STATE OF ILLINOIS

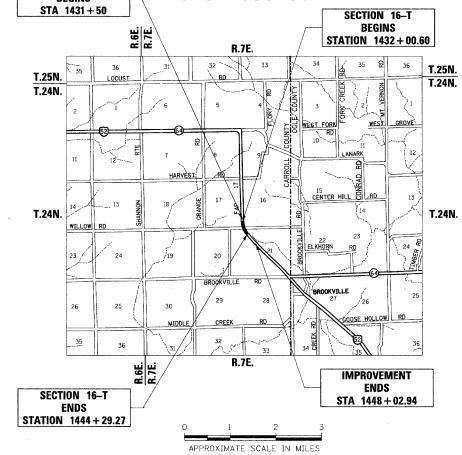
DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

PLANS FOR PROPOSED FEDERAL AID HIGHWAY

FAP ROUTE 17 (US 52/1L 64) SECTION 16-T

CARROLL COUNTY IMPROVEMENT C-92-096-06 STA 1431 + 50



TOTAL LENGTH OF PROJECT = 1228.67 FEET = 0.233 MILES NET LENGTH OF PROJECT = 1228.67 FEET = 0.233 MILES

CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS **DESIGN DESIGNATION FAP 17**

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

FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD

ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT

ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

FOR INDEX OF SHEETS, SEE SHEET NO. 2 FOR STATE STANDARDS, SEE SHEET NO. 2

LIMA TOWNSHIP (SECTIONS 16, 17 & 21)

CONTRACT NO. 64897

FAP ROUTE 17 (US 52/L 64)

CARROLL COUNTY

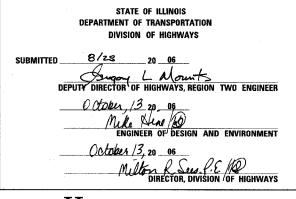
SECTION

COUNTY

CARROLL

D-92-050-03

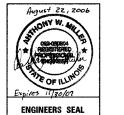




Hutchison Engineering, Inc.

PO Box 820 Jacksonville, Illinois 62651 PHONE: (217)245-7164 FAX (217)243-0468

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RURAL PRINCIPAL ARTERIAL

ADT = 1,560 (2006)

% SU = 9%

% MU = 8%

INDEX OF SHEETS

- COVER SHEET
- 2 INDEX OF SHEETS & HIGHWAY STANDARDS
- GENERAL NOTES & LEGEND
- SUMMARY OF QUANTITIES
- TYPICAL SECTIONS 5-6
- FIELD ENTRANCE AND BUTT JOINT DETAILS
- SCHEDULES OF QUANTITIES
- HORIZONTAL AND VERTICAL CONTROL
- MAINTENANCE OF TRAFFIC DETAILS 12
- PLAN AND PROFILE SHEET FAP ROUTE 17 13
- PLAN AND PROFILE SHEET WILLOW ROAD 14
- RIGHT-OF-WAY AND EASEMENT DETAILS
- 16 INTERSECTION DETAILS
- EROSION CONTROL PLAN 17
- PAVEMENT ELEVATIONS
- 19 FIELD TILE AND VAULT DETAILS
- CULVERT DROP BOX DETAILS 20-21
- GRATED CULVERT EXTENSION NO. 1 DETAILS 22
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 - 2.1 STORM WATER POLLUTION PREVENTION PLAN
 - 34.1 CORRUGATED STEEL PIPE MULTIPLE END SECTIONS,
 - 41.1 TYPICAL PAVEMENT MARKINGS
 - 92.1 DETAILS OF PLANTING AND BRACING TREES
 - 90.2 MECHANICAL JOINTS FOR CONCRETE PIPE AND BOX CULVERTS
 - 29.2 EROSION CONTROL DETAILS FOR SILT FENCE
 - 30.2 FIELD TILE JUNCTION VAULTS 24" AND 36" DIA.
 - 31.2 TREATMENT OF FIELD TILE SYSTEMS UNDER DITCHES
 - 66.2 WITNESS MARKER & PERMANENT SURVEY MARKER, TYPE II
 - 37.4 DELINEATOR AND POST ORIENTATION
 - 50.4 TYPICAL BENCHING ON EXISTING EMBANKMENT
 - 63.4 LAND SECTION & REFERENCE MARKERS
- 32-43 CROSS SECTIONS FAP ROUTE 17
- 44-47 CROSS SECTIONS WILLOW ROAD

STANDARDS

000001-04	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001	AREA OF REINFORCEMENT REBARS

280001-02 TEMPORARY EROSION CONTROL SYSTEMS

442201-01 CLASS C AND D PATCHES

482001 BITUMINOUS SHOULDER ADJACENT TO FLEXIBLE PAVEMENT 482006-01 BITUMINOUS SHOULDER ADJACENT TO RIGID PAVEMENT

BITUMINOUS SHOULDER STRIPS/SHOULDERS WITH RESURFACING OR WIDENING AND RESURFACING PROJECTS

542401 METAL END SECTION FOR PIPE CULVERTS

DELINEATORS 635001

642001 SHOULDER RUMBLE STRIPS

666001 RIGHT-OF-WAY MARKERS

701001-01 OFF-ROAD OPERATIONS, 2L 2W, MORE THAN 15' AWAY

701006-02 OFF-ROAD OPERATIONS, 2L, 2W, 15' TO 24" FROM PAVEMENT EDGE

701011-01 OFF-ROAD MOVING OPERATIONS, 2L, 2W, DAY ONLY

701201-02 LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS ≥ 45 MPH

701301-02 LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS

701306-01 LANE CLOSURE, 2L, 2W, SLOW MOVING OPERATIONS - DAY ONLY, FOR SPEEDS \geq 45 MPH

701311-02 LANE CLOSURE, 2L, 2W, MOVING OPERATIONS - DAY ONLY

701326-02 LANE CLOSURE 2L 2W, PAVEMENT WIDENING, FOR SPEEDS \geq 45 MPH

702001-06 TRAFFIC CONTROL DEVICES

METAL POSTS FOR SIGNS, MARKERS & DELINEATORS

781001-02 TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS

ILLINOIS DEPARTMENT OF TRANSPORTATION

FAP ROUTE 17 INDEX OF SHEETS & STANDARDS

DATE 8/22/2006

DRAWN BY JCW

Z05003GN1

GENERAL NOTES

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 PAVEMENT REMOVAL of the type

The final top 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 411 cubic yards of earth will be hauled to the job from outside the project limits. A shrinkage factor of 25% has been used.

The topsoil excavation quantities have been adjusted to allow for shrinkage of topsoll between removal and replacement.

The Contractor shall seed all disturbed areas within the project limits. Class 2A seeding shall be used on front slopes and ditch bottoms. Class 4 seeding 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.

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

Placement and compaction of the backfill for AR culverts shall conform to Placement and compaction of the backfill for AR aulverts shall conform to Section 502.10 of the Standard Specifications, except that the material shall conform to the Interim Special Provision for COURSE AGGREGATE FOR TRENCH BACKFILL, BACKFILL AND BEDDING, and shall be compacted to a minimum of 95% of the standard laboratory density. The entire excavation, within 2 feet outside of each shoulder, shall be backfilled with trench backfill material to the bottom of the proposed subgrade. This trench backfill material will not be measured for payment, but shall be included in the contract unit price for the class of concrete involved of other unit price item of the work for which it is confirmed.

The minimum patch dimension for full-depth patches will be shown on State Standard 442201.

Place LEVELING BINDER (MACHINE METHOD) on curves to attain additional superelevation as indicated on the typical section. The curves requiring such treatment are included in the schedules. Estimated Total: 621 Tons.

Mixture Uses(s):	Bituminous Concrete	Bituminous Concrete		Incidental	Bituminous	
WIX 1 01 0 0300 (6).	Base Course, 9"	Surface Course	Level Binder	Bituminous Surfacing	Shoulders, 61/2"	
PG:	PG64-22	PG64-22	PG64-22	PG64-22	PG58-22	
RAP%: (Max)	15%	15%	25%	15%	30%	
Design Air Voids	3.0% © NDesign=50	4.2% @ NDesign=50	4.2% @ NDesign=50	4.2% @ NDesign=50	2.0% @ NDesign=50	
Mixture Composition	Superpave IL-19.0	Superpave IL-9.5 or 12.5	Superpave IL-9.5	Superpave IL-9.5 or 12.5	ВАМ	
Friction Aggregate	N/A	Mix "C"	N/A	Mix "C"	N/A	
20 Year ESAL	0.64	0.64	0.64	0.64	0.64	

The Contractor will be required to furnish 140 mm ($5^{1}/2^{\prime\prime}$) high brass stencils as approved by the Engineer and install stationing at 250′ intervals. Stationing shall be placed on both lanes of 2-lane highways and on the outside lanes in both directions on 4-lane highways. The stations shall be placed 150 mm ($6^{\prime\prime}$) inside the pavement marking edge so they can be read from the shoulder. This work will be included in the cost of the final pavement surface.

Reflective Crack Control shall be placed on the existing surface prior to any resurfacing, unless pavement is milled then it will be placed on the binder

Bituminous and Aggregate prime coat shall be placed in accordance with Section 406 of the Standard Specifications. The cost of the prime coats shall be included in the contract unit price per ton for LEVELING BINDER (MACHINE METHOD), SUPERPAVE N50 and BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "C", N50.

The Contractor shall clean out all AR culverts and stream flows to the right-of-way lines on the entire section. The cost shall be included in the contract unit price for the pipe culverts of the size and type specified.

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

Where field tile is encountered, storm sewer protected or pipe drain will be used in accordance with Section 611. The minimum size for replacement will be 6", but the size must be at least 2" larger than the adjoining tile. A Field Tile Junction Vault will be constructed at the right of may line to connect the tile and storm sewer.

Delineators shall be placed at the ends of approach guardrall terminal sections, and at each headwall or end section of AR Culverts. This work will be paid for at the contract unit price each for DELINEATORS.

GENERAL NOTES

Pavement Marking shall be done according to Standard 780001, except as follows:

1. All words, such as ONLY, shall be 2.4 m (8 feet) high.

2. All non-freeway arrows shall be the large size.

3. The distance between yellow no-passing lines shall be 200 mm (8"), not 180 mm (7") as shown in the detail of Typical Lane and Edge Lines.

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 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.

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 Company

Citizens

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.

POLICY GUIDELINES

All trees removed from the project area (2 trees, max) for construction purposes will be replaced with deciduous tree species which are native to the District 2 area. The location of the replacement trees shall be determined by the District 2 Landscape Architect.

LEGEND

PROPOSED RIGHT-OF-WAY MARKER



PAVEMENT PATCHING, TYPE, SQ YD

ITEM TO BE REMOVED (TREE, ETC.)

PROPOSED SPECIAL DITCH PROPOSED STANDARD DITCH

SPECIAL DITCH PROFILE LT

SPECIAL DITCH PROFILE RT



RIPRAP

BITUMINOUS SURFACE REMOVAL - BUTT JOINT

COMMITMENTS

none

TOTAL SHEET SHEETS NO. SECTION COUNTY 16-T CARROLL 47 3 FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

CONTRACT NO. 64897

REVISIONS		ILLINOIS DEPARTMENT O	E TO ANCOOD TATION
NAME	DATE	ILLINOIS DEFARIMENT C	F TRANSFORTATION
		FAP ROU	TE 17
		GENERAL NOTES, LEGE	ND & COMMITMENTS
		OLINEINAL MOTES, ELOL	W COMMITTMENTS
	ļ		
	1		DRAWN BY JCW
		DATE 8/22/2006	CHECKED BY AWM

SUMMARY OF QUANTITIES

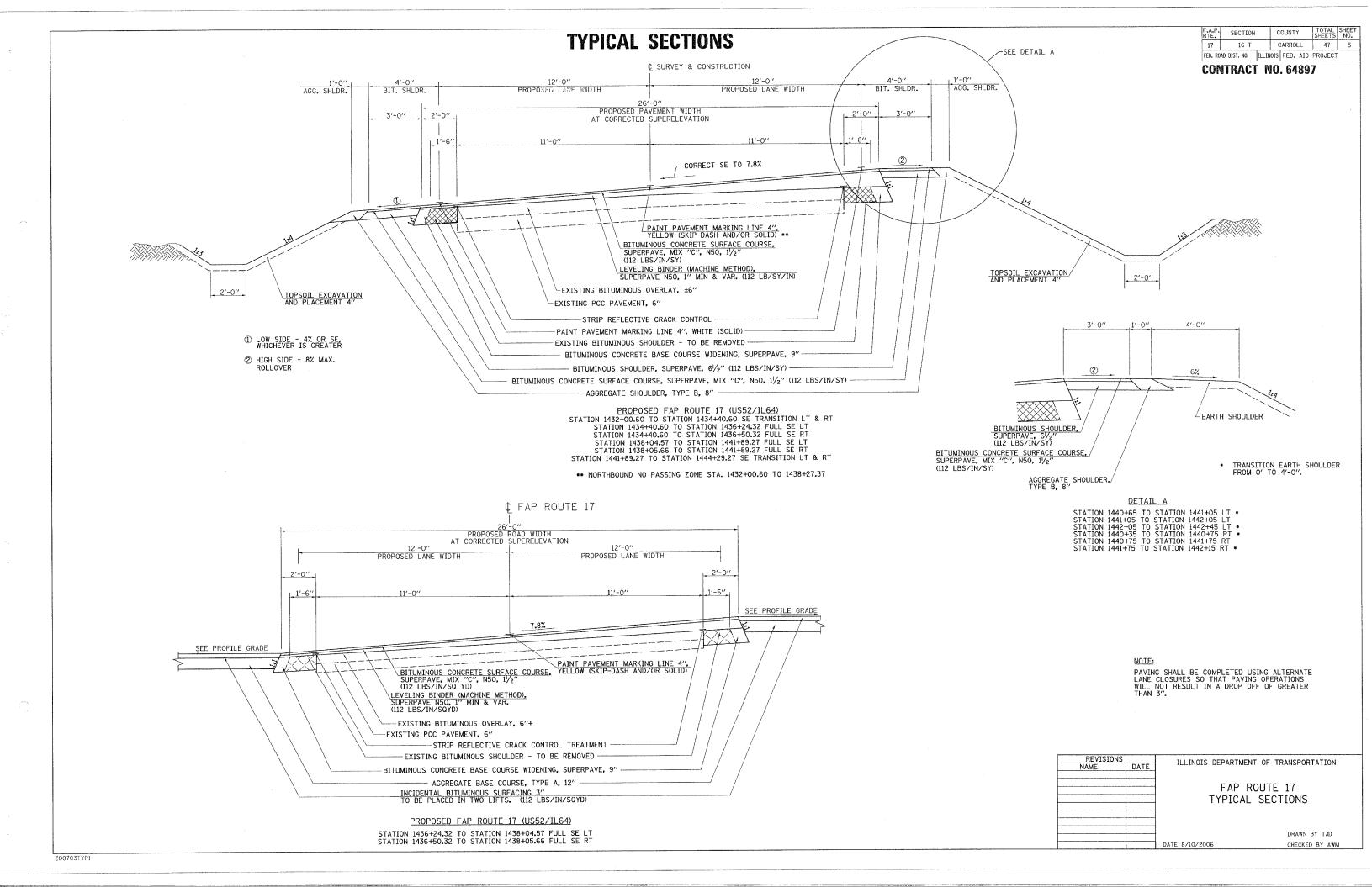
	0005 40	SUMMARY OF QUANTITIES	IMITT	TOTAL QUANTITY	CONSTRUCTION CODE
İ	CODE NO	ITEM	UNIT	IOOX STATE	ROADWAY IOOO-2A
	20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	20	20
	20200100	EARTH EXCAVATION	CU YD	2,094	2,094
	20400800	FURNISHED EXCAVATION	CU YD	411	411
	21101505	TOPSOIL EXCAVATION AND PLACEMENT	CU YD	1,078	1,078
*	25000210	SEEDING, CLASS 2A	ACRE	1.00	1.00
*	25000310	SEEDING, CLASS 4	ACRE	1.25	1.25
*	25000750	MOWING	ACRE	2.25	2.25
*	25100115	MULCH, METHOD 2	ACRE	2.25	2.25
	25100630	EROSION CONTROL BLANKET	SQ YD	1,255	1,255
	28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	900	900
	28000300	TEMPORARY DITCH CHECKS	EACH	59	59
	28000400	PERIMETER EROSION BARRIER	FOOT	172	172
	28000500	INLET AND PIPE PROTECTION	EACH	5	5
	28100207	STONE RIPRAP, CLASS A4	TON	697	697
	28200200	FILTER FABRIC	SQ YD	1,047	1,047
	35101100	AGGREGATE BASE COURSE, TYPE A 12"	SQ YD	1,521	1,521
	35102000	AGGREGATE BASE COURSE, TYPE B 8"	SQ YD	65	65
	40600980	BITUMINOUS SURFACE REMOVAL - BUTT JOINT	SQ YD	168	168
	40600990	TEMPORARY RAMP	SQ YD	28	28
	40800040	INCIDENTAL BITUMINOUS SURFACING	TON	253	253
	44000100	PAVEMENT REMOVAL	SQ YD	108	108
	44001430	BITUMINOUS SHOULDER REMOVAL	SQ YD	395	395
	44201789	CLASS D PATCHES, TYPE II, 12 INCH	SQ YD	24	24
	44201794	CLASS D PATCHES, TYPE III, 12 INCH	SQ YD	38	38
	44300200	STRIP REFLECTIVE CRACK CONTROL TREATMENT	FOOT	2,458	2,458
	48101200	AGGREGATE SHOULDERS, TYPE B	TON	228	228
	48202410	BITUMINOUS SHOULDERS SUPERPAVE 6 1/2"	SQ YD	708	708
İ	50100300	REMOVAL OF EXISTING STRUCTURES NO. 1	EACH	1	1
ŀ	50100400	REMOVAL OF EXISTING STRUCTURES NO. 2	EACH	1	1
-	542A1093	PIPE CULVERTS, CLASS A, TYPE 2 48"	FOOT	96	96
}	542D0220	PIPE CULVERTS, CLASS D, TYPE 1 15"	FOOT	30	30
ŀ	542D0235	PIPE CULVERTS, CLASS D, TYPE 1 30"	FOOT	232	232
	54213450	END SECTIONS 15"	EACH	2	2
Į	54213465	END SECTIONS 30"	EACH	2	2

