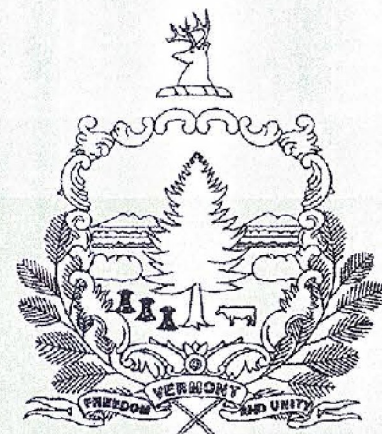
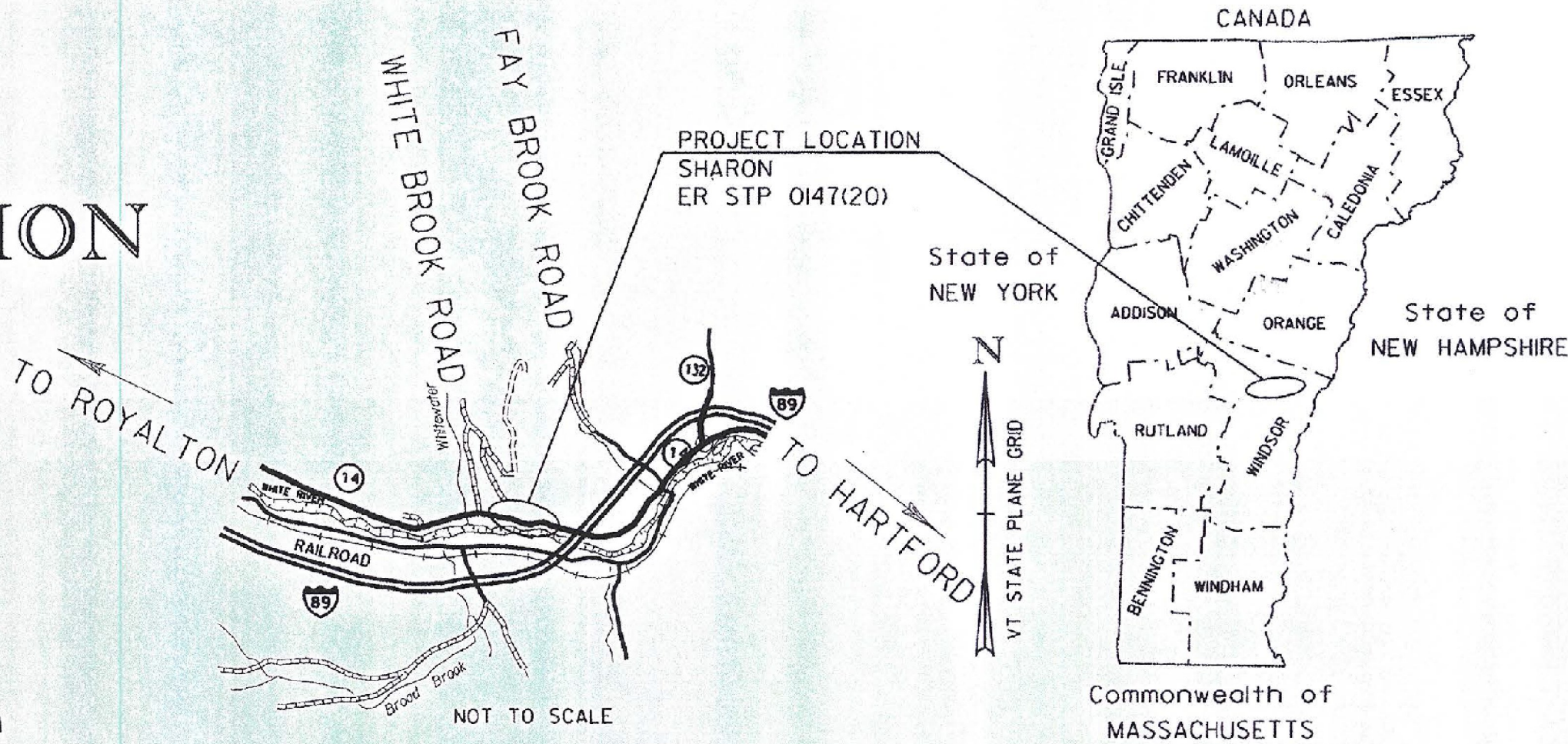


STATE OF VERMONT
AGENCY OF TRANSPORTATION



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



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.

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

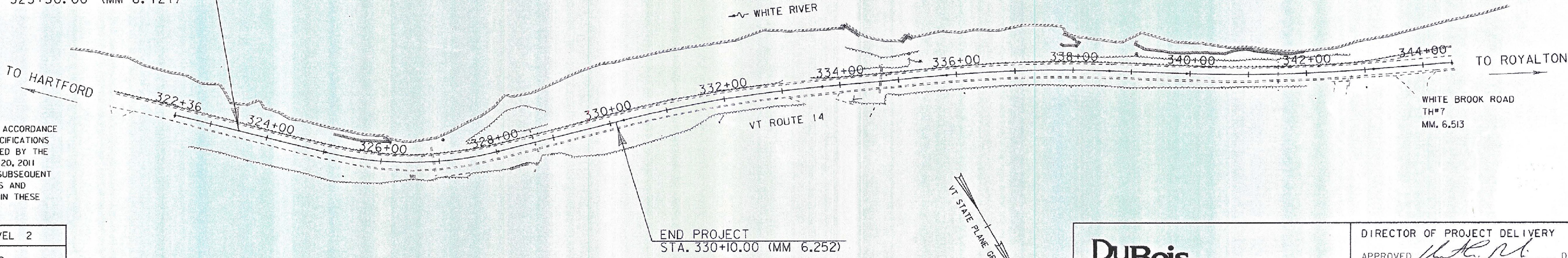
TRAFFIC DATA

HIGHWAY SECTION	AADT		DHV		CUM. ESALS (2013-2023)	CUM. ESALS (2013-2033)
	2013	2023	2013	2023		
VT 14 - MM 6.117 - MM 6.496	3000	3100	350	360	512,000	1,453,000
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

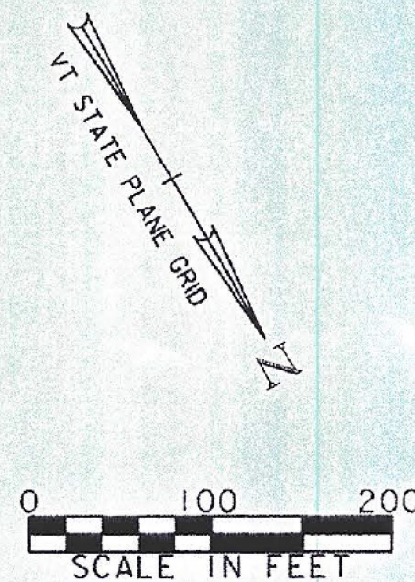
PROJECT DESCRIPTION: WORK TO BE PERFORMED UNDER THIS PROJECT INCLUDES ROADWAY RECONSTRUCTION, SLOPE STABILIZATION, RAISING A SECTION OF THE VERTICAL ALIGNMENT, CORRECTING SUPERELEVATION DEFICIENCIES, RESURFACING WITH BASE AND WEARING COURSES, NEW PAVEMENT MARKINGS, GUARDRAIL IMPROVEMENTS, DRAINAGE IMPROVEMENTS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

BEGIN PROJECT
STA. 323+50.00 (MM 6.127)

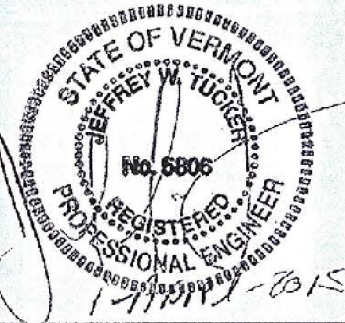


CONSTRUCTION IS TO BE CARRIED ON IN ACCORDANCE WITH THESE PLANS AND THE STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2011, AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION ON JULY 20, 2011 FOR USE ON THIS PROJECT, INCLUDING ALL SUBSEQUENT REVISIONS AND SUCH REVISED SPECIFICATIONS AND SPECIAL PROVISIONS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



DuBois & King Inc.



DIRECTOR OF PROJECT DELIVERY	
APPROVED <u>PAUL LIBBY</u>	DATE <u>4/2/2015</u>
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	PLOT DATE: 3/31/2015
PROJECT LEADER: J. TUCKER	DRAWN BY: B. MACK
DESIGNED BY: B. BRESLEND	CHECKED BY: A. SANZ
INDEX OF SHEETS	SHEET 2 OF 66

GENERAL INFORMATION

SYMBOLGY LEGEND NOTE

THE SYMBOLGY ON THIS SHEET IS INTENDED TO COVER STANDARD CONVENTIONAL SYMBOLGY. THE SYMBOLGY 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. SYMBOLGY 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 VALVE
⊗	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 SYMBOLGY

UNDERGROUND UTILITIES

— UT —	UTILITY (GENERIC-UNKNOWN)
— UE —	TELEPHONE
— UC —	ELECTRIC
— UEC —	CABLE (TV)
— UET —	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)

— T —	UTILITY (GENERIC-UNKNOWN)
— E —	TELEPHONE
— C —	ELECTRIC
— EC —	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 SYMBOLGY

PROJECT DESIGN & LAYOUT SYMBOLGY

— -- — 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 SYMBOLGY

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	SLOPE RIGHTS
6f	6F PROPERTY BOUNDARY
4f	4F PROPERTY BOUNDARY
HAZ	HAZARDOUS WASTE

EPSC LAYOUT PLAN SYMBOLGY

EPSC MEASURES

ONNOONNOONNO	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
Ⓜ	HISTORIC STRUCTURE

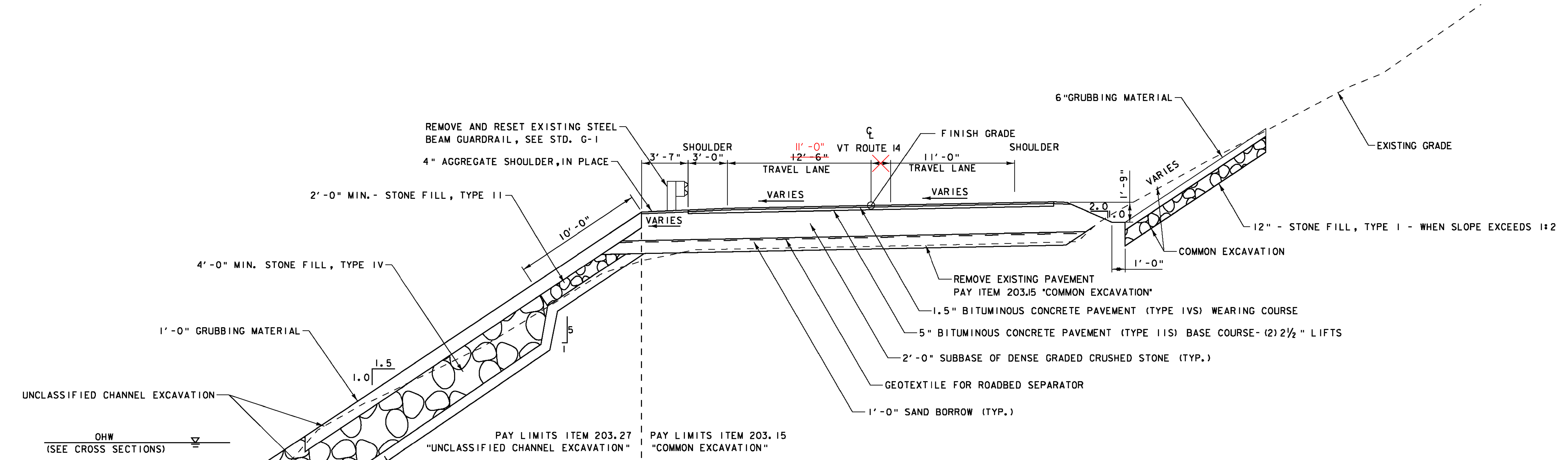
CONVENTIONAL TOPOGRAPHIC SYMBOLGY

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

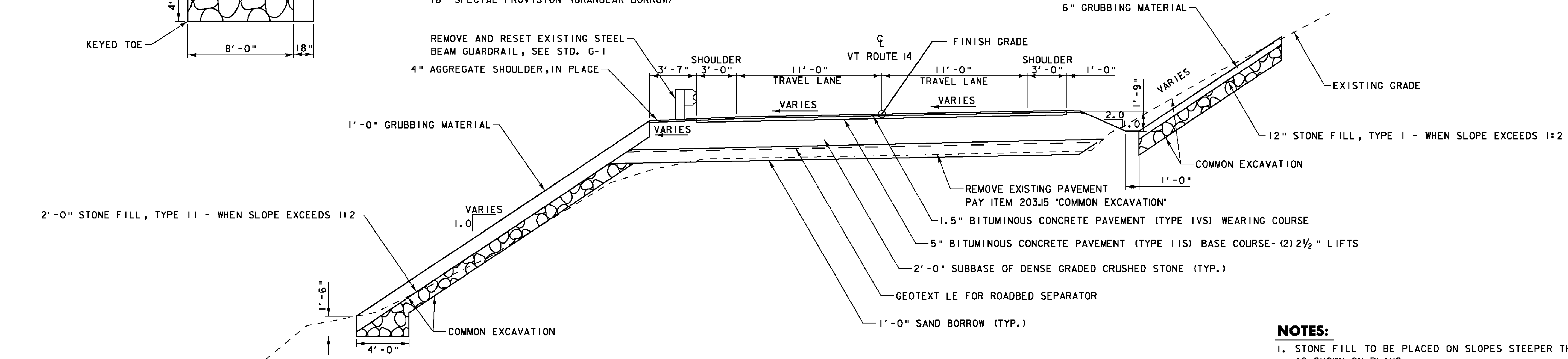
PROJECT NAME:	SHARON
PROJECT NUMBER:	ER STP 0147(20)
FILE NAME:	z12c410.dgn
PROJECT LEADER:	J. TUCKER
DESIGNED BY:	B. BRESLEND
CONVENTIONAL SYMBOLGY LEGEND SHEET	PLOT DATE: 3/31/2015 DRAWN BY: B. MACK CHECKED BY: A. SANZ SHEET 3 OF 66





**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 : +/- 1/4" TOTAL PAVEMENT THICKNESS  
SUBBASE : +/- 1" TOTAL CRUSHED STONE THICKNESS  
SAND BORROW : +/- 1" TOTAL SAND THICKNESS

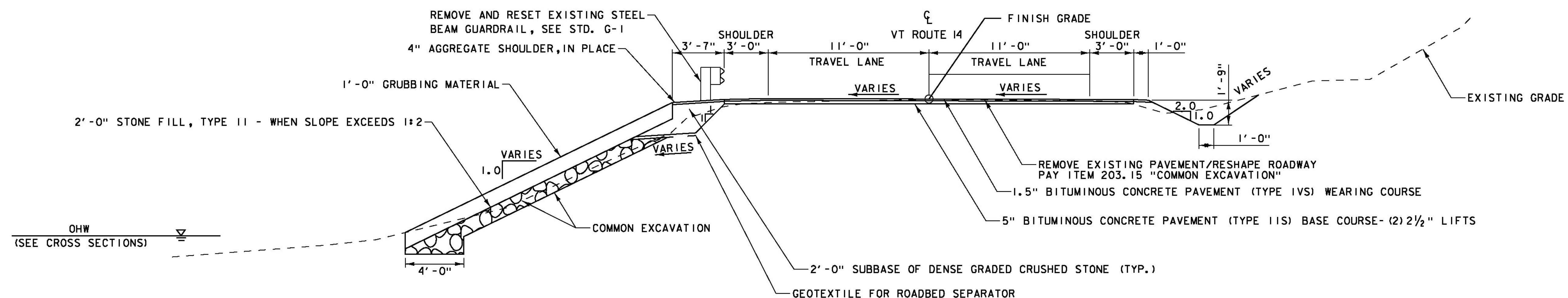
**NOTES:**

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**

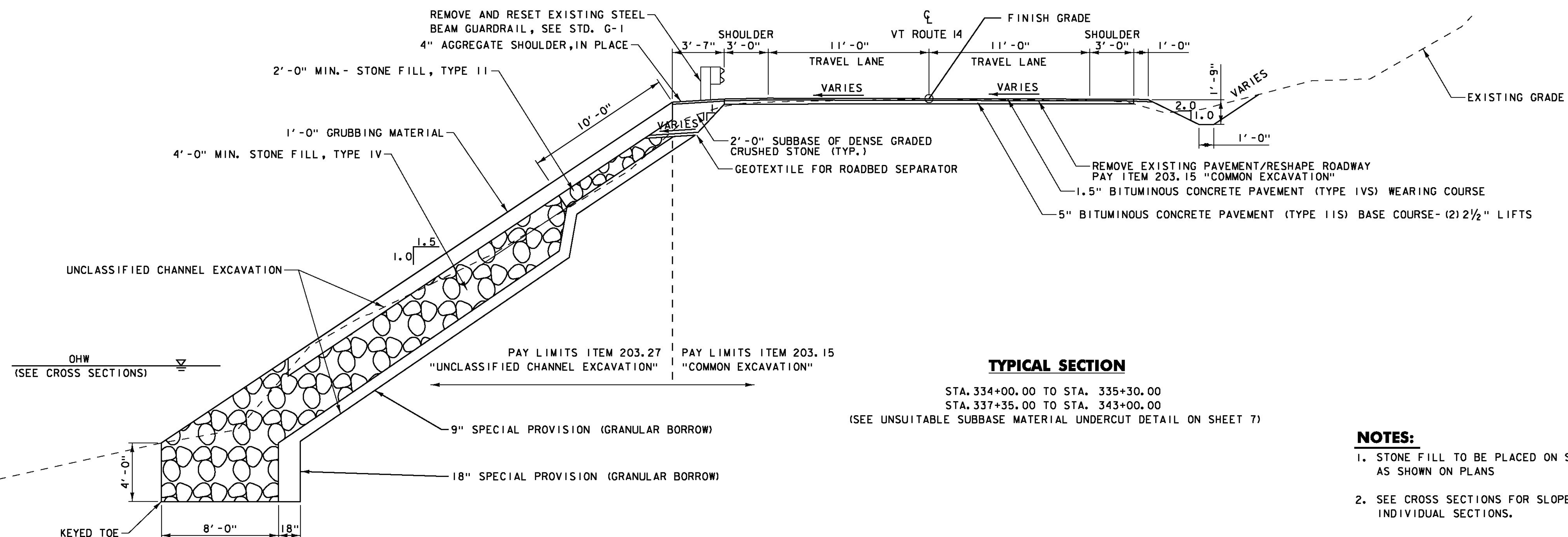
PROJECT NAME: SHARON	
PROJECT NUMBER: ER STP 0147 (20)	
FILE NAME: z12c410.dgn	PLOT DATE: 3/31/2015
PROJECT LEADER: J. TUCKER	DRAWN BY: B. MACK
DESIGNED BY: B. BRESLEND	CHECKED BY: A. SANZ
TYPICAL SECTION SHEET 1	SHEET 4 OF 66





### 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)

### 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.

### TOLERANCES :

PAVEMENT : +/- 1/4" TOTAL PAVEMENT THICKNESS  
 SUBBASE : +/- 1" TOTAL CRUSHED STONE THICKNESS  
 SAND BORROW : +/- 1" TOTAL SAND THICKNESS

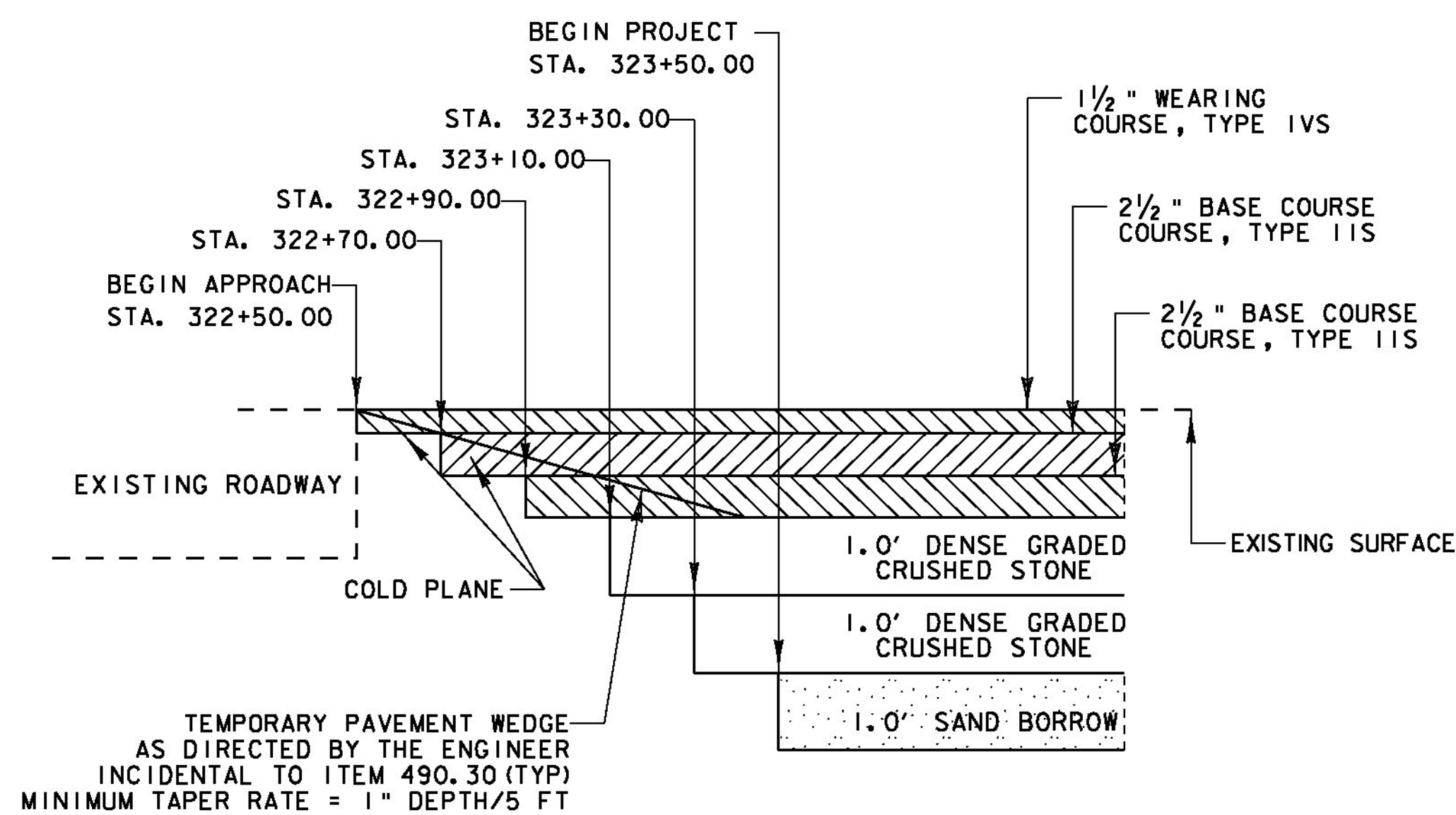
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 PROJECT NUMBER: ER STP 0147 (20)

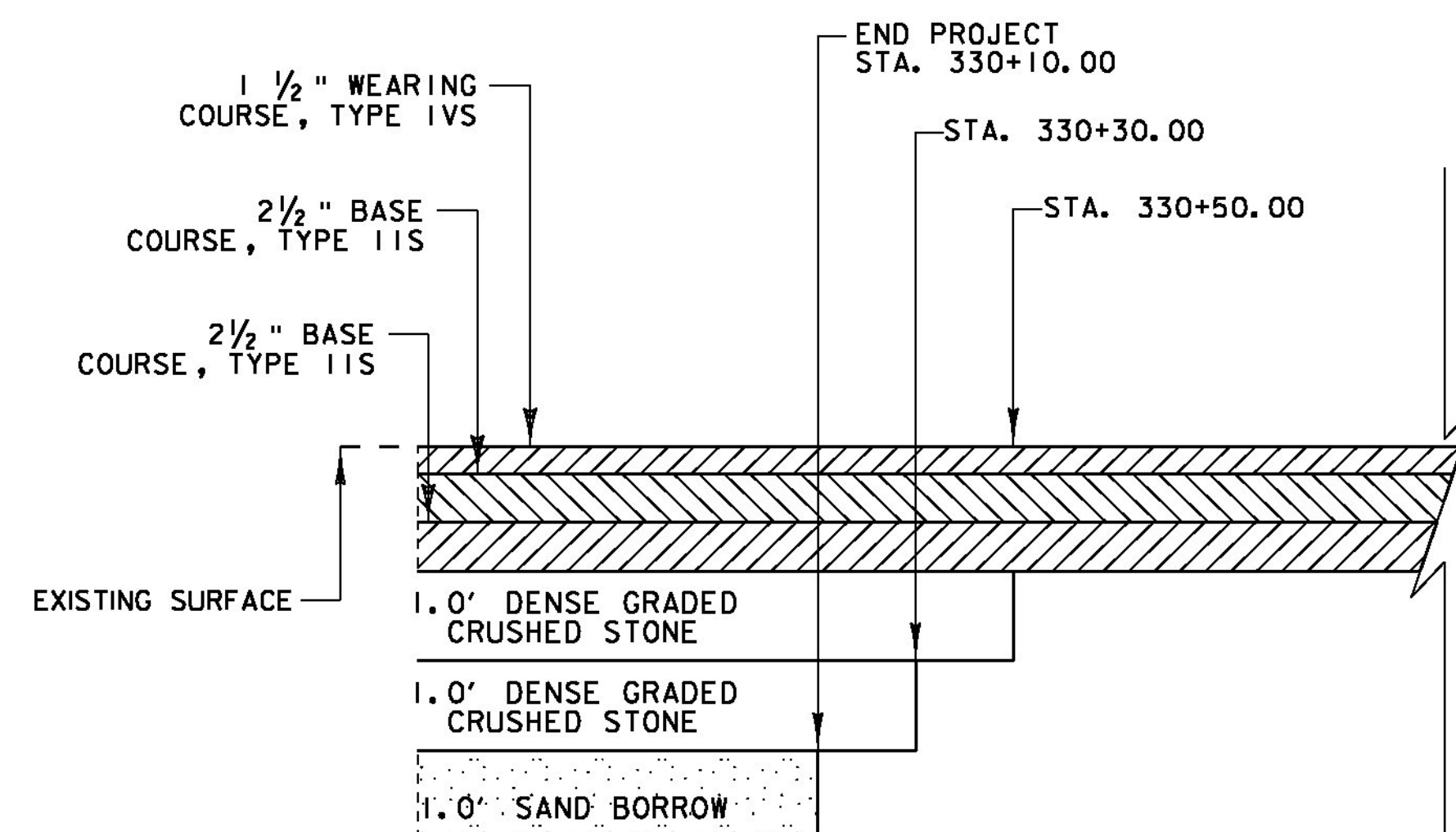
FILE NAME: z12c410.dgn  
 PROJECT LEADER: J. TUCKER  
 DESIGNED BY: B. BRESLEND  
 TYPICAL SECTION SHEET 2

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

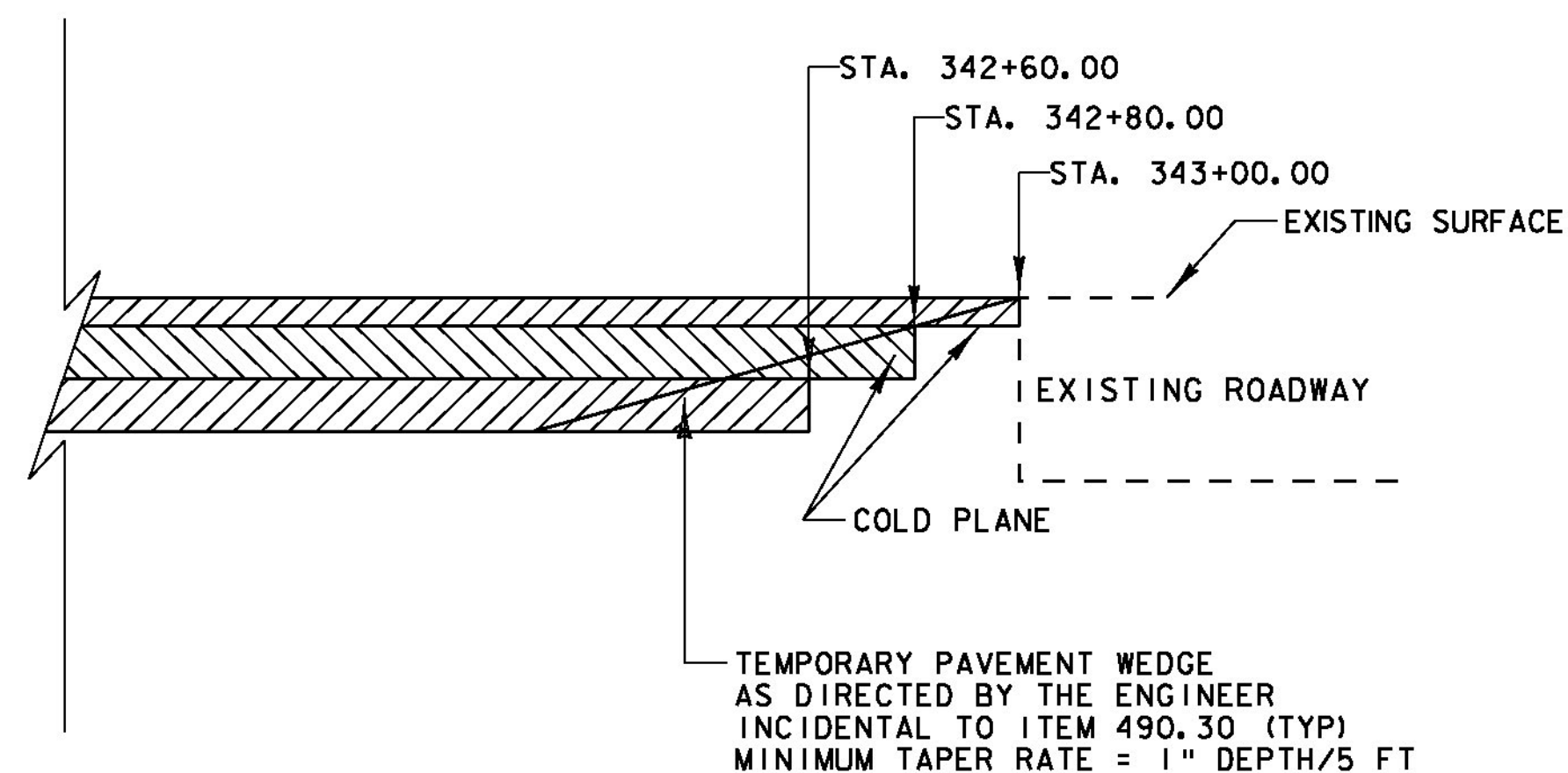




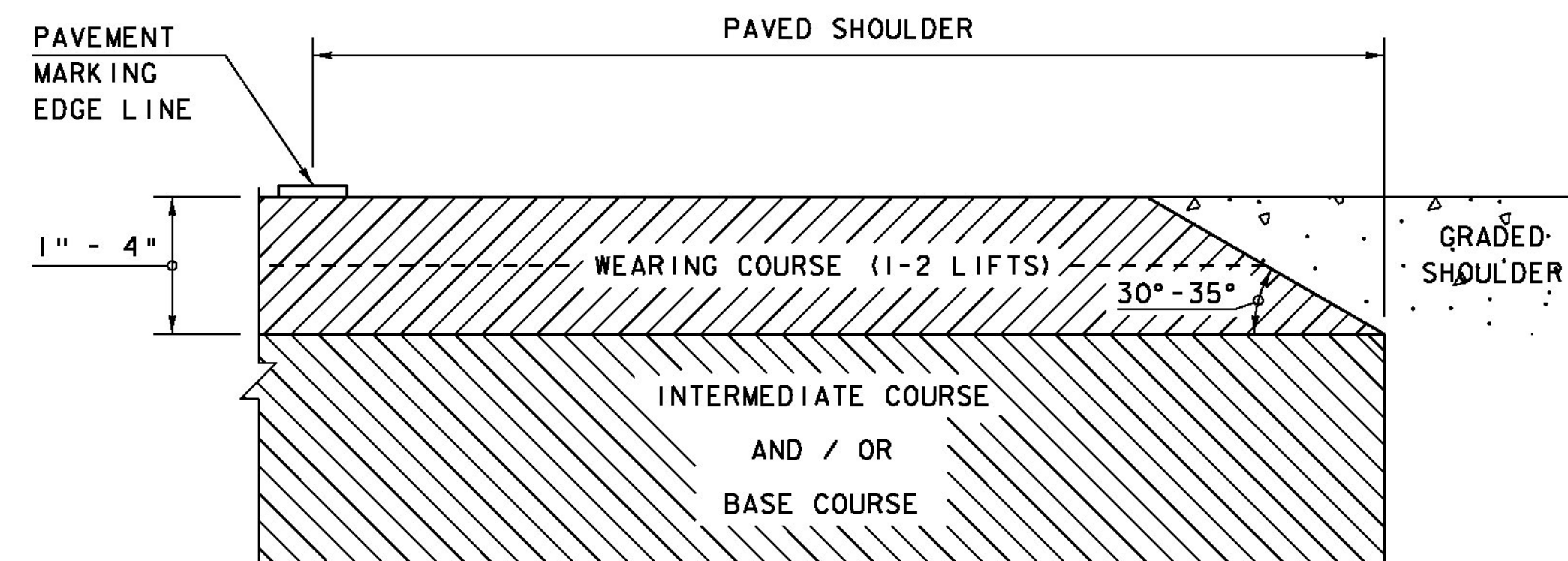
**APPROACH AREA DETAIL (BEGIN PROJECT)**



**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.

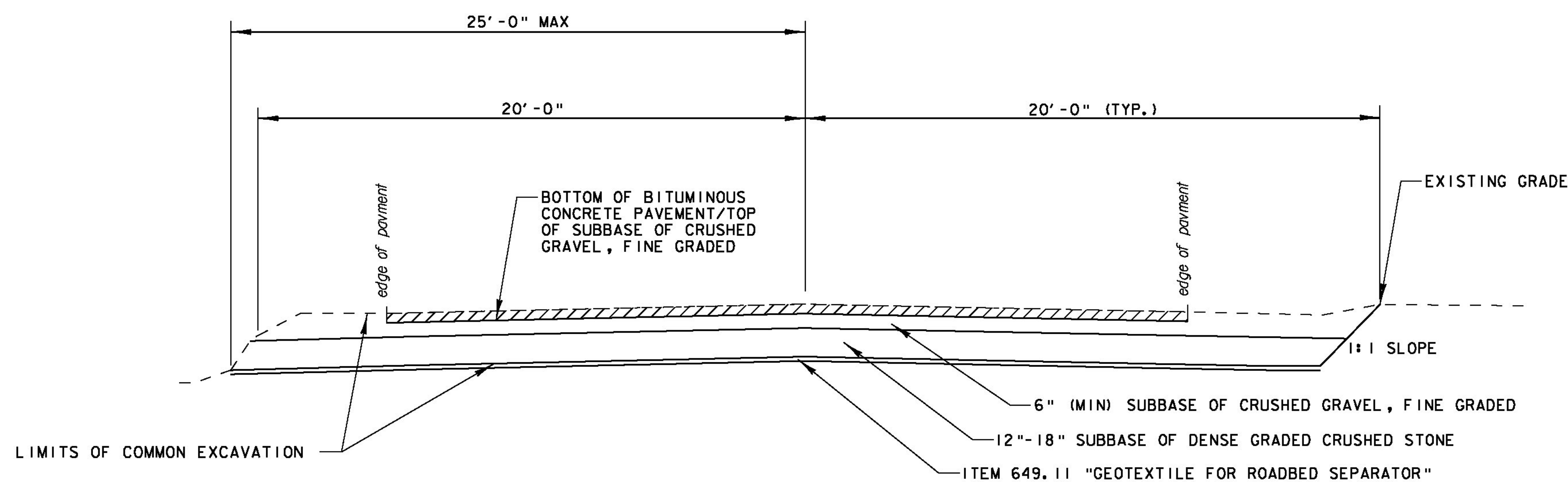
NOT TO SCALE

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

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

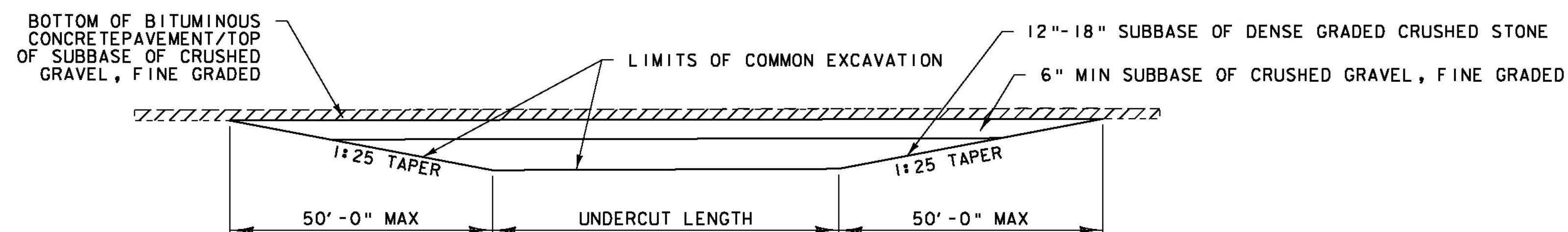
PLOT DATE: 3/31/2015  
DRAWN BY: B. MACK  
CHECKED BY: A. SANZ  
SHEET 6 OF 66





### UNSUITABLE SUBBASE MATERIAL UNDERCUT DETAIL

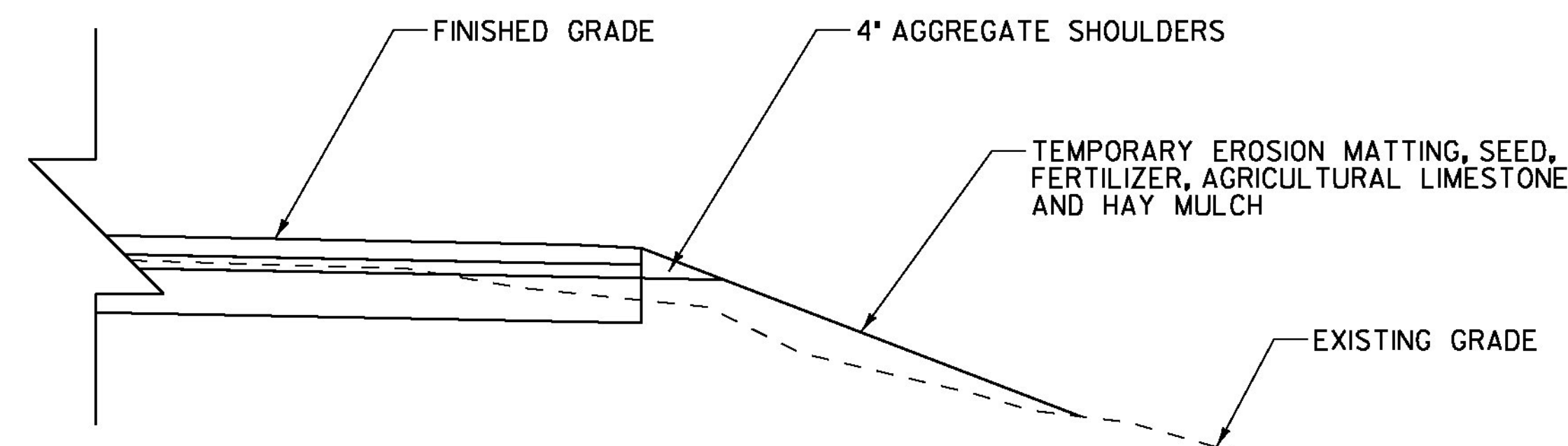
NOTE: THIS DETAIL TO BE USED IN AREAS AS DEEMED NECESSARY BY THE ENGINEER. ALL WIDTHS AND DEPTHS TO BE APPROVED BY ENGINEER PRIOR TO WORK BEING PERFORMED.



### UNSUITABLE SUBBASE MATERIAL TRANSITION DETAIL

NOT TO SCALE

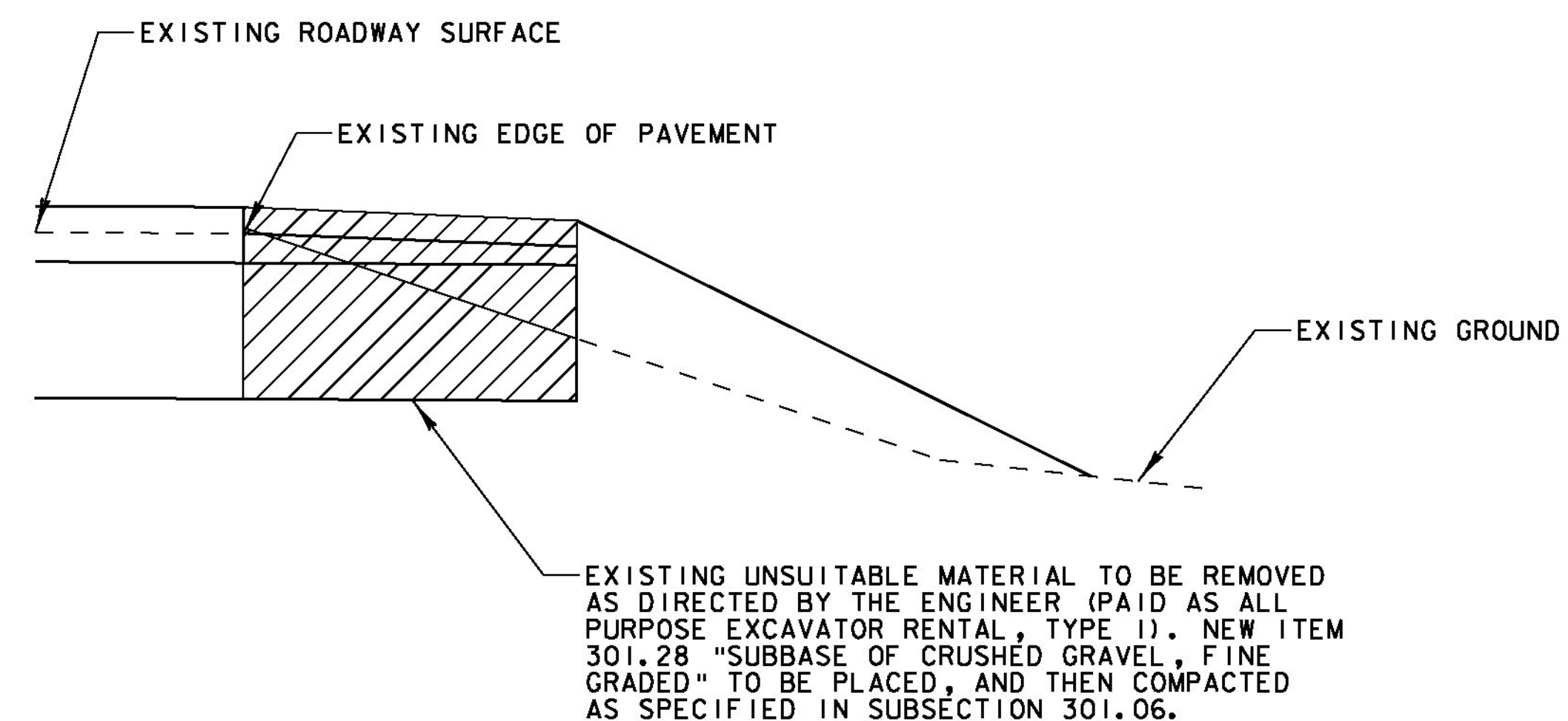
- NOTES:
1. UNDERCUT CANDIDATE AREAS ENCOUNTERED DURING CONSTRUCTION SHALL BE REVIEWED AND APPROVED BY THE VTRANS CONSTRUCTION PAVING ENGINEER PRIOR TO THE TREATMENT.
  2. ALL UNDERCUTS SHALL BE FULL WIDTH.



### FILL SLOPE DETAIL

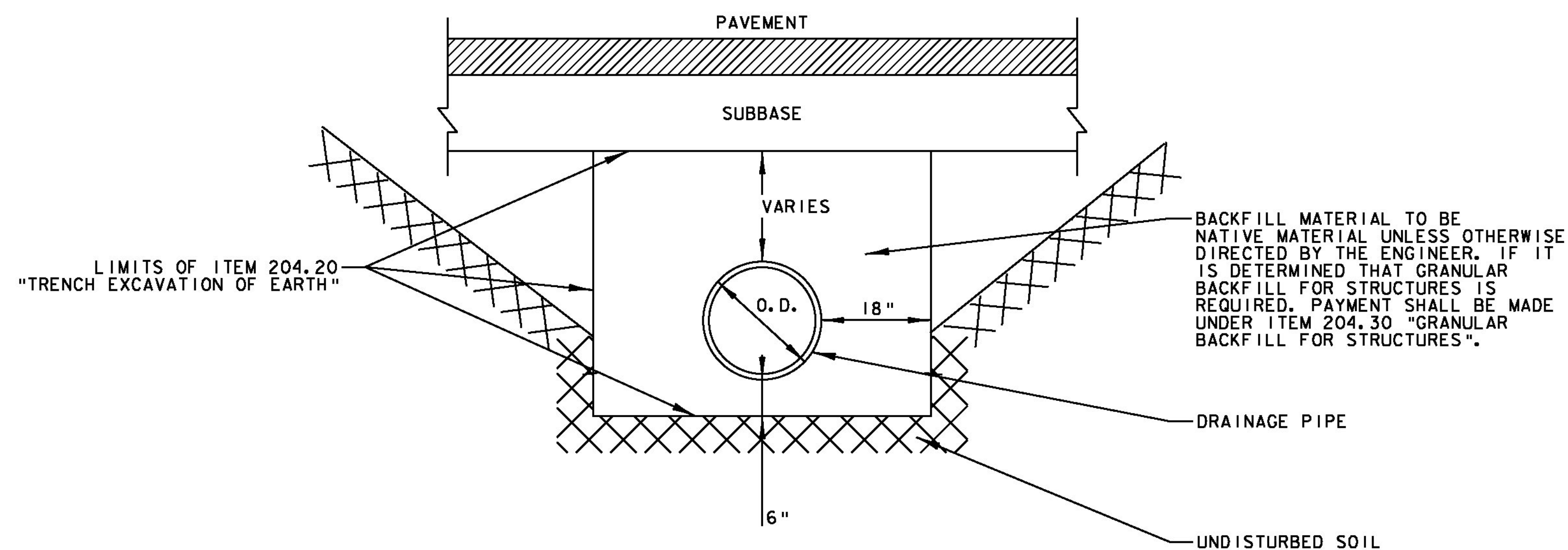
NOT TO SCALE

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")".



### 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.



### TYPICAL TRENCH BOX DETAIL

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 4

PLOT DATE: 3/31/2015  
DRAWN BY: B. MACK  
CHECKED BY: A. SANZ  
SHEET 7 OF 66



GENERAL

- 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.
- TOPOGRAPHY AND PLANIMETRIC DATA SHOWN ON THESE PLANS ARE BASED ON FIELD SURVEY COMPLETED BY DUBOIS & KING, INC. IN 2013.
- 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.
- ALL UTILITY POLES ARE TO REMAIN UNDISTURBED UNLESS OTHERWISE NOTED IN THESE PLANS.
- 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.
- 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.
- 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. "
- 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.
- 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.
- 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.
- 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".
- 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.
- 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.
- YIELDING MARKER POSTS FOR CULVERTS SHALL BE PLACED AS INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
- SLOPE ROUNDING: ALL CUT SLOPES SHALL BE ROUNDED IN ACCORDANCE WITH STANDARD DWG. B-5.
- 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.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR REVIEWING AND UNDERSTANDING ALL APPLICABLE ENVIRONMENTAL PERMITS AND ENSURING THAT ALL CONSTRUCTION REQUIREMENTS ARE MET.
- AT COMPLETION OF GRADING, THE SLOPES, DITCHES, AND ALL DISTURBED AREAS SHALL BE SMOOTH AND FREE OF POCKETS WITH SUFFICIENT SLOPE TO ENSURE DRAINAGE.
- 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.
- THE CONTRACTOR SHALL SUBMIT SEDIMENT AND EROSION CONTROL METHODS TO THE ENGINEER FOR APPROVAL 14 DAYS PRIOR TO START OF WORK.
- TYPICAL CROSS SECTIONS ARE MEANT FOR GUIDANCE ONLY. FIELD CONDITIONS MAY VARY AND SHALL BE VERIFIED BY THE CONTRACTOR.
- 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

- 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".
- 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.
- 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.
- 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.
- 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.
- 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.
- 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

- 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.
- THE CONTRACTOR SHALL NOT DISRUPT ANY EXISTING UTILITY SERVICE (PRIVATE OR PUBLIC) WITHOUT WRITTEN AUTHORIZATION FROM VTRANS.
- 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.
- SEE THE UTILITIES SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.



