

FOR INDEX OF SHEETS, SEE SHEET 2 OF 64

RECORD PLANS

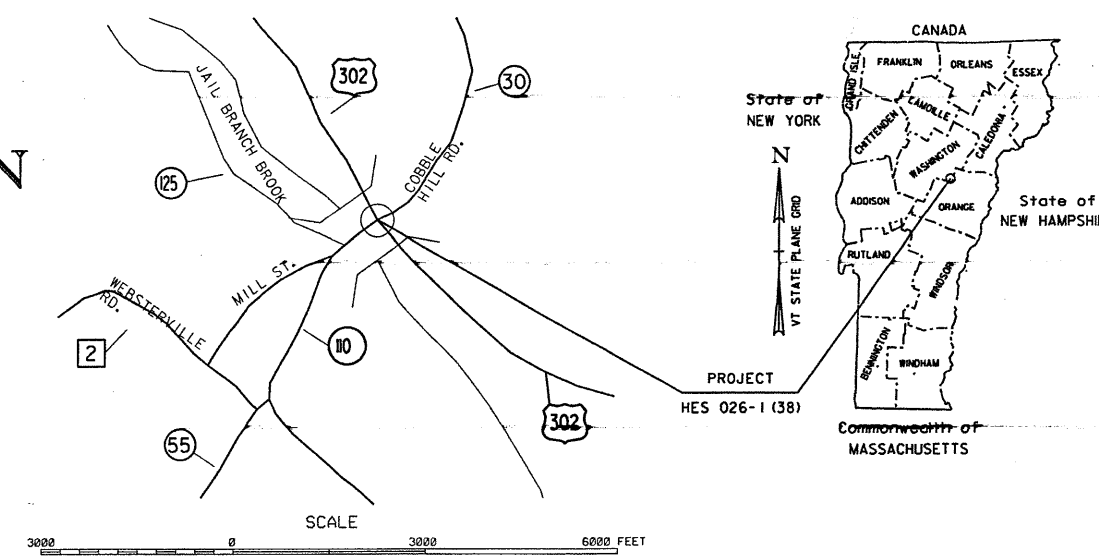
CONTRACTOR: J. HUTCHINS, INC. - RICHMOND, VT
 RESIDENT ENGINEER: DAVID HOSKING
 CONSTRUCTION BEGAN: JULY 16, 2009
 CONSTRUCTION COMPLETE: AUGUST 4, 2010
 RECORD PLANS BY: DAVID HOSKING & CRAIG PETERC
 I HEREBY CERTIFY THAT ALL THE CONSTRUCTION REQUIRED BY THIS SET OF DRAWINGS HAS BEEN ACCOMPLISHED AS INDICATED HEREIN.
 BY: *David Hosking* RESIDENT ENGINEER
 DATE: 4/8/11 *C. Peterc*

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

STATE OF VERMONT
 AGENCY OF TRANSPORTATION



BARRE TOWN
 COUNTY OF WASHINGTON
 CONSTRUCTION OF A ROUNDABOUT
 AT THE INTERSECTION OF U.S. ROUTE 302 (MINOR ARTERIAL),
 VT 110 (MAJOR COLLECTOR) AND COBBLE HILL ROAD (LOCAL ROAD)



LOCATED AT THE INTERSECTION OF US ROUTE 302, VT 110 AND TH 30 (COBBLE HILL ROAD)
 EXTENDING APPROXIMATELY 291 FEET NORTHWESTERLY AND 309 FEET SOUTHEASTERLY ALONG US ROUTE 302
 AND EXTENDING APPROXIMATELY 169 FEET SOUTHWESTERLY ALONG VT 110
 AND EXTENDING APPROXIMATELY 231 FEET NORTHEASTERLY ALONG COBBLE HILL ROAD.
 THIS PROJECT CONSISTS OF THE CONSTRUCTION OF A ROUNDABOUT, MINOR REALIGNMENT OF THE APPROACHES,
 CONSTRUCTION OF NEW SIDEWALKS, NEW DRAINAGE, NEW LANDSCAPING AND NEW STREET LIGHTS,
 AND RELOCATION OF THE EXISTING PARKING AREA TO A TURNOUT ON US ROUTE 302 APPROXIMATELY 1300 FEET NORTHWEST OF SAID INTERSECTION.
 LENGTH OF US ROUTE 302: 325.00 FT. = 0.062 MILES
 LENGTH OF VT 110: 168.51 FT. = 0.032 MILES
 LENGTH OF COBBLE HILL ROAD: 93.99 FT. = 0.018 MILES
 TOTAL PROJECT LENGTH: 587.50 = 0.111 MILES

US ROUTE 302 TRAFFIC DATA

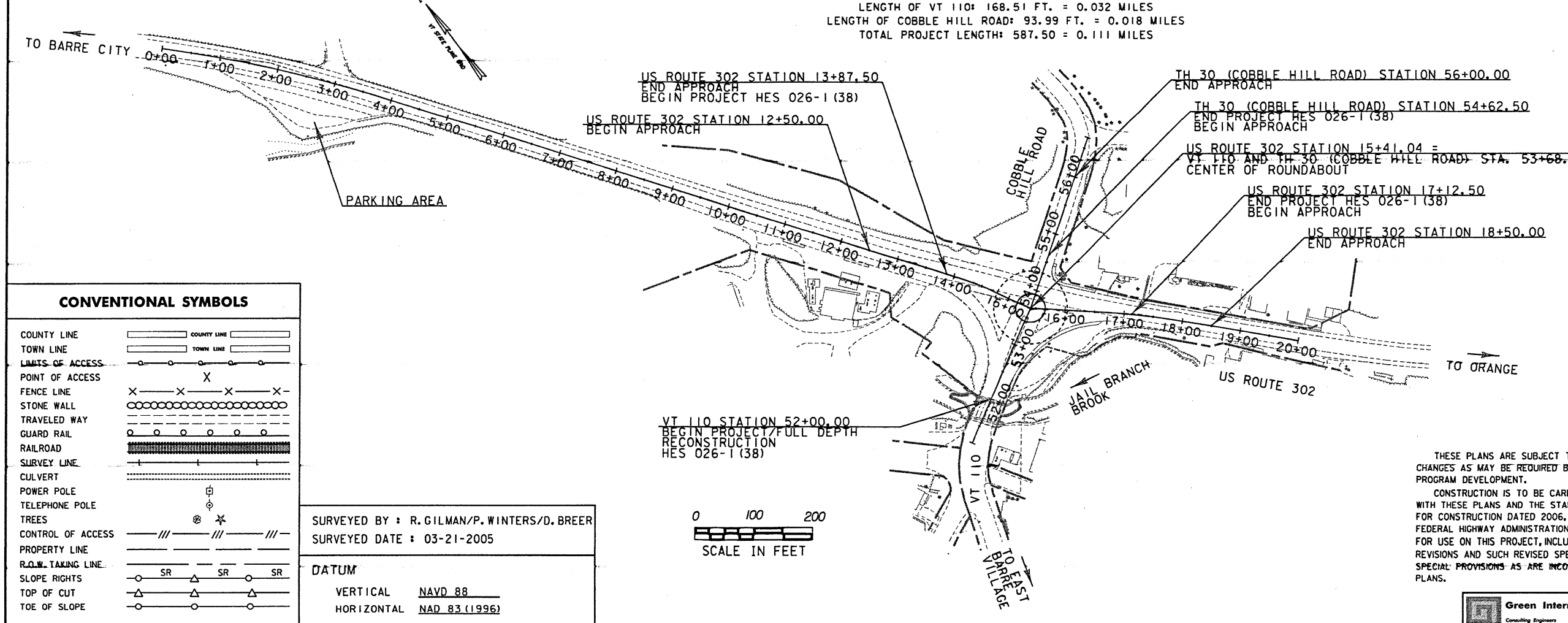
2007 ADT	= 7,150
2007 DHV	= 930
2027 ADT	= 9,125
2027 DHV	= 1,270
D	= 44%
T	= 6%
V	= 25 MPH
2007-2027 ESAL	= 3,674,000
2007-2047 ESAL	= 9,826,000

VT 110 TRAFFIC DATA

2007 ADT	= 6,400
2007 DHV	= 815
2027 ADT	= 7,400
2027 DHV	= 1,120
D	= 58%
T	= 12%
V	= 25 MPH
2007-2027 ESAL	= 1,993,000
2007-2047 ESAL	= 5,344,000

**BITUMINOUS CONCRETE PAVEMENT
 SUPER PAVE MIXTURE DESIGN CRITERIA**

DESIGN LIFE ESAL (DESIGN LANE)	3,674,000
DESIGN NUMBER OF OPERATIONS	75
PERFORMANCE GRADED ASPHALT BINDER	PG58-34



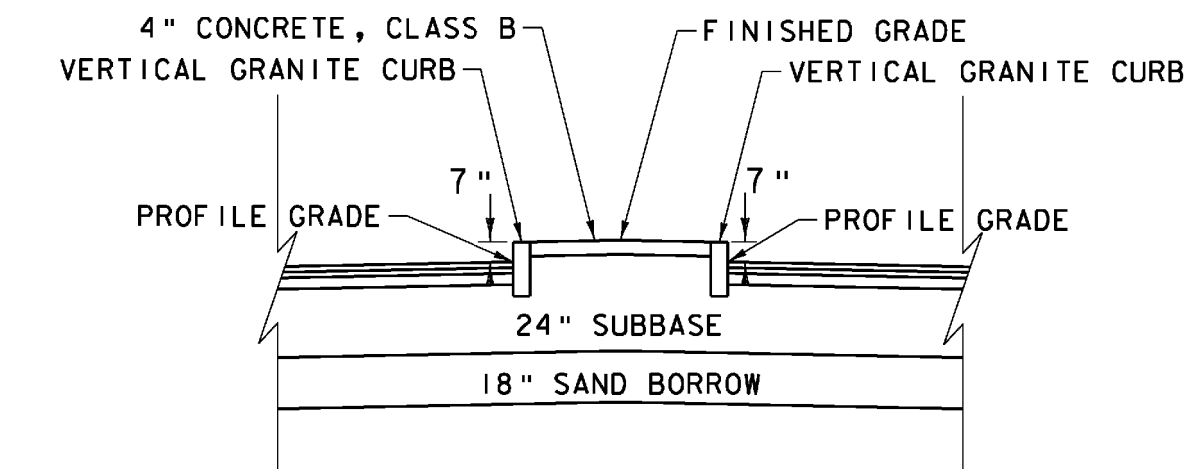
THESE PLANS ARE SUBJECT TO SUCH ENGINEERING CHANGES AS MAY BE REQUIRED BY THE DIRECTOR OF PROGRAM DEVELOPMENT.
 CONSTRUCTION IS TO BE CARRIED ON IN ACCORDANCE WITH THESE PLANS AND THE STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2006, AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION ON JUNE 16, 2006.
 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: *[Signature]* DATE: 1-31-08
 PROJECT MANAGER: JOSHUA SCHULTZ
 PROJECT NAME: BARRE TOWN
 PROJECT NUMBER: HES 026-1 (38)
 SHEET 1 OF 64 SHEETS



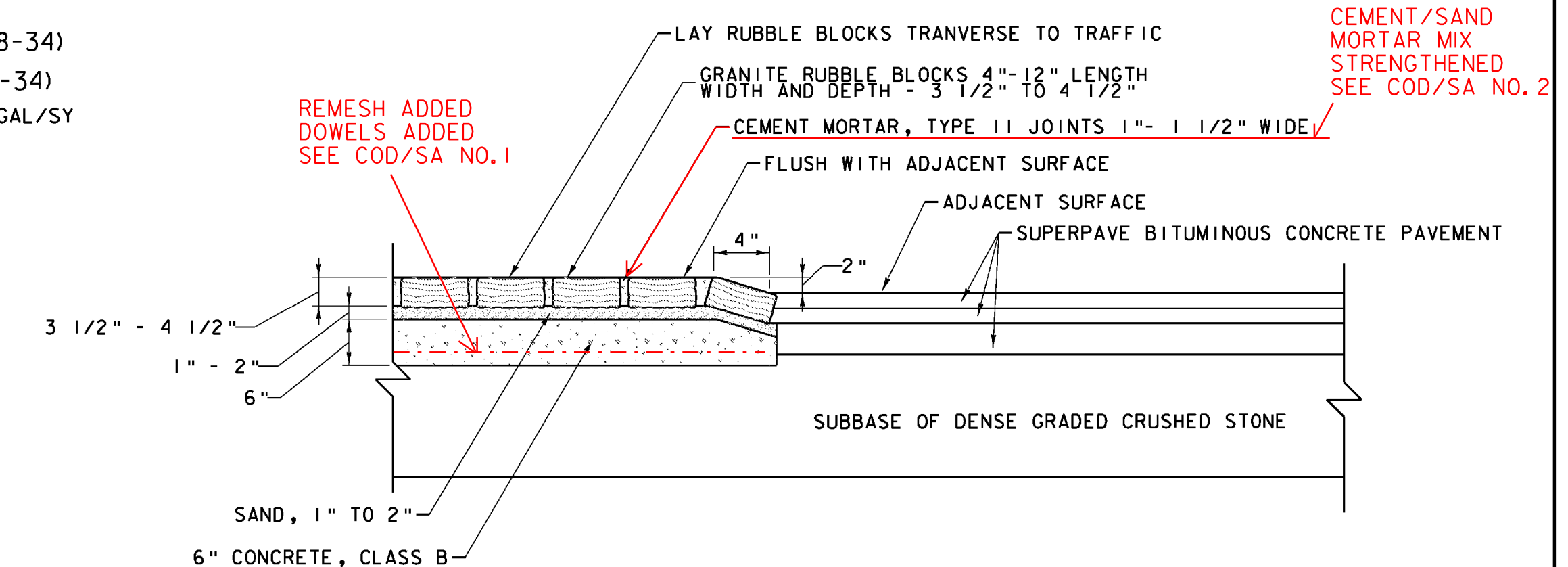
TYPICAL SECTIONS

- US ROUTE 302, VT 110, AND TH 30
 - 2" SUPERPAVE BITUMINOUS CONCRETE PAVEMENT (TYPE IIS PG58-34)
 - 2" SUPERPAVE BITUMINOUS CONCRETE PAVEMENT (TYPE IIS PG58-34)
 - 4" SUPERPAVE BITUMINOUS CONCRETE PAVEMENT IN ONE LIFT (TYPE IS PG58-34)
 - 24" SUBBASE OF DENSE GRADED CRUSHED STONE
 - 18" SAND BORROW
 - TACK COAT: EMULSIFIED ASPHALT IS TO BE APPLIED AT THE RATE OF 0.025 GAL/SY BETWEEN SUCCESSIVE COURSES OF PAVEMENT AS DIRECTED BY THE ENGINEER.
- PARKING TURNOUT
 - 2" SUPERPAVE BITUMINOUS CONCRETE PAVEMENT (TYPE IIS PG58-34)
 - 2" SUPERPAVE BITUMINOUS CONCRETE PAVEMENT (TYPE IS PG58-34)
 - TACK COAT: EMULSIFIED ASPHALT IS TO BE APPLIED AT THE RATE OF 0.025 GAL/SY BETWEEN SUCCESSIVE COURSES OF PAVEMENT AS DIRECTED BY THE ENGINEER.



NOTE:
PAYMENT FOR GRADING AND PLACING THE CONCRETE FOR THE APPROACH ISLAND SHALL BE MADE UNDER ITEM 900.675 SPECIAL PROVISION (PORTLAND CEMENT CONCRETE ISLAND TREATMENT, 4 INCH.)

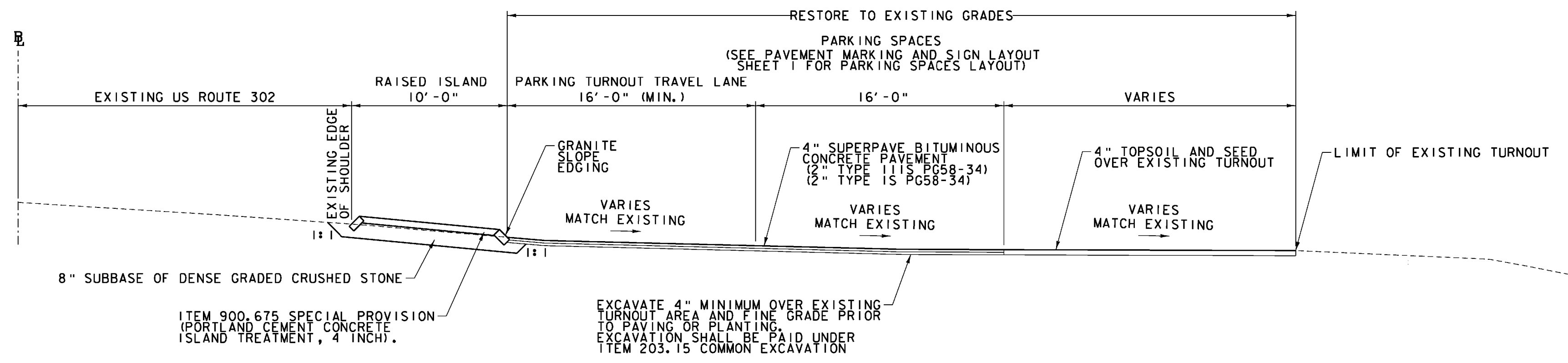
TYPICAL APPROACH ISLAND DETAIL
NOT TO SCALE



NOTE:
PAYMENT FOR THE GRANITE RUBBLE BLOCKS, CEMENT MORTAR JOINTS, SAND, AND CONCRETE, CLASS B SHALL BE MADE UNDER ITEM 900.675 SPECIAL PROVISION (GRANITE RUBBLE BLOCK PAVEMENT).

SPECIAL PROVISION (GRANITE RUBBLE BLOCK PAVEMENT)

NOT TO SCALE
CONSULT COD/SA'S NO. 1 & 2 FOR SPECIFIC REVISIONS TO THIS DETAIL & SPEC.

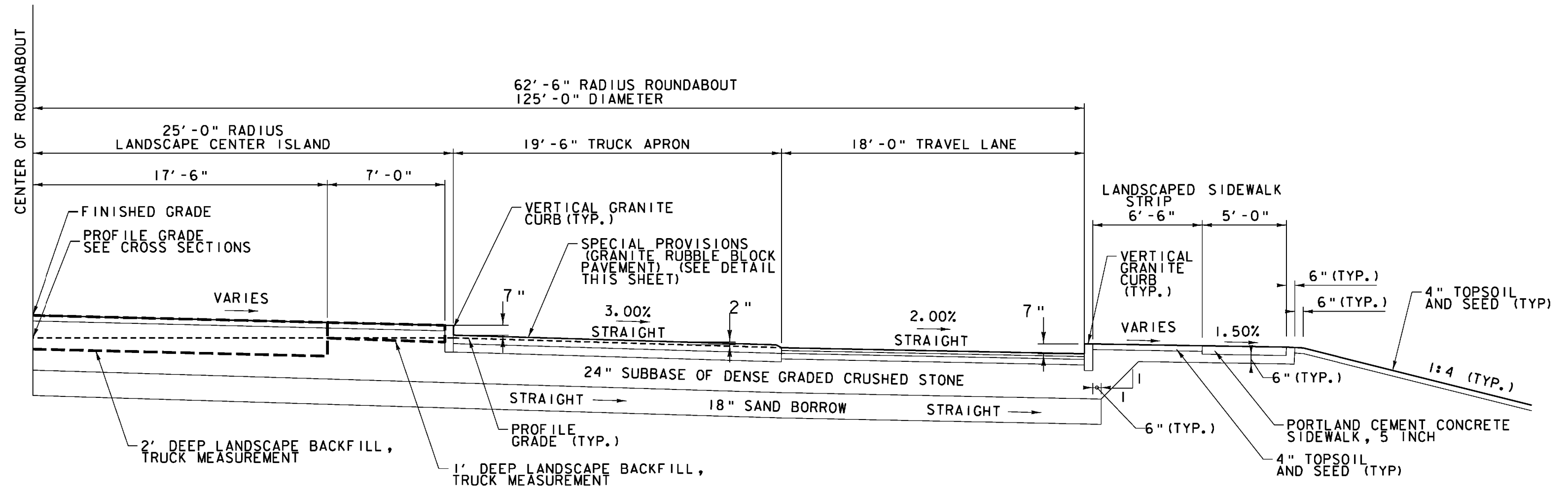


TYPICAL PARKING TURNOUT SECTION

US ROUTE 302 STA. 1+15 RT - 3+95 RT
NOT TO SCALE

UTILITY GENERAL NOTES:

1. THE LOCATION, DEPTH, SIZE AND MATERIAL OF THE EXISTING UNDERGROUND STORM DRAIN, SEWER, AND WATER SYSTEM PIPING ARE BASED ON TOPOGRAPHICAL SURVEY OF AT-GRADE FEATURES SUCH AS DROP INLETS AND THE BEST AVAILABLE INFORMATION OF RECORD. THE LOCATION, DEPTH, SIZE AND MATERIAL OF THESE UNDERGROUND PIPES ARE NOT GUARANTEED TO BE EXACT. THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF THE EXISTING PIPES WHERE NEW CONNECTIONS ARE PROPOSED. NO ADDITIONAL PAYMENT FOR PIPE AND TRENCH EXCAVATION OF EARTH, EXPLORATORY SHALL BE MADE WHERE THE CONTRACTOR HAS FAILED TO FIELD VERIFY THE LOCATIONS AND DEPTHS OF EXISTING PIPES.
2. THE CONTRACTOR SHALL INSTALL AND MAINTAIN EROSION CONTROL MEASURES TO PROTECT THE NEW DRAIN SYSTEM IN ACCORDANCE WITH THE EROSION CONTROL PLANS AND THE CGP 3-9020 (2006).
3. ALL EXISTING DRAIN PIPE TO BE ABANDONED AND NOT IN CONFLICT WITH THE PROPOSED IMPROVEMENTS SHALL BE CUT AND PLUGGED AND ABANDONED IN-PLACE. WHERE THE EXISTING PIPE DIAMETER IS 10-INCHES OR GREATER, THE CONTRACTOR SHALL COMPLETELY FILL THE ENTIRE LENGTH OF THE EXISTING PIPE WITH CONTROLLED DENSITY FILL SO THAT ALL VOIDS WITHIN THE PIPE ARE FILLED. PAYMENT FOR FILL MATERIAL SHALL BE MADE UNDER 900.608 SPECIAL PROVISION (CONTROLLED DENSITY (FLOWABLE) FILL).
4. STATION AND OFFSET LOCATIONS OF PROPOSED DRAINAGE STRUCTURES ARE GIVEN TO THE BACK CENTER (AT THE EDGE OF THE CURB) OF THE GRATES EXCEPT FOR MANHOLES AND STRUCTURES IN DITCHES WHICH ARE GIVEN TO THE CENTER OF THE GRATE OR MANHOLE COVER.
5. CONTRACTOR SHALL MAINTAIN EXISTING FLOWS OR PROVIDE MEASURES TO BY-PASS FLOWS IN EXISTING DRAINAGE UNTIL PROPOSED DRAINAGE IMPROVEMENTS HAVE BEEN COMPLETED. PAYMENT WILL BE CONSIDERED INCIDENTAL TO THE CONTRACT DRAINAGE ITEMS.