CODE NO	SUMMARY OF QUANTITIES	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE
CODE NO	ITEM] UNII	100% STATE	ROADWAY IOOO-2A
5422D042	PIPE CULVERTS, CLASS D, TYPE 2 42" (TEMPORARY)	FOOT	16	16
61100500	EXPLORATION TRENCH 52" DEPTH	FOOT	200	200
61100605	MISCELLANEOUS CONCRETE	CU YD	3	3
61101013	STORM SEWERS PROTECTED, CLASS A, 12"	FOOT	220	220
61101017	STORM SEWERS PROTECTED, CLASS A, 15"	FOOT	100	100
61133100	FIELD TILE JUNCTION VAULTS, 2' DIA	EACH	4	4
61133200	FIELD TILE JUNCTION VAULTS, 3' DIA	EACH	1	1
63500105	DELINEATORS	EACH	17	17
66600105	FURNISHING AND ERECTING RIGHT OF WAY MARKERS	EACH	33	33
66700305	PERMANENT SURVEY MARKERS, TYPE II	EACH	2	2
67100100	MOBILIZATION	L SUM	1	1
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1	. 1
70100460	TRAFFIC CONTROL AND PROTECTION, STANDARD 701306	L SUM	1	1
70100500	TRAFFIC CONTROL AND PROTECTION, STANDARD 701326	L SUM	1	1
70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	5	5
70300100	SHORT-TERM PAVEMENT MARKING	FOOT	246	246
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	41	41
78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	7,720	7,720
78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	16	16
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	16	16
A2007814	TREE, TILIA AMERICANA (AMERICAN LINDEN/BASSWOOD), 1-3/4" CALIPER, BALLED AND BURLAPPED	EACH	2	2
X0322263	CULVERT DROP BOX	EACH	1	1
X0950100	PIPE CULVERT REMOVAL 15"	FOOT	10	10
X3560130	BITUMINOUS CONCRETE BASE COURSE WIDENING, SUPERPAVE 9 INCH	SQ YD	859	859
X4066414	BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "C", N50	TON	362	362
X4066765	LEVELING BINDER (MACHINE METHOD), SUPERPAVE N50	TON	715	715
X4420500	TEMPORARY PAVEMENT PATCH	SQ YD	62	62
Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1
Z0020900	ESTABLISHING AND REFERENCING LAND SECTION MARKERS	EACH	1	1
Z0023600	FILLING EXISTING CULVERTS	EACH	2	2
Z0029001	GRATED CULVERT EXTENSION, NO 1	EACH	1	1
XO325587 SPECIALTY	CORRUGATED STEEL PIPE MULTIPLE END SECTIONS DOUBLE 30"	EACH	2	2

* SPECIALTY ITEMS

ILLINOIS DEPARTMENT OF TRANSPORTATION FAP ROUTE 17 SUMMARY OF QUANTITIES

DRAWN BY TJD CHECKED BY AWM



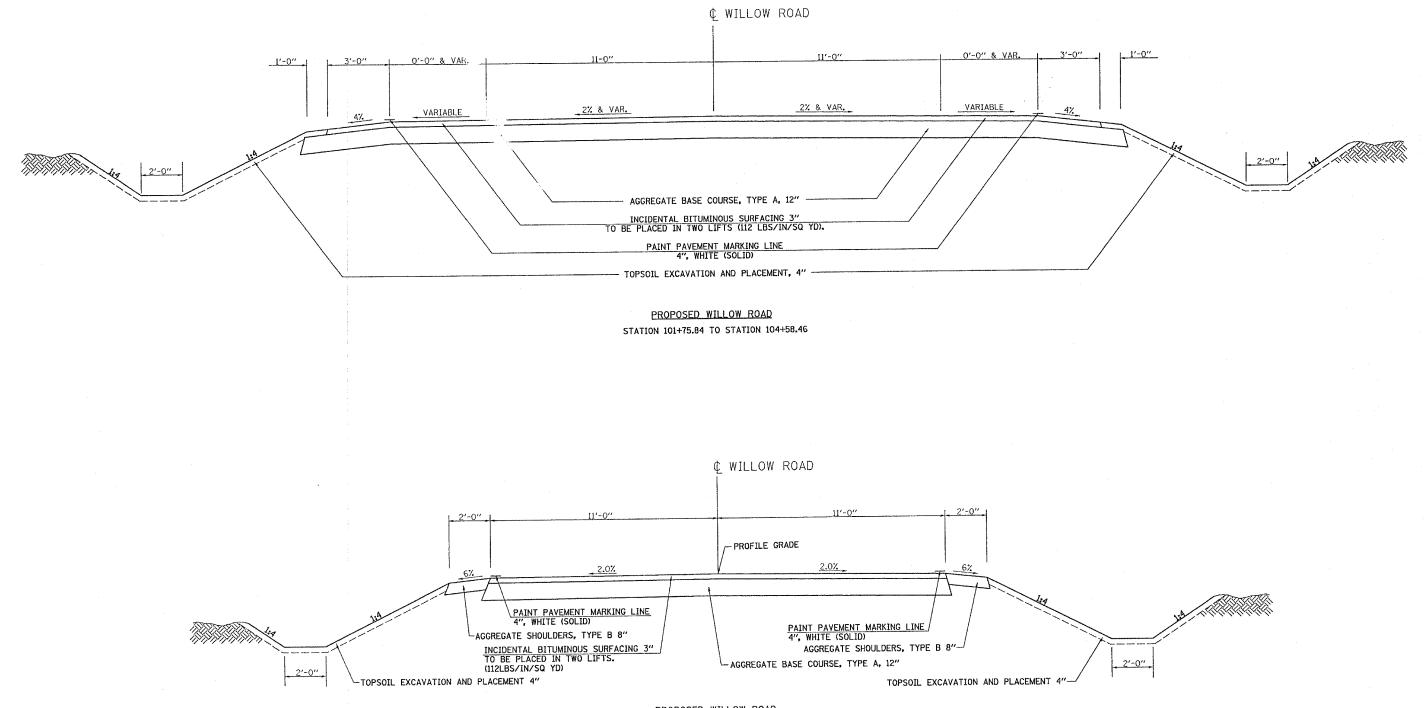
F.A.P. SECTION COUNTY SHEETS NO.

17 16-T CARROLL 47 6

FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

CONTRACT NO. 64897

TYPICAL SECTIONS

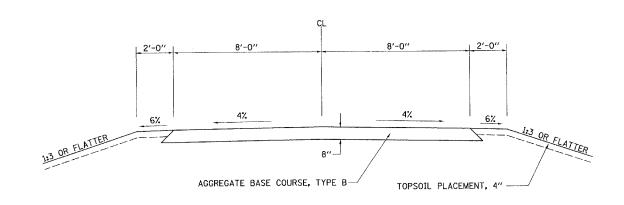


PROPOSED WILLOW ROAD
STATION 104+58.46 TO STATION 105+20.00

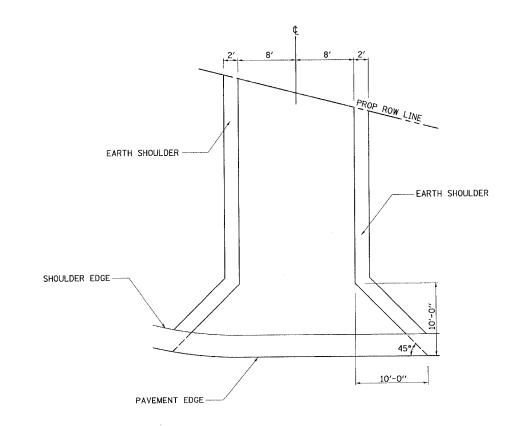
REVISIONS	THI THOIS DEPARTMENT	OF TRANSPORTATION
NAME DATE		
		W BOAD
		W ROAD
	TYPICAL	SECTIONS
		DRAWN BY JCW
	DATE 8/22/2006	CHECKED BY AWM

Z05003TYP2

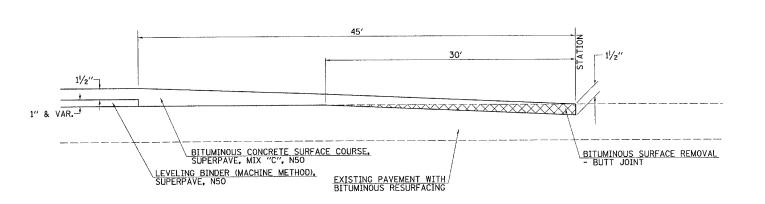
CONTRACT NO. 64897



TYPICAL SECTION FIELD ENTRANCE AT STA 102+51.7



PLAN VIEW FIELD ENTRANCE AT STA 102+51.7



BITUMINOUS CONCRETE BUTT JOINT

STATION 1432+00.60 1444+29.27

REVISIONS	THE PROPERTY OF	TDANCDODTATION
NAME DATE	ILLINOIS DEPARTMENT OF	TRANSPURTATION
	FIELD ENT & BUTT JOINT	
		DRAWN BY TJD
	DATE 8/10/2006	CHECKED BY AWM

20100110:	TREE REM	OVAL (6	TO 15 UNITS)
STATION	SIDE	OFFSET	TREE REMOVAL (6 TO 15 UNITS)
		FOOT	UNIT
1442+09 LT 1442+27 LT		37.8	12
		33.6	8
TOTAL	20		

					EA	RTHWORK SO	CHEDULE						•	
	<u> </u>	1	2	3	4	5	6	7	8	9	10	11	12	13
STATION TO STATION						TOPSOIL EXCAVATION AND PLACEMENT (BORROW)	S CUMULATIVE EXCESS (BORROW)	FURNISHED EXCAVATION (20400800)	EARTH EXCAVATION (20200100)					
		CUT	FILL	4" CUT	4" FILL	4"	СПТ	FILL	FILL x 1.25	(21101505)		. Idoniton/		12020000
			CU	YD		SQ YD					CU YD			***************************************
FAP 17 (US 52/IL 64)														· · · · · · · · · · · · · · · · · · ·
1432+00.60	1444+29.27	2061.1	2185.3	377,2	371.5	6738.3	2438.3	1813.8	2267.3	935.9	(764.8)	(764.8)	611.9	1502.4
DE-GRADING WATERWAY			,,				h			1	L			10021
1441+70.7	1442+34.6	145.8	56.5	15.2	11.4	239.4	161.0	45.1	56.4	33.3	71.3	71.3	(57.1)	127.7
STAGE CONSTRUCTION				**		· · · · · · · · · · · · · · · · · · ·								12111
1440+49.00	1441+71.30	79.0	192.6	0.0	0.0	0.0	79.0	192.6	240.8	0.0	(161.8)	(161.8)	129.4	79.0
WILLOW ROAD				<u></u>	<u> </u>	<u> </u>		1	1			1.01.07	15.017	1 350
101+75.84	105+20.00	422.4	50.9	70.6	16.3	782.1	493.0	34.6	43.3	108.6	341.1	341.1	(272.9)	384.4
PROJECT TOTAL		2,708	2,485	463	399	7,760	3,171	2,086	2,608	1,078	(514)	(514)	411	2,094

A SHRINKAGE FACTOR OF 20% WAS USED TO DETERMINE THE EXCESS AND BORROW QUANTITIES. SHRINKAGE FACTOR = 1.00/0.80 = 1.25.

			SEEDING			
STATION T	O STATION	SIDE	SEEDING, CLASS 2A (25000210)	SEEDING, CLASS 4 (25000310)	MULCH, METHOD 2 (25100115)	MOWING (25000750)
		1		AC	RE	· · · · · · · · · · · · · · · · · · ·
FAP 17 (US 52/1	L 64)				:	
1432+00.60	1437+00.00	LT	0.24	0.18	0.42	0.42
1432+00.60	1436+50.00	RT	0.23	0.26	0.50	0.50
1437+50.00	1444+29.27	LT	0.25	0.24	0.49	0.49
1437+00.00	1444+29.27	RT	0.22	0.24	0.46	0.46
WILLOW ROAD						
101+75.84	103+00.00	LT	0.04	0.06	0.10	0.10
101+75.84	103+00.00	RT	0,01	0.01	0.02	0.02
103+50.00	105+20.00	LT	0.04	0.06	0.09	0.09
103+50.00	105+20.00	RT	0.04	0.03	0.07	0.07
TOTAL			1.07	1.08	2.15	2.15
USE			1.00	1.25	2.25	2.25

25100630:	FROSTON	CONTROL	BI ANKE

STATION TO STATION		SIDE	LENGTH	WIDTH	AREA	
STATION	IO STATION	SIDE	FO	FOOT		
FAP 17 (US 52/	IL 64)					
1432+50.0	1436+96.6	LT	446.6	8	397.0	
1433+00.0	1436+71.7	RT	371.7	8	330.4	
1440+65.0	1442+45.0	LT	180.0	6	120.0	
WILLOW ROAD						
101+75.8	102+57.1	LT	81.3	8	72.3	
101+75.8	102+42.4	RT	66.6	8	59.2	
103+48.7	105+20.0	LT	171.3	8	152.3	
103+81.7	105+20.0	RT	138.3	8	122.9	
TOTAL					1,254.1	
JSE					1.255	

COLUMN 5 = (COLUMN 3 + COLUMN 4) \times 9

COLUMN 6 = COLUMN 1 + COLUMN 3 COLUMN 7 = COLUMN 2 - COLUMN 4

COLUMN 8 = COLUMN 7 x 1.25 (SHRINKAGE FACTOR)

COLUMN 9 = (COLUMN 3 +COLUMN 4) x 1.25 (SHRINKAGE FACTOR)

COLUMN 10 = COLUMN 6 - COLUMN 8 - COLUMN 9

COLUMN 12 = COLUMN 7 - (COLUMN 6 - COLUMN 9) x 0.80

COLUMN 13 = COLUMN 6 - COLUMN 9

EARTH EXCAVATION = COLUMN 13 (PAY ITEM QUANTITY) = 2,094 CU YD

FURNISHED EXCAVATION = COLUMN 12 (PAY ITEM QUANTITY) = 411 CU YD

TOPSOIL EXCAVATION AND PLACEMENT = COLUMN 9 (PAY ITEM QUANTITY) = 1,078 CU YD

TEMPORARY FROSION CONTROL SEEDING

F.A.P. SECTION COUNTY TOTAL SHEET NO.
17 16-T CARROLL 47 8 FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT CONTRACT NO. 64897

	TEMPORARY	EROSION	CONTROL	SEEDING
STATION TO STATION		STATION SIDE		TEMPORARY EROSION CONTROL SEEDING (28000250)
		1	ACRES	POUND
FAP 17 (US 52	/IL 64)			
1432+00.60	1437+00.00	LT	0.42	42
1432+00.60	1436+50.00	RT	0.50	50
1437+50.00	1444+29.27	LT	0.49	49
1437+00.00 1444+29.27		RT	0.46	46
WILLOW ROAD				
101+75.84	103+00.00	LT	0.10	10
101+75.84	103+00.00	RT	0.02	2
103+50.00	105+20.00	LT	0.09	9
103+50.00	105+20.00	RT	0.07	7
TOTAL			2.15	215
JSE			2.25	225
4 APPLICATION	1S			900

