



### INDEX OF SHEETS

\* 00-00220-06-RS

### SUMMARY OF QUANTITIES

CODE NO.	ITEM	UNIT	QUANTITY
20200100	EARTH EXCAVATION	CU YD	134
20400800	FURNISHED EXCAVATION	CU YD	73
20800150	TRENCH BACKFILL	CU YD	67
21400100	GRADING AND SHAPING DITCHES	FOOT	460
25000100	SEEDING, CLASS 1	ACRE	0.6
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	54
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	54
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	54
25100115	MULCH, METHOD 2	ACRE	0.6
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	500
28000300	TEMPORARY DITCH CHECKS	EACH	10
28000500	INLET AND PIPE PROTECTION	EACH	10
35100100	AGGREGATE BASE COURSE, TYPE A	TON	189
40200800	AGGREGATE SURFACE COURSE, TYPE B	TON	496
42000300	PORTLAND CEMENT CONCRETE PAVEMENT 8"	SQ YD	1478
42300200	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 6 INCH	SQ YD	115
42400100	PORTLAND CEMENT CONCRETE SIDEWALK 4 INCH	SQ FT	292
42400800	DETECTABLE WARNINGS	SQ FT	43
44000600	SIDEWALK REMOVAL	SQ FT	135
44201305	CLASS C PATCHES, TYPE II, 6 INCH	SQ YD	35
44201309	CLASS C PATCHES, TYPE III, 6 INCH	SQ YD	40
44201311	CLASS C PATCHES, TYPE IV, 6 INCH	SQ YD	324
44213200	SAW CUTS	FOOT	580
48100100	AGGREGATE SHOULDERS, TYPE A	TON	619
542D0217	PIPE CULVERTS, CLASS D, TYPE 1 12"	FOOT	732
542D0220	PIPE CULVERTS, CLASS D, TYPE 1 15"	FOOT	154
542D0223	PIPE CULVERTS, CLASS D, TYPE 1 18"	FOOT	104
542D0229	PIPE CULVERTS, CLASS D, TYPE 1 24"	FOOT	210
542D0241	PIPE CULVERTS, CLASS D, TYPE 1 36"	FOOT	34
542D0247	PIPE CULVERTS, CLASS D, TYPE 1 42"	FOOT	50
550B0030	STORM SEWERS, CLASS B, TYPE 1 8"	FOOT	146
56109210	WATER VALVES TO BE ADJUSTED	EACH	4
60236200	INLETS, TYPE A, TYPE 8 GRATE	EACH	1
60255500	MANHOLES TO BE ADJUSTED	EACH	7
67000500	ENGINEER'S FIELD OFFICE, TYPE B	CAL MO	5
67100100	MOBILIZATION	L SUM	1
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1
70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1
70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	8
70300100	SHORT-TERM PAVEMENT MARKING	FOOT	444
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	147
* 78005110	EPOXY PAVEMENT MARKING - LINE 4"	FOOT	9836
* 78005130	EPOXY PAVEMENT MARKING - LINE 6"	FOOT	40
* 78005180	EPOXY PAVEMENT MARKING - LINE 24"	FOOT	39
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	109
Z0010700	COLD MILLING	SQ YD	9783
Z0048900	RAILROAD TRACK REMOVAL	FOOT	30
Z0062000	SAW CUTTING	FOOT	102
Z0070200	SURVEY MONUMENTS	EACH	1
XX007371	PORTLAND CEMENT CONCRETE PAVEMENT, FURNISHED	CU YD	1370
XX007372	PORTLAND CEMENT CONCRETE PAVEMENT, 5" PLACEMENT	SQ YD	9783
XX008173	PORTLAND CEMENT CONCRETE SHOULDER, 5"	SQ YD	397

\* SPECIALTY ITEMS

#### EARTHWORK SCHEDULE

LOCATION	STATION	EARTH EXCAVATION	EARTH EX. ADJUSTED*	EMBANKMENT	EARTHWORK BALANCE
		C.Y.	C.Y.		C.Y.
CURVE #1	16+04.61 - 20+00.67	36.1	27.1	82.4	-55.3
CURVE #2	24+62.04 - 28+56.18	98.1	73.6	91.7	-18.1
TOTAL		134.2	100.7	174.1	-73.4

\*Earth excavation adjusted by shrinkage factor of 25%

PAGE	DESCRIPTION
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HIGHWAY STANDARDS	
STANDARD NUMBER	STANDARD NAME
000001-05	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
280001-04	TEMPORARY EROSION CONTROL SYSTEMS
420001-07	PAVEMENT JOINTS
424001-05	CURB RAMPS FOR SIDEWALKS
442201-03	CLASS C and D PATCHES
602301-02	INLET - TYPE A
604001-03	FRAME AND LIDS TYPE 1
604036-02	GRATE TYPE 8
701006-03	OFF - ROAD OPERATIONS 2L, 2W, 15' TO 24" FROM PAVEMENT EDGE
701201-03	LANE CLOSURE 2L, 2W, DAY ONLY FOR SPEEDS >= 45 M.P.H.
701301-03	LANE CLOSURE 2L, 2W, SHORT TIME OPERATIONS
701311-03	LANE CLOSURE 2L, 2W, MOVING OPERATIONS - DAY ONLY
701801-04	LANE CLOSURE MULTILANE 1W OR 2W CROSSWALK OR SIDEWALK CLOSURE
701901-01	TRAFFIC CONTROL DEVICES
780001-02	TYPICAL PAVEMENT MARKINGS
781001-03	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS
BLR - 21-8	TRAFFIC CONTROL DEVICES ON RURAL LOCAL HIGHWAYS
BLR 24 - 2	MAILBOX TURNOUT LOCAL ROADS
483001-04	PEC SHOULDER

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.S. 713	*	SHELBY	19	3

\* 00-00220-06-RS

**GENERAL NOTES**

WHEREVER IN THE PLANS OR SPECIFICATIONS THE TERM STANDARD SPECIFICATIONS IS USED, IT SHALL BE UNDERSTOOD BY THE CONTRACTOR TO MEAN THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AS PREPARED BY THE DEPARTMENT OF TRANSPORTATION OF THE STATE OF ILLINOIS AND ADOPTED JANUARY 1, 2007.

WHERE SECTION, SUB-SECTION MARKERS, OR U.S. ARMY CORPS OF ENGINEER MARKERS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL PROPERTY MARKERS AND MONUMENTS UNTIL THE DEPARTMENT AND AUTHORIZED AGENT OR LAND SURVEYOR HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION.

ANY REFERENCE TO STANDARDS THROUGHOUT THE PLANS SHALL BE INTERPRETED TO BE THE LATEST STANDARDS OF THE DEPARTMENT AS SHOWN ON THE SCHEDULE OF THE STANDARD DRAWINGS ON THE COVER SHEET.

FOR THE SUGGESTED SEQUENCE OF OPERATIONS SEE THE CONTRACT SPECIAL PROVISIONS.

EXISTING ROAD SIGNS THAT CONFLICT WITH CONSTRUCTION OPERATIONS SHALL BE COVERED OR REMOVED AS DIRECTED BY THE ENGINEER, THIS WORK WILL NOT BE PAID FOR SEPERATELY BUT SHALL BE INCLUDED IN THE COST OF THE CONTRACT PAY ITEMS AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED THE CONTRACTOR.

EXCEPT WHERE DESIGNATED OTHERWISE, THE LOCATIONS AND/OR DEPTHS OF UNDERGROUND UTILITIES SHOWN HAVE BEEN TAKEN FROM INFORMATION FURNISHED BY THE UTILITY OWNERS & MUST BE CONSIDERED APPROXIMATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES. CONTACT J.U.L.I.E., PHONE 800-892-0123, AND ALL UTILITY COMPANIES PRIOR TO DIGGING.

THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES 48 HOURS PRIOR TO EXCAVATION OPERATIONS.

UTILITY COMPANIES MAY BE ADJUSTING THEIR FACILITIES AT THE TIME OF CONSTRUCTION OF THIS PROJECT. THE CONTRACTOR SHALL COOPERATE WITH THESE ORGANIZATIONS WHILE THEY PERFORM THEIR WORK.

GRADING SHALL BE DONE BY HAND AROUND LIGHT POLES, UTILITY POLES, SIGN POSTS, SHRUBS, TREES, OR OTHER NATURAL OR MANMADE OBJECTS WHERE SHALLOW FILLS OR CUTS ARE ADJACENT TO THESE ITEMS. IT IS THE INTENT THAT THE LIMITS OF CONSTRUCTION BE SUCH TO PRESERVE IN THE ORIGINAL STATE AS MUCH AREA OF TEMPORARY EASEMENT AS POSSIBLE. THE DECISION AS TO ITEMS TO REMAIN IN PLACE SHALL BE DIRECTED BY THE ENGINEER. THIS WORK WILL NOT BE PAID FOR SEPARATELY, AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

EARTH STOCK PILES SHALL BE TEMPORARILY SEEDED IF THEY ARE TO REMAIN UNUSED FOR MORE THAN 14 DAYS.

TEMPORARY EROSION CONTROL MEASURES ARE TO BE IMPLEMENTED AS DIRECTED BY THE ENGINEER.

SEEDING SHALL BE DONE ON ALL AREAS THAT ARE DISTURBED BY CONSTRUCTION OPERATIONS AS DIRECTED BY THE ENGINEER. SEEDING SHALL BE PAID FOR ONLY WITHIN THE PROPOSED RIGHT-OF-WAY OR EASEMENT LIMITS. ALL AREAS DISTURBED BY THE CONTRACTOR OUTSIDE THE PROPOSED CONSTRUCTION LIMIT SHALL BE SEEDED AS DIRECTED BY THE ENGINEER, AT THE CONTRACTOR'S EXPENSE.

