

Patrick
Jpk → MCS

STATE DEPARTMENT OF HIGHWAYS DIVISION OF HIGHWAYS - STATE OF COLORADO

P.E., R.O.W., Utilities under CXFR 03-0034-18.

PLAN AND PROFILE OF PROPOSED As Constructed
COLORADO PROJECT NO. CX 03-0034-23
STATE HIGHWAY NO. 34
WELD COUNTY

| | | | |
|------------------|----------|---------------|-----------|
| FED. ROAD REGION | DIVISION | PROJECT NO. | SHEET NO. |
| VIII | COLO. | CX 03-0034-23 | 1 |
| AS CONSTRUCTED | | | |
| NO REVISIONS | REVISED | VOID | |
| | 5-28-91 | | |

| REVISIONS | |
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| | |
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Index of Sheets

- 1 Title Sheet
- 2 Standard Plans List
- 3 Typical Sections, General Notes, Details of Hot Bituminous Pavement (Patching)
- 4-5 Summary of Approximate Quantities
- 6 Structure Quantities
- 7 Summary of Earthwork, Tabulation of Delineator Removal, Surfacing Quantities, Tabulation of Fence Detail of CBC Extension Sta. 118+55
- 8 Detail of Placement of Concrete Box Culvert (Precast), Detail of Diversion Box Sta. 194+98, Detail of Concrete Box Culvert Sta. 118+
- 9-18 Plan & Profile Sheets, Site # 1 through Site # 8
- 17 Detour Signing (For One Direction)
- 18 Tabulation of Signs
- 19 Tabulation of Pavement Markings
- 20 Schedule of Traffic Control Devices

New & Revised Standards
M-603-3, Precast Concrete Box Culvert (11-01-1985) (1 sheet)
M-620-2, Field Laboratory Class 2 (05-25-1998) (1 sheet)

**AS CONSTRUCTED PLANS
RETURN TO DIST. 4 DESIGN**

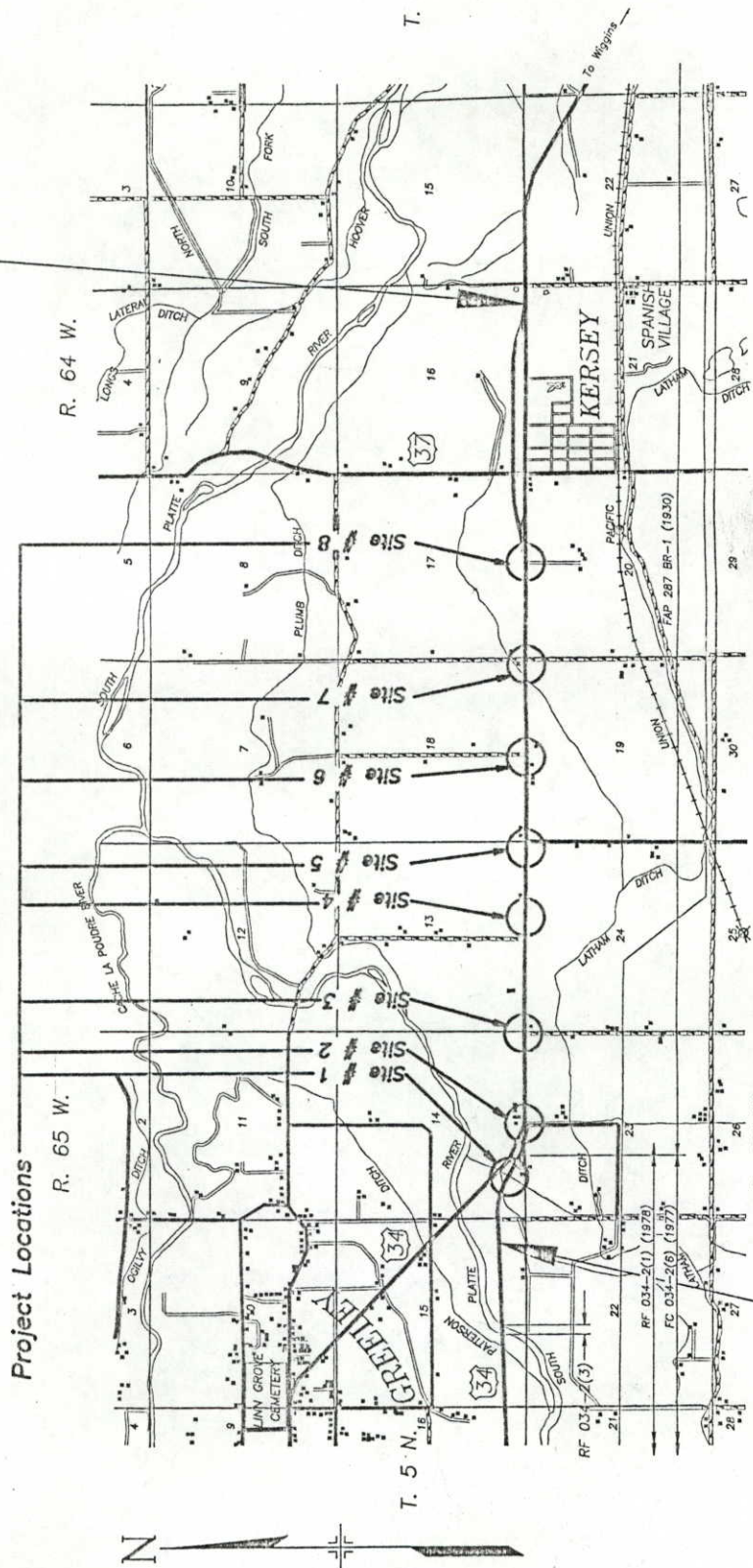
T. 5 N.

SCALES OF ORIGINAL DRAWINGS

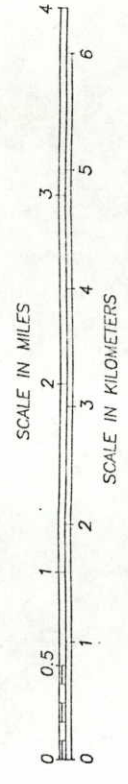
- ON PLAN 1" = 50'
- ON PROFILE 1" = 50'
- 1" = 5'

GRADE LINE ON PROFILE IS SHOWN AS GRADE OF FINISHED ROAD

END CXFR 03-0034-18 (FUTURE)
Sta. 356+84.83 PROJ M.P. 120.038



BEGIN CXFR 03-0034-18 (FUTURE)
Sta. 102+97.89 EBL & WBL M.P. 115.178
= Approx. Sta. 594+50 on FC 034-2(6)



TABULATION OF LENGTH AND DESIGN DATA

| Location | Roadway | |
|---|-------------|--------------|
| | Lin. Ft. | Miles |
| Site # 1 --- Sta. 118+55 PROJ | 0 | |
| Site # 2 --- Sta. 133+06 PROJ | 0 | |
| Site # 3 --- Sta. 156+76.5 to 161+11.5 PROJ | 435 | |
| Site # 4 --- Sta. 195+14 PROJ | 0 | |
| Site # 5 --- Sta. 211+95 PROJ | 0 | |
| Site # 6 --- Sta. 237+37 PROJ | 0 | |
| Site # 7 --- Sta. 255+38 to 261+38 PROJ | 600 | |
| Site # 8 --- Sta. 288+77.5 to 294+32.5 PROJ | 555 | |
| Total | 1590 | 0.301 |

| SUMMARY | |
|--------------------|----------------|
| Project Net Length | Lin. Ft. Miles |
| 1590 | 0.301 |

| DESIGN DATA | |
|----------------------------|-------------------------|
| MAXIMUM DEGREE OF CURVE | N/A |
| MAXIMUM GRADE | 2.1739% |
| MINIMUM S.S.D. HORIZONTAL | > 1200' |
| MINIMUM S.S.D. VERTICAL | 325' |
| MAXIMUM DESIGN SPEED | 45 M.P.H. |
| 2011 DESIGN TRAFFIC VOLUME | DHV = 941 ADT = 7838 |

AS CONSTRUCTED INFORMATION

| | | | |
|-------------------------------|----------------------------|------|---------|
| CONTRACTOR | L. E. M. Enterprises, Inc. | | |
| RESIDENT ENGINEER | Robert Patrick | | |
| PROJECT STARTED | 3-1-91 | | |
| PROJECT COMPLETED | 5-28-91 | | |
| AS CONSTRUCTED PLANS APPROVED | <i>Robert Patrick</i> | | |
| TITLE | AS CONSTRUCTED | DATE | 6-18-91 |