28000300: TEMPORARY DITCH CHECKS

STATION 1	O STATION	SIDE	EACH
FAP 17 (US 52/	IL 64)		
1432+00.6	1434+00.0	LT	7
1432+00.6	1435+25.0	RT	2
1434+00.0	1435+25.0	LT	3
1435+25.0	1436+50.0	LT	3
1435+25.0	1436+69.5	RT	4
1436+50.0	1436+90.0	L,T	1
1437+47.3	1439+50.0	RT	6
1437+87.0	1441+00.0	LT	7
1439+50.0	1441+00.0	RT	2
1441+00.0	1442+25.0	LT	3
1441+10.0	1441+50.0	RT	1
1441+50.0	1442+00.0	RT	2
1442+00.0	1443+50.0	RT	2
1443+50.0	1444+29.27	RT	1
WILLOW ROAD			
101+75.84	102+58.0	LT	2
101+75.84	102+76.5	RT	3
103+52.7	105+20.0	LT	5
103+74.5	105+20.0	RT	5
TOTAL			59

28000400: PERIMETER EROSION BARRIER

20000400;	LEWINE IEW E	TOSTON F	MINITELL
STATION TO STATION		SIDE	LENGTH
STATION	TO STATION	SIDE	FOOT
FAP 17 (US 52/	'IL 64)		
1432+01.1	1433+24.8	RT	129.5
WILLOW ROAD			······································
103+82.8	104+25.0	RT	42.2
TOTAL			171.7
USE			172

28000500: INLET AND PIPE PROTECTION

STATION	SIDE	FOOT	EACH
FAP 17 (US 52/I	L 64)		
1441+03.6	RT	43.8	1
WILLOW ROAD			
102+39.1	RT	28.4	1
102+54.5	LT	38.2	2
103+51.6	LT	40.7	1
TOTAL			5
103+51.6	LT LT		1

STONE RIPRAP, CLASS A4 & FILTER FABRIC

	TIAN TOTAL POLITICA		TE 1 PUT 1 (187)	120	
STATION TO STATION		SIDE	STONE RIPRAP CLASS A4 (28100207)	FILTER FABRIC (28200200)	
			TON	SQ YD	
FAP 17 (US 52/)	(L 64)				
1437+83.1	1438+07.1	LT	21.3	32	
1437+42.0	1440+00.0	RT	228.8	344	
1438+07.1	1441+00.0	LT	173.1	259.7	
1440+00.0	1441+13.3	RT	157,2	236.4	
1441+00.0	1441+85.7	LT	50.7	76.2	
1441+70.6	1442+31.9	LT	56.8	85.3	
WILLOW ROAD					
102+66.7	102+80.5	RT	8.4	12.5	
TOTAL			696.3	1046.1	
USE			697	1047	

ILLINOIS DEPARTMENT OF TRANSPORTATION

FAP ROUTE 17 SCHEDULES OF QUANTITIES

DRAWN BY TJD CHECKED BY AWM

Z05003CVR3

DATE 8/22/2006

PAVING SCHEDULE

			PAVING SCHEDULE			
STATION TO STATION	AGGREGATE BASE COURSE, TYPE A, 12" (35101100)	AGGREGATE BASE COURSE, TYPE B 8" (35102000)	BITUMINOUS CONCRETE BASE COURSE WIDENING, SUPERPAVE 9 INCH (X3560130)	INCIDENTAL BITUMINOUS SURFACING (40800040)	BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "C", N50 (X4066414)	LEVELING BINDER (MACHINE METHOD), SUPERPAVE N50 (X4066765)
		SQ YD	<u> </u>		TON	
US 52/IL 64						
1432+00.60 TO 1434+40.60			146.7		73.2	113.7
1434+40.60 TO 1441+89.27			457.6		215.0	507.7
1441+89.27 TO 1444+29.27			146.7		73.2	92.8
STAGE CONSTRUCTION						
1440+49.00 TO 1441+61.00			107.4			
WILLOW ROAD						
FIELD ENTRANCE AT 102+51.70		64.5				
101+75.26 TO 103+00.49	656.7			105.5		
103+27.80 TO 104+58.46	713.2			114.3		
104+58.46 TO 105+20.00	150.4			32.5		
TOTAL	1520.3	64.5	858.4	252.3	361.4	714.1
USE	1,521	65	859	253	362	715

40600980: i	BITUMINOUS SI	JRFACE F	REMOVAL_	- BUTT JOINT
STATION TO STATION		WIDTH	LENGTH	BITUMINOUS SURFACE REMOVAL - BUTT JOINT
		FC	TOOT	SQ YD
FAP 17 (US 52/)	(L 64)			
1432+00.60	1432+30.60	24.9	30.0	83.0
1443+99.27	1444+29.27	25.3	30.0	84.3
TOTAL				167.3
USE				168

406	00990: TEM	PORARY RAI	MP
CTATION T	CTATION	WIDTH	AREA
STATION TO STATION		FOOT	SQ YD
FAP 17 (US 52/	IL 64)		
1432+00.60	1432+05.60	24.9	13.8
1444+24.27	1444+29.27	25.3	14.1
TOTAL			27.9
USE			28

	ITDACT	- 1	in	CAOO	7	
FFO. RO	AD DIST. NO.	II I IN	015	FED. AID	PROJECT	
17	16-T		C.	ARROLL	47	9
F.A.P. RTE.	SECTION		С	OUNTY	TOTAL SHEETS	SHEET NO.

CONTRACT NO. 64897

44000100:	PAVEMENT	REMOVAL
440001001	PAVEMENT	KEMO A AL

STATION TO STATION		SIDE	AREA
		SIDE	SQ YD
1440+20.0	1440+77.9	RT	22.5
1440+77.9	1441+58.0	RT	62.3
1441+58.0	1442+16.0	RT	22.6
TOTAL.			107.4
JSE			108

44001430:	BITUMINOUS	SHOULDE	K KEMUYAL
			SHOULDER
CTATION	TO STATION	SIDE	REMOVAL

STATION T	O STATION	SIDE	SHOULDER REMOVAL
•			SQ YD
1432+00.60	1436+92.75	LT & RT	164.1
1436+92.75	1437+04.42	LT	2.0
1437+34.65	1437+53.24	RT	3.1
1437+53,24	1444+29.27	LT & RT	225.4
TOTAL	<u> </u>		394.6
USE			395

CLASS D	PATCHES, 1	2 INCH
	CLASS D	PATCHES
	TY II	TY III

	CLASS D	PATCHES
STATION	TY II (44201789)	TY III (44201794)
	SQ	YD
1441+42.0		37.4
1441+73.9	23.7	
TOTAL	23.7	37.4
USE	24	38
L		

4300200:	STRIP	REFLECTIV	E CRACK	CONTROL	
AT.177	NI TO C	TATION	SIDE	LENGTH	
214110	ON TO ST	ATION	SIVE	F00T	

CTATION TO STATION			
STATION TO STATION		F00T	
(L 64)			
1444+29.27	LT	1228.7	
1444+29.27	RT	1228.7	
		2457.4	
		2458	
	IL 64) 1444+29.27	[L 64) 1444+29.27 LT	

48101200: AGGREGAT	E SHOULD	ERS, TYP	E B
STATION TO STATION	SIDE	WIDTH	AGGREGATE SHOULDERS, TYPE B
		FT	TON
US 52/IL 64	.1		
1432+00.60 TO 1436+24.32	LT	1	42.9
1432+00.60 TO 1436+50.32	RT	1	45.5
1438+04.57 TO 1444+29.27	LT	1	63.2
1438+05.66 TO 1444+29.27	RT	1	63.1
WILLOW ROAD			
104+58.46 TO 105+20.00	LT/RT	2	12.5
TOTAL		<u> </u>	227.2
USE			228

49202410.	BITUMINOUS	SHOULDERS.	SUPERPAVE	61/2"
48202410:	BT I OWINGO	SHOULDERS,	SOI LIN AVE	0/2

ON TO S	TATION	SIDE	WIDTH	BITUMINOUS SHOULDERS, SUPERPAVE 61/2"
			FT	SQ YD
60 TO 1	436+24.32	LT	3	141.2
60 TO 1	436+50.32	RT	3	149.9
57 TO 1	444+29.27	LT	3	208.2
66 TO 1	444+29.27	RT	3	207.9
		1		707.3
				708
	60 TO 1	ON TO STATION 60 TO 1436+24.32 60 TO 1436+50.32 57 TO 1444+29.27 66 TO 1444+29.27	ON TO STATION SIDE 60 TO 1436+24.32 LT 60 TO 1436+50.32 RT 57 TO 1444+29.27 LT	ON TO STATION SIDE WIDTH FT 60 TO 1436+24.32 LT 3 60 TO 1436+50.32 RT 3 57 TO 1444+29.27 LT 3

REMOVAL OF EXISTING STRUCTURES

STATION	STRUCTURE NUMBER	STRUCTURE TYPE	REMOVAL OF EXISTING STRUCTURES (50100300) (50100400)
			EACH
WILLOW ROAD			
103+39.11	1	2'x2' B0X	11
102+90.78	2	2'x1.5' B0X	1
TOTAL			2

PIPE CUI VERT SCHEDULE

				171	L COLVER	1 2CHEDOF						
[CLASS A		CLASS D		FND SE	CTIONS			
				TYPE 2	TYF	PE 1	TYPE 2	2110 32		CORRUGATED		
STATION	SIDE	TYPE	STANDARD	48" (542A1093)	15" (542D0220)	30" (542D0235)	42" (TEMPORARY) (5422D042)	15" (54213450)	30" (54213465)	STEEL PIPE MULTIPLE END SECTIONS DOUBLE 30" (#2001376)	CULVERT DROP BOX (X0322263)	GRATED CULVERT EXTENSION, NO 1 (Z0029001)
					JF	FOOT				EACH		
FAP ROUTE 17 (US 52/IL	64)					· · · · · · · · · · · · · · · · · · ·		1	T		I .
1441+42.0	CL	PIPE CULVERT & END SECTION	542206	96							11	1
1441+73.9	RT	PIPE CULVERT (TEMPORARY)					16	<u></u>	L	<u> </u>	L	L
WILLOW ROAD	L					.,		1	T		r	T
102+51.7	RT	PIPE CULVERT & END SECTIONS	542401		30			2				
102+66.0	CL	PIPE CULVERT & END SECTIONS	542401			148		ļ		2		
103+63.5	CL	PIPE CULVERT & END SECTIONS	542401			84		<u> </u>	2	 	 	1
TOTALS	1	4		96	30	232	16	2	2	2	 	ļ
USE				96	30	232	16	<u> </u>	2	2	<u> </u>	L

CONTINGENCY ITEMS FOR FIELD TILE REPAIR AND REPLACEMENT

ITEM	UNIT	QUANTITY
EXPLORATION TRENCH 52" DEPTH (61100500)	FOOT	200
MISCELLANEOUS CONCRETE (61100605)	CU YD	3
STORM SEWERS PROTECTED, CLASS A, 12" (61101013)	FOOT	220
STORM SEWERS PROTECTED, CLASS A, 15" (61101017)	FOOT	100
FIELD TILE JUNCTION VAULTS, 2' DIA (61133100)	EACH	4
FIELD TILE JUNCTION VAULTS, 3' DIA (61133200)	EACH	1

63500105: DELINEATORS

6.	DOUGIOD: D	EFTINENT	JN3
		SIDE	DELINEATORS
STATION 1	ON TO STATION S		EACH
1433+74.60	1442+55.27	LT	7
1441+	59.72	LT	i
1433+74.60	1442+55.27	RT	8
1441+	24.75	RT	11
TOTAL			17

REVISIONS	ILLINOIS DEPARTMENT OF TRANSPORTATION
NAME DATE	TELINOIS DEFAILTMENT OF TRANSPORTATION
	-
	FAP ROUTE 17
	SCHEDULES OF QUANTITIES
	1 JOHEDOLES OF GOARTITIES

DATE 8/22/2006

CHECKED BY AWM

66600105: FURNISHING AND ERECTING RIGHT OF WAY MARKERS

RIGHT	OF WAY	Y MARKERS	
STATION	CIDE	OFFSET	T
STATION	SIDE	FEET	EACH
FAP 17 (US 52/IL	64)		
1431+50.00	LT	33.00	1
1431+50.00	RT	33.00	1
1432+00.00	RT	60.00	1
1433+00.00	LT	45.00	1
1433+74.60	RT	60.00	1
1434+50.26	LT	50.00	1
1434+00.86	RT	65.00	1
1436+00.00	RT	65.00	1
1436+44.00	RT	70.00	1
1436+50.37	LT	60.00	1
1436+80.18	LT	70.00	1
1437+53.46	RT	65.00	1
1437+95.45	LT	50.00	1
1438+00.00	RT	55.00	1
1439+00.00	LT	55.00	1
1439+00.00	RT	55.00	1
1440+00.00	RT	55.00	1
1440+00.00	LT	60.00	1
1441+00.00	LT	60.00	1
1441+00.00	RT	65.00	1
1442+00.00	LT	60.00	1
1442+55.27	LT	33.00	1
1444+00.00	RT	55.00	1
1445+00.00	LT	33.00	1
1446+00.00	LT	45.00	1
1446+50.00	RT	80.00	1
1447+00.00	LT	45.00	1
1448+00.00	LT	33.00	1
1448+02.93	RT	80.00	1
WILLOW ROAD			
101+65.00	LT	25.00	1
101+65.00	RT	25.00	1
105+00.00	LT	25.00	1
105+20.00	RT	25.00	1
TOTAL			33

66700305: PERMANENT SURVEY MARKERS, TYPE II

		MICHIGAN 111	٠
STATION	DESCRIPTION	PERMANENT SURVEY MARKERS TYPE II	
		EACH	
AP 17 (US 52/	IL 64)		
1433+74.60	PC	1	
1442+55.27	PT	1	
OTAL		2	

SHORT-TERM PAVEMENT MARKING AND REMOVAL SCHEDULE

01101(1)	I CITIAL I WALIAIE	IVI WAIN	ING AND REMOVA	IL SCHEDULE
STATION T	O STATION	SIDE	SHORT-TERM PAVEMENT MARKING (70300100)	WORK ZONE PAVEMENT MARKING REMOVAL (70301000)
			FOOT	SQ FT
AP 17 (US 52/I	L 64)			
EVELING BINDER	COURSE			
1432+00.60	1444+29.27	CL	122.9	
SURFACE COURSE				
1432+00.60	1444+29.27	CL	122.9	41.0
OTAL		·	245.8	41.0
ISE			246	41

PAVEMENT MARKING SCHEDU

		.,	PAVEMENT MA	RKING SCHEDULE		
			PAINT	PAVEMENT MARKING	(78001110)	
STATION T	O STATION	SIDE	LINE 4" WHITE EDGE LINE	LINE 4" YELLOW SKIP-DASH	LINE 4" YELLOW SOLID LINE	RAISED REFLECTIVE PAVEMENT MARKER (78100100)
				FOOT		EACH
AP 17 (US 52/)						
1432+00.60	1436+24.32	LT	423.7			····
1432+00.60	1436+50.32	RT	449.7			
1432+00.60	1438+30.00	CL		157.4		
1432+00.60	1438+30.00	CL*			629.4*	8
1438+04.57	1444+29.27	LT	624.7		02011	
1438+05.66	1444+29,27	RT	623.6			
1438+30.00	1444+29.27	CL		149.8		8
/ILLOW ROAD						0
101+75.84	102+81.40	LT	137.3			
101+75.84	103+30.00	RT	190.1			
103+00.70	105+20.0	LT	270.3	***		
103+53.70	105+20.00	RT	203.5			
OTAL			2923.0	307.2	629.4	16
ST APPLICATION				3860		10
ND APPLICATION	V			3860		
ISE	· · · · · · · · · · · · · · · · · · ·			7720		
	O PASSING ZONE		<u> </u>	1120	<u></u>	16

* NORTHBOUND NO PASSING ZONE

78300200: RAISED REFLECTIVE PAVEMENT MARKER REMOVAL

OCCOOL NAISED REFLECT	TAE LAAF	MENT MARKER REMO
STATION TO STATION	SIDE	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL
		EACH
FAP 17 (US 52/IL 64)		
1432+00.60 1444+29.27	CL	16
TOTAL		16

A2007814: TREE, TILIA AMERICANA (AMERICAN LINDEN/BASSWOOD), 1-3/4" CALIPER, BALLED AND BURLAPPED

LOCATION	TREE, TILIA AMERICANA (AMERICAN LINDEN/BASSWOOD), 1-3/4" CALIPER, BALLED AND BURLAPPED		
	EACH		
SEE POLICY GUIDELINES - SHEET 3	2		
TOTAL	2		

X0950100: PIPE CULVERT REMOVAL, 15"

