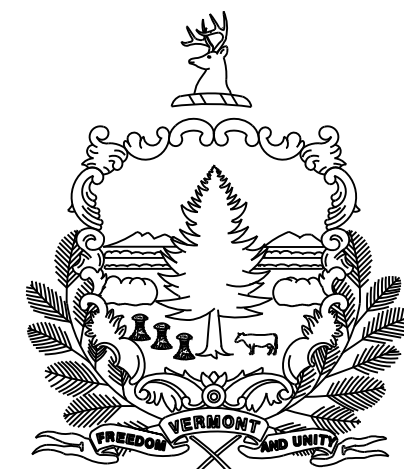
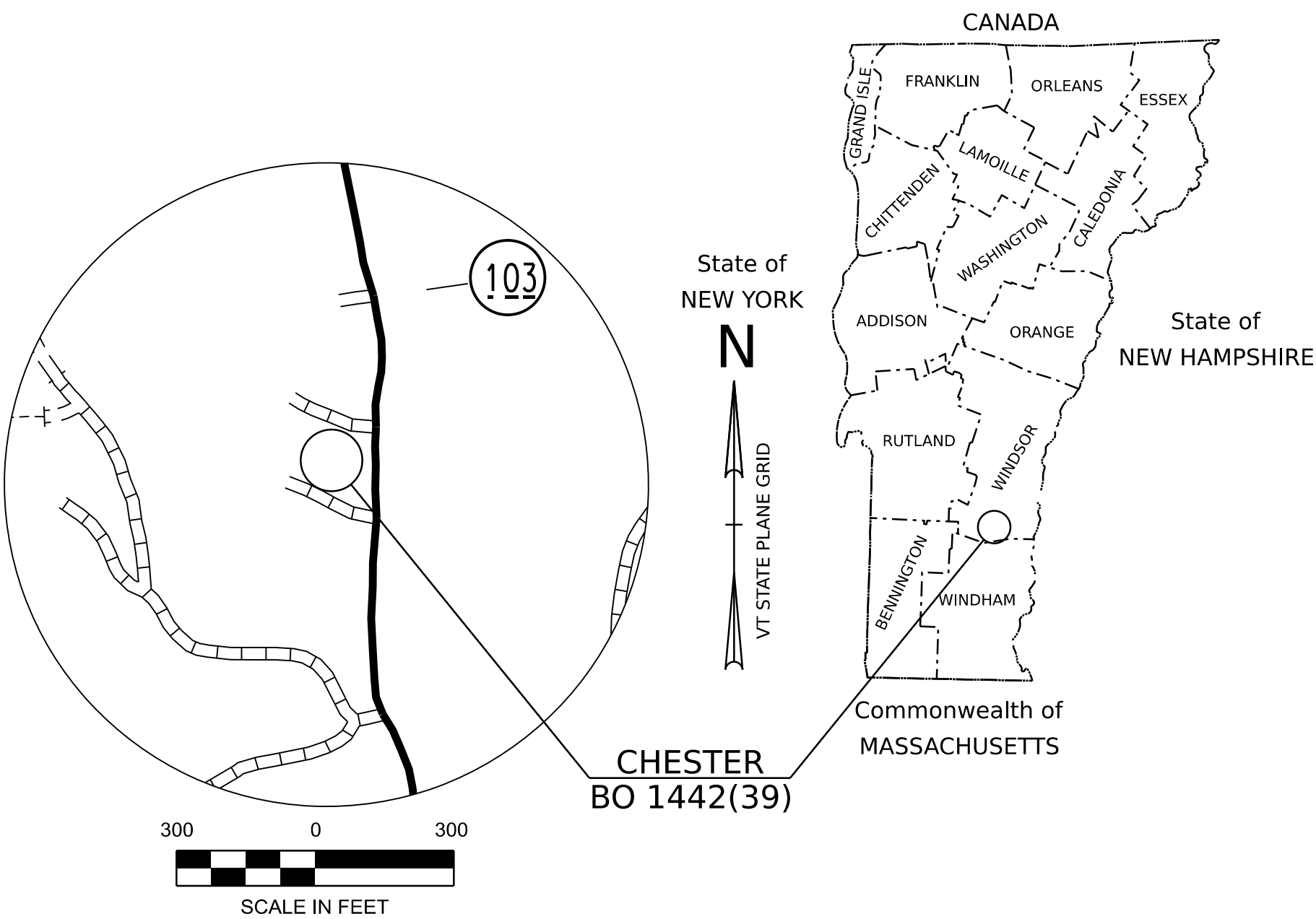


STATE OF VERMONT
AGENCY OF TRANSPORTATION



PROPOSED IMPROVEMENT
BRIDGE PROJECT

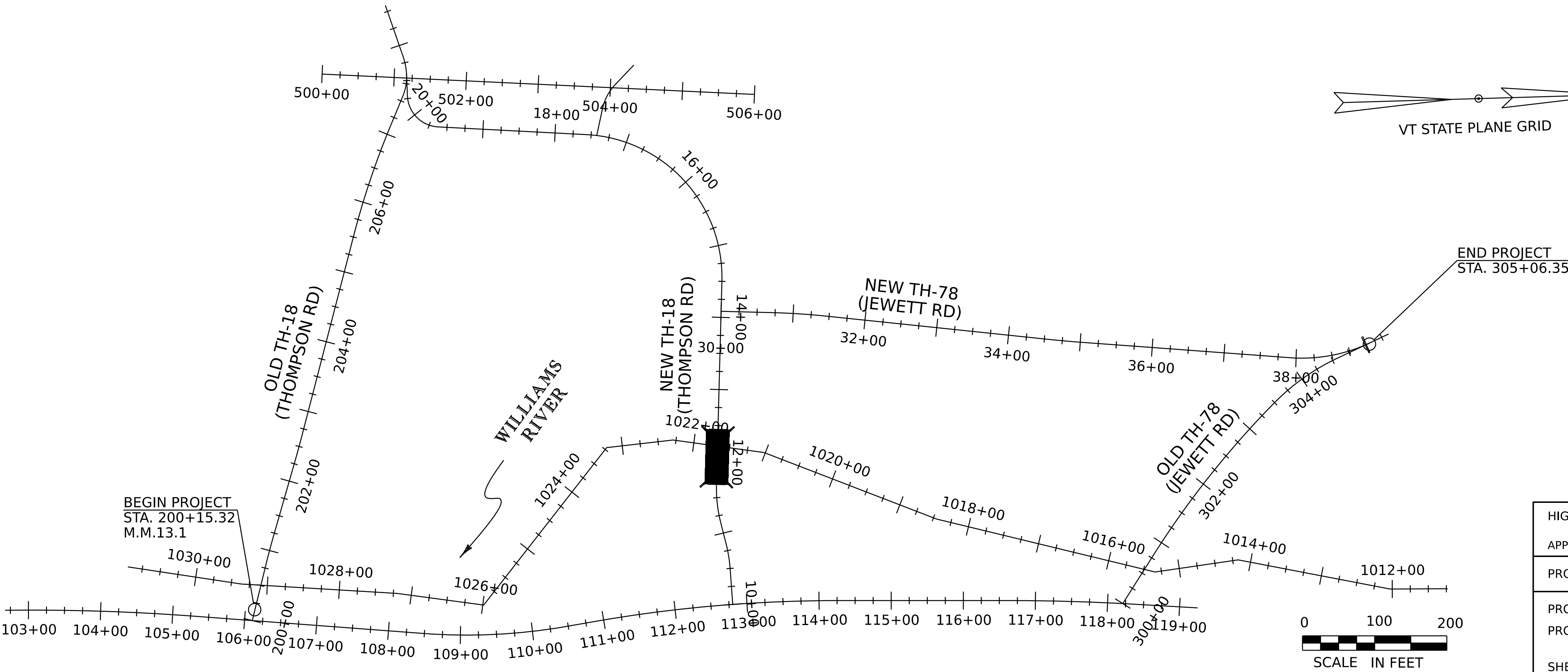
TOWN OF CHESTER
COUNTY OF WINDSOR
TOWN HIGHWAY 18 (THOMPSON ROAD)
BRIDGE NO. 62 OVER WILLIAMS RIVER