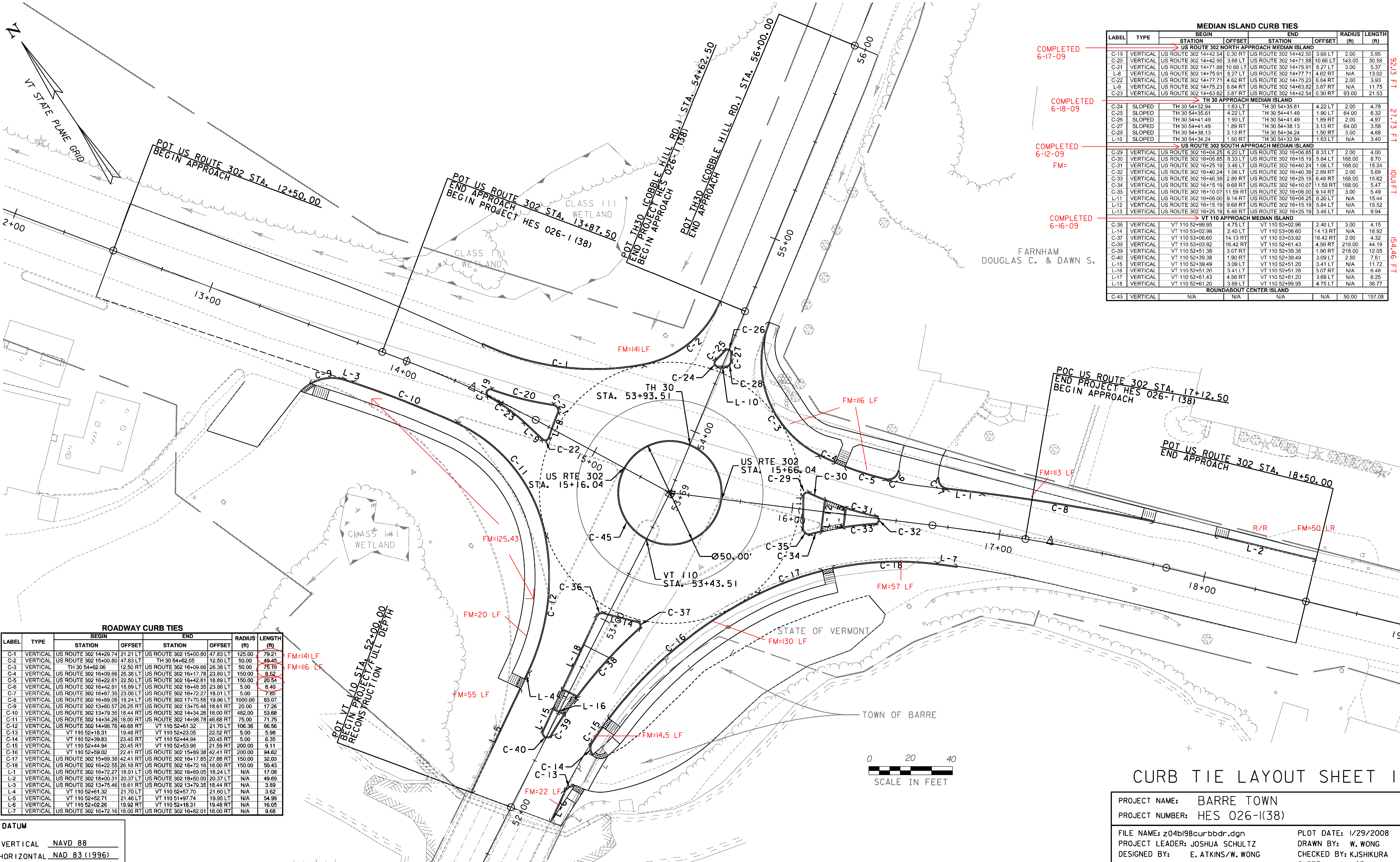


TYPICAL ROUNDABOUT SECTION

NOT TO SCALE

DATUM	
VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (1996)

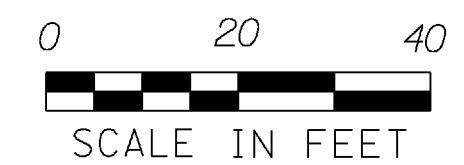
PROJECT NAME:	BARRE TOWN
PROJECT NUMBER:	HES 026-1(38)
FILE NAME:	z04b198+yp.dgn
PROJECT LEADER:	JOSHUA SCHULTZ
DESIGNED BY:	E. ATKINS/W.WONG
TYPICAL SECTIONS	2
PLOT DATE:	2/5/2008
DRAWN BY:	W.WONG
CHECKED BY:	K. ISHIKURA
SHEET	4 OF 64



MEDIAN ISLAND CURB TIES							
LABEL	TYPE	BEGIN		END		RADIUS (ft)	LENGTH (ft)
		STATION	OFFSET	STATION	OFFSET		
US ROUTE 302 NORTH APPROACH MEDIAN ISLAND							
C-19	VERTICAL	US ROUTE 302 14+42.54	0.30 RT	US ROUTE 302 14+42.50	3.68 LT	2.00	5.95
C-20	VERTICAL	US ROUTE 302 14+42.50	3.68 LT	US ROUTE 302 14+71.88	10.66 LT	143.00	30.58
C-21	VERTICAL	US ROUTE 302 14+71.88	10.66 LT	US ROUTE 302 14+75.91	8.27 LT	3.00	5.37
L-8	VERTICAL	US ROUTE 302 14+75.91	8.27 LT	US ROUTE 302 14+77.71	4.62 RT	N/A	13.02
C-22	VERTICAL	US ROUTE 302 14+77.71	4.62 RT	US ROUTE 302 14+75.23	6.84 RT	2.00	3.93
L-9	VERTICAL	US ROUTE 302 14+75.23	6.84 RT	US ROUTE 302 14+63.82	3.87 RT	N/A	11.75
C-23	VERTICAL	US ROUTE 302 14+63.82	3.87 RT	US ROUTE 302 14+42.54	0.30 RT	93.00	21.53
TH 30 APPROACH MEDIAN ISLAND							
C-24	SLOPED	TH 30 54+32.94	1.63 LT	TH 30 54+35.61	4.22 LT	2.00	4.78
C-25	SLOPED	TH 30 54+35.61	4.22 LT	TH 30 54+41.49	1.90 LT	64.00	6.32
C-26	SLOPED	TH 30 54+41.49	1.90 LT	TH 30 54+41.49	1.89 RT	2.00	4.97
C-27	SLOPED	TH 30 54+41.49	1.89 RT	TH 30 54+38.13	3.13 RT	64.00	3.58
C-28	SLOPED	TH 30 54+38.13	3.13 RT	TH 30 54+34.24	1.50 RT	3.00	4.68
L-10	SLOPED	TH 30 54+34.24	1.50 RT	TH 30 54+32.94	1.63 LT	N/A	3.40
US ROUTE 302 SOUTH APPROACH MEDIAN ISLAND							
C-29	VERTICAL	US ROUTE 302 16+04.25	6.20 LT	US ROUTE 302 16+06.85	8.33 LT	2.00	4.00
C-30	VERTICAL	US ROUTE 302 16+06.85	8.33 LT	US ROUTE 302 16+15.19	5.84 LT	168.00	8.70
C-31	VERTICAL	US ROUTE 302 16+25.19	3.46 LT	US ROUTE 302 16+40.24	1.06 LT	168.00	15.24
C-32	VERTICAL	US ROUTE 302 16+40.24	1.06 LT	US ROUTE 302 16+40.39	2.89 RT	2.00	5.69
C-33	VERTICAL	US ROUTE 302 16+40.39	2.89 RT	US ROUTE 302 16+25.19	6.48 RT	168.00	15.62
C-34	VERTICAL	US ROUTE 302 16+25.19	6.48 RT	US ROUTE 302 16+10.07	11.59 RT	168.00	5.47
C-35	VERTICAL	US ROUTE 302 16+10.07	11.59 RT	US ROUTE 302 16+06.50	9.14 RT	3.00	5.49
L-11	VERTICAL	US ROUTE 302 16+06.50	9.14 RT	US ROUTE 302 16+04.25	6.20 LT	N/A	15.44
L-12	VERTICAL	US ROUTE 302 16+15.19	9.68 RT	US ROUTE 302 16+15.19	5.84 LT	N/A	15.52
L-13	VERTICAL	US ROUTE 302 16+25.19	6.48 RT	US ROUTE 302 16+25.19	3.46 LT	N/A	9.94
VT 110 APPROACH MEDIAN ISLAND							
C-36	VERTICAL	VT 110 52+99.95	4.75 LT	VT 110 53+02.96	2.40 LT	3.00	4.15
L-14	VERTICAL	VT 110 53+02.96	2.40 LT	VT 110 53+06.60	14.13 RT	N/A	16.92
C-37	VERTICAL	VT 110 53+06.60	14.13 RT	VT 110 53+03.92	16.42 RT	2.00	4.32
C-38	VERTICAL	VT 110 53+03.92	16.42 RT	VT 110 52+61.43	4.56 RT	218.00	44.19
C-39	VERTICAL	VT 110 52+61.43	4.56 RT	VT 110 52+39.38	1.90 RT	218.00	12.05
C-40	VERTICAL	VT 110 52+39.38	1.90 RT	VT 110 52+39.49	3.09 LT	2.50	7.61
L-15	VERTICAL	VT 110 52+39.49	3.09 LT	VT 110 52+51.20	3.41 LT	N/A	11.72
L-16	VERTICAL	VT 110 52+51.20	3.41 LT	VT 110 52+51.28	3.07 RT	N/A	6.48
L-17	VERTICAL	VT 110 52+61.43	4.56 RT	VT 110 52+61.20	3.68 LT	N/A	8.25
L-18	VERTICAL	VT 110 52+61.20	3.68 LT	VT 110 52+99.95	4.75 LT	N/A	38.77
ROUNDBOUT CENTER ISLAND							
C-45	VERTICAL	N/A	N/A	N/A	N/A	50.00	157.08

ROADWAY CURB TIES							
LABEL	TYPE	BEGIN		END		RADIUS (ft)	LENGTH (ft)
		STATION	OFFSET	STATION	OFFSET		
C-1	VERTICAL	US ROUTE 302 14+29.74	21.21 LT	US ROUTE 302 15+00.80	47.83 LT	125.00	79.21
C-2	VERTICAL	US ROUTE 302 15+00.80	47.83 LT	TH 30 54+62.05	12.50 LT	50.00	49.45
C-3	VERTICAL	TH 30 54+62.05	12.50 RT	US ROUTE 302 16+09.66	26.38 LT	50.00	75.19
C-4	VERTICAL	US ROUTE 302 16+09.66	26.38 LT	US ROUTE 302 16+17.78	23.80 LT	150.00	8.52
C-5	VERTICAL	US ROUTE 302 16+17.78	23.80 LT	US ROUTE 302 16+42.81	18.89 LT	150.00	20.54
C-6	VERTICAL	US ROUTE 302 16+42.81	18.89 LT	US ROUTE 302 16+48.35	23.86 LT	5.00	8.40
C-7	VERTICAL	US ROUTE 302 16+48.35	23.86 LT	US ROUTE 302 16+72.27	18.01 LT	5.00	7.85
C-8	VERTICAL	US ROUTE 302 16+72.27	18.01 LT	US ROUTE 302 17+70.55	19.96 LT	1000.00	83.07
C-9	VERTICAL	US ROUTE 302 13+60.57	26.25 RT	US ROUTE 302 13+75.46	18.61 RT	20.00	17.28
C-10	VERTICAL	US ROUTE 302 13+75.46	18.61 RT	US ROUTE 302 14+34.26	18.00 RT	482.00	53.68
C-11	VERTICAL	US ROUTE 302 14+34.26	18.00 RT	US ROUTE 302 14+98.78	46.68 RT	75.00	71.75
C-12	VERTICAL	US ROUTE 302 14+98.78	46.68 RT	VT 110 52+61.32	21.70 LT	106.36	66.56
C-13	VERTICAL	VT 110 52+61.32	21.70 LT	VT 110 52+23.05	22.52 RT	5.00	5.98
C-14	VERTICAL	VT 110 52+23.05	22.52 RT	VT 110 52+44.94	20.45 RT	5.00	6.35
C-15	VERTICAL	VT 110 52+44.94	20.45 RT	VT 110 52+53.98	21.59 RT	200.00	9.11
C-16	VERTICAL	VT 110 52+53.98	21.59 RT	US ROUTE 302 15+89.38	42.41 RT	200.00	94.62
C-17	VERTICAL	US ROUTE 302 15+89.38	42.41 RT	US ROUTE 302 16+17.95	27.88 RT	150.00	32.03
C-18	VERTICAL	US ROUTE 302 16+17.95	27.88 RT	US ROUTE 302 16+72.16	18.00 RT	150.00	50.43
L-1	VERTICAL	US ROUTE 302 16+72.16	18.00 RT	US ROUTE 302 16+89.05	18.24 LT	N/A	17.08
L-2	VERTICAL	US ROUTE 302 18+00.31	20.37 LT	US ROUTE 302 18+50.00	20.37 LT	N/A	49.69
L-3	VERTICAL	US ROUTE 302 13+75.46	18.61 RT	US ROUTE 302 13+79.35	18.44 RT	N/A	3.89
L-4	VERTICAL	VT 110 52+61.32	21.70 LT	VT 110 52+57.70	21.60 LT	N/A	3.62
L-5	VERTICAL	VT 110 52+57.70	21.60 LT	VT 110 51+97.74	19.95 LT	N/A	54.99
L-6	VERTICAL	VT 110 52+02.26	19.92 RT	VT 110 52+18.31	19.48 RT	N/A	16.05
L-7	VERTICAL	US ROUTE 302 16+72.16	18.00 RT	US ROUTE 302 16+82.01	18.00 RT	N/A	9.68

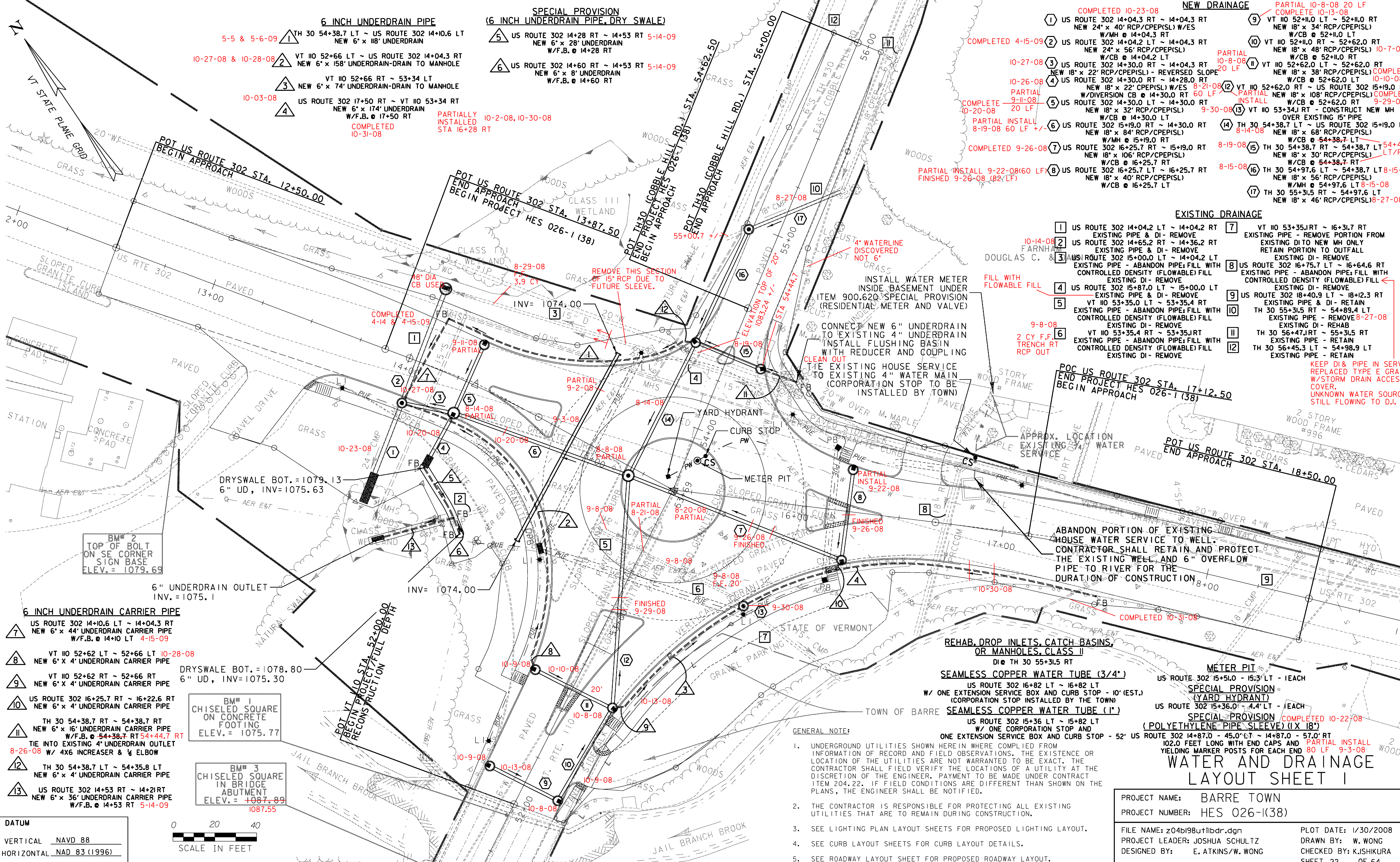
DATUM
 VERTICAL NAVD 88
 HORIZONTAL NAD 83 (1996)



CURB TIE LAYOUT SHEET 1

PROJECT NAME: BARRE TOWN
 PROJECT NUMBER: HES 026-1(38)
 FILE NAME: z04b198curbbdr.dgn
 PROJECT LEADER: JOSHUA SCHULTZ
 DESIGNED BY: E. ATKINS/W. WONG
 PLOT DATE: 1/29/2008
 DRAWN BY: W. WONG
 CHECKED BY: K.JSHIKURA
 SHEET 17 OF 64

9213 FT
2773 FT
1011 FT
15446 FT



6 INCH UNDERDRAIN PIPE

- 5-5 & 5-6-09 1 TH 30 54+38.7 LT ~ US ROUTE 302 14+10.6 LT
NEW 6" x 118' UNDERDRAIN
- 10-27-08 & 10-28-08 2 VT 110 52+66 LT ~ US ROUTE 302 14+04.3 RT
NEW 6" x 158' UNDERDRAIN-DRAIN TO MANHOLE
- VT 110 52+66 RT ~ 53+34 LT
NEW 6" x 74' UNDERDRAIN-DRAIN TO MANHOLE
- 10-03-08 3 US ROUTE 302 17+50 RT ~ VT 110 53+34 RT
NEW 6" x 174' UNDERDRAIN
W/F.B. @ 17+50 RT
COMPLETED 10-31-08
- 4

SPECIAL PROVISION (6 INCH UNDERDRAIN PIPE, DRY SWALE)

- 5 US ROUTE 302 14+28 RT ~ 14+53 RT 5-14-09
NEW 6" x 28' UNDERDRAIN
W/F.B. @ 14+28 RT
- 6 US ROUTE 302 14+60 RT ~ 14+53 RT 5-14-09
NEW 6" x 8' UNDERDRAIN
W/F.B. @ 14+60 RT

NEW DRAINAGE

- 1 COMPLETED 10-23-08 US ROUTE 302 14+04.3 RT ~ 14+04.3 RT
NEW 24" x 40' RCP/CPEP(SL) W/ES
W/MH @ 14+04.3 RT
- 2 COMPLETED 4-15-09 US ROUTE 302 14+04.2 LT ~ 14+04.3 RT
NEW 24" x 56' RCP/CPEP(SL)
W/CB @ 14+04.2 LT
- 3 10-27-08 US ROUTE 302 14+30.0 RT ~ 14+04.3 RT
NEW 18" x 22' RCP/CPEP(SL) - REVERSED SLOPE
W/DIVERSION CB @ 14+30.0 RT
- 4 10-26-08 US ROUTE 302 14+30.0 RT ~ 14+28.0 RT
NEW 18" x 22' RCP/CPEP(SL) W/ES 8-21-08
60 LF
- 5 COMPLETE 10-20-08 US ROUTE 302 14+30.0 LT ~ 14+30.0 RT
NEW 18" x 32' RCP/CPEP(SL)
W/CB @ 14+30.0 LT
- 6 PARTIAL INSTALL 8-19-08 60 LF +/- US ROUTE 302 15+19.0 RT ~ 14+30.0 RT
NEW 18" x 84' RCP/CPEP(SL)
W/MH @ 15+19.0 RT
- 7 COMPLETED 9-26-08 US ROUTE 302 16+25.7 RT ~ 15+19.0 RT
NEW 18" x 106' RCP/CPEP(SL)
W/CB @ 16+25.7 RT
- 8 PARTIAL INSTALL 9-22-08 (60 LF) FINISHED 9-26-08 (82' LF) US ROUTE 302 16+25.7 LT ~ 16+25.7 RT
NEW 18" x 40' RCP/CPEP(SL)
W/CB @ 16+25.7 LT
- 9 PARTIAL 10-8-08 COMPLETE 10-13-08 VT 110 52+11.0 LT ~ 52+11.0 RT
NEW 18" x 34' RCP/CPEP(SL)
W/CB @ 52+11.0 LT
- 10 PARTIAL 10-8-08 COMPLETE 10-10-08 VT 110 52+11.0 RT ~ 52+62.0 RT
NEW 18" x 48' RCP/CPEP(SL)
W/CB @ 52+11.0 RT
- 11 PARTIAL 10-8-08 COMPLETE 10-10-08 VT 110 52+62.0 LT ~ 52+62.0 RT
NEW 18" x 38' RCP/CPEP(SL)
W/CB @ 52+62.0 LT
- 12 PARTIAL 10-8-08 COMPLETE 10-10-08 VT 110 52+62.0 RT ~ US ROUTE 302 15+19.0 RT
NEW 18" x 108' RCP/CPEP(SL)
W/CB @ 52+62.0 RT
- 13 9-30-08 VT 110 53+34.1 RT - CONSTRUCT NEW MH
OVER EXISTING 15" PIPE
- 14 8-14-08 TH 30 54+38.7 LT ~ US ROUTE 302 15+19.0 RT
NEW 18" x 68' RCP/CPEP(SL)
W/CB @ 54+38.7 LT
- 15 8-19-08 TH 30 54+38.7 RT ~ 54+38.7 LT
NEW 18" x 30' RCP/CPEP(SL)
W/CB @ 54+38.7 RT
- 16 8-15-08 TH 30 54+97.6 LT ~ 54+38.7 LT
NEW 18" x 56' RCP/CPEP(SL)
W/MH @ 54+97.6 LT
- 17 TH 30 55+31.5 RT ~ 54+97.6 RT
NEW 18" x 46' RCP/CPEP(SL)

EXISTING DRAINAGE

- 1 US ROUTE 302 14+04.2 LT ~ 14+04.2 RT
EXISTING PIPE & DI - REMOVE
- 2 US ROUTE 302 14+65.2 RT ~ 14+36.2 RT
EXISTING PIPE & DI - REMOVE
- 3 US ROUTE 302 15+00.0 LT ~ 14+04.2 LT
EXISTING PIPE - ABANDON PIPE; FILL WITH
CONTROLLED DENSITY (FLOWABLE) FILL
EXISTING DI - REMOVE
- 4 US ROUTE 302 15+87.0 LT ~ 15+00.0 LT
EXISTING PIPE & DI - REMOVE
- 5 VT 110 53+35.0 LT ~ 53+35.4 RT
EXISTING PIPE - ABANDON PIPE; FILL WITH
CONTROLLED DENSITY (FLOWABLE) FILL
EXISTING DI - REMOVE
- 6 9-8-08 2 CY F.F. TRENCH RT
RCP OUT VT 110 53+35.4 RT ~ 53+35.1 RT
EXISTING PIPE - ABANDON PIPE; FILL WITH
CONTROLLED DENSITY (FLOWABLE) FILL
EXISTING DI - REMOVE
- 7 VT 110 53+35.1 RT ~ 16+31.7 RT
EXISTING PIPE - REMOVE PORTION FROM
EXISTING DI TO NEW MH ONLY
RETAIN PORTION TO OUTFALL
EXISTING DI - REMOVE
- 8 US ROUTE 302 16+75.7 LT ~ 16+64.6 RT
EXISTING PIPE - ABANDON PIPE; FILL WITH
CONTROLLED DENSITY (FLOWABLE) FILL
EXISTING DI - REMOVE
- 9 US ROUTE 302 18+40.9 LT ~ 18+12.3 RT
EXISTING PIPE & DI - RETAIN
- 10 TH 30 55+31.5 RT ~ 54+89.4 LT
EXISTING PIPE - REMOVE 8-27-08
EXISTING DI - REHAB
- 11 TH 30 56+47.1 RT ~ 55+31.5 RT
EXISTING PIPE - RETAIN
- 12 TH 30 56+45.3 LT ~ 54+98.9 LT
EXISTING PIPE - RETAIN

6 INCH UNDERDRAIN CARRIER PIPE

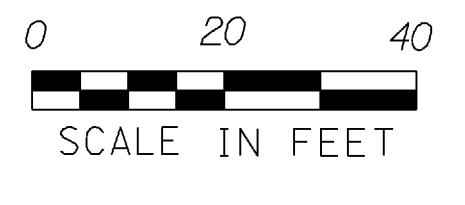
- 7 US ROUTE 302 14+10.6 LT ~ 14+04.3 RT
NEW 6" x 44' UNDERDRAIN CARRIER PIPE
W/F.B. @ 14+10 LT 4-15-09
- 8 VT 110 52+62 LT ~ 52+66 LT 10-28-08
NEW 6" x 4' UNDERDRAIN CARRIER PIPE
- 9 VT 110 52+62 RT ~ 52+66 RT
NEW 6" x 4' UNDERDRAIN CARRIER PIPE
- 10 US ROUTE 302 16+25.7 RT ~ 16+22.6 RT
NEW 6" x 4' UNDERDRAIN CARRIER PIPE
- 11 TH 30 54+38.7 RT ~ 54+38.7 RT
NEW 6" x 16' UNDERDRAIN CARRIER PIPE
W/F.B. @ 54+44.7 RT
TIE INTO EXISTING 4" UNDERDRAIN OUTLET
8-26-08 W/ 4X6 INCREASER & 1/2 ELBOW
- 12 TH 30 54+38.7 LT ~ 54+35.8 LT
NEW 6" x 4' UNDERDRAIN CARRIER PIPE
- 13 US ROUTE 302 14+53 RT ~ 14+21 RT
NEW 6" x 36' UNDERDRAIN CARRIER PIPE
W/F.B. @ 14+53 RT 5-14-09

DRYSWALE BOT. = 1078.80
6" UD, INV = 1075.30

BM# 1
CHISELED SQUARE
ON CONCRETE
FOOTING
ELEV. = 1075.77

BM# 3
CHISELED SQUARE
IN BRIDGE
ABUTMENT
ELEV. = 1087.89
1087.55

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (1996)



GENERAL NOTE:

1. UNDERGROUND UTILITIES SHOWN HEREIN WHERE COMPILED FROM INFORMATION OF RECORD AND FIELD OBSERVATIONS. THE EXISTENCE OR LOCATION OF THE UTILITIES ARE NOT WARRANTED TO BE EXACT. THE CONTRACTOR SHALL FIELD VERIFY THE LOCATIONS OF A UTILITY AT THE DISCRETION OF THE ENGINEER. PAYMENT TO BE MADE UNDER CONTRACT ITEM 204.22. IF FIELD CONDITIONS ARE DIFFERENT THAN SHOWN ON THE PLANS, THE ENGINEER SHALL BE NOTIFIED.
2. THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING ALL EXISTING UTILITIES THAT ARE TO REMAIN DURING CONSTRUCTION.
3. SEE LIGHTING PLAN LAYOUT SHEETS FOR PROPOSED LIGHTING LAYOUT.
4. SEE CURB LAYOUT SHEETS FOR CURB LAYOUT DETAILS.
5. SEE ROADWAY LAYOUT SHEET FOR PROPOSED ROADWAY LAYOUT.

