

**PLANS SYMBOLS**

STATE LINE	-----	SPRINGS	-----
COUNTY LINE	-----	MARSH	-----
TOWNSHIP OR RANGE LINE	-----	TIMBER	-----
SECTION LINE	-----	ORCHARD	-----
QUARTER LINE	-----	BRUSH	-----
SIXTEENTH LINE	-----	NURSERY	-----
RIGHT-OF-WAY LINE	-----	CATCH BASIN	C.B. □
PRESENT RIGHT-OF-WAY LINE	-----	FIRE HYDRANT	-----
CONTROL OF ACCESS LINE	-----	CATTLE GUARD	-----
PROPERTY LINE (Except Land Lines)	-----	OVERPASS (Highway Over)	-----
VACATED PLATTED PROPERTY	-----	UNDERPASS (Highway Under)	-----
CORPORATE OR CITY LIMITS	-----	BRIDGE	-----
TRUNK HIGHWAY CENTER LINE	-----	BUILDING (One Story Frame)	-----
RETAINING WALL	-----	F-FRAME C-CONCRETE	-----
RAILROAD	-----	S-STONE T-TILE	-----
RAILROAD RIGHT-OF-WAY LINE	-----	B-BRICK ST-STUCCO	-----
RIVER OR CREEK	-----	IRON PIPE OR ROD	-----
DRY RUN	-----	MONUMENT (STONE, CONCRETE, OR METAL)	-----
DRAINAGE DITCH	-----	WOODEN HUB	-----
DRAIN TILE	-----	GRAVEL PIT	-----
CULVERT	-----	SAND PIT	-----
DROP INLET	-----	BORROW PIT	-----
GUARD RAIL	-----	ROCK QUARRY	-----
BARBED WIRE FENCE	-----		
WOVEN WIRE FENCE	-----		
CHAIN LINK FENCE	-----		
RAILROAD SNOW FENCE	-----		
STONE WALL OR FENCE	-----		
HEDGE	-----		
RAILROAD CROSSING SIGN	-----		
RAILROAD CROSSING BELL	-----		
ELECTRIC WARNING SIGN	-----		
CROSSING GATE	-----		
MEANDER CORNER	-----		

**UTILITIES SYMBOLS**

POWER POLE LINE	-----	CONDUIT	-----
TELEPHONE OR TELEGRAPH POLE LINE	-----	TELEPHONE CABLE IN CONDUIT	-----
JOINT TELEPHONE AND POWER ON POWER POLES	-----	ELECTRIC CABLE IN CONDUIT	-----
ON TELEPHONE POLES	-----	TELEPHONE MANHOLE	-----
ANCHOR	-----	ELECTRIC MANHOLE	-----
STEEL TOWER	-----	BURIED TELEPHONE CABLE	-----
STREET LIGHT	-----	BURIED ELECTRIC CABLE	-----
PEDESTAL TELEPHONE CABLE TERMINAL	-----	AERIAL TELEPHONE CABLE	-----
GAS MAIN	-----	SEWER, (SANITARY OR STORM)	-----
WATER MAIN	-----	SEWER MANHOLE	-----

**PIT DATA**

PIT NO. _____	Located in _____
PIT NO. _____	Located in _____
PIT NO. _____	Located in _____
PIT NO. _____	Located in _____

**SPECIFICATIONS**

THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION DATED JANUARY 1, 1964 AS AMENDED BY SUPPLEMENTAL SPECIFICATIONS DATED FEBRUARY 1, 1966 SHALL GOVERN.

**OFFICE OF COUNTY ENGINEER**

**RAMSEY COUNTY**

CONSTRUCTION PLAN FOR TURN LANES AND BITUMINOUS SURFACING

**LARPENTEUR AVE.**

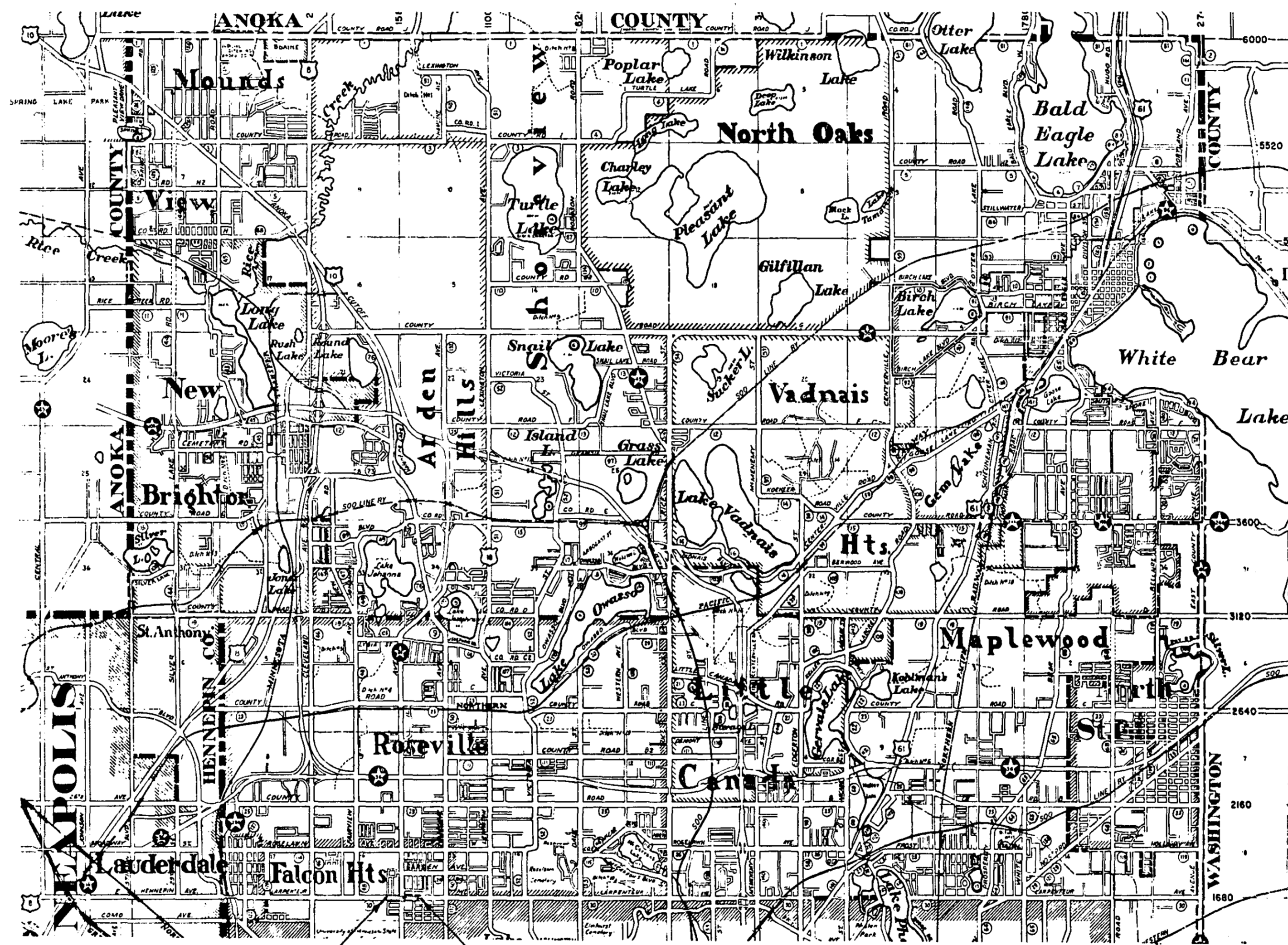
BETWEEN: FRY ST. AND: ARONA AVE.