| Plan No. | Title | Page | Plan No. | Title | Page | Plan No. | Title | Page |
|--|--|------|---|---|------|--|---|------|
| <input checked="" type="checkbox"/> M-100-1 | STANDARD SYMBOLS..... | 1 | <input type="checkbox"/> M-607-1 | WIRE FENCES AND GATES..... (2 SHEETS) | 52 | <input type="checkbox"/> S-612-1 | TYPICAL DELINEATOR INSTALLATIONS..... (4 SHEETS) | 75 |
| <input type="checkbox"/> M-107-1 | TEMPORARY EROSION CONTROL..... | 2 | <input type="checkbox"/> M-607-2 | CHAIN LINK FENCE..... (3 SHEETS) | 54 | <input type="checkbox"/> S-614-1 | TYPICAL GROUND SIGN PLACEMENT..... | 79 |
| <input type="checkbox"/> M-203-1 | APPROACH ROADS, FLARING, CUT SLOPE TREATMENT, BRIDGE & CREST WIDENING..... | 3 | <input type="checkbox"/> M-607-3 | BARRIER FENCE..... | 57 | <input type="checkbox"/> S-614-2 | CLASS I GROUND SIGN INSTALLATIONS..... | 80 |
| <input type="checkbox"/> M-203-2 | DITCH TYPES..... | 4 | <input type="checkbox"/> M-607-4 | DEER FENCE AND GATE..... (2 SHEETS) | 58 | <input type="checkbox"/> S-614-3 | CLASS II GROUND SIGN INSTALLATIONS..... | 81 |
| <input checked="" type="checkbox"/> M-203-10 | SUPERELEVATION OF CURVES - CROWNED HIGHWAYS..... | 5 | <input type="checkbox"/> M-607-10 | PICKET SNOW FENCE..... | 60 | <input type="checkbox"/> S-614-4 | CLASS III SIGNS, LAMINATED ALUMINUM PANELS AND POST SPACING TABLE..... (2 SHEETS) | 82 |
| <input type="checkbox"/> M-203-11 | SUPERELEVATION OF CURVES - DIVIDED HIGHWAYS - SHOULDER PIVOT..... | 6 | <input type="checkbox"/> M-608-1 | CURB RAMPS..... | 61 | <input type="checkbox"/> S-614-5 | BREAK-AWAY SIGN SUPPORT DETAILS FOR GROUND SIGNS..... (2 SHEETS) | 84 |
| <input type="checkbox"/> M-203-12 | SUPERELEVATION OF CURVES - STREETS..... | 7 | <input type="checkbox"/> M-609-1 | CURBS AND GUTTERS..... | 62 | <input type="checkbox"/> S-614-6 | CONCRETE FOOTINGS AND SIGN ISLANDS FOR CLASS III SIGNS..... (2 SHEETS) | 86 |
| <input type="checkbox"/> M-203-13 | SUPERELEVATION OF CURVES - DIVIDED HIGHWAYS - CENTER PIVOT..... | 8 | <input type="checkbox"/> M-611-1 | CATTLE GUARD - WELDED GRILL UNITS - 10' THRU 42' ROADWAYS..... (2 SHEETS) | 63 | <input type="checkbox"/> S-614-10 | TYPICAL MARKER ASSEMBLY INSTALLATIONS..... | 88 |
| <input checked="" type="checkbox"/> M-206-1 | EXCAVATION AND BACKFILL FOR STRUCTURES..... (2 SHEETS) | 9 | <input type="checkbox"/> M-613-1 | HIGHWAY LIGHTING..... | 65 | <input type="checkbox"/> S-614-11 | MILEPOST SIGN AND INSTALLATION..... | 89 |
| <input type="checkbox"/> M-206-2 | EXCAVATION AND BACKFILL FOR BRIDGES..... | 11 | <input type="checkbox"/> M-615-1 | EMBANKMENT PROTECTOR, TYPES 3 & 4..... | 67 | <input type="checkbox"/> S-614-12 | STRUCTURE NUMBER INSTALLATION (BRIDGE INFORMATION SHEET)..... | 90 |
| <input type="checkbox"/> M-214-1 | PLANTING DETAILS..... | 12 | <input type="checkbox"/> M-615-2 | EMBANKMENT PROTECTOR, TYPE 5..... | 68 | <input type="checkbox"/> S-614-13 | STANDARD RAILROAD CROSSING SIGNS AND MARKINGS..... | 91 |
| <input type="checkbox"/> M-412-1 | CONCRETE PAVEMENT JOINTS..... | 13 | <input checked="" type="checkbox"/> M-616-1 | INVERTED SIPHON..... (ALSO USE M-603 OR M-604 AS REQUIRED) | 69 | <input type="checkbox"/> S-614-20 | TYPICAL POLE MOUNT SIGN INSTALLATION..... | 92 |
| <input type="checkbox"/> M-504-1 | STEEL CRIBBING..... | 14 | <input type="checkbox"/> M-620-1 | FIELD LABORATORY - CLASS 1..... | 70 | <input type="checkbox"/> S-614-21 | CONCRETE BARRIER SIGN POST INSTALLATIONS..... | 93 |
| <input type="checkbox"/> M-506-1 | GABIONS AND SLOPE MATTRESS..... | 15 | <input type="checkbox"/> M-620-2 | FIELD LABORATORY - CLASS 2..... | 71 | <input type="checkbox"/> S-614-22 | TYPICAL MULTI-SIGN INSTALLATIONS..... | 94 |
| <input type="checkbox"/> M-510-1 | STRUCTURAL PLATE CULVERT PIPE - H-20 LOADING..... (2 SHEETS) | 16 | <input type="checkbox"/> M-620-11 | FIELD OFFICE - CLASS 1..... | 72 | <input type="checkbox"/> S-614-30 | INTERSTATE ROUTE MARKERS..... | 95 |
| <input checked="" type="checkbox"/> M-601-1 | SINGLE CONCRETE BOX CULVERT..... | 18 | <input type="checkbox"/> M-620-12 | FIELD OFFICE - CLASS 2..... | 73 | <input type="checkbox"/> S-614-31 | U. S. & COLORADO ROUTE MARKERS..... | 96 |
| <input type="checkbox"/> M-601-2 | DOUBLE CONCRETE BOX CULVERT..... | 19 | | | | <input type="checkbox"/> S-614-32 | AUXILIARY MARKERS..... | 97 |
| <input type="checkbox"/> M-601-3 | TRIPLE CONCRETE BOX CULVERT..... | 20 | | | | <input type="checkbox"/> S-614-40 | TRAFFIC SIGNAL INSTALLATION DETAILS... (3 SHEETS) | 98 |
| <input checked="" type="checkbox"/> M-601-10 | HEADWALL FOR PIPE CULVERTS..... | 21 | | | | <input checked="" type="checkbox"/> S-614-50 | TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION..... (4 SHEETS) | 101 |
| <input type="checkbox"/> M-601-11 | TYPE "S" SADDLE HEADWALL FOR PIPE CULVERTS..... | 22 | | | | <input checked="" type="checkbox"/> S-614-51 | BARRICADES, DRUMS, CONCRETE BARRIER (TEMP) & VERTICAL PANELS..... | 105 |
| <input type="checkbox"/> M-601-12 | HEADWALL, INTERCEPTING HEADWALL AND CULVERT OUTLET PAVING..... | 23 | | | | <input checked="" type="checkbox"/> S-627-1 | TYPICAL PAVEMENT MARKINGS..... (3 SHEETS) | 106 |
| <input checked="" type="checkbox"/> M-601-20 | WINGWALLS FOR PIPE OR BOX CULVERTS..... | 24 | | | | | | |
| <input type="checkbox"/> M-603-1 | METAL CULVERT PIPE - H-20 LOADING..... (2 SHEETS) | 25 | | | | | | |
| <input checked="" type="checkbox"/> M-603-2 | REINFORCED CONCRETE PIPE..... | 27 | | | | | | |
| <input type="checkbox"/> M-603-3 | PRECAST CONCRETE BOX CULVERT..... | 28 | | | | | | |
| <input type="checkbox"/> M-603-10 | CONCRETE AND METAL END SECTIONS..... | 29 | | | | | | |
| <input type="checkbox"/> M-604-1 | PIPE SEWER IN TRENCH..... | 30 | | | | | | |
| <input type="checkbox"/> M-604-10 | INLET, TYPE C..... | 31 | | | | | | |
| <input type="checkbox"/> M-604-11 | INLET, TYPE D..... | 32 | | | | | | |
| <input type="checkbox"/> M-604-12 | CURB INLET, TYPE R..... (2 SHEETS) | 33 | | | | | | |
| <input type="checkbox"/> M-604-13 | CONCRETE INLET, TYPE 13..... | 35 | | | | | | |
| <input type="checkbox"/> M-604-20 | MANHOLES..... | 36 | | | | | | |
| <input type="checkbox"/> M-604-21 | STEPS FOR MANHOLES & INLETS..... | 37 | | | | | | |
| <input type="checkbox"/> M-606-1 | GUARD RAIL, TYPE 3, W-BEAM..... (8 SHEETS) | 38 | | | | | | |
| <input type="checkbox"/> M-606-2 | GUARD RAIL, TYPE 3, W-BEAM FOR LOCAL ROADS & STREETS..... (4 SHEETS) | 46 | | | | | | |
| <input type="checkbox"/> M-606-10 | GUARD RAIL, TYPE 4, CONCRETE BARRIER, CAST-IN-PLACE..... | 50 | | | | | | |
| <input type="checkbox"/> M-606-11 | GUARD RAIL, TYPE 4, CONCRETE BARRIER, PRECAST-PORTABLE..... | 51 | | | | | | |

THE STANDARD PLAN SHEETS INDICATED HEREON BY A MARKED BOX ARE TO BE USED TO CONSTRUCT THIS PROJECT.

| | | | | | |
|-----------------|----------|----------------|-----------------|--------------|------|
| NO REVISIONS | | AS CONSTRUCTED | REVISED 5-25-91 | | VOID |
| FED. ROAD RECON | DIVISION | PROJ. NO. | SHEET NO. | SHEET TOTALS | |
| VII | COLO. | CX 03-0034-23 | 3 | 20 | |

GENERAL NOTES

FOR PRELIMINARY PLAN QUANTITIES OF SURFACING MATERIALS, THE FOLLOWING RATES OF APPLICATION WERE USED:

TACK COAT DILUTED EMUL. ASPH. (SLOW-SETTING) @ 0.1 GALS/SQ. YD. (DILUTED) BITUMINOUS PAVEMENT @ 110 LBS./SQ. YD. /INCH THICK AGGREGATE BASE COURSE @ 133 LBS./CU. FT.

DILUTED EMULSIFIED ASPHALT (SLOW-SETTING) FOR TACK COAT SHALL CONSIST OF 1 PART EMULSIFIED ASPHALT AND 1 PART WATER.

RATES OF APPLICATION SHALL BE AS DETERMINED BY THE ENGINEER AT THE TIME OF CONSTRUCTION.

FOR GRAVELED DETOURS, WATER SHALL BE USED AS A DUST PALLIATIVE WHERE REQUIRED. LOCATIONS SHALL BE AS ORDERED BY THE ENGINEER. THIS WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST OF EMBANKMENT MATERIAL (CIP).

THE FOLLOWING SHALL BE FURNISHED WITH EACH BITUMINOUS PAVEMENT:

- A SKI TIRE DEVICE AT LEAST 30 FEET IN LENGTH.
- A SHORT SKI OR SHOE.

ANY LAYER OF BITUMINOUS PAVEMENT THAT IS TO HAVE A SUCCEEDING LAYER PLACED THEREON SHALL BE COMPLETED FULL WIDTH BEFORE SUCCEEDING LAYER IS PLACED.

MINIMUM R VALUE OF EMBANKMENT SHALL BE 50.

DEPTH OF MOISTURE-DENSITY CONTROL FOR THIS PROJECT SHALL BE AS FOLLOWS:

FULL DEPTH OF ALL EMBANKMENTS.

BASES OF CUTS AND FILLS 0.5 FOOT.

EXCAVATION REQUIRED FOR COMPACTION OF BASES OF CUTS AND FILLS WILL BE CONSIDERED AS SUBSIDIARY TO THAT COMPACTION AND WILL NOT BE PAID FOR SEPARATELY.

TYPE OF COMPACTION FOR THIS PROJECT SHALL BE AASHTO T-99.

IT IS ESTIMATED THAT 409 HOURS OF BLADING WITH A MOTOR GRADER IN THE 125-150 HORSEPOWER RANGE SHALL BE REQUIRED TO MAINTAIN THE DETOURS. THE GRADER AND AN OPERATOR SHALL BE AVAILABLE ON THE PROJECT 24 HOURS A DAY DURING OPERATION OF THE DETOURS.

THE CONTRACTOR SHALL BE REQUIRED TO SET REINFORCED CONCRETE PIPE AND PRECAST CONCRETE BOX CULVERTS WITH A LASER GRADE LINE.

REMOVAL OF OLD ASPHALT AND CONCRETE ROADWAY REQUIRED FOR THE REMOVAL OF STRUCTURES OR THE PLACEMENT OF NEW STRUCTURES WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE WORK.

IT IS ESTIMATED THAT 1844 CU. YD. OF TOPSOIL FROM DETOUR AREAS SHALL BE STOCKPILED ALONG THE NORTH BOUNDARY OF THE DETOUR EASEMENTS. THIS TOPSOIL SHALL REMAIN IN FILES FOR USE IN FUTURE CONSTRUCTION.

THE CONTRACTOR SHALL BE REQUIRED TO KEEP ALL FIELD APPROACHES AND HOME APPROACHES ACCESSIBLE DURING CONSTRUCTION.

THE CONTRACTOR SHALL ARRANGE HIS WORK SO THAT SITE #8 AND SITE #4 ARE COMPLETED FIRST.

ALL EXCAVATION REQUIRED FOR DITCH WORK AT NEW STRUCTURES SHALL BE CONSIDERED MINOR AND WILL NOT BE MEASURED AND PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE WORK.

ALL EMBANKMENT REQUIRED FOR DITCH WORK AT NEW STRUCTURES (EXCEPT AT STA 159+30 LT.) SHALL BE CONSIDERED MINOR AND WILL NOT BE MEASURED AND PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE WORK.

