

STATEMENT OF ESTIMATED QUANTITIES

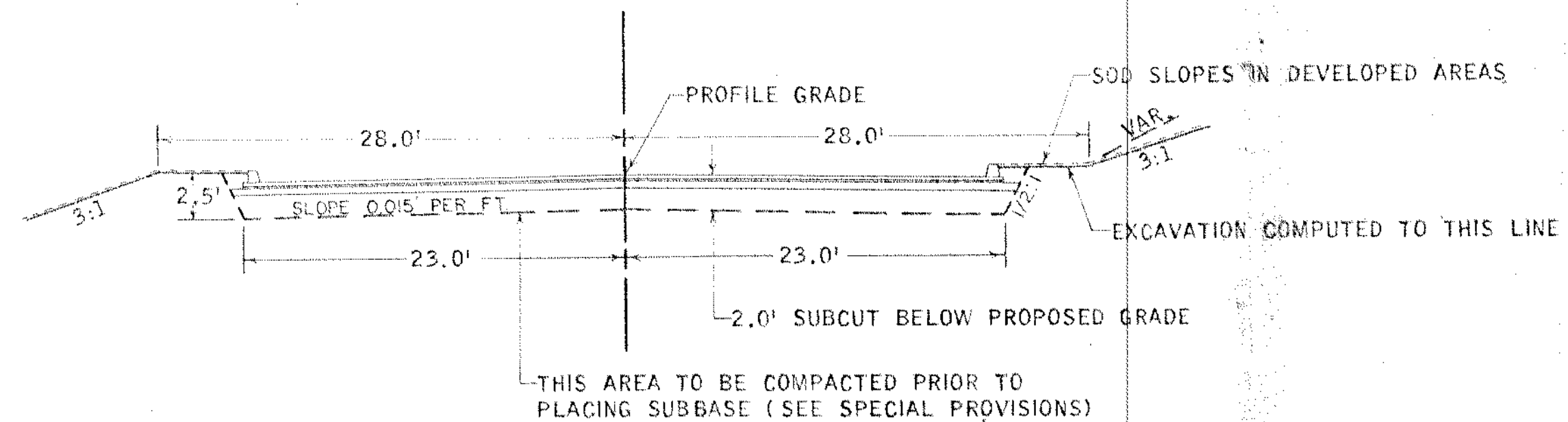
| ITEM NO. | ITEM | UNIT | TOTAL ESTIMATED QUANTITIES | TOTAL FINAL QUANTITIES |
|----------|------------------------------------------------|----------|----------------------------|------------------------|
| 2101.502 | CLEARING | TREE | 5 | |
| 2101.506 | GRUBBING | ACRE | .05 | |
| 2101.507 | GRUBBING | TREE | 10 | |
| 2104.501 | REMOVE PORT. CULV. | LIN. FT. | 16 | |
| 2104.504 | REMOVE CURB | LIN. FT. | 104 | |
| 2104.506 | REMOVE SIDEWALK | SQ. YD. | 20 | |
| 2104.507 | REMOVE MASONRY & CONCRETE STRUCTURES | CU. YD. | 1 | |
| 2104.510 | REMOVE FENCE | LIN. FT. | 163 | |
| 557.621 | RESET FENCE | LIN. FT. | 154 | |
| 2105.501 | CLASS "A" EXCAVATION | CU. YD. | 7,954 | |
| 2201.526 | GRAVEL SUB-BASE INP. (CL.-4) | TON | 8,285 | |
| 2202.526 | GRAVEL BASE INP. (CL.-5) | TON | 3,020 | |
| 2130.501 | WATER | M-GAL. | 170 | |
| 2208.501 | BIT. MATERIAL FOR PRIME COAT | GAL. | 3,145 | |
| 2208.503 | BIT. MATERIAL FOR MIXTURE | GAL. | 6,420 | |
| 2208.506 | AGGREGATE | TON | 535 | |
| 2351.502 | BIT. MATERIAL FOR TACK COAT | GAL. | 535 | |
| 2351.504 | ASPHALT CEMENT | TON | 107 | |
| 2351.509 | ASPHALTIC CONCRETE WEARING COURSE + FILLER | TON | 900 | |
| 2351.510 | ASPHALTIC CONCRETE BINDER COURSE | TON | 1016 | |
| 2461.501 | CONCRETE GRADE A MIX NO. 1 | CU. YD. | 1 | |
| 2506.522 | ADJ. FRAME & RING CASTINGS | ASSEM. | 10 | |
| 504.685 | ADJ. WATER GATE HOUSING | ASSEM. | 1 | |
| 2104.511 | REMOVE MANHOLES AND CATCH BASINS | STRUCT. | 2 | |
| 2104.515 | REMOVE PIPE SEWERS | LIN. FT. | 86 | |
| 2503.512 | F. & I. 12" RCP SEWER CL. 2 | LIN. FT. | 108 | |
| 2503.512 | F. & I. 15" RCP SEWER CL. 2 | LIN. FT. | 723 | |
| 2506.506 | CONSTRUCT MANHOLES DESIGN A OR F | LIN. FT. | 17.4 | |
| 2506.507 | CONSTRUCT CATCH BASINS DESIGN A OR F | LIN. FT. | 15.1 | |
| 2506.507 | CONSTRUCT CATCH BASINS DESIGN C OR G | LIN. FT. | 3.0 | |
| 2506.516 | F. & I. CASTING ASSEMBLIES (NEENAH NO. 3246 C) | ASSEM. | 2 | |
| 2506.516 | F. & I. CASTING ASSEMBLIES (711) (700-B) | ASSEM. | 3 | |
| 2535.501 | BITUMINOUS CURB | LIN. FT. | 3,960 | |
| 2574.501 | ROADSIDE SEEDING | ACRE | 0.15 | |
| 2576.501 | SODDING | SQ. YD. | 3,200 | |