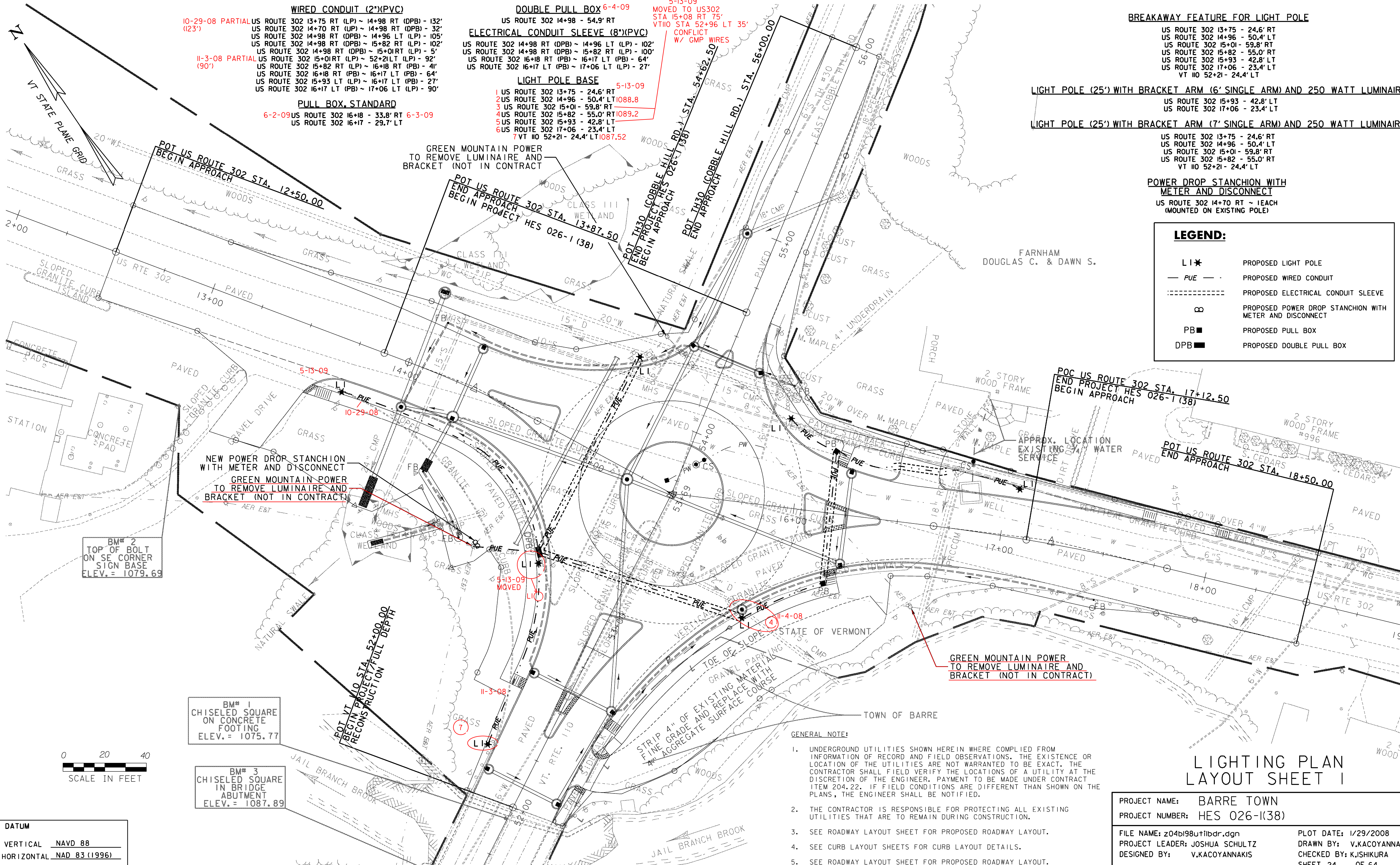
REHAB. DROP INLETS, CATCH BASINS, OR MANHOLES, CLASS II

- DI @ TH 30 55+31.5 RT
- SEAMLESS COPPER WATER TUBE (3/4")**
US ROUTE 302 16+82 LT ~ 16+82 LT
W/ ONE EXTENSION SERVICE BOX AND CURB STOP - 10' (EST.)
(CORPORATION STOP INSTALLED BY THE TOWN)
- SEAMLESS COPPER WATER TUBE (1")**
US ROUTE 302 15+36 LT ~ 15+82 LT
W/ ONE CORPORATION STOP AND
ONE EXTENSION SERVICE BOX AND CURB STOP - 52'

METER PIT
US ROUTE 302 15+51.0 - 15+31.7 LT - EACH
SPECIAL PROVISION (YARD HYDRANT)
US ROUTE 302 15+36.0 - 15+44.7 LT - EACH
SPECIAL PROVISION (POLYETHYLENE PIPE SLEEVE) (1X 18")
COMPLETED 10-22-08
US ROUTE 302 14+87.0 - 45.0 LT ~ 14+87.0 - 57.0 RT
102.0 FEET LONG WITH END CAPS AND PARTIAL INSTALL
YIELDING MARKER POSTS FOR EACH END 80 LF 9-3-08

WATER AND DRAINAGE LAYOUT SHEET I

PROJECT NAME: BARRE TOWN	FILE NAME: z04bi98u11bdr.dgn	PLOT DATE: 1/30/2008
PROJECT NUMBER: HES 026-1(K38)	PROJECT LEADER: JOSHUA SCHULTZ	DRAWN BY: W. WONG
	DESIGNED BY: E. ATKINS/W. WONG	CHECKED BY: K.JSHIKURA
		SHEET 22 OF 64



WIRED CONDUIT (2") (PVC)
 10-29-08 PARTIAL (123')
 US ROUTE 302 13+75 RT (LP) - 14+98 RT (DPB) - 132'
 US ROUTE 302 14+70 RT (UP) - 14+98 RT (DPB) - 32'
 US ROUTE 302 14+98 RT (DPB) - 14+96 LT (LP) - 105'
 US ROUTE 302 14+98 RT (DPB) - 15+82 RT (LP) - 102'
 US ROUTE 302 14+98 RT (DPB) - 15+01 RT (LP) - 5'
 II-3-08 PARTIAL (90')
 US ROUTE 302 15+01 RT (LP) - 52+21 LT (LP) - 92'
 US ROUTE 302 15+82 RT (LP) - 16+18 RT (PB) - 4'
 US ROUTE 302 16+18 RT (PB) - 16+17 LT (PB) - 64'
 US ROUTE 302 15+93 LT (LP) - 16+17 LT (PB) - 27'
 US ROUTE 302 16+17 LT (PB) - 17+06 LT (LP) - 90'

DOUBLE PULL BOX 6-4-09
 US ROUTE 302 14+98 - 54.9' RT

ELECTRICAL CONDUIT SLEEVE (8") (PVC)
 US ROUTE 302 14+98 RT (DPB) - 14+96 LT (LP) - 102'
 US ROUTE 302 14+98 RT (DPB) - 15+82 RT (LP) - 100'
 US ROUTE 302 16+18 RT (PB) - 16+17 LT (PB) - 64'
 US ROUTE 302 16+17 LT (PB) - 17+06 LT (LP) - 27'

LIGHT POLE BASE 5-13-09
 1 US ROUTE 302 13+75 - 24.6' RT
 2 US ROUTE 302 14+96 - 50.4' LT 1088.8
 3 US ROUTE 302 15+01 - 59.8' RT
 4 US ROUTE 302 15+82 - 55.0' RT 1089.2
 5 US ROUTE 302 15+93 - 42.8' LT
 6 US ROUTE 302 17+06 - 23.4' LT
 7 VT 110 52+21 - 24.4' LT 1087.52

PULL BOX, STANDARD
 6-2-09 US ROUTE 302 16+18 - 33.8' RT 6-3-09
 US ROUTE 302 16+17 - 29.7' LT

BREAKAWAY FEATURE FOR LIGHT POLE

LIGHT POLE (25') WITH BRACKET ARM (6' SINGLE ARM) AND 250 WATT LUMINAIRE
 US ROUTE 302 13+75 - 24.6' RT
 US ROUTE 302 14+96 - 50.4' LT
 US ROUTE 302 15+01 - 59.8' RT
 US ROUTE 302 15+82 - 55.0' RT
 US ROUTE 302 15+93 - 42.8' LT
 US ROUTE 302 17+06 - 23.4' LT
 VT 110 52+21 - 24.4' LT

LIGHT POLE (25') WITH BRACKET ARM (7' SINGLE ARM) AND 250 WATT LUMINAIRE
 US ROUTE 302 13+75 - 24.6' RT
 US ROUTE 302 14+96 - 50.4' LT
 US ROUTE 302 15+01 - 59.8' RT
 US ROUTE 302 15+82 - 55.0' RT
 US ROUTE 302 17+06 - 23.4' LT
 VT 110 52+21 - 24.4' LT

POWER DROP STANCHION WITH METER AND DISCONNECT
 US ROUTE 302 14+70 RT - 1 EACH
 (MOUNTED ON EXISTING POLE)

LEGEND:

LI*	PROPOSED LIGHT POLE
— PUE —	PROPOSED WIRED CONDUIT
-----	PROPOSED ELECTRICAL CONDUIT SLEEVE
∞	PROPOSED POWER DROP STANCHION WITH METER AND DISCONNECT
PB■	PROPOSED PULL BOX
DPB■	PROPOSED DOUBLE PULL BOX

BM# 2
 TOP OF BOLT
 ON SE CORNER
 SIGN BASE
 ELEV. = 1079.69

NEW POWER DROP STANCHION
 WITH METER AND DISCONNECT
 GREEN MOUNTAIN POWER
 TO REMOVE LUMINAIRE AND
 BRACKET (NOT IN CONTRACT)

BM# 1
 CHISELED SQUARE
 ON CONCRETE
 FOOTING
 ELEV. = 1075.77

BM# 3
 CHISELED SQUARE
 IN BRIDGE
 ABUTMENT
 ELEV. = 1087.89



DATUM
 VERTICAL NAVD 88
 HORIZONTAL NAD 83 (1996)

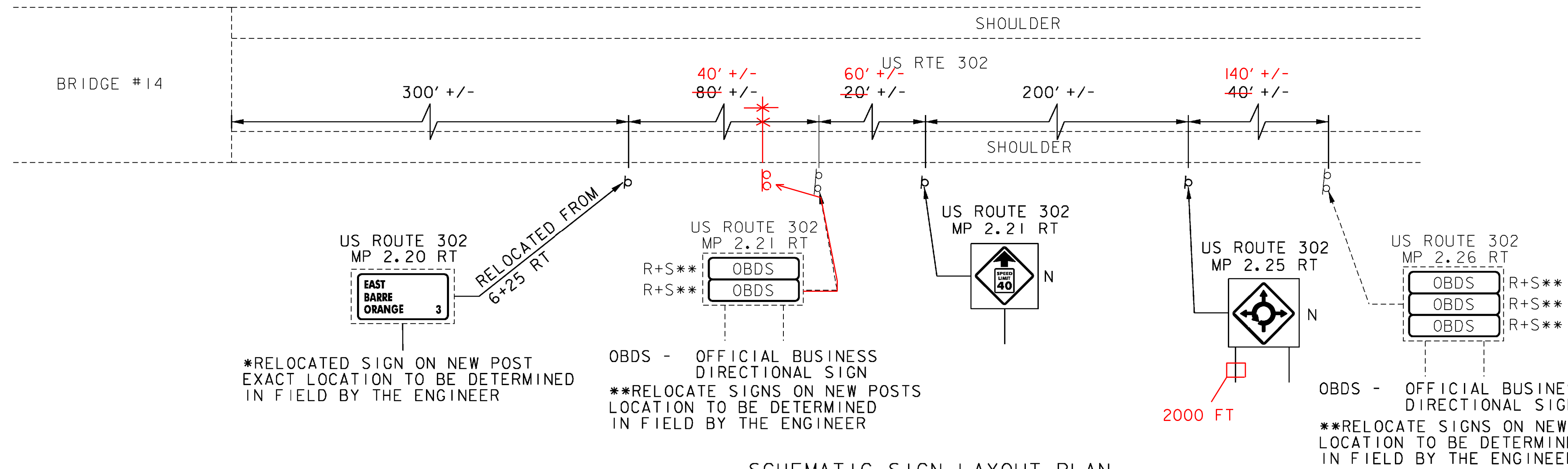
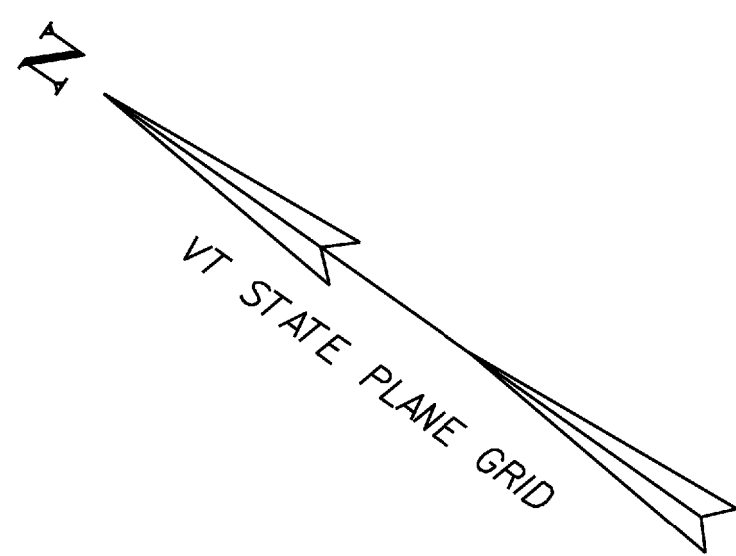
- GENERAL NOTE:**
- UNDERGROUND UTILITIES SHOWN HEREIN WHERE COMPLIED FROM INFORMATION OF RECORD AND FIELD OBSERVATIONS. THE EXISTENCE OR LOCATION OF THE UTILITIES ARE NOT WARRANTED TO BE EXACT. THE CONTRACTOR SHALL FIELD VERIFY THE LOCATIONS OF A UTILITY AT THE DISCRETION OF THE ENGINEER. PAYMENT TO BE MADE UNDER CONTRACT ITEM 204.22. IF FIELD CONDITIONS ARE DIFFERENT THAN SHOWN ON THE PLANS, THE ENGINEER SHALL BE NOTIFIED.
 - THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING ALL EXISTING UTILITIES THAT ARE TO REMAIN DURING CONSTRUCTION.
 - SEE ROADWAY LAYOUT SHEET FOR PROPOSED ROADWAY LAYOUT.
 - SEE CURB LAYOUT SHEETS FOR CURB LAYOUT DETAILS.
 - SEE ROADWAY LAYOUT SHEET FOR PROPOSED ROADWAY LAYOUT.

**LIGHTING PLAN
 LAYOUT SHEET I**

PROJECT NAME: BARRE TOWN
 PROJECT NUMBER: HES 026-1(38)

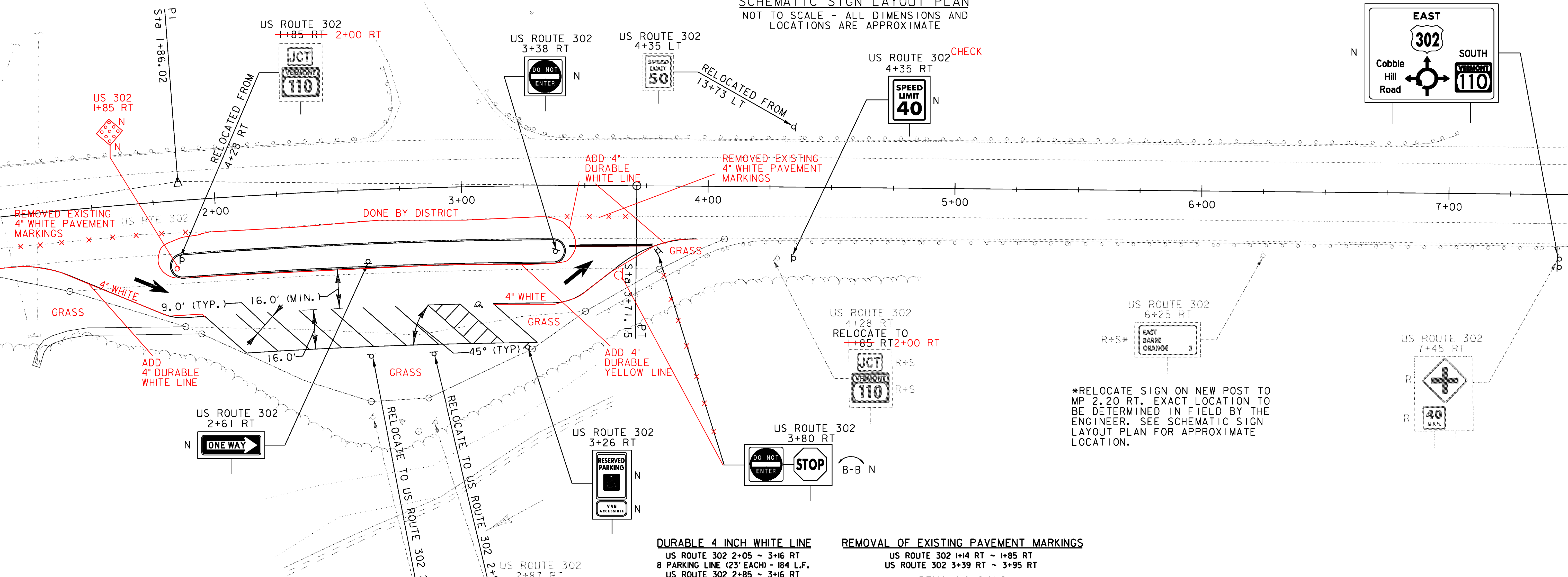
FILE NAME: z04b198ut1bdr.dgn
 PROJECT LEADER: JOSHUA SCHULTZ
 DESIGNED BY: V.KACOYANNAKIS

PLOT DATE: 1/29/2008
 DRAWN BY: V.KACOYANNAKIS
 CHECKED BY: K.ISHIKURA
 SHEET 24 OF 64



SCHEMATIC SIGN LAYOUT PLAN
NOT TO SCALE - ALL DIMENSIONS AND LOCATIONS ARE APPROXIMATE

SEE SCHEMATIC SIGN LAYOUT PLAN FOR CONTINUATION OF SIGNING ALONG US ROUTE 302



MATCHLINE STA. 7+50
PAVEMENT MARKING AND SIGNING LAYOUT SHEET 2

SIGN LEGEND

	= EXISTING SIGN AND POST
	= NEW SIGN W/ NEW POST
R	= REMOVE EXISTING SIGN AND POST
R+S	= SALVAGE SIGN AND RELOCATE TO NOTED LOCATION WITH NEW SIGN POST, REMOVE AND DISPOSE EXISTING SIGN POST
N	= NEW
RET	= RETAIN AT EXISTING LOCATION
B-B	= BACK TO BACK

NOTES:
THE EXACT LOCATION OF THE PROPOSED SIGNS TO BE DETERMINED IN THE FIELD BY THE ENGINEER.

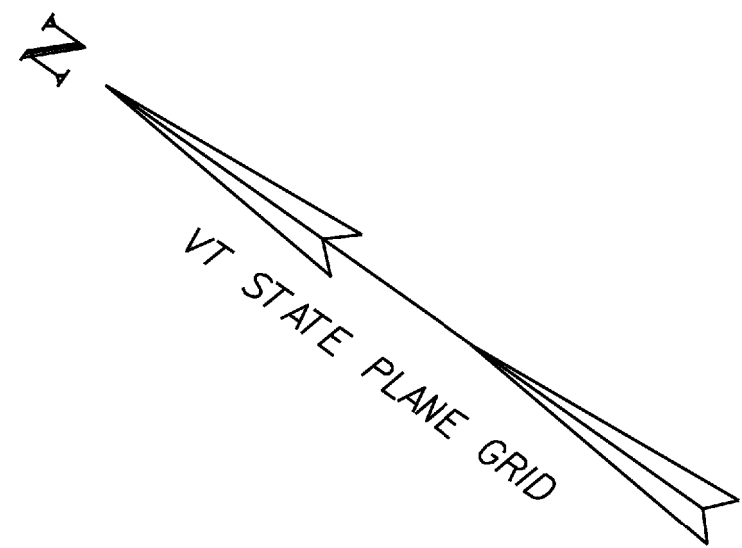
- DURABLE 4 INCH WHITE LINE**
US ROUTE 302 2+05 ~ 3+16 RT
8 PARKING LINE (23' EACH) - 184 L.F.
US ROUTE 302 2+85 ~ 3+16 RT
CORE MARKINGS FOR ACCESSIBLE AREA - 45 L.F.
- DURABLE 24 INCH STOP BAR**
US ROUTE 302 3+44 ~ 3+78 RT - 34 L.F.
- DURABLE LETTER OR SYMBOL**
US ROUTE 302 1+72 RT QTY=1
1- THRU ARROW
US ROUTE 302 3+06 RT QTY=1
1- HANDICAP PARKING SYMBOL
US ROUTE 302 3+48 RT QTY=1
1- THRU ARROW
- REMOVAL OF EXISTING PAVEMENT MARKINGS**
US ROUTE 302 1+14 RT ~ 1+85 RT
US ROUTE 302 3+39 RT ~ 3+95 RT
- REMOVING SIGNS**
13 EACH
- ERECTING SALVAGED SIGNS**
12 EACH



DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (1996)

PAVEMENT MARKING AND SIGNING LAYOUT SHEET I

PROJECT NAME: BARRE TOWN	PLOT DATE: 1/30/2008
PROJECT NUMBER: HES 026-1(38)	DRAWN BY: V.KACOYANNAKIS
FILE NAME: z04b198tr fbd.r.dgn	DESIGNED BY: J. FORD
PROJECT LEADER: JOSHUA SCHULTZ	CHECKED BY: J.FORD
	SHEET 35 OF 64



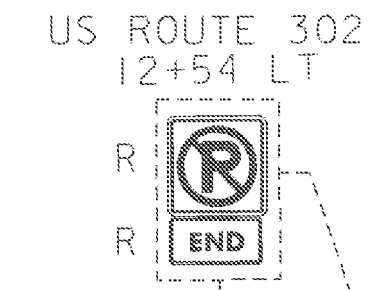
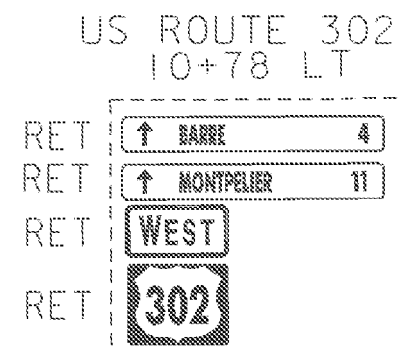
DURABLE 4 INCH WHITE LINE
 US ROUTE 302 8+50 ~ 13+00, LT 450 L.F.
 US ROUTE 302 8+50 ~ 13+00, RT 450 L.F.

DURABLE 4 INCH YELLOW LINE
 US ROUTE 302 8+50 ~ 13+00, 2 @ 450 L.F. - 900 L.F.

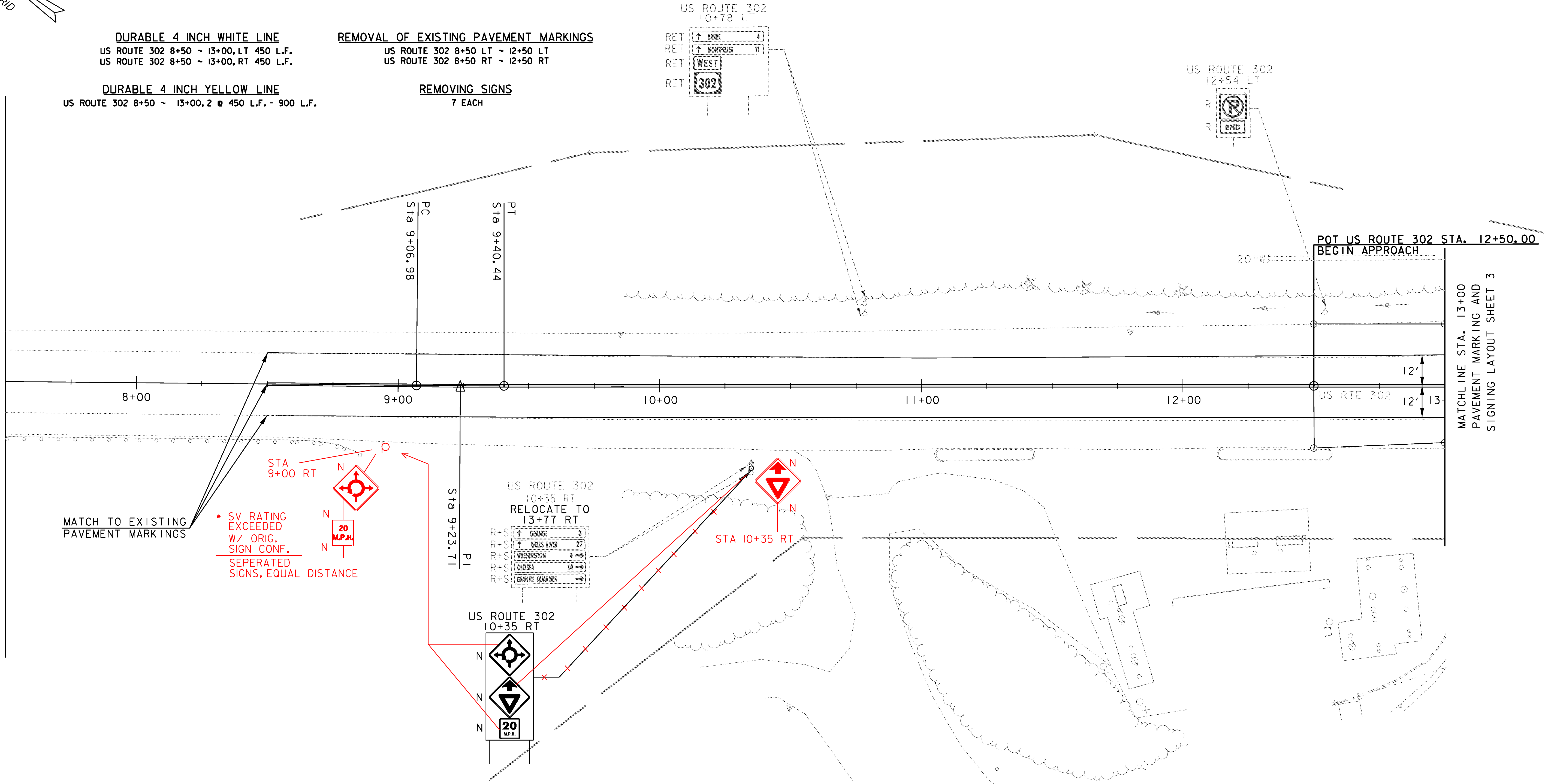
REMOVAL OF EXISTING PAVEMENT MARKINGS

US ROUTE 302 8+50 LT ~ 12+50 LT
 US ROUTE 302 8+50 RT ~ 12+50 RT

REMOVING SIGNS
 7 EACH



MATCHLINE STA. 7+50
PAVEMENT MARKING AND
SIGNING LAYOUT SHEET 1



MATCHLINE STA. 13+00
PAVEMENT MARKING AND
SIGNING LAYOUT SHEET 3

MATCH TO EXISTING PAVEMENT MARKINGS

• SV RATING EXCEEDED W/ ORIG. SIGN CONF. SEPERATED SIGNS, EQUAL DISTANCE

SIGN LEGEND	
	= EXISTING SIGN AND POST
	= NEW SIGN W/ NEW POST
R	= REMOVE EXISTING SIGN AND POST
R+S	= SALVAGE SIGN AND RELOCATE TO NOTED LOCATION WITH NEW SIGN POST. REMOVE AND DISPOSE EXISTING SIGN POST
N	= NEW
RET	= RETAIN AT EXISTING LOCATION
B-B	= BACK TO BACK

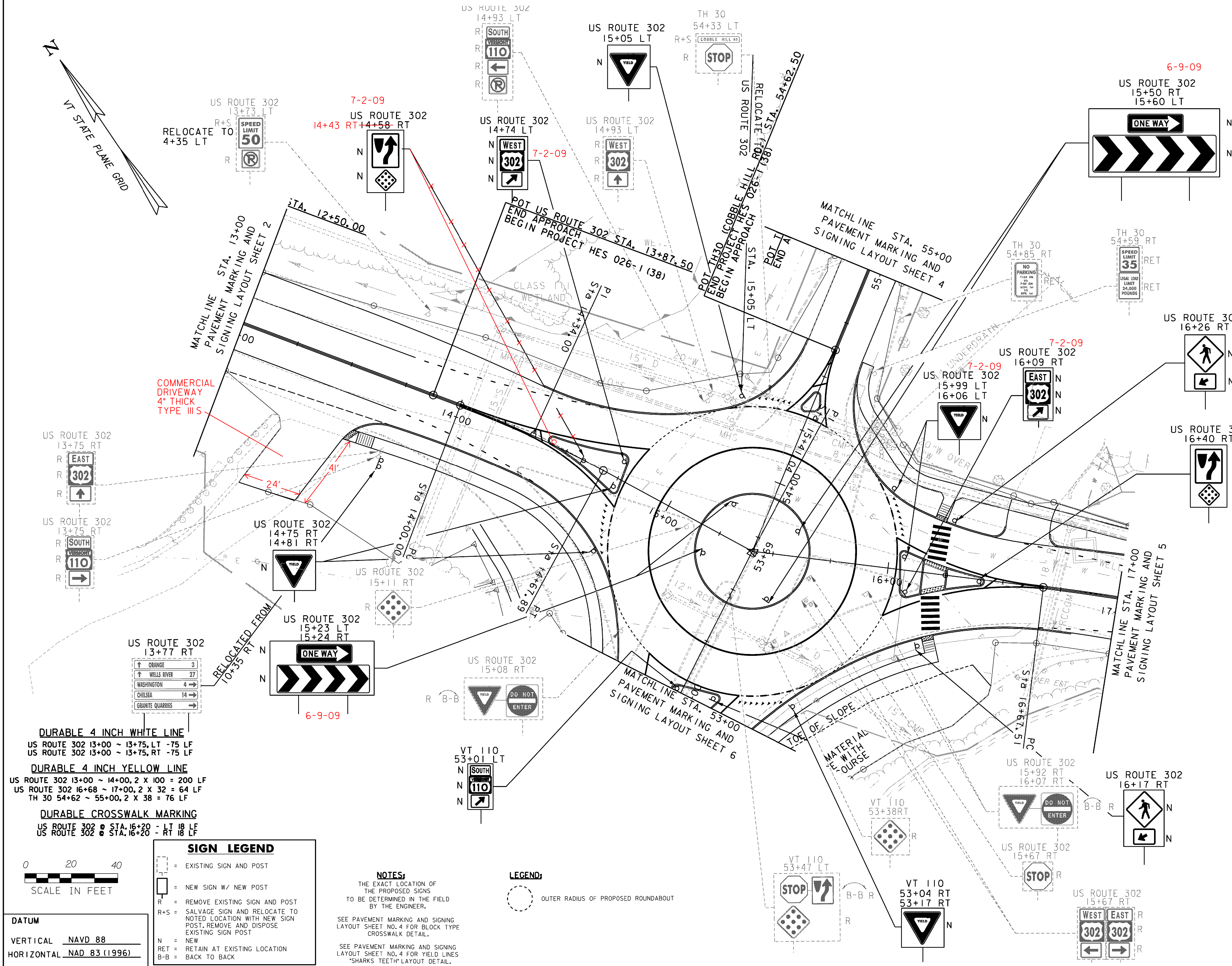
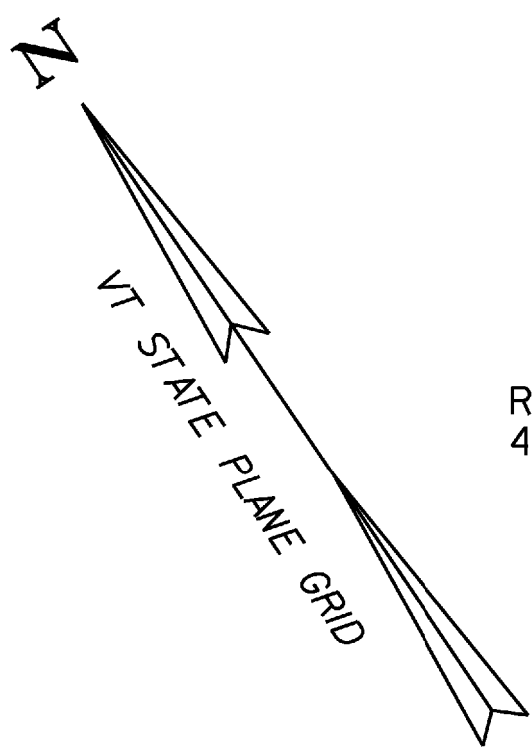


DATUM
 VERTICAL NAVD 88
 HORIZONTAL NAD 83 (1996)

NOTES:
 THE EXACT LOCATION OF THE PROPOSED SIGNS TO BE DETERMINED IN THE FIELD BY THE ENGINEER.

