

REVIEWER NOTES

1. THIS WILL BE A THREE TO FOUR WEEK CLOSURE (TBD) WITH A LOCAL DETOUR.
2. THE BRIDGE WILL BE PLACED OFF-ALIGNMENT. THE CHANNEL BANKS WILL BE BLENDED TO MATCH THE UPSTREAM AND DOWNSTREAM BANKS AFTER EXISTING BRIDGE REMOVAL.
3. RIGHT-OF-WAY ACQUISITION WILL BE NECESSARY.
4. OVERHEAD UTILITIES RELOCATION WILL BE NEEDED. EXISTING UNDERGROUND UTILITIES WILL NOT BE RELOCATED.
5. A SIMPLIFIED PAVEMENT DESIGN HAS BEEN DONE FOR THIS PROJECT.
6. EXISTING PAVEMENT OUTSIDE OF THE PROPOSED ROADWAY LIMITS WILL BE REMOVED AND TOPSOIL AND SEED ADDED. THE CUT AND SEEDED AREA WILL GRADUALLY SLOPE AWAY FROM THE PROPOSED ROAD.
7. DISTURBED AREAS OUTSIDE THE PROPOSED ROADWAY LIMITS AND BETWEEN THE CHANNEL AND VT 16 WILL BE RE-VEGETATED TO PROVIDE A "NATURAL" RIPARIAN BUFFER. INPUT FROM ANR WILL BE NECESSARY TO DETERMINE THE EXTENTS OF THE RE-VEGETATION AND TYPE OF VEGETATION.
8. A SURVEY BENCHMARK (REFERENCE MARK) WILL BE REPLACED ON ONE OF THE BRIDGE ABUTMENTS FOR USE BY THE VILLAGE IN FUTURE FEMA DOCUMENTATION.

STATE OF VERMONT AGENCY OF TRANSPORTATION



PROPOSED IMPROVEMENT BRIDGE PROJECT

VILLAGE OF BARTON
COUNTY OF ORLEANS

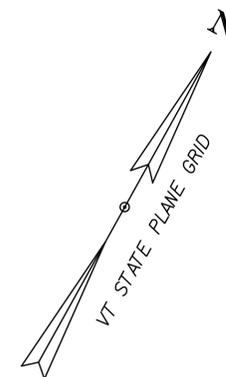
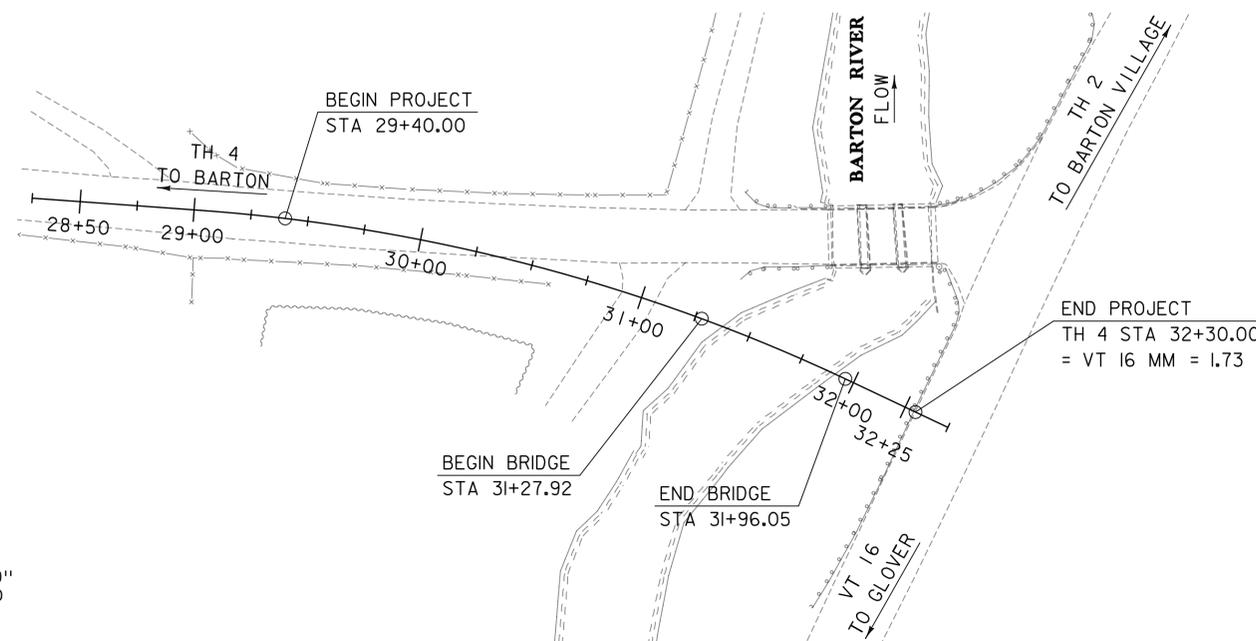
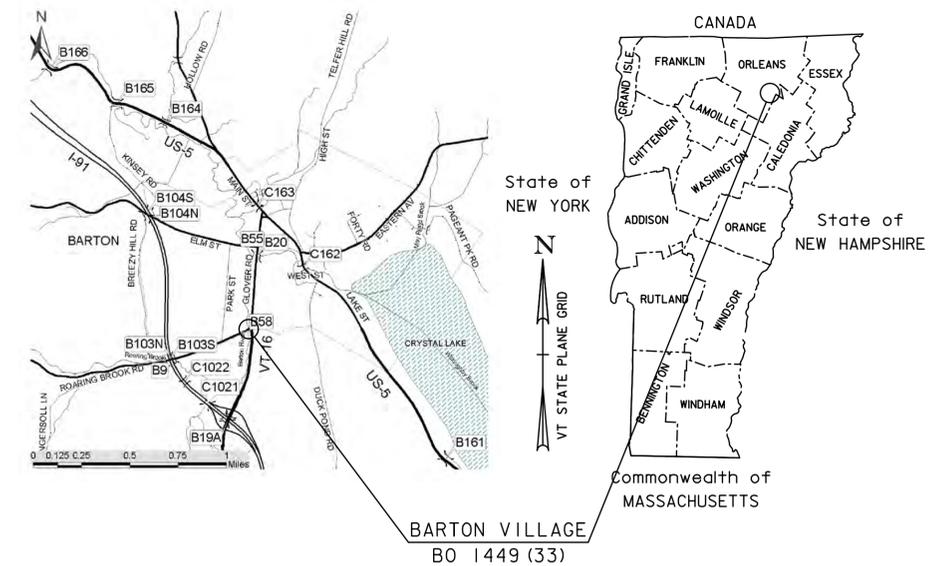
ROUTE NO : TH 4 (ROARING BROOK RD) , RURAL MINOR COLLECTOR, CLASS 2 TOWN HIGHWAY

BRIDGE NO : 58

PROJECT LOCATION: AT THE INTERSECTION OF TH-4 AND VT ROUTE 16

PROJECT DESCRIPTION: REMOVAL OF EXISTING STRUCTURE AND REPLACEMENT WITH A NEW STRUCTURE.

LENGTH OF STRUCTURE: 68.13 FEET
LENGTH OF ROADWAY: 221.87 FEET
LENGTH OF PROJECT: 290.00 FEET



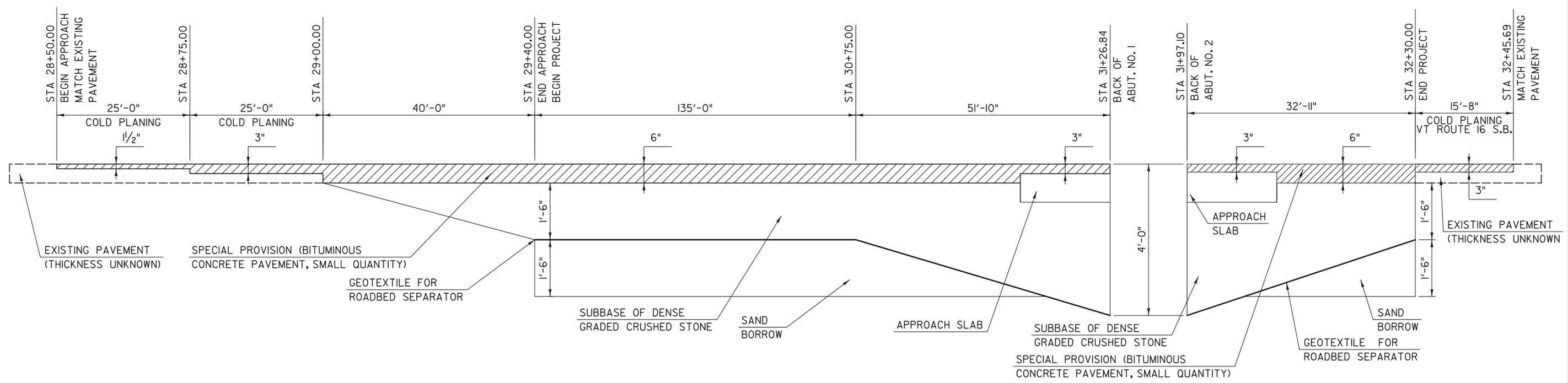
**REVISED
PRELIMINARY PLANS
10/27/2014**

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 : R. GILMAN	
SURVEYED DATE : 04/16/2013; 04/21/2014	
DATUM	
VERTICAL	NAVD88
HORIZONTAL	NAD 83 (2011)

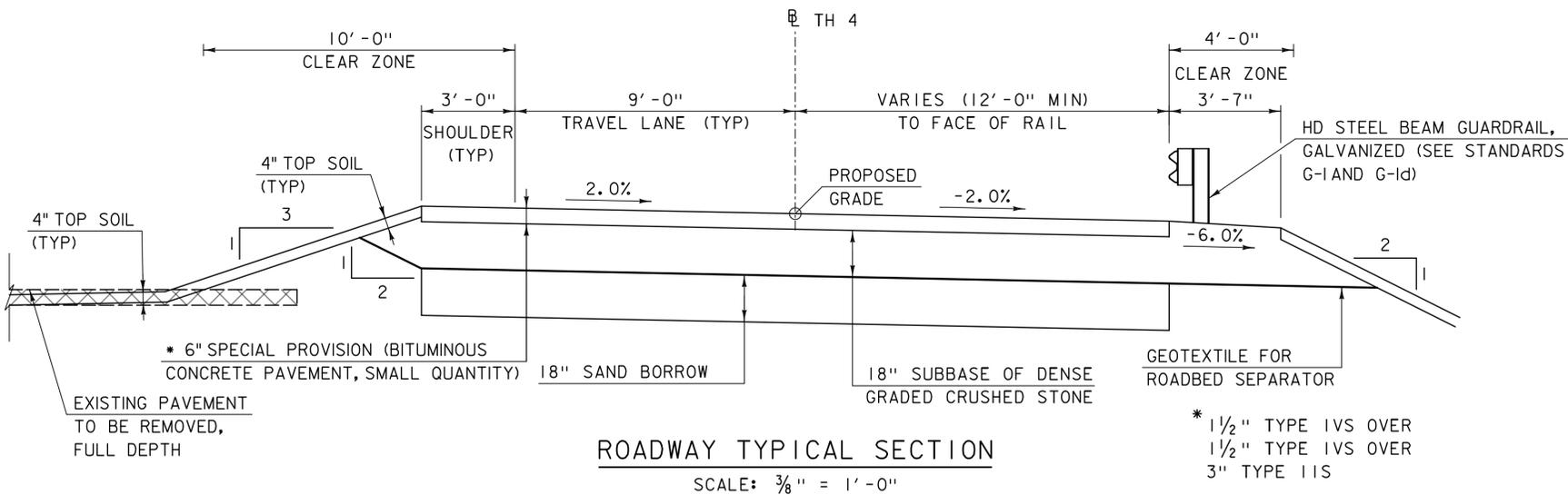
SCALE 1" = 40' - 0"
40 0 40

TYLINT INTERNATIONAL	DIRECTOR OF PROJECT DELIVERY
	APPROVED _____ DATE _____
	PROJECT MANAGER : JENNIFER FITCH, P.E.
	PROJECT NAME : BARTON VILLAGE PROJECT NUMBER : BO 1449 (33)
SHEET 1 OF 35 SHEETS	

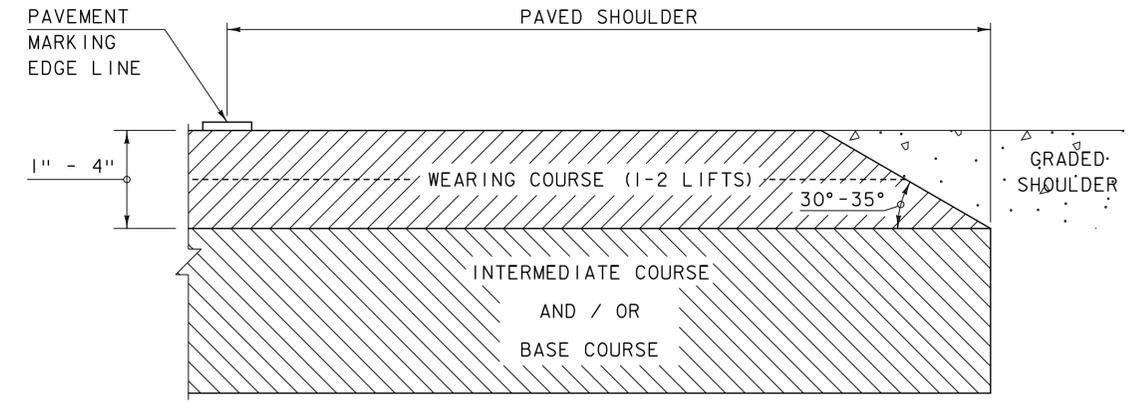


SUBBASE TAPER - WEST APPROACH
NOT TO SCALE
(ALONG BASELINE)

SUBBASE TAPER - EAST APPROACH
NOT TO SCALE
(ALONG BASELINE)



ROADWAY TYPICAL SECTION
SCALE: 3/8" = 1'-0"



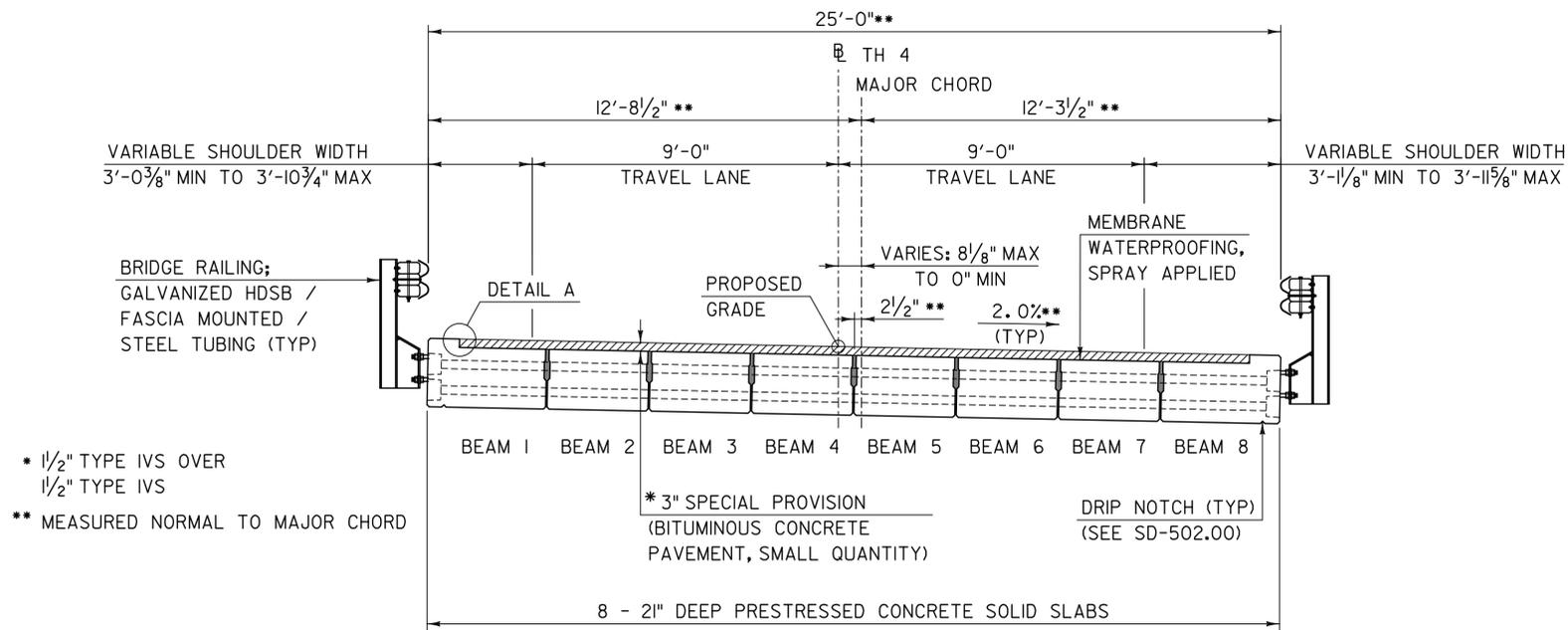
SAFETY EDGE DETAIL
NOT TO SCALE

MATERIAL TOLERANCES (IF USED ON PROJECT)	
SURFACE	
- PAVEMENT (TOTAL THICKNESS)	+/- 1/4"
- AGGREGATE SURFACE COURSE	+/- 1/2"
SUBBASE	
SAND BORROW	+/- 1"

NOTE: EMULSIFIED ASPHALT SHALL BE APPLIED TO ALL COLD PLANED BITUMINOUS CONCRETE PAVEMENT SURFACES AT THE RATE OF 0.04 GAL/SY OR AS DIRECTED BY THE ENGINEER. EMULSIFIED ASPHALT SHALL ALSO BE APPLIED BETWEEN ALL LIFTS OF PAVEMENT. THE COST SHALL BE PAID UNDER ITEM 404.65, "EMULSIFIED ASPHALT".

- NOTES:
1. LEVELING COURSE MAY INCLUDE THE "SAFETY EDGE" AT THE CONTRACTOR'S CHOICE.
 2. 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.

FOR REVIEW ONLY NOT FOR CONSTRUCTION	PROJECT NAME: BARTON VILLAGE
	PROJECT NUMBER: BO 1449(33)
TYLIN INTERNATIONAL	FILE NAME: z13j078typ1.dgn
	PROJECT LEADER: J. OLUND
	DESIGNED BY: B. TOOTHAKER
	ROADWAY TYPICAL SECTION AND DETAILS
	PLOT DATE: 10/27/2014
	DRAWN BY: B. TOOTHAKER
	CHECKED BY: J. HOWE
	SHEET 3 OF 35



BRIDGE TYPICAL SECTION

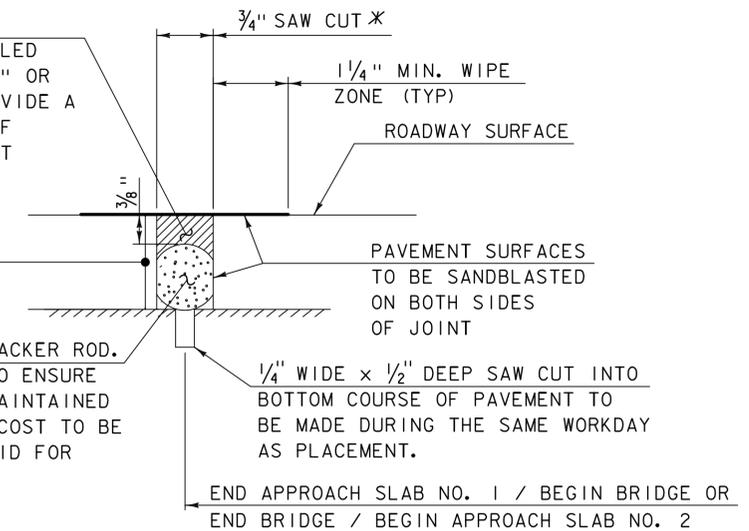
SCALE: 3/8" = 1'-0"

* 1/2" TYPE IVS OVER 1/2" TYPE IVS
 ** MEASURED NORMAL TO MAJOR CHORD

JOINT SEALER, HOT POURED; SHALL BE SLIGHTLY OVER FILLED THEN WIPED FLUSH WITH A "V" OR "U" SHAPED SQUEEGEE TO PROVIDE A 1/4" WIPE ZONE EACH SIDE OF JOINT. ASPHALTIC PLUG JOINT BINDER MAY BE USED AS A SUBSTITUTE JOINT SEALER

TOP COURSE OF PAVEMENT

7/8" Ø HEAT RESISTANT FOAM BACKER ROD. COMPRESSION FIT REQUIRED TO ENSURE THAT THE ROD POSITION IS MAINTAINED DURING FILLING OPERATION. COST TO BE INCLUDED WITH UNIT PRICE BID FOR JOINT SEALER.

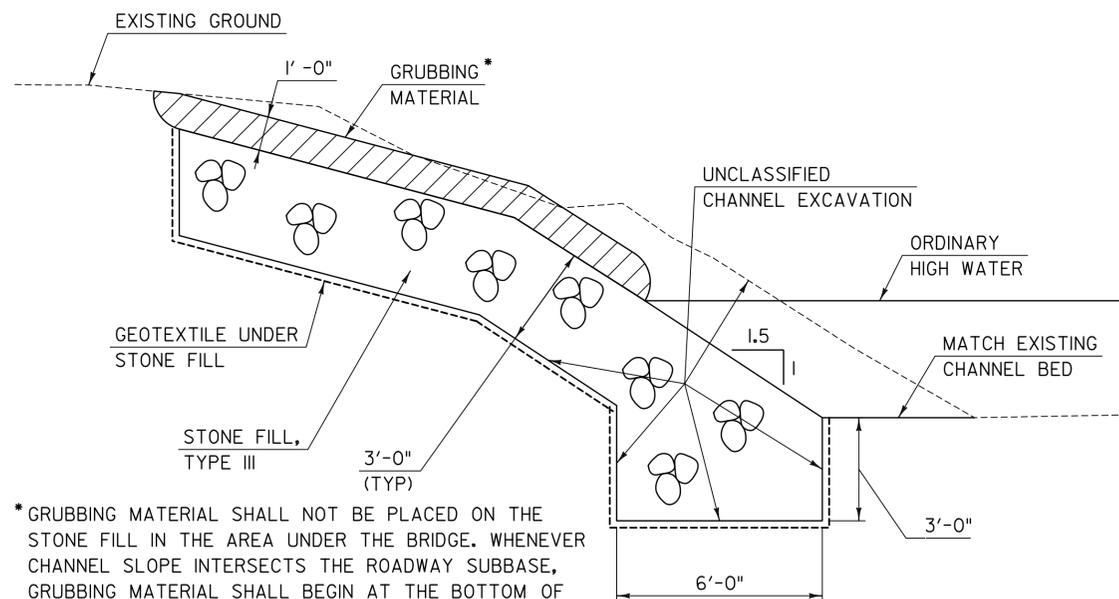


ITEM 524.11, "JOINT SEALER, HOT POURED"

SAWED PAVEMENT JOINT DETAIL

NOT TO SCALE

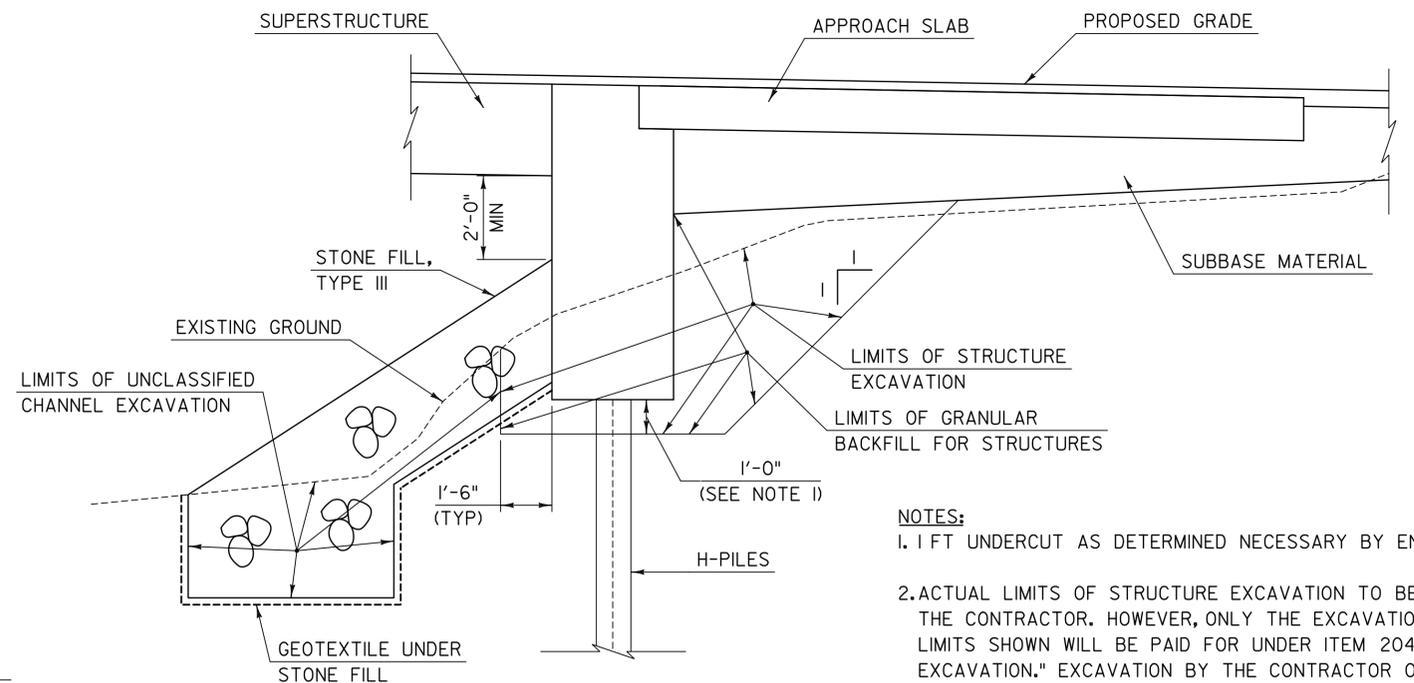
* JOINT IS TO BE LOCATED ACCURATELY BY STRING LINING, OR OTHER MEANS, PRIOR TO PAVING, SO THAT THE SAW CUTS WILL BE MADE DIRECTLY OVER THE END OF CONCRETE DECK. JOINT SHALL BE CUT DRY IN A SINGLE PASS AND BE SEALED WITHIN 24 HOURS OR PRIOR TO EXPOSURE TO TRAFFIC. JOINT SHALL BE CLEANED PRIOR TO APPLYING THE JOINT SEALER.



TYPICAL CHANNEL SECTION

SCALE: 3/8" = 1'-0"

* GRUBBING MATERIAL SHALL NOT BE PLACED ON THE STONE FILL IN THE AREA UNDER THE BRIDGE. WHENEVER CHANNEL SLOPE INTERSECTS THE ROADWAY SUBBASE, GRUBBING MATERIAL SHALL BEGIN AT THE BOTTOM OF SUBBASE.

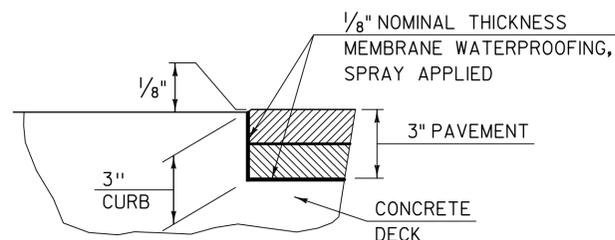


TYPICAL EARTHWORK SECTION

SCALE: 3/8" = 1'-0"

NOTES:

1. 1 FT UNDERCUT AS DETERMINED NECESSARY BY ENGINEER.
2. ACTUAL LIMITS OF STRUCTURE EXCAVATION TO BE DETERMINED BY THE CONTRACTOR. HOWEVER, ONLY THE EXCAVATION BETWEEN THE LIMITS SHOWN WILL BE PAID FOR UNDER ITEM 204.25, "STRUCTURE EXCAVATION." EXCAVATION BY THE CONTRACTOR OUTSIDE THESE LIMITS WILL BE AT THE EXPENSE OF THE CONTRACTOR.



DETAIL A

NOT TO SCALE

(LEFT CURB SHOWN RIGHT CURB SIMILAR)

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TYLIN INTERNATIONAL

PROJECT NAME: BARTON VILLAGE
 PROJECT NUMBER: BO 1449(33)

FILE NAME: z13j078typ2.dgn
 PROJECT LEADER: J. OLUND
 DESIGNED BY: J. OLUND
 BRIDGE TYPICAL SECTION AND DETAILS

PLOT DATE: 10/27/2014
 DRAWN BY: S. MORGAN
 CHECKED BY: T. POULIN
 SHEET 4 OF 35

GPS CONTROL POINTS

HVCTRL #1

ASHTON AZ MK
 NORTH = 814450.470
 EAST = 1722648.050
 ELEV. = 894.650

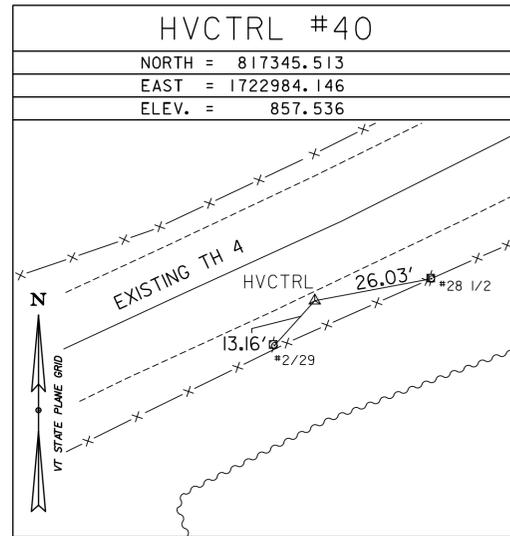
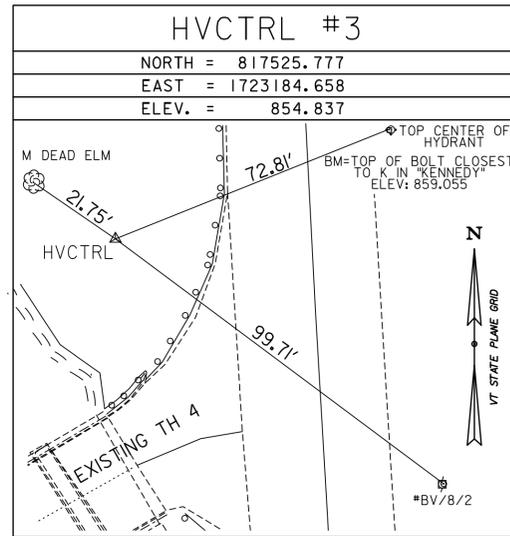
BARTON, VT. AT THE DISTRICT 9 BARTON GARAGE IN THE LAWN AREA NORTHEAST OF THE FUEL PUMP AND NORTHWEST OF THE GARAGE OFFICE. IT IS 29.8 M N OF THE WEST CORNER OF THE GARAGE, 20.4 M NW OF THE NORTH CORNER OF THE GARAGE, 24.9 M W OF A 10 CM DIAMETER VERTICAL METAL PIPE, 23.3 M NNE OF THE NORTH CORNER OF THE CONCRETE FUEL PUMP ISLAND BASE, 29.5 M E OF POLE NO 1, 20.4 M SW OF A R-O-W FENCE, AND 6.6 M SW OF A FIBERGLASS WITNESS AT AN ELECTRICAL RISER.

