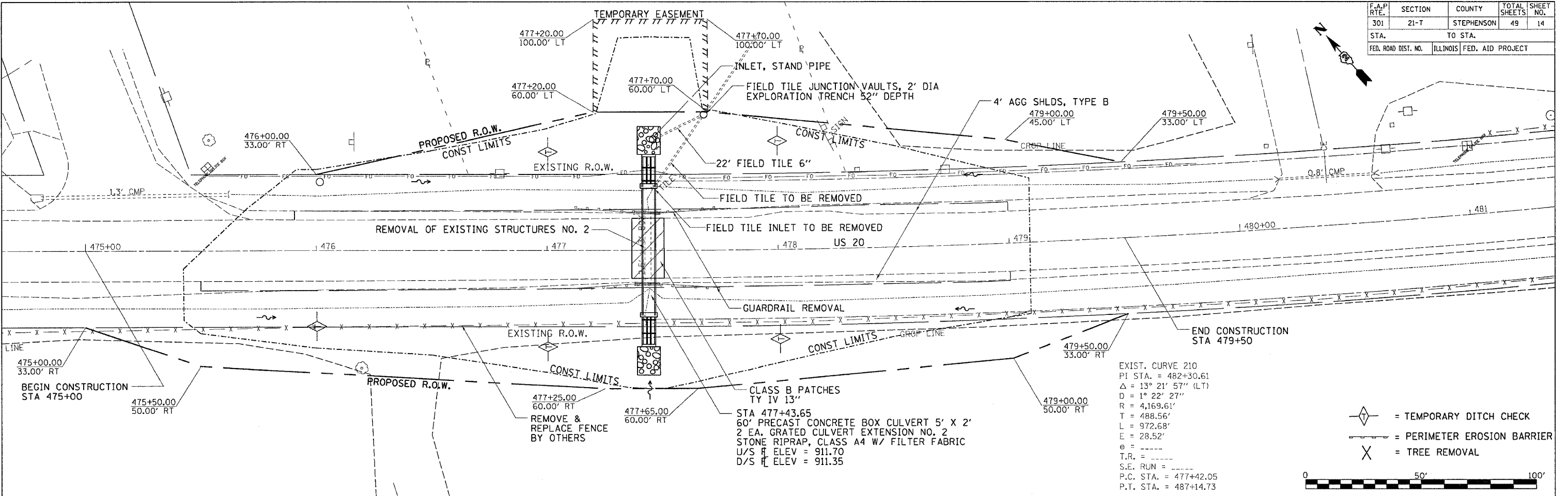
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
301	21-T	STEPHENSON	49	14
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

PLAN	DATE
BY	
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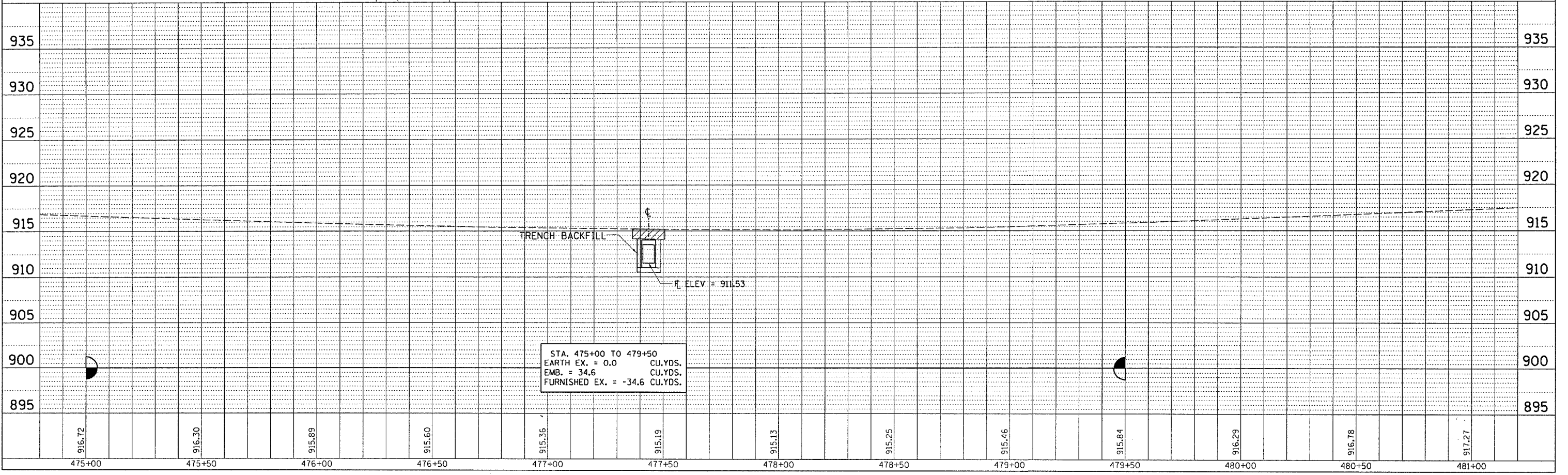
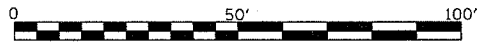
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EXIST. CURVE 210
 PI STA. = 482+30.61
 $\Delta = 13^\circ 21' 57''$ (LT)
 $D = 1^\circ 22' 27''$
 $R = 4,169.61'$
 $T = 488.56'$
 $L = 972.68'$
 $E = 28.52'$
 $\theta =$
 $T.R. =$
 $S.E. RUN =$
 $P.C. STA. = 477+42.05$
 $P.T. STA. = 487+14.73$

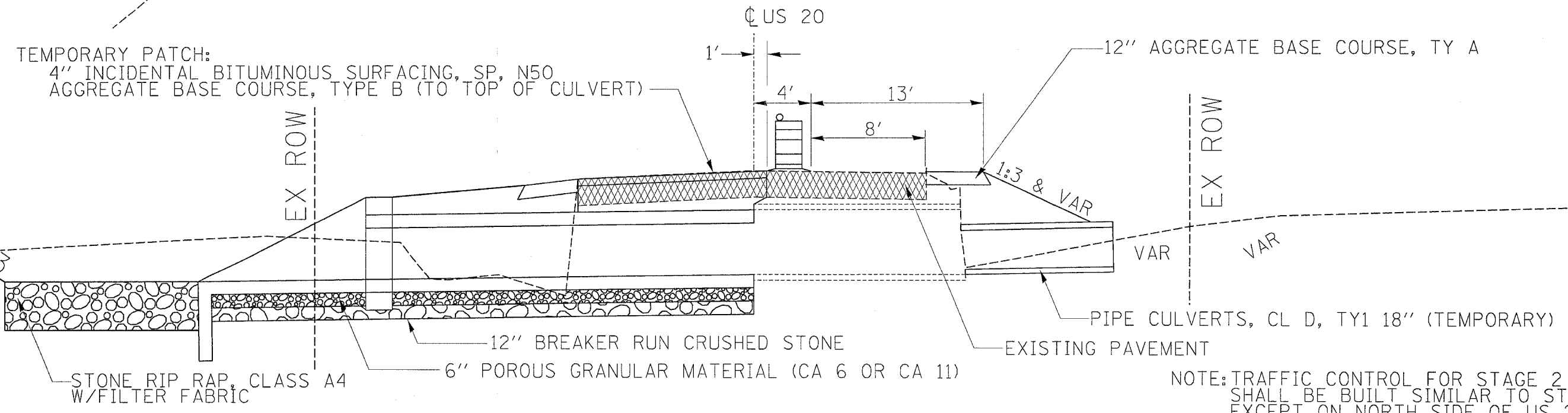
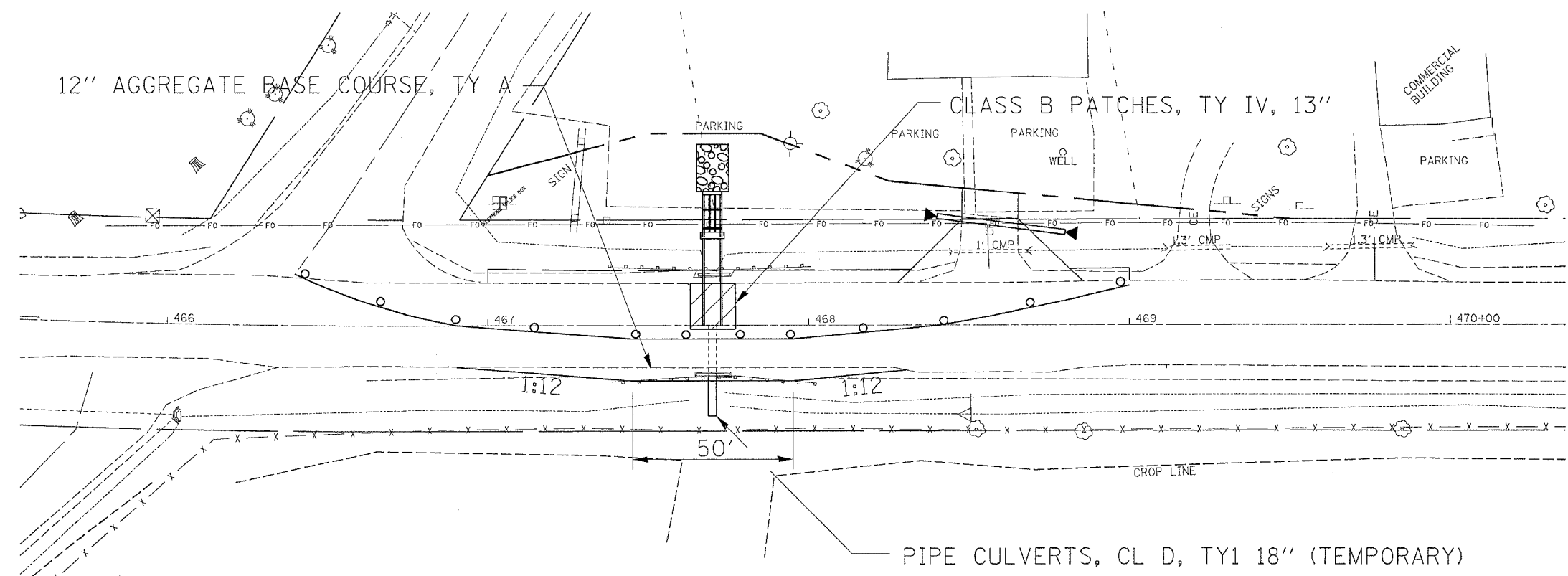
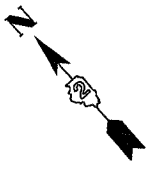
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- = PERIMETER EROSION BARRIER
- = TREE REMOVAL



F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
301	21-T	STEPHENSON	49	16
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CULVERT DETAILS

STA. 467 + 70.16



NOTE: TRAFFIC CONTROL FOR STAGE 2 SHALL BE BUILT SIMILAR TO STAGE 1 EXCEPT ON NORTH SIDE OF US 20

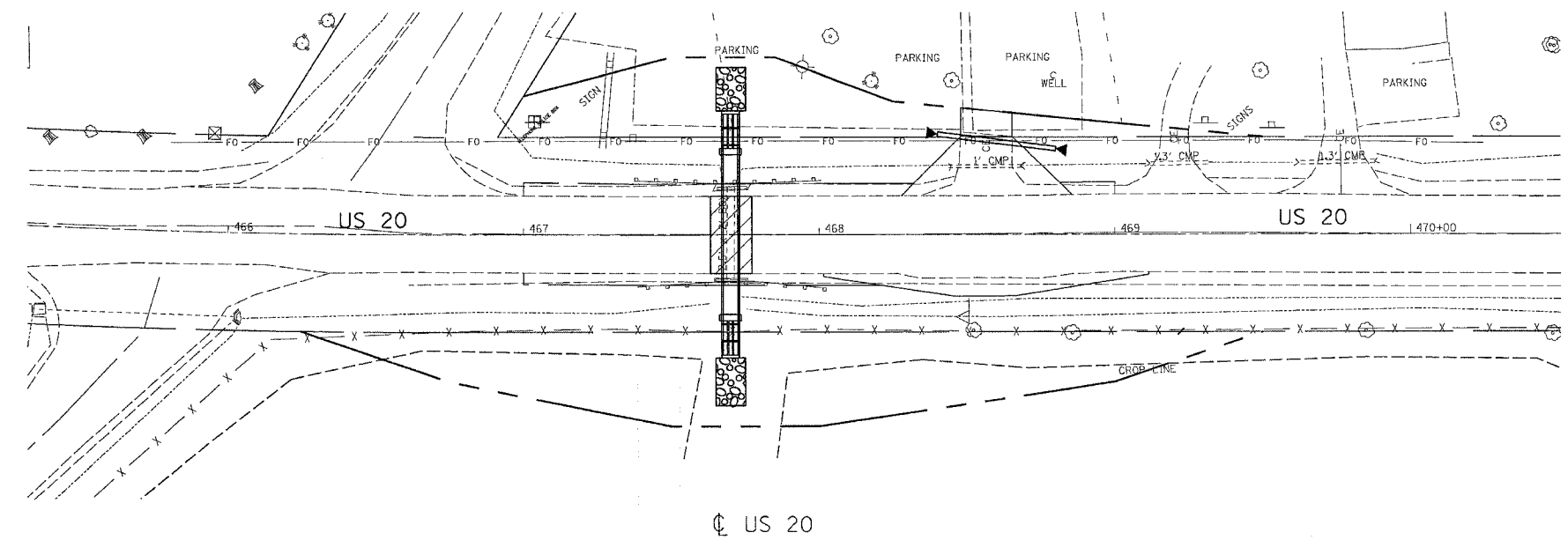
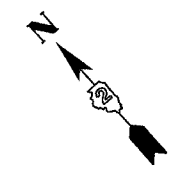
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F.A.P. RY.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
301	21-T	STEPHENSON	49	17
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CULVERT LOCATION NO. 1

5' X 2' PRECAST BOX CULVERT

STA. 467 + 70.16



Build tops of headwalls parallel to grade line.

Class "SI" concrete shall be used throughout. Exposed edges shall be beveled 3/4 inch.

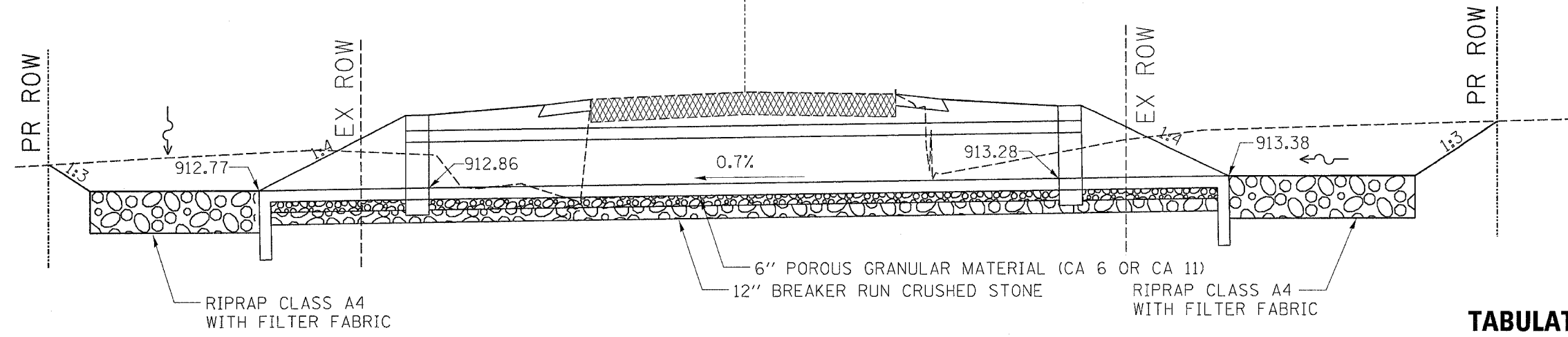
Reinforcement bars shall conform to the requirements of AASHTO M-31 or M-53, grade 60.

A layer of Porous Granular Bedding Material (min 6") shall be placed below the elevation of the bottom of the box culvert and extend at least 2 feet beyond each side of the box culvert, according to Section 540 of the Standard Specifications.

The contractor is responsible for maintaining flow in the manner acceptable to the engineer.

