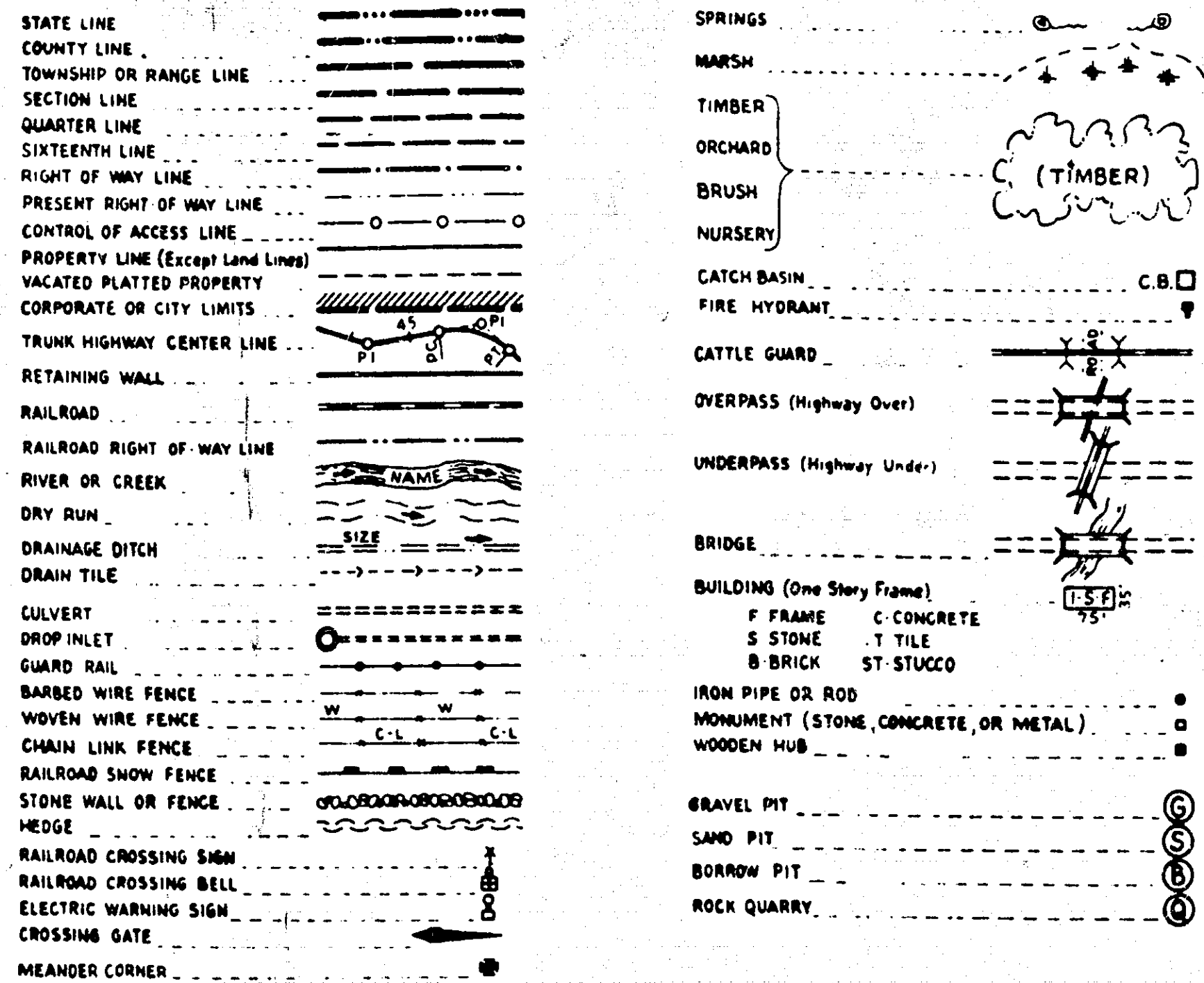
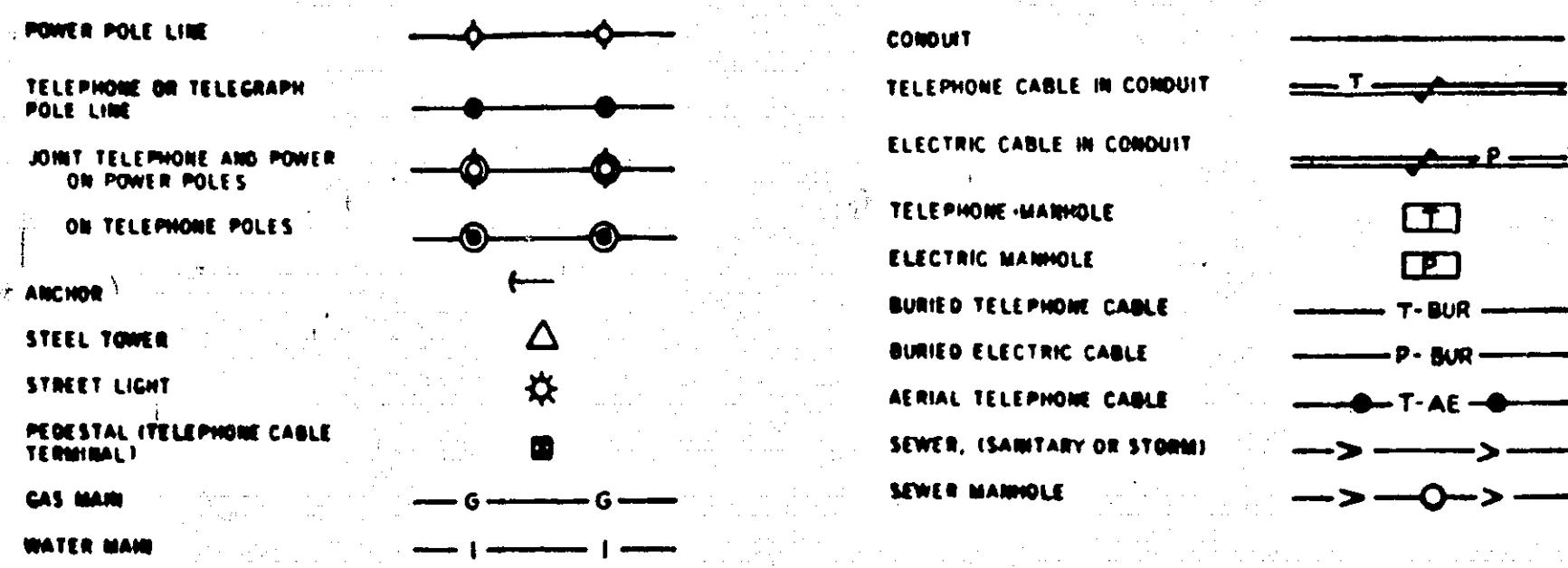


PLANS SYMBOLS



UTILITIES SYMBOLS



PIT DATA

PIT NO. _____ Located in _____
Dead Haul

PIT NO. _____ Located in _____
Dead Haul

THE "MINNESOTA HIGHWAY DEPARTMENT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION" DATED JANUARY 1, 1972 SHALL GOVERN.

LEGAL DESCRIPTIONS

CO. RD. "B2"
FROM A POINT 523.5 FEET EAST AND 347 FEET NORTH OF THE CENTER OF SECTION 9, T. 29N., R. 23W.
TO A POINT 55.5 FEET EAST AND 289.20 FEET NORTH OF THE CENTER OF SECTION 9, T. 29N., R. 23W.
FAIRVIEW AVE.
FROM A POINT 254 FEET NORTH OF THE CENTER OF SECTION 9, T. 29N., R. 23W.
TO A POINT 1126 NORTH OF THE CENTER OF SECTION 9, T. 29N., R. 23W.
CO. RD. C
FROM A POINT 333 FEET WEST OF THE SOUTH EAST CORNER OF SECTION 5, T. 29N., R. 23W.
TO A POINT 437 FEET EAST OF THE SOUTH WEST CORNER OF SECTION 4, T. 29N., R. 23W.
CLEVELAND AVE.
FROM A POINT 200 FEET SOUTH AND 8.5 FEET WEST OF THE NORTH EAST CORNER OF SECTION 8, T. 29N., R. 23W.
TO A POINT 660 FEET NORTH AND 8.5 FEET WEST OF THE SOUTH EAST CORNER OF SECTION 5, T. 29N., R. 23W.

CO. RD. "E"
FROM A POINT 605 FEET EAST OF THE SOUTH WEST CORNER OF SECTION 26, T. 30N., R. 23W.
TO A POINT 70 FEET WEST OF THE SOUTH WEST CORNER OF SECTION 27, T. 30N., R. 23W.
LEXINGTON AVE.
FROM A POINT 765 FEET SOUTH OF THE NORTH EAST CORNER OF SECTION 34, T. 30N., R. 23W.
TO A POINT 664 FEET NORTH OF THE SOUTH EAST CORNER OF SECTION 27, T. 30N., R. 23W.

S.P. 62-648-04 FED. NO. EHS T 5007(005) COUNTY ROAD "B2" & FAIRVIEW AVE.
S.P. 62-623-11 FED. NO. EHS T 5007(005) COUNTY ROAD "C" & CLEVELAND AVE.
S.P. 62-615-02 FED. NO. EHS T 5007(006) COUNTY ROAD "E" & LEXINGTON AVE.

NOTE: RAMSEY COUNTY WILL LET A SEPARATE CONCURRENT CONTRACT FOR INSTALLATION OF TRAFFIC SIGNAL SYSTEMS AT THESE INTERSECTIONS

GROSS LENGTH	FEET	MILES
BRIDGES - LENGTH	FEET	MILES
EXCEPTIONS - LENGTH	FEET	MILES
NET LENGTH	FEET	MILES

PLAN, 1 inch = 50 Feet
PROFILE, Horiz. 1 inch = 50 Feet Vert. 1 inch = 5 Feet
CROSS-SECTIONS, 1 inch = 10 Feet
LAYOUT, 1 inch = 5280 Feet

INDEX

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	TYPICAL SECTIONS & ESTIMATED QUANTITIES
3	TYPICAL SECTIONS & DETAILS
4	DRAINAGE CHARTS & DETAILS
5-7	PLANS SHEETS & CONSTRUCTIONS SHEETS
8	PROFILE FAIRVIEW AVE. & DETAILS

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA
REG. NO. 6334 DATE 4/18/72