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

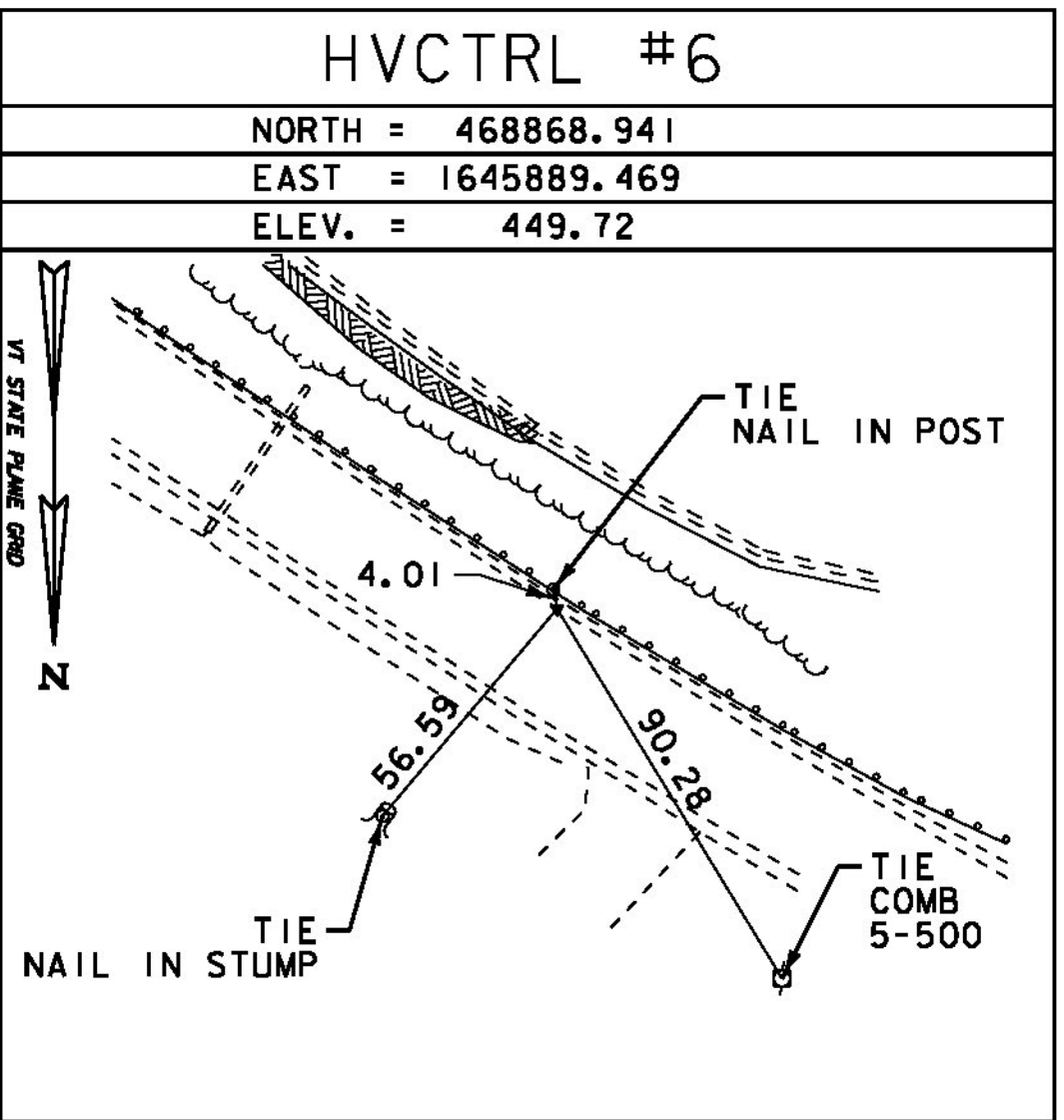
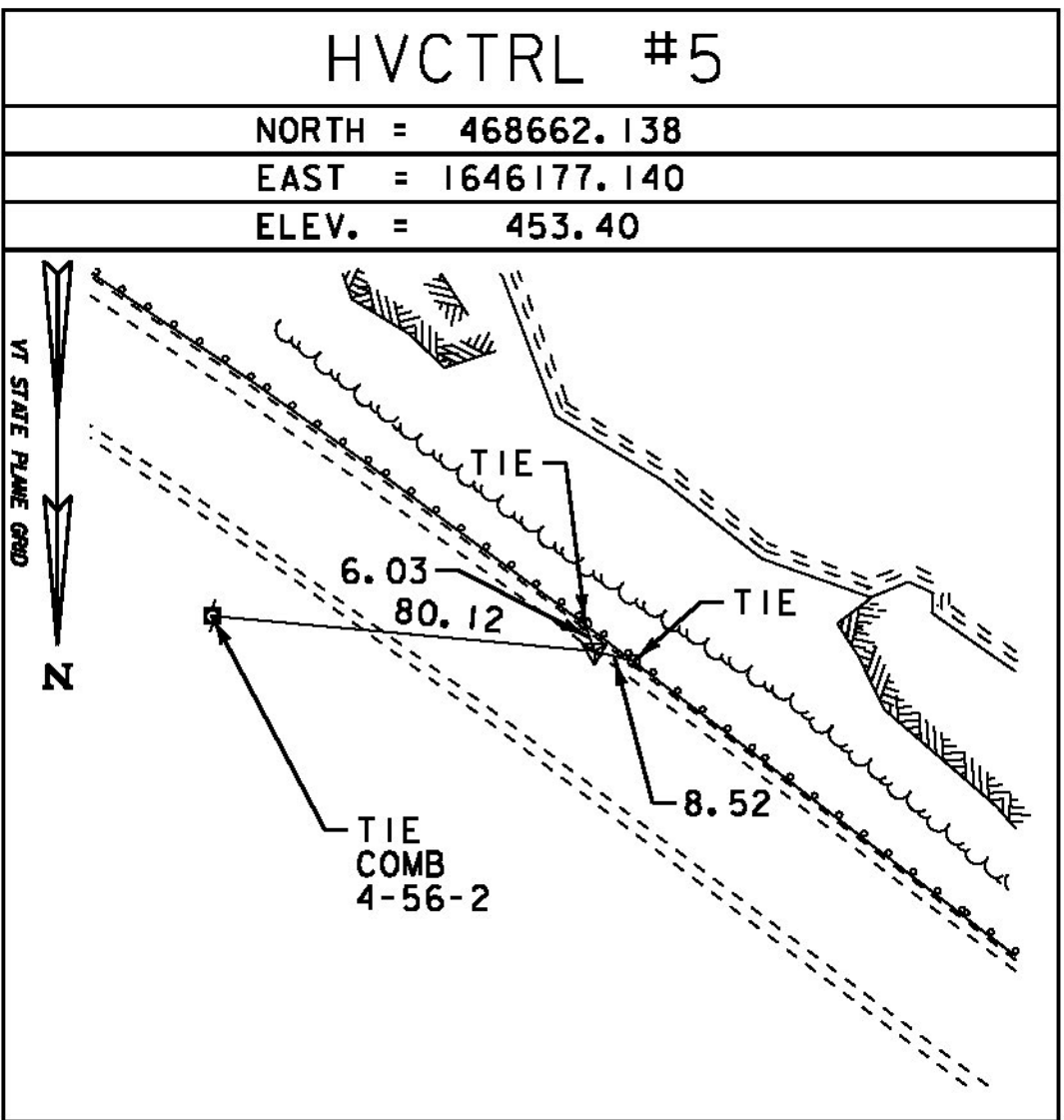
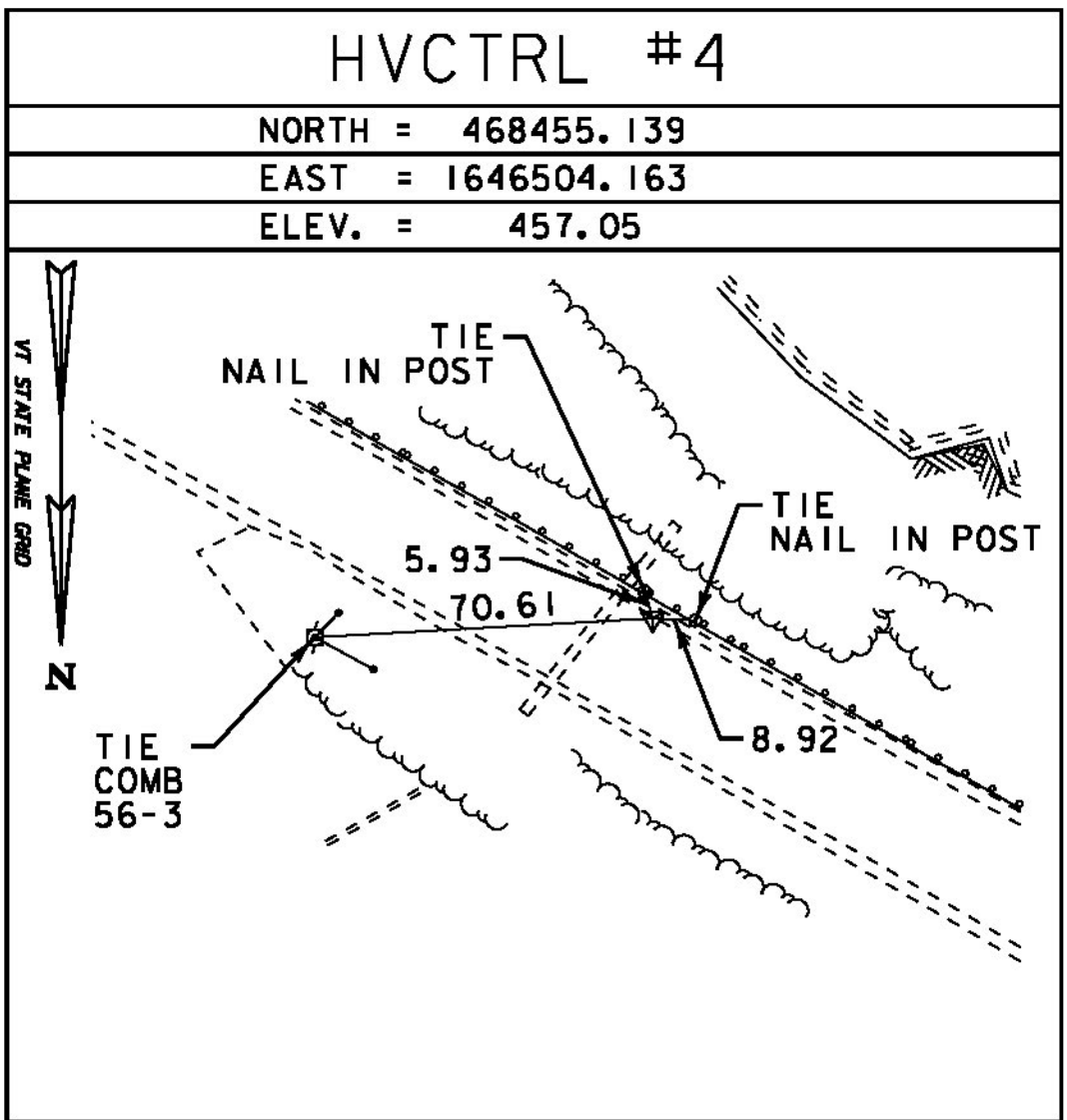
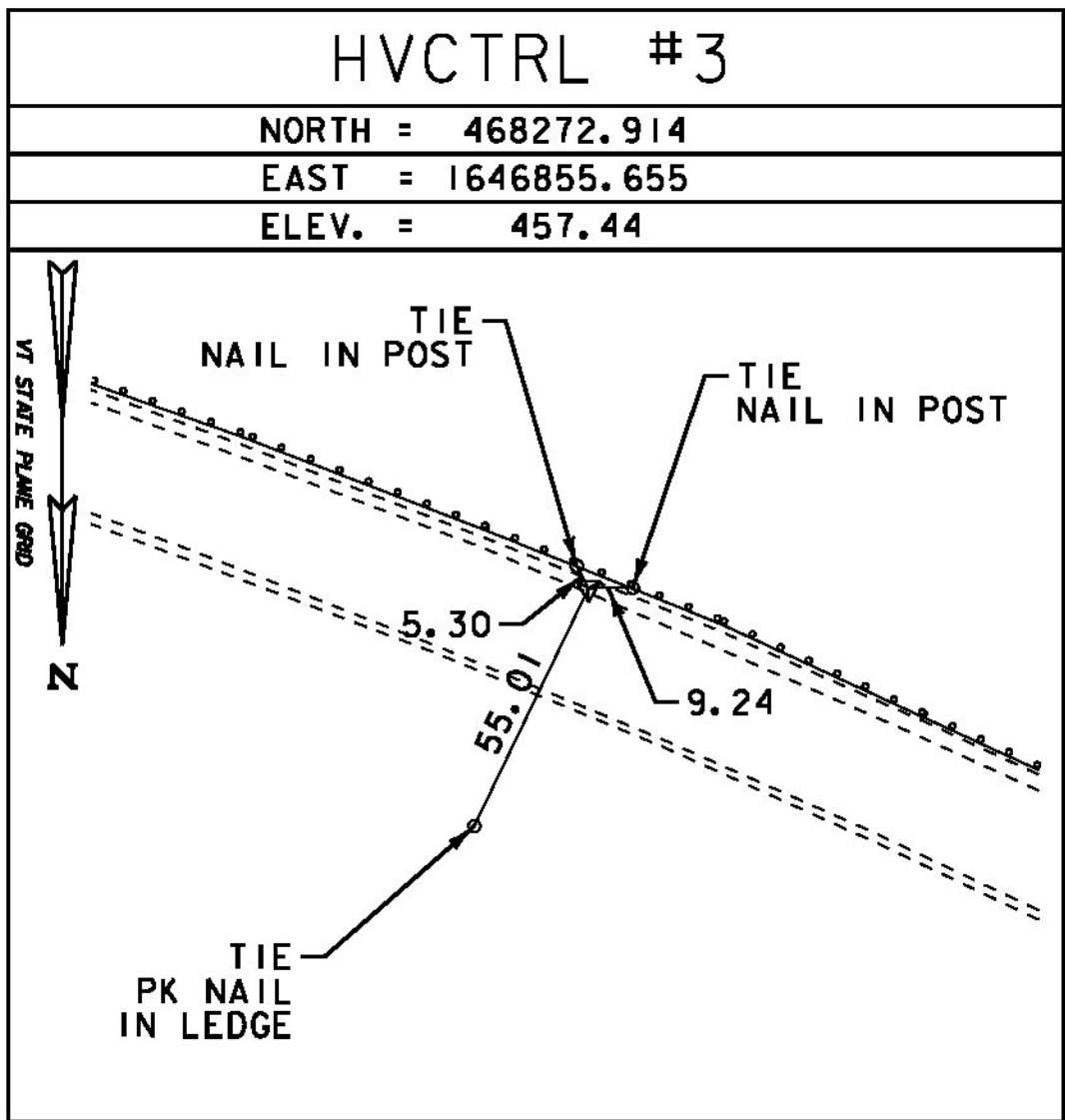
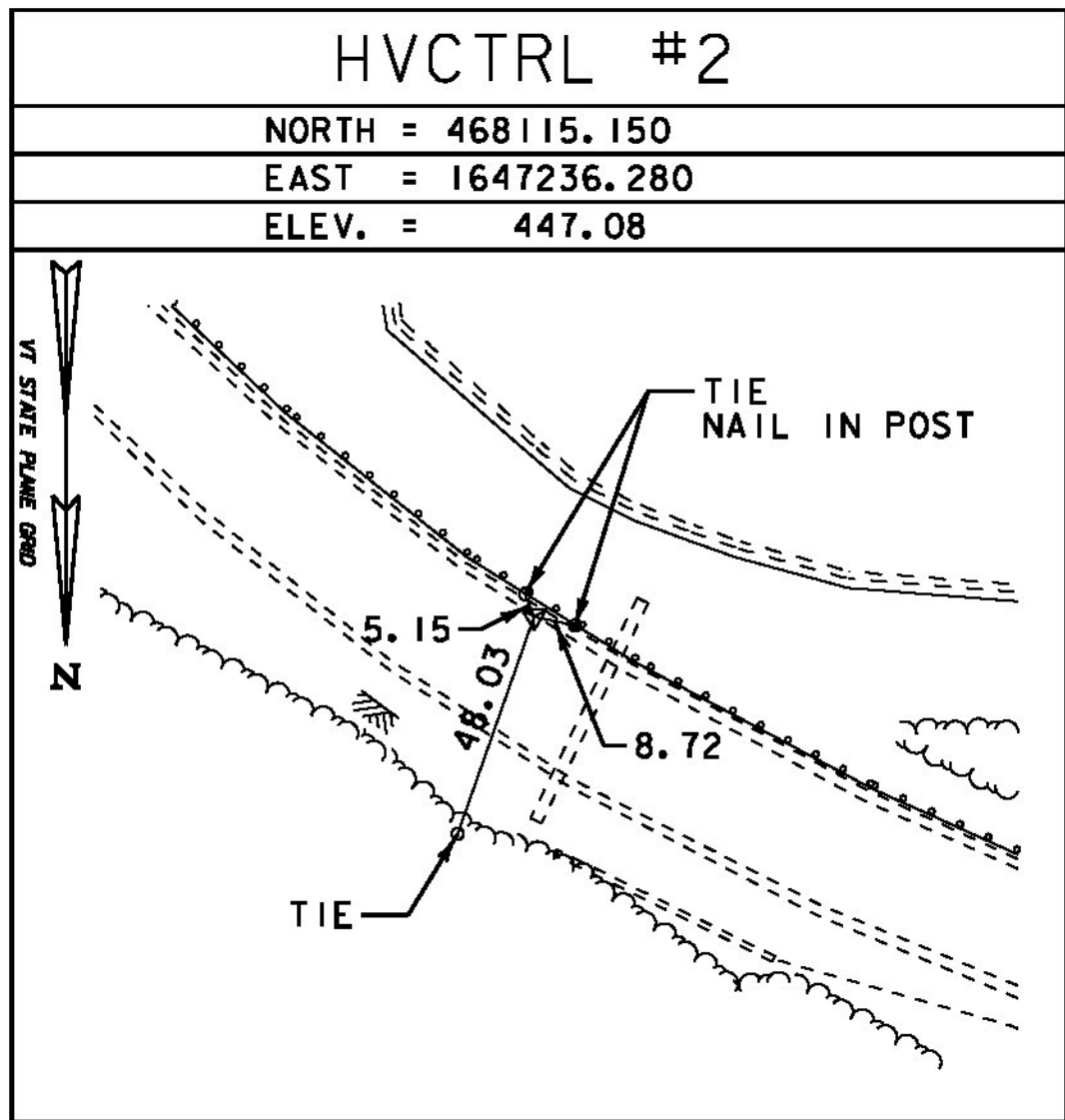
PROJECT NAME: SHARON	
PROJECT NUMBER: ER STP 0147 (20)	
FILE NAME:z12c410.dgn	PLOT DATE: 5/26/2015
PROJECT LEADER: J. TUCKER	DRAWN BY: B. MACK
DESIGNED BY: B. BRESLEND	CHECKED BY: A. SANZ
PROJECT NOTES SHEET	SHEET 8 OF 66



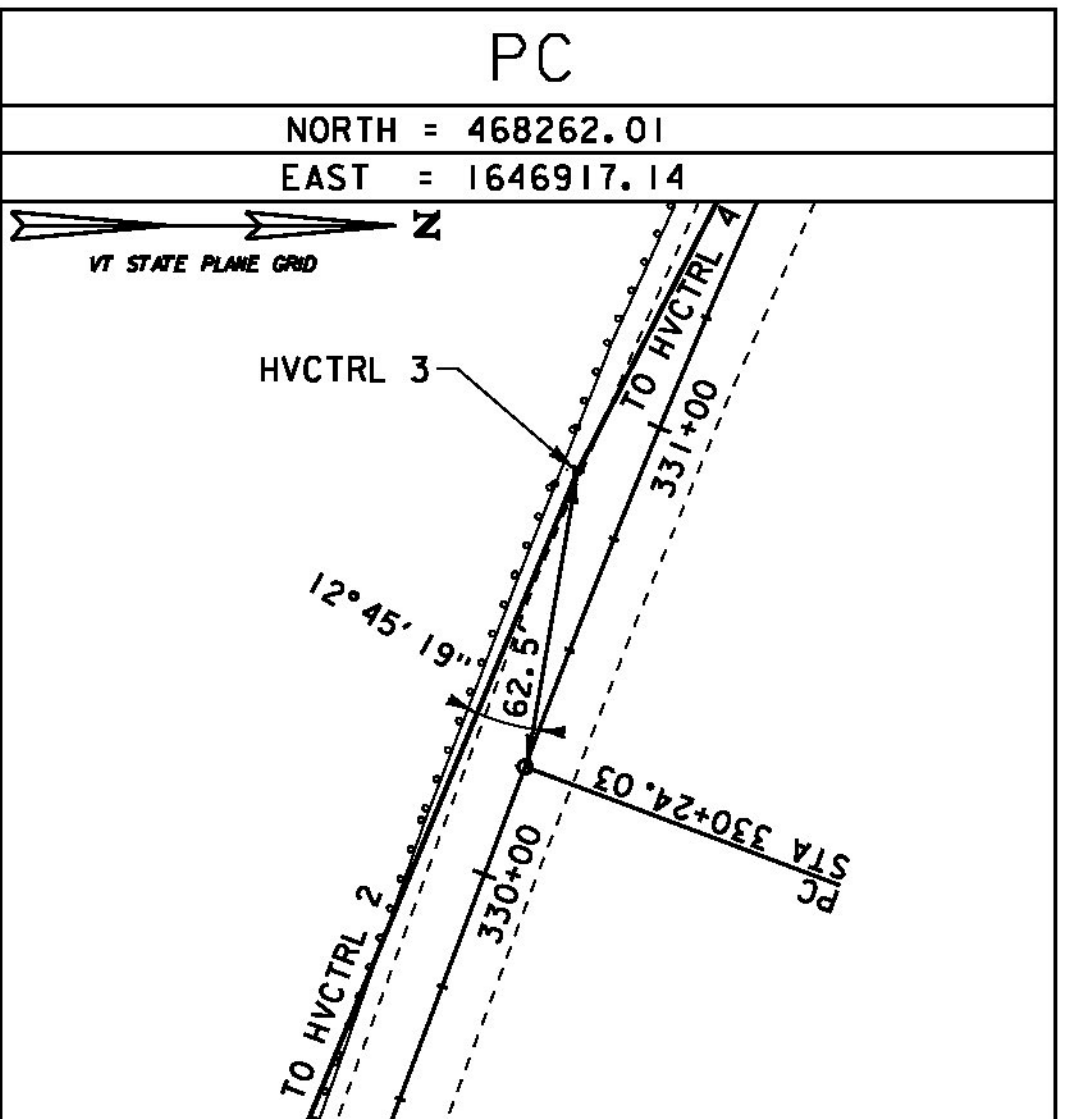
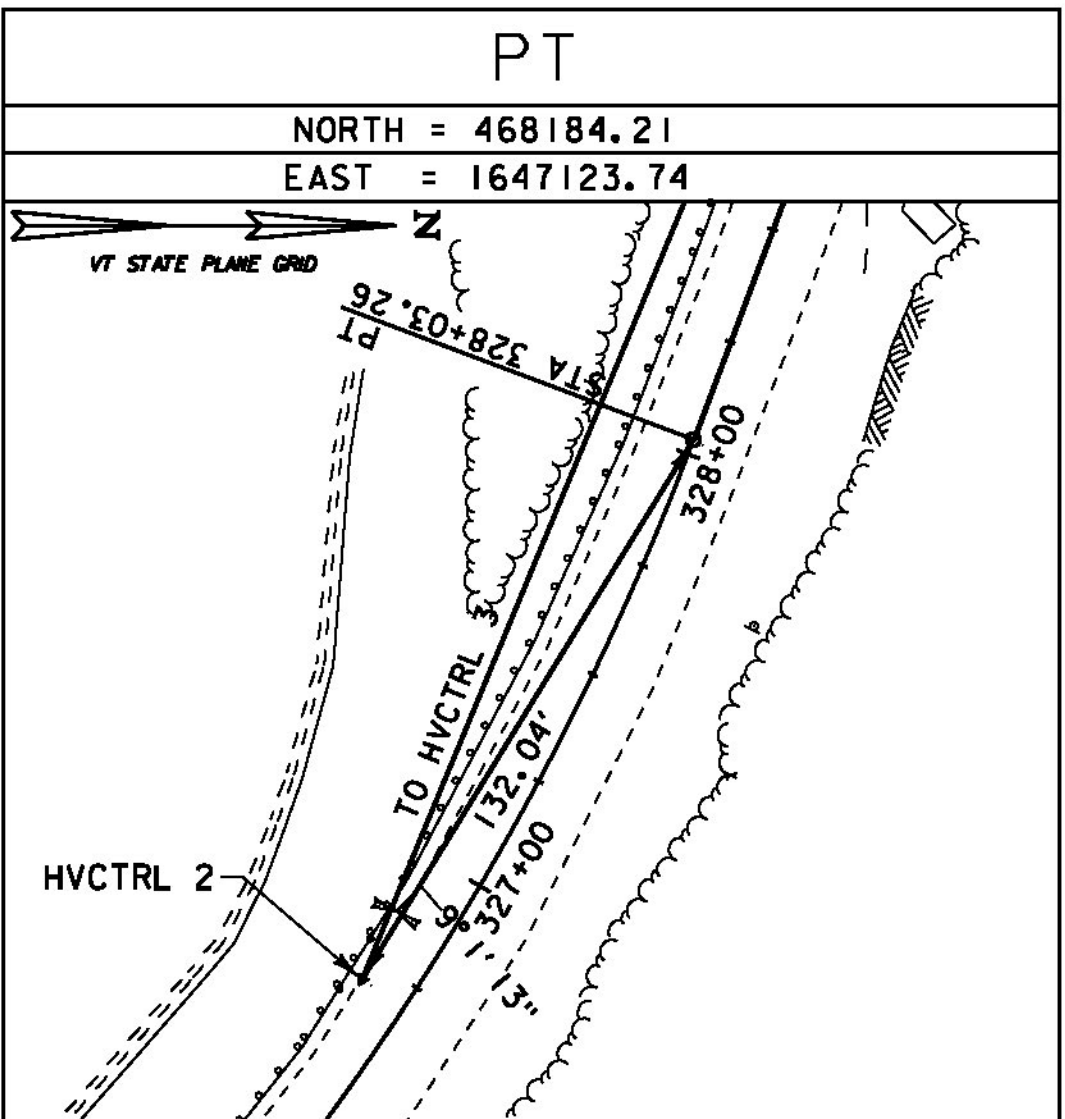
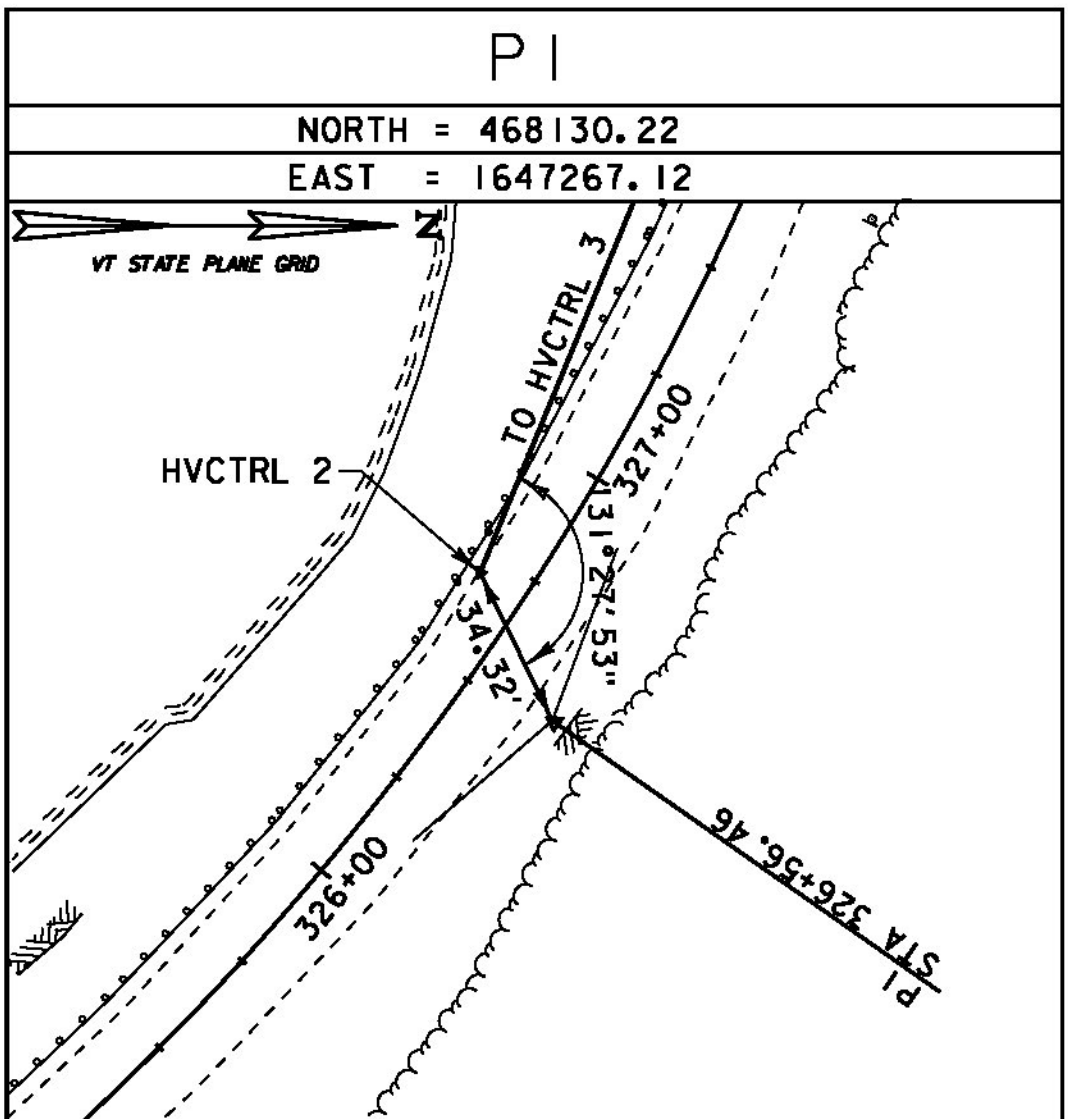
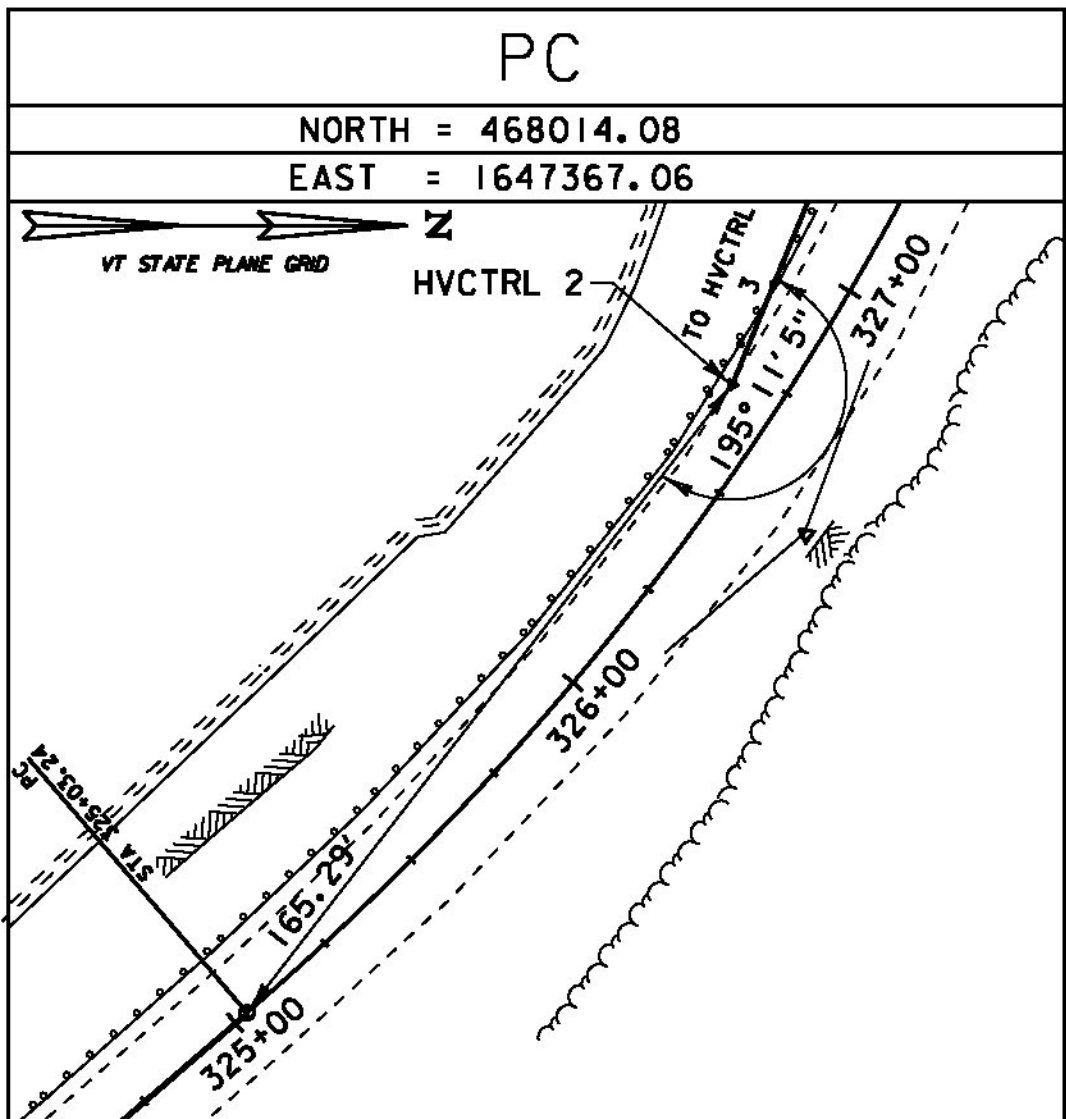
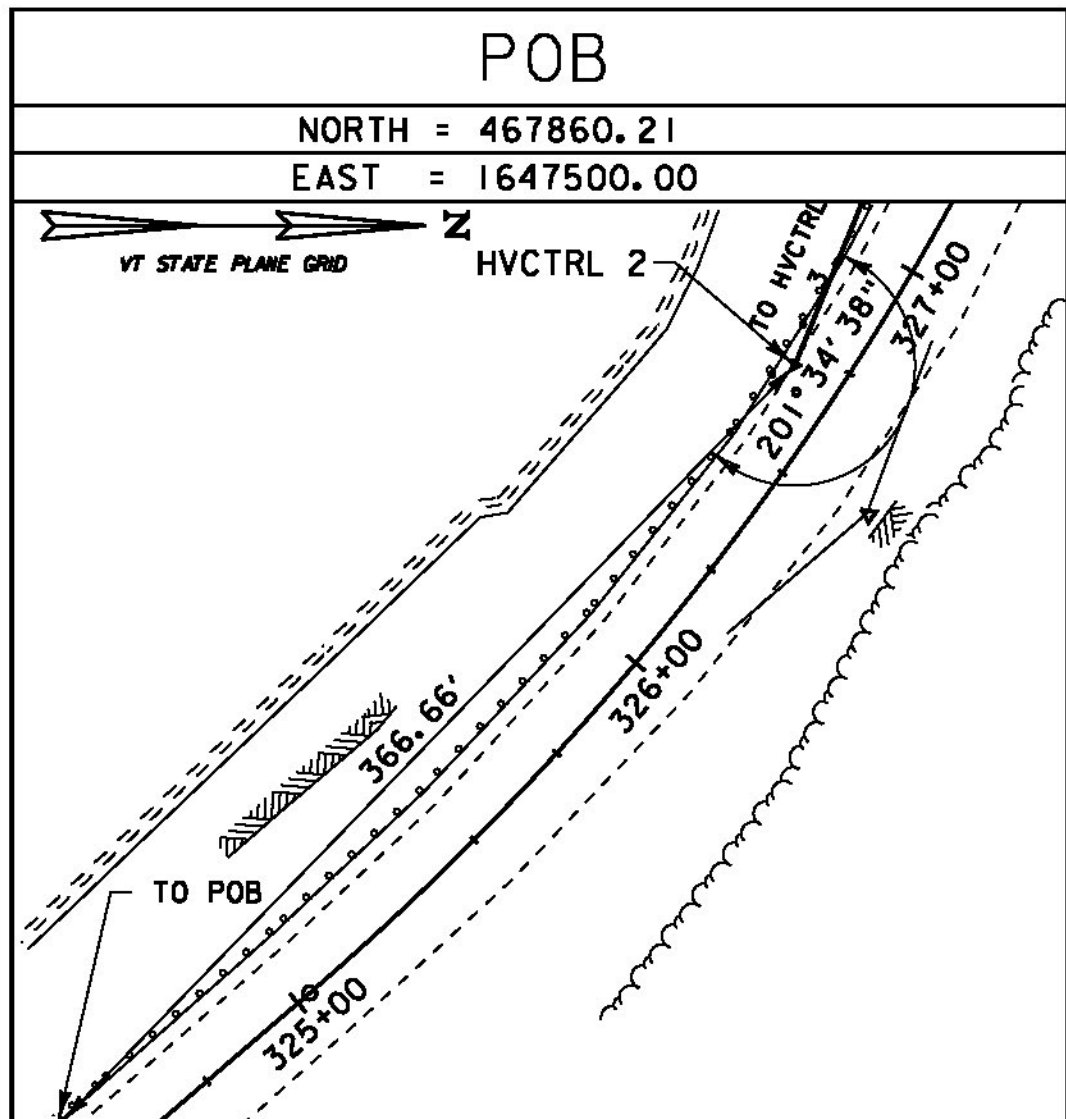
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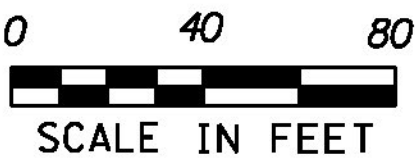
TRAVERSE TIES