SEE PLAN AND PROFILE SHEET FOR MORE INFORMATION

SEE GRATED CULVERT EXTENSION PLANS FOR MORE INFORMATION



TABULATION OF CULVERT QUANTITIES

DESCRIPTION	UNIT	QTY.
Precast Concrete Box Culvert 5' X 2'	FOOT	60
Grated Culvert Extension No. 1	EACH	2
Breaker Run Crushed Stone (12")	TON	66.3
Removal of Existing Structures No. 1	EACH	1
Stone Rip Rap Class A4 (2 - 10' X 13')	SQ. YD.	28.8
Filter Fabric (2 - 10' X 13')	SQ. YD.	28.8

Drainage Area =	30.2	acres		
Existing Low Grade Elevation:	916.79	ft. @	467+70.16	
Proposed Low Grade Elevation:	916.79	ft. @	467+70.16	
Flood	Frequency	Discharge	Headwater Elev.	(ft)
	Year	cfs	Existing	Proposed
Ten-Year	10	35	915.92	915.07
Design	50	48	916.47	915.51
Base	100	56	916.94	915.89
EX Overtopping	76	55	916.79	
PR Overtopping	425	74		916.79
Max Calc				

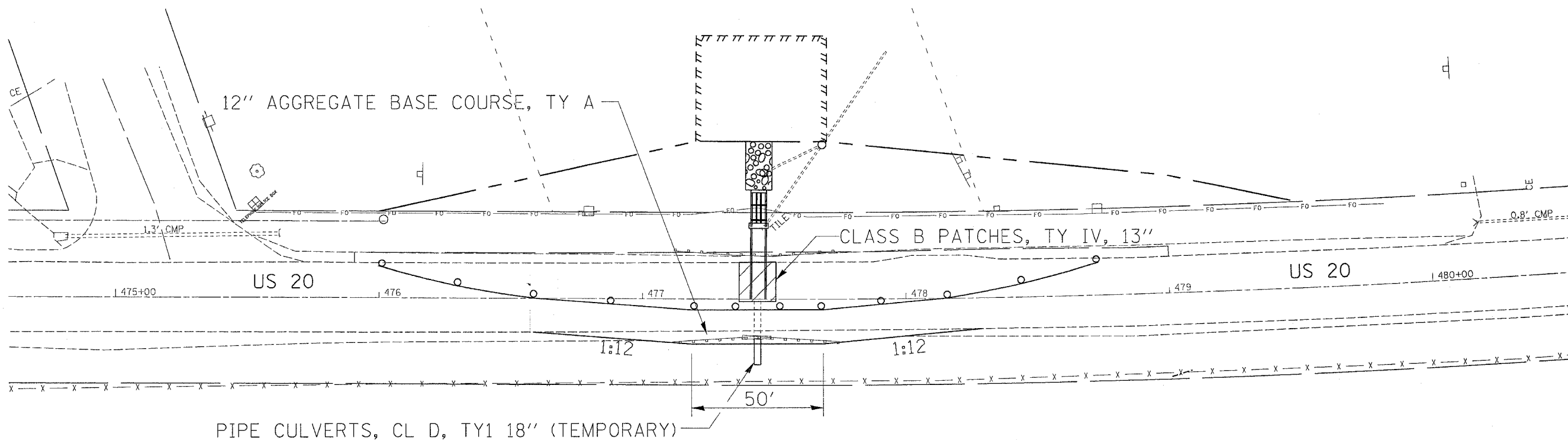
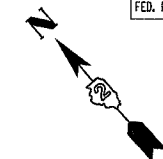
10-Year Velocity through Existing Culvert = 7.2 fps
 10-Year Velocity through Proposed Culvert = 6.7 fps

PLOT DATE
 FILE NAME
 SCALE
 USER NAME

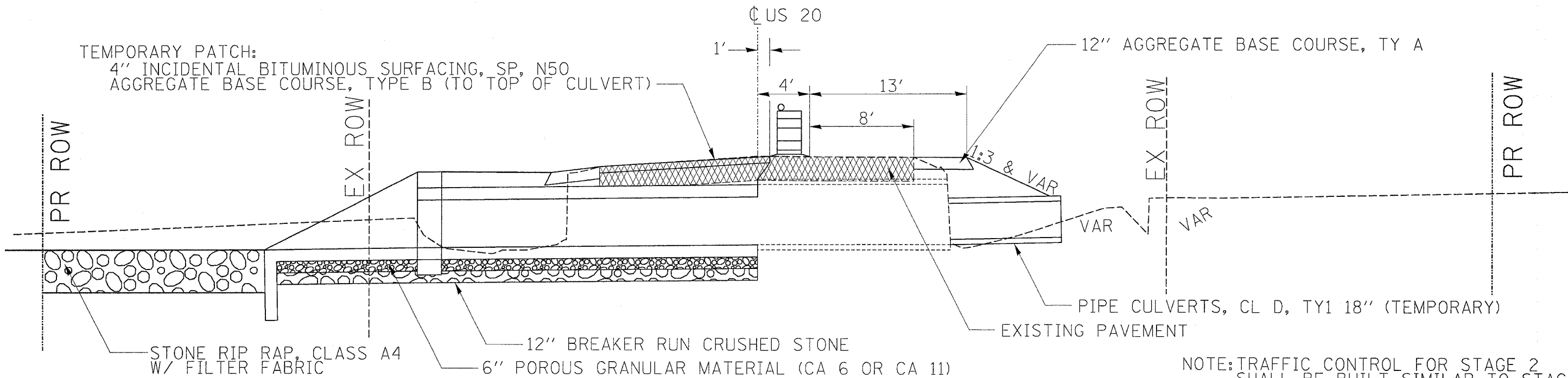
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
301	21-T	STEPHENSON	49	18
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

CULVERT DETAILS

STA. 477 + 43.65



TEMPORARY PATCH:
 4" INCIDENTAL BITUMINOUS SURFACING, SP, N50
 AGGREGATE BASE COURSE, TYPE B (TO TOP OF CULVERT)



NOTE: TRAFFIC CONTROL FOR STAGE 2 SHALL BE BUILT SIMILAR TO STAGE 1, EXCEPT ON NORTH SIDE OF US 20

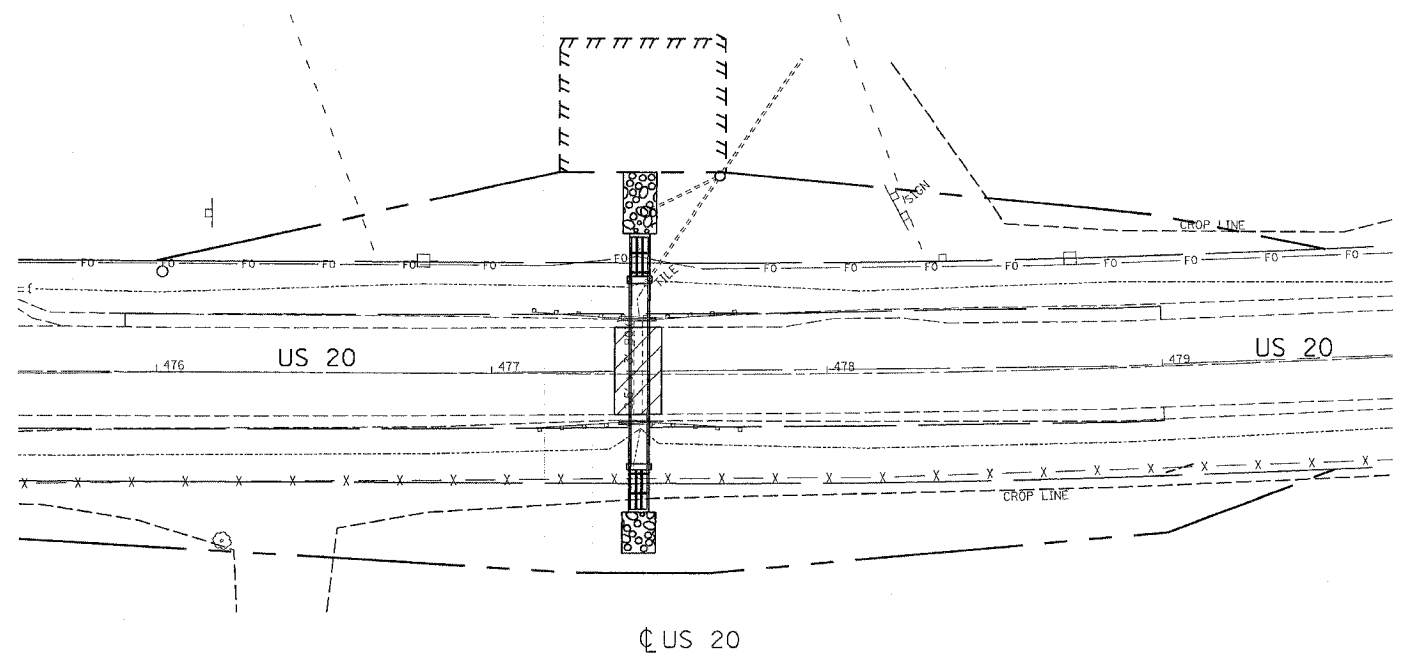
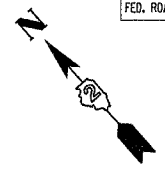
PLOT DATE
 FILE NAME
 PLOT SCALE
 USER NAME

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
301	21-T	STEPHENSON	49	19
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

CULVERT LOCATION NO. 2

5' X 2' PRECAST BOX CULVERT

STA. 477 + 43.65



Build tops of headwalls parallel to grade line.

Class "SI" concrete shall be used throughout. Exposed edges shall be beveled 3/4 inch.

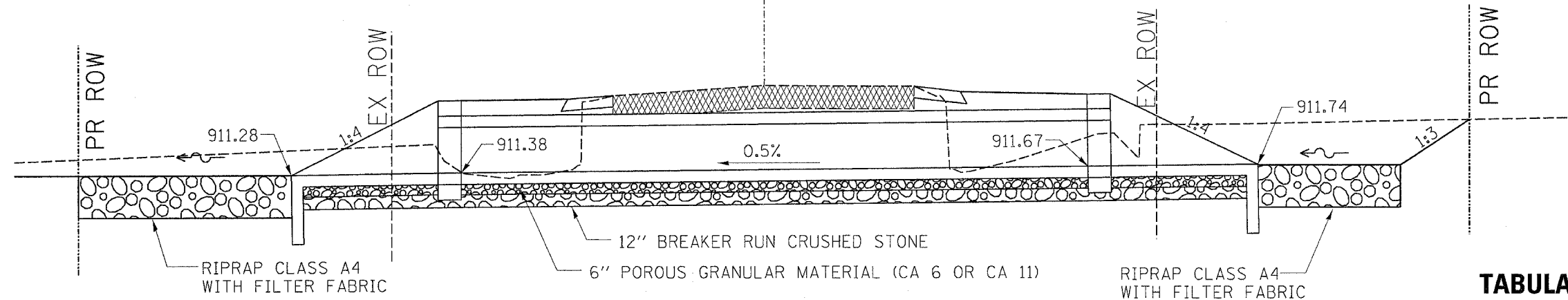
Reinforcement bars shall conform to the requirements of AASHTO M-31 or M-53, grade 60.

A layer of Porous Granular Bedding Material (min 6") shall be placed below the elevation of the bottom of the box culvert and extend at least 2 feet beyond each side of the box culvert, according to Section 540 of the Standard Specifications.

The contractor is responsible for maintaining flow in the manner acceptable to the engineer.

SEE PLAN AND PROFILE SHEET FOR MORE INFORMATION

SEE GRATED CULVERT EXTENSION PLANS FOR MORE INFORMATION



TABULATION OF CULVERT QUANTITIES

DESCRIPTION	UNIT	QTY.
Precast Concrete Box Culvert 5' X 2'	FOOT	60
Grated Culvert Extension No. 2	EACH	2
Breaker Run Crushed Stone (12")	TON	66.3
Removal of Existing Structures No. 2	EACH	1
Stone Rip Rap Class A4 (2 - 10' X 10')	SQ. YD.	22.2
Filter Fabric (2 - 10' X 10')	SQ. YD.	22.2

Drainage Area =	33.0	acres		
Existing Low Grade Elevation:	915.10	ft. @	477+43.65	
Proposed Low Grade Elevation:	915.10	ft. @	477+43.65	
Flood	Frequency Year	Discharge cfs	Headwater Elev. Existing	Headwater Elev. Proposed (ft)
Ten-Year	10	33	914.25	913.40
Design	50	46	914.88	913.85
Base	100	53	915.19	914.17
EX Overtopping	69	51	915.10	
PR Overtopping	490	72		915.10
Max Calc				

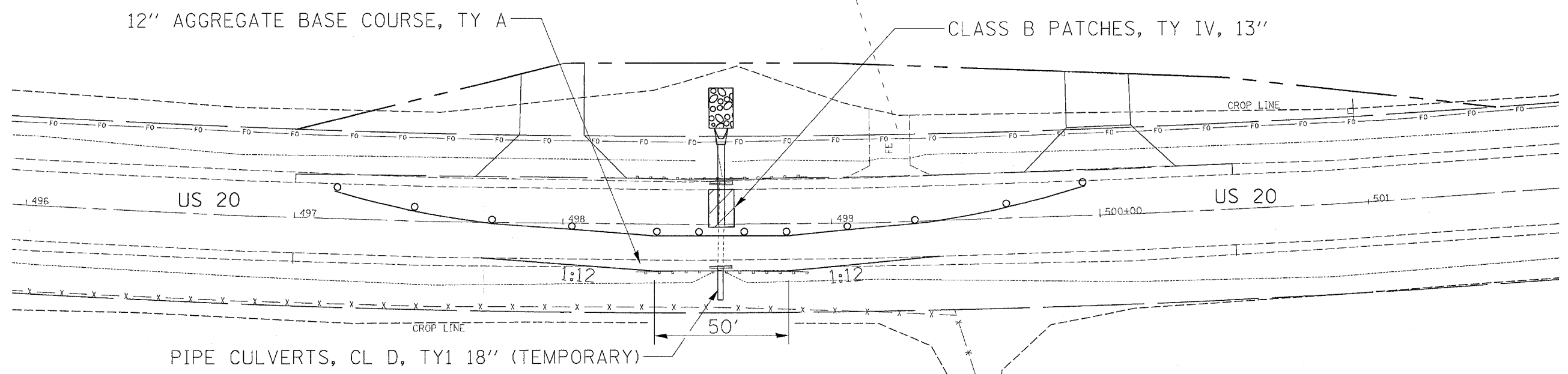
10-Year Velocity through Existing Culvert = 7.0 fps
 10-Year Velocity through Proposed Culvert = 6.2 fps

PLOT DATE
 FILE NAME
 PLOT SCALE
 USER NAME

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

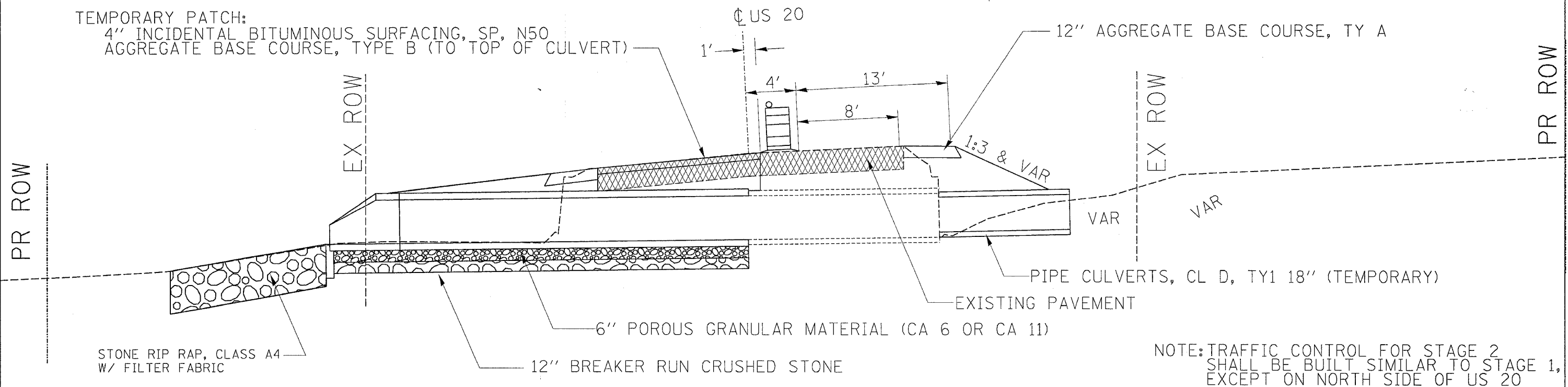
CULVERT DETAILS

STA. 498 + 59.03



TEMPORARY PATCH:

4" INCIDENTAL BITUMINOUS SURFACING, SP, N50
AGGREGATE BASE COURSE, TYPE B (TO TOP OF CULVERT)



NOTE: TRAFFIC CONTROL FOR STAGE 2
SHALL BE BUILT SIMILAR TO STAGE 1,
EXCEPT ON NORTH SIDE OF US 20

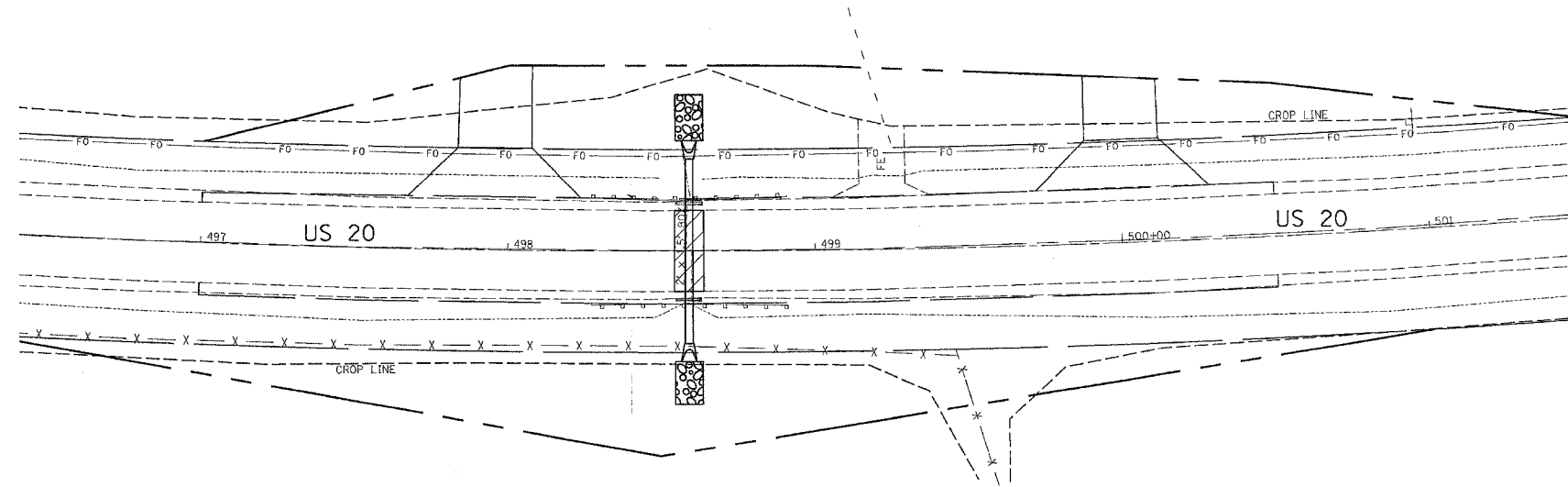
PLOT DATE
FILE NAME
PLOT SCALE
USER NAME

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
301	21-T	STEPHENSON	49	21
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

CULVERT LOCATION NO. 3

30" EQRS ARCH PIPE

STA. 498 + 59.03



Build tops of headwalls parallel to grade line.