RECOMMENDED FOR APPROVAL _____ DATE 4-24-72
COUNTY ENGINEER

APPROVED _____ DATE _____
CHAIRMAN OF THE RAMSEY COUNTY BOARD

APPROVED _____ DATE _____

APPROVED _____ DATE _____

MINNESOTA STATE HIGHWAY DEPARTMENT

RECOMMENDED FOR APPROVAL _____ DATE 5-1-72

RECOMMENDED FOR APPROVAL _____ DATE 5/23/72

RECOMMENDED FOR APPROVAL _____ DATE 6/5/72

ASBUILT PLAN
CONFORMING TO
CONST. RECORDS

DONE BY: KB JA

DATE: 1-27-77

STATEMENT OF ESTIMATED QUANTITIES

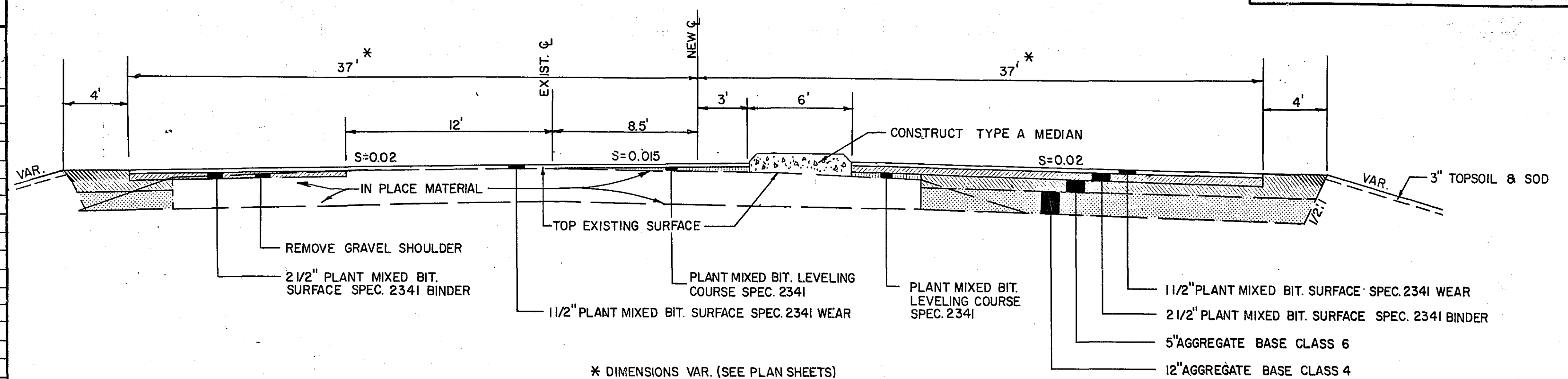
ITEM NO.	ITEM	UNIT	"B2" & FAIRVIEW	"C" & CLEVELAND	"E" & LEXINGTON	TOTAL ESTIMATED QUANTITIES
2101.502	CLEARING	TREE	9		1	10 9
2101.507	GRUBBING	TREE	8		1	9 8
2104.501	REMOVE CONCRETE CURB & GUTTER	L.F.	1107	1677 1755	20	2804 2883
2104.501	REMOVE WOVEN WIRE FENCE	L.F.	332 222			332 222
2104.503	REMOVE CONCRETE SIDEWALK	S.F.		3071		3071
2104.501	REMOVE CULVERT PIPE	L.F.		20		20
2104.505	REMOVE CONCRETE MEDIAN	S.Y.			7	7
2104.505	REMOVE CONCRETE PAVEMENT	S.Y.	21072000	220 200	2052 176	43792 464
2104.523	SALVAGE ORNAMENTAL LIGHT & BASE	EACH	4			4
2104.523	SALVAGE 24" (R.C.) APRON	EACH		2		2
2104.523	SALVAGE CATCH BASINS	EACH	6 4			6 4
2105.501	COMMON EXCAVATION	C.Y.	7964	398	8662	17,024
2105.525	TOPSOIL BORROW (L.V.)	C.Y.	169 42	217 209	742 459	1128 780
2105.523	COMMON BORROW (L.V.)	C.Y.		100		100
2130.501	WATER	(M) GAL	68 50	57 50	50	119 150
2211.501	AGGREGATE BASE, CLASS 4	TON	2140772	2832 673	604	53761 445
2211.501	AGGREGATE BASE, CLASS 6	TON	988 419	2367 509	390 614	37451 542
2301.503	CONCRETE PAVEMENT IRREGULAR WIDTH	S.Y.		1253 978		1253 978
2301.511	STRUCTURAL CONCRETE	C.Y.		316 244		316 244
2301.521	PAVEMENT REINFORCEMENT, TYPE 612X04.9X04	S.Y.		1253 978		1253 978
2331.504	BITUMINOUS MATERIAL FOR MIXTURE	TON	111.7 121	11.5	136.5 328	259.7 359
2331.514	BASE COURSE MIXTURE	TON	2403687	255	30345290	57291977
2341.504	BITUMINOUS MATERIAL FOR MIXTURE	TON	80.1 59	82.7 68	147.9 190	320.3 317
2341.508	WEARING COURSE MIXTURE	TON	873 510	635 502	1576 1643	3204 2655
2341.510	BINDER COURSE MIXTURE	TON	825 530	563 643	1159 1257	2547 2438
2341.518	BITUMINOUS MIXTURE FOR LEVELING COURSE	TON		60 100	505	60 605
2357.502	BITUMINOUS MATERIAL FOR TACK COAT	GAL.	900	248 275	1895 2094	3043 3269
2358.501	BITUMINOUS MATERIAL FOR PRIME COAT	GAL.	100 1902	0 398	0 3698	1902 5998
2545.515	LIGHT BASE DESIGN SPECIAL	EACH	2			2
2501.573	INSTALL APRON (24") CONCRETE	EACH			0 +	0 +
2501.515	15" R.C. PIPE APRONS	EACH		4 +	0 +	4 +
2503.511	12" R.C. PIPE SEWER, CLASS 4	L.F.	37 30			37 30
2503.511	15" R.C. PIPE SEWER, CLASS 4	L.F.	460 444	72 36	173 232	705 712
2503.511	24" R.C. PIPE SEWER, CLASS 2	L.F.		186 940		186 940
2506.508	CONSTRUCT MANHOLES, DESIGN A OR F	EACH		3		3
2506.509	CONSTRUCT CATCH BASINS, DESIGN R.C.2	EACH	4 3	5 3	2 4	11 10
2506.511	RECONSTRUCT MANHOLES	L.F.	4.0	5.0		4.0 5.0
2506.521	INSTALL CASTING	EACH		1		1
2506.522	ADJUST FRAME AND RING CASTING	EACH	3 4	4	6	13 14
2521.501	4" CONCRETE WALK	S.F.		891 625		891 625
2531.501	CONCRETE CURB AND GUTTER, DESIGN B618	L.F.	1951 2293	1789 1680		3740 3973
2531.503	CONCRETE MEDIAN, TYPE A	S.Y.		460 506	20	480 526
2531.503	CONCRETE MEDIAN, TYPE B	S.Y.	622 605	340 337		962 942
2531.507	6" CONCRETE DRIVEWAY PAVEMENT	S.Y.	318 291	180 123		498 414
2535.501	BITUMINOUS CURB	L.F.		170 265	3022 4608	3292 4873
2575.501	ROADSIDE SEEDING	ACRE			1.0 1.8	1.0 1.8
2575.502	SEED, MIXTURE 6	POUND			75 79	75 79
2575.505	SODDING	S.Y.	3182 1344	550 2513	1574 350	10244 2207
2575.531	COMMERCIAL FERTILIZER, ANALYSIS 12-12-12	TON	0.210 10	0.210 18	0.4	0.850 68
301.626	LUG ANCHORAGE 0 SPEC.	L.S.		1		1
	RETURN 24" R.C. PIPE SEWER, CLASS 2	L.S.		327.4		327.4
2104.523	SALVAGE HYDRANT	EACH	1		2 +	4 3
504.666	INSTALL HYDRANT	EACH	1		2 +	4 3
504.679	ADJUST VALVE BOX	BOX	5	5	5	15
545.602	INSTALL ORNAMENTAL STREET LIGHTS	UNIT	2			2
506.623	INSTALL CATCH BASINS	STRUCTURE	5 4			5 4
2104.511	REMOVE 24" R.C. PIPE SEWER CLASS 2	L.F.		88		88
2503.511	36" R.C. PIPE SEWER	L.F.		843		843
	RECONSTRUCT FENCE	L.F.	90			90

