

# PLANS SYMBOLS

STATE LINE  
COUNTY LINE  
TOWNSHIP OR RANGE LINE  
SECTION LINE  
QUARTER LINE  
SIXTEENTH LINE  
RIGHT OF WAY LINE  
PRESENT RIGHT OF WAY LINE  
CONTROL OF ACCESS LINE  
PROPERTY LINE (Except Land Lines)  
VACATED PLATTED PROPERTY  
CORPORATE OR CITY LIMITS  
TRUNK HIGHWAY CENTER LINE  
RETAINING WALL  
RAILROAD  
RAILROAD RIGHT OF WAY LINE  
RIVER OR CREEK  
DRY RUN  
DRAINAGE DITCH  
DRAIN TILE  
CULVERT  
DROP INLET  
GUARD RAIL  
BARBED WIRE FENCE  
WOODEN 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  
SLOPE EASEMENT (CONST. LIMITS)

SPRINGS  
MARSH  
TIMBER  
ORCHARD  
BRUSH  
NURSERY  
CATCH BASIN  
FIRE HYDRANT  
CATTLE GUARD  
OVERPASS (Highway Over)  
UNDERPASS (Highway Under)  
BRIDGE  
BUILDING (One Story Frame)  
F FRAME C CONCRETE  
S STONE T TILE  
B BRICK ST STUCCO  
IRON PIPE OR ROD  
MONUMENT (STONE, CONCRETE OR METAL)  
WOODEN HUB  
GRAVEL PIT  
SAND PIT  
BORROW PIT  
ROCK QUARRY

# UTILITIES SYMBOLS

POWER POLE LINE  
TELEPHONE OR TELEGRAPH  
POLE LINE  
JOINT TELEPHONE AND POWER  
ON POWER POLES  
ON TELEPHONE POLES  
ANCHOR  
STEEL TOWER  
STREET LIGHT  
PEDESTAL TELEPHONE CABLE  
TERMINAL  
GAS MAIN  
WATER MAIN

CONDUIT  
TELEPHONE CABLE IN CONDUIT  
ELECTRIC CABLE IN CONDUIT  
TELEPHONE MANHOLE  
ELECTRIC MANHOLE  
BURIED TELEPHONE CABLE  
BURIED ELECTRIC CABLE  
AERIAL TELEPHONE CABLE  
SEWER (SANITARY OR STORM)  
SEWER MANHOLE

NOTE: SECTION NUMBERS REF.  
FROM "THE SCL"

# PIT DATA

PIT NO. Located in  
Dead Haul  
PIT NO. Located in  
Dead Haul

S.A.P. 62-648-12

GROSS LENGTH  
NET LENGTH  
EXCEPTION

FEET  
539.01  
539.01  
0.0

MILES  
0.1021  
0.1021  
0.0

PLAN

PROFILE HORIZ.

PROFILE VERT.

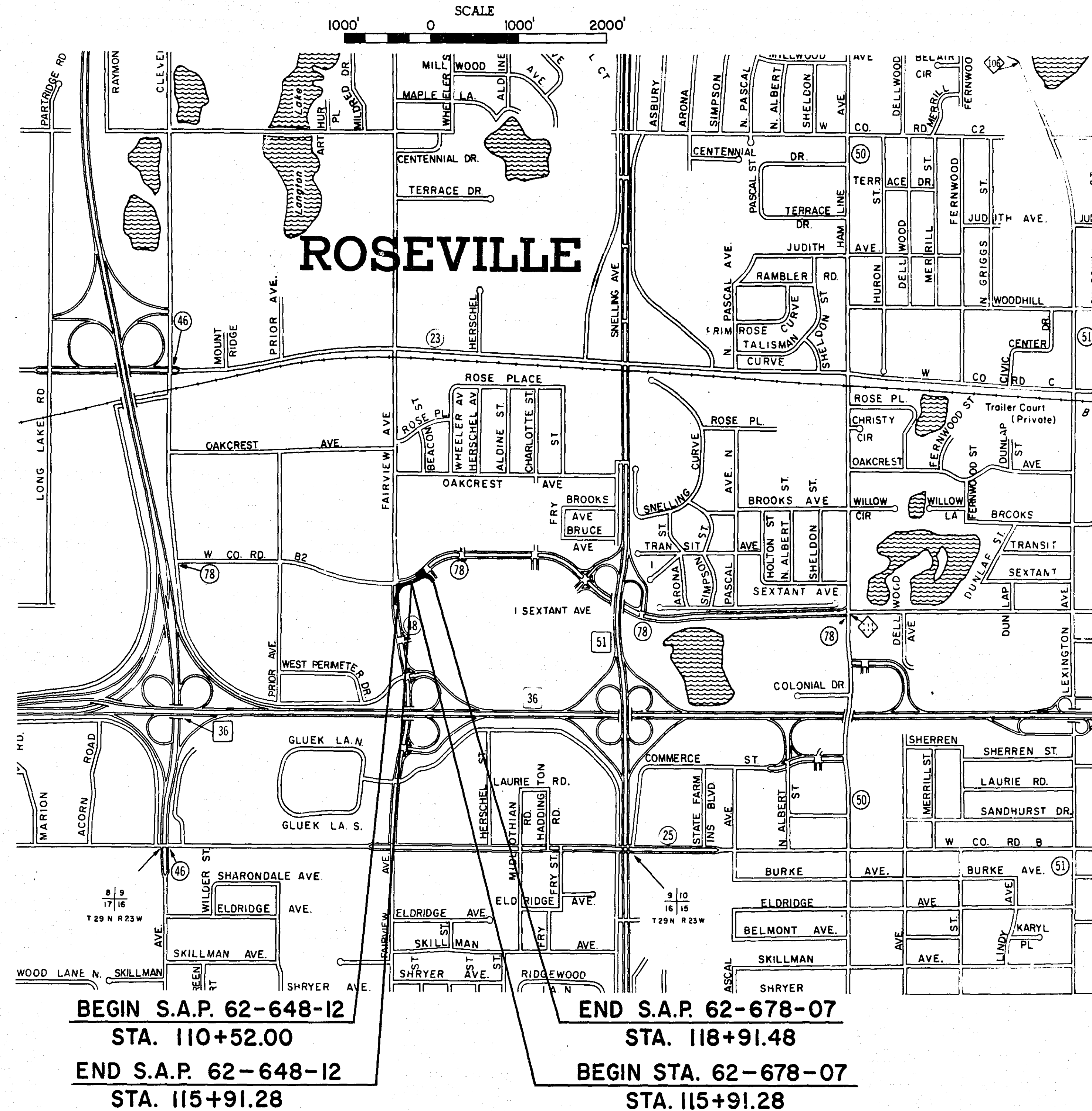
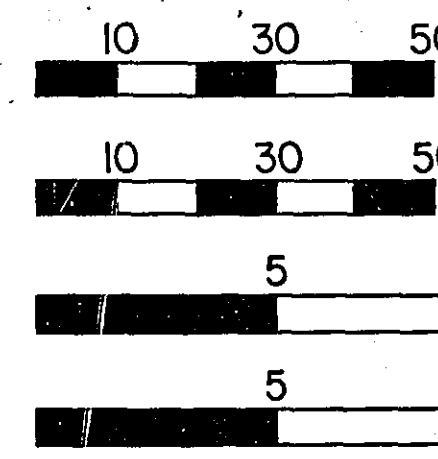
CROSS SECTIONS

S.A.P. 62-678-07

GROSS LENGTH  
NET LENGTH  
EXCEPTION

FEET  
300.20  
300.20  
0.0

MILES  
0.0569  
0.0569  
0.0



# DESIGN DESIGNATION

|                        | FAIRVIEW AVE | CO. RD. 'B' |
|------------------------|--------------|-------------|
| ADT (CURRENT) 1988     | 17,000 VPD   | 10,600 VPD  |
| ADT (FUTURE) 2008      | 27,200 VPD   | 17,000 VPD  |
| N18 20 YEAR            | 1,933,000    | 1,205,000   |
| DESIGN LOAD            | 9 TON        | 9 TON       |
| STABILOMETER 'R' VALUE | 5            | 75 %        |
| SOIL FACTOR            |              | 40 MPH      |
| DESIGN SPEED           | 40 MPH       | 5 %         |
| % TRUCKS               | 5 %          | 850         |
| HCADT                  | 1360         |             |

BASED ON STOPPING SIGHT DISTANCE  
HEIGHT OF EYE : 3.50 FEET  
HEIGHT OF OBJECT : 0.50 FEET

# RAMSEY COUNTY DEPARTMENT OF PUBLIC WORKS

CONSTRUCTION PLAN: FOR GRADING, AGGREGATE BASE, BITUMINOUS  
BASE AND SURFACING, STORM SEWER, CONCRETE CURB & GUTTER

# COUNTY ROAD "B" & FAIRVIEW AVE.

AT: ROSEDALE CENTER

S.A.P. 62-648-12, S.A.P. 62-678-07

FROM: A POINT 161.92 FEET SOUTH OF THE CENTER OF SECTION 9,  
T29N, R23W AND 45.86 FEET EAST OF THE QUARTER LINE OF  
SAID SECTION 9

TO: A POINT 300.17 FEET NORTH OF THE CENTER OF SECTION 9,  
T29N, R23W AND 205.52 FEET EAST OF THE QUARTER LINE OF  
SAID SECTION 9

FROM: A POINT 300.17 FEET NORTH OF THE CENTER OF SECTION 9,  
T29N, R23W AND 205.52 FEET EAST OF THE QUARTER LINE OF  
SAID SECTION 9

TO: A POINT 292.75 FEET NORTH OF THE CENTER OF SECTION 9,  
T29N, R23W AND 474.03 FEET EAST OF THE QUARTER LINE OF  
SAID SECTION 9

# INDEX OF SHEETS

| SHEET NO. | DESCRIPTION                               |
|-----------|-------------------------------------------|
| 1         | TITLE SHEET                               |
| 2         | STATEMENT OF ESTIMATED QUANTITIES         |
| 3         | DRAINAGE CHART & DETAILS, STANDARD PLATES |
| 4         | TYPICAL SECTIONS & PROFILE                |
| 5         | PLAN SHEET                                |
| 6-9       | X-SECTIONS                                |

ACCOUNT NO. 47330

DESIGN SQUAD CT DATE 12-1-87  
DRAWN BY \_\_\_\_\_ DATE \_\_\_\_\_  
CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_

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.

DATE 12-14-87 REG. NO. 14257 ENGR. David T. Rhall

RECOMMENDED FOR APPROVAL DJS DATE 12/17/87

RECOMMENDED FOR APPROVAL Thomas J. H. H. H. DATE 1/14/88  
COUNTY ENGINEER

RECOMMENDED FOR APPROVAL DJS DATE 12/16/87

APPROVED Wm. J. H. H. DATE 7-7-88  
CHAIRMAN OF THE RAMSEY COUNTY BOARD

RECOMMENDED FOR APPROVAL DJS DATE 12/17/87

APPROVED Charles V. H. H. DATE 2-1-88  
CITY OF ROSEVILLE

RECOMMENDED FOR APPROVAL DJS DATE 12/14/87

APPROVED \_\_\_\_\_ DATE \_\_\_\_\_

RECOMMENDED FOR APPROVAL DJS DATE 12-14-87

APPROVED \_\_\_\_\_ DATE \_\_\_\_\_

RECOMMENDED FOR APPROVAL DJS DATE 12-14-87

MINNESOTA DEPARTMENT OF TRANSPORTATION

RECOMMENDED FOR APPROVAL DJS DATE 12-14-87

RECOMMENDED FOR APPROVAL Julie Skallman DATE 2/23/88

APPROVED David T. Rhall DATE 1-12-88

RECOMMENDED FOR APPROVAL Julie Skallman DATE 2/9/88

APPROVED David T. Rhall DATE 1-12-88

RECOMMENDED FOR APPROVAL Julie Skallman DATE 2/23/88

APPROVED David T. Rhall DATE 1-12-88

APPROVAL David T. Rhall DATE 2/23/88  
STATE AND ENGINEER

| PLAN REVISIONS |             |    |
|----------------|-------------|----|
| DATE           | SHEET NO.   | BY |
| 3/15/88        | 2,3,4 and 5 | ET |

THE 1983 EDITION OF THE MINNESOTA DEPARTMENT  
OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR  
CONSTRUCTION" SHALL GOVERN.

