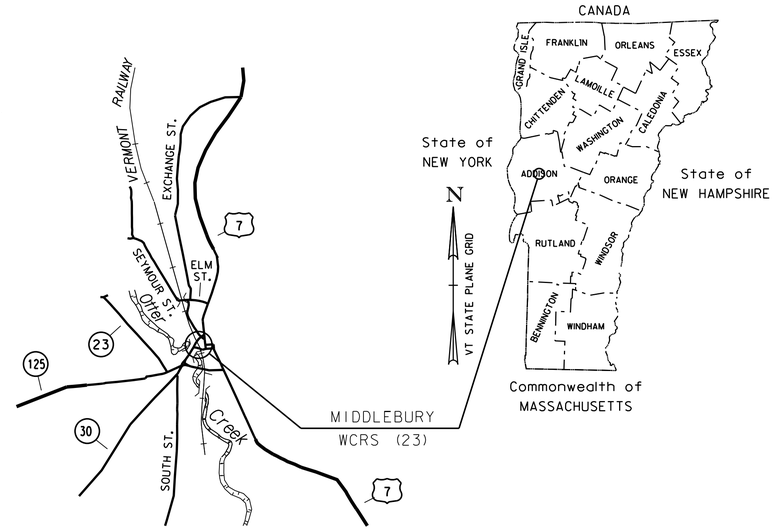
STATE OF VERMONT
AGENCY OF TRANSPORTATION



PROPOSED DEVELOPMENT

BRIDGE PROJECT

TOWN OF MIDDLEBURY
COUNTY OF ADDISON
MAIN ST (MINOR ARTERIAL), BRIDGE NO. 102
MERCHANTS ROW (MINOR ARTERIAL), BRIDGE NO. 2
WCRS (23)

PROJECT LOCATION: LOCATED IN THE COUNTY OF ADDISON, TOWN OF MIDDLEBURY, ON MAIN STREET (TH 2); BRIDGE NO. 102 OVER VERMONT RAILWAY, APPROXIMATELY 400 FT SOUTHWEST OF THE INTERSECTION OF MAIN STREET AND US ROUTE 7, AND ON MERCHANTS ROW (TH 8); BRIDGE NO. 2 OVER VERMONT RAILWAY, APPROXIMATELY 230 FT WEST OF THE INTERSECTION OF MERCHANTS ROW AND SOUTH PLEASANT STREET (TH 47).

PROJECT DESCRIPTION: WORK TO BE PERFORMED UNDER THIS PROJECT INCLUDES THE REMOVAL AND REPLACEMENT OF BRIDGE NO. 102 AND BRIDGE NO. 2 WITH A TUNNEL ALONG A MODIFIED RAILROAD ALIGNMENT, LOWERING OF TRACKS, CONSTRUCTION OF APPROACH RETAINING WALLS (U-WALLS), AND ROADWAY AND UTILITY WORK. THE PRECEDING WORK OF EWP3(2) INCLUDES MICROTUNNELING FOR SELECT DRAINAGE IMPROVEMENTS, CONSTRUCTING AN ACCESS ROAD TO THE DRAINAGE OUTFALL, AND CONSTRUCTING A TEMPORARY ACCESS ROAD.

LENGTH OF STRUCTURE:

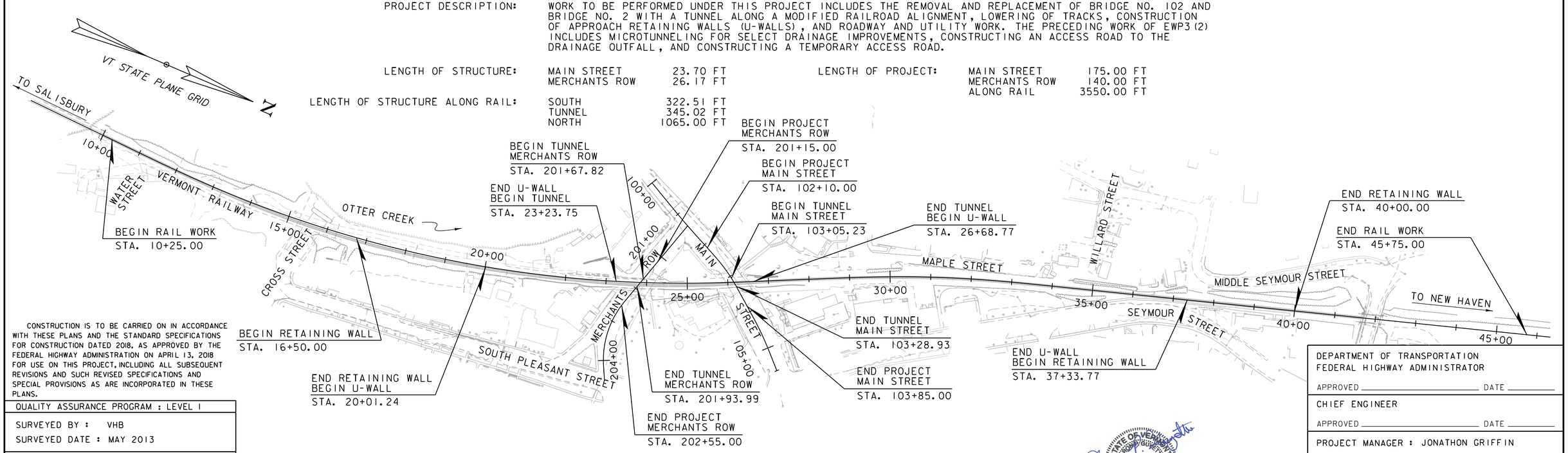
MAIN STREET	23.70 FT
MERCHANTS ROW	26.17 FT

LENGTH OF STRUCTURE ALONG RAIL:

SOUTH	322.51 FT
TUNNEL	345.02 FT
NORTH	1065.00 FT

LENGTH OF PROJECT:

MAIN STREET	175.00 FT
MERCHANTS ROW	140.00 FT
ALONG RAIL	3550.00 FT



CONSTRUCTION IS TO BE CARRIED ON IN ACCORDANCE WITH THESE PLANS AND THE STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2018, AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION ON APRIL 13, 2018 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 : VHB
SURVEYED DATE : MAY 2013

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83

STATE OF VERMONT
ANDREW GUY JEFFERY
NO 9019
CIVIL
LICENSED
PROFESSIONAL ENGINEER
5/1/2019

vhb

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATOR
APPROVED _____ DATE _____

CHIEF ENGINEER
APPROVED _____ DATE _____

PROJECT MANAGER : JONATHON GRIFFIN

PROJECT NAME : MIDDLEBURY
PROJECT NUMBER : WCRS(23)

SHEET 1 OF 328 SHEETS

STATE OF VERMONT
AGENCY OF TRANSPORTATION

PRELIMINARY INFORMATION SHEET (BRIDGE)