PAVEMENT MARKING AND SIGNING LAYOUT SHEET 2

PROJECT NAME: BARRE TOWN	PLOT DATE: 1/30/2008
PROJECT NUMBER: HES 026-1(38)	DRAWN BY: V.KACOYANNAKIS
FILE NAME: z04b198tr fbd.r.dgn	DESIGNED BY: J.FORD
PROJECT LEADER: JOSHUA SCHULTZ	CHECKED BY: J.FORD
SHEET 36 OF 64	



- REMOVING SIGNS**
40 EACH
- ERECTING SALVAGED SIGNS**
6 EACH
- DURABLE LETTER OR SYMBOL**
US ROUTE 302 QTY = 15 EA.
15- "SHARKS TEETH"- YIELD SYMBOLS
COBBLE HILL ROAD QTY = 6 EA.
6 - "SHARKS TEETH"- YIELD SYMBOLS
VT 110 QTY = 11EA.
8 - "SHARKS TEETH"- YIELD SYMBOLS
- DURABLE 8 INCH WHITE LINE**
US ROUTE 302 13+75 RT ~ 14+43 RT, R=288', 11X2' = 22 LF
US ROUTE 302 13+75 LT ~ 14+61 LT, 15X2' = 30 LF
US ROUTE 302 16+57 LT ~ 17+00 LT, 8X2' = 16 LF
US ROUTE 302 16+68 RT ~ 17+00 RT, R=550', 5X2' = 10 LF
US ROUTE 302 14+80 RT ~ 14+81 LT - R = 62.50', 30 LF
US ROUTE 302 15+23 RT ~ 15+43 RT - R = 62.50', 45 LF
US ROUTE 302 15+25 LT ~ 15+66 LT - R = 62.50', 20 LF
US ROUTE 302 16+00 RT ~ 16+02 LT - R = 62.50', 35 LF
- DURABLE 8 INCH YELLOW LINE**
US ROUTE 302 14+00 RT ~ 14+80 RT - R = 99', 82 LF
US ROUTE 302 14+00 LT ~ 14+81 LT - R = 287', 84 LF
US ROUTE 302 14+20 LT ~ 14+39 RT, 9 LF - GORE MARKS
US ROUTE 302 16+00 RT ~ 16+15 RT - R = 128', 18 LF
US ROUTE 302 16+02 LT ~ 16+16 LT - R = 150', 15 LF
US ROUTE 302 16+25 RT ~ 16+68 RT - R = 128', 44 LF
US ROUTE 302 16+25 LT ~ 16+68 LT - R = 150', 44 LF
US ROUTE 302 16+42 RT ~ 16+60 LT, 10 LF - GORE MARKS
VT 110 53+00 RT ~ 53+10 RT - R = 334', 11LF
VT 110 53+00 LT ~ 53+09 LT - R = 472', 10 LF
TH 30 54+30 RT ~ 54+63 RT - R = 62', 34 LF
TH 30 54+30 LT ~ 54+63 LT - R = 62', 34 LF
TH 30 54+44 LT ~ 54+57 RT, - 10 LF - GORE MARKS
EDGE OF TRUCK APRON, R = 45.00', 282 LF
- DURABLE 12 INCH WHITE LINE**
US ROUTE 302 14+80 RT ~ 14+92 RT
R = 62.50, 5 X 3' = 15 LF
US ROUTE 302 15+92 LT ~ 16+01 LT
R = 62.50, 4 X 3' = 12 LF
VT 110 53+12 RT ~ 53+27 RT
R = 62.50, 5 X 3' = 15 LF
TH 30 54+22 LT ~ 54+30 LT
R = 62.50, 4 X 3' = 12 LF

- DURABLE 4 INCH WHITE LINE**
US ROUTE 302 13+00 ~ 13+75, LT - 75 LF
US ROUTE 302 13+00 ~ 13+75, RT - 75 LF
- DURABLE 4 INCH YELLOW LINE**
US ROUTE 302 13+00 ~ 14+00, 2 X 100 = 200 LF
US ROUTE 302 16+68 ~ 17+00, 2 X 32 = 64 LF
TH 30 54+62 ~ 55+00, 2 X 38 = 76 LF
- DURABLE CROSSWALK MARKING**
US ROUTE 302 @ STA. 16+20 - LT 18 LF
US ROUTE 302 @ STA. 16+20 - RT 18 LF

SIGN LEGEND

- [Symbol] = EXISTING SIGN AND POST
- [Symbol] = NEW SIGN W/ NEW POST
- R = REMOVE EXISTING SIGN AND POST
- R+S = SALVAGE SIGN AND RELOCATE TO NOTED LOCATION WITH NEW SIGN POST. REMOVE AND DISPOSE EXISTING SIGN POST
- N = NEW
- RET = RETAIN AT EXISTING LOCATION
- B-B = BACK TO BACK

NOTES:
THE EXACT LOCATION OF THE PROPOSED SIGNS TO BE DETERMINED IN THE FIELD BY THE ENGINEER.

LEGEND:
[Symbol] OUTER RADIUS OF PROPOSED ROUNDABOUT

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (1996)

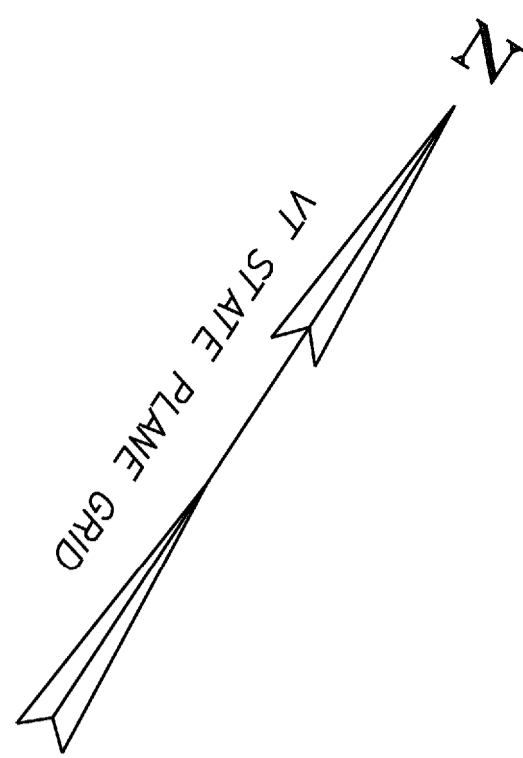


PAVEMENT MARKING AND SIGNING LAYOUT SHEET 3

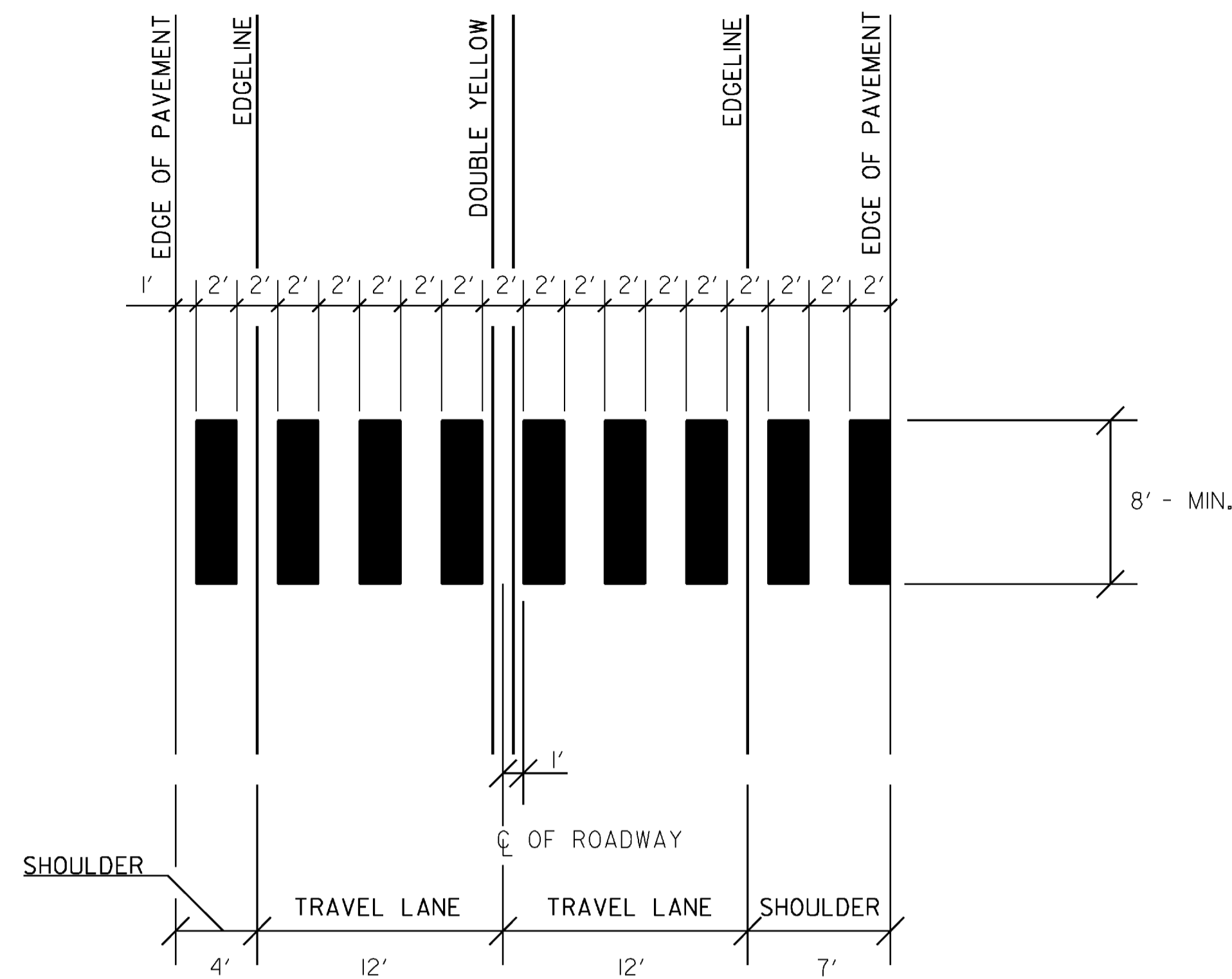
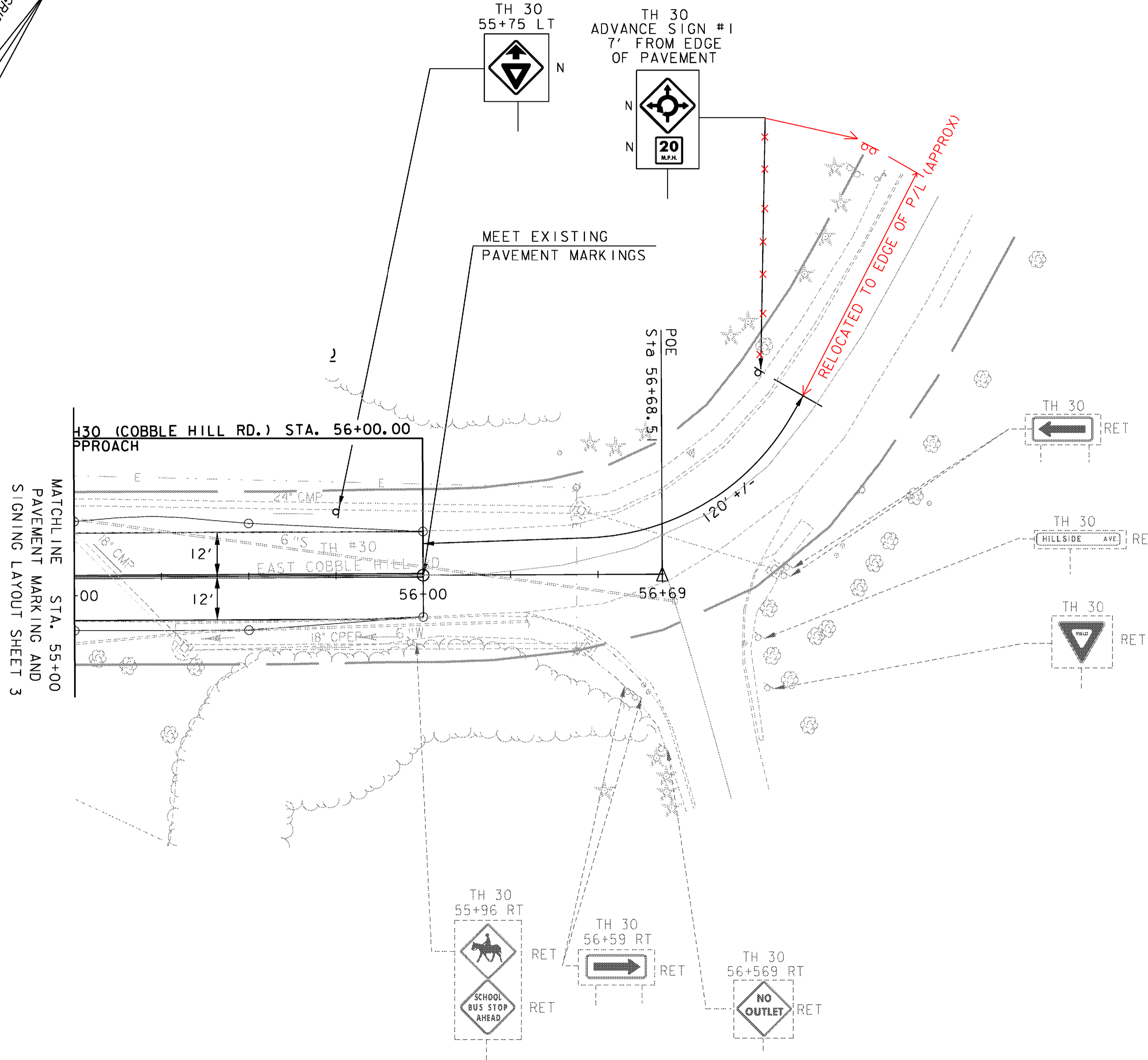
PROJECT NAME: BARRE TOWN
PROJECT NUMBER: HES 026-1(38)

FILE NAME: z04b198trfbd.rgn
PROJECT LEADER: JOSHUA SCHULTZ
DESIGNED BY: J.FORD

PLOT DATE: 1/30/2008
DRAWN BY: V.KACOYANNAKIS
CHECKED BY: J.FORD
SHEET 37 OF 64

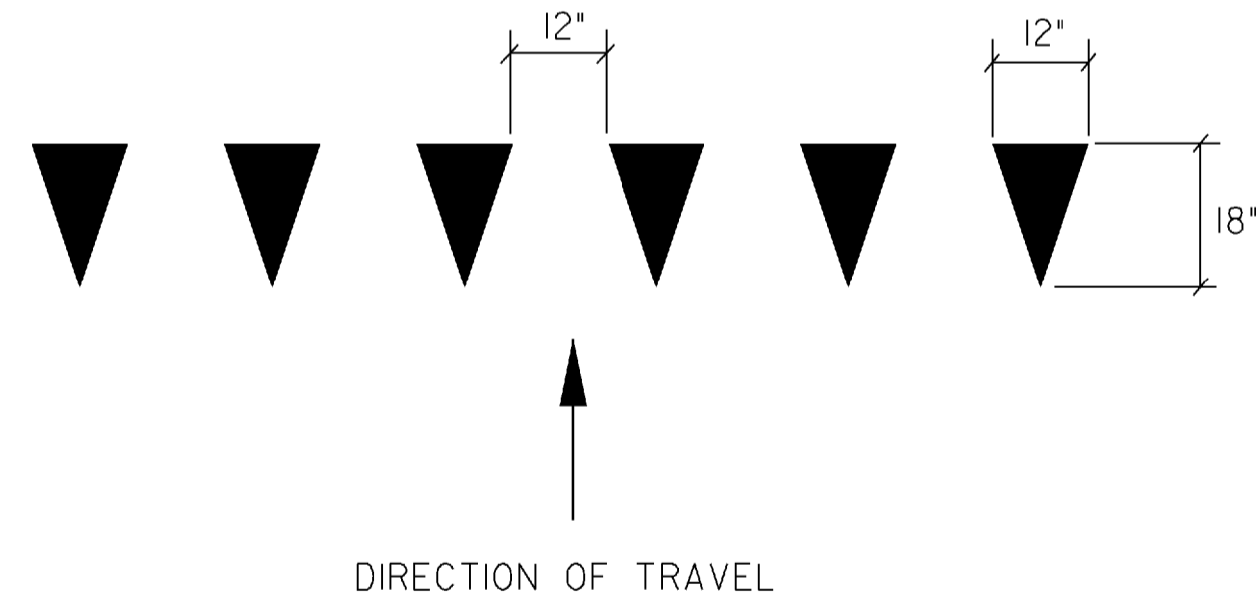


• RELOCATED AWAY FOR AIKENS FRONT YARD



BLOCK TYPE CROSSWALK DETAIL

YIELD LINE LAYOUTS



DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (1996)

SIGN LEGEND

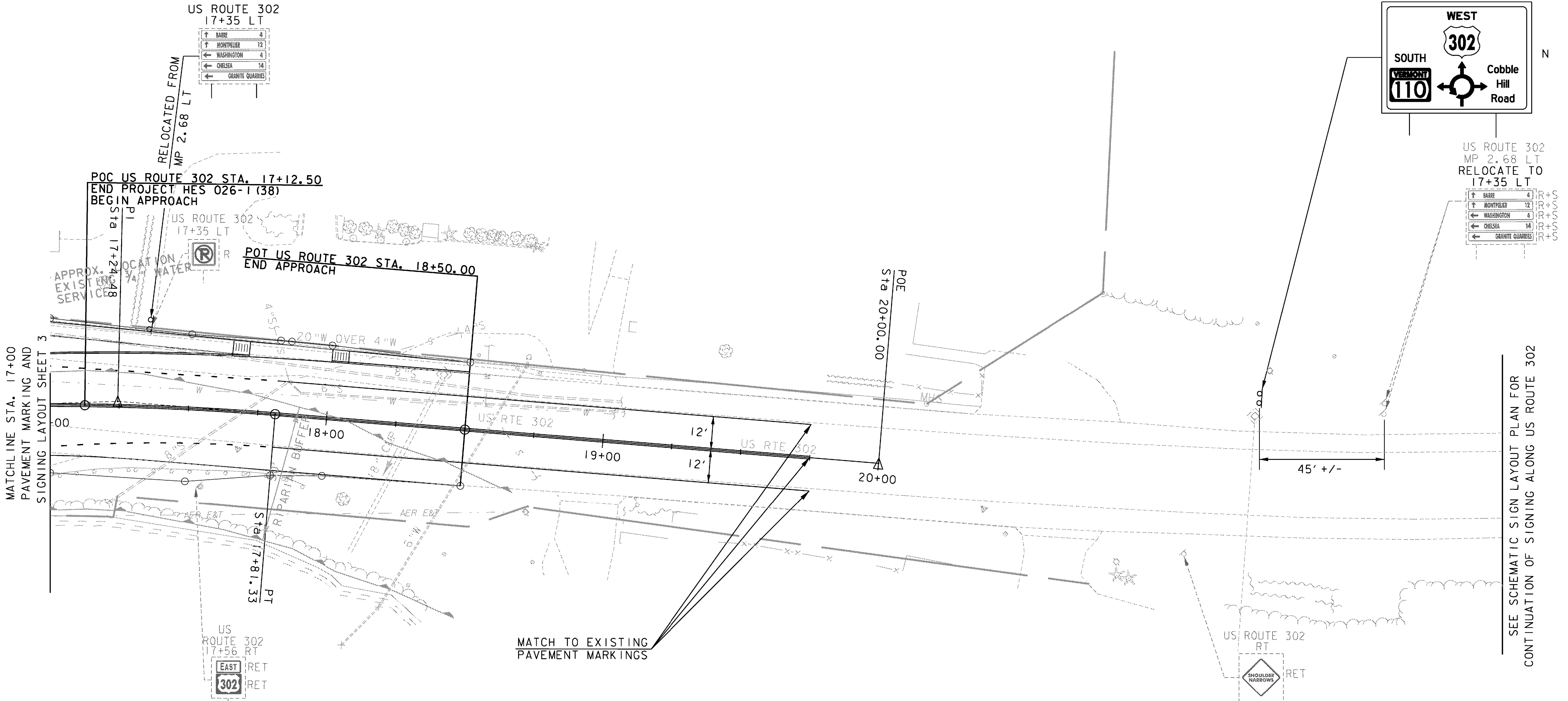
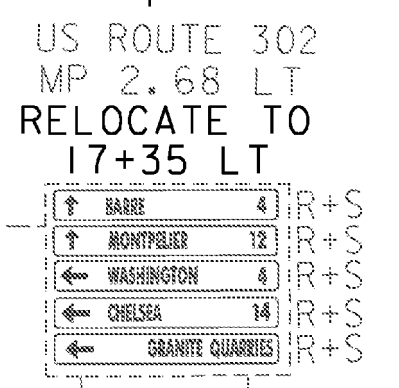
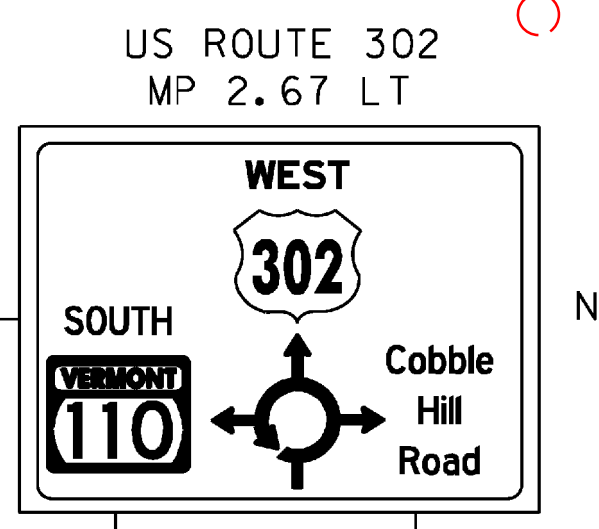
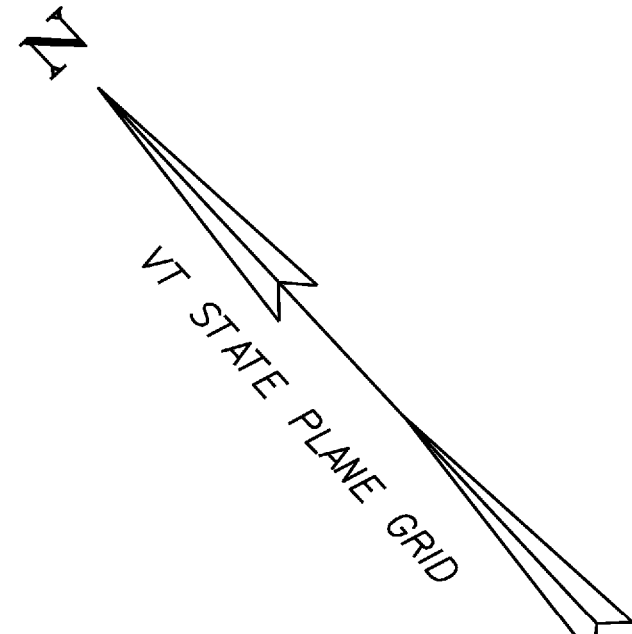
- = EXISTING SIGN AND POST
- = NEW SIGN W/ NEW POST
- R = REMOVE EXISTING SIGN AND POST
- R+S = SALVAGE SIGN AND RELOCATE TO NOTED LOCATION WITH NEW SIGN POST. REMOVE AND DISPOSE EXISTING SIGN POST
- N = NEW
- RET = RETAIN AT EXISTING LOCATION
- B-B = BACK TO BACK

DURABLE 4 INCH YELLOW LINE
TH 30 55+00 ~ 56+00, 2 X 100' = 200 LF

NOTES:
THE EXACT LOCATION OF THE PROPOSED SIGNS TO BE DETERMINED IN THE FIELD BY THE ENGINEER.

