

INDEX OF SHEETS  
SEE SHEET 2

RECORD PLANS

CONTRACTOR: MUNSON EARTH MOVING CORP. - WILLISTON, VT.

RESIDENT ENGINEER: GREG WILCOX

CONSTRUCTION BEGAN: JUNE 10, 2011

CONSTRUCTION COMPLETE: MAY 18, 2012

RECORD PLANS BY: GREG WILCOX & C. PIERCE

I HEREBY CERTIFY THAT ALL THE CONSTRUCTION REQUIRED BY THIS SET OF DRAWINGS HAS BEEN ACCOMPLISHED AS INDICATED HEREIN.

BY: *Greg Wilcox* RESIDENT ENGINEER

DATE: 5/22/12

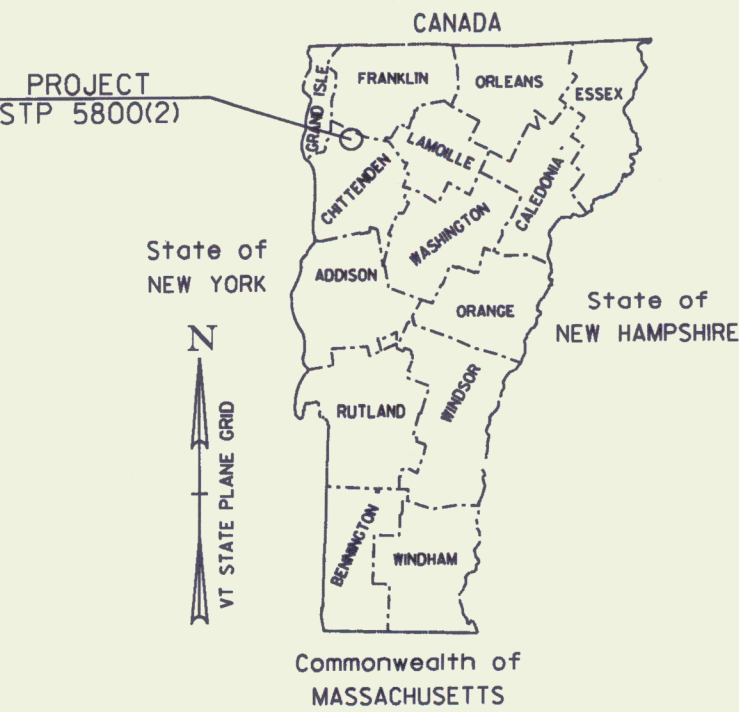
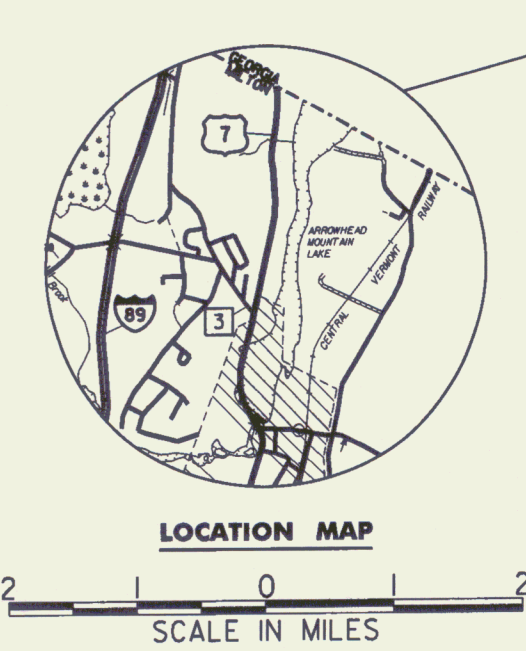
NOTE: Any further information concerning final quantities, amounts or other details relative to this project may be found at Central Files in the electronic archives.

| BITUMINOUS CONCRETE PAVEMENT<br>SUPERPAVE MIXTURE DESIGN CRITERIA |                                               |
|-------------------------------------------------------------------|-----------------------------------------------|
| DESIGN LANE / DESIGN LIFE ESAL                                    | 1,405,200                                     |
| DESIGN NUMBER OF GRADATIONS                                       | 65                                            |
| PERFORMANCE GRADE ASPHALT BINDER                                  | SEE SECTION 490<br>GENERAL SPECIAL PROVISIONS |

STATE OF VERMONT  
AGENCY OF TRANSPORTATION



PROPOSED IMPROVEMENT  
TOWN OF MILTON  
COUNTY OF CHITTENDEN  
US ROUTE 7 - MINOR ARTERIAL



TRAFFIC DATA

| LOCATION                          | AADT  |       | DHV  |      | ADTT |      | ZT | XD | ESALS         |               | V      |
|-----------------------------------|-------|-------|------|------|------|------|----|----|---------------|---------------|--------|
|                                   | 2011  | 2031  | 2031 | 2031 | 2031 | 2031 |    |    | (2011 - 2031) | (2011 - 2031) |        |
| US ROUTE 7 NORTH APPROACH         | 4,200 | 4,800 | 600  | 660  | 10   | 60   |    |    | 2,342,000     | 5,353,000     | 40 MPH |
| US ROUTE 7 SOUTH APPROACH         | 6,900 | 7,800 | 970  | 480  | 2    | 67   |    |    | 1,900,000     | 4,550,000     | 40 MPH |
| LAKE ROAD WEST APPROACH           | 4,400 | 5,000 | 620  | 270  | 6    | 68   |    |    | 815,000       | 1,616,000     | 35 MPH |
| COMMERCIAL BUILDING EAST APPROACH | 750   | 840   | 90   | 70   | 8    | 52   |    |    | 147,000       | 342,000       | N/A    |

BEGINNING AT A POINT, IN THE TOWN OF MILTON, APPROXIMATELY 5.775 MILES NORTH OF THE COLCHESTER/MILTON TOWN LINE AND EXTENDING NORTHERLY 0.170 MILES TO APPROXIMATE MILE MARKER 5.945.

LENGTH OF ROADWAY: 900 FEET = 0.170 MILES  
LENGTH OF PROJECT: 900 FEET = 0.170 MILES

THE PROJECT SHALL CONSIST OF INTERSECTION REALIGNMENT, FULL DEPTH ROADWAY RECONSTRUCTION, DRAINAGE IMPROVEMENTS, AND OTHER RELATED ITEMS.

STA 101+25.00 US 7  
END APPROACH  
BEGIN PROJECT

STA 100+00.00 US 7  
BEGIN APPROACH

STA 305+00.00 TH 3  
END APPROACH  
ROADWAY CONSTRUCTION

STA 110+25.00 US 7  
END PROJECT  
BEGIN APPROACH

STA 111+50.00 US 7  
END APPROACH

STA 201+25.72 TH 80  
END APPROACH  
ROADWAY CONSTRUCTION

SURVEYED BY: L. ORVIS  
SURVEYED DATE: 07/21/04

DATUM  
VERTICAL NAVD88  
HORIZONTAL NAD83(96)

THESE PLANS ARE SUBJECT TO SUCH ENGINEERING CHANGES AS MAY BE REQUIRED BY THE FEDERAL HIGHWAY ADMINISTRATION OR THE DIRECTOR OF PROGRAM DEVELOPMENT.  
CONSTRUCTION IS TO BE CARRIED ON IN ACCORDANCE WITH THESE PLANS AND THE STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2006, AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION ON JUNE 15, 2006 FOR USE ON THIS PROJECT, INCLUDING ALL SUBSEQUENT REVISIONS AND SUCH REVISED SPECIFICATIONS AND SPECIAL PROVISIONS AS ARE INCORPORATED IN THESE PLANS.

DIRECTOR OF PROGRAM DEVELOPMENT  
APPROVED: *Richard J. Schultz* DATE: 2/12/11  
PROJECT MANAGER: J. SCHULTZ  
PROJECT NAME: MILTON  
PROJECT NUMBER: STP 5800 (2)  
SHEET 1 OF 104 SHEETS

QUALITY ASSURANCE PROGRAM : LEVEL 2

CONVENTIONAL SYMBOLS

|                    |  |
|--------------------|--|
| COUNTY LINE        |  |
| TOWN LINE          |  |
| LIMITS OF ACCESS   |  |
| POINT OF ACCESS    |  |
| FENCE LINE         |  |
| STONE WALL         |  |
| TRAVELED WAY       |  |
| GUARD RAIL         |  |
| RAILROAD           |  |
| SURVEY LINE        |  |
| CULVERT            |  |
| POWER POLE         |  |
| TELEPHONE POLE     |  |
| TREES              |  |
| CONTROL OF ACCESS  |  |
| PROPERTY LINE      |  |
| R.O.W. TAKING LINE |  |
| SLOPE RIGHTS       |  |
| TOP OF CUT         |  |
| TOE OF SLOPE       |  |



INDEX OF SHEETS

INDEX OF SHEETS

|         |                                   |
|---------|-----------------------------------|
| 1       | TITLE SHEET                       |
| 2       | INDEX OF SHEETS                   |
| 3-5     | TYPICAL SHEETS                    |
| 6       | DRAINAGE STRUCTURE DETAIL SHEET   |
| 7-9     | QUANTITY SHEETS                   |
| 10      | ITEM DETAIL SHEET                 |
| 11      | DRAINAGE SHEET                    |
| 12      | EARTHWORKS SHEET                  |
| 13-15   | R.O.W. DETAIL SHEETS              |
| 16-19   | R.O.W. LAYOUT SHEETS              |
| 20      | TIE SHEET                         |
| 21-29   | LAYOUT AND PROFILE SHEETS         |
| 30-33   | DRAINAGE LAYOUT SHEETS            |
| 34-36   | DRAINAGE PROFILE SHEETS           |
| 37      | STORMWATER TREATMENT DETAIL SHEET |
| 38      | EPSC NARRATIVE                    |
| 39-42   | EPSC EXISTING CONDITIONS SHEETS   |
| 43-46   | EPSC CONSTRUCTION SHEETS          |
| 47-50   | EPSC FINAL CONDITIONS SHEETS      |
| 51-53   | EPSC DETAIL SHEETS                |
| 54-57   | LANDSCAPE LAYOUT SHEETS           |
| 58      | LANDSCAPE DETAIL SHEET            |
| 59-62   | TSPM LAYOUT SHEETS                |
| 63-64   | TRAFFIC SIGN SUMMARY SHEETS       |
| 65      | TRAFFIC SIGN DETAIL SHEET         |
| 66-69   | TC PHASE 1 LAYOUT SHEETS          |
| 70-73   | TC PHASE 2 LAYOUT SHEETS          |
| 74-77   | TC PHASE 3 LAYOUT SHEETS          |
| 78-90   | US ROUTE 7 CROSS SECTION SHEETS   |
| 91-96   | LAKE ROAD CROSS SECTION SHEETS    |
| 97-98   | KILBURN ROAD CROSS SECTION SHEETS |
| 99-101  | BORING SHEETS                     |
| 102-104 | WATERLINE SHEETS                  |

STANDARDS LIST

|        |                                                                                                                                                                                                      |           |
|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| B-5    | SLOPE GRADING, EMBANKMENTS, MUCK                                                                                                                                                                     | 6/1/1994  |
| B-11   | UNDERDRAIN - ROCK SUBGRADE, SLOPE STABILIZ.                                                                                                                                                          | 6/1/1994  |
| B-12   | SIDE ROAD INTERSECTION, DEPRESSED RAMP                                                                                                                                                               | 6/1/1994  |
| B-71   | RESIDENTIAL AND COMMERCIAL DRIVES                                                                                                                                                                    | 7/8/2005  |
| C-10   | CURBING                                                                                                                                                                                              | 2/11/2008 |
| D-1    | PRECAST REINFORCED CONCRETE PIPE DROP INLET WITH CAST IRON GRATE PRECAST REINFORCED CONCRETE PIPE DROP INLET WITH CONCRETE COVER                                                                     | 6/1/1994  |
| D-3    | TREATED GUTTERS                                                                                                                                                                                      | 6/1/1994  |
| D-11   | STEEL GRATE CAST IRON GRATE TYPE A CAST IRON COVER                                                                                                                                                   | 6/1/1994  |
| D-15   | PRECAST REINFORCED CONCRETE CATCH BASIN W/CAST IRON GRATE PRECAST REINFORCED CONCRETE MANHOLE W/CAST IRON COVER CAST IRON GRATE WITH FRAME, TYPE D CAST IRON GRATE WITH FRAME, TYPE E                | 6/1/1994  |
| D-16   | PRECAST REINFORCED CONCRETE CURB DROP INLET WITH CAST IRON GRATE CAST IRON GRATE, TYPE B CAST IRON GRATE, TYPE C UNDERDRAIN RISER REINFORCED CONCRETE PIPE END SECTION ENERGY DISSIPATOR FOR CULVERT | 6/1/1994  |
| D-20   | HIGHWAY CROSSING SLEEVES FOR UNDERGROUND UTILITIES                                                                                                                                                   | 3/3/2003  |
| D-30   | UNDERDRAIN CONSTRUCTION DETAILS                                                                                                                                                                      | 8/13/2007 |
| D-33   | REINFORCED CONCRETE STRAIGHT HEADWALL                                                                                                                                                                | 3/12/2007 |
| E-100  | CONSTRUCTION APPROACH SIGNS                                                                                                                                                                          | 1/2/2004  |
| E-100A | SIDE ROAD CONSTRUCTION - APPROACH SIGNS                                                                                                                                                              | 1/2/2004  |
| E-101  | CONSTRUCTION SIGN DETAILS                                                                                                                                                                            | 5/30/2003 |
| E-102  | CONSTRUCTION SIGN DETAILS                                                                                                                                                                            | 6/30/2003 |
| E-102A | CONSTRUCTION SIGN DETAILS                                                                                                                                                                            | 5/1/2004  |
| E-103  | MAINLINE TRAFFIC CONTROL DIVIDED HIGHWAY ONE LANE CLOSED                                                                                                                                             | 3/1/2004  |
| E-106  | TRAFFIC CONTROL - MISCELLANEOUS DETAILS                                                                                                                                                              | 3/1/2004  |
| E-107  | DELINEATION, BARRICADES AND DETOURS FOR CONSTRUCTION AREAS                                                                                                                                           | 6/30/2003 |

|        |                                                                                                                          |            |
|--------|--------------------------------------------------------------------------------------------------------------------------|------------|
| E-107A | BREAKAWAY BARRICADE DETAILS                                                                                              | 6/8/2009   |
| E-108  | CONSTRUCTION ZONE LONGITUDINAL DROP OFFS                                                                                 | 6/8/2009   |
| E-108A | CONSTRUCTION ZONE LONGITUDINAL DROP OFFS FOR PAVING                                                                      | 6/8/2009   |
| E-110  | MAJOR MAINTENANCE OPERATION LANE CLOSURE                                                                                 | 8/8/1995   |
| E-111  | MINOR MAINTENANCE OPERATIONS                                                                                             | 3/11/1997  |
| E-120  | STANDARD SIGN PLACEMENT - EXPRESSWAY & FREEWAY                                                                           | 8/8/1995   |
| E-121  | STANDARD SIGN PLACEMENT - CONVENTIONAL ROAD                                                                              | 8/8/1995   |
| E-123  | GUIDE SIGN PLACEMENT - MISCELLANEOUS DETAILS                                                                             | 3/16/2004  |
| E-125  | TRAVEL INFORMATION COUNCIL SIGNS                                                                                         | 8/8/1995   |
| E-127  | ROUTE MARKINGS AT RURAL INTERSECTIONS                                                                                    | 8/8/1995   |
| E-136A | U.S. ROUTE MARKER SIGN DETAILS                                                                                           | 8/8/1995   |
| E-136B | STATE ROUTE MARKER SIGN DETAILS                                                                                          | 8/8/1995   |
| E-138  | MILEMARKER DETAILS - STATE & TOWN HIGHWAYS                                                                               | 5/30/2003  |
| E-140  | REGULATORY SIGN DETAILS                                                                                                  | 8/30/1996  |
| E-141  | REGULATORY SIGN DETAILS                                                                                                  | 9/20/1995  |
| E-142  | REGULATORY SIGN DETAILS                                                                                                  | 9/20/1995  |
| E-143  | REGULATORY SIGN DETAILS                                                                                                  | 6/15/2004  |
| E-144  | REGULATORY SIGN DETAILS                                                                                                  | 3/29/1999  |
| E-145A | REGULATORY SIGN DETAILS - LANE USE CONTROL SIGNS                                                                         | 12/23/1994 |
| E-145B | REGULATORY SIGN DETAILS - LANE USE CONTROL SIGNS                                                                         | 12/23/1994 |
| E-150  | WARNING SIGN DETAILS                                                                                                     | 5/1/2004   |
| E-164  | SQUARE STEEL SIGN POST                                                                                                   | 6/8/2009   |
| E-191  | PAVEMENT MARKING DETAILS                                                                                                 | 2/1/1999   |
| E-192  | PAVEMENT MARKING DETAILS                                                                                                 | 10/12/2000 |
| E-193  | PAVEMENT MARKING DETAILS                                                                                                 | 8/18/1995  |
| F-2    | CHAIN LINK FENCE, TYPE I DRIVE GATE FOR CHAIN LINK FENCE, TYPE I WALK GATE FOR CHAIN LINK FENCE, TYPE I                  | 6/1/1994   |
| G-1    | STEEL BEAM GUARDRAIL WITH STEEL POSTS                                                                                    | 1/3/2000   |
| G-1D   | STEEL BEAM GUARDRAIL WITH WOOD POSTS                                                                                     | 1/3/2000   |
| G-1D   | STEEL BEAM GUARDRAIL (40MPH & LESS) HEAVY DUTY STEEL BEAM GUARDRAIL STEEL BEAM MEDIAN BARRIER ANCHOR FOR STEEL BEAM RAIL | 1/3/2000   |
| G-19   | GENERIC GRADING PLANS FOR GUARDRAIL END TERMINALS                                                                        | 11/15/2002 |
| J-3    | MAILBOX SUPPORT DETAILS                                                                                                  | 8/7/1995   |

PROJECT NAME: MILTON

PROJECT NUMBER: STP 5800 (2)

FILE NAME: +92D289.frm.dgn

PROJECT LEADER: J. SCHULTZ

DESIGNED BY: D. LYMAN

INDEX OF SHEETS

PLOT DATE: 23-FEB-2011

DRAWN BY: D. LYMAN

CHECKED BY: J. DEVLIN

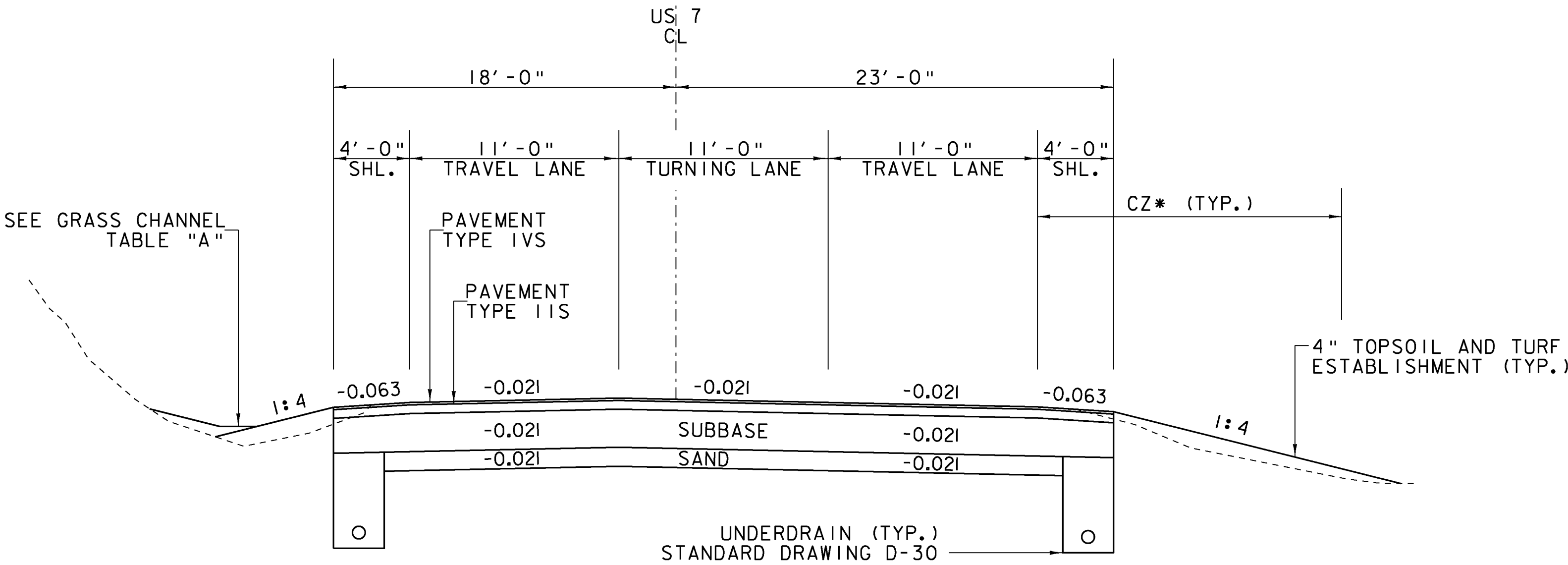
SHEET 2 OF 104



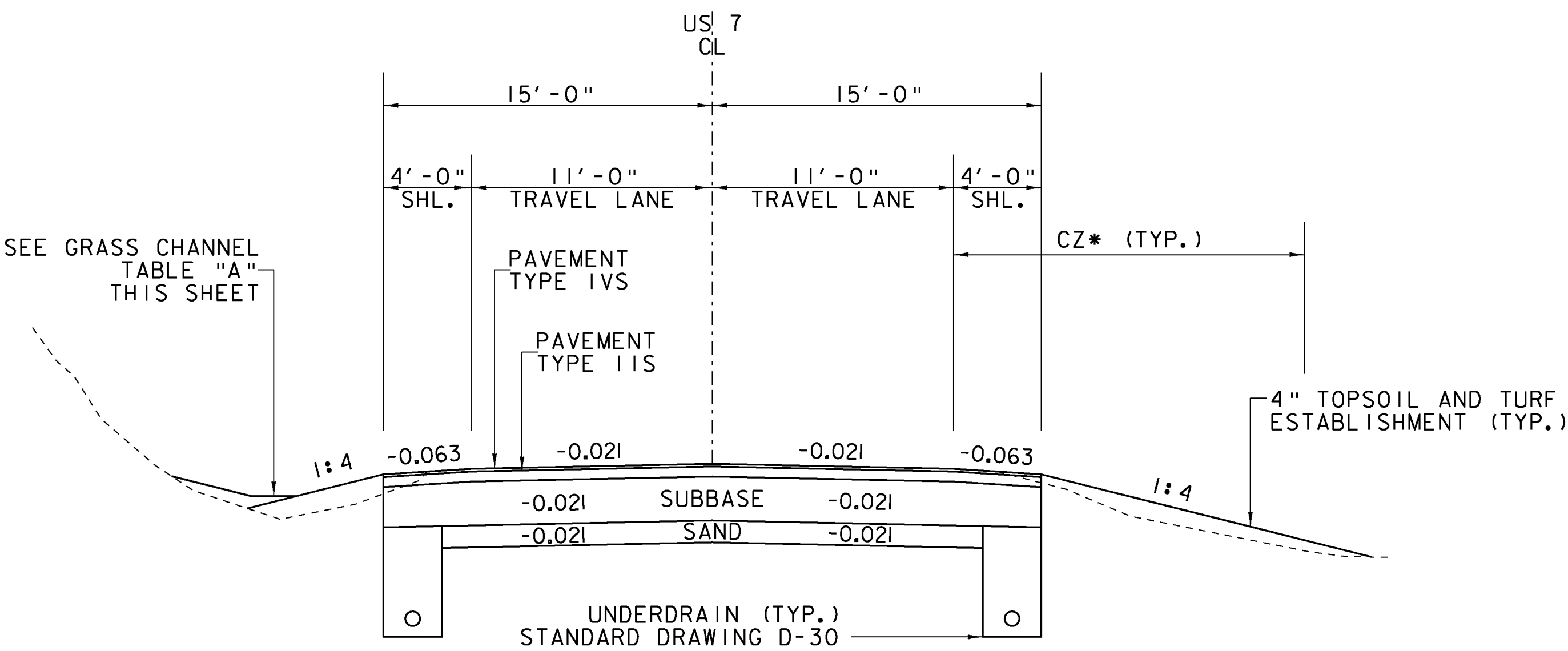
US ROUTE 7  
TYPICAL SECTIONS  
NOT TO SCALE

1.5" TYPE IVS SUPERPAVE BITUMINOUS CONCRETE PAVEMENT (1 - 1.5" PAVEMENT LIFT)  
5.5" TYPE IIS SUPERPAVE BITUMINOUS CONCRETE PAVEMENT (2 - 2.75" PAVEMENT LIFTS)  
24" SUBBASE OF DENSE GRADED CRUSHED STONE  
12" SAND BORROW

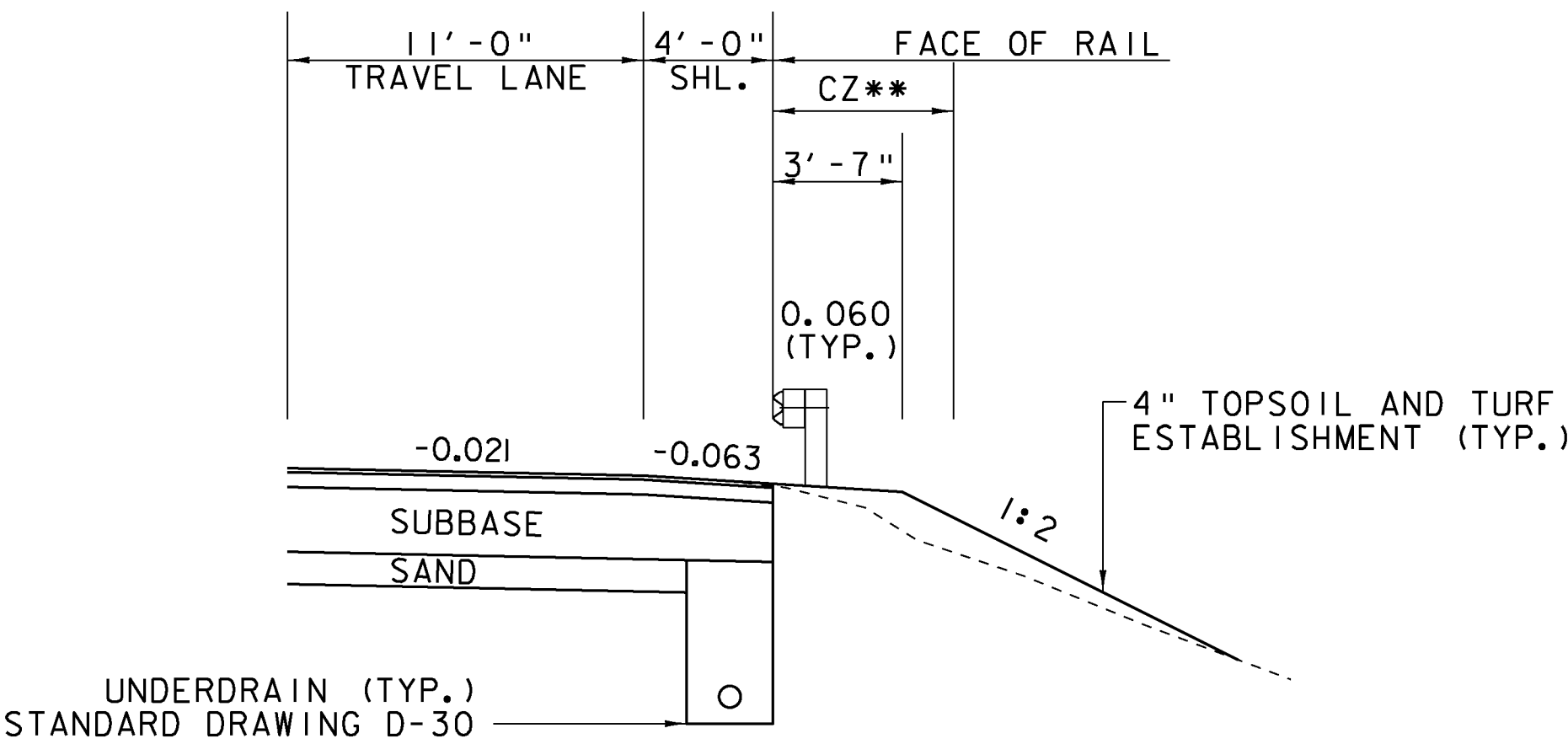
| MATERIAL TOLERANCES     |            |
|-------------------------|------------|
| PAVEMENT (TOTAL DEPTH): | +/- 1/4 in |
| SUBBASE (TOTAL DEPTH):  | +/- 1 in   |
| SAND (TOTAL DEPTH):     | +/- 1 in   |



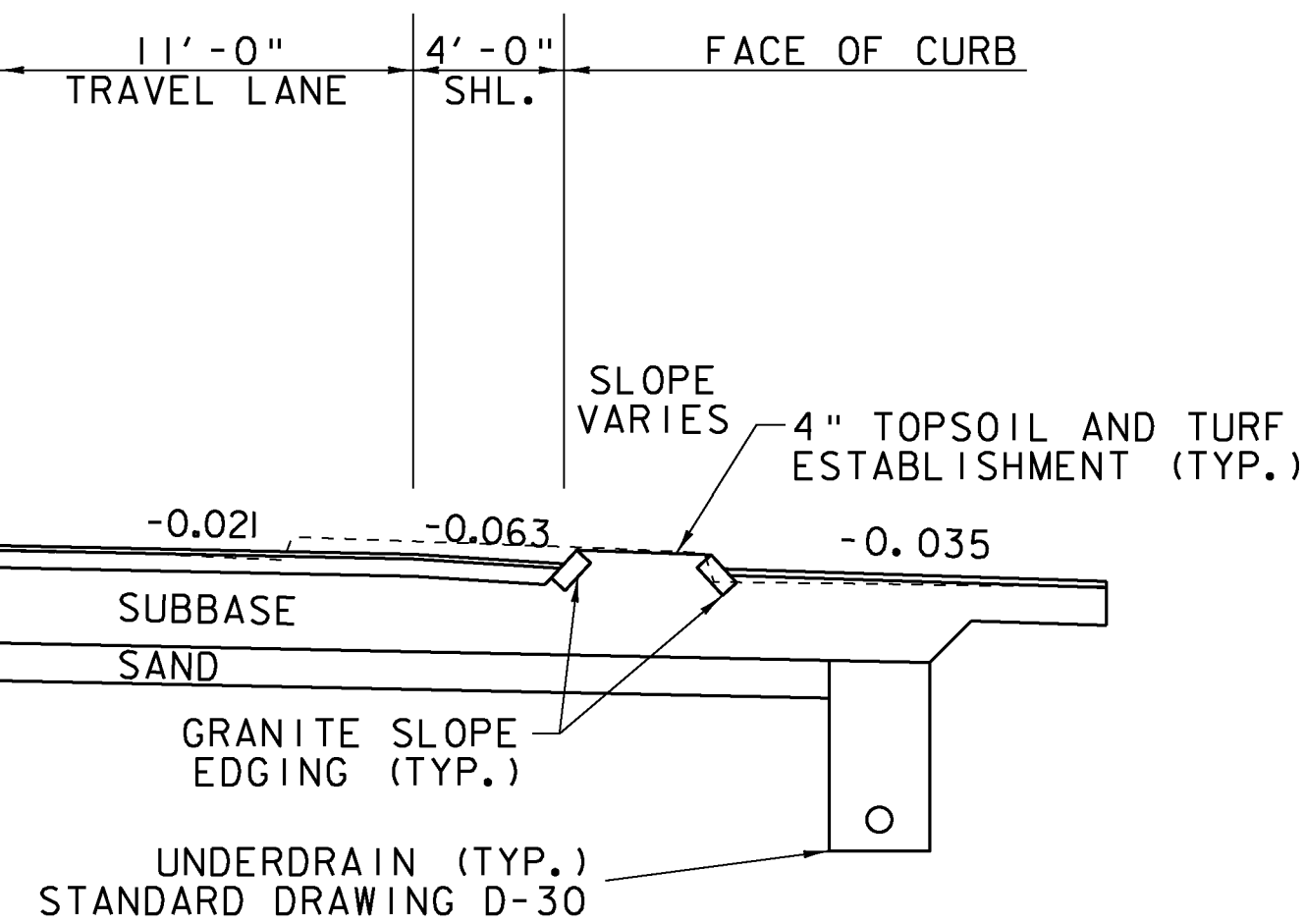
3 - LANE TYPICAL SECTION  
US ROUTE 7



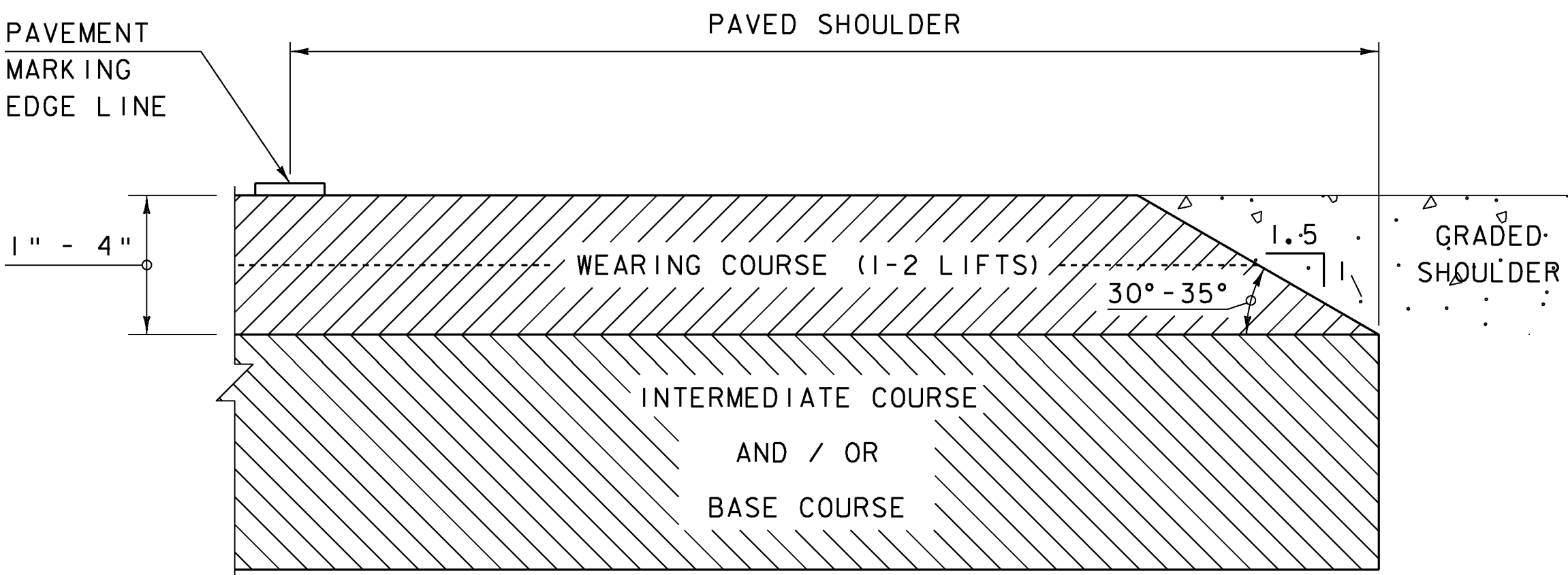
2 - LANE TYPICAL SECTION  
US ROUTE 7



GUARDRAIL TYPICAL SECTION  
US ROUTE 7



CURB TYPICAL SECTION  
US ROUTE 7



SAFETY EDGE DETAIL  
NOT TO SCALE

NOTE: LEVELING COURSE MAY INCLUDE THE "SAFETY EDGE" AT THE CONTRACTOR'S CHOICE.

| GRASS CHANNEL TABLE "A"     |           |                   |           |
|-----------------------------|-----------|-------------------|-----------|
| STATIONS                    | FORESLOPE | BOTTOM WIDTH (FT) | BACKSLOPE |
| 100+50.00 LT - 101+28.69 LT | 1:4       | 2                 | 1:3       |
| 101+75.00 LT - 102+60.00 LT | 1:4       | 2                 | 1:3       |
| 103+47.00 LT - 104+04.00 LT | 1:4       | 2                 | 1:4       |
| 105+02.00 LT - 105+68.00 LT | 1:4       | 2                 | 1:4       |
| 108+42.00 LT - 111+00.00 LT | 1:4       | 2                 | 1:4       |

| CLEAR ZONE (CZ) TABLE                |               |
|--------------------------------------|---------------|
| APPROACH                             | DISTANCE (FT) |
| US ROUTE 7 3-LANE TYPICAL SECTION    | 16*           |
| US ROUTE 7 2-LANE TYPICAL SECTION    | 16*           |
| US ROUTE 7 GUARDRAIL TYPICAL SECTION | 5**           |

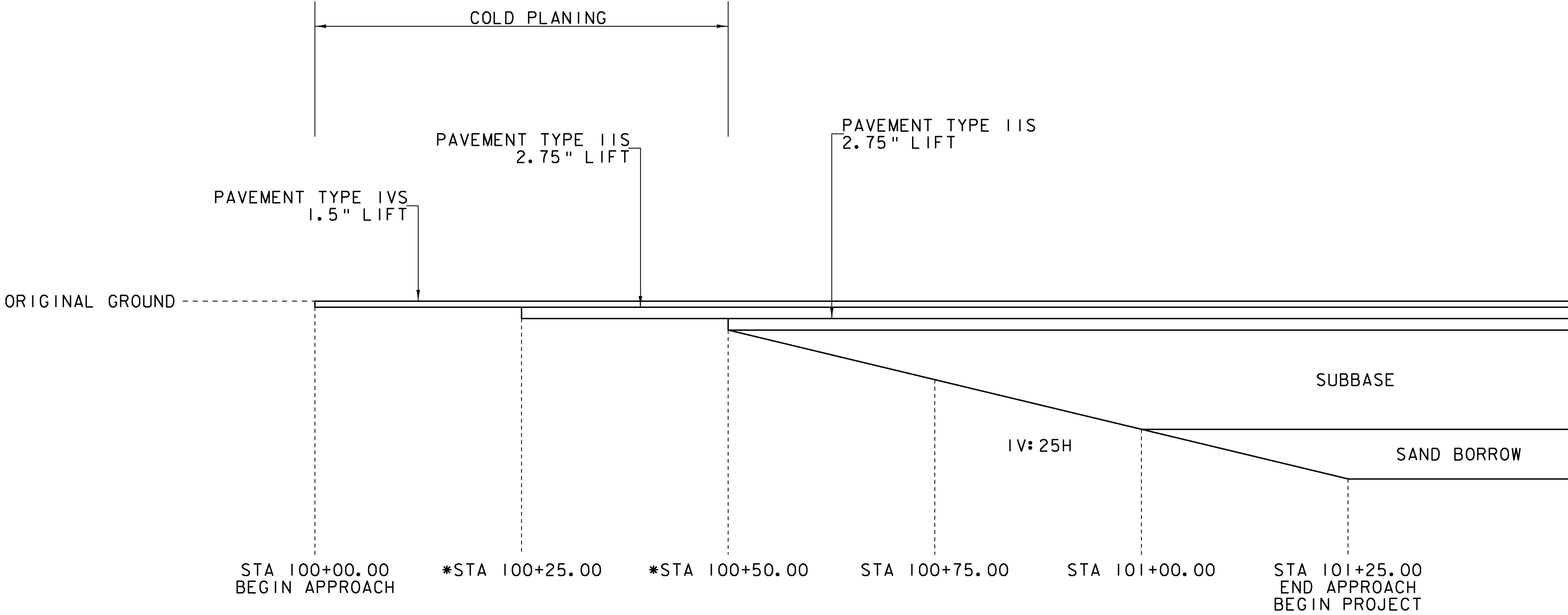
\* DISTANCE MEASURED FROM EDGE OF TRAVELED LANE  
\*\* DISTANCE MEASURED FROM THE FACE OF GUARDRAIL

|                 |                |
|-----------------|----------------|
| PROJECT NAME:   | MILTON         |
| PROJECT NUMBER: | STP 5800 (2)   |
| FILE NAME:      | t92d289typ.dgn |
| PROJECT LEADER: | J. SCHULTZ     |
| DESIGNED BY:    | D. LYMAN       |
| TYPICAL SHEET 1 |                |
| PLOT DATE:      | 23-FEB-2011    |
| DRAWN BY:       | D. LYMAN       |
| CHECKED BY:     | J. DEVLIN      |
| SHEET 3         | OF 104         |

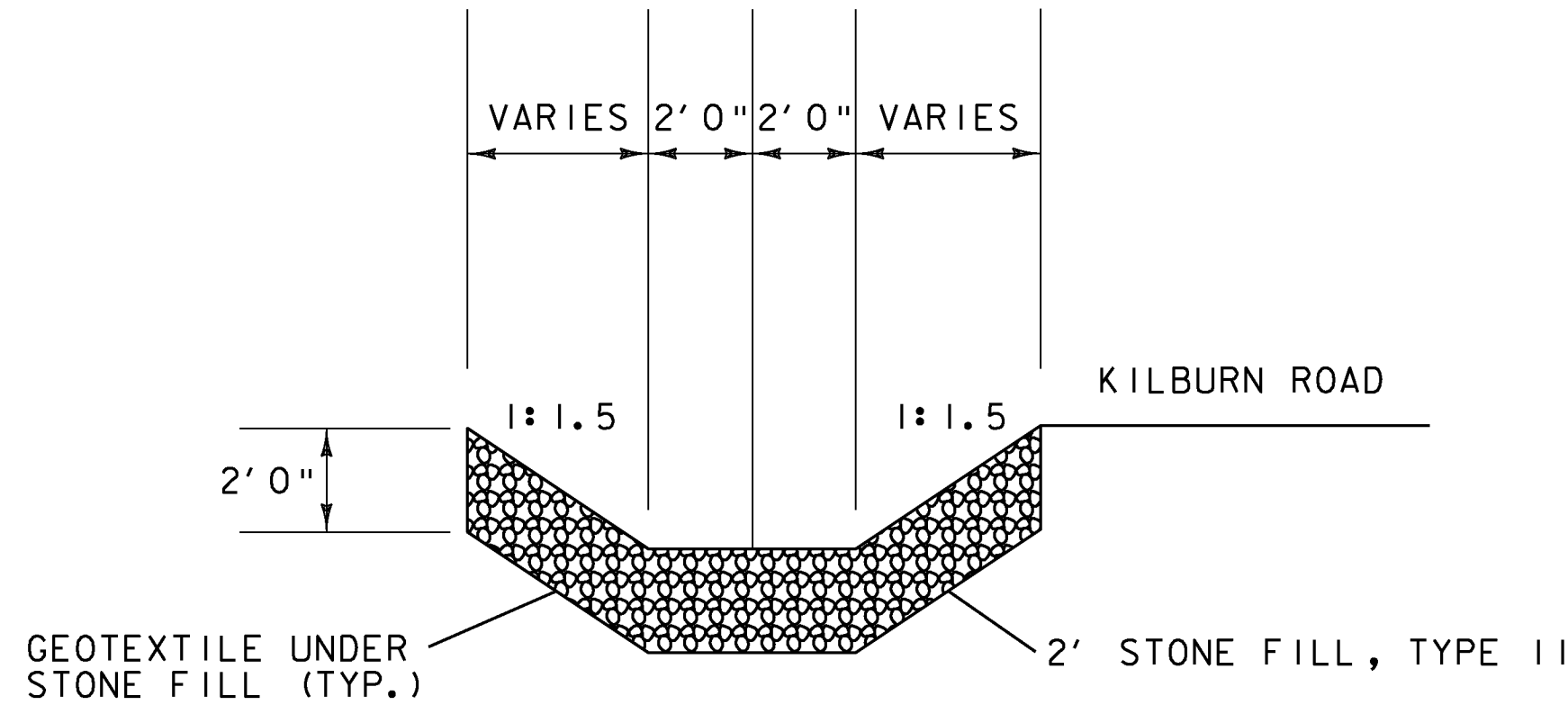


\*FIELD CONDITIONS WILL DETERMINE THE LOCATION OF THE BEGIN AND END OF THE CONCRETE ROADBED REMOVAL. FULL PAVEMENT DEPTH IS REQUIRED AT THE LOCATION OF THE BEGIN AND END OF CONCRETE ROADBED, STATIONS MAY BE ADJUSTED AS NECESSARY TO ACCOMPLISH THIS.

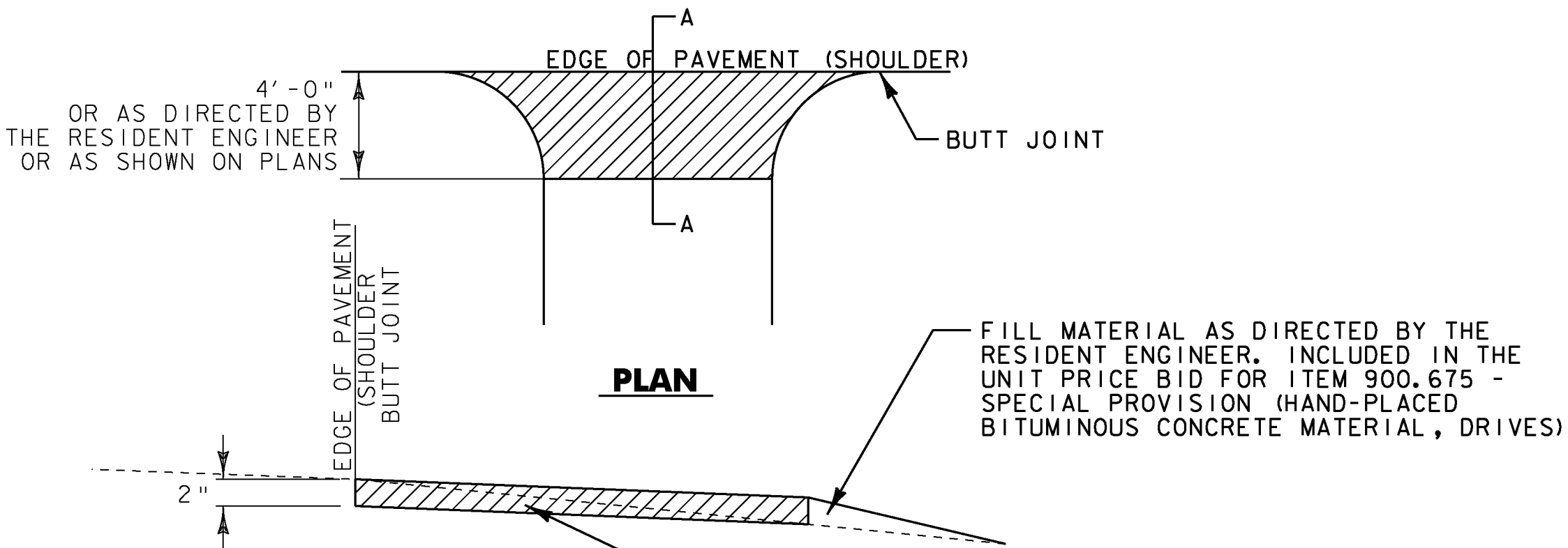
| MATERIAL TOLERANCES     |            |
|-------------------------|------------|
| PAVEMENT (TOTAL DEPTH): | +/- 1/4 in |
| SUBBASE (TOTAL DEPTH):  | +/- 1 in   |
| SAND (TOTAL DEPTH):     | +/- 1 in   |



**US ROUTE 7  
BEGIN PROJECT MATERIAL TRANSITION DETAIL**



**TYPICAL CHANNEL SECTION  
US ROUTE 7  
STA 101+15.90 RT - 102+92.76 RT  
NOT TO SCALE**



**PLAN**

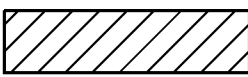
FILL MATERIAL AS DIRECTED BY THE RESIDENT ENGINEER, INCLUDED IN THE UNIT PRICE BID FOR ITEM 900.675 - SPECIAL PROVISION (HAND-PLACED BITUMINOUS CONCRETE MATERIAL, DRIVES)

**SECTION A-A**

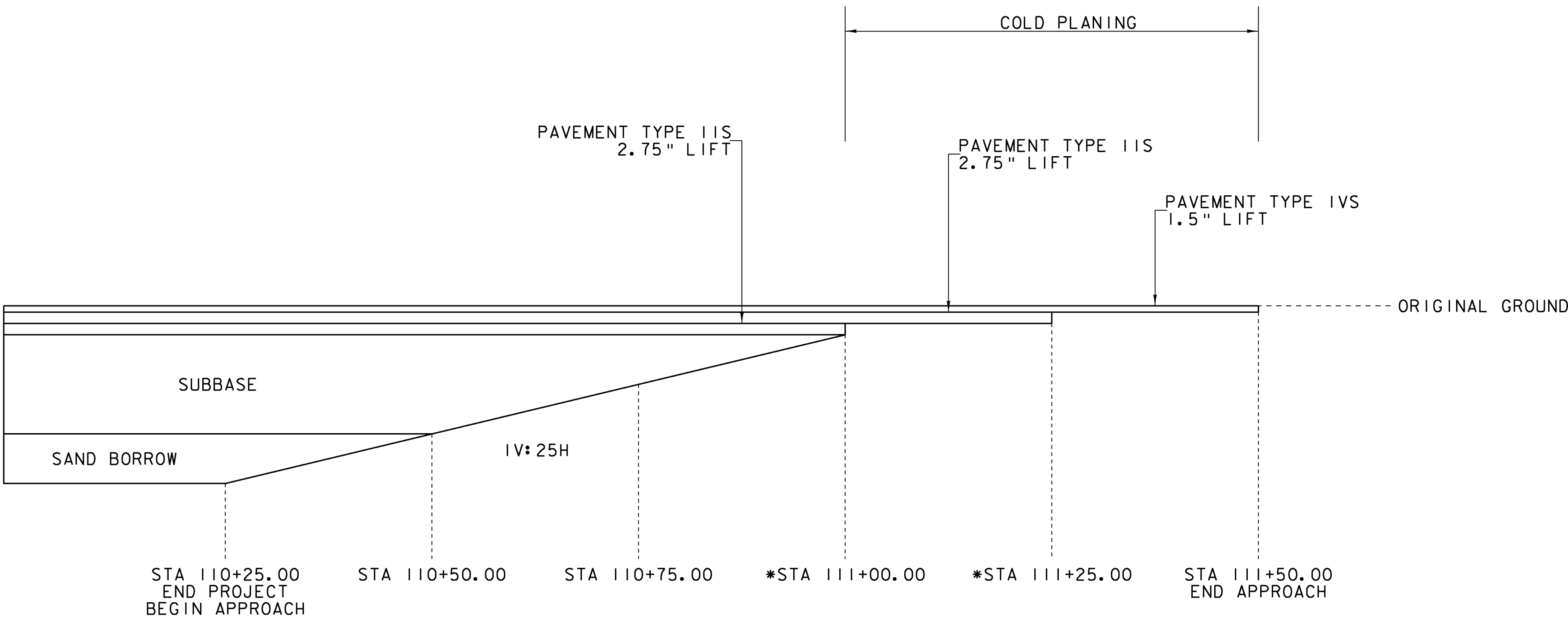
ANY EXCAVATION REQUIRED SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 900.675 - SPECIAL PROVISION (HAND-PLACED BITUMINOUS CONCRETE MATERIAL, DRIVES)

| STATION      | QUANTITY (SY) |
|--------------|---------------|
| 104+31.22 LT | 17.2 SY       |
| 104+83.50 LT | 14.3 SY       |
| 105+87.17 LT | 15.7 SY       |
| 111+12.33 RT | 16.0 SY       |
| 111+24.25 LT | 8.4 SY        |
| 302+97.06 RT | 15.8 SY       |
| 303+37.16 LT | 13.2 SY       |
| 303+85.78 RT | 16.3 SY       |
| 304+83.64 LT | 10.1 SY       |

**DRIVE LOCATION SUMMARY**

 AREAS FOR 900.675 - SPECIAL PROVISION (HAND-PLACED BIT. CONC. MATERIAL, DRIVES)

**ITEM NO.900.675 - SPECIAL PROVISION  
(HAND-PLACED BITUMINOUS CONCRETE MATERIAL, DRIVES)  
NOT TO SCALE**



**US ROUTE 7  
END PROJECT MATERIAL TRANSITION DETAIL**

|                              |                        |
|------------------------------|------------------------|
| PROJECT NAME: MILTON         |                        |
| PROJECT NUMBER: STP 5800 (2) |                        |
| FILE NAME: +92d289+yp.dgn    | PLOT DATE: 23-FEB-2011 |
| PROJECT LEADER: J. SCHULTZ   | DRAWN BY: D. LYMAN     |
| DESIGNED BY: D. LYMAN        | CHECKED BY: J. DEVLIN  |
| TYPICAL SHEET 2              | SHEET 4 OF 104         |

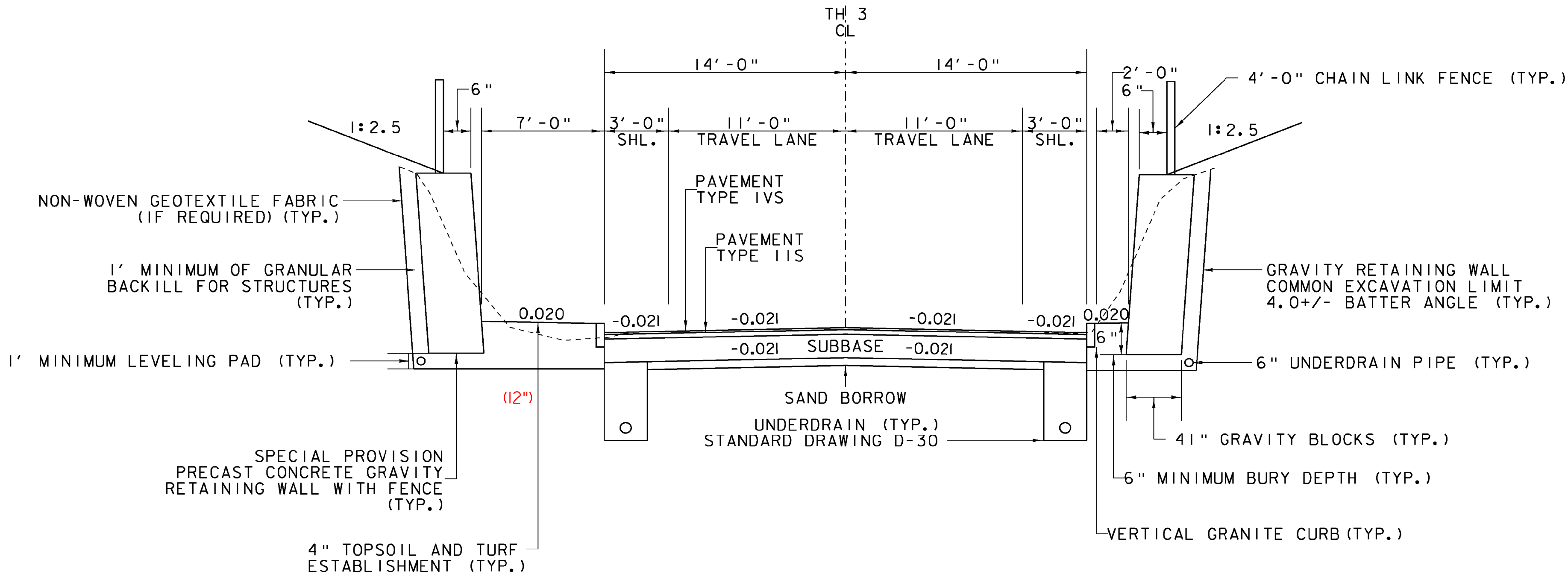


| MATERIAL TOLERANCES     |            |
|-------------------------|------------|
| PAVEMENT (TOTAL DEPTH): | +/- 1/4 in |
| SUBBASE (TOTAL DEPTH):  | +/- 1 in   |
| SAND (TOTAL DEPTH):     | +/- 1 in   |

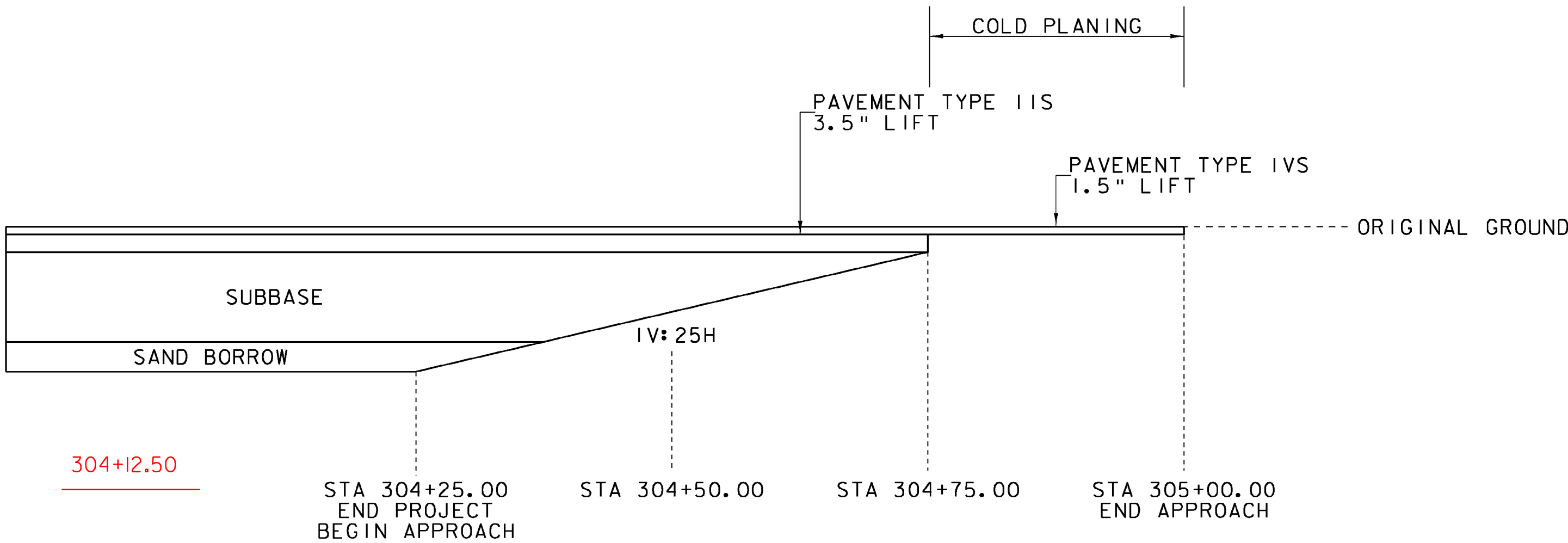
TH 3 - LAKE ROAD  
TYPICAL SECTIONS

NOT TO SCALE

1.5" TYPE IVS SUPERPAVE BITUMINOUS CONCRETE PAVEMENT (1 - 1.5" PAVEMENT LIFT)  
3.5" TYPE IIS SUPERPAVE BITUMINOUS CONCRETE PAVEMENT (1 - 3.5" PAVEMENT LIFT)  
18" SUBBASE OF DENSE GRADED CRUSHED STONE  
6" SAND BORROW PER W.O. \*II (9-13-II)  
12"



2 - LANE TYPICAL SECTION  
TH 3 - LAKE ROAD



TH 3 - LAKE ROAD  
END PROJECT MATERIAL TRANSITION DETAIL

| CLEAR ZONE TABLE              |               |
|-------------------------------|---------------|
| APPROACH                      | DISTANCE (FT) |
| TH 3 - CURBED TYPICAL SECTION | 1.5*          |

\* DISTANCE MEASURED FROM THE FACE OF CURB

SEEDING FORMULA

SEE EPSC DETAILS SHEET 2 FOR THE SEEDING FORMULA.

GENERAL NOTES

- ALL MATERIALS AND CONSTRUCTION PRACTICES SHALL CONFORM TO THE STATE OF VERMONT AGENCY OF TRANSPORTATION'S 2006 STANDARD SPECIFICATIONS FOR CONSTRUCTION AND IT'S LATEST REVISIONS.
- TACK COAT: EMULSIFIED ASPHALT IS TO BE APPLIED AT THE RATE OF 0.040 GAL/SY ON ALL MILLED SURFACES AND AT A RATE OF 0.25 G/SY BETWEEN SUCCESSIVE COURSES OF PAVEMENT AS DIRECTED BY THE ENGINEER.
- MARKER POSTS: TO BE PLACED AS INDICATED OR AS DIRECTED BY THE ENGINEER.
- SLOPE ROUNDING: ALL CUT SLOPES TO BE ROUNDED IN ACCORDANCE WITH STANDARD B-5.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING ALL ARRANGEMENTS FOR ANCHORING, SUPPORTING AND/OR RELOCATING AND PROTECTING ALL UTILITIES DURING CONSTRUCTION. ALL COSTS SHALL BE INCLUDED IN THE UNIT PRICES BID. IN THE CASE OF DAMAGE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COST OF ALL REPAIRS.
- THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF THE EXISTING FEATURES AND STRUCTURES WITHIN AND ADJACENT TO THE WORK. IN THE CASE OF DAMAGE, THE REPAIRS OR REPLACEMENT SHALL BE COMPLETED AT THE CONTRACTOR'S EXPENSE AS APPROVED BY THE ENGINEER.
- ALL WORK MUST COMPLY WITH FEDERAL, STATE AND LOCAL REGULATIONS AND IN THE CASE THERE ARE CONFLICTING REGULATIONS THE MORE CONSERVATIVE OR STRICTER REGULATION WILL TAKE PRECEDENCE.
- ANY DISCREPENCIES BETWEEN THESE DRAWINGS AND ACTUAL FIELD CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING WITH THE WORK.
- THE CONTRACTOR IS RESPONSIBLE FOR LOCATING ANY EXISTING STRUCTURES OR PIPES, WHICH CONNECT TO PIPES THAT ARE SPECIFIED TO BE PLUGGED, FILLED OR ABANDONED. IN THE EVENT THAT ADJOINING STRUCTURES OR PIPES ARE FOUND IT SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING WITH THE WORK. ALL SUCH WORK SHALL BE PAID UNDER ITEM 204.22 TRENCH EXCAVATION, EXPLORATORY.
- WATER REPELLENT SILANE SHALL BE APPLIED TO ALL EXPOSED CONCRETE HEADWALL SURFACES.
- ALL ASSOCIATED RETAINING WALL EXCAVATION SHALL ONLY INCLUDE AN AREA WHERE THE CORRESPONDING RETAINING WALL CAN BE CONSTRUCTED AND BACKFILLED WITHIN THE SAME WORKING DAY OR AS APPROVED BY THE ENGINEER.
- THE CONTRACTOR MAY SUBSTITUTE SUBBASE MATERIAL FOR THE SAND BORROW SHOWN ON THE PLANS. THE SUBBASE MATERIAL SHALL MEET THE TYPE SPECIFIED IN THE CONTRACT AND BE PLACED TO MEET THE SUBBASE SPECIFICATIONS. IF PLACEMENT OF SUBBASE IS IN LIEU OF SAND BORROW PLACE A GEOTEXTILE MEETING THE REQUIREMENTS OF SECTION 649 FOR GEOTEXTILE FOR ROADBED SEPARATOR BETWEEN THE SUBGRADE AND THE SUBBASE MATERIAL. ALL COSTS ASSOCIATED WITH THE SUBSTITUTION INCLUDING THE GEOTEXTILE SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 203.31 SAND BORROW.

|                            |                        |
|----------------------------|------------------------|
| PROJECT NAME:              | MILTON                 |
| PROJECT NUMBER:            | STP 5800 (2)           |
| FILE NAME: +92d289+yp.dgn  | PLOT DATE: 23-FEB-2011 |
| PROJECT LEADER: J. SCHULTZ | DRAWN BY: D. LYMAN     |
| DESIGNED BY: D. LYMAN      | CHECKED BY: J. DEVLIN  |
| TYPICAL SHEET 3            | SHEET 5 OF 104         |





## TYPICAL PRECAST CATCH BASIN OR MANHOLE WITH URBAN UNDERDRAIN FLUSHING BASIN

NOT TO SCALE

- ## **PRECAST REINFORCED CONCRETE CATCH BASIN NOTES:**
- 
1. PRECAST CONCRETE SECTIONS SHALL CONFORM TO SUBSECTION 705.04 OF THE STANDARD SPECIFICATIONS.
  2. MINIMUM CONCRETE COMPRESSIVE STRENGTH: 5,000 PSI AT 28-DAYS
  3. STEEL REINFORCING SHALL CONFORM TO ASTM A185 OR A82 FOR HS-25 LOADING.
  4. MANHOLE STEPS SHALL BE 14" WIDE STEEL REINFORCED COPOLYMER POLYPROPYLENE PLASTIC AND SHALL BE CAST INTO MANHOLE SECTIONS BY THE PRECAST CONCRETE MANUFACTURER.
  5. FACE OF PIPE SHALL NOT PROJECT MORE THAN 2" NOR LESS THAN 1" FROM INSIDE WALL OF STRUCTURE.
  6. ALL STRUCTURES WITH MULTIPLE PIPES SHALL HAVE A MINIMUM OF 12" OF OUTSIDE SURFACE BETWEEN HOLES, NO MORE THAN 75% OF A HORIZONTAL CROSS-SECTION SHALL BE HOLES, AND THERE SHALL BE NO HOLES CLOSER THAN 3' TO JOINTS.
  7. FITTING FRAME TO FINAL GRADE MAY BE DONE WITH BRICK OR PRECAST CONCRETE GRADE RINGS OF APPROPRIATE THICKNESS (3 COURSES MAX).
  8. FLAT SLAB TOPS SHALL BE USED FOR ALL CATCH BASINS UNLESS OTHERWISE PERMITTED BY THE ENGINEER.
  9. ALL PIPE INVERTS AND PENETRATION ANGLES SHALL BE FIELD VERIFIED PRIOR TO PRECASTING.
  10. PRECAST SECTIONS SHALL HAVE A TONGUE AND GROOVE JOINT AND BE ASSEMBLED USING A BUTYL RUBBER OR APPROVED EQUAL SEALANT.
  11. PROVIDE FLEXIBLE RUBBER SLEEVES CONFORMING TO ASTM C-923, RESILIENT, OF SIZE REQUIRED, FOR EACH PIPE CONNECTING TO STRUCTURE.
  12. PAYMENT FOR FURNISHING AND INSTALLING CATCH BASINS SHALL BE MADE UNDER THE PRECAST REINFORCED CONCRETE CATCH BASIN WITH CAST IRON GRATE ITEM (604.20).
  13. DEPTH AS SHOWN ON THE DRAINAGE DETAIL SHEET AND DRAINAGE PROFILE SHEETS IS DEFINED AS THE VERTICAL DISTANCE BETWEEN RIM ELEVATION AND THE BOTTOM OF SUMP

|                                 |                        |
|---------------------------------|------------------------|
| FILE NAME: +92d289+yp.dgn       | PLOT DATE: 23-FEB-2011 |
| PROJECT LEADER: J. SCHULTZ      | DRAWN BY: D. LYMAN     |
| DESIGNED BY: D. LYMAN           | CHECKED BY: J. DEVLIN  |
| DRAINAGE STRUCTURE DETAIL SHEET | SHEET 6 OF 104         |



QUANTITY SHEET 1

| SUMMARY OF ESTIMATED QUANTITIES |  |  |  |        |         |                                    |           |                 |                       |                                               |               | TOTALS      |        | DESCRIPTIONS |                                                              |             |       | DETAILED SUMMARY OF QUANTITIES |      |                                               |  |
|---------------------------------|--|--|--|--------|---------|------------------------------------|-----------|-----------------|-----------------------|-----------------------------------------------|---------------|-------------|--------|--------------|--------------------------------------------------------------|-------------|-------|--------------------------------|------|-----------------------------------------------|--|
|                                 |  |  |  |        | ROADWAY | ROADWAY (NO FEDERAL PARTICIPATION) | LANDSCAPE | EROSION CONTROL | UTILITIES - BID ITEMS | UTILITIES - BID ITEMS (NO FED. / STATE PART.) | FULL CE ITEMS | GRAND TOTAL | FINAL  | UNIT         | ITEMS                                                        | ITEM NUMBER | ROUND | QUANTITIES                     | UNIT | ITEMS                                         |  |
|                                 |  |  |  |        | 1       |                                    |           |                 |                       |                                               |               | 1           | 1LS    | LS           | CLEARING AND GRUBBING, INCLUDING INDIVIDUAL TREES AND STUMPS | 201.10      | -     |                                |      | 203.15 COMMON EXCAVATION                      |  |
|                                 |  |  |  |        | 8100    |                                    |           |                 |                       |                                               |               | 8100        | 8150.8 | CY           | COMMON EXCAVATION                                            | 203.15      | 230   | 4920 CY                        |      | US ROUTE 7                                    |  |
|                                 |  |  |  |        | 825     |                                    |           |                 |                       |                                               |               | 825         | 1129   | CY           | SOLID ROCK EXCAVATION                                        | 203.16      | 34    | 2576 CY                        |      | LAKE ROAD                                     |  |
|                                 |  |  |  |        | 450     |                                    |           |                 |                       |                                               |               | 450         |        | CY           | UNCLASSIFIED CHANNEL EXCAVATION                              | 203.27      | 10    | 9 CY                           |      | KILBURN ROAD                                  |  |
|                                 |  |  |  |        | 85      |                                    |           |                 |                       |                                               |               | 85          | 91.3   | CY           | EXCAVATION OF SURFACES AND PAVEMENTS                         | 203.28      | 4     | 365 CY                         |      | DRIVES                                        |  |
|                                 |  |  |  |        | 1450    |                                    |           |                 |                       |                                               |               | 1450        | 1937.1 | CY           | SAND BORROW                                                  | 203.31      | 31    | 7870 CY                        |      | SUB TOTAL                                     |  |
|                                 |  |  |  | 2535.9 | -2799-  |                                    |           |                 | 420                   | 980                                           |               | 4100        |        | CY           | TRENCH EXCAVATION OF EARTH                                   | 204.20      | 113   | 230 CY                         |      | ROUND                                         |  |
|                                 |  |  |  |        | 30      |                                    |           |                 |                       |                                               |               | 30          |        | CY           | TRENCH EXCAVATION OF ROCK                                    | 204.21      | 4     | 8100 CY                        |      | TOTAL                                         |  |
|                                 |  |  |  |        | 1       |                                    |           |                 |                       |                                               |               | 1           |        | CY           | TRENCH EXCAVATION OF EARTH, EXPLORATORY (N.A.B.I.)           | 204.22      | -     |                                |      | 203.16 SOLID ROCK EXCAVATION                  |  |
|                                 |  |  |  |        | 472     |                                    |           |                 | 151                   | 302                                           |               | 925         |        | CY           | GRANULAR BACKFILL FOR STRUCTURES                             | 204.30      | 32    | 741 CY                         |      | US ROUTE 7 - CONCRETE ROADBED                 |  |
|                                 |  |  |  |        | 375     |                                    |           |                 |                       |                                               |               | 375         | 505    | SY           | COLD PLANING, BITUMINOUS PAVEMENT                            | 210.10      | 21.4  | 49 CY                          |      | KILBURN ROAD - CONCRETE ROADBED               |  |
|                                 |  |  |  |        | 4250    |                                    |           |                 |                       |                                               |               | 4250        | 4436.9 | CY           | SUBBASE OF DENSE GRADED CRUSHED STONE                        | 301.35      | 157   | 1 CY                           |      | CONCRETE WALL - STA 110+41.01 RT              |  |
|                                 |  |  |  |        | 30      |                                    |           |                 |                       |                                               |               | 30          | 56.0   | CY           | AGGREGATE SURFACE COURSE                                     | 401.10      | 2.1   | 791 CY                         |      | SUB TOTAL                                     |  |
|                                 |  |  |  |        | 25      |                                    |           |                 |                       |                                               |               | 25          | 35.2   | CWT          | EMULSIFIED ASPHALT                                           | 404.65      | 3.2   | 34 CY                          |      | ROUND                                         |  |
|                                 |  |  |  |        | 1       |                                    |           |                 |                       |                                               |               | 1           | 4534   | LU           | PRICE ADJUSTMENT, ASPHALT CEMENT (N.A.B.I.)                  | 406.50      | -     | 825 CY                         |      | TOTAL                                         |  |
|                                 |  |  |  |        | 2400    |                                    |           |                 |                       |                                               |               | 2400        | 2443.4 | TON          | SUPERPAVE BITUMINOUS CONCRETE PAVEMENT                       | 490.30      | 72.5  |                                |      | 203.31 SAND BORROW                            |  |
|                                 |  |  |  |        | 1       |                                    |           |                 |                       |                                               |               | 1           | 0      | LU           | AIR VOIDS PAY ADJUSTMENT (N.A.B.I.)                          | 490.31      | -     | 1236 CY                        |      | US ROUTE 7                                    |  |
|                                 |  |  |  |        | 1       |                                    |           |                 |                       |                                               |               | 1           | 807    | LU           | MAT DENSITY PAY ADJUSTMENT (N.A.B.I.)                        | 490.32      | -     | 183 CY                         |      | LAKE ROAD                                     |  |
|                                 |  |  |  |        | 2950    |                                    |           |                 |                       |                                               |               | 2950        | 2358   | LB           | REINFORCING STEEL                                            | 507.15      | 76    | 1419 CY                        |      | SUB TOTAL                                     |  |
|                                 |  |  |  |        | 3       |                                    |           |                 |                       |                                               |               | 3           | 4.0    | GAL          | WATER REPELLENT, SILANE                                      | 514.10      | EST   | 31 CY                          |      | ROUND                                         |  |
|                                 |  |  |  |        | 25      |                                    |           |                 |                       |                                               |               | 25          | 19.22  | CY           | CONCRETE, CLASS B                                            | 541.25      | 2.9   | 1450 CY                        |      | TOTAL                                         |  |
|                                 |  |  |  |        | 95      |                                    |           |                 |                       |                                               |               | 95          | 0      | LF           | BEGIN OPTION AA<br>48" CAAP .105 (2-2/3 X 1/2)               | 601.0257    | -     |                                |      | 204.20 TRENCH EXCAVATION OF EARTH (ROADWAY)   |  |
|                                 |  |  |  |        | 95      |                                    |           |                 |                       |                                               |               | 95          | 95     | LF           | 48" PCCSP .109 (2-2/3 X 1/2)<br>END OPTION AA                | 601.0457    | -     | 1460 CY                        |      | DRAINAGE PIPES                                |  |
|                                 |  |  |  |        |         |                                    |           |                 |                       |                                               |               |             |        |              |                                                              |             |       | 984 CY                         |      | UNDERDRAIN PIPE                               |  |
|                                 |  |  |  |        | 58      |                                    |           |                 |                       |                                               |               | 58          | 0      | LF           | BEGIN OPTION BB<br>24" PCCSP .064 (2-2/3 X 1/2)              | 601.0425    | -     | 108 CY                         |      | UNDERDRAIN CARRIER PIPE                       |  |
|                                 |  |  |  |        | 58      |                                    |           |                 |                       |                                               |               | 58          | 49.5   | LF           | 24" CPEP<br>END OPTION BB                                    | 601.0920    | -     | 35 CY                          |      | DRY SWALE                                     |  |
|                                 |  |  |  |        | 906     |                                    |           |                 |                       |                                               |               | 906         | 0      | LF           | BEGIN OPTION CC<br>18" RCP CLASS III                         | 601.0815    | -     | 2587 CY                        |      | SUB TOTAL                                     |  |
|                                 |  |  |  |        | 906     |                                    |           |                 |                       |                                               |               | 906         | 964    | LF           | 18" CPEP(SL)<br>END OPTION CC                                | 601.2615    | -     | 113 CY                         |      | ROUND                                         |  |
|                                 |  |  |  |        | 248     |                                    |           |                 |                       |                                               |               | 248         | 0      | LF           | BEGIN OPTION DD<br>24" RCP CLASS III                         | 601.0825    | -     | 2700 CY                        |      | TOTAL                                         |  |
|                                 |  |  |  |        | 248     |                                    |           |                 |                       |                                               |               | 248         | 238.8  | LF           | 24" CPEP(SL)<br>END OPTION DD                                | 601.2620    | -     |                                |      | 490.30 SUPERPAVE BITUMINOUS CONCRETE PAVEMENT |  |
|                                 |  |  |  |        |         |                                    |           |                 |                       |                                               |               |             |        |              |                                                              |             |       | 392.7 TON                      |      | US ROUTE 7, TYPE I/S WEARING COURSE           |  |
|                                 |  |  |  |        | 71      |                                    |           |                 |                       |                                               |               | 71          | 0      | LF           | BEGIN OPTION EE<br>30" RCP CLASS III                         | 601.0835    | -     | 1370.5 TON                     |      | US ROUTE 7, TYPE IIS BASECOURSE               |  |
|                                 |  |  |  |        | 71      |                                    |           |                 |                       |                                               |               | 71          | 70     | LF           | 30" CPEP(SL)<br>END OPTION EE                                | 601.2625    | -     | 149.5 TON                      |      | LAKE ROAD, TYPE I/S WEARING COURSE            |  |
|                                 |  |  |  |        | 45      |                                    |           |                 |                       |                                               |               | 45          | 41     | LF           | CLEANING CULV. PIPE, IN-PLACE [0 TO 24 IN., INCL.]           | 601.995     | 4     | 335.0 TON                      |      | LAKE ROAD, TYPE IIS BASE COURSE               |  |
|                                 |  |  |  |        | 16      |                                    |           |                 |                       |                                               |               | 16          | 16     | EACH         | PRECAST REINFORCED CONCRETE CATCH BASIN WITH CAST IRON GRATE | 604.20      | -     | 23.7 TON                       |      | KILBURN ROAD, TYPE I/S WEARING COURSE         |  |
|                                 |  |  |  |        | 2300    |                                    |           |                 |                       |                                               |               | 2300        | 2017   | LF           | 6 INCH UNDERDRAIN PIPE                                       | 605.10      | 58    | 56.1 TON                       |      | DRIVES, TYPE I/S WEARING COURSE               |  |
|                                 |  |  |  |        | 350     |                                    |           |                 |                       |                                               |               | 350         | 383    | LF           | 6 INCH UNDERDRAIN CARRIER PIPE                               | 605.20      | 12    | 2327.5 TON                     |      | SUB TOTAL                                     |  |
|                                 |  |  |  |        |         |                                    |           |                 |                       |                                               |               |             |        |              |                                                              |             |       | 72.5 TON                       |      | ROUND                                         |  |
|                                 |  |  |  |        |         |                                    |           |                 |                       |                                               |               |             |        |              |                                                              |             |       | 2400 TON                       |      | TOTAL                                         |  |

|                            |                        |
|----------------------------|------------------------|
| PROJECT NAME:              | MILTON                 |
| PROJECT NUMBER:            | STP 5800 (2)           |
| FILE NAME: +920289.frm.dgn | PLOT DATE: 23-FEB-2011 |
| PROJECT LEADER: J. SCHULTZ | DRAWN BY: D. LYMAN     |
| DESIGNED BY: D. LYMAN      | CHECKED BY: J. DEVLIN  |
| QUANTITY SHEET 1           | SHEET 7 OF 104         |



QUANTITY SHEET 2

| SUMMARY OF ESTIMATED QUANTITIES |  |  |  |  |         |                                    |           |                 |                       |                                               |               | TOTALS      |        | DESCRIPTIONS |                                            |             |       | DETAILED SUMMARY OF QUANTITIES |      |                              |  |
|---------------------------------|--|--|--|--|---------|------------------------------------|-----------|-----------------|-----------------------|-----------------------------------------------|---------------|-------------|--------|--------------|--------------------------------------------|-------------|-------|--------------------------------|------|------------------------------|--|
|                                 |  |  |  |  | ROADWAY | ROADWAY (NO FEDERAL PARTICIPATION) | LANDSCAPE | EROSION CONTROL | UTILITIES - BID ITEMS | UTILITIES - BID ITEMS (NO FED. / STATE PART.) | FULL CE ITEMS | GRAND TOTAL | FINAL  | UNIT         | ITEMS                                      | ITEM NUMBER | ROUND | QUANTITIES                     | UNIT | ITEMS                        |  |
|                                 |  |  |  |  | 5       |                                    |           |                 |                       |                                               |               | 5           | 9      | EACH         | UNDERDRAIN FLUSHING BASIN                  | 605.95      | -     |                                |      | 613.11 STONE FILL, TYPE II   |  |
|                                 |  |  |  |  | 50      |                                    |           |                 |                       |                                               |               | 50          | 24.3   | HR           | POWER BROOM RENTAL, TYPE II                | 608.31      | EST   | 11 CY                          |      | DRAINAGE PIPE 16 OUTLET      |  |
|                                 |  |  |  |  | 500     |                                    |           |                 |                       |                                               |               | 500         | 0      | MGAL         | DUST CONTROL WITH WATER                    | 609.10      | EST   | 330 CY                         |      | DRAINAGE PIPE 17 OUTLET      |  |
|                                 |  |  |  |  | 3       |                                    |           |                 |                       |                                               |               | 3           | 6.63   | TON          | DUST AND ICE CONTROL WITH CALCIUM CHLORIDE | 609.15      | EST   | 12 CY                          |      | DRAINAGE PIPE 11 STONE PAD   |  |
|                                 |  |  |  |  | 380     |                                    |           |                 |                       |                                               |               | 380         |        | CY           | STONE FILL, TYPE II                        | 613.11      | 15    | 12 CY                          |      | DRY SWALE STONE PAD          |  |
|                                 |  |  |  |  | 250     |                                    |           |                 |                       |                                               |               | 250         | 243    | LF           | GRANITE SLOPE EDGING                       | 616.20      | 4     | 365 CY                         |      | SUB TOTAL                    |  |
|                                 |  |  |  |  | 880     |                                    |           |                 |                       |                                               |               | 880         | 917    | LF           | VERTICAL GRANITE CURB                      | 616.21      | 12    | 15 CY                          |      | ROUND                        |  |
|                                 |  |  |  |  | 225     |                                    |           |                 |                       |                                               |               | 225         | 231    | LF           | REMOVAL OF EXISTING CURB                   | 616.41      | 2     | 380 CY                         |      | TOTAL                        |  |
|                                 |  |  |  |  | 6       |                                    |           |                 |                       |                                               |               | 6           | 7      | EACH         | RELOCATE MAILBOX, SINGLE SUPPORT           | 617.10      | -     |                                |      | 619.17 YIELDING MARKER POSTS |  |
|                                 |  |  |  |  | 1       |                                    |           |                 |                       |                                               |               | 1           | 2      | EACH         | RELOCATE MAILBOX, MULTIPLE SUPPORT         | 617.12      | -     | 1 EACH                         |      | DRAINAGE PIPES               |  |
|                                 |  |  |  |  |         |                                    |           |                 |                       | 2                                             |               | 2           | 2      | EACH         | BOLLARDS                                   | 619.14      | -     | 5 EACH                         |      | UNDERDRAIN PIPE              |  |
|                                 |  |  |  |  | 10      |                                    |           |                 |                       |                                               |               | 10          | 18     | EACH         | YIELDING MARKER POSTS                      | 619.17      | -     | 3 EACH                         |      | UNDERDRAIN CARRIER PIPE      |  |
|                                 |  |  |  |  | 40      |                                    |           |                 |                       |                                               |               | 40          | 0      | LF           | REMOVING AND RESETTNG FENCE                | 620.50      | 3.7   | 1 EACH                         |      | DRY SWALE                    |  |
|                                 |  |  |  |  | 20      |                                    |           |                 |                       |                                               |               | 20          | 80     | LF           | REMOVAL OF EXISTING FENCE                  | 620.55      | 2     |                                |      |                              |  |
|                                 |  |  |  |  | 425     |                                    |           |                 |                       |                                               |               | 425         | 362.5  | LF           | HD STEEL BEAM GUARDRAIL, GALVANIZED        | 621.21      | 7     |                                |      |                              |  |
|                                 |  |  |  |  | 1       |                                    |           |                 |                       |                                               |               | 1           | 1.0    | EACH         | MANUFACTURED TERMINAL SECTION, FLARED      | 621.50      | -     |                                |      |                              |  |
|                                 |  |  |  |  | 155     |                                    |           |                 |                       |                                               |               | 155         | 25     | LF           | REMOVAL AND DISPOSAL OF GUARDRAIL          | 621.80      | 4     |                                |      |                              |  |
|                                 |  |  |  |  |         |                                    |           |                 | 0.31                  | 0.06                                          |               |             | 0.41   | MFBM         | INSULATION BOARD                           | 622.10      | EST   |                                |      |                              |  |
|                                 |  |  |  |  |         |                                    |           |                 | <del>0.46</del>       | <del>0.25</del>                               |               |             | 105    | LF           | SLEEVES FOR UTILITIES (1 X 24")(STEEL)     | 625.10      | EST   |                                |      |                              |  |
|                                 |  |  |  |  |         |                                    |           |                 |                       |                                               |               | 40          | 0      | LF           | SLEEVES FOR UTILITIES (1 X 4")(STEEL)      | 625.10      | EST   |                                |      |                              |  |
|                                 |  |  |  |  | 230     |                                    |           |                 |                       |                                               |               | 230         | 241    | LF           | SLEEVES FOR UTILITIES (1 X 8")(PVC)        | 625.10      | 4     |                                |      |                              |  |
|                                 |  |  |  |  | 4       |                                    |           |                 |                       |                                               |               | 4           | 2      | EACH         | ADJUST ELEVATION OF VALVE BOX              | 629.20      | -     |                                |      |                              |  |
|                                 |  |  |  |  |         |                                    |           |                 | 160                   | 5                                             |               | 165         |        | LF           | SEAMLESS COPPER WATER TUBE (3/4")          | 629.23      | EST   |                                |      |                              |  |
|                                 |  |  |  |  |         |                                    |           |                 | 487.2                 | 585                                           |               | 1243        | 1072.2 | LF           | DUCTILE IRON PIPE, CEMENT-LINED (12")      | 629.24      | EST   |                                |      |                              |  |
|                                 |  |  |  |  |         |                                    |           |                 | <del>500</del>        | <del>735</del>                                |               |             |        | LF           | DUCTILE IRON PIPE, CEMENT-LINED (6")       | 629.24      | EST   |                                |      |                              |  |
|                                 |  |  |  |  |         |                                    |           |                 |                       | <del>40</del> 3.5                             |               | 10          | 3.5    | LF           | DUCTILE IRON PIPE, CEMENT-LINED (6")       | 629.24      | EST   |                                |      |                              |  |
|                                 |  |  |  |  |         |                                    |           |                 | <del>3</del> 6        | 1                                             |               | 4           | 7      | EACH         | EXTENSION SERVICE BOX AND CURB STOP (3/4") | 629.25      | -     |                                |      |                              |  |
|                                 |  |  |  |  |         |                                    |           |                 | 1                     | 4                                             |               | 5           | 5      | EACH         | GATE VALVE WITH VALVE BOX (12")            | 629.27      | -     |                                |      |                              |  |
|                                 |  |  |  |  |         |                                    |           |                 |                       | 1                                             |               | 1           | 1      | EACH         | GATE VALVE WITH VALVE BOX (6")             | 629.27      | -     |                                |      |                              |  |
|                                 |  |  |  |  |         |                                    |           |                 |                       | 1                                             |               | 1           | 1      | EACH         | HYDRANT                                    | 629.28      | -     |                                |      |                              |  |
|                                 |  |  |  |  |         |                                    |           |                 | <del>3</del> 6        | 1                                             |               | 4           | 7      | EACH         | CORPORATION STOP (3/4")                    | 629.39      | -     |                                |      |                              |  |
|                                 |  |  |  |  |         |                                    |           |                 |                       | 1                                             |               | 1           | 1      | LS           | TRANSFER TO NEW SYSTEM, WATER SYSTEM       | 629.42      | -     |                                |      |                              |  |
|                                 |  |  |  |  |         |                                    |           |                 |                       | <del>4</del> 5 2                              |               | 1.5         | 2      | TON          | CRUSHED STONE BEDDING                      | 629.54      | EST   |                                |      |                              |  |
|                                 |  |  |  |  | 1000    |                                    |           |                 |                       |                                               |               | 1000        | 62.8   | HR           | UNIFORMED TRAFFIC OFFICERS                 | 630.10      | EST   |                                |      |                              |  |
|                                 |  |  |  |  | 3000    |                                    |           |                 |                       |                                               |               | 3000        | 3852.8 | HR           | FLAGGERS                                   | 630.15      | EST   |                                |      |                              |  |
|                                 |  |  |  |  |         |                                    |           |                 |                       |                                               | 1             | 1           | 1      | LS           | FIELD OFFICE, ENGINEERS                    | 631.10      | -     |                                |      |                              |  |
|                                 |  |  |  |  |         |                                    |           |                 |                       |                                               | 1             | 1           | 1      | LS           | TESTING EQUIPMENT, CONCRETE                | 631.16      | -     |                                |      |                              |  |
|                                 |  |  |  |  |         |                                    |           |                 |                       |                                               | 1             | 1           | 1      | LS           | TESTING EQUIPMENT, BITUMINOUS              | 631.17      | -     |                                |      |                              |  |
|                                 |  |  |  |  |         |                                    |           |                 |                       |                                               | 3000          | 3000        | 1251   | DL           | FIELD OFFICE TELEPHONE (N.A.B.I.)          | 631.26      | -     |                                |      |                              |  |
|                                 |  |  |  |  | 1       |                                    |           |                 |                       |                                               |               | 1           | 1      | LS           | MOBILIZATION/DEMOBILIZATION                | 635.11      | -     |                                |      |                              |  |
|                                 |  |  |  |  | 1       |                                    |           |                 |                       |                                               |               | 1           | 1      | LS           | TRAFFIC CONTROL                            | 641.10      | -     |                                |      |                              |  |



# QUANTITY SHEET 3

|                              |                        |
|------------------------------|------------------------|
| PROJECT NAME: MILTON         |                        |
| PROJECT NUMBER: STP 5800 (2) |                        |
| FILE NAME: t920289.frm.dgn   | PLOT DATE: 23-FEB-2011 |
| PROJECT LEADER: J. SCHULTZ   | DRAWN BY: D. LYMAN     |
| DESIGNED BY: D. LYMAN        | CHECKED BY: J. DEVLIN  |
| QUANTITY SHEET 3             | SHEET 9 OF 104         |



# ITEM DETAIL SHEET

|                              |                        |
|------------------------------|------------------------|
| PROJECT NAME: MILTON         |                        |
| PROJECT NUMBER: STP 5800 (2) |                        |
| FILE NAME: *920289.frm.dgn   | PLOT DATE: 23-FEB-2011 |
| PROJECT LEADER: J. SCHULTZ   | DRAWN BY: D. LYMAN     |
| DESIGNED BY: D. LYMAN        | CHECKED BY: J. DEVLIN  |
| ITEM DETAIL SHEET            | SHEET 10 OF 104        |



# DRAINAGE DETAIL SHEET

|                              |                        |
|------------------------------|------------------------|
| PROJECT NAME: MILTON         |                        |
| PROJECT NUMBER: STP 5800 (2) |                        |
| FILE NAME: I92D289.frm.dgn   | PLOT DATE: 23-FEB-2011 |
| PROJECT LEADER: J. SCHULTZ   | DRAWN BY: D. LYMAN     |
| DESIGNED BY: D. LYMAN        | CHECKED BY: J. DEVLIN  |
| DRAINAGE SHEET               | SHEET II OF 104        |



# EARTHWORKS

|                              |                        |
|------------------------------|------------------------|
| PROJECT NAME: MILTON         |                        |
| PROJECT NUMBER: STP 5800 (2) |                        |
| FILE NAME: t92D289.frm.dgn   | PLOT DATE: 23-FEB-2011 |
| PROJECT LEADER: J. SCHULTZ   | DRAWN BY: D. LYMAN     |
| DESIGNED BY: D. LYMAN        | CHECKED BY: J. DEVLIN  |
| EARTHWORKS SHEET             | SHEET 12 OF 104        |



# RIGHT - OF - WAY DETAIL SHEET

[illegible]

|       |                            |
|-------|----------------------------|
| BF    | -BARRIER FENCE             |
| D & C | -DISCONNECT & CONNECT      |
| EC    | -EROSION CONTROL           |
| (P)   | -PERMANENT                 |
| (T)   | -TEMPORARY                 |
| DR.   | -DRAINAGE RIGHT            |
| DIT.  | -DITCHING RIGHT            |
| CH.   | -CHANNEL RIGHT             |
| DRIVE | -DRIVE RIGHT               |
| CUL.  | -CULVERT RIGHT             |
| C&T   | -CLEARING & TRIMMING RIGHT |
| SR    | -SLOPE RIGHT               |
| UE    | -UTILITY EASEMENT          |

PLOT DATE 10/25/10

|                                             |                               |
|---------------------------------------------|-------------------------------|
| PROJECT NAME: <b>MILTON</b>                 |                               |
| PROJECT NUMBER: <b>STP 5800 (2)</b>         |                               |
| FILE NAME: <b>r 92d289 detail sheet.xls</b> | PLOT DATE:                    |
| PROJECT LEADER: <b>J. SHULTZ</b>            | DRAWN BY: <b>M.R.</b>         |
| DESIGNED BY: <b>D. LYMAN</b>                | CHECKED BY: <b>E.P.</b>       |
| <b>R.O.W. DETAIL SHEET #1</b>               | SHEET <b>13</b> OF <b>104</b> |



[illegible]

APPROVED: HARRY PETROVS DATE: 01/29/10  
CHIEF, PLANS & TITLES

PLOT DATE 10/25/10



# RIGHT - OF - WAY DETAIL SHEET

[illegible]

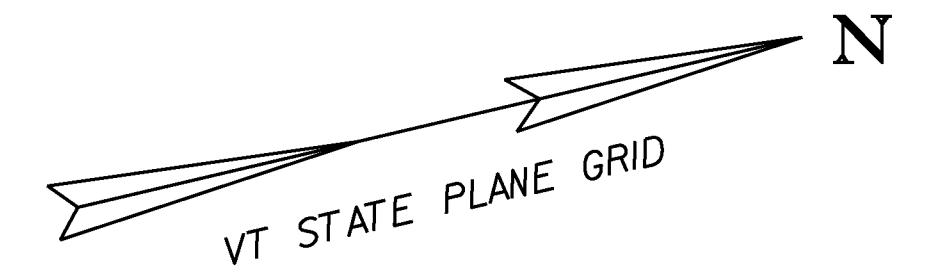
APPROVED: HARRY PETROVS DATE: 01/29/10  
CHIEF, PLANS & TITLES

PLOT DATE 10/25/10



CONSTRUCT DIVE  
STA 101+52.44 LT (20.0' - PAVED)  
629.20 ADJUST ELEVATION OF VALVE BOX  
STA 101+95.31 LT  
210.10 COLD PLANING, BITUMINOUS CONCRETE PAVEMENT  
STA 100+00.00 - 100+50.00

2  
**MASON, PETER M.  
& TONYA M.**

[illegible]

EXISTING & PROPOSED WATERLINES  
ARE FOR REFERENCE ONLY. PLEASE  
REFER TO WATERLINE SHEETS 102-104  
R.O.W. LAYOUT SHEET 1

**FOR R.O.W.  
PURPOSES  
ONLY**

|                 |              |
|-----------------|--------------|
| PROJECT NAME:   | MILTON       |
| PROJECT NUMBER: | STP 5800 (2) |

FILE NAME: 92d289\ROW\r92d289r11.i  
PROJECT LEADER: J. SCHULTZ  
DESIGNED BY: D. LYMAN  
R.O.W. SHEET 25 OF 28

PLOT DATE: 23-FEB-2011  
DRAWN BY: D. LYMAN  
CHECKED BY: J. DEVLIN  
SHEET 16 OF 104





900.675 SPECIAL PROVISION  
(PRECAST CONCRETE GRAVITY  
RETAINING WALL WITH FENCE)

STA 300+70.00 LT - 302+00.00 LT  
STA 300+70.00 RT - 302+00.00 RT

CONSTRUCT DRIVE

STA 200+32.31 LT (13.9' - PAVED)  
STA 200+49.49 LT (11.3' - PAVED)  
STA 106+63.93 RT (18.0' - PAVED)  
STA 107+73.89 RT (57.5' - PAVED)

401.10 AGGREGATE SURFACE COURSE

STA 104+31.22 LT (15.9' - GRAVEL DRIVE)  
STA 104+83.50 LT (18.7' - GRAVEL DRIVE)  
STA 105+87.17 LT (23.7' - GRAVEL DRIVE)

616.20 GRANITE SLOPE EDGING

STA 105+83.13 RT - 106+55.80 RT  
STA 106+66.88 RT - 107+45.52 RT (ISLAND)

616.21 VERTICAL GRANITE CURB

STA 106+75.00 LT - 300+65.45 LT 95' RAD  
STA 300+65.45 LT - 302+00.00 LT  
STA 108+34.53 LT - 301+00.00 RT 43' RAD  
STA 108+34.53 LT - 108+66.68 LT  
STA 301+00.00 RT - 302+00.00 RT

616.41 REMOVAL OF EXISTING CURB

STA 106+14.19 RT - 106+54.51 RT  
STA 106+65.77 RT - 107+45.70 RT

617.10 RELOCATE MAILBOX, SINGLE SUPPORT

STA 104+43.42 LT  
STA 104+97.78 LT  
STA 109+77.14 RT

617.12 RELOCATE MAILBOX, MULTIPLE SUPPORT

STA 105+67.34 RT

620.50 REMOVING AND RESETTNG FENCE

STA 106+30.34 LT - 106+60.00 LT

620.55 REMOVAL OF EXISTING FENCE

STA 301+40.00 LT - 301+76.90 LT

629.20 ADJUST ELEVATION OF VALVE BOX

STA 106+16.47 RT

STA 106+29.59 RT

STA 107+11.80 RT

203.28 EXCAVATION OF SURFACES AND PAVEMENTS

STA 105+29.22 RT - 106+14.61 RT

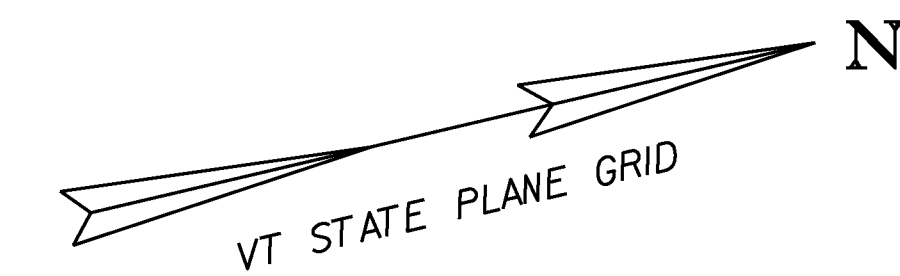
STA 105+98.99 LT - 106+23.85 LT

STA 106+28.45 LT - 300+95.64 LT

4  
**GARROW, PAUL G.  
& TINA M.**

EXISTING UTILITY  
EASEMENT - TOWN  
OF MILTON

REMOVE & REPLACE(T)  
REMOVE(T)  
INSTALL & MAINT(P)  
SR(T)  
INSTALL & MAINT(P)  
SR(T)  
REMOVE & REPLACE(T)  
REMOVE(T)  
INSTALL & MAINT(P)  
SR(T)  
APPROACH(T)  
MATCH LINE STA 302+00



2  
**MASON, PETER M.  
& TONYA M.**

3  
**RITCHIE, LAURIE J.  
& JOHN L.**

END MAINT. AGREE. ZONE #2  
TH3 300+46 CL  
LENGTH=32'

END RELINQUISHMENT #2  
TH3 301+00.00 23.12'RT

7  
**HAMILTON, RICHARD A.  
& JANE E.**

60' R.O.W. IN COMMON WITH  
KENDREW, JERRY & PAMELA  
AND  
KRAUSE, JUSTIN & ZENDA  
(EXISTING)

STATE OF VERMONT  
PROJ. ST 102L 1937  
VOL. 29 PG. 387

STATE OF VERMONT  
HWY. EASE.  
3 ROADS

BEGIN MAINT. AGREE. ZONE #1  
TH80 200+19 CL

BEGIN RELINQUISHMENT #2  
TH3 300+39.54 20.64'RT  
= 107+75.75 45.00'LT

STATE OF VERMONT  
WD VOL. 27 PG. 818 1929

STATE OF VERMONT  
PROJ. ST 102L 1937  
VOL. 29 PG. 387

STATE OF VERMONT  
HWY. EASE.  
3 ROADS

BEGIN MAINT. AGREE. ZONE #2  
TH3 300+14 CL

END RELINQUISHMENT #1  
106+34.40 35.00'RT

STATE OF VERMONT  
PROJ. ST 102L 1937  
VOL. 29 PG. 387

STATE OF VERMONT  
PROJ. ST 102L 1937  
VOL. 29 PG. 387

STATE OF VERMONT  
HWY. EASE.  
3 ROADS

BEGIN MAINT. AGREE. ZONE #2  
TH3 300+14 CL

END RELINQUISHMENT #1  
106+34.40 35.00'RT

CURVE DATA  
Δ = 77°40'45"  
D = 190°59'09"  
R = 30.00'  
T = 24.15'  
L = 40.67'  
E = 8.52'  
BANK = N/A FT / FT

END MAINT. AGREE. ZONE #1  
TH80 200+36 CL  
LENGTH=17'

END RELINQUISHMENT #1  
106+34.40 35.00'RT

BEGIN MAINT. AGREE. ZONE #2  
TH3 300+14 CL

END RELINQUISHMENT #1  
106+34.40 35.00'RT

HEIRS OF  
MURETTA  
KILBURN

10  
**DOUCETTE, WILLIAM P.  
& SOBIESKI, JANET**

621.21 HD STEEL BEAM GUARDRAIL, GALVANIZED  
STA 104+00.00 RT - 104+67.26 RT  
621.50 MANUFACTURED TERMINAL SECTION, FLARED  
STA 104+67.26 RT - 105+04.79 RT  
621.80 REMOVAL AND DISPOSAL OF GUARDRAIL  
STA 105+35.69 RT - 105+92.83 RT  
625.10 SLEEVES FOR UTILITIES (1 x 8") (PVC)  
FOR FUTURE USE - PLUG OR CAP BOTH ENDS  
STA 106+90.00 RT - 108+20.00 RT  
STA 108+25.00 LT - 108+25.00 RT  
STA 300+60.00 LT - 300+60.00 RT  
900.675 SPECIAL PROVISION  
(HAND-PLACED BITUMINOUS CONCRETE MATERIAL, DRIVES)  
STA 104+31.22 LT (PAVED DRIVE APRON)  
STA 104+83.50 LT (PAVED DRIVE APRON)  
STA 105+87.17 LT (PAVED DRIVE APRON)

9  
**DAMSCO, LLC, LESSOR;  
R+F DAMON REALTY, INC.,  
LESSEE  
d/b/a THE DAM STORE**

8  
**JOHNSON, ERIK L.  
& BRODEUR-JOHNSON, CATHERINE M.**

| REMOVE & REPLACE PROPERTY MARKERS |                          |
|-----------------------------------|--------------------------|
| EXISTING                          | PROPOSED                 |
| L.P. 108+52.08 24.22' RT          | L.P. 108+55.17 33.44' RT |
| L.P. 301+76.70 24.29' LT          | L.P. 301+76.70 23.75' LT |

EXISTING R.O.W.  
(CALCULATED)



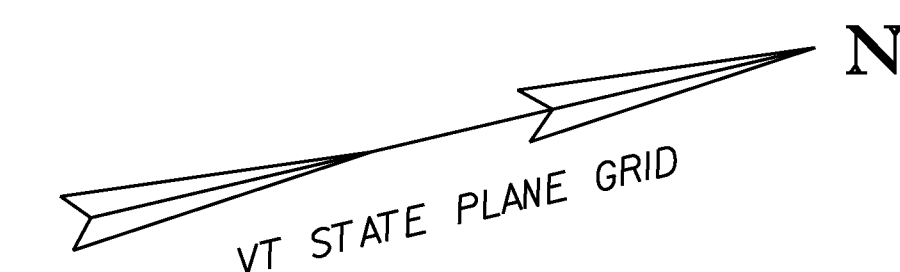
EXISTING & PROPOSED WATERLINES  
ARE FOR REFERENCE ONLY. PLEASE  
REFER TO WATERLINE SHEETS 102-104

FOR R.O.W.  
PURPOSES  
ONLY

|                       |                                                                                          |
|-----------------------|------------------------------------------------------------------------------------------|
| R.O.W. LAYOUT SHEET 2 |                                                                                          |
| PROJECT NAME:         | MILTON                                                                                   |
| PROJECT NUMBER:       | STP 5800 (2)                                                                             |
| FILE NAME:            | 92d289\ROW\92d289r12.i                                                                   |
| PROJECT LEADER:       | J. SCHULTZ                                                                               |
| DESIGNED BY:          | D. LYMAN                                                                                 |
| R.O.W. SHEET 26 OF 28 | PLOT DATE: 23-FEB-2011<br>DRAWN BY: D. LYMAN<br>CHECKED BY: J. DEVLIN<br>SHEET 17 OF 104 |

LINES SHOWN ON THIS PLAN AS EXISTING  
PROPERTY LINES P/L ARE BELIEVED TO  
BE ACCURATE BUT SHOULD NOT BE RELIED  
UPON FOR PURPOSES UNRELATED TO THE  
STATE OF VERMONT'S ACQUISITION OF LAND  
AND RIGHTS FOR THIS PROJECT.