THE CONTRACTOR SHALL CONSULT WITH THE ENGINEER IN REGARD TO THE EXACT LENGTHS OF PIPE CULVERTS PRIOR TO ORDER

ALL STREET RETURNS SHALL HAVE RADII MEASURED TO THE EDGE OF THE PAVEMENT UNLESS OTHERS WISE NOTED ON THE PLANS.

THE CONTRACTOR SHALL SCHEDULE POURS SO THAT ACCESS IS MAINTAINED AT ALL TIMES TO THE VILLAGE OF TOWER HILL'S FIRE DEPARTMENT LOCATED AT THE INTERSECTION OF MICHGAN AND FREEMONT STREETS

MAILBOX TURNOUTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH I.D.O.T. STANARD B.L.R. 24.

THE CONTRACTOR SHALL NOTIFY THE SHELBY COUNTY HIGHWAY DEPARTMENT RESIDENT ENGINEER, THE VILLAGE OF TOWER HILL ILLINOIS AND THE SHELBY COUNTY ENGINEER 72 HOURS IN ADVANCE OF CONSTRUCTION WORK.

TRANSVERSE CONSTRUCTION JOINTS SHALL REQUIRE # 5 SMOOTH BARS 18 INCHES LONG AND AT 12 INCH CENTERS IT IS ANTICIPATED THAT TRANSVERSE CONSTRUCTION JOINTS WILL BE REQUIRED AT THE END OF EACH DAYS POUR AND AT BLOCKOUTS FOR ACCESS TO DRIVEWAYS AND SIDEROADS.

**UTILITIES**  
( FOR INFORMATION ONLY )

**TELEPHONE:** CONSOLIDATED COMMUNICATIONS  
121 SOUTH 17<sup>TH</sup> STREET  
MATTOON ILLINOIS 61938

**GAS:** AMEREN CIPS  
711 SOUTH 9<sup>TH</sup> STRRET  
MATTOON ILLINOIS 61938

**POWER:** AMEREN CIPS  
PANA ILLINOIS 62557

**CABLE TV** MEDIA COM  
TAYORVILLE ILLINOIS 62568

**WATER** VILLAGE OF TOWER HILL ILLINOIS  
P.O. BOX 20  
TOWER HILL ILLINOIS 62571

**SEWER** VILLAGE OF TOWER HILL ILLINOIS  
P.O. BOX 20  
TOWER HILL ILLINOIS 62571

**RATES OF APPLICATION**

THE FOLLOWING RATES OF APPLICATION HAVE BEEN USED IN CALCULATING PLAN QUANTITIES.

AGGREGATE SHOULDERS 2.10 TONS/CU.YD.

AGGREGATE SURFACE COURSE 2.10 TONS/CU.YD.

AGGREGATE BASE COURSE TYPE A 2.10 TONS/CU.YD.

FERTILIZER NUTRIENT = 90.0 POUNDS OF NUT. / ACRE

MULCH, METHOD 2 = 2.0 TON / ACRE

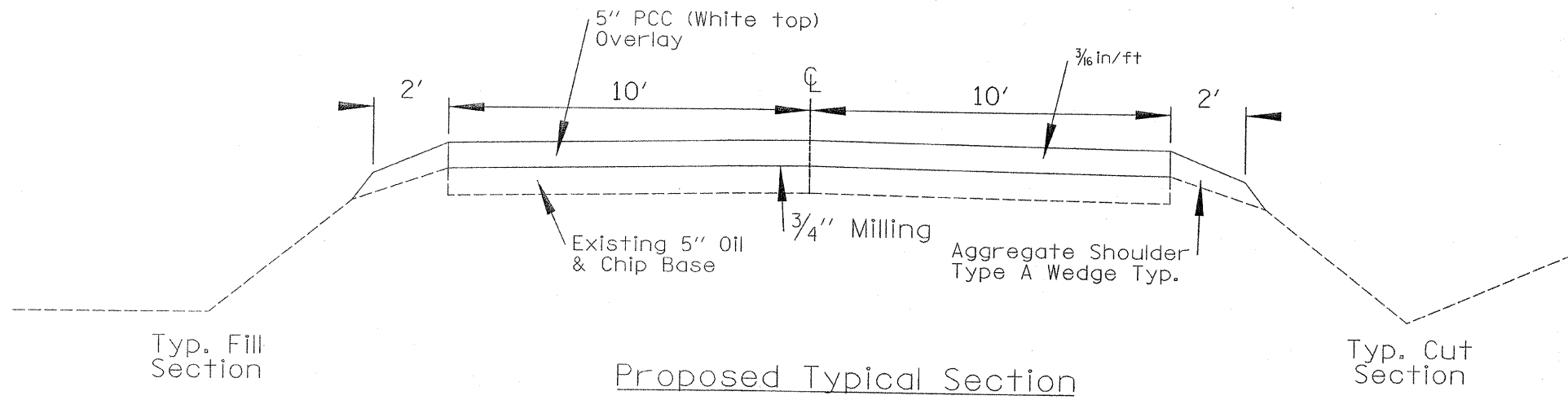
TEMPORARY EROSION SEEDING = 200.0 POUND / ACRE

CONTRACT NO. 95602

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	00-00220-06-RS	SHELBY	19	4

PROJECT NO. ARA - 0713 (III)

\* FAS - 713



STA 10+00.00 TO STA 15+04.61  
 STA 21+00.67 TO STA 23+62.04  
 STA 29+56.18 TO STA 58+68.00

PAVEMENT DESIGN DATA

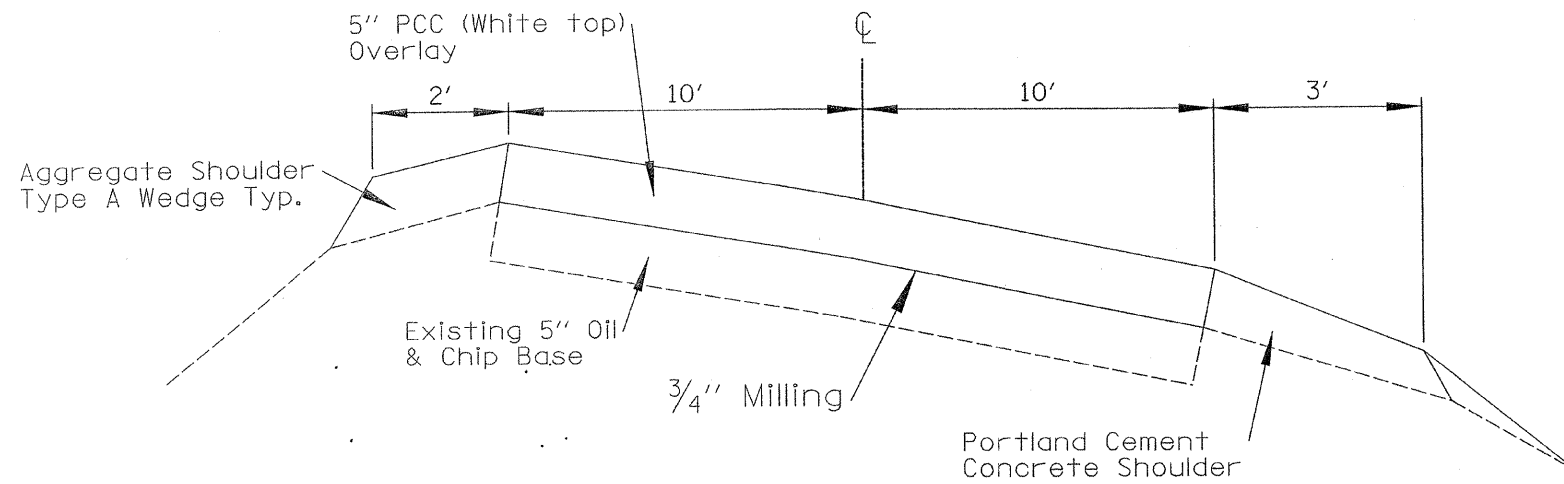
3R Guidelines

Current A.D.T. = 1250  
 Design Year = 2009  
 Design Period = 20 Years  
 Design A.D.T. = 1650  
 Pu = 94.8%  
 Su = 4.2%  
 Mu = 1.0%  
 Design Speed = 30 m.p.h.