Version
LRFD

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FINAL HYDRAULIC REPORT

TRAFFIC MAINTENANCE NOTES

1. SEE TRAFFIC CONTROL PLANS AND REFERENCE TRANSPORTATION MANAGEMENT PLAN.

DESIGN VALUES

1.	DESIGN LIVE LOAD		HL-93
2.	FUTURE PAVEMENT	d_P:	0.0 INCH
3.	DESIGN SPAN	L:	17'-9" FT
4.	MIN. MID-SPAN POS. CAMBER @ RELEASE (PRESTRESSED UNITS)	Δ:	- - -
5.	PRESTRESSING STRAND	f_y:	- - -
6.	PRESTRESSED CONCRETE STRENGTH	f'_c:	- - -
7.	PRESTRESSED CONCRETE RELEASE STRENGTH	f'_{ci}:	- - -
8.	HIGH PERFORMANCE CONCRETE, CLASS PCD	f'_c:	4.0 KSI
9.	HIGH PERFORMANCE CONCRETE, CLASS PCS	f'_c:	3.5 KSI
10.	REINFORCING STEEL	f_y:	60 KSI
11.	STRUCTURAL STEEL AASHTO M270	f_y:	- - -
12.	NOMINAL BEARING RESISTANCE OF SOIL (TUNNEL)	q_n:	44.0 KSF
13.	SOIL BEARING RESISTANCE FACTOR (REFER TO AASHTO LRFD)	ϕ:	0.45
14.	NOMINAL BEARING RESISTANCE OF SOIL (SOUTH U-WALL)	q_n:	29.3 KSF
15.	SOIL FACTOR OF SAFETY (REFER TO AREMA) (SOUTH U-WALL)	ϕ:	3.00
18.	NOMINAL BEARING RESISTANCE OF SOIL (NORTH U-WALL)	q_n:	4.3 KSF
19.	SOIL FACTOR OF SAFETY (REFER TO AREMA) (NORTH U-WALL)	ϕ:	2.79
20.	PILE RESISTANCE FACTOR	ϕ:	- - -
21.	LATERAL PILE DEFLECTION	Δ:	- - -
22.	BASIC WIND SPEED	V_{3s}:	- - -
23.	MINIMUM GROUND SNOW LOAD	p_g:	- - -
	SEISMIC DATA PGA: 0	S_s:	- - -
24.		S_1:	- - -
25.			- - -
26.			- - -
27.			- - -

LRFR LOAD RATING FACTORS MAIN ST

LOADING LEVELS	TRUCK						
	H-20	HL-93	3S2	6 AXLE	3A STR.	4A STR.	5A SEM
TONNAGE	20	36	36	66	30	34.5	38
INVENTORY							
POSTING							
OPERATING							
COMMENTS:							

LRFR LOAD RATING FACTORS MERCHANTS ROW

LOADING LEVELS	TRUCK						
	H-20	HL-93	3S2	6 AXLE	3A STR.	4A STR.	5A SEM
TONNAGE	20	36	36	66	30	34.5	38
INVENTORY							
POSTING							
OPERATING							
COMMENTS:							

TRAFFIC DATA MAIN ST

YEAR	ADT	DHV	% D	% T	ADTT
2018	9,000			2.6	470
2038	10,000			3.6	710

20 year ESAL for flexible pavement from 2018 to 2038: 3,422,000
40 year ESAL for flexible pavement from 2018 to 2058: 8,164,000
Design Speed : 25 mph

TRAFFIC DATA MERCHANTS ROW

YEAR	ADT	DHV	% D	% T	ADTT
2018	1,900			9.8	200
2038	2,200			15.1	370

20 year ESAL for flexible pavement from 2018 to 2038: 1,226,000
40 year ESAL for flexible pavement from 2018 to 2058: 3,099,000
Design Speed : 25 mph

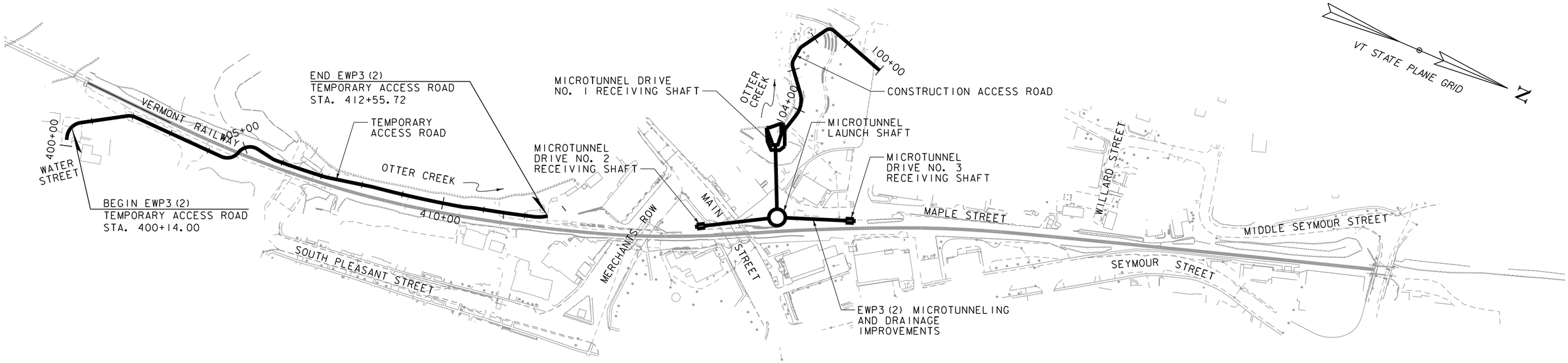
AS BUILT "REBAR" DETAIL

LEVEL I	LEVEL II	LEVEL III
TYPE:	TYPE:	TYPE:
GRADE:	GRADE:	GRADE:

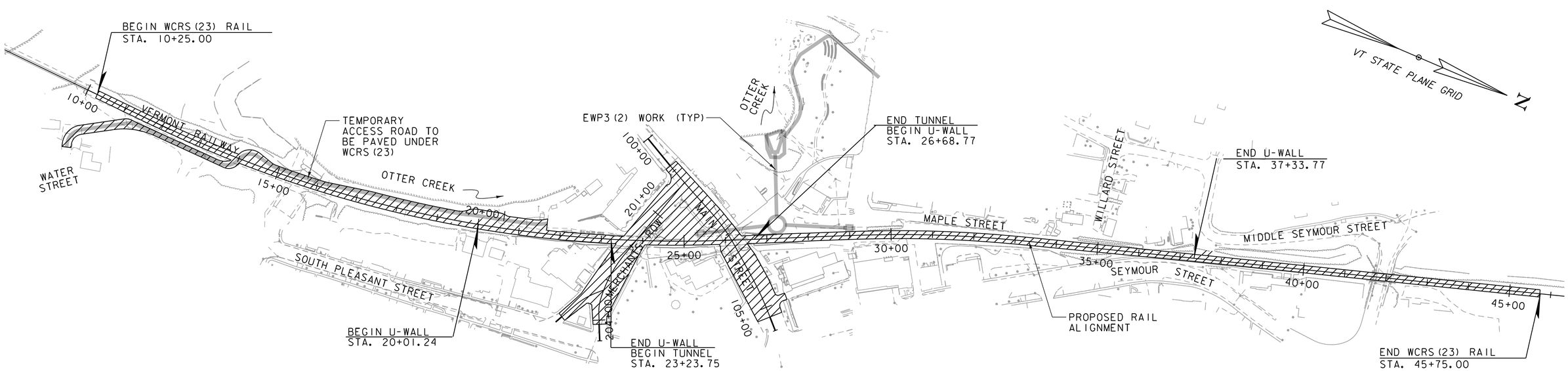
PROJECT NAME: **MIDDLEBURY**
PROJECT NUMBER: **WCRS(23)**

FILE NAME: **z13g542pi.xls**
PROJECT LEADER: **A.P. GUYETTE**
DESIGNED BY: **VHB**
PRELIMINARY INFORMATION SHEET 1

PLOT DATE: 4/30/2019
DRAWN BY: **E.F. LAWES**
CHECKED BY: **VHB**
SHEET 2 OF 328



EWP3(2) - EARLY WORK PACKAGE 2



WCRS(23) - MAIN PROJECT

NOTE:

1. THIS PLAN SET DETAILS ALL WORK INCLUDED IN WCRS(23). EWP3(2) PLANS INCLUDE CONSTRUCTION ACTIVITIES INDICATED, TO OCCUR PRIOR TO WCRS(23).