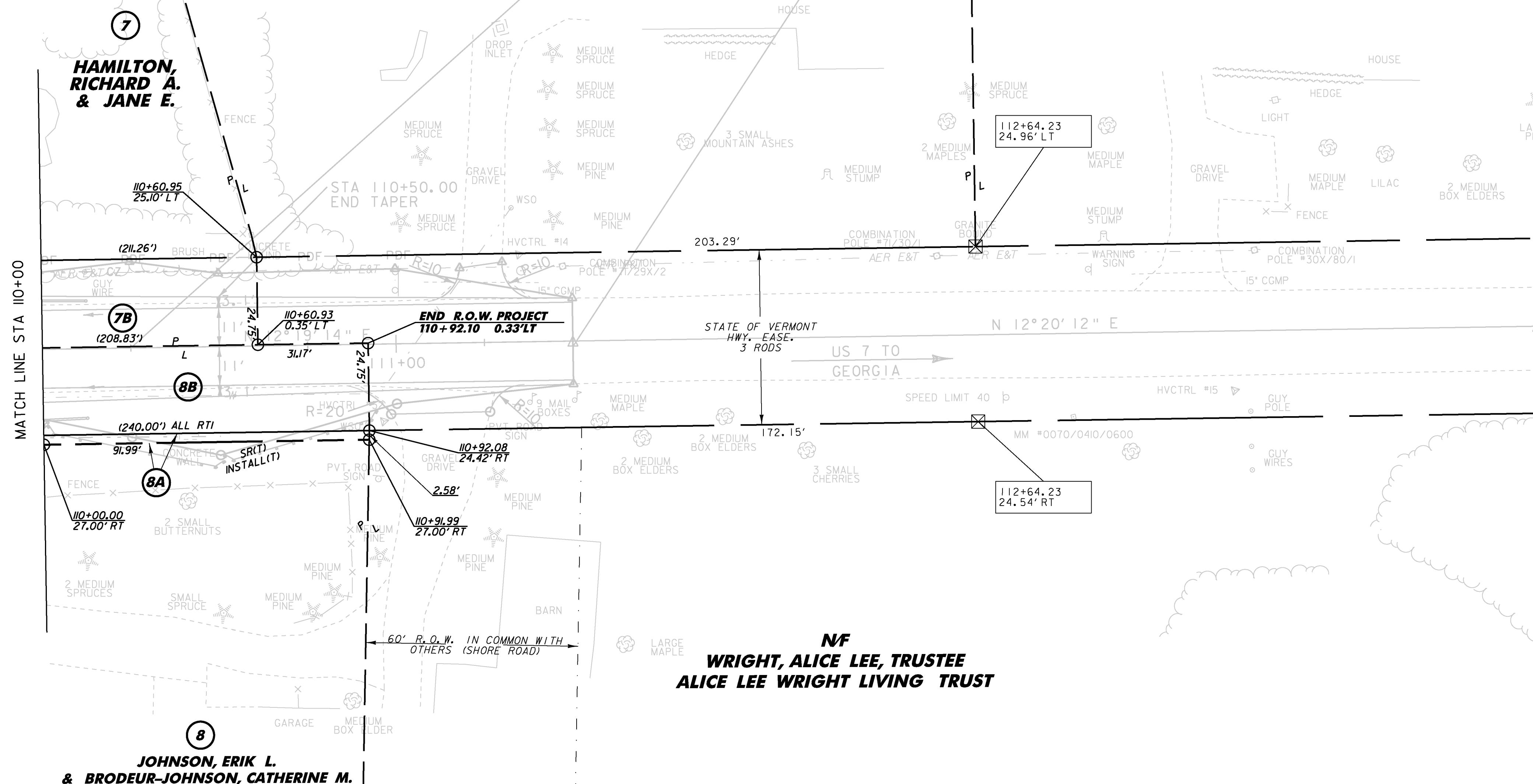


401.10 AGGREGATE SURFACE COURSE  
STA 111+12.33 RT (28.0' - GRAVEL DRIVE)  
STA 111+24.25 LT (12.1' - GRAVEL DRIVE)  
900.675 SPECIAL PROVISION  
(HAND-PLACED BITUMINOUS CONCRETE MATERIAL, DRIVES)  
STA 111+12.33 RT (PAVED DRIVE APRON)  
STA 111+24.25 LT (PAVED DRIVE APRON)

203.16 SOLID ROCK EXCAVATION  
STA 110+41.01 RT (CONCRETE WALL)  
210.10 COLD PLANING, BITUMINOUS CONCRETE PAVEMENT  
STA 111+00.00 - 111+50.00

**NF**  
**DOWD, KEVIN & THERESE J.**

STATION 110+25.00  
END PROJECT  
BEGIN APPROACH  
STATION 111+50.00  
END APPROACH



**NF**  
**WRIGHT, ALICE LEE, TRUSTEE**  
**ALICE LEE WRIGHT LIVING TRUST**

**JOHNSON, ERIK L.**  
**& BRODEUR-JOHNSON, CATHERINE M.**

LINES SHOWN ON THIS PLAN AS EXISTING  
PROPERTY LINES P/L ARE BELIEVED TO  
BE ACCURATE BUT SHOULD NOT BE RELIED  
UPON FOR PURPOSES UNRELATED TO THE  
STATE OF VERMONT'S ACQUISITION OF LAND  
AND RIGHTS FOR THIS PROJECT.

EXISTING R.O.W.  
(CALCULATED)

0 20 40  
SCALE IN FEET

EXISTING & PROPOSED WATERLINES  
ARE FOR REFERENCE ONLY. PLEASE  
REFER TO WATERLINE SHEETS 102-104

**FOR R.O.W.  
PURPOSES  
ONLY**

**R.O.W. LAYOUT SHEET 3**

PROJECT NAME: MILTON  
PROJECT NUMBER: STP 5800 (2)

FILE NAME: 92d289\ROW\92d289r13.i  
PROJECT LEADER: J. SCHULTZ  
DESIGNED BY: D. LYMAN  
R.O.W. SHEET 27 OF 28

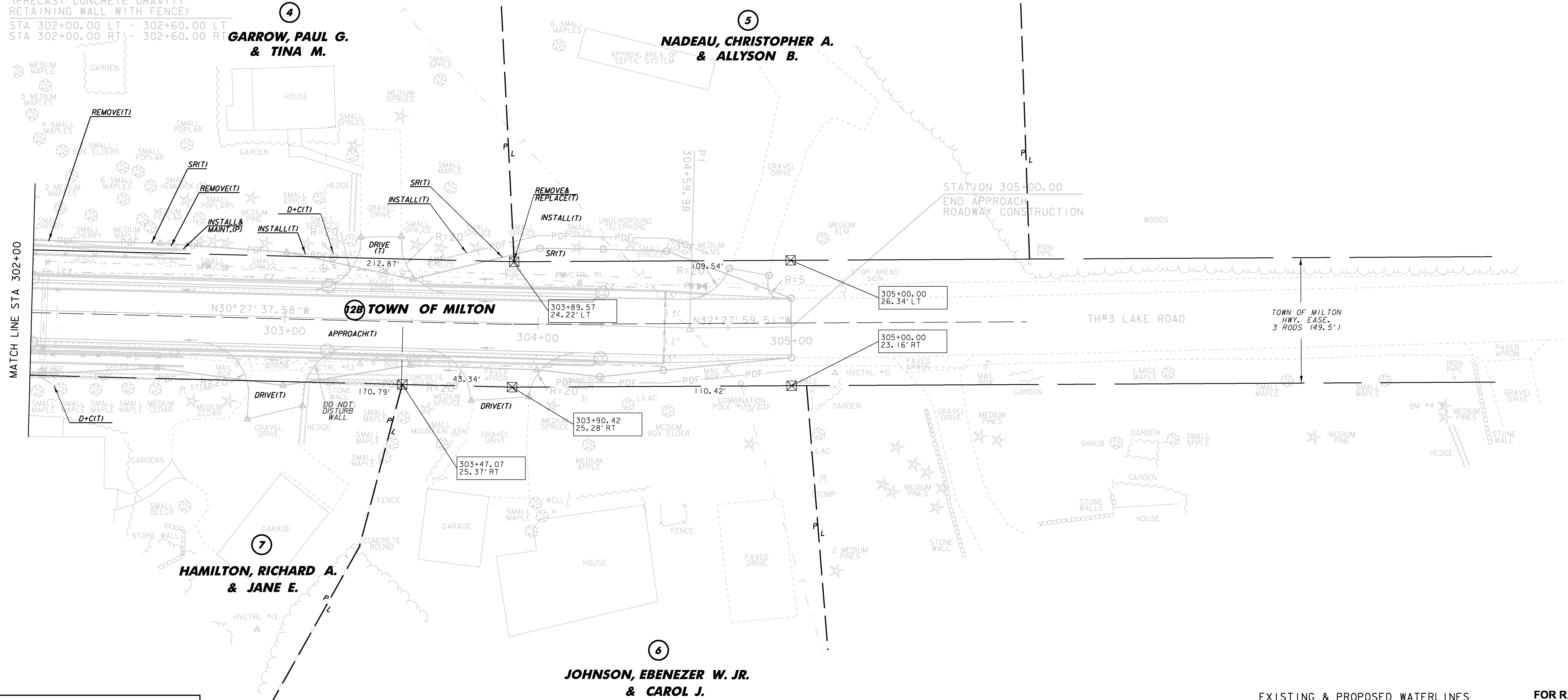
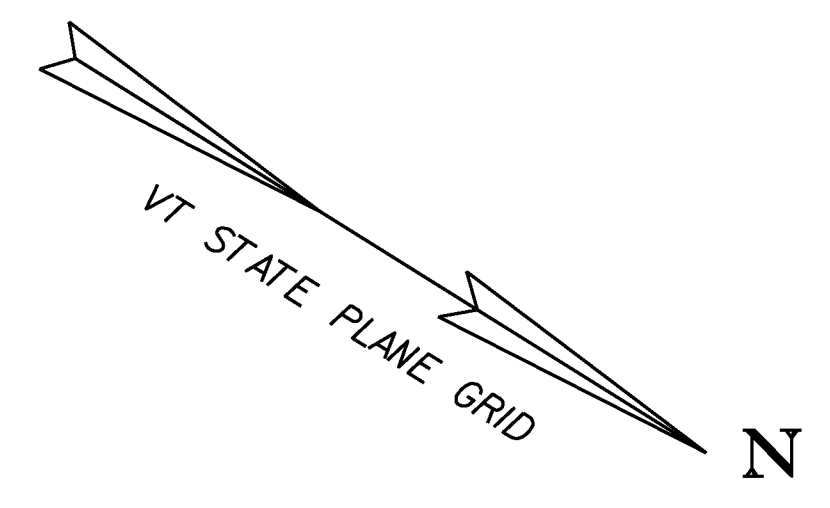
PLOT DATE: 23-FEB-2011  
DRAWN BY: D. LYMAN  
CHECKED BY: J. DEVLIN  
SHEET 18 OF 104



401.10 AGGREGATE SURFACE COURSE  
STA 302+97.06 RT (22.4' - GRAVEL DRIVE)  
STA 303+37.16 LT (16.0' - GRAVEL DRIVE)  
STA 303+85.78 RT (22.7' - GRAVEL DRIVE)  
STA 304+83.64 LT (15.8' - GRAVEL DRIVE)  
900.675 SPECIAL PROVISION  
(HAND-PLACED BITUMINOUS CONCRETE MATERIAL, DRIVES)  
STA 302+97.06 RT (PAVED DRIVE APRON)  
STA 303+37.16 LT (PAVED DRIVE APRON)  
STA 303+85.78 RT (PAVED DRIVE APRON)  
STA 304+83.64 LT (PAVED DRIVE APRON)  
900.675 SPECIAL PROVISION  
(PRECAST CONCRETE GRAVITY  
RETAINING WALL WITH FENCE)  
STA 302+00.00 LT - 302+60.00 LT  
STA 302+00.00 RT - 302+60.00 RT

616.21 VERTICAL GRANITE CURB  
STA 302+00.00 LT - 303+20.50 LT  
STA 302+00.00 RT - 302+77.72 RT  
STA 303+16.94 RT - 303+65.31 RT  
STA 303+53.91 LT - 304+67.06 LT  
STA 304+05.68 RT - 304+50.00 RT  
617.10 RELOCATE MAILBOX, SINGLE SUPPORT  
STA 302+81.43 RT  
STA 303+35.38 RT  
STA 303+56.30 RT  
210.10 COLD PLANING, BITUMINOUS PAVEMENT  
STA 304+50.00 - 305+00.00

| REMOVE & REPLACE PROPERTY MARKERS |                          |
|-----------------------------------|--------------------------|
| EXISTING                          | PROPOSED                 |
| I.P. PIPE 303+89.90 24.75' LT     | I.P. 303+89.57 24.22' LT |



LINES SHOWN ON THIS PLAN AS EXISTING  
PROPERTY LINES P/L ARE BELIEVED TO  
BE ACCURATE BUT SHOULD NOT BE RELIED  
UPON FOR PURPOSES UNRELATED TO THE  
STATE OF VERMONT'S ACQUISITION OF LAND  
AND RIGHTS FOR THIS PROJECT.



EXISTING & PROPOSED WATERLINES  
ARE FOR REFERENCE ONLY. PLEASE  
REFER TO WATERLINE SHEETS 102-104

FOR R.O.W.  
PURPOSES  
ONLY

R.O.W. LAYOUT SHEET 4

|                 |                        |
|-----------------|------------------------|
| PROJECT NAME:   | MILTON                 |
| PROJECT NUMBER: | STP 5800 (2)           |
| FILE NAME:      | 92d289\ROW\92d289r14.i |
| PROJECT LEADER: | J. SCHULTZ             |
| DESIGNED BY:    | D. LYMAN               |
| R.O.W. SHEET    | 28 OF 28               |
| PLOT DATE:      | 23-FEB-2011            |
| DRAWN BY:       | D. LYMAN               |
| CHECKED BY:     | J. DEVLIN              |
| SHEET           | 19 OF 104              |



GPS CONTROL POINTS

HVCTRL #1

STANDARD DISC STAMPED

"DAUNAIS AZ MK 2004 "

N = 781132.7590

E = 1480472.7970

ELEV. = 293.6000

GENERAL LOCATION, MILTON, VT. TO REACH FROM THE INTERSECTION OF VT ROUTE 104A AND US ROUTE 7 IN GEORGIA, GO SOUTH ALONG US ROUTE 7 FOR 3.0 MI TO THE INTERSECTION OF LAKE ROAD RIGHT. CONTINUE STRAIGHT AHEAD AND GO SOUTH ALONG US ROUTE 7 FOR 0.7 MI TO THE INTERSECTION OF HOWARD DRIVE RIGHT AND THE SITE OF THE MARK ON THE RIGHT. IT IS SET IN THE GRASSY TRIANGLE FORMED BY US ROUTE 7 AND HOWARD DRIVE OPPOSITE THE WEST END OF THE ARROWHEAD LAKE DAM. THE MARK IS SET ABOUT 5 CM BELOW GROUND SURFACE IN THE TOP OF A 30 CM DIAMETER CONCRETE MONUMENT. IT IS 14.7 M WEST SOUTHWEST OF AND ABOUT 1.0 M HIGHER THAN THE CENTERLINE OF US ROUTE 7, 9.3 M EAST SOUTHEAST OF THE CENTERLINE OF HOWARD DRIVE, 17.7 M SOUTHEAST OF POLE NO 11 01, 17.1 M NORTH OF THE NORTHWEST CORNER OF A STONE RETAINING WALL, AND 0.2 M EAST NORTHEAST OF A FIBERGLASS WITNESS POST

HVCTRL #2

STANDARD DISC STAMPED

"DAUNAIS 2004 "

\*\* N = 784642.4690

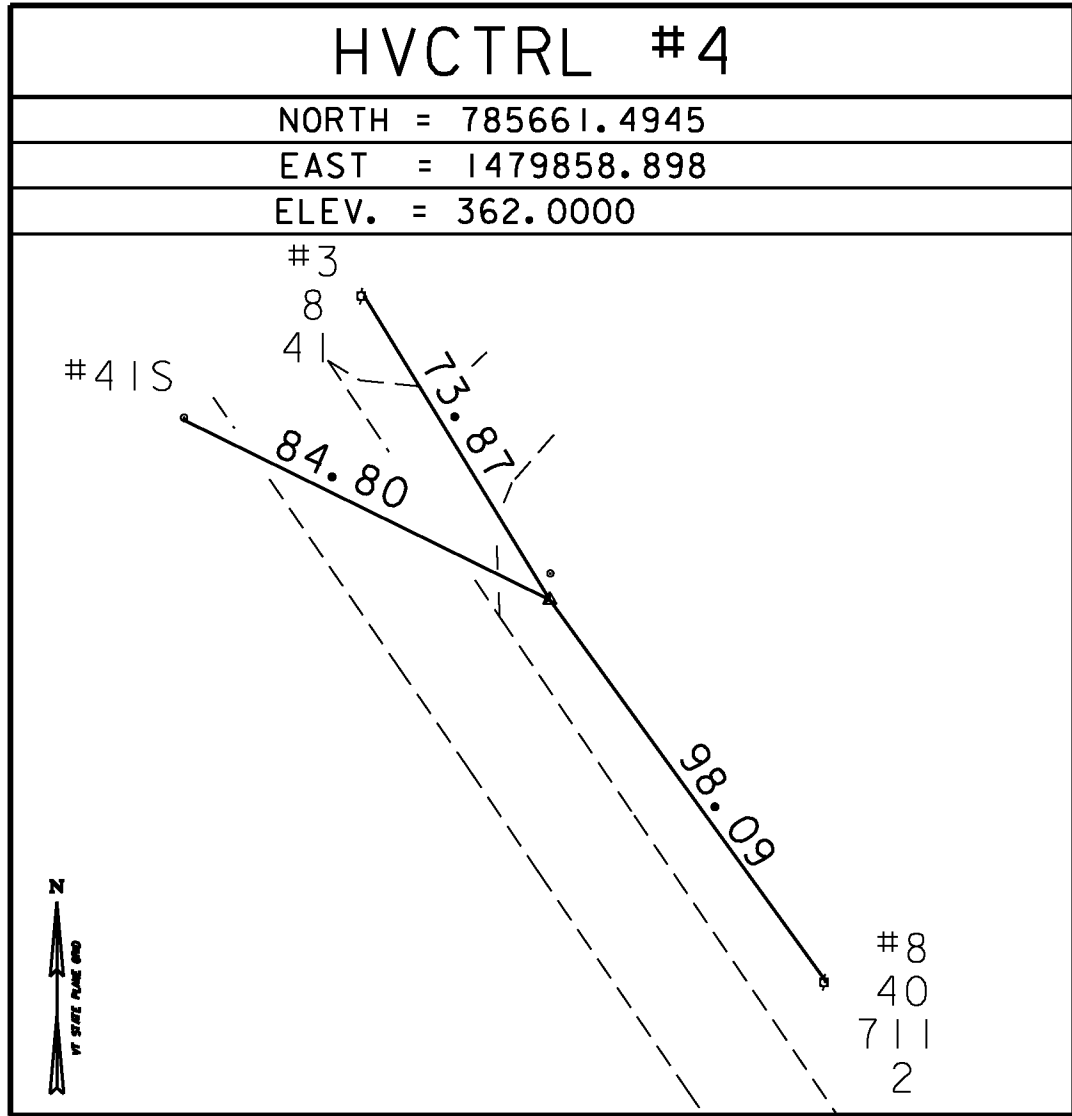
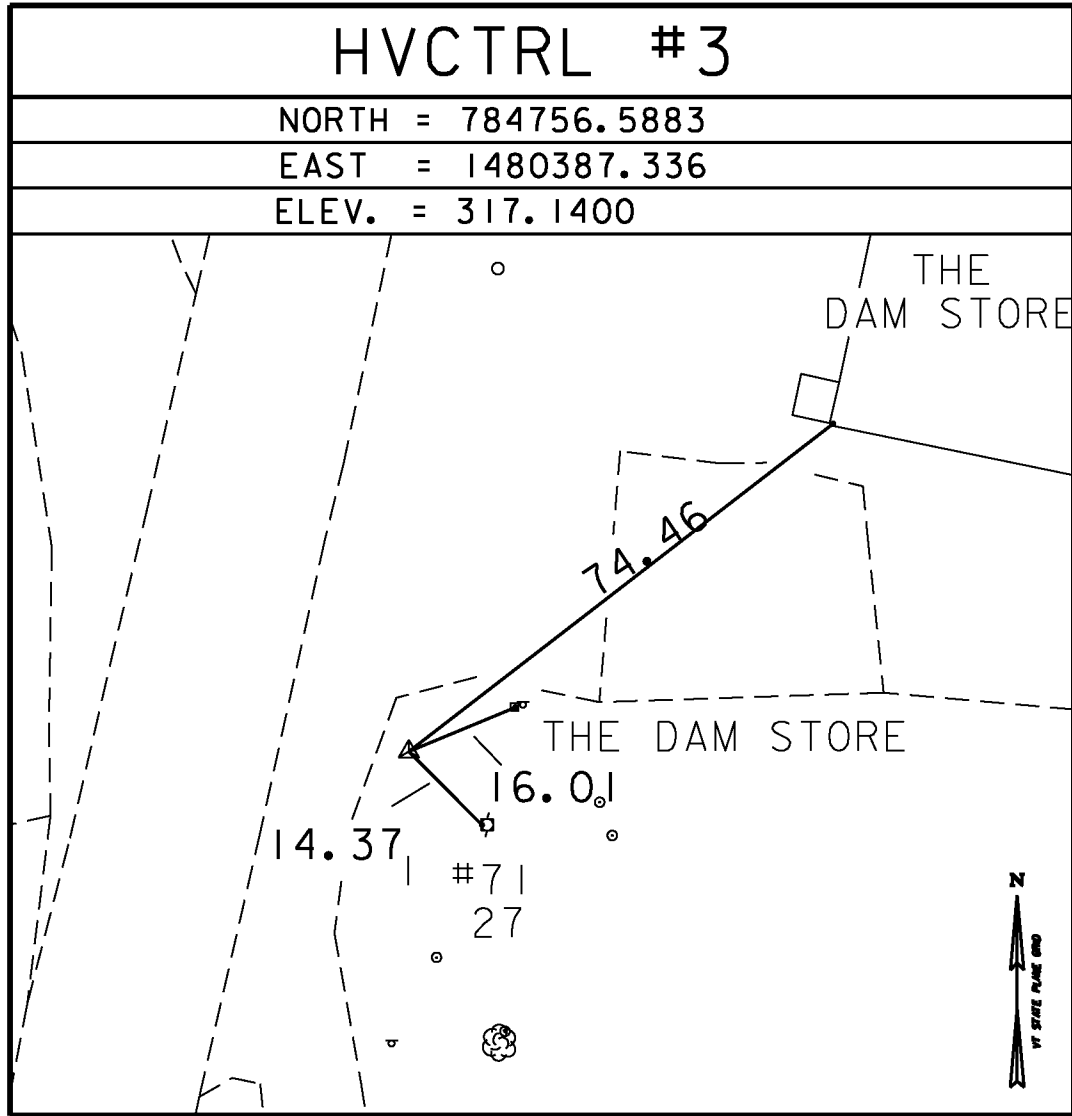
E = 1480244.1920

ELEV. = 319.5500

GENERAL LOCATION, MILTON, VT. OWNERSHIP, NICK DAUNAIS, 82 US ROUTE 7 NORTH, MILTON, VT 05468. TO REACH FROM THE INTERSECTION OF VT ROUTE 104A AND US ROUTE 7 IN GEORGIA, GO SOUTH ALONG US ROUTE 7 FOR 3.0 MI TO THE INTERSECTION OF LAKE ROAD RIGHT. CONTINUE STRAIGHT AHEAD AND GO SOUTH ALONG US ROUTE 7 FOR ABOUT 50 M TO THE INTERSECTION OF A GRAVEL DRIVE RIGHT LEADING TO HOUSE NO 82 AND THE SITE OF THE MARK ON THE RIGHT IN A LAWN JUST NORTH OF THE DRIVEWAY. THE MARK IS SET ABOUT 12 CM BELOW GROUND SURFACE IN THE TOP OF A 30 CM DIAMETER CONCRETE MONUMENT POURED 1.3 M DEEP. IT IS 25.8 M NORTHWEST OF AND ABOUT 1.2 M HIGHER THAN THE CENTERLINE OF US ROUTE 7, 3.7 M NORTHEAST OF THE CENTERLINE OF THE GRAVEL DRIVE, 34.5 M EAST OF POLE NO 26-1/5B, 22.1 M SOUTHWEST OF THE SOUTH CORNER OF A SMALL GARAGE, AND 4.7 M SOUTH SOUTHEAST OF THE SOUTHWEST END OF A PICKET FENCE.

\* DESCRIPTION PROVIDED BY VERMONT AGENCY OF TRANSPORTATION GEODETIC SURVEY UNIT

TRAVERSE TIES



\* MAIN TRAVERSE COMPLETED: JUNE 14, 2004 BY L.ORVIS PC/ J.HULETT

ALIGNMENT TIES

| DATUM      |            |
|------------|------------|
| VERTICAL   | NAVD 88    |
| HORIZONTAL | NAD-83(96) |
| ADJUSTMENT | UNAJUSTED  |

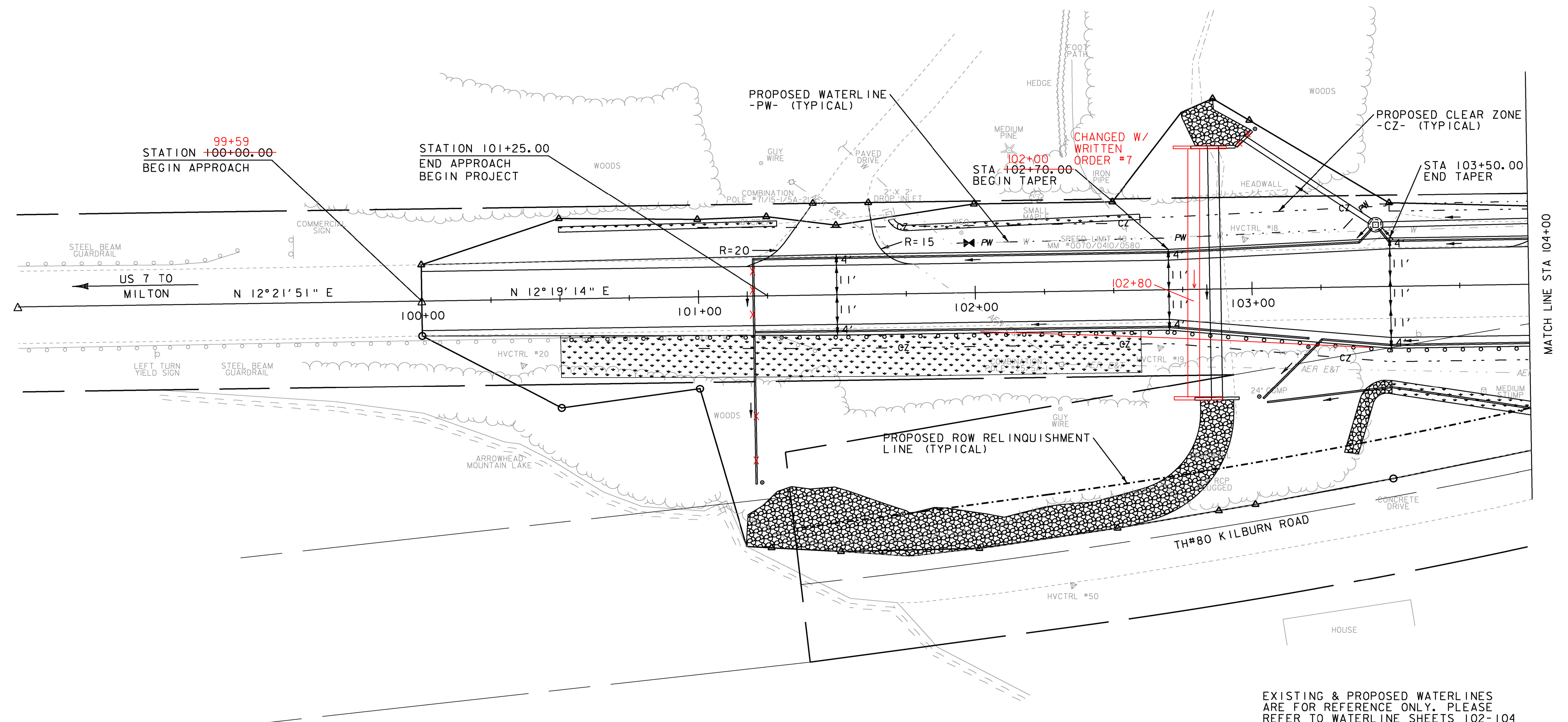
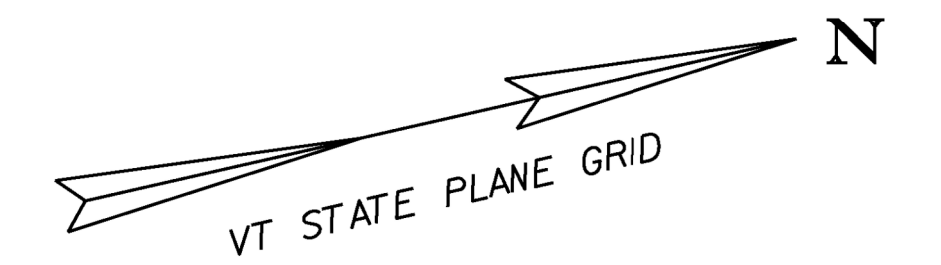
|                                       |                        |
|---------------------------------------|------------------------|
| PROJECT NAME: MILTON                  |                        |
| PROJECT NUMBER: STP 5800 (2)          |                        |
| FILE NAME: 92d289\Survey\92d289+1.dgn | PLOT DATE: 23-FEB-2011 |
| PROJECT LEADER: J. SCHULTZ            | DRAWN BY: J.H. & R.B.  |
| DESIGNED BY: D. LYMAN                 | CHECKED BY: P. HODGE   |
| TIE SHEET                             | SHEET 20 OF 104        |



621.80 REMOVAL AND DISPOSAL OF GUARDRAIL  
STA 100+50.00 RT - 101+42.67 RT  
621.21 HD STEEL BEAM GUARDRAIL, GALVANIZED  
STA 100+50.00 RT - 104+00.00 RT

NOTE: MATCH PROPOSED HD STEEL BEAM GUARDRAIL  
INTO EXISTING GUARDRAIL AT STA 100+50.00 RT

CONSTRUCT DRIVE  
STA 101+52.44 LT (20.0' - PAVED)  
629.20 ADJUST ELEVATION OF VALVE BOX  
STA 101+95.31 LT  
210.10 COLD PLANING, BITUMINOUS CONCRETE PAVEMENT  
STA 100+00.00 - 100+50.00

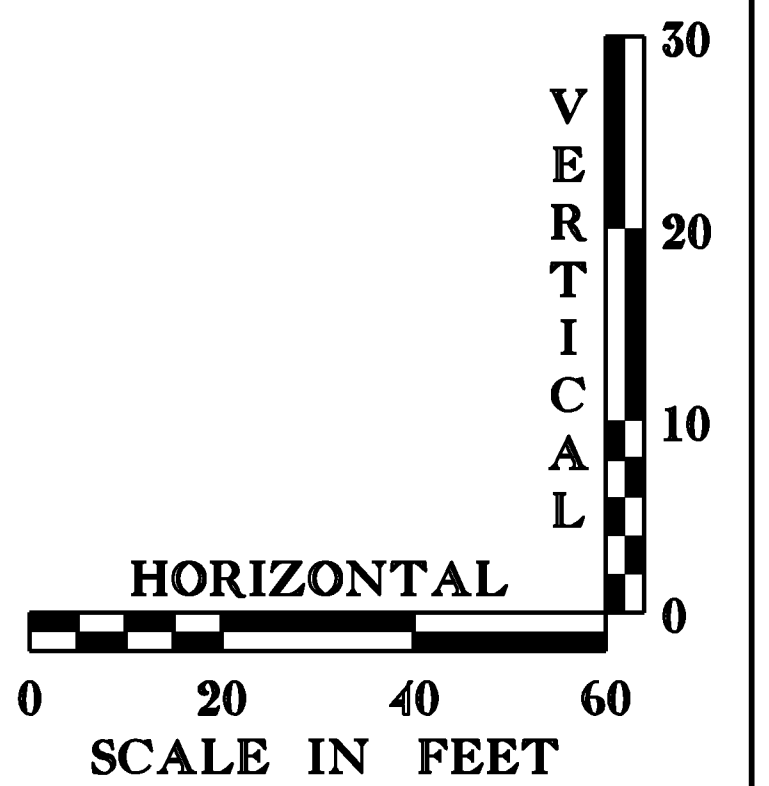
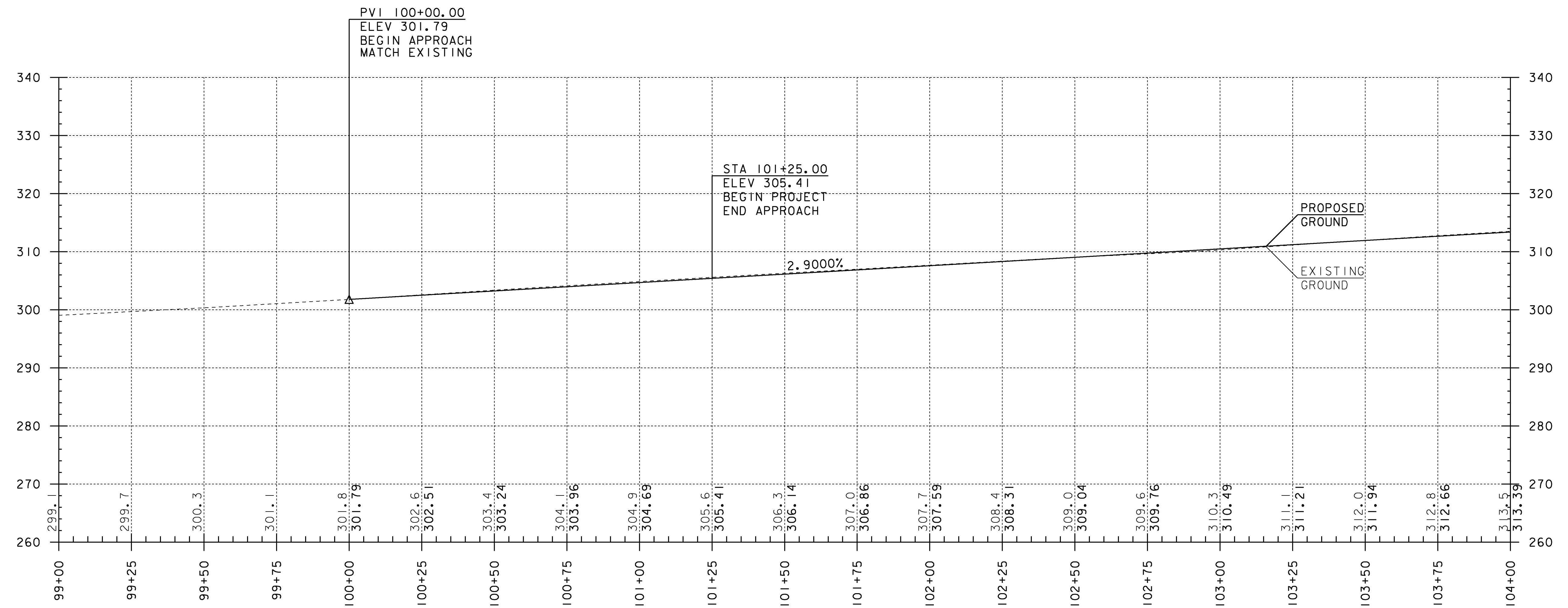


EXISTING & PROPOSED WATERLINES  
ARE FOR REFERENCE ONLY. PLEASE  
REFER TO WATERLINE SHEETS 102-104

0 20 40  
SCALE IN FEET

|                 |                |             |             |
|-----------------|----------------|-------------|-------------|
| PROJECT NAME:   | MILTON         | PLOT DATE:  | 23-FEB-2011 |
| PROJECT NUMBER: | STP 5800 (2)   | DRAWN BY:   | D. LYMAN    |
| FILE NAME:      | +92d289bdr.dgn | CHECKED BY: | J. DEVLIN   |
| PROJECT LEADER: | J. SCHULTZ     | SHEET       | 21 OF 104   |
| DESIGNED BY:    | D. LYMAN       |             |             |
| LAYOUT SHEET    | I              |             |             |





THE ELEVATIONS SHOWN TO THE NEAREST TENTH  
ARE THE OLD GROUND ALONG CENTERLINE. THE  
ELEVATIONS SHOWN TO THE NEAREST HUNDRETH  
ARE THE PROPOSED FINISHED GRADE ALONG  
CENTERLINE.

PROJECT NAME: MILTON  
PROJECT NUMBER: STP 5800 (2)

FILE NAME: t92d289profile.dgn  
PROJECT LEADER: J. SCHULTZ  
DESIGNED BY: D. LYMAN  
US ROUTE 7 - PROFILE SHEET 1

PLOT DATE: 23-FEB-2011  
DRAWN BY: J. DEVLIN  
CHECKED BY: J. DEVLIN  
SHEET 22 OF 104



900.675 SPECIAL PROVISION  
(PRECAST CONCRETE GRAVITY  
RETAINING WALL WITH FENCE)

STA 300+70.00 LT - 302+00.00 LT  
STA 300+70.00 RT - 302+00.00 RT

CONSTRUCT DRIVE

STA 200+32.31 LT (13.9' - PAVED)  
STA 200+49.49 LT (11.3' - PAVED)  
STA 106+63.93 RT (18.0' - PAVED)  
STA 107+73.89 RT (57.5' - PAVED)

401.10 AGGREGATE SURFACE COURSE

STA 104+31.22 LT (15.9' - GRAVEL DRIVE)  
STA 104+83.50 LT (16.7' - GRAVEL DRIVE)  
STA 105+87.17 LT (23.7' - GRAVEL DRIVE)

616.20 GRANITE SLOPE EDGING

STA 105+83.13 RT - 106+55.80 RT  
STA 106+66.88 RT - 107+45.52 RT (ISLAND)

616.21 VERTICAL GRANITE CURB

STA 106+75.00 LT - 300+65.45 LT 95' RAD  
STA 300+65.45 LT - 302+00.00 LT  
STA 108+34.53 LT - 301+00.00 RT 43' RAD  
STA 108+34.53 LT - 108+66.68 LT  
STA 301+00.00 RT - 302+00.00 RT

616.41 REMOVAL OF EXISTING CURB

STA 106+14.19 RT - 106+54.51 RT  
STA 106+65.77 RT - 107+45.70 RT

617.10 RELOCATE MAILBOX, SINGLE SUPPORT

STA 104+43.42 LT  
STA 104+97.78 LT  
STA 109+77.14 RT

617.12 RELOCATE MAILBOX, MULTIPLE SUPPORT

STA 105+67.34 RT

620.50 REMOVING AND RESETTING FENCE

STA 106+30.34 LT - 106+60.00 LT

620.55 REMOVAL OF EXISTING FENCE

STA 301+40.00 LT - 301+76.90 LT

629.20 ADJUST ELEVATION OF VALVE BOX

STA 106+16.47 RT  
STA 106+29.59 RT  
STA 107+11.80 RT

203.28 EXCAVATION OF SURFACES AND PAVEMENTS

STA 105+29.22 RT - 106+14.61 RT  
STA 105+98.99 LT - 106+23.85 LT  
STA 106+28.45 LT - 300+95.64 LT

CURVE DATA

$\Delta = 47^{\circ}13'11''$   
 $D = 39^{\circ}30'52''$   
 $R = 145.00'$   
 $T = 63.38'$   
 $L = 119.50'$   
 $E = 13.25'$   
BANK = N/A FT / FT

STA 108+20.00  
BEGIN TAPER

STATION 107+56.00 =  
LAKE ROAD  
STATION 300+00.00

STATION 105+22.13 =  
KILBURN ROAD  
STATION 200+00.00

CURVE DATA

$\Delta = 77^{\circ}40'45''$   
 $D = 190^{\circ}59'09''$   
 $R = 30.00'$   
 $T = 24.15'$   
 $L = 40.67'$   
 $E = 8.52'$   
BANK = N/A FT / FT

621.21 HD STEEL BEAM GUARDRAIL, GALVANIZED

STA 104+00.00 RT - 104+67.26 RT

621.50 MANUFACTURED TERMINAL SECTION, FLARED

STA 104+67.26 RT - 105+04.79 RT

621.80 REMOVAL AND DISPOSAL OF GUARDRAIL

STA 105+35.69 RT - 105+92.83 RT

625.10 SLEEVES FOR UTILITIES (1 x 8") (PVC)  
FOR FUTURE USE - PLUG OR CAP BOTH ENDS

STA 106+90.00 RT - 108+20.00 RT  
STA 108+25.00 LT - 108+25.00 RT  
STA 300+60.00 LT - 300+60.00 RT

900.675 SPECIAL PROVISION  
(HAND-PLACED BITUMINOUS CONCRETE MATERIAL, DRIVES)

STA 104+31.22 LT (PAVED DRIVE APRON)  
STA 104+83.50 LT (PAVED DRIVE APRON)  
STA 105+87.17 LT (PAVED DRIVE APRON)

EXISTING & PROPOSED WATERLINES  
ARE FOR REFERENCE ONLY. PLEASE  
REFER TO WATERLINE SHEETS 102-104

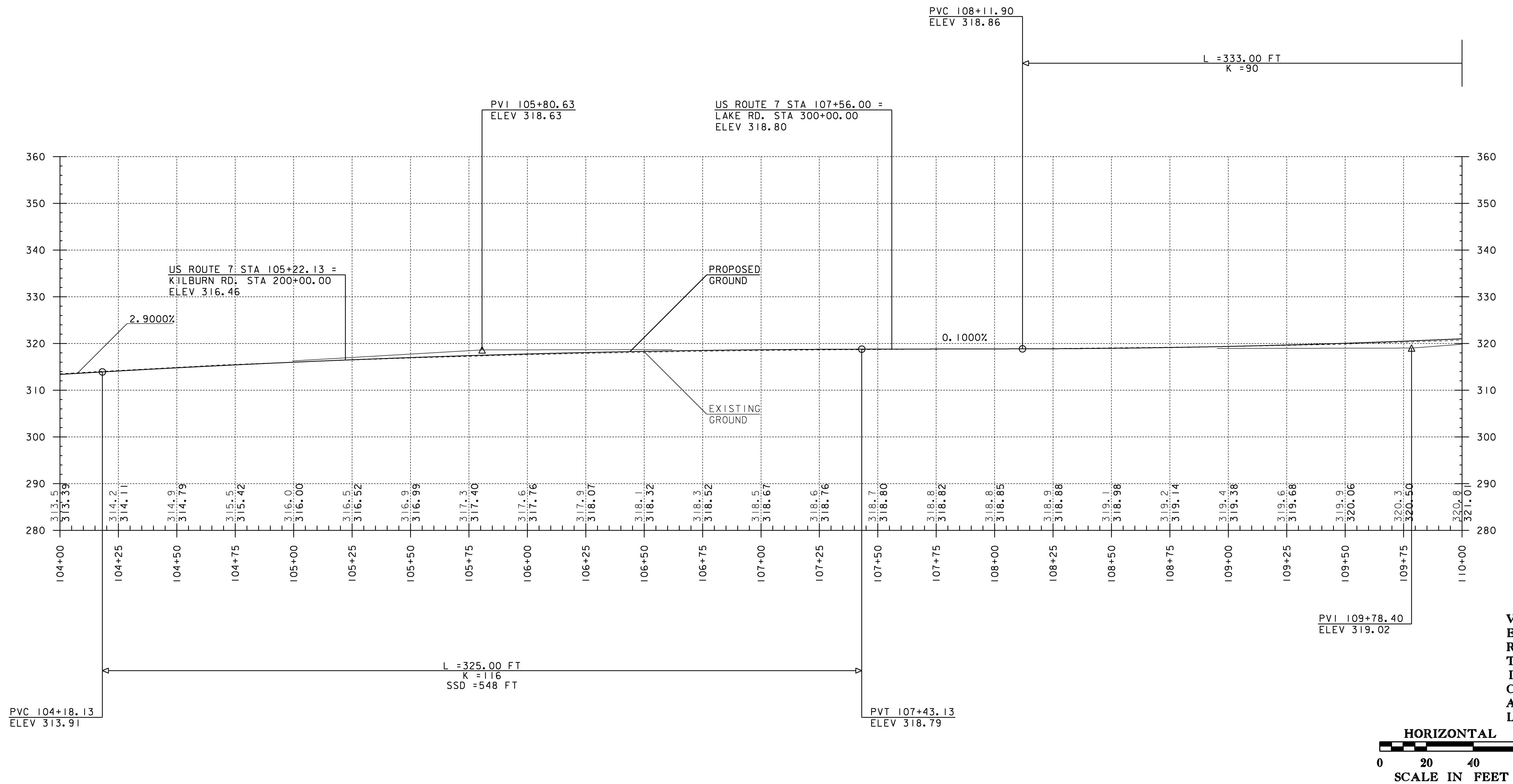
PROJECT NAME: MILTON  
PROJECT NUMBER: STP 5800 (2)

FILE NAME: +92d289bdr.dgn  
PROJECT LEADER: J. SCHULTZ  
DESIGNED BY: D. LYMAN  
LAYOUT SHEET 2

PLOT DATE: 23-FEB-2011  
DRAWN BY: D. LYMAN  
CHECKED BY: J. DEVLIN  
SHEET 23 OF 104

0 20 40  
SCALE IN FEET





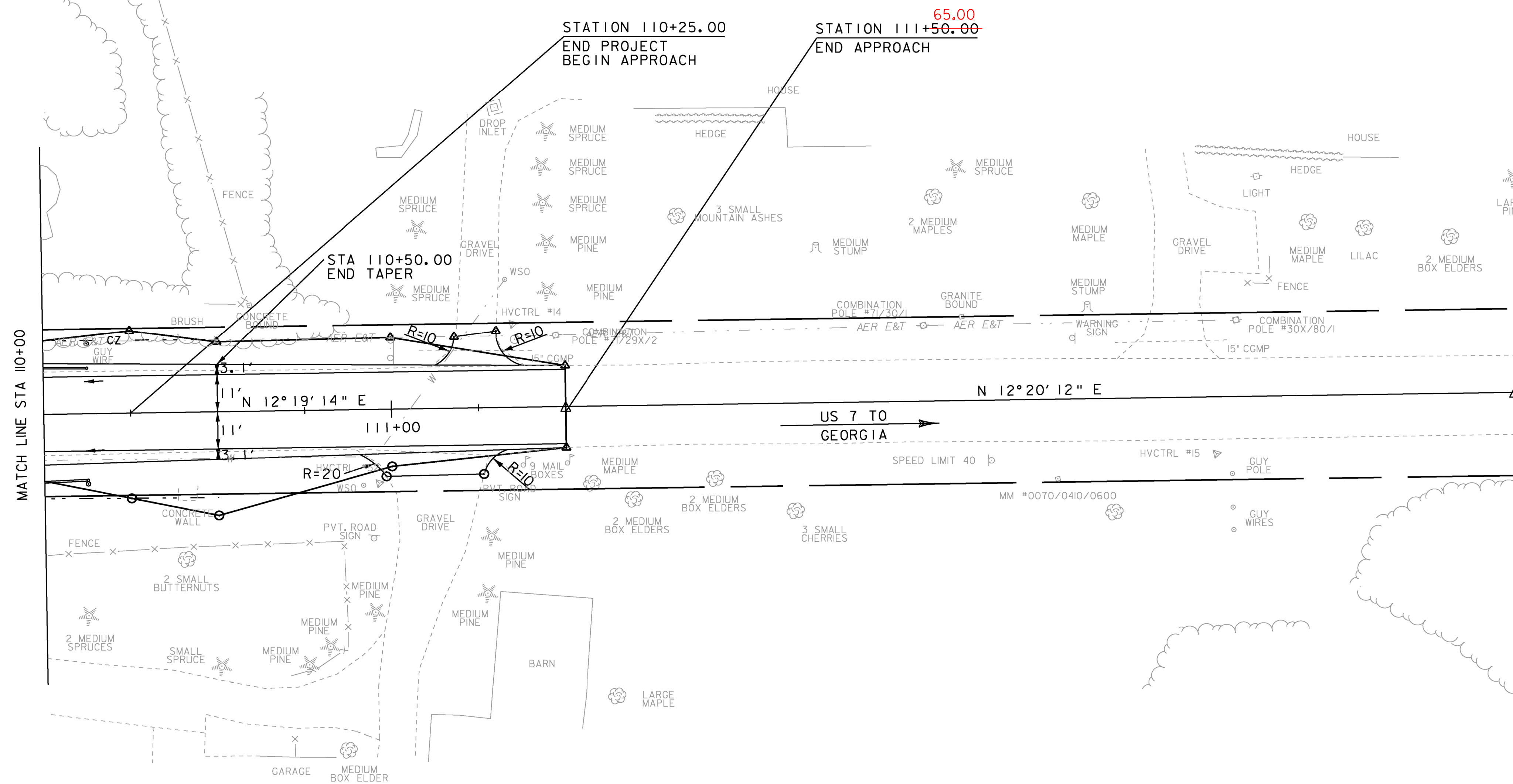
THE ELEVATIONS SHOWN TO THE NEAREST TENTH  
ARE THE OLD GROUND ALONG CENTERLINE. THE  
ELEVATIONS SHOWN TO THE NEAREST HUNDRETH  
ARE THE PROPOSED FINISHED GRADE ALONG  
CENTERLINE.

|                              |                    |             |             |
|------------------------------|--------------------|-------------|-------------|
| PROJECT NAME:                | MILTON             | PLOT DATE:  | 23-FEB-2011 |
| PROJECT NUMBER:              | STP 5800 (2)       | DRAWN BY:   | J. DEVLIN   |
| FILE NAME:                   | t92d289profile.dgn | CHECKED BY: | J. DEVLIN   |
| DESIGNED BY:                 | D. LYMAN           | SHEET       | 24 OF 104   |
| US ROUTE 7 - PROFILE SHEET 2 |                    |             |             |



203.16 SOLID ROCK EXCAVATION  
STA 110+41.01 RT (CONCRETE WALL)

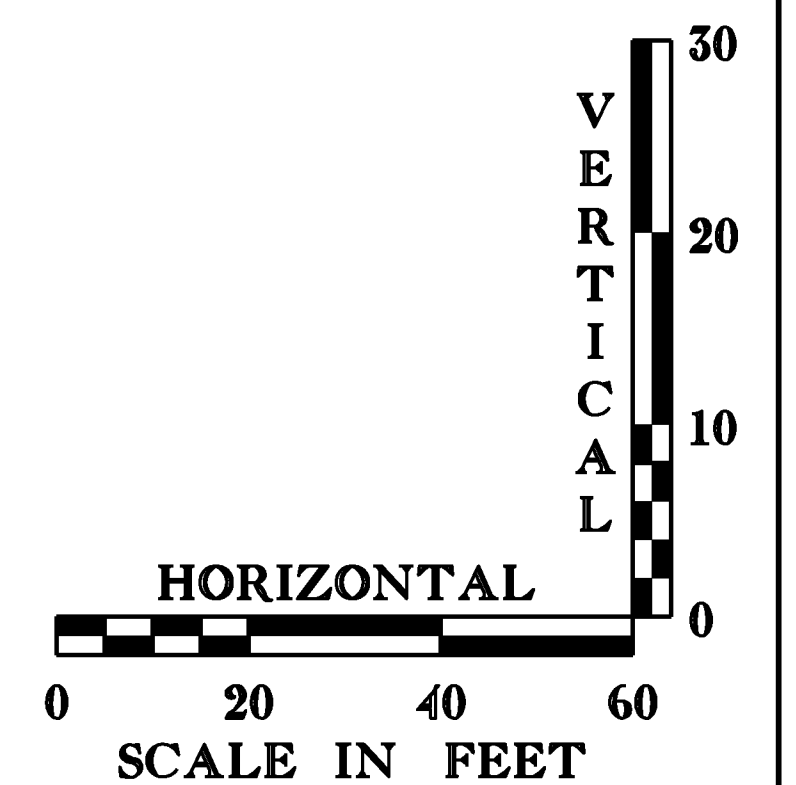
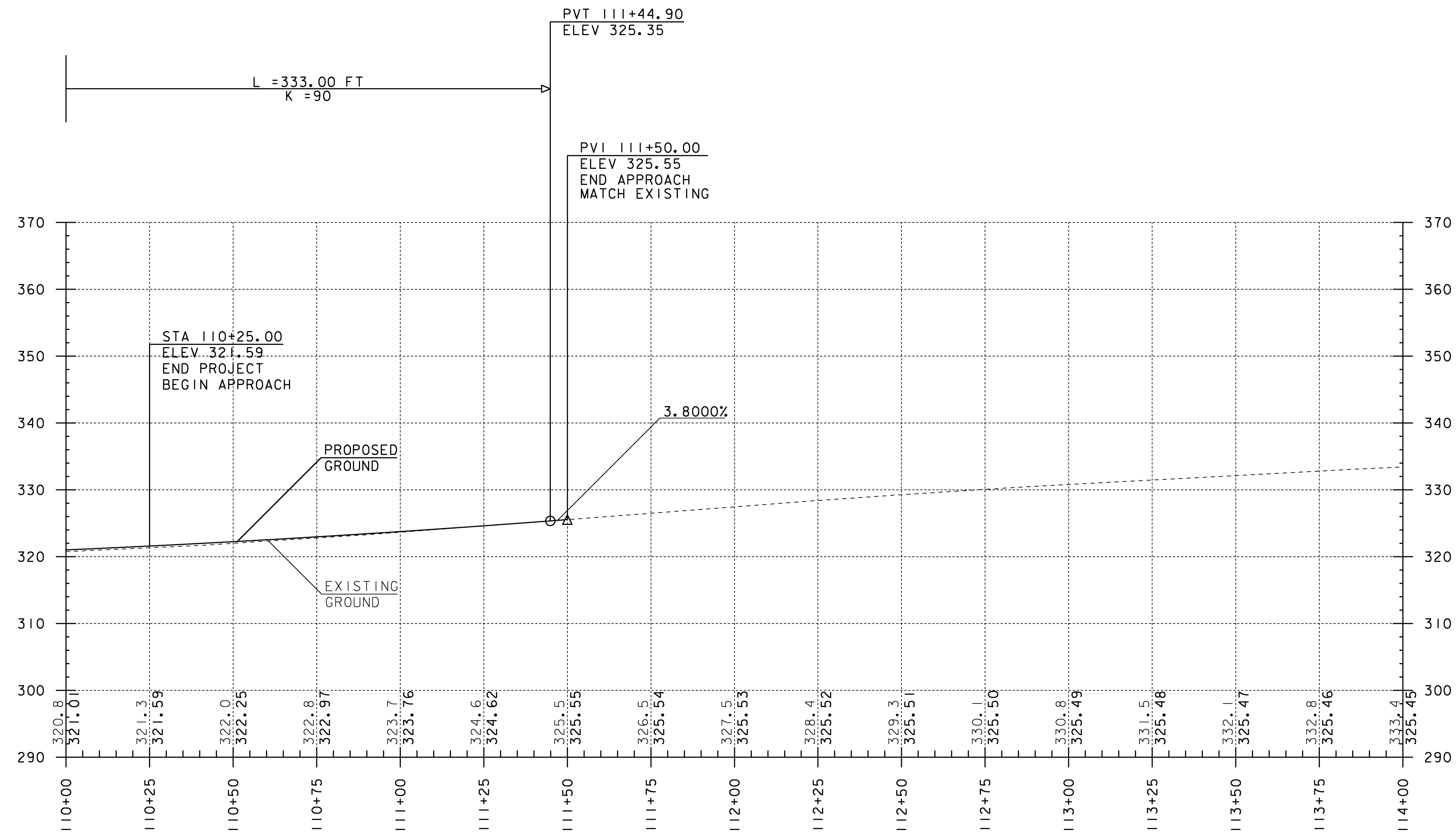
210.10 COLD PLANING, BITUMINOUS CONCRETE PAVEMENT  
STA 111+00.00 - 111+50.00  
10.00 65.00



PLOT DATE: 23-FEB-2011  
DRAWN BY: D. LYMAN  
CHECKED BY: J. DEVLIN  
SHEET 25 OF 104







THE ELEVATIONS SHOWN TO THE NEAREST TENTH ARE THE OLD GROUND ALONG CENTERLINE. THE ELEVATIONS SHOWN TO THE NEAREST HUNDRETH ARE THE PROPOSED FINISHED GRADE ALONG CENTERLINE.

|                               |                        |
|-------------------------------|------------------------|
| PROJECT NAME: MILTON          |                        |
| PROJECT NUMBER: STP 5800 (2)  |                        |
| FILE NAME: t92d289profile.dgn | PLOT DATE: 23-FEB-2011 |
| PROJECT LEADER: J. SCHULTZ    | DRAWN BY: J. DEVLIN    |
| DESIGNED BY: D. LYMAN         | CHECKED BY: J. DEVLIN  |
| US ROUTE 7 - PROFILE SHEET 3  | SHEET 26 OF 104        |



401.10 AGGREGATE SURFACE COURSE  
STA 302+97.06 RT (22.4' - GRAVEL DRIVE)  
STA 303+37.16 LT (16.0' - GRAVEL DRIVE)  
STA 303+85.78 RT (22.7' - GRAVEL DRIVE)  
STA 304+83.64 LT (15.8' - GRAVEL DRIVE)

900.675 SPECIAL PROVISION  
(HAND-PLACED BITUMINOUS CONCRETE MATERIAL, DRIVES)

STA 302+97.06 RT (PAVED DRIVE APRON)  
STA 303+37.16 LT (PAVED DRIVE APRON)  
STA 303+85.78 RT (PAVED DRIVE APRON)  
STA 304+83.64 LT (PAVED DRIVE APRON)

900.675 SPECIAL PROVISION  
(PRECAST CONCRETE GRAVITY  
RETAINING WALL WITH FENCE)

STA 302+00.00 LT - 302+60.00 LT  
STA 302+00.00 RT - 302+60.00 RT

616.21 VERTICAL GRANITE CURB

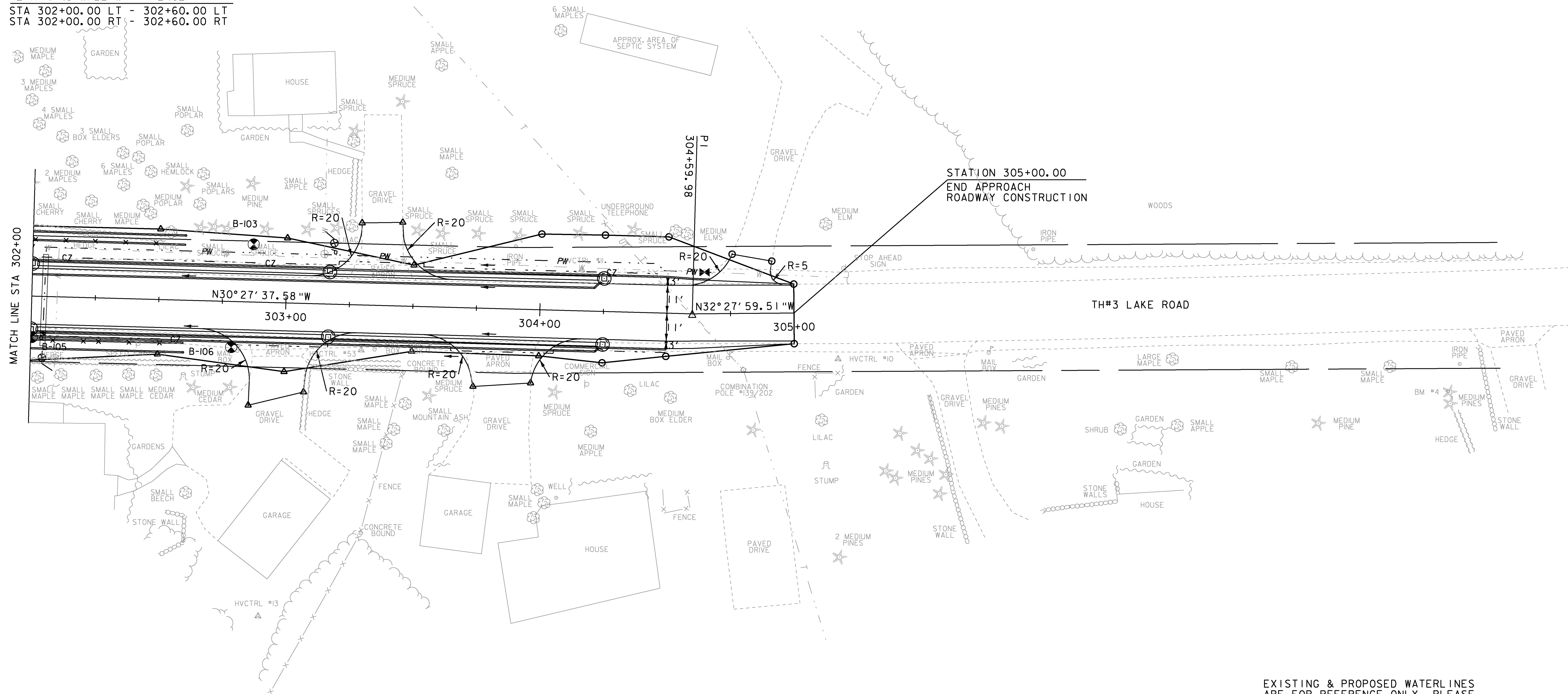
STA 302+00.00 LT - 303+20.50 LT  
STA 302+00.00 RT - 302+77.72 RT  
STA 303+16.94 RT - 303+65.31 RT  
STA 303+53.91 LT - 304+67.06 LT  
STA 304+05.68 RT - 304+50.00 RT

617.10 RELOCATE MAILBOX, SINGLE SUPPORT

STA 302+81.43 RT  
STA 303+35.38 RT  
STA 303+56.30 RT

210.10 COLD PLANING, BITUMINOUS PAVEMENT

STA 304+50.00 - 305+00.00



EXISTING & PROPOSED WATERLINES  
ARE FOR REFERENCE ONLY. PLEASE  
REFER TO WATERLINE SHEETS 102-104

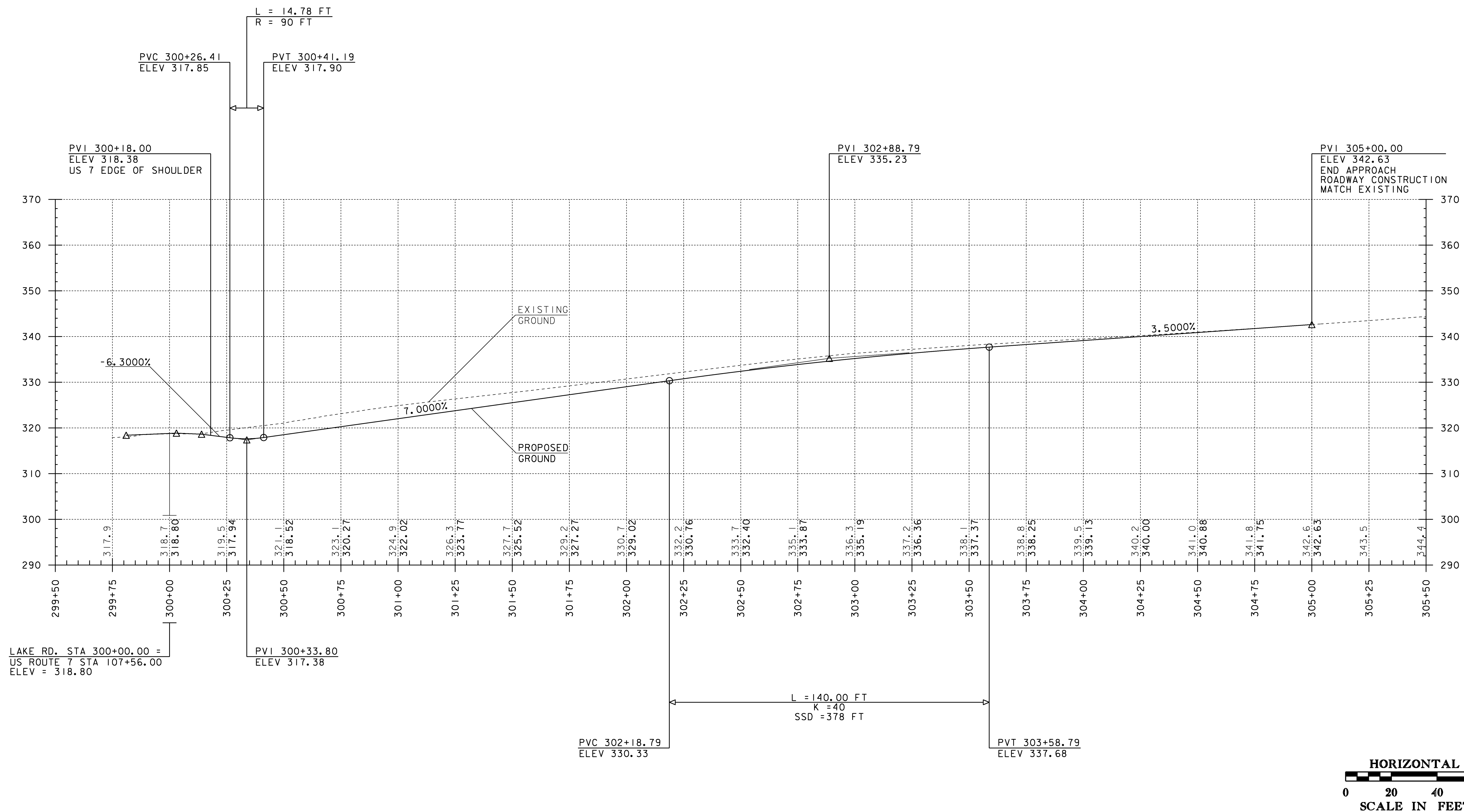
0 20 40  
SCALE IN FEET

PROJECT NAME: MILTON  
PROJECT NUMBER: STP 5800 (2)

FILE NAME: +92d289bdr.dgn  
PROJECT LEADER: J. SCHULTZ  
DESIGNED BY: D. LYMAN  
LAYOUT SHEET 4

PLOT DATE: 23-FEB-2011  
DRAWN BY: D. LYMAN  
CHECKED BY: J. DEVLIN  
SHEET 27 OF 104





LAKE RD. STA 300+00.00 =  
US ROUTE 7 STA 107+56.00  
ELEV = 318.80

PVI 300+33.80  
ELEV 317.38

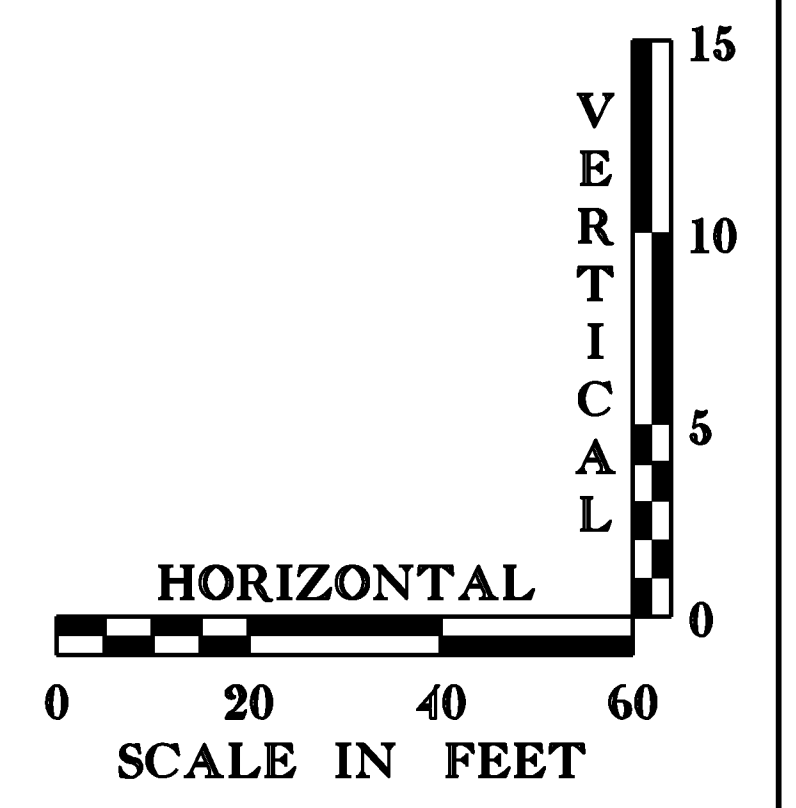
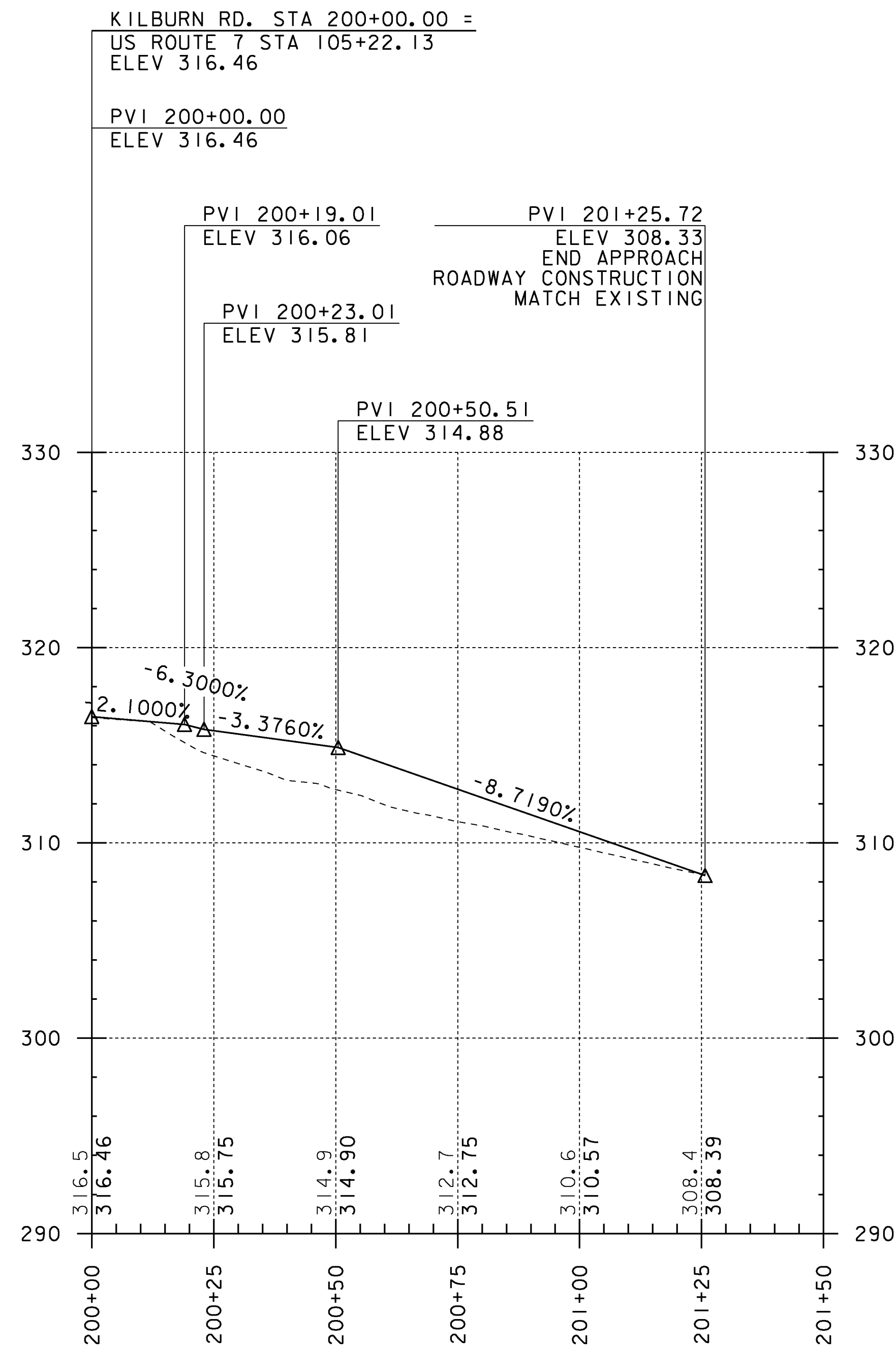
PVC 302+18.79  
ELEV 330.33

PVT 303+58.79  
ELEV 337.68

THE ELEVATIONS SHOWN TO THE NEAREST TENTH  
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ELEVATIONS SHOWN TO THE NEAREST HUNDRETH  
ARE THE PROPOSED FINISHED GRADE ALONG  
CENTERLINE.

|                             |                    |
|-----------------------------|--------------------|
| PROJECT NAME:               | MILTON             |
| PROJECT NUMBER:             | STP 5800 (2)       |
| FILE NAME:                  | +92d289profile.dgn |
| PROJECT LEADER:             | J. SCHULTZ         |
| DESIGNED BY:                | D. LYMAN           |
| LAKE ROAD - PROFILE SHEET 1 |                    |
| PLOT DATE:                  | 23-FEB-2011        |
| DRAWN BY:                   | J. DEVLIN          |
| CHECKED BY:                 | J. DEVLIN          |
| SHEET 28                    | OF 104             |





THE ELEVATIONS SHOWN TO THE NEAREST TENTH  
ARE THE OLD GROUND ALONG CENTERLINE. THE  
ELEVATIONS SHOWN TO THE NEAREST HUNDRETH  
ARE THE PROPOSED FINISHED GRADE ALONG  
CENTERLINE.

|                                |                    |
|--------------------------------|--------------------|
| PROJECT NAME:                  | MILTON             |
| PROJECT NUMBER:                | STP 5800 (2)       |
| FILE NAME:                     | t92d289profile.dgn |
| PROJECT LEADER:                | J. SCHULTZ         |
| DESIGNED BY:                   | D. LYMAN           |
| KILBURN ROAD - PROFILE SHEET 1 |                    |
| PLOT DATE:                     | 23-FEB-2011        |
| DRAWN BY:                      | D. LYMAN           |
| CHECKED BY:                    | J. DEVLIN          |
| SHEET                          | 29 OF 104          |



NEW DRAINAGE

15 STA 104+50.00 LT - 103+45.00 LT  
NEW 24" X 105' RCP/CPEP (SL)  
W/4' PRRCB @ STA 104+50.00 LT  
OFFSET = 24.07' W/GRADE TYPE A(1)

16 STA 103+45.00 LT - 102+97.60 LT  
NEW 24" X 58' PCCSP/CAAP/CPEP  
W/REINFORCED CONCRETE HEADWALL (TYP) @ OUTLET  
W/4' PRRCB @ STA 103+45.00 LT  
OFFSET = 23.00' W/GRADE TYPE A(1)

17 STA 102+86.76 LT - 102+86.76 RT  
NEW 48" X 95' PCCSP/CAAP  
W/REINFORCED CONCRETE HEADWALL (TYP) @ INLET  
W/REINFORCED CONCRETE HEADWALL (TYP) @ OUTLET

613.11 STONE FILL, TYPE 11

STA 101+15.90 RT - 102+92.76 RT  
STA 102+75.41 LT - 103+00.44 LT  
STA 103+32.55 RT - 103+50.00 RT

649.31 GEOTEXTILE UNDER STONE FILL

STA 101+15.90 RT - 102+92.76 RT  
STA 102+75.41 LT - 103+00.44 LT  
STA 102+88.76 LT - 102+97.71 LT  
STA 103+32.55 RT - 103+50.00 RT

619.17 YIELDING MARKER POSTS

STA 101+22.00 RT  
STA 103+02.00 LT  
STA 103+02.00 RT  
STA 103+20.00 RT

605.10 6 INCH UNDERDRAIN PIPE

7 STA 104+94.17 LT - 103+49.59 LT  
NEW 6" X 145' UNDERDRAIN PIPE

7 STA 108+20.00 RT - 103+25.13 RT  
NEW 6" X 500' UNDERDRAIN PIPE  
W/FLUSHING BASIN @ 108+20.00 RT  
FLUSHING BASIN @ 105+80.00 RT

8 STA 103+38.99 LT - 101+20.00 LT  
NEW 6" X 219' UNDERDRAIN PIPE

9 STA 103+20.00 RT - 101+20.00 RT  
NEW 6" X 200' UNDERDRAIN PIPE  
W/FLUSHING BASIN @ STA 103+20.00 RT  
101+20

NEW STORMWATER TREATMENT PRACTICE  
DISCHARGE PERMIT #6019-INDS

STA 100+50.00 RT - 102+60.00 RT  
"DISCONNECTION OF NON-ROOFTOP  
RUNOFF CREDIT"

601.995 CLEANING CULV. PIPE, IN-PLACE

1 STA 101+69.18 LT - 101+28.64 LT  
EXISTING 18" CPEP & CONCRETE DI

605.20 6 INCH UNDERDRAIN CARRIER PIPE

19 STA 103+49.59 LT - 103+45.00 LT  
NEW 6" X 6' UNDERDRAIN CARRIER PIPE

20 STA 103+25.13 RT - 103+03.50 RT  
NEW 6" X 31' UNDERDRAIN CARRIER PIPE

21 STA 103+45.00 LT - 103+38.99 LT  
NEW 6" X 7' UNDERDRAIN CARRIER PIPE  
W/URBAN FLUSHING BASIN @  
STA 103+45.00 LT

22 STA 101+20.00 LT - 101+20.00 RT  
NEW 6" X 84' UNDERDRAIN CARRIER PIPE

23 STA 103+50.00 RT - 103+04.92 RT  
NEW 6" X 45' UNDERDRAIN CARRIER PIPE

NEW STORMWATER TREATMENT PRACTICE  
DISCHARGE PERMIT #6019-INDS

STA 100+50.00 LT - 101+28.71 LT  
STA 101+75.00 LT - 102+60.00 LT  
GRASS CHANNEL - 2' BOTTOM WIDTH

EXISTING DRAINAGE

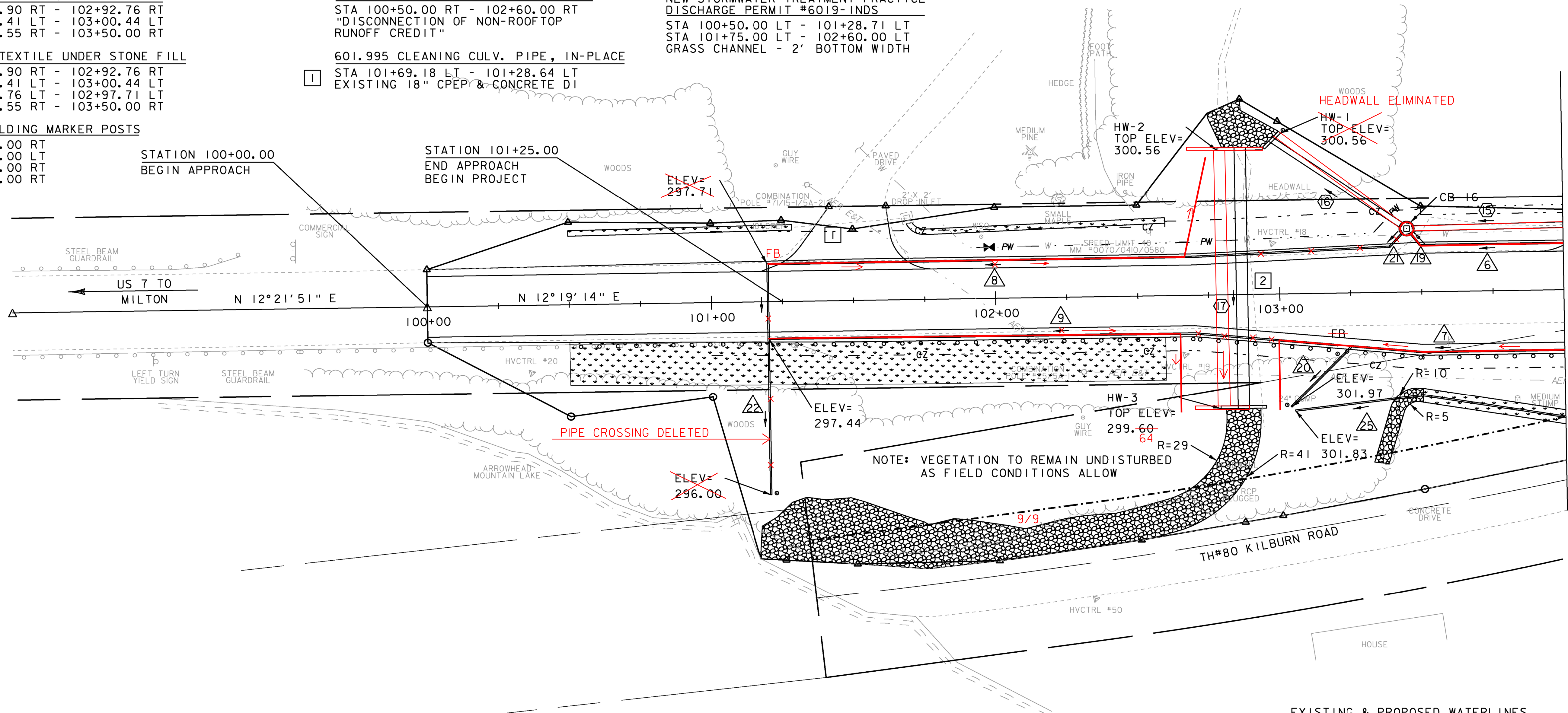
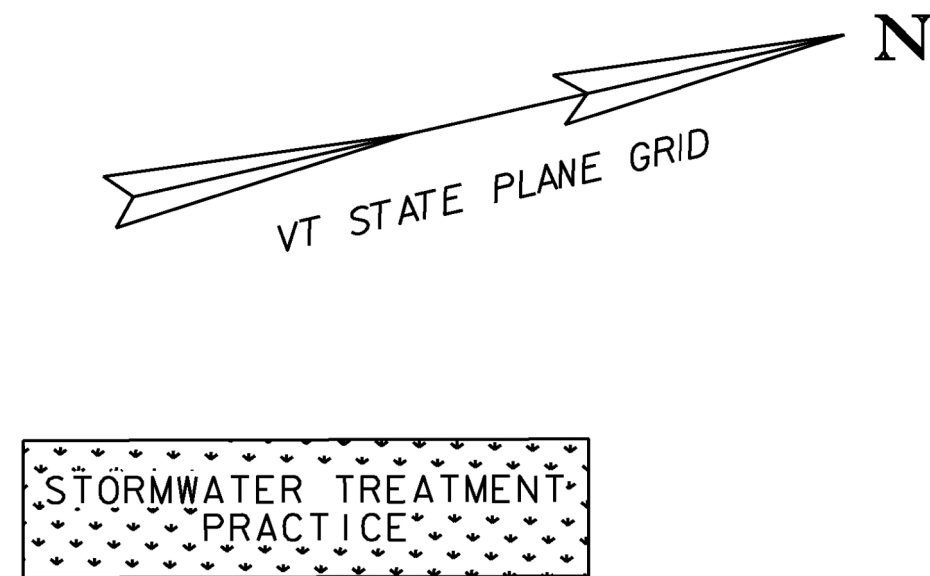
1 STA 101+69.18 LT - 101+28.64 LT  
EXISTING 18" CPEP & CONCRETE DI =  
RETAIN

2 STA 102+88.46 LT - 102+93.77 RT  
EXISTING 24" X 84' CGMP & HEADWALL =  
REMOVE

900.640 SPECIAL PROVISION  
(6 INCH UNDERDRAIN PIPE, DRY SWALE)

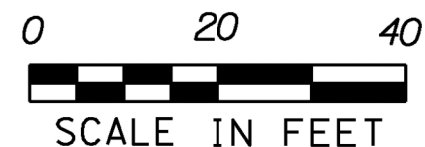
NEW STORMWATER TREATMENT PRACTICE  
DISCHARGE PERMIT #6019-INDS

STA 104+30.00 RT - 103+50.00 RT  
NEW 6" X 81' UNDERDRAIN PIPE  
W/FLUSHING BASIN @ STA 104+30.00 RT



NOTE:  
GEOTEXTILE UNDER STONE FILL SHALL BE  
PLACED VERTICALLY ON THE BACK SIDE OF  
HEADWALL 1 AND HEADWALL 2, BETWEEN PIPES  
16 AND 17 TO PREVENT MATERIAL MIGRATION.

