

STATE OF MINNESOTA  
DEPARTMENT OF HIGHWAYS

GRADING, BITUMINOUS BASE,  
CONSTRUCTION PLAN FOR CONCRETE CURB & GUTTER & BIT SURFACING

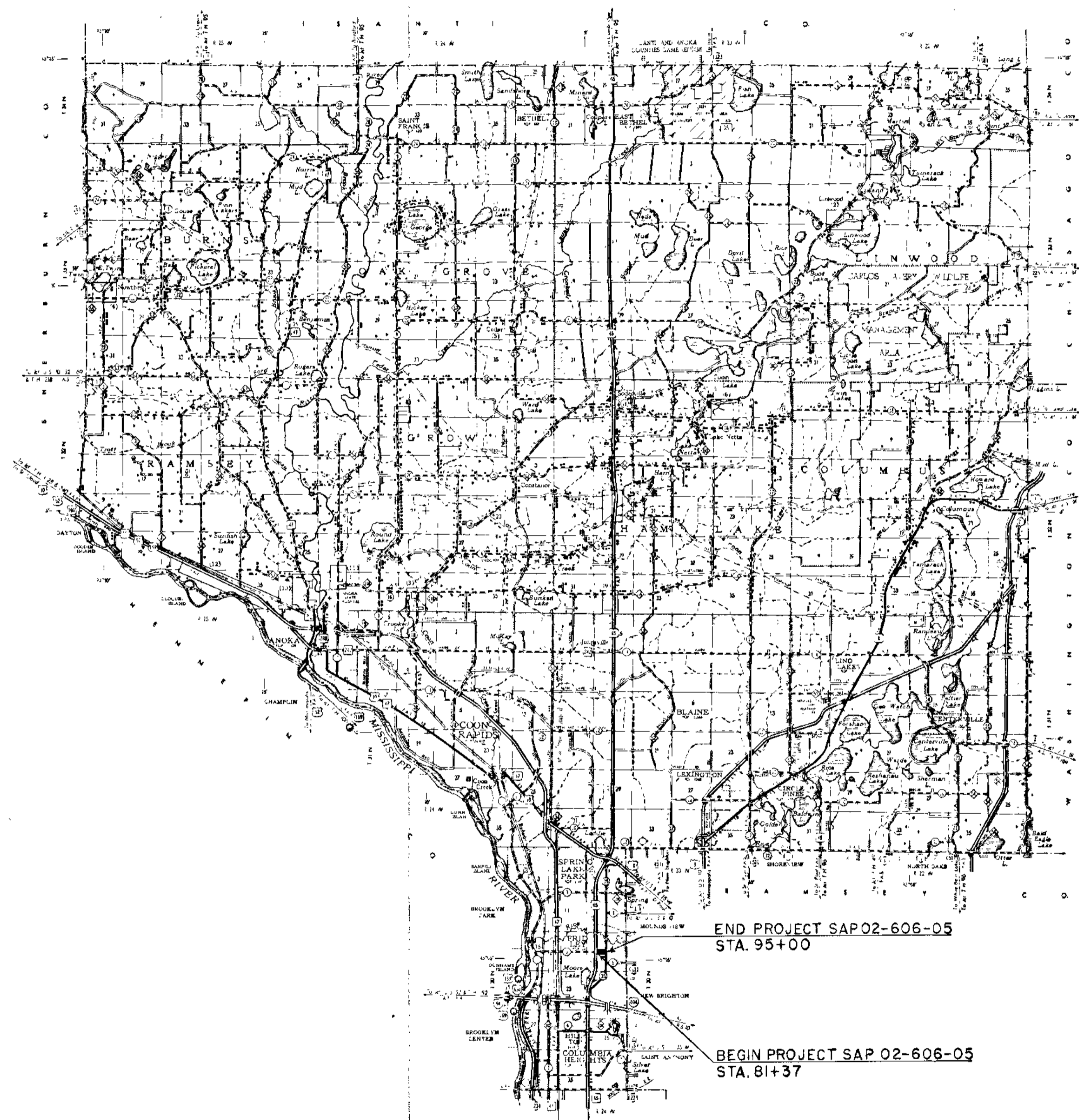
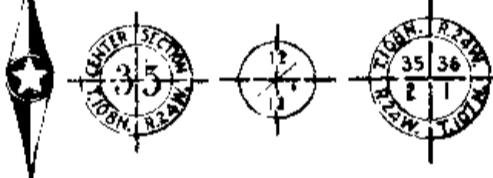
County State Aid Highway No. 6

Between TH 65 And CSAH 35

From A PT. 125.82' E'LY OF W/4 COR. SEC. 13 T 30 R 24 To A PT. 23.0' W'LY OF CENTER SEC. 13 T 30 R 24

CONVENTIONAL SIGNS

Table listing various highway signs and their symbols, including State Line, County Line, Section Line, Right of Way Line, Railroad Crossing Sign, Electric Warning Sign, and many others.