PAVEMENT MARKING AND SIGNING LAYOUT SHEET 4

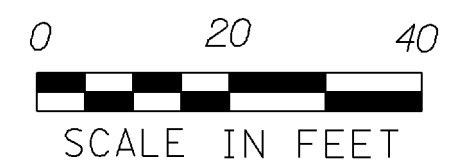
PROJECT NAME: BARRE TOWN	PLOT DATE: 1/30/2008
PROJECT NUMBER: HES 026-1(38)	DRAWN BY: V.KACOYANNAKIS
FILE NAME: z04b198trfbdr.dgn	CHECKED BY: J.FORD
PROJECT LEADER: JOSHUA SCHULTZ	SHEET 38 OF 64
DESIGNED BY: J. FORD	



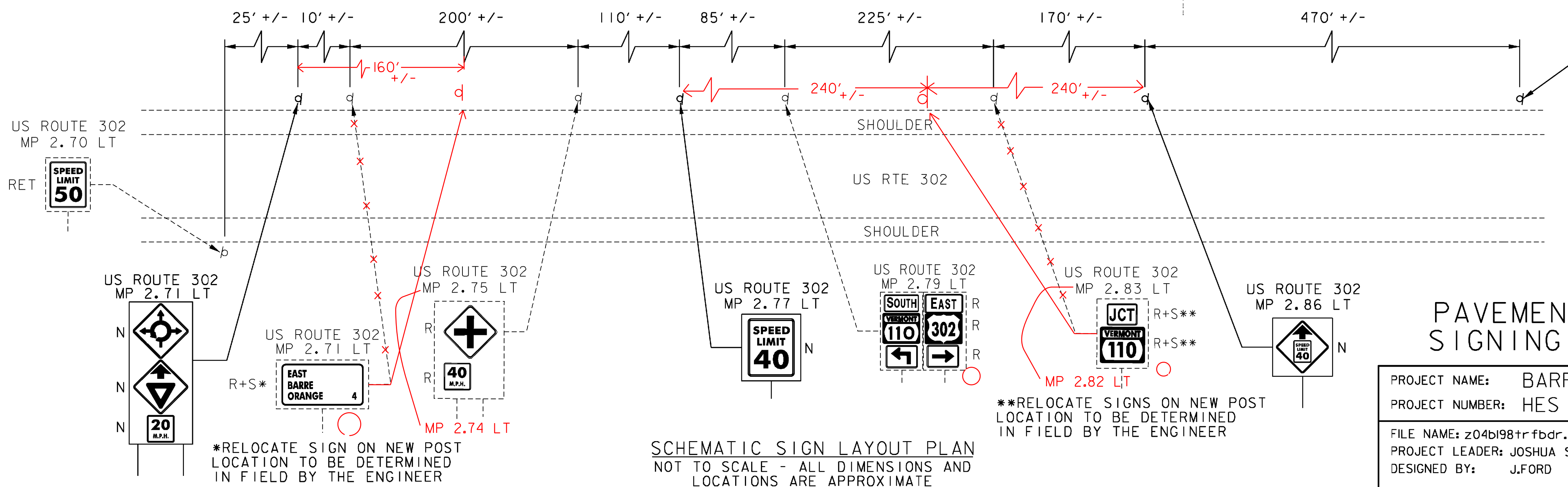
- DURABLE 4 INCH WHITE LINE**
US ROUTE 302 17+81 ~ 19+75, LT 194' LF
US ROUTE 302 17+81 ~ 19+75, RT 194' LF
- DURABLE 4 INCH YELLOW LINE**
US ROUTE 302 17+00 ~ 19+75, 2 X 275' = 550' LF
- DURABLE 8 INCH WHITE LINE**
US ROUTE 302 17+00 ~ 17+81, LT 2 X 13 = 26' LF
US ROUTE 302 17+00 ~ 17+81, RT, R = 550', 2 X 13 = 26' LF

- REMOVAL OF EXISTING PAVEMENT MARKINGS**
US ROUTE 302 18+50 LT ~ 19+75 LT
US ROUTE 302 18+50 RT ~ 19+75 RT
- REMOVE SIGNS**
17 EACH
- ERECTING SALVAGED SIGNS**
8 EACH

SIGN LEGEND	
	= EXISTING SIGN AND POST
	= NEW SIGN W/ NEW POST
R	= REMOVE EXISTING SIGN AND POST
R+S	= SALVAGE SIGN AND RELOCATE TO NOTED LOCATION WITH NEW SIGN POST. REMOVE AND DISPOSE EXISTING SIGN POST
N	= NEW
RET	= RETAIN AT EXISTING LOCATION
B-B	= BACK TO BACK



DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (1996)

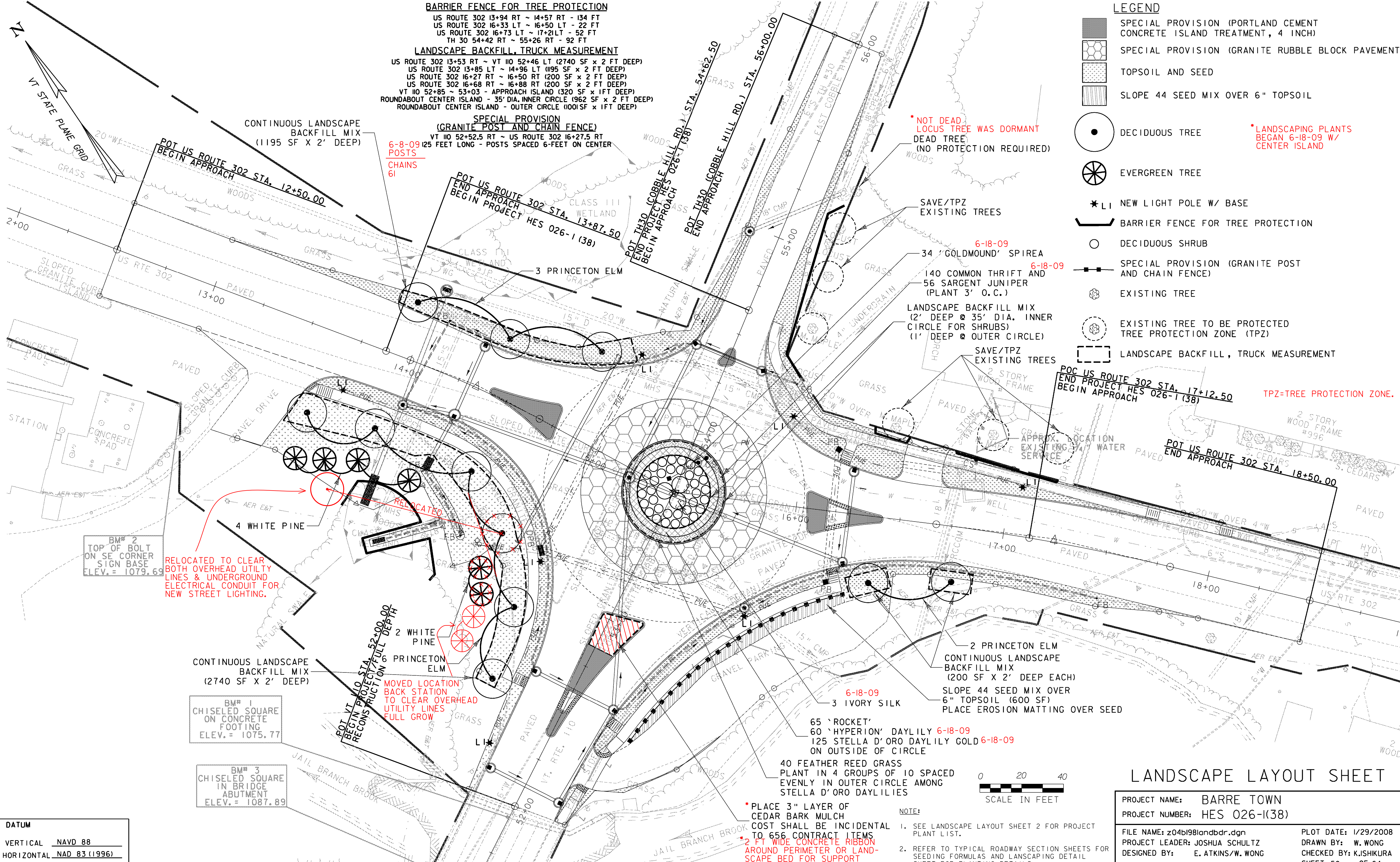


NOTES:
THE EXACT LOCATION OF THE PROPOSED SIGNS TO BE DETERMINED IN THE FIELD BY THE ENGINEER.

SCHEMATIC SIGN LAYOUT PLAN
NOT TO SCALE - ALL DIMENSIONS AND LOCATIONS ARE APPROXIMATE

PAVEMENT MARKING AND SIGNING LAYOUT SHEET 5

PROJECT NAME: BARRE TOWN	PLOT DATE: 1/30/2008
PROJECT NUMBER: HES 026-1(38)	DRAWN BY: V.KACOYANNAKIS
FILE NAME: z04b198tr.fldr.dgn	CHECKED BY: J.FORD
PROJECT LEADER: JOSHUA SCHULTZ	SHEET 39 OF 64
DESIGNED BY: J.FORD	



BARRIER FENCE FOR TREE PROTECTION

US ROUTE 302 13+94 RT ~ 14+57 RT - 134 FT
 US ROUTE 302 16+33 LT ~ 16+50 RT - 22 FT
 US ROUTE 302 16+73 LT ~ 17+21LT - 52 FT
 TH 30 54+42 RT ~ 55+26 RT - 92 FT

LANDSCAPE BACKFILL, TRUCK MEASUREMENT

US ROUTE 302 13+53 RT ~ VT 110 52+46 LT (2740 SF x 2 FT DEEP)
 US ROUTE 302 13+85 LT ~ 14+96 LT (1195 SF x 2 FT DEEP)
 US ROUTE 302 16+27 RT ~ 16+50 RT (200 SF x 2 FT DEEP)
 US ROUTE 302 16+68 RT ~ 16+88 RT (200 SF x 2 FT DEEP)
 VT 110 52+85 ~ 53+03 - APPROACH ISLAND (320 SF x 1 FT DEEP)
 ROUNDABOUT CENTER ISLAND - 35' DIA. INNER CIRCLE (962 SF x 2 FT DEEP)
 ROUNDABOUT CENTER ISLAND - OUTER CIRCLE (1001 SF x 1 FT DEEP)

SPECIAL PROVISION (GRANITE POST AND CHAIN FENCE)

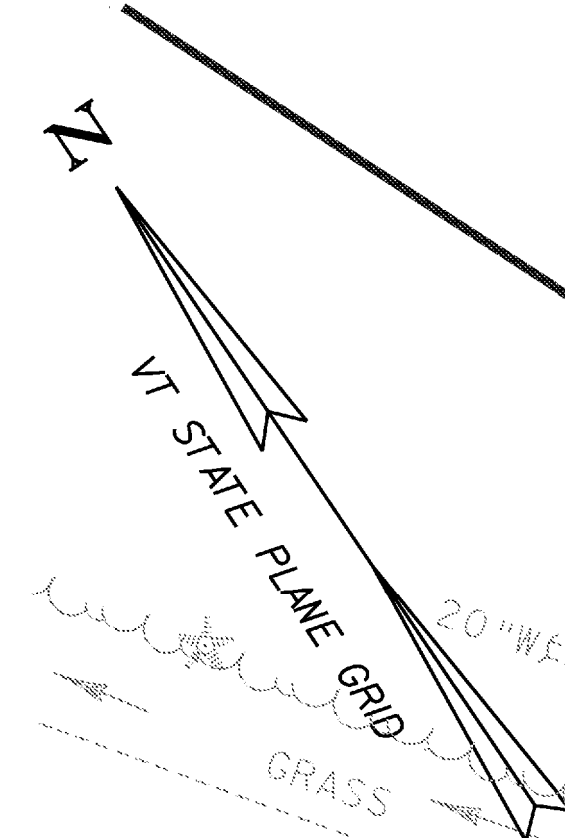
VT 110 52+52.5 RT ~ US ROUTE 302 16+27.5 RT
 125 FEET LONG - POSTS SPACED 6-FEET ON CENTER

LEGEND

- SPECIAL PROVISION (PORTLAND CEMENT CONCRETE ISLAND TREATMENT, 4 INCH)
- SPECIAL PROVISION (GRANITE RUBBLE BLOCK PAVEMENT)
- TOPSOIL AND SEED
- SLOPE 44 SEED MIX OVER 6" TOPSOIL
- DECIDUOUS TREE
- EVERGREEN TREE
- * LI NEW LIGHT POLE W/ BASE
- BARRIER FENCE FOR TREE PROTECTION
- DECIDUOUS SHRUB
- SPECIAL PROVISION (GRANITE POST AND CHAIN FENCE)
- EXISTING TREE
- EXISTING TREE TO BE PROTECTED TREE PROTECTION ZONE (TPZ)
- LANDSCAPE BACKFILL, TRUCK MEASUREMENT

* LANDSCAPING PLANTS BEGAN 6-18-09 W/ CENTER ISLAND

TPZ-TREE PROTECTION ZONE.



DATUM
 VERTICAL NAVD 88
 HORIZONTAL NAD 83 (1996)

LANDSCAPE LAYOUT SHEET 1

PROJECT NAME: BARRE TOWN
 PROJECT NUMBER: HES 026-(138)
 FILE NAME: z04b198landbdr.dgn
 PROJECT LEADER: JOSHUA SCHULTZ
 DESIGNED BY: E. ATKINS/W. WONG
 PLOT DATE: 1/29/2008
 DRAWN BY: W. WONG
 CHECKED BY: K.ISHIKURA
 SHEET 50 OF 64



NOTE:

1. SEE LANDSCAPE LAYOUT SHEET 2 FOR PROJECT PLANT LIST.
2. REFER TO TYPICAL ROADWAY SECTION SHEETS FOR SEEDING FORMULAS AND LANDSCAPING DETAIL SHEET FOR PLANTING DETAILS.

* PLACE 3" LAYER OF CEDAR BARK MULCH COST SHALL BE INCIDENTAL TO 656 CONTRACT ITEMS
 * 2 FT WIDE CONCRETE RIBBON AROUND PERIMETER OF LANDSCAPE BED FOR SUPPORT VERTICAL GRANITE CURBING.

RELOCATED TO CLEAR BOTH OVERHEAD UTILITY LINES & UNDERGROUND ELECTRICAL CONDUIT FOR NEW STREET LIGHTING.

MOVED LOCATION BACK STATION TO CLEAR OVERHEAD UTILITY LINES FULL GROW

BM# 1 CHISELED SQUARE ON CONCRETE FOOTING ELEV. = 1075.77

BM# 3 CHISELED SQUARE IN BRIDGE ABUTMENT ELEV. = 1087.89

BM# 2 TOP OF BOLT ON SE CORNER SIGN BASE ELEV. = 1079.69

CONTINUOUS LANDSCAPE BACKFILL MIX (2740 SF X 2' DEEP)

CONTINUOUS LANDSCAPE BACKFILL MIX (1195 SF X 2' DEEP)

POT VT 110 STA. 52+00.00 BEGIN PROJECT FULL DEPTH RECONSTRUCTION

POT US ROUTE 302 STA. 13+87.50 END APPROACH BEGIN PROJECT HES 026-1 (38)

POT TH30 COBBLE HILL RD. STA. 54+62.50 END PROJECT HES 026-1 (38) BEGIN APPROACH

POT US ROUTE 302 STA. 17+12.50 END PROJECT HES 026-1 (38) BEGIN APPROACH

POT US ROUTE 302 STA. 18+50.00 END APPROACH

CONTINUOUS LANDSCAPE BACKFILL MIX (1195 SF X 2' DEEP)

POT US ROUTE 302 STA. 12+50.00 BEGIN APPROACH

SAVE/TPZ EXISTING TREES

34 'GOLDMOUND' SPIREA 6-18-09
 140 COMMON THRIFT AND 56 SARGENT JUNIPER (PLANT 3' O.C.) 6-18-09

LANDSCAPE BACKFILL MIX (2' DEEP @ 35' DIA. INNER CIRCLE FOR SHRUBS) (1' DEEP @ OUTER CIRCLE)

SAVE/TPZ EXISTING TREES

2 STORY WOOD FRAME

APPROX. LOCATION EXISTING 1/4" WATER SERVICE

PAVED

PAVED

PAVED

PAVED

PAVED

PAVED

PAVED

PAVED

PAVED

PAVED

PAVED

PAVED

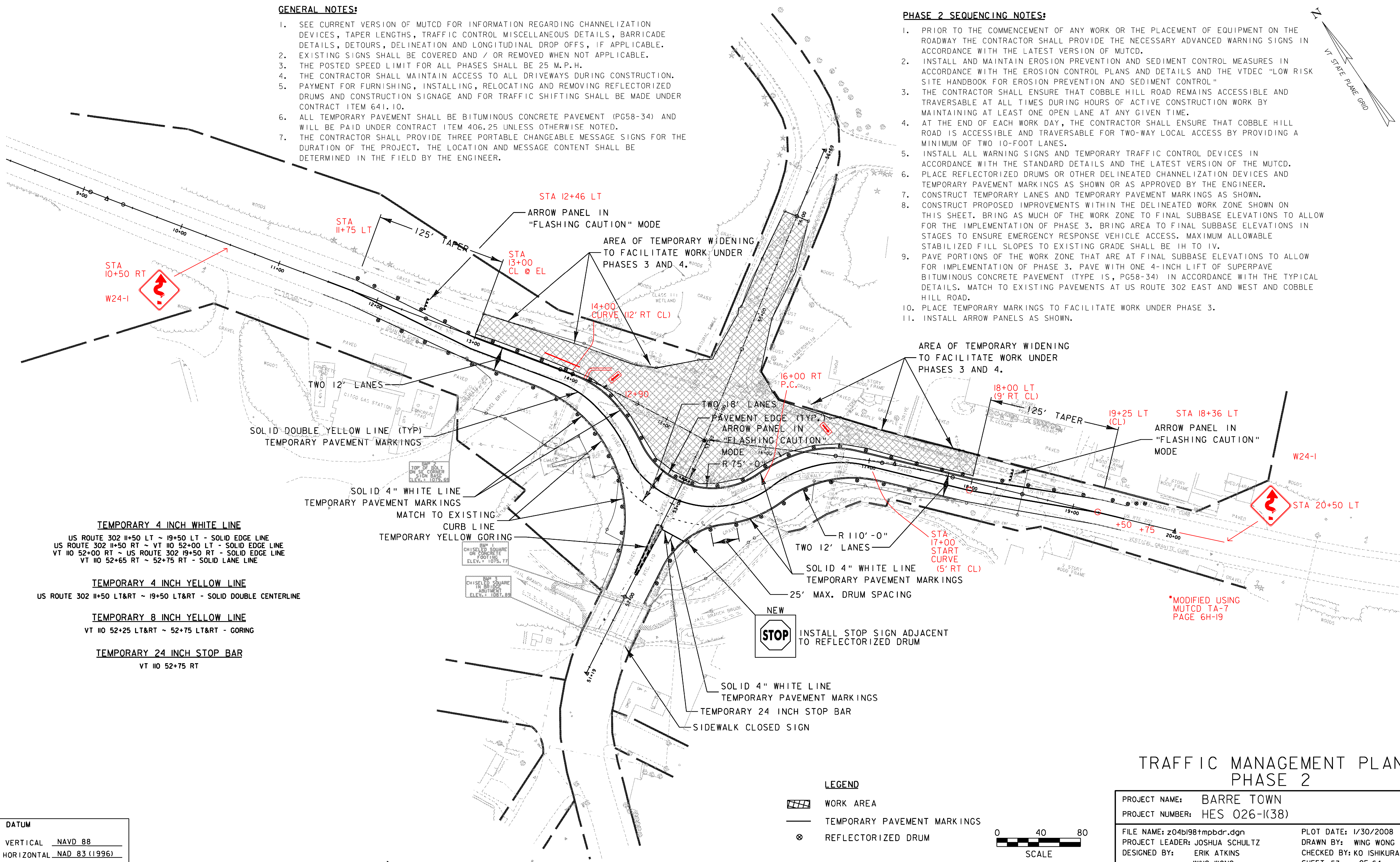
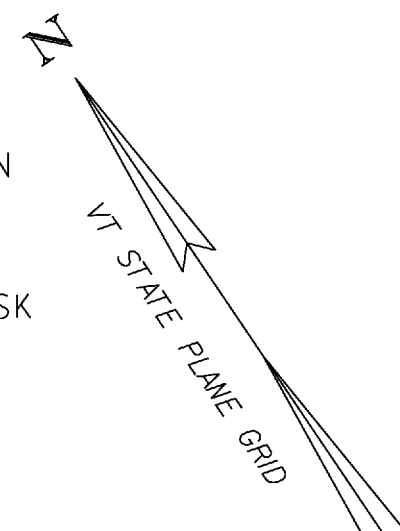
PAVED

GENERAL NOTES:

1. SEE CURRENT VERSION OF MUTCD FOR INFORMATION REGARDING CHANNELIZATION DEVICES, TAPER LENGTHS, TRAFFIC CONTROL MISCELLANEOUS DETAILS, BARRICADE DETAILS, DETOURS, DELINEATION AND LONGITUDINAL DROP OFFS, IF APPLICABLE.
2. EXISTING SIGNS SHALL BE COVERED AND / OR REMOVED WHEN NOT APPLICABLE.
3. THE POSTED SPEED LIMIT FOR ALL PHASES SHALL BE 25 M.P.H.
4. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS DURING CONSTRUCTION.
5. PAYMENT FOR FURNISHING, INSTALLING, RELOCATING AND REMOVING REFLECTORIZED DRUMS AND CONSTRUCTION SIGNAGE AND FOR TRAFFIC SHIFTING SHALL BE MADE UNDER CONTRACT ITEM 641.10.
6. ALL TEMPORARY PAVEMENT SHALL BE BITUMINOUS CONCRETE PAVEMENT (PG58-34) AND WILL BE PAID UNDER CONTRACT ITEM 406.25 UNLESS OTHERWISE NOTED.
7. THE CONTRACTOR SHALL PROVIDE THREE PORTABLE CHANGEABLE MESSAGE SIGNS FOR THE DURATION OF THE PROJECT. THE LOCATION AND MESSAGE CONTENT SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER.

PHASE 2 SEQUENCING NOTES:

1. PRIOR TO THE COMMENCEMENT OF ANY WORK OR THE PLACEMENT OF EQUIPMENT ON THE ROADWAY THE CONTRACTOR SHALL PROVIDE THE NECESSARY ADVANCED WARNING SIGNS IN ACCORDANCE WITH THE LATEST VERSION OF MUTCD.
2. INSTALL AND MAINTAIN EROSION PREVENTION AND SEDIMENT CONTROL MEASURES IN ACCORDANCE WITH THE EROSION CONTROL PLANS AND DETAILS AND THE VTDEC "LOW RISK SITE HANDBOOK FOR EROSION PREVENTION AND SEDIMENT CONTROL"
3. THE CONTRACTOR SHALL ENSURE THAT COBBLE HILL ROAD REMAINS ACCESSIBLE AND TRAVERSABLE AT ALL TIMES DURING HOURS OF ACTIVE CONSTRUCTION WORK BY MAINTAINING AT LEAST ONE OPEN LANE AT ANY GIVEN TIME.
4. AT THE END OF EACH WORK DAY, THE CONTRACTOR SHALL ENSURE THAT COBBLE HILL ROAD IS ACCESSIBLE AND TRAVERSABLE FOR TWO-WAY LOCAL ACCESS BY PROVIDING A MINIMUM OF TWO 10-FOOT LANES.
5. INSTALL ALL WARNING SIGNS AND TEMPORARY TRAFFIC CONTROL DEVICES IN ACCORDANCE WITH THE STANDARD DETAILS AND THE LATEST VERSION OF THE MUTCD.
6. PLACE REFLECTORIZED DRUMS OR OTHER DELINEATED CHANNELIZATION DEVICES AND TEMPORARY PAVEMENT MARKINGS AS SHOWN OR AS APPROVED BY THE ENGINEER.
7. CONSTRUCT TEMPORARY LANES AND TEMPORARY PAVEMENT MARKINGS AS SHOWN.
8. CONSTRUCT PROPOSED IMPROVEMENTS WITHIN THE DELINEATED WORK ZONE SHOWN ON THIS SHEET. BRING AS MUCH OF THE WORK ZONE TO FINAL SUBBASE ELEVATIONS TO ALLOW FOR THE IMPLEMENTATION OF PHASE 3. BRING AREA TO FINAL SUBBASE ELEVATIONS IN STAGES TO ENSURE EMERGENCY RESPONSE VEHICLE ACCESS. MAXIMUM ALLOWABLE STABILIZED FILL SLOPES TO EXISTING GRADE SHALL BE 1H TO 1V.
9. PAVE PORTIONS OF THE WORK ZONE THAT ARE AT FINAL SUBBASE ELEVATIONS TO ALLOW FOR IMPLEMENTATION OF PHASE 3. PAVE WITH ONE 4-INCH LIFT OF SUPERPAVE BITUMINOUS CONCRETE PAVEMENT (TYPE 1S, PG58-34) IN ACCORDANCE WITH THE TYPICAL DETAILS. MATCH TO EXISTING PAVEMENTS AT US ROUTE 302 EAST AND WEST AND COBBLE HILL ROAD.
10. PLACE TEMPORARY MARKINGS TO FACILITATE WORK UNDER PHASE 3.
11. INSTALL ARROW PANELS AS SHOWN.