EXISTING & PROPOSED WATERLINES  
ARE FOR REFERENCE ONLY. PLEASE  
REFER TO WATERLINE SHEETS 102-104



|                   |                |             |             |
|-------------------|----------------|-------------|-------------|
| PROJECT NAME:     | MILTON         | PLOT DATE:  | 23-FEB-2011 |
| PROJECT NUMBER:   | STP 5800 (2)   | DRAWN BY:   | D. LYMAN    |
| FILE NAME:        | t92d289bdr.dgn | CHECKED BY: | J. DEVLIN   |
| PROJECT LEADER:   | J. SCHULTZ     | SHEET       | 30 OF 104   |
| DESIGNED BY:      | D. LYMAN       |             |             |
| DRAINAGE LAYOUT 1 |                |             |             |



# NEW DRAINAGE

- |                                                                                                                                          |                                                                                                                                          |                                                                                                                                          |
|------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| ⑤ STA 302+00.00 LT - 301+00.00 LT<br>NEW 18" X 102' RCP/CPEP (SL)<br>W/4' PRCCB @ STA 302+00.00 LT<br>OFFSET = 12.83' W/GRATE TYPE D (1) | ⑨ STA 300+70.00 RT - 300+50.00 RT<br>NEW 24" X 21' RCP/CPEP (SL)<br>W/4' PRCCB @ STA 300+70.00 RT<br>OFFSET = 22.60' W/GRATE TYPE D (1)  | ⑬ STA 106+10.00 LT - 105+00.00 LT<br>NEW 18" X 110' RCP/CPEP (SL)<br>W/4' PRCCB @ STA 106+10.00 LT<br>OFFSET = 26.08' W/GRATE TYPE A (1) |
| ⑥ STA 302+00.00 RT - 301+00.00 RT<br>NEW 18" X 98' RCP/CPEP (SL)<br>W/4' PRCCB @ STA 302+00.00 RT<br>OFFSET = 12.80' W/GRATE TYPE D (1)  | ⑩ STA 300+50.00 RT - 108+40.00 LT<br>NEW 24" X 44' RCP/CPEP (SL)<br>W/4' PRCCB @ STA 300+50.00 RT<br>OFFSET = 36.87' W/GRATE TYPE D (1)  | ⑭ STA 105+00.00 LT - 104+50.00 LT<br>NEW 24" X 50' RCP/CPEP (SL)<br>W/4' PRCCB @ STA 105+00.00 LT<br>OFFSET = 23.00' W/GRATE TYPE A (1)  |
| ⑦ STA 301+00.00 LT - 301+00.00 RT<br>NEW 18" X 26' RCP/CPEP (SL)<br>W/4' PRCCB @ STA 301+00.00 LT<br>OFFSET = 13.00' W/GRATE TYPE D (1)  | ⑪ STA 108+40.00 LT - 108+40.00 RT<br>NEW 30" X 71' RCP/CPEP (SL)<br>W/5' PRCCB @ STA 108+40.00 LT<br>OFFSET = 20.64' W/GRATE TYPE D (1)  | ⑮ STA 104+50.00 LT - 103+45.00 LT<br>NEW 24" X 105' RCP/CPEP (SL)<br>W/4' PRCCB @ STA 104+50.00 LT<br>OFFSET = 24.07' W/GRATE TYPE A (1) |
| ⑧ STA 301+00.00 RT - 300+70.00 RT<br>NEW 24" X 28' RCP/CPEP (SL)<br>W/4' PRCCB @ STA 301+00.00 RT<br>OFFSET = 13.17' W/GRATE TYPE D (1)  | ⑫ STA 107+29.41 LT - 106+10.00 LT<br>NEW 18" X 120' RCP/CPEP (SL)<br>W/4' PRCCB @ STA 107+29.41 LT<br>OFFSET = 35.36' W/GRATE TYPE D (1) | ⑯ STA 104+33.00 RT<br>STA 105+80.00 RT<br>STA 108+20.00 RT<br>STA 108+45.00 RT                                                           |

## 619.17 YIELDING MARKER POSTS

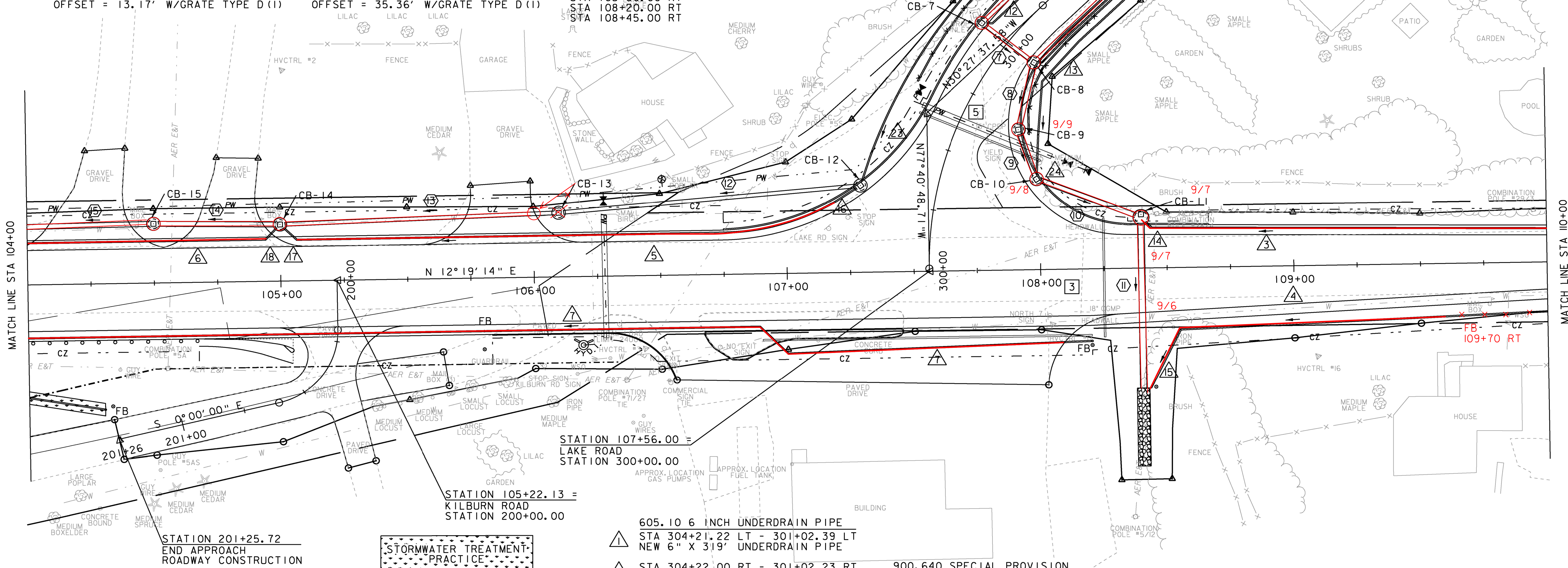
- STA 104+33.00 RT  
STA 105+80.00 RT  
STA 108+20.00 RT  
STA 108+45.00 RT

## 649.31 GEOTEXTILE UNDER STONE FILL

- STA 108+40.00 RT  
STA 108+40.00 RT  
32' X 5' X 2'

## 613.11 STONE FILL, TYPE II

- STA 108+40.00 RT  
STA 108+40.00 RT  
32' X 5' X 2'



## 605.20 6 INCH UNDERDRAIN CARRIER PIPE

- ⑫ STA 301+02.39 LT - 301+01.00 LT  
NEW 6" X 2' UNDERDRAIN CARRIER PIPE
- ⑬ STA 301+02.23 RT - 301+00.00 RT  
NEW 6" X 3' UNDERDRAIN CARRIER PIPE
- ⑭ STA 108+44.16 LT - 108+40.00 LT  
NEW 6" X 4' UNDERDRAIN CARRIER PIPE
- ⑮ STA 108+55.00 RT - 108+42.92 RT  
NEW 6" X 27' UNDERDRAIN CARRIER PIPE
- ⑯ STA 107+29.41 LT - 107+19.34 LT  
NEW 6" X 10' UNDERDRAIN CARRIER PIPE  
W/URBAN FLUSHING BASIN @ STA 107+29.41 LT

- ⑫ STA 105+06.55 LT - 105+00.00 LT  
NEW 6" X 7' UNDERDRAIN CARRIER PIPE
- ⑬ STA 105+00.00 LT - 104+94.17 LT  
NEW 6" X 7' UNDERDRAIN CARRIER PIPE  
W/URBAN FLUSHING BASIN @ STA 105+00.00 LT

NOTE: UNDERDRAIN CARRIER PIPE #23 AND #24 SHALL BE CONNECTED TO UNDERDRAIN FROM RETAINING WALL

- ⑫ STA 300+70.00 LT - 107+29.41 LT  
NEW 6" X 47' UNDERDRAIN CARRIER PIPE
- ⑬ STA 300+70.00 RT - 300+50.00 RT  
NEW 6" X 16' UNDERDRAIN CARRIER PIPE

## 605.10 6 INCH UNDERDRAIN PIPE

- ① STA 304+21.22 LT - 301+02.39 LT  
NEW 6" X 319' UNDERDRAIN PIPE
- ② STA 304+22.00 RT - 301+02.23 RT  
NEW 6" X 318' UNDERDRAIN PIPE
- ③ STA 110+12.50 LT - 108+44.16 LT  
NEW 6" X 168' UNDERDRAIN PIPE
- ④ STA 110+12.50 RT - 108+55.00 RT  
NEW 6" X 158' UNDERDRAIN PIPE
- ⑤ STA 107+19.34 LT - 105+06.55 LT  
NEW 6" X 215' UNDERDRAIN PIPE
- ⑥ STA 104+94.17 LT - 103+49.59 LT  
NEW 6" X 145' UNDERDRAIN PIPE
- ⑦ STA 108+20.00 RT - 103+25.13 RT  
NEW 6" X 500' UNDERDRAIN PIPE  
W/FLUSHING BASIN @ 108+20.00 RT  
FLUSHING BASIN @ 105+80.00 RT

## 900.640 SPECIAL PROVISION

- (6 INCH UNDERDRAIN PIPE, DRY SWALE)  
STA 104+30.00 RT - 103+50.00 RT  
NEW STORMWATER TREATMENT PRACTICE  
DISCHARGE PERMIT #6019-INDS  
NEW 6" X 81' UNDERDRAIN PIPE  
W/FLUSHING BASIN @ STA 104+30.00 RT

## EXISTING DRAINAGE

- ③ STA 108+17.21 LT - 108+15.59 RT  
EXISTING 18" X 33' CGMP & HEADWALLS (2) = REMOVE
- ⑤ STA 301+00.76 LT - 300+59.56 RT  
EXISTING 15" X 51' CPEP & CONCRETE DI = REMOVE

EXISTING & PROPOSED WATERLINES ARE FOR REFERENCE ONLY. PLEASE REFER TO WATERLINE SHEETS 102-104

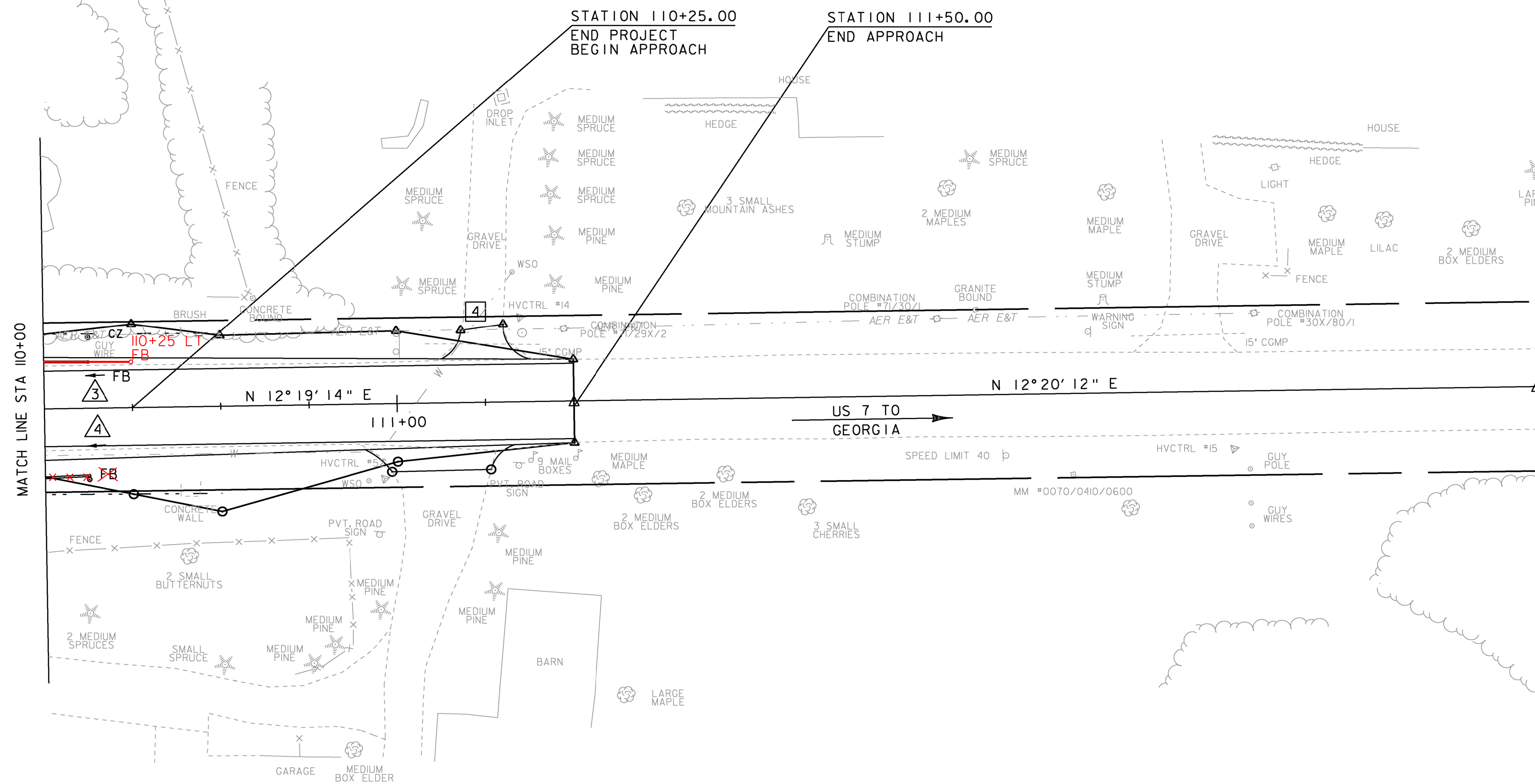
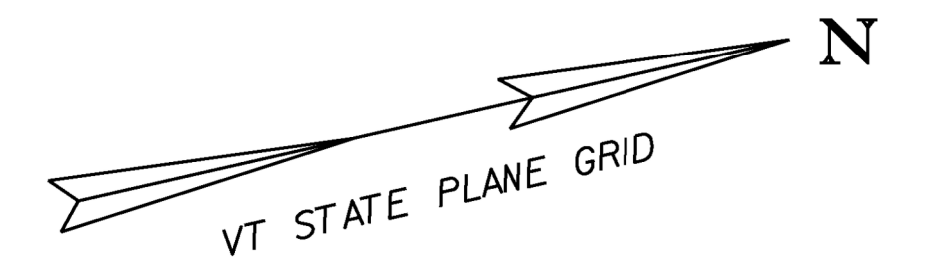
|                   |                |             |             |
|-------------------|----------------|-------------|-------------|
| PROJECT NAME:     | MILTON         | PLOT DATE:  | 23-FEB-2011 |
| PROJECT NUMBER:   | STP 5800 (2)   | DRAWN BY:   | D. LYMAN    |
| FILE NAME:        | t92d289bdr.dgn | CHECKED BY: | J. DEVLIN   |
| PROJECT LEADER:   | J. SCHULTZ     | SHEET       | 31 OF 104   |
| DESIGNED BY:      | D. LYMAN       |             |             |
| DRAINAGE LAYOUT 2 |                |             |             |





- 605.10 6 INCH UNDERDRAIN PIPE  
STA 110+12.50 LT - 108+44.16 LT  
NEW 6" X 168' UNDERDRAIN PIPE  
W/FLUSHING BASIN @ STA 110+12.50 LT
- 3
- 4
- STA 110+12.50 RT - 108+55.00 RT  
NEW 6" X 158' UNDERDRAIN PIPE  
W/FLUSHING BASIN @ STA 110+12.50 RT

- EXISTING DRAINAGE  
STA 111+40.70 LT - 111+08.21 LT  
EXISTING 15" CGMP = ~~RETAIN~~ REPLACED W/ 15" CPEP & CPEPES (2)
- 619.17 YIELDING MARKER POSTS  
STA 110+12.50 LT  
STA 110+12.50 RT



EXISTING & PROPOSED WATERLINES  
ARE FOR REFERENCE ONLY. PLEASE  
REFER TO WATERLINE SHEETS 102-104



|                 |                |             |             |
|-----------------|----------------|-------------|-------------|
| PROJECT NAME:   | MILTON         | PLOT DATE:  | 23-FEB-2011 |
| PROJECT NUMBER: | STP 5800 (2)   | DRAWN BY:   | D. LYMAN    |
| FILE NAME:      | +92d289bdr.dgn | CHECKED BY: | J. DEVLIN   |
| PROJECT LEADER: | J. SCHULTZ     | SHEET       | 32 OF 104   |
| DESIGNED BY:    | D. LYMAN       |             |             |
| DRAINAGE LAYOUT | 3              |             |             |



NEW DRAINAGE 95.00

- |   |                                                                                                                                        |   |                                                                                                                                        |
|---|----------------------------------------------------------------------------------------------------------------------------------------|---|----------------------------------------------------------------------------------------------------------------------------------------|
| ① | STA 304+25.00 LT - 303+17.00 LT<br>NEW 18" X 108' RCP/CPEP (SL)<br>W/4' PRCCB @ STA 304+25.00 LT<br>OFFSET = 13.00' W/GRATE TYPE D (I) | ④ | STA 303+17.00 RT - 302+00.00 RT<br>NEW 18" X 117' RCP/CPEP (SL)<br>W/4' PRCCB @ STA 303+17.00 RT<br>OFFSET = 12.84' W/GRATE TYPE D (I) |
| ② | STA 304+25.00 RT - 303+17.00 RT<br>NEW 18" X 108' RCP/CPEP (SL)<br>W/4' PRCCB @ STA 304+25.00 RT<br>OFFSET = 13.00' W/GRATE TYPE D (I) |   |                                                                                                                                        |
| ③ | STA 303+17.00 LT - 302+00.00 LT<br>NEW 18" X 117' RCP/CPEP (SL)<br>W/4' PRCCB @ STA 303+17.00 LT<br>OFFSET = 12.61' W/GRATE TYPE D (I) |   |                                                                                                                                        |

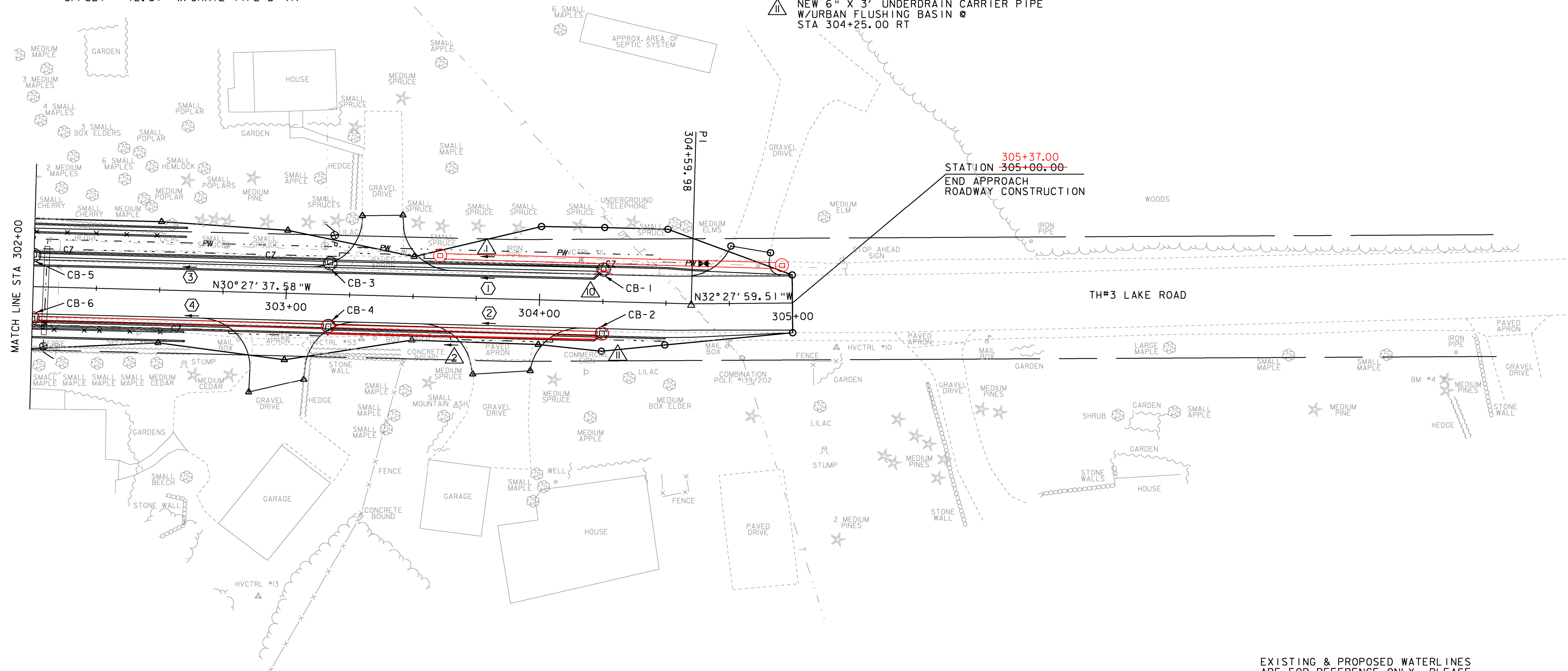
605.10 6 INCH UNDERDRAIN PIPE  
STA 304+21.22 LT - 301+02.39 LT  
NEW 6" X 319' UNDERDRAIN

- |   |                                                             |
|---|-------------------------------------------------------------|
| 1 | STA 304+21.22 LT - 301+02.39 LT<br>NEW 6" X 319' UNDERDRAIN |
| 2 | STA 304+22.00 RT - 301+02.23 RT<br>NEW 6" X 318' UNDERDRAIN |

605.20 6 INCH UNDERDRAIN CARRIER PIPE

- 
 STA 304+25.00 LT - 304+21.22 LT  
 NEW 6" X 4' UNDERDRAIN CARRIER PIPE  
 W/URBAN FLUSHING BASIN @  
 STA 304+25.00 LT  
 303+55

- STA 304+25.00 RT - 304+22.00 RT  
NEW 6" X 3' UNDERDRAIN CARRIER PIPE  
W/URBAN FLUSHING BASIN @  
STA 304+25.00 RT



EXISTING & PROPOSED WATERLINES  
ARE FOR REFERENCE ONLY. PLEASE  
REFER TO WATERLINE SHEETS 102-104

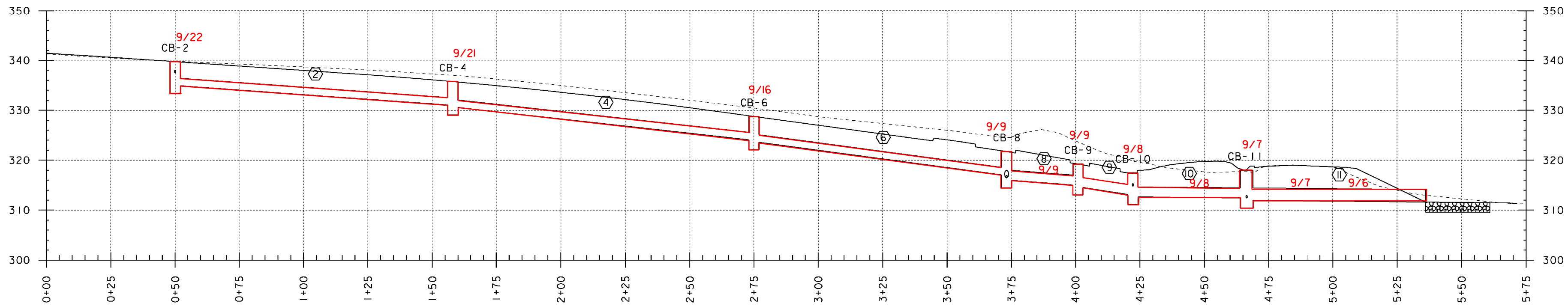
|                 |              |
|-----------------|--------------|
| PROJECT NAME:   | MILTON       |
| PROJECT NUMBER: | STP 5800 (2) |

FILE NAME: +92d289bdr.dgn  
PROJECT LEADER: J. SCHULTZ  
DESIGNED BY: D. LYMAN  
DRAINAGE LAYOUT 4

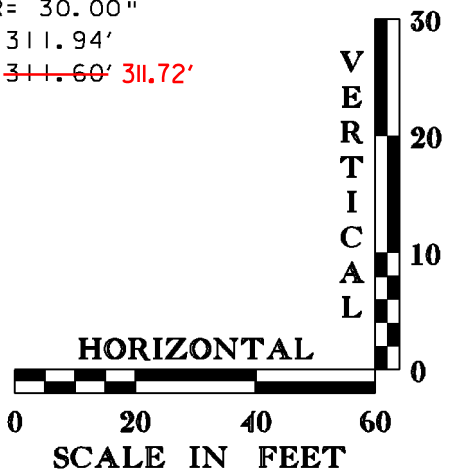
PLOT DATE: 23-FEB-2011  
DRAWN BY: D. LYMAN  
CHECKED BY: J. DEVLIN  
SHEET 33 OF 104







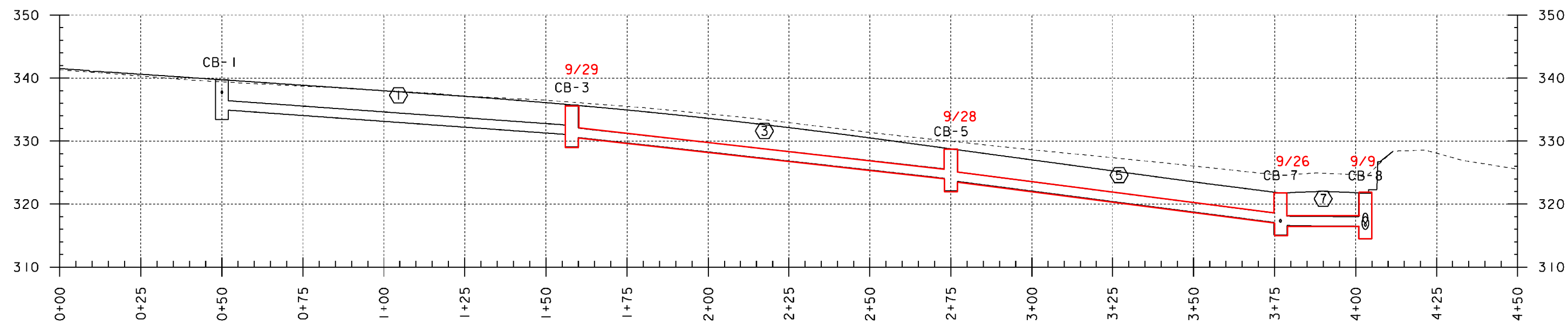
|                                                                                                                                                                               |                                                                                                                                                                                                      |                                                                                                                                                                                          |                                                                                                                                                                                    |                                                                                                                                                                                             |                                                                                                                                                                                            |                                                                                                                                                                                  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CB-2<br>GRATE TYPE D (1)<br>STA 304+25.00 RT<br>OFFSET = 13.00'<br>RIM ELEV= 339.73'<br>DIAMETER= 4.00'<br>DEPTH = 6.33'<br>SUMP = 1.50'                                      | CB-4<br>GRATE TYPE D (1)<br>STA 303+17.00 RT<br>OFFSET = 12.84'<br>RIM ELEV= 335.73'<br>DIAMETER= 4.00'<br>DEPTH = 6.68'<br>SUMP = 1.50'                                                             | CB-6<br>GRATE TYPE D (1)<br>STA 302+00.00 RT<br>OFFSET = 12.80'<br>RIM ELEV= 328.75'<br>DIAMETER= 4.00'<br>DEPTH = 6.67'<br>SUMP = 1.50'                                                 | CB-8<br>GRATE TYPE D (1)<br>STA 301+00.00 RT<br>OFFSET = 13.17'<br>RIM ELEV= <del>324.73'</del> 321.60'<br>DIAMETER= 4.00'<br>DEPTH = 7.26'<br>SUMP = 1.50'                        | CB-9<br>GRATE TYPE D (1)<br>STA 300+70.00 RT<br>OFFSET = 22.60'<br>RIM ELEV= <del>319.23'</del> 319.15'<br>DIAMETER= 4.00'<br>DEPTH = 6.21'<br>SUMP = 1.50'                                 | CB-10<br>GRATE TYPE D (1)<br>STA 300+50.00 RT<br>OFFSET = 36.87'<br>RIM ELEV= <del>317.45'</del> 317.57'<br>DIAMETER= 4.00'<br>DEPTH = 6.31'<br>SUMP = 1.50'                               | CB-11<br>GRATE TYPE D (1)<br>STA 108+40.00 LT<br>OFFSET = 20.64'<br>RIM ELEV= 318.00'<br>DIAMETER= 5.00'<br>DEPTH = 7.56'<br>SUMP = 1.50'                                        |
| ②<br>STA 304+25.00 RT-<br>STA 303+17.00 RT<br>SLOPE= 3.70%<br>NEW PIPE<br>TYPE: OPTION PIPE<br>LENGTH= 108'<br>DIAMETER= 18.00"<br>INV IN= 330.55' 330.40'<br>INV OUT=331.05' | ④<br>STA 303+17.00 RT-<br>STA 302+00.00 RT<br>SLOPE= 5.73%<br>NEW PIPE<br>TYPE: OPTION PIPE<br>LENGTH= 44' 116'<br>DIAMETER= 18.00"<br>INV IN= <del>330.55'</del> 330.40'<br>INV OUT=324.08' 323.73' | ⑥<br>STA 302+00.00 RT-<br>STA 301+00.00 RT<br>SLOPE= 6.93%<br>NEW PIPE<br>TYPE: OPTION PIPE<br>LENGTH= 98' 96'<br>DIAMETER= 18.00"<br>INV IN= 323.58' 323.28'<br>INV OUT=317.06' 316.93' | ⑧<br>STA 301+00.00 RT-<br>STA 300+70.00 RT<br>SLOPE= 3.97%<br>NEW PIPE<br>TYPE: OPTION PIPE<br>LENGTH= 28' 25.5'<br>DIAMETER= 24.00"<br>INV IN= 315.97'<br>INV OUT=315.02' 314.77' | ⑨<br>STA 300+70.00 RT-<br>STA 300+50.00 RT<br>SLOPE= 7.96%<br>NEW PIPE<br>TYPE: OPTION PIPE<br>LENGTH= 24' 20.33'<br>DIAMETER= 24.00"<br>INV IN= 314.52' 314.39'<br>INV OUT=313.14' 312.64' | ⑩<br>STA 300+50.00 RT-<br>STA 108+40.00 LT<br>SLOPE= 0.51%<br>NEW PIPE<br>TYPE: OPTION PIPE<br>LENGTH= 44' 33.5'<br>DIAMETER= 24.00"<br>INV IN= 312.64' 312.33'<br>INV OUT=312.44' 312.36' | ⑪<br>STA 108+40.00 LT-<br>STA 108+40.00 RT<br>SLOPE= 0.50%<br>NEW PIPE<br>TYPE: OPTION PIPE<br>LENGTH= 44' 70'<br>DIAMETER= 30.00"<br>INV IN= 311.94'<br>INV OUT=311.60' 311.72' |



|                              |                        |
|------------------------------|------------------------|
| PROJECT NAME: MILTON         |                        |
| PROJECT NUMBER: STP 5800 (2) |                        |
| FILE NAME: t92d289d.rvt      | PLOT DATE: 23-FEB-2011 |
| PROJECT LEADER: J. SCHULTZ   | DRAWN BY: D. LYMAN     |
| DESIGNED BY: D. LYMAN        | CHECKED BY: J. DEVLIN  |
| DRAINAGE PROFILE SHEET 1     | SHEET 34 OF 104        |

|            |            |
|------------|------------|
| DATUM      |            |
| VERTICAL   | NAVD 1988  |
| HORIZONTAL | NAD83 (96) |





CB-1  
GRATE TYPE D (1)  
STA ~~304+25.00~~ LT 304+95 LT  
OFFSET = 13.00'  
RIM ELEV=~~339.73~~ 341.35'  
DIAMETER= 4.00'  
DEPTH = 6.33'  
SUMP = 1.50'

CB-3  
GRATE TYPE D (1)  
STA 303+17.00 LT  
OFFSET = 12.61'  
RIM ELEV=335.72'  
DIAMETER= 4.00'  
DEPTH = 6.67'  
SUMP = 1.50'

CB-5  
GRATE TYPE D (1)  
STA 302+00.00 LT  
OFFSET = 12.83'  
RIM ELEV=328.75'  
DIAMETER= 4.00'  
DEPTH = 6.67'  
SUMP = 1.50'

CB-7  
GRATE TYPE D (1)  
STA 301+00.00 LT  
OFFSET = 13.00'  
RIM ELEV=~~321.75~~ 321.68'  
DIAMETER= 4.00'  
DEPTH = 6.67'  
SUMP = 1.50'

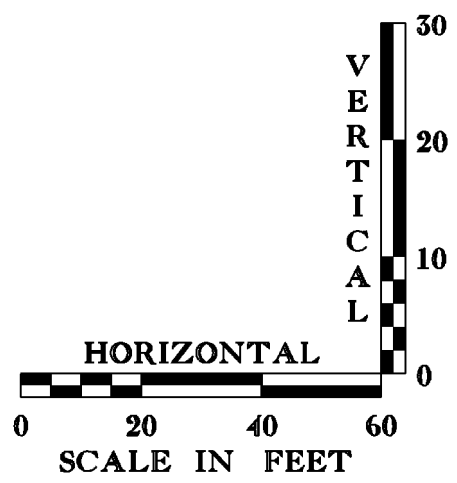
CB-8  
GRATE TYPE D (1)  
STA 301+00.00 RT  
OFFSET = 13.17'  
RIM ELEV=~~321.73~~ 321.60'  
DIAMETER= 4.00'  
DEPTH = 7.26'  
SUMP = 1.50'

①  
STA 304+25.00 LT-  
STA 303+17.00 LT  
SLOPE= 3.70%  
NEW PIPE  
TYPE: OPTION PIPE  
LENGTH= 108'  
DIAMETER= 18.00"  
INV IN= ~~334.99~~ 337.59'  
INV OUT=~~331.05~~ 332.78'

③  
STA 303+17.00 LT-  
STA 302+00.00 LT  
SLOPE= 5.73%  
NEW PIPE  
TYPE: OPTION PIPE  
LENGTH= 117'  
DIAMETER= 18.00"  
INV IN= ~~330.55~~ 332.14'  
INV OUT=~~324.08~~ 323.66'

⑤  
STA 302+00.00 LT-  
STA 301+00.00 LT  
SLOPE= 6.65%  
NEW PIPE  
TYPE: OPTION PIPE  
LENGTH= ~~102~~ 100'  
DIAMETER= 18.00"  
INV IN= ~~323.58~~ 323.12'  
INV OUT=317.08'

⑦  
STA 301+00.00 LT-  
STA 301+00.00 RT  
SLOPE= 0.50%  
NEW PIPE  
TYPE: OPTION PIPE  
LENGTH= ~~25~~ 22'  
DIAMETER= 18.00"  
INV IN= ~~316.58~~ 316.59'  
INV OUT=~~316.44~~ 316.48'



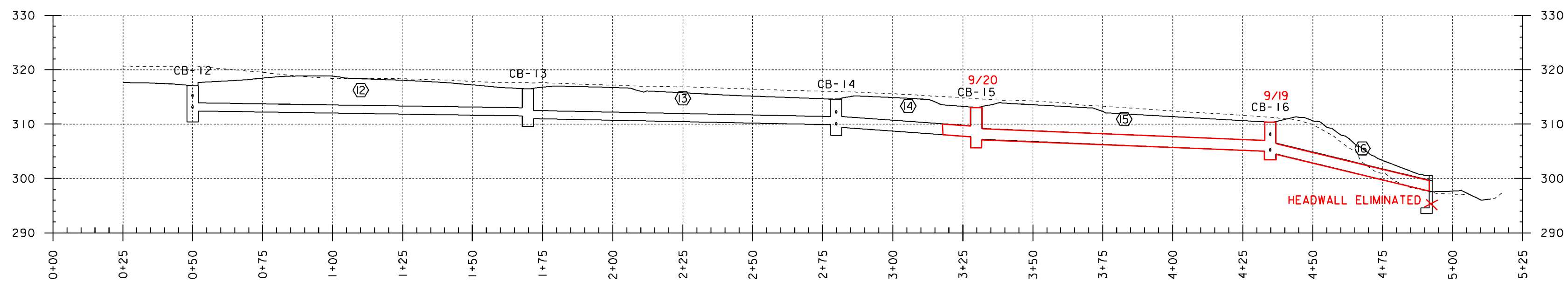
PROJECT NAME: MILTON  
PROJECT NUMBER: STP 5800 (2)

FILE NAME: t92d289d.mxd  
PROJECT LEADER: J. SCHULTZ  
DESIGNED BY: D. LYMAN  
DRAINAGE PROFILE SHEET 2

PLOT DATE: 23-FEB-2011  
DRAWN BY: D. LYMAN  
CHECKED BY: J. DEVLIN  
SHEET 35 OF 104

DATUM  
VERTICAL NAVD 1988  
HORIZONTAL NAD83 (96)





CB-12  
GRATE TYPE D (1)  
STA 107+29.41 LT  
OFFSET = 35.36'  
RIM ELEV= ~~317.07~~ 317.42'  
DIAMETER= 4.00'  
DEPTH = 6.17'  
SUMP = 1.50'

⑫  
STA 107+29.41 LT-  
STA ~~+06+10.00~~ LT 106+00 LT  
SLOPE =0.78%  
NEW PIPE  
TYPE: OPTION PIPE  
LENGTH =120'  
DIAMETER =18.00"  
INV IN= 342.40' 312.38'  
INV OUT=~~344.50~~ 311.15'

CB-13  
GRATE TYPE A (1)  
STA 106+10.00 LT  
OFFSET = 26.08'  
RIM ELEV=316.50'  
DIAMETER= 4.00'  
DEPTH = 7.00'  
SUMP = 1.50'

⑬  
STA 106+10.00 LT-  
STA 105+00.00 LT  
SLOPE =1.06%  
NEW PIPE  
TYPE: OPTION PIPE  
LENGTH =+10' 97'  
DIAMETER =18.00"  
INV IN= ~~344.00~~ 310.65'  
INV OUT=~~309.88~~ 309.53'

CB-14  
GRATE TYPE A (1)  
STA 105+00.00 LT  
OFFSET = 23.00'  
RIM ELEV=~~314.58~~ 314.49'  
DIAMETER= 4.00'  
DEPTH = 6.70'  
SUMP = 1.50'

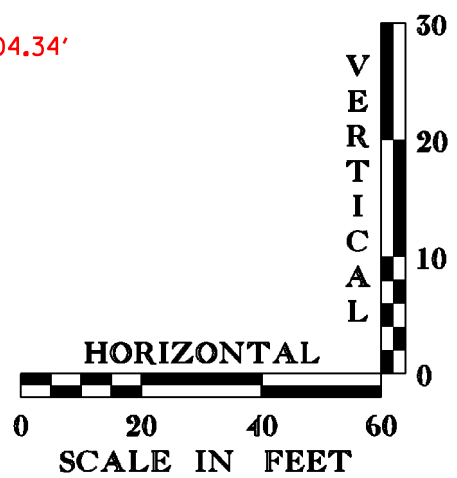
⑭  
STA 105+00.00 LT-  
STA 104+50.00 LT  
SLOPE =3.69%  
NEW PIPE  
TYPE: OPTION PIPE  
LENGTH =50'  
DIAMETER =24.00"  
INV IN= ~~309.38~~ 309.07'  
INV OUT=~~307.68~~ 307.28'

CB-15  
GRATE TYPE A (1)  
STA 104+50.00 LT  
OFFSET = 24.07'  
RIM ELEV=313.10'  
DIAMETER= 4.00'  
DEPTH = 7.42'  
SUMP = 1.50'

⑮  
STA 104+50.00 LT-  
STA 103+45.00 LT  
SLOPE =2.16%  
NEW PIPE  
TYPE: OPTION PIPE  
LENGTH =+85' III  
DIAMETER =24.00"  
INV IN= ~~307.18~~ 307.10'  
INV OUT=~~305.00~~ 304.84'

CB-16  
GRATE TYPE A (1)  
STA ~~+03+45.00~~ LT 103+30 LT  
OFFSET = 23.00'  
RIM ELEV=310.37'  
DIAMETER= 4.00'  
DEPTH = 7.37'  
SUMP = 1.50'

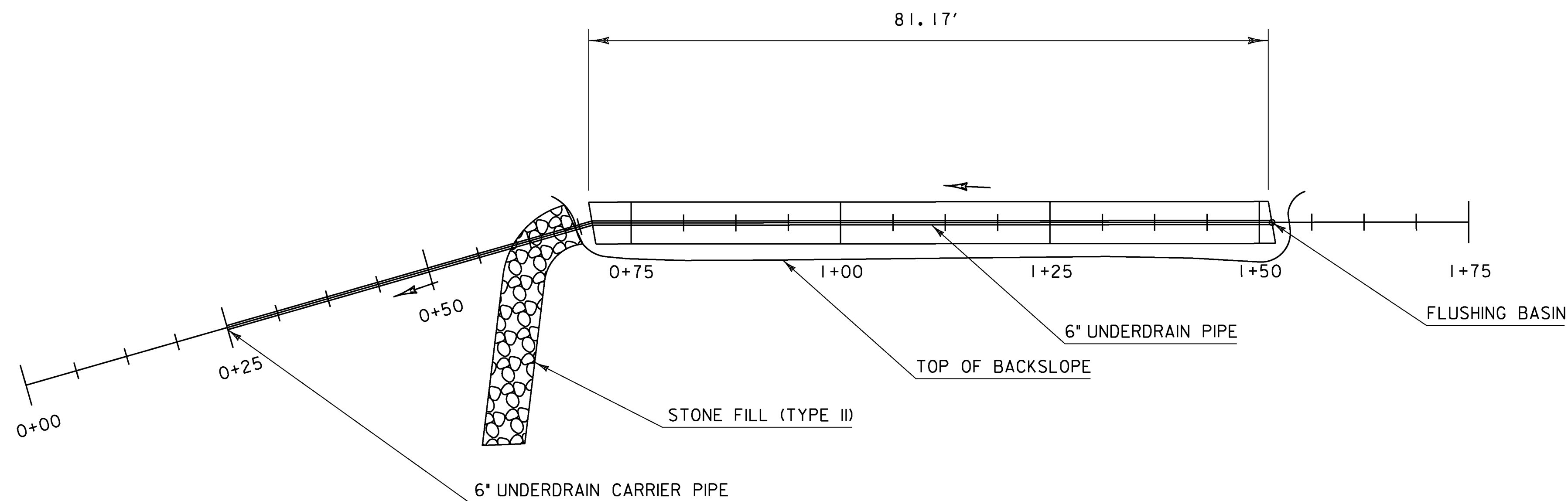
⑯  
STA 103+45.00 LT-  
STA 102+97.60 LT  
SLOPE =12.42%  
NEW PIPE  
TYPE: OPTION PIPE  
LENGTH =58' 49.5'  
DIAMETER =24.00"  
INV IN= ~~304.50~~ 304.34'  
INV OUT=297.56'



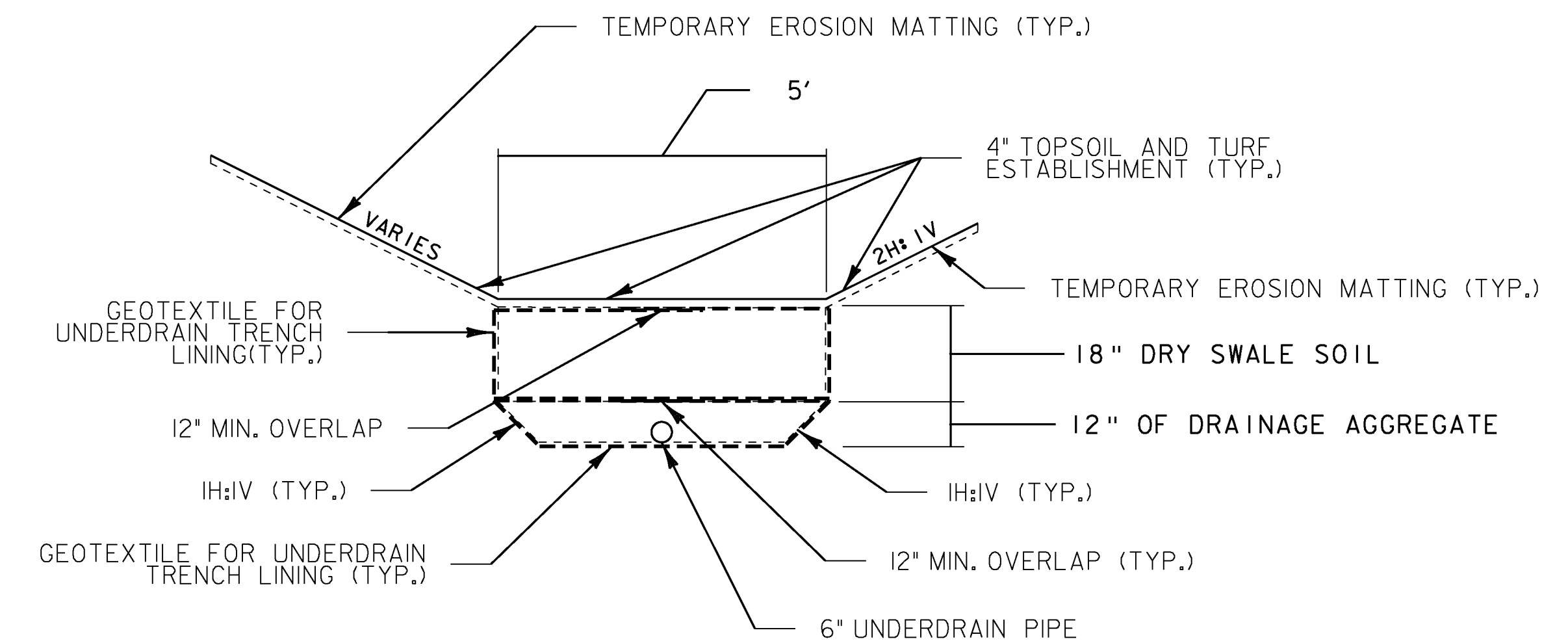
|                              |                        |
|------------------------------|------------------------|
| PROJECT NAME: MILTON         |                        |
| PROJECT NUMBER: STP 5800 (2) |                        |
| FILE NAME: t92d289d.mxd      | PLOT DATE: 23-FEB-2011 |
| PROJECT LEADER: J. SCHULTZ   | DRAWN BY: D. LYMAN     |
| DESIGNED BY: D. LYMAN        | CHECKED BY: J. DEVLIN  |
| DRAINAGE PROFILE SHEET 3     | SHEET 36 OF 104        |

|            |            |
|------------|------------|
| DATUM      | NAVD 1988  |
| VERTICAL   |            |
| HORIZONTAL | NAD83 (96) |

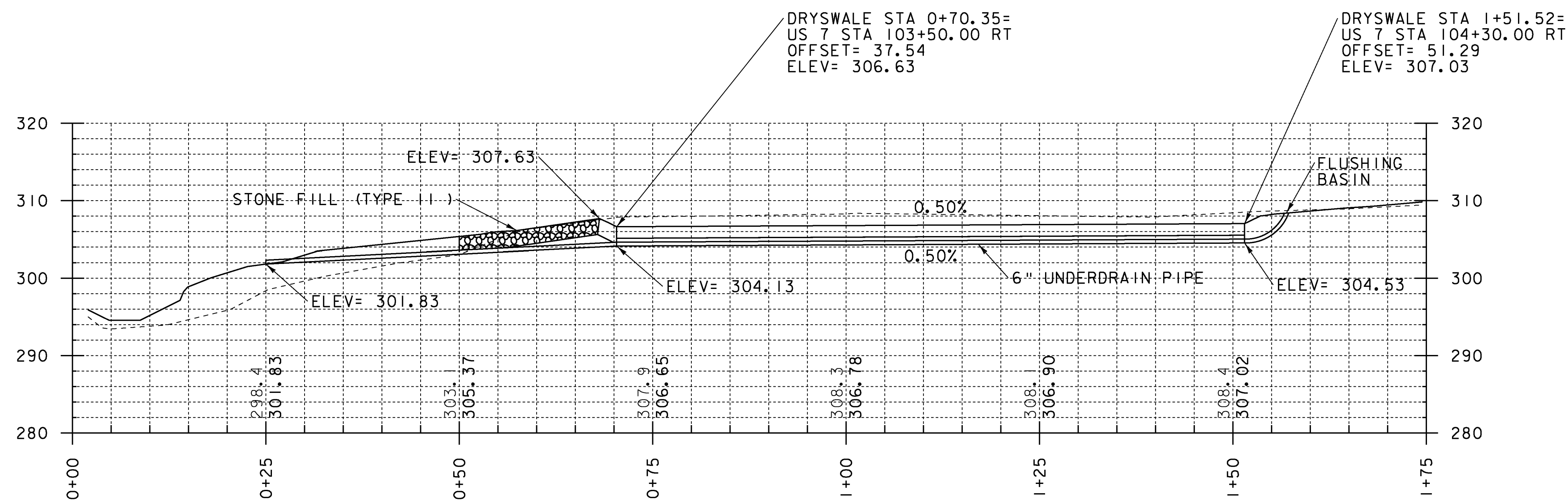




**900.640 SPECIAL PROVISION  
(6" UNDERDRAIN PIPE, DRY SWALE)  
PLAN**



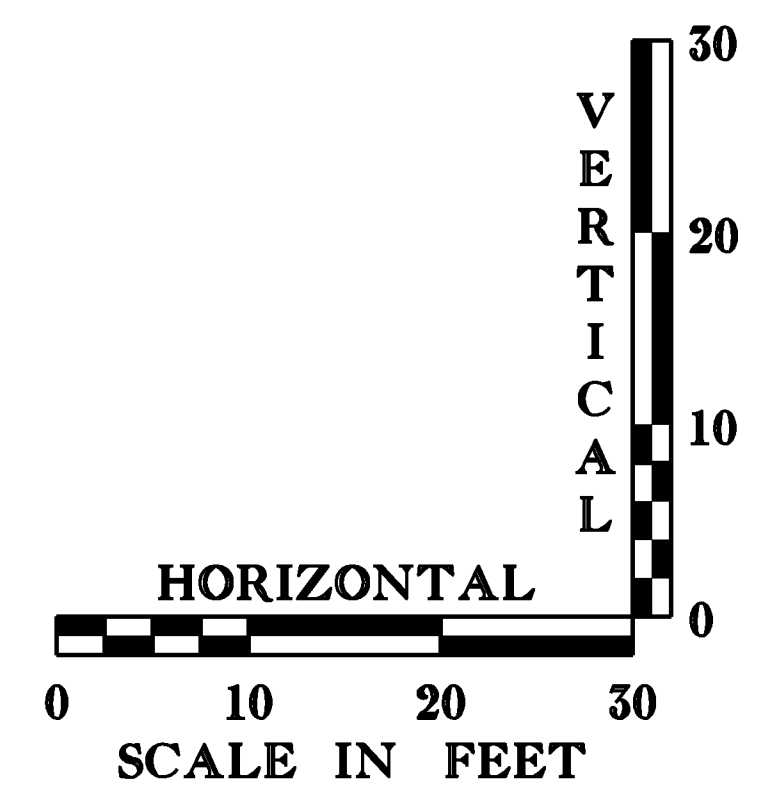
**900.640 SPECIAL PROVISION  
(6" UNDERDRAIN PIPE, DRY SWALE)  
US ROUTE 7  
104+30.00 RT - 103+50.00 RT  
NOT TO SCALE**



**900.640 SPECIAL PROVISION  
(6" UNDERDRAIN PIPE, DRY SWALE)  
PROFILE**

#### DRY SWALE NOTES

1. THE CONTRACTOR SHALL WRAP GEOTEXTILE FOR UNDERDRAIN TRENCH LINING AROUND THE DRY SWALE SOIL AND DRAINAGE AGGREGATE SEPARATELY WITH A MINIMUM OF 12" OVERLAP AT ENDS.
2. THE CONTRACTOR SHALL PLACE TEMPORARY EROSION MATTING WITH GRASS AND SEED OVER THE DRY SWALE SOIL.



|                                   |                        |
|-----------------------------------|------------------------|
| PROJECT NAME:                     | MILTON                 |
| PROJECT NUMBER:                   | STP 5800 (2)           |
| FILE NAME: +92d289+typ.dgn        | PLOT DATE: 23-FEB-2011 |
| PROJECT LEADER: J. SCHULTZ        | DRAWN BY: D. LYMAN     |
| DESIGNED BY: D. LYMAN             | CHECKED BY: J. DEVLIN  |
| STORMWATER TREATMENT DETAIL SHEET | SHEET 37 OF 104        |



EROSION CONTROL NARRATIVE

1.1 PROJECT DESCRIPTION

THE PROJECT IS LOCATED AT THE INTERSECTION OF US ROUTE 7 AND TOWN HIGHWAY #3 (LAKE ROAD). WORK TO BE PERFORMED INCLUDES HORIZONTAL AND VERTICAL ALIGNMENT IMPROVEMENTS, CONSTRUCTION OF A US ROUTE 7 NORTHBOUND LEFT TURN LANE, FULL DEPTH ROADWAY RECONSTRUCTION, AND DRAINAGE IMPROVEMENTS.

NOTE: AREA OF DISTURBANCE SHALL INCLUDE LIMITS OF EARTH DISTURBANCE WITHIN THE PROJECT AREA, INCLUDING ANY WASTE, STAGING AND BORROW AREAS WITHIN OR DIRECTLY ADJACENT TO THE PROJECT LIMITS.

TOTAL AREA OF DISTURBANCE IS APPROXIMATELY 3.07 ACRES.

IT IS ANTICIPATED THAT THIS PROJECT WILL LAST ONE CONSTRUCTION SEASON.

1.2 SITE INVENTORY

1.2.1 TOPOGRAPHY

THE PROPERTY SURROUNDING THE PROJECT SITE CONSISTS OF A BALANCE BETWEEN WELL ESTABLISHED WOODED AREAS AS WELL AS RESIDENTIAL DEVELOPMENT. THESE RESIDENTIAL LOTS HAVE WELL ESTABLISHED LAWNS AND SCATTERED LANDSCAPING FEATURES. THE PROJECT SITE WILL RECEIVE RUNOFF FROM AREAS WEST OF US ROUTE 7. AREAS EAST OF US ROUTE 7 WILL PRIMARILY DRAIN AWAY FROM THE PROJECT SITE. ALL RUNOFF FROM THESE OFF-SITE AREAS HAVE BEEN CONSIDERED IN DRAINAGE DESIGN CALCULATIONS.

1.2.2 DRAINAGE, WATERWAYS, BODIES OF WATER, AND PROXIMITY TO NATURAL OR MAN-MADE WATER FEATURES

AT THE SOUTHERN END OF THE PROJECT, US ROUTE 7 RUNS PARALLEL AND IN CLOSE PROXIMITY TO ARROWHEAD MOUNTAIN LAKE. AN UNNAMED TRIBUTARY OF ARROWHEAD MOUNTAIN LAKE IS THE ONLY OTHER WATER SOURCE ON THE PROJECT SITE. THE UNNAMED TRIBUTARY CROSSING IS LOCATED APPROXIMATELY 186 FEET NORTH OF THE BEGIN PROJECT STATION. THE TRIBUTARY DRAINAGE AREA AT THE CULVERT CROSSING IS APPROXIMATELY 38 ACRES. ALONG LAKE ROAD AND A PORTION OF US ROUTE 7 THERE ARE MULTIPLE DROP INLETS PROPOSED THAT WILL SERVE TO COLLECT THE ROADWAY AND LIMITED OFFSITE RUNOFF AND ULTIMATELY CONVEY THIS WATER TO ARROWHEAD MOUNTAIN LAKE.

1.2.3 VEGETATION

THE VEGETATION IN THE PROJECT AREA CONSISTS OF WOODS, BRUSH, AND GRASSED AREAS. THE IMPACT TO VEGETATION WILL BE LIMITED TO THAT WHICH IS DIRECTLY AFFECTED BY THE ROADWAY CONSTRUCTION ACTIVITIES. DISTURBED VEGETATION WILL BE REESTABLISHED WITH STANDARD SEED AND MULCH PRACTICES.

1.2.4 SOILS

ALL SOIL DATA CAME FROM THE U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE FOR THE COUNTY OF CHITTENDEN, VERMONT. SOILS ON THE PROJECT SITE ARE ADAMS AND WINDSOR LOAMY SANDS, 0% TO 5% SLOPES AND 12% TO 30% SLOPES, “K FACTOR” = 0.17. THE SOIL IS CONSIDERED TO HAVE LOW EROSION POTENTIAL.  
NOTE: K-VALUES GENERALLY INDICATE THEFOLLOWING: 0.0-0.23 = LOW EROSION POTENTIAL; 0.24-0.36 = MODERATE EROSION POTENTIAL; 0.37 AND HIGHER = HIGH EROSION POTENTIAL.

1.2.5 SENSITIVE RESOURCE AREAS

CRITICAL HABITATS: NO  
HISTORICAL OR ARCHEOLOGICAL AREAS: NO  
PRIME AGRICULTURAL LAND: NO  
THREATENED AND ENDANGERED SPECIES: NO  
WATER RESOURCE: ARROWHEAD MOUNTAIN LAKE, UNNAMED TRIBUTARY  
WETLANDS: NO

1.3 RISK EVALUATION

THIS PROJECT FALLS UNDER THE JURISDICTION OF GENERAL PERMIT 3-9020 FOR STORMWATER RUNOFF FROM CONSTRUCTION SITES FOR LOW RISK PROJECTS. ANY MODIFICATIONS TO THE PROJECT THAT INCREASE THE RISK TO ENVIRONMENTAL RESOURCES SHALL BE EVALUATED IN ACCORDANCE WITH THE PERMIT REQUIREMENTS. THE CONTRACTOR WILL BE RESPONSIBLE FOR ANY ADDITIONAL PERMITTING.

1.4 EROSION PREVENTION AND SEDIMENT CONTROL

THE EROSION CONTROL PLANS ARE MEANT AS A GUIDELINE FOR PREVENTING EROSION AND CONTROLLING SEDIMENT TRANSPORT. THE PRINCIPLES OUTLINED IN THIS NARRATIVE CONSIST OF APPLYING MEASURES THROUGHOUT CONSTRUCTION OF THE PROJECT IN ORDER TO MINIMIZE SEDIMENT TRANSPORT TO THE RECEIVING WATERS. THE MEASURES INCLUDE STABILIZATION AND STRUCTURAL PRACTICES, STORM WATER CONTROLS AND OTHER POLLUTION PREVENTION PRACTICES. THEY HAVE BEEN PROPOSED BY THE DESIGNER AS A BASIS FOR PROTECTING RESOURCES AND WILL NEED TO BE BUILT UPON BASED ON THE SPECIFC MEANS AND METHODS OF THE CONTRACTOR. REFER TO THE LOW RISK SITE HANDBOOK AND APPROPRIATE DETAIL SHEETS FOR SPECIFIC GUIDANCE AND CONSTRUCTION DETAILING.

ALL MEASURES SHALL BE REGULARLY MAINTAINED AND SHALL BE CHECKED FOR SEDIMENT BUILD-UP. SEDIMENT SHALL BE DISPOSED OF AT AN APPROVED SITE WHERE IT WILL NOT BE SUBJECT TO EROSION.

1.4.1 MARK SITE BOUNDARIES  
SITE BOUNDARIES AND AREAS CONSTRUCTION EQUIPMENT CAN ACCESS SHALL BE DELINEATED.

PROJECT DEMARCATION FENCING, DENOTED -PDF- ON THE PLANS IS USED TO DELINEATE THE LIMITS THE CONTRACTOR CAN ACCESS WITH CONSTRUCTION. THIS PROJECT FALLS UNDER THE CGP 3-9020, THEREFORE BARRIER FENCE DENOTED -BF- SHALL BE USED INSTEAD OF PROJECT DEMARCATION FENCE WITHIN 100 FEET OF A WATER RESOURCE. THIS MEASURE LIMITS THE AREA THAT CAN BE DISTURBED AND EXPOSED TO EROSION.

1.4.2 LIMIT DISTURBANCE AREA  
PREVENTING INITIAL SOIL EROSION BY MINIMIZING THE EXPOSED AREA IS MUCH MORE EFFECTIVE THAN TREATING ERODED SEDIMENT. EARTH DISTURBANCE CAN BE MINIMIZED THROUGH CONSTRUCTION PHASING BY ONLY OPENING UP EARTH AS NECESSARY. THIS CAN LIMIT THE AREA THAT WILL BE DISTURBED AND EXPOSED TO EROSION. EMPLOY TEMPORARY CONSTRUCTION STABILIZATION PRACTICES IN INCREMENTAL STAGES AS PHASES CHANGE. FOR PROJECTS WHICH FALL UNDER THE CONSTRUCTION GENERAL PERMIT, EARTH DISTURBANCE AT ANY ONE TIME SHALL BE LIMITED TO 2 ACRES.

MAINTAINING VEGETATED BUFFERS ALONG STREAM BANKS, WETLANDS OR OTHER SENSITIVE AREAS IS A CRUCIAL EROSION AND SEDIMENT CONTROL MEASURE THAT SHOULD BE ESTABLISHED WHEREVER POSSIBLE. DISTURBANCE IN THE VICINITY OF ARROWHEAD MOUNTAIN LAKE AND THE UNAMED TRIBUTARY SHALL BE MINIMIZED.

1.4.3 SITE ENTRANCE/EXIT STABILIZATION  
TRACKING OF SEDIMENT ONTO PUBLIC HIGHWAYS SHALL BE MNIMIZED TO REDUCE THE POTENTIAL FOR RUNOFF ENTERING RECEIVING WATERS. INSTALLATION SHALL COINCIDE WITH THE CONTRACTORS PROGRESS SCHEDULE.

STABILIZED CONSTRUCTION ENTRANCES SHALL BE INSTALLED AS REQUIRED BY THE RESIDENT ENGINEER AND SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.

1.4.4 INSTALL SEDIMENT BARRIERS  
SEDIMENT BARRIERS SHALL BE UTILIZED TO INTERCEPT RUNOFF AND ALLOW SUSPENDED SEDIMENT TO SETTLE OUT. THEY SHALL BE INSTALLED PRIOR TO ANY UP SLOPE WORK.

SILT FENCE WILL BE INSTALLED AS PROPOSED ON THE EPSC PLAN. BECAUSE THIS PROJECT FALLS UNDER THE CGP 3-9020, WOVEN WIRE REINFORCED SILT FENCE SHALL BE USED INSTEAD OF SILT FENCE WITHIN 100 FEET UPSLOPE OF RECEIVING WATERS.

1.4.5 DIVERT UPLAND RUNOFF  
DIVERSIONARY MEASURES SHALL BE USED TO INTERCEPT RUNOFF FROM ABOVE THE CONSTRUCTION AND DIRECT IT AROUND THE DISTURBED AREA SO THAT CLEAN WATER DOES NOT BECOME MUDDIED WHILE TRAVELING OVER EXPOSED SOILS ON THE CONSTRUCITON SITE.

EXISTING SWALES SHALL BE UTILIZED TO DIVERT PORTIONS OF THE OFF-SITE RUNOFF PRIOR TO REACHING THE PROJECT SITE.

1.4.6 SLOW DOWN CHANNELIZED RUNOFF  
CHECK STRUCTURES SHALL BE UTILIZED TO REDUCE THE VELOCITY, AND THUS THE EROSIVE POTENTIAL, OF CONCENTRATED FLOW IN CHANNELS.

CHECK DAM STRUCTURES ARE NOT ANTICIPATED FOR THIS PROJECT.

1.4.7 CONSTRUCT PERMANENT CONTROLS  
PERMANENT STORMWATER TREATMENT DEVICES SHALL BE INSTALLED AS SHOWN ON THE PLANS AND IN ACCORDANCE WITH PERMIT CONDITIONS.

TYPE II STONE FOR SLOPE LINING AND CHANNEL PROTECTION  
SEED AND MULCH  
DRAINAGE INLETS AND PIPING

1.4.8 STABILIZE EXPOSED SOILS DURING CONSTRUCTION  
ALL AREAS OF DISTURBANCE MUST HAVE TEMPORARY STABILIZATION IN PLACE WITHIN 48 HOURS OF DISTURBANCE OR IN ACCORDANCE WITH THE CONSTRUCTION GENERAL PERMIT 3-9020 AUTHORIZATION.

SURFACE ROUGHENING OF ALL EXPOSED SLOPES, COMBINED WITH TEMPORARY MULCHING, SHALL BE UTILIZED ON A REGULAR BASIS. BIODEGRADABLE EROSION CONTROL MATTING OR AN EQUIVALENT SHALL BE USED TO STABILIZE ALL SLOPES STEEPER THAN 1:3.

THE FORECAST OF RAINFALL EVENTS SHALL TRIGGER IMMEDIATE PROTECTION OF EXPOSED SOILS.

1.4.9 WINTER STABILIZATION  
VARIOUS MEASURES SPECIFIC TO WINTER MAY BE NECESSARY SHOULD THE PROJECT EXTEND INTO WINTER (OCTOBER 15 THROUGH APRIL 15). REFER TO THE LOW RISK SITE HANDBOOK FOR GUIDANCE.

1.4.10 STABILIZE SOIL AT FINAL GRADE  
EXPOSED SOIL MUST BE STABILIZED WITHIN 48 HOURS OF REACHING FINAL GRADE.

SEED, MULCH, FERTILIZER AND LIME SHALL BE USED TO ESTABLISH PERMANENT VEGETATION. FOR SLOPES STEEPER THAN 1:3, BIODEGRADABLE EROSION CONTROL MATTING OR AN EQUIVALENT SHALL BE USED INSTEAD OF MULCH.

1.4.11 DE-WATERING ACTIVITIES  
DISCHARGE FROM DEWATERING ACTIVITIES THAT FLOWS OFF OF THE CONSTRUCTION SITE MUST NOT CAUSE OR CONTRIBUTE TO A VIOLATION OF THE VERMONT WATER QUALITY STANDARDS.

BASED ON CONTRACTOS’S PHASING, DEWATERING ASSOCIATED WITH THE CULVERT REPLACEMENT AT APPROXIMATE STATION 102+87 MAY BE REQUIRED.

1.4.12 INSPECT YOUR SITE  
INSPECT THE PROJECT SITE BASED ON SPECIAL PROVISION REQUIREMENTS OR CONSTRUCTION GENERAL PERMIT AUTHORIZATION STIPULATIONS.

1.5 SEQUENCE AND STAGING

THIS SECTION WILL BE DEVELOPED BY THE CONTRACTOR USING THE GUIDANCE OUTLINED IN THE VTRANS EPSC PLAN CONTRACTOR CHECKLIST.

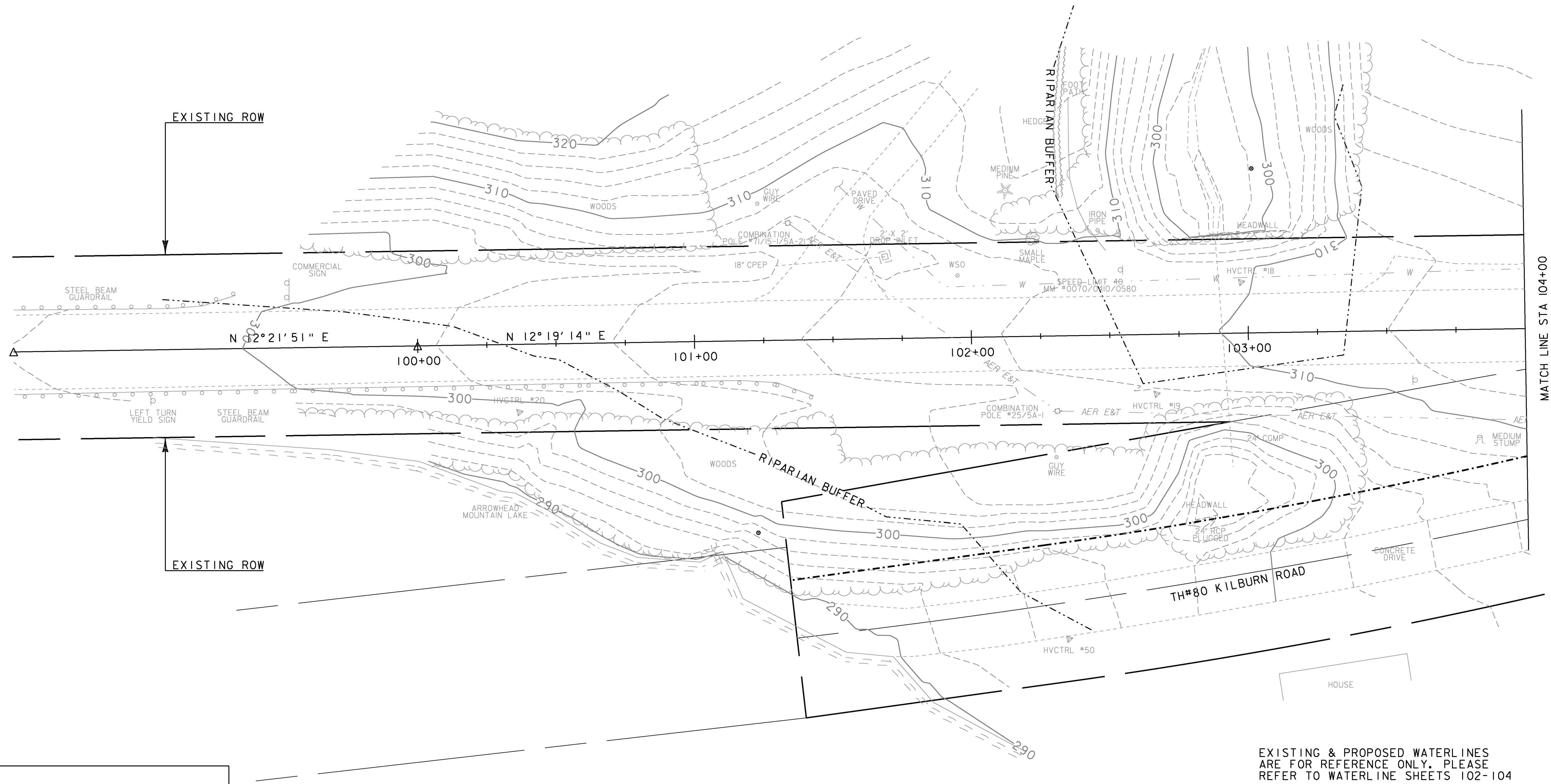
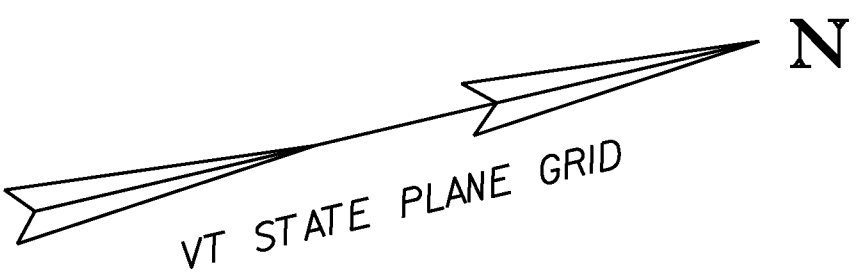
1.5.1 CONSTRUCTION SEQUENCE

1.5.2 OFF-SITE ACTIVITIES  
IN ADDITION TO THE CONTRACTOR CHECKLIST ANY ACTIVITIES OUTSIDE THE CONSTRUCTION LIMITS SHALL FOLLOW SUBSECTIONS 105.25- 105.29 OF THE STANDARD SPECIFICATIONS FOR CONSTRUCTION.

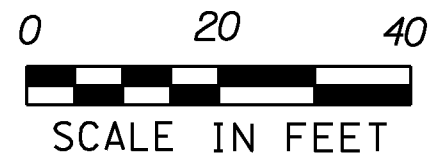
1.5.3 UPDATES

|                                   |                        |
|-----------------------------------|------------------------|
| PROJECT NAME: MILTON              |                        |
| PROJECT NUMBER: STP 5800 (2)      |                        |
| FILE NAME: +92d289ecnarrative.dgn | PLOT DATE: 23-FEB-2011 |
| PROJECT LEADER: J. SCHULTZ        | DRAWN BY: J. DEVLIN    |
| DESIGNED BY: D. LYMAN             | CHECKED BY: J. DEVLIN  |
| EPSC NARRATIVE                    | SHEET 38 OF 104        |





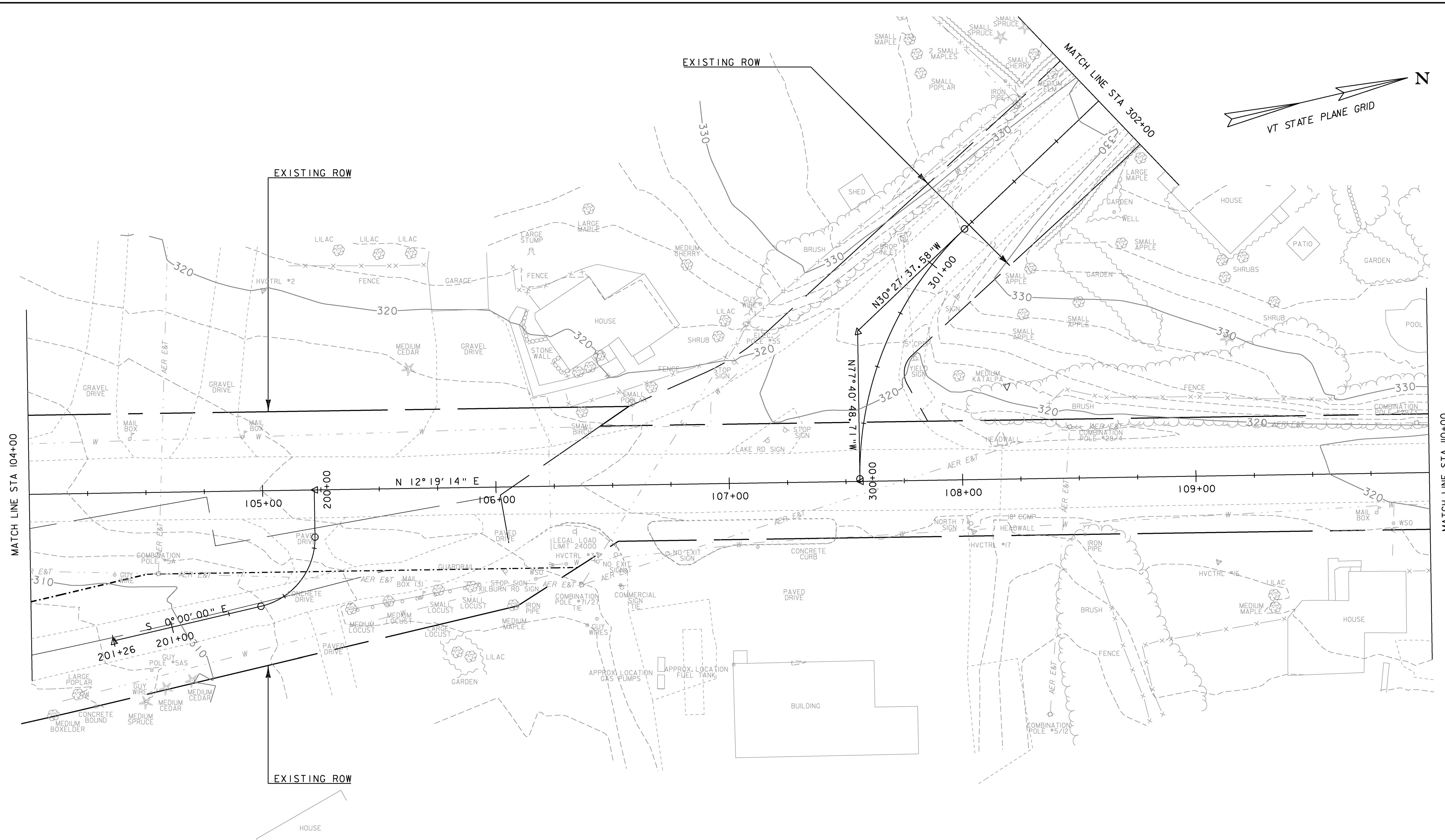
LEGEND  
— AER E&T — AERIAL ELECTRIC & TELEPHONE



EXISTING & PROPOSED WATERLINES  
ARE FOR REFERENCE ONLY. PLEASE  
REFER TO WATERLINE SHEETS 102-104

|                                      |                        |
|--------------------------------------|------------------------|
| PROJECT NAME: MILTON                 |                        |
| PROJECT NUMBER: STP 5800 (2)         |                        |
| FILE NAME: +92D289ecex1st+ingbdr.dgn | PLOT DATE: 23-FEB-2011 |
| PROJECT LEADER: J. SCHULTZ           | DRAWN BY: J. DEVLIN    |
| DESIGNED BY: D. LYMAN                | CHECKED BY: J. DEVLIN  |
| EPSC EXISTING CONDITIONS SHEET 1     | SHEET 39 OF 104        |





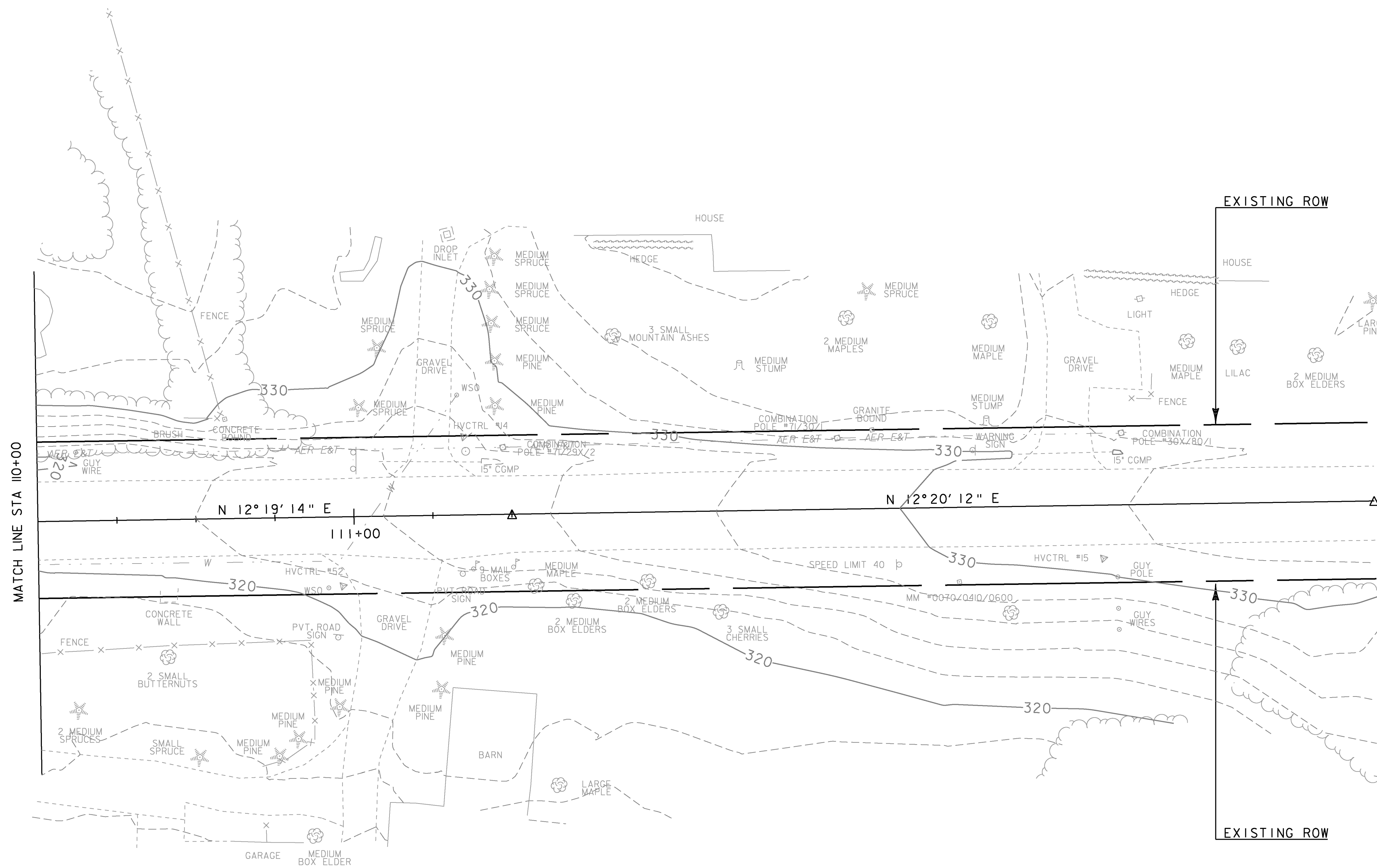
LEGEND  
— AER E&T — AERIAL ELECTRIC & TELEPHONE



EXISTING & PROPOSED WATERLINES  
ARE FOR REFERENCE ONLY. PLEASE  
REFER TO WATERLINE SHEETS 102-104

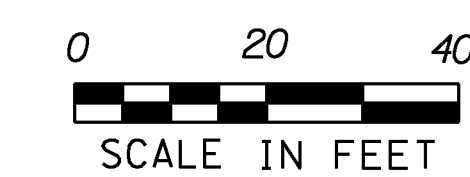
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| PROJECT NAME: MILTON                 |                        |
| PROJECT NUMBER: STP 5800 (2)         |                        |
| FILE NAME: +92D289ecexlst+ingbdr.dgn | PLOT DATE: 23-FEB-2011 |
| PROJECT LEADER: J. SCHULTZ           | DRAWN BY: J. DEVLIN    |
| DESIGNED BY: D. LYMAN                | CHECKED BY: J. DEVLIN  |
| EPSC EXISTING CONDITIONS SHEET 2     | SHEET 40 OF 104        |





— AER E&T — AERIAL ELECTRIC & TELEPHONE

|                                     |                        |
|-------------------------------------|------------------------|
| FILE NAME: +92D289ecexistingbdr.dgn | PLOT DATE: 23-FEB-2011 |
| PROJECT LEADER: J. SCHULTZ          | DRAWN BY: J. DEVLIN    |
| DESIGNED BY: D. LYMAN               | CHECKED BY: J. DEVLIN  |
| EPSC EXISTING CONDITIONS SHEET 3    | SHEET 41 OF 104        |









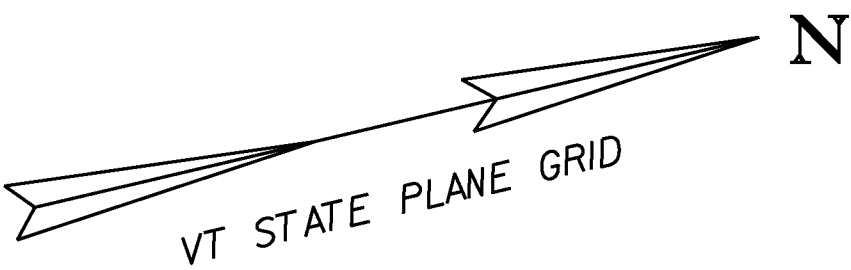
ESPC CONSTRUCTION NOTES:

1. THESE PLANS SHOW A CONCEPTUAL EROSION CONTROL PLAN, THE CONTRACTOR MUST SUBMIT A TEMPORARY EROSION CONTROL PLAN FOR APPROVAL.
2. TEMPORARY EROSION CONTROL MEASURES ARE CONCEPTUALLY SHOWN. THE CONTRACTOR MAY RELOCATE TEMPORARY MEASURES TO IMPROVE EROSION CONTROL WITH APPROVAL OF THE RESIDENT ENGINEER AND ON SITE COORDINATOR. SILT FENCE SHALL NOT BE INSTALLED ACROSS CONTOURS.
3. THE CONTRACTOR SHALL USE OTHER TEMPORARY EROSION CONTROL MEASURES AS NECESSITATED BY THE SEQUENCE OF CONSTRUCTION OR AS DIRECTED BY THE RESIDENT ENGINEER AND ON SITE COORDINATOR.
4. REFER TO TEMPORARY EROSION CONTROL DETAIL SHEETS FOR ADDITIONAL DETAILS.

SOIL CLASSIFICATION  
ADAMS AND WINDSOR  
LOAMY SANDS  
0 - 5% SLOPES  
"K FACTOR" 0.17  
LOW EROSION POTENTIAL

SOIL CLASSIFICATION  
ADAMS AND WINDSOR  
LOAMY SANDS  
30 - 60% SLOPES  
"K FACTOR" 0.17  
LOW EROSION POTENTIAL

NOTE: GEOTEXTILE FOR SILT FENCE, WOVEN WIRE REINFORCED BETWEEN APPROXIMATE STA 100+80.65 RT AND 102+63.93 RT MAY BE RELOCATED CLOSER TO THE ROADWAY BASED ON FIELD GRADING CONDITIONS



EXISTING ROW

EXISTING ROW

649.515 - GEOTEXTILE FOR SILT FENCE, WOVEN WIRE REINFORCED  
STA 100+06.24 RT - 100+33.96 RT  
STA 100+28.96 RT - 100+56.67 RT  
STA 100+62.95 RT - 100+78.04 RT  
STA 100+80.65 RT - 101+67.44 RT  
STA 101+65.98 RT - 102+55.01 RT  
STA 102+53.51 RT - 102+63.93 RT

653.20 - TEMPORARY EROSION MATTING  
STA 102+49.62 LT - 103+40.34 LT  
STA 102+59.99 RT - 104+00.00 RT

653.40 - INLET PROTECTION, TYPE I  
STA 101+69.27 LT  
STA 103+45.00 LT

653.50 - BARRIER FENCE  
STA 100+00.00 RT - 101+01.14 RT  
STA 102+50.00 LT - 103+53.06 LT

653.55 - PROJECT DEMARCATION FENCE  
STA 100+00.00 LT - 101+35.00 LT  
STA 101+75.00 LT - 102+50.00 LT  
STA 103+53.06 LT - 104+00.00 LT

LEGEND

- SILT FENCE
- SILT FENCE, WOVEN WIRE REINFORCED
- LIMITS OF SOIL DISTURBANCE
- EROSION MATTING
- PDF - PDF PROJECT DEMARCATION FENCE
- BF - BF BARRIER FENCE
- STONE DROP INLET PROTECTION

SOIL CLASSIFICATION  
ADAMS AND WINDSOR  
LOAMY SANDS  
0 - 5% SLOPES  
"K FACTOR" 0.17  
LOW EROSION POTENTIAL

EXISTING & PROPOSED WATERLINES  
ARE FOR REFERENCE ONLY. PLEASE  
REFER TO WATERLINE SHEETS 102-104

PROJECT NAME: MILTON  
PROJECT NUMBER: STP 5800 (2)

FILE NAME: +92D289econstructionbdr.dgn PLOT DATE: 23-FEB-2011  
PROJECT LEADER: J. SCHULTZ DRAWN BY: J. DEVLIN  
DESIGNED BY: D. LYMAN CHECKED BY: J. DEVLIN  
ESPC CONSTRUCTION SHEET 1 SHEET 43 OF 104

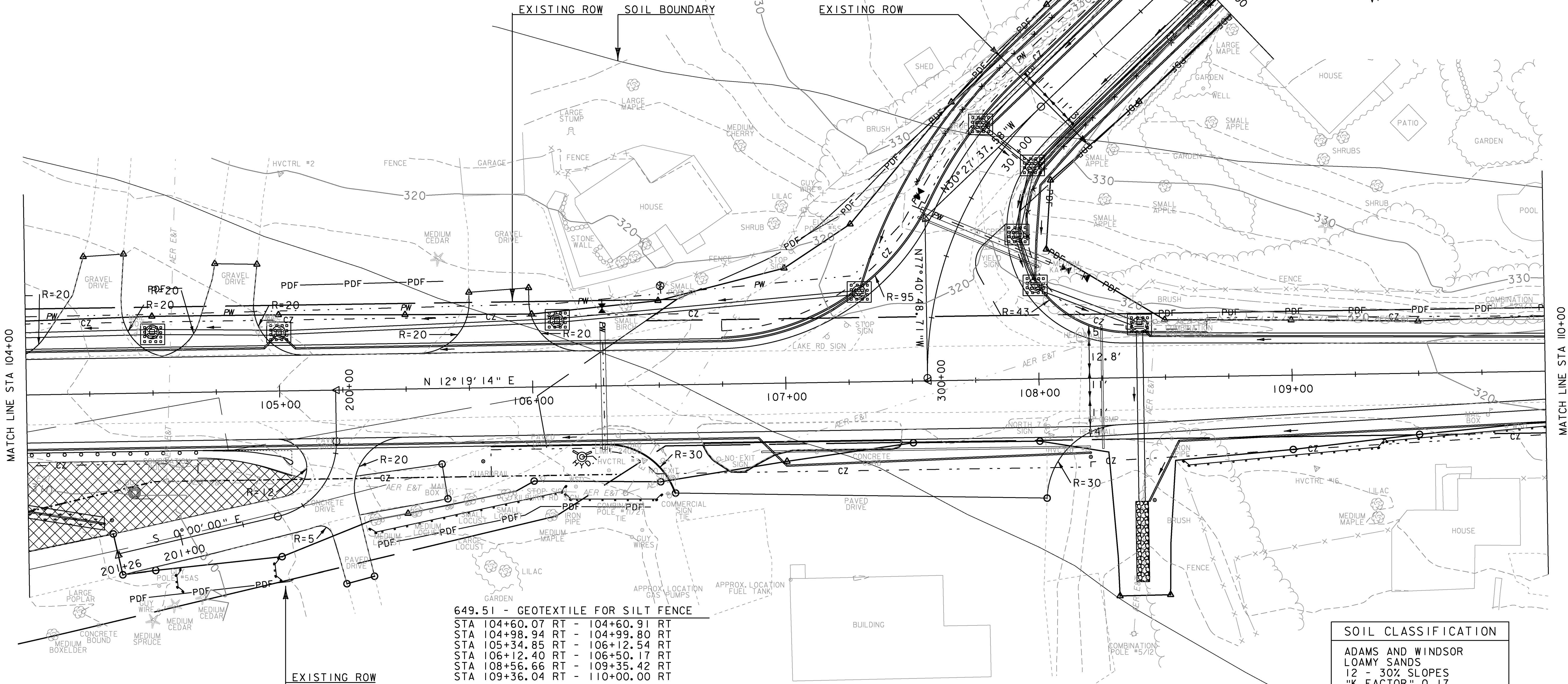
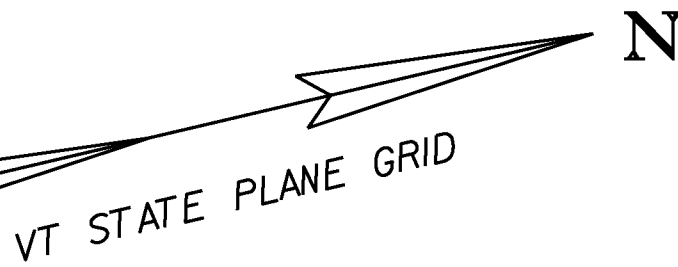
0 20 40  
SCALE IN FEET



NOTE: SEE SHEET 43 FOR EPSC CONSTRUCTION NOTES

SOIL CLASSIFICATION

ADAMS AND WINDSOR  
LOAMY SANDS  
0 - 5% SLOPES  
"K FACTOR" 0.17  
LOW EROSION POTENTIAL



649.51 - GEOTEXTILE FOR SILT FENCE

STA 104+60.07 RT - 104+60.91 RT  
STA 104+98.94 RT - 104+99.80 RT  
STA 105+34.85 RT - 106+12.54 RT  
STA 106+12.40 RT - 106+50.17 RT  
STA 108+56.66 RT - 109+35.42 RT  
STA 109+36.04 RT - 110+00.00 RT

653.20 - TEMPORARY EROSION MATTING

STA 104+00.00 RT - 105+09.31 RT

SOIL CLASSIFICATION

ADAMS AND WINDSOR  
LOAMY SANDS  
0 - 5% SLOPES  
"K FACTOR" 0.17  
LOW EROSION POTENTIAL

653.40 - INLET PROTECTION, TYPE 1

STA 104+50.00 LT  
STA 105+00.00 LT  
STA 106+10.00 LT  
STA 107+29.41 LT  
STA 108+40.00 LT  
STA 300+50.00 RT  
STA 300+70.00 RT  
STA 301+00.00 LT  
STA 301+00.00 RT  
STA 302+00.00 LT  
STA 302+00.00 RT

653.55 - PROJECT DEMARCATION FENCE

STA 104+00.00 LT - 104+06.84 LT  
STA 104+39.12 RT - 105+04.28 RT  
STA 104+48.09 LT - 104+62.15 LT  
STA 105+00.79 LT - 105+65.34 LT  
STA 105+37.40 RT - 106+45.88 RT  
STA 107+00.00 LT - 302+00.00 LT  
STA 302+00.00 RT - 110+00.00 LT

SOIL CLASSIFICATION

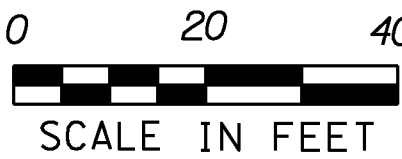
ADAMS AND WINDSOR  
LOAMY SANDS  
12 - 30% SLOPES  
"K FACTOR" 0.17  
LOW EROSION POTENTIAL

LEGEND

- SILT FENCE
- — △ — ○ LIMITS OF SOIL DISTURBANCE
- ▨ EROSION MATTING
- PDF — PDF PROJECT DEMARCATION FENCE
- STONE DROP INLET PROTECTION

SOIL BOUNDARY

EXISTING & PROPOSED WATERLINES  
ARE FOR REFERENCE ONLY. PLEASE  
REFER TO WATERLINE SHEETS 102-104



PROJECT NAME: MILTON  
PROJECT NUMBER: STP 5800 (2)

FILE NAME: +92D289econstructionbdr.dgn PLOT DATE: 23-FEB-2011  
PROJECT LEADER: J. SCHULTZ DRAWN BY: J. DEVLIN  
DESIGNED BY: D. LYMAN CHECKED BY: J. DEVLIN  
EPSC CONSTRUCTION SHEET 2 SHEET 44 OF 104

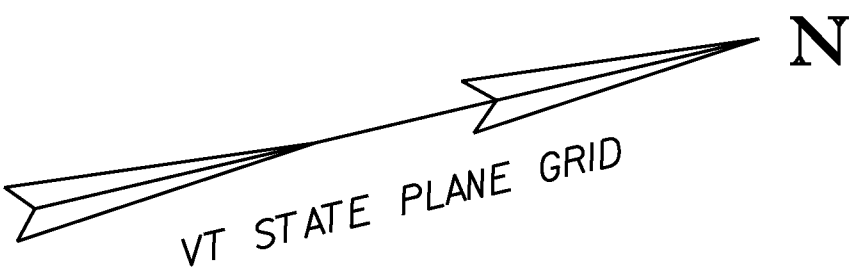


649.51 - GEOTEXTILE FOR SILT FENCE

STA 110+00.00 RT - 110+00.94 RT  
STA 110+01.53 RT - 110+50.79 RT  
STA 110+51.18 RT - 110+93.92 RT

653.55 - PROJECT DEMARCATION FENCE

STA 110+00.00 LT - 111+09.25 LT



SOIL CLASSIFICATION

ADAMS AND WINDSOR  
LOAMY SANDS  
0 - 5% SLOPES  
"K FACTOR" 0.17  
LOW EROSION POTENTIAL

SOIL BOUNDARY

SOIL CLASSIFICATION

ADAMS AND WINDSOR  
LOAMY SANDS  
12 - 30% SLOPES  
"K FACTOR" 0.17  
LOW EROSION POTENTIAL

EXISTING & PROPOSED WATERLINES  
ARE FOR REFERENCE ONLY. PLEASE  
REFER TO WATERLINE SHEETS 102-104

PROJECT NAME: MILTON  
PROJECT NUMBER: STP 5800 (2)

FILE NAME: +92D289econstructionbdr.dgn PLOT DATE: 23-FEB-2011  
PROJECT LEADER: J. SCHULTZ DRAWN BY: J. DEVLIN  
DESIGNED BY: D. LYMAN CHECKED BY: J. DEVLIN  
EPSC CONSTRUCTION SHEET 3 SHEET 45 OF 104

LEGEND

- SILT FENCE
- LIMITS OF SOIL DISTURBANCE
- EROSION MATTING
- PDF - PDF PROJECT DEMARCATION FENCE
- STONE DROP INLET PROTECTION

NOTE: SEE SHEET 43 FOR EPSC CONSTRUCTION NOTES

0 20 40  
SCALE IN FEET

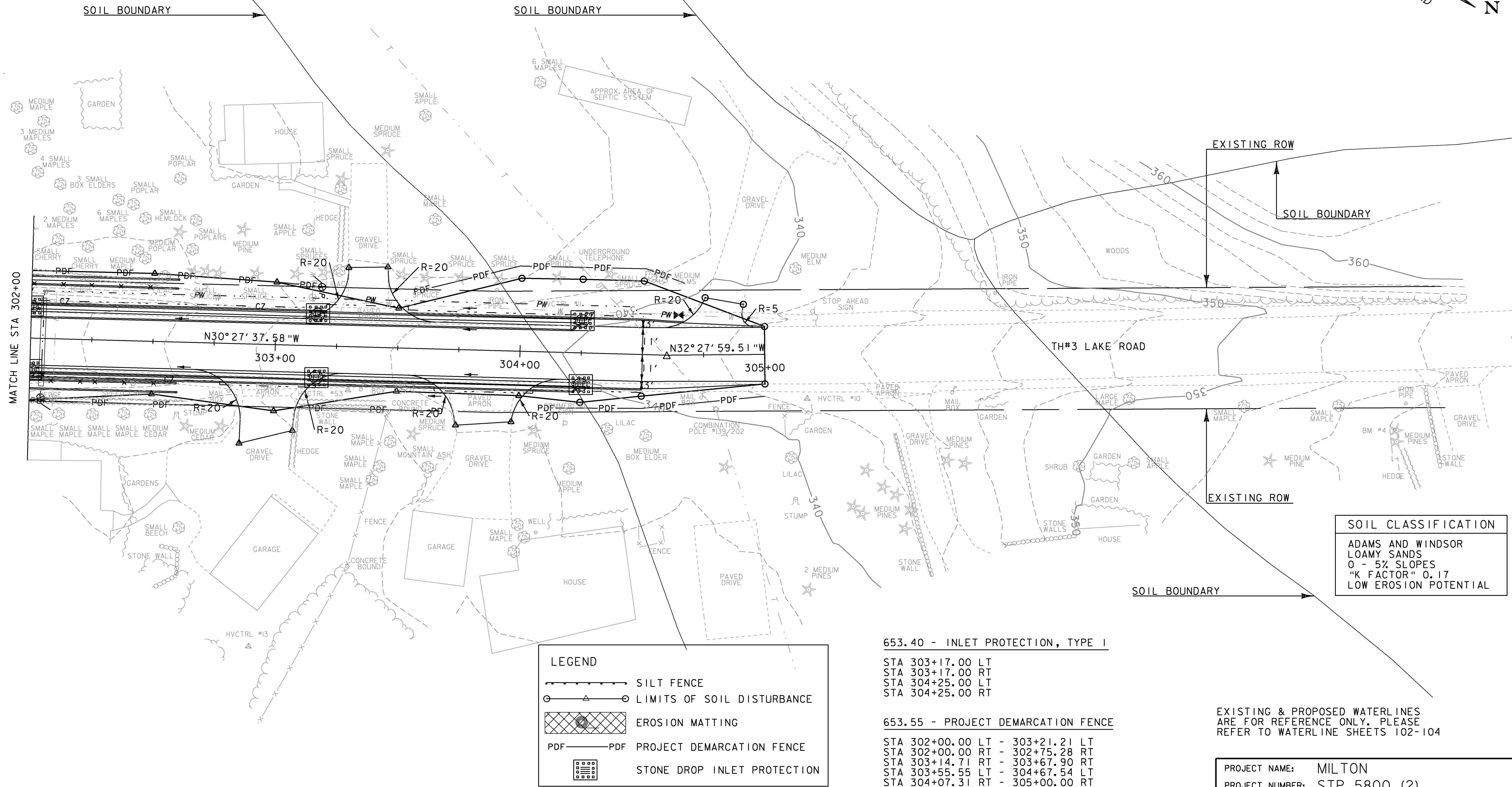
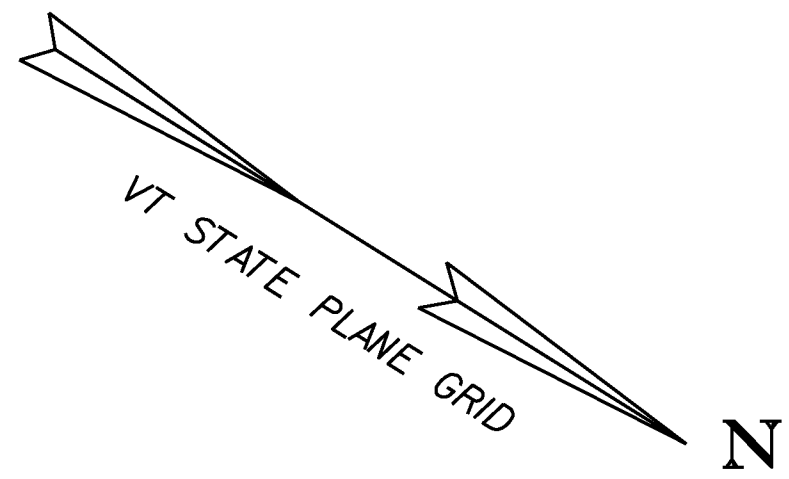


SOIL CLASSIFICATION  
ADAMS AND WINDSOR  
LOAMY SANDS  
0 - 5% SLOPES  
"K FACTOR" 0.17  
LOW EROSION POTENTIAL

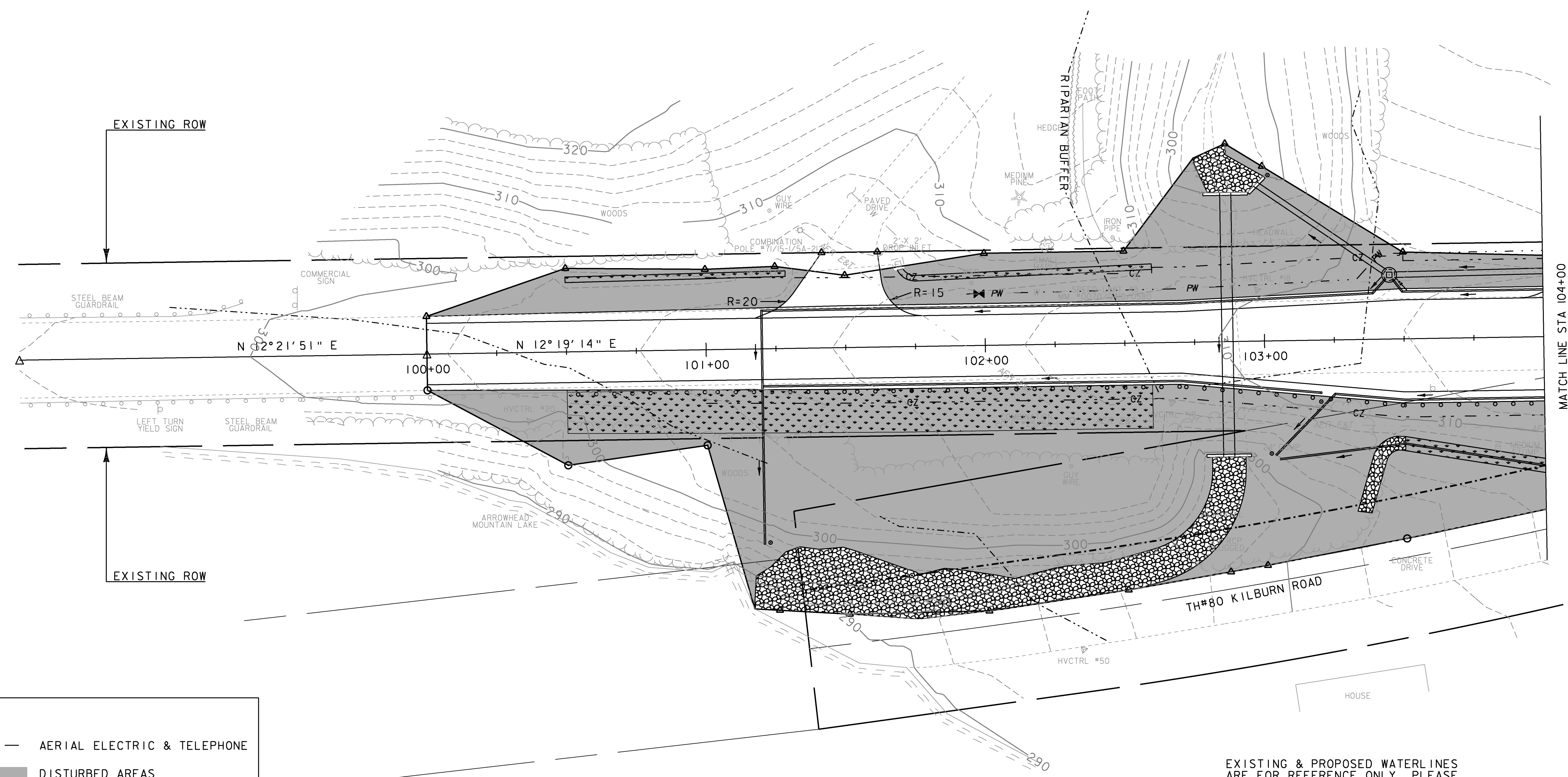
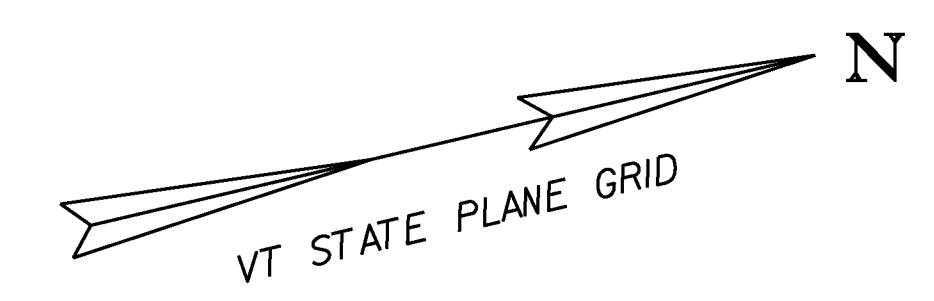
SOIL CLASSIFICATION  
ADAMS AND WINDSOR  
LOAMY SANDS  
5 - 12% SLOPES  
"K FACTOR" 0.17  
LOW EROSION POTENTIAL