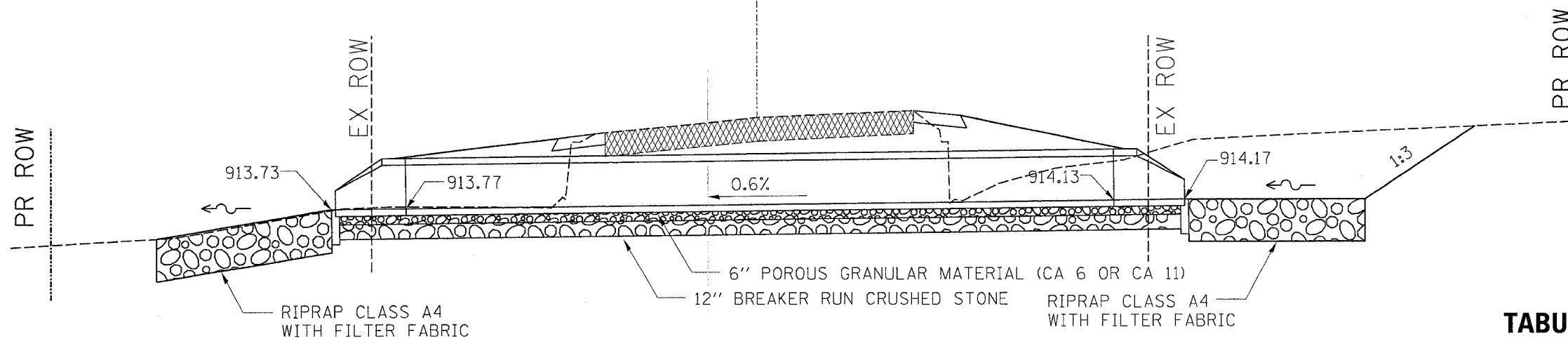
Class "SI" concrete shall be used throughout. Exposed edges shall be beveled 3/4 inch.

Reinforcement bars shall conform to the requirements of AASHTO M-31 or M-53, grade 60.

A layer of Porous Granular Bedding Material (min 6") shall be placed below the elevation of the bottom of the box culvert and extend at least 2 feet beyond each side of the box culvert, according to Section 540 of the Standard Specifications.

The contractor is responsible for maintaining flow in the manner acceptable to the engineer.

SEE PLAN AND PROFILE SHEET FOR MORE INFORMATION



TABULATION OF CULVERT QUANTITIES

Drainage Area =		11.6 acres		
Existing Low Grade Elevation:		917.65 ft. @ 498+59.03		
Proposed Low Grade Elevation:		917.65 ft. @ 498+59.03		
Flood	Frequency Year	Discharge cfs	Headwater Elev. Existing	(ft) Proposed
Ten-Year	10	9	915.68	915.24
Design	50	13	916.07	915.57
Base	100	15	916.25	915.74
EX Overtopping				
PR Overtopping				
Max Calc	500	21	916.88	916.23

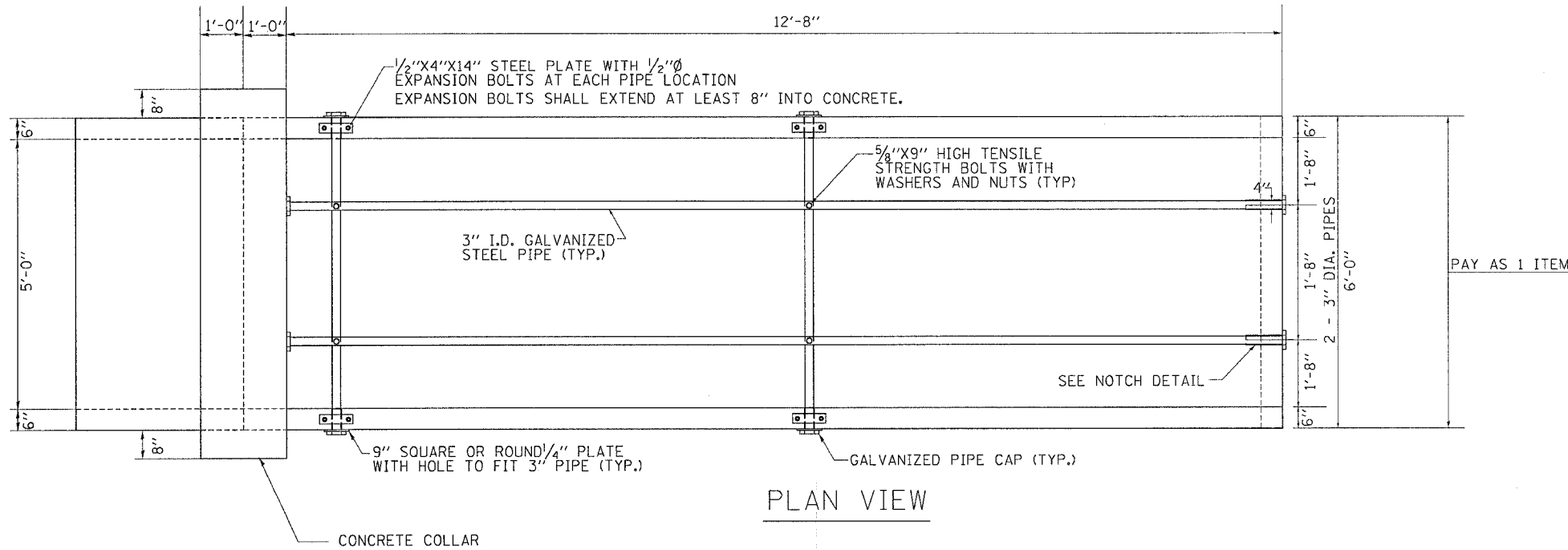
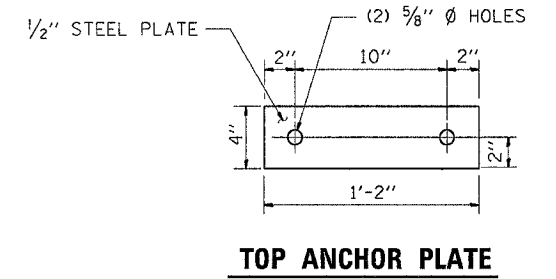
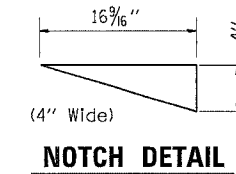
DESCRIPTION	UNIT	QTY.
PIPE CULV, CLASS A, TYPE 1 EQRS 30"	FOOT	60
PRC Flared End Sections, EQRS 30"	EACH	2
Breaker Run Crushed Stone (12")	TON	41.5
Removal of Existing Structures No. 3	EACH	1
Stone Rip Rap Class A4 (2 - 9' X 15')	SQ. YD.	30
Filter Fabric (2 - 9' X 15')	SQ. YD.	30

10-Year Velocity through Existing Culvert = 5.8 fps
 10-Year Velocity through Proposed Culvert = 5.3 fps

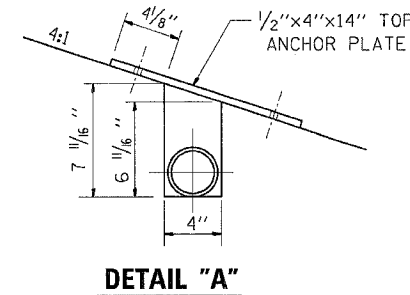
F.A.P. RTEL.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
301	21-T	STEPHENSON	49	22
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

GRATED CULVERT EXTENSION NO. 1 & 2

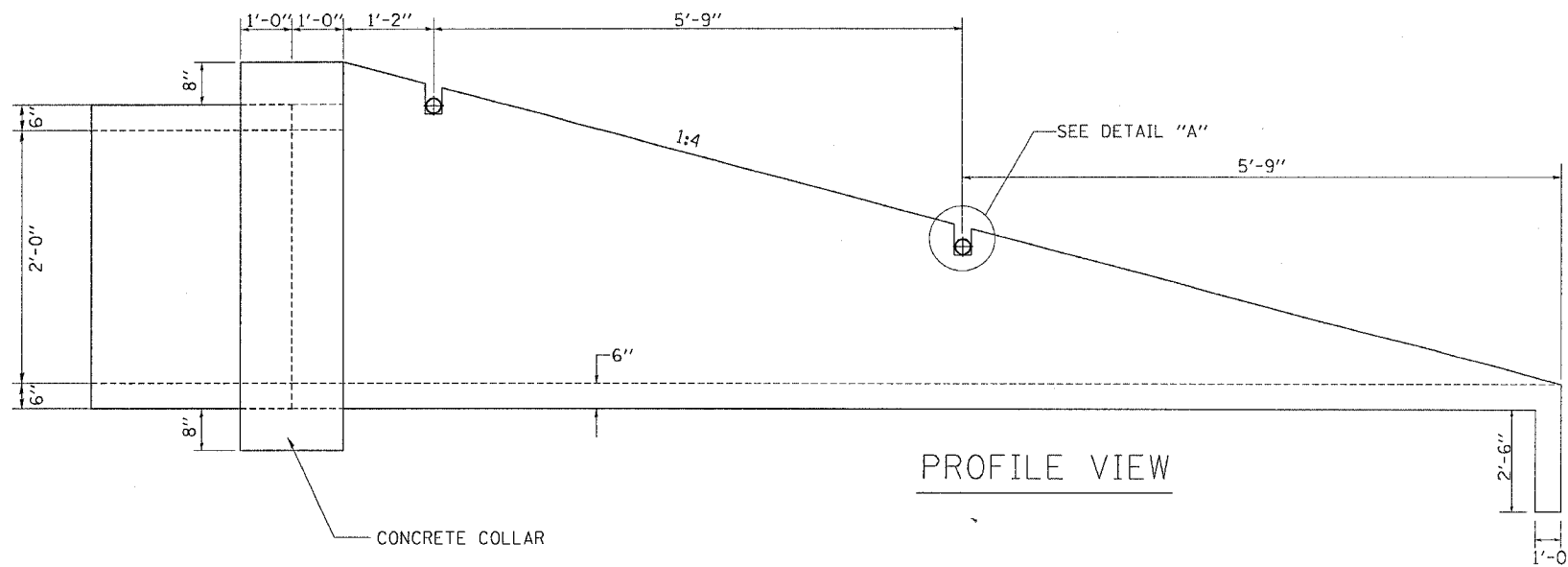
RT /LT STA. 467 + 70.16
RT /LT STA. 477 + 43.65



PLAN VIEW



DETAIL "A"



PROFILE VIEW

BILL OF MATERIALS (FOR ONE EXTENSION)

DESCRIPTION	UNIT	QTY.
3" I.D. Galvanized Steel Pipe	2e	13'-0"
3" Galv Pipe Caps	EACH	8
1/4" Galv. Stl. Plate (9" Nominal)	EACH	4
1/2"x4"x14" Galv. Steel Plate	EACH	4
5/8"x9" Galv. Steel Bolts	EACH	4
Expansion Bolts 1/2"Ø	EACH	8

GENERAL NOTES:

Slope flow line of the extension at the same rate as the flow line of the box.

Bolts, Nuts, and Washers shall be in accordance with Article 710.11 of the standard specification and shall be galvanized.

The contract unit price "Each" for Grated Culvert Extension No. 1 & 2 shall be of precast construction. It shall also include the Class SI Concrete for the Collar, Galvanized Pipe, Bolts, Nuts, Washers, Steel Plates and Reinforcement Bars. Collar shall be constructed according to District Standard 33.1

Steel pipes shall conform to A.S.T.M. A-53 (Type E or S) Grade B, Schedule 40, and shall be galvanized conforming to A.S.T.M. A-120. Contractor shall field verify pipe length.

Steel Plates shall conform to AASHTO M-183 and shall be galvanized conforming to AASHTO M-111.

SEE PLAN AND PROFILE SHEET FOR MORE INFORMATION
SEE CULVERT LOCATION PLANS FOR MORE INFORMATION
SEE CULVERT STAGING PLANS FOR MORE INFORMATION

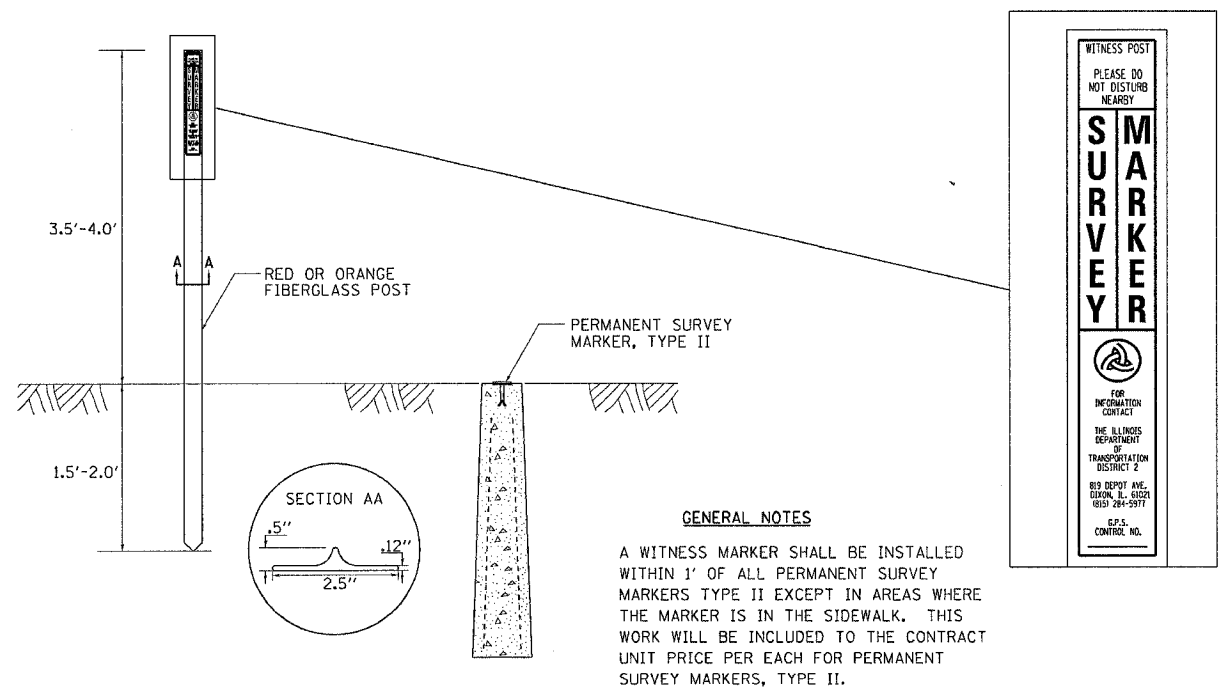
Grated Culvert End Section shall be precast. If contractor elects to use cast-in place grated culvert extension, reinforcement bars shall be designed by contractor. The materials, fabrication, and construction of grated culvert extension are subject to approval by the engineer.

Expansion bolts shall conform to AASHTO M270M Grade 250 (M270 Grade 36)

DATE TIME
DRAWN SPEC
REF
REF
REF

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
301	21-T	STEPHENSON	49	24
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

WITNESS MARKER FOR PERMANENT SURVEY MARKERS TYPE II

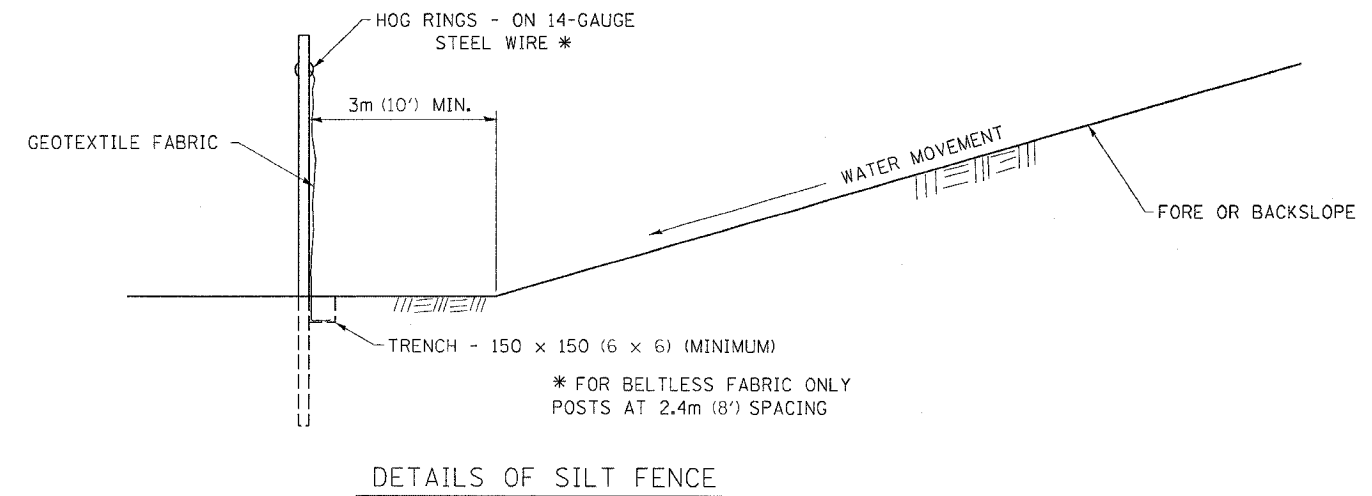
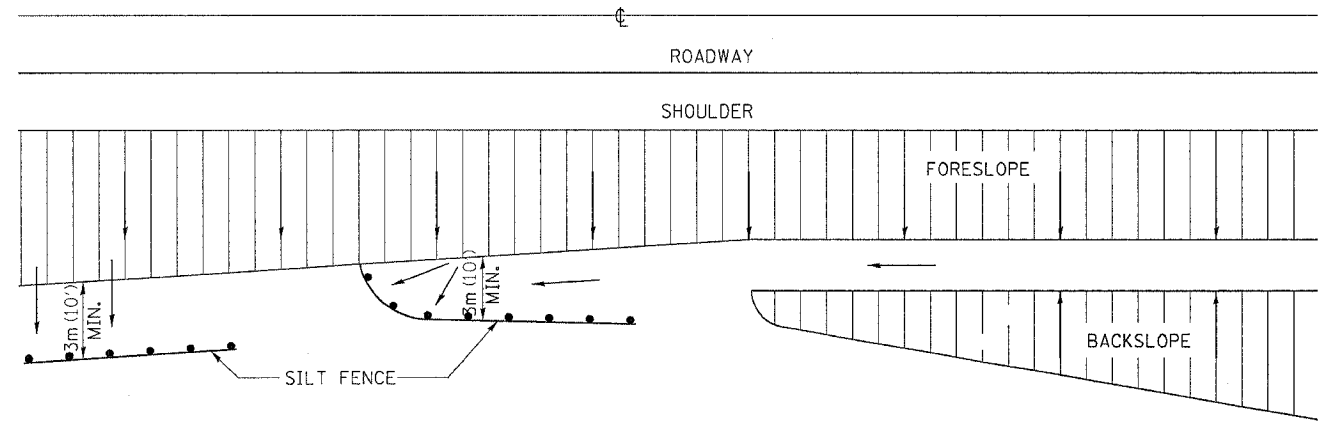


GENERAL NOTES
 A WITNESS MARKER SHALL BE INSTALLED WITHIN 1' OF ALL PERMANENT SURVEY MARKERS TYPE II EXCEPT IN AREAS WHERE THE MARKER IS IN THE SIDEWALK. THIS WORK WILL BE INCLUDED TO THE CONTRACT UNIT PRICE PER EACH FOR PERMANENT SURVEY MARKERS, TYPE II.