- 1. FOR CONCRETE STEP REMOVAL
- 2. TO CONSTRUCT STEPS
- 3. COUNTY SHALL FURNISH SEED

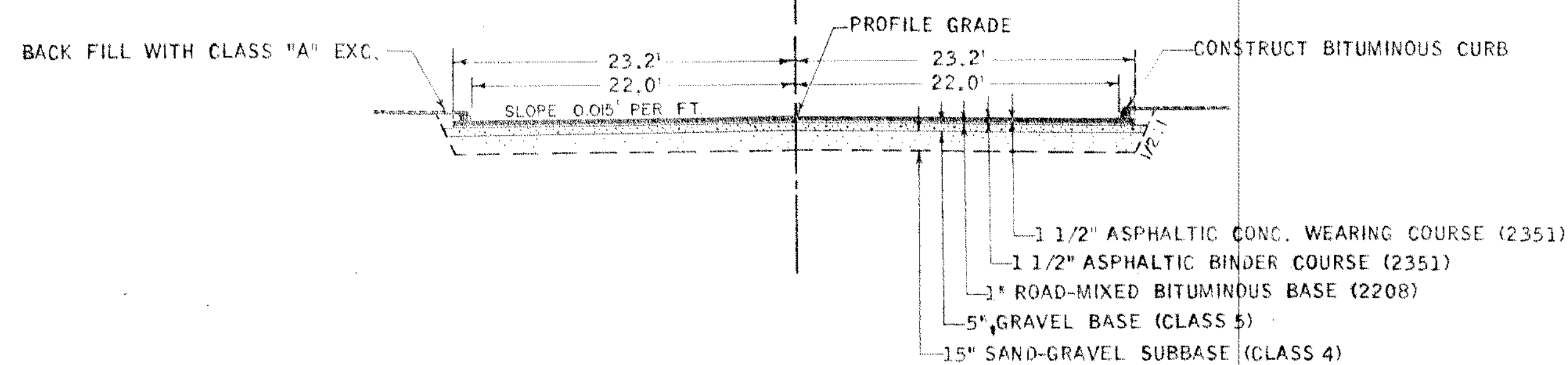
The following Standard Detail plates, approved by the Bureau of Public Roads, shall apply on this project.