S.A.P. 62-648-12, S.A.P. 62-678-07

Sheet No. 1 of 9 Sheets

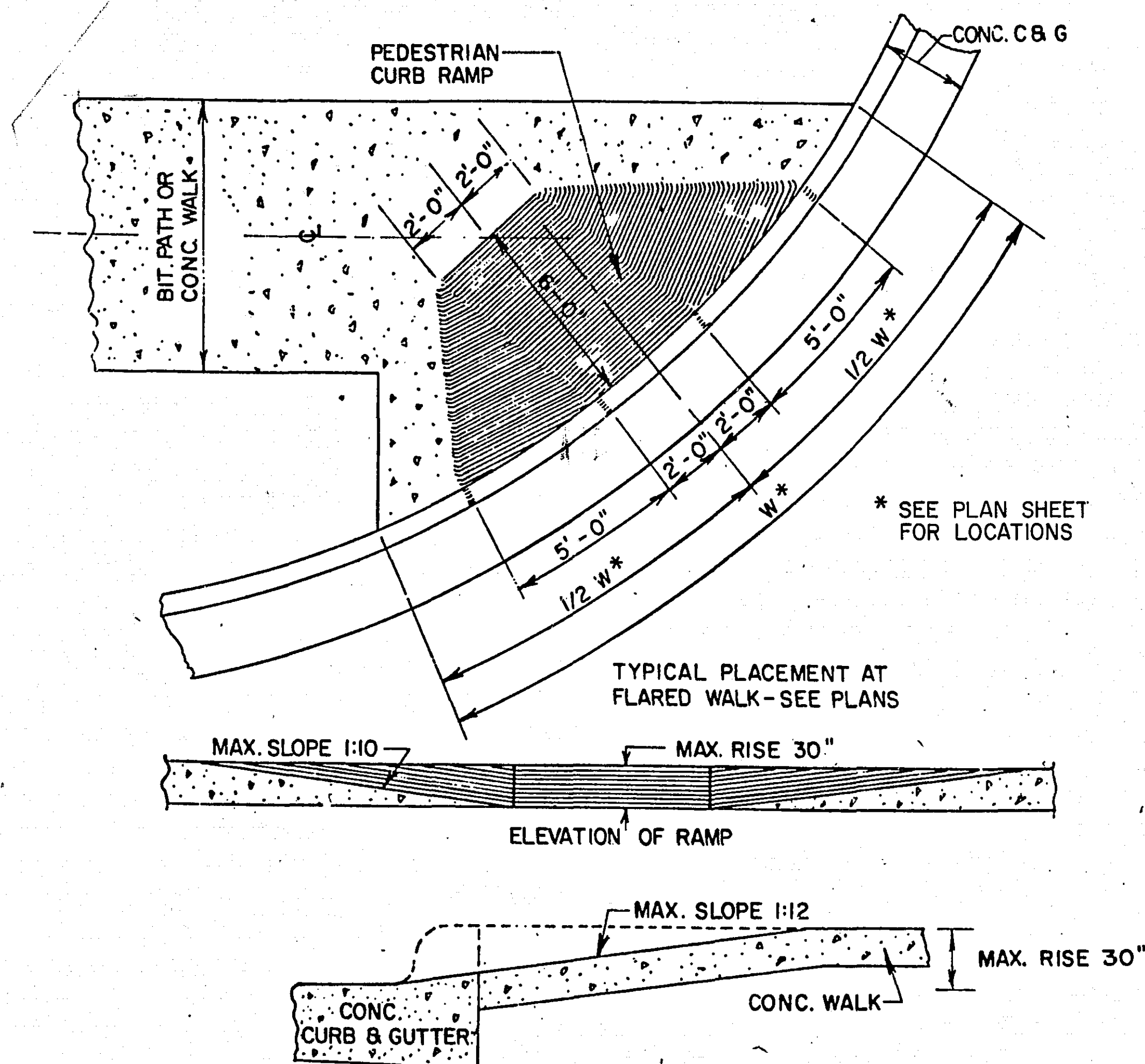
27-114

STATEMENT OF ESTIMATED QUANTITIES

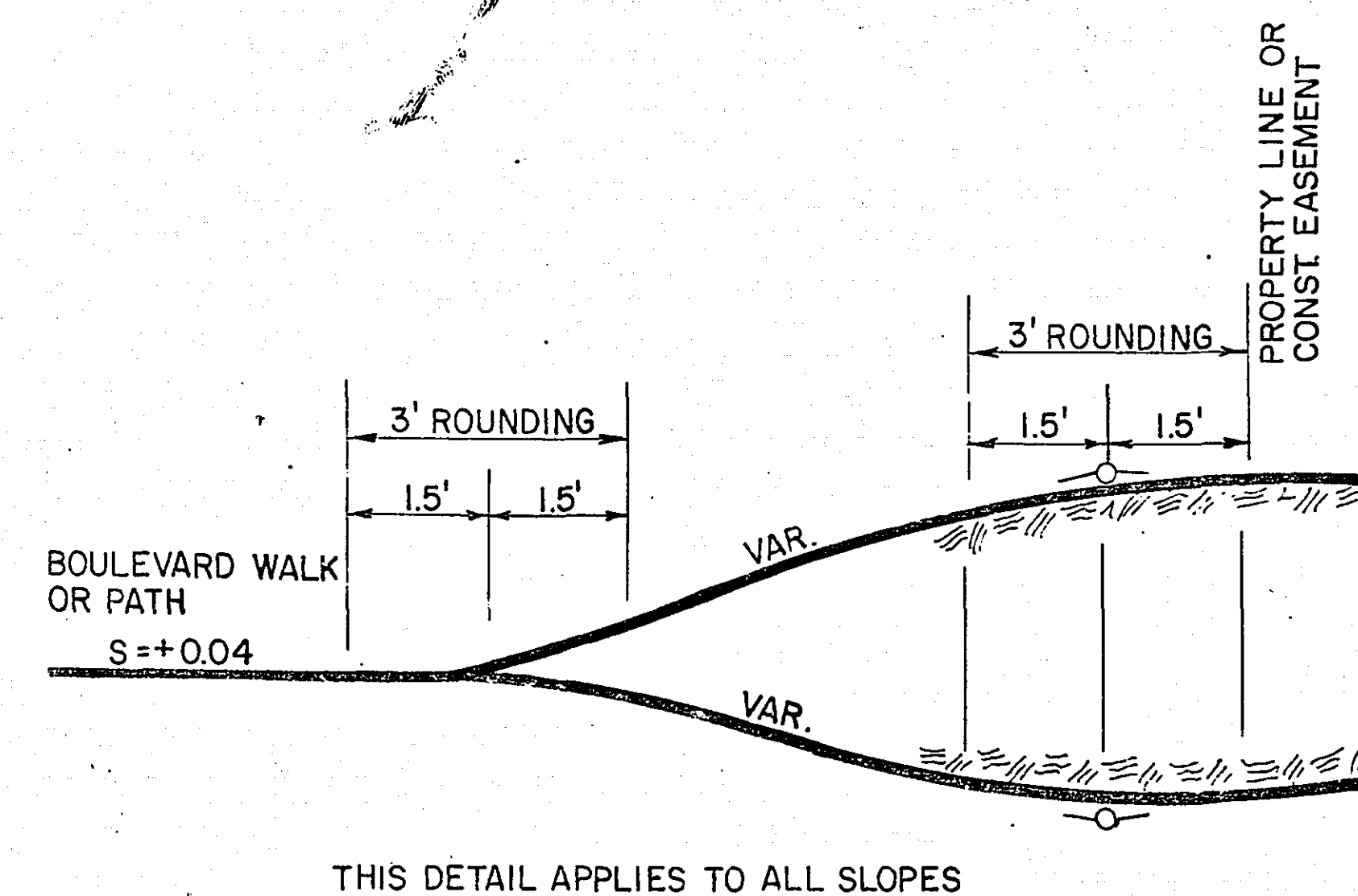
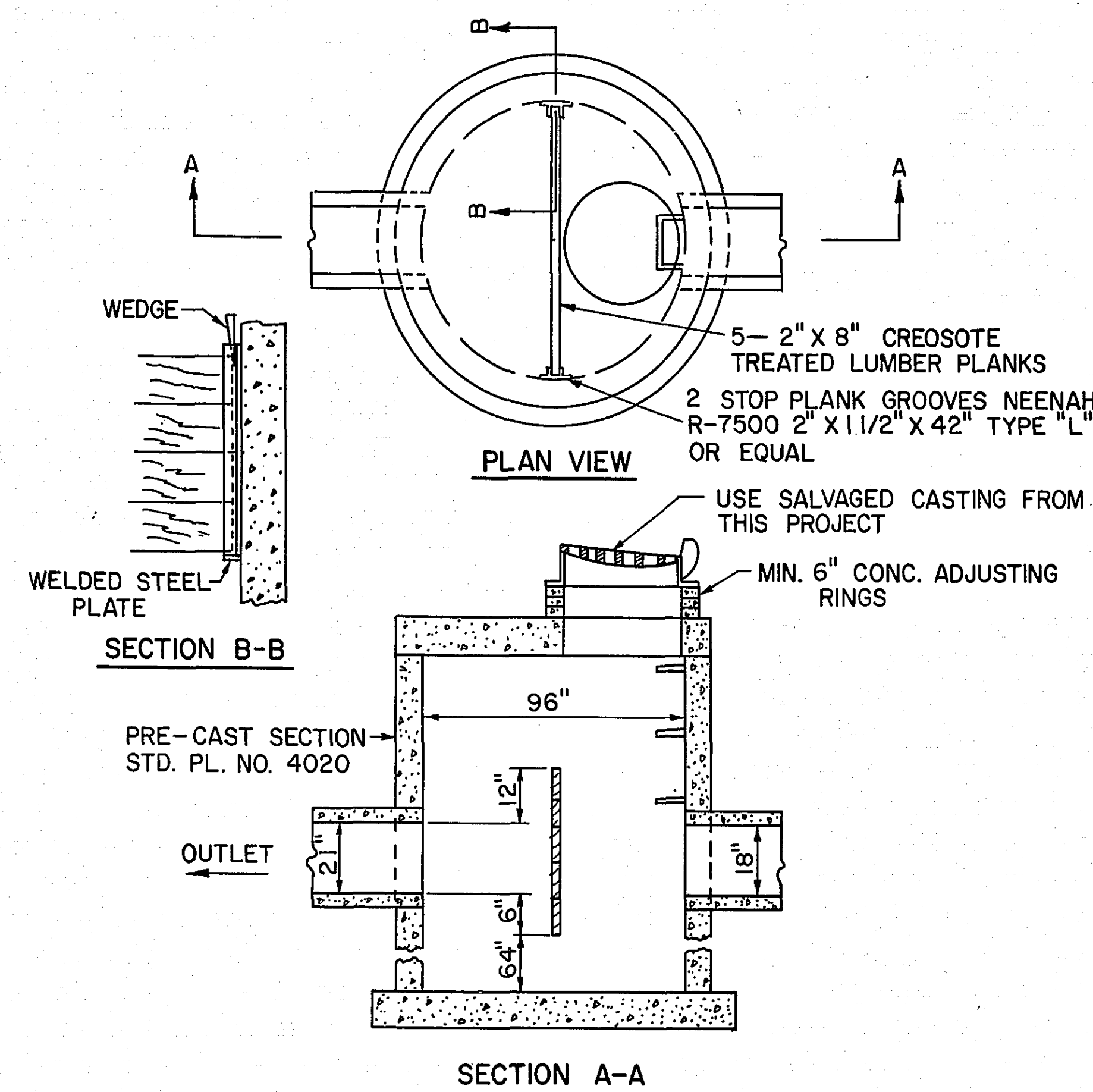
|                                                                                                                                           |                                                 |       |                      |                  | FAIRVIEW AVENUE      |                  | COUNTY ROAD "B2"     |                  |  |  |  |  |
|-------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|-------|----------------------|------------------|----------------------|------------------|----------------------|------------------|--|--|--|--|
|                                                                                                                                           |                                                 |       |                      |                  | S.A.P. 62-648-12     |                  | S.A.P. 62-678-07 (8) |                  |  |  |  |  |
| ITEM NO.                                                                                                                                  | CONTRACT ITEM                                   | UNT   | ESTIMATED QUANTITIES | FINAL QUANTITIES | ESTIMATED QUANTITIES | FINAL QUANTITIES | ESTIMATED QUANTITIES | FINAL QUANTITIES |  |  |  |  |
| 2021.501                                                                                                                                  | MOBILIZATION                                    | LS    | 1                    |                  | 0.6                  |                  | 0.4                  |                  |  |  |  |  |
| 2101.502                                                                                                                                  | CLEARING                                        | TREE  | 3                    |                  | 3                    |                  | 0                    |                  |  |  |  |  |
| 2101.507                                                                                                                                  | GRUBBING                                        | TREE  | 3                    |                  | 3                    |                  | 0                    |                  |  |  |  |  |
| 2104.501                                                                                                                                  | REMOVE SEWER PIPE                               | LF    | 153                  |                  | 54                   |                  | 99                   |                  |  |  |  |  |
| 2104.501                                                                                                                                  | REMOVE CURB & GUTTER                            | LF    | 1620                 |                  | 820                  |                  | 800                  |                  |  |  |  |  |
| 2104.503                                                                                                                                  | REMOVE CONCRETE SIDEWALK                        | SF    | 1700                 |                  | 975                  |                  | 725                  |                  |  |  |  |  |
| 2104.505                                                                                                                                  | REMOVE BITUMINOUS PAVEMENT                      | SY    | 392                  |                  | 0                    |                  | 392                  |                  |  |  |  |  |
| 2104.509                                                                                                                                  | REMOVE CATCH BASINS                             | EACH  | 5                    |                  | 1                    |                  | 4                    |                  |  |  |  |  |
| 2104.513                                                                                                                                  | SAWING BITUMINOUS PAVEMENT                      | LF    | 600                  |                  | 200                  |                  | 400                  |                  |  |  |  |  |
| 2104.523                                                                                                                                  | SALVAGE CASTINGS                                | EACH  | 5                    |                  | 1                    |                  | 4                    |                  |  |  |  |  |
| 2105.501                                                                                                                                  | COMMON EXCAVATION                               | P CY  | 2989                 |                  | 2455                 |                  | 534                  |                  |  |  |  |  |
| 2105.521                                                                                                                                  | SELECT GRANULAR BORROW (L.V.)                   | CY    | 2159                 |                  | 1880                 |                  | 279                  |                  |  |  |  |  |
| (1) 2105.525                                                                                                                              | TOPSOIL BORROW (L.V.)                           | CY    | 156                  |                  | 89                   |                  | 67                   |                  |  |  |  |  |
| (2) 2130.501                                                                                                                              | WATER                                           | M GAL | 4                    |                  | 2                    |                  | 2                    |                  |  |  |  |  |
| 2211.503                                                                                                                                  | AGGEREGATE BASE CL.3                            | CY    | 361                  |                  | 278                  |                  | 83                   |                  |  |  |  |  |
| (9) 2211.503                                                                                                                              | AGGEREGATE BASE CL.5 MOD.                       | CY    | 189                  |                  | 162                  |                  | 27                   |                  |  |  |  |  |
| 2211.503                                                                                                                                  | AGGEREGATE BASE CL.4                            | CY    | 274                  |                  | 196                  |                  | 78                   |                  |  |  |  |  |
| (5) 2331.504                                                                                                                              | BITUMINOUS MATERIAL FOR MIXTURE                 | TON   | 26                   |                  | 19                   |                  | 7                    |                  |  |  |  |  |
| 2331.518                                                                                                                                  | WEARING COURSE MIXTURE (MOD.) (BIT. PATH)       | TON   | 36                   |                  | 19                   |                  | 17                   |                  |  |  |  |  |
| 2331.518                                                                                                                                  | BINDER COURSE MIXTURE (MOD.) (BIT. PATH)        | TON   | 36                   |                  | 19                   |                  | 17                   |                  |  |  |  |  |
| 2331.510                                                                                                                                  | BINDER COURSE MIXTURE (MOD.)                    | TON   | 152                  |                  | 107                  |                  | 45                   |                  |  |  |  |  |
| 2331.514                                                                                                                                  | BASE COURSE MIXTURE (MOD.)                      | TON   | 318                  |                  | 240                  |                  | 78                   |                  |  |  |  |  |
| 2357.502                                                                                                                                  | BITUMINOUS MAT. FOR TACK COAT (BIT. PATH)       | GAL   | 17                   |                  | 9                    |                  | 8                    |                  |  |  |  |  |
| 2357.502                                                                                                                                  | BITUMINOUS MAT. FOR TACK COAT                   | GAL   | 69                   |                  | 49                   |                  | 20                   |                  |  |  |  |  |
| (6) 2361.504                                                                                                                              | ASPHALT CEMENT                                  | TON   | 8                    |                  | 6                    |                  | 2                    |                  |  |  |  |  |
| 2361.508                                                                                                                                  | WEARING COURSE MIXTURE (MOD.)                   | TON   | 114                  |                  | 80                   |                  | 34                   |                  |  |  |  |  |
| 0301.604                                                                                                                                  | SAWING CONCRETE PAVEMENT                        | LF    | 37                   |                  | 18                   |                  | 19                   |                  |  |  |  |  |
