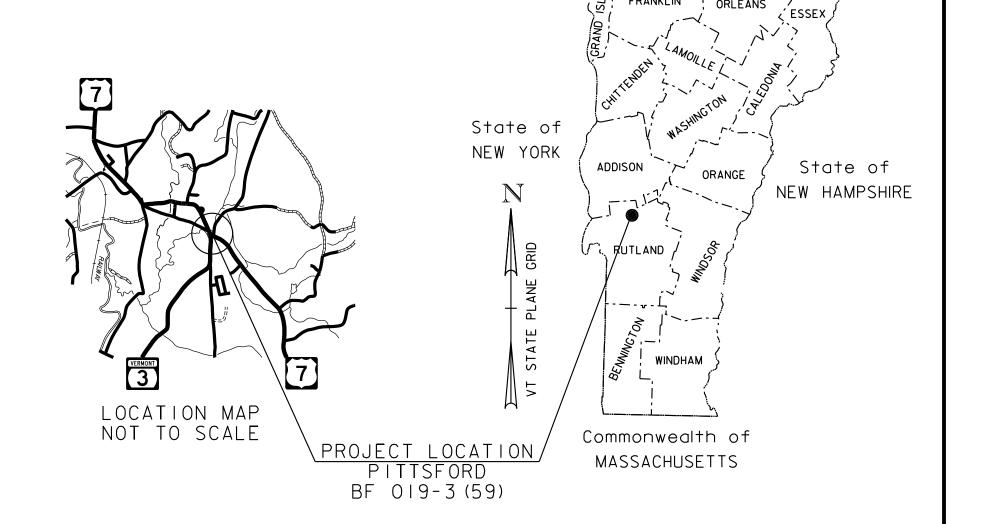
PRELIMINARY PLANS REVIEWER NOTES

- 1) BRIDGE 108 GEOMETRY IS COMPLEX DUE TO THE SPLIT OFF FOR VT ROUTE 3. THE BRIDGE TRANSVERSE SLOPE IS BANKED AT 4% BASED ON THE US ROUTE 7 HORIZONTAL AND VERTICAL CURVE GEOMETRY I.E. TRANSVERSE TO THE US ROUTE 7 HORIZONTAL CURVE.
- 2) THIS BRIDGE GEOMETRY PROVIDES AN INTERIM LAYOUT OF THE VT ROUTE 3 AND US ROUTE 7 INTERSECTION. INTERSECTION MAY BE WIDENED AND ALTERED AS PART OF A FUTURE US ROUTE 7 ROADWAY PROJECT.
- 3) THREE PHASE CONSTRUCTION OF THE BRIDGE IS PLANNED. CONSIDERATIONS FOR MAINTAINING A MINIMUM OF TWO LANES OF TRAFFIC AT ALL TIMES WERE MADE.
- 4) THE EXISTING FLASHING BEACONS AT THE US ROUTE 7 / VT ROUTE 3 INTERSECTION WILL NEED TO BE RELOCATED DURING THE UTILITY RELOCATION PHASE OF THE PROJECT PRIOR TO TEMPORARY SIGNAL INSTALLATION. DURING CONSTRUCTION, THE BEACONS WILL NEED TO BE REMOVED. AFTER BRIDGE CONSTRUCTION IS COMPLETED, THE BEACONS AT THE US ROUTE 7 / VT ROUTE 3 INTERSECTION WILL NEED TO BE REPLACED ON A NEW SPAN WIRE.
- 5) PEDESTRIAN TRAFFIC WILL BE MAINTAINED ON AN OFF ALIGNMENT TEMPORARY BRIDGE.
- 6) THE INTENT OF THIS PROJECT IS TO PUT A NEW, SHORTER, SINGLE SPAN BRIDGE WITHIN THE FOOTPRINT OF THE EXISTING BRIDGE AND TO MATCH THE EXISTING ROADWAY CONFIGURATION. THE BANKING HAS BEEN MODIFIED TO BALANCE THE EXISTING CONDITIONS AND THE FUTURE US ROUTE 7 PROJECT WHILE MEETING CONSTRUCTABILITY LIMITATIONS OF THREE PHASE CONSTRUCTION.

STATE OF VERMONT AGENCY OF TRANSPORTATION





CANADA

MARCH 31, 2017

PROJECT MANAGER : DOUGLAS BONNEAU, P.E.

DATE

DIRECTOR OF PROJECT DELIVERY

PROJECT NAME : PITTSFORD

PROJECT NUMBER : BF 019-3 (59)

SHEET I OF 60 SHEETS

CONSULTING ENGINEERS

540 Commercial Street

Manchester, NH 03101

(603) 668-8223

www.cldengineers.com

PROPOSED IMPROVEMENT BRIDGE PROJECT

TOWN OF PITTSFORD COUNTY OF RUTLAND

US ROUTE 7 (PRINCIPAL ARTERIAL - NHS) BRIDGE NO. 108

- 7) AN EXISTING WATER MAIN CROSSES FURNACE BROOK SUSPENDED ON THE EXISTING BRIDGE. THE WATER MAIN WILL BE TEMPORARILY RELOCATED ON THE TEMPORARY PEDESTRIAN BRIDGE DURING CONSTRUCTION. THE WATER MAIN WILL BE PERMANENTLY SUPPORTED BY THE NEW BRIDGE AFTER THE BRIDGE IS CONSTRUCTED.
- 8) THE WATER MAIN RELOCATION WILL BE FUNDED BY THE TOWN BUT WILL BE INCORPORATED INTO THIS CONTRACT. PRELIMINARY WATER MAIN RELOCATION PLANS HAVE BEEN INCLUDED HEREIN.

SCALE IN FEET

PROJECT LOCATION:

TH 12 (OXBOW RD) STA 26+00.00

LIMIT OF WORK

LOCATED IN THE TOWN OF PITTSFORD ON US ROUTE 7 AT THE INTERSECTION OF US ROUTE 7 AND VT ROUTE 3 OVER FURNACE BROOK AND EXTENDING APPROXIMATELY 350 FT TO THE END.

PROJECT DESCRIPTION: WORK TO BE PERFORMED UNDER THIS PROJECT INCLUDES FULL REPLACEMENT OF EXISTING BRIDGE 108 INCLUDING RELATED ROADWAY WORK.

> LENGTH OF STRUCTURE US ROUTE 7: 87.22 FEET LENGTH OF ROADWAY US ROUTE 7: 262,78 FEET LENGTH OF PROJECT US ROUTE 7: 350.00 FEET

US ROUTE 7 STA 53+84.86 US ROUTE 7 STA 52+97.64 END BRIDGE BRO(BEGIN BRIDGE VT ROUTE 3 STA II+00.00 (MM 0.208) US ROUTE 7 TO BRANDON LIMIT OF WORK 55±00-US ROUTE 7 STA 51+75.00 (MM\0.980) BEGIN PROJECT ROUTE 7 STA 55+25.00 (MM 1.046) PRELIMINARY PLANS END PROJECT

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 I

SURVEYED BY : L.ORVIS (VAOT) SURVEYED DATE: 12-18-2013

DATUM

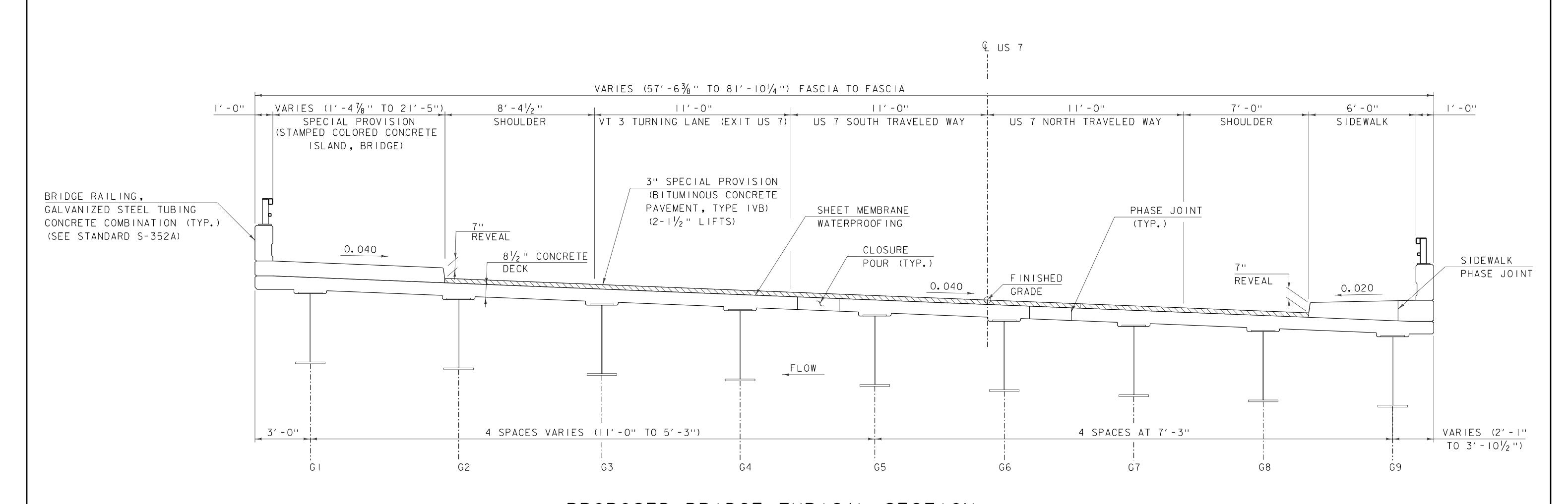
VERTICAL NAVD 88 HORIZONTAL NAD 83 (1992)

STATE OF VERMONT AGENCY OF TRANSPORTATION

PRELIMINARY INFORMATION SHEET (BRIDGE)

LRFD

INDEX OF SHEETS	FINAL HYDRAULIC REPORT					
	ARDS LIST	HYDROLOGIC DATA Date: October 2016	PROPOSED STRUCTURE			
1 TITLE SHEET 2 PRELIMINARY INFORMATION SHEET 3 TYPICAL BRIDGE SECTION 4 - 5 TYPICAL ROADWAY SECTION SHEETS 1-2 6 DETAIL SHEET 1 7 TYPICAL EARTHWORK SECTIONS 8 CONVENTIONAL SYMBOLOGY LEGEND SHEET 9 - 12 TIE SHEETS 1-4 13 ALIGNMENT & PAVEMENT LAYOUT SHEET 14 LAYOUT SHEET 15 US ROUTE 7 PROFILE AND BANKING DIAGRAM 16 VT ROUTE 3 & TH 12 PROFILE 17 TRAFFIC CONTROL NOTES 18 TRAFFIC CONTROL PLAN 19 PHASING SECTIONS 20 TRAFFIC CONTROL SHEET PHASE 1 21 TRAFFIC CONTROL SHEET PHASE 2 22 TRAFFIC CONTROL SHEET PHASE 3 23 TPAR PROFILE 24 DRAINAGE LAYOUT SHEET 25 UTILITY RELOCATION NOTES SHEETS 1-2		DRAINAGE AREA: 28.6 sq. mi. CHARACTER OF TERRAIN: Mixture fields and woods STREAM CHARACTERISTICS: Sinuous and alluvial NATURE OF STREAMBED: Gravel, cobbles PEAK FLOW DATA - ANNUAL EXCEEDANCE PROBABILITY (AEP) 43% = 1,350 cfs 2% = 4,350 cfs 10% = 2,700 cfs 1% = 5,200 cfs 4% = 3,550 cfs 0.2% = 7,300 cfs DATE OF FLOOD OF RECORD: Unknown ESTIMATED DISCHARGE: Unknown WATER SURFACE ELEV: Unknown WATER SURFACE ELEV: Unknown NATURAL STREAM VELOCITY: @ 2% AEP = 15.4 fps ICE CONDITIONS: Moderate DEBRIS: Light DOES THE STREAM REACH MAXIMUM HIGHWATER ELEV. RAPIDLY? No IS ORDINARY RISE RAPID? No IS STAGE AFFECTED BY UPSTREAM OR DOWNSTREAM CONDITIONS? No IF YES, DESCRIBE:	STRUCTURE TYPE: Single span steel beam girder CLEAR SPAN(NORMAL TO STREAM): 72' VERTICAL CLEARANCE ABOVE STREAMBED: ~24' WATERWAY OF FULL OPENING: 1440 sf WATER SURFACE ELEVATIONS AT: 43% AEP = 416.1' VELOCITY= 10.4 fps 10% AEP = 418.7' " 13.0 fps 4% AEP = 420.0' " 14.1 fps 2% AEP = 420.6' " 13.6 fps 1% AEP = 421.7' " 14.4 fps IS THE ROADWAY OVERTOPPED BELOW 1% AEP: No FREQUENCY: N/A RELIEF ELEVATION: 438.5' DISCHARGE OVER ROAD @ 1% AEP: N/A BRIDGE LOW CHORD ELEVATION: 434.7' FREEBOARD: @ 2% AEP = 14.1'			
28 - 30 WATER MAIN RELOCATION DETAILS SHEETS 1-3 31 WATER MAIN RELOCATION PLAN 32 WATER MAIN RELOCATION PROFILE 33 TRAFFIC SIGNS & PAVEMENT MARKINGS SHEET 34 - 35 TRAFFIC SIGN SUMMARY SHEETS 1-2 36 BORNING INFORMATION SHEET 37 - 38 BORING LOGS SHEETS 1-2 39 PLAN AND ELEVATION 40 - 45 US ROUTE 7 CROSS SECTIONS SHEETS 1-6 46 - 47 VT ROUTE 3 CROSS SECTIONS SHEETS 1-2 48 OXBOW RD CROSS SECTIONS 49 MATERIAL TRANSITION DIAGRAMS 50 - 53 CHANNEL CROSS SECTIONS SHEETS 1-4 54 EPSC NARRATIVE 55 EPSC EXISTING PLAN SHEET 56 EPSC CONSTRUCTION PLAN SHEET 57 EPSC FINAL PLAN SHEET 58 - 60 EPSC DETAIL SHEETS 1-3		WATERSHED STORAGE: <1%	SCOUR: Contraction scour = 0' up to 0.5% AEP. Foundations built to ledge or 6' below streambed. REQUIRED CHANNEL PROTECTION: Stone Fill, Type IV PERMIT INFORMATION AVERAGE DAILY FLOW: - DEPTH OR ELEVATION: ORDINARY LOW WATER: CORDINARY HIGH WATER: CORDINARY HIGH WATER: - CORDINARY BRIDGE REQUIREMENTS STRUCTURE TYPE: None required CLEAR SPAN (NORMAL TO STREAM): VERTICAL CLEARANCE ABOVE STREAMBED: WATERWAY AREA OF FULL OPENING: ADDITIONAL INFORMATION			
STRUCTURES DETAIL SHEETS		LONG TERM STREAMBED CHANGES: None noted	TRAFFIC MAINTENANCE NOTES 1. MAINTAIN TWO-WAY TRAFFIC ON THE EXISTING STRUCTURE. 2. TRAFFIC SIGNALS ARE NOT NECESSARY.			
TRAFFIC DATA		S THE ROADWAY OVERTOPPED BELOW 1% AEP: No	3. SIDEWALKS ARE NOT NECESSARY 4. A TEMPORARY PEDESTRIAN BRIDGE WILL BE CONSTRUCTED UPSTREAM. DESIGN VALUES 1. DESIGN LIVE LOAD 2. FUTURE PAVEMENT 3. DESIGN SPAN 4. MIN. MID-SPAN POS. CAMBER @ RELEASE (PRESTRESSED UNITS) 4. MIN. MID-SPAN POS. CAMBER @ RELEASE (PRESTRESSED UNITS) 5. PRESTRESSING STRAND 6. PRESTRESSED CONCRETE STRENGTH 7. PRESTRESSED CONCRETE STRENGTH 8. CONCRETE, HIGH PERFORMANCE CLASS AA 9. CONCRETE, HIGH PERFORMANCE CLASS AA 9. CONCRETE, HIGH PERFORMANCE CLASS AA 9. CONCRETE, HIGH PERFORMANCE CLASS B 10. CONCRETE, HIGH PERFORMANCE CLASS B 11. CONCRETE, HIGH PERFORMANCE CLASS B 12. REINFORCING STEEL 13. STRUCTURAL STEEL AASHTO M270 (WEATHERING) 14. NOMINAL BEARING RESISTANCE OF SOIL 14. NOMINAL BEARING RESISTANCE OF SOIL 15. SOIL BEARING RESISTANCE FACTOR (REFER TO AASHTO LRFD) 16. NOMINAL BEARING RESISTANCE FACTOR (REFER TO AASHTO LRFD) 17. ROCK BEARING RESISTANCE FACTOR (REFER TO AASHTO LRFD) 18. PILE RESISTANCE FACTOR (REFER TO AASHTO LRFD) 19. LATERAL PILE DEFLECTION 10. A			
YEAR ADT DHV %D %T ADTT 20 year ESAL for flexible pavement from 2017 to 2037 : 7128000 2017 9800 1100 56 5.3 810 40 year ESAL for flexible pavement from 2017 to 2057 : 16407000 2037 10400 1200 56 7.5 1200 Design Speed : 35 mph			FILE NAME: 86e048/cos/zi3b266pi.dgn PLOT DATE: 3/3i/20i7 PROJECT LEADER: J.BYATT DRAWN BY: M.SMITH DESIGNED BY: S.BEAUMONT CHECKED BY: A.GIRALDI PRELIMINARY INFORMATION SHEET SHEET 2 OF 60			



PROPOSED BRIDGE TYPICAL SECTION

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

CONSULTING ENGINEERS

PROJECT NAME: PITTSFORD PROJECT NUMBER: BF 019-3(59)

FILE NAME: zI3b266sup.dgn
PROJECT LEADER: J. BYATT
DESIGNED BY: N. CARON
TYPICAL BRIDGE SECTION

PLOT DATE: 3/31/2017
DRAWN BY: M. SMITH
CHECKED BY: S. BEAUMONT
SHEET 3 OF 60

7" SPECIAL PROVISION (BITUMINOUS CONCRETE PAVEMENT, SMALL QUANTITY) (2-3 $\frac{1}{2}$ " LIFTS) (TYPE IIS) 24" SUBBASE OF DENSE GRADED CRUSHED STONE SURFACE 18" SAND BORROW +/- 1/4" - PAVEMENT (TOTAL THICKNESS) +/- 1/2" - AGGREGATE SURFACE COURSE SUBBASE +/- |" SAND BORROW +/- |" 4' -0" CLEAR ZONE CLEAR ZONE STEEL BEAM GUARDRAIL,
GALVANIZED (SEE STANDARDS
G-I, G-Id AND G-I9) (MIN.) (MIN.) 22'-0" (STA 51+75 TO 54+00) 11'-0" (STA 54+00 TO 55+25) 3' - 7" SHOULDER 11'-0" SHOULDER 5′-6" | | ' - 0'' (TRAVELED WAY) (TRAVELED WAY) (WIDTH VARIES) (WIDTH VARIES) VERTICAL GRANITE CURB,
7" REVEAL (TYP) 3" AGGREGATE SHOULDERS -FINISH O. 040 MAX GRADE -0.020 MAX 0.040 MAX 4" TOPSOIL (URBAN AREA MIX)
IF REQUIRED AND AS DIRECTED BY
THE ENGINEER IN THE FIELD (TYP) 0.060 0.040 SUBBASE 0.040 0.040 SAND BORROW 0.040 WITH GUARDRAIL WITH SIDEWALK

US ROUTE 7 MAXIMUM BANKED SECTION

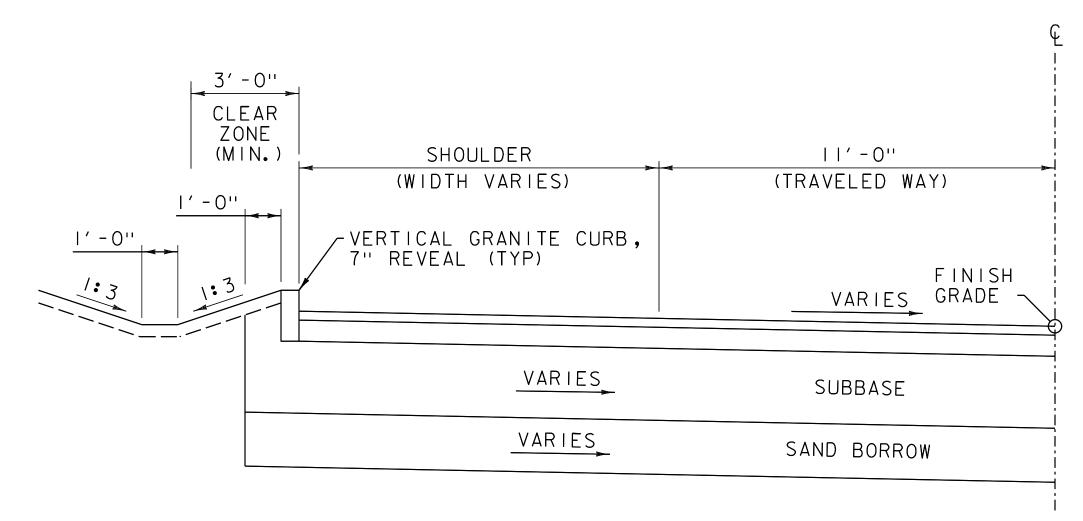
SCALE: $\frac{3}{8}$ " = 1'-0"

3" SPECIAL PROVISION (BITUMINOUS CONCRETE PAVEMENT, TYPE IVB) (2-1/2" LIFTS)

3" SPECIAL PROVISION (BITUMINOUS CONCRETE PAVEMENT, TYPE IVB) (2-1 $\frac{1}{2}$ " LIFTS) 7" SPECIAL PROVISION (BITUMINOUS CONCRETE PAVEMENT, SMALL QUANTITY) (2-31/2" LIFTS) (TYPE IIS)

24" SUBBASE OF DENSE GRADED CRUSHED STONE

18" SAND BORROW



WITH CURB AND SWALE

US ROUTE 7 BANKED SECTION

SCALE: $\frac{3}{8}$ " = 1'-0"

PITTSFORD PROJECT NAME: PROJECT NUMBER: BF 019-3(59)

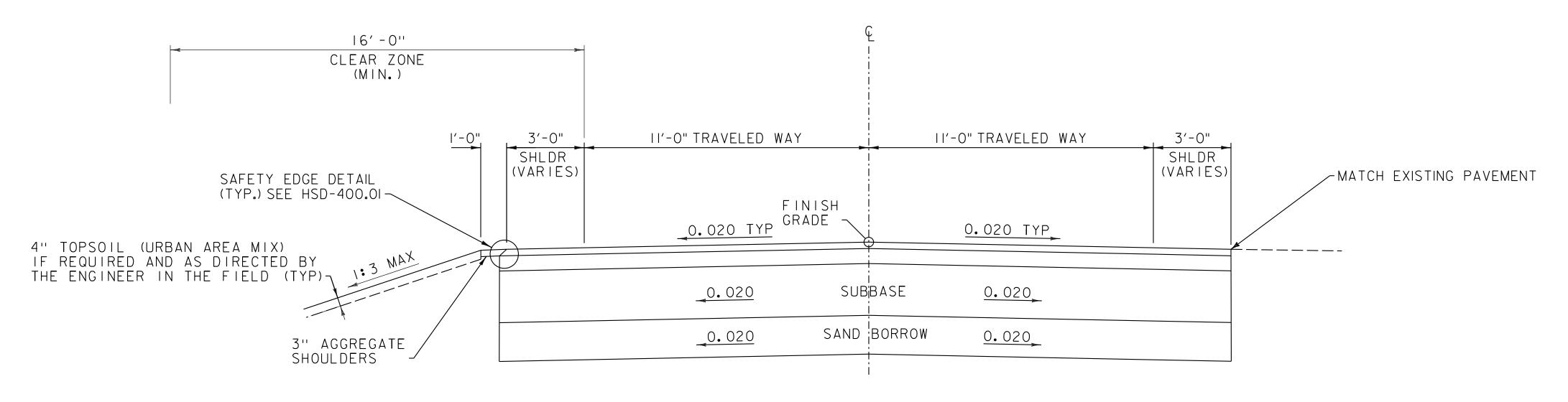
FILE NAME: zI3b266frm.dgn PROJECT LEADER: J. BYATT DESIGNED BY: M. HALEY TYPICAL ROADWAY SECTIONS SHEET PLOT DATE: 3/31/2017 DRAWN BY: S. GOODWIN CHECKED BY: P. SHEDD SHEET 4 OF 60

MATERIAL TOLERANCES

(IF USED ON PROJECT)



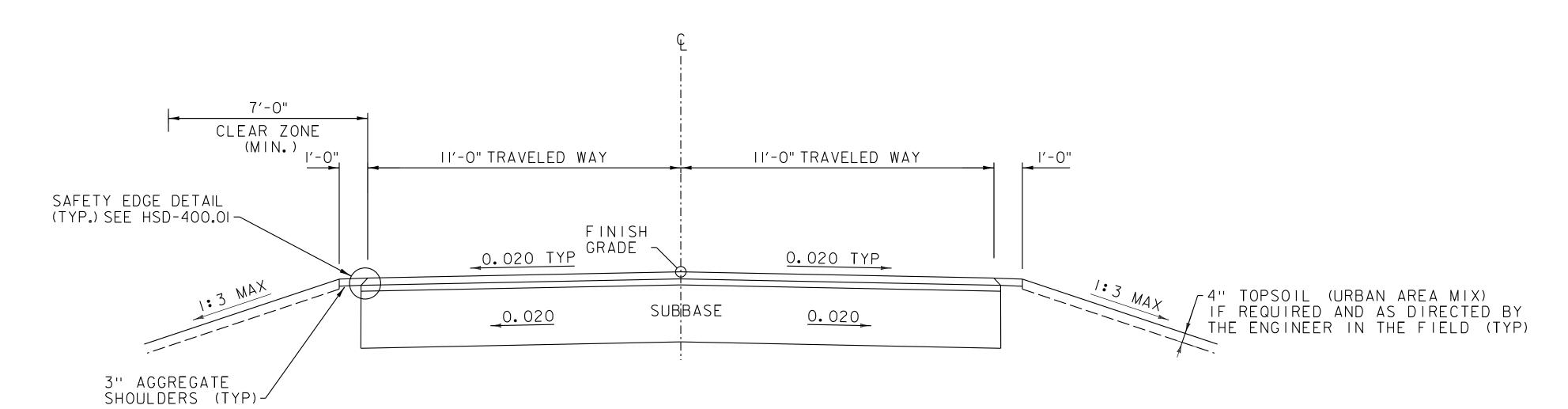
- 3" SPECIAL PROVISION (BITUMINOUS CONCRETE PAVEMENT, TYPE IVB) (2-1/2" LIFTS)
- 7" SPECIAL PROVISION (BITUMINOUS CONCRETE PAVEMENT, SMALL QUANTITY) (2-3 $\frac{1}{2}$ " LIFTS) (TYPE IIS)
- 24" SUBBASE OF DENSE GRADED CRUSHED STONE
- 18" SAND BORROW



VT ROUTE 3 TYPICAL SECTION

SCALE: $\frac{3}{8}$ " = 1'-0"

- 3" SPECIAL PROVISION (BITUMINOUS CONCRETE PAVEMENT, TYPE IVB) (2-1 $\frac{1}{2}$ " LIFTS)
- 2" SPECIAL PROVISION (BITUMINOUS CONCRETE PAVEMENT, SMALL QUANTITY) (1-2" LIFT) (TYPE IIS)
- 24" SUBBASE OF DENSE GRADED CRUSHED STONE



OXBOW RD TYPICAL SECTION

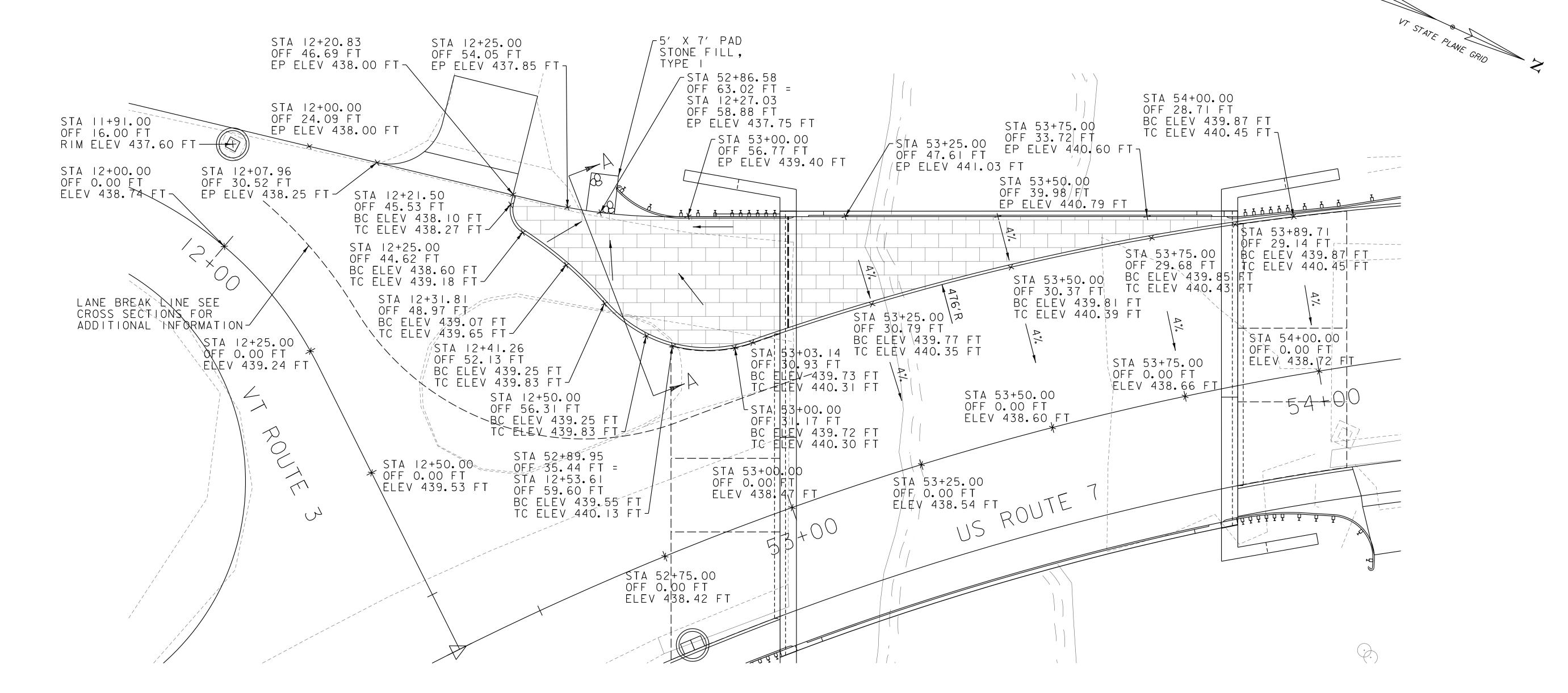
SCALE: 3/8" = 1'-0"



PROJECT NAME: PITTSFORD PROJECT NUMBER: BF 019-3(59)

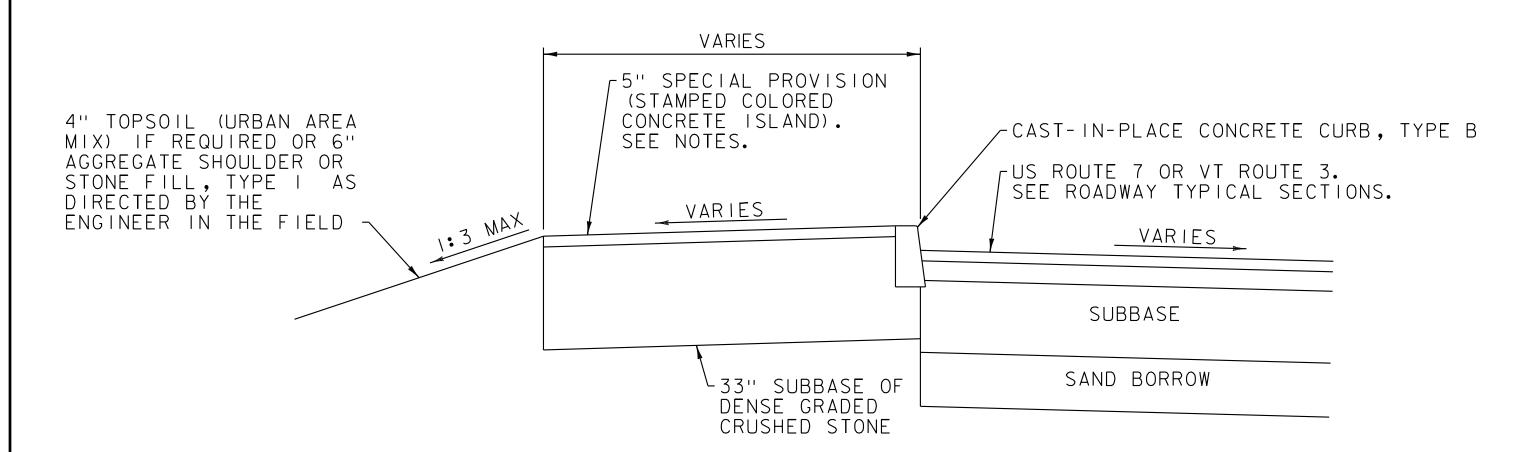
FILE NAME: zI3b266frm.dgn
PROJECT LEADER: J. BYATT
DESIGNED BY: M. HALEY
TYPICAL ROADWAY SECTIONS SHEET 2

PLOT DATE: 3/31/2017
DRAWN BY: S. GOODWIN
CHECKED BY: P. SHEDD
SHEET 5 OF 60



SPECIAL PROVISION (STAMPED COLORED CONCRETE ISLAND) DETAIL

SCALE: |" = |0'



CONCRETE ISLAND SECTION A-A

SCALE: $\frac{3}{8}$ " = 1'-0"

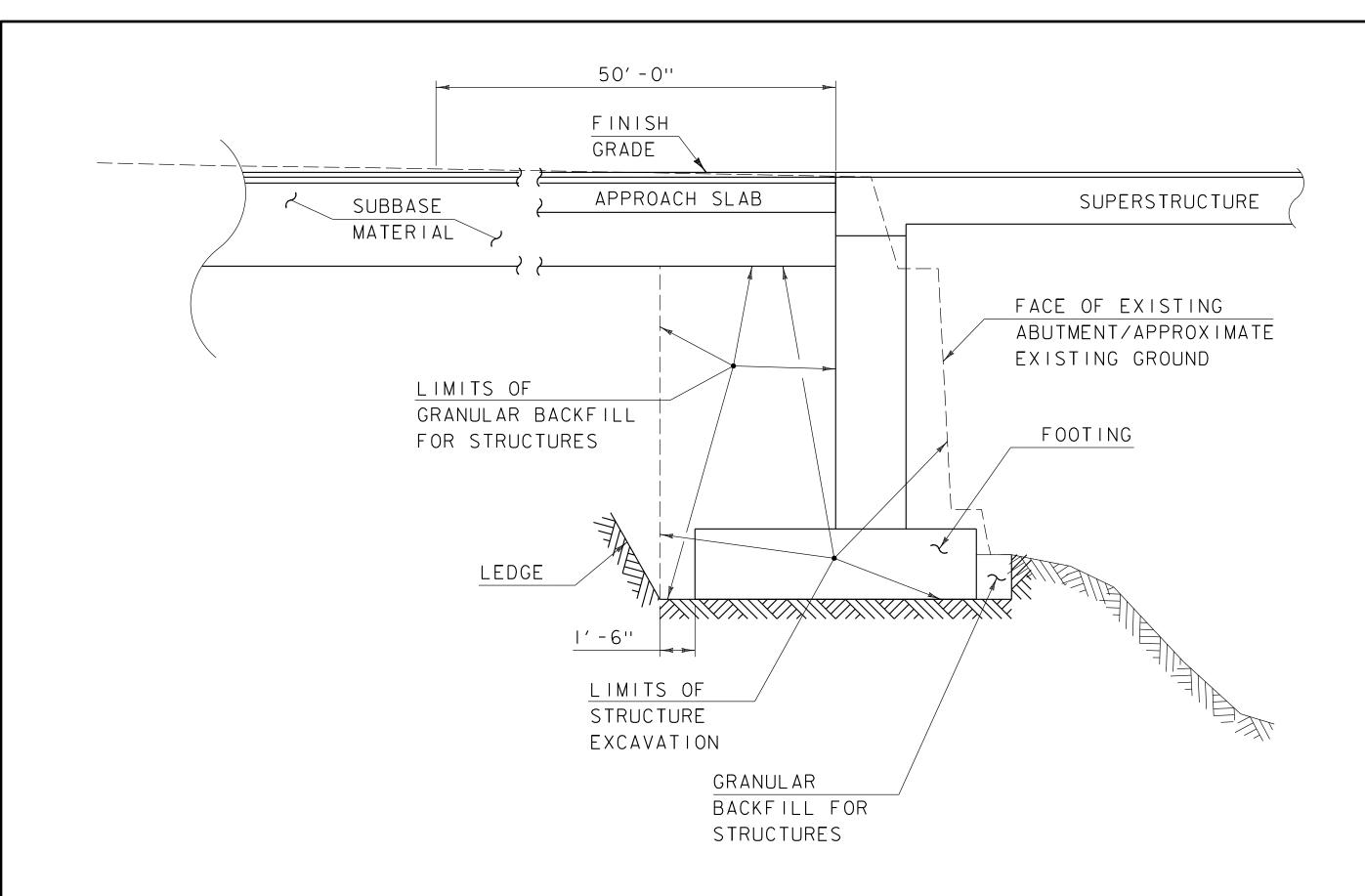
SPECIAL PROVISION (STAMPED COLORED CONCRETE ISLAND) NOTES

- I. CONCRETE FOR THE ISLAND OFF OF THE BRIDGE SHALL BE PAID FOR UNDER ITEM 900.675, "SPECIAL PROVISION (STAMPED COLORED CONCRETE ISLAND)". CONCRETE SHALL COMPLY WITH SECTION 541 FOR CONCRETE, CLASS B.
- 2. CONCRETE FOR THE ISLAND ON THE BRIDGE SHALL BE PAID FOR UNDER ITEM 900.675, "SPECIAL PROVISION (STAMPED COLORED CONCRETE ISLAND, BRIDGE)". CONCRETE SHALL COMPLY WITH SECTION 501 FOR HIGH PERFORMANCE CONCRETE, CLASS A.
- 3. THE COLOR OF THE CONCRETE AGGREGATE SHALL MATCH THAT OF THE COLORED CONCRETE.
- 4. CONCRETE SHALL BE STAMPED WITH RUNNING BOND PATTERN. COLOR SHALL BE LIGHT GRAY.
- 5. CONCRETE ISLAND SHALL HAVE A SAWED PAVEMENT JOINT CONSTRUCTED ALONG THE BRIDGE JOINT.