| PLATE NO. | DESCRIPTION |
|---------------------|-----------------------------------------|
| 4000 E | MANHOLE OR CATCH BASIN (DESIGN A) |
| 4002 C | MANHOLE OR CATCH BASIN (DESIGN C) |
| 4005 E | MANHOLE OR CATCH BASIN (DESIGN F) |
| 4006 D | MANHOLE OR CATCH BASIN (DESIGN G) |
| 4101 A | RING CASTING FOR MANHOLE OR CATCH BASIN |
| 4110 C | COVER CASTING FOR MANHOLE |
| 7065 B | BITUMINOUS CURB |
| 8000 A, B001 & B009 | STANDARD BARRICADES |
| 8003-8008 A | SIGNS: FENCE & PLACEMENT |

TYPICAL GRADING SECTION



TYPICAL BITUMINOUS SECTION



SPECIAL DETAILS

EXCESS CLASS A EXCAVATION (APPROX. 6700 CU. YD.) TO BE DISPOSED OF BY THE CONTRACTOR WILL BE HAULED OFF PROJECT WITH RUBBER Tired VEHICLES. DISPOSAL AREAS WILL BE AT THE APPROVAL OF THE CITY OF COLUMBIA HEIGHTS OR CITY OF FRIDLEY

ALL AREAS TO BE SODDED NOT ALREADY HAVING CLAY OR TOPSOIL WILL BE COVERED WITH A MINIMUM OF 3 INCHES OF CLAY OR TOPSOIL. THIS WILL BE CONSIDERED INCIDENTAL TO CLASS A EXCAVATION.

THE BITUMINOUS SURFACE IN PLACE WILL BE SALVAGED AND PLACED IN LAYERS (TO THE SATISFACTION OF THE ENGINEER) IN THE LOWER PORTION OF THE BACKFILL. THIS WILL BE CONSIDERED INCIDENTAL TO CLASS A EXCAVATION.

THE BACKFILL BEHIND CURB WILL BE CONSIDERED AN INCIDENTAL ITEM.

NO CASTINGS ARE REQUIRED FOR CATCH BASINS NO. 3 & NO. 4 CONTRACTOR SHALL CONSTRUCT A WOOD COVER A MINIMUM OF 2" THICK & COVER WITH TAR PAPER.

BASIS OF PLANNED QUANTITIES

| | |
|---------------------------------|--------------------------------------------------------------------------------------------------------|
| SAND GRAVEL SUBBASE: | 140 POUNDS / CU. FT. |
| GRAVEL BASE: | 145 POUNDS / CU. FT. |
| BITUMINOUS PRIME COAT: | 0.3 GAL. / SQ. YD. |
| BITUMINOUS BASE: | AGG. 100 LBS. / SQ. YD. BITUMINOUS MATERIAL 0.6 GALS. / 100 LBS. AGG. |
| ASPHALTIC CONC. BINDER COURSE: | TACK COAT 0.05 GALS. / SQ. YD. BIT. MIXTURE 165 LBS. / SQ. YD. BIT. MATERIAL 5.0% OF MIXTURE BY WEIGHT |
| ASPHALTIC CONC. WEARING COURSE: | BIT. MIXTURE 165 LBS. / SQ. YD. BIT. MATERIAL 6.2% OF MIXTURE BY WEIGHT |

NOTE: ALL DIMENSIONS & SLOPES SHOWN ON THE TYPICAL SECTIONS ARE NOMINAL.

B.M. NO. 1 ELEV. 907.90
TOP OF N.W. COR. TOP STEP 1/5.F.
150 40TH. AVE.

STA. 35+58 LT.
INP. 15'X16' C.M.P.
REMOVE
NO CULV. REQ.