| 2451.507                                                                                                                                  | GRANULAR BEDDING (C.V.)                         | CY    | 26                   |                  | 6                    |                  | 20                   |                  |  |  |  |  |
| 2501.515                                                                                                                                  | 15" R.C. PIPE APRONS                            | EACH  | 1                    |                  | 1                    |                  | 0                    |                  |  |  |  |  |
| 2501.602                                                                                                                                  | TRASH GUARD FOR 15" CONCRETE APRON              | EACH  | 1                    |                  | 1                    |                  | 0                    |                  |  |  |  |  |
| 2503.541                                                                                                                                  | 12" R.C.P. SEWER DES. 3006 CL. V                | LF    | 26                   |                  | 0                    |                  | 26                   |                  |  |  |  |  |
| 2503.541                                                                                                                                  | 18" R.C.P. SEWER DES. 3006 CL. II               | LF    | 32                   |                  | 0                    |                  | 32                   |                  |  |  |  |  |
| 2503.541                                                                                                                                  | 15" R.C.P. SEWER DES. 3006 CL. V                | LF    | 36                   |                  | 36                   |                  | 0                    |                  |  |  |  |  |
| 2503.541                                                                                                                                  | 24" R.C.P. SEWER DES. 3006 CL. II               | LF    | 59                   |                  | 0                    |                  | 59                   |                  |  |  |  |  |
| 2506.506                                                                                                                                  | CONSTRUCT CATCH BASINS DESIGN A OR F            | EACH  | 4                    |                  | 1                    |                  | 3                    |                  |  |  |  |  |
| 2506.509                                                                                                                                  | ADJUST FRAME AND RING CASTINGS                  | EACH  | 1                    |                  | 0                    |                  | 1                    |                  |  |  |  |  |
| 2506.509                                                                                                                                  | CONST. CATCH BASIN DES. SPEC.                   | EACH  | 1                    |                  | 0                    |                  | 1                    |                  |  |  |  |  |
| (10) 2521.501                                                                                                                             | CONCRETE CURB AND GUTTER (DES. B612)            | LF    | 195                  |                  | 0                    |                  | 195                  |                  |  |  |  |  |
| (4) 2521.501                                                                                                                              | 4" CONCRETE WALK                                | SF    | 5382                 |                  | 3508                 |                  | 1874                 |                  |  |  |  |  |
| (7) 2531.501                                                                                                                              | CONC. CURB & GUTTER DES. B624                   | LF    | 1713                 |                  | 1019                 |                  | 694                  |                  |  |  |  |  |
| 2545.533                                                                                                                                  | ARMORED CABLE, 3 CONDUCTOR NO. 4                | LF    | 180                  |                  | 0                    |                  | 180                  |                  |  |  |  |  |
| (11) 2573.502                                                                                                                             | SILT FENCE HEAVY DUTY                           | LF    | 150                  |                  | 30                   |                  | 120                  |                  |  |  |  |  |
| (1) 2575.505                                                                                                                              | SODDING                                         | SY    | 1244                 |                  | 710                  |                  | 534                  |                  |  |  |  |  |
| (3) 2575.531                                                                                                                              | COMM. FERT. ANALYSIS 12-12-12                   | TON   | 0.05                 |                  | 0.03                 |                  | 0.02                 |                  |  |  |  |  |
| 0563.601                                                                                                                                  | TRAFFIC CONTROL (COVERED IN SPECIAL PROVISIONS) | LS    | 1                    |                  | 0.6                  |                  | 0.4                  |                  |  |  |  |  |
| QUANTITY NOTES                                                                                                                            |                                                 |       |                      |                  |                      |                  |                      |                  |  |  |  |  |
| (1) AREAS TO BE TOPSOILED AND SODDED HAVE BEEN INCREASED 10% TO ALLOW FOR ADDITIONAL AREA ON SLOPES.                                      |                                                 |       |                      |                  |                      |                  |                      |                  |  |  |  |  |
| (2) FOR DUST CONTROL.                                                                                                                     |                                                 |       |                      |                  |                      |                  |                      |                  |  |  |  |  |
| (3) ESTIMATED AT 350 POUNDS PER ACRE.                                                                                                     |                                                 |       |                      |                  |                      |                  |                      |                  |  |  |  |  |
| (4) INCLUDES 1700 S.F. REPLACEMENT.                                                                                                       |                                                 |       |                      |                  |                      |                  |                      |                  |  |  |  |  |
| (5) MATERIAL CONTENT ESTIMATED AT RATE OF:<br>BASE COURSE MIXTURE - 5.2%<br>BINDER COURSE MIXTURE - 5.2%<br>WEARING COURSE MIXTURE - 6.2% |                                                 |       |                      |                  |                      |                  |                      |                  |  |  |  |  |
| (6) MATERIAL CONTENT ESTIMATED AT RATE OF 6.8%                                                                                            |                                                 |       |                      |                  |                      |                  |                      |                  |  |  |  |  |
| (7) INCLUDES 60 LF. REPLACEMENT.                                                                                                          |                                                 |       |                      |                  |                      |                  |                      |                  |  |  |  |  |
| (8) 31% S.A.P. 62-678-07 PARTICIPATING<br>69% CITY OF ROSEVILLE                                                                           |                                                 |       |                      |                  |                      |                  |                      |                  |  |  |  |  |
| (9) INCLUDES 58 CY FOR BIT. PATH                                                                                                          |                                                 |       |                      |                  |                      |                  |                      |                  |  |  |  |  |
| (10) INCLUDES 1019 LF FOR B624 MOD. C & G                                                                                                 |                                                 |       |                      |                  |                      |                  |                      |                  |  |  |  |  |
| (11) SILT FENCE ESTIMATED AT 30 LF PER INLET STRUCTURE.                                                                                   |                                                 |       |                      |                  |                      |                  |                      |                  |  |  |  |  |

| REVISIONS |  | DATE | BY |
|-----------|--|------|----|
| 2503.541  |  | 3/88 | ET |
|           |  |      |    |
|           |  |      |    |
|           |  |      |    |