Summary table of project lengths: Gross Length 1363 Feet (0.258 Miles), Bridges Length 0.0 Feet (0 Miles), Exceptions Length 0.0 Feet (0 Miles), Net Length 1363 Feet (0.258 Miles).

Index of Sheets table: Sheet No. 1 - Title Sheet & Layout Map; No. 2 - Est. Quantities & Typical Section; No. 3 to 4 - Plan & Profile; No. 5 to 6 - Cross Sections.

DESIGN DESIGNATION  
ADT (CURRENT YEAR) 3722  
ADT (FUTURE YEAR) 8560  
T (HEAVY COMMERCIAL) LESS THAN 600  
9 Ton Design, Soil Factor - 50 %  
Design Speed 30 MPH  
Design Speed not achieved at:  
STA. \_\_\_\_\_ TO STA. \_\_\_\_\_ MPH  
STA. \_\_\_\_\_ TO STA. \_\_\_\_\_ MPH

SPECIFICATIONS  
THE "STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION", DATED JAN. 1, 1968 SHALL GOVERN

ALL APPLICABLE FEDERAL, STATE AND LOCAL LAWS AND ORDINANCES WILL BE COMPLIED WITH IN THE CONSTRUCTION OF THIS PROJECT.

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.

*E. J. Lundgren* COUNTY ENGINEER DATE 1-26-68

ANOKA COUNTY REG. NO. 2551

RECOMMENDED FOR APPROVAL *G. G. Welch* DISTRICT ENGINEER 3/14/68

RECOMMENDED FOR APPROVAL *C. E. Weichselbaum* 4-5-68

APPROVED *Hubert M. Gatz* STATE AID ENGINEER 4/8 68

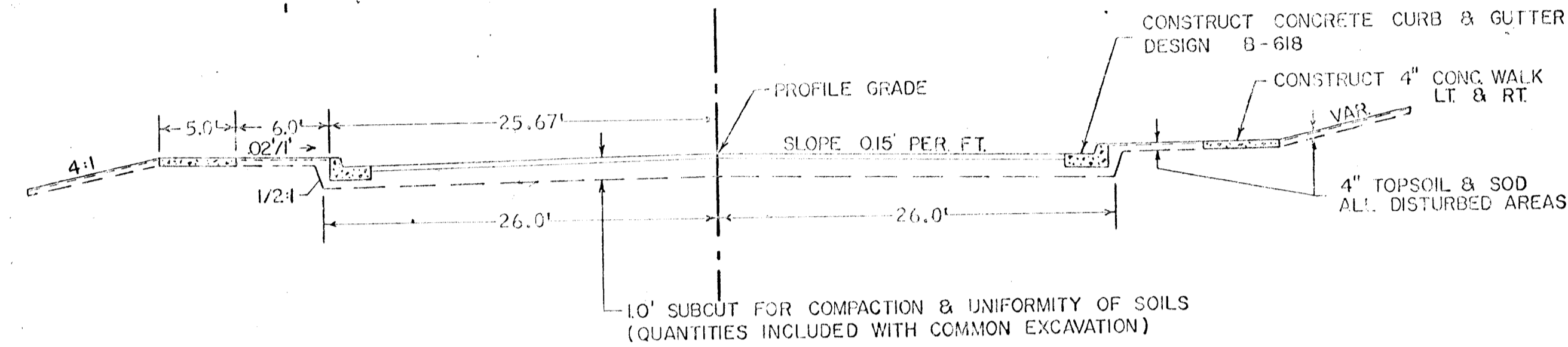
Minn. Proj. No. \_\_\_\_\_ County Proj. No. \_\_\_\_\_  
State Proj. No. \_\_\_\_\_ S. A. P. 02-606-05

