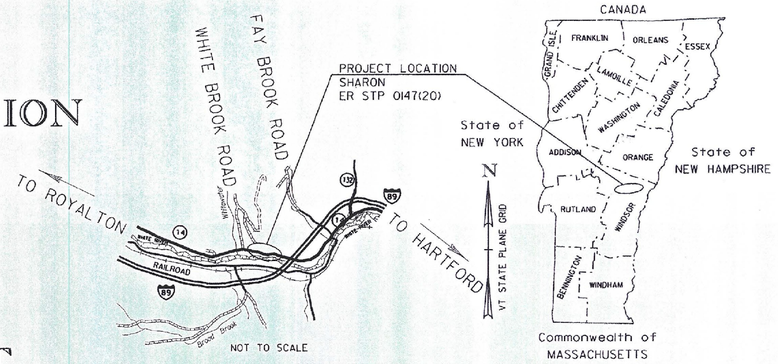
STATE OF VERMONT
AGENCY OF TRANSPORTATION



PROPOSED IMPROVEMENT
TOWN OF SHARON
COUNTY OF WINDSOR
VT ROUTE 14 (MAJOR COLLECTOR)

PROJECT LOCATION: BEGINNING IN THE TOWN OF SHARON ON VT ROUTE 14 AT MM 6.127 (STA. 323+50.00) AND EXTENDING NORTHERLY 0.125 MILES (660 FT) TO MM 6.252 (STA. 330+10.00).

STATION TO STATION DATA	LENGTH (FEET)	(MILES)
STA. 323+50.00 TO STA. 330+10.00 (MM 6.127 TO MM 6.252)	660.00	0.125
TOTAL ROADWAY LENGTH =	660.00	0.125
TOTAL PROJECT LENGTH =	660.00	0.125

PROJECT DESCRIPTION: WORK TO BE PERFORMED UNDER THIS PROJECT INCLUDES ROADWAY RECONSTRUCTION, SLOPE STABILIZATION, RAISING A SECTION OF THE VERTICAL ALIGNMENT, CORRECTING SUPERELEVATION DEFICIENCIES, RESURFACING WITH BASE AND WEARING COURSES, NEW PAVEMENT MARKINGS, GUARDRAIL IMPROVEMENTS, DRAINAGE IMPROVEMENTS AND OTHER RELATED HIGHWAY ITEMS.

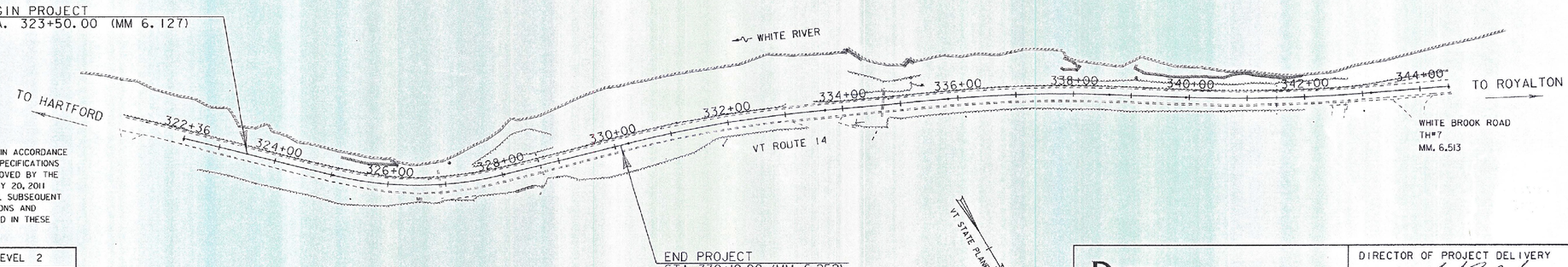
TRAFFIC DATA

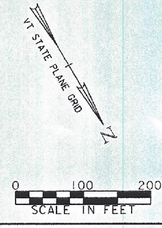
HIGHWAY SECTION	AADT 2013	AADT 2023	DHV 2013	DHV 2023	CUM. ESALS (2013-2023)	CUM. ESALS (2013-2033)
VT 14 - MM 6.117 ~ MM 6.496	3000	3100	350	360	512,000	1,153,000

TRUCKS (PERCENT) 2013	2023
5.8	7.1

POSTED SPEED	50 MPH
DESIGN SPEED	50 MPH

BITUMINOUS CONCRETE SUPERPAVE MIXTURE DESIGN CRITERIA	
DESIGN LANE/DESIGN LIFE ESAL	691,800
DESIGN NUMBER OF GYRATIONS	65
PERFORMANCE GRADED ASPHALT BINDER:	SEE SUBSECTION 490.03B





CONSTRUCTION IS TO BE CARRIED ON IN ACCORDANCE WITH THESE PLANS AND THE STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2011, AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION ON JULY 20, 2011 FOR USE ON THIS PROJECT, INCLUDING ALL SUBSEQUENT REVISIONS AND SUCH REVISED SPECIFICATIONS AND SPECIAL PROVISIONS AS ARE INCORPORATED IN THESE PLANS.

QUALITY ASSURANCE PROGRAM : LEVEL 2

SURVEYED BY : DUBOIS & KING
SURVEYED DATE : JANUARY, 2013

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (2011)

RECORD PLANS

CONTRACTOR: NOTT'S EXCAVATION, INC. - WHITE RIVER JCT., VT
RESIDENT ENGINEER: TOM CHASE
CONSTRUCTION BEGAN: JULY 22, 2015
CONSTRUCTION COMPLETE: OCTOBER 20, 2015
RECORD PLANS BY: TOM CHASE & KEVIN KING

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

BY Thomas A. Chase RESIDENT ENGINEER
DATE 01/30/17

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.

DuBois & King inc.

STATE OF VERMONT JEFFREY W. TUDDEN No. 5805 REGISTERED PROFESSIONAL ENGINEER

DIRECTOR OF PROJECT DELIVERY
APPROVED _____ DATE 4/2/2015

PROJECT MANAGER : PAUL LIBBY

PROJECT NAME : SHARON
PROJECT NUMBER : ER STP 0147(20)

SHEET 1 OF 66 SHEETS

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64	TRAFFIC CONTROL NOTES
65	CONSTRUCTION APPROACH SIGNING SHEET
66	CONSTRUCTION OPERATIONS TRAFFIC PROTECTION PLAN

VAOT STANDARDS

B-5	06/01/1994
B-71	07/08/2005
D-30	08/13/2007
E-121	08/08/1995
E-193	08/18/1995
G-1	02/10/2014
G-1D	02/10/2014
J-3	08/07/1995
T-1	08/06/2012
T-10	08/06/2012
T-28	08/06/2012
T-30	08/06/2012
T-31	08/06/2012
T-35	08/06/2012
T-36	08/06/2012
T-44	04/09/2014
T-45	01/02/2013

PROJECT NAME: SHARON
PROJECT NUMBER: ER STP 0147(20)

FILE NAME: z12c410.dgn
PROJECT LEADER: J. TUCKER
DESIGNED BY: B. BRESLEND
INDEX OF SHEETS

PLOT DATE: 3/31/2015
DRAWN BY: B. MACK
CHECKED BY: A. SANZ
SHEET 2 OF 66

GENERAL INFORMATION

SYMBOLOGY LEGEND NOTE

THE SYMBOLOGY ON THIS SHEET IS INTENDED TO COVER STANDARD CONVENTIONAL SYMBOLOGY. THE SYMBOLOGY IS USED FOR EXISTING & PROPOSED FEATURES WITH HEAVIER LINEWEIGHT, IN COMBINATION WITH PROJECT ANNOTATION, AS NOTED ON PROJECT PLAN SHEETS. THIS LEGEND SHEET COVERS THE BASICS. SYMBOLOGY ON PLANS MAY VARY, PLAN ANNOTATIONS AND NOTES SHOULD BE USED TO CLARIFY AS NEEDED.

R.O.W. ABBREVIATIONS (CODES) & SYMBOLS

POINT	CODE	DESCRIPTION
	CH	CHANNEL EASEMENT
	CONST	CONSTRUCTION EASEMENT
	CUL	CULVERT EASEMENT
	D&C	DISCONNECT & CONNECT
	DIT	DITCH EASEMENT
	DR	DRAINAGE EASEMENT
	DRIVE	DRIVEWAY EASEMENT
	EC	EROSION CONTROL
	HWY	HIGHWAY EASEMENT
	I&M	INSTALL & MAINTAIN EASEMENT
	LAND	LANDSCAPE EASEMENT
	R&RES	REMOVE & RESET
	R&REP	REMOVE & REPLACE
	SR	SLOPE RIGHT
	UE	UTILITY EASEMENT
	(P)	PERMANENT EASEMENT
	(T)	TEMPORARY EASEMENT
■	BNDNS	BOUND SET
⊡	BNDNS	BOUND TO BE SET
●	IPNS	IRON PIN SET
◎	IPNS	IRON PIN TO BE SET
⊠	CALC	EXISTING ROW POINT
○	PROW	PROPOSED ROW POINT
[LENGTH]		LENGTH CARRIED ON NEXT SHEET

COMMON TOPOGRAPHIC POINT SYMBOLS

POINT	CODE	DESCRIPTION
	APL	BOUND APPARENT LOCATION
	BM	BENCHMARK
	BND	BOUND
	CB	CATCH BASIN
	COMB	COMBINATION POLE
	DITHR	DROP INLET THROATED DNC
	EL	ELECTRIC POWER POLE
	FPOLE	FLAGPOLE
	GASFIL	GAS FILLER
	GP	GUIDE POST
	GSO	GAS SHUT OFF
	GUY	GUY POLE
	GUYW	GUY WIRE
	GV	GATE VALUE
	H	TREE HARDWOOD
	HCTRL	CONTROL HORIZONTAL
	HVCTRL	CONTROL HORIZ. & VERTICAL
	HYD	HYDRANT
	IP	IRON PIN
	IPIPE	IRON PIPE
	LI	LIGHT - STREET OR YARD
	MB	MAILBOX
	MH	MANHOLE (MH)
	MM	MILE MARKER
	PM	PARKING METER
	PMK	PROJECT MARKER
	POST	POST STONE/WOOD
	RRSIG	RAILROAD SIGNAL
	RRSL	RAILROAD SWITCH LEVER
	S	TREE SOFTWOOD
	SAT	SATELLITE DISH
	SHRUB	SHRUB
	SIGN	SIGN
	STUMP	STUMP
	TEL	TELEPHONE POLE
	TIE	TIE
	TSIGN	SIGN W/DOUBLE POST
	VCTRL	CONTROL VERTICAL
	WELL	WELL
	WSO	WATER SHUT OFF

THESE ARE COMMON VAOT SURVEY POINT SYMBOLS FOR EXISTING FEATURES, ALSO USED FOR PROPOSED FEATURES WITH HEAVIER LINEWEIGHT, IN COMBINATION WITH PROPOSED ANNOTATION.

PROPOSED GEOMETRY CODES

CODE	DESCRIPTION
PC	POINT OF CURVATURE
PI	POINT OF INTERSECTION
CC	CENTER OF CURVE
PT	POINT OF TANGENCY
PCC	POINT OF COMPOUND CURVE
PRC	POINT OF REVERSE CURVE
POB	POINT OF BEGINNING
POE	POINT OF ENDING
STA	STATION PREFIX
AH	AHEAD STATION SUFFIX
BK	BACK STATION SUFFIX
D	CURVE DEGREE OF (100FT)
R	CURVE RADUIS OF
T	CURVE TANGENT LENGTH
L	CURVE LENGTH OF
E	CURVE EXTERNAL DISTANCE

UTILITY SYMBOLOGY

UNDERGROUND UTILITIES

- UTILITY (GENERIC-UNKNOWN)
- UT — TELEPHONE
- UE — ELECTRIC
- UC — CABLE (TV)
- UEC — ELECTRIC+CABLE
- UET — ELECTRIC+TELEPHONE
- UCT — CABLE+TELEPHONE
- UECT — ELECTRIC+CABLE+TELEP.
- G — GAS LINE
- W — WATER LINE
- S — SANITARY SEWER (SEPTIC)

ABOVE GROUND UTILITIES (AERIAL)

- UTILITY (GENERIC-UNKNOWN)
- T — TELEPHONE
- E — ELECTRIC
- C — CABLE (TV)
- EC — ELECTRIC+CABLE
- ET — ELECTRIC+TELEPHONE
- AER E&T — ELECTRIC+TELEPHONE
- CT — CABLE+TELEPHONE
- ECT — ELECTRIC+CABLE+TELEP.
- UTILITY POLE GUY WIRE

PROJECT CONSTRUCTION SYMBOLOGY

PROJECT DESIGN & LAYOUT SYMBOLOGY

- CZ — CLEAR ZONE
- PLAN LAYOUT MATCHLINE

PROJECT CONSTRUCTION FEATURES

- TOP OF CUT SLOPE
- TOE OF FILL SLOPE
- STONE FILL
- BOTTOM OF DITCH ℄
- CULVERT PROPOSED
- STRUCTURE SUBSURFACE
- PDF — PDF — PROJECT DEMARCATION FENCE
- BF — BF — BARRIER FENCE
- TREE PROTECTION ZONE (TPZ)
- STRIPING LINE REMOVAL
- SHEET PILES

CONVENTIONAL BOUNDARY SYMBOLOGY

BOUNDARY LINES

- TOWN LINE — TOWN BOUNDARY LINE
- COUNTY LINE — COUNTY BOUNDARY LINE
- STATE LINE — STATE BOUNDARY LINE
- PROPOSED STATE R.O.W. (LIMITED ACCESS)
- PROPOSED STATE R.O.W.
- STATE ROW (LIMITED ACCESS)
- STATE ROW
- TOWN ROW
- PERMANENT EASEMENT LINE (P)
- TEMPORARY EASEMENT LINE (T)
- SURVEY LINE
- P/L — PROPERTY LINE (P/L)
- SR SR SR — SLOPE RIGHTS
- 6F — 6F — 6F PROPERTY BOUNDARY
- 4F — 4F — 4F PROPERTY BOUNDARY
- HAZ — HAZ — HAZARDOUS WASTE

EPSC LAYOUT PLAN SYMBOLOGY

EPSC MEASURES

- FILTER CURTAIN
- SILT FENCE
- SILT FENCE WOVEN WIRE
- CHECK DAM
- DISTURBED AREAS REQUIRING RE-VEGETATION
- EROSION MATTING

ENVIRONMENTAL RESOURCES

- WETLAND BOUNDARY
- RIPARIAN BUFFER ZONE
- WETLAND BUFFER ZONE
- SOIL TYPE BOUNDARY
- T&E — THREATENED & ENDANGERED SPECIES
- HAZ — HAZ — HAZARDOUS WASTE AREA
- AG — AGRICULTURAL LAND
- HABITAT — FISH & WILDLIFE HABITAT
- FLOOD PLAIN — FLOOD PLAIN
- OHW — ORDINARY HIGH WATER (OHW)
- STORM WATER
- USDA FOREST SERVICE LANDS
- WILDLIFE HABITAT SUIT/CONN

ARCHEOLOGICAL & HISTORIC

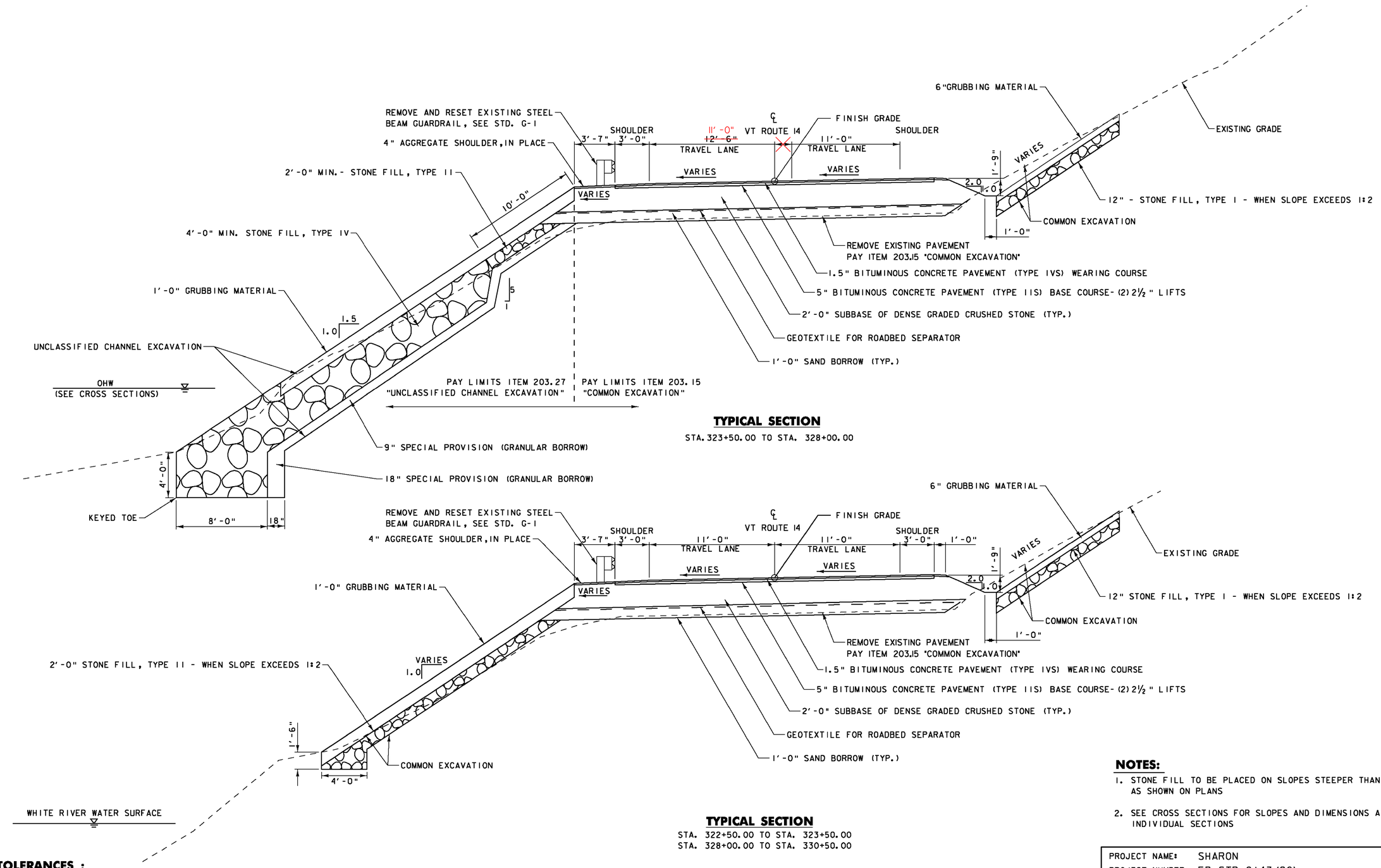
- ARCH — ARCHEOLOGICAL BOUNDARY
- HISTORIC DIST — HISTORIC DISTRICT BOUNDARY
- HISTORIC — HISTORIC AREA
- (H) HISTORIC STRUCTURE

CONVENTIONAL TOPOGRAPHIC SYMBOLOGY

EXISTING FEATURES

- ROAD EDGE PAVEMENT
- ROAD EDGE GRAVEL
- DRIVEWAY EDGE
- DITCH
- FOUNDATION
- FENCE (EXISTING)
- FENCE WOOD POST
- FENCE STEEL POST
- GARDEN
- ROAD GUARDRAIL
- RAILROAD TRACKS
- CULVERT (EXISTING)
- STONE WALL
- WALL
- WOOD LINE
- BRUSH LINE
- HEDGE
- BODY OF WATER EDGE
- LEDGE EXPOSED

PROJECT NAME:	SHARON
PROJECT NUMBER:	ER STP 0147(20)
FILE NAME: zl2c410.dgn	PLOT DATE: 3/31/2015
PROJECT LEADER: J. TUCKER	DRAWN BY: B. MACK
DESIGNED BY: B. BRESLEND	CHECKED BY: A. SANZ
CONVENTIONAL SYMBOLOGY LEGEND SHEET	SHEET 3 OF 66



TYPICAL SECTION

STA. 323+50.00 TO STA. 328+00.00

TYPICAL SECTION

STA. 322+50.00 TO STA. 323+50.00
STA. 328+00.00 TO STA. 330+50.00

TOLERANCES :

PAVEMENT : +/- ¼" TOTAL PAVEMENT THICKNESS
SUBBASE : +/- 1" TOTAL CRUSHED STONE THICKNESS
SAND BORROW : +/- 1" TOTAL SAND THICKNESS

NOTES:

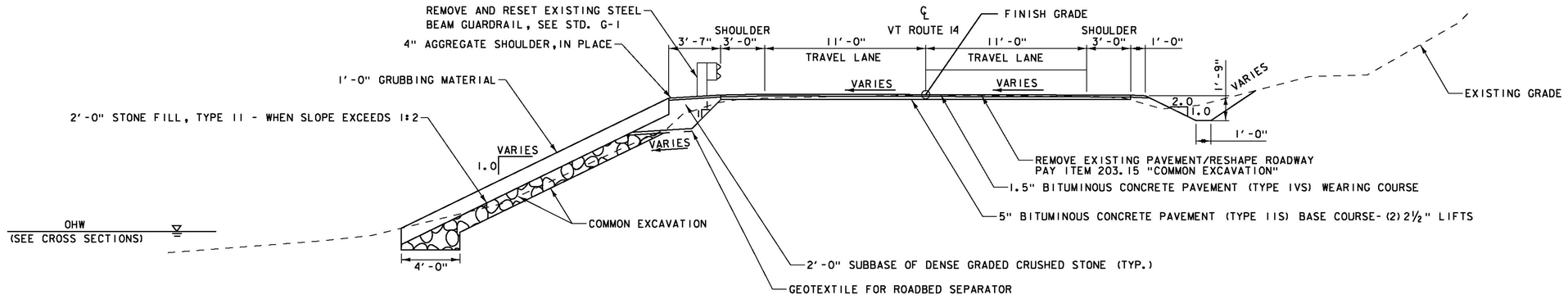
1. STONE FILL TO BE PLACED ON SLOPES STEEPER THAN 1:2 AS SHOWN ON PLANS
2. SEE CROSS SECTIONS FOR SLOPES AND DIMENSIONS AT INDIVIDUAL SECTIONS

NOT TO SCALE

PROJECT NAME: SHARON
PROJECT NUMBER: ER STP 0147(20)

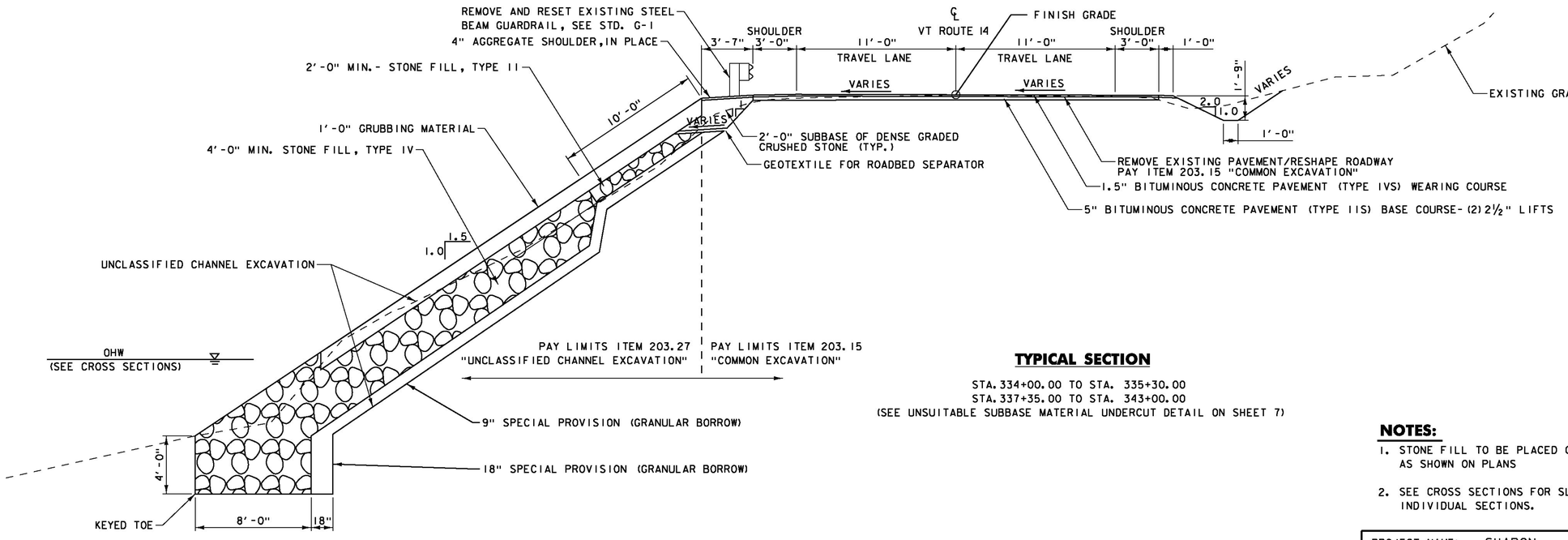
FILE NAME: z12c410.dgn
PROJECT LEADER: J. TUCKER
DESIGNED BY: B. BRESLEND
TYPICAL SECTION SHEET 1

PLOT DATE: 3/31/2015
DRAWN BY: B. MACK
CHECKED BY: A. SANZ
SHEET 4 OF 66



TYPICAL SECTION

STA. 330+50.00 TO STA. 334+00.00
STA. 335+30.00 TO STA. 337+35.00
(SEE UNSUITABLE SUBBASE MATERIAL UNDERCUT DETAIL ON SHEET 7)



TYPICAL SECTION

STA. 334+00.00 TO STA. 335+30.00
STA. 337+35.00 TO STA. 343+00.00
(SEE UNSUITABLE SUBBASE MATERIAL UNDERCUT DETAIL ON SHEET 7)

TOLERANCES :

PAVEMENT : +/- ¼" TOTAL PAVEMENT THICKNESS
SUBBASE : +/- 1" TOTAL CRUSHED STONE THICKNESS
SAND BORROW : +/- 1" TOTAL SAND THICKNESS

NOTES:

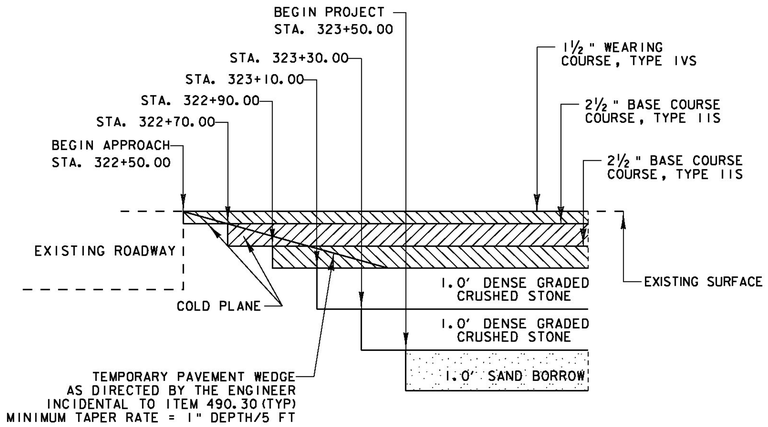
1. STONE FILL TO BE PLACED ON SLOPES STEEPER THAN 1:2 AS SHOWN ON PLANS
2. SEE CROSS SECTIONS FOR SLOPES AND DIMENSIONS AT INDIVIDUAL SECTIONS.

NOT TO SCALE

PROJECT NAME: SHARON
PROJECT NUMBER: ER STP 0147(20)

FILE NAME: z12c410.dgn
PROJECT LEADER: J. TUCKER
DESIGNED BY: B. BRESLEND
TYPICAL SECTION SHEET 2

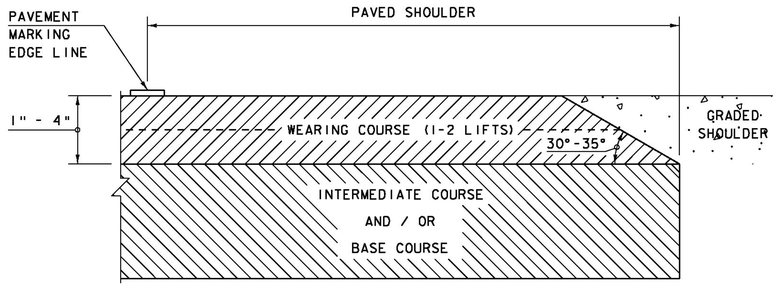
PLOT DATE: 3/31/2015
DRAWN BY: B. MACK
CHECKED BY: A. SANZ
SHEET 5 OF 66



APPROACH AREA DETAIL (BEGIN PROJECT)

TRANSITION AREA DETAIL (END FULL DEPTH RECONSTRUCTION)

APPROACH AREA DETAIL (END PROJECT)



SAFETY EDGE DETAIL

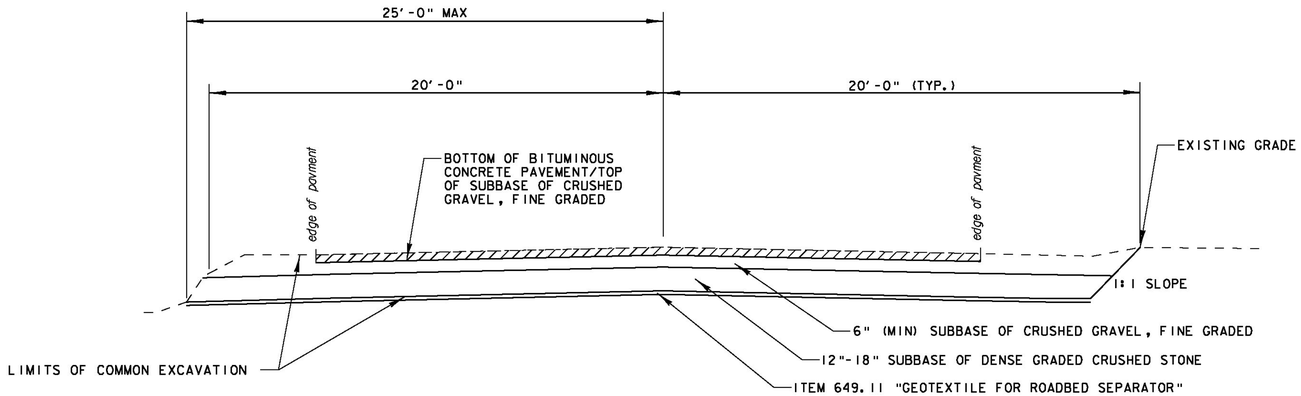
NOT TO SCALE

NOTE:

THE EDGE OF PAVEMENT SHALL BE FORMED IN SUCH A WAY THAT THE BITUMINOUS CONCRETE PAVEMENT IS EXTRUDED OR COMPRESSED TO FORM THE 30 TO 35 DEGREE ANGLE. DEVICES THAT SIMPLY STRIKE-OFF THE MIX WITHOUT PROVIDING ANY COMPACTIVE EFFORT WILL NOT BE ALLOWED.

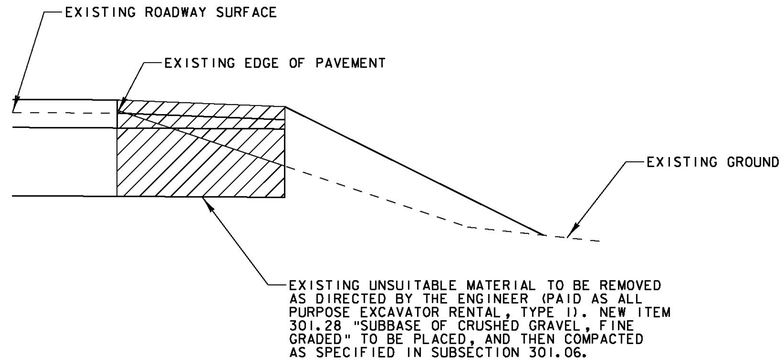
NOT TO SCALE

PROJECT NAME: SHARON	
PROJECT NUMBER: ER STP 0147(20)	
FILE NAME: z12c410.dgn	PLOT DATE: 3/31/2015
PROJECT LEADER: J. TUCKER	DRAWN BY: B. MACK
DESIGNED BY: B. BRESLEND	CHECKED BY: A. SANZ
TYPICAL SECTION SHEET 3	SHEET 6 OF 66



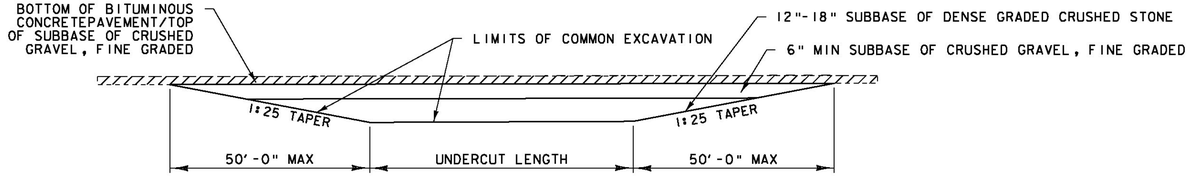
UNSUITABLE SUBBASE MATERIAL UNDERCUT DETAIL

NOTE: THIS DETAIL TO BE USED IN AREAS
AS DEEMED NECESSARY BY THE ENGINEER
ALL WIDTHS AND DEPTHS TO BE APPROVED
BY ENGINEER PRIOR TO WORK BEING PERFORMED.



EXISTING SHOULDER RECONSTRUCTION DETAIL

NOTE: THIS DETAIL TO BE USED IN AREAS
AS DEEMED NECESSARY BY THE ENGINEER
ALL WIDTHS AND DEPTHS TO BE APPROVED
BY ENGINEER PRIOR TO WORK BEING PERFORMED.

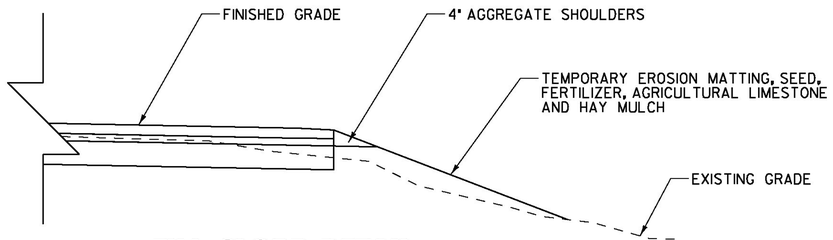


UNSUITABLE SUBBASE MATERIAL TRANSITION DETAIL

NOT TO SCALE

NOTES:

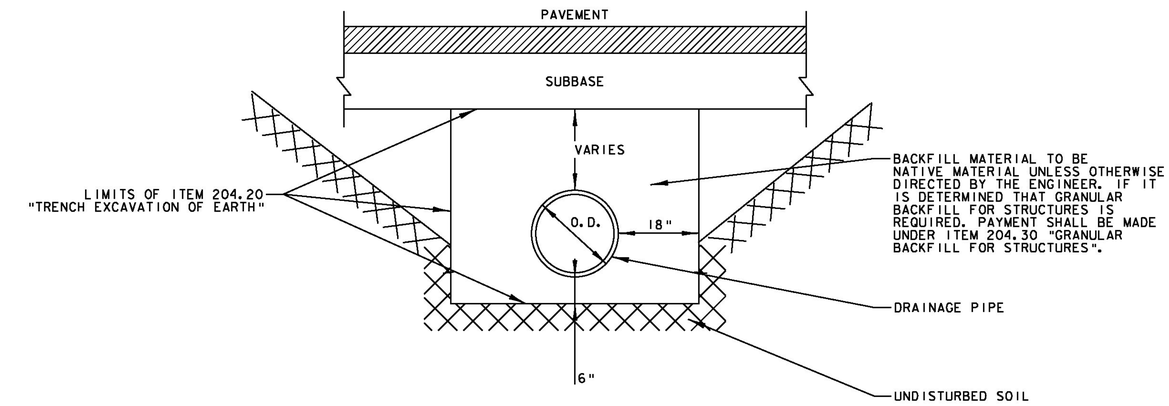
1. UNDERCUT CANDIDATE AREAS ENCOUNTERED DURING CONSTRUCTION SHALL BE REVIEWED AND APPROVED BY THE VTRANS CONSTRUCTION PAVING ENGINEER PRIOR TO THE TREATMENT.
2. ALL UNDERCUTS SHALL BE FULL WIDTH.



FILL SLOPE DETAIL

NOT TO SCALE

NOTE: IF DUE TO GROWING SEASON TIME CONSTRAINTS IT IS DEEMED NECESSARY BY THE CONSTRUCTION ENVIRONMENTAL ENGINEER THAT A MORE RAPID VEGETATION ESTABLISHMENT IS REQUIRED, 2 INCHES OF GRUBBING MATERIAL SHALL BE PLACED ON THE SLOPE PRIOR TO PLACEMENT OF SEED, FERTILIZER, TEMPORARY EROSION MATTING, AND AGRICULTURAL LIMESTONE. PLACEMENT OF GRUBBING MATERIAL WILL BE PAID FOR UNDER CONTRACT ITEM 651.40 "GRUBBING MATERIAL (2")".



TYPICAL TRENCH BOX DETAIL

NOT TO SCALE

PROJECT NAME: SHARON	
PROJECT NUMBER: ER STP 0147(20)	
FILE NAME: z12c410.dgn	PLOT DATE: 3/31/2015
PROJECT LEADER: J. TUCKER	DRAWN BY: B. MACK
DESIGNED BY: B. BRESLEND	CHECKED BY: A. SANZ
TYPICAL SECTION SHEET 4	SHEET 7 OF 66

GENERAL

1. ALL CONSTRUCTION ACTIVITIES SHALL BE IN ACCORDANCE WITH THE VERMONT AGENCY OF TRANSPORTATION'S STANDARD SPECIFICATIONS FOR CONSTRUCTION, 2011 EDITION, LATEST REVISIONS, AND CURRENT DESIGN STANDARDS FOR CONSTRUCTION.

2. TOPOGRAPHY AND PLANIMETRIC DATA SHOWN ON THESE PLANS ARE BASED ON FIELD SURVEY COMPLETED BY DUBOIS & KING, INC. IN 2013.

3. WRITTEN DIMENSIONS HAVE PRECEDENCE OVER SCALED DIMENSIONS. THE CONTRACTOR SHALL USE CAUTION WHEN SCALING REPRODUCED PLANS. IN CASE OF CONFLICT BETWEEN THIS PLAN SET AND ANY OTHER DRAWINGS OR SPECIFICATION, THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY FOR CLARIFICATIONS.

4. ALL UTILITY POLES ARE TO REMAIN UNDISTURBED UNLESS OTHERWISE NOTED IN THESE PLANS.

5. SUBSURFACE FEATURES SUCH AS ELECTRIC AND TELEPHONE LINES, WATER LINES, SEWER LINES, STORM DRAIN AND CULVERTS, ETC., ENCOUNTERED IN THE CONSTRUCTION OF THE PROJECT SHALL BE PROTECTED, SUPPORTED, OR REMOVED AND REINSTALLED BY THE CONTRACTOR UNLESS OTHERWISE NOTED ON THE PLANS. THE COST OF THIS WORK SHALL BE INCIDENTAL TO THE CONTRACT UNLESS PAYMENT IS SPECIFICALLY NOTED AS A SEPARATE PAY ITEM. THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANIES AND/OR HIGHWAY DEPARTMENTS WHEN THE WORK INVOLVES THEIR RESPECTIVE FACILITIES. SEE UTILITIES NOTES THIS SHEET AND THE UTILITIES SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

6. ANY SURFACE OR SUBSURFACE FEATURES DAMAGED BY THE CONTRACTOR DURING CONSTRUCTION SHALL BE RESTORED TO A CONDITION AT LEAST EQUAL TO THAT IN WHICH THEY WERE FOUND IMMEDIATELY PRIOR TO THE BEGINNING OF CONSTRUCTION. ALL COSTS ASSOCIATED WITH THE RESTORATION SHALL BE AT THE SOLE EXPENSE OF THE CONTRACTOR.

7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT THE DUST CREATED AS A RESULT OF CONSTRUCTION DOES NOT CREATE A NUISANCE OR A SAFETY HAZARD. WHERE AND WHEN DEEMED NECESSARY BY THE ENGINEER, THE CONTRACTOR SHALL BE REQUIRED TO WET SECTIONS OF THE CONSTRUCTION AREA WITH WATER. THIS SHALL BE PAID FOR UNDER ITEM 609.10, "DUST CONTROL WITH WATER."

8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING FIELD MEASUREMENTS OF ALL EXISTING CONDITIONS AFFECTING THE WORK. ANY DISCREPANCIES IN DIMENSIONS, CHARACTER OR EXTENT OF EXISTING FEATURES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE ADVANCING THE WORK. WORKING DRAWINGS REQUIRED FOR VARIOUS ITEMS OF THE WORK SHALL INDICATE THE ACTUAL FIELD MEASUREMENTS BY THE CONTRACTOR PRIOR TO SUBMITTAL FOR THE ENGINEER'S APPROVAL AND SHALL BE SO NOTED.

9. ITEM 201.10 "CLEARING AND GRUBBING INCLUDING INDIVIDUAL TREES AND STUMPS" HAS BEEN INCLUDED TO REMOVE ANY VEGETATION, PARTIAL AND FULL TREE REMOVAL, THINNING AND TRIMMING FOR SIGNS, AND ANY ASSOCIATED GRUBBING WITHIN THE 3 ROD ROW OR GREATER IF NECESSARY WHEN ROW HAS BEEN CONFIRMED BEYOND THE ASSUMED 3 RODS. THE ENGINEER MAY EXCLUDE REMOVAL IN SOME AREAS WHERE DEEMED NECESSARY AND APPROPRIATE OR NECESSITATED BY PERMIT REQUIREMENTS PER THE CONSTRUCTION ENVIRONMENTAL ENGINEER'S RECOMMENDATIONS.

10. TREES LOCATED WITHIN AND ADJACENT TO THE CONSTRUCTION EASEMENT SHALL BE SAVED EXCEPT AS NOTED ON THE PLANS. THE CONTRACTOR SHALL UTILIZE SUITABLE METHODS NECESSARY TO PROTECT THE REMAINING TREES AND THEIR ROOTS FROM DAMAGE.

⚠ 11. ALL WOODY DEBRIS (TREE LIMBS, BRANCHES, ETC.) SHALL BE CHIPPED AND MULCHED ON-SITE AND USED FOR TEMPORARY EROSION CONTROL. ALL CUT TREE LOGS SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE SITE. ALL STUMPS SHALL BE GROUND DOWN ON SITE AND THE CHIPS USED AS EROSION CONTROL. PAYMENT FOR THE CUTTING AND DISPOSAL OF TREE LOGS, CHIPPING AND SPREADING OF WOODY DEBRIS AND GRINDING OF STUMPS WILL BE PAID FOR UNDER ITEM 201.10, "CLEARING & GRUBBING, INCL. INDV. TREES & STUMPS".