CONTRACT BREAKOUT

120 0 120

SCALE IN FEET

LEGEND

APPROXIMATE EWP3(2) LIMITS OF CONSTRUCTION (PRIOR WORK)

APPROXIMATE WCRS(23) LIMITS OF CONSTRUCTION

vhb

PROJECT NAME: MIDDLEBURY	
PROJECT NUMBER: WCRS(23)	
FILE NAME: zl3g542key_plan.dgn	PLOT DATE: 4/30/2019
PROJECT LEADER: A.P. GUYETTE	DRAWN BY: R.H. BARNES
DESIGNED BY: R.H. BARNES	CHECKED BY: VHB
CONTRACT BREAKOUT	SHEET 3 OF 328

PROJECT NOTES

GENERAL

1. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE STATE OF VERMONT AGENCY OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION, DATED 2018, AND ITS LATEST REVISIONS, THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 8TH EDITION, AND THE AREMA MANUAL FOR RAILWAY ENGINEERING, 2013.

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

3. FOR INFORMATION REGARDING UTILITIES, SEE THE PROJECT SPECIAL PROVISIONS.

4. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL BURIED AND AERIAL UTILITIES AND POLES PRIOR TO STARTING THE WORK. SOME UTILITIES HAVE BEEN RELOCATED DURING THE PREPARATION OF THESE PLANS AND THE CONTRACTOR WILL NEED TO COORDINATE WITH ALL UTILITY OWNERS TO CONFIRM ACTUAL LOCATIONS PRIOR TO CONSTRUCTION.

5. ACCESS TO BUILDINGS AND DRIVES SHALL BE MAINTAINED AT ALL TIMES.

6. THE CONTRACTOR SHALL COORDINATE WITH THE BATTELL BLOCK BUSINESS OWNERS TO COORDINATE ACCESS FOR DELIVERIES TO THEIR STORES.

7. THE CONTRACTOR SHALL PROVIDE CONTINUOUS VEHICULAR ACCESS TO THE BATTELL BLOCK PARKING LOT EITHER VIA MERCHANTS ROW OR VIA THE TEMPORARY ACCESS ROAD. AT ALL TIMES THE CONTRACTOR SHALL ALSO PROVIDE A 5-FT WIDE PEDESTRIAN WALKWAY FROM MERCHANTS ROW TO THE BATTELL BLOCK PARKING LOT.

8. EMULSIFIED ASPHALT SHALL BE APPLIED UNDER ALL NEW COUSES OF PAVEMNET AT RATES SPECIFIED IN SUBSECTION 406.12 OF THE STANDARD SPECIFICATIONS.

9. ALL ITEMS IDENTIFIED AS EWP3(2) ARE PART OF A SEPARATE CONTRACT AND ARE ASSUMED TO BE CONSTRUCTED PRIOR TO THE START OF THIS CONTRACT.

10. CONCRETE PAVEMENT EXISTS UNDER THE ASPHALT PAVEMENT ALONG PORTIONS OF MAIN STREET AND MERCHANTS ROW WITHIN THE PROJECT LIMITS. THE CONCRETE IS ASSUMED TO BE FULL WIDTH OF THE ROADWAYS AND APPROXIMATELY 12" THICK. IN AREAS WHERE EXCAVATION IS REQUIRED, THE CONTRACTOR SHALL REMOVE THIS CONCRETE PAVEMENT IN ITS ENTIRETY. CONCRETE PAVEMENT REMOVAL AND DISPOSAL SHALL BE PAID AS ITEM 203.16, "SOLID ROCK EXCAVATION".

11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE TEMPORARY RELOCATION OF THE GARBAGE COMPACTORS LOCATED ON THE MARBLEWORKS PROPERTY. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING MARBLEWORKS WITH ALTERNATE MEANS OF GARBAGE AND RECYCLING REMOVAL FOR THE DURATION OF TIME THAT THE GARBAGE COMPACTORS ARE NOT FUNCTIONING OR ACCESSIBLE TO TENANTS. THE ALTERNATE MEANS MUST PROVIDE EQUIVALENT CAPACITY AND EASE OF ACCESS. THE COST OF THIS WORK WILL NOT BE PAID FOR DIRECTLY, BUT WILL BE CONSIDERED INCIDENTAL TO ALL OTHER CONTRACT ITEMS.

12. UPON COMPLETION OF CONSTRUCTION, THE CONTRACTOR SHALL COLD PLANE AND PAVE THE MARBLEWORKS ACCESS ROUTE USED FOR ACCESS TO THE PROJECT SITE. THIS WORK WILL INCLUDE COLD PLANNING OF THE PAVEMENT TO A DEPTH OF 2", CONSTRUCTING A ½" LEVELING SHIM COURSE, AND A 1 ½" FINAL PAVEMENT COURSE. THIS WORK SHALL ALSO INCLUDE RECONSTRUCTION OF SPEED BUMPS AND LINE STRIPING.

13. COLD PLANING OF THE MARBLEWORKS ACCESS ROUTE WILL BE PAID FOR UNDER ITEM 210.10, COARSE-MILLING, BITUMINOUS CONCRETE PAVEMENT".

14. THE MARBLEWORKS ACCESS ROUTE SHALL BE REPAVED AND SPEED BUMPS RECONSTRUCTED WITH TYPE IV PAVEMENT. PAYMENT WILL BE MADE UNDER ITEM 406.25, "MARSHALL BITUMINOUS CONCRETE PAVEMENT".

15. LINE STRIPING OF THE MARBLEWORK ACCESS ROUTE WILL BE PAID FOR UNDER THE APPROPRIATE CONTRACT ITEMS.

16. INSTALLATION OF PERMANENT STEEL SHEET PILING: CONTRACTOR SHALL PRE-EXCAVATE A MINIMUM OF 10 FEET BELOW EXISTING GRADE AT LOCATION OF PROPOSED PERMANENT SHEET PILING. PERMANENT STEEL SHEET PILING SHALL THEN BE INSTALLED USING A VIBRATORY HAMMER UNTIL SHEETS REACH THE DESIRED ELEVATION DEFINED BY THE PLANS OR UNTIL REFUSAL. SHEETS SHALL THEN BE BACKFILLED WITH FLOWABLE FILL. CONTRACTOR SHALL SUBMIT AS-BUILT ELEVATIONS OF BOTTOM OF EXCAVATION AND BOTTOM OF SHEET PILES TO THE ENGINEER.

17. PERMANENT STEEL SHEET PILING TO BE PZ-27.

18. IN AREAS WHERE PERMANENT STEEL SHEET PILE WALL HAS UTILITIES CROSSING THE WALL, THE CONTRACTOR SHALL ENSURE THAT THE SHEETS ARE DRIVEN SUCH THAT THE UTILITY CAN BE INSTALLED AND THE SHEETS DO NOT DAMAGE THE UTILITY.

TEMPORARY ACCESS ROAD

19. THE TEMPORARY ACCESS ROAD WAS INSTALLED UNDER THE EWP3(2) CONTRACT. IT IS INTENDED TO BE USED FOR CONTRACTOR ACCESS AND FOR PUBLIC ACCESS TO THE BATTELL BLOCK BUILDING AT TIMES WHEN THE BATTELL BLOCK DRIVEWAY IS INACCESSIBLE.