ALIGNMENT TIES



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



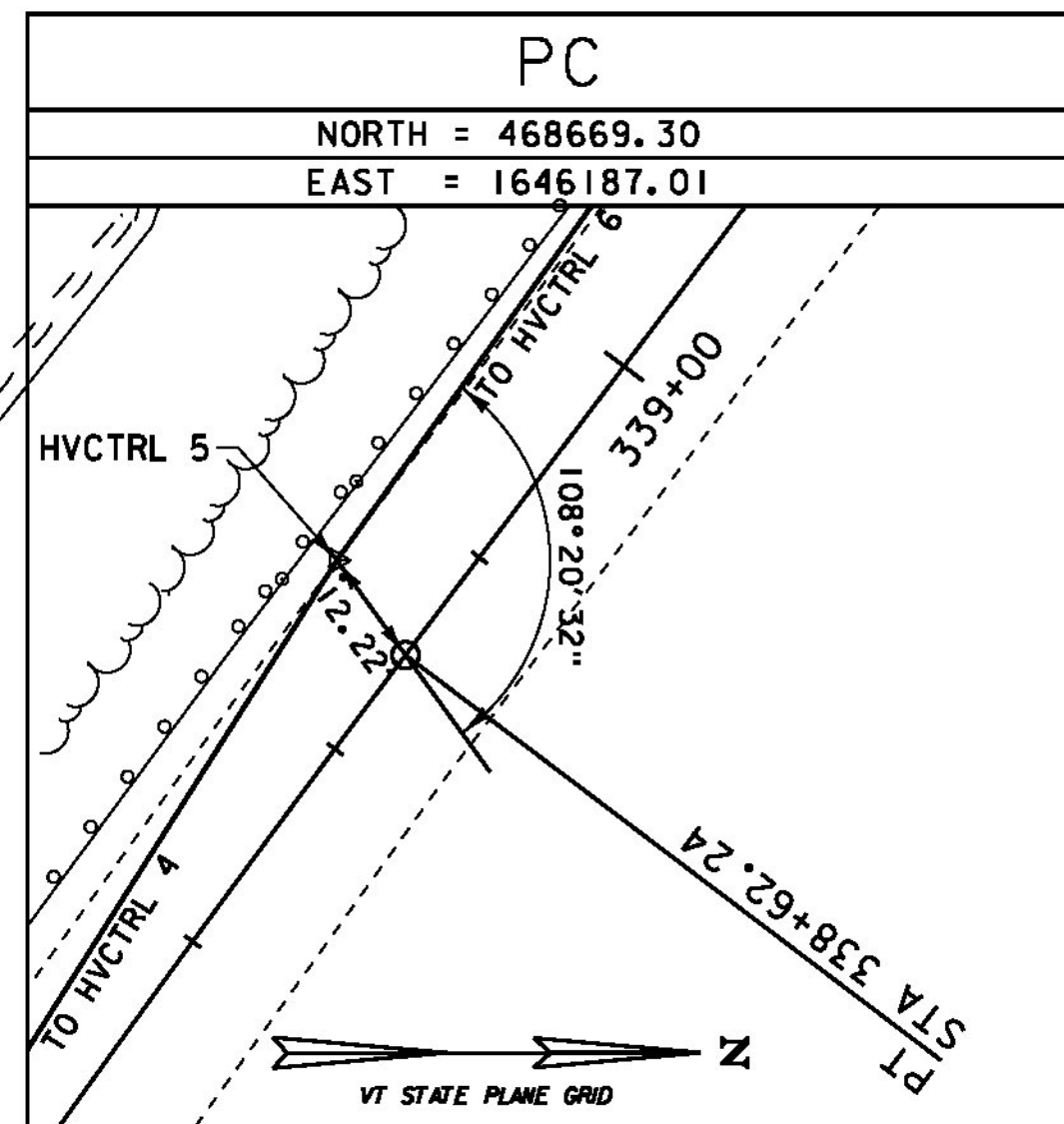
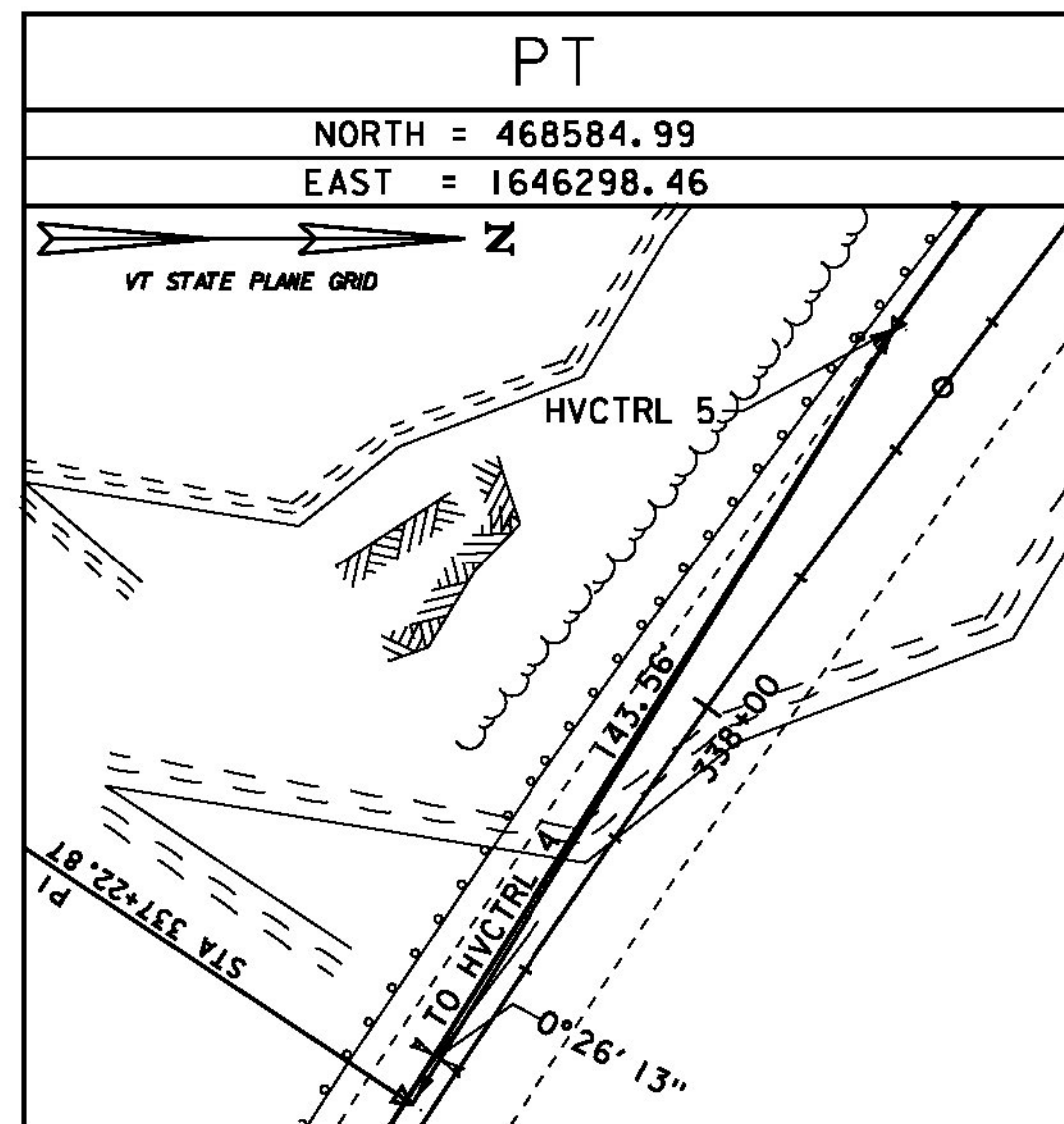
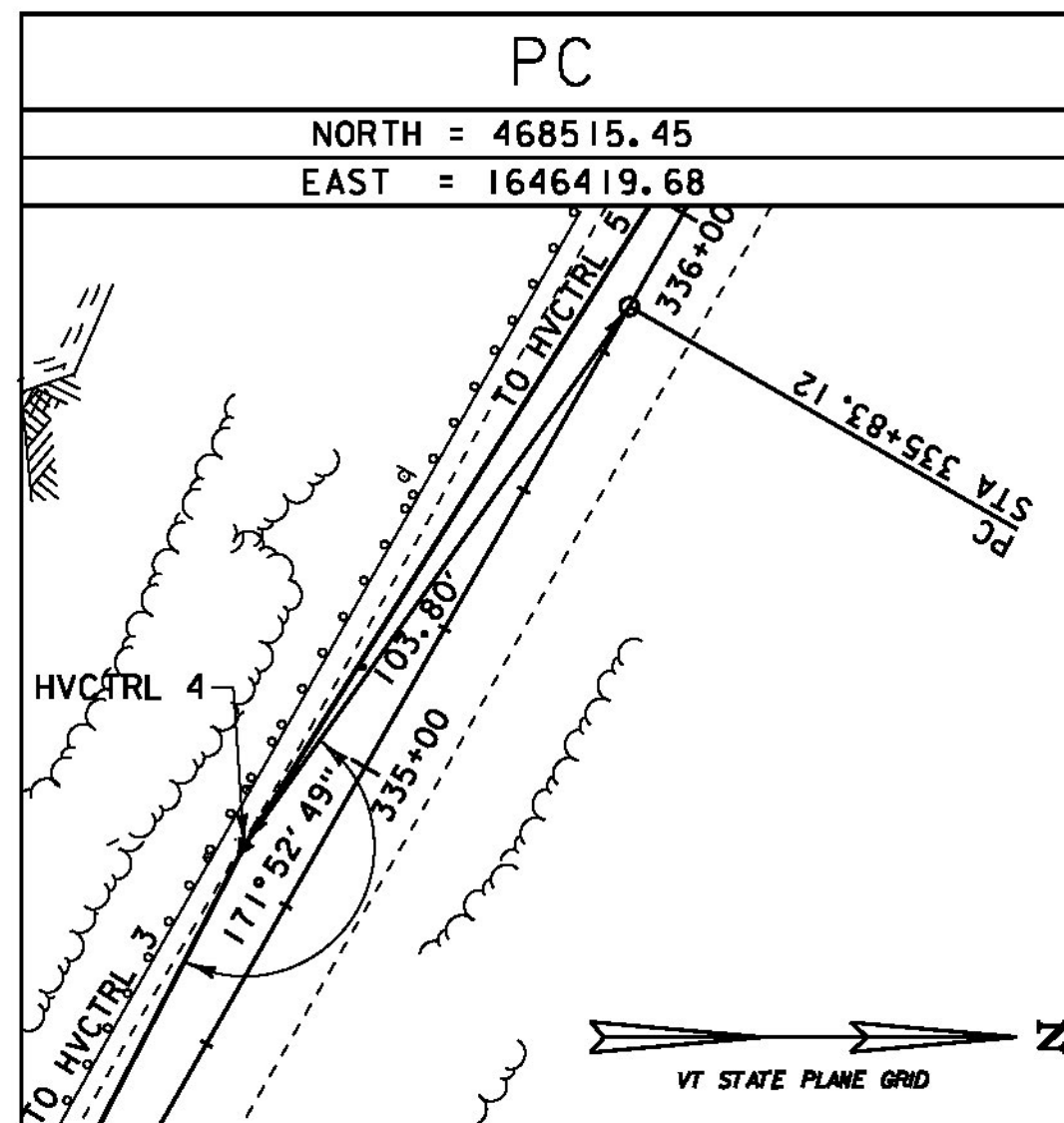
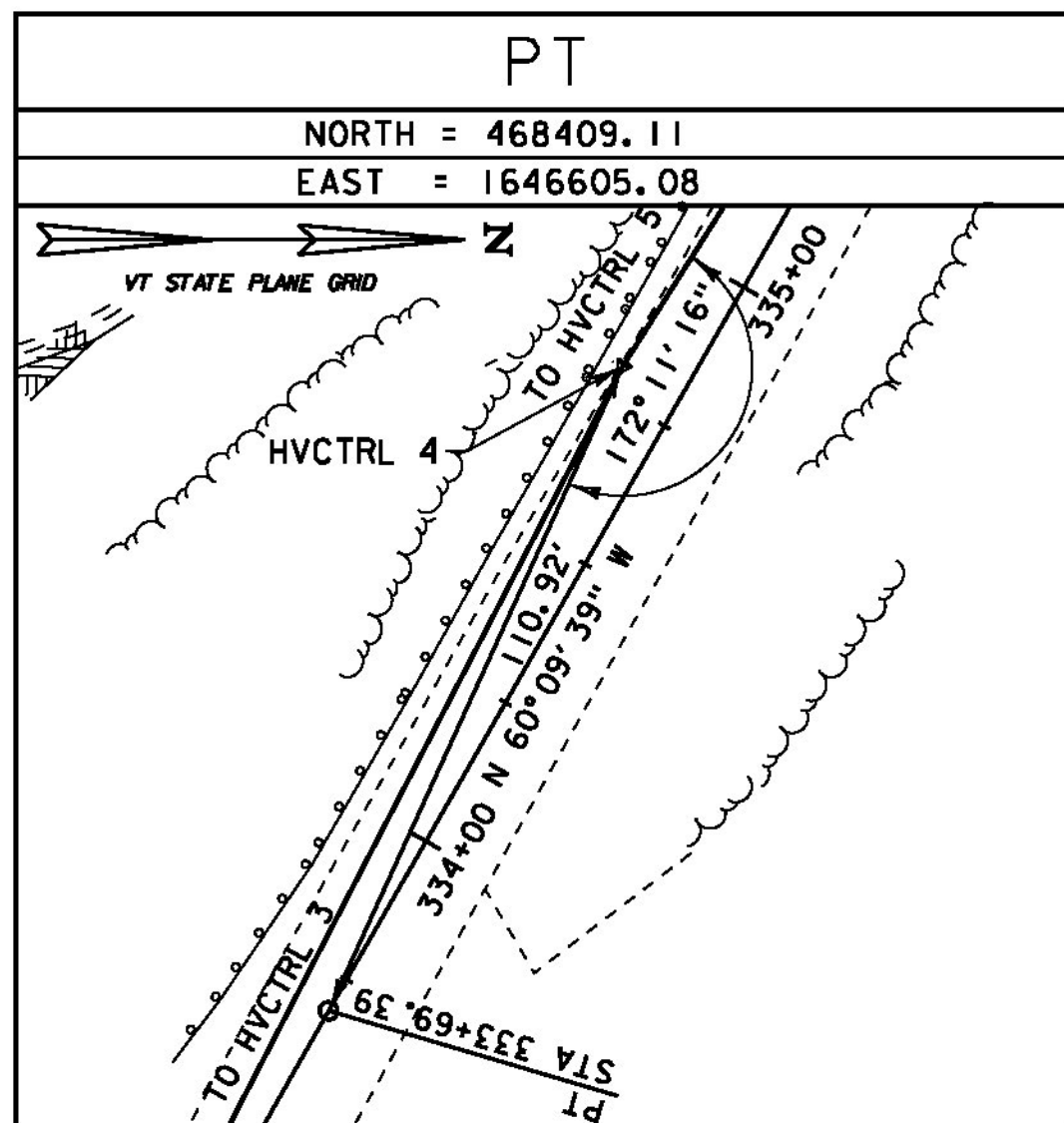
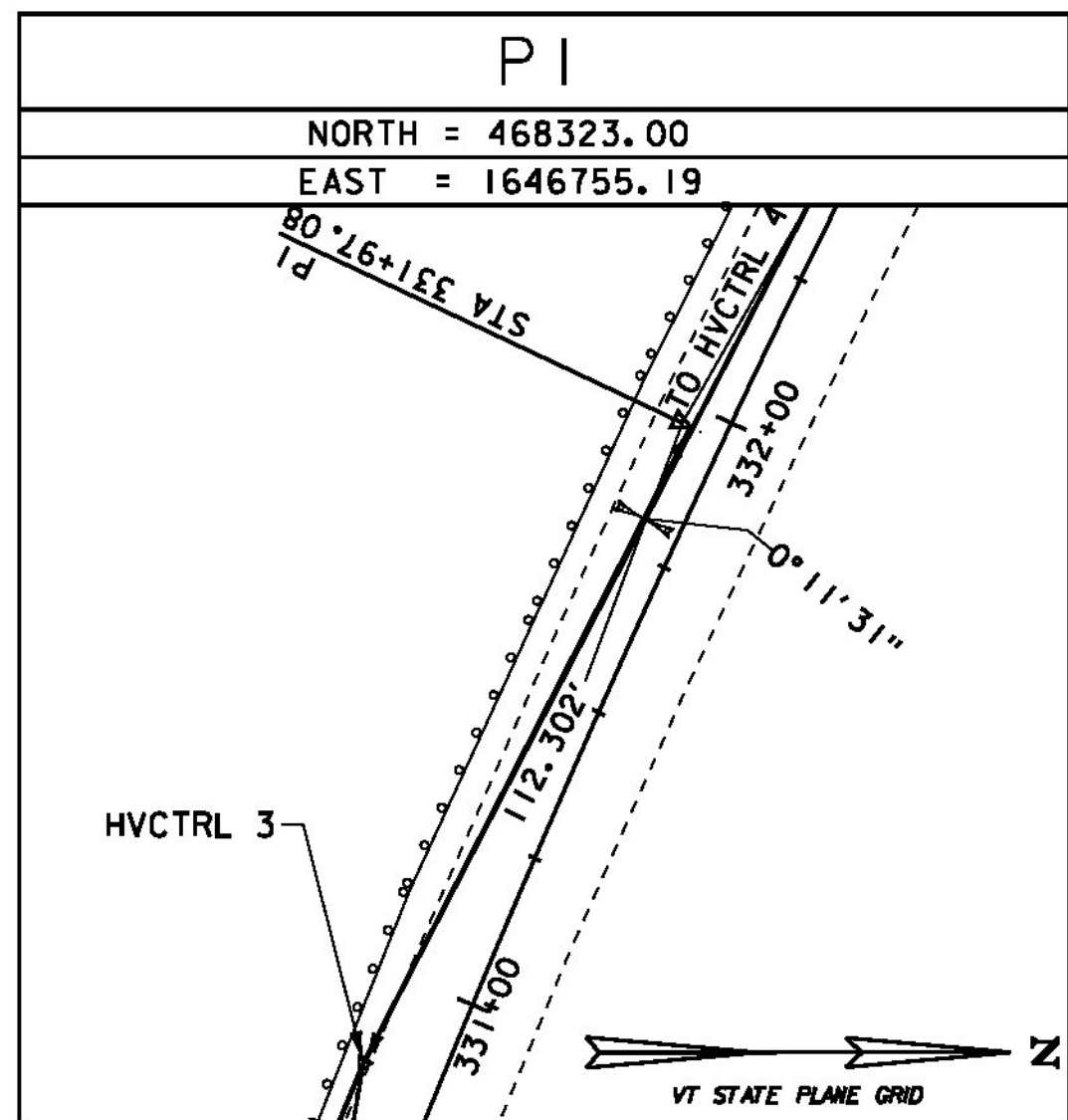
PROJECT NAME: SHARON  
PROJECT NUMBER: ER STP 0147 (20)

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

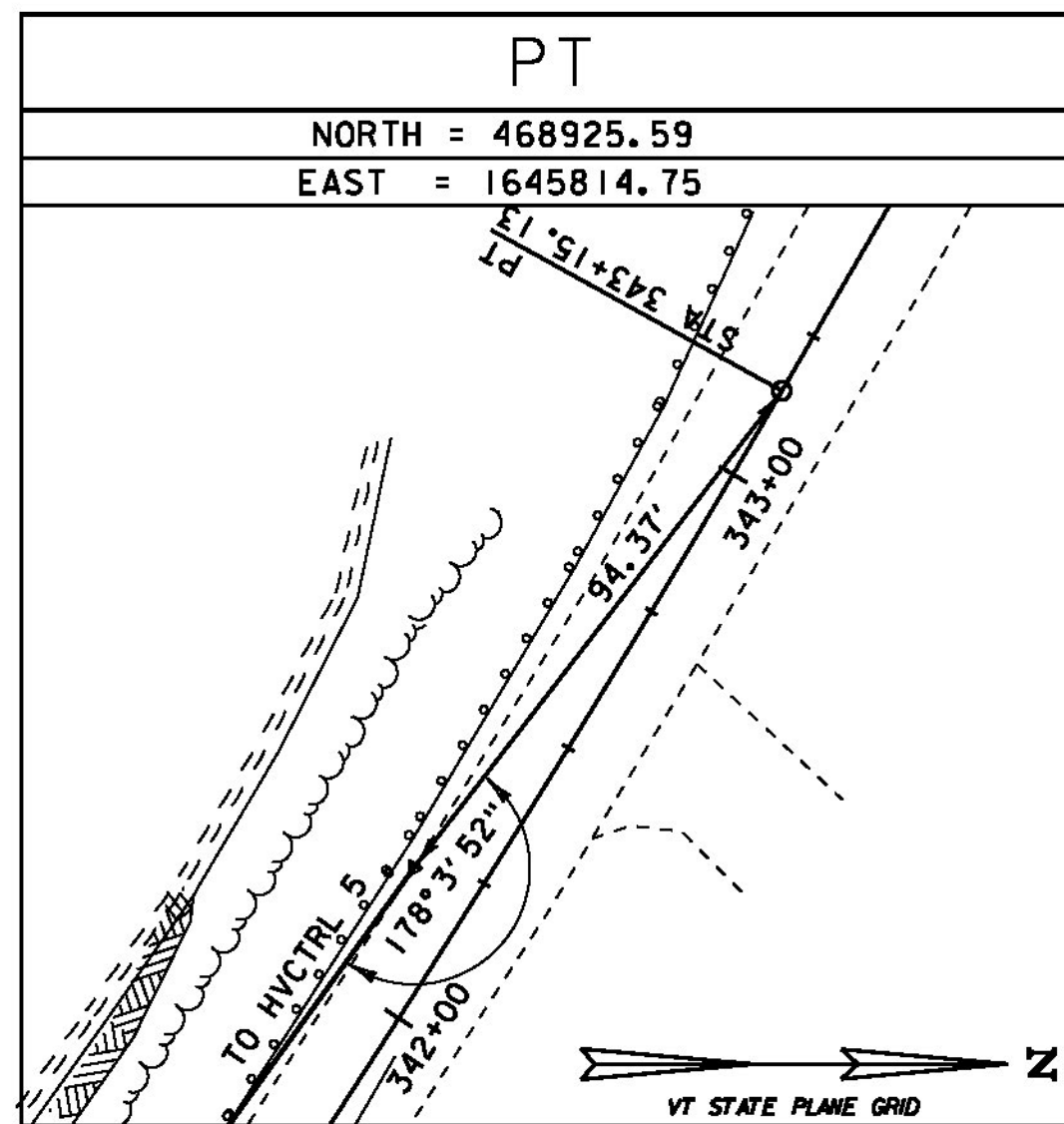
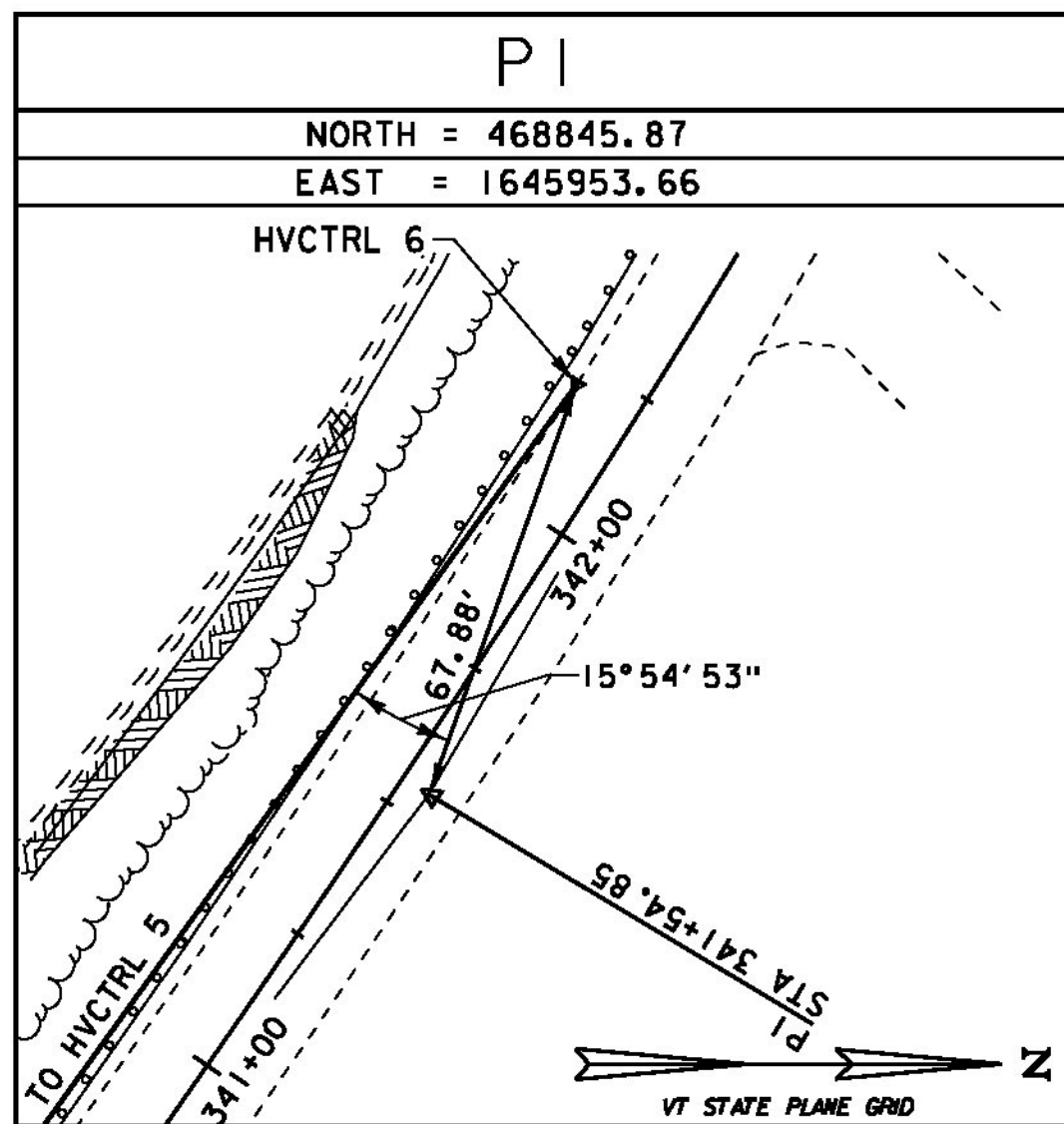
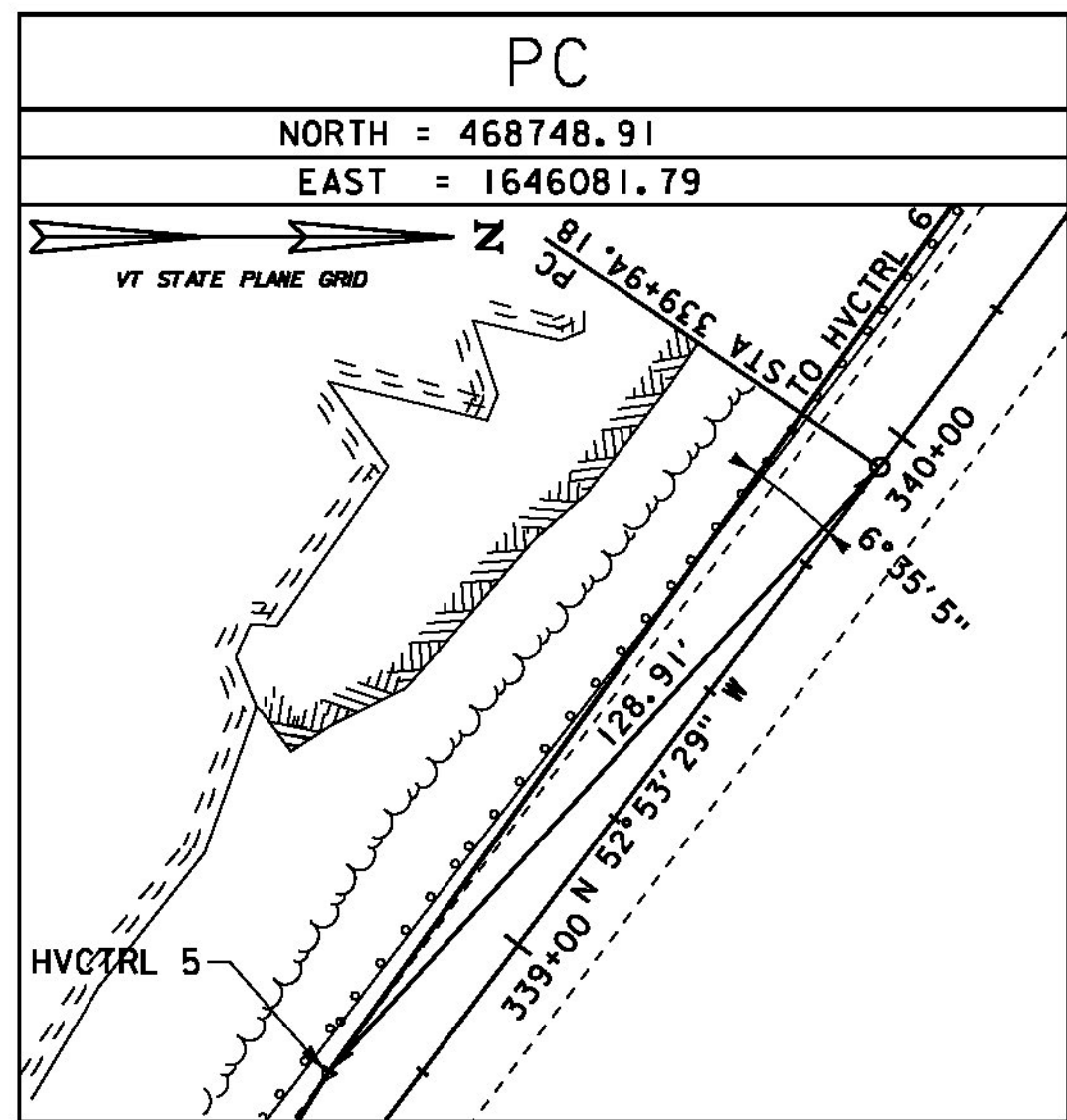
PLOT DATE: 3/31/2015  
DRAWN BY: B. MACK  
CHECKED BY: A. SANZ  
SHEET 9 OF 66



ALIGNMENT TIES

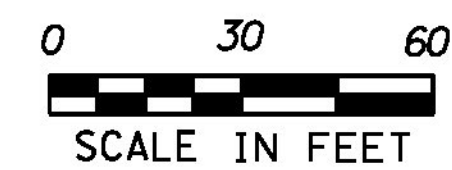


ALIGNMENT TIES



ALIGNMENT TIES

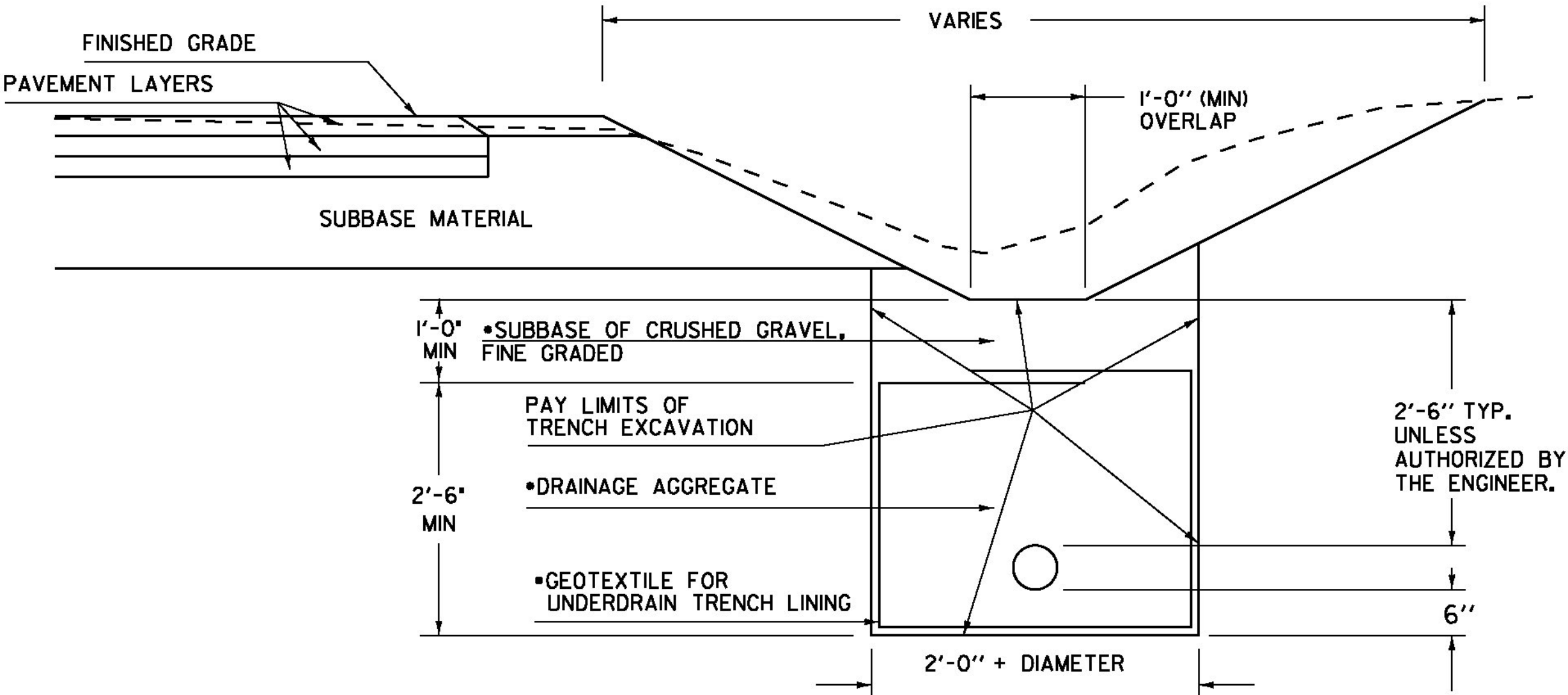
DATUM	
VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (2011)
ADJUSTMENT	NONE



PROJECT NAME: SHARON	
PROJECT NUMBER: ER STP 0147 (20)	
FILE NAME: z12c410tie.dgn	PLOT DATE: 3/31/2015
PROJECT LEADER: J. TUCKER	DRAWN BY: B. MACK
DESIGNED BY: B. BRESLEND	CHECKED BY: A. SANZ
TIE SHEET 2	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 UNDERDRAIN PIPE	DRAINAGE AGGREGATE	GEOTEXTILE FOR TRENCH	TRENCH EXCAVATION OF EARTH	TRENCH EXCAVATION OF ROCK	SUBBASE OF CRUSHED GRAVEL FINE GRADED	YIELDING MARKER POSTS	605.10 "6 INCH UNDERDRAIN PIPE"
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

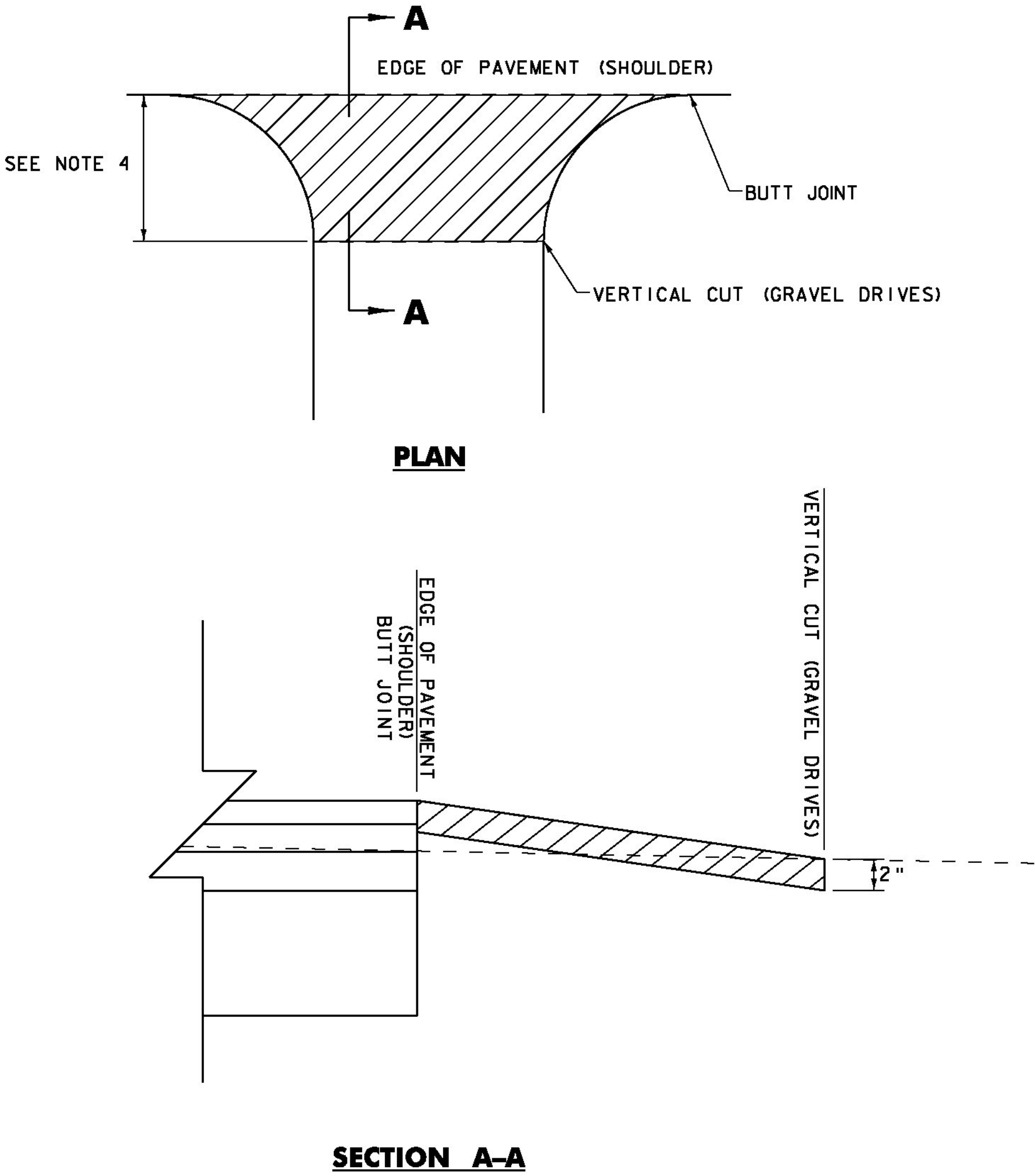
- NOTES:
1. GEOTEXTILE FOR UNDERDRAIN TRENCH LINING SHALL NOT BE PLACED AROUND UNDERDRAIN WHEN COVER ABOVE UNDERDRAIN IS LESS THAN ONE FOOT.
  2. THE END OF THE UNDERDRAIN PIPE AT THE BEGINNING OF ALL UNDERDRAIN RUNS SHALL BE WRAPPED IN GEOTEXTILE FABRIC. PAYMENT FOR THIS WORK IS INCLUDED IN THE UNIT 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	PLOT DATE: 3/31/2015
PROJECT LEADER: J. TUCKER	DRAWN BY: B. MACK
DESIGNED BY: B. BRESLEND	CHECKED BY: A. SANZ
UNDERDRAIN DETAIL SHEET	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

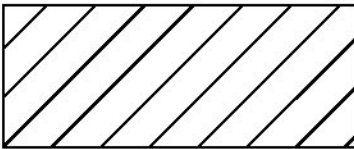


**HANDWORK DETAILS FOR DRIVES – GRAVEL DRIVES**

**NOTES:**

- PAVING LIFT NOT TO EXCEED 2 INCHES.
- 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)".
- 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)".
- 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		



SOIL CLASSIFICATION		COMMONLY USED SYMBOLS		GENERAL NOTES	
AASHTO		▽ Water Elevation		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.	
A1	Gravel and Sand	⊕ Standard Penetration Boring		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.	
A3	Fine Sand	⊕ Auger Boring		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.	
A2	Silty or Clayey Gravel and Sand	⊙ Rod Sounding		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.	
A4	Silty Soil - Low Compressibility	S Sample			
A5	Silty Soil - Highly Compressible	N Standard Penetration Test			
A6	Clayey Soil - Low Compressibility	Blow Count Per 300 mm For:			
A7	Clayey Soil - Highly Compressible	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			
		Sl 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			
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		
DEFINITIONS (AASHTO)					
BEDROCK (LEDGE) - Rock in its native location of indefinite thickness.		VARVED - Alternate layers of silt and clay.			
BOULDER - A rock fragment with an average dimension > 304.8 mm.		HARDPAN - Extremely dense soil, cemented layer, not softened when wet.			
COBBLE - Rock fragments with an average dimension between 76.2 and 304.8 mm.		MUCK - Soft organic soil (containing > 10% organic material).			
GRAVEL - Rounded particles of rock < 76.2 mm and > 2 mm (#10 sieve).		MOISTURE CONTENT - Weight of water divided by dry weight of soil.			
SAND - Particles of rock < 2 mm (#10 sieve) and > 75 μm (#200 sieve).		FLOWING SAND - Granular soil so saturated (loose) that it flows into drill casing during extraction of wash rod.			
SILT - Soil < 75 μm (#200 sieve), non or slightly plastic and exhibits no strength when air-dried.		STRIKE - Angle from magnetic north to line of intersection of bed with a horizontal plane.			
CLAY - Fine grained soil, exhibits plasticity when moist and considerable strength when air-dried.		DIP - Inclination of bed with a horizontal plane.			
		SEE LAYOUT SHEETS FOR BORING LOCATIONS			
		PROJECT NAME: SHARON			
		PROJECT NUMBER: ER STP 0147 (20)			
		FILE NAME: z12c410boring.dgn		PLOT DATE: 3/31/2015	
		PROJECT LEADER: J. TUCKER		DRAWN BY: B. MACK	
		DESIGNED BY: B. BRESLEND		CHECKED BY: A. SANZ	
		BORING LAYOUT SHEET		SHEET 14 OF 66	



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

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



QUANTITY SHEET 2

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
											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	--			

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

STATE OF VERMONT  
AGENCY OF TRANSPORTATION

QUANTITY SHEET 3

[illegible]

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
QUANTITY SHEET 3	SHEET 17 OF 66



**STATE OF VERMONT  
AGENCY OF TRANSPORTATION**

## ITEM DETAIL SHEET

[illegible]

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
ITEM DETAIL SHEET	SHEET 18 OF 66



# DRAINAGE DETAIL SHEET

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

[illegible]



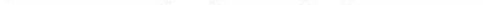
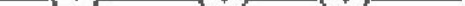
**STATE OF VERMONT  
AGENCY OF TRANSPORTATION**

# RIGHT - OF - WAY DETAIL SHEET

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 326+85.61 LT 328+00.00 LT 328+47.44 LT 328+72 LT 329+37.93 LT 333+26 LT 333+66.33 LT	323+00.00 LT 328+84.07 LT 326+89.66 328+73.74 LT 328+73.74 LT 333+76 LT 333+44.25 LT  333+75.66 LT			CONSTRUCTION SLOPE CULVERT & DRAINAGE CONSTRUCTION CULV, DIT & DRAINAGE CONSTRUCTION SLOPE  SLOPE	T P P T P T P  P	221 SF ± 0.22 A ±  462 SF 907 SF 0.12 A ± 0.10 A  3 SF							Incl. EROSION CONTROL Incl. STONE FILL; 9,595 SF ±   Incl. ENVIROMENTAL FENCE Incl. STONE FILL Incl. EROSION CONTROL; 5,382 SF ± Incl. STONE FILL; 4,474 SF DRIVE; MM 0630	
1B		1, 2	322+97 RT 323+00.00 RT 325+82.94 RT 326+58 RT 326+67.63 RT 326+98.87 RT 328+51 RT 328+54.07 RT	326+29 RT 325+49.75 RT 326+05.00 RT 327+41 RT 327+28.17 RT 327+48 RT 330+22 RT 328+94.60 RT			CONSTRUCTION SLOPE SLOPE CONSTRUCTION CULVERT & DITCH REMOVE CONSTRUCTION DITCH	T P P T P T T P	957 SF 0.10 A 8 SF 262 SF 455 SF  535 SF 146 SF							Incl. BF 4,481 SF   Incl. BF Incl. STONE FILL & EROSION CONTROL CULVERT Incl. BF Incl. STONE FILL & EROSION CONTROL	
1C		2, 3	330+21 RT 333+56 RT	333+13 RT			CONSTRUCTION	T	732 SF								Incl. BF DRIVE; MM 0631
1D		3	333+97 RT 333+99.44 RT	336+64 RT 334+98.30 RT			CONSTRUCTION DITCH	T P	559 SF 971 SF								Incl. BF Incl. STONE FILL & EROSION CONTROL
2	WITIK, ALEXANDER	3, 4	336+63 RT 338+41.15 RT 341+25 RT 341+29.59 RT 342+06 RT 342+58 RT	340+66 RT 338+60.77 RT 341+95 RT 341+72.58 RT 342+44.25 RT			CONSTRUCTION DITCH CONSTRUCTION DITCH CONSTRUCTION	T P T P T	712 SF 67 SF 174 SF 331 SF 29 SF								Incl. BF Incl. STONE FILL & EROSION CONTROL Incl. BF Incl. STONE FILL Incl. BF DRIVE; MM 0647

[illegible]

PLOT DATE 09/10/14

PLAN LEGEND					
	EXISTING RIGHT-OF-WAY		TOE OF SLOPE	EC	-EROSION CONTROL
	TAKING WITH ACCESS		TOP OF CUT	(P)	-PERMANENT
	TAKING WITHOUT ACCESS		SLOPE RIGHT	(T)	-TEMPORARY
	CLEAR ZONE		CONSTRUCTION RIGHT	DR.	-DRAINAGE RIGHT
	PROPERTY LINE		PROJECT DEMARCATION FENCE	DIT.	-DITCHING RIGHT
				CH.	-CHANNEL RIGHT
				DRIVE	-DRIVE RIGHT
				CUL.	-CULVERT RIGHT
				C&T	-CLEARING & TRIMMING RIGHT
				SR	-SLOPE RIGHT
				UE	-UTILITY EASEMENT

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

PROJECT NAME: <b>SHARON</b>	
PROJECT NUMBER: <b>STP 0147(20)</b>	
FILE NAME: <b>z12c410detail.dgn</b>	PLOT DATE: <b>10-SEP-2014</b>
PROJECT LEADER: <b>LIBBY-D&amp;K</b>	DRAWN BY: <b>MR</b>
DESIGNED BY: <b>B. MACK</b>	CHECKED BY: <b>JB</b>
<b>R.O.W. DETAIL SHEET #1</b>	<b>ROW</b> SHEET 21 OF 66

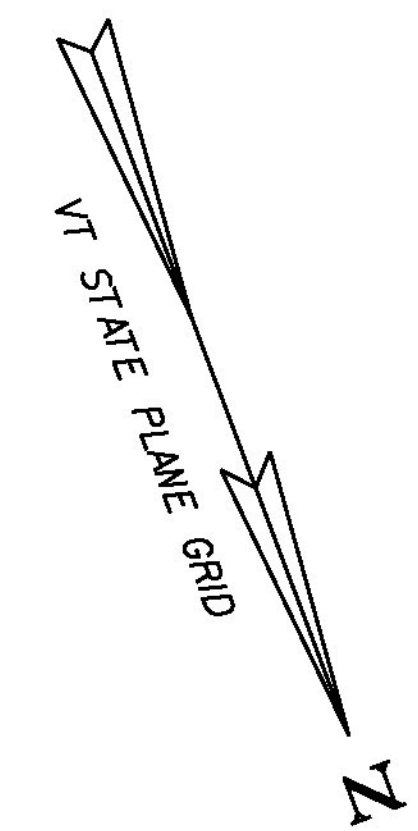


BEGIN PROJECT STP 0147 (20)  
STA. 322+50.00 = MM 6.108  
**BEGIN R.O.W. PROJECT**  
**STP 0147 (20)**  
**STA. 322+91.88**  
**24.75' LT.**

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



**1A**  
**SYMONDS, PETER W.**  
**& ANDREA W.**

**1B**  
**SYMONDS, PETER W.**  
**& ANDREA W.**

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

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"

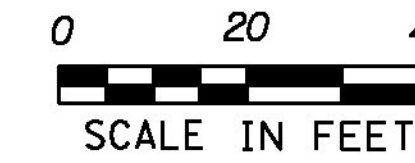
7 STA. 327+01.00 RT 18.5' TO  
STA. 328+25.00 RT 18.5'  
INSTALL 6" UNDERDRAIN  
LENGTH = 124'-0"

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.

CURVE (I)  
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



**FOR R.O.W.**  
**USE ONLY**

PROJECT NAME:	SHARON	PROJECT NUMBER:	STP 0147(20)
FILE NAME:	I2c410/row/I2c410lay1	PLOT DATE:	10-SEP-2014
PROJECT LEADER:	J. TUCKER	DRAWN BY:	B. MACK
DESIGNED BY:	B. MACK	CHECKED BY:	J. TUCKER
ROW LAYOUT SHEET I		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)

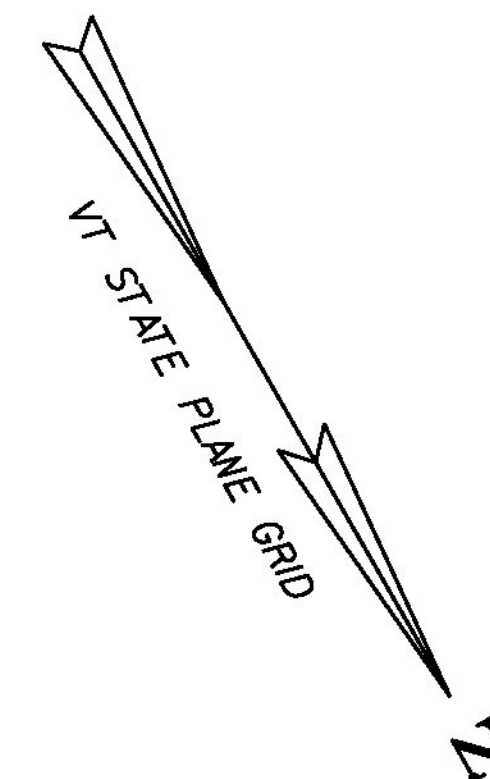
TEMPORARY 4 INCH YELLOW LINE, PAINT  
STA. 328+25 - STA. 333+00 (SOLID LT & RT)

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



NAVIGABLE WATERS  
WHITE RIVER

1A

SYMONDS, PETER W.  
& ANDREA W.

1C

SYMONDS, PETER W.  
& ANDREA W.

END FULL DEPTH RECONSTRUCTION  
BEGIN PARTIAL ROADWAY RECONSTRUCTION  
STA. 330+50 = MM 6.259

1B

SYMONDS, PETER W.  
& ANDREA W.