SUBPAVING RATES FOR MINIMUM ROADWAY WIDTHS MATERIAL SHALL BE PLACED IN SEPARATE COURSES AT THE FOLLOWING APPROXIMATE RATES PER 100 LINEAR FEET OF ROADWAY:

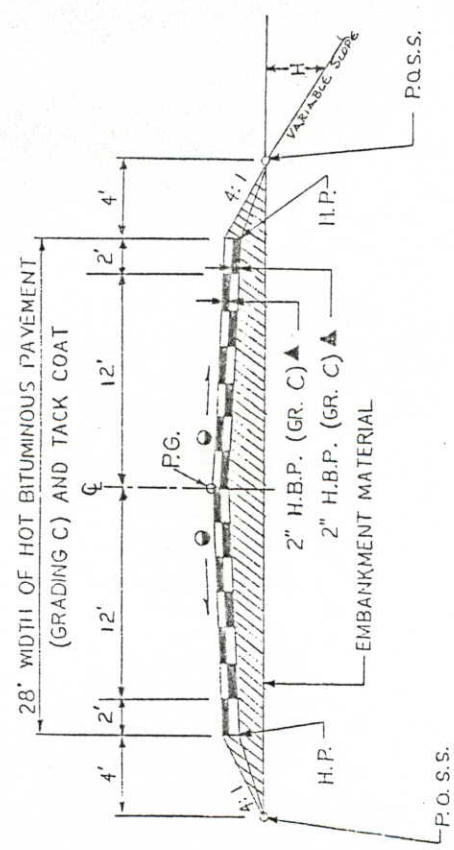
BITUMINOUS PAVEMENT { TOP LAYER 35 TONS
BOTTOM LAYER 35 TONS

AGGREGATE BASE COURSE (CLASS 6) 55 TONS

THE RATES SHOWN HAVE BEEN DETERMINED FROM INFORMATION AVAILABLE AT THE TIME OF DESIGN. RATES SHOULD BE ADJUSTED DURING CONSTRUCTION TO OBTAIN THE REQUIRED APPROXIMATE THICKNESS.

- P.G. - PROFILE GRADE
- H.P. - HINGE POINT
- P.O.S.S. - POINT OF SLOPE SELECTION
- ▲ SLOPE 0.02 ' / FT.
- ▲ APPROXIMATE THICKNESS

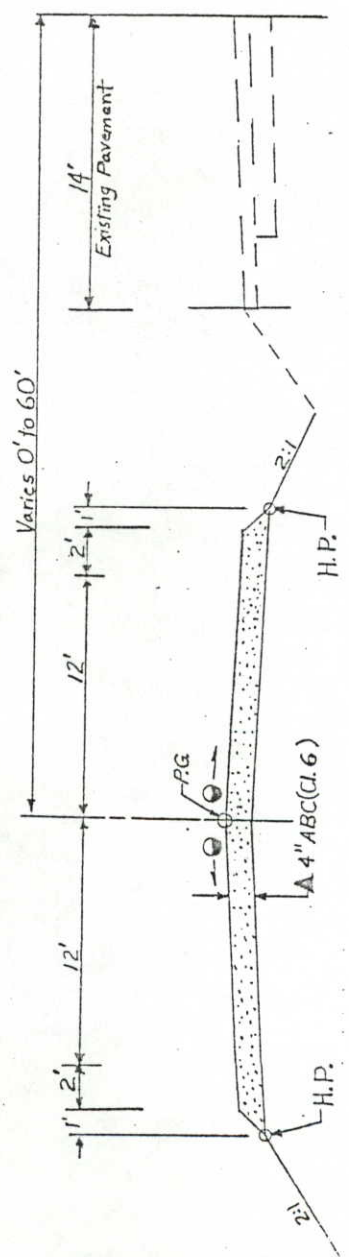
FILL SLOPES!
SLOPE 4:1 WHERE "H" IS LESS THAN 10'
SLOPE 3:1 WHERE "H" IS 10' TO 15'
IN SPECIAL CASES, SLOPES MAY BE STEEPENED.



TYPICAL SECTION - NEW ROADWAY

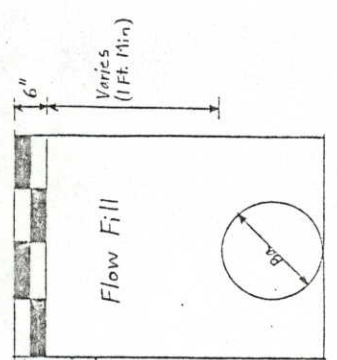
STA 160 ±, STA 258 ±, STA 290 ±

TYPICAL OF DETOUR Sta. 160 ±, Sta. 258 ±, Sta. 290 ±



DETAILS OF HOT BITUMINOUS PAVEMENT (PATCHING)

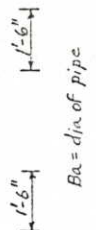
Sta 133+06 and Sta. 211+95



FILL TOP 6" OF TRENCH WITH TWO 3" LIFTS OF HOT BITUMINOUS PAVEMENT (PATCHING) WHERE THE TRENCH IS CUT THROUGH THE EXISTING CONCRETE PAVEMENT.

IT IS ESTIMATED THAT 16 TONS OF HOT BITUMINOUS PAVEMENT (PATCHING) SHALL BE REQUIRED AT 2 LOCATIONS.

STRUCTURE BACKFILL (CLASS 1) WILL BE MEASURED AND PAID FOR UP TO THE BOTTOM OF ASPHALT AT THESE LOCATIONS.



Ba = dia. of pipe

FINAL SUMMARY OF APPROXIMATE QUANTITIES

| | | | |
|--------------|----------------|----------|---------------|
| NO REVISIONS | AS CONSTRUCTED | DIVISION | PROJ. NO. |
| D | H | VIII | CX 03-0034-23 |
| O | H | COLO. | SHEET NO. |
| H | H | | 4 |

| INDEX | CONTRACT ITEM NO. | CONTRACT ITEM | UNIT | ROADWAY | | PROJECT TOTALS | |
|-------|-------------------|--|------|---------|-----------|----------------|-----------|
| | | | | PLAN | AS CONST. | PLAN | AS CONST. |
| 305 | 202 | REMOVAL OF STRUCTURE | EACH | 6 | 3 | 6 | 3 |
| | 202 | REMOVAL OF TREE | EACH | 1 | 2 | 1 | 2 |
| | 202 | REMOVAL OF DITCH LINING | LF | 370 | 683 | 370 | 683 |
| | 202 | REMOVAL OF DELINEATOR | EACH | 16 | 18 | 16 | 18 |
| | 202 | REMOVAL OF PAVEMENT MARKING | SF | 1,500 | 1,000 | 1,500 | 1,000 |
| | 202 | REMOVAL OF PORTIONS OF PRESENT STRUCTURE | EACH | 2 | 6 | 2 | 6 |
| | 202 | REMOVAL OF GROUND SIGN | EACH | 4 | 0 | 4 | 0 |
| | 202 | PLUG CULVERT | EACH | 2 | 8 | 2 | 8 |
| 305 | 203 | EMBANKMENT MATERIAL (COMPLETE IN PLACE) | CY | 7,047 | 9702 | 7,047 | 9702 |
| 7 | 203 | BLADING | HR | 100 | 120 | 100 | 120 |
| 305 | 206 | STRUCTURE EXCAVATION | CY | 1,124 | 1293 | 1,124 | 1293 |
| | 206 | STRUCTURE BACKFILL (CLASS 1) | CY | 230 | 261 | 230 | 261 |
| | 206 | STRUCTURE BACKFILL (CLASS 2) | CY | 1,150 | 1314 | 1,150 | 1314 |
| | 207 | STOCKPILE TOPSOIL (HAUL) | CY | 1,444 | 1865 | 1,444 | 1865 |
| | 210 | RESET GROUND SIGN | EACH | 2 | 2 | 2 | 2 |
| | 210 | RESET FENCE | LF | 600 | 340 | 600 | 340 |
| | 210 | RELAY PIPE (18 INCH) | LF | 15 | 15 | 15 | 15 |
| 3 | 304 | AGGREGATE BASE COURSE (CLASS 6) (HAUL) | TON | 1,636 | 3825.45 | 1,636 | 3825.45 |
| | 403 | HOT BITUMINOUS PAVEMENT (PATCHING) (HAUL AND ASPHALT) | TON | 16 | 36.53 | 16 | 36.53 |
| 3 | 403 | HOT BITUMINOUS PAVEMENT (GRADING C) (HAUL AND ASPHALT) | TON | 996 | 999.12 | 996 | 999.12 |
| 3 | 411 | EMULSIFIED ASPHALT (SLOW-SETTING) | GAL | 210 | 97 | 210 | 97 |
| | 507 | CONCRETE SLOPE AND DITCH PAVING | CY | 65.8 | 120.31 | 65.8 | 120.31 |
| | 601 | CONCRETE CLASS A (BOX CULVERT) | CY | 275.1 | 275.1 | 275.1 | 275.1 |
| | 601 | CONCRETE CLASS A (WALL) | CY | 77.4 | 77.4 | 77.4 | 77.4 |
| | 602 | REINFORCING STEEL | LB | 27,723 | 30991 | 27,723 | 30991 |
| | 603 | 18 INCH REINFORCED CONCRETE PIPE | LF | 98 | 98 | 98 | 98 |
| | 603 | 30X19 INCH REINFORCED CONCRETE PIPE ELLIPTICAL | LF | 218 | 218 | 218 | 218 |
| 3 | 603 | 53X34 INCH REINFORCED CONCRETE PIPE ELLIPTICAL | LF | 668 | 758 | 668 | 758 |
| | 603 | 54X4 FOOT CONCRETE BOX CULVERT (PRECAST) | LF | 180 | 281 | 180 | 281 |
| | 603 | 84X4 FOOT CONCRETE BOX CULVERT (PRECAST) | LF | 180 | 198 | 180 | 198 |
| | 605 | 6 INCH PLASTIC PIPE (POLYVINYL CHLORIDE) | LF | 150 | 150 | 150 | 150 |
| 305 | 607 | CORNER AND LINE BRACE POST | EACH | 5 | 4 | 5 | 4 |

SUMMARY OF APPROXIMATE QUANTITIES

AS CONSTRUCTED
 NO REVISIONS: REVISED: 5-28-91 VOID

C/FED. ROAD REGION DIVISION PROJ. NO. SHEET NO.
 D/O VIII COLO. CX 03-0034-23 5

| INDEX | CONTRACT ITEM NO. | CONTRACT ITEM | UNIT | ROADWAY | | PROJECT TOTALS | |
|-------|-------------------|--|------|---------|-----------|----------------|-----------|
| | | | | PLAN | AS CONST. | PLAN | AS CONST. |
| 205 | 607 | FENCE BARBED WIRE WITH METAL POSTS | LF | 190 | 270 | 190 | 270 |
| 7 | 614 | FLAGGING | HOUR | 1,000 | 1058 | 1,000 | 1058 |
| 7 | 614 | TRAFFIC CONTROL SUPERVISOR | DAY | 40 | 39 | 40 | 39 |
| 305 | 614 | SIGN PANEL (CLASS I) DELETE BY 105 | SF | 10 | 0 | 10 | 0 |
| | 614 | SIGN PANEL (CLASS II) DELETE BY 105 | SF | 24 | 0 | 24 | 0 |
| | 614 | BARRICADE (TYPE 3 M-B) (TEMPORARY) | EACH | 5 | 6 | 5 | 6 |
| | 614 | CONSTRUCTION TRAFFIC SIGN (PANEL SIZE A) | EACH | 12 | 15 | 12 | 15 |
| | 614 | CONSTRUCTION TRAFFIC SIGN (PANEL SIZE B) | EACH | 50 | 56 | 50 | 56 |
| | 614 | VERTICAL PANEL (WITH LIGHT) (FLASHING) | EACH | 20 | 20 | 20 | 20 |
| | 614 | DRUM CHANNELIZING DEVICE (WITH LIGHT) (FLASHING) | EACH | 2 | 2 | 2 | 2 |
| | 614 | DRUM CHANNELIZING DEVICE (WITH LIGHT) (STEADYBURN) | EACH | 50 | 50 | 50 | 50 |
| | 614 | TRAFFIC CONE | EACH | 100 | 100 | 100 | 100 |
| | 616 | 24 INCH CONCRETE SIPHON PIPE | LF | 186 | 186 | 186 | 186 |
| | 616 | 24 INCH TRASH GUARD | EACH | 2 | 2 | 2 | 2 |
| | 616 | 6 INCH VALVE AND VALVE BOX | EACH | 1 | 1 | 1 | 1 |
| | 620 | FIELD LABORATORY (CLASS 2) | EACH | 1 | 1 | 1 | 1 |
| | 620 | SANITARY FACILITY | EACH | 1 | 1 | 1 | 1 |
| | 626 | MOBILIZATION | L.S. | 1 | 1 | 1 | 1 |
| | 627 | PAVEMENT MARKING PAINT | GAL | 37 | 59 | 37 | 59 |
| 3 | 627 | 4 INCH PAVEMENT MARKING TAPE (REMOVABLE) | LF | 3,600 | 2200 | 3,600 | 2200 |
| 2 | | ADDITIONAL DITCH WORK | LS | | 1 | 0 | 1 |
| 1 | | Stabilization of Detour | LS | | 1 | 0 | 1 |
| 3 | | DETOUR | LS | | 1 | 0 | 1 |
| 305 | 700 | FORCE ACCOUNT ===== | F.A. | 1 | 1 | 1 | 1 |
| | | F/A MINOR CONTRACT REVISIONS | | | | | |
| 305 | 403 | HBP Grc H&OspH Price RED | LS | 0 | 1 | 0 | 1 |
| 305 | 507 | Con SI & DIT Paving Price RED | LS | 0 | 1 | 0 | 1 |