12. RESTORATION OF DISTURBED AREAS: RESTORE DISTURBED AREAS, EXCEPT STONE FILL AREAS, WITH 2 INCHES TOPSOIL, SEED, FERTILIZER AND MULCH, UNLESS THE ENGINEER DIRECTS THE USE OF SUITABLE EXCAVATED MATERIAL.

13. ALL COMMERCIAL AND RESIDENTIAL PROPERTY OWNERS SHALL BE GIVEN 48 HOURS ADVANCE NOTIFICATION WHEN CONSTRUCTION IS TO TAKE PLACE ADJACENT TO PROPERTIES. EGRESS MUST BE MAINTAINED AT ALL TIMES.

14. YIELDING MARKER POSTS FOR CULVERTS SHALL BE PLACED AS INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

15. SLOPE ROUNDING: ALL CUT SLOPES SHALL BE ROUNDED IN ACCORDANCE WITH STANDARD DWG. B-5.

16. TACK COAT / EMULSIFIED ASPHALT IS TO BE APPLIED AT THE RATE OF 0.04 GAL/SY BETWEEN SUCCESSIVE COURSES OF NEW PAVEMENT AND 0.08 GAL/SY BETWEEN EXISTING/COLD PLANED SURFACES AND A NEW SURFACE OR AS DIRECTED BY THE ENGINEER.

17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REVIEWING AND UNDERSTANDING ALL APPLICABLE ENVIRONMENTAL PERMITS AND ENSURING THAT ALL CONSTRUCTION REQUIREMENTS ARE MET.

18. AT COMPLETION OF GRADING, THE SLOPES, DITCHES, AND ALL DISTURBED AREAS SHALL BE SMOOTH AND FREE OF POCKETS WITH SUFFICIENT SLOPE TO ENSURE DRAINAGE.

19. NO WORK BEYOND THE LIMITS OF CONSTRUCTION SHOWN ON THE PLANS WILL BE ALLOWED. WORKING OUTSIDE OF THESE LIMITS MAY TRIGGER ADDITIONAL PERMITTING REQUIREMENTS, WHICH WILL BE THE CONTRACTOR'S RESPONSIBILITY.

20. THE CONTRACTOR SHALL SUBMIT SEDIMENT AND EROSION CONTROL METHODS TO THE ENGINEER FOR APPROVAL 14 DAYS PRIOR TO START OF WORK.

21. TYPICAL CROSS SECTIONS ARE MEANT FOR GUIDANCE ONLY. FIELD CONDITIONS MAY VARY AND SHALL BE VERIFIED BY THE CONTRACTOR.

22. A QUANTITY OF ITEM 204.21 "TRENCH EXCAVATION OF ROCK" HAS BEEN INCLUDED IN THE EVENT LEDGE IS ENCOUNTERED DURING THE INSTALLATION OF PROPOSED DRAINAGE OR UNDERDRAIN OUTSIDE THE LIMITS OF UNCLASSIFIED CHANNEL EXCAVATION.

STONE FILL

1. TO THE EXTENT PRACTICAL, EXCAVATION AND PLACEMENT OF STONE FILL SHALL BE PERFORMED OUTSIDE OF FLOWING WATER TO MINIMIZE THE DISCHARGE OF SEDIMENT-LADEN WATER. THE CONTRACTOR IS RESPONSIBLE FOR DIVERTING, PUMPING, BYPASS PIPING OR OTHERWISE CONTROLLING WATER TO MEET THIS REQUIREMENT. PAYMENT FOR CONTROL OF WATER WILL BE CONSIDERED INCIDENTAL TO CONTRACT ITEM 613.13 "STONE FILL, TYPE IV".

2. STONE FILL SHALL BE PLACED IN A MANNER THAT WILL NOT SEPARATE SMALL AND LARGE STONES. PLACEMENT BY DUMP TRUCK OR DOZER WILL NOT BE ALLOWED. REGULAR MIXING OF THE STONE FILL STOCKPILE DURING INSTALLATION MAY BE NECESSARY TO PREVENT SEPARATION OF THE SMALL AND LARGE STONES.

3. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLING THE STONE FILL AS A WELL-COMPACTED MASS, WITH STONES INTERLOCKED WITH EACH OTHER AND WITH NO LARGE VOIDS TO REDUCE THE POTENTIAL FOR UPLIFT AND MOVEMENT AND TO PREVENT GRUBBING MATERIAL FROM WASHING INTO THE STONE.

4. TO ACHIEVE A WELL-COMPACTED MASS, THE CONTRACTOR MAY BE REQUIRED TO FOLLOW THE INITIAL PLACEMENT OF STONE FILL WITH ADDITIONAL PASSES OF SMALLER MATERIAL. SELECTIVE HAND PLACEMENT OF STONE FOLLOWED BY COMPACTION MAY ALSO BE REQUIRED. PAYMENT WILL BE CONSIDERED INCIDENTAL TO THE APPROPRIATE STONE FILL CONTRACT ITEM.

5. THE CONTRACTOR SHALL PROVIDE THE ENGINEER AN OPPORTUNITY TO INSPECT, WITH 48-HOUR PRIOR NOTICE, AN IN-PLACE STONE FILL TEST SECTION. THE TEST SECTION SHALL BE BETWEEN 10 AND 20 FEET LONG AND BE INSTALLED TO THE DEPTH AND ELEVATIONS INDICATED IN THE CONTRACT DOCUMENTS. INSTALLATION OF ADDITIONAL STONE FILL IS NOT TO CONTINUE UNTIL THE ENGINEER HAS COMPLETED AND APPROVED, OR WAIVED THE INSPECTION.

6. CONTRACTOR SHALL PLACE A 12 INCH (MINIMUM) LAYER OF GRUBBING MATERIAL OVER THE TOP OF THE STONE FILL SLOPE DOWN TO THE ORDINARY HIGH WATER (OHW) ELEVATION. GRUBBING MATERIAL SHALL BE WORKED IN TO THE STONE FILL MASS AND INTO ANY SMALL REMAINING SURFACE VOIDS AND CREVICES. ON-SITE EXCAVATED GRUBBING MATERIAL MAY BE USED IF, IN THE OPINION OF THE ENGINEER, AN ADEQUATE PERCENTAGE OF FINES AND ORGANICS IS PRESENT IN THE MATERIAL TO SUPPORT A GRASS COVER.

7. GRANULAR BORROW FOR BEDDING OF STONE FILL SECTIONS SHALL MEET THE REQUIREMENTS OF THE SPECIAL PROVISIONS AND WILL BE PAID UNDER CONTRACT ITEM 900.608 "SPECIAL PROVISION (GRANULAR BORROW)".

UTILITIES

1. UTILITIES INFORMATION SHOWN HEREON WAS OBTAINED FROM THE BEST AVAILABLE SOURCES AND MAY OR MAY NOT BE EITHER ACCURATE OR COMPLETE. CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF EXISTING UTILITIES AND SHALL BE RESPONSIBLE FOR ANY DAMAGE AS A RESULT OF THE CONTRACTOR'S OPERATIONS TO ANY UTILITY, PUBLIC OR PRIVATE, SHOWN OR NOT SHOWN HEREON. CONTRACTOR SHALL CONNECT OR RECONNECT ALL UTILITIES TO THE NEAREST SOURCE THROUGH COORDINATION WITH THE UTILITY OWNER.

2. THE CONTRACTOR SHALL NOT DISRUPT ANY EXISTING UTILITY SERVICE (PRIVATE OR PUBLIC) WITHOUT WRITTEN AUTHORIZATION FROM VTRANS.

3. THE CONTRACTOR SHALL CONTACT "DIG SAFE" [1-888-DIG-SAFE (1-888-344-7233)] AND ALL AFFECTED UTILITY COMPANIES PRIOR TO PERFORMING ANY EXCAVATION, IN ACCORDANCE WITH DIG SAFE'S RULES OF NOTIFICATION.

4. SEE THE UTILITIES SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

REV	DATE	DESCRIPTION
1	5/26/2015	NOTE 11 MODIFIED

PROJECT NAME: SHARON
PROJECT NUMBER: ER STP 0147(20)

FILE NAME: z12c410.dgn
PROJECT LEADER: J. TUCKER
DESIGNED BY: B. BRESLEND
PROJECT NOTES SHEET

PLOT DATE: 5/26/2015
DRAWN BY: B. MACK
CHECKED BY: A. SANZ
SHEET 8 OF 66

GPS CONTROL POINTS

NONE

TRAVERSE TIES

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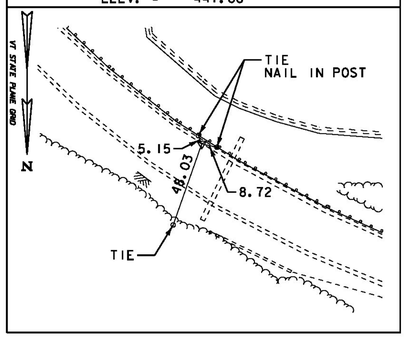
ELEV. = 447.08



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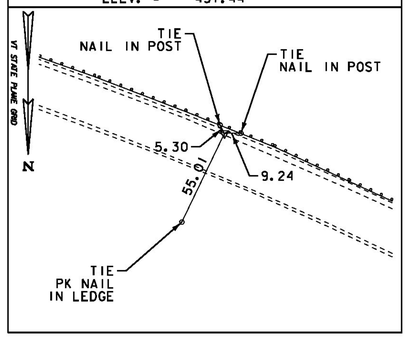

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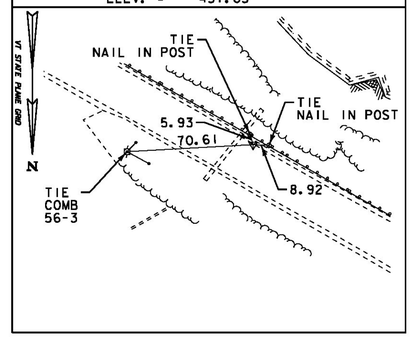

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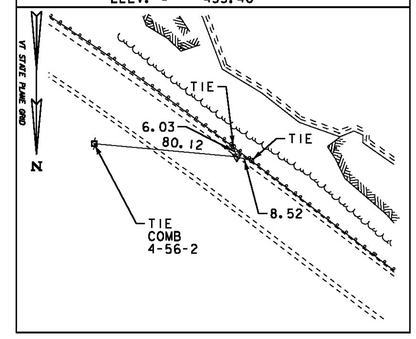

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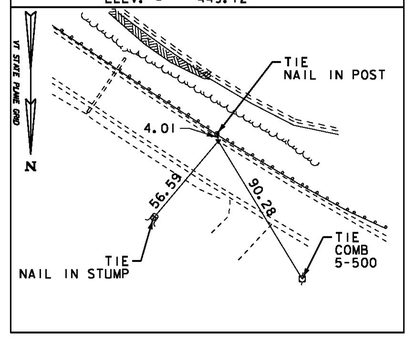

ALIGNMENT TIES

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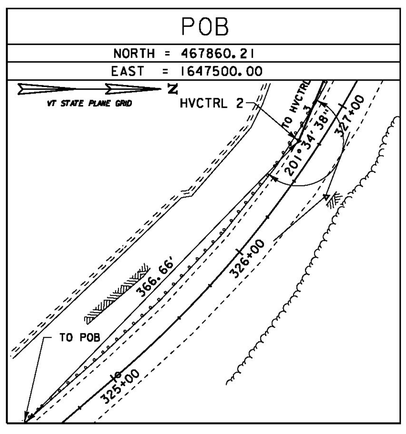

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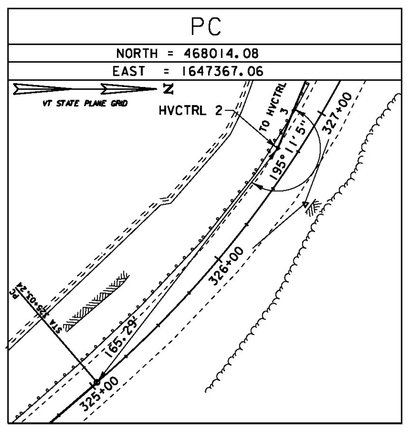

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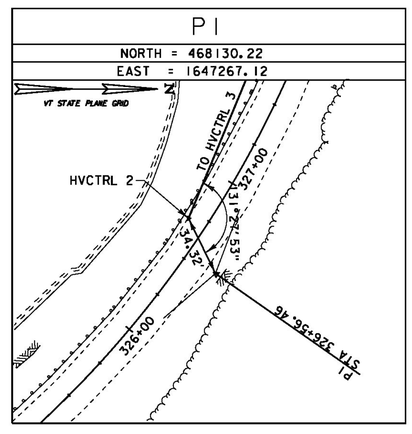

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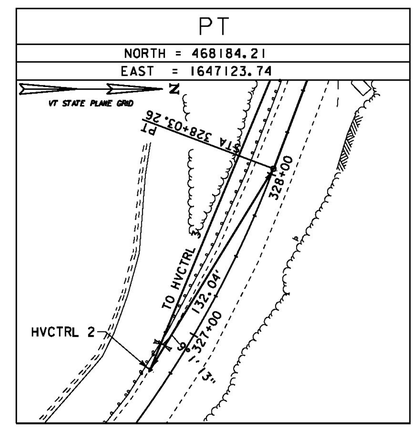

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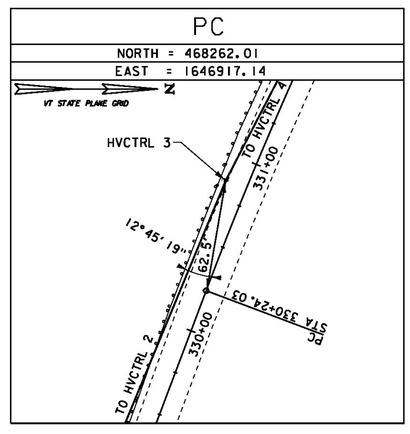

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (2011)
ADJUSTMENT NONE

0 40 80
SCALE IN FEET

PROJECT NAME: SHARON
PROJECT NUMBER: ER STP 0147(20)

FILE NAME: z12c410tie.dgn
PROJECT LEADER: J. TUCKER
DESIGNED BY: B. BRESLEND
TIE SHEET 1

PLOT DATE: 3/31/2015
DRAWN BY: B. MACK
CHECKED BY: A. SANZ
SHEET 9 OF 66

ALIGNMENT TIES

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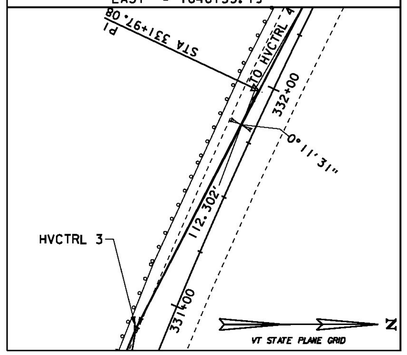

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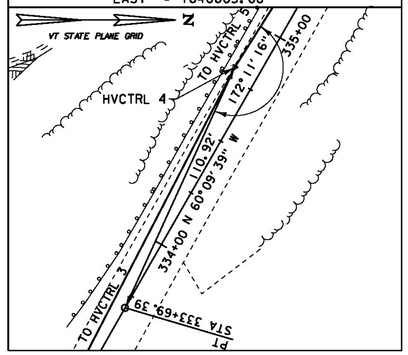

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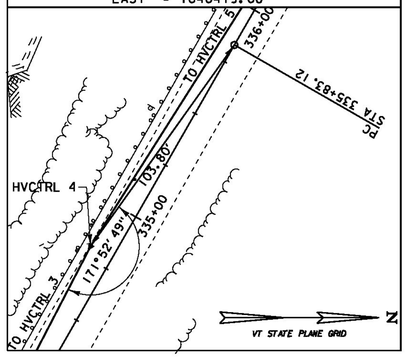

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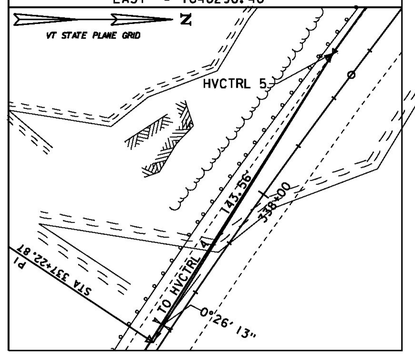

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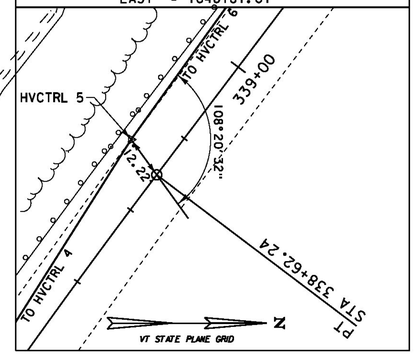

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PI
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EAST = 1645953.66

PT
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EAST = 1645814.75

ALIGNMENT TIES

DATUM	
VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (2011)
ADJUSTMENT	NONE

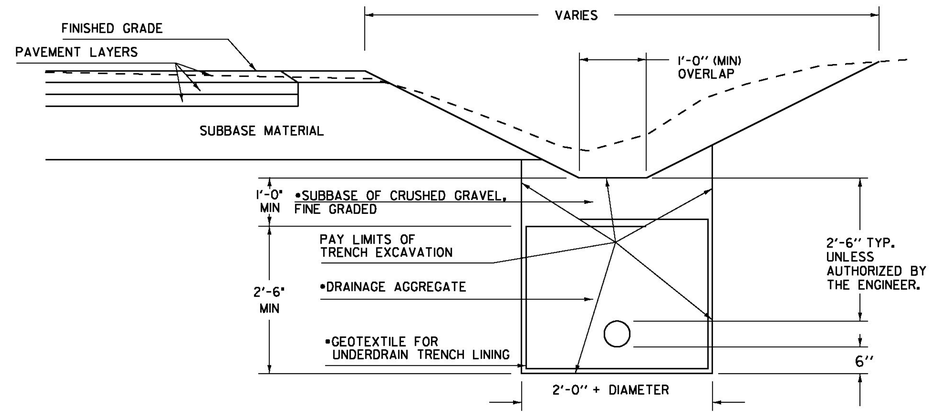
0 30 60
SCALE IN FEET

PROJECT NAME: SHARON
PROJECT NUMBER: ER STP 0147(20)

FILE NAME: z12c410tie.dgn
PROJECT LEADER: J. TUCKER
DESIGNED BY: B. BRESLEND
TIE SHEET 2

PLOT DATE: 3/31/2015
DRAWN BY: B. MACK
CHECKED BY: A. SANZ
SHEET 10 OF 66

LOCATION						MISC. ITEMS							REMARKS
SITE		STATION		STATION	POS.	605.10	*	*	204.20	204.21	*	619.17	* ITEMS TO BE PAID UNDER ITEM
						6 INCH	DRAINAGE	GEOTEXTILE	TRENCH	TRENCH	SUBBASE OF	YIELDING	605.10 "6 INCH UNDERDRAIN PIPE"
						UNDERDRAIN PIPE	AGGREGATE	FOR TRENCH	EXCAVATION	EXCAVATION	CRUSHED GRAVEL	MARKER POSTS	
									OF EARTH	OF ROCK	FINE GRADED		
SHARON						LF	CY	SY	CY	CY	TON	EA	
1		324+25		326+88	RT	263	104	419	88	16	69	2	
2		327+01		328+50	RT	149	59	237	50	9	39	2	
		SUBTOTAL				412	163	656	138	25	108	4	
		ROUNDING				38	-	-	-	15	-	-	
		TOTAL				450	163	656	**	40	**	**	** SEE QUANTITY SHEETS FOR TOTAL QUANTITIES



• MATERIALS AND INSTALLATION INCLUDED IN THE UNIT PRICE BID FOR CONTRACT ITEM 605.10.

UNDERDRAIN DETAIL

NOTES:

1. GEOTEXTILE FOR UNDERDRAIN TRENCH LINING SHALL NOT BE PLACED AROUND UNDERDRAIN WHEN COVER ABOVE UNDERDRAIN IS LESS THAN ONE FOOT.
2. THE END OF THE UNDERDRAIN PIPE AT THE BEGINNING OF ALL UNDERDRAIN RUNS SHALL BE WRAPPED IN GEOTEXTILE FABRIC. PAYMENT FOR THIS WORK IS INCLUDED IN THE UNIT PRICE BID FOR ITEM 605.10 "6 INCH UNDERDRAIN PIPE".

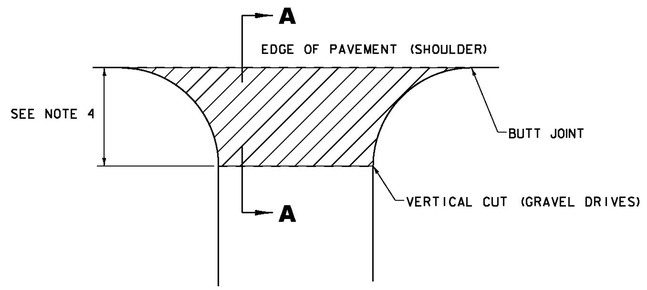
NOT TO SCALE

PROJECT NAME: SHARON
PROJECT NUMBER: ER STP 0147(20)

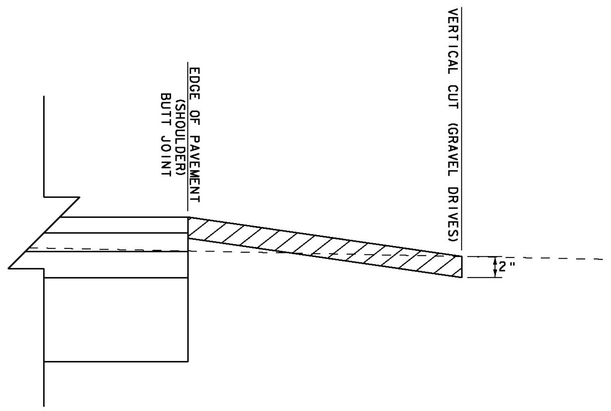
FILE NAME: z12c410.dgn
PROJECT LEADER: J. TUCKER
DESIGNED BY: B. BRESLEND
UNDERDRAIN DETAIL SHEET

PLOT DATE: 3/31/2015
DRAWN BY: B. MACK
CHECKED BY: A. SANZ
SHEET 11 OF 66

STATION	POSITION	TYPE	QUANTITY (SY)
SHARON			
333+26	LT	FIELD	9.8
333+56	RT	GRAVEL	37.1
342+58	RT	GRAVEL	12.2
		SUBTOTAL =	59.1
		ROUNDING =	0.9
		TOTAL =	60.0



PLAN



SECTION A-A

HANDWORK DETAILS FOR DRIVES - GRAVEL DRIVES

NOTES:

1. PAVING LIFT NOT TO EXCEED 2 INCHES.
2. THE COST OF PLACING SUBBASE MATERIAL, CLEANING EXISTING PAVED SURFACES, INCLUDING POWER EQUIPMENT, AND FOR FILLING JOINTS, CRACKS AND HOLES WILL NOT BE PAID DIRECTLY BUT WILL BE CONSIDERED INCIDENTAL TO ITEM 900.675 "SPECIAL PROVISION (HAND-PLACED BITUMINOUS CONCRETE MATERIAL, DRIVES)".
3. EXCAVATION OR FILL NEEDED TO ACHIEVE PROPER DRIVE SLOPES WILL NOT BE PAID DIRECTLY BUT WILL BE CONSIDERED INCIDENTAL TO ITEM 900.675 "SPECIAL PROVISION (HAND-PLACED BITUMINOUS CONCRETE MATERIAL, DRIVES)".
4. FIELD DRIVES 2'-0"; RESIDENTIAL AND COMMERCIAL DRIVES 4'-0"; OR AS DIRECTED BY THE ENGINEER.

LEGEND

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

DETAILS ARE NOT TO SCALE

PROJECT NAME: SHARON	
PROJECT NUMBER: ER STP 0147(20)	
FILE NAME: z12c410.dgn	PLOT DATE: 3/31/2015
PROJECT LEADER: J. TUCKER	DRAWN BY: B. MACK
DESIGNED BY: B. BRESLEND	CHECKED BY: A. SANZ
HANDWORK DETAILS FOR DRIVES	SHEET 12 OF 66

STATE OF VERMONT
AGENCY OF TRANSPORTATION
MATERIALS & RESEARCH SECTION
SOILS & FOUNDATION UNIT
DRILLING NOTES

PROJECT NAME: Sharon **PROJECT NUMBER:** STP 0147(20) **SITE:** VT-14 **DATE:** 05/2013
BORING CREW: Mike's Boring & Coring **TESTED BY:** J. Touchette **REVIEWED BY:** C. Benda

BORING No.	DATE DRILLED	STATION	OFFSET (FT)	DEPTH (FT)	SAMPLE TYPE	FIELD DESCRIPTION	LABORATORY RESULTS							
						SOIL TYPE, COLOR, MOISTURE	% MOISTURE	AASHTO CLASS.	SOIL DES.	% GRAVEL	% SAND	% FINES	LIQUID LIMIT	PLASTIC LIMIT
S-1	5/22/13	324+06	5.5 RT	0.0-0.8		Asphalt Pavement								
				0.8-2.5		Brown Med. Gr, Damp	4.9	A-1-b	Gravelly Sand	38.2	43.2	18.5		
				2.5-4.5		Brown Med Gr & Sa, Damp/wet	13.3	A-2-4	Silty Sand	14.2	54.4	31.4		
				4.5-6.5		SiSa w/ some stones, wet	13.3	A-2-4	Gravelly Silty Sand	22.4	46.7	30.9		
S-2	5/22/13	332+66	5.5 LT	0.0-0.7		Asphalt Pavement								
				0.7-2.5		Med. Gr w/ weathered rock & Fine Sa, Damp	2.1	A-1-b	Silty Gravelly Sand	34.6	44.1	21.3		
				2.5-4.5		Fine SiSa, Brown, Damp	9.6	A-4	Silty Sand	1.0	54.7	44.3		
				4.5-6.5		Fine SiSa, Brown, Damp	16.0	A-4	Sandy Silt	0.3	40.9	58.7		
S-3	5/22/13	324+06	5.5 RT	0.0-0.65		Asphalt Pavement								
				0.65-2.5		Med. Gr, Brown, Damp	1.0	A-1-a	Sandy Gravel	50.2	36.5	13.3		
				2.5-4.5		Brown Med. Gr & Brown fine Sa w/ trace Si, Damp	6.6	A-2-4	Silty Sand	0.0	73.8	26.2		
				4.5-6.5		Brown fine Sa w/ trace Si, Damp	7.6	A-2-4	Silty Sand	0.0	77.1	22.9		

PROJECT NAME: SHARON
PROJECT NUMBER: ER STP 0147(20)

FILE NAME: z12c410boring.dgn
PROJECT LEADER: J. TUCKER
DESIGNED BY: B. BRESLEND
BORING LOG SHEET

PLOT DATE: 3/31/2015
DRAWN BY: B. MACK
CHECKED BY: A. SANZ
SHEET 13 OF 66

SOIL CLASSIFICATION

AASHTO	
A1	Gravel and Sand
A3	Fine Sand
A2	Silty or Clayey Gravel and 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 kPa	CONSISTENCY
<12	Very Soft
12-24	Soft
24-48	Med. Stiff
48-96	Stiff
96-192	Very Stiff
>192	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 300 mm For: 50.8 mm O. D. Sampler 35.0 mm I. D. Sampler Hammer Weight Of 63.5 kg. Hammer Fall Of 762 mm
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 30.1mm
BX	Core Size 42.0 mm
NX	Core Size 54.7 mm
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
ROD	Rock Quality Designation
CBR	California Bearing Ratio
<	Less Than
>	Greater Than
R	Refusal (N > 100)
OW	Indicates a temporary observation well installed

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		

DEFINITIONS (AASHTO)

BEDROCK (LEDGE) - Rock in its native location of indefinite thickness.

BOULDER - A rock fragment with an average dimension > 304.8 mm.

COBBLE - Rock fragments with an average dimension between 76.2 and 304.8 mm.

GRAVEL - Rounded particles of rock < 76.2 mm and > 2 mm (#10 sieve).

SAND - Particles of rock < 2 mm (#10 sieve) and > 75 μm (#200 sieve).

SILT - Soil < 75 μm (#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.

GENERAL NOTES

1. The test borings shown herein were drilled by Mike's Boring and Coring in the period from 05-21-13 through 05-23-13.

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.

5. Pictorial structure details shown on the boring plan layout or soils profile are for illustrative purposes only and may not accurately portray final contract details.

6. Terminology used on boring logs to describe the hardness, degree of weathering, and spacing of fractures, joints and other discontinuities in the bedrock is defined in the AASHTO Manual on Subsurface Investigations, 1988.

SEE LAYOUT SHEETS FOR BORING LOCATIONS

PROJECT NAME: SHARON
PROJECT NUMBER: ER STP 0147(20)

FILE NAME: z12c410boring.dgn
PROJECT LEADER: J. TUCKER
DESIGNED BY: B. BRESLEND
BORING LAYOUT SHEET

PLOT DATE: 3/31/2015
DRAWN BY: B. MACK
CHECKED BY: A. SANZ
SHEET 14 OF 66

STATE OF VERMONT
AGENCY OF TRANSPORTATION

QUANTITY SHEET 1

SUMMARY OF ESTIMATED QUANTITIES			TOTALS		DESCRIPTIONS				DETAILED SUMMARY OF QUANTITIES		
ROADWAY	EROSION CONTROL	FULL C.E. ITEMS	GRAND TOTAL	FINAL	UNIT	ITEMS	ITEM NUMBER	ROUND	QUANTITIES	UNIT	ITEMS
											EARTHWORKS SUMMARY
1			1		LS	CLEARING AND GRUBBING, INCLUDING INDIVIDUAL TREES AND STUMPS	201.10	--			
5700			5700		CY	COMMON EXCAVATION	203.15	58			FILL REQUIRED
50			50		CY	SOLID ROCK EXCAVATION	203.16	EST	369	CY	EARTHWORKS (321 CY * 1.15)
									369	CY	SUBTOTAL
5500			5500		CY	UNCLASSIFIED CHANNEL EXCAVATION	203.27	49			FILL AVAILABLE
1100			1100		CY	SAND BORROW	203.31	40	3949	CY	COMMON EXCAVATION (5642 CY * 0.70)
									25	CY	SOLID ROCK EXCAVATION (50 CY * 0.495)
510			510		CY	TRENCH EXCAVATION OF EARTH	204.20	6	1635	CY	UNCLASSIFIED CHANNEL EXCAVATION (5451 CY * 0.30)
									130	CY	UNDERDRAIN EXCAVATION (163 CY * 0.80)
40			40		CY	TRENCH EXCAVATION OF ROCK	204.21	15	5739	CY	SUBTOTAL
1			1		CY	TRENCH EXCAVATION OF EARTH, EXPLORATORY (N.A.B.I.)	204.22	--	5739	CY	FILL AVAILABLE
									369	CY	FILLREQUIRED
370			370		CY	GRANULAR BACKFILL FOR STRUCTURES	204.30	4	5370	CY	WASTE
260			260		SY	COLD PLANING, BITUMINOUS PAVEMENT	210.10	11			COMMON EXCAVATION
									5156	CY	ROADWAY
350			350		TON	SUBBASE OF CRUSHED GRAVEL, FINE GRADED	301.28	15	486	CY	UNSUITABLE SUBBASE MATERIAL
3200			3200		CY	SUBBASE OF DENSE GRADED CRUSHED STONE	301.35	88	58	CY	ROUNDING
									5700	CY	TOTAL
120			120		CY	AGGREGATE SHOULDERS, IN PLACE	402.10	3			
											TRENCH EXCAVATION OF EARTH
1			1		LU	PRICE ADJUSTMENT, ASPHALT CEMENT (N.A.B.I.)	406.50	--			
									366	CY	DRAINAGE DETAIL SHEET
2400			2400		TON	SUPERPAVE BITUMINOUS CONCRETE PAVEMENT	490.30	36	138	CY	UNDERDRAIN DETAIL SHEET
1			1		LU	AIR VOIDS PAY ADJUSTMENT (N.A.B.I.)	490.31	--	6	CY	ROUNDING
									510	CY	TOTAL
1			1		LU	MAT DENSITY PAY ADJUSTMENT (N.A.B.I.)	490.32	--			
											COLD PLANING, BITUMINOUS PAVEMENT
70			70		LF	48" PCCSP .109 (2-2/3 X 1/2)	601.0457	8			
									249	SY	MAINLINE APPROACHES
110			110		LF	24" CPEP(SL)	601.2620	6			
									11	SY	ROUNDING
60			60		LF	30" CPEP(SL)	601.2625	4	260	SY	TOTAL
80			80		LF	36" CPEP(SL)	601.2630	8			SUBBASE OF CRUSHED GRAVEL, FINE GRADED
450			450		LF	6 INCH UNDERDRAIN PIPE	605.10	38	108	T	UNSUITABLE SHOULDER MATERIAL
									227	T	UNSUITABLE SUBBASE MATERIAL
20			20		HR	ALL PURPOSE EXCAVATOR RENTAL, TYPE I	608.25	EST			
									15	T	ROUNDING
10			10		HR	POWER BROOM RENTAL, TYPE I	608.30	EST	350	T	TOTAL
20			20		HR	TRUCK RENTAL	608.37	EST			
											SUBBASE OF DENSE GRADED CRUSHED STONE
300			300		MGAL	DUST CONTROL WITH WATER	609.10	EST			
									2752	CY	ROADWAY
150			150		CY	STONE FILL, TYPE I	613.10	6	360	CY	UNSUITABLE SUBBASE MATERIAL
850			850		CY	STONE FILL, TYPE II	613.11	28	88	CY	ROUNDING
									3200	CY	TOTAL
5900			5900		CY	STONE FILL, TYPE IV	613.13	134			
											SUPERPAVE BITUMINOUS CONCRETE PAVEMENT
14			14		EACH	YIELDING MARKER POSTS	619.17	--			
											WEARING COURSE TYPE IVS
50			50		LF	STEEL BEAM GUARDRAIL, GALVANIZED	621.20	--	558	TON	ROUTE 14
2			2		EACH	ANCHOR FOR STEEL BEAM RAIL	621.60	--			BASE COURSE TYPE II S
1900			1900		LF	REMOVE AND RESET GUARDRAIL	621.75	--	1806	TON	ROUTE 14
30			30		EACH	REPLACE GUARDRAIL POST ASSEMBLY	621.76	--	36	TON	ROUNDING
									2400	TON	TOTAL
20			20		EACH	REPLACE GUARDRAIL BEAM UNIT	621.77	5			
											YIELDING MARKER POSTS
53			53		LF	REMOVAL AND DISPOSAL OF GUARDRAIL	621.80	--	10	EA	DRAINAGE DETAIL SHEET
									4	EA	UNDERDRAIN DETAIL SHEET
320			320		HR	UNIFORMED TRAFFIC OFFICERS	630.10	EST			
									--	EA	ROUNDING
1300			1300		HR	FLAGGERS	630.15	EST	14	EA	TOTAL
		1	1		LS	FIELD OFFICE, ENGINEERS	631.10	--			
		1	1		LS	TESTING EQUIPMENT, BITUMINOUS	631.17	--			

PROJECT NAME: SHARON
PROJECT NUMBER: ER STP 0147(20)

FILE NAME: z12c410.dgn
PROJECT LEADER: J. TUCKER
DESIGNED BY: B. BRESLEND
QUANTITY SHEET 1

PLOT DATE: 3/31/2015
DRAWN BY: B. MACK
CHECKED BY: A. SANZ
SHEET 15 OF 66

STATE OF VERMONT
AGENCY OF TRANSPORTATION

QUANTITY SHEET 2

SUMMARY OF ESTIMATED QUANTITIES			TOTALS		DESCRIPTIONS			
ROADWAY	EROSION CONTROL	FULL C.E. ITEMS	GRAND TOTAL	FINAL	UNIT	ITEMS	ITEM NUMBER	ROUND
		3000	3000		DL	FIELD OFFICE TELEPHONE (N.A.B.I.)	631.26	--
1			1		LS	MOBILIZATION/DEMOBILIZATION	635.11	--
1			1		LS	TRAFFIC CONTROL	641.10	--
2			2		EACH	PORTABLE CHANGEABLE MESSAGE SIGN	641.15	--
						BEGIN OPTION AA		
4200			4200		LF	DURABLE 4 INCH WHITE LINE, THERMOPLASTIC	646.402	100
4200			4200		LF	DURABLE 4 INCH WHITE LINE, POLYUREA	646.404	100
						END OPTION AA		
						BEGIN OPTION BB		
4200			4200		LF	DURABLE 4 INCH YELLOW LINE, THERMOPLASTIC	646.412	100
4200			4200		LF	DURABLE 4 INCH YELLOW LINE, POLYUREA	646.414	100
						END OPTION BB		
8300			8300		LF	TEMPORARY 4 INCH WHITE LINE, PAINT	646.602	100
8300			8300		LF	TEMPORARY 4 INCH YELLOW LINE, PAINT	646.612	100
840			840		EACH	LINE STRIPING TARGETS	646.76	-
3850			3850		SY	GEOTEXTILE FOR ROADBED SEPARATOR	649.11	24
	460		460		SY	GEOTEXTILE FOR SILT FENCE, WOVEN WIRE REINFORCED	649.515	11
	750		750		SY	GEOTEXTILE FOR FILTER CURTAIN	649.61	10
	90		90		LB	SEED	651.15	3
	750		750		LB	FERTILIZER	651.18	21
	3		3		TON	AGRICULTURAL LIMESTONE	651.20	0.1
	3		3		TON	HAY MULCH	651.25	0.1
	20		20		CY	TOPSOIL	651.35	-
	4900		4900		SY	GRUBBING MATERIAL (12")	651.40	10
	1900		1900		SY	GRUBBING MATERIAL (2")	651.40	13
	300		300		SY	GRUBBING MATERIAL (6")	651.40	20
	1		1		LS	EPSC PLAN	652.10	--
	150		150		HR	MONITORING EPSC PLAN	652.20	--
	1		1		LU	MAINTENANCE OF EPSC PLAN (N.A.B.I.)	652.30	EST.
	7100		7100		SY	TEMPORARY EROSION MATTING	653.20	43
	20		20		CY	TEMPORARY STONE CHECK DAM, TYPE I	653.25	3
	40		40		CY	VEHICLE TRACKING PAD	653.35	10
	5		5		EACH	INLET PROTECTION DEVICE, TYPE I	653.40	--
	2800		2800		LF	BARRIER FENCE	653.50	24
23			23		SF	TRAFFIC SIGNS, TYPE A	675.20	0.33
100			100		LF	SQUARE TUBE SIGN POST AND ANCHOR	675.341	--
4			4		EACH	REMOVING SIGNS	675.50	--
1			1		EACH	ERECTING SALVAGED SIGNS	675.60	--
2			2		EACH	DELINEATOR WITH STEEL POST	676.10	--
2			2		EACH	REMOVAL OF EXISTING DELINEATOR	676.12	--

DETAILED SUMMARY OF QUANTITIES		
QUANTITIES	UNIT	ITEMS

PROJECT NAME: SHARON
PROJECT NUMBER: ER STP 0147(20)

FILE NAME: z12c410.dgn
PROJECT LEADER: J. TUCKER
DESIGNED BY: B. BRESLEND
QUANTITY SHEET 2

PLOT DATE: 3/31/2015
DRAWN BY: B. MACK
CHECKED BY: A. SANZ
SHEET 16 OF 66

STATE OF VERMONT
AGENCY OF TRANSPORTATION

QUANTITY SHEET 3

SUMMARY OF ESTIMATED QUANTITIES

ROADWAY	EROSION CONTROL	FULL C.E. ITEMS
1		
1280		
1950		
60		
50		

TOTALS

GRAND TOTAL	FINAL
1	
1280	
1950	
60	
50	

DESCRIPTIONS

UNIT	ITEMS	ITEM NUMBER	ROUND
LU	PRICE ADJUSTMENT, FUEL (N.A.B.I.)	690.50	--
CY	SPECIAL PROVISION (GRANULAR BORROW)	900.608	10
LF	SPECIAL PROVISION (BARRIER FOR TEMPORARY TRAFFIC PROTECTION)	900.640	--
SY	SPECIAL PROVISION (HAND-PLACED BITUMINOUS CONCRETE MATERIAL, DRIVES)	900.675	0.9
CWT	SPECIAL PROVISION (EMULSIFIED ASPHALT)(RS-1H OR CRS-1H)	900.683	7

DETAILED SUMMARY OF QUANTITIES

QUANTITIES	UNIT	ITEMS

PROJECT NAME: SHARON
PROJECT NUMBER: ER STP 0147(20)