SOIL CLASSIFICATION  
PERU  
EXTREMELY STONY LOAM  
20 - 60% SLOPES  
"K FACTOR" 0.24  
MODERATE EROSION POTENTIAL

NOTE: SEE SHEET 43 FOR EPSC CONSTRUCTION NOTES







MATCH LINE STA 104+00

LEGEND

AER E&T

AERIAL ELECTRIC & TELEPHONE

DISTURBED AREAS  
REQUIRING RE-VEGETATION

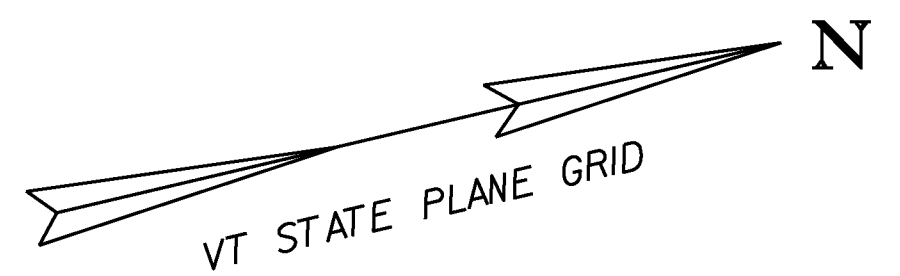
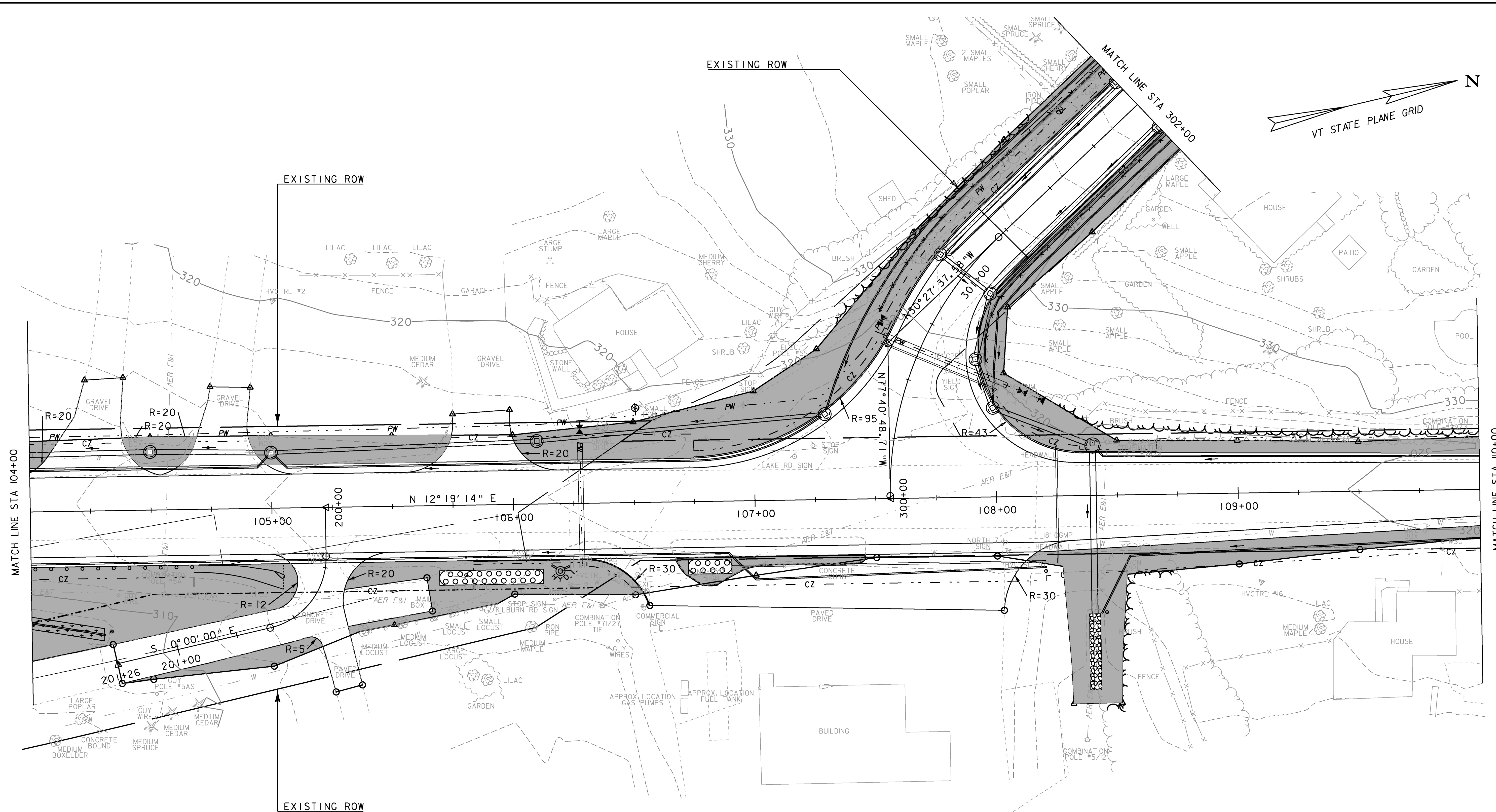
LIMITS OF SOIL DISTURBANCE



EXISTING & PROPOSED WATERLINES  
ARE FOR REFERENCE ONLY. PLEASE  
REFER TO WATERLINE SHEETS 102-104

|                             |                       |             |             |
|-----------------------------|-----------------------|-------------|-------------|
| PROJECT NAME:               | MILTON                | PLOT DATE:  | 23-FEB-2011 |
| PROJECT NUMBER:             | STP 5800 (2)          | DRAWN BY:   | J. DEVLIN   |
| FILE NAME:                  | +92D289ecfinalbdr.dgn | CHECKED BY: | J. DEVLIN   |
| PROJECT LEADER:             | J. SCHULTZ            | SHEET       | 47 OF 104   |
| DESIGNED BY:                | D. LYMAN              |             |             |
| EPSC FINAL CONDITIONS SHEET | 1                     |             |             |





LEGEND

— AER E&T —

AERIAL ELECTRIC & TELEPHONE

DISTURBED AREAS  
REQUIRING RE-VEGETATION

○ — △ — ○

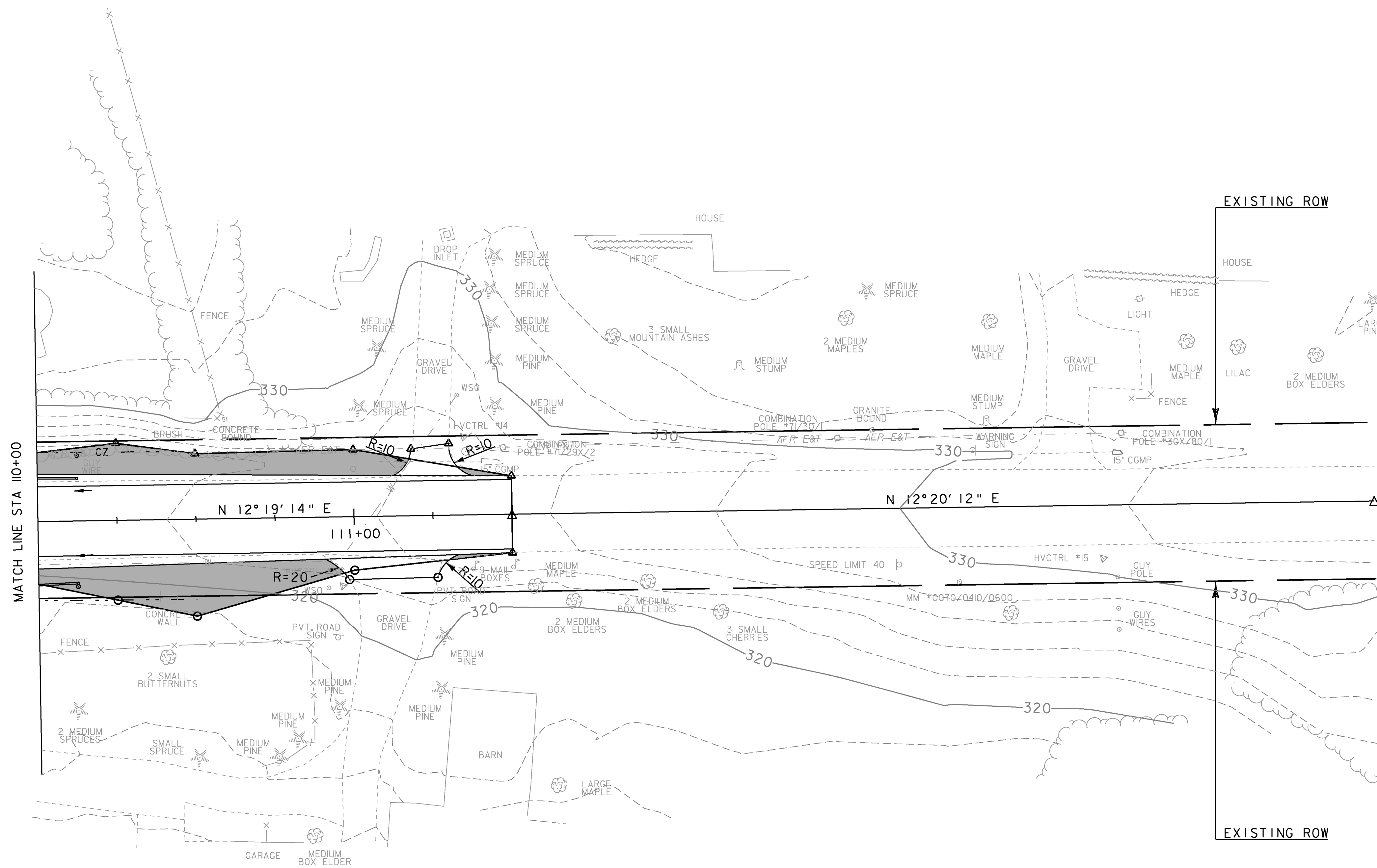
LIMITS OF SOIL DISTURBANCE



EXISTING & PROPOSED WATERLINES  
ARE FOR REFERENCE ONLY. PLEASE  
REFER TO WATERLINE SHEETS 102-104

|                                  |                        |
|----------------------------------|------------------------|
| PROJECT NAME: MILTON             |                        |
| PROJECT NUMBER: STP 5800 (2)     |                        |
| FILE NAME: +92D289ecfinalbdr.dgn | PLOT DATE: 23-FEB-2011 |
| PROJECT LEADER: J. SCHULTZ       | DRAWN BY: J. DEVLIN    |
| DESIGNED BY: D. LYMAN            | CHECKED BY: J. DEVLIN  |
| EPSC FINAL CONDITIONS SHEET 2    | SHEET 48 OF 104        |



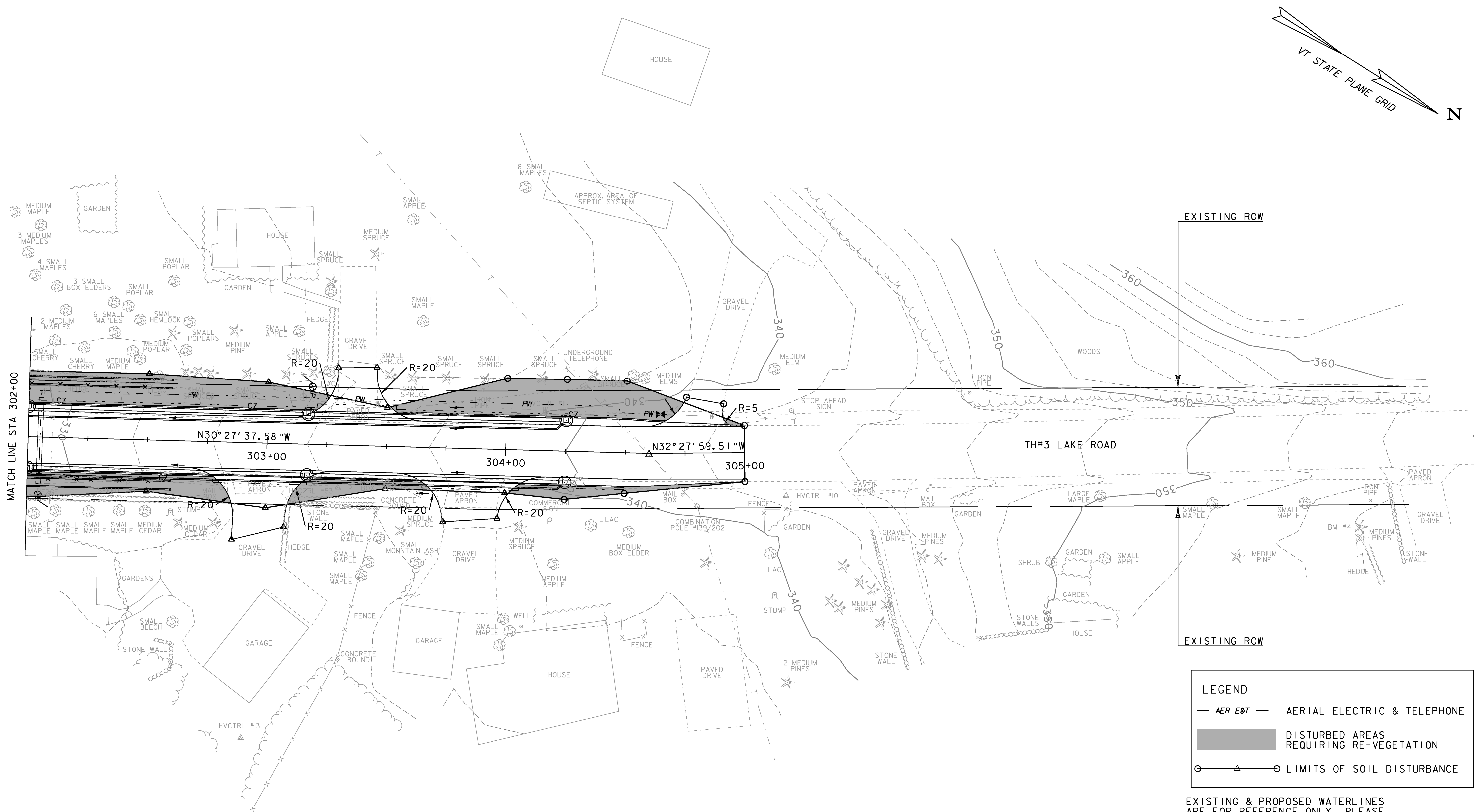


— AER E&T — AERIAL ELECTRIC & TELEPHONE  
 [Shaded Area] DISTURBED AREAS  
 REQUIRING RE-VEGETATION  
 ○ — △ — ○ LIMITS OF SOIL DISTURBANCE

PLOT DATE: 23-FEB-2011  
DRAWN BY: J. DEVLIN  
CHECKED BY: J. DEVLIN  
SHEET 49 OF 104







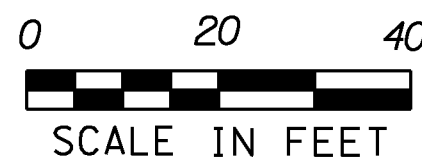
**LEGEND**

— AER E&T — AERIAL ELECTRIC & TELEPHONE

■ DISTURBED AREAS  
REQUIRING RE-VEGETATION

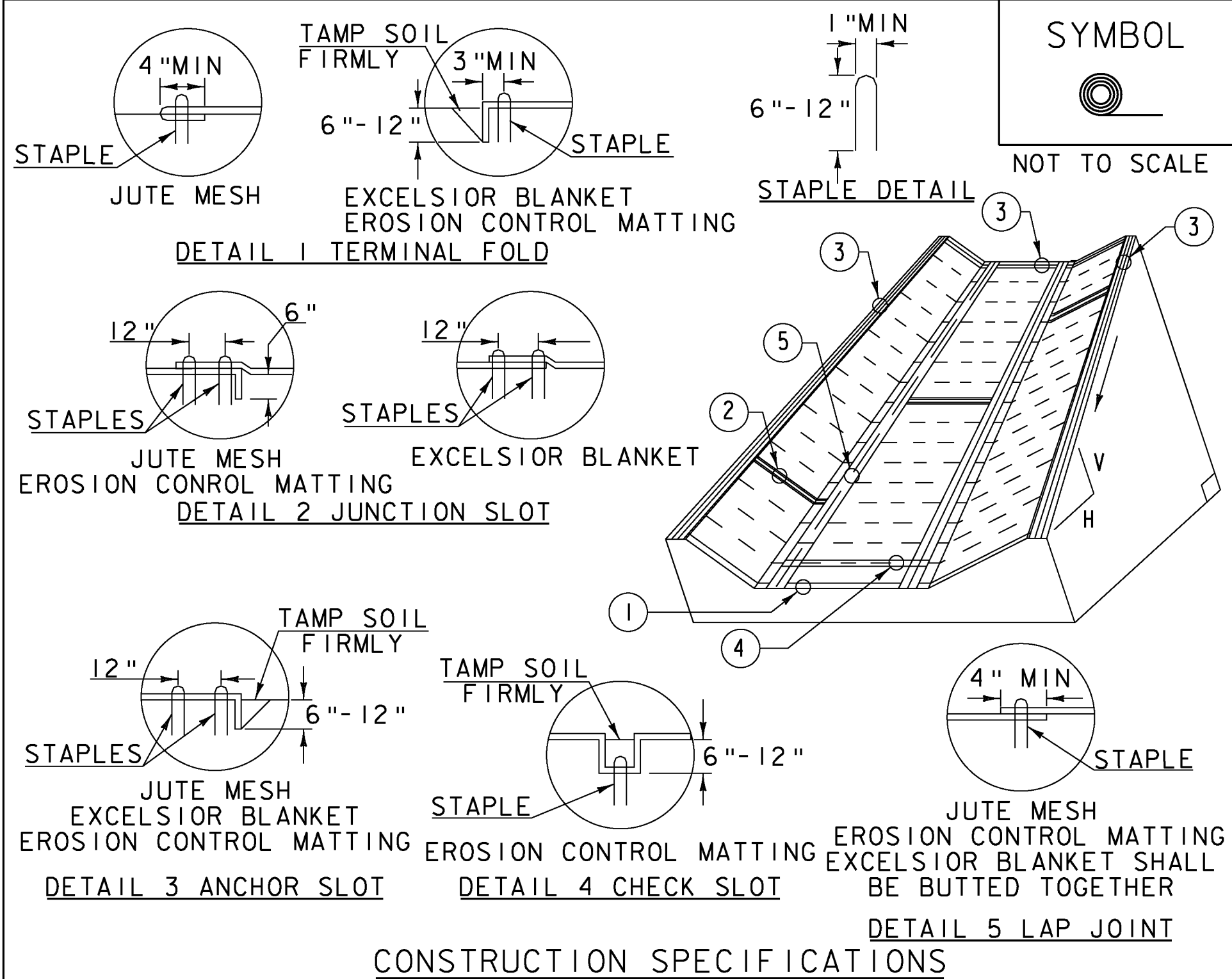
○ — △ — ○ LIMITS OF SOIL DISTURBANCE

EXISTING & PROPOSED WATERLINES  
ARE FOR REFERENCE ONLY. PLEASE  
REFER TO WATERLINE SHEETS 102-104



|                             |                       |             |             |
|-----------------------------|-----------------------|-------------|-------------|
| PROJECT NAME:               | MILTON                | PLOT DATE:  | 23-FEB-2011 |
| PROJECT NUMBER:             | STP 5800 (2)          | DRAWN BY:   | J. DEVLIN   |
| FILE NAME:                  | +92D289ecfinalbdr.dgn | CHECKED BY: | J. DEVLIN   |
| DESIGNED BY:                | D. LYMAN              | SHEET       | 50 OF 104   |
| EPSC FINAL CONDITIONS SHEET | 4                     |             |             |





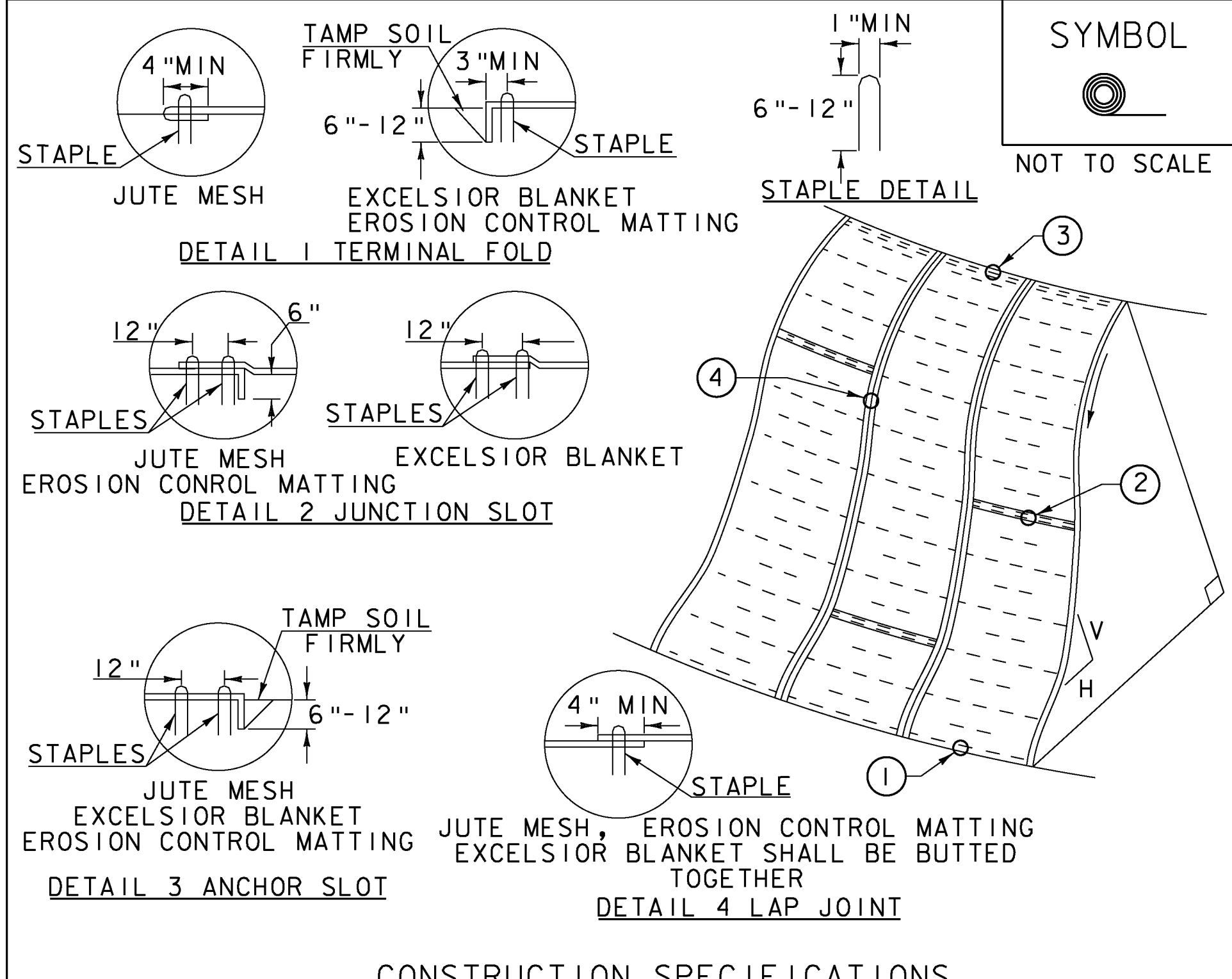
- CONSTRUCTION SPECIFICATIONS**
1. EROSION MATTING, CHECK SLOTS, SHALL BE SPACED IN DITCH CHANNEL SO THAT ONE OCCURS WITHIN EACH 50' ON SLOPES OF MORE THAN 4% AND LESS THAN 6%. ON SLOPES OF 6% OR MORE, THEY SHALL BE SPACED SO THAT ONE OCCURS WITHIN EACH 25'.
  2. APPLY FERTILIZER, LIME SEED PRIOR TO PLACING MATTING.
  3. STAPLES ARE TO BE PLACED ALTERNATELY, IN COLUMNS APPROXIMATELY 2' APART AND IN ROWS APPROXIMATELY 3' APART. APPROXIMATELY 175 STAPLES ARE REQUIRED PER 4'X225' ROLL OF MATERIAL AND 125 STAPLES ARE REQUIRED PER 4'X150' ROLL OF MATERIAL.
  4. DISTURBED AREAS SHALL BE SMOOTHLY GRADED. EROSION CONTROL MATERIAL SHALL BE PLACED LOOSELY OVER GROUND SURFACE. DO NOT STRETCH.
  5. ALL TERMINAL ENDS AND TRANSVERSE LAPS SHALL BE STAPLED AT APPROXIMATELY 12" INTERVALS.

ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC  
ORIGINALLY DEVELOPED BY USDA-NRCS  
VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

**ROLLED EROSION  
CONTROL PRODUCT  
(RECP) DITCH**

NOTES:  
REFER TO "THE VERMONT STANDARDS & SPECIFICATIONS FOR  
EROSION PREVENTION & SEDIMENT CONTROL -2006- "FROM  
THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL  
GUIDANCE.  
THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION  
653 AND AS SHOWN IN THE PLANS FOR TEMPORARY EROSION  
MATTING (PAY ITEM 653.20)

| REVISIONS        |     |  |
|------------------|-----|--|
| MARCH 8, 2007    | JMF |  |
| APRIL 16, 2007   | WHF |  |
| JANUARY 13, 2009 | WHF |  |



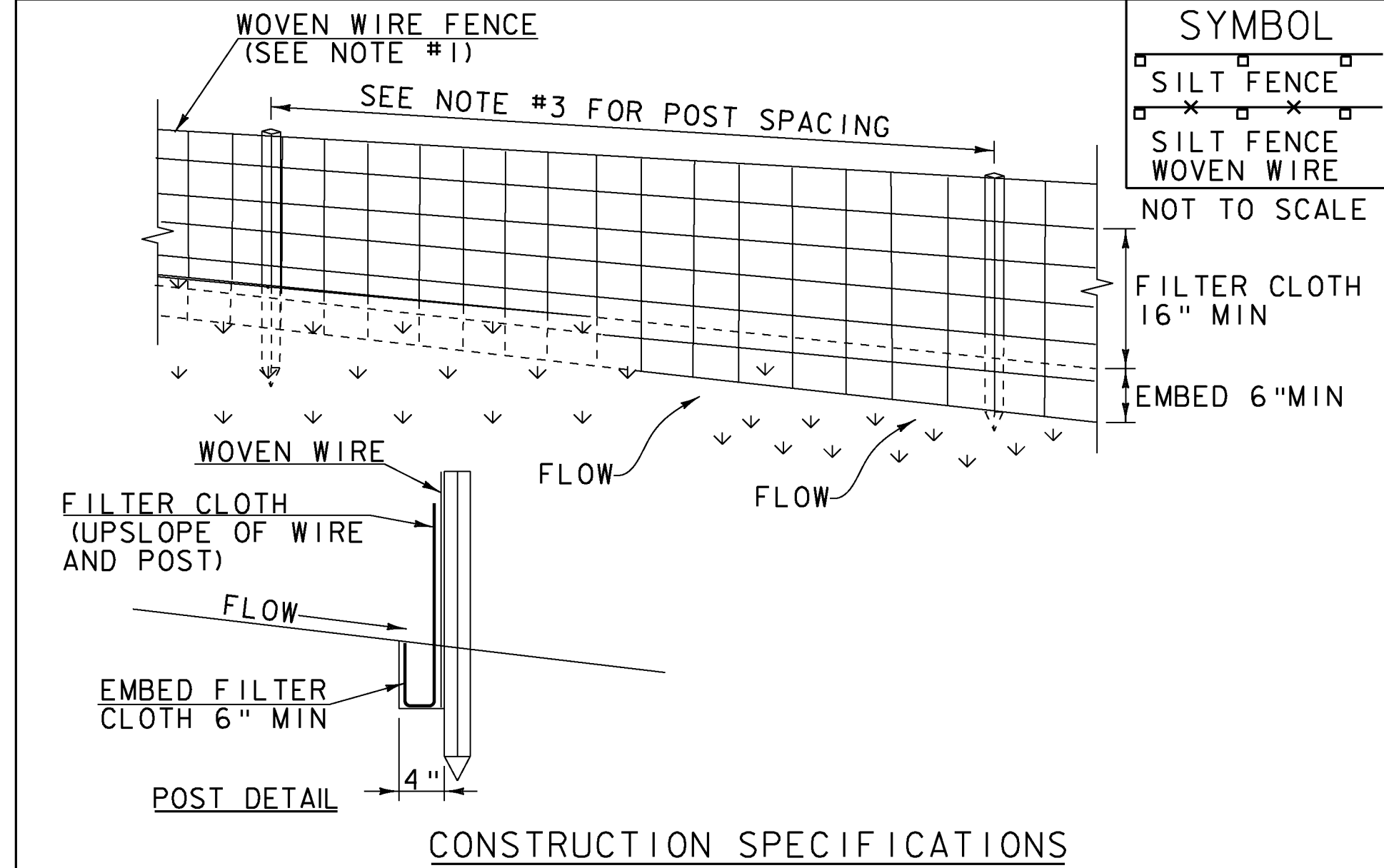
- CONSTRUCTION SPECIFICATIONS**
1. APPLY TO SLOPES GREATER THAN 3H:1V OR WHERE NECESSARY TO AID IN ESTABLISHING VEGETATION.
  2. APPLY FERTILIZER, LIME SEED PRIOR TO PLACING MATTING.
  3. STAPLES ARE TO BE PLACED ALTERNATELY, IN COLUMNS APPROXIMATELY 2' APART AND IN ROWS APPROXIMATELY 3' APART. APPROXIMATELY 175 STAPLES ARE REQUIRED PER 4'X225' ROLL OF MATERIAL AND 125 STAPLES ARE REQUIRED PER 4'X150' ROLL OF MATERIAL.
  4. DISTURBED AREAS SHALL BE SMOOTHLY GRADED. EROSION CONTROL MATERIAL SHALL BE PLACED LOOSELY OVER GROUND SURFACE. DO NOT STRETCH.
  5. ALL TERMINAL ENDS AND TRANSVERSE LAPS SHALL BE STAPLED AT APPROXIMATELY 12" INTERVALS.

ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC  
ORIGINALLY DEVELOPED BY USDA-NRCS  
VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

**ROLLED EROSION  
CONTROL PRODUCT  
(RECP) SIDE SLOPE**

NOTES:  
REFER TO "THE VERMONT STANDARDS & SPECIFICATIONS FOR  
EROSION PREVENTION & SEDIMENT CONTROL -2006- "FROM  
THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL  
GUIDANCE.  
THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION  
653 AND AS SHOWN IN THE PLANS FOR TEMPORARY EROSION  
MATTING (PAY ITEM 653.20)

| REVISIONS        |     |  |
|------------------|-----|--|
| APRIL 16, 2007   | JMF |  |
| JANUARY 13, 2009 | WHF |  |



- CONSTRUCTION SPECIFICATIONS**
1. WOVEN WIRE REINFORCED FENCE IS REQUIRED WITHIN 100' UPSLOPE OF RECEIVING WATERS WHEN THE PROJECT FALLS UNDER A CONSTRUCTION STORMWATER PERMIT. WOVEN WIRE SHALL BE A MIN. 14 GAUGE WITH A 6" MAX. MESH OPENING.
  2. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFL100X, STABILINKA T140N OR APPROVED EQUIVALENT.
  3. POST SPACING FOR WIRE-BACKED FENCE SHALL BE 10' MAXIMUM. FOR FILTER-CLOTH FENCE, WHEN ELONGATION IS >50%, POST SPACING SHALL NOT EXCEED 4' AND WHEN ELONGATION IS <50%, POST SPACING SHALL NOT EXCEED 6'.
  4. WOVEN WIRE FENCE IS TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES. FILTER CLOTH IS TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
  5. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER-LAPPED BY 6" AND FOLDED.
  6. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN SEDIMENT REACHES HALF OF FABRIC HEIGHT.

ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC  
ORIGINALLY DEVELOPED BY USDA-NRCS  
VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

**SILT FENCE**

NOTES:  
REFER TO "THE VERMONT STANDARDS & SPECIFICATIONS FOR  
EROSION PREVENTION & SEDIMENT CONTROL -2006- "FROM  
THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL  
GUIDANCE.

THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH  
SECTION 649 AND AS SHOWN IN THE PLANS FOR GEOTEXTILE  
FOR SILT FENCE (PAY ITEM 649.51) OR GEOTEXTILE FOR  
SILT FENCE, WOVEN WIRE REINFORCED (PAY ITEM 649.515).

| REVISIONS         |     |  |
|-------------------|-----|--|
| MARCH 21, 2008    | WHF |  |
| DECEMBER 11, 2008 | WHF |  |
| JANUARY 13, 2009  | WHF |  |

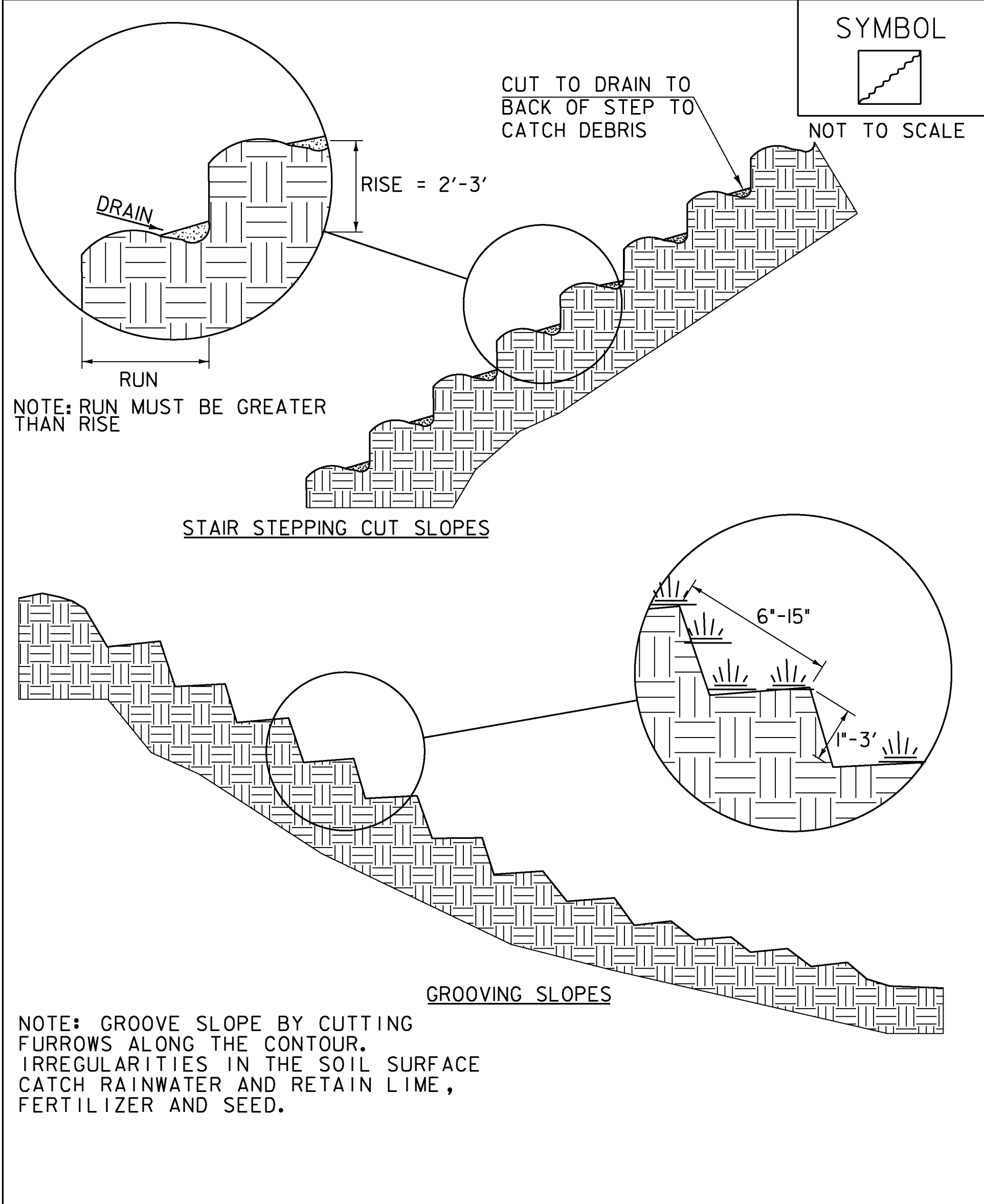
PROJECT NAME: MILTON  
PROJECT NUMBER: STP 5800 (2)

|                                |                        |
|--------------------------------|------------------------|
| FILE NAME: +92D289ecd+alls.dgn | PLOT DATE: 23-FEB-2011 |
| PROJECT LEADER: J. SCHULTZ     | DRAWN BY: J. DEVLIN    |
| DESIGNED BY: D. LYMAN          | CHECKED BY: J. DEVLIN  |
| EPSC DETAILS SHEET 1           | SHEET 51 OF 104        |









ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC  
ORIGINALLY DEVELOPED BY USDA-NRCS  
VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SURFACE ROUGHENING

NOTES:  
REFER TO "THE VERMONT STANDARDS & SPECIFICATIONS FOR  
EROSION PREVENTION & SEDIMENT CONTROL -2006- " FROM  
THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL  
GUIDANCE.

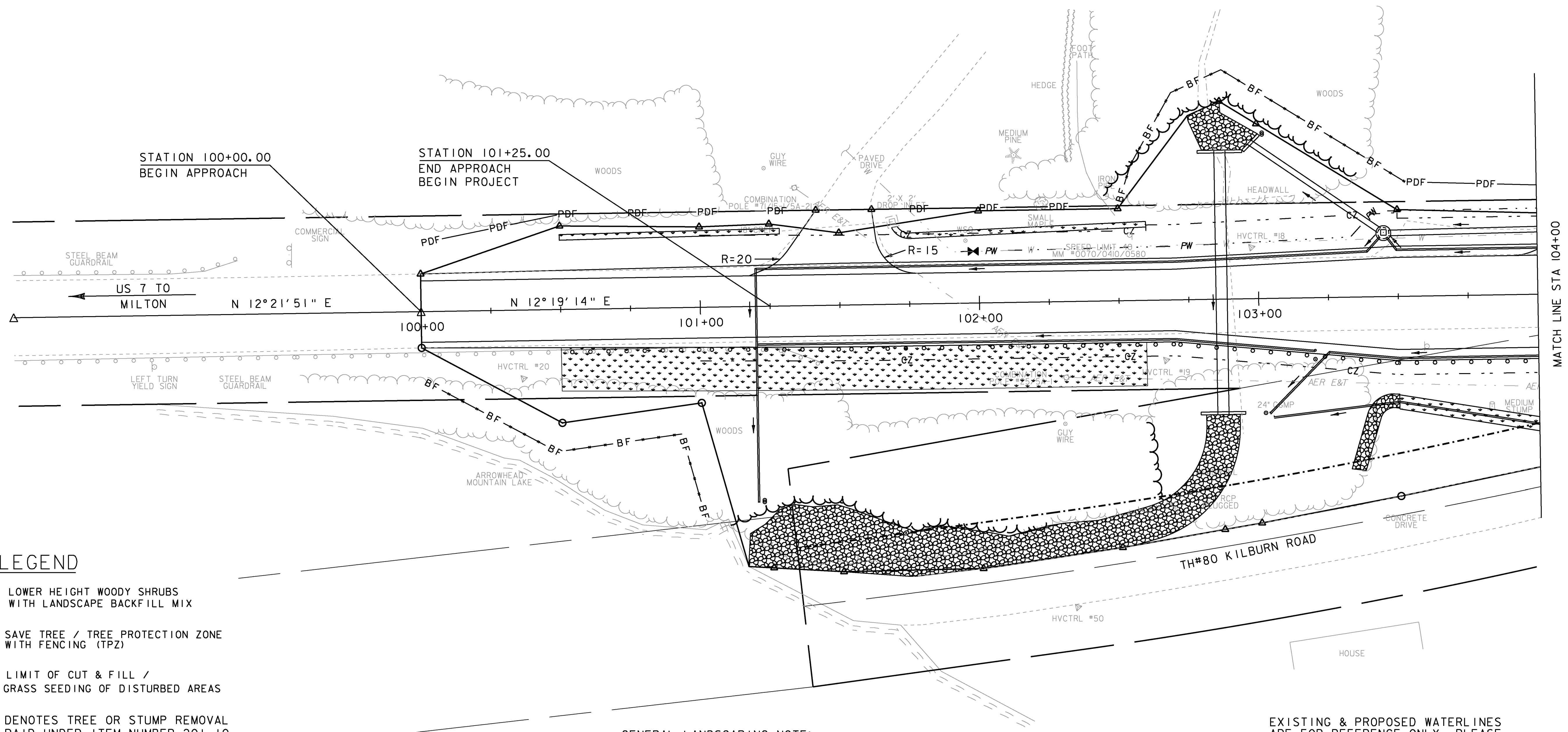
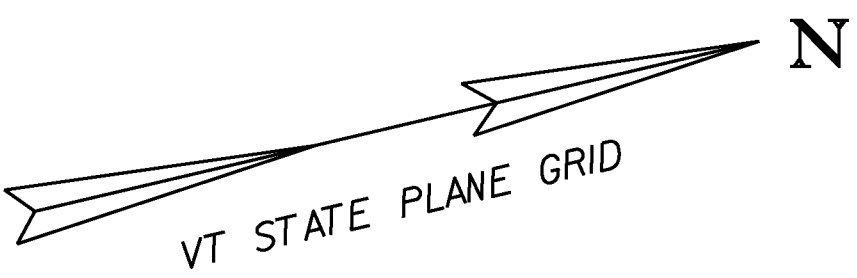
THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE  
CONTRACT

| REVISIONS        |     |
|------------------|-----|
| APRIL 1, 2008    | WHF |
| JANUARY 13, 2009 | WHF |
|                  |     |
|                  |     |
|                  |     |

PROJECT NAME: MILTON  
PROJECT NUMBER: STP 5800 (2)

|                                 |                        |
|---------------------------------|------------------------|
| FILE NAME: t92D289ecdetails.dgn | PLOT DATE: 23-FEB-2011 |
| PROJECT LEADER: J. SCHULTZ      | DRAWN BY: J. DEVLIN    |
| DESIGNED BY: D. LYMAN           | CHECKED BY: J. DEVLIN  |
| EPSC DETAILS SHEET 3            | SHEET 53 OF 104        |

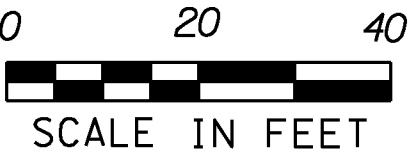




LEGEND

- LOWER HEIGHT WOODY SHRUBS WITH LANDSCAPE BACKFILL MIX
- SAVE TREE / TREE PROTECTION ZONE WITH FENCING (TPZ)
- LIMIT OF CUT & FILL / GRASS SEEDING OF DISTURBED AREAS
- DENOTES TREE OR STUMP REMOVAL PAID UNDER ITEM NUMBER 201.10 CLEARING AND GRUBBING, INCLUDING INDIVIDUAL TREES AND STUMPS

GENERAL LANDSCAPING NOTE:  
EXISTING LANDSCAPE FEATURES  
LOCATED BEYOND PROPOSED PROJECT  
DEMARCATON FENCE SHALL REMAIN  
UNDISTURBED THROUGHOUT CONSTRUCTION



EXISTING & PROPOSED WATERLINES  
ARE FOR REFERENCE ONLY. PLEASE  
REFER TO WATERLINE SHEETS 102-104

|                              |                        |
|------------------------------|------------------------|
| PROJECT NAME: MILTON         |                        |
| PROJECT NUMBER: STP 5800 (2) |                        |
| FILE NAME: +92d289bdr.dgn    | PLOT DATE: 23-FEB-2011 |
| PROJECT LEADER: J. SCHULTZ   | DRAWN BY: D. LYMAN     |
| DESIGNED BY: D. LYMAN        | CHECKED BY: J. DEVLIN  |
| LANDSCAPE LAYOUT 1           | SHEET 54 OF 104        |



STA 105+69.00 RT - 106+12.00 RT  
20 ANTHONY WATERER (SPIREA)  
STA 106+72.00 RT - 106+90.00 RT  
8 LIMEMOUND (SPIREA)

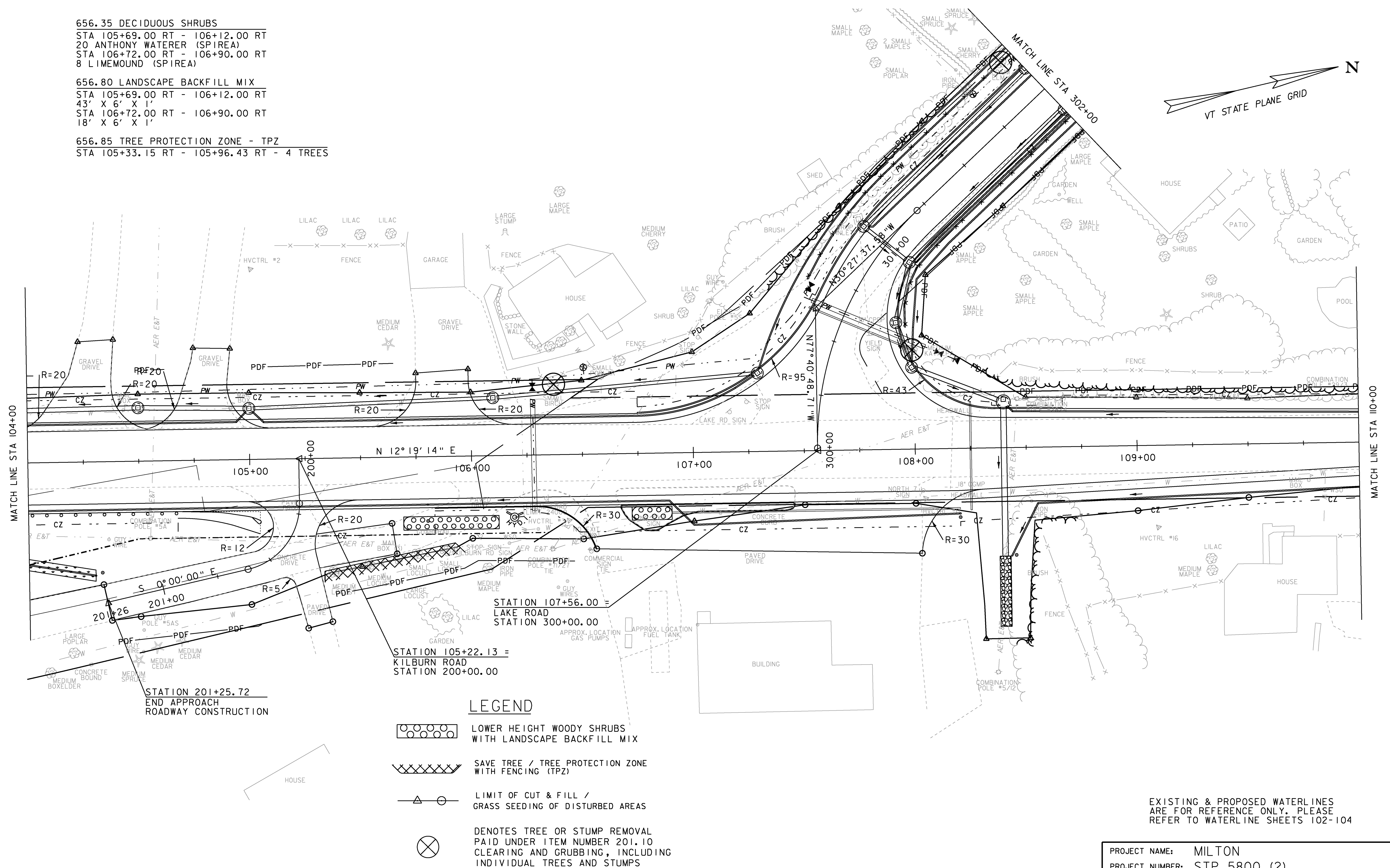
656.80 LANDSCAPE BACKFILL MIX

---

STA 105+69.00 RT - 106+12.00 RT  
43' X 6' X 1'

STA 106+72.00 RT - 106+90.00 RT  
18' X 6' X 1'

656.85 TREE PROTECTION ZONE - TPZ  
STA 105+33.15 RT - 105+96.43 RT - 4 TREES



EXISTING & PROPOSED WATERLINES  
ARE FOR REFERENCE ONLY. PLEASE  
REFER TO WATERLINE SHEETS 102-104

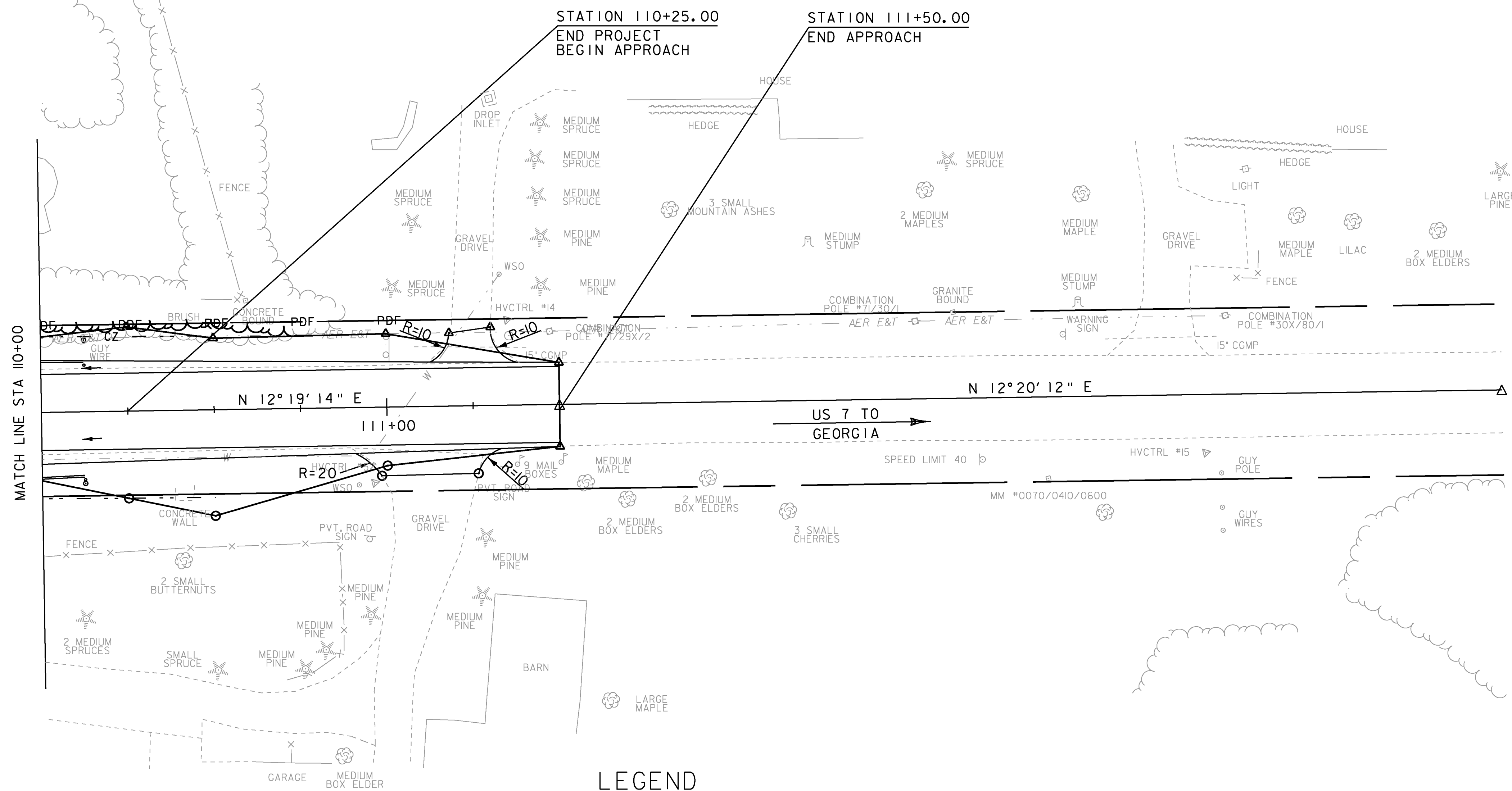
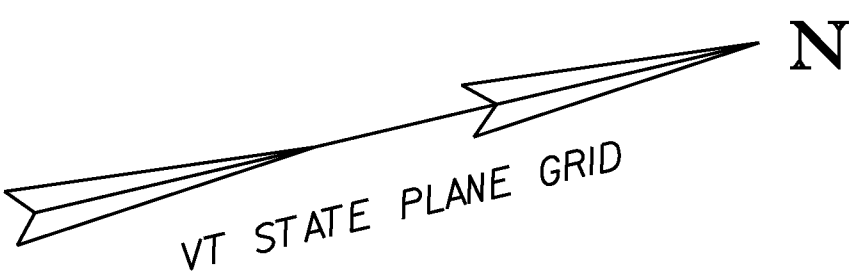
PROJECT NAME: MILTON  
PROJECT NUMBER: STP 5800 (2)

FILE NAME: +92d289bdr.dgn  
PROJECT LEADER: J. SCHULTZ  
DESIGNED BY: D. LYMAN  
LANDSCAPE LAYOUT 2

PLOT DATE: 23-FEB-2011  
DRAWN BY: D. LYMAN  
CHECKED BY: J. DEVLIN  
SHEET 55 OF 104







LEGEND

- LOWER HEIGHT WOODY SHRUBS  
WITH LANDSCAPE BACKFILL MIX
- SAVE TREE / TREE PROTECTION ZONE  
WITH FENCING (TPZ)
- LIMIT OF CUT & FILL /  
GRASS SEEDING OF DISTURBED AREAS
- DENOTES TREE OR STUMP REMOVAL  
PAID UNDER ITEM NUMBER 201.10  
CLEARING AND GRUBBING, INCLUDING  
INDIVIDUAL TREES AND STUMPS

0 20 40  
SCALE IN FEET

EXISTING & PROPOSED WATERLINES  
ARE FOR REFERENCE ONLY. PLEASE  
REFER TO WATERLINE SHEETS 102-104

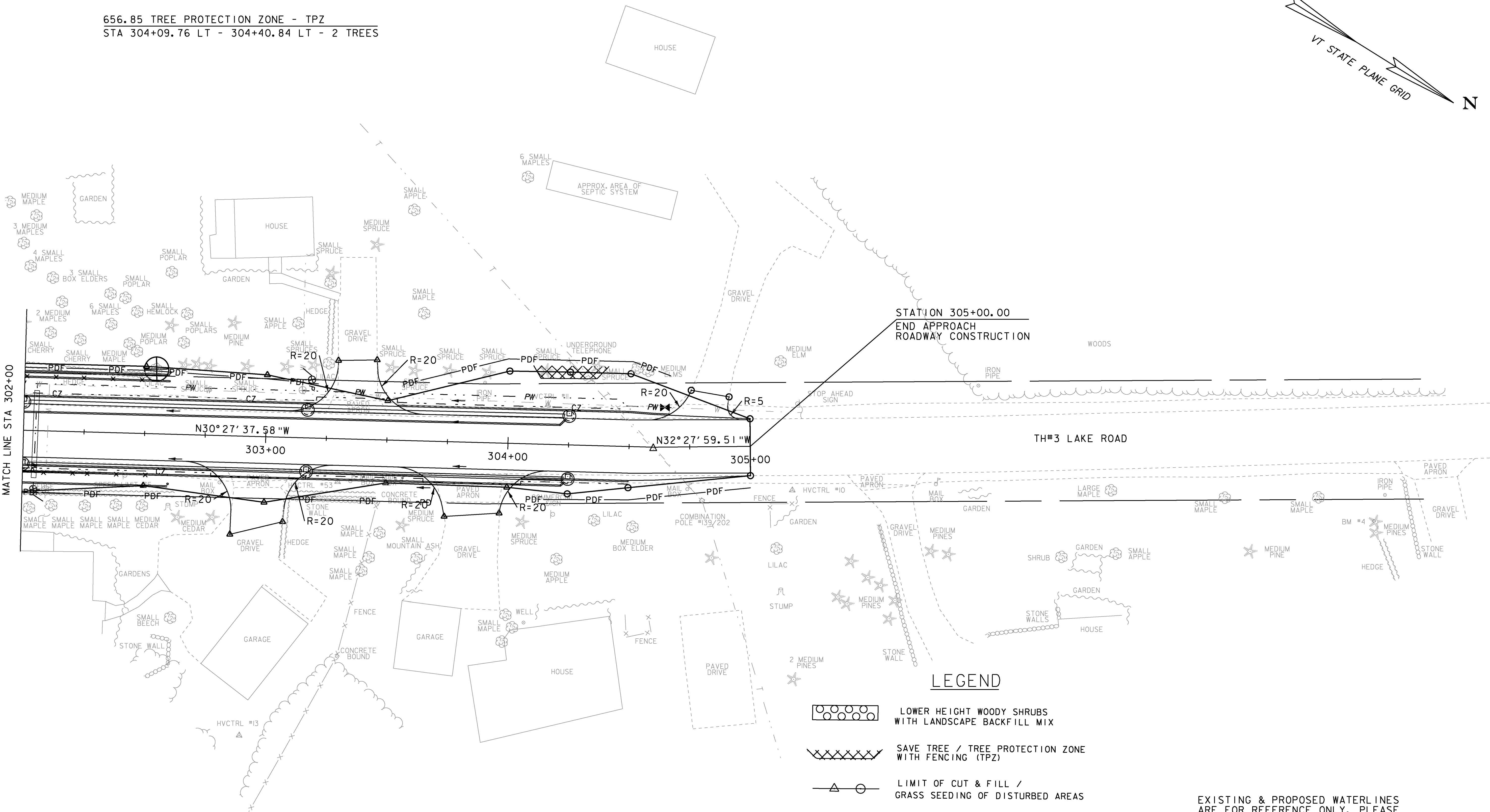
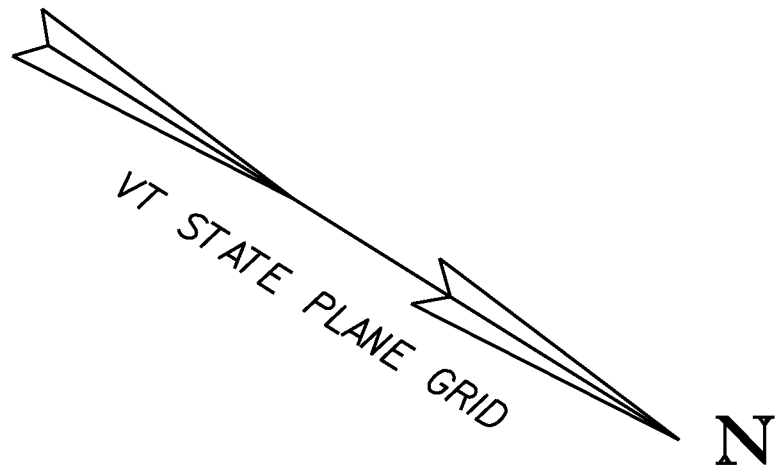
PROJECT NAME: MILTON  
PROJECT NUMBER: STP 5800 (2)

FILE NAME: +92d289bdr.dgn  
PROJECT LEADER: J. SCHULTZ  
DESIGNED BY: D. LYMAN  
LANDSCAPE LAYOUT 3

PLOT DATE: 23-FEB-2011  
DRAWN BY: D. LYMAN  
CHECKED BY: J. DEVLIN  
SHEET 56 OF 104

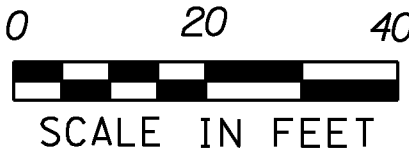


656.85 TREE PROTECTION ZONE - TPZ  
STA 304+09.76 LT - 304+40.84 LT - 2 TREES



LEGEND

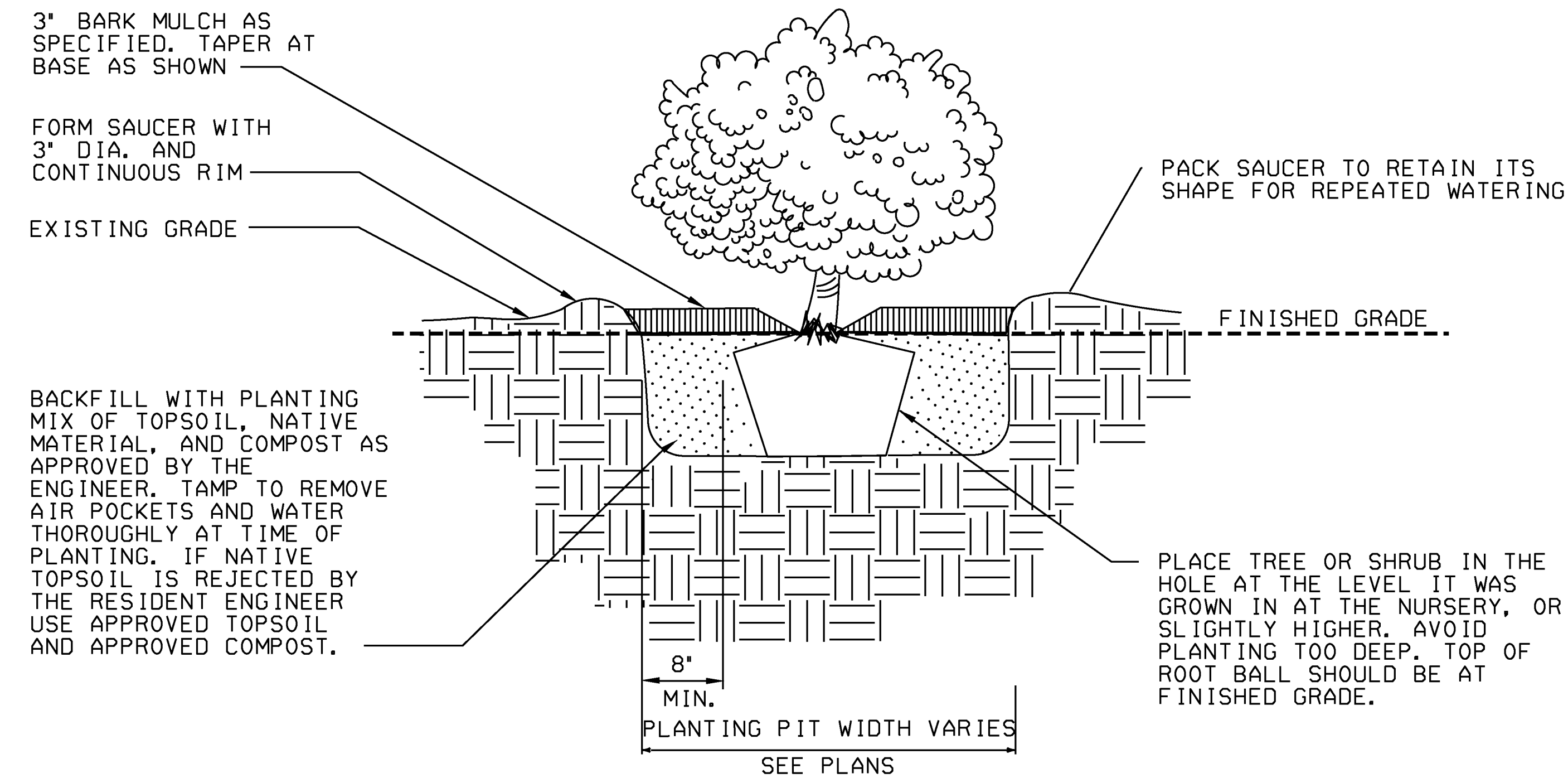
- LOWER HEIGHT WOODY SHRUBS  
WITH LANDSCAPE BACKFILL MIX
- SAVE TREE / TREE PROTECTION ZONE  
WITH FENCING (TPZ)
- LIMIT OF CUT & FILL /  
GRASS SEEDING OF DISTURBED AREAS
- DENOTES TREE OR STUMP REMOVAL  
PAID UNDER ITEM NUMBER 201.10  
CLEARING AND GRUBBING, INCLUDING  
INDIVIDUAL TREES AND STUMPS



EXISTING & PROPOSED WATERLINES  
ARE FOR REFERENCE ONLY. PLEASE  
REFER TO WATERLINE SHEETS 102-104

|                              |                        |
|------------------------------|------------------------|
| PROJECT NAME: MILTON         |                        |
| PROJECT NUMBER: STP 5800 (2) |                        |
| FILE NAME: +92d289bdr.dgn    | PLOT DATE: 23-FEB-2011 |
| PROJECT LEADER: J. SCHULTZ   | DRAWN BY: D. LYMAN     |
| DESIGNED BY: D. LYMAN        | CHECKED BY: J. DEVLIN  |
| LANDSCAPE LAYOUT 4           | SHEET 57 OF 104        |





## SHRUB PLANTING DETAIL

NOT TO SCALE

| PLANT LIST |                   |                          |                                        |                    |
|------------|-------------------|--------------------------|----------------------------------------|--------------------|
|            |                   | SHRUBS                   |                                        |                    |
| Qty.       | Size              | Common Name / AREA       | Botanical Name                         | Spacing / COMMENTS |
| 20         | 12" TO 18" HEIGHT | 'ANTHONY WATERER' SPIREA | SPIREA X BUMALDA 'ANTHONY WATERER'     | 3' ON CENTER       |
| 8          | 12" TO 18" HEIGHT | 'LIMEMOUND' SPIREA       | SPIREA 'MONHUB' P.P.# 5834 'LIMEMOUND' | 3' ON CENTER       |

### NOTES

Follow VTRANS Planting Specifications Section 656.

Water per specifications 5 gallons per shrub at time of planting and 5 gallons per shrub 2 times per week

ADD LANDSCAPE BACKFILL MIX TO THE BED AS DIMENSIONED PRIOR TO PLANTING. LANDSCAPE BACKFILL MIX SHALL BE 2/3 APPROVED TOPSOIL MIX AND 1/3 APPROVED COMPOST (see VTrans Specifications)

### APPROVED ALTERNATIVE SPECIES FOR 'ANTHONY WATERER' SPIREA

|                           |                                   |
|---------------------------|-----------------------------------|
| 'LITTLE PRINCESS ' SPIREA | SPIREA JAPONICA 'LITTLE PRINCESS' |
| 'GOLDFLAME' SPIREA        | SPIREA X BUMALDA 'GOLDFLAME'      |
| 'SNOWMOUND' SPIREA        | SPIREA NAPPONICA 'SNOWOUND '      |

### APPROVED ALTERNATIVE SPECIES FOR 'LIMEMOUND' SPIREA

|                       |                                         |
|-----------------------|-----------------------------------------|
| 'GOLDMOUND' SPIREA    | SPIREA JAPONICA 'GOLDMOUND'             |
| 'MAGIC CARPET' SPIREA | SPIREA X BUMALDA WALBURN 'MAGIC CARPET' |

## TREE PROTECTION NOTES

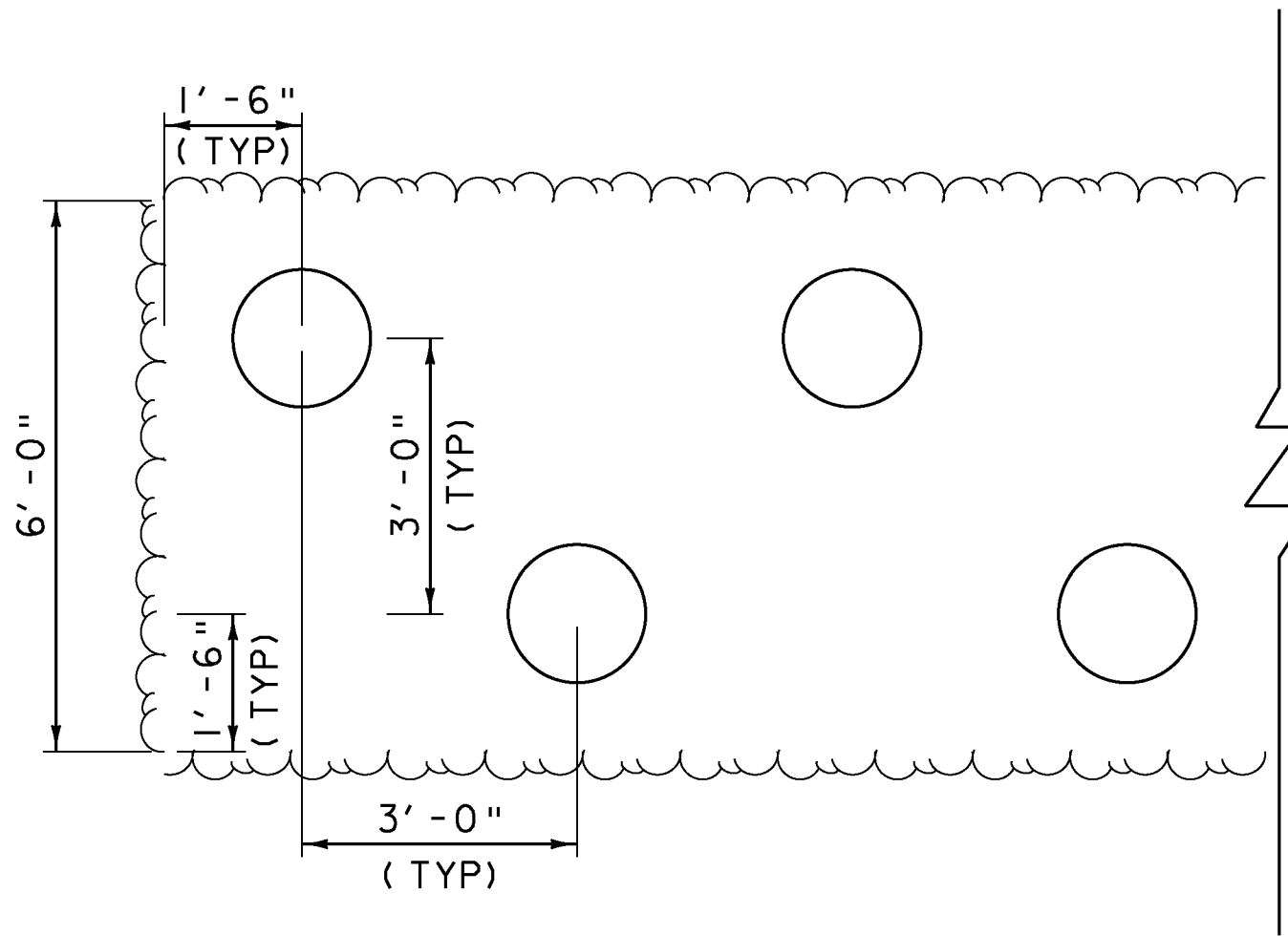
1. DURING CONSTRUCTION: PROTECT TREES TO BE SAVED BY ERECTING BARRIER FENCE JUST AT LIMIT OF CONSTRUCTION AS INDICATED (PLEASE SEE LANDSCAPE PLANS AND TREE PROTECTION DETAIL). INSTALL SIGNAGE AT EACH PROTECTION ZONE WHICH CLEARLY READS: "TREES ARE BEING PROTECTED. NO UNAUTHORIZED TRESPASS IS ALLOWED".

2. AVOID CUTTING ROOTS OF TREES WHENEVER POSSIBLE. WHEN AVOIDANCE IS NOT POSSIBLE, CUT ROOTS FLUSH (SAW THOSE ROOTS GREATER THAN 1" WIDE), WHICH WILL ENCOURAGE NEW ROOT GROWTH. DO NOT RIP ROOTS WITH EXCAVATOR OR OTHER HEAVY EQUIPMENT.

3. BACKFILL AS SOON AS POSSIBLE; KEEP ROOT ENDS MOIST WITH WET BURLAP OR SIMILAR MATERIAL UNTIL ABLE TO BACKFILL. ADD A ROOT STIMULATOR SUCH AS MYCORRHIZAL FUNGI PER MANUFACTURER'S INSTRUCTIONS, AND WATER (PER APPROVED WATERING SPECIFICATIONS) TO THE ENTIRE BACKFILL AREA WITHIN 24 HOURS.

4. NO EXCAVATED OR BACKFILL MATERIAL SHALL BE PILED IN TREE PROTECTION ZONE; NO EQUIPMENT SHALL BE STORED OR PILED IN TREE PROTECTION ZONE.

5. IF A PROTECTED TREE IS DAMAGED DUE TO THE CONTRACTOR'S NEGLIGENCE AND IS NOT REPAIRABLE (AS DETERMINED BY THE ENGINEER OR VAOT LANDSCAPE ARCHITECT), THEN THE CONTRACTOR SHALL REPLACE THE TREE (AT THE CONTRACTOR'S EXPENSE AND ACCORDING TO APPROVED PLANTING TECHNIQUES) WITH THE SAME TREE OF EQUAL VALUE, OR TWO OR MORE TREES WITH A TOTAL VALUE EQUAL TO THAT OF THE DAMAGED TREE. IN ADDITION, WITH THE EXCEPTION OF FENCING, ALL TREE PROTECTION MEASURES, ROOT PRUNING, AND OTHER MATERIALS WILL NOT BE PAID SEPARATELY, BUT WILL BE CONSIDERED INCIDENTAL TO ALL OTHER LANDSCAPING CONTRACT ITEMS.



## TYPICAL SHRUB BED LAYOUT

NOT TO SCALE

PROJECT NAME: MILTON  
PROJECT NUMBER: STP 5800 (2)

FILE NAME: +92d289landde+.dgn  
PROJECT LEADER: J. SCHULTZ  
DESIGNED BY: D. LYMAN  
LANDSCAPE DETAIL SHEET

PLOT DATE: 23-FEB-2011  
DRAWN BY: D. LYMAN  
CHECKED BY: J. DEVLIN  
SHEET 58 OF 104



646.406 - DURABLE 4" WHITE LINE, RECESSED POLYUREA  
STA 100+00.00 LT - 104+00.00 LT (SOLID)  
STA 100+00.00 RT - 104+00.00 RT (SOLID)  
STA 103+50.00 RT - 104+00.00 RT (DOTTED)

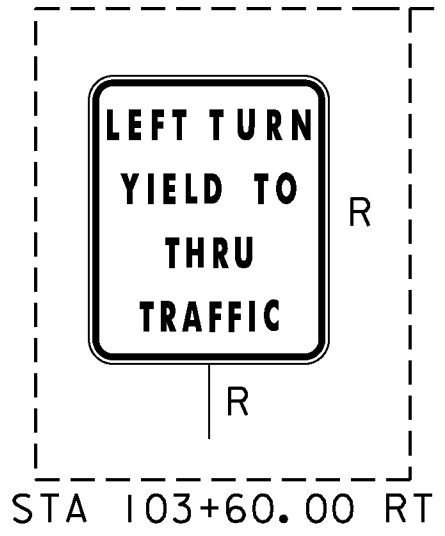
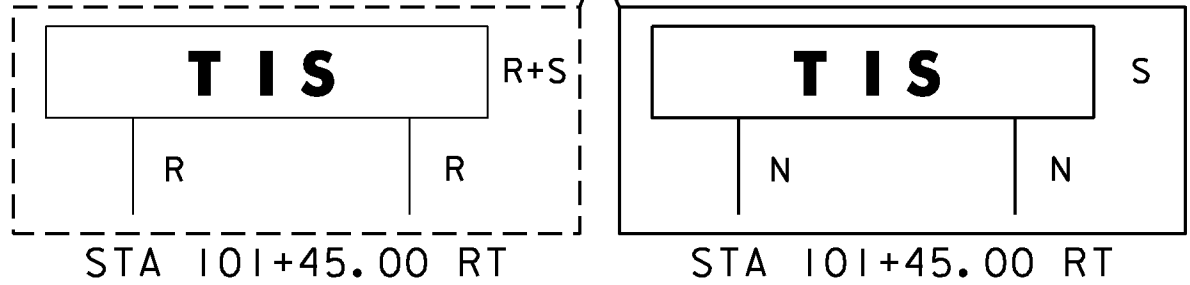
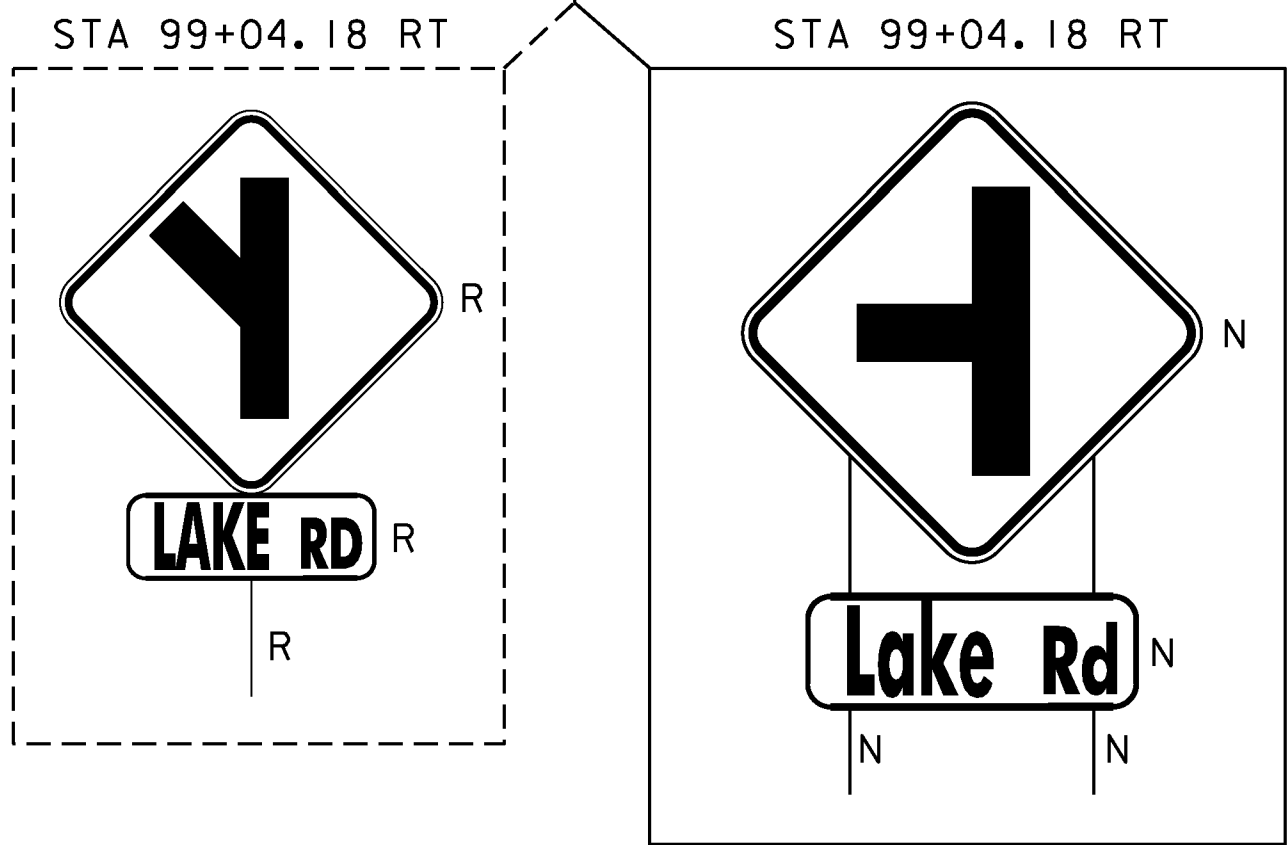
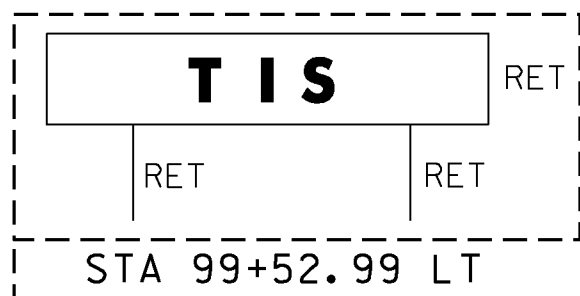
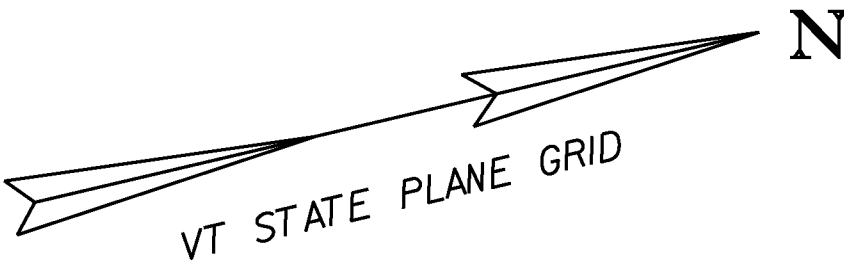
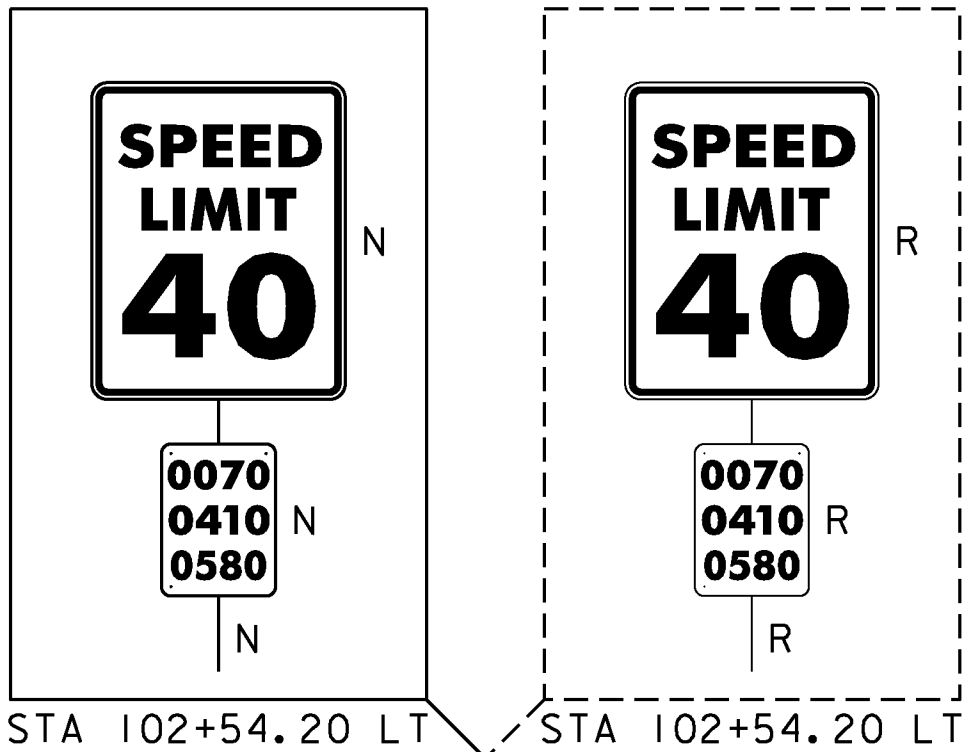
646.416 - DURABLE 4" YELLOW LINE, RECESSED POLYUREA  
STA 100+00.00 CL - 102+70.00 CL (SOLID - DOUBLE)  
STA 102+70.00 LT - 104+00.00 LT (SOLID - DOUBLE)  
STA 102+70.00 RT - 104+00.00 RT (SOLID - DOUBLE)

646.456 - DURABLE 8" YELLOW LINE, RECESSED POLYUREA  
STA 102+90.00 LT - 102+92.97 RT (SOLID, DIAG.)  
STA 103+03.53 LT - 103+08.49 RT (SOLID, DIAG.)  
STA 103+17.04 LT - 103+23.99 RT (SOLID, DIAG.)  
STA 103+30.34 LT - 103+39.25 RT (SOLID, DIAG.)  
STA 103+43.63 LT - 103+53.83 RT (SOLID, DIAG.)  
STA 103+57.18 LT - 103+66.83 RT (SOLID, DIAG.)  
STA 103+70.94 LT - 103+79.84 RT (SOLID, DIAG.)  
STA 103+84.72 LT - 103+92.84 RT (SOLID, DIAG.)  
STA 103+98.49 LT - 104+00.00 LT (SOLID, DIAG.)

646.600 - TEMPORARY 4" WHITE LINE  
STA 100+00.00 LT - 104+00.00 LT (SOLID)  
STA 100+00.00 RT - 104+00.00 RT (SOLID)  
STA 103+50.00 RT - 104+00.00 RT (DOTTED)

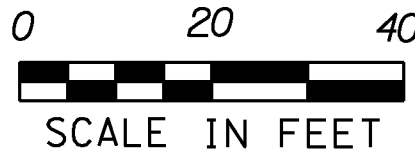
646.610 - TEMPORARY 4" YELLOW LINE  
STA 100+00.00 CL - 102+70.00 CL (SOLID - DOUBLE)  
STA 102+70.00 LT - 104+00.00 LT (SOLID - DOUBLE)  
STA 102+70.00 RT - 104+00.00 RT (SOLID - DOUBLE)

675.50 - REMOVING SIGNS  
STA 99+04.18 RT (2)  
STA 101+45.00 RT  
STA 102+54.20 LT (2)  
STA 103+60.00 RT  
  
675.60 - ERECTING SALVAGED SIGNS  
STA 101+45.00 RT



| SIGN LEGEND |                |
|-------------|----------------|
| R           | = REMOVE       |
| S           | = SALVAGE      |
| N           | = NEW          |
| RET         | = RETAIN       |
| B-B         | = BACK TO BACK |
| EXISTING    | = -----        |
| NEW         | = _____        |

NOTE: MATCH EXISTING PAVEMENT MARKINGS AT STA 100+00.00



|                   |                    |             |             |
|-------------------|--------------------|-------------|-------------|
| PROJECT NAME:     | MILTON             | PLOT DATE:  | 23-FEB-2011 |
| PROJECT NUMBER:   | STP 5800 (2)       | DRAWN BY:   | J. DEVLIN   |
| FILE NAME:        | +92D289+spmbdr.dgn | CHECKED BY: | J. DEVLIN   |
| PROJECT LEADER:   | J. SCHULTZ         | SHEET       | 59 OF 104   |
| DESIGNED BY:      | D. LYMAN           |             |             |
| TSPM LAYOUT SHEET | 1                  |             |             |



646.406 - DURABLE 4" WHITE LINE, RECESSED POLYUREA  
STA 104+00.00 LT - 106+75.00 LT (SOLID)  
STA 104+00.00 RT - 105+30.00 RT (DOTTED)  
STA 105+30.00 RT - 107+25.00 RT (SOLID)  
STA 104+00.00 RT - 105+00.00 RT (SOLID)  
STA 105+50.00 RT - 110+00.00 RT (SOLID)  
STA 108+32.00 LT - 110+00.00 LT (SOLID)  
STA 300+13.00 LT - 302+00.00 LT (SOLID)  
STA 300+13.00 RT - 302+00.00 RT (SOLID)

646.456 - DURABLE 8" YELLOW LINE, RECESSED POLYUREA  
STA 104+00.00 LT - 104+05.84 RT (SOLID, DIAG.)  
STA 104+12.26 LT - 104+18.84 RT (SOLID, DIAG.)  
STA 104+26.03 LT - 104+31.84 RT (SOLID, DIAG.)  
STA 104+39.81 LT - 104+44.85 RT (SOLID, DIAG.)  
STA 104+53.58 LT - 104+57.85 RT (SOLID, DIAG.)  
STA 104+67.30 LT - 104+70.86 RT (SOLID, DIAG.)  
STA 104+81.13 LT - 104+83.86 LT (SOLID, DIAG.)  
STA 104+94.90 LT - 104+96.86 LT (SOLID, DIAG.)  
STA 107+91.50 LT - 108+02.20 RT (SOLID, DIAG.)  
STA 108+05.50 LT - 108+16.20 RT (SOLID, DIAG.)  
STA 108+19.50 LT - 108+29.80 RT (SOLID, DIAG.)  
STA 108+35.50 LT - 108+43.00 RT (SOLID, DIAG.)  
STA 108+47.50 LT - 108+56.20 RT (SOLID, DIAG.)  
STA 108+61.50 LT - 108+69.40 RT (SOLID, DIAG.)  
STA 108+75.50 LT - 108+82.60 RT (SOLID, DIAG.)  
STA 108+89.50 LT - 108+95.80 RT (SOLID, DIAG.)  
STA 109+03.50 LT - 109+09.00 RT (SOLID, DIAG.)  
STA 109+17.50 LT - 109+22.20 RT (SOLID, DIAG.)  
STA 109+31.50 LT - 109+35.40 RT (SOLID, DIAG.)  
STA 109+45.50 LT - 109+48.60 RT (SOLID, DIAG.)  
STA 109+59.50 LT - 109+61.80 RT (SOLID, DIAG.)