PITTSFORD PROJECT NAME: PROJECT NUMBER: BF 019-3(59)

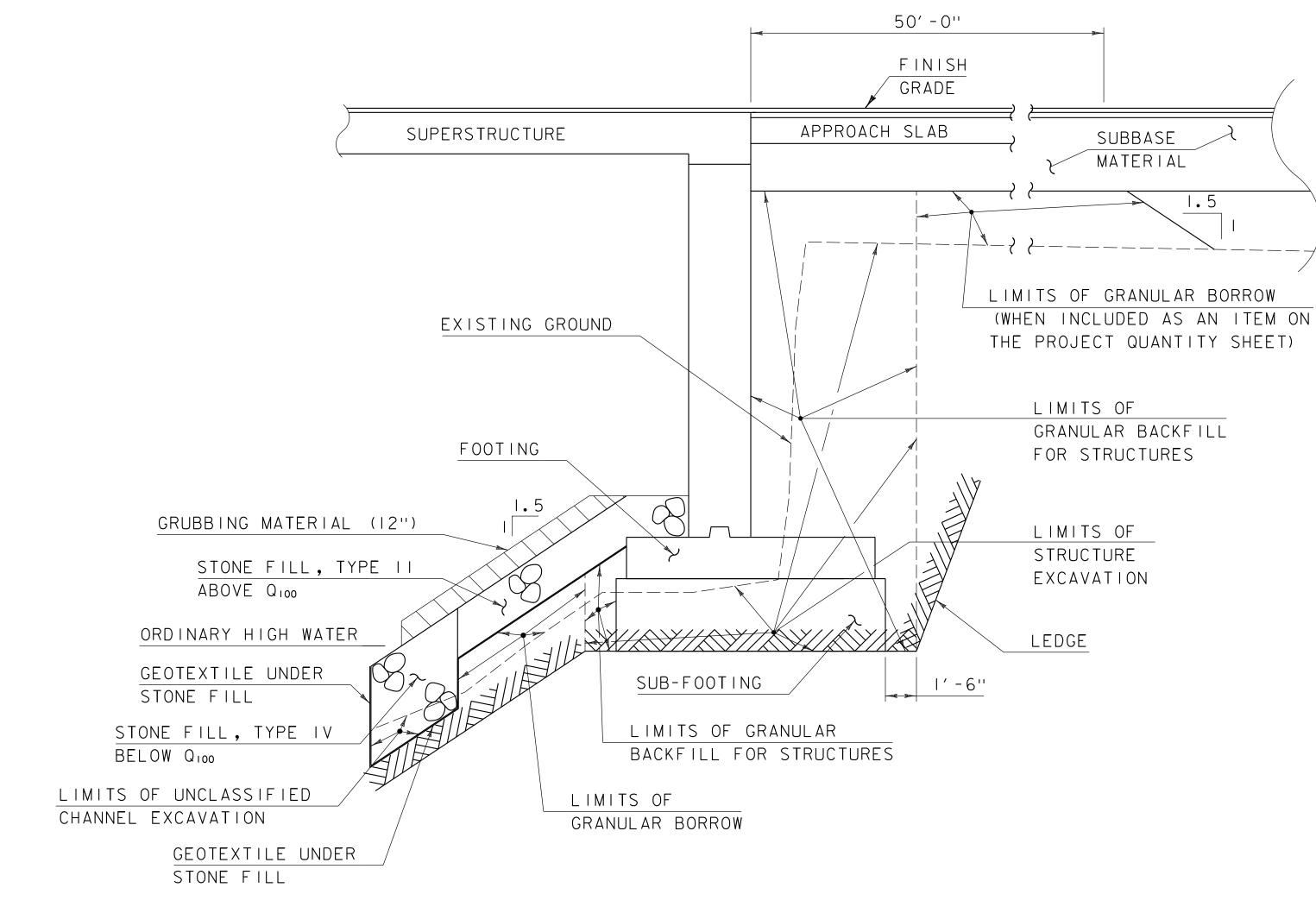
FILE NAME: zl3b266frm.dgn PROJECT LEADER: J. BYATT DESIGNED BY: M. HALEY DETAIL SHEET I

PLOT DATE: 3/31/2017 DRAWN BY: S. GOODWIN CHECKED BY: P. SHEDD SHEET 6 OF 60



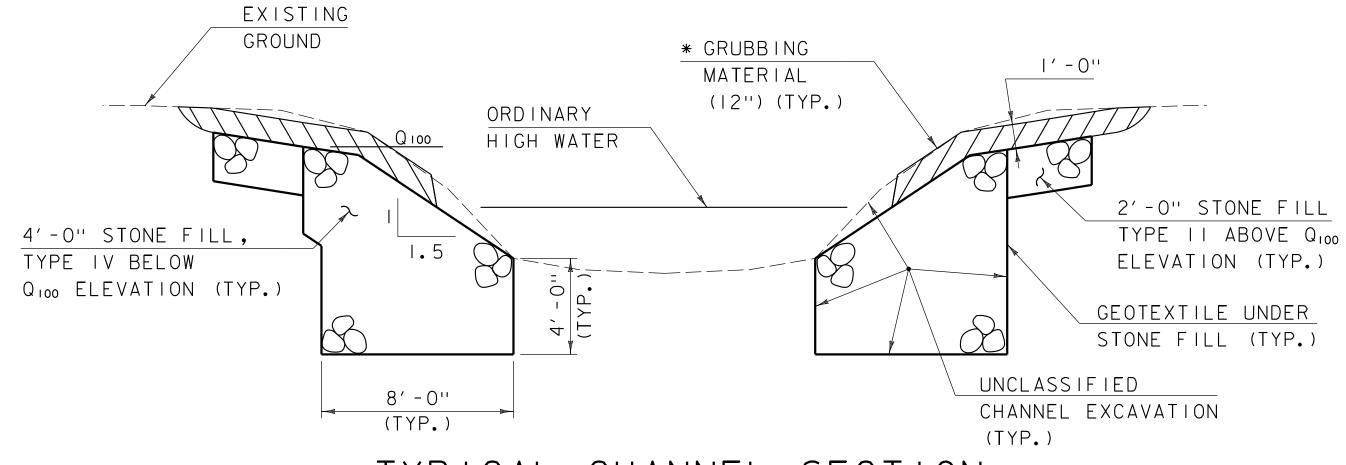
TYPICAL ABUTMENT I EARTHWORK SECTION

NOT TO SCALE



TYPICAL ABUTMENT 2 EARTHWORK SECTION

NOT TO SCALE



TYPICAL CHANNEL SECTION

NOT TO SCALE

* WHENEVER CHANNEL SLOPE INTERSECTS ROADWAY SUBBASE, GRUBBING MATERIAL SHALL BEGIN AT THE BOTTOM OF SUBBASE.

PROJECT NAME: PITTSFORD PROJECT NUMBER: BF 019-3(59)

CONSULTING
ENGINEERS

FILE NAME: zI3b266sub.dgn
PROJECT LEADER: J. BYATT
DESIGNED BY: N. CARON
TYPICAL EARTHWORK SECTIONS

PLOT DATE: 3/31/2017
DRAWN BY: M. SMITH
CHECKED BY: S. BEAUMONT
SHEET 7 OF 60

GENERAL INFORMATION

SYMBOLOGY LEGEND NOTE

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

R. O. W.	ABBREV	IATIONS (CODES) & SYMBOLS
POINT	CODE	DESCRIPTION
	СН	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
	1&M	INSTALL & MAINTAIN EASEMENT
	LAND	LANDSCAPE EASEMENT
	R&RES	REMOVE & RESET
	R&REP	REMOVE & REPLACE
	SR	SLOPE RIGHT
	UE	UTILITY EASEMENT
	(P)	PERMANENT EASEMENT
	(T)	TEMPORARY EASEMENT
	BNDNS	BOUND SET
	BNDNS	BOUND TO BE SET
	IPNS	IRON PIN SET
\odot	IPNS	IRON PIN TO BE SET
\boxtimes	CALC	EXISTING ROW POINT
\bigcirc	PROW	PROPOSED ROW POINT
[LENG	TH]	LENGTH CARRIED ON NEXT SHEET

COMMON TODOCOADULC DOLLIT CYMPOLS

COMMON	N TOPOG	RAPHIC POINT SYMBOLS
POINT	CODE	DESCRIPTION
(:)	APL	BOUND APPARENT LOCATION
•	ВМ	BENCHMARK
•	BND	BOUND
	СВ	CATCH BASIN
	COMB	COMBINATION POLE
	DITHR	DROP INLET THROATED DNC
;	EL	ELECTRIC POWER POLE
⊙	FPOLE	FLAGPOLE
\odot	GASFIL	GAS FILLER
\odot	GP	GUIDE POST
×	GSO	GAS SHUT OFF
0	GUY	GUY POLE
•	GUYW	GUY WIRE
×	GV	GATE VALUE
	Н	TREE HARDWOOD
\triangle	HCTRL	CONTROL HORIZONTAL
\triangle	HVCTRL	CONTROL HORIZ. & VERTICAL
\Diamond	HYD	HYDRANT
(a)	IP	IRON PIN
⊚	IPIPE	IRON PIPE
¢.	LI	LIGHT - STREET OR YARD
o	MB	MAILBOX
\odot	MH	MANHOLE (MH)
•	MM	MILE MARKER
⊖	PM	PARKING METER
•	PMK	PROJECT MARKER
⊙ ==	POST	POST STONE/WOOD
	RRSIG	RAILROAD SIGNAL
•	RRSL	RAILROAD SWITCH LEVER
	S	TREE SOFTWOOD
⊙	SAT	SATELLITE DISH
	SHRUB	SHRUB
$\overline{\circ}$	SIGN	SIGN
A	STUMP	STUMP
-0-	TEL	TELEPHONE POLE
•	TIE	TIE
0 0	TSIGN	SIGN W/DOUBLE POST
人	VCTRL	CONTROL VERTICAL
0	WELL	WELL
M	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.

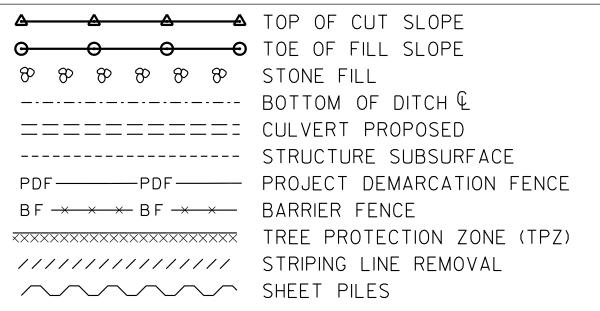
PROPOSED GEOMETRY CODES

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
АН	AHEAD STATION SUFFIX
BK	BACK STATION SUFFIX
D	CURVE DEGREE OF (100FT)
R	CURVE RADIUS OF
Τ	CURVE TANGENT LENGTH
L	CURVE LENGTH OF
E	CURVE EXTERNAL DISTANCE

UTILITY SYMBOLOGY 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+TELEP. — 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+TELEP. PROJECT CONSTRUCTION SYMBOLOGY

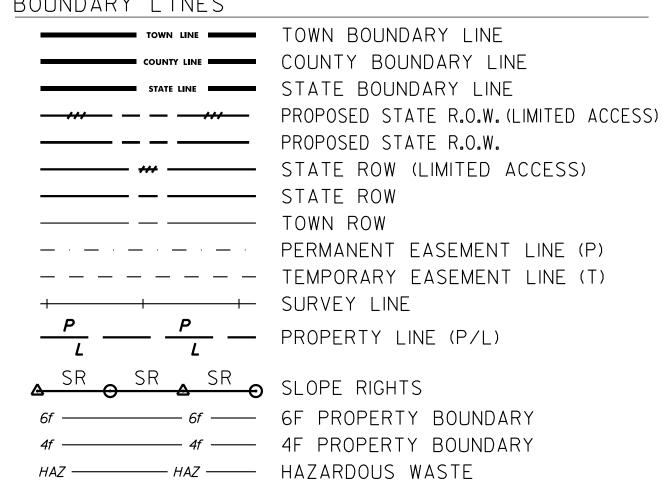
PROJECT DESIGN & LAYOUT SYMBOLOGY
— — CZ — — CLEAR ZONE

PROJECT CONSTRUCTION FEATURES

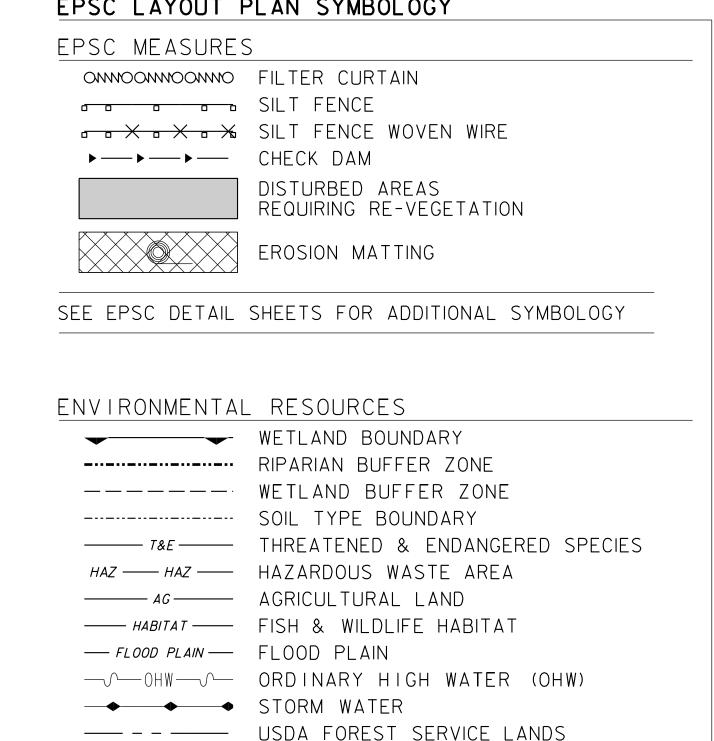


CONVENTIONAL BOUNDARY SYMBOLOGY

BOUNDARY LINES



EPSC LAYOUT PLAN SYMBOLOGY



CONVENTIONAL TOPOGRAPHIC SYMBOLOGY

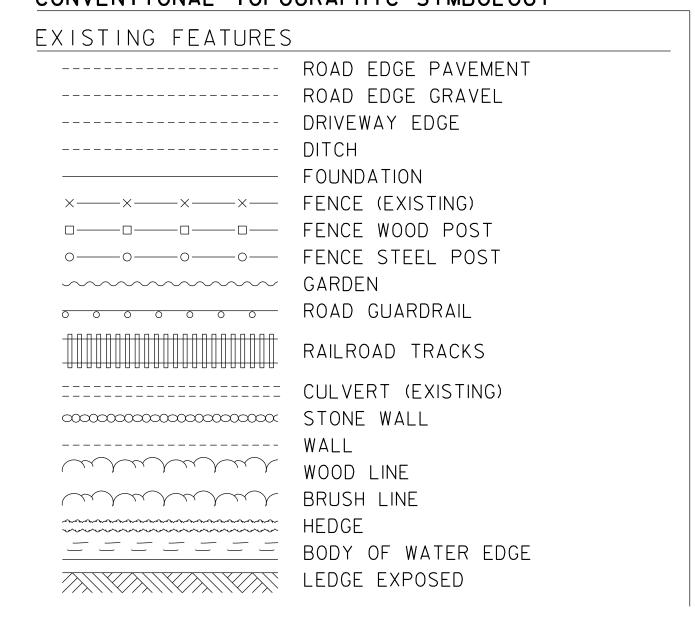
— · · — · · WILDLIFE HABITAT SUIT/CONN

--- HISTORIC DISTRICT BOUNDARY

HISTORIC STRUCTURE

ARCHEOLOGICAL & HISTORIC

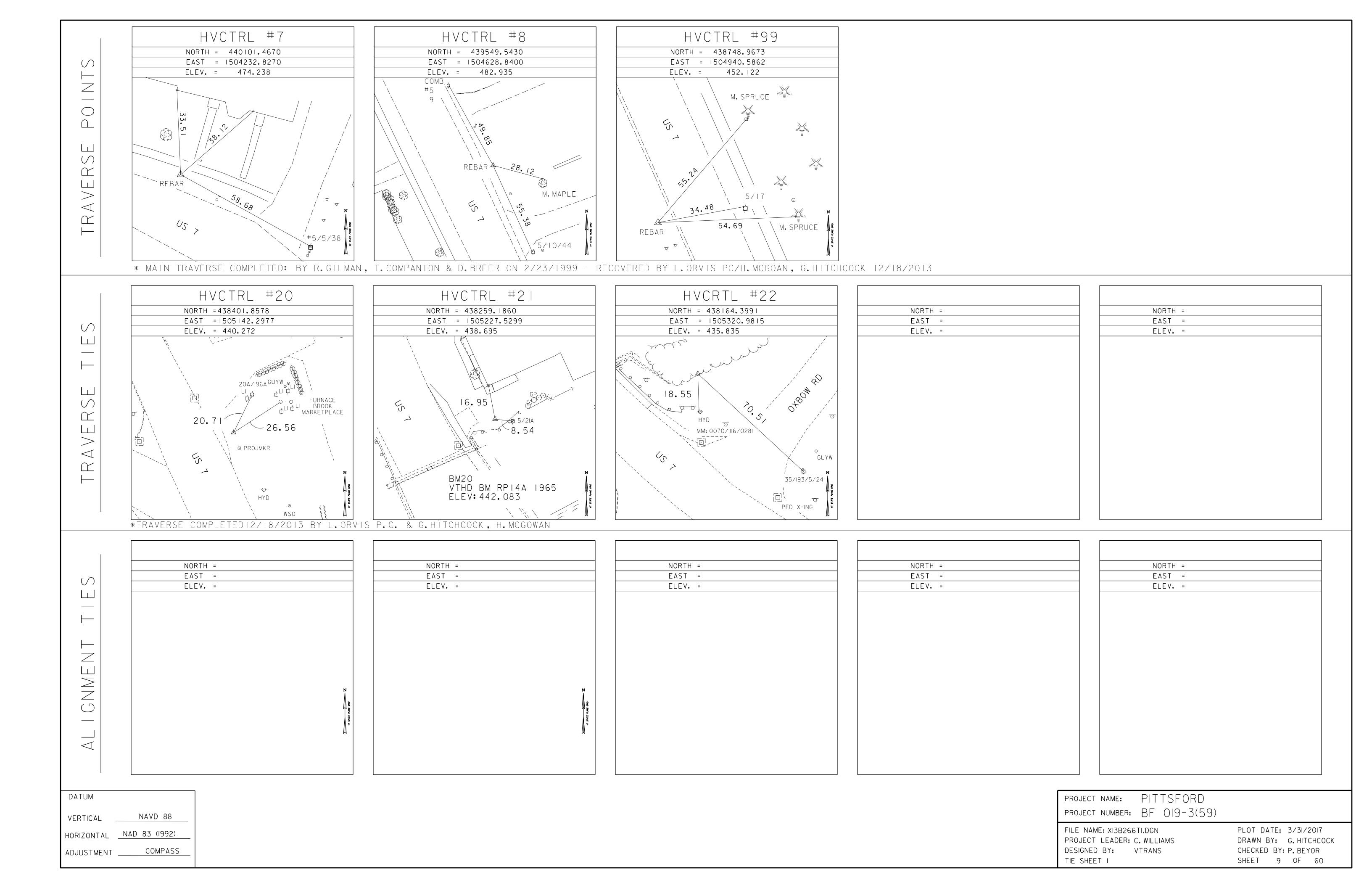
----- HISTORIC AREA

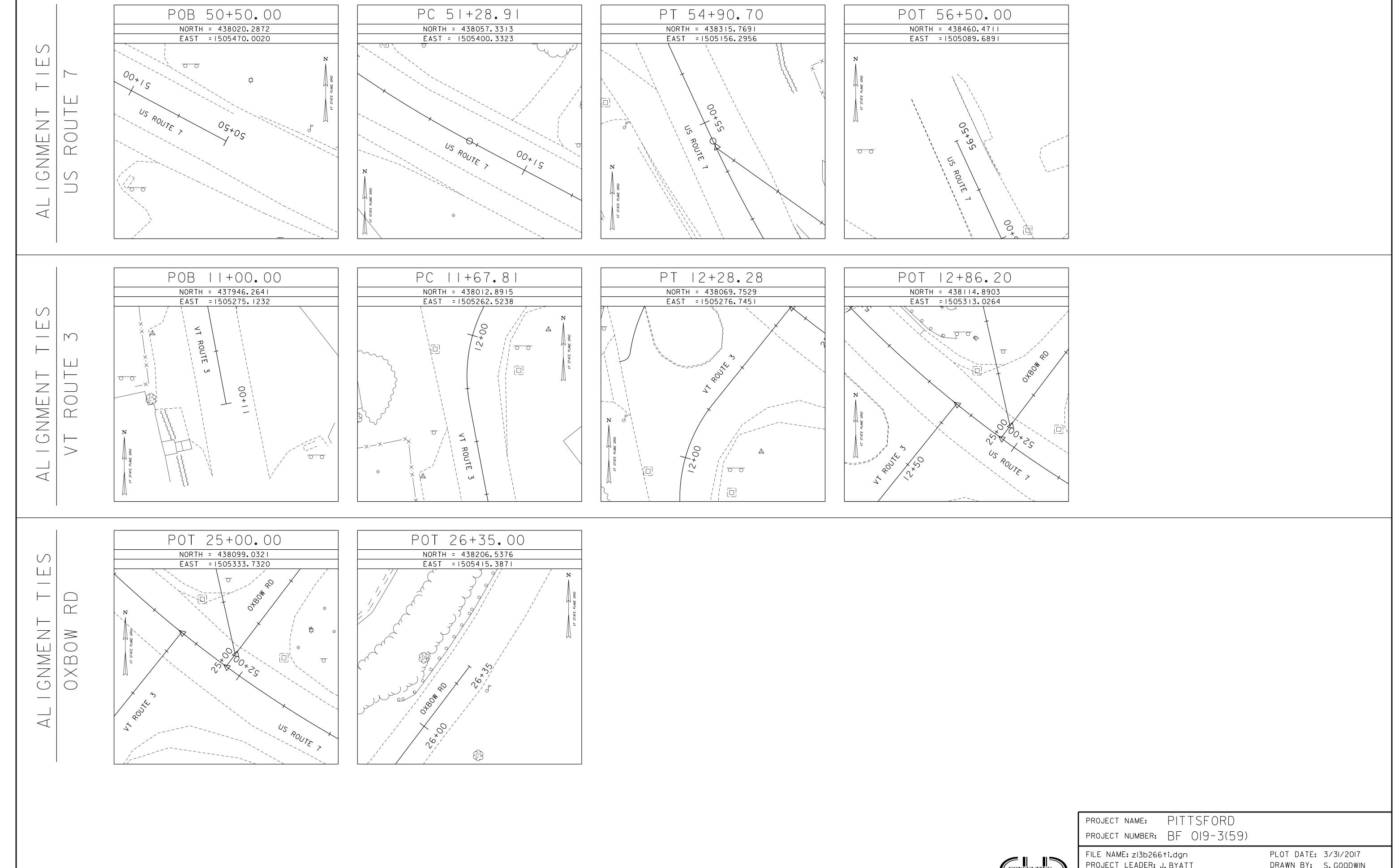


PROJECT NAME: PITTSFORD PROJECT NUMBER: BF 019-3(59)

FILE NAME: zI3b266frm.dgn PROJECT LEADER: J. BYATT DESIGNED BY: M. HALEY CONVENTIONAL SYMBOLOGY LEGEND SHEET SHEET 8 OF 60

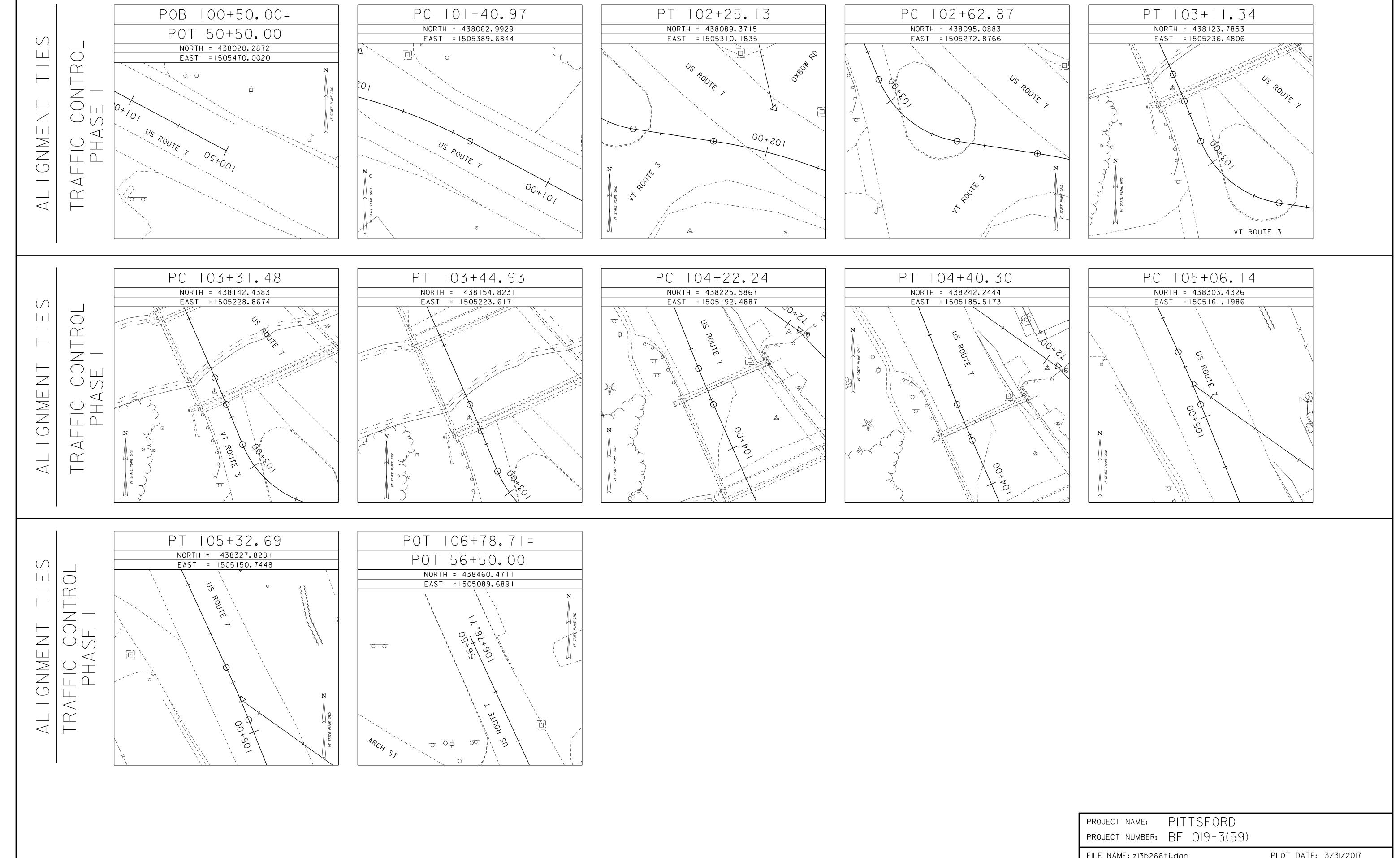
PLOT DATE: 3/31/2017 DRAWN BY: S. GOODWIN CHECKED BY: P. SHEDD





CONSULTING ENGINEERS FILE NAME: zl3b266ti.dgn
PROJECT LEADER: J. BYATT
DESIGNED BY: M. HALEY
TIE SHEET 2

PLOT DATE: 3/31/2017
DRAWN BY: S. GOODWIN
CHECKED BY: P. SHEDD
SHEET 10 OF 60



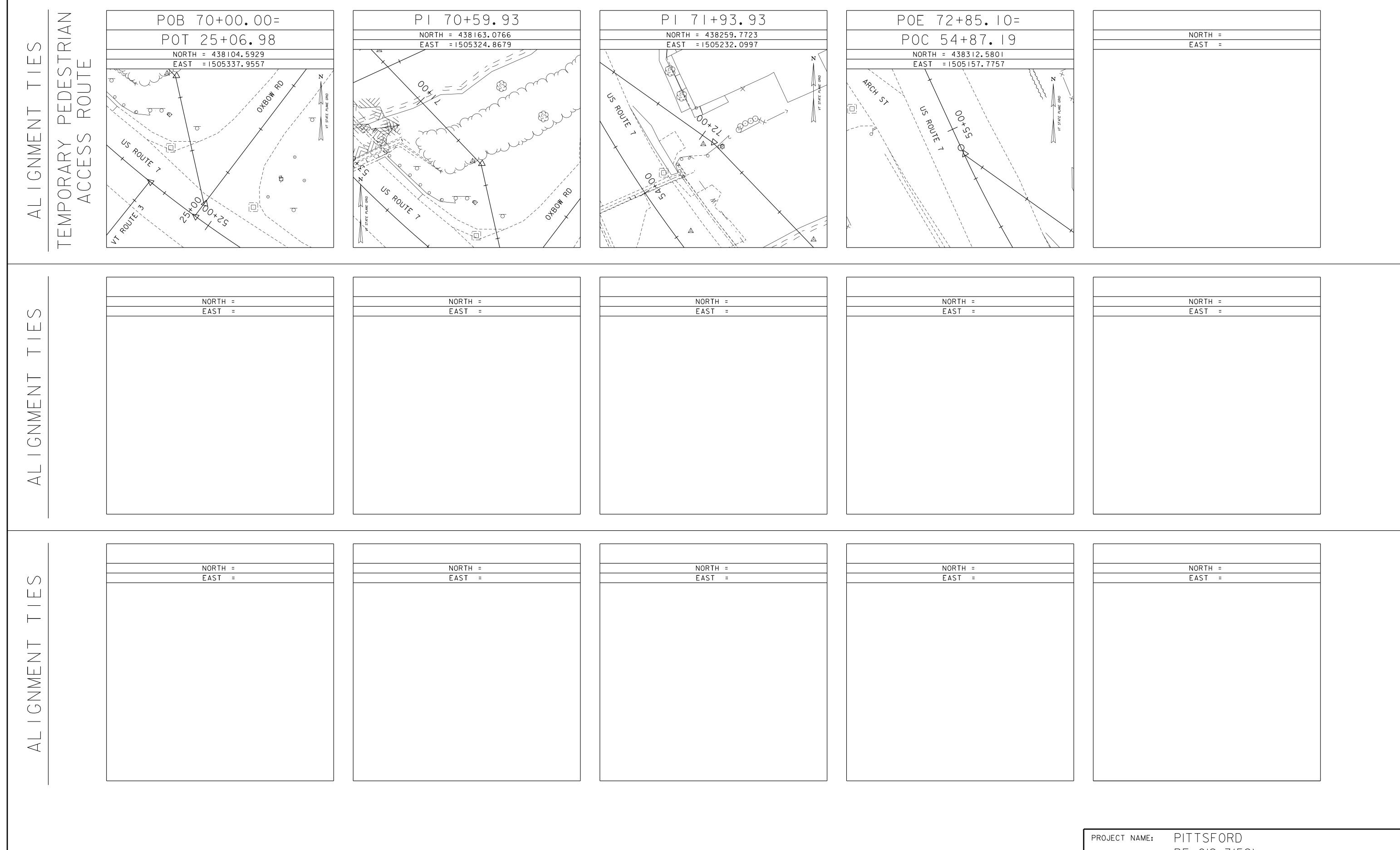
CONSULTING ENGINEERS FILE NAME: zI3b266+i.dgn
PROJECT LEADER: J. BYATT
DESIGNED BY: M. HALEY
TIE SHEET 3

PLOT DATE: 3/31/2017

DRAWN BY: P. MCKECHNIE

CHECKED BY: P. SHEDD

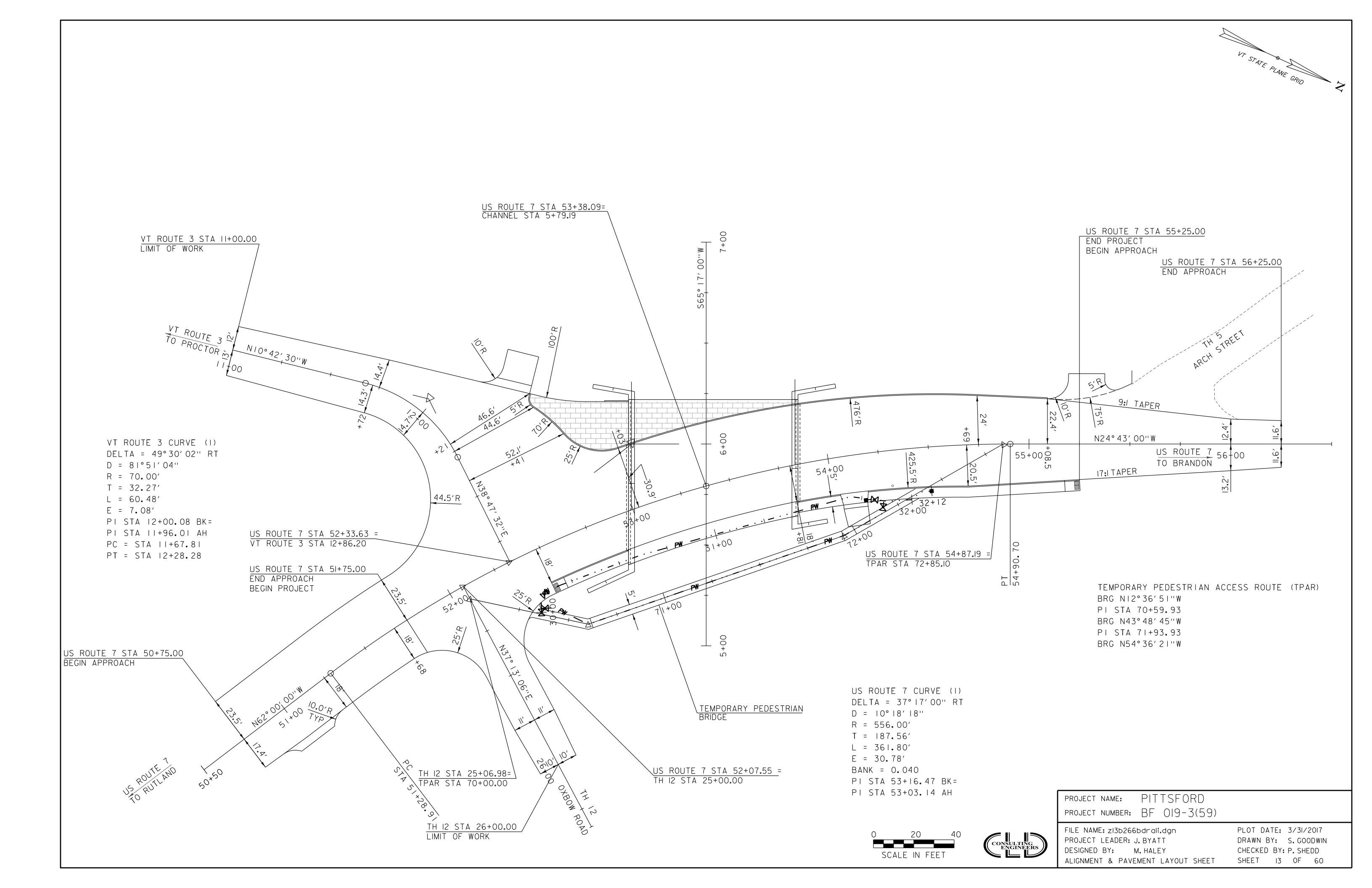
SHEET II OF 60

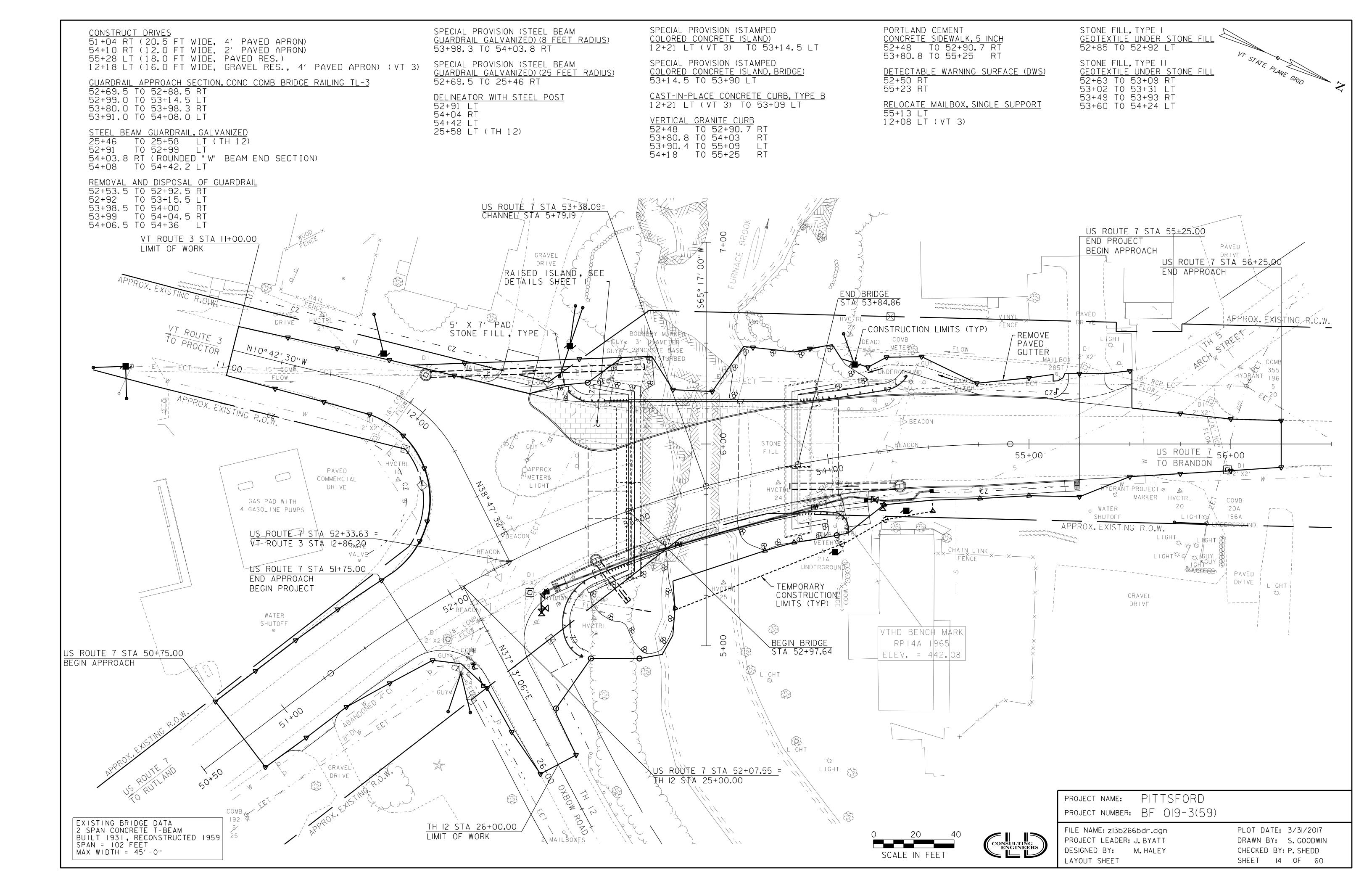


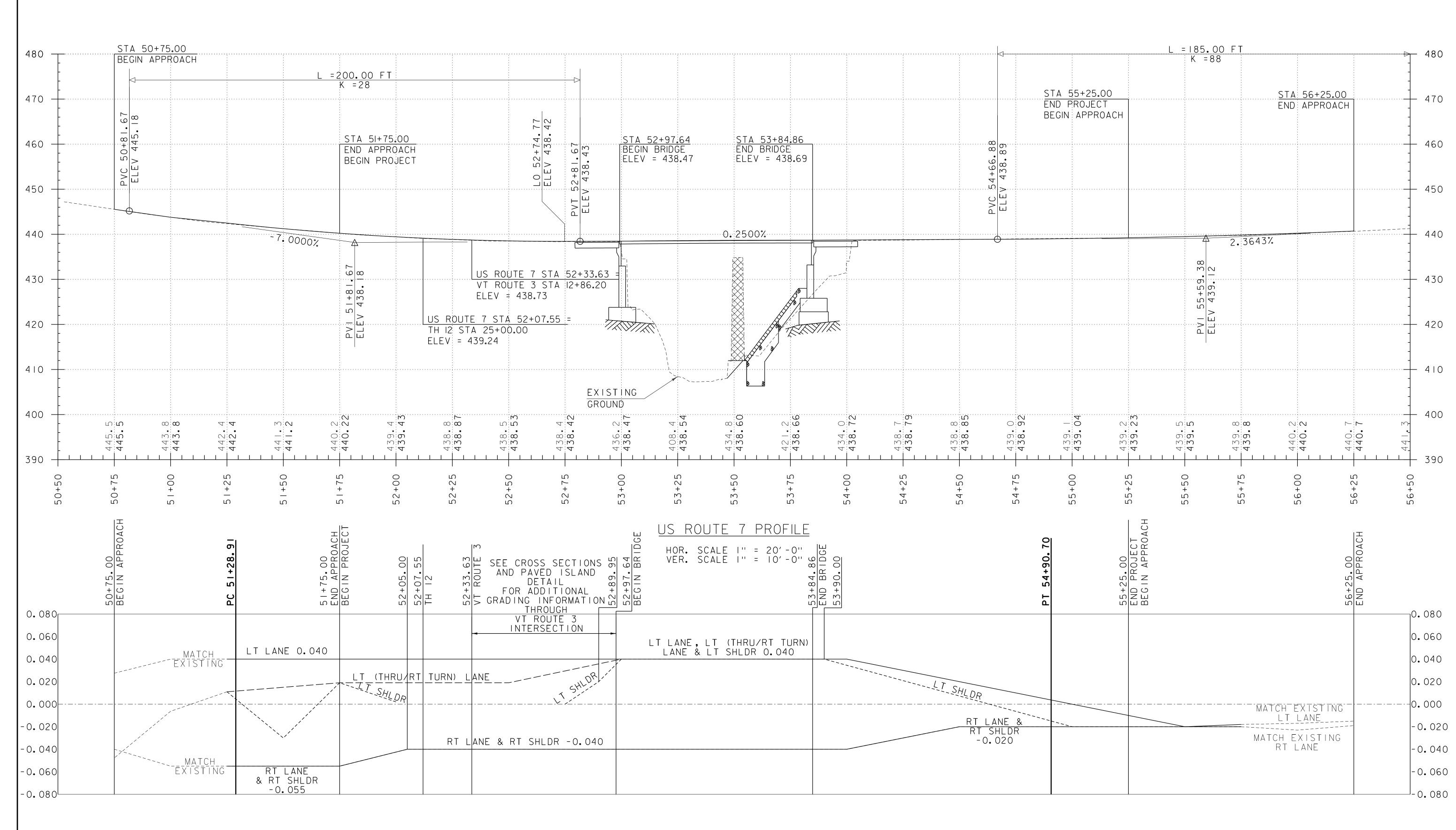
PROJECT NUMBER: BF 019-3(59)

FILE NAME: zI3b266ti.dgn PROJECT LEADER: J. BYATT DESIGNED BY: M. HALEY TIE SHEET 4

PLOT DATE: 3/31/2017 DRAWN BY: P. MCKECHNIE CHECKED BY: P. SHEDD SHEET 12 OF 60





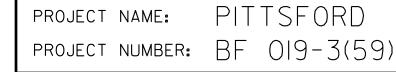


STATIONS AND ELEVATIONS ARE IN FEET.

THE ELEVATIONS SHOWN TO THE NEAREST TENTH ARE THE OLD GROUND ALONG THE CENTERLINE.