SHELBY COUNTY  
 IN TOWN TOWER HILL  
 SECTION 00-00220-06-RS

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	00-002200-06-RS	SHELBY	19	5

PROJECT NO. ARA - 0713 (111)  
 \* FAS - 713

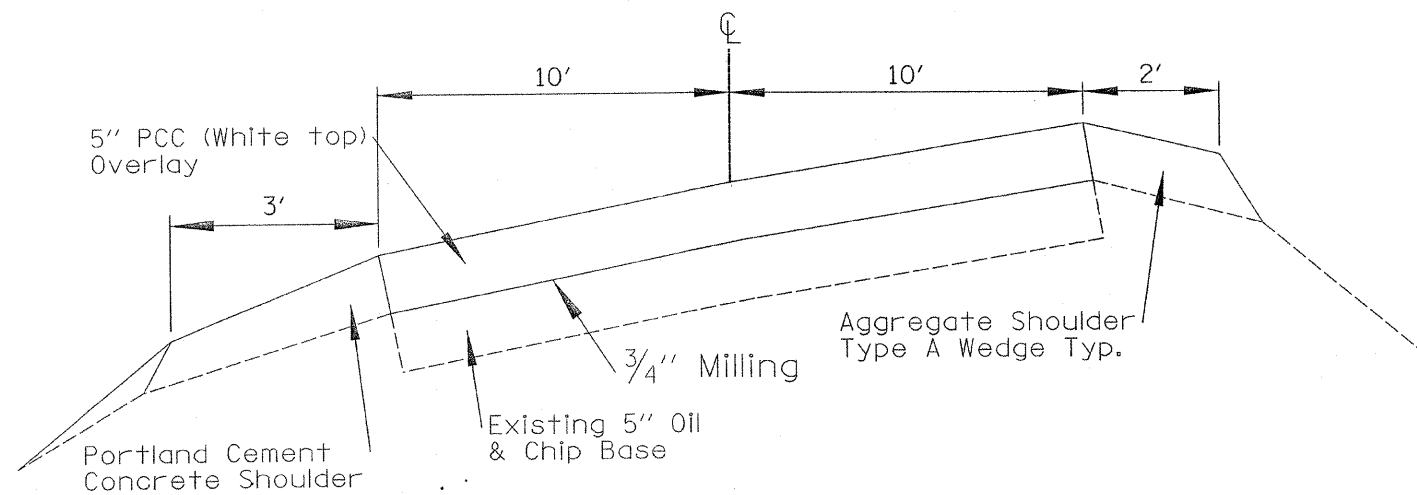


Proposed Typical Section

STA 15+04.67 TO STA 21+00.67

CURVE #1

PI STA = 18+58.00  
 $\Delta = 90^\circ 46' 16''$   
 R = 250.00  
 T = 253.39  
 E = 105.95  
 D =  $22^\circ 55' 06''$   
 L = 396.06  
 PC STA = 16+04.61  
 PT STA = 20+00.67  
 SE = 0.08 FT/FT  
 TRANSITION LENGTH = 150.00'  
 ATTAIN SE = 15+04.61 TO 16+54.61  
 REMOVE SE = 19+50.67 TO 21+00.67



Proposed Typical Section

STA 23+62.04 TO STA 29+56.18

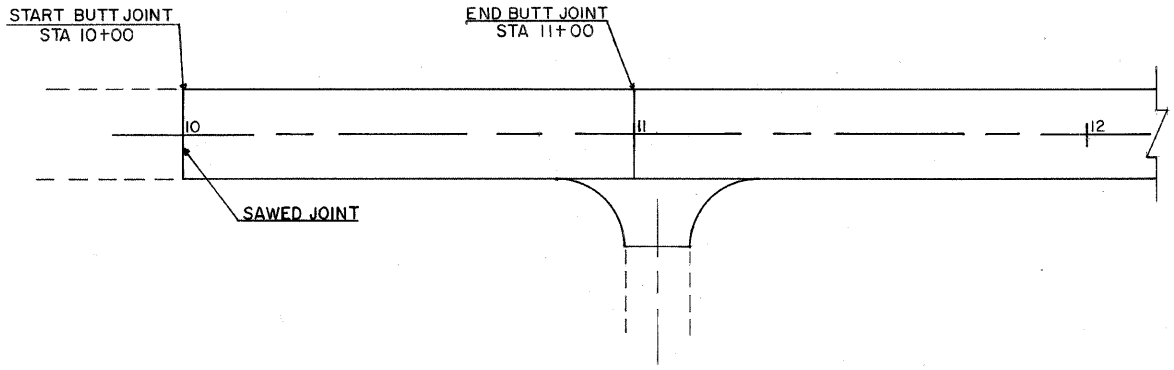
CURVE #2

PI STA = 27+13.48  
 $\Delta = 90^\circ 19' 46''$   
 R = 250.00  
 T = 251.44  
 E = 104.57  
 D =  $22^\circ 55' 06''$   
 L = 394.14  
 PC STA = 24+62.04  
 PT STA = 28+56.18  
 SE = 0.08 FT/FT  
 TRANSITION LENGTH = 150.00'  
 ATTAIN SE = 23+62.04 TO 25+12.04  
 REMOVE SE = 28+06.18 TO 29+56.18

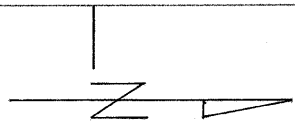
Portland Cement Concrete Shoulder - 5"		
STA. to STA.	O/S	Quantity
15+04.67 to 21+00.67	10' RT to 13' RT	199
23+62.04 to 29+56.18	10' LT to 13' LT	198
	Total	397

SHELBY COUNTY  
 IN TOWN TOWER HILL  
 SECTION 00-00220-06-RS

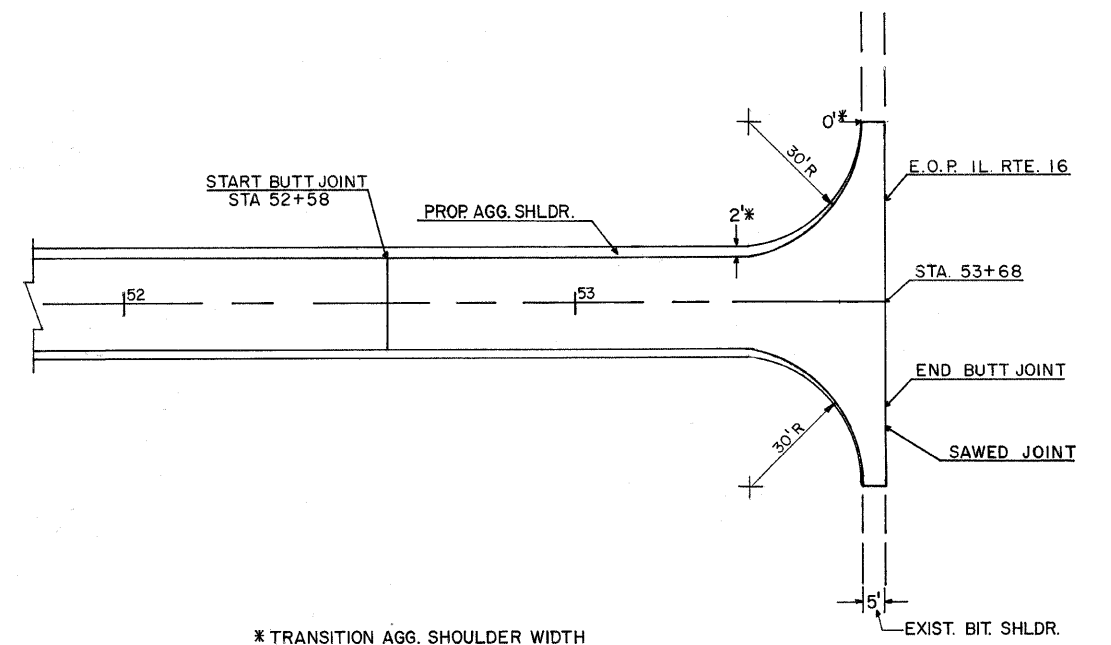
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 BY: \_\_\_\_\_  
 CHECKED: \_\_\_\_\_  
 IN CHARGE: \_\_\_\_\_  
 NOTE: LOOK AT ADJACENT SHEETS.  
 NO. \_\_\_\_\_



SOUTH BUTT JOINT STA. 10+00 - STA. 11+00



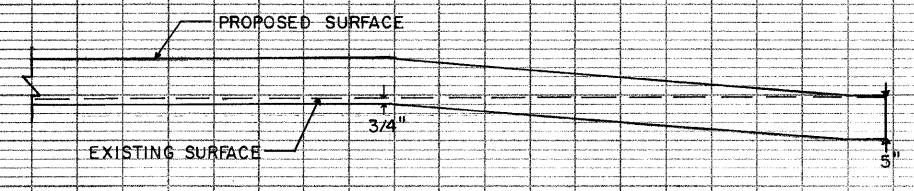
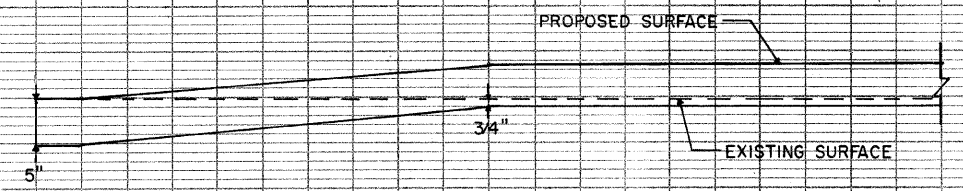
(SEE SPECIAL PROVISIONS)



NORTH BUTT JOINT STA. 52+58 - STA. 53+68

\* TRANSITION AGG. SHOULDER WIDTH THROUGH RADIUS (Typ.)