34+28 RT. REMOVE SIDEWALK
& STEPS TO R.W.

33+18 LT. REMOVE
SIDEWALK TO R.W.
CONSTRUCT BITUMINOUS CURB

STA. 35+51 LT.
REMOVE 9' FE.

STA. 35+64 TO 35+92 T.
REMOVE & RESET 28' FE.

STA. 40+52 LT.
REMOVE & RESET 7' FE.

STA. 40+52 TO 40+89 LT.
REMOVE & RESET 46' FE.

STA. 41+01 TO 42+25 LT.
GRUB .05 ACRE

BEGIN PROJECT S.A.P. 02-602-02
STA. 29+88.5 P.O.T.

12" SEWER PIPE INP.
REMOVE 15 L.F. 12" CMP
FBI 12" X 15" RCP SEWER
REMOVE 71 L.F. 12" SEWER PIPE
12" SEWER PIPE INP.

STA. 30+50 RT. REMOVE
CONC. CURB. RADIUS 29 LIN. FT.

30+51 23' RT. ADJUST
FRAME & RING CASTING

30+06 34' RT. ADJUST
GATE VALVE

30+48 19' RT. ADJUST
FRAME & RING CASTING

31+59 RT. REMOVE
SIDEWALK TO R.W.

31+99 RT. REMOVE
SIDEWALK TO R.W.

31+09 RT. REMOVE
SIDEWALK TO R.W.

STA. 30+92 RT.
CLEAR 1 TREE GRUB 1 STP.

32+68 RT. REMOVE SIDEWALK
& STEPS TO R.W.

32+49 04' RT. ADJUST
FRAME & RING CASTING

32+70 03' RT. ADJUST
FRAME & RING CASTING

STA. 33+06 RT.
CLEAR 1 TREE GRUB 1 STP.

33+84 RT. REMOVE
SIDEWALK TO R.W.

CONSTRUCT BITUMINOUS CURB

36+32 04' RT. ADJUST
FRAME & RING CASTING

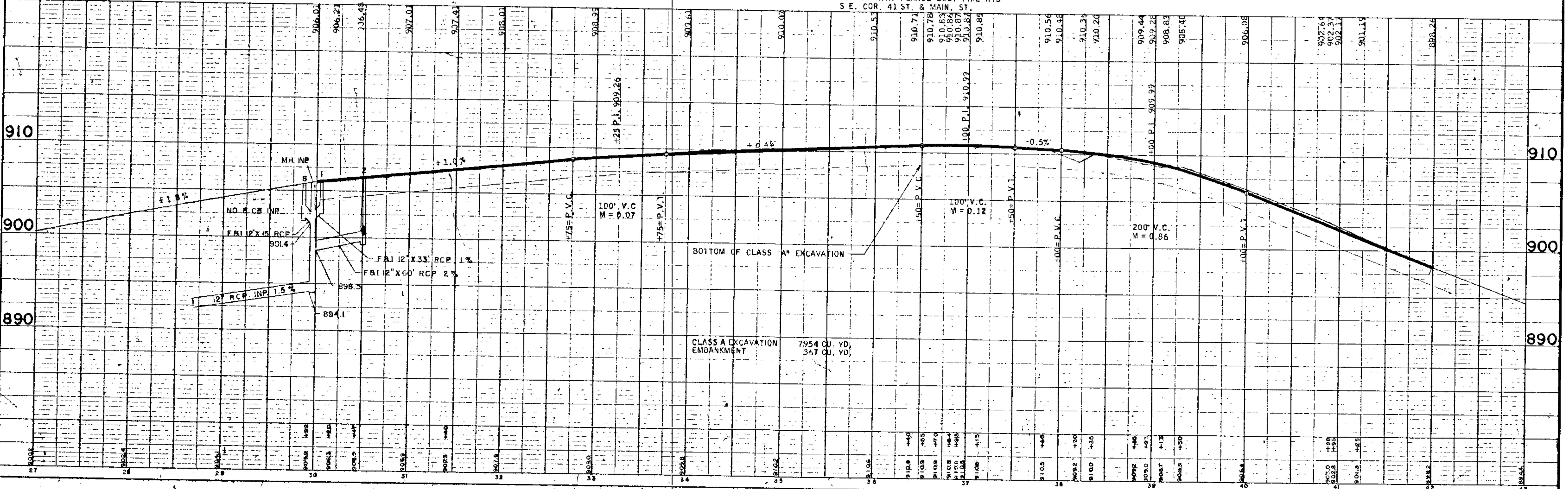
STA. 37+09 RT.
GRUB 1 STP.