20. CONTRACTOR SHALL PROVIDE BATTELL BLOCK RESIDENTS 48 HOURS NOTICE ANY TIME THAT PARKING BEHIND BATTELL BLOCK WILL BE RESTRICTED AND ANY TIME THAT RESIDENTS WILL BE REQUIRED TO USE THE TEMPORARY ACCESS ROAD TO ACCESS PARKING BEHIND BATTELL BLOCK INSTEAD OF THE BATTELL BLOCK DRIVEWAY.

21. PRIOR TO OPENING THE TEMPORARY ACCESS ROAD FOR PUBLIC USE, THE CONTRACTOR SHALL PAVE THE ROAD AND INSTALL TEMPORARY TRAFFIC BARRIERS IN ACCORDANCE WITH THE CONTRACT PLANS. PAVING THE TEMPORARY ACCESS ROAD WILL BE PAID FOR UNDER ITEM 900.680, 'SPEICAL PROVISION(TEMPORARY PAVEMENT)". TEMPORARY TRAFFIC BARRIERS WILL BE PAID FOR UNDER ITEM 621.90, "TEMPORARY TRAFFIC BARRIER".

22. THE TEMPRARY ACCESS ROAD SHALL BE REMOVED IN ACCORDANCE WITH THE CONTRACT PLANS. IN THE AREA BETWEEN WATER STREET AND THE RAILROAD ROW, TEMPORARY ACCESS ROAD MATERIALS SHALL BE REMOVED COMPLETELY AND THE AREA SHALL BE RETURNED TO GRADING CONFIGURATION PRIOR TO EARLY WORK PACKAGE 2 CONSTRUCTION. PAYMENT WILL BE MADE UNDER ITEM 203.15, "COMMON EXCAVATION". TEMPORARY DRAINAGE PIPES, SUBBASE, AND FABRIC SHALL ALL BE REMOVED AND THE AREA SHALL BE STABILIZED WITH TOPSOIL, SEED, AND MULCH TO ESTABLISH LAWN.

RAILROAD CONSTRUCTION

23. THE CONTRACTOR'S ATTENTION IS CALLED TO THE FACT THAT CONTINUOUS COORDINATION WITH THE OPERATING RAILROAD WILL BE REQUIRED THROUGHOUT CONSTRUCTION. VTR WILL PROVIDE THE CONTRACTOR WITH FLAGGERS FOR PROTECTION OF RAILROAD TRAFFIC WHILE WORK IS BEING PERFORMED WITHIN THE RAILROAD RIGHT OF WAY (R.O.W.). THE CONTRACTOR SHALL NOT ENTER THE R.O.W. AT ANY TIME WITHOUT VTR AUTHORIZATION. ALL COSTS FOR RAILROAD FLAGGER PROTECTION WILL BE PAID FOR UNDER ITEM 632.10, "RAILROAD FLAGGERS (N.A.B.I.)". SEE THE SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

24. THE CONTRACTOR SHALL DEVELOP AN INVENTORY OF ALL CONTINUOUS WELDED RAIL(CWR) IN THE VICINITY OF THE PROJECT AREA. THE INVENTORY SHALL INCLUDE RAIL LENGTH, WEIGHT, AND LOCATION. THE CONTRACTOR SHALL USE THE INVENTORY INFORMATION TO DEVELOP A PLAN FOR INCOROPORATION OF THE CWR INTO THE FINAL PROJECT. CWR USED THROUGH THE TUNNEL SHALL BE CONTINUOUS AND NO WELDS WILL BE ALLOWED. THE COST OF THIS WORK WILL BE PAID UNDER ITEM SPECIAL PROVISION (CONTINUOUS WELDED RAIL).

25. THE CONTRACTOR IS RESPONSIBLE FOR RELOCATING THE CONTINUOUS WELDED RAIL THAT IS LOCATED WITHIN THE RAILROAD RIGHT-OF-WAY NEAR STA. 30+00 LT & RT AND WILL BE PAID FOR UNDER ITEM 900.645 "SPECIAL PROVISION (RELOCATION OF CONTINUOUS WELDED RAIL)".

26. ITEM 900.640, "SPECIAL PROVISION (CONTINUOUS WELDED RAIL)" SHALL BE 115 LB RAIL.

27. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE EXISTING TOP OF RAIL ELEVATIONS ON BRIDGE 239 (OTTER CREEK TRUSS).

EARTHWORK

28. SOILS THROUGHOUT THE SITE HAVE BEEN SAMPLED AND PRECHARATERIZED PRIOR TO CONSTRUCTION. SOIL CONTAMINATES AND FINAL DISPOSTION OF SOILS ARE REGULATED BY THE PROJECT SPECIFIC "CORRECTIVE ACTION PLAN" (CAP).

29. THE CONTRACTOR SHALL MAKE EVERY EFFORT TO REUSE SUITALBE EXCAVATED MATERIALS ONSITE.

30. SOILS THAT ARE EXCAVATED, REMAIN ONSITE, AND ARE REUSED AS PART OF THE CONSTRUCTION WILL NOT BE PAID FOR SEPARATELY.

31. EXCAVATED SOILS THAT ARE REMOVED FROM THE SITE, STOCKPILED, AND RETURNED TO THE PROJECT SITE FOR REUSE WILL BE PAID FOR UNDER THE ITEM 203.30, "EARTH BORROW".

32. NO OFF-SITE EARTH BORROW MATERIAL IS ANTICIPATED TO BE USED FOR THIS PROJECT.

33. THE INITIAL COST OF EXCAVATION AND STOCKPILING OF CONTAMINATED SOILS WILL BE PAID FOR UNDER THE APPROPRIATE CONTRACT EXCAVATION ITEMS.

34. ALL COSTS FOR REMOVAL AND DISPOSAL OF CONTAMINATED SOILS FROM STOCKPILE AREA SHALL BE INCLUDED IN THE UNIT BID PRICE FOR CONTRACT ITEM 900.680, "SPECIAL PROVISION (MANAGEMENT AND DISPOSAL OF CONTAMINATED SOIL)".

35. ANY WASTE MATERIAL THAT WILL BE TAKEN OFF SITE SHALL BE REMOVED AND HAULED TO AN APPROVED FACILITY IN ACCORDANCE WITH THE CORRECTIVE ACTION PLAN.

36. IN THE EVENT PETROLEUM-IMPACTED SOIL, GROUNDWATER, AND OTHER MEDIA ARE ENCOUNTERED DURING EXCAVATION AND CONSTRUCTION ACTIVITIES BASED ON VISUAL, OLFACTORY, OR OTHER EVIDENCE, THE CONTRACTOR SHALL STOP WORK IN THE VICINITY OF THE SUSPECT MATERIAL TO AVOID FURTHER SPREADING OF THE MATERIAL AND SHALL NOTIFY THE ENGINEER IMMEDIATELY SO THAT THE APPROPRIATE TESTING AND SUBSEQUENT ACTION CAN BE TAKEN.

37. CONTAMINATED SOILS WILL BE ALLOWED FOR USE AS GENERAL BACKFILL IN AREAS THROUGHOUT THE PROJECT AREA IN ACCORDANCE WITH THE CAP. IN AREAS WHERE CONTAMINATED SOILS ARE USED, AN ORANGE GEOTEXTIEL INDICATOR FABRIC SHALL BE INSTALLED OVER THE CONTAMINATED SOILS. ALL FINAL GRADES SHALL BE CAPPED WITH IMPERVIOUS SURFACES OR AT LEAST 18 INCHES OF CLEAN FILL AND STABILIZED.

38. BACKFILLING OF MATERIAL (CONTAMINATED OR CLEAN) IS ALLOWABLE SO LONG AS IT IS RETURNED AS CLOSE TO ITS EXCAVATION AREA AS POSSIBLE.