WITNESS MARKER FOR PERMANENT SURVEY MARKERS TYPE II 38.4

REVISED 1-31-00

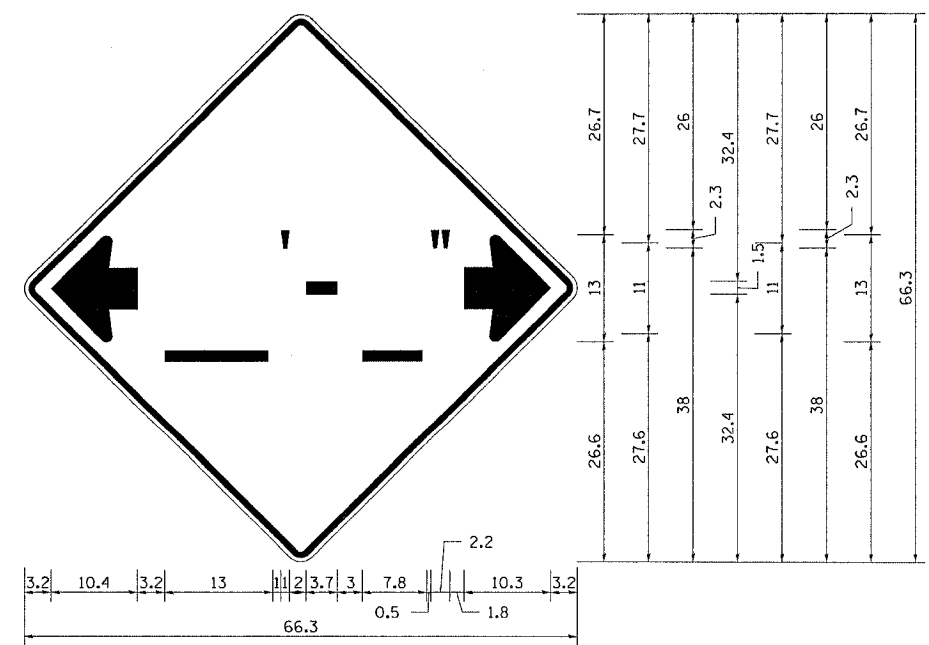
EROSION CONTROL DETAILS FOR SILT FENCE



DETAILS OF SILT FENCE

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

INFORMATIONAL WARNING SIGN (FOR NARROW TRAVEL LANES)



NOTES
 W12-2 - Horizontal Clearance Sign
 48.0" across sides, 1.9" Radius,
 0.8" Border, 0.5" Indent, Black on
 Orange; Standard Arrow Custom
 10.4" X 8.1" 180° Black 11 Inch
 D Series Lettering; Standard Arrow
 Custom 10.4" X 8.1" 0°
 All work to furnish and install these
 signs shall be included in the cost of
 the Traffic Control Standards and
 shall not be paid for separately.

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

INFORMATIONAL WARNING SIGN (FOR NARROW TRAVEL LANES) 39.4

REVISED 6-29-05

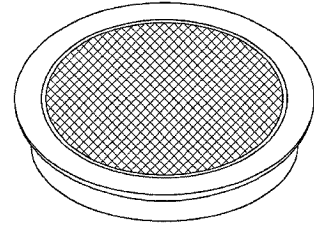
EROSION CONTROL DETAILS FOR SILT FENCE 29.2

REVISED 10-22-01

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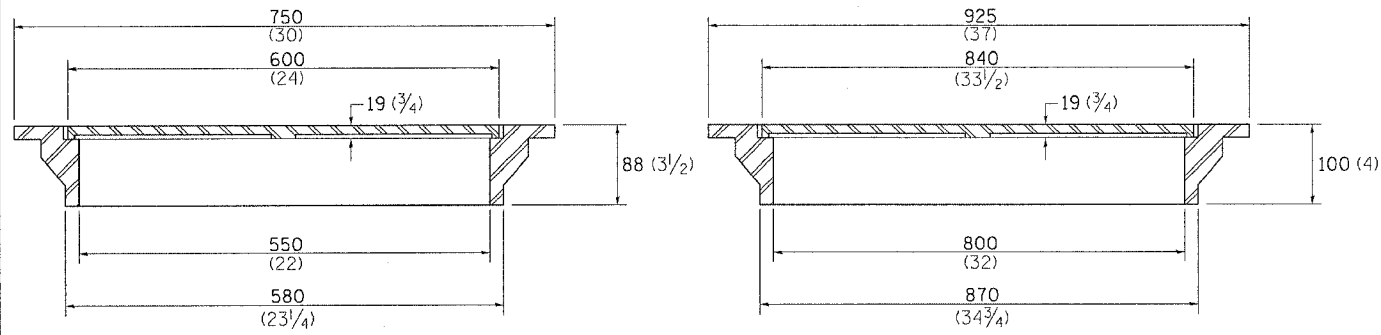
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
301	21-T	STEPHENSON	49	25
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

FIELD TILE JUNCTION VAULTS 600 (24) AND 900 (36) DIA.



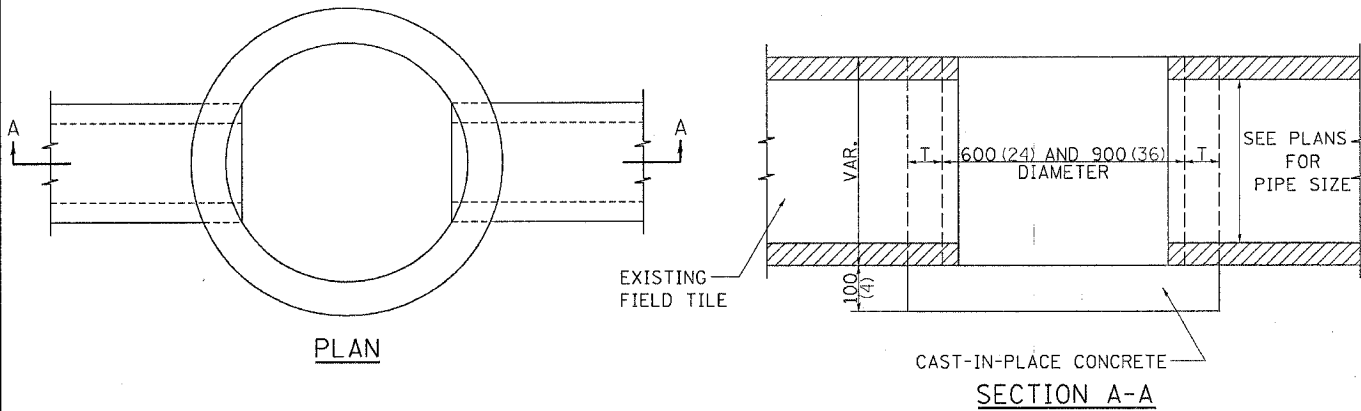
FRAME & LID FOR
600 (24) VAULT

FRAME & LID FOR
900 (36) VAULT



TOTAL WEIGHT: 66 Kg (146 lbs)

TOTAL WEIGHT: 127 Kg (280 lbs)



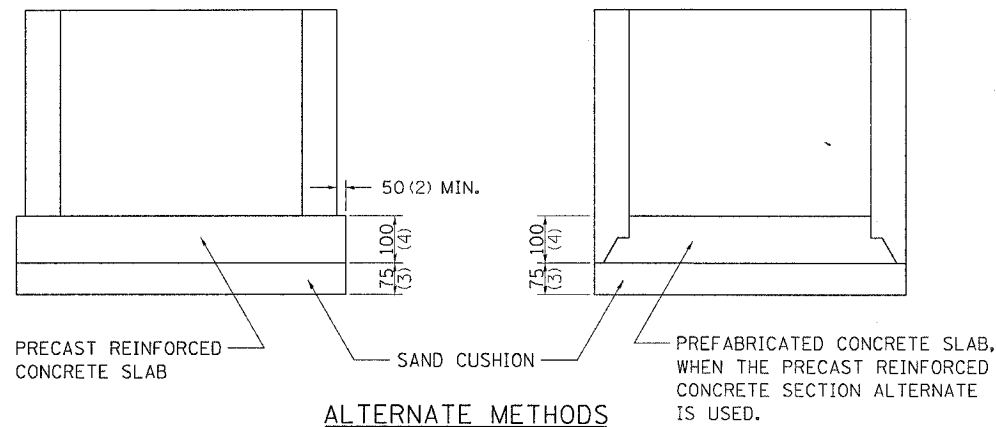
PLAN

SECTION A-A

ALTERNATE MATERIALS FOR WALLS	T
BRICK MASONRY	200 (8)
CAST-IN-PLACE CONCRETE	150 (6)
CONCRETE MASONRY UNIT	125 (5)
PRECAST REINFORCED CONCRETE SECTION	75 (3)

NOTE: THE FRAME AND LID IS REQUIRED ON ALL JUNCTION VAULTS.

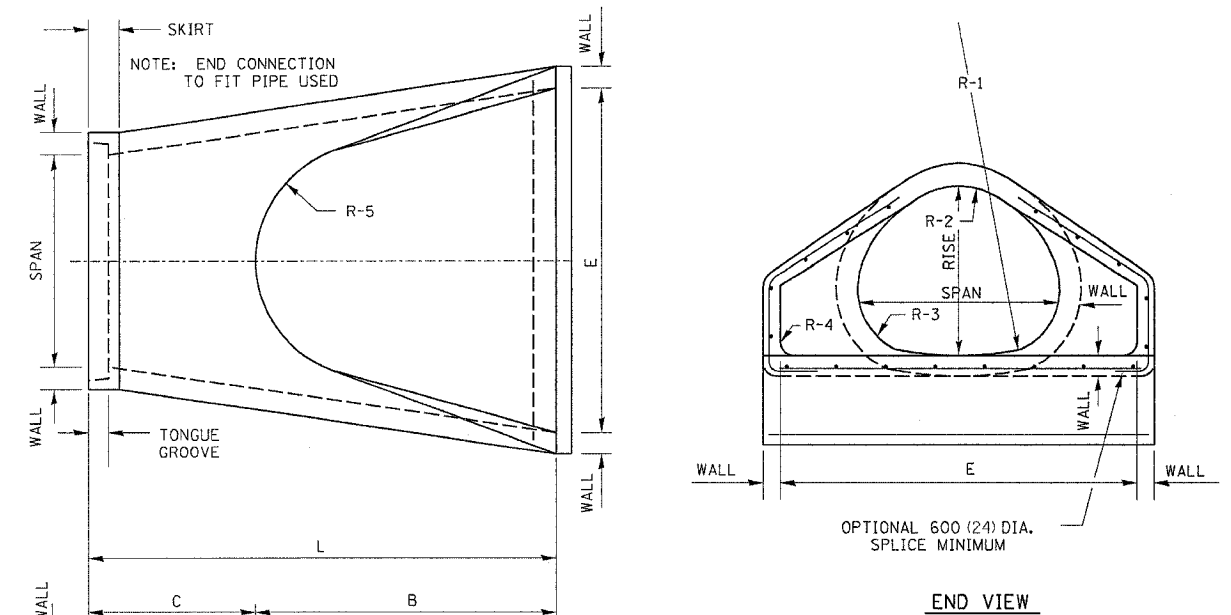
ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.



ALTERNATE METHODS

PRECAST REINFORCED CONCRETE ARCH DIAMETER FLARED END SECTION

SIZE	WALL	SPAN	RISE	L	B	C	E	A	SLOPE	R-1	R-2	R-3	R-4	R-5
450 (18)	64 (2 1/2)	559 (22)	343 (13 1/2)	1829 (72)	686 (27)	1143 (45)	914 (36)	178 (7)	1:2.16	699 (27 1/2)	349 (13 3/4)	133 (5 1/4)	51 (2)	305 (12)
600 (24)	76 (3)	724 (28 1/2)	457 (18)	1829 (72)	991 (39)	838 (33)	1219 (48)	203 (8)	1:2.29	1033 (40 3/4)	370 (14 5/8)	117 (4 5/8)	76 (3)	356 (14)
750 (30)	89 (3 1/2)	921 (36 1/4)	572 (22 1/2)	1829 (72)	1219 (48)	610 (24)	1524 (60)	254 (10)	1:2.34	1295 (51)	476 (18 3/4)	156 (6 1/4)	76 (3)	381 (15)
900 (36)	102 (4)	1111 (43 3/4)	676 (26 5/8)	2438 (96)	1524 (60)	914 (36)	1828 (72)	270 (10 5/8)	1:2.4	1575 (62)	572 (22 1/2)	165 (6 1/2)	152 (6)	508 (20)
1050 (42)	114 (4 1/2)	1308 (51 1/8)	795 (31 3/8)	2438 (96)	1524 (60)	914 (36)	1981 (78)	402 (15 3/8)	1:2.35	1854 (73)	667 (26 1/4)	197 (7 3/4)	152 (6)	559 (22)
1200 (48)	127 (5)	1485 (58 1/2)	914 (36)	2438 (96)	1524 (60)	914 (36)	2134 (84)	533 (21)	1:2.31	2134 (84)	762 (30)	225 (8 7/8)	152 (6)	559 (22)
1350 (54)	140 (5 1/2)	1651 (65)	1016 (40)	2438 (96)	1524 (60)	914 (36)	2286 (90)	648 (25 1/2)	1:2.26	2350 (92 1/2)	848 (33 3/8)	254 (10)	152 (6)	610 (24)
1500 (60)	152 (6)	1854 (73)	1143 (45)	2438 (96)	1905 (75)	533 (21)	2438 (96)	660 (26)	1:2.34	2667 (105)	953 (37 1/2)	281 (11 1/8)	152 (6)	533 (21)
1800 (72)	178 (7)	2235 (88)	1371 (54)	2540 (100)	1981 (78)	559 (22)	3048 (120)	889 (35)	1:2.29	3200 (126)	1143 (45)	338 (13 3/8)	152 (6)	610 (24)



LONGITUDINAL SECTION

END VIEW

NOTES:

PRECAST CONCRETE FLARED END SECTIONS SHALL CONFORM TO THE APPLICABLE REQUIREMENT OF AASHTO M-206.

PRECAST CONCRETE FLARED END SECTION FOR PIPE ARCH DIAMETER REQUIRED SHALL BE AS INDICATED ON DETAIL PLAN FOR EACH INDIVIDUAL INSTALLATION.

THE END BLOCK SHALL BE PLACED PRIOR TO THE INSTALLATION OF THE FLARED END SECTION. THE END BLOCK SHALL BE BACKFILLED IN ACCORDANCE WITH ART. 502.10 (502.11) OF THE STANDARD SPECIFICATIONS, COST INCIDENTAL TO END SECTION.

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

PLOT DATE = Fri Sep 02 14:15:25 2005
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 REFERENCE = SHEET#

STORM WATER POLLUTION PREVENTION PLAN

EROSION CONTROL PLAN

CONTRACT NO. 64896				
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
301	21-T	STEPHENSON	49	26
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

THE FOLLOWING PLAN WAS ESTABLISHED AND INCLUDED IN THESE PLANS TO DIRECT THE CONTRACTOR IN THE PLACEMENT OF TEMPORARY EROSION CONTROL SYSTEMS AND TO PROVIDE A STORM WATER POLLUTION PREVENTION PLAN FOR COMPLIANCE UNDER NPDES.

THE PURPOSE OF THIS PLAN IS TO MINIMIZE SILTATION WITHIN THE CONSTRUCTION ZONE AND TO ELIMINATE SEDIMENTS FROM ENTERING AND LEAVING THE CONSTRUCTION ZONE BY UTILIZING PROPER TEMPORARY EROSION CONTROL SYSTEMS AND PROVIDING GROUND COVER WITHIN A REASONABLE AMOUNT OF TIME.

CERTAIN ITEMS, AS SHOWN IN THIS PLAN AND REFERENCED BY THE LEGEND, SHALL BE PLACED BY THE CONTRACTOR AT THE BEGINNING OF CONSTRUCTION. OTHER ITEMS SHALL BE PLACED BY THE CONTRACTOR AS DIRECTED BY THE ENGINEER ON A CASE BY CASE SITUATION RESULTING FROM THE CONTRACTOR'S SEQUENCE OF ACTIVITIES, TIME OF YEAR, AND EXPECTED WEATHER CONDITIONS.