FINAL STRUCTURE QUANTITIES

AS CONSTRUCTED
 NO REVISIONS REVISED [5-28-51] VOID

FED. ROAD REGION VIII
 DIVISION COLO.
 PROJ. NO. CX 03-0034-23
 SHEET NO. 6
 TOTAL SHEETS 20

| INDEX | BOOK PAGE SHEET | LOCATION | REMOV. OF EXIST. STRUCTURE | UNCLASSIFIED EXCAVATION | | PLUG CULVERT | STRUCTURE EXCAVATION | | STRUCTURE BACKFILL | | REMOVAL OF DITCH LINING | CONCRETE BOX CULVERT (PRECAST) | | CONCRETE CL. A | REINFORCING STEEL LB. | REINFORCED CONCRETE PIPE | "H" OVER CULV. | CONCRETE AND SLOPE DITCH PAVING | MISCELLANEOUS |
|-------|-----------------|-------------------------------------|----------------------------|-------------------------|------|--------------|----------------------|------------|--------------------|------------|-------------------------|--------------------------------|-------|-------------------|-----------------------|--------------------------|----------------|---------------------------------|--|
| | | | | EXCAVATION | EMB. | | CUBIC YARD | CL. 2 | CUBIC YARD | CUBIC YARD | | CL. 1 | CL. 2 | | | | | | |
| | | | EA | | | EA | CUBIC YARD | CUBIC YARD | CUBIC YARD | CUBIC YARD | YD. | YD. | YD. | YD. | LB. | INCH | FEET | CU. YD. | |
| | | SITE #1 188+55 | | | | | 118 5 | 321 5 | 235 | | | | | 24535 25,424 | | | 2 | 658 733 | Relay 15 Lin. Ft. Pipe (18 Inch) Remove Portions of Present Str. 1 Ea. |
| | | 133+06 SITE #2 | 1 | | | 117 | 30 | 61 | 25 | | | | | 292 | | | 3 | 343 | 186 Lin. Ft. of 24 Inch Concrete Siphon Pipe 150 Lin Ft 6 Inch Plastic Pipe (PVC) and 1 EA. VALVE AND VALVE BOX, 2 EA. 24 INCH TRASH GUARD. Remove Portion of Present Str. 158+72 |
| | | 142+20 158+72 SITE #3 | + | | | 170 | 53 | 73 | 25 | | | | | 915 409 | | 180 | 5 | | |
| | | 158+94 SITE #3 | + | | | 83 77 | 31 | 95 106 | 307 75 | | | | | 915 409 | | 195 180 | 3 | 0.25 | Remove Portion of Present Str. 158+94 |
| | | 159+30 SITE #3 163+14 | + | | | 242 220 | 70 | 167 145 | 198 180 | | | | | 1017 851 | | | 4 | 100.24 56.8 | Rem. Portion of Present Str. |
| | | 195+14 SITE #4 Rt | | | | 19 8 | 21 4 | | | | | | | 351 143 190 | | 90 8 | 4 | | Removal of Tree Trunk Division Box Lt. and Rt. (See DETAILS) |
| | | 211+19 211+95 SITE #5 212+ | | | | 87 | 20 | 66 | | | | | | 672 474 | | 218 | 2 | | |
| | | 237+37 SITE #6 | | | | 67 38 | 31 | 83 65 | | | | | | 447 218 | | 68 90 | 3 | 1.73 | REMOVAL OF TREE / EACH |
| | | 258+10 258+30 site 7 258+38 | 1 | | | 310 198 | 17 | 296 183 | 74 | | | | | 910 850 | | | 1 | | Removal of Portion of Present Structure / Each |
| | | 290+81 291+55 SITE #8 | + | | | 67 | 9 | 111 | 42 20 | | | | | 937 463 | | 225 210 | 2 | 4.28 147 | Rem. of Portion of Present Str. / each |
| | | 258+80 Site 7 | 1 | | | | | | | | | | | | | | | | Rem. Div. Box Lt. |
| | | Project Totals | 6 | | | 1124 | 230 | 1150 | 370 | | | | | 774 | | 218 | | 733 | |
| | | | 3 | | | 1293 | 261 | 1314 | 683 | | | | | 30991 | | | | 8.71 | |

* CARRIED TO SUMMARY OF EARTHWORK

FINAL
SUMMARY OF EARTHWORK

| ITEM | CU. YDS. | |
|---|----------|-------------|
| | PLAN | FINAL |
| PAY QUANTITIES | | |
| EMBANKMENT MATERIAL (COMPLETE IN PLACE) | | |
| ROADWAY STA. 1601 ESTIMATED | 415 | 0 |
| DETOUR STA. 1601 (FROM CROSS SECTIONS) | 911 | 1005 |
| ROADWAY STA. 2882 ESTIMATED | 1195 | 997 |
| DETOUR STA. 2882 (FROM CROSS SECTIONS) | 1048 | 1337 |
| ROADWAY STA. 2901 ESTIMATED | 881 | 992 |
| DETOUR STA. 2901 (FROM CROSS SECTIONS) | 369 | 385 |
| STRUCTURE QUANTITIES AS EMBANKMENT | 784 | 573 |
| STA 257+ Rdway (770) Det (511) | 1441 | 2548 |
| REPLACE TOPSOIL | 7047 | 1865 |
| TOTAL | | 9702 |
| FOR INFORMATION ONLY | | |
| UNCLASSIFIED EXCAVATION | | |
| DETOUR STA. 1601 (FROM CROSS SECTIONS) | 95 | |
| DETOUR STA. 2882 (FROM CROSS SECTIONS) | 89 | |
| DETOUR STA. 2901 (FROM CROSS SECTIONS) | 82 | |
| STRUCTURE QUANTITIES AS DITCH | 459 | |
| BORROW (CONTRACTORS SOURCE) | 9141 | |
| TOTAL | 9866 | |
| EMBANKMENT MATERIAL (NET) | 7047 | |
| EMBANKMENT x FACTOR (1.40) | 9866 | |
| TOTAL | 7047 | |
| COMPACTION (AASHTO T99) (NET) | 7047 | |
| BASES OF CUTS AND FILLS (DETOUR) | 1850 | |
| TOTAL | 8897 | |
| NETTING (M-GAL) | 356 | |
| CONFECTION | 25 | |
| AGGREGATE BASE COURSE (C1. 6) | 482 | |
| TOTAL | | |

FINAL
TABULATION OF FENCE

| STATION | SIDE | FENCE BARBED WIRE W/METAL POSTS | | RESET FENCE | |
|-----------------------|-----------|---------------------------------|------------|-------------|------------|
| | | LIN. FT. | | LIN. FT. | |
| | | PLAN | FINAL | PLAN | FINAL |
| 118 + | LT. & RT. | 210 | 270 | 300 | 300 |
| 133 + | RT. | | | 50 | 16 |
| 158 + | RT. | | | 80 | 0 |
| 258 + | RT. | | | 50 | 24 |
| 290 + | RT. | | | 50 | 0 |
| PROJECT TOTALS | | 210 | 270 | 530 | 340 |

NOTE: IT IS ESTIMATED THAT 5 CORNER POSTS WILL BE REQUIRED FOR THIS PROJECT.

FINAL
SURFACING QUANTITIES

| STATION TO STATION | SOURCE | HOT BITUMINOUS PAVEMENT (GRADING C) (HAUL & ASPHALT) | | AGGREGATE BASE COURSE (CLASS 6) (HAUL) | |
|--------------------------|------------|--|-------------------|--|----------------|
| | | BOTTOM LIFT TONS | TOP LIFT TONS | PLAN TONS | FINAL TONS |
| 177+29 TO 160+84 | | 125 | 125 | | |
| 255+50 TO 260+70 | | 182 | 182 | | |
| 288+44 TO 293+19 | | 167 | 167 | | |
| DETOUR 51+20 TO 58+40 | CONTRACTOR | | | 468 | |
| DETOUR 101+20 TO 108+70 | | | | 553 | |
| DETOUR 151+20 TO 159+45 | | | | 537 | |
| ESTIMATED IRREGULARITIES | | 48 | | 78 | |
| SUBTOTALS | | 522 | 474 | 1636 | 3825.45 |
| TOTAL | | | 996 999.12 | | |

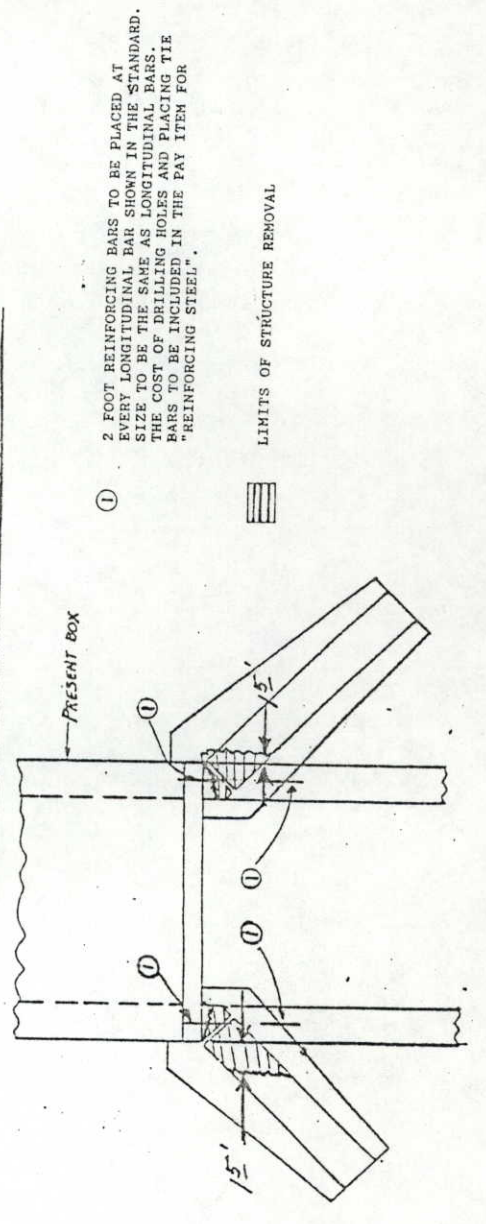
STABILIZATION BASED ON:
1. 18% ESAL 88,750
2. RELIABILITY 80.00%
3. PSI LOSS 2,000
4. SUBGRADE "R" VALUE 50