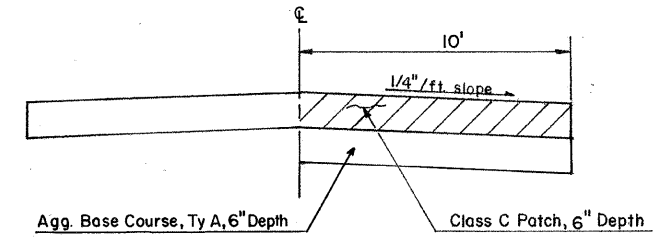
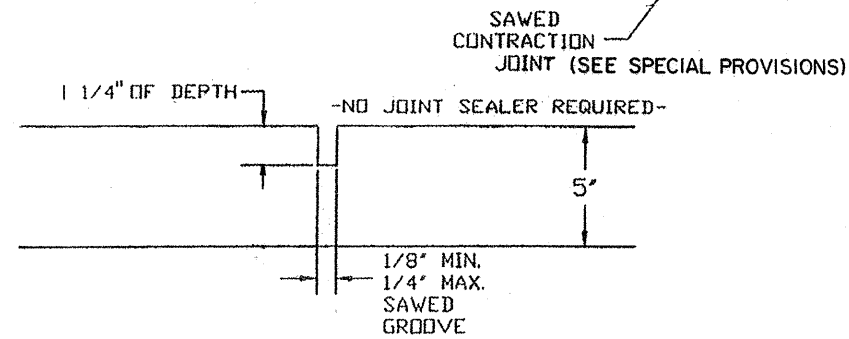
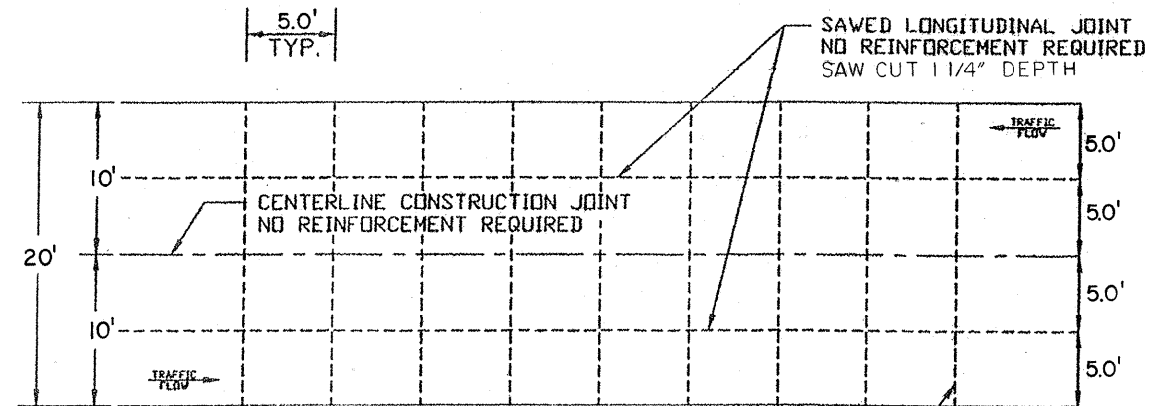
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 NO. \_\_\_\_\_



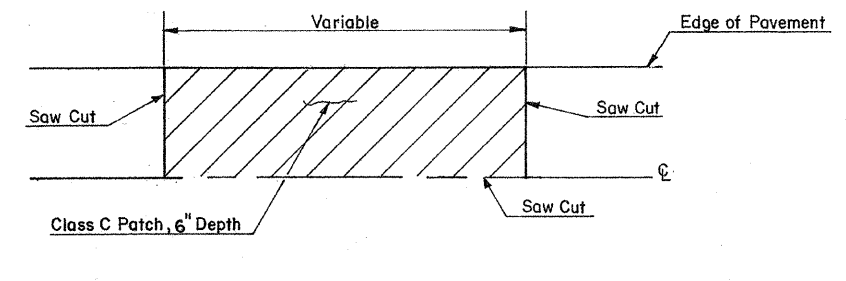
\* FAS 713

## CONTRACTION / CONSTRUCTION JOINTS

STA 10+00 TO STA 53+68



TYPICAL CROSS SECTION



PLAN VIEW

CLASS C PATCH DETAILS

### MAINLINE PAVEMENT PATCHING

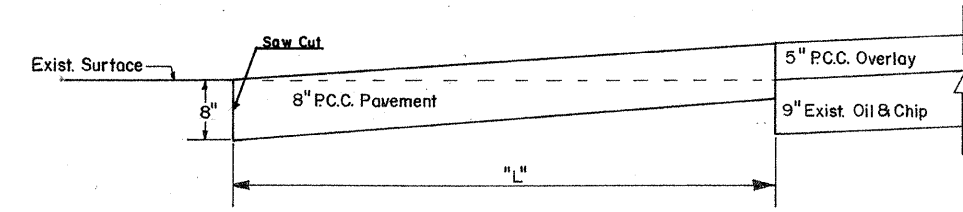
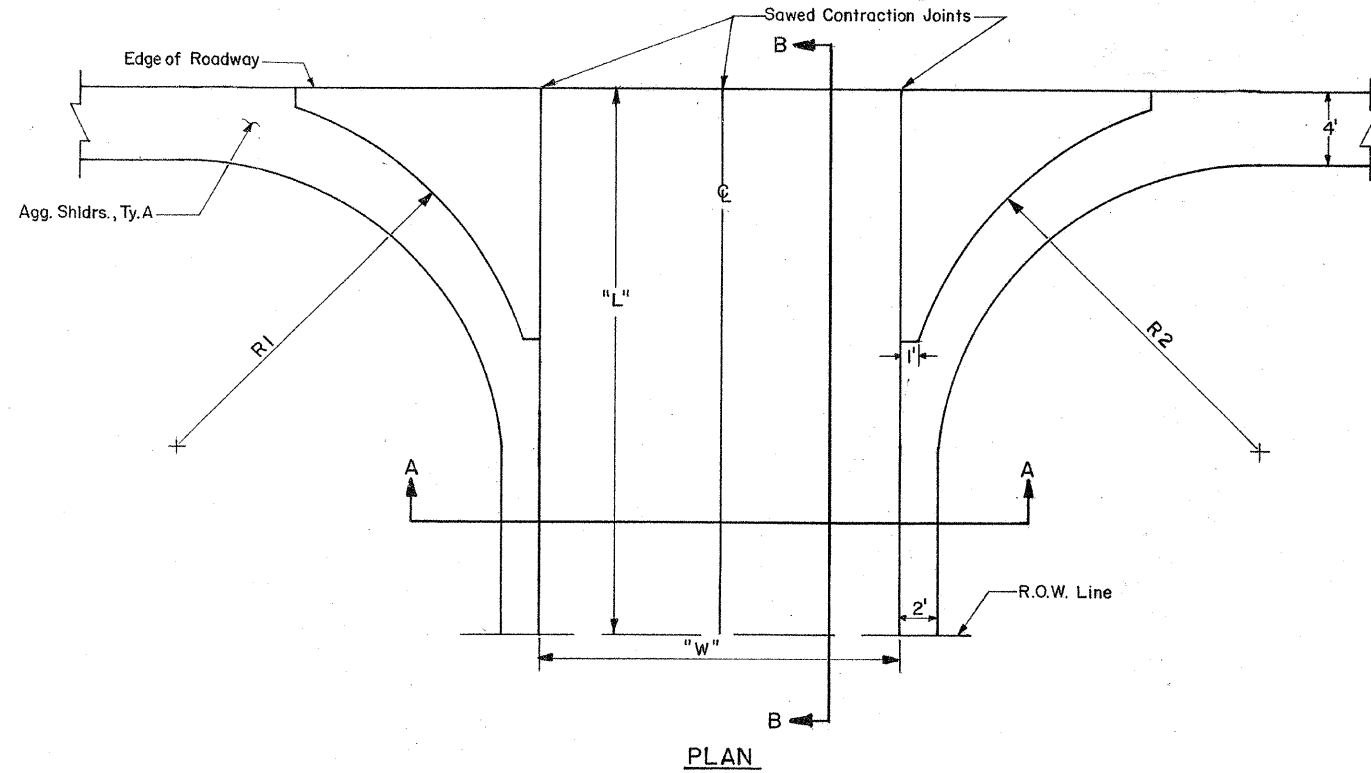
STATION	OFFSET	CL C PATCHING (SY)		AGG. BASE TY A (TONS)	SAW CUTTING (FEET)
		TY III	TYPE IV		
34+02 - 34+24	RT	24.4		8.6	42
34+75.5 - 35+30.5	RT		61.1	21.4	75
38+48 - 38+73	LT & RT		55.6	19.4	40
42+60 - 43+18	LT		64.4	22.6	78
43+81 - 44+26	LT		50.0	17.5	65
51+94 - 52+78	RT		93.3	32.7	104
TOTAL		24.4	324.4	171.6	404

### PAVEMENT PATCHING AT PIPE CULVERTS

STATION	CL C PATCHING (SY)		AGG. BASE TY A (TONS)	SAW CUTTING (FEET)
	TYPE II	TYPE III		
11+05		15.6	5.4	56
14+80	14.4		5.1	40
17+65	11.1		4.0	40
45+38	9.4		3.4	40
TOTAL	34.9	15.6	17.9	176

SHELBY COUNTY  
P.C.C. OVERLAY  
DETAILS

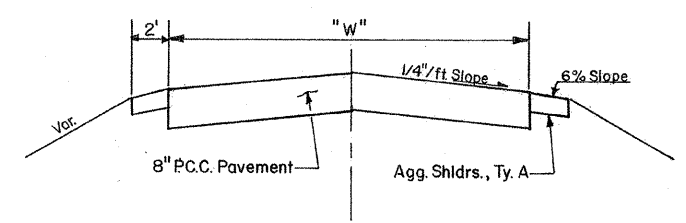
PROPOSED TYPICAL SIDEROAD



SECTION B-B

**SIDE ROAD SCHEDULE**

STATION	O/S	TYPE	PCC PVT. - 8" (SQ. YD.)	AGG. SHOULDER (TON)	WIDTH "W"	LENGTH "L"	RADIUS "R1"	RADIUS "R2"
11+05	RT	S.R.	34.1	3.0	14	15	15	15
14+59	RT	S.R.	34.1	3.0	14	15	15	15
16+51	LT	S.R.	91.0	5.0	18	30	30	20
19+96	LT	S.R.	112.4	5.0	20	35	15	35
23+60	RT	S.R.	54.6	4.0	16	20	20	20
23+60	LT	S.R.	50.2	4.0	14	20	20	20
30+33	LT	S.R.	116.5	5.0	20	35	35	30
30+33	RT	S.R.	128.4	6.0	20	35	35	30
34+15	LT	S.R.	97.7	5.0	20	30	30	20
34+15	RT	S.R.	74.3	5.0	16	25	25	25
38+07	LT	S.R.	63.3	4.0	14	25	25	20
38+07	RT	S.R.	57.8	4.0	12	25	20	25
41+28	LT	S.R.	116.5	5.0	20	35	35	20
41+28	RT	S.R.	128.4	6.0	20	35	30	35
45+25	LT	S.R.	54.6	4.0	16	20	20	20
45+25	RT	S.R.	54.6	4.0	16	20	20	20
49+16	LT	S.R.	68.7	5.0	14	25	25	25
49+16	RT	S.R.	140.6	7.0	18	40	30	40
<b>TOTALS =</b>			<b>1477.8</b>	<b>84.0</b>				