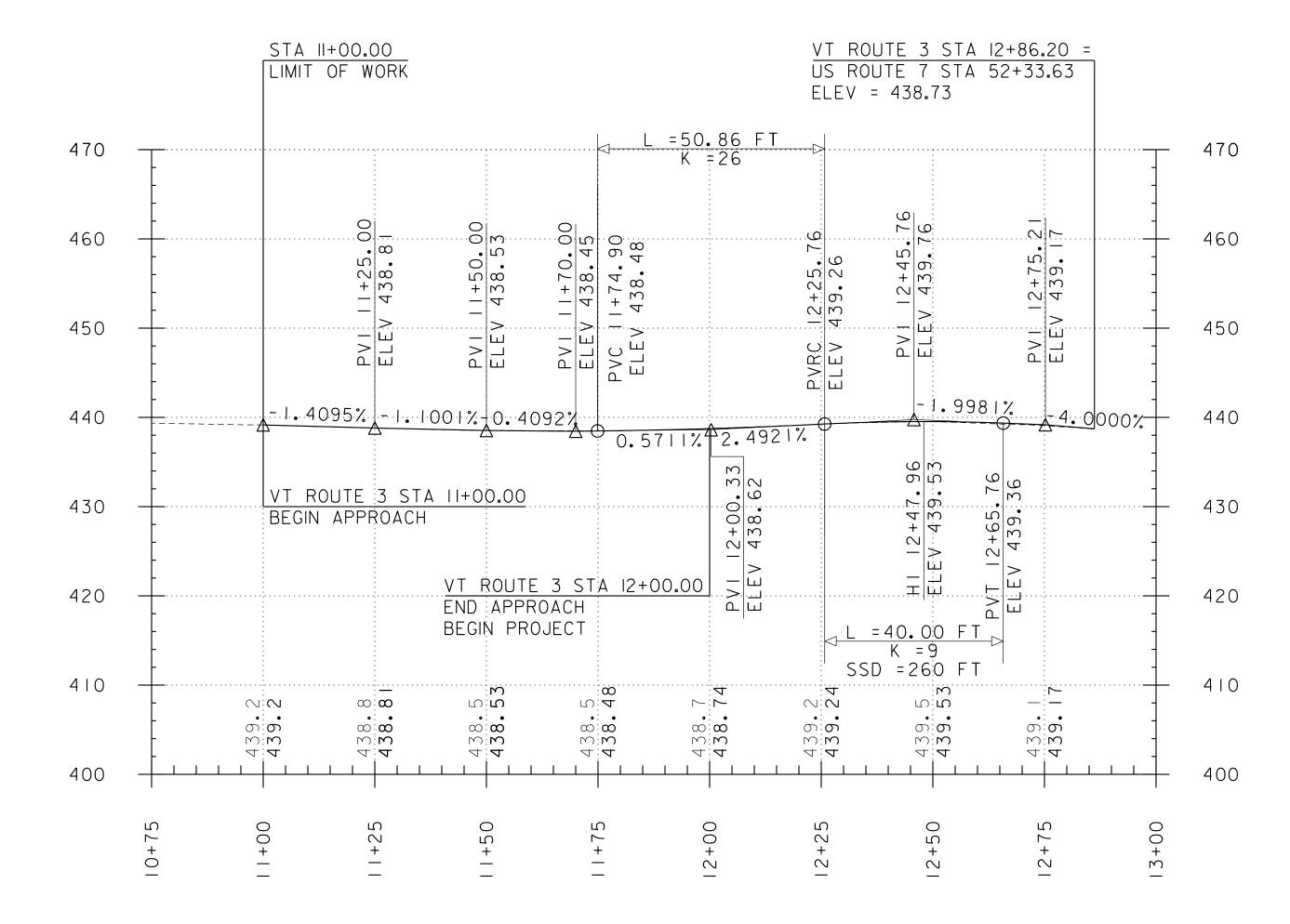
THE ELEVATIONS SHOWN TO THE NEAREST HUNDREDTH ARE THE PROPOSED FINISHED GRADE ALONG THE CENTERLINE.

BANKING DIAGRAM NOT TO SCALE



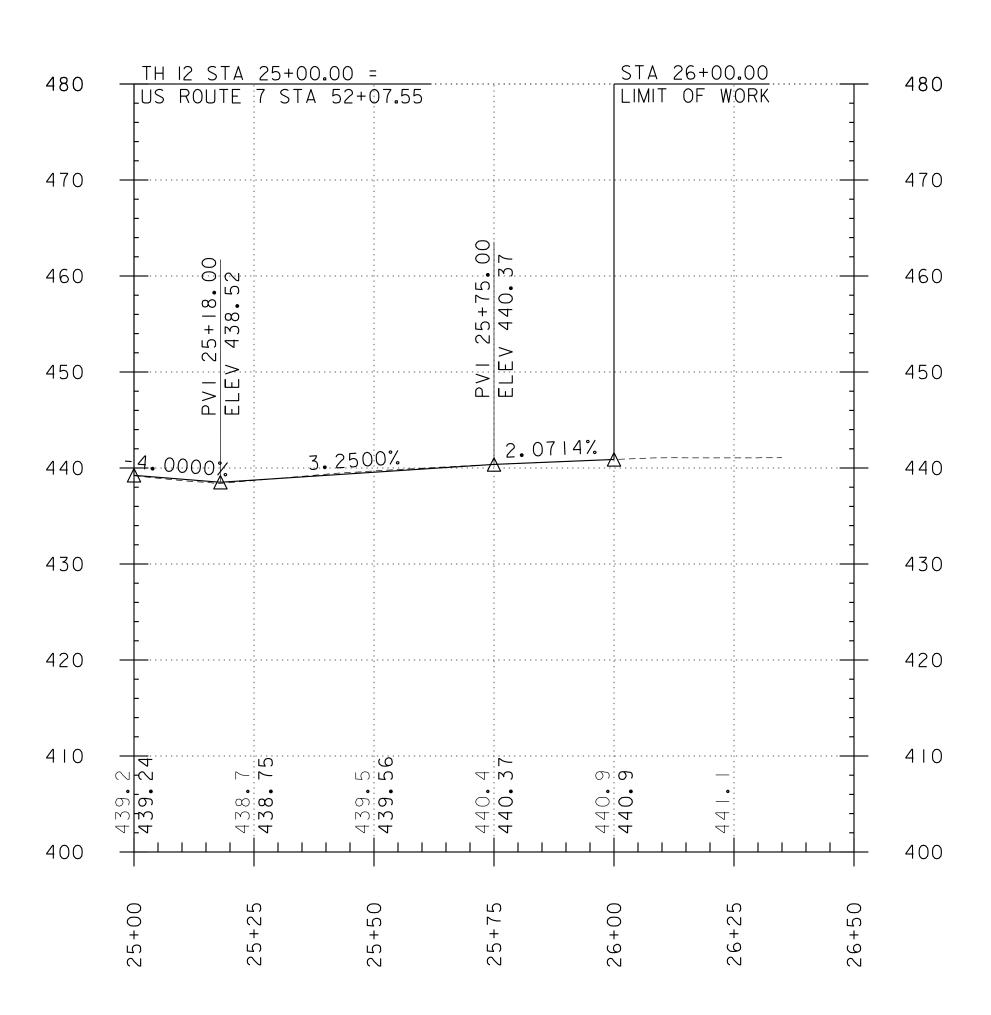
FILE NAME: zl3b266pro.dgn PROJECT LEADER: J. BYATT DESIGNED BY: M. HALEY US ROUTE 7 PROFILE AND BANKING DIAGRAM SHEET 15 OF 60

PLOT DATE: 3/31/2017 DRAWN BY: S. GOODWIN CHECKED BY: P. SHEDD



VT ROUTE 3 PROFILE

HOR. SCALE I'' = 20'-0" VER. SCALE I'' = 10'-0"



TH 12 (OXBOW ROAD) PROFILE

HOR. SCALE I'' = 20'-0" VER. SCALE I'' = 10'-0"

STATIONS AND ELEVATIONS ARE IN FEET.

THE ELEVATIONS SHOWN TO THE NEAREST TENTH ARE THE OLD GROUND ALONG THE CENTERLINE.

THE ELEVATIONS SHOWN TO THE NEAREST HUNDREDTH ARE THE PROPOSED FINISHED GRADE ALONG THE CENTERLINE.



PROJECT NAME: PITTSFORD PROJECT NUMBER: BF 019-3(59)

FILE NAME: zl3b266pro.dgn
PROJECT LEADER: J.BYATT
DESIGNED BY: M.HALEY
VT ROUTE 3 & TH I2 PROFILE

PLOT DATE: 3/31/2017
DRAWN BY: S. GOODWIN
CHECKED BY: P. SHEDD
SHEET 16 OF 60

TRAFFIC CONTROL NOTES

- I. ANY USE OF UNIFORMED TRAFFIC OFFICERS SHALL BE PAID UNDER ITEM 630.10. "UNIFORMED TRAFFIC OFFICERS". ANY USE OF FLAGGERS SHALL BE PAID UNDER ITEM 630.15. "FLAGGERS".
- 2. TRAFFIC CONTROL SHALL CONSIST OF TWO-WAY TRAFFIC UNDER SIGNALIZED CONTROL. TEMPORARY TRAFFIC BARRIER, TEMPORARY TRAFFIC BARRIER-BOLTED, TEMPORARY TRAFFIC BARRIER-BRACED, TRAFFIC CONTROL DEVICES, TEMPORARY SIGNALS, TEMPORARY PAVEMENT MARKINGS. REMOVAL OF EXISTING AND TEMPORARY PAVEMENT MARKINGS, AND OTHER ITEMS REQUIRED TO CONSTRUCT, INSPECT, MAINTAIN AND REMOVE THE TEMPORARY DETOUR WILL BE INCLUDED UNDER PAY ITEM 900.645. "SPECIAL PROVISION (TRAFFIC CONTROL. ALL-INCLUSIVE)". ALL OTHER ITEMS RELATED TO TRAFFIC CONTROL. INCLUDING THE PROJECT TRAFFIC CONTROL PLAN AND ALL OTHER ON AND OFF-PROJECT TEMPORARY CONSTRUCTION SIGNING. WILL BE INCLUDED UNDER PAY ITEM 900.645. "SPECIAL PROVISION (TRAFFIC CONTROL. ALL-INCLUSIVE)".
- 3. PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS) WARNING MOTORISTS OF THE CONSTRUCTION PROJECT AND CHANGING TRAFFIC PATTERNS WILL BE INCLUDED UNDER PAY ITEM 641.15. "PORTABLE CHANGEABLE MESSAGE" SIGN". THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER TO DETERMINE APPROPRIATE LOCATIONS FOR PCMS.
- 4. THE CONTRACTOR SHALL SUBMIT A SITE SPECIFIC TRAFFIC CONTROL PLAN FOR APPROVAL PRIOR TO THE START OF CONSTRUCTION. THE COST OF PREPARING THE PLAN (AND MAKING CHANGES IF NECESSARY) SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 900.645. "SPECIAL PROVISION (TRAFFIC CONTROL. ALL-INCLUSIVE)".
- 5. UNLESS OTHERWISE NOTED ON THE PLANS. ACCESS TO ALL EXISTING DRIVES SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION.
- 6. INSTALLATION OF NECESSARY SIGNS SHALL NOT BLOCK ANY EXISTING TRAFFIC CONTROL SIGN ASSEMBLIES. THE CONTRACTOR SHALL COVER EXISTING SIGNS THAT CONFLICT WITH PROPOSED TRAFFIC CONTROL SIGN ASSEMBLIES.
- 7. THE CONTRACTOR SHALL CONTACT DIG SAFE AT 1-888-344-7233 PRIOR TO COMMENCING ANY WORK.
- 8. ALL TRAFFIC SIGNS, TYPE A THAT ARE 36" X 36" OR LARGER SHALL BE MOUNTED ON TWO POSTS.
- 9. ALL SIGN PACKAGES SHALL CONFORM TO THE 2009 MUTCD OR ITS LATEST REVISION.
- IO. NON-CRASHWORTHY FEATURES RESULTING FROM CONSTRUCTION ACTIVITIES THAT ARE LOCATED WITHIN THE CLEAR ZONE SHALL BE PROPERLY PROTECTED. ALL TEMPORARY DEVICES SHALL BE NCHRP REPORT 350 OR MASH COMPLIANT AND SHALL BE FURNISHED IN ACCORDANCE WITH SECTION 621.
- II. WHERE TEMPORARY BARRIER IS USED, BARRIER ENDS FACING ONCOMING TRAFFIC SHALL BE TAPERED BEYOND THE CLEAR ZONE OR PROTECTED WITH AN ENERGY ABSORPTION ATTENUATOR, ENERGY ABSORPTION ATTENUATORS WILL BE INCLUDED UNDER PAY ITEM 900.645. "SPECIAL PROVISION (TRAFFIC CONTROL. ALL-INCLUSIVE)".
- 12. REFER TO MUTCD PART 6 AND THE TRAFFIC CONTROL PLANS FOR ADDITIONAL INFORMATION REGARDING REQUIRED SIGNAGE AND SIGN LOCATIONS.

PEDESTRIAN TEMPORARY TRAFFIC CONTROL NOTES

- I. THE CONTRACTOR SHALL MAINTAIN PEDESTRIAN THROUGH MOVEMENTS FROM ONE END OF THE CONSTRUCTION AREA TO THE OTHER UTILIZING A PEDESTRIAN BRIDGE DURING CONSTRUCTION. THE PEDESTRIAN BRIDGE SHALL MEET THE REQUIREMENTS OF SECTION 528. ANY ADDITIONAL EASEMENTS AND APPLICABLE PERMITS THAT ARE NECESSARY AS A RESULT OF REVISIONS TO THE WORK SHOWN ON THE PLANS SHALL BE THE CONTRACTOR'S RESPONSIBILITY. PAYMENT FOR THIS WORK SHALL BE PAID FOR UNDER ITEM 528.12. "TEMPORARY PEDESTRIAN BRIDGE (8 FT X 132 FT)". ANY SIDEWALK CLOSURES SHALL MEET THE REQUIREMENTS OF MUTCD, PART 6.
- 2. PEDESTRIAN ACCESS SHALL BE PROVIDED TO ALL ADJACENT PROPERTIES, BUILDINGS, RESIDENCES AND COMMERCIAL PROPERTIES AT ALL TIMES. THIS MAY INCLUDE TEMPORARY WALKWAYS SPANNING THE CONSTRUCTION AREA.
- 3. PEDESTRIAN TRAFFIC AT THE INTERSECTION OF US ROUTE 7.VT ROUTE 3 AND OXBOW ROAD WILL BE UNDER SIGNAL CONTROL.
- 4. THE CONTRACTOR SHALL NOT STORE OR PLACE ANY CONSTRUCTION MATERIALS. EQUIPMENT OR SIGNS IN THE PEDESTRIAN PATH OF TRAVEL.
- 5. THE CONTRACTOR'S OPERATIONS SHALL NOT OCCUPY SIDEWALKS, EXCEPT WHERE PROPER PROTECTION AND A TEMPORARY PEDESTRIAN ACCESS ROUTE (TPAR) HAVE BEEN PROVIDED.
- 6. THE CONTRACTOR SHALL PROVIDE A TEMPORARY PEDESTRIAN TRAFFIC CONTROL PLAN FOR REVIEW AND WRITTEN APPROVAL BY THE ENGINEER A MINIMUM OF THREE WEEKS BEFORE SUCH PLAN IS IMPLEMENTED. THIS PLAN SHALL DETAIL THE CONSTRUCTION PHASING, SCHEDULE AND THE SPECIFIC METHODS OF MAINTAINING SAFE PEDESTRIAN ACCESS THROUGHOUT THE CONSTRUCTION AREA. THIS PLAN SHALL PROVIDE THE LOCATION AND DETAILS OF TEMPORARY CONSTRUCTION SIGNING, MARKINGS, BARRICADES, RESIDENCES, ETC.
- 7. PROVISION OF THE TEMPORARY PEDESTRIAN ACCESS ROUTE (TPAR) AND ALL OF ITS ELEMENTS, INCLUDING BUT NOT LIMITED TO SIGNS, CHANNELIZING DEVICES, BARRICADES, TEMPORARY PAVEMENT MARKINGS AND OTHER TRAFFIC CONTROL DEVICES IS TO BE PAID FOR INCIDENTAL TO ITEM 900.645. "SPECIAL PROVISION (TRAFFIC CONTROL, ALL-INCLUSIVE)".

SIGNAL OPERATION NOTES

- I. TEMPORARY TRAFFIC SIGNAL SYSTEM SHALL COMPLY WITH THE REQUIREMENTS OF SECTION 678. "TRAFFIC CONTROL SIGNALS" AND WILL BE CONSIDERED INCIDENTAL TO ITEM 900.645. "SPECIAL PROVISION (TRAFFIC CONTROL, ALL-INCLUSIVE)".
- 2. THE SIGNAL SYSTEM SHALL CONSIST OF POLES, SIGNS, AND POSTS, WARNING SIGNS, LUMINAIRES, ASSOCIATED PAVEMENT MARKINGS AND SIGNAL EQUIPMENT TO PROVIDE FOR AN ADEQUATE DESIGN. IT ALSO INCLUDES PERMITS AND COSTS ASSOCIATED WITH PROVIDING ELECTRICAL POWER.
- 3. THE CONTRACTOR SHALL INSTALL PORTABLE TRAFFIC SIGNAL TRAILERS IN PLACE OF A STATIC SIGNAL SYSTEM AS SHOWN ON THE PLANS. THE TRAILERS SHALL COMMUNICATE VIA RADIO INTERFACE TO FUNCTION AS A SINGLE CONTROL SYSTEM. AT LEAST ONE SIGNAL HEAD SHALL BE UNMISTAKABLY IN LINE WITH THE CENTER OF APPROACHING TRAFFIC AT ALL TIMES. THE SECOND SIGNAL HEAD MAY BE POST MOUNTED ON THE TRAILER, LOCATED AT A DISTANCE OF 14.5 FEET FROM THE CENTER OF THE APPROACH LANE WHEN THE STOP BAR IS 40 FEET FROM THE SIGNAL HEAD. CONSULT THE LATEST EDITION OF THE MUTCD FOR ADDITIONAL INFORMATION CONCERNING SIGNAL PLACEMENT.
- 4. THE BOTTOM OF A SIGNAL FACE NOT MOUNTED OVER A ROADWAY SHALL NOT BE LESS THAN 8.0 FEET NOR MORE THAN 15.0 FEET ABOVE THE GROUND. CAUTION SHOULD BE USED TO ENSURE COMPLIANCE WITH THE HEIGHT REQUIREMENTS IN THE EVENT THE NEW APPROACH GRADES DIFFER SIGNIFICANTLY FROM THE OLD ROADWAY GRADE.
- 5. SIGNAL FACES FOR ANY ONE APPROACH SHALL NOT BE LESS THAN 8 FEET APART MEASURED HORIZONTALLY BETWEEN CENTER FACES.
- 6. SIGNAL FACES SHALL BE L.E.D. AND CONSIST OF 12 INCH LENSES (RED, YELLOW AND GREEN)
- 7. SIGNAL HEAD PLACEMENT IS CRITICAL. HEADS SHALL BE ADJUSTED TO REFLECT LANE LOCATION CHANGES BETWEEN EACH PHASE OF CONSTRUCTION.
- 8. THE TRAFFIC SIGNALS SHALL NOT OPERATE WITHOUT THE PAVEMENT MARKINGS AND SIGNAL RELATED SIGNING IN PLACE.
- 9. INSTALL WIRING BETWEEN POWER SOURCES AND SIGNAL TRAILERS TO PROVIDE FOR A SAFE INSTALLATION. ANY NECESSARY CONNECTIONS TO UTILITY POLES SHALL BE COORDINATED BY THE CONTRACTOR WITH THE UTILITY COMPANY.
- IO. ANY TEMPORARY POLES SHALL BE PLACED BEHIND GUARDRAIL. BARRIER. OR BE OUTSIDE OF THE CLEAR ZONE.
- II. LUMINAIRES SHALL BE INSTALLED AT EACH OF THE APPROACHES TO ADEQUATELY ILLUMINATE THE STOP BAR AREAS. 250 WATT HIGH PRESSURE SODIUM, 150 WATT MERCURY OR AN EQUIVALENT WATTAGE L.E.D. LAMP ARE ALL ACCEPTABLE FORMS OF LUMINAIRE. THE MOUNTING HEIGHT SHALL BE 30 FEET ABOVE THE CENTERLINE OR AS DIRECTED BY THE ENGINEER. WHILE THE INTENT IS TO ILLUMINATE THE TEMPORARY SIGNAL SYSTEM, MEASURED NIGHTTIME ILLUMINANCE AT EACH STOP BAR SHALL NOT BE LESS THAN I.O FOOT-CANDLE. THE ENGINEER SHALL ORDER CHANGES TO THE LIGHTING COMPONENTS IF DETERMINED TO BE INSUFFICIENT.
- 12. ALL TRAFFIC SIGNS, INCLUDING STOP SIGNS, MADE IRRELEVANT DUE TO THE TEMPORARY SIGNAL SHALL BE COMPLETELY COVERED DURING OPERATION OF THE TEMPORARY SIGNAL OR AT THE DISCRETION OF THE ENGINEER.
- 13. CONSTRUCTION APPROACH SIGNS SHALL BE PROVIDED ON EACH APPROACH PER THE TRAFFIC CONTROL PLANS IN THIS PLAN SET. ADDITIONAL SIGNS SHALL BE INSTALLED AS REQUIRED BY THE ENGINEER. PER STANDARD T-I AND T-IO.
- 14. SIGNAL TIMING SHOWN ON THE PLANS MAY REQUIRE FINE-TUNING BY THE ENGINEER IN THE FIELD BASED ON TRAFFIC OBSERVATION. COST OF ADJUSTMENTS SHALL BE INCIDENTAL TO ITEM 900.645. "SPECIAL PROVISION (TRAFFIC CONTROL, ALL-INCLUSIVE)".
- 15. WHEN THE TEMPORARY TRAFFIC CONTROL SIGNALS ARE CHANGED TO FLASHING MODE. EITHER MANUALLY OR AUTOMATICALLY, RED SIGNAL INDICATIONS SHALL BE FLASHED TO ALL APPROACHES.
- 16. ALL TEMPORARY SIGNAL EQUIPMENT, SIGNS, ETC., SHALL BELONG TO THE CONTRACTOR AT THE END OF THE PROJECT AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR THEIR REMOVAL INCLUDING ANY TEMPORARY PAVEMENT MARKINGS. UTILITY POLES. WIRES. ETC.

PROJECT NUMBER: BF 019-3(59)

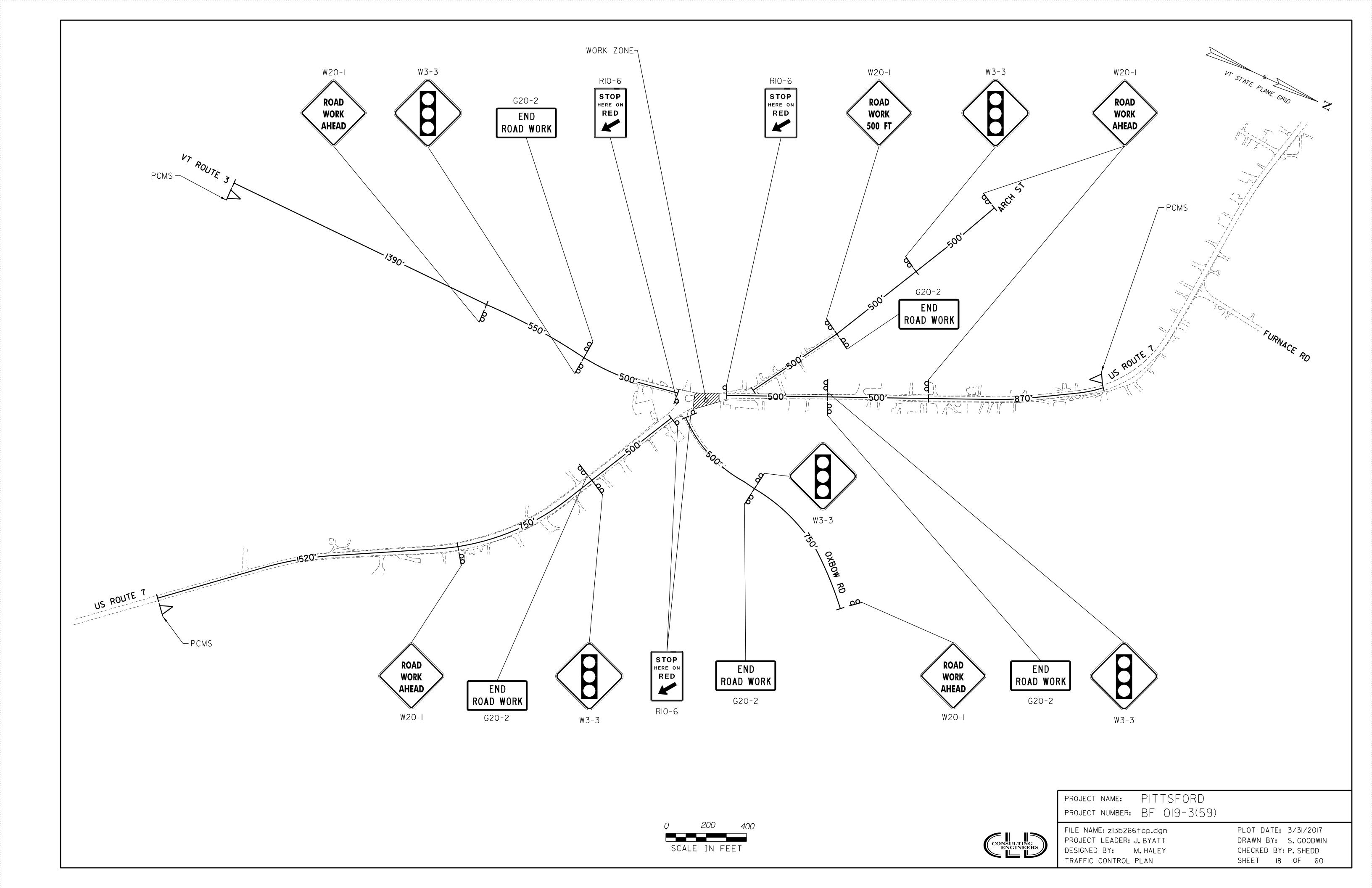
PROJECT NAME: PITTSFORD

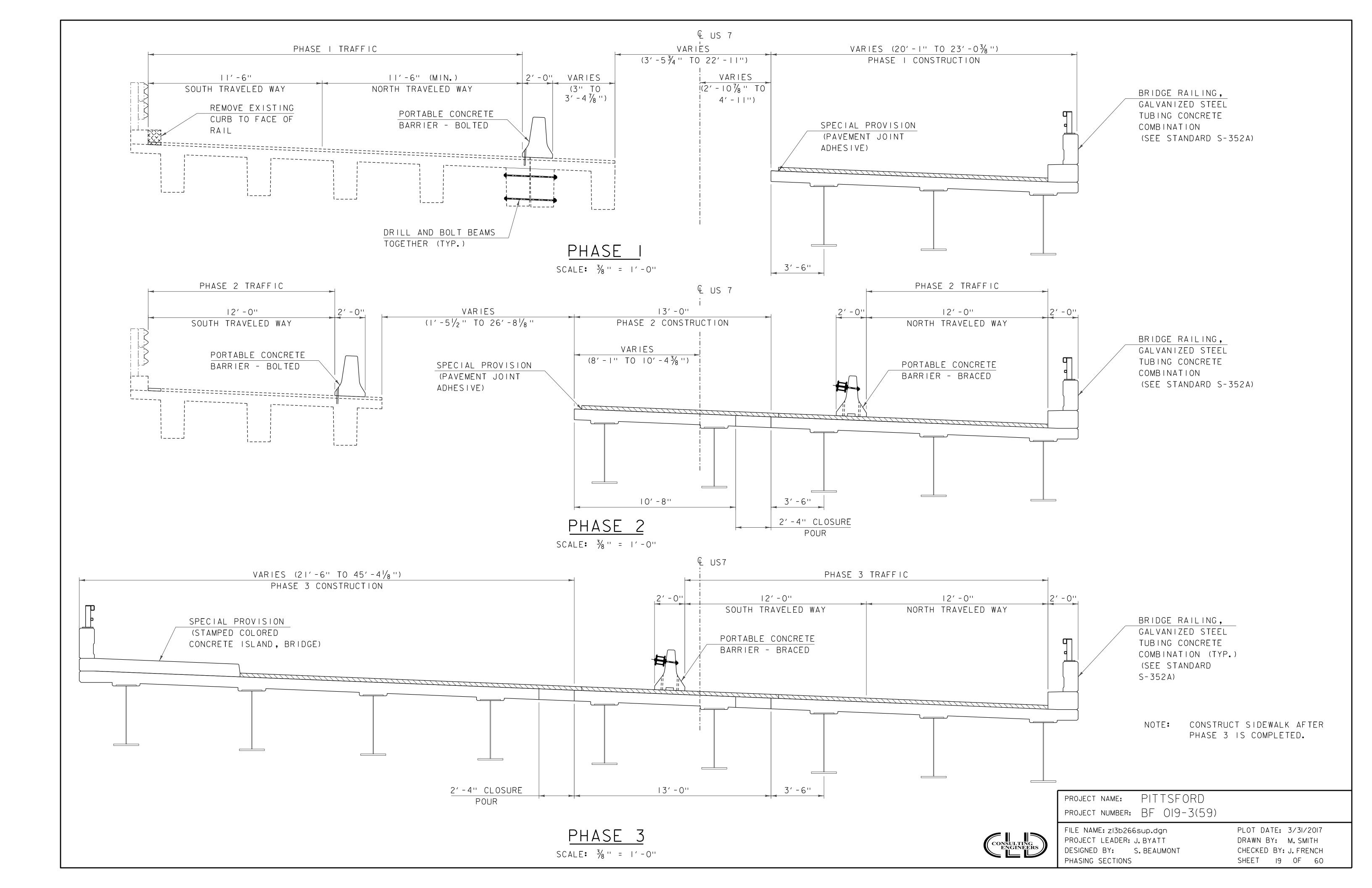
FILE NAME: zI3b266frm.dgn PROJECT LEADER: J. BYATT DESIGNED BY: M. HALEY

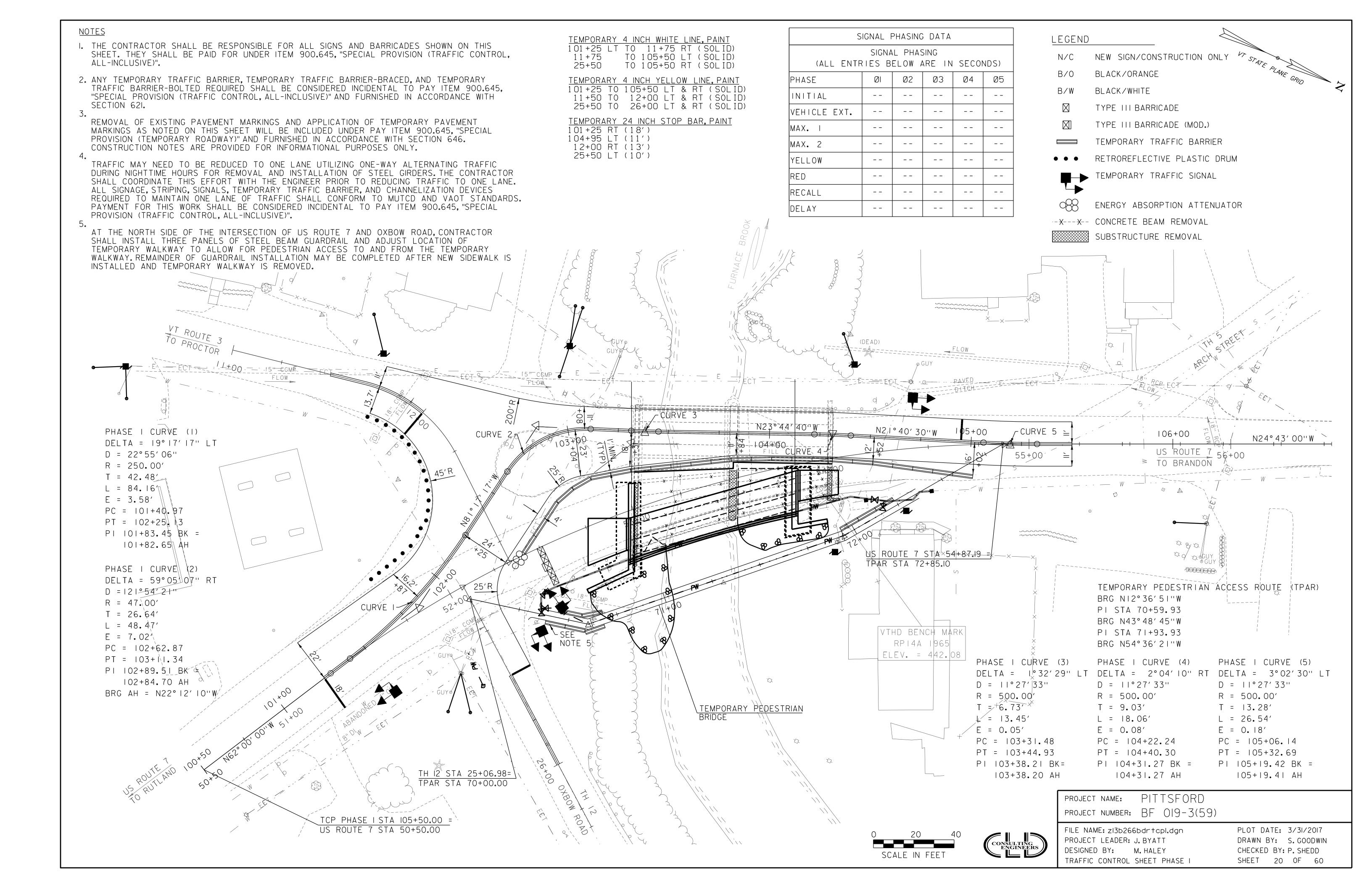
TRAFFIC CONTROL NOTES

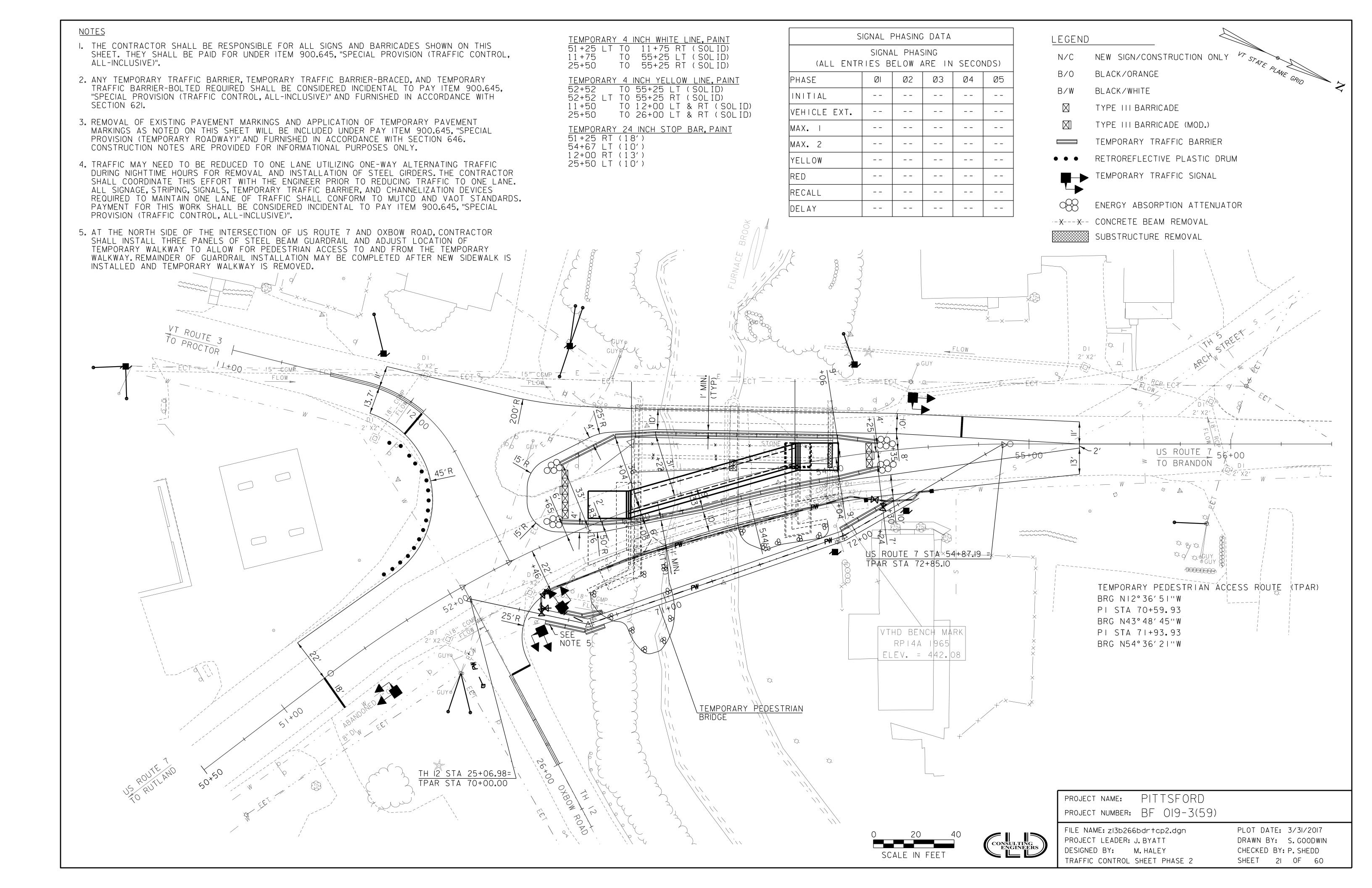
PLOT DATE: 3/31/2017 DRAWN BY: S. GOODWIN CHECKED BY: P. SHEDD SHEET I7 OF 60

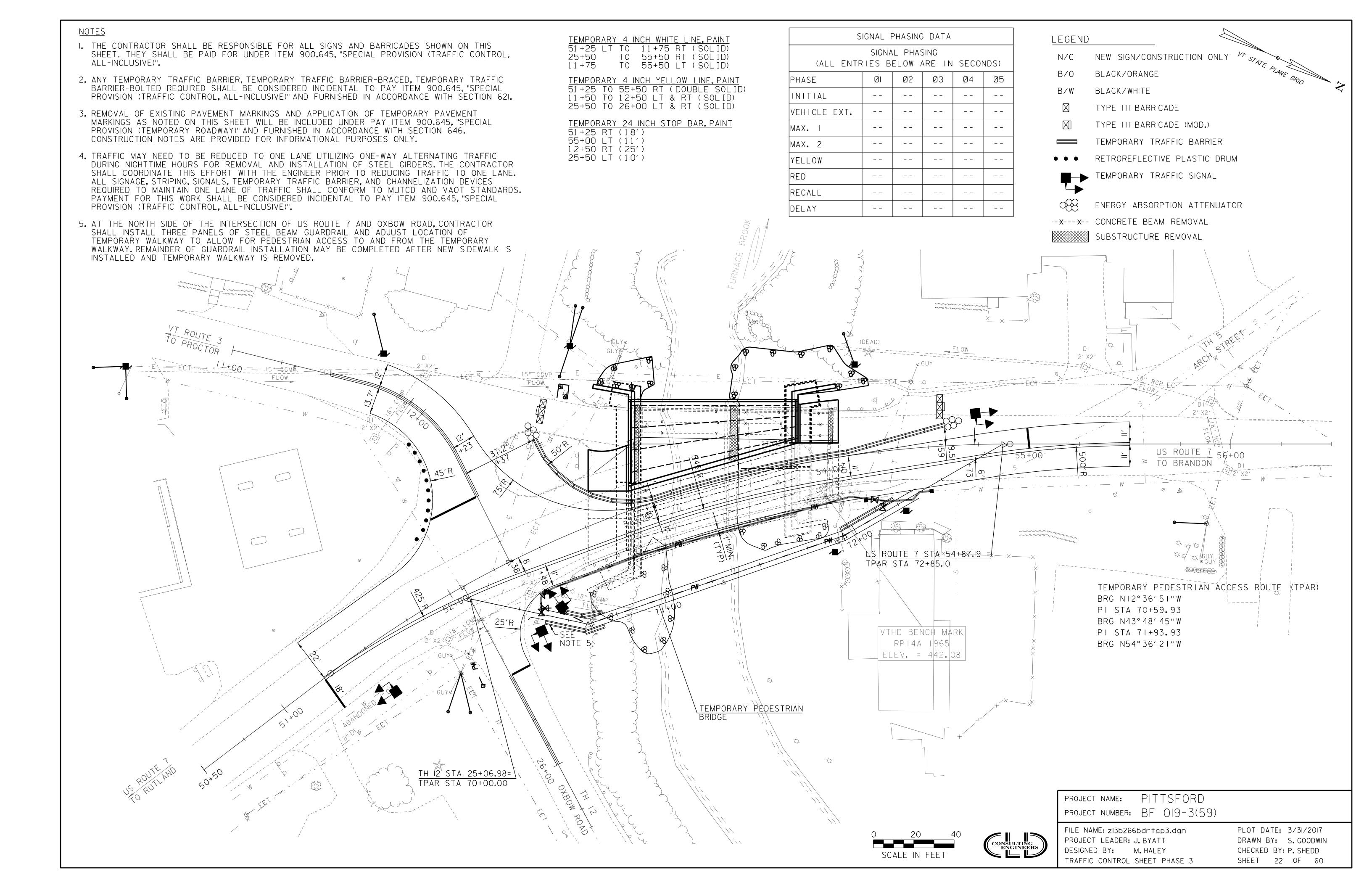


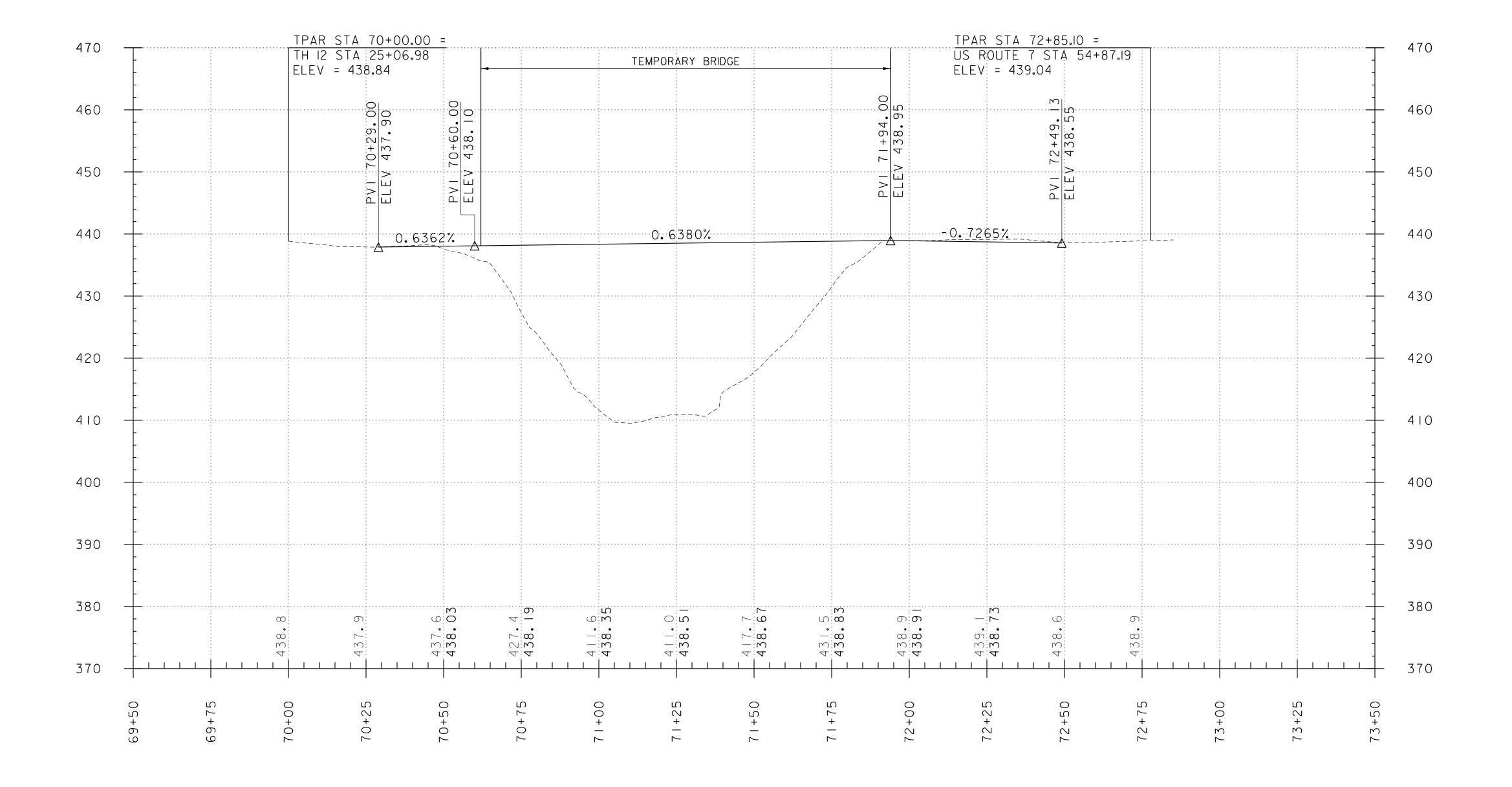












TEMPORARY PEDESTRIAN ACCESS ROUTE (TPAR) PROFILE

HOR. SCALE I'' = 20'-0'' VER. SCALE I'' = 10'-0''

STATIONS AND ELEVATIONS ARE IN FEET.