PROJECT LOCATION: IN THE TOWN OF CHESTER APPROXIMATELY 3.5 MILES NORTH OF THE INTERSECTION OF VT ROUTE 103 AND VT ROUTE 11 JUST WEST OF VT ROUTE 103 IN BETWEEN THE TH-18 (THOMPSON RD) AND TH-78 (JEWETT RD) JUNCTIONS.

PROJECT DESCRIPTION: THE PROJECT CONSISTS OF THE DEMOLITION OF TWO EXISTING BRIDGES THAT CROSS THE WILLIAMS RIVER IN THE TOWN OF CHESTER JUST WEST OF VERMONT ROUTE 103: BRIDGE No. 62, THOMPSON ROAD / TH-18, AND BRIDGE No. 72, JEWETT ROAD, THE CONSTRUCTION OF A SINGLE REPLACEMENT BRIDGE, THE CONSTRUCTION OF A NEW THOMPSON ROAD AND AN EXTENSION OF JEWETT ROAD TO CONNECT THE ROADWAYS ON THE WEST SIDE OF THE RIVER.

LENGTH OF STRUCTURE: 84.5 FEET
LENGTH OF ROADWAY: 1940.00 FEET
LENGTH OF PROJECT: 3090.00 FEET



CONSTRUCTION IS TO BE CARRIED ON IN ACCORDANCE WITH THESE PLANS AND THE STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2024, AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION ON JUNE 27, 2023 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 :	VTRANS
SURVEYED DATE :	OCTOBER 2015
DATUM	
VERTICAL	NAVD88
HORIZONTAL	NAD 83 (2011)

HIGHWAY DIVISION, CHIEF ENGINEER	
APPROVED _____	DATE _____
PROJECT MANAGER : ROBERT YOUNG, PE	
PROJECT NAME :	CHESTER
PROJECT NUMBER :	BO 1442(39)
SHEET 1 OF 11 SHEETS	

GENERAL INFORMATION

SYMBOLOLOGY LEGEND NOTE

THE SYMBOLOLOGY ON THIS SHEET IS INTENDED TO COVER STANDARD CONVENTIONAL SYMBOLOLOGY. THE SYMBOLOLOGY 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. SYMBOLOLOGY ON PLANS MAY VARY, PLAN ANNOTATIONS AND NOTES SHOULD BE USED TO CLARIFY AS NEEDED.

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

POINT	CODE	DESCRIPTION
	BF	BARRIER FENCE
	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
	PDF	PROJECT DEMARCATION FENCE
	R&RES	REMOVE & RESET
	R&REP	REMOVE & REPLACE
	R.T. & I.	RIGHT, TITLE, AND INTEREST
	SR	SLOPE RIGHT
	UE	UTILITY EASEMENT
	(P)	PERMANENT EASEMENT
	(T)	TEMPORARY EASEMENT
■	BNDNS	BOUND SET
▣	BNDNS	BOUND TO BE SET
◎	IPNF	IRON PIN FOUND
●	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	POST STONE/WOOD
RRSIG	RRSIG	RAILROAD SIGNAL
RRSL	RRSL	RAILROAD SWITCH LEVER
S	S	TREE SOFTWOOD
SAT	SAT	SATELLITE DISH
🌳	SHRUB	SHRUB
SIGN	SIGN	SIGN
STUMP	STUMP	STUMP
TEL	TEL	TELEPHONE POLE
TIE	TIE	TIE
TSIGN	TSIGN	SIGN W/DOUBLE POST
VCTRL	VCTRL	CONTROL VERTICAL
WELL	WELL	WELL
WSO	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 RADIUS OF
T	CURVE TANGENT LENGTH
L	CURVE LENGTH OF
E	CURVE EXTERNAL DISTANCE
CB	CHORD BEARING

UTILITY SYMBOLOLOGY

UNDERGROUND UTILITIES

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

ABOVE GROUND UTILITIES (AERIAL)