ΛU	330100: FI	LE COLA	RI KEMUVAL,	15
	STATION	SIDE	PIPE CULVERT REMOVAL, 15"]
			FOOT	7
	1435+25.0	LT	10	7
	TOTAL		10	٦

X4420500: TEMPORARY PAVEMENT PATCH

. 1000000 10000 01	***** 1111 EINE 1 1710
STATION	TEMPORARY PAVEMENT PATCH
	SQ YD
1441+42.0	38
1441+73.9	23.7
TOTAL.	61.7
USE	62

Z0020900: ESTABLISHING AND REFERENCING

	LAND SECTI	ON MARK	EK2	
LOCATION	STATION	SIDE	OFFSET	ESTABLISHING AND REFERENCING LAND SECTION MARKERS
]	EACH
NW CORNER, SECTION 21	1437+00.48	RT	70.54'	1
	TOTAL			1

Z0023600: FILLING EXISTING CULVERTS

JOO! ILLLING	CVIOLING COL
STATION	FILLING EXISTING CULVERTS
	EACH
1435+25.00	1
1441+73.93	1
TOTAL	2

REVISIONS
NAME DATE
ILLINOIS DEPARTMENT OF TRANSPORTATION

1.6

RTE. SECTION
17 16-T

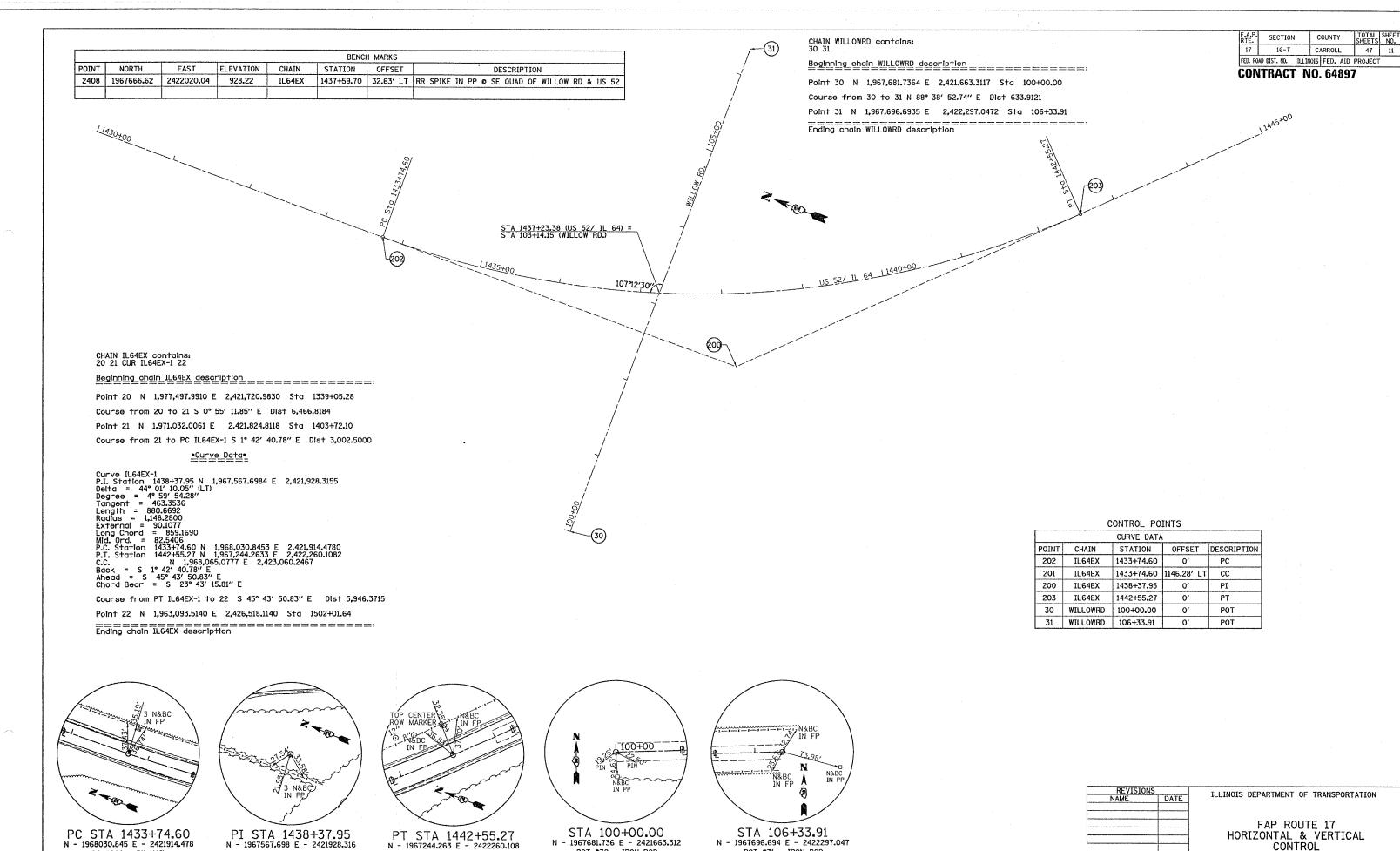
COUNTY

FED. ROAD DIST. NO. | ILLINOIS FED. AID PROJECT
CONTRACT NO. 64897

CARROLL 47 10

FAP ROUTE 17 SCHEDULES OF QUANTITIES

DATE 8/22/2006 CHECKED BY AWM



POT #30 - IRON ROD

POT #31 - IRON ROD

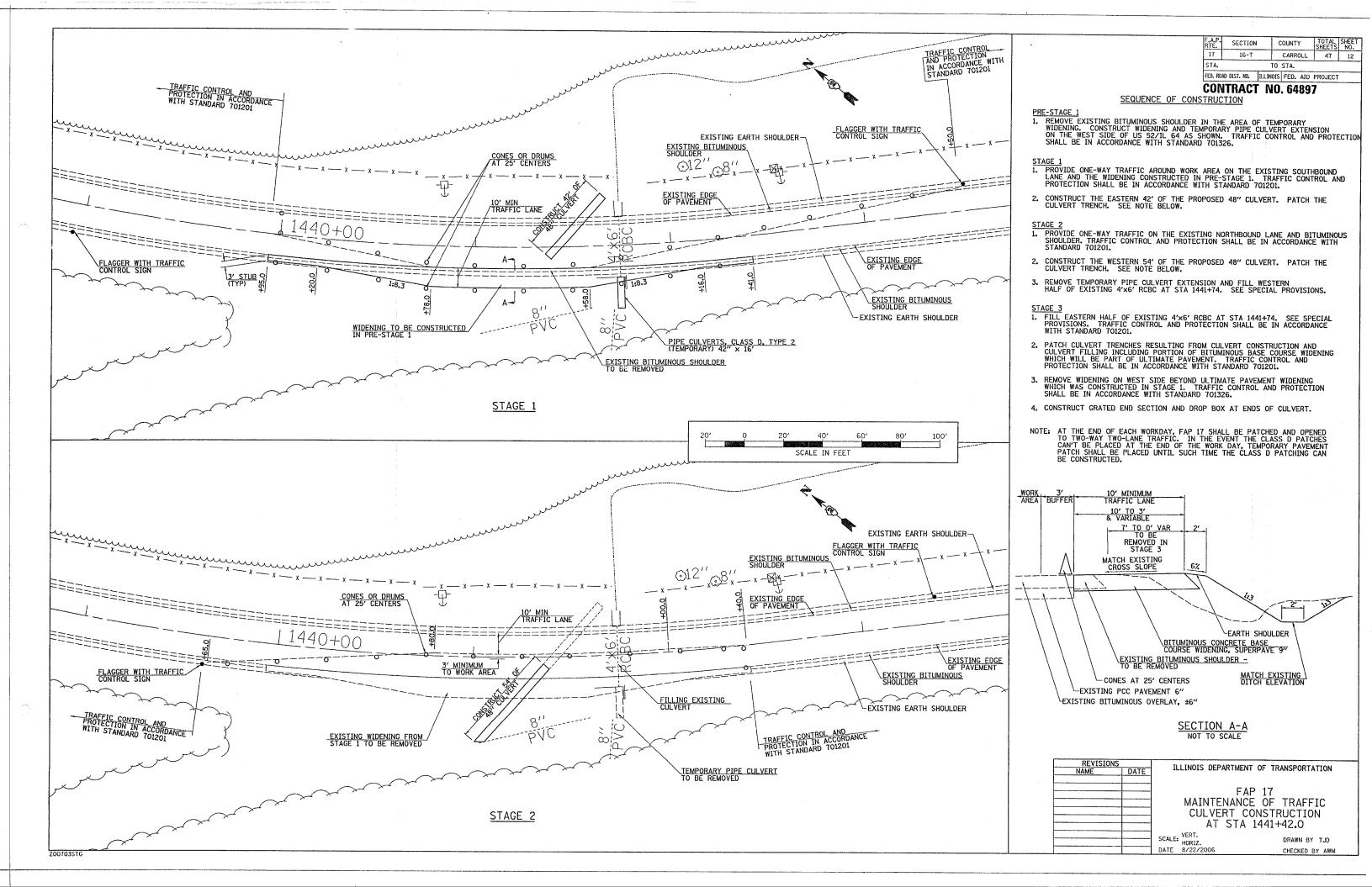
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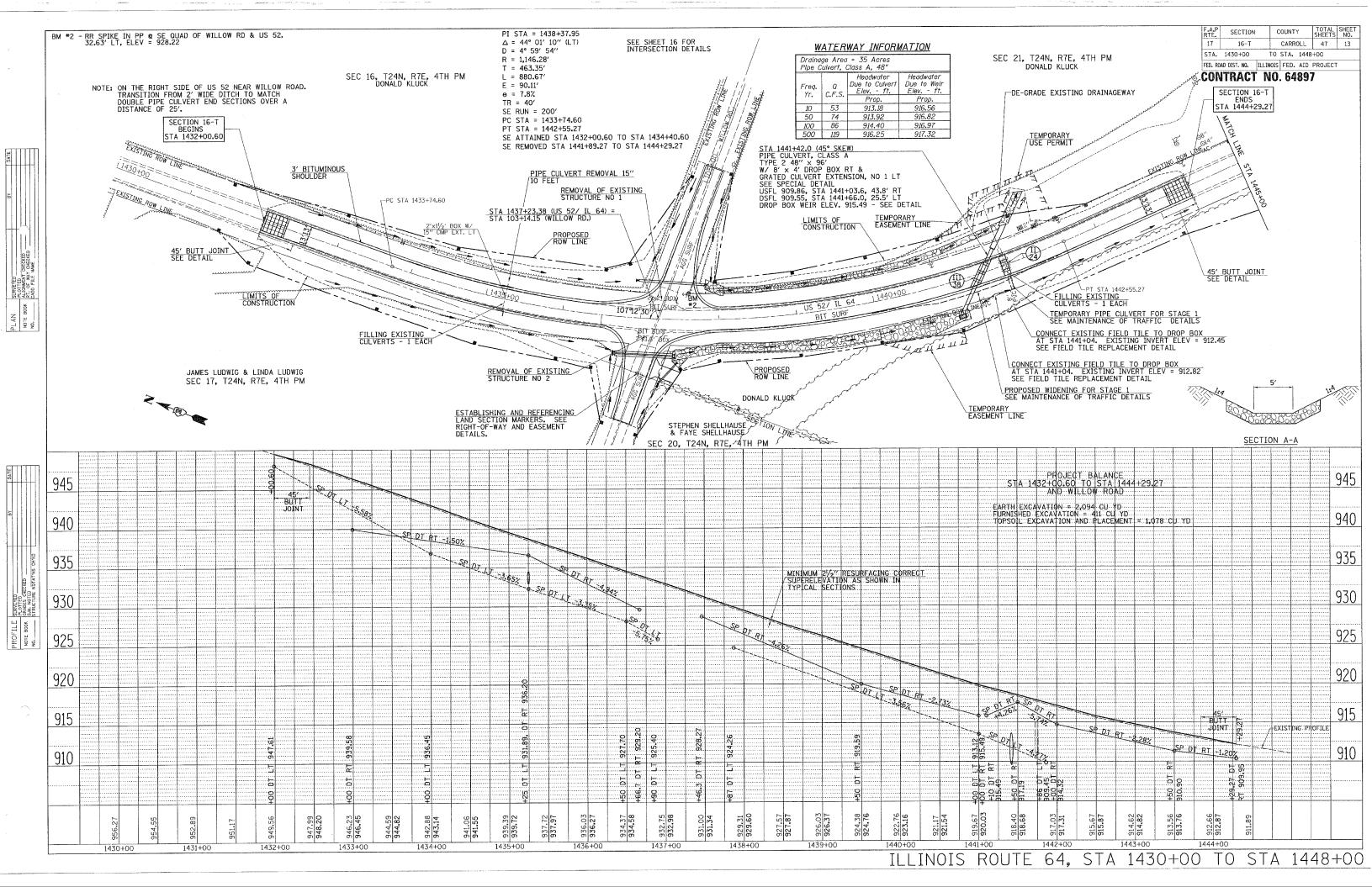
PC #202 - PK NAIL