# PEDESTRIAN CURB RAMP DETAIL



# SPECIAL "TRAP" DETAIL CB 105



# SLOPE ROUNDING DETAIL

| REVISIONS   | DATE | BY |
|-------------|------|----|
| STORM SEWER | 3/88 | ET |
|             |      |    |
|             |      |    |
|             |      |    |

# THE FOLLOWING STANDARD PLATES AS APPROVED BY FHWA SHALL APPLY ON THIS PROJECT

| 0004A | SPECIFICATION REFERENCE TO STANDARD PLATES  |
|-------|---------------------------------------------|
| 3000K | REINFORCED CONCRETE PIPE                    |
| 3006F | GASKET JOINT FOR R.C. PIPE                  |
| 3100G | CONCRETE APRON FOR REINFORCED CONCRETE PIPE |
| 3145E | CONCRETE PIPE TIES                          |
| 4005K | MANHOLE OR CATCH BASIN                      |
| 4010G | CONCRETE SHORT CONE & ADJUSTING RING        |
| 4011D | PRECAST CONCRETE BASE                       |
| 4180H | MANHOLE OR CATCH BASIN STEP                 |
| 7100F | CONCRETE CURB & GUTTERS                     |
| 8000I | STANDARD BARRICADES                         |

# CONSTRUCTION NOTES

- THE CONTRACTOR WILL COOPERATE WITH RAMSEY COUNTY AS RELATES TO PERPETUATING MONUMENTATION. ADVANCE NOTICE OF ANY DISTURBANCE OF MONUMENTS SHOULD BE MADE TO RAMSEY COUNTY SURVEYORS OFFICE AT 298-5278.
- THE CONTRACTOR SHALL OBTAIN FROM THE UTILITY COMPANIES THE EXACT LOCATION OF ANY UNDERGROUND UTILITIES WHICH HE MAY ENCOUNTER IN THE PERFORMANCE OF HIS WORK.
- TO MEET CERTAIN CONDITIONS OF PHASING, TRAFFIC CONTROL, ETC., THE CONTRACTOR MAY HAVE TO DOUBLE HANDLE AND STOCKPILE MATERIAL OUTSIDE THE RIGHT-OF-WAY FOR FUTURE USE. ALL COSTS INCURRED BY THE CONTRACTOR IN EXCAVATING, PLACING, AND TRANSPORTING THIS MATERIAL SHALL BE INCLUDED IN THE PRICE BID FOR ITEM NO. 2105.501, COMMON EXCAVATION.
- PEDESTRIAN CURB RAMPS SHALL BE INSTALLED AT ALL STREET RADII. THE EXACT LOCATION SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER.
- THE ORDINARY COMPACTION METHOD SHALL BE USED ON THIS PROJECT FOR GRADING AND AGGREGATE BASE.
- TOP OF "GRADING GRADE" IS DEFINED AS THE TOP OF THE EMBANKMENT MATERIAL OR THE BOTTOM OF THE AGGREGATE BASE COURSE.
- TAPER ENDS OF SUBCUTS TO A 20:1 SLOPE UNLESS OTHERWISE INDICATED.
- FROM A SOILS STANDPOINT, TRAFFIC SHOULD BE MAINTAINED NO CLOSER THAN AN IMAGINARY 2:1 LINE DRAWN FROM THE BOTTOM OF ANY EXCAVATION INTERSECTING THE SURFACE. THESE EXCAVATIONS SHALL BE BACKFILLED PROMPTLY TO AVOID UNDERMINING.
- WHERE THE PROPOSED SUBCUT IS LOCATED UNDER INPLACE BASE AND BITUMINOUS SURFACING OR CONCRETE PAVEMENT, THE ENDS OF SUBCUT SHALL BE VERTICAL FOR THE DEPTH OF THE BITUMINOUS OR CONCRETE AND 2:1 IN AGGREGATE BASE.
- STRIP TOPSOIL FROM ALL AREAS TO BE DISTURBED BY CONSTRUCTION AND STOCKPILE (IF PRACTICAL) FOR REPLACEMENT LATER AS SLOPE DRESSING.
- UNSUITABLE GRADING MATERIAL SHALL CONSIST OF TOPSOIL, OTHER ORGANIC SOIL AND DEBRIS.
- NO PENETRATION PRIME IS REQUIRED ON THIS PROJECT.
- PROVIDE A TACK COAT, SPEC. 2357.2A, BETWEEN BITUMINOUS COURSES.
- PROVIDE DRAINAGE OUTLETS FOR ALL SUBCUTS DURING CONSTRUCTION. DITCHES SHOULD BE DEEPER THAN SUBCUT TO PROVIDE OUTLET DRAINAGE.
- SILT FENCE SHALL BE INSTALLED AT ALL CATCH BASIN INLETS AND OTHER AREAS AS DIRECTED BY THE ENGINEER.
- SEPERATE CONCURRENT CONTRACT FOR SIGNALS. SEE SPECIAL PROVISIONS.

# DRAINAGE CHART

| STATION | LOCATION | NO. | TYPE | DESIGN   | CONST. HEIGHT<br>LIN. FT. | CASTING<br>ASSEMBLY | ELEVATION |                              |                         |                       |                          | ADJUST<br>CASTING<br>ASSEMBLY | RECONSTRUCT<br>CATCH BASIN<br>OR MANHOLE<br>LIN. FT. | INSTALL<br>CASTING<br>ASSEMBLY | FURNISH AND INSTALL PIPE SEWER |                       |     |     |  |     |       |       |                  |               | DRAINS TO |     | REMARKS |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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|         |          |     |      |          |                           |                     | PROFILE   | ORIGINAL<br>GRATE OR<br>RING | NEW<br>GRATE OR<br>RING | CB. or M.H.<br>INVERT | REINFORCED CONCRETE PIPE |                               |                                                      |                                |                                | CORRUGATED STEEL PIPE |     |     |  |     | APRON | CLASS | STRUCTURE<br>NO. | INVERT<br>EL. |           |     |         |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|         |          |     |      |          |                           |                     |           |                              |                         |                       | 12"                      |                               |                                                      |                                | 15"                            | 18"                   | 21" | 24" |  | 12" |       |       |                  |               | 15"       | 18" |         |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|         |          |     |      | EXISTING |                           |                     |           |                              |                         |                       |                          |                               |                                                      |                                |                                |                       |     |     |  |     |       |       |                  |               |           |     |         |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