39. THE EXISTING MAIN STREET AND MERCHANTS ROW BRIDGE ABUTMENTS ARE CONSTRUCTED OF HISTORIC ASHLAR BLOCKS. THE HISTORIC ASHLAR BLOCKS SHALL BE SALVAGED AND STOCKPILED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS FOR REUSE. BLOCKS THAT ARE IDENTIFIED TO BE SALVAGED FOR REUSE WILL BE PAID FOR UNDER ITEM 900.608, "SPECIAL PROVISION (SALVAGE AND STOCKPILE STONE BLOCKS)".

40. ASHLAR BLOCKS THAT REQUIRE REMOVAL, BUT THAT ARE NOT IDENTIFIED FOR SALVAGE AND REUSE, ALONG WITH ALL OTHER REMOVAL OF STONE WALLS ALONG THE RAILROAD CORRIDOR WILL BE PAID FOR UNDER ITEM 529.25, "REMOVAL OF CONCRETE OR MASONRY".

SUPPORT OF EXCAVATION

41. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN AND CONSTRUCTION OF ALL TEMPORARY SUPPORT OF EXCAVATION. DESIGN OF SOE WILL NOT BE PAID FOR DIRECLTY, BUT WILL BE CONSIDERED INCIDENTAL TO THE TEMPORARY SUPPORT OF EXCAVATION ITEMS.

42. IN AREAS WHERE SUPPORT OF EXCAVATION AND UNDERDRAIN ARE IN CONFLICT, THE UNDERDRAIN SHALL TO BE INSTALLED AFTER THE SUPPORT OF EXCAVATION IS REMOVED. THE CONTRACTOR IS RESPONSIBLE FOR TAKING ALL PRECAUTIONS NECESSARY TO ENSURE THAT THE TEMPORARY SUPPORT OF EXCAVATION CAN BE AND IS REMOVED IN THOSE LOCATIONS.

43. WHERE REQUIRED BY DESIGN, THE TEMPORARY SUPPORT OF EXCAVATION DESIGN WILL REQUIRE INSTALLATION OF MINIPILE INSERTS. INSTALLATION OF MINIPILE INSERFT WILL BE PAID FOR UNDER ITEM 900.620, "SPECIAL PROVISION (MINIPILE SLEEVE ASSEMBLY)".

44. MINIPILES INSTALLED AS PART OF THE TEMPORARY SUPPORT OF EXCAVATION SHALL BE CUT OFF A MINIMUM OF 2-FEET BELOW THE PROPOSED GRADE.

45. THE STATE WILL PROVIDE THE CONTRACTOR WITH A LIMITED QUANTITY OF 13.5" DIAMETER MINIPILE CASINGS TO BE USED IN THE INSTALLATION OF THE SUPPORT OF EXCAVATION. THE INSTALLATION OF THESE MINIPILE CASINGS WILL BE PAID FOR UNDER ITEM 900.640 "SPECIAL PROVISION (MINIPILE IN EARTH) (STATE SUPPLIED)" OR ITEM 900.640 "SPECIAL PROVISION (MINIPILE IN ROCK) (STATE SUPPLIED)". THE FOLLOWING MINIPILE CASINGS WILL BE PROVIDED TO THE CONTRACTOR BY THE STATE:

    A. 10 FOOT STARTER CASINGS: 4 EACH
    B. 10 FOOT CASING: 12 EACH
    C. 5 FOOT CASING: 25 EACH

46. TEMPORARY SUPPORT OF EXCAVATION TIEBACKS REQUIRED AT THE US POST OFFICE PROPERTY SHALL BE DETENSIONED BY THE CONTRACTOR FOLLOWING CONSTRUCTION. THE WORK WILL NOT BE PAID FOR DIRECTLY, BUT WILL BE CONSIDERED INCIDENTAL TO THE TEMPORARY SUPPORT OF EXCAVATION CONTRACT ITEMS.

UTILITY CONSTRUCTION

47. EXISTING UNDERGROUND UTILITY LOCATIONS ARE SHOWN AS APPROXIMATE.

48. EXISTING WATER AND SEWER LOCATIONS WERE DETERMINED BASED ON AS-BUILT DRAWINGS AND FIELD EVIDENCE, AND WERE REVIEWED WITH THE TOWN OF MIDDLEBURY PUBLIC WORKS DEPARTMENT. SEE WATER AND SEWER NOTES, PLANS, PROFILES, SERVICE CONNECTIONS, AND DETAILS FOR REQUIRED CONSTRUCTION.

49. UNKNOWN WATER AND SEWER SERVICE CONNECTIONS MAY EXIST. THE CONTRACTOR SHALL VERIFY SERVICE CONNECTIONS ARE ACCOUNTED FOR AND ARE CONNECTED. THIS WORK WILL NOT BE PAID FOR DIRECTLY, BUT WILL BE CONSIDERED INCIDENTAL TO WATER AND SEWER CONTRACT ITEMS.

50. THE CONTRACTOR SHALL BE PREPARED TO MAKE ADDITIONAL SERVICE CONNECITONS TO ACCOMMODATE UNKNOWN EXISTING WATER AND SEWER SERVICE CONNECTIONS.

51. THE PROJECT WILL INVOLVE A NUMBER OF UTILIY TRENCHS TO BE DUG THROUGH EXISTING ROADWAYS, SIDEWALKS, DRIVEWAYS, PARKING AREAS, LAWNS, AND THE RAILROAD CORRIDOR. THESE TRENCHES ARE ANTICIPATED TO OCCUR PRIOR TO FULL DEPTH EXCAVATION ACTIVITIES IN THE SAME AREAS. THE LIMITS OF PAYMENT FOR EXCAVATION AND BACKFILL WILL BE MEASURED FROM EXISTING GROUND, EVEN WHEN THE SAME MATERIAL WILL BE EXCAVATED AGAIN IN THE FUTURE.

52. ALL EXCAVATION AND TRENCHES SHALL BE BACKFILLED OR PROPERLY PROTECTED AT THE END OF EACH WORK DAY TO ENSURE SAFE MOTORIST, PEDESTRIAN, AND RAILROAD OPERATION THROUGH THE WORK ZONE.

53. SEWER AND DRAINAGE GRAVITY SYSTEMS REQUIRE TIGHT CONTROL ON LOCATION AND ELEVATION GIVIN THE FLAT TERRAIN WITHIN THE PROJECT AREA AND THE NEED TO CONNECT INTO EXISTING SYSTEMS. NO ADDITIONAL PAYMENT WILL BE MADE FOR RELOCATION OF THESE UTILITIES OR FOR GENERAL REWORK THAT IS REQUIRED THAT WAS A RESULT OF THE CONTRACTOR'S CONSTRUCTION SEQUENCING AND/OR DISREGARD TO THE ELEVATIONS OF THESE SYSTEMS.

54. WATER

    A. ALL EXISTING WATERLINE PIPE THAT IS ABANDONED IN-PLACE SHALL BE CUT AND CAPPED AT THE PIPE ENDS. PAYMENT WILL BE INCLUDED UNDER ITEM 629.42, "TRANSFER TO NEW SYSTEM, WATER SYSTEM".

    B. ALL DUCTILE IRON PIPE INSTALLED SUBSURFACE SHALL BE POLYWRAPPED (A.K.A. POLYETHYLENE ENCASED). INSTALL METALLIC WARNING TAPE ABOVE PIPE.