INV. 449.00  
18.5 RT  
K=10.81' N9°38'27"W  
L=5.00' N42°41'15"W  
M=9.07' S45°58'18"W  
N=24.39' N76°30'0"W

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

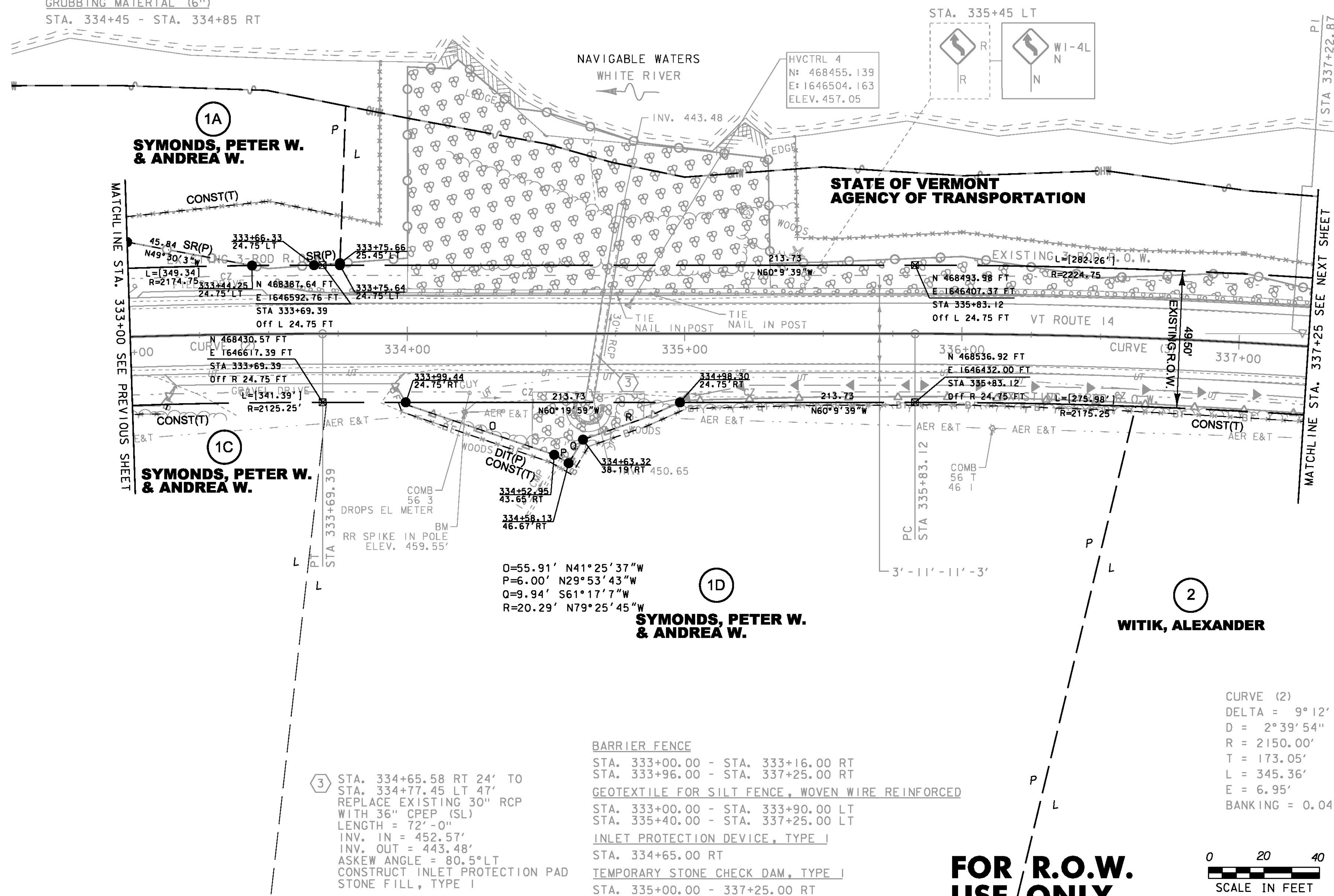
PLOT DATE: 10-SEP-2014  
DRAWN BY: B. MACK  
CHECKED BY: J. TUCKER  
ROW SHEET 23 OF 66



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

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 F

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

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

**FOR / R.O.W.  
USE / ONLY**

0 20 40  
SCALE IN FEET











STA. 328+53 - STA. 328+67 LT  
STA. 328+59 - STA. 328+90 RT

STA. 330+00 - STA. 331+50 LT

STA. 330+00 - STA. 331+50 LT

STA. 328+59 - STA. 328+90 RT

STA. 328+25 - STA. 333+00 (SOLID LT & RT)

STA. 328+25 - STA. 333+00 (SOLID LT & RT)

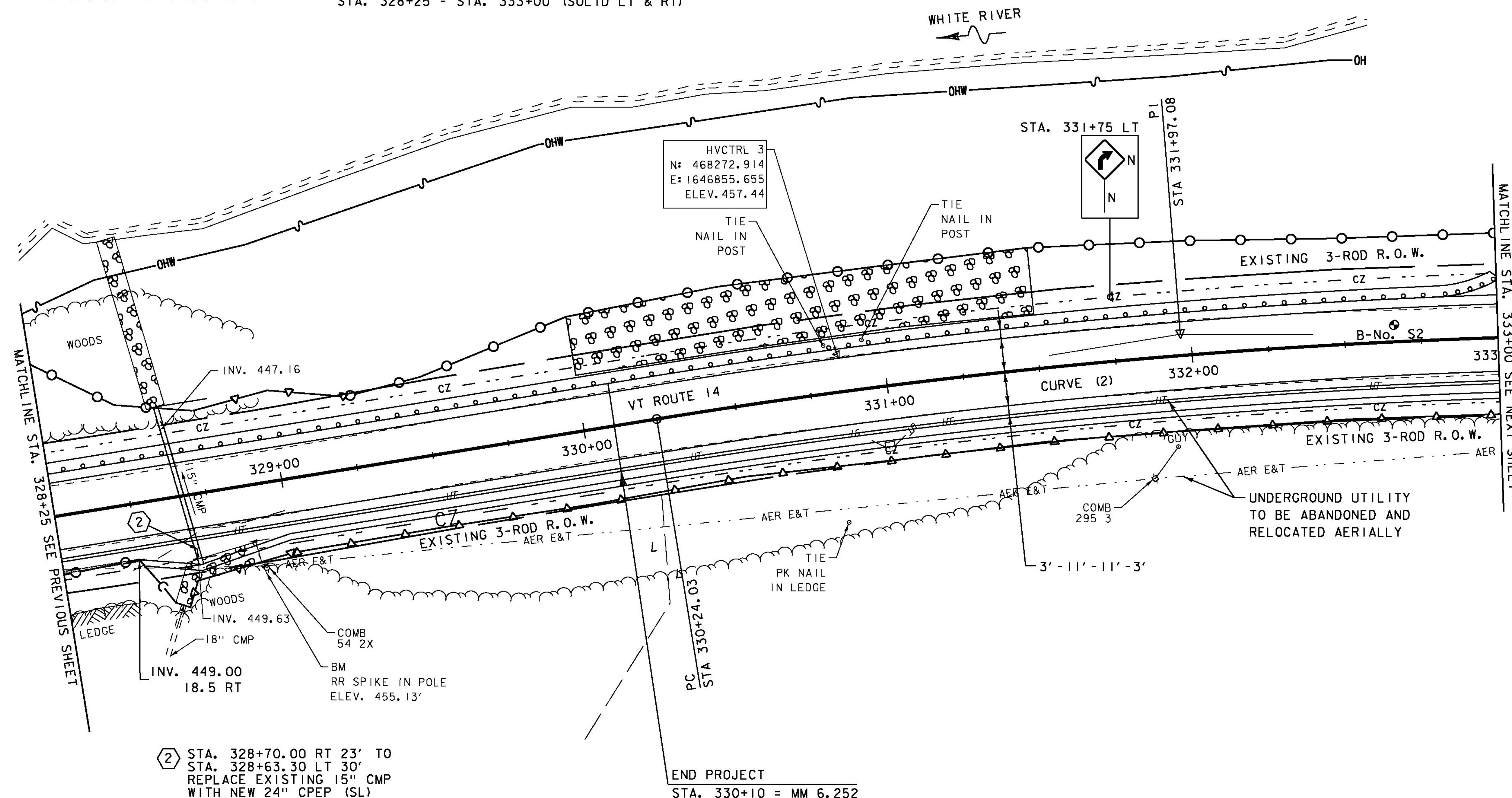
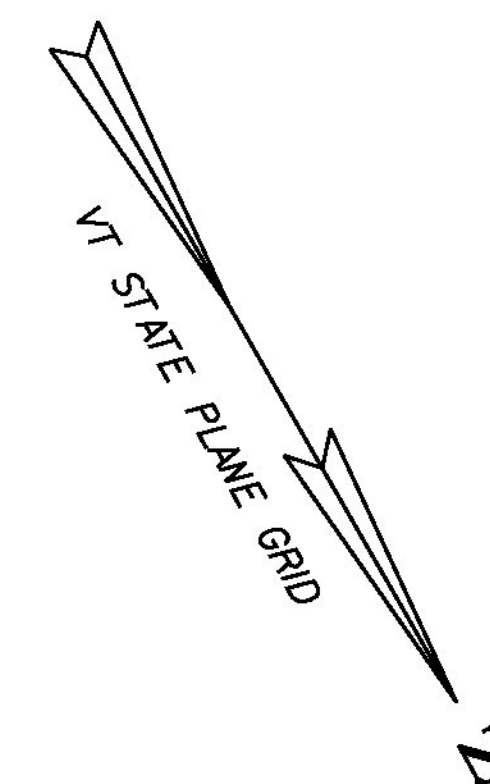
STA. 328+25 - STA. 333+00 (SOLID LT & RT)

STA. 328+25 - STA. 333+00 (SOLID LT & RT)

STA. 328+25 - STA. 333+00 LT

STA. 333+00 LT

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



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

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

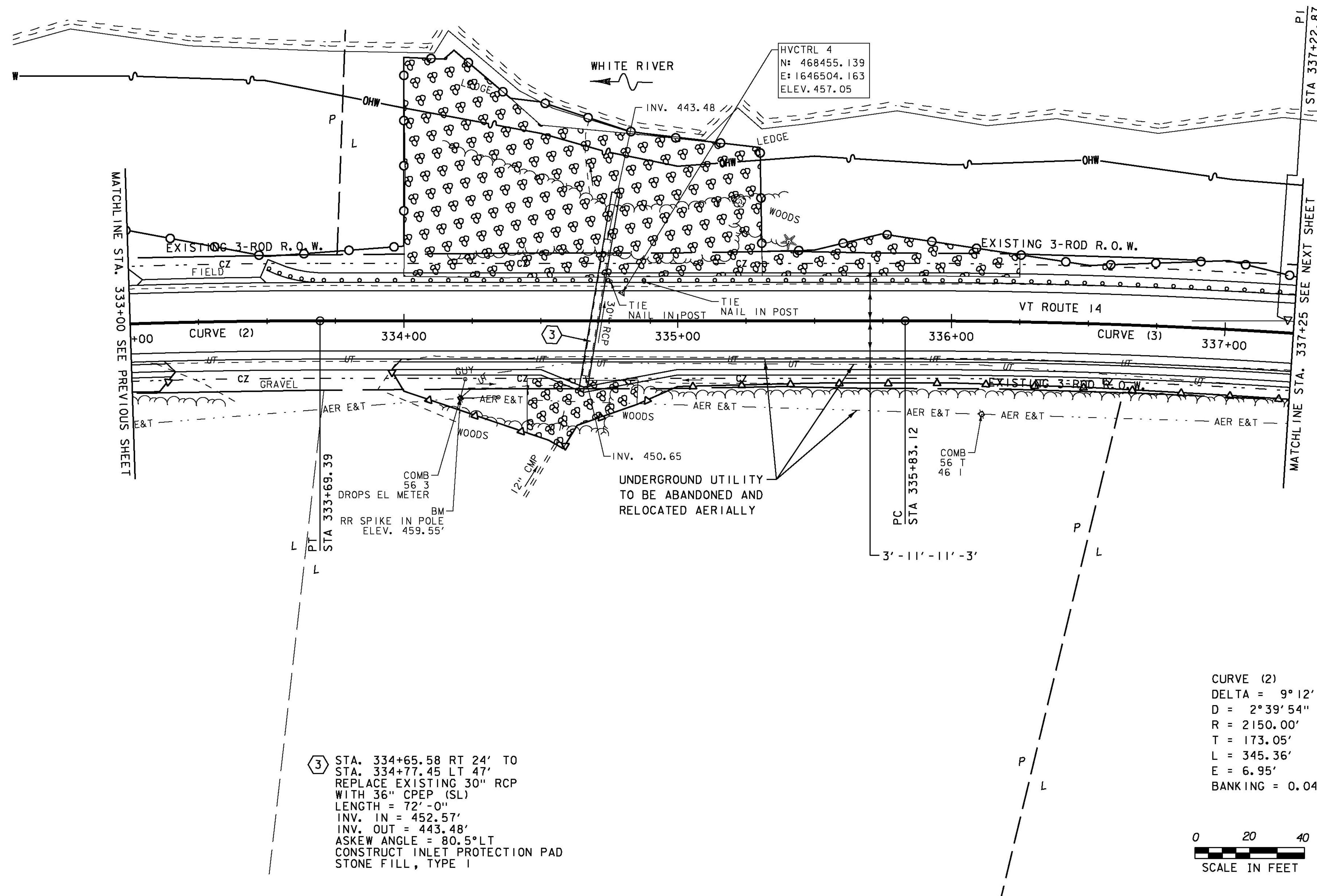
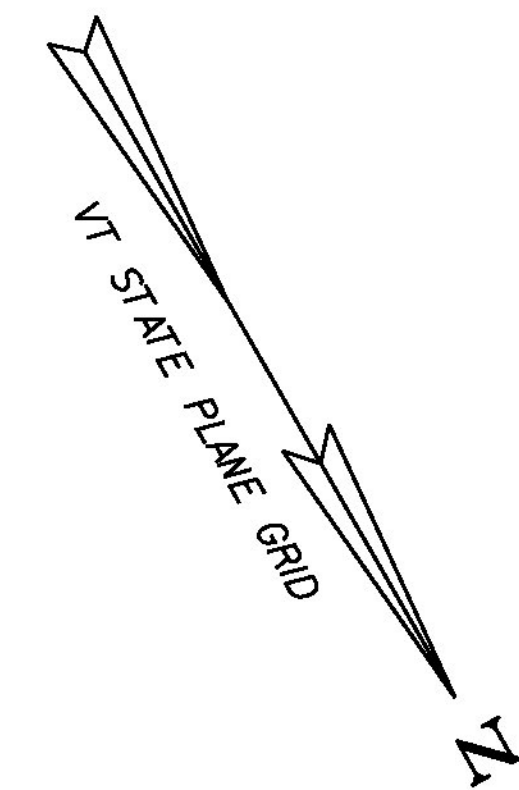
PLOT DATE: 3/31/2015  
DRAWN BY: B. MACK  
CHECKED BY: J. TUCKER  
SHEET 27 OF 66



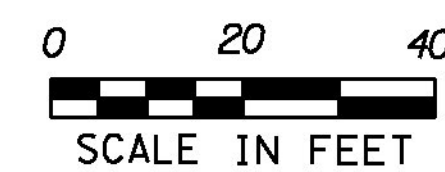
STONE FILL, TYPE I  
STA. 334+45 - STA. 334+85 RT  
STONE FILL, TYPE II  
STA. 334+00 - STA. 336+25 LT  
STONE FILL, TYPE IV  
STA. 334+00 - STA. 335+30 LT  
GRUBBING MATERIAL (6")  
STA. 334+45 - STA. 334+85 RT  
GRUBBING MATERIAL (12")  
STA. 334+00 - STA. 336+25 LT

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



CURVE (2)	CURVE (3)
DELTA = 9°12'13"	DELTA = 7°16'10"
D = 2°39'54"	D = 2°36'16"
R = 2150.00'	R = 2200.00'
T = 173.05'	T = 139.75'
L = 345.36'	L = 279.12'
E = 6.95'	E = 4.43'
BANKING = 0.049 FT/FT AT 50 MPH	BANKING = 0.048 FT/FT AT 50 MPH



PROJECT NAME: SHARON	PLOT DATE: 3/31/2015
PROJECT NUMBER: ER STP 0147 (20)	DRAWN BY: B. MACK
FILE NAME: z12c410bdr.dgn	CHECKED BY: J. TUCKER
DESIGNED BY: B. BRESLEND	SHEET 28 OF 66
PLAN SHEET 3	



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

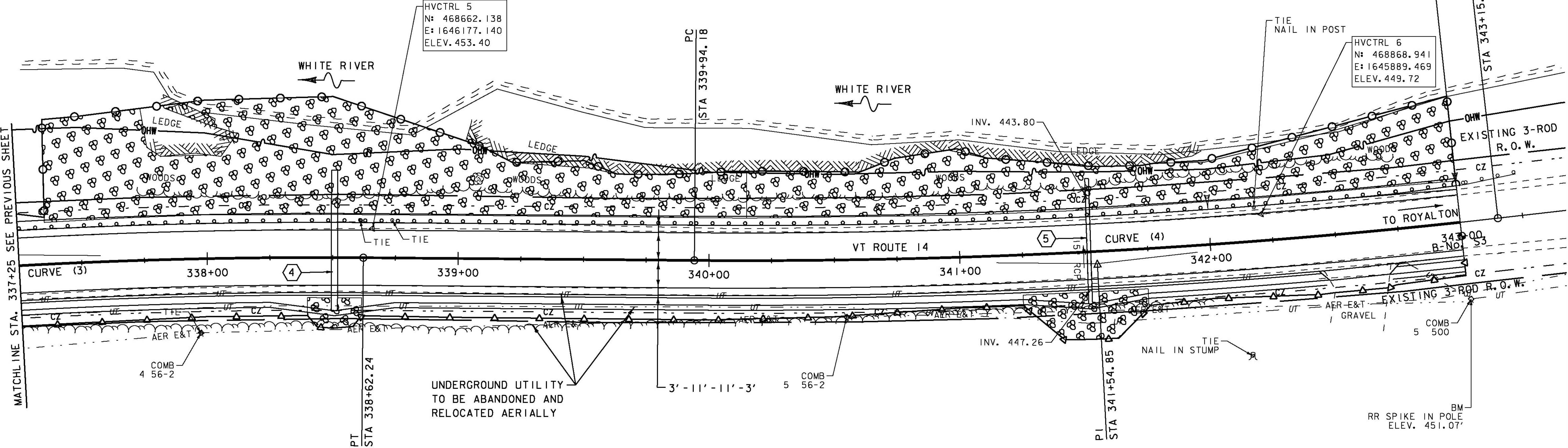
TEMPORARY 4 INCH WHITE LINE, PAINT  
STA. 337+25 - STA. 343+00 (SOLID LT & RT)

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)

END APPROACH  
STA. 343+00.00 = MM 6.496



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 (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

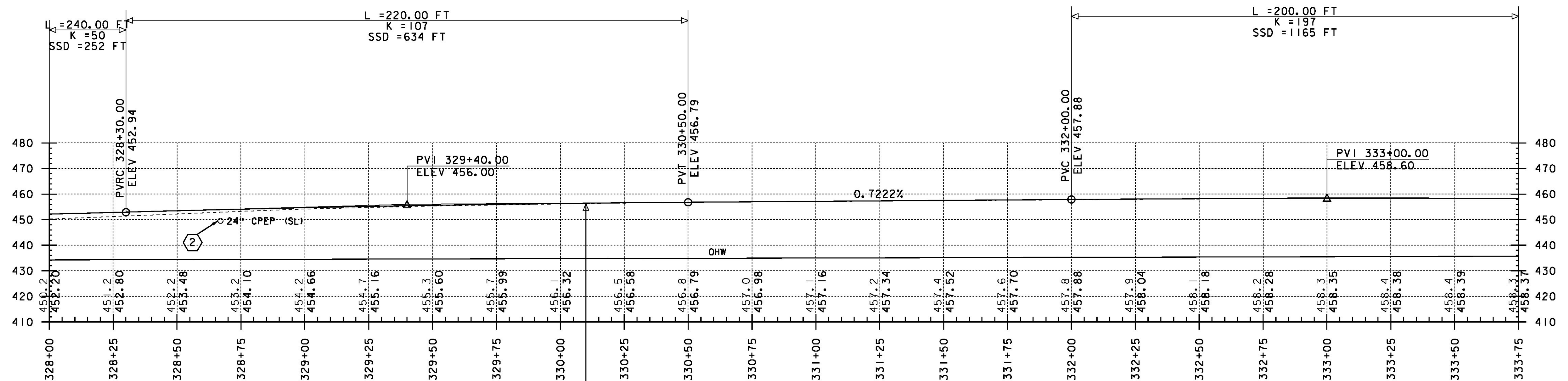
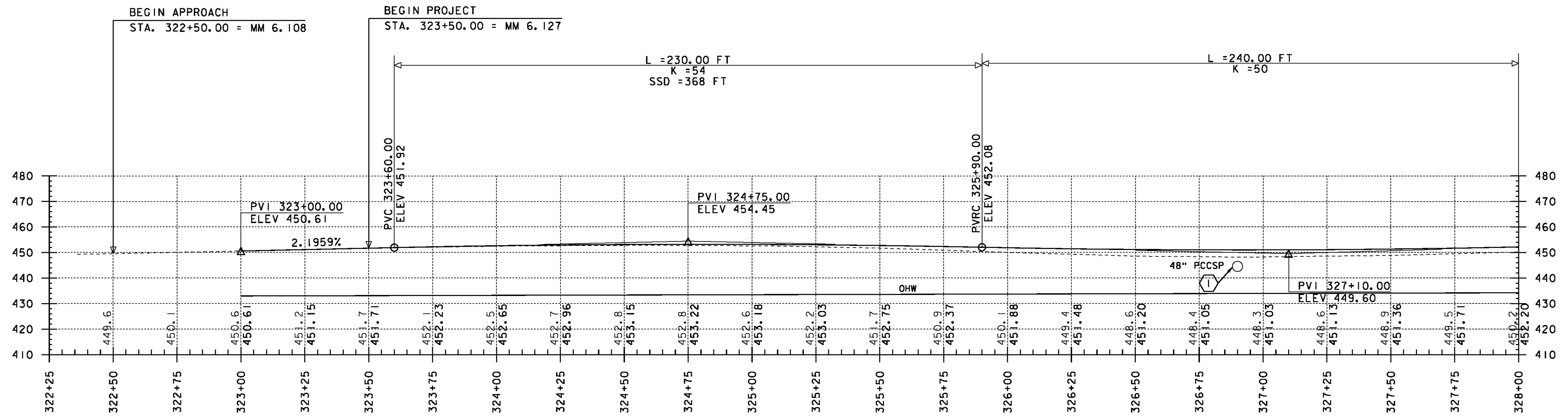
CURVE (3)  
DELTA = 7°16'10"  
D = 2°36'16"  
R = 2200.00'  
T = 139.75'  
L = 279.12'  
E = 4.43'  
BANKING = 0.048 FT/FT AT 50 MPH

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

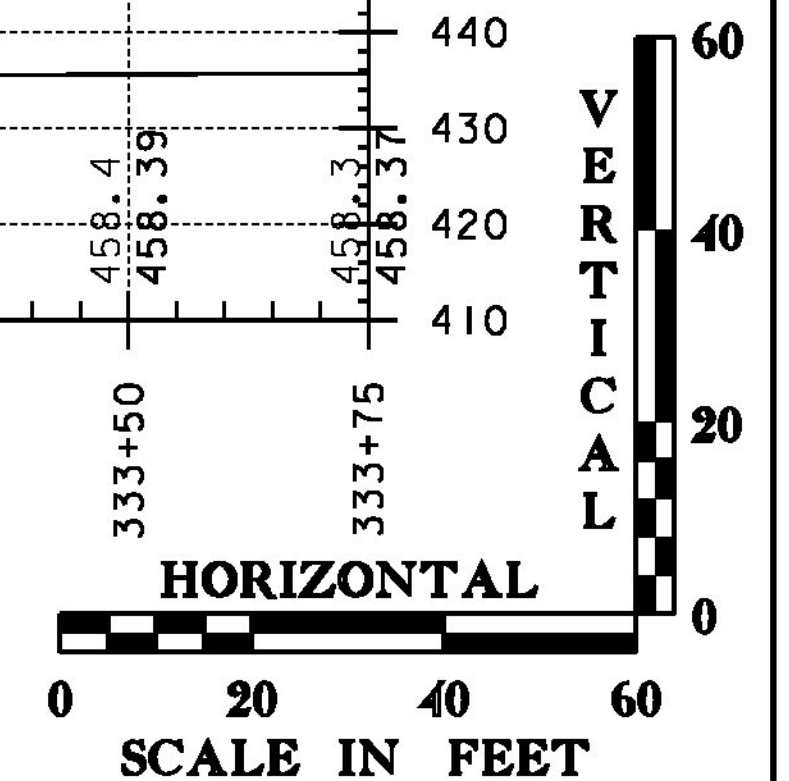




**NOTE**

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.

END PROJECT  
STA. 330+10 = MM 6.252

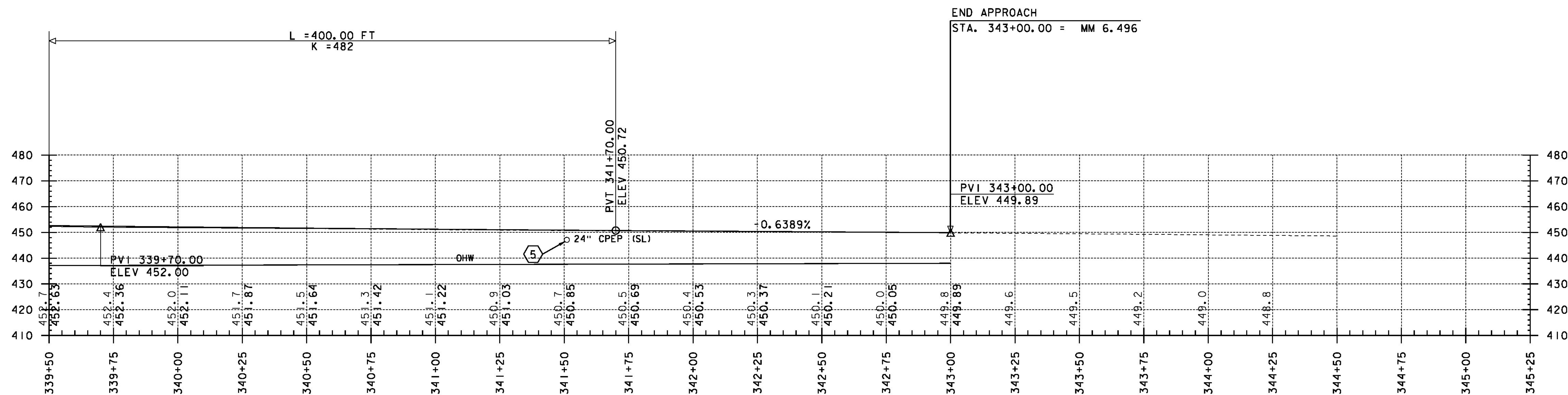
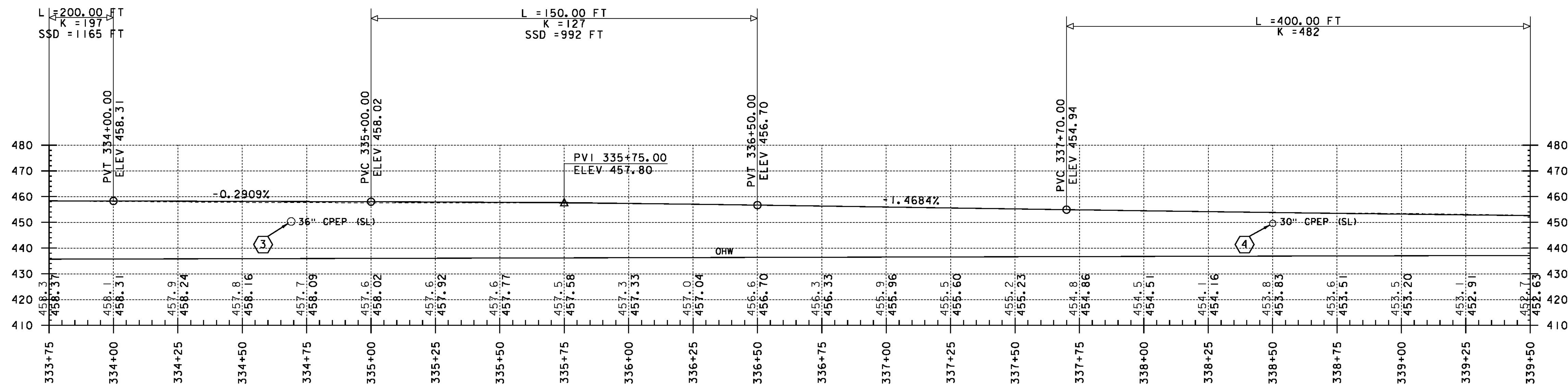


PROJECT NAME: SHARON  
PROJECT NUMBER: ER STP 0147 (20)

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

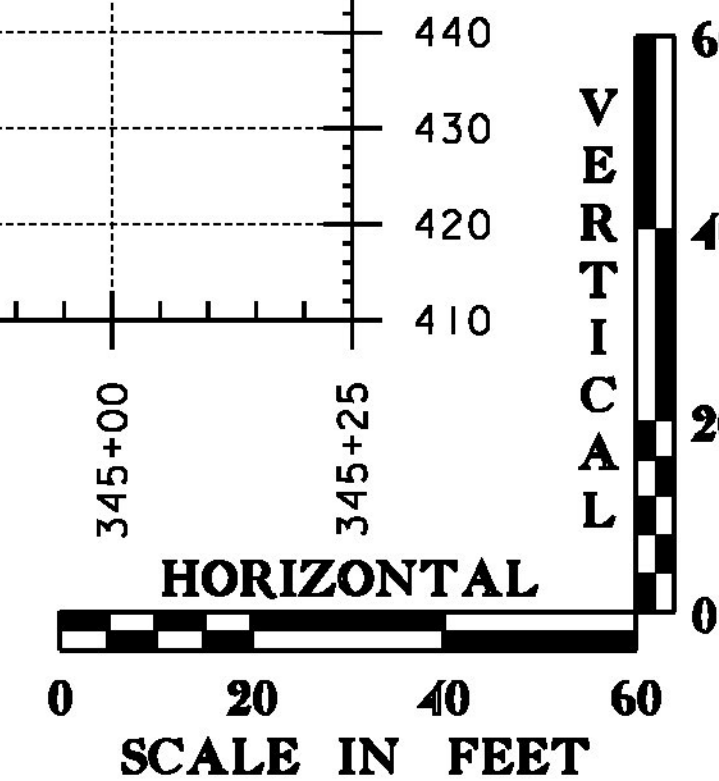
PLOT DATE: 3/31/2015  
DRAWN BY: B. MACK  
CHECKED BY: A. SANZ  
SHEET 30 OF 66





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.

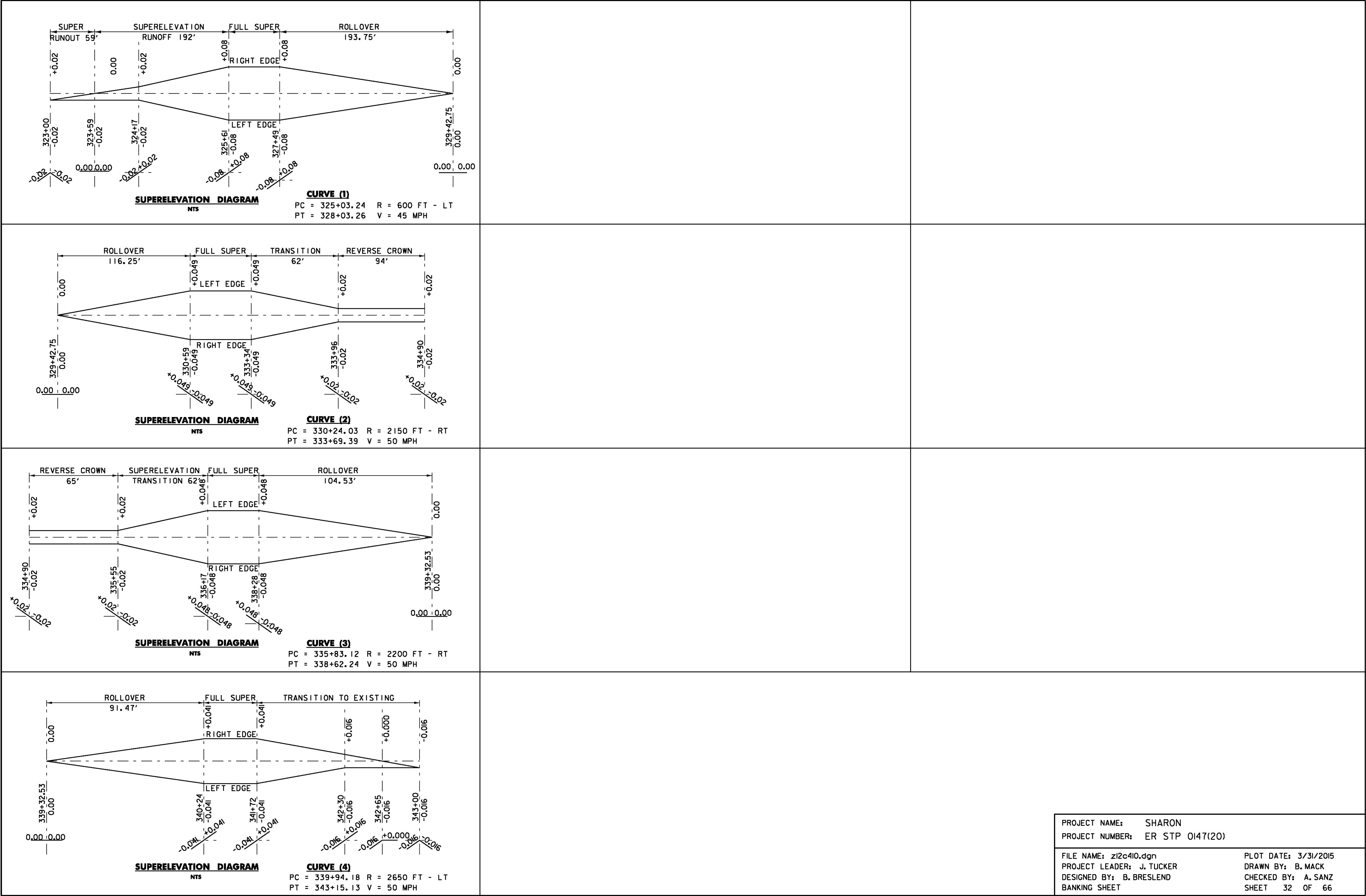


PROJECT NAME: SHARON  
PROJECT NUMBER: ER STP 0147 (20)

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







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 EROSION 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

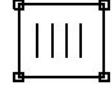
THIS SECTION WILL BE DEVELOPED BY THE CONTRACTOR USING THE GUIDANCE OUTLINED IN THE VTRANS EPSC PLAN CONTRACTOR CHECKLIST.

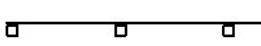
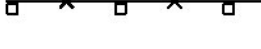
1.5.1 OFF-SITE ACTIVITIES

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



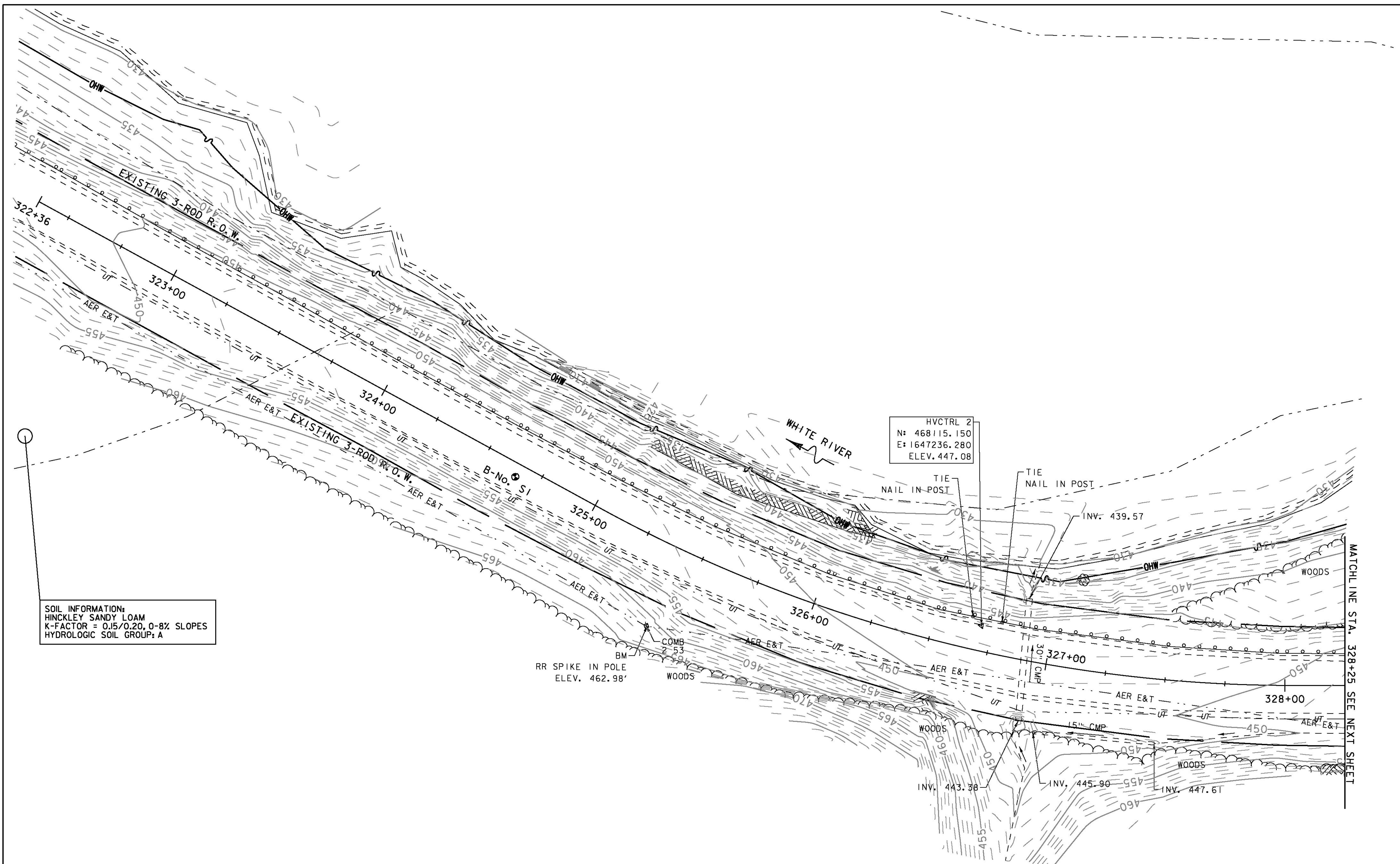
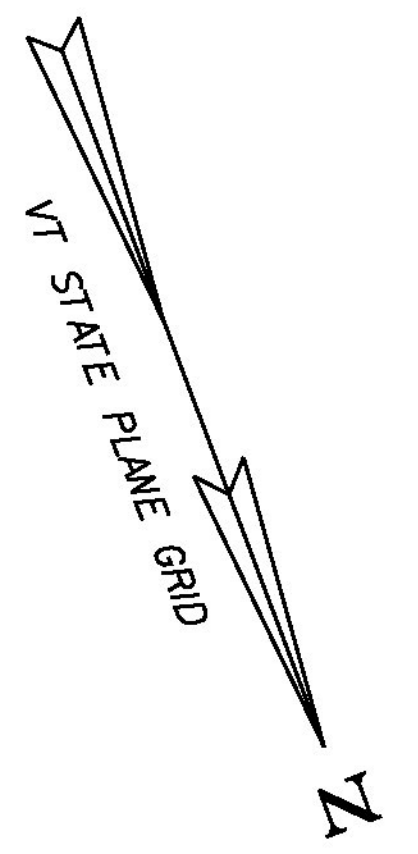
BARRIER FENCE (LINE STYLE) 653.50	-BF-----BF-
BRUSH LAYER 653.75, DETAIL	(BL)
CHECK DAM (LINE STYLE) 653.25, DETAIL	▶-----▶
COFFERDAM (LINE STYLE) 208.40	~~~~~
CURB DROP INLET PROTECTION 653.40, DETAIL	
DUST CONTROL 609.10 & 15	
PIPE INLET PROTECTION 653.40, DETAIL	
EXCAVATED DROP INLET PROTECTION 653.40, DETAIL	
FIBER ROLL (EROSION LOG) 653.60, DETAIL	(FR)
FILTER BAG 653.45, DETAIL	
FILTER FABRIC DROP INLET PROTECTION 653.40, DETAIL	
LIVE CUTTINGS/LIVE STAKES PLANTING 653.70, DETAIL	(LS)
LIVE FASCINE 653.65, DETAIL	(LF)
PROJECT DEMARCATION FENCE (LINE STYLE) 653.55	-PDF-----PDF-
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:
- THESE PLANS SHOW A CONCEPTUAL EROSION CONTROL PLAN, THE CONTRACTOR MUST SUBMIT A TEMPORARY EROSION CONTROL PLAN FOR APPROVAL.
  - 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.
  - 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.
  - REFER TO EPSC DETAIL SHEETS 1-3 FOR ADDITIONAL DETAILS.
  - 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".
  - 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



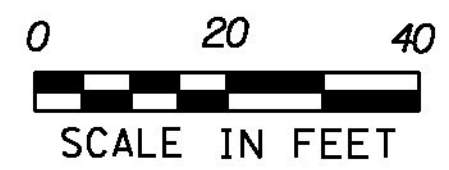


SOIL INFORMATION:  
HINCKLEY SANDY LOAM  
K-FACTOR = 0.15/0.20, 0-8% SLOPES  
HYDROLOGIC SOIL GROUP: A

HVCTRL 2  
N: 468115.150  
E: 1647236.280  
ELEV. 447.08

BM  
RR SPIKE IN POLE  
ELEV. 462.98'

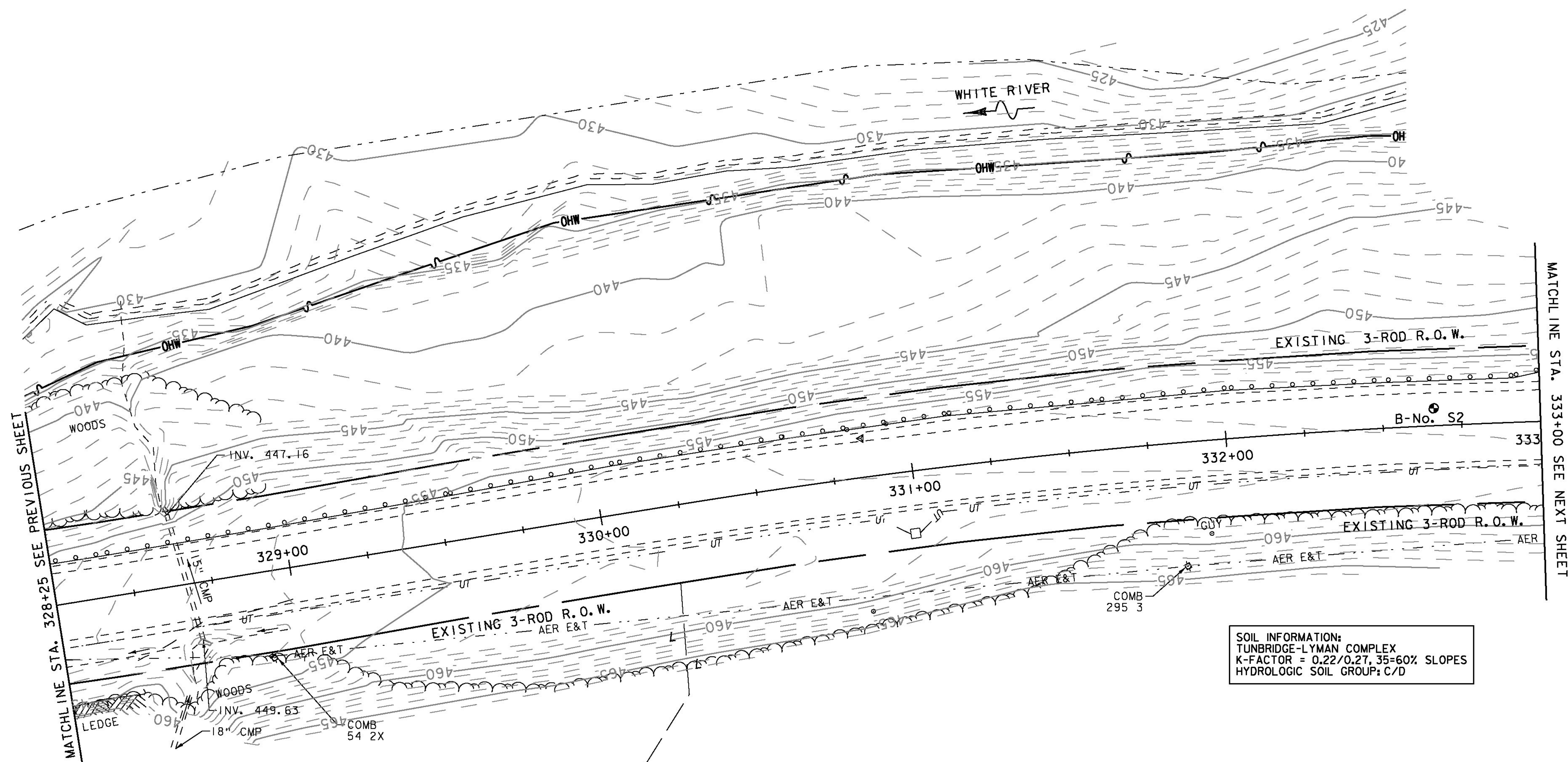
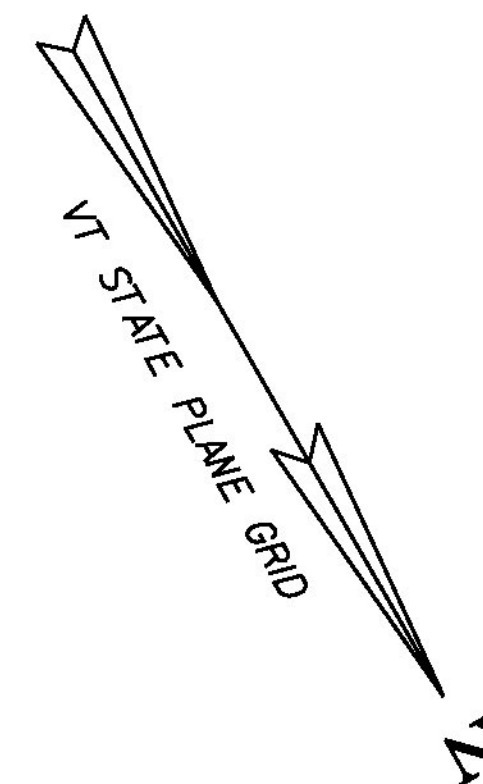
SOIL INFORMATION:  
TUNBRIDGE-LYMAN COMPLEX  
K-FACTOR = 0.22/0.27, 35-60% SLOPES  
HYDROLOGIC SOIL GROUP: C/D



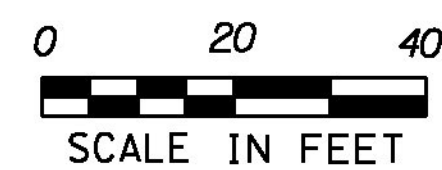
PROJECT NAME: SHARON	
PROJECT NUMBER: ER STP 0147 (20)	
FILE NAME: z12c410EPSC_bdr.dgn	PLOT DATE: 3/31/2015
PROJECT LEADER: J. TUCKER	DRAWN BY: B. MACK
DESIGNED BY: B. BRESLEND	CHECKED BY: J. TUCKER
EPSC EXISTING COND. PLAN SHEET 1	SHEET 35 OF 66

MATCHLINE STA. 328+25 SEE NEXT SHEET





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

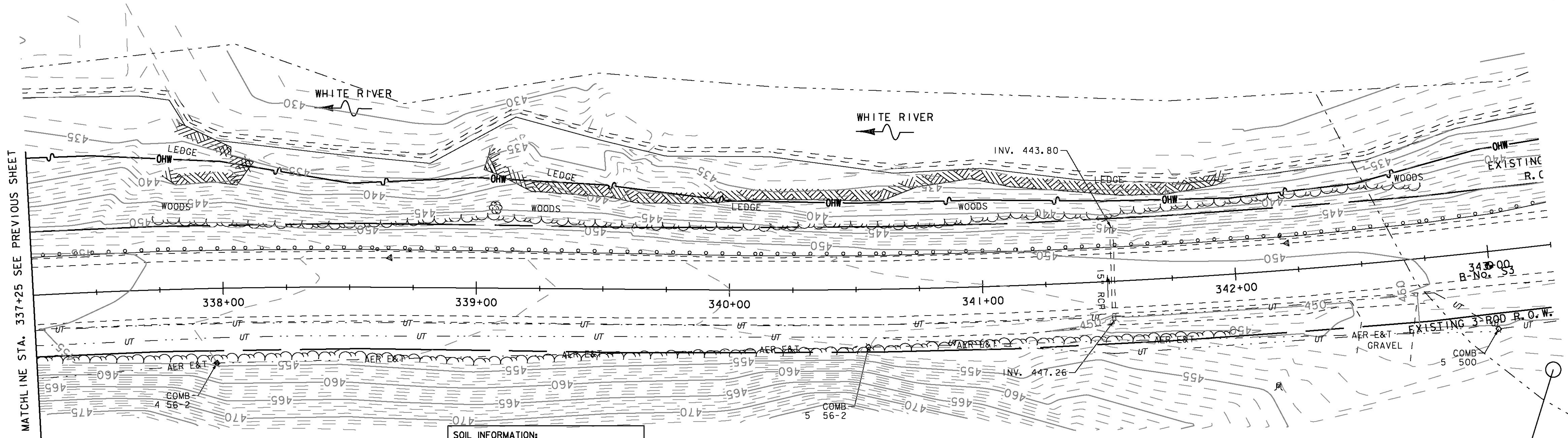
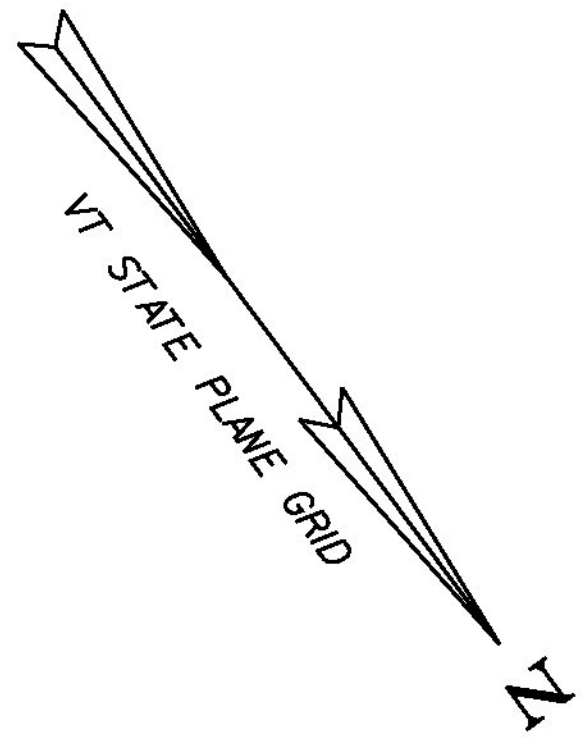


PROJECT NAME: SHARON	
PROJECT NUMBER: ER STP 0147 (20)	
FILE NAME: z12c410EPSC_bdr.dgn	PLOT DATE: 3/31/2015
PROJECT LEADER: J. TUCKER	DRAWN BY: B. MACK
DESIGNED BY: B. BRESLEND	CHECKED BY: J. TUCKER
EPSC EXISTING COND. PLAN SHEET 2	SHEET 36 OF 66