FROM: A POINT 1283.71 FEET WEST OF THE SOUTH-EAST CORNER OF SECTION 16, T.29N., R.23W. TO: A POINT 1000 FEET EAST OF THE SOUTHWEST CORNER OF SECTION 15, T.29N., R.23W.

S.A.P. NO. 62-630-09

GROSS LENGTH 2283.7 FEET 0.4325 MILES  
 BRIDGES-LENGTH 0 FEET 0 MILES  
 EXCEPTIONS-LENGTH 0 FEET 0 MILES  
 NET LENGTH 2283.7 FEET 0.4325 MILES

SCALES: PLAN, 1 inch = 50 Feet  
 PROFILE, Horiz. 1 inch = 50 Feet Vert 1 inch = 5 Feet  
 WORKING PLANS: Horiz. 1 inch = 50 Feet Vert 1 inch = 5 Feet  
 Cross-Sections 1 inch = 10 Feet  
 LAYOUT, 1 inch = 2640 Feet



CITY OF ST. PAUL

BEGIN PROJ. STA. 92+50 END PROJ. STA. 10+00

**INDEX**

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	TYPICAL SECTIONS & ESTIMATED QUANTITIES
384	CONSTRUCTION PLAN & PROFILES

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.  
*Monica Parker* ENGINEER REG. NO. 2042 DATE 2-7-67

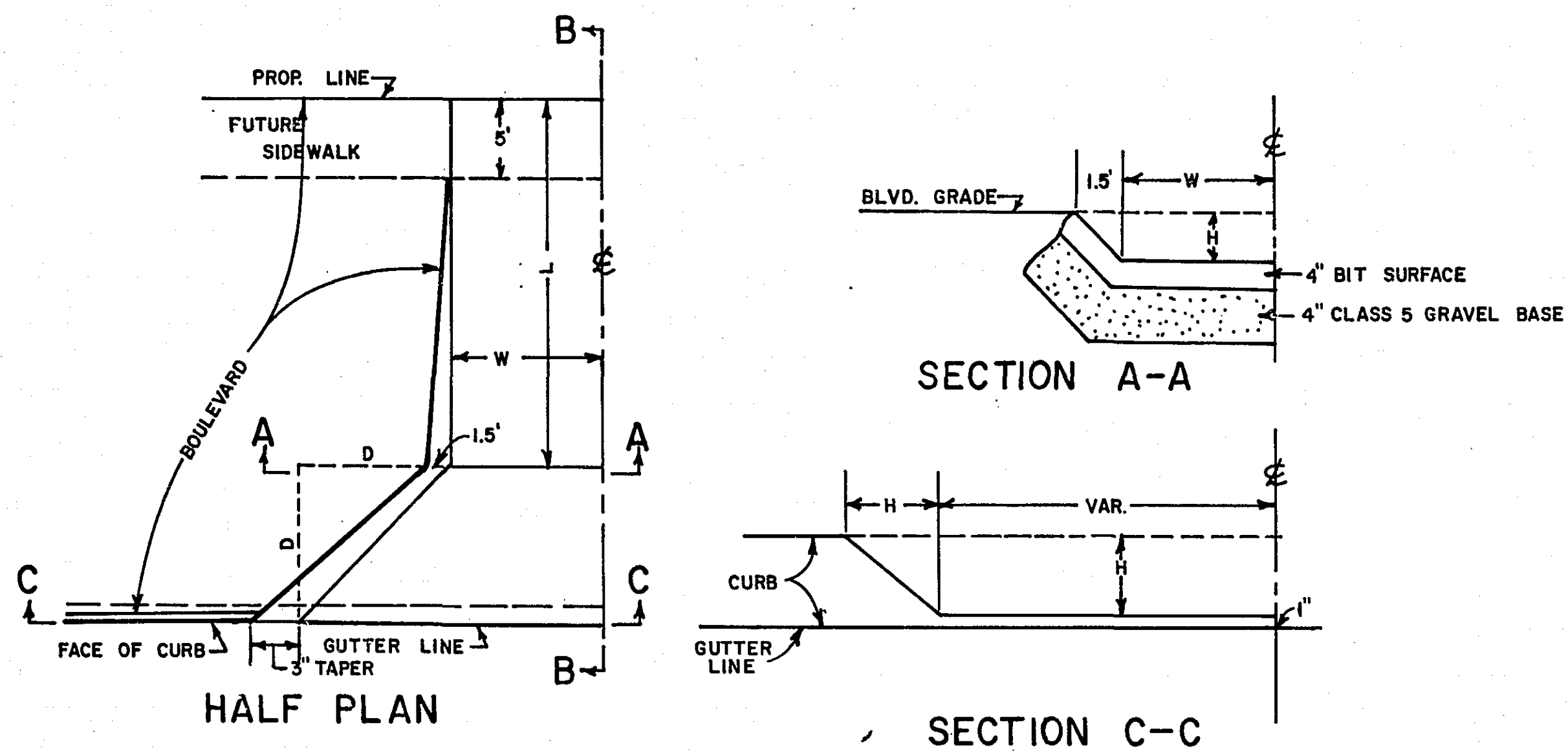
RECOMMENDED FOR APPROVAL *Dean S. Adala* COUNTY ENGINEER DATE 2-7-67  
 APPROVED *W. Barnard* CHAIRMAN OF THE RAMSEY COUNTY BOARD  
 APPROVED *A. C. Nelson* MAYOR, VILLAGE OF FALCON HEIGHTS