REVISION	DATE	DESCRIPTION	BY
1	5/17/2019	TEXT MODIFIED TO MATCH CORRECTIVE ACTION PLAN	KCB

vhb

PROJECT NAME: MIDDLEBURY
PROJECT NUMBER: WCRS(23)

FILE NAME: zl3g542pnnotes.dgn
PROJECT LEADER: A.P. GUYETTE
DESIGNED BY: R.H. BARNES
PROJECT NOTES SHEET (1 OF 2)

PLOT DATE: 5/17/2019
DRAWN BY: R.H.BARNES
CHECKED BY: K.C. BARRY
SHEET 4 OF 328

51. WATER AND SEWER SERVICE CONNECTIONS ARE SHOWN IN APPROXIMATE LOCATIONS AND MAY VARY FROM WHERE SHOWN IN THE PLANS.

52. UNKNOWN WATER AND SEWER SERVICE CONNECTIONS MAY EXIST. THE CONTRACTOR SHALL VERIFY SERVICE CONNECTIONS ARE ACCOUNTED FOR AND ARE CONNECTED. THIS WORK WILL NOT BE PAID FOR DIRECTLY, BUT WILL BE CONSIDERED INCIDENTAL TO WATER AND SEWER CONTRACT ITEMS.

53. THE CONTRACTOR SHALL BE PREPARED TO MAKE ADDITIONAL SERVICE CONNECITONS TO ACCOMMODATE UNKNOWN EXISTING WATER AND SEWER SERVICE CONNECTIONS.

54. THE PROJECT WILL INVOLVE A NUMBER OF UTILIY TRENCHS TO BE DUG THROUGH EXISTING ROADWAYS, SIDEWALKS, DRIVEWAYS, PARKING AREAS, LAWNS, AND THE RAILROAD COORRIDOR. THESE TRENCHES ARE ANTICIPATED TO OCCUR PRIOR TO FULL DEPTH EXCAVATION ACTIVITIES IN THE SAME AREAS. THE LIMITS OF PAYMENT FOR EXCAVATION AND BACKFILL WILL BE MEASURED FROM EXISTING GROUND, EVEN WHEN THE SAME MATERIAL WILL BE EXCAVATED AGAIN IN THE FUTURE.

55. ALL EXCAVATION AND TRENCHES SHALL BE BACKFILLED OR PROPERLY PROTECTED AT THE END OF EACH WORK DAY TO ENSURE SAFE MOTORIST, PEDESTRIAN, AND RAILROAD OPERATION THROUGH THE WORK ZONE.

56. SEWER AND DRAINAGE GRAVITY SYSTEMS REQUIRE TIGHT CONTROL ON LOCATION AND ELEVATION GIVIN THE FLAT TERRAIN WITHIN THE PROJECT AREA AND THE NEED TO CONNECT INTO EXISTING SYSTEMS. NO ADDITIONAL PAYMENT WILL BE MADE FOR RELOCATION OF THESE UTILITIES OR FOR GENERAL REWORK THAT IS REQUIRED THAT WAS A RESULT OF THE CONTRACTOR'S CONSTRUCTION SEQUENCING AND/OR DISREGARD TO THE ELEVATIONS OF THESE SYSTEMS.

57. WATER

A. ABANDONING EXISTING GATE VALVES WILL BE PAID FOR UNDER BID ITEM 629.42, "TRANSFER TO NEW SYSTEM, WATER SYSTEM".

B. SEAMLESS COPPER WATER TUBE SHALL BE TYPE K COPPER. INSTALL METALLIC WARNING TAPE ABOVE PIPE.

C. WHERE WATERLINE AND FORCEMAIN SEWERLINE ARE INSTALLED IN THE SAME TRENCH, THE WATERLINE SHALL BE INSTALLED ABOVE THE SEWERLINE WITH A MINIMUM 18" VERTICAL SEPARATION, AND BOTH UTILITIES WILL BE PAID FOR SEPARATELY THEIR RESPECTIVE PAY ITEMS.

D. ALL EXISTING WATERLINE PIPE THAT IS ABANDONED IN-PLACE SHALL BE CUT AND CAPPED AT THE PIPE ENDS. PAYMENT WILL BE INCLUDED UNDER ITEM 629.42, "TRANSFER TO NEW SYSTEM, WATER SYSTEM".

E. VALVES THAT ARE BEING ABANDONED IN-PLACE SHALL HAVE THE VALVE BOX CUT BELOW GRADE AND THE VALVES SHALL BE CLOSED. PAYMENT WILL BE INCLUDED UNDER ITEM 629.42, "TRANSFER TO NEW SYSTEM, WATER SYSTEM".

F. ALL DUCTILE IRON PIPE INSTALLED SUBSURFACE SHALL BE POLYWRAPPED (A.K.A. POLYETHYLENE ENCASED). INSTALL METALLIC WARNING TAPE ABOVE PIPE.

58. SEWER

G. PAYMENT FOR REMOVAL OF EXISTING SEWER PIPELINES THAT CALLED OUT TO BE REMOVED WILL BE INCLUDED UNDER ITEM 628.42, "TRANSFER TO NEW SYSTEM, SANITARY SEWER".

H. CONTRACTOR SHALL COORDINATE ALL SEWER BYPASS PUMPING, AS NECESSARY, DURING CONSTRUCTION OF NEW SEWERLINES AND SEWERLINE APPURTENANCES. PAYMENT FOR SEWER BYPASS PUMPING WILL BE MADE UNDER ITEM 628.42, "TRANSFER TO NEW SYSTEM, SANITARY SEWER".

I. EXISTING SEWER MANHOLES SHALL NOT BE REMOVED UNTIL THE NEW SEWER INFRASTRUCTURE HAS BEEN TESTED, ACCEPTED, AND PLACED INTO SERVICE. REMOVAL OF EXISTING SEWER MANHOLES WILL BE PAID FOR UNDER ITEM 204.21, "TRENCH EXCAVATION OF ROCK".

J. EXISTING SEWERLINE PIPE THAT IS ABANDONED IN-PLACE SHALL BE CUT AND CAPPED AT THE LIMITS OF DISTURBANCE. PAYMENT WILL BE MADE UNDER ITEM 628.42, "TRANSFER TO NEW SYSTEM, SANITARY SEWER".

K. EXISTING STRUCTURES TO BE DECOMMISSIONED WILL BE PAID FOR UNDER ITEM 628.42, "TRANSFER TO NEW SYSTEM, SANITARY SEWER". DECOMMISSIONING SHALL INCLUDE DRILLING HOLES IN THE CONCRETE BASE TO ALLOW FOR DRAINAGE.

L. ALL DUCTILE IRON PIPE INSTALLED SUBSURFACE SHALL BE POLYWRAPPED (A.K.A. POLYETHYLENE ENCASED).

M. ALL PVC C900 SEWER FORCEMAIN PIPE WILL BE PAID FOR UNDER ITEM 628.35, "PVC SEWER PIPE". PIPE MATERIAL SHALL MEET THE REQUIREMENTS OF SUBSECTION 740.02.

N. INSTALL METALLIC WARNING TAPE ABOVE ALL SEWER PIPE.

59. STORMWATER

O. REMOVAL OF EXISTING STORMWATER PIPELINES THAT ARE 4 FOOT DIAMETER OR LESS WILL BE PAID FOR UNDER ITEM 204.20, "TRENCH EXCAVATION OF EARTH".

P. ALL DUCTILE IRON PIPE INSTALLED SUBSURFACE SHALL BE POLYWRAPPED (A.K.A. POLYETHYLENE ENCASED). ALL DUCTILE IRON PIPE AND FITTINGS USED FOR STORMWATER SHALL BE CLASS 350, BITUMINOUS COATED AND CEMENT-LINED.