- ① FOR DUST PALIATIVE
② PAYMENT IN FULL FOR JOINTS & REINFORCING BARS
③ SEE DETAIL , SHEET NO.8

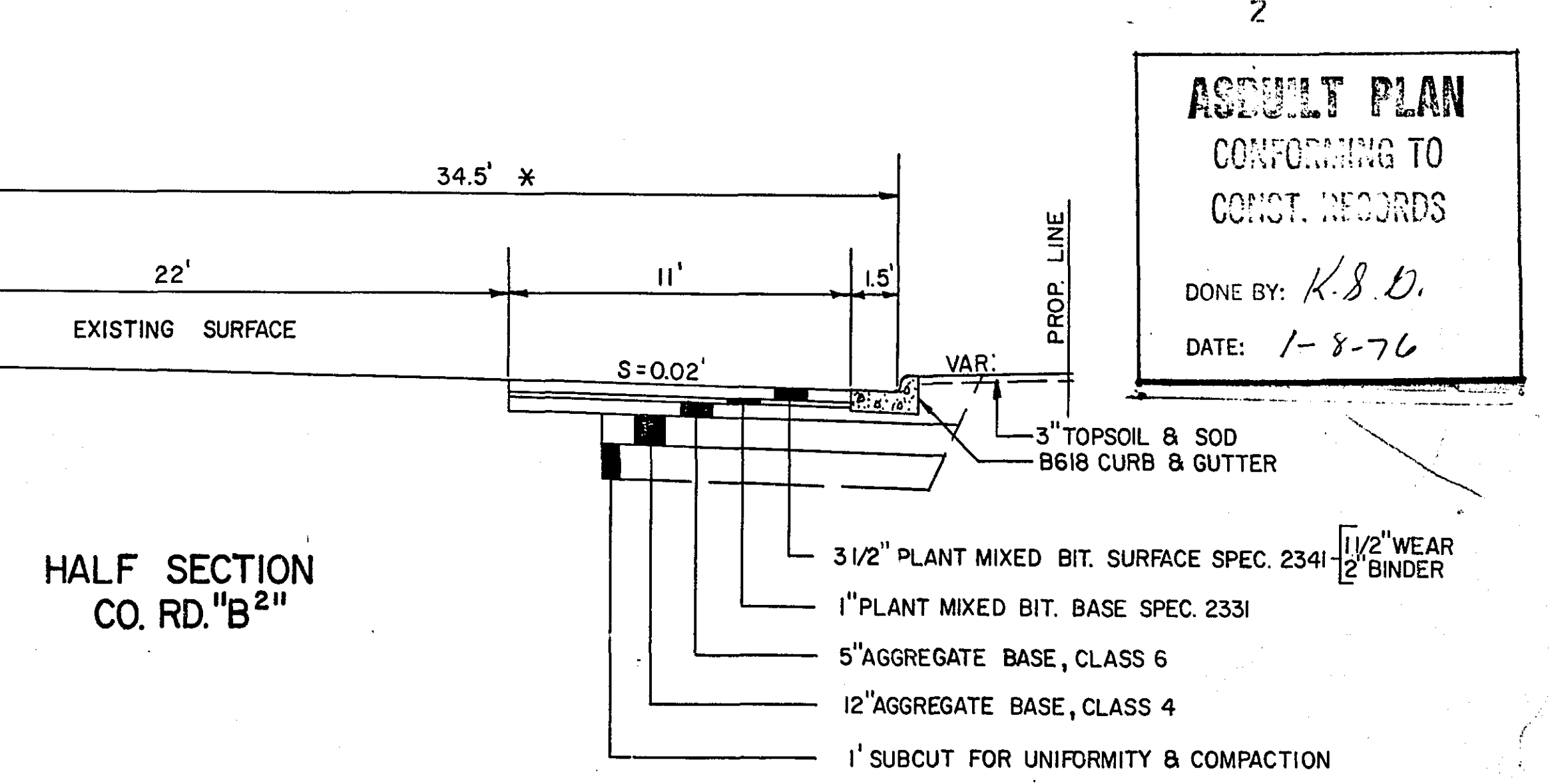
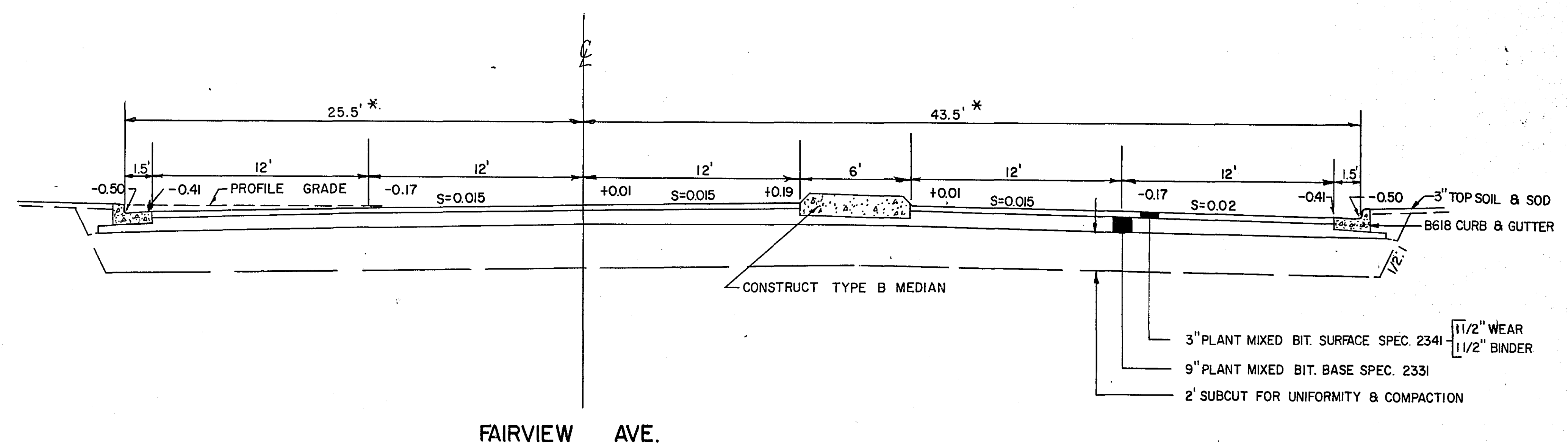
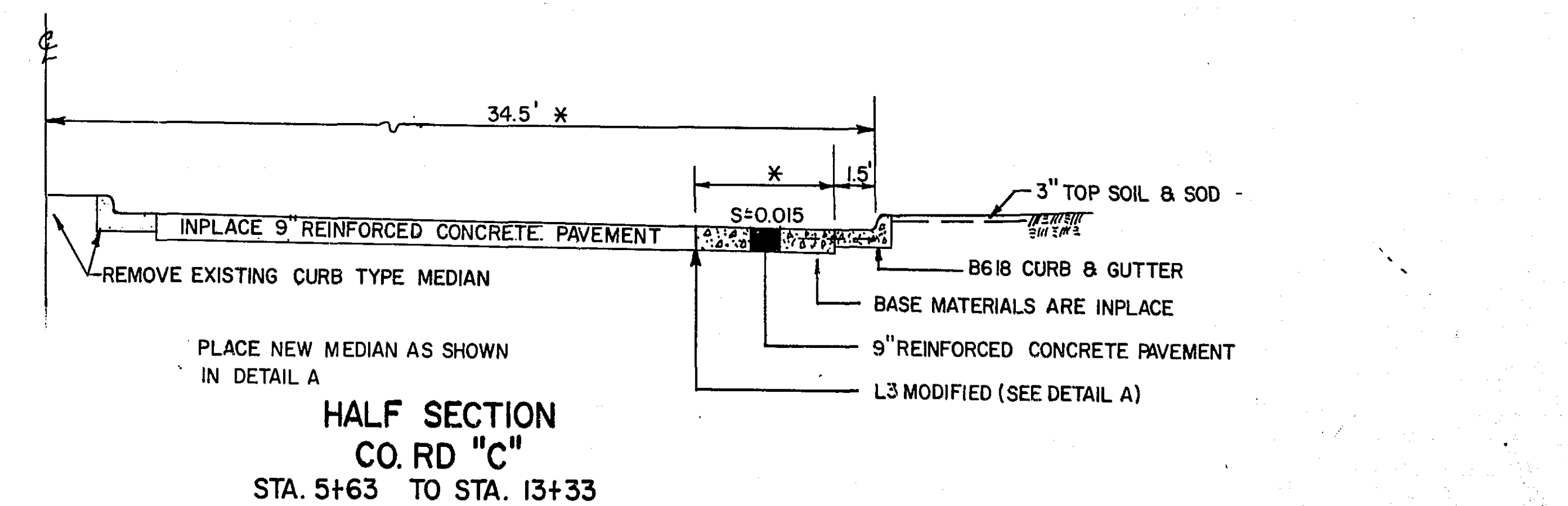
STANDARD DETAIL PLATES

0001A	SPECIFICATION REFERENCE TO STANDARD PLATES
1017C	CONCRETE PAVEMENTS WITH STEEL FABRIC REINFORCEMENTS
1120M	CONTRACTION JOINTS
1140L	LONGITUDINAL JOINTS
1141B	PAVEMENT KEYWAY FOR KEYED JOINT CONSTRUCTION
3000 F	REINFORCED CONCRETE PIPE
3100F	CONCRETE APRON FOR REINFORCED CONCRETE PIPE
4000G	MANHOLE OR CATCH BASIN
4005I	MANHOLE OR CATCH BASIN
4101B	RING CASTING FOR MANHOLE OR CATCH BASIN
4110D	COVER CASTING FOR MANHOLE
4180 F	MANHOLE STEP CASTING
7065C	BITUMINOUS CURB
7100D	CONCRETE CURB AND GUTTERS
7105C	CONCRETE MEDIAN
8000C	STANDARD BARRICADES
8008D	CONTRACTORS SIGN
9102C	SODDING AT PIPE CULVERT ENDS

Fed. Proj. No. EHS T 5007 (005)
EHS T 5007 (006)



CLEVELAND AVE.
STA. 5+34 TO STA. 11+60



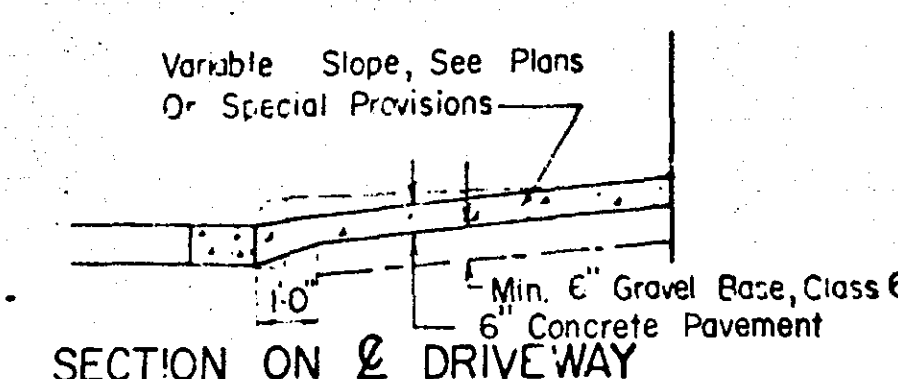
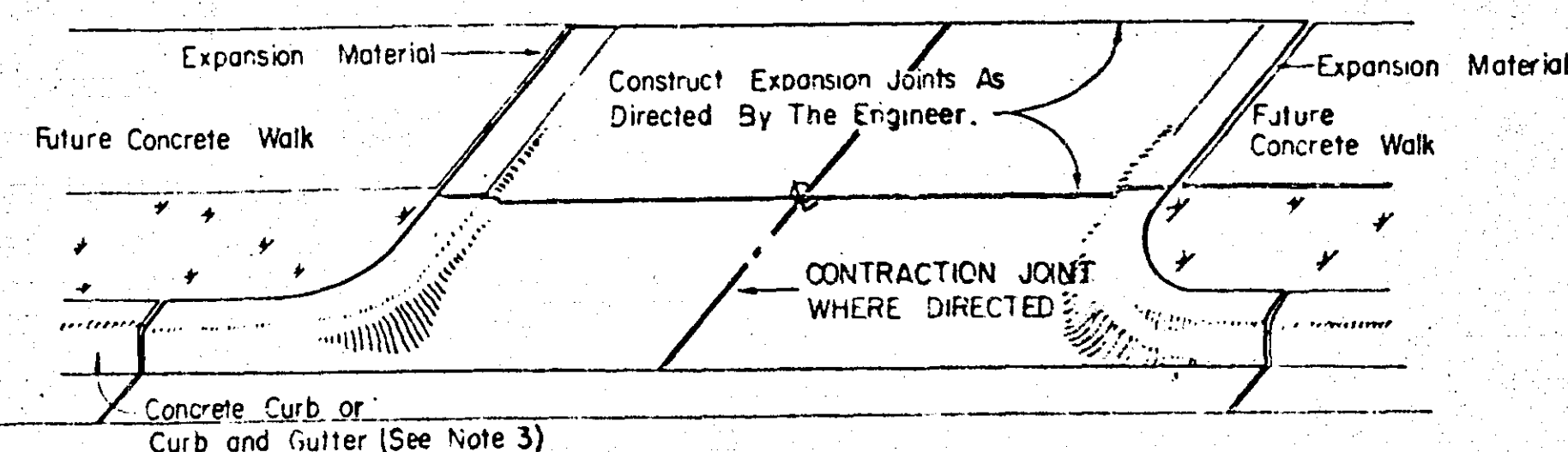
ASBUILT PLAN
CONFORMING TO
CONST. RECORDS
DONE BY: K.S.D.
DATE: 1-8-76