STRENGTH COEFFICIENTS
5. HOT BITUMINOUS PAVEMENT (GRADING C) 0.44
6. AGGREGATE BASE COURSE (CLASS 6) 0.12

FINAL
TABULATION OF DELINEATOR REMOVAL

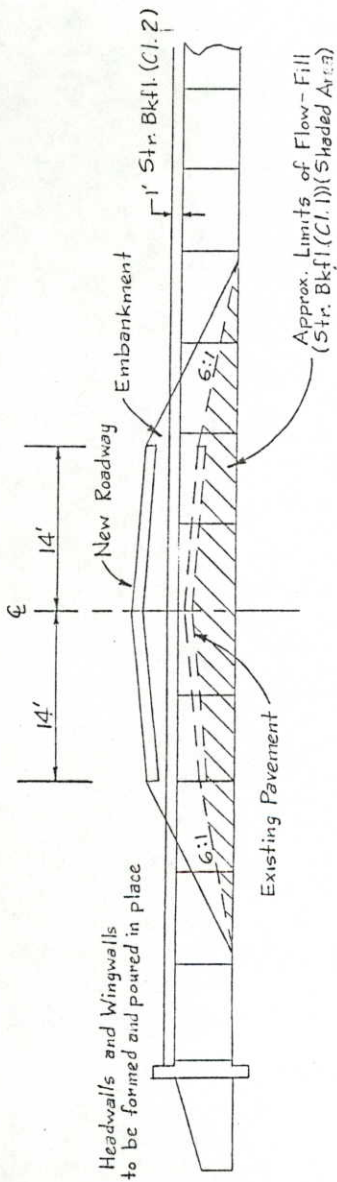
| LOCATION | SIDE | DELINEATOR - EACH TYPE III |
|----------------------|------------|----------------------------|
| 133 + | LT. | 1 |
| 158 + | RT. | 6 |
| 211 + 235 + | RT. RT. | 3 4 |
| 258 + | RT. | 2 |
| 290 + | RT. | 2 |
| PROJECT TOTAL | | 16 1/3 |

Details of CBC Extension Sta. 118+55



| | | | | | | |
|----------------|---------|------------------|----------|---------------|-----------|--------------|
| AS CONSTRUCTED | | FED. ROAD REGION | DIVISION | PROJ. NO. | SHEET NO. | SHEET TOTALS |
| NO REVISIONS | 5-25-77 | VIII | COLO. | CX 03-0034-23 | 8 | 20 |
| | REVISED | | | | | |
| | VOID | | | | | |

DETAIL OF PLACEMENT OF CONCRETE BOX CULVERT (PRECAST)

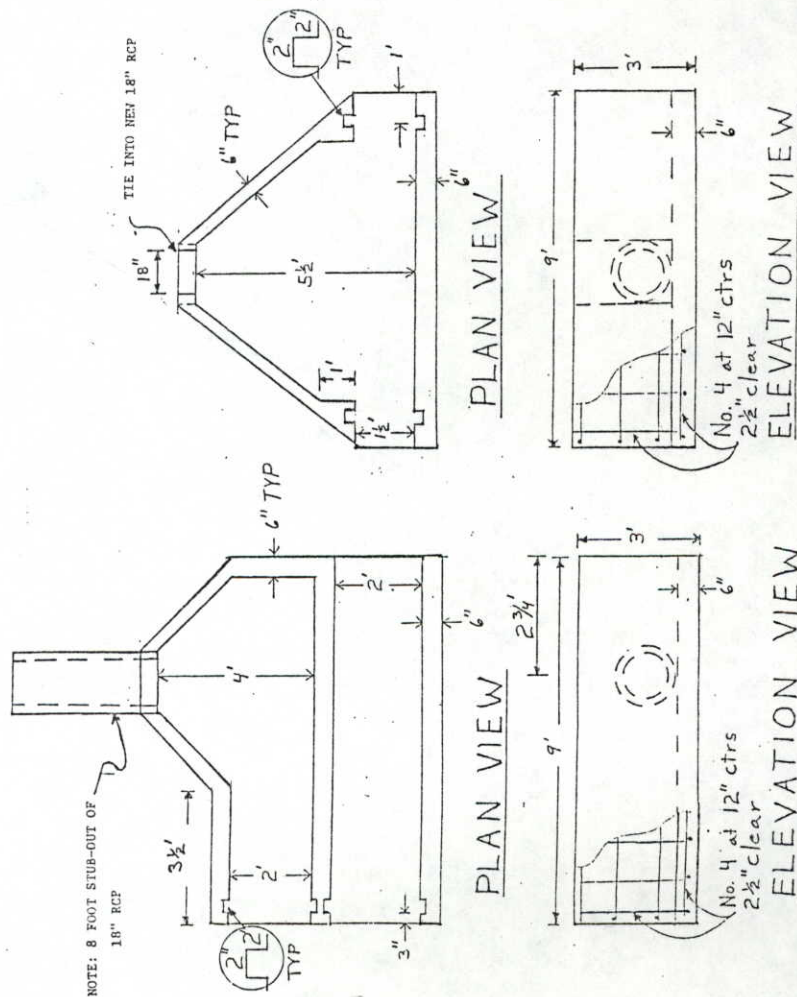


NOTE: FLOW-FILL WILL BE REQUIRED ON ALL CROSS CULVERTS TO LIMITS SHOWN ABOVE.

DETAIL OF DIVERSION BOX STA 195+14

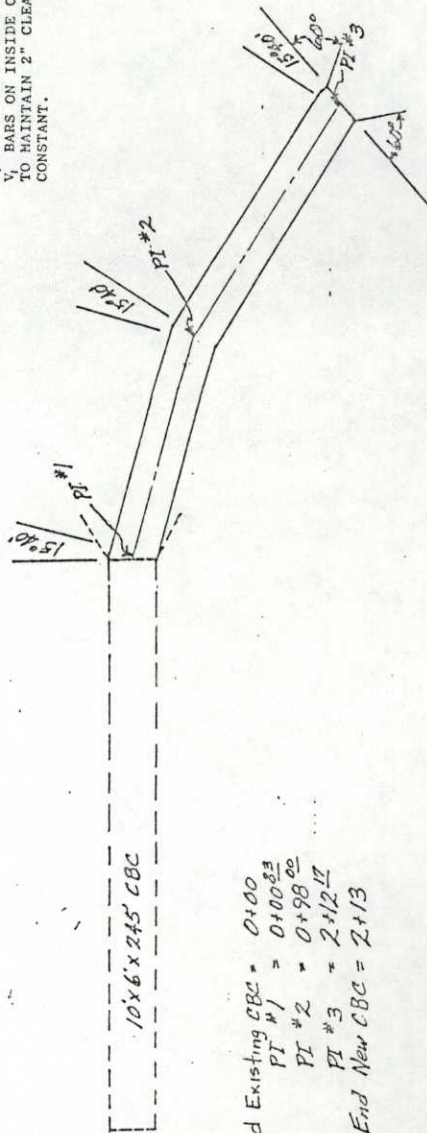
RIGHT

LEFT



DETAIL CBC Sta. 118+

V₁ BARS TO BE PLACED AT NORMAL SPACING ON OUTSIDE OF ANGLE.
 V₂ BARS ON INSIDE OF ANGLE TO BE PLACED AT VARIABLE SPACING TO MAINTAIN 2" CLEARANCE BETWEEN BARS. LENGTH OF BARS TO REMAIN CONSTANT.

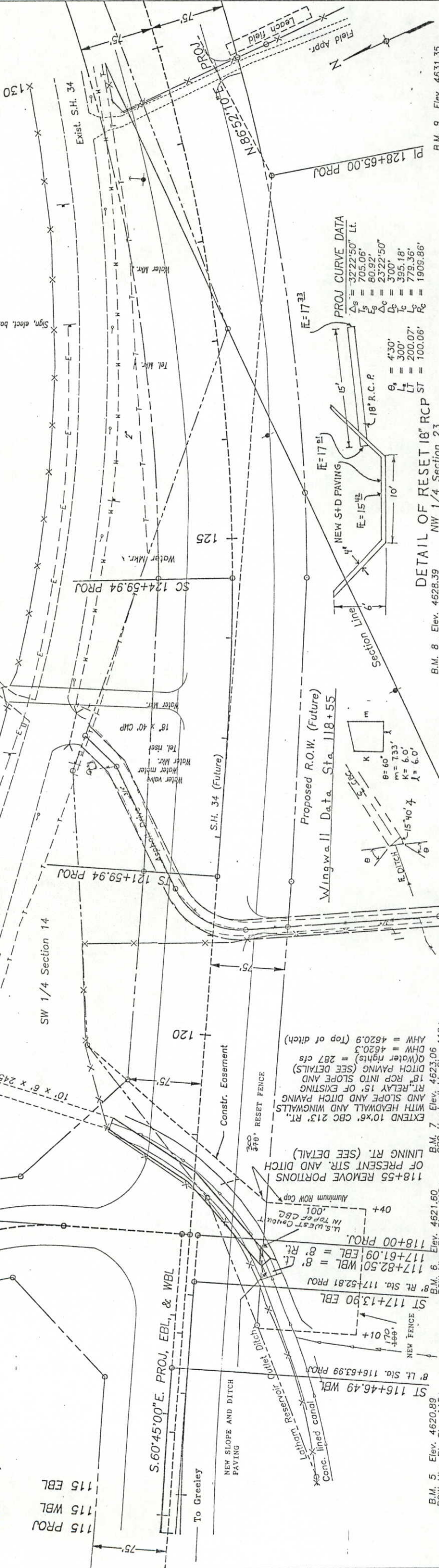


End Existing CBC = 0+00
 PI #1 = 0+00.23
 PI #2 = 0+98.00
 PI #3 = 2+12.17
 End New CBC = 2+13

| | |
|------------------|---------------|
| FED. ROAD REGION | VIII |
| DIVISION | COLO. |
| PROJ. NO. | CX 03-0034-23 |
| SHEET NO. | 9 |
| TOTAL SHEETS | 20 |

SITE #1

| | | | |
|----------------|--------------|-----------------|------|
| AS CONSTRUCTED | NO REVISIONS | REVISED 5-28-91 | VOID |
|----------------|--------------|-----------------|------|



B.M. 5 Elev. 4620.89
 ROW Mkr. Rt. Sta. 115+
 B.M. 6 Elev. 4621.60
 ROW Mkr. Rt. Sta. 118+
 B.M. 7 Elev. 4623.06
 CBC Headwall Lt. Sta. 118+
 B.M. 8 Elev. 4628.39
 Rebar Lt. Sta. 124+
 B.M. 9 Elev. 4631.35
 Nail in P.P. Lt. Sta. 128+
 N 89°52'10" E

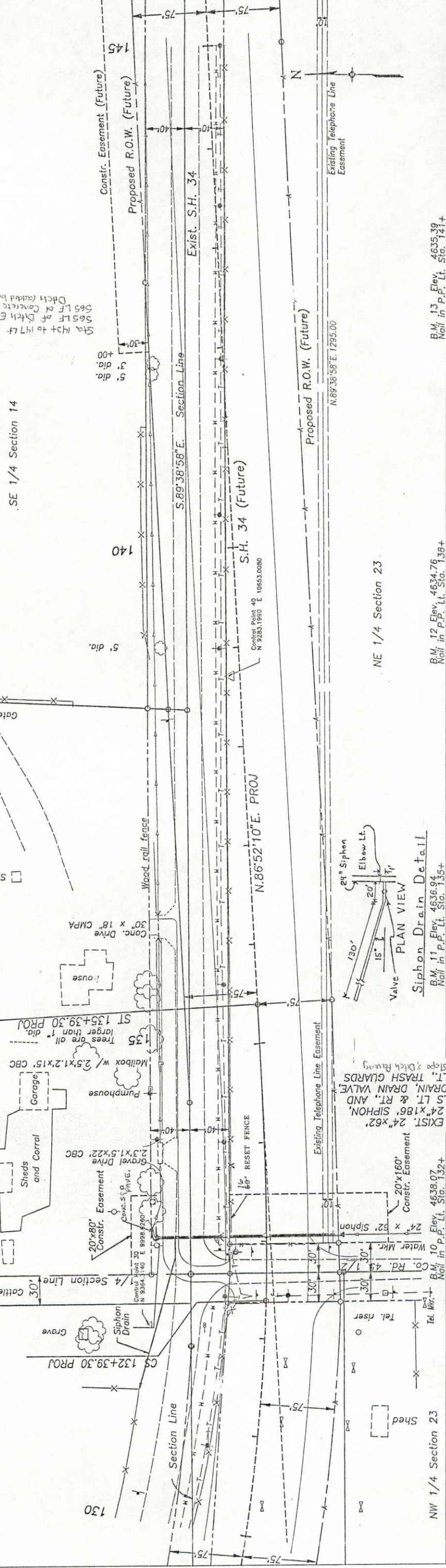
- Utilities
- U.S. West Communications telephone
 - Associated Natural Gas
 - Poudre Valley R.E.A.
 - Central Weld County Water District
 - Town of Kersey san. sewer

| | | | | |
|------------------|----------|---------------|-----------|--------------|
| FED. ROAD REGION | DIVISION | PROJ. NO. | SHEET NO. | TOTAL SHEETS |
| VIII | COLO. | CX 03-0034-23 | 10 | 20 |