646.600 - TEMPORARY 4" WHITE LINE  
STA 104+00.00 LT - 106+75.00 LT (SOLID)  
STA 104+00.00 RT - 105+30.00 RT (DOTTED)  
STA 105+30.00 RT - 107+25.00 RT (SOLID)  
STA 104+00.00 RT - 105+00.00 RT (SOLID)  
STA 105+50.00 RT - 110+00.00 RT (SOLID)  
STA 108+32.00 LT - 110+00.00 LT (SOLID)  
STA 300+13.00 LT - 302+00.00 LT (SOLID)  
STA 300+13.00 RT - 302+00.00 RT (SOLID)

646.610 - TEMPORARY 4" YELLOW LINE  
STA 104+00.00 LT - 107+25.00 LT (SOLID - DOUBLE)  
STA 104+00.00 RT - 105+30.00 LT (SOLID - DOUBLE)  
STA 107+86.00 LT - 110+00.00 LT (SOLID - DOUBLE)  
STA 107+86.00 RT - 110+00.00 RT (SOLID - DOUBLE)  
STA 300+25.00 CL - 302+00.00 CL (SOLID - DOUBLE)

646.680 - TEMPORARY 24" STOP BAR  
STA 300+25.00 LT - 300+25.00 LT

646.690 - TEMPORARY LETTER OR SYMBOL  
STA 105+62.00 RT (SYMBOL - LEFT ARROW)  
STA 106+42.00 RT (LETTERS - ONLY)  
STA 107+22.00 RT (SYMBOL - LEFT ARROW)  
STA 300+30.40 LT (LETTERS - STOP)

646.416 - DURABLE 4" YELLOW LINE, RECESSED POLYUREA  
STA 104+00.00 LT - 107+25.00 LT (SOLID - DOUBLE)  
STA 104+00.00 RT - 105+30.00 LT (SOLID - DOUBLE)  
STA 107+86.00 LT - 110+00.00 LT (SOLID - DOUBLE)  
STA 107+86.00 RT - 110+00.00 RT (SOLID - DOUBLE)  
STA 300+25.00 CL - 302+00.00 CL (SOLID - DOUBLE)

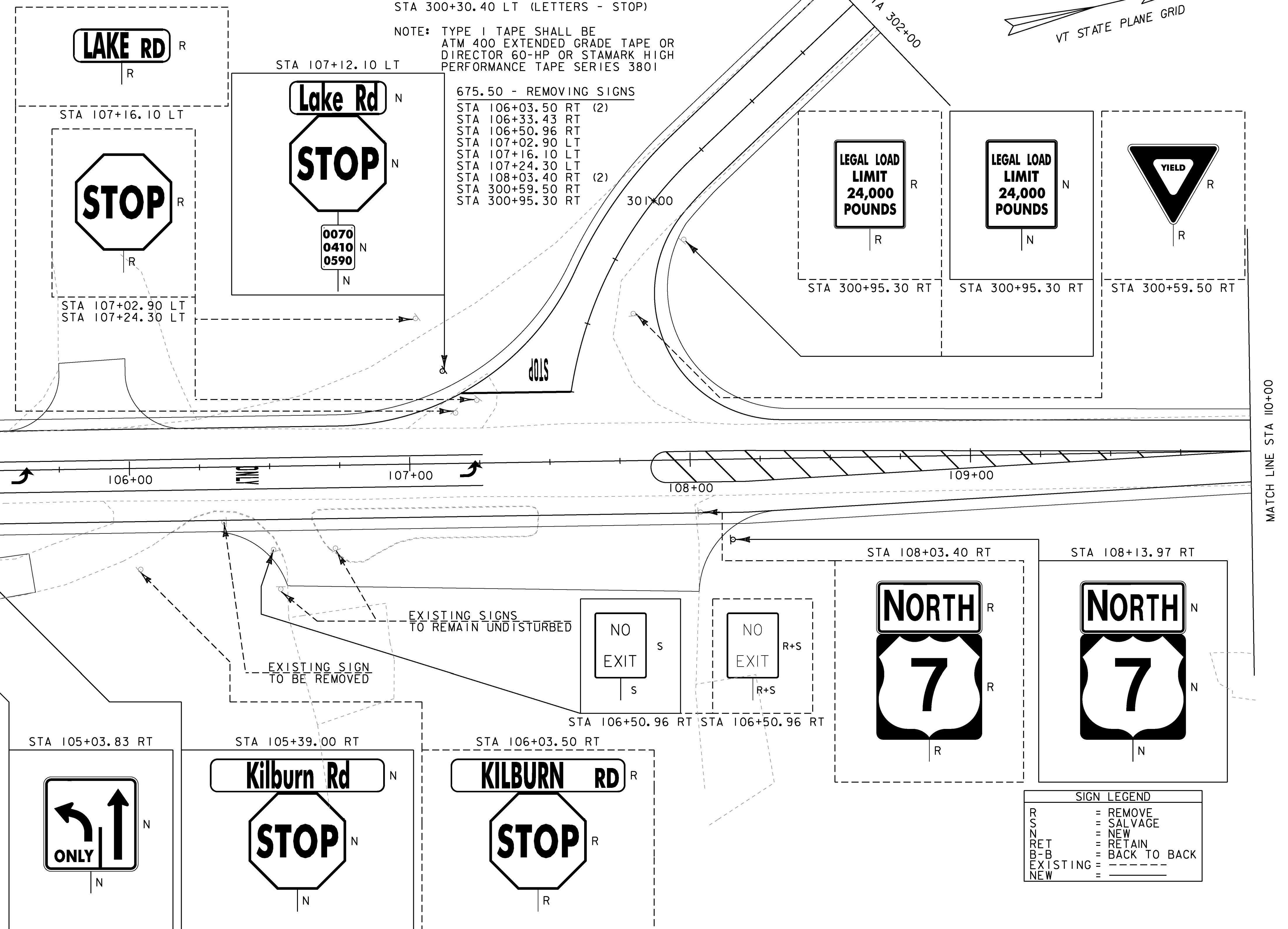
646.481 - DURABLE 24" STOP BAR, TYPE I TAPE  
STA 300+25.00 LT - 300+25.00 LT

646.491 - DURABLE LETTER OR SYMBOL, TYPE I TAPE  
STA 105+62.00 RT (SYMBOL - LEFT ARROW)  
STA 106+42.00 RT (LETTERS - ONLY)  
STA 107+22.00 RT (SYMBOL - LEFT ARROW)  
STA 300+30.40 LT (LETTERS - STOP)

NOTE: TYPE I TAPE SHALL BE  
ATM 400 EXTENDED GRADE TAPE OR  
DIRECTOR 60-HP OR STAMARK HIGH  
PERFORMANCE TAPE SERIES 3801

675.50 - REMOVING SIGNS

STA 106+03.50 RT (2)  
STA 106+33.43 RT  
STA 106+50.96 RT  
STA 107+02.90 LT  
STA 107+16.10 LT  
STA 107+24.30 LT  
STA 108+03.40 RT (2)  
STA 300+59.50 RT  
STA 300+95.30 RT



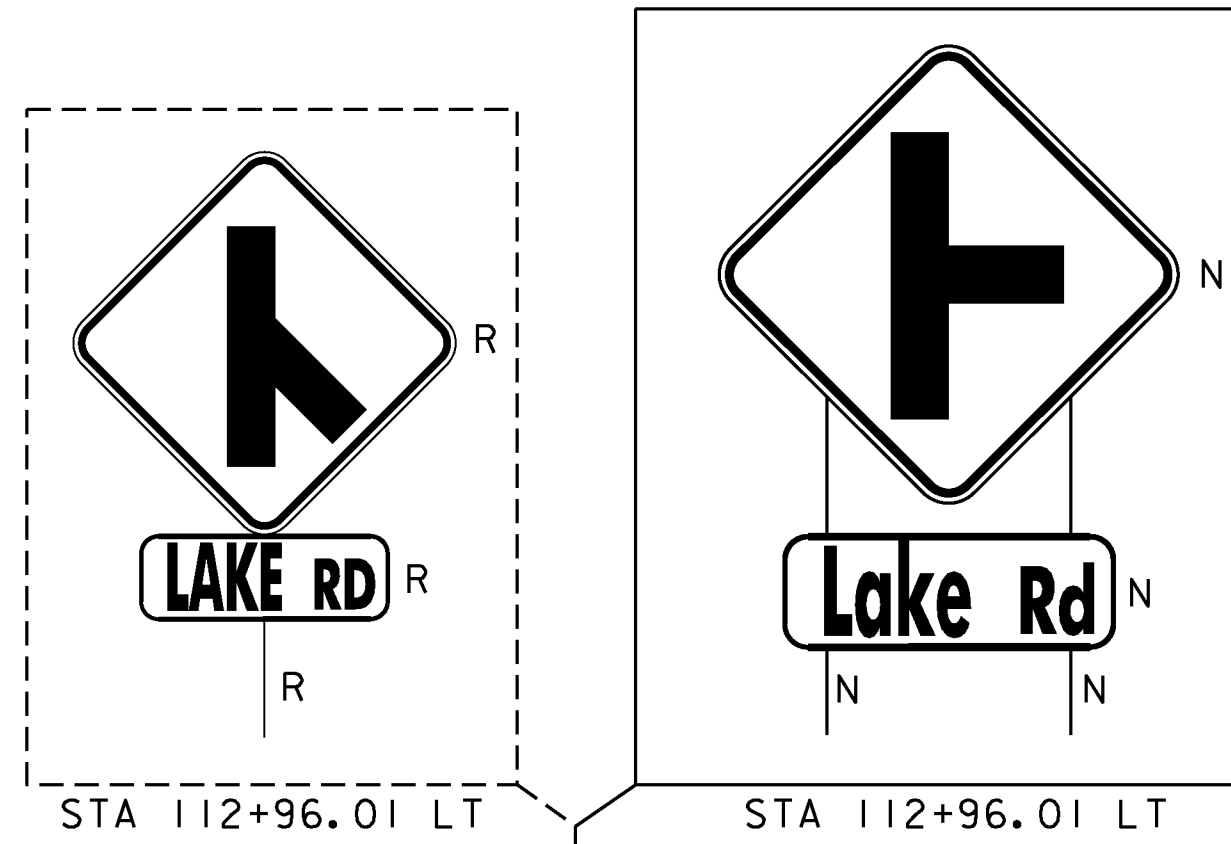
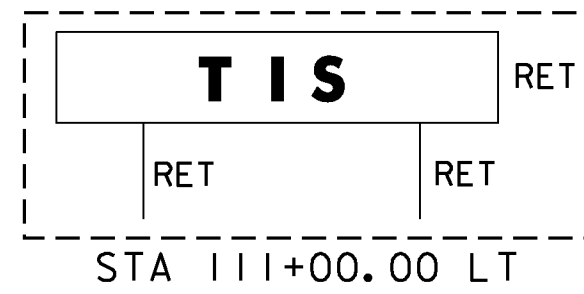
675.60 - ERECTING SALVAGED SIGNS  
STA 106+50.96 RT

675.61 - SETTING SALVAGED POSTS  
STA 106+50.96 RT

PROJECT NAME: MILTON  
PROJECT NUMBER: STP 5800 (2)  
FILE NAME: +92D289+spmbdr.dgn  
PROJECT LEADER: J. SCHULTZ  
DESIGNED BY: D. LYMAN  
TSPM LAYOUT SHEET 2  
PLOT DATE: 23-FEB-2011  
DRAWN BY: J. DEVLIN  
CHECKED BY: J. DEVLIN  
SHEET 60 OF 104



MATCH LINE STA 110+00



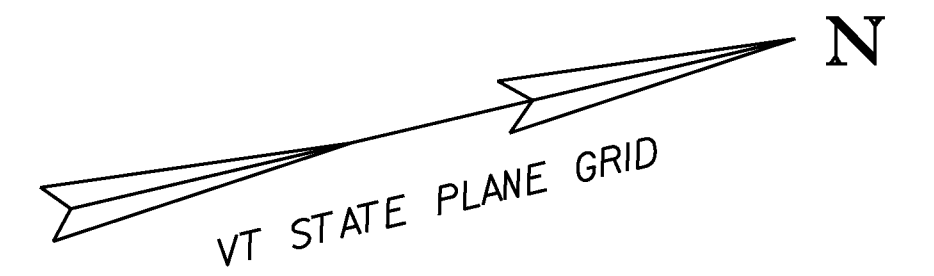
646.406 - DURABLE 4" WHITE LINE, RECESSED POLYUREA  
STA 110+00.00 LT - 111+50.00 LT (SOLID)  
STA 110+00.00 RT - 111+50.00 RT (SOLID)

646.416 - DURABLE 4" YELLOW LINE, RECESSED POLYUREA  
STA 110+00.00 CL - 111+50.00 CL (SOLID - DOUBLE)

646.600 - TEMPORARY 4" WHITE LINE  
STA 110+00.00 LT - 111+50.00 LT (SOLID)  
STA 110+00.00 RT - 111+50.00 RT (SOLID)

646.610 - TEMPORARY 4" YELLOW LINE  
STA 110+00.00 CL - 111+50.00 CL (SOLID - DOUBLE)

675.50 - REMOVING SIGNS  
STA 112+96.01 LT (2)



EXISTING SIGNS  
TO REMAIN UNDISTURBED

EXISTING SIGN  
TO REMAIN UNDISTURBED

| SIGN LEGEND |                |
|-------------|----------------|
| R           | = REMOVE       |
| S           | = SALVAGE      |
| N           | = NEW          |
| RET         | = RETAIN       |
| B-B         | = BACK TO BACK |
| EXISTING    | = -----        |
| NEW         | = _____        |

NOTE: MATCH EXISTING PAVEMENT MARKINGS AT STA 111+50.00



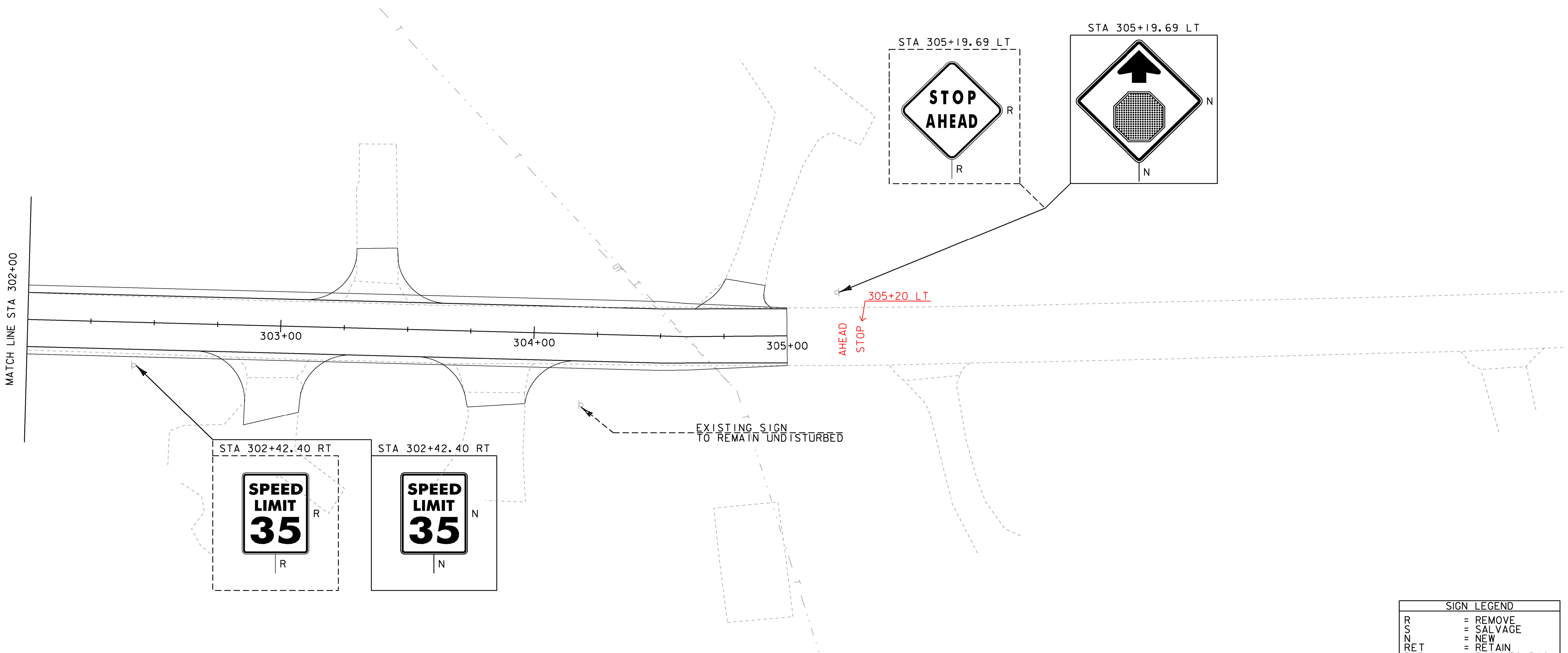
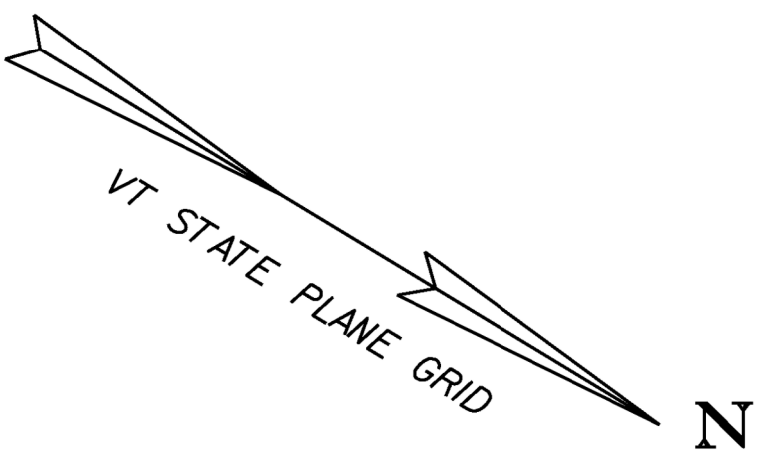
|                   |                    |
|-------------------|--------------------|
| PROJECT NAME:     | MILTON             |
| PROJECT NUMBER:   | STP 5800 (2)       |
| FILE NAME:        | +92D289+spmbdr.dgn |
| PROJECT LEADER:   | J. SCHULTZ         |
| DESIGNED BY:      | D. LYMAN           |
| TSPM LAYOUT SHEET | 3                  |
| PLOT DATE:        | 23-FEB-2011        |
| DRAWN BY:         | J. DEVLIN          |
| CHECKED BY:       | J. DEVLIN          |
| SHEET             | 61 OF 104          |



646.406 - DURABLE 4" WHITE LINE, RECESSED POLYUREA  
STA 302+00.00 LT - 305+00.00 LT (SOLID)  
STA 302+00.00 RT - 305+00.00 RT (SOLID)  
  
646.416 - DURABLE 4" YELLOW LINE, RECESSED POLYUREA  
STA 302+00.00 CL - 305+00.00 CL (SOLID - DOUBLE)

646.600 - TEMPORARY 4" WHITE LINE  
STA 302+00.00 LT - 305+00.00 LT (SOLID)  
STA 302+00.00 RT - 305+00.00 RT (SOLID)  
  
646.610 - TEMPORARY 4" YELLOW LINE  
STA 302+00.00 CL - 305+00.00 CL (SOLID - DOUBLE)

675.50 - REMOVING SIGNS  
STA 302+42.40 RT  
STA 305+19.69 LT



| SIGN LEGEND |                |
|-------------|----------------|
| R           | = REMOVE       |
| S           | = SALVAGE      |
| N           | = NEW          |
| RET         | = RETAIN       |
| B-B         | = BACK TO BACK |
| EXISTING    | = -----        |
| NEW         | = _____        |

NOTE: MATCH EXISTING PAVEMENT MARKINGS AT STA 305+00.00



|                               |                        |
|-------------------------------|------------------------|
| PROJECT NAME: MILTON          |                        |
| PROJECT NUMBER: STP 5800 (2)  |                        |
| FILE NAME: +92D289+spmbdr.dgn | PLOT DATE: 23-FEB-2011 |
| PROJECT LEADER: J. SCHULTZ    | DRAWN BY: J. DEVLIN    |
| DESIGNED BY: D. LYMAN         | CHECKED BY: J. DEVLIN  |
| TSPM LAYOUT SHEET 4           | SHEET 62 OF 104        |



STATE OF VERMONT  
 AGENCY OF TRANSPORTATION

# TRAFFIC SIGN SUMMARY SHEET

# TRAFFIC SIGN SUMMARY SHEET

[illegible]



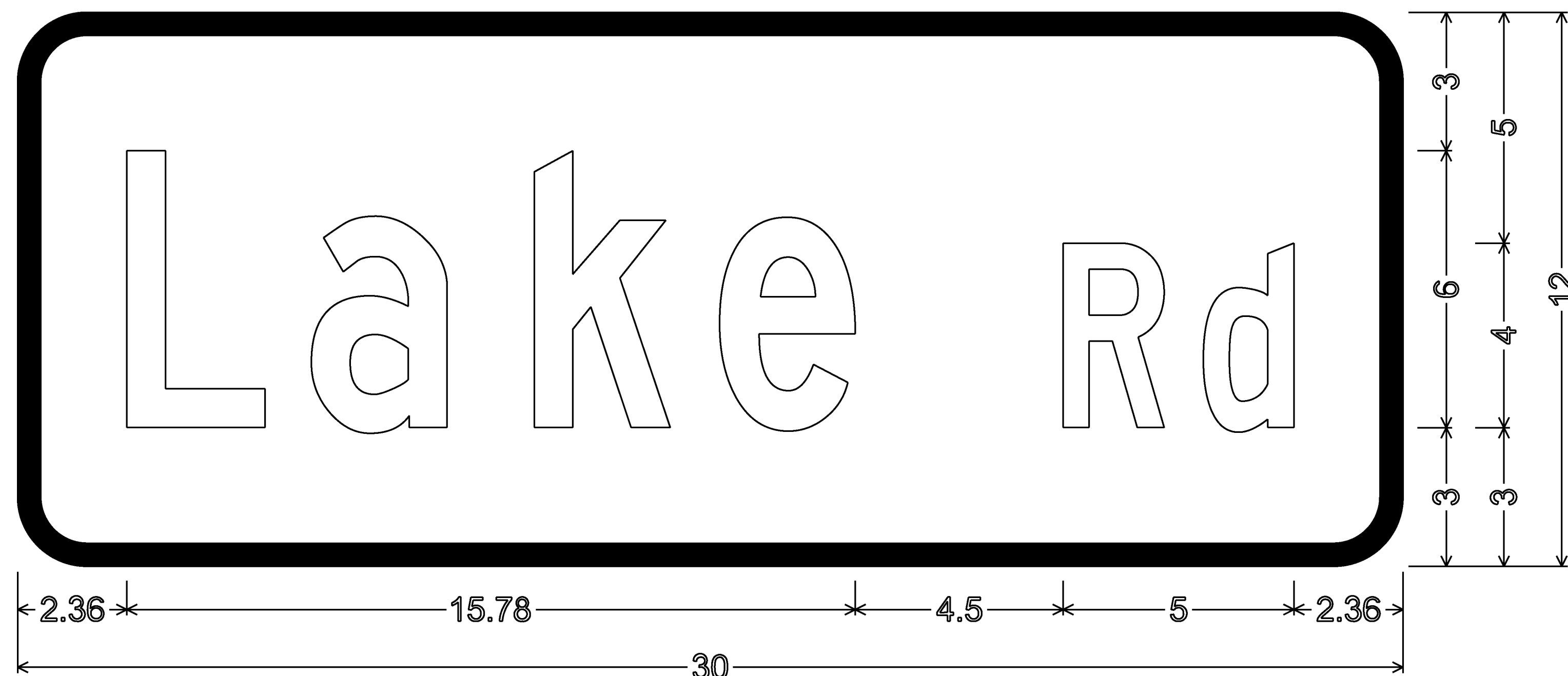
STATE OF VERMONT  
 AGENCY OF TRANSPORTATION

# TRAFFIC SIGN SUMMARY SHEET

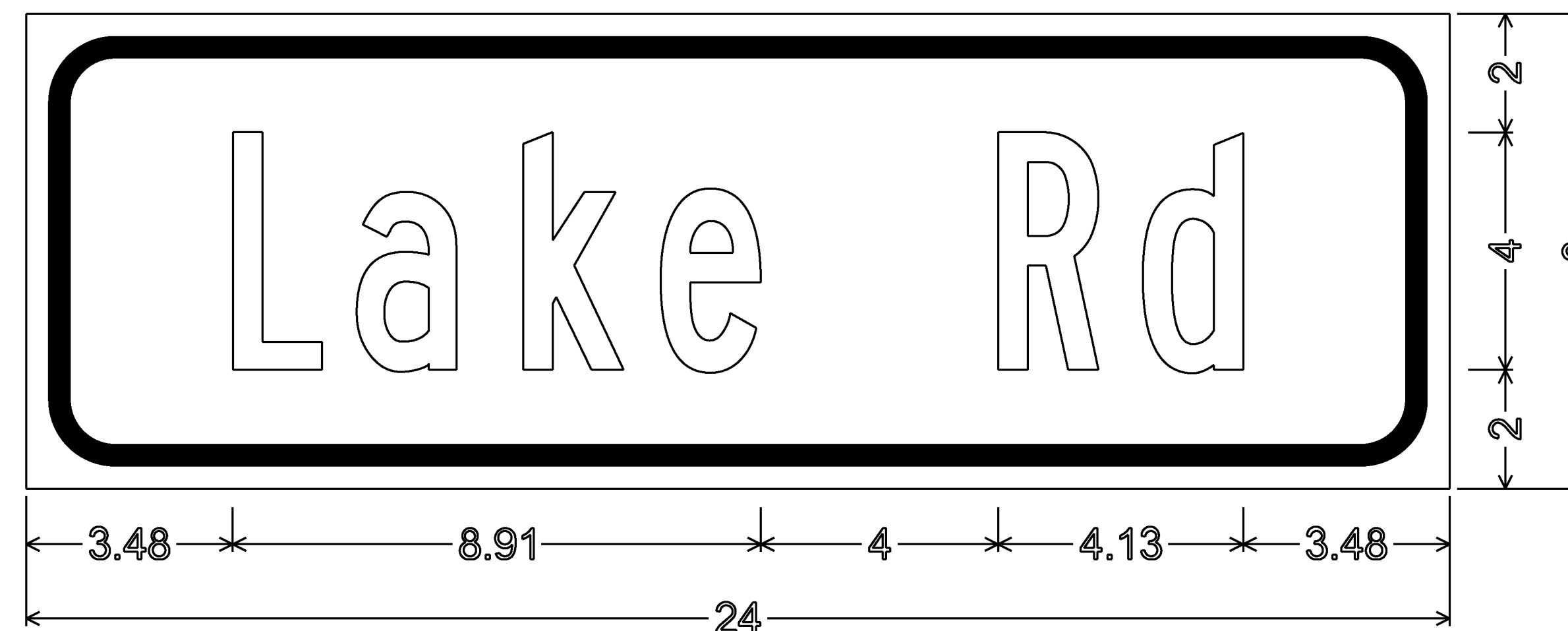
# TRAFFIC SIGN SUMMARY SHEET

[illegible]

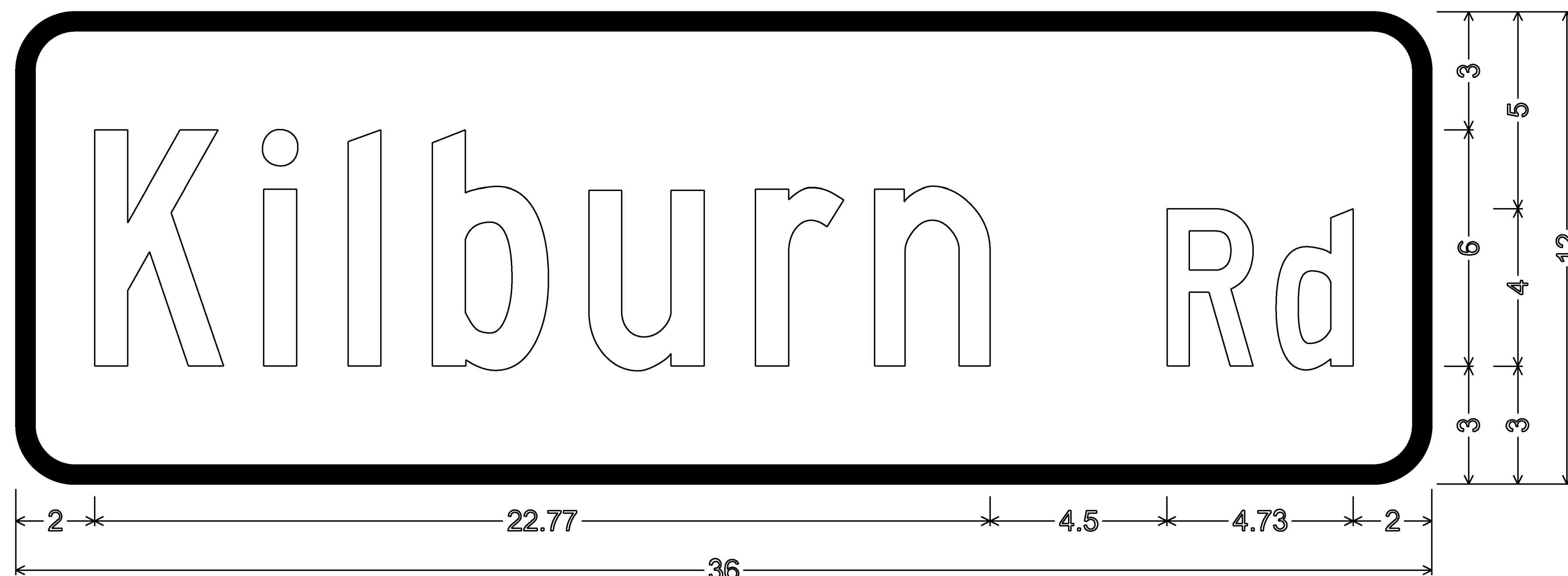




1.50" Radius, 0.50" Border, White on Green;  
"Lake Rd" C;



1.50" Radius, 0.38" Border, 0.38" Indent, Black on Yellow;  
"Lake Rd" B;



1.50" Radius, 0.50" Border, White on Green;  
"Kilburn Rd" C specified length;

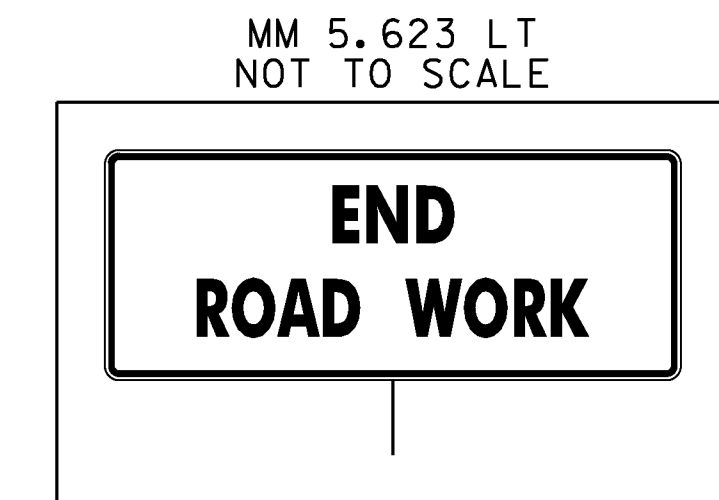
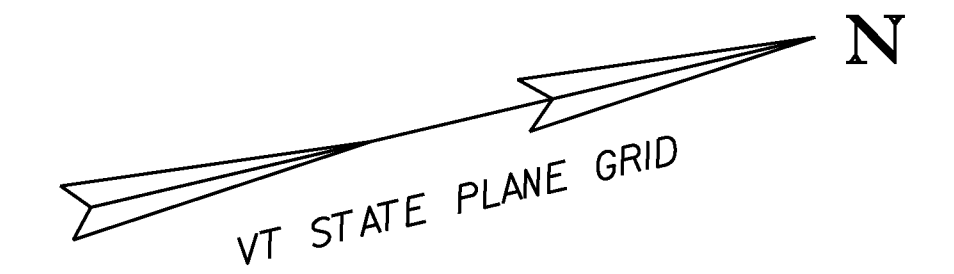
NOTE: ALL DIMENSIONS IN INCHES  
NOT TO SCALE

|                              |                        |
|------------------------------|------------------------|
| PROJECT NAME: MILTON         |                        |
| PROJECT NUMBER: STP 5800 (2) |                        |
| FILE NAME: t92D289tssum.dgn  | PLOT DATE: 23-FEB-2011 |
| PROJECT LEADER: J. SCHULTZ   | DRAWN BY: D. LYMAN     |
| DESIGNED BY: D. LYMAN        | CHECKED BY: J. DEVLIN  |
| TRAFFIC SIGN DETAIL SHEET    | SHEET 65 OF 104        |

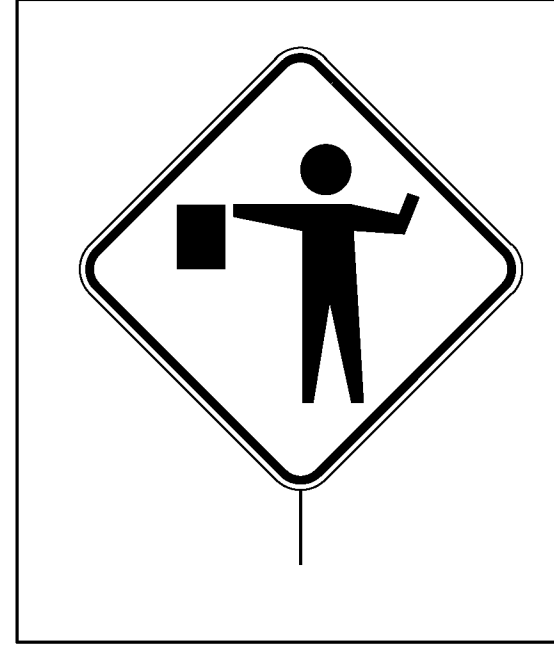
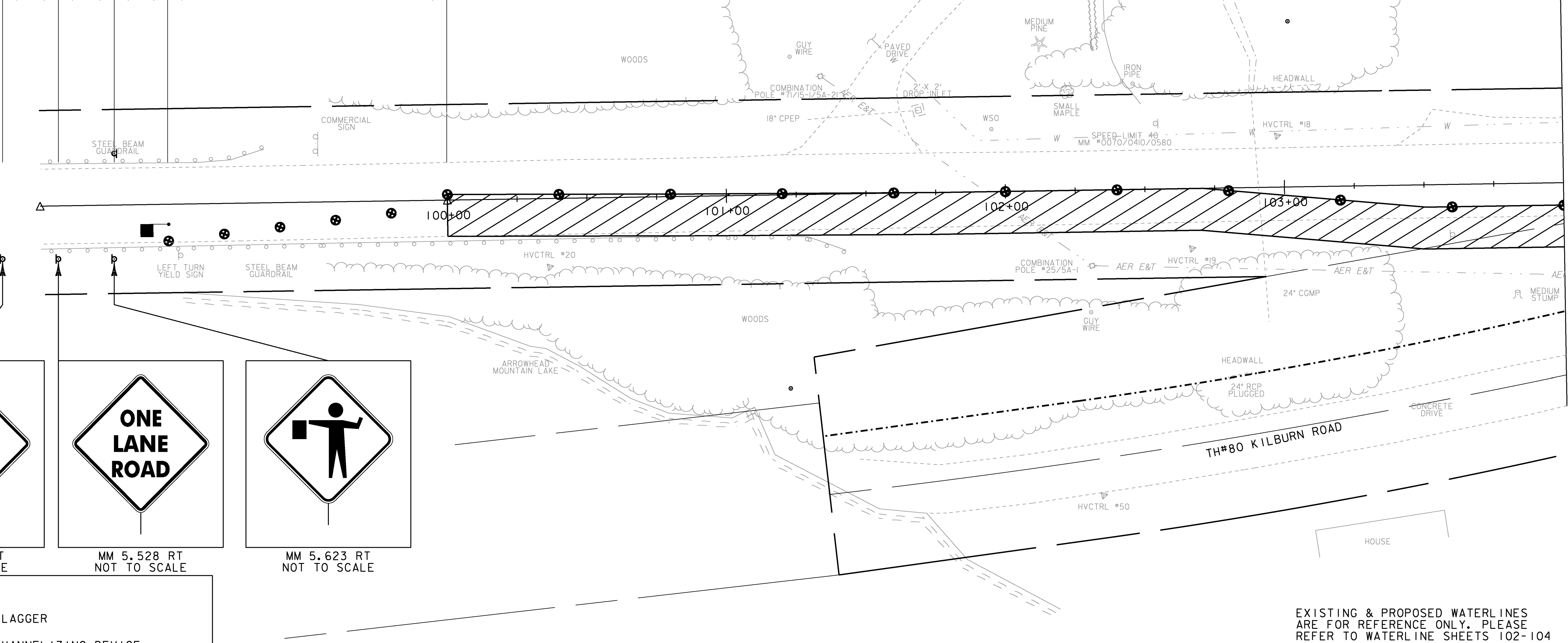


NOTES:

1. TRAFFIC CONTROL PHASE 1 CONSISTS OF WIDENING EASTERLY OFF OF US ROUTE 7, EXTENDING FROM THE EXISTING SHOULDER TO THE PROPOSED EDGE OF PAVEMENT. REFER TO MUTCD FIGURE 6H-10. LANE CLOSURE ON TWO-LANE ROAD USING FLAGGERS (TYPICAL APPLICATION 10).
2. TEMPORARY LANE AND/OR SHOULDER CLOSURES SHALL BE ALLOWED DURING WORKING HOURS. US ROUTE 7 AND LAKE ROAD SHALL BE RESTORED TO FULL CAPACITY AT THE CLOSE OF DAILY CONSTRUCTION ACTIVITIES.
3. ADDITIONAL TRAFFIC CONTROL WARNING SIGNS MAY BE REQUIRED AND SHALL BE INSTALLED AS REQUESTED BY THE RESIDENT ENGINEER PER THE MUTCD. PAYMENT FOR THESE SIGNS, THE REFLECTORIZED PLASTIC DRUMS, ETC., SHALL BE PAID UNDER CONTRACT ITEM 641.10.
4. ACCESS TO RESIDENTIAL DRIVES, COMMERCIAL DRIVES, AND TOWN HIGHWAYS SHALL BE MAINTAINED THROUGHOUT THE PROJECT'S DURATION. CONSTRUCTION OF MINOR SIDE ROADS AS WELL AS DRIVEWAYS SHALL TAKE PLACE DURING THE ADJACENT CONSTRUCTION PHASE.
5. SIGNS SHALL BE COVERED OR REMOVED WHEN NOT APPLICABLE.
6. ADDITIONAL DENSE GRADED CRUSHED STONE MAY BE REQUIRED TO RESTORE ROADWAY TO FULL CAPACITY AT THE CLOSE OF DAILY CONSTRUCTION ACTIVITIES AND SHALL BE CONSIDERED INCIDENTAL TO ITEM 641.10.

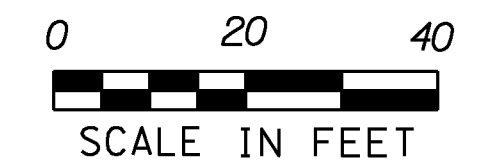


500' 500' 500' 100'



LEGEND

- FLAGGER
- CHANNELIZING DEVICE
- PHASE I CONSTRUCTION ZONE



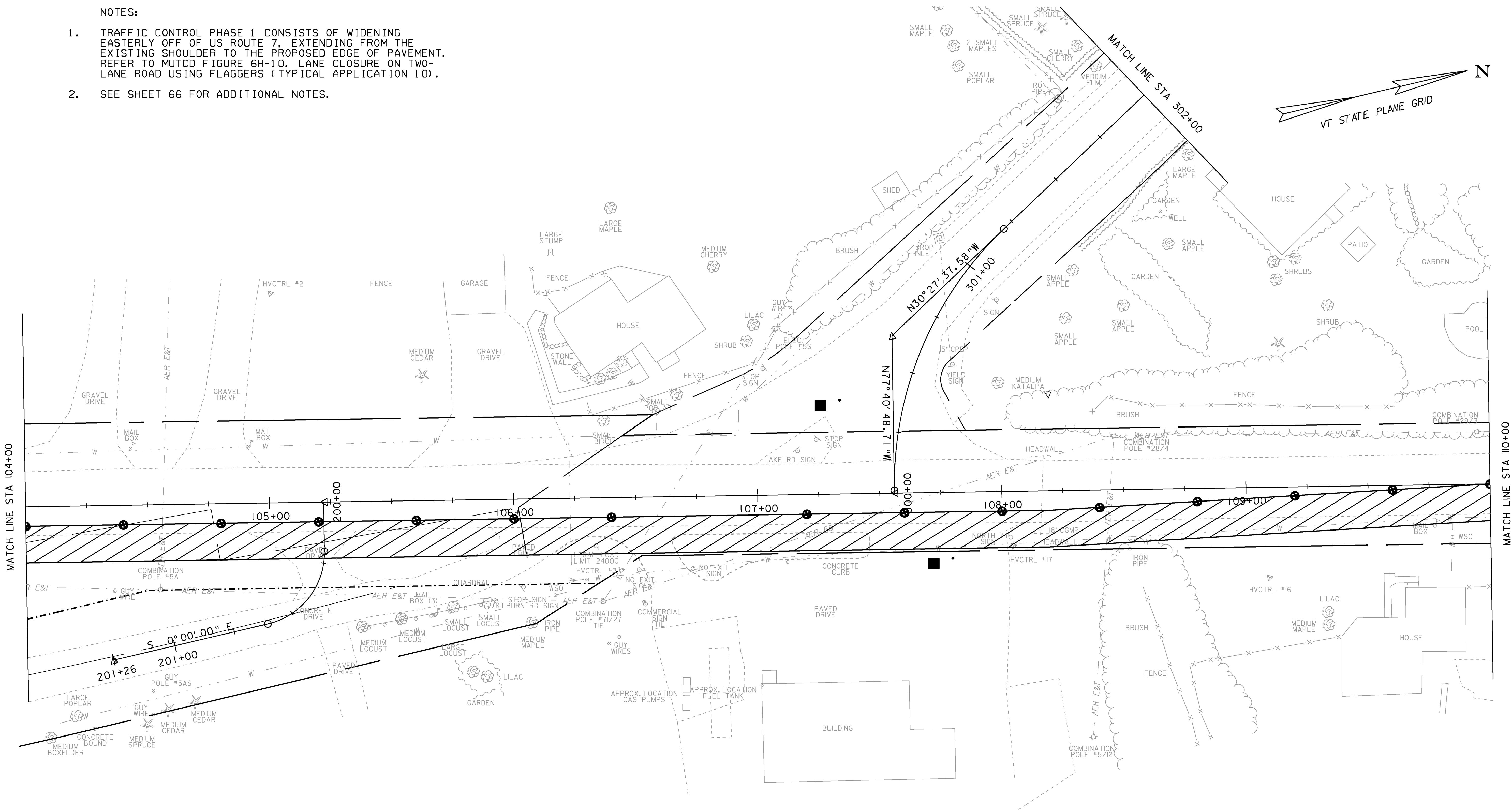
EXISTING & PROPOSED WATERLINES ARE FOR REFERENCE ONLY. PLEASE REFER TO WATERLINE SHEETS 102-104

|                           |                    |             |             |
|---------------------------|--------------------|-------------|-------------|
| PROJECT NAME:             | MILTON             | PLOT DATE:  | 23-FEB-2011 |
| PROJECT NUMBER:           | STP 5800 (2)       | DRAWN BY:   | J. DEVLIN   |
| FILE NAME:                | +92D289+cp1bdr.dgn | CHECKED BY: | J. DEVLIN   |
| PROJECT LEADER:           | J. SCHULTZ         | SHEET       | 66 OF 104   |
| DESIGNED BY:              | D. LYMAN           |             |             |
| TC PHASE I LAYOUT SHEET I |                    |             |             |



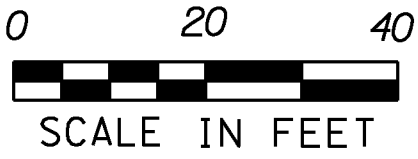
NOTES:

1. TRAFFIC CONTROL PHASE 1 CONSISTS OF WIDENING EASTERLY OFF OF US ROUTE 7, EXTENDING FROM THE EXISTING SHOULDER TO THE PROPOSED EDGE OF PAVEMENT. REFER TO MUTCD FIGURE 6H-10. LANE CLOSURE ON TWO-LANE ROAD USING FLAGGERS (TYPICAL APPLICATION 10).
2. SEE SHEET 66 FOR ADDITIONAL NOTES.



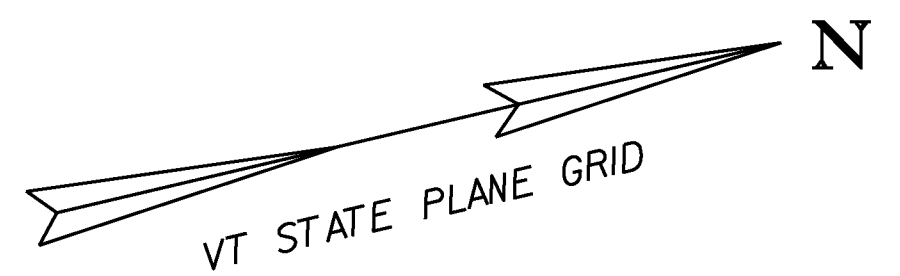
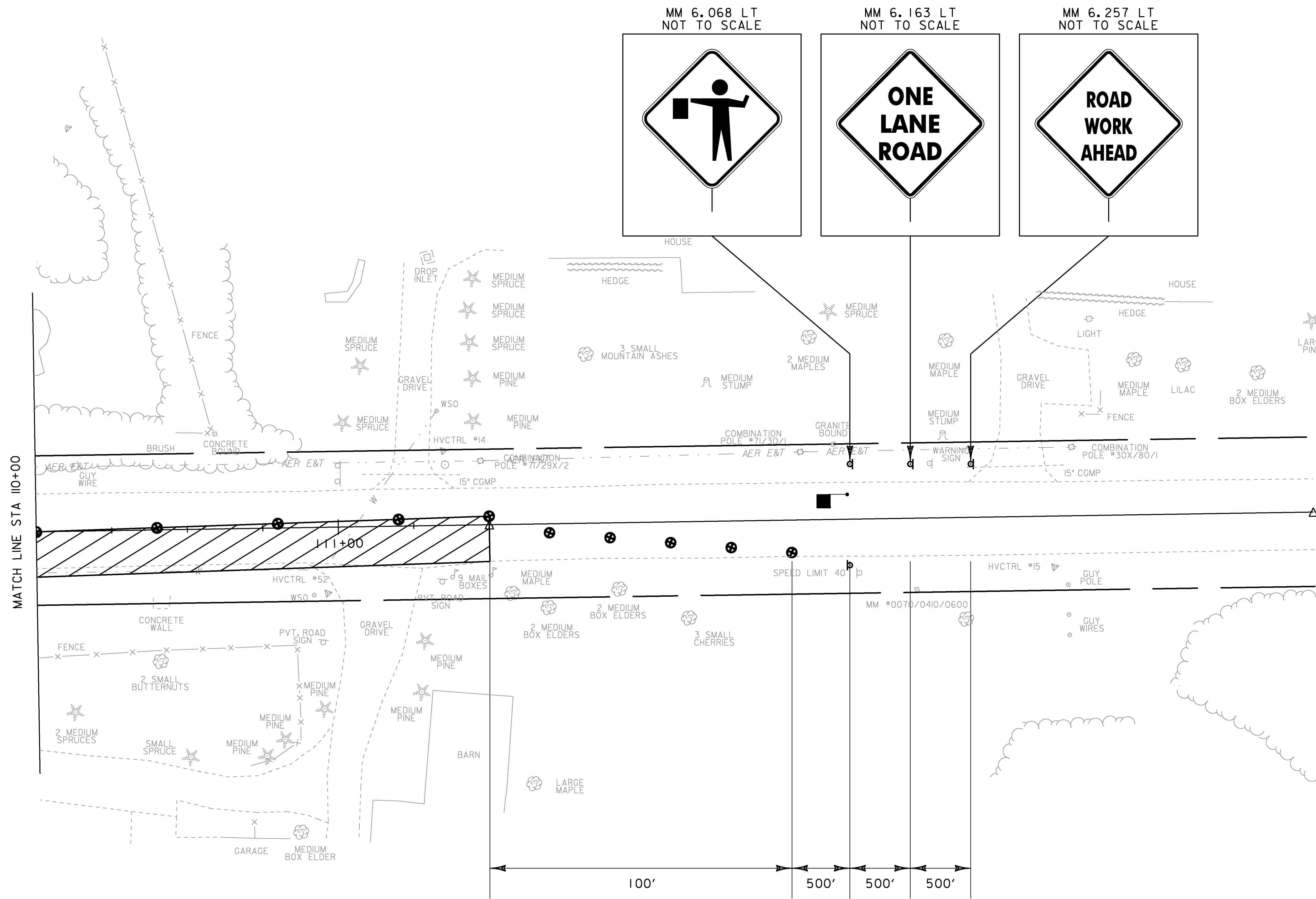
**LEGEND**

- FLAGGER
- CHANNELIZING DEVICE
- PHASE I CONSTRUCTION ZONE



|                                                                                                 |                   |
|-------------------------------------------------------------------------------------------------|-------------------|
| EXISTING & PROPOSED WATERLINES ARE FOR REFERENCE ONLY. PLEASE REFER TO WATERLINE SHEETS 102-104 |                   |
| PROJECT NAME:                                                                                   | MILTON            |
| PROJECT NUMBER:                                                                                 | STP 5800 (2)      |
| FILE NAME:                                                                                      | +92D289+cpbdr.dgn |
| PROJECT LEADER:                                                                                 | J. SCHULTZ        |
| DESIGNED BY:                                                                                    | D. LYMAN          |
| TC PHASE I LAYOUT SHEET 2                                                                       |                   |
| PLOT DATE:                                                                                      | 23-FEB-2011       |
| DRAWN BY:                                                                                       | J. DEVLIN         |
| CHECKED BY:                                                                                     | J. DEVLIN         |
| SHEET                                                                                           | 67 OF 104         |





- NOTES:
1. TRAFFIC CONTROL PHASE 1 CONSISTS OF WIDENING EASTERLY OFF OF US ROUTE 7, EXTENDING FROM THE EXISTING SHOULDER TO THE PROPOSED EDGE OF PAVEMENT. REFER TO MUTCD FIGURE 6H-10. LANE CLOSURE ON TWO-LANE ROAD USING FLAGGERS (TYPICAL APPLICATION 10).
  2. SEE SHEET 66 FOR ADDITIONAL NOTES.

LEGEND

FLAGGER

CHANNELIZING DEVICE

PHASE I CONSTRUCTION ZONE

END  
ROAD WORK

MM 6.068 RT  
NOT TO SCALE

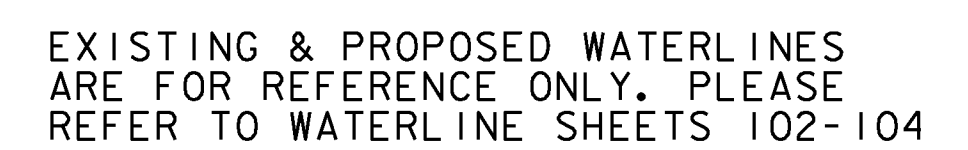


EXISTING & PROPOSED WATERLINES  
ARE FOR REFERENCE ONLY. PLEASE  
REFER TO WATERLINE SHEETS 102-104

|                               |                        |
|-------------------------------|------------------------|
| PROJECT NAME: MILTON          |                        |
| PROJECT NUMBER: STP 5800 (2)  |                        |
| FILE NAME: +92D289+cp1bdr.dgn | PLOT DATE: 23-FEB-2011 |
| PROJECT LEADER: J. SCHULTZ    | DRAWN BY: J. DEVLIN    |
| DESIGNED BY: D. LYMAN         | CHECKED BY: J. DEVLIN  |
| TC PHASE I LAYOUT SHEET 3     | SHEET 68 OF 104        |



1. TRAFFIC CONTROL PHASE 1 CONSISTS OF WIDENING  
EASTERLY OFF OF US ROUTE 7, EXTENDING FROM THE  
EXISTING SHOULDER TO THE PROPOSED EDGE OF PAVEMENT.  
REFER TO MUTCD FIGURE 6H-10, LANE CLOSURE ON TWO-  
LANE ROAD USING FLAGGERS (TYPICAL APPLICATION 10).
2. SEE SHEET 66 FOR ADDITIONAL NOTES.

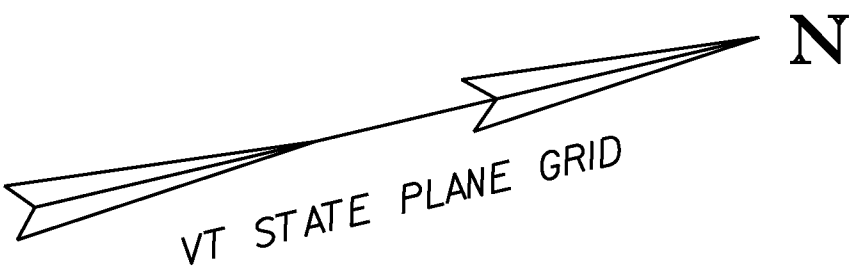


|                               |                        |
|-------------------------------|------------------------|
| FILE NAME: t92D289+cp1bdr.dgn | PLOT DATE: 23-FEB-2011 |
| PROJECT LEADER: J. SCHULTZ    | DRAWN BY: J. DEVLIN    |
| DESIGNED BY: D. LYMAN         | CHECKED BY: J. DEVLIN  |
| TC PHASE LAYOUT SHEET 4       | SHEET 69 OF 104        |



NOTES:

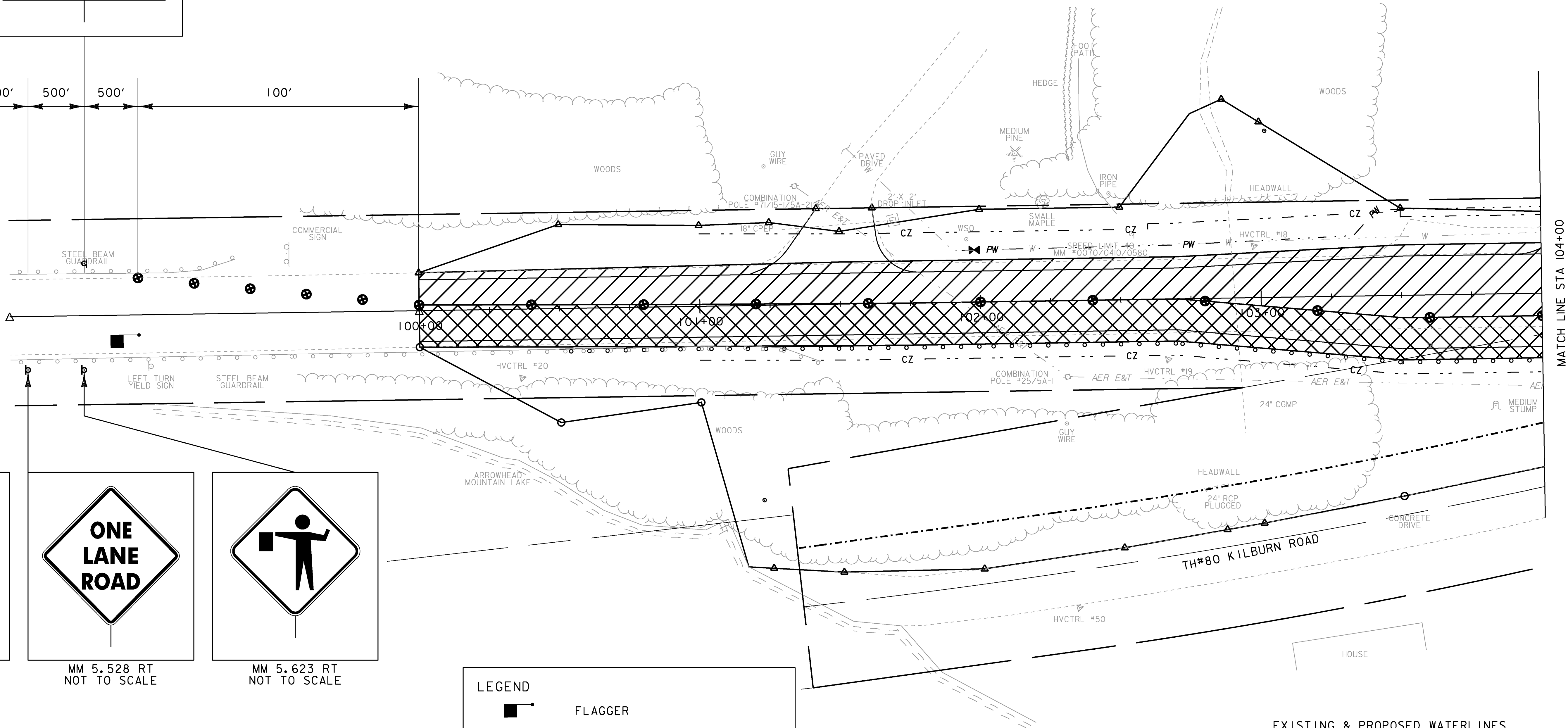
1. TRAFFIC CONTROL PHASE 2 CONSISTS OF TEMPORARY ONE WAY TRAFFIC ON US ROUTE 7 AND LAKE ROAD. REFER TO MUTCD FIGURE 6H-10. LANE CLOSURE ON TWO-LANE ROAD USING FLAGGERS (TYPICAL APPLICATION 10).
2. SEE SHEET 66 FOR ADDITIONAL NOTES.



MM 5.623 LT  
NOT TO SCALE

**END  
ROAD WORK**

500' 500' 500' 100'



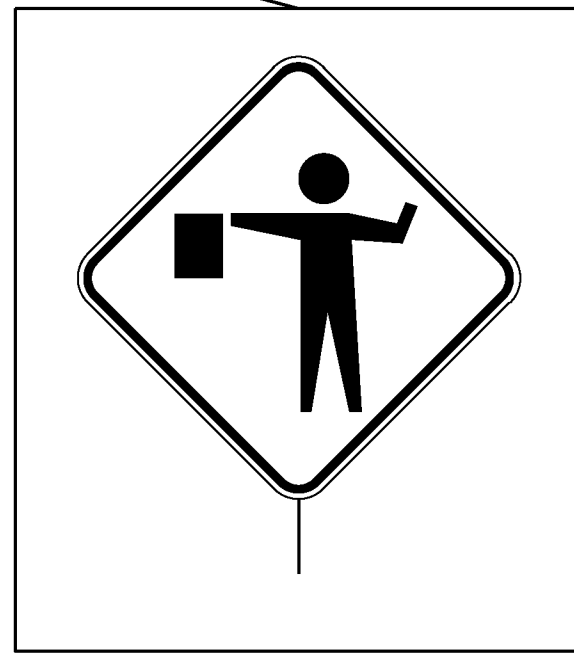
MATCH LINE STA 104+00



MM 5.434 RT  
NOT TO SCALE



MM 5.528 RT  
NOT TO SCALE



MM 5.623 RT  
NOT TO SCALE

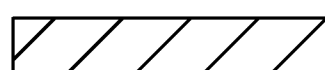
LEGEND



FLAGGER



CHANNELIZING DEVICE



PHASE II CONSTRUCTION ZONE



PHASE II TRAFFIC

EXISTING & PROPOSED WATERLINES  
ARE FOR REFERENCE ONLY. PLEASE  
REFER TO WATERLINE SHEETS 102-104

PROJECT NAME: MILTON  
PROJECT NUMBER: STP 5800 (2)

FILE NAME: +92D289+cp2bdr.dgn  
PROJECT LEADER: J. SCHULTZ  
DESIGNED BY: D. LYMAN  
TC PHASE 2 LAYOUT SHEET 1

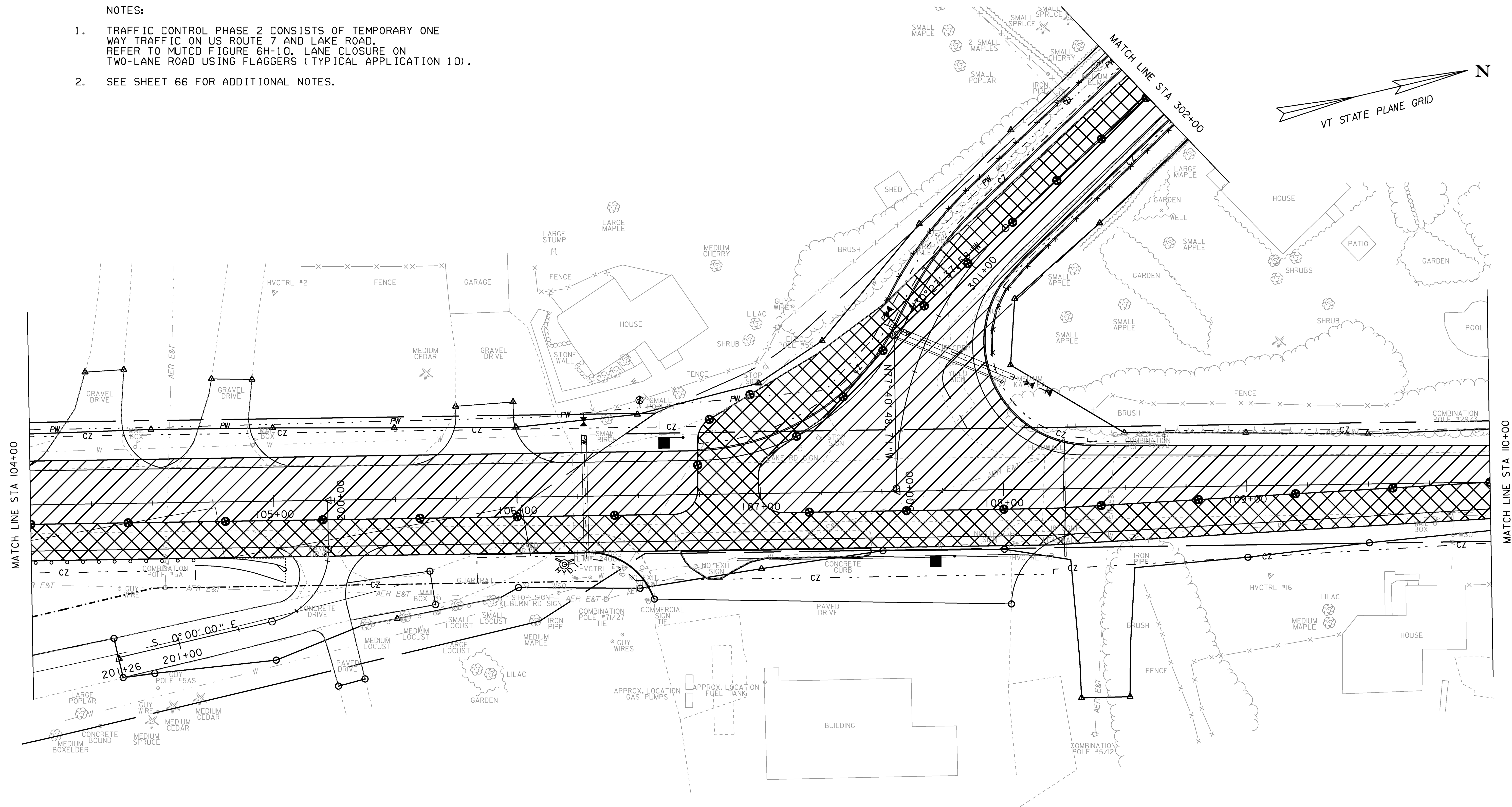
PLOT DATE: 23-FEB-2011  
DRAWN BY: J. DEVLIN  
CHECKED BY: J. DEVLIN  
SHEET 70 OF 104

0 20 40  
SCALE IN FEET



NOTES:

1. TRAFFIC CONTROL PHASE 2 CONSISTS OF TEMPORARY ONE WAY TRAFFIC ON US ROUTE 7 AND LAKE ROAD. REFER TO MUTCD FIGURE 6H-10. LANE CLOSURE ON TWO-LANE ROAD USING FLAGGERS (TYPICAL APPLICATION 10).
2. SEE SHEET 66 FOR ADDITIONAL NOTES.



LEGEND

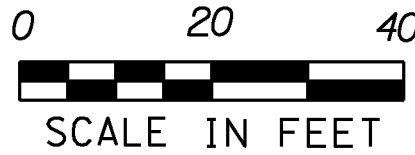
- FLAGGER
- CHANNELIZING DEVICE
- PHASE II CONSTRUCTION ZONE
- PHASE II TRAFFIC

EXISTING & PROPOSED WATERLINES  
ARE FOR REFERENCE ONLY. PLEASE  
REFER TO WATERLINE SHEETS 102-104

PROJECT NAME: MILTON  
PROJECT NUMBER: STP 5800 (2)

FILE NAME: +92D289+cp2bdr.dgn  
PROJECT LEADER: J. SCHULTZ  
DESIGNED BY: D. LYMAN  
TC PHASE 2 LAYOUT SHEET 2

PLOT DATE: 23-FEB-2011  
DRAWN BY: J. DEVLIN  
CHECKED BY: J. DEVLIN  
SHEET 71 OF 104

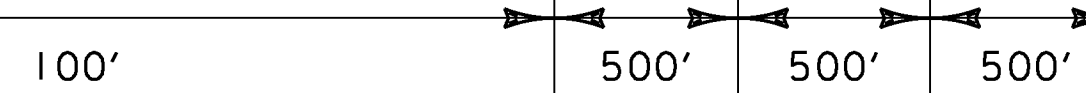
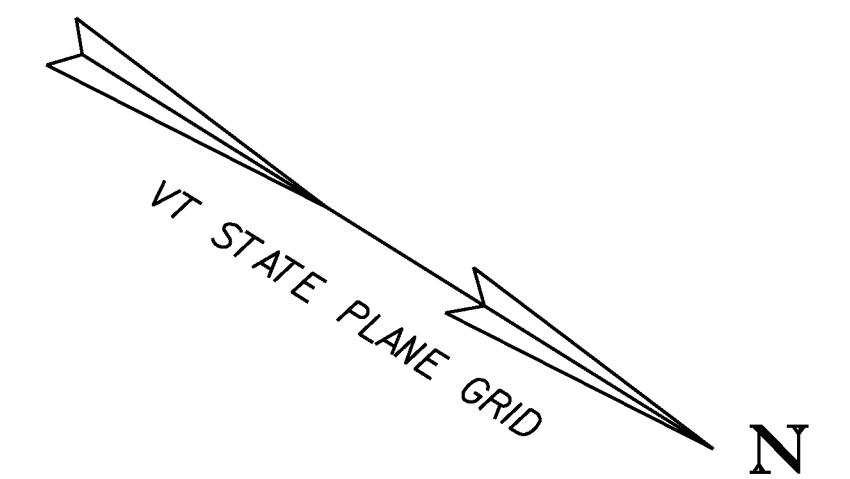








1. TRAFFIC CONTROL PHASE 2 CONSISTS OF TEMPORARY ONE WAY TRAFFIC ON US ROUTE 7 AND LAKE ROAD. REFER TO MUTCD FIGURE 6H-10. LANE CLOSURE ON TWO-LANE ROAD USING FLAGGERS (TYPICAL APPLICATION 10).
2. SEE SHEET 66 FOR ADDITIONAL NOTES.



**END  
ROAD WORK**

MM 0.208 RT  
NOT TO SCALE

EXISTING & PROPOSED WATERLINES  
ARE FOR REFERENCE ONLY. PLEASE  
REFER TO WATERLINE SHEETS 102-104

|                 |              |
|-----------------|--------------|
| PROJECT NAME:   | MILTON       |
| PROJECT NUMBER: | STP 5800 (2) |

FILE NAME: +92D289+cp2bdr.dgn  
PROJECT LEADER: J. SCHULTZ  
DESIGNED BY: D. LYMAN  
TC PHASE 2 LAYOUT SHEET 4

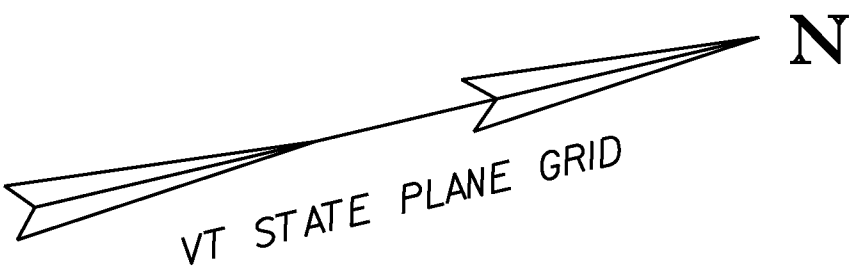
PLOT DATE: 23-FEB-2011  
DRAWN BY: J. DEVLIN  
CHECKED BY: J. DEVLIN  
SHEET 73 OF 104

0 20 40  
SCALE IN FEET



NOTES:

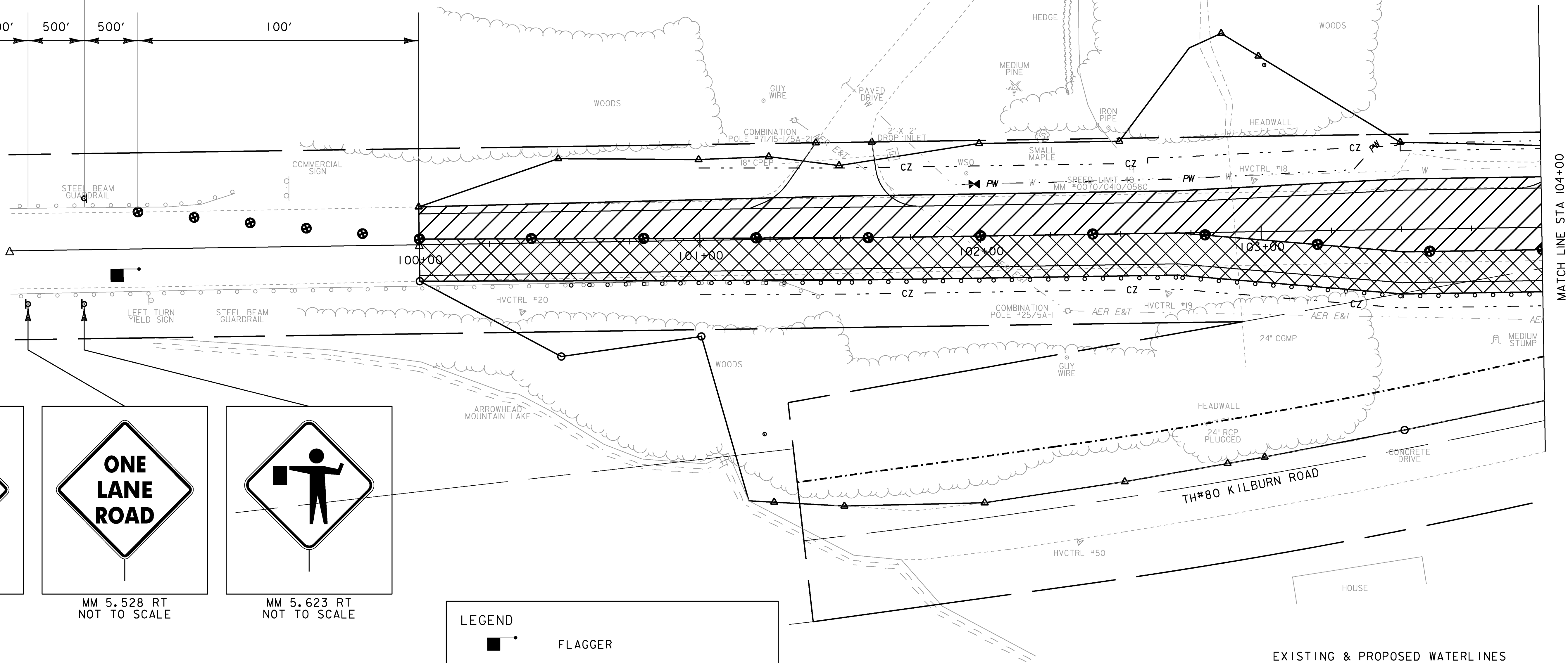
1. TRAFFIC CONTROL PHASE 3 CONSISTS OF TEMPORARY ONE WAY TRAFFIC ON US ROUTE 7 AND LAKE ROAD. REFER TO MUTCD FIGURE 6H-10. LANE CLOSURE ON TWO-LANE ROAD USING FLAGGERS (TYPICAL APPLICATION 10).
2. SEE SHEET 66 FOR ADDITIONAL NOTES.



MM 5.623 LT  
NOT TO SCALE

**END  
ROAD WORK**

500' 500' 500' 100'



MATCH LINE STA 104+00

EXISTING & PROPOSED WATERLINES  
ARE FOR REFERENCE ONLY. PLEASE  
REFER TO WATERLINE SHEETS 102-104

PROJECT NAME: MILTON  
PROJECT NUMBER: STP 5800 (2)

FILE NAME: +92D289+cp3bdr.dgn  
PROJECT LEADER: J. SCHULTZ  
DESIGNED BY: D. LYMAN  
TC PHASE 3 LAYOUT SHEET 1

PLOT DATE: 23-FEB-2011  
DRAWN BY: J. DEVLIN  
CHECKED BY: J. DEVLIN  
SHEET 74 OF 104

0 20 40  
SCALE IN FEET

LEGEND

- FLAGGER
- CHANNELIZING DEVICE
- PHASE III CONSTRUCTION ZONE
- PHASE III TRAFFIC

**ROAD  
WORK  
AHEAD**

MM 5.434 RT  
NOT TO SCALE

**ONE  
LANE  
ROAD**

MM 5.528 RT  
NOT TO SCALE

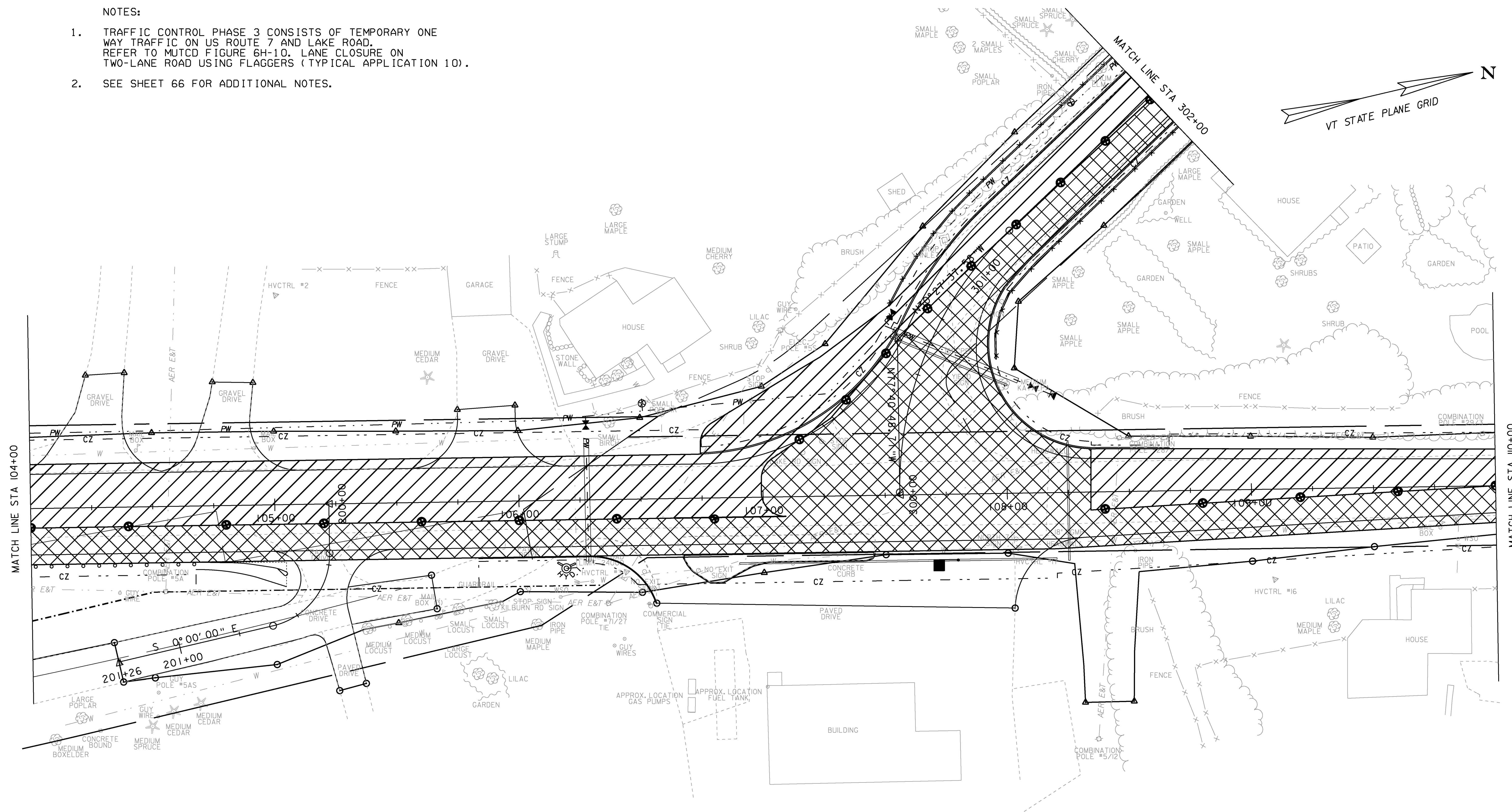


MM 5.623 RT  
NOT TO SCALE



NOTES:

1. TRAFFIC CONTROL PHASE 3 CONSISTS OF TEMPORARY ONE WAY TRAFFIC ON US ROUTE 7 AND LAKE ROAD. REFER TO MUTCD FIGURE 6H-10. LANE CLOSURE ON TWO-LANE ROAD USING FLAGGERS (TYPICAL APPLICATION 10).
2. SEE SHEET 66 FOR ADDITIONAL NOTES.



LEGEND

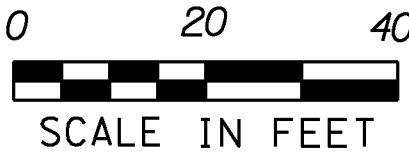
|  |                             |
|--|-----------------------------|
|  | FLAGGER                     |
|  | CHANNELIZING DEVICE         |
|  | PHASE III CONSTRUCTION ZONE |
|  | PHASE III TRAFFIC           |

EXISTING & PROPOSED WATERLINES  
ARE FOR REFERENCE ONLY. PLEASE  
REFER TO WATERLINE SHEETS 102-104

PROJECT NAME: MILTON  
PROJECT NUMBER: STP 5800 (2)

FILE NAME: +920289+cp3bdr.dgn  
PROJECT LEADER: J. SCHULTZ  
DESIGNED BY: D. LYMAN  
TC PHASE 3 LAYOUT SHEET 2

PLOT DATE: 23-FEB-2011  
DRAWN BY: J. DEVLIN  
CHECKED BY: J. DEVLIN  
SHEET 75 OF 104









1. TRAFFIC CONTROL PHASE 3 CONSISTS OF TEMPORARY ONE WAY TRAFFIC ON US ROUTE 7 AND LAKE ROAD. REFER TO MUTCD FIGURE 6H-10. LANE CLOSURE ON TWO-LANE ROAD USING FLAGGERS (TYPICAL APPLICATION 10).
2. SEE SHEET 66 FOR ADDITIONAL NOTES.

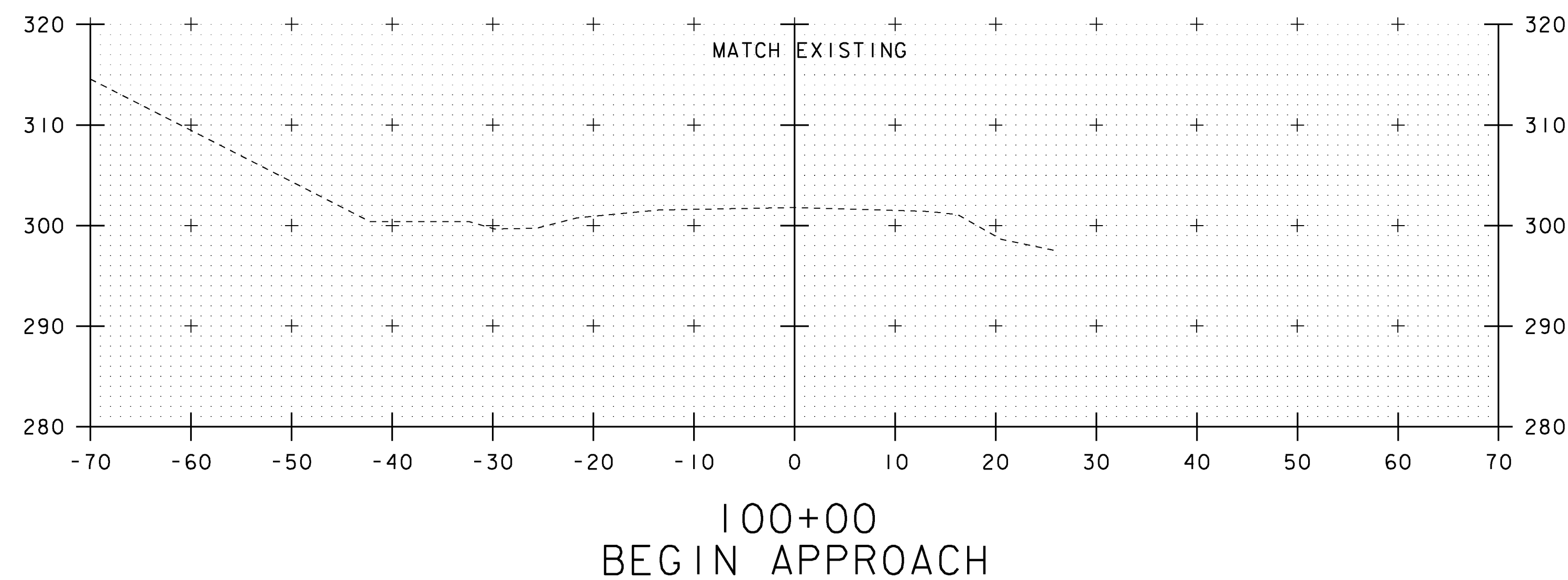
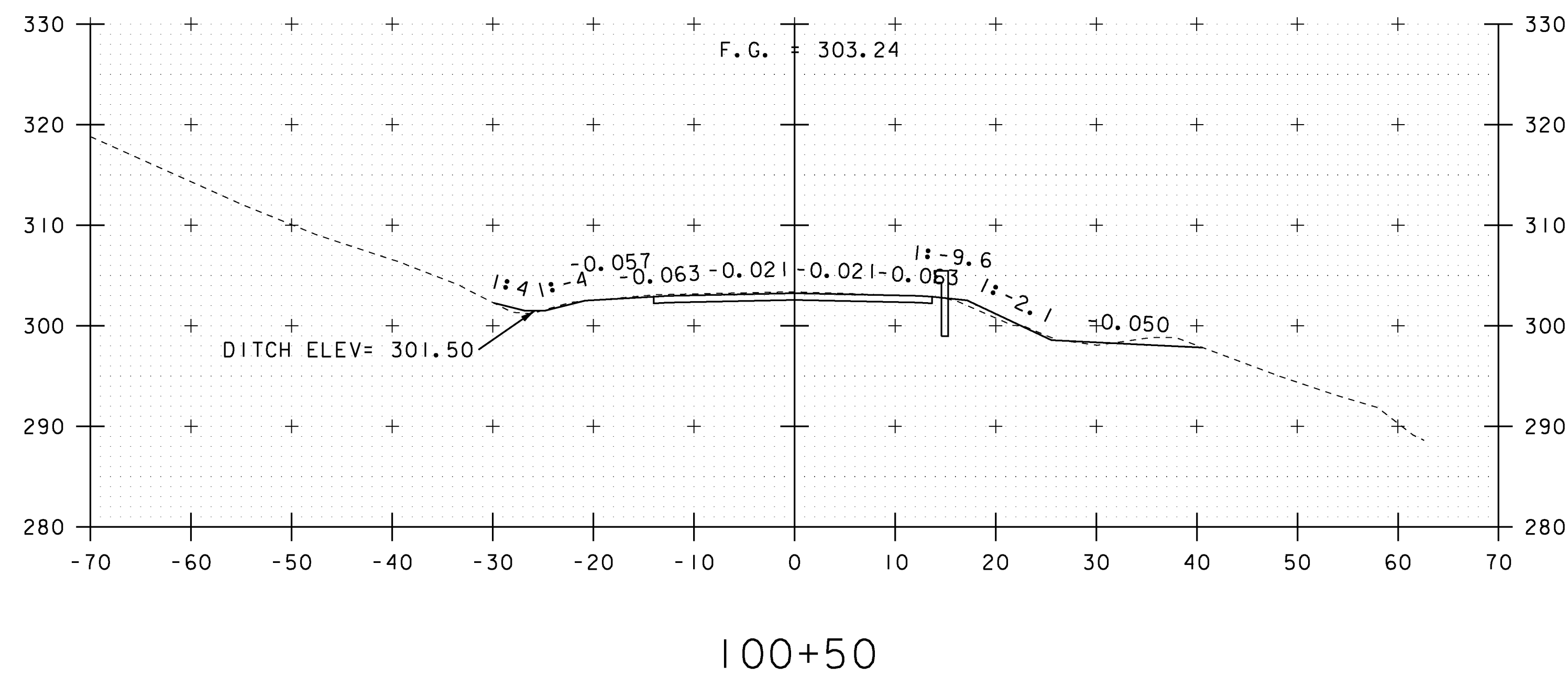
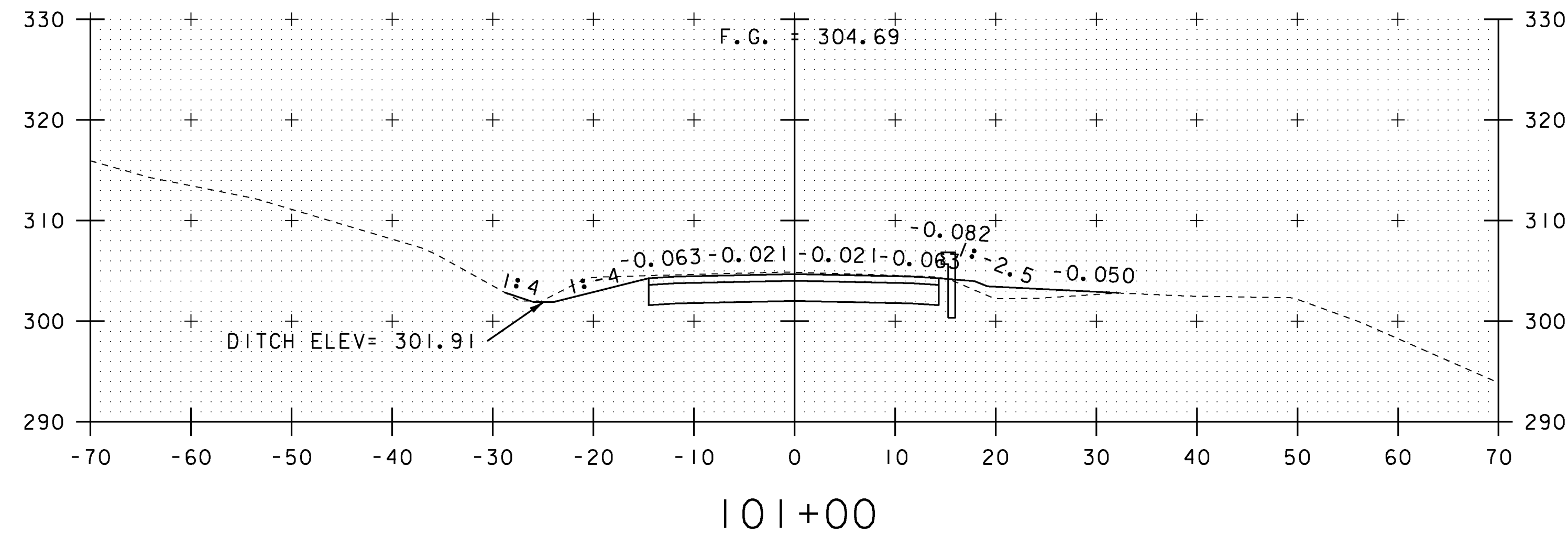


PROJECT NAME: MILTON  
PROJECT NUMBER: STP 5800 (2)

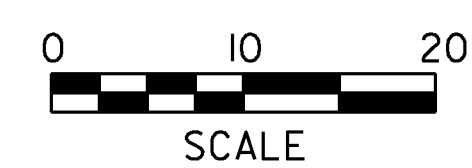
FILE NAME: +92D289+cp3bdr.dgn  
PROJECT LEADER: J. SCHULTZ  
DESIGNED BY: D. LYMAN  
TC PHASE 3 LAYOUT SHEET 4

PLOT DATE: 23-FEB-2011  
DRAWN BY: J. DEVLIN  
CHECKED BY: J. DEVLIN  
SHEET 77 OF 104





EXISTING & PROPOSED WATERLINES  
ARE FOR REFERENCE ONLY. PLEASE  
REFER TO WATERLINE SHEETS 102-104

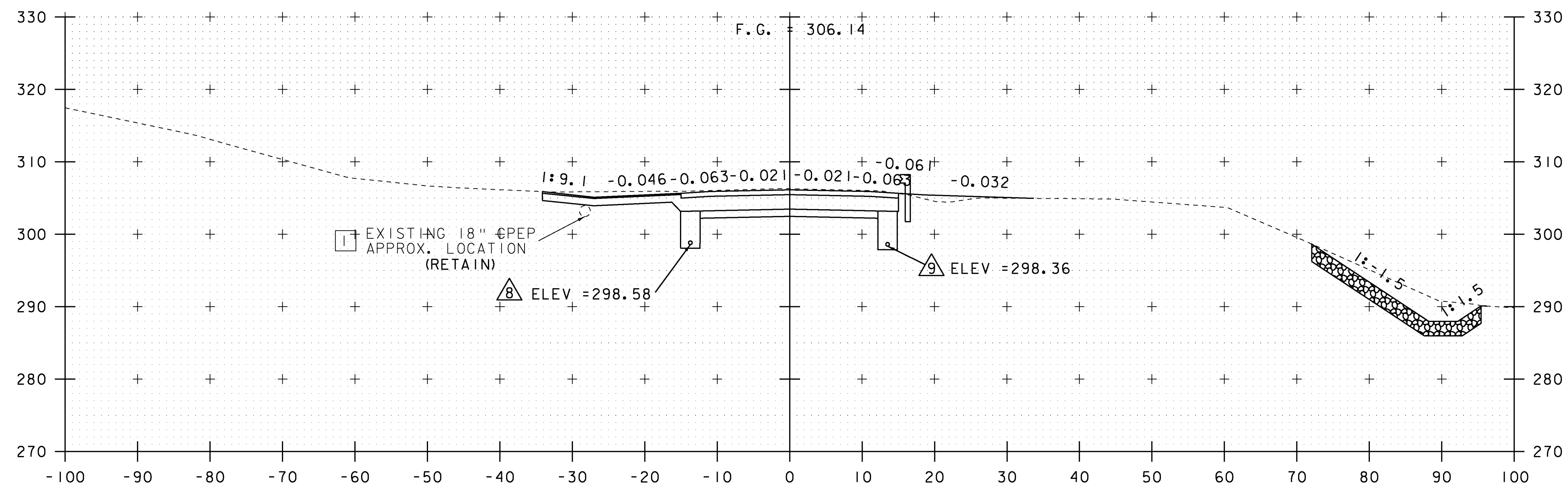


NOTE:  
DRAINAGE FEATURES ARE NOT PROJECTED ONTO  
CROSS SECTIONS, PLEASE REFER TO DRAINAGE  
LAYOUT AND DRAINAGE PROFILE SHEETS FOR  
DETAILED INFORMATION (TYP.)

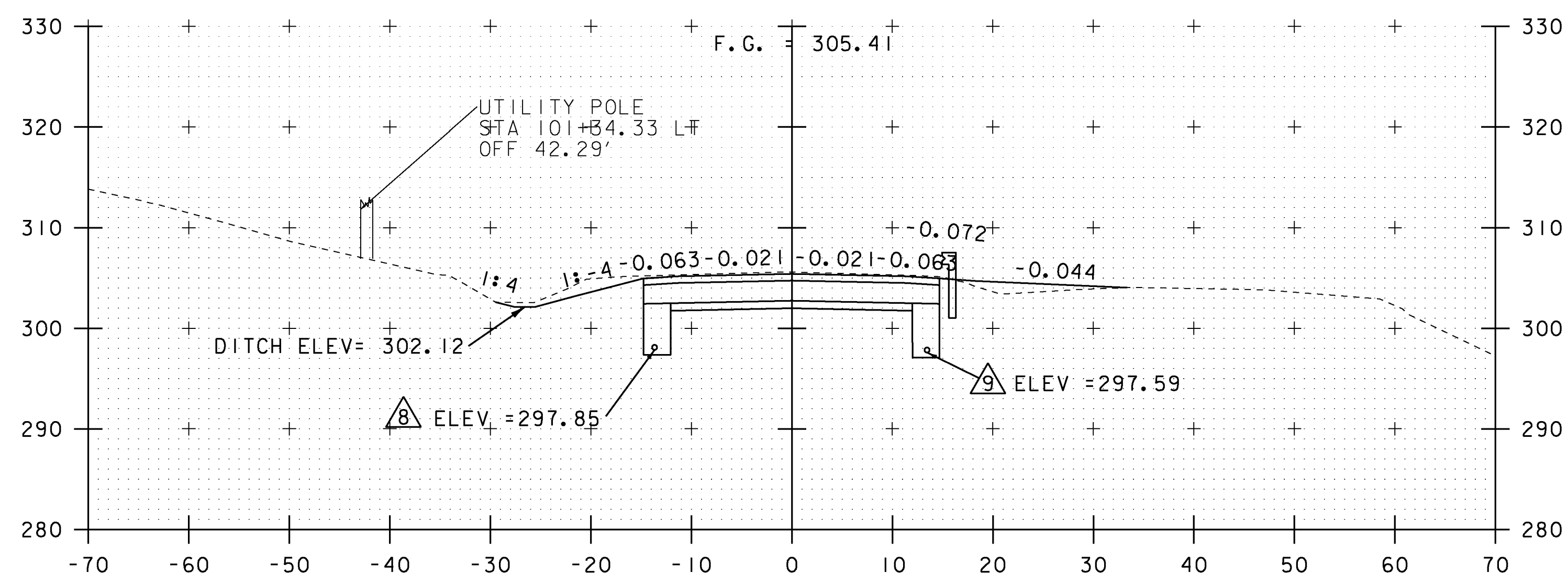
STA. 100+00 TO STA. 101+00

|                                  |                |
|----------------------------------|----------------|
| PROJECT NAME:                    | MILTON         |
| PROJECT NUMBER:                  | STP 5800 (2)   |
| FILE NAME:                       | +92D289xsl.dgn |
| PROJECT LEADER:                  | J. SCHULTZ     |
| DESIGNED BY:                     | D. LYMAN       |
| US ROUTE 7 CROSS SECTION SHEET 1 |                |
| PLOT DATE:                       | 23-FEB-2011    |
| DRAWN BY:                        | D. LYMAN       |
| CHECKED BY:                      | J. DEVLIN      |
| SHEET 78                         | OF 104         |



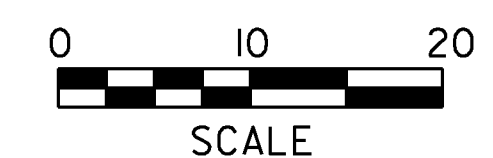


101+50



101+25  
END APPROACH  
BEGIN PROJECT

EXISTING & PROPOSED WATERLINES  
ARE FOR REFERENCE ONLY. PLEASE  
REFER TO WATERLINE SHEETS 102-104



NOTE:  
DRAINAGE FEATURES ARE NOT PROJECTED ONTO  
CROSS SECTIONS, PLEASE REFER TO DRAINAGE  
LAYOUT AND DRAINAGE PROFILE SHEETS FOR  
DETAILED INFORMATION (TYP.)

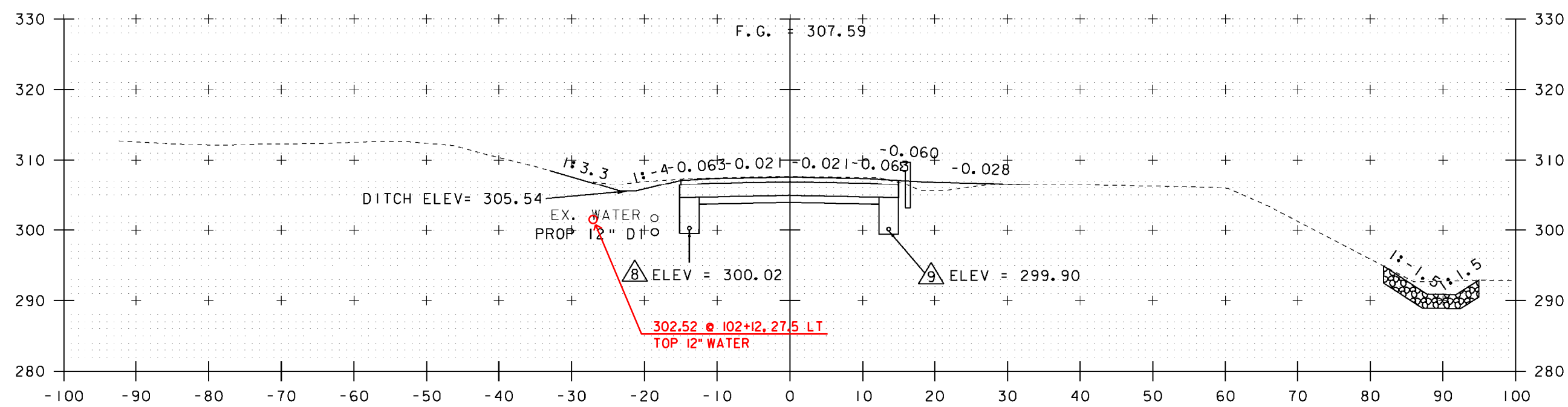
STA. 101+25 TO STA. 101+50

PROJECT NAME: MILTON  
PROJECT NUMBER: STP 5800 (2)

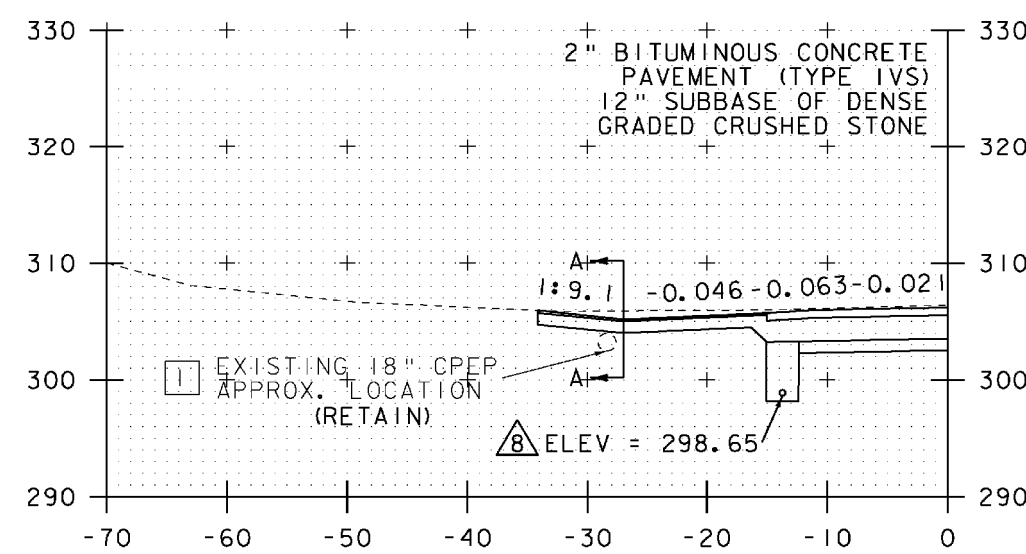
FILE NAME: t92D289xsl.dgn  
PROJECT LEADER: J. SCHULTZ  
DESIGNED BY: D. LYMAN  
US ROUTE 7 CROSS SECTION SHEET 2

PLOT DATE: 23-FEB-2011  
DRAWN BY: D. LYMAN  
CHECKED BY: J. DEVLIN  
SHEET 79 OF 104

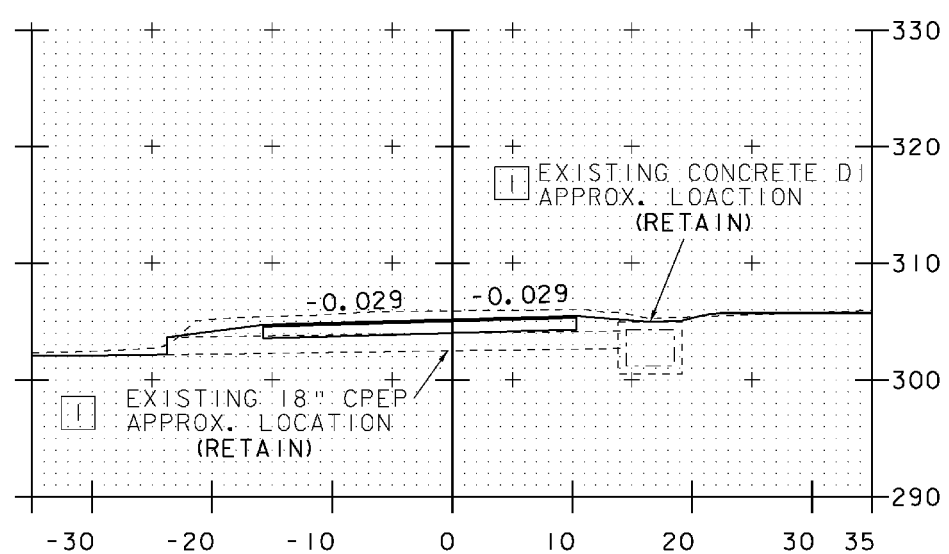




102+00



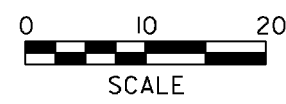
101+52.44  
PAVED DRIVE LT



SECTION A-A

STA. 101+52.44 TO STA. 102+00

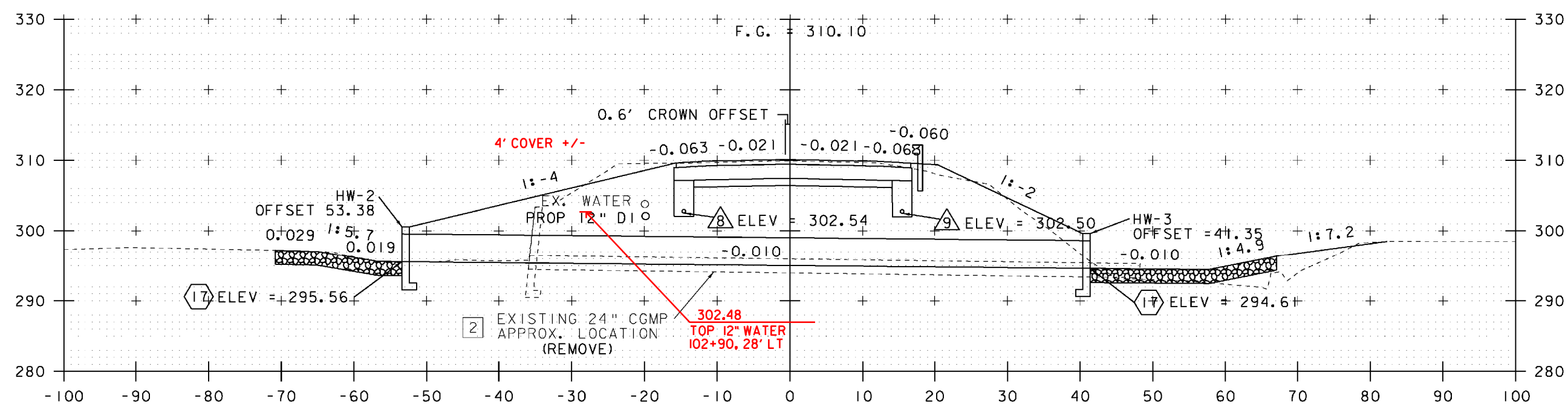
EXISTING & PROPOSED WATERLINES  
ARE FOR REFERENCE ONLY. PLEASE  
REFER TO WATERLINE SHEETS 102-104



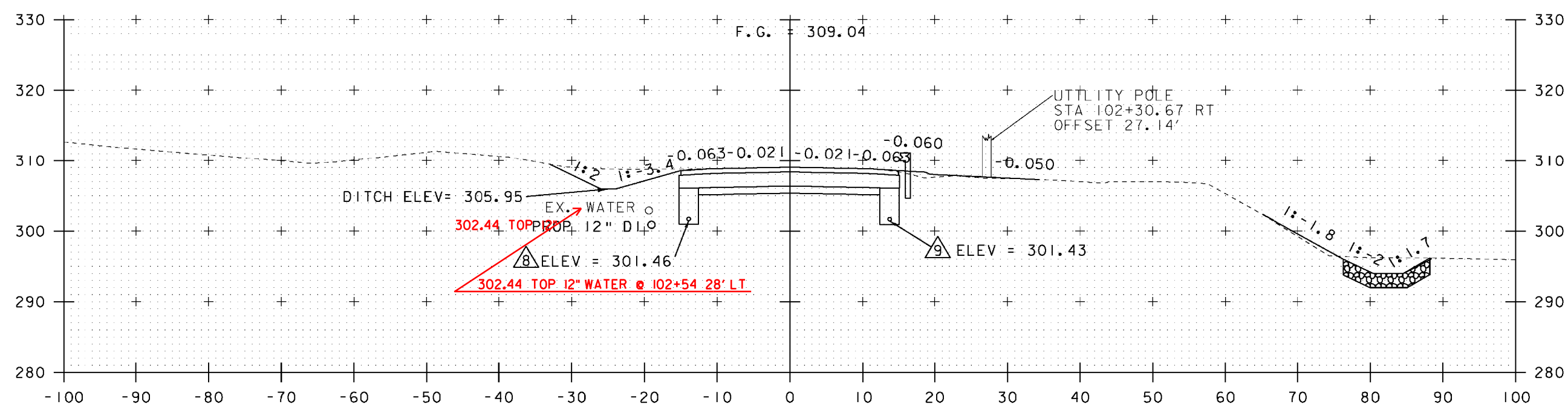
|                                  |                        |
|----------------------------------|------------------------|
| PROJECT NAME: MILTON             |                        |
| PROJECT NUMBER: STP 5800 (2)     |                        |
| FILE NAME: +920289xsl.dgn        | PLOT DATE: 23-FEB-2011 |
| PROJECT LEADER: J. SCHULTZ       | DRAWN BY: D. LYMAN     |
| DESIGNED BY: D. LYMAN            | CHECKED BY: J. DEVLIN  |
| US ROUTE 7 CROSS SECTION SHEET 3 | SHEET 80 OF 104        |

NOTE:  
DRAINAGE FEATURES ARE NOT PROJECTED ONTO  
CROSS SECTIONS. PLEASE REFER TO DRAINAGE  
LAYOUT AND DRAINAGE PROFILE SHEETS FOR  
DETAILED INFORMATION (TYP.)



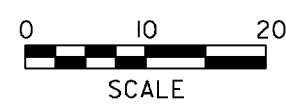


102+87  
48" DIAMETER CULVERT



102+50

EXISTING & PROPOSED WATERLINES  
ARE FOR REFERENCE ONLY. PLEASE  
REFER TO WATERLINE SHEETS 102-104

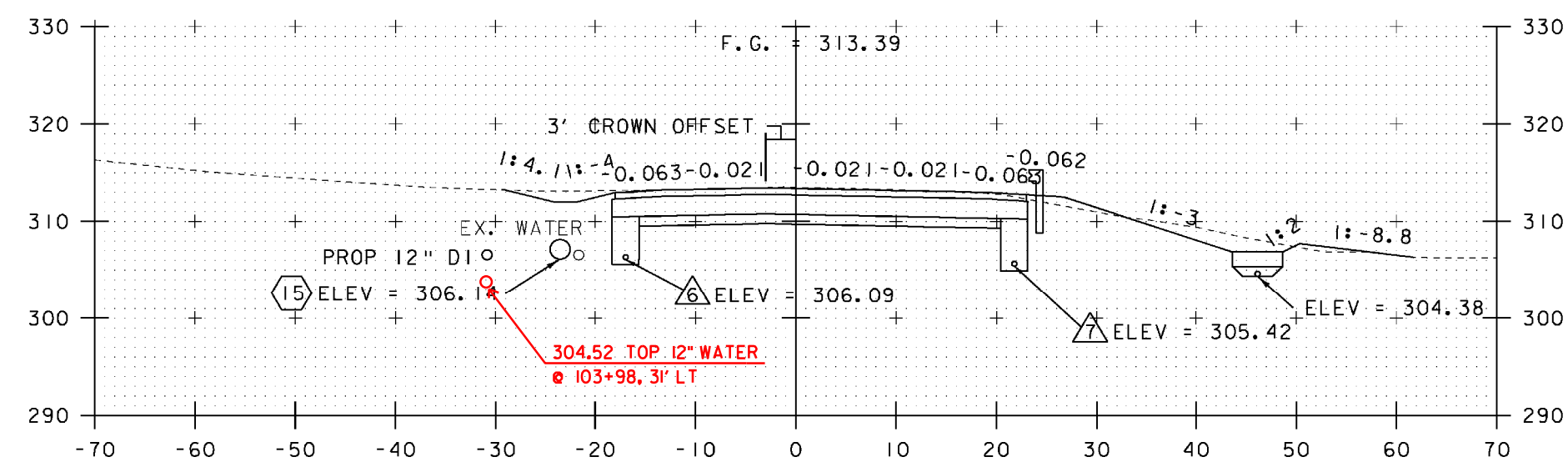


NOTE:  
DRAINAGE FEATURES ARE NOT PROJECTED ONTO  
CROSS SECTIONS. PLEASE REFER TO DRAINAGE  
LAYOUT AND DRAINAGE PROFILE SHEETS FOR  
DETAILED INFORMATION (TYP.)