THE ELEVATIONS SHOWN TO THE NEAREST TENTH ARE THE OLD GROUND ALONG THE CENTERLINE.

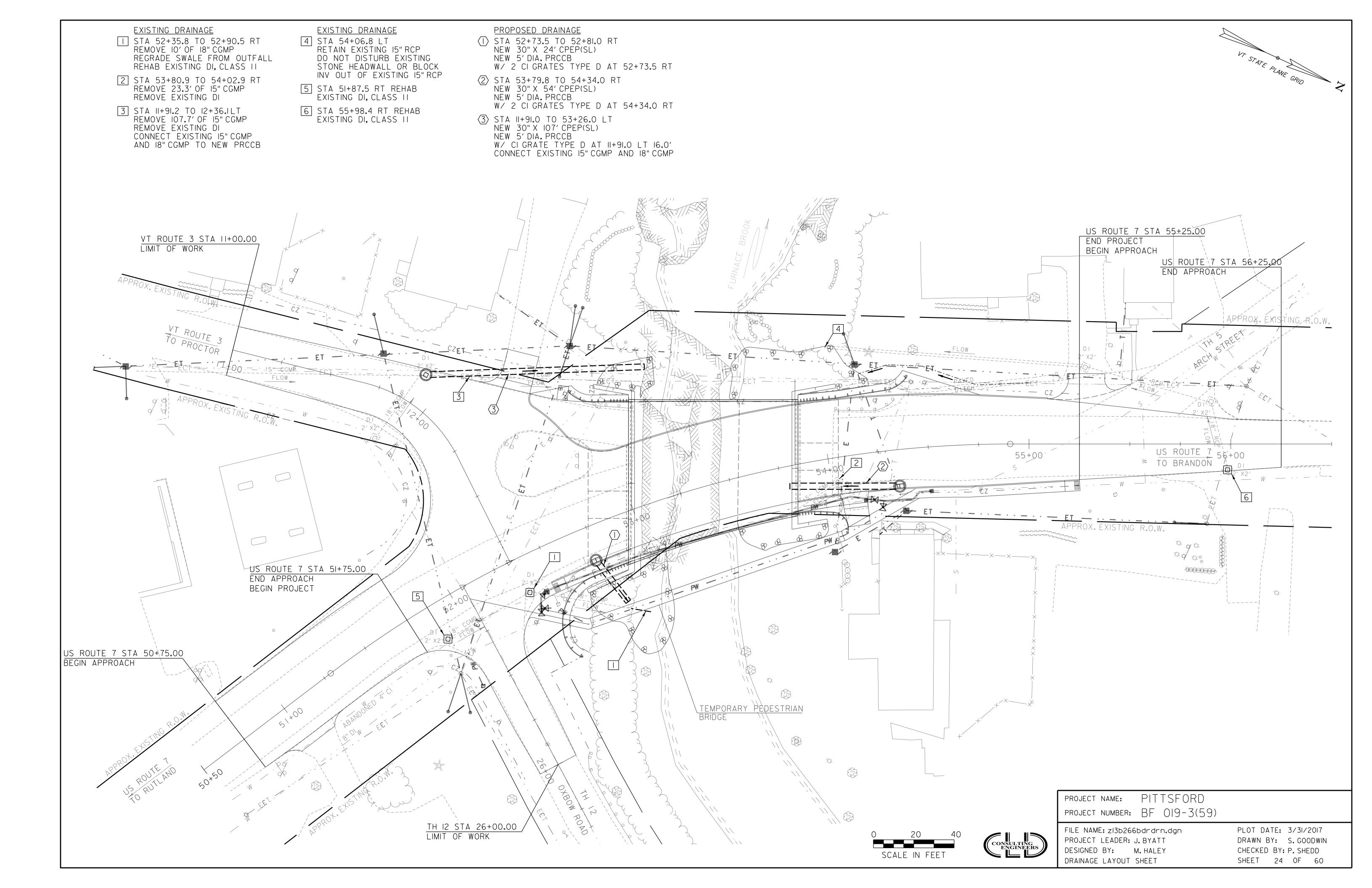
THE ELEVATIONS SHOWN TO THE NEAREST HUNDREDTH ARE THE PROPOSED FINISHED GRADE ALONG THE CENTERLINE.



PROJECT NAME: PITTSFORD PROJECT NUMBER: BF 019-3(59)

FILE NAME: zI3b266pro.dgn
PROJECT LEADER: J.BYATT
DESIGNED BY: M.HALEY
TPAR PROFILE

PLOT DATE: 3/31/2017
DRAWN BY: S. GOODWIN
CHECKED BY: P. SHEDD
SHEET 23 OF 60



NAA DIK STATIO	AN OFFICET	DER & A DIVC	POLE NUMBER		NAA DIK STATION OFFCET	DERAA		POLE NUMBER	
UP#1 10+53	3 19.8' RT	REPLACE EXISTING POLE WITH A NEW POLE 3' TO THE SOUTH. REMOVE EXISTING ANCHOR AND INSTALL NEW BI-SECT ANCHOR (16' LEAD) AND A NEW DEAD-END ANCHOR (16' LEAD).	-		UP#8 54+44 32.9' LT	REMAIREMOVE EXISTING POLE AND ANCHORS. REMOVE SIGNAL HEADS TO POLE # 12. REMOVE ELECTRIC OF THE POLE O	E EXISTING ELECTRIC LINE, SPAN CABLE AND CABLE TO METER. REMOVE TELEPHONE CABL		VT STATE PLANE GRID
UP#2 11+72	2 16.5' LT	CONNECT PERMANENT LINES TO TEMPORARY POLE # 2 AND PERMANENT POLE # 3. INSTALL TEMPORARY POLE W/TEMPORARY DEAD-END ANCHOR (20' LEAD). CONNECT PERMANENT LINES TO POLE # 1 AND POLE # 3. INSTALL TEMPORARY LINE TO POLE #11.	-		UP#9 56+08 28.7' LT	REMOVE EXISTING LINES TO POLES #4, #5 AND #9 REPLACE EXISTING POLE. CONNECT NEW PERMAN LINES TO POLE # 14. REMOVE EXISTING LINES TO TELEPHONE SERVICE AT 55+46 LT. INSTALL NEW T	IENT LINE WITH POLE #7. RETAIN EXISTING POLE #8. REMOVE EXISTING MID-SPAN	355/196/5/20	PLANE GRID
UP#3 12+16		REMOVE POLE #2 AND ANCHOR AND TEMPORARY LINE TO POLE #11 AFTER CONSTRUCTION. INSTALL NEW POLE WITH 2 NEW ANCHORS (ONE DEAD-END/ONE BI-SECT). CONNECT NEW PERMANENT LINES TO EXISTING POLE # 1, TEMPORARY POLE #2 AND EXISTING POLE #7. INSTALL NEW ELECTRIC AND TELEPHONE SERVICE LINES. INSTALL PERMANENT NEW LINE FROM	NEW		UP#10 50+53 30.4' RT	RETAIN EXISTING POLE AND ANCHOR. RETAIN EXISTING POLE AND ANCHORS. RETAIN EXISTENCE OF TEMPORARY DEAD -END ANCHOR (20' LEAD) (REM	(ISTING LINES TO POLE # 10. INSTALL	192/5/25	
		POLE #3 TO POLE #11 AFTER CONSTRUCTION. INSTALL PERMANENT NEW PUSH BRACE AFTER CONSTRUCTION. REMOVE EXISTING POLE AND ANCHOR. REMOVE EXISTING LINES TO POLE # 1, POLE # 6 AND	14244		UP#11 51+84 36.5' RT	EXISTING LINES TO DOLE # 4 DOLE # 5 AND DOLE	#6. CONNECT TEMPORARY LINES TO POLE # : MANENT LINES TO POLE # 3 (AFTER	35/193/5/24	
	9 64.0° L1 1 64.3' LT	POLE #8. REMOVE EXISTING ELECTRIC AND TELEPHONE SERVICE LINES. REMOVE EXISTING POLE AND ANCHORS. REMOVE EXISTING LINES TO POLE # 1, POLE # 11 AND POLE #8.	-			CONSTRUCTION). RELOCATE EXISTING POLE AND RISER. REMOVE EXISTING POLE #8. INSTALL NEW ELECTR	(ISTING ELECTRIC LINE, SPAN CABLE AND	5/21A	
	2 42.1° LI	REMOVE EXISTING POLE, ELECTRIC LINE, SPAN CABLE AND SIGNAL HEADS. REMOVE EXISTING LINES TO POLE # 4 AND POLE # 11. INSTALL NEW POLE (ON TANGENT) W/ ELECTRIC RISER. CONNECT NEW PERMANENT LINES TO	-		UP#13 54+36.0 30.5' RT	CONSTRUCTION). REMOVE TEMPORARY LINE TO INSTALL TEMPORARY POLE. CONNECT TEMPORAR POLE # 12 AND POLE # 14. REMOVE POLE AND TE	Y ELECTRIC AND TELEPHONE SERVICES TO	-	
UP#7 54+19		POLE #3 AND POLE #9. INSTALL NEW ELECTRIC SERVICE LINE TO POLE # 12 AND TELEPHONE SERVICE LINE AFTER POLE # 13 IS REMOVED (AFTER CONSTRUCTION). INSTALL PERMANENT NEW DEAD-END ANCHOR (16' LEAD) AFTER CONSTRUCTION.	NEW		UP#14 55+88 39.5' RT	RETAIN EXISTING POLE AND ANCHORS. RETAIN EXTEMPORARY LINE TO POLE # 13 (REMOVE AFTER (16' LEAD) BRACE (REMOVE AFTER CONSTRUCTION)	CONSTRUCTION). INSTALL TEMPORARY PUSH	20A/196A	
APPROX. EXIS	STING ROLL	CZ X-X-X-X-X-X-X-X-X-X-X-X-X-X-X-X-X-X-X-	%				PAVED		
JP #I	VT ROUTE	DRIVE HVCTRL 27 UP CZET — · · · · · · · ·	ET GUY			HVC/RL 23 (DEAD) COMB FLOW	DRIVE L GHT	,	THE TREET
- E-		FLOW		JP #5	ET ECT ECT	UNDERGROUND EXT.	2' X2' Q V T T T T T T T T T T T T T T T T T T	La" RCP ECT	CYW COMB HYDRANT 196 UP #
	APPROX.	XISTING ROOM. W		HVCTRL / / / / / / / / / / / / / / / / / / /		BEACON		5 / D	X2' Y
		HVCTRL.				BEACON	55+00	US ROUTE ≥ TO BRAND	7 56+00 ON
		PAVED COMMERCIAL DRIVE CAS PAD WITH PAVED COMMERCIAL DRIVE CAS PAD WITH CAS PAD WITH CAS PAD WITH CAS PAD WITH			HVCTF 24		ZZ =	₩ A HVCTRL	2' <u>X2'</u> W —
		4 GASOLINE PUMPS //BEACON					APPROX. EXISTING	LIGHT R.O.W.	UNDERGROUND #14
		BEACON		8		UNDERGROUND S	×——×——× ×	LIGHT ^T O TO	GUY 81 TGUY 81 PAVED
		DE BEACON PRANT	B" BCMP	7 40	HVCIRO 25			RAVEL	DRIVE LIGHT
		2' X2' Q CQMB	HALL 22			VTHD BENCH MARK RP14A 1965 ELEV. = 442.08	\ \ \ \ \ \		
\		GUYG - CV93	*		LIGHT	ELEV 442.00	X 		
		UP #H			TEMPORARY PEDEST BRIDGE	RIAN	+ × × ×		
DRROT: EXCIMO		GRAVEL				LIGHT			
US RUTLAN	50*	GRAVEL DRIVE DRIVE	1 1			LIGHT (5)	PROJECT NUMBER:		59)
		COMB UP #10 PROTEST OF THE PROTEST O	12/2/			O 20 40 SCALE IN FEET	FILE NAME: z13b26 PROJECT LEADER: DESIGNED BY:	J. BYATT	PLOT DATE: 3/31/2017 DRAWN BY: S.GOODW CHECKED BY: P.SHEDD

GENERAL WATER NOTES

- 1. THIS PROJECT IS TO BE CONSTRUCTED IN ACCORDANCE WITH THE CONTRACT DRAWINGS AND SPECIFICATIONS. ADDITIONAL REFERENCE IS MADE TO THE FOLLOWING DOCUMENTS:
 - -STATE OF VERMONT, AGENCY OF TRANSPORTATION-STANDARD DRAWINGS AND STANDARD SPECIFICATIONS FOR CONSTRUCTION, DATED 2011.
 -STATE OF VERMONT, AGENCY OF NATURAL RESOURCES WATER SUPPLY RULE, DATED 2010.
 - -STATE OF VERMONT, DEPARTMENT OF ENVIRONMENTAL CONSERVATION STANDARDS AND SPECIFICATIONS FOR EROSION PREVENTION AND SEDIMENT CONTROL, DATED 2006.
 - -AMERICAN WATER WORKS ASSOCIATION STANDARDS AWWA STANDARDS, LATEST EDITIONS.
 - -AMERICAN SOCIETY FOR TESTING AND MATERIALS ASTM, LATEST EDITIONS.
- THE CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES OWNING UTILITIES, EITHER OVERHEAD OR IN THE GROUND, WITHIN THE CONSTRUCTION AREA, AND SHALL COORDINATE WITH THE OWNERS OF SAID UTILITIES. THE CONTRACTOR SHALL TAKE ADEQUATE PRECAUTIONS TO PROTECT ALL EXISTING UTILITIES. RELOCATION OF ANY UTILITY, IF REQUIRED, SHALL BE ONLY AS DIRECTED BY THE OWNER OF SAID UTILITY. UTILITIES THAT ARE DAMAGED AS A RESULT OF THE CONTRACTOR'S OPERATIONS SHALL BE REPLACED AT NO COST TO THE STATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING ALL ARRANGEMENTS FOR ANCHORING, SUPPORTING, AND/OR RELOCATING AND PROTECTING ALL UTILITIES DURING CONSTRUCTION. SEE UTILITY SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
- THE LOCATIONS, SIZES, AND TYPES OF EXISTING UTILITIES ARE SHOWN AS AN APPROXIMATE REPRESENTATION ONLY. THE OWNER OR DESIGN ENGINEER HAVE NOT INDEPENDENTLY VERIFIED THIS INFORMATION AS SHOWN ON THE PLANS. THE UTILITY INFORMATION SHOWN DOES NOT GUARANTEE THE ACTUAL EXISTENCE, SERVICEABILITY, OR OTHER DATA CONCERNING THE UTILITIES, NOR DOES IT GUARANTEE AGAINST THE POSSIBILITY THAT ADDITIONAL UTILITIES MAY BE PRESENT THAT ARE NOT SHOWN ON THE PLANS. PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL VERIFY AND DETERMINE THE EXACT LOCATIONS, SIZES, AND ELEVATIONS OF THE POINTS OF CONNECTIONS TO EXISTING UTILITIES AND THE PROPOSED UTILITY ROUTES. INCLUDING ROUTES WITHIN THE PUBLIC RIGHTS OF WAY.
- 4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION AND PAYMENT OF ALL NECESSARY PERMITS AT NO COST TO THE STATE.
- 5. A QUANTITY OF 204.21 TRENCH EXCAVATION OF ROCK HAS BEEN INCLUDED AS A CONTINGENCY FOR REMOVAL OF BOULDERS IF ENCOUNTERED.
- 6. ALL EXCAVATIONS SHALL COMPLY WITH OSHA AND VERMONT OSHA REQUIREMENTS.
- 7. NO WORK WILL TAKE PLACE UNLESS THE WATER SYSTEM OWNER'S REPRESENTATIVE IS PRESENT. THE OWNER RESERVES THE RIGHT TO REJECT ANY AND ALL WORK NOT MEETING THIS REQUIREMENT.
- 8. THE CONTRACTOR IS RESPONSIBLE FOR ALL ENGINEERING AND RELATED COSTS ASSOCIATED WITH ANY DESIGN ALTERNATIVES IN ACCORDANCE WITH SUBSECTION 105.30 OF THE SPECIFICATIONS. DESIGN ALTERNATIVES SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND ACCEPTANCE PRIOR TO IMPLEMENTATION.
- 9. THE CONTRACTOR SHALL MAINTAIN "RED LINE" DRAWINGS DURING CONSTRUCTION THAT REFLECT LOCATIONS AND ELEVATIONS OF INSTALLED WORK TO INCLUDE AT A MINIMUM, PIPE INVERTS, WATER CORPORATION STOPS, AND TEE LOCATIONS.
- 10. TEMPORARY BYPASS UTILITIES OR TEMPORARY MODIFICATIONS TO THE EXISTING SYSTEMS MAY BE NECESSARY TO ACCOMMODATE THE INSTALLATION OF NEW WATER MAIN AND SERVICE CONNECTIONS. THIS WORK WILL BE PAID UNDER ITEM 629.42 TRANSFER TO NEW SYSTEM, WATER SYSTEM.
- 11. NO VERTICAL DEPTH FACTOR WILL APPLY TO EARTHWORK EXCAVATION OR BACKFILL FOR WATER WORK.
- 12. BUY AMERICA REQUIREMENTS APPLY TO ALL IRON AND STEEL PRODUCTS. SEE SUBSECTION 107.22 OF THE SPECIFICATIONS.
- 13. THE CONTRACTOR SHALL MAINTAIN EMERGENCY ACCESS TO ALL AREAS AFFECTED BY THE WORK AT ALL TIMES.
- 14. ALL CROSS-COUNTRY EXCAVATIONS SHALL BE THOROUGHLY SECURED WITH STEEL PLATES ON A DAILY BASIS BY THE CONTRACTOR. THE CONTRACTOR MAY ELECT TO USE STEEL PLATES OVERNIGHT FOR EXCAVATIONS IN ROADWAY LOCATIONS BUT SHALL ACCEPT LIABILITY FOR SAFETY CONCERNS.
- 15. TEMPORARY TRENCH PATCH WILL BE REQUIRED DURING CONSTRUCTION AT LOCATIONS AS DIRECTED BY THE ENGINEER. SAWCUT EDGE OF REMAINING PAVEMENT AND PAVE 2-INCH THICK PAVEMENT COURSE. NO PAY FACTORS WILL APPLY. NO SUBBASE IS REQUIRED. PAYMENT WIDTH SHALL BE LIMITED TO 8 FEET. THIS WORK SHALL BE PAID FOR UNDER ITEM 900.680 SPECIAL PROVISION (BITUMINOUS CONCRETE PAVEMENT, SMALL QUANTITY).

DEMOLITION

- 1. EXISTING MANHOLES AND PIPES ENCOUNTERED WITHIN PROPOSED TRENCH THAT ARE NO LONGER NECESSARY SHALL BE COMPLETELY REMOVED. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE RELEVANT NEW PIPE ITEMS.
- 2. EXISTING WATER MAIN PIPE TO BE ABANDONED WITHIN ROADWAY LIMITS SHALL BE CAPPED.
- 3. PIPES THAT ARE NO LONGER NECESSARY AND EXTEND BEYOND THE ROADWAY LIMIT SHALL BE CAPPED AND ABANDONED UNLESS NOTED OTHERWISE ON THE PLANS OR DIRECTED BY THE ENGINEER. PAYMENT FOR THIS WORK WILL BE CONSIDERED INCIDENTAL TO ITEM 629.42 TRANSFER TO NEW SYSTEM, WATER SYSTEM, AS APPROPRIATE.
- 4. CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL AND PROPER DISPOSAL OF ALL ITEMS REMOVED DURING CONSTRUCTION.
- 5. EXISTING FRAMES, COVERS AND HYDRANTS SHALL BE SALVAGED TO THE OWNER. PAYMENT FOR THIS WORK WILL BE CONSIDERED INCIDENTAL TO ITEM 629.42 TRANSFER TO NEW SYSTEM, WATER SYSTEM, AS APPROPRIATE.

SURVEY NOTES

- 1. THE BASE MAPPING SHOWN WAS DEVELOPED BY VTRANS AND SUPPLEMENTED BY TOWN AND ENGINEER MEASUREMENTS. SOME SUBSURFACE FEATURES SHOWN WERE INPUT BASED ON THE BEST AVAILABLE DATA SUPPLIED BY THE TOWN.
- 2. THE CONTRACTOR WILL ESTABLISH AND MAINTAIN SURVEY CONTROL THROUGHOUT THE PROJECT. THIS WORK IS SUBJECT TO THE CHECKING, APPROVAL, AND SURVEILLANCE BY THE ENGINEER.

PROJECT NAME: PITTSFORD PROJECT NUMBER: BF 019-3(59)



FILE NAME: zI3b266wtrdet.dgn
PROJECT LEADER: J. BYATT
DESIGNED BY: D. LEWIS
WATER MAIN RELOCATION NOTES SHEET I

PLOT DATE: 3/31/2017
DRAWN BY: W. GORDON
CHECKED BY: S. REICHERT
SHEET 26 OF 60

WATER CONSTRUCTION

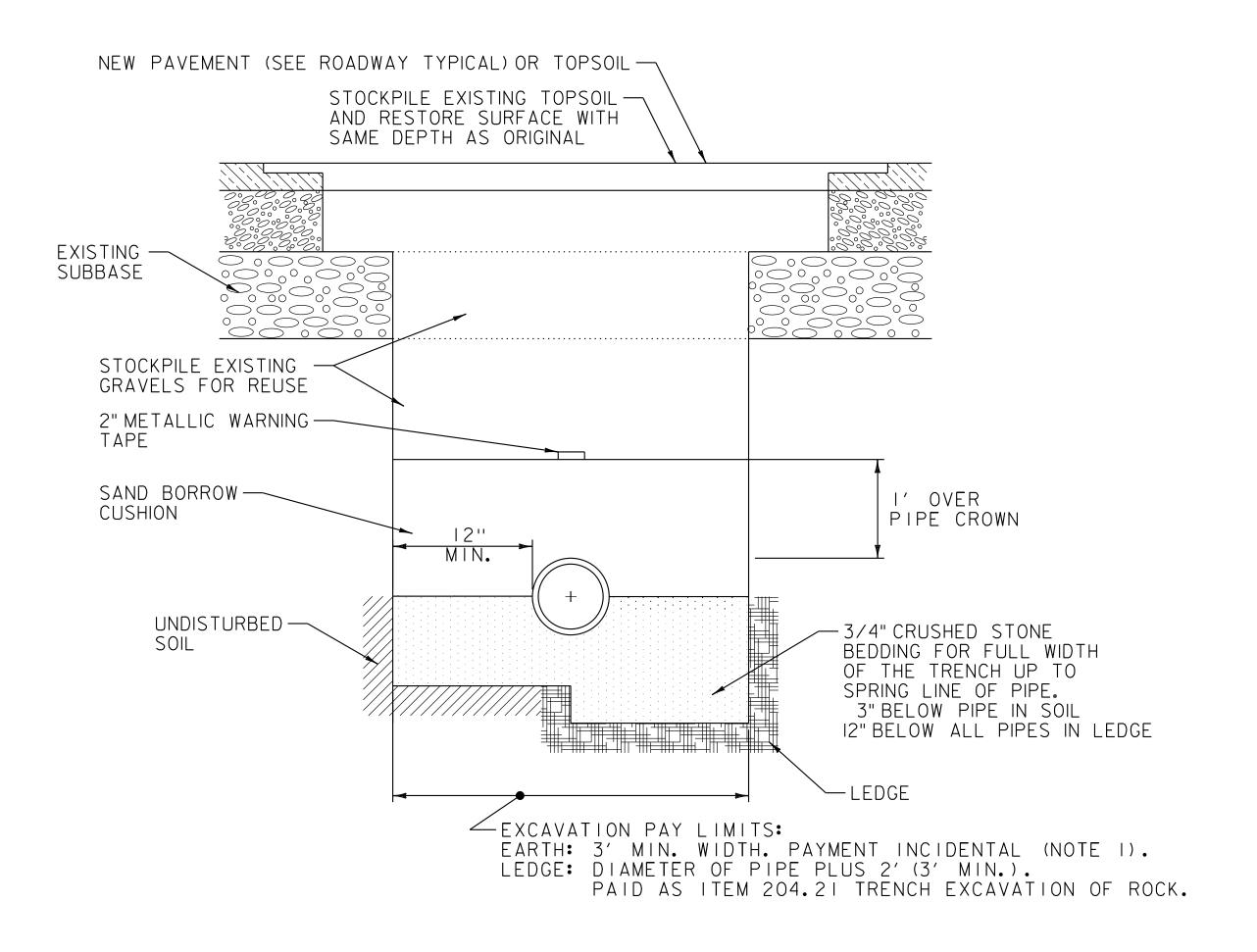
- ONLY TOWN PERSONNEL MAY OPERATE VALVES.
- THE CONTRACTOR SHALL DEVELOP A PLAN TO ADDRESS TEMPORARY WATER SUPPLY DURING CONSTRUCTION. THE PLAN SHALL BE PRESENTED TO THE TOWN FOR REVIEW AND ACCEPTANCE AT LEAST TWO WEEKS PRIOR TO PLANNED IMPLEMENTATION. NO MORE THAN 1000 LF OF CONTIGUOUS TEMPORARY WATER SUPPLY PIPE SHALL BE IN SERVICE. THE EFFORT TO PREPARE AND SUBMIT THE PLAN SHALL BE CONSIDERED INCIDENTAL TO ITEM 629.42 TRANSFER TO NEW SYSTEM, WATER SYSTEM.
- THE CONTRACTOR SHALL SUPPLY A TIE-CARD TO THE OWNER AND THE WATER CUSTOMER DOCUMENTING THE LOCATION OF EACH INSTALLED SERVICE CONNECTION (CORPORATION AND CURB STOP).
- WATER MAIN INSTALLATION SHALL COMPLY WITH AWWA C-600 AND THE VERMONT WATER SUPPLY RULE. LEAKAGE AND HYDROSTATIC TESTING PER AWWA C-600 SHALL BE PERFORMED IN THE PRESENCE OF THE ENGINEER AND TOWN DPW PERSONNEL. THE OWNER RESERVES THE RIGHT TO REJECT WORK NOT COMPLYING WITH THIS REQUIREMENT. A SECTION BEING TESTED SHALL BE SUBJECTED TO A HYDROSTATIC PRESSURE OF AT LEAST 150 PERCENT OF WORKING PRESSURE FOR A TWO HOUR DURATION. WORKING PRESSURE IS 100 PSI.
- PERMANENT AND TEMPORARY WATER MAIN SHALL BE FLUSHED AND DISINFECTED PER SECTION 629.THIS WORK SHALL BE CONSIDERED INCIDENTAL TO ITEM 900.640 SPECIAL PROVISION (DUCTILE IRON PIPE, CEMENT LINED, ALL-INCLUSIVE)(10" WATER). NOTE THE FOLLOWING:
 - THE VERMONT WATER SUPPLY RULE, APPENDIX A, SUBSECTION 8.5.7, STATES THAT THE TABLET FORM OF DISINFECTION IS NOT ACCEPTABLE. PROVIDE PLAN AND PROPOSED METHOD FOR DISINFECTION TWO WEEKS PRIOR TO INTENDED WORK.
 - AFTER DISINFECTION, CHLORINATED WATER SHALL BE PUMPED INTO THE TOWN SEWER SYSTEM. PROVIDE TOWN WASTEWATER TREATMENT PLANT WITH TWO WEEKS NOTICE BEFORE DISCHARGE.
- WATER MAIN SHALL HAVE 5.5 FT COVER MIN. (TYP.). ITEM 622.10 INSULATION BOARD SHALL BE INSTALLED OVER WATER MAIN WHERE LESS THAN 5.5 FT COVER IS PROVIDED (BASED ON FINAL GRADE). WHERE SEPARATION DISTANCE OF WATER MAIN IS CLOSER THAN 1.5 FT TO DRAINAGE PIPE OR SEWER LINE, CONTRACTOR SHALL INSULATE WATER MAIN FOR FROST PROTECTION WITH ITEM 622.10 INSULATION BOARD. REFER TO WATER DETAILS FOR ADDITIONAL INFORMATION. AT CROSSINGS, ONE FULL LENGTH OF WATER PIPE SHALL BE LOCATED SO BOTH JOINTS WILL BE AS FAR FROM THE SEWER AS POSSIBLE. IF A SEWER MAIN IS LOCATED OVER A WATER MAIN, THE FIRST SEWER PIPE JOINTS ON EITHER SIDE OF THE WATER MAIN MUST BE CONCRETE-ENCASED. WATER MAINS SHALL NOT PASS THROUGH SEWER MANHOLES OR BE SUBMERGED IN BASINS CONTAINING SEWAGE OR OTHER GROSSLY CONTAMINATED OR HAZARDOUS MATERIALS.
- ALL PERMANENT DUCTILE IRON (DI), PIPE SHALL BE CLASS 52, DOUBLE CEMENT LINED AND SEAL COATED.
- ALL WATER SERVICE PIPE TO BE TYPE K COPPER.
- THRUST RESTRAINT REQUIREMENTS:
 - -RETAINER GLANDS WITHIN THREE PIPE LENGTHS ON EACH SIDE SHALL BE USED IN LIEU OF THREADED ROD OR GRIP RINGS AT ALL PIPE BENDS, FITTINGS, VALVES, AND APPURTENANCES.
 - -CONTRACTOR SHALL IDENTIFY SELECTION OF RESTRAINT, SIZE, AND DESIGN BASIS IN WORKING DRAWINGS PROVIDED TO ENGINEER FOR REVIEW. -ALL TEES, BENDS, PLUGS, AND HYDRANTS SHALL BE PROVIDED WITH THRUST RESTRAINT DESIGNED TO PREVENT MOVEMENT. -ALL AIR SHALL BE REMOVED FROM THE PIPES BEFORE WATER AT TEST PRESSURE LEVELS IS ADDED.
- REPLACEMENT WATER SERVICE SIZES SHALL BE SAME SIZE AS EXISTING UNLESS OTHERWISE DIRECTED BY THE ENGINEER. CONTRACTOR SHALL CONFIRM EXISTING SERVICE SIZES AT ALL LOCATIONS PRIOR TO LAYING WATER MAIN. CONTRACTOR SHALL COORDINATE WITH WATER CUSTOMERS AND OWNER.
- ALL HYDRANTS TO OPEN LEFT AND VALVES TO OPEN RIGHT.
- DURING PERIODS OF DELAY AND AT THE CONCLUSION OF THE DAY'S WORK, LENGTHS OF PIPE WITH OPEN ENDS SHALL BE TIGHTLY CLOSED WITH WATERTIGHT PLUGS, SPECIAL SEALS, OR BY OTHER SUITABLE MEANS ACCEPTED BY THE ENGINEER TO PREVENT THE ENTRY OF ANIMALS, FOREIGN MATTER AND TRENCH WATER. TRENCH WATER SHALL BE PUMPED OUT BEFORE THE SEALS, PLUGS, OR OTHER TEMPORARY CLOSURES ARE REMOVED. PAYMENT FOR THIS WORK WILL BE CONSIDERED INCIDENTAL TO ITEM 629.42 TRANSFER TO NEW SYSTEM, WATER SYSTEM.
- PROVIDE BRONZE CONDUCTIVE WEDGES ON WATER MAIN INSTALLATION.
- PERFORM WATER TRANSITION WORK AT NIGHT (10 P.M. TO 5 A.M.) MONDAY THROUGH THURSDAY. NOTIFY TOWN AND PROPERTY OWNERS TWO WEEKS PRIOR TO PLANNED WORK.
- EXTENSIONS TO TEMPORARY HYDRANT TO ACCOMMODATE RAISED ROADWAY PROFILE SHALL BE CONSIDERED INCIDENTAL TO ITEM 629.42 TRANSFER TO NEW SYSTEM, WATER SYSTEM. CONTRACTOR TO PROVIDE WORKING DRAWINGS FOR THIS CONSTRUCTION ELEMENT.

PROJECT NAME: PITTSFORD PROJECT NUMBER: BF 019-3(59)



FILE NAME: zl3b266wtrdet.dgn PROJECT LEADER: J. BYATT DESIGNED BY: D. LEWIS WATER MAIN RELOCATION NOTES SHEET 2 SHEET 27 OF 60

PLOT DATE: 3/31/2017 DRAWN BY: W. GORDON CHECKED BY: S. REICHERT



<u>NOTES</u>

- I. EXCEPT FOR NEW PAVEMENT AND TRENCH EXCAVATION OF ROCK, WORK DEPICTED ON THIS DETAIL SHALL BE INCIDENTAL TO EITHER SPECIAL PROVISION WATER MAIN ITEMS.
- 2. FOR STREET EXCAVATIONS, SUITABLE STOCKPILED MATERIAL FOR BACKFILL SHALL BE PLACED TO MATCH THE DEPTH OF EXISTING SUBBASE. UNSUITABLE BACKFILL WILL INCLUDE STONES OVER 4 INCHES IN LARGEST DIMENSION, CLAY, WET OR UNSTABLE MATERIAL, WOOD OR OTHER ORGANIC MATERIAL, AND FROZEN MATERIAL.
- 3. PAYMENT FOR TRENCH EXCAVATION OF EARTH, STOCKPILING, DISPOSAL OF ALL SURPLUS MATERIAL, BACKFILL, SAND BORROW CUSHION, CRUSHED STONE BEDDING, LABOR, TOOLS, EQUIPMENT AND ALL INCIDENTALS NECESSARY TO COMPLETE THE WORK SHALL BE INCIDENTAL TO THE APPLICABLE PAY ITEM REFERENCED IN NOTE I; EXCEPT FOR NEW PAVEMENT AND TRENCH EXCAVATION OF ROCK, WHICH WILL BE PAID FOR SEPARATELY.

TYPICAL TRENCH DETAIL

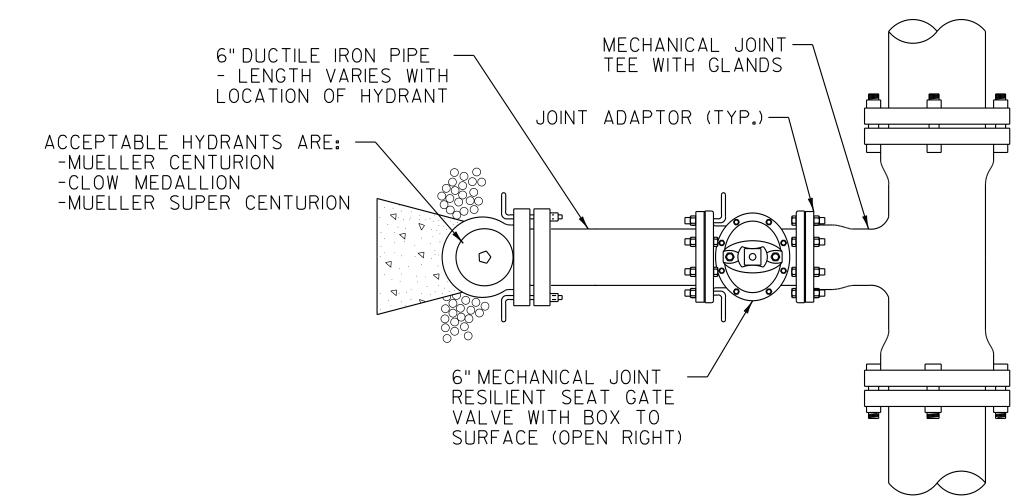
NOT TO SCALE



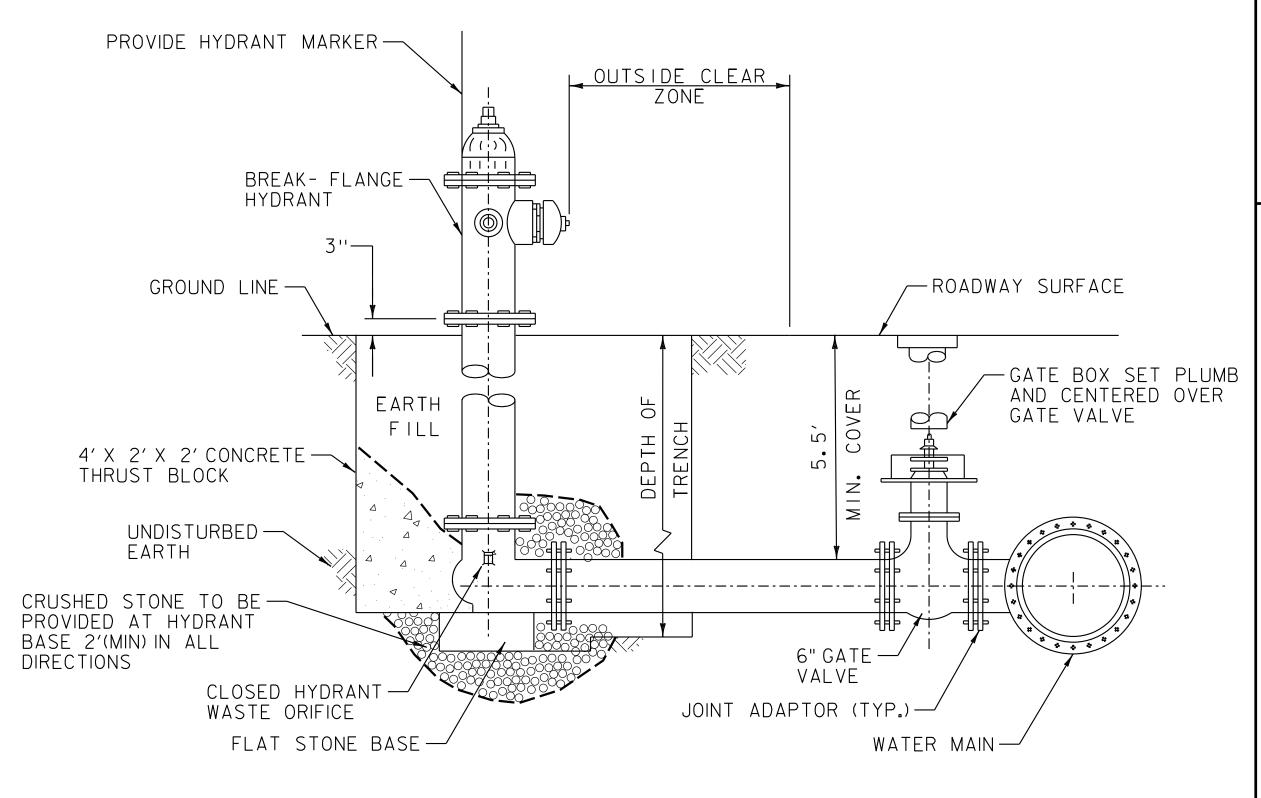
PROJECT NAME: PITTSFORD PROJECT NUMBER: BF 019-3(59)

FILE NAME: zl3b266wtrdet.dgn PROJECT LEADER: J. BYATT DESIGNED BY: D.LEWIS

PLOT DATE: 3/31/2017 DRAWN BY: W. GORDON CHECKED BY: S. REICHERT WATER MAIN RELOCATION DETAIL SHEET | SHEET 28 OF 60



PLAN VIEW



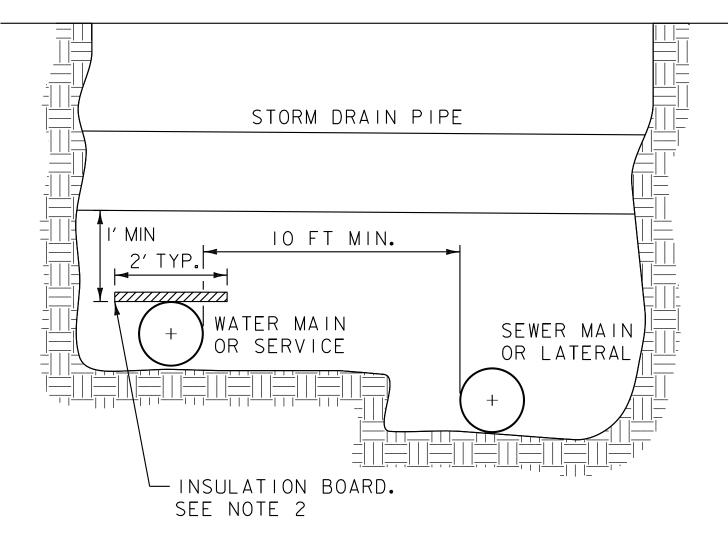
PROFILE VIEW

<u>NOTES</u>

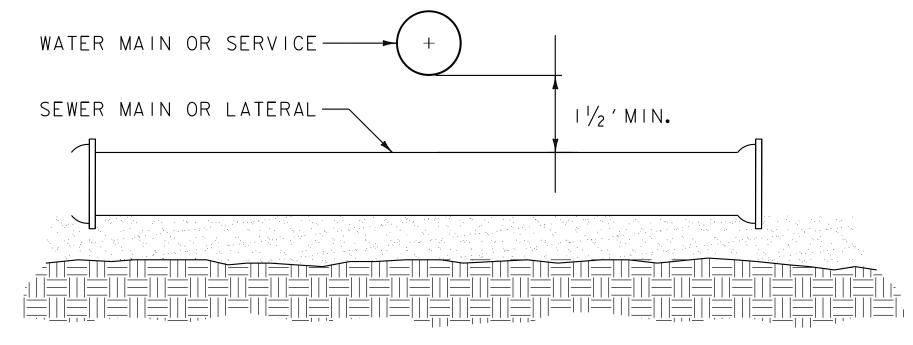
- I. ALL MATERIALS AND INSTALLATION PROCEDURES SHALL CONFORM TO AWWA TECHNICAL SPECIFICATIONS.
- 2. SUBSTITUTE RETAINER GLANDS IN LIEU OF THREADED ROD OR GRIP RINGS. CONTRACTOR SHALL IDENTIFY SELECTION OF RESTRAINT IN WORKING DRAWING PROVIDED TO ENGINEER FOR REVIEW.
- 3. THE HYDRANT DRAIN PORT SHALL BE PLUGGED.
- 4. 6" PIPE AND GATE VALVE SHALL BE PAID FOR UNDER ITEM 900.640 SPECIAL PROVISION (DUCTILE IRON PIPE, CEMENT-LINED, ALL-INCLUSIVE) (6" WATER) AND ITEM 629.27 GATE VALVE WITH VALVE BOX. HYDRANTS SHALL BE PAID FOR UNDER ITEM 629.28 HYDRANT. ALL NECESSARY FITTINGS AND BENDS SHALL BE CONSIDERED INCIDENTAL AS NOTED IN THE SPECIFICATIONS AND SPECIAL PROVISIONS.