THE CONTRACTOR SHALL PLACE PERMANENT EROSION CONTROL SYSTEMS AND SEEDING WITHIN A REASONABLE AMOUNT OF TIME: THEREFORE, REDUCING THE AMOUNT OF AREA BEING OPEN TO THE POSSIBILITY OF EROSION AND REDUCING THE AMOUNT OF TEMPORARY SEEDING. THE RESIDENT ENGINEER WILL DETERMINE IF TEMPORARY EROSION CONTROL SYSTEMS SHOWN IN THE PLAN CAN BE DELETED, THE SIZE OF THE PROPOSED DITCH CHECKS, THE PROPER METHOD OF INSTALLATION, AND IF ANY ADDITIONAL TEMPORARY EROSION CONTROL SYSTEMS SHALL BE ADDED WHICH ARE NOT INCLUDED IN THE PLANS. THE CONTRACTOR SHALL PERFORM ALL WORK AS DIRECTED BY THE ENGINEER AND AS SHOWN IN STANDARD 280001 OF THE PLANS.

SITE DESCRIPTION

DESCRIPTION OF CONSTRUCTION ACTIVITY:

THIS PROJECT CONSISTS OF REPLACING THREE CULVERTS NEAR ELEROY (0.3 MILE, 0.7 MILE, AND 0.9 MILE WEST OF RINK ROAD)

DESCRIPTION OF INTENDED SEQUENCE OF ACTIVITIES:

THE SEQUENCE OF EVENTS ARE AS FOLLOW: CLEARING, EMBANKMENT, EXCAVATION, GRADING AND PAVING. THIS PROJECT WILL BE CONSTRUCTED IN SEGMENTS AS SHOWN IN THE "STAGING PLANS".

TOTAL CONSTRUCTION SITE (CONSTRUCTION LIMIT TO CONSTRUCTION LIMIT) 1.07 ACRES

PROPOSED R.O.W (TOTAL PARCEL AREA) 1.62 ACRES

DISTURBED BY EXCAVATION (E.O.P TO CONSTRUCTION LIMIT) 1.05 ACRES

SUPPORTING REPORTS AND PLANS

THE FOLLOWING ASSISTED IN DEVELOPING THE EROSION CONTROL PLAN AS REFERENCED DOCUMENTS:

SOIL PROFILE SHEETS, SOILS REPORTS, BORING LOGS
USGS DRAINAGE MAPS, PROJECT PLAN DOCUMENTS

DRAINAGE TRIBUTARIES RECEIVING WATER FROM CONSTRUCTION SITE

EROSION CONTROLS AND SEDIMENT CONTROL PROCEDURES

STABILIZATION PRACTICES AT THE BEGINNING OF CONSTRUCTION:

PERIMETER EROSION CONTROL SHALL BE PLACED PRIOR TO BEGINNING EARTHWORK.

STABILIZATION PRACTICES DURING CONSTRUCTION:

AS EARTH EXCAVATION AND EMBANKMENT ARE BEING COMPLETED THE CONTRACTOR SHALL PLACE DITCH CHECKS, INLET AND PIPE PROTECTION, EROSION CONTROL BLANKET, AND SEEDING AS STAGES OF THE PROJECT ARE COMPLETED. PERIMETER EROSION BARRIER WILL BE INSTALLED AT ADDITIONAL LOCATIONS AS THE PROJECT PROGRESSES. SEEDING SHALL BE COMPLETED AS SPECIFIED IN THE EROSION CONTROL/ SEEDING MOBILIZATION AND TEMPORARY SEEDING SPECIAL PROVISION.

MAINTENANCE AFTER FINAL GRADING

TEMPORARY EROSION CONTROL SYSTEMS SHALL BE LEFT IN PLACE WITH PROPER MAINTENANCE UNTIL PERMANENT EROSION CONTROL IS IN PLACE AND WORKING PROPERLY AND ALL PROPOSED TURF AREAS SEEDED AND ESTABLISHED WITH THE PROPER STAND. ONCE PERMANENT EROSION CONTROL SYSTEMS AS PROPOSED IN THE PLANS ARE FUNCTIONAL AND ESTABLISHED, TEMPORARY ITEMS SHALL BE REMOVED, CLEANED UP AND DISTURBED TURF RESEEDED.

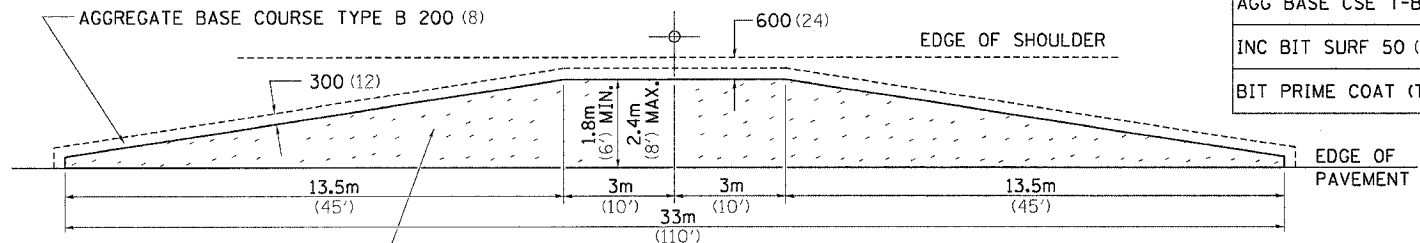
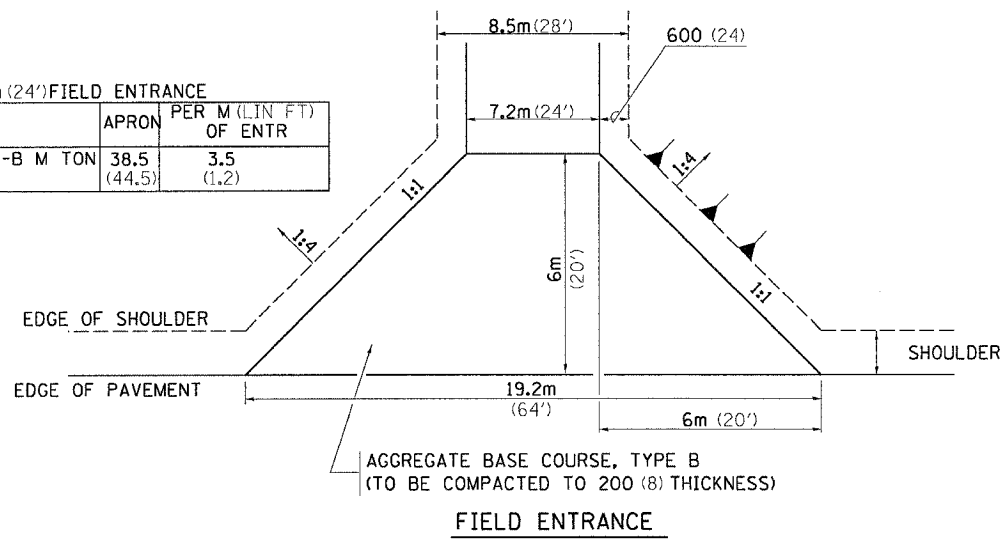
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
301	21-T	STEPHENSON	49	27
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

BITUMINOUS APPROACHES & MAILBOX RETURNS

7.2m (24') FIELD ENTRANCE

AGG BASE CSE T-B M TON	APRON	PER M (LIN FT) OF ENTR
(44.5)	38.5	3.5
	(44.5)	(1.2)



	1.8m (6')	2.4m (8')
AGG BASE CSE T-B (TON)	22.2 (24.5)	28.2 (31.1)
INC BIT SURF 50 (2) (TON)	5.3 (5.8)	7.1 (7.8)
BIT PRIME COAT (TON)	0.05 (0.06)	0.07 (0.08)

ON ALL ENTRANCES
AGGREGATE BASE COURSE TYPE B 200 (8)
INCIDENTAL BITUMINOUS SURFACING 50 (2)

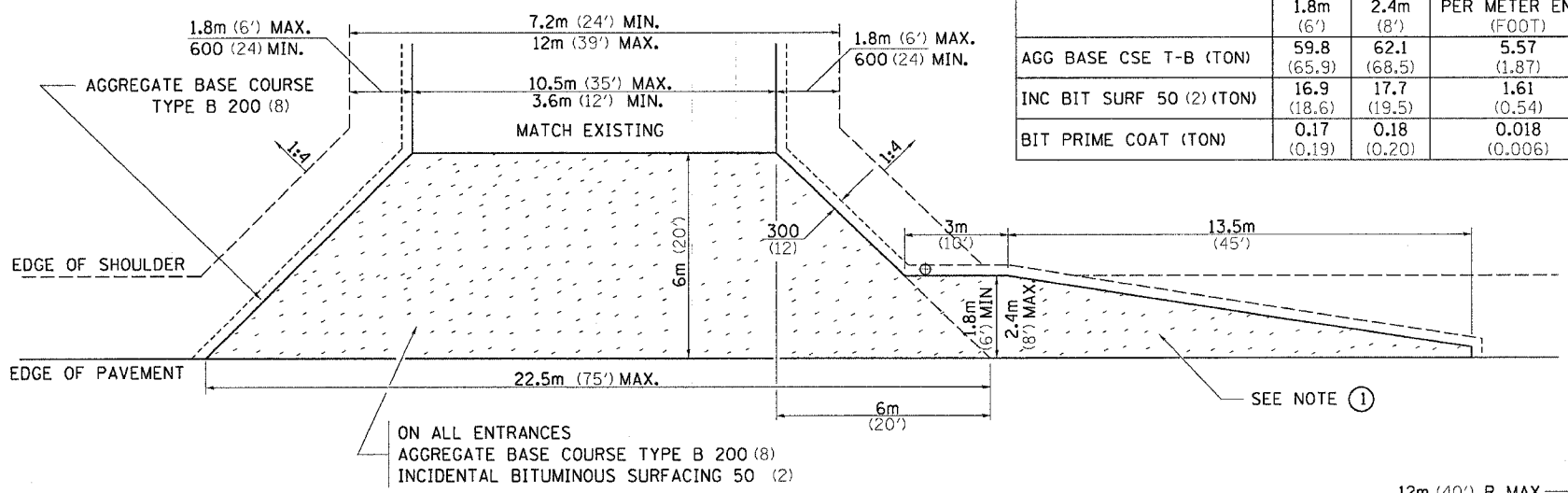
MAILBOX TURNOUT

NOTE

- TURNOUTS ARE TO BE CONSTRUCTED ON THE APPROACH SIDE OF ALL PE & CE REGARDLESS IF A MAILBOX IS PRESENT.
- ALL PE & CE ARE TO BE SURFACED TO RIGHT OF WAY LINE. AREA BEHIND RIGHT OF WAY SHALL MATCH EXISTING SURFACE.
- FE ARE TO BE AGGREGATE TO RIGHT OF WAY OR TOUCH DOWN, WHICH EVER IS GREATEST.
- QUANTITIES ARE CALCULATED WITH 1' BITUMINOUS SHOULDER IN PLACE. AGGREGATE QUANTITIES SHOWN ARE FOR NEW CONSTRUCTION.
- EXCAVATION REQUIRED FOR PLACEMENT OF AGGREGATE BASE COURSE SHALL BE CONSIDERED INCIDENTAL TO THE AGGREGATE BASE COURSE.
- ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.

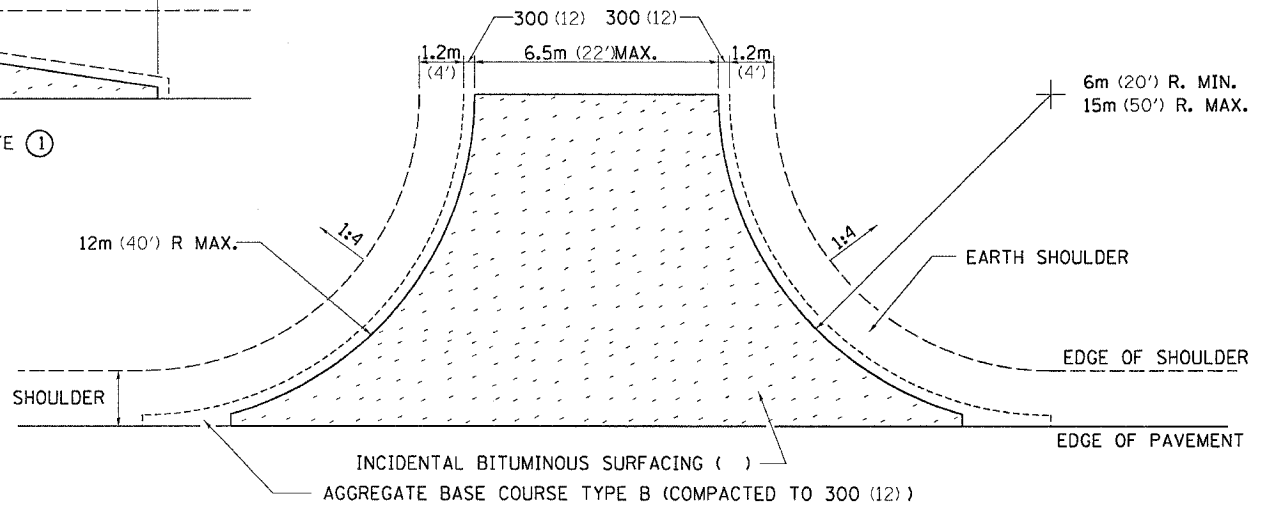
10.5m (35') COMMERCIAL ENTRANCE

	1.8m (6')	2.4m (8')	PER METER ENTR (FOOT)
AGG BASE CSE T-B (TON)	59.8 (65.9)	62.1 (68.5)	5.57 (1.87)
INC BIT SURF 50 (2) (TON)	16.9 (18.6)	17.7 (19.5)	1.61 (0.54)
BIT PRIME COAT (TON)	0.17 (0.19)	0.18 (0.20)	0.018 (0.006)



ON ALL ENTRANCES
AGGREGATE BASE COURSE TYPE B 200 (8)
INCIDENTAL BITUMINOUS SURFACING 50 (2)

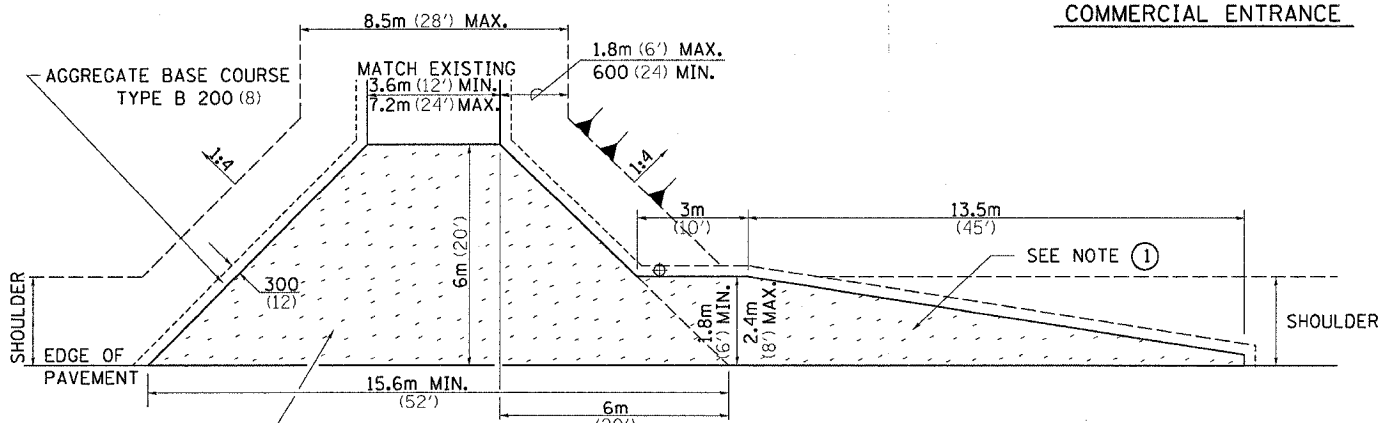
COMMERCIAL ENTRANCE



SIDE ROAD RETURN

	6m RADIUS (20')			9m RADIUS (30')			12m RADIUS (40')		
	5.5m (18')	6m (20')	6.5m (22')	5.5m (18')	6m (20')	6.5m (22')	5.5m (18')	6m (20')	6.5m (22')
AGG BASE CSE T-B (TON)	40.9 (45.1)	43.7 (48.2)	46.4 (51.2)	70.3 (77.5)	74.4 (82.0)	78.6 (86.6)	105.5 (116.3)	111.0 (122.4)	116.6 (128.5)
INC BIT SURF AT 25 (1) (TON)	3 (3.3)	3.3 (3.6)	3.4 (3.8)	5.3 (5.8)	5.5 (6.1)	5.9 (6.5)	8.0 (8.8)	8.4 (9.3)	9.0 (9.9)
BIT PRIME COAT (TON)	0.07 (0.08)	0.08 (0.09)	0.10 (0.11)	0.14 (0.15)	0.15 (0.16)	0.15 (0.17)	0.20 (0.22)	0.22 (0.24)	0.23 (0.25)

NOTE: USE 50 (2) INC. BIT. SURF. ON EXISTING RETURNS



ON ALL ENTRANCES
AGGREGATE BASE COURSE TYPE B (TO BE COMPACTED TO 200 (8) THICKNESS)
INCIDENTAL BITUMINOUS SURFACING 50 (2)