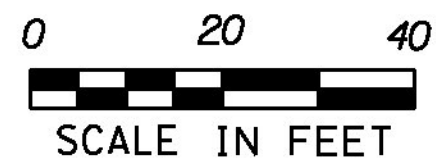






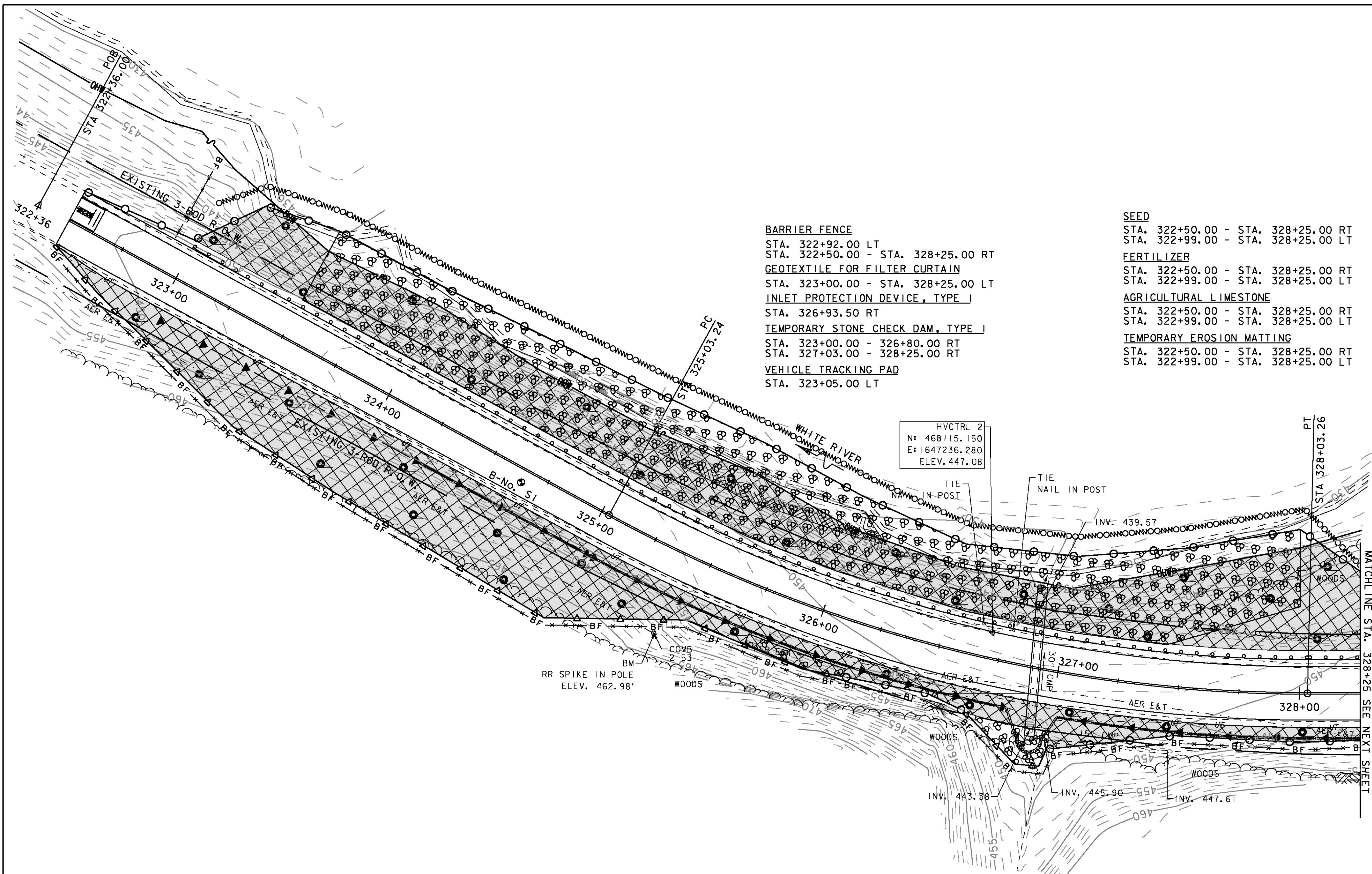
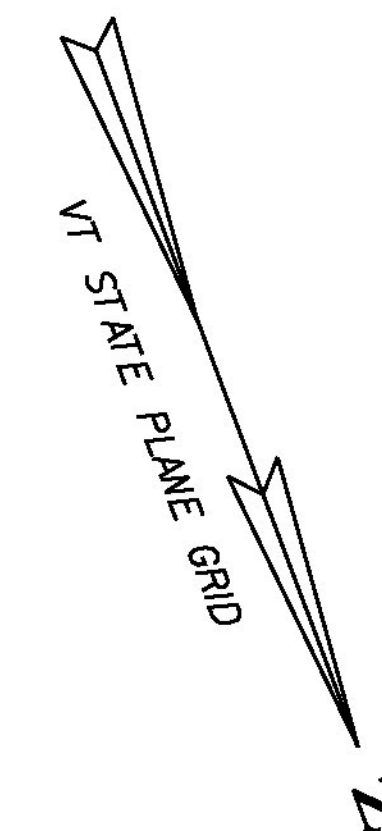
SOIL INFORMATION:  
TUNBRIDGE-LYMAN COMPLEX  
K-FACTOR = 0.22/0.27, 35=60% SLOPES  
HYDROLOGIC SOIL GROUP: C/D

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



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 4	SHEET 38 OF 66

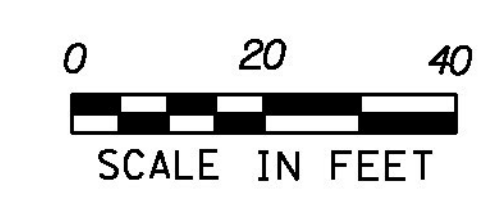




- BARRIER FENCE  
STA. 322+92.00 LT  
STA. 322+50.00 - STA. 328+25.00 RT
- GEOTEXTILE FOR FILTER CURTAIN  
STA. 323+00.00 - STA. 328+25.00 LT
- INLET PROTECTION DEVICE, TYPE I  
STA. 326+93.50 RT
- TEMPORARY STONE CHECK DAM, TYPE I  
STA. 323+00.00 - 326+80.00 RT  
STA. 327+03.00 - 328+25.00 RT
- VEHICLE TRACKING PAD  
STA. 323+05.00 LT

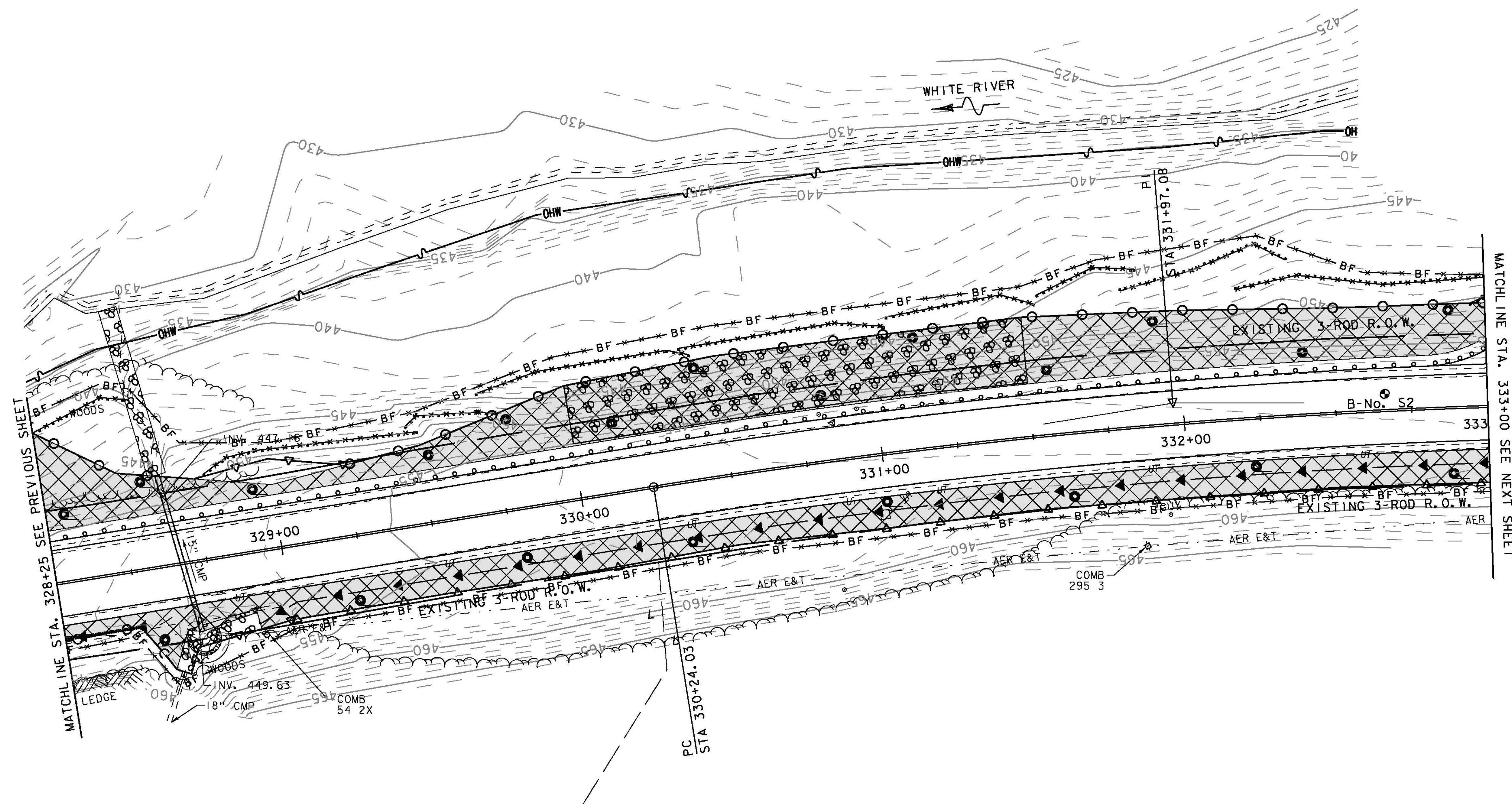
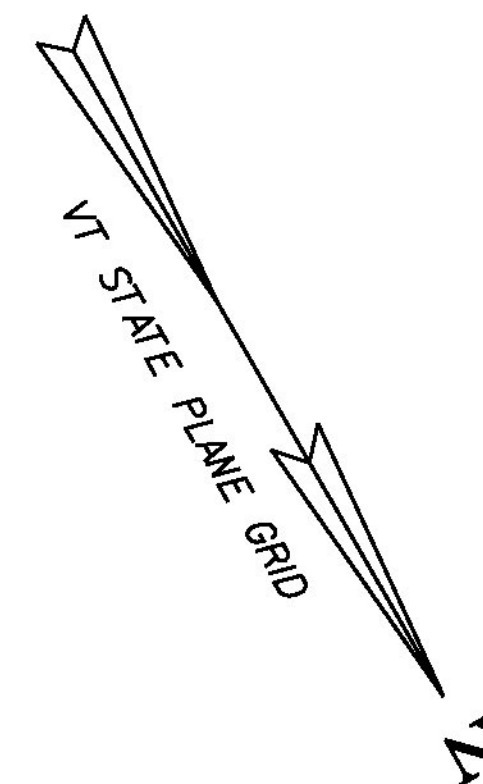
- SEED  
STA. 322+50.00 - STA. 328+25.00 RT  
STA. 322+99.00 - STA. 328+25.00 LT
- FERTILIZER  
STA. 322+50.00 - STA. 328+25.00 RT  
STA. 322+99.00 - STA. 328+25.00 LT
- AGRICULTURAL LIMESTONE  
STA. 322+50.00 - STA. 328+25.00 RT  
STA. 322+99.00 - STA. 328+25.00 LT
- TEMPORARY EROSION MATTING  
STA. 322+50.00 - STA. 328+25.00 RT  
STA. 322+99.00 - STA. 328+25.00 LT

HVCTRL 2  
N: 468115.150  
E: 1647236.280  
ELEV. 447.08



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 I	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

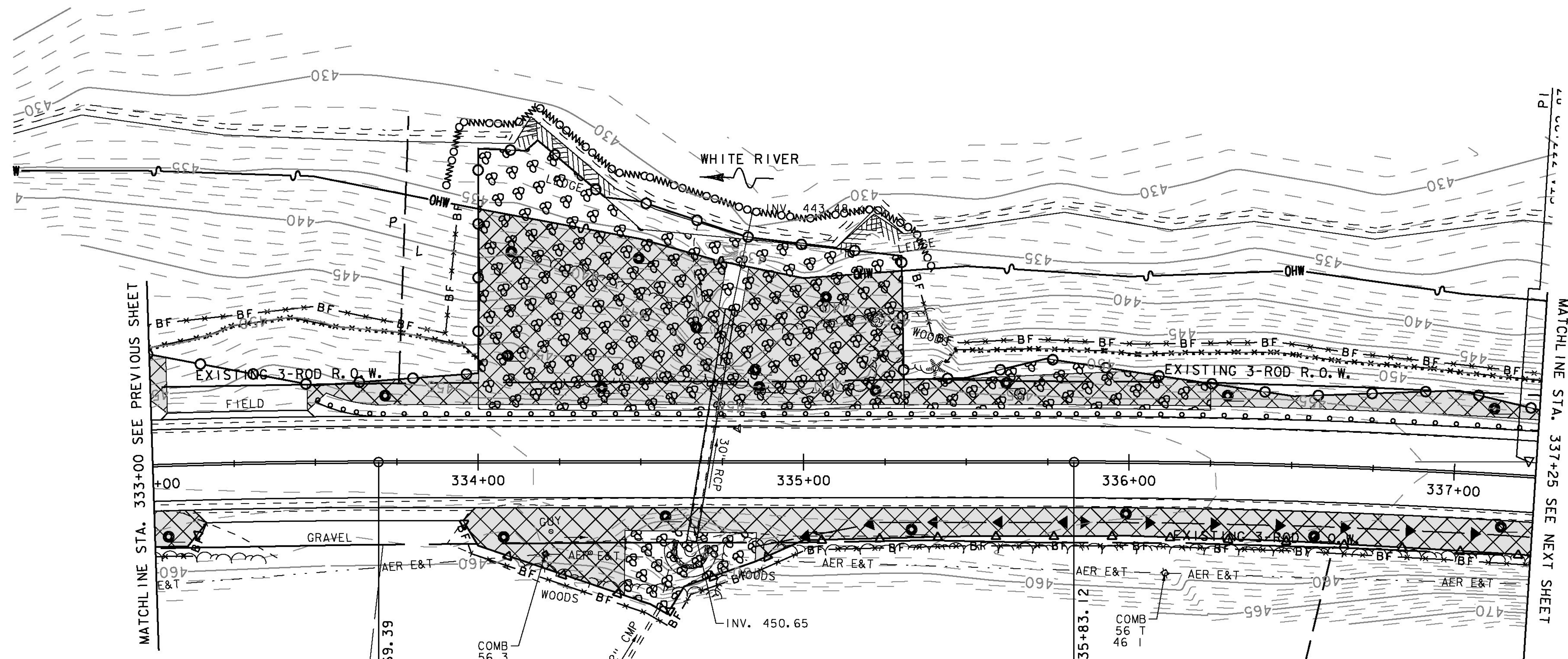
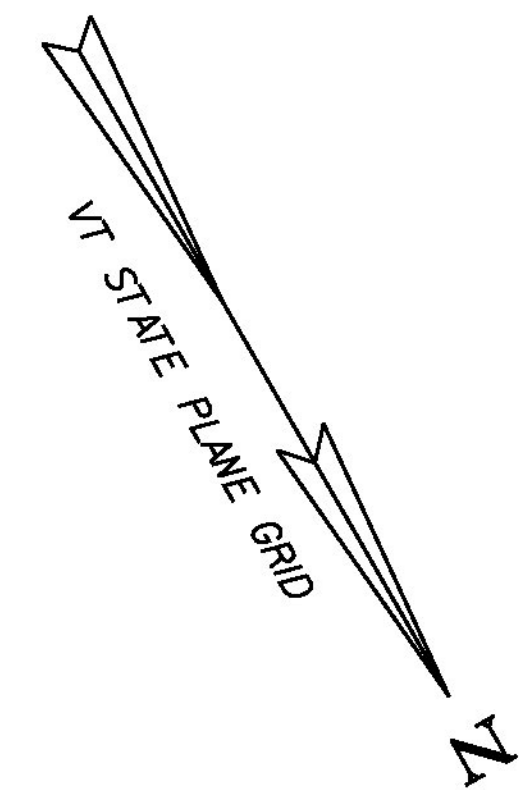
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SCALE IN FEET

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  
SHEET 40 OF 66





**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

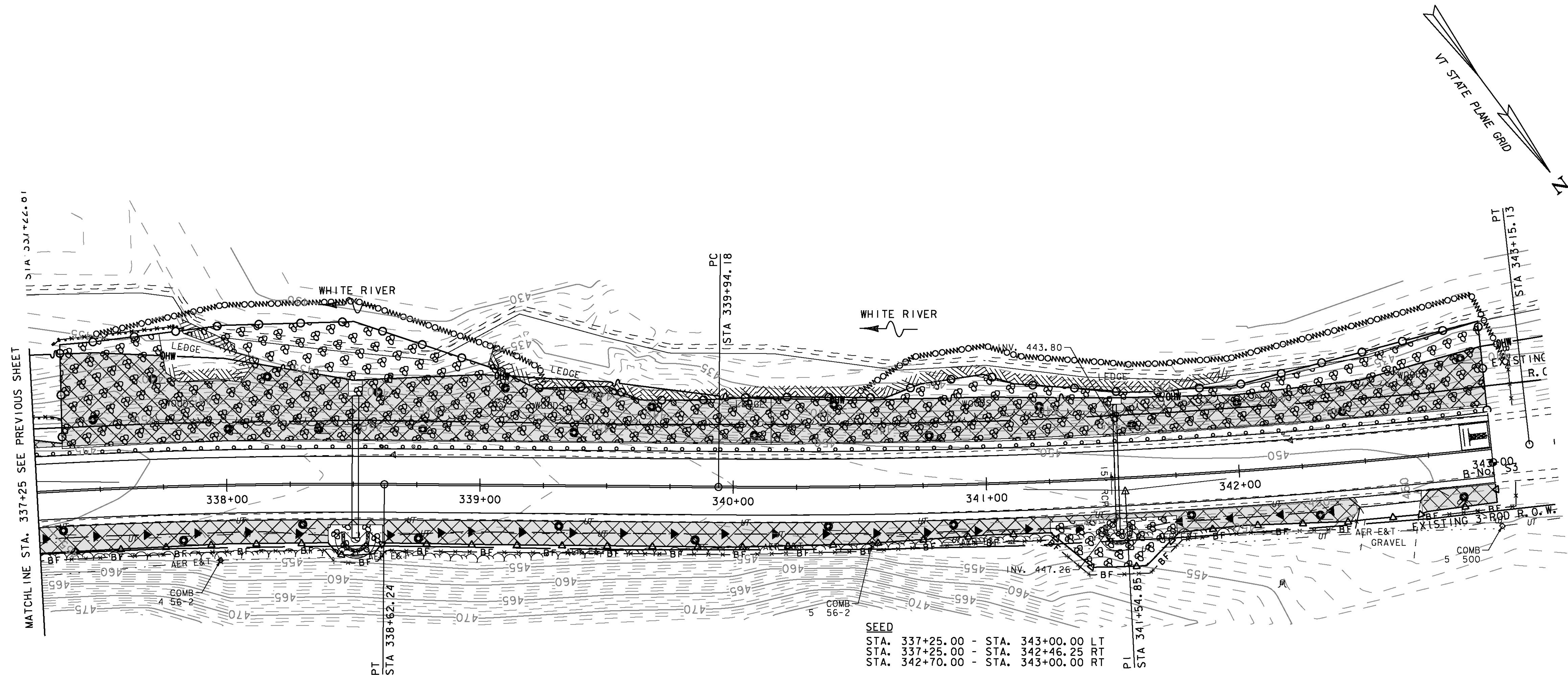


PROJECT NAME: SHARON  
PROJECT NUMBER: ER STP 0147 (20)

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





**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

**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

**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

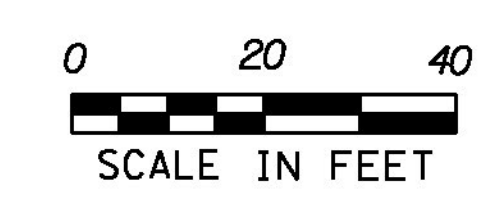
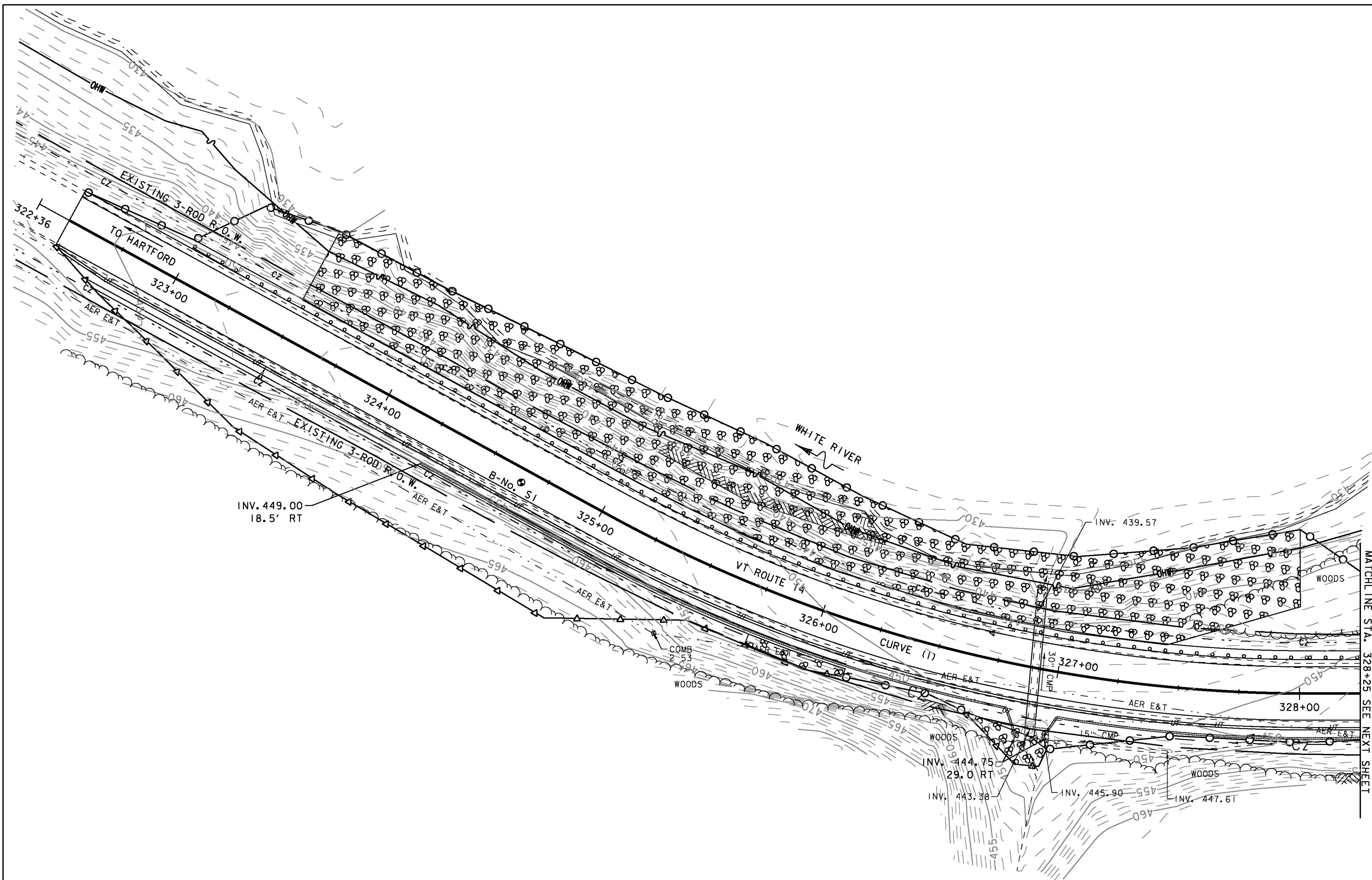
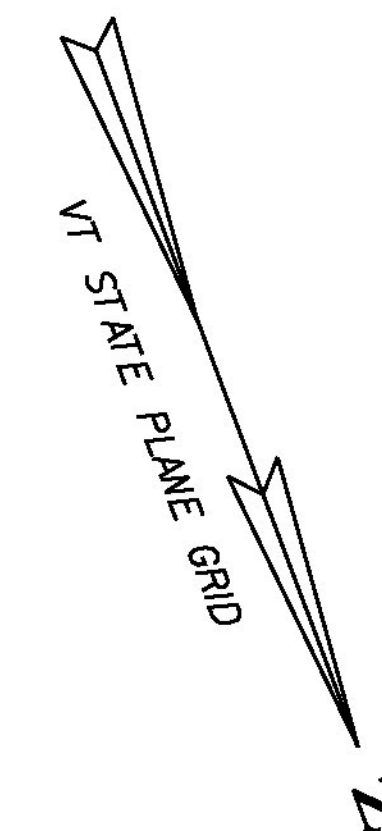
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SCALE IN FEET

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

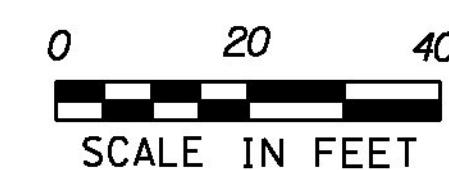
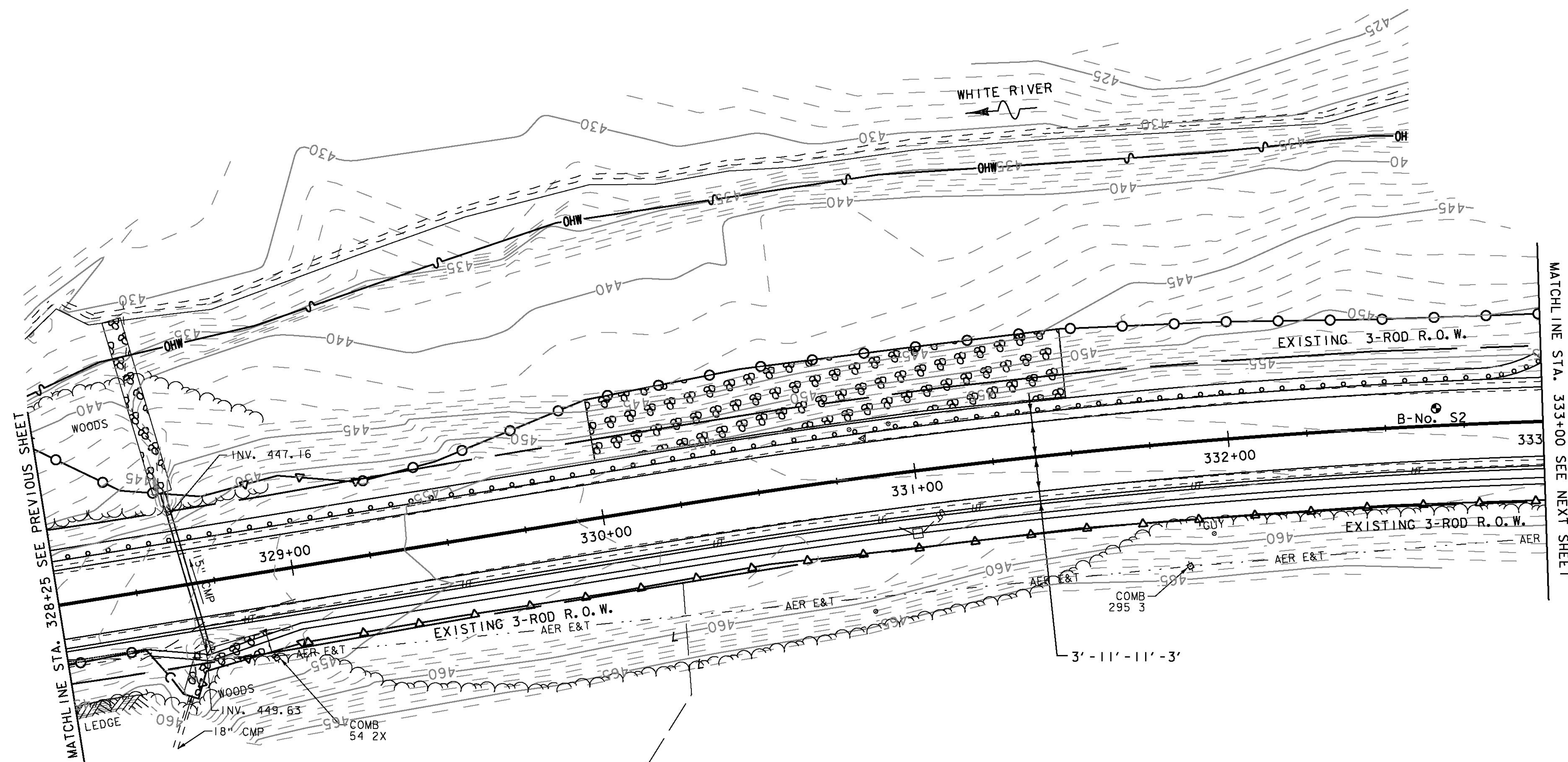
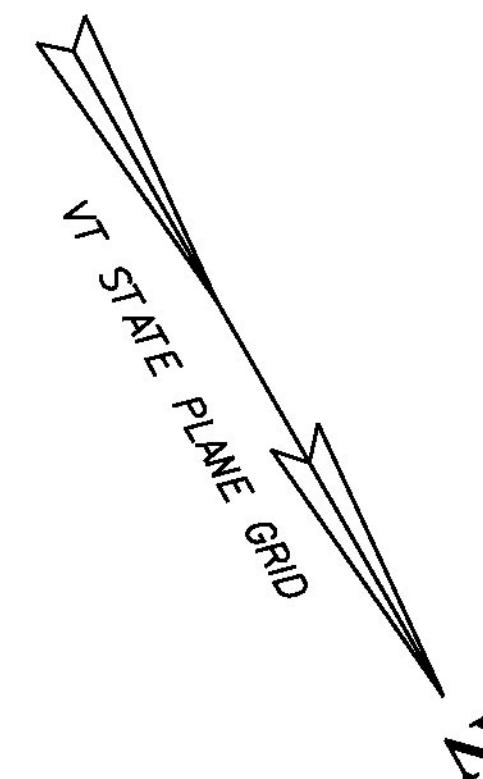
PLOT DATE: 3/31/2015  
DRAWN BY: B. MACK  
CHECKED BY: J. TUCKER  
SHEET 42 OF 66





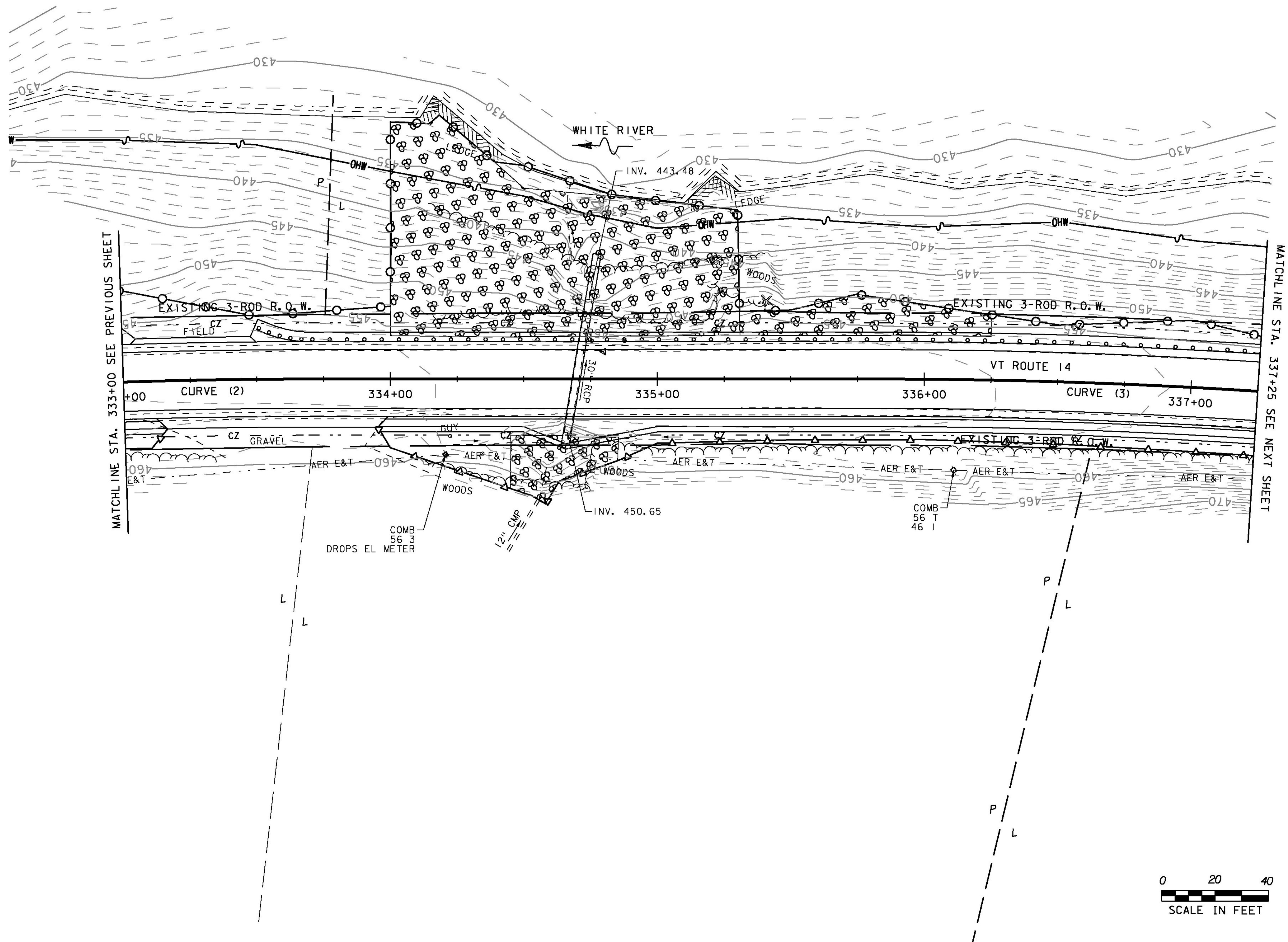
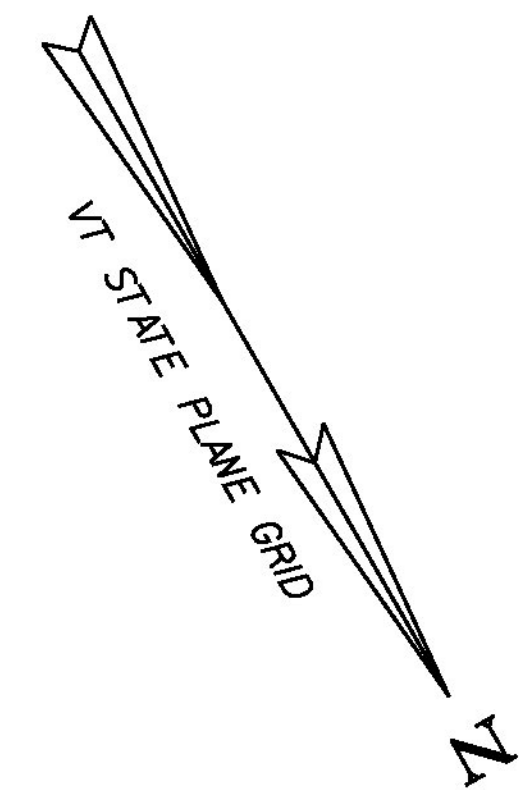
PROJECT NAME: SHARON	
PROJECT NUMBER: ER STP 0147 (20)	
FILE NAME: z12c410EPSC_bdr.dgn	PLOT DATE: 3/31/2015
PROJECT LEADER: J. TUCKER	DRAWN BY: B. MACK
DESIGNED BY: B. BRESLEND	CHECKED BY: J. TUCKER
EPSC FINAL CONDITIONS PLAN SHEET 1	SHEET 43 OF 66





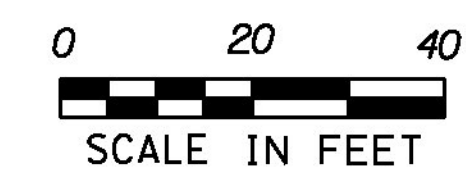
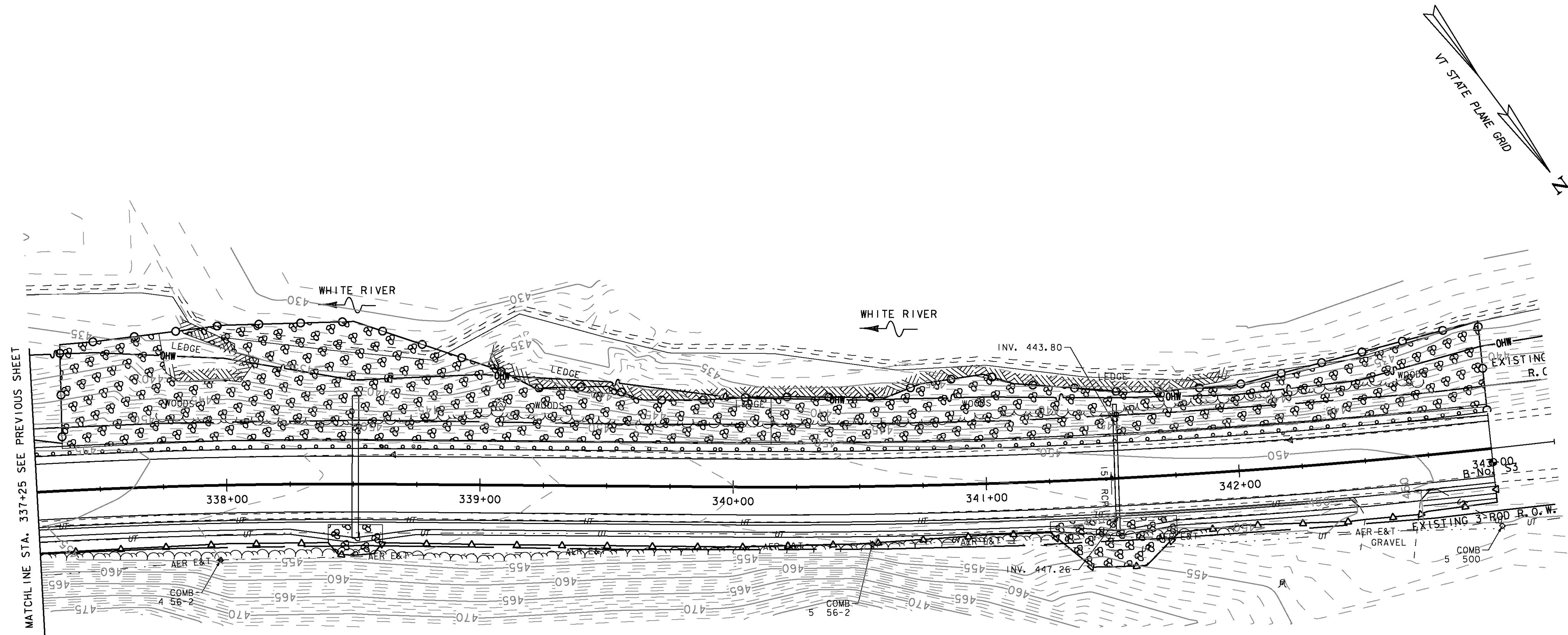
PROJECT NAME: SHARON	
PROJECT NUMBER: ER STP 0147 (20)	
FILE NAME: z12c410EPSC_bdr.dgn	PLOT DATE: 3/31/2015
PROJECT LEADER: J. TUCKER	DRAWN BY: B. MACK
DESIGNED BY: B. BRESLEND	CHECKED BY: J. TUCKER
EPSC FINAL CONDITIONS PLAN SHEET 2	SHEET 44 OF 66





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





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

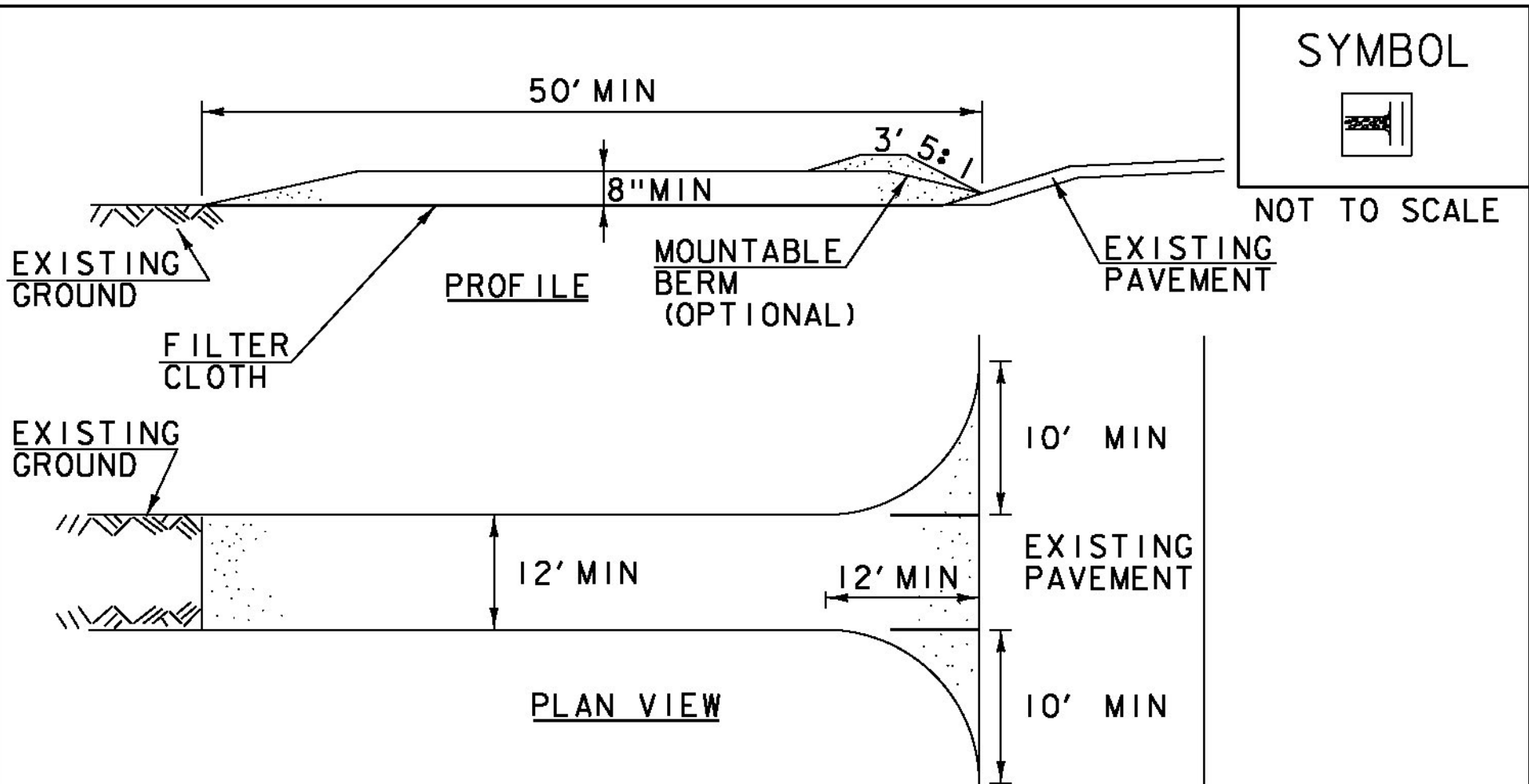
CONSTRUCTION GUIDANCE

- 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	



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.

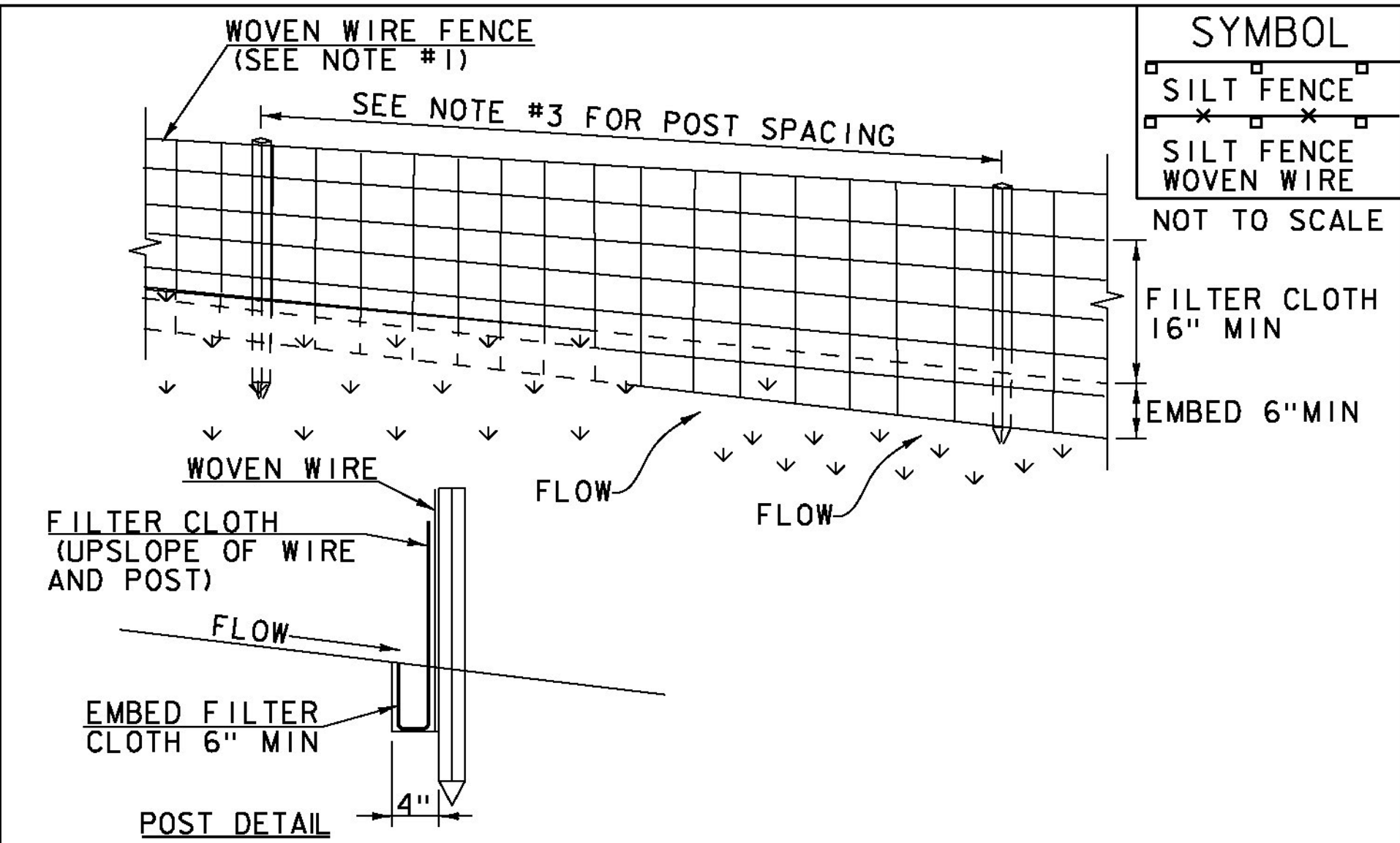
ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC  
ORIGINALLY DEVELOPED BY USDA-NRCS  
VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

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	



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, MIRAF1100X, 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.

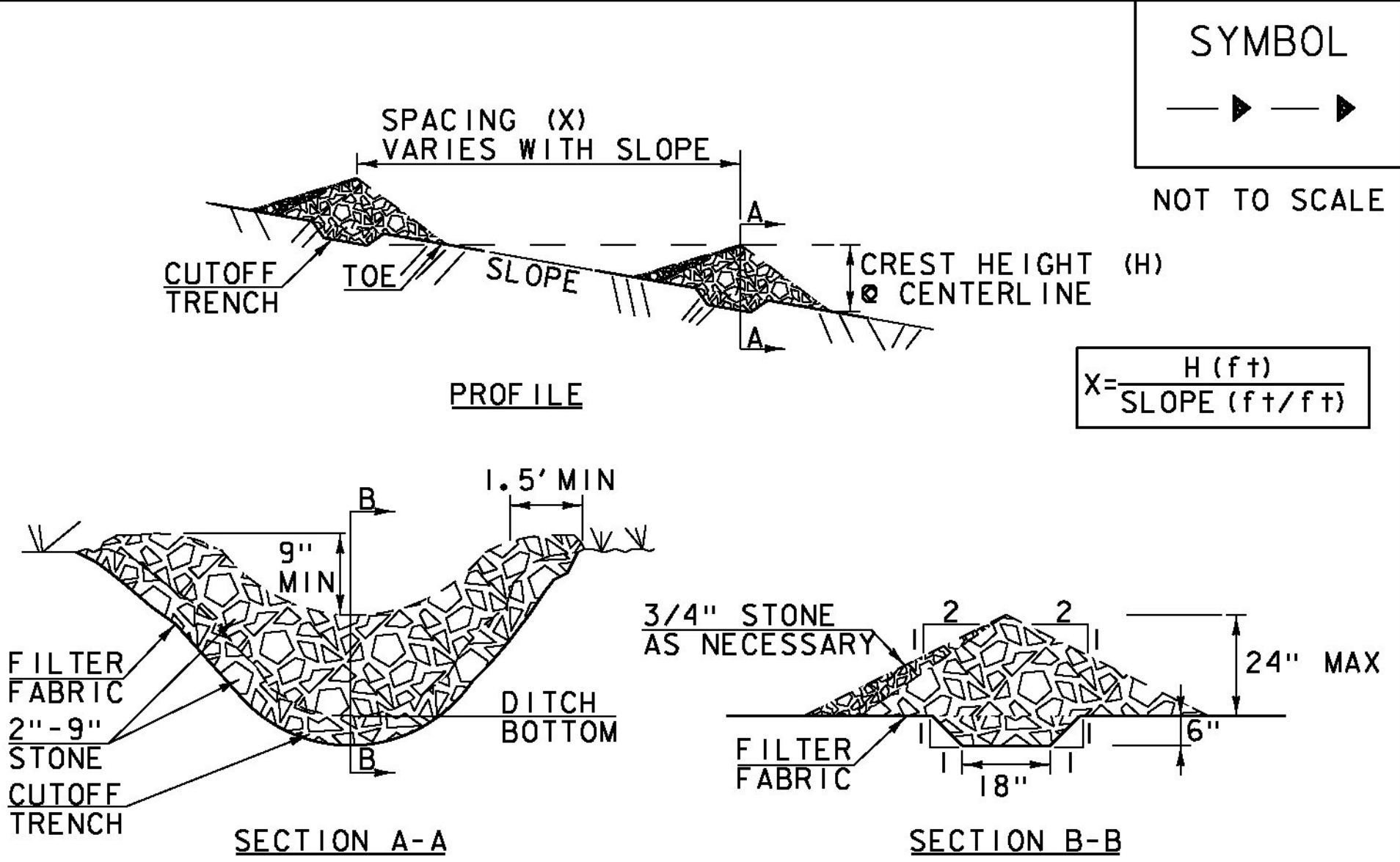
THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 649 AND AS SHOWN IN THE PLANS FOR GEOTEXTILE- FOR SILT FENCE (PAY ITEM 649.51) OR GEOTEXTILE FOR SILT FENCE, WOVEN WIRE REINFORCED (PAY ITEM 649.515).