HVCTRL #2

A06024
 NORTH = 817121.730
 EAST = 1723280.400
 ELEV. = 865.270

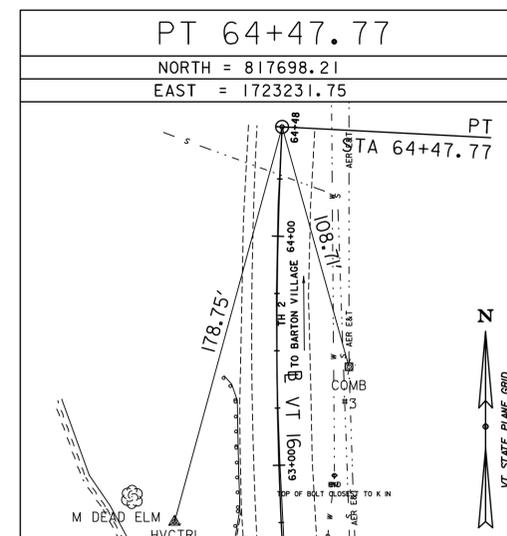
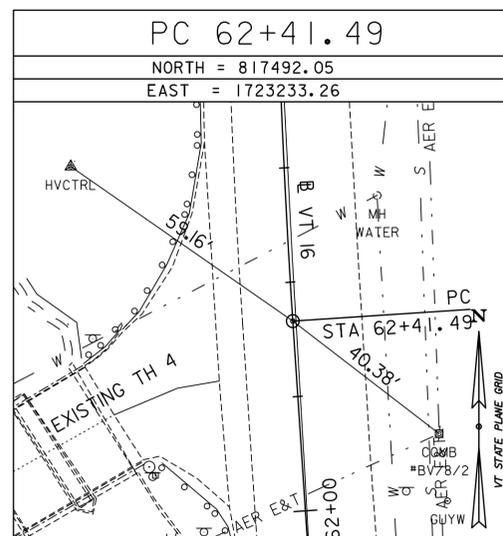
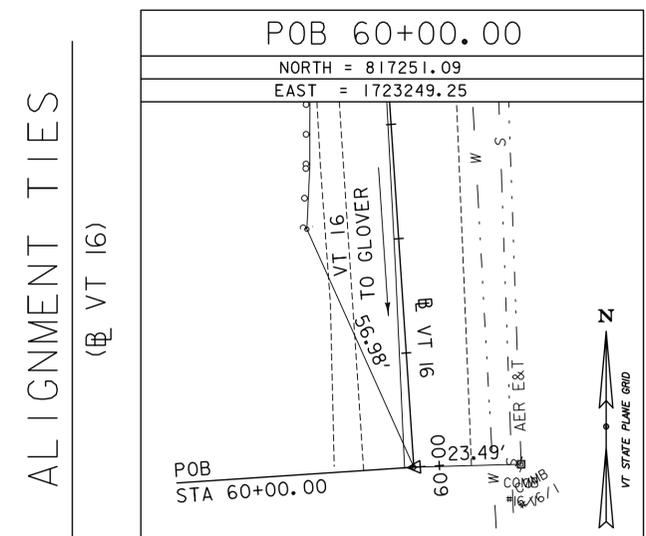
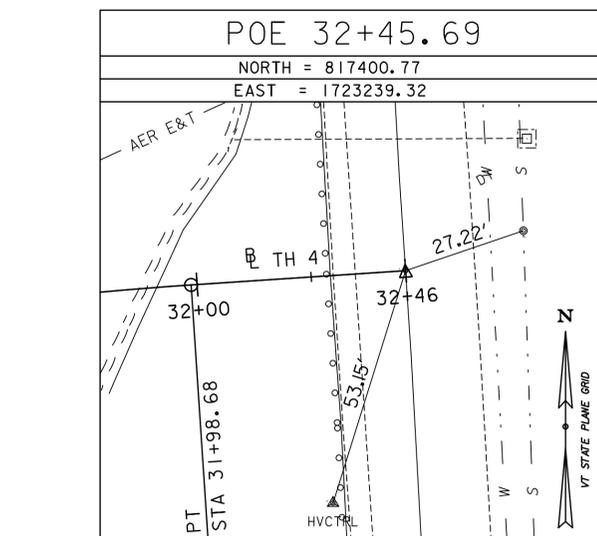
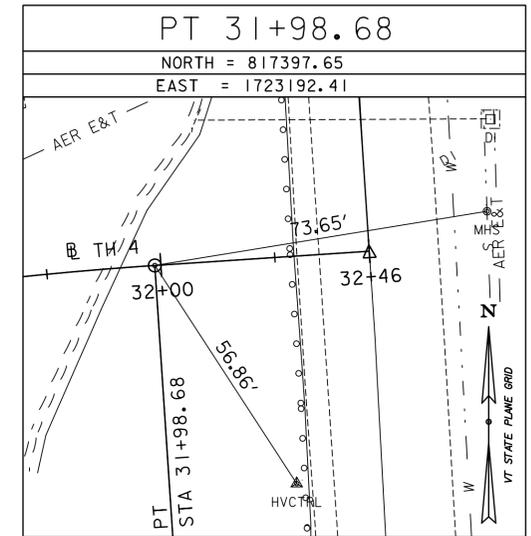
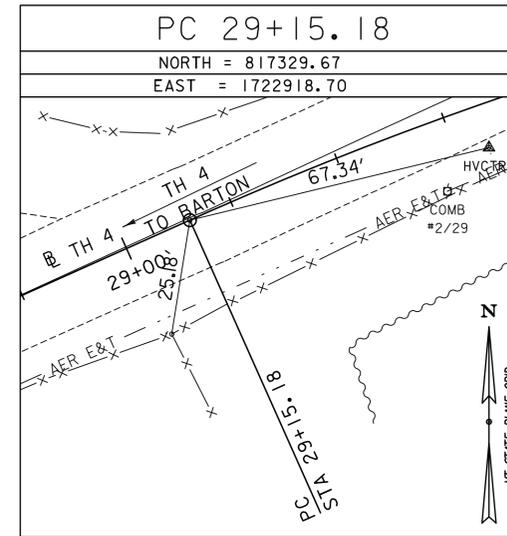
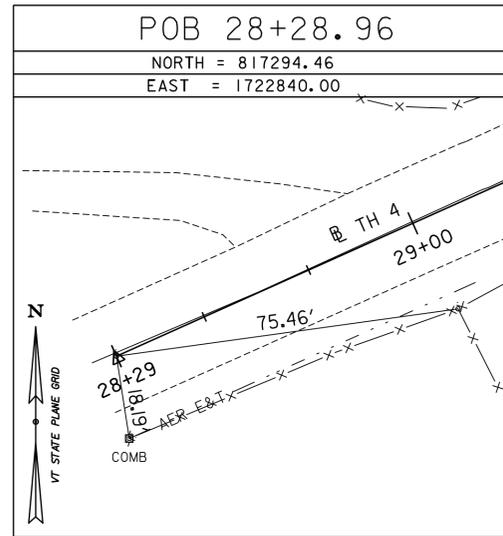
BARTON VT. ABOUT 120 M (393.7 FT) SOUTH OF THE VT ROUTE 16 INTERSECTION WITH ROARING BROOK ROAD, 10.9 M (35.8 FT) EAST OF AND ABOUT 1.0 M (3.3 FT) HIGHER THAN THE CL OF VT ROUTE 16, 39.6 M (129.9 FT) SOUTH OF POLE NO B/8/01, 24.6 M (80.7 FT) SOUTH WESTWEST OF THE MOST WESTERLY OF TWO POSTS FOR A WELCOME TO BARTON SIGN, 51.2 M (168.0 FT) NORTH OF THE NORTHWEST CORNER OF HOUSE NO 527, AND 1.5 M (4.9 FT) SOUTH OF A BARBED WIRE FENCE CORNER. NOTE, MARK IS INTERVISIBLE WITH MARK ASHTON AZIMUTH MK.

TRAVERSE TIES



ALIGNMENT TIES

(@ TH 4)



ALIGNMENT TIES

(@ VT 16)

DATUM	
VERTICAL	NAVD 88
HORIZONTAL	NAD 83(2011)
ADJUSTMENT	COMPASS

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TYLIN INTERNATIONAL

PROJECT NAME: BARTON VILLAGE
 PROJECT NUMBER: BO 1449(33)

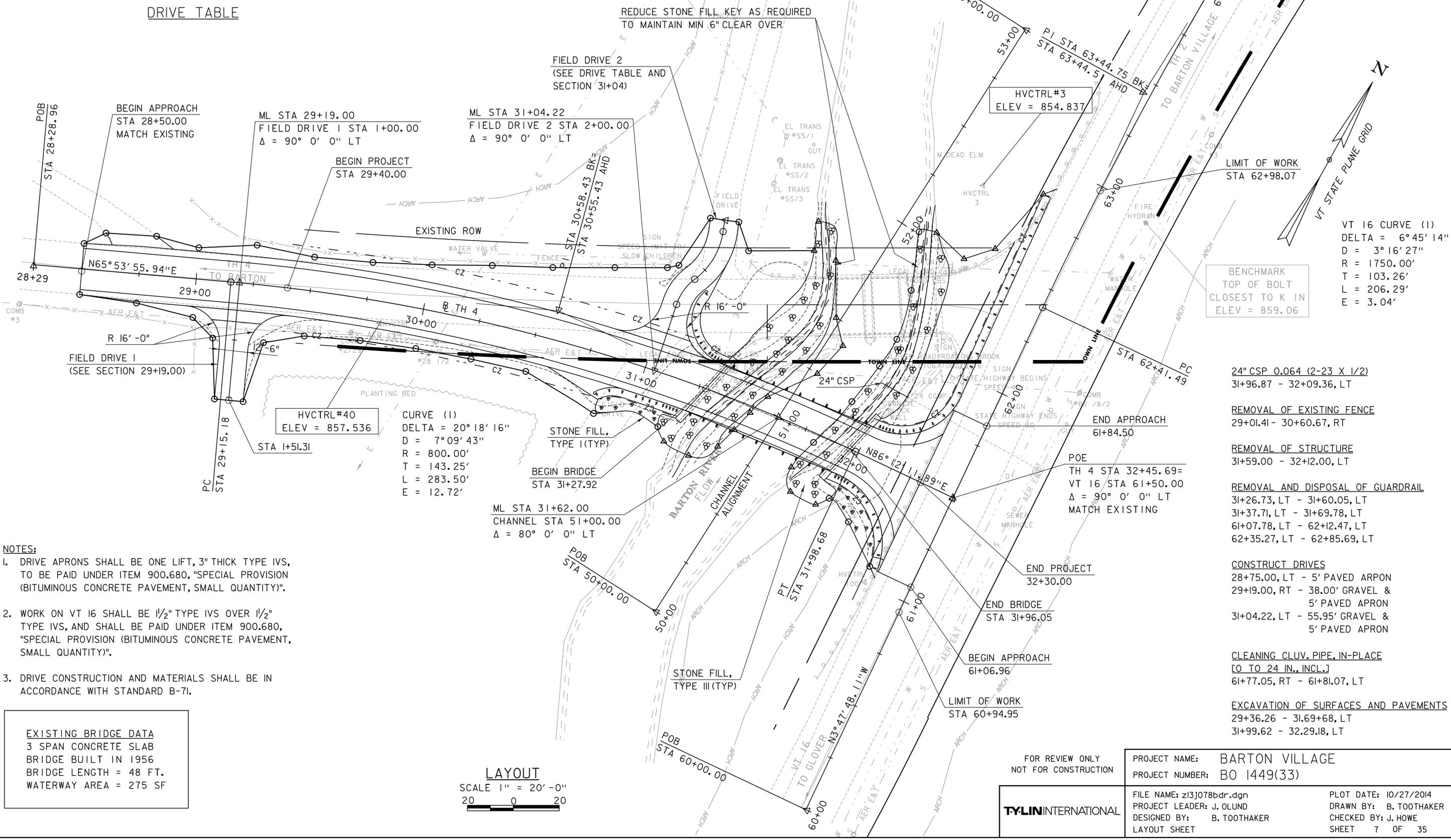
FILE NAME: z13j078t1.dgn
 PROJECT LEADER: J. OLUND
 DESIGNED BY: B. TOOTHAKER
 TIE SHEET

PLOT DATE: 10/27/2014
 DRAWN BY: B. TOOTHAKER
 CHECKED BY: J. OLUND
 SHEET 6 OF 35

FIELD DRIVE NUMBER	CURVE 1	CURVE 2	POE	WIDTH
2	PC = 2+30.28 PRC = 2+44.01 R = 22.25'	PRC = 2+44.01 PT = 2+68.79 R = 31.25'	2+73.81	12.50'

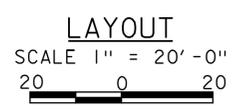
NOTE: DISTANCES MEASURED ALONG BASELINE OF DRIVE, AWAY FROM B TH 4

DRIVE TABLE



- NOTES:**
- DRIVE APRONS SHALL BE ONE LIFT, 3" THICK TYPE IVS, TO BE PAID UNDER ITEM 900.680, "SPECIAL PROVISION (BITUMINOUS CONCRETE PAVEMENT, SMALL QUANTITY)".
 - WORK ON VT 16 SHALL BE 1/2" TYPE IVS OVER 1/2" TYPE IVS, AND SHALL BE PAID UNDER ITEM 900.680, "SPECIAL PROVISION (BITUMINOUS CONCRETE PAVEMENT, SMALL QUANTITY)".
 - DRIVE CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH STANDARD B-71.

EXISTING BRIDGE DATA
 3 SPAN CONCRETE SLAB
 BRIDGE BUILT IN 1956
 BRIDGE LENGTH = 48 FT.
 WATERWAY AREA = 275 SF



VT 16 CURVE (1)
 DELTA = 6° 45' 14"
 D = 3° 16' 27"
 R = 1750.00'
 T = 103.26'
 L = 206.29'
 E = 3.04'

BENCHMARK
 TOP OF BOLT
 CLOSEST TO K IN
 ELEV = 859.06

24" CSP 0.064 (2-23 X 1/2)
 31+96.87 - 32+09.36, LT

REMOVAL OF EXISTING FENCE
 29+01.41 - 30+60.67, RT

REMOVAL OF STRUCTURE
 31+59.00 - 32+12.00, LT

REMOVAL AND DISPOSAL OF GUARDRAIL
 31+26.73, LT - 31+60.05, LT
 31+37.71, LT - 31+69.78, LT
 61+07.78, LT - 62+12.47, LT
 62+35.27, LT - 62+85.69, LT

CONSTRUCT DRIVES
 28+75.00, LT - 5' PAVED ARPON
 29+19.00, RT - 38.00' GRAVEL &
 5' PAVED APRON
 31+04.22, LT - 55.95' GRAVEL &
 5' PAVED APRON

CLEANING CLUV. PIPE, IN-PLACE
 [O TO 24 IN., INCL.]
 61+77.05, RT - 61+81.07, LT

EXCAVATION OF SURFACES AND PAVEMENTS
 29+36.26 - 31.69+68, LT
 31+99.62 - 32.29.18, LT

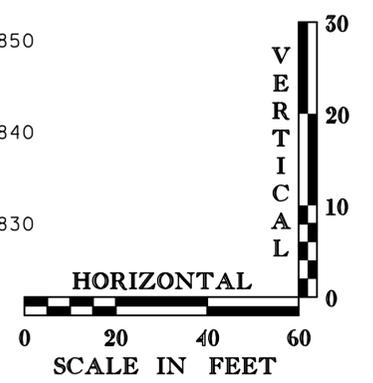
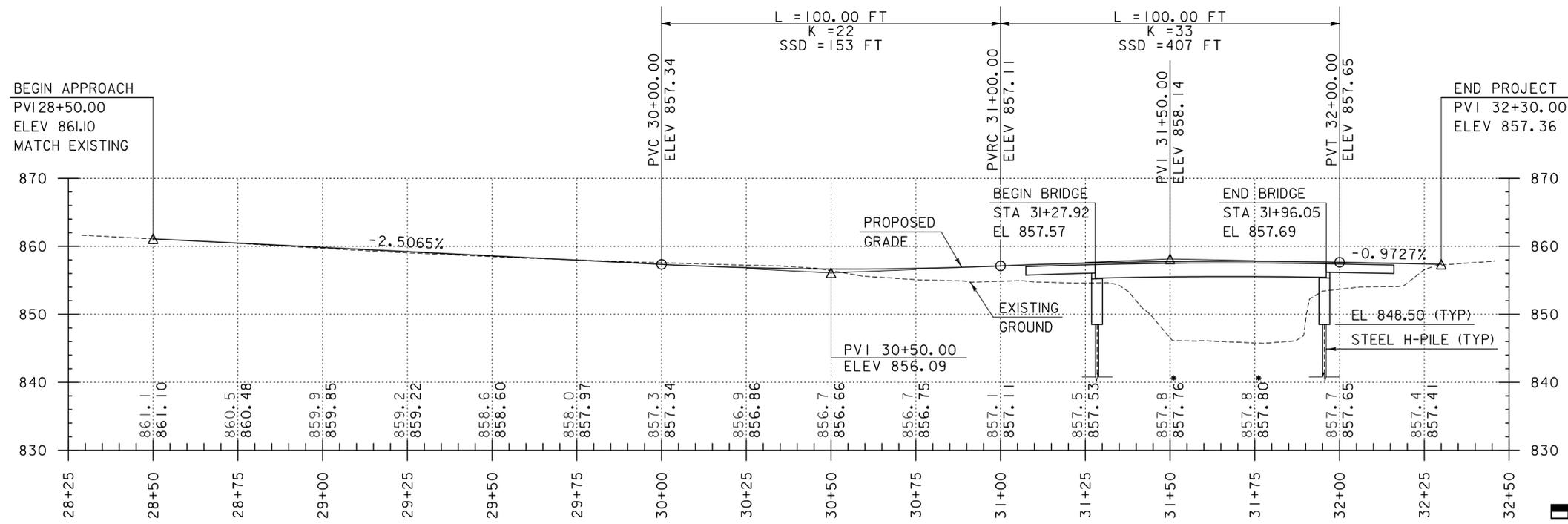
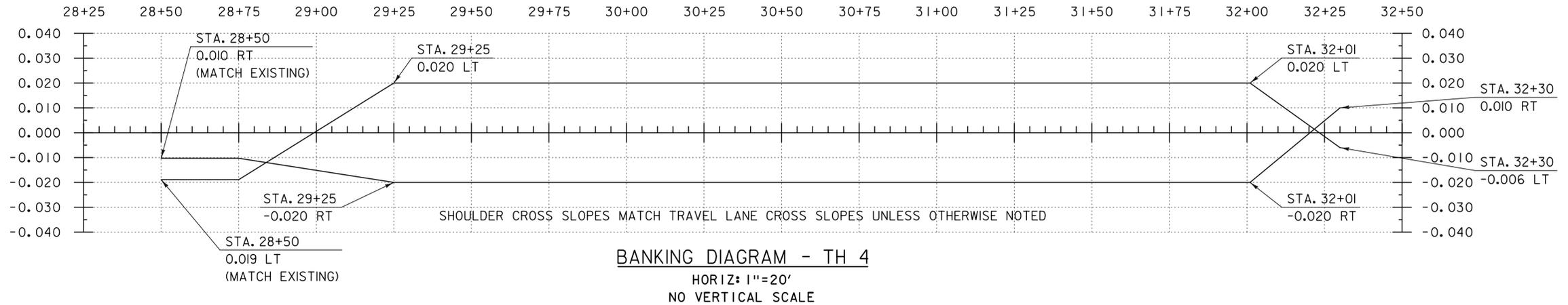
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TYLIN INTERNATIONAL

PROJECT NAME: BARTON VILLAGE
 PROJECT NUMBER: BO 1449(33)

FILE NAME: z13j078bdr.dgn
 PROJECT LEADER: J. OLUND
 DESIGNED BY: B. TOOTHAKER
 LAYOUT SHEET

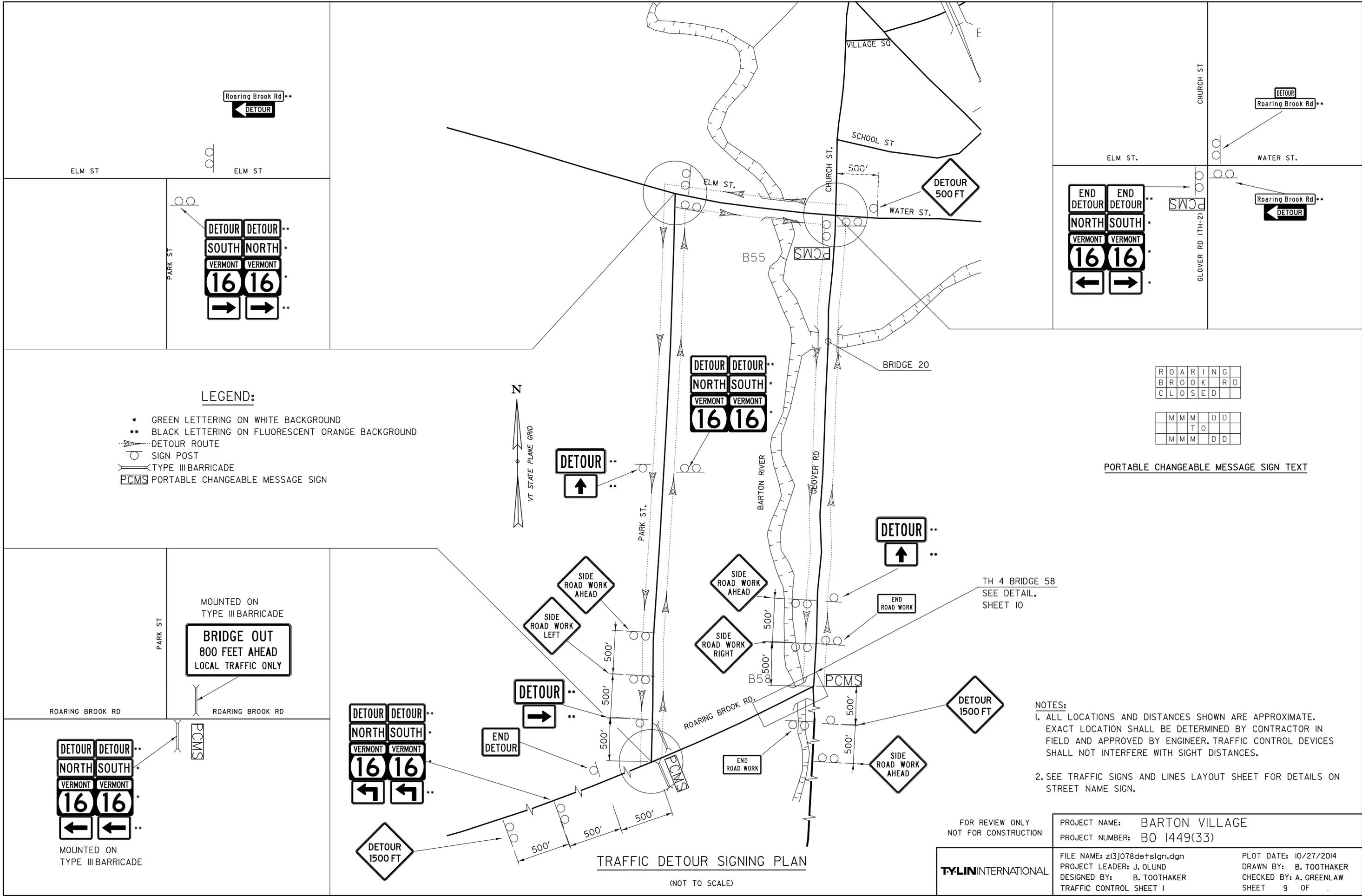
PLOT DATE: 10/27/2014
 DRAWN BY: B. TOOTHAKER
 CHECKED BY: J. HOWE
 SHEET 7 OF 35



*PROPOSED GRADE ELEVATIONS WITHIN THE BRIDGE LIMITS ARE THEORETICAL AND ACTUAL ELEVATIONS WILL BE A RESULT OF BEAM CAMBER. SEE PROJECT NOTES FOR ADDITIONAL INFORMATION.

NOTE:
GRADES SHOWN TO THE NEAREST TENTH ARE EXISTING GROUND ALONG \square
GRADES SHOWN TO THE NEAREST HUNDREDTH ARE PROPOSED GRADE ALONG \square

TYLINT INTERNATIONAL	FOR REVIEW ONLY NOT FOR CONSTRUCTION	
	PROJECT NAME: BARTON VILLAGE PROJECT NUMBER: BO 1449(33)	FILE NAME: z13j078pro.dgn PROJECT LEADER: J. OLUND DESIGNED BY: B. TOOTHAKER PROFILE AND BANKING DIAGRAM SHEET
	PLOT DATE: 10/27/2014 DRAWN BY: B. TOOTHAKER CHECKED BY: J. HOWE SHEET 8 OF 35	



LEGEND:

- * GREEN LETTERING ON WHITE BACKGROUND
- ** BLACK LETTERING ON FLUORESCENT ORANGE BACKGROUND
- DETOUR ROUTE
- SIGN POST
- TYPE III BARRICADE
- PCMS PORTABLE CHANGEABLE MESSAGE SIGN

R	O	A	R	I	N	G
B	R	O	O	K	R	D
C	L	O	S	E	D	

M	M	M	D	D
		T	O	
M	M	M	D	D

PORTABLE CHANGEABLE MESSAGE SIGN TEXT

NOTES:

1. ALL LOCATIONS AND DISTANCES SHOWN ARE APPROXIMATE. EXACT LOCATION SHALL BE DETERMINED BY CONTRACTOR IN FIELD AND APPROVED BY ENGINEER. TRAFFIC CONTROL DEVICES SHALL NOT INTERFERE WITH SIGHT DISTANCES.
2. SEE TRAFFIC SIGNS AND LINES LAYOUT SHEET FOR DETAILS ON STREET NAME SIGN.