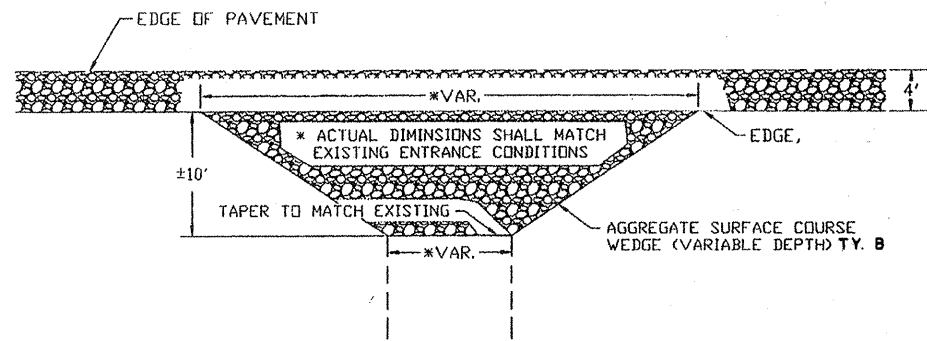
SECTION A-A

SHELBY COUNTY  
P.C.C. OVERLAY  
DETAILS





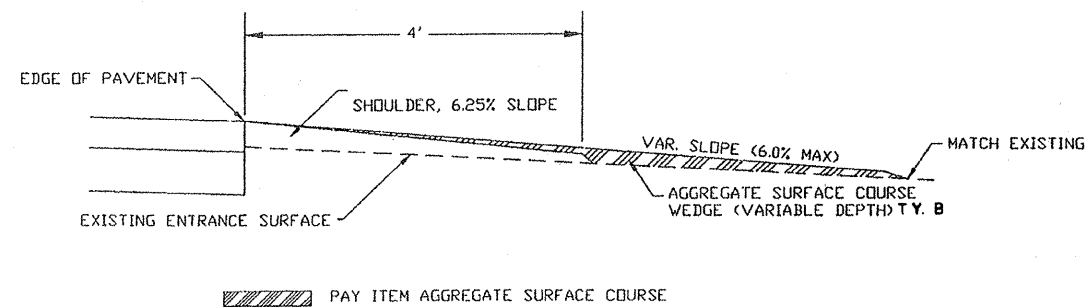
AGGREGATE ENTRANCE DETAIL



AGGREGATE ENTRANCE SCHEDULE

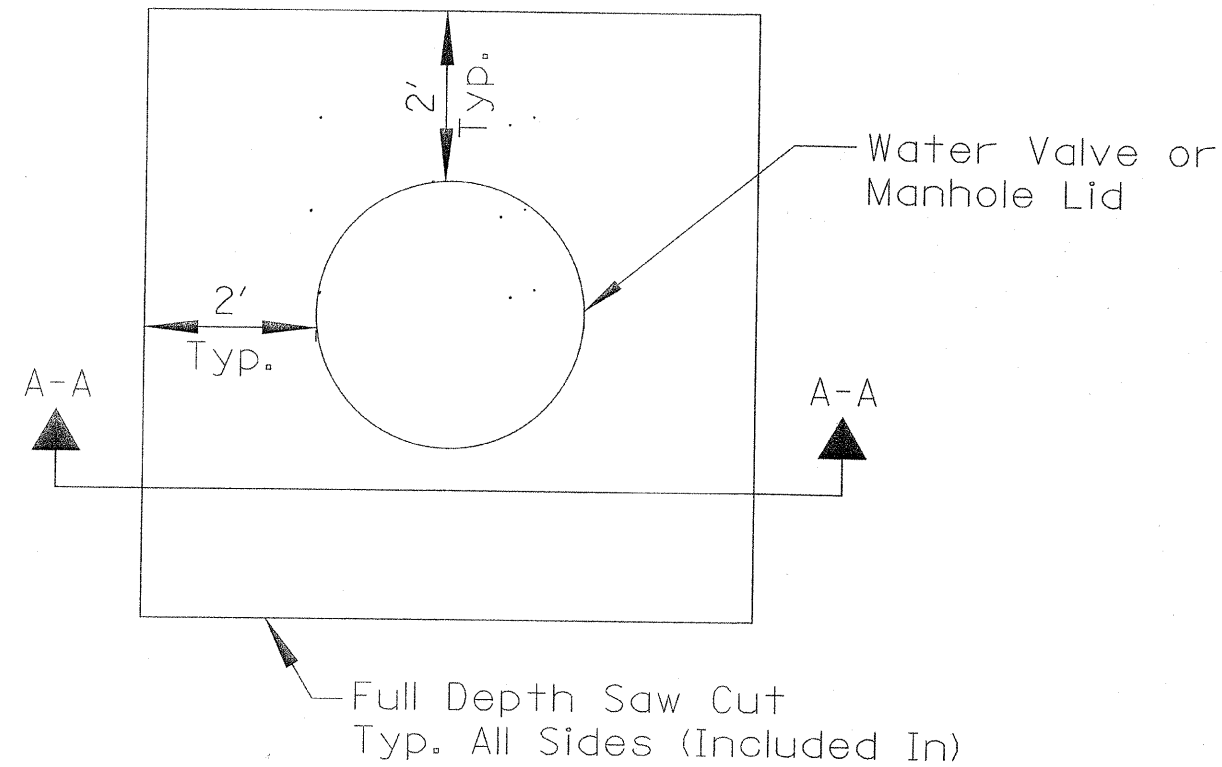
STATION	O/S	TYPE	WIDTH "W 1"	WIDTH "W 2"	AGG. SURF. TY. B (TON)
12+81	RT	ALLEY	36	16	10
16+45	RT	ALLEY	36	16	10
17+62	LT	PE	68	48	23
18+75	RT	PE	40	20	12
18+79 (W/MB)	LT	PE	42	22	15
19+97	RT	PE	40	20	12
21+00 (W/MB)	RT	PE	42	22	15
21+63	LT	PE	40	20	12
21+88	RT	PE	40	20	12
22+16	RT	PE	40	20	12
24+58	RT	PE	40	20	12
24+82 (W/MB)	LT	PE	46	26	17
25+80	RT	PE	40	20	12
27+05	RT	PE	42	22	13
27+41	RT	PE	44	22	14
28+25	LT	PE	42	22	13
29+03	LT	PE	42	22	13
31+32	RT	PE	44	24	14
31+96	LT	PE	40	20	12
32+38 (W/MB)	RT	PE	44	24	14
32+83	LT	PE	42	22	13
33+08	RT	PE	42	22	13
35+48	RT	PE	46	26	14
36+10	LT	PE	44	24	14
37+07	LT	PE	44	24	14
37+73	LT	PE	42	22	13
43+29	LT	ALLEY	36	16	10
43+29	RT	ALLEY	36	16	10
43+95	RT	PE	42	22	13
46+23	LT	PE	42	22	13
47+10	LT	PE	64	44	21
47+63	LT	PE	42	22	13
48+50	LT	PE	42	22	13
49+98	LT	PE	85	65	30
51+81	LT	ALLEY	36	16	10
52+83	RT	PE	42	22	15
TOTAL =					496

AGGREGATE ENTRANCE CROSS-SECTION

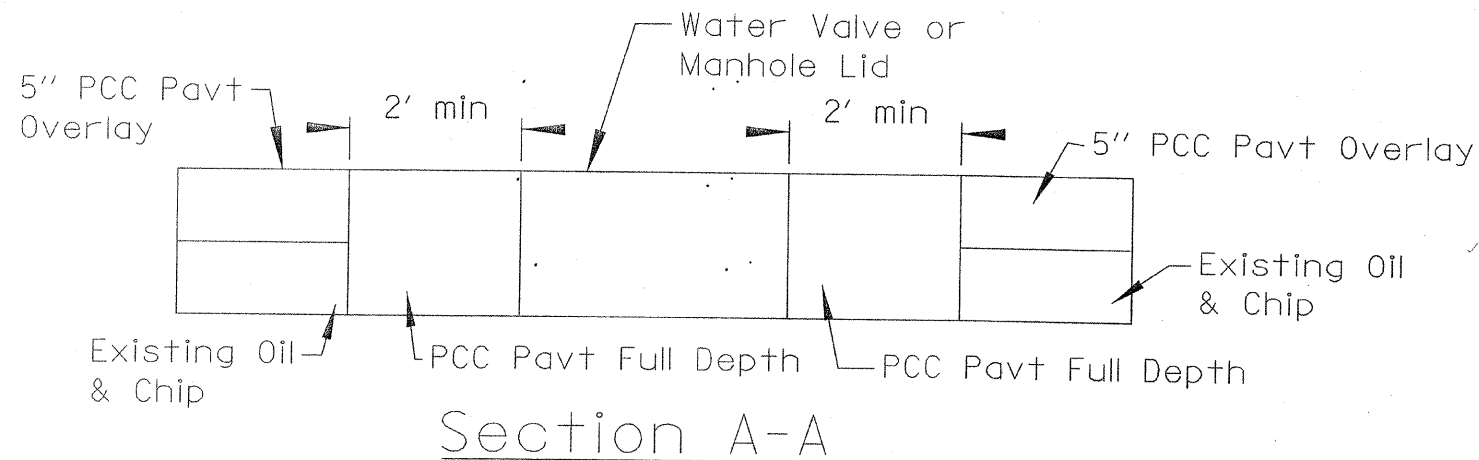


SHELBY COUNTY  
 P.C.C. OVERLAY  
 DETAILS

RT.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
•	00-00220-06-RS	SHELBY	19	11
PROJECT NO. ARA - 0713 (111)				
• FAS 713				