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.

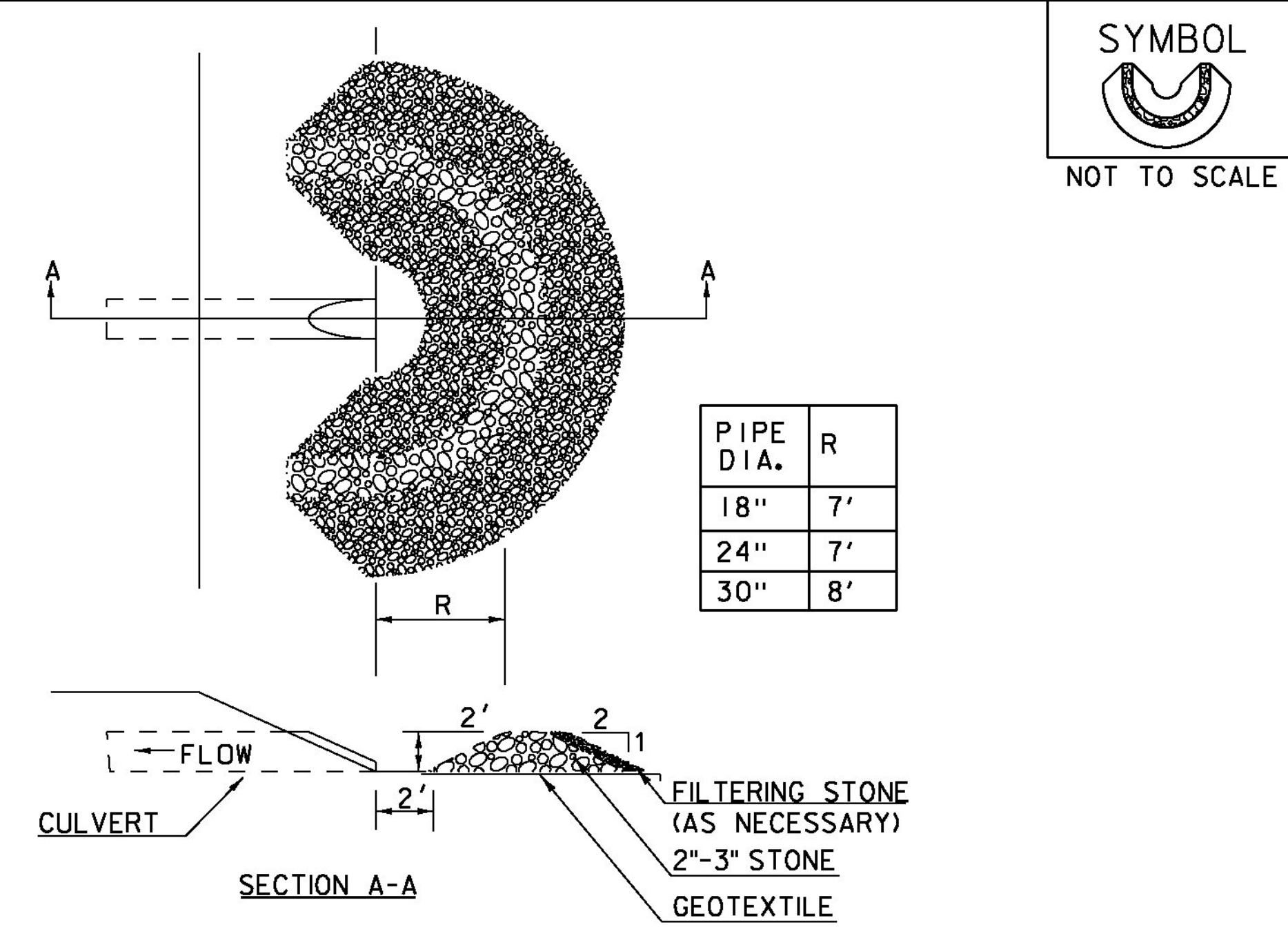
ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC  
ORIGINALLY DEVELOPED BY USDA-NRCS  
VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

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  
—U—  
NOT TO SCALE

CONSTRUCTION SPECIFICATIONS

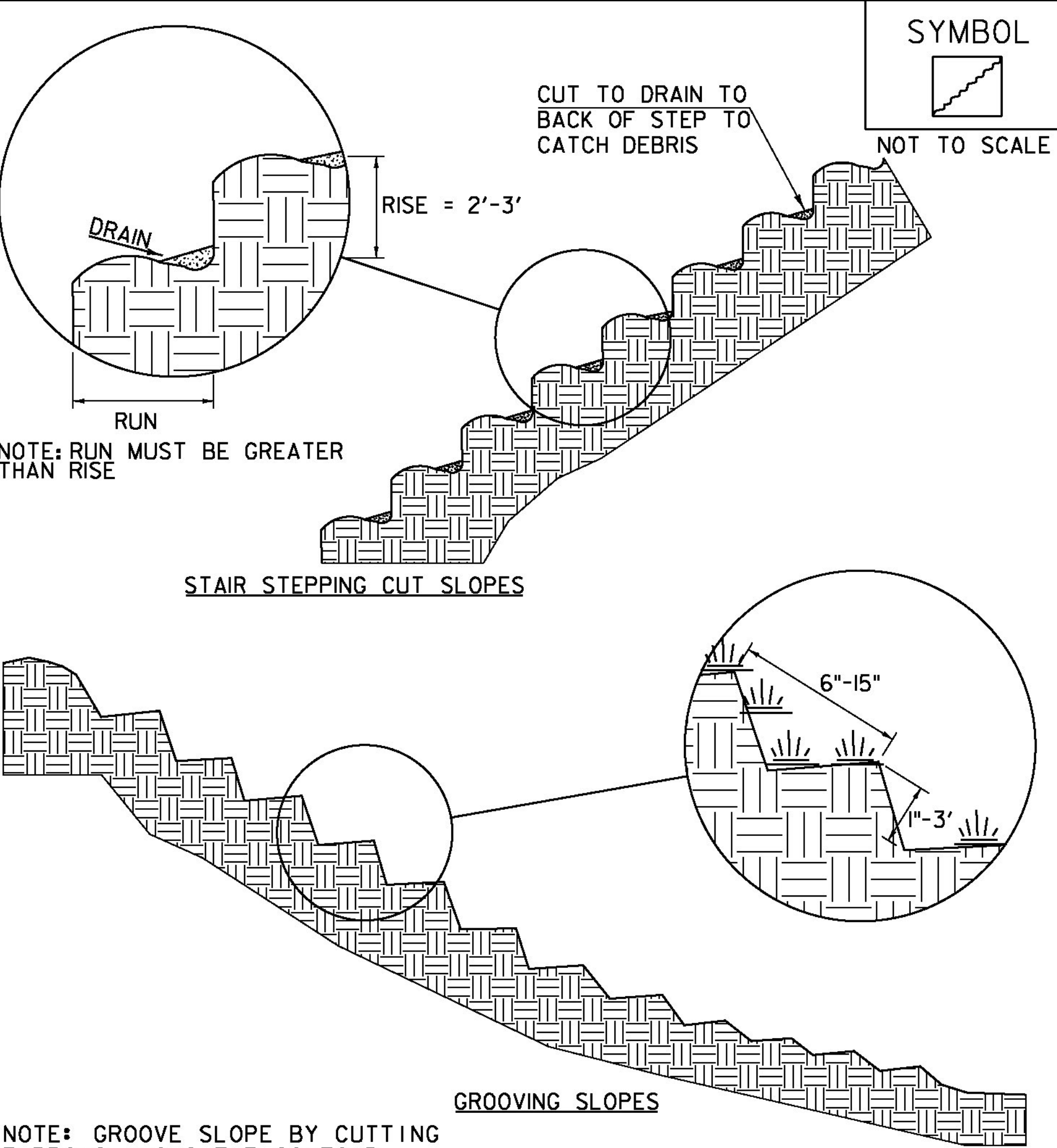
1. USE 2" TO 3" STONE. FILTERING STONE SHALL BE 3/4".
2. PLACE STONE OVER GEOTEXTILE.
- 3.
4. THE CHECK DAM(S) SHALL BE FLATTENED AND GRADED IN A MANNER WHICH PROTECTS THE AREA FROM EROSION AND CHANNEL BLOCKAGE. (GEOTEXTILE MUST BE REMOVED).
5. THE GEOTEXTILE MUST BE DISPOSED OF APPROPRIATELY.
6. THE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

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

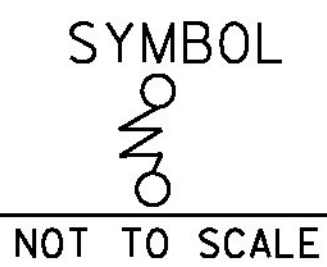
SURFACE ROUGHENING

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





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.

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

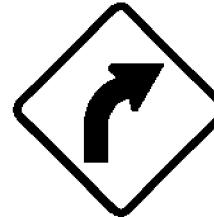
THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 649 FOR GEOTEXTILE FOR FILTER CURTAIN (PAY ITEM 649.6I).

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 3	SHEET 49 OF 66

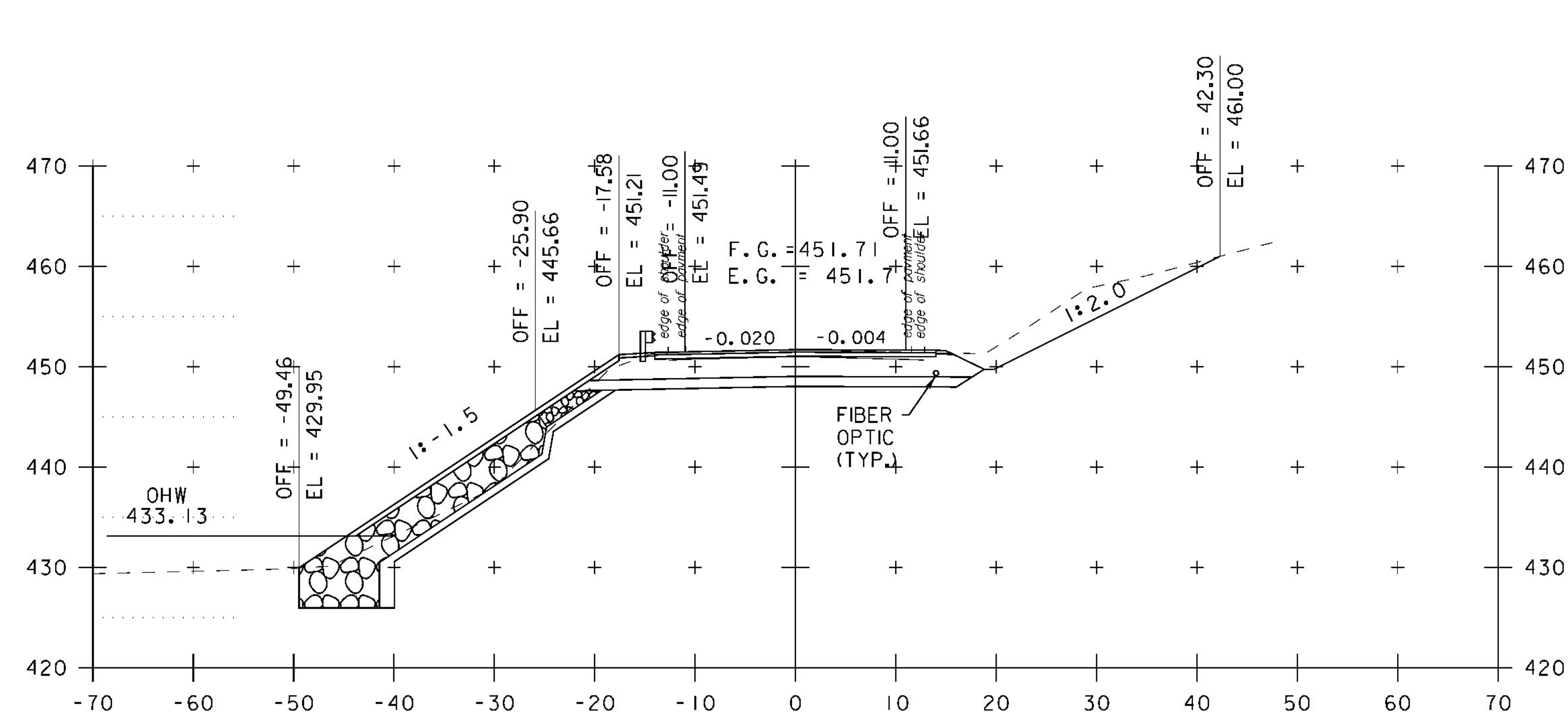


STATE OF VERMONT  
AGENCY OF TRANSPORTATION

TRAFFIC SIGN SUMMARY SHEET

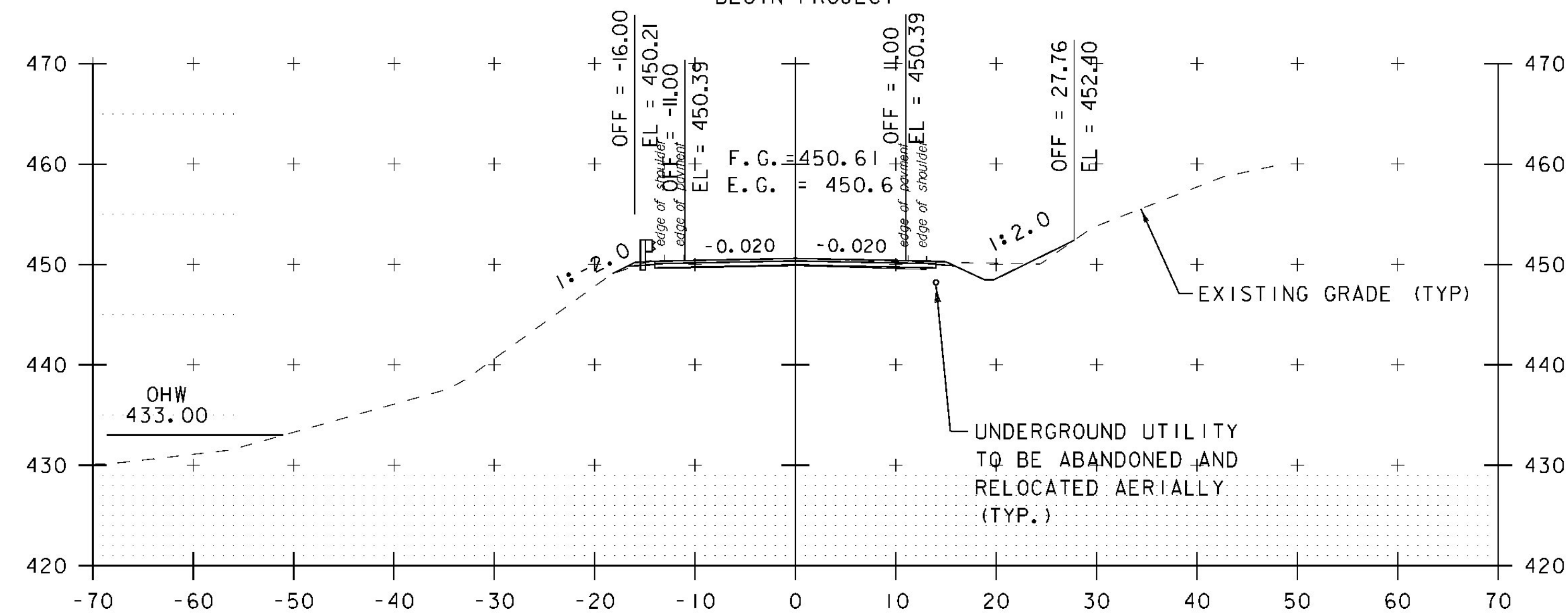
MILEMARKER, STATION, OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS		NEW & SALVAGED SIGNS				EXIST POST		NEW SIGN POSTS																				REMARKS  SHSM = FHWA STANDARD HIGHWAY SIGNS AND MARKINGS BOOK	SIGN DETAIL							
		E A	WIDTH (in)	HEIGHT (in)	"A"	"B"	SALV SIGN	SALV TIS	RE TAIN	SAL VAGE	NO. OF POSTS	FLANGED CHANNEL REMOVING SIGNS			SQUARE STEEL (in)			TUBULAR ALUMINUM Ø (in)			TUBULAR STEEL Ø (in)				W-SHAPE STEEL				RE QUIRE D		DETAIL IN SHSM	DETAIL ON DWG. NUMBER	STD. SHEET NUMBER					
												1.2	2.0	3.0	1.75	2.0	2.5	3.0	4.0	4.0 MOD	FOUND- ATION	3.0	3.5	4.0	5.0	FTG. SIZE		WEIGHT						POST SIZE				
																										lb/ft	lb/ft								lb/ft	24"	30"	
STA. 325+25 RT			30	30			I			I					X 13.0		X																		MOUNT SALVAGED SIGN ON POST			
STA. 326+18 RT		I	48	24	8.00					2		I			X 21.0		X																	WI-6R			SHSM	
STA. 326+28 RT		I	48	24	8.00					2		I			X 22.5		X																	WI-6L			SHSM	
STA. 327+36 RT		I	6	10	0.42					I		I		X 8.75		X																		VD-700			T-44	
STA. 331+75 LT		I	30	30	6.25					I				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 ROUNDING		22.67 0.33			I					LF 3 EA	LF 10- 8.75	LF 90- 70.0	LF -		EA.	LB	LB	LB		LB	LB	LB	LB							PROJECT NAME: SHARON PROJECT NUMBER: ER STP 0147(20)			
					TOTALS		SF 23.00	SF	EA.	SF				LF 3 EA	LF 100- 78.75				LB		EA.	LB					EA.	EA.	LB						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			





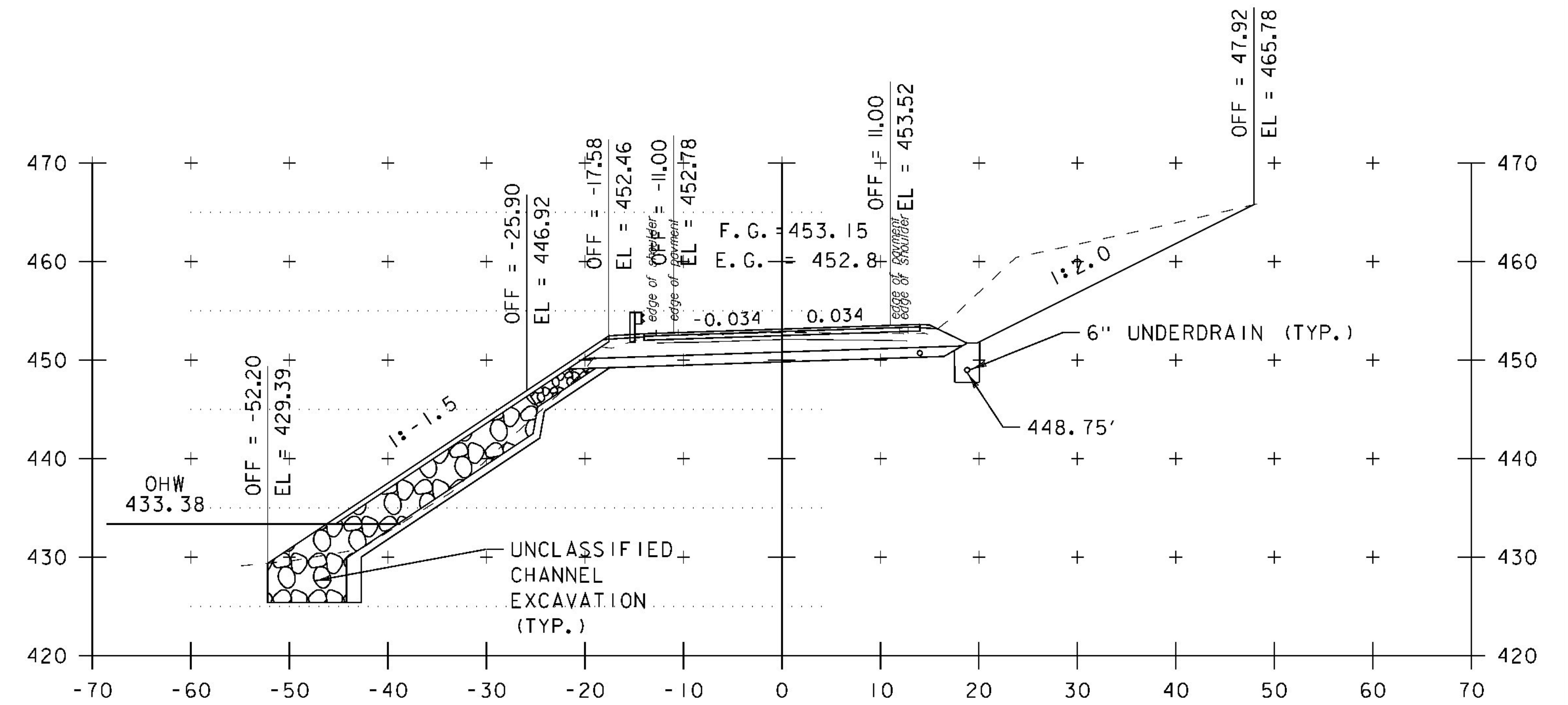
323+50

BEGIN PROJECT

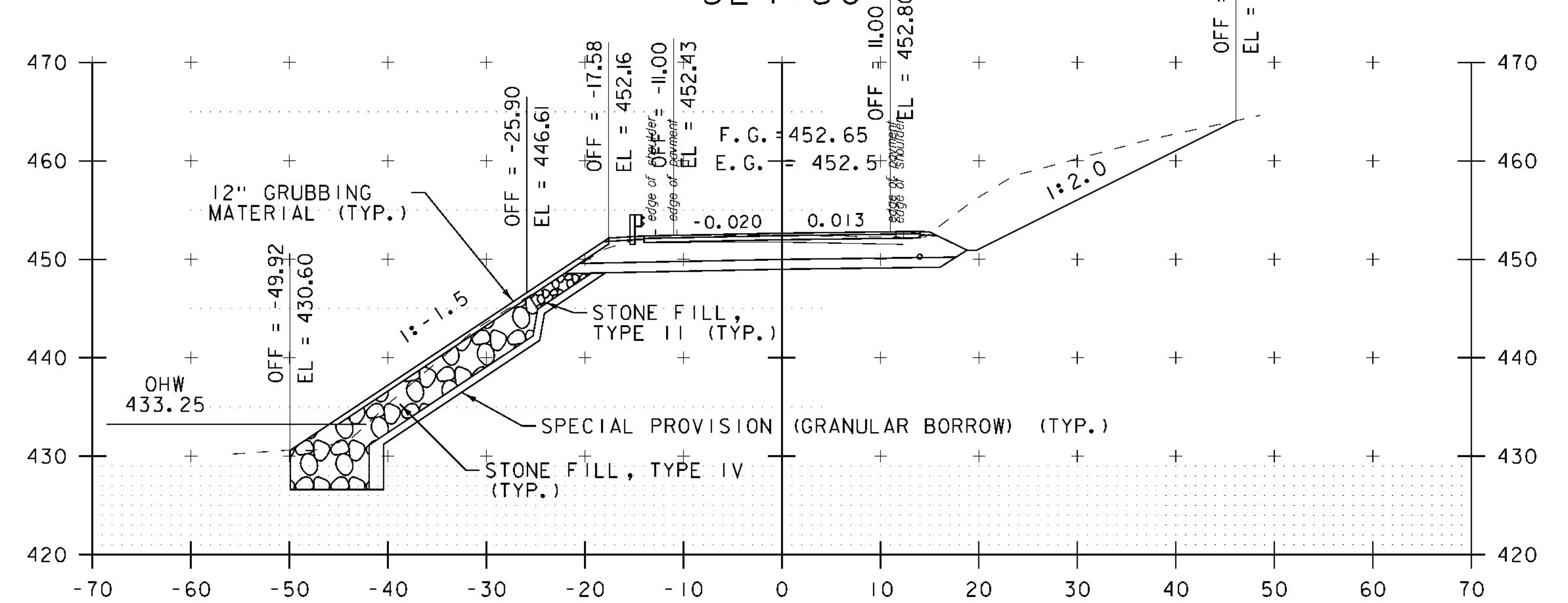


323+00

STA. 322+50.00  
BEGIN APPROACH  
MATCH EXISTING



324+50



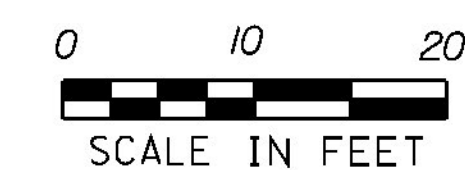
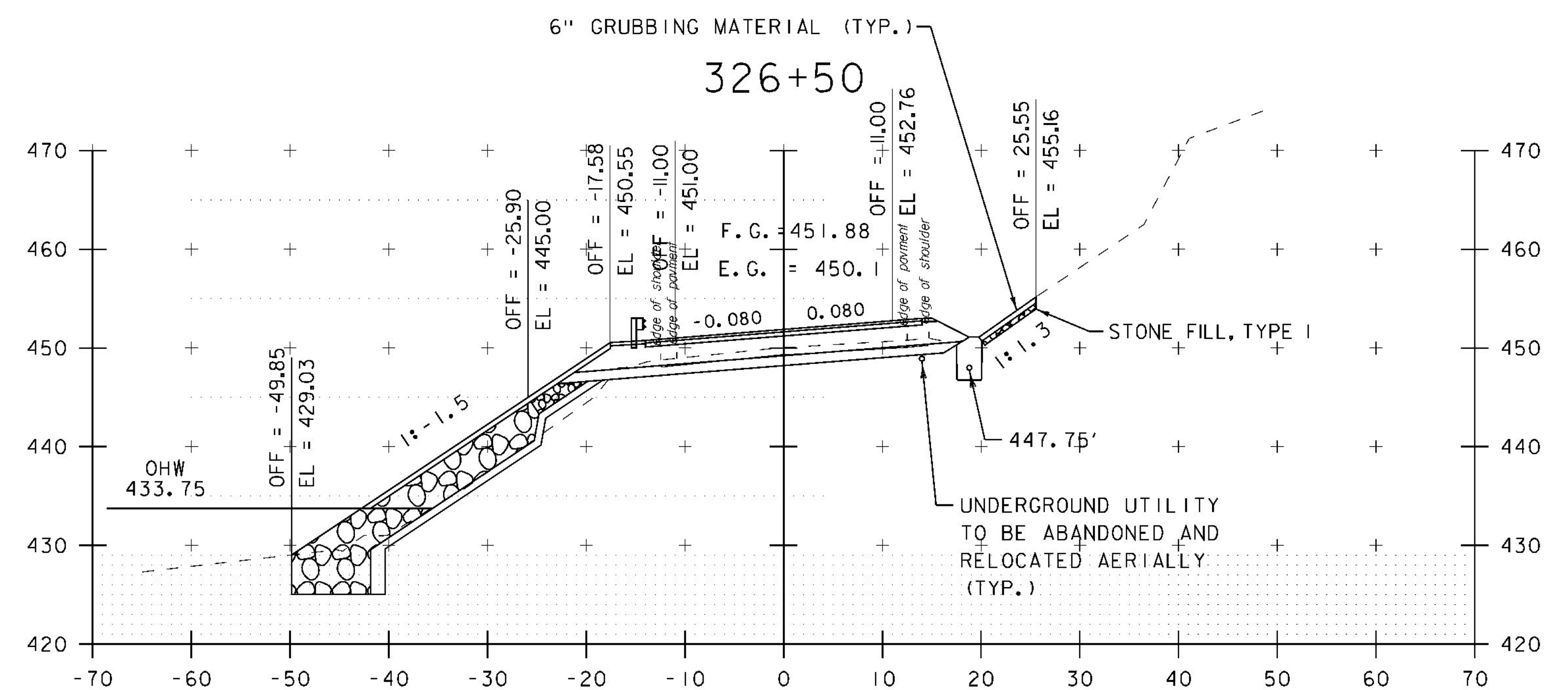
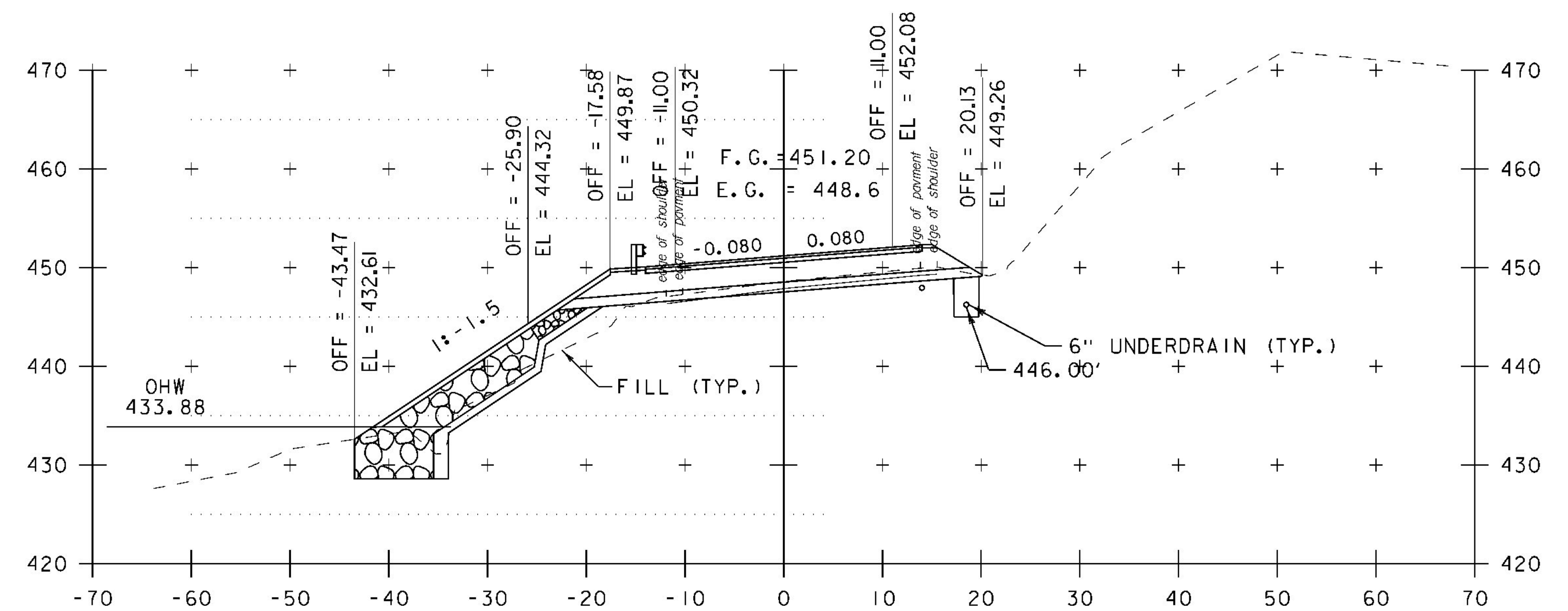
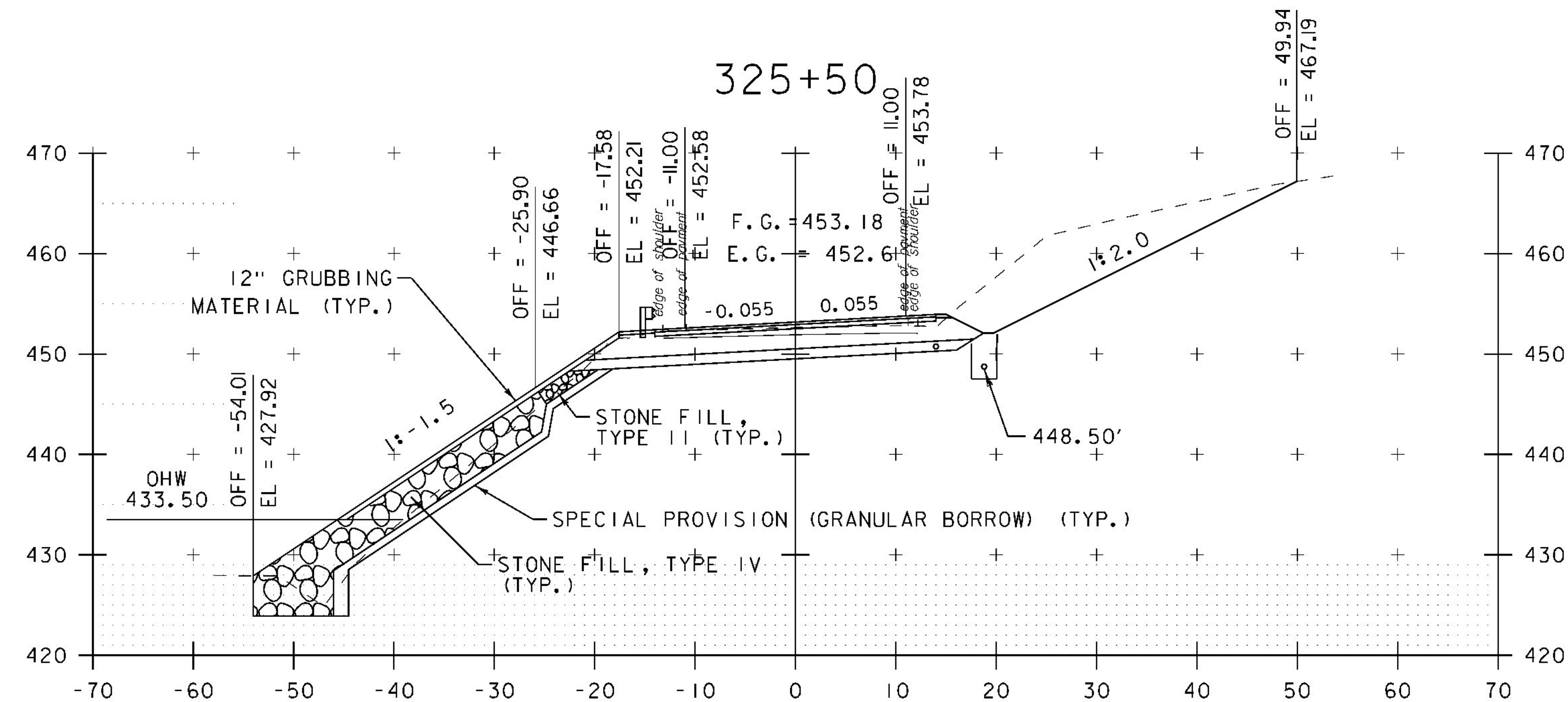
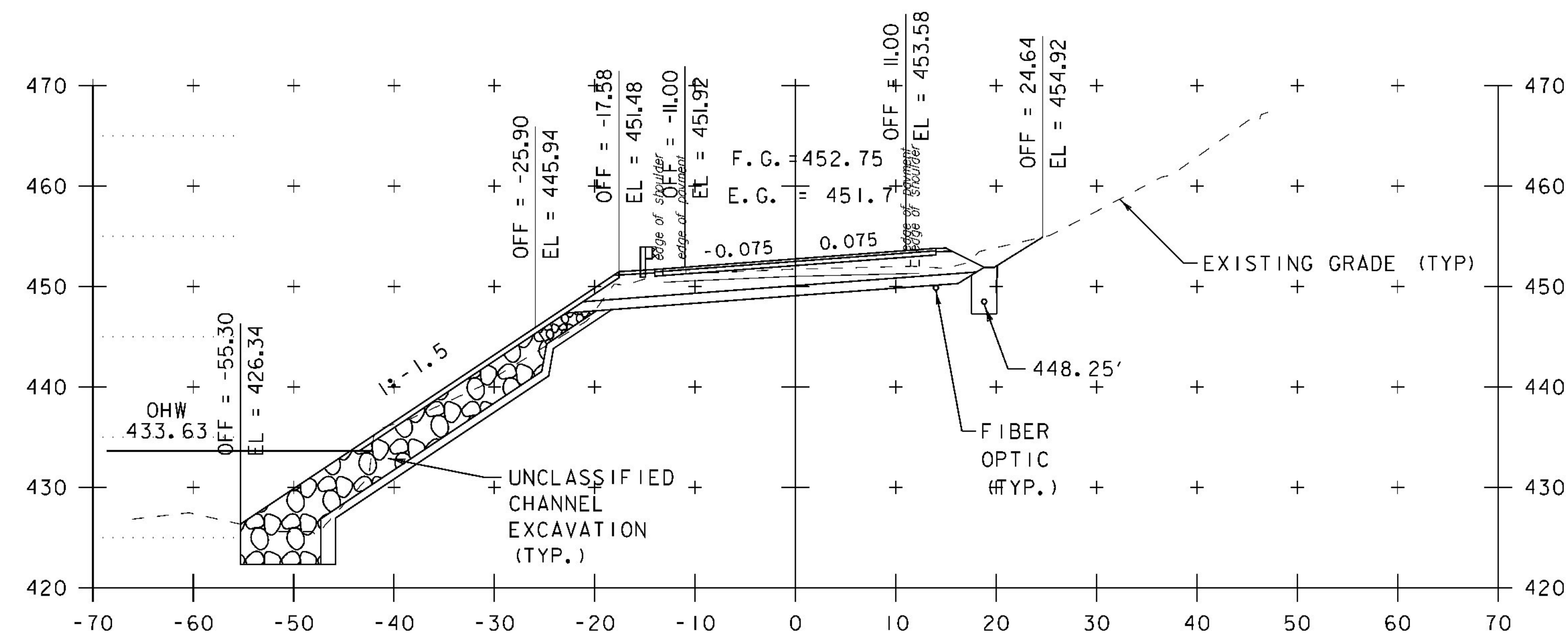
324+00

323+00 - 324+50

0 10 20  
SCALE IN FEET

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

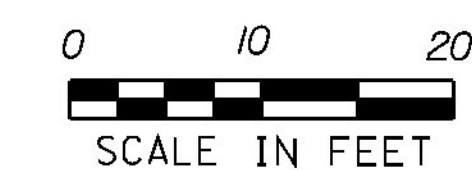
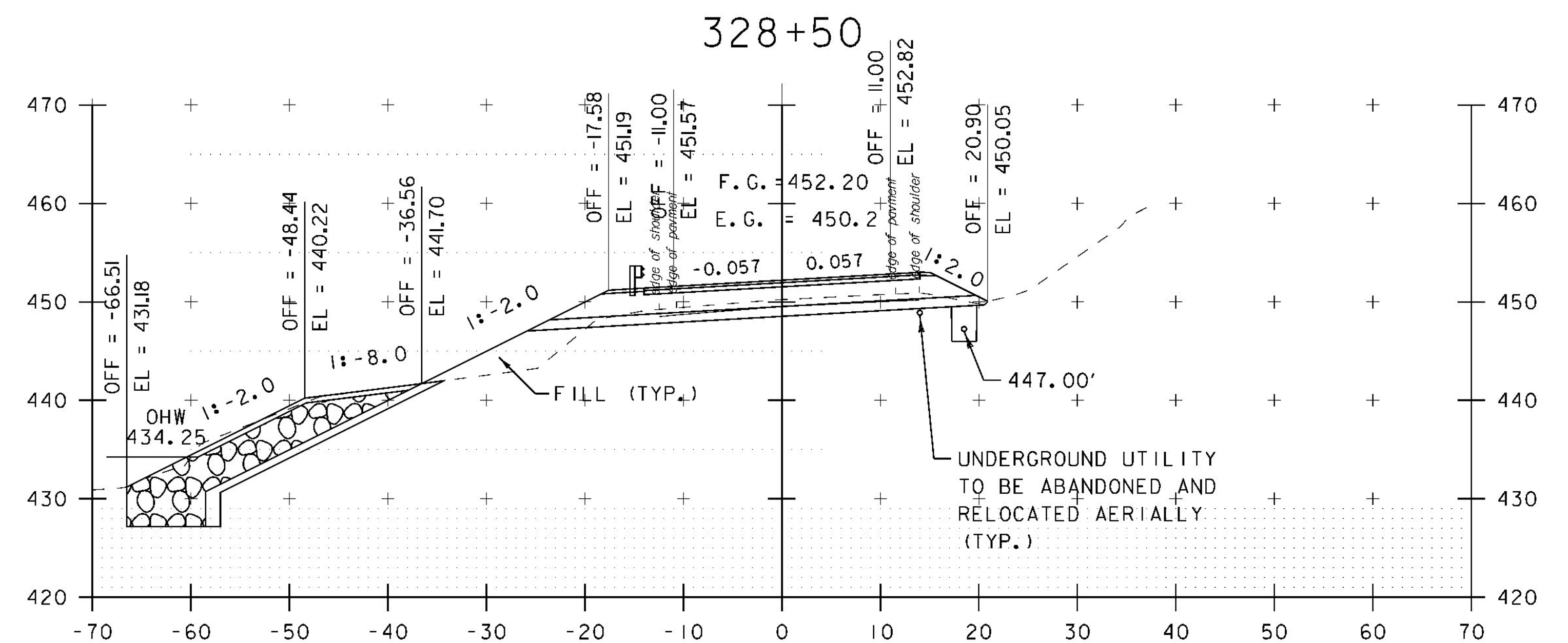
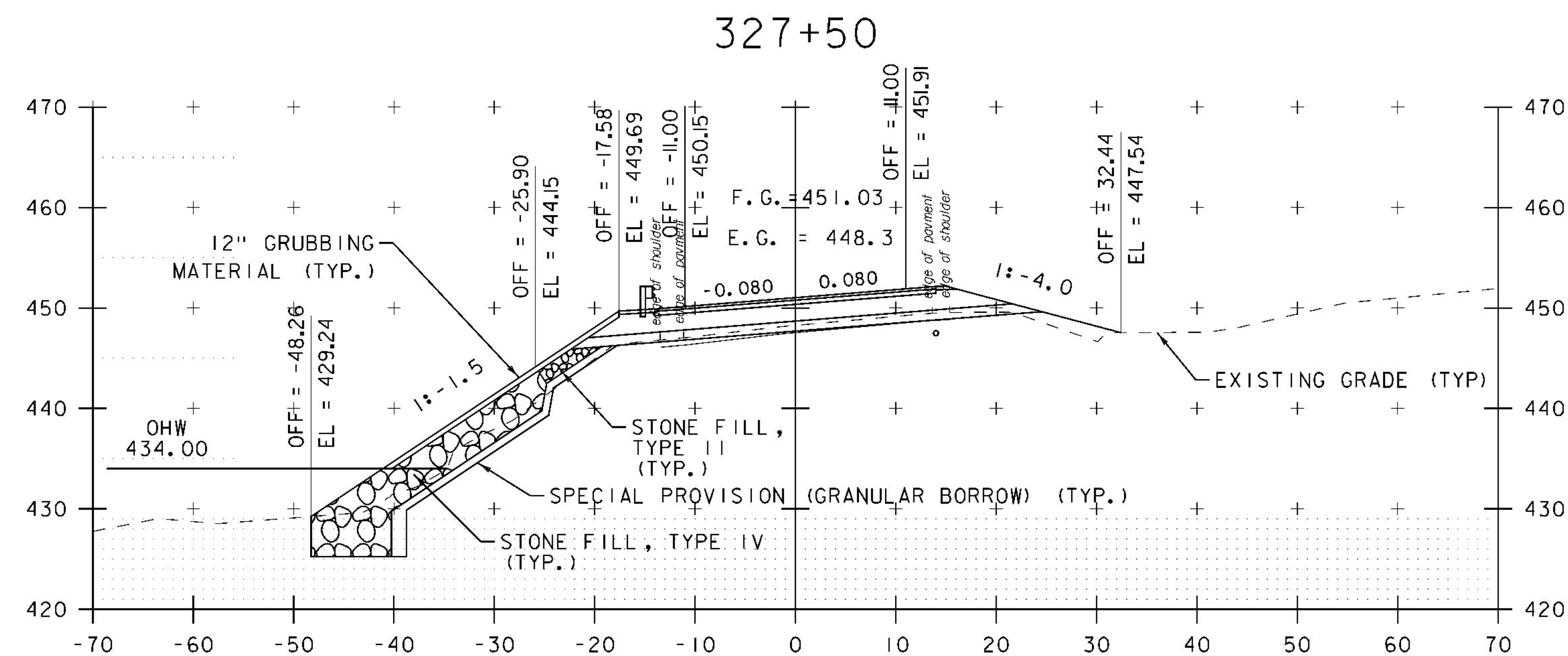
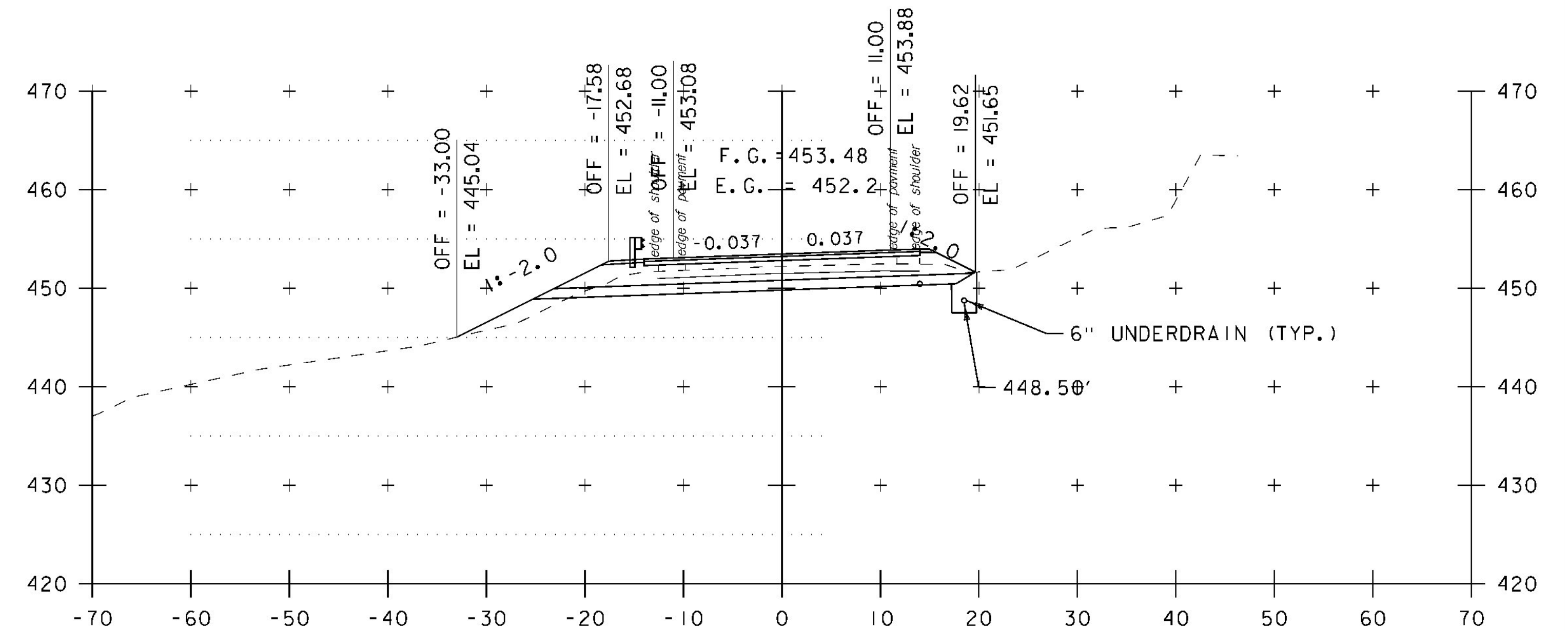
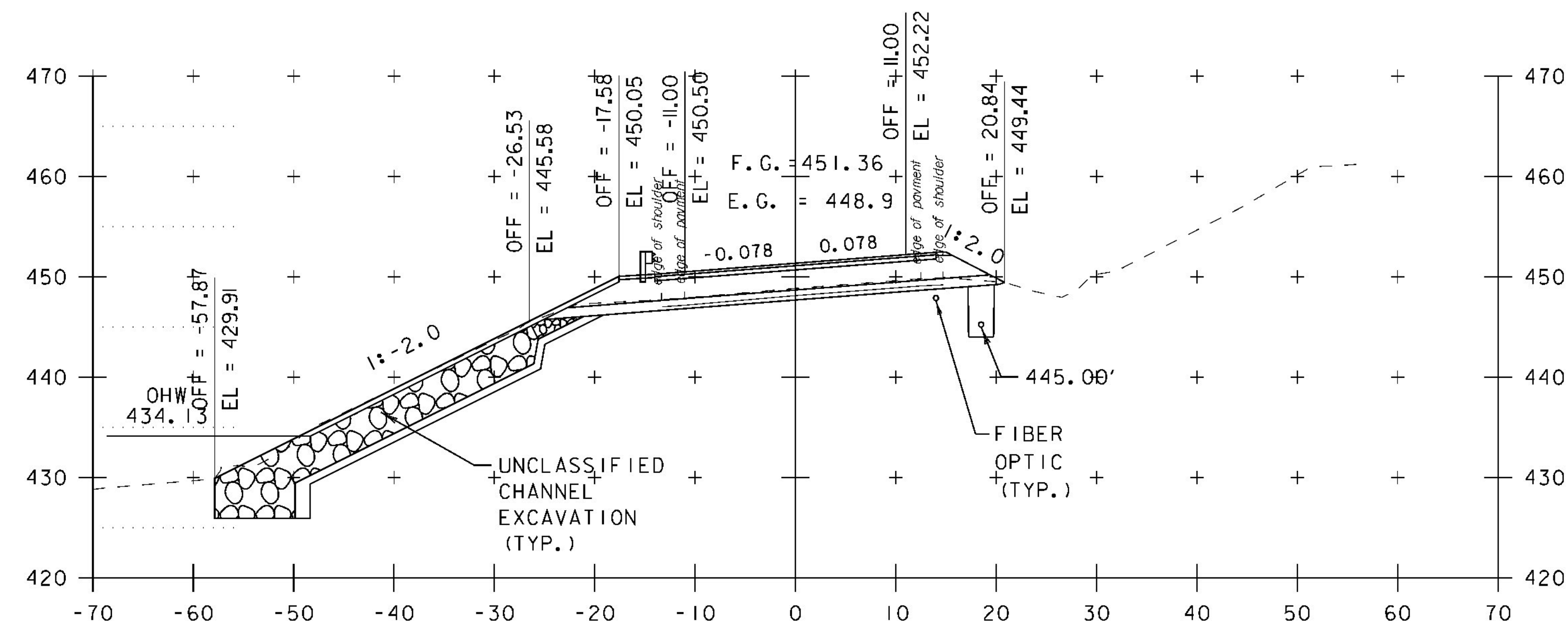