State Proj No. 62-648-04, 62-623-11, 62-615-02

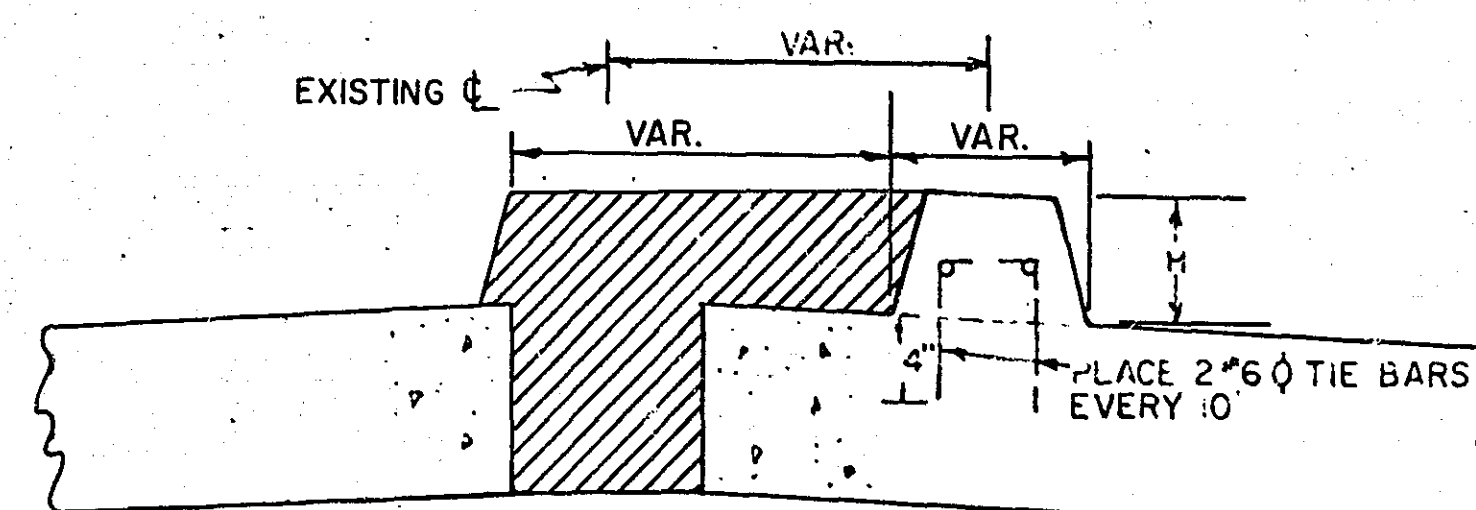
MICROFILMED
RAMSEY CO. ENGRS

Sheet No. 2 of 8 Sheets

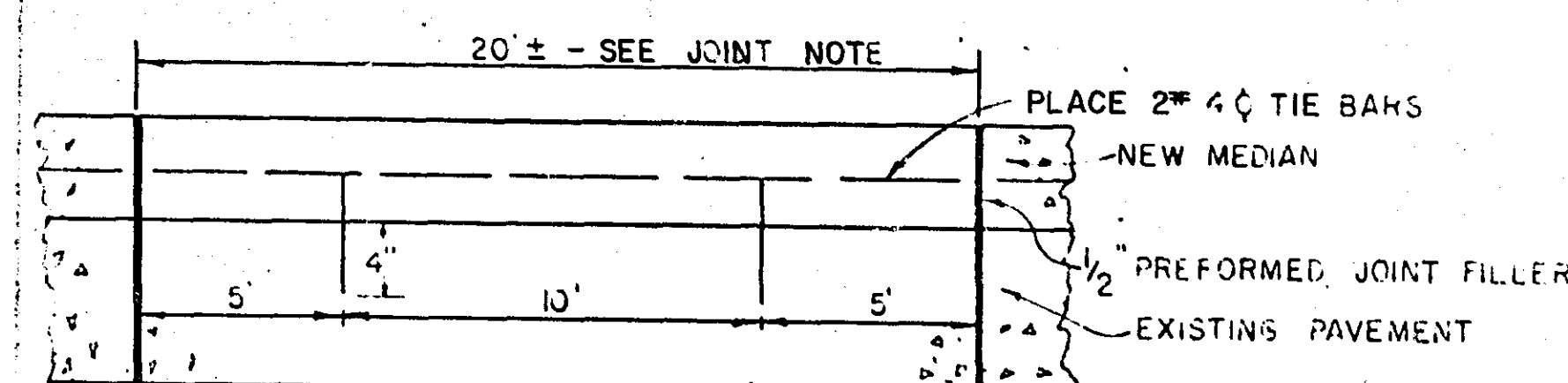
CONCRETE DRIVEWAY



- NOTE
1. CONTRACTION JOINT REQUIRED IF WIDTH EXCEEDS 16'
 2. THE EXACT LOCATION AND WIDTH OF ENTRANCES SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER
 3. GUTTER TO BE PAVED INTEGRAL WITH DRIVEWAY PAVEMENT WHERE CURB AND GUTTER IS USED
 5. DRIVEWAY WIDTH, RESIDENTIAL MIN 12', MAX 22', COMMERCIAL 30' ± 32', 60' ± 26'
 6. RADIUS - RESIDENTIAL IS 5', COMMERCIAL IS MIN 5' - MAX 15' ALL TO BE VERIFIED BY THE ENGINEER



CONCRETE TO BE INCIDENTAL TO CONCRETE MEDIAN TYPE A



LONGITUDINAL SECTION

CONCRETE MEDIAN TYPE A (SEE ABOVE)

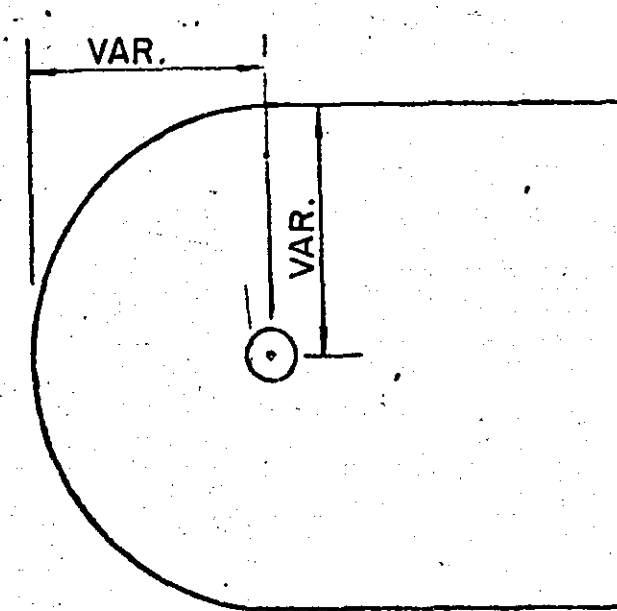
CONCRETE MEDIAN TYPE B (STD. PLATE NO. 7105 C)

CONCRETE PAVEMENT

THE TRANSVERSE JOINTS SHALL ALIGN WITH LIKE JOINTS IN EXISTING PAVEMENT AS SHOWN IN STANDARD PLATE NO. 1120 F
THE LONGITUDINAL JOINTS SHALL BE FORMED AND REMOVABLE INSERTS AS SHOWN IN STANDARD PLATE NO. 1140 J
CONCRETE TREATMENT OIL AND AIR CONTENT SHALL BE AS PROVIDED IN 2301

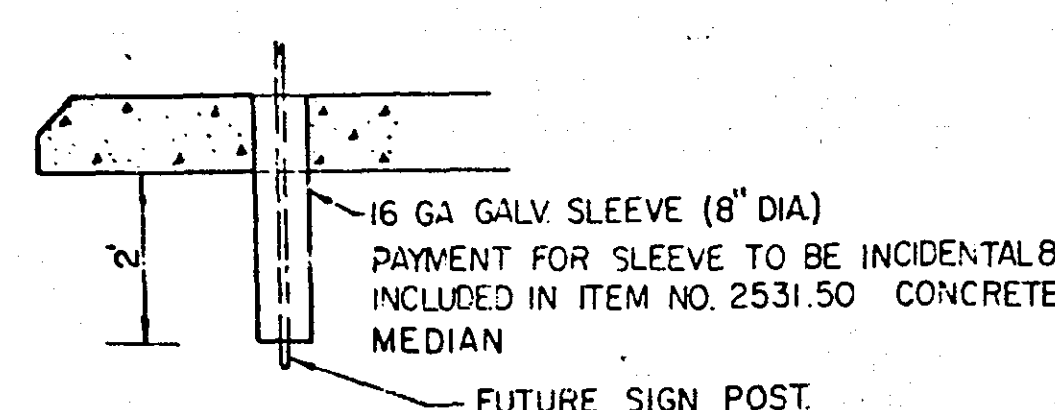
CONCRETE MEDIAN TIE BARS

DRILL 1" DIAMETER HOLES FOR TIE BARS, BACKFILL HOLES WITH GROUT CONSISTING OF 2 PARTS CEMENT SAND AND 1 PART PORTLAND CEMENT.
POUND TIE BARS INTO HOLES IMMEDIATELY AFTER GROUT IS PLACED
GROUTING AND PLACING TIE BARS SHALL BE DONE IN CONJUNCTION WITH PLACEMENT OF CONCRETE FOR CONCRETE MEDIAN.
SEE PLAN SHEETS FOR LOCATION OF MEDIANS.
THE HEIGHT OF THE MEDIAN SHALL BE AS SHOWN IN STANDARD PLATE NO. 7105 C