TYPICAL HYDRANT INSTALLATION

NOT TO SCALE



PARALLEL INSTALLATION



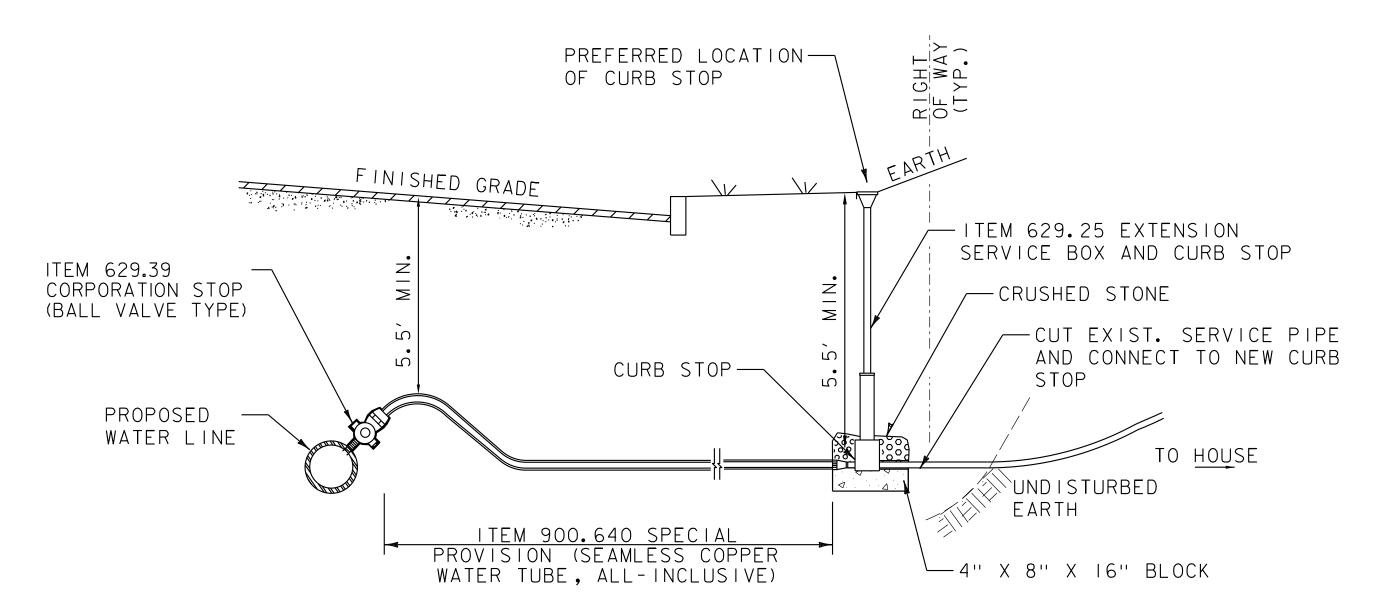
MAIN CROSSINGS

<u>NOTES</u>

- I. WATER MAINS SHALL BE ADJUSTED AS NEEDED TO AVOID DRAINAGE AND SEWER PIPES. SEE PLANS, PROFILES AND CROSS SECTIONS FOR THE LOCATION OF UNDERGROUND FEATURES.
- 2. ITEM 622. 10 INSULATION BOARD SHALL BE PROVIDED FOR 8'ALONG WATER MAIN WHERE WATER MAIN EXTENDS WITHIN 1.5' OF DRAINAGE PIPE OR MANHOLE FEATURES. INSULATION BOARD SHALL BE 2" THICK. THE USE OF INSULATION BOARD IS ANTICIPATED. A QUANTITY OF INSULATION BOARD HAS BEEN INCLUDED FOR USE DUE TO FIELD CHANGES OR AS DIRECTED BY THE ENGINEER.

WATER MAIN SEPARATION DETAIL

NOT TO SCALE



<u>NOTES</u>

- I. INSTALLED SERVICE SIZE TO BE BASED ON EXISTING SERVICE LINE SIZE OR AS DIRECTED BY ENGINEER. COMPRESSION FITTINGS SHALL BE USED.
- 2. FIELD APPLY STRIP TYPE INSULATION SUITABLE FOR UNDERGROUND INSTALLATION TO CORPORATION STOP.
- 3. CURB BOX TO BE INSTALLED SUCH THAT ITS COVER IS FREE OF ANY OBSTRUCTIONS.

TYPICAL WATER SERVICE CONNECTION

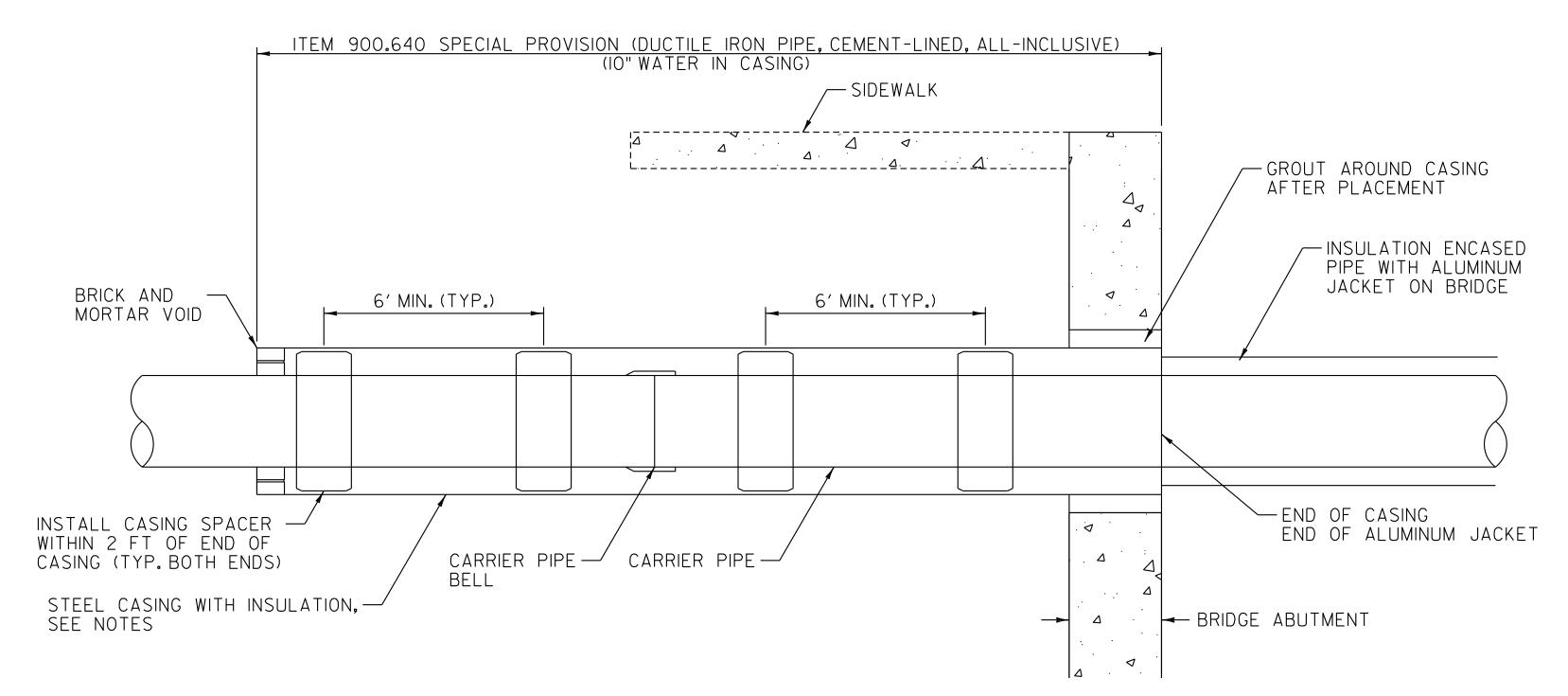
NOT TO SCALE

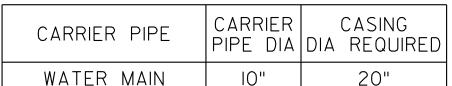
PROJECT NAME: PITTSFORD PROJECT NUMBER: BF 019-3(59)



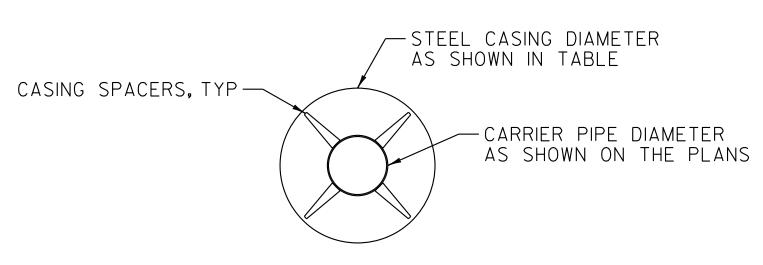
FILE NAME: zI3b266wtrdet.dgn PROJECT LEADER: J. BYATT DESIGNED BY: D. LEWIS WATER MAIN RELOCATION DETAIL SHEET 2 SHEET 29 OF 60

PLOT DATE: 3/31/2017 DRAWN BY: W. GORDON CHECKED BY: S. REICHERT





PROFILE VIEW



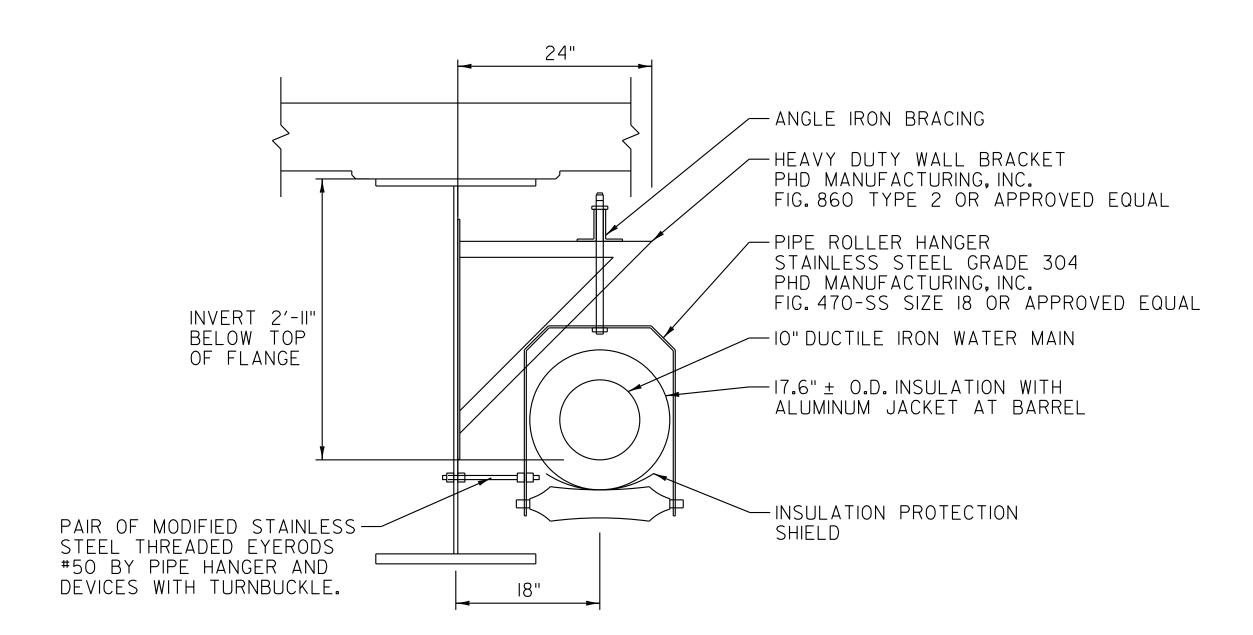
SECTION VIEW

<u>NOTES</u>

- I. HOLES IN ABUTMENT WALLS SHALL BE SIZED AND ANGLED TO ALLOW CASING AND GROUT PLACEMENT.
- 2. STEEL PIPE CASING SHALL BE SINGLE PIECE (WITHOUT WELDS) OF SMOOTH STEEL PIPE FABRICATED IN ACCORDANCE WITH AWWA C200. LENGTHS OF CASING SHALL BE AS LONG AS PRACTICAL FOR SITE CONDITIONS, BUT MUST EXTEND 2 FEET (MIN.) PAST APPROACH
- 3. INSULATION SHALL BE 3-INCH POLYISOCYANURATE. INSULATION CAN BE REDUCED AT CASING SPACERS.
- 4 STEEL PIPE CASING WALL THICKNESS SHALL BE 0.375-INCH THICK. VERIFY CASING SIZE PRIOR TO ORDERING AND SIZING CASING SPACERS. EXTERIOR COAL-TAR COATING SHALL COMPLY WITH AWWA C203.
- 5 CASING SPACERS SHALL BE STAINLESS STEEL, RESTRAINED-TYPE BOLTED SPACERS AND SHALL HAVE A MAXIMUM SPACING AS SHOWN OR AS RECOMMENDED BY MANUFACTURER, WHICHEVER IS LESS.
- 6. ALL MATERIALS AND WORK IN THIS DETAIL SHALL BE PAID UNDER ITEM 900.640 SPECIAL PROVISION (DUCTILE IRON PIPE, CEMENT-LINED, ALL-INCLUSIVE) (10" WATER IN CASING) AS APPLICABLE, UNLESS OTHERWISE SPECIFIED.

STEEL CASING DETAIL

NOT TO SCALE



SECTION VIEW

NOTES

- I. ALL PIPE SHALL JOINTS SHALL BE FULLY RESTRAINED, EBAA MEGALUG SERIES 1100 OR APPROVED EQUAL.
- 2. PIPE SUPPORT MUST BE LOCATED ON OUTBOARD SIDES OF GIRDER. AVOID HAVING PIPE BELL AT STIFFENER LOCATIONS. AVOID HAVING SUPPORTS AT PIPE BELL LOCATIONS.
- 3. PROVIDE AT LEAST ONE PIPE SUPPORT PER PIPE LENGTH.
- 4. INSULATION SHALL BE 3-INCH POLYISOCYANURATE WITH A 0.020-INCH THICK ALUMINUM JACKET.
- 5. SUPPLY DIMENSIONED WORKING PLANS STAMPED BY A VERMONT LICENSED PROFESSIONAL ENGINEER WITH STRUCTURAL CALCULATIONS AND MEANS OF ATTACHMENT. REFER TO VIRANS STRUCTURES DESIGN MANUAL FOR LOADING GUIDANCE.
- 6. FOR WATER MAIN, INSTALL LOCKABLE 2-INCH CORPORATION FOR MANUAL AIR RELEASE AT CREST. PROVIDE WORKING PLAN TO ENGINEER FOR APPROVAL. THIS WORK SHALL BE INCIDENTAL (SEE NOTE 7).
- 7. ALL MATERIALS, SUBMITTALS AND WORK IN THIS DETAIL SHALL BE PAID FOR UNDER ITEM 900.640 SPECIAL PROVISION (DUCTILE IRON PIPE, CEMENT LINED, ALL-INCLUSIVE) (IO" WATER ON BRIDGE).

WATER MAIN ON BRIDGE DETAIL

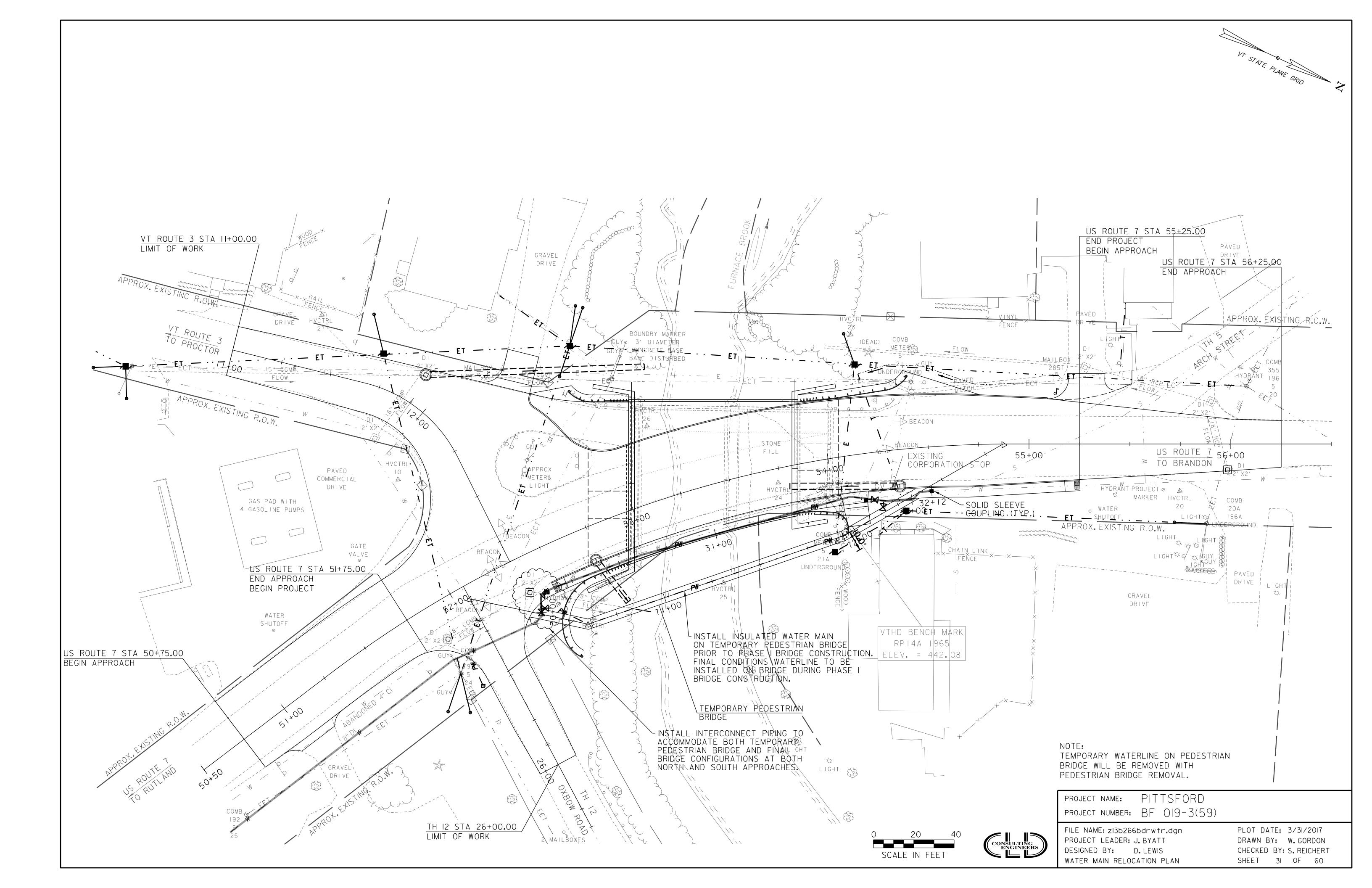
NOT TO SCALE

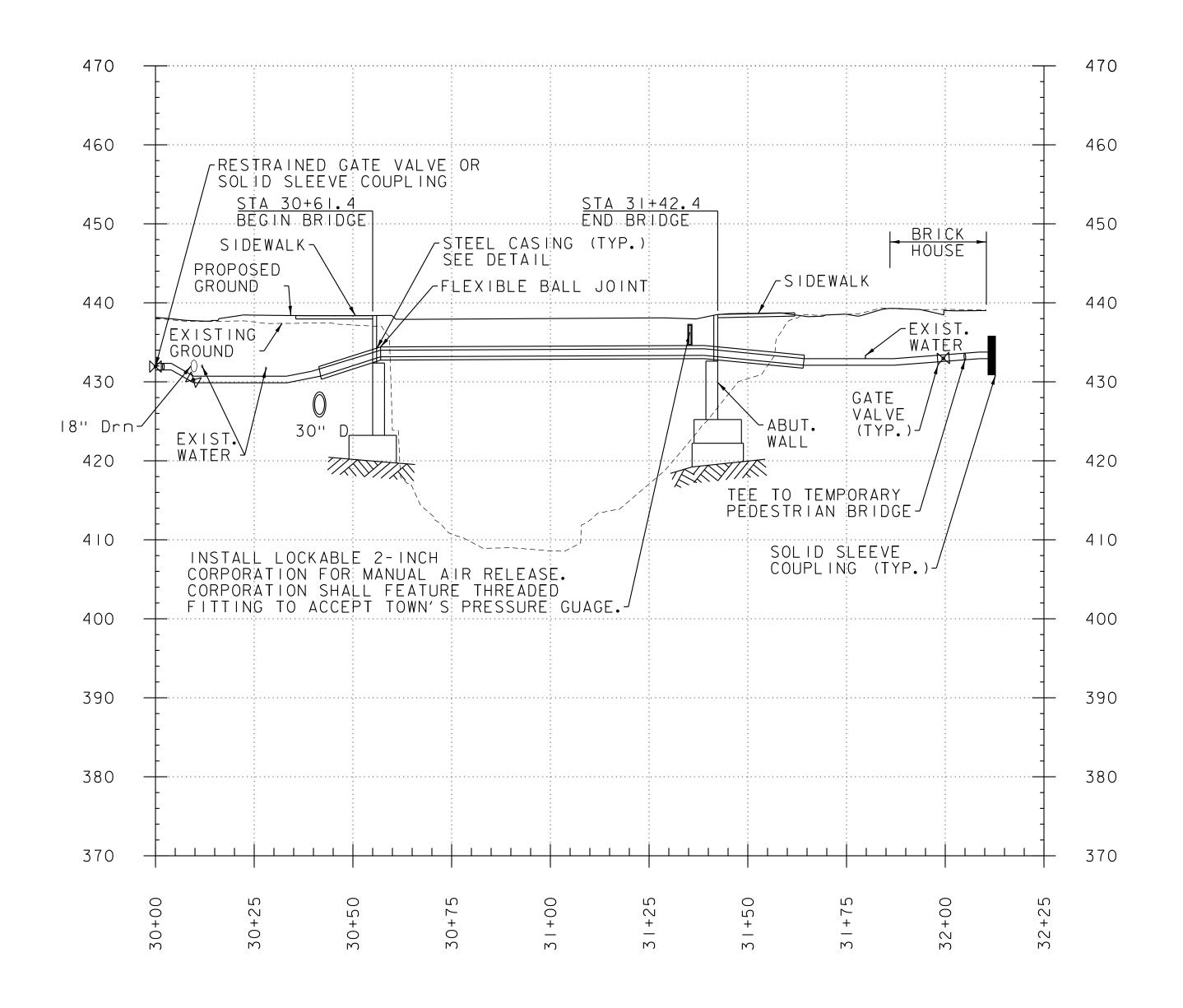
PROJECT NAME: PITTSFORD PROJECT NUMBER: BF 019-3(59)



FILE NAME: zI3b266wtrdet.dgn PROJECT LEADER: J. BYATT DESIGNED BY: D. LEWIS

PLOT DATE: 3/31/2017 DRAWN BY: W. GORDON CHECKED BY: S. REICHERT WATER MAIN RELOCATION DETAIL SHEET 3 SHEET 30 OF 60





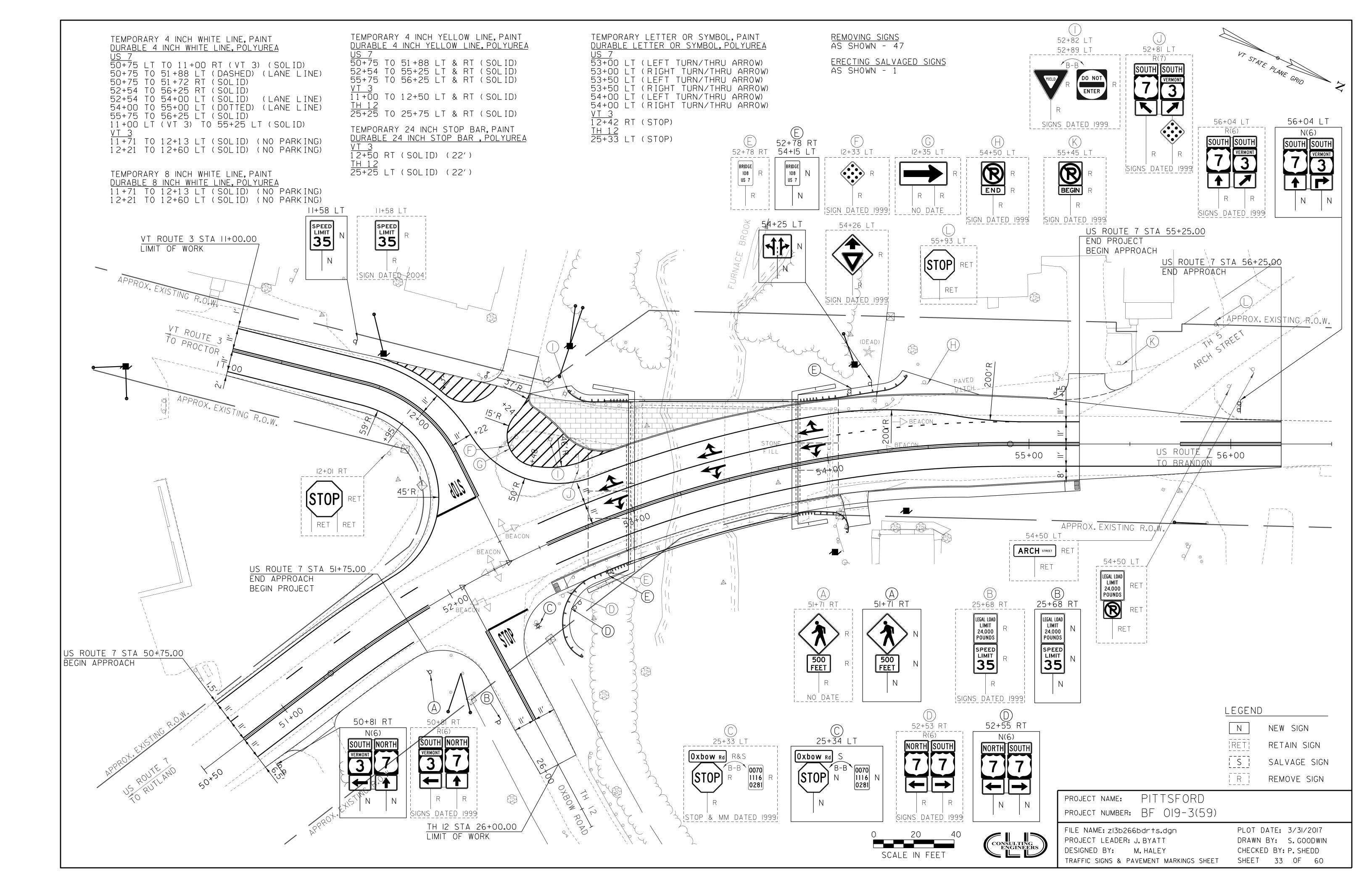
WATER MAIN PROFILE

HOR. SCALE I'' = 20'-0'' VER. SCALE I'' = 10'-0''

PROJECT NAME: PITTSFORD PROJECT NUMBER: BF 019-3(59)

FILE NAME: zI3b266wtrpro.dgn
PROJECT LEADER: J.BYATT
DESIGNED BY: D.LEWIS
WATER MAIN RELOCATION PROFILE

PLOT DATE: 3/31/2017
DRAWN BY: W. GORDON
CHECKED BY: S. REICHERT
SHEET 32 OF 60



STATE OF VERMONT AGENCY OF TRANSPORTATION

TRAFFIC SIGN SUMMARY SHEET #1

SHSM = FHWA 2004 STANDARD HIGHWAY SIGNS AND MARKINGS BOOK AND THE 2012 SUPPLEMENT TO THE 2004 EDITION

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STATE OF VERMONT AGENCY OF TRANSPORTATION

TRAFFIC SIGN SUMMARY SHEET #2

SHSM = FHWA 2004 STANDARD HIGHWAY SIGNS AND MARKINGS BOOK AND THE 2012 SUPPLEMENT TO THE 2004 EDITION

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SOIL CLASSIFICATION

AASHTO

Gravel and Sand

Fine Sand

Silty or Clayey Gravel and Sand

Silty Soil - Low Compressibility Silty Soil - Highly Compressible Clayey Soil - Low Compressibility

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
CHEAD CEDENICEH

>4000

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

Stiff Very Stiff Hard

CORRELATION GUIDE OF "N" TO DENSITY/CONSISTENCY

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

COMMONLY USED SYMBOLS

Water Elevation Standard Penetration Boring Auger Boring Rod Sounding Sample Standard Penetration Test Blow Count Per Foot For: 2"O.D. Sampler $1\frac{3}{8}$ "I.D. Sampler Hammer Weight Of 140 Lbs. Hammer Fall Of 30" Field Vane Shear Test Undisturbed Soil Sample Blast Diamond Core Mud Drill Wash Ahead Hollow Stem Auger Core Size 11/8"
Core Size 15/8" Core Size 2 1/8"

Moisture Content (Dry Wgt. Basis) Dry

Greater Than Refusal (N > 100) VTSPG NAD83 - See Note 7

	COLOR	
blk Black bl Blue brn Brown dk Dark gry Gray gn Green lt Liaht	pnk pu rd tn wh yel mltc	Pink Purple Red Tan White Yellow Multicolored

herein were made between June 3rd

B-102

NORTHING 438 174.35

EASTING 1505270.34

B-101

NORTHING 438150.27

EASTING 1505219.66

engineering interpretation from reflect actual variations in subsurface conditions that may be encountered between individual

and other factors.

GENERAL NOTES

4. Engineering judgment 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 judgment by the Contractor.

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

BORING INFORMATION SHEET

SCALE I'' = 10'-0"

0 0

[-====]!

11_----

54+00

B-103

NORTHING 438217.03

EASTING 1505190.68

NORTHING 438231.26

EASTING 1505222.53

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

7. Northing and Easting coordinates are shown in Vermont State Plane Grid North American Datum 1983 in meters and survey feet.

BORING CHART

VT STATE PLANE GAID

HOLE NO.	SURV. STATION	OFFSET	GROUND ELEV.	ELEV. TLOB
B-101	53+22	38.6′ LT	423.1′	422.4′
B-102	53+07	15.0' RT	420.2′	420.2′
B-103	53+90	19.5' LT	425.3′	420.8′
B-104	53+83	14.7' RT	425.7′	417.6′

PITTSFORD PROJECT NAME: PROJECT NUMBER: BF 019-3(59)

FILE NAME: zl3b266bor.dgn PROJECT LEADER: J. BYATT DESIGNED BY: S. BEAUMONT BORING INFORMATION SHEET

PLOT DATE: 3/31/2017 DRAWN BY: M. SMITH CHECKED BY: J. BYATT SHEET 36 OF 60

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

GRAVEL - Rounded particles of rock $\langle 3" \text{ and } \rangle 0.0787" (*10 \text{ sieve}).$

12 inches.

SAND - Particles of rock < 0.0787" (#IO sieve) and > 0.0029" (#200 sieve).

SILT - Soil < 0.0029" (#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.

US WΑ Double Tube Core Barrel Used Liquid Limit Plastic Limit Plasticity Index Non Plastic Moist Moist To Wet Wet Sat Saturated Во Boulder Gr Gravel Sa Sand Si Silt CI Clay Hardpan Le Ledge No Ledge To Depth Can Not Penetrate Further Top of Ledge Or Boulder No Recovery Rec. Recovery Percent Recovery Rock Quality Designation California Bearing Ratio Less Than

Orange

I. The subsurface explorations shown and June 10th 2015 by the Agency.

2. Soil and rock classifications, properties and descriptions are based on available subsurface information by the Agency and may not necessarily boring or sample locations.

3. Observed water levels and/or conditions indicated are as recorded at the time of exploration and may vary according to the prevailing rainfall, methods of exploration

				STATE (OF VERMONT			ВО	RING	LOG		Во	ring No	·.: _	B-10	<u>)1</u>
		$T_{\alpha\alpha}$	Jarking to Cot Vou Thorn	AGENCY OF	TRANSPORTAT	ION		PI	TTSFO	RD		Pa	ge No.:		1 of	1
	N. C.	Irans	orking to Get You There		RUCTION AND ALS BUREAU				= 019-3(Pir	No.:	1	3B26	6
				CENTRAL	. LABORATORY			US	S-7 BR-	108		Ch	ecked l	Ву:	ML	.M
	Dorina	~ Cross	ILIDIZ	INC LICOX NIE			I	Casing	g San	npler		Groundw	ater Ob	serva	tions	
		g Crew:		INS, HOOK, NIE		Type:		WB		S	Dat	e Dep	oth	No	otes	
		Started:		Date Finished: _	6/05/15	I.D.:	\ \ / / / .	4 in		<u>5 in</u>		(ft				
	VTSP	G NAD83:	N 4381	50.27 ft E 150		Hamm Hamm		N.A. N.A.		0 lb. in.	06/05	/15	No	wate	er to de	epth.
	Statio	n: <u>53</u>	3+22	Offset:	-38.60		er/Rod T		<u></u> Auto/AV							
	Grour	nd Elevation	n: <u>423.</u>	1 ft		Rig: _	CME 45	C SKID		1.33						
	Depth (ft)	Strata (1)			ATION OF MATE Description)	ERIALS			Run (Dip deg.)	Core Rec. % (RQD %)	Drill Rate minutes/ft	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
		07001	Visual Descri	ntion: Annears	to be a manufac	tured Aad	arenate I	l t/brn		Ö		12-	2.2			
	-	0000	Moist, Rec. =		to be a mandiac	iaiea Ag	gregate, i	LUDITI,				R@2.5"				
	-				sive DOLOMITIC Hard, Very sligh				1 (-)	38 (0)	3	Тор	of Bed	drock	@ 0.7	ft
	-		NXMDC, RM		naru, very siigir	uy weaui	erea, Po	or rock,	()	(0)	_					
BOTTOM OF	-										5					
ABUT. I FOOTING	2.5 -		27# 57#	Light grov Moor	sive DOLOMITIC	NADDI	□ with a	range	2	40	F					
EL. 420.0'			staining along	Lignt gray, Mass g joint surfaces.	sive DOLOMITIC Hard, Very sligh	≀MARBL tly weath	ered, Fai	range r rock,	2 (-)	42 (33)	5					
	-		NXMDC, RM	R = 41		•			,		3					
APPROX. TLOB	-										3					
	F 0										6					
	5.0 -															
	_		5.7 ft - 10.7 ft	Light grav. Ma	ssive DOLOMITI	C MARB	LE. with	orange	3	100	4					
	_		and brown st	aining along join	it surfaces. Hard				(-)	(68)						
	_		Good rock, N	XMDC, RMR =	61						5					
	7.5 -															
	-										5					
	-															
	-										4					
	-															
	10.0										6					
	-															
	-	-			Hole stopp	ed @ 10.	7 ft									
	-	-														
	-	-	Remarks:													
5	12.5	1			ugh bridge deck its the ground su		vation									
6/30/15	-	-	3. Boring log	begins at the gr	ound surface.	nace ele	valion.									
. 1	_		Top of Bridge	Deck Data												
BF 019-3(59).GPJ VERMONT AOT.GDT	_	1	1. Asphalt Pa	vement 0.0'-0.3'	•											
▼ - Z	15.0 <i>-</i>		2. Concrete 0		surface = 15.6 ft.											
RM O	13.0			g												
N VE	_															
.GP.	_															
-3(59	_	-														
. 019	17.5-															
	-	_														
SFORD	-	-														
STII STI	-	-														
0 2	_	-														
٩					between material type											
ORING	Notes:	2. N Values I 3. Water leve	nave not been corre el readings have be	cted for hammer ener en made at times and	rgy. C₌ is the hammer under conditions state	energy corre ed. Fluctuati	ection factor ons may oc	cur due to	other facto	rs than th	nose pre:	sent at the tim	ne measu	rements	s were n	nade.

	AGENCY OF TRANSPORTATION CONSTRUCTION AND MATERIALS BUREAU CENTRAL LABORATORY AGENCY OF TRANSPORTATION PITTS BF 01 US-7 II				RING LOG TTSFORD 019-3(59) -7 BR-108			Boring No.: B-102 Page No.: 1 of 1 Pin No.: 13B266 Checked By: MLM							
	Boring	g Crew:	JUDKIN	IS, GARROV	V, HOOK	Type		Casing	Sampler		Ground	water	Observ	ations	
	Date \$	Started: _	6/03/15 E	Date Finished	d:6/03/15	─		WB 4 in	CORE	Date	I	epth (ft)	N	otes	
	VTSP	G NAD83:	N 4381	74.35 ft E	1505270.34 ft	_ Hamm Hamm		N.A.	N.A. N.A.		`		No wat	er to de	epth.
	Station: <u>53+07</u> Offset: <u>15.00</u>					r Fall: <u> N.A. </u>									
	Ground Elevation: 420.2 ft				Rig: _	CME 45	C SKID	<u>C</u> _E = 1.33					1 1		
BOTTOM OF	Depth (ft)	Strata (1)		CLAS	SIFICATION OF (Description		S		Run (Dip deg.)	Core Rec. % (RQD %)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
ABUT.I FOOTING EL. 420.0' +/- APPROX. TLOB	 - - - 2.5 –		0.0 ft - 3.0 ft, Light gray, Massive DOLOMITIC MARBLE, Brown and orange staining along joint surfaces. Hard, Very slightly weathered, Poor rock, NXMDC, RMR = 33												
	5.0 —		3.0 ft - 8.0 ft, staining along RMR = 33	Light gray, Ng joint surfac	Massive DOLOMI es. Hard, Slightly	ITIC MARBL weathered	E, Brown Poor roo	n and oran ck, NXMD	age 2 C, (-)	96 (12)					
	7.5 -		8.0 ft - 10.0 ft staining alon RMR = 43	:, Light gray, g joint surfac	Massive DOLONes. Hard, Very sl	MITIC MARE lightly weath	ered, Fa	vn and ora ir rock, NX	inge 3 (MDC, (-)	40 (40)					
	-														
6/30/15	- - 12.5 –		Remarks: 1. Boring was performed through bridge deck. 2. Ground elevation represents the ground surface elevation. 3. Boring log begins at the ground surface. Top of Bridge Deck Data:												
F 019-3(59).GPJ VERMONT AOT.GDT 6/	- - - 15.0		1. Asphalt Pa 2. Sand 0.15 3. Concrete 0	ivement 0.0'- '-0.50').50'-0.90'		4 ft.									
NTTSFORD BF 019-3(59). GPJ 17.5 —															
BORING LOG 2 PI	Notes:				ndary between materia energy. C _s is the hami and under conditions				ner factors than t	nose prese	ent at the	time mea	asuremen	is were n	nade.