FILE NAME: z12c410.dgn
PROJECT LEADER: J. TUCKER
DESIGNED BY: B. BRESLEND
QUANTITY SHEET 3

PLOT DATE: 3/31/2015
DRAWN BY: B. MACK
CHECKED BY: A. SANZ
SHEET 17 OF 66

STATE OF VERMONT
AGENCY OF TRANSPORTATION

ITEM DETAIL SHEET

BEGIN STATION	END STATION	POS.	203.16 SOLID ROCK EXCAV.	203.31 SAND BORROW	301.35 SUBBASE OF DENSE GRD. CR. STONE	402.10 AGGREG. SHLDRS. IN PLACE	613.10 STONE FILL, TYPE I	613.11 STONE FILL, TYPE II	613.13 STONE FILL, TYPE IV	621.20 STEEL BEAM G.R. GALV.	621.60 ANCHOR FOR STEEL BEAM G.R.	621.75 REMOVE & RESET G.R.	621.76 REPLACE G.R. POST ASSEMBLY	621.77 REPLACE G.R. BEAM UNIT	621.80 REMOVAL AND DISPOSAL OF G.R.	649.11 GEOTECH. FOR ROADBED SEP.	649.31 GEOTECH. UNDER STONE FILL	651.35 TOPSOIL	651.40 GRUBBING MATERIAL (2")	651.40 GRUBBING MATERIAL (6")	651.40 GRUBBING MATERIAL (12")	900.608 SP. PROV. GRANULAR BORROW	REMARKS
			CY	CY	CY	CY	CY	CY	CY	LF	EA	LF	EA	EA	LF	SY	SY	CY	SY	SY	SY	CY	
322+50	343+00	LT&RT	50															10	1887				ESTIMATED QUANTITIES TO BE USED AS DIRECTED BY THE ENGINEER
322+50	323+50	LT&RT			74	6																	
323+00	333+00	LT									1	1000	16	8	3			5					SEE VTRANS STANDARD SHEET GI-D. PROVIDE ANCHOR AT STA. 333+00.
323+50	328+00	LT&RT		713	1227	26		146	2408							2000						510	RECON. OF ROADWAY TO NEW VERT. ALIGN. & SLOPE STABILIZATION
323+50	328+00	LT																			1506		
325+75	326+16	RT					11													33			PLACE STONE FILL, SLOPE STABILIZATION
326+67	327+01	RT					18										23			43	149		INLET OR OUTLET PROTECTION FOR NEW CULVERTS
328+00	330+50	LT&RT		347	668	14										1111							RECON. OF ROADWAY TO NEW VERT. ALIGN. & SLOPE STABILIZATION
328+53	328+67	LT					18										9						INLET OR OUTLET PROTECTION FOR NEW CULVERTS
328+59	328+90	RT					11										21			20			INLET OR OUTLET PROTECTION FOR NEW CULVERTS
330+50	334+00	LT&RT			190	20		255								200					323		RECON. OF SHLDRS. & SLOPE STABILIZATION
333+50	343+00	LT								50	1	900	14	7	50			5					SEE VTRANS STANDARD SHEET GI-D. PROVIDE ANCHOR AT STA. 333+50.
334+00	335+30	LT&RT			115	7		64	1081							87					972	224	RECON. OF SHLDRS. & SLOPE STABILIZATION
334+45	334+85	RT					35										27			94			INLET OR OUTLET PROTECTION FOR NEW CULVERTS
335+30	337+35	LT&RT			135	12		65								114					168		RECON. OF SHLDRS. & SLOPE STABILIZATION
337+35	343+00	LT&RT			343	32		292	2277							314					1772	536	RECON. OF SHLDRS. & SLOPE STABILIZATION
338+40	338+62	RT					12										15			15			INLET OR OUTLET PROTECTION FOR NEW CULVERTS
341+25	341+75	RT					39										33			75			INLET OR OUTLET PROTECTION FOR NEW CULVERTS
SUBTOTAL			50	1060	2752	117	144	822	5766	50	2	1900	30	15	53	3826	128	20	1887	280	4890	1270	
ROUNDING			-	40	48	3	6	28	134	-	-	-	-	5	-	24	2	-	13	20	10	10	
TOTAL			50	1100	2800	120	150	850	5900	50	2	1900	30	20	53	3850	130	20	1900	300	4900	1280	

PROJECT NAME: SHARON
PROJECT NUMBER: ER STP 0147(20)

FILE NAME: z12c410.dgn
PROJECT LEADER: J. TUCKER
DESIGNED BY: B. BRESLEND
ITEM DETAIL SHEET

PLOT DATE: 3/31/2015
DRAWN BY: B. MACK
CHECKED BY: A. SANZ

STATE OF VERMONT
AGENCY OF TRANSPORTATION

DRAINAGE DETAIL SHEET

STATION	STATION	POS.	ASKEW	INLET/OUTLET TYPE		DITCH		PIPE ARCH			PIPE		ALLOWABLE OPTIONS						PIPE ELBOW	ES	CB		DEPTH DI	CONC CLASS B	REINF STEEL	DI GRATE	CHAN ELEV	CRM	TRENCH EXCAVATION		COMM EXC	UNC CHAN EXC	STRUCT EXCAV	GRAN BKFILL STRUCT	GRAN BORR	EROS MATT	STONE FILL		MARKER POSTS				REMARKS
				INLET	OUTLET	IN	OUT	SPAN	RISE	L	D	L	PCCSP	CAAP	RCP	CSP	CPEP	PCCSP PI										EARTH	ROCK									LT	RT			
			NO. DEG.					IN	IN	FT	IN	FT	TH	TH	CL	TH	SL	TH	NO. DEG.	EA	EA		FT	CY	LBS	TYPE	EA	CY	CY	CY	CY	CY	CY	CY	CY	SY	CY	TYPE	EA	EA			
326+87.58	326+93.36	LT-RT	84.6 RT	PIPE	PIPE						48	62	X															84					84					1	1			DRAINAGE NOTE #1 - ADD INLET PROTECTION
328+63.30	328+70.00	LT-RT	82.9 RT	PIPE	PIPE						24	54					X											46					46					1	1			DRAINAGE NOTE #2 - ADD INLET/OUTLET PROTECTION
334+65.58	334+77.45	RT-LT	80.5 LT	PIPE	PIPE						36	72					X											120					120					1	1			DRAINAGE NOTE #3 - ADD INLET PROTECTION
338+50.75	338+50.75	RT-LT	90	PIPE	PIPE						30	56					X											53					53					1	1			DRAINAGE NOTE #4 - ADD INLET PROTECTION
341+51.13	341+52.08	RT-LT	83.9 LT	PIPE	PIPE						24	50					X											39					39					1	1			DRAINAGE NOTE #5 - ADD INLET PROTECTION
326+99.40	327+47.92	RT																										24					24									DRAINAGE NOTE #6 REMOVE EXISTING 15" DRIVE PIPE
TOTALS :																												366					366					5	5			

PROJECT NAME: SHARON
PROJECT NUMBER: ER STP 0147(20)

FILE NAME: z12c410.dgn
PROJECT LEADER: J. TUCKER
DESIGNED BY: B. BRESLEND
DRAINAGE DETAIL SHEET

PLOT DATE: 3/31/2015
DRAWN BY: B. MACK
CHECKED BY: A. SANZ
SHEET 19 OF 66

STATE OF VERMONT
AGENCY OF TRANSPORTATION

EARTHWORKS

STATION	DIST	TOTAL EXCAVATION EARTH AND ROCK AREA S.F.	TOTAL EXCAVATION EARTH AND ROCK VOLUME C.Y.	ROCK EXCAVATION AREA S.F.	ROCK EXCAVATION VOLUME C.Y.	EMBANKMENT AREA S.F.	EMBANKMENT VOLUME C.Y.		
323+00		25.8				2.0			
	50		265				2		
323+50		260.8				0.0			
	50		579				0		
324+00		364.3				0.0			
	50		602				0		
324+50		285.7				0.0			
	50		567				0		
325+00		326.9				0.0			
	50		502				0	CUT	3903
325+50		215.6				0.0		ROCK	0
	50		314				7	R.FAC	.495
326+00		123.8				7.4		FILL	94
	50		191				21	F.FAC	1.15
326+50		82.0				14.9		EX. C	3795
	50		169				23		
327+00		100.5				9.8			
	50		312				9		
327+50		236.0				0.0			
	50		402				32		
328+00		198.0				34.9			
	50		262				42		
328+50		84.9				10.7			
	50		201				10		
329+00		132.6				0.0			
	50		246				0		
329+50		133.0				0.0			
	50		280				0		
330+00		169.6				0.0			
	50		216				0	CUT	1769
330+50		63.5				0.0		ROCK	0
	50		137				0	R.FAC	.495
331+00		84.4				0.0		FILL	119
	50		164				0	F.FAC	1.15
331+50		93.2				0.0		EX. C	1632
	50		123				8		
332+00		39.9				9.2			
	50		71				24		
332+50		36.9				17.3			
	50		69				35		
333+00		37.2				20.1			
	50		75				19		
333+50		43.7				0.0			
	50		253				0		
334+00		229.8				0.0			
	50		532				1		
334+50		344.9				1.5			
	50		444				19		
335+00		134.2				19.1			
	50		168				18	CUT	2338
335+50		47.1				0.0		ROCK	0
	50		93				0	R.FAC	.495
336+00		53.6				0.0		FILL	59
	50		85				0	F.FAC	1.15
336+50		37.8				0.1		EX. C	2270
	50		70				1		
337+00		38.3				0.8			
	50		234				1		
337+50		214.7				0.0			
	50		384				0		
338+00		200.0				0.0			
	50		323				6		
338+50		149.1				6.2			
	50		314				6		
339+00		190.3				0.0			
	50		329				0		
339+50		164.8				0.0			
	50		284				0		
340+00		141.4				0.5			
	50		231				1	CUT	2594
340+50		108.2				0.6		ROCK	0
	50		206				1	R.FAC	.495
341+00		114.6				1.0		FILL	49
	50		241				12	F.FAC	1.15
341+50		146.1				11.6		EX. C	2538
	50		230				17		
342+00		102.7				6.7			
	50		190				6		
342+50		102.0				0.0			
	50		246				0		
343+00		163.9				0.0			
TO BE USED AT DISCRETION OF ENGINEER					50			CUT	486
								ROCK	50
UNSUITABLE SUBBASE								R.FAC	.495
MATERIAL			486					FILL	0
								F.FAC	1.15
								EX. C	511

STATION	DIST	TOTAL EXCAVATION EARTH AND ROCK AREA S.F.	TOTAL EXCAVATION EARTH AND ROCK VOLUME C.Y.	ROCK EXCAVATION AREA S.F.	ROCK EXCAVATION VOLUME C.Y.	EMBANKMENT AREA S.F.	EMBANKMENT VOLUME C.Y.		

STATION	DIST	TOTAL EXCAVATION EARTH AND ROCK AREA S.F.	TOTAL EXCAVATION EARTH AND ROCK VOLUME C.Y.	ROCK EXCAVATION AREA S.F.	ROCK EXCAVATION VOLUME C.Y.	EMBANKMENT AREA S.F.	EMBANKMENT VOLUME C.Y.		

SUMMARY AND BALANCES

STATION TO STATION		TOT EXC. EARTH & ROCK C.Y.	ROCK EXCAV C.Y.	EMBANK C.Y.	EXCESSES CUT	EXCESSES FILL	ACUMULATIVE EXCESSES CUT	ACUMULATIVE EXCESSES FILL
323+00	328+00	3903	0	94	3903	94	3903	94
328+00	333+00	1769	0	119	1769	119	5672	213
333+00	338+00	2338	0	59	2338	59	8010	272
338+00	343+00	2594	0	0	2594	49	10604	321
TO BE USED AT DISCRECTION OF ENGINEER		0	50	0	50	0	10654	321
UNSUITABLE SUBBASE MATERIAL		486	0	0	486	0	11140	321

REMARKS

EARTH AND ROCK EXCAVATION	11140	
SOLID ROCK EXCAVATION	50	
EARTH EXCAVATION	11090	
PLANIMETERED FILL	321	
LESS FACTORED SOLID ROCK		
LESS DISPLACEMENT OF ANY LARGE STRUCTURES		
NET PLANIMETERED FILL	321	
FACTOR	0.15	
PLANIMETERED FILL INCLUDING FACTOR	369	
MATERIALS AVAILABLE FOR FILLS		
EARTH EXCAVATION (5642 CY * 0.70)	3949	
CHANNEL EXCAVATION (5451 CY * 0.30)	1635	
UNDERDRAIN EXCAVATION (163 CY * 0.80)	130	
SOLID ROCK EXCAVATION (50 CY * 0.495)	25	
TOTAL MATERIAL AVAILABLE FOR FILL	5739	
TOTAL FILL INCLUDING FACTOR	369	
TOTAL MATERIAL FOR FILL	5739	
BORROW		
EXCESS EXCAVATION	5370	

PROJECT NAME: **SHARON**
PROJECT NUMBER: **ER STP 0147(20)**

FILE NAME: **z12c410.dgn**
PROJECT LEADER: **J. TUCKER**
DESIGNED BY: **B. BRESLEND**
EARTHWORKS SHEET

PLOT DATE: **3/31/2015**
DRAWN BY: **B. MACK**
CHECKED BY: **A. SANZ**
SHEET **20** OF **66**

STATE OF VERMONT
AGENCY OF TRANSPORTATION

RIGHT - OF - WAY DETAIL SHEET

TABLE OF PROPERTY ACQUISITION

PARCEL NO.	PROPERTY OWNER	SHEET NO.	BEGINNING STATION	ENDING STATION	TAKE	REMAINDER	RIGHT			RECORDING DATA					REMARKS
					AREA±	AREA±	TYPE	(T)/(P)	AREA ±	TITLE	DATE	TOWN / CITY	BOOK	PAGE	
1A	SYMONDS, PETER W. & ANDREA W.	1-3	322+91.88 LT	323+00.00 LT			CONSTRUCTION	T	221 SF ±						INCL. EROSION CONTROL
			323+00.00 LT	328+84.07 LT			SLOPE	P	0.22 A ±						INCL. STONE FILL; 9,595 SF ±
			326+85.61 LT	326+89.66			CULVERT & DRAINAGE	P							
			328+00.00 LT	328+73.74 LT			CONSTRUCTION	T	462 SF						INCL. ENVIROMENTAL FENCE
			328+47.44 LT	328+73.74 LT			CULV, DIT & DRAINAGE	P	907 SF						INCL. STONE FILL
			328+72 LT	333+76 LT			CONSTRUCTION	T	0.12 A ±						INCL. EROSION CONTROL; 5,382 SF ±
			329+37.93 LT	333+44.25 LT			SLOPE	P	0.10 A						INCL. STONE FILL; 4,474 SF
			333+26 LT												DRIVE; MM 0630
			333+66.33 LT	333+75.66 LT			SLOPE	P	3 SF						
1B		1, 2	322+97 RT	326+29 RT			CONSTRUCTION	T	957 SF						INCL. BF
			323+00.00 RT	325+49.75 RT			SLOPE	P	0.10 A						4,481 SF
			325+82.94 RT	326+05.00 RT			SLOPE	P	8 SF						
			326+58 RT	327+41 RT			CONSTRUCTION	T	262 SF						INCL. BF
			326+67.63 RT	327+28.17 RT			CULVERT & DITCH	P	455 SF						INCL. STONE FILL & EROSION CONTROL
			326+98.87 RT	327+48 RT			REMOVE	T							CULVERT
			328+51 RT	330+22 RT			CONSTRUCTION	T	535 SF						INCL. BF
			328+54.07 RT	328+94.60 RT			DITCH	P	146 SF						INCL. STONE FILL & EROSION CONTROL
1C		2, 3	330+21 RT	333+13 RT			CONSTRUCTION	T	732 SF						INCL. BF
			333+56 RT												DRIVE; MM 0631
1D		3	333+97 RT	336+64 RT			CONSTRUCTION	T	559 SF						INCL. BF
			333+99.44 RT	334+98.30 RT			DITCH	P	971 SF						INCL. STONE FILL & EROSION CONTROL
2	WITIK, ALEXANDER	3, 4	336+63 RT	340+66 RT			CONSTRUCTION	T	712 SF						INCL. BF
			338+41.15 RT	338+60.77 RT			DITCH	P	67 SF						INCL. STONE FILL & EROSION CONTROL
			341+25 RT	341+95 RT			CONSTRUCTION	T	174 SF						INCL. BF
			341+29.59 RT	341+72.58 RT			DITCH	P	331 SF						INCL. STONE FILL
			342+06 RT	342+44.25 RT			CONSTRUCTION	T	29 SF						INCL. BF
			342+58 RT												DRIVE; MM 0647

TABLE OF REVISIONS

REVISION NO.	SHEET NO.	DESCRIPTION	DATE

PLAN LEGEND

- EXISTING RIGHT-OF-WAY
- TAKING WITH ACCESS
- TAKING WITHOUT ACCESS
- CLEAR ZONE (CZ)
- PROPERTY LINE (P / L)
- TOE OF SLOPE
- TOP OF CUT
- SLOPE RIGHT (SR (P))
- CONSTRUCTION RIGHT (CONST. (T))
- PROJECT DEMARCATION FENCE (PDF)

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 09/10/14

APPROVED: RYAN CLOUTIER DATE: 9-10-2014
CHIEF, PLANS & TITLES

PROJECT NAME: **SHARON**
PROJECT NUMBER: **STP 0147(20)**

FILE NAME: z12c410detail.dgn
PROJECT LEADER: LIBBY-D&K
DESIGNED BY: B. MACK
R.O.W. DETAIL SHEET #1

PLOT DATE: 10-SEP-2014
DRAWN BY: MR
CHECKED BY: JB
ROW SHEET 21 OF 66

BEGIN PROJECT STP 0147(20)
STA. 322+50.00 = MM 6.108

BEGIN R.O.W. PROJECT
STP 0147 (20)
STA. 322+91.88
24.75' LT.

STONE FILL, TYPE I
STA. 326+67 - STA. 327+01 RT

STONE FILL, TYPE II
STA. 323+50 - STA. 327+50 LT
STA. 325+75 - STA. 326+16 RT

STONE FILL, TYPE IV
STA. 323+50 - STA. 328+00 LT

GRUBBING MATERIAL (12")
STA. 323+50 - STA. 328+00 LT

GRUBBING MATERIAL (6")
STA. 326+67 - STA. 327+01 RT
STA. 325+75 - STA. 326+16 RT

TEMPORARY 4 INCH WHITE LINE, PAINT
STA. 323+00 - STA. 328+25 (SOLID LT & RT)

TEMPORARY 4 INCH YELLOW LINE, PAINT
STA. 323+00 - STA. 328+25 (SOLID LT & RT)

DURABLE 4 INCH WHITE LINE (SEE OPTION ITEMS)
STA. 323+00 - STA. 328+25 (SOLID LT & RT)

DURABLE 4 INCH YELLOW LINE (SEE OPTION ITEMS)
STA. 323+00 - STA. 328+25 (SOLID LT & RT)

REMOVING SIGNS
AS SHOWN - 3

6 INCH UNDERDRAIN PIPE
STA. 323+00 - STA. 326+88 RT
STA. 327+01 - STA. 328+25 RT

GEOTEXTILE UNDER STONE FILL
STA. 326+67 - STA. 327+01 RT

REMOVE AND RESET GUARDRAIL
STA. 323+00 - STA. 328+25 LT

ERECTING SALVAGED SIGNS
AS SHOWN - 2

VT STATE PLANE GRID
N

1A
SYMONDS, PETER W. & ANDREA W.

1B
SYMONDS, PETER W. & ANDREA W.

POB STA 322+36.00
OHW
CZ
EXISTING 3-ROD R.O.W.
322+36
TO HARTFORD
323+00
AER E&T
323+00.00 24.75' RT
323+00.00 27.76' RT
323+57.36 44.45' RT
CONST(T)
SR(P)
N40°42'54"W
EXISTING R.O.W. 49.50'
324+00
325+00
326+00
327+00
328+00
B-No. 51
WOODS
BEGIN FULL DEPTH RECONSTRUCTION
STA. 323+50.00 = MM 6.127
A=3.01' N49°17'6"E
B=59.74' N24°29'28"E
C=142.74' S38°30'31"E
D=58.29' N68°23'13"E
323+00.00 51.04± LT
26.29'
S49°17'7"W
323+00.00 24.75' LT
N 467997.94 FT
E 1647348.30 FT
STA 325+03.24
Off L 24.75 FT
N 468030.23 FT
E 1647385.82 FT
STA 325+03.24
Off R 24.75 FT
325+00.00 49.94' RT
325+49.75 24.75' RT
325+82.94 24.75' RT
326+00.00 25.55' RT
326+05.00 24.75' RT
E=17.80' N46°33'52"W
F=2.61' N58°55'26"W
326+67.83 24.75' RT
PC STA 325+03.24
NAVIGABLE WATERS
WHITE RIVER
VT ROUTE 14
CURVE (1)
PI STA 326+56.46
CURVE (1)
DELTA = 28°38'58"
D = 9°32'57"
R = 600.00'
T = 153.21'
L = 300.02'
E = 19.25'
BANKING = 0.080 FT/FT A
PT STA 328+03.26
328+00.00 82.31± LT
151.24'
S34°27'19"E
CULV&DR(P)
L=228.23
R=575.25
N 468161.25 FT
E 1647114.47 FT
STA 328+03.84
Off L 24.75 FT
N 468207.16 FT
E 1647133.01 FT
STA 328+02.70
Off R 24.75 FT
L=311.81
R=624.75
REMOVE(T)
CONST(T)
CULV & DIT(P)
326+89.53 40.54' RT
326+98.87 39.66' RT
327+00.77 32.20' RT
327+28.17 24.75' RT
G=27.97' N23°5'39"W
H=10.00' N63°58'48"W
I=7.73' S45°34'56"W
J=29.65' N75°26'37"W
MATCHLINE STA. 328+25 SEE NEXT SHEET

(1) STA. 326+93.36 RT 28' TO
STA. 326+87.58 LT 33'
REPLACE EXISTING 30" CMP
WITH NEW 48" PCCSP
LENGTH = 62'-0"
INV. IN = 444.54'
INV. OUT = 440.13'
ASKEW ANGLE = 84.6° RT
CONSTRUCT INLET PROTECTION PAD
STONE FILL, TYPE I

(6) STA. 323+00.00 RT 18.5' TO
STA. 326+85.00 RT 18.5'
INSTALL 6" UNDERDRAIN
LENGTH = 385'-0"

(7) STA. 327+01.00 RT 18.5' TO
STA. 328+25.00 RT 18.5'
INSTALL 6" UNDERDRAIN
LENGTH = 124'-0"

(8) STA. 327+00.00 RT 28' TO
STA. 327+48.00 RT 27'
REMOVE EXISTING 15" CMP DRIVE PIPE
LENGTH = 51'-0"

BARRIER FENCE
STA. 322+92.00 - STA. 328+25.00 RT

GEOTEXTILE FOR SILT FENCE, WOVEN WIRE REINFORCED
STA. 322+92.00 - STA. 322+92.00 LT
STA. 328+08.00 - STA. 328+25.00 LT

INLET PROTECTION DEVICE, TYPE I
STA. 326+93.50 RT

TEMPORARY STONE CHECK DAM, TYPE I
STA. 323+00.00 - 326+80.00 RT
STA. 327+03.00 - 328+25.00 RT

VEHICLE TRACKING PAD
STA. 323+05.00 LT

LINE 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.

FOR R.O.W. USE ONLY

0 20 40
SCALE IN FEET

PROJECT NAME: SHARON
PROJECT NUMBER: STP 0147(20)
FILE NAME: 12c410/row/12c410lay1
PROJECT LEADER: J. TUCKER
DESIGNED BY: B. MACK
ROW LAYOUT SHEET 1
PLOT DATE: 10-SEP-2014
DRAWN BY: B. MACK
CHECKED BY: J. TUCKER
ROW SHEET 22 OF 66

STONE FILL, TYPE I
STA. 328+53 - STA. 328+67 LT
STA. 328+59 - STA. 328+90 RT

STONE FILL, TYPE II
STA. 330+00 - STA. 331+50 LT

GRUBBING MATERIAL (12")
STA. 330+00 - STA. 331+50 LT

GRUBBING MATERIAL (6")
STA. 328+59 - STA. 328+90 RT

GEOTEXTILE UNDER STONE FILL
STA. 328+53 - STA. 328+67 LT
STA. 328+59 - STA. 328+90 RT

TEMPORARY 4 INCH WHITE LINE, PAINT
STA. 328+25 - STA. 333+00 (SOLID LT & RT)

TEMPORARY 4 INCH YELLOW LINE, PAINT
STA. 328+25 - STA. 333+00 (SOLID LT & RT)

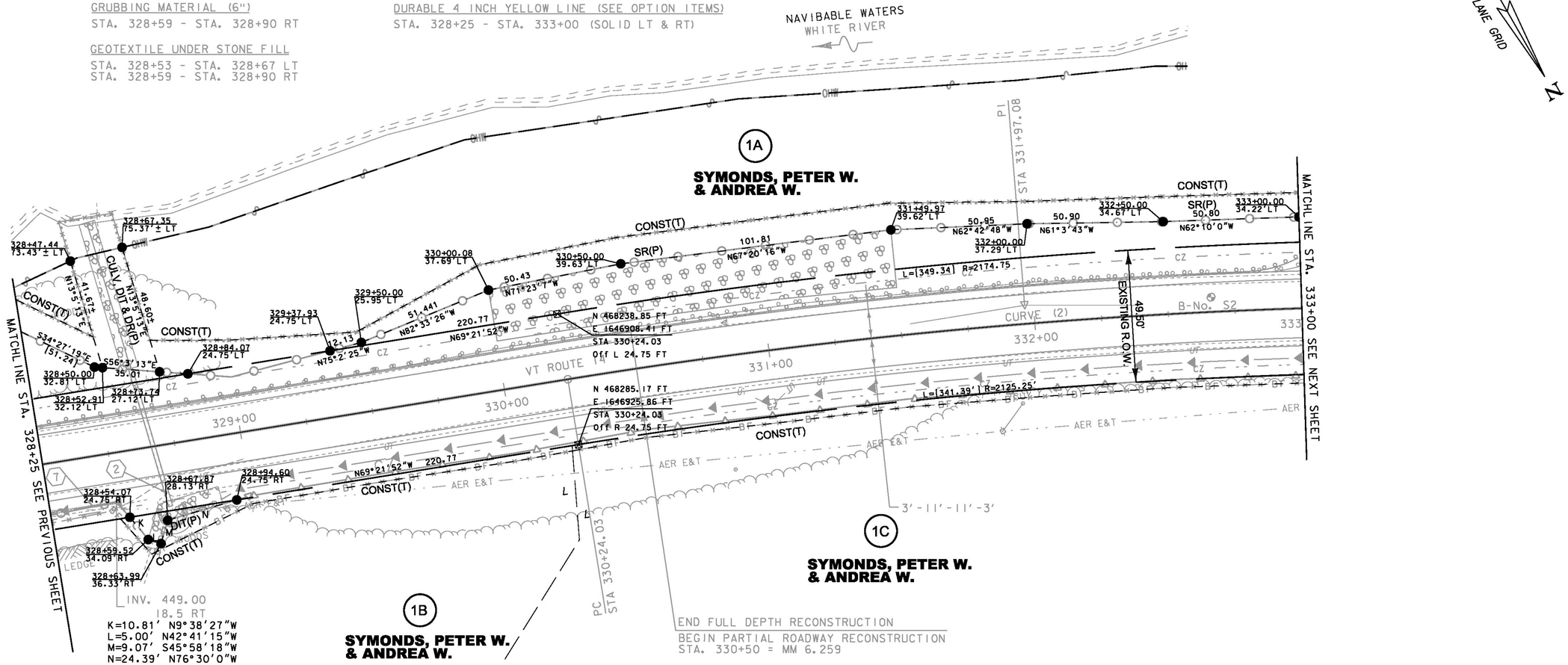
DURABLE 4 INCH WHITE LINE (SEE OPTION ITEMS)
STA. 328+25 - STA. 333+00 (SOLID LT & RT)

DURABLE 4 INCH YELLOW LINE (SEE OPTION ITEMS)
STA. 328+25 - STA. 333+00 (SOLID LT & RT)

6 INCH UNDERDRAIN PIPE
STA. 328+25 - STA. 328+50 RT

REMOVE AND RESET GUARDRAIL
STA. 328+25 - STA. 333+00 LT

VT STATE PLANE GRID



(2) STA. 328+70.00 RT 23' TO
STA. 328+63.30 LT 30'
REPLACE EXISTING 15" CMP
WITH NEW 24" CPEP (SL)
LENGTH = 54'-0"
INV. IN = 449.93'
INV. OUT = 446.77'
ASKEW ANGLE = 82.9°RT
CONSTRUCT INLET PROTECTION PAD
STONE FILL, TYPE I

(7) STA. 328+25.00 RT 18.5' TO
STA. 328+50.00 RT 18.5'
INSTALL 6" UNDERDRAIN
LENGTH = 25'-0"

BARRIER FENCE
STA. 328+25.00 - STA. 333+00.00 RT

GEOTEXTILE FOR SILT FENCE, WOVEN WIRE REINFORCED
STA. 328+25.00 - STA. 333+00.00 LT

INLET PROTECTION DEVICE, TYPE I
STA. 328+70.00 RT

TEMPORARY STONE CHECK DAM, TYPE I
STA. 328+25.00 - 328+52.00 RT
STA. 328+97.00 - 333+00.00 RT

LINE 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.

CURVE (2)
DELTA = 9°12'13"
D = 2°39'54"
R = 2150.00'
T = 173.05'
L = 345.36'
E = 6.95'
BANKING = 0.049 FT/FT AT 50 MPH

FOR R.O.W. USE ONLY

0 20 40
SCALE IN FEET

PROJECT NAME: SHARON
PROJECT NUMBER: STP 0147(20)

FILE NAME: z12c410bdr.dgn
PROJECT LEADER: J. TUCKER
DESIGNED BY: B. MACK
ROW LAYOUT SHEET 2
PLOT DATE: 10-SEP-2014
DRAWN BY: B. MACK
CHECKED BY: J. TUCKER
ROW SHEET 23 OF 66

STONE FILL, TYPE I
STA. 334+45 - STA. 334+85 RT

STONE FILL, TYPE II
STA. 334+00 - STA. 337+25 LT

STONE FILL, TYPE IV
STA. 334+00 - STA. 335+30 LT

GEOTEXTILE UNDER STONE FILL
STA. 334+45 - STA. 334+85 RT

GRUBBING MATERIAL (12")
STA. 334+00 - STA. 337+25 LT

GRUBBING MATERIAL (6")
STA. 334+45 - STA. 334+85 RT

TEMPORARY 4 INCH WHITE LINE, PAINT
STA. 333+00 - STA. 337+25 (SOLID LT & RT)

TEMPORARY 4 INCH YELLOW LINE, PAINT
STA. 333+00 - STA. 337+25 (SOLID LT & RT)

DURABLE 4 INCH WHITE LINE (SEE OPTION ITEMS)
STA. 333+00 - STA. 337+25 (SOLID LT & RT)

DURABLE 4 INCH YELLOW LINE (SEE OPTION ITEMS)
STA. 333+00 - STA. 337+25 (SOLID LT & RT)

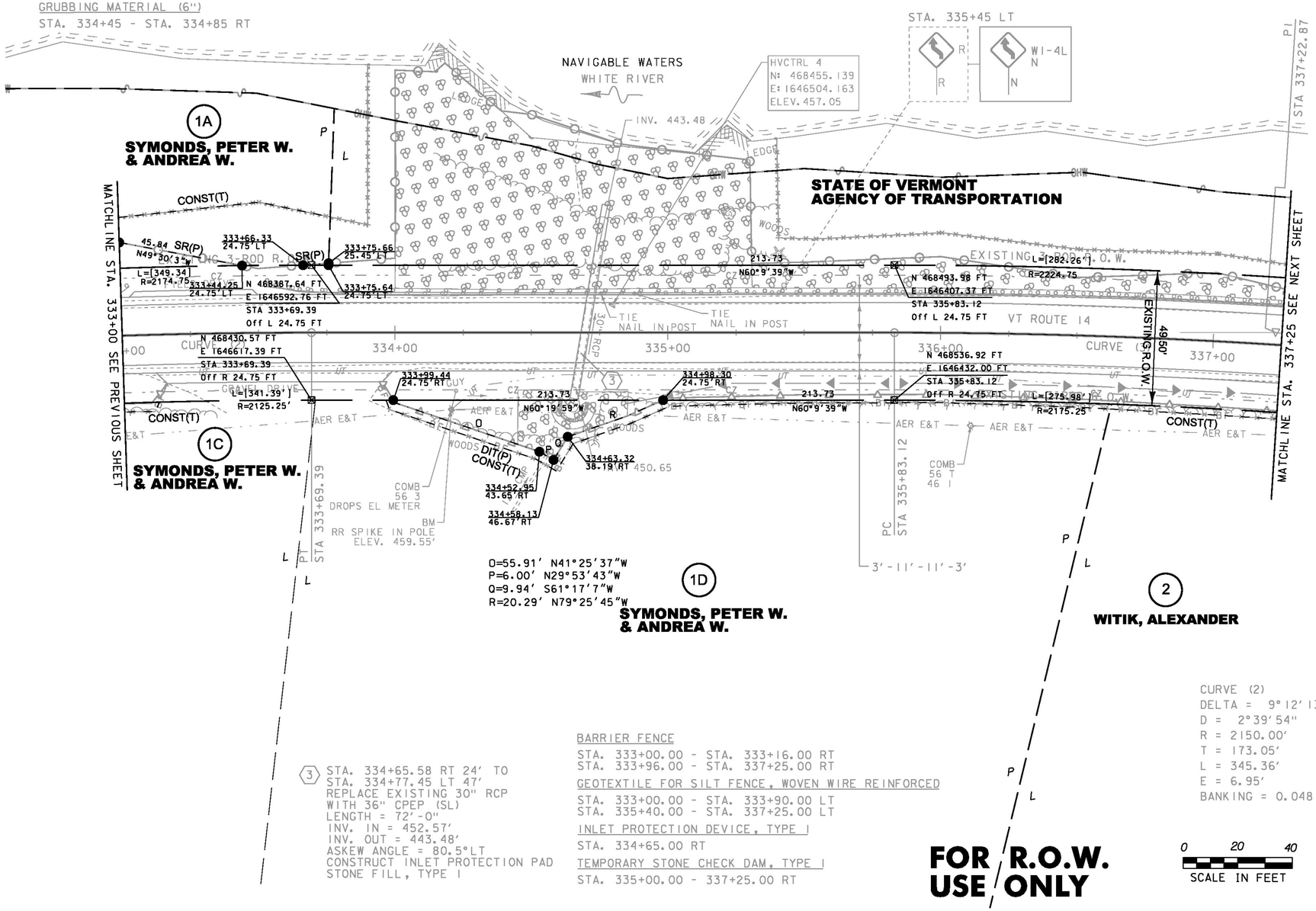
REMOVING SIGNS
AS SHOWN - 1

REMOVE AND RESET GUARDRAIL
STA. 334+00 - STA. 337+25 LT

REMOVAL AND DISPOSAL OF GUARDRAIL
STA. 333+50 TO STA. 334+00 LT

STEEL BEAM GUARDRAIL, GALVANIZED
STA. 333+50 - STA. 334+00 LT

ANCHOR FOR STEEL BEAM RAIL
STA. 333+50 LT



LINE 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.

CURVE (2)
DELTA = 9°12'13"
D = 2°39'54"
R = 2150.00'
T = 173.05'
L = 345.36'
E = 6.95'
BANKING = 0.048 FT/FT AT 50 MPH

CURVE (3)
DELTA = 7°16'10"
D = 2°36'16"
R = 2200.00'
T = 139.75'
L = 279.12'
E = 4.43'
BANKING = 0.048 FT/FT AT 50 MPH

3 STA. 334+65.58 RT 24' TO
STA. 334+77.45 LT 47'
REPLACE EXISTING 30" RCP
WITH 36" CPEP (SL)
LENGTH = 72'-0"
INV. IN = 452.57'
INV. OUT = 443.48'
ASKEW ANGLE = 80.5°LT
CONSTRUCT INLET PROTECTION PAD
STONE FILL, TYPE I

BARRIER FENCE
STA. 333+00.00 - STA. 333+16.00 RT
STA. 333+96.00 - STA. 337+25.00 RT

GEOTEXTILE FOR SILT FENCE, WOVEN WIRE REINFORCED
STA. 333+00.00 - STA. 333+90.00 LT
STA. 335+40.00 - STA. 337+25.00 LT

INLET PROTECTION DEVICE, TYPE I
STA. 334+65.00 RT

TEMPORARY STONE CHECK DAM, TYPE I
STA. 335+00.00 - 337+25.00 RT

FOR R.O.W. USE ONLY

0 20 40
SCALE IN FEET

PROJECT NAME: SHARON
PROJECT NUMBER: STP 0147(20)

FILE NAME: z12c410bdr.dgn
PROJECT LEADER: J. TUCKER
DESIGNED BY: B. MACK
ROW LAYOUT SHEET 3

PLOT DATE: 10-SEP-2014
DRAWN BY: B. MACK
CHECKED BY: J. TUCKER
ROW SHEET 24 OF 66

STONE FILL, TYPE II
STA. 337+25 - STA. 343+00 LT

STONE FILL, TYPE IV
STA. 337+35 - STA. 343+00 LT

REMOVE AND RESET GUIDERAIL
STA. 337+25 - STA. 343+00 LT

STONE FILL, TYPE I
STA. 338+40 - STA. 338+62 RT
STA. 341+25 - STA. 341+75 RT

GRUBBING MATERIAL (12")
STA. 337+25 - STA. 343+00 LT

GRUBBING MATERIAL (6")
STA. 338+40 - STA. 338+62 RT
STA. 341+25 - STA. 341+75 RT

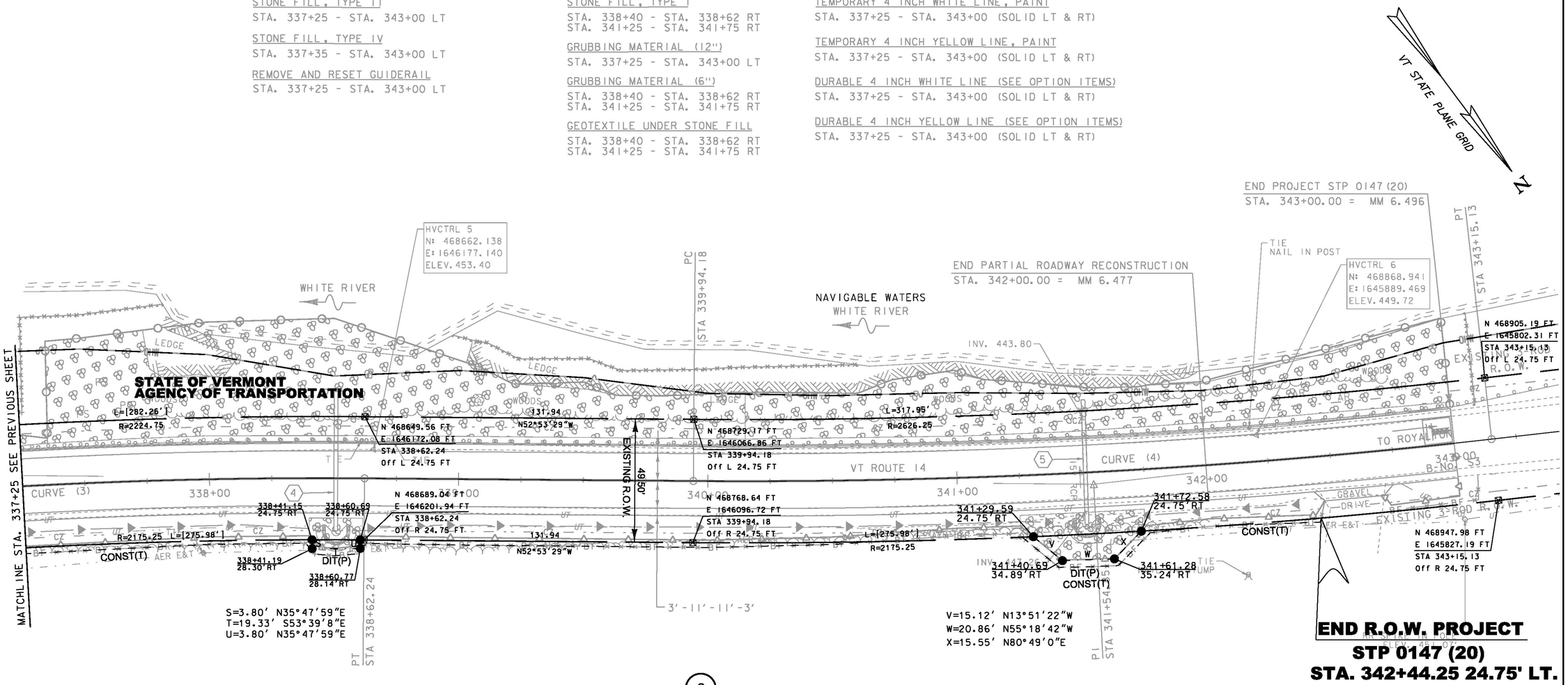
GEOTEXTILE UNDER STONE FILL
STA. 338+40 - STA. 338+62 RT
STA. 341+25 - STA. 341+75 RT

TEMPORARY 4 INCH WHITE LINE, PAINT
STA. 337+25 - STA. 343+00 (SOLID LT & RT)

TEMPORARY 4 INCH YELLOW LINE, PAINT
STA. 337+25 - STA. 343+00 (SOLID LT & RT)

DURABLE 4 INCH WHITE LINE (SEE OPTION ITEMS)
STA. 337+25 - STA. 343+00 (SOLID LT & RT)

DURABLE 4 INCH YELLOW LINE (SEE OPTION ITEMS)
STA. 337+25 - STA. 343+00 (SOLID LT & RT)



2

WITIK, ALEXANDER

LINE 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.

FOR R.O.W. USE ONLY

4 STA. 338+50.75 RT 21.2' TO
STA. 338+50.75 LT 34.8'
INSTALL NEW 18" CPEP (SL)
LENGTH = 56'-0"
INV. IN = 449.64'
INV. OUT = 445.65'
ASKEW ANGLE = 90.0°
CONSTRUCT INLET PROTECTION PAD
STONE FILL, TYPE I

5 STA. 341+51.13 RT 21' TO
STA. 341+52.08 LT 29'
REPLACE EXISTING 15" RCP
WITH NEW 24" CPEP (SL)
LENGTH = 50'-0"
INV. IN = 447.89'
INV. OUT = 442.96'
ASKEW ANGLE = 83.9°LT
CONSTRUCT INLET PROTECTION PAD
STONE FILL, TYPE I

BARRIER FENCE
STA. 337+25.00 - STA. 342+42.00 RT
STA. 342+71.00 - STA. 343+09.00 RT

GEOTEXTILE FOR SILT FENCE, WOVEN WIRE REINFORCED
STA. 337+25.00 - STA. 337+83.00 LT
STA. 338+98.00 - STA. 340+60.00 LT
STA. 343+10.00 - STA. 343+10.00 LT

INLET PROTECTION DEVICE, TYPE I
STA. 338+51.00 RT
STA. 341+51.00 RT

TEMPORARY STONE CHECK DAM, TYPE I
STA. 337+25.00 - 338+30.00 RT
STA. 338+65.00 - 341+36.00 RT
STA. 341+75.00 - 342+36.00 RT

VEHICLE TRACKING PAD
STA. 342+94.00 LT

CURVE (3)
DELTA = 7°16'10"
D = 2°36'16"
R = 2200.00'
T = 139.75'
L = 279.12'
E = 4.43'
BANKING = 0.048 FT/FT AT 50 MPH

CURVE (4)
DELTA = 6°56'21"
D = 2°09'44"
R = 2650.00'
T = 160.67'
L = 320.95'
E = 4.87'
BANKING = 0.041 FT/FT AT 50 MPH

0 20 40
SCALE IN FEET

PROJECT NAME: SHARON
PROJECT NUMBER: STP 0147(20)

FILE NAME: z12c410bdr.dgn
PROJECT LEADER: J. TUCKER
DESIGNED BY: B. MACK
ROW LAYOUT SHEET 4

PLOT DATE: 10-SEP-2014
DRAWN BY: B. MACK
CHECKED BY: J. TUCKER
ROW SHEET 25 OF 66

BEGIN APPROACH
STA. 322+50.00 = MM 6.108

POB
STA 322+36.00

EXISTING 3-ROD R.O.W.