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

PROJECT CONSTRUCTION SYMBOLOLOGY

PROJECT DESIGN & LAYOUT SYMBOLOLOGY

- - - - - CZ - - - - -	CLEAR ZONE
—————	PLAN LAYOUT MATCHLINE

PROJECT CONSTRUCTION FEATURES

▲ —▲—▲—▲	TOP OF CUT SLOPE
○ —○—○—○	TOE OF FILL SLOPE
⊗ ⊗ ⊗ ⊗ ⊗	STONE FILL
- - - - -	BOTTOM OF DITCH L C
- - - - -	CULVERT PROPOSED
- - - - -	STRUCTURE SUBSURFACE
PDF ——— PDF ———	PROJECT DEMARCATION FENCE
BF — x — x — x — BF — x — x —	BARRIER FENCE
xxxxxxxxxxxxxxxxxxxxxxxx	TREE PROTECTION ZONE (TPZ)
//////////	STRIPING LINE REMOVAL
~~~~~	SHEET PILES

CONVENTIONAL BOUNDARY SYMBOLOLOGY

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
+ ——— + ——— +	PROPERTY LINE (P/L)
— P ——— — P ———	
— L ——— — L ———	
▲ — SR —○— SR —▲ — SR —○—	SLOPE RIGHTS
6f ——— 6f ———	6F PROPERTY BOUNDARY
4f ——— 4f ———	4F PROPERTY BOUNDARY
HAZ ——— HAZ ———	HAZARDOUS WASTE

EPSC LAYOUT PLAN SYMBOLOLOGY

EPSC MEASURES

ONNOONNOONNO	IN-WATER SEDIMENT ISOLATION MEASURES
—————	SILT FENCE, TYPE I
— x — x — x — x — x —	SILT FENCE, TYPE II
▶ —▶—▶—	CHECK DAM
▣	DISTURBED AREAS REQUIRING RE-VEGETATION
▣	EROSION MATTING

SEE EPSC DETAIL SHEETS FOR ADDITIONAL SYMBOLOLOGY

ENVIRONMENTAL RESOURCES

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

ARCHEOLOGICAL & HISTORIC

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

CONVENTIONAL TOPOGRAPHIC SYMBOLOLOGY

EXISTING FEATURES

—————	ROAD EDGE PAVEMENT
—————	ROAD EDGE GRAVEL
—————	DRIVEWAY EDGE
—————	DITCH
—————	FOUNDATION
x ——— x ——— x ——— x ———	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:	CHESTER
PROJECT NUMBER:	BO 1442(39)
FILE NAME:	z12j616legend.dgn
PROJECT LEADER:	A.P. GUYETTE
DESIGNED BY:	J.D. BACHIOCHI
CONVENTIONAL SYMBOLOLOGY LEGEND SHEET	
PLOT DATE:	6/20/2025
DRAWN BY:	T.D. BURT
CHECKED BY:	A.P. GUYETTE
SHEET	3 OF 11





GENERAL:

1.

ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE STATE OF VERMONT AGENCY OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION, DATED 2024, AND ITS LATEST REVISIONS, AND THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 9th EDITION.
2.

ALL DIMENSIONS ARE HORIZONTAL OR VERTICAL, AND ARE GIVEN AT 68 DEGREES FAHRENHEIT, UNLESS NOTED OTHERWISE.
3.

THE BRIDGE IS DESIGNED FOR HL-93 LIVE LOAD.
4.

THE EXISTING BRIDGES ON THOMPSON ROAD AND JEWETT ROAD CONTAIN STRUCTURAL STEEL. THE STRUCTURAL STEEL MAY BE PAINTED WITH A MATERIAL WHICH CONTAINS LEAD OR OTHER HEAVY METALS. THE CONTRACTOR SHALL FOLLOW ALL APPLICABLE REGULATIONS WHEN HANDLING AND WORKING WITH THIS STEEL. THE REMOVED STRUCTURAL STEEL IS THE PROPERTY OF THE CONTRACTOR. THE CONTRACTOR SHALL INDEMNIFY AND HOLD THE STATE, ITS OFFICERS AND EMPLOYEES HARMLESS CONCERNING THE CONTRACTOR'S USE OR DISPOSITION OF THE REMOVED EXISTING STRUCTURAL STEEL.
5.

REMOVAL OF THE EXISTING BRIDGE ON THOMPSON ROAD WILL BE PAID FOR UNDER ITEM 529.1500 "REMOVAL OF STRUCTURE (THOMPSON ROAD)". THIS WORK WILL INCLUDE THE COMPLETE REMOVAL, DISASSEMBLY, AND DELIVERY OF THE TEMPORARY BRIDGE AS DEFINED IN THE SPECIAL PROVISIONS. THIS WORK WILL ALSO INCLUDE THE COMPLETE REMOVAL AND DISPOSAL OF THE EXISTING BRIDGE SUPERSTRUCTURE, INCLUDING ALL BRIDGE RAILINGS, BEARINGS, ANCHOR BOLTS, AND APPROACH SLABS, AS WELL AS EXISTING BRIDGE SUBSTRUCTURES UNLESS THEY ARE TO BE REMOVED UNDER OTHER EXCAVATION ITEMS, TO A DEPTH A MINIMUM OF 2 -0" BELOW FINISHED GRADE.