PRIVATE ENTRANCE

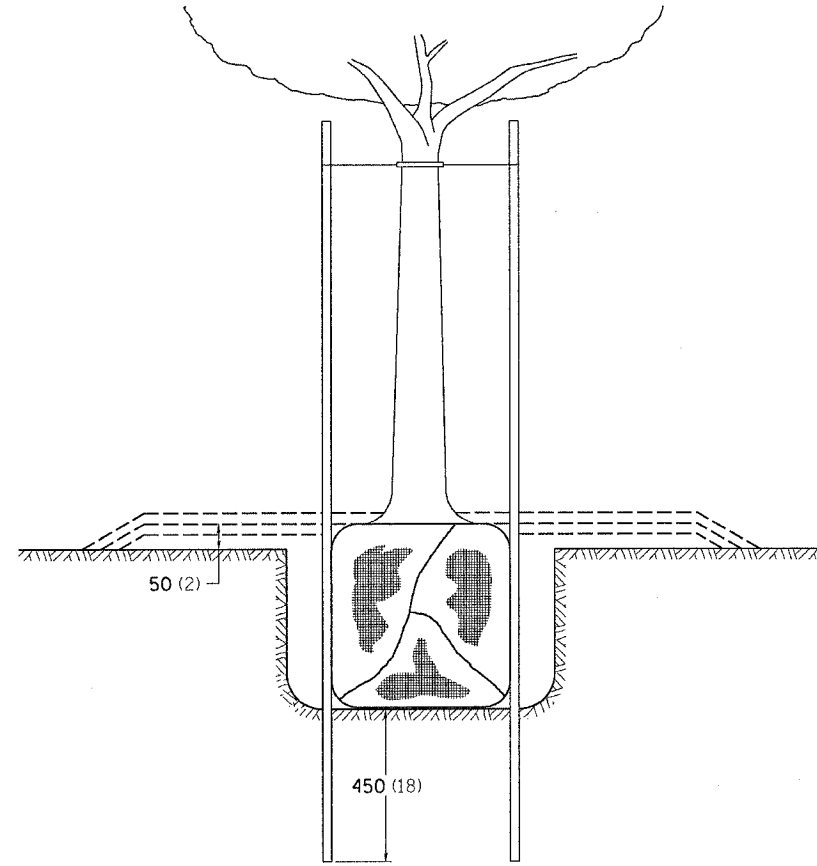
3.6m (12') PRIVATE ENTRANCE

	1.8m (6')	2.4m (8')	PER METER ENTR (FOOT)
AGG BASE CSE T-B (TON)	39.7 (43.8)	42.0 (46.3)	2.11 (0.71)
INC BIT SURF 50 (2) (TON)	10.7 (11.8)	11.5 (12.7)	0.57 (0.19)
BIT PRIME COAT (TON)	0.11 (0.12)	0.18 (0.13)	0.006 (0.002)

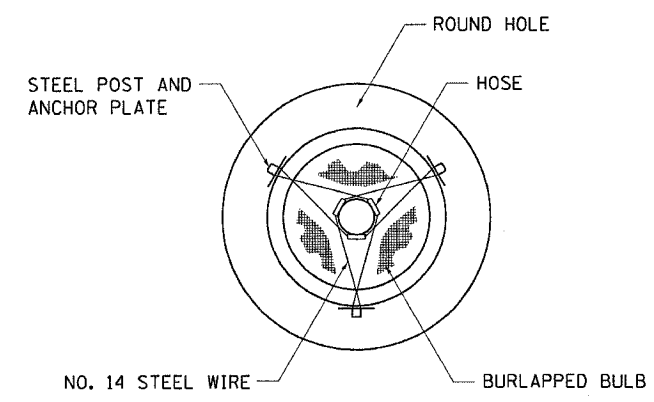
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
301	21-T	STEPHENSON	49	30
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

DETAILS OF PLANTING AND BRACING TREES

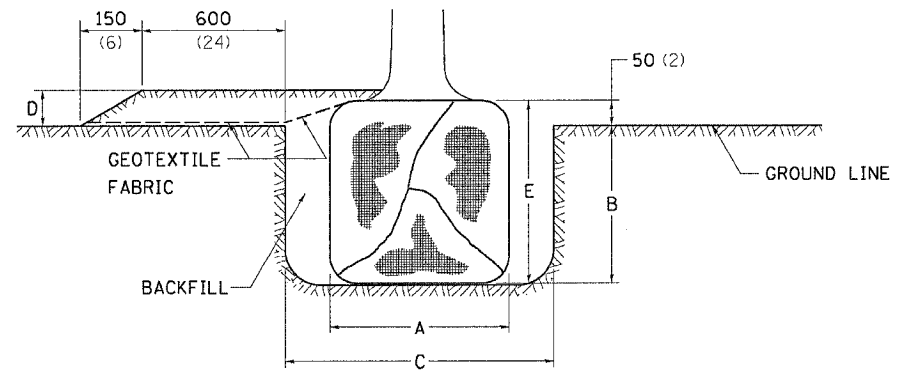


TREES SMALLER THAN 115 (4 1/2) IN DIAMETER

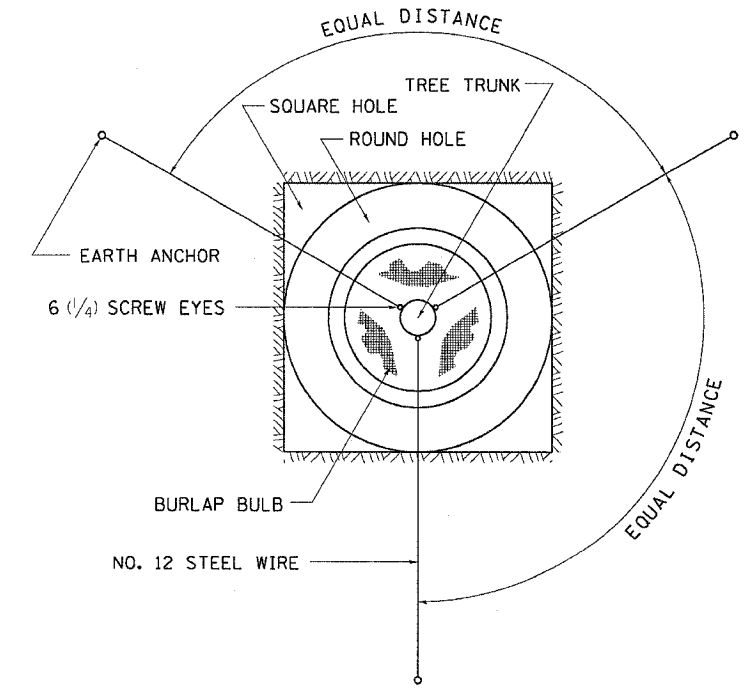


SMALL	A	B	C	D	E	F
TREE SIZE	DIAMETER OF BALL OR ROOT SYS.	DEPTH OF HOLE EXCAVATION	WIDTH OF HOLE EXCAVATION	THICKNESS OF MULCH COVER	DEPTH OF BALL OR ROOT SYS.	VOLUME OF MULCH COVER m ³ (CU. YDS.)
1.5-1.8m (5'-6')	400 (16)	250 (10)	750 (30)	100 (4)	300 (12)	0.41 (0.54)
1.5-1.8m (5'-6') BB	400 (16)	250 (10)	750 (30)	100 (4)	300 (12)	0.41 (0.54)
1.8-2.0m (6'-7') BB	450 (18)	300 (12)	750 (30)	100 (4)	350 (14)	0.41 (0.54)
2.0-2.4m (7'-8') BB	500 (20)	275 (11)	750 (30)	100 (4)	325 (13)	0.41 (0.54)
2.4-3.0m (8'-10') BB	600 (24)	350 (14)	900 (36)	100 (4)	400 (16)	0.47 (0.61)
3.0-3.6m (10'-12') BB	650 (26)	375 (15)	900 (36)	100 (4)	425 (17)	0.47 (0.61)

LARGE	A	B	C	D	E	F
TREE SIZE	DIAMETER OF BALL OR ROOT SYS.	DEPTH OF HOLE EXCAVATION	WIDTH OF HOLE EXCAVATION	THICKNESS OF MULCH COVER	DEPTH OF BALL OR ROOT SYS.	VOLUME OF MULCH COVER m ³ (CU. YDS.)
0-50 (0-2)	500 (20)	275 (11)	900 (36)	100 (4)	325 (13)	0.47 (0.61)
50-65 (2-2 1/2) BB	600 (24)	350 (14)	1200 (48)	100 (4)	400 (16)	0.60 (0.78)
65-75 (2 1/2-3) BB	700 (28)	425 (17)	1200 (48)	100 (4)	475 (19)	0.60 (0.78)
75-90 (3-3 1/2) BB	800 (32)	425 (17)	1500 (60)	100 (4)	475 (19)	0.73 (0.96)
90-100 (3 1/2-4) BB	900 (36)	500 (20)	1500 (60)	100 (4)	550 (22)	0.73 (0.96)
100-115 (4-4 1/2) BB	1000 (40)	550 (22)	1800 (72)	100 (4)	600 (24)	0.89 (1.16)
115-125 (4 1/2-5) BB	1100 (44)	600 (24)	1800 (72)	100 (4)	650 (26)	0.89 (1.16)
125-140 (5-5 1/2) BB	1200 (48)	675 (27)	2100 (84)	100 (4)	725 (29)	1.06 (1.38)



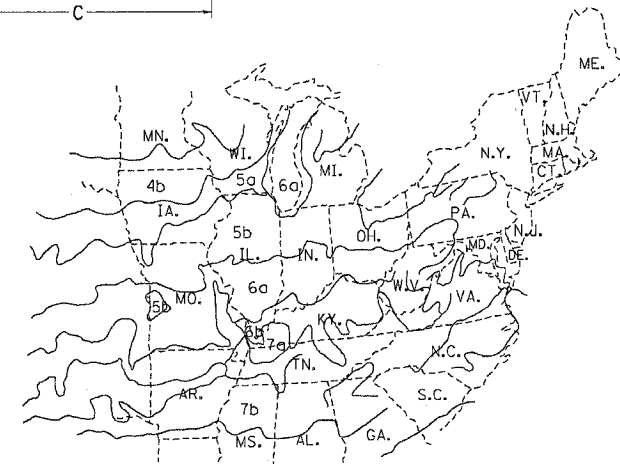
TREES OVER 115 (4 1/2) IN DIAMETER



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

TREE REPLACEMENT SCHEDULE

CODE NUMBER	SCIENTIFIC NAME	COMMON NAME	SIZE	UNIT	QUANTITY
A2006514	TREE, QUERCUS BICOLOR	SWAMP WHITE OAK	1 3/4" CALIPER, BALLED & BURLAPPED	EACH	3



PLANT HARDINESS ZONE MAP
U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL RESEARCH SERVICE
PUBLICATION NO. 814

PLOT DATE = Fri Sep 02 14:15:27 2005
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REFERENCE = PREP

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STA. 467+70.1588 TO STA. 468+00.0000				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

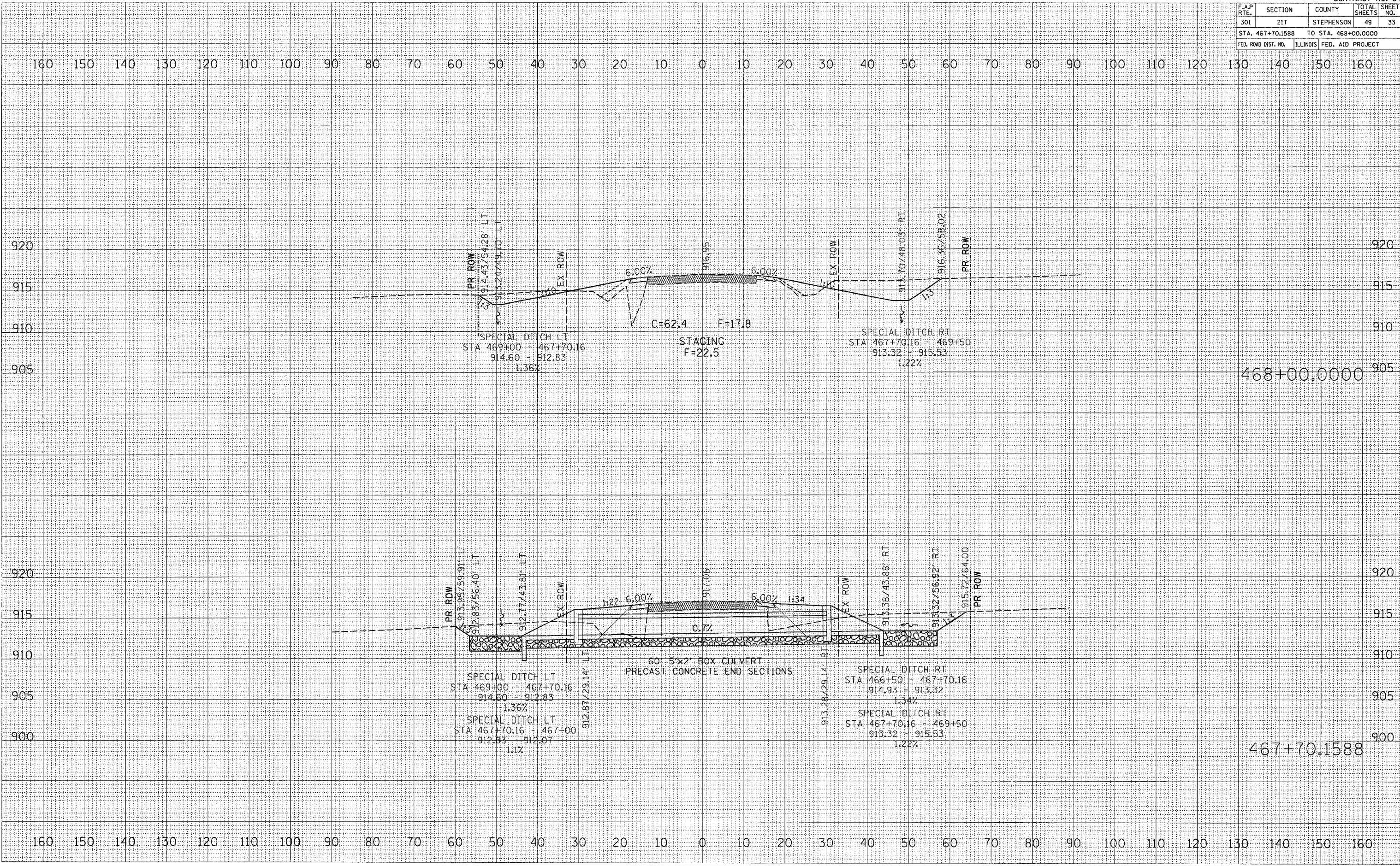
DATE	BY

FINAL SURVEY PLOTTED FROM DATE AREAS CHECKED

DATE	BY

ORIGINAL SURVEY PLOTTED FROM DATE AREAS CHECKED

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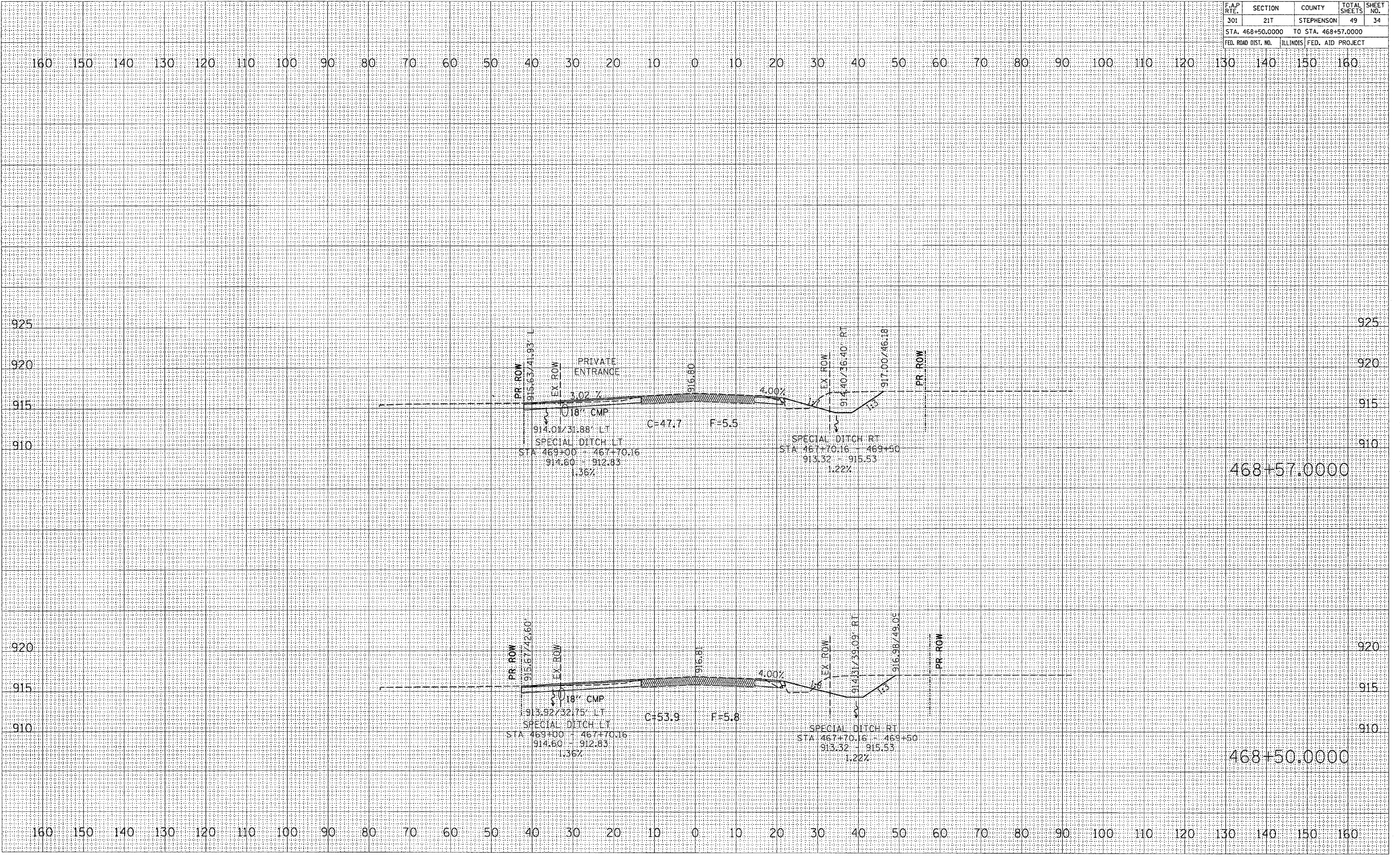


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301	21T	STEPHENSON	49	34
STA. 468+50.0000 TO STA. 468+57.0000				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