322+36

TO HARTFORD

323+00

AER E&T

324+00

EXISTING 3-ROD R.O.W.

INV. 449.00
18.5' RT

BEGIN PROJECT
STA. 323+50.00 = MM 6.127

UNDERGROUND UTILITY
TO BE ABANDONED AND
RELOCATED AERIALLY

3'-11'-11'-3'

B-No. 5

325+00

VT ROUTE 14

326+00

CURVE (1)

327+00

328+00

PC
STA 325+03.24

WHITE RIVER

COMB
2 53

BM
RR SPIKE IN POLE
ELEV. 462.98'

WOODS

HVCTRL 2
N: 468115.150
E: 1647236.280
ELEV. 447.08

TIE
NAIL IN POST

TIE
NAIL IN POST

INV. 439.57

PT
STA 328+03.26

MATCHLINE STA. 328+25 SEE NEXT SHEET

30" CMP

15" CMP

INV. 444.75
29.0 RT

INV. 443.38

INV. 445.90

INV. 447.61

PI
STA 326+56.46

CURVE (1)
DELTA = 28°38'58"
D = 9°32'57"
R = 600.00'
T = 153.21'
L = 300.02'
E = 19.25'
BANKING = 0.080 FT/FT
AT 45 MPH

STA. 325+25 RT

STA. 326+18 RT

STA. 326+20 RT

STA. 326+28 RT

STA. 326+28 RT

STA. 327+36 RT

STA. 327+74 RT

0140
1417
0620

0 20 40
SCALE IN FEET

VT STATE PLANE GRID

N

TEMPORARY 4 INCH WHITE LINE, PAINT
STA. 322+50 - STA. 328+25 (SOLID LT & RT)

TEMPORARY 4 INCH YELLOW LINE, PAINT
STA. 322+50 - STA. 328+25 (SOLID LT & RT)

DURABLE 4 INCH WHITE LINE (SEE OPTION ITEMS)
STA. 322+50 - STA. 328+25 (SOLID LT & RT)

DURABLE 4 INCH YELLOW LINE (SEE OPTION ITEMS)
STA. 322+50 - STA. 328+25 (SOLID LT & RT)

STONE FILL, TYPE I
STA. 325+75 - STA. 326+16 RT
STA. 326+67 - STA. 327+01 RT

STONE FILL, TYPE II
STA. 323+50 - STA. 327+50 LT

STONE FILL, TYPE IV
STA. 323+50 - STA. 328+00 LT

GRUBBING MATERIAL (6")
STA. 325+75 - STA. 326+16 RT
STA. 326+67 - STA. 327+01 RT

GRUBBING MATERIAL (12")
STA. 323+50 - STA. 328+00 LT

6 INCH UNDERDRAIN PIPE
STA. 324+25 - STA. 326+88 RT
STA. 327+01 - STA. 328+25 RT

REMOVE AND RESET GUARDRAIL
STA. 323+00 - STA. 328+25 LT

REMOVING SIGNS
AS SHOWN - 4

ERECTING SALVAGED SIGNS
AS SHOWN - 1

(1) STA. 326+93.36 RT 28' TO
STA. 326+87.58 LT 33'
REPLACE EXISTING 30" CMP
WITH NEW 48" PCCSP
LENGTH = 62'-0"
INV. IN = 444.54'
INV. OUT = 440.13'
ASKEW ANGLE = 84.6° RT
CONSTRUCT INLET PROTECTION PAD
STONE FILL, TYPE I

(6) STA. 326+99.40 RT 28.86' TO
STA. 327+47.92 RT 26.87'
REMOVE EXISTING 15" CMP DRIVE PIPE
LENGTH = 51'-0"

PROJECT NAME: SHARON
PROJECT NUMBER: ER STP 0147(20)

FILE NAME: z2c410bdr.dgn
PROJECT LEADER: J. TUCKER
DESIGNED BY: B. BRESLEND
PLAN SHEET 1

PLOT DATE: 3/31/2015
DRAWN BY: B. MACK
CHECKED BY: J. TUCKER
SHEET 26 OF 66

STONE FILL, TYPE I
STA. 328+53 - STA. 328+67 LT
STA. 328+59 - STA. 328+90 RT

STONE FILL, TYPE II
STA. 330+00 - STA. 331+50 LT

GRUBBING MATERIAL (12")
STA. 330+00 - STA. 331+50 LT

GRUBBING MATERIAL (6")
STA. 328+59 - STA. 328+90 RT

DURABLE 4 INCH WHITE LINE (SEE OPTION ITEMS)
STA. 328+25 - STA. 333+00 (SOLID LT & RT)

DURABLE 4 INCH YELLOW LINE (SEE OPTION ITEMS)
STA. 328+25 - STA. 333+00 (SOLID LT & RT)

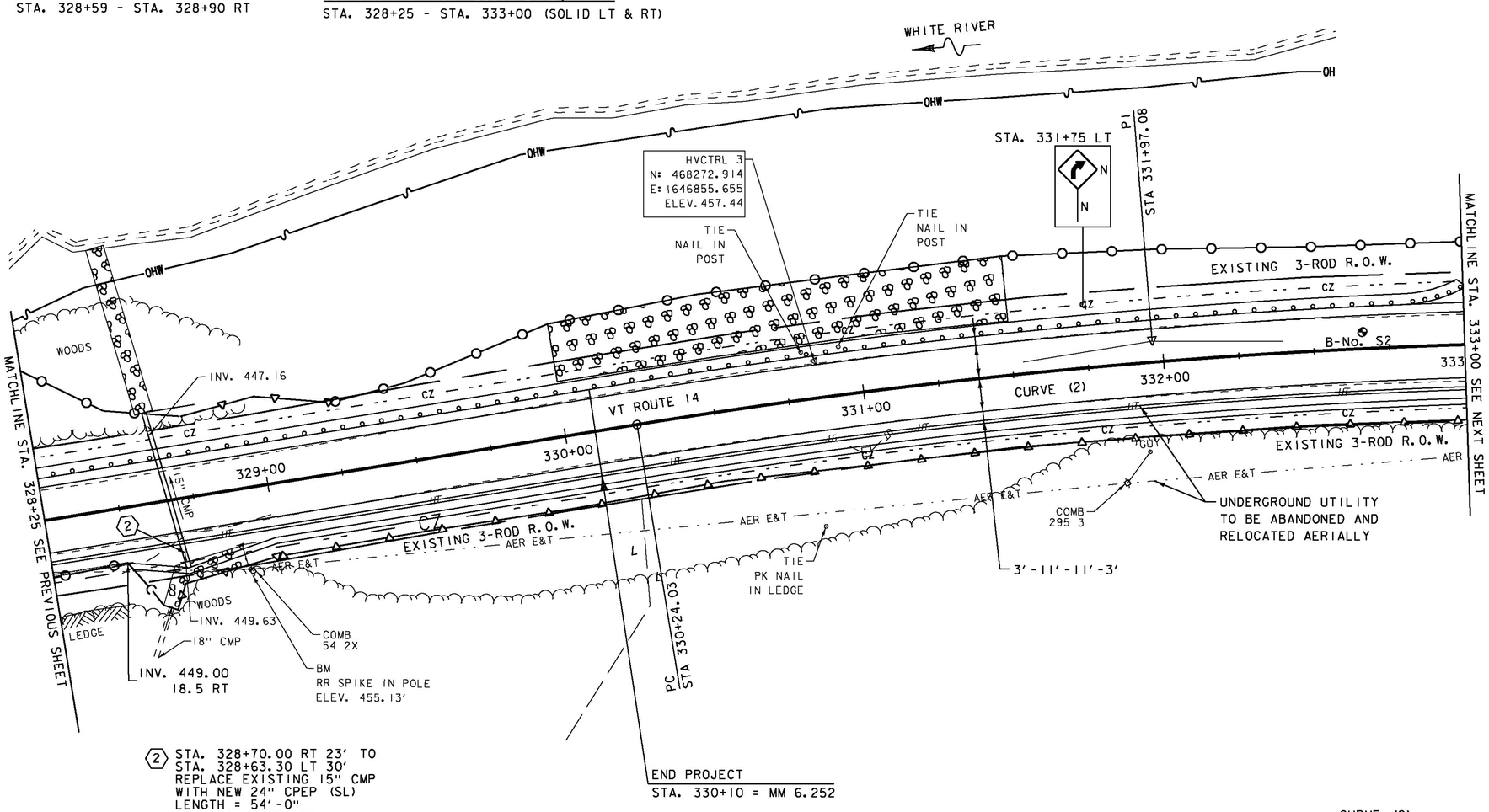
TEMPORARY 4 INCH WHITE LINE, PAINT
STA. 328+25 - STA. 333+00 (SOLID LT & RT)

TEMPORARY 4 INCH YELLOW LINE, PAINT
STA. 328+25 - STA. 333+00 (SOLID LT & RT)

REMOVE AND RESET GUARDRAIL
STA. 328+25 - STA. 333+00 LT

ANCHOR FOR STEEL BEAM RAIL
STA. 333+00 LT

6 INCH UNDERDRAIN PIPE
STA. 328+25 - STA. 328+50 RT



(2) STA. 328+70.00 RT 23' TO
STA. 328+63.30 LT 30'
REPLACE EXISTING 15" CMP
WITH NEW 24" CPEP (SL)
LENGTH = 54'-0"
INV. IN = 449.93'
INV. OUT = 446.77'
ASKEW ANGLE = 82.9°RT
CONSTRUCT INLET/OUTLET PROTECTION PADS
STONE FILL, TYPE I

CURVE (2)
DELTA = 9°12'13"
D = 2°39'54"
R = 2150.00'
T = 173.05'
L = 345.36'
E = 6.95'
BANKING = 0.049 FT/FT AT 50 MPH

0 20 40
SCALE IN FEET

PROJECT NAME: SHARON
PROJECT NUMBER: ER STP 0147(20)

FILE NAME: z12c410bdr.dgn
PROJECT LEADER: J. TUCKER
DESIGNED BY: B. BRESLEND
PLAN SHEET 2

PLOT DATE: 3/31/2015
DRAWN BY: B. MACK
CHECKED BY: J. TUCKER
SHEET 27 OF 66

STONE FILL, TYPE I
STA. 334+45 - STA. 334+85 RT

STONE FILL, TYPE II
STA. 334+00 - STA. 336+25 LT

STONE FILL, TYPE IV
STA. 334+00 - STA. 335+30 LT

GRUBBING MATERIAL (6")
STA. 334+45 - STA. 334+85 RT

GRUBBING MATERIAL (12")
STA. 334+00 - STA. 336+25 LT

TEMPORARY 4 INCH WHITE LINE, PAINT
STA. 333+00 - STA. 337+25 (SOLID LT & RT)

TEMPORARY 4 INCH YELLOW LINE, PAINT
STA. 333+00 - STA. 337+25 (SOLID LT & RT)

DURABLE 4 INCH WHITE LINE (SEE OPTION ITEMS)
STA. 333+00 - STA. 337+25 (SOLID LT & RT)

DURABLE 4 INCH YELLOW LINE (SEE OPTION ITEMS)
STA. 333+00 - STA. 337+25 (SOLID LT & RT)

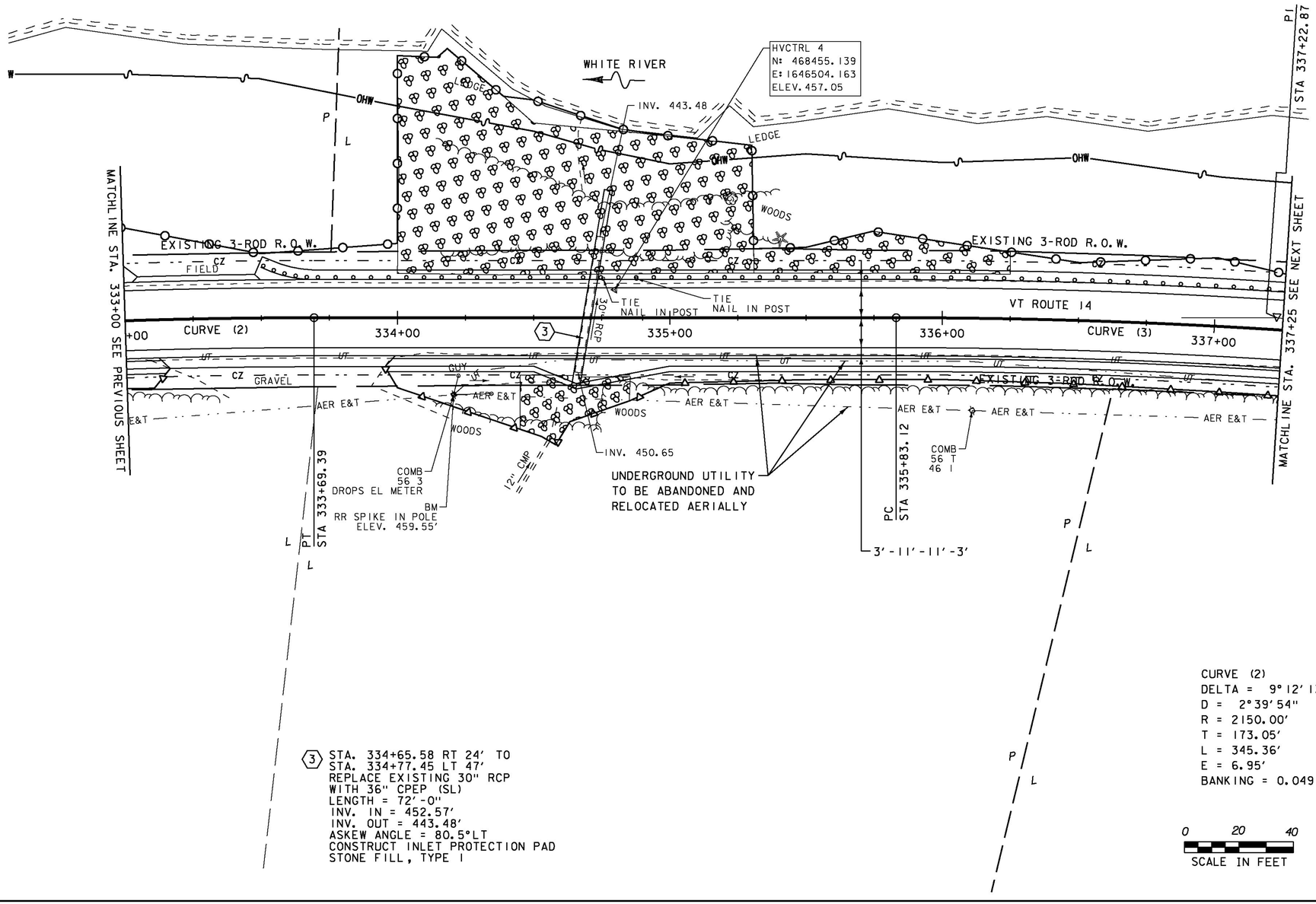
STEEL BEAM GUARDRAIL, GALVANIZED
STA. 333+50 - STA. 334+00 LT

REMOVE AND RESET GUARDRAIL
STA. 334+00 - STA. 337+25 LT

REMOVAL AND DISPOSAL OF GUARDRAIL
STA. 333+00 - STA. 333+03 LT
STA. 333+50 - STA. 334+00 LT

ANCHOR FOR STEEL BEAM RAIL
STA. 333+50 LT

VT STATE PLANE GRID
N



(3) STA. 334+65.58 RT 24' TO
STA. 334+77.45 LT 47'
REPLACE EXISTING 30" RCP
WITH 36" CPEP (SL)
LENGTH = 72'-0"
INV. IN = 452.57'
INV. OUT = 443.48'
ASKEW ANGLE = 80.5°LT
CONSTRUCT INLET PROTECTION PAD
STONE FILL, TYPE I

CURVE (2)
DELTA = 9°12'13"
D = 2°39'54"
R = 2150.00'
T = 173.05'
L = 345.36'
E = 6.95'
BANKING = 0.049 FT/FT AT 50 MPH

CURVE (3)
DELTA = 7°16'10"
D = 2°36'16"
R = 2200.00'
T = 139.75'
L = 279.12'
E = 4.43'
BANKING = 0.048 FT/FT AT 50 MPH

0 20 40
SCALE IN FEET

PROJECT NAME: SHARON
PROJECT NUMBER: ER STP 0147(20)

FILE NAME: z12c410bdr.dgn
PROJECT LEADER: J. TUCKER
DESIGNED BY: B. BRESLEND
PLAN SHEET 3

PLOT DATE: 3/31/2015
DRAWN BY: B. MACK
CHECKED BY: J. TUCKER
SHEET 28 OF 66

REMOVE AND RESET GUARDRAIL
STA. 337+25 - STA. 343+00 LT

STONE FILL, TYPE I
STA. 338+40 - STA. 338+62 RT
STA. 341+25 - STA. 341+75 RT

STONE FILL, TYPE II
STA. 337+35 - STA. 343+00 LT

STONE FILL, TYPE IV
STA. 337+35 - STA. 343+00 LT

GRUBBING MATERIAL (12")
STA. 337+35 - STA. 343+00 LT

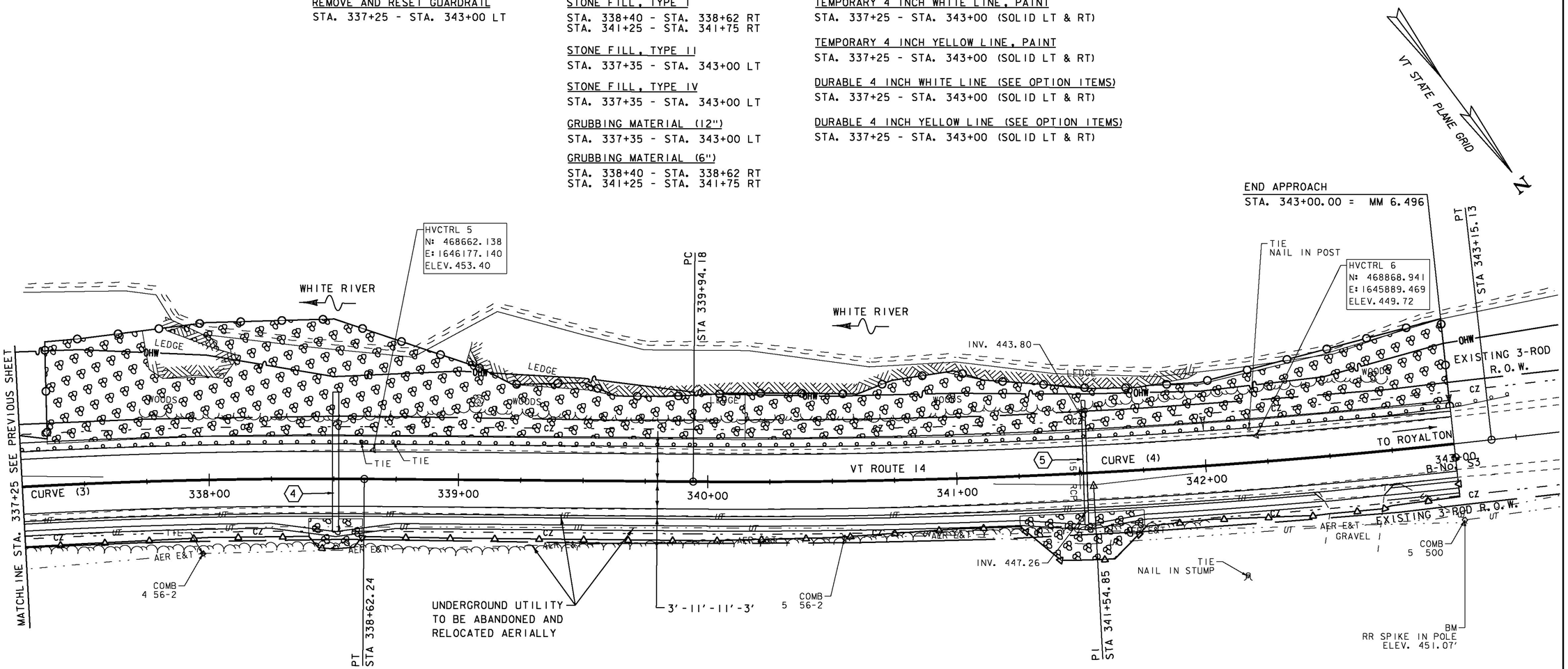
GRUBBING MATERIAL (6")
STA. 338+40 - STA. 338+62 RT
STA. 341+25 - STA. 341+75 RT

TEMPORARY 4 INCH WHITE LINE, PAINT
STA. 337+25 - STA. 343+00 (SOLID LT & RT)

TEMPORARY 4 INCH YELLOW LINE, PAINT
STA. 337+25 - STA. 343+00 (SOLID LT & RT)

DURABLE 4 INCH WHITE LINE (SEE OPTION ITEMS)
STA. 337+25 - STA. 343+00 (SOLID LT & RT)

DURABLE 4 INCH YELLOW LINE (SEE OPTION ITEMS)
STA. 337+25 - STA. 343+00 (SOLID LT & RT)



4 STA. 338+50.75 RT 21.2' TO
STA. 338+50.75 LT 34.8'
INSTALL NEW 30" CPEP (SL)
LENGTH = 56'-0"
INV. IN = 449.64'
INV. OUT = 445.65'
ASKEW ANGLE = 90.0°
CONSTRUCT INLET PROTECTION PAD
STONE FILL, TYPE I

5 STA. 341+51.13 RT 21' TO
STA. 341+52.08 LT 29'
REPLACE EXISTING 15" RCP
WITH NEW 24" CPEP (SL)
LENGTH = 50'-0"
INV. IN = 447.89'
INV. OUT = 442.96'
ASKEW ANGLE = 83.9°LT
CONSTRUCT INLET PROTECTION PAD
STONE FILL, TYPE I

CURVE (3)
DELTA = 7°16'10"
D = 2°36'16"
R = 2200.00'
T = 139.75'
L = 279.12'
E = 4.43'
BANKING = 0.048 FT/FT AT 50 MPH

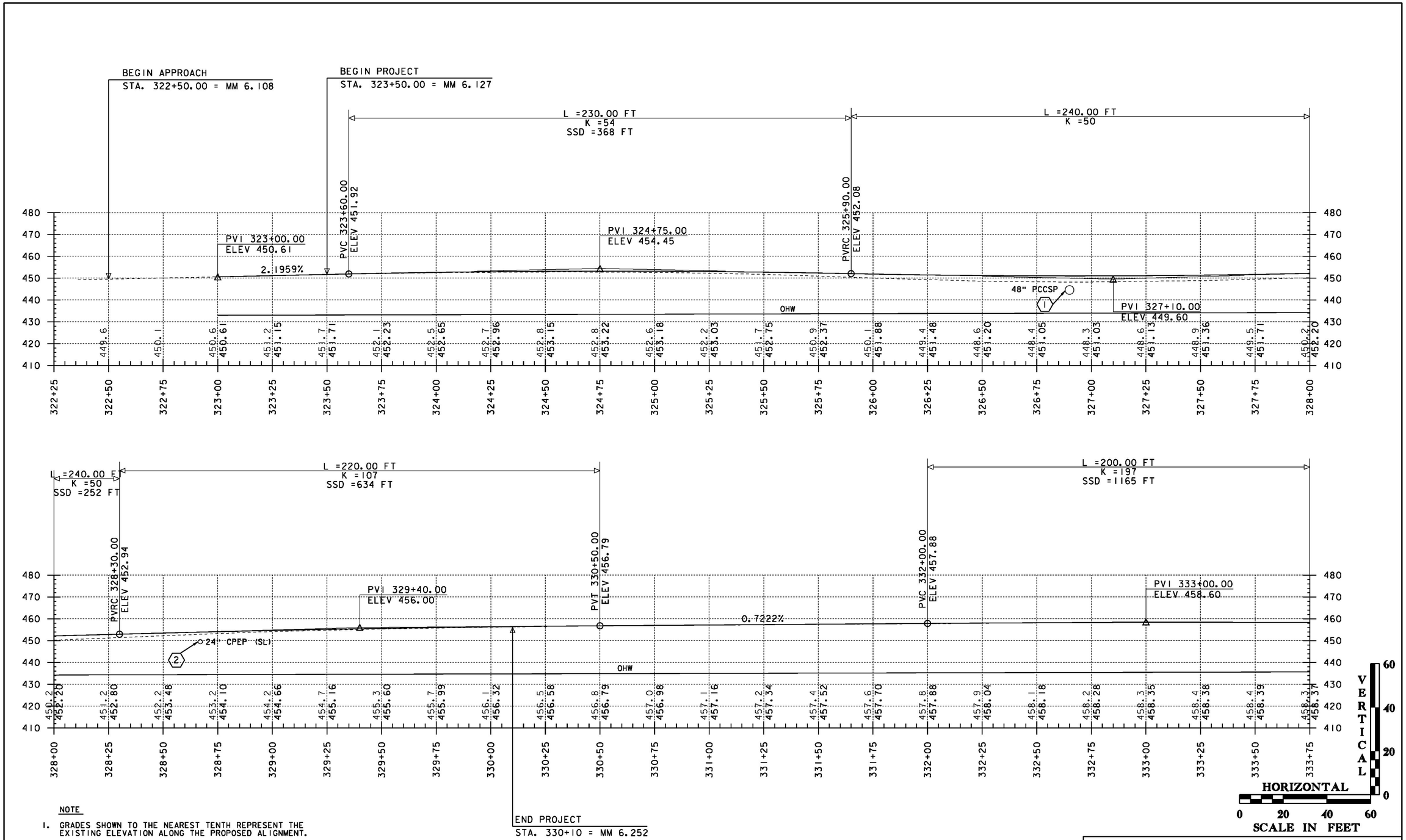
CURVE (4)
DELTA = 6°56'21"
D = 2°09'44"
R = 2650.00'
T = 160.67'
L = 320.95'
E = 4.87'
BANKING = 0.041 FT/FT AT 50 MPH

0 20 40
SCALE IN FEET

PROJECT NAME: SHARON
PROJECT NUMBER: ER STP 0147(20)

FILE NAME:z12c410bdr.dgn
PROJECT LEADER:J. TUCKER
DESIGNED BY:B. BRESLEND
PLAN SHEET 4

PLOT DATE: 3/31/2015
DRAWN BY: B. MACK
CHECKED BY: J. TUCKER
SHEET 29 OF 66



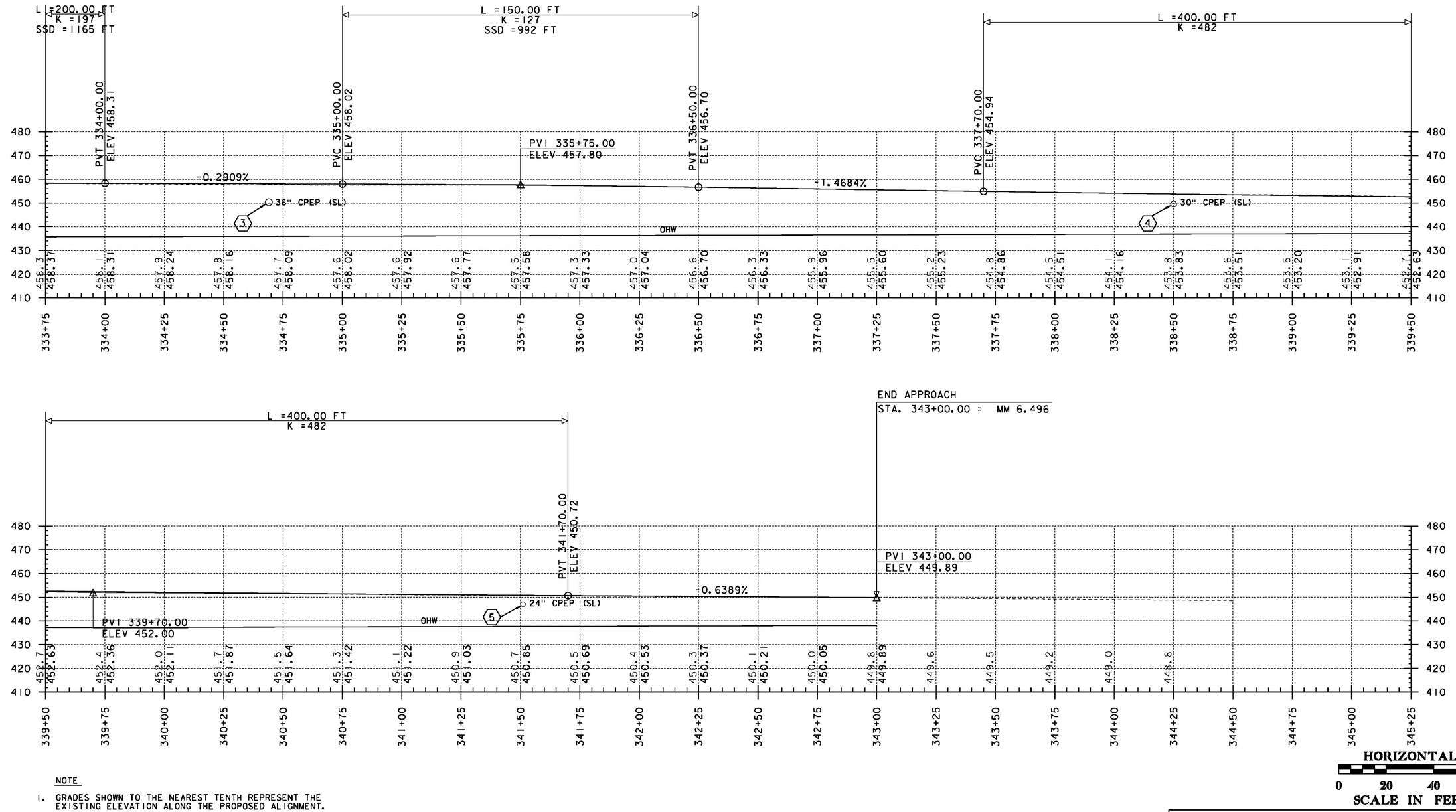
NOTE

1. GRADES SHOWN TO THE NEAREST TENTH REPRESENT THE EXISTING ELEVATION ALONG THE PROPOSED ALIGNMENT.
2. GRADES SHOWN TO THE NEAREST HUNDREDTH REPRESENT THE PROPOSED ELEVATION ALONG THE PROPOSED ALIGNMENT.

PROJECT NAME: SHARON
PROJECT NUMBER: ER STP 0147(20)

FILE NAME: z12c410pro.dgn
PROJECT LEADER: J. TUCKER
DESIGNED BY: B. BRESLEND
PROFILE SHEET 1

PLOT DATE: 3/31/2015
DRAWN BY: B. MACK
CHECKED BY: A. SANZ
SHEET 30 OF 66



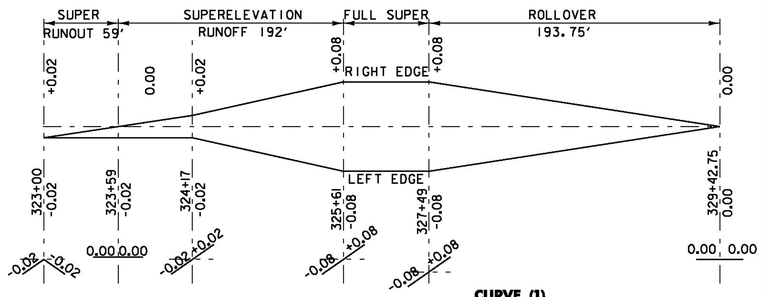
NOTE

1. GRADES SHOWN TO THE NEAREST TENTH REPRESENT THE EXISTING ELEVATION ALONG THE PROPOSED ALIGNMENT.
2. GRADES SHOWN TO THE NEAREST HUNDREDTH REPRESENT THE PROPOSED ELEVATION ALONG THE PROPOSED ALIGNMENT.

PROJECT NAME: SHARON
PROJECT NUMBER: ER STP 0147(20)

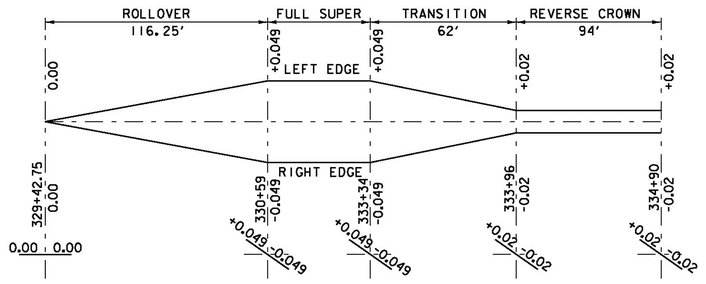
FILE NAME: z12c410pro.dgn
PROJECT LEADER: J. TUCKER
DESIGNED BY: B. BRESLEND
PROFILE SHEET 2

PLOT DATE: 3/31/2015
DRAWN BY: B. MACK
CHECKED BY: A. SANZ
SHEET 31 OF 66



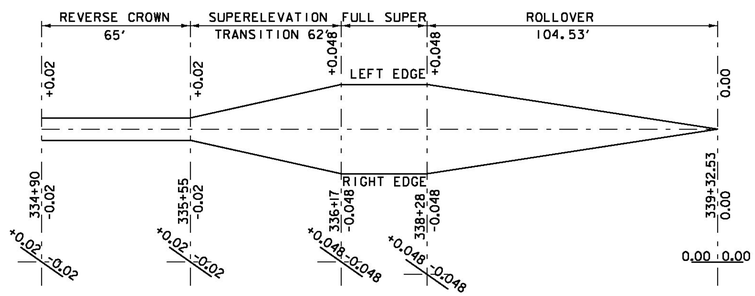
SUPERELEVATION DIAGRAM
NTS

CURVE (1)
PC = 325+03.24 R = 600 FT - LT
PT = 328+03.26 V = 45 MPH



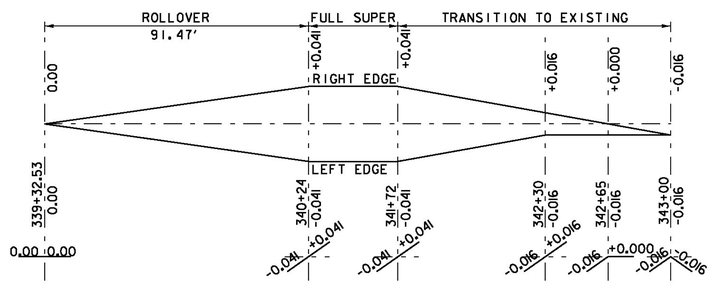
SUPERELEVATION DIAGRAM
NTS

CURVE (2)
PC = 330+24.03 R = 2150 FT - RT
PT = 333+69.39 V = 50 MPH



SUPERELEVATION DIAGRAM
NTS

CURVE (3)
PC = 335+83.12 R = 2200 FT - RT
PT = 338+62.24 V = 50 MPH



SUPERELEVATION DIAGRAM
NTS

CURVE (4)
PC = 339+94.18 R = 2650 FT - LT
PT = 343+15.13 V = 50 MPH

PROJECT NAME:	SHARON
PROJECT NUMBER:	ER STP 0147(20)
FILE NAME: z12c410.dgn	PLOT DATE: 3/31/2015
PROJECT LEADER: J. TUCKER	DRAWN BY: B. MACK
DESIGNED BY: B. BRESLEND	CHECKED BY: A. SANZ
BANKING SHEET	SHEET 32 OF 66

EPSC PLAN NARRATIVE

1.1 PROJECT DESCRIPTION

THE PROJECT IS ON VT ROUTE 14 IN THE TOWN OF SHARON BETWEEN MM 6.127 AND MM 6.252

THIS PROJECT INVOLVES ROADWAY RECONSTRUCTION (RAISING OF THE VERTICAL ALIGNMENT), CORRECTING SUPERELEVATION DEFICIENCIES, SLOPE STABILIZATION, RESURFACING WITH BASE AND WEARING COURSES, NEW GUARDRAIL, NEW PAVEMENT MARKINGS AND DRAINAGE IMPROVEMENTS.

NOTE: AREA OF DISTURBANCE INCLUDES LIMITS OF EARTH DISTURBANCE WITHIN THE PROJECT AREA, AS WELL AS WASTE, BORROW AND STAGING AREAS, AND OTHER EARTH DISTURBING ACTIVITIES WITHIN OR DIRECTLY ADJACENT TO THE PROJECT LIMITS AS SHOWN ON THE ATTACHED EPSC PLAN.

TOTAL AREA OF DISTURBANCE AS SHOWN ON THE ATTACHED EPSC PLAN IS APPROXIMATELY 2.6 ACRES.

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

1.2 SITE INVENTORY

1.2.1 TOPOGRAPHY

THE TOPOGRAPHY OF THE AREA IS RELATIVELY FLAT WITH THE WHITE RIVER ON THE WEST SIDE OF VT ROUTE 14 AND WELL ESTABLISHED WOODED AREAS ON THE EAST SIDE. VT ROUTE 14, WHITE BROOK ROAD (TH 7), AND TWO GRAVEL DRIVEWAYS ARE WITHIN THE PROJECT SITE. THERE ARE THREE RESIDENCES ON THE EAST SIDE OF THE PROJECT.

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

THE WHITE RIVER IS THE ONLY WATER SOURCE ON THE PROJECT SITE. THERE ARE FOUR EXISTING CROSS CULVERTS ON VT ROUTE 14 WITHIN THE PROJECT AREA. ONE CARRIES A SEASONAL STREAM AND THE OTHER ROADWAY AND DITCH RUNOFF.

1.2.3 VEGETATION

THE VEGETATION IN THE PROJECT AREA CONSISTS MOSTLY OF UNDERGROWTH ALONG THE RIVER EMBANKMENT. THE IMPACT TO VEGETATION WILL BE LIMITED TO THAT WHICH IS DIRECTLY AFFECTED BY THE ADJUSTMENT TO THE VERTICAL PROFILE AND THE PLACEMENT OF THE PROPOSED STONE FILL TYPE IV ALONG THE RIVER EMBANKMENT AS SPECIFIED ON THE PLANS. 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 WINDSOR, VERMONT. SOILS ON THE PROJECT SITE ARE:

TUNBRIDGE-LYMAN COMPLEX, 35-60% SLOPES, VERY ROCKY, “K-FACTOR” = 0.22/0.27
HINCKLEY SANDY LOAM, 0-8% SLOPES, “K-FACTOR” = 0.15/0.20

NOTE: K-VALUES GENERALLY INDICATE THE FOLLOWING:
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: WHITE RIVER
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 SPECIFIC 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 (PDF) SHALL BE USED TO PHYSICALLY MARK SITE BOUNDARIES. BECAUSE THIS PROJECT FALLS UNDER THE CGP 3-9020, BARRIER FENCE SHALL BE USED INSTEAD OF PROJECT DEMARCATION FENCE WITHIN 100 FEET OF A WATER RESOURCE (STREAM, BROOK, LAKE, POND, WETLAND, ETC).

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, ONLY THE ACREAGE LISTED ON THE PERMIT AUTHORIZATION MAY BE EXPOSED AT ANY GIVEN TIME.

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.

1.4.3 SITE ENTRANCE/EXIT STABILIZATION

TRACKING OF SEDIMENT ONTO PUBLIC HIGHWAYS SHALL BE MINIMIZED TO REDUCE THE POTENTIAL FOR RUNOFF ENTERING RECEIVING WATERS. INSTALLATION SHALL COINCIDE WITH THE CONTRACTOR’S PROGRESS SCHEDULE.

STABILIZED CONSTRUCTION ENTRANCES SHALL BE INSTALLED AS PROPOSED ON THE EPSC PLAN AND ANYWHERE EQUIPMENT WILL BE GOING FROM AREAS OF EXPOSED SOILS TO PAVED SURFACES.

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 CONSTRUCTION SITE.

THE PROJECT AREA IS RELATIVELY FLAT. THEREFORE IT IS NOT ANTICIPATED THAT DIVERSION MEASURES WILL BE NECESSARY.

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.

TEMPORARY STONE CHECK DAMS WILL BE INSTALLED AS PROPOSED ON THE EPSC PLAN, AT A MINIMUM.

1.4.7 CONSTRUCT PERMANENT CONTROLS

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

PERMANENT STORMWATER TREATMENT DEVICES ARE NOT ANTICIPATED TO BE NEEDED FOR THIS PROJECT AS DESIGNED.

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 DEWATERING 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.

DEWATERING IS NOT ANTICIPATED TO BE NEEDED FOR THIS PROJECT AS DESIGNED.

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 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.

PROJECT NAME:	SHARON
PROJECT NUMBER:	ER STP 0147(20)

FILE NAME: z12c410ESPC_Narrative.dgn	PLOT DATE: 3/31/2015
PROJECT LEADER: J. TUCKER	DRAWN BY: B. MACK
DESIGNED BY: B. MACK	CHECKED BY: A. SANZ
EPSC NARRATIVE	SHEET 33 OF 66

BARRIER FENCE (LINE STYLE) -BF-×-×-×-BF-
653.50

BRUSH LAYER (BL)
653.75, DETAIL

CHECK DAM (LINE STYLE)
653.25, DETAIL

COFFERDAM (LINE STYLE)
208.40

CURB DROP INLET PROTECTION
653.40, DETAIL

DUST CONTROL (DC)
609.10 & 15

PIPE INLET PROTECTION
653.40, DETAIL

EXCAVATED DROP INLET PROTECTION
653.40, DETAIL

FIBER ROLL (EROSION LOG) (FR)
653.60, DETAIL

FILTER BAG
653.45, DETAIL

FILTER FABRIC DROP INLET PROTECTION
653.40, DETAIL

LIVE CUTTINGS/LIVE STAKES PLANTING (LS)
653.70, DETAIL

LIVE FASCINE (LF)
653.65, DETAIL

PROJECT DEMARCATION FENCE (LINE STYLE) -PDF——— PDF-
653.55

ROLLED EROSION CONTROL PRODUCT (RECP)
653.20 (TEMP. EROSION MATTING)

SEDIMENT BASIN
INCIDENTAL TO COFFERDAM 208.40

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

STANDARD SYMBOLS

SILT FENCE(LINE STYLE)
649.51, DETAIL

SILT FENCE WOVEN WIRE(LINE STYLE)
649.515, DETAIL

STABILIZED CONSTRUCTION ENTRANCE
653.35, DETAIL, VEHICLE TRACKING PAD

STONE & BLOCK DROP INLET PROTECTION
653.40, DETAIL

SURFACE ROUGHENING
INCIDENTAL TO CONTRACT

TURBIDITY CURTAIN
649.61, DETAIL, FILTER CURTAIN

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

STANDARD SYMBOLS

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 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 ENGINEER AND ON SITE COORDINATOR.
4. REFER TO EPSC DETAIL SHEETS 1-3 FOR ADDITIONAL DETAILS.
5. WHERE LEDGE IS EXPOSED, GRAVEL BAGS MAY BE USED INSTEAD OF FILTER CURTAIN. PAYMENT WOULD BE CONSIDERED INCIDENTAL TO ITEM 649.61 "GEOTEXTILE FOR FILTER CURTAIN".
6. SEE SHEET 3 FOR ADDITIONAL STANDARD SYMBOLS AND SYMBOLOGY.