40+12 05' RT. ADJUST
FRAME & RING CASTING

12" UNDERGROUND GAS MA'N

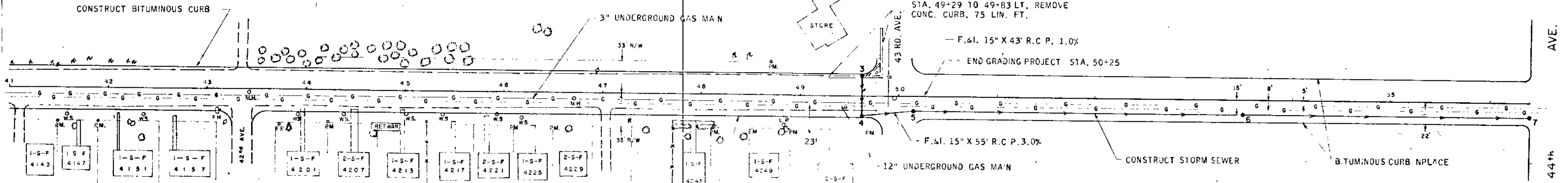
SCALE HORZ. 1" = 50'
VERT. 1" = 05'

B.M. NO. 2 ELEV. 913.53
TOP OF N.W. FLANGE BOLT FIRE HYD
S.E. COR. 41 ST. & MAIN. ST.



STA. 44+10.45
CLEAR 3 TREES GRUB 3 STP.

STA. 49+29 TO 49+83 LT. REMOVE CONC. CURB, 75 LIN. FT.
- F.&I. 15" X 43" R.C.P. 1.0%
END GRADING PROJECT STA. 50+25



43+41.04' RT. ADJUST FRAME & RING CASTING

CONSTRUCT BITUMINOUS CURB -

STA. 47+27 RT. GRUB 1 STP.

46+71.06' RT. ADJUST FRAME & RING CASTING
47+92 RT. REMOVE SIDEWALK TO R.W.

50+00 E ADJUST FRAME & RING CASTING

116 TONS 2351 BINDER MATERIAL INCLUDED TO REPAIR SURFACE STATION 50+25 TO 56+40

SCALE
HORZ. 1" = 50'
VERT. 1" = 05'