① USE SALVAGED CASTINGS FROM THIS PROJECT  
② SEE DETAIL

③ ONE MITERED BEND SECTION MAYBE REQUIRED-INCIDENTAL TO ITEM NO. 2503.541 TOTALS 26 36 32 59

REMOVE CB - 5 EA  
REMOVE R.C. PIPE - 153 LF

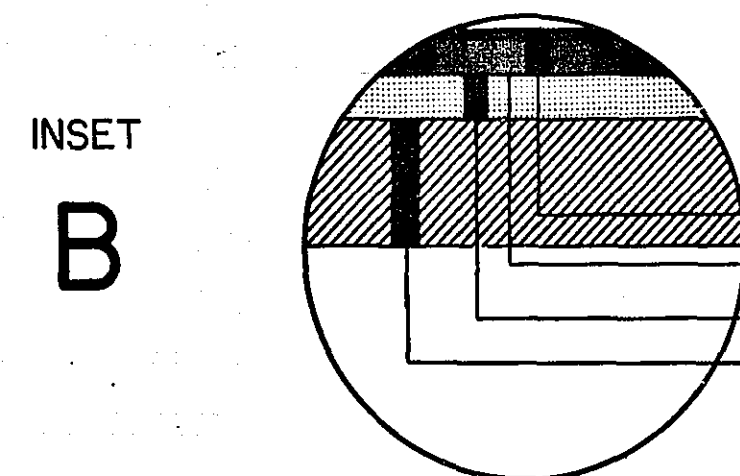
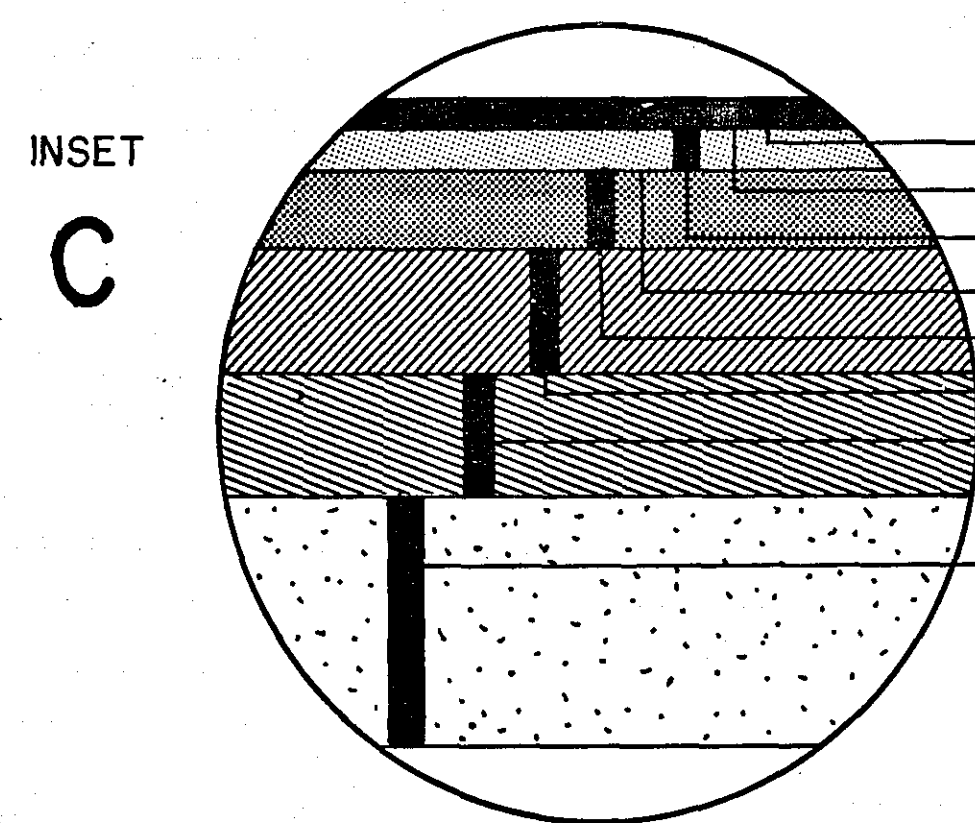
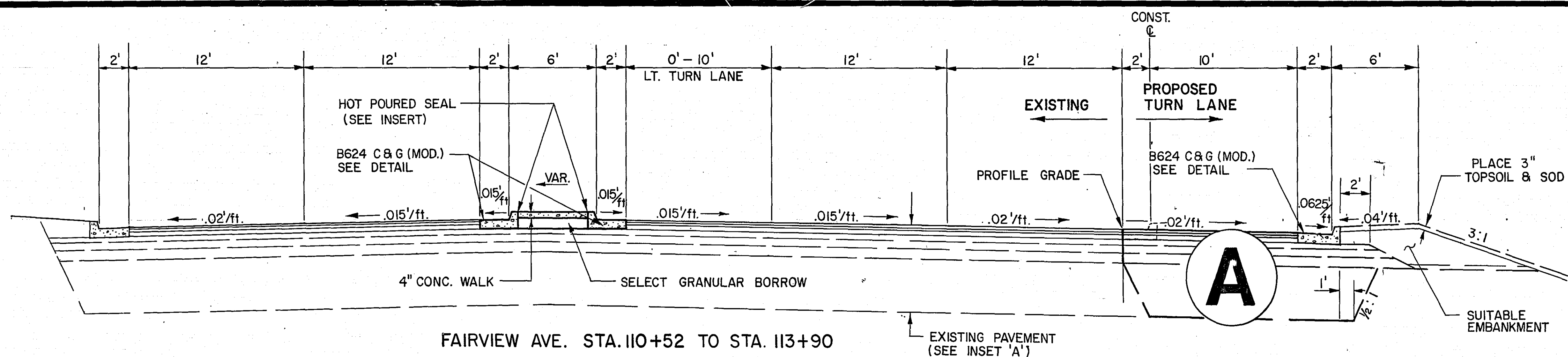
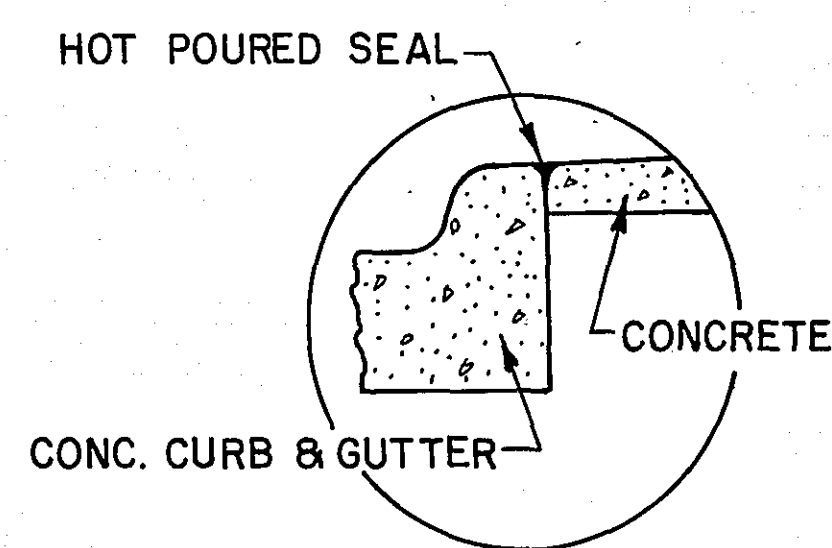
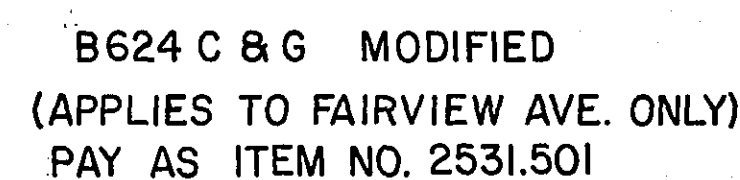
S.A.P. 62-648-12, S.A.P. 62-678-07

Sheet No. 3 of 9 Sheet

|            |            |      |            |      |
|------------|------------|------|------------|------|
| TOPOGRAPHY | PLOTTED BY | DATE | CHECKED BY | DATE |
| UTILITIES  | PLOTTED BY | DATE | CHECKED BY | DATE |
| PROFILE    | PLOTTED BY | DATE | CHECKED BY | DATE |

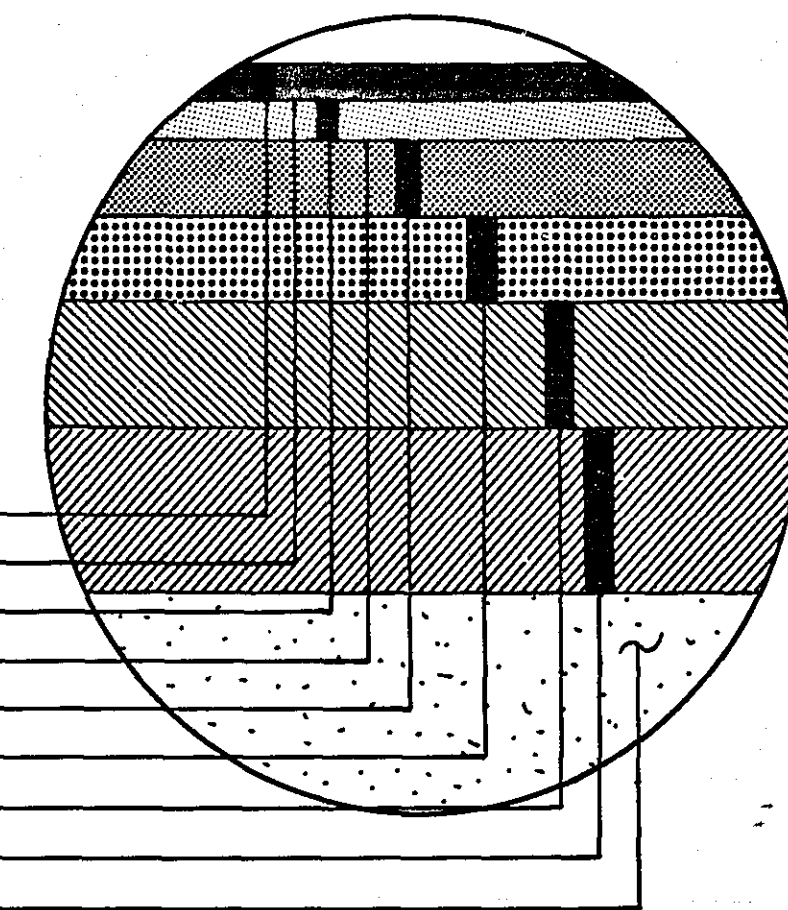


NOTE: TURN LANE STA. 113+90 TO STA. 115+90 REQUIRES THE USE OF  
B624 MOD. CURB & GUTTER (SEE DETAIL)

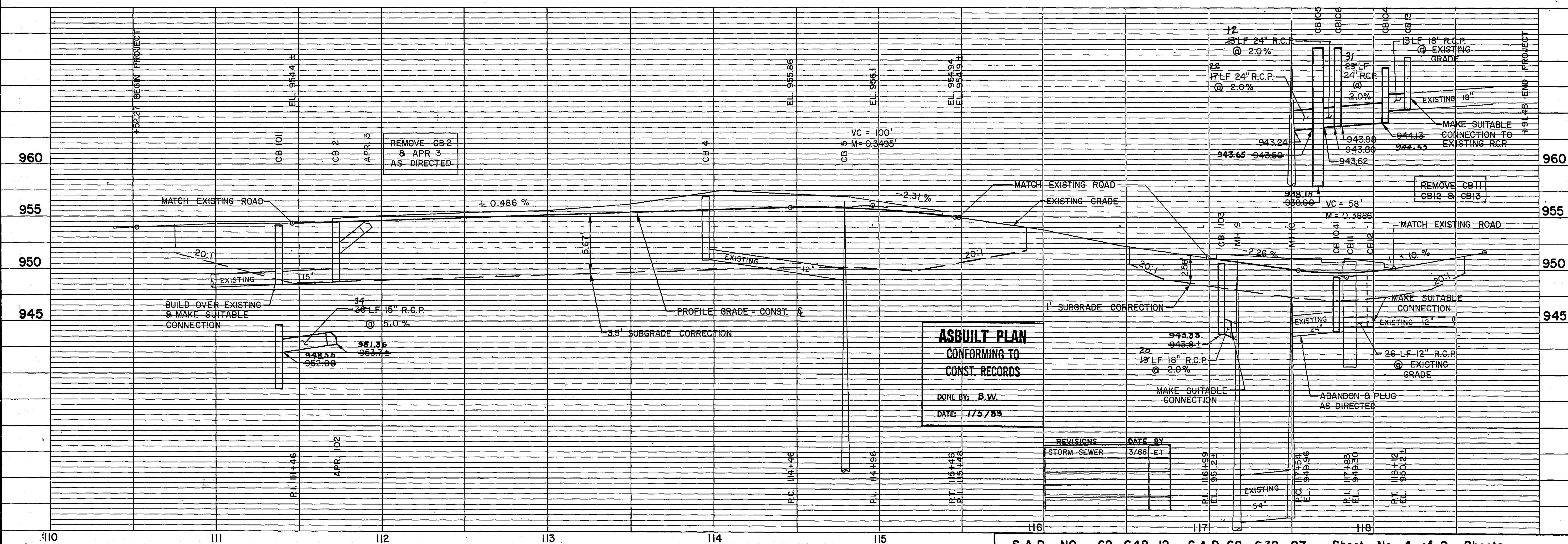


- 1-1/2" PLANT MIXED BITUMINOUS WEARING COURSE, SPEC. 2361 (MOD.)  
TACK COAT, SPEC. 2357  
2" PLANT MIXED BITUMINOUS BINDER COURSE, SPEC 2331 (MOD.)  
TACK COAT, SPEC. 2357  
3-1/2" PLANT MIXED BITUMINOUS BASE, SPEC. 2331 (MOD.)  
6" AGGREGATE BASE, CLASS 4, SPEC. 2211  
6" AGGREGATE BASE, CLASS 3, SPEC. 2211  
12" SUBGRADE CORRECTION, SELECT GRANULAR BORROW

- |        |                                                          |  |
|--------|----------------------------------------------------------|--|
| 1-1/2" | PLANT MIXED BITUMINOUS WEARING COURSE, SPEC. 2361 (MOD.) |  |
|        | TACK COAT, SPEC. 2357                                    |  |
| 2"     | PLANT MIXED BITUMINOUS BINDER COURSE, SPEC 2331 (MOD.)   |  |
|        | TACK COAT, SPEC. 2357                                    |  |
| 4-1/2" | PLANT MIXED BITUMINOUS BASE, SPEC. 2331 (MOD.)           |  |
| 4"     | AGGREGATE BASE, CLASS 5 MOD., SPEC. 2211                 |  |
| 6"     | AGGREGATE BASE, CLASS 4, SPEC. 2211                      |  |
| 8"     | AGGREGATE BASE, CLASS 3, SPEC. 2211                      |  |
| 3.5'   | SUBGRADE CORRECTION, SELECT GRANULAR BORROW              |  |



NOTE: BITUMINOUS BASE COURSES EXCEEDING 2-1/2" IN THICKNESS SHALL BE PLACED IN NOT LESS THAN TWO APPROXIMATELY EQUAL LIFTS.