PROJECT NAME: SHARON
PROJECT NUMBER: ER STP 0147(20)

FILE NAME:z12c410ESPC_Narrative.dgn PLOT DATE: 3/31/2015
PROJECT LEADER: J. TUCKER DRAWN BY: B. MACK
DESIGNED BY: B. BRESLEND CHECKED BY: E. ANDREWS
EPSC LEGEND & NOTES SHEET 34 OF 66

VT STATE PLANE GRID

N

EXISTING 3-ROD R.O.W.

322+36

323+00

324+00

325+00

326+00

327+00

328+00

OHW

UT

AER E&T

WHITE RIVER

HVCTRL 2
N: 468115.150
E: 1647236.280
ELEV. 447.08

TIE
NAIL IN POST

TIE
NAIL IN POST

INV. 439.57

30" CMP

15" CMP

WOODS

INV. 443.38

INV. 445.90

INV. 447.61

B-No. 4 SI

COMB
2.53

BM
RR SPIKE IN POLE
ELEV. 462.98'

MATCHLINE STA. 328+25 SEE NEXT SHEET

SOIL INFORMATION:
HINCKLEY SANDY LOAM
K-FACTOR = 0.15/0.20, 0-8% SLOPES
HYDROLOGIC SOIL GROUP: A

SOIL INFORMATION:
TUNBRIDGE-LYMAN COMPLEX
K-FACTOR = 0.22/0.27, 35=60% SLOPES
HYDROLOGIC SOIL GROUP: C/D

0 20 40
SCALE IN FEET

PROJECT NAME: SHARON
PROJECT NUMBER: ER STP 0147(20)

FILE NAME: z12c410EPSC_bdr.dgn
PROJECT LEADER: J. TUCKER
DESIGNED BY: B. BRESLEND
EPSC EXISTING COND. PLAN SHEET 1

PLOT DATE: 3/31/2015
DRAWN BY: B. MACK
CHECKED BY: J. TUCKER
SHEET 35 OF 66

VT STATE PLANE GRID

N

WHITE RIVER

EXISTING 3-ROD R.O.W.

AER E&T

OHW

OH

UT

WOODS

INV. 447.16

INV. 449.63

15" CMP

18" CMP

LEDGE

B-No. S2

COMB 54 2X

COMB 295 3

GUY

329+00

330+00

331+00

332+00

333

MATCHLINE STA. 328+25 SEE PREVIOUS SHEET

MATCHLINE STA. 333+00 SEE NEXT SHEET

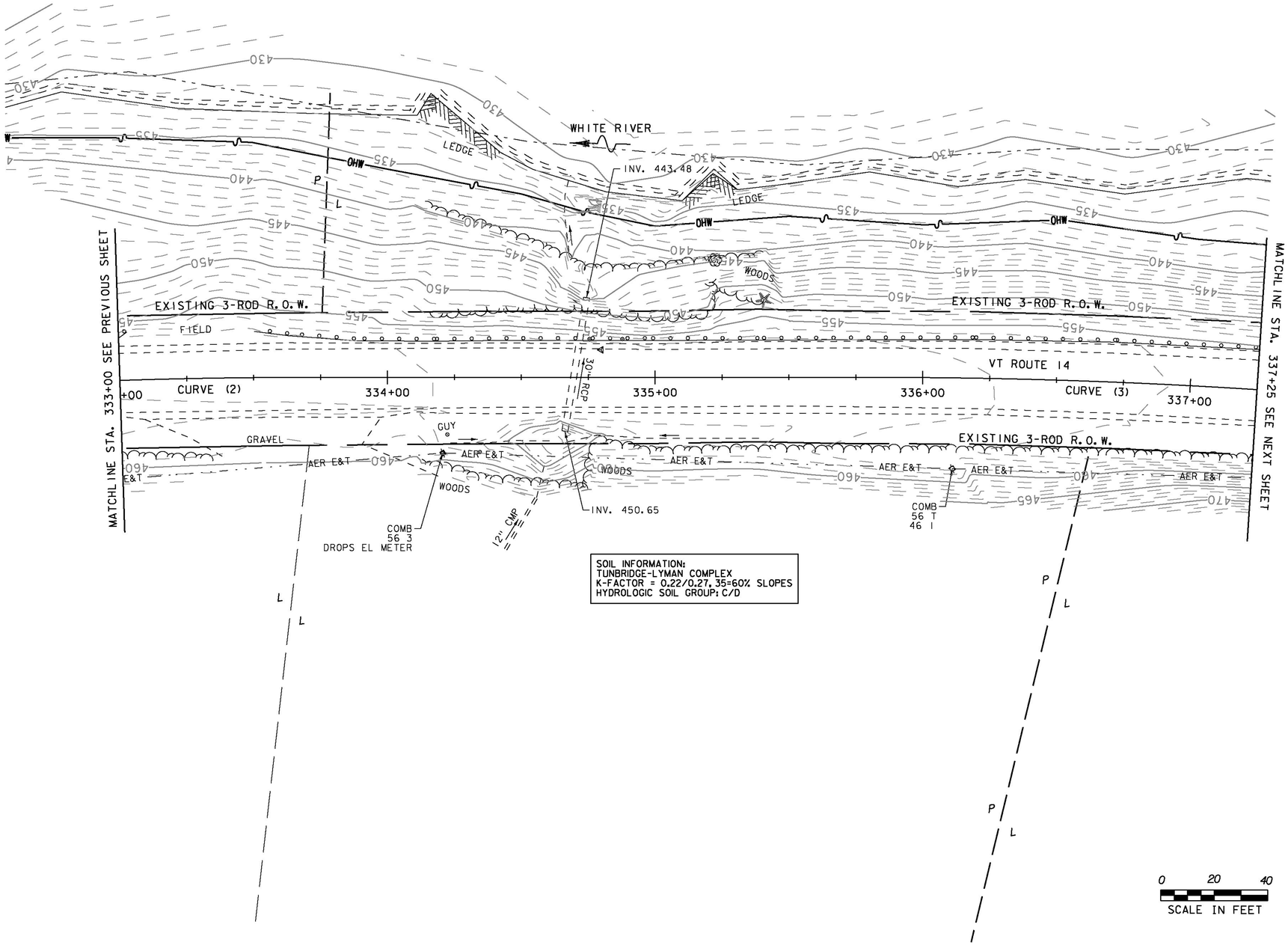
SOIL INFORMATION:
TUNBRIDGE-LYMAN COMPLEX
K-FACTOR = 0.22/0.27, 35=60% SLOPES
HYDROLOGIC SOIL GROUP: C/D

0 20 40
SCALE IN FEET

PROJECT NAME: SHARON
PROJECT NUMBER: ER STP 0147(20)

FILE NAME: z12c410EPSC_bdr.dgn
PROJECT LEADER: J. TUCKER
DESIGNED BY: B. BRESLEND
EPSC EXISTING COND. PLAN SHEET 2

PLOT DATE: 3/31/2015
DRAWN BY: B. MACK
CHECKED BY: J. TUCKER
SHEET 36 OF 66



PROJECT NAME:	SHARON
PROJECT NUMBER:	ER STP 0147(20)
FILE NAME: z12c410EPSC_bdr.dgn	PLOT DATE: 3/31/2015
PROJECT LEADER: J. TUCKER	DRAWN BY: B. MACK
DESIGNED BY: B. BRESLEND	CHECKED BY: J. TUCKER
EPSC EXISTING COND. PLAN SHEET 3	SHEET 37 OF 66

VT STATE PLANE GRID

N

MATCHLINE STA. 337+25 SEE PREVIOUS SHEET

WHITE RIVER

WHITE RIVER

LEDGE

OHW

WOODS

INV. 443.80

EXISTING R.C

338+00

339+00

340+00

341+00

342+00

343+00

B-NO. 53

15" RCP

AER E&T

UT

COMB 4 56-2

COMB 5 56-2

INV. 447.26

GRAVEL

EXISTING 3-ROD R.O.W.

COMB 5 500

SOIL INFORMATION:
TUNBRIDGE-LYMAN COMPLEX
K-FACTOR = 0.22/0.27, 35=60% SLOPES
HYDROLOGIC SOIL GROUP: C/D

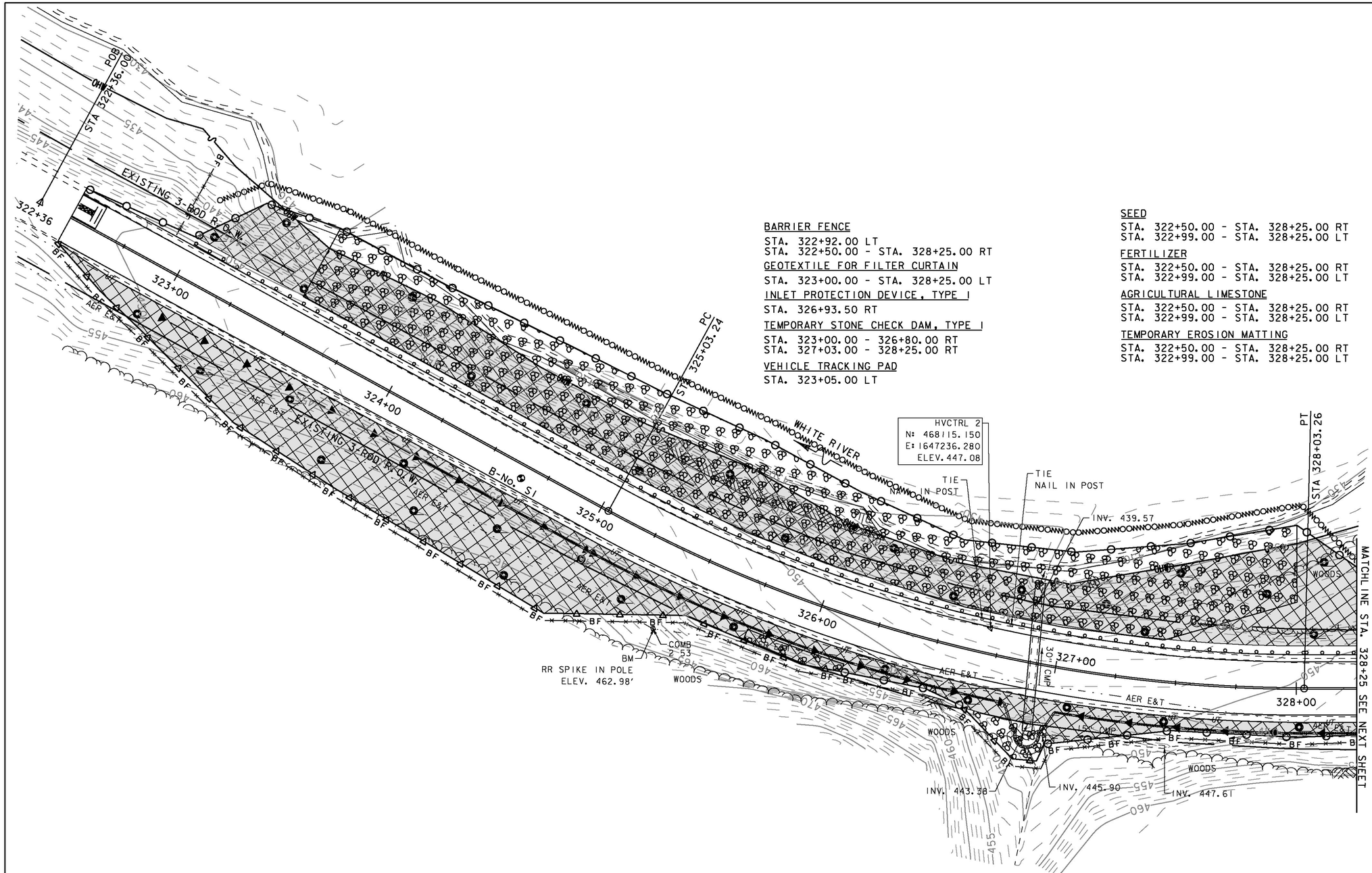
SOIL INFORMATION:
WINDSOR LOAMY FINE SAND
K-FACTOR = 0.15/0.15, 0-8% SLOPES
HYDROLIGIC SOIL GROUP: A

0 20 40
SCALE IN FEET

PROJECT NAME: SHARON
PROJECT NUMBER: ER STP 0147(20)

FILE NAME: z12c410EPSC_bdr.dgn
PROJECT LEADER: J. TUCKER
DESIGNED BY: B. BRESLEND
EPSC EXISTING COND. PLAN SHEET 4

PLOT DATE: 3/31/2015
DRAWN BY: B. MACK
CHECKED BY: J. TUCKER
SHEET 38 OF 66



BARRIER FENCE
STA. 322+92.00 LT
STA. 322+50.00 - STA. 328+25.00 RT

GEOTEXTILE FOR FILTER CURTAIN
STA. 323+00.00 - STA. 328+25.00 LT

INLET PROTECTION DEVICE, TYPE I
STA. 326+93.50 RT

TEMPORARY STONE CHECK DAM, TYPE I
STA. 323+00.00 - 326+80.00 RT
STA. 327+03.00 - 328+25.00 RT

VEHICLE TRACKING PAD
STA. 323+05.00 LT

SEED
STA. 322+50.00 - STA. 328+25.00 RT
STA. 322+99.00 - STA. 328+25.00 LT

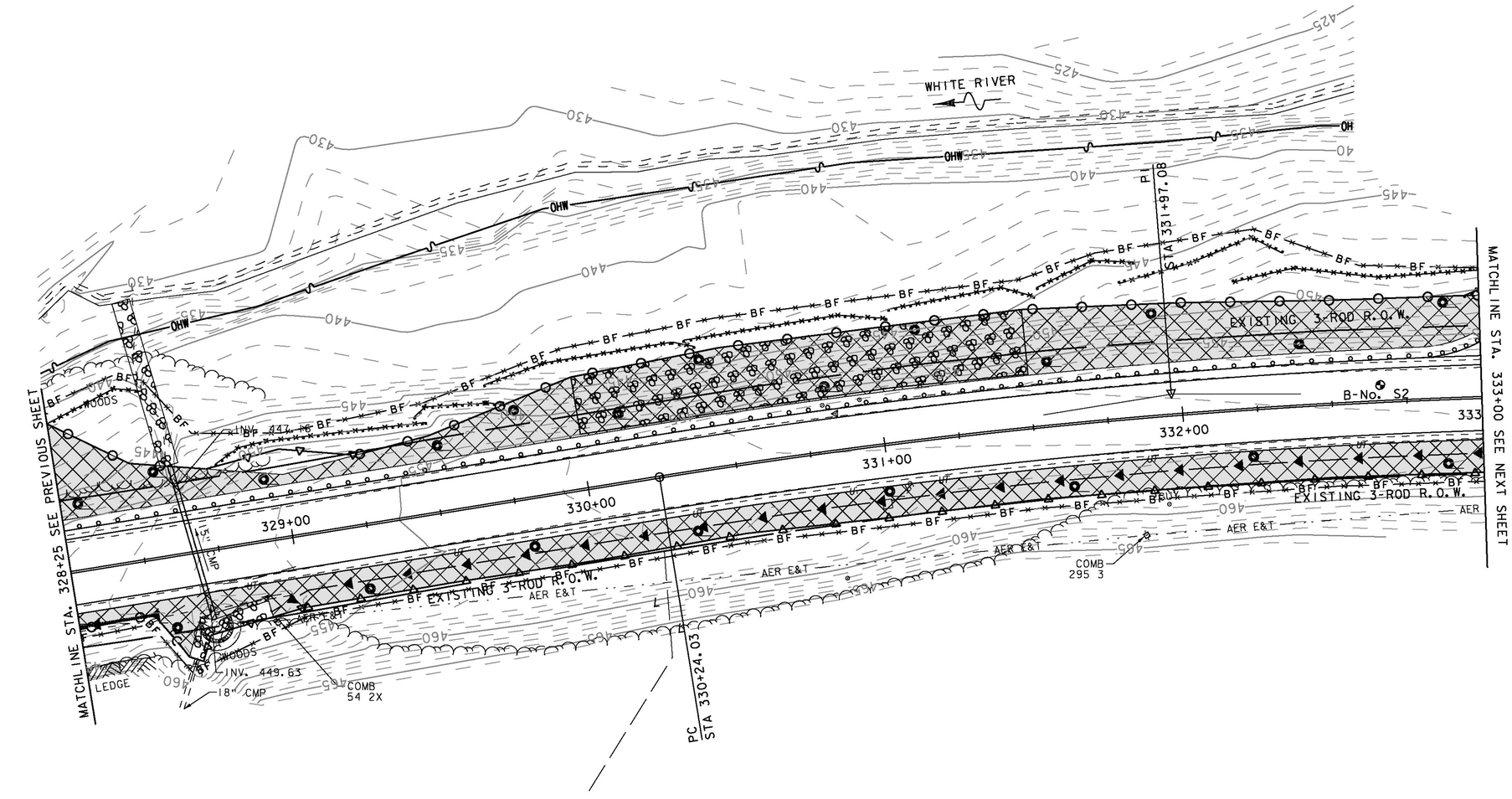
FERTILIZER
STA. 322+50.00 - STA. 328+25.00 RT
STA. 322+99.00 - STA. 328+25.00 LT

AGRICULTURAL LIMESTONE
STA. 322+50.00 - STA. 328+25.00 RT
STA. 322+99.00 - STA. 328+25.00 LT

TEMPORARY EROSION MATTING
STA. 322+50.00 - STA. 328+25.00 RT
STA. 322+99.00 - STA. 328+25.00 LT

0 20 40
SCALE IN FEET

PROJECT NAME: SHARON	
PROJECT NUMBER: ER STP 0147(20)	
FILE NAME: z12c410EPSC_bdr.dgn	PLOT DATE: 3/31/2015
PROJECT LEADER: J. TUCKER	DRAWN BY: B. MACK
DESIGNED BY: B. BRESLEND	CHECKED BY: J. TUCKER
EPSC CONSTRUCTION PLAN SHEET 1	SHEET 39 OF 66



BARRIER FENCE

STA. 328+25.00 - STA. 333+00.00 LT
STA. 328+25.00 - STA. 333+00.00 RT

GEOTEXTILE FOR SILT FENCE, WOVEN WIRE REINFORCED

STA. 328+25.00 - STA. 328+57.00 LT
STA. 328+78.00 - STA. 329+50.00 LT
STA. 329+46.00 - STA. 329+77.00 LT
STA. 329+71.00 - STA. 330+42.00 LT
STA. 330+39.00 - STA. 331+06.00 LT
STA. 331+07.00 - STA. 331+54.00 LT
STA. 331+55.00 - STA. 331+88.00 LT
STA. 331+83.00 - STA. 332+36.00 LT
STA. 332+20.00 - STA. 333+00.00 LT
STA. 332+95.00 - STA. 333+00.00 LT

INLET PROTECTION DEVICE, TYPE I

STA. 328+70.00 RT

TEMPORARY STONE CHECK DAM, TYPE I

STA. 328+25.00 - 328+52.00 RT
STA. 328+97.00 - 333+00.00 RT

SEED

STA. 328+25.00 - STA. 333+00.00 LT
STA. 328+25.00 - STA. 333+00.00 RT

FERTILIZER

STA. 328+25.00 - STA. 333+00.00 LT
STA. 328+25.00 - STA. 333+00.00 RT

AGRICULTURAL LIMESTONE

STA. 328+25.00 - STA. 333+00.00 LT
STA. 328+25.00 - STA. 333+00.00 RT

TEMPORARY EROSION MATTING

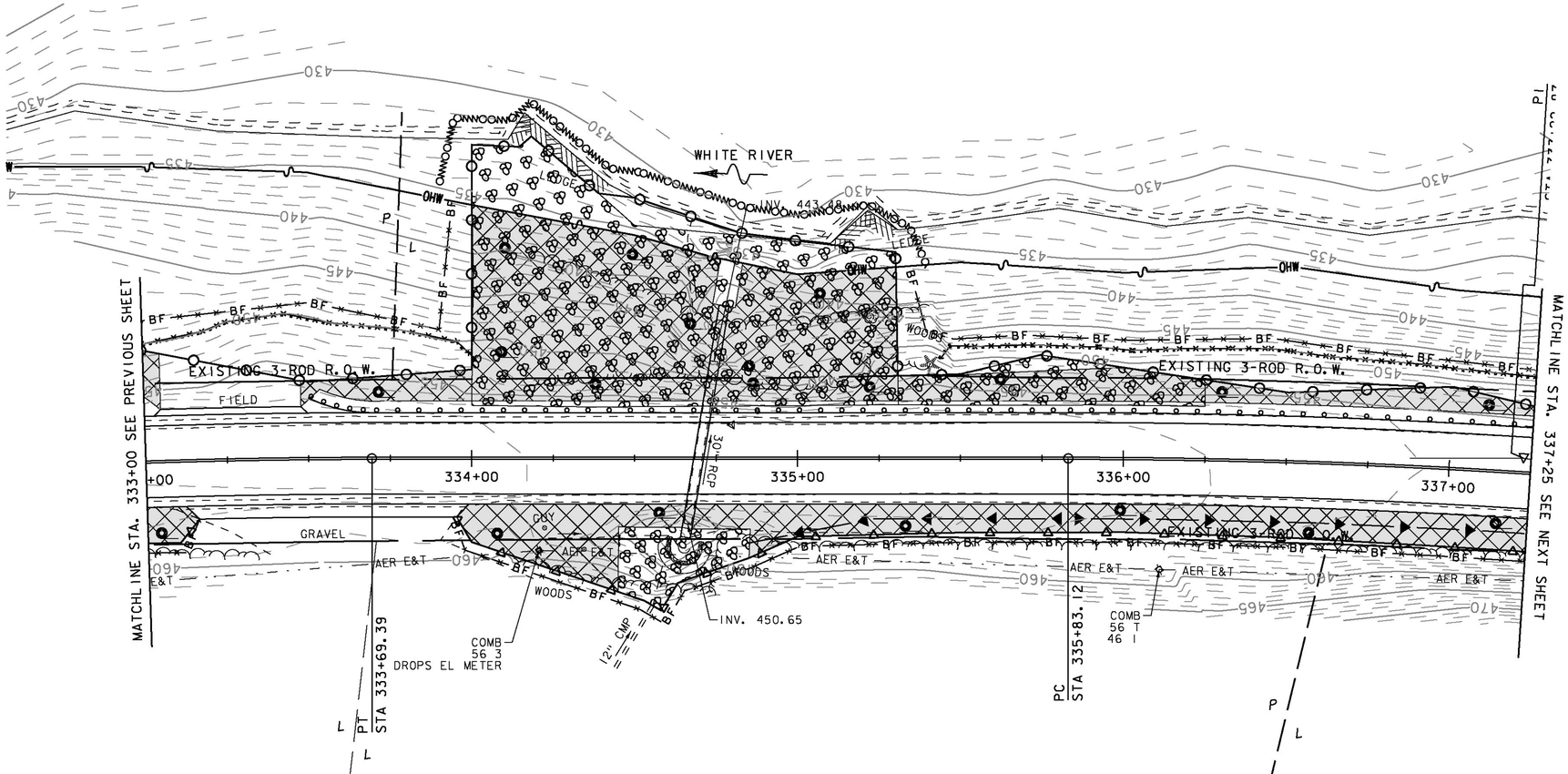
STA. 328+25.00 - STA. 333+00.00 LT
STA. 328+25.00 - STA. 333+00.00 RT

0 20 40
SCALE IN FEET

PROJECT NAME: SHARON
PROJECT NUMBER: ER STP 0147(20)

FILE NAME: z12c410EPSC_bdr.dgn
PROJECT LEADER: J. TUCKER
DESIGNED BY: B. BRESLEND
EPSC CONSTRUCTION PLAN SHEET 2

PLOT DATE: 3/31/2015
DRAWN BY: B. MACK
CHECKED BY: J. TUCKER



BARRIER FENCE

STA. 333+00.00 - STA. 333+16.00 RT
STA. 333+00.00 - STA. 333+94.00 LT
STA. 333+96.00 - STA. 337+25.00 RT
STA. 335+34.00 - STA. 337+25.00 LT

GEOTEXTILE FOR SILT FENCE, WOVEN WIRE REINFORCED

STA. 333+00.00 - STA. 334+00.00 LT
STA. 335+44.00 - STA. 337+25.00 LT

GEOTEXTILE FOR FILTER CURTAIN

STA. 333+90.00 - STA. 335+40.00 LT

INLET PROTECTION DEVICE, TYPE I

STA. 334+65.00 RT

TEMPORARY STONE CHECK DAM, TYPE I

STA. 335+00.00 - 337+25.00 RT

SEED

STA. 333+00.00 - STA. 333+05.00 LT
STA. 333+00.00 - STA. 333+16.00 RT
STA. 333+47.75 - STA. 337+25.00 LT
STA. 333+95.50 - STA. 337+25.00 RT

FERTILIZER

STA. 333+00.00 - STA. 333+05.00 LT
STA. 333+00.00 - STA. 333+16.00 RT
STA. 333+47.75 - STA. 337+25.00 LT
STA. 333+95.50 - STA. 337+25.00 RT

AGRICULTURAL LIMESTONE

STA. 333+00.00 - STA. 333+05.00 LT
STA. 333+00.00 - STA. 333+16.00 RT
STA. 333+47.75 - STA. 337+25.00 LT
STA. 333+95.50 - STA. 337+25.00 RT

TEMPORARY EROSION MATTING

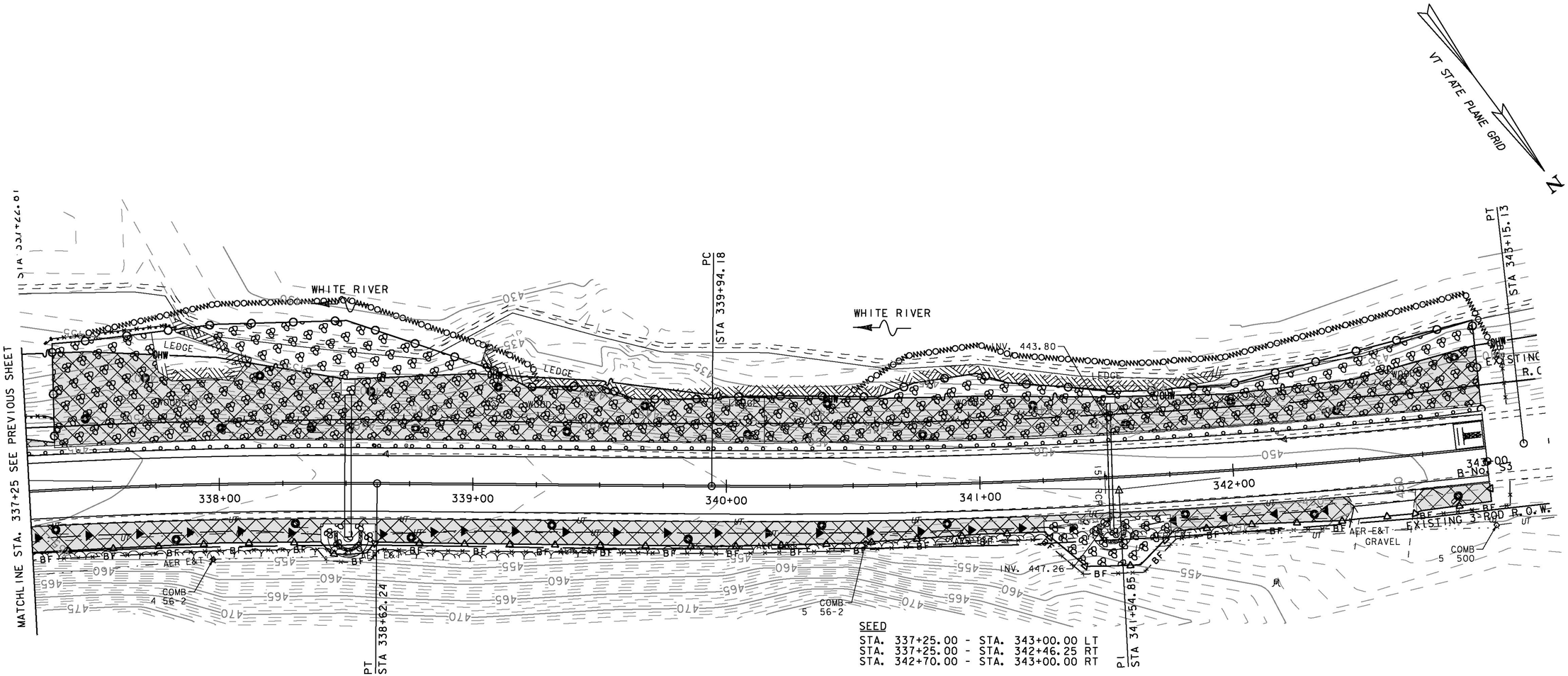
STA. 333+00.00 - STA. 333+05.00 LT
STA. 333+00.00 - STA. 333+16.00 RT
STA. 333+47.75 - STA. 337+25.00 LT
STA. 333+95.50 - STA. 337+25.00 RT

0 20 40
SCALE IN FEET

PROJECT NAME: SHARON
PROJECT NUMBER: ER STP 0147(20)

FILE NAME: z12c410EPSC_bdr.dgn
PROJECT LEADER: J. TUCKER
DESIGNED BY: B. BRESLEND
EPSC CONSTRUCTION PLANS SHEET 3

PLOT DATE: 3/31/2015
DRAWN BY: B. MACK
CHECKED BY: J. TUCKER
SHEET 41 OF 66



SEED

STA. 337+25.00 - STA. 343+00.00 LT
STA. 337+25.00 - STA. 342+46.25 RT
STA. 342+70.00 - STA. 343+00.00 RT

BARRIER FENCE

STA. 337+25.00 - STA. 342+42.00 RT
STA. 342+71.00 - STA. 343+09.00 RT
STA. 343+10.00 LT

GEOTEXTILE FOR SILT FENCE, WOVEN WIRE REINFORCED

STA. 337+25.00 - STA. 337+36.00 LT
STA. 337+34.00 - STA. 337+84.00 LT

GEOTEXTILE FOR FILTER CURTAIN

STA. 337+50.00 - STA. 339+25.00 LT
STA. 340+50.00 - STA. 343+10.00 LT

INLET PROTECTION DEVICE, TYPE I

STA. 338+51.00 RT
STA. 341+51.00 RT

TEMPORARY STONE CHECK DAM, TYPE I

STA. 337+25.00 - 338+30.00 RT
STA. 338+65.00 - 341+36.00 RT
STA. 341+75.00 - 342+36.00 RT

VEHICLE TRACKING PAD

STA. 342+94.00 LT

FERTILIZER

STA. 337+25.00 - STA. 343+00.00 LT
STA. 337+25.00 - STA. 342+46.25 RT
STA. 342+70.00 - STA. 343+00.00 RT

AGRICULTURAL LIMESTONE

STA. 337+25.00 - STA. 343+00.00 LT
STA. 337+25.00 - STA. 342+46.25 RT
STA. 342+70.00 - STA. 343+00.00 RT

TEMPORARY EROSION MATTING

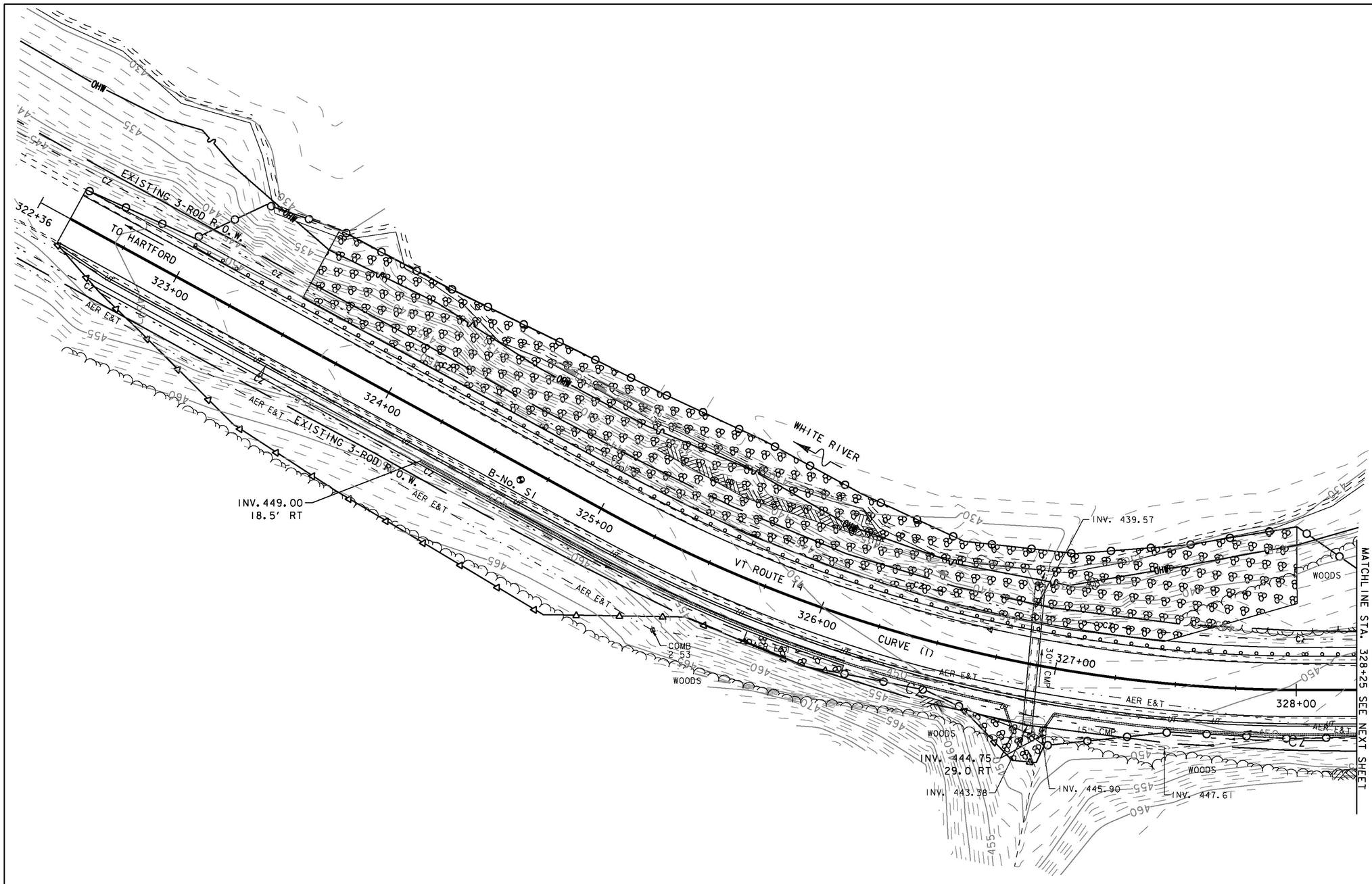
STA. 337+25.00 - STA. 343+00.00 LT
STA. 337+25.00 - STA. 342+46.25 RT
STA. 342+70.00 - STA. 343+00.00 RT

0 20 40
SCALE IN FEET

PROJECT NAME: SHARON
PROJECT NUMBER: ER STP 0147(20)

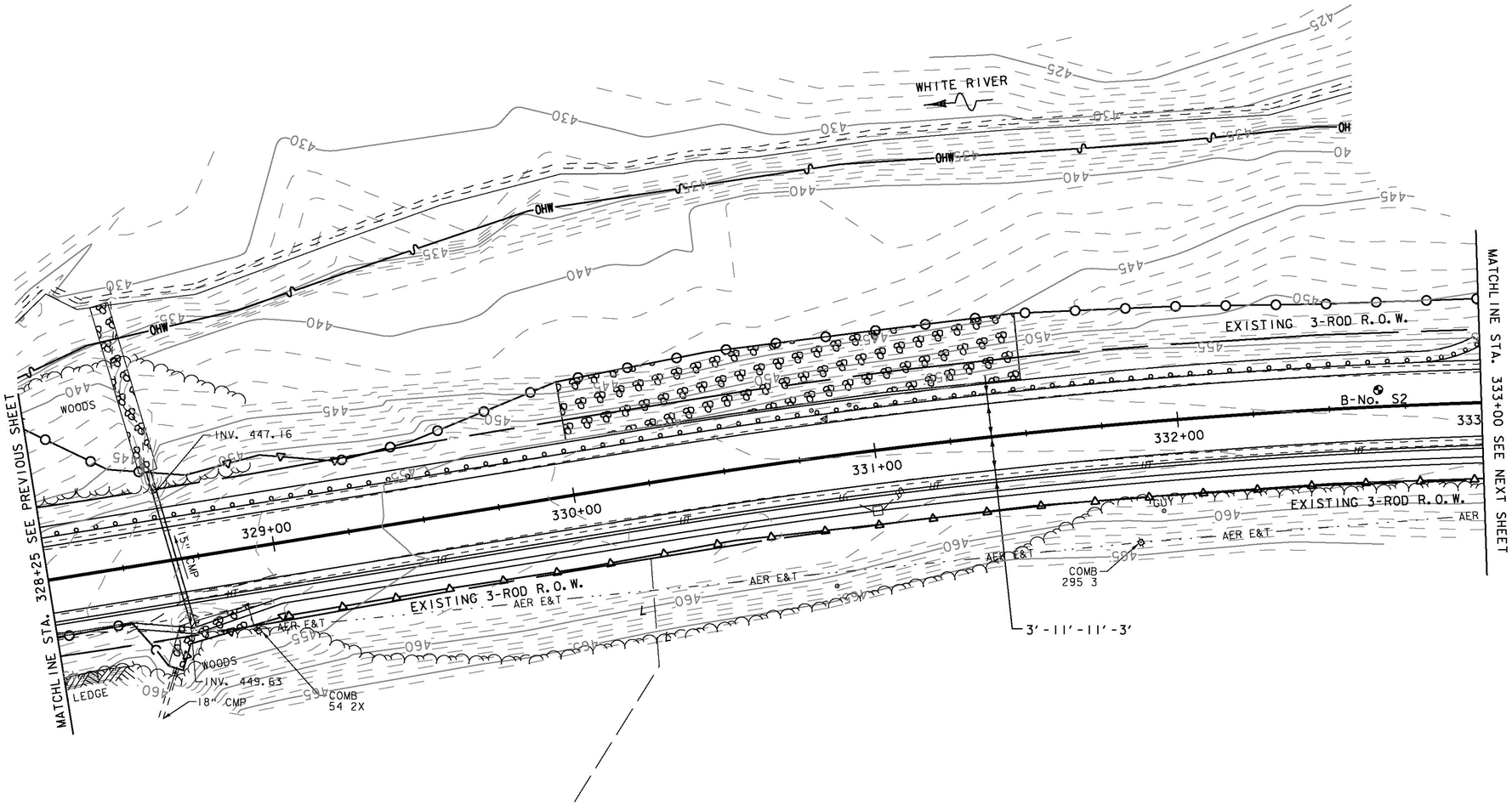
FILE NAME: z12c410EPSC_bdr.dgn
PROJECT LEADER: J. TUCKER
DESIGNED BY: B. BRESLEND
EPSC CONSTRUCTION PLAN SHEET 4

PLOT DATE: 3/31/2015
DRAWN BY: B. MACK
CHECKED BY: J. TUCKER
SHEET 42 OF 66



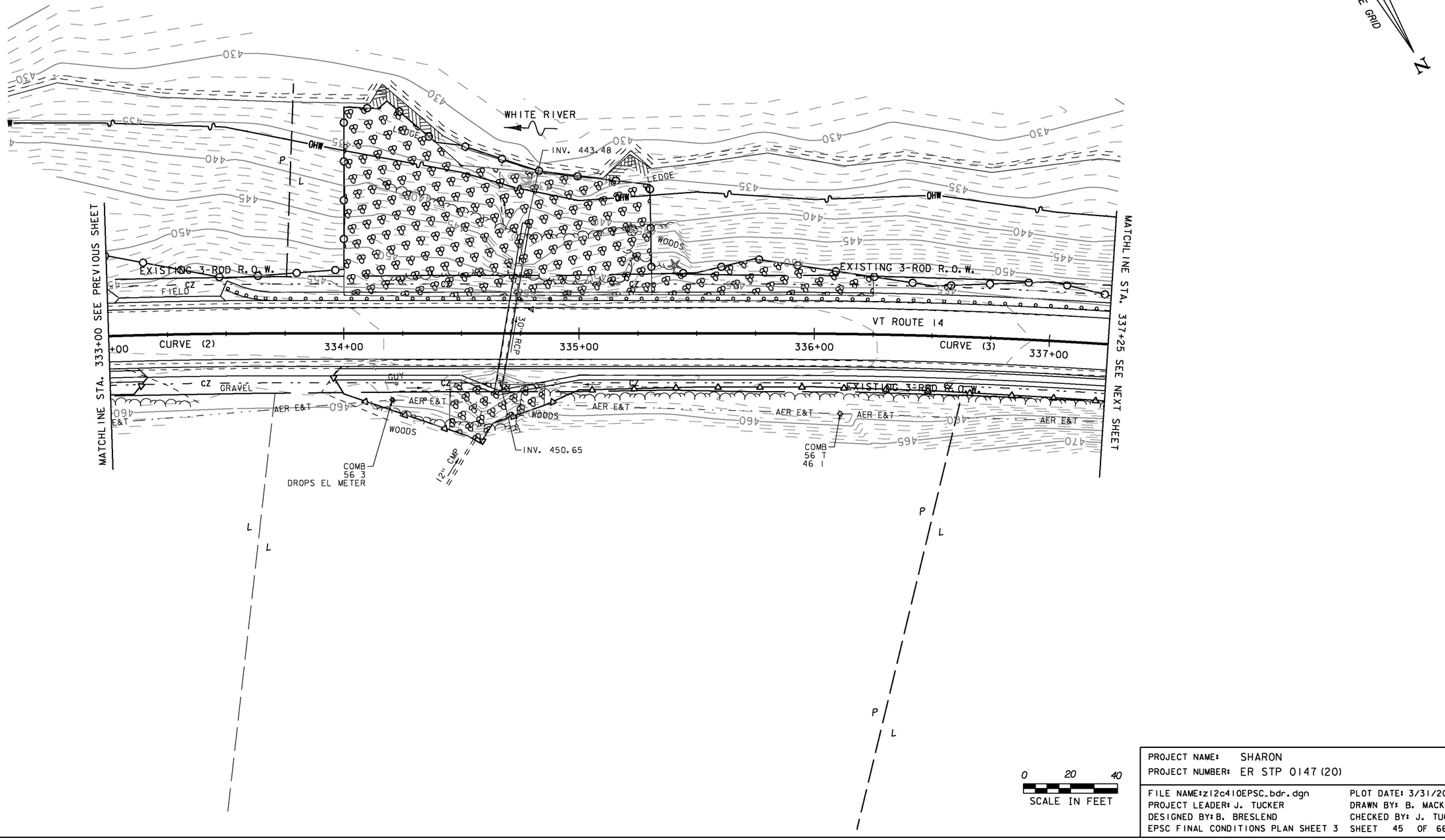
0 20 40
SCALE IN FEET

PROJECT NAME: SHARON	
PROJECT NUMBER: ER STP 0147(20)	
FILE NAME: z12c410EPSC_bdr.dgn	PLOT DATE: 3/31/2015
PROJECT LEADER: J. TUCKER	DRAWN BY: B. MACK
DESIGNED BY: B. BRESLEND	CHECKED BY: J. TUCKER
EPSC FINAL CONDITIONS PLAN SHEET 1	SHEET 43 OF 66