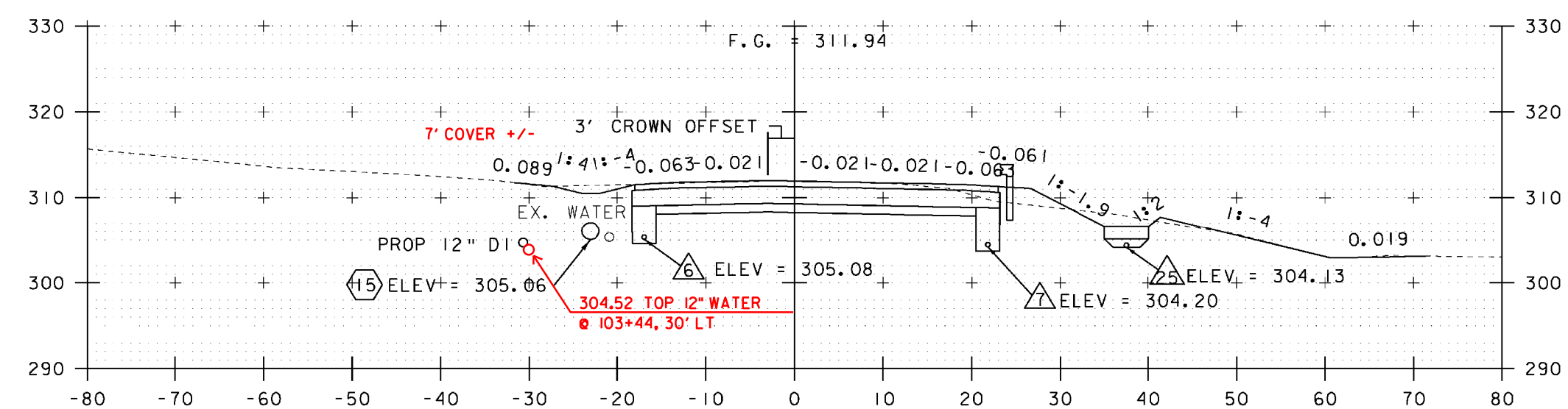
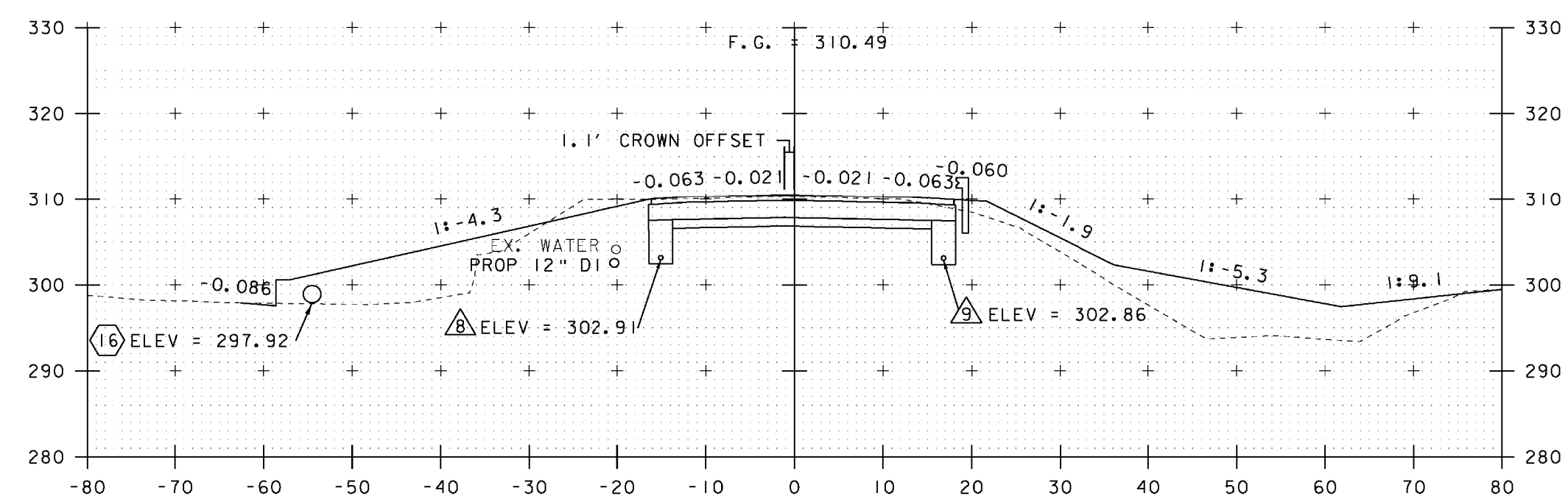
STA. 102+50 TO STA. 102+87

|                                  |                        |
|----------------------------------|------------------------|
| PROJECT NAME: MILTON             |                        |
| PROJECT NUMBER: STP 5800 (2)     |                        |
| FILE NAME: 1920289xsl.dgn        | PLOT DATE: 23-FEB-2011 |
| PROJECT LEADER: J. SCHULTZ       | DRAWN BY: D. LYMAN     |
| DESIGNED BY: D. LYMAN            | CHECKED BY: J. DEVLIN  |
| US ROUTE 7 CROSS SECTION SHEET 4 | SHEET 81 OF 104        |



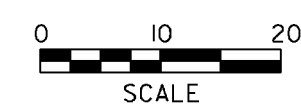


104+00

 $103+50$ 

103+00

EXISTING & PROPOSED WATERLINES  
ARE FOR REFERENCE ONLY. PLEASE  
REFER TO WATERLINE SHEETS 102-104



NOTE:  
DRAINAGE FEATURES ARE NOT PROJECTED ONTO  
CROSS SECTIONS, PLEASE REFER TO DRAINAGE  
LAYOUT AND DRAINAGE PROFILE SHEETS FOR  
DETAILED INFORMATION (TYP.)

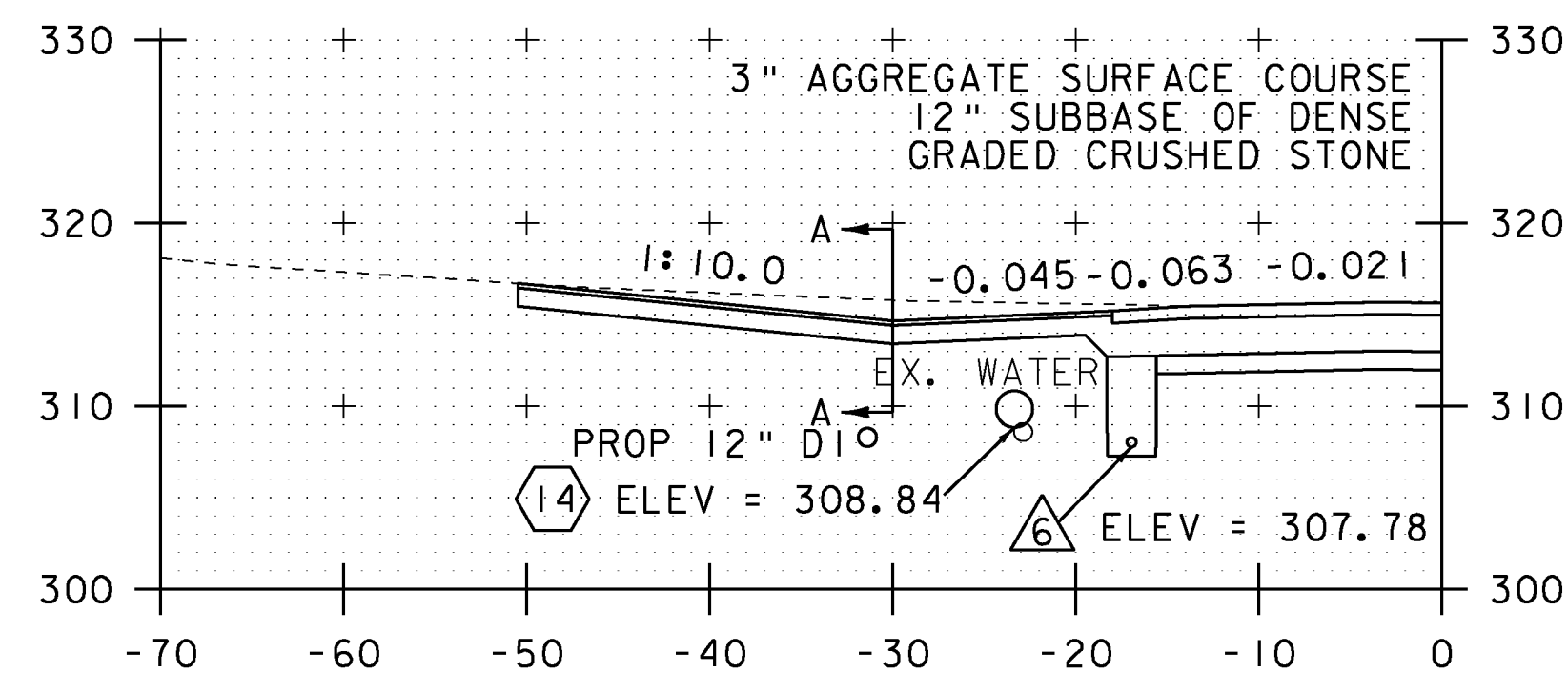
STA. 103+00 TO STA. 104+00

|                 |              |
|-----------------|--------------|
| PROJECT NAME:   | MILTON       |
| PROJECT NUMBER: | STP 5800 (2) |

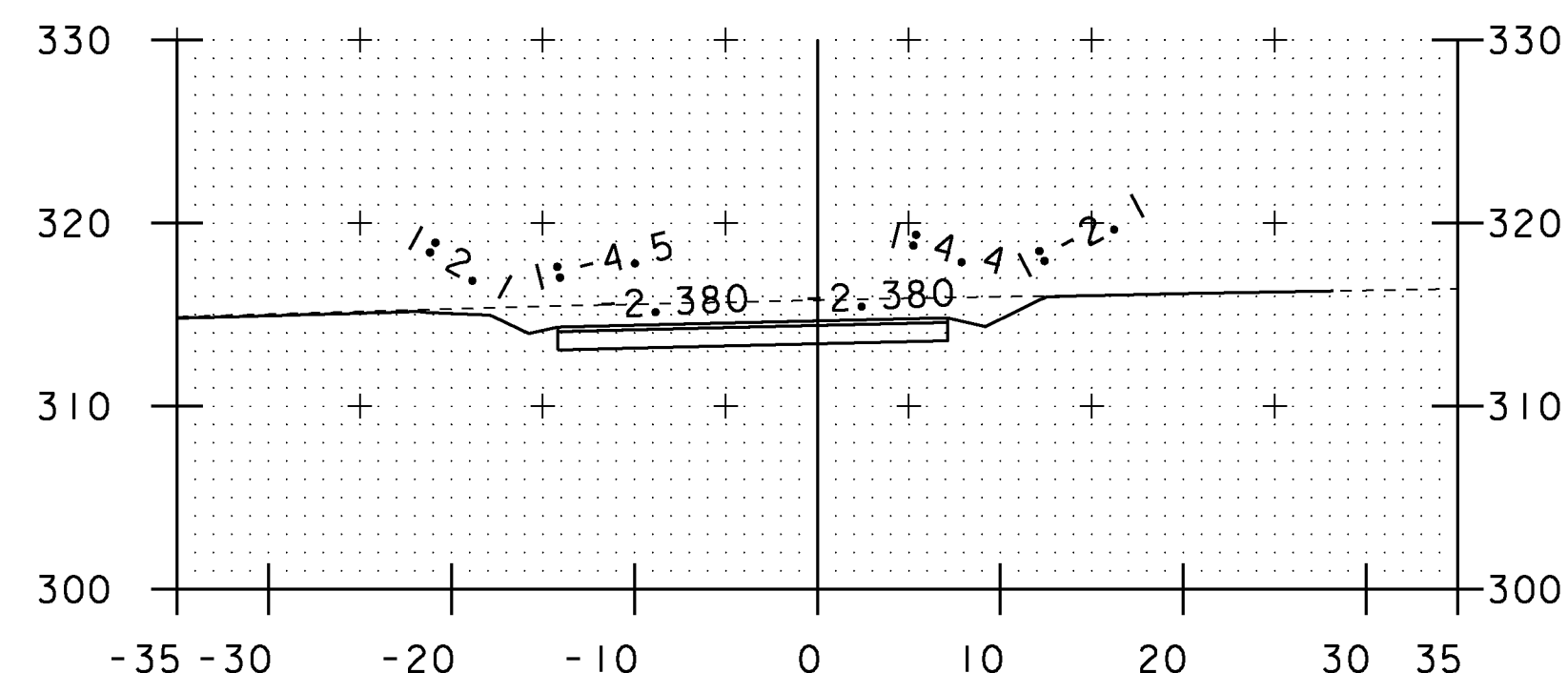
FILE NAME: +92D289xsl.dgn  
PROJECT LEADER: J. SCHULTZ  
DESIGNED BY: D. LYMAN  
US ROUTE 7 CROSS SECTION SHEET 5

PLOT DATE: 23-FEB-2011  
DRAWN BY: D. LYMAN  
CHECKED BY: J. DEVLIN  
SHEET 82 OF 104

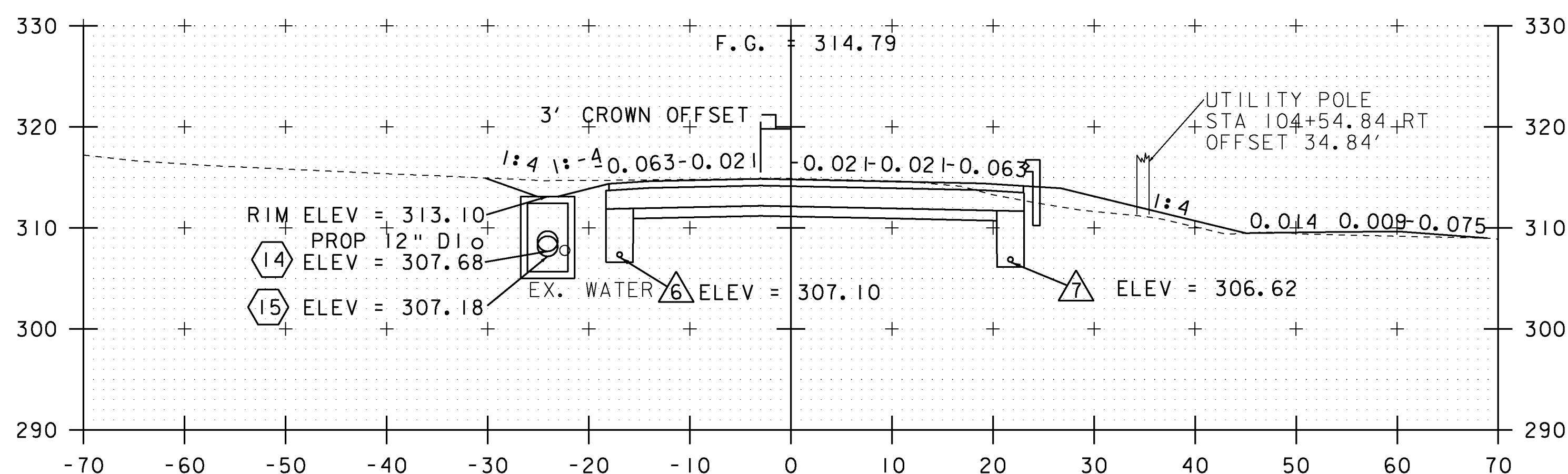




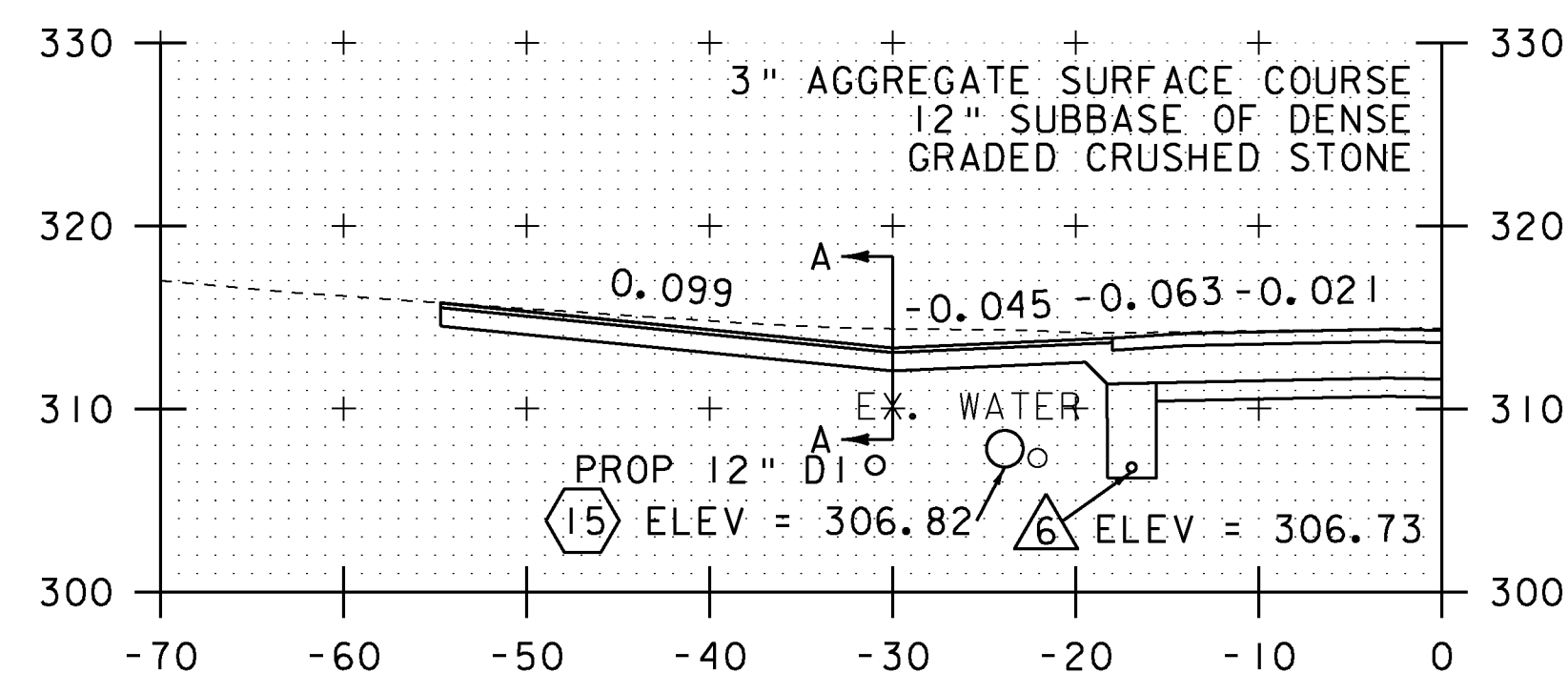
104+83.50  
GRAVEL DRIVE LT



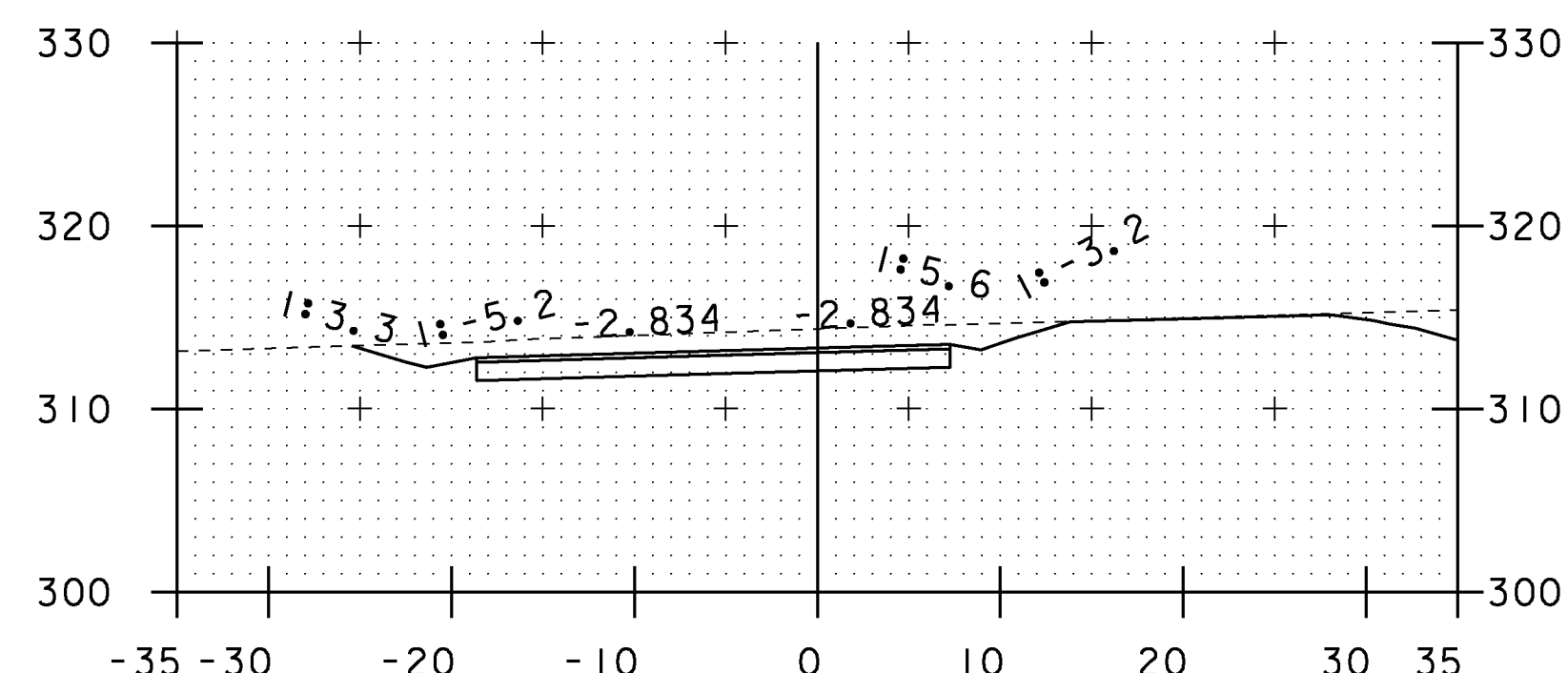
SECTION A-A



104+50



104+31.22  
GRAVEL DRIVE LT

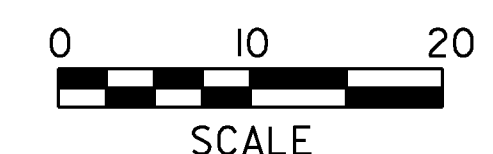


SECTION A-A

NOTE:  
DRAINAGE FEATURES ARE NOT PROJECTED ONTO  
CROSS SECTIONS, PLEASE REFER TO DRAINAGE  
LAYOUT AND DRAINAGE PROFILE SHEETS FOR  
DETAILED INFORMATION (TYP.)

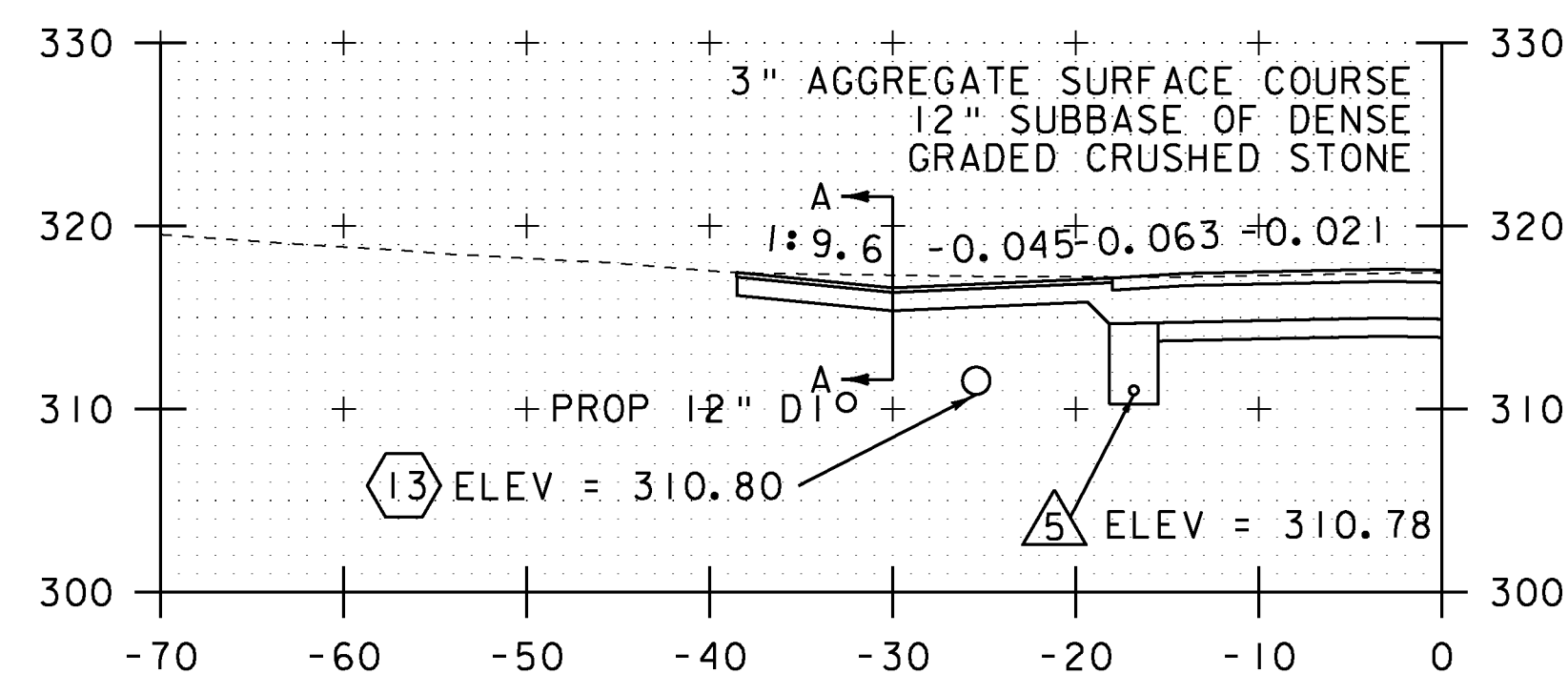
STA. 104+31.22 TO STA. 104+83.50

EXISTING & PROPOSED WATERLINES  
ARE FOR REFERENCE ONLY. PLEASE  
REFER TO WATERLINE SHEETS 102-104

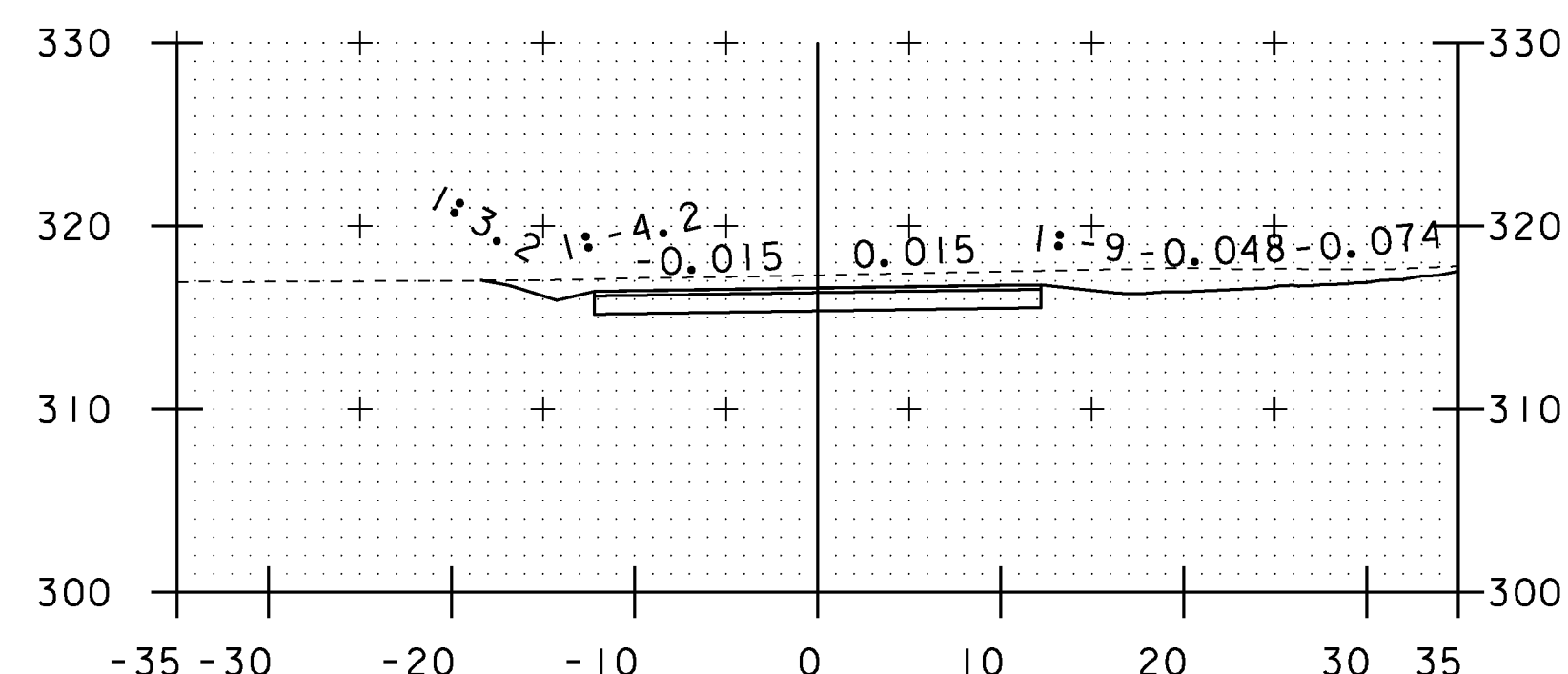


|                                  |                |
|----------------------------------|----------------|
| PROJECT NAME:                    | MILTON         |
| PROJECT NUMBER:                  | STP 5800 (2)   |
| FILE NAME:                       | +92D289xsl.dgn |
| PROJECT LEADER:                  | J. SCHULTZ     |
| DESIGNED BY:                     | D. LYMAN       |
| US ROUTE 7 CROSS SECTION SHEET 6 |                |
| PLOT DATE:                       | 23-FEB-2011    |
| DRAWN BY:                        | D. LYMAN       |
| CHECKED BY:                      | J. DEVLIN      |
| SHEET 83                         | OF 104         |

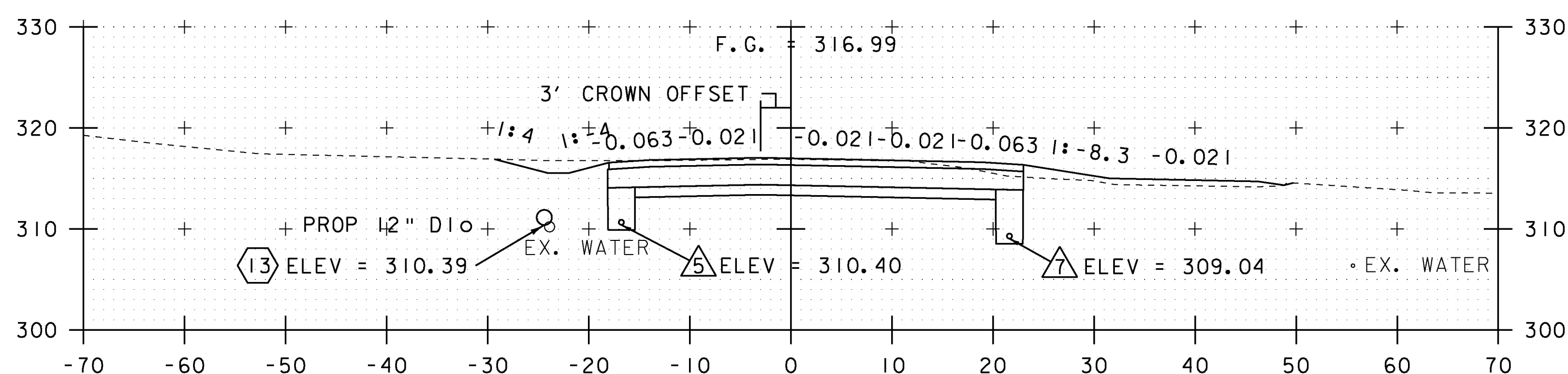




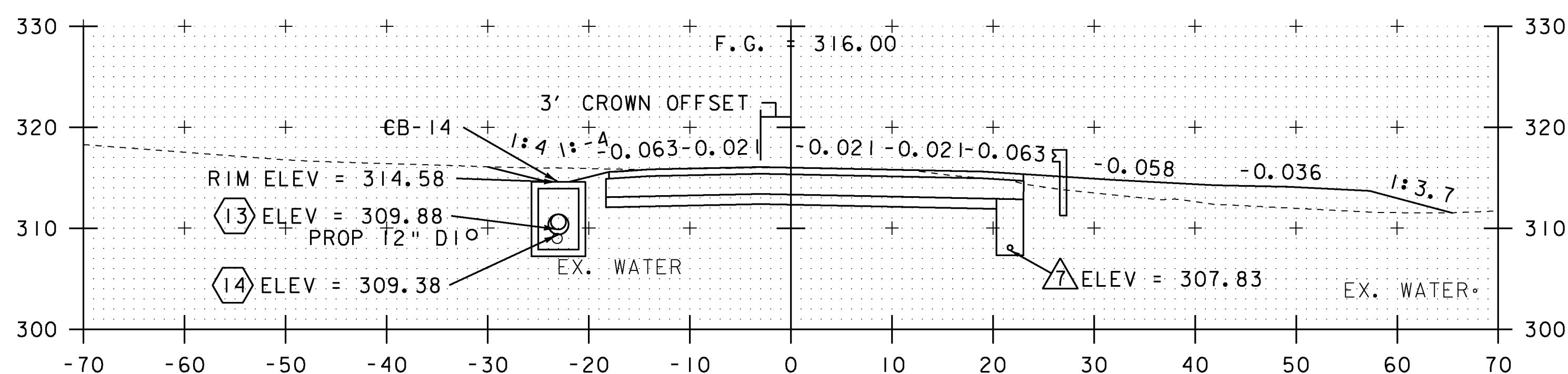
105+87.17  
GRAVEL DRIVE LT



SECTION A-A

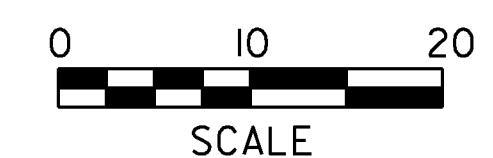


105+50



105+00

EXISTING & PROPOSED WATERLINES  
ARE FOR REFERENCE ONLY. PLEASE  
REFER TO WATERLINE SHEETS 102-104



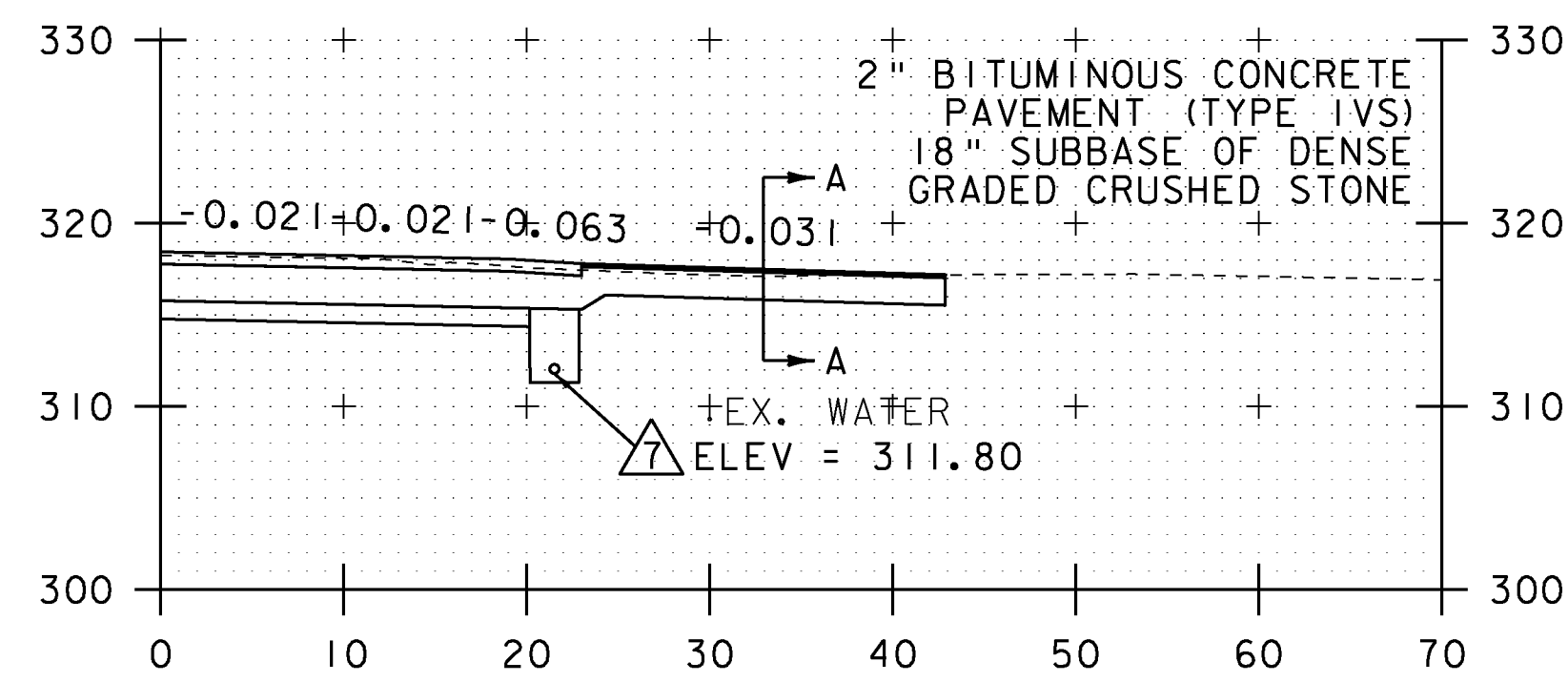
NOTE:  
DRAINAGE FEATURES ARE NOT PROJECTED ONTO  
CROSS SECTIONS, PLEASE REFER TO DRAINAGE  
LAYOUT AND DRAINAGE PROFILE SHEETS FOR  
DETAILED INFORMATION (TYP.)

STA. 105+00 TO STA. 105+87.17

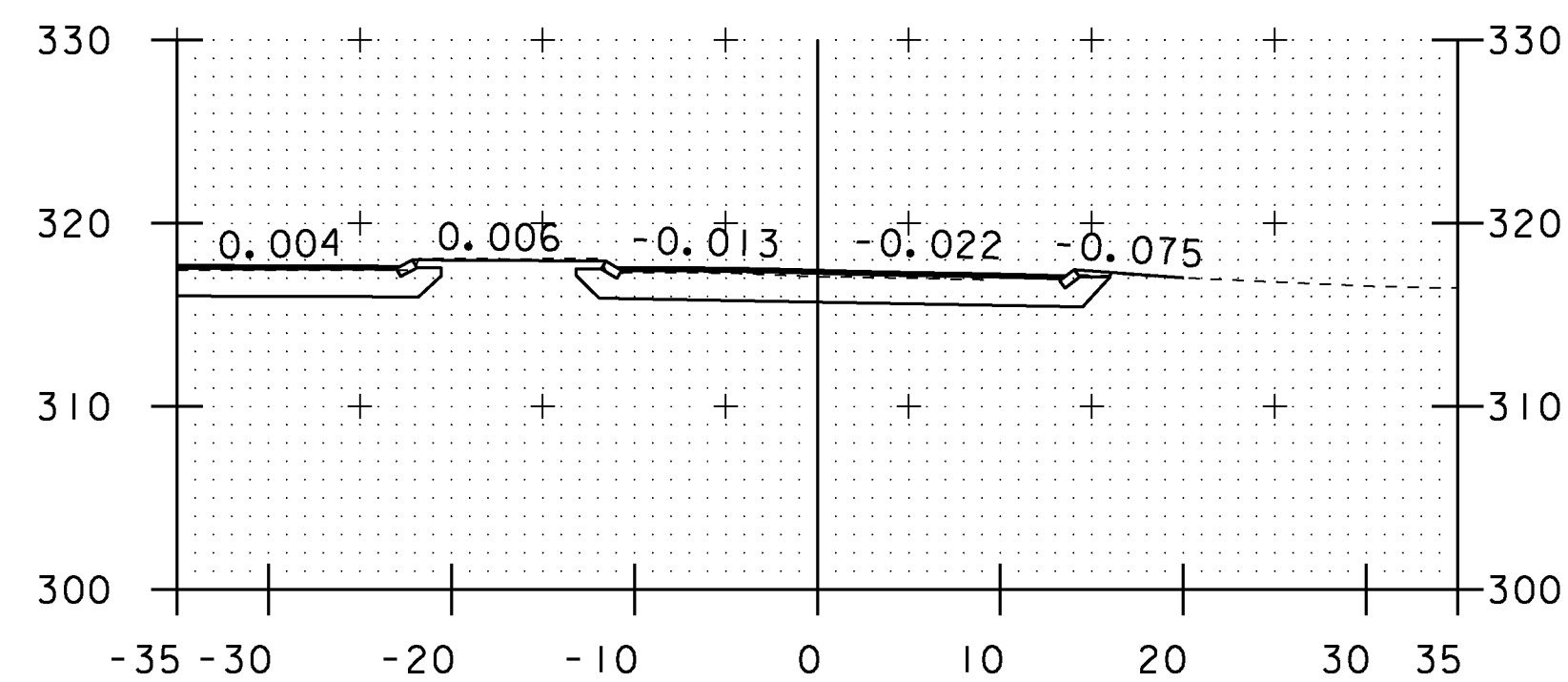
PROJECT NAME: MILTON  
PROJECT NUMBER: STP 5800 (2)

FILE NAME: 192D289xsl.dgn PLOT DATE: 23-FEB-2011  
PROJECT LEADER: J. SCHULTZ DRAWN BY: D. LYMAN  
DESIGNED BY: D. LYMAN CHECKED BY: J. DEVLIN  
US ROUTE 7 CROSS SECTION SHEET 7 SHEET 84 OF 104

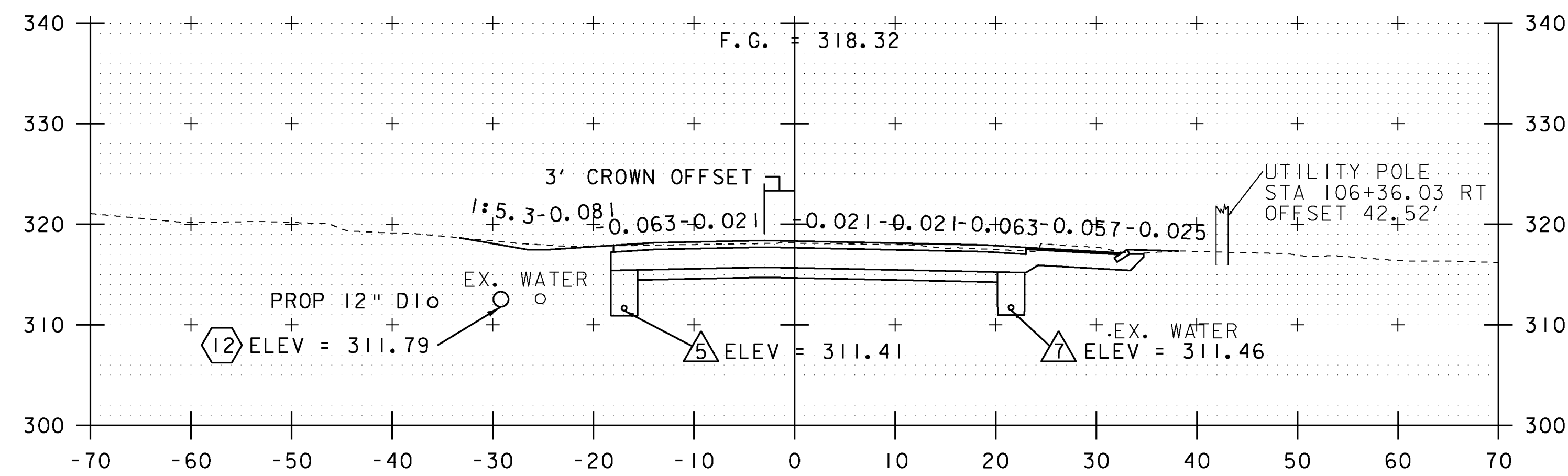




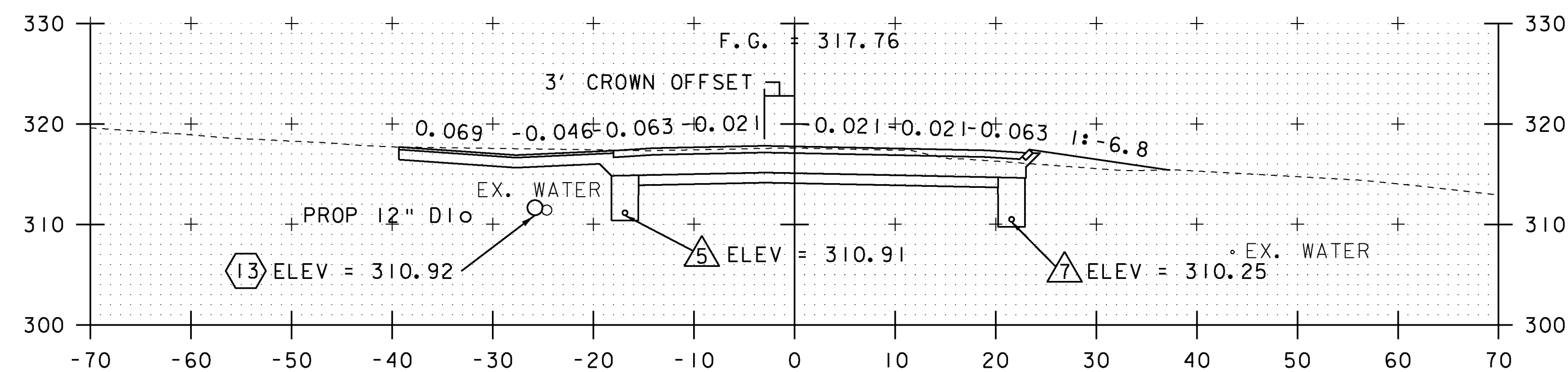
106+63.93  
PAVED DRIVE RT



SECTION A-A

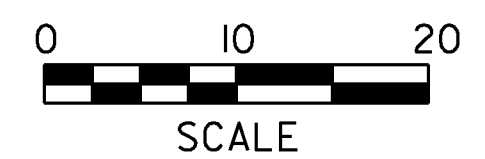


106+50



106+00

EXISTING & PROPOSED WATERLINES  
ARE FOR REFERENCE ONLY. PLEASE  
REFER TO WATERLINE SHEETS 102-104

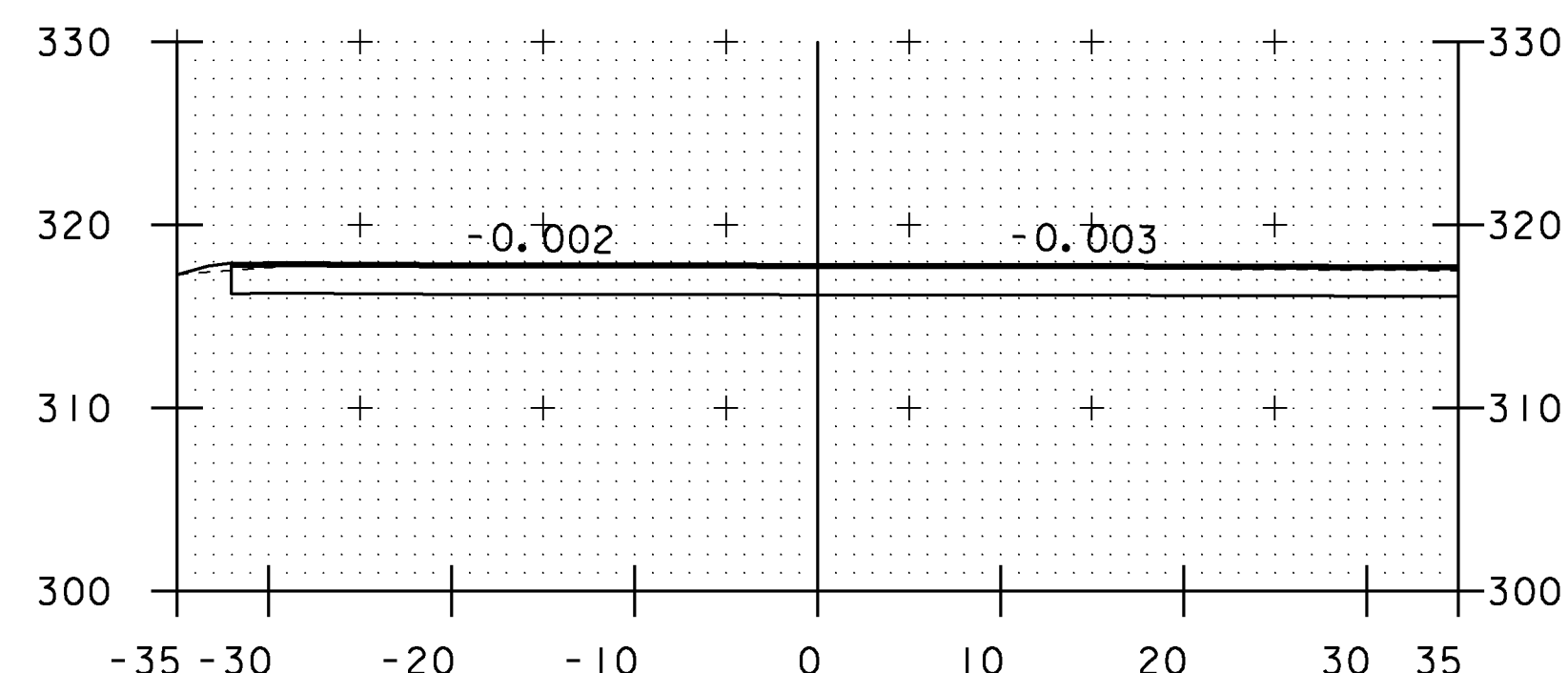
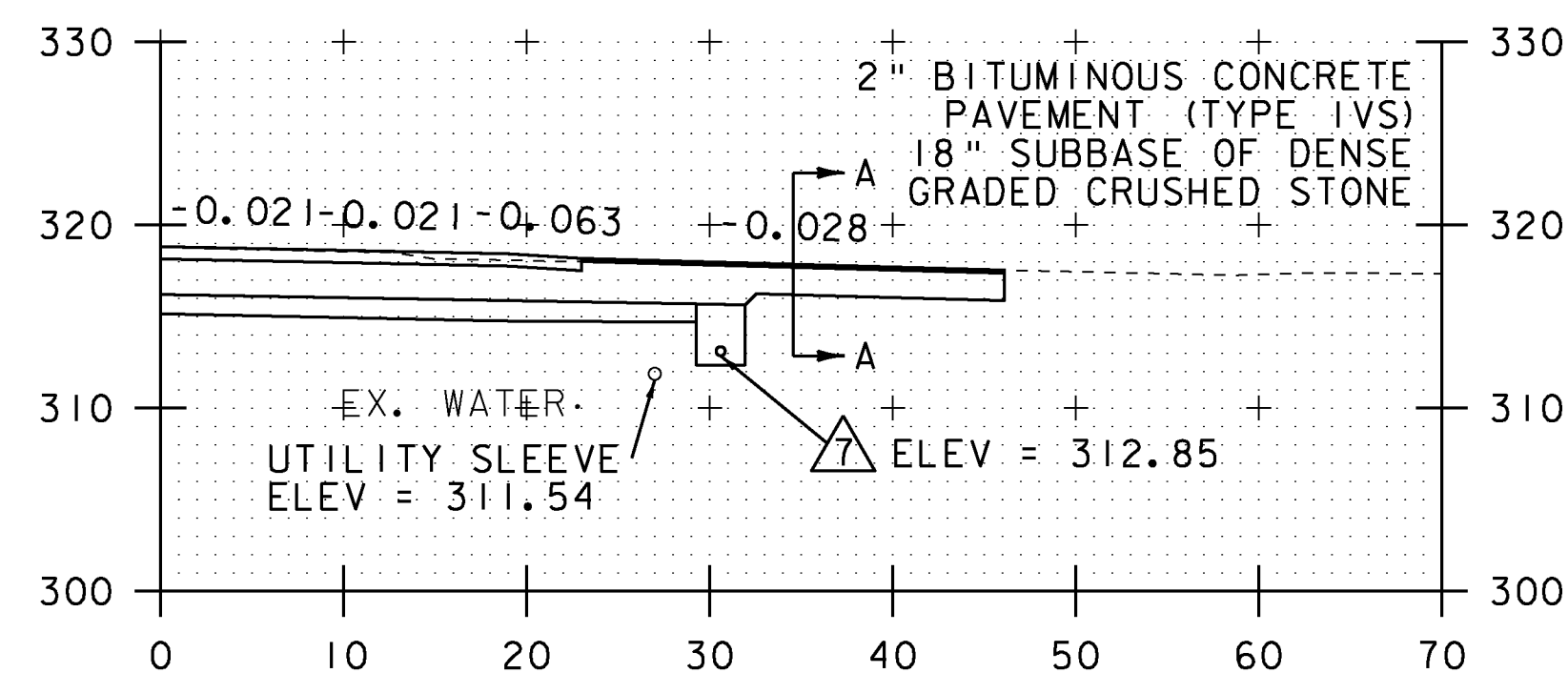


NOTE:  
DRAINAGE FEATURES ARE NOT PROJECTED ONTO  
CROSS SECTIONS, PLEASE REFER TO DRAINAGE  
LAYOUT AND DRAINAGE PROFILE SHEETS FOR  
DETAILED INFORMATION (TYP.)

STA. 106+00 TO STA. 106+63.93

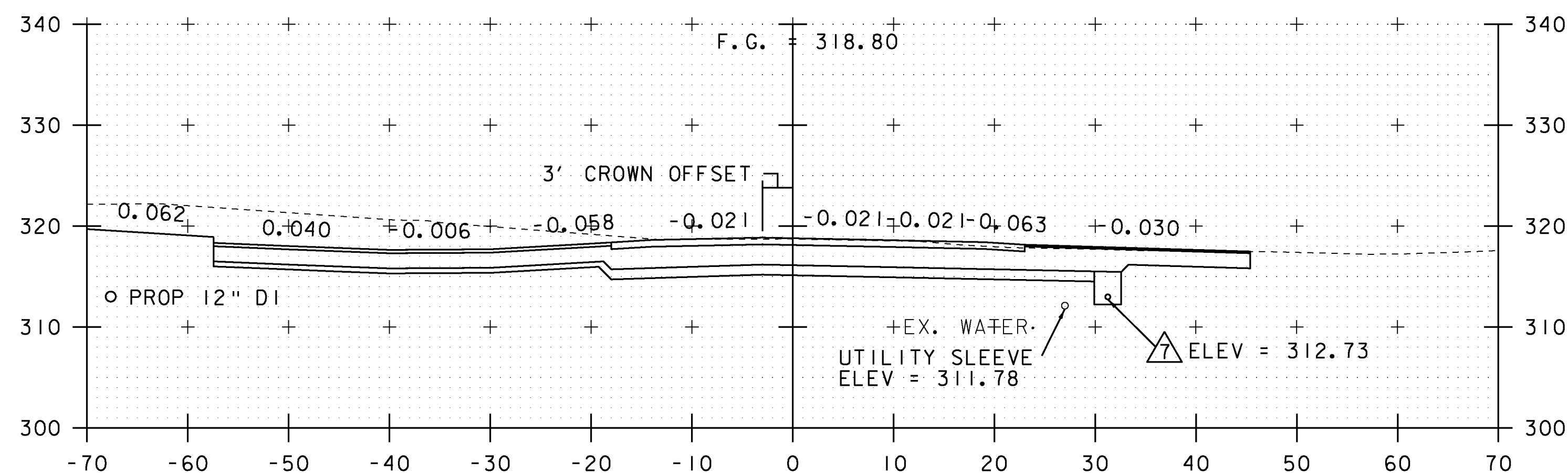
|                                  |                |
|----------------------------------|----------------|
| PROJECT NAME:                    | MILTON         |
| PROJECT NUMBER:                  | STP 5800 (2)   |
| FILE NAME:                       | +92D289xsl.dgn |
| PROJECT LEADER:                  | J. SCHULTZ     |
| DESIGNED BY:                     | D. LYMAN       |
| US ROUTE 7 CROSS SECTION SHEET 8 |                |
| PLOT DATE:                       | 23-FEB-2011    |
| DRAWN BY:                        | D. LYMAN       |
| CHECKED BY:                      | J. DEVLIN      |
| SHEET 85                         | OF 104         |



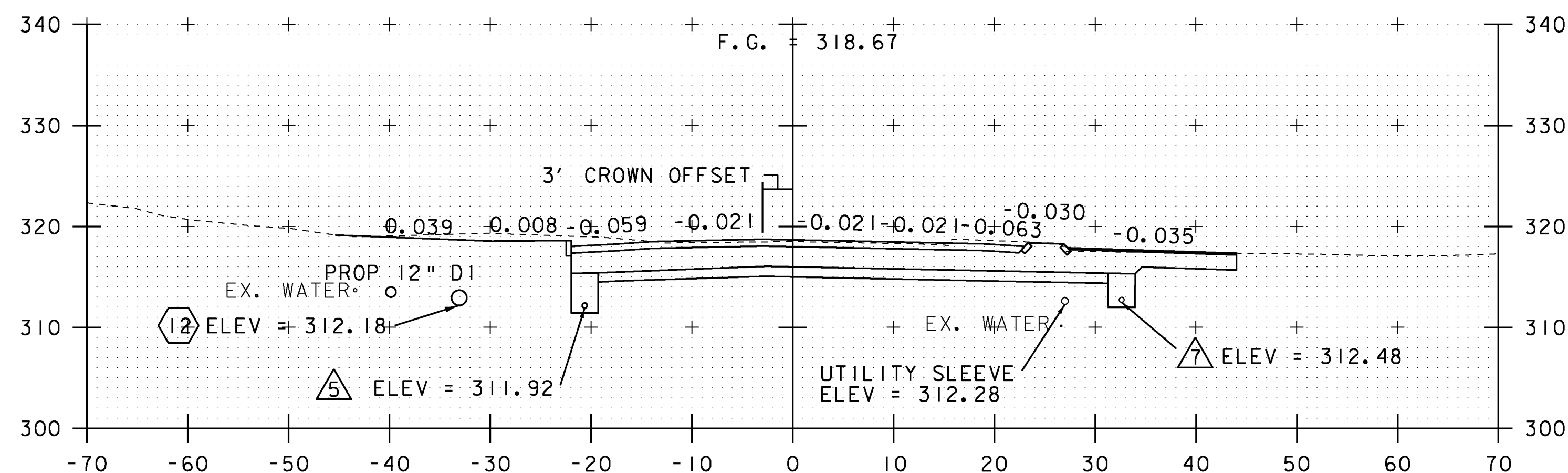


107+73.89  
PAVED DRIVE RT

SECTION A-A



107+50



107+00

EXISTING & PROPOSED WATERLINES  
ARE FOR REFERENCE ONLY. PLEASE  
REFER TO WATERLINE SHEETS 102-104



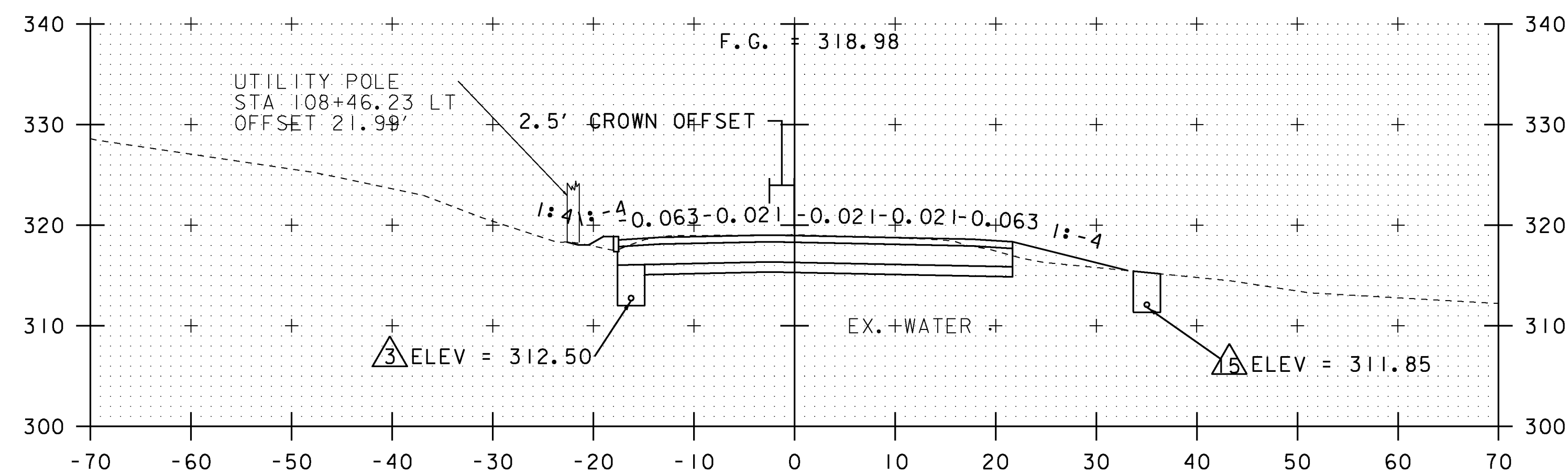
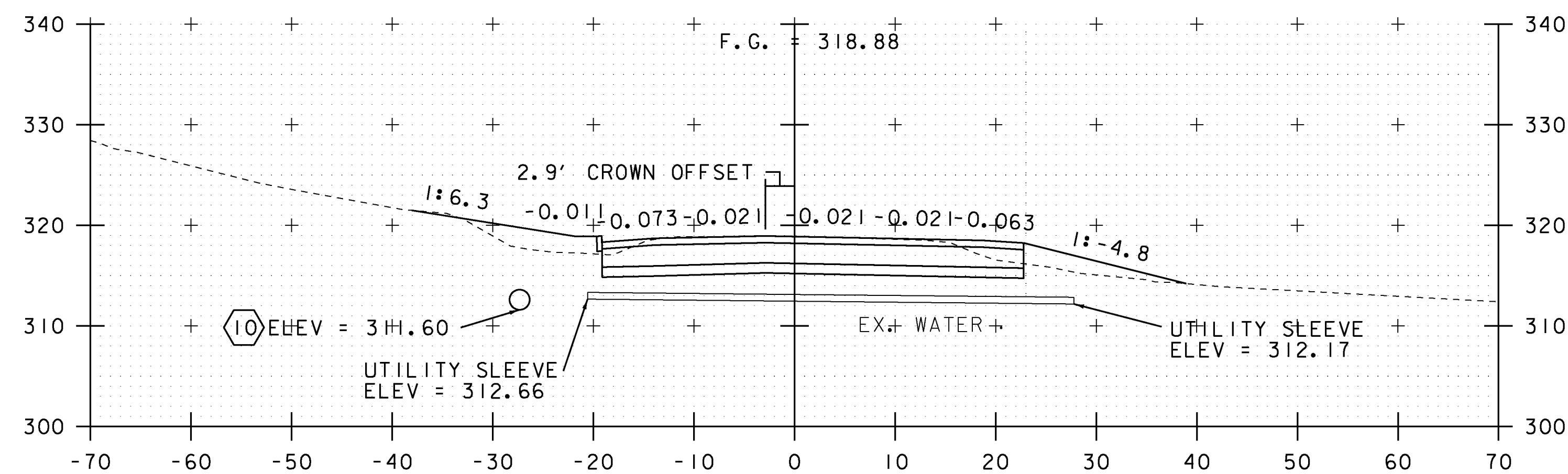
NOTE:  
DRAINAGE FEATURES ARE NOT PROJECTED ONTO  
CROSS SECTIONS, PLEASE REFER TO DRAINAGE  
LAYOUT AND DRAINAGE PROFILE SHEETS FOR  
DETAILED INFORMATION (TYP.)

STA. 107+00 TO STA. 107+73.89

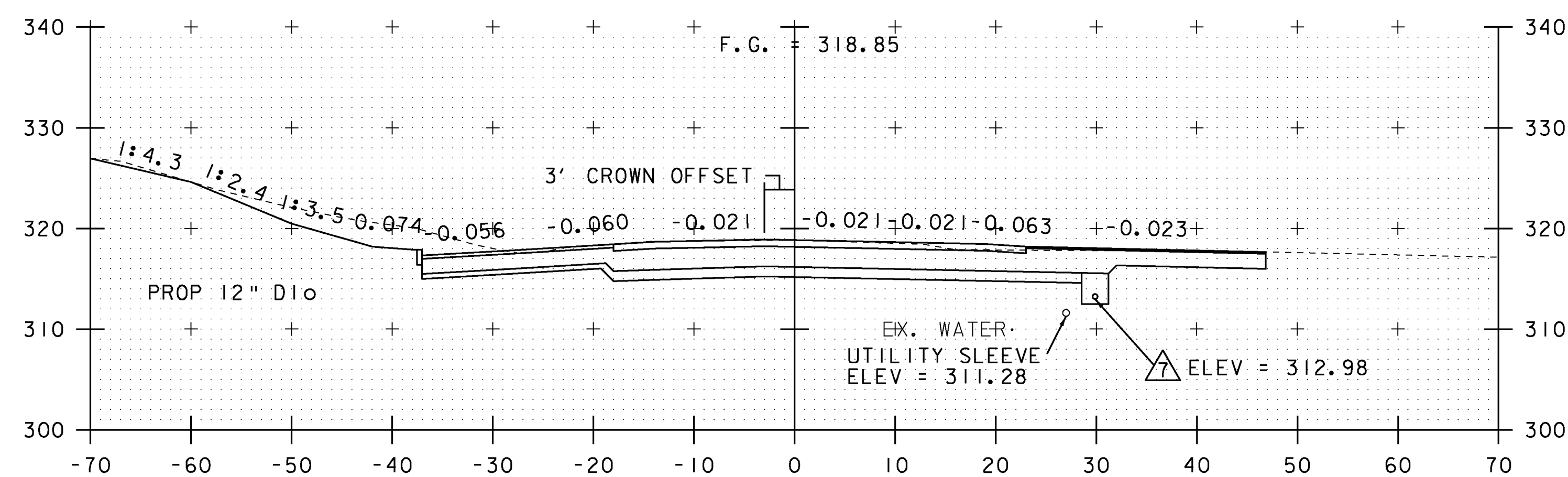
PROJECT NAME: MILTON  
PROJECT NUMBER: STP 5800 (2)

FILE NAME: +920289xsl.dgn PLOT DATE: 23-FEB-2011  
PROJECT LEADER: J. SCHULTZ DRAWN BY: D. LYMAN  
DESIGNED BY: D. LYMAN CHECKED BY: J. DEVLIN  
US ROUTE 7 CROSS SECTION SHEET 9 SHEET 86 OF 104



 $108 + 50$ 

108+25  
8" DIAMETER UTILITY SLEEVE

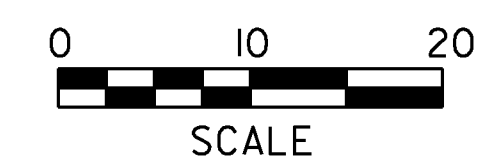


108+00

NOTE:  
DRAINAGE FEATURES ARE NOT PROJECTED ONTO  
CROSS SECTIONS, PLEASE REFER TO DRAINAGE  
LAYOUT AND DRAINAGE PROFILE SHEETS FOR  
DETAILED INFORMATION (TYP.)

STA. 108+00 TO STA. 108+50

EXISTING & PROPOSED WATERLINES  
ARE FOR REFERENCE ONLY. PLEASE  
REFER TO WATERLINE SHEETS 102-104

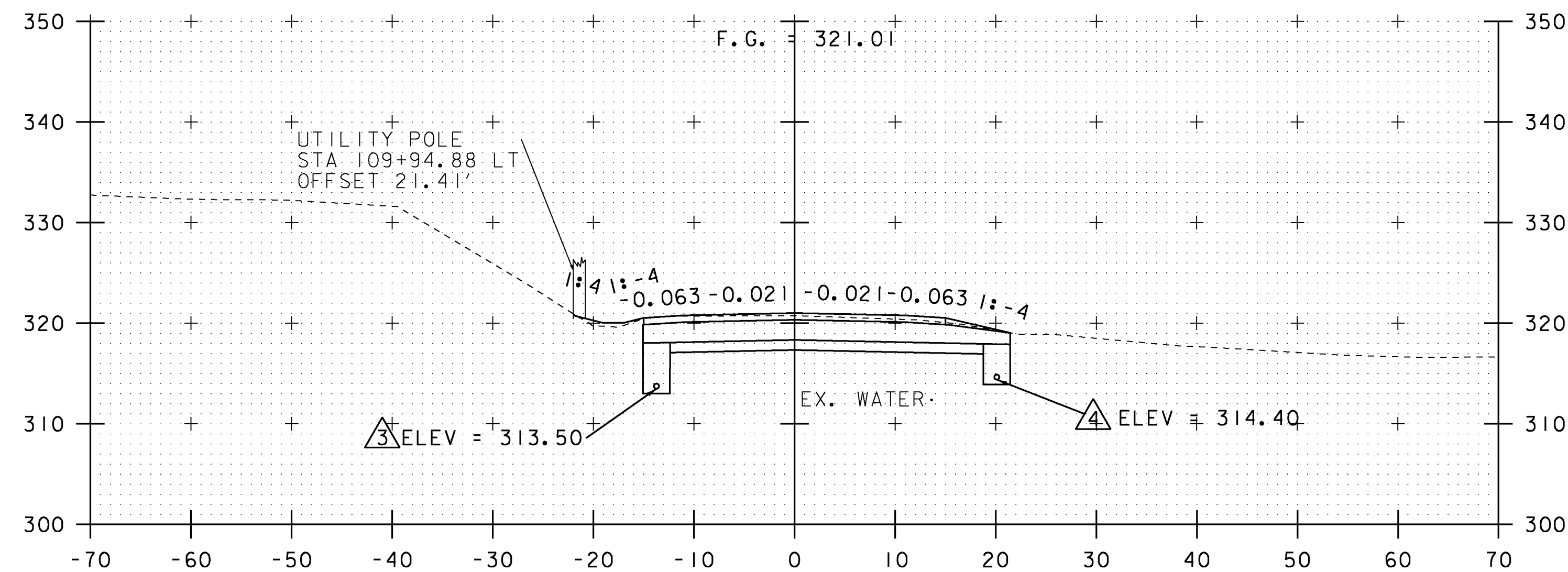


|                 |              |
|-----------------|--------------|
| PROJECT NAME:   | MILTON       |
| PROJECT NUMBER: | STP 5800 (2) |

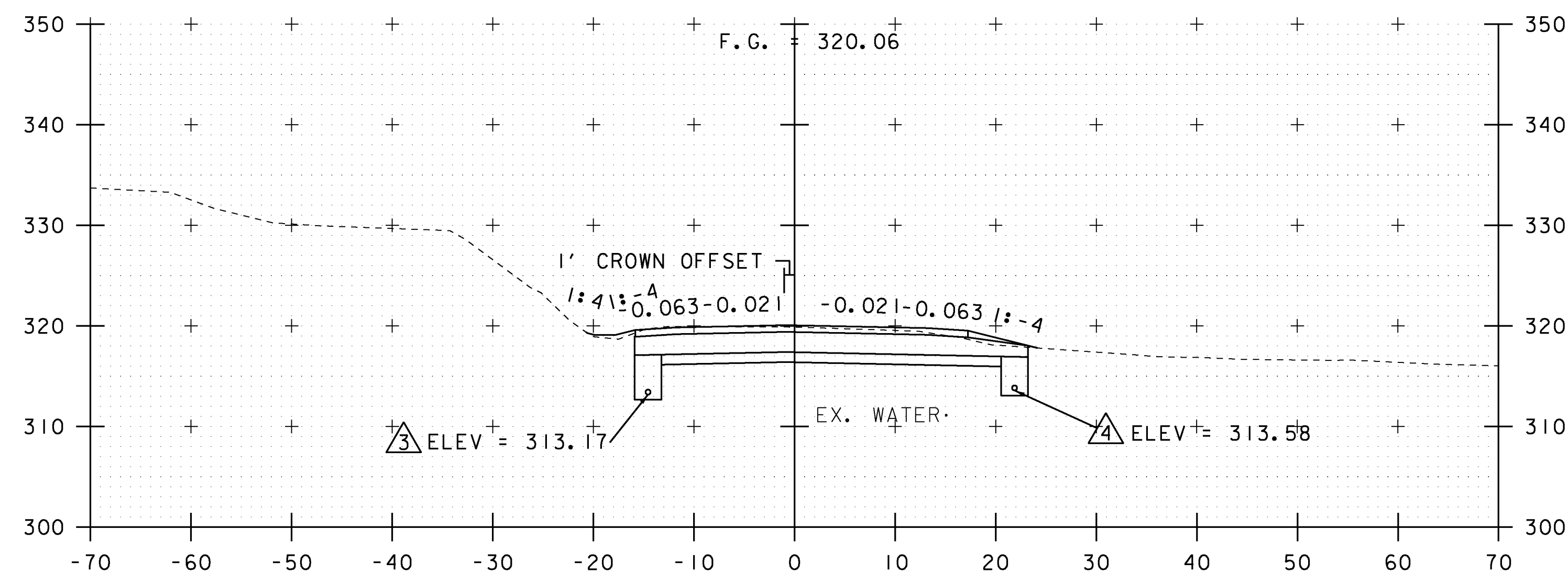
FILE NAME: +92D289xsl.dgn  
PROJECT LEADER: J. SCHULTZ  
DESIGNED BY: D. LYMAN  
US ROUTE 7 CROSS SECTION SHEET 10

PLOT DATE: 23-FEB-2011  
DRAWN BY: D. LYMAN  
CHECKED BY: J. DEVLIN  
SHEET 87 OF 104

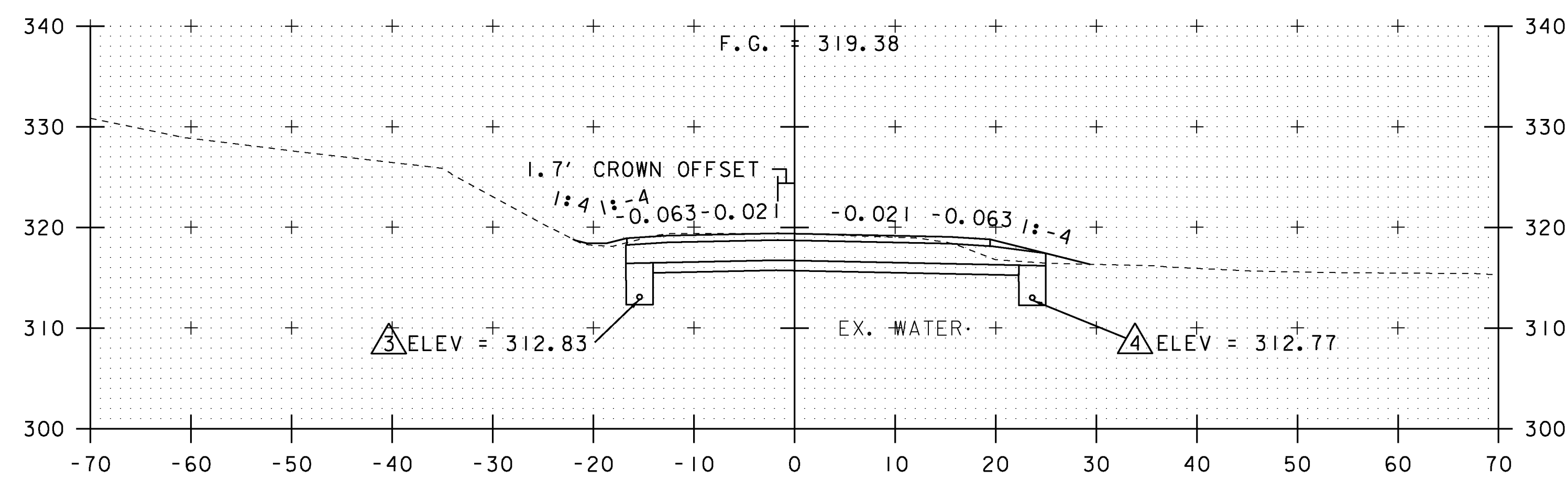




110+00

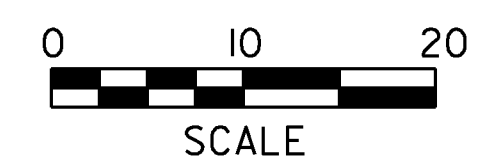


109+50



109+00

EXISTING & PROPOSED WATERLINES  
ARE FOR REFERENCE ONLY. PLEASE  
REFER TO WATERLINE SHEETS 102-104

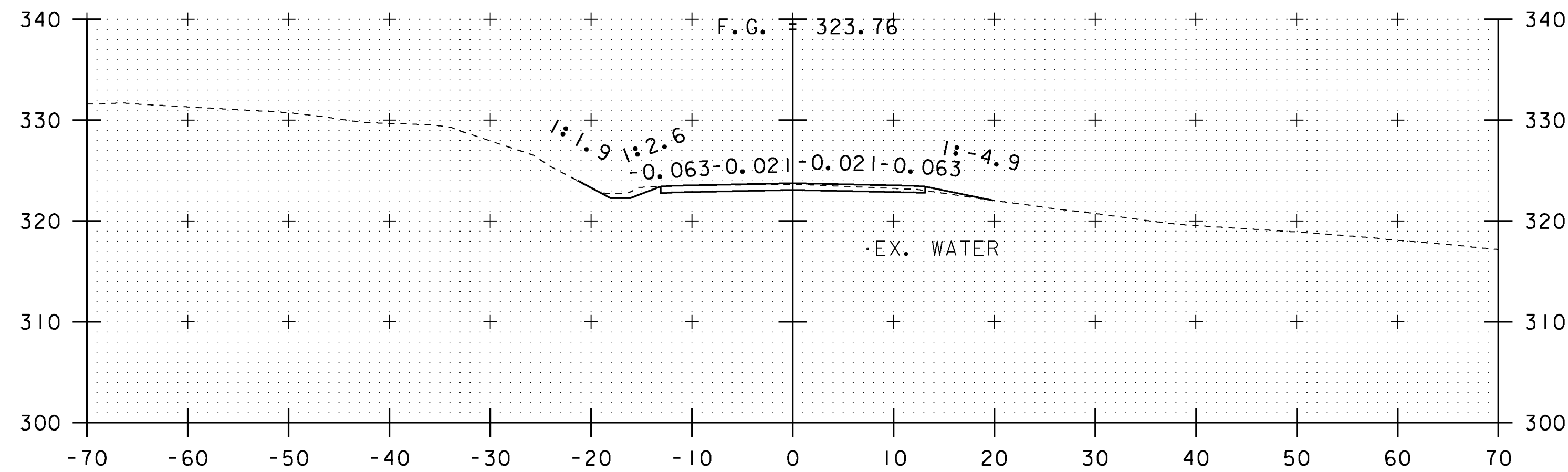


NOTE:  
DRAINAGE FEATURES ARE NOT PROJECTED ONTO  
CROSS SECTIONS, PLEASE REFER TO DRAINAGE  
LAYOUT AND DRAINAGE PROFILE SHEETS FOR  
DETAILED INFORMATION (TYP.)

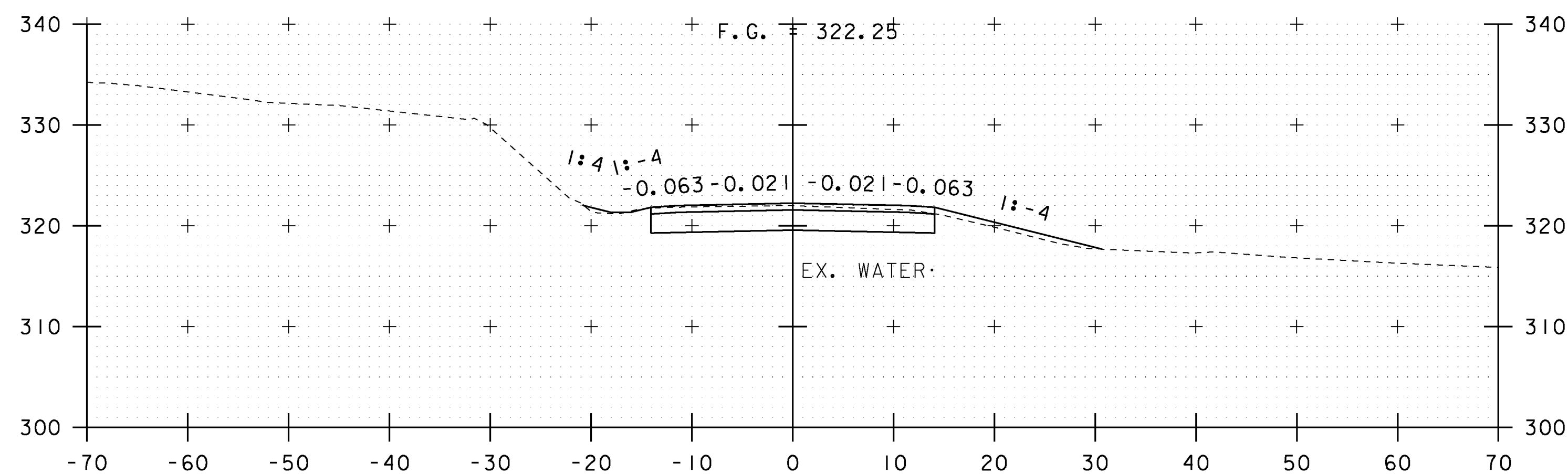
STA. 109+00 TO STA. 110+00

|                                   |                        |
|-----------------------------------|------------------------|
| PROJECT NAME: MILTON              |                        |
| PROJECT NUMBER: STP 5800 (2)      |                        |
| FILE NAME: +92D289xsl.dgn         | PLOT DATE: 23-FEB-2011 |
| PROJECT LEADER: J. SCHULTZ        | DRAWN BY: D. LYMAN     |
| DESIGNED BY: D. LYMAN             | CHECKED BY: J. DEVLIN  |
| US ROUTE 7 CROSS SECTION SHEET II | SHEET 88 OF 104        |

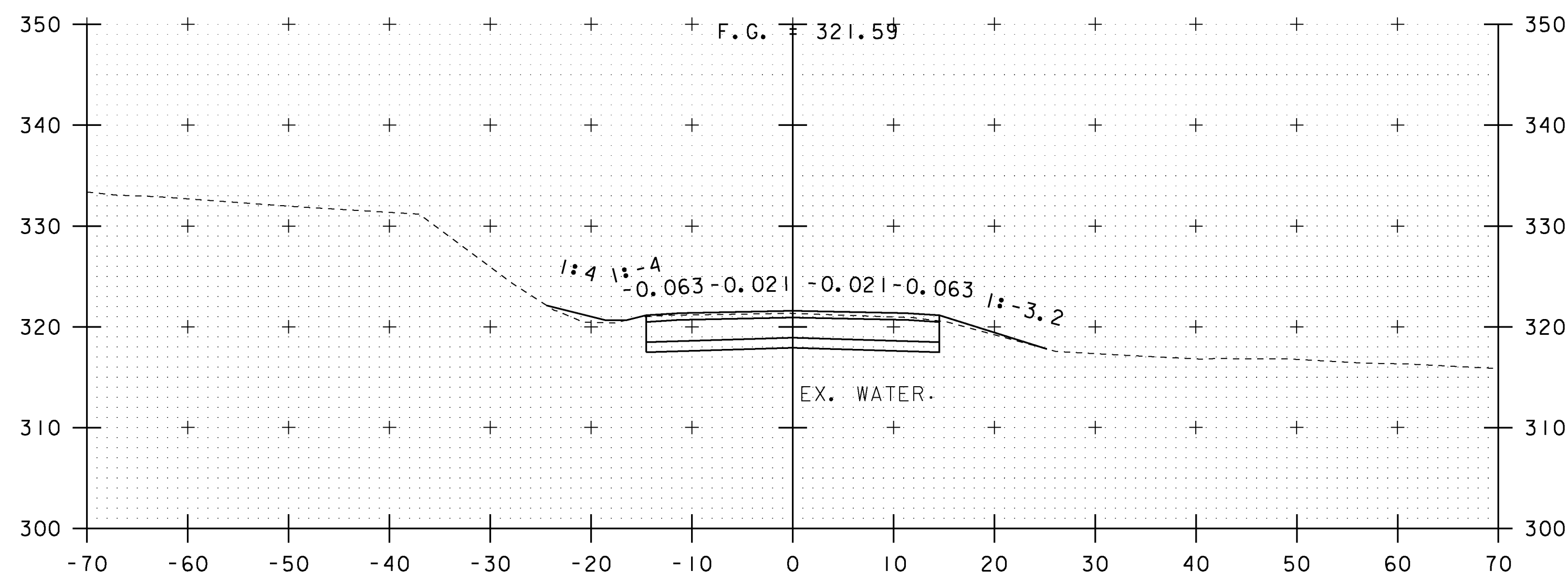




111+00

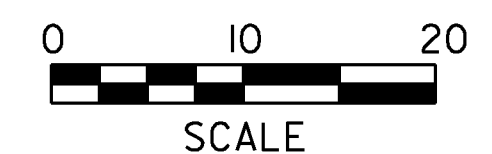


110+50



110+25  
END PROJECT  
BEGIN APPROACH

EXISTING & PROPOSED WATERLINES  
ARE FOR REFERENCE ONLY. PLEASE  
REFER TO WATERLINE SHEETS 102-104

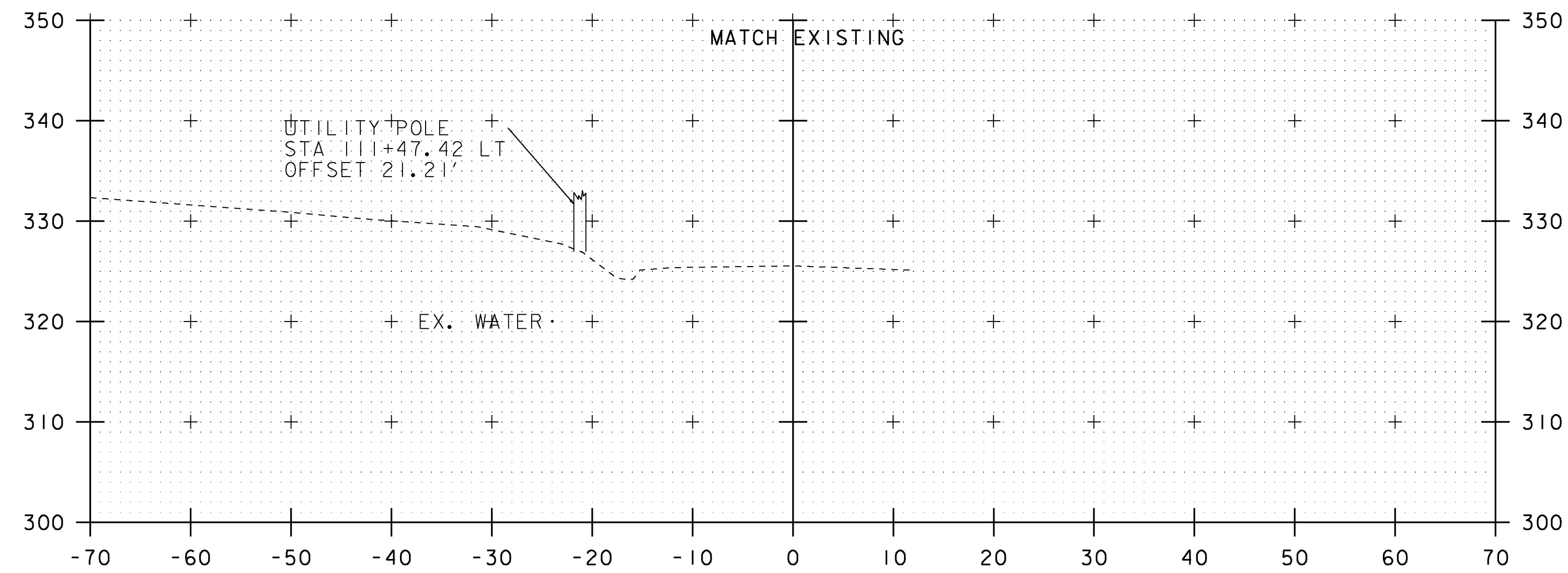


NOTE:  
DRAINAGE FEATURES ARE NOT PROJECTED ONTO  
CROSS SECTIONS, PLEASE REFER TO DRAINAGE  
LAYOUT AND DRAINAGE PROFILE SHEETS FOR  
DETAILED INFORMATION (TYP.)

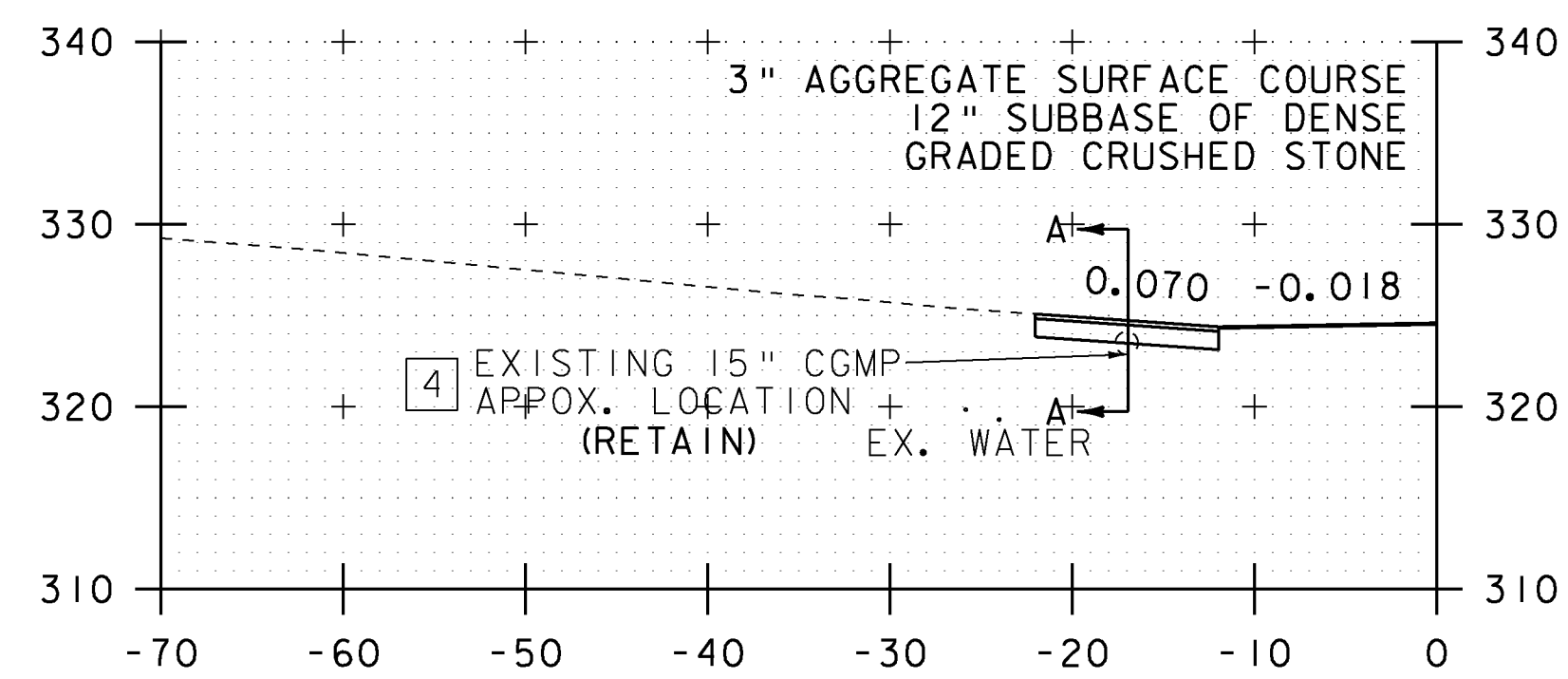
STA. 110+25 TO STA. 111+00

|                                   |                        |
|-----------------------------------|------------------------|
| PROJECT NAME: MILTON              |                        |
| PROJECT NUMBER: STP 5800 (2)      |                        |
| FILE NAME: 1920289xsl.dgn         | PLOT DATE: 23-FEB-2011 |
| PROJECT LEADER: J. SCHULTZ        | DRAWN BY: D. LYMAN     |
| DESIGNED BY: D. LYMAN             | CHECKED BY: J. DEVLIN  |
| US ROUTE 7 CROSS SECTION SHEET 12 | SHEET 89 OF 104        |

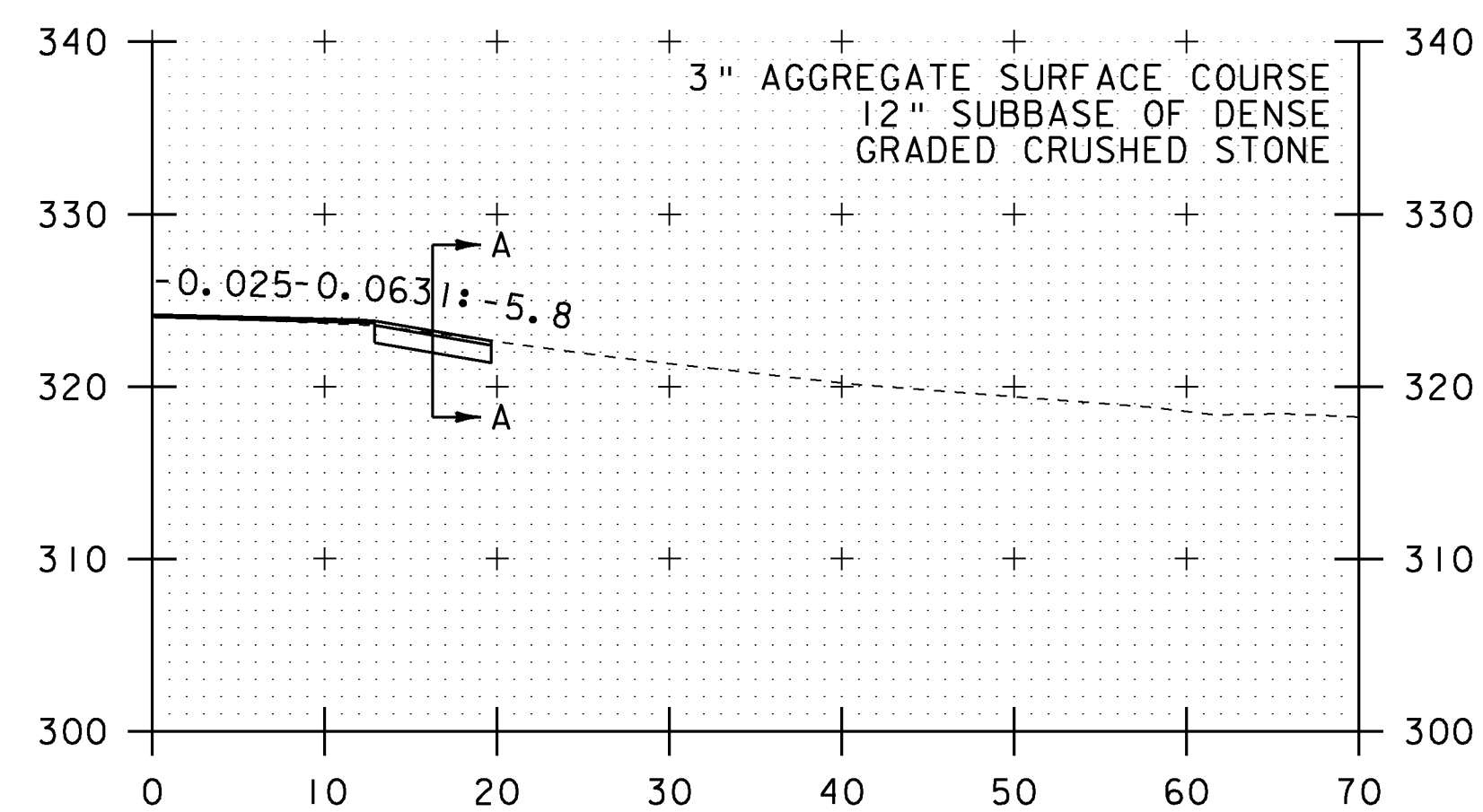




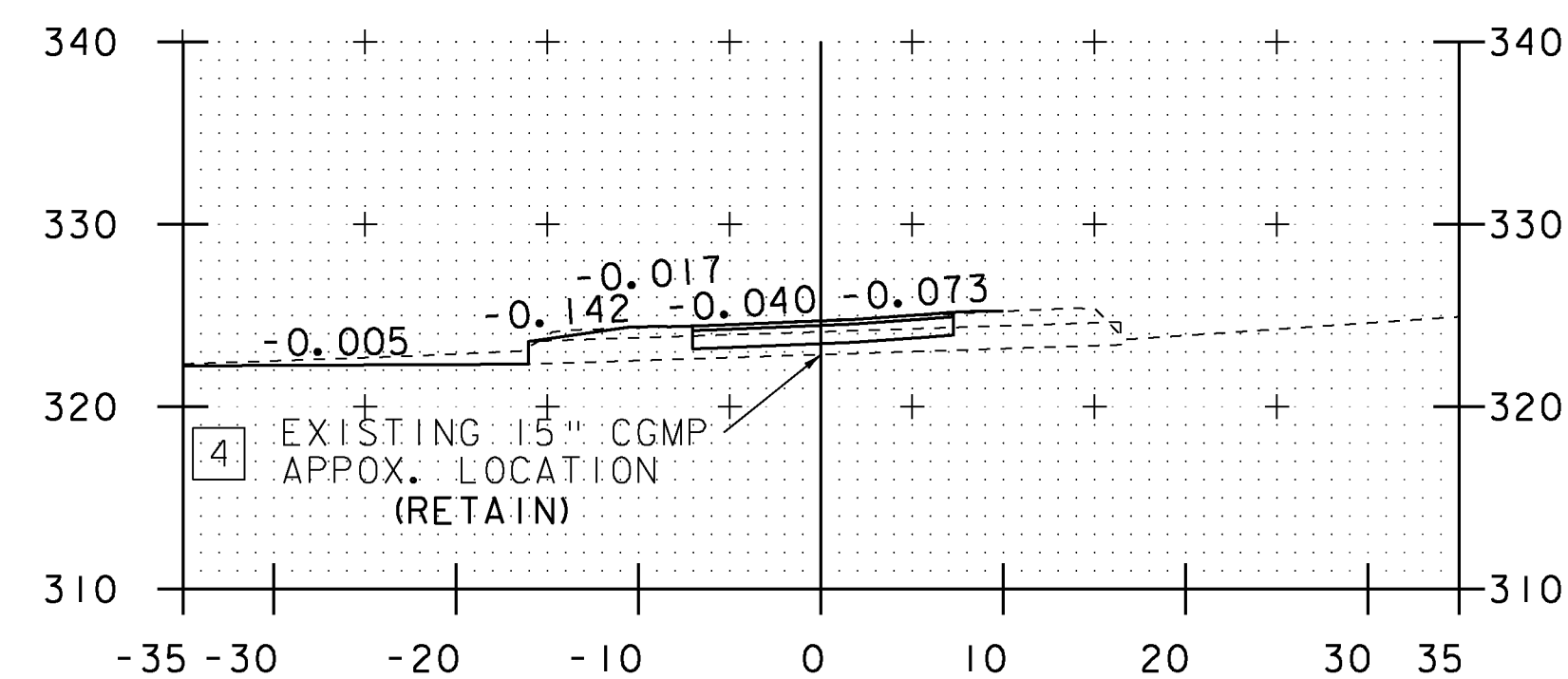
111+50  
END APPROACH



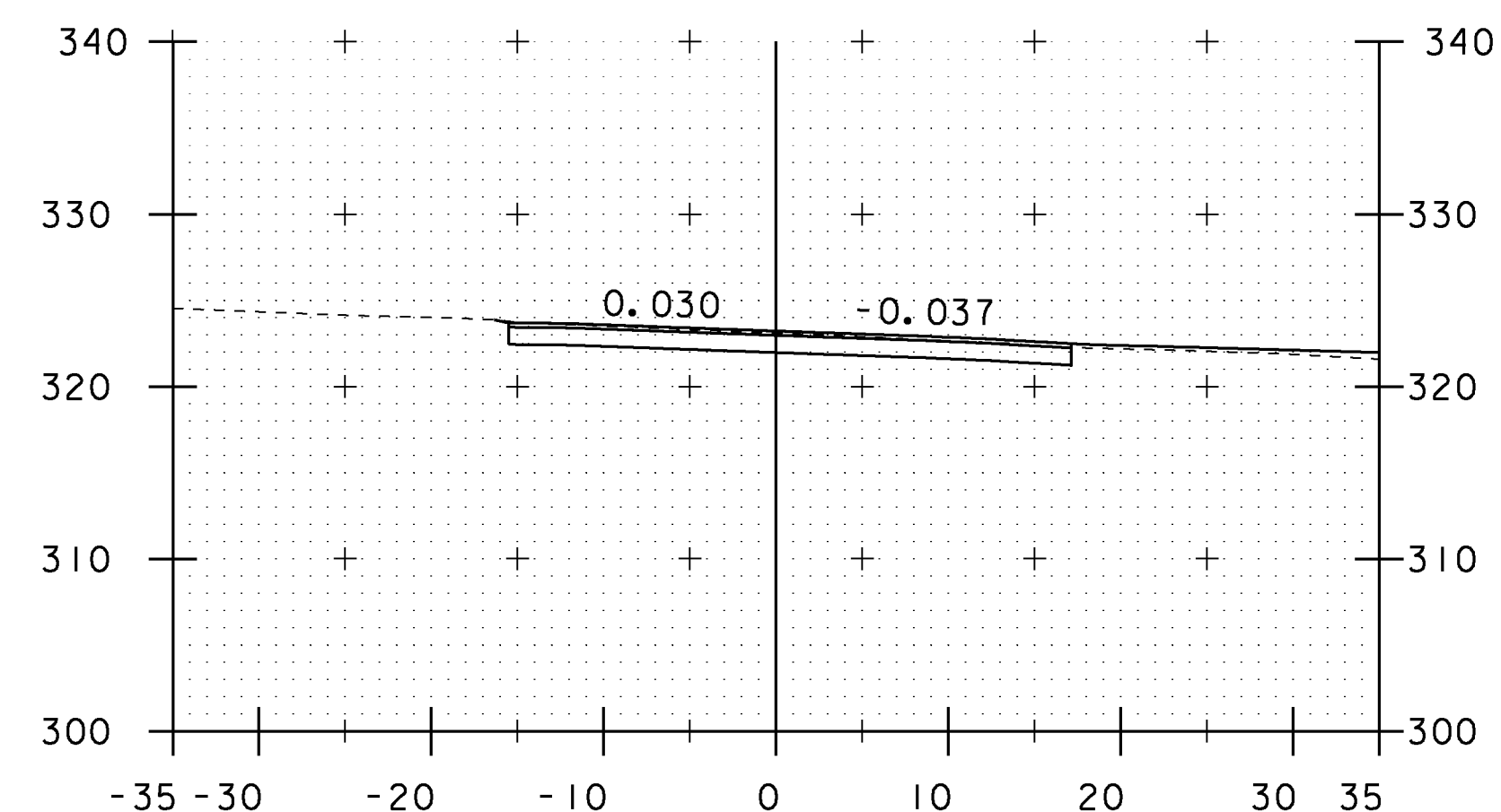
111+24.25  
GRAVEL DRIVE LT



111+12.33  
GRAVEL DRIVE RT

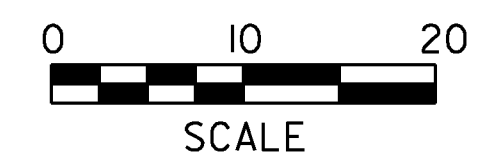


SECTION A-A



SECTION A-A

EXISTING & PROPOSED WATERLINES  
ARE FOR REFERENCE ONLY. PLEASE  
REFER TO WATERLINE SHEETS 102-104



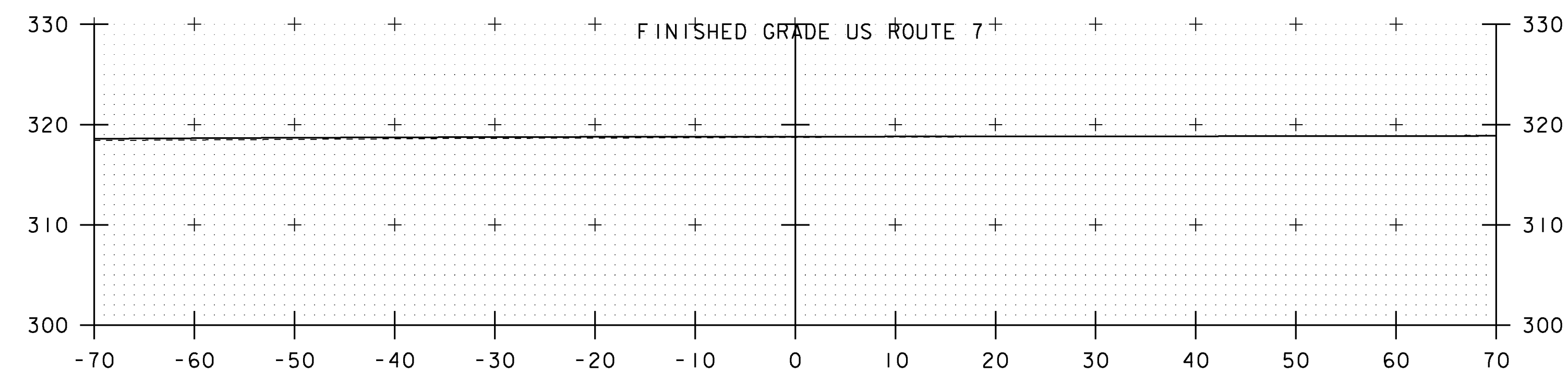
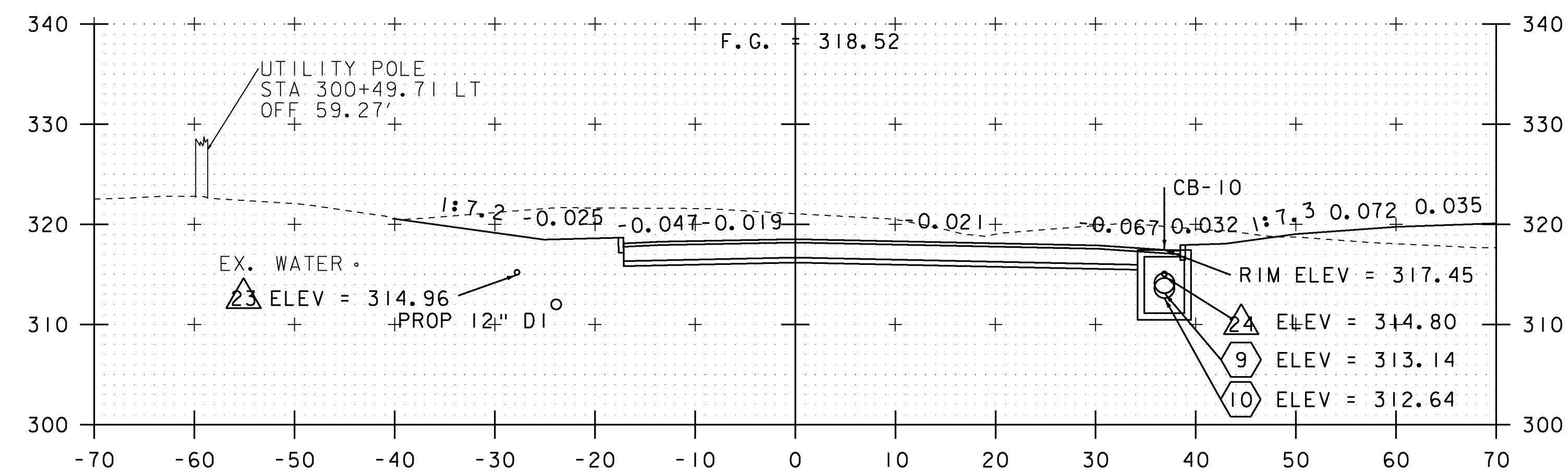
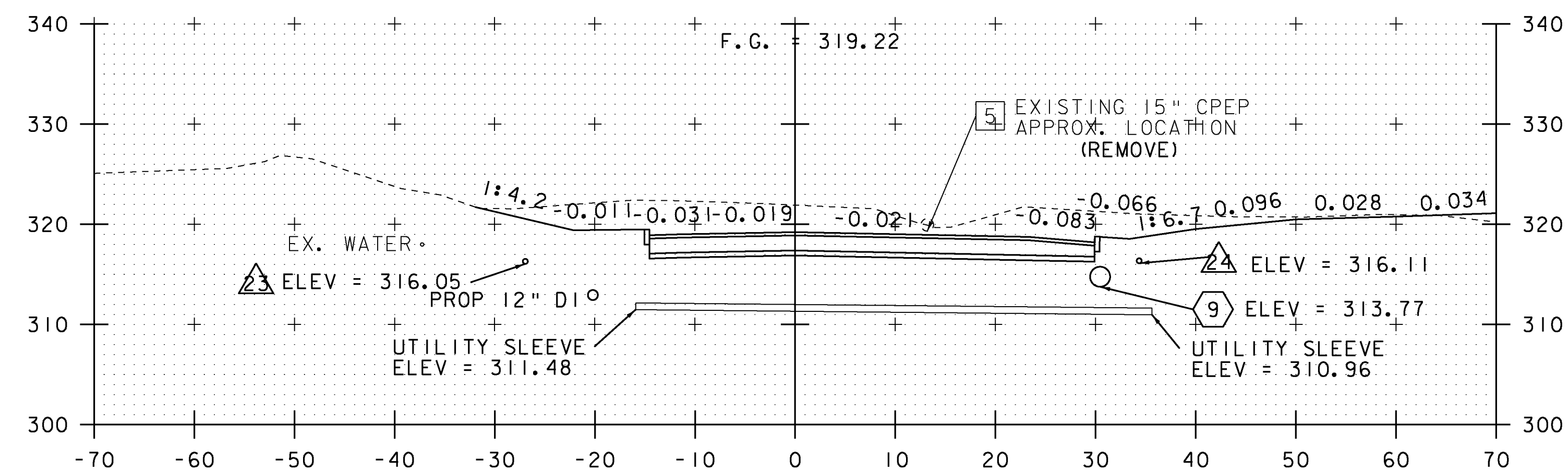
NOTE:  
DRAINAGE FEATURES ARE NOT PROJECTED ONTO  
CROSS SECTIONS, PLEASE REFER TO DRAINAGE  
LAYOUT AND DRAINAGE PROFILE SHEETS FOR  
DETAILED INFORMATION (TYP.)