PROJECT NAME: SHARON	
PROJECT NUMBER: ER STP 0147 (20)	
FILE NAME: z12c410xs.dgn	PLOT DATE: 3/31/2015
PROJECT LEADER: J. TUCKER	DRAWN BY: B. MACK
DESIGNED BY: B. BRESLEND	CHECKED BY: A. SANZ
VT 14 CROSS SECTION SHEET 2	SHEET 52 OF 66

325+00 - 326+50

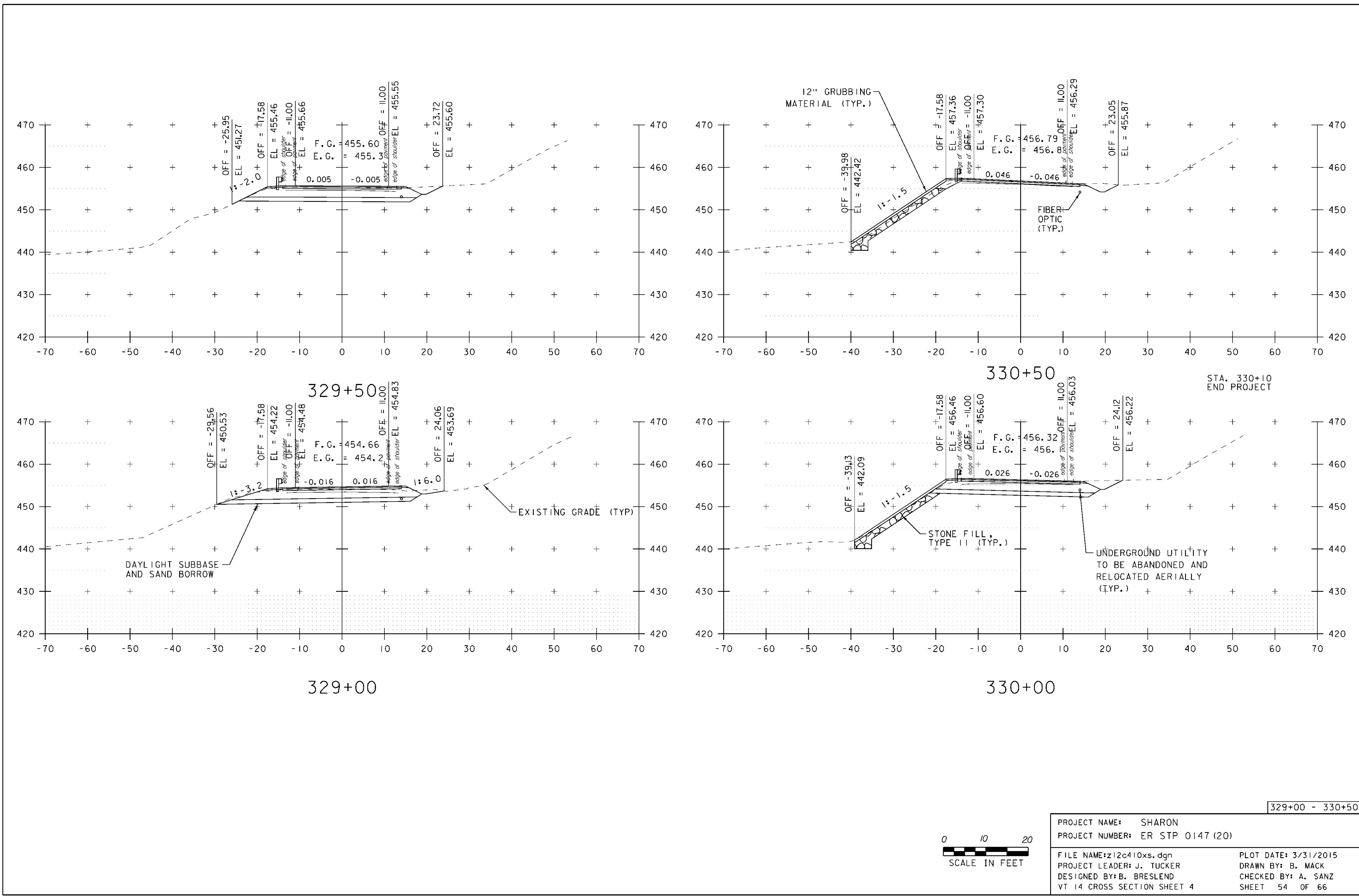




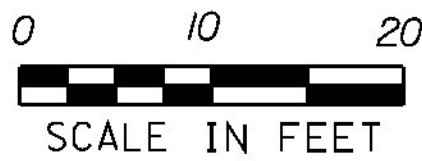
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PROJECT NUMBER: ER STP 0147 (20)	
FILE NAME: z12c410xs.dgn	PLOT DATE: 3/31/2015
PROJECT LEADER: J. TUCKER	DRAWN BY: B. MACK
DESIGNED BY: B. BRESLEND	CHECKED BY: A. SANZ
CROSS SECTION SHEET 3	SHEET 53 OF 66

327+00 - 328+50



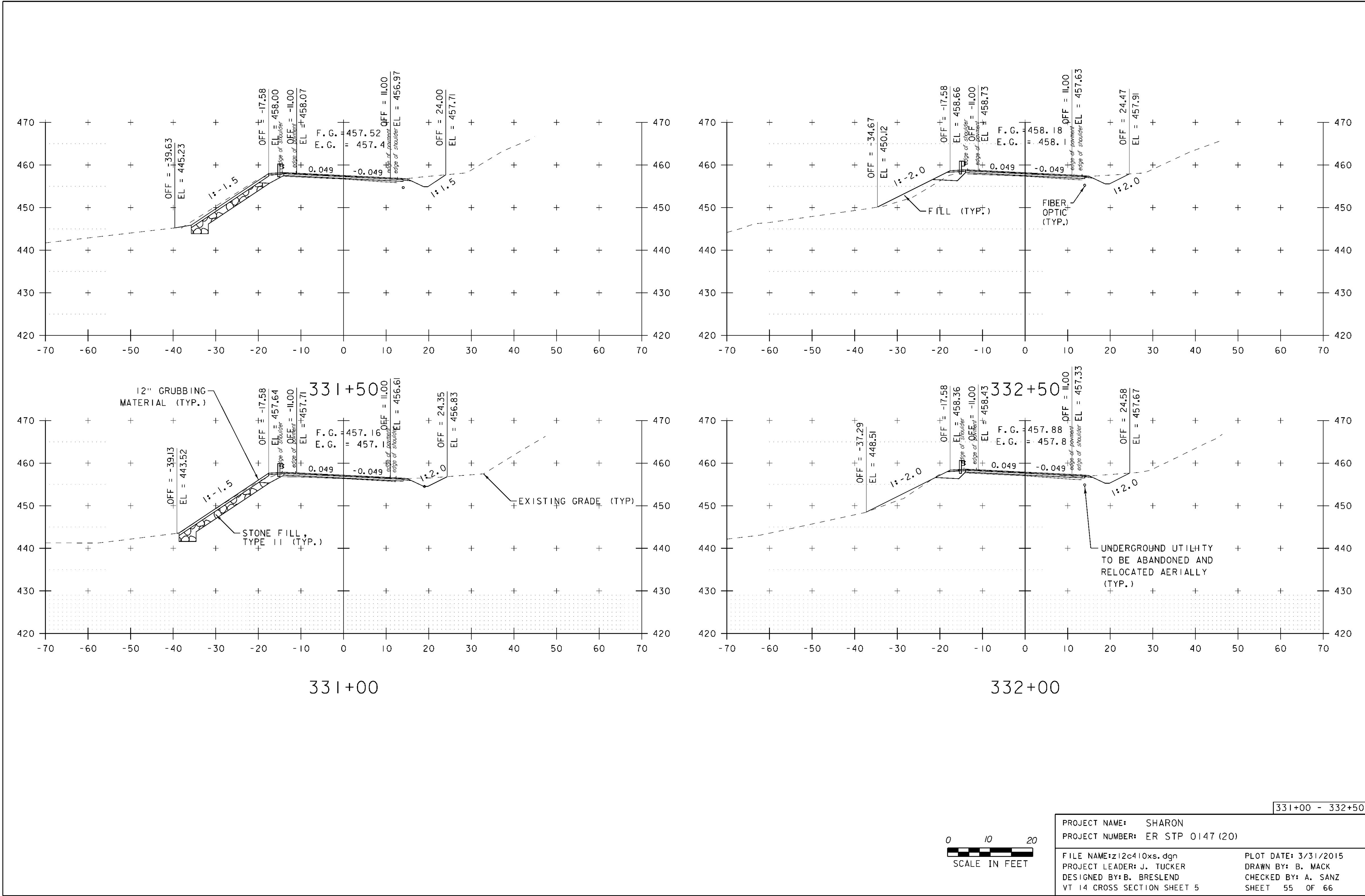


329+00 - 330+50

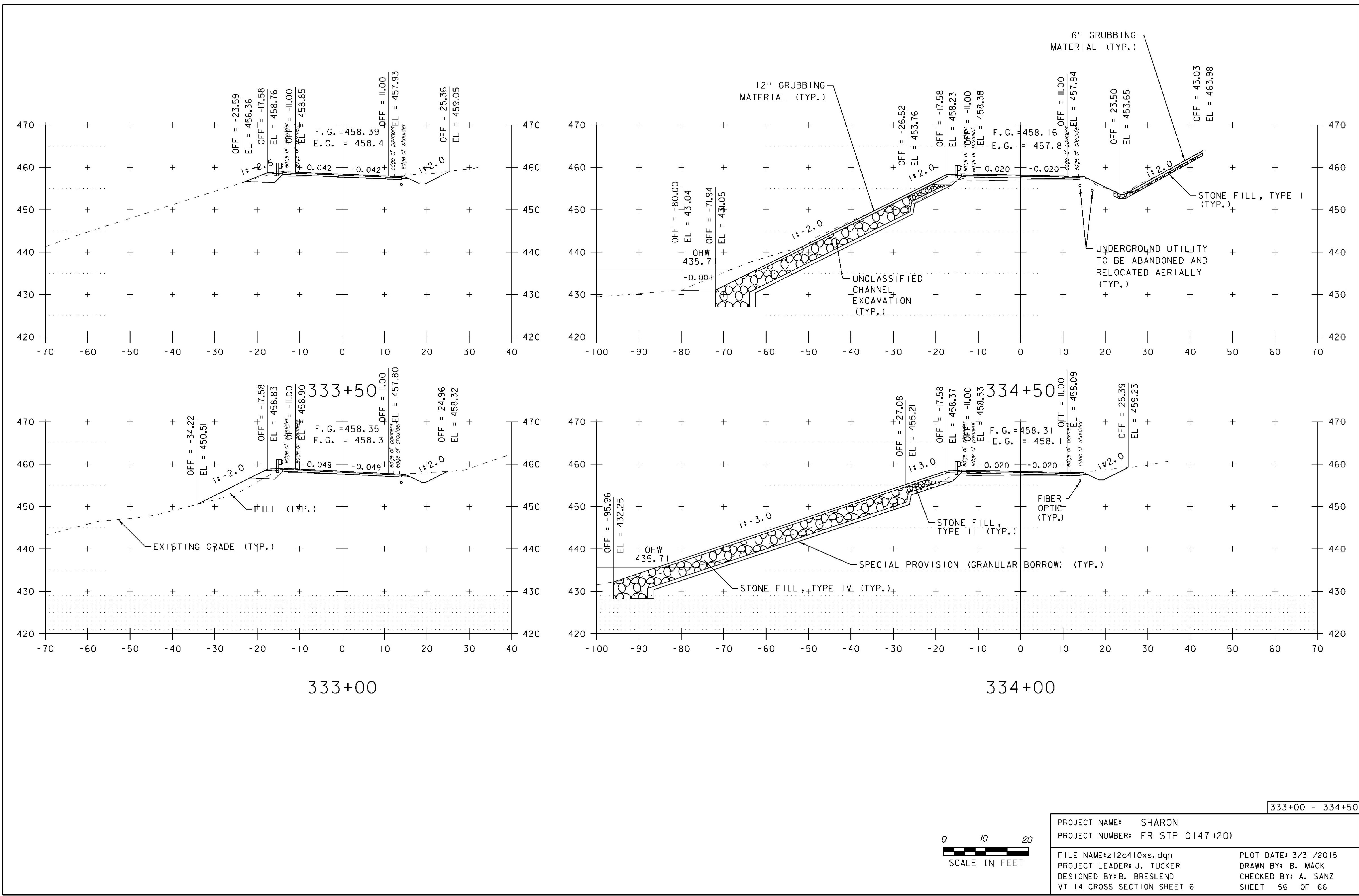


PROJECT NAME: SHARON	
PROJECT NUMBER: ER STP 0147 (20)	
FILE NAME: z12c410xs.dgn	PLOT DATE: 3/31/2015
PROJECT LEADER: J. TUCKER	DRAWN BY: B. MACK
DESIGNED BY: B. BRESLEND	CHECKED BY: A. SANZ
VT 14 CROSS SECTION SHEET 4	SHEET 54 OF 66

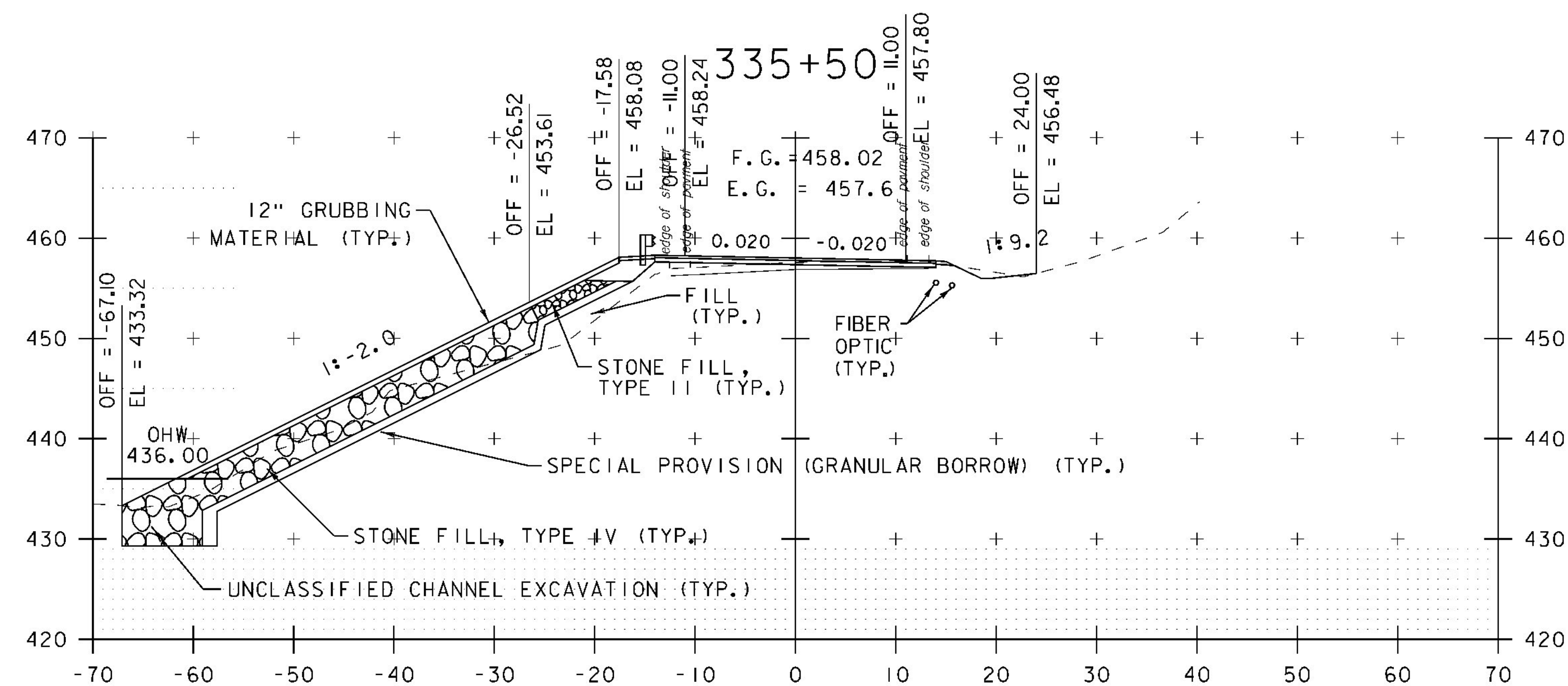
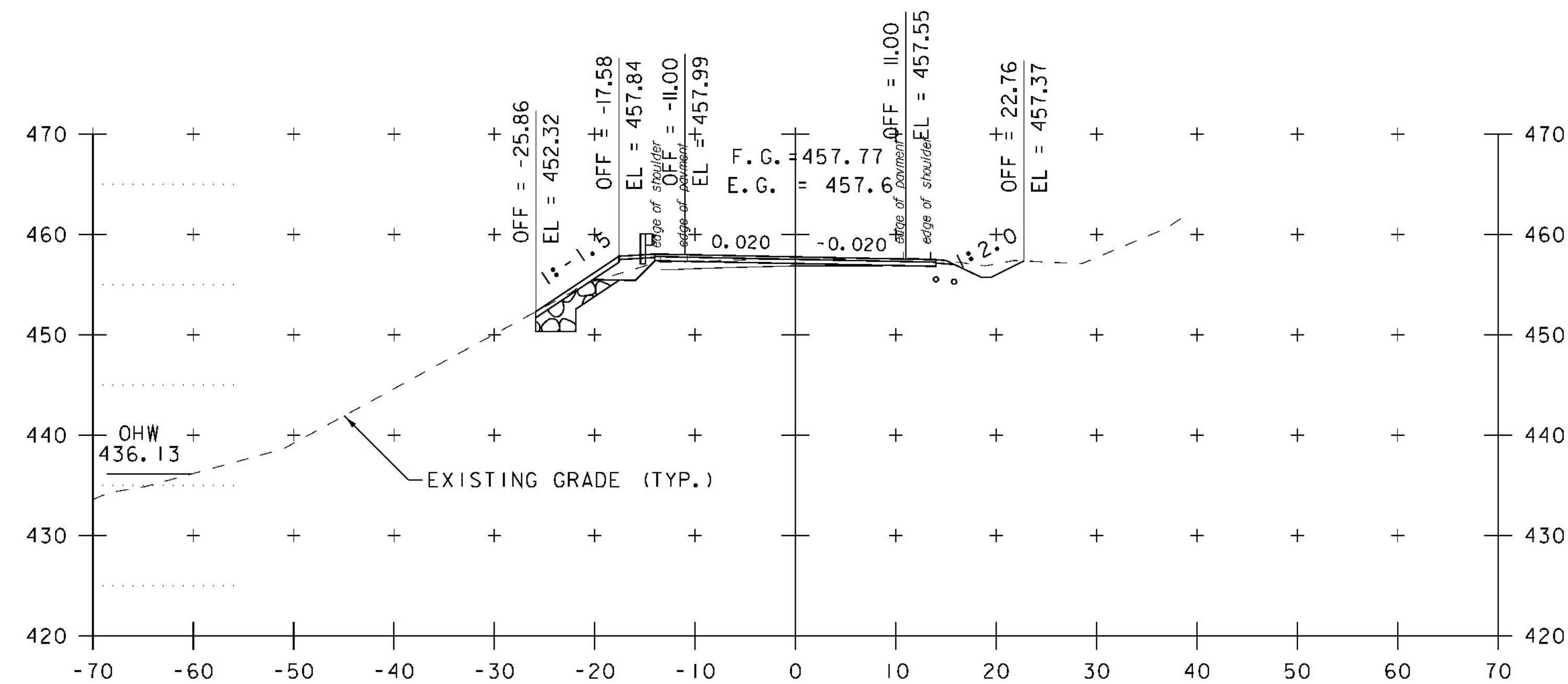




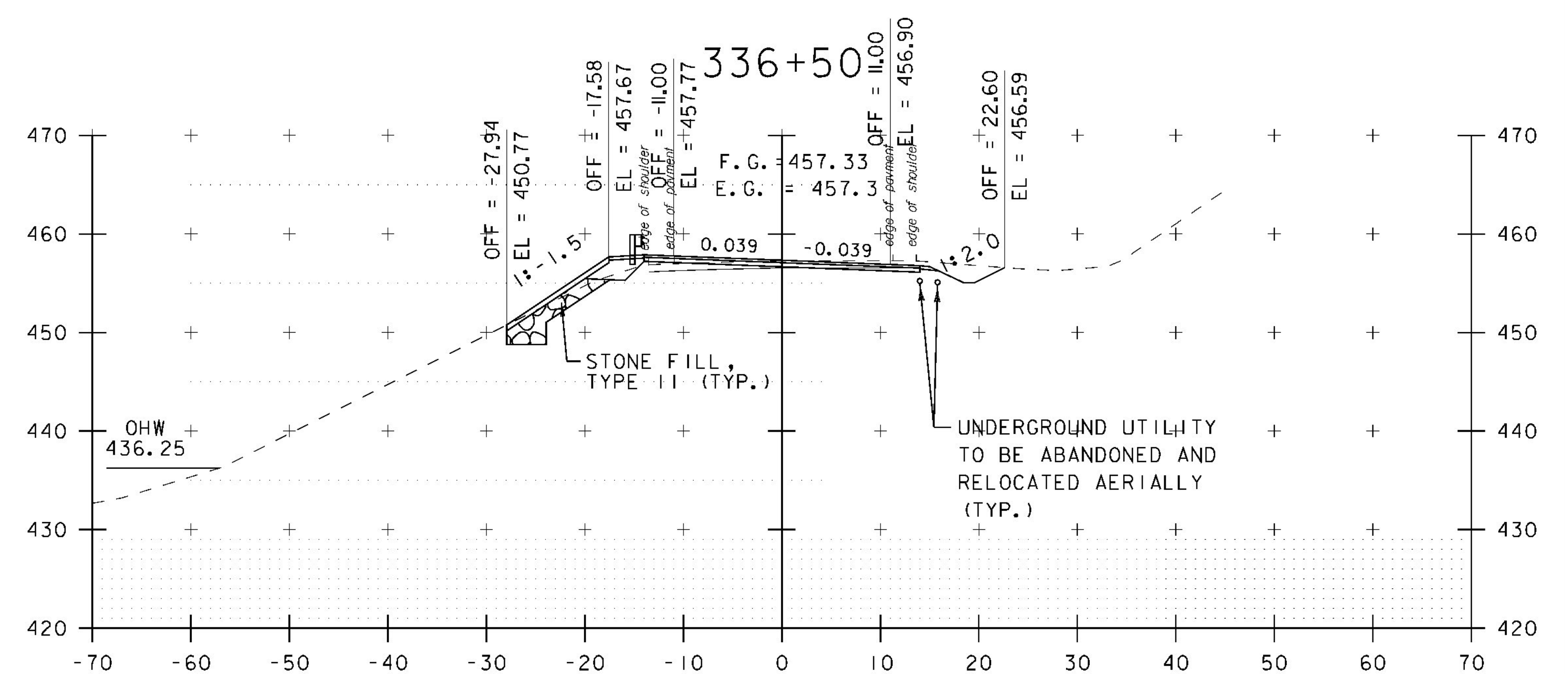
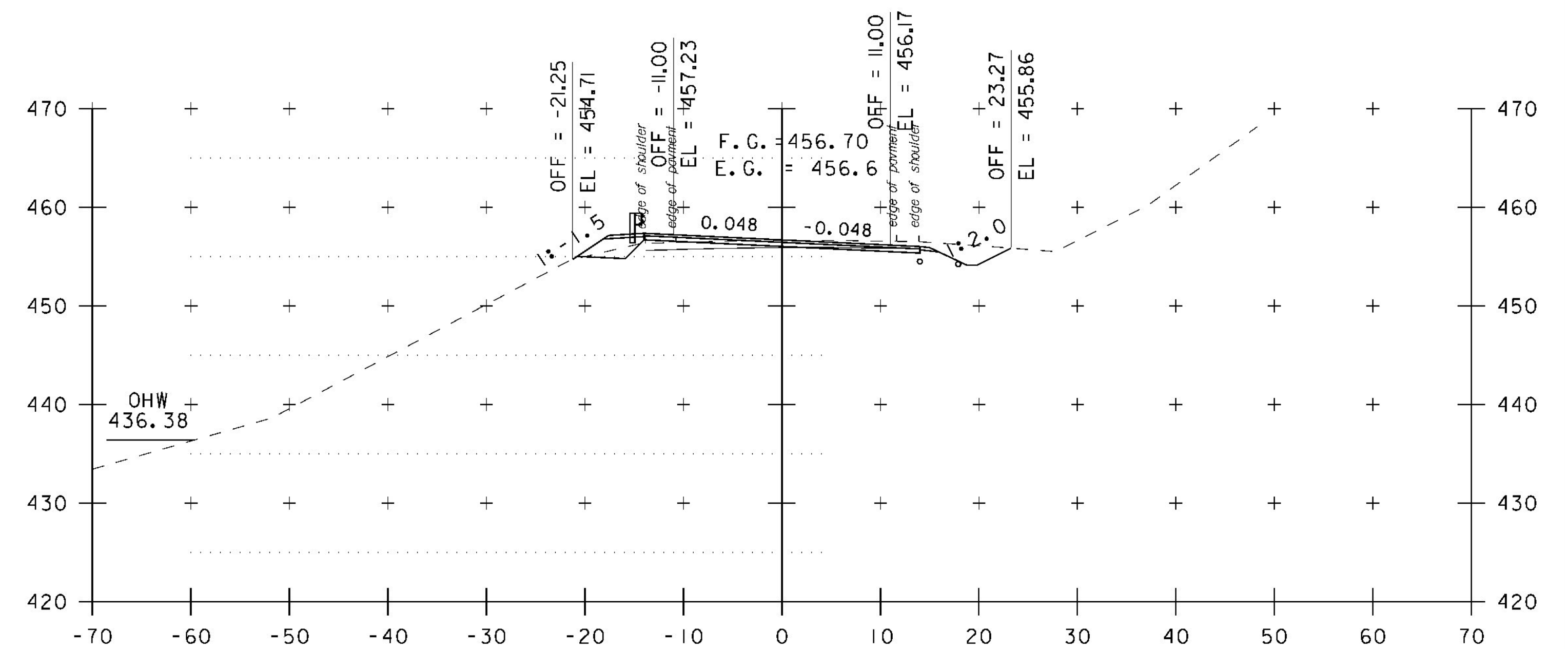




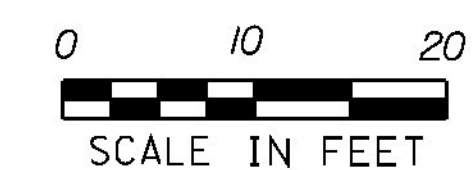




335+00



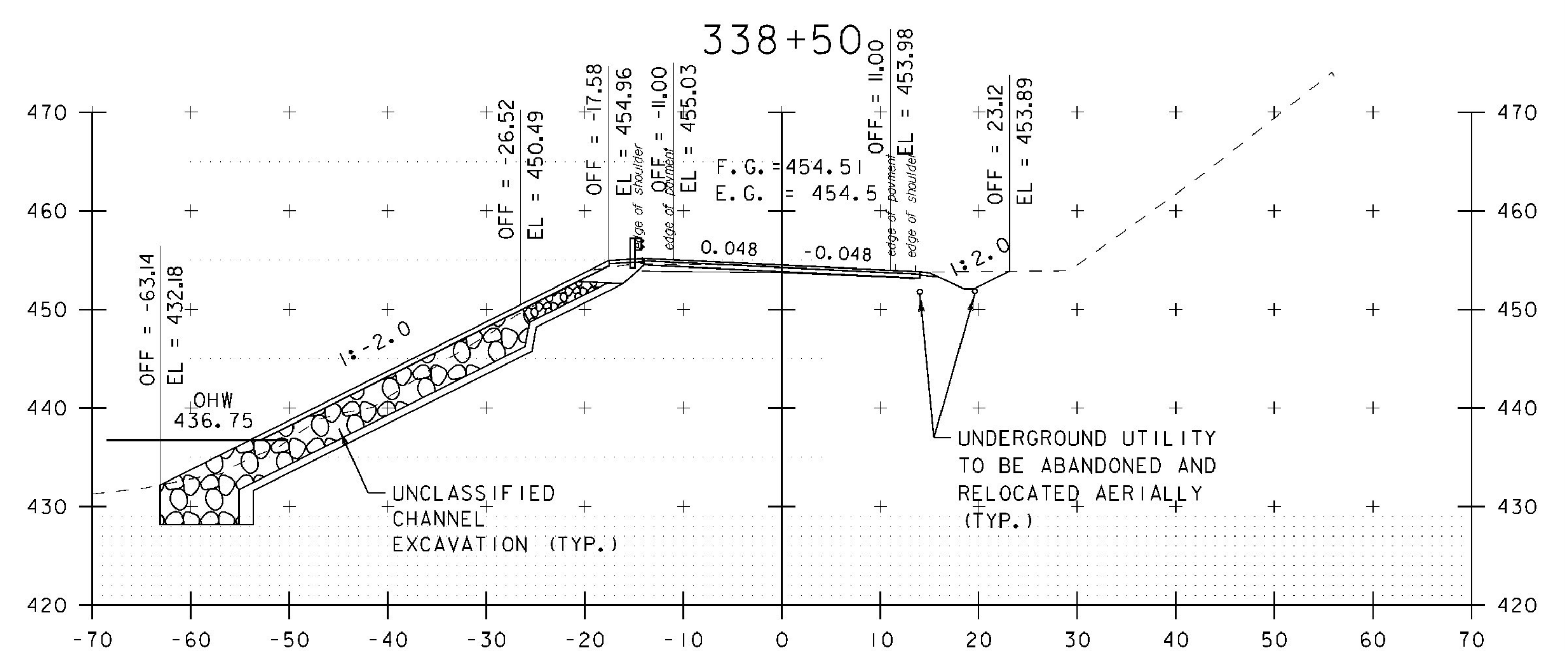
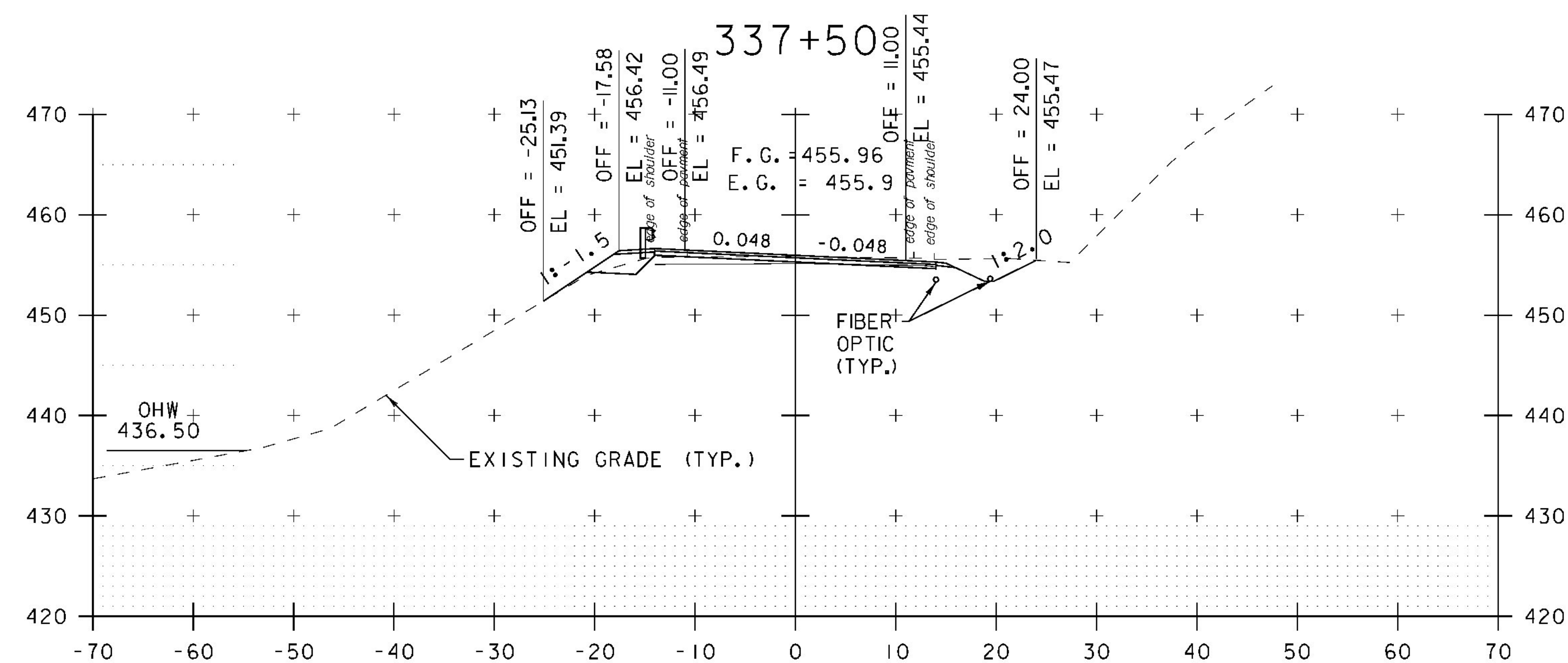
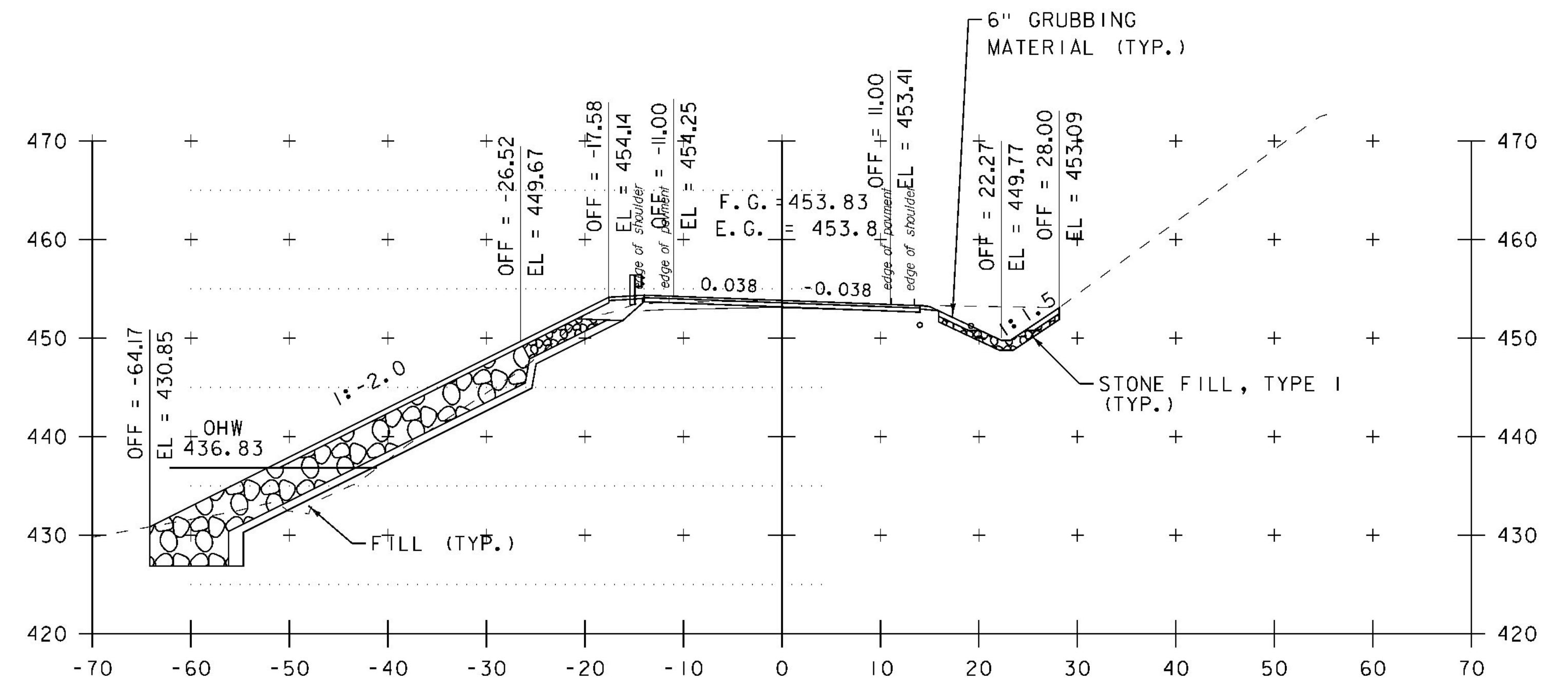
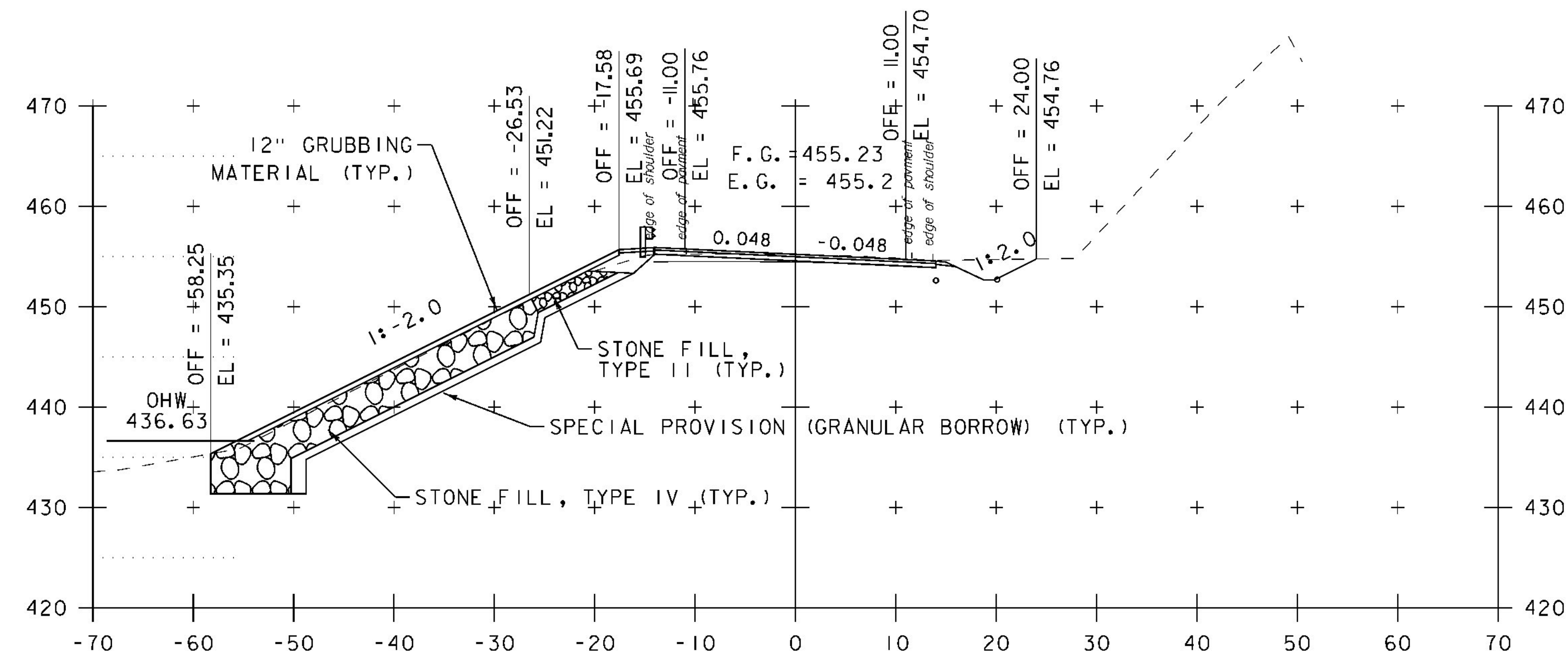
336+00