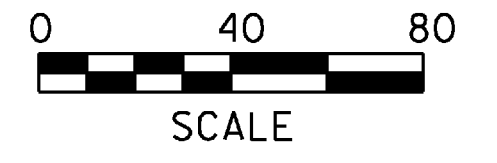
- TEMPORARY 4 INCH WHITE LINE**
US ROUTE 302 11+50 LT ~ 19+50 LT - SOLID EDGE LINE
US ROUTE 302 11+50 RT ~ VT 110 52+00 LT - SOLID EDGE LINE
VT 110 52+00 RT ~ US ROUTE 302 19+50 RT - SOLID EDGE LINE
VT 110 52+65 RT ~ 52+75 RT - SOLID LANE LINE
- TEMPORARY 4 INCH YELLOW LINE**
US ROUTE 302 11+50 LT&RT ~ 19+50 LT&RT - SOLID DOUBLE CENTERLINE
- TEMPORARY 8 INCH YELLOW LINE**
VT 110 52+25 LT&RT ~ 52+75 LT&RT - GORING
- TEMPORARY 24 INCH STOP BAR**
VT 110 52+75 RT

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (1996)

NEW STOP
INSTALL STOP SIGN ADJACENT TO REFLECTORIZED DRUM

*MODIFIED USING MUTCD TA-7 PAGE 6H-19

- LEGEND**
- WORK AREA
 - TEMPORARY PAVEMENT MARKINGS
 - REFLECTORIZED DRUM

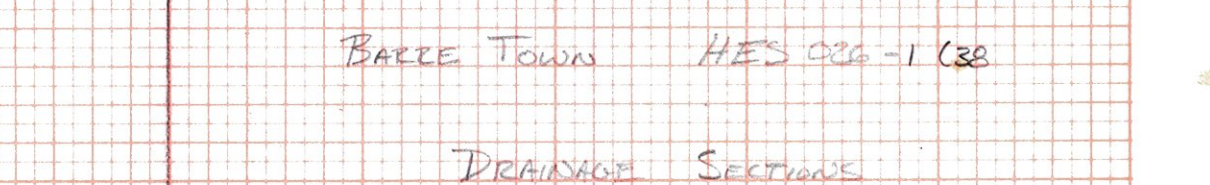
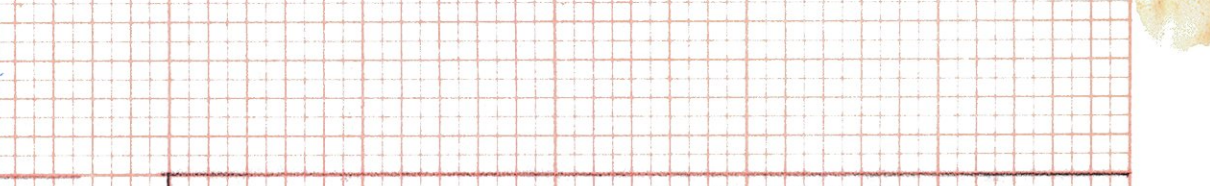
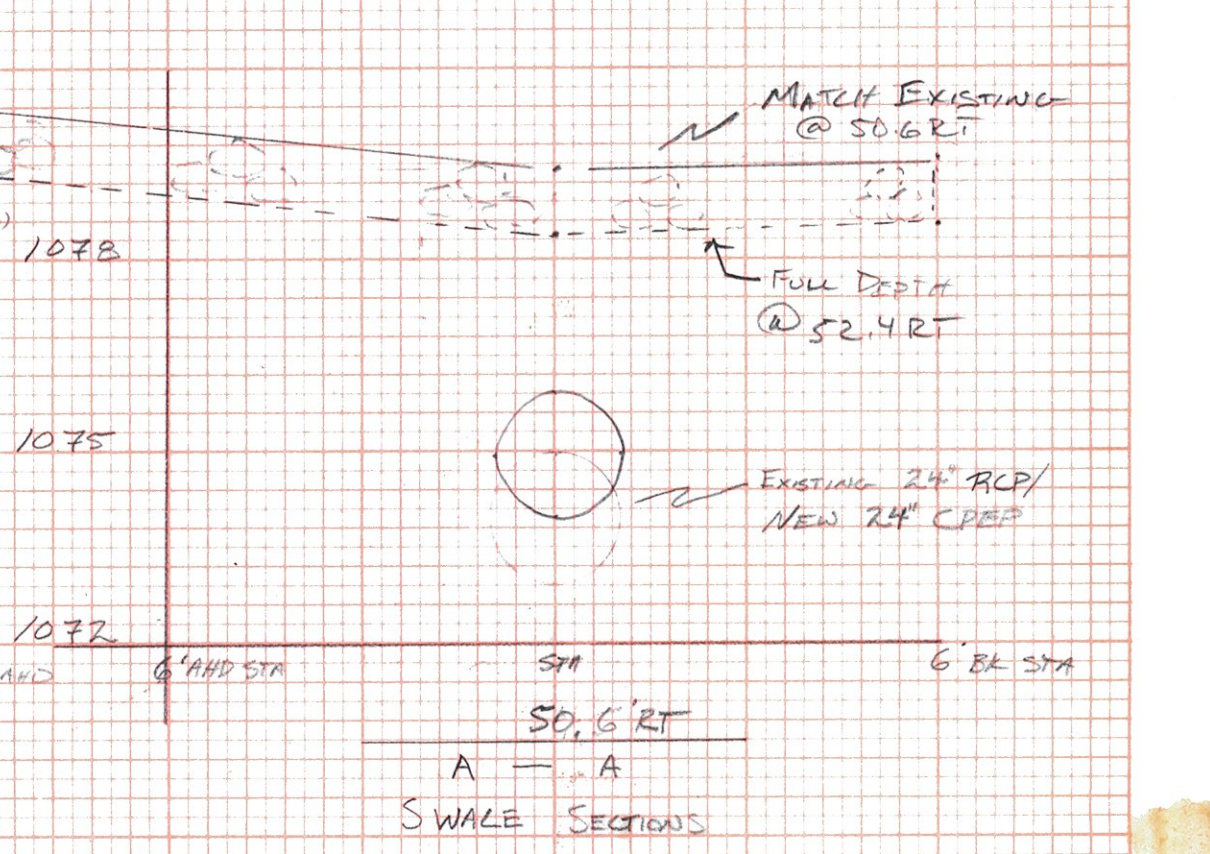
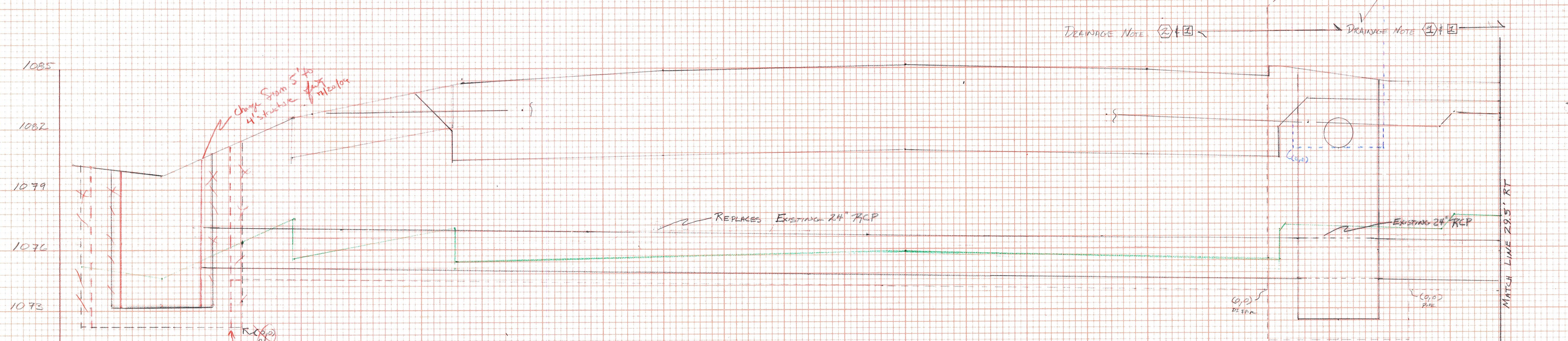
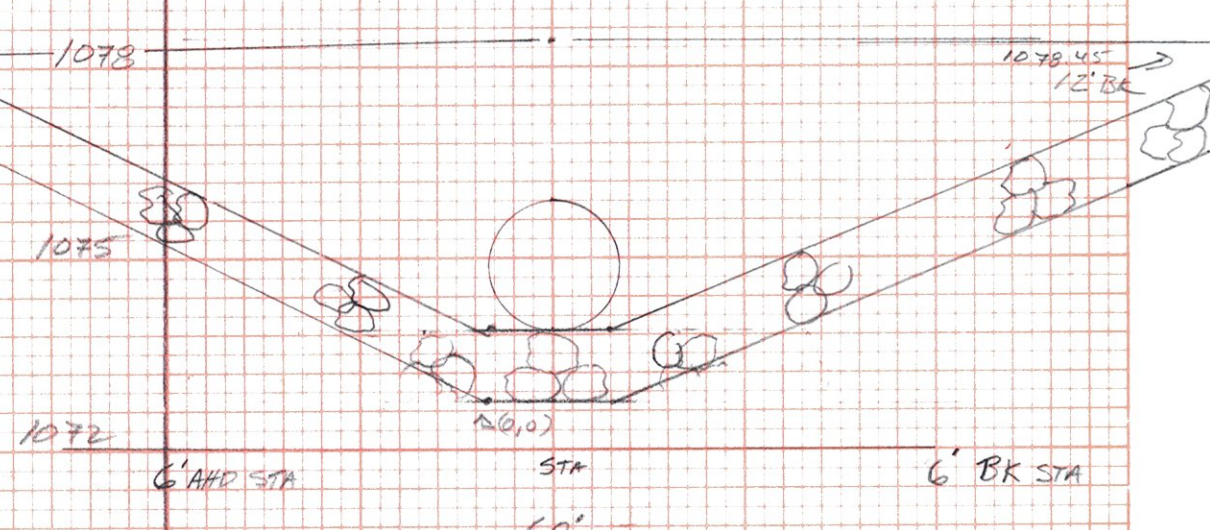
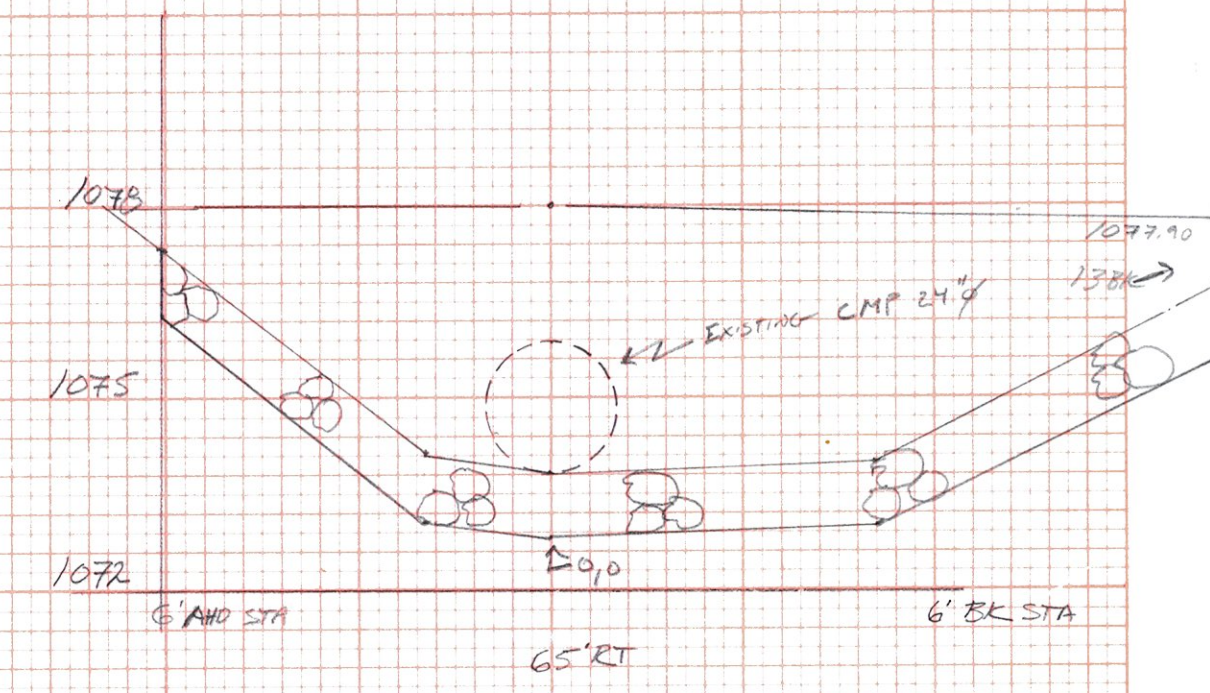
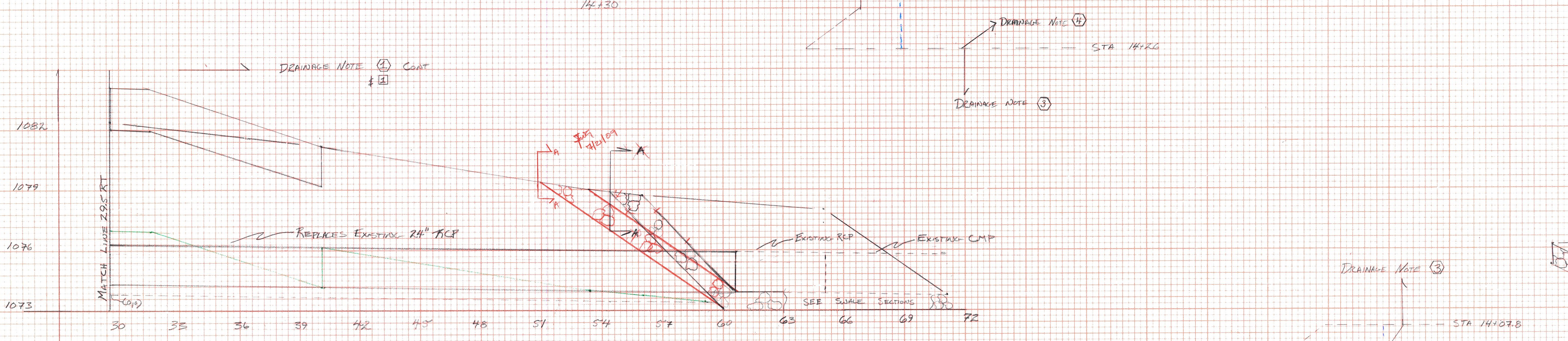
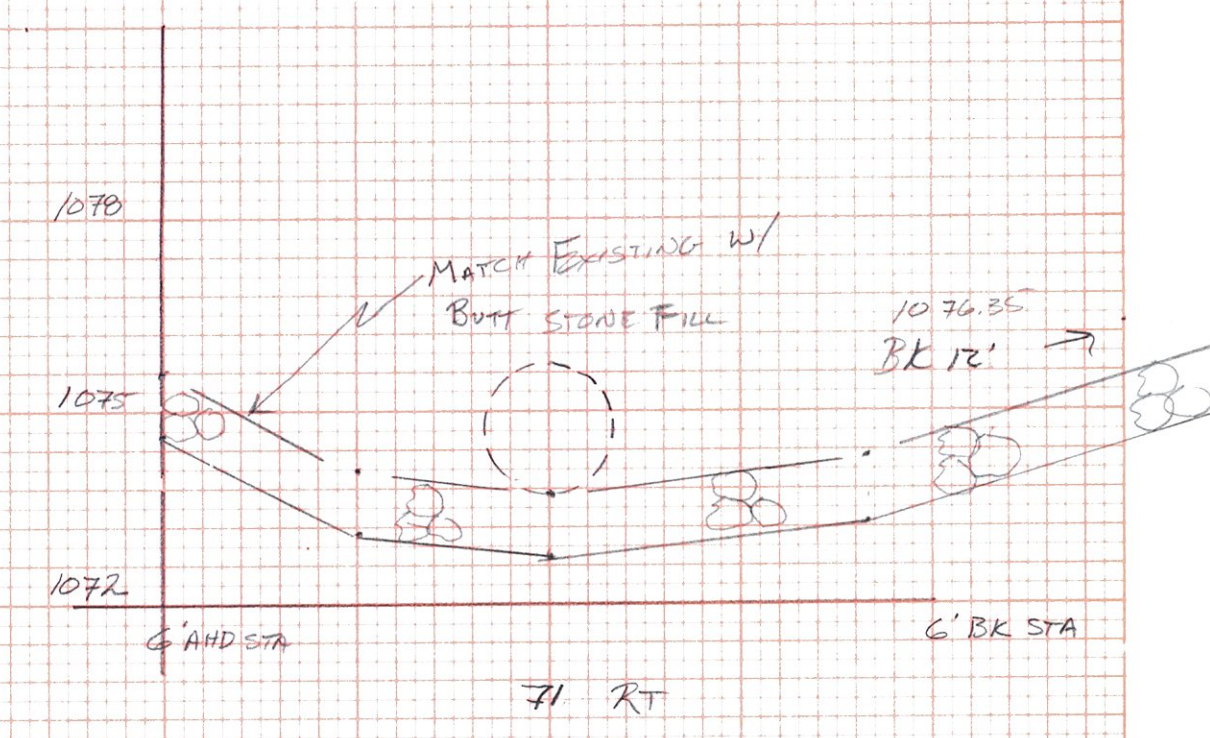
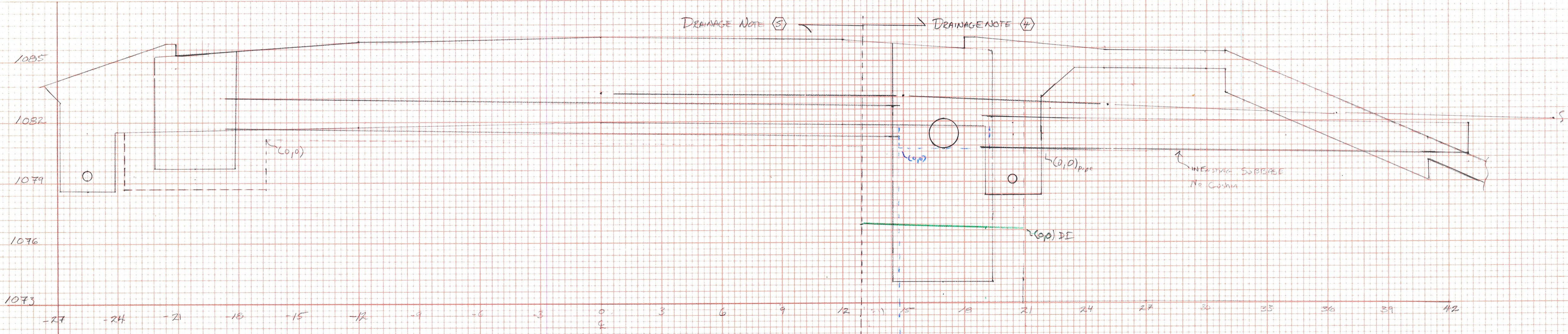


TRAFFIC MANAGEMENT PLAN PHASE 2

PROJECT NAME:	BARRE TOWN	PLOT DATE:	1/30/2008
PROJECT NUMBER:	HES 026-1(38)	DRAWN BY:	WING WONG
FILE NAME:	z04bl98+mpbdr.dgn	CHECKED BY:	KO ISHIKURA
PROJECT LEADER:	JOSHUA SCHULTZ	SHEET	53 OF 64
DESIGNED BY:	ERIK ATKINS WING WONG		

FINAL SURVEY PLOTTED NOTE BOOK NO. AREAS CHECKED

ORIGINAL SURVEY PLOTTED NOTE BOOK NO. AREAS CHECKED

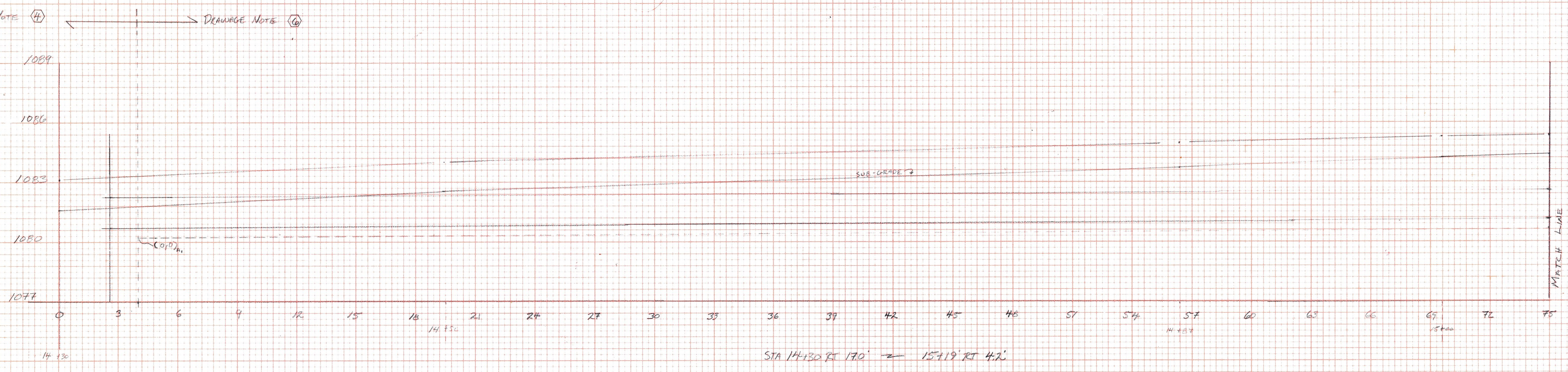
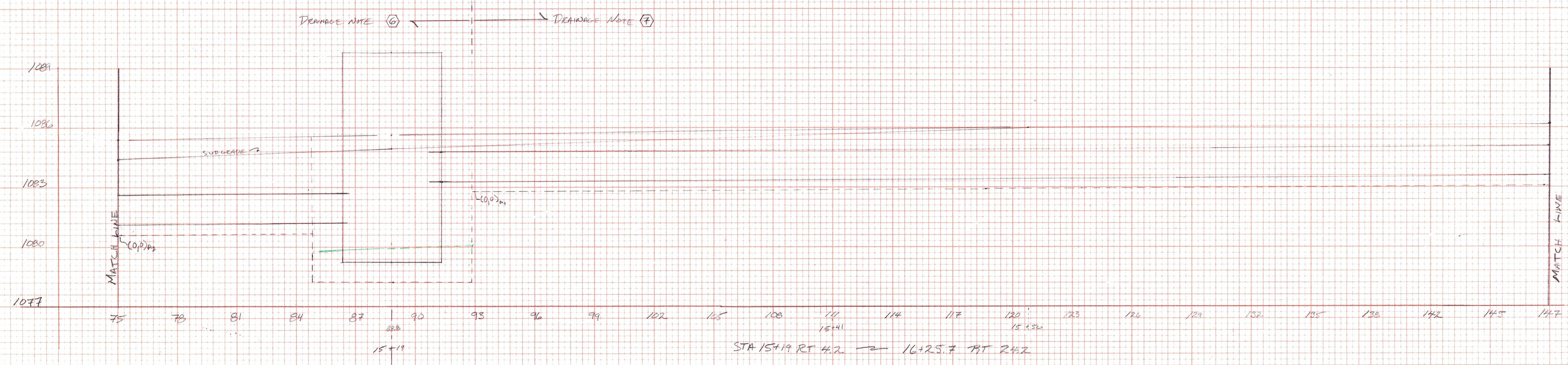
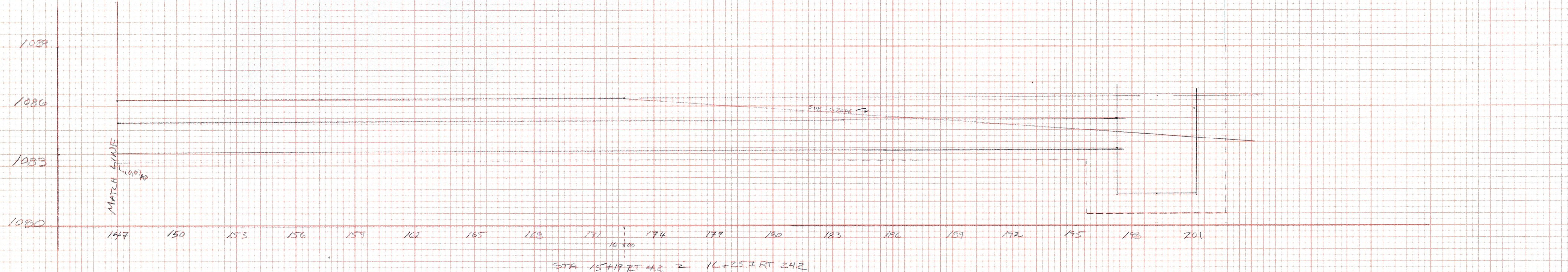


US 302
14+04.2 ← 14+04.3

Barre Towns HES 006-1 (CB)
DRAINAGE SECTIONS
SCALE: 1" = 3'
DWG: [Signature]
DATE: 12/2/2009
CKD:
DATE:
SHEET 1 OF 6

FINAL SURVEY SURVEYED, PLOTTED, NOTE BOOK, TEMPLATE NO. DATE BY AREAS CHECKED

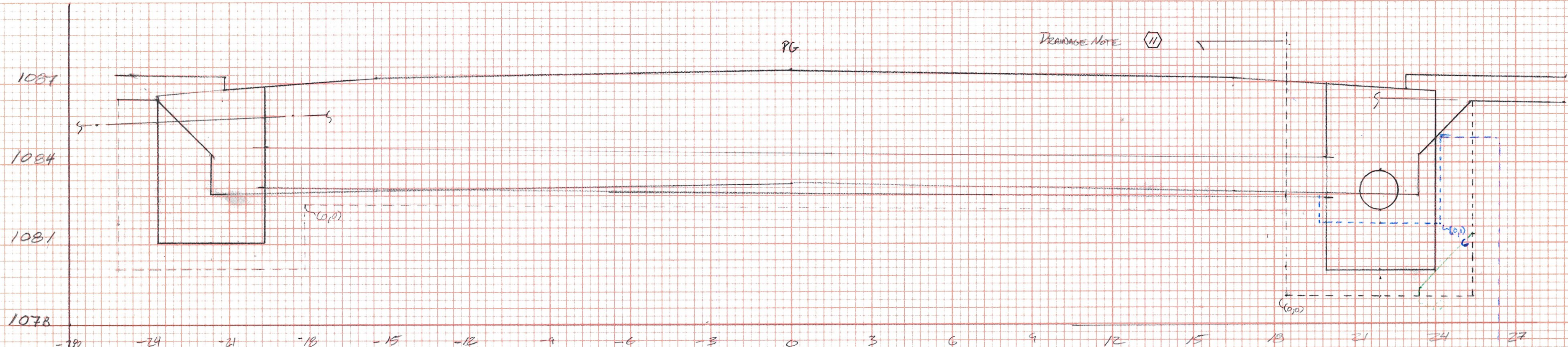
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BARRE TOWN HES ORG-1 (38)
 DRAINAGE SECTION
 SCALE: 1"=3'
 DWG: JMR DATE: 12/08/2008
 CAD: DATE:
 SHEET: 2 OF 6