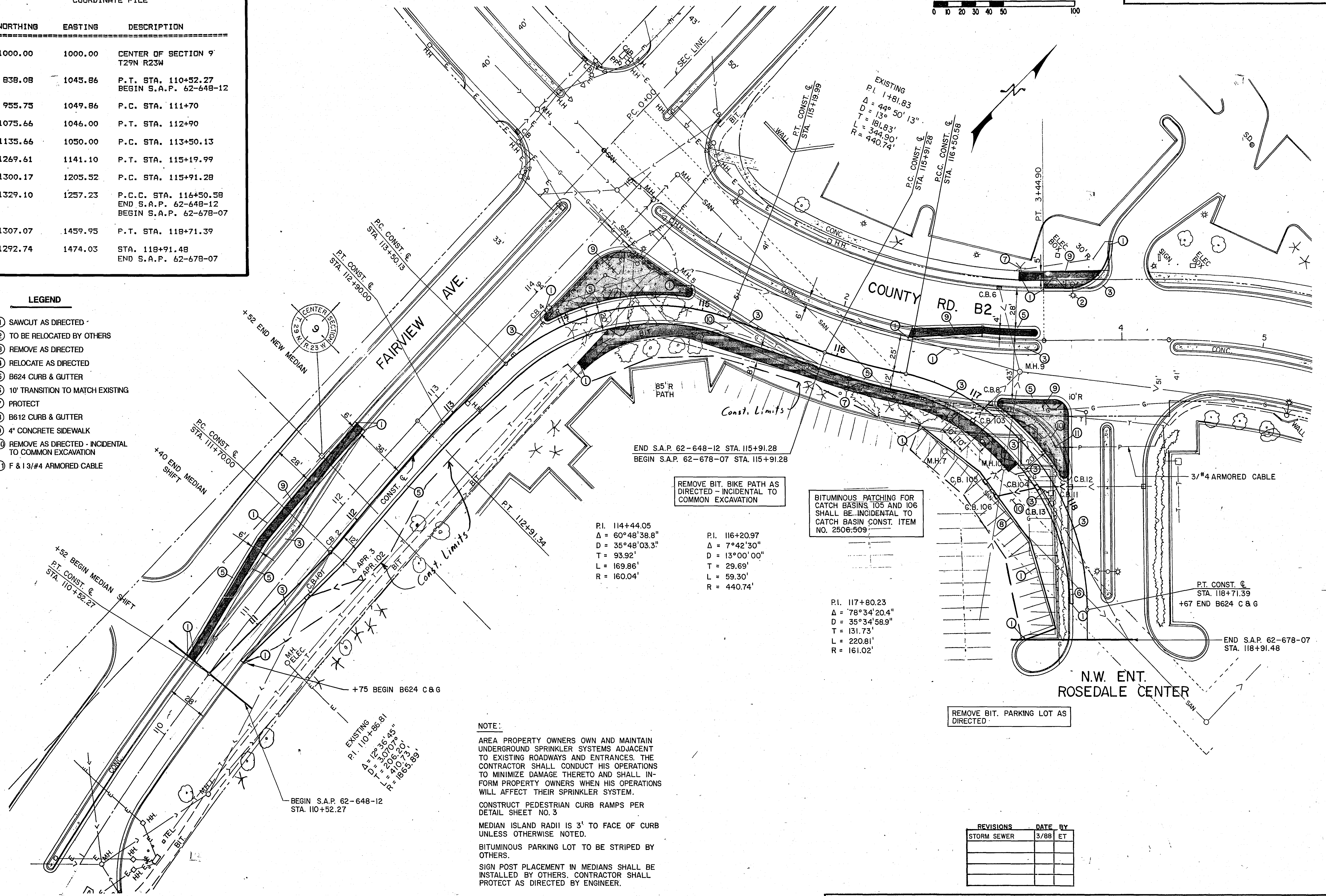


# COORDINATE FILE

| NORTHING | EASTING | DESCRIPTION                                                             |
|----------|---------|-------------------------------------------------------------------------|
| 1000.00  | 1000.00 | CENTER OF SECTION 9<br>T29N R23W                                        |
| 838.08   | 1045.86 | P.T. STA. 110+52.27<br>BEGIN S.A.P. 62-648-12                           |
| 955.75   | 1049.86 | P.C. STA. 111+70                                                        |
| 1075.66  | 1046.00 | P.T. STA. 112+90                                                        |
| 1135.66  | 1050.00 | P.C. STA. 113+50.13                                                     |
| 1269.61  | 1141.10 | P.T. STA. 115+19.99                                                     |
| 1300.17  | 1205.52 | P.C. STA. 115+91.28                                                     |
| 1329.10  | 1257.23 | P.C.C. STA. 116+50.58<br>END S.A.P. 62-648-12<br>BEGIN S.A.P. 62-678-07 |
| 1307.07  | 1459.95 | P.T. STA. 118+71.39                                                     |
| 1292.74  | 1474.03 | STA. 118+91.48<br>END S.A.P. 62-678-07                                  |

## LEGEND

- ① SAWCUT AS DIRECTED
- ② TO BE RELOCATED BY OTHERS
- ③ REMOVE AS DIRECTED
- ④ RELOCATE AS DIRECTED
- ⑤ B624 CURB & GUTTER
- ⑥ 10' TRANSITION TO MATCH EXISTING
- ⑦ PROTECT
- ⑧ B612 CURB & GUTTER
- ⑨ 4" CONCRETE SIDEWALK
- ⑩ REMOVE AS DIRECTED - INCIDENTAL TO COMMON EXCAVATION
- ⑪ F & I 3/4" ARMORED CABLE



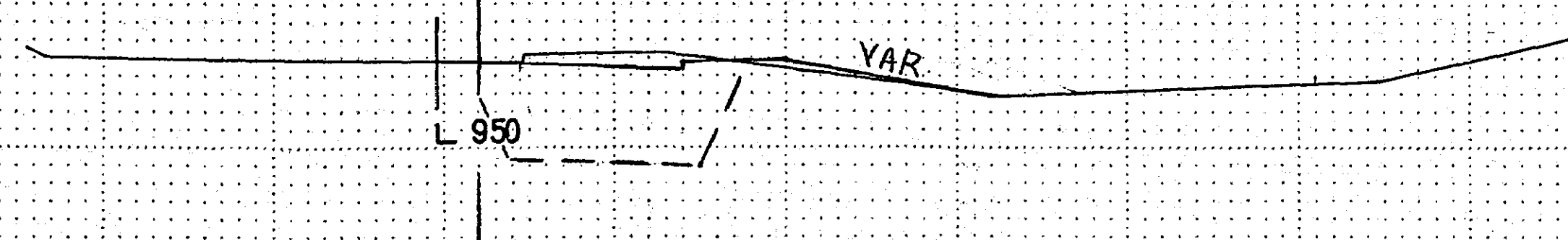
Fed. Proj. No.