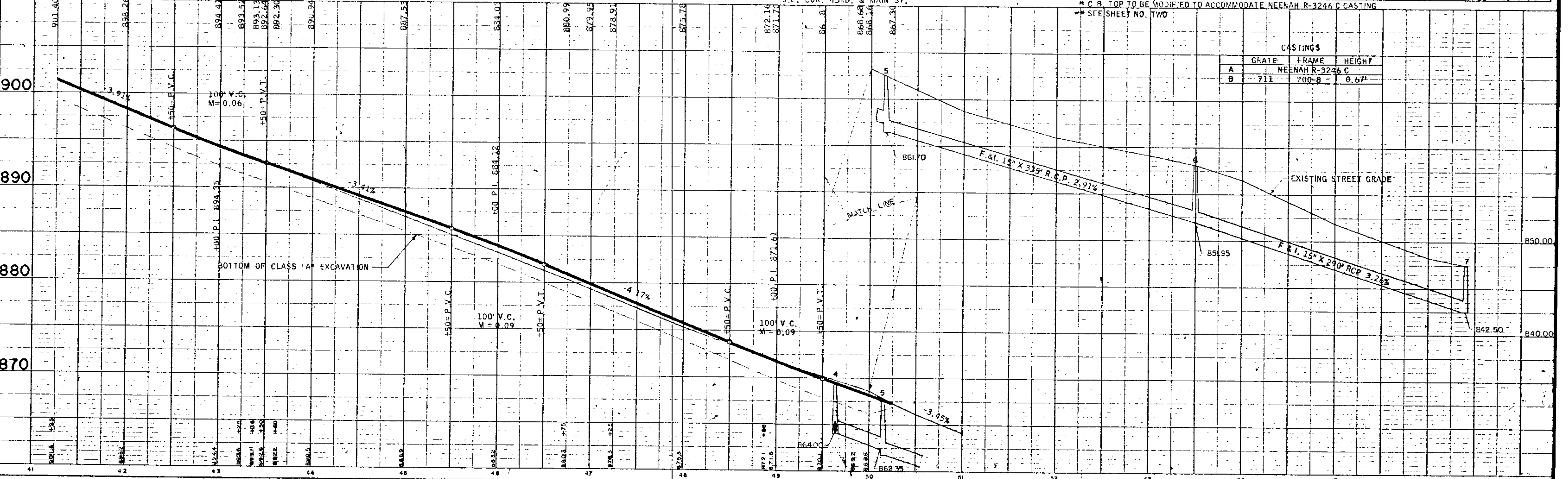
B.M. NO. 3 ELEV. 896.90
TOP OF FIRE HYD. S.E. COR. 42ND. & MAIN ST.

B.M. NO. 4 ELEV. 871.03
TOP OF N.E. LY. FLANGE BOLT FIRE HYD. S.E. COR. 43RD. & MAIN ST.

See Revised sheet #4

| STORM SEWER SYSTEM | | | | | | | | | | |
|--------------------|---------|-----------|------|---------|----------|-------------|--------|----------------------|-----------|-----------------|
| NO. | STATION | LOCATION | TYPE | DESIGN | LIN. FT. | TOP CASTING | OUTLET | F & I, CAST ASSEMBLY | DRAINS TO | F & I, R.C.P. |
| 1 | 30+04 | 21.5' LT. | C.B. | COR G* | 3.0 | 905.50 | 902.50 | A | MH INP | 12" X 33' CL 2 |
| 2 | 30+47 | 39' RT. | C.B. | AOR F* | 5.5 | 905.20 | 899.70 | A | MH INP | 12" X 60' CL 2 |
| 3 | 42+60 | 21.5' LT. | C.B. | AOR F* | 4.6 | 869.00 | 864.43 | COVER** | C.B. #4 | 15" X 43' CL 2 |
| 4 | 42+60 | 21.5' RT. | C.B. | AOR F* | 5.0 | 869.00 | 864.00 | COVER** | M.H. #5 | 15" X 55' CL 2 |
| 5 | 50+15 | 15' RT. | M.H. | AOR F | 6.2 | 867.93 | 861.70 | B | M.H. #6 | 15" X 335' CL 2 |
| 6 | 52+50 | 15' RT. | M.H. | AOR F | 6.2 | 858.10 | 851.95 | B | M.H. #7 | 15" X 290' CL 2 |
| 7 | 56+40 | 15' RT. | M.H. | AOR F | 5.0 | 847.50 | NONE | B | | |
| 8 | 29+89 | 22' RT. | C.B. | INPLACE | | 905.00 | 902.10 | NPLACE | MH INP | 12" X 15' CL 2 |

* C.B. TOP TO BE MODIFIED TO ACCOMMODATE NEENAH R-3246 C CASTING
** SEE SHEET NO. TWO



CASTINGS

| GRATE | FRAME | HEIGHT |
|-------|-----------------|---------------|
| A | NEENAH R-3246 C | |
| B | 711 | 700-B - 0.67' |