STA. 111+12.33 TO STA. 111+50

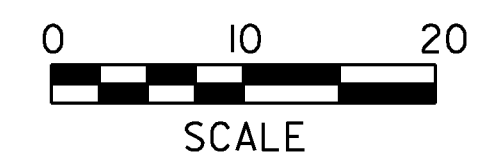
PROJECT NAME: MILTON  
PROJECT NUMBER: STP 5800 (2)

FILE NAME: +92D289xsl.dgn PLOT DATE: 23-FEB-2011  
PROJECT LEADER: J. SCHULTZ DRAWN BY: D. LYMAN  
DESIGNED BY: D. LYMAN CHECKED BY: J. DEVLIN  
US ROUTE 7 CROSS SECTION SHEET 13 SHEET 90 OF 104





EXISTING & PROPOSED WATERLINES  
ARE FOR REFERENCE ONLY. PLEASE  
REFER TO WATERLINE SHEETS 102-104

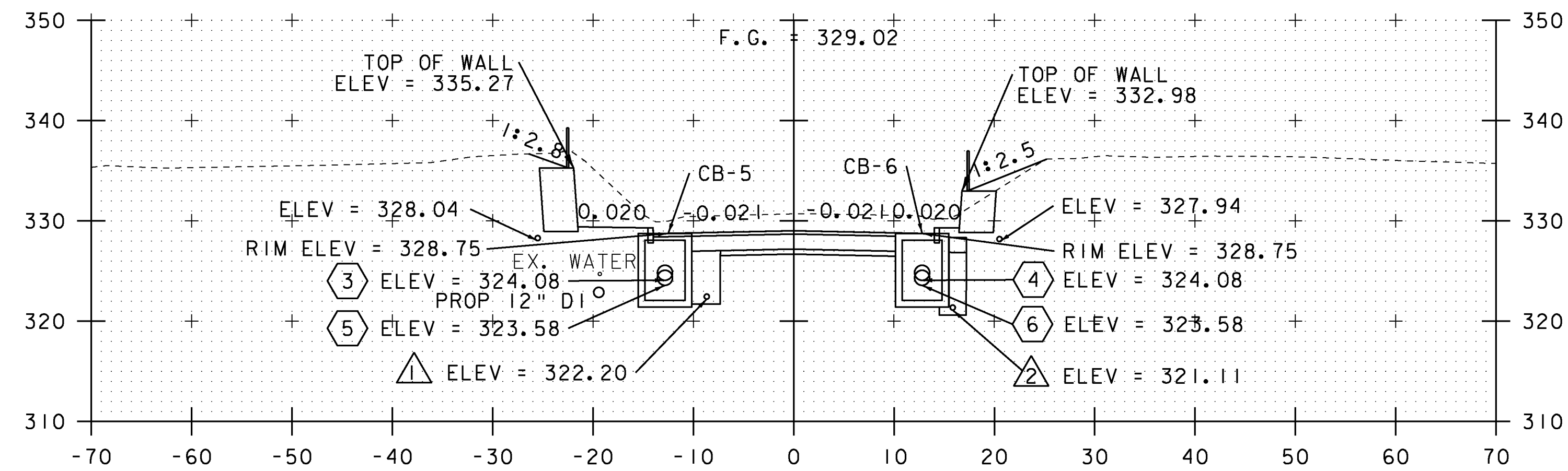


NOTE:  
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DETAILED INFORMATION (TYP.)

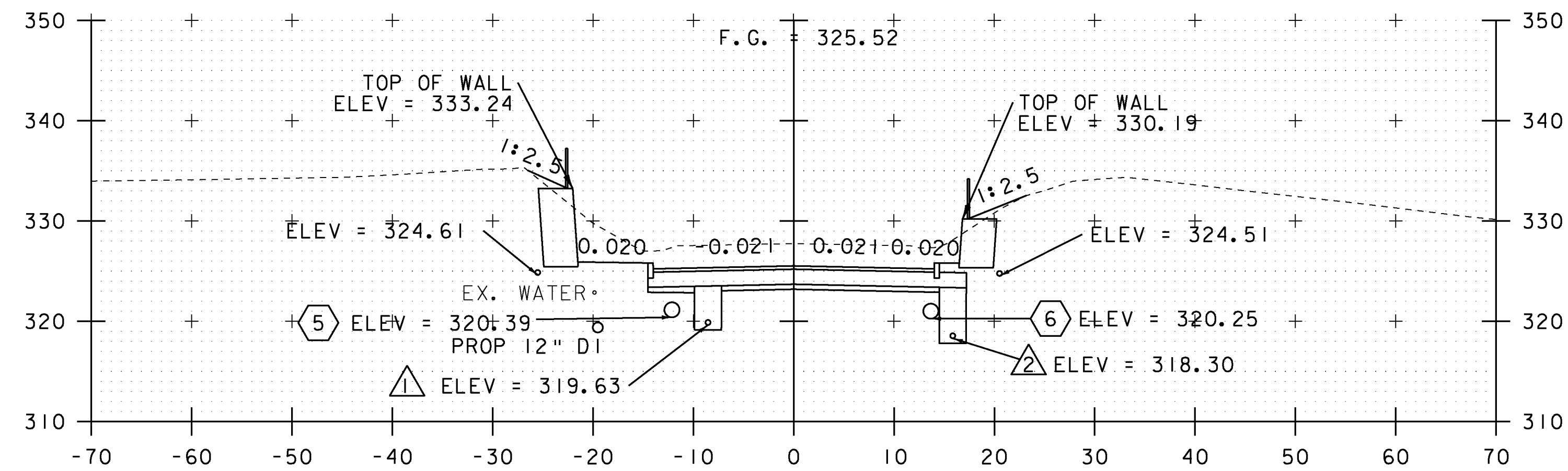
STA. 300+00 TO STA. 300+60

|                                 |                        |
|---------------------------------|------------------------|
| PROJECT NAME: MILTON            |                        |
| PROJECT NUMBER: STP 5800 (2)    |                        |
| FILE NAME: +92D289xsl.dgn       | PLOT DATE: 23-FEB-2011 |
| PROJECT LEADER: J. SCHULTZ      | DRAWN BY: D. LYMAN     |
| DESIGNED BY: D. LYMAN           | CHECKED BY: J. DEVLIN  |
| LAKE ROAD CROSS SECTION SHEET 1 | SHEET 91 OF 104        |

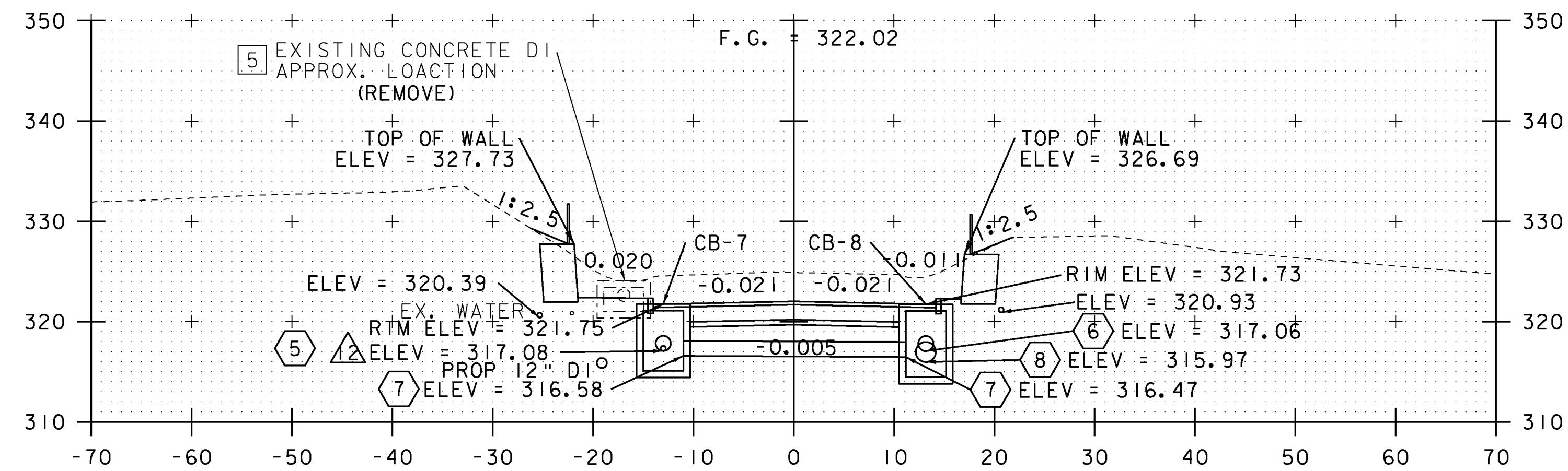




302+00

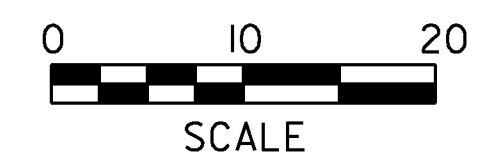


301+50



301+00

EXISTING & PROPOSED WATERLINES  
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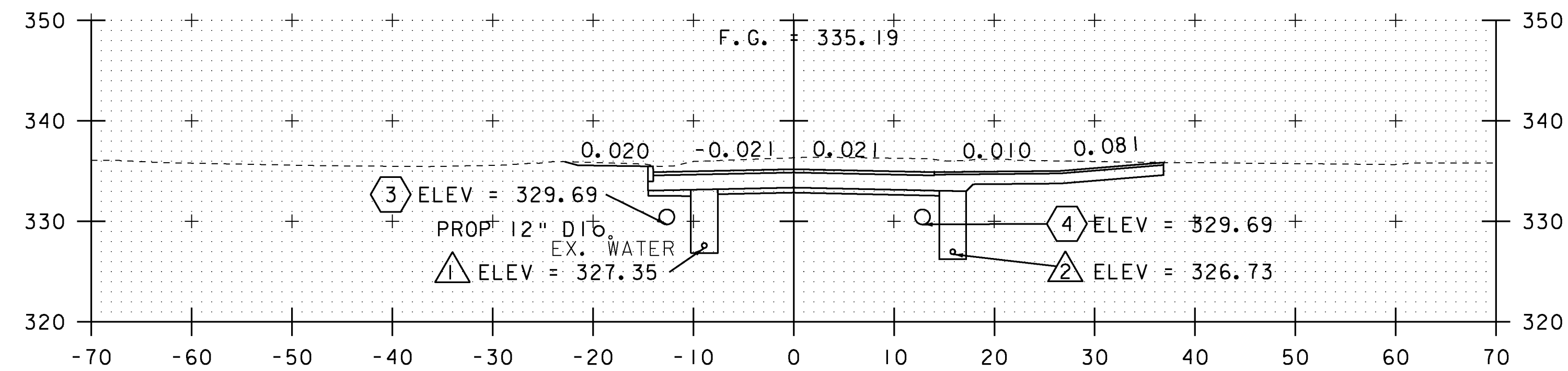
NOTE:  
DRAINAGE FEATURES ARE NOT PROJECTED ONTO  
CROSS SECTIONS, PLEASE REFER TO DRAINAGE  
LAYOUT AND DRAINAGE PROFILE SHEETS FOR  
DETAILED INFORMATION (TYP.)

STA. 301+00 TO STA. 302+00

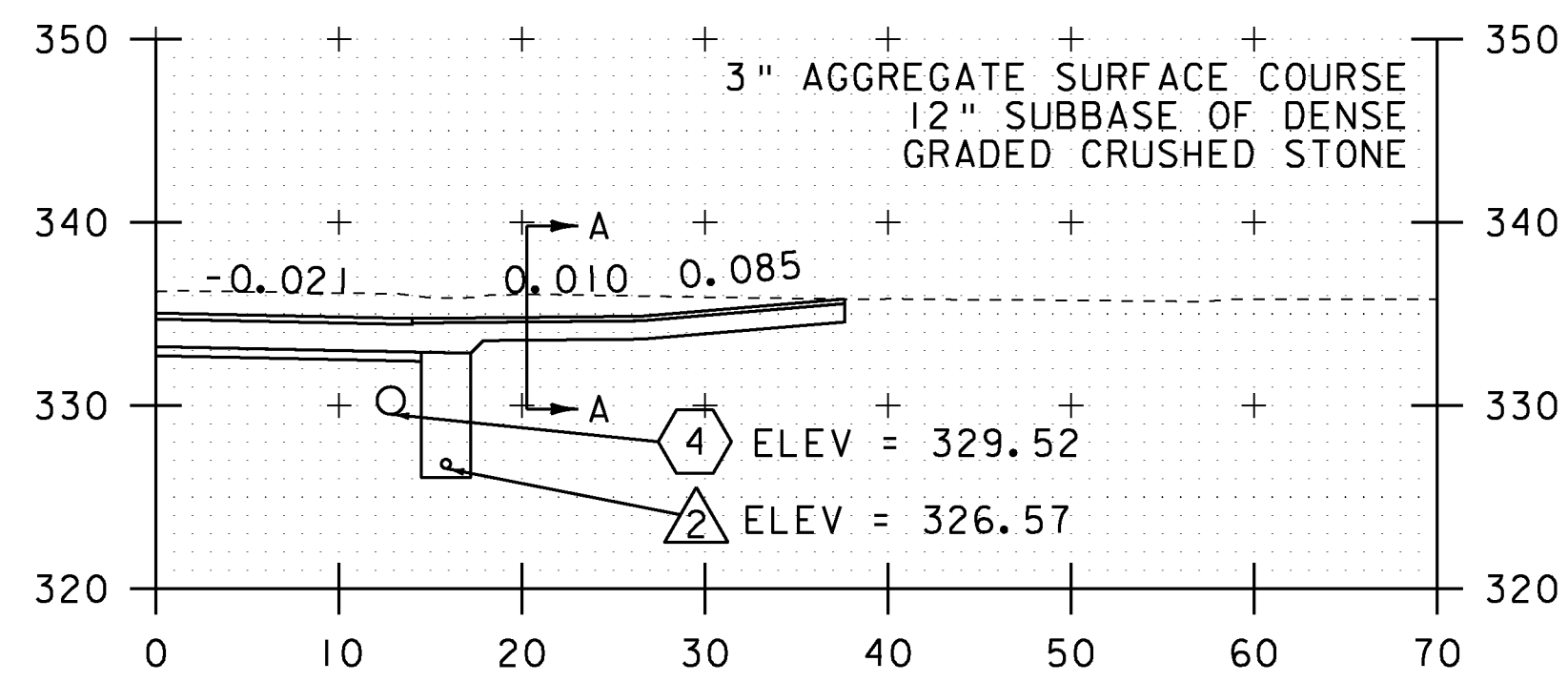
PROJECT NAME: MILTON  
PROJECT NUMBER: STP 5800 (2)

FILE NAME: +92D289xsl.dgn PLOT DATE: 23-FEB-2011  
PROJECT LEADER: J. SCHULTZ DRAWN BY: D. LYMAN  
DESIGNED BY: D. LYMAN CHECKED BY: J. DEVLIN  
LAKE ROAD CROSS SECTION SHEET 2 SHEET 92 OF 104

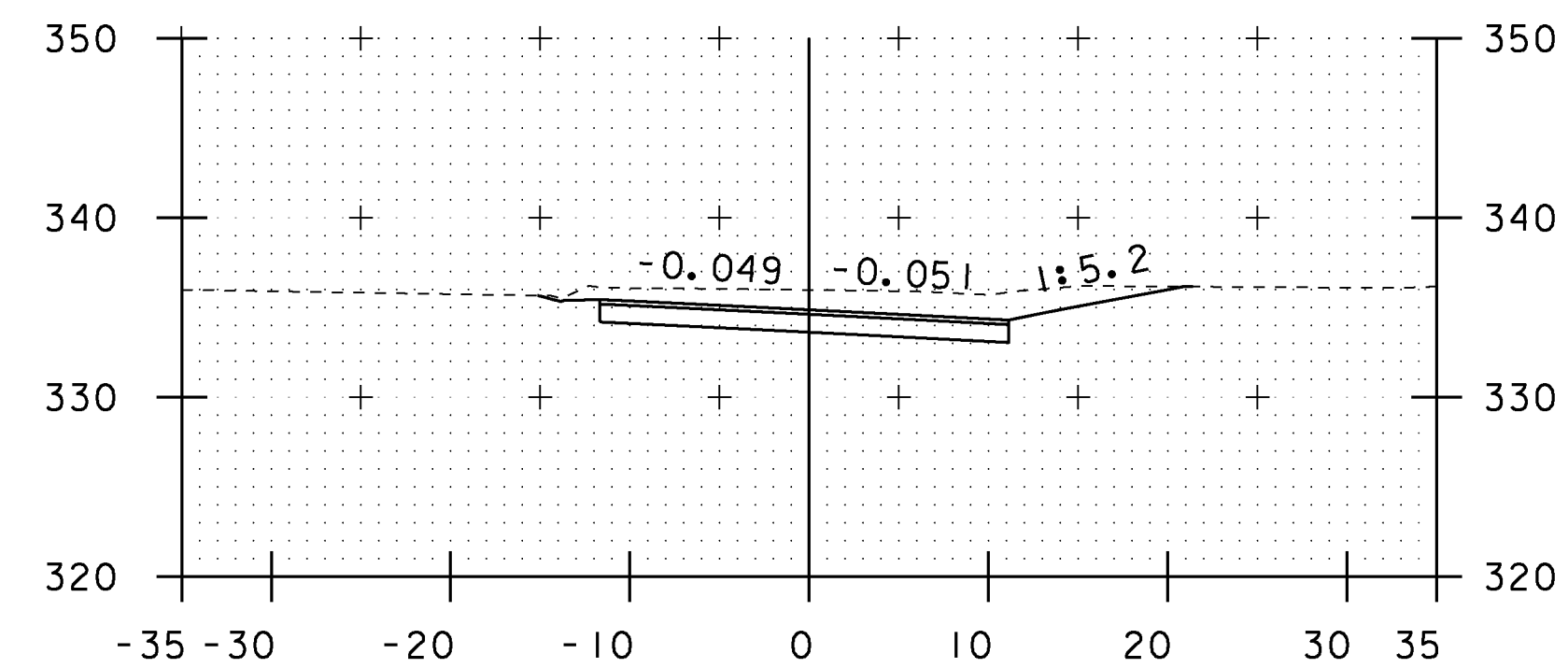




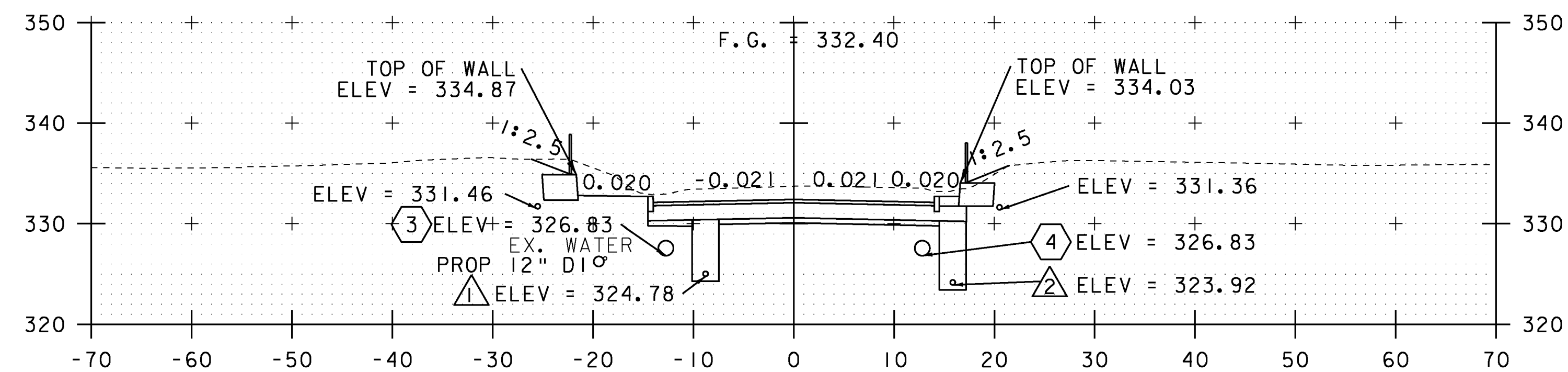
303+00



302+97.06  
GRAVEL DRIVE RT

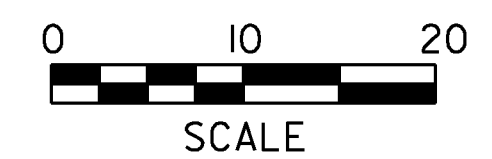


SECTION A-A



302+50

EXISTING & PROPOSED WATERLINES  
ARE FOR REFERENCE ONLY. PLEASE  
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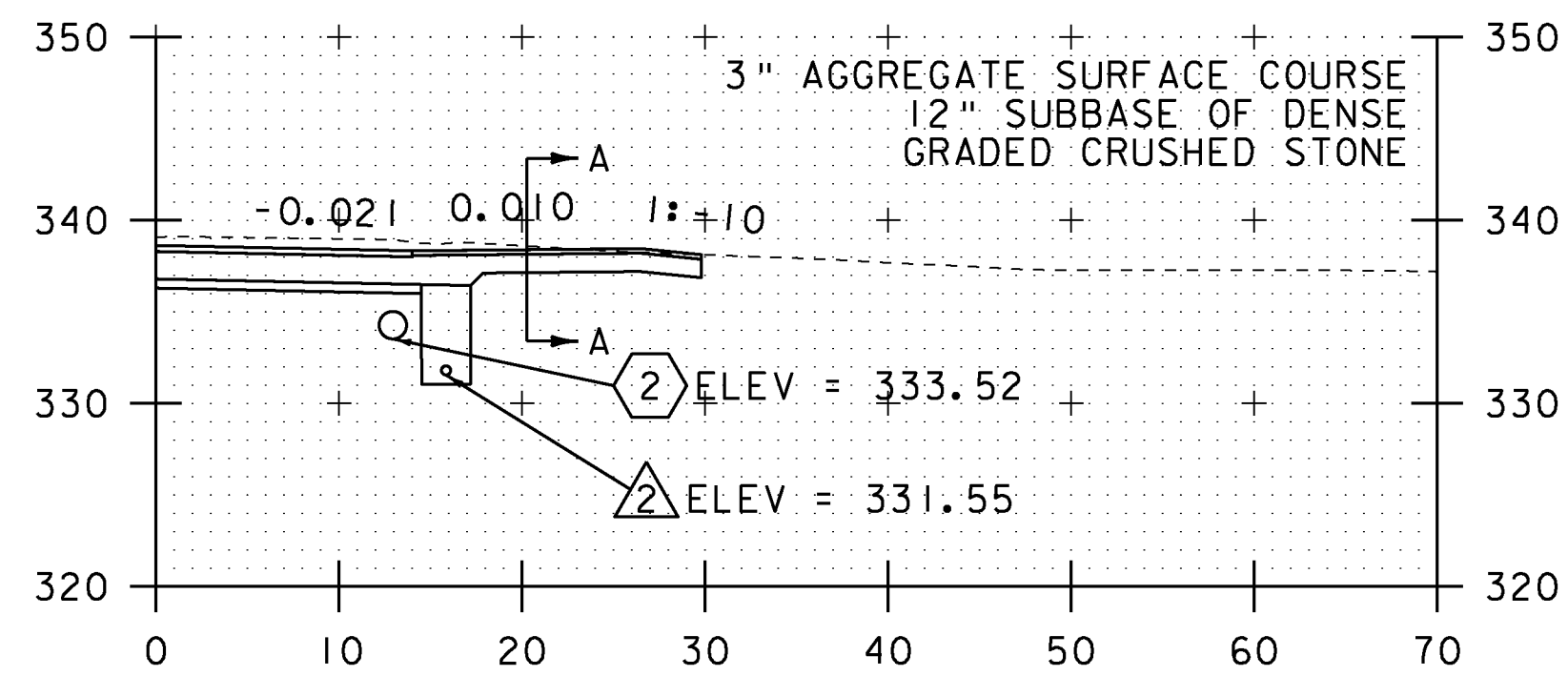


NOTE:  
DRAINAGE FEATURES ARE NOT PROJECTED ONTO  
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LAYOUT AND DRAINAGE PROFILE SHEETS FOR  
DETAILED INFORMATION (TYP.)

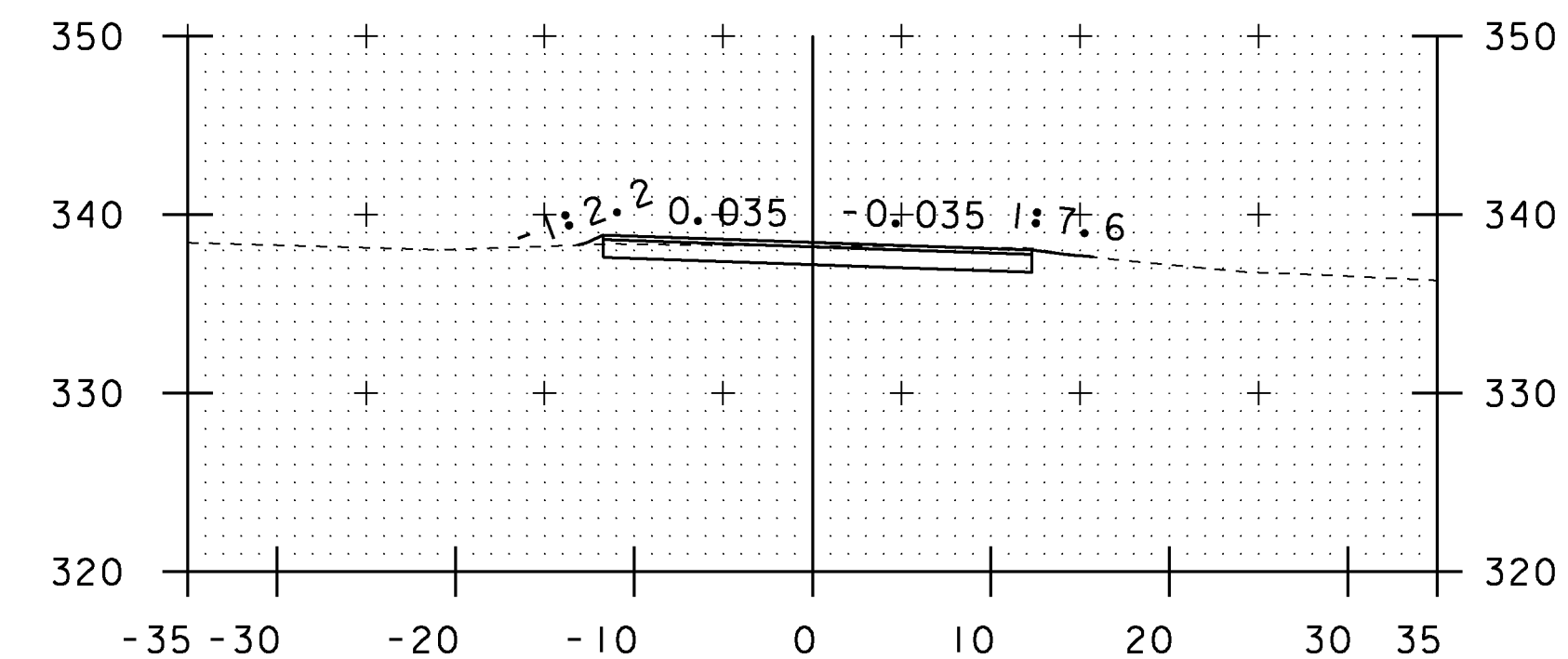
STA. 302+50 TO STA. 303+00

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|---------------------------------|----------------|
| PROJECT NAME:                   | MILTON         |
| PROJECT NUMBER:                 | STP 5800 (2)   |
| FILE NAME:                      | +92D289xsl.dgn |
| PROJECT LEADER:                 | J. SCHULTZ     |
| DESIGNED BY:                    | D. LYMAN       |
| LAKE ROAD CROSS SECTION SHEET 3 |                |
| PLOT DATE:                      | 23-FEB-2011    |
| DRAWN BY:                       | D. LYMAN       |
| CHECKED BY:                     | J. DEVLIN      |
| SHEET 93                        | OF 104         |

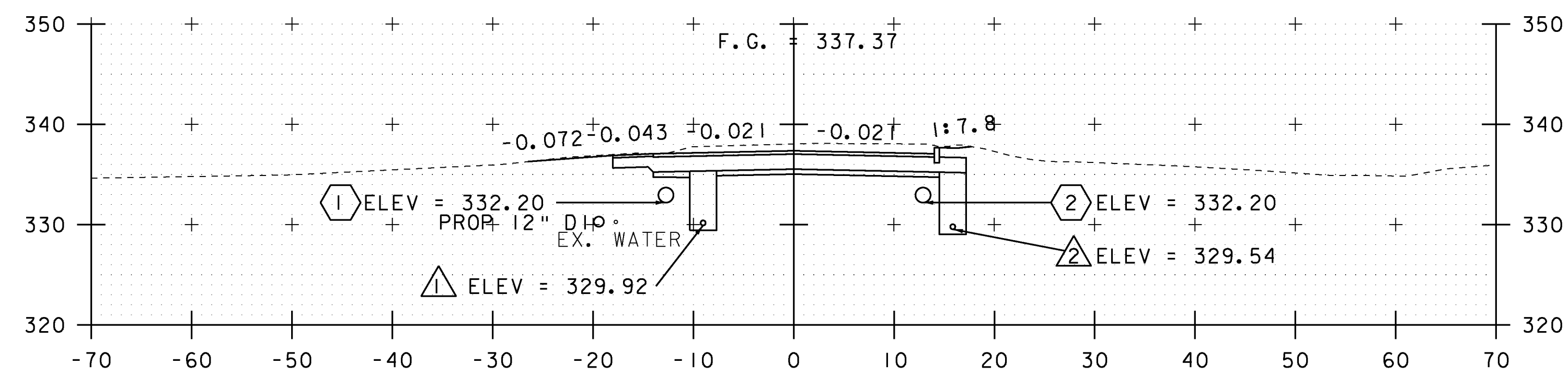




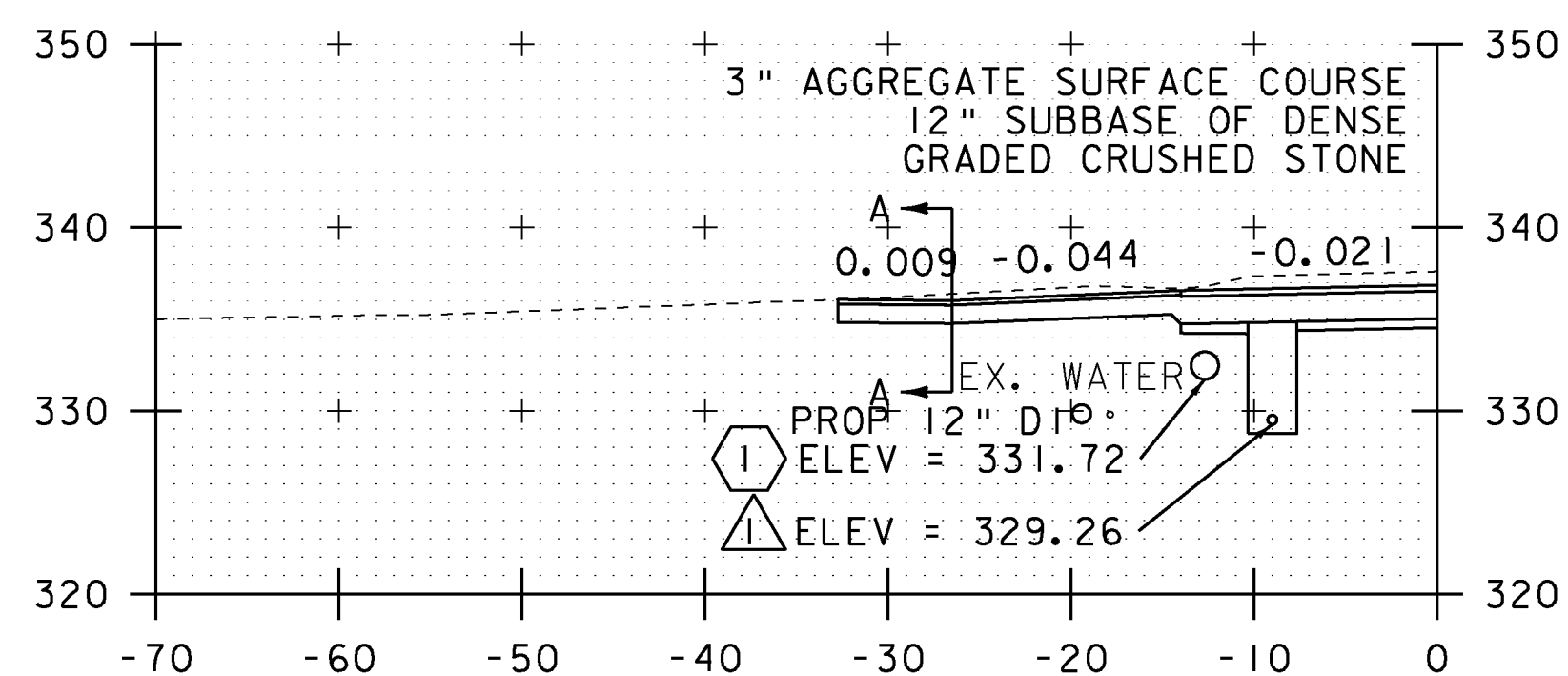
303+85.78  
GRAVEL DRIVE RT



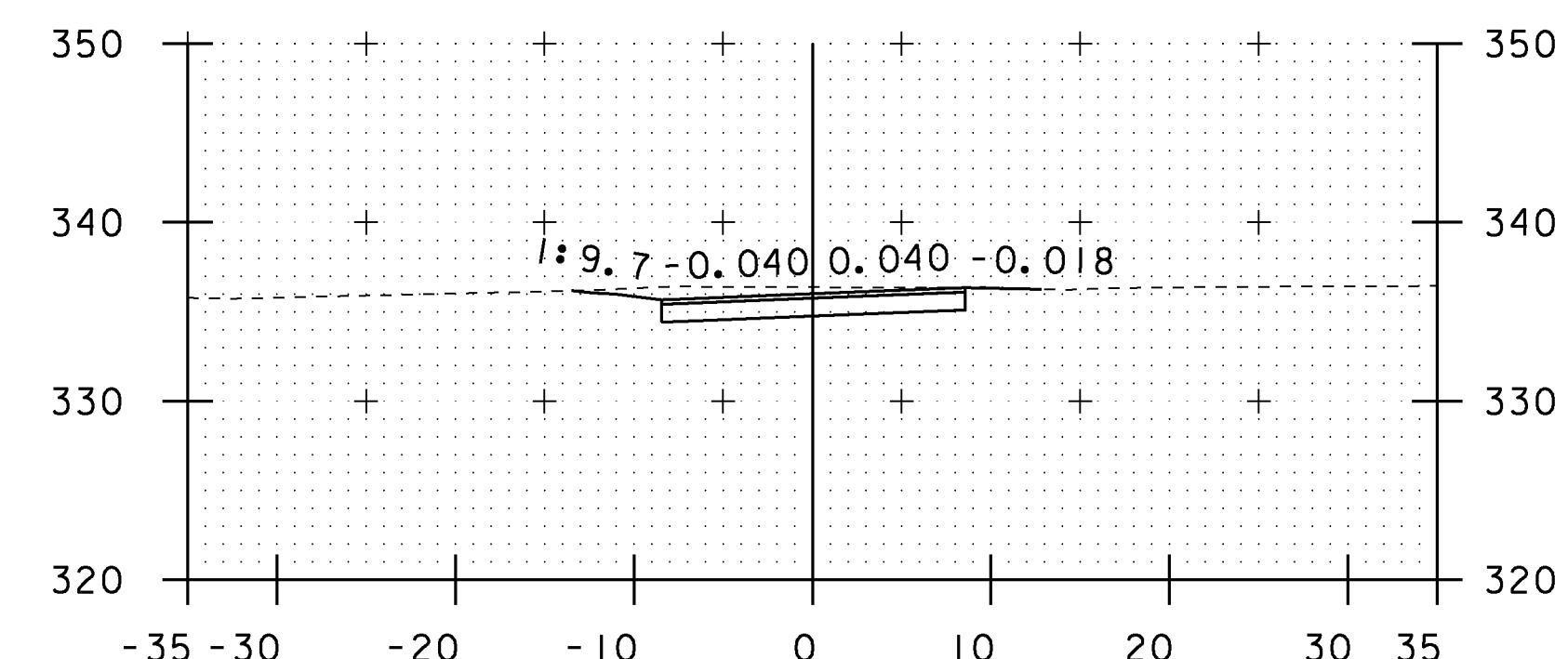
SECTION A-A



303+50

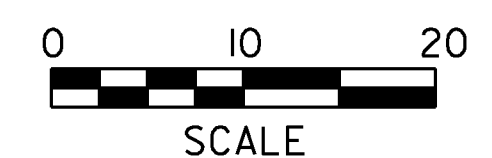


303+37.16  
GRAVEL DRIVE LT



SECTION A-A

EXISTING & PROPOSED WATERLINES  
ARE FOR REFERENCE ONLY. PLEASE  
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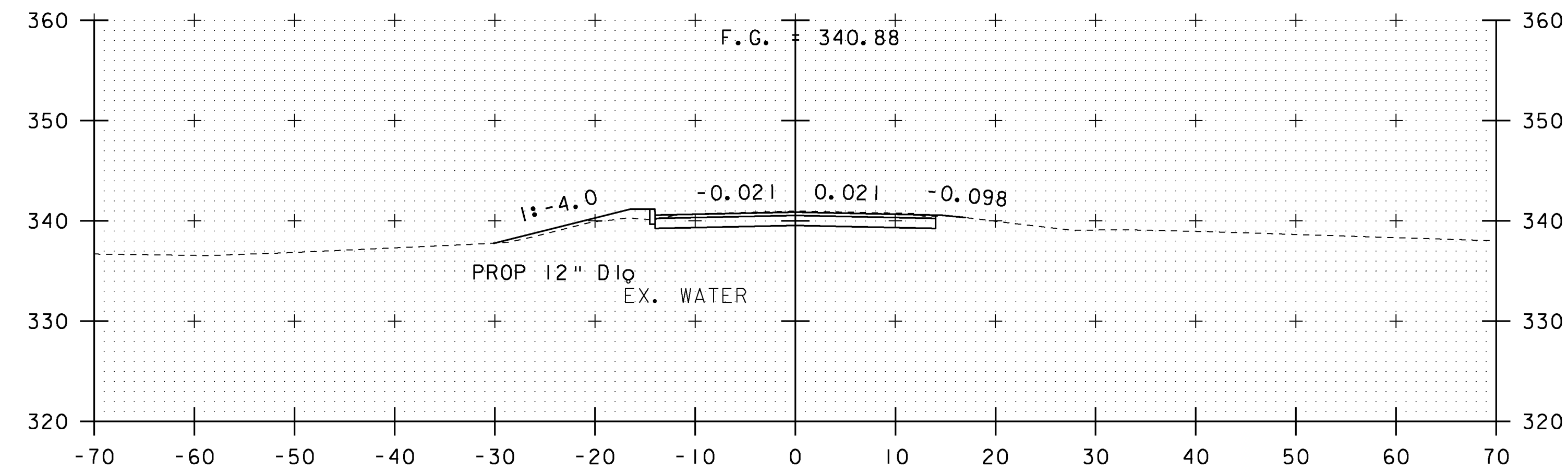


NOTE:  
DRAINAGE FEATURES ARE NOT PROJECTED ONTO  
CROSS SECTIONS, PLEASE REFER TO DRAINAGE  
LAYOUT AND DRAINAGE PROFILE SHEETS FOR  
DETAILED INFORMATION (TYP.)

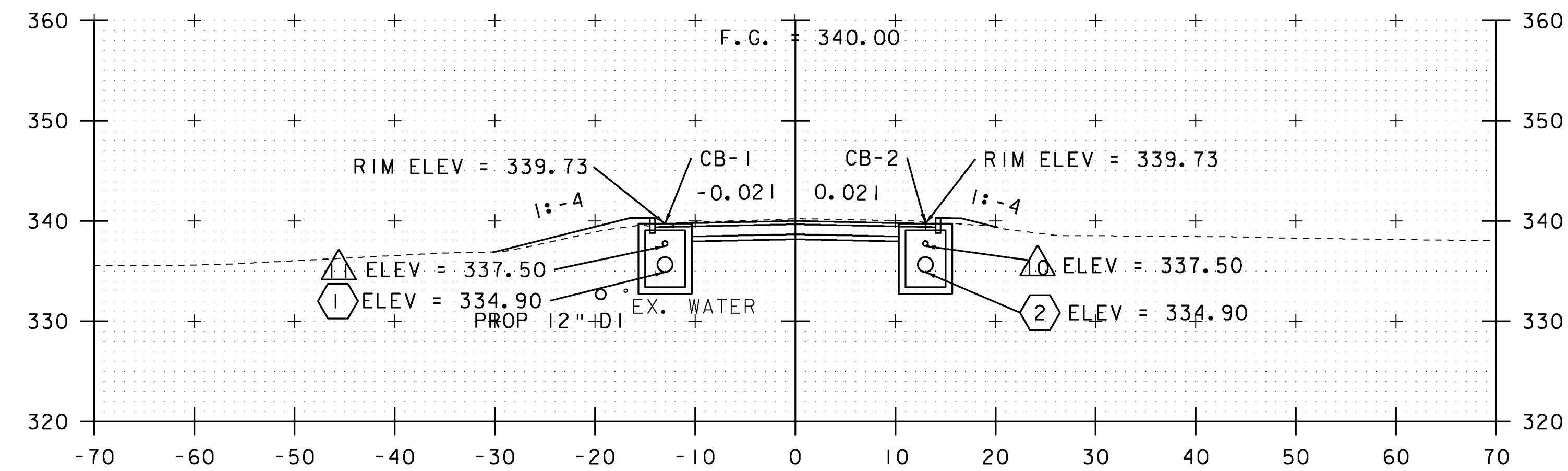
STA. 303+37.16 TO STA. 303+85.78

|                                 |                |
|---------------------------------|----------------|
| PROJECT NAME:                   | MILTON         |
| PROJECT NUMBER:                 | STP 5800 (2)   |
| FILE NAME:                      | +92D289xsl.dgn |
| PROJECT LEADER:                 | J. SCHULTZ     |
| DESIGNED BY:                    | D. LYMAN       |
| LAKE ROAD CROSS SECTION SHEET 4 |                |
| PLOT DATE:                      | 23-FEB-2011    |
| DRAWN BY:                       | D. LYMAN       |
| CHECKED BY:                     | J. DEVLIN      |
| SHEET 94                        | OF 104         |

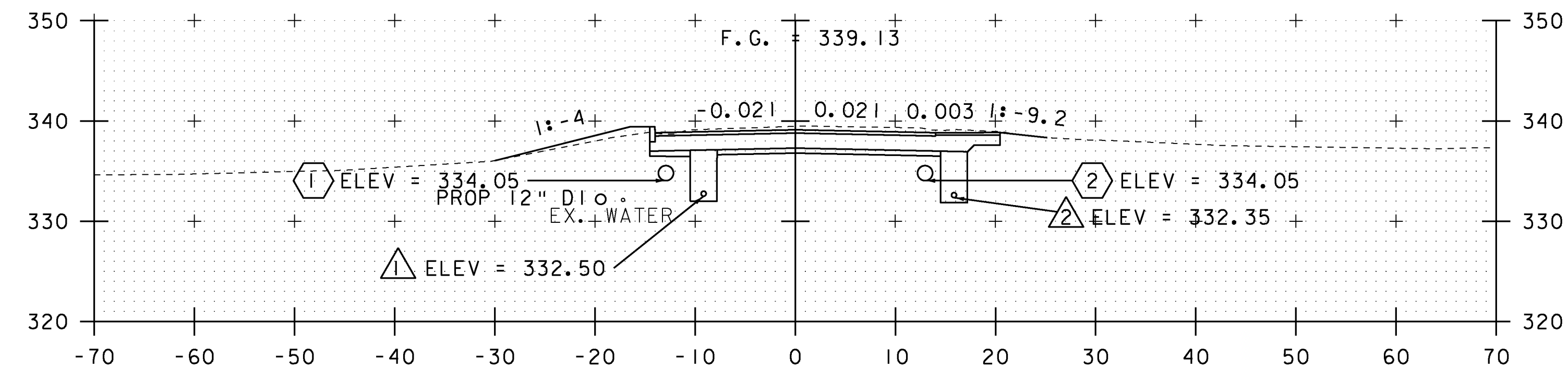




304+50

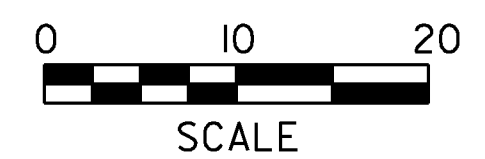


304+25



304+00

EXISTING & PROPOSED WATERLINES  
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NOTE:  
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CROSS SECTIONS, PLEASE REFER TO DRAINAGE  
LAYOUT AND DRAINAGE PROFILE SHEETS FOR  
DETAILED INFORMATION (TYP.)

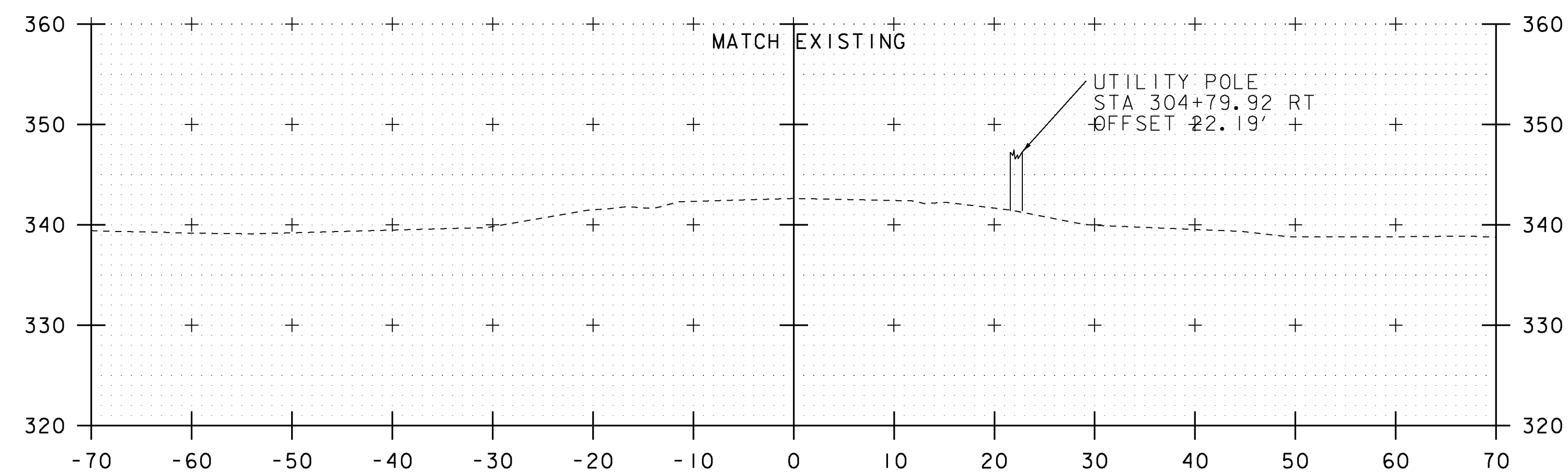
STA. 304+00 TO STA. 304+50

PROJECT NAME: MILTON  
PROJECT NUMBER: STP 5800 (2)

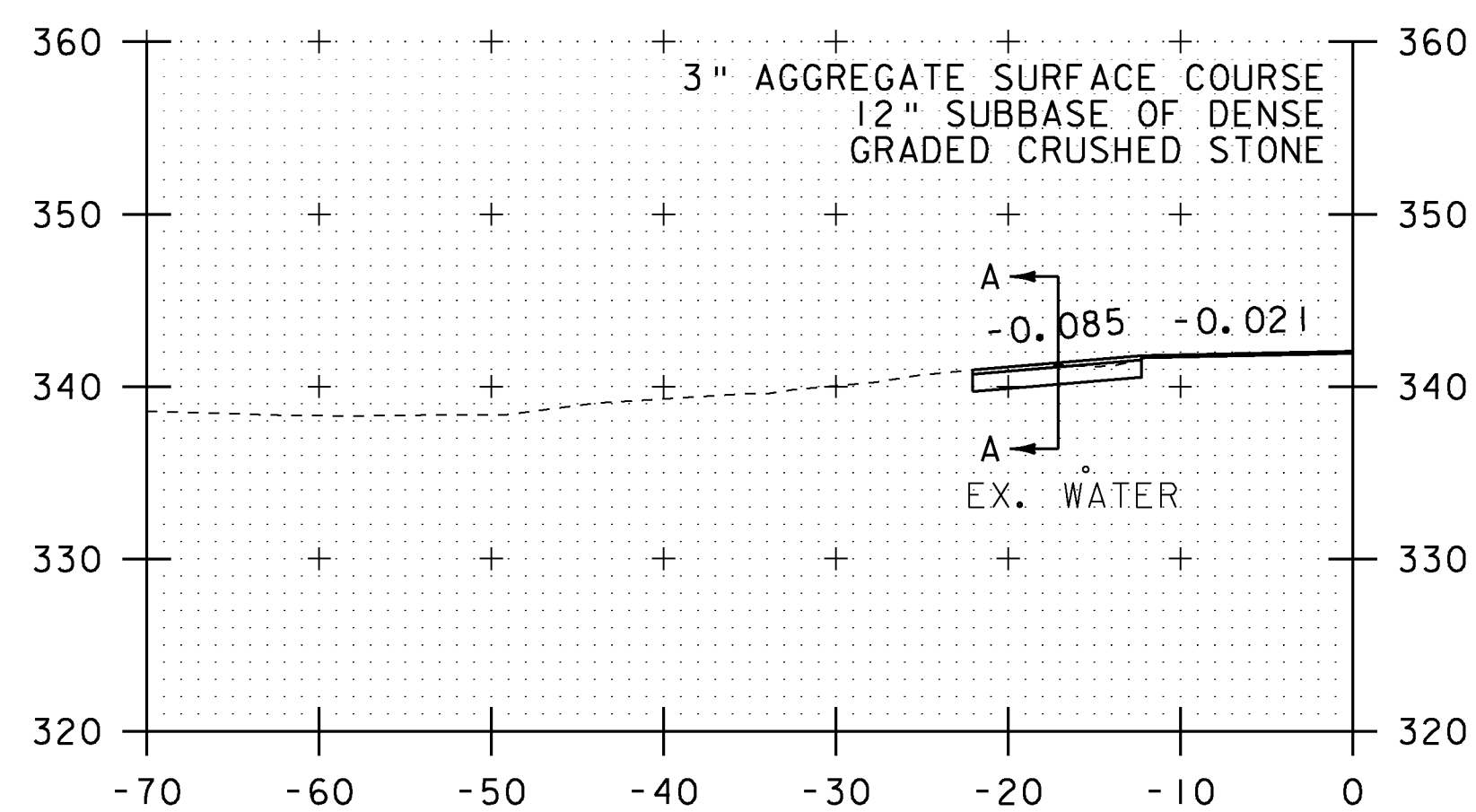
FILE NAME: +92D289xsl.dgn  
PROJECT LEADER: J. SCHULTZ  
DESIGNED BY: D. LYMAN  
LAKE ROAD CROSS SECTION SHEET 5

PLOT DATE: 23-FEB-2011  
DRAWN BY: D. LYMAN  
CHECKED BY: J. DEVLIN  
SHEET 95 OF 104

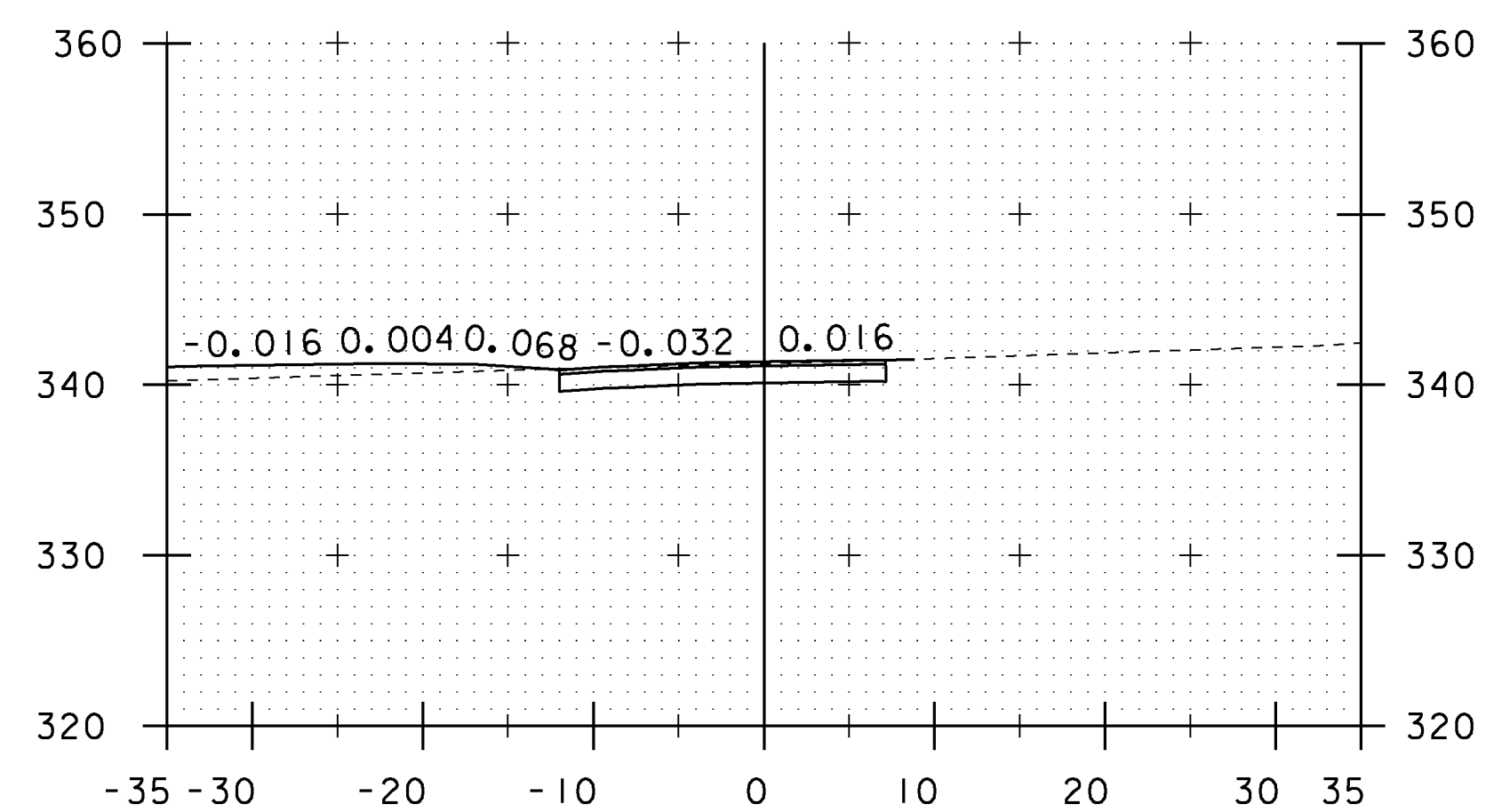




# 305+00 END APPROACH ROADWAY CONSTRUCTION

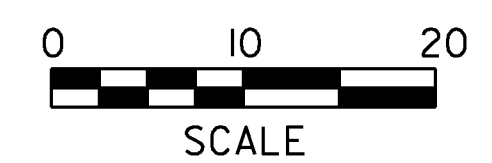


# 304+83.64 GRAVEL DRIVE LT



# SECTION A-A

EXISTING & PROPOSED WATERLINES  
ARE FOR REFERENCE ONLY. PLEASE  
REFER TO WATERLINE SHEETS 102-104

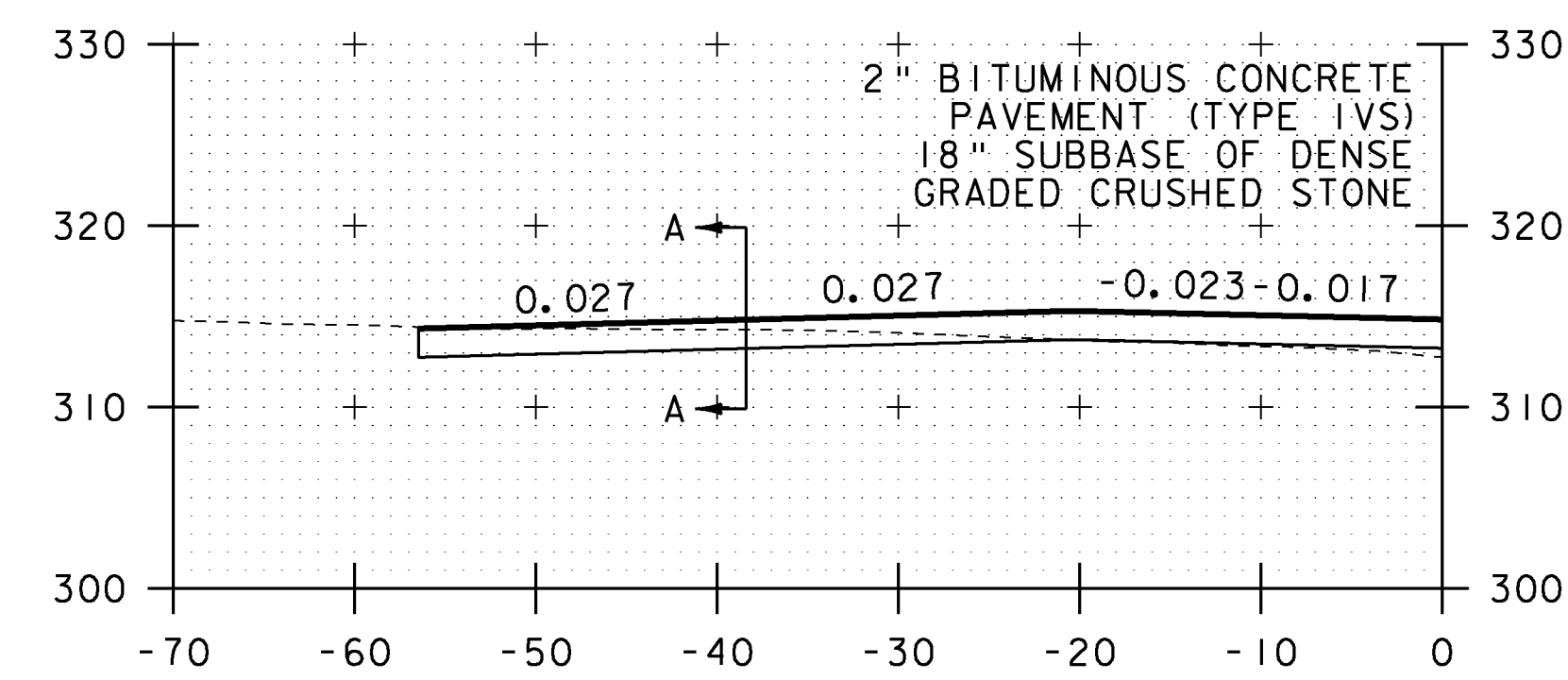


NOTE:  
DRAINAGE FEATURES ARE NOT PROJECTED ONTO  
CROSS SECTIONS, PLEASE REFER TO DRAINAGE  
LAYOUT AND DRAINAGE PROFILE SHEETS FOR  
DETAILED INFORMATION (TYP.)

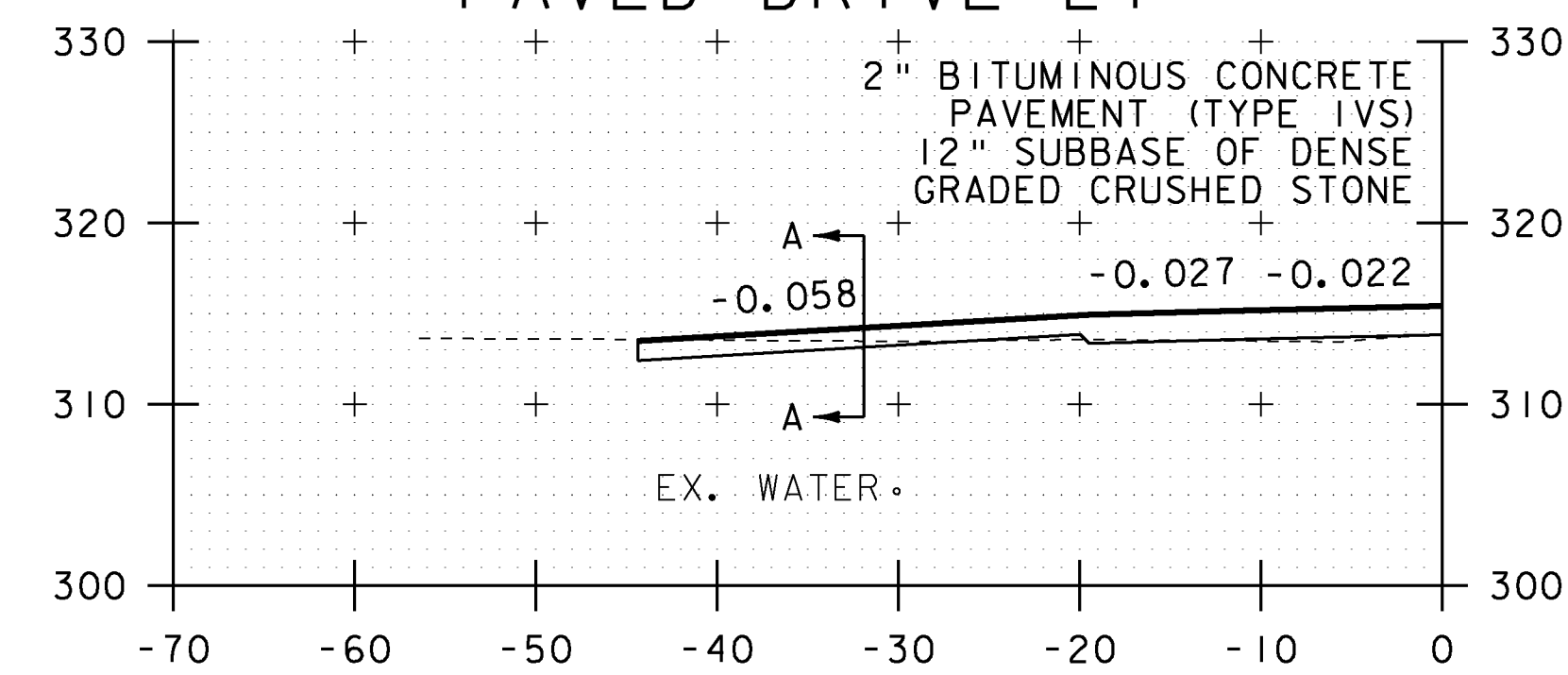
STA. 304+83.64 TO STA. 305+00

|                                 |                        |
|---------------------------------|------------------------|
| PROJECT NAME: MILTON            | PLOT DATE: 23-FEB-2011 |
| PROJECT NUMBER: STP 5800 (2)    | DRAWN BY: D. LYMAN     |
| FILE NAME: t92D289xsl.dgn       | CHECKED BY: J. DEVLIN  |
| PROJECT LEADER: J. SCHULTZ      | SHEET 96 OF 104        |
| DESIGNED BY: D. LYMAN           |                        |
| LAKE ROAD CROSS SECTION SHEET 6 |                        |

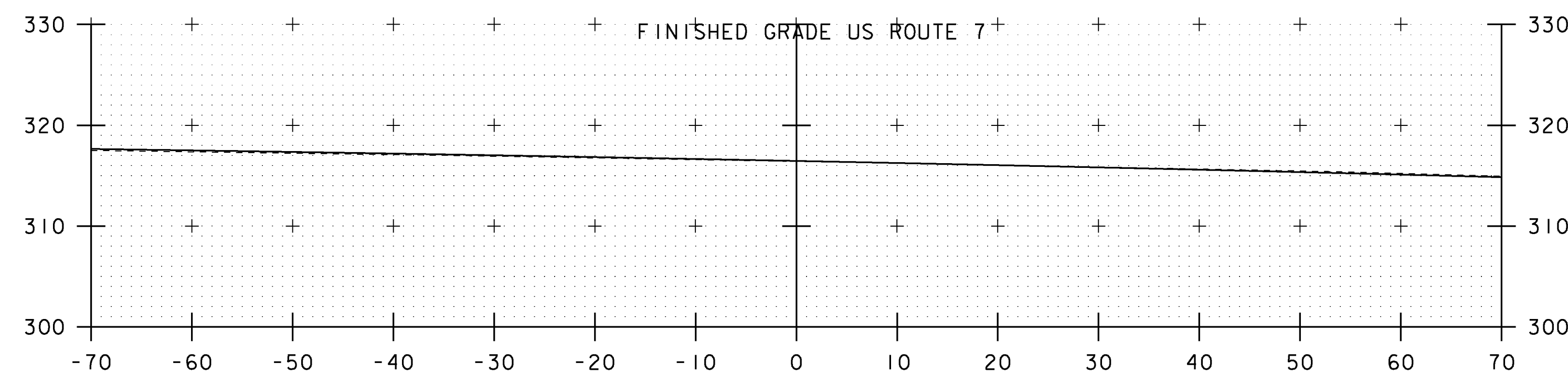




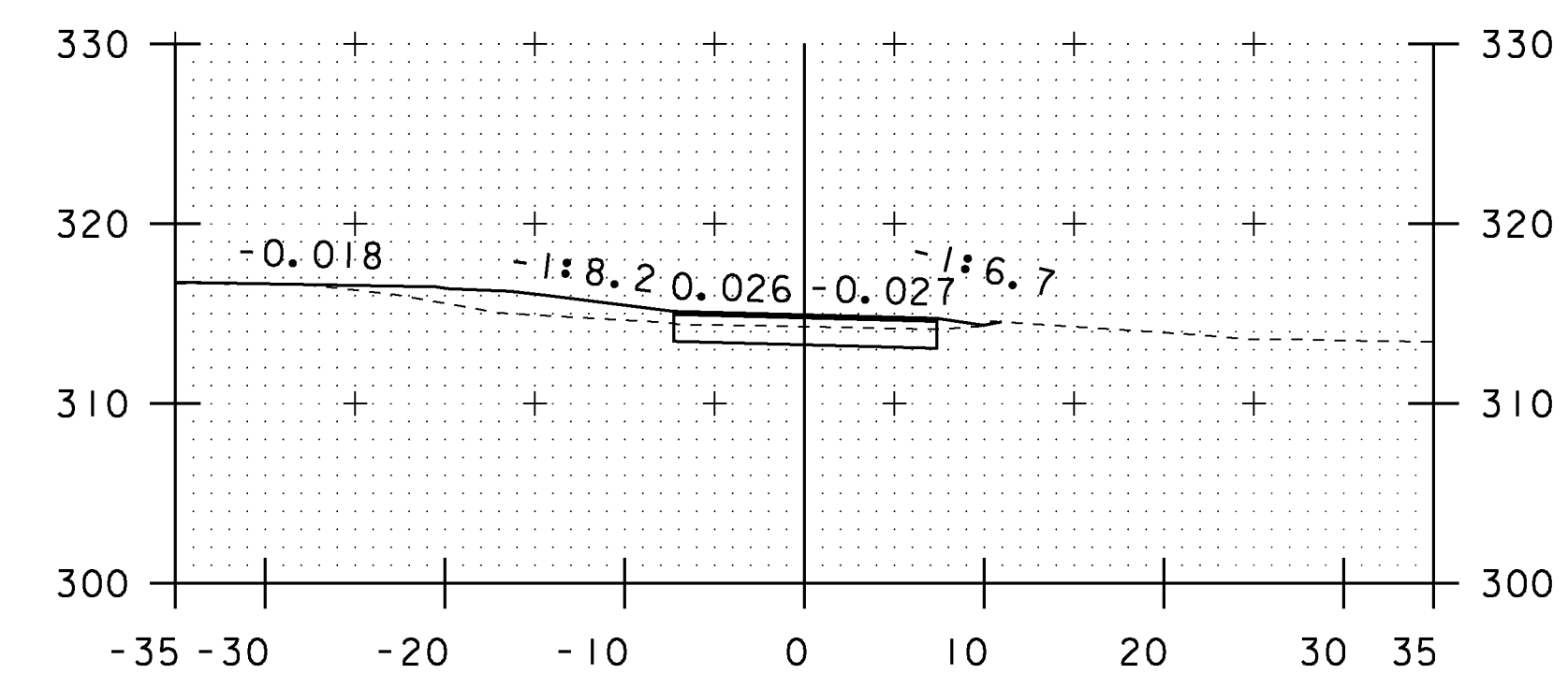
200+49.49  
SKEWED 295°33'04.68"  
PAVED DRIVE LT



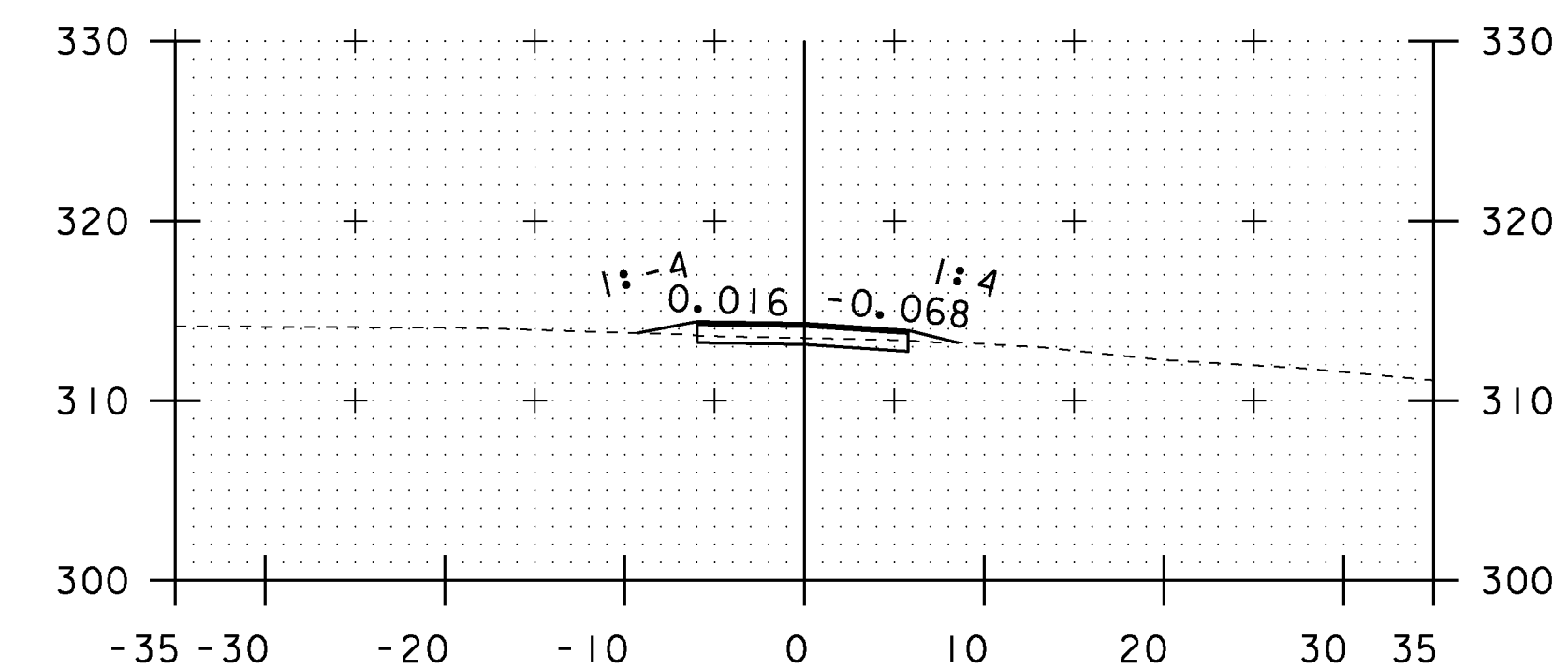
200+32.31  
SKEWED 52°57'24.51"  
PAVED DRIVE LT



200+00

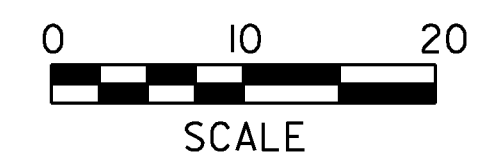


SECTION A-A



SECTION A-A

EXISTING & PROPOSED WATERLINES  
ARE FOR REFERENCE ONLY. PLEASE  
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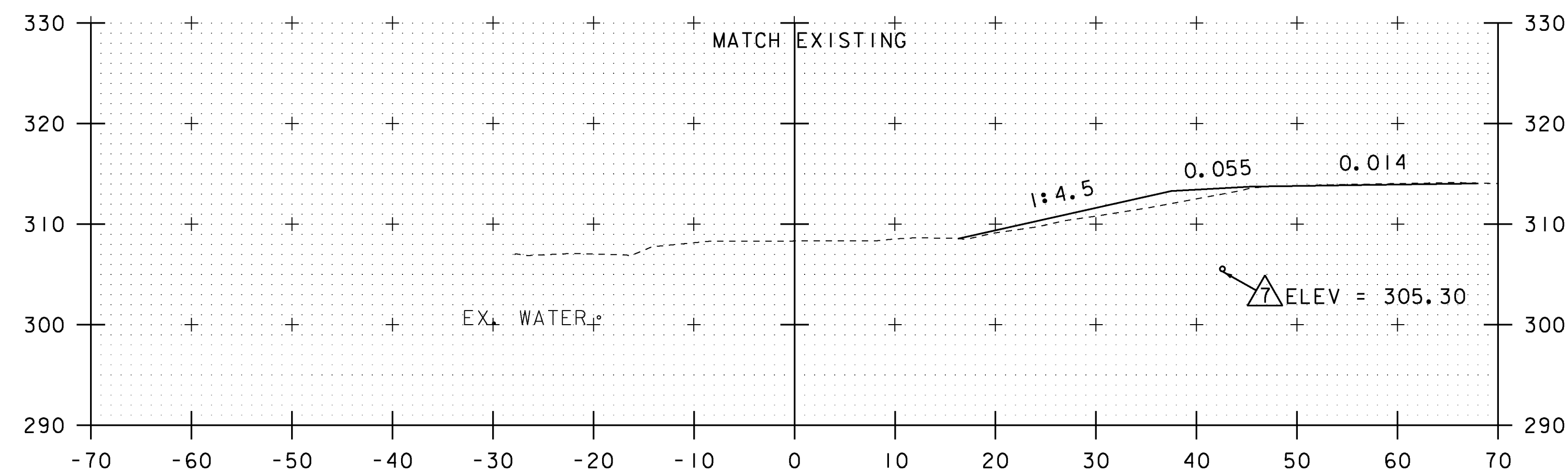
NOTE:  
DRAINAGE FEATURES ARE NOT PROJECTED ONTO  
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LAYOUT AND DRAINAGE PROFILE SHEETS FOR  
DETAILED INFORMATION (TYP.)

STA. 200+00 TO STA. 200+49.49

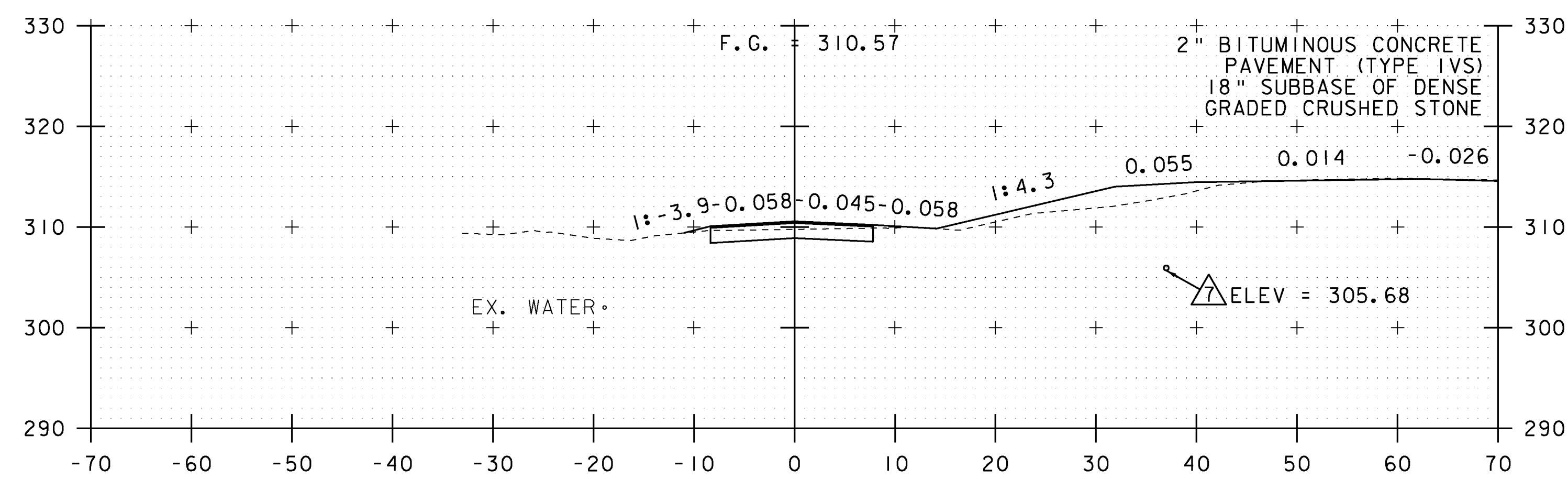
PROJECT NAME: MILTON  
PROJECT NUMBER: STP 5800 (2)

FILE NAME: +92D289xsl.dgn PLOT DATE: 23-FEB-2011  
PROJECT LEADER: J. SCHULTZ DRAWN BY: D. LYMAN  
DESIGNED BY: D. LYMAN CHECKED BY: J. DEVLIN  
KILBURN ROAD CROSS SECTION SHEET 1 SHEET 97 OF 104

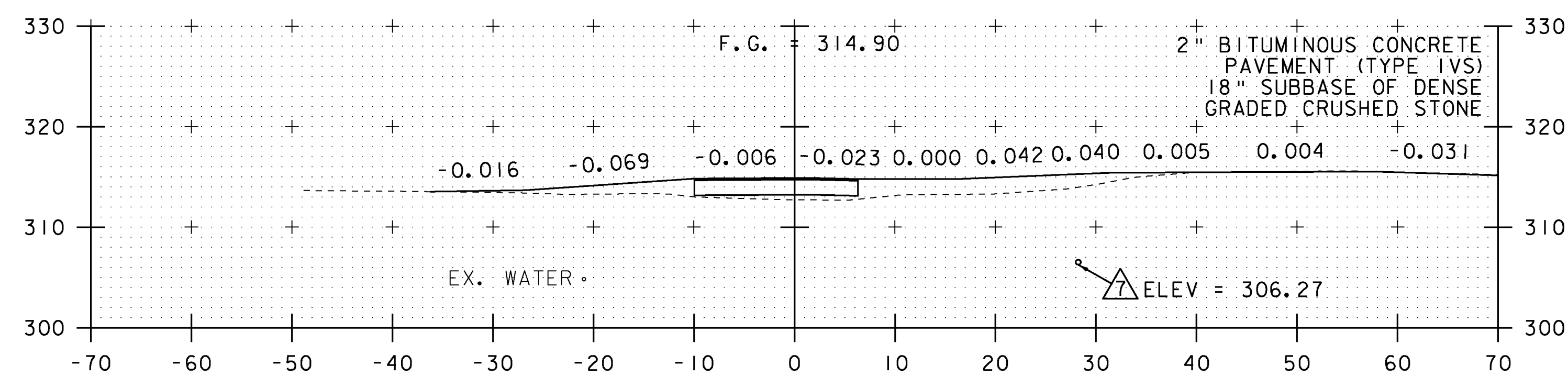




201+25.72  
END APPROACH  
ROADWAY CONSTRUCTION

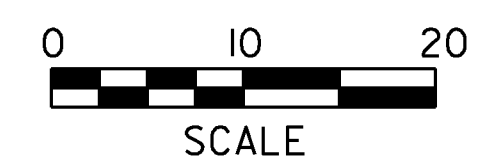


201+00



200+50

EXISTING & PROPOSED WATERLINES  
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LAYOUT AND DRAINAGE PROFILE SHEETS FOR  
DETAILED INFORMATION (TYP.)

STA. 200+50 TO STA. 201+25.72

PROJECT NAME: MILTON  
PROJECT NUMBER: STP 5800 (2)

FILE NAME: +92D289xsl.dgn PLOT DATE: 23-FEB-2011  
PROJECT LEADER: J. SCHULTZ DRAWN BY: D. LYMAN  
DESIGNED BY: D. LYMAN CHECKED BY: J. DEVLIN  
KILBURN ROAD CROSS SECTION SHEET 2 SHEET 98 OF 104



SOIL CLASSIFICATION

|        |                                   |
|--------|-----------------------------------|
| AASHTO |                                   |
| A1     | GRAVEL AND SAND                   |
| A2     | SILTY OR CLAYEY GRAVEL AND SAND   |
| A3     | FINE SAND                         |
| A4     | SILTY SOIL - LOW COMPRESSIBILITY  |
| A5     | SILTY SOIL - HIGHLY COMPRESSIBLE  |
| A6     | CLAYEY SOIL - LOW COMPRESSIBILITY |
| A7     | CLAYEY SOIL - HIGHLY COMPRESSIBLE |

ROCK QUALITY DESIGNATION

| R.Q.D. (%) | ROCK DESCRIPTION |
|------------|------------------|
| <25        | VERY POOR        |
| 25 to 50   | POOR             |
| 51 to 75   | FAIR             |
| 76 to 90   | GOOD             |
| >90        | EXCELLENT        |

SHEAR STRENGTH

| UNDRAINED SHEAR STRENGTH IN P.S.F. | CONSISTENCY |
|------------------------------------|-------------|
| <250                               | VERY SOFT   |
| 250-500                            | SOFT        |
| 500-1000                           | MED. STIFF  |
| 1000-2000                          | STIFF       |
| 2000-4000                          | VERY STIFF  |
| >4000                              | HARD        |

CORRELATION GUIDE OF "N" TO DENSITY /CONSISTENCY

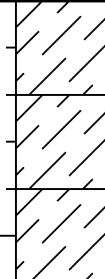
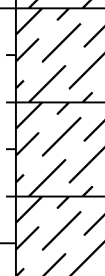
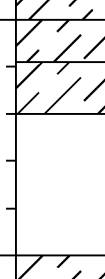
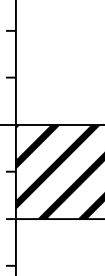
| DENSITY (GRANULAR SOILS) |                  | CONSISTENCY (COHESIVE SOILS) |                  |
|--------------------------|------------------|------------------------------|------------------|
| N                        | DESCRIPTIVE TERM | N                            | DESCRIPTIVE TERM |
| <5                       | VERY LOOSE       | <2                           | VERY SOFT        |
| 5-10                     | LOOSE            | 2-4                          | SOFT             |
| 11-24                    | MED. DENSE       | 5-8                          | MED. STIFF       |
| 25-50                    | DENSE            | 9-15                         | STIFF            |
| >50                      | VERY DENSE       | 16-30                        | VERY STIFF       |
|                          |                  | 31-60                        | HARD             |
|                          |                  | >60                          | VERY HARD        |

COMMONLY USED SYMBOLS

|       |                                   |
|-------|-----------------------------------|
| ▼     | WATER ELEVATION                   |
| ⊙     | STANDARD PENETRATION BORING       |
| ⊗     | AUGER BORING                      |
| ○     | ROD SOUNDING                      |
| S     | SAMPLE                            |
| N     | STANDARD PENETRATION TEST         |
|       | BLOW COUNT PER FOOT FOR:          |
|       | 2" O.D. SAMPLER                   |
|       | 1 3/8" I.D. SAMPLER               |
|       | HAMMER WEIGHT OF 140 LBS.         |
|       | HAMMER FALL OF 30"                |
| VS    | FIELD VANE SHEAR TEST             |
| US    | UNDISTURBED SOIL SAMPLE           |
| B     | BLAST                             |
| DC    | DIAMOND CORE                      |
| MD    | MUD DRILL                         |
| WA    | WASH AHEAD                        |
| HSA   | HOLLOW STEM AUGER                 |
| AX    | CORE SIZE 1 1/8"                  |
| BX    | CORE SIZE 1 3/8"                  |
| NX    | CORE SIZE 2 1/8"                  |
| M     | DOUBLE TUBE CORE BARREL USED      |
| LL    | LIQUID LIMIT                      |
| PL    | PLASTIC LIMIT                     |
| PI    | PLASTICITY INDEX                  |
| NP    | NON PLASTIC                       |
| W     | MOISTURE CONTENT (DRY WGT. BASIS) |
| D     | DRY                               |
| M     | MOIST                             |
| MTW   | MOIST TO WET                      |
| W     | WET                               |
| SAT   | SATURATED                         |
| BO    | BOULDER                           |
| GR    | GRAVEL                            |
| SA    | SAND                              |
| SI    | SILT                              |
| CL    | CLAY                              |
| HP    | HARDPAN                           |
| LE    | LEDGE                             |
| NLTD  | NO LEDGE TO DEPTH                 |
| CNPF  | CAN NOT PENETRATE FURTHER         |
| TLOB  | TO LEDGE OR BOULDER               |
| NR    | NO RECOVERY                       |
| REC.  | RECOVERY                          |
| %REC. | PERCENT RECOVERY                  |
| RQD   | ROCK QUALITY DESIGNATION          |
| CBR   | CALIFORNIA BEARING RATIO          |
| <     | LESS THAN                         |
| >     | GREATER THAN                      |
| R     | REFUSAL (N>100)                   |

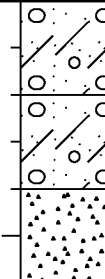
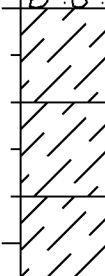
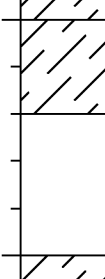
COLOR

|     |        |      |              |
|-----|--------|------|--------------|
| blk | BLACK  | pnk  | PINK         |
| bl  | BLUE   | pu   | PURPLE       |
| brn | BROWN  | rd   | RED          |
| dk  | DARK   | tn   | TAN          |
| gry | GRAY   | wh   | WHITE        |
| gn  | GREEN  | yel  | YELLOW       |
| lt  | LIGHT  | mltc | MULTICOLORED |
| or  | ORANGE |      |              |

|                                              |                                                                                     |                                              | STATE OF VERMONT<br>AGENCY OF TRANSPORTATION<br>MATERIALS & RESEARCH SECTION<br>SUBSURFACE INFORMATION |                                                                                                                                                                  |               | BORING NUMBER: B-101<br>SHEET 1 of 1<br>DATE STARTED: 7/25/07<br>DATE COMPLETED: 7/25/07 |              |           |           |
|-------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|----------------------------------------------|--------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|------------------------------------------------------------------------------------------|--------------|-----------|-----------|
| PROJECT NAME: MILTON<br>SITE NAME: US7 & TH3<br>STATION: 300+75.00<br>OFFSET: -27.00<br>VTSPG: N 784885.92 ft E 1480298.22 ft |                                                                                     |                                              |                                                                                                        | PROJECT NUMBER: STP 5800(2)<br>SITE NUMBER: ROADWAY-INTERSECTION<br>GROUND ELEVATION: 325.5 ft<br>GROUNDWATER DEPTH: Hole Caved In<br>PROJECT PIN NUMBER: 92D289 |               |                                                                                          |              |           |           |
| BORING CREW<br>CREW CHIEF: PORTER<br>DRILLER: PORTER<br>LOGGER: WERNER                                                        |                                                                                     |                                              |                                                                                                        | BORING RIG: LAG TRACK RIG #9 w/AUTO HAMMER<br>BORING TYPE: HOLLOW STEM AUGER<br>SAMPLE TYPE: SPLIT BARREL<br>CHECKED BY: DLG                                     |               |                                                                                          |              |           |           |
| DEPTH<br>(ft)                                                                                                                 | SYMBOL                                                                              | CLASSIFICATION OF MATERIALS<br>(Description) | BLOWS<br>PER<br>FOOT                                                                                   | M.C.<br>(%)                                                                                                                                                      | GRAVEL<br>(%) | SAND<br>(%)                                                                              | FINES<br>(%) | LL<br>(%) | PI<br>(%) |
| 5                                                                                                                             |    | A-4, Si, brn, Moist, Rec. = 1.3 ft           | 5                                                                                                      | 25.5                                                                                                                                                             | 1.6           | 13.6                                                                                     | 84.8         |           |           |
|                                                                                                                               |                                                                                     | A-4, Si, brn, Moist, Rec. = 1.5 ft           | 2                                                                                                      | 27.1                                                                                                                                                             | 0.5           | 15.4                                                                                     | 84.1         |           |           |
|                                                                                                                               |                                                                                     | A-4, Si, brn, Moist, Rec. = 1.4 ft           | 7                                                                                                      | 28.2                                                                                                                                                             | 2.9           | 10.8                                                                                     | 86.3         |           |           |
|                                                                                                                               |                                                                                     | A-4, Si, brn, Wet, Rec. = 1.5 ft             | 4                                                                                                      | 28.8                                                                                                                                                             | 0.8           | 6.4                                                                                      | 92.8         |           |           |
|                                                                                                                               |                                                                                     | A-4, Si, brn, Wet, Rec. = 1.4 ft             | 1                                                                                                      | 29.4                                                                                                                                                             | 2.3           | 5.2                                                                                      | 92.5         |           |           |
| 10                                                                                                                            |  | A-4, Si, brn, Wet, Rec. = 1.1 ft             | 4                                                                                                      | 27.6                                                                                                                                                             | 2.9           | 7.5                                                                                      | 89.6         |           |           |
|                                                                                                                               |                                                                                     | A-4, Si, brn, Wet, Rec. = 1.4 ft             | 4                                                                                                      | 27.9                                                                                                                                                             | 1.1           | 3.0                                                                                      | 95.9         |           |           |
|                                                                                                                               |                                                                                     | A-4, Si, brn, Wet, Rec. = 1.3 ft             | 4                                                                                                      | 28.7                                                                                                                                                             | 0.1           | 1.4                                                                                      | 98.5         |           |           |
|                                                                                                                               |                                                                                     | A-4, Si, brn, Wet, Rec. = 1.5 ft             | 5                                                                                                      | 28.2                                                                                                                                                             | 0.1           | 6.6                                                                                      | 93.3         |           |           |
|                                                                                                                               |                                                                                     | A-4, Si, gry, Wet, Rec. = 1.8 ft             | 3                                                                                                      | 28.4                                                                                                                                                             | 0.0           | 0.7                                                                                      | 99.3         |           |           |
| 20                                                                                                                            |  | A-4, ClSi, gry, Wet, Rec. = 0.7 ft           | WH                                                                                                     | 28.7                                                                                                                                                             | 0.0           | 1.1                                                                                      | 98.9         | 27        | 7         |
|                                                                                                                               |                                                                                     | A-4, Si, gry, Wet, Rec. = 1.1 ft             |                                                                                                        | 27.7                                                                                                                                                             | 0.0           | 2.7                                                                                      | 97.3         | 23        | 4         |
|                                                                                                                               |                                                                                     |                                              |                                                                                                        |                                                                                                                                                                  |               |                                                                                          |              |           |           |
| 25                                                                                                                            |  | A-4, ClSi, gry, Wet, Rec. = 2.0 ft           | WH                                                                                                     | 31.7                                                                                                                                                             | 0.0           | 1.3                                                                                      | 98.7         | 29        | 8         |
|                                                                                                                               |                                                                                     |                                              |                                                                                                        |                                                                                                                                                                  |               |                                                                                          |              |           |           |
|                                                                                                                               |                                                                                     |                                              |                                                                                                        |                                                                                                                                                                  |               |                                                                                          |              |           |           |
| 30                                                                                                                            |  | A-6, Cl, gry, Moist, Rec. = 2.0 ft           | WH                                                                                                     | 40.6                                                                                                                                                             | 0.3           | 3.5                                                                                      | 96.2         | 40        | 21        |
|                                                                                                                               |                                                                                     |                                              |                                                                                                        |                                                                                                                                                                  |               |                                                                                          |              |           |           |
|                                                                                                                               |                                                                                     |                                              |                                                                                                        |                                                                                                                                                                  |               |                                                                                          |              |           |           |
|                                                                                                                               |                                                                                     | Hole stopped @ 32.0 ft                       |                                                                                                        |                                                                                                                                                                  |               |                                                                                          |              |           |           |
| 35                                                                                                                            |                                                                                     |                                              |                                                                                                        |                                                                                                                                                                  |               |                                                                                          |              |           |           |

LOG OF BORING - MILTON - STP 5800(2).dgn VT AUTODT 9/25/07

LOG OF BORING - MILTON - STP 5800(2).dgn VT AUTODT 9/25/07

|                                            |                                                                                       |                                              | STATE OF VERMONT<br>AGENCY OF TRANSPORTATION<br>MATERIALS & RESEARCH SECTION<br>SUBSURFACE INFORMATION |                                                                                                                                                                   |               | BORING NUMBER: B-102<br>SHEET 1 of 1<br>DATE STARTED: 7/31/07<br>DATE COMPLETED: 7/31/07 |              |           |           |
|-------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|----------------------------------------------|--------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|------------------------------------------------------------------------------------------|--------------|-----------|-----------|
| PROJECT NAME: MILTON<br>SITE NAME: US7 & TH3<br>STATION: 301+66.50<br>OFFSET: -33.90<br>VTSPG: N 784963.54 ft E 1480234.65 ft |                                                                                       |                                              |                                                                                                        | PROJECT NUMBER: STP 5800(2)<br>SITE NUMBER: ROADWAY-INTERSECTION<br>GROUND ELEVATION: 335.77 ft<br>GROUNDWATER DEPTH: Hole Caved In<br>PROJECT PIN NUMBER: 92D289 |               |                                                                                          |              |           |           |
| BORING CREW<br>CREW CHIEF: PORTER<br>DRILLER: PORTER<br>LOGGER: WERNER                                                        |                                                                                       |                                              |                                                                                                        | BORING RIG: LAG TRACK RIG #9 w/AUTO HAMMER<br>BORING TYPE: HOLLOW STEM AUGER<br>SAMPLE TYPE: SPLIT BARREL<br>CHECKED BY: DLG                                      |               |                                                                                          |              |           |           |
| DEPTH<br>(ft)                                                                                                                 | SYMBOL                                                                                | CLASSIFICATION OF MATERIALS<br>(Description) | BLOWS<br>PER<br>FOOT                                                                                   | M.C.<br>(%)                                                                                                                                                       | GRAVEL<br>(%) | SAND<br>(%)                                                                              | FINES<br>(%) | LL<br>(%) | PI<br>(%) |
| 5                                                                                                                             |    | A-2-4, SiSa, brn, Moist, Rec. = 1.5 ft       | 3                                                                                                      | 10.4                                                                                                                                                              | 0.9           | 68.4                                                                                     | 30.7         |           |           |
|                                                                                                                               |                                                                                       | A-2-4, Sa, brn, Moist, Rec. = 0.9 ft         | 4                                                                                                      | 6.2                                                                                                                                                               | 0.7           | 85.5                                                                                     | 13.8         |           |           |
|                                                                                                                               |                                                                                       | A-3, Sa, brn, Moist, Rec. = 1.3 ft           | 9                                                                                                      | 4.7                                                                                                                                                               | 0.9           | 91.0                                                                                     | 8.1          |           |           |
|                                                                                                                               |                                                                                       | A-3, Sa, brn, Moist, Rec. = 1.1 ft           | 11                                                                                                     | 3.5                                                                                                                                                               | 19.5          | 76.0                                                                                     | 4.5          |           |           |
|                                                                                                                               |                                                                                       | A-1-b, GrSa, brn, Moist, Rec. = 1.0 ft       | 5                                                                                                      | 3.8                                                                                                                                                               | 21.5          | 72.8                                                                                     | 5.7          |           |           |
| 10                                                                                                                            |  | A-4, SiSa, brn, Moist, Rec. = 1.0 ft         | 9                                                                                                      | 17.7                                                                                                                                                              | 12.0          | 49.9                                                                                     | 38.1         |           |           |
|                                                                                                                               |                                                                                       | A-4, Si, brn, Wet, Rec. = 1.6 ft             | 6                                                                                                      | 26.3                                                                                                                                                              | 0.6           | 8.6                                                                                      | 90.8         |           |           |
|                                                                                                                               |                                                                                       | A-4, SoSi, brn, Wet, Rec. = 1.7 ft           | 5                                                                                                      | 28.5                                                                                                                                                              | 1.3           | 34.2                                                                                     | 64.5         |           |           |
| 15                                                                                                                            |  | A-4, Si, gry, Wet, Rec. = 1.6 ft             | 3                                                                                                      | 26.7                                                                                                                                                              | 0.4           | 11.6                                                                                     | 88.0         |           |           |
|                                                                                                                               |                                                                                       | A-4, Si, gry, Wet, Rec. = 1.5 ft             | 1                                                                                                      | 28.2                                                                                                                                                              | 0.0           | 3.4                                                                                      | 96.6         | 24        | 3         |
|                                                                                                                               |                                                                                       | A-4, Si, gry, Wet, Rec. = 1.0 ft             | 4                                                                                                      | 26.9                                                                                                                                                              | 0.0           | 9.9                                                                                      | 90.1         |           |           |
|                                                                                                                               |                                                                                       |                                              |                                                                                                        |                                                                                                                                                                   |               |                                                                                          |              |           |           |
| 25                                                                                                                            |  | A-4, Si, gry, Wet, Rec. = 2.0 ft             | 1                                                                                                      | 29.6                                                                                                                                                              | 0.0           | 3.2                                                                                      | 96.8         | 23        | 3         |
|                                                                                                                               |                                                                                       |                                              |                                                                                                        |                                                                                                                                                                   |               |                                                                                          |              |           |           |
| 30                                                                                                                            |  | A-4, Si, gry, Wet, Rec. = 2.0 ft             | 1                                                                                                      | 30.4                                                                                                                                                              | 0.0           | 0.6                                                                                      | 99.4         | 28        | 5         |
|                                                                                                                               |                                                                                       |                                              |                                                                                                        |                                                                                                                                                                   |               |                                                                                          |              |           |           |
|                                                                                                                               |                                                                                       | Hole stopped @ 32.0 ft                       |                                                                                                        |                                                                                                                                                                   |               |                                                                                          |              |           |           |
| 35                                                                                                                            |                                                                                       |                                              |                                                                                                        |                                                                                                                                                                   |               |                                                                                          |              |           |           |

LOG OF BORING - MILTON - STP 5800(2).dgn VT AUTODT 9/25/07

GENERAL NOTES

1. THE SUBSURFACE EXPLORATIONS SHOWN HEREIN WERE MADE BETWEEN JULY 23, 2007 AND JULY 31, 2007 BY THE AGENCY.
2. SOIL AND ROCK CLASSIFICATIONS, PROPERTIES AND DESCRIPTIONS ARE BASED ON ENGINEERING INTERPRETATION FROM AVAILABLE SUBSURFACE INFORMATION BY THE AGENCY AND MAY NOT NECESSARILY REFLECT ACTUAL VARIATIONS IN SUBSURFACE CONDITIONS THAT MAY BE ENCOUNTERED BETWEEN INDIVIDUAL BORING OR SAMPLE LOCATIONS.
3. OBSERVED WATER LEVELS AND/OR CONDITIONS INDICATED ARE AS RECORDED AT THE TIME OF EXPLORATION AND MAY VARY ACCORDING TO THE PREVAILING RAINFALL, METHODS OF EXPLORATION AND OTHER FACTORS.
4. ENGINEERING JUDGEMENT WAS EXERCISED IN PREPARING THE SUBSURFACE INFORMATION PRESENTED HEREIN. ANALYSIS AND INTERPRETATION OF SUBSURFACE DATA WAS PERFORMED AND INTERPRETED FOR AGENCY DESIGN AND ESTIMATING PURPOSES. PRESENTATION OF THE INFORMATION IN THE CONTRACT IS INTENDED TO PROVIDE THE CONTRACTOR ACCESS TO THE SAME DATA AVAILABLE TO THE AGENCY. THE SUBSURFACE INFORMATION IS PRESENTED IN GOOD FAITH AND IS NOT INTENDED AS A SUBSTITUTE FOR PERSONAL INVESTIGATION, INDEPENDENT INTERPRETATION, INDEPENDENT ANALYSIS OR JUDGEMENT BY THE CONTRACTOR.