SITE #2

| | | |
|----------------|---------|------|
| AS CONSTRUCTED | REVISED | VOID |
| | 5-28-91 | |

| | |
|--------------|----------------|
| NO REVISIONS | AS CONSTRUCTED |
|--------------|----------------|



133+06 REMOVE EXIST. 24"x62" SIPHON. REQ'D. 24"x186" SIPHON, SIPHON HEADWALLS LT. & RT. AND 6"x150" SIPHON DRAIN, DRAIN VALVE AND VALVE BOX LT., TRASH GUARDS LT. & RT. & Conc. Slop. & Ditch Flaring

B.M. 10 ELEV. 4638.07
Rail in P.P. Lt. Stg. 132+

B.M. 11 ELEV. 4636.94
Rail in P.P. Lt. Stg. 135+

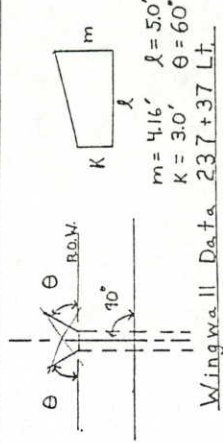
B.M. 12 ELEV. 4634.76
Rail in P.P. Lt. Stg. 138+

B.M. 13 ELEV. 4635.39
Rail in P.P. Lt. Stg. 141+

| | | | | |
|------------------|----------|---------------|-----------|--------------|
| FED. ROAD REGION | DIVISION | PROJ. NO. | SHEET NO. | TOTAL SHEETS |
| VIII | COLO. | CX 03-0034-23 | 14 | 20 |

SITE #6

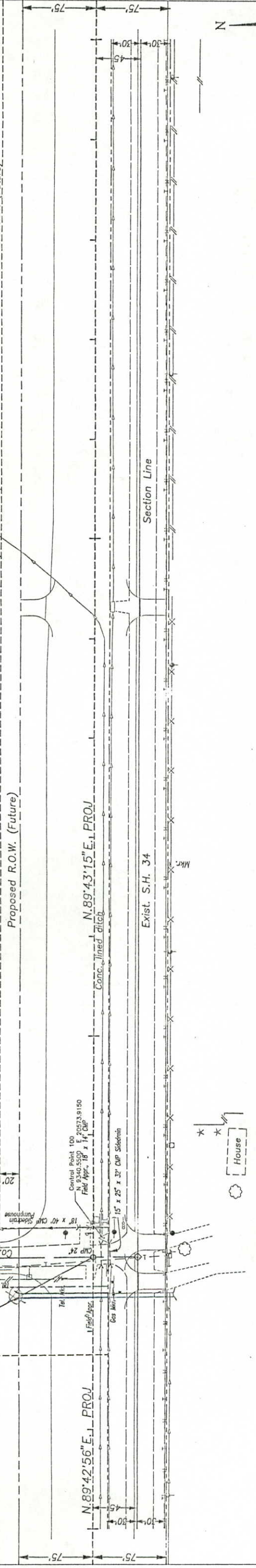
SE 1/4 Section 18



237+37 REQ'D. 158
 HEADWALL AND
 WINGWALLS LT. Plug Culvert
 (PIPE CAPACITY) = 36 cfs
 DHW = 4628.8
 (TO BE SET BY
 DITCH OWNER)
 20' conc. lined ditch

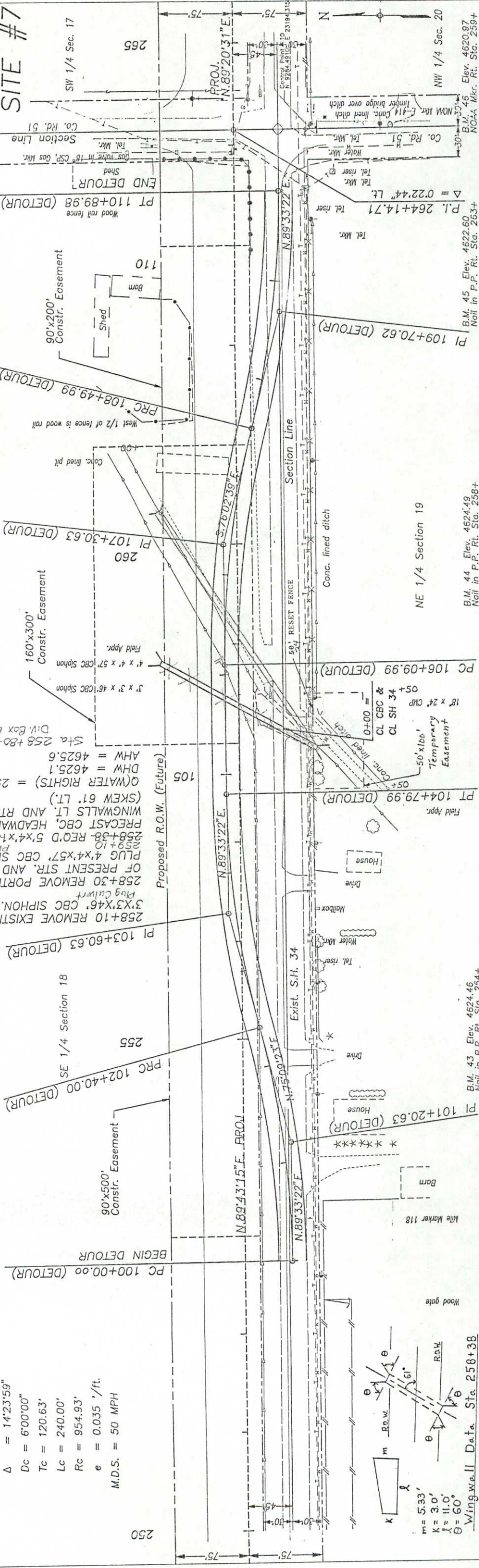
20' x 40' CWP
 18' x 40' CWP
 15' x 25' x 37' CWP
 600' Mkr.
 Tel. Mkr.
 Field Appr.
 Tel. riser
 Mailbox
 Drive

SW 1/4 Section 18
 70'x150'
 Constr. Easement
 PI 237+75.92 PROJ
 $\Delta = 0^\circ 00' 19''$ Rt.
 1/4 Section Line
 30'
 30'
 20'

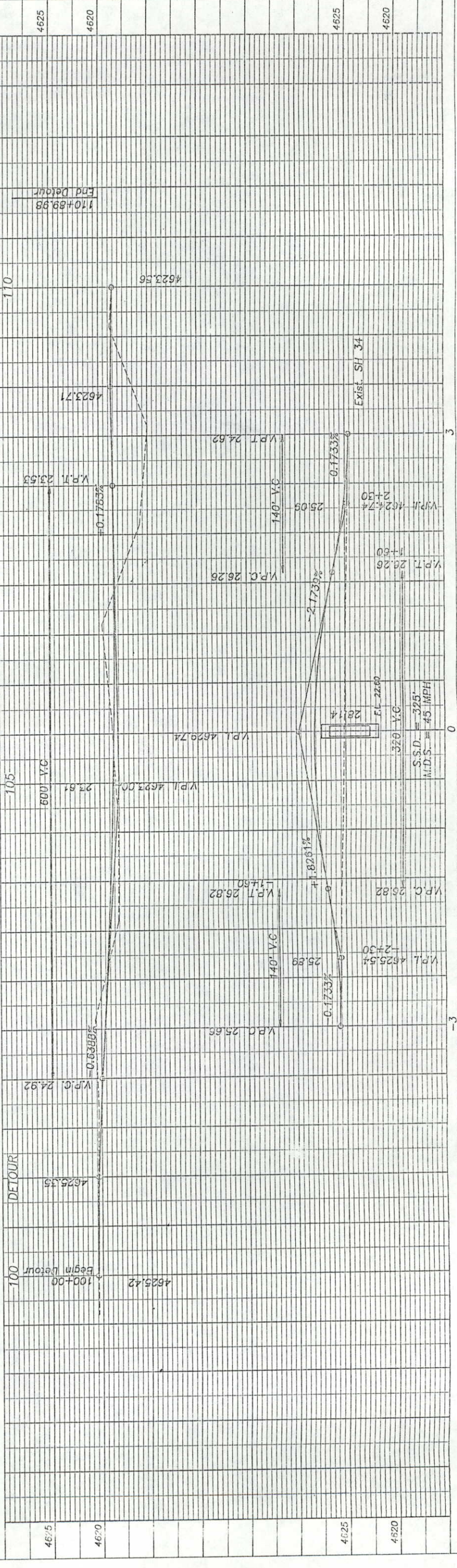
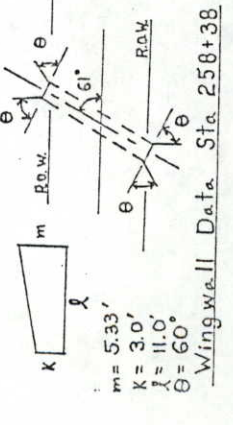


NW 1/4 Section 19
 NE 1/4 Section 19
 Section Line
 Exist. S.H. 34
 MKr.
 B.M. 40 Elev. 4627.75
 Nail in P.P. Rt. Sta. 237+
 B.M. 41 Elev. 4625.63
 Nail in P.P. Rt. Sta. 243+
 B.M. 42 Elev. 4623.72
 Nail in P.P. Rt. Sta. 249+

| | | | |
|----------------|--------------|-----------------|------|
| AS CONSTRUCTED | NO REVISIONS | REVISED 5-28-91 | VOID |
|----------------|--------------|-----------------|------|



Detour Curve Data
 $\Delta = 14'23.59''$
 $D_c = 6'00.00''$
 $T_c = 120.63'$
 $L_c = 240.00'$
 $R_c = 954.93'$
 $e = 0.035' / ft.$
 M.D.S. = 50 MPH



SITE #8

PROJ. CURVE DATA
 $\Delta = 14^{\circ}00'$ Lt.
 $D = 175'$
 $T = 562.80'$
 $L = 1120.00'$
 $R = 4583.66'$