MINNESOTA STATE HIGHWAY DEPARTMENT  
 RECOMMENDED FOR APPROVAL \_\_\_\_\_ DATE \_\_\_\_\_  
 RECOMMENDED FOR APPROVAL \_\_\_\_\_ DATE \_\_\_\_\_  
 APPROVAL \_\_\_\_\_ STATE AID ENGINEER DATE \_\_\_\_\_

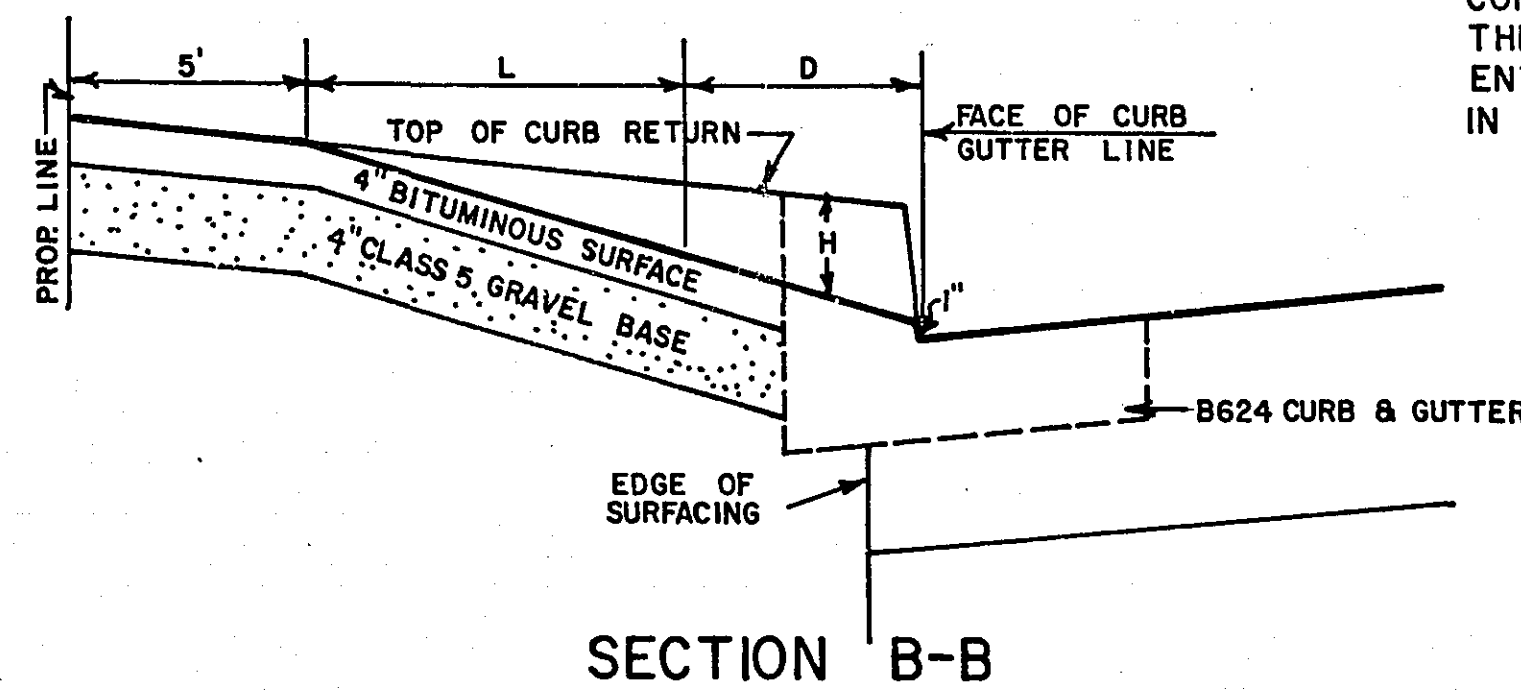
**STATEMENT OF ESTIMATED QUANTITIES**

ITEM NO.	ITEM	UNIT	TOTAL ESTIMATED QUANTITIES
2104502	REMOVE PAVEMENT	S.Y.	284
2104504	REMOVE CURB	L.F.	595
2104506	REMOVE SIDEWALK	S.Y.	34.0
2104511	REMOVE MANHOLES AND CATCH BASINS	STRUCTURE	2
2104515	REMOVE PIPE SEWERS	L.F.	266
2104518	REMOVE BITUMINOUS PAVEMENT SURFACING	S.Y.	4100
2104520	REMOVE MONOLITHIC BOX CULVERT	STRUCTURE	1
2105504	CLASS S.G. EXCAVATION	C.Y.	500
2202526	GRAVEL BASE IN PLACE (CLASS 5)	TON	420
2301511	9" NON-REINFORCED CONC. PAVE. (STANDARD STRENGTH)	S.Y.	522
2301531	REINFORCEMENT BARS (INCLUDES HOLES)	POUND	3044
2351502	BIT. MATERIAL FOR TACK COAT	GAL.	410
2351504	ASPHALT CEMENT	TON	50
2351509	ASPHALTIC CONCRETE WEARING COURSE AND FILLER	TON	511
2351512	ASPHALTIC CONCRETE LEVELING COURSE	TON	350
2356505	BIT. MATERIAL FOR SEAL COAT	GAL.	1207
2301529	CONCRETE TREATING OIL	GAL.	63
356511	SEAL COAT AGGREGATE FA-2	TON	60
2503512	F & I. 18" R.C.P. SEWER, CLASS II	L.F.	76
2506509	CONSTRUCT CATCH BASINS L.P. 4-4	STRUCTURE	1
2506511	RECONSTRUCT MANHOLES	L.F.	3
2521501	CONCRETE WALK 4" THICK	S.F.	70
2531501	CONCRETE CURB AND GUTTER, DESIGN B624	L.F.	845
2531503	CONCRETE MEDIAN	S.Y.	923
	BARRIER POSTS	POST	12