PROJECT NAME: PITTSFORD PROJECT NUMBER: BF 019-3(59)

FILE NAME: zl3b266bor.dgn
PROJECT LEADER: J. BYATT
DESIGNED BY: S. BEAUMONT
BORING LOGS SHEET I

PLOT DATE: 3/31/2017
DRAWN BY: M. SMITH
CHECKED BY: J. BYATT
SHEET 37 OF 60

					OF VERMONT			BORING LOG					Boring No.: B-103				
		MATERIALS BUREAU BF 01			TTSFO 019-3(6-7 BR-	59)		Piı	ige No n No.: necked		1 of 13B26 ML	6					
	Borin	g Crew:	וווחאוו	NS, HOOK, HUL	REDT		(Casing	Sam	pler		Groundw					
	,	_		Date Finished:	6/10/15	Type:				S	Dat			N	otes		
		otarted: PG NAD83:		217.03 ft E 150		I.D.: Hamme	er Wt:	4 in N.A.		<u>in</u>) lb.		(f		No water to depth			
	Statio		3+90	Offset:	-19.50	Hamme	er Fall:	N.A.		in.			r	No wat	er to d	eptn.	
		nd Elevatio		.3 ft	10.00		er/Rod Typ CME 45C		Auto/AV								
						TXIG	CIVIL 430	SKID		1.33							
	Depth (ft)	Strata (1)			ATION OF MATI (Description)	ERIALS			Run (Dip deg.)	Core Rec. % (RQD %)	Drill Rate minutes/ft	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	% Sines	
	-	0000	•		, Rec. = 0.8 ft, L	ab Note: E	Broken Roc	ck was				WH-5-7-	12.1	51.0	26.7	22.3	
BOTTOM OF	-		within sampl								(12)						
ABUT. 2 FOOTING EL. 422.8'	2.5 -	0 0	A-2-4, SaSiO within sampl		t, Rec. = 0.7 ft, La	ab Note: E	Broken Roc	ck was				2-2-2-2 (4)	15.0	37.1	31.3	31.6	
	-		V' ID.	tota - Bada - E	5 l 'th l .		D 0.4	4 51				D 0 0 0 1	44.4				
		\frac{5}{2}			Rock with sand, one of the control o				1	94	5	R@6.0" To		edrock	@ 4.5	ft	
	5.0 -		staining alon	g joint surfaces	Hard, Very sligh '-7.2', RMR = 43	itly weathe	ered, Fair r	ock,	(-)	(30)		·					
	-		NAME OF THE	rtical joint at 0.0	-7.2, INVIIX - 43	,					4						
	-										4						
	7.5 -								6								
	-																
	-	 									5						
	10.0-		9.5 ft - 14.5 f	ft, Light gray, Ma	assive DOLOMIT	IC MARB	LE, with br	own	2	92	3						
	10.0	<u> </u>	and orange s Fair rock, N	staining along joi KMDC, RMR = 4	int surfaces. Har 5	d, Very sli	ightly weat	hered,	(-)	(43)	9						
	-																
	-										6						
	12.5	<u> </u>									5						
	-									8							
	-																
	15.0-		Hole stopped @ 14.5 ft														
<u>5</u>	-																
6/30/15	-		Remarks: 1. Boring was performed through bridge deck. 2. Ground elevation represents the ground surface elevation.														
GDT	17.5 -																
AOT.	17.5		3. Boring log begins at the ground surface.														
LNO	-			e Deck Data: avement 0.0'-0.3	ני												
/ERM	-		2. Concrete	0.3'-0.9'													
\ CAS	20.0-		3. Bottom of	deck to ground s	surface = 12.7 ft												
(59).6	-																
019-3	2. Ground elevation represents the ground surface elevation. 3. Boring log begins at the ground surface. Top of Bridge Deck Data: 1. Asphalt Pavement 0.0'-0.3' 2. Concrete 0.3'-0.9' 3. Bottom of deck to ground surface = 12.7 ft.																
	22.5-																
PITTSFORD	-																
PITI9	-	1															
LOG 2	-																
J J ØF	NIat-				y between material typergy. C₁ is the hammer												
BORING	inotės:	3. Water leve	el readings have be	een made at times and	Notes: 2. N Values have not been corrected for hammer energy. C _i is the hammer energy correction factor. 3. Water level readings have been made at times and under conditions stated. Fluctuations may occur due to							sent at the tir	ne meas	surement	s were n	nade.	

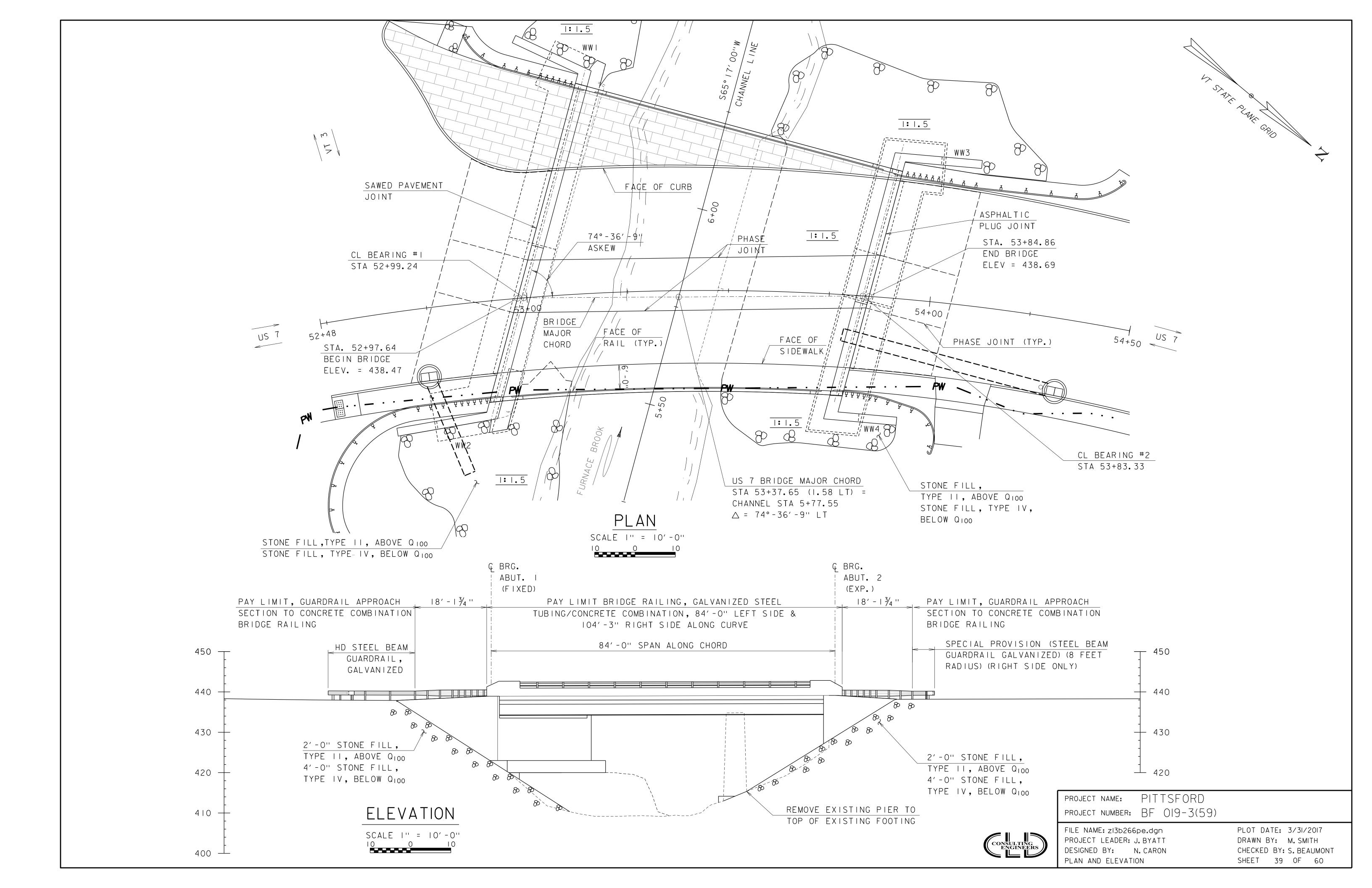
	AGENCY OF TRANSPORTATION CONSTRUCTION AND MATERIALS BUREAU CENTRAL LABORATORY				RING L TTSFOI 019-3(5-7 BR-1	RD 59)		Pa Pir	Boring No.: B-104 Page No.: 1 of 1 Pin No.: 13B266 Checked By: MLM				
	Boring Crew:	JUDKINS, HOOK, HULBERT	Type:	Casing WB	Sam S	•		Groundw					
	Date Started: 6/0	04/15 Date Finished:6/04/15	I.D.:	4 in	1.5	in	Dat	e Dep	I	N	otes		
	VTSPG NAD83:	N 438231.26 ft E 1505222.53 ft	Hamme Hamme	· · · · · · · · · · · · · · · · · · ·	_ <u>140</u> 30				N	lo wat	er to d	epth.	
	Station: 53+83		Hamme	er/Rod Type:A	Auto/AW								
	Ground Elevation:	425.7 ft	Rig: _	CME 45C SKID		1.33 %				<u> </u>			
	Depth (ft) (ft) Strata (1)	CLASSIFICATION OF MATE (Description)	ERIALS		Run (Dip deg.)	Core Rec. (RQD %)	Drill Rate minutes/ft	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %	
		-1-a, SaGr, brn-Lt/brn, Moist, Rec. = 0.8 ft, Nab Note: Broken Rock was within sample.	IXDC, CI	eaned out casing.				5-8-3-4 (11)	6.6	60.7	26.2	13.1	
BOTTOM OF ABUT. 2 FOOTING EL. 422.8'	2.5 A-	-1-a, GrSa, Dk/brn, Moist, Rec. = 0.8 ft, NXD	OC, Clear	ned out casing.				5-8-4-14 (12)	13.4	33.4	47.3	19.3	
	5.0 Fi	eld Note:, No Recovery, NXDC, Cleaned ou	t casing.					13-7-5-5 (12)					
	7.5 - O O O	-1-b, SaGr, brn, MTW, Rec. = 0.9 ft, NXDC, ote: Broken Rock was within sample.	Cleaned	out casing. Lab				21-22- 28- R@5.0" (50)	11.5	61.8	21.1	17.1	
		eld Note:, No Recovery		/	1	66	6	R@1.0"	of Be	drock	<u>ത</u>	ft	
	8. — or	1 ft - 11.6 ft, Light gray, Massive DOLOMITI ange staining along joints. Hard, Very slight XMDC, RMR = 48	C MARB ly weathe	LE, Brown and ered, Fair rock,	(-)	(50)	5	104		di ook	(a)		
	12.5 — sta	I.6 ft - 13.1 ft, Light gray, Massive DOLOMI ⁻ aining on joints. Hard, Very slightly weather MR = 43			2 (-)	(33)	2 7						
	br	3.1 ft - 18.1 ft, Light gray, Massive DOLOMITown staining on joints. Hard, Very slightly w XMDC, RMR = 43			3 (-)	100 (42)	5 3						
	15.0						3						
715													
6/30/15							3						
T.GDJ	17.5						3						
O P L	-	Hole stoppe	ed @ 18.	1 ft									
VERMONT AOT.GDT													
019-3(59).GPJ VE	1. 2.	emarks: Boring was performed through bridge deck Ground elevation represents the ground su Boring log begins at the ground surface.	rface elev	vation.									
PITTSFORD BF 0'	22.5 - 1. 2.	op of Bridge Deck Data: Asphalt Pavement 0.0'-0.15' Concrete 0.15'-0.85' Bottom of deck to ground surface = 12.15 f	t.										
BORING LOG 2 F		nes represent approximate boundary between material type not been corrected for hammer energy. C is the hammer a dings have been made at times and under conditions state			ther factor	s than th	nose pre:	sent at the tin	ne meas	urement	s were r	made.	

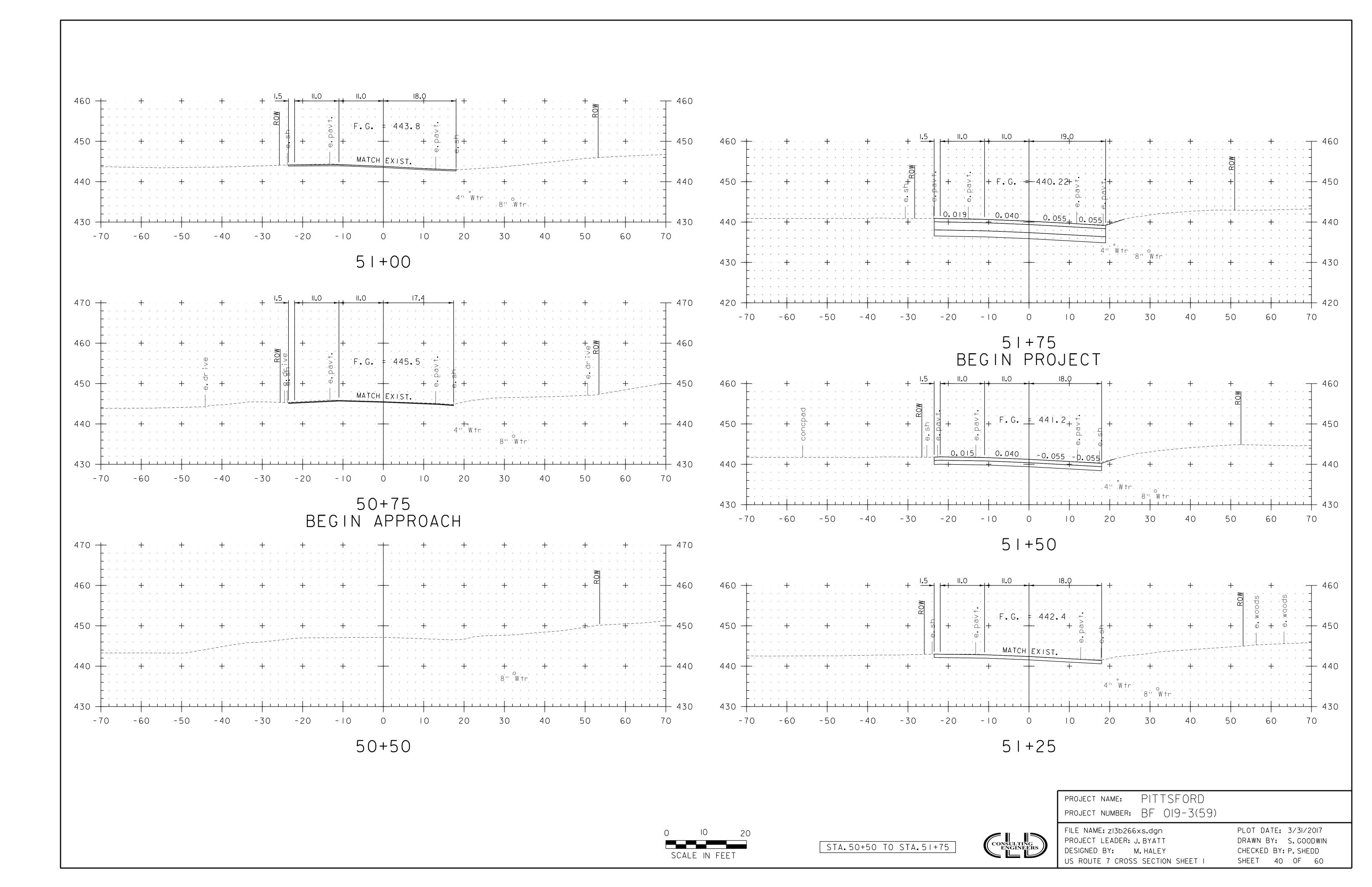


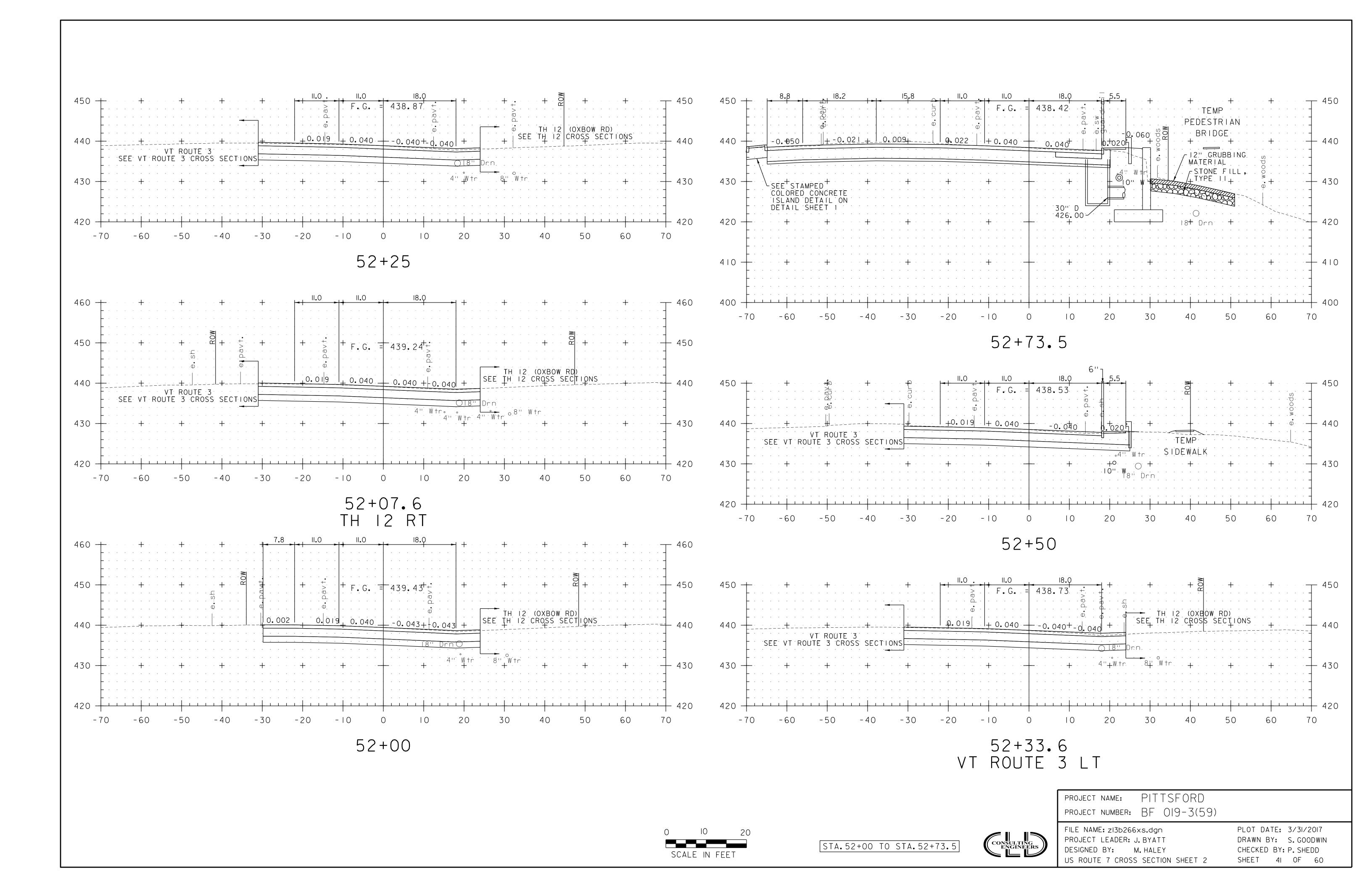
PROJECT NAME: PITTSFORD PROJECT NUMBER: BF 019-3(59)

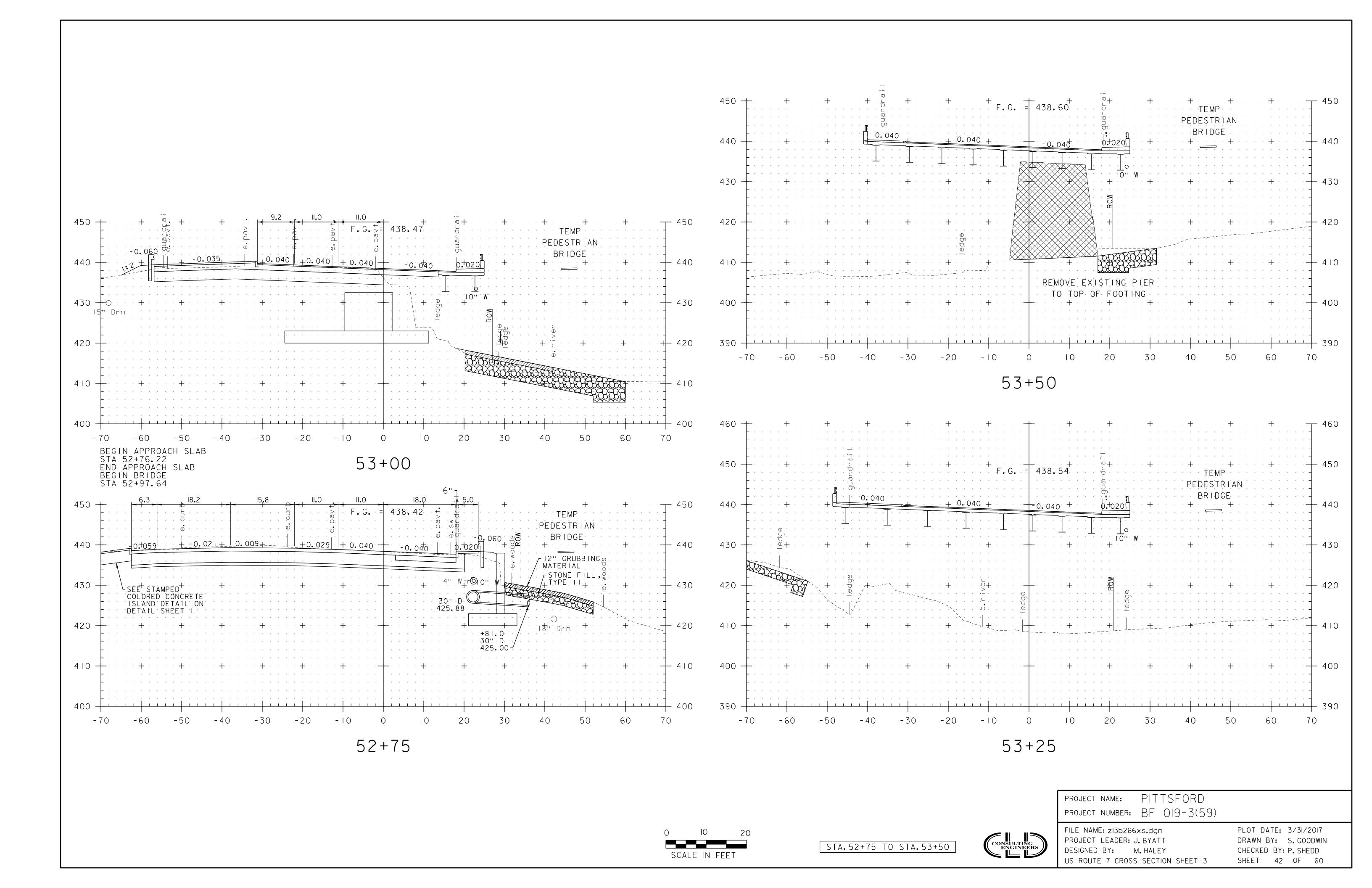
FILE NAME: zI3b266bor.dgn
PROJECT LEADER: J. BYATT
DESIGNED BY: S. BEAUMONT
BORING LOGS SHEET 2

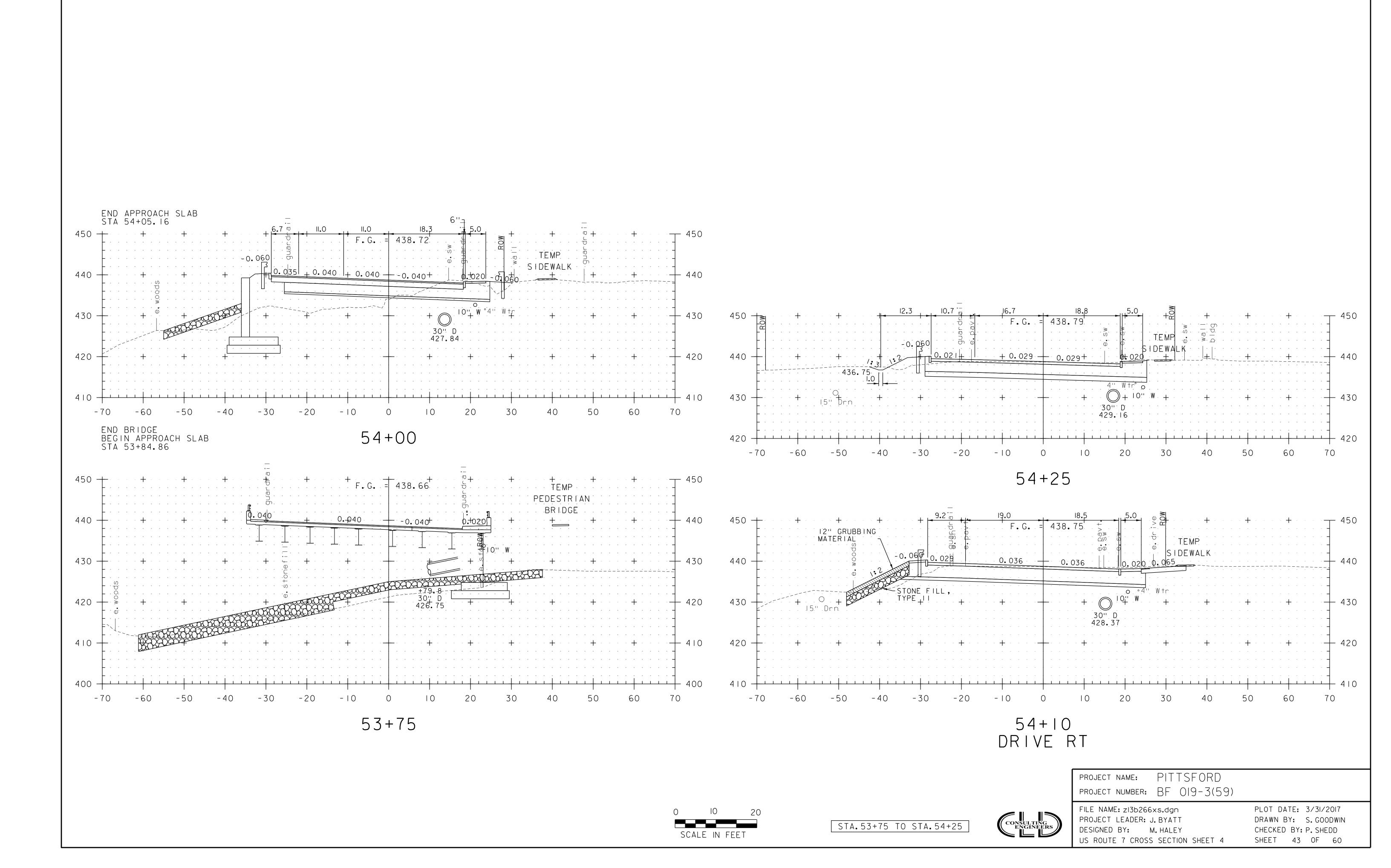
PLOT DATE: 3/31/2017
DRAWN BY: M. SMITH
CHECKED BY: J. BYATT
SHEET 38 OF 60

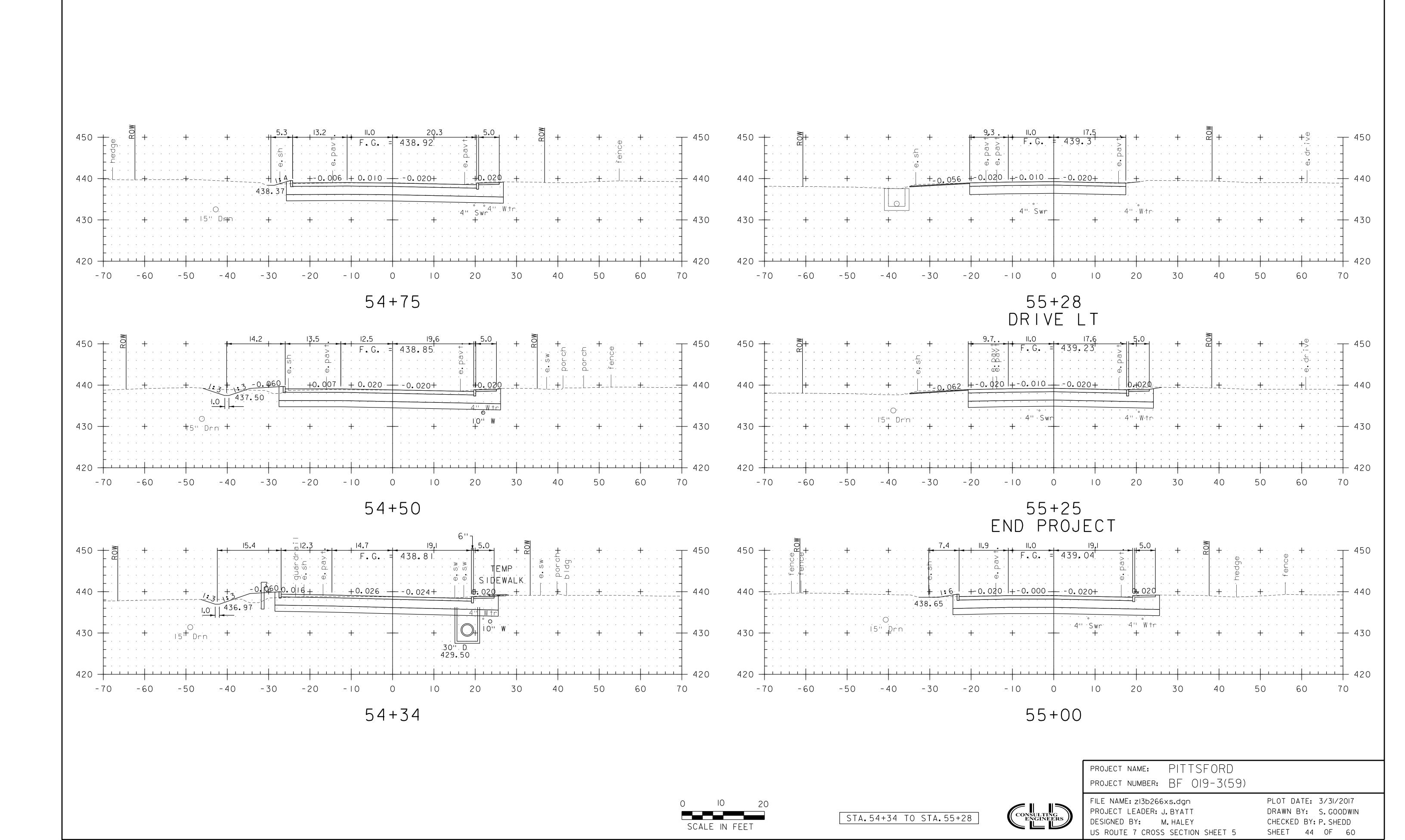


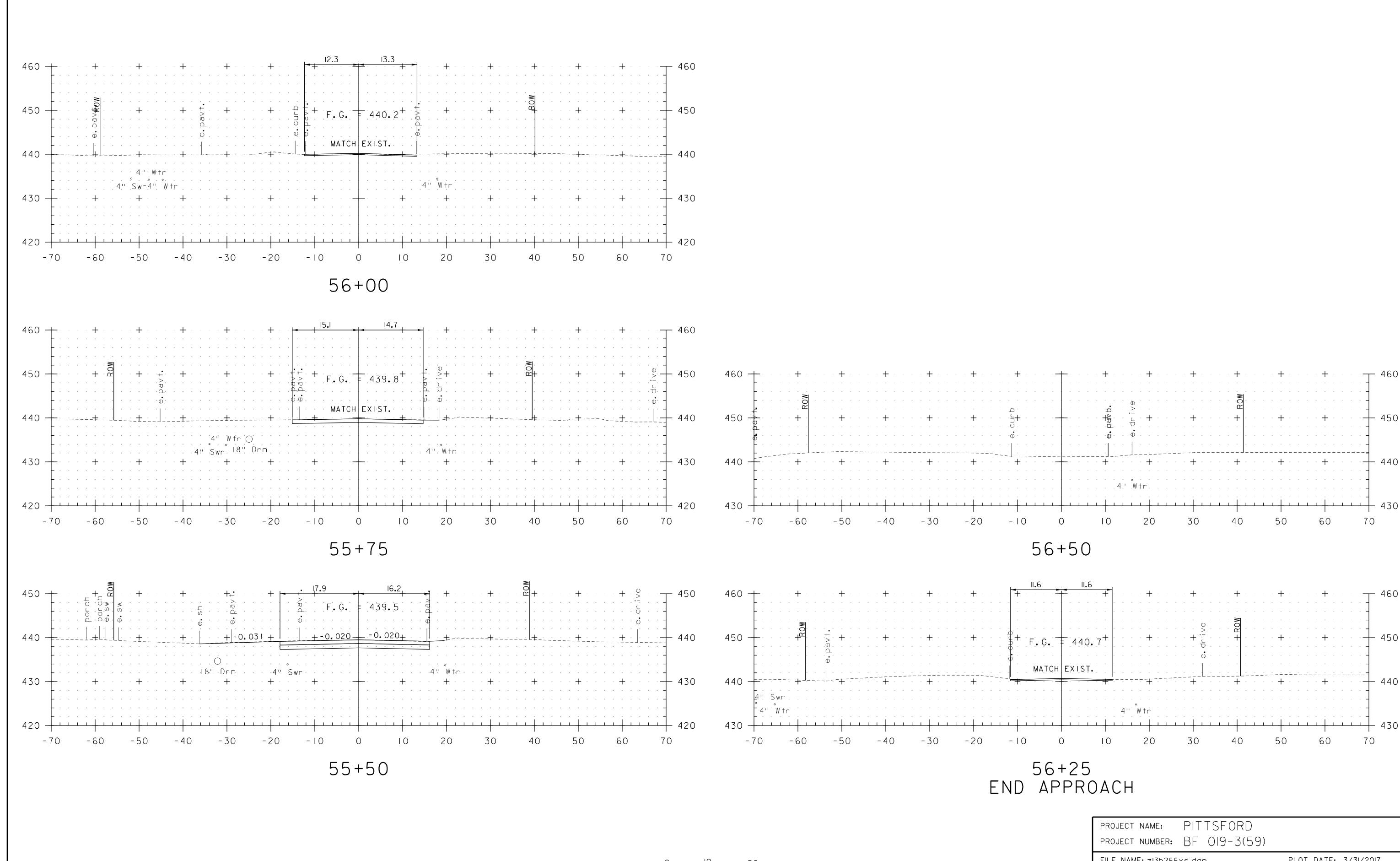










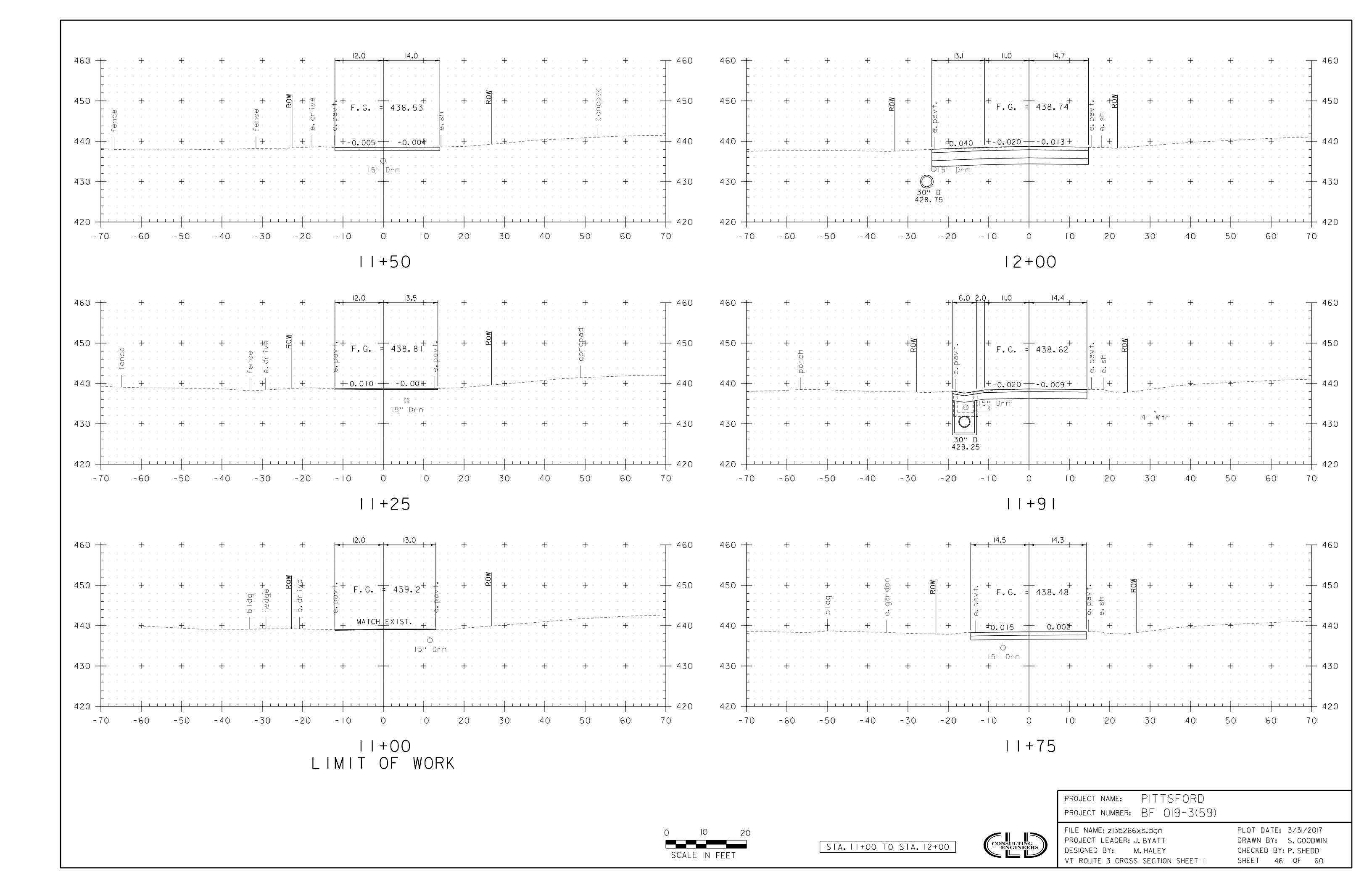


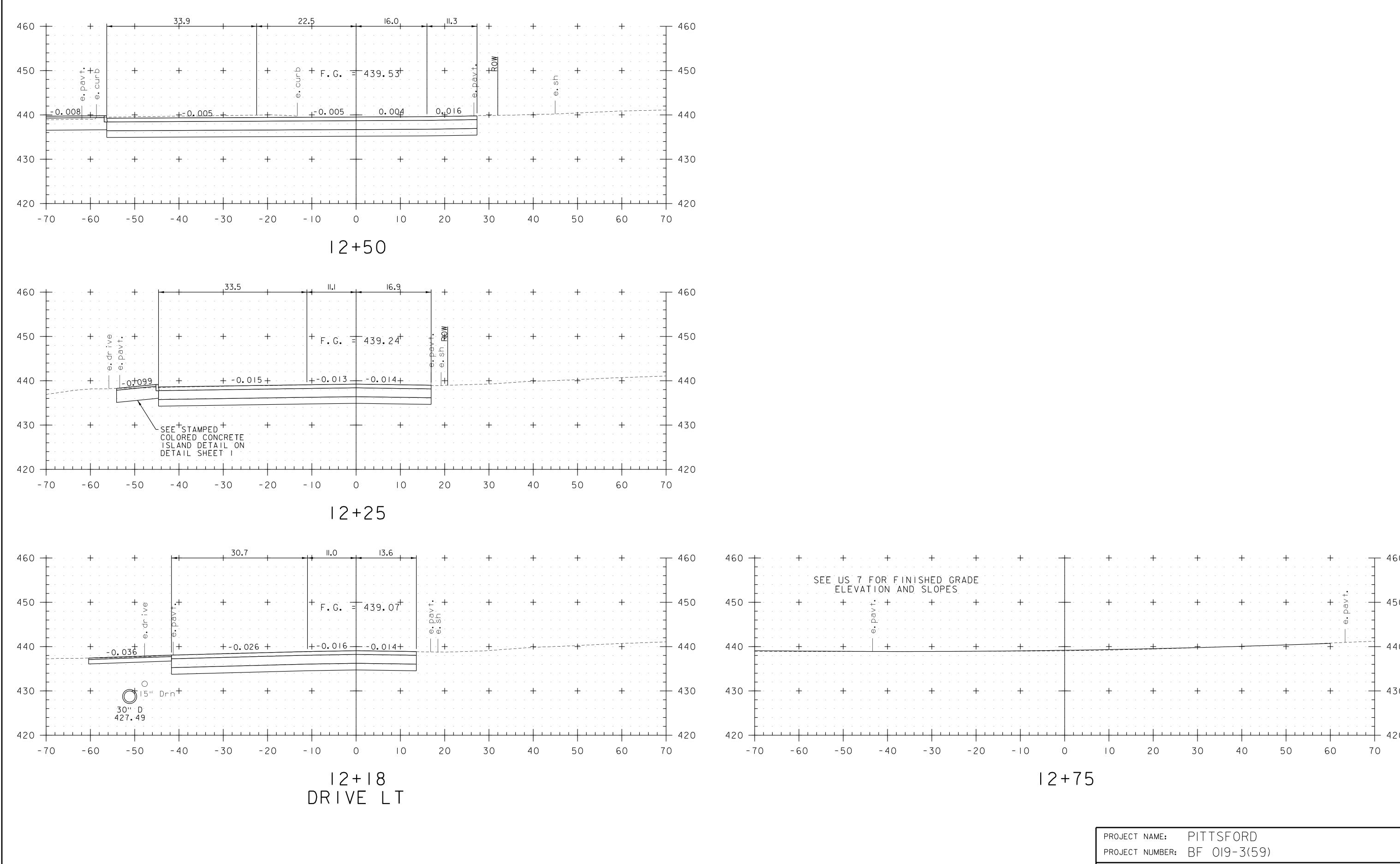
O IO 20

SCALE IN FEET

CONSULTING ENGINEERS FILE NAME: zI3b266xs.dgn
PROJECT LEADER: J.BYATT
DESIGNED BY: M.HALEY
US ROUTE 7 CROSS SECTION SHEET 6