6.

REMOVAL OF THE EXISTING BRIDGE ON JEWETT ROAD WILL BE PAID FOR UNDER ITEM 529.1500 "REMOVAL OF STRUCTURE (JEWETT ROAD)". THIS WORK WILL INCLUDE THE COMPLETE REMOVAL AND DISPOSAL OF THE EXISTING BRIDGE SUPERSTRUCTURE, INCLUDING ALL BRIDGE RAILINGS, BEARINGS, ANCHOR BOLTS, AND APPROACH SLABS, AS WELL AS EXISTING BRIDGE SUBSTRUCTURES UNLESS THEY ARE TO BE REMOVED UNDER OTHER EXCAVATION ITEMS, TO A DEPTH A MINIMUM OF 2 -0" BELOW FINISHED GRADE.
7.

MAILBOXES AT THE END OF THE CURRENT THOMPSON ROAD AND THE END OF JEWETT ROAD SHALL BE RELOCATED TO THE NEW INTERSECTION OF THOMPSON ROAD AND VT-103.
8.

THIS PROJECT HAS BEEN PERMITTED TO DISCHARGE STORMWATER UNDER GENERAL PERMIT 3-9050. THE FOLLOWING STORMWATER TREATMENT PRACTICES SHALL NOT BE MODIFIED.

A.

GRAVEL WETLAND, STA 15+30 RT TO STA 16+50 RT.

TRAFFIC CONTROL:

9.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN AND IMPLEMENTATION OF A SITE-SPECIFIC TRAFFIC CONTROL PLAN FOR ALL STAGES OF CONSTRUCTION INCLUSIVE OF WORK ON THE CURRENT AND PROPOSED THOMPSON ROAD, THE CURRENT AND PROPOSED JEWETT ROAD, AND VERMONT ROUTE 103. THE CONTRACTOR SHALL SUBMIT A DETAILED TRAFFIC CONTROL PLAN TO THE ENGINEER FOR ALL STAGES OF CONSTRUCTION FOR APPROVAL. ALL COSTS WILL BE INCLUDED IN ITEM 641.1100, "TRAFFIC CONTROL, ALL-INCLUSIVE".
10.

ALL ITEMS REQUIRED TO IMPLEMENT THE CONTRACTOR'S TRAFFIC CONTROL PLAN THAT ARE NOT INCLUDED IN THE CONTRACT, WILL NOT BE PAID FOR DIRECTLY BUT WILL BE INCIDENTAL TO ITEM 641.1100, "TRAFFIC CONTROL, ALL-INCLUSIVE".

EARTHWORK:

11.

STONE FILL SHALL BE PLACED IN FRONT OF THE ABUTMENTS AS SHOWN ON THE PLANS BEFORE THE NEW PRESTRESSED NEXT BEAMS ARE SET.

CONCRETE:

12.

CONCRETE FOR THE RESPECTIVE STRUCTURAL ELEMENTS SHALL BE AS SPECIFIED IN THE TABLE ON THIS SHEET.

CONCRETE		REINFORCING STEEL	
STRUCTURAL ELEMENT:	CONTRACT ITEM:	TO MEET REQUIREMENTS OF:	PAYMENT TO BE INCLUDED IN:
BRIDGE DECK (INCLUDING FLANGE CONNECTIONS)	ITEM 501.3700, PERFORMANCE-BASED CONCRETE, CLASS PCD	LEVEL II (HOT DIPPED GALVANIZED OR CONTINUOUSLY GALVANIZED)	ITEM 507.1200, REINFORCING STEEL, LEVEL II
INTEGRAL ABUTMENT (ABOVE CONSTRUCTION JOINT)	ITEM 501.3700, PERFORMANCE-BASED CONCRETE, CLASS PCD	LEVEL II (HOT DIPPED GALVANIZED OR CONTINUOUSLY GALVANIZED)	ITEM 507.1200, REINFORCING STEEL, LEVEL II
INTEGRAL ABUTMENT (BELOW CONSTRUCTION JOINT)	ITEM 501.3800, PERFORMANCE-BASED CONCRETE, CLASS PCS	LEVEL II (HOT DIPPED GALVANIZED OR CONTINUOUSLY GALVANIZED)	ITEM 507.1200, REINFORCING STEEL, LEVEL II

13.

JOINTS AND SCORE MARKS IN CONCRETE SHALL BE CONSTRUCTED AS INDICATED IN THE MODEL, STD. S-500, OR AS DIRECTED BY THE ENGINEER.
14.

ALL EXPOSED EDGES SHALL HAVE A 1" X 1" CHAMFER UNLESS OTHERWISE NOTED.
15.

ITEM 514.1000, "WATER REPELLENT, SILANE", SHALL BE TYPE II SILANE MEETING THE REQUIREMENTS OF SUBSECTION 726.10 AND SHALL BE APPLIED TO ALL EXPOSED CONCRETE ON THE BRIDGE SUPERSTRUCTURE AND SUBSTRUCTURE EXCEPT THE UNDERSIDE OF THE DECK BETWEEN THE DRIP NOTCHES.