**BITUMINOUS ENTRANCE DETAILS**

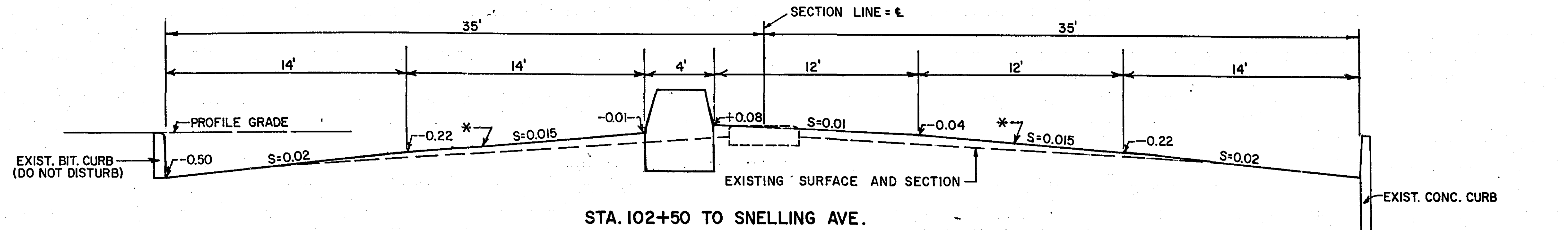


NOTE: PRIVATE ENTRANCE: W=6' D=5'  
 COMMERCIAL ENTRANCE: W=11' D=10'  
 THE EXACT LOCATION AND WIDTH OF  
 ENTRANCES SHALL BE DETERMINED  
 IN THE FIELD BY THE TRAFFIC ENGINEER.

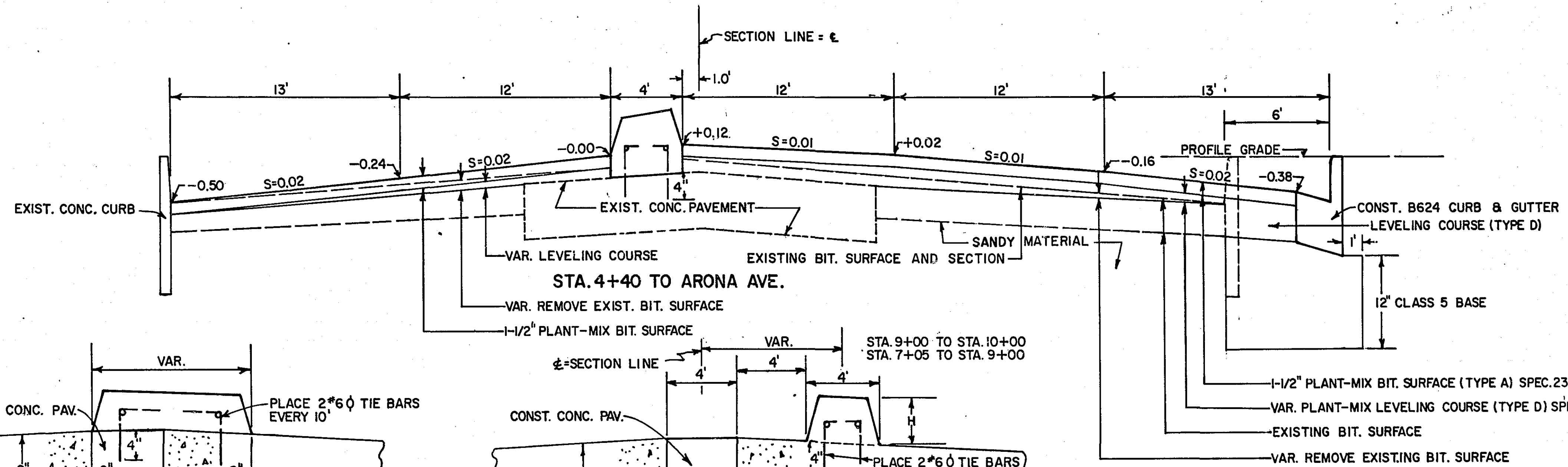
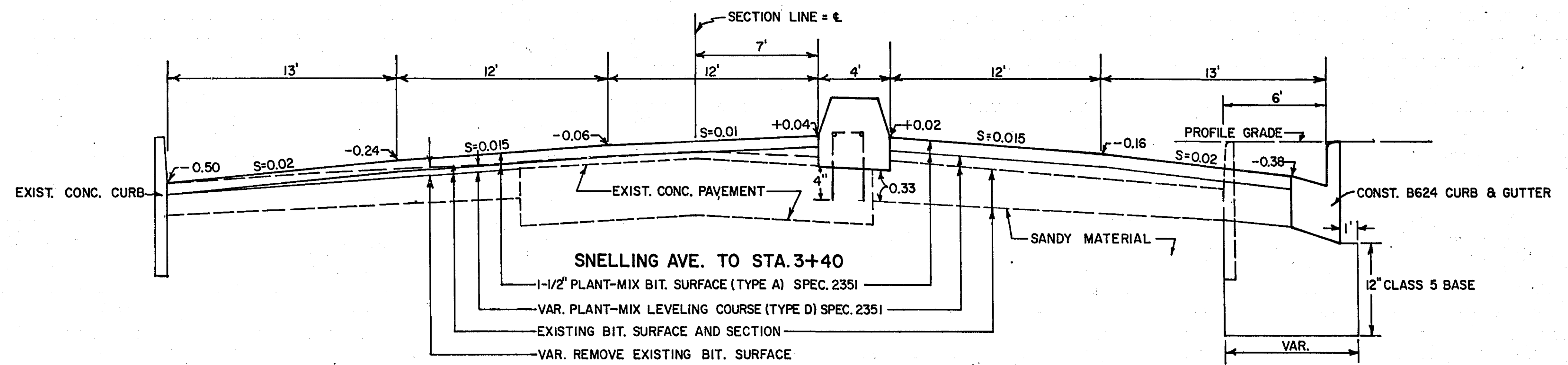