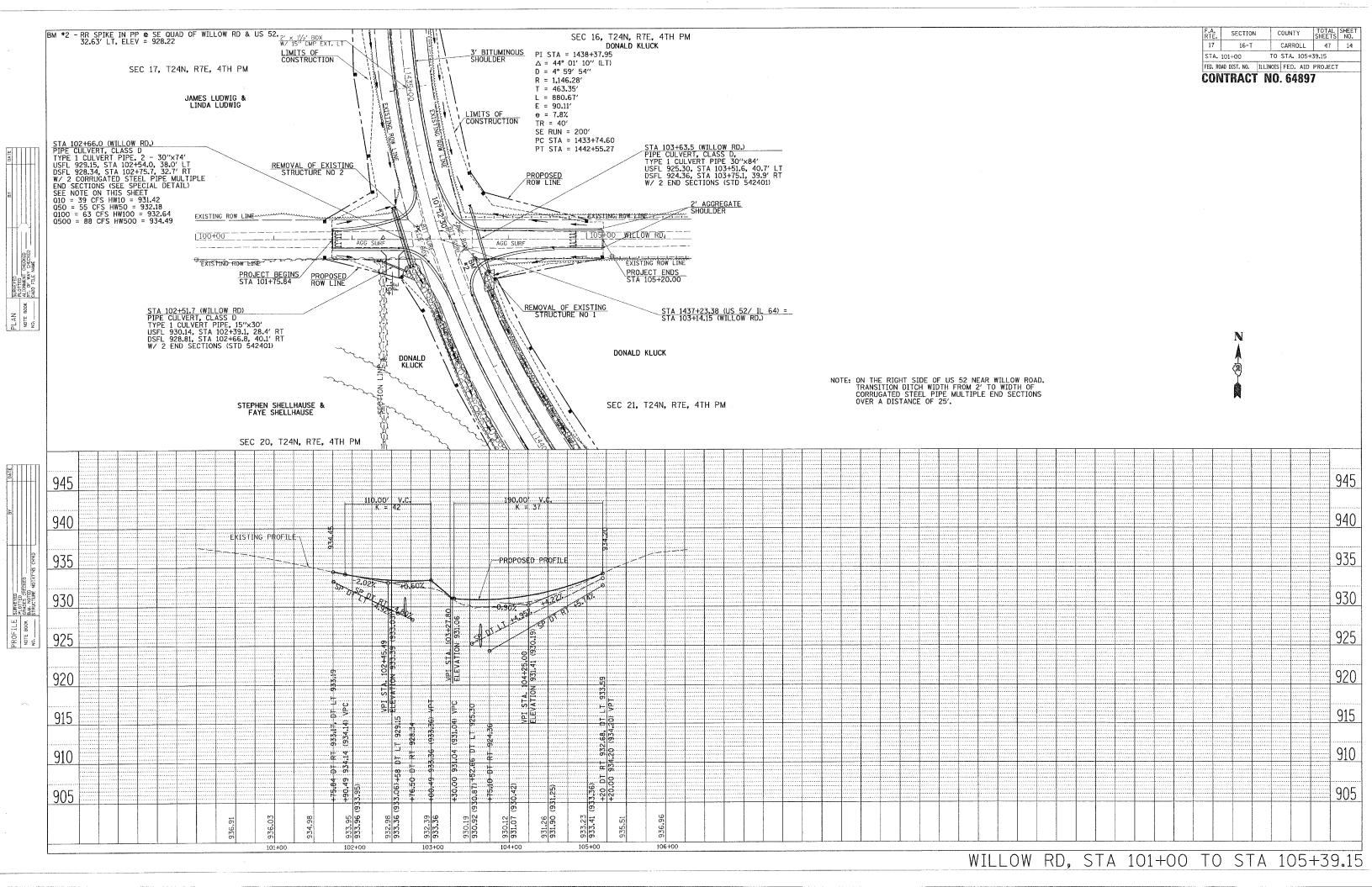
PI #200 - IRON ROD

PT #203 - PK NAIL

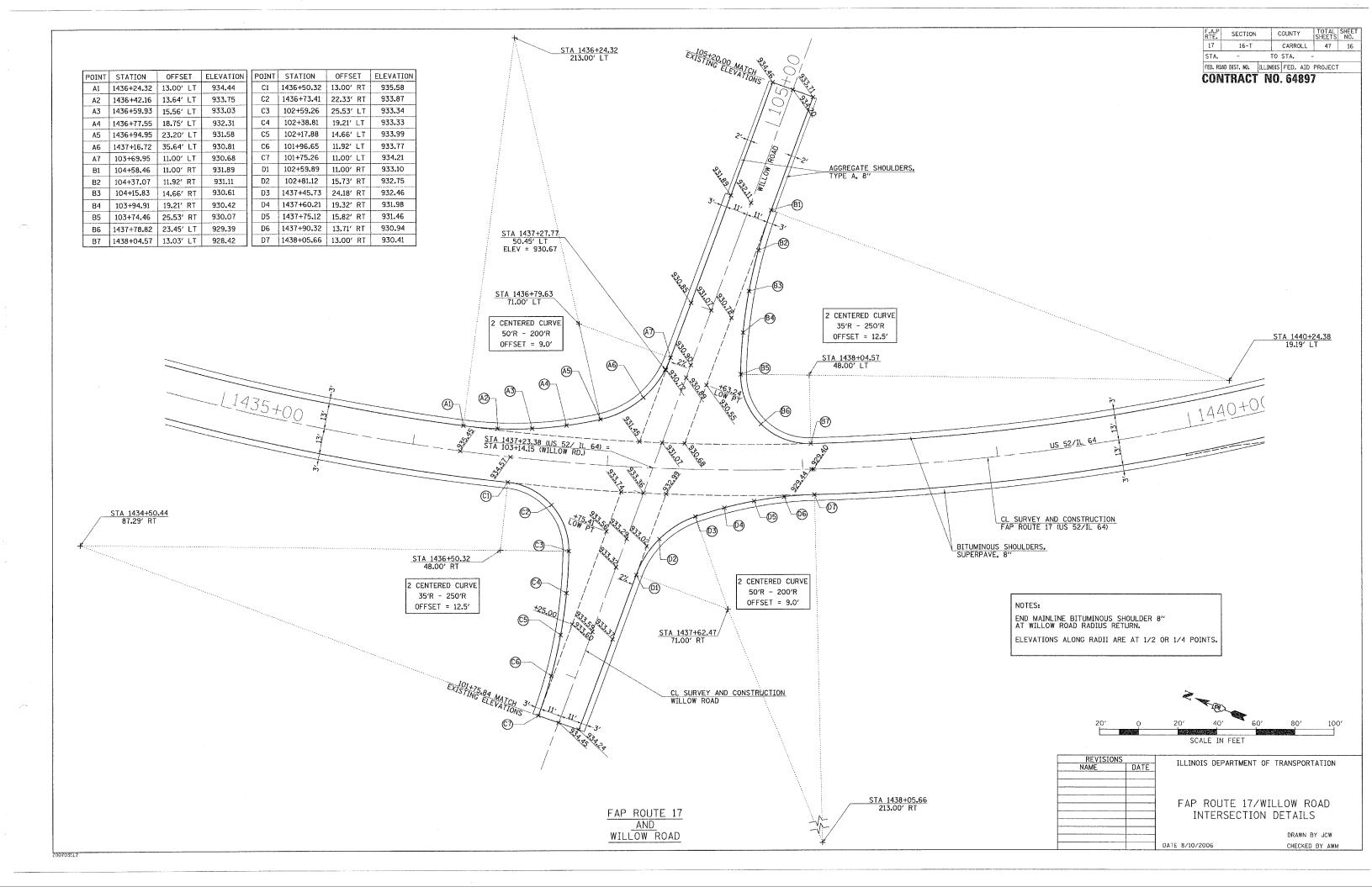
DRAWN BY JCW CHECKED BY AWM

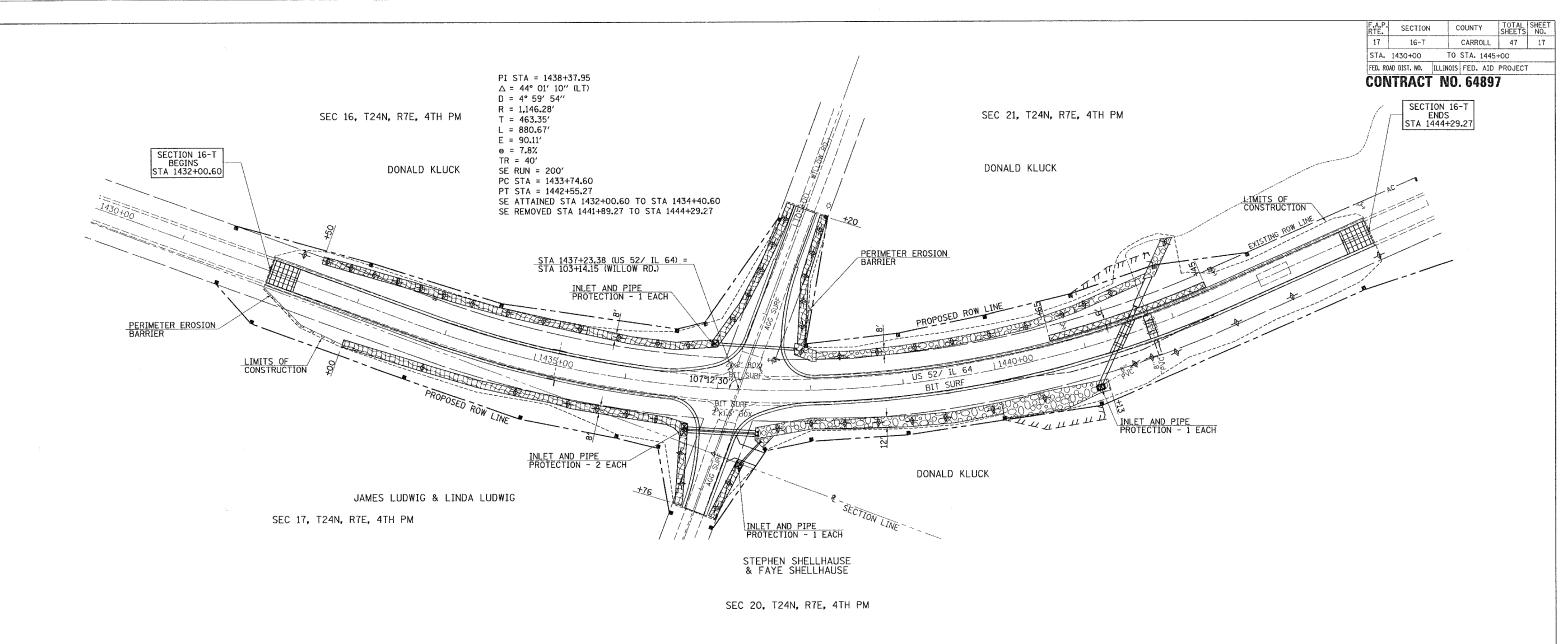


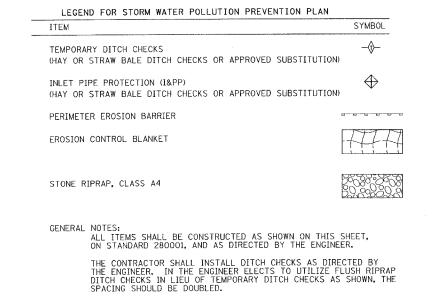


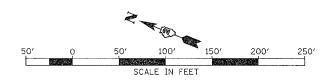


BM #2 - RR SPIKE IN PP @ SE QUAD OF WILLOW RD & US 52. 32.63' LT, ELEV = 928.22 SECTION COUNTY RIGHT-OF-WAY AND EASEMENT DETAILS 17 16-T CARROLL 47 15 STA. 1430+00 TO STA. 1448+00 FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT CONTRACT NO. 64897 PI STA = 1438+37.95 SEC 21, T24N, R7E, 4TH PM $\Delta = 44^{\circ} \ 01' \ 10'' \ (LT)$ DONALD KLUCK D = 4° 59′ 54″ R = 1,146.28'T = 463.35'SEC 16, T24N, R7E, 4TH PM DONALD KLUCK L = 880.67'E = 90.11' e = 7.8% TR = 40' SECTION 16-T ENDS STA 1444+29.27 PROPOSED TEMPORARY USE PERMIT TO GRADE DRAINAGE WAY & PLACE RIPRAP SE RUN = 200' SECTION 16-T BEGINS STA 1432+00.60 PC STA = 1433+74.60 STA 1442+00 60° LT STA 1442+93.45 TX STA 1443+00 STA 1 PT STA = 1442+55.27 SE ATTAINED STA 1432+00.60 TO STA 1434+40.60 SE REMOVED STA 1441+89.27 TO STA 1444+29.27 STA 105+00 25' LT STA 1442+00 75' LT STA 1441+60 100' LT PROPOSED TEMPORARY STA 1441+50
EASEMENT LINE -PC STA 1433+74.60 STA 1437+23.38 (US 52/ IL 64) = STA 103+14.15 (WILLOW RD.) STA 1436+80.44 70' LT STA 1444+00 55' RT STA 1440+00 60' LT TA 1437+95.85 50' LT STA 1431+50 33' RT STA 1439+00 55' LT -PT STA 1442+55.27 STA 1432+00/ 60' RT STA 1433+74.60/ JAMES LUDWIG & LINDA LUDWIG STA 1435+00 65' RT SEC 17, T24N, R7E, 4TH PM STA 1441+00 80' RT STA 1436+00/ 65' RT DONALD KLUCK STA 1439+00 55′ RT STA 1436+43.65 STA 101+65 25' RT PROPOSED TEMPORARY EASEMENT LINE STEPHEN SHELLHAUSE & FAYE SHELLHAUSE STA 101+65 25' LT SEC 20, T24N, R7E, 74TH PM O/A" STA 1448+00 ESTABLISING AND REFERENCING LAND SECTION MARKERS NW CORNER, SECTION 21 STA 1437+00.48, 70.54' RT STA 102+93.78, 1.66' LT N 1967689.054 E 2421902.985 DONALD KLUCK STA 1446+00 STA 1445+00 REST AREA STA 1448+02.94 80' RT DONALD KLUCK STA 1446+50 80' RT ILLINOIS DEPARTMENT OF TRANSPORTATION FAP ROUTE 17 RIGHT-OF-WAY AND EASEMENT DETAILS SCALE: VERT.
HORIZ.
DATE 8/10/2006 DRAWN BY TJD CHECKED BY AWM Z00703R0W1









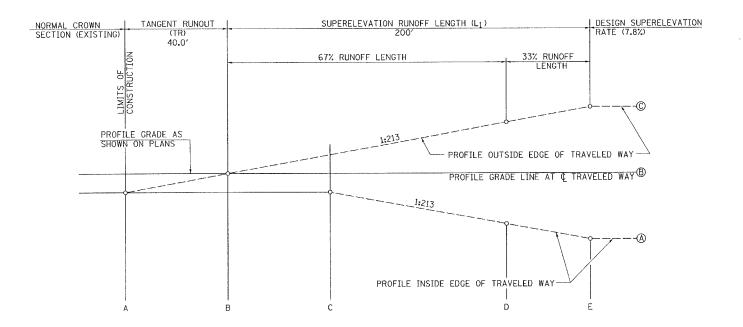
REVISIONS
NAME
DATE

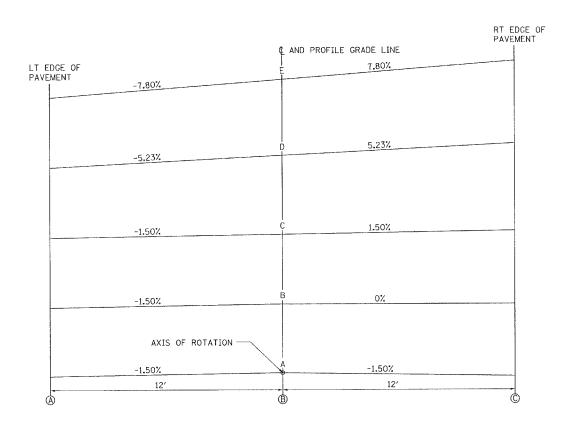
FAP ROUTE 17
EROSION CONTROL PLAN

SCALE: VERT.
HORIZ.
DATE 8/10/2006
CHECKED BY AWM

'00703ER1

CONTRACT NO. 64897



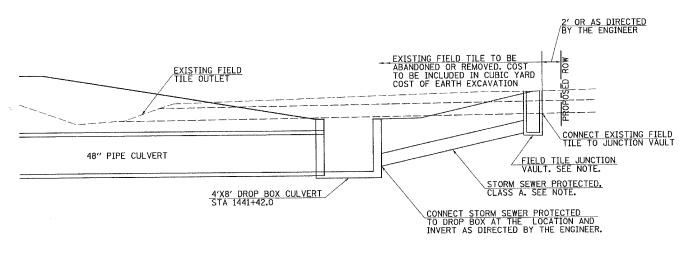


SUPERELEVATION	TRANSITION	DETAIL

SECTION	STATION	13' LT EDGE	SE %	13' RT EDGE	SE %
A	1432+00.60	949.35	-1.50	949.35	-1.50
	1432+25	948.69	-1.50	948.80	-0.59
В	1432+40.60	948.26	-1.50	948.45	0.00
	1432+50	948.01	~1.50	948.25	0.37
	1432+75	947.14	-1.50	947.50	1.34
С	1432+79.06	946.99	-1 . 50	947.38	1.50
	1433+00	946.15	-2.32	946.75	2.32
	1433+25	945.21	-3.29	946.07	3.29
	1433+50	944.26	-4.27	945.38	4.27
D (P.C.)	1433+74.60	943.31	-5.23	944.67	5.23
	1434+00	942.33	-6.22	943.95	6.22
	1434+25	941.42	-7.19	943.24	7.19
É	1434+40.60	940.80	-7.80	942.83	7,80
	1434+50	940.50	-7.80	942.52	7.80
	1434+75	939.63	-7.80	941.65	7.80
	1435+00	938.71	-7.80	940.73	7.80
	1435+25	937.84	-7.80	939.88	7.80
	1435+50	936.96	-7.80	938.98	7.80
	1435+75	936.11	-7.80	938.13	7.80
	1436+00	935.26	-7.80	937.28	7.80
	1436+25	934.42	-7.80	936,44	7.80
	1436+50	933.57	-7.80	935.59	7.80
	1436+75	932.77	-7.80	934.79	7.80
	1437+00	931.97	-7.80	933.99	7.80
	1437+25	931.15	-7.80	933.17	7,80
	1437+50	930.33	-7.80	932.35	7.80
	1437+75	929.46	-7.80	931.48	7.80
	1438+00	928.59	-7.80	930.61	7.80
	1438+25	927.73	-7.80	929.75	7.80
	1438+50	926.86	-7.80	928,88	7.80
	1438+75	926.11	-7.80	928.13	7.80
	1439+00	925.36	-7.80	927.38	7.80
	1439+25	924.56	-7,80	926.58	7.80
	1439+50	923.75	-7.80	925.77	7.80
	1439+75	922.95	-7.80	924.97	7.80
	1440+00	922.15	-7.80	924.17	7.80
	1440+25	921.34	-7.80	923.36	7.80
	1440+50	920.53	-7.80	922.55	7.80
	1440+75	919.78	-7.80	921.80	7.80
	1441+00	919.02	-7.80	921.04	7.80
	1441+25	918.35	-7.80	920.37	7.80
	1441+50	917.67	-7.80	919.69	7.80
	1441+75	917.01	-7.80	918.98	7,80
E	1441+89.27	916.59	-7.80	918.61	7.80
	1442+00	916,35	-7.38	918.27	7.38
	1442+25	915.76	-6.41	917.42	6.41
	1442+50	915.16	-5.43	916.58	5,43
D (P.T.)	1442+55.27	915.08	-5.23	916.44	5.23
	1442+75	914.77	-4.46	915.93	4.46
	1443+00	914.37	-3.48	915.27	3.48
	1443+25	913.96	-2.51	914.62	2.51
	1443+50	913.56	-1.53	913.96	1.53
С	1443+50.81	913.56	-1.50	913.95	1.50
	1443+75	913.13	-1.50	913.39	0.56
В	1443+89.27	912.87	-1.50	913.06	0.00
- U	1444+00	912.68	-1.50	912.82	-0.40
	1444+25	912.12	-1.50	912.14	-1.34
A	1444+29.27	912.02	-1.50	912.02	-1.50
A	1777763.21	1 312.02	1.00	714.04	1.00

			and the second s					
REVISIONS		THE TRICKS DEPARTMEN	IT OF TRANSPORTATION					
NAME	DATE	ILLINOIS DEI ANTIGEN	TO TRANSFORTATION					
		FAP ROUTE 17						
		PAVEMENT ELEVATIONS						
		1 AVENILIAI	LLL VA I TONS					
			DRAWN BY JCW					
		DATE 8/10/2006	CHECKED BY AWM					

 F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
17	16-T	CARROLL.	47	19
FED. RO	AD DIST, NO. DILL	NOIS FED. AID	PROJECT	



FIELD TILE REPLACEMENT DETAIL

NOTES:
FIELD TILE SHALL BE REPLACED IN ACCORDANCE WITH
SECTION 611 OF THE STANDARD SPECIFICATIONS. THE COST
PER CONTRACT UNIT PRICE OF ITEMS INCLUDED IN THIS
CONTRACT SHALL BE PAID FOR AS STATED IN SECTION 611 OF
THE STANDARD SPECIFICATIONS. IF THE CONTRACT UNIT PRICE
IS NOT INCLUDED IN THIS CONTRACT, PAYMENT FOR THIS WORK
WILL BE IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD
SPECIFICATIONS.