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TYLIN INTERNATIONAL

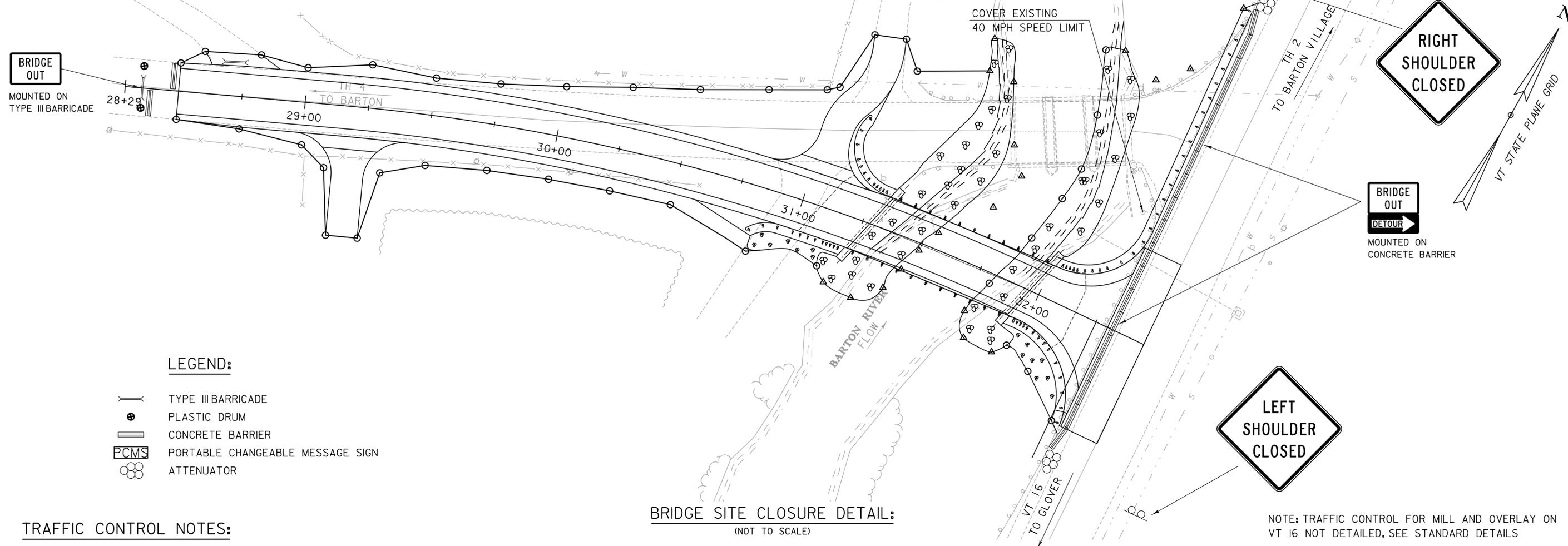
PROJECT NAME: BARTON VILLAGE
PROJECT NUMBER: BO 1449(33)

FILE NAME: z13j078de+sign.dgn
PROJECT LEADER: J. OLUND
DESIGNED BY: B. TOOTHAKER
TRAFFIC CONTROL SHEET 1

PLOT DATE: 10/27/2014
DRAWN BY: B. TOOTHAKER
CHECKED BY: A. GREENLAW
SHEET 9 OF

TRAFFIC DETOUR SIGNING PLAN

(NOT TO SCALE)



LEGEND:

- TYPE III BARRICADE
- PLASTIC DRUM
- CONCRETE BARRIER
- PORTABLE CHANGEABLE MESSAGE SIGN
- ATTENUATOR

TRAFFIC CONTROL NOTES:

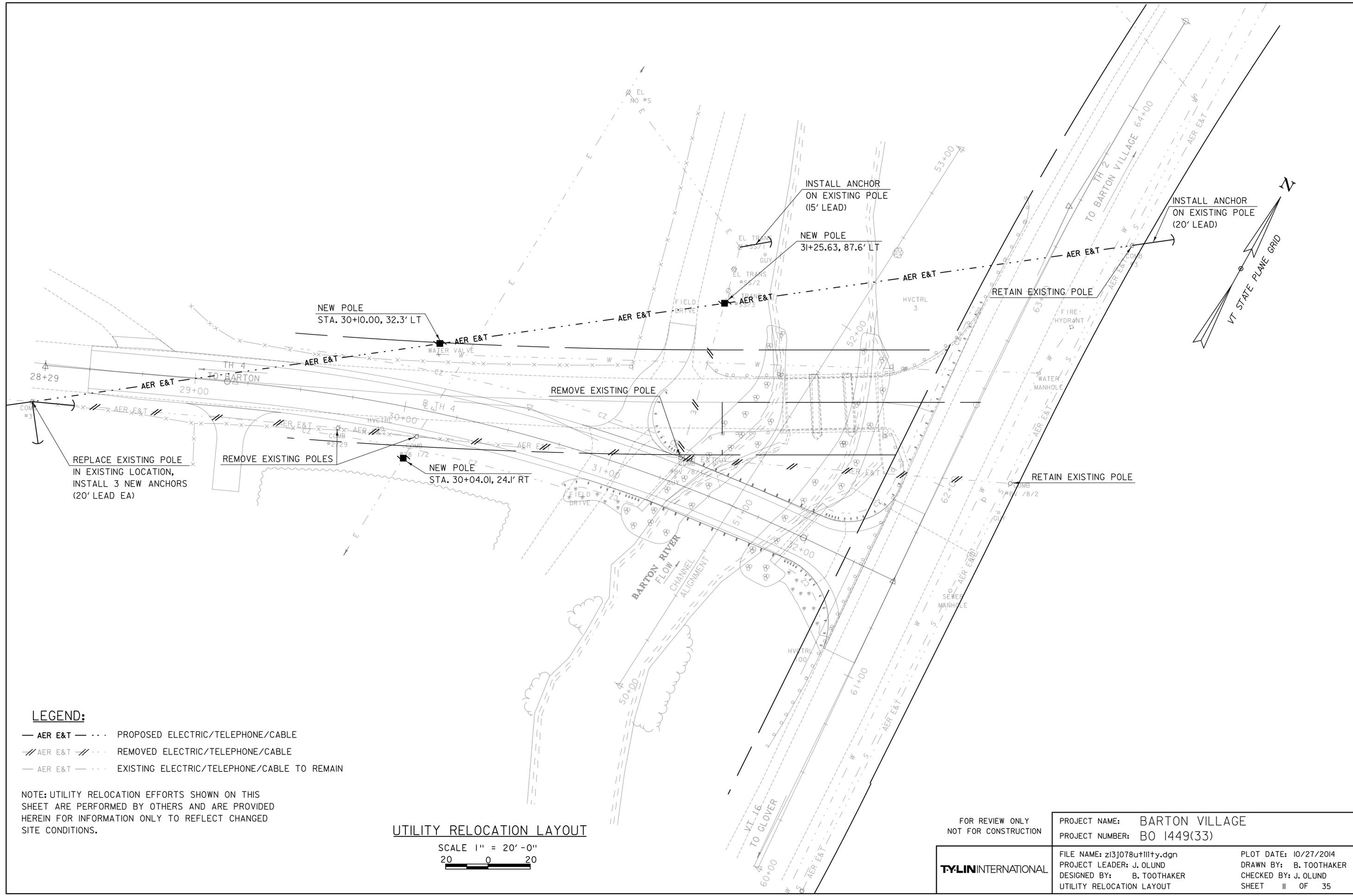
1. TRAFFIC WILL BE MAINTAINED WITH AN OFFSITE DETOUR ALONG, PARK ST, ELM ST, AND GLOVER RD SUCH AS THE ONE SHOWN ON TRAFFIC CONTROL SHEET I. THE DETOUR SHOWN ON THESE PLANS IS CONCEPTUAL. THE CONTRACTOR SHALL SUBMIT FOR APPROVAL A DETAILED SITE SPECIFIC TRAFFIC CONTROL PLAN IDENTIFYING BRIDGE CLOSURE METHODS AND SIGN LOCATIONS PRIOR TO THE BEGINNING OF CONSTRUCTION.
2. A PUBLIC OUTREACH COORDINATOR (NOT IN CONTRACT) WILL BE USED FOR PUBLICIZING AND COORDINATING DETOUR INFORMATION INCLUDING, BUT NOT LIMITED TO, TRAFFIC DELAYS FOR THE PUBLIC ASSOCIATED WITH THIS BRIDGE CLOSURE. THE CONTRACTOR SHALL COORDINATE WITH THE PUBLIC OUTREACH COORDINATOR AS NEEDED.
3. BRIDGE 58 SHALL BE CLOSED, CONSTRUCTED, AND FULLY OPENED TO TWO WAY TRAFFIC, INCLUDING INSTALLATION OF FINAL SIGNING, STRIPING, AND RAILING AS INDICATED IN THESE PLANS, PRIOR TO CLOSURE OF BRIDGE 20. A MINIMUM OF TWO WEEKS SHALL ELAPSE BETWEEN THE OPENING OF BRIDGE 58 AND THE CLOSURE OF BRIDGE 20. AT NO TIME WILL A PARTIAL OR FULL CLOSURE OF BOTH BRIDGES BE ALLOWED. NEW FIELD DRIVE SHALL BE CONSTRUCTED PRIOR TO CLOSING EXISTING FIELD DRIVE SOUTHWEST OF BRIDGE NEAR STATION 31+00, RT. PROPERTY OWNER ACCESS TO NEW DRIVE SHALL BE MAINTAINED DURING CONSTRUCTION.
4. CONSTRUCTION SIGNS WILL BE COVERED IF PLACED PRIOR TO THE START OF THE BRIDGE 58 CLOSURE AND WILL BECOME THE PROPERTY OF THE STATE ONCE CONSTRUCTION IS COMPLETE. CONSTRUCTION SIGN COVERS SHALL MEET VERMONT STANDARD REQUIREMENTS WITH REGARDS TO MATERIAL AND SIZE. THE RELOCATION AND MAINTENANCE OF CONSTRUCTION SIGNS AND TRAFFIC CONTROL DEVICES REUSED WILL BE PAID FOR AS 900.645, "SPECIAL PROVISION (TRAFFIC CONTROL, ALL-INCLUSIVE)".
5. ALL SIGNS AND TRAFFIC CONTROL DEVICES FURNISHED FOR THIS PROJECT SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), DATED 2009, AND ITS LATEST REVISIONS, THE LATEST EDITION OF THE STANDARD HIGHWAY SIGNS (SHS) BOOK, AND THE VERMONT STANDARD DRAWINGS.
6. ALL SIGNS SHALL BE INSPECTED DAILY FOR DUST, DEBRIS AND DISREPAIR AND MAINTAINED AS NECESSARY IN A MANNER ACCEPTABLE TO THE ENGINEER.
7. ALL ONSITE AND OFFSITE PROJECT SIGNS AND TRAFFIC CONTROL DEVICES, INCLUDING ADDITIONAL PROJECT CONSTRUCTION SIGNS REQUIRED BY THE ENGINEER, WILL BE PROVIDED BY THE CONTRACTOR AND SHALL BE PAID FOR UNDER ITEM 900.645, "SPECIAL PROVISION (TRAFFIC CONTROL, ALL-INCLUSIVE)". THE EXACT LOCATIONS WILL BE COORDINATED BETWEEN THE ENGINEER AND THE CONTRACTOR. ALL SIGNS SHALL BE PLACED WITHIN EXISTING VILLAGE OR TOWN RIGHT OF WAY.

BRIDGE SITE CLOSURE DETAIL:
(NOT TO SCALE)

NOTE: TRAFFIC CONTROL FOR MILL AND OVERLAY ON VT 16 NOT DETAILED, SEE STANDARD DETAILS

8. WHERE PRACTICAL, DETOUR ROUTE MARKERS AND ANY ADDITIONAL PROJECT CONSTRUCTION SIGNS SHALL BE INSTALLED ADJACENT TO EXISTING ROUTE MARKERS AND MODIFIED TRAFFIC CONTROL SIGN ASSEMBLIES. NO CONSTRUCTION SIGNS SHALL BE INSTALLED AS TO BLOCK EXISTING TRAFFIC CONTROL SIGN ASSEMBLIES OR TO INTERFERE WITH STOPPING SIGHT DISTANCE AND CORNER SIGHT DISTANCE FROM DRIVES AND TOWN HIGHWAYS. THE CONTRACTOR SHALL MAINTAIN AT LEAST 200 FEET BETWEEN SIGN ASSEMBLIES WHENEVER POSSIBLE.
9. EXISTING SIGNS THAT ARE IN CONFLICT WITH THE TRAFFIC FLOW OF THE DETOUR SHALL BE REMOVED OR COVERED BY THE CONTRACTOR. ALL SIGNS REMOVED OR COVERED SHALL BE REPLACED OR UNCOVERED WHEN THE TRAFFIC CONTROL PLAN IS DISASSEMBLED. PAYMENT FOR THIS WORK WILL BE INCIDENTAL TO ITEM 900.645, "SPECIAL PROVISION (TRAFFIC CONTROL, ALL-INCLUSIVE)". ANY REMOVED SIGNS THAT DO NOT MEET REQUIREMENTS OF THE CURRENT VERSION OF MUTCD SHALL BE REPLACED WITH COMPLIANT SIGNS, AT THE CONTRACTOR'S EXPENSE.
10. TREES AND SHRUBS WITHIN EXISTING RIGHT OF WAY AND OTHERWISE INTERFERING WITH VISIBILITY OF EXISTING OR PROPOSED DETOUR SIGNS SHALL BE TRIMMED ACCORDINGLY. COSTS FOR SUCH TRIMMING SHALL BE PAID UNDER ITEM 900.645, "SPECIAL PROVISION (TRAFFIC CONTROL, ALL-INCLUSIVE)".
11. PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS) SHALL BE PLACED WHERE DESIGNATED BY THE ENGINEER. ONE SIGN EACH SHALL BE PLACED AT THE CHURCH ST/ELM ST INTERSECTION, ONE AT THE ROARING BROOK RD/GLOVER RD INTERSECTION, AND ONE AT THE ROARING BROOK RD/PARK ST INTERSECTION 14 DAYS PRIOR TO THE START OF CONSTRUCTION TO WARN OF IMPENDING DETOURS. THESE SHALL THEN BE DEPLOYED TO LOCATIONS SPECIFIED BY THE ENGINEER ONCE CONSTRUCTION HAS BEGUN, IF NECESSARY. PAYMENT FOR THESE SIGNS, INCLUDING RELOCATING DURING CONSTRUCTION AS DIRECTED BY THE ENGINEER, SHALL BE INCLUDED IN ITEM 900.645 "SPECIAL PROVISION (TRAFFIC CONTROL, ALL-INCLUSIVE)". SAMPLE TEXT IS INCLUDED ON THE PLANS.
12. TEMPORARY TRAFFIC BARRIER SHALL BE FURNISHED IN ACCORDANCE WITH SECTION 621 AND PLACED AT THE BRIDGE EXTENTS. PAYMENT FOR THIS WORK WILL BE INCIDENTAL TO ITEM 900.645, "SPECIAL PROVISION (TRAFFIC CONTROL, ALL-INCLUSIVE)".
13. CONTACT DIG-SAFE AT 1-888-344-7233 PRIOR TO BREAKING GROUND TO INSTALLING ANY SIGN POSTS.

FOR REVIEW ONLY NOT FOR CONSTRUCTION 	PROJECT NAME: BARTON VILLAGE	FILE NAME: z13j078de+sign2.dgn	PLOT DATE: 10/27/2014
	PROJECT NUMBER: BO 1449(33)	PROJECT LEADER: J. OLUND	DRAWN BY: B. TOOTHAKER
		DESIGNED BY: B. TOOTHAKER	CHECKED BY: A. GREENLAW
		TRAFFIC CONTROL SHEET 2	SHEET 10 OF 35



LEGEND:

- AER E&T — PROPOSED ELECTRIC/TELEPHONE/CABLE
- // AER E&T // REMOVED ELECTRIC/TELEPHONE/CABLE
- AER E&T — EXISTING ELECTRIC/TELEPHONE/CABLE TO REMAIN

NOTE: UTILITY RELOCATION EFFORTS SHOWN ON THIS SHEET ARE PERFORMED BY OTHERS AND ARE PROVIDED HEREIN FOR INFORMATION ONLY TO REFLECT CHANGED SITE CONDITIONS.

UTILITY RELOCATION LAYOUT

SCALE 1" = 20' - 0"
 20 0 20

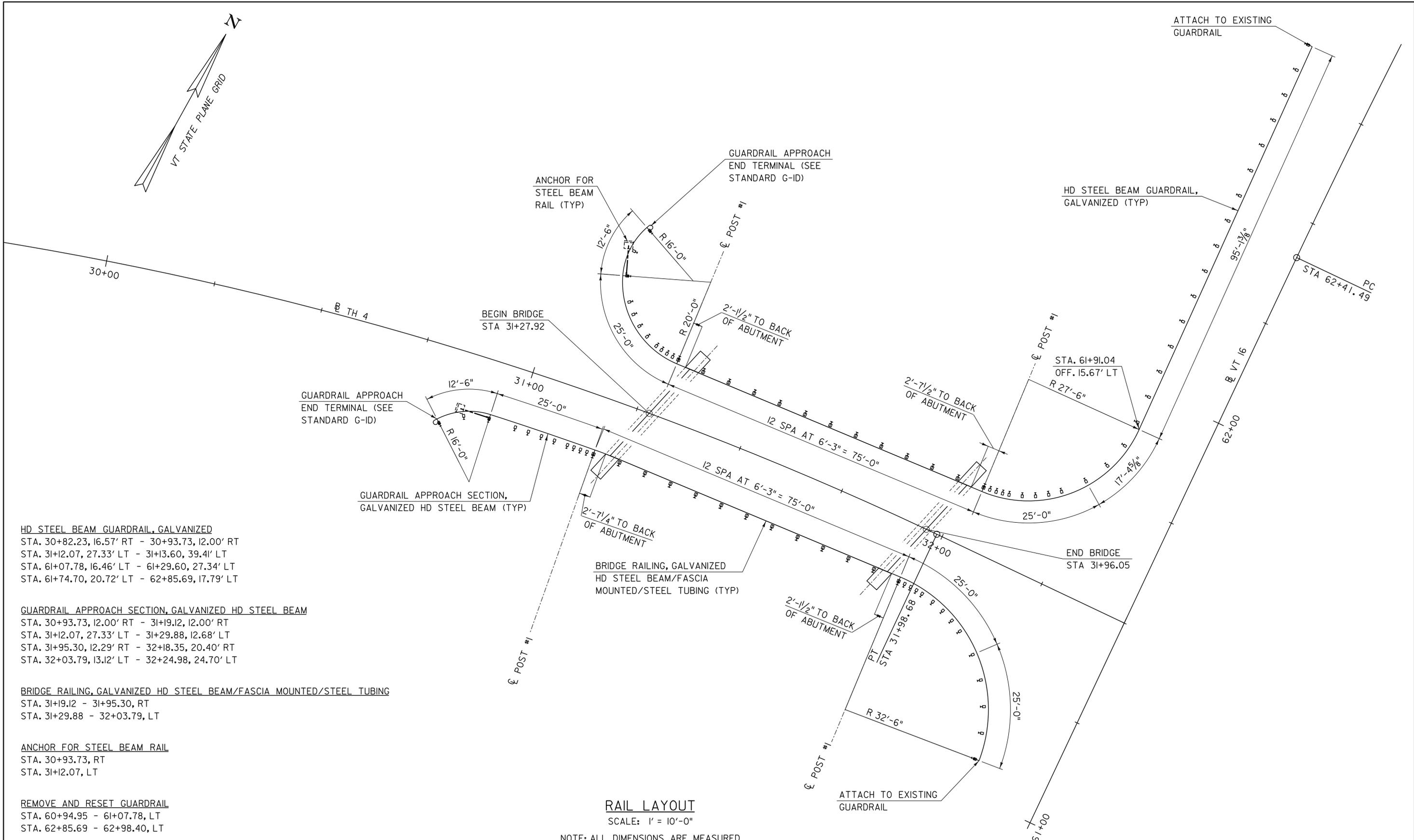
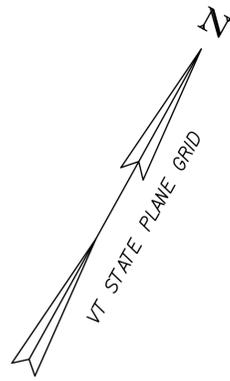
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PROJECT NAME: BARTON VILLAGE
 PROJECT NUMBER: BO 1449(33)

TYLIN INTERNATIONAL

FILE NAME: z\3\078u\111ty.dgn
 PROJECT LEADER: J. OLUND
 DESIGNED BY: B. TOOTHAKER
 UTILITY RELOCATION LAYOUT

PLOT DATE: 10/27/2014
 DRAWN BY: B. TOOTHAKER
 CHECKED BY: J. OLUND
 SHEET 11 OF 35



HD STEEL BEAM GUARDRAIL, GALVANIZED
 STA. 30+82.23, 16.57' RT - 30+93.73, 12.00' RT
 STA. 31+12.07, 27.33' LT - 31+13.60, 39.41' LT
 STA. 61+07.78, 16.46' LT - 61+29.60, 27.34' LT
 STA. 61+74.70, 20.72' LT - 62+85.69, 17.79' LT

GUARDRAIL APPROACH SECTION, GALVANIZED HD STEEL BEAM
 STA. 30+93.73, 12.00' RT - 31+19.12, 12.00' RT
 STA. 31+12.07, 27.33' LT - 31+29.88, 12.68' LT
 STA. 31+95.30, 12.29' RT - 32+18.35, 20.40' RT
 STA. 32+03.79, 13.12' LT - 32+24.98, 24.70' LT

BRIDGE RAILING, GALVANIZED HD STEEL BEAM/FASCIA MOUNTED/STEEL TUBING
 STA. 31+19.12 - 31+95.30, RT
 STA. 31+29.88 - 32+03.79, LT

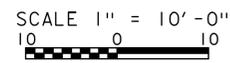
ANCHOR FOR STEEL BEAM RAIL
 STA. 30+93.73, RT
 STA. 31+12.07, LT

REMOVE AND RESET GUARDRAIL
 STA. 60+94.95 - 61+07.78, LT
 STA. 62+85.69 - 62+98.40, LT

RAIL LAYOUT

SCALE: 1" = 10'-0"

NOTE: ALL DIMENSIONS ARE MEASURED HORIZONTALLY ALONG FACE OF RAIL.



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PROJECT NAME: BARTON VILLAGE
 PROJECT NUMBER: BO 1449(33)

FILE NAME: z13j078railay.dgn
 PROJECT LEADER: J. OLUND
 DESIGNED BY: B. TOOTHAKER
 RAIL LAYOUT SHEET

PLOT DATE: 10/27/2014
 DRAWN BY: B. TOOTHAKER
 CHECKED BY: J. HOWE
 SHEET 12 OF 35

4 INCH WHITE LINE (4" WL)
 31+20.00 - 32+30.00, LT
 31+20.00 - 32+30.00, RT
 61+05.50 - 61+23.14, LT
 61+70.79 - 62+80.75, LT

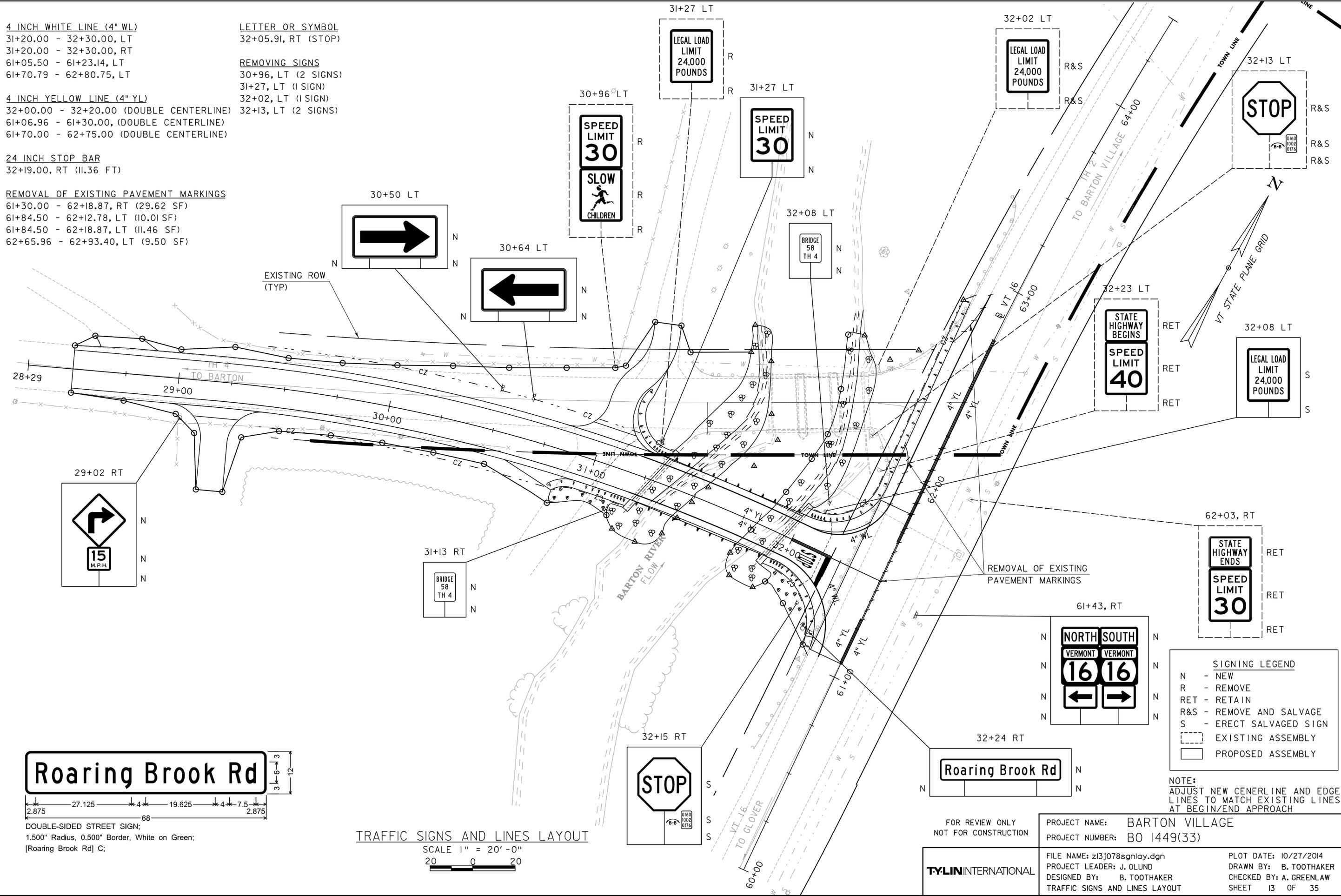
4 INCH YELLOW LINE (4" YL)
 32+00.00 - 32+20.00 (DOUBLE CENTERLINE)
 61+06.96 - 61+30.00, (DOUBLE CENTERLINE)
 61+70.00 - 62+75.00 (DOUBLE CENTERLINE)

24 INCH STOP BAR
 32+19.00, RT (11.36 FT)

REMOVAL OF EXISTING PAVEMENT MARKINGS
 61+30.00 - 62+18.87, RT (29.62 SF)
 61+84.50 - 62+12.78, LT (10.01 SF)
 61+84.50 - 62+18.87, LT (11.46 SF)
 62+65.96 - 62+93.40, LT (9.50 SF)

LETTER OR SYMBOL
 32+05.91, RT (STOP)

REMOVING SIGNS
 30+96, LT (2 SIGNS)
 31+27, LT (1 SIGN)
 32+02, LT (1 SIGN)
 32+13, LT (2 SIGNS)



DOUBLE-SIDED STREET SIGN;
 1,500" Radius, 0,500" Border, White on Green;
 [Roaring Brook Rd] C;

TRAFFIC SIGNS AND LINES LAYOUT

SCALE 1" = 20' - 0"
 20 0 20

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PROJECT NAME: BARTON VILLAGE
 PROJECT NUMBER: BO 1449(33)

TYLIN INTERNATIONAL

FILE NAME: z13j078sgnlay.dgn
 PROJECT LEADER: J. OLUND
 DESIGNED BY: B. TOOTHAKER
 TRAFFIC SIGNS AND LINES LAYOUT

PLOT DATE: 10/27/2014
 DRAWN BY: B. TOOTHAKER
 CHECKED BY: A. GREENLAW
 SHEET 13 OF 35

SOIL CLASSIFICATION

AASHTO

- A1 Gravel and Sand
- A3 Fine Sand
- A2 Silty or Clayey Gravel and Sand
- A4 Silty Soil - Low Compressibility
- A5 Silty Soil - Highly Compressible
- A6 Clayey Soil - Low Compressibility
- A7 Clayey Soil - Highly Compressible

ROCK QUALITY DESIGNATION

R.Q.D. (%)	ROCK DESCRIPTION
<25	Very Poor
25 to 50	Poor
51 to 75	Fair
76 to 90	Good
>90	Excellent

SHEAR STRENGTH

UNDRAINED SHEAR STRENGTH IN P.S.F.	CONSISTENCY
<250	Very Soft
250-500	Soft
500-1000	Med. Stiff
1000-2000	Stiff
2000-4000	Very Stiff
>4000	Hard

CORRELATION GUIDE OF "N" TO DENSITY/CONSISTENCY

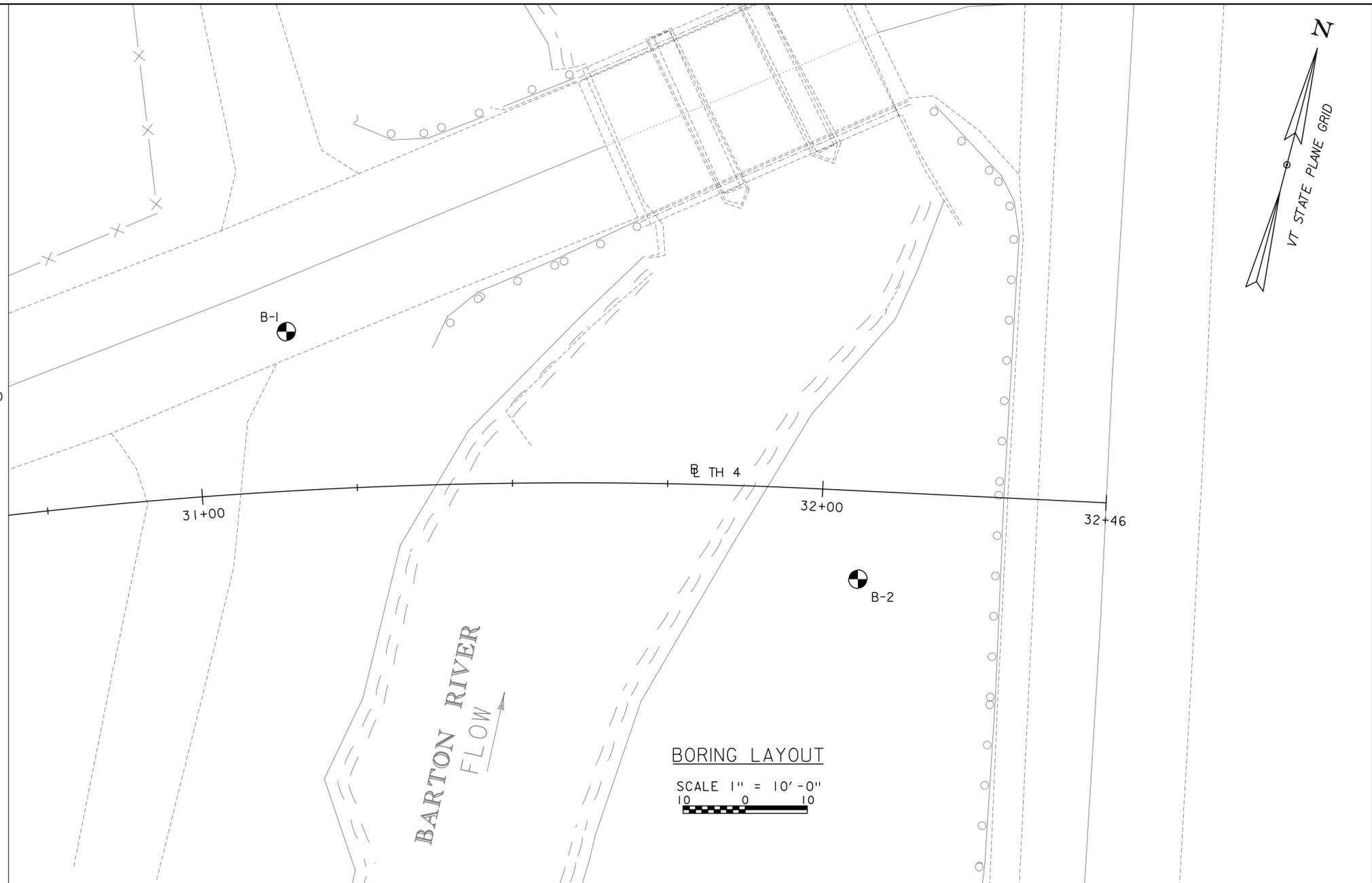
DENSITY (GRANULAR SOILS)		CONSISTENCY (COHESIVE SOILS)	
N	DESCRIPTIVE TERM	N	DESCRIPTIVE TERM
<5	Very Loose	<2	Very Soft
5-10	Loose	2-4	Soft
11-24	Med. Dense	5-8	Med. Stiff
25-50	Dense	9-15	Stiff
>50	Very Dense	16-30	Very Stiff
		31-60	Hard
		>60	Very Hard

COMMONLY USED SYMBOLS

- ▼ Water Elevation
- ⊕ Standard Penetration Boring
- ⊕ Auger Boring
- ⊕ Rod Sounding
- S Sample
- N Standard Penetration Test
- Blow Count Per Foot For:
- 2" O. D. Sampler
- 1 3/8" I. D. Sampler
- Hammer Weight Of 140 Lbs.
- Hammer Fall Of 30"
- VS Field Vane Shear Test
- US Undisturbed Soil Sample
- B Blast
- DC Diamond Core
- MD Mud Drill
- WA Wash Ahead
- HSA Hollow Stem Auger
- AX Core Size 1 1/8"
- BX Core Size 1 5/8"
- NX Core Size 2 1/8"
- M Double Tube Core Barrel Used
- LL Liquid Limit
- PL Plastic Limit
- PI Plasticity Index
- NP Non Plastic
- w Moisture Content (Dry Wgt. Basis)
- D Dry
- M Moist
- MTW Moist To Wet
- W Wet
- Sat Saturated
- Bo Boulder
- Gr Gravel
- Sa Sand
- SI Silt
- Cl Clay
- HP Hardpan
- Le Ledge
- NLTD No Ledge To Depth
- CNPF Can Not Penetrate Further
- TLOB To Ledge Or Boulder
- NR No Recovery
- Rec. Recovery
- %Rec. Percent Recovery
- RQD Rock Quality Designation
- CBR California Bearing Ratio
- < Less Than
- > Greater Than
- R Refusal (N > 100)

COLOR

bik	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		



BORING LAYOUT

SCALE 1" = 10'-0"
10 0 10

GENERAL NOTES

- The subsurface explorations shown herein were made between January 20, 2014 and February 3, 2014 by GeoDesign, Inc.
- Soil and rock classifications, properties and descriptions are based on engineering interpretation from available subsurface information by GeoDesign, Inc. and may not necessarily reflect actual variations in subsurface conditions that may be encountered between individual boring or sample locations.
- Observed water levels and/or conditions indicated are as recorded at the time of exploration and may vary according to the prevailing rainfall, methods of exploration and other factors.
- 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.
- 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.
- 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.