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 7	SHEET 57 OF 66

335+00 - 336+50

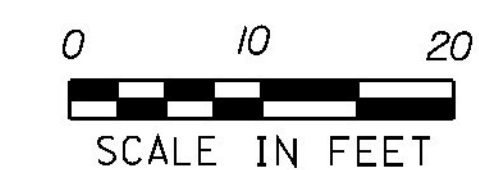




337+00

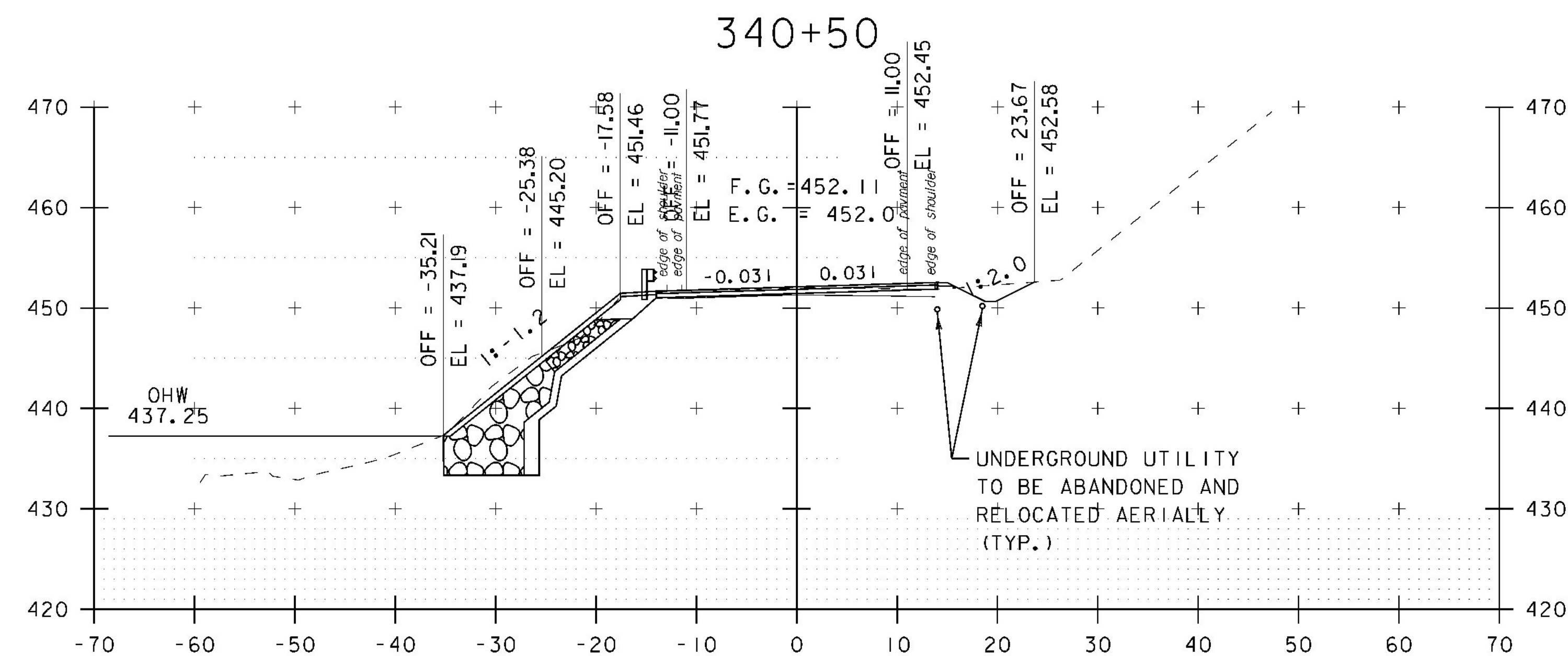
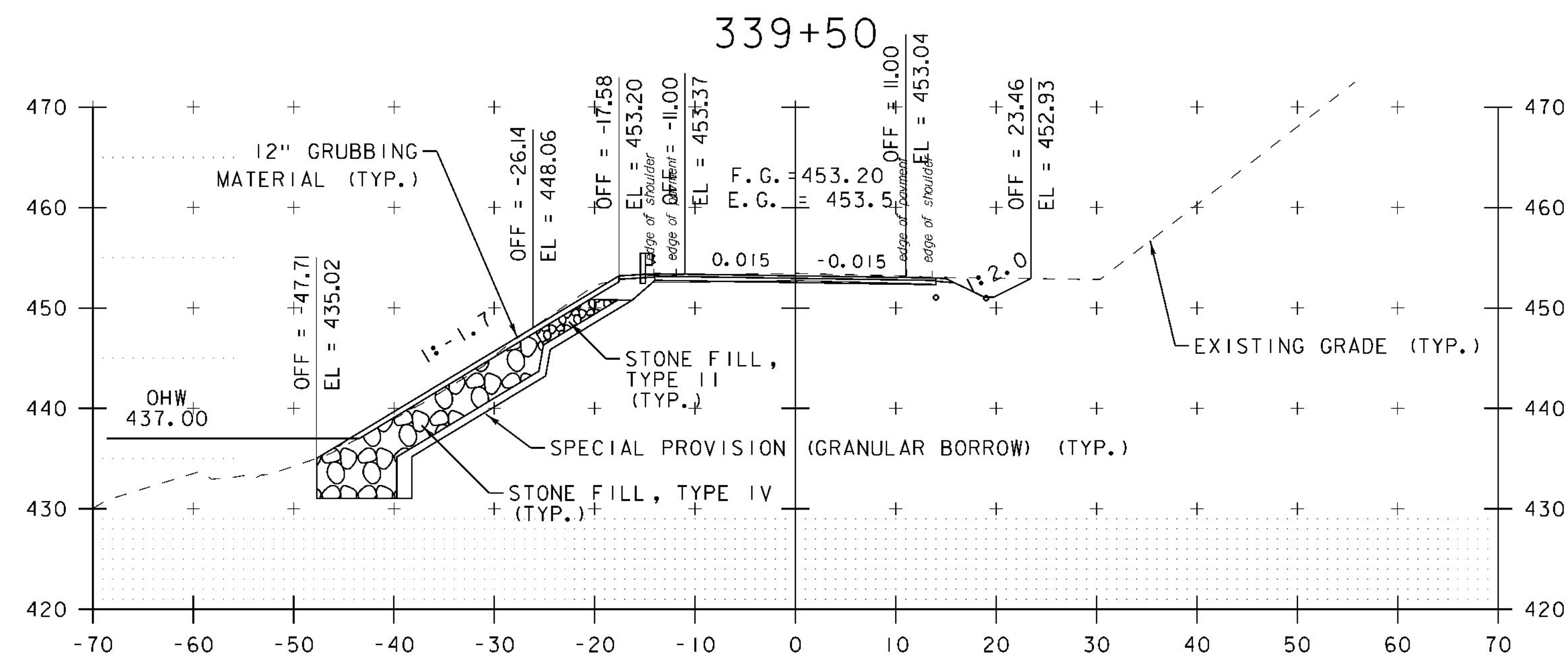
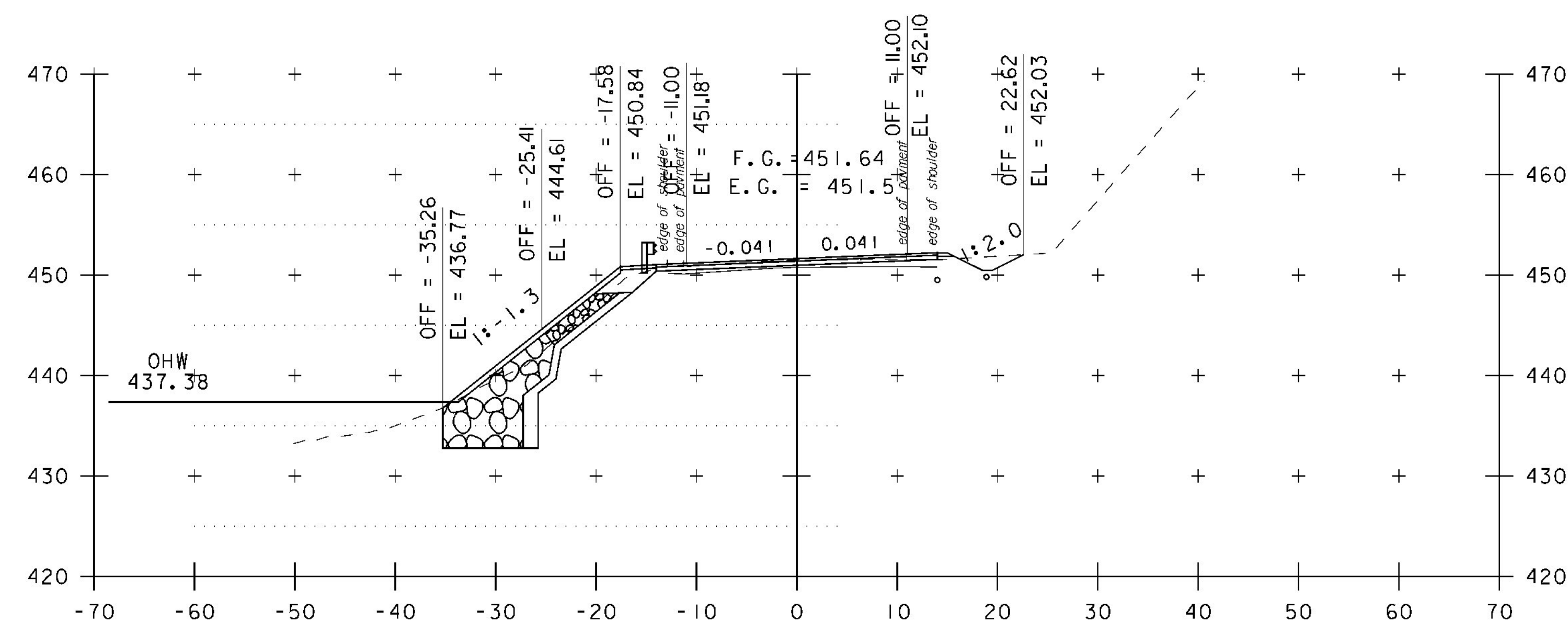
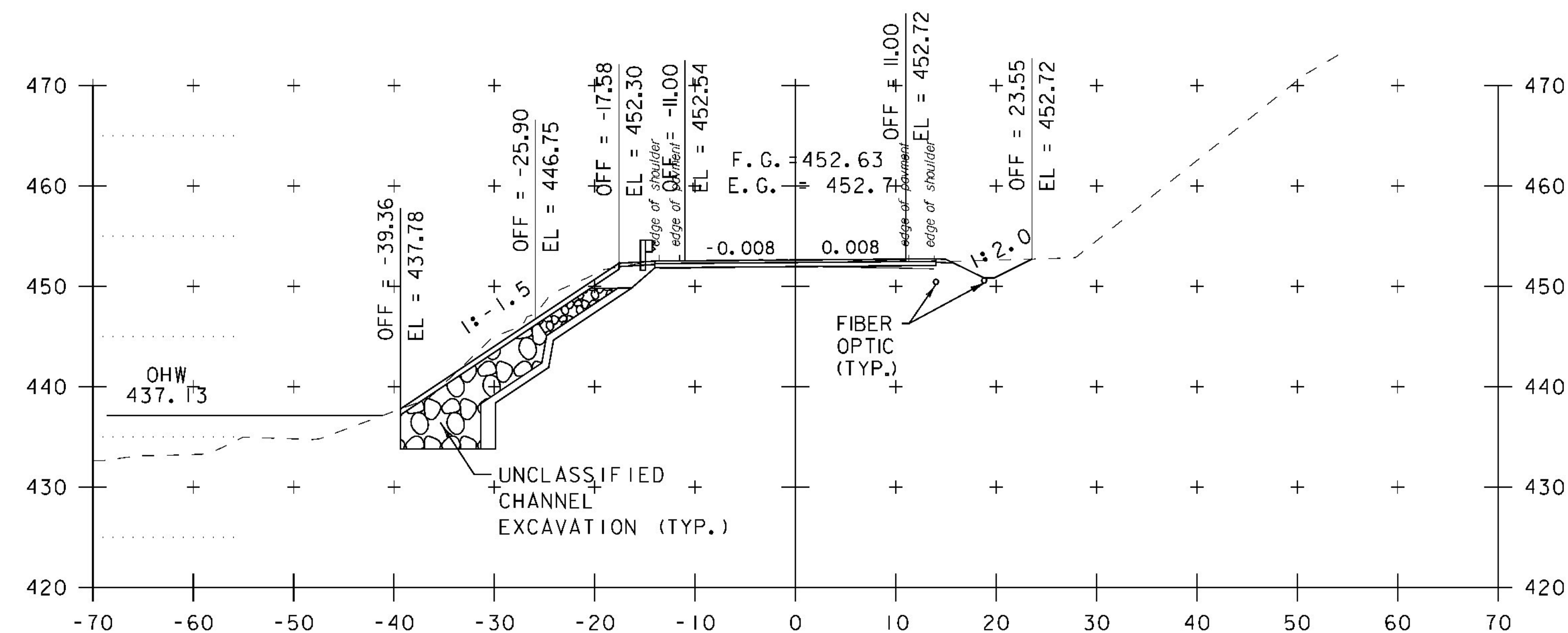
338+00

337+00 - 338+50



PROJECT NAME: SHARON	PLOT DATE: 3/31/2015
PROJECT NUMBER: ER STP 0147 (20)	DRAWN BY: B. MACK
FILE NAME: z12c410xs.dgn	CHECKED BY: A. SANZ
PROJECT LEADER: J. TUCKER	SHEET 58 OF 66
DESIGNED BY: B. BRESLEND	
VT 14 CROSS SECTION SHEET 8	



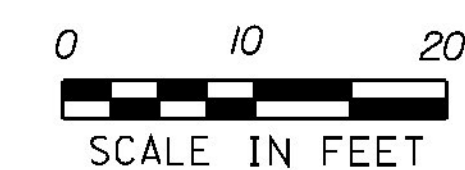


339+50

340+50

339+00

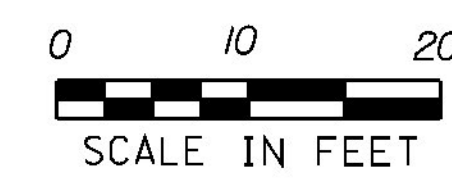
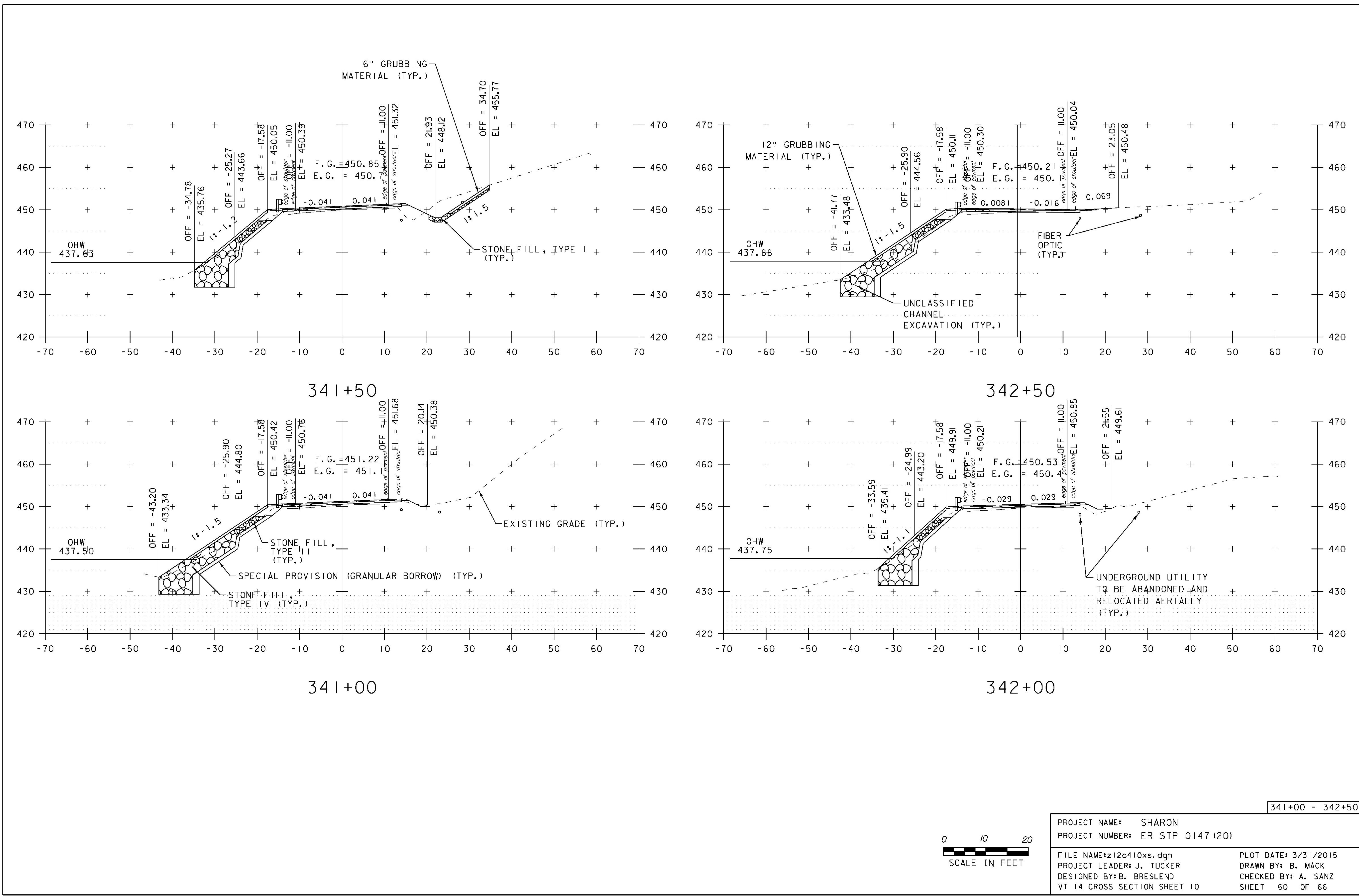
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PROJECT NAME: SHARON	
PROJECT NUMBER: ER STP 0147 (20)	
FILE NAME: z12c410xs.dgn	PLOT DATE: 3/31/2015
PROJECT LEADER: J. TUCKER	DRAWN BY: B. MACK
DESIGNED BY: B. BRESLEND	CHECKED BY: A. SANZ
VT 14 CROSS SECTION SHEET 9	SHEET 59 OF 66

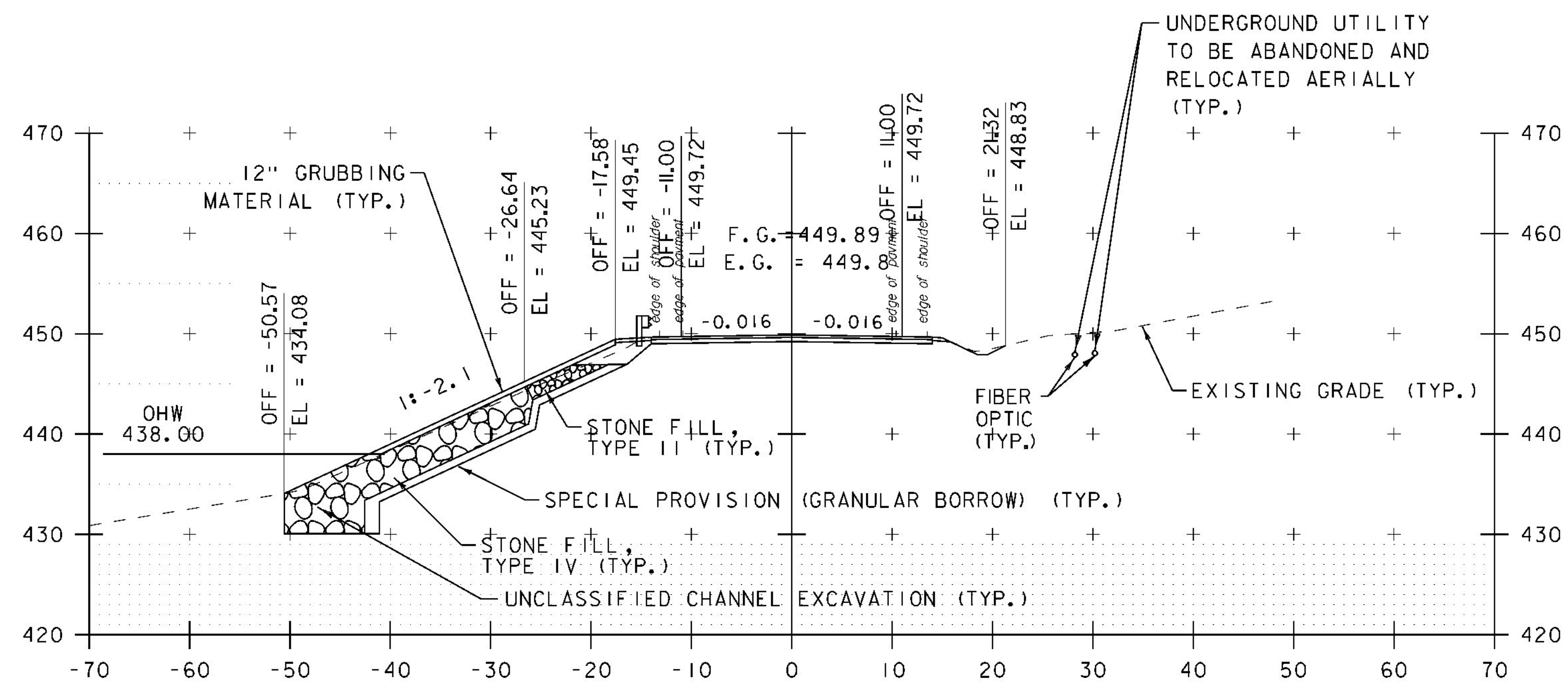
339+00 - 340+50





341+00 - 342+50	
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 10	SHEET 60 OF 66





343+00

STA. 343+00  
END APPROACH  
MATCH EXISTING

0 10 20  
SCALE IN FEET

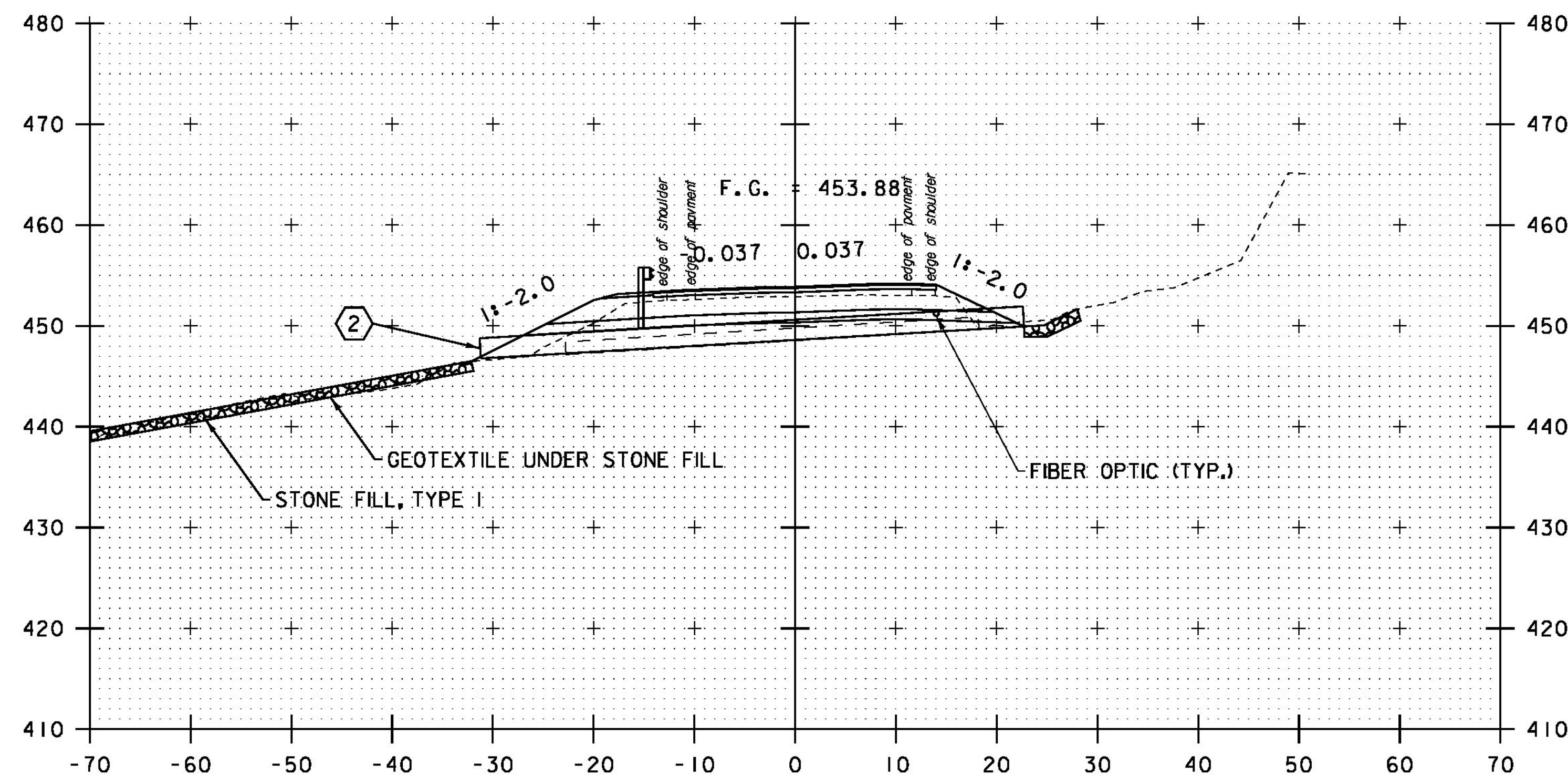
343+00 - 343+00

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 11

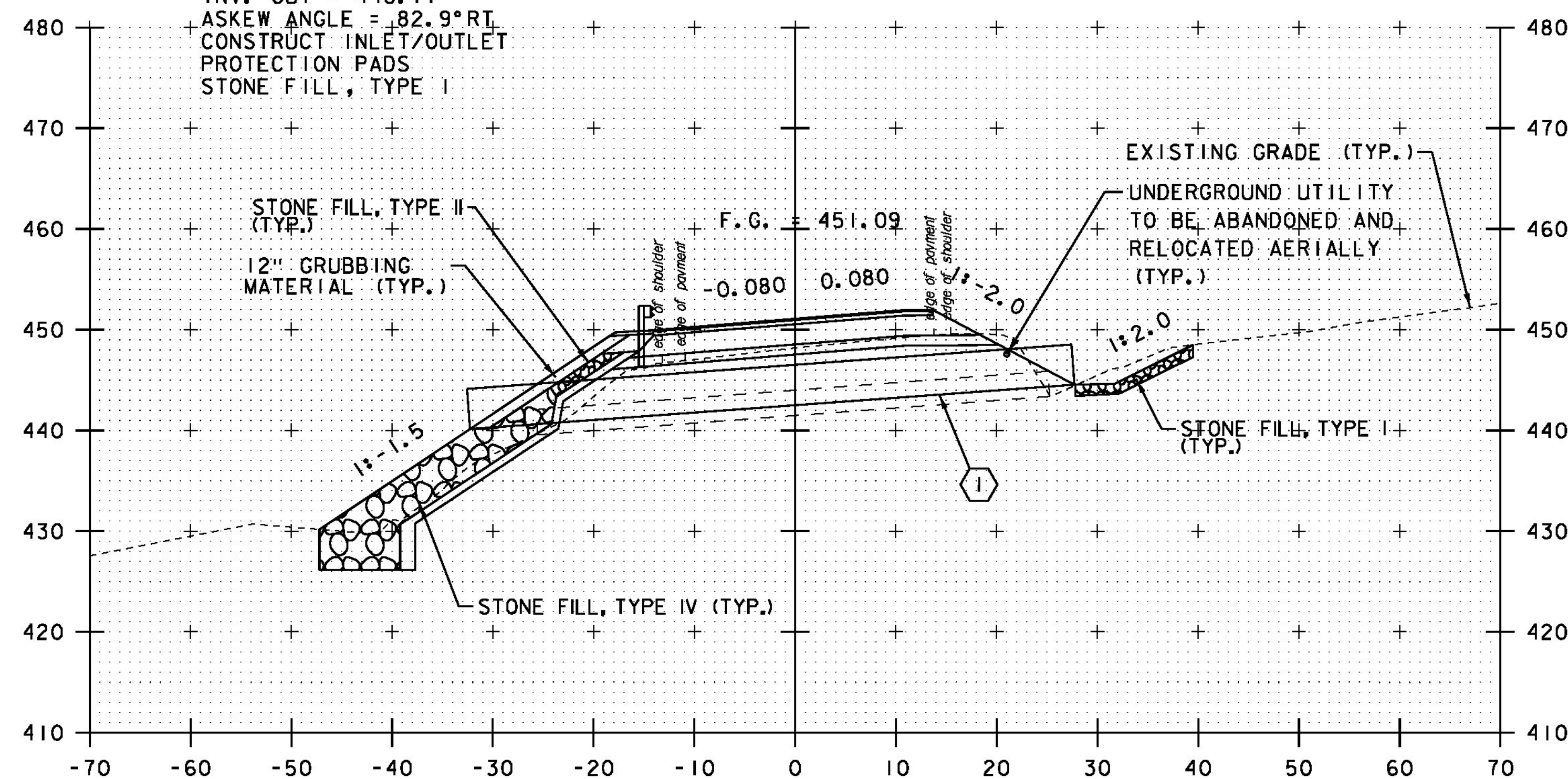
PLOT DATE: 3/31/2015  
DRAWN BY: B. MACK  
CHECKED BY: A. SANZ  
SHEET 61 OF 66





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

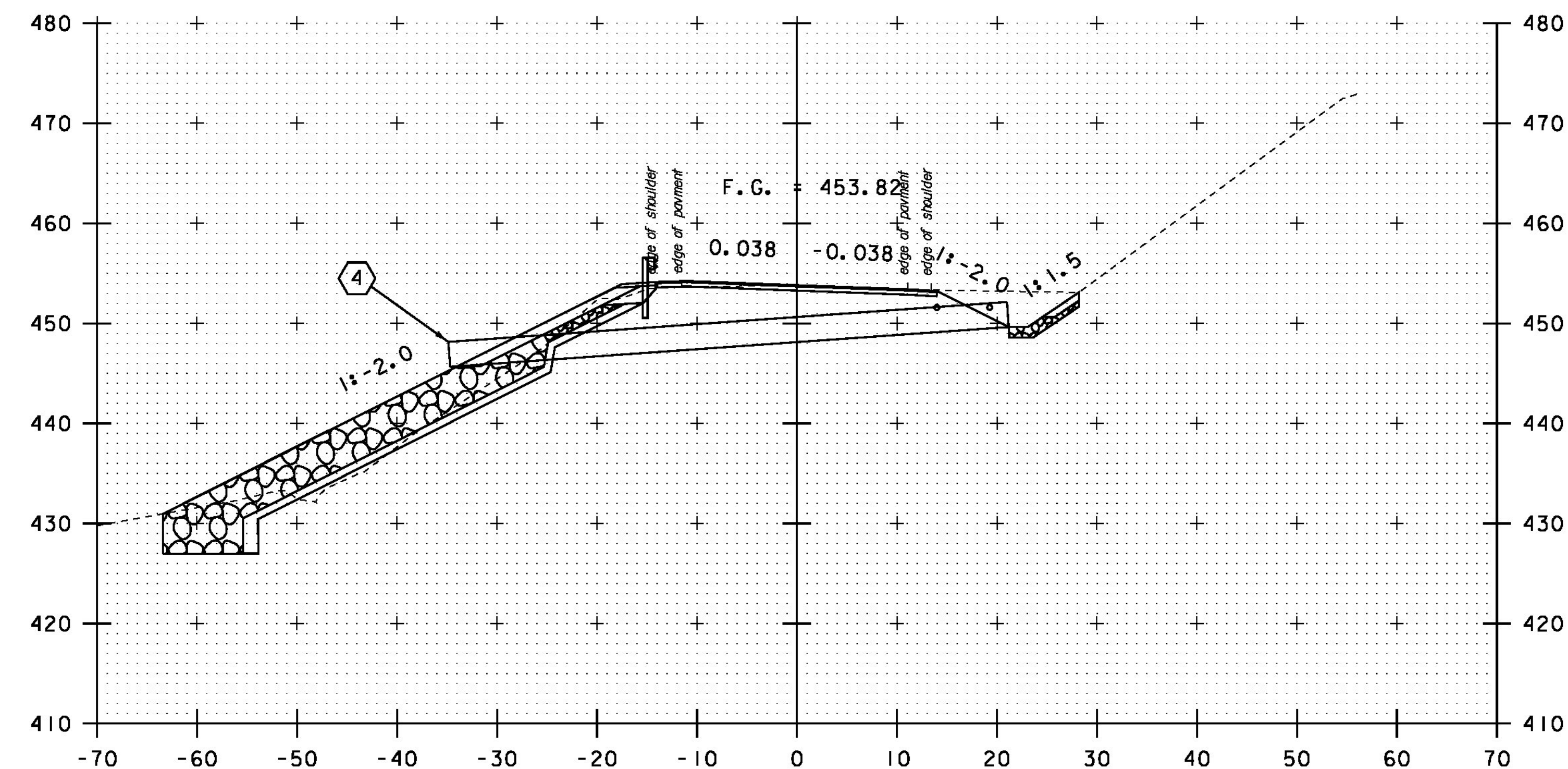
### 328+67 CULVERT #2



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

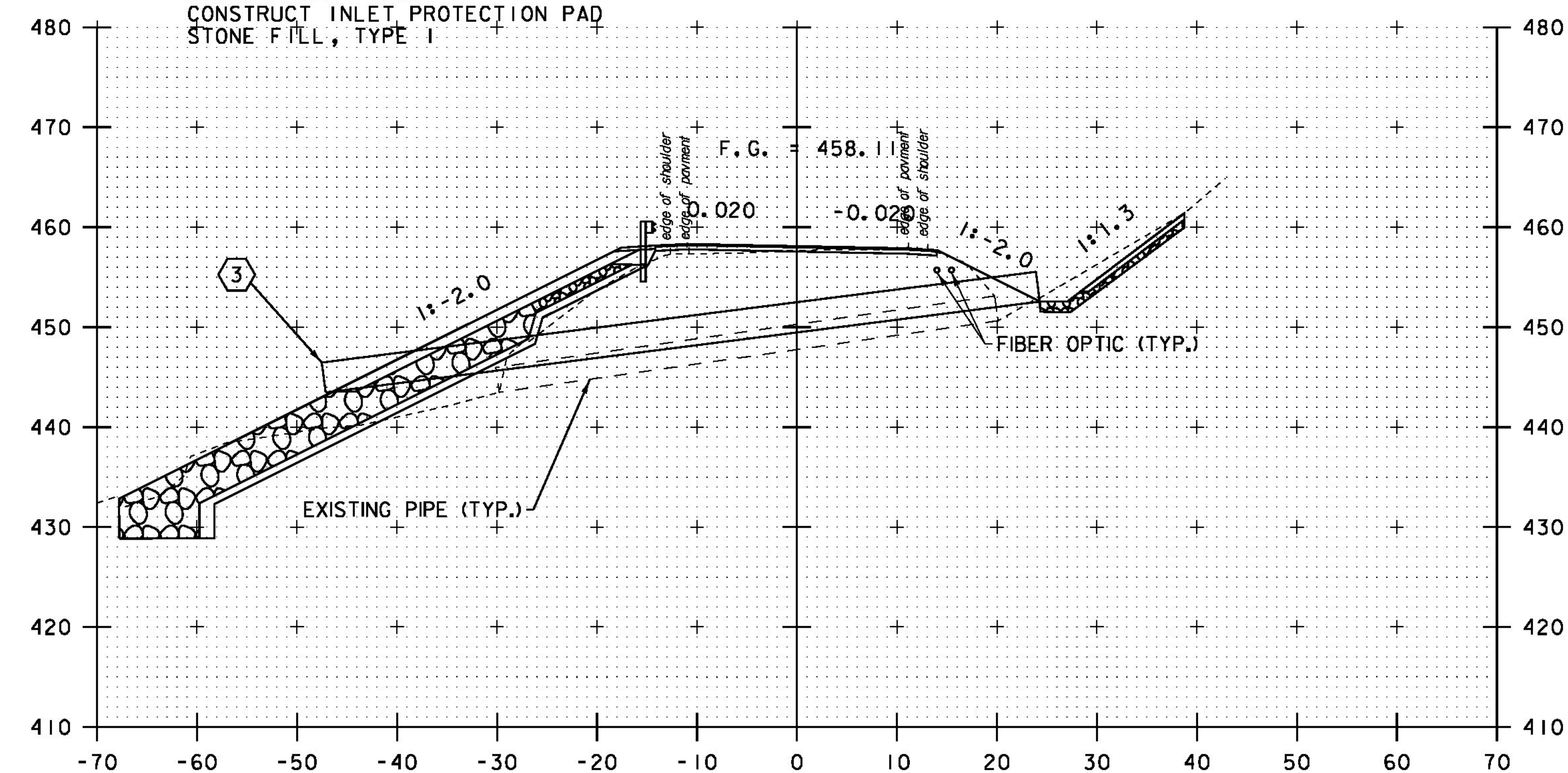
### 326+91 CULVERT #1

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"



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



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

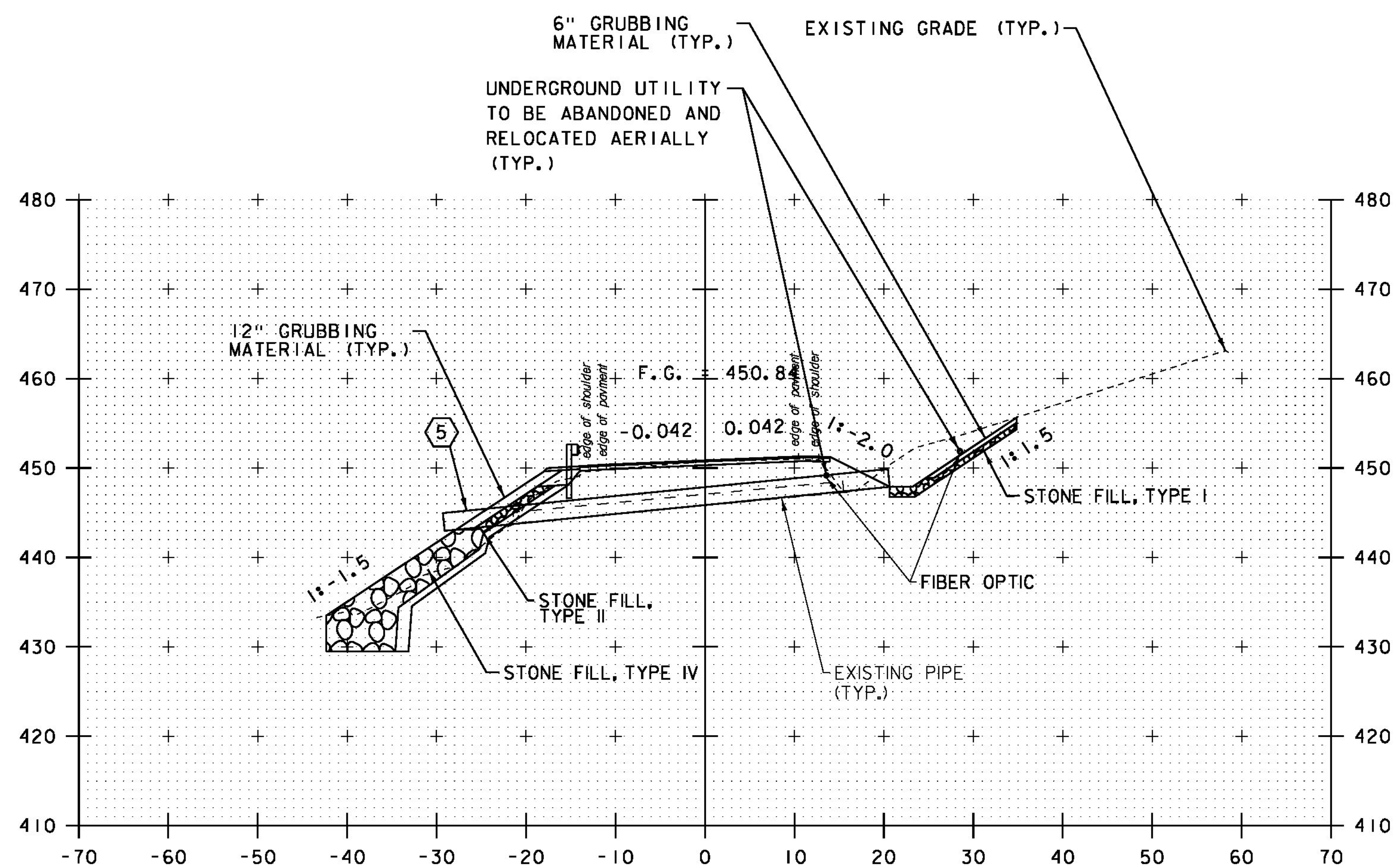
### 334+70 CULVERT #3

10 20  
SCALE IN FEET

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

FILE NAME: z12c410culver txs. dgn  
PROJECT LEADER: J. TUCKER  
DESIGNED BY: B. BRESLEND  
VT 14 CULVERT CROSS SECTION SHEET 1  
PLOT DATE: 3/31/2015  
DRAWN BY: B. MACK  
CHECKED BY: A. SANZ  
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: z12c410culvert.txs.dgn	PLOT DATE: 3/31/2015
PROJECT LEADER: J. TUCKER	DRAWN BY: B. MACK
DESIGNED BY: B. BRESLEND	CHECKED BY: A. SANZ
VT14 CULVERT CROSS SECTION SHEET 2	SHEET 63 OF 66



**TRAFFIC CONTROL NOTES**

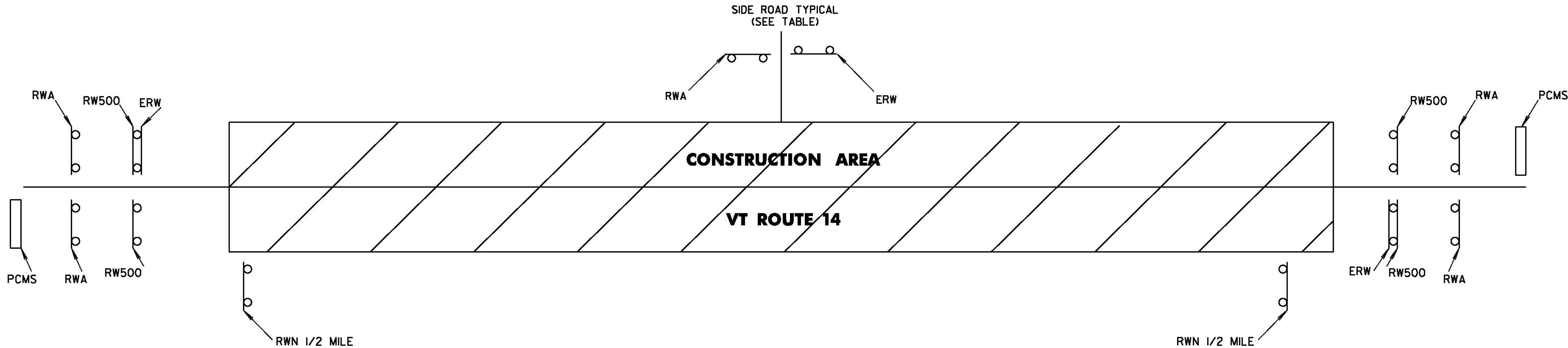
- 1. THE CONTRACTOR MUST PROVIDE ACCESS THROUGH THE WORK ZONE FOR EMERGENCY VEHICLES AT ALL TIMES. THE CONTRACTOR MUST MAINTAIN ACCESS TO ALL PROPERTIES AT ALL TIMES FOR EMERGENCY VEHICLES. ALL ACCESSES SHALL ALSO BE KEPT FREE OF WORK WITH TRAFFIC CONTROLLED BY UNIFORMED TRAFFIC OFFICERS OR FLAGGERS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

- 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 641.0, "TRAFFIC CONTROL". THE TRAFFIC CONTROL PLAN SHALL BE IN COMPLIANCE WITH VTRANS STANDARDS AND 2009 MUTCD. WHERE CONFLICTS EXIST, THE 2009 MUTCD SHALL GOVERN.
- 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 641.0, "TRAFFIC CONTROL".
- THE BID PRICE FOR "TRAFFIC CONTROL", ITEM 641.0, 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
- 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.
- CONES SHALL BE USED TO CLEARLY DEFINE THE TRAVEL SPACE AND PROVIDE SEPARATION FROM THE WORK SPACE ALONG ITS ENTIRE LENGTH.
- 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.
- 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.

- 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 641.0 TRAFFIC CONTROL.
- CONSTRUCTION SIGNS SHALL BE IN NEW OR LIKE NEW CONDITION PER VAOT STANDARDS.
- DIAMOND SHAPED SIGNS SHALL BE 4'X4' WITH BLACK TEXT AND BORDER ON A RETROREFLECTIVE FLUORESCENT ORANGE BACKGROUND.
- CONSTRUCTION ZONE SIGNS SHALL BE INSTALLED AS OUTLINED IN THE SPECIAL PROVISIONS.
- 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

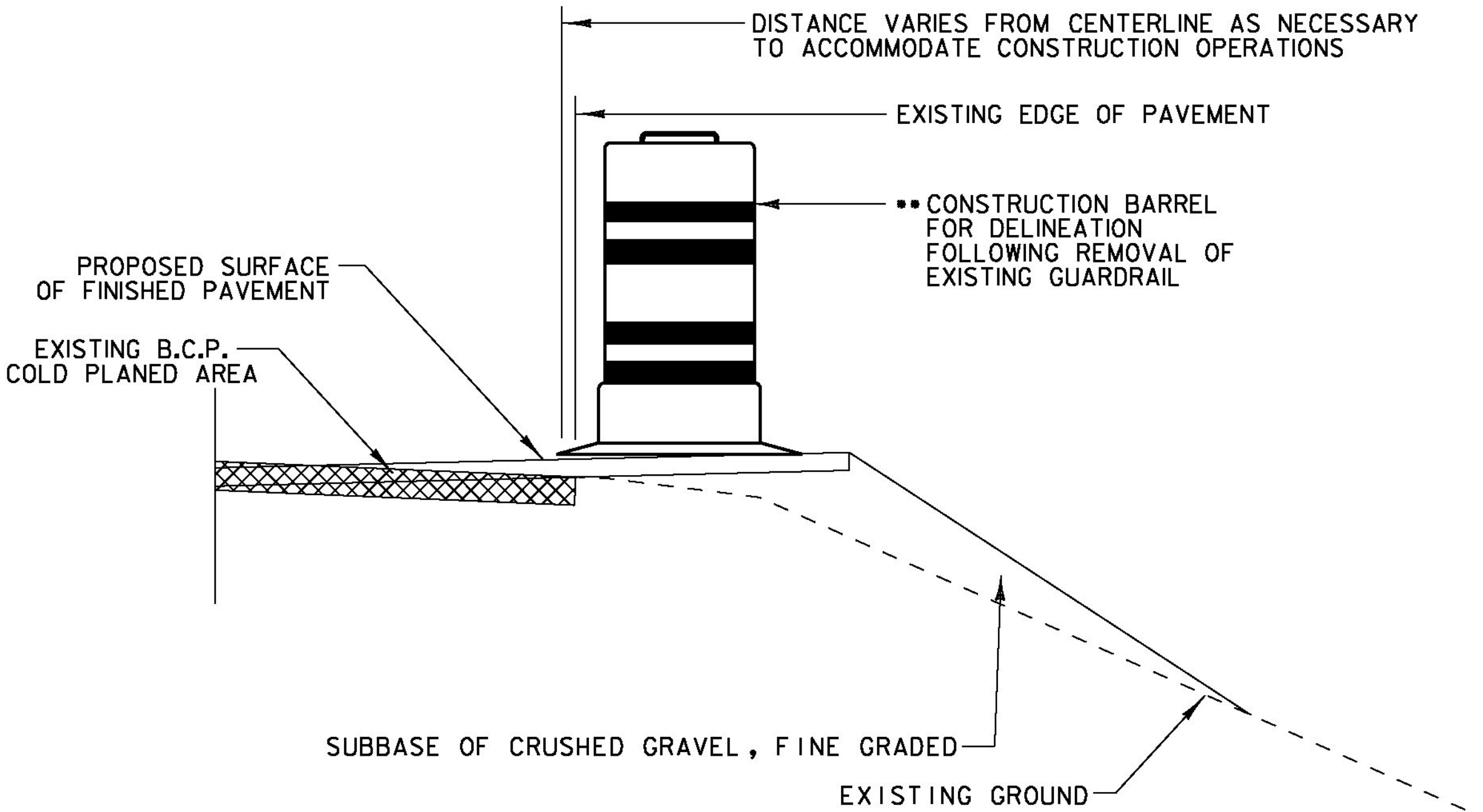
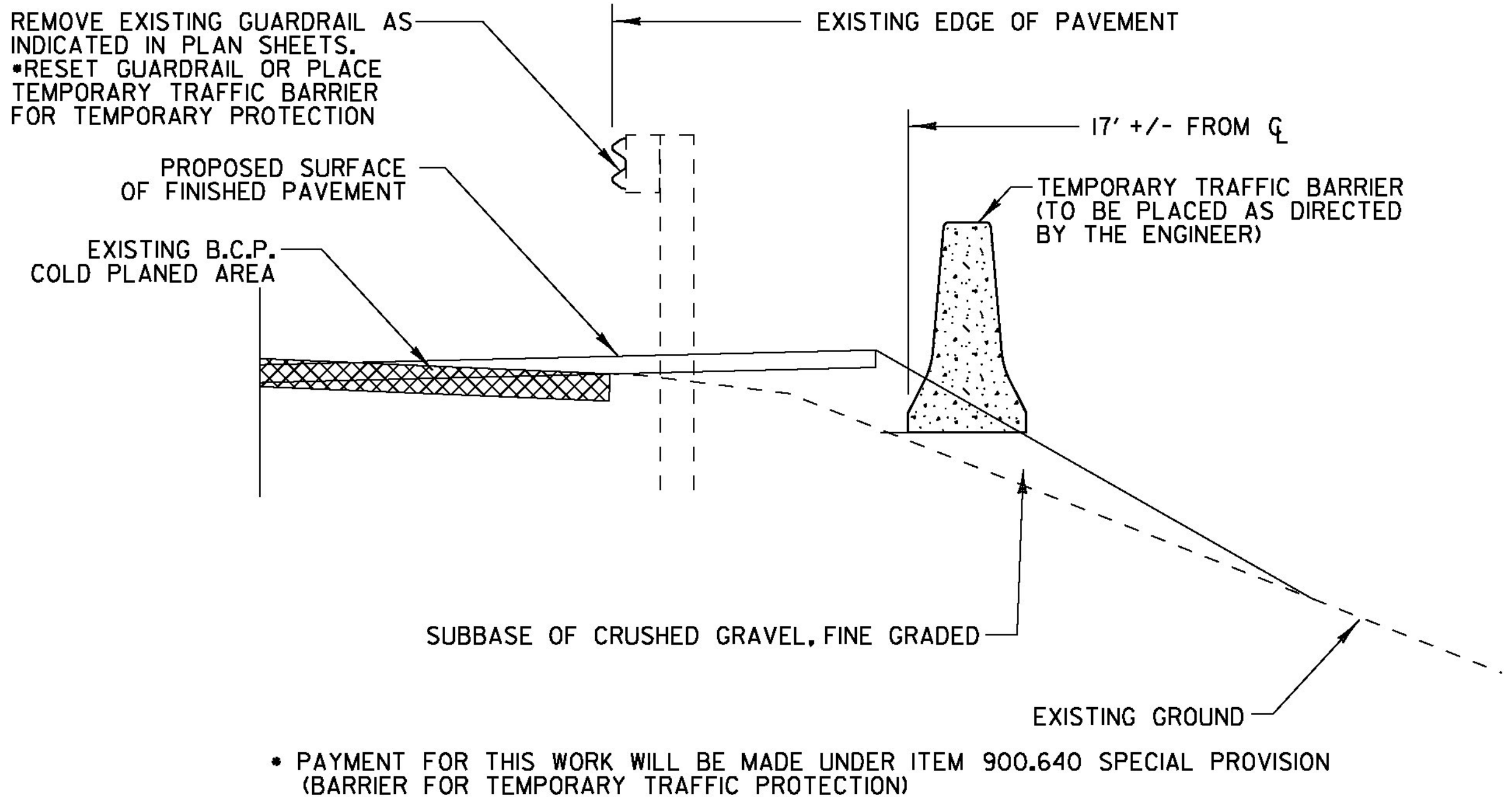
DETAILS ARE NOT TO SCALE

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 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:	z1c410.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