AS CONSTRUCTED
 NO REVISIONS
 REVISED 5-23-71
 VOID

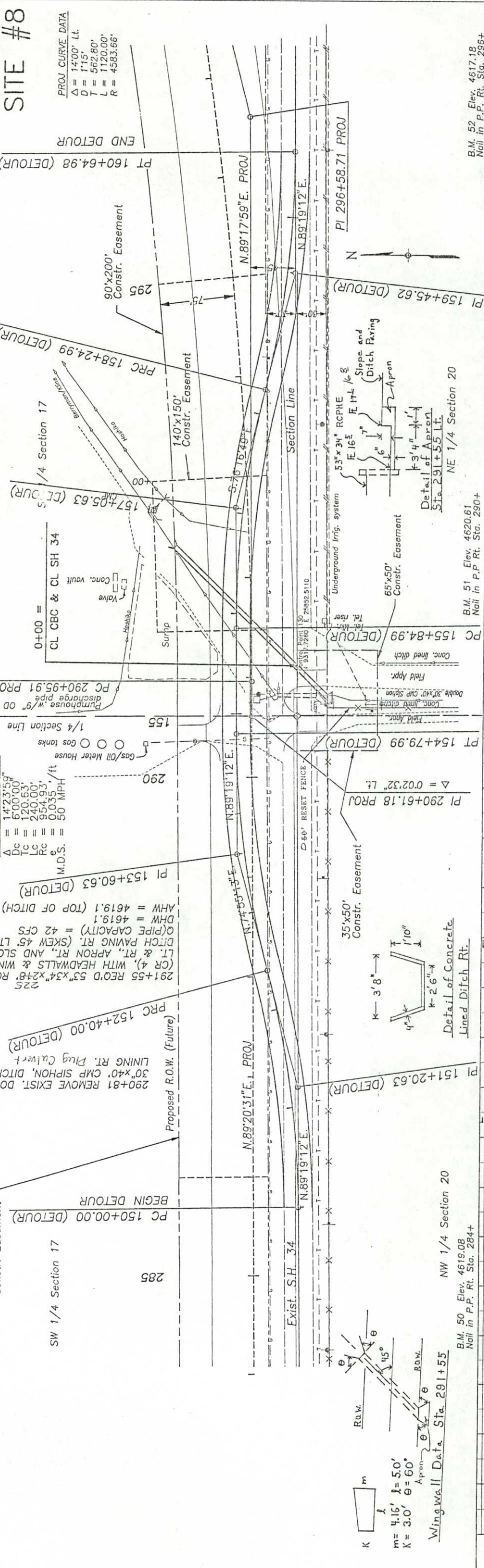
DETOUR CURVE DATA
 $\Delta = 14^{\circ}23'59''$
 $Dc = 600.00'$
 $Tc = 120.63'$
 $Lc = 240.00'$
 $Rc = 954.93'$
 $M.D.S. = 0.035$
 50 MPH

290+81 REMOVE EXIST. DOUBLE LINED RT. PLUG CULVERT
 290+81 REMOVE EXIST. DOUBLE LINED RT. PLUG CULVERT
 291+55 REOD 53"x34"x24" RCPHE (CR 4), WITH HEADWALLS & WINGWALLS LT. & RT. APRON RT. AND SLOPE AND DITCH PAVING RT. (SKEW 45' LT.)
 Q (PIPE CAPACITY) = 42 CFS
 DHW = 4619.1
 AHW = 4619.1 (TOP OF DITCH)

290+81 REMOVE EXIST. DOUBLE LINED RT. PLUG CULVERT
 290+81 REMOVE EXIST. DOUBLE LINED RT. PLUG CULVERT
 291+55 REOD 53"x34"x24" RCPHE (CR 4), WITH HEADWALLS & WINGWALLS LT. & RT. APRON RT. AND SLOPE AND DITCH PAVING RT. (SKEW 45' LT.)
 Q (PIPE CAPACITY) = 42 CFS
 DHW = 4619.1
 AHW = 4619.1 (TOP OF DITCH)

290+81 REMOVE EXIST. DOUBLE LINED RT. PLUG CULVERT
 290+81 REMOVE EXIST. DOUBLE LINED RT. PLUG CULVERT
 291+55 REOD 53"x34"x24" RCPHE (CR 4), WITH HEADWALLS & WINGWALLS LT. & RT. APRON RT. AND SLOPE AND DITCH PAVING RT. (SKEW 45' LT.)
 Q (PIPE CAPACITY) = 42 CFS
 DHW = 4619.1
 AHW = 4619.1 (TOP OF DITCH)

290+81 REMOVE EXIST. DOUBLE LINED RT. PLUG CULVERT
 290+81 REMOVE EXIST. DOUBLE LINED RT. PLUG CULVERT
 291+55 REOD 53"x34"x24" RCPHE (CR 4), WITH HEADWALLS & WINGWALLS LT. & RT. APRON RT. AND SLOPE AND DITCH PAVING RT. (SKEW 45' LT.)
 Q (PIPE CAPACITY) = 42 CFS
 DHW = 4619.1
 AHW = 4619.1 (TOP OF DITCH)



Wingwall Detail Sta. 291+55
 $m = 4.16'$
 $k = 3.0'$
 $\theta = 60^{\circ}$

APRON
 $3' \times 4'$
 $3' \times 8'$

DETOUR
 150
 155
 160

DETOUR
 150
 155
 160

DETOUR
 150
 155
 160

DETOUR
 150
 155
 160

DETOUR
 150
 155
 160

DETOUR
 150
 155
 160

| Station | Elevation | Notes |
|-----------|-----------|--|
| 150+00.00 | 4620 | B.M. 50 Elev. 4619.08 Nail in P.P. Rt. Sta. 284+ |
| 151+20.63 | 4615 | |
| 152+40.00 | 4620 | |
| 153+60.63 | 4615 | |
| 154+79.99 | 4620 | |
| 155+84.99 | 4615 | |
| 158+24.99 | 4620 | |
| 160+64.98 | 4615 | |
| 159+45.62 | 4620 | |
| 160+00.00 | 4615 | B.M. 52 Elev. 4617.18 Nail in P.P. Rt. Sta. 296+ |

AS CONSTRUCTED

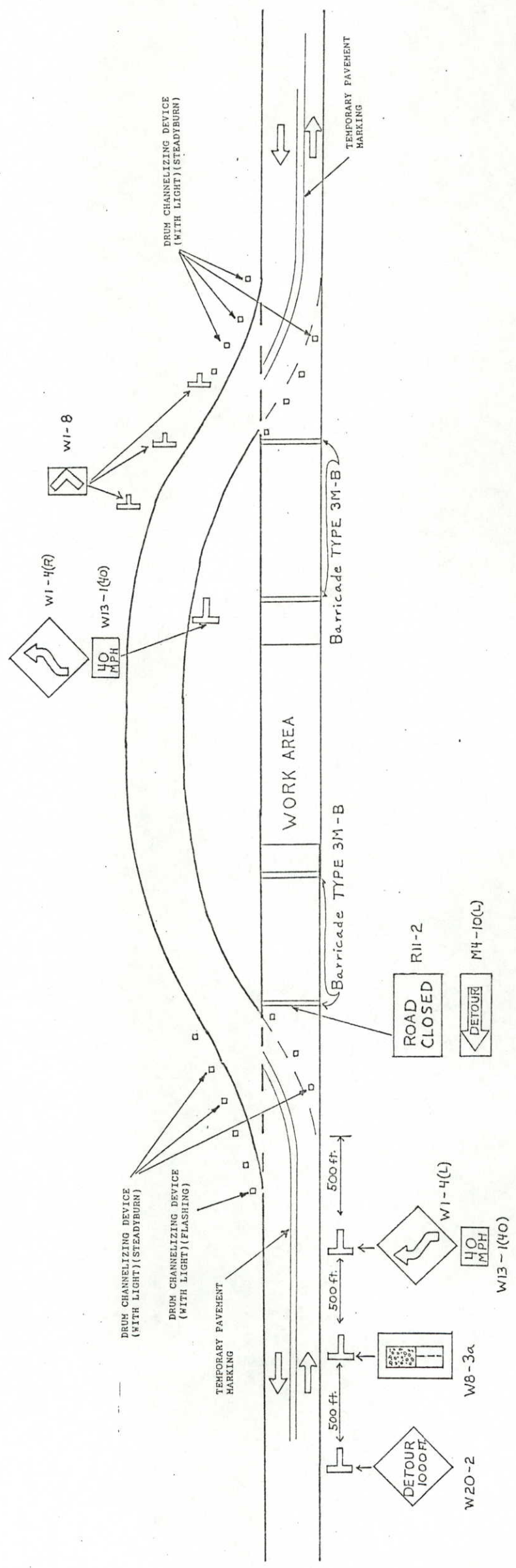
NO REVISIONS 5-25-97 REVISED VOID

| | | | | |
|------------------|----------|---------------|-----------|--------------|
| FED. ROAD REGION | DIVISION | PROJ. NO. | SHEET NO. | SHEET TOTALS |
| VIII | COLO. | CX 03-0034-23 | 17 | 20 |

NOTES

SIGN SEQUENCE IS THE SAME FOR OPPOSITE DIRECTION (USE APPROPRIATE CURVE SYMBOLS).
 ONLY ONE DETOUR IS TO BE IN USE AT ANY ONE TIME.
 SIGNS FOR DETOUR WILL BE PAID FOR ONLY ONCE. ONE SET OF SIGNS SHALL BE USED ON ALL THREE DETOURS.
 BARRICADES SHALL BE EQUIPPED WITH FLASHING LIGHTS.
 COST OF THE LIGHTS SHALL BE INCLUDED IN THE PRICE OF THE BARRICADE.
 THE 5TH BARRICADE WILL BE PLACED AT CO. RD. 47 WHEN THE DETOUR AT SITE #3 IS IN OPERATION.

TYPICAL DETOUR SIGNING
 (FOR ONE DIRECTION)



FINAL TABULATION OF PAVEMENT MARKINGS

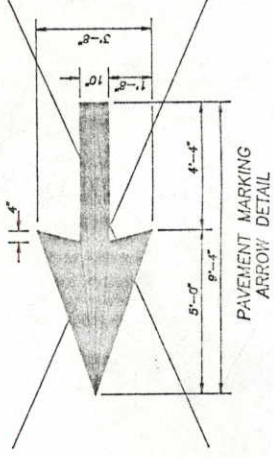
AS CONSTRUCTED

NO REVISIONS REVISED 5-28-97 VOID

FED. ROAD REGION VIII DIVISION COLO. CX 03-0034-23 SHEET NO. 19 TOTAL SHEETS 19-20

| STATION | LOCATION | 4 INCH PAVEMENT MARKING TAPE (REM) (LINEAR FEET) | | | | | | | | | | PMT MARKING REMOVAL SQ. FT. | STOP WHITE SOLID 24 INCH |
|------------------|----------|--|--------------------------|--------------------------|---------------------------|----------------------------|---------------------------------|----------------------------------|-------------------------------|--------------------------------|------------------------------|-----------------------------|--------------------------|
| | | EDGE WHITE SOLID 4 INCH | EDGE YELLOW SOLID 4 INCH | LANE WHITE BROKEN 4 INCH | LANE YELLOW BROKEN 4 INCH | CENTER YELLOW SOLID 4 INCH | CHANNELIZING WHITE SOLID 8 INCH | CHANNELIZING YELLOW SOLID 8 INCH | GROSSHATCH WHITE SOLID 8 INCH | GROSSHATCH YELLOW SOLID 8 INCH | PVMT MARKING REMOVAL SQ. FT. | | |
| 154+30 to 163+90 | SITE #3 | 600 | 0 | Final | 600 | 0 | Final | 600 | 0 | 500 | 500 | 500 | |
| 162 253+00 | SITE #7 | 600 | 275 | | 600 | 275 | | 600 | 275 | 500 | 500 | 500 | |
| 251+70 to 263+50 | SITE #8 | 600 | 0 | | 600 | 0 | | 600 | 0 | 500 | 0 | 0 | |
| 285+60 to 296+10 | | | | | | | | | | | | | |
| 153+35 to 154+72 | | 275 | | | | 275 | | | | | | | |
| 164+15 to 165+53 | | 275 | | | | 275 | | | | | | | |
| 263+20 to 264+57 | | 275 | | | | 275 | | | | | | | |
| TOTALS | | 1800 | 1100 | | 1800 | 1100 | | 1800 | 1100 | 1500 | 1000 | 1500 | |

| STATION | LOCATION | PAVEMENT MARKING LINES (LINEAR FEET) | | | | | | | | | | TOTALS | |
|------------------|----------|--------------------------------------|--------------------------|--------------------------|---------------------------|----------------------------|---------------------------------|----------------------------------|-------------------------------|--------------------------------|--------------------------------|--------|--------------------------|
| | | EDGE WHITE SOLID 4 INCH | EDGE YELLOW SOLID 4 INCH | LANE WHITE BROKEN 4 INCH | LANE YELLOW BROKEN 4 INCH | CENTER YELLOW SOLID 4 INCH | CHANNELIZING WHITE SOLID 8 INCH | CHANNELIZING YELLOW SOLID 8 INCH | GROSSHATCH WHITE SOLID 8 INCH | GROSSHATCH YELLOW SOLID 8 INCH | CROSS WALK WHITE SOLID 12 INCH | | STOP WHITE SOLID 24 INCH |
| 154+30 to 163+90 | SITE #3 | 1920 | | | 1600 | 40 | | | | | | | |
| 251+70 to 263+50 | SITE #7 | 2360 | | | 1600 | 100 | | | | | | | |
| 285+60 to 296+10 | SITE #8 | 2100 | | | 1600 | 60 | | | | | | | |
| TOTALS | | 6380 | | | 4800 | 200 | | | | | | | |