Manholes to be Adjusted	
Sta.	O/S
36+75	CL
38+10	CL
39+51	1' RT
41+08	2' LT
43+28	8' LT
48+73	24' LT
53+41	12' RT



Water Valves to be Adjusted	
Sta.	O/S
49+24	CL
49+24	2' LT
34+30	25' RT
49+33	23' LT

Note  
SEE CONTRACT SPECIAL PROVISIONS

SHELBY COUNTY  
TOWER HILL  
00-00220-06-RS  
MANHOLES OR WATER  
VALVES TO BE ADJUSTED

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
•	00-00220-06-RS	SHELBY	19	12

\* FAS-713

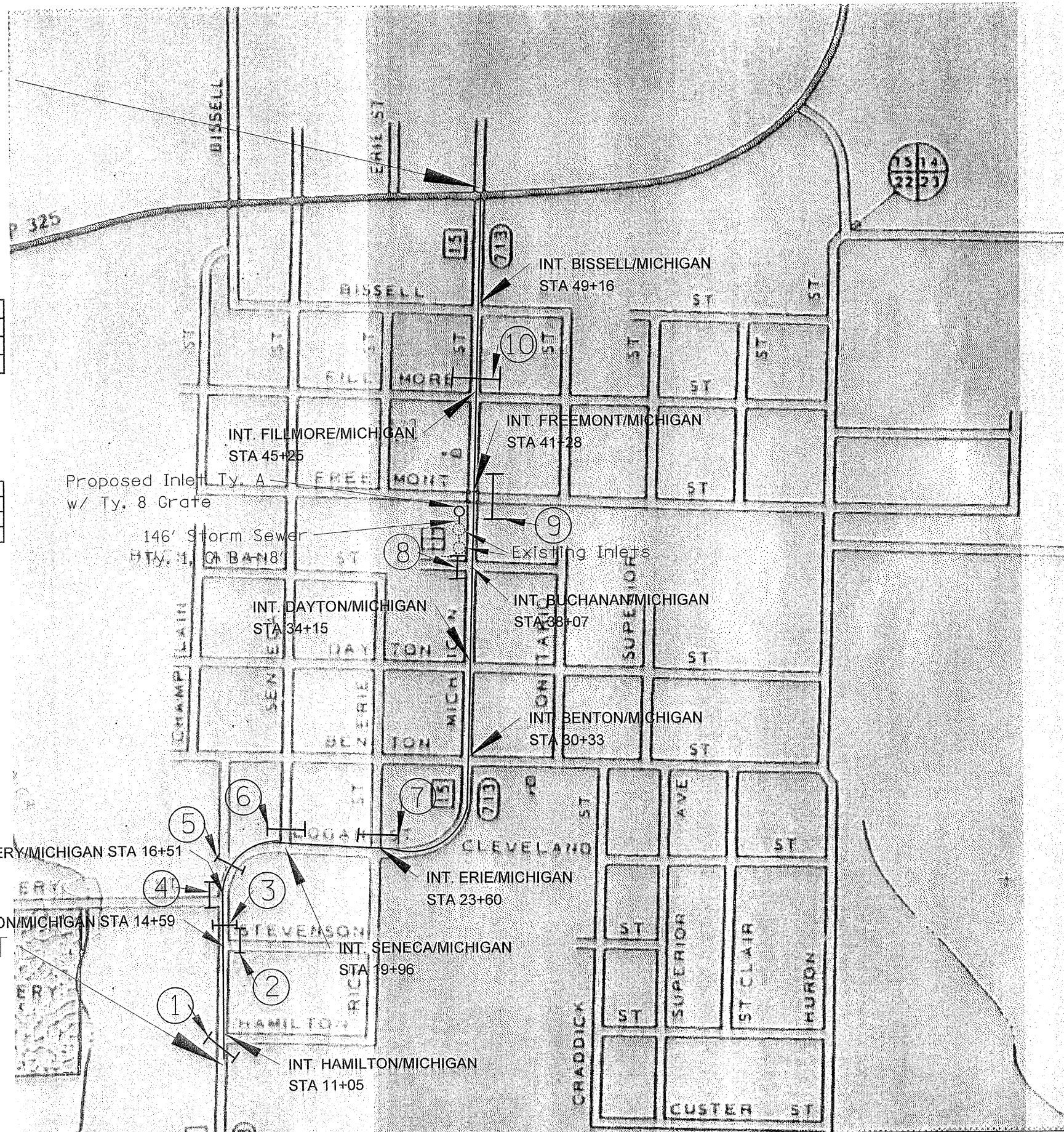


END PROJECT  
STA 53+68

Inlet Ty. A w/ Ty. 8 Grate		
STA.	O/S	Quantity
40+20	28' LT	1.0 each
Total		1.0 each

Storm Sewer Ty. 1, CI B - 8"		
STA to STA	O/S	Quantity
40+20 to 41+66	28' LT	146 foot
Total		146 foot

Pipe Culverts Class D				
Pipe No.	Sta.	Length	Size	Inlet & Pipe Protection
1	11+05	68'	24"	1.0
2	14+59	34'	36"	1.0
3	14+80	50'	42"	1.0
4	16+51	40'	18"	1.0
5	17+65	62'	24"	1.0
6	19+96	40'	15"	1.0
7	23+60	42'	12"	1.0
8	38+07	56'	12"	1.0
9	41+28	64'	18"	1.0
10	45+38	34'	15"	1.0



○ - INDICATE PIPE NUMBERS

Note: All Class D pipe culverts shown on this sheet shall be aluminized steel type 2 corrugated pipe in accordance with Article 1006.01

BEGIN PROJECT  
STA 10+00

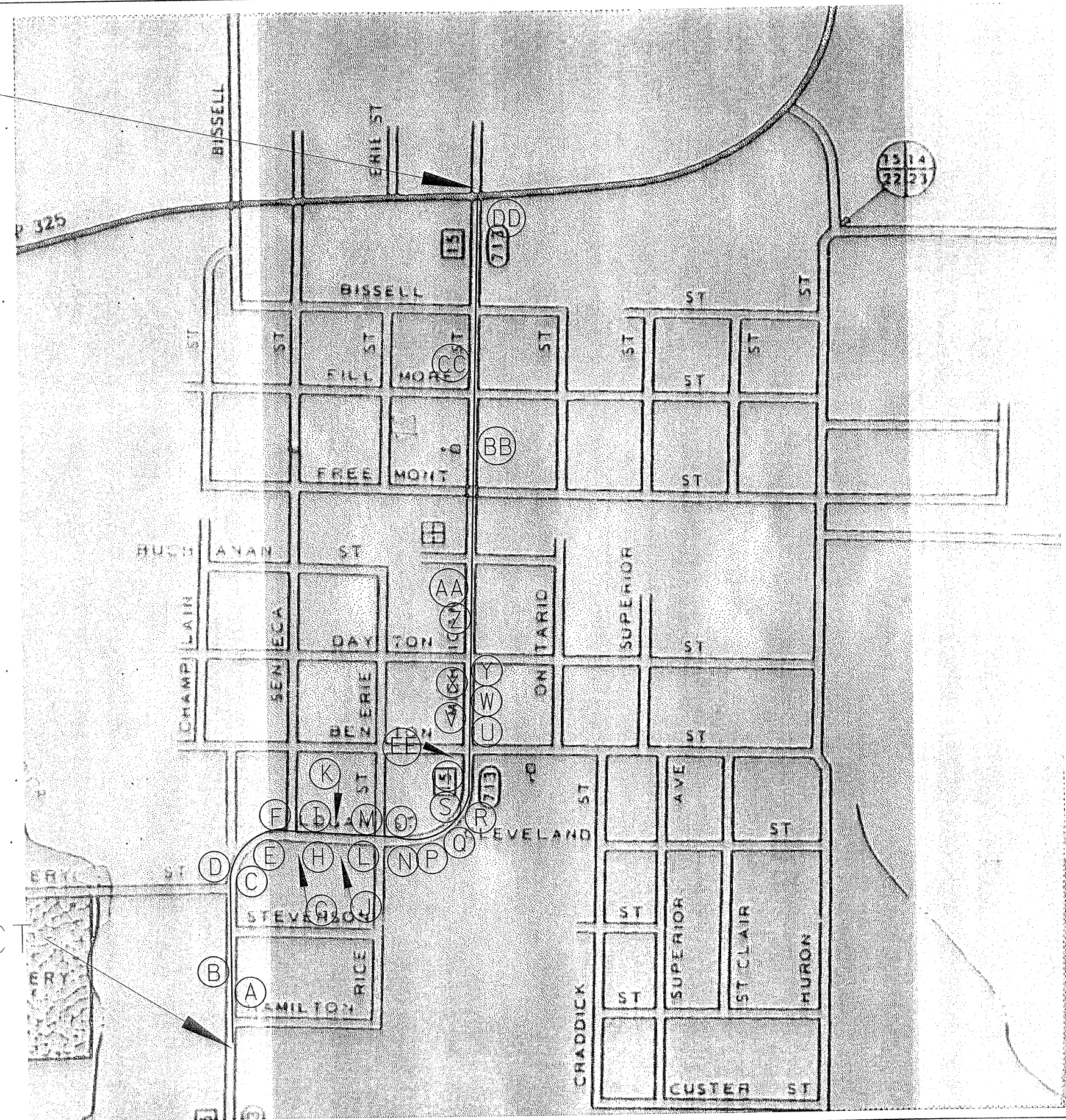
SHELBY COUNTY  
TOWER HILL  
00-00220-06-RS  
PIPE CULVERTS CLASS D  
UNDER ROADWAYS