FINAL SURVEY
 SURVEYOR
 PLOTTED
 NOTE BOOK TEMPLATE
 NO. AREA CHECKED

ORIGINAL SURVEY
 SURVEYOR
 PLOTTED
 NOTE BOOK TEMPLATE
 NO. AREA CHECKED

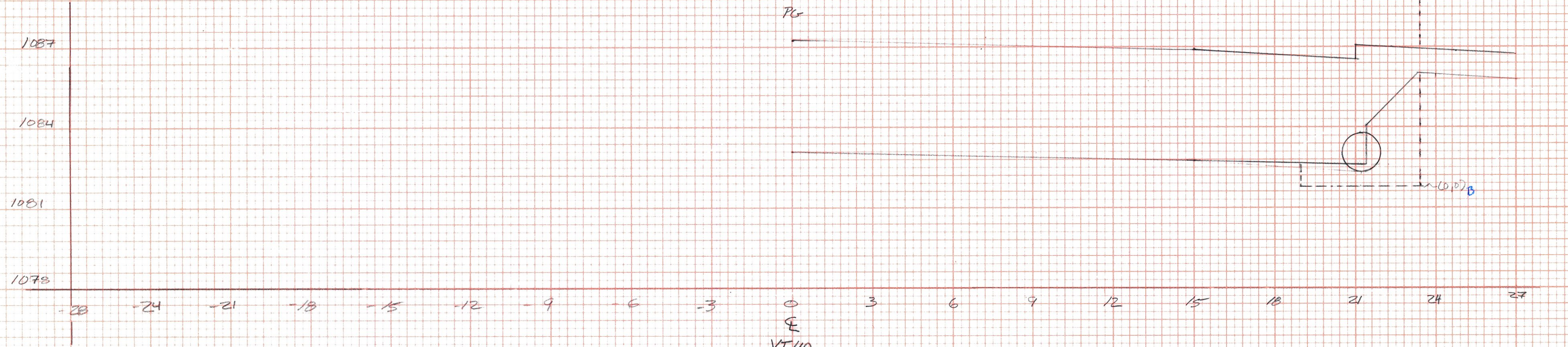


VT110
 52+62

STA 52+58.5

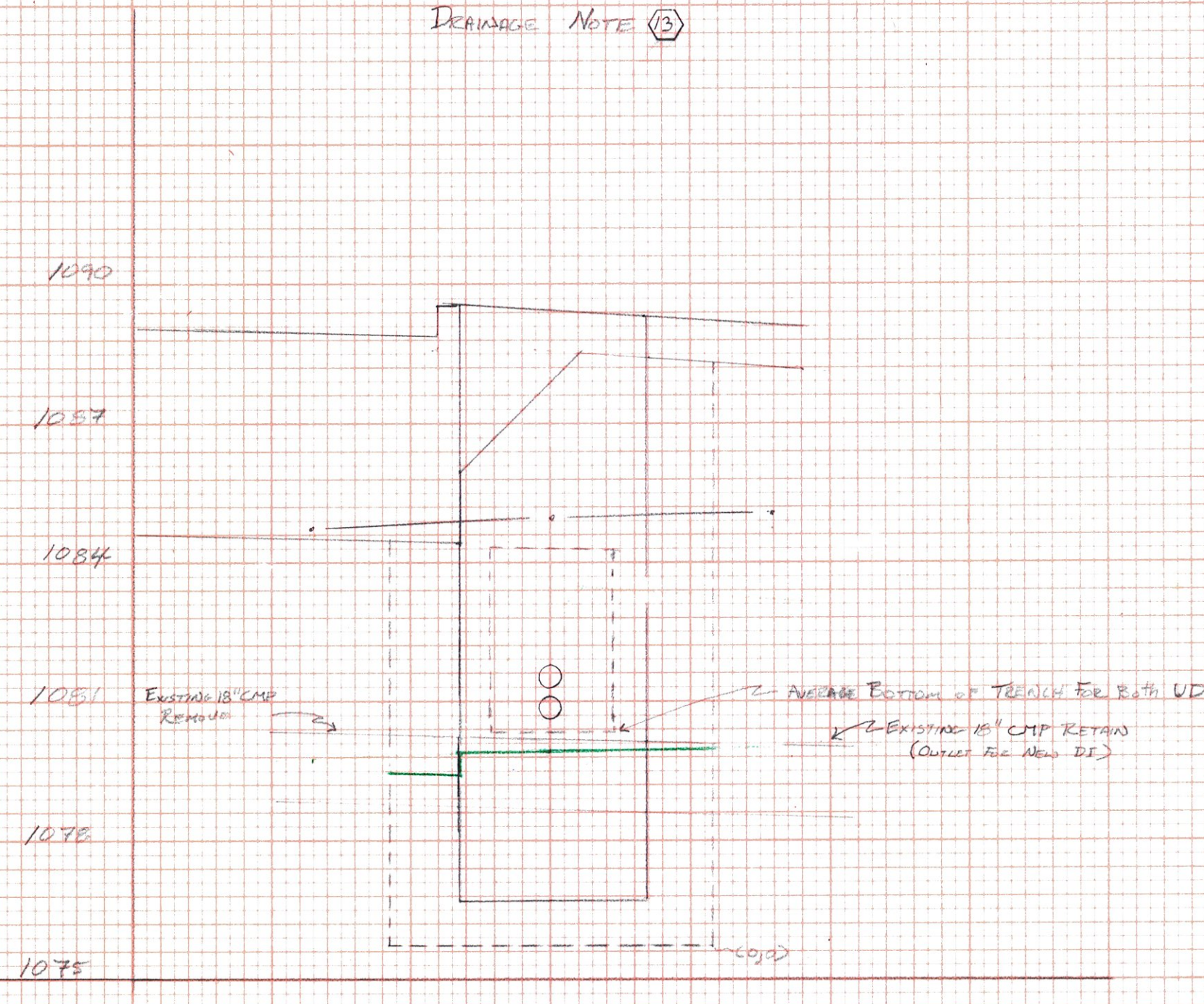
Drainage Note (11)
 Drainage Note (12)
 Drainage Note (13)

DN#10



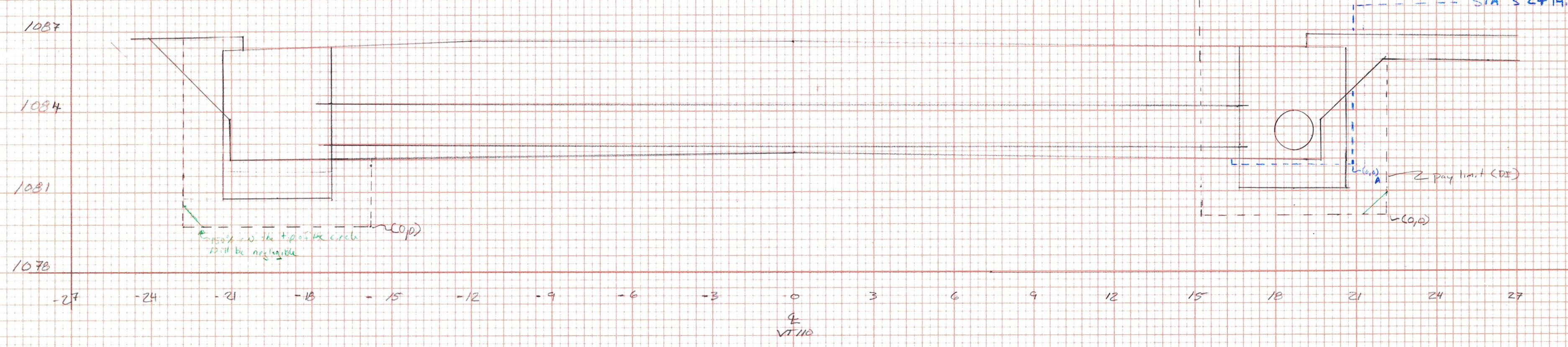
VT110
 52+50

Drainage Note (9)
 Drainage Note (10)
 STA 52+14.5 (Ply. Lin. Pipe)



STA 53+34.1
 53' RT

Drainage Note (13)



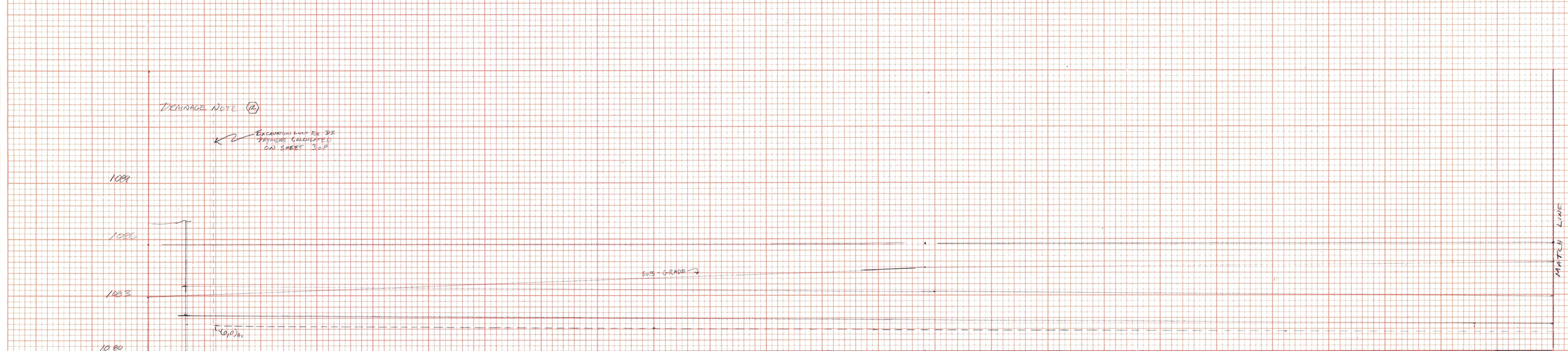
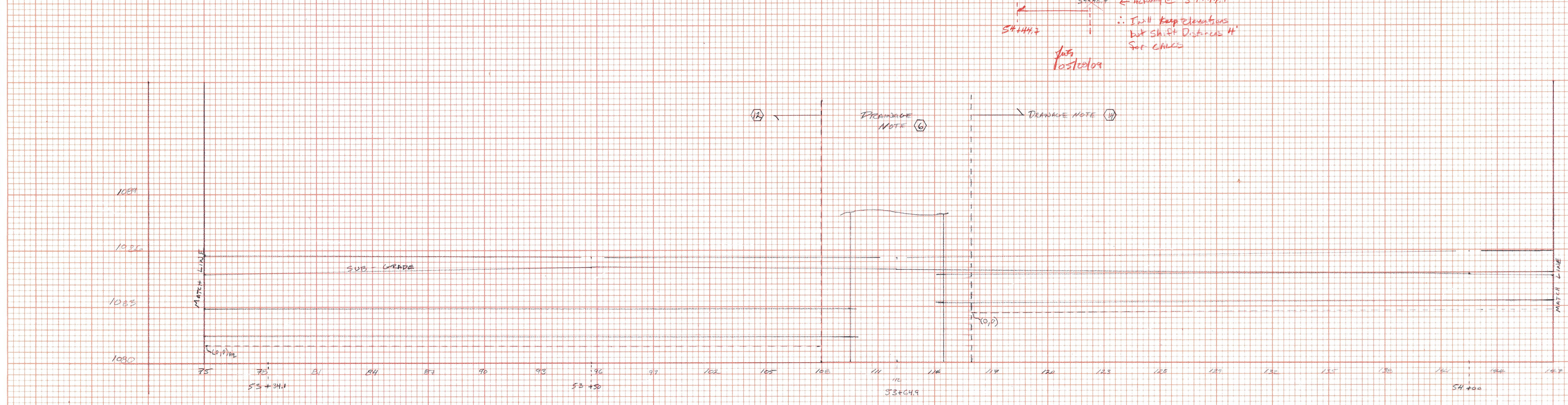
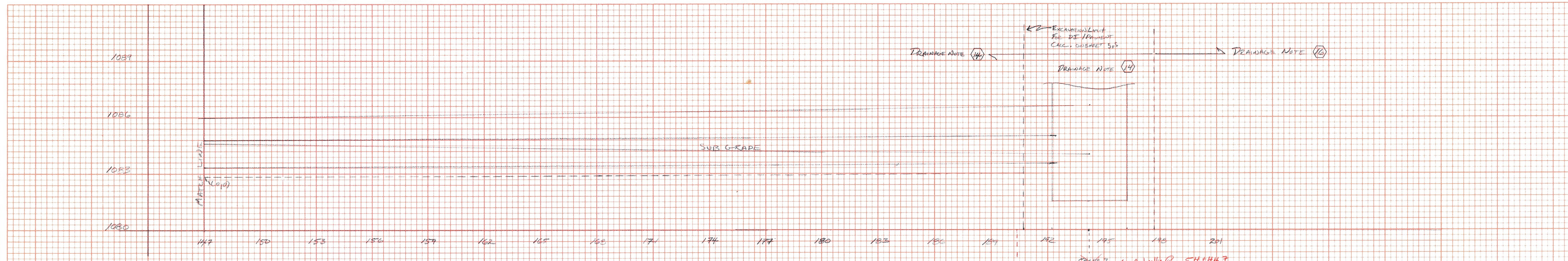
VT110
 52+11
 19.3' W x 18.7' RT

Drainage Note (9)
 Drainage Note (10)
 Z-pipe limit (10)

THREE TOWNS HD 026-1 (CAD)
 DRAINAGE SECTIONS
 SCALE: 1"=3'
 DRAWN: JMK
 CHECKED: JMK
 DATE: 12/1/2010
 SHEET 3 OF 6

FINAL SURVEY
 SURVEYED
 PLOTTED
 AREAS
 CHECKED
 NO.

ORIGINAL SURVEY
 SURVEYED
 PLOTTED
 AREAS
 CHECKED
 NO.



BREEZE TOWN HES ORG-1 (10)
 DRAINAGE SECTIONS
 SCALE 1" = 3'
 DRAWN JMR DATE 12/10/2008
 CRO TBG
 SHEET 4 OF 6

FINAL SURVEY PLOTTED NOTE BOOK NO. BY DATE

ORIGINAL SURVEY PLOTTED NOTE BOOK NO. BY DATE

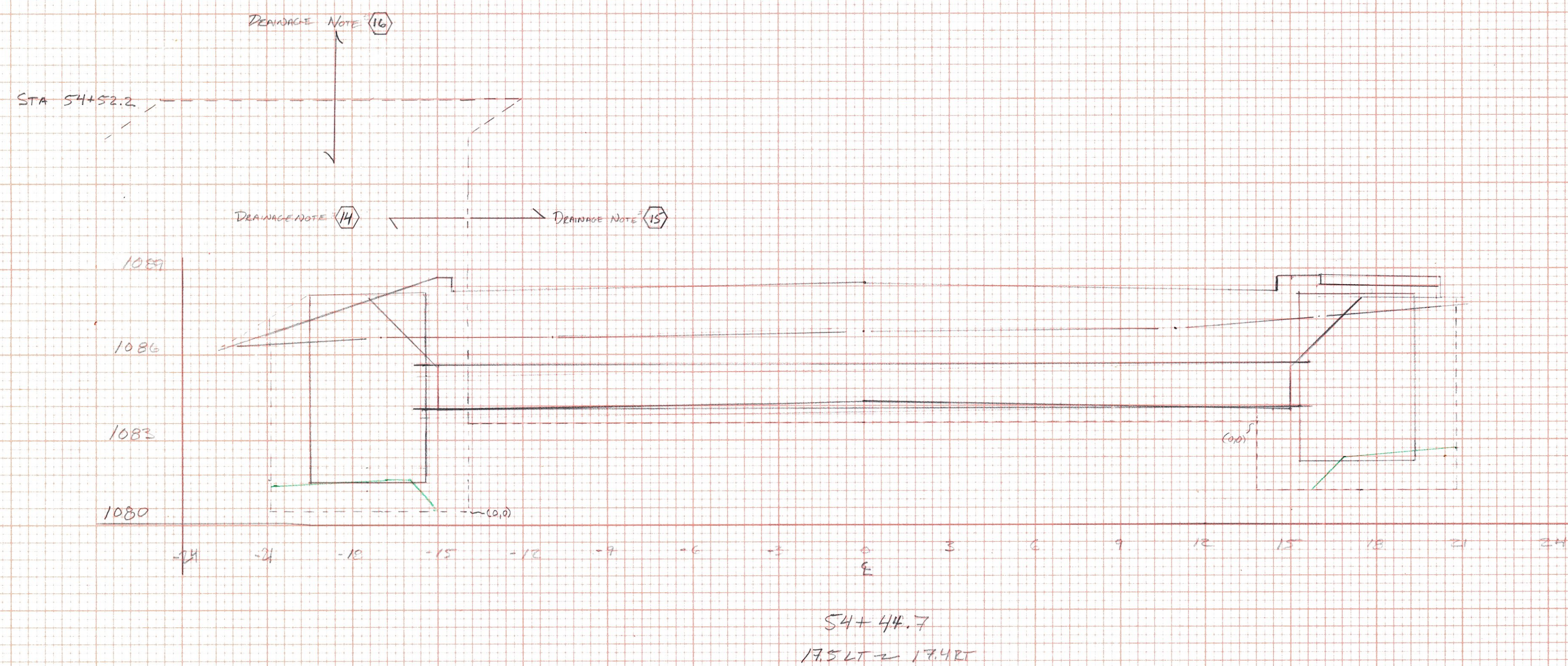
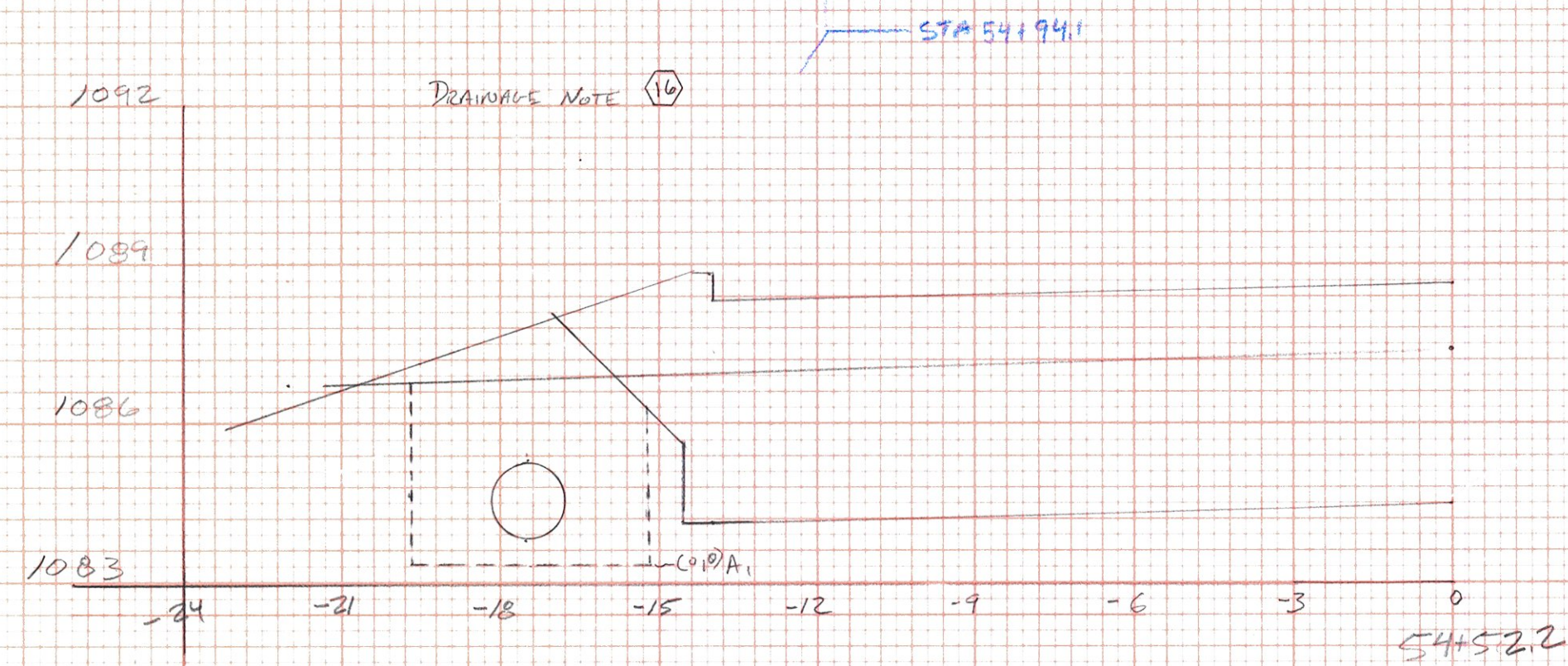
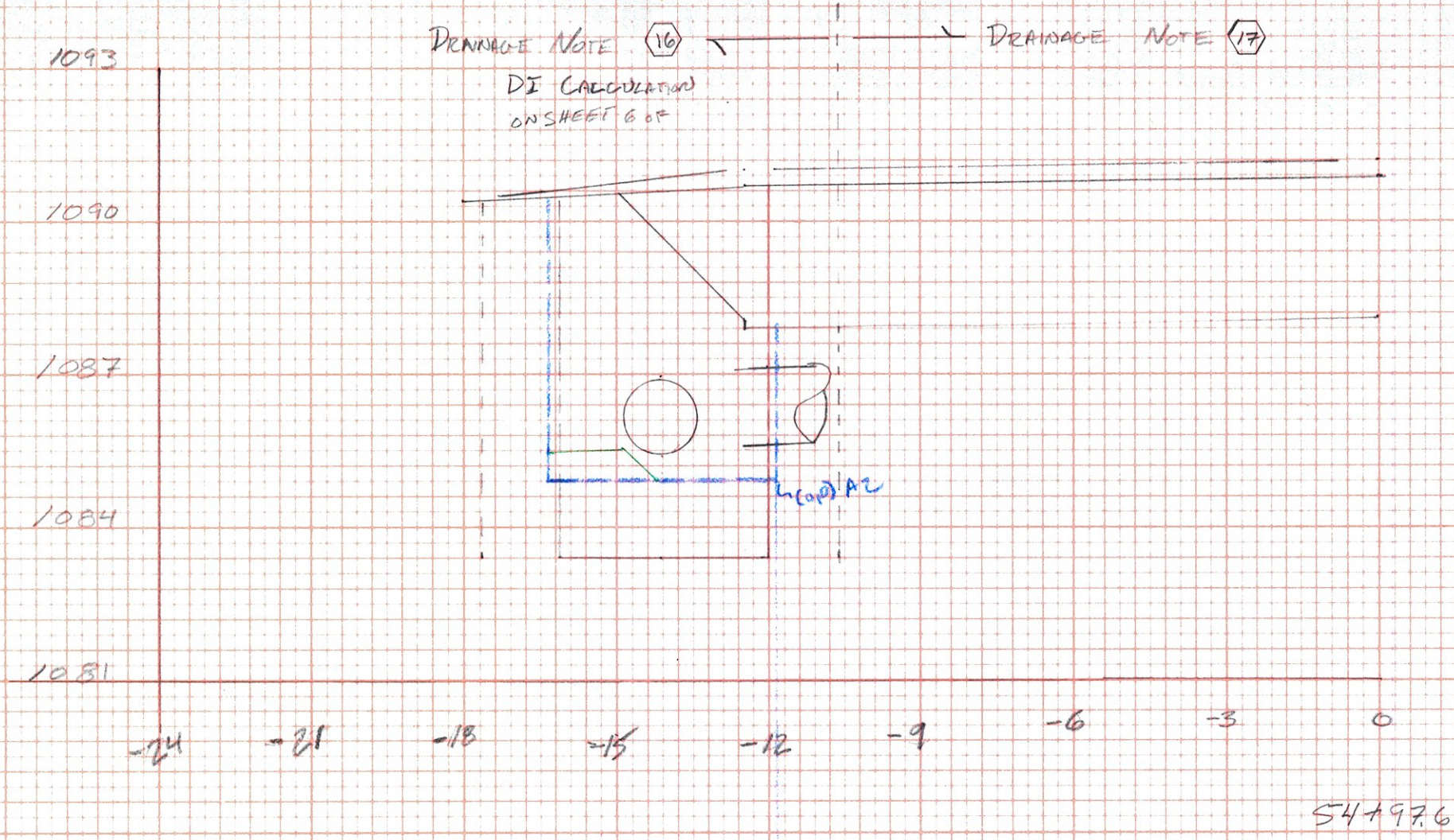
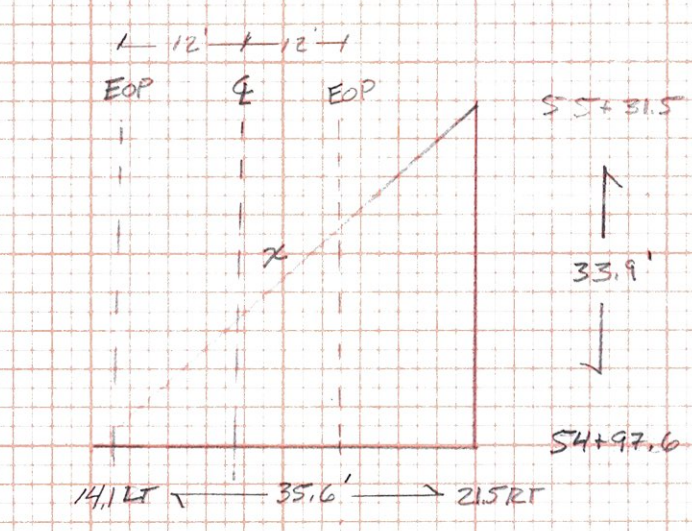
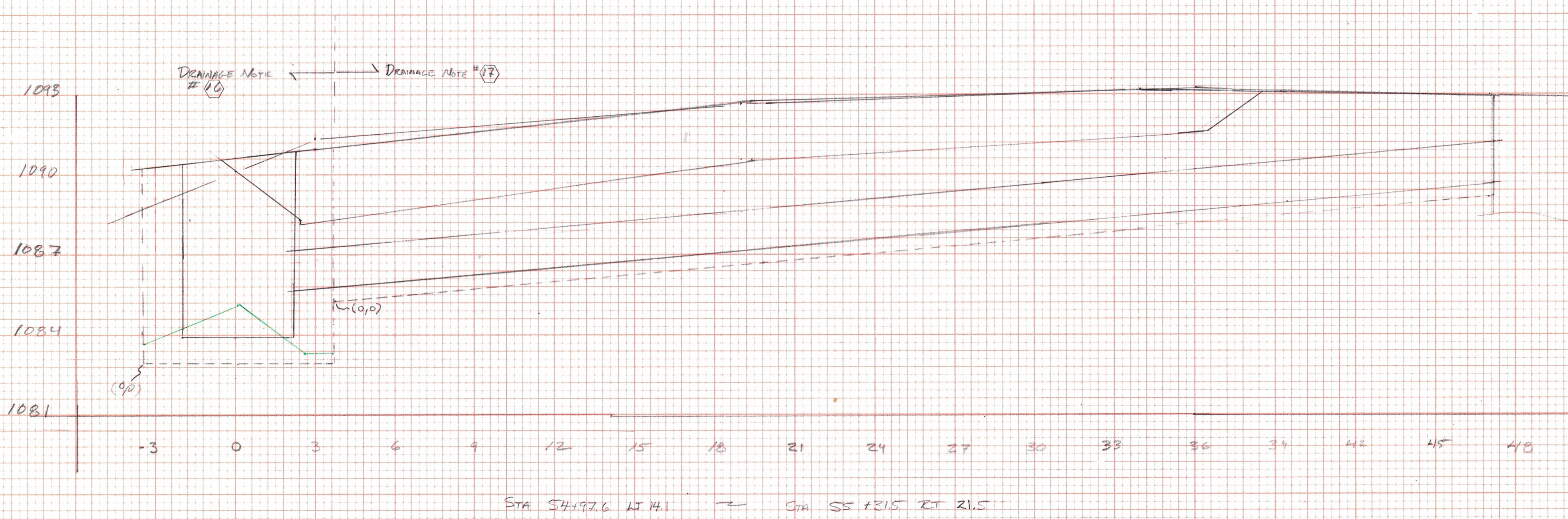
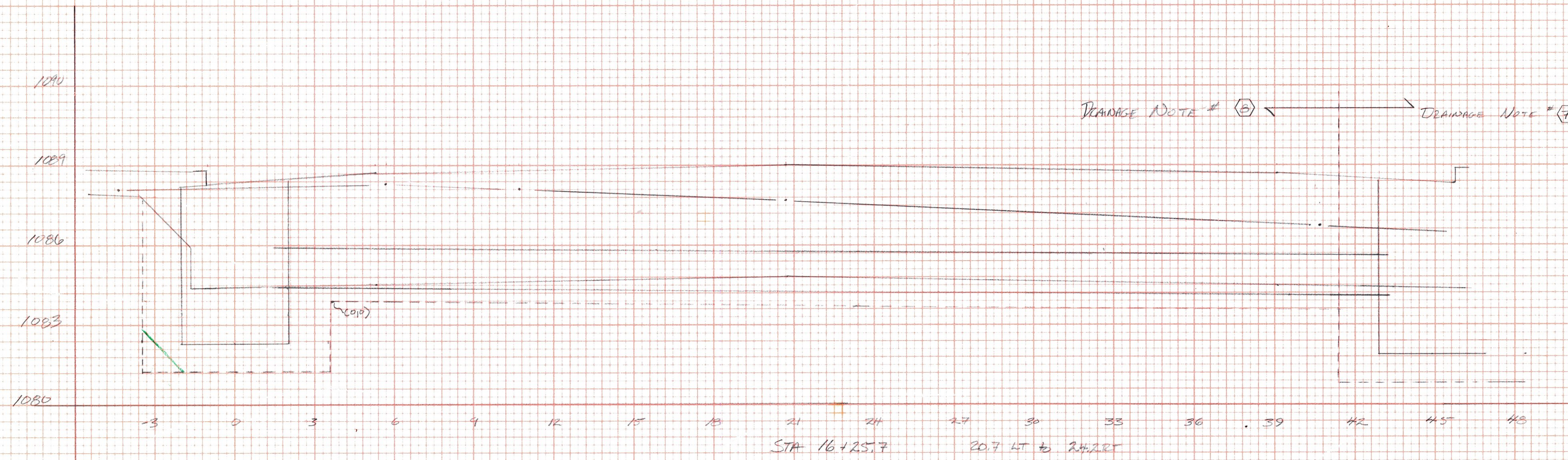