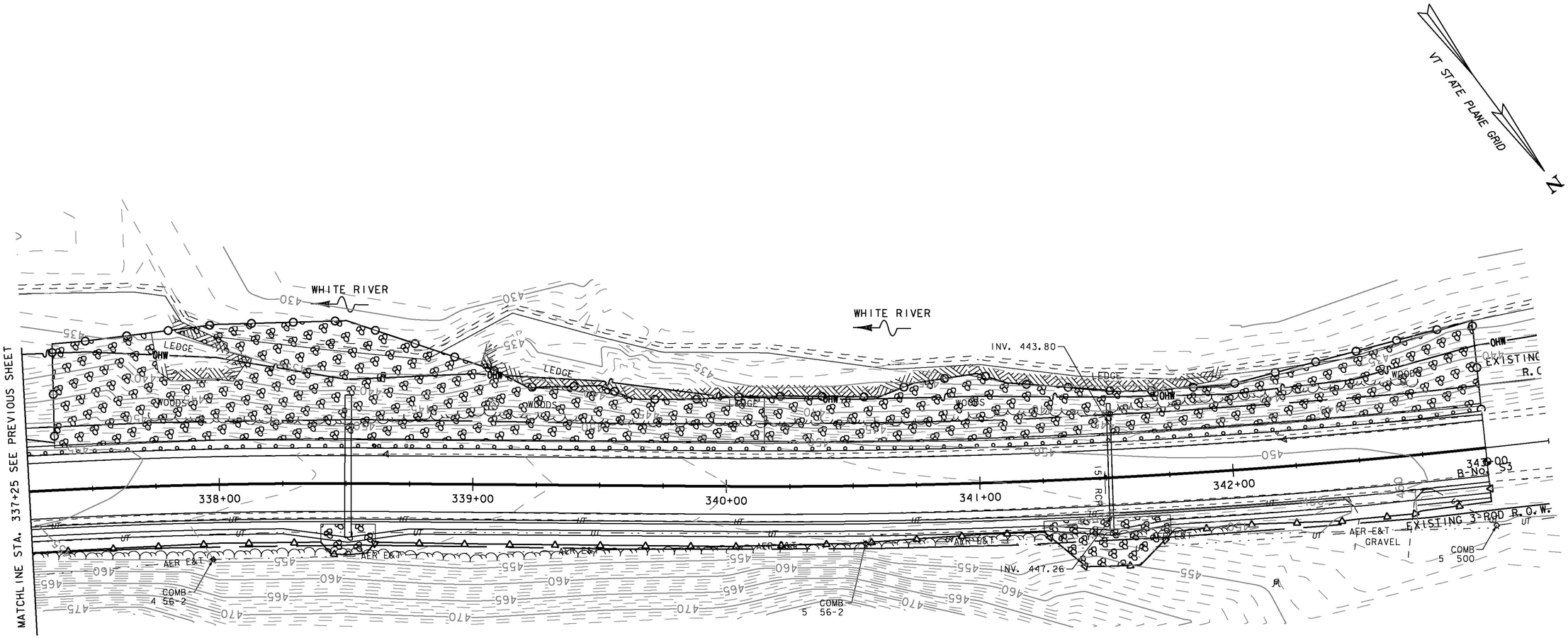


0 20 40
SCALE IN FEET

PROJECT NAME: SHARON	
PROJECT NUMBER: ER STP 0147(20)	
FILE NAME: z12c410EPSC_bdr.dgn	PLOT DATE: 3/31/2015
PROJECT LEADER: J. TUCKER	DRAWN BY: B. MACK
DESIGNED BY: B. BRESLEND	CHECKED BY: J. TUCKER
EPSC FINAL CONDITIONS PLAN SHEET 2	SHEET 44 OF 66



PROJECT NAME:	SHARON
PROJECT NUMBER:	ER STP 0147(20)
FILE NAME: z12c410EPSC_bdr.dgn	PLOT DATE: 3/31/2015
PROJECT LEADER: J. TUCKER	DRAWN BY: B. MACK
DESIGNED BY: B. BRESLEND	CHECKED BY: J. TUCKER
EPSC FINAL CONDITIONS PLAN SHEET 3	SHEET 45 OF 66



0 20 40
SCALE IN FEET

PROJECT NAME: SHARON	
PROJECT NUMBER: ER STP 0147(20)	
FILE NAME: z12c410EPSC_bdr.dgn	PLOT DATE: 3/31/2015
PROJECT LEADER: J. TUCKER	DRAWN BY: B. MACK
DESIGNED BY: B. BRESLEND	CHECKED BY: J. TUCKER
EPSC FINAL CONDITIONS PLAN SHEET 4	SHEET 46 OF 66

VAOT RURAL AREA MIX

LBS/AC					
% WEIGHT	BROADCAST	HYDROSEED	NAME	GERM %	PURITY %
37.5%	22.5	45	CREEPING RED FESCUE	85%	98%
37.5%	22.5	45	TALL FESCUE	90%	95%
5.0%	3	6	RED TOP	90%	95%
15.0%	9	18	BIRDSFOOT TREFOIL	85%	98%
5.0%	3	6	ANNUAL RYE GRASS	85%	95%
100%	60	120			

VAOT URBAN AREA MIX

LBS/AC					
% WEIGHT	BROADCAST	HYDROSEED	NAME	GERM %	PURITY %
42.5%	34	68	CREEPING RED FESCUE	85%	98%
10.0%	8	16	PERENNIAL RYE GRASS	90%	95%
42.5%	34	68	KENTUCKY BLUE GRASS	85%	85%
5.0%	4	8	ANNUAL RYE GRASS	85%	95%
100%	80	160			

SOIL AMENDMENT GUIDANCE

FERTILIZER		LIME	
BROADCAST	HYDROSEED	BROADCAST	HYDROSEED
10-20-10	*FOLLOW*	PELLETIZED	*FOLLOW*
500 LBS/AC	*MANUFACTURER*	2 TONS/AC	*MANUFACTURER*

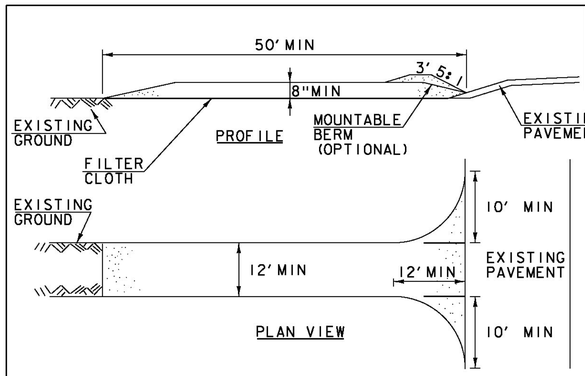
CONSTRUCTION GUIDANCE

1. RURAL SEED MIX: USE AS INDICATED IN THE PLANS AND/OR FOR ALL ESTABLISHED UPLAND (NON WETLAND) AREAS DISTURBED BY THE CONTRACTOR.
2. URBAN SEED MIX: USE AS INDICATED IN THE PLANS AND/OR FOR ALL ESTABLISHED LAWN AREAS DISTURBED BY THE CONTRACTOR.
3. ALL SEED MIXTURES: SHALL NOT HAVE A WEED CONTENT EXCEEDING 0.40% BY WEIGHT AND SHALL BE FREE OF ALL NOXIOUS SEED.
4. FERTILIZER AND LIMESTONE: SHALL FOLLOW RATES SHOWN ON PLAN OR AS DIRECTED BY THE ENGINEER
5. HAY MULCH: TO BE PLACED ON EARTH SLOPES AT THE RATE OF 2 TONS/ACRE, ACHIEVE 90% GROUND COVER OR AS DIRECTED BY THE ENGINEER.
6. TOPSOIL: TO BE USED WITH SEED AS INDICATED ON THE PLANS, OR AS DIRECTED BY THE ENGINEER.
7. HYDROSEEDING: ALTHOUGH GUIDANCE IS GIVEN ABOVE THE SITE CONDITIONS AND THE TYPE OF HYDROSEED WILL ULTIMATELY DICTATE THE AMOUNTS AND TYPES OF SOIL AMENDMENTS TO BE APPLIED
8. TURF ESTABLISHMENT: PLACING SEED, FERTILIZER, LIME AND MULCH PRIOR TO SEPTEMBER 15 AND AFTER APRIL 15 CAN BETTER ENSURE A VIGOROUS GROWTH OF GRASS.

ADAPTED FROM VTRANS TECHNICAL LANDSCAPE MANUAL FOR ROADWAYS AND TRANSPORTATION FACILITIES

TURF ESTABLISHMENT

REVISIONS	
JUNE 23, 2009	WHF
JANUARY 15, 2010	WHF
FEBRUARY 16, 2011	WHF



SYMBOL

NOT TO SCALE

CONSTRUCTION SPECIFICATIONS

1. STONE SIZE- USE 1-4" STONE, RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH- NOT LESS THAN 50' (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30' MINIMUM LENGTH APPLIES).
3. THICKNESS- NOT LESS THAN 8".
4. WIDTH- 12' MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. 24' IF SINGLE ENTRANCE TO SITE.
5. GEOTEXTILE MUST BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING STONE.
6. SURFACE WATER- ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
7. MAINTENANCE- THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY, ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
8. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED ACCORDING TO PERMIT REQUIREMENTS.

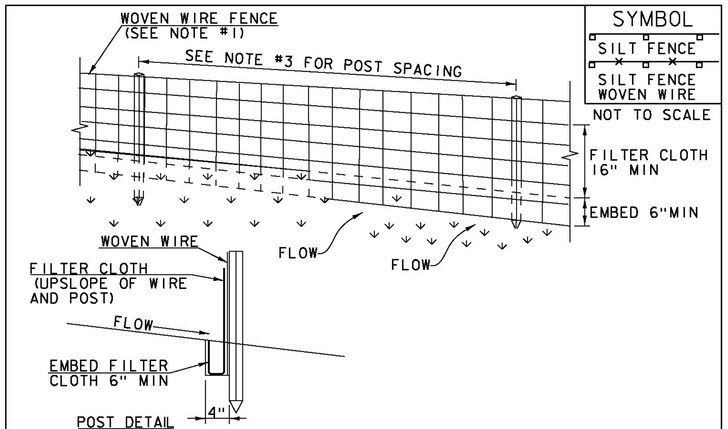
ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC ORIGINALLY DEVELOPED BY USDA-NRCS VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

STABILIZED CONSTRUCTION ENTRANCE

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 FOR VEHICLE TRACKING PAD (PAY ITEM 653.35) OR AS SPECIFIED IN THE CONTRACT.

REVISIONS	
MARCH 24, 2008	WHF
JANUARY 13, 2009	WHF



SYMBOL

SILT FENCE

SILT FENCE WOVEN WIRE

NOT TO SCALE

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, MIRAFI100X, 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).

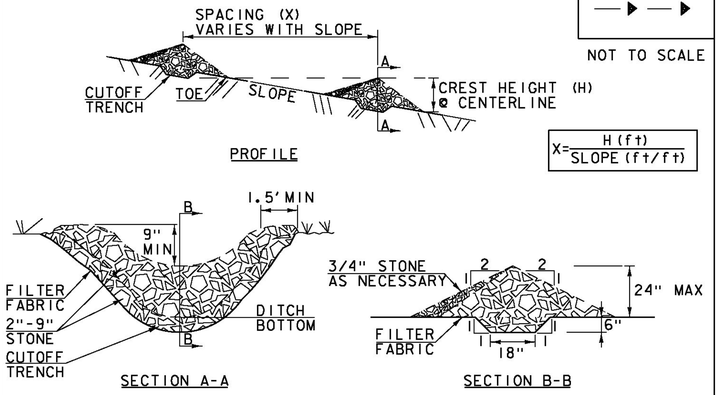
REVISIONS	
MARCH 21, 2008	WHF
DECEMBER 11, 2008	WHF
JANUARY 13, 2009	WHF

PROJECT NAME: SHARON
PROJECT NUMBER: ER STP 0147(20)

FILE NAME: z12c410ESPC_Narrative.dgn PLOT DATE: 3/31/2015
PROJECT LEADER: J. TUCKER DRAWN BY: B. MACK
DESIGNED BY: B. BRESLEND CHECKED BY: E. ANDREWS
EPSC DETAIL SHEET 1 SHEET 47 OF 66

SYMBOL

NOT TO SCALE



CONSTRUCTION SPECIFICATIONS

1. STONE WILL BE PLACED ON A FILTER FABRIC FOUNDATION.
2. CHECK DAMS SHALL BE SPACED SO THAT THE ELEVATION OF THE CREST OF THE DOWNSTREAM DAM IS AT THE SAME ELEVATION AS THE TOE OF THE UPSTREAM DAM.
3. 3/4" FILTERING STONE MAY BE ADDED TO THE FACE OF THE CHECK DAM AS NECESSARY.
4. EXTEND THE STONE A MINIMUM OF 1.5' BEYOND THE DITCH BANKS TO PREVENT CUTTING AROUND THE DAM.
5. PROTECT CHANNEL DOWNSTREAM OF THE LOWEST CHECK DAM FROM SCOUR AND EROSION WITH STONE OR LINER AS APPROPRIATE.
6. ENSURE THAT CHANNEL APPURTENANCES SUCH AS CULVERT ENTRANCES BELOW CHECK DAMS ARE NOT SUBJECT TO DAMAGE OR BLOCKAGE FROM DISPLACED STONE.
7. MAXIMUM DRAINAGE AREA 2 ACRES.

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

CHECK DAM

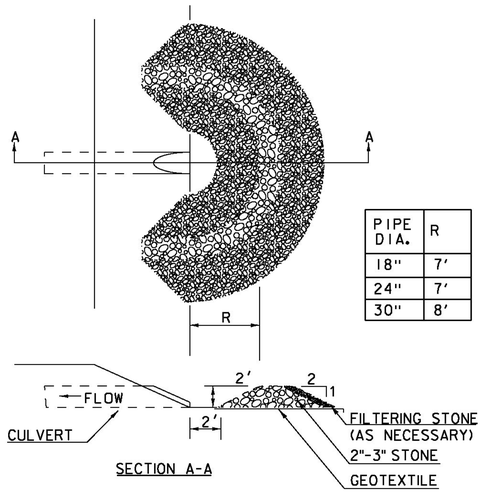
NOTES:
REFER TO "THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL -2006- " FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.

THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 653 FOR TEMPORARY STONE CHECK DAM, TYPE I (PAY ITEM 653.25)

REVISIONS	
MARCH 21, 2008	WHF
JANUARY 8, 2009	WHF

SYMBOL

NOT TO SCALE



CONSTRUCTION SPECIFICATIONS

1. USE 2" TO 3" STONE. FILTERING STONE SHALL BE 3/4".
2. PLACE STONE OVER GEOTEXTILE.
3.
4. THE CHECK DAM(S) SHALL BE FLATTENED AND GRADED IN A MANNER WHICH PROTECTS THE AREA FROM EROSION AND CHANNEL BLOCKAGE . (GEOTEXTILE MUST BE REMOVED).
5. THE GEOTEXTILE MUST BE DISPOSED OF APPROPRIATELY.
6. THE AREA CONTRIBUTING TO THE CHECK DAM SHALL NOT EXCEED 4 ACRES.

ADAPTED FROM DETAILS PROVIDED BY: ILLINOIS USDA-NRCS
ORIGINALLY DEVELOPED BY USDA-NRCS

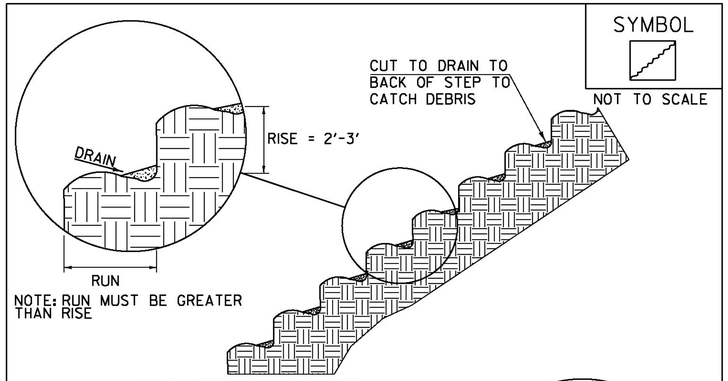
PIPE INLET PROTECTION

THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 653 FOR INLET PROTECTION DEVICE, TYPE I (PAY ITEM 653.40).

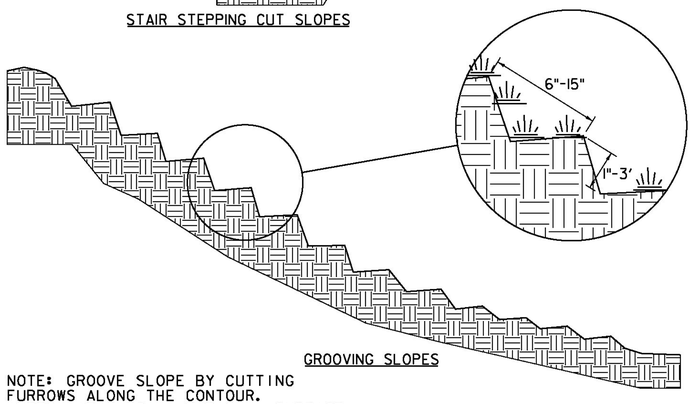
REVISIONS	
MARCH 6, 2008	WHF
JANUARY 13, 2009	WHF

SYMBOL

NOT TO SCALE



STAIR STEPPING CUT SLOPES



GROOVING SLOPES

NOTE: GROOVE SLOPE BY CUTTING FURROWS ALONG THE CONTOUR. IRREGULARITIES IN THE SOIL SURFACE CATCH RAINWATER AND RETAIN LIME, FERTILIZER AND SEED.

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.

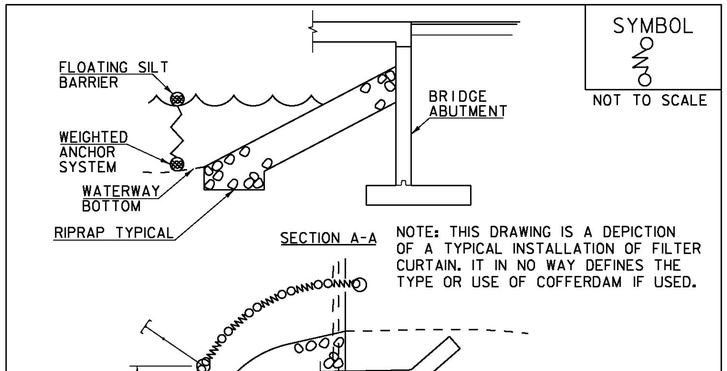
THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT

REVISIONS	
APRIL 1, 2008	WHF
JANUARY 13, 2009	WHF

PROJECT NAME: SHARON
PROJECT NUMBER: ER STP 0147(20)

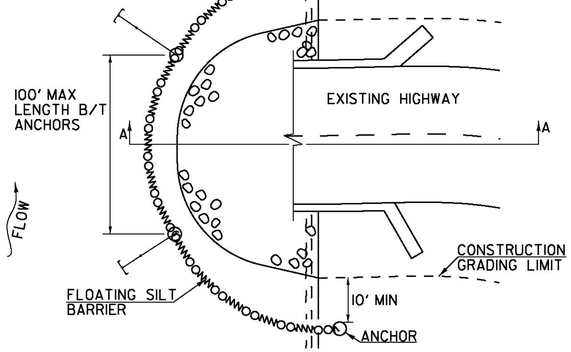
FILE NAME: z12c410ESPC_Narrative.dgn
PROJECT LEADER: J. TUCKER
DESIGNED BY: B. BRESLEND
EPSC DETAIL SHEET 2

PLOT DATE: 3/31/2015
DRAWN BY: B. MACK
CHECKED BY: E. ANDREWS
SHEET 48 OF 66



SECTION A-A

NOTE: THIS DRAWING IS A DEPICTION OF A TYPICAL INSTALLATION OF FILTER CURTAIN. IT IN NO WAY DEFINES THE TYPE OR USE OF COFFERDAM IF USED.



CONSTRUCTION SPECIFICATIONS

1. FILTER CURTAIN SHALL NOT BE PLACED ACROSS A FLOWING WATERWAY, OR IN A WATERWAY WITH STREAM VELOCITIES GREATER THAN 1.5 FEET/SECOND.
2. MAXIMUM 100' LENGTH BETWEEN ANCHORS.
3. LAST SECTION SHALL TERMINATE A MINIMUM OF 10' BEYOND LIMIT OF DISTURBANCE.
4. THE WEIGHTED ANCHOR SYSTEM SHALL BE A TYPE WHICH ALLOWS THE CURTAIN TO CONFORM TO THE BOTTOM OF THE WATERWAY.
5. THE CURTAIN SHALL BE REMOVED BY SLOWLY PULLING TOWARD THE SHORE MINIMIZING THE ESCAPE OF SEDIMENTS INTO WATERWAY.

FILTER CURTAIN

THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 649 FOR GEOTEXTILE FOR FILTER CURTAIN (PAY ITEM 649.61).

REVISIONS	
APRIL 1, 2008	WHF
JANUARY 13, 2009	WHF
SEPTEMBER 4, 2009	WHF

PROJECT NAME: SHARON
PROJECT NUMBER: ER STP 0147(20)

FILE NAME: z12c410ESPC_Narrative.dgn
PROJECT LEADER: J. TUCKER
DESIGNED BY: B. BRESLEND
EPSC DETAIL SHEET 3

PLOT DATE: 3/31/2015
DRAWN BY: B. MACK
CHECKED BY: E. ANDREWS
SHEET 49 OF 66

STATE OF VERMONT
AGENCY OF TRANSPORTATION

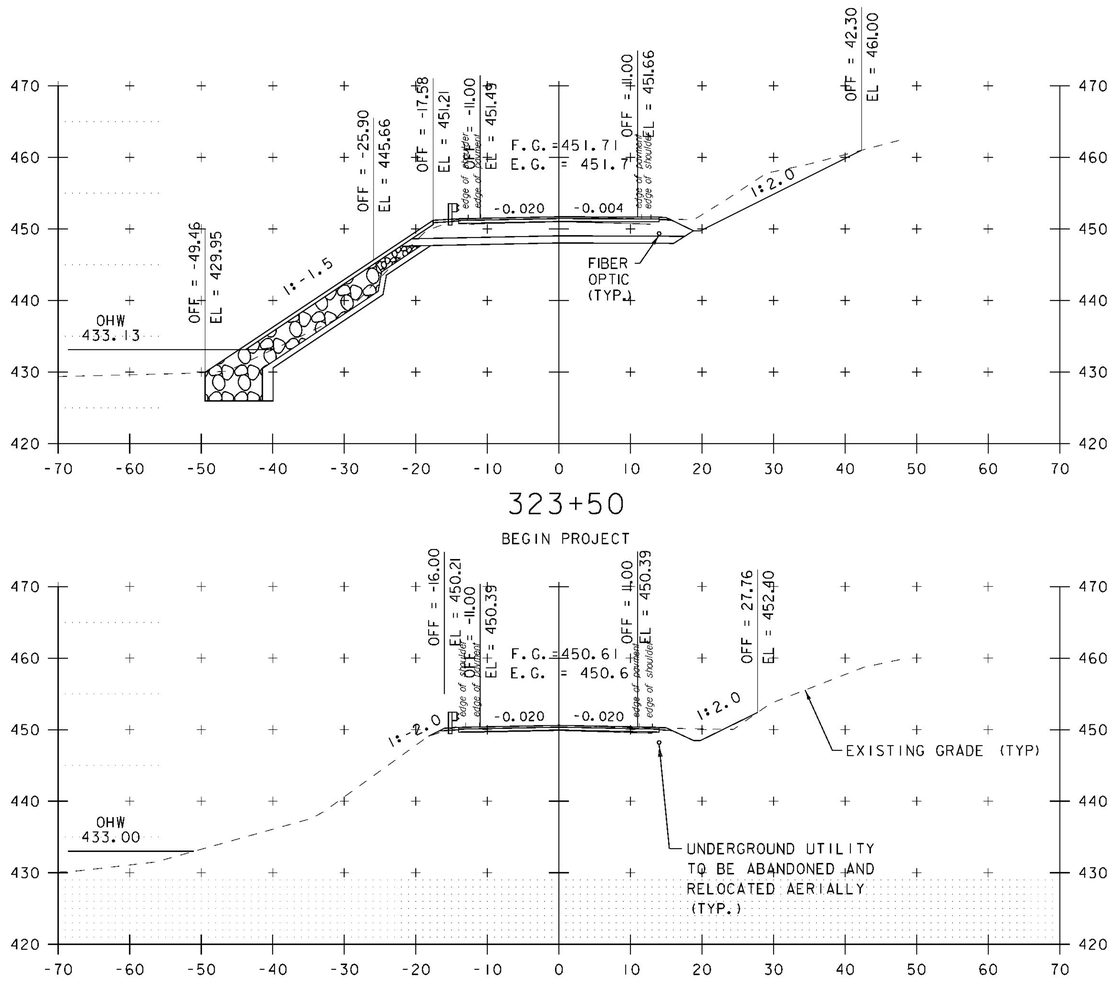
TRAFFIC SIGN SUMMARY SHEET

MILEMARKER, STATION, OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS EA	WIDTH (in)	HEIGHT (in)	NEW & SALVAGED SIGNS "A"	"B"	SALV SIGN	SALV TIS	EXIST POST RETAIN	SALVAGE	NEW SIGN POSTS NO. OF POSTS	~~FLANGED CHANNEL~~ REMOVING SIGNS ~~lb/ft~~ ~~1.12~~	~~2.0~~	~~3.0~~	SQUARE STEEL (in) 1.75 lb/ft 1.88	2.0 lb/ft 2.42	2.5 lb/ft 3.35	ANCHOR	SLEEVE	TUBULAR ALUMINUM Ø (in) 3.0 lb/ft 1.3	4.0 lb/ft 1.7	4.0 MOD lb/ft 1.7	TUBULAR STEEL Ø (in) FOUNDATION	3.0 lb/ft 7.6	3.5 lb/ft 9.0	4.0 lb/ft 10.8	5.0 lb/ft 14.6	W-SHAPE STEEL FTG. SIZE 24"	30"	WEIGHT	POST SIZE	SIGN FRAME REQUIRED	REMARKS SHSM = FHWA STANDARD HIGHWAY SIGNS AND MARKINGS BOOK	SIGN DETAIL DETAIL IN SHSM	DETAIL ON DWG. NUMBER	STD. SHEET NUMBER
STA. 325+25 RT			30	30			1				1					X 13.0		X																MOUNT SALVAGED SIGN ON POST			
STA. 326+18 RT		1	48	24	8.00						2		1			X 21.0		X																WI-6R			SHSM
STA. 326+28 RT		1	48	24	8.00						2		1			X 22.5		X																WI-6L			SHSM
STA. 327+36 RT	0140 1417 0620	1	6	10	0.42						1		1		X 8.75			X																VD-700			T-44
STA. 331+75 LT		1	30	30	6.25						1					X 13.5		X																WI-2R			SHSM
FINAL POST LENGTHS ARE TO BE DETERMINED IN THE FIELD. POST SIZES ARE COMPUTED BA. SANZED ON INFORMATION FURNISHED ON THE STANDARD SHEETS AND THE VTRANS "SIGN POST DESIGN GUIDELINE."	SUBTOTAL	22.67		1							~~LF~~	~~LF~~ 3 EA	~~LF~~	LF ~~10~~ 8.75	LF ~~90~~ 70.0	LF ~~100~~ -		EA.	LB	LB	LB		LB	LB	LB	LB									
	ROUNDING	0.33																																			
	TOTALS	SF 23.00	SF	EA.	SF		~~LF~~ 3 EA				LF ~~100~~ 78.75								LB			EA.	LB				EA.	EA.	LB								

PROJECT NAME: SHARON
PROJECT NUMBER: ER STP 0147(20)

FILE NAME: z12c410.dgn
PROJECT LEADER: J. TUCKER
DESIGNED BY: B. BRESLEND
TRAFFIC SIGN SUMMARY SHEET

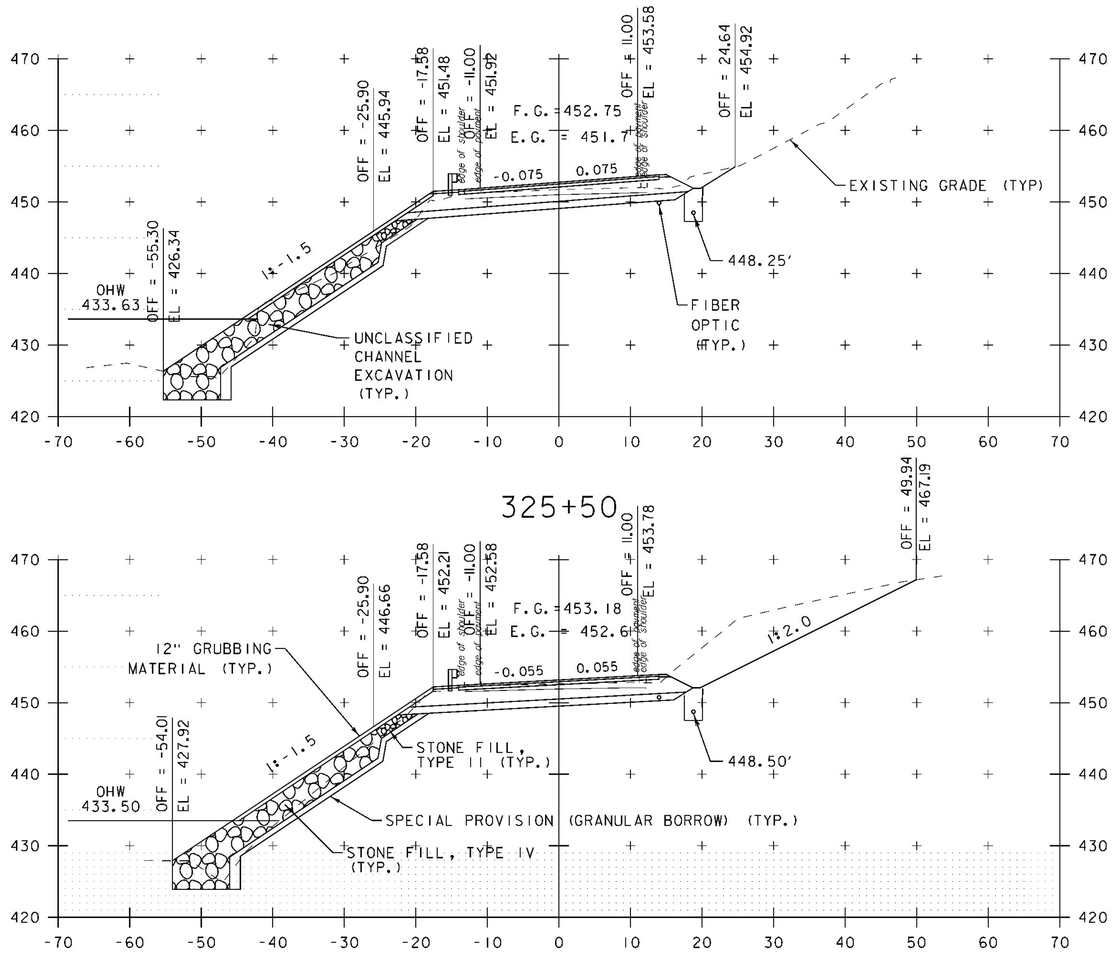
PLOT DATE: 3/31/2015
DRAWN BY: B. MACK
CHECKED BY: A. SANZ
SHEET 50 OF 66

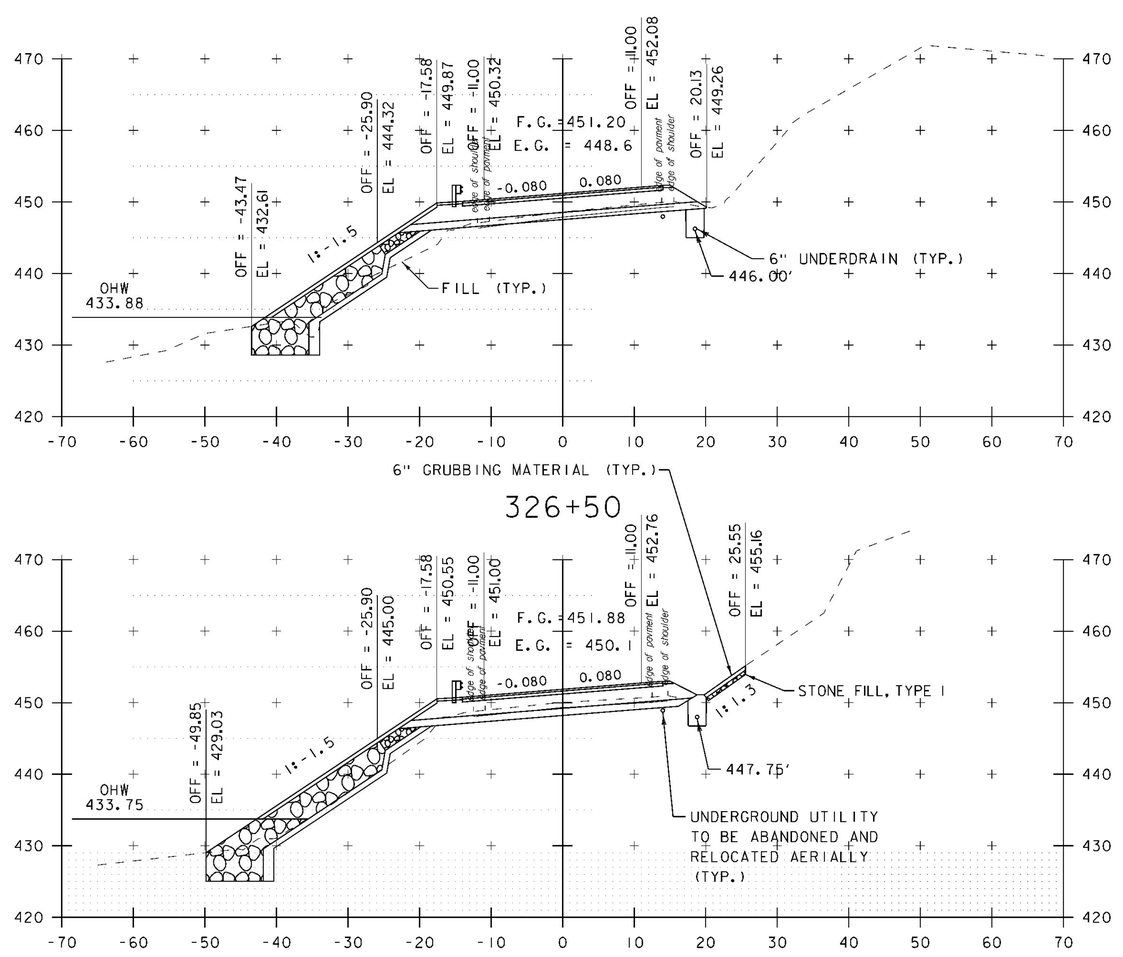


323+00 - 324+50

0 10 20
SCALE IN FEET

PROJECT NAME: SHARON	
PROJECT NUMBER: ER STP 0147(20)	
FILE NAME: z12c410xs.dgn	PLOT DATE: 3/31/2015
PROJECT LEADER: J. TUCKER	DRAWN BY: B. MACK
DESIGNED BY: B. BRESLEND	CHECKED BY: A. SANZ
VT 14 CROSS SECTION SHEET 1	SHEET 51 OF 66





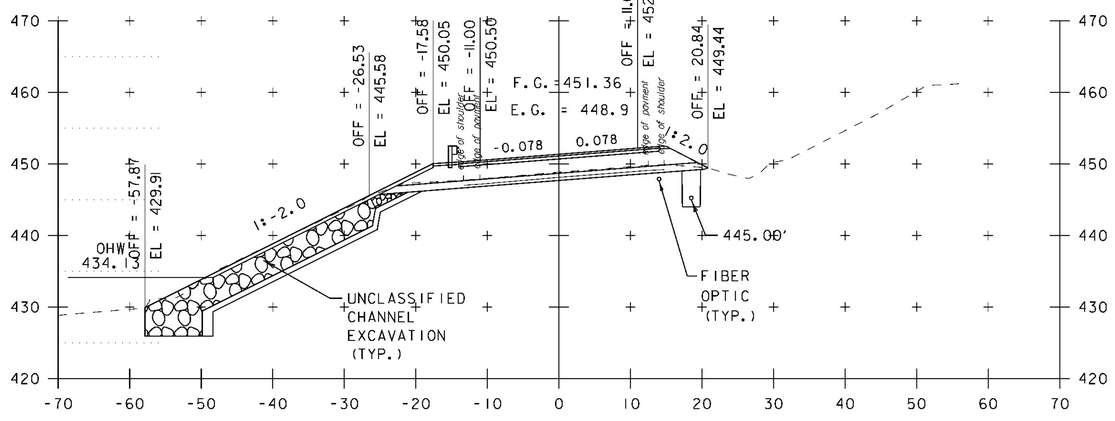
0 10 20
SCALE IN FEET

325+00 - 326+50

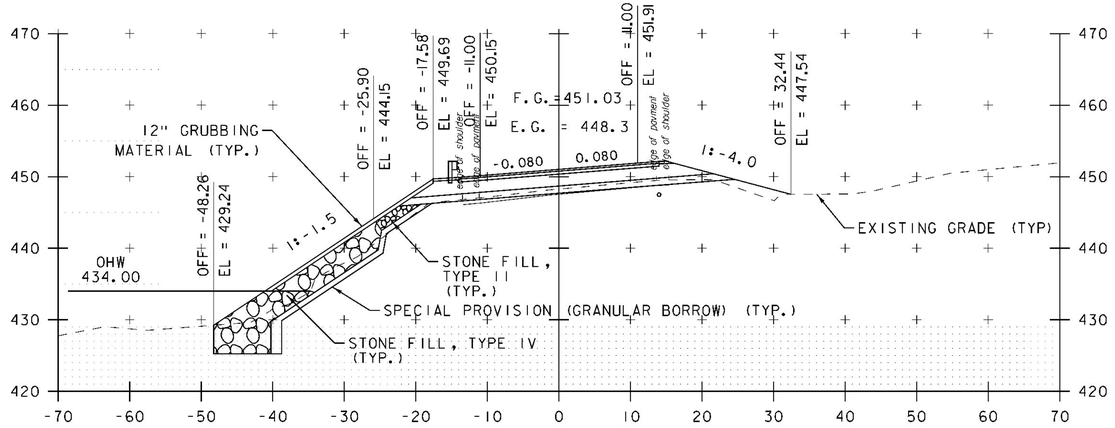
PROJECT NAME: SHARON
PROJECT NUMBER: ER STP 0147(20)

FILE NAME:z12c410xs.dgn
PROJECT LEADER: J. TUCKER
DESIGNED BY: B. BRESLEND
VT 14 CROSS SECTION SHEET 2

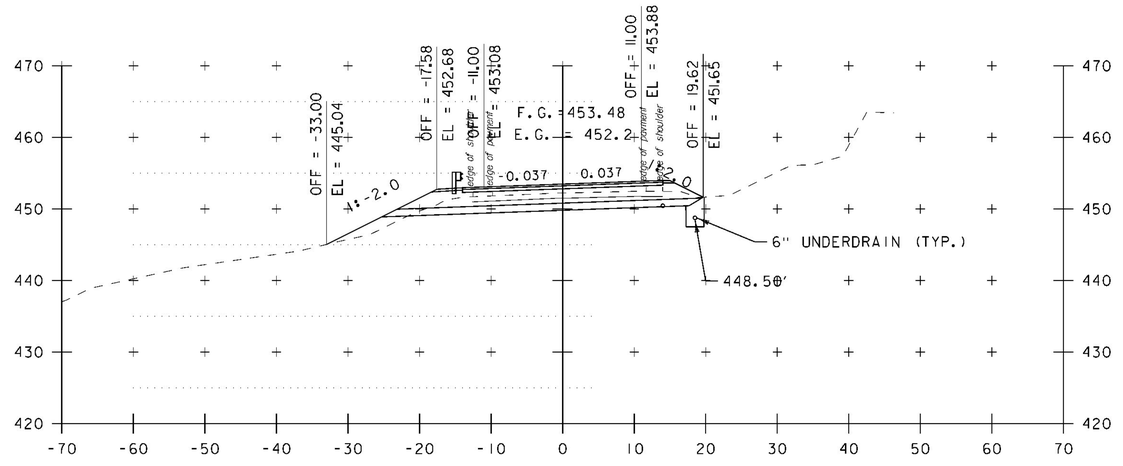
PLOT DATE: 3/31/2015
DRAWN BY: B. MACK
CHECKED BY: A. SANZ
SHEET 52 OF 66



327+50



327+00



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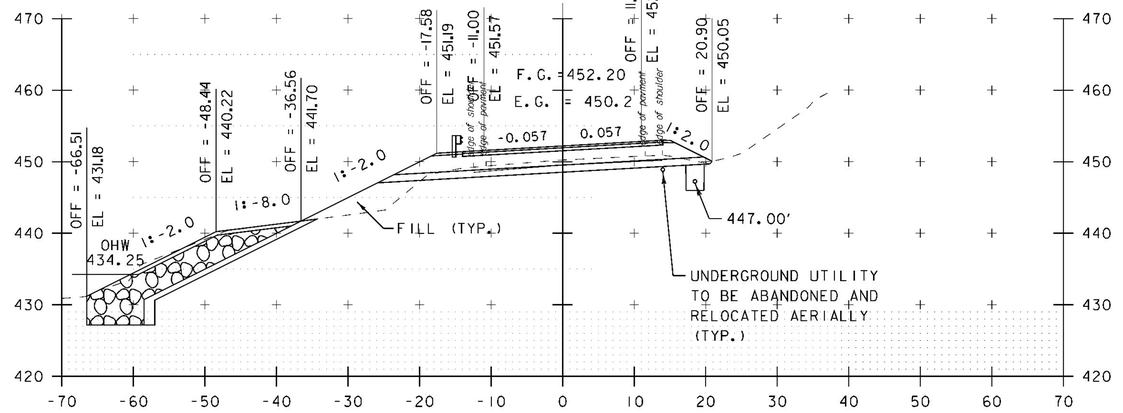