ALL EXISTING FIELD TILE SHALL BE REPLACED WITH STORM SEWER OF THE TYPE REGUIRED FOR BY THE DEPTH OF COVER, THE LINEAL MEASUREMENT WILL BE ALONG THE CENTRODIAL AXIS AND INCLUDE ALL BENDS, ELBOWS, OR PIPE TEE'S WHICH ARE REQUIRED.

EXISTING UNEXPOSED FIELD TILE SHALL BE LOCATED BOTH HORIZONTALLY AND VERTICALLY AT THE LOCATIONS DIRECTED BY THE ENGINEER BY THE USE OF AN EXPLORATION TRENCH. THIS TRENCH SHALL NOT BE LESS THAN 52 INCHES IN DEPTH, MEASURED FROM THE EXISTING GROUND ELEVATION. THE WIDTH OF THE TRENCH SHALL BE SUFFICIENT TO ALLOW PROPER INVESTIGATION OF THE ENTIRE TRENCH.

THE EXISTING TILE DRAINAGE SYSTEM SHALL BE MAINTAINED IN A FUNCTIONAL CONDITION BY IMMEDIATE CONSTRUCTION OF THE NEW STORM SEWER SYSTEM OR BY REPAIRING THE CUT TILE WITH THE SAME DIAMETER UNTIL SUCH TIME AS THE NEW SYSTEM IS COMPLETED.

USE FIELD TILE JUNCTION VAULT. 2' FOR ONE FIELD TILE CONNECTION AND FIELD TILE JUNCTION VAULT, 3' FOR TWO OR MORE FIELD TILE CONNECTIONS IN ACCORDANCE WITH ARTICLE 611.05 OF THE STANDARD SPECIFICATIONS.

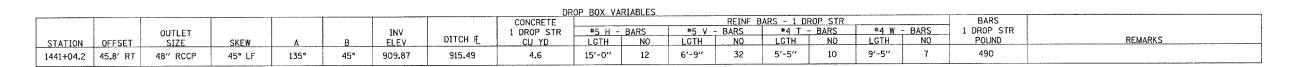
STORM SEWER PROTECTED, CLASS A, 12" SHALL BE USED IN CONJUNCTION WITH FIELD TILE JUNCTION VAULT, 2' AND STORM SEWER PROTECTED, CLASS A, 15" SHALL BE USED IN CONJUNCTION WITH FIELD TILE JUNCTION VAULT, 3'.

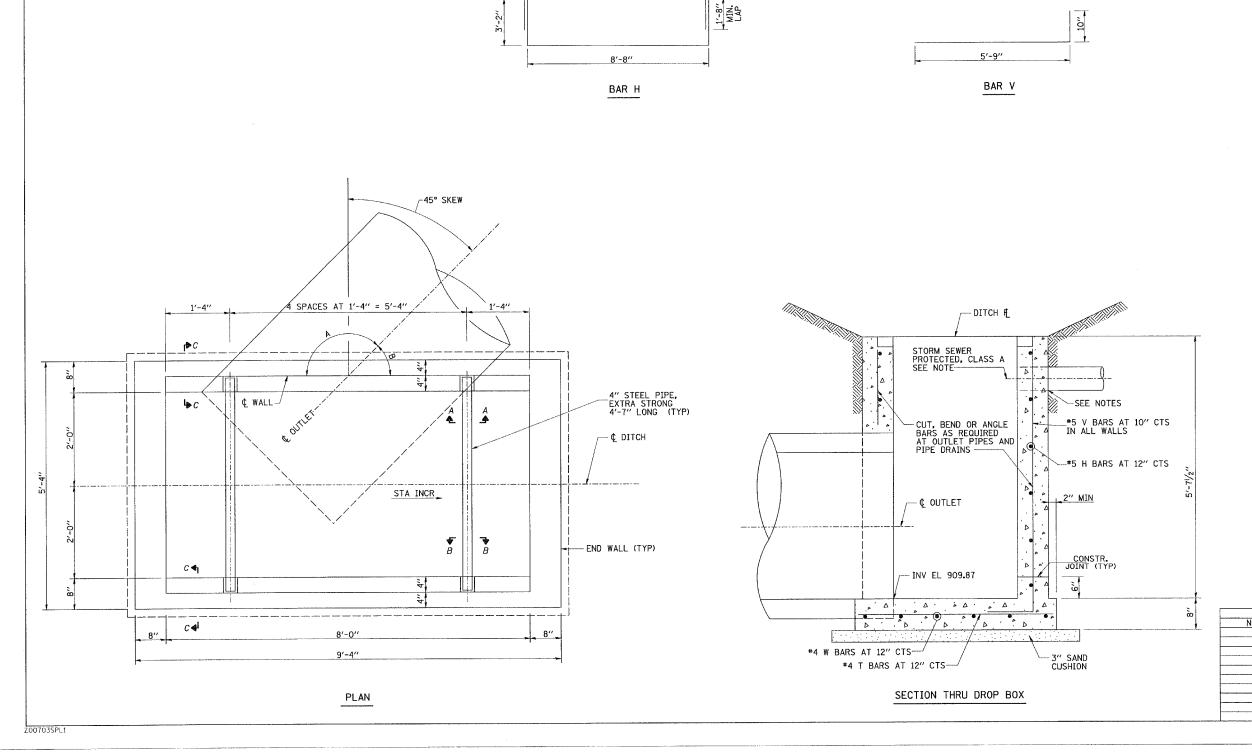
REVISIONS		THINOIS DEPARTMENT OF TRANSPORTATION
NAME	DATE	ILLINOIS DEL ARTIMENT OF TRANSPORTATION
		FAP ROUTE 17 FIELD TILE AND VAULT DETAILS
	 	VAULI DETAILS

DRAWN BY TJD

DATE 8/10/2006 CHECKED BY AWM

F.A.P. RTE.	SECTION		COUNTY			TOTAL SHEETS	SHEET NO.
17	16T			CARROLL		47	20
FED. ROAD DIST. NO. ILL		ILLIN	OIS	FED.	AID	PROJECT	





NOTE: STEEL PIPE SHALL CONFORM TO ASTM A53 GRADE B OR ASTM A501.

ALL STEEL PLATES SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M 270, GRADE 50.

BOLTS AND NUTS SHALL CONFORM TO THE REQUIREMENTS OF ASTM DESIGNATION A 307. ALL BOLTS, NUTS, WASHERS AND LOCK WASHERS SHALL BE GALVANIZED ACCORDING TO AASHTO M 232.

ALL PLATES AND PIPES SHALL BE GALVANIZED AFTER SHOP FABRICATION ACCORDING TO AASHTO M 111 AND ASTM A 385.

CALCULATED WEIGHT OF STEEL = 370 LBS.

STORM SEWER PROTECTED, CLASS A, SHALL BE CONNECTED TO THE PROPOSED DROP BOX AT THE LOCATION AND INVERTS AS DIRECTED BY THE ENGINEER.

ALL WORK AND MATERIAL INCORPORATED INTO THE CONSTRUCTION OF THE CULVERT DROP BOX SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR "CULVERT DROP BOX".

REVISIONS
AME DATE

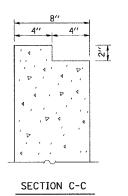
LLINOIS DEPARTMENT OF TRANSPORTATION

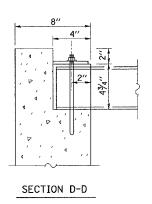
FAP ROUTE 17 CULVERT DROP BOX DETAILS STA 1441+04.2

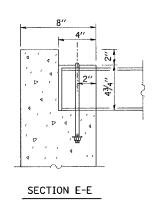
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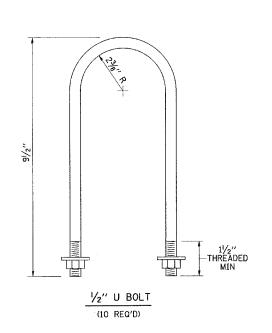
DATE 8/10/2006

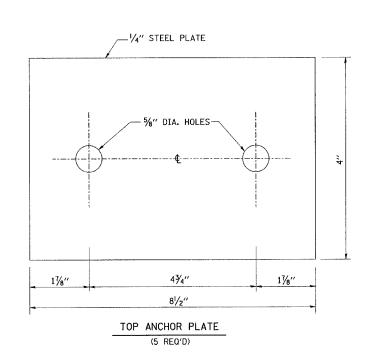
F.A.P. RTE.	SECTION	(COUNT	Y	TOTAL	SHEET NO.
17	16-T	С	ARROL	L	47	21
FEO. ROA	AD DIST. NO.	ILLINOIS	FED.	AID	PROJECT	

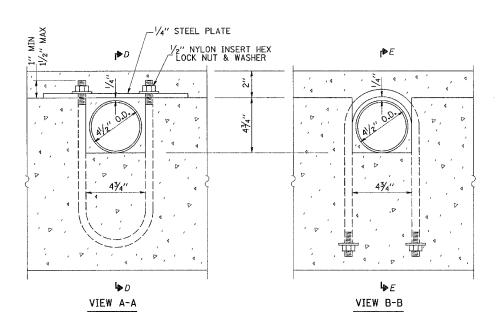








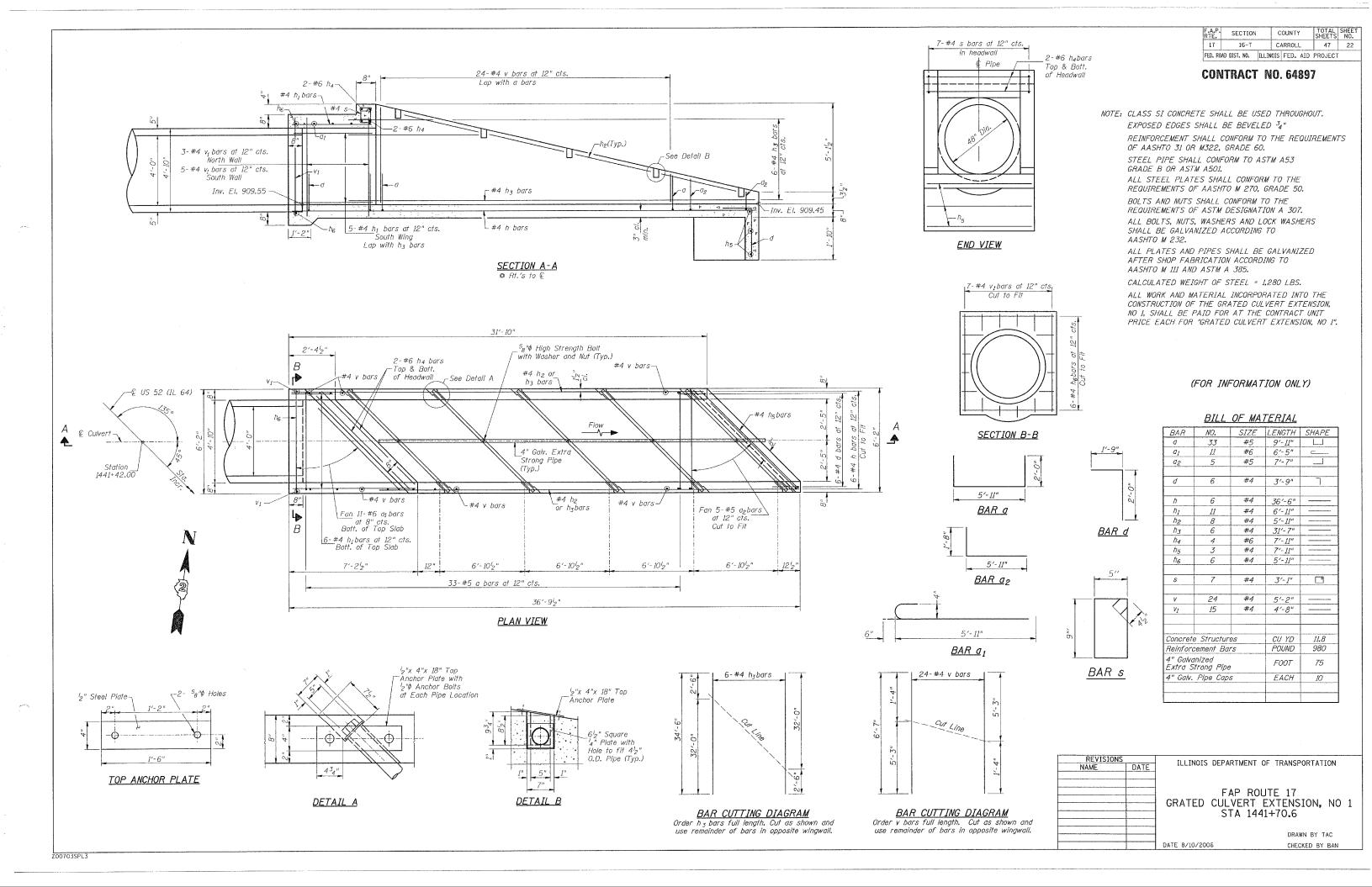




REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION					
NAME D	ATE	TECHNOIS DEFAITMENT OF TRANSPORTATION					
		CAD DOUTE 17					
		FAP ROUTE 17					
		CULVERT DROP BOX DETAILS					
		STA 1441+04.2					
		DRAWN BY TAC					

DATE 8/10/2006

CHECKED BY BAN



STORM WATER POLLUTION PREVENTION PLAN EROSION CONTROL PLAN

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 EROSION CONTROL 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 WIDENING AND RESURFACING 0.233 MI OF TWO LANE HIGHWAY IN CARROLL COUNTY. CONSTRUCTION CONSIST OF CONSTRUCTING CULVERTS, WIDENING, BITUMINOUS RESURFACING, PLACING BITUMINOUS, AGGREGATE SHOULDERS AND GRADING AND OTHER MISCELLANEOUS WORK.

DESCRIPTION OF INTENDED SEQUENCE OF ACTIVITIES:

THE SEQUENCE OF EVENTS ARE AS FOLLOW: DRAINAGE STRUCTURES, EMBANKMENT, EXCAVATION, GRADING AND PAVING.

THIS PROJECT WILL BE CONSTRUCTED IN SEGMENTS AS SHOWN IN THE MAINTENANCE OF TRAFFIC PLAN AND SPECIAL PROVISIONS.

TOTAL CONSTRUCTION SITE (CONSTRUCTION LIMIT TO CONSTRUCTION LIMIT): 3.1 ACRES. PROPOSED R.O.W (TOTAL PARCEL AREA): 1.8 ACRES.

DISTURBED BY EXCAVATION (E.O.P TO CONSTRUCTION LIMIT): 2.2 ACRES.