STANDARD DETAIL PLATES	
1120 H	CONTRACTION JOINTS
1140 H	LONGITUDINAL JOINTS
3000 E	REINFORCED CONCRETE PIPE
7020 D	CONCRETE CURB
7035 E	CONCRETE WALK AND CURB RETURN AT ENTRANCES
7100 D	CONCRETE CURB AND GUTTER
7105 C	CONCRETE MEDIAN
8000 C	STANDARD BARRICADE

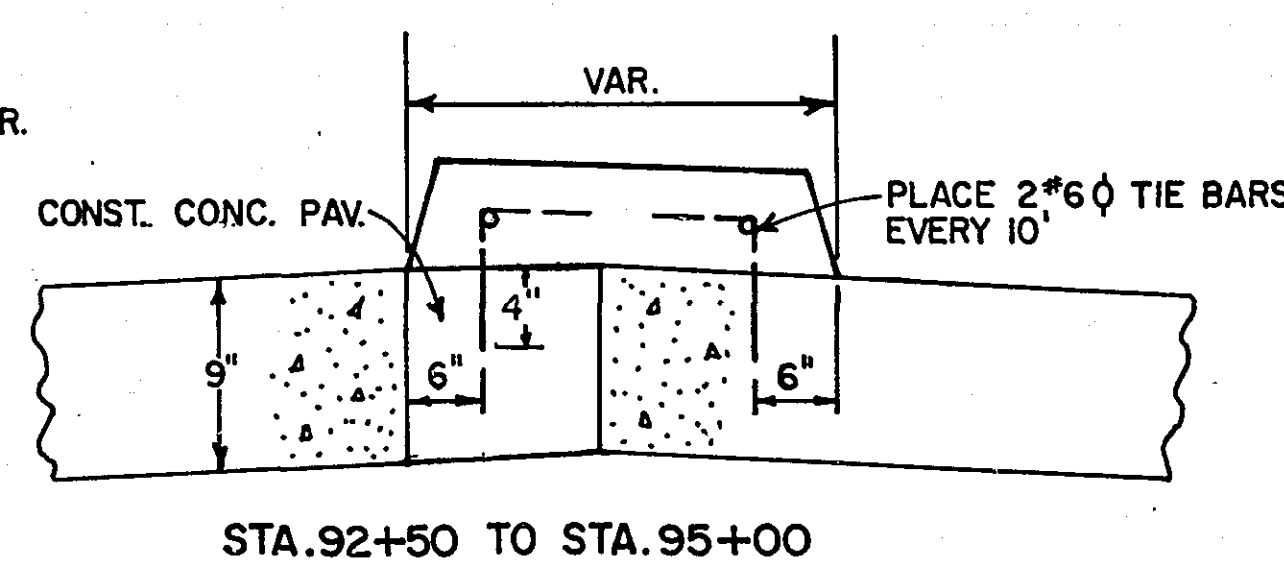
**TYPICAL SECTIONS**



\* PLACE BIT. WEARING COURSE OVER  
 EXIST. BIT. SURFACE AS DIRECTED  
 BY ENGINEER.