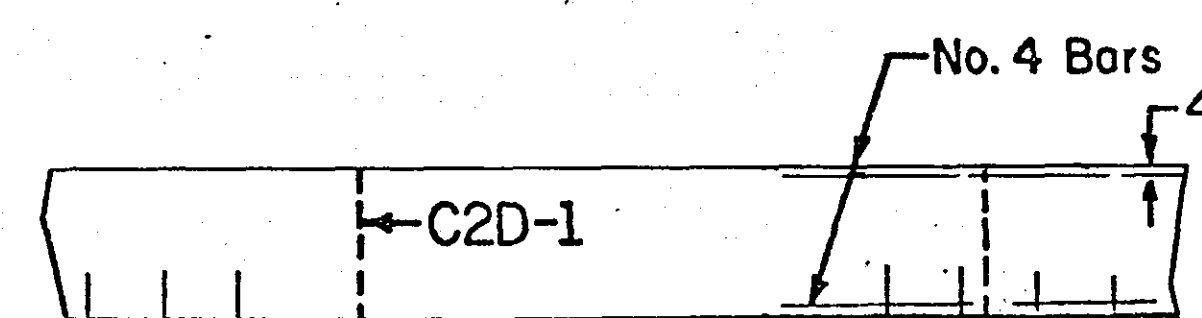


MEDIAN

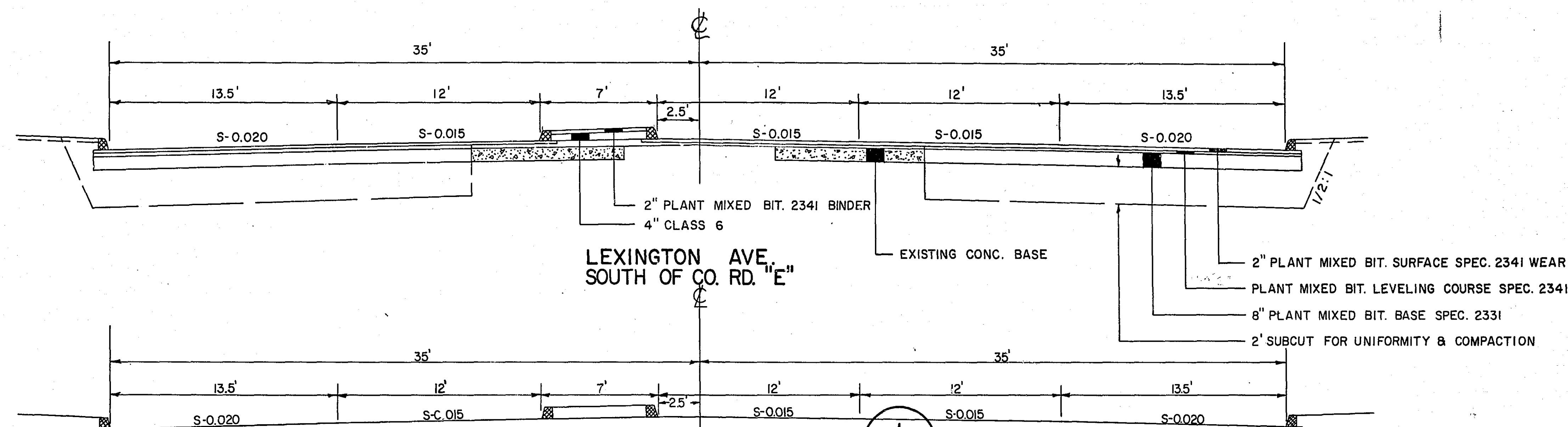
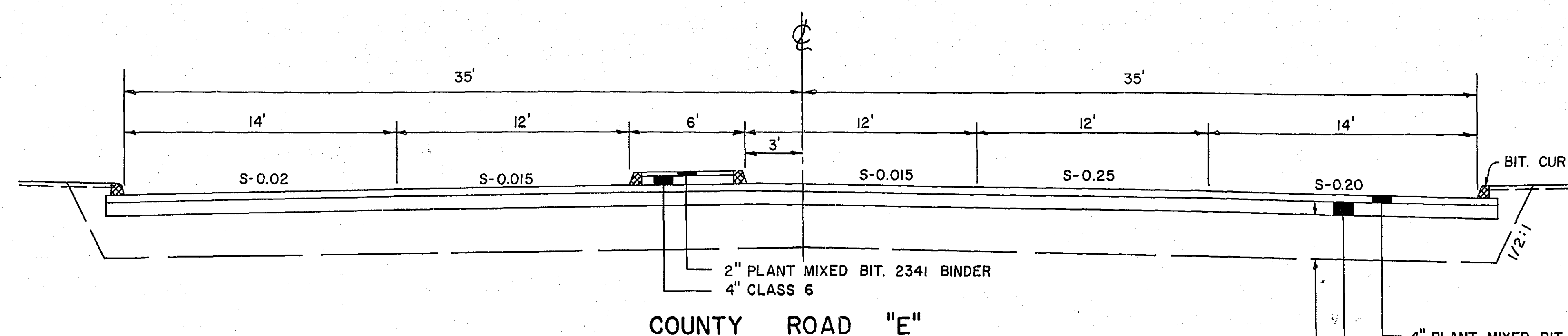
PLACEMENT OF MEDIAN HOLES



DETAIL A L3 MODIFIED-FOR CONCRETE WIDENING ON CO. RD. "C"

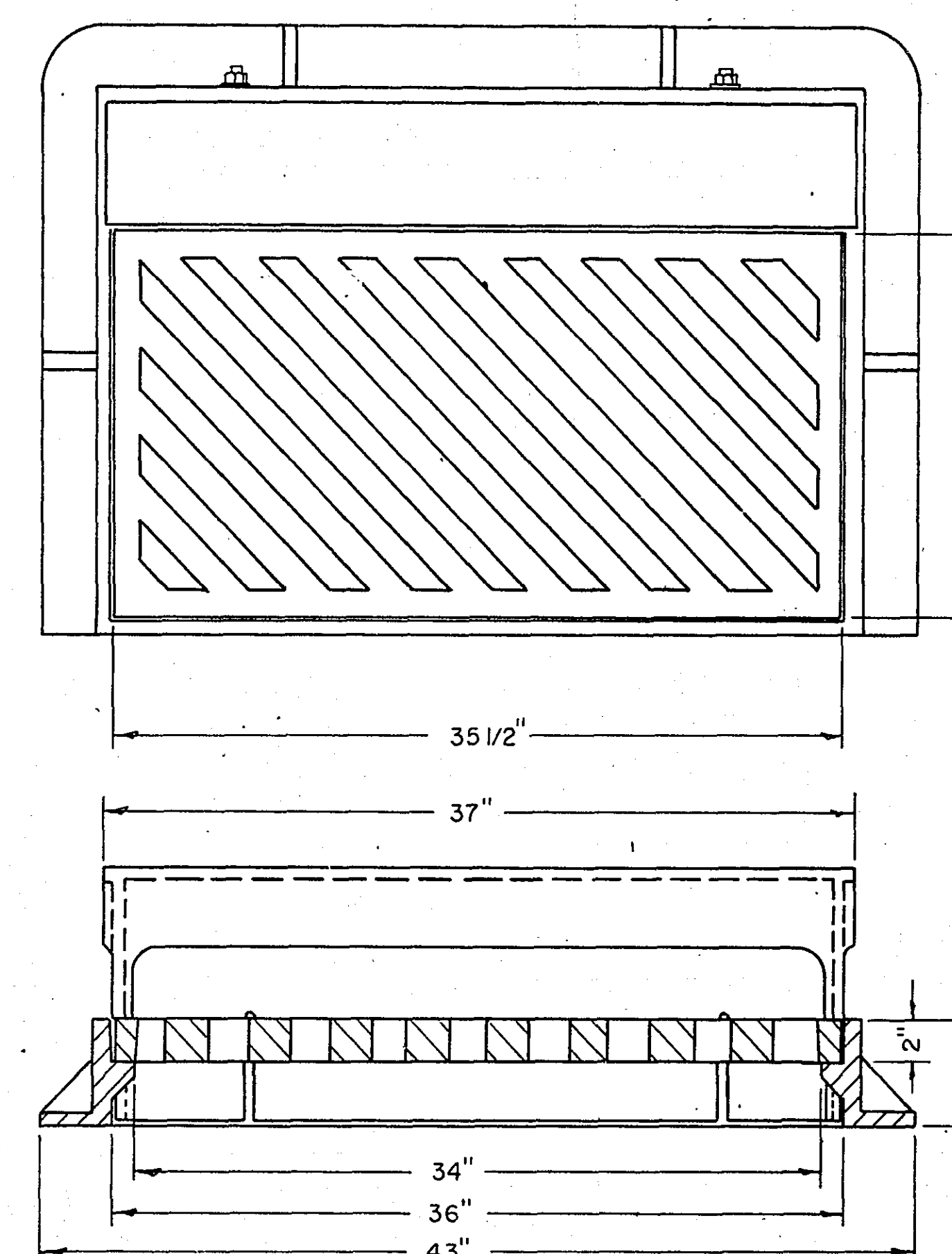


No. 5 bars - 2'6" long, spaced at 2'6" centers
Drill & Grout Tie Bars 8" Min. Penetration
Into Inplace Concrete Pavement. PLACEMENT OF JOINTS AND BARS SHALL BE INCIDENTAL TO CONC. PAVEMENT



LEXINGTON AVE.
NORTH OF CO. RD. "E"