| COMMON<br>EXC. | SUBGRADE<br>CORR. |
|----------------|-------------------|
| 202            | 129               |

STA. 110+75 to 111+70

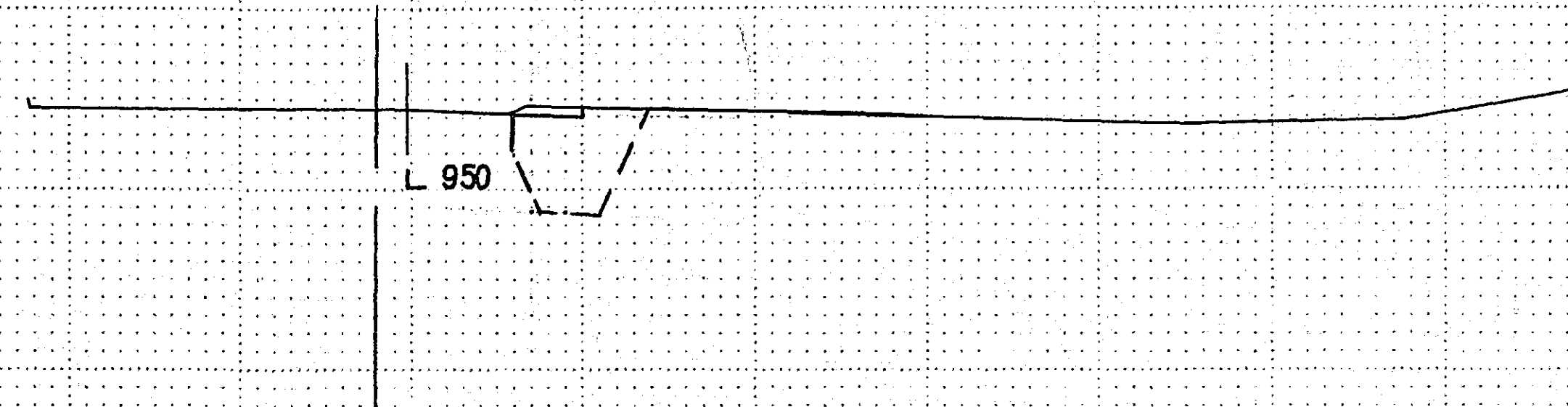
F STA. 111+50.00 ± 954.40 OT1

Const. 111+51  
954.42



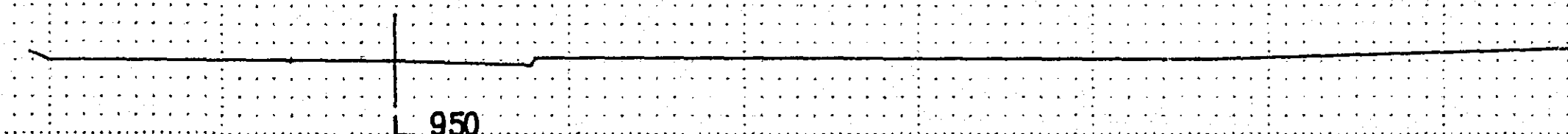
F STA. 111+00.00 ± 954.31 OT1

Const. 111+00  
954.18

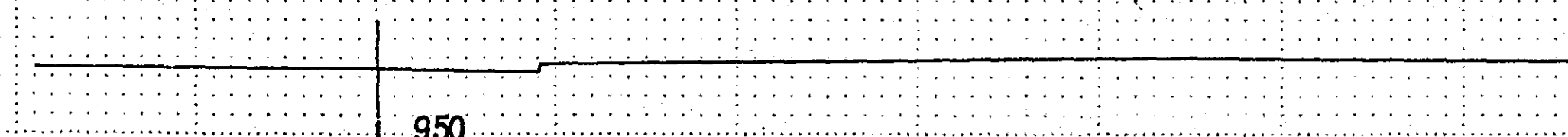


+75 BEGIN WIDENING SUBCUT

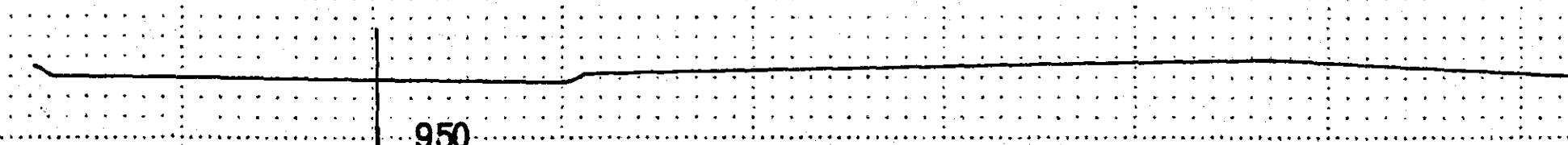
F STA. 110+50.00 ± 954.00 OT1



F STA. 110+00.00 ± 953.71 OT1



F STA. 109+50.00 ± 953.39 OT1



State Proj. No. 62-648-12 , 62-678-07

Sheet No. 6 of 9 Sheets

27-14

STA. 109+50.00 TO 111+50.00 SCALE = 10 X 10

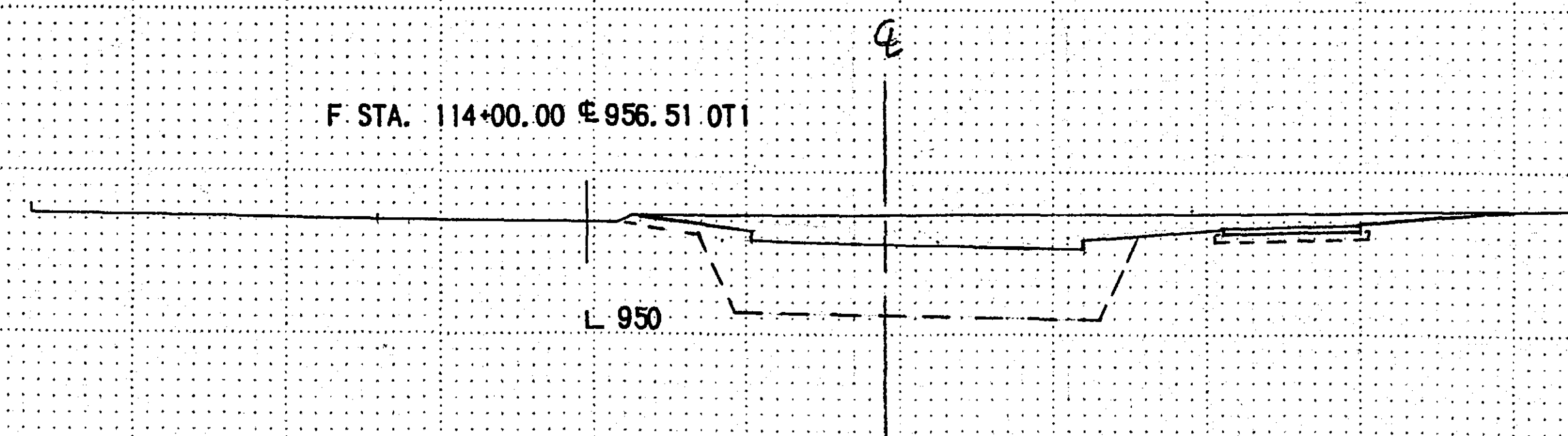
Fed. Proj. No.

COMMON  
EXC.

SUBGRADE  
CORR.