BORING LAYOUT

HOLE NO.	STATION	OFFSET	NORTHING	EASTING	GROUND ELEVATION	TLOB ELEVATION
B-1	31+15.00	25.6', LT	817413.0	1723105.0	857.0	811.5
B-2 (OW)	32+06.35	14.2', RT	817384.0	1723201.0	854.0	807.5

DEFINITIONS (AASHTO)

- BEDROCK (LEDGE)** - Rock in its native location of indefinite thickness.
- BOULDER** - A rock fragment with an average dimension > 12 inches.
- COBBLE** - Rock fragments with an average dimension between 3 and 12 inches.
- GRAVEL** - Rounded particles of rock < 3" and > 0.075" (#10 sieve).
- SAND** - Particles of rock < 0.075" (#10 sieve) and > 0.0025" (#200 sieve).
- SILT** - Soil < 0.0025" (#200 sieve), non or slightly plastic and exhibits no strength when air-dried.
- CLAY** - Fine grained soil, exhibits plasticity when moist and considerable strength when air-dried.
- VARVED** - Alternate layers of silt and clay.
- HARDPAN** - Extremely dense soil, cemented layer, not softened when wet.
- MUCK** - Soft organic soil (containing > 10% organic material).
- MOISTURE CONTENT** - Weight of water divided by dry weight of soil.
- FLOWING SAND** - Granular soil so saturated (loose) that it flows into drill casing during extraction of wash rod.
- STRIKE** - Angle from magnetic north to line of intersection of bed with a horizontal plane.
- DIP** - Inclination of bed with a horizontal plane.

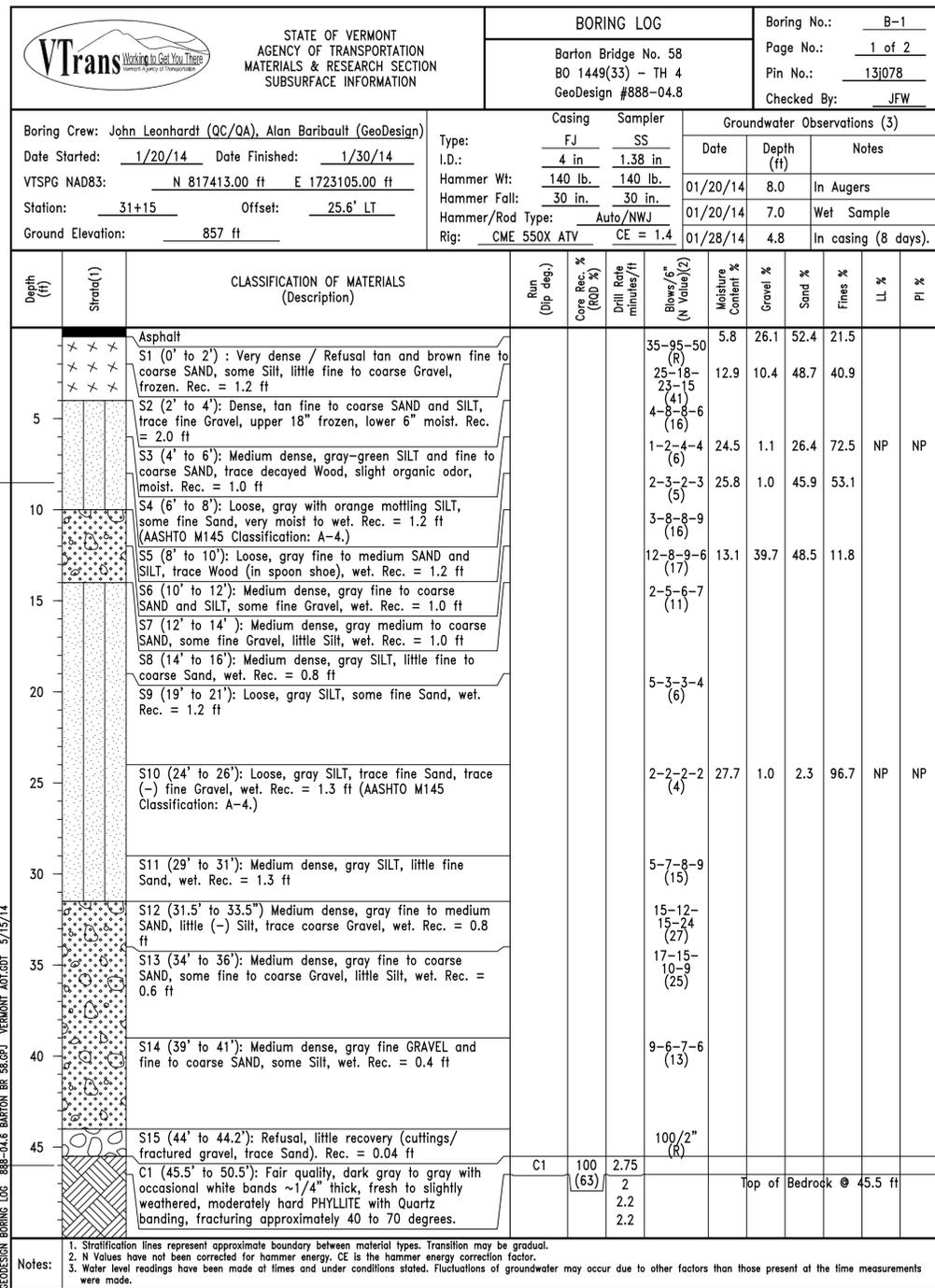
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TYLIN INTERNATIONAL

PROJECT NAME: BARTON VILLAGE
PROJECT NUMBER: BO 1449(33)

FILE NAME: z13j078bor.dgn
PROJECT LEADER: J. OLUND
DESIGNED BY: J. OLUND
BORING INFORMATION & LAYOUT SHEET

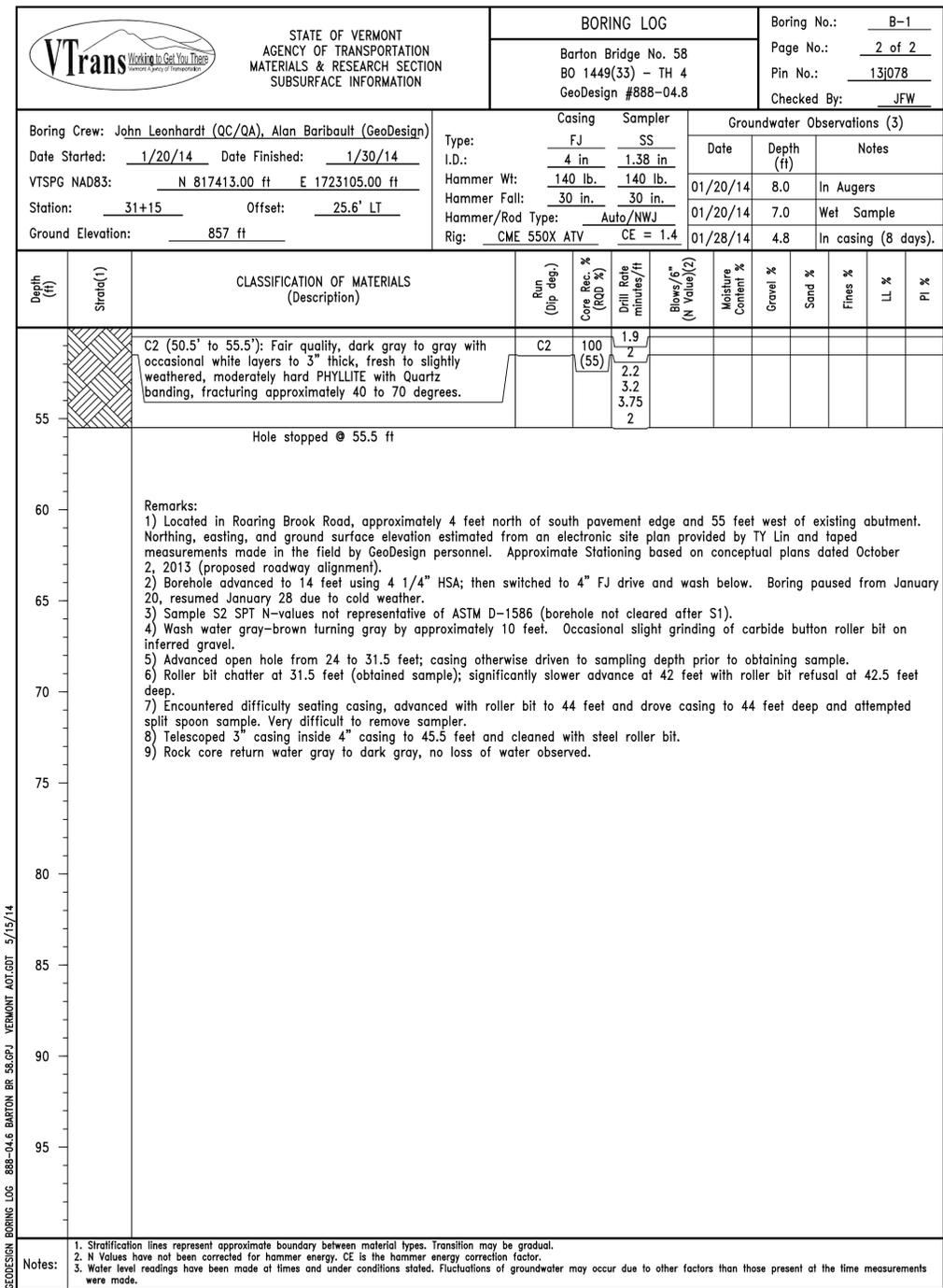
PLOT DATE: 10/27/2014
DRAWN BY: S. MORGAN
CHECKED BY: T. POULIN
SHEET 16 OF 35



BOTTOM OF ABUT NO 1
 EL 848.50

ESTIMATED BOTTOM OF
 PILE AT ABUT NO 1
 EL 811.0

GEODESIC BORING LOC. 888-04.6 BARTON BR. 56.GPJ VERMONT AOT.GDT 5/15/14



GEODESIC BORING LOC. 888-04.6 BARTON BR. 56.GPJ VERMONT AOT.GDT 5/15/14

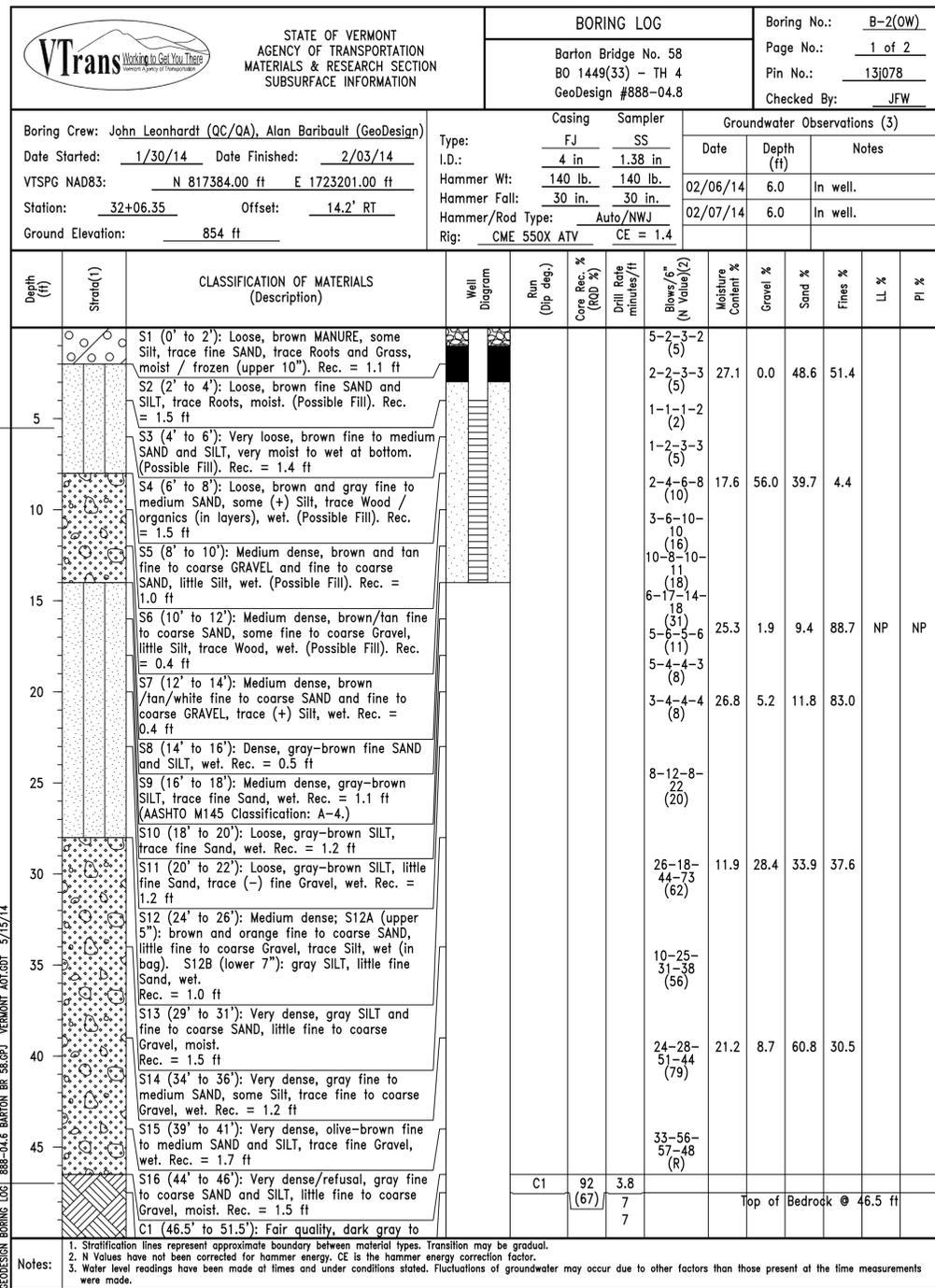
FOR REVIEW ONLY
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PROJECT NAME: BARTON VILLAGE
 PROJECT NUMBER: BO 1449(33)

TYLIN INTERNATIONAL

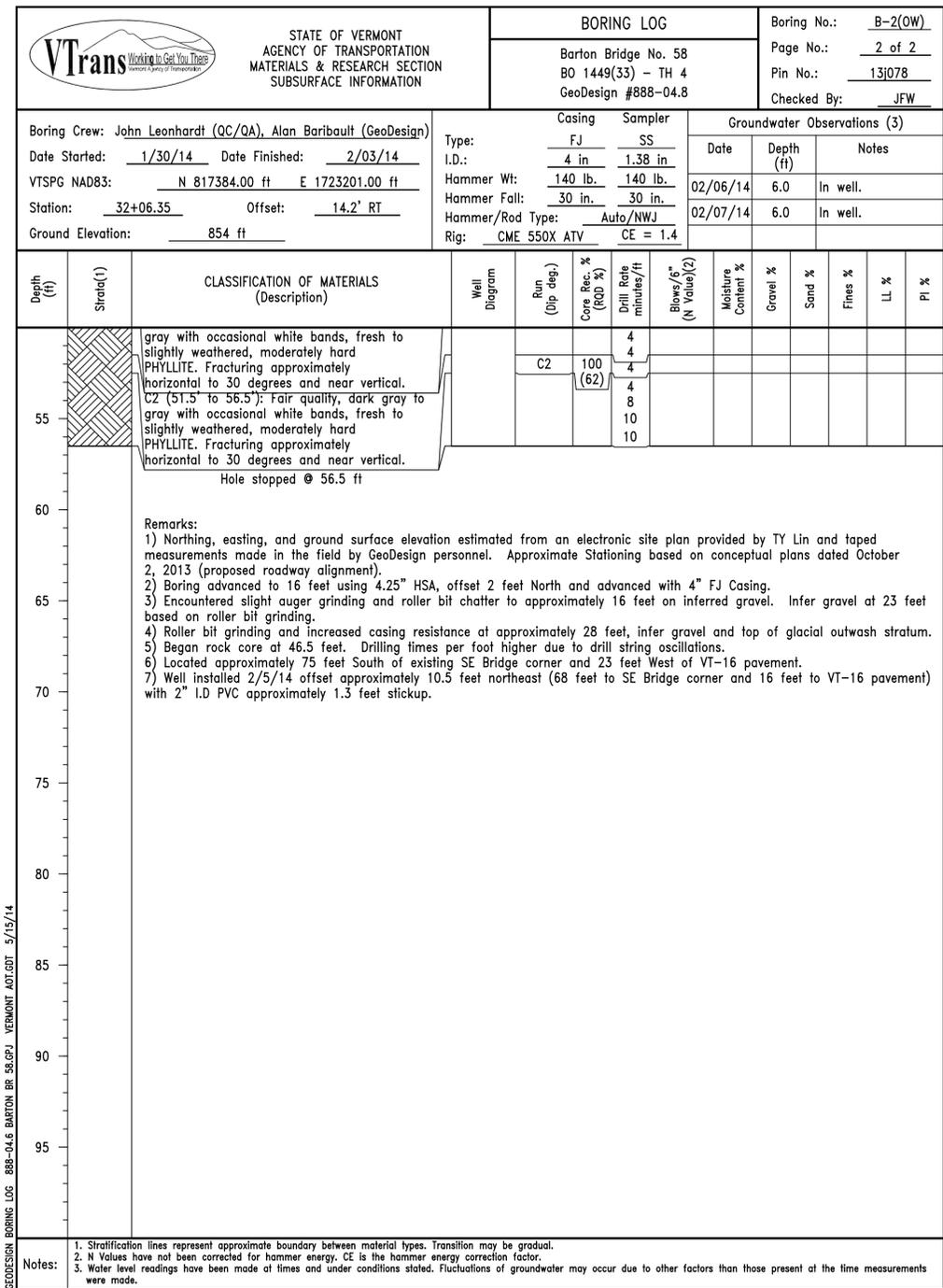
FILE NAME: z13j078blogl.dgn
 PROJECT LEADER: J. OLUND
 DESIGNED BY: J. OLUND
 BORING LOG 1

PLOT DATE: 10/27/2014
 DRAWN BY: S. MORGAN
 CHECKED BY: T. POULIN
 SHEET 17 OF 35



BOTTOM OF ABUT NO 2
 EL 848.50

ESTIMATED BOTTOM OF
 PILE AT ABUT NO 2
 EL 807.0



GEODESIGN BORING LOG 888-04.6 BARTON BR 56.GPJ VERMONT AOT.GDT 5/15/14

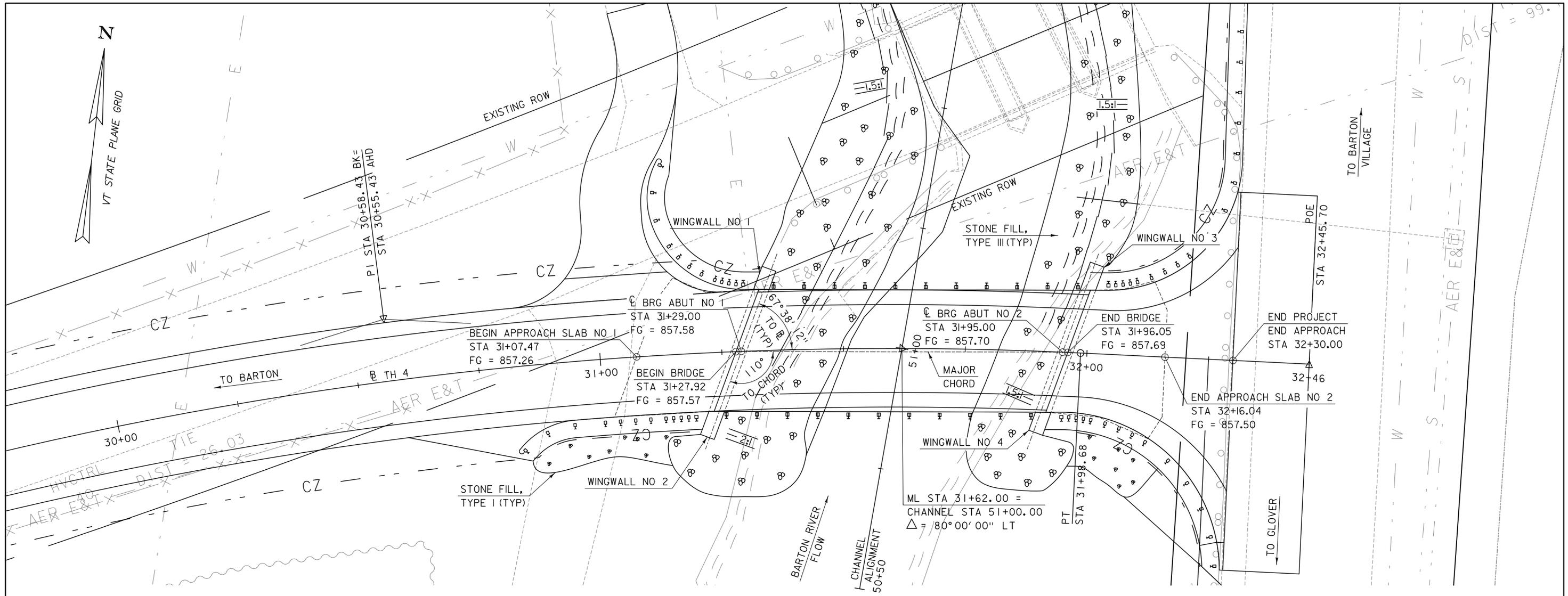
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PROJECT NAME: BARTON VILLAGE
 PROJECT NUMBER: BO 1449(33)

TYLIN INTERNATIONAL

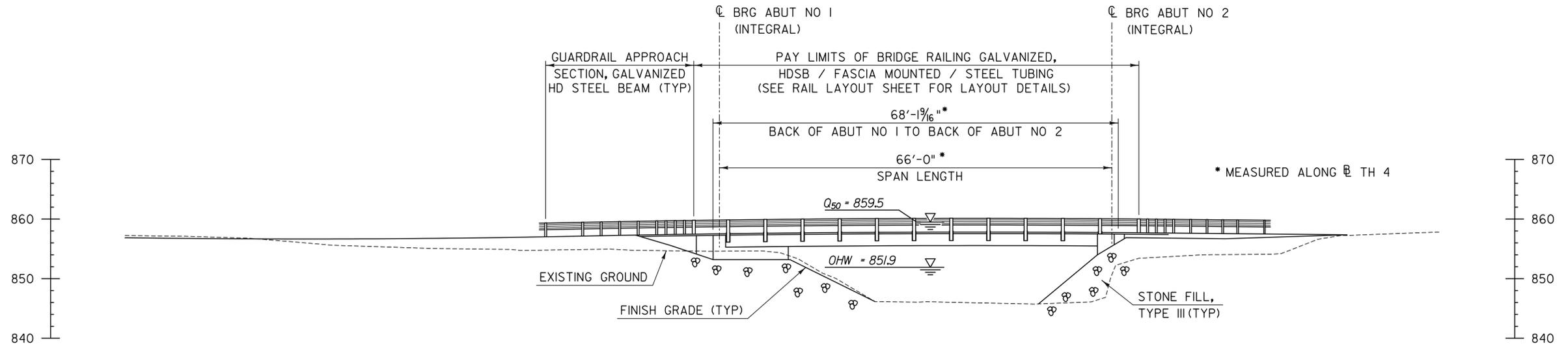
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 PROJECT LEADER: J. OLUND
 DESIGNED BY: J. OLUND
 BORING LOG 2

PLOT DATE: 10/27/2014
 DRAWN BY: S. MORGAN
 CHECKED BY: T. POULIN
 SHEET 18 OF 35



PLAN

SCALE: 1" = 10'-0"



ELEVATION

SCALE: 1" = 10'-0"

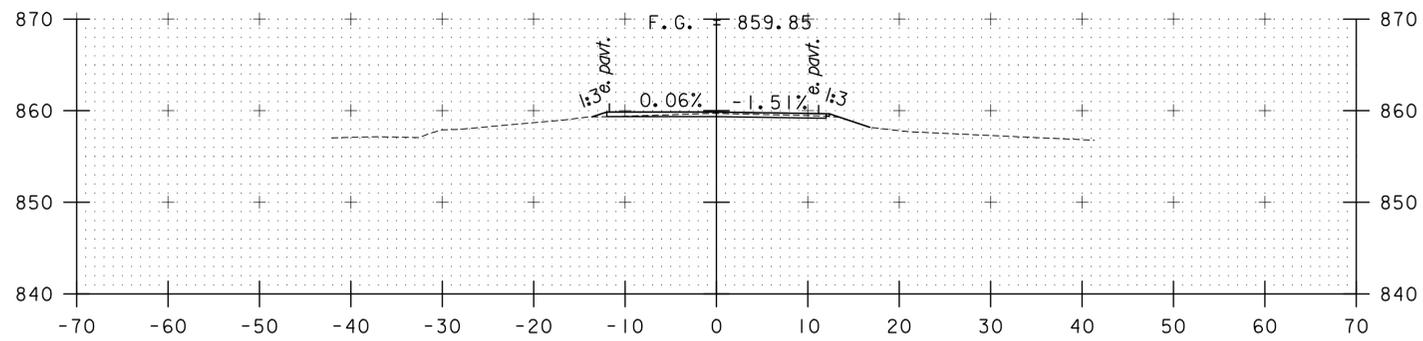
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TYLIN INTERNATIONAL

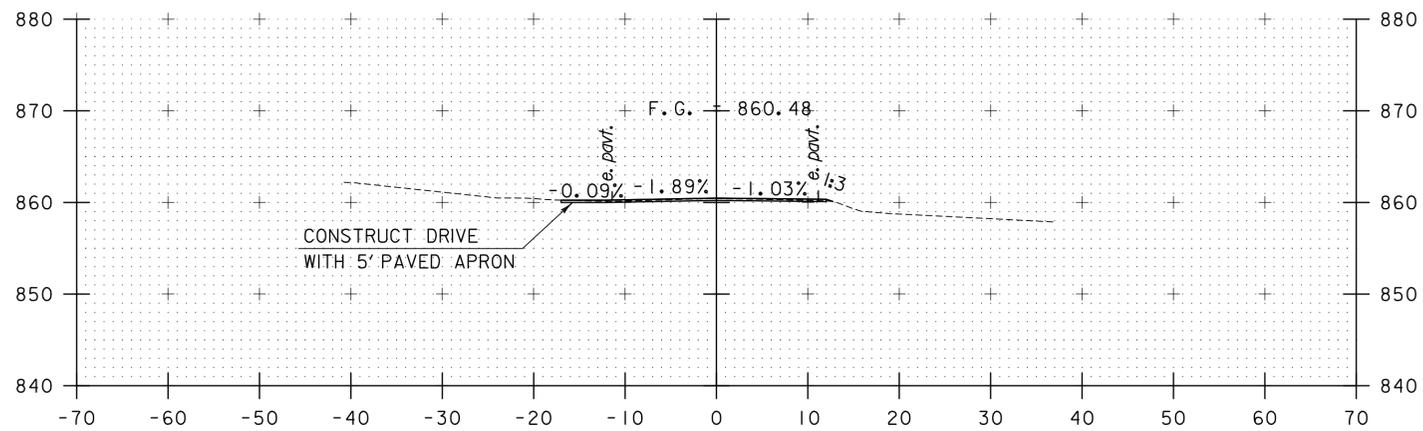
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PROJECT NUMBER: BO 1449(33)