CATCH BASIN GRATE, FRAME & CURB BOX

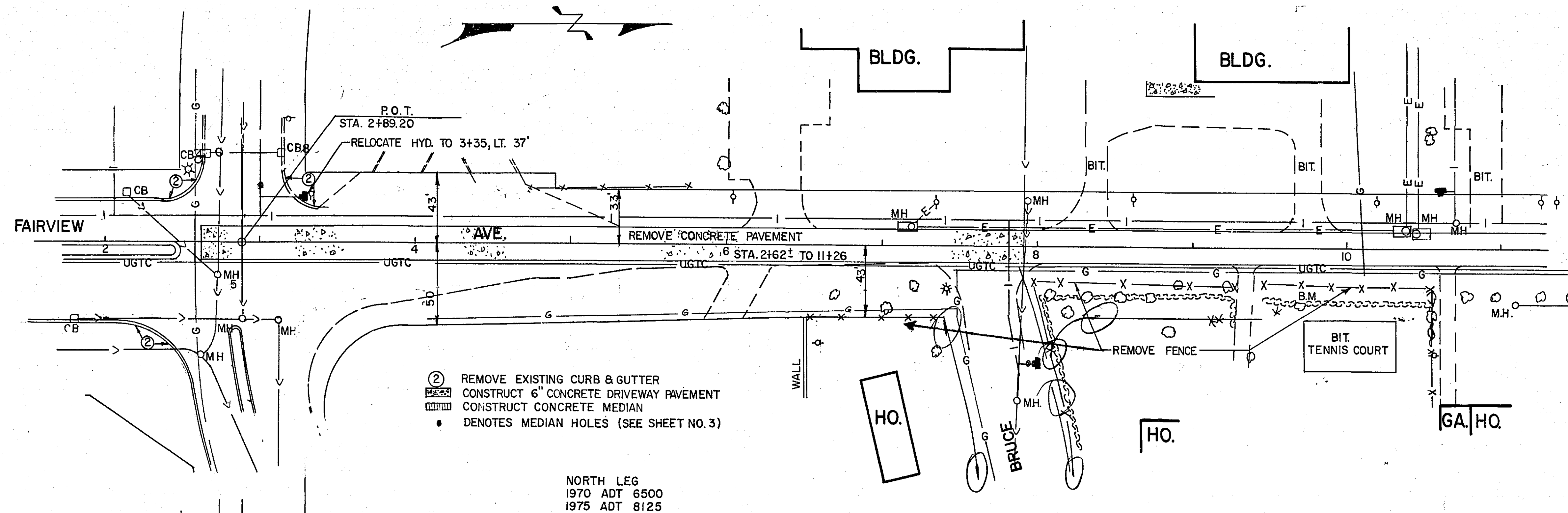


ASBUILT PLAN
CONFORMING TO
CONST. RECORDS

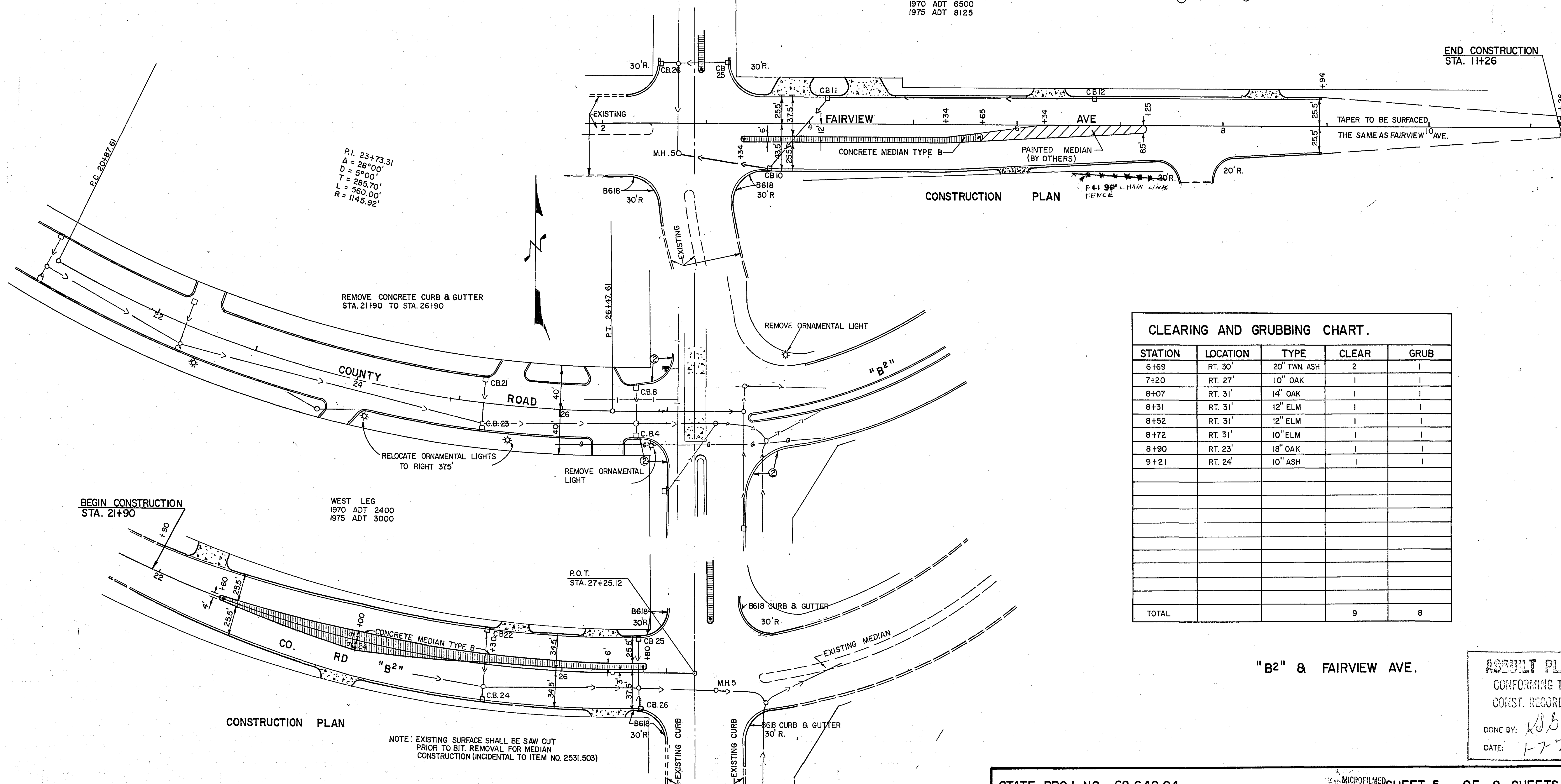
DONE BY: KSD
DATE: 1-7-76

MATERIAL: CAST GRAY IRON
CLASS 30
MHD. SPEC. REFERENCE 3321

NOTE: CURB BOX HEIGHT IS ADJUSTABLE TO 9"



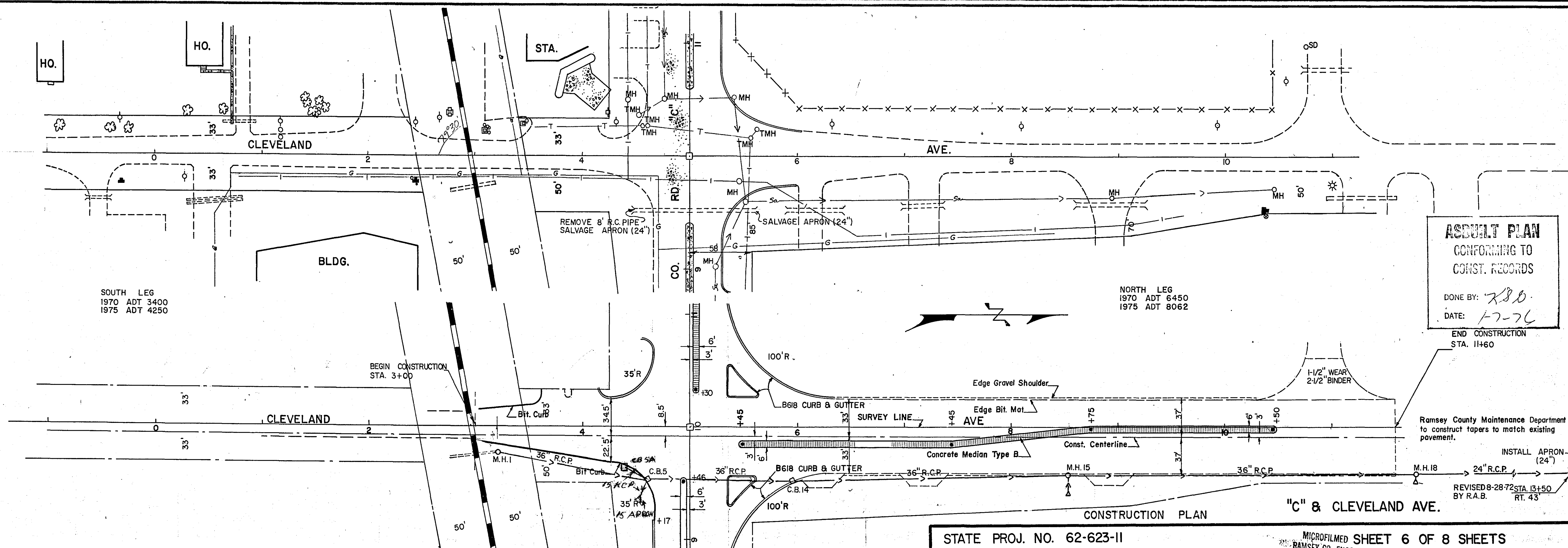
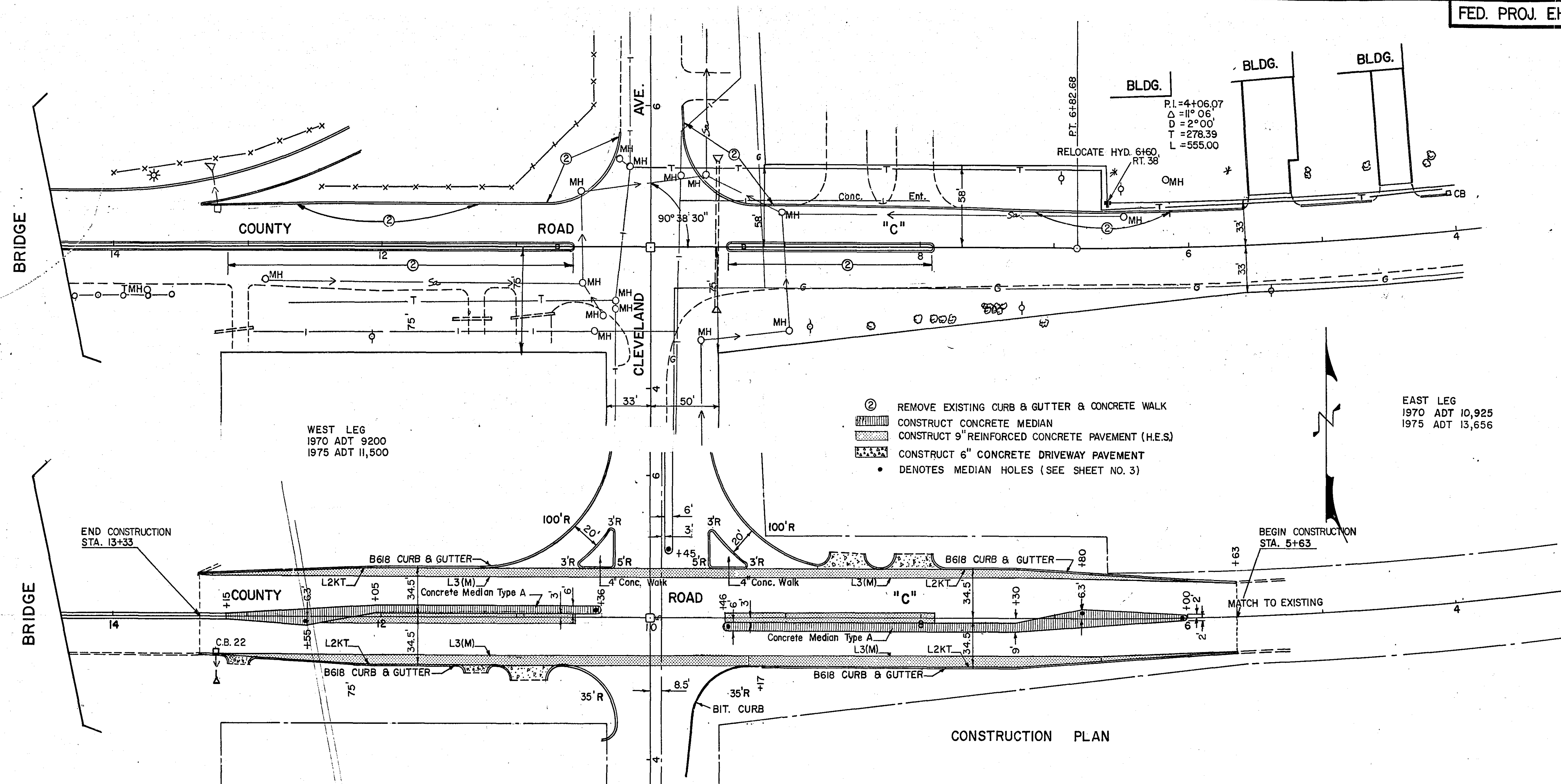
NORTH LEG
1970 ADT 6500
1975 ADT 8125