REINFORCING STEEL

16.

REINFORCING STEEL FOR THE RESPECTIVE STRUCTURAL ELEMENTS SHALL BE AS SPECIFIED IN THE TABLE ON THIS SHEET.
17.

MINIMUM CLEAR COVER SHALL BE AS FOLLOWS, UNLESS OTHERWISE NOTED:

LOCATION

CLEAR COVER (INCHES)

BACK FACES OF WALLS AGAINST EARTH

2.0

TOP SURFACE OF DECK (FOLLOWING GRINDING)

3.0

BOTTOM SURFACE OF NEXT BEAM

1.5

ELSEWHERE, UNLESS OTHERWISE NOTED

3.0
18.

TEST BARS SHALL BE PROVIDED IN ACCORDANCE WITH THE "VERMONT AGENCY OF TRANSPORTATION MATERIAL SAMPLING MANUAL" AVAILABLE ON THE AGENCY WEBSITE. ALL COSTS ASSOCIATED WITH PROVIDING BARS FOR TESTING WILL BE CONSIDERED INCIDENTAL TO THE APPROPRIATE SECTION 507 ITEM.
19.

LAP LENGTHS PROVIDED ARE THE MINIMUM REQUIRED. EXCEPT WHERE NOTED AS CUT TO FIT, REINFORCING BAR LENGTHS ARE DETAILED FOR THE LAP TO VARY AT SLOPED AND STEPPED COMPONENTS.

20.

ALL REINFORCEMENT SHALL MEET THE REQUIREMENTS OF SECTION 507 FOR LEVEL II REINFORCING STEEL. PAYMENT FOR STEEL REINFORCEMENT IN NEXT E BEAMS WILL BE INCLUDED IN THE UNIT PRICE BID FOR CONTRACT ITEM 510.2700, PRESTRESSED CONCRETE NEXT E BEAMS.
21.

CUTTING AND REPAIRING DAMAGED AREAS OF COATED REINFORCING STEEL SHALL BE PERFORMED IN ACCORDANCE WITH SUBSECTION 507.04.

SPUN PIPE PILE FOUNDATIONS:

22.

SPUN PIPE PILE SHALL BE CONSTRUCTED WITH A MINIMUM EMBEDMENT INTO BEDROCK OF 5-FT.
23.

TOP OF PILES SHALL BE CONSTRUCTED AT THE ELEVATIONS SHOWN IN THE MODEL. FOR ESTIMATING PURPOSES, THE PILES ARE MODELED AS AN ASSUMED LENGTH. THE ACTUAL IN PLACE LENGTHS MAY VARY.

NEXT E BEAMS:

24.

NEXT E BEAMS ARE A NON-PROPRIETARY SHAPE DEVELOPED BY PCI NORTHEAST ("PCINE"). STANDARD SECTION PROPERTIES AND DETAILS ARE FOUND AT <http://www.pcine.org>.
25.

DESIGN VALUES:

A.

CONCRETE COMPRESSIVE STRENGTH: f'c = 10,000 PSI

B.

CONCRETE COMPRESSIVE STRENGTH AT RELEASE: f'c = 8,000 PSI

C.

PRESTRESSING STRANDS: 0.6 INCH DIAMETER, 270 KSI, LOW-RELAXATION 7-WIRE STRANDS

D.

ASSUMED MODULUS OF ELASTICITY = 28,500 KSI

E.

PRESTRESSING STRANDS SHALL EACH BE PULLED TO HAVE A NET TENSION FORCE OF 44.0 KIPS AFTER ACCOUNTING FOR CHUCK SLIPPAGE.

F.

SERVICE LOADS

MEMBER MOMENT

742.9 K-FT

NON-COMPOSITE SUPERIMPOSED DEAD LOAD MOMENT

INTERIOR BEAM: 399.4 K-FT    EXTERIOR BEAM: 379.4 K-FT

COMPOSITE SUPERIMPOSED DEAD LOAD MOMENT

262.8 K-FT

LIVE LOAD AND IMPACT MOMENT

1748.3 K-FT

DEAD LOAD REACTION

INTERIOR BEAM: 80.9 KIPS    EXTERIOR BEAM: 79.6 KIPS

LIVE LOAD AND IMPACT REACTION

INTERIOR BEAM: 106.1 KIPS    EXTERIOR BEAM: 106.1 KIPS

TOTAL REACTION

INTERIOR BEAM: 187.0 KIPS    EXTERIOR BEAM: 185.7 KIPS

FINAL CAMBER AT ERECTION

2 7⁄8 INCHES
26.

THE FABRICATOR SHALL PROVIDE A CALCULATED CAMBER ESTIMATE FOR THE NEXT E BEAMS AT RELEASE, ERECTION, AND FINAL CONDITIONS PRIOR TO ANY SUPERIMPOSED LOADING OF THE BEAM. MINOR ADJUSTMENTS TO THE BRIDGE SEAT ELEVATIONS AND NEXT BEAM FLANGE THICKNESS MAY BE REQUIRED DURING THE FABRICATION REVIEW PROCESS BASED OFF OF THESE VALUES. ALL WORK ASSOCIATED WITH PROVIDING AN ESTIMATED CAMBER ALONG WITH ANY ADJUSTMENTS TO THE BRIDGE SEAT ELEVATIONS OR NEXT BEAM FLANGE THICKNESS BE WILL CONSIDERED INCIDENTAL TO ITEM 510.2700, PRESTRESSED CONCRETE NEXT E BEAMS AND THE APPROPRIATE ABUTMENT PAY ITEM.