FILE NAME: z13j078pe.dgn
PROJECT LEADER: J. OLUND
DESIGNED BY: J. OLUND
PLAN & ELEVATION

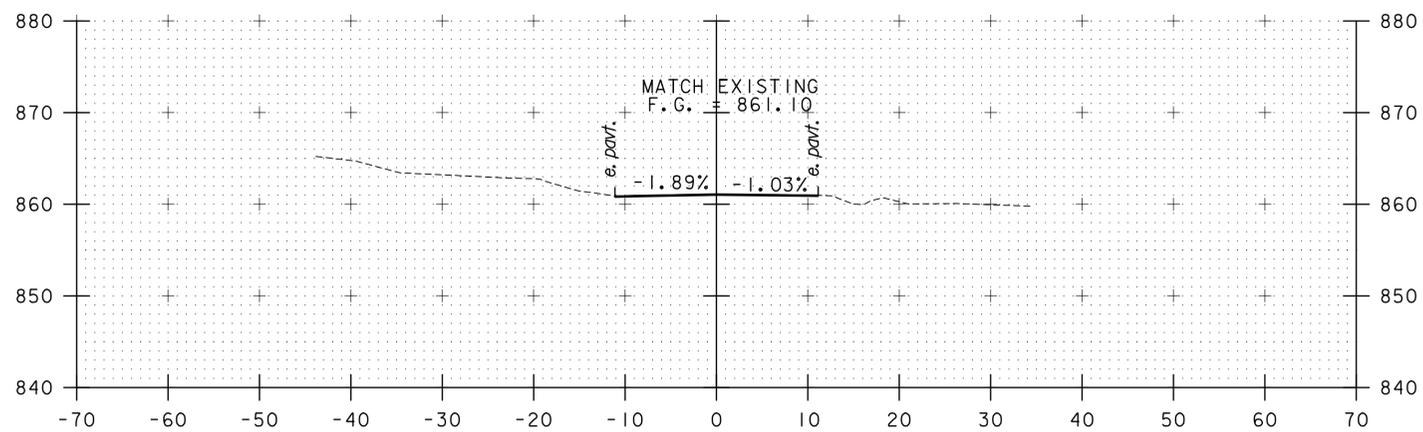
PLOT DATE: 10/27/2014
DRAWN BY: S. MORGAN
CHECKED BY: T. POULIN
SHEET 19 OF 35



29+00

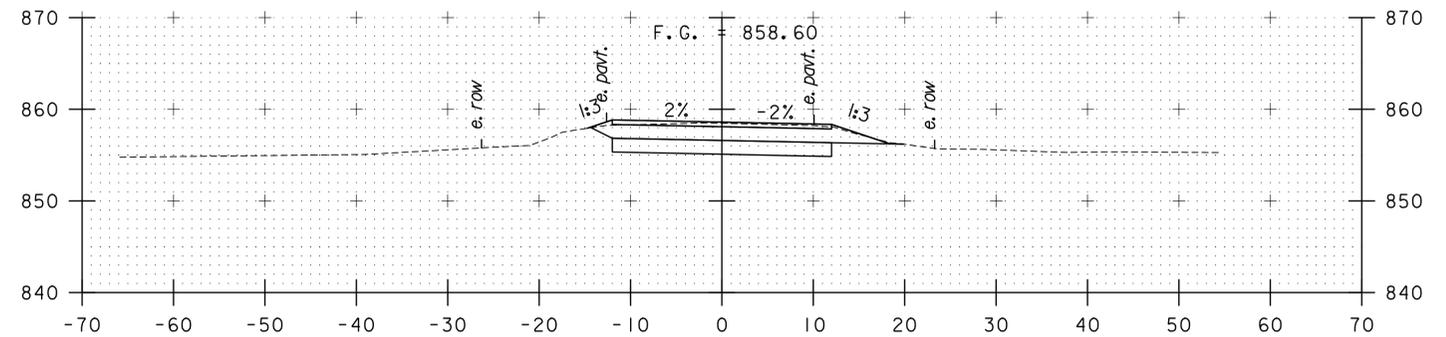


28+75



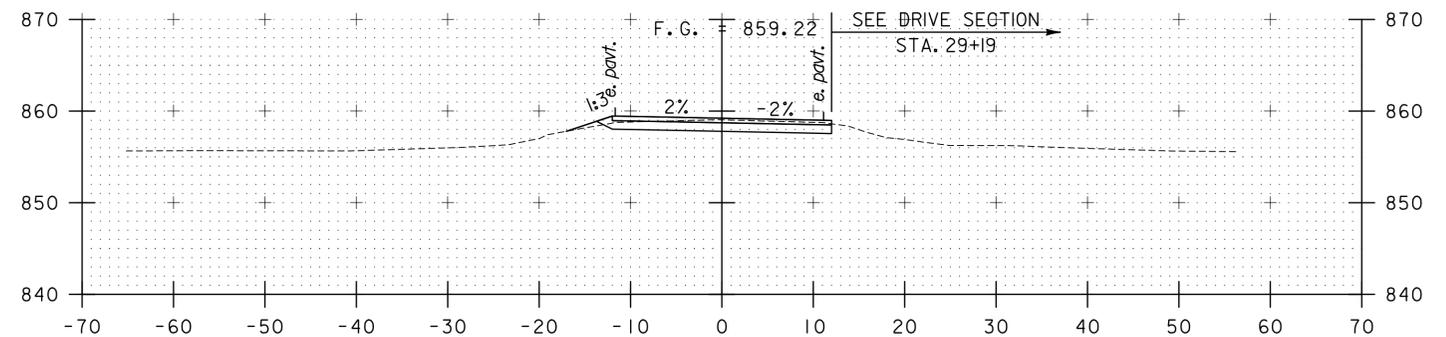
28+50

BEGIN APPROACH STA 28+50.00

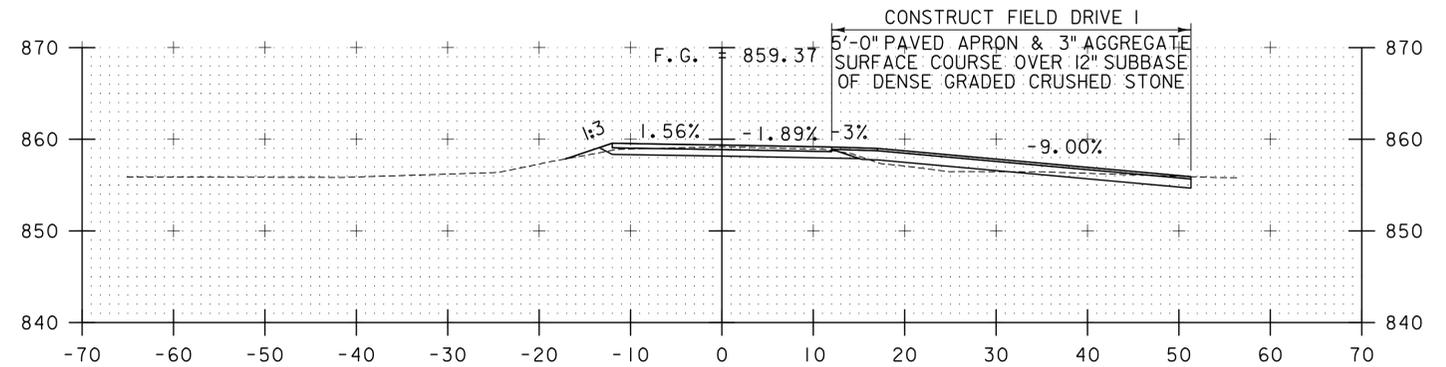


29+50

BEGIN PROJECT STA 29+40.00



29+25



29+19

STA. 28+50 TO STA. 29+50

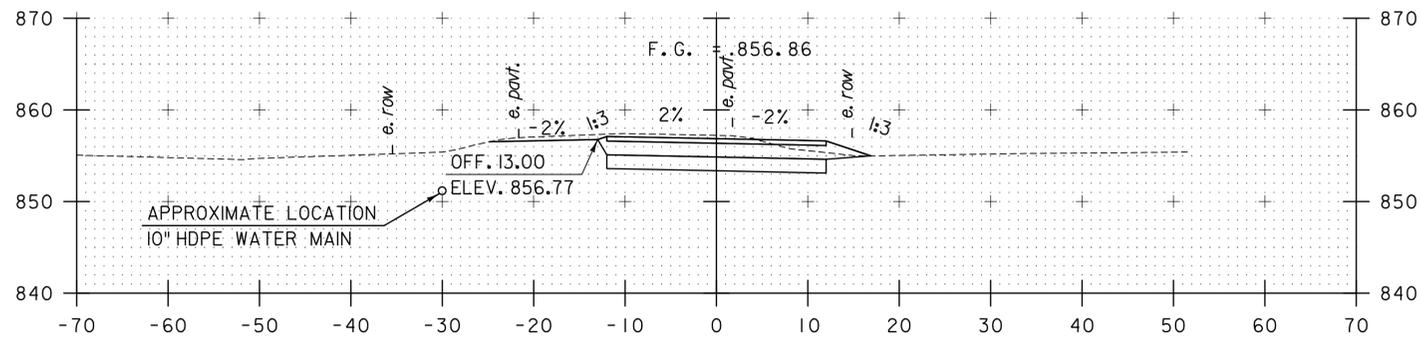
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TYLINTERNATIONAL

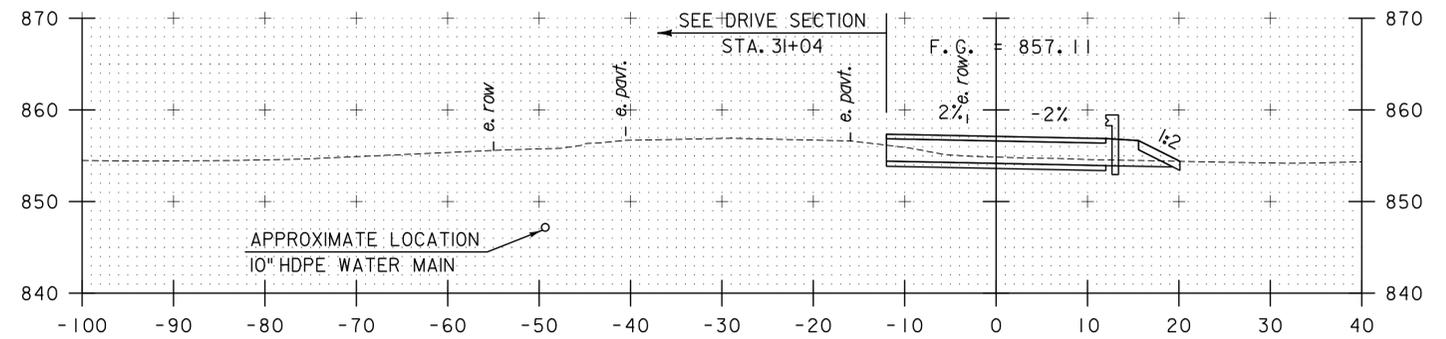
PROJECT NAME: BARTON VILLAGE
PROJECT NUMBER: BO 1449(33)

FILE NAME: z13j078xsl.dgn
PROJECT LEADER: J. OLUND
DESIGNED BY: B. TOOTHAKER
TH4 CROSS SECTIONS I

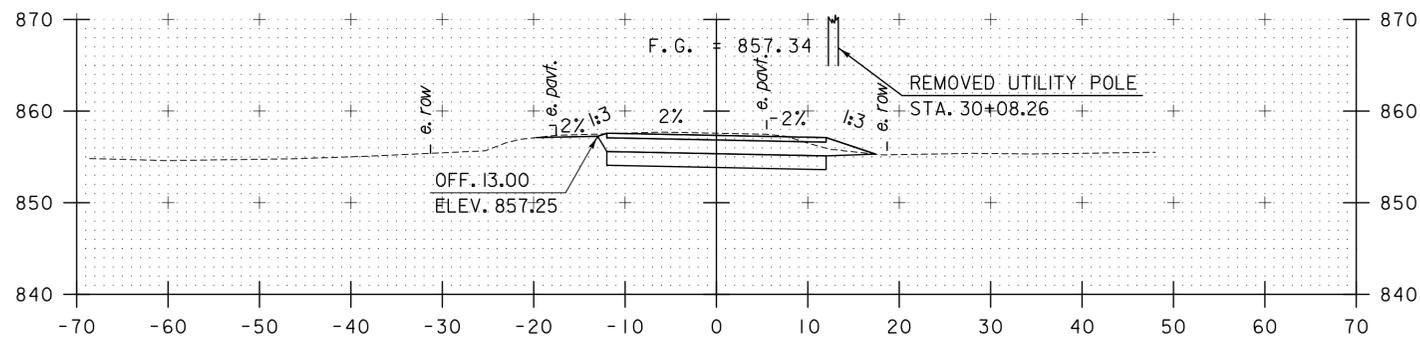
PLOT DATE: 10/27/2014
DRAWN BY: B. TOOTHAKER
CHECKED BY: J. HOWE
SHEET 20 OF 35



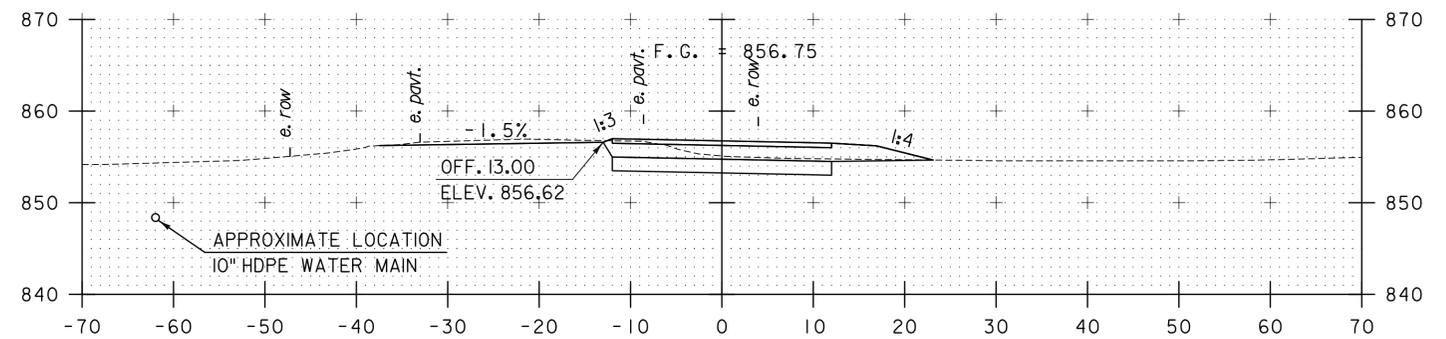
30+25



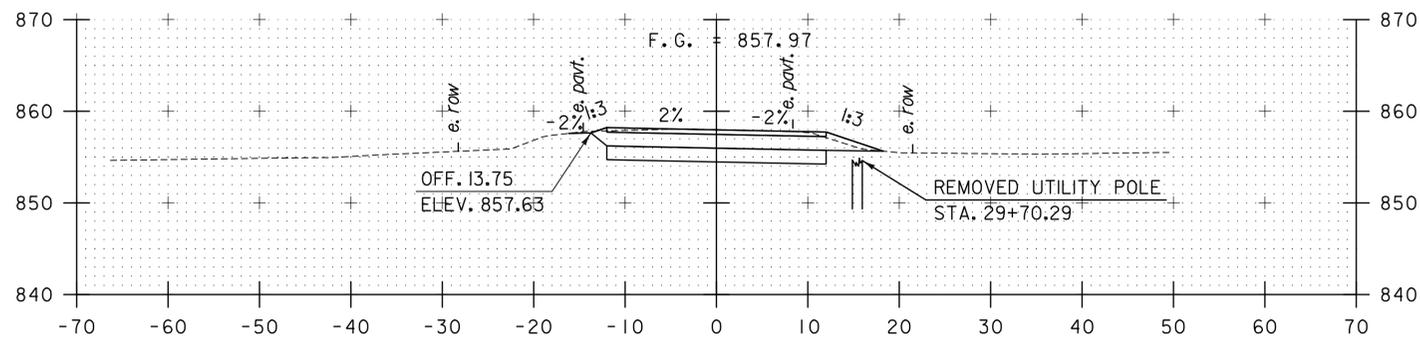
31+00



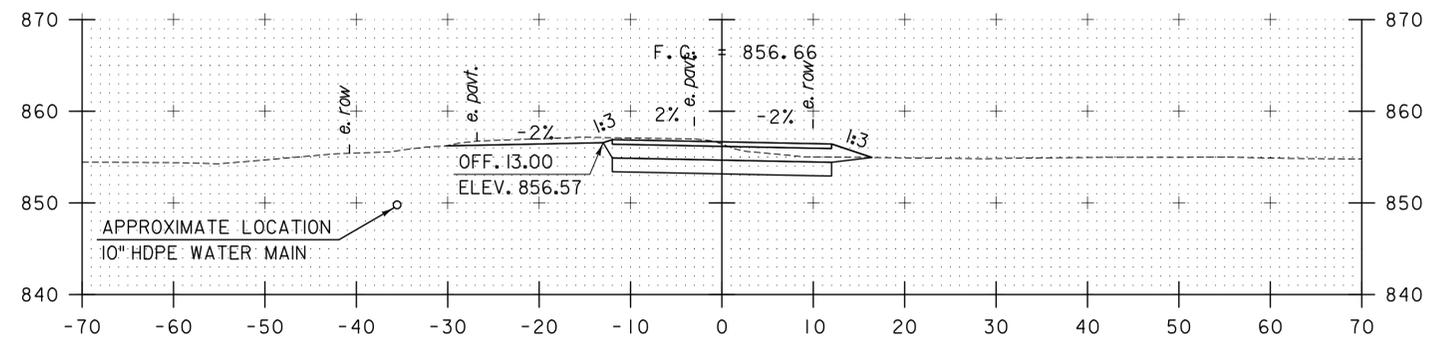
30+00



30+75



29+75



30+50

STA. 29+75 TO STA. 31+00

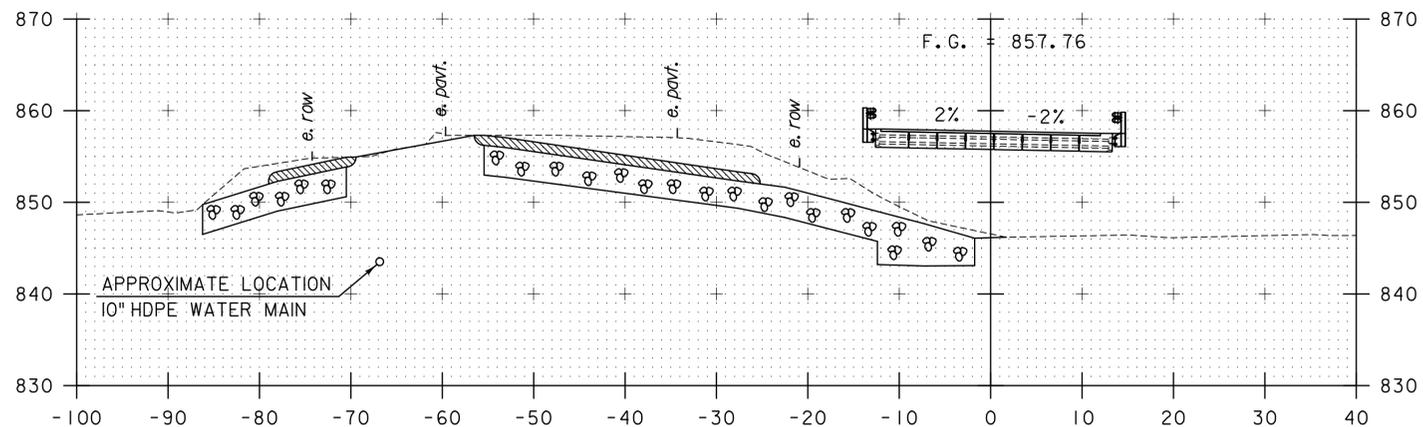
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NOT FOR CONSTRUCTION

TYLINTERNATIONAL

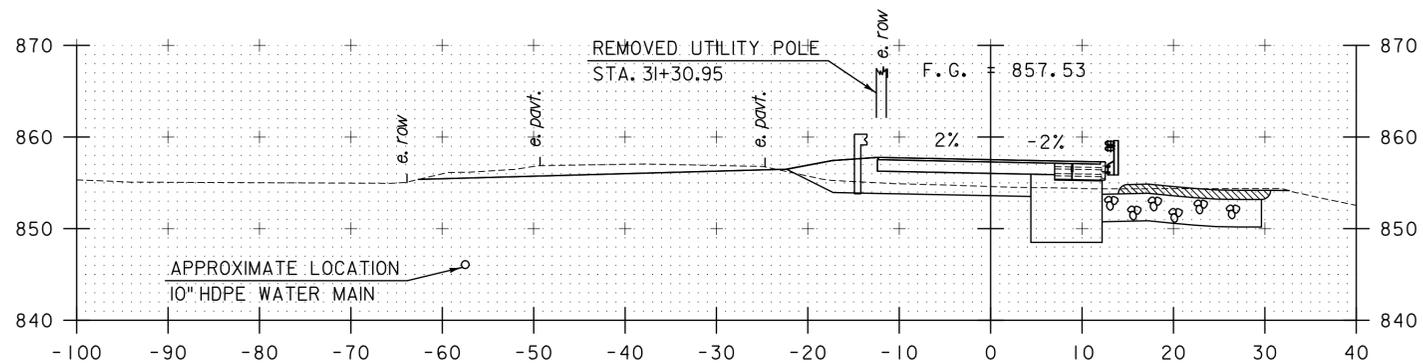
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PROJECT NUMBER: BO 1449(33)

FILE NAME: z13j078xsl.dgn
PROJECT LEADER: J. OLUND
DESIGNED BY: B. TOOTHAKER
TH4 CROSS SECTIONS 2

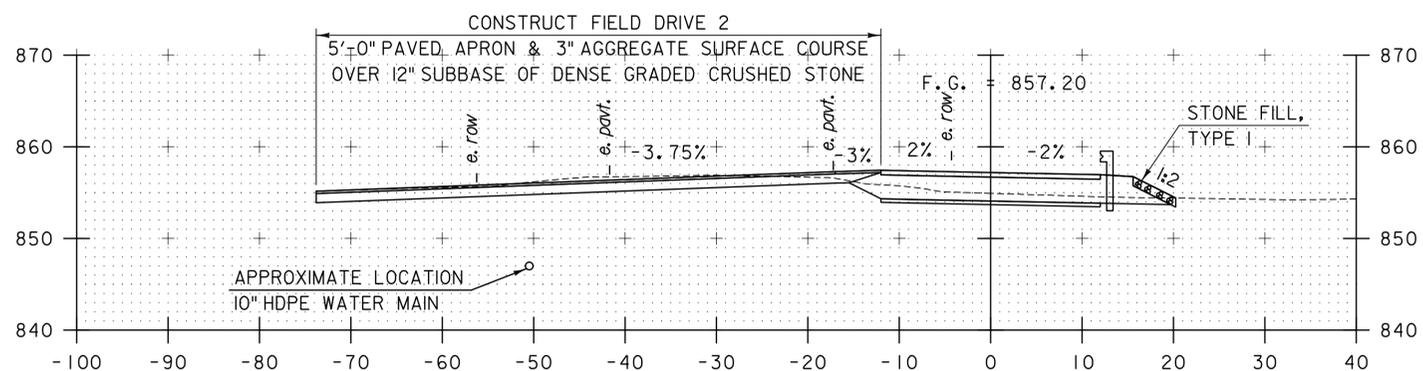
PLOT DATE: 10/27/2014
DRAWN BY: B. TOOTHAKER
CHECKED BY: J. HOWE
SHEET 21 OF 35



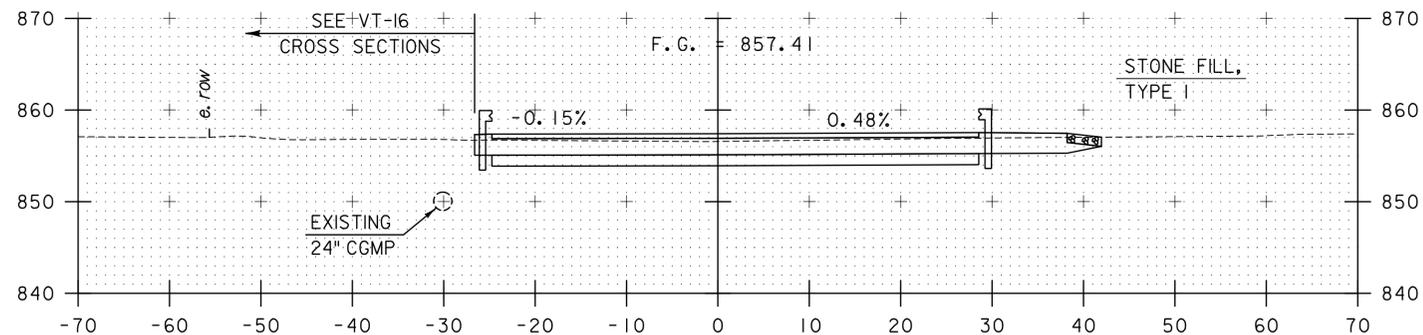
31+50
BEGIN BRIDGE STA 31+27.92



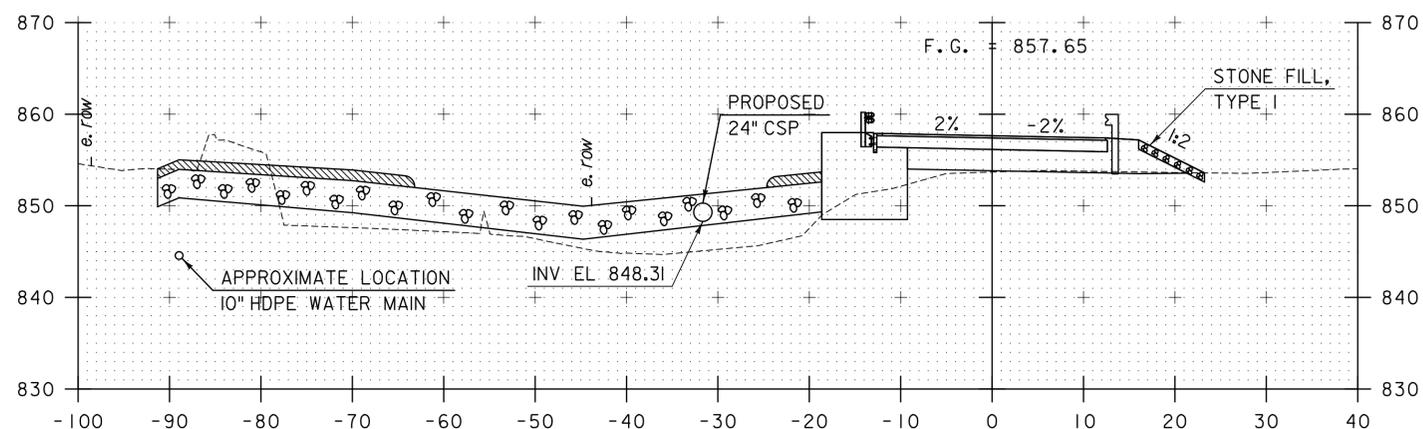
31+25



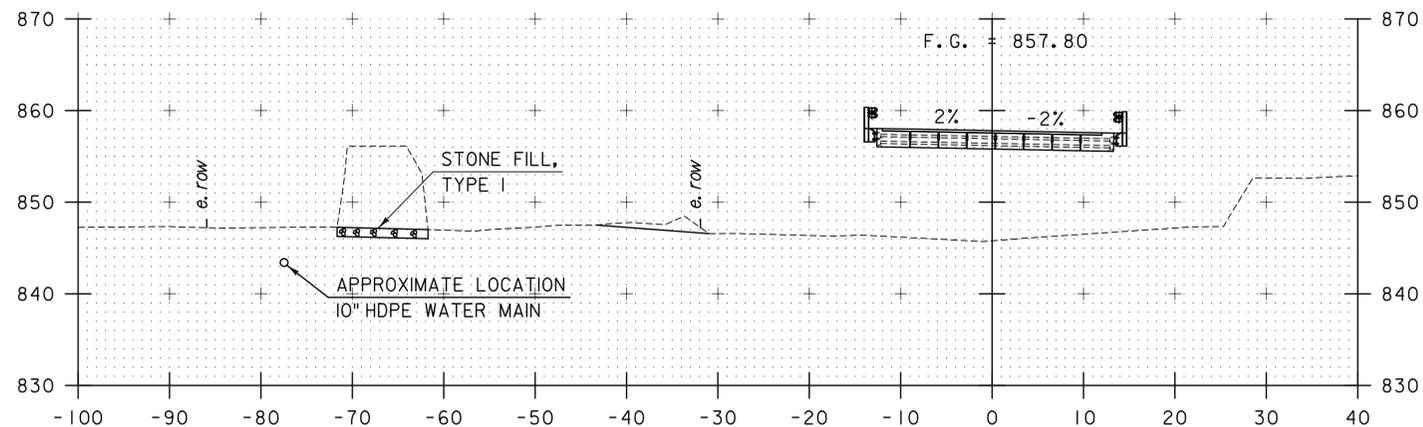
31+04
(FOLLOWS CENTERLINE OF DRIVE)



32+25



32+00
END BRIDGE STA 31+96.05



31+75

STA. 31+04 TO STA. 32+25

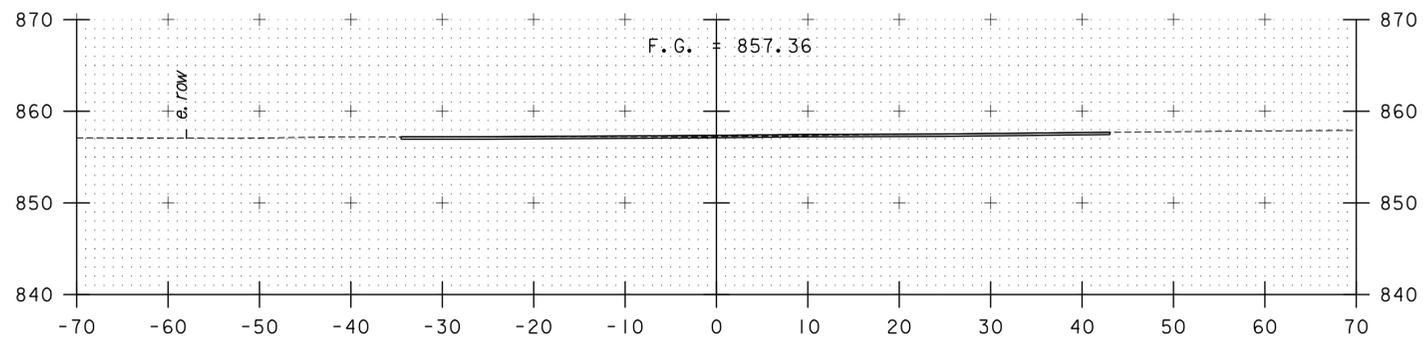
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TYLIN INTERNATIONAL

PROJECT NAME: BARTON VILLAGE
PROJECT NUMBER: BO 1449(33)