FORM 2165-10-58

**STATEMENT OF ESTIMATED QUANTITIES**

ITEM NO.	ITEM	UNIT	TOTAL ESTIMATED QUANTITIES
	02-606-05		
2101.502	CLEARING	TREE	14
2101.507	GRUBBING	TREE	13
2104.502	REMOVE PAVEMENT	SQ. YD.	160
2104.503	REMOVE CURB & GUTTER	LIN. FT.	72
2104.510	REMOVE FENCE	LIN. FT.	120
557.621	RESET FENCE	LIN. FT.	110
2105.501	COMMON EXCAVATION	CU. YD.	3937
2105.525	TOPSOIL BORROW	CU. YD. (V.M.)	355
2105.531	SALVAGED BITUMINOUS MIXTURE	CU. YD. (V.M.)	1200
(1) 2130.501	WATER	M-GAL.	15
(1) 2131.501	CALCIUM CHLORIDE TYPE 2	TON	8
2207.503	BITUMINOUS MATERIAL FOR MIXTURE	GAL.	23,025
2207.512	BIT. STAB. SUBGRADE (6" THICK)	SQ. YD.	7675
(2) 2211.501	AGGREGATE BASE, CLASS 5	TON	10
(2) 2331.504	BITUMINOUS MATERIAL FOR MIXTURE	TON	2
(2) 2331.518	BIT. MIXTURE FOR DRIVEWAY REPLMT.	TON	32
2341.504	BITUMINOUS MATERIAL FOR MIXTURE	TON	65
2341.509	WEARING COURSE MIXTURE FILLER	TON	635
2341.510	BINDER COURSE MIXTURE	TON	635
2357.502	BIT. MATERIAL FOR TACK COAT	GAL.	385
2506.522	ADJ. FRAME & RING CASTINGS	ASSEMBLY	5
(3) 504.601	F & I 6" WATER MAIN	LIN. FT.	17
504.674	MOVE HYDRANT	HYDRANT	4
504.685	ADJ. WATER GATE HOUSING	HOUSING	5
2521.501	4" CONCRETE WALK	SQ. FT.	11,280
2521.501	6" CONCRETE WALK	SQ. FT.	1,320
2531.501	CONCRETE CURB & GUTTER DESIGN B-618	LIN. FT.	2626
2531.507	6" CONCRETE DRIVEWAY PAVEMENT	SQ. YD.	165
2531.507	8" CONCRETE DRIVEWAY PAVEMENT	SQ. YD.	23
2575.505	SODDING	SQ. YD.	2650
565.661	REVISE SIGNAL SYSTEM	SYSTEM	1

**TYPICAL GRADING SECTIONS**

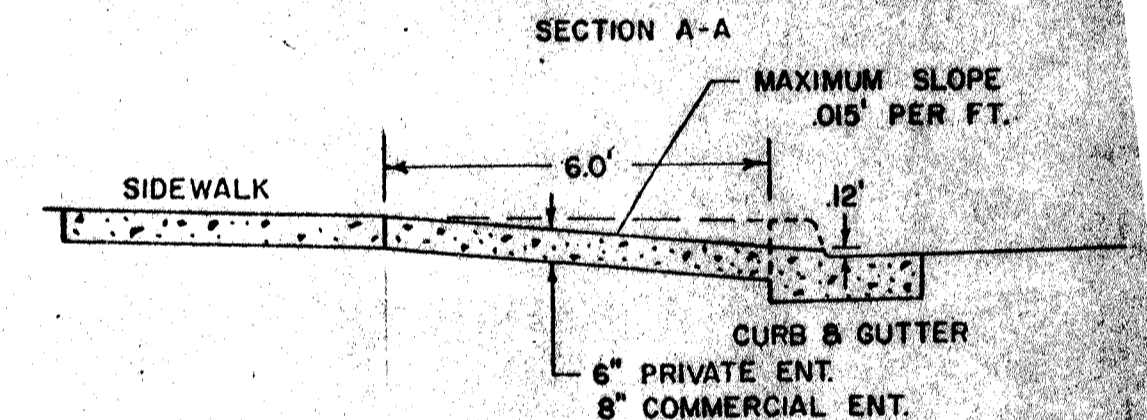
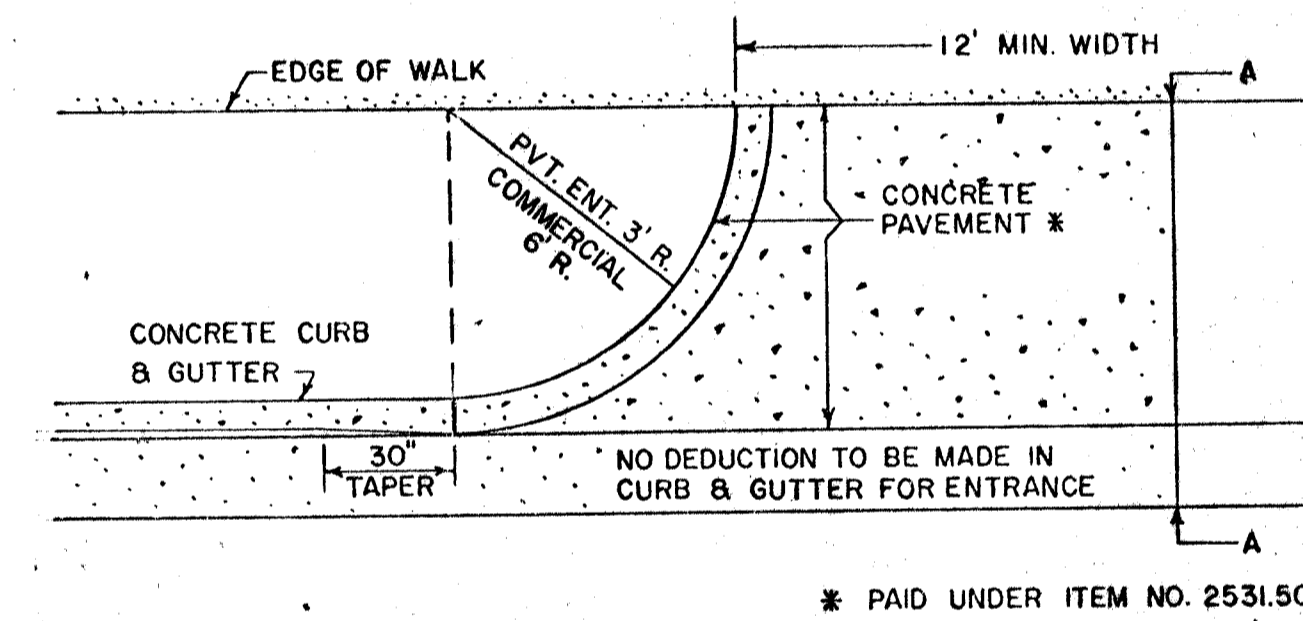