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

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

DATE _____
 BY _____
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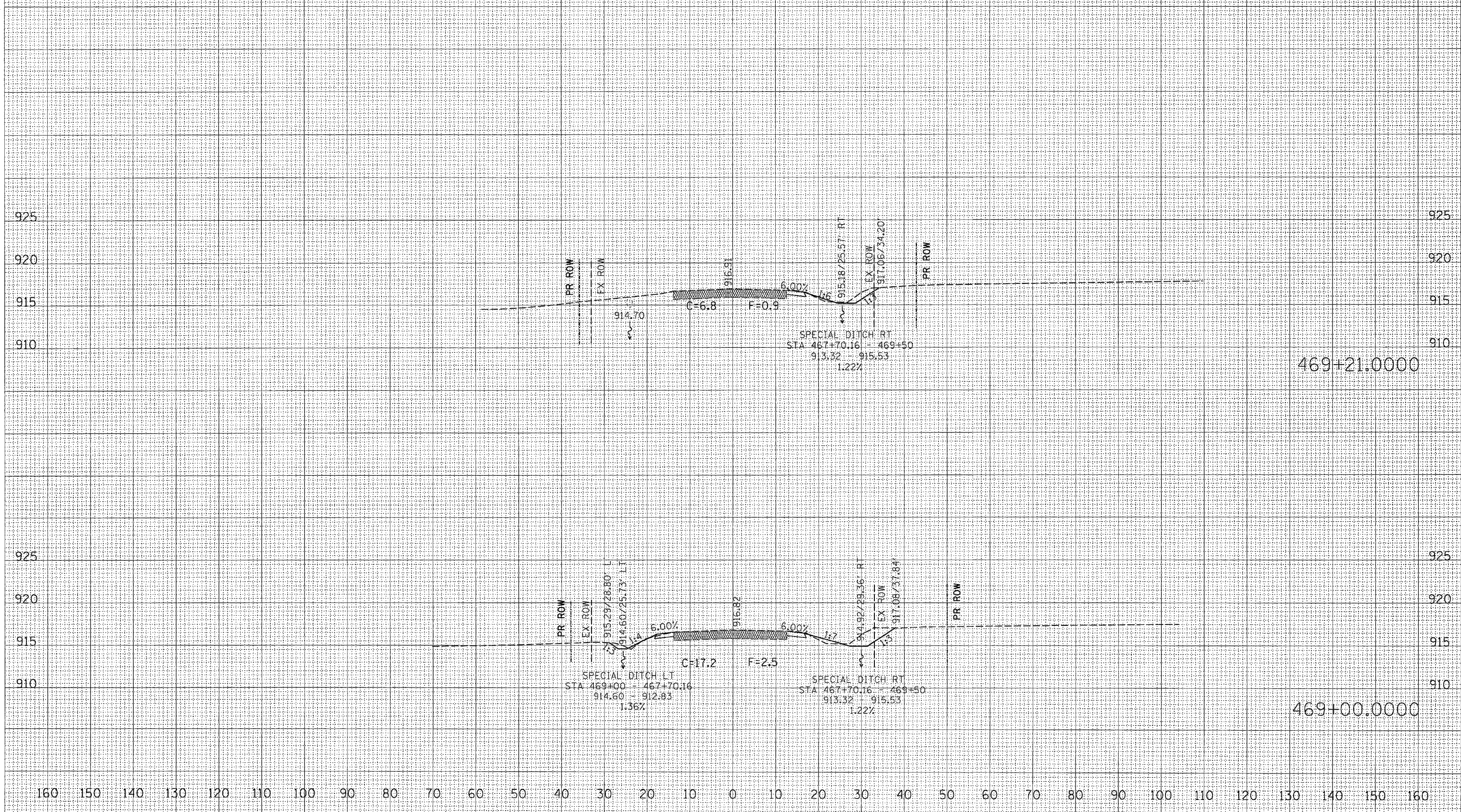
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301	21T	STEPHENSON	49	35
STA. 469+00.0000		TO STA. 469+21.0000		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

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

ORIGINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
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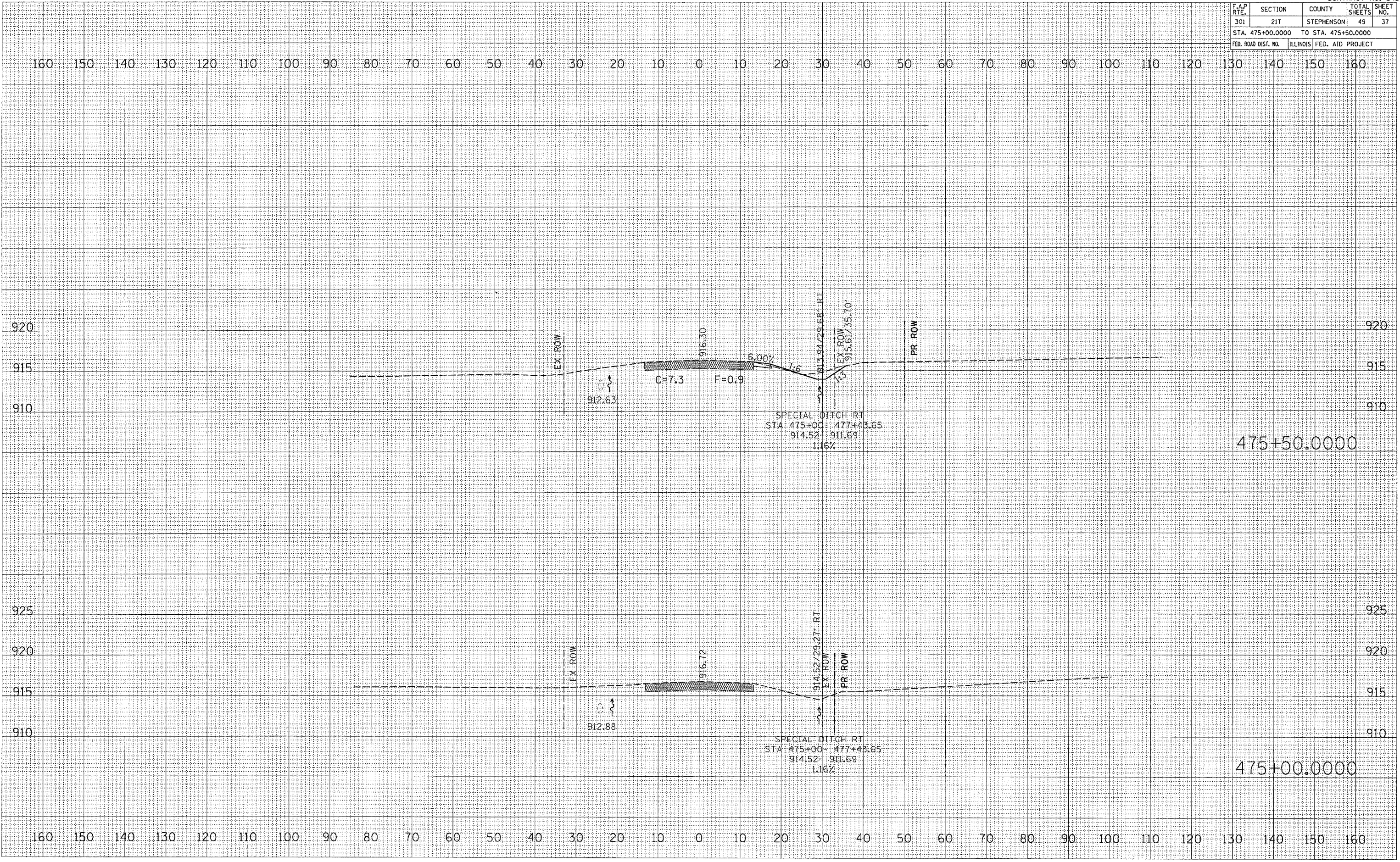


F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
301	21T	STEPHENSON	49	37
STA. 475+00.0000 TO STA. 475+50.0000				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

DATE	
BY	
FINAL SURVEY	
PLOTTED	
NOTE BOOK	
AREAS CHECKED	

DATE	
BY	
ORIGINAL SURVEY	
PLOTTED	
NOTE BOOK	
AREAS CHECKED	

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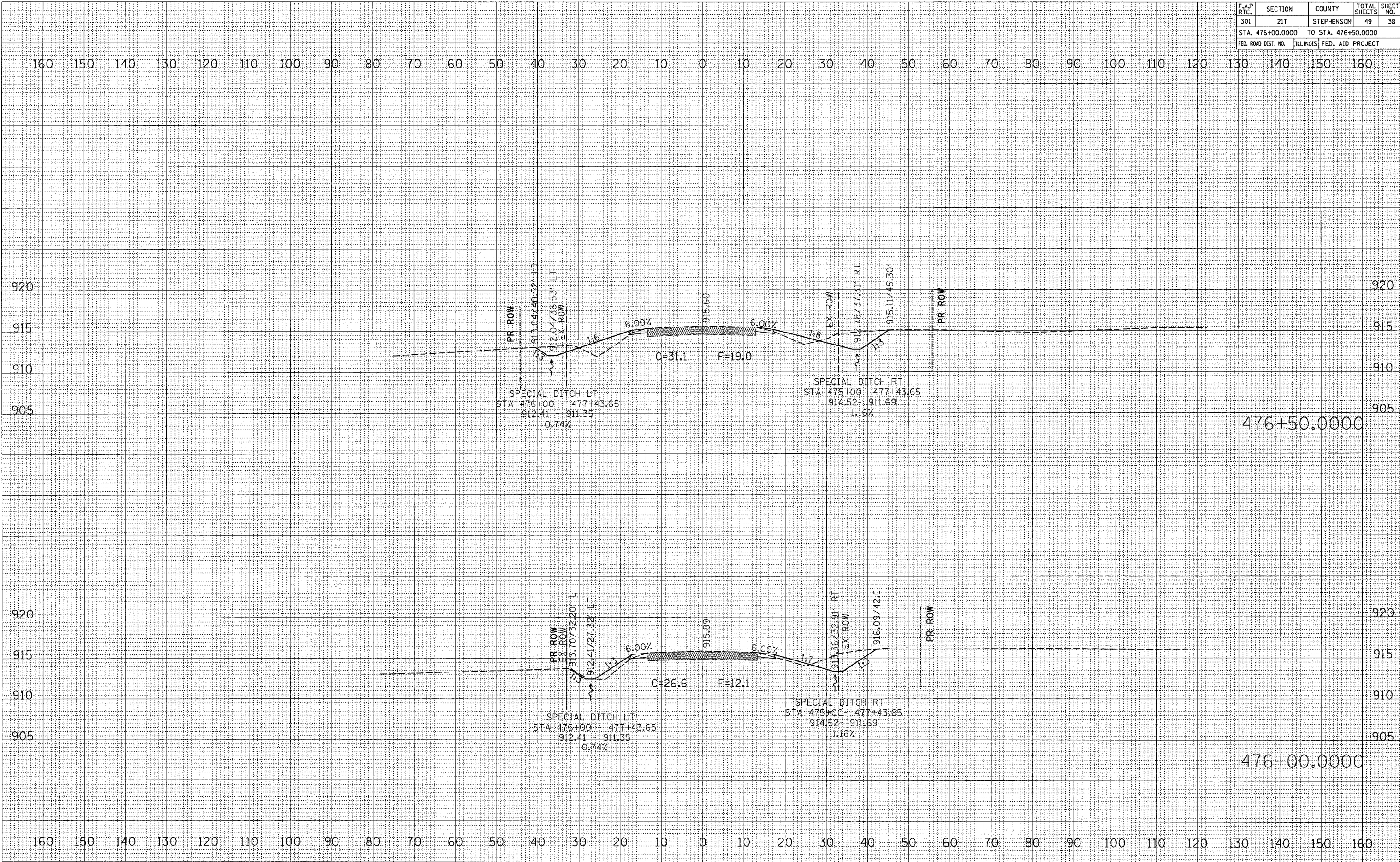


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301	21T	STEPHENSON	49	38
STA. 476+00.0000 TO STA. 476+50.0000				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

DATE	
BY	
FINAL SURVEY	
PLOTTED	
NOTE BOOK	
AREAS CHECKED	
NO.	

DATE	
BY	
ORIGINAL SURVEY	
PLOTTED	
NOTE BOOK	
AREAS CHECKED	
NO.	

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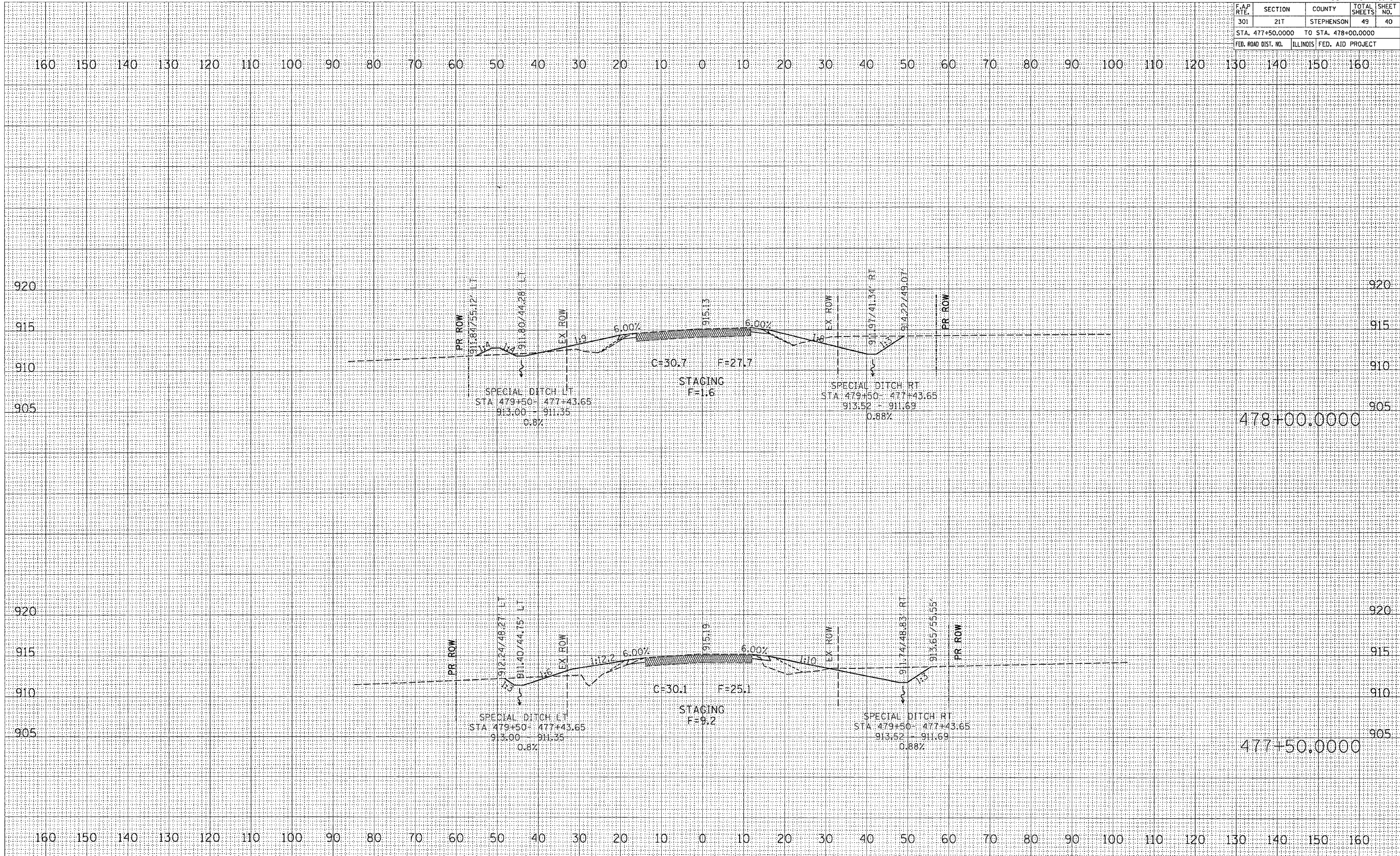


F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
301	21T	STEPHENSON	49	40
STA. 477+50.0000 TO STA. 478+00.0000				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

DATE	
BY	
FINISHED SURVEY	
PLOTTED	
NOTE BOOK	
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AREAS CHECKED	

DATE	
BY	
ORIGINAL SURVEY	
PLOTTED	
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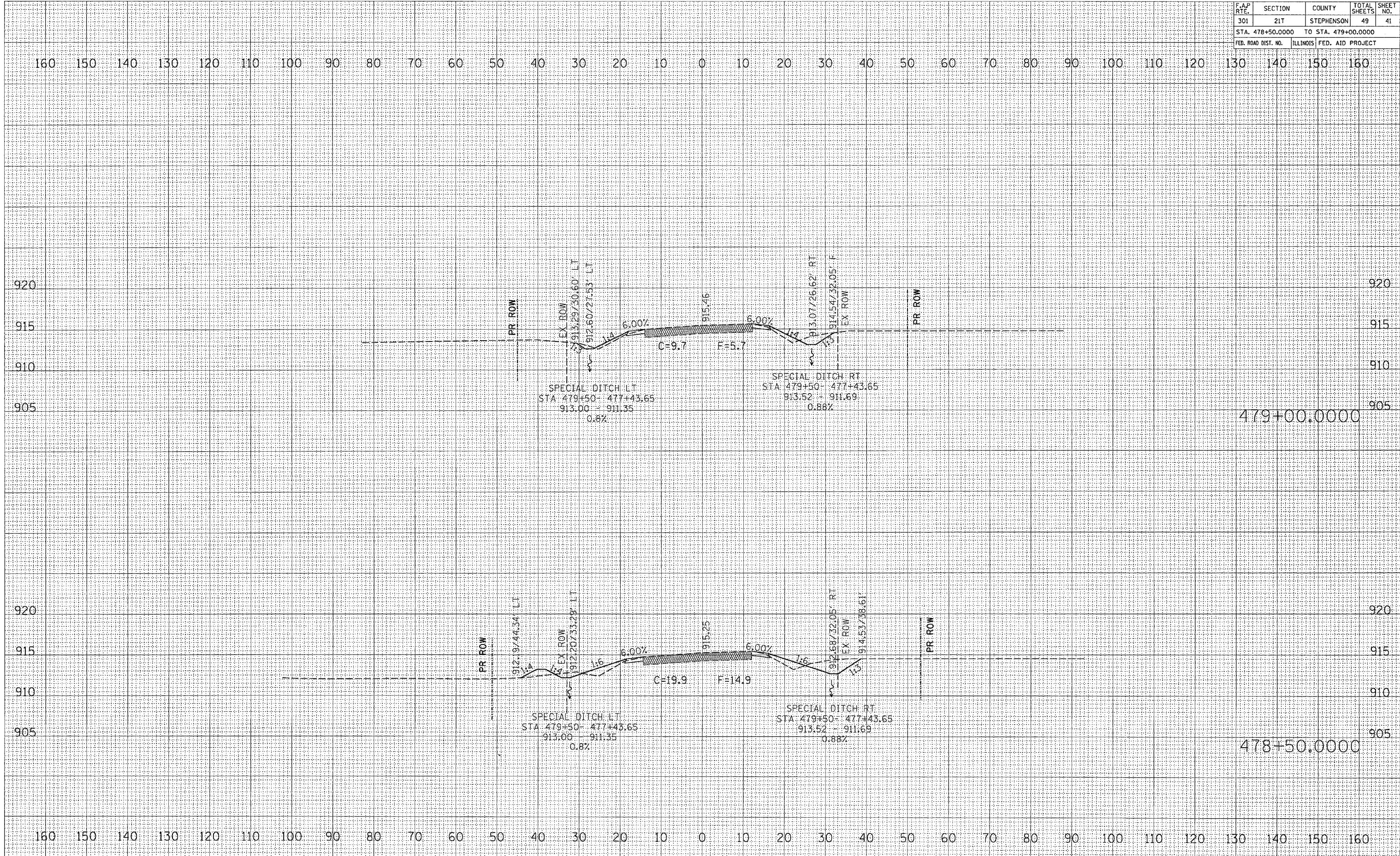