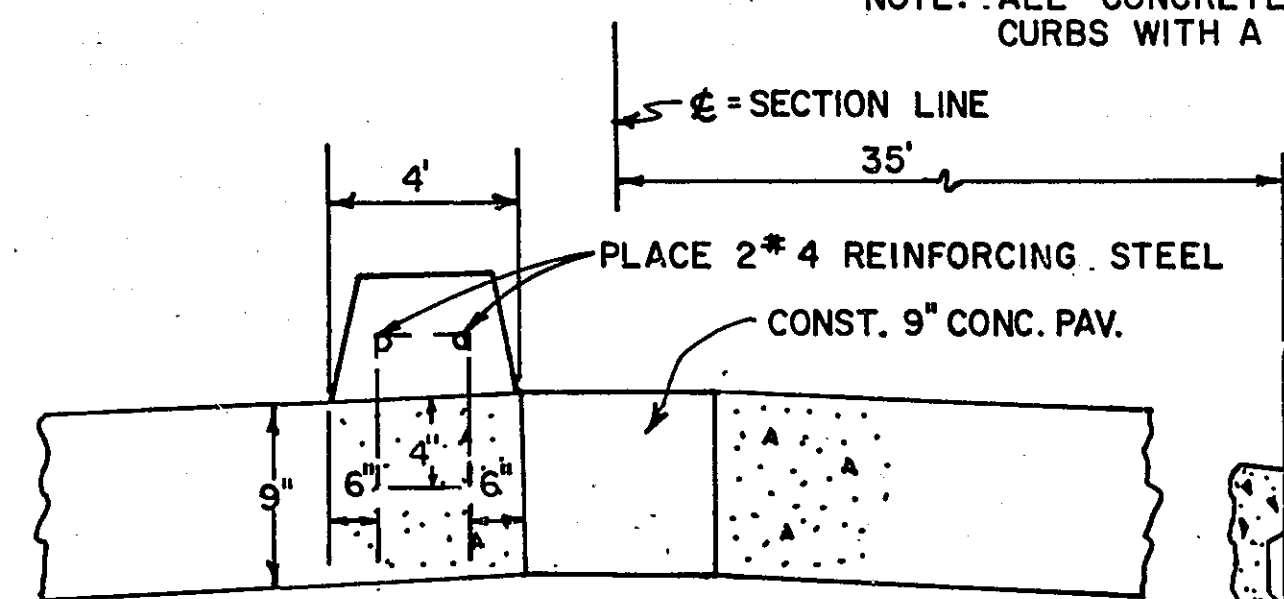


**NOTES:**  
**CONCRETE PAVEMENT**  
 THE TRANSVERSE JOINTS SHALL ALIGN WITH LIKE JOINTS IN EXISTING PAVEMENT AS SHOWN IN STANDARD PLATE NO. 1120F.  
 THE LONGITUDINAL JOINTS SHALL BE FORMED BY REMOVABLE INSERTS AS SHOWN IN STANDARD PLATE NO. 1140G.  
 CONCRETE TREATING OIL AND AIR CONTENT SHALL BE AS PROVIDED IN 2301.  
**CONCRETE CURB AND GUTTER, MEDIAN AND SIDEWALK**  
 TRANSVERSE JOINTS, CONCRETE TREATING OIL AND AIR CONTENT SHALL BE AS PROVIDED IN 2531.  
 THE HEIGHT OF THE MEDIAN SHALL BE AS SHOWN IN STANDARD PLATE NO. 7105B. THE EXACT LOCATION OF END OF MEDIANS SHALL BE DETERMINED IN THE FIELD BY THE TRAFFIC ENGINEER.  
 A 6" SAND-GRAVEL FOUNDATION SHALL BE PLACED UNDER SIDEWALK.  
**PLANT-MIXED BITUMINOUS SURFACE**  
 BITUMINOUS MATERIAL SHALL BE:  
 FOR PRIME COAT: M.C.-70 3152  
 FOR TACK COAT: M.C.-250 OR M.C.-800 3152  
 FOR MIXTURE: A.C.-1 (85-100 PENETRATION) 3151  
 SEAL COAT: THE MATERIAL FOR THE SEAL COAT SHALL BE: C.R.S.-2 (3156).  
**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.

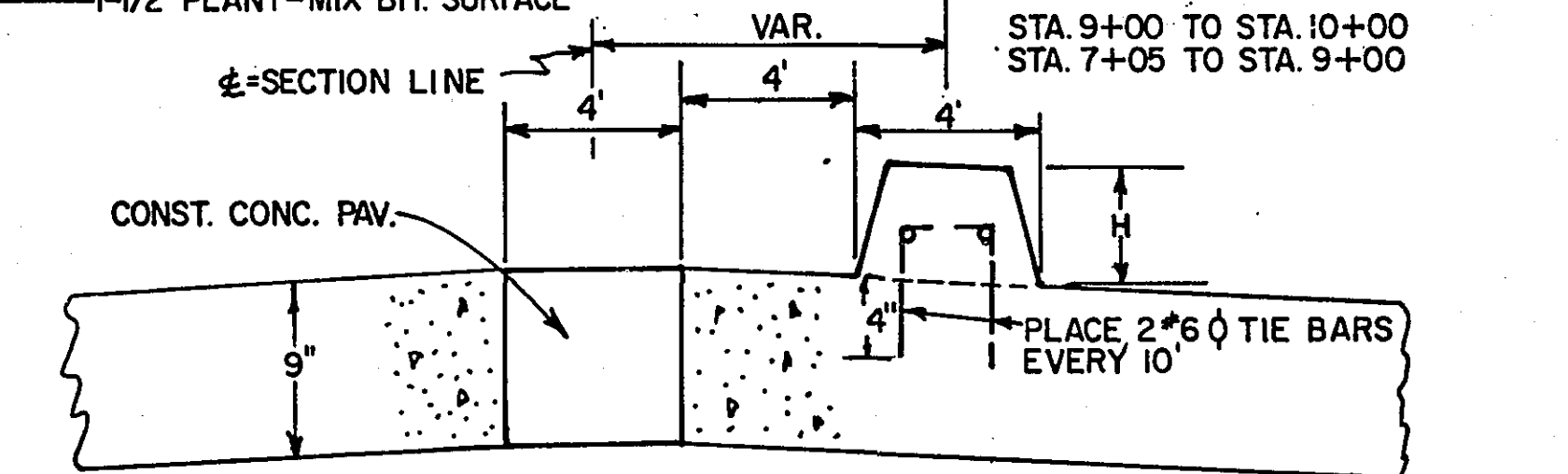


STA. 92+50 TO STA. 95+00

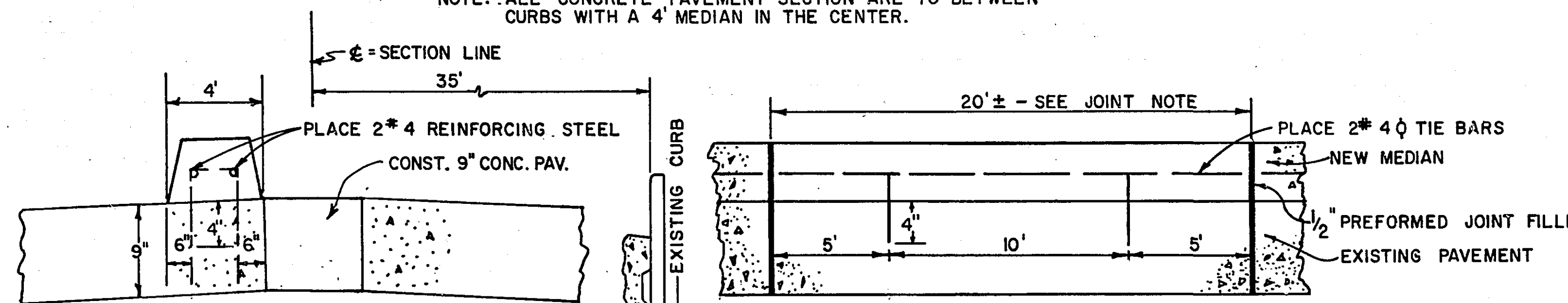
NOTE: ALL CONCRETE PAVEMENT SECTION ARE 70' BETWEEN CURBS WITH A 4' MEDIAN IN THE CENTER.