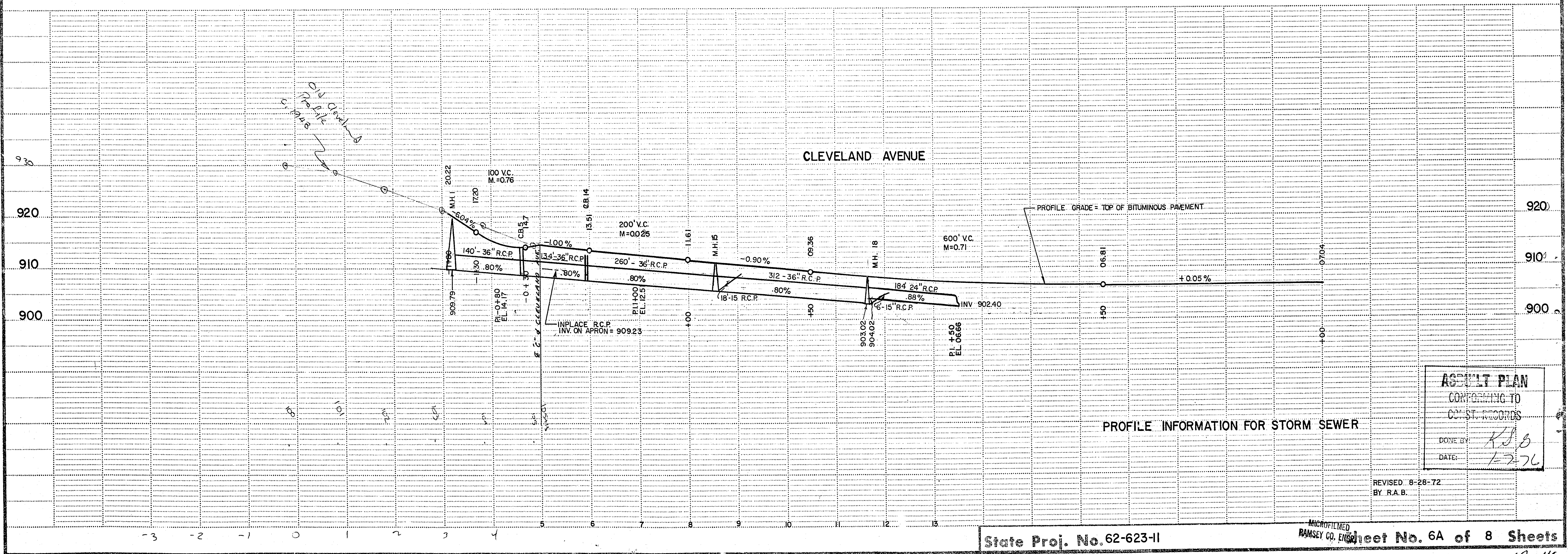


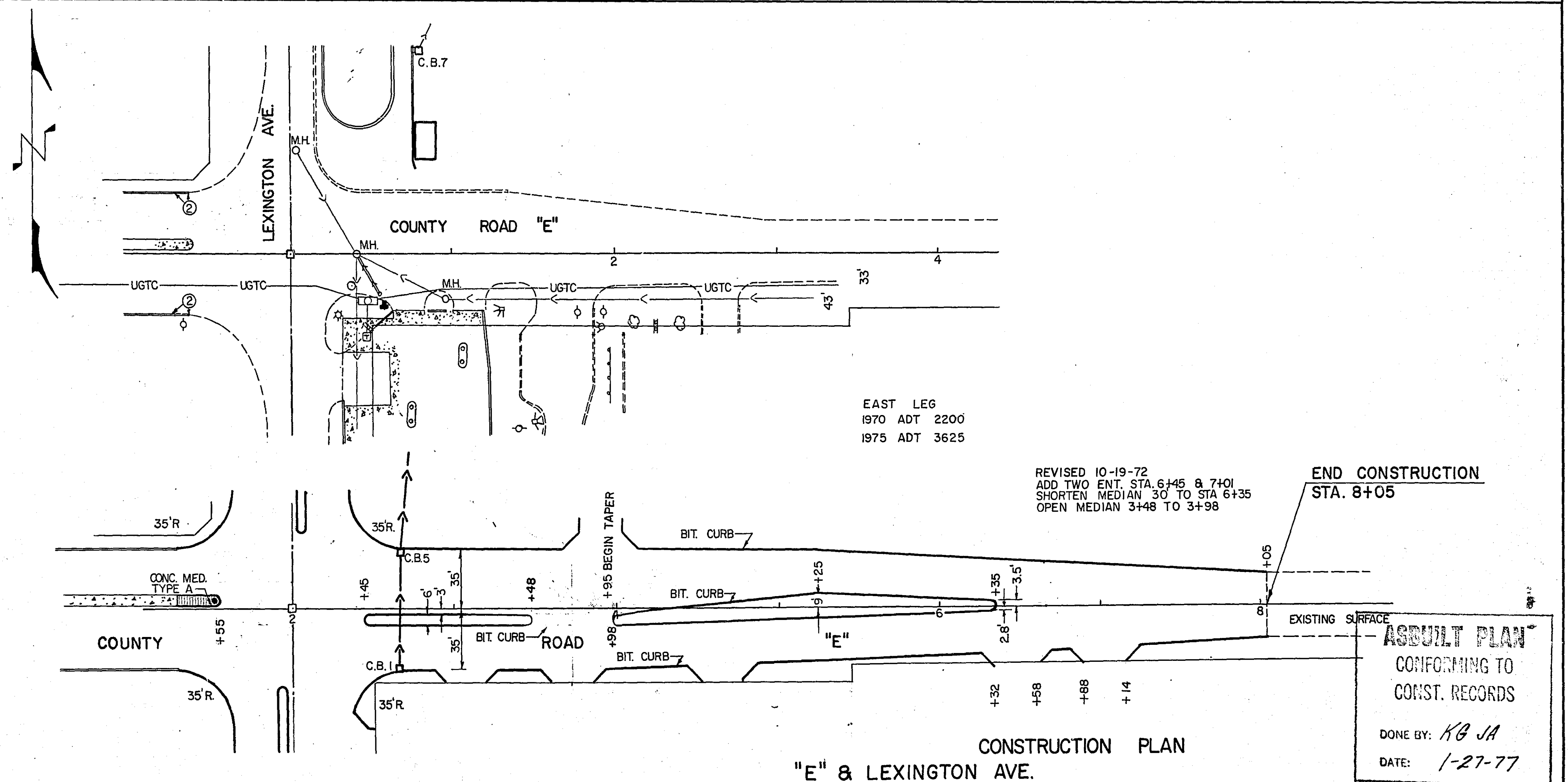
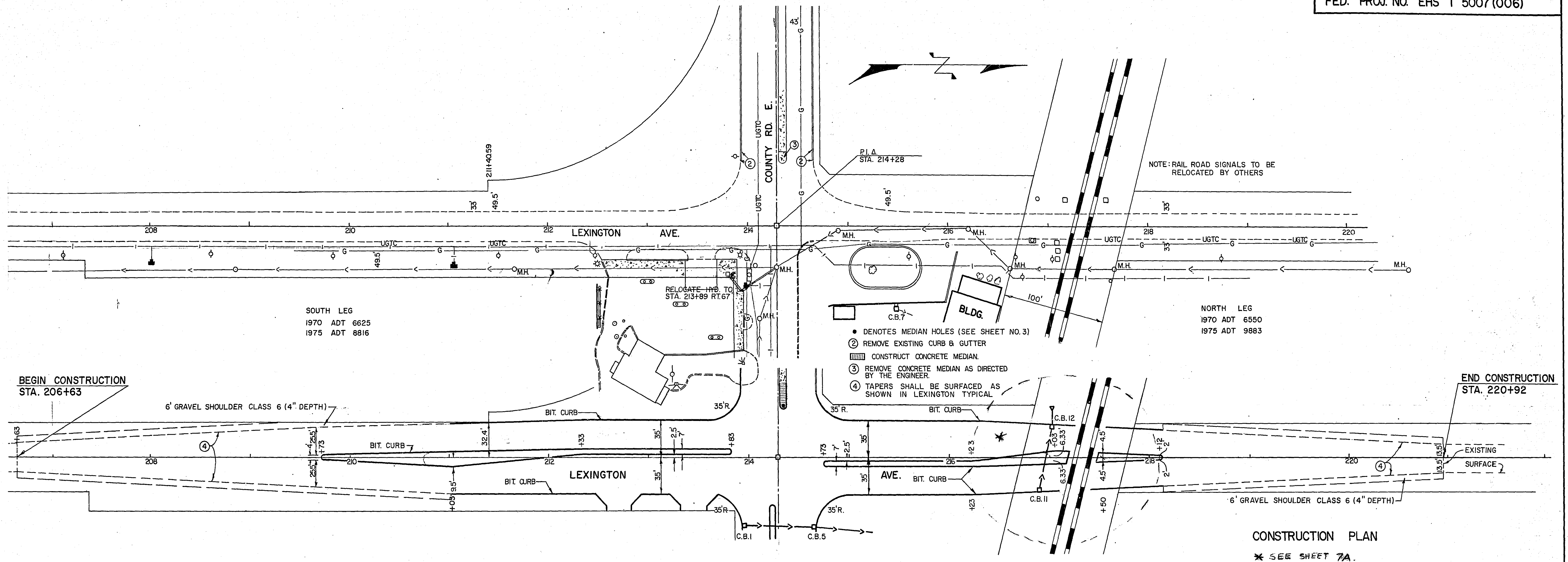
CLEARING AND GRUBBING CHART.				
STATION	LOCATION	TYPE	CLEAR	GRUB
6+69	RT. 30'	20" TWN. ASH	2	1
7+20	RT. 27'	10" OAK	1	1
8+07	RT. 31'	14" OAK	1	1
8+31	RT. 31'	12" ELM	1	1
8+52	RT. 31'	12" ELM	1	1
8+72	RT. 31'	10" ELM	1	1
8+90	RT. 23'	18" OAK	1	1
9+21	RT. 24'	10" ASH	1	1
TOTAL			9	8

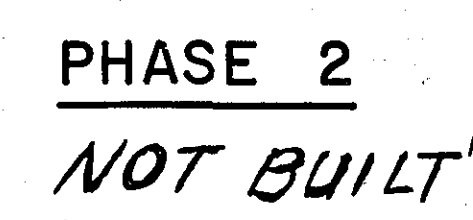
"B2" & FAIRVIEW AVE.