Q. EXISTING DRAINAGE STRUCTURES THAT ARE BEING REMOVED WILL BE PAID FOR UNDER ITEM 204.21, "TRENCH EXCAVATION OF ROCK".

R. UNDERDRAIN PIPE SHALL BE 12" CPEP (SL) TYPE S UNDERDRAIN WITH CLASS II PERFORATIONS.

S. DMH 211 AND DMH 212 HAVE BEEN PARTIALLY INSTALLED UNDER EWP3(2). COMPLETION OF THEIR INSTALLATION, INCLUDING INSTALLATION OF ADDITIONAL RISERS, WILL BE MADE UNDER ITEM 900.645 "SPECIAL PROVISION (CHANGING ELEVATION OF DROP INLETS, CATCH BASINS, OR MANHOLES) (STATE SUPPLIED RISERS)". RISERS WILL BE PROVIDED TO THE CONTRACTOR FOR INSTALLATION.

T. ALL STORMWATER PIPELINES THAT ARE IDENTIFIED AS PVC WILL BE PAID FOR AS PVC SEWER PIPE UNDER THE APPROPRIATE PIPE SIZE ITEM 628.35 "PVC SEWER PIPE".

LANDSCAPING

60. REFER TO LANDSCAPE PLANS FOR ALL LANDSCAPING ELEMENTS AND DETAILS.

61. ST. STEPHENS CHURCH, LOCATED ON THE VILLAGE GREEN, HAS INSTALLED AN IRRIGATION SYSTEM THAT IS USED FOR WATERING LANDSCAPED AREAS. DURING CONSTRUCTION, THE CONTRACTOR SHALL LOCATE AND PROTECT THE IRRIGATION SYSTEM FROM DAMAGE. THE IRRIGATION SYSTEM SHALL BE ADJUSTED IN ELEVATION TO MEET THE PROPOSED GRADE THROUGHOUT ITS CURRENT LIMITS. DESIGN PLANS FOR THE CURRENT IRRIGATION SYSTEM ARE AVAILABLE FROM ST. STEPHENS CHRUCH. THIS WORK WILL NOT BE PAID FOR DIRECLTY, BUT WILL BE CONSIDERED INCIDENTAL TO ALL OTHER LANDSCAPE ITEMS.

MAINTENANCE OF TEMPORARY BRIDGES

62. TEMPORARY BRIDGES WERE INSTALLED UNDER THE CONSTRUCTION CONTRACT FOR MIDDLEBURY EWP3(1). IT IS ANTICIPATED THAT MAINTENANCE OF THOSE BRIDGE WILL BE REQUIRED TO KEEP THEM FUNCTIONING AND PERFORMING IN A SATISFACTORY MANNER. AS MAINTENACE NEEDS ARE IDENTIFIED, THE ENGINEER WILL NOTIFY THE CONTRACTOR OF THE NEEDS AND REQUEST A WORKPLAN FROM THE CONTRACTOR TO COMPLETE THE NEEDED MAINTENANCE.

63. ALL MAINTENANCE ACTIVITIES WILL BE PAID FOR UNDER ITEM 900.615, "SPECIAL PROVISION (MAINTENANCE OF TEMPORARY BRIDGES) (N.A.B.I.)".

REVISION	DATE	DESCRIPTION	BY
1	5/17/2019	CORRECTED TYPO	KCB

vhb

PROJECT NAME: MIDDLEBURY
PROJECT NUMBER: WCRS(23)

FILE NAME: zl3g542pnnotes.dgn
PROJECT LEADER: A.P. GUYETTE
DESIGNED BY: R.H. BARNES
PROJECT NOTES SHEET (2 OF 2)

PLOT DATE: 5/17/2019
DRAWN BY: R.H.BARNES
CHECKED BY: K.C. BARRY
SHEET 5 OF 328

STATE OF VERMONT
AGENCY OF TRANSPORTATION

QUANTITY SHEET 1

SUMMARY OF ESTIMATED QUANTITIES									TOTALS		DESCRIPTIONS				DETAILED SUMMARY OF QUANTITIES		
ROADWAY	LANDSCAPE	EROSION CONTROL	UTILITIES	NON-PARTICIP. UTIL	FULL C.E.	RAILROAD	GRAND TOTAL	FINAL	UNIT	ITEMS	ITEM NUMBER	ROUND	QUANTITIES	UNIT	ITEMS
1							1		LS	CLEARING AND GRUBBING, INCLUDING INDIVIDUAL TREES AND STUMPS	201.10				
1430						27170	28600		CY	COMMON EXCAVATION	203.15				
200						1800	2000		CY	SOLID ROCK EXCAVATION	203.16				
60						5940	6000		CY	EARTH BORROW	203.30				
			1593	157			1750		CY	SAND BORROW	203.31				
			8100	900			9000		CY	TRENCH EXCAVATION OF EARTH	204.20				
			460	40			500		CY	TRENCH EXCAVATION OF ROCK	204.21				
						1	1		CY	TRENCH EXCAVATION OF EARTH, EXPLORATORY (N.A.B.I.)	204.22				
						1100	1100		CY	STRUCTURE EXCAVATION	204.25				
			320	23		5477	5820		CY	GRANULAR BACKFILL FOR STRUCTURES	204.30				
7370							7370		SY	COARSE-MILLING, BITUMINOUS PAVEMENT	210.10				
	64					846	910		CY	SUBBASE OF CRUSHED GRAVEL, FINE GRADED	301.26				
2805	495						3300		CY	SUBBASE OF DENSE GRADED CRUSHED STONE	301.35				
185							185		CWT	EMULSIFIED ASPHALT	404.65				
2530							2530		TON	MARSHALL BITUMINOUS CONCRETE PAVEMENT	406.25				
1							1		LU	AIR VOIDS PAY ADJUSTMENT (N.A.B.I.)	406.28				
1							1		LU	MAT DENSITY PAY ADJUSTMENT (N.A.B.I.)	406.29				
1							1		LU	PRICE ADJUSTMENT, ASPHALT CEMENT (N.A.B.I.)	406.50				
250							250		CY	HIGH PERFORMANCE CONCRETE, CLASS PCD	501.37				
						600	600		CY	HIGH PERFORMANCE CONCRETE, CLASS PCS	501.38				
						8100	8100		SF	PERMANENT STEEL SHEET PILING (ZMIN. = 30.2 CUBIC INCHES)	505.35				
			1370				1370		LB	REINFORCING STEEL, LEVEL I	507.11				
						85000	85000		LB	REINFORCING STEEL, LEVEL II	507.12				
12000							12000		LB	REINFORCING STEEL, LEVEL III	507.13				
			2			198	200		GAL	WATER REPELLENT, SILANE	514.10				
300							300		SY	MEMBRANE WATERPROOFING, SPRAY APPLIED	519.10				
300							300		LF	JOINT SEALER, HOT POURED	524.11				
1							1		EACH	PARTIAL REMOVAL OF STRUCTURE (MAIN ST. TEMP. BRIDGE)	529.20				
1							1		EACH	PARTIAL REMOVAL OF STRUCTURE (MAIN ST. TEMP. PED. BRIDGE)	529.20				
1							1		EACH	PARTIAL REMOVAL OF STRUCTURE (MERCHANTS ROW TEMP. BRIDGE)	529.20				
						3800	3800		CY	REMOVAL OF CONCRETE OR MASONRY	529.25				
						1	1		LS	PRECAST CONCRETE STRUCTURE (17'-0"W X 13'-1"H X 247'-6"L LOW U-WALL)	540.10				
						1	1		LS	PRECAST CONCRETE STRUCTURE (17'-0"W X 21'-6"H X 915'-0"L MID-HEIGHT U-WALL)	540.10				
						1	1		LS	PRECAST CONCRETE STRUCTURE (17'-0"W X 30'-1"H X 225'-0"L THICKENED U-WALL)	540.10				
						1	1		LS	PRECAST CONCRETE STRUCTURE (17'-9"W X 24'-4"H X 345'-0"L TUNNEL)	540.10				
			80				80		CY	CONCRETE, CLASS B	541.25				
						2990	2990		CY	CONTROLLED DENSITY (FLOWABLE) FILL	541.45				
			850				850		LF	18" CPEP(SL)	601.2615				
			540				540		LF	24" CPEP(SL)	601.2620				

vhb

PROJECT NAME: MIDDLEBURY
PROJECT NUMBER: WCRS(23)