27.

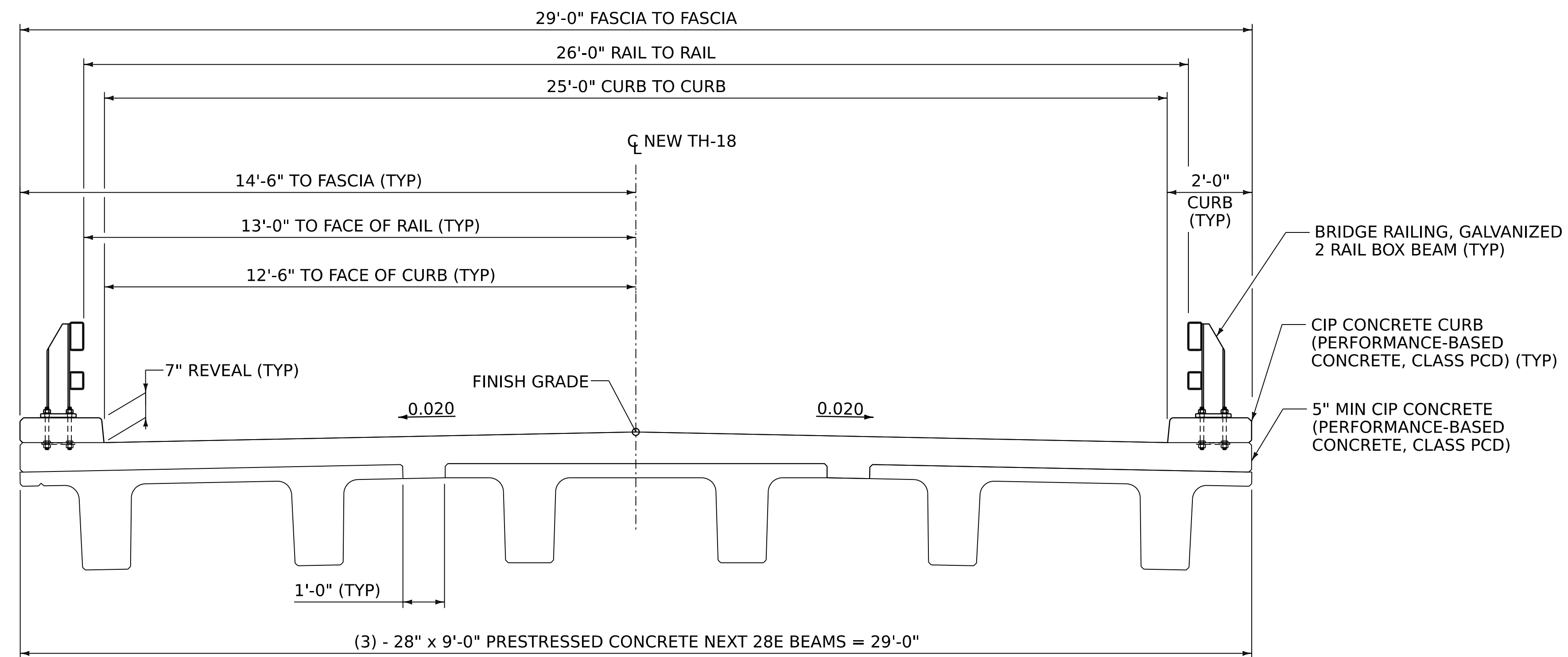
THE FABRICATOR MAY ALTER THE DESIGN AS DETAILED IN THE MODEL TO ACCOMMODATE THEIR SPECIFIC OPERATION. THIS ALTERATION SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF VERMONT TO MEET THE ABOVE CRITERIA AND SHALL BE APPROVED BY THE PROJECT MANAGER.
28.

METHOD OF FORMING FLANGE CONNECTION SHALL BE DETERMINED BY THE CONTRACTOR. THE FORMS SHALL BE REMOVABLE AND ABLE TO ACCOMMODATE DIFFERENTIAL CAMBER. FORM SUPPORTS SHALL NOT BE ATTACHED TO ANY PREFABRICATED SUPERSTRUCTURE ELEMENT BY DRILLING OR SIMILAR MEANS.
29.

NEXT BEAMS WILL BE PAID FOR UNDER ITEM 510.2700, PRESTRESSED CONCRETE NEXT E BEAMS.



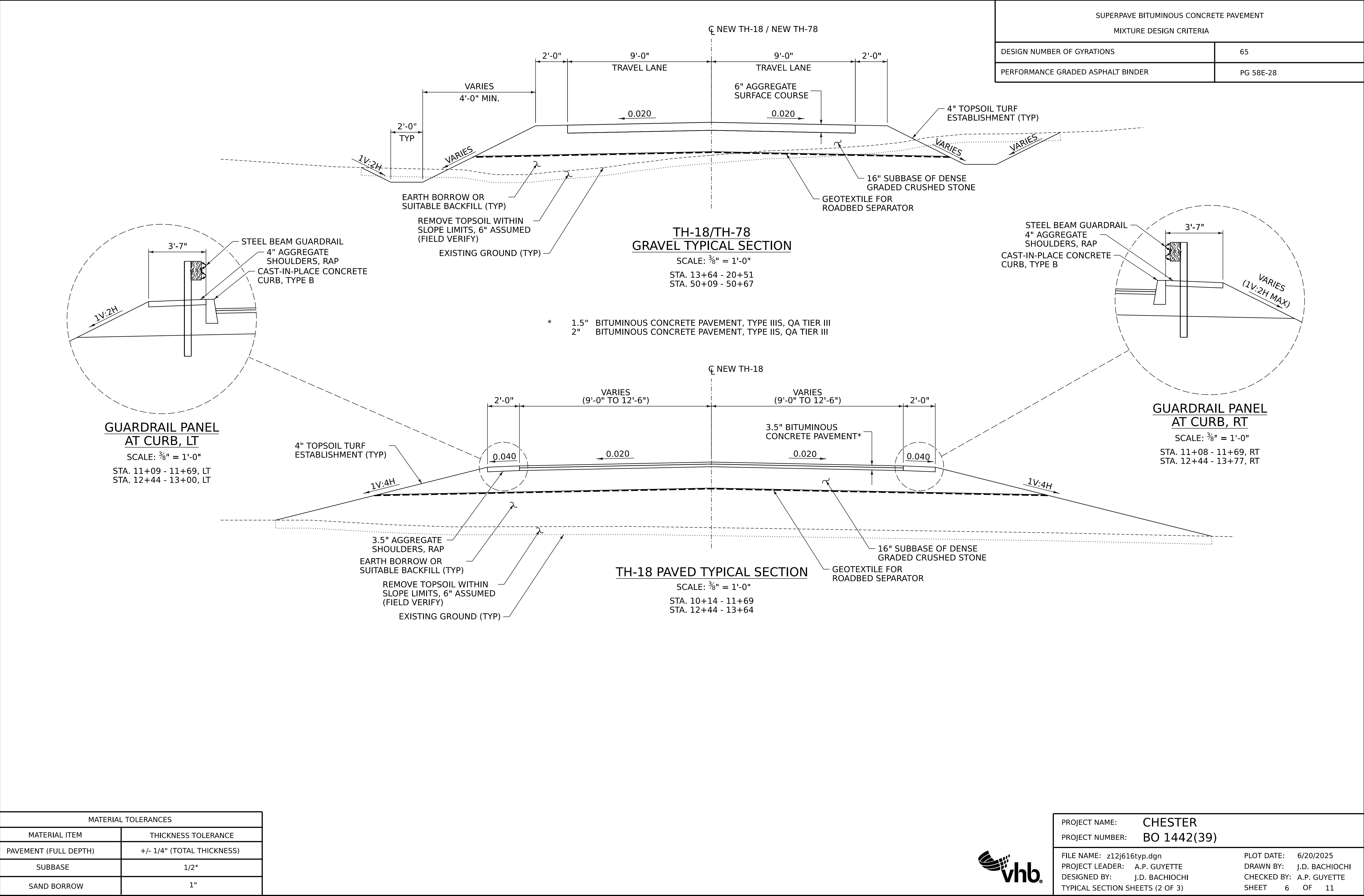
PROJECT NAME: <b>CHESTER</b>	
PROJECT NUMBER: <b>BO 1442(39)</b>	
FILE NAME: z12j616pn.dgn	PLOT DATE: 6/20/2025
PROJECT LEADER: A.P. GUYETTE	DRAWN BY: T.D. BURT
DESIGNED BY: J.D. BACHIOCHI	CHECKED BY: A.P. GUYETTE
GENERAL NOTES SHEET (1 OF 1)	SHEET 4 OF 11

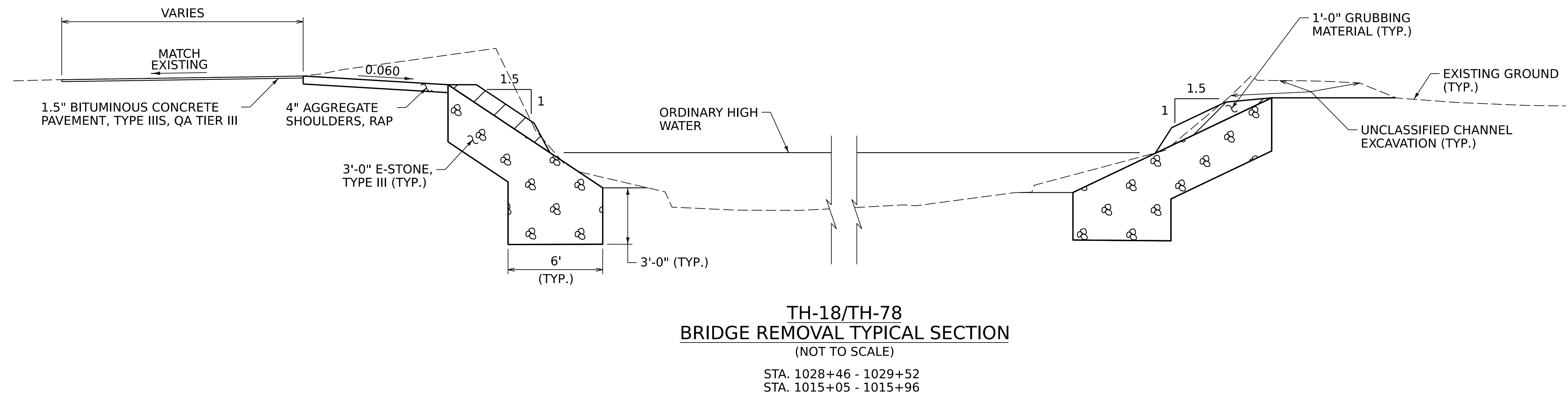
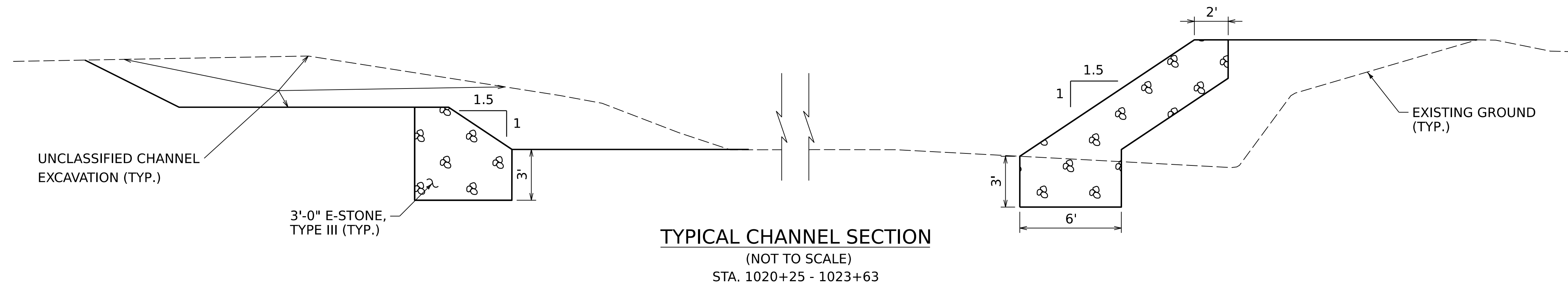


**BRIDGE TYPICAL SECTION**  
SCALE: 1/2"=1'-0"



PROJECT NAME:	CHESTER	PLOT DATE:	6/20/2025
PROJECT NUMBER:	BO 1442(39)	DRAWN BY:	M.F. NEMETH
FILE NAME:	z12j616bridge_typ.dgn	CHECKED BY:	A.P. GUYETTE
PROJECT LEADER:	A.P. GUYETTE	TYPICAL SECTION SHEETS (1 OF 3)	SHEET 5 OF 11
DESIGNED BY:	M.F. NEMETH		





PROJECT NAME:	CHESTER	FILE NAME:	z12j616typ.dgn	PLOT DATE:	6/20/2025
PROJECT NUMBER:	BO 1442(39)	PROJECT LEADER:	A.P. GUYETTE	DRAWN BY:	T.D. BURT
		DESIGNED BY:	J.D. BACHIOCHI	CHECKED BY:	A.P. GUYETTE
		TYPICAL SECTION SHEETS		SHEET	7 OF 11

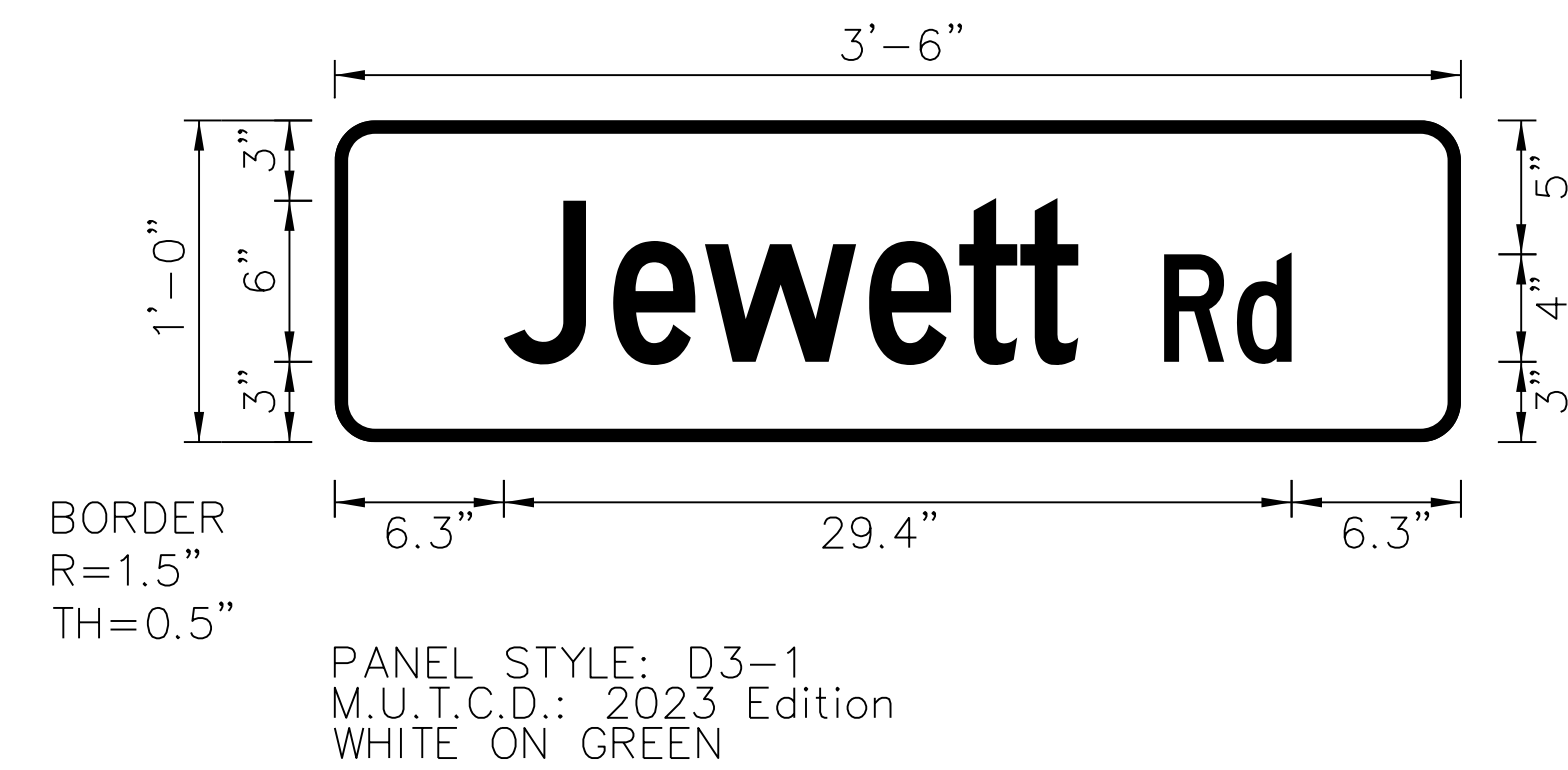
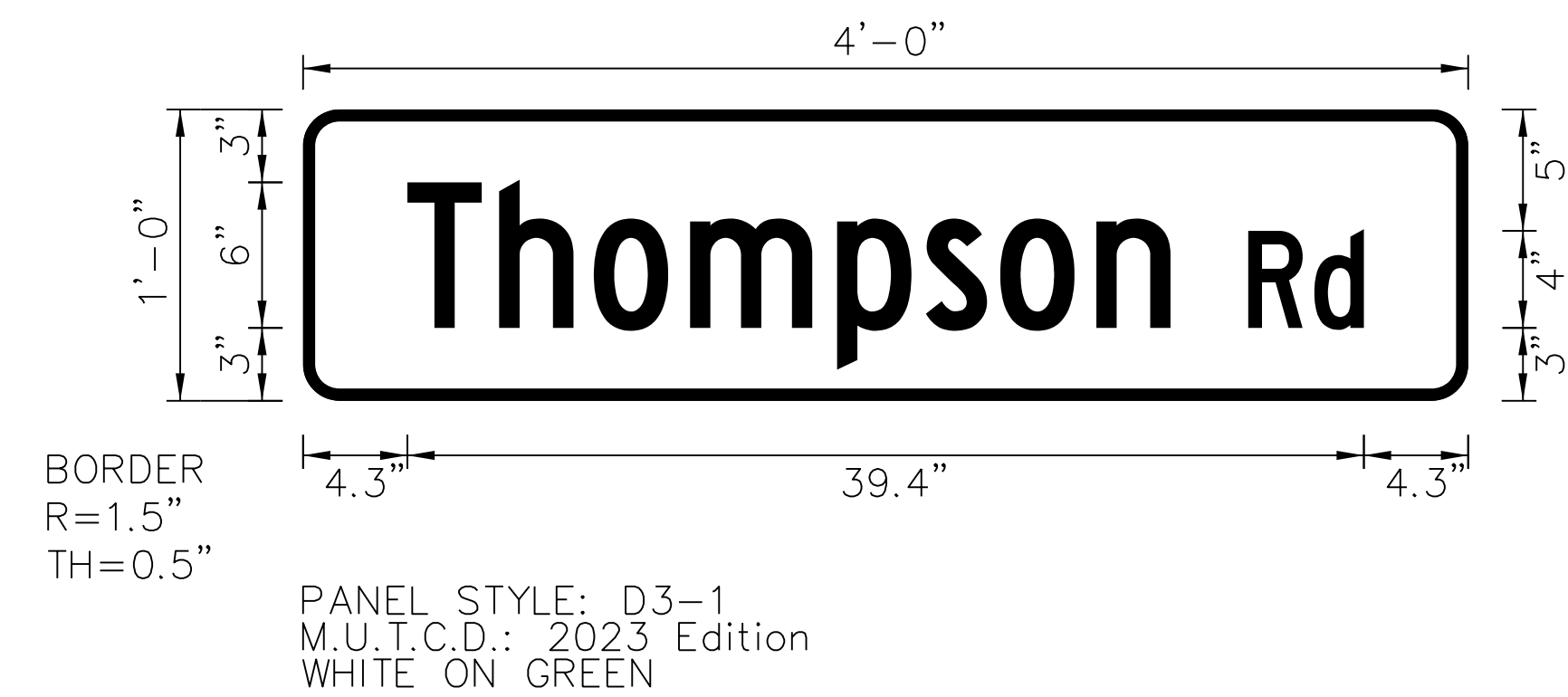
STATE OF VERMONT AGENCY OF TRANSPORTATION												QUANTITY SHEET 1									
SUMMARY OF ESTIMATED QUANTITIES												TOTALS		DESCRIPTIONS				DETAILED SUMMARY OF QUANTITIES			
								1011 - ROADWAY	1051 - EROSION CONTROL	1199 - RAILROAD - TRAIN DELAY	1211 - BRIDGE NO. 1	1999 - FULL C.E. ITEMS	GRAND TOTAL	FINAL	UNIT	ITEMS	ITEM NUMBER	ROUND	QUANTITIES	UNIT	ITEMS
										1			1		DL	LIQUIDATED DAMAGES, TRAIN DELAY (N.A.B.I.) (TRAIN DELAY LIQUIDATED DAMAGES)(GR	199.9999				
								1					1		LS	CLEARING AND GRUBBING, INCLUDING INDIVIDUAL TREES AND STUMPS	201.1000				
								6032					6032		CY	COMMON EXCAVATION	203.1500				
								2190					2190		CY	UNCLASSIFIED CHANNEL EXCAVATION	203.2700				
								2070					2070		CY	EARTH BORROW	203.3000				
								140					140		CY	TRENCH EXCAVATION OF EARTH	204.2000				
								1					1		CY	TRENCH EXCAVATION OF EARTH, EXPLORATORY (N.A.B.I.)	204.2200				
											100		100		CY	GRANULAR BACKFILL FOR STRUCTURES (FOR BRIDGE)	204.3000				
								110					110		CY	GRANULAR BACKFILL FOR STRUCTURES	204.3000				
									1				1		LS	COFFERDAM	208.4000				
								310					310		SY	COARSE-MILLING, BITUMINOUS PAVEMENT	210.1000				
								3200					3200		CY	SUBBASE OF DENSE GRADED CRUSHED STONE	301.3500				
								560					560		CY	AGGREGATE SURFACE COURSE	401.1000				