**SPECIAL DETAILS**

SALVAGED BITUMINOUS MATERIAL SHALL BE USED IN THE TOP 6" OF THE ROAD BED.

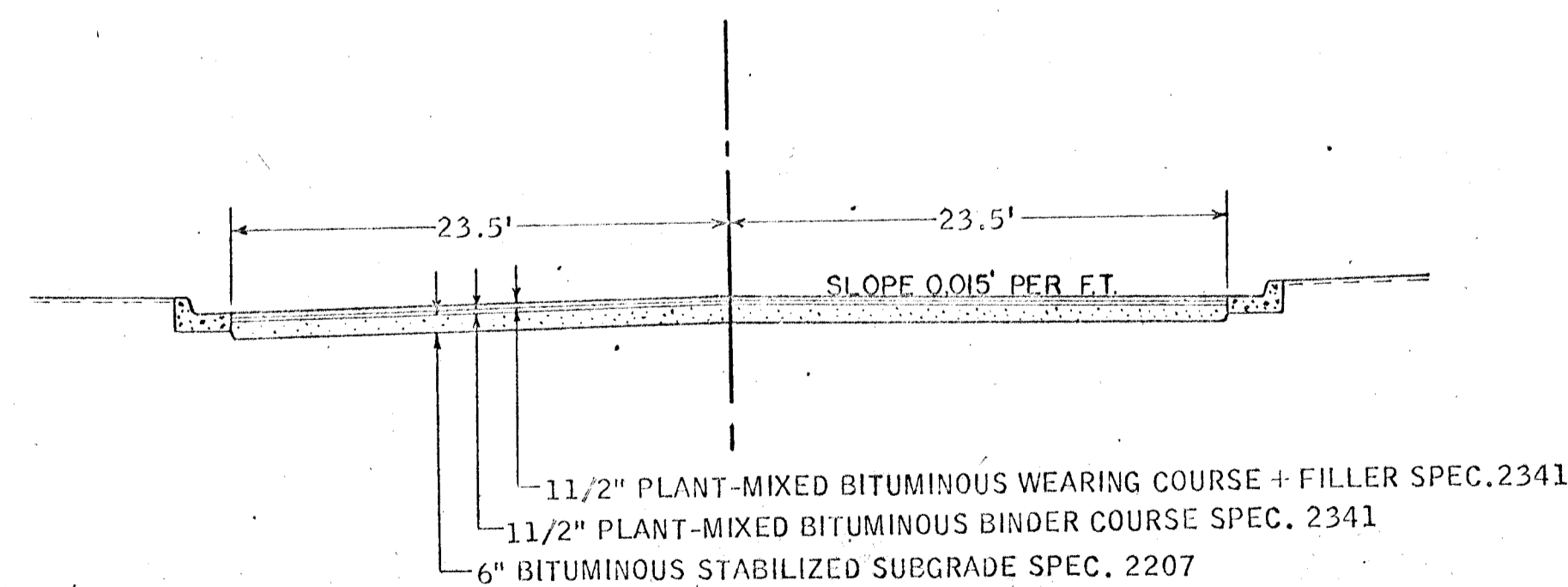
EXCESS COMMON EXCAVATION, APPROXIMATELY 2029 CU. YDS. SHALL BE HAULED TO OSBORN ROAD PROJECT (BETWEEN TH. 65 & OLD CENTRAL AVENUE) FOR EMBANKMENT MATERIAL. SEE SPECIAL PROVISIONS.