FILE NAME: z\3\078xsl.dgn
PROJECT LEADER: J. OLUND
DESIGNED BY: B. TOOTHAKER
TH4 CROSS SECTIONS 3

PLOT DATE: 10/27/2014
DRAWN BY: B. TOOTHAKER
CHECKED BY: J. HOWE
SHEET 22 OF 35



32+30
 END PROJECT STA 32+30.00

STA. 32+30 TO STA. 32+30

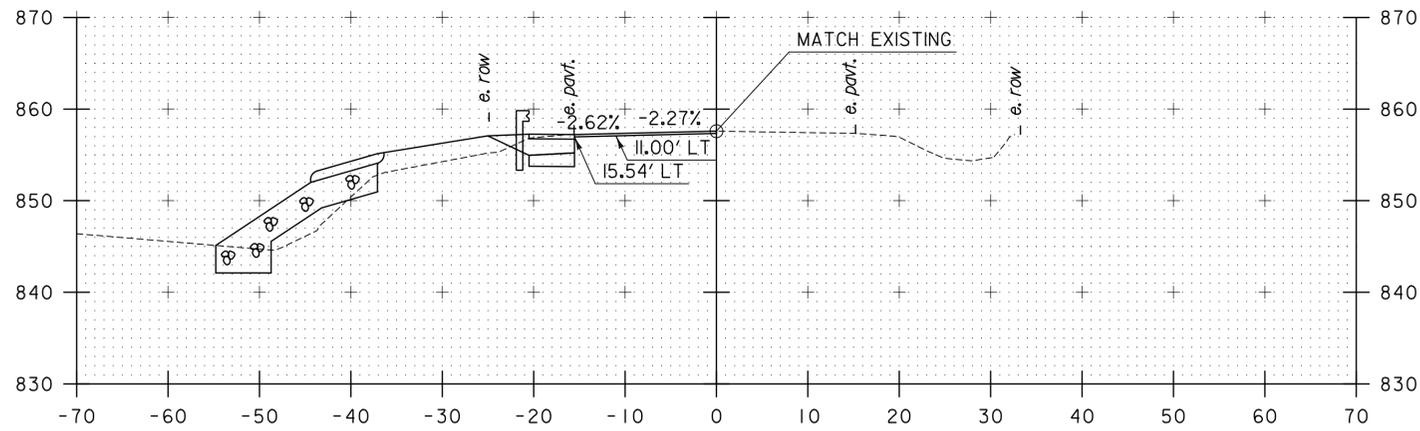
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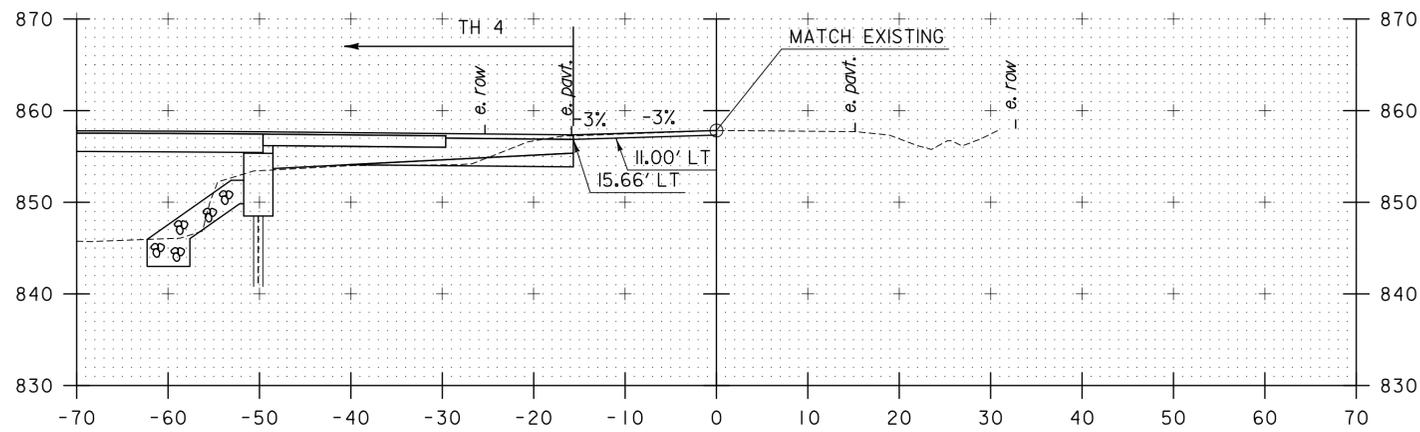
TYLININTERNATIONAL

FILE NAME: z\3\078\ysl.dgn
 PROJECT LEADER: J. OLUND
 DESIGNED BY: B. TOOTHAKER
 TH4 CROSS SECTIONS 4

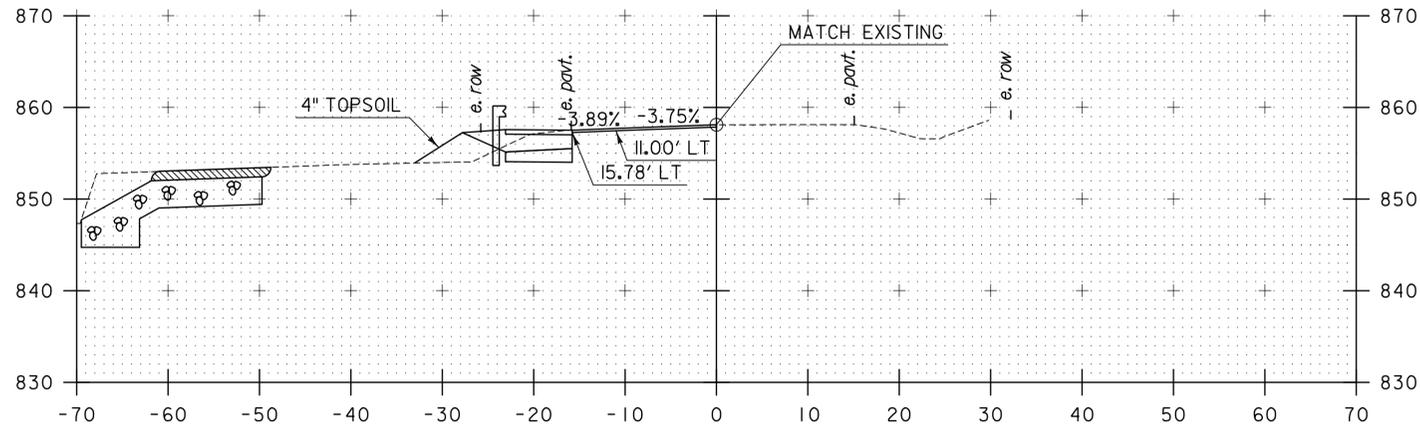
PLOT DATE: 10/27/2014
 DRAWN BY: B. TOOTHAKER
 CHECKED BY: J. HOWE
 SHEET 23 OF 35



61+75



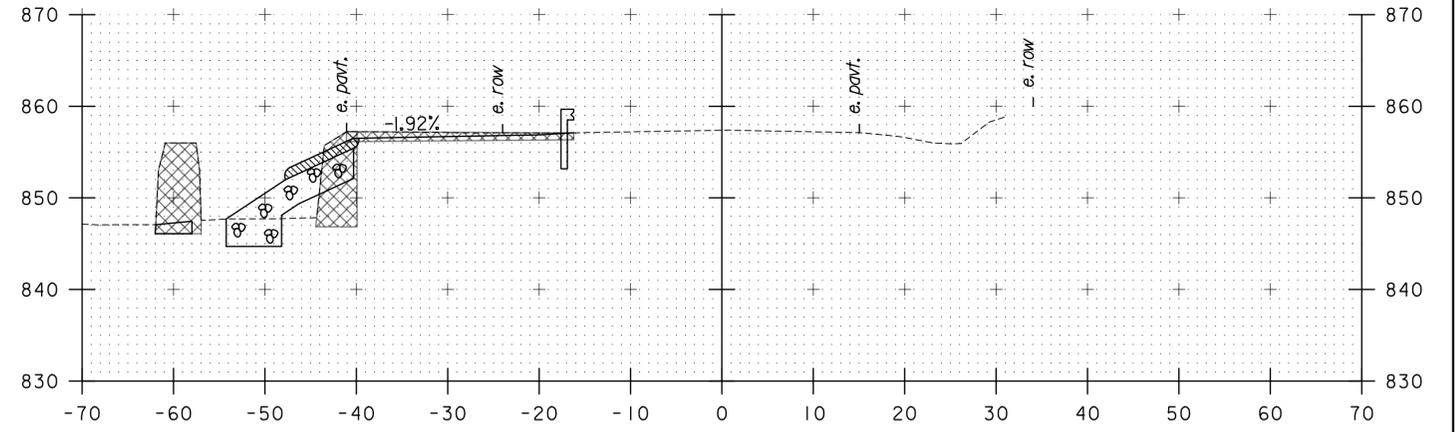
61+50



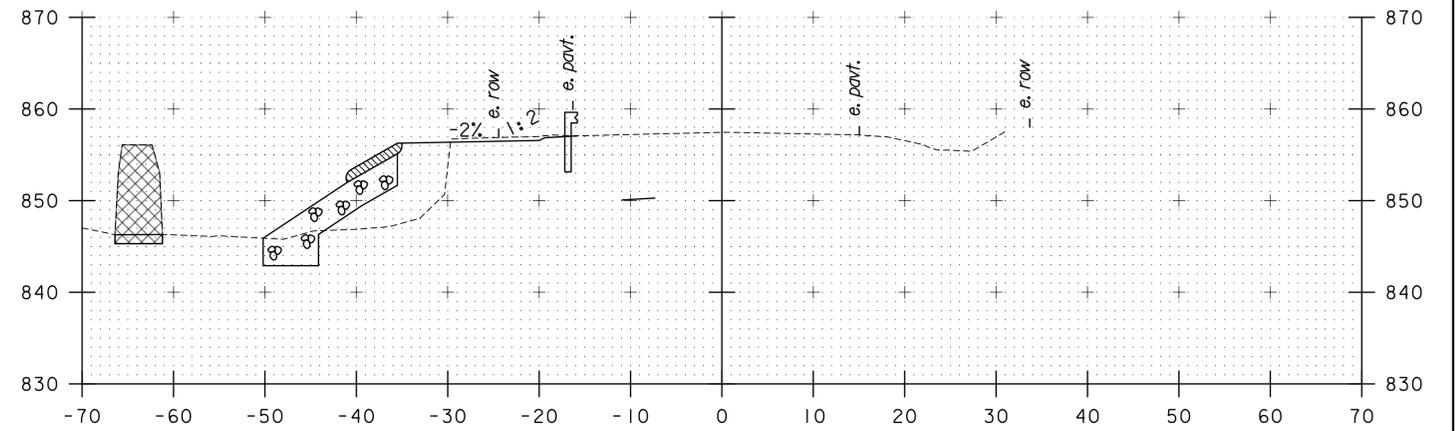
61+25

BEGIN APPROACH STA 61+06.96
LIMIT OF WORK STA 60+94.95

NOTES: WATER AND SEWER
LINES BELOW VT 16 RIGHT
DITCH NOT SHOWN.

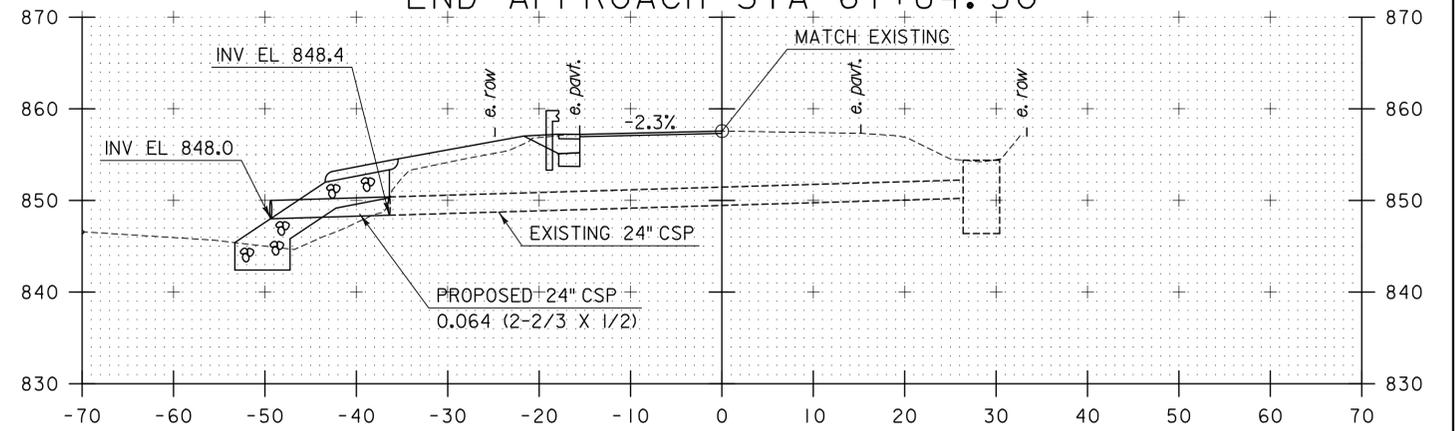


62+25



62+00

END APPROACH STA 61+84.50



61+79

SKewed 3° 31' 48" BACK RIGHT

STA. 61+25 TO STA. 62+25

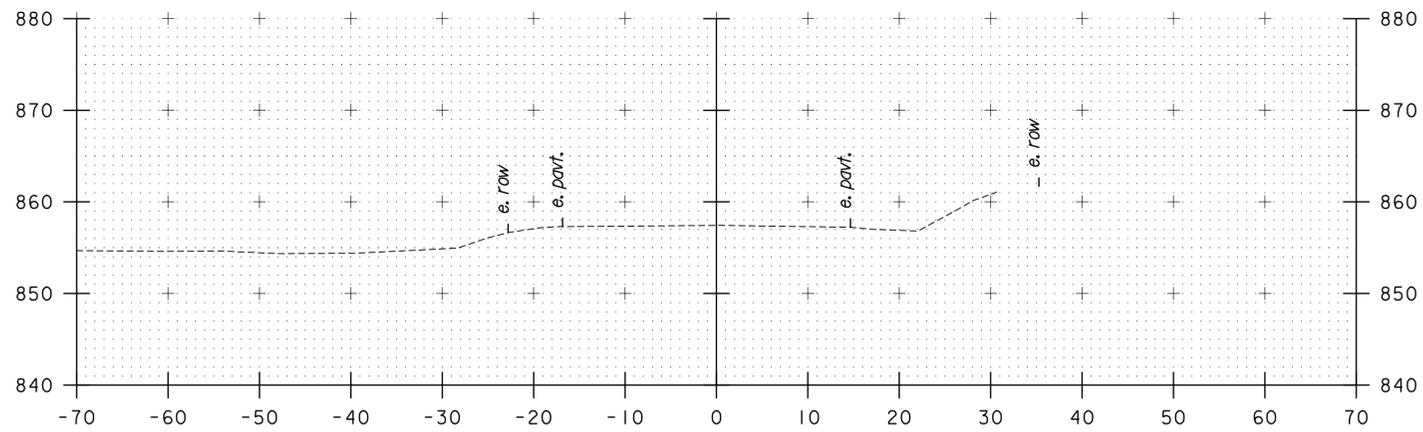
FOR REVIEW ONLY
NOT FOR CONSTRUCTION

TYLIN INTERNATIONAL

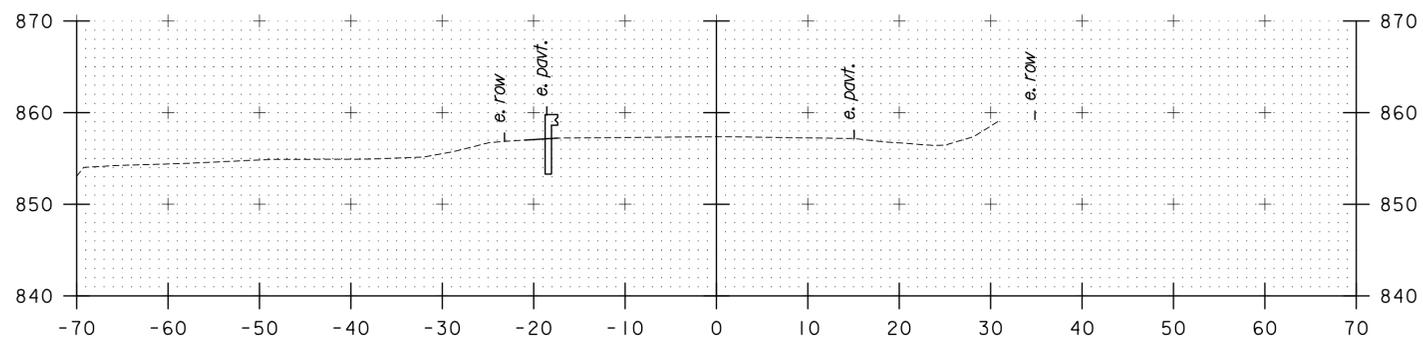
PROJECT NAME: BARTON VILLAGE
PROJECT NUMBER: BO 1449(33)

FILE NAME: z13j078xs2.dgn
PROJECT LEADER: J. OLUND
DESIGNED BY: B. TOOTHAKER
VT16 CROSS SECTIONS 1

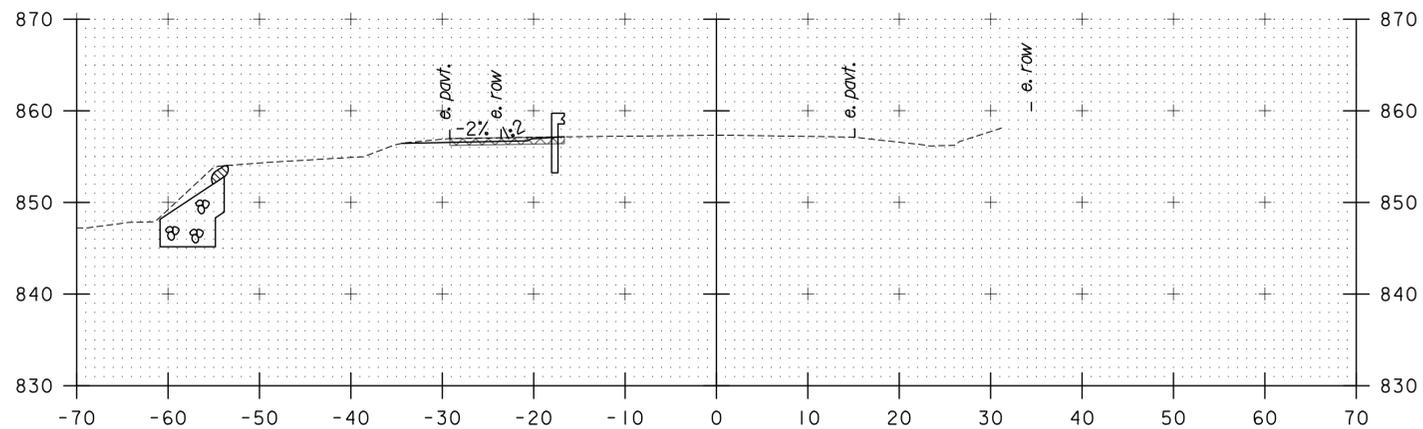
PLOT DATE: 10/27/2014
DRAWN BY: B. TOOTHAKER
CHECKED BY: J. HOWE
SHEET 24 OF 35



63+00
LIMIT OF WORK STA 62+90.28



62+75



62+50

STA. 62+50 TO STA. 63+00

NOTES: WATER AND SEWER LINES BELOW
VT 16 RIGHT DITCH NOT SHOWN.

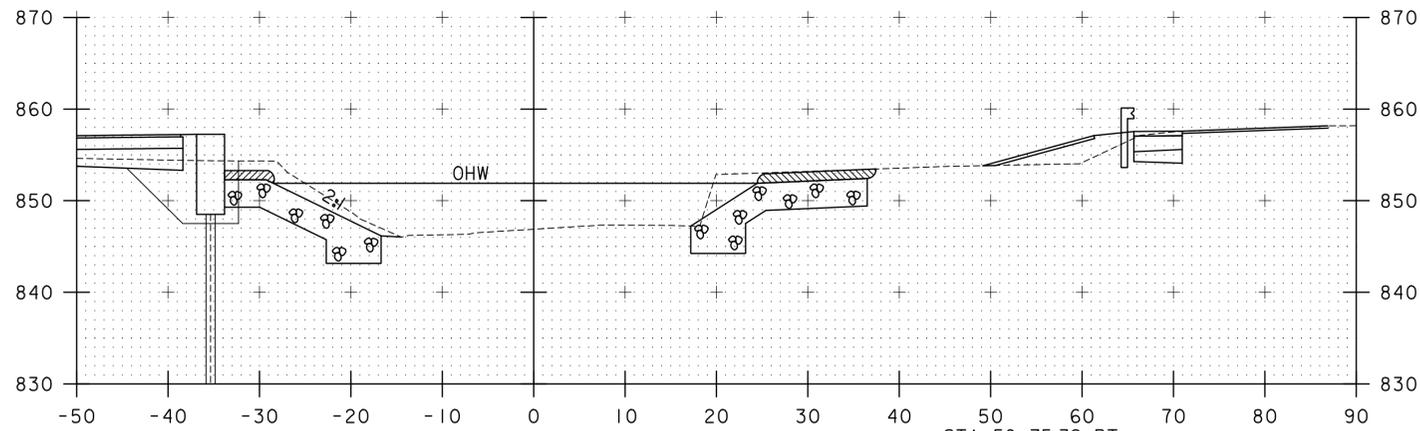
FOR REVIEW ONLY
NOT FOR CONSTRUCTION

TYLINTERNATIONAL

PROJECT NAME: BARTON VILLAGE
PROJECT NUMBER: BO 1449(33)

FILE NAME: z\3\078xs2.dgn
PROJECT LEADER: J. OLUND
DESIGNED BY: B. TOOTHAKER
VT16 CROSS SECTIONS 2

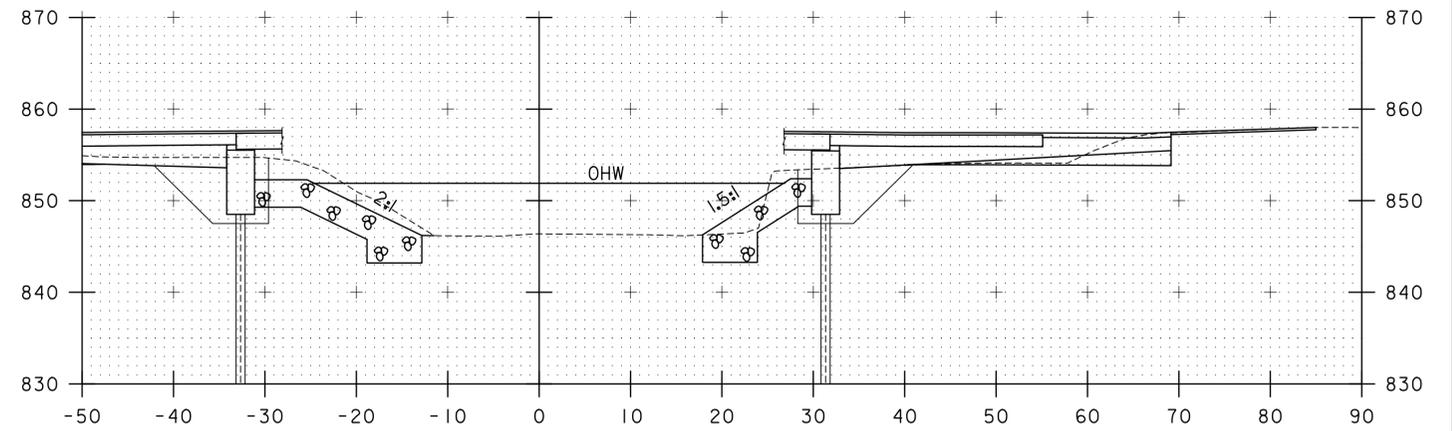
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DRAWN BY: B. TOOTHAKER
CHECKED BY: J. HOWE
SHEET 25 OF 35



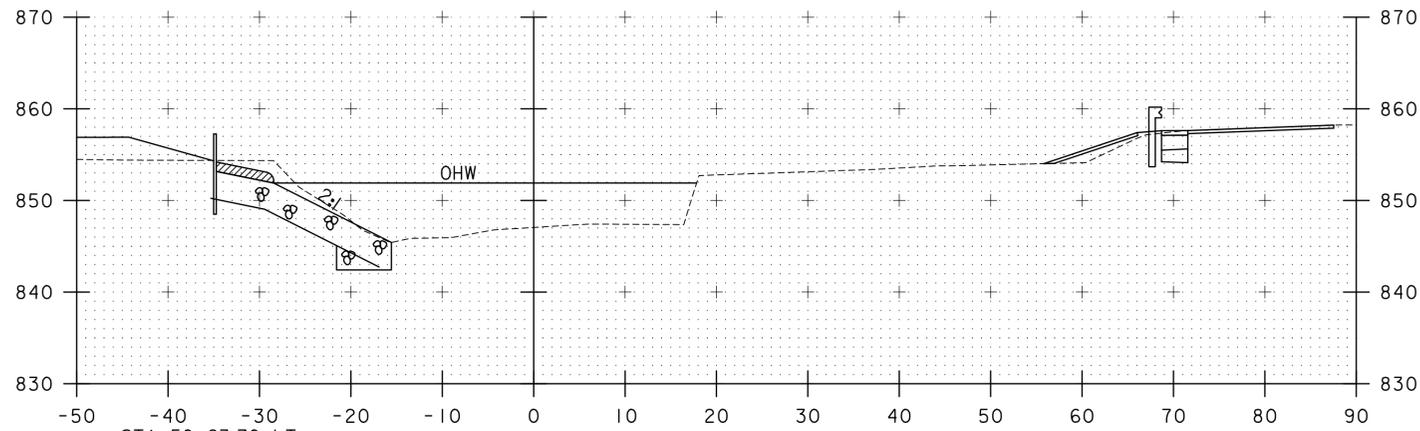
NO GRUBBING MATERIAL BENEATH SUPERSTRUCTURE

50+80

STA 50+75.39, RT
 BEGIN UNCLASSIFIED CHANNEL EXCAVATION
 BEGIN GEOTEXTILE UNDER STONE FILL
 BEGIN STONE FILL, TYPE III
 BEGIN GRUBBING MATERIAL

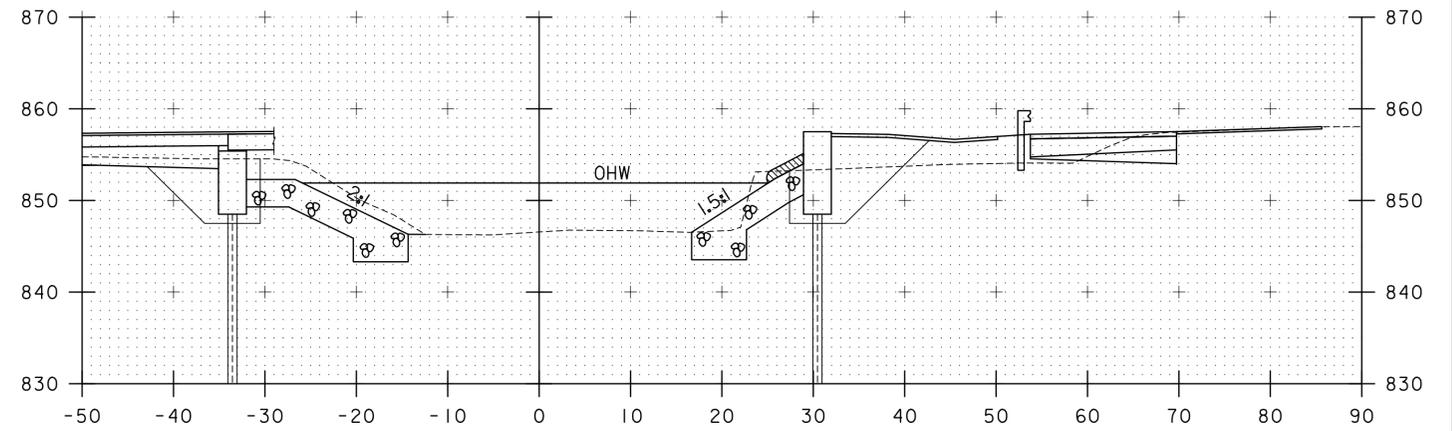


50+95



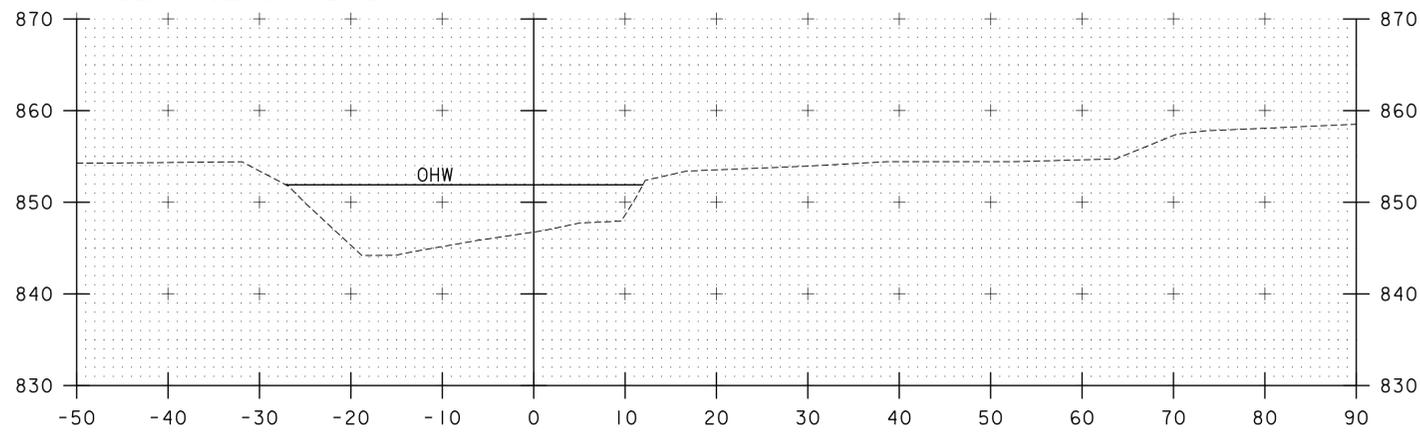
STA 50+63.70, LT
 BEGIN UNCLASSIFIED CHANNEL EXCAVATION
 BEGIN GEOTEXTILE UNDER STONE FILL
 BEGIN STONE FILL, TYPE III
 BEGIN GRUBBING MATERIAL