PLOT DATE: 3/31/2017
DRAWN BY: S.GOODWIN
CHECKED BY: P.SHEDD
SHEET 45 OF 60



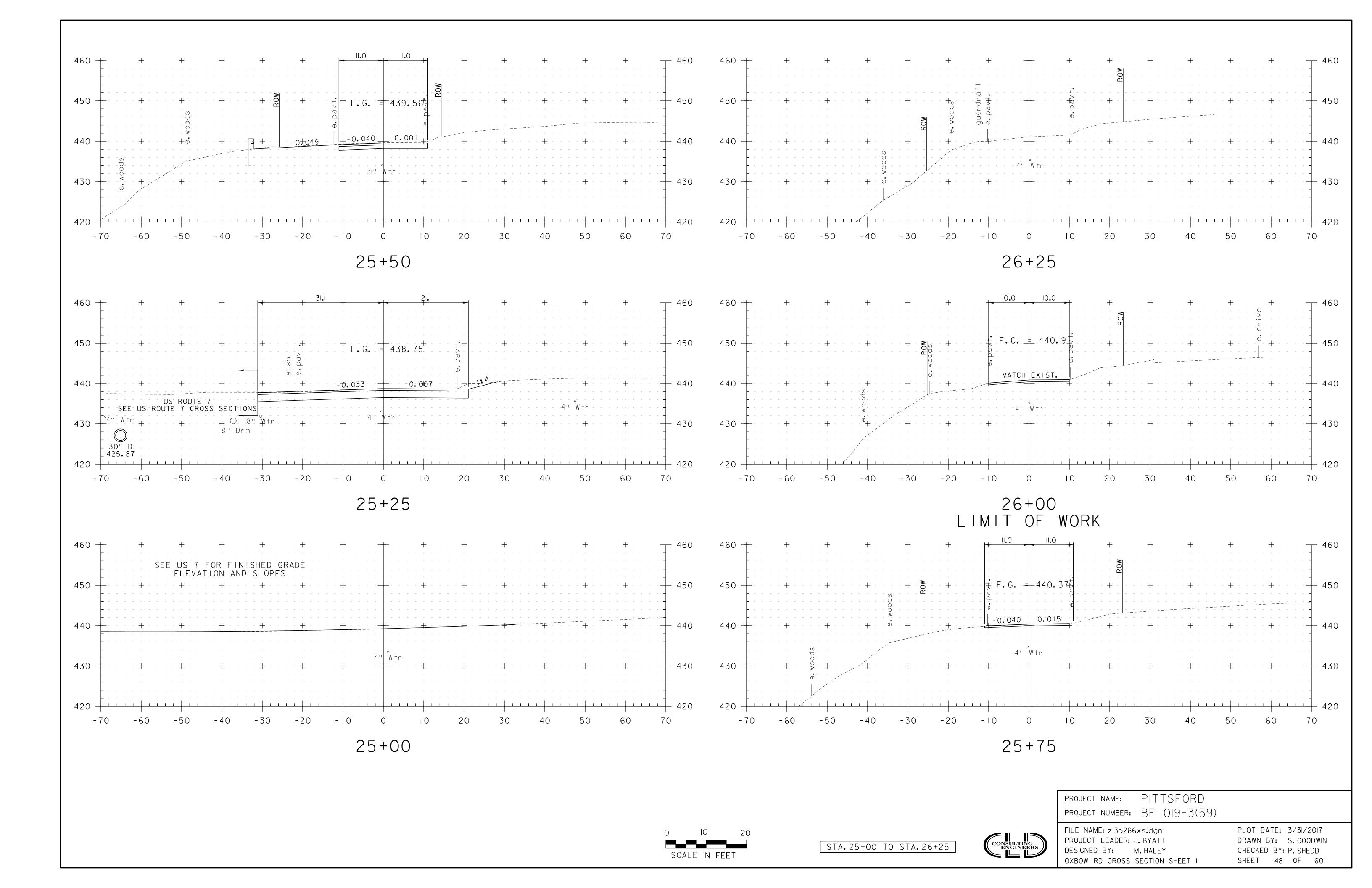


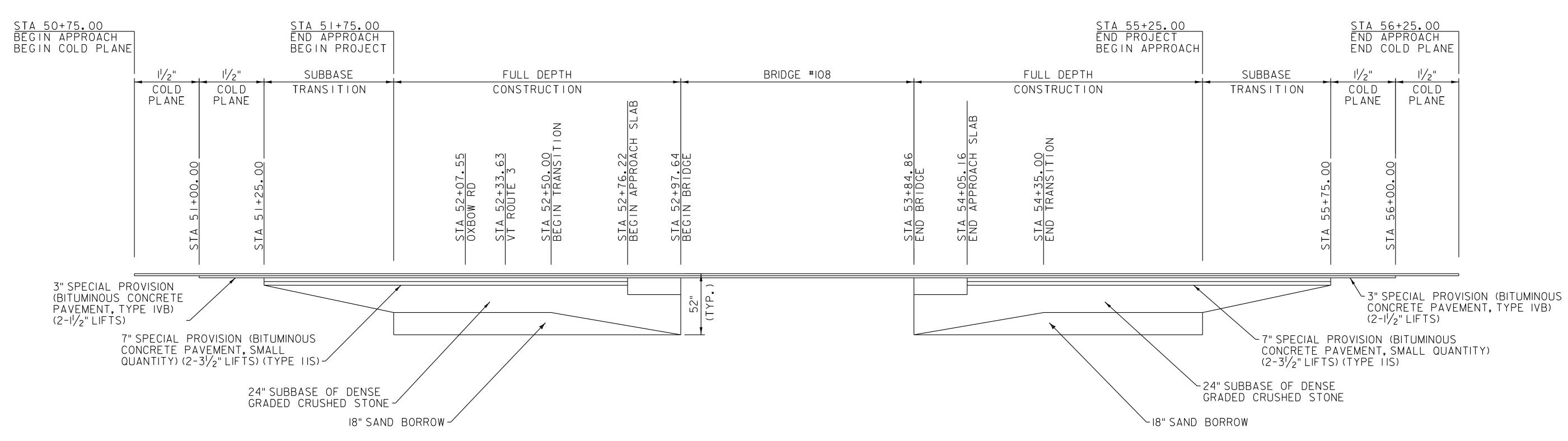
O IO 20

SCALE IN FEET

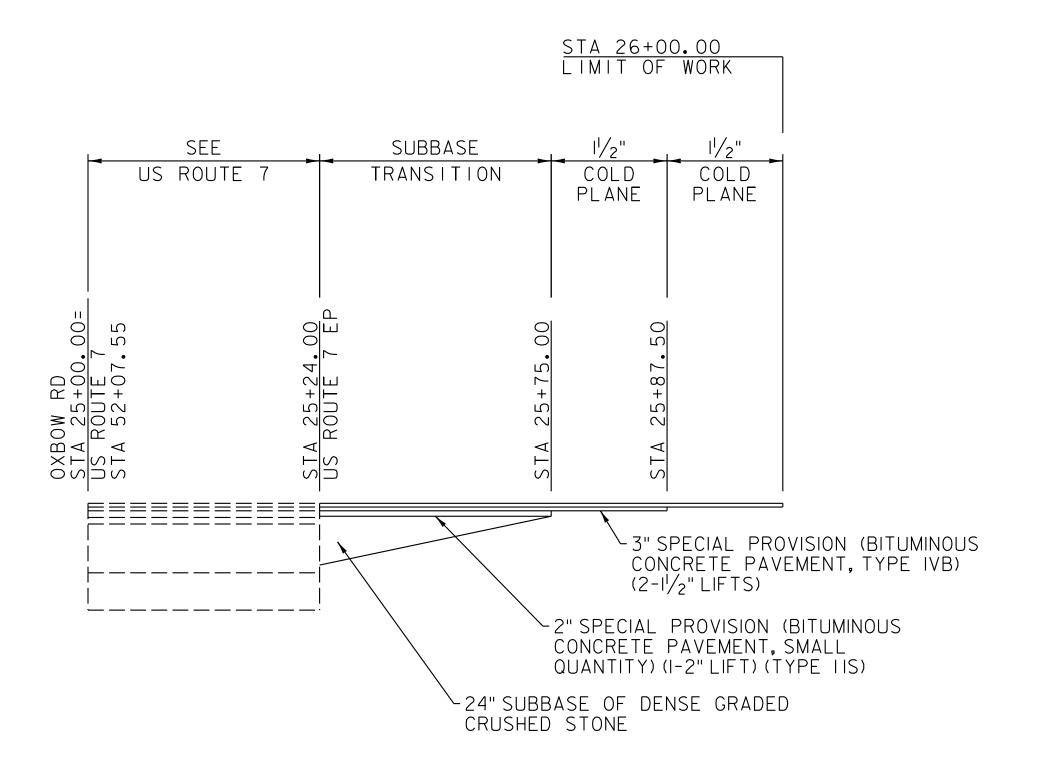
CONSULTING ENGINEERS FILE NAME: zI3b266xs.dgn
PROJECT LEADER: J.BYATT
DESIGNED BY: M.HALEY
VT ROUTE 3 CROSS SECTION SHEET 2

PLOT DATE: 3/31/2017
DRAWN BY: S. GOODWIN
CHECKED BY: P. SHEDD
SHEET 47 OF 60

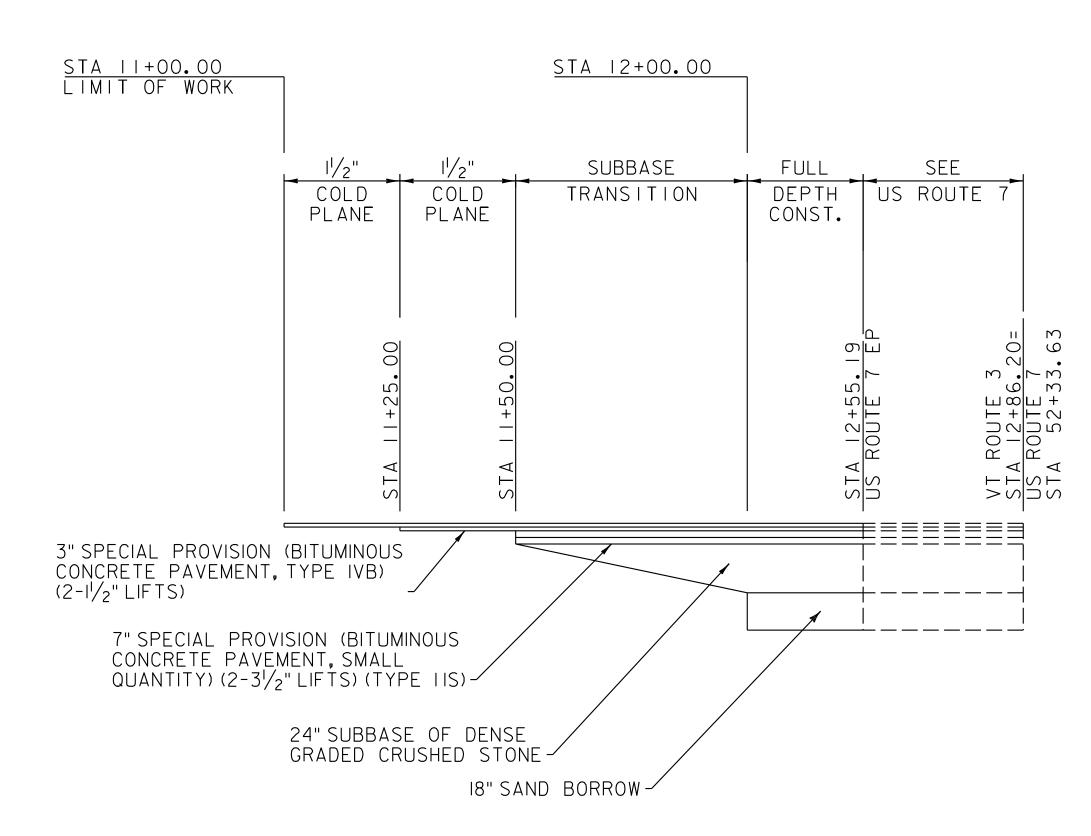




US ROUTE 7 MATERIAL TRANSITION DIAGRAM



OXBOW ROAD MATERIAL TRANSITION DIAGRAM

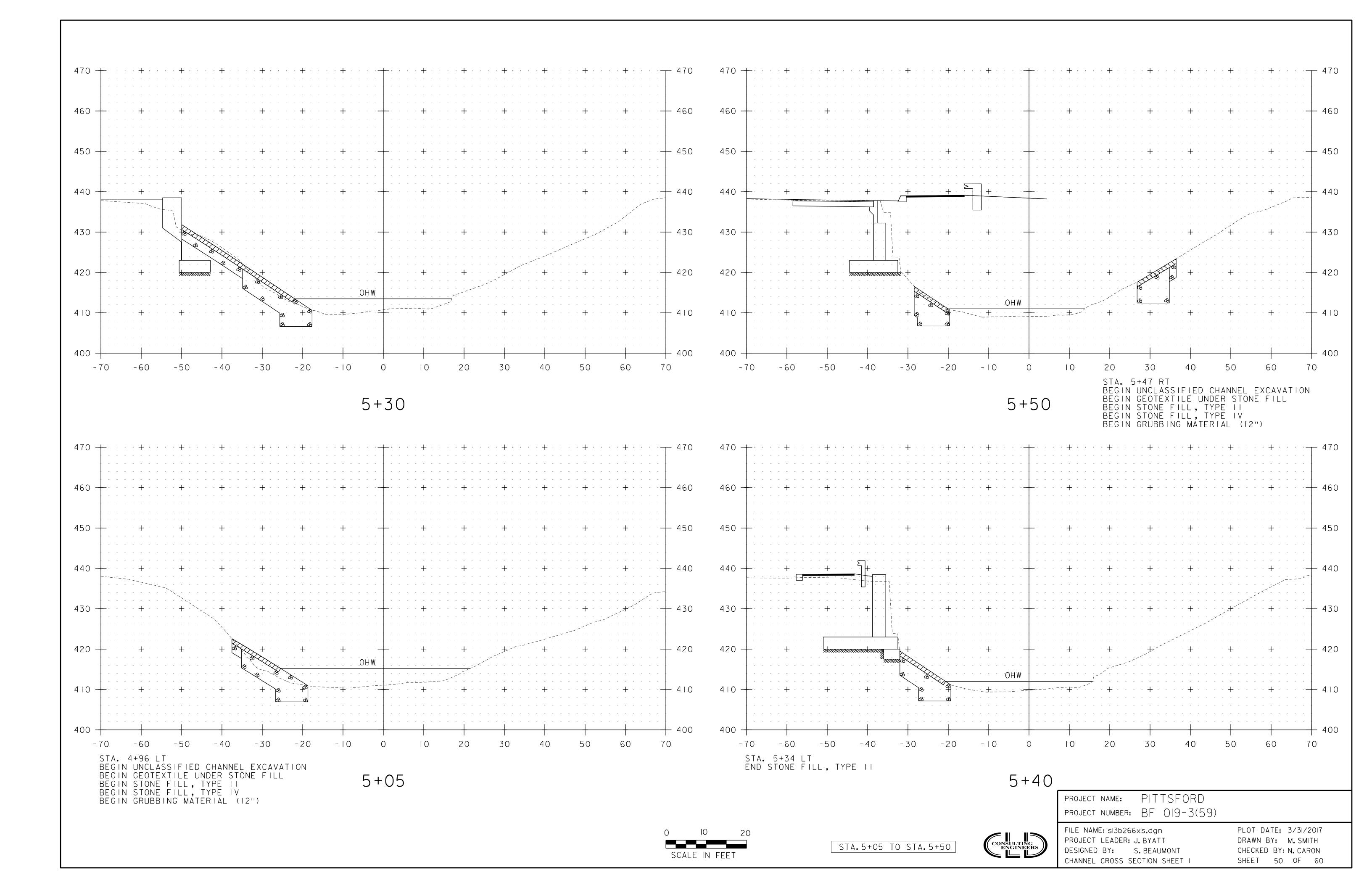


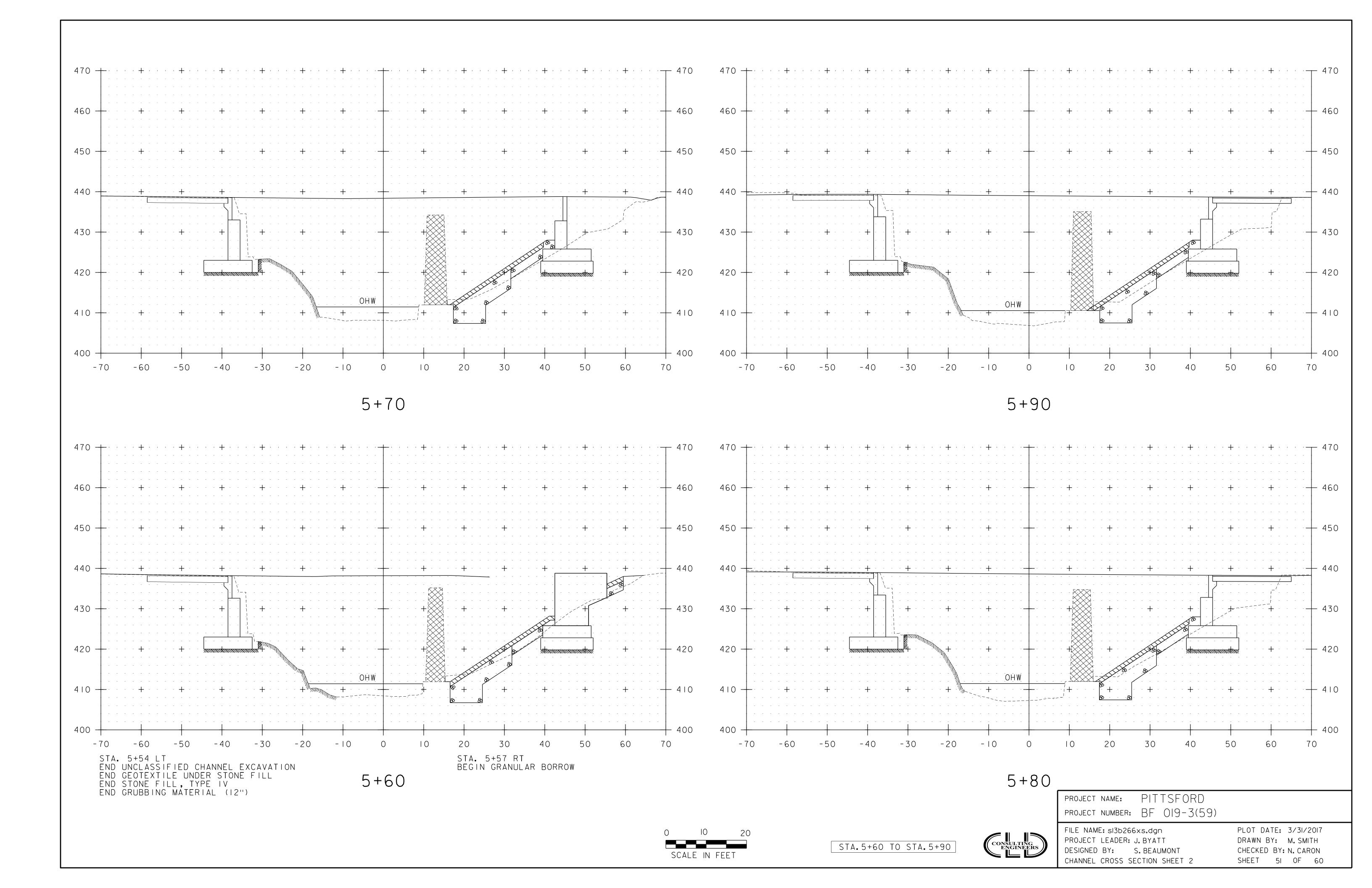
VT ROUTE 3 MATERIAL TRANSITION DIAGRAM

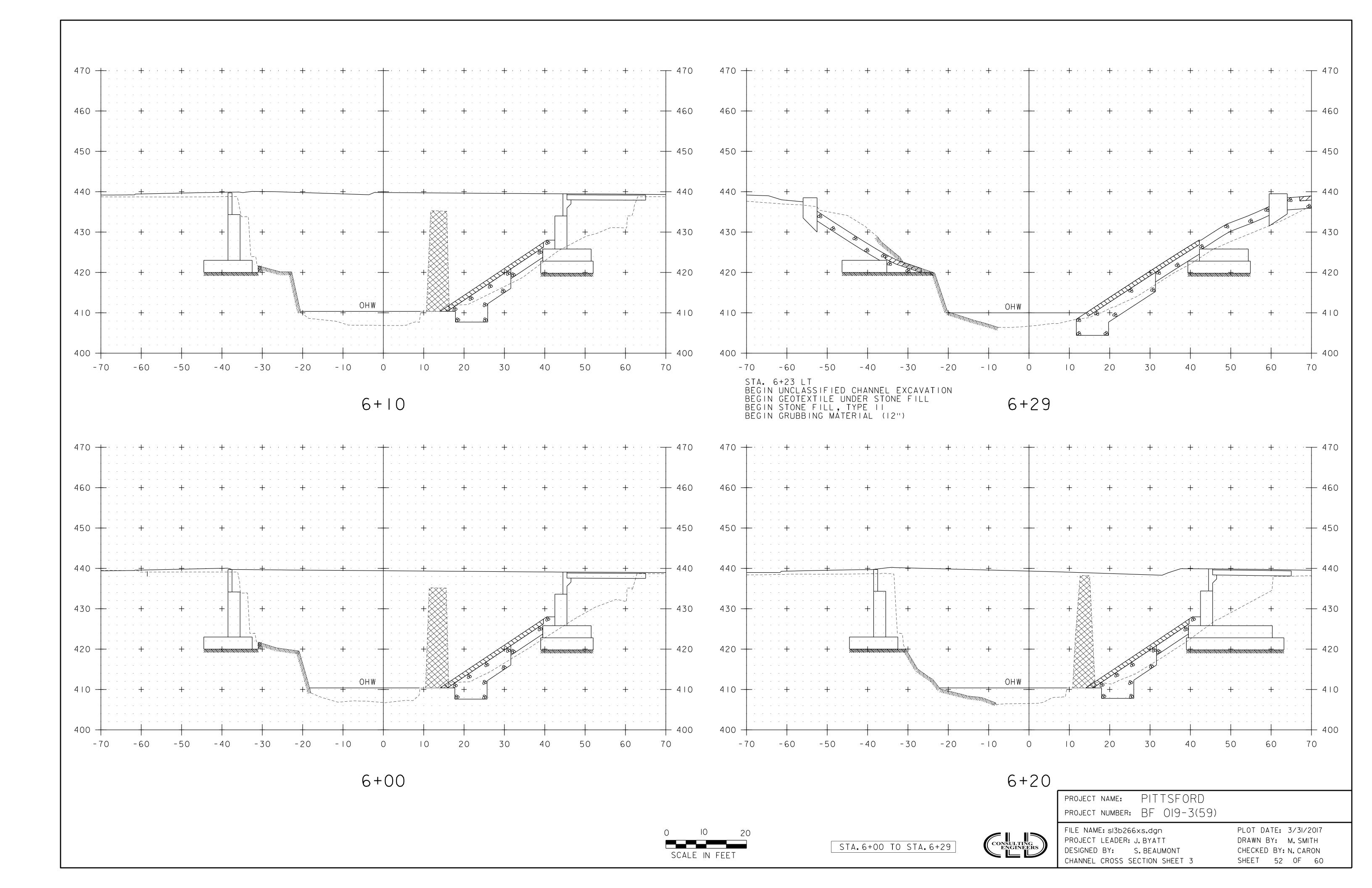
CONSULTING ENGINEERS PROJECT NAME: PITTSFORD PROJECT NUMBER: BF 019-3(59)

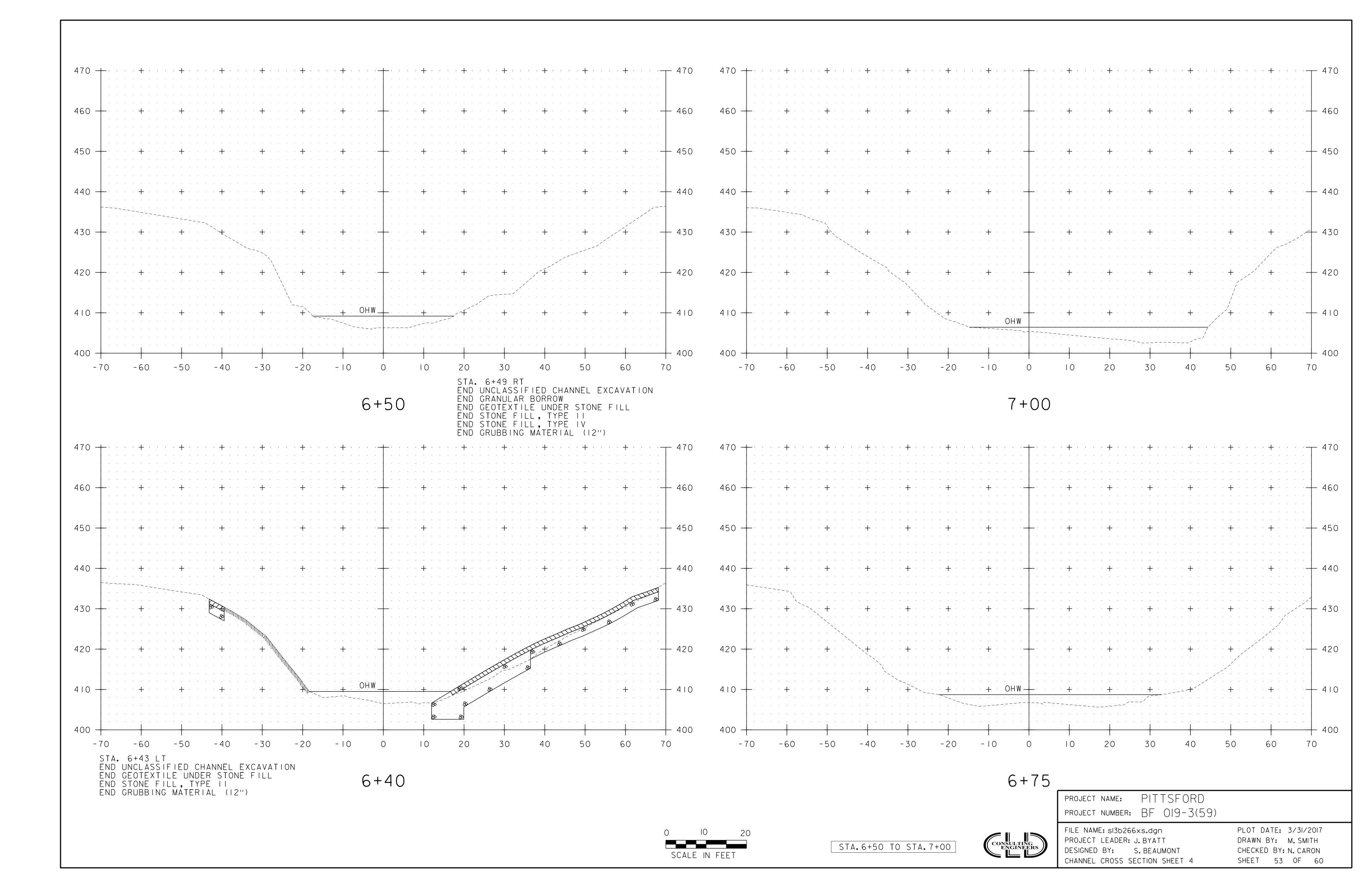
FILE NAME: zl3b266frm.dgn
PROJECT LEADER: J.BYATT
DESIGNED BY: M.HALEY
MATERIAL TRANSITION DIAGRAMS

PLOT DATE: 3/31/2017
DRAWN BY: S. GOODWIN
CHECKED BY: P. SHEDD
SHEET 49 OF 60









EPSC PLAN NARRATIVE

1.1 PROJECT DESCRIPTION

THIS PROJECT INVOLVES THE FULL REPLACEMENT OF EXISTING BRIDGE 108 INCLUDING RELATED ROADWAY WORK, SPANNING 84 FEET OVER FURNACE BROOK, ON NEW FOOTINGS ALONG THE SAME ALIGNMENT. FURNACE BROOK IS LOCATED IN THE TOWN OF PITTSFORD, ON US ROUTE 7, NORTH OF THE INTERSECTION OF US ROUTE 7, VT ROUTE 3, AND TH 12 (OXBOW ROAD).

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

TOTAL AREA OF DISTURBANCE AS SHOWN ON THE ATTACHED EPSC PLAN IS APPROXIMATELY 1.11 ACRES.

IT IS ANTICIPATED THAT THIS PROJECT WILL LAST TWO CONSTRUCTION SEASONS.

1.2 SITE INVENTORY

1.2.1 TOPOGRAPHY

THE TOPOGRAPHY OF THE AREA IS GENERALLY OPEN AT THE EDGE OF A DEVELOPED VILLAGE AREA WITH MAINTAINED LAWNS AND WOODED AREAS. US ROUTE 7, VT ROUTE 3, A GAS STATION, MULTIPLE PAVED PARKING LOTS, AND DRIVEWAYS ARE WITHIN THE PROJECT SITE. THE GAS STATION IS SOUTH OF THE PROJECT, AND OTHER BUSINESSES AND HOUSES ARE IN THE VICINITY OF THE PROJECT.

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

THE FURNACE BROOK IS THE ONLY WATER SOURCE ON THE PROJECT SITE. RESIDENCES AND BUSINESSES WATER SUPPLIES ARE FROM MUNICIPAL WATER. THE BROOK IS CLASSIFIED AS GRADUAL, SINUOUS, NARROW, WITH A CONFINED AND ARMORED CHANNEL AT THE SITE. THE STREAM BED CONSISTS OF GRAVEL, COBBLES AND BOULDERS. THE TRIBUTARY AREA AT THE BRIDGE CROSSING IS 28.6 MILES². THERE ARE A NUMBER OF DROP INLETS ON SITE DRAINING FROM THE ROADWAY TO THE BROOK. DUE TO THE NATURE OF THE SURROUNDING TERRAIN THE PROJECT SITE COULD RECEIVE RUNOFF WATER FROM A FEW NEARBY SLOPES.

1.2.3 VEGETATION

THE VEGETATION IN THE PROJECT AREA CONSISTS OF SINGULAR TREES AND GRASS WITH DENSE TREES AND SHRUBS AROUND THE BROOK. THE IMPACT TO VEGETATION WILL BE LIMITED TO THAT WHICH IS DIRECTLY AFFECTED BY REPLACEMENT OF THE EXISTING BRIDGE AND ROADWAY WORK. UPON PROJECT COMPLETION, THE BROOK WILL BE ARMORED WITH STONE FILL TYPE II 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 RUTLAND, VERMONT. SOILS ON THE PROJECT SITE INCLUDE:

HINCKLEY, GRAVELLY LOAMY FINE SAND, 25% TO 40% SLOPES, "K FACTOR" = 0.10, THE SOIL IS CONSIDERED HIGHLY ERODIBLE;

GEORGIA AND AMENIA, 3% TO 8% SLOPES, "K FACTOR" = 0.28, THE SOIL IS CONSIDERED POTENTIALLY HIGHLY ERODIBLE: SUDBURY, FINE SANDY LOAM, 3% TO 8% SLOPES, "K FACTOR" = 0.24, THE SOIL IS CONSIDERED

POTENTIALLY HIGHLY ERODIBLE: AND GALWAY-NELLIS-FARMINGTON COMPLEX, ROCKY, 8% TO 15% SLOPES, "K FACTOR" = 0.37, THE SOIL IS CONSIDERED HIGHLY ERODIBLE.

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. A VARIETY OF AQUATIC SPECIES OCCUR WITHIN FURNACE BROOK. IN STREAM RESTRICTIONS WILL BE REQUIRED DURING CONSTRUCTION.

HISTORICAL OR ARCHEOLOGICAL AREAS: YES BRIDE 108 IS LOCATED WITHIN THE PITTSFORD MILLS HISTORIC DISTRICT WITH ADJACENT HISTORIC PROPERTIES. THE GREEN SPACE AT INTERSECTION OF VT ROUTE 3 IS CONSIDERED A CONTRIBUTING FEATURE OF THE HISTORIC DISTRICT. RAILING AND APPROACH RAIL WILL BE REQUIRED TO BE COMPATIBLE WITH THE HISTORIC DISTRICT.

PRIME AGRICULTURAL LAND: NO

THREATENED AND ENDANGERED SPECIES: NO

WATER RESOURCE: FURNACE BROOK

WETLANDS: NO

1.3 RISK EVALUATION

THIS PROJECT FALLS UNDER THE JURISDICTION OF GENERAL PERMIT 3-9020 FOR STORMWATER RUNOFF FROM CONSTRUCTION SITES FOR LOW RISK PROJECTS. ANY MODIFICATIONS TO THE PROJECT THAT INCREASE THE RISK TO ENVIRONMENTAL RESOURCES SHALL BE EVALUATED IN ACCORDANCE WITH THE PERMIT REQUIREMENTS. THE CONTRACTOR WILL BE RESPONSIBLE FOR ANY ADDITIONAL PERMITTING.

1.4 EROSION PREVENTION AND SEDIMENT CONTROL

THE EROSION CONTROL PLANS ARE MEANT AS A GUIDELINE FOR PREVENTING EROSION AND CONTROLLING SEDIMENT TRANSPORT. THE PRINCIPLES OUTLINED IN THIS NARRATIVE CONSIST OF APPLYING MEASURES THROUGHOUT CONSTRUCTION OF THE PROJECT IN ORDER TO MINIMIZE SEDIMENT TRANSPORT TO THE RECEIVING WATERS. THE MEASURES INCLUDE STABILIZATION AND STRUCTURAL PRACTICES, STORM WATER CONTROLS AND OTHER POLLUTION PREVENTION PRACTICES. THEY HAVE BEEN PROPOSED BY THE DESIGNER AS A BASIS FOR PROTECTING RESOURCES AND WILL NEED TO BE BUILT UPON BASED ON THE SPECIFIC MEANS AND METHODS OF THE CONTRACTOR. REFER TO THE LOW RISK SITE HANDBOOK AND APPROPRIATE DETAIL SHEETS FOR SPECIFIC GUIDANCE AND CONSTRUCTION DETAILING.

ALL MEASURES SHALL BE REGULARLY MAINTAINED AND SHALL BE CHECKED FOR SEDIMENT BUILD-UP. SEDIMENT SHALL BE DISPOSED OF AT AN APPROVED SITE WHERE IT WILL NOT BE SUBJECT TO EROSION.

1.4.1 MARK SITE BOUNDARIES

SITE BOUNDARIES AND AREAS CONSTRUCTION EQUIPMENT CAN ACCESS SHALL BE DELINEATED.

PROJECT DEMARCATION FENCING (PDF) SHALL BE USED TO PHYSICALLY MARK SITE BOUNDARIES. BECAUSE THIS PROJECT FALLS UNDER THE CGP 3-9020, BARRIER FENCE SHALL BE USED INSTEAD OF PROJECT DEMARCATION FENCE WITHIN 100 FEET OF A WATER RESOURCE (STREAM, BROOK, LAKE, POND, WETLAND, ETC).

1.4.2 LIMIT DISTURBANCE AREA

PREVENTING INITIAL SOIL EROSION BY MINIMIZING THE EXPOSED AREA IS MUCH MORE EFFECTIVE THAN TREATING ERODED SEDIMENT. EARTH DISTURBANCE CAN BE MINIMIZED THROUGH CONSTRUCTION PHASING BY ONLY OPENING UP EARTH AS NECESSARY. THIS CAN LIMIT THE AREA THAT WILL BE DISTURBED AND EXPOSED TO EROSION. EMPLOY TEMPORARY CONSTRUCTION STABILIZATION PRACTICES IN INCREMENTAL STAGES AS PHASES CHANGE. FOR PROJECTS WHICH FALL UNDER THE CONSTRUCTION GENERAL PERMIT, ONLY THE ACREAGE LISTED ON THE PERMIT AUTHORIZATION MAY BE EXPOSED AT ANY GIVEN TIME.

MAINTAINING VEGETATED BUFFERS ALONG STREAM BANKS, WETLANDS OR OTHER SENSITIVE AREAS IS A CRUCIAL EROSION AND SEDIMENT CONTROL MEASURE THAT SHOULD BE ESTABLISHED WHEREVER POSSIBLE.

1.4.3 SITE ENTRANCE/EXIT STABILIZATION

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

STABILIZED CONSTRUCTION ENTRANCES ARE NOT ANTICIPATED ON THIS PROJECT. THE EXISTING ROADWAY WILL BE USED TO ACCESS THE BRIDGE.

1.4.4 INSTALL SEDIMENT BARRIERS

SEDIMENT BARRIERS SHALL BE UTILIZED TO INTERCEPT RUNOFF AND ALLOW SUSPENDED SEDIMENT TO

1.5.3 UPDATES SETTLE OUT. THEY SHALL BE INSTALLED PRIOR TO ANY UP SLOPE WORK.

SILT FENCE WILL BE INSTALLED AS PROPOSED ON THE EPSC PLAN. BECAUSE THIS PROJECT FALLS UNDER THE CGP 3-9020, WOVEN WIRE REINFORCED SILT FENCE SHALL BE USED INSTEAD OF SILT FENCE WITHIN 100 FEET UPSLOPE OF RECEIVING WATERS.

1.4.5 DIVERT UPLAND RUNOFF

DIVERSIONARY MEASURES SHALL BE USED TO INTERCEPT RUNOFF FROM ABOVE THE CONSTRUCTION AND DIRECT IT AROUND THE DISTURBED AREA SO THAT CLEAN WATER DOES NOT BECOME MUDDIED WHILE TRAVELING OVER EXPOSED SOILS ON THE CONSTRUCTION SITE.

THE PROJECT AREA IS RELATIVELY FLAT; HOWEVER, US ROUTE 7 NORTH AND SOUTH OF THE PROJECT AREA DRAINS TOWARD THE PROJECT AREA. RUNOFF FROM THESE AREAS MAY NEED TO BE DIVERTED AWAY FROM THE PROJECT AREA. THE CONTRACTOR SHALL REFER TO THE LOW RISK HANDBOOK FOR GUIDANCE.

1.4.6 SLOW DOWN CHANNELIZED RUNOFF

CHECK STRUCTURES SHALL BE UTILIZED TO REDUCE THE VELOCITY, AND THUS THE EROSIVE POTENTIAL, OF CONCENTRATED FLOW IN CHANNELS.

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

1.4.7 CONSTRUCT PERMANENT CONTROLS

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

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

1.4.8 STABILIZE EXPOSED SOILS DURING CONSTRUCTION

ALL AREAS OF DISTURBANCE MUST HAVE TEMPORARY STABILIZATION IN PLACE WITHIN 48 HOURS OF DISTURBANCE OR IN ACCORDANCE WITH THE CONSTRUCTION GENERAL PERMIT 3-9020 AUTHORIZATION.

SURFACE ROUGHENING OF ALL EXPOSED SLOPES, COMBINED WITH TEMPORARY MULCHING, SHALL BE UTILIZED ON A REGULAR BASIS. BIODEGRADABLE EROSION CONTROL MATTING OR AN EQUIVALENT SHALL BE USED TO STABILIZE ALL SLOPES STEEPER THAN 1:3.

THE FORECAST OF RAINFALL EVENTS SHALL TRIGGER IMMEDIATE PROTECTION OF EXPOSED SOILS.

1.4.9 WINTER STABILIZATION

VARIOUS MEASURES SPECIFIC TO WINTER MAY BE NECESSARY SHOULD THE PROJECT EXTEND INTO WINTER (OCTOBER 15 THROUGH APRIL 15). REFER TO THE LOW RISK SITE HANDBOOK FOR GUIDANCE.