								100					100		TON	AGGREGATE SHOULDERS, RAP	402.1300				
								15					15		CWT	TACK COAT, EMULSIFIED ASPHALT	404.1100				
								90					90		TON	BITUMINOUS CONCRETE PAVEMENT, TYPE IIS, QA TIER III	406.0230				
								90					90		TON	BITUMINOUS CONCRETE PAVEMENT, TYPE IIIS, QA TIER III	406.0330				
								1					1		DL	PAY ADJUSTMENT, BCP, MIXTURE PROPERTIES (N.A.B.I.)	406.9100				
								1					1		DL	PAY ADJUSTMENT, BCP, MAT DENSITY (N.A.B.I.)	406.9200				
								1					1		DL	PAY ADJUSTMENT, BCP, LONGITUDINAL JOINT DENSITY (N.A.B.I.)	406.9300				
											80		80		CY	PERFORMANCE-BASED CONCRETE, CLASS PCD	501.3700				
											60		60		CY	PERFORMANCE-BASED CONCRETE, CLASS PCS	501.3800				
											35600		35600		LB	REINFORCING STEEL, LEVEL II	507.1200				
											1880		1880		SF	CONCRETE BRIDGE DECK SURFACE PREPARATION	509.1500				
											10		10		GAL	WATER REPELLENT, SILANE	514.1000				
											50		50		LF	BRIDGE EXPANSION JOINT, ASPHALTIC PLUG	516.1000				
											150		150		LF	BRIDGE RAILING, GALVANIZED 2 RAIL BOX BEAM	525.3120				
											1		1		DL	MAINTENANCE OF STRUCTURES AND APPROACHES (N.A.B.I.)	527.1000001				
											1		1		EACH	REMOVAL OF STRUCTURE (THOMPSON ROAD)	529.1500				
											1		1		EACH	REMOVAL OF STRUCTURE (JEWETT ROAD)	529.1500				
											12		12		EACH	BEARING DEVICE ASSEMBLY, STEEL REINFORCED ELASTOMERIC PAD	531.1700				
											1		1		LS	PRECAST CONCRETE STRUCTURE	540.1000				
								70					70		LF	18 INCH CPEP(SL)	601.2615				
								4					4		EACH	18 INCH CPEPES	601.7015				
								1					1		EACH	PRECAST REINFORCED CONCRETE MANHOLE WITH CAST IRON COVER	604.2100				
								20					20		LF	UNDERDRAIN CARRIER PIPE, 6 INCH	605.2006				
								100					100		MGAL	DUST CONTROL WITH WATER	609.1000				
								1					1		TON	DUST CONTROL WITH CALCIUM CHLORIDE	609.1500				
												1	1		LS	GNSS MACHINE CONTROL GRADING	610.1000				
												2	2		EACH	GNSS CONSTRUCTION INSPECTION EQUIPMENT	610.2000				
																	<div>PROJECT NAME: CHESTER</div> <div>PROJECT NUMBER: BO 1442(39)</div> <div><div>FILE NAME: z12j616qty.dgn</div><div>PROJECT LEADER: A.P. GUYETTE</div><div>DESIGNED BY: J.D. BACHIOCHI</div><div>QUANTITY SHEETS</div></div> <div><div>PLOT DATE: 6/20/2025</div><div>DRAWN BY: J.D. BACHIOCHI</div><div>CHECKED BY: A.P. GUYETTE</div><div>SHEET 8 OF 11</div></div>				



STATE OF VERMONT AGENCY OF TRANSPORTATION													QUANTITY SHEET 2									
SUMMARY OF ESTIMATED QUANTITIES													TOTALS		DESCRIPTIONS				DETAILED SUMMARY OF QUANTITIES			
								1011 - ROADWAY	1051 - EROSION CONTROL	1199 - RAILROAD - TRAIN DELAY	1211 - BRIDGE NO. 1	1999 - FULL C.E. ITEMS	GRAND TOTAL	FINAL	UNIT	ITEMS	ITEM NUMBER	ROUND	QUANTITIES	UNIT	ITEMS	
												1	1		LS	GNSS CONSTRUCTION INSPECTION SURFACE MODELS	610.2500					
								40					40		CY	E-STONE FILL, TYPE I	613.0601					
								1540					1540		CY	E-STONE FILL, TYPE III	613.0603					
								10					10		CY	STONE FILL, TYPE I	613.1001					
								80					80		CY	STONE FILL, TYPE III	613.1003					
								160					160		LF	CAST-IN-PLACE CONCRETE CURB, TYPE B	616.2702					