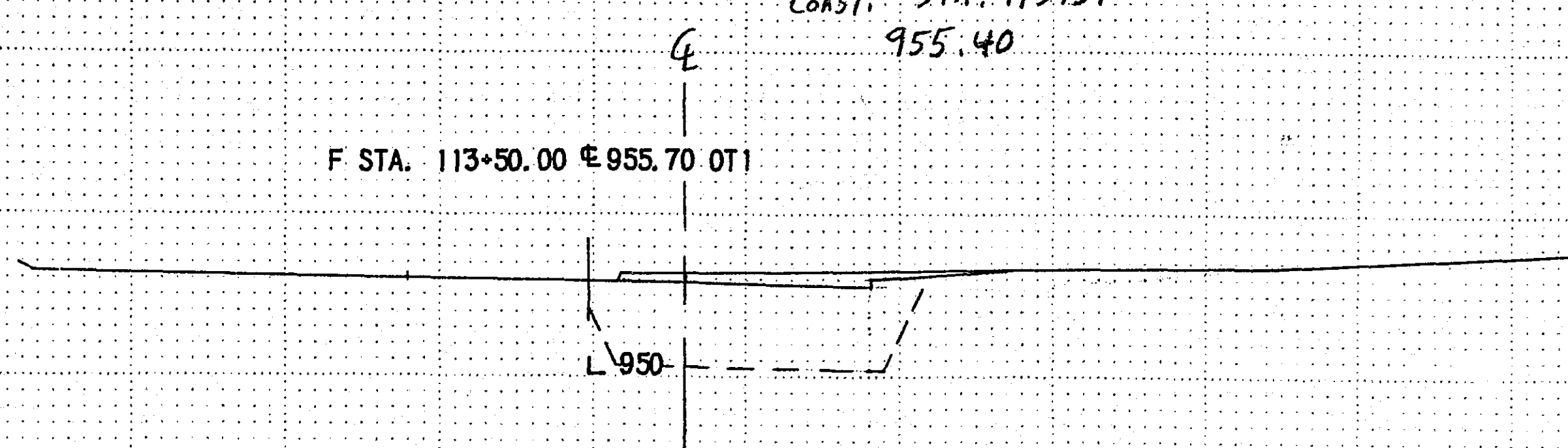
Const. STA. 114+04  
955.65

F STA. 114+00.00 @ 956.51 OT1



Const. STA. 113+51  
955.40

F STA. 113+50.00 @ 955.70 OT1



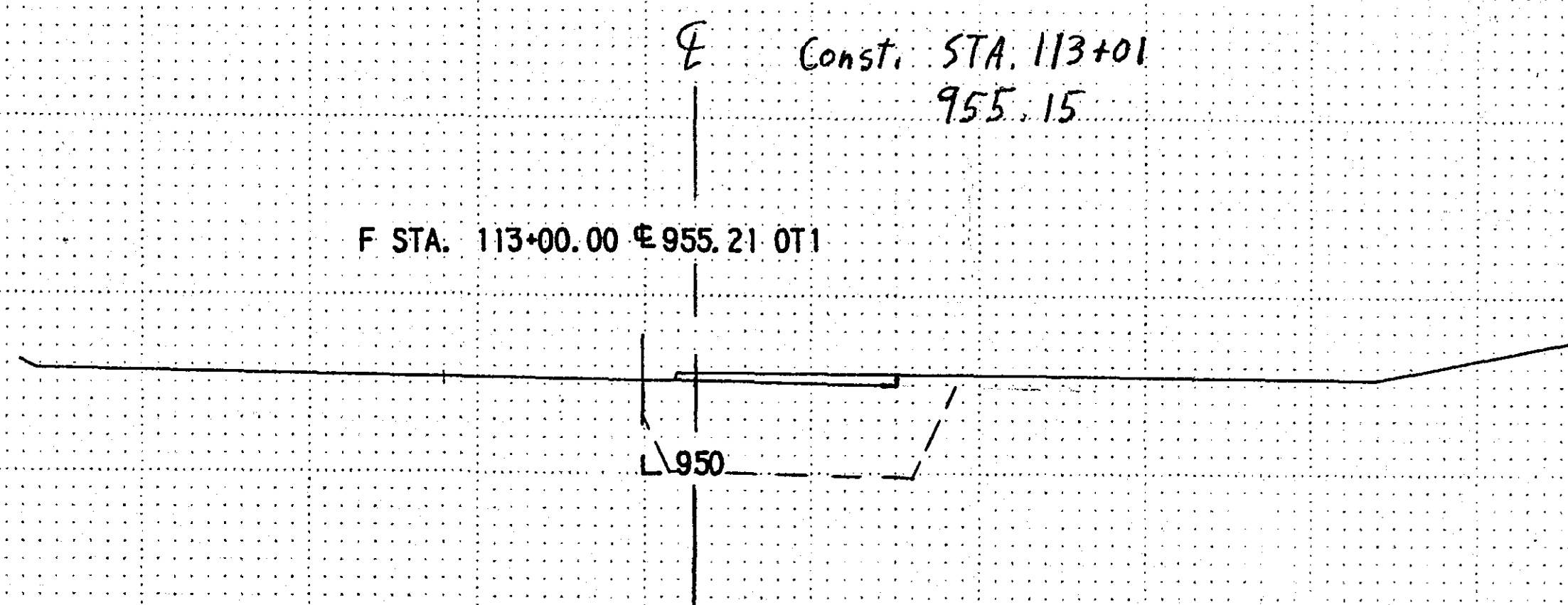
STA. 112+90 to 113+92

579

298

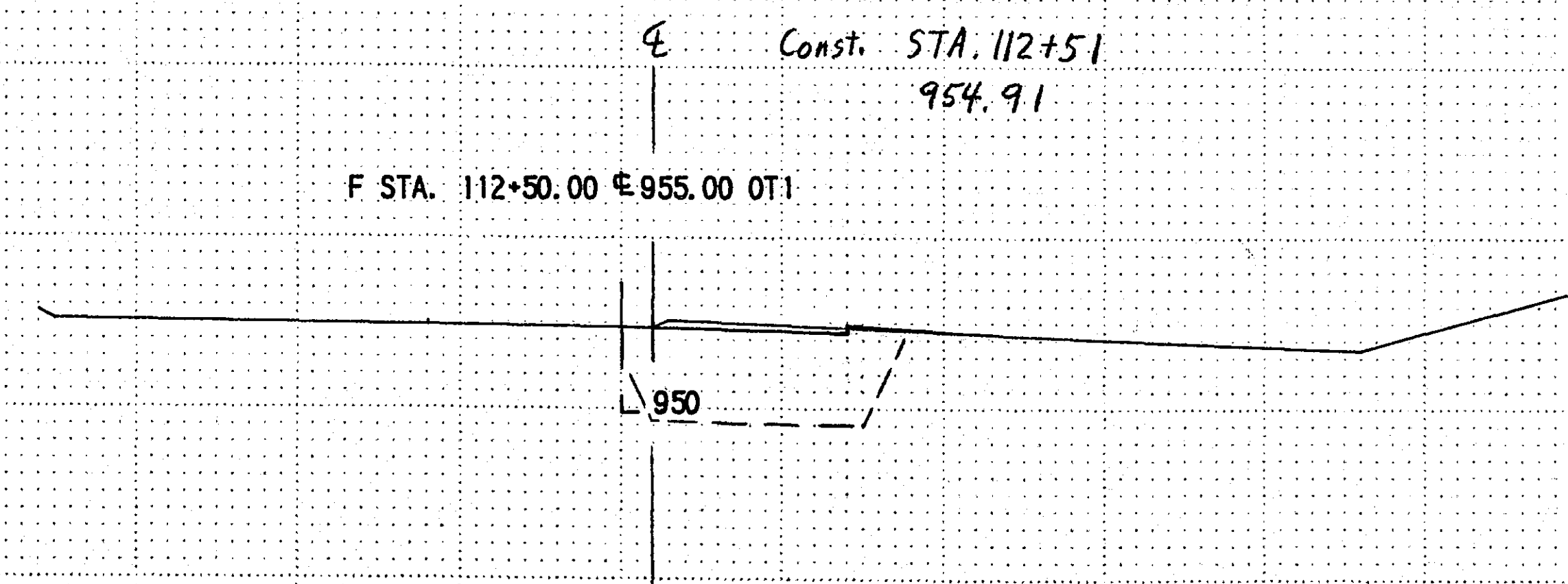
Const. STA. 113+01  
955.15

F STA. 113+00.00 @ 955.21 OT1



Const. STA. 112+51  
954.91

F STA. 112+50.00 @ 955.00 OT1



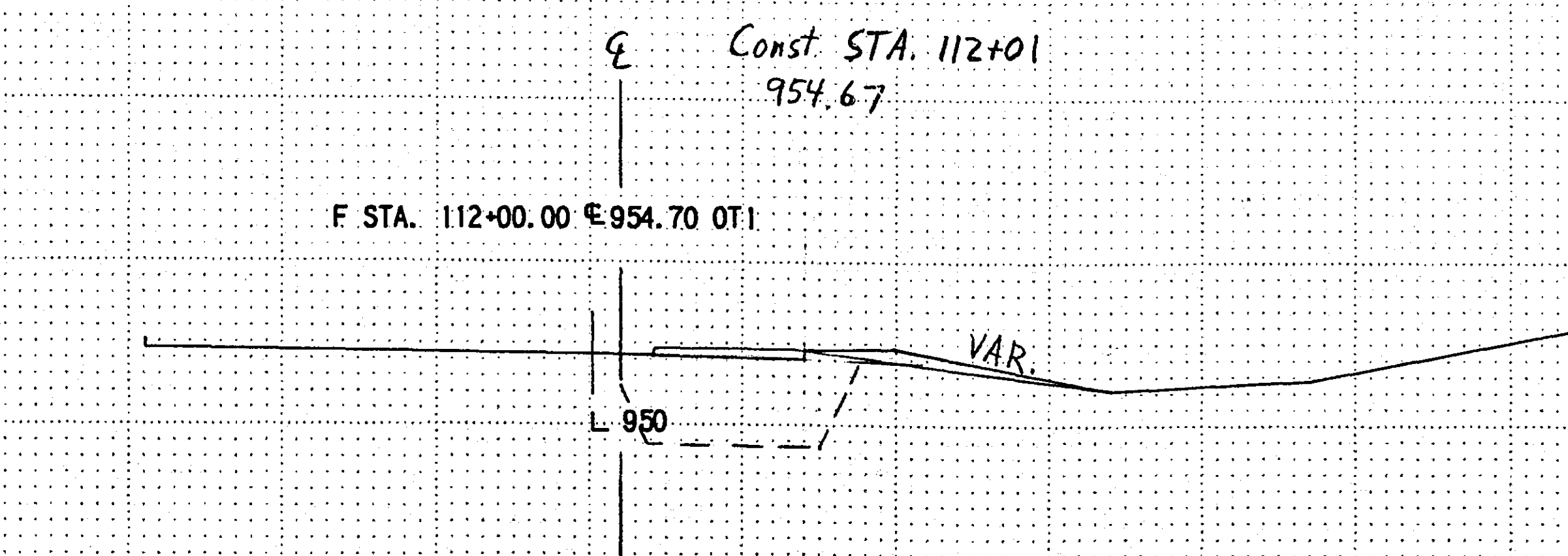
STA. 111+70 to 112+90

452

241

Const. STA. 112+01  
954.67

F STA. 112+00.00 @ 954.70 OT1

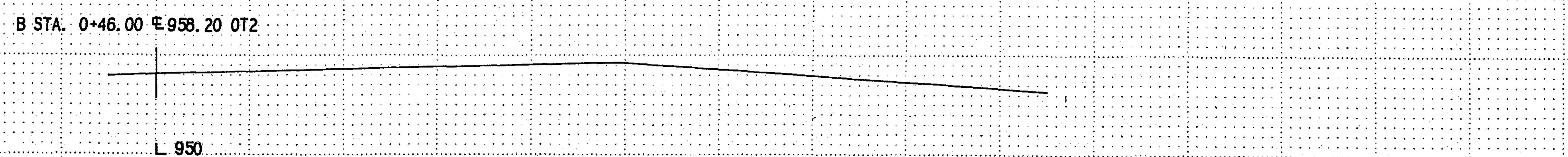
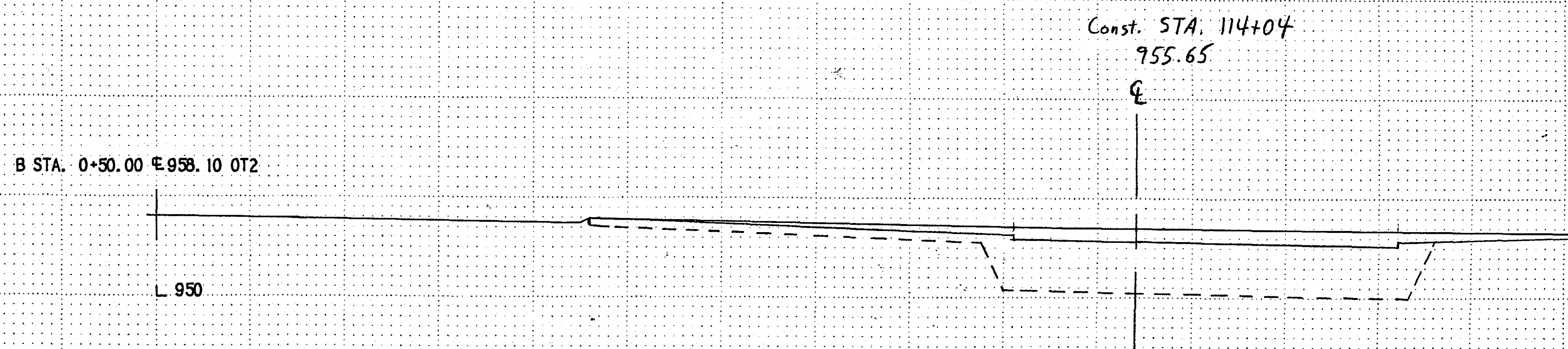
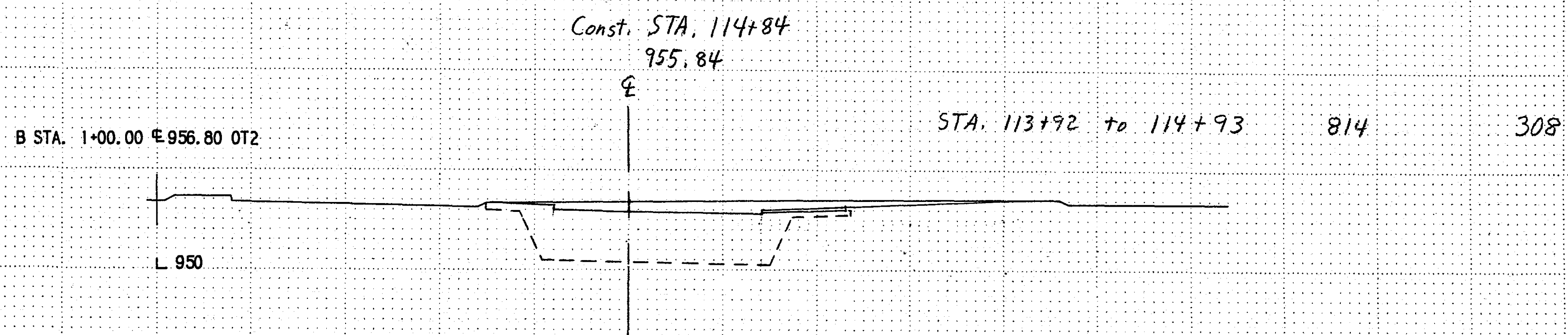
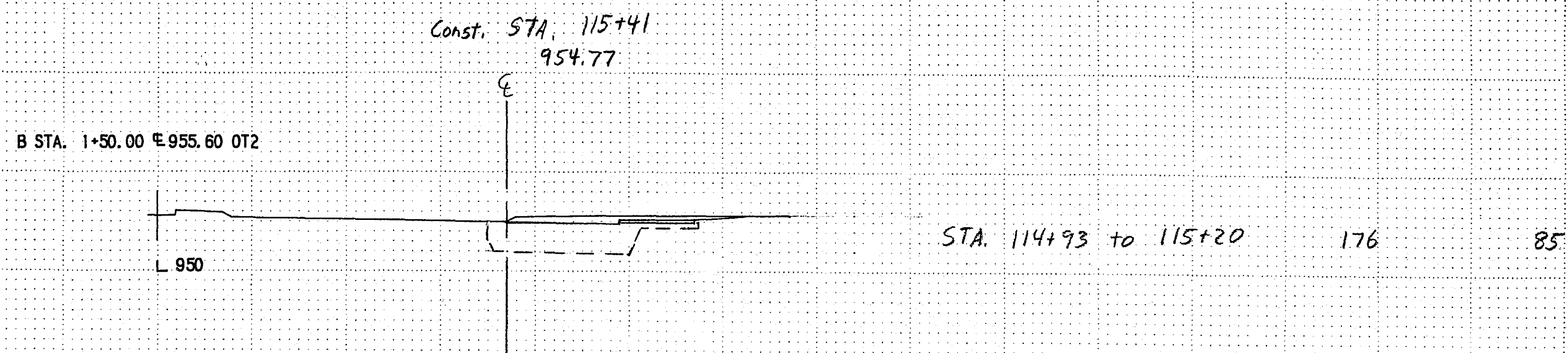
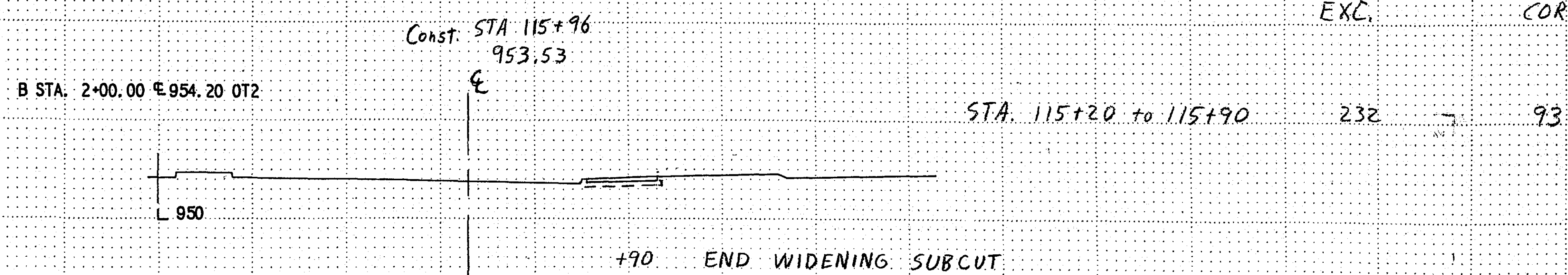


State Proj. No. 62-648-12, 62-678-07

Sheet No. 7 of 9 Sheets

STA. 112+00.00 TO 114+00.00 SCALE = 10 X 10

27-114



STA. 0+46.00 TO 2+00.00 SCALE = 10 X 10

| EARTHWORK SUMMARY      |              |
|------------------------|--------------|
| EXCAVATION             | = 2989 CY    |
| EMBANKMENT             | = 0 CY       |
| EXCESS EXCAVATION      | = 2989 CY    |
| SUBGRADE CORRECTION    | = 1439 CY    |
| X                      | 1.5          |
| SELECT GRANULAR BORROW | 2159 CY (LV) |