TABLE TENS HES-ORG-1030
DRAINAGE SECTIONS

SCALE:
DRAWN: JAR DATE: 12/10/2000
CHKD: DATE:
SHEET: 5 OF 6

FINAL SURVEY PLOTTED
NOTE BOOK NO. AREA CHECKED

ORIGINAL SURVEY PLOTTED
NOTE BOOK NO. AREA CHECKED



$$x = \sqrt{33.9^2 + 35.6^2} = 49.2'$$

$$L STA = \frac{141}{356} \times 33.9 + (54.976) = 55+11$$

$$LT EOP = \frac{21}{356} \times 33.9 + (54.976) = 54+99.6$$

$$RT EOP = \frac{261}{356} \times 33.9 + (54.976) = 55+22.5$$

$$FG MH = 1080.9 + 141 \times 0.000 = 1090.6$$

$$FG EOP = 1091.1 + 120 \times 0.000 = 1090.9$$

$$FC @ = \text{same as profile at } 1092.2'$$

$$FG EOP = 1092.2' + (226-11) \left(\frac{1}{100} \right) - (12 \times 0.000) = 1093.1$$

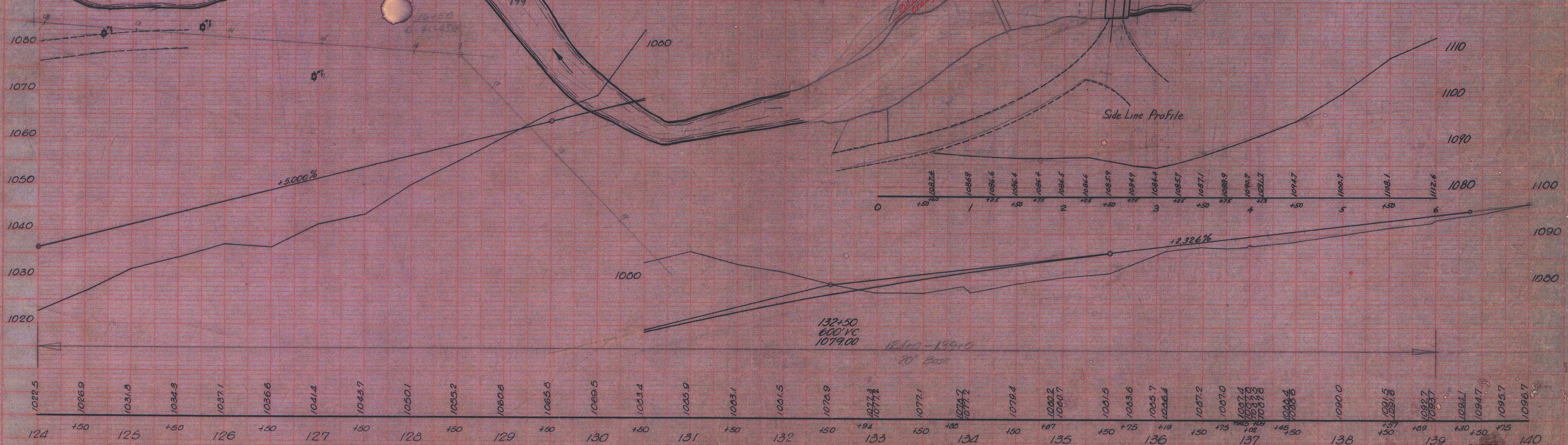
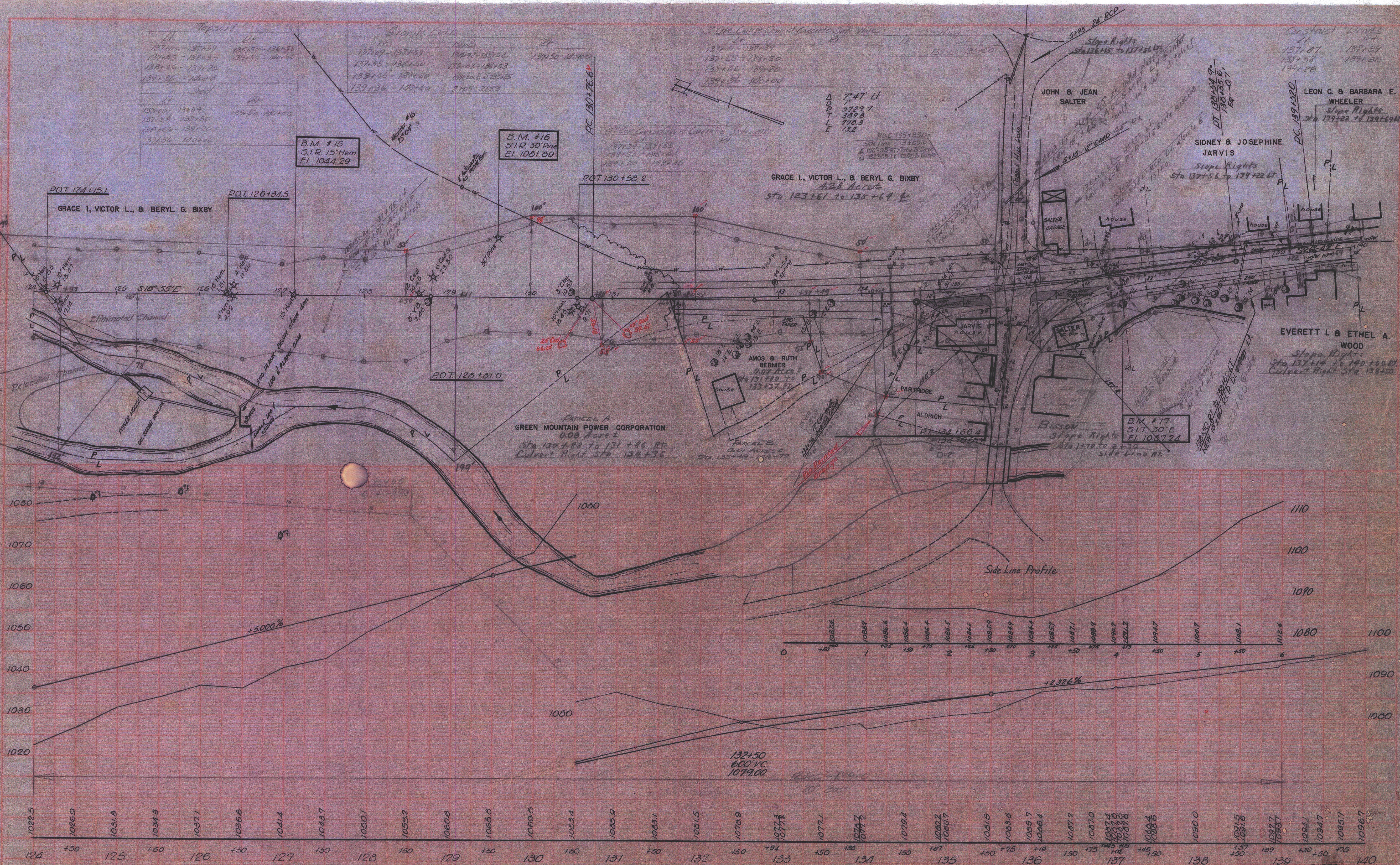
BARRE TOWNS HES. ORG. 1(38)
DRAINAGE SECTIONS
SCALE: 1" = 3'
DWN: JMG DATE: 12/11/2008
CAD: DATE:
SHEET 6 OF 6

Handwritten notes and signatures at the top left of the page.

Topsoil		Granite Curb	
LT	RT	LT	RT
137100-137139	135150-136150	137109-137139	136192-135152
137155-138150	139150-140100	137155-138150	136153-136153
138166-139120		138166-139120	Approach to 135145
139136-140100		139136-140100	2105-2153

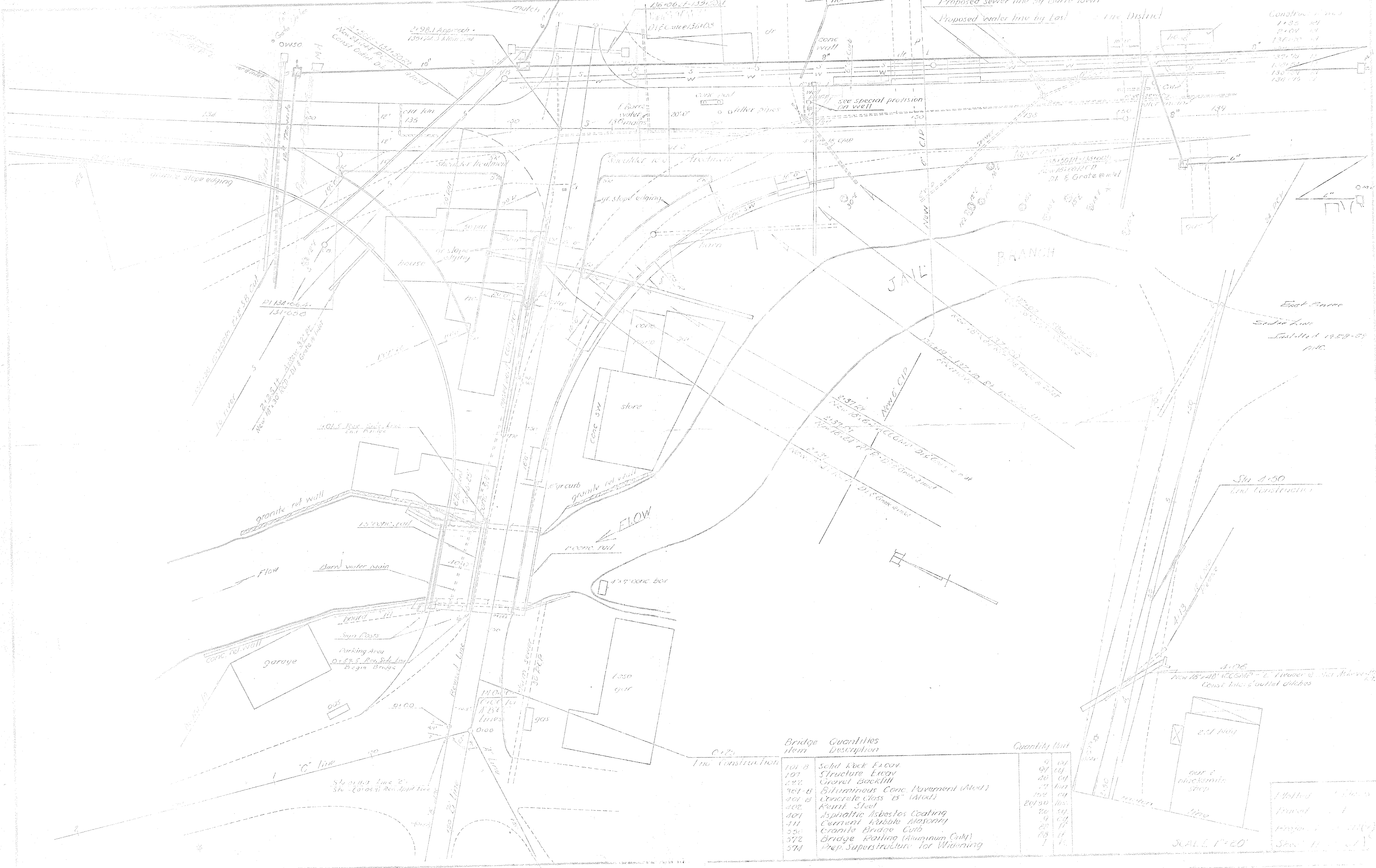
5' One Course Cement Concrete Side Walk		Seeding	
LT	RT	LT	RT
137109-137139		135150-136150	
137155-138150			
138166-139120			
139136-140100			

Shoulding
14.2
7.56



BM # 17 Spike in Trunk 30' Elm 33ft Rt Sta. 137+13 Elevation 1087.24

PROJ. NO. 11119
SHEET 5 OF



Constructive work

135	21
136	21
137	21
138	21
139	21
140	21

Item	Quantities Description	Quantity Unit
101-B	Solid Rock Excav.	0
102	Structure Excav.	26
222	Gravel Backfill	27
261-B	Bituminous Conc. Pavement (Mod.)	102
261-B	Concrete Class "B" (Mod.)	207.30
302	Reinf. Steel	20
301	Asphaltic Asbestos Coating	9
311	Cement Rubble Masonry	28
330	Granite Bridge Curb	88
372	Bridge Railing (Aluminum Only)	1
374	Prep. Superstructure for Whinning	

SCALE 1"=20'

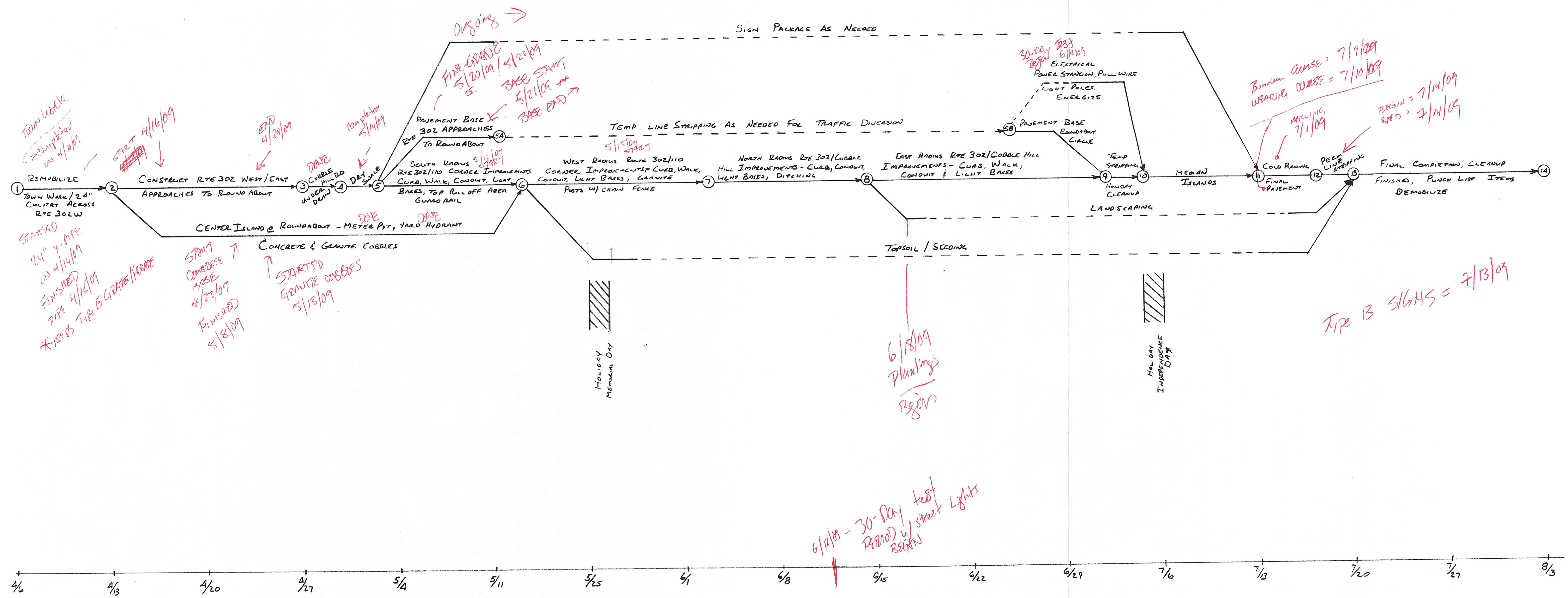
1/16" = 1' (Horizontal)
 1/32" = 1' (Vertical)
 Sheet 11 of 11

2009 SCHEDULE

BARRÉ ROUNDABOUT
 EAST BARRÉ, VERMONT
 VTRANS PROJECT "BARRÉ HES 026-1(38)"
 CONTRACTOR: J. HUTCHINS, INC.
 PREPARED BY: J. CHRISTIAN 4/2/09
 COMPLETION SCHEDULE
 SPRING / SUMMER 2009

REC'D 4/3/09
 DAT N.W. 200

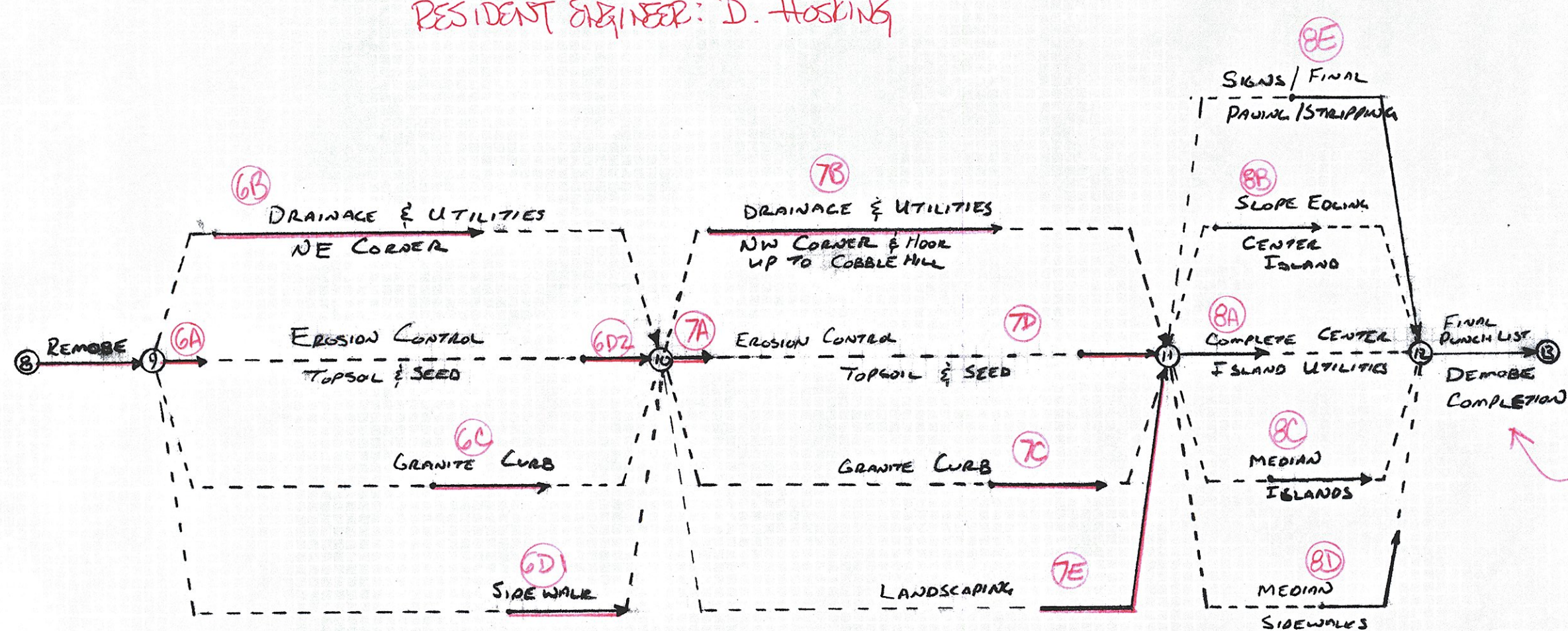
Substantial Completion ISSUED: 7/17/09
 Final Inspections: 7/23/09



BARRE TOWN #ES 026-1(38)
 CONSTRUCTION SEQUENCING PLAN - 2009 SEASON
 SUBMITTED BY: J. Hutchins, Inc., - RICHMOND, VT.
 RESIDENT ENGINEER: D. HOSKINS

RECEIVED

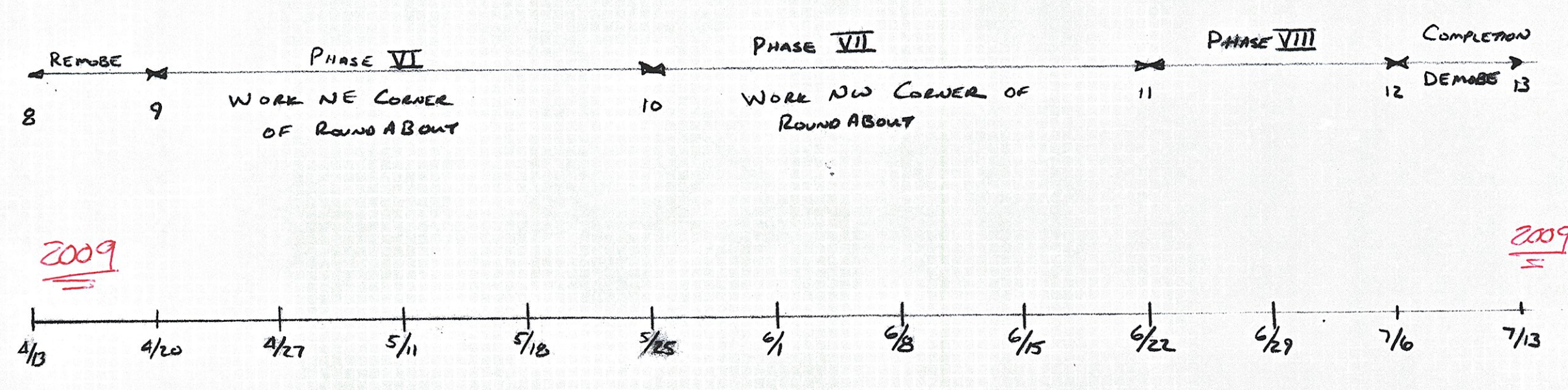
RECEIVED
 6/19/09
 H.E. PCO
 P.C.C.



Contract Completion
 DATE: OCTOBER 16, 2009

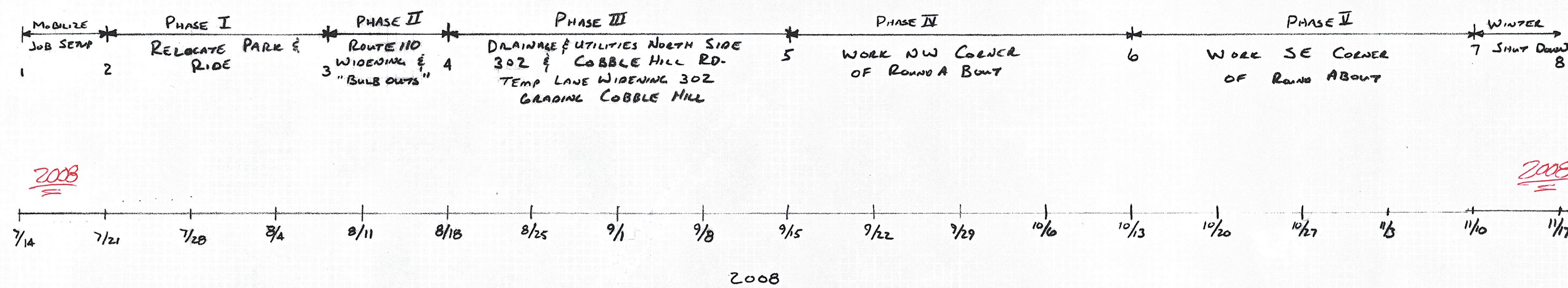
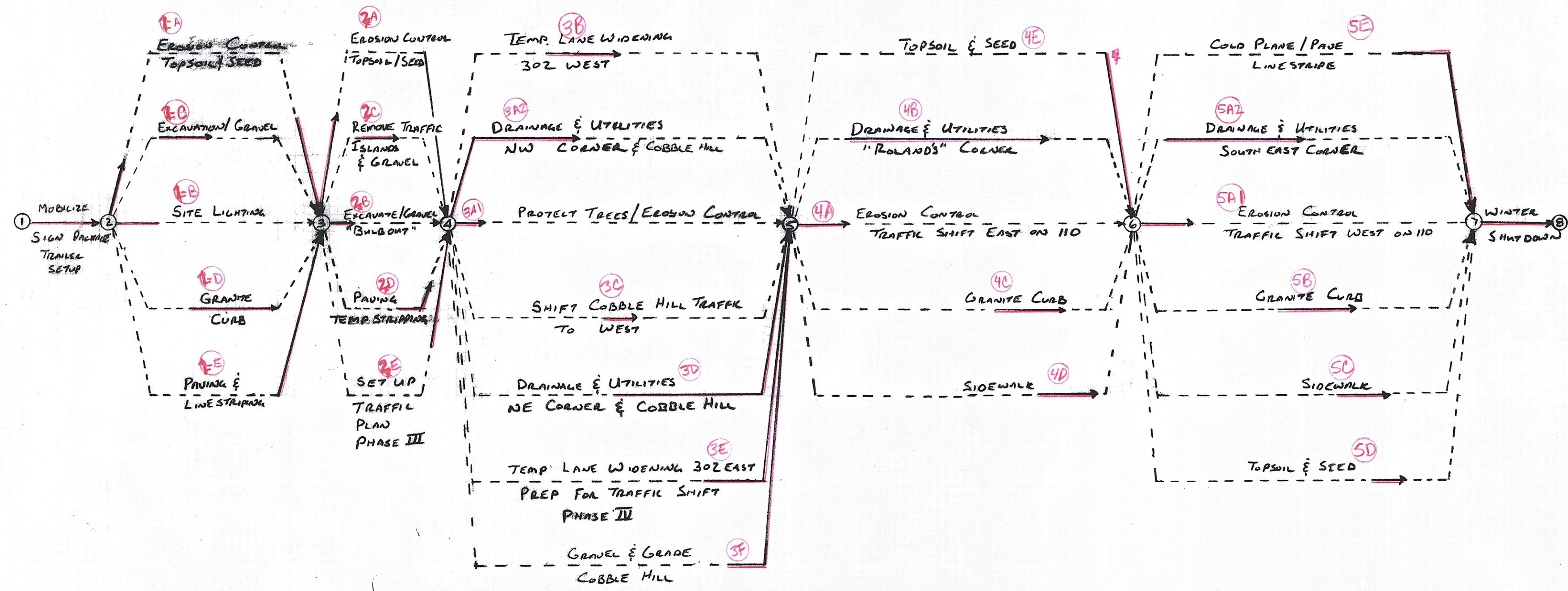
LIQUIDATED DAMAGES = \$ 1,100/day Post 10/16/09

* MAINTENANCE/WARRANTY PERIOD ON LANDSCAPING??



BARRE TOWN HES 026-1(38)
 CONSTRUCTION SEQUENCING PLAN - 2008 SEASON
 SUBMITTED BY: J. HUTCHINS, INC. - RICHMOND, VT.
 RESIDENT ENGINEER: D. HOSKING

RECEIVED
 6-14-08
 H.E. RCO
 P.C.C.



23003432 03/10/08 10:00 AM