DEFINITIONS (AASHTO)

**BEDROCK (LEDGE)** - ROCK IN ITS NATIVE LOCATION OF INDEFINITE THICKNESS.  
**BOULDER** - A ROCK FRAGMENT WITH AN AVERAGE DIMENSION >12 INCHES.  
**COBBLE** - ROCK FRAGMENTS WITH AN AVERAGE DIMENSION BETWEEN 3 AND 12 INCHES.  
**GRAVEL** - ROUNDED PARTICLES OF ROCK <3" AND > 0.075" (#10 SIEVE).  
**SAND** - PARTICLES OF ROCK < 0.075" (#10 SIEVE) AND > 0.0025" (#200 SIEVE).  
**SILT** - SOIL < 0.0025" (#200 SIEVE), NON OR SLIGHTLY PLASTIC AND EXHIBITS NO STRENGTH WHEN AIR-DRIED.  
**CLAY** - FINE GRAINED SOIL, EXHIBITS PLASTICITY WHEN MOIST AND CONSIDERABLE STRENGTH WHEN AIR-DRIED.  
**VARVED** - ALTERNATE LAYERS OF SILT AND CLAY.  
**HARDPAN** - EXTREMELY DENSE SOIL, CEMENTED LAYER, NOT SOFTENED WHEN WET.  
**MUCK** - SOFT ORGANIC SOIL (CONTAINING > 10% ORGANIC MATERIAL).  
**MOISTURE CONTENT** - WEIGHT OF WATER DIVIDED BY DRY WEIGHT OF SOIL.  
**FLOWING SAND** - GRANULAR SOIL SO SATURATED (LOOSE) THAT IT FLOWS INTO DRILL CASING DURING EXTRACTION OF WASH ROD.  
**STRIKE** - ANGLE FROM MAGNETIC NORTH TO LINE OF INTERSECTION OF BED WITH A HORIZONTAL PLANE.  
**DIP** - INCLINATION OF BED WITH A HORIZONTAL PLANE.

PROJECT NAME: MILTON  
PROJECT NUMBER: STP 5800 (2)

FILE NAME: t92D289bor.dgn  
PROJECT LEADER: J. SCHULTZ  
DESIGNED BY: D. LYMAN  
BORING SHEET 1

PLOT DATE: 10-MAR-2011  
DRAWN BY: D. LYMAN  
CHECKED BY: J. DEVLIN  
SHEET 99 OF 104



## SOIL CLASSIFICATION

AASHTO

|    |                                   |
|----|-----------------------------------|
| A1 | GRAVEL AND SAND                   |
| A2 | SILTY OR CLAYEY GRAVEL AND SAND   |
| A3 | FINE SAND                         |
| A4 | SILTY SOIL - LOW COMPRESSIBILITY  |
| A5 | SILTY SOIL - HIGHLY COMPRESSIBLE  |
| A6 | CLAYEY SOIL - LOW COMPRESSIBILITY |
| A7 | CLAYEY SOIL - HIGHLY COMPRESSIBLE |

## ROCK QUALITY DESIGNATION

| R.O.D. (%) | ROCK DESCRIPTION |
|------------|------------------|
| <25        | VERY POOR        |
| 25 to 50   | POOR             |
| 51 to 75   | FAIR             |
| 76 to 90   | GOOD             |
| >90        | EXCELLENT        |

## **SHEAR STRENGTH**

| UNDRAINED<br>SHEAR STRENGTH<br>IN P.S.F. | CONSISTENCY |
|------------------------------------------|-------------|
| <250                                     | VERY SOFT   |
| 250-500                                  | SOFT        |
| 500-1000                                 | MED. STIFF  |
| 1000-2000                                | STIFF       |
| 2000-4000                                | VERY STIFF  |
| >4000                                    | HARD        |

## CORRELATION GUIDE OF "N" TO DENSITY /CONSISTENCY

| DENSITY<br>(GRANULAR SOILS) |                     | CONSISTENCY<br>(COHESIVE SOILS) |                     |
|-----------------------------|---------------------|---------------------------------|---------------------|
| N                           | DESCRIPTIVE<br>TERM | N                               | DESCRIPTIVE<br>TERM |
| <5                          | VERY LOOSE          | <2                              | VERY SOFT           |
| 5-10                        | LOOSE               | 2-4                             | SOFT                |
| 11-24                       | MED. DENSE          | 5-8                             | MED. STIFF          |
| 25-50                       | DENSE               | 9-15                            | STIFF               |
| >50                         | VERY DENSE          | 16-30                           | VERY STIFF          |
|                             |                     | 31-60                           | HARD                |
|                             |                     | >60                             | VERY HARD           |

## COMMONLY USED SYMBOLS

|       |                                   |
|-------|-----------------------------------|
|       | WATER ELEVATION                   |
| ▼     | STANDARD PENETRATION BORING       |
| ⊕     | AUGER BORING                      |
| ○     | ROD SOUNDING                      |
| S     | SAMPLE                            |
| N     | STANDARD PENETRATION TEST         |
|       | BLOW COUNT PER FOOT FOR:          |
|       | 2" O.D. SAMPLER                   |
|       | 1 3/8" I.D. SAMPLER               |
|       | HAMMER WEIGHT OF 140 LBS.         |
|       | HAMMER FALL OF 30"                |
| VS    | FIELD VANE SHEAR TEST             |
| US    | UNDISTURBED SOIL SAMPLE           |
| B     | BLAST                             |
| DC    | DIAMOND CORE                      |
| MD    | MUD DRILL                         |
| WA    | WASH AHEAD                        |
| HSA   | HOLLOW STEM AUGER                 |
| AX    | CORE SIZE 1 1/8"                  |
| BX    | CORE SIZE 1 5/8"                  |
| NX    | CORE SIZE 2 1/8"                  |
| M     | DOUBLE TUBE CORE BARREL USED      |
| LL    | LIQUID LIMIT                      |
| PL    | PLASTIC LIMIT                     |
| PI    | PLASTICITY INDEX                  |
| NP    | NON PLASTIC                       |
| D     | MOISTURE CONTENT (DRY WGT. BASIS) |
| D     | DRY                               |
|       | MOIST                             |
| MTW   | MOIST TO WET                      |
| W     | WET                               |
| SAT   | SATURATED                         |
| BO    | BOULDER                           |
| GR    | GRAVEL                            |
| SA    | SAND                              |
| SI    | SILT                              |
| CL    | CLAY                              |
| HP    | HARDPAN                           |
|       | LEDGE                             |
| NLTD  | NO LEDGE TO DEPTH                 |
| CNPF  | CAN NOT PENETRATE FURTHER         |
| TLOB  | TO LEDGE OR BOULDER               |
| NR    | NO RECOVERY                       |
| REC.  | RECOVERY                          |
| %REC. | PERCENT RECOVERY                  |
| ROD   | ROCK QUALITY DESIGNATION          |
| CBR   | CALIFORNIA BEARING RATIO          |
| <     | LESS THAN                         |
| >     | GREATER THAN                      |
| R     | REFUSAL (N>100)                   |

COLOR

|      |        |       |              |
|------|--------|-------|--------------|
| blk  | BLACK  | pnk   | PINK         |
| bl   | BLUE   | pu    | PURPLE       |
| brn  | BROWN  | rd    | RED          |
| dk   | DARK   | tn    | TAN          |
| gray | GRAY   | wh    | WHITE        |
| gn   | GREEN  | yel   | YELLOW       |
| lt   | LIGHT  | mlt+c | MULTICOLORED |
| or   | ORANGE |       |              |

STATE OF VERMONT  
AGENCY OF TRANSPORTATION  
MATERIALS & RESEARCH SECTION  
SUBSURFACE INFORMATION

BORING NUMBER: B-103  
SHEET 1 of 1  
DATE STARTED: 7/30/07  
DATE COMPLETED: 7/30/07

|                                                                                                                                                                       |                                                                                                                                                                                                              |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>PROJECT NAME:</b> MILTON<br><b>SITE NAME:</b> US7 & TH3<br><b>STATION:</b> 302+86.80<br><b>OFFSET:</b> -22.90<br><b>VTSPG:</b> N 785072.79 ft      E 1480183.32 ft | <b>PROJECT NUMBER:</b> STP 5800(2)<br><b>SITE NUMBER:</b> ROADWAY-INTERSECTION<br><b>GROUND ELEVATION:</b> 335.99 ft<br><b>GROUNDWATER DEPTH:</b> Hole Caved In at 6.0'<br><b>PROJECT PIN NUMBER:</b> 92D289 |
| <b>BORING CREW</b><br><b>CREW CHIEF:</b> PORTER<br><b>DRILLER:</b> PORTER<br><b>LOGGER:</b> WERNER                                                                    | <b>BORING RIG:</b> LAG TRACK RIG #9 w/AUTO HAMMER<br><b>BORING TYPE:</b> HOLLOW STEM AUGER<br><b>SAMPLE TYPE:</b> SPLIT BARREL<br><b>CHECKED BY:</b> DLG                                                     |

| DEPTH<br>(ft) | SYMBOL | CLASSIFICATION OF MATERIALS<br>(Description) | BLOWS<br>PER<br>FOOT | M.C.<br>(%) | GRAVEL<br>(%) | SAND<br>(%) | FINES<br>(%) | LL<br>(%) | PI<br>(%) |
|---------------|--------|----------------------------------------------|----------------------|-------------|---------------|-------------|--------------|-----------|-----------|
| 5             |        | A-2-4, Sa, brn, Moist, Rec. = 1.5 ft         | 5                    | 7.3         | 11.3          | 72.5        | 16.2         |           |           |
|               |        | A-2-4, Sa, brn, Moist, Rec. = 1.6 ft         | 2                    | 8.1         | 2.2           | 82.6        | 15.2         |           |           |
|               |        | A-2-4, Sa, brn, Moist, Rec. = 0.6 ft         | 2                    | 9.2         | 5.9           | 76.7        | 17.4         |           |           |
|               |        | A-3, Sa, brn, Moist, Rec. = 1.3 ft           | 10                   | 5.2         | 4.2           | 90.9        | 4.9          |           |           |
| 10            |        | A-1-b, Sa, brn, Wet, Rec. = 1.6 ft           | 9                    | 9.5         | 7.9           | 87.1        | 5.0          |           |           |
|               |        | A-1-b, Sa, brn, Wet, Rec. = 1.3 ft           | 5                    | 15.9        | 17.9          | 72.5        | 9.6          |           |           |
|               |        | A-4, SoSi, brn, Wet, Rec. = 1.0 ft           | 3                    | 23.3        | 6.6           | 35.6        | 57.8         |           |           |
| 15            |        | A-4, Si, brn, Wet, Rec. = 1.2 ft             | 2                    | 31.1        | 0.0           | 12.2        | 87.8         |           |           |
|               |        | A-4, Si, brn, Wet, Rec. = 1.2 ft             | 3                    | 28.1        | 0.0           | 3.8         | 96.2         | 25        | 3         |
|               |        | A-4, ClSi, gry, Wet, Rec. = 2.0 ft           | WH                   | 30.5        | 0.0           | 1.4         | 98.6         | 28        | 7         |
| 20            |        | A-4, Si, gry, Wet, Rec. = 2.0 ft             | WH                   | 30.6        | 0.0           | 0.8         | 99.2         | 26        | 4         |
|               |        |                                              |                      |             |               |             |              |           |           |
| 25            |        | A-4, ClSi, gry, Wet, Rec. = 2.0 ft           | WH                   | 31.4        | 0.0           | 0.6         | 99.4         | 29        | 8         |
|               |        |                                              |                      |             |               |             |              |           |           |
| 30            |        | A-6, SiCl, gry, Wet, Rec. = 2.0 ft           | WH                   | 35.7        | 0.0           | 3.8         | 96.2         | 35        | 17        |
|               |        |                                              |                      |             |               |             |              |           |           |
| 35            |        | Hole stopped @ 32.0 ft                       |                      |             |               |             |              |           |           |
|               |        |                                              |                      |             |               |             |              |           |           |



STATE OF VERMONT  
AGENCY OF TRANSPORTATION  
MATERIALS & RESEARCH SECTION  
SUBSURFACE INFORMATION

BORING NUMBER: B-104  
SHEET 1 of 1  
DATE STARTED: 7/23/07  
DATE COMPLETED: 7/24/07

PROJECT NAME: MILTON  
SITE NAME: US7 & TH3  
STATION: 300+75.00  
OFFSET: 29.00  
VTSPG: N 784927.73 ft E 1480335.22 ft

PROJECT NUMBER: STP 5800(2)  
SITE NUMBER: ROADWAY-INTERSECTION  
GROUND ELEVATION: 324.0 ft  
GROUNDWATER DEPTH: 24.2 ft 7/24/07  
PROJECT PIN NUMBER: 92D289

BORING CREW  
CREW CHIEF: PORTER  
DRILLER: PORTER  
LOGGER: WERNER

BORING RIG: LAG TRACK RIG #9 w/AUTO HAMMER  
BORING TYPE: HOLLOW STEM AUGER  
SAMPLE TYPE: SPLIT BARREL  
CHECKED BY: DLG

| DEPTH (ft) | SYMBOL | CLASSIFICATION OF MATERIALS (Description) | BLOWS PER FOOT | M.C. (%) | GRAVEL (%) | SAND (%) | FINES (%) | LL (%) | PI (%) |
|------------|--------|-------------------------------------------|----------------|----------|------------|----------|-----------|--------|--------|
| 5          |        | A-2-4, Sa, brn, Moist, Rec. = 0.7 ft      | 2              | 11.4     | 8.0        | 72.7     | 19.3      |        |        |
|            |        | A-3, Sa, brn, Moist, Rec. = 1.3 ft        | 7              | 4.3      | 2.7        | 92.2     | 5.1       |        |        |
|            |        | A-2-4, Sa, brn, Moist, Rec. = 1.4 ft      | 8              | 8.4      | 1.2        | 80.6     | 18.2      |        |        |
|            |        | A-4, Si, brn, Moist, Rec. = 1.9 ft        | 4              | 29.9     | 0.0        | 3.6      | 96.4      |        |        |
| 10         |        | A-4, Si, brn, Wet, Rec. = 1.0 ft          | 4              | 30.9     | 0.0        | 2.7      | 97.3      |        |        |
|            |        | A-4, Si, brn, Wet, Rec. = 1.3 ft          | 4              | 31.0     | 0.0        | 7.0      | 93.0      |        |        |
| 15         |        | A-4, Si, gry, Wet, Rec. = 1.5 ft          | 5              | 27.9     | 0.0        | 5.5      | 94.5      |        |        |
| 20         |        | A-4, Si, gry, Wet, Rec. = 1.9 ft          | WH             | 30.1     | 0.0        | 0.8      | 99.2      | 24     | 2      |
| 25         |        | A-4, ClSi, gry, Wet, Rec. = 2.0 ft        | WH             | 33.5     | 0.0        | 0.6      | 99.4      | 30     | 9      |
| 30         |        | A-7-6, Cl, gry, Moist, Rec. = 2.0 ft      | 3              | 51.7     | 0.3        | 2.2      | 97.5      | 57     | 35     |
| 35         |        | A-7-6, Cl, gry, Moist, Rec. = 2.0 ft      | 1              | 46.0     | 0.0        | 0.8      | 99.2      | 50     | 29     |
|            |        | Hole stopped @ 37.0 ft                    |                |          |            |          |           |        |        |

DO NOT BORING  
MILTON ST 300+75.00 7/24/07

BORING  
MILTON ST 300+75.00 7/24/07

## GENERAL NOTES

1. THE SUBSURFACE EXPLORATIONS SHOWN HEREIN WERE MADE DURING JULY 23, 2007 AND JULY 31, 2007 BY THE AGENCY.
2. LANDS AND ROCK CLASSIFICATIONS, PROPERTIES AND DESCRIPTIONS ARE BASED ON ENGINEERING INTERPRETATION FROM AVAILABLE SUBSURFACE INFORMATION BY THE AGENCY AND MAY NOT NECESSARILY REFLECT ACTUAL VARIATIONS IN SUBSURFACE CONDITIONS THAT MAY BE ENCOUNTERED BETWEEN INDIVIDUAL BORING OR SAMPLE LOCATIONS.
3. OBSERVED WATER LEVELS AND/OR CONDITIONS INDICATED ARE AS RECORDED AT THE TIME OF EXPLORATION AND MAY VARY ACCORDING TO THE PREVAILING RAINFALL, METHODS OF EXPLORATION AND OTHER FACTORS.
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## DEFINITIONS (AASHTO)

**BEDROCK (LEDGE)** - ROCK IN ITS NATIVE LOCATION OF INDEFINITE THICKNESS.  
**BOULDER** - A ROCK FRAGMENT WITH AN AVERAGE DIMENSION >12 INCHES.  
**COBBLE** - ROCK FRAGMENTS WITH AN AVERAGE DIMENSION BETWEEN 3 AND 12 INCHES.  
**GRAVEL** - ROUNDED PARTICLES OF ROCK <3' AND > 0.0787" (\*10 SIEVE).  
**SAND** - PARTICLES OF ROCK < 0.0787" (\*10 SIEVE) AND > 0.0029" (\*200 SIEVE).  
**SILT** - SOIL < 0.0029" (\*200 SIEVE), NON OR SLIGHTLY PLASTIC AND EXHIBITS NO STRENGTH WHEN AIR-DRIED.  
**CLAY** - FINE GRAINED SOIL, EXHIBITS PLASTICITY WHEN MOIST AND CONSIDERABLE STRENGTH WHEN AIR-DRIED.  
**VARVED** - ALTERNATE LAYERS OF SILT AND CLAY.  
**HARDPAN** - EXTREMELY DENSE SOIL, CEMENTED LAYER, NOT SOFTENED WHEN WET.  
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**MOISTURE CONTENT** - WEIGHT OF WATER DIVIDED BY DRY WEIGHT OF SOIL...  
**FLOWING SAND** - GRANULAR SOIL SO SATURATED (LOOSE) THAT IT FLOWS INTO DRILL CASING DURING EXTRACTION OF WASH ROD.  
**STRIKE** - ANGLE FROM MAGNETIC NORTH TO LINE OF INTERSECTION OF BED WITH A HORIZONTAL PLANE.  
**DIP** - INCLINATION OF BED WITH A HORIZONTAL PLANE.

|                              |                        |
|------------------------------|------------------------|
| PROJECT NAME: MILTON         |                        |
| PROJECT NUMBER: STP 5800 (2) |                        |
| FILE NAME: +92D289bor.dgn    | PLOT DATE: 10-MAR-2011 |
| PROJECT LEADER: J. SCHULTZ   | DRAWN BY: D. LYMAN     |
| DESIGNED BY: D. LYMAN        | CHECKED BY: J. DEVLIN  |
| BORING SHEET 2               | SHEET 100 OF 104       |



SOIL CLASSIFICATION

|        |                                   |
|--------|-----------------------------------|
| AASHTO |                                   |
| A1     | GRAVEL AND SAND                   |
| A2     | SILTY OR CLAYEY GRAVEL AND SAND   |
| A3     | FINE SAND                         |
| A4     | SILTY SOIL - LOW COMPRESSIBILITY  |
| A5     | SILTY SOIL - HIGHLY COMPRESSIBLE  |
| A6     | CLAYEY SOIL - LOW COMPRESSIBILITY |
| A7     | CLAYEY SOIL - HIGHLY COMPRESSIBLE |

ROCK QUALITY DESIGNATION

| R.Q.D. (%) | ROCK DESCRIPTION |
|------------|------------------|
| <25        | VERY POOR        |
| 25 to 50   | POOR             |
| 51 to 75   | FAIR             |
| 76 to 90   | GOOD             |
| >90        | EXCELLENT        |

SHEAR STRENGTH

| UNDRAINED SHEAR STRENGTH IN P.S.F. | CONSISTENCY |
|------------------------------------|-------------|
| <250                               | VERY SOFT   |
| 250-500                            | SOFT        |
| 500-1000                           | MED. STIFF  |
| 1000-2000                          | STIFF       |
| 2000-4000                          | VERY STIFF  |
| >4000                              | HARD        |

CORRELATION GUIDE OF "N" TO DENSITY /CONSISTENCY

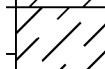
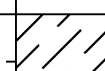
| DENSITY (GRANULAR SOILS) |                  | CONSISTENCY (COHESIVE SOILS) |                  |
|--------------------------|------------------|------------------------------|------------------|
| N                        | DESCRIPTIVE TERM | N                            | DESCRIPTIVE TERM |
| <5                       | VERY LOOSE       | <2                           | VERY SOFT        |
| 5-10                     | LOOSE            | 2-4                          | SOFT             |
| 11-24                    | MED. DENSE       | 5-8                          | MED. STIFF       |
| 25-50                    | DENSE            | 9-15                         | STIFF            |
| >50                      | VERY DENSE       | 16-30                        | VERY STIFF       |
|                          |                  | 31-60                        | HARD             |
|                          |                  | >60                          | VERY HARD        |

COMMONLY USED SYMBOLS

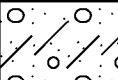
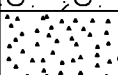
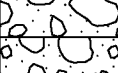
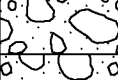
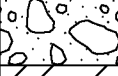
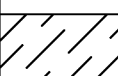
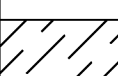
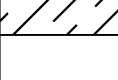
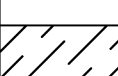
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|-------|-----------------------------------|
| ▼     | WATER ELEVATION                   |
| ⊗     | STANDARD PENETRATION BORING       |
| ⊙     | AUGER BORING                      |
| ⊖     | ROD SOUNDING                      |
| S     | SAMPLE                            |
| N     | STANDARD PENETRATION TEST         |
|       | BLOW COUNT PER FOOT FOR:          |
|       | 2" O.D. SAMPLER                   |
|       | 1 3/8" I.D. SAMPLER               |
|       | HAMMER WEIGHT OF 140 LBS.         |
|       | HAMMER FALL OF 30"                |
| VS    | FIELD VANE SHEAR TEST             |
| US    | UNDISTURBED SOIL SAMPLE           |
| B     | BLAST                             |
| DC    | DIAMOND CORE                      |
| MD    | MUD DRILL                         |
| WA    | WASH AHEAD                        |
| HSA   | HOLLOW STEM AUGER                 |
| AX    | CORE SIZE 1 1/8"                  |
| BX    | CORE SIZE 1 3/8"                  |
| NX    | CORE SIZE 2 1/8"                  |
| M     | DOUBLE TUBE CORE BARREL USED      |
| LL    | LIQUID LIMIT                      |
| PL    | PLASTIC LIMIT                     |
| PI    | PLASTICITY INDEX                  |
| NP    | NON PLASTIC                       |
| W     | MOISTURE CONTENT (DRY WGT. BASIS) |
| D     | DRY                               |
| M     | MOIST                             |
| MTW   | MOIST TO WET                      |
| W     | WET                               |
| SAT   | SATURATED                         |
| BO    | BOULDER                           |
| GR    | GRAVEL                            |
| SA    | SAND                              |
| SI    | SILT                              |
| CL    | CLAY                              |
| HP    | HARDPAN                           |
| LE    | LEDGE                             |
| NLTD  | NO LEDGE TO DEPTH                 |
| CNPF  | CAN NOT PENETRATE FURTHER         |
| TLOB  | TO LEDGE OR BOULDER               |
| NR    | NO RECOVERY                       |
| REC.  | RECOVERY                          |
| %REC. | PERCENT RECOVERY                  |
| RQD   | ROCK QUALITY DESIGNATION          |
| CBR   | CALIFORNIA BEARING RATIO          |
| <     | LESS THAN                         |
| >     | GREATER THAN                      |
| R     | REFUSAL (N>100)                   |

COLOR

|     |        |      |              |
|-----|--------|------|--------------|
| blk | BLACK  | pnk  | PINK         |
| bl  | BLUE   | pu   | PURPLE       |
| brn | BROWN  | rd   | RED          |
| dk  | DARK   | tn   | TAN          |
| gr  | GRAY   | wh   | WHITE        |
| gn  | GREEN  | yel  | YELLOW       |
| lt  | LIGHT  | mltc | MULTICOLORED |
| or  | ORANGE |      |              |

| <div></div> <div>STATE OF VERMONT<br/>AGENCY OF TRANSPORTATION<br/>MATERIALS &amp; RESEARCH SECTION<br/>SUBSURFACE INFORMATION</div> |                                                                                     |                                           |                | <div>BORING NUMBER: B-105<br/>SHEET 1 of 1<br/>DATE STARTED: 7/26/07<br/>DATE COMPLETED: 7/26/07</div>                                                            |            |          |           |        |        |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|----------|-----------|--------|--------|
| PROJECT NAME: MILTON<br>SITE NAME: US7 & TH3<br>STATION: 302+00.50<br>OFFSET: 16.20<br>VTSPG: N 785018.08 ft E 1480260.67 ft                                                                                          |                                                                                     |                                           |                | PROJECT NUMBER: STP 5800(2)<br>SITE NUMBER: ROADWAY-INTERSECTION<br>GROUND ELEVATION: 331.95 ft<br>GROUNDWATER DEPTH: Hole Caved In<br>PROJECT PIN NUMBER: 92D289 |            |          |           |        |        |
| BORING CREW<br>CREW CHIEF: PORTER<br>DRILLER: PORTER<br>LOGGER: WERNER                                                                                                                                                |                                                                                     |                                           |                | BORING RIG: LAG TRACK RIG #9 w/AUTO HAMMER<br>BORING TYPE: HOLLOW STEM AUGER<br>SAMPLE TYPE: SPLIT BARREL<br>CHECKED BY: DLG                                      |            |          |           |        |        |
| DEPTH (ft)                                                                                                                                                                                                            | SYMBOL                                                                              | CLASSIFICATION OF MATERIALS (Description) | BLOWS PER FOOT | M.C. (%)                                                                                                                                                          | GRAVEL (%) | SAND (%) | FINES (%) | LL (%) | PI (%) |
| 5                                                                                                                                                                                                                     |    | A-1-b, GrSa, brn, Moist, Rec. = 1.1 ft    | 5              | 3.0                                                                                                                                                               | 31.9       | 61.4     | 6.7       |        |        |
|                                                                                                                                                                                                                       |    | A-4, SaSi, brn, Moist, Rec. = 1.1 ft      | 6              | 22.5                                                                                                                                                              | 0.0        | 34.6     | 65.4      |        |        |
|                                                                                                                                                                                                                       |    | A-4, Si, brn, Moist, Rec. = 1.2 ft        | 4              | 25.6                                                                                                                                                              | 0.4        | 8.4      | 91.2      |        |        |
|                                                                                                                                                                                                                       |    | A-4, SaSi, brn, Wet, Rec. = 1.2 ft        | 7              | 24.2                                                                                                                                                              | 0.7        | 33.9     | 65.4      |        |        |
| 10                                                                                                                                                                                                                    |   | A-4, Si, brn, Wet, Rec. = 1.4 ft          | 6              | 28.2                                                                                                                                                              | 0.0        | 5.8      | 94.2      |        |        |
|                                                                                                                                                                                                                       |  | A-4, Si, gry, Wet, Rec. = 1.4 ft          | 2              | 26.1                                                                                                                                                              | 0.0        | 3.5      | 96.5      | 23     | 2      |
| 15                                                                                                                                                                                                                    |  | A-4, Si, gry, Wet, Rec. = 1.5 ft          | WH             | 29.1                                                                                                                                                              | 0.0        | 2.0      | 98.0      | 24     | 3      |
|                                                                                                                                                                                                                       |                                                                                     |                                           |                |                                                                                                                                                                   |            |          |           |        |        |
| 20                                                                                                                                                                                                                    |  | A-4, CiSi, gry, Wet, Rec. = 2.0 ft        | 2              | 29.5                                                                                                                                                              | 0.0        | 0.9      | 99.1      | 27     | 7      |
|                                                                                                                                                                                                                       |                                                                                     |                                           |                |                                                                                                                                                                   |            |          |           |        |        |
| 25                                                                                                                                                                                                                    |  | A-6, SiCl, gry, Wet, Rec. = 2.0 ft        | 2              | 35.6                                                                                                                                                              | 0.0        | 1.5      | 98.5      | 36     | 17     |
|                                                                                                                                                                                                                       | Hole stopped @ 27.0 ft                                                              |                                           |                |                                                                                                                                                                   |            |          |           |        |        |
| 30                                                                                                                                                                                                                    |                                                                                     |                                           |                |                                                                                                                                                                   |            |          |           |        |        |
| 35                                                                                                                                                                                                                    |                                                                                     |                                           |                |                                                                                                                                                                   |            |          |           |        |        |

LOG OF BORING - MILTON - STP 5800(2).dgn VT AUTODT 9/25/07

| <div>STATE OF VERMONT<br/>AGENCY OF TRANSPORTATION<br/>MATERIALS &amp; RESEARCH SECTION<br/>SUBSURFACE INFORMATION</div> |                                                                                       |                                              | BORING NUMBER: B-106<br>SHEET 1 of 1<br>DATE STARTED: 7/27/07<br>DATE COMPLETED: 7/27/07                                                                            |             |               |             |              |           |           |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|----------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|---------------|-------------|--------------|-----------|-----------|
| PROJECT NAME: MILTON<br>SITE NAME: US7 & TH3<br>STATION: 302+79.02<br>OFFSET: 18.00<br>VTSPG: N 785086.70 ft E 1480222.42 ft                                                                                |                                                                                       |                                              | PROJECT NUMBER: STP 5800(2)<br>SITE NUMBER: ROADWAY-INTERSECTION<br>GROUND ELEVATION: 335.39 ft<br>GROUNDWATER DEPTH: 23.0 ft 7/27/07<br>PROJECT PIN NUMBER: 92D289 |             |               |             |              |           |           |
| BORING CREW<br>CREW CHIEF: PORTER<br>DRILLER: PORTER<br>LOGGER: WERNER                                                                                                                                      |                                                                                       |                                              | BORING RIG: LAG TRACK RIG #9 w/AUTO HAMMER<br>BORING TYPE: HOLLOW STEM AUGER<br>SAMPLE TYPE: SPLIT BARREL<br>CHECKED BY: DLG                                        |             |               |             |              |           |           |
| DEPTH<br>(ft)                                                                                                                                                                                               | SYMBOL                                                                                | CLASSIFICATION OF MATERIALS<br>(Description) | BLOWS<br>PER<br>FOOT                                                                                                                                                | M.C.<br>(%) | GRAVEL<br>(%) | SAND<br>(%) | FINES<br>(%) | LL<br>(%) | PI<br>(%) |
| 5                                                                                                                                                                                                           |    | A-2-4, Sa, brn, Moist, Rec. = 1.1 ft         | 3                                                                                                                                                                   | 5.8         | 5.6           | 82.0        | 12.4         |           |           |
|                                                                                                                                                                                                             |    | A-3, Sa, brn, Moist, Rec. = 1.4 ft           | 5                                                                                                                                                                   | 5.3         | 12.6          | 82.8        | 4.6          |           |           |
|                                                                                                                                                                                                             |    | A-1-b, GrSa, brn, Moist, Rec. = 1.6 ft       | 14                                                                                                                                                                  | 3.9         | 36.0          | 56.6        | 7.4          |           |           |
|                                                                                                                                                                                                             |    | A-1-b, GrSa, brn, Moist, Rec. = 1.6 ft       | 15                                                                                                                                                                  | 5.2         | 20.7          | 72.2        | 7.1          |           |           |
|                                                                                                                                                                                                             |   | A-1-b, Sa, brn, Wet, Rec. = 1.4 ft           | 9                                                                                                                                                                   | 15.4        | 9.2           | 86.1        | 4.7          |           |           |
| 10                                                                                                                                                                                                          |  | A-4, SaSi, brn, Wet, Rec. = 1.0 ft           | 6                                                                                                                                                                   | 24.2        | 4.9           | 34.3        | 60.8         |           |           |
|                                                                                                                                                                                                             |                                                                                       |                                              |                                                                                                                                                                     |             |               |             |              |           |           |
| 15                                                                                                                                                                                                          |  | A-4, Si, gry, Wet, Rec. = 1.3 ft             | 4                                                                                                                                                                   | 28.3        | 0.1           | 10.7        | 89.2         |           |           |
|                                                                                                                                                                                                             |                                                                                       |                                              |                                                                                                                                                                     |             |               |             |              |           |           |
| 20                                                                                                                                                                                                          |  | A-4, Si, gry, Wet, Rec. = 1.8 ft             | WH                                                                                                                                                                  | 28.5        | 0.0           | 3.1         | 96.9         | 24        | 4         |
|                                                                                                                                                                                                             |  |                                              |                                                                                                                                                                     |             |               |             |              |           |           |
| 25                                                                                                                                                                                                          |                                                                                       |                                              |                                                                                                                                                                     |             |               |             |              |           |           |
|                                                                                                                                                                                                             |  | A-4, CiSi, gry, Wet, Rec. = 1.7 ft           | WH                                                                                                                                                                  | 31.3        | 0.0           | 0.8         | 99.2         | 29        | 10        |
| Hole stopped @ 27.0 ft                                                                                                                                                                                      |                                                                                       |                                              |                                                                                                                                                                     |             |               |             |              |           |           |

LOG OF BORING - MILTON - STP 5800(2).dgn VT AUTODT 9/25/07

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**STRIKE** - ANGLE FROM MAGNETIC NORTH TO LINE OF INTERSECTION OF BED WITH A HORIZONTAL PLANE.  
**DIP** - INCLINATION OF BED WITH A HORIZONTAL PLANE.

PROJECT NAME: MILTON  
PROJECT NUMBER: STP 5800 (2)

FILE NAME: t92D289bor.dgn  
PROJECT LEADER: J. SCHULTZ  
DESIGNED BY: D. LYMAN  
BORING SHEET 3

PLOT DATE: 10-MAR-2011  
DRAWN BY: D. LYMAN  
CHECKED BY: J. DEVLIN  
SHEET 101 OF 104



CIVIL & ENVIRONMENTAL ENGINEERS

FA&A

FORCIER ALDRICH & ASSOCIATES

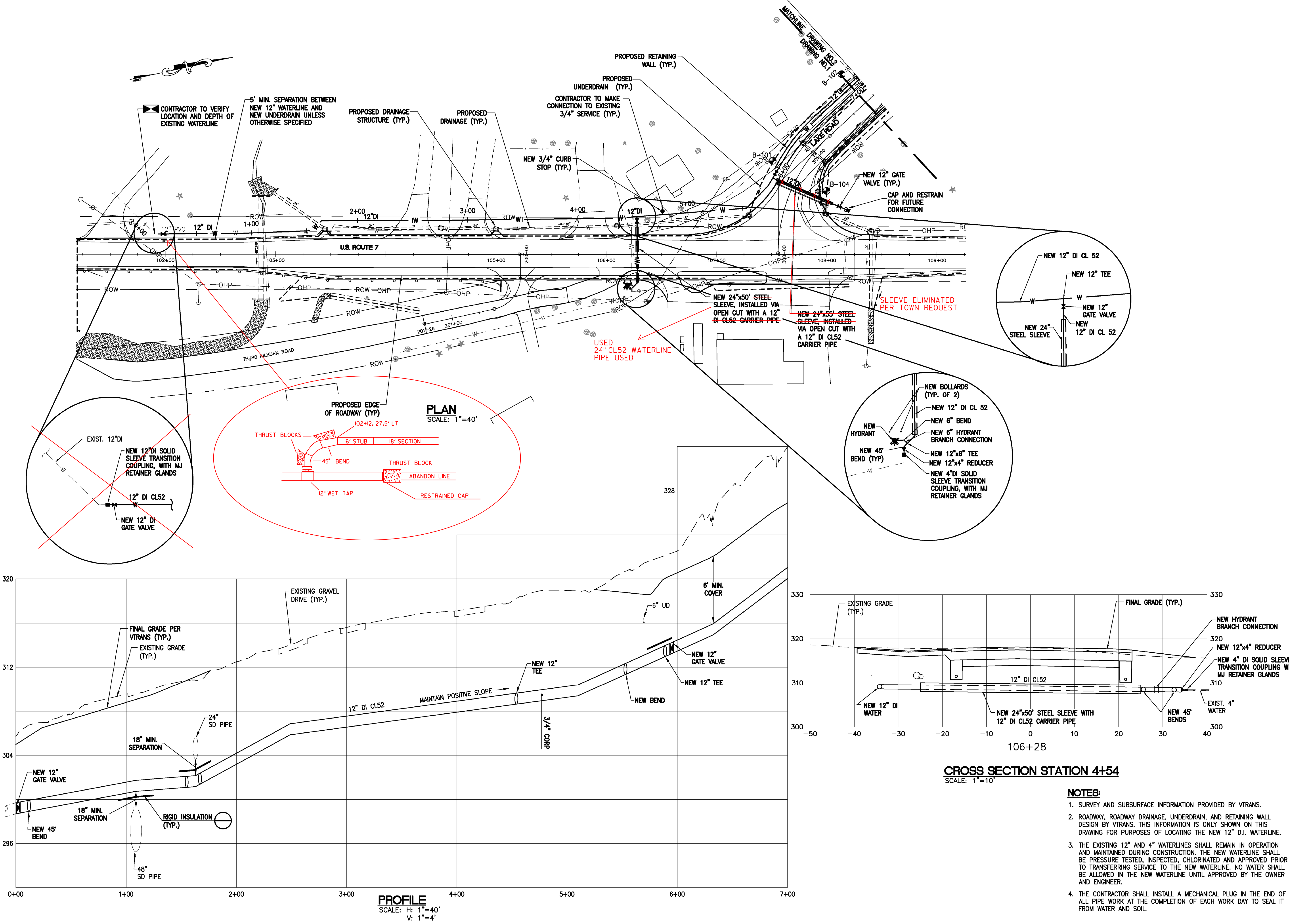
STATE OF VERMONT  
SEASON R. BOOTH  
No. 0488  
Civil  
LICENSED PROFESSIONAL ENGINEER

TOWN OF MILTON  
COUNTY OF CHITTENDEN

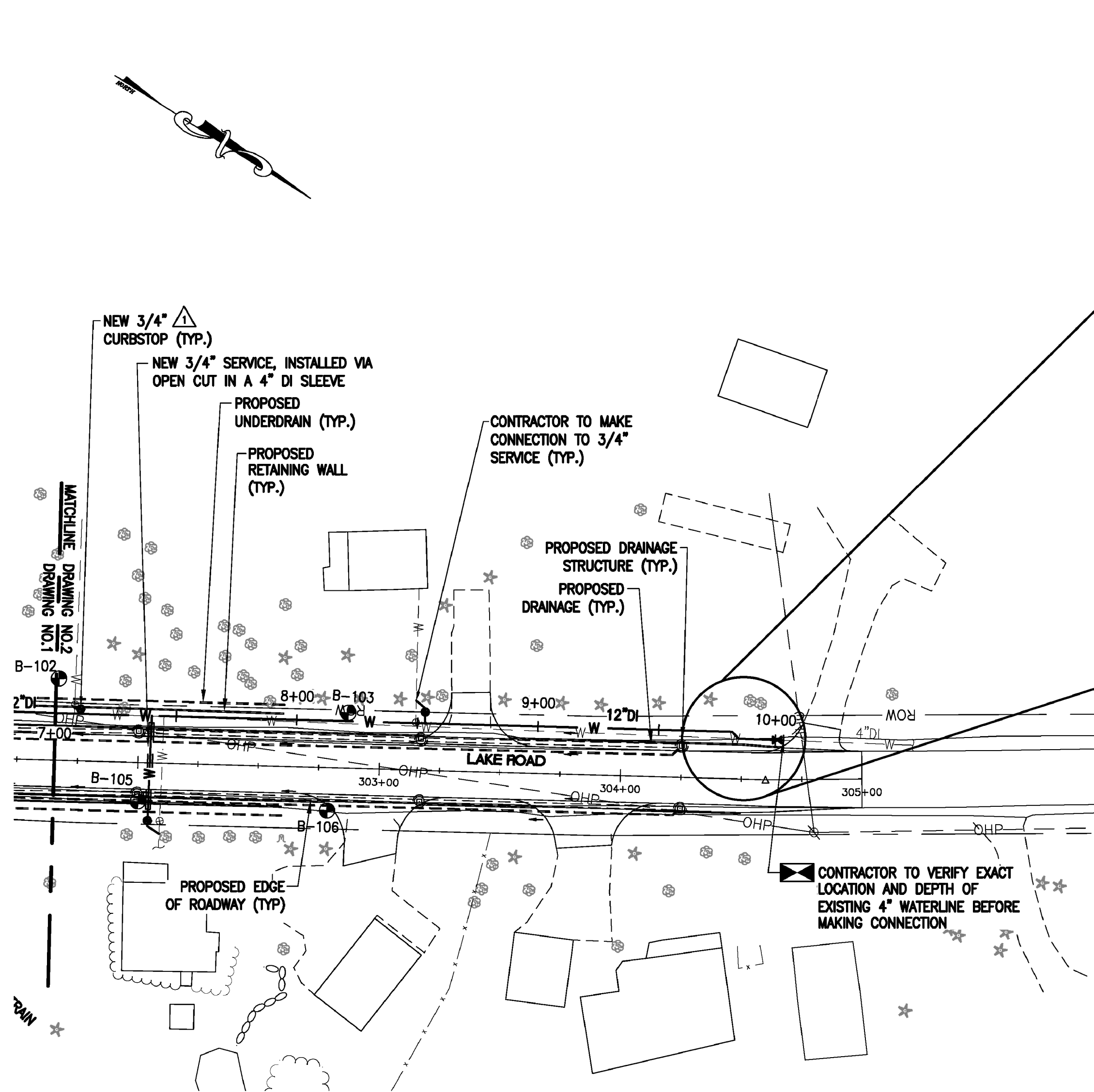
MILTON  
STP 5800 (2)

U.S. ROUTE 7  
PLAN AND PROFILE  
STA. 0+00 TO 7+00

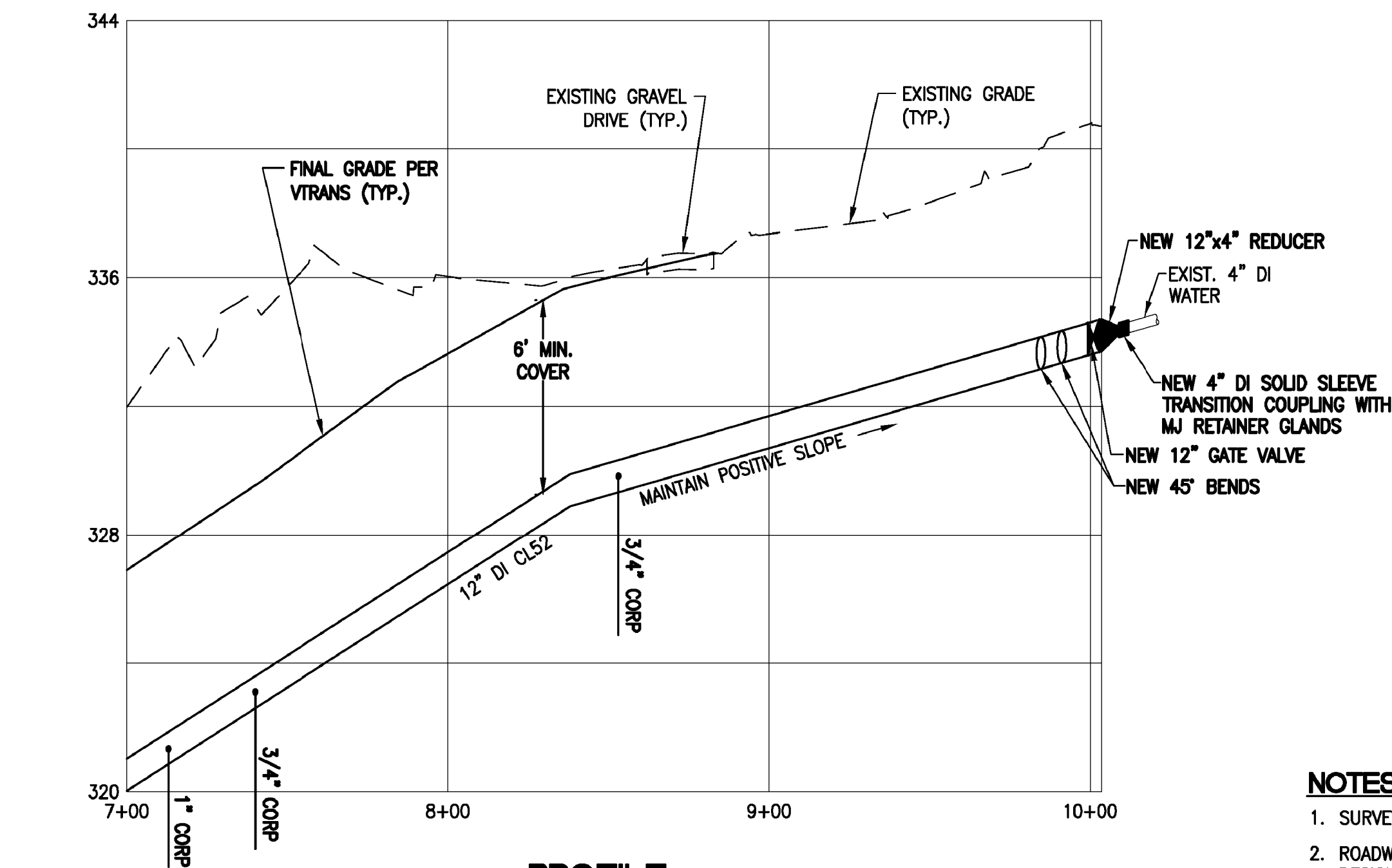
|                   |                      |
|-------------------|----------------------|
| DESIGNED<br>JAB   | PROJECT NO.<br>09033 |
| DRAWN<br>JEB      | DRAWING NO.<br>102   |
| CHECKED<br>WAE    | OF<br>104            |
| DATE<br>MAY, 2009 |                      |







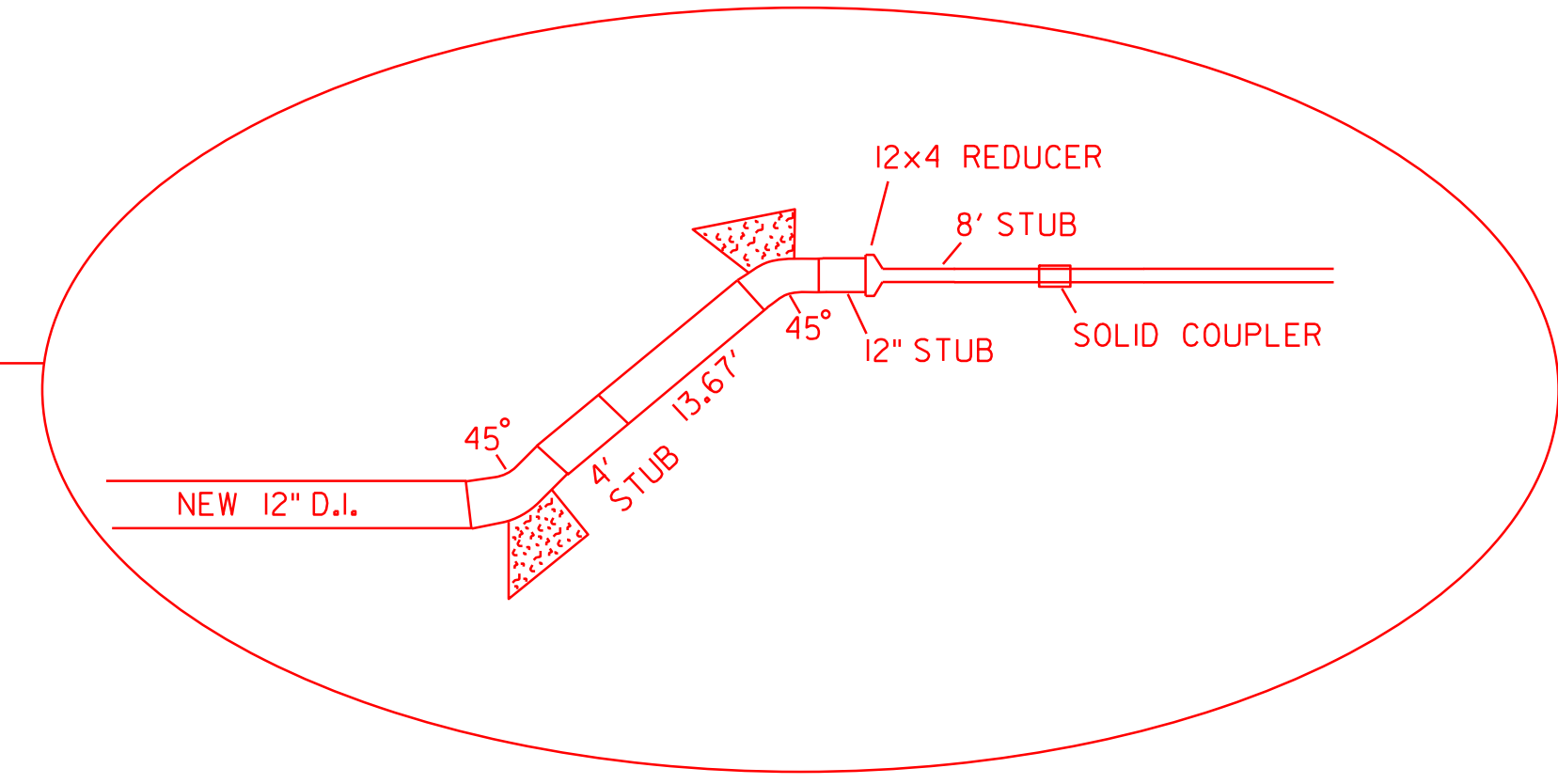
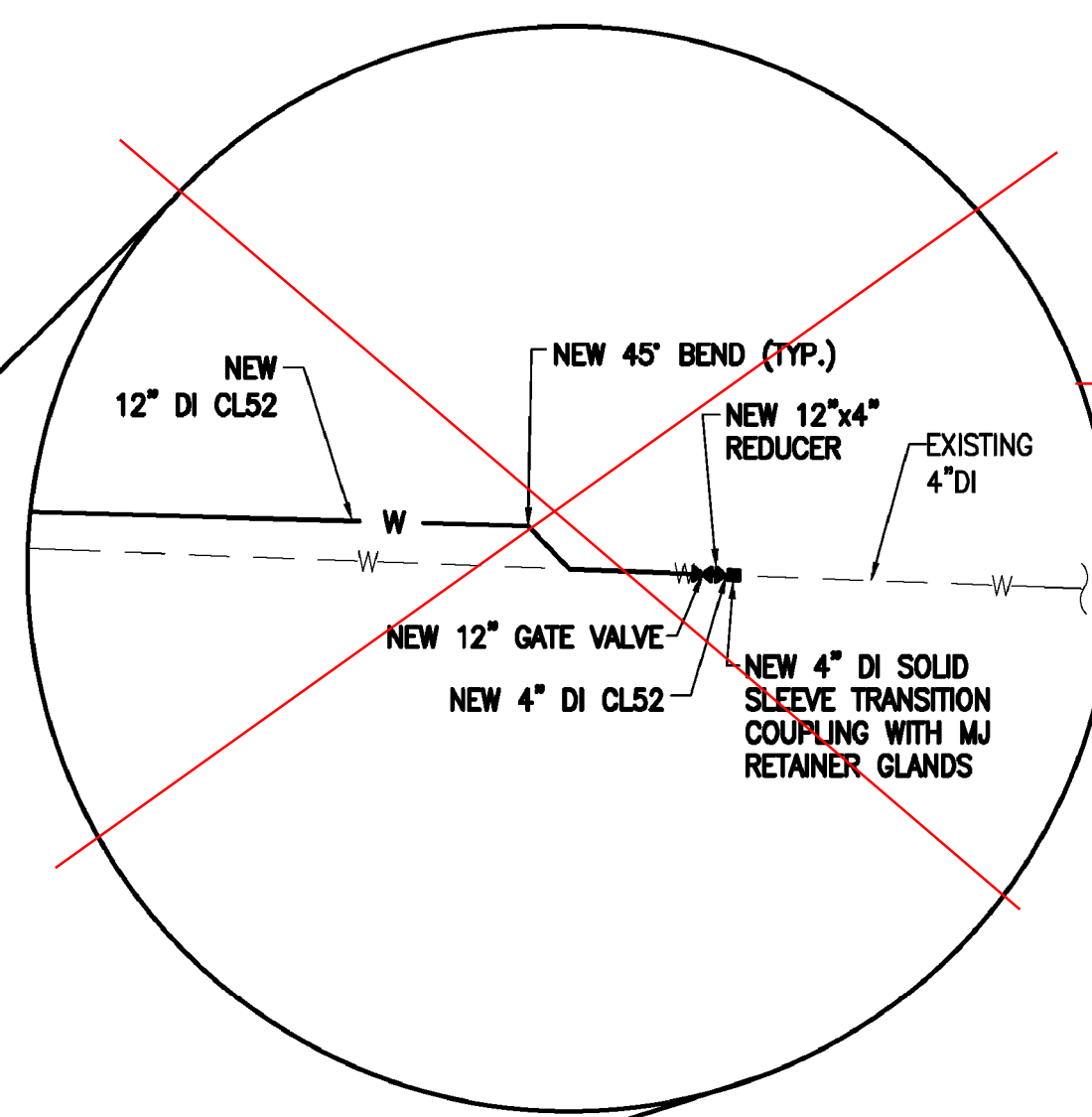
PLAN  
SCALE: 1"=40'



PROFILE  
SCALE: H: 1"=40'  
V: 1"=4'

NOTES:

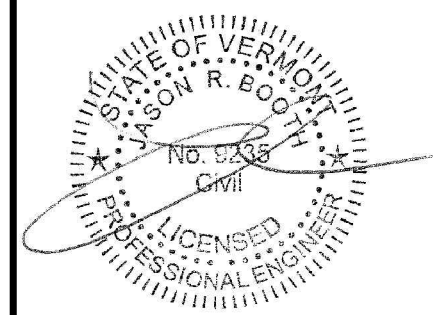
1. SURVEY AND SUBSURFACE INFORMATION PROVIDED BY VTRANS.
2. ROADWAY, ROADWAY DRAINAGE, UNDERDRAIN, AND RETAINING WALL DESIGN BY VTRANS. THIS INFORMATION IS ONLY SHOWN ON THIS DRAWING FOR PURPOSES OF LOCATING THE NEW 12" D.I. WATERLINE.
3. THE EXISTING 12" AND 4" WATERLINES SHALL REMAIN IN OPERATION AND MAINTAINED DURING CONSTRUCTION. THE NEW WATERLINE SHALL BE PRESSURE TESTED, INSPECTED, CHLORINATED AND APPROVED PRIOR TO TRANSFERRING SERVICE TO THE NEW WATERLINE. NO WATER SHALL BE ALLOWED IN THE NEW WATERLINE UNTIL APPROVED BY THE OWNER AND ENGINEER.
4. THE CONTRACTOR SHALL INSTALL A MECHANICAL PLUG IN THE END OF ALL PIPE WORK AT THE COMPLETION OF EACH WORK DAY TO SEAL IT FROM WATER AND SOIL.



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FORCIER  
ALDRICH &  
ASSOCIATES



TOWN OF MILTON  
COUNTY OF CHITTENDEN

MILTON  
STP 5800 (2)

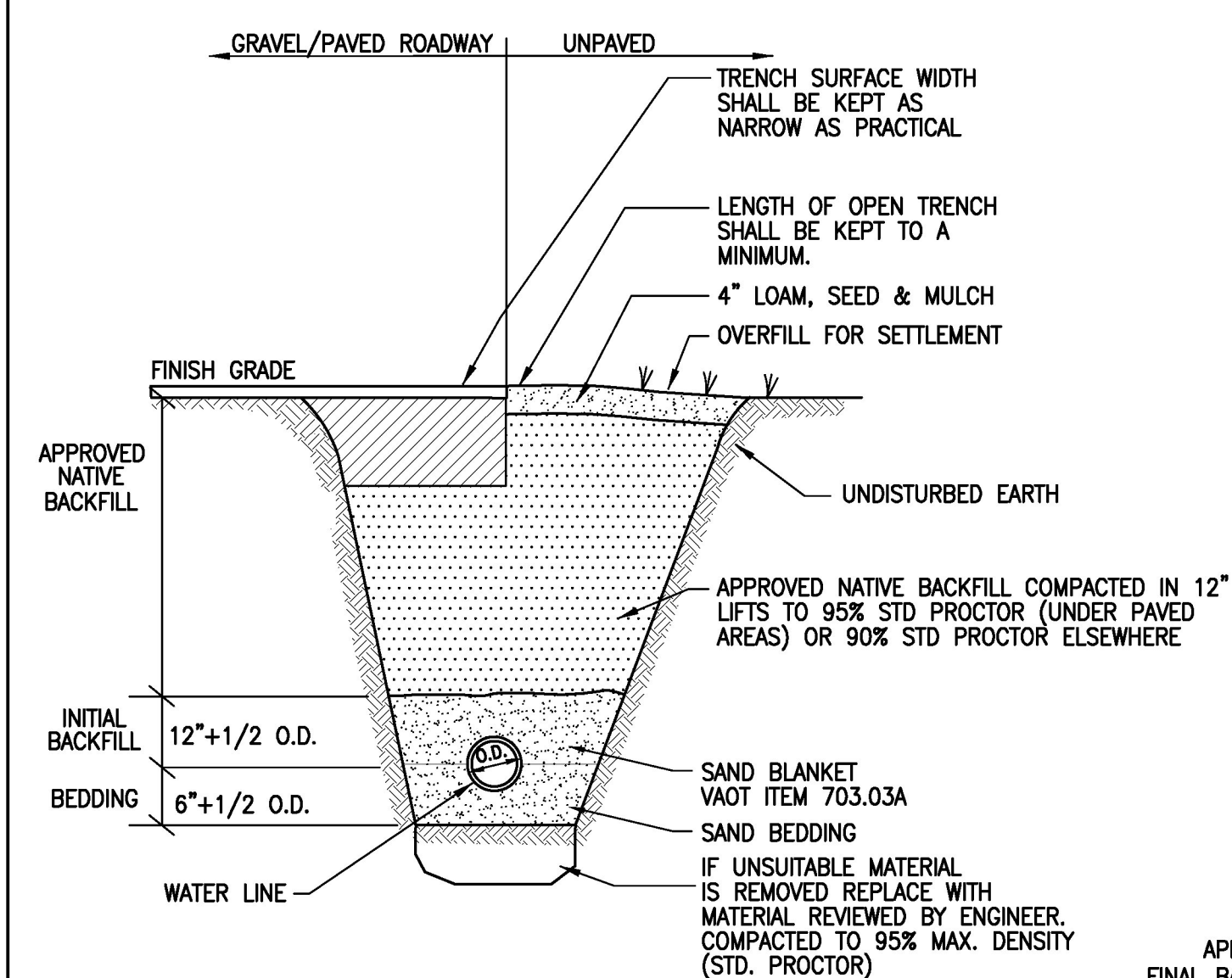
LAKE ROAD  
PLAN AND PROFILE  
STATION 7+00 TO 10+03

DESIGNED  
JAB  
PROJECT NO.  
09033

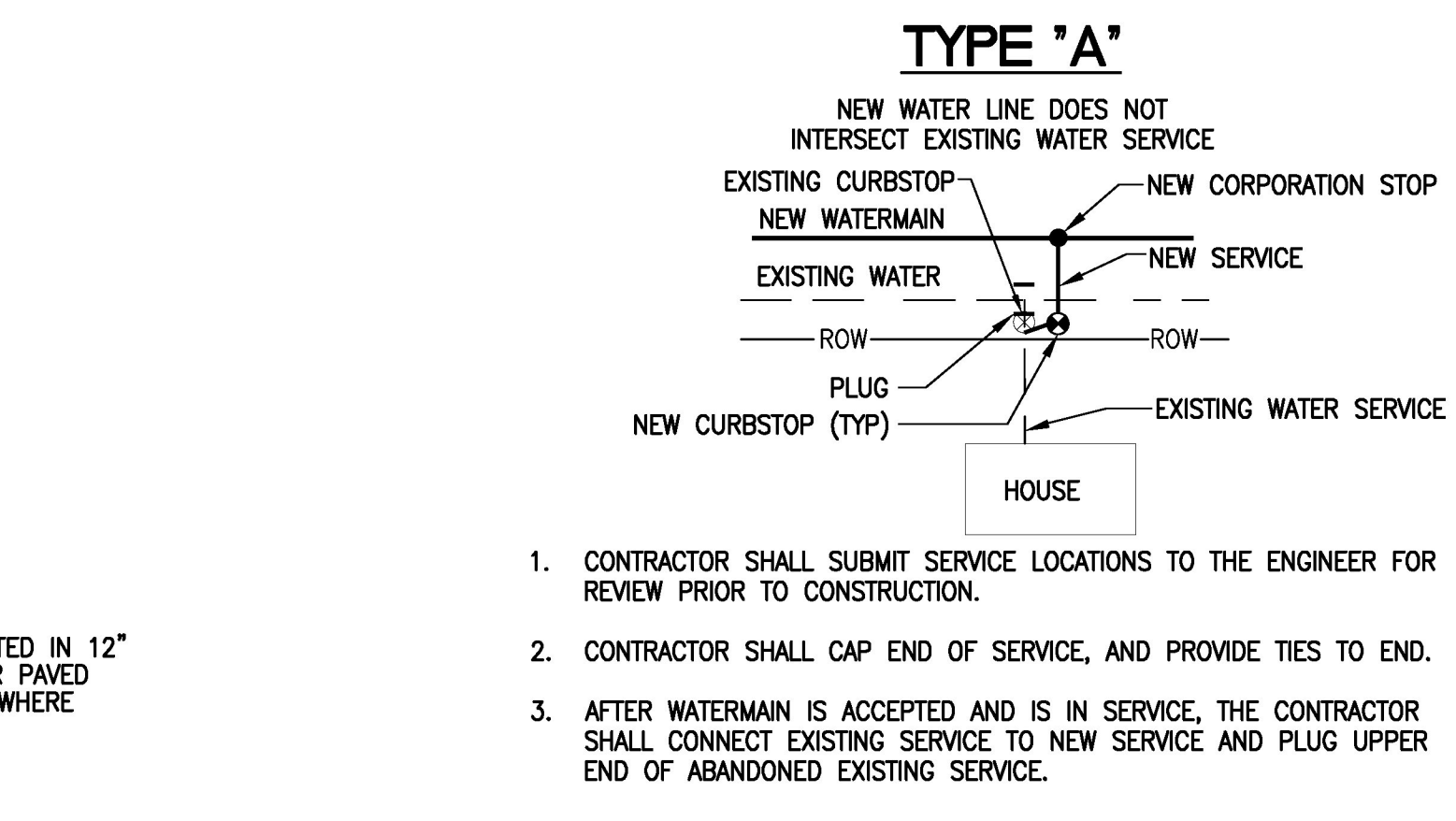
DRAWN  
JEB  
DRAWING NO.  
103  
OF  
104

CHECKED  
WAE  
DATE  
MAY, 2009

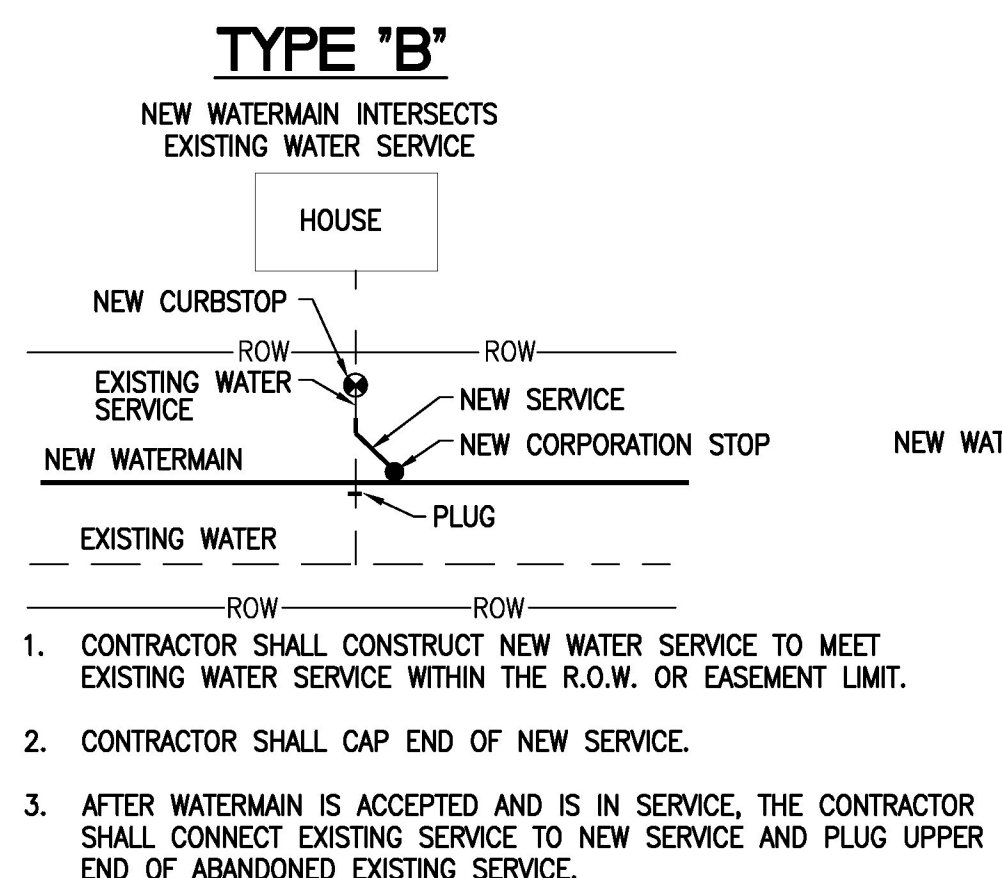




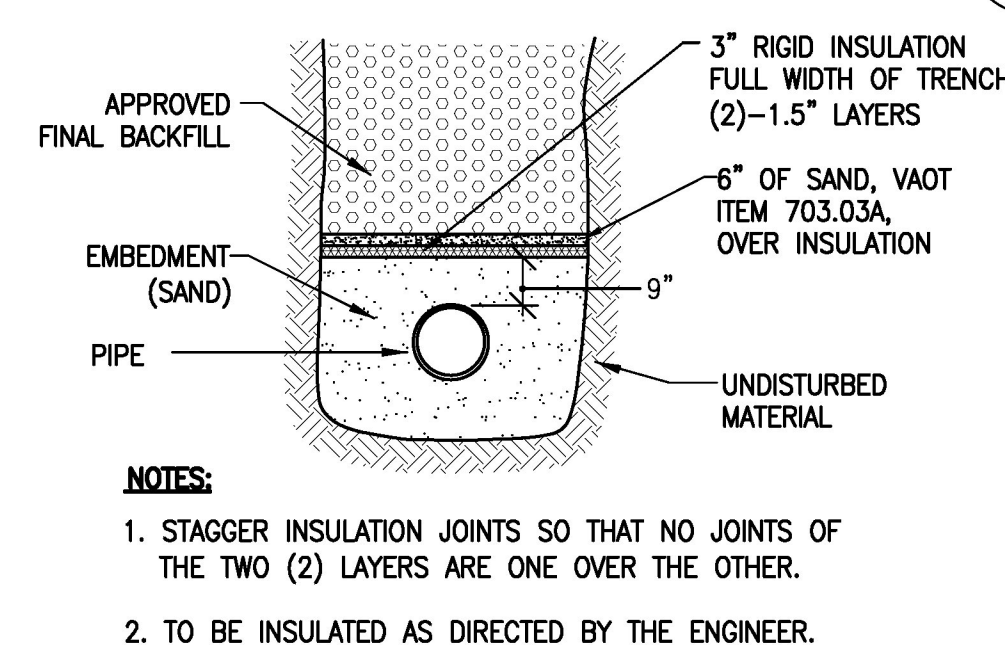
**A TYPICAL WATERLINE TRENCH DETAIL**  
SCALE: NONE



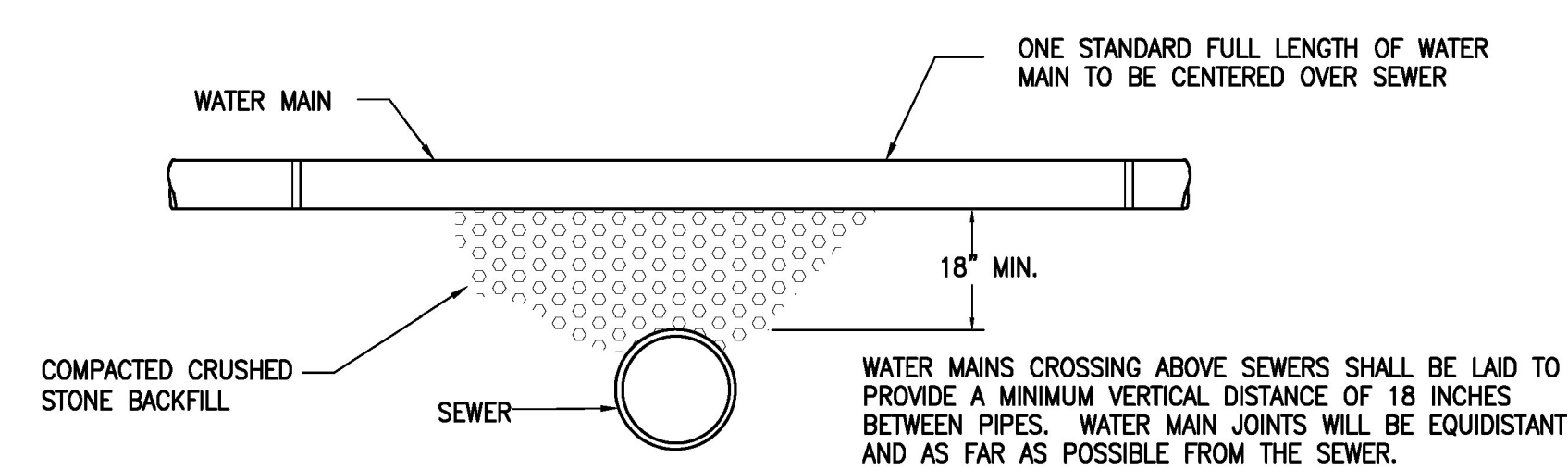
**B TYPICAL WATER SERVICE CONNECTIONS**  
SCALE: NONE



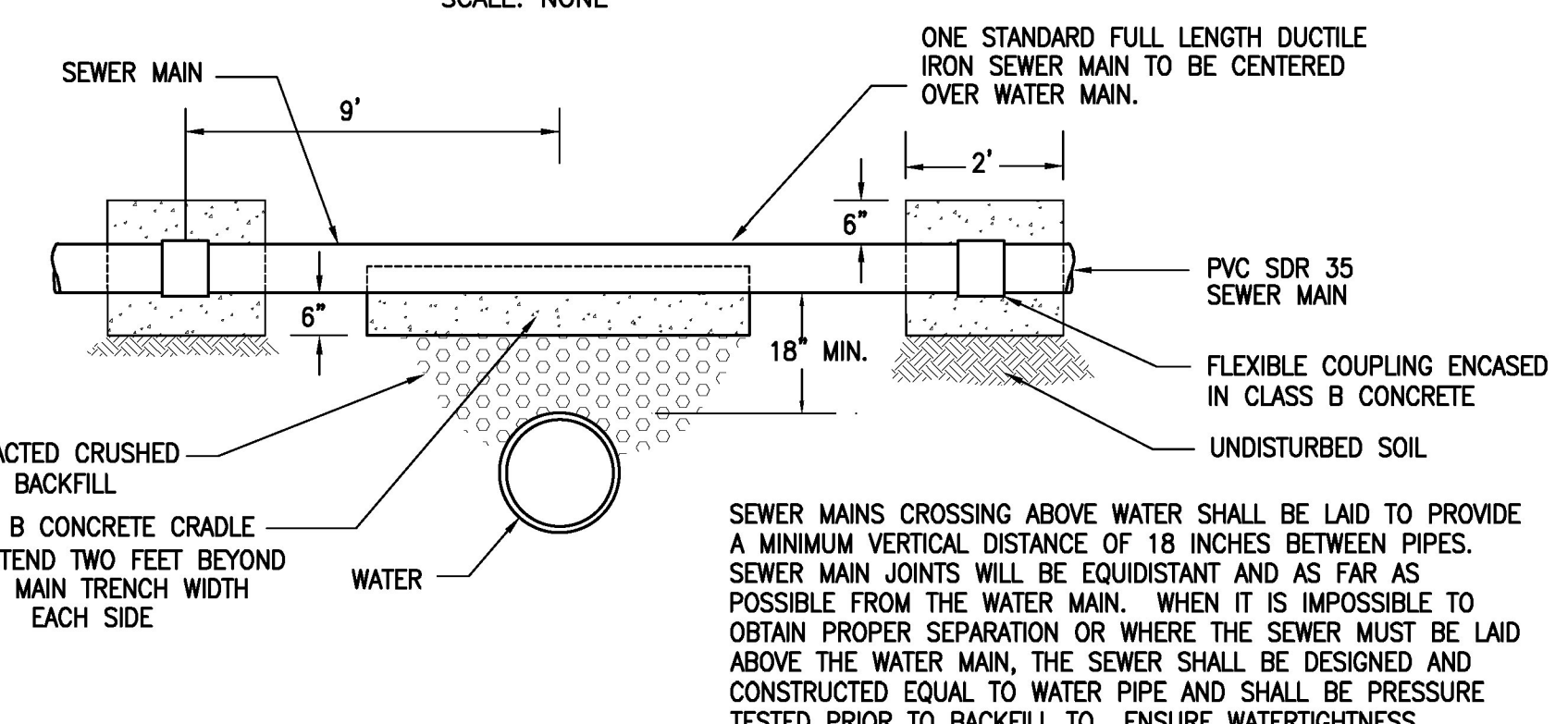
**C WATER SERVICE CONNECTION DETAIL**  
SCALE: NONE



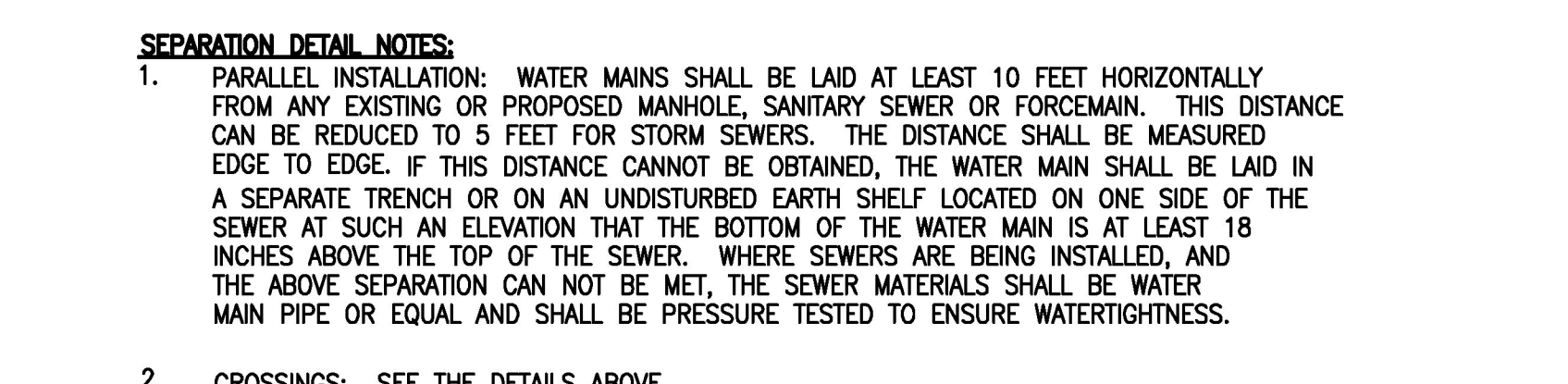
**D INSULATION DETAIL**  
SCALE: NONE



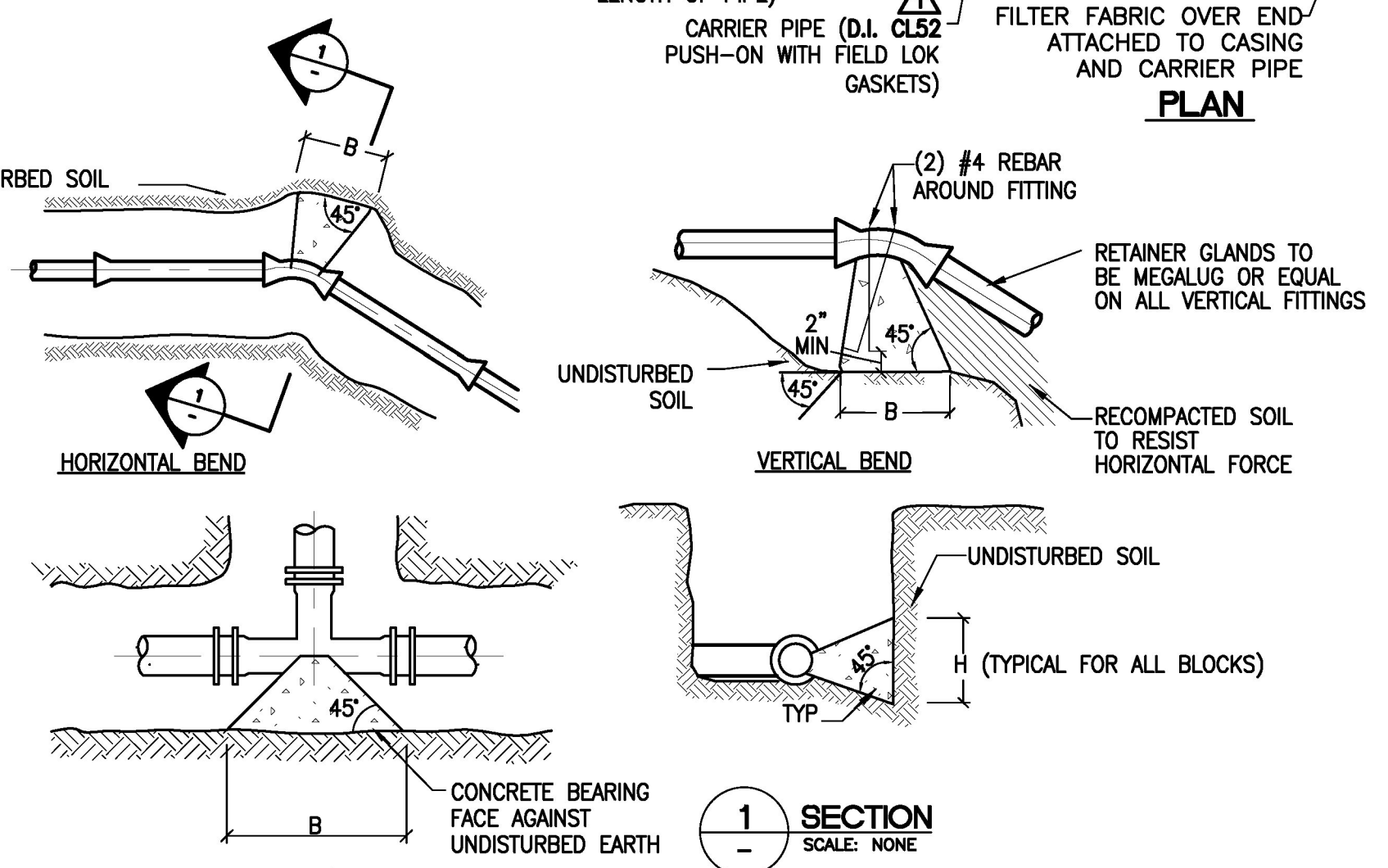
**E TYPICAL SLEEVE DETAIL**  
SCALE: NONE



**F WATER MAIN ABOVE SEWER - PREFERRED METHOD**  
SCALE: NONE



**G WATER MAIN BELOW SEWER - NOT THE RECOMMENDED METHOD**  
SCALE: NONE



**NOTES:**

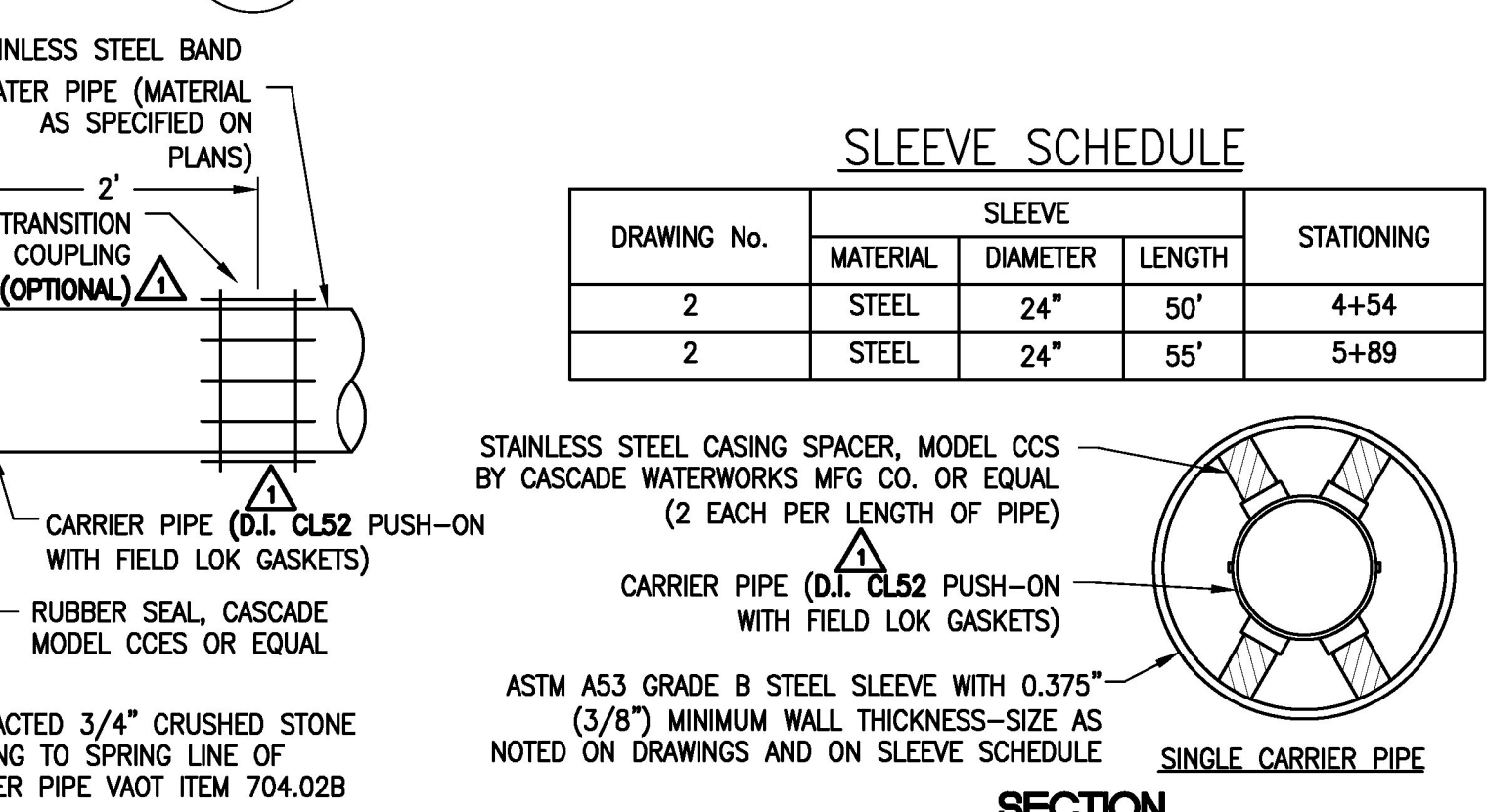
- ALL THRUST BLOCKS SHALL BE CLASS "B" CONCRETE. SEE SPEC SECTION 03305.
- CONCRETE SHALL BE PLACED SO AS NOT TO HAMPER THE FUTURE REMOVAL OF A FITTING.
- ALL FITTINGS ARE TO BE WRAPPED WITH POLYETHYLENE.

MINIMUM BEARING FACE "HEIGHTS AND WIDTHS" FOR CONCRETE THRUST BLOCKS (TEST PRESSURE = 150 PSI)

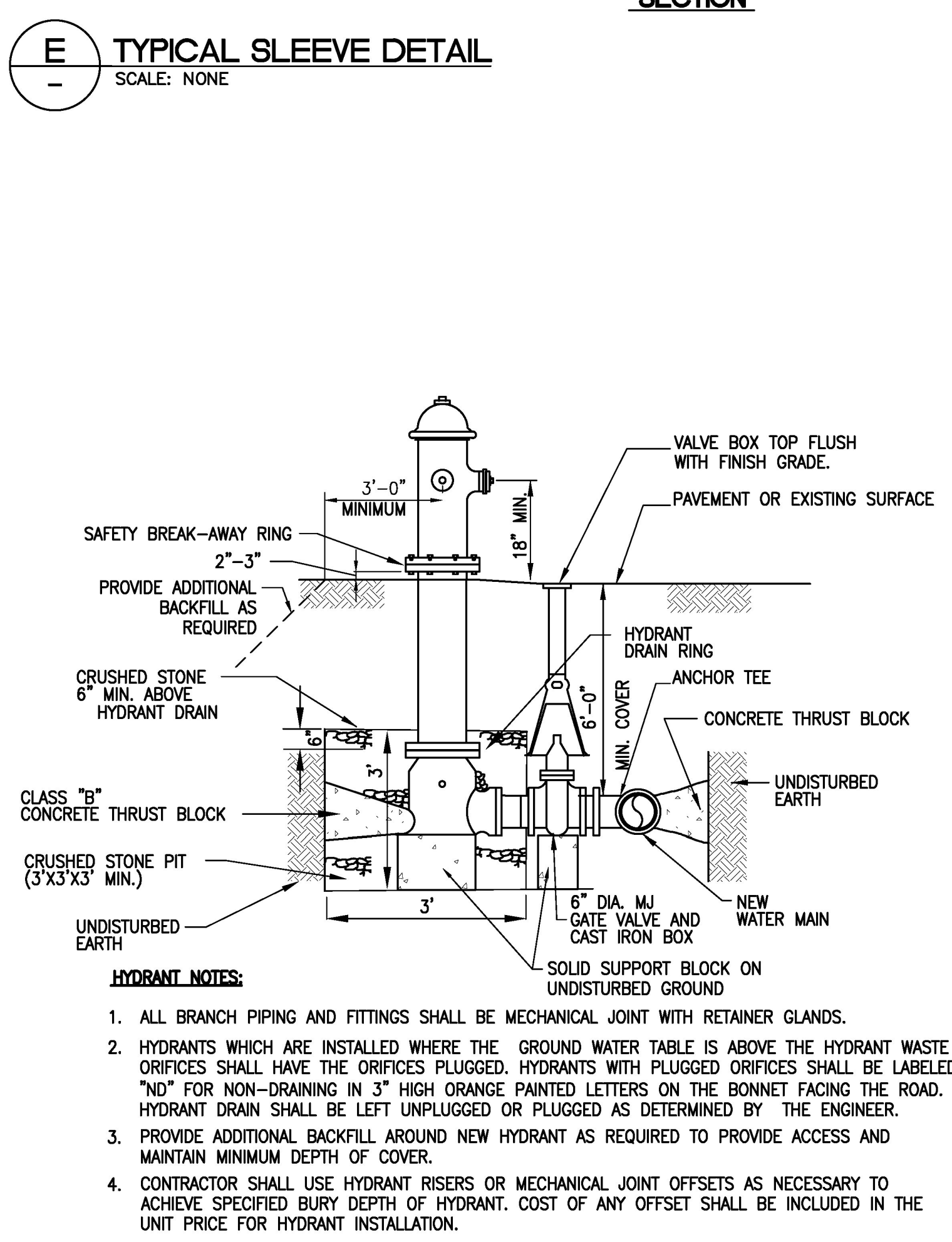
| PIPELINE SIZE | 11 1/4" BEND |      | 22 1/2" BEND |      | 45" BEND |      | 90" BEND |      | TEES & PLUGS |     | WYES |      |
|---------------|--------------|------|--------------|------|----------|------|----------|------|--------------|-----|------|------|
|               | H            | B    | H            | B    | H        | B    | H        | B    | H            | B   | H    | B    |
| 8"            | 1.0          | 1.0  | 1.0          | 1.75 | 1.5      | 2.25 | 1.75     | 3.5  | 1.5          | 3.0 | 1.5  | 2.25 |
| 10"           | 1.25         | 1.25 | 1.25         | 2.0  | 1.75     | 2.75 | 2.0      | 3.75 | 1.75         | 3.0 | 1.75 | 2.75 |
| 12"           | 1.25         | 1.5  | 1.25         | 2.25 | 1.75     | 3.0  | 2.25     | 4.0  | 2.0          | 3.0 | 1.75 | 3.0  |

- NOTES:**
- HYDROSTATIC AND LEAKAGE TEST PRESSURE PER SPECIFICATIONS.
  - UNDISTURBED EARTH. SIDE OF TRENCH OR OTHER EXCAVATION.
  - SEE DIAGRAM FOR H AND B LOCATION REFERENCE. H AND B IN FEET.
  - PLACE 4 MIL POLYETHYLENE BETWEEN FITTINGS AND THRUST BLOCKS.
  - MINIMUM BEARING FACE IS BASED ON A SOIL TYPE WITH AASHTO CLASSIFICATION OF GROUP A-1 AND A-2 FOR GRANULAR MATERIALS. OTHER SOIL TYPES MAY REQUIRE AN INCREASE IN THE BEARING FACES, AS IDENTIFIED DURING CONSTRUCTION.
  - NO JOINTS SHALL BE COVERED WITH CONCRETE.
  - THRUST RESTRAINT IS REQUIRED FOR ALL TEES, BENDS, REDUCERS, CAPS, PLUGS, AND CROSSES.

**H THRUST BLOCK DETAILS**  
SCALE: NONE



**I HYDRANT DETAIL**  
SCALE: NONE



**J WATER/SEWER SEPARATION DETAIL**  
SCALE: NONE

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COUNTY OF CHITTENDEN

MILTON  
STP 5800 (2)

| REVISION                       |  | DATE    | NO. | WAE | CHECKED |
|--------------------------------|--|---------|-----|-----|---------|
| REVISED PIPE MATERIAL-DETAIL E |  | 3/30/11 | 1   |     |         |
| DESCRIPTION                    |  |         |     |     |         |

DESIGNED  
JAB

DRAWN  
JEB

CHECKED  
WAE

DATE  
MAY, 2009

PROJECT NO.  
**09033**

DRAWING NO.