328+00

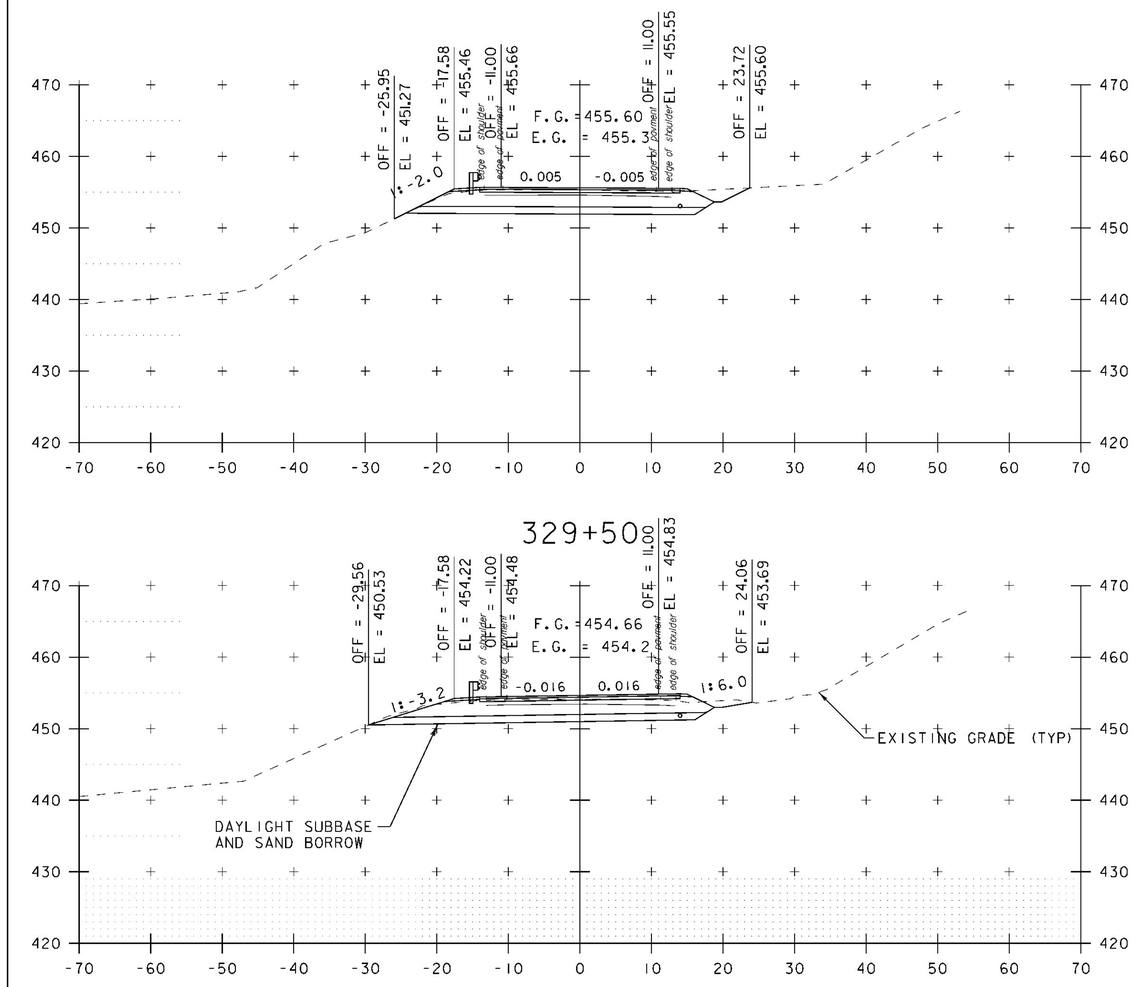
0 10 20
SCALE IN FEET

327+00 - 328+50

PROJECT NAME: SHARON
PROJECT NUMBER: ER STP 0147(20)

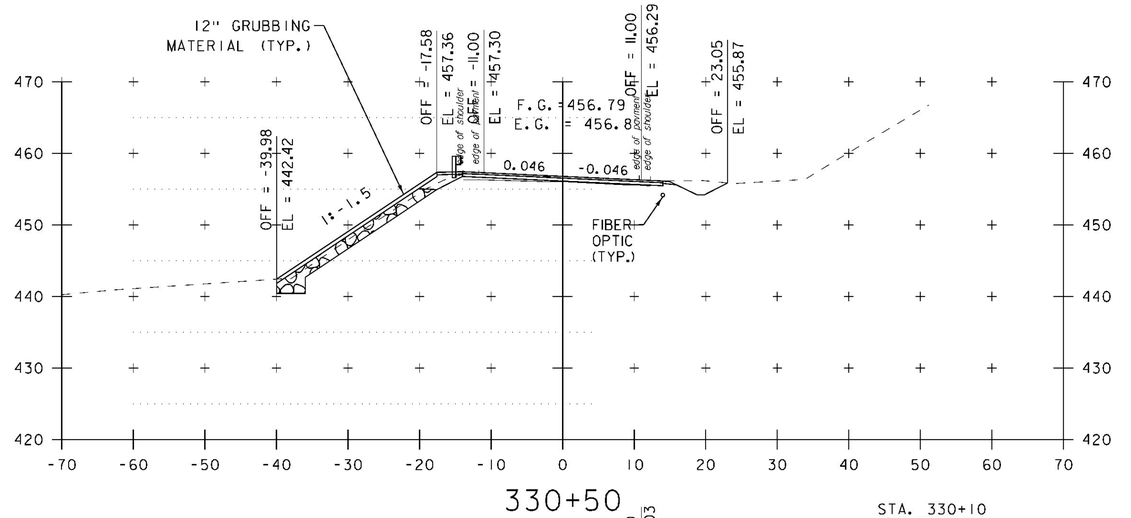
FILE NAME: z12c410xs.dgn
PROJECT LEADER: J. TUCKER
DESIGNED BY: B. BRESLEND
CROSS SECTION SHEET 3

PLOT DATE: 3/31/2015
DRAWN BY: B. MACK
CHECKED BY: A. SANZ
SHEET 53 OF 66



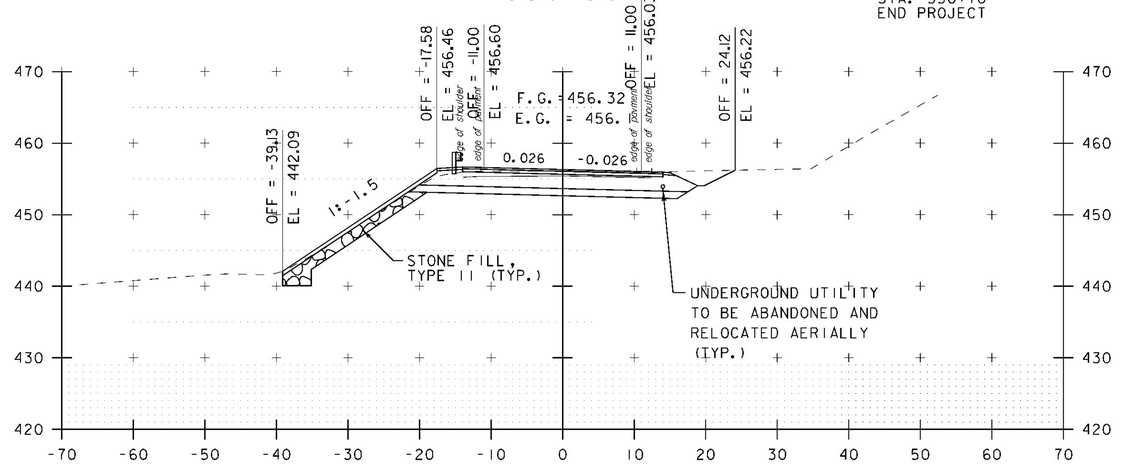
329+50

329+00



330+50

STA. 330+10
END PROJECT



330+00

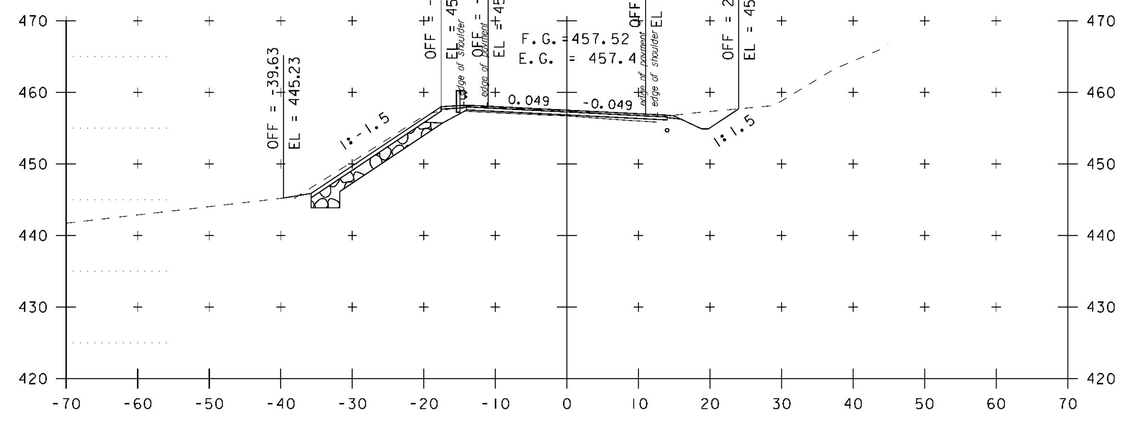
329+00 - 330+50

0 10 20
SCALE IN FEET

PROJECT NAME: SHARON
PROJECT NUMBER: ER STP 0147(20)

FILE NAME:z12c410xs.dgn
PROJECT LEADER: J. TUCKER
DESIGNED BY: B. BRESLEND
VT 14 CROSS SECTION SHEET 4

PLOT DATE: 3/31/2015
DRAWN BY: B. MACK
CHECKED BY: A. SANZ
SHEET 54 OF 66



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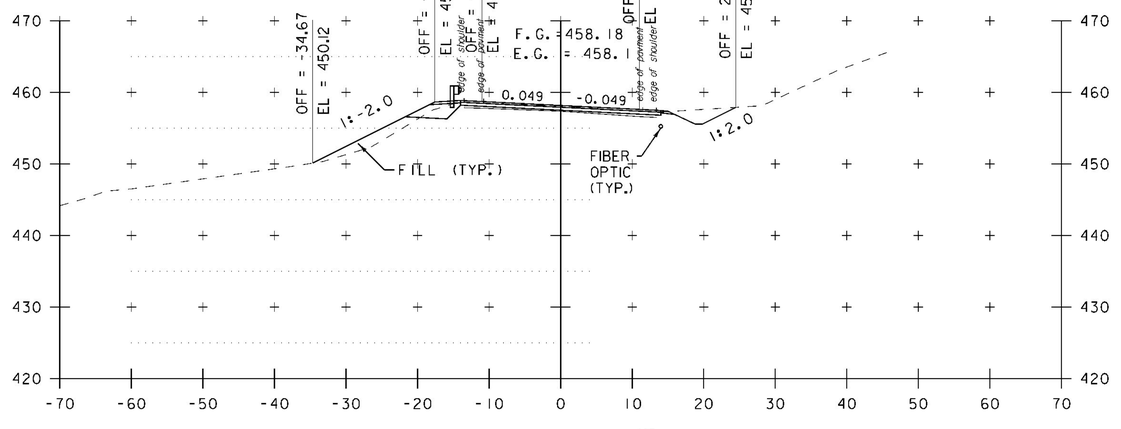

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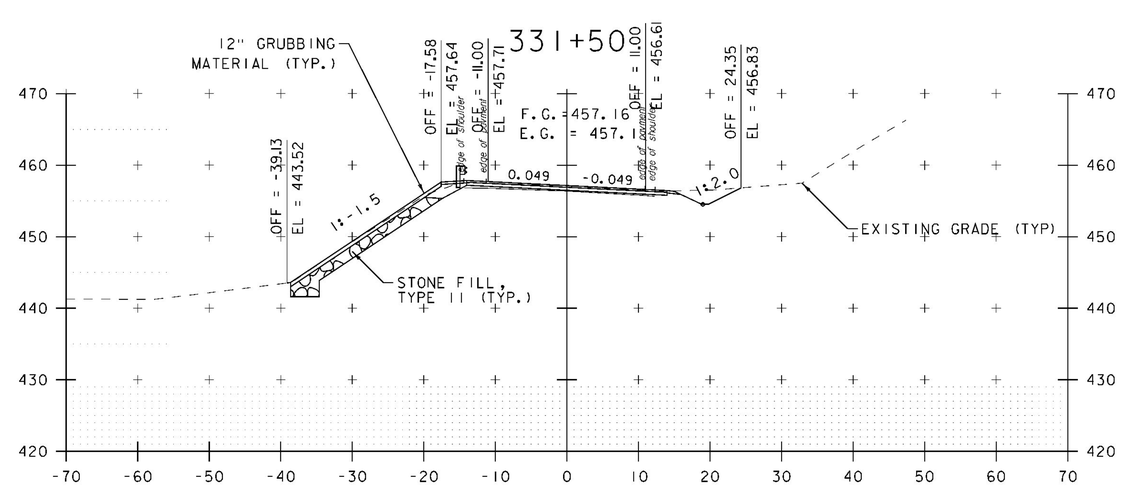

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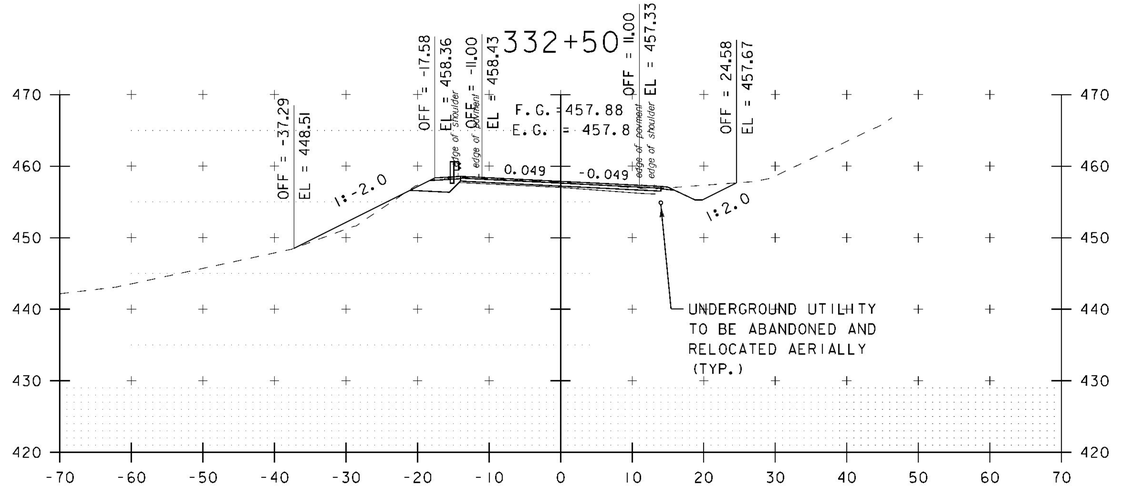


332+00

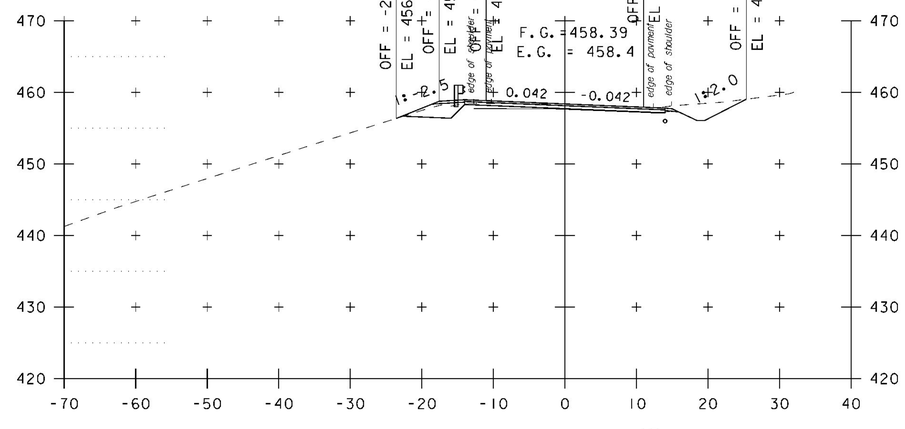
331+00 - 332+50

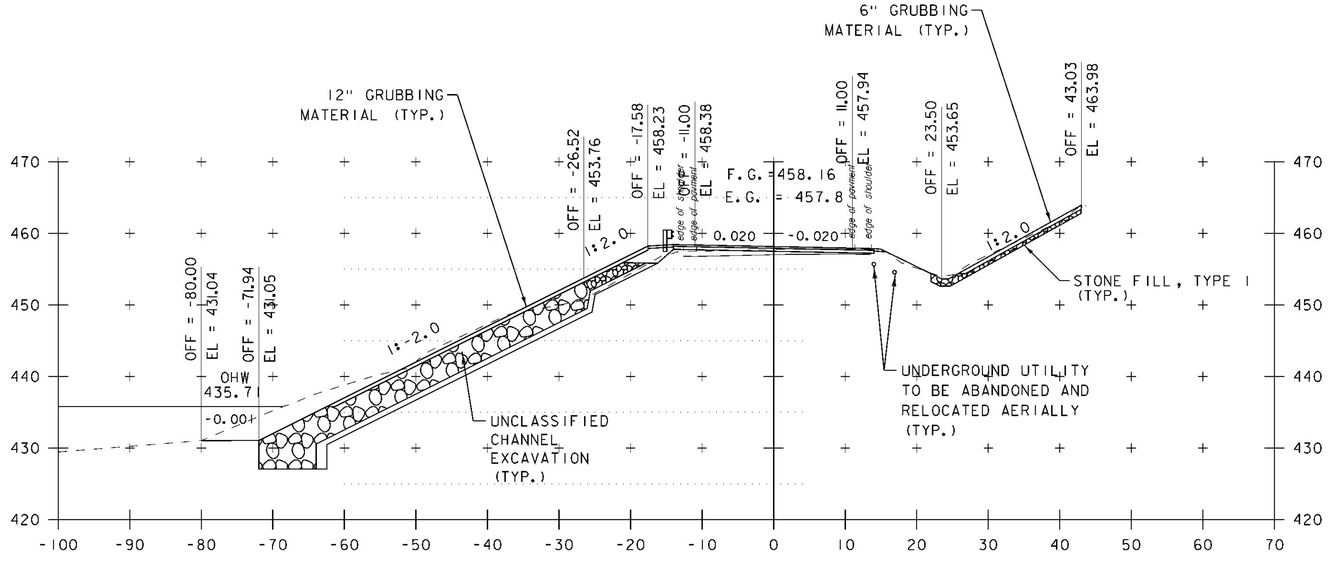
0 10 20
SCALE IN FEET

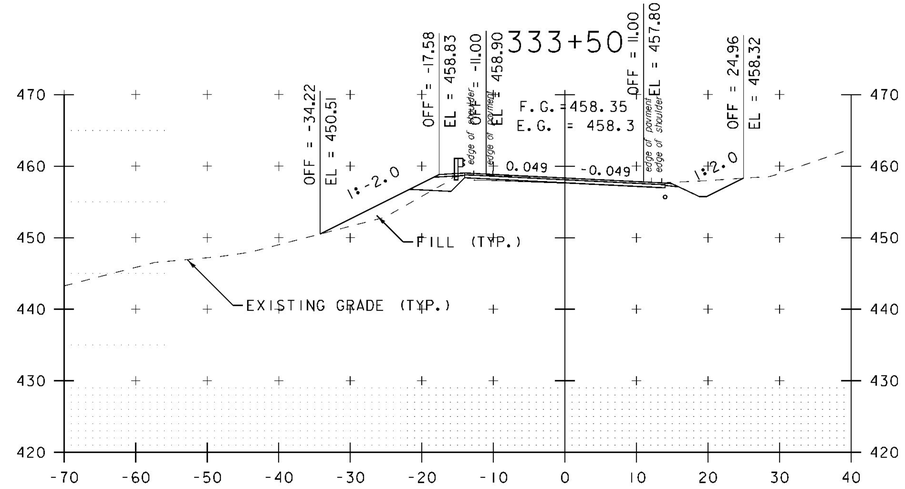
PROJECT NAME: SHARON
PROJECT NUMBER: ER STP 0147(20)

FILE NAME: z12c410xs.dgn
PROJECT LEADER: J. TUCKER
DESIGNED BY: B. BRESLEND
VT 14 CROSS SECTION SHEET 5

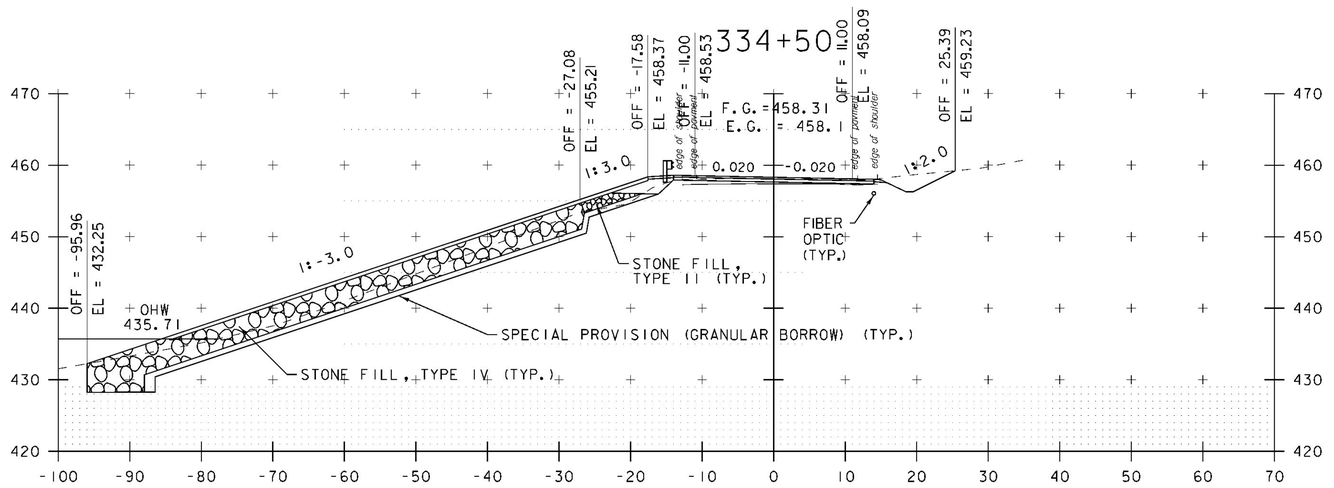
PLOT DATE: 3/31/2015
DRAWN BY: B. MACK
CHECKED BY: A. SANZ
SHEET 55 OF 66







333+00



334+00

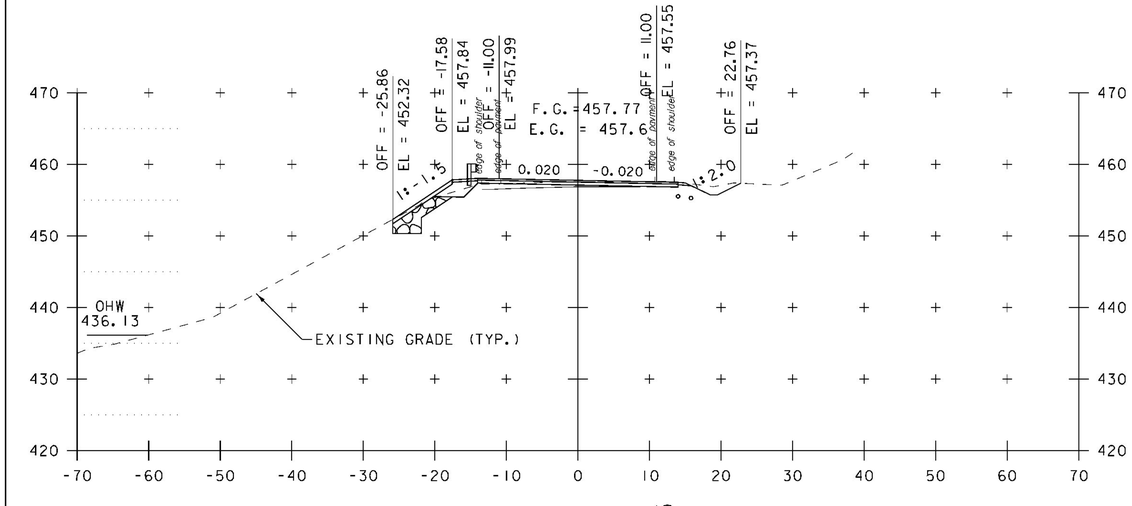
0 10 20
SCALE IN FEET

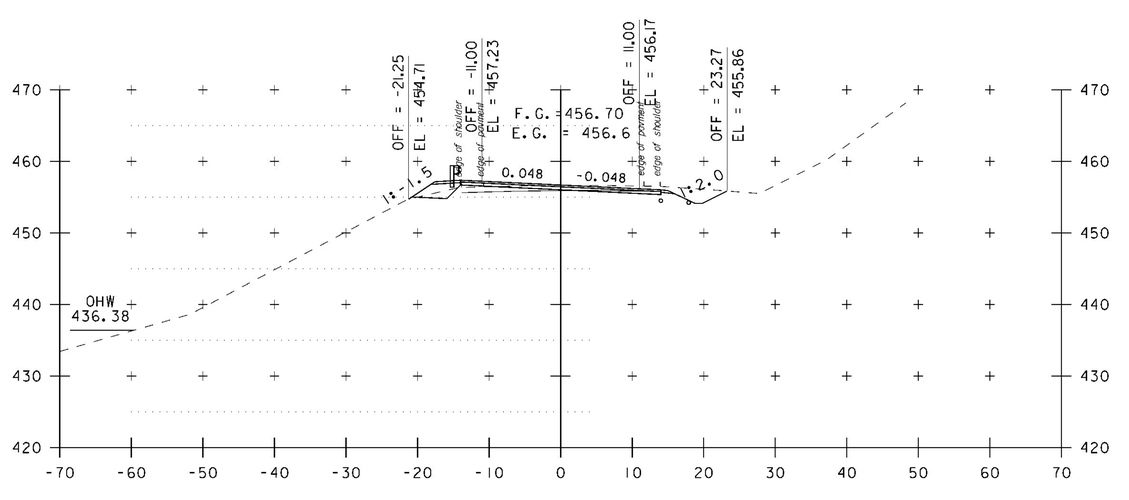
333+00 - 334+50

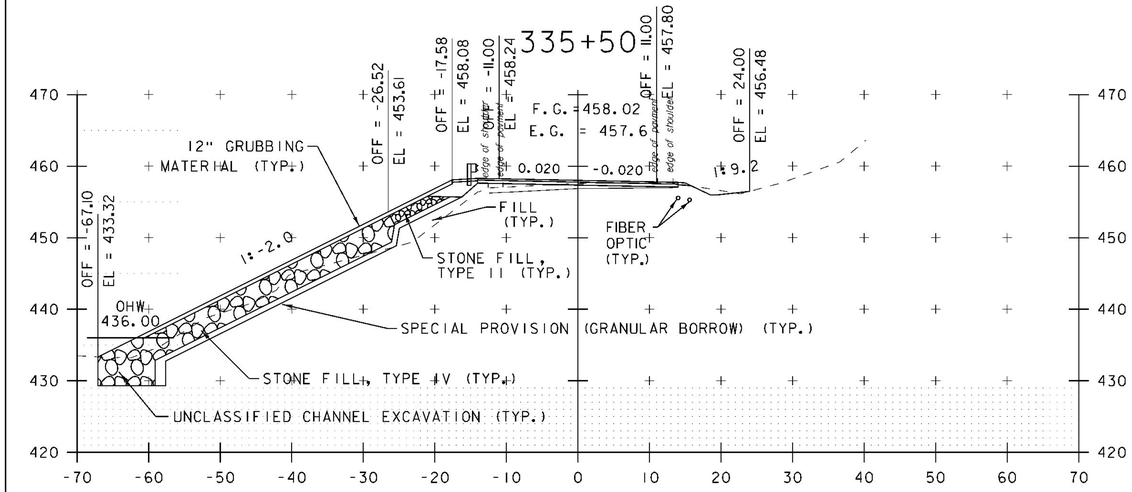
PROJECT NAME: SHARON
PROJECT NUMBER: ER STP 0147(20)

FILE NAME: z12c410xs.dgn
PROJECT LEADER: J. TUCKER
DESIGNED BY: B. BRESLEND
VT 14 CROSS SECTION SHEET 6

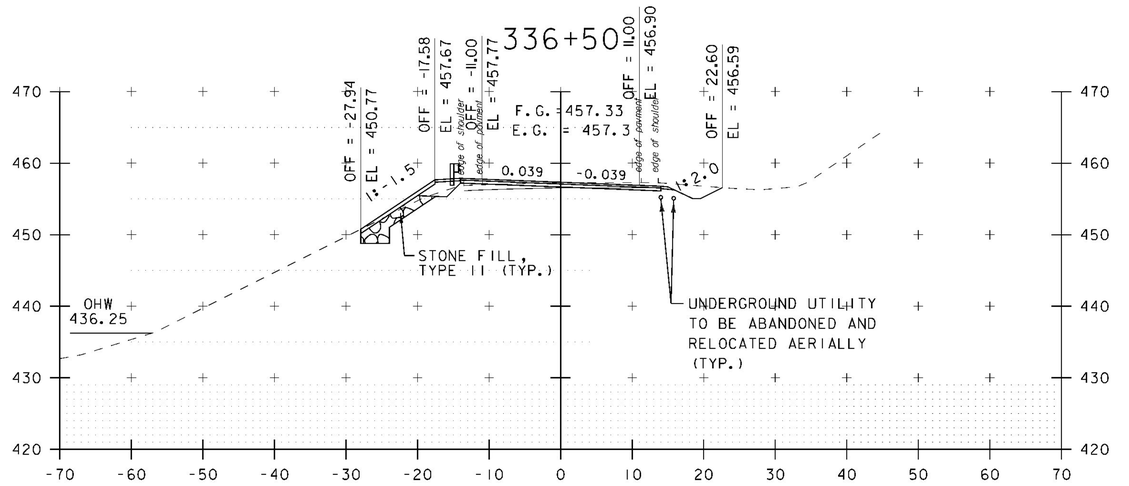
PLOT DATE: 3/31/2015
DRAWN BY: B. MACK
CHECKED BY: A. SANZ
SHEET 56 OF 66







335+00



336+00

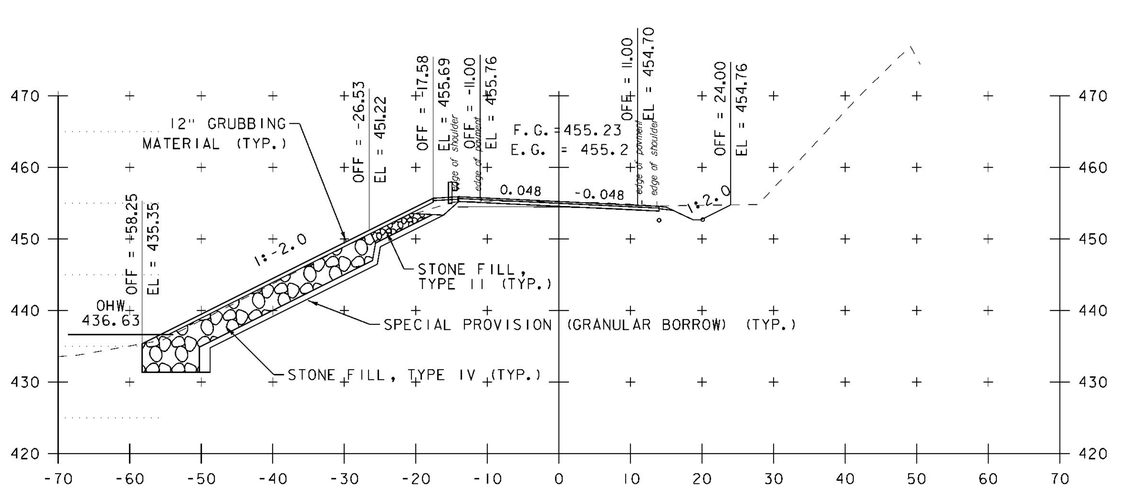
335+00 - 336+50

0 10 20
SCALE IN FEET

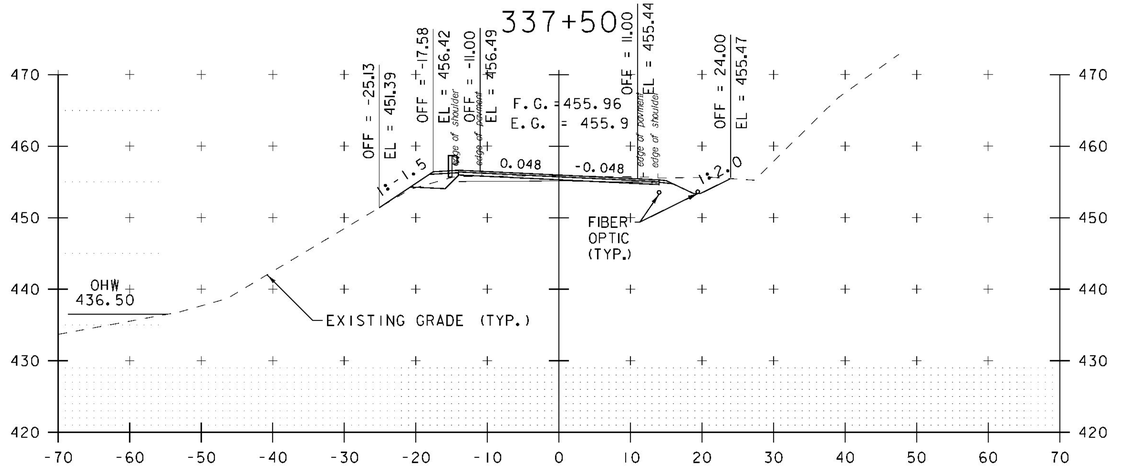
PROJECT NAME: SHARON
PROJECT NUMBER: ER STP 0147(20)

FILE NAME: z12c410xs.dgn
PROJECT LEADER: J. TUCKER
DESIGNED BY: B. BRESLEND
VT 14 CROSS SECTION SHEET 7

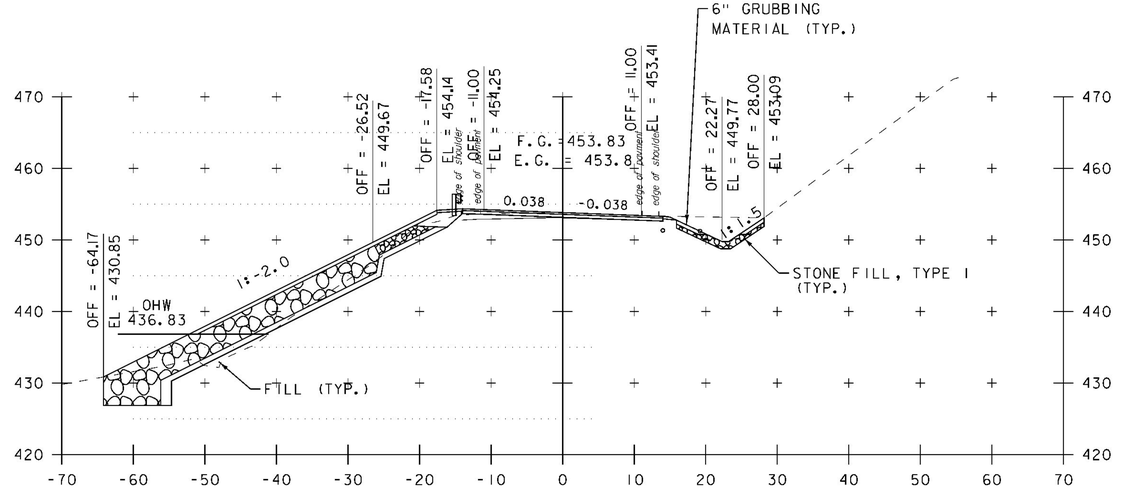
PLOT DATE: 3/31/2015
DRAWN BY: B. MACK
CHECKED BY: A. SANZ
SHEET 57 OF 66



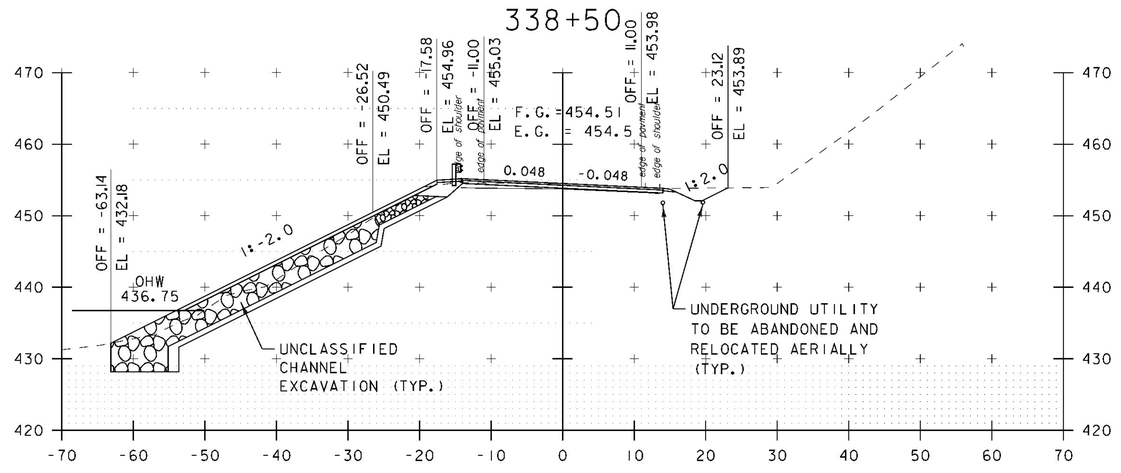
337+50



337+00



338+50



338+00

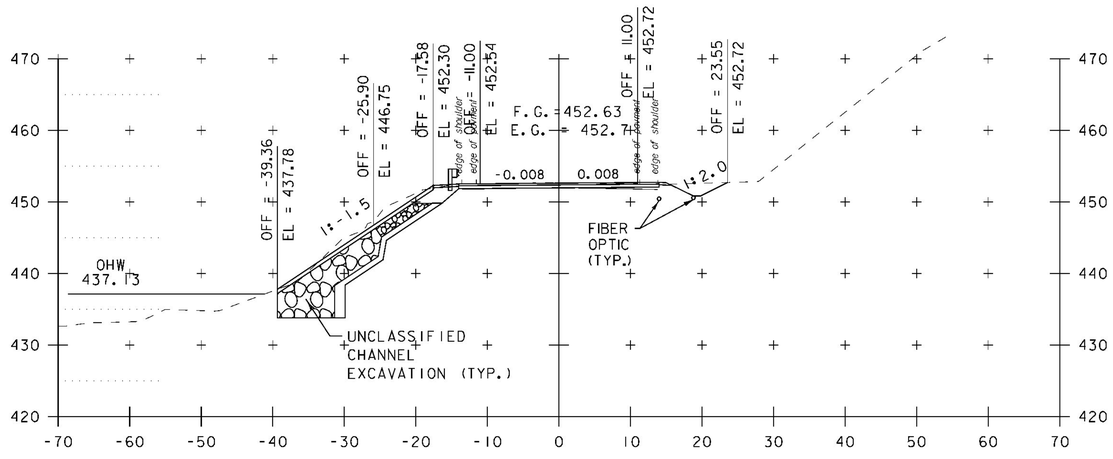
0 10 20
SCALE IN FEET

337+00 - 338+50

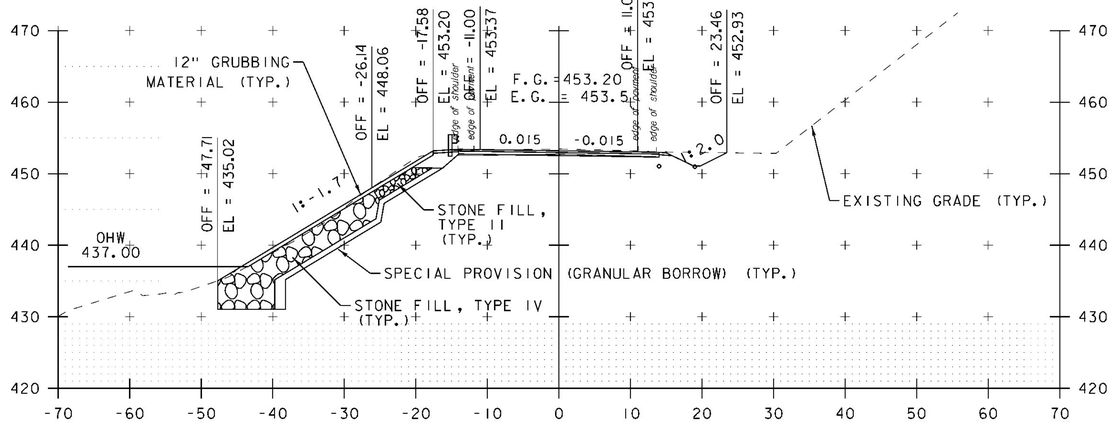
PROJECT NAME: SHARON
PROJECT NUMBER: ER STP 0147(20)