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
•	00-00220-06-RS	SHELBY	19	13

PROJECT NO. ARA - 0713 (111)

\* FAS-713

END PROJECT  
STA 53+68



PIPE	STA	DIA	LENGTH
A	12+84 RT	24"	20'
B	13+64 LT	24"	20'
C	16+51 RT	24"	40'
D	17+60 LT	12"	48'
E	18+76 RT	12"	20'
F	18+81 LT	15"	20'
G	20+00 RT	12"	22'
H	21+04 RT	12"	34'
I	20+98 LT	12"	20'
J	21+89 RT	12"	20'
K	21+63 LT	12"	22'
L	22+19 RT	12"	20'
M	22+68 LT	12"	20'
N	24+58 RT	12"	20'
O	24+79 LT	12"	22'
P	25+80 RT	12"	20'
Q	26+97 RT	12"	28'
R	27+48 RT	15"	40'
S	28+48 LT	12"	30'
T	29+04 LT	15"	20'
U	31+33 RT	12"	24'
V	31+92 LT	12"	20'
W	32+39 RT	12"	22'
X	32+81 LT	12"	20'
Y	33+08 RT	12"	20'
Z	35+46 LT	12"	20'
AA	36+10 LT	12"	20'
BB	43+48 RT	12"	88'
CC	46+10 LT	12"	24'
DD	50+78 RT	12"	20'
EE	30+13 LT	12"	10'

○ - INDICATE PIPE LETTERS

BEGIN PROJECT  
STA 10+00

SHELBY COUNTY  
TOWER HILL  
00-00220-06-RS  
ENTRANCE PIPES

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
•	00-00220-06-RS	SHELBY	19	14

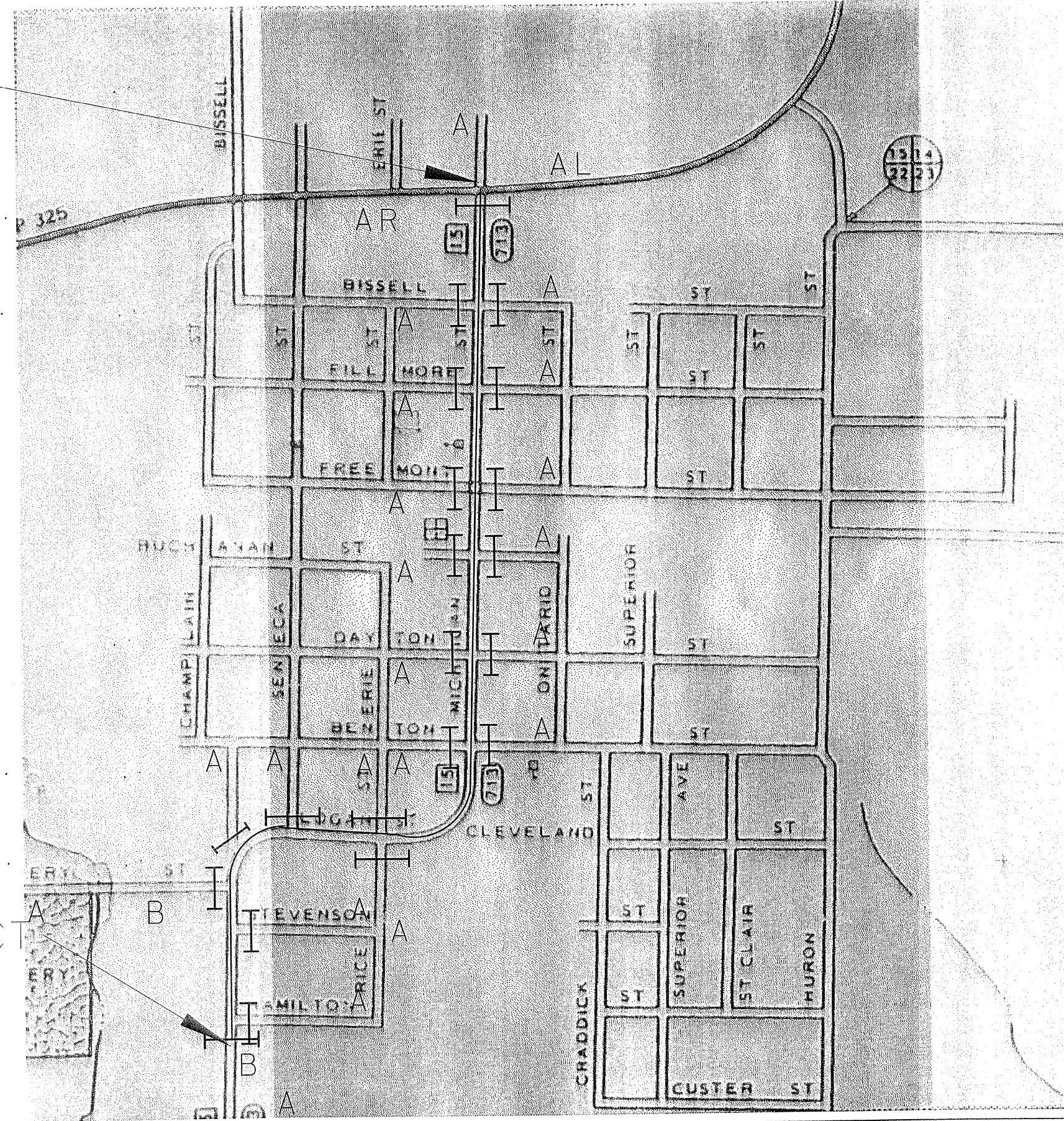
PROJECT NO. ARA - 0713 (111)

• FAS-713



END PROJECT  
STA 53+68

BEGIN PROJECT  
STA 10+00



LEGEND

- |— = Type III Barricade  
(See Special Provisions)
- A = Road Closed Ahead Sign
- B = Road Closed 500 Sign
- L = Arrow Left
- R = Arrow Right

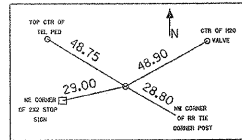
SHELBY COUNTY  
TOWER HILL  
00-00220-06-RS  
TRAFFIC CONTROL

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	00-00220-06-RS	SHELBY	19	15

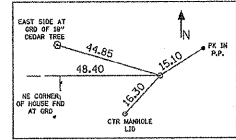
PROJECT NO. ARA - 0713 (111)

\* FAS - 713

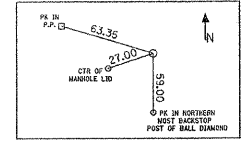
TIES TO PC CURVE #1  
STA 16+04.61



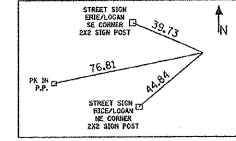
TIES TO PI CURVE #1  
STA 18+58.00



TIES TO PI CURVE #2  
STA 27+13.48



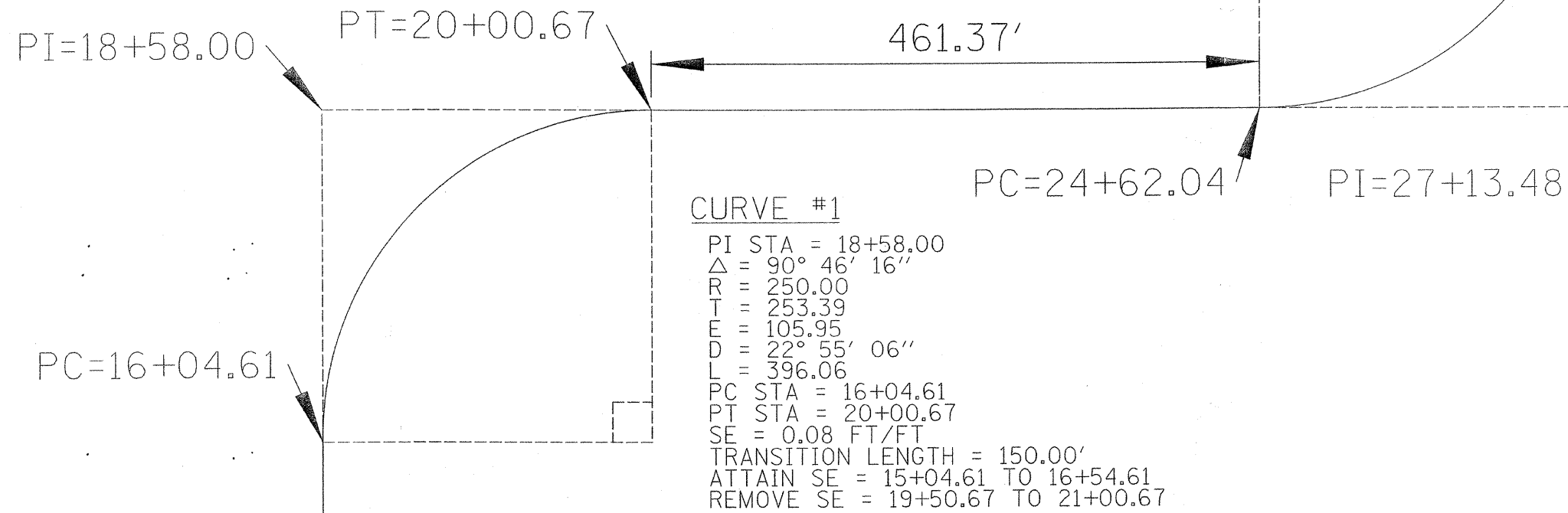
TIES TO PC CURVE #2  
STA 24+62.04



**CURVE #2**

PI STA = 27+13.48  
 $\Delta = 90^\circ 19' 46''$   
 R = 250.00  
 T = 251.44  
 E = 104.57  
 $D = 22^\circ 55' 06''$   
 L = 394.14  
 PC STA = 24+62.04  
 PT STA = 28+56.18  
 SE = 0.08 FT/FT  
 TRANSITION LENGTH = 150.00'  
 ATTAIN SE = 23+62.04 TO 25+12.04  
 REMOVE SE = 28+06.18 TO 29+56.18