1.4.10 STABILIZE SOIL AT FINAL GRADE

EXPOSED SOIL MUST BE STABILIZED WITHIN 48 HOURS OF REACHING FINAL GRADE.

SEED, MULCH, FERTILIZER AND LIME SHALL BE USED TO ESTABLISH PERMANENT VEGETATION. FOR SLOPES STEEPER THAN 1:3, BIODEGRADABLE EROSION CONTROL MATTING OR AN EQUIVALENT SHALL BE USED INSTEAD OF MULCH.

TEMPORARY EROSION MATTING AND STONE FILL SHALL BE USED TO STABILIZE ROADWAY SLOPES AT AS SHOWN ON THE PLANS.

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 DISCHARGE FROM DEWATERING ACTIVITIES IS ANTICIPATED. THE SPECIFIC MEANS FOR TREATMENT OF DISCHARGE SHALL BE PROVIDED BY THE CONTRACTOR. ALL COSTS FOR TREATMENT OF DISCHARGE SHALL BE PAID FOR UNDER CONTRACT ITEM 653.45.

1.4.12 INSPECT YOUR SITE

INSPECT THE PROJECT SITE BASED ON SPECIAL PROVISION REQUIREMENTS OR CONSTRUCTION GENERAL PERMIT AUTHORIZATION STIPULATIONS.

1.5 SEQUENCE AND STAGING

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

1.5.1 CONSTRUCTION SEQUENCE

1.5.2 OFF-SITE ACTIVITIES

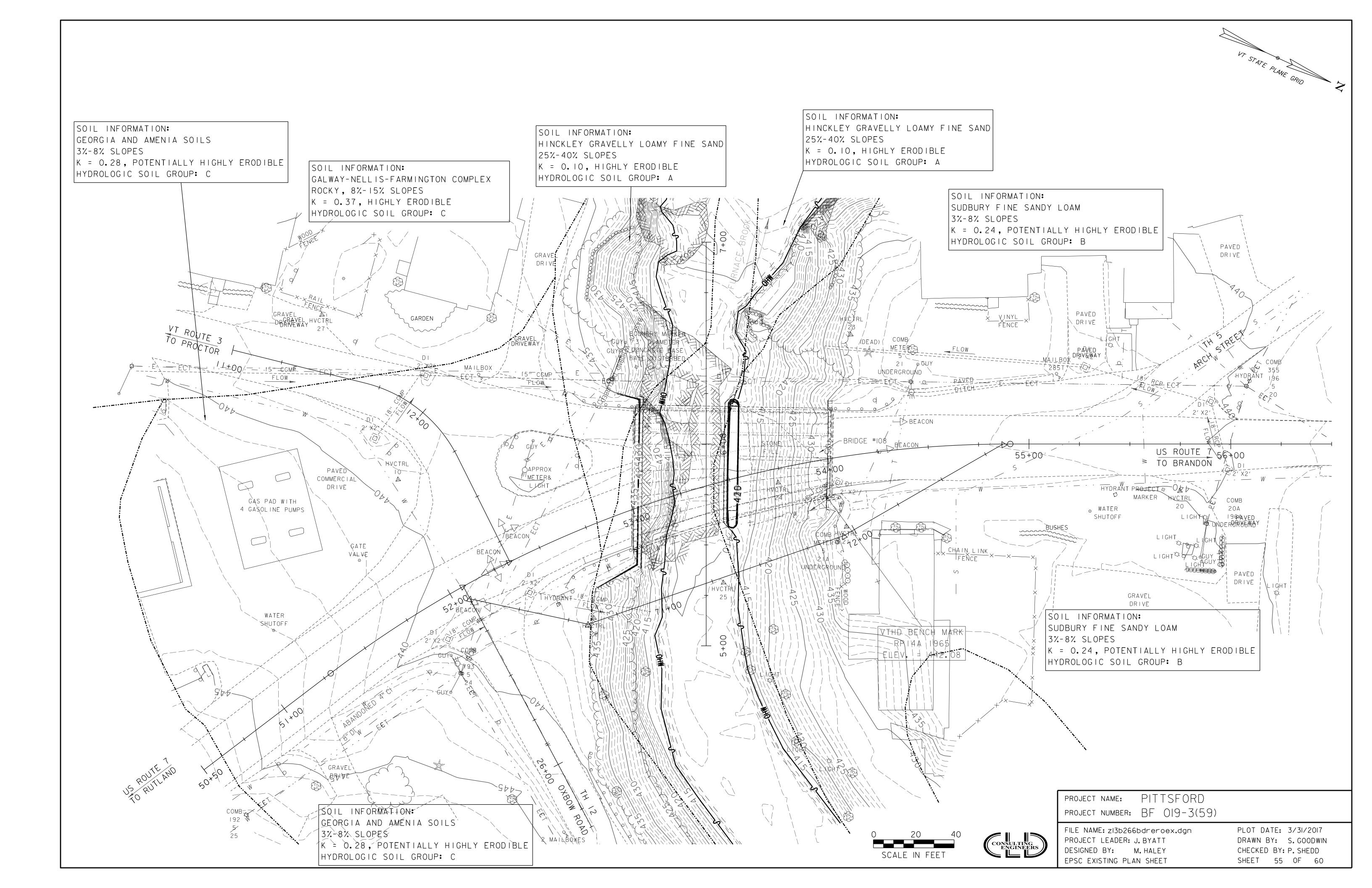
IN ADDITION TO THE CONTRACTOR CHECKLIST ANY ACTIVITIES OUTSIDE THE CONSTRUCTION LIMITS SHALL FOLLOW SPECIFICATION 105.25- 105.29 OF THE STANDARD SPECIFICATIONS FOR CONSTRUCTION.

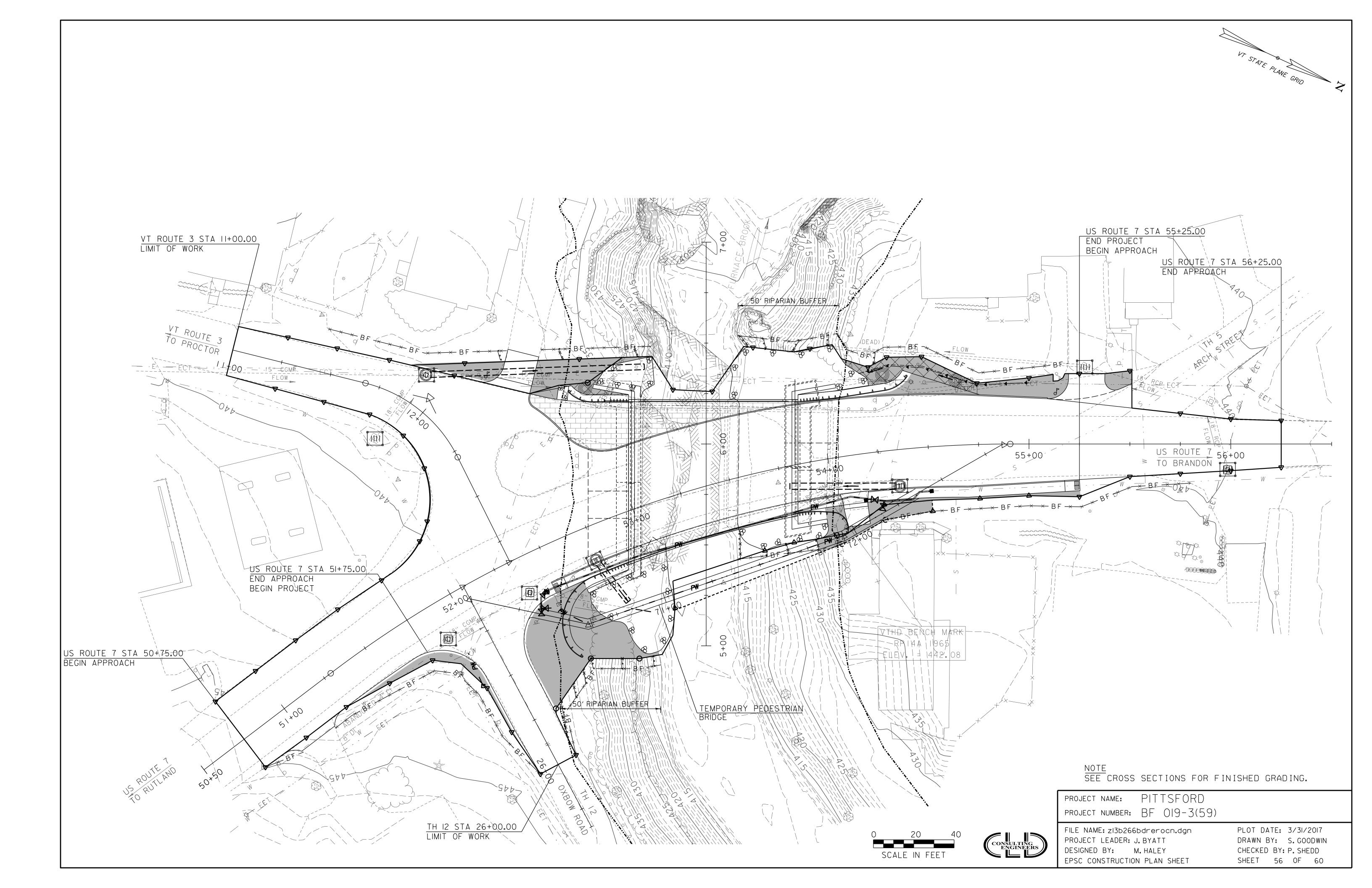
PITTSFORD PROJECT NAME: PROJECT NUMBER: BF 019-3(59)

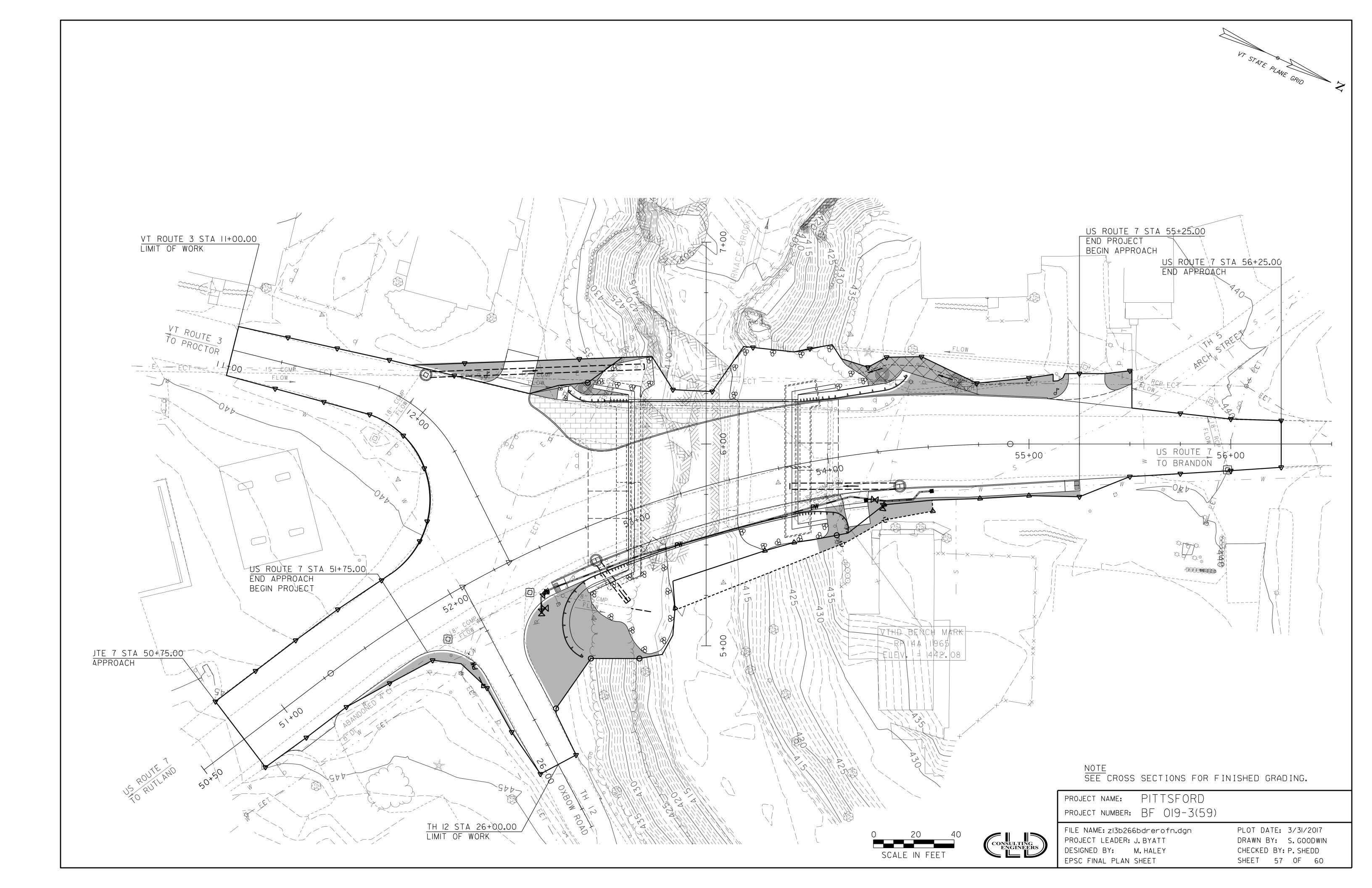
FILE NAME: zl3b266erodet.dgn PROJECT LEADER: J. BYATT DESIGNED BY: M. HALEY EPSC NARRATIVE

PLOT DATE: 3/31/2017 DRAWN BY: S. GOODWIN CHECKED BY: P. SHEDD SHEET 54 OF 60









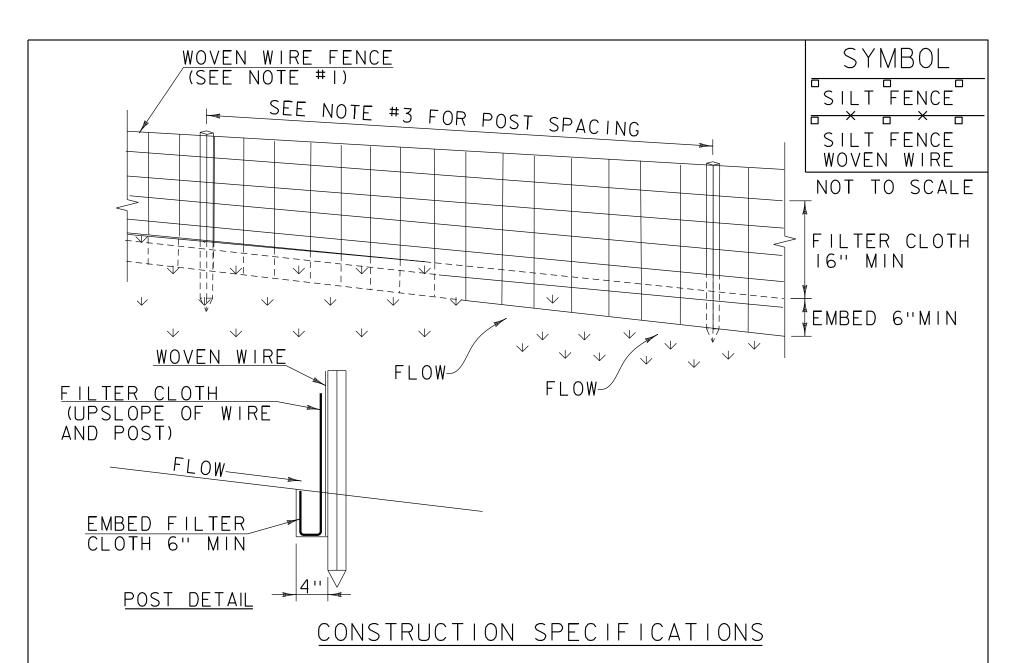
	VAOT URBAN LAWN MIX											
	LBS/AC											
WEIGHT	BROADCAST	HYDROSEED	NAME	LATIN NAME	GERM	PURITY						
42.5%	34	68	CREEPING RED FESCUE	FESTUCA RUBRA X RUBRA	85%	98%						
20.0%	16	32	PERENNIAL RYE GRASS	LOLIUM PERENNE	90%	95%						
32.5%	26	52	KENTUCKY BLUE GRASS	POA PRATENSIS	85%	85%						
5.0%	4	8	ANNUAL RYE GRASS	LOLIUM MULTIFLORUM	85%	95%						
100%	80	160										

GENERAL AMENDMENT GUIDANCE									
FERTILIZER	L	IME							
10/20/10	AG LIME	PELLITIZED							
500 LBS/AC	2 TONS/AC	1 TONS/AC							

CONSTRUCTION GUIDANCE

- I.SEED MIX: THE URBAN AREA MIX SHALL NOT BE USED IN WETLANDS OR ANY WATERS OF THE STATE OF VERMONT.
- 2.SEED MIX: USE ONLY AS INDICATED IN THE PLANS.
- 3.SEED MIX: 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.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
- 7.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 651FOR SEED (PAY ITEM 651.15)	REVISIONS JANUARY 22, 2015 WHF



- I. 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, MIRAFIIOOX, STABILINKA TI40N OR APPROVED EQUIVALENT.
- 3. POST SPACING FOR WIRE-BACKED FENCE SHALL BE 10' MAXIMUM. FOR FILTER-CLOTH FENCE, WHEN ELONGATION IS >50%, POST SPACING SHALL NOT EXCEED 4' AND WHEN ELONGATION IS <50%, POST SPACING SHALL NOT EXCEED 6'.
- 4. WOVEN WIRE FENCE IS TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES. FILTER CLOTH IS TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
- 5. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER-LAPPED BY 6" AND FOLDED.
- 6. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN SEDIMENT REACHES HALF OF FABRIC HEIGHT.

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

SILT FENCE

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

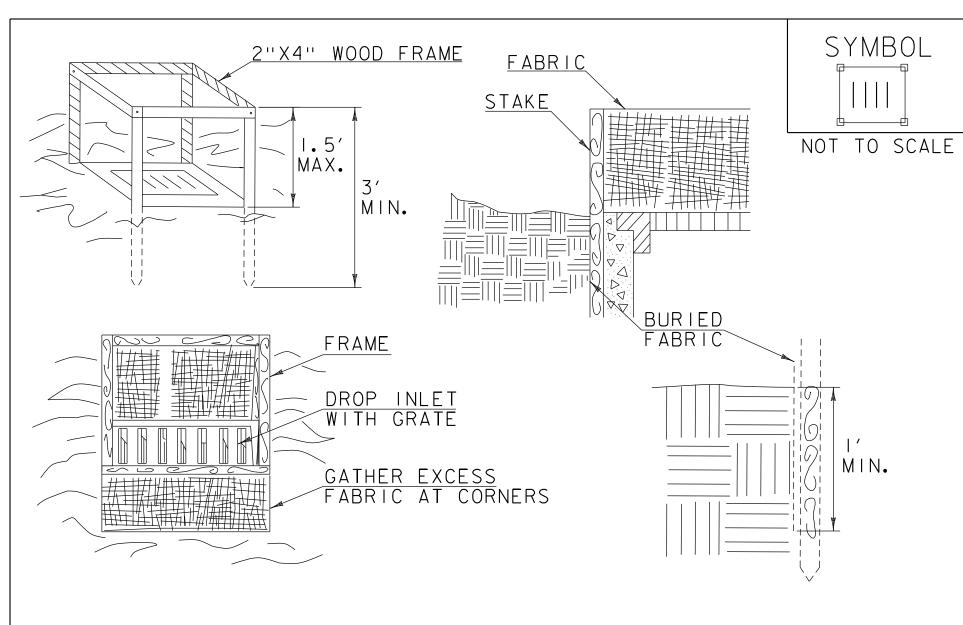
THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 649 AND AS SHOWN IN THE PLANS FOR GEOTEXTILE FOR SILT FENCE (PAY ITEM 649.51) OR GEOTEXTILE FOR SILT FENCE, WOVEN WIRE REINFORCED (PAY ITEM 649.515).

REVISIONS

MARCH 21, 2008 WHF

DECEMBER II, 2008 WHF

JANUARY 13, 2009 WHF



CONSTRUCTION SPECIFICATIONS

- I.FILTER FABRIC SHALL HAVE AN APPARENT OPENING SIZE OF 40-85. BURLAP MAY BE USED FOR SHORT TERM APPLICATIONS.
- 2. CUT FABRIC FROM A CONTINUOUS ROLL TO ELIMINATE JOINTS. IF JOINTS ARE NEEDED THEY WILL BE OVERLAPPED TO THE NEXT STAKE.
- 3.STAKE MATERIALS WILL BE STANDARD 2"× 4" WOOD OR EQUIVALENT METAL WITH A MINIMUM LENGTH OF 3'.
- 4.SPACE STAKES EVENLY AROUND INLET 3' APART AND DRIVE A MINIMUM 18" DEEP. SPANS GREATER THAN 3' MAY BE BRIDGED WITH THE USE OF WIRE MESH BEHIND THE FILTER FABRIC FOR SUPPORT.
- 5. FABRIC SHALL BE EMBEDDED I' MINIMUM BELOW GROUND AND BACKFILLED. IT SHALL BE SECURELY FASTENED TO THE STAKES AND FRAME.
- 6. A 2" × 4" WOOD FRAME SHALL BE COMPLETED AROUND THE CREST OF THE FABRIC FOR OVER FLOW STABILITY.
- 7. MAXIMUM DRAINAGE AREA I ACRE

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

NOTES:

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

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

REVISIONS

MARCH 7, 2008 WHF

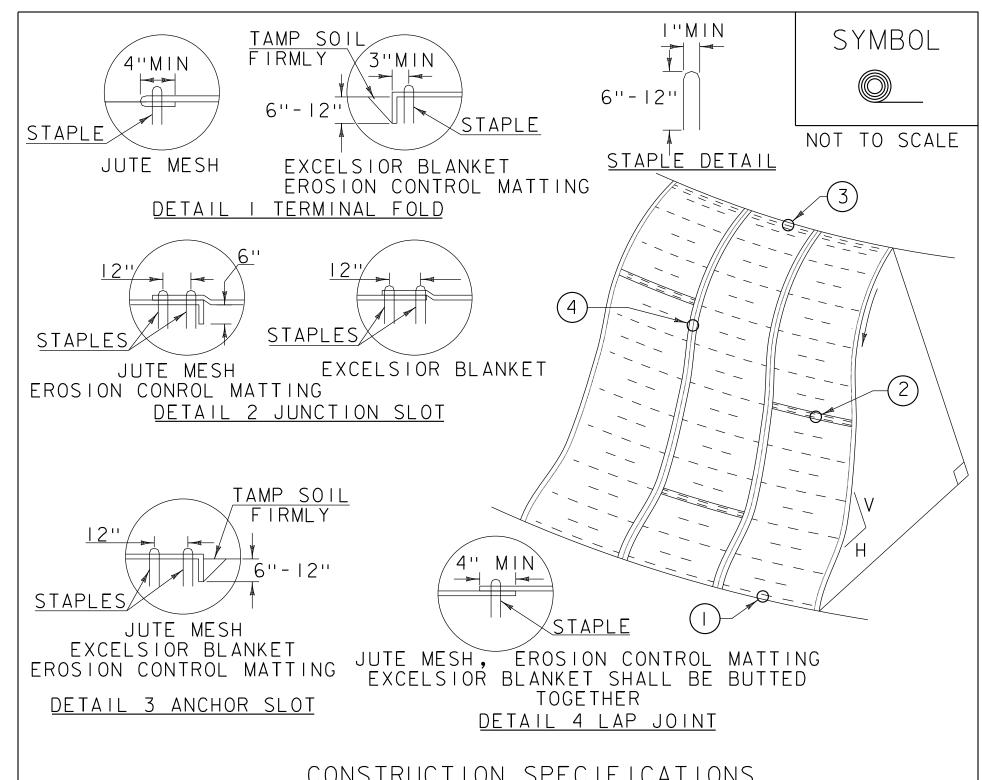
JANUARY 13, 2009 WHF



PROJECT NAME: PITTSFORD PROJECT NUMBER: BF 019-3(59)

FILE NAME: zl3b266erodet.dgn
PROJECT LEADER: J. BYATT
DESIGNED BY: M. HALEY
EPSC DETAILS SHEET I

PLOT DATE: 3/31/2017
DRAWN BY: S. GOODWIN
CHECKED BY: P. SHEDD
SHEET 58 OF 60



CONSTRUCTION SPECIFICATIONS

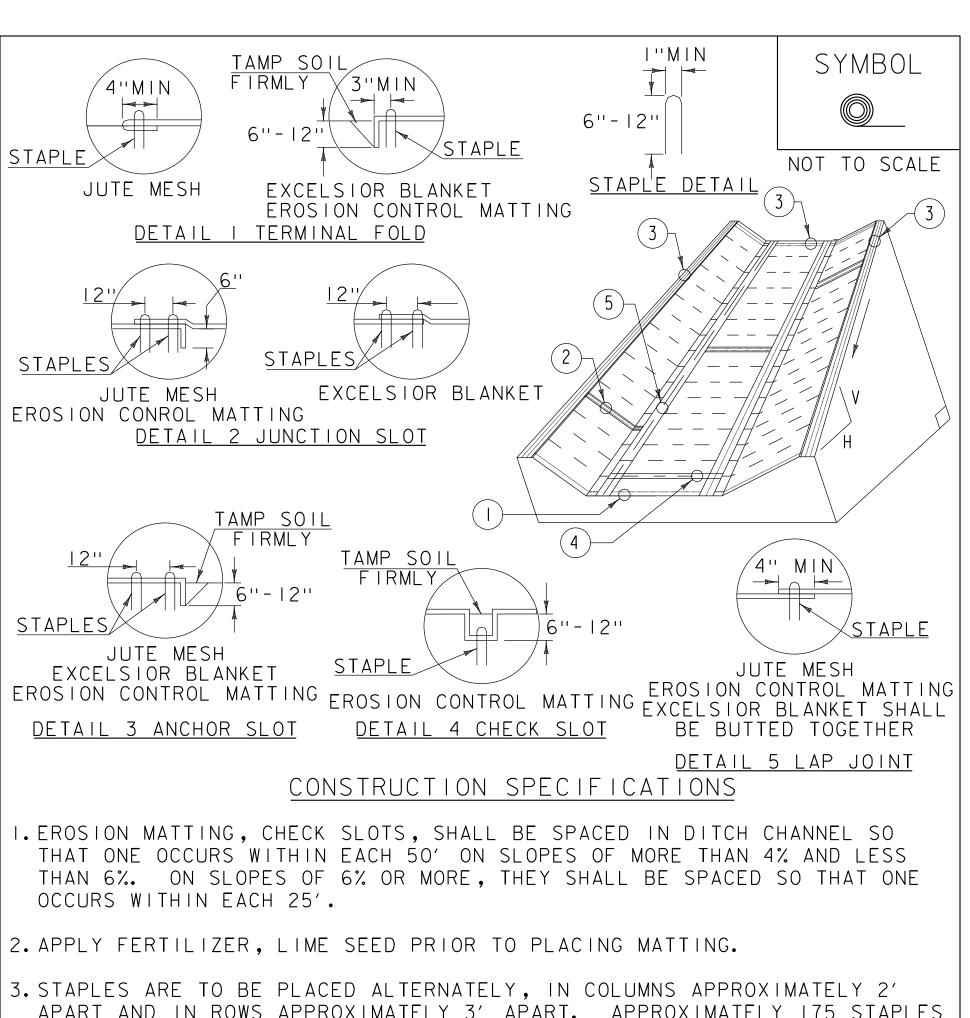
- I. APPLY TO SLOPES GREATER THAN 3H: IV OR WHERE NECESSARY TO AID IN ESTABLISHING VEGETATION.
- 2. APPLY FERTILIZER, LIME SEED PRIOR TO PLACING MATTING.
- 3. STAPLES ARE TO BE PLACED ALTERNATELY, IN COLUMNS APPROXIMATELY 2' APART AND IN ROWS APPROXIMATELY 3' APART. APPROXIMATELY 175 STAPLES ARE REQUIRED PER 4'X225' ROLL OF MATERIAL AND 125 STAPLES ARE REQUIRED PER 4'X150' ROLL OF MATERIAL.
- 4. DISTURBED AREAS SHALL BE SMOOTHLY GRADED. EROSION CONTROL MATERIAL SHALL BE PLACED LOOSELY OVER GROUND SURFACE. DO NOT STRETCH.
- 5. ALL TERMINAL ENDS AND TRANSVERSE LAPS SHALL BE STAPLED AT APPROXIMATELY 12" INTERVALS.

VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION			SIDE		•
NOTES: REFER TO "THE VERMONT STANDARDS & SPECIFICATIONS F					
EROSION PREVENTION & SEDIMENT CONTROL -2006- "FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL CUIDANCE.		REVIS APRIL	10NS 16, 200	 ე7	JMF
GUIDANCE. THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SE	CITON	JANUAI	RY 13, 2	2009	WHF
653 AND AS SHOWN IN THE PLANS FOR TEMPORARY EROSI MATTING (PAY ITEM 653.20) OR PERMANENT EROSION MATT					

(PAY ITEM 653,21).

ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC

ORIGINALLY DEVELOPED BY USDA-NRCS



- APART AND IN ROWS APPROXIMATELY 3' APART. APPROXIMATELY 175 STAPLES ARE REQUIRED PER 4'X225' ROLL OF MATERIAL AND 125 STAPLES ARE REQUIRED PER 4'X150' ROLL OF MATERIAL.
- 4. DISTURBED AREAS SHALL BE SMOOTHLY GRADED. EROSION CONTROL MATERIAL SHALL BE PLACED LOOSELY OVER GROUND SURFACE. DO NOT STRETCH.
- 5. ALL TERMINAL ENDS AND TRANSVERSE LAPS SHALL BE STAPLED AT APPROXIMATELY 12" INTERVALS.

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

ROLLED EROSION CONTROL PRODUCT (RECP) DITCH

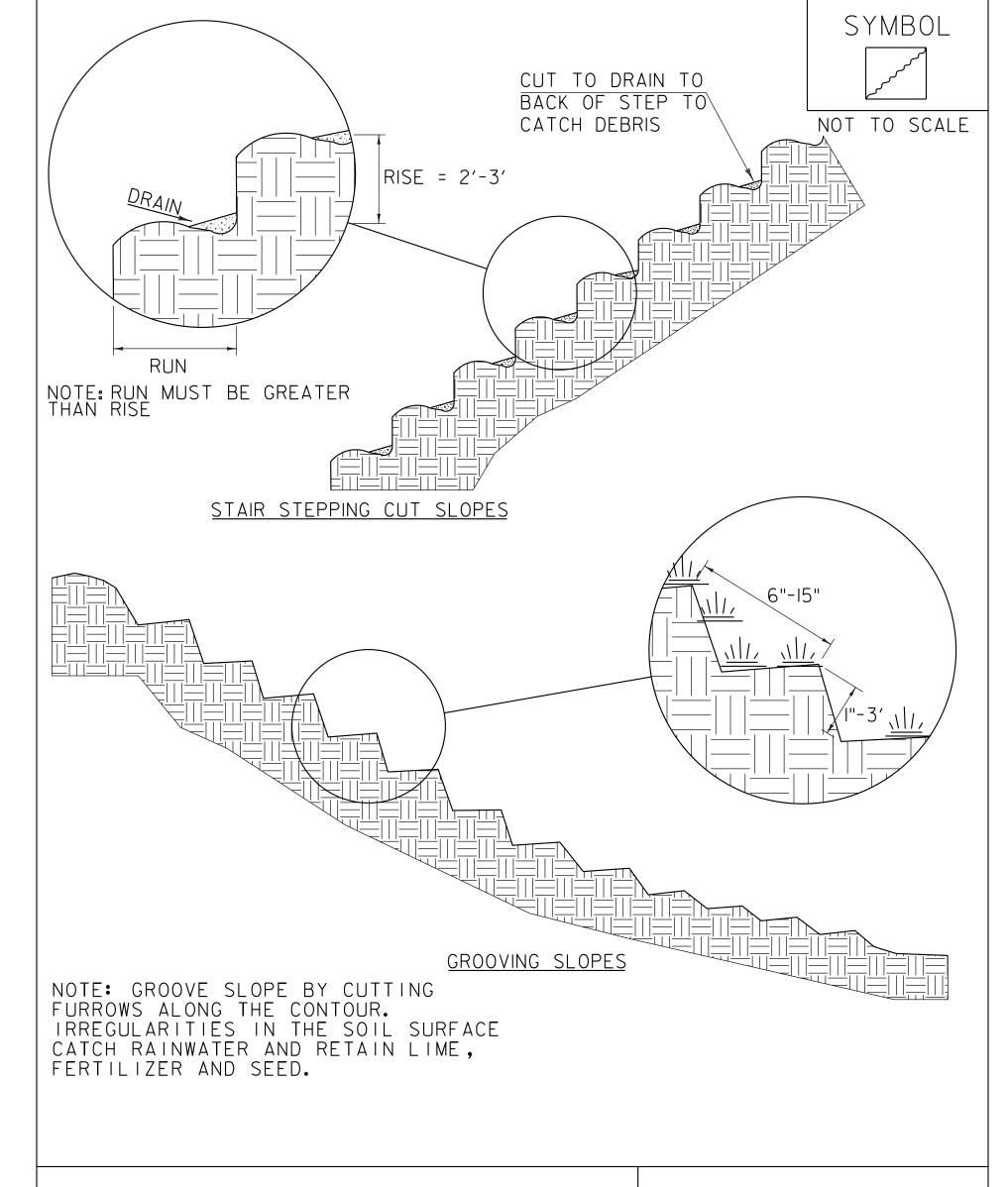
ROLLED EROSION

CONTROL PRODUCT

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

THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 653 AND AS SHOWN IN THE PLANS FOR TEMPORARY EROSION MATTING (PAY ITEM 653.20) OR PERMANENT EROSION MATTING (PAY ITEM 653.21).

REVISIONS MARCH 8 . 2007 APRIL 16, 2007 |JANUARY 13, 2009 WHF



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

|SURFACE ROUGHENING|

NOTES:

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

THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT

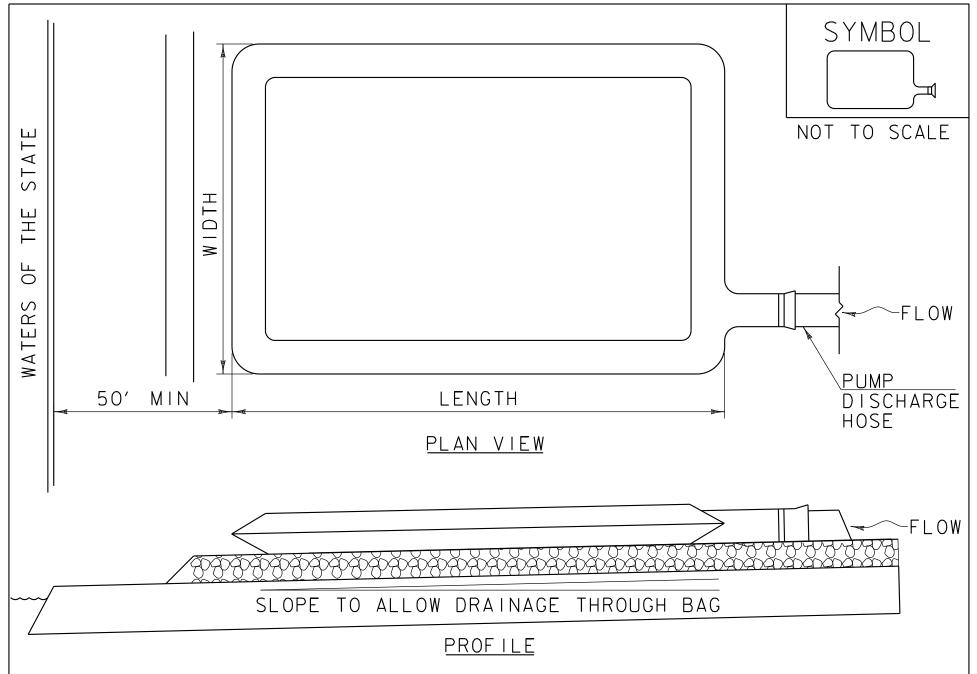
REVISIONS APRIL 1. 2008 WHF JANUARY 13. 2009 WHF



PITTSFORD PROJECT NAME: PROJECT NUMBER: BF 019-3(59)

FILE NAME: zl3b266erodet.dgn PROJECT LEADER: J. BYATT DESIGNED BY: M. HALEY EPSC DETAILS SHEET 2

PLOT DATE: 3/31/2017 DRAWN BY: S. GOODWIN CHECKED BY: P. SHEDD SHEET 59 OF 60



CONSTRUCTION SPECIFICATIONS

- 1. THE PRIMARY PURPOSE OF FILTER BAG IS TO RETAIN SILT, SAND, AND FINES DURING DEWATERING OPERATIONS.
- 2. FILTER BAGS SHALL BE INSTALLED ON A VEGETATED SLOPE GRADED TO ALLOW INCOMING WATER TO FLOW THROUGH THE BAG.
- 3. FILTER BAGS MAY ALSO BE PLACED ON COARSE AGGREGATE, STONE, OR HAYBALES TO INCREASE FILTRATION EFFICIENCY.
- 4. FILTER BAGS SHALL BE LOCATED A MINIMUM OF 50' FROM WATERS OF THE STATE UNLESS OTHERWISE APPROVED BY THE ENGINEER.
- 5. THE NECK OF THE FILTER BAG SHALL BE STRAPPED TIGHTLY TO THE DISCHARGE HOSE.
- 6. A FILTER BAG IS FULL WHEN IT NO LONGER CAN EFFICIENTLY FILTER SEDIMENT OR ALLOW WATER TO PASS AT A REASONABLE RATE.
- 7. FILTER BAG SHALL BE DISPOSED OF AS APPROVED IN THE EPSC PLAN OR AS DIRECTED BY THE ENGINEER.

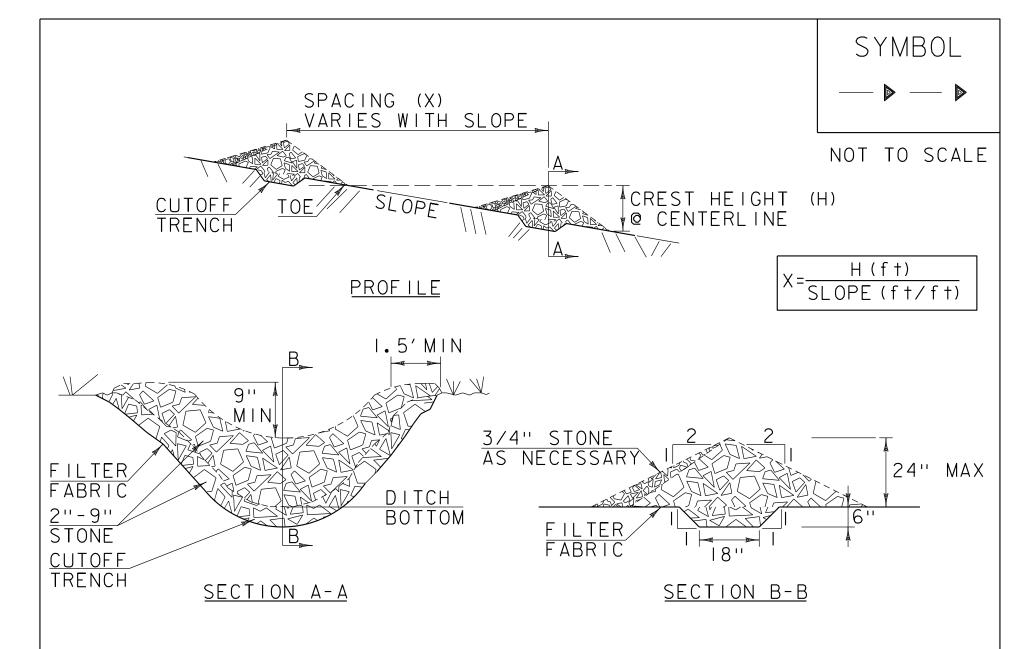
FILTER BAG

NOTES:

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

THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 653 FOR FILTER BAG (PAY ITEM 653.45) AND AS SPECIFIED IN THE CONTRACT.

REVISIONS	
MARCH 24,2008	WHF
JANUARY 13,2009	WHF



CONSTRUCTION SPECIFICATIONS

- I. STONE WILL BE PLACED ON A FILTER FABRIC FOUNDATION.
- 2. CHECK DAMS SHALL BE SPACED SO THAT THE ELEVATION OF THE CREST OF THE DOWNSTREAM DAM IS AT THE SAME ELEVATION AS THE TOE OF THE UPSTREAM
- 3.3/4" FILTERING STONE MAY BE ADDED TO THE FACE OF THE CHECK DAM AS NECESSARY.
- 4. EXTEND THE STONE A MINIMUM OF 1.5' BEYOND THE DITCH BANKS TO PREVENT CUTTING AROUND THE DAM.
- 5. PROTECT CHANNEL DOWNSTREAM OF THE LOWEST CHECK DAM FROM SCOUR AND EROSION WITH STONE OR LINER AS APPROPRIATE.
- 6. ENSURE THAT CHANNEL APPURTENANCES SUCH AS CULVERT ENTRANCES BELOW CHECK DAMS ARE NOT SUBJECT TO DAMAGE OR BLOCKAGE FROM DISPLACED STONE.
- 7. MAXIMUM DRAINAGE AREA 2 ACRES.

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

CHECK DAM

NOTES:

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

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

REVISIONS	
MARCH 21, 2008	WHF
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