**CONCRETE DRIVEWAY APRON DETAIL**



\* PAID UNDER ITEM NO. 2531.507

**TYPICAL BASE & SURFACE SECTIONS**



- ① FOR DUST CONTROL
- ② FOR REPAIR OF DRIVEWAYS
- ③ FOR RELOCATION OF HYDRANT

PLATE NO.	DESCRIPTION
7100 D	CONCRETE CURB & GUTTER DESIGN B-618
8000 C	STANDARD BARRICADES
7035 E	CONC. WALK & CURB RETURNS AT ENTRANCES

ADJ. WATER GATE HOUSING		
STATION	LOCATION	
84+98	6' RT.	
86+25	16' RT.	
88+06	6' RT.	
89+90	18' RT.	
91+33	7' RT.	

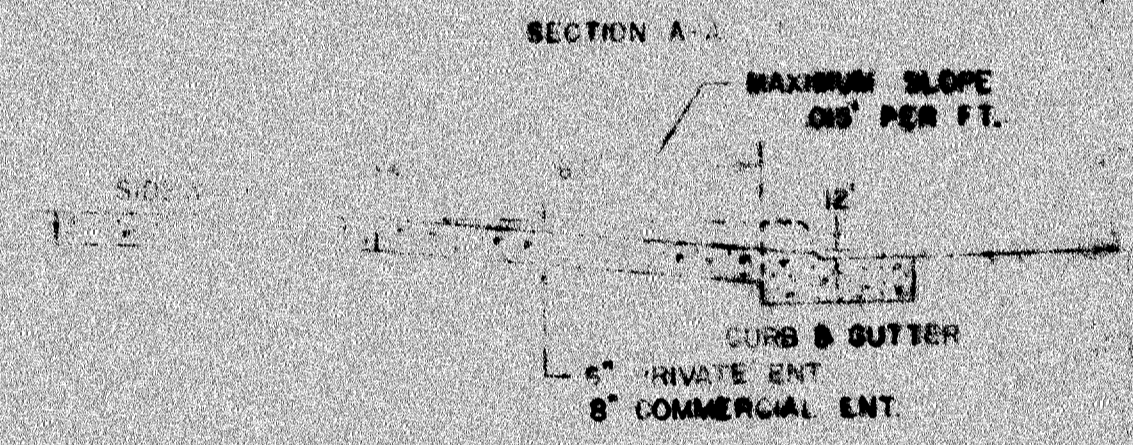
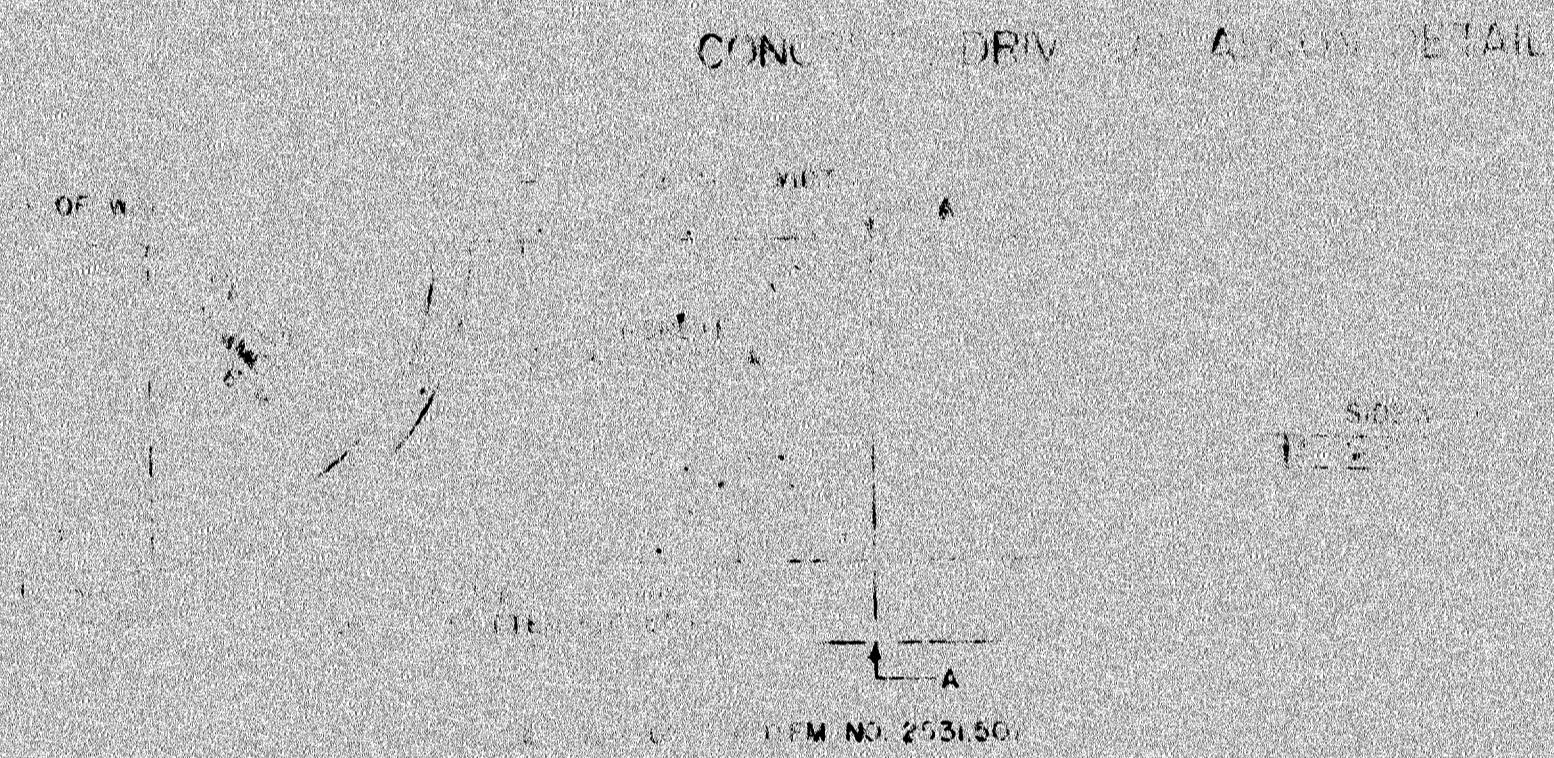
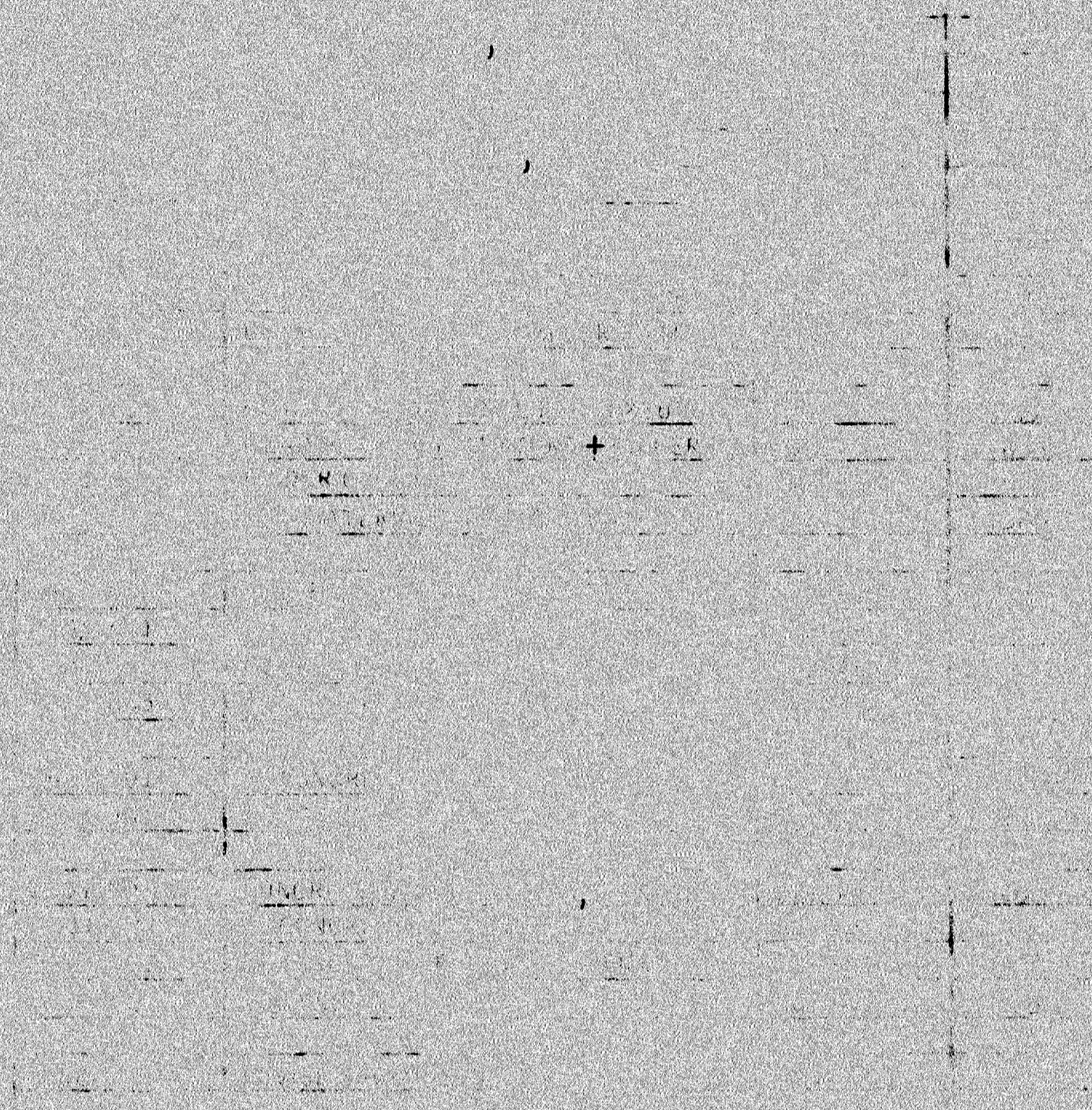
ADJ. FRAME & RING CASTINGS		
ITEM	STATION	LOCATION
M.H.	81+87	16' RT.
M.H.	82+71	4' RT.
M.H.	85+07	1' RT.
M.H.	91+42	C
M.H.	94+96	1' RT.