F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
301	21T	STEPHENSON	49	41
STA. 478+50.0000		TO STA. 479+00.0000		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

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

ORIGINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
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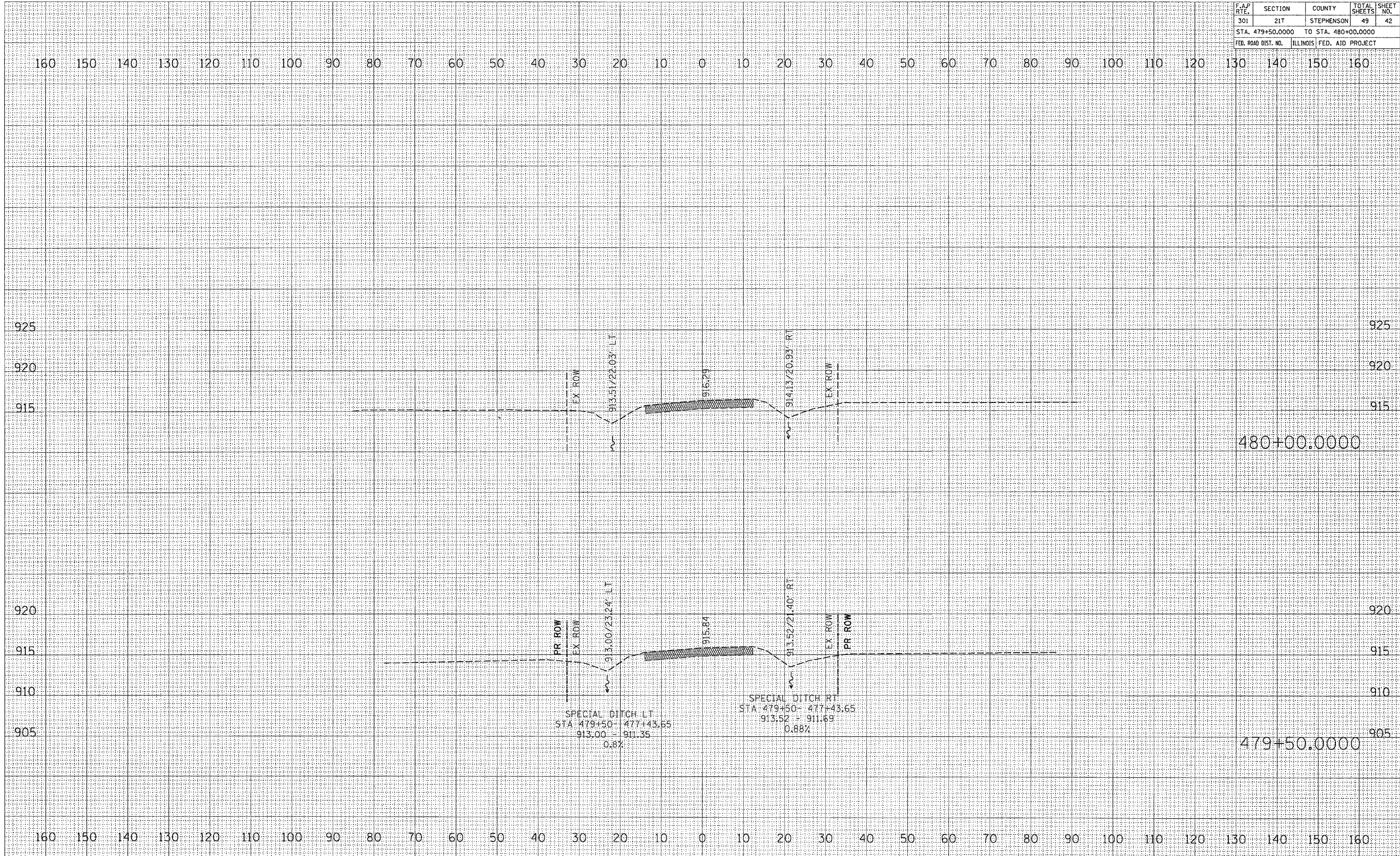


F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
301	21T	STEPHENSON	49	42
STA. 479+50.0000		TO STA. 480+00.0000		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

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

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

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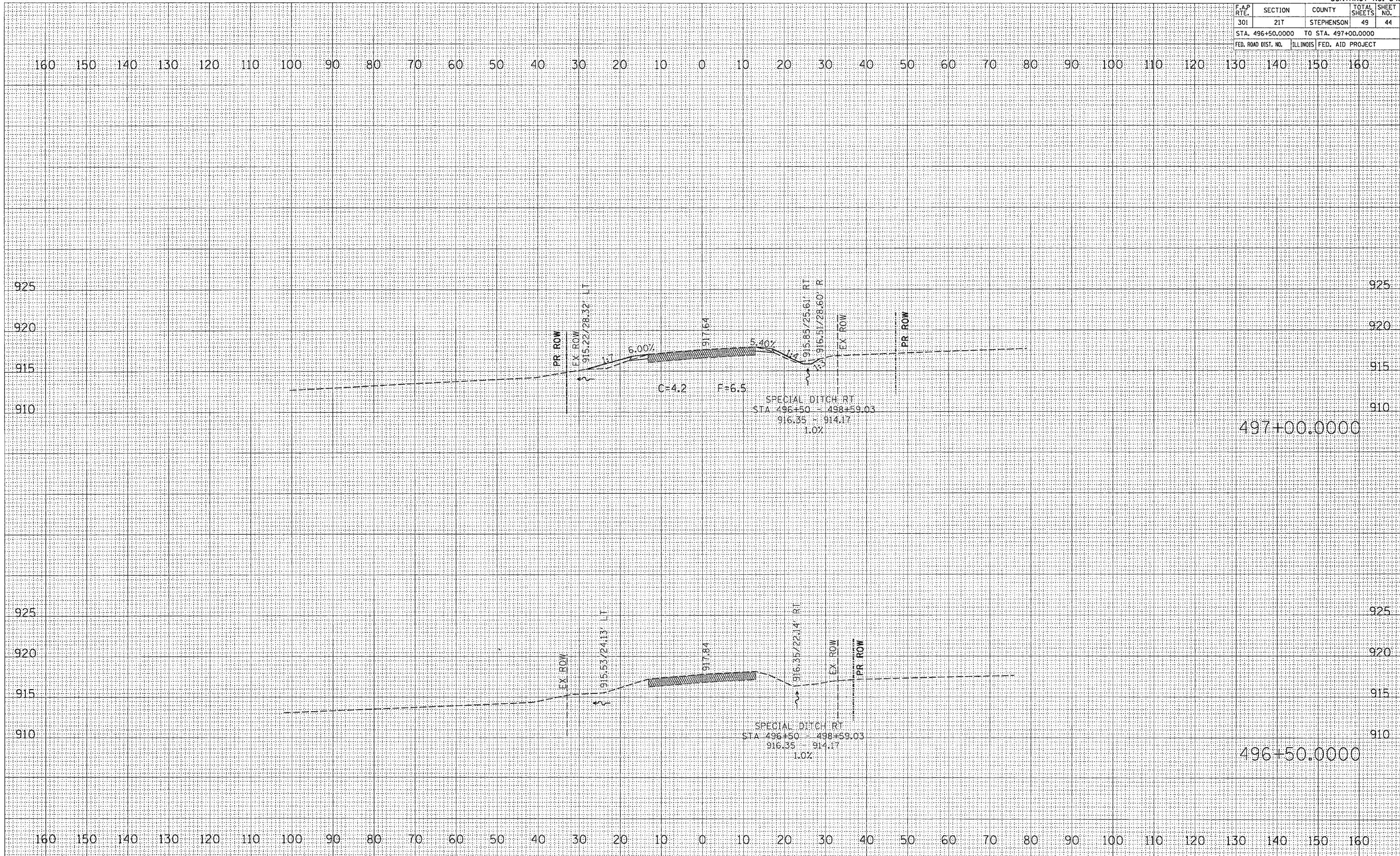


F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
301	21T	STEPHENSON	49	44
STA. 496+50.0000		TO STA. 497+00.0000		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

DATE	
BY	
NO.	
AREAS CHECKED	
TEMPLATE	
PLOTTED	
SURVEYED	
FINAL	

DATE	
BY	
NO.	
AREAS CHECKED	
TEMPLATE	
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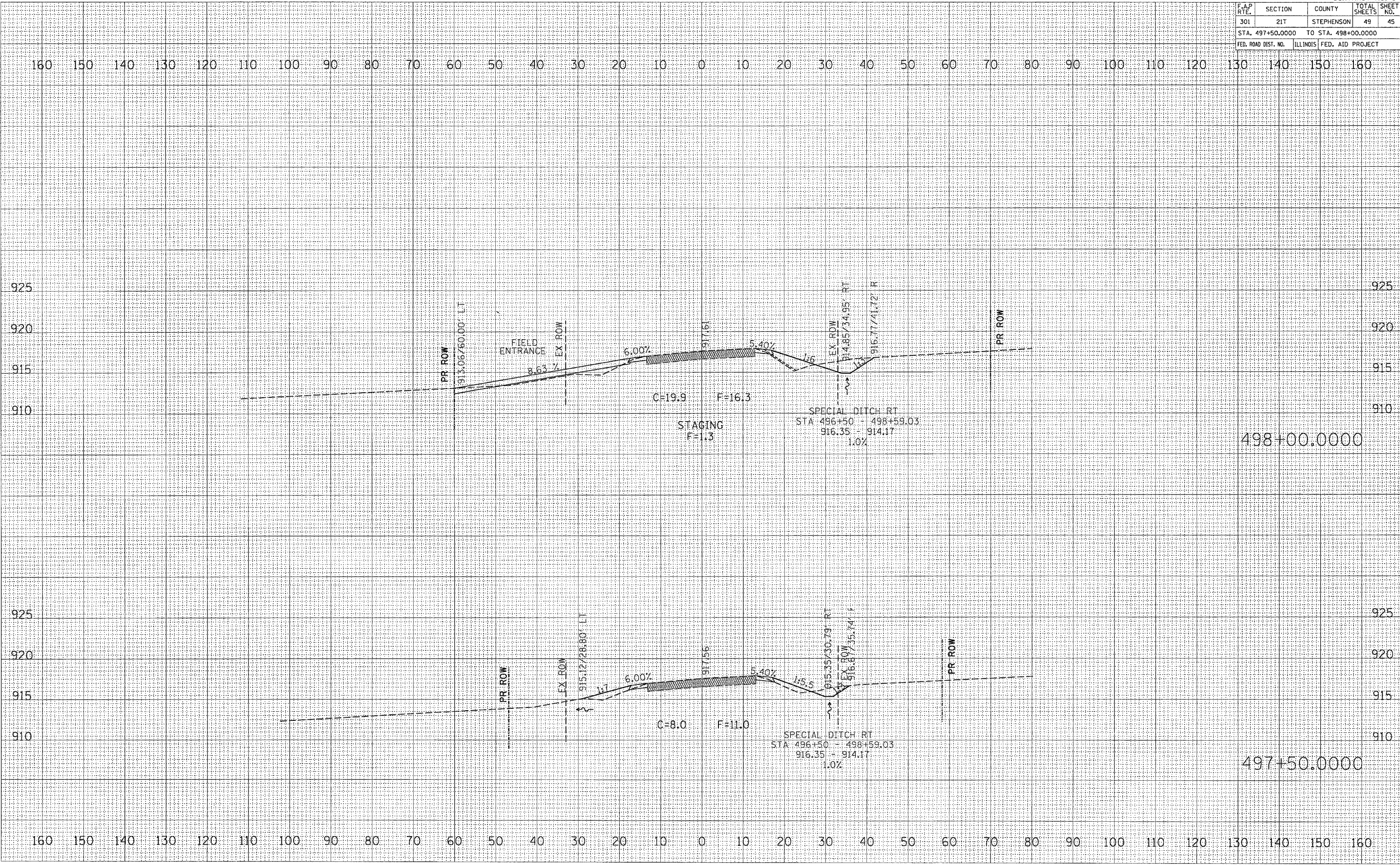


F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
301	21T	STEPHENSON	49	45
STA. 497+50.0000 TO STA. 498+00.0000				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

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

DATE: _____
 BY: _____
 SURVEYED: _____
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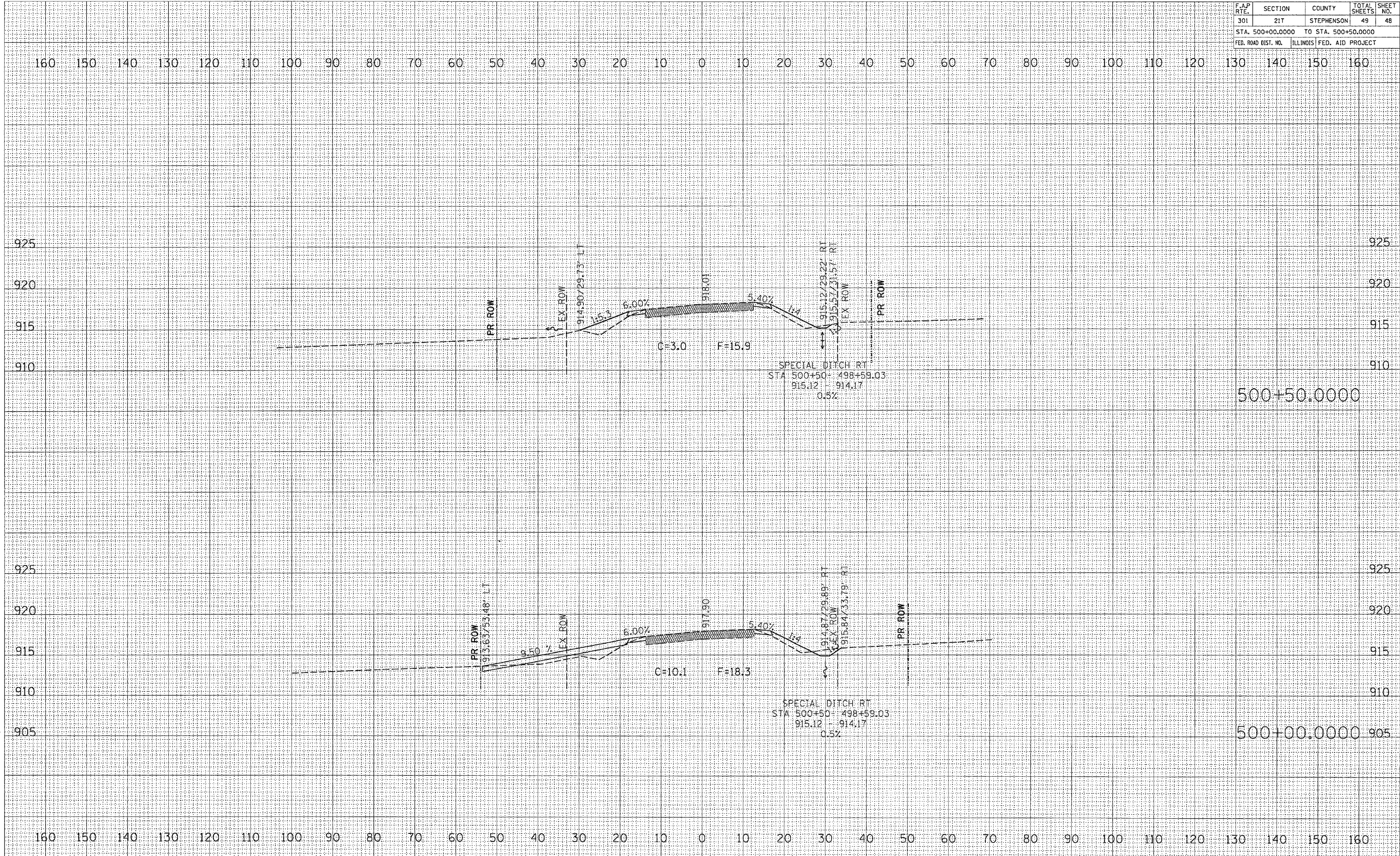


F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
301	21T	STEPHENSON	49	48
STA. 500+00.0000		TO STA. 500+50.0000		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

FINAL SURVEY	DATE
NO.	

ORIGINAL SURVEY	DATE
NO.	

PLOT DATE = Fri Sep 02 14:22:13 2011
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
301	21T	STEPHENSON	49	49
STA. 501+00.0000		TO STA. 501+00.0000		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

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

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

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