STA. 95+00 TO STA. 102+50



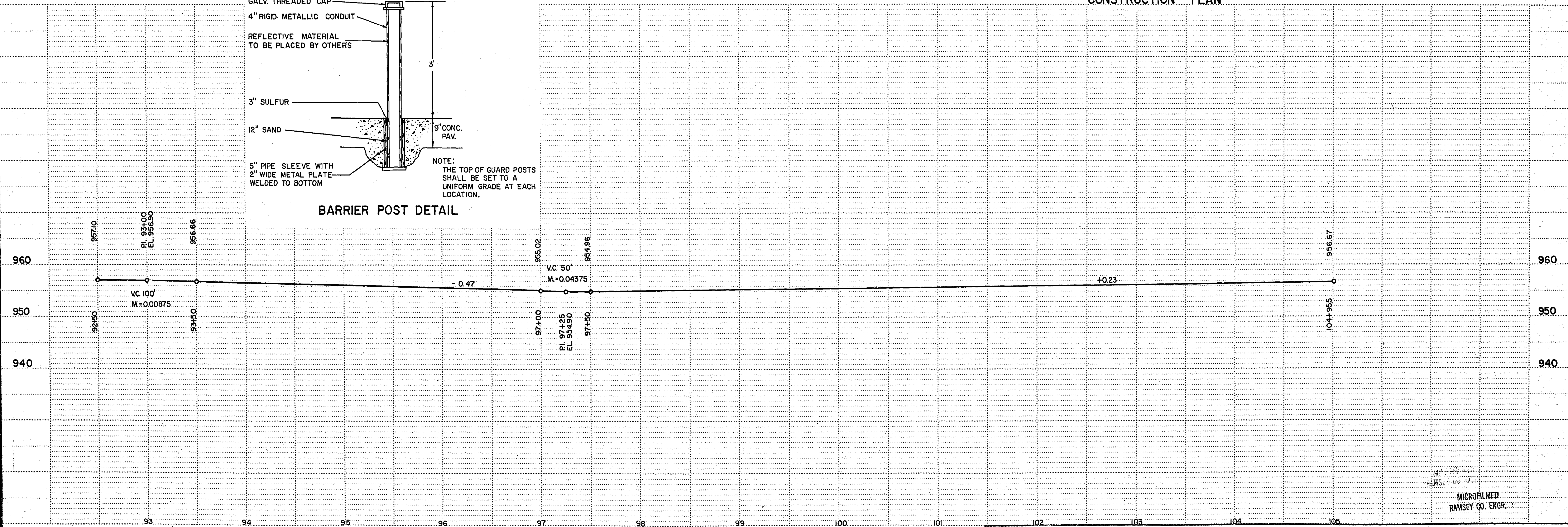
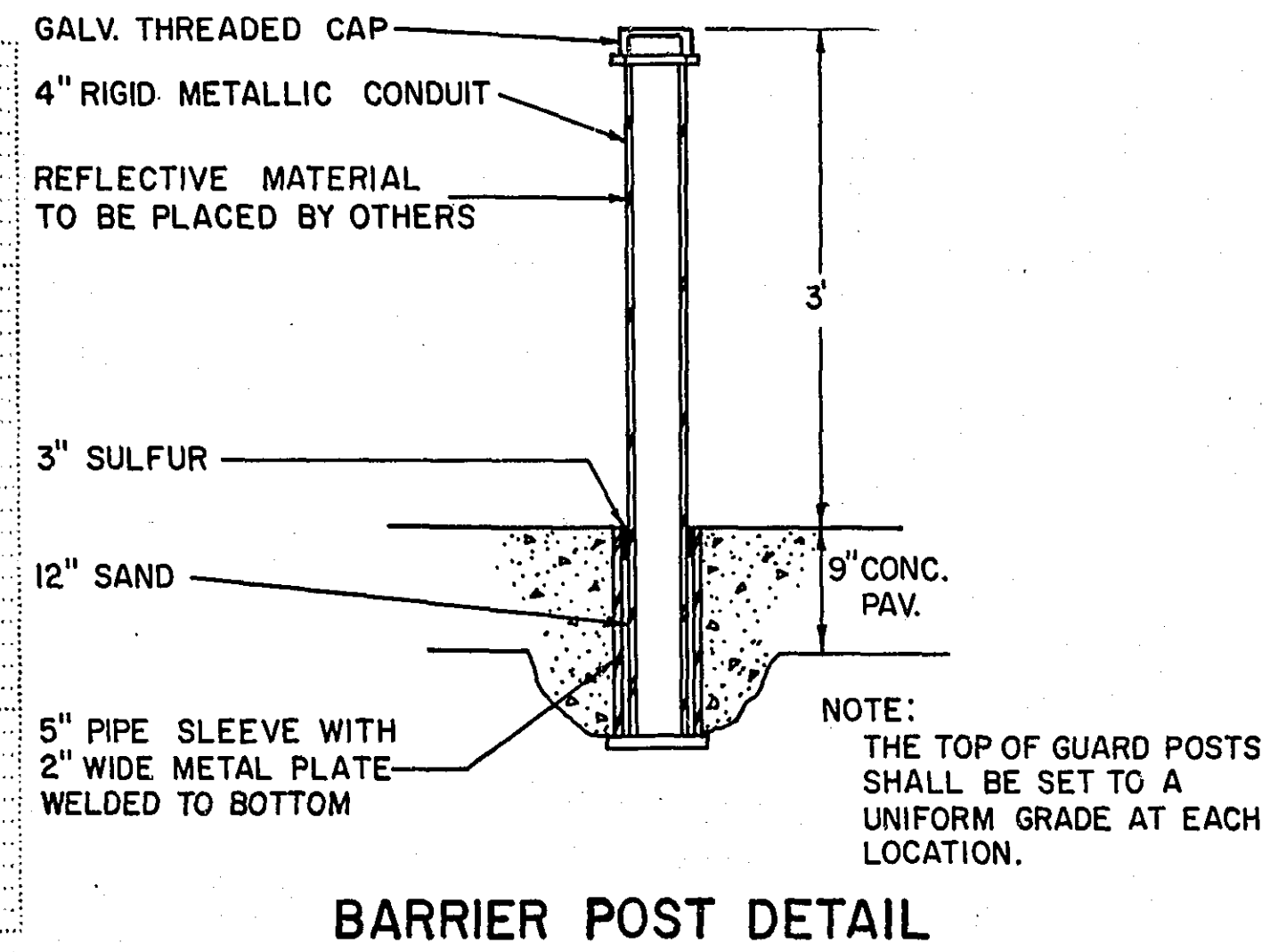
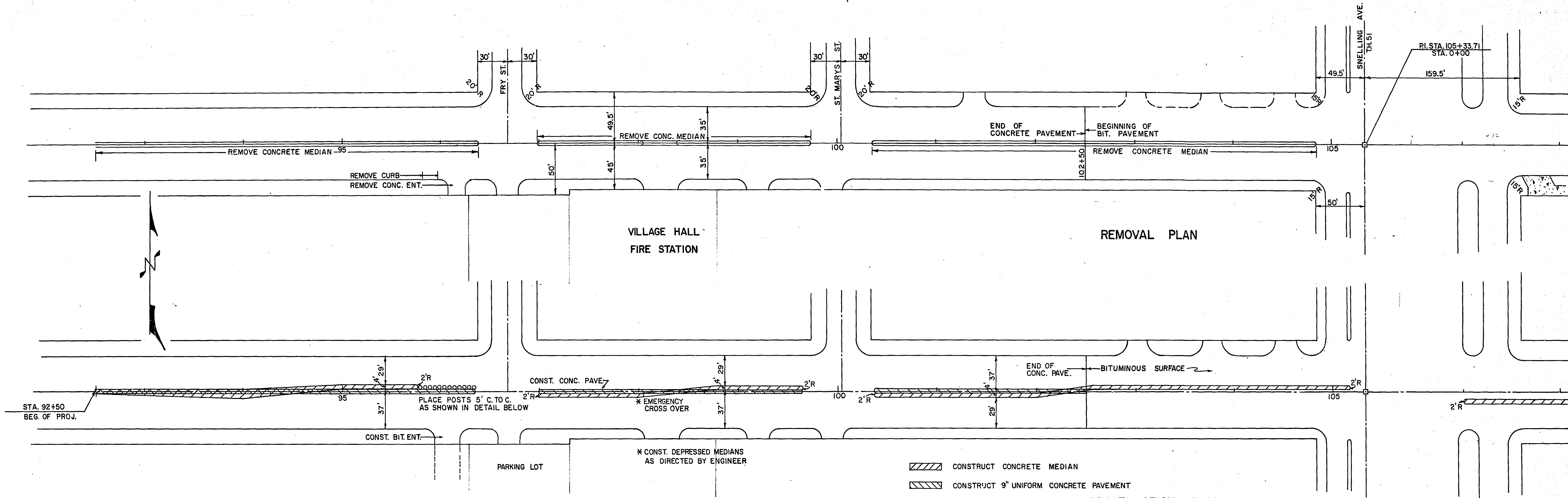
STA. 7+05 TO STA. 10+00