**BASIS OF PLANNED QUANTITIES**

- 2207 BITUMINOUS STABILIZED SUBGRADE
- BITUMINOUS MATERIAL FOR MIX 0.5 GAL. PER SQ. YD. PER INCH THICKNESS
- BITUMINOUS MATERIAL FOR FOG 0.10 GAL. PER SQ. YD.
- 2341 PLANT MIXED BITUMINOUS BINDER COURSE
- BITUMINOUS MIXTURE 165 LBS. PER SQ. YD.
- BITUMINOUS MATERIAL 4.5% OF MIXTURE BY WT.
- 2341 PLANT MIXED BITUMINOUS WEARING COURSE
- BITUMINOUS MIXTURE 165 LBS. PER SQ. YD.
- BITUMINOUS MATERIAL FOR TACK COAT 0.05 GAL. PER SQ. YD.
- BITUMINOUS MATERIAL 5.5% OF MIXTURE BY WT.

NOTE: ALL DIMENSIONS SHOWN ON TYPICAL SECTIONS ARE NOMINAL.





8008C CONTRACTORS' SIGN



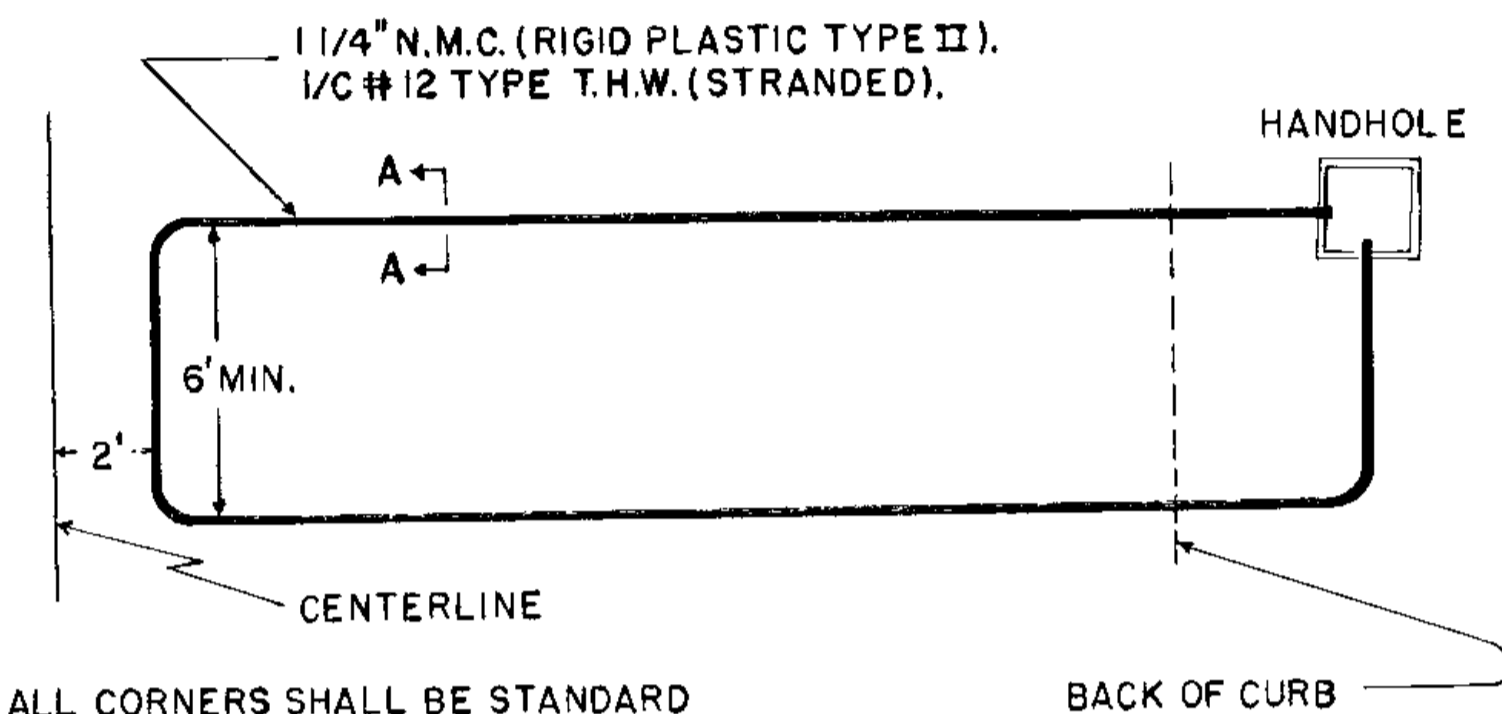
# SIGNAL REVISION

## LOOP DETECTOR DETAIL

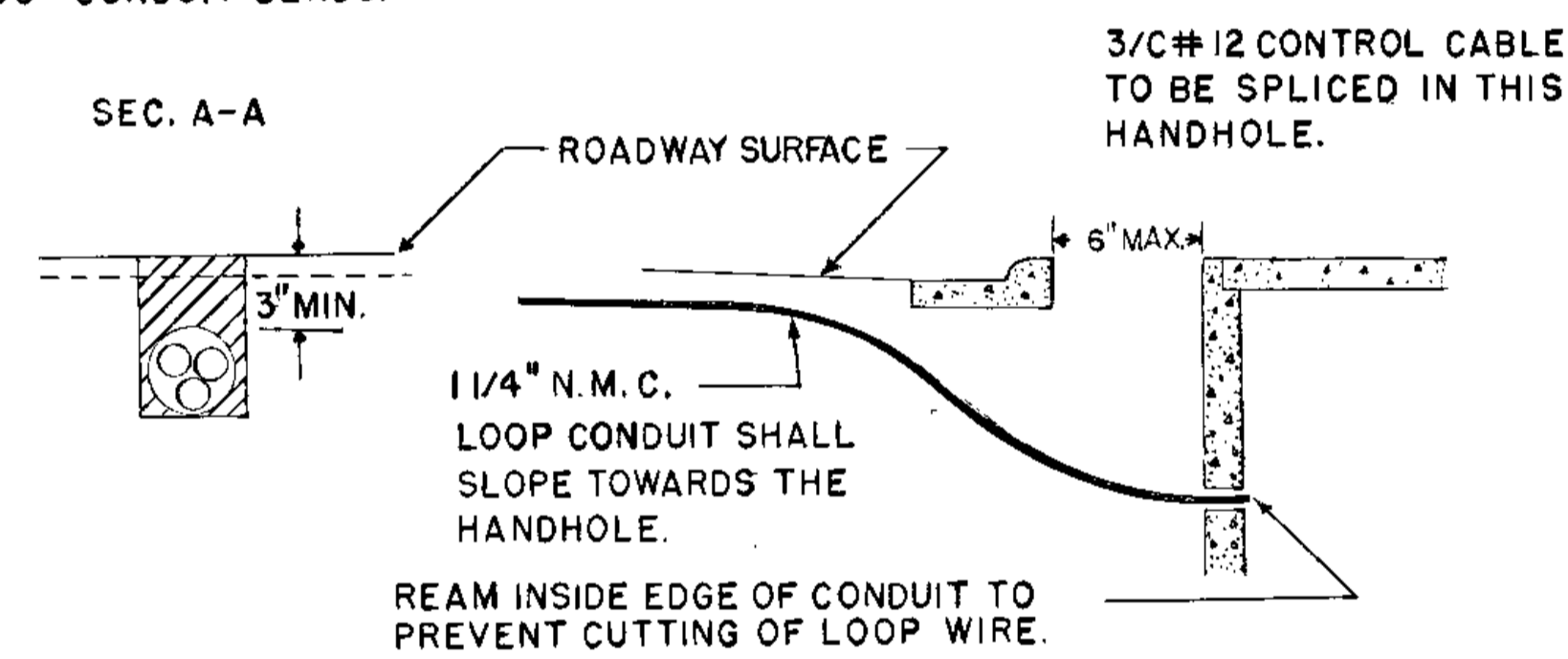
SCALE NONE

NOTE: NUMBER OF TURNS IN THE LOOPS SHALL BE AS SPECIFIED BY THE ENGINEER IN THE FIELD.

THE LOOP SHALL BE ONE CONTINUOUS WIRE WITH NO SPLICES AND EACH TURN SHALL BE PULLED TIGHT WITH NO SLACK IN THE HANDHOLE.



ALL CORNERS SHALL BE STANDARD 90° CONDUIT BENDS.



THE LOOP DETECTOR SHALL BE PLACED AFTER COMPLETION OF THE BITUMINOUS STABILIZED BASE AND PRIOR TO PAVING THE FINAL BITUMINOUS MAT.



SCALE  
1" = 30'