FILE NAME:z12c410xs.dgn
PROJECT LEADER: J. TUCKER
DESIGNED BY: B. BRESLEND
VT 14 CROSS SECTION SHEET 8

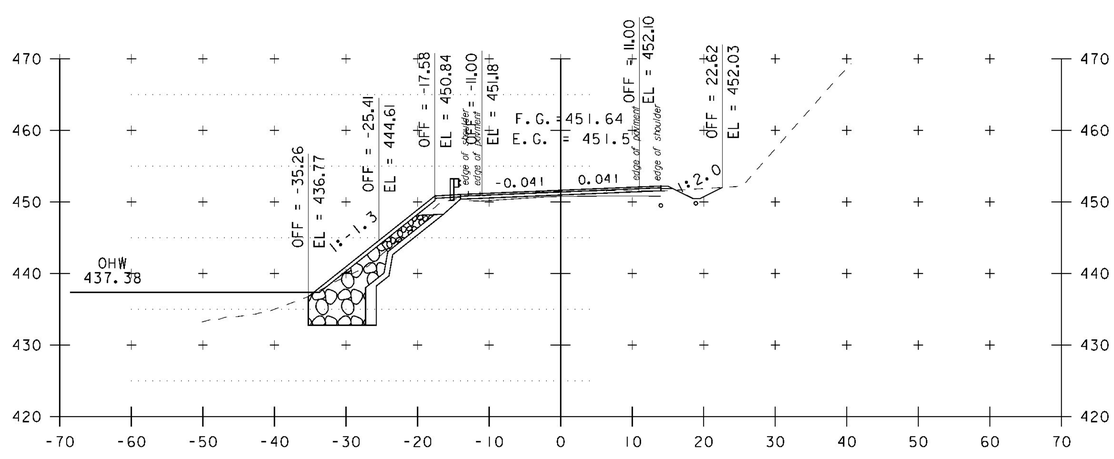
PLOT DATE: 3/31/2015
DRAWN BY: B. MACK
CHECKED BY: A. SANZ
SHEET 58 OF 66



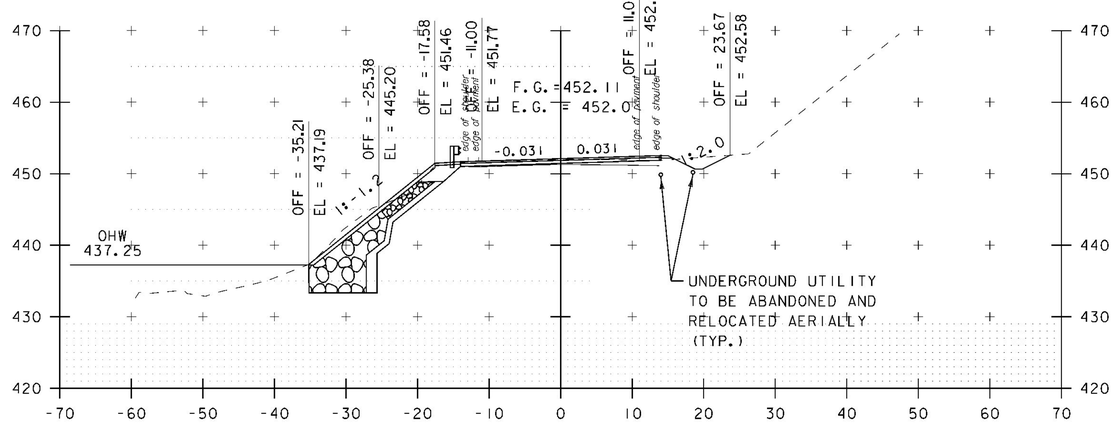
339+50



339+00



340+50



340+00

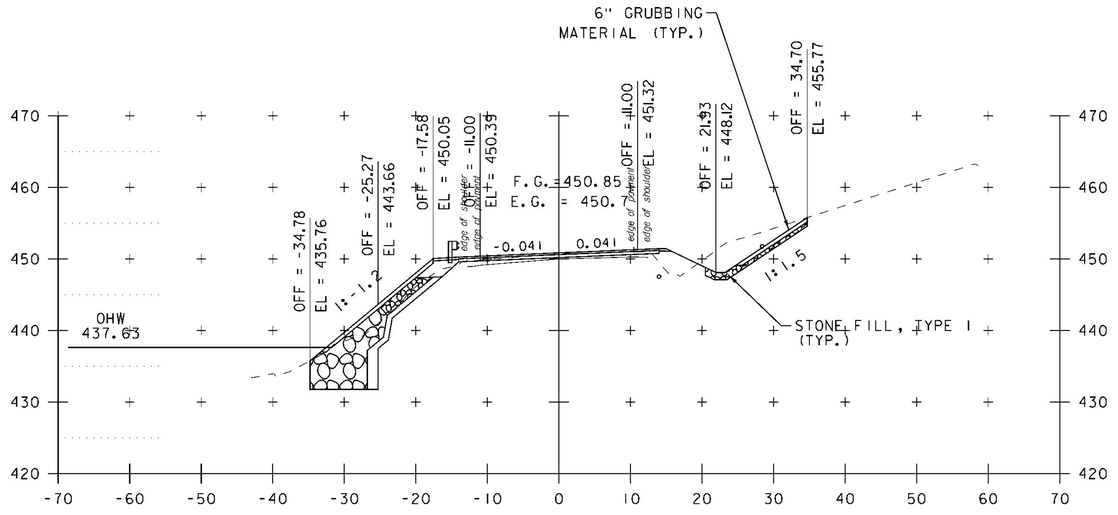
0 10 20
SCALE IN FEET

339+00 - 340+50

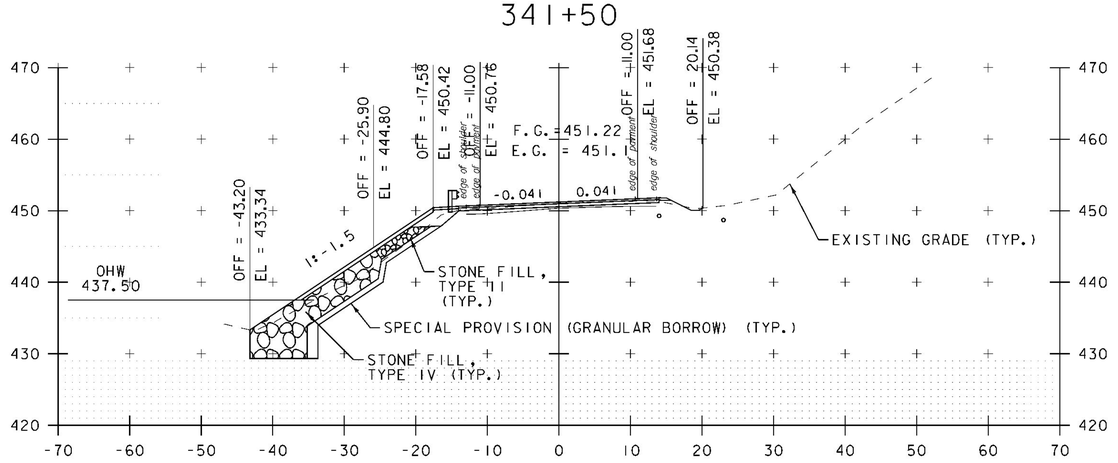
PROJECT NAME: SHARON
PROJECT NUMBER: ER STP 0147(20)

FILE NAME:z12c410xs.dgn
PROJECT LEADER: J. TUCKER
DESIGNED BY: B. BRESLEND
VT 14 CROSS SECTION SHEET 9

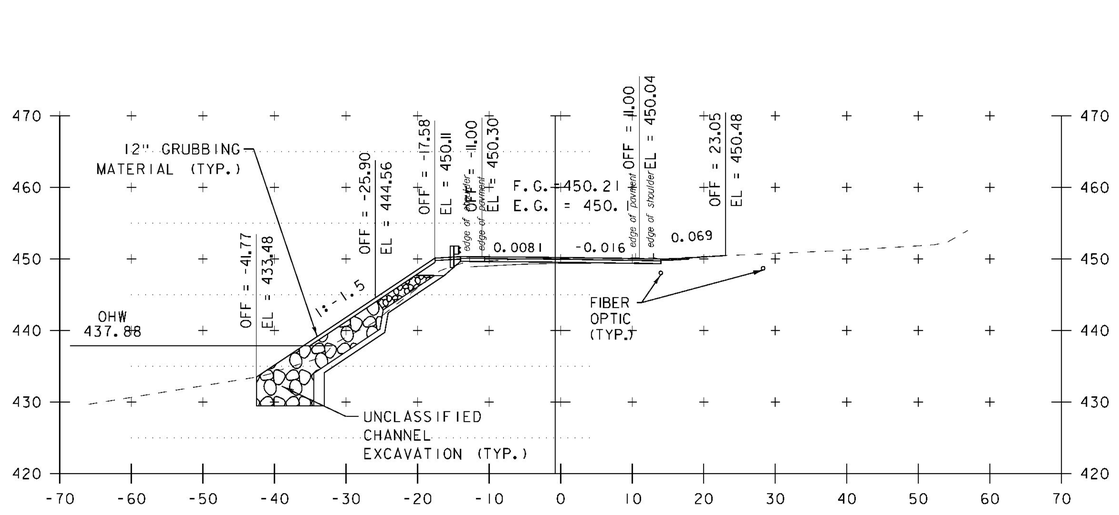
PLOT DATE: 3/31/2015
DRAWN BY: B. MACK
CHECKED BY: A. SANZ
SHEET 59 OF 66



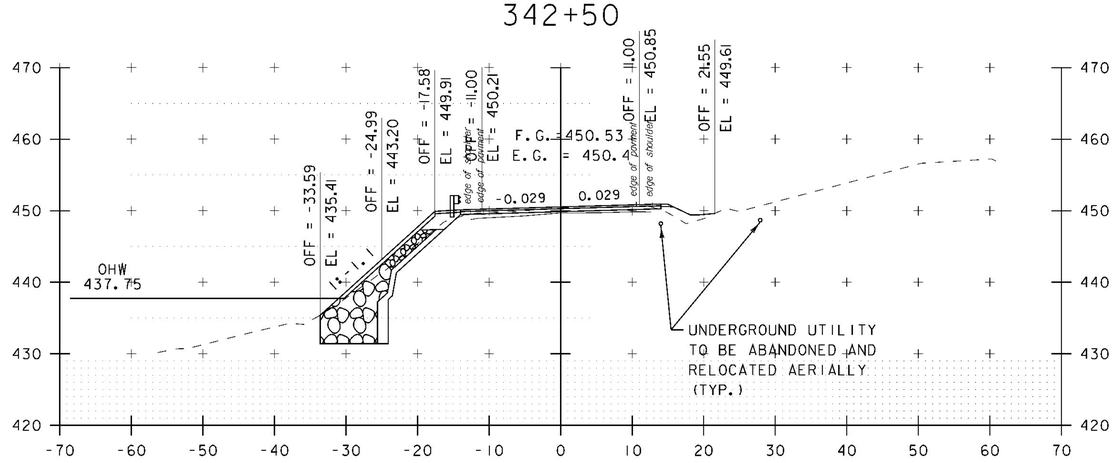
341+50



341+00



342+50



342+00

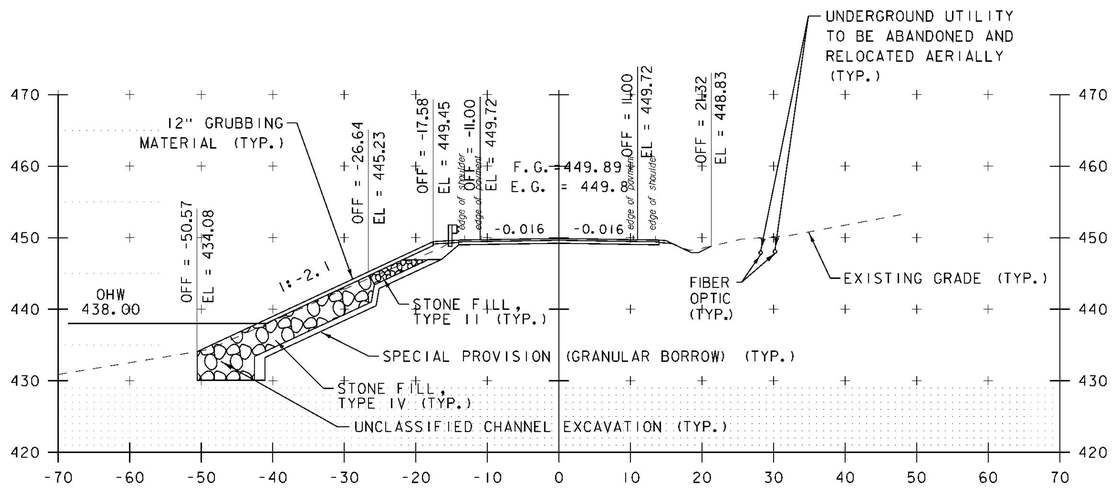
0 10 20
SCALE IN FEET

341+00 - 342+50

PROJECT NAME: SHARON
PROJECT NUMBER: ER STP 0147(20)

FILE NAME:z12c410xs.dgn
PROJECT LEADER: J. TUCKER
DESIGNED BY: B. BRESLEND
VT 14 CROSS SECTION SHEET 10

PLOT DATE: 3/31/2015
DRAWN BY: B. MACK
CHECKED BY: A. SANZ
SHEET 60 OF 66



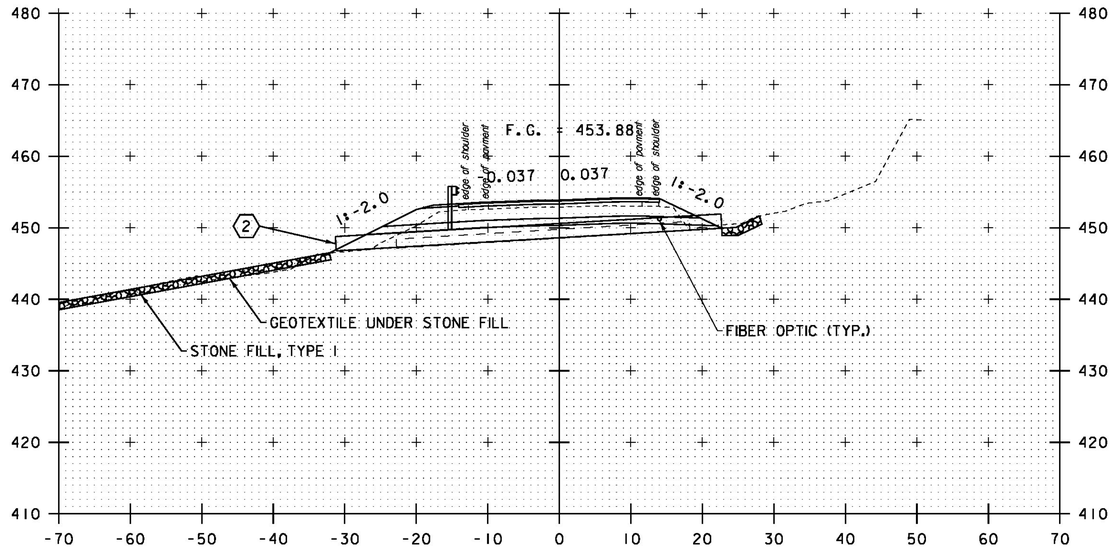
343+00

STA. 343+00
END APPROACH
MATCH EXISTING

343+00 - 343+00

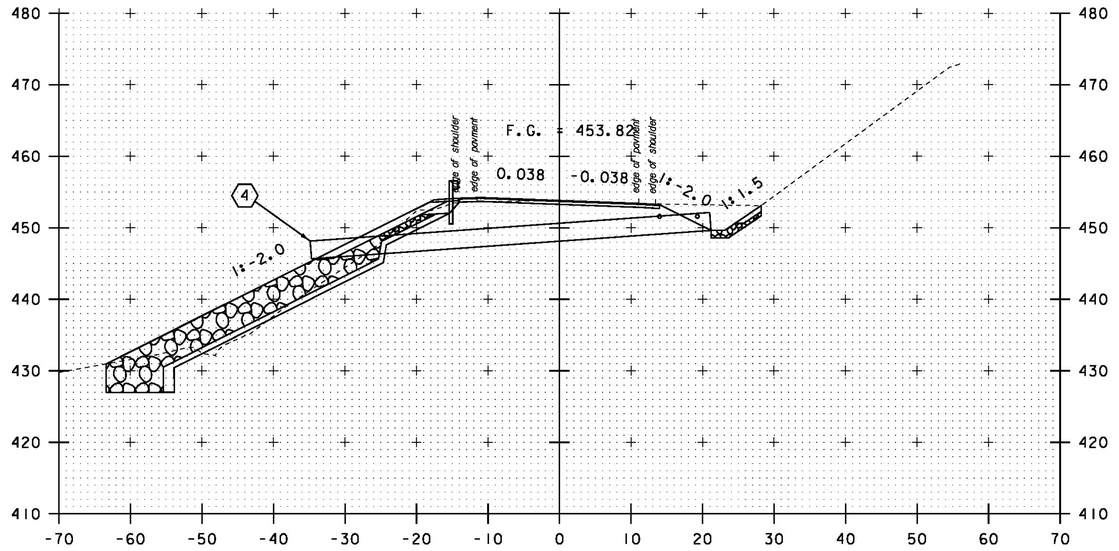
0 10 20
SCALE IN FEET

PROJECT NAME: SHARON	
PROJECT NUMBER: ER STP 0147(20)	
FILE NAME:z12c410xs.dgn	PLOT DATE: 3/31/2015
PROJECT LEADER: J. TUCKER	DRAWN BY: B. MACK
DESIGNED BY: B. BRESLEND	CHECKED BY: A. SANZ
VT 14 CROSS SECTION SHEET 11	SHEET 61 OF 66



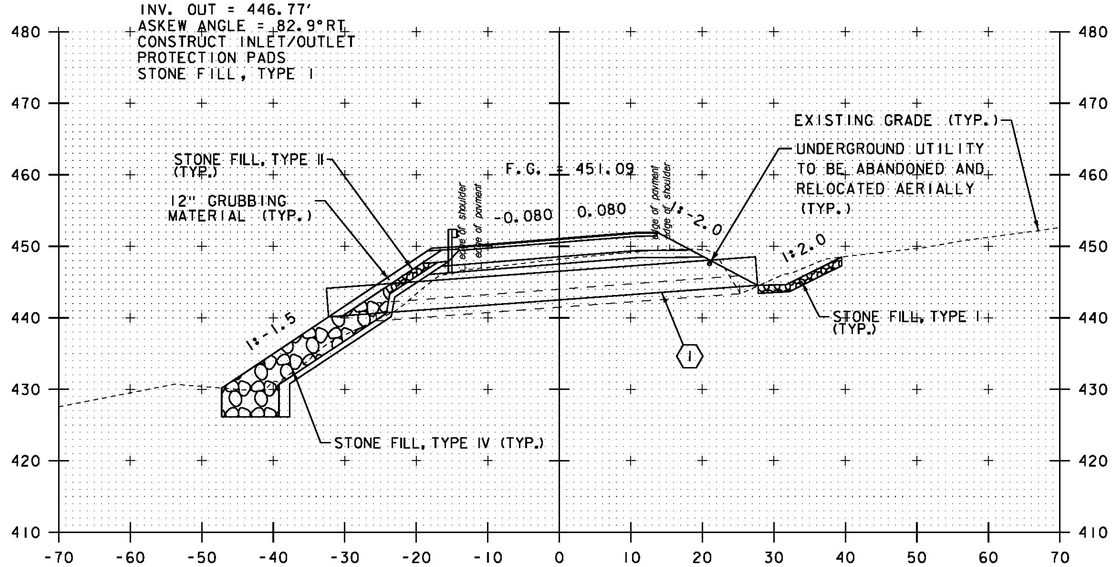
2 STA. 328+70.00 RT 23' TO
STA. 328+63.30 LT 30'
REPLACE EXISTING 15" CMP
WITH NEW 24" CPEP (SL)
LENGTH = 54'-0"
INV. IN = 449.93'
INV. OUT = 446.77'
ASKEW ANGLE = 82.9° RT
CONSTRUCT INLET/OUTLET
PROTECTION PADS
STONE FILL, TYPE I

328+67
CULVERT #2



4 STA. 338+50.75 RT 21.2' TO
STA. 338+50.75 LT 34.8'
INSTALL NEW 30" CPEP (SL)
LENGTH = 56'-0"
INV. IN = 449.64'
INV. OUT = 445.65'
ASKEW ANGLE = 90.0°
CONSTRUCT INLET PROTECTION PAD
STONE FILL, TYPE I

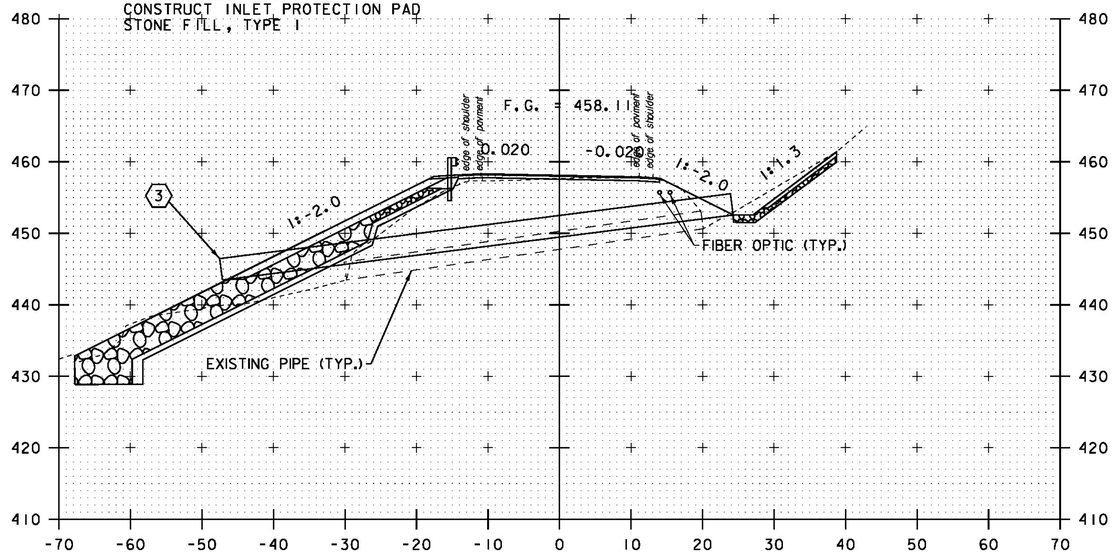
338+51
CULVERT #4



1 STA. 326+93.36 RT 28' TO
STA. 326+87.58 LT 33'
REPLACE EXISTING 30" CMP
WITH NEW 48" PCCSP
LENGTH = 62'-0"
INV. IN = 444.54'
INV. OUT = 440.13'
ASKEW ANGLE = 84.6° RT
CONSTRUCT INLET PROTECTION PAD
STONE FILL, TYPE I

326+91
CULVERT #1

6 STA. 326+99.40 RT 28.86' TO
STA. 327+47.92 RT 26.87'
REMOVE EXISTING 15" CMP DRIVE PIPE
LENGTH = 51'-0"



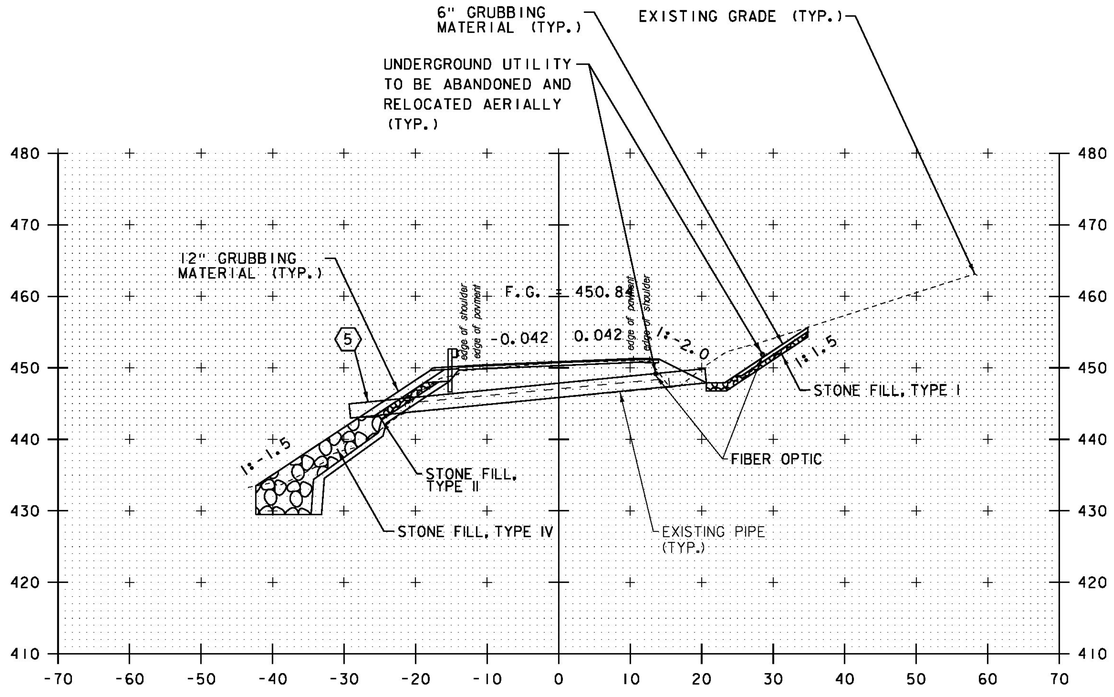
3 STA. 334+65.58 RT 24' TO
STA. 334+77.45 LT 47'
REPLACE EXISTING 30" RCP
WITH 36" CPEP (SL)
LENGTH = 72'-0"
INV. IN = 452.57'
INV. OUT = 443.48'
ASKEW ANGLE = 80.5° LT
CONSTRUCT INLET PROTECTION PAD
STONE FILL, TYPE I

334+70
CULVERT #3

0 10 20
SCALE IN FEET

PROJECT NAME: SHARON
PROJECT NUMBER: ER STP 0147(20)

FILE NAME: z12c410culvertxs.dgn
PROJECT LEADER: J. TUCKER
DESIGNED BY: B. BRESLEND
PLOT DATE: 3/31/2015
DRAWN BY: B. MACK
CHECKED BY: A. SANZ
VT 14 CULVERT CROSS SECTION SHEET 1 SHEET 62 OF 66



(5) STA. 341+51.13 RT 21' TO
STA. 341+52.08 LT 29'
REPLACE EXISTING 15" RCP
WITH NEW 24" CPEP (SL)
LENGTH = 50'-0"
INV. IN = 447.89'
INV. OUT = 442.96'
ASKEW ANGLE = 83.9°LT
CONSTRUCT INLET PROTECTION PAD
STONE FILL, TYPE I

341+52
CULVERT #5

0 10 20
SCALE IN FEET

PROJECT NAME: SHARON
PROJECT NUMBER: ER STP 0147(20)

FILE NAME: z12c410culvertxs.dgn
PROJECT LEADER: J. TUCKER
DESIGNED BY: B. BRESLEND
VT14 CULVERT CROSS SECTION SHEET 2

PLOT DATE: 3/31/2015
DRAWN BY: B. MACK
CHECKED BY: A. SANZ
SHEET 63 OF 66

TRAFFIC CONTROL NOTES

1. THE CONTRACTOR MUST PROVIDE ACCESS THROUGH THE WORK ZONE FOR EMERGENCY VEHICLES AT ALL TIMES. THE CONTRACTOR MUST MAINTAIN ACCESS TO ALL PROPERTIES AT ALL TIMES FOR EMERGENCY VEHICLES. ALL ACCESSES SHALL ALSO BE KEPT FREE OF WORK WITH TRAFFIC CONTROLLED BY UNIFORMED TRAFFIC OFFICERS OR FLAGGERS AS REQUIRED BY THE ENGINEER.

2. A MINIMUM LANE WIDTH OF 10 FEET (INCLUDED SHOULDERS) SHALL BE MAINTAINED.

3. WHEN COLD PLANED BITUMINOUS PAVEMENT OR GRAVEL IS OPEN TO TRAFFIC, A "MOTORCYCLES USE CAUTION" SIGN, AS PER VAOT STANDARD T-30, SHALL BE PROVIDED.

4. THE CONTRACTOR SHOULD LEAVE NO LONGITUDINAL DROP-OFFS DURING THE OVERNIGHT HOURS. THEREFORE, THE FULL ROADWAY WIDTH SHOULD BE COLD PLANED OR PAVED DURING THE DAILY WORK PERIOD. WHEN NECESSARY, DROP-OFF PROTECTION IN THESE AREAS SHALL CONFORM TO VAOT STANDARD T-35 AND T-36.

5. ALL PERMANENT SIGNS WHICH CONFLICT WITH TEMPORARY TRAFFIC CONTROL SHALL BE COMPLETELY COVERED.

6. ALL REASONABLE EFFORTS SHALL BE MADE TO ACCOMMODATE PEDESTRIAN TRAVEL AT ALL TIMES. THIS CAN INCLUDE, BUT IS NOT LIMITED TO A DEDICATED PEDESTRIAN ESCORT, SIGNAGE AND CONED OFF WALKING AREAS WITHIN CLOSED LANES. FLAGGERS SHALL NOT BE USED AS PEDESTRIAN ESCORTS. WHEN EXISTING PEDESTRIAN FACILITIES ARE DISRUPTED, CLOSED, OR RELOCATED IN A TEMPORARY TRAFFIC CONTROL ZONE, THE TEMPORARY FACILITIES SHALL BE DETECTABLE AND SHALL INCLUDE ACCESSIBILITY FEATURES CONSISTENT WITH THE FEATURES PRESENT IN THE EXISTING PEDESTRIAN FACILITY. PAYMENT WILL BE INCLUDED IN THE UNIT PRICE FOR ITEM 641.10 TRAFFIC CONTROL.

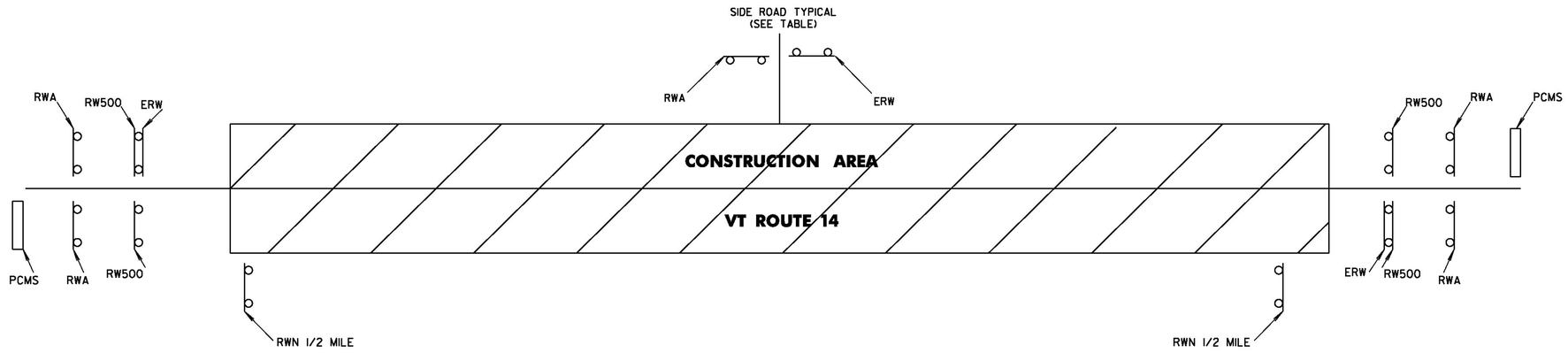
PROJECT NAME:	SHARON
PROJECT NUMBER:	ER STP 0147(20)

FILE NAME: z12c410.dgn	PLOT DATE: 3/31/2015
PROJECT LEADER: J. TUCKER	DRAWN BY: B. MACK
DESIGNED BY: B. BRESLEND	CHECKED BY: A. SANZ
TRAFFIC CONTROL NOTES	SHEET 64 OF 66

CONSTRUCTION APPROACH SIGNING

NOT TO SCALE

SEE STDS T-1 AND T-10 FOR SIGN PLACEMENT



NOTES:

1. THE CONTRACTOR SHALL SUBMIT A SITE SPECIFIC TRAFFIC CONTROL PLAN TO THE ENGINEER FOR APPROVAL PRIOR TO THE START OF CONSTRUCTION. THE COST OF PREPARING THIS PLAN (AND MAKING CHANGES IF NECESSARY) WILL NOT BE PAID SEPARATELY BUT WILL BE PAID AS PART OF ITEM 641.10, "TRAFFIC CONTROL". THE TRAFFIC CONTROL PLAN SHALL BE IN COMPLIANCE WITH VTRANS STANDARDS AND 2009 MUTCD. WHERE CONFLICTS EXIST, THE 2009 MUTCD SHALL GOVERN.

2. THE CONTRACTOR SHALL INCLUDE A CONSTRUCTION SIGN APPROACH PACKAGE FOR EXPECTED LANE CLOSURES AND WORK ZONE SPEED REDUCTIONS IN COMPLIANCE WITH THE TRAFFIC CONTROL NOTES AND PART 6 OF THE 2009 MUTCD. PAYMENT FOR PROVIDING THIS PACKAGE WILL BE PAID AS PART OF ITEM 641.10, "TRAFFIC CONTROL".

3. THE BID PRICE FOR "TRAFFIC CONTROL", ITEM 641.10, SHALL INCLUDE ALL OF THE FOLLOWING, AS NEEDED: APPROACH AND ON-PROJECT CONSTRUCTION SIGNING, PORTABLE ARROW BOARDS, BARRELS, CONES, BARRICADES, TEMPORARY REGULATORY AND WARNING SIGNS, AND POSTS AS DETAILED IN VAOT STANDARDS. ALL ADJUSTING, RELOCATING, AND REMOVING OF THESE DEVICES AS DIRECTED BY THE ENGINEER SHALL ALSO BE INCLUDED. THE FOLLOWING ITEMS WILL BE PAID FOR SEPARATELY:
   646.602, 646.612 - TEMPORARY PAVEMENT MARKINGS
   630.10 UNIFORMED TRAFFIC OFFICERS, 630.15 - FLAGGERS

4. THE MUTCD 2009 AND ITS LATEST REVISIONS SHALL BE THE STANDARD FOR ALL TRAFFIC CONTROL DEVICES. EXISTING SIGNS, SIGNALS AND MARKINGS SHALL BE VALID UNTIL SUCH TIME AS THEY ARE REPLACED OR RECONSTRUCTED. WHEN NEW TRAFFIC CONTROL DEVICES ARE ERECTED OR PLACED OR EXISTING TRAFFIC CONTROL DEVICES ARE REPLACED OR REPAIRED THE EQUIPMENT, DESIGN, METHOD OF INSTALLATION, PLACEMENT OR REPAIR SHALL CONFORM WITH SUCH STANDARDS.

5. CONES SHALL BE USED TO CLEARLY DEFINE THE TRAVEL SPACE AND PROVIDE SEPARATION FROM THE WORK SPACE ALONG ITS ENTIRE LENGTH.

6. AS THE PAVING OPERATION MOVES, THE FLAGGER SIGNS SHALL BE MOVED ACCORDINGLY. AT NO TIME SHOULD THE FLAGGER SYMBOL SIGN BE MORE THAN 1000 FT FROM THE FLAGGER STATION. FLAGGER SIGNS SHALL BE COVERED OR TURNED AWAY IF FLAGGING OPERATIONS CEASE FOR MORE THAN 15 MINUTES.

7. NO CONSTRUCTION SIGNS SHALL BE INSTALLED AS TO INTERFERE OR OBSTRUCT THE VIEW OF EXISTING TRAFFIC CONTROL DEVICES, STOPPING SIGHT DISTANCE, AND CORNER SIGHT DISTANCE FROM DRIVES AND TOWN HIGHWAYS.

8. ALL PERMANENT SIGNS THAT CONFLICT WITH TEMPORARY TRAFFIC CONTROL WILL BE COMPLETELY COVERED, THE PAYMENT FOR WHICH WILL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 641.10 TRAFFIC CONTROL.

9. CONSTRUCTION SIGNS SHALL BE IN NEW OR LIKE NEW CONDITION PER VAOT STANDARDS.

10. DIAMOND SHAPED SIGNS SHALL BE 4'X4' WITH BLACK TEXT AND BORDER ON A RETROREFLECTIVE FLUORESCENT ORANGE BACKGROUND.

11. CONSTRUCTION ZONE SIGNS SHALL BE INSTALLED AS OUTLINED IN THE SPECIAL PROVISIONS.

12. WHERE TEMPORARY SIGNS ARE PLACED BEHIND GUARDRAIL, THEY SHALL BE ADJUSTED SUCH THAT THE BOTTOM OF THE SIGNS ARE ABOVE THE TOP OF GUARDRAIL.

	ROAD WORK AHEAD	END ROAD WORK	ROAD WORK 500 FT	ROAD WORK NEXT 1/2 MILES	PCMS
SHARON					
BEGIN PROJECT (VT 14)	2	1	2	1	1
WHITE BROOK RD	1	1			
END PROJECT (VT 14)	2	1	2	1	1
TOTALS	5	3	4	2	2

LEGEND

RWA = ROAD WORK AHEAD
RW500 = ROAD WORK 500 FT
ERW = END ROAD WORK
RWN = ROAD WORK NEXT 1/2 MILE
PCMS = PORTABLE CHANGEABLE MESSAGE SIGN

DETAILS ARE NOT TO SCALE

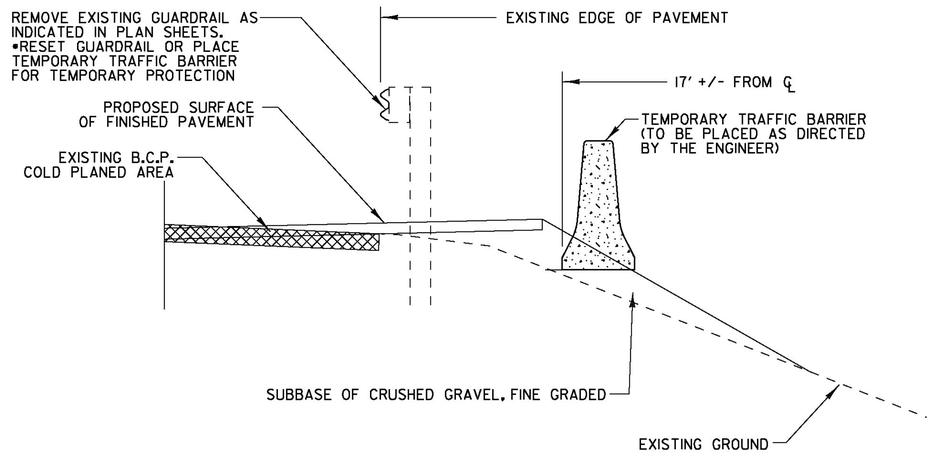
PROJECT NAME: SHARON
PROJECT NUMBER: ER STP 0147(20)

FILE NAME: z12c410.dgn
PROJECT LEADER: J. TUCKER
DESIGNED BY: B. BRESLEND
CONSTRUCTION APPROACH SIGNING SHEET

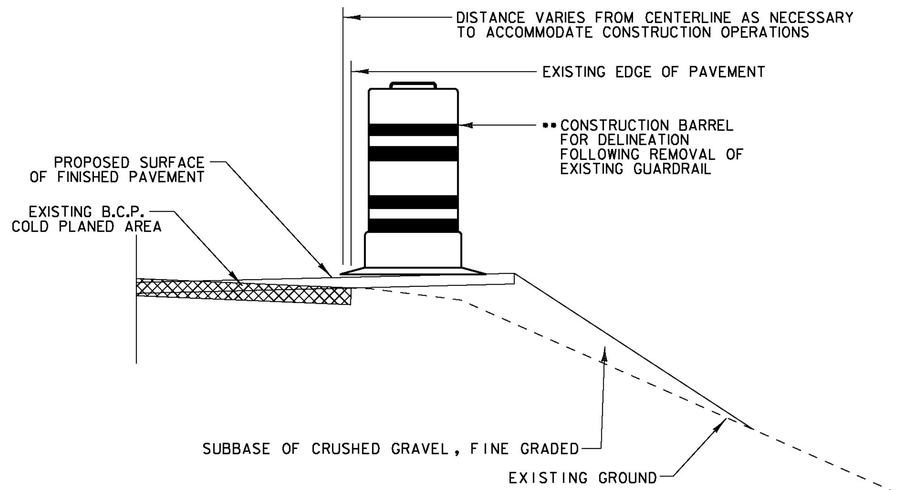
PLOT DATE: 3/31/2015
DRAWN BY: B. MACK
CHECKED BY: A. SANZ
SHEET 65 OF 66

CONSTRUCTION OPERATIONS TRAFFIC PROTECTION PLAN

EXISTING GUARDRAIL INVENTORY								PROTECTION PLAN	
BEGIN STA.	END STA.	POS.	LENGTH (LF)	RETAIN/REPLACE (Y/N)	APPROX. OFFSET DISTANCE FROM PROPOSED CENTERLINE TO FACE OF EXISTING RAIL (LF)	EXISTING RAIL TYPE (POST AND BARRIER)	ASSESSED CONDITION (GOOD/FAIR/POOR)	CONSTRUCTION CONDITION	900.640 BARRIER FOR TEMPORARY TRAFFIC PROTECTION (LF)
SHARON - ROUTE 14									
323+00	333+03	LT	1003.0	Y	13-14	STEEL W-BEAM	GOOD	REMOVE AND RESET TO FACE OF RAIL 14 FEET OFF OF PROPOSED CENTERLINE, STA. 323+00 - STA. 333+00, BEFORE CONSTRUCTING SIDE SLOPES.	1000
333+50	343+00	LT	950.0	Y	13-14	STEEL W-BEAM	GOOD	REMOVE AND RESET TO FACE OF RAIL 14 FEET OFF OF PROPOSED CENTERLINE, STA. 334+00 - STA. 343+00, BEFORE CONSTRUCTING SIDE SLOPES.	950
								TOTAL =	1950



• PAYMENT FOR THIS WORK WILL BE MADE UNDER ITEM 900.640 SPECIAL PROVISION (BARRIER FOR TEMPORARY TRAFFIC PROTECTION)



** PAYMENT FOR THIS WORK WILL BE INCLUDED IN THE UNIT PRICE BID FOR CONTRACT ITEM 641.10 "TRAFFIC CONTROL"

TEMPORARY PROTECTION AND DELINEATION DETAILS FOR ROADSIDE HAZARDS DURING CONSTRUCTION

NOT TO SCALE

PROJECT NAME:	SHARON
PROJECT NUMBER:	ER STP 0147(20)

FILE NAME: z12c410.dgn	PLOT DATE: 3/31/2015
PROJECT LEADER: J. TUCKER	DRAWN BY: B. MACK
DESIGNED BY: B. BRESLEND	CHECKED BY: A. SANZ
CONST. OPER. TRAFF. PROT. PLAN	SHEET 66 OF 66