NOTE:
FOR DETAILS OF PAVEMENT MARKING LINES AND LINE PLACEMENT, SEE STANDARD S-627-1.

| SUMMARY OF PAVEMENT MARKING QUANTITIES | | | |
|--|------------------------------------|-------------------------------------|-------------------------------|
| COLOR | PAVEMENT MARKING QUANTITIES (CALC) | 4 IN PAVER TAPE (REM) (LINEAR FEET) | PMT MARKING REMOVAL (SQ. FT.) |
| YELLOW | 3424 | 1800 | 1100 |
| WHITE | 2516 | 1800 | 1100 |
| TOTAL | 5937 | 3600 | 2200 |

1000

FINAL
SCHEDULE OF CONSTRUCTION TRAFFIC CONTROL DEVICES

| SIGN CODE | LEGEND | DIMENSIONS | PANEL SIZE | | OTHER DEVICES | QUANTITY |
|----------------|-----------------------------|--------------|------------|----|-------------------------------|----------|
| | | | A | B | | |
| 48 WB - 3a | PAVEMENT ENDS | 48" X 48" | 2 | 2 | BARRICADE (TYPE 3M-B) TEMP | 50 |
| 48 W20 - 1 | ROAD / CONST / DIST | 48" X 48" | 1 | 10 | DRUM CHANNELIZING DEVICE (SB) | 50 |
| 48 W20 - 4 | ONE LANE / ROAD / DIST | 48" X 48" | 2 | 4 | TRAFFIC CONE 36" | 100 |
| 48 W20 - 7a | FLAGGER SYMBOL | 48" X 48" | 4 | 6 | VERTICAL PANEL (LIGHT) (F) | 20 |
| 60 G20 - 1 | ROAD / CONST / NEXT X MILES | 60" X 36" | 2 | 2 | DRUM CHANNELIZING DEVICE (F) | 2 |
| 60 G20 - 2 | END / CONSTRUCTION | 60" X 24" | 3 | | | |
| 48 R4 - 1 | DO / NOT / PASS | 48" X 36" | 2 | 4 | | |
| 48 R4 - 2 | PASS / WITH / CARE | 48" X 36" | 2 | | | |
| 48 W20 - 2 | DETOUR / 1000 FT | 48" X 48" | 2 | | | |
| 48 W1 - 4(L) | REVERSE CURVE LEFT | 48" X 48" | 2 | | | |
| 48 W1 - 4(R) | REVERSE CURVE RIGHT | 48" X 48" | 2 | | | |
| 48 R11 - 2 | ROAD CLOSED | 48" X 30" | 1 | 5 | | |
| 48 M4 - 10(R) | DETOUR ARROW RIGHT | 48" X 18" | 1 | | | |
| 48 M4 - 10(L) | DETOUR ARROW LEFT | 48" X 18" | 1 | | | |
| 18 W1 - 8 | CHEVRON SYMBOL | 18" X 24" | 6 | | | |
| 24 W13 - 1(40) | ADVISORY SPEED PLATE | 24" X 24" | 2 | 4 | | |
| 36 R2-1(40) | SPEED/LIMIT /40 | 36" X 48" | | 2 | | |
| 36 R2-1(55) | SPEED/LIMIT /55 | 24" X 30" 32 | | | | |
| 48 W8-1 | Bump | 48 X 48 | 4 | | | |
| 48 W8-3 | 2 Way Traffic | 48 X 48 | 2 | | | |
| | TYPE II BARRICADE (F) | | | 10 | | |
| SIGN TOTALS | | | | | 12 | 50 |
| | | | | | 15 | 56 |

General Notes - Construction Traffic Control:

- Based upon sight distance and other considerations, the final location of Construction Traffic Control Devices is subject to the approval of the Engineer.
- All construction signs provided on this project shall be furnished with high brightness encapsulated type reflective sheeting. See Section 713.10 of the Standard Specifications.
- For basic placement details of the construction traffic control devices refer to Standard S-614-50 of the Colorado Standard Plans as follows:
Road Closure - Bypass Detour Case IV
- Estimated quantities for construction traffic control devices are for the maximum number of signs used at one location.
- Light provided for Type II Barricade shall be considered part of the Barricade and shall be at no additional cost.

CONSTRUCTION TRAFFIC CONTROL DEVICES

Construction Traffic Control Sign Usage:

G20-1 This sign shall be erected at the limits of the project.

G20-2 This sign should be erected approximately 500 feet beyond the end of the project.

M4-10 () This sign should be mounted just below ROAD CLOSED (R11-2) sign at the point where the detour roadway or route has been established due to the closure of the street or highway to through traffic.

R4-1 This sign is intended for use in advance of a point on a multiple-lane roadway where conditions makes overtaking or passing hazardous, such as closure of traffic lanes.

R4-2 This sign is intended for use at the end of a zone where no passing regulations are in effect and in conjunction with a Do Not Pass sign (R4-1).

R11-2 This sign is to be mounted on a type (3M-B) barricade and placed before the work zone entrance to prohibit traffic from entering the workzone.

W1-4 () This sign should be placed at the beginning of the first curve in the direction of travel, mark the two curves in opposite directions that are separated by a tangent of less than 600 feet.

W1-8 This sign is intended to be used to give notice, provide emphasis and guidance to vehicle operators of a sharp change in horizontal alignment with the direction of travel.

W8-3a This sign should be placed at the point where the pavement surface changes from a hard-surfaced pavement to the low-type surface or earth road.

W13-1 () This sign is intended to supplement warning signs only and shall not be mounted alone. It is used to indicate the maximum recommended speed around curves or through hazardous locations.

W20-1 This sign is to be located in advance of the initial activity or detour a driver may encounter and is intended to be used as a warning of obstructions or restrictions.

W20-2 This sign is intended for use in advance of a point at which traffic is diverted over a temporary roadway or route.

W20-4 This sign is intended for use only in advance of a point where traffic in both directions must use a single lane.

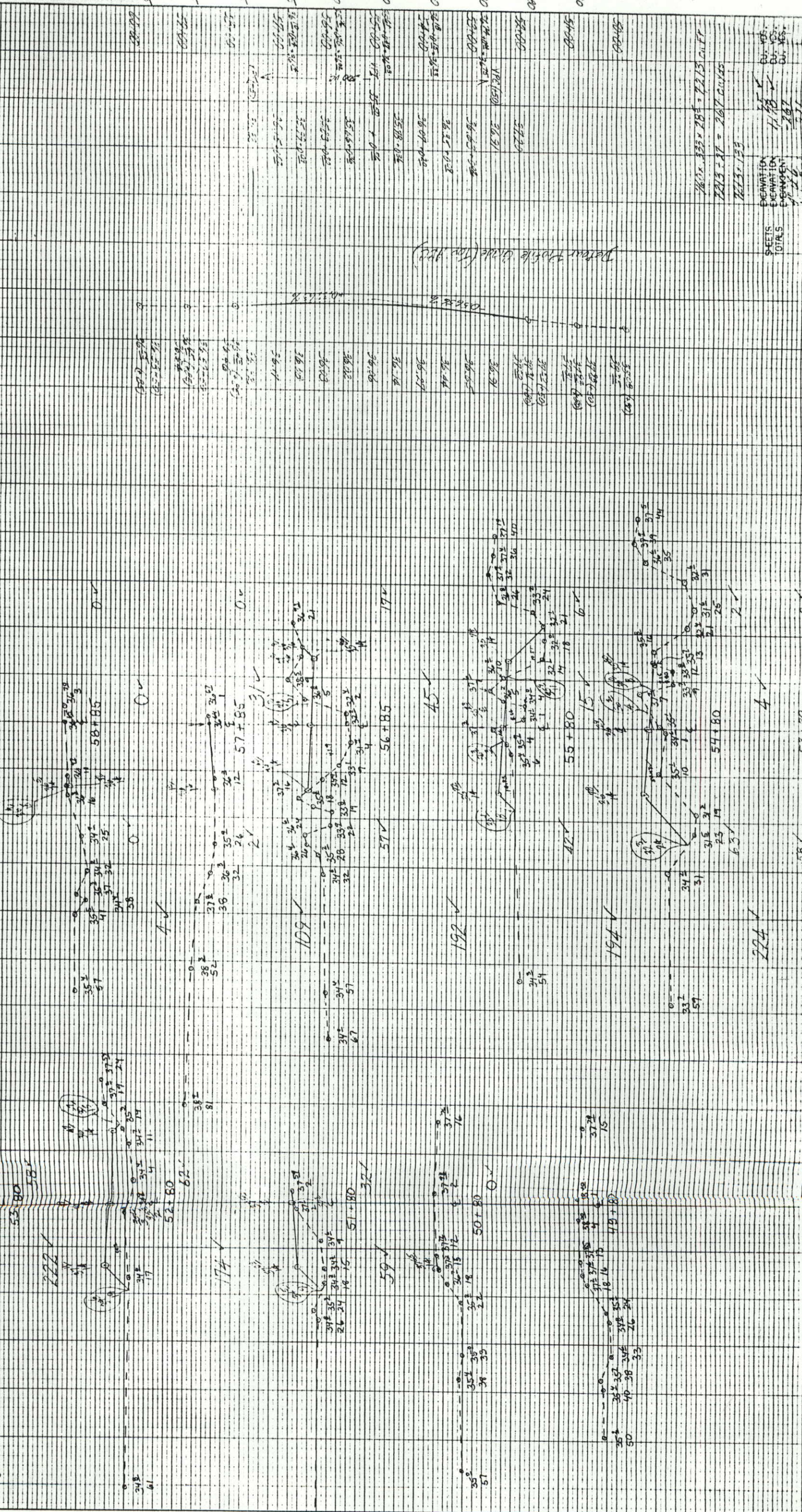
W20-7a This sign is intended for use 500 feet in advance of any point at which a flagger has been stationed to control traffic through or around the project.

| | | | | |
|--------|----------|---------------|-----------|--------------|
| REGION | DIVISION | PROJ. NO. | SHEET NO. | TOTAL SHEETS |
| XIII | COLO. | CX 03-0034-23 | | |

NO REVISIONS REVISED VOID

AS CONSTRUCTED

DETOUR #1
 MAINLINE STA 57+29.17 to 60+84.2
 (DETOUR STA 49+80 to 59+85)



| | | |
|-----|--------|----|
| NO. | DATE | BY |
| 69 | 3/4/61 | |

| | | |
|-----|------|----|
| NO. | DATE | BY |
| | | |

| | | | |
|------------|-----------|----------|------|
| EXCAVATION | EMBARMENT | DU. YDS. | AREA |
| 11.88 | 11.88 | | |
| 2.87 | 2.87 | | |
| 2.11 | 2.11 | | |
| TOTALS | | | |