PI TO PI = 966.2'



**CURVE #1**

PI STA = 18+58.00  
 $\Delta = 90^\circ 46' 16''$   
 R = 250.00  
 T = 253.39  
 E = 105.95  
 $D = 22^\circ 55' 06''$   
 L = 396.06  
 PC STA = 16+04.61  
 PT STA = 20+00.67  
 SE = 0.08 FT/FT  
 TRANSITION LENGTH = 150.00'  
 ATTAIN SE = 15+04.61 TO 16+54.61  
 REMOVE SE = 19+50.67 TO 21+00.67

BM 2 - RR SPIKE IN POWER POLE JUST NORTH OF SOUTH SCHOOL DRIVE

BM 3 - RR SPIKE IN POWER POLE 72' LT AT STA 18+50

SHELBY COUNTY  
 IN TOWN TOWER HILL  
 SECTION 00-00220-06-RS

**SIDEWALK REMOVAL**

STATION	O/S	QUANTITY	STREET
30+13	10' LT. - 15' LT.	25.0 SQ. FT.	BENTON
45+02 to 45+15	27' LT.	85.0 SQ. FT.	FILLMORE
45+35 to 45+40	27' LT.	25.0 SQ. FT.	FILLMORE
<b>TOTAL</b>		<b>135.0 SQ. FT.</b>	

**PORTLAND CEMENT CONCRETE SIDEWALK 4 INCH**

STATION	O/S	WIDTH	QUANTITY	STREET
30+13	10' LT. - 12' LT.	5'	10.0 SQ. FT.	BENTON
30+13	14' LT. - 30' LT.	5'	80.0 SQ. FT.	BENTON
30+13	10' RT. - 12' RT.	5'	10.0 SQ. FT.	BENTON
30+13	14' RT. - 30' RT.	5'	80.0 SQ. FT.	BENTON
45+02 - 45+11	27' LT.	6.5	59.0 SQ. FT.	FILLMORE
45+13 - 45+15	27' LT.	6.5	13.0 SQ. FT.	FILLMORE
45+35 - 45+37	27' LT.	5.0	10.0 SQ. FT.	FILLMORE
45+39 - 45+45	27' LT.	5.0	30.0 SQ. FT.	FILLMORE
<b>TOTAL</b>			<b>292 SQ. FT.</b>	

**DETECTABLE WARNINGS**

STATION	O/S	WIDTH	QUANTITY	STREET
30+13	12' LT - 14' LT	5'	10.0 SQ. FT.	BENTON
30+13	12' RT - 14' RT	5'	10.0 SQ. FT.	BENTON
45+11 - 45+13	27' LT	6.5'	13.0 SQ. FT.	FILLMORE
45+37 - 45+39	27' LT	5'	10.0 SQ. FT.	FILLMORE
<b>TOTAL</b>			<b>43.0 SQ. FT.</b>	

**EPOXY PAVEMENT MARKING - LINE - 6 INCH**

STATION	O/S	TYPE	COLOR	QUANTITY
30+10	10' LT	CROSSWALK	WHITE	20.0 FT
30+16	10' LT	CROSSWALK	WHITE	20.0 FT
<b>TOTAL</b>				<b>40.0 FT</b>

**EPOXY PAVEMENT MARKING - LINE-4 INCH**

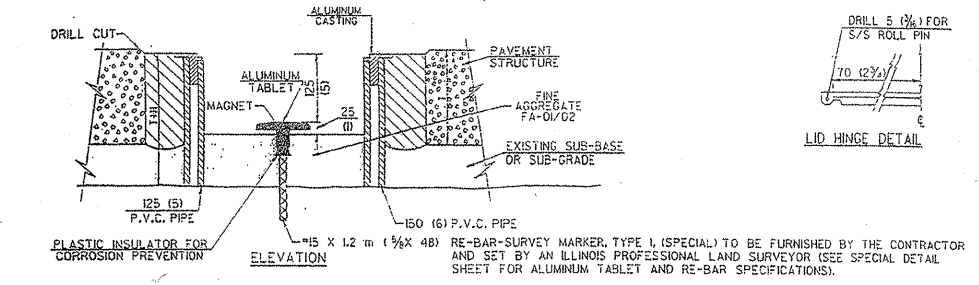
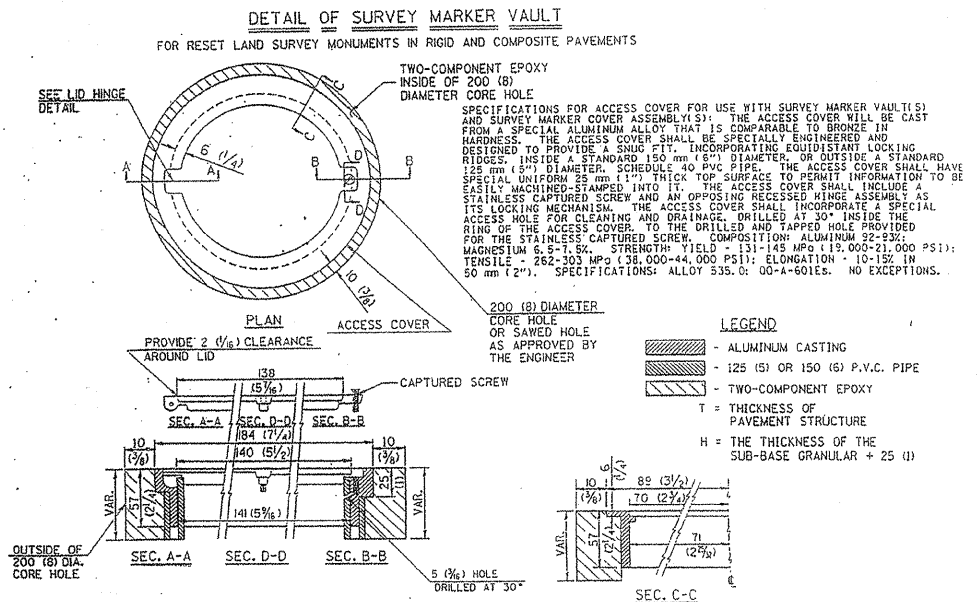
STATION	O/S	COLOR	QUANTITY
10+00 - 53+68	CENTER LINE	YELLOW	1100 FT
10+00 - 53+68	LT EDGELINE	WHITE	4368 FT
10+00 - 53+68	RT EDGELINE	WHITE	4368 FT
<b>TOTAL</b>			<b>9836 FT</b>

**EPOXY PAVEMENT MARKING - LINE - 24 INCH**

STATION	O/S	TYPE	COLOR	QUANTITY
30+17	CL - 10' RT	STOP BAR	WHITE	10.0 FT
30+46 - 30+48	CL - 10' LT	STOP BAR	WHITE	10.0 FT
53+56 - 53+58	CL - 19' RT	STOP BAR	WHITE	19.0 FT
<b>TOTAL</b>				<b>39.0 FT</b>

**SURVEY MARKER VAULTS**

LOCATION	QUANTITY
STA. 16+53 (2' RT)	1 EACH



- GENERAL NOTES**
- ALUMINUM CASTING SHALL BE EITHER PLACED OVER A 125 mm (5") P.V.C. PIPE OR INSIDE OF A 150 mm (6") P.V.C. PIPE.
  - BACKFILL WITH FINE AGGREGATE-FA-01/02.
  - WORK SHALL NOT START ON THIS ITEM UNTIL THE FINAL LIFT OF CLASS I HAS BEEN COMPLETED.
  - SEE SPECIAL PROVISION "PRESERVATION OF LAND SURVEY MONUMENTS".
  - THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR SURVEY MARKER VAULT WHICH PRICE SHALL INCLUDE ALL LABOR AND MATERIAL AS SPECIFIED INCLUDING CORING, EPOXY AND FA-01/02 AGGREGATE AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
  - THE CASTING SHALL BE ANCHORED IN THE 200 mm (8") DIAMETER CORE HOLE WITH TWO-COMPONENT EPOXY CONFORMING TO APPLICABLE PORTIONS OF ARTICLE 1025.01(725.01) OF THE STANDARD SPECIFICATIONS.
  - ALL SURVEY MARKER (VAULTS) SHALL BE PLACED 6 mm (1/4") BELOW THE FINAL SURFACE.
  - THE 200 mm (8") DIAMETER CORE HOLE SHALL BE SUBJECT TO THE APPROVAL OF THE ENGINEER.
- BILL OF MATERIAL**
- ALUMINUM CASTING OF THE DIMENSIONS AND SPECIFICATIONS SHOWN OR OTHER SUBJECT TO ENGINEER'S APPROVAL OF SHOP DRAWINGS.  
 125 mm OR 150 mm (5" OR 6") P.V.C. PIPE, SCHEDULE 40, ALUMINUM TABLET, STAMPED IN ACCORDANCE WITH STANDARD 2135.  
 15 X 1.2 m (1/2" X 48") RE-BAR, EPOXY AND FA-01/02 AGGREGATE.

SHELBY COUNTY  
 DETAILS