SUPPORTING REPORTS AND PLANS
THE FOLLOWING ASSISTED IN DEVELOPING THE EROSION CONTROL PLAN AS REFERENCED DOCUMENTS:

FIELD REVIEWS, PROJECT DESIGN REPORT, HYDRAULIC REPORT USGS DRAINAGE MAPS, PROJECT PLAN DOCUMENTS

DRAINAGE TRIBUTARIES RECEIVING WATER FROM CONSTRUCTION SITE: TRIBUTARY TO ELKHORN CREEK

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:

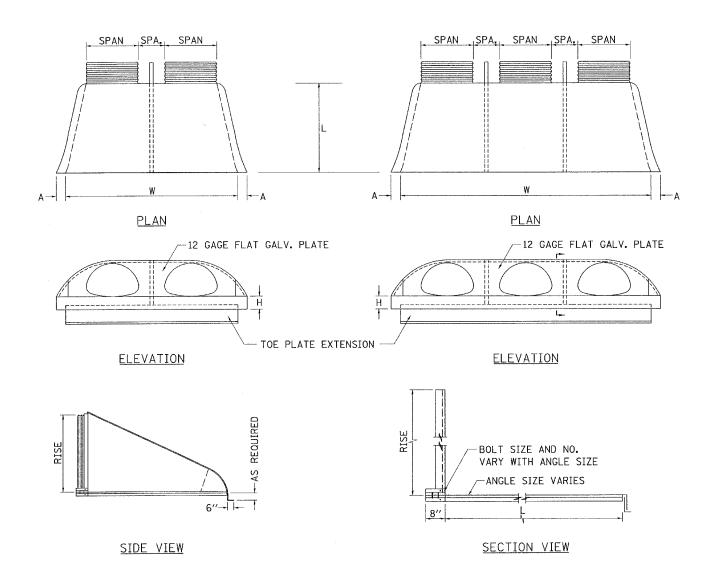
AS EARTH EXCAVATION AND EMBANKMENT ARE BEING COMPLETED THE CONTRACTOR SHALL PLACE DITCH CHECKS, INLET AND PIPE PROTECTION, EROSION CONTROL BLANKET, AND TEMPORARY EROSION CONTROL SEEDING AS STAGES OF THE PROJECT ARE COMPLETED. PERIMETER EROSION BARRIER WILL BE INSTALLED AT ADDITIONAL LOCATIONS AS THE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

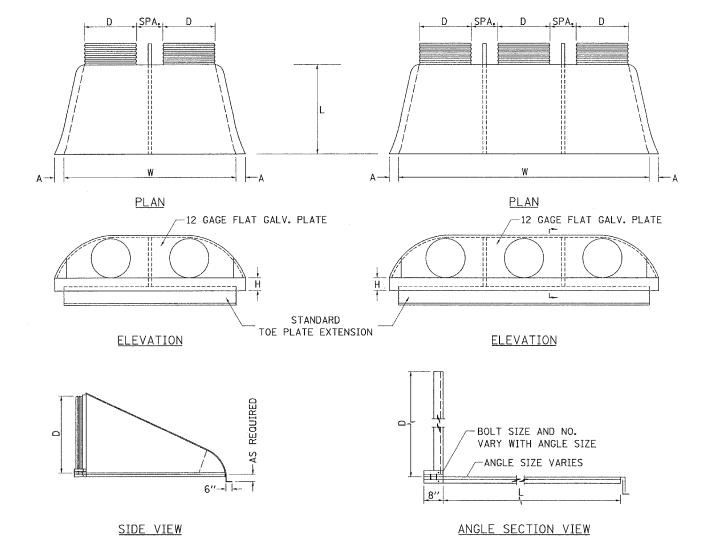
MAINTENANCE AFTER FINAL GRADING

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.