50+75

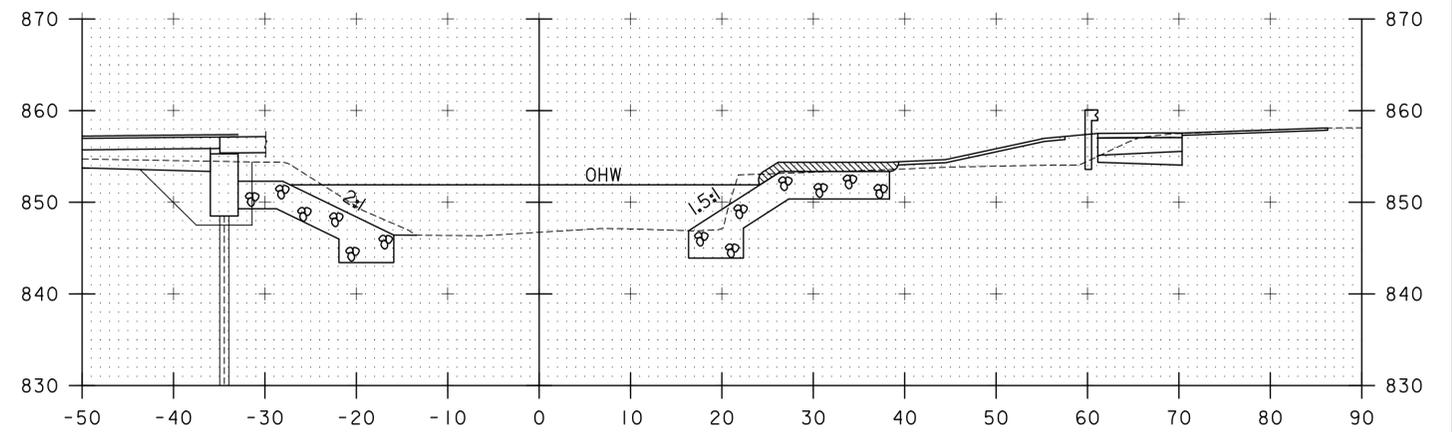


NO GRUBBING MATERIAL BENEATH SUPERSTRUCTURE

50+90



50+50



50+85

STA. 50+50 TO STA. 50+95

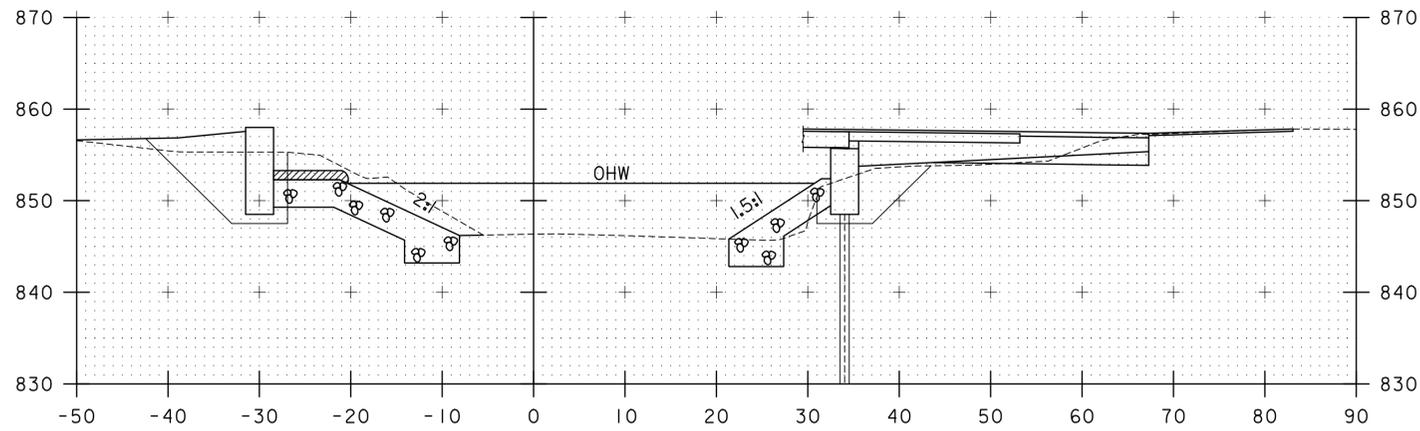
FOR REVIEW ONLY
 NOT FOR CONSTRUCTION

TYLINTERNATIONAL

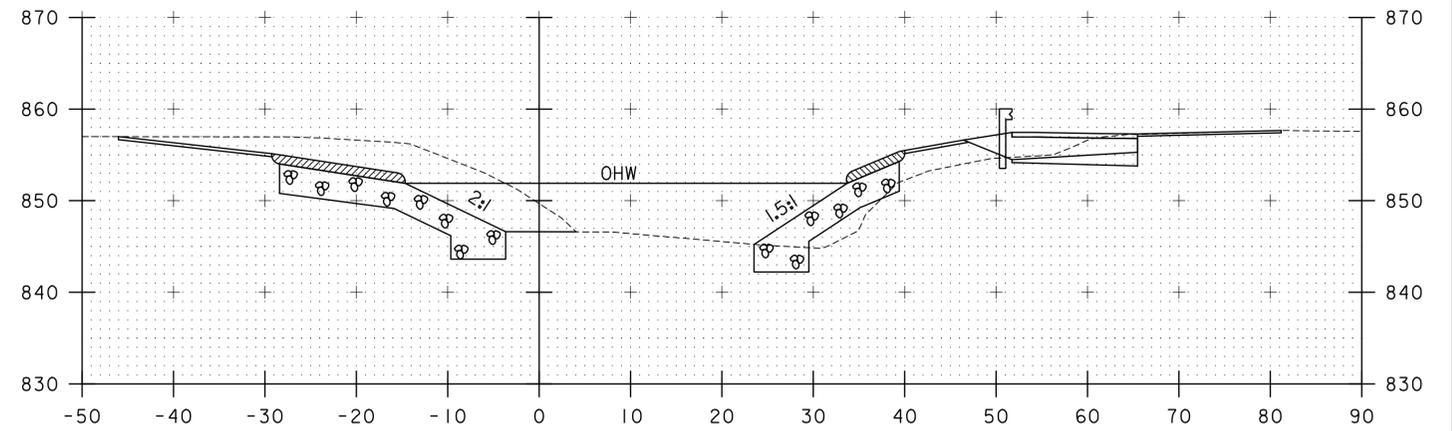
PROJECT NAME: BARTON VILLAGE
 PROJECT NUMBER: BO 1449(33)

FILE NAME: z13j078xschnl.dgn
 PROJECT LEADER: J. OLUND
 DESIGNED BY: B. TOOTHAKER
 CHANNEL CROSS SECTIONS 1

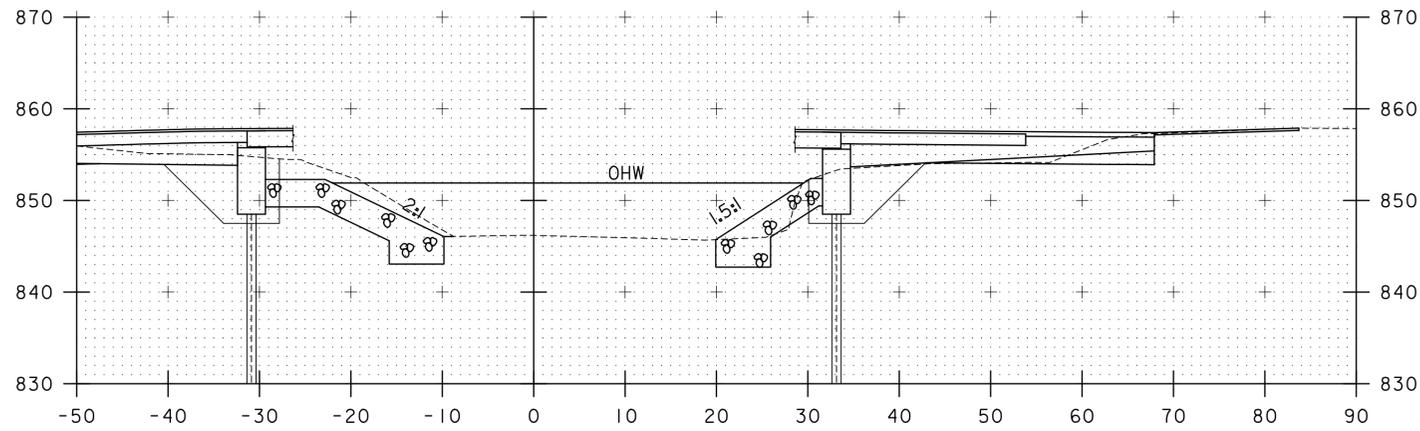
PLOT DATE: 10/27/2014
 DRAWN BY: J. OLUND
 CHECKED BY: T. POULIN
 SHEET 26 OF 35



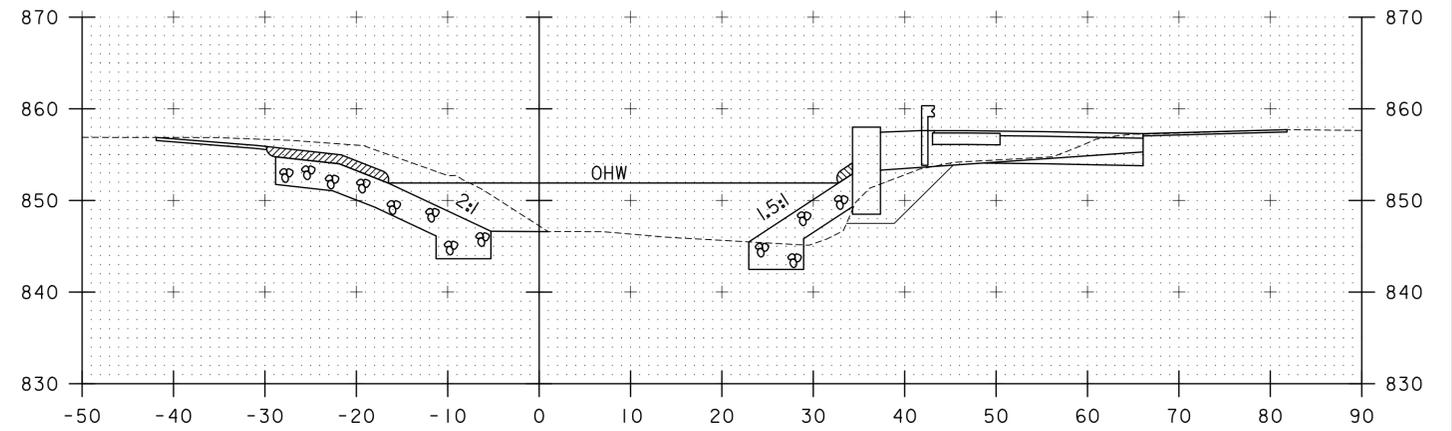
51+10



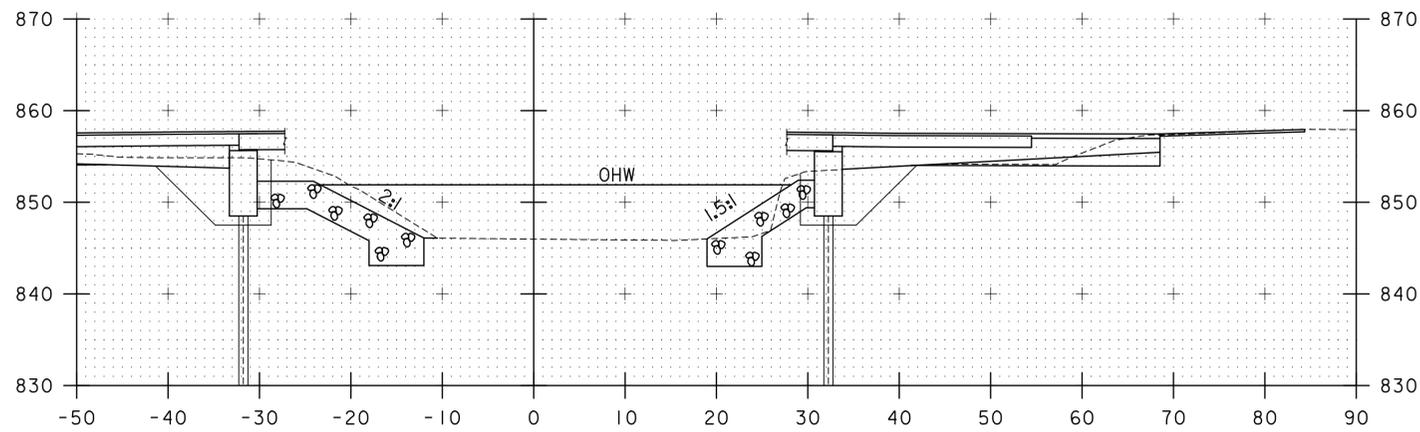
51+25



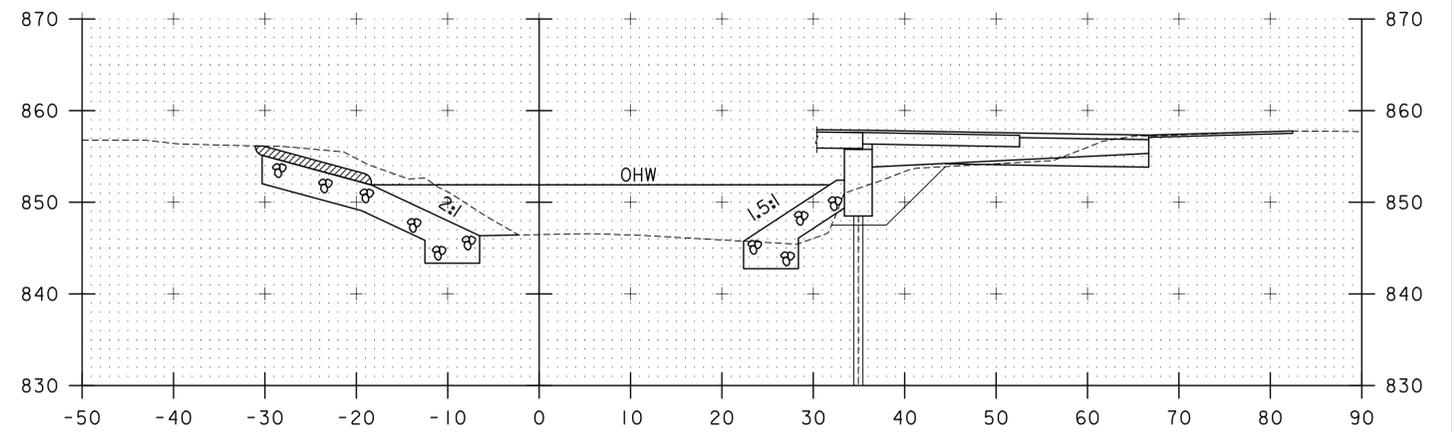
51+05



51+20



51+00



51+15

STA. 51+00 TO STA. 51+25

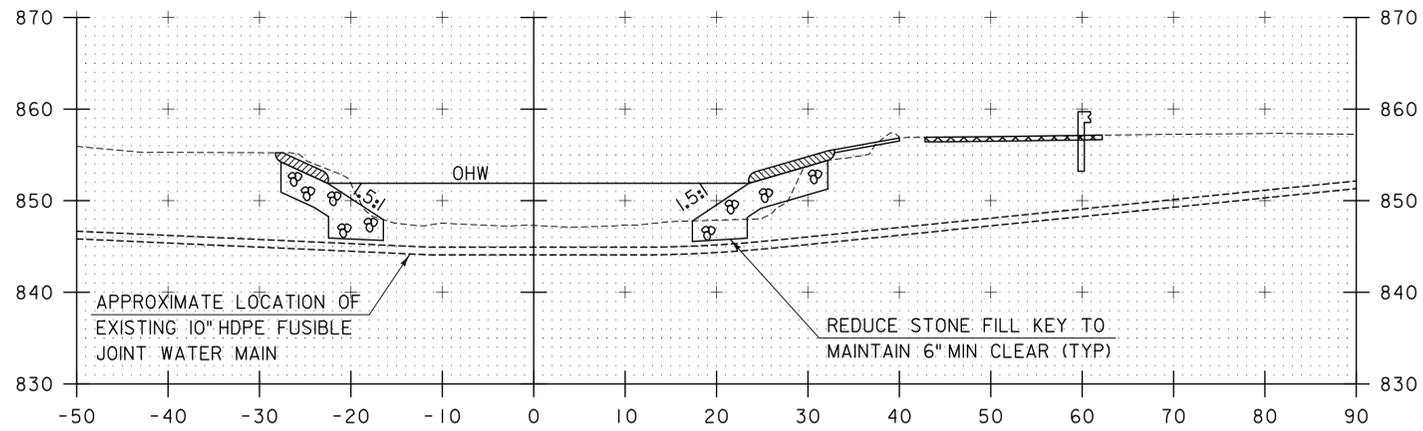
FOR REVIEW ONLY
NOT FOR CONSTRUCTION

TYLINTERNATIONAL

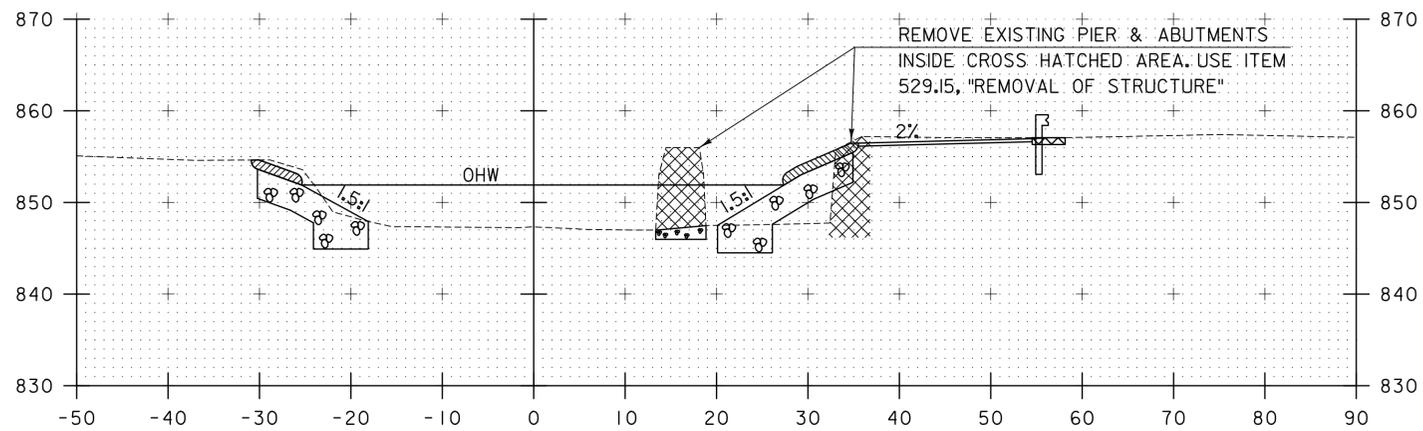
PROJECT NAME: BARTON VILLAGE
PROJECT NUMBER: BO 1449(33)

FILE NAME: z13j078xschnl.dgn
PROJECT LEADER: J. OLUND
DESIGNED BY: B. TOOTHAKER
CHANNEL CROSS SECTIONS 2

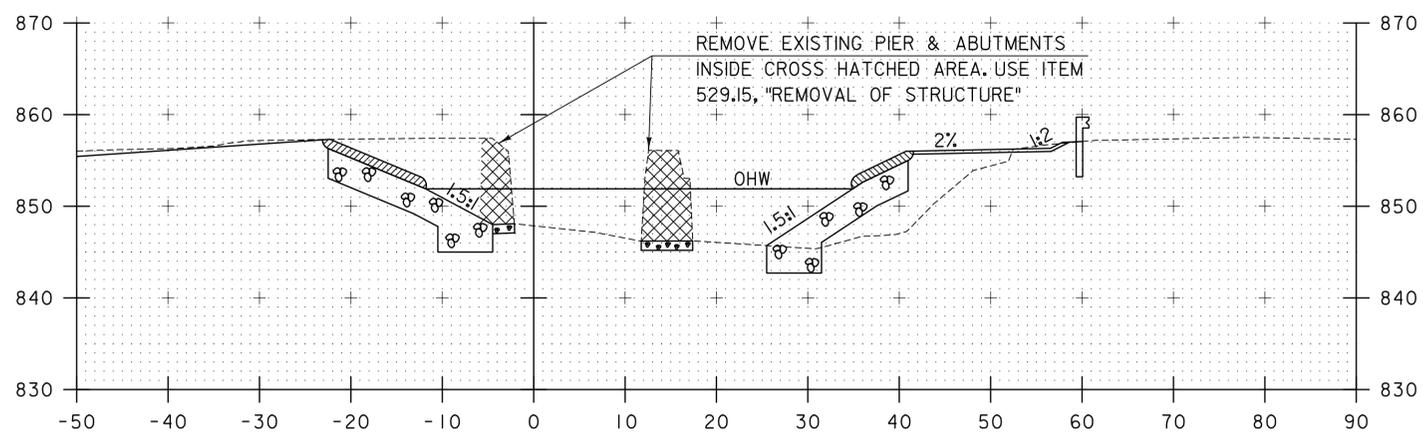
PLOT DATE: 10/27/2014
DRAWN BY: J. OLUND
CHECKED BY: T. POULIN
SHEET 27 OF 35



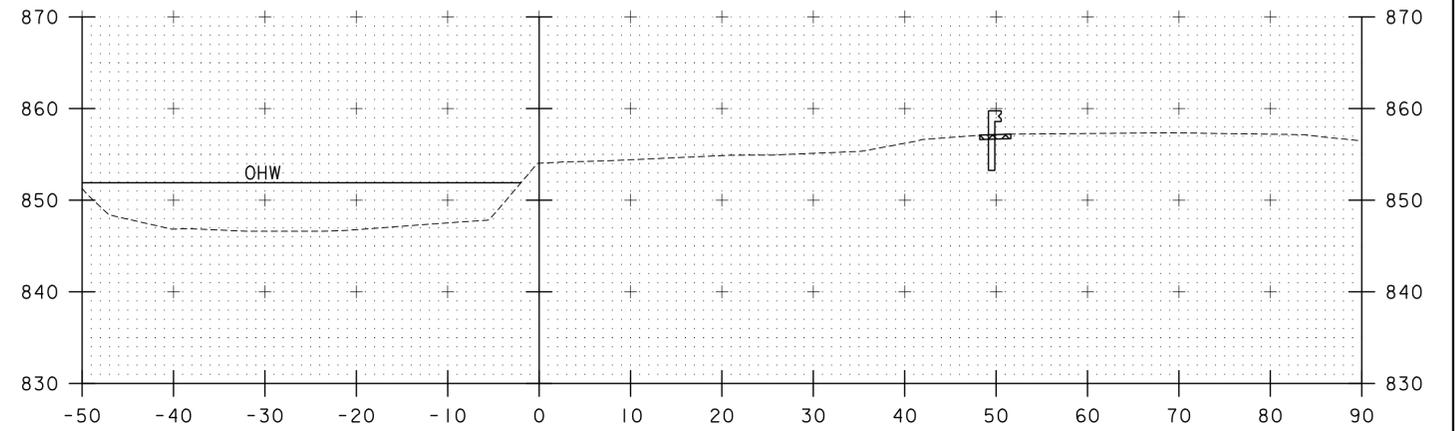
51+78.16
SKEWED SECTION



51+75

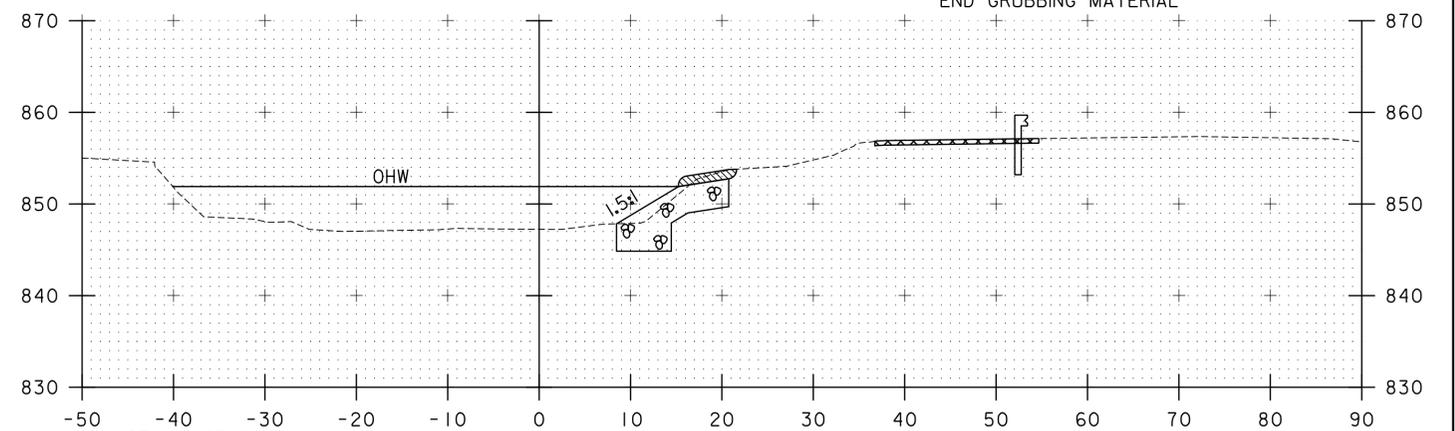


51+50



STA 52+04.73, RT
END UNCLASSIFIED CHANNEL EXCAVATION
END GEOTEXTILE UNDER STONE FILL
END STONE FILL, TYPE III
END GRUBBING MATERIAL

52+25



STA 51+83.I2, LT
END UNCLASSIFIED CHANNEL EXCAVATION
END GEOTEXTILE UNDER STONE FILL
END STONE FILL, TYPE III
END GRUBBING MATERIAL

52+00

STA. 51+50 TO STA. 52+25

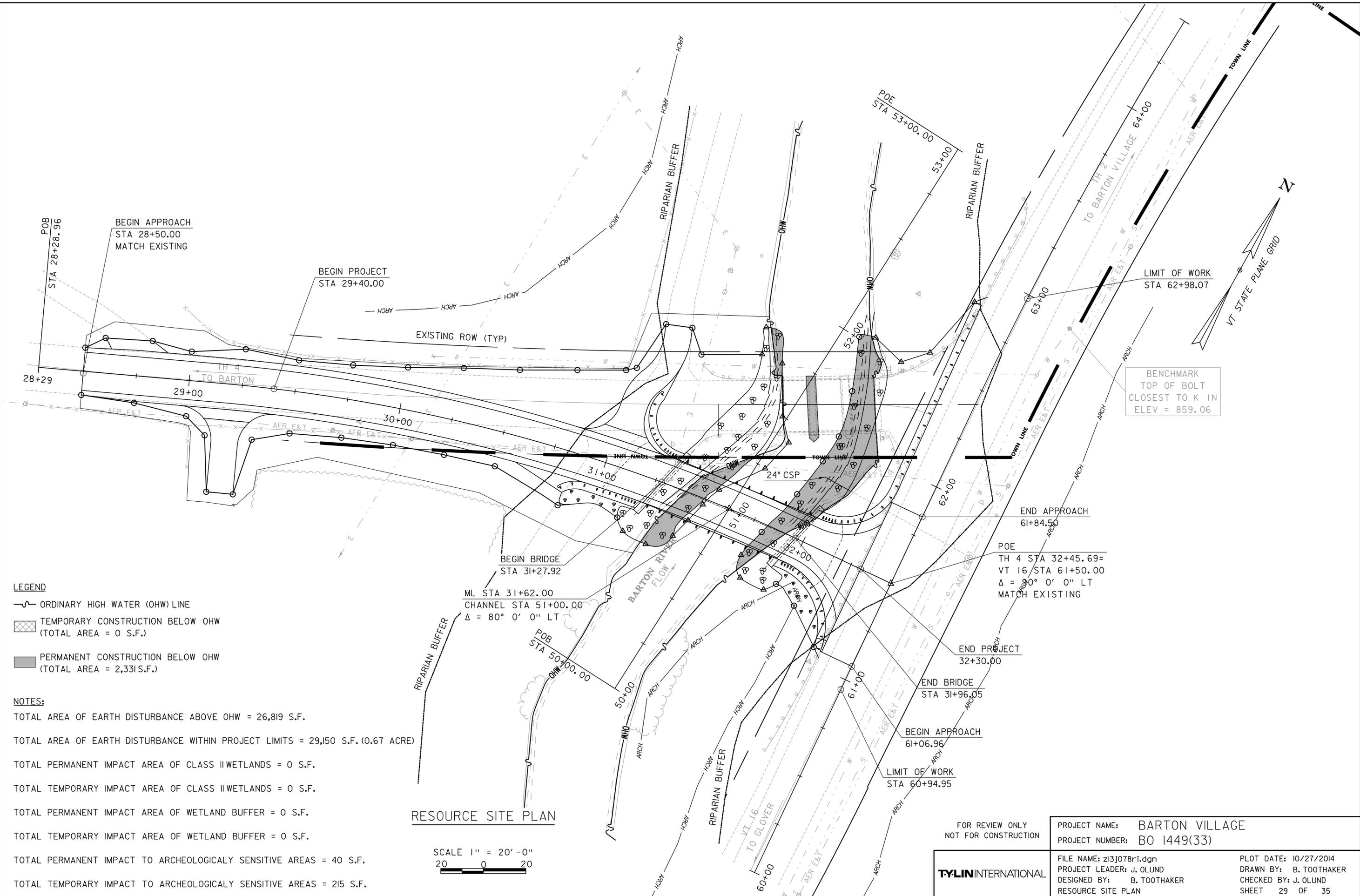
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NOT FOR CONSTRUCTION

TYLIN INTERNATIONAL

PROJECT NAME: BARTON VILLAGE
PROJECT NUMBER: BO 1449(33)

FILE NAME: z13j078xschnl.dgn
PROJECT LEADER: J. OLUND
DESIGNED BY: B. TOOTHAKER
CHANNEL CROSS SECTIONS 3

PLOT DATE: 10/27/2014
DRAWN BY: J. OLUND
CHECKED BY: T. POULIN
SHEET 28 OF 35



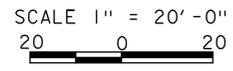
LEGEND

- ORDINARY HIGH WATER (OHW) LINE
- ▨ TEMPORARY CONSTRUCTION BELOW OHW (TOTAL AREA = 0 S.F.)
- PERMANENT CONSTRUCTION BELOW OHW (TOTAL AREA = 2,331 S.F.)

NOTES:

- TOTAL AREA OF EARTH DISTURBANCE ABOVE OHW = 26,819 S.F.
- TOTAL AREA OF EARTH DISTURBANCE WITHIN PROJECT LIMITS = 29,150 S.F. (0.67 ACRE)
- TOTAL PERMANENT IMPACT AREA OF CLASS II WETLANDS = 0 S.F.
- TOTAL TEMPORARY IMPACT AREA OF CLASS II WETLANDS = 0 S.F.
- TOTAL PERMANENT IMPACT AREA OF WETLAND BUFFER = 0 S.F.
- TOTAL TEMPORARY IMPACT AREA OF WETLAND BUFFER = 0 S.F.
- TOTAL PERMANENT IMPACT TO ARCHEOLOGICALLY SENSITIVE AREAS = 40 S.F.
- TOTAL TEMPORARY IMPACT TO ARCHEOLOGICALLY SENSITIVE AREAS = 215 S.F.

RESOURCE SITE PLAN



FOR REVIEW ONLY
NOT FOR CONSTRUCTION

TYLIN INTERNATIONAL

PROJECT NAME: BARTON VILLAGE	
PROJECT NUMBER: BO 1449(33)	
FILE NAME: z13j078r1.dgn	PLOT DATE: 10/27/2014
PROJECT LEADER: J. OLUND	DRAWN BY: B. TOOTHAKER
DESIGNED BY: B. TOOTHAKER	CHECKED BY: J. OLUND
RESOURCE SITE PLAN	SHEET 29 OF 35

EPSC PLAN NARRATIVE

1.1 PROJECT DESCRIPTION

THIS PROJECT INVOLVES THE REPLACEMENT OF BRIDGE 58 ON TH-4 IN BARTON VILLAGE. BRIDGE 58 WILL BE REPLACED WITH EIGHT, 21 INCH DEEP PRE-STRESSED CONCRETE SOLID SLABS, SPANNING 66 FEET OVER THE BARTON RIVER, ON NEW ABUTMENTS ON A NEW ALIGNMENT. BRIDGE 58 IS APPROXIMATELY 50 FT WEST OF THE INTERSECTION OF ROARING BROOK RD (TH-4) AND GLOVER RD (TH-2). WORK WILL INVOLVE REMOVAL OF EXISTING BRIDGE STRUCTURE, CONSTRUCTION OF NEW ABUTMENTS AND CONSTRUCTION OF BRIDGE SUPERSTRUCTURE. BRIDGE REPLACEMENT WILL INCLUDE TEMPORARY DETOUR, CHANNEL RECONSTRUCTION, AND APPROACH WORK.