								3					3		EACH	REMOVE AND REPLACE MAILBOX, SINGLE SUPPORT	617.2100					
								1					1		EACH	REMOVE AND REPLACE MAILBOX, MULTIPLE SUPPORT	617.2200					
								9					9		EACH	YIELDING MARKER POSTS	619.1700					
								4					4		EACH	REMOVING AND RESETTNG PROPERTY MARKERS	619.2000					
								200					200		LF	REMOVAL OF GUARDRAIL	621.0100					
								410					410		LF	STEEL BEAM GUARDRAIL	621.1060					
								5					5		EACH	ANCHOR FOR STEEL BEAM GUARDRAIL	621.1520					
								150					150		LF	TEMPORARY TRAFFIC BARRIER	621.2400					
								4					4		EACH	GUARDRAIL APPROACH SECTION, 2 RAIL BOX BEAM	621.8120					
												200	200		HR	UNIFORMED TRAFFIC OFFICERS	630.1000					
												500	500		HR	FLAGGERS	630.1500					
												1	1		LS	FIELD OFFICE, ENGINEER'S	631.1000					
												1	1		LS	TESTING EQUIPMENT, CONCRETE	631.1600					
												1	1		LS	TESTING EQUIPMENT, BITUMINOUS	631.1700					
												3000	3000		DL	FIELD OFFICE COMMUNICATIONS (N.A.B.I.)	631.2600					
												80000	80000		DL	RAILROAD FLAGGERS (N.A.B.I.)	632.1000					
												16	16		EACH	CPM SCHEDULE	633.1000					
								1					1		LS	MOBILIZATION/DEMOBILIZATION	635.1100					
								1					1		LS	TRAFFIC CONTROL, ALL-INCLUSIVE	641.1100					
								2					2		EACH	PORTABLE CHANGEABLE MESSAGE SIGN	641.1500					
								280					280		LF	DURABLE 4 INCH WHITE LINE, POLYUREA	646.4040					
								600					600		LF	DURABLE 4 INCH YELLOW LINE, POLYUREA	646.4140					
								20					20		LF	DURABLE 24 INCH STOP BAR, POLYUREA	646.4840					
								6530					6530		SY	GEOTEXTILE FOR ROADBED SEPARATOR	649.1100					
									9830				9830		SY	TURF ESTABLISHMENT, GENERAL SEED	651.1500					
									6610				6610		SY	TURF ESTABLISHMENT, SPECIALTY SEED	651.1600					
								1060					1060		CY	TOPSOIL	651.3500					
								120					120		SY	GRUBBING MATERIAL, 12 INCH	651.4012					
									1				1		LS	EPSC PLAN	653.0100					
									250				250		HR	MONITORING EPSC PLAN	653.0200					
									5000				5000		DL	MAINTENANCE OF EPSC PLAN (N.A.B.I.)	653.0300					
									5.5				5.5		TON	HAY MULCH	653.1000					
									4300				4300		SY	ROLLED EROSION CONTROL PRODUCT, TYPE I	653.2001					
									80				80		CY	STABILIZED CONSTRUCTION ENTRANCE	653.3500					
																	<div><div></div><div>vhb.</div></div>					
																	PROJECT NAME: CHESTER					
																	PROJECT NUMBER: BO 1442(39)					
																	FILE NAME: z12j616qty.dgn			PLOT DATE: 6/20/2025		
																	PROJECT LEADER: A.P. GUYETTE			DRAWN BY: J.D. BACHIOCHI		
																	DESIGNED BY: J.D. BACHIOCHI			CHECKED BY: A.P. GUYETTE		
																	QUANTITY SHEETS			SHEET 9 OF 11		

PROJECT NAME: CHESTER	
PROJECT NUMBER: BO 1442(39)	
FILE NAME: z12j616qty.dgn	PLOT DATE: 6/20/2025
PROJECT LEADER: A.P. GUYETTE	DRAWN BY: J.D. BACHIOCHI
DESIGNED BY: J.D. BACHIOCHI	CHECKED BY: A.P. GUYETTE
QUANTITY SHEETS	SHEET 10 OF 11





PROJECT NAME:	CHESTER	FILE NAME:	z12j616det_ts.dgn	PLOT DATE:	6/20/2025
PROJECT NUMBER:	BO 1442(39)	PROJECT LEADER:	A.P. GUYETTE	DRAWN BY:	M.D. COOMBS
		DESIGNED BY:	M.D. COOMBS	CHECKED BY:	J.D. BACHIOCHI
		TRAFFIC SIGN DETAIL SHEETS		SHEET	11 OF 11