ASBUILT PLAN
CONFORMING TO
CONST. RECORDS
DONE BY: *JSB*
DATE: *1-7-76*







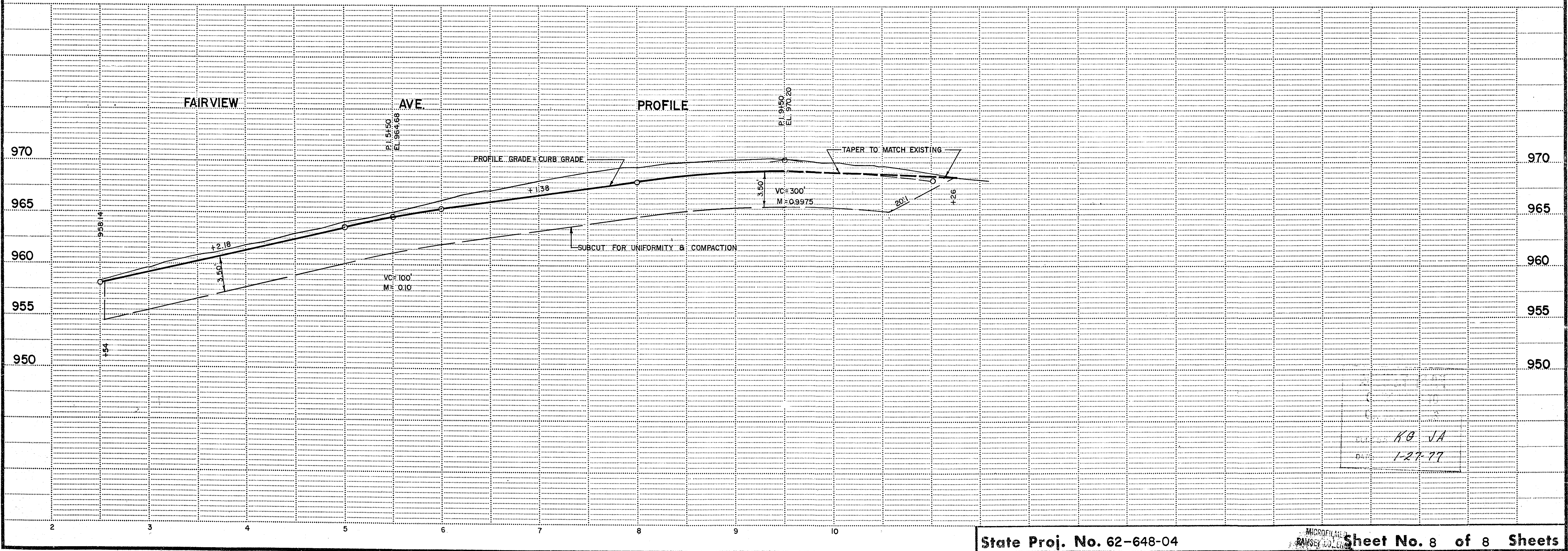
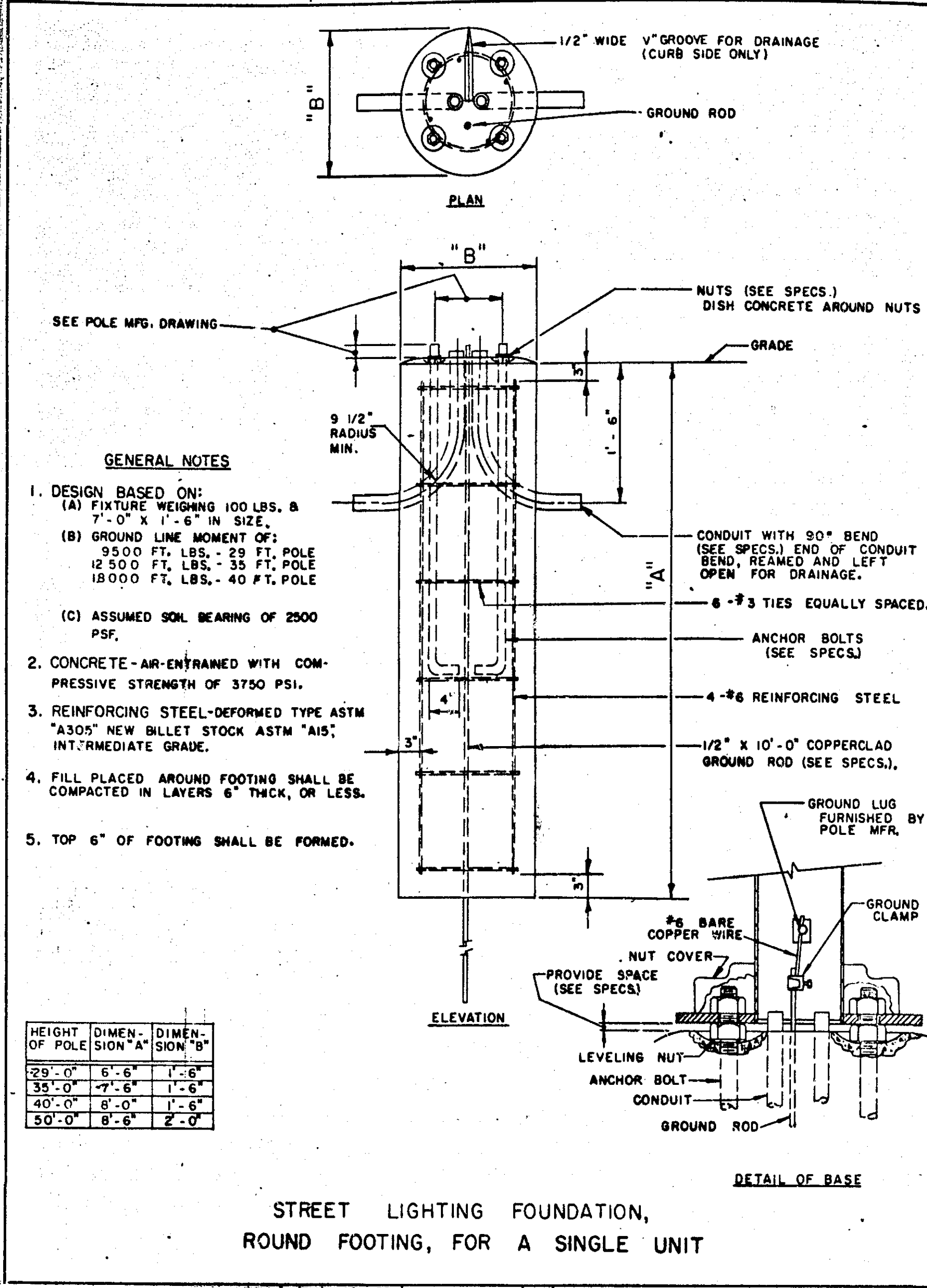


ADULT PLAN
CONFORMING TO
CONST. RECORDS

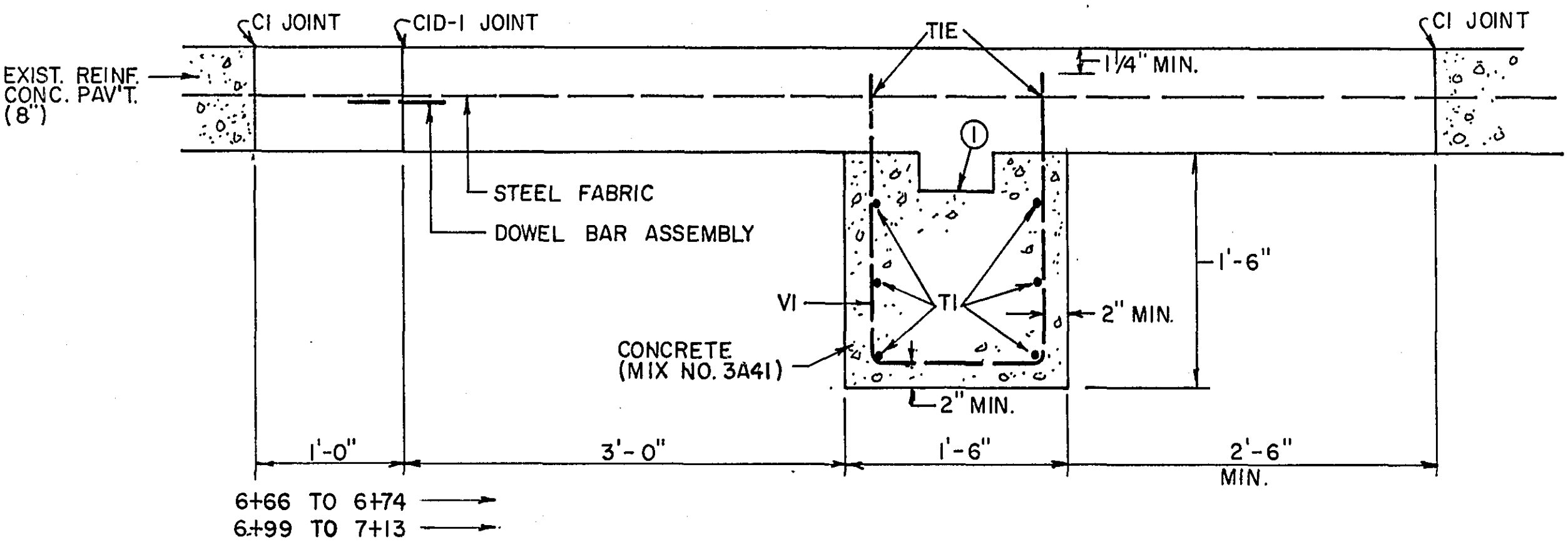
DONE BY:

DATE:

18-116



① KEYWAY JOINT APPROX. 5 1/2" X 3 1/4".
USE TWO NOMINAL 2"X6" PLANKS
NAIL TOGETHER TO FORM KEYWAY.



TRANSVERSE SECTION THROUGH LUG ANCHORAGE

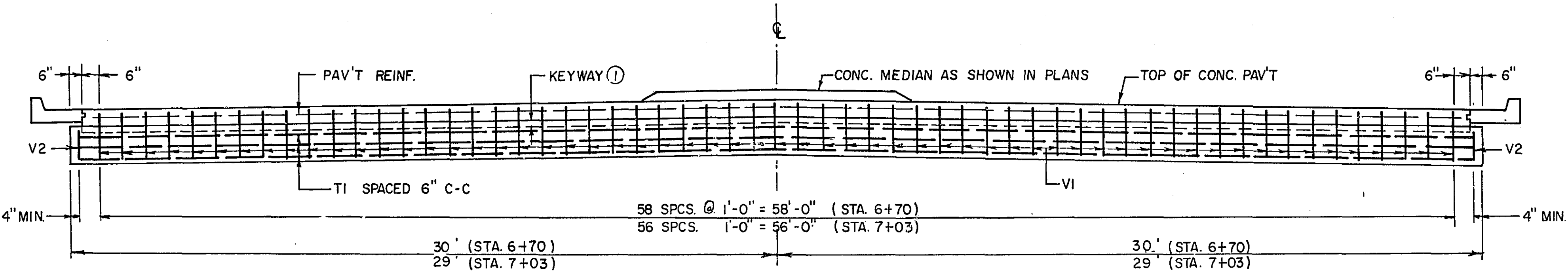
APPROXIMATE QUANTITIES

REMOVE CONCRETE PAV'T	117 S.Y.
COMMON EXCAVATION	13.6 C.Y.
AGGREGATE BASE, CLASS 6	20 TON
CONCRETE PAVEMENT	117 S.Y.
PAV'T REINFORCEMENT TYPE 612 XD4.9XD4	117 S.Y.
DOWEL BAR ASSEMBLY	116 L.F.
CID-I JOINT	116 L.F.
CI JOINT	232 L.F.
STRUCTURAL CONC. (CONC. PAV'T	26.2 C.Y.
STRUCTURAL CONC. (LUG ANCHOR)	9.8 C.Y.
STEEL REINFORCEMENT	1,342 LBS

BAR LIST FOR LUG ANCHORAGE				
LOCATION	BARS	NO. REQ'D	LENGTH	SHAPE
6+70	VI	59	4'-11"	BENT
	V2	2	3'-6"	BENT
	TI	6	59'-6"	STRT.
7+03	VI	57	4'-11"	BENT
	V2	2	3'-6"	BENT
	TI	6	57'-6"	STRT.

NOTES:
ALL REINFORCEMENT BARS SHALL BE NO. 5 (5/8") DEFORMED.
ALL INTERSECTIONS OF REINFORCEMENT BARS SHALL BE TIED OR SPOT WELDED.
EXISTING CONCRETE PAVEMENT SHALL BE SAW CUT PRIOR TO REMOVAL.
ALL CONCRETE SHALL BE HIGH EARLY MIN. 6 BAGS CEMENT PER CUBIC YARD.

COUNTY RD. "C"
TYPICAL SECTION FOR LUG ANCHORAGE



ASBUILT PLAN
CONFORMING TO
EXIST. RECORDS
DONE BY: KG JA
DATE: 1-27-77

DATE: 8-14-72
R.W.
REVISED 8-24-72
R.A.B.

"PLAN CHANGE TO BE ACCOMPLISHED UNDER SUPPLEMENTAL AGREEMENT NO.2
TO CONTRACT NO.14787 DATED 8-14-72"