CORRUGATED STEEL PIPE MULTIPLE END SECTIONS

		CC	NTR/	СТ	NO.	64	897
 F.A.P. RTE.	SECTION		COUNT	Υ	TOT	AL TS	SHEET NO.
17	16-T		CARRO	LL	4	7	24
STA.		TO	STA.				
FED. RO	AD DIST, NO.	ILLINOIS	FED.	AID	PROJ	ECT	





		~~~		PIPE-A	ARCH.					
MULTIPLE INLET END SECTIONS										
SPAN x RISE	EQUIV.	0.4.0.	SPA.	Α	Н	L	DOUBLE	TRIPLE	REINFORCING	
2-2/3" x 1/2"	ROUND	GAGE	(in)	(in)	(in)	(in)	W	W	ANGLE	
17 × 13	15	16	12	61/2	6	20	59	88	2 × 2 × 1/4	
21 × 15	18	16	12	71/2	6	24	69	102	2 x 2 x 1/4	
$24 \times 18$	21	16	12	8	6	28	78	114	2 x 2 x 1/4	
28 x 20	24	16	12	8	6	32	88	128	5 x 3 x 1/4	
$35 \times 24$	30	14	12	10	6	39	107	154	5 x 3 x 1/4	
$42 \times 29$	36	14	14	12	71/2	46	131	187	$5 \times 3 \times \frac{1}{4}$	
49 × 33	42	12	17	131/2	9	53	150	216	5 × 3 × 1/4	
$57 \times 38$	48	12	19	181/2	12	62	166	242	6 x 4 x 3/8	
64 × 43	54	12	22	18	12	69	188	274	$6 \times 4 \times \frac{3}{8}$	
71 × 47	60	12/10	24	181/2	12	77	209	304	$6 \times 4 \times \frac{3}{8}$	
$77 \times 62$	66	12/10	26	18	12	77	229	332	6 × 4 × 3/8	
83 × 67	72	12/10	28	18	12	77	243	354	$6 \times 4 \times \frac{3}{8}$	
SPAN x RISE	EQUIV.	CACE	SPA.	Α	Н	L	DOUBLE	TRIPLE	REINFORCING	
3"x1" & 5"x1"	ROUND	GAGE	(în)	(în)	(in)	(in)	W	W	ANGLE	
60 × 46	54	12	20	18	12	70	182	262	$6 \times 4 \times \frac{3}{8}$	
66 × 51	60	12/10	22	18	12	77	202	290	6 × 4 × %	
$73 \times 55$	66	12/10	25	18	12	77	224	322	6 × 4 × 3/8	
81 x 69	72	12/10	27	18	12	77	246	354	6 × 4 × 3/8	

ROUND PIPE									
MULTIPLE INLET END SECTIONS									
PIPE DIA. (D)	GAGE	SPA.	Ā	Н	L	DOUBLE	TRIPLE	REINFORCING	
(in)	UAUL	(in)	(in)	(in)	(In)	W	W	ANGLE	
12	16	12	61/2	6	21	48	72	2 x 2 x 1/4	
15	16	12	71/2	6	26	57	84	2 × 2 × 1/4	
18	16	12	8	6	31	66	96	2 x 2 x 1/4	
21	16	12	10	6	36	75	108	2 × 2 × 1/4	
24	16	12	10	6	41	84	120	5 × 3 × 1/4	
30	14	15	121/4	8	51	102	147	5 x 3 x 1/4	
36	14	18	$14\frac{1}{2}$	9	60	126	180	5 × 3 × 1/4	
42	12	21	17	$10\frac{1}{2}$	69	147	210	5 × 3 × 1/4	
48	12	24	181/2	12	79	162	234	6 × 4 × 1/16	
54	12	27	181/2	12	84	183	264	6 × 4 × 1/16	
60	12/10	30	18	12	88	204	294	6 × 4 × 1/16	
66	12/10	33	18	12	87	219	318	6 × 4 × 1/16	
72	12/10	36	18	12	881/2	228	336	6 × 4 × 1/16	
78	12/10	36	18	12	871/2	252	366	6 × 4 × 1/16	
84	12/10	36	18	12	871/2	254	384	6 × 4 × 1/16	

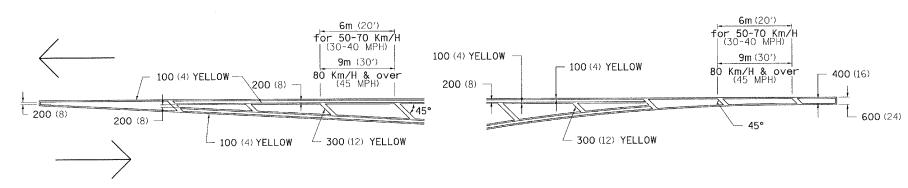
NOTE: ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED

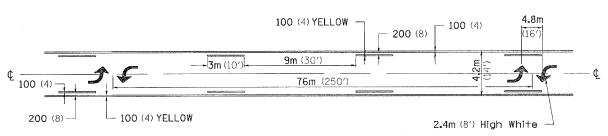
# TYPICAL PAVEMENT MARKINGS

COUNTY TOTAL SHEET NO. SECTION CARROLL 47 25 STA. TO STA. FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT

## TYPICAL PAVEMENT MARKING FOR FLUSH MEDIAN AT LEFT TURN LANE

## MEDIAN PAVEMENT MARKING

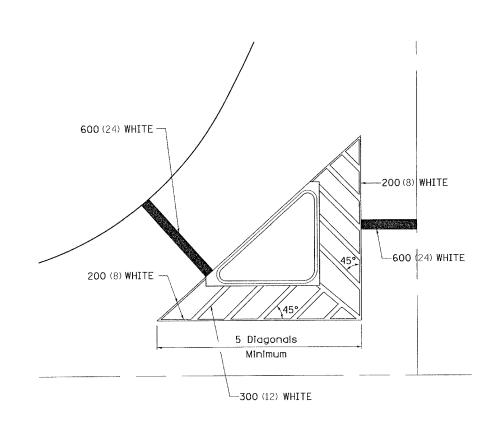


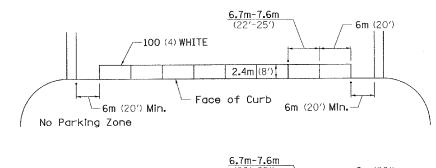


## TYPICAL ISLAND OFFSET SHOULDER WIDTH

## TYPICAL PARKING SPACING

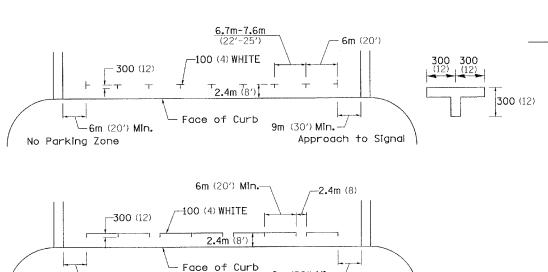
** ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.





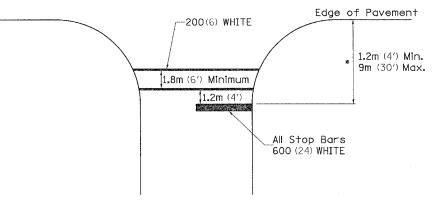
└**_6m** (20′) **Min**.

No Parking Zone

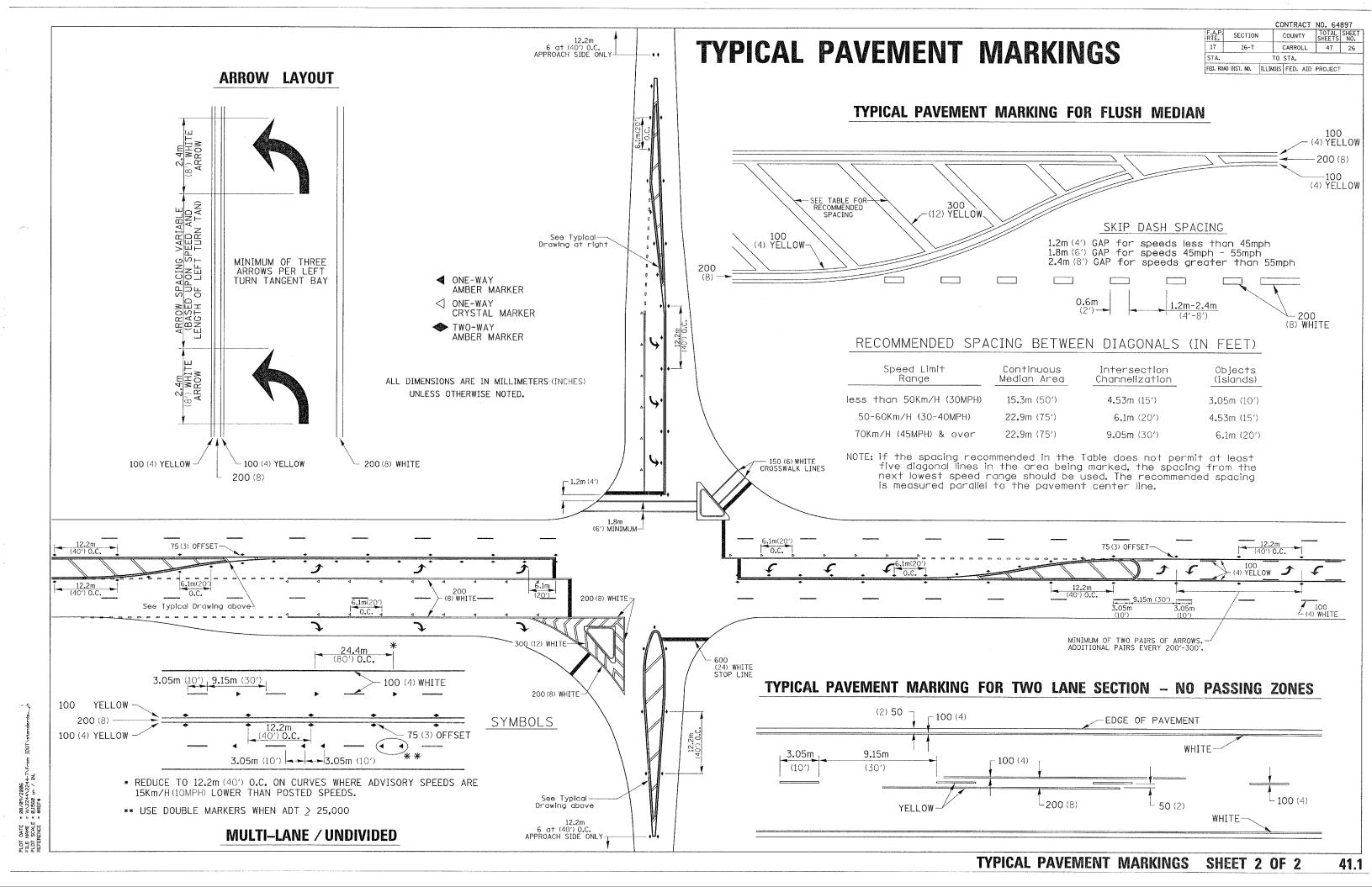


6m (20') Min.-

## STANDARD CROSSWALK MARKING See Schedules for Locations



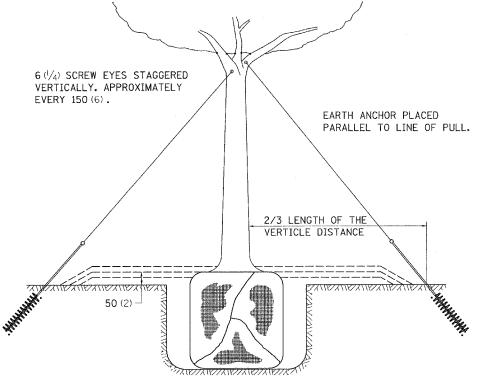
* Distance to the nearest edge of the intersecting roadway in the absence of a marked crosswalk.



DETAILS OF PLANTING AND BRACING TREES

SMALL	Α	В	С	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)	<b>750</b> (30)	100 (4)	300 (12)	0.41 (0.54)
1.5-1.8m (5'-6') BB	400 (16)	250 (10)	<b>750</b> (30)	100 (4)	300 (12)	0.41 (0.54)
1.8-2.0m (6'-7') BB	450 (18)	300 (12)	<b>750</b> (30)	100 (4)	350 (14)	0.41 (0.54)
2.0-2.4m (7'-8') BB	500 (20)	275 (11)	<b>750</b> (30)	100 (4)	<b>325</b> (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)	<b>375</b> (15)	900 (36)	100 (4)	425 (17)	0.47 (0.61)

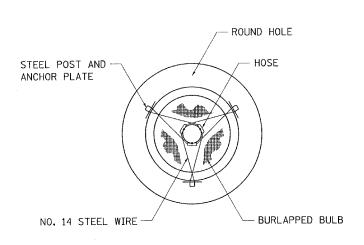
LARGE	А	В	С	D	E	F
TREE SIZE	DIAMETER OF BALL OR ROOT SYS.	DEPTH OF HOLE EXCAVATION	WIDTH OF HOLE EXCAVATION	THICKNESS OF MULCH COVER	DEPTH OF BALL OR ROOT SYS.	VOLUME OF MULCH COVER m ³ (CU. YDS.)
0-50 (0-2)	500 (20)	275 (11)	900 (36)	100 (4)	<b>325</b> (13)	0.47 (0.61)
50-65 (2-2 ¹ / ₂ )BB	600 (24)	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)	<b>475</b> (19)	0.60 (0.78)
75-90 (3-3 ¹ / ₂ ) BB	800 (32)	425 (17)	<b>1500</b> (60)	100 (4)	475 (19)	0.73 (0.96)
90-100 (3½-4) BB	900 (36)	500 (20)	<b>1500</b> (60)	100 (4)	<b>550</b> (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 (41/2-5) BB	1100 (44)	600 (24)	1800 (72)	100 (4)	650 (26)	0.89 (1.16)
125-140 (5-5 ¹ / ₂ ) BB	1200 (48)	<b>675</b> (27)	2100 (84)	100 (4)	<b>725</b> (29)	1.06 (1.38)

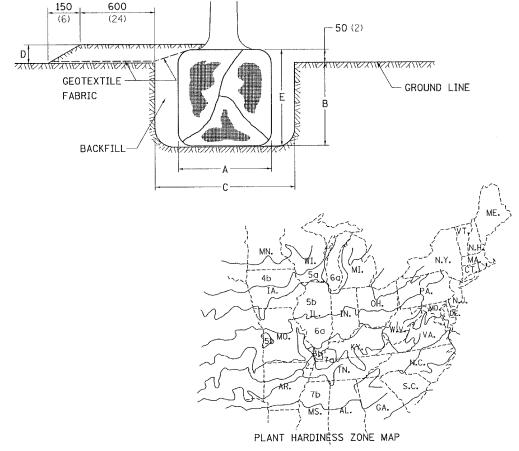


FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

TREES SMALLER THAN 115 (41/2) IN DIAMETER

450 (18)





EQUAL DISTANCE

TREE TRUNK

ROUND HOLE

FOUND HOLE

SOURCE HOLE

ROUND HOLE

FOUND HOLE

BURLAP BULB

NO. 12 STEEL WIRE

TREES OVER 115  $(4\frac{1}{2})$  IN DIAMETER

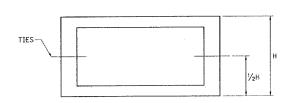
U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL RESEARCH SERVICE PUBLICATION NO. 814

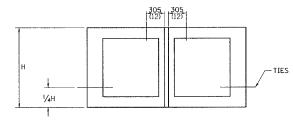
ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.

COUNTY

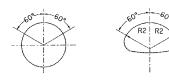
CARROLL 47 28

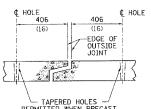
THE CULVERT TIES SHALL BE INCLUDED IN THE COST OF THE CONCRETE PIPE CULVERTS OR THE PRECAST CONCRETE BOX CULVERT, THE MECHANICAL TIES SHALL BE ON THE OUTSIDE OF THE CULVERT. THE NUTS AND WASHERS SHALL BE PLACED ON THE INSIDE OF OF THE CULVERT AND COVERED WITH MASTIC JOINT SEALER CONFORMING TO ARTICLES 1055 OR 1056 IN THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.





WELD COUPLER TO BOLT -

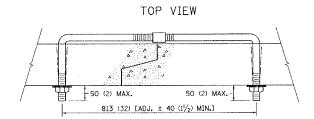




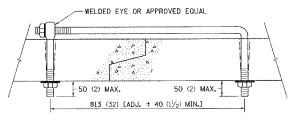
¢ HOLE 1 406	¢ HOLE
(16)	(16)
	EDGE OF OUTSIDE JOINT
TAPERED PERMITTED WH	

PLACEMENT OF HOLES						
BOX CULVERT METERS (FEET)	PIPE SIZE MILLIMETERS (INCHES)	THREAD DIAMETER				
	300 (12) 380 (15) 450 (18) 530 (21) 600 (24) 680 (27)	16 (5%) ROLLED THREADS (SEE NOTE 4)				
0,9x0.6 (3x2) 0,9x0.9 (3x3) 1,2x0.6 (4x2) 1,2x0.9 (4x3) 1,2x1.2 (4x4) 1,5x0.9 (5x3) 1,5x1.2 (5x4)	760 (30) 830 (33) 910 (36) 1060 (42) 1210 (48) 1370 (54) 1520 (60) 1670 (66)	19 (¾) CUT OR ROLLED				
1.5x1.5 (5x5) 1.8x • (6x •) 2.ix • (7x •) 2.4x • (8x •) 2.7x • (9x •) 3.0x • (10x •)	1820 (72) 1980 (78) 2130 (84) 2280 (90) 2430 (96) 2590 (102) 2740 (108) 3040 (120) 3350 (132)	25 (1) CUT OR ROLLED				
3.4X * (11X *) AND GREATER	3500 (138) AND GREATER	35 (1 ¹ / ₄ )				

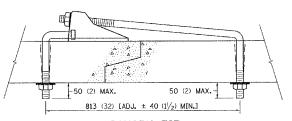
- 1. HOLES SHALL BE CAST-IN OR DRILLED 400 (16) FROM OUTSIDE EDGE OF JOINT.
- 2. NUTS AND WASHERS ARE NOT REQUIRED ON INSIDE OF 675 (27) DIAM. PIPE OR LESS.
- 3. TIES ARE NOT REQUIRED FOR BELL PIPE 600 (24) AND SMALLER. ON OTHER SIZES TIE MAY BE INSERTED FROM INSIDE.
- 4. CUT THREADS MAY BE USED IF WASHER AND NUT
- 5. PIPE SIZE LISTED IS INSIDE DIAM. OF ROUND PIPE OR EQUIVALENT DIAM. OF PIPE ARCH OR ELLIPTICAL.
- 6. GALVANIZING OF TIES IS REQUIRED.
- 7. ALL DIMENSIONS ARE IN MILLIMETERS (INCHES)



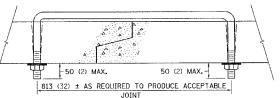
ADJUSTABLE TIE



EYE BOLT TIE

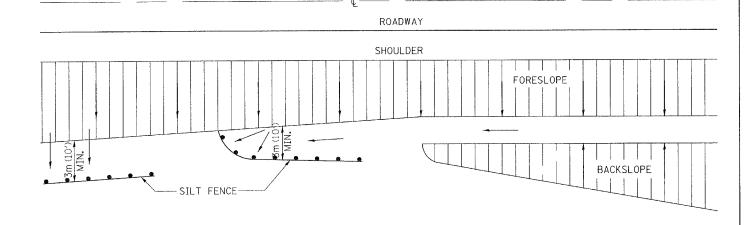


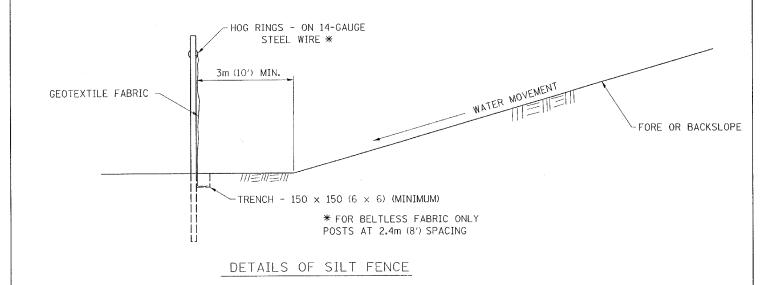
CANOPY TIE



U BOLT TIE

# EROSION CONTROL DETAILS FOR SILT FENCE



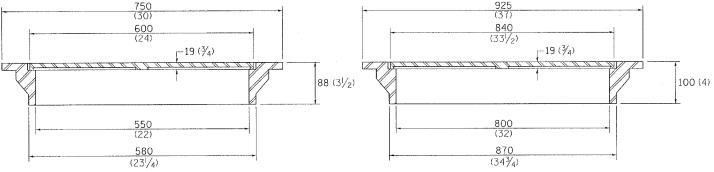


ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.

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



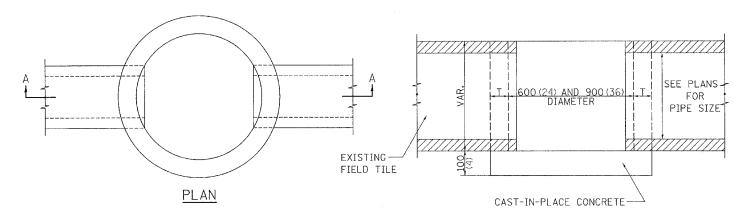
FRAME & LID FOR 900 (36) VAULT



TOTAL WEIGHT: 66 Kg (146 lbs)

TOTAL WEIGHT: 127 Kg (280 lbs)

SECTION A-A



para de la constanta de la con

ALTERNATE MATERIALS FOR WALLS

BRICK MASONRY

CAST-IN-PLACE CONCRETE

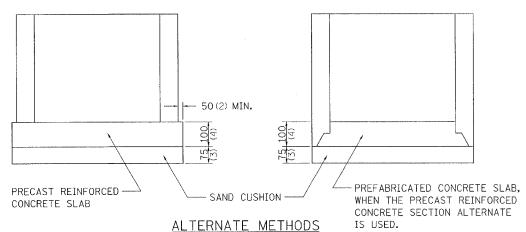
CONCRETE MASONRY UNIT

PRECAST REINFORCED CONCRETE SECTION

75 (3)

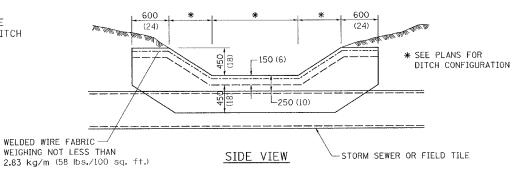
NOTE: THE FRAME AND LID IS REQUIRED ON ALL JUNCTION VAULTS.

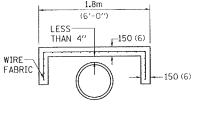
ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.



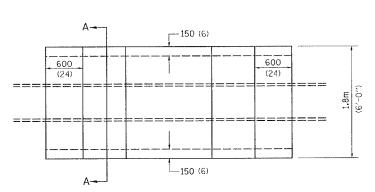
### PAVED DITCH

TO BE USED IF COVER OVER THE PIPE AT THE BOTTOM OF THE DITCH IS LESS THAN 250mm (10 Inches)





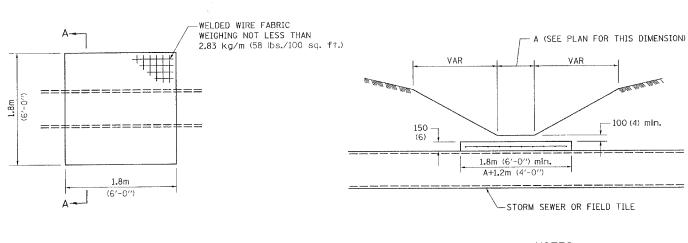
SECTION A-A



#### PLAN VIEW

## CONCRETE SLAB

TO BE USED IF COVER OVER THE PIPE AT THE BOTTOM OF THE DITCH IS 250mm (10 inches) TO 600mm (24 inches)



# 150 — 1.8m (6'-0'') WIRE FABRIC

#### SECTION A-A

## NOTES

THIS WORK SHALL BE DONE IN ACCORDANCE WITH ARTICLE 611.04 OF THE STANDARD SPECIFICATION.

THE CONCRETE SLAB AND PAVED DITCH WILL BE PAID FOR AT THE CONCRETE UNIT PRICE PER CUBIC METER (CUBIC YARD) FOR MISCELLANEOUS CONCRETE.

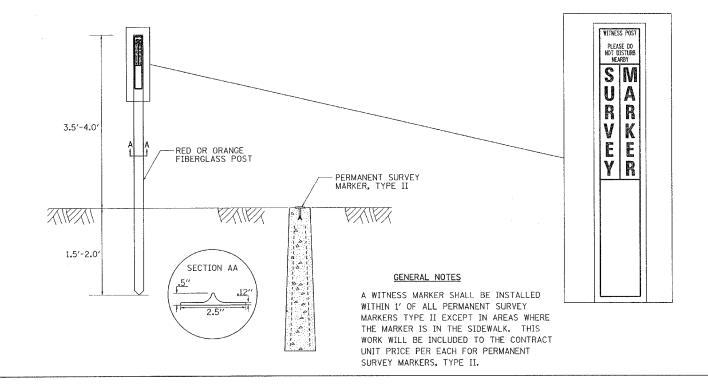
ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.

31.2

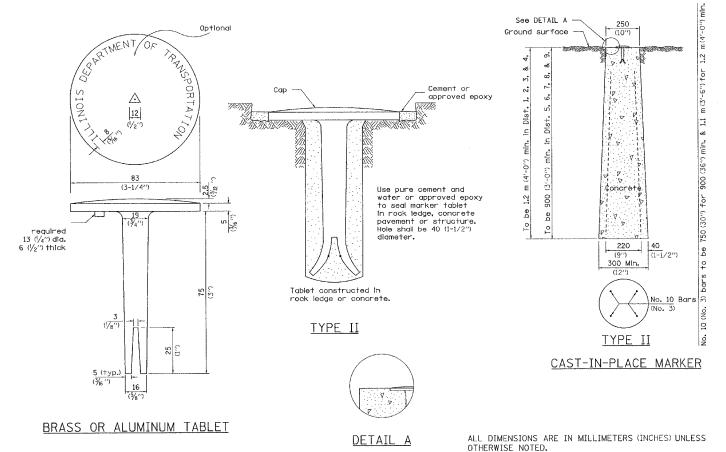
# WITNESS MARKER FOR PERMANENT SURVEY MARKERS, TYPE II

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.			
17	16-T	CARROLL	47	30			
STA.	STA. TO STA.						
FFD. ROA	AD DIST, NO. TILLIN	IOIS FED. AID	PROJECT	-			

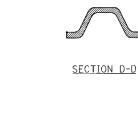
CONTRACT NO. 64897

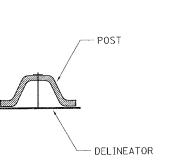


## PERMANENT SURVEY MARKERS, TYPE II



## **DELINEATOR AND** POST ORIENTATION





DELINEATORS SHALL BE INSTALLED ACCORDING TO STANDARD 635001 EXCEPT THAT THE POST SHALL BE ROTATED 180°. THE POST WILL HAVE THE WIDE SIDE FACING TRAFFIC AND THE DELINEATOR ATTACHECD AS SHOWN ABOVE.

DIRECTION OF TRAFFIC

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

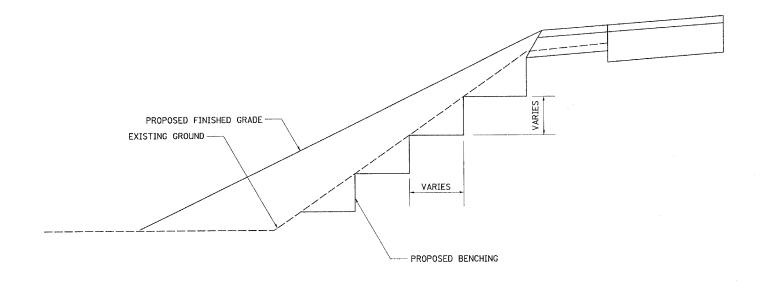
## **DELINEATOR AND POST ORIENTATION**

37.4

# TYPICAL BENCHING ON EXISTING EMBANKMENT

TOTAL SHEET SHEETS NO. SECTION COUNTY CARROLL 47 STA. TO STA. FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

CONTRACT NO. 64897

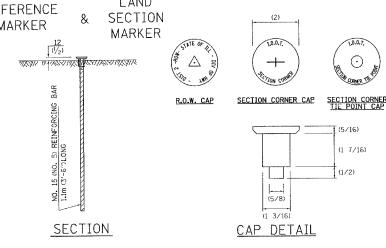


TYPICAL BENCHING ON EXISTING EMBANKMENT

50.4

REVISED 2-22-06

## LAND SECTION & REFERENCE MARKERS

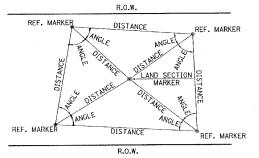


AND 1/4 SECTION CORNERS. WHERE LAND SECTION MARKERS FALL IN THE SHOULDERS OR GRAVEL SURFACES, THE TOP OF THE BAR SHALL BE KEPT 75(3) BELOW THE SURFACE, LAND

METAL CAPS SHALL BE PLACED ON TOP OF THE REINFORCEMENT BAR. THERE ARE 3 TYPES METAL CAPS SHALL BE PLACED ON TOP OF THE REINFUNCEMENT DAN. THERE ARE STIFLE OF CAPS, ONE FOR THE RIGHT-OF-WAY CORNERS, ONE FOR THE SECTION CORNERS AND ONE FOR THE SECTION CORNER TIE POINTS. THE CAPS WILL BE SUPPLIED BY IDOT, CALL CHIP CORDELL (815) 284-5370 A MINIMUM OF ONE WEEK BEFORE THE CAPS ARE NEEDED

## METHOD OF REFERENCING MARKERS

REVISED 1-31-00



- USE INSTRUMENT TIES TO NEARBY LAND-MARKS (STEEPLES, TOWERS, SILOS, ETC ...)
- IN CULTIVATED FIELDS, SET 600(2') OR MORE BELOW GROUND SURFACE.
- IN FENCE LINE OR PROTECTED AREA SET TOP AT GROUND LEVEL.

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

63.4

REVISED 4-22-05

# LAND REFERENCE MARKER

## METHOD OF REFERENCING POINTS

REFERENCE MARKERS SHALL BE USED TO TIE IN PERMANENT LAND SECTION SECTION MARKERS LOCATED IN TRAFFIC LANES SHALL NOT BE REPLACED.

## LAND SECTION & REFERENCE MARKERS