STA. 95+00 TO STA. 102+50

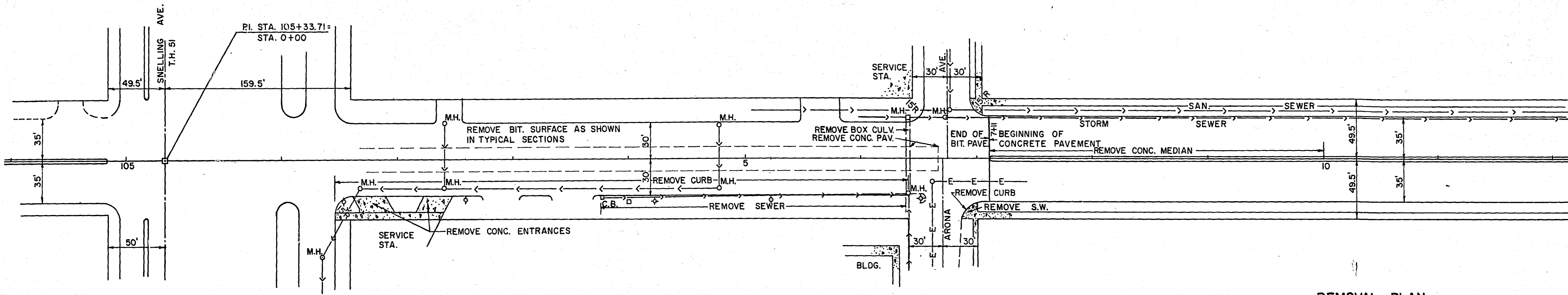
LONGITUDINAL SECTION

**CONCRETE MEDIAN DETAILS**

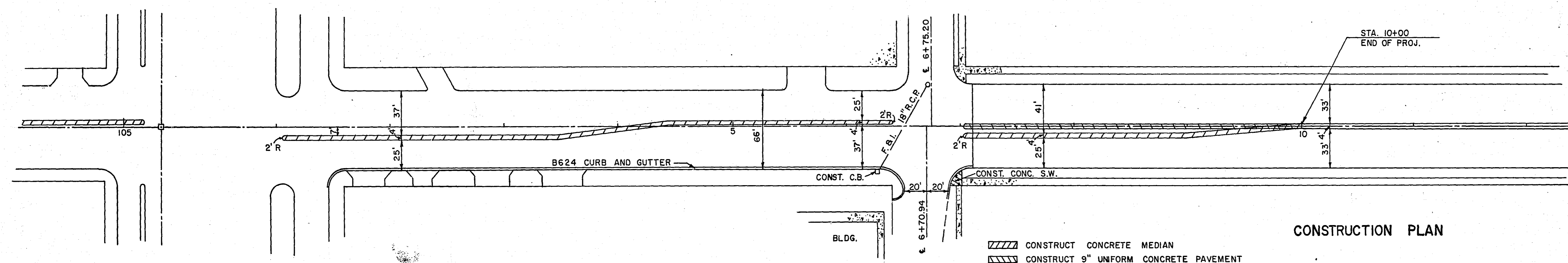


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MICROFILMED  
 RAMSEY CO. ENGR.



REMOVAL PLAN



CONSTRUCTION PLAN

- CONSTRUCT CONCRETE MEDIAN
- CONSTRUCT 9" UNIFORM CONCRETE PAVEMENT