NOTE: AREA OF DISTURBANCE INCLUDES LIMITS OF EARTH DISTURBANCE WITHIN THE PROJECT AREA AS SHOWN ON THE ATTACHED EPSC PLAN. THE AREA OF DISTURBANCE DOES NOT INCLUDE WASTE, BORROW OR STAGING AREAS. THE CONTRACTOR IS RESPONSIBLE FOR WASTE, BORROW, AND STAGING AREAS, AS WELL AS THE MATERIAL STOCKPILE, REFUELING AND MAINTENANCE AREAS. A MAP SHALL BE ATTACHED IF NECESSARY.

TOTAL AREA OF DISTURBANCE AS SHOWN ON THE ATTACHED EPSC PLAN IS APPROXIMATELY 0.67 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 GENERALLY FLAT GROUND IN FARMLAND. TH-4 GENERALLY RUNS WEST TO EAST. ALL TOWN HIGHWAY ROADS WITHIN OR NEAR THE PROJECT LIMITS ARE BITUMINOUS CONCRETE.

WITHIN THE PROJECT SITE ALONG ROARING BROOK RD (TH-4), THERE ARE THREE GRAVEL DRIVES. THERE ARE NO RESIDENCES OR STRUCTURES ON EITHER SIDE OF THE STREET. LAND IMMEDIATELY ADJACENT TO THE PROJECT IS PASTURE AND/OR FARMLAND.

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

THE BARTON RIVER IS THE ONLY WATER SOURCE ON THE PROJECT. THE OUTLET IS CLASSIFIED AS SINUOUS, AND INCISED. THE STREAM BED CONSISTS OF SMALL GRAVEL, FINE SAND, AND SILT. THE DRAINAGE AREA IS 36.7 SQUARE MILES. THERE IS ONE DROP INLET ON VT-16, WHICH DRAINS INTO BARTON RIVER WITHIN THE PROJECT LIMITS - THE DROP INLET IS OUTSIDE OF PROJECT CONSTRUCTION LIMITS AND UPHILL OF THE ANTICIPATED CONSTRUCTION ACTIVITIES.

1.2.3 VEGETATION

THE VEGETATION IN THE PROJECT AREA CONSISTS OF GRASS AND BRUSH. THE IMPACT TO VEGETATION WILL BE LIMITED TO THAT WHICH IS DIRECTLY AFFECTED BY REPLACEMENT OF THE EXISTING BRIDGE. UPON PROJECT COMPLETION, THE CHANNEL WILL BE ARMORED WITH STONE FILL, TYPE III 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 ORLEANS, VERMONT. SOILS ON THE PROJECT SITE ARE: 33A MOOSILAUKE VERY FINE SANDY LOAM, 0% TO 3% SLOPES, "K FACTOR" = 0.24; 60A RUMNEY FINE SANDY LOAM, FREQUENTLY FLOODED, 0% - 2% SLOPES, "K FACTOR" = 0.28; AND 18D - BUCKLAND FINE SANDY LOAM, VERY STONY, 15-35% SLOPES, "K FACTOR" = 0.43.

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: YES (TWO AREAS - SEE EPSC - EXISTING CONDITIONS LAYOUT FOR LOCATIONS)
PRIME AGRICULTURAL LAND: NO
THREATENED AND ENDANGERED SPECIES: NO
WATER RESOURCE: BARTON RIVER
WETLANDS: NO

1.3 RISK EVALUATION

THIS PROJECT DOES NOT FALL UNDER THE JURISDICTION OF GENERAL PERMIT 3-9020 FOR STORMWATER RUNOFF FROM CONSTRUCTION SITES. SHOULD CHANGES PRIOR TO OR DURING CONSTRUCTION RESULT IN ONE OR MORE ACRES OF EARTH DISTURBANCE OR SHOULD THE PROJECT BECOME PART OF A LARGER PLAN OF DEVELOPMENT, 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.

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 CONTRACTORS 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 AND DETAIL SHEETS.

FILTER CURTAIN WILL BE INSTALLED AS PROPOSED ON THE EPSC PLAN AND DETAIL SHEETS.

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 DIVERSION MEASURES ARE NOT ANTICIPATED TO BE NEEDED.

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.

THE PROJECT AREA IS RELATIVELY FLAT; THEREFORE CHECK STRUCTURES ARE NOT ANTICIPATED TO BE NEEDED.

1.4.7 CONSTRUCT PERMANENT CONTROLS

PERMANENT STORMWATER TREATMENT DEVICES SHALL BE INSTALLED AS SHOWN ON THE PLANS.

SEED AND MULCH WILL BE USED AS PERMANENT CONTROLS TO STABILIZE EXPOSED SOIL. STONE FILL WILL BE USED TO STABILIZE THE SLOPES AND STREAMBED AROUND ABUTMENTS.

1.4.8 STABILIZE EXPOSED SOILS DURING CONSTRUCTION

ALL AREAS OF DISTURBANCE MUST HAVE TEMPORARY STABILIZATION IN PLACE WITHIN 48 HOURS OF DISTURBANCE.

BIODEGRADABLE EROSION CONTROL MATTING OR AN EQUIVALENT SHALL BE USED TO STABILIZE ALL SLOPES STEEPER THAN 1:3.

THE USE OF TEMPORARY EROSION MATTING IS NOT ANTICIPATED FOR THIS PROJECT.

THE USE OF SURFACE ROUGHENING IS NOT ANTICIPATED FOR THIS PROJECT.

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.

SHOULD EARTH DISTURBANCE BE PERFORMED OUTSIDE THE CONSTRUCTION SEASON, A WINTER EROSION AND SEDIMENT CONTROL PLAN DESCRIBING ALTERNATIVE STABILIZATION METHODS SHALL BE SUBMITTED TO THE ENGINEER PRIOR TO AUGUST 15 FOR APPROVAL.

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.

THE USE OF PERMANENT EROSION CONTROL MATTING IS NOT ANTICIPATED FOR THIS PROJECT.

1.4.11 DE-WATERING ACTIVITIES

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

TREATMENT OF DEWATERING COFFERDAM IS NOT ANTICIPATED.

1.4.12 INSPECT YOUR SITE

INSPECT THE PROJECT SITE BASED ON SPECIAL PROVISION REQUIREMENTS.

1.5 SEQUENCE AND STAGING

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

1.5.1 CONSTRUCTION SEQUENCE

1.5.2 OFF-SITE ACTIVITIES

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

WASTE, BORROW, AND STAGING AREAS MUST BE APPROVED BY THE VTRANS ENVIRONMENTAL SECTION.

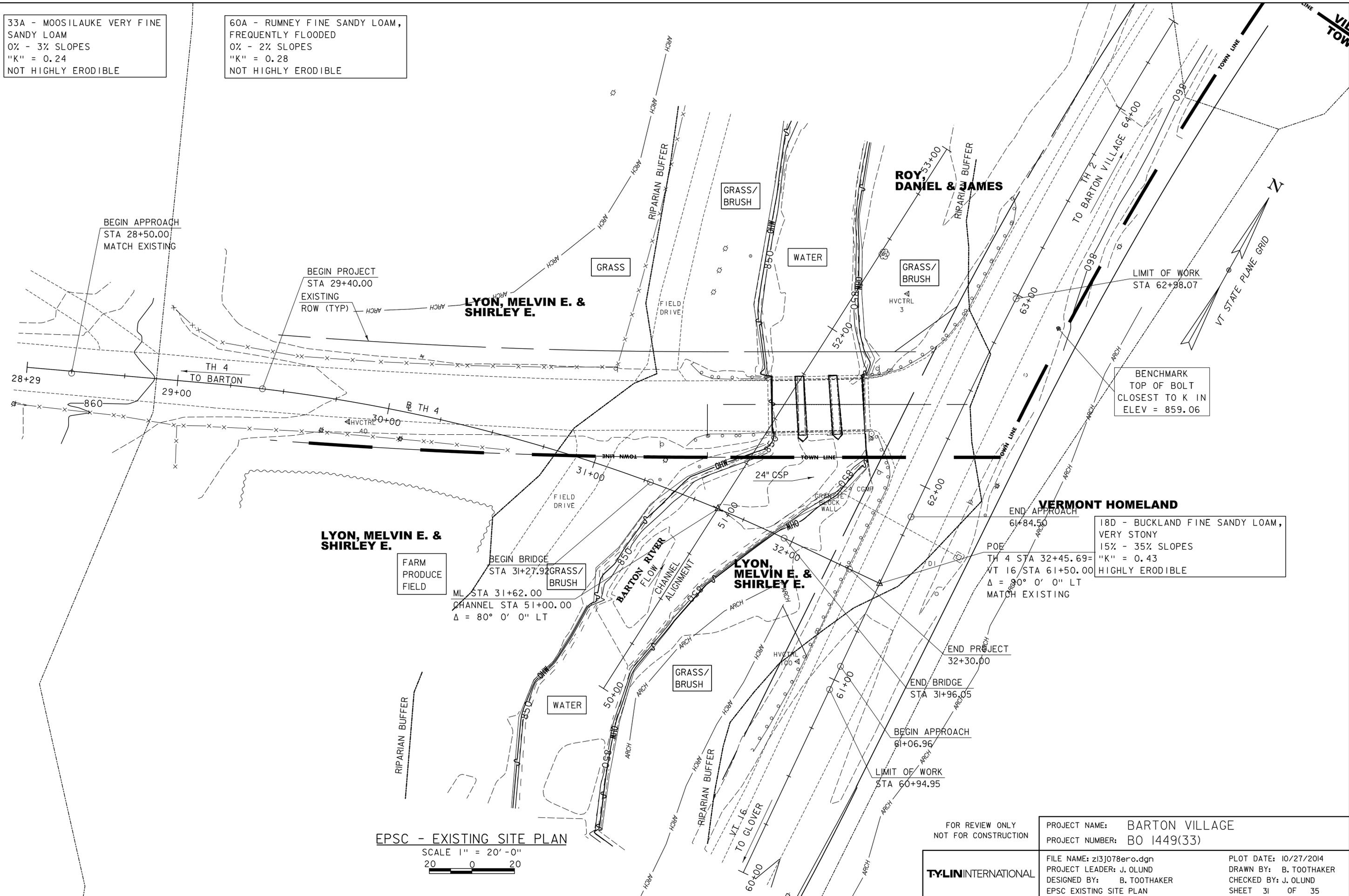
1.5.3 UPDATES

FOR REVIEW ONLY NOT FOR CONSTRUCTION	PROJECT NAME: BARTON VILLAGE	
	PROJECT NUMBER: BO 1449(33)	
TYLIN INTERNATIONAL	FILE NAME: z13j078epsonar.dgn	PLOT DATE: 10/27/2014
	PROJECT LEADER: J. OLUND	DRAWN BY: B. TOOTHAKER
	DESIGNED BY: B. TOOTHAKER	CHECKED BY: J. OLUND
	EPSC PLAN NARRATIVE	SHEET 30 OF 35

33A - MOOSILAUKE VERY FINE SANDY LOAM
 0% - 3% SLOPES
 "K" = 0.24
 NOT HIGHLY ERODIBLE

60A - RUMNEY FINE SANDY LOAM,
 FREQUENTLY FLOODED
 0% - 2% SLOPES
 "K" = 0.28
 NOT HIGHLY ERODIBLE

18D - BUCKLAND FINE SANDY LOAM,
 VERY STONY
 15% - 35% SLOPES
 "K" = 0.43
 HIGHLY ERODIBLE



BEGIN APPROACH
 STA 28+50.00
 MATCH EXISTING

BEGIN PROJECT
 STA 29+40.00
 EXISTING
 ROW (TYP)

LYON, MELVIN E. & SHIRLEY E.

ROY, DANIEL & JAMES

LIMIT OF WORK
 STA 62+98.07

BENCHMARK
 TOP OF BOLT
 CLOSEST TO K IN
 ELEV = 859.06

LYON, MELVIN E. & SHIRLEY E.

FARM
 PRODUCE
 FIELD

BEGIN BRIDGE
 STA 31+27.92
 ML STA 31+62.00
 CHANNEL STA 51+00.00
 $\Delta = 80^\circ 0' 0''$ LT

LYON, MELVIN E. & SHIRLEY E.

VERMONT HOMELAND

END APPROACH
 STA 61+84.50

POE
 TH 4 STA 32+45.69=
 VT 16 STA 61+50.00
 $\Delta = 80^\circ 0' 0''$ LT
 MATCH EXISTING

END PROJECT
 STA 32+30.00

END BRIDGE
 STA 31+96.05

BEGIN APPROACH
 STA 61+06.96

LIMIT OF WORK
 STA 60+94.95

EPSC - EXISTING SITE PLAN

SCALE 1" = 20'-0"
 20 0 20

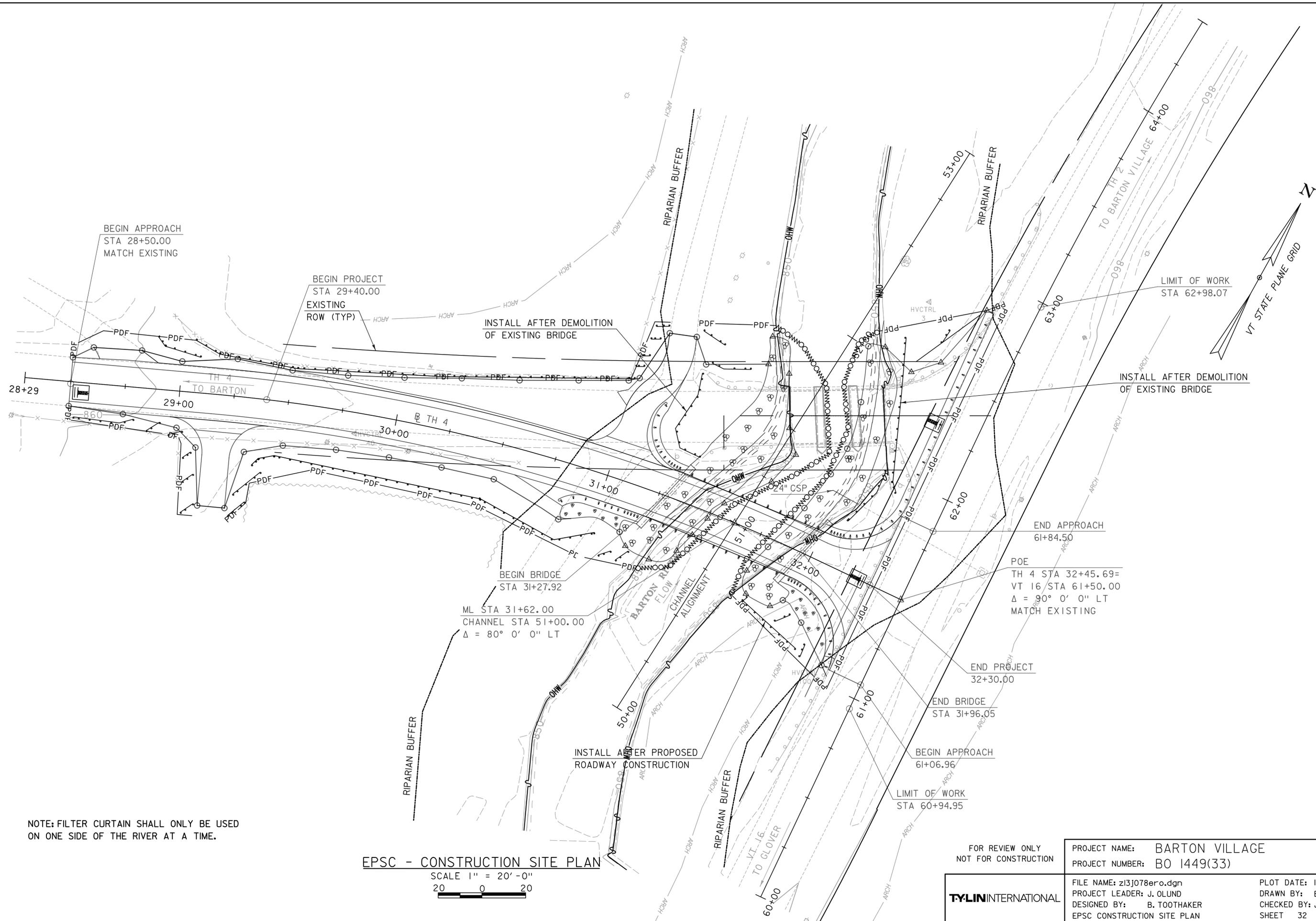
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PROJECT NAME: BARTON VILLAGE
 PROJECT NUMBER: BO 1449(33)

TYLIN INTERNATIONAL

FILE NAME: z13j078ero.dgn
 PROJECT LEADER: J. OLUND
 DESIGNED BY: B. TOOTHAKER
 EPSC EXISTING SITE PLAN

PLOT DATE: 10/27/2014
 DRAWN BY: B. TOOTHAKER
 CHECKED BY: J. OLUND
 SHEET 31 OF 35



NOTE: FILTER CURTAIN SHALL ONLY BE USED ON ONE SIDE OF THE RIVER AT A TIME.

EPSC - CONSTRUCTION SITE PLAN
 SCALE 1" = 20' - 0"
 20 0 20

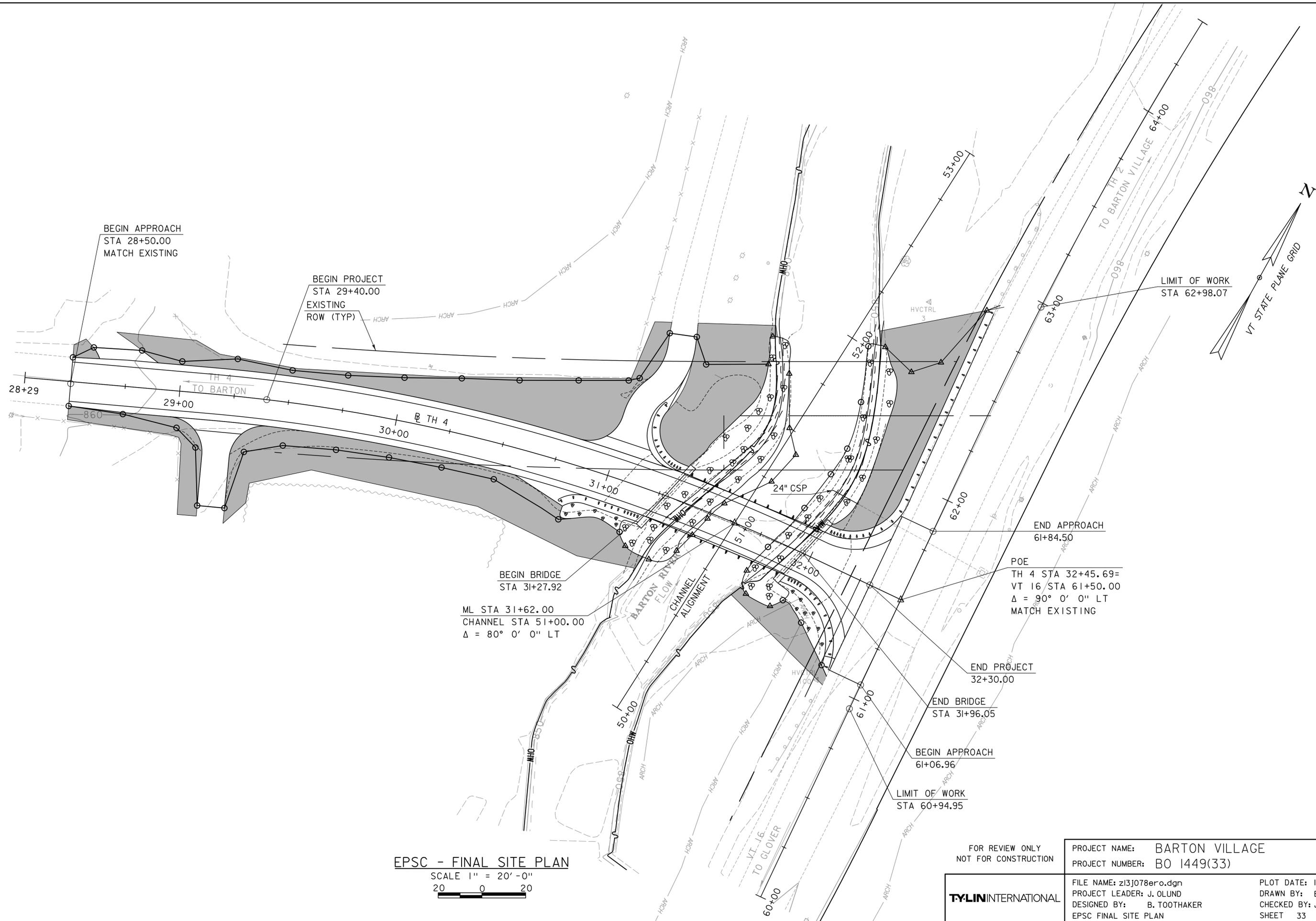
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 NOT FOR CONSTRUCTION

TYLIN INTERNATIONAL

PROJECT NAME: BARTON VILLAGE
 PROJECT NUMBER: BO 1449(33)

FILE NAME: z13j078ero.dgn
 PROJECT LEADER: J. OLUND
 DESIGNED BY: B. TOOTHAKER
 EPSC CONSTRUCTION SITE PLAN

PLOT DATE: 10/27/2014
 DRAWN BY: B. TOOTHAKER
 CHECKED BY: J. OLUND
 SHEET 32 OF 35



EPSC - FINAL SITE PLAN
 SCALE 1" = 20' - 0"
 20 0 20

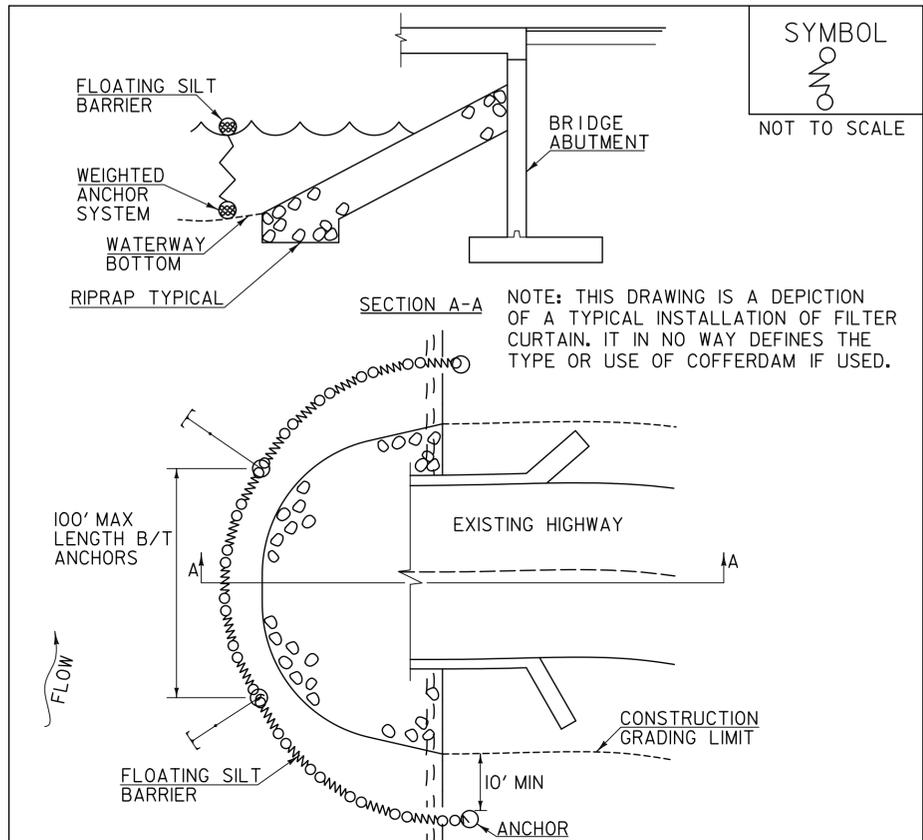
FOR REVIEW ONLY
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TYLIN INTERNATIONAL

PROJECT NAME: BARTON VILLAGE
 PROJECT NUMBER: BO 1449(33)

FILE NAME: z13j078ero.dgn
 PROJECT LEADER: J. OLUND
 DESIGNED BY: B. TOOTHAKER
 EPSC FINAL SITE PLAN

PLOT DATE: 10/27/2014
 DRAWN BY: B. TOOTHAKER
 CHECKED BY: J. OLUND
 SHEET 33 OF 35



SYMBOL

 NOT TO SCALE

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

CONSTRUCTION SPECIFICATIONS

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

FILTER CURTAIN

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 649.6).

VAOT RURAL AREA MIX					
% WEIGHT	LBS/AC		NAME	GERM %	PURITY %
	BROADCAST	HYDROSEED			
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					
% WEIGHT	LBS/AC		NAME	GERM %	PURITY %
	BROADCAST	HYDROSEED			
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

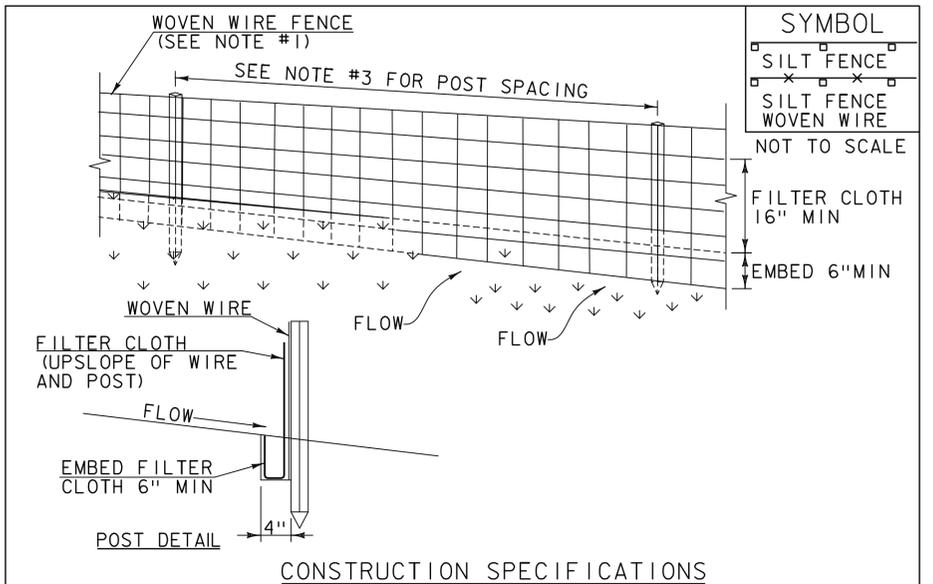
1. RURAL SEED MIX: USE AS INDICATED IN THE PLANS AND/OR FOR ALL ESTABLISHED UPLAND (NON WETLAND) AREAS DISTURBED BY THE CONTRACTOR.
2. URBAN SEED MIX: USE AS INDICATED IN THE PLANS AND/OR FOR ALL ESTABLISHED LAWN AREAS DISTURBED BY THE CONTRACTOR.
3. ALL SEED MIXTURES: SHALL NOT HAVE A WEED CONTENT EXCEEDING 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

THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 651 FOR SEED (PAY ITEM 651.15)

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



SYMBOL

 NOT TO SCALE

CONSTRUCTION SPECIFICATIONS

1. WOVEN WIRE REINFORCED FENCE IS REQUIRED WITHIN 100' UPSLOPE OF RECEIVING WATERS WHEN THE PROJECT FALLS UNDER A CONSTRUCTION STORMWATER PERMIT. WOVEN WIRE SHALL BE A MIN. 14 GAUGE WITH A 6" MAX. MESH OPENING.
2. FILTER CLOTH SHALL BE EITHER FILTER X, 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 649.5) 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

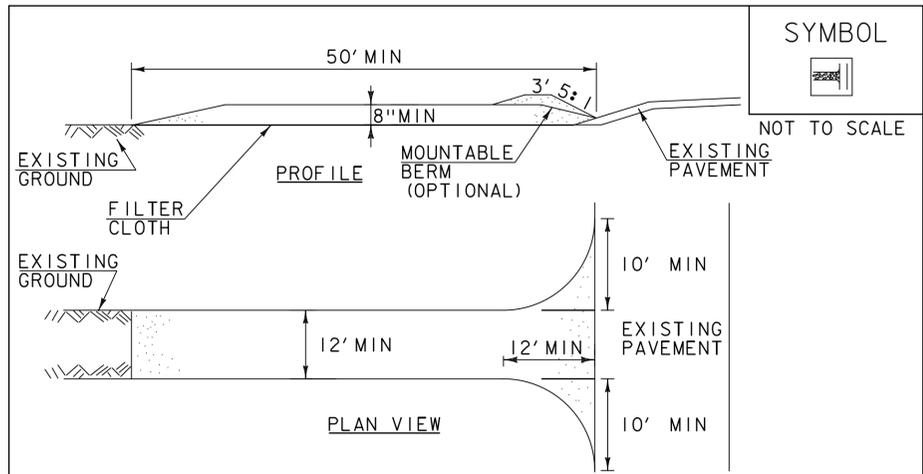
FOR REVIEW ONLY
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PROJECT NAME: BARTON VILLAGE
 PROJECT NUMBER: BO 1449(33)

TYLIN INTERNATIONAL

FILE NAME: z13j078epscode1.dgn
 PROJECT LEADER: J. OLUND
 DESIGNED BY: B. TOOTHAKER
 EPSC DETAIL SHEET 1

PLOT DATE: 10/27/2014
 DRAWN BY: B. TOOTHAKER
 CHECKED BY: J. OLUND
 SHEET 34 OF 35



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.

REVISIONS	
MARCH 24, 2008	WHF
JANUARY 13, 2009	WHF

THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH
SECTION 653 FOR VEHICLE TRACKING PAD (PAY ITEM 653.35)
OR AS SPECIFIED IN THE CONTRACT.

FOR REVIEW ONLY
NOT FOR CONSTRUCTION

PROJECT NAME: BARTON VILLAGE
PROJECT NUMBER: BO 1449(33)

TYLIN INTERNATIONAL

FILE NAME: z13j078epsdet.dgn
PROJECT LEADER: J. OLUND
DESIGNED BY: B. TOOTHAKER
EPSC DETAIL SHEET 2

PLOT DATE: 10/27/2014
DRAWN BY: B. TOOTHAKER
CHECKED BY: J. OLUND
SHEET 35 OF 35