FILE NAME: z13g542qs.dgn
PROJECT LEADER: A.P. GUYETTE
DESIGNED BY: R.J. FORBES
QUANTITY SHEET (1 of 7)

PLOT DATE: 5/17/2019
DRAWN BY: R.J. FORBES
CHECKED BY: K.C. BARRY
SHEET 6 OF 328

STATE OF VERMONT
AGENCY OF TRANSPORTATION

QUANTITY SHEET 2

SUMMARY OF ESTIMATED QUANTITIES									TOTALS		DESCRIPTIONS				DETAILED SUMMARY OF QUANTITIES		
	ROADWAY	LANDSCAPE	EROSION CONTROL	UTILITIES	NON-PARTICIP. UTIL	FULL C.E.	RAILROAD	GRAND TOTAL	FINAL	UNIT	ITEMS	ITEM NUMBER	ROUND		QUANTITIES	UNIT	ITEMS
				17				17		EACH	PRECAST REINFORCED CONCRETE CATCH BASIN WITH CAST IRON GRATE (4' DIA.)	604.20					
				1				1		EACH	PRECAST REINFORCED CONCRETE CATCH BASIN WITH CAST IRON GRATE (8' DIA.)	604.20					
				1				1		EACH	PRECAST REINFORCED CONCRETE MANHOLE WITH CAST IRON COVER (4' DIA.)	604.21					
				1				1		EACH	PRECAST REINFORCED CONCRETE MANHOLE WITH CAST IRON COVER (8' DIA.)	604.21					
				6	3			9		EACH	SANITARY SEWER MANHOLE (4' DIA.)	604.22					
				4				4		EACH	CHANGING ELEVATION OF DROP INLETS, CATCH BASINS, OR MANHOLES	604.40					
				1				1		EACH	CHANGING ELEVATION OF SEWER MANHOLES	604.42					
				1				1		EACH	CAST IRON COVER WITH FRAME	604.55					
				2100				2100		LF	UNDERDRAIN PIPE, 12 INCHES	605.13					
				65				65		LF	UNDERDRAIN CARRIER PIPE, 12 INCHES	605.23					
				9				9		EACH	UNDERDRAIN FLUSHING BASIN	605.95					
	10							10		MGAL	DUST CONTROL WITH WATER	609.10					
							300	300		CY	STONE FILL, TYPE I	613.10					
							700	700		CY	STONE FILL, TYPE II	613.11					
	350							350		LF	CAST-IN-PLACE CONCRETE CURB, TYPE B	616.28					
	1290							1290		LF	REMOVAL OF EXISTING CURB	616.41					
	2300							2300		SY	PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH	618.10					
	135							135		SY	PORTLAND CEMENT CONCRETE SIDEWALK, 8 INCH	618.11					
	225							225		SF	DETECTABLE WARNING SURFACE	618.30					
	2							2		EACH	BOLLARDS	619.14					
							350	350		LF	CHAIN-LINK FENCE, 4 FEET	620.11					
							780	780		LF	REMOVAL OF EXISTING FENCE	620.55					
	8							8		EACH	ENERGY ABSORPTION ATTENUATOR, TEMPORARY	621.56					
	1560							1560		LF	TEMPORARY TRAFFIC BARRIER	621.90					
				4				4		MFBM	INSULATION BOARD	622.10					
				40				40		LF	SLEEVES FOR UTILITIES (1 X 18")	625.10					
				26				26		LF	SLEEVES FOR UTILITIES (1 X 24")	625.10					
				25				25		LF	SLEEVES FOR UTILITIES (1 X 60")	625.10					
				20				20		LF	DUCTILE IRON SEWER PIPE, CEMENT-LINED (10")	628.28					
				36				36		LF	DUCTILE IRON SEWER PIPE, CEMENT-LINED (18")	628.28					
				125				125		LF	DUCTILE IRON SEWER PIPE, CEMENT-LINED (24")	628.28					
				130				130		LF	DUCTILE IRON SEWER PIPE, CEMENT-LINED (42")	628.28					
				130	520			650		LF	PVC SEWER PIPE (10")	628.35					
				375				375		LF	PVC SEWER PIPE (1-1/2")	628.35					
				755				755		LF	PVC SEWER PIPE (15")	628.35					
				10				10		LF	PVC SEWER PIPE (18")	628.35					
				75				75		LF	PVC SEWER PIPE (4")	628.35					
				550				550		LF	PVC SEWER PIPE (6")	628.35					
				65				65		LF	PVC SEWER PIPE (8")	628.35					
					1			1		LS	TRANSFER TO NEW SYSTEM, SANITARY SEWER (NON-PARTICIPATING 0.1 LS)	628.42					

PROJECT NAME: MIDDLEBURY
PROJECT NUMBER: WCRS(23)

FILE NAME: z13g542qs.dgn
PROJECT LEADER: A.P. GUYETTE
DESIGNED BY: R.J. FORBES
QUANTITY SHEET (2 of 7)

PLOT DATE: 5/17/2019
DRAWN BY: R.J. FORBES
CHECKED BY: K.C. BARRY
SHEET 7 OF 328

STATE OF VERMONT
AGENCY OF TRANSPORTATION

QUANTITY SHEET 3

SUMMARY OF ESTIMATED QUANTITIES									TOTALS		DESCRIPTIONS				DETAILED SUMMARY OF QUANTITIES		
	ROADWAY	LANDSCAPE	EROSION CONTROL	UTILITIES	NON-PARTICIP. UTIL	FULL C.E.	RAILROAD	GRAND TOTAL	FINAL	UNIT	ITEMS	ITEM NUMBER	ROUND		QUANTITIES	UNIT	ITEMS
				1				1		LS	TRANSFER TO NEW SYSTEM, SANITARY SEWER (PARTICIPATING 0.9 LS)	628.42					
				35				35		LF	SEAMLESS COPPER WATER TUBE (1")	629.23					
				10				10		LF	SEAMLESS COPPER WATER TUBE (1-1/4")	629.23					
				550				550		LF	SEAMLESS COPPER WATER TUBE (3/4")	629.23					
				60				60		LF	DUCTILE IRON WATER PIPE, CEMENT-LINED (6")	629.24					
				110				110		LF	DUCTILE IRON WATER PIPE, CEMENT-LINED (8")	629.24					
				1				1		EACH	EXTENSION SERVICE BOX AND CURB STOP (1")	629.25					
				2				2		EACH	EXTENSION SERVICE BOX AND CURB STOP (3/4")	629.25					
				2				2		EACH	GATE VALVE WITH VALVE BOX (6")	629.27					
				2				2		EACH	GATE VALVE WITH VALVE BOX (8")	629.27					
				2				2		EACH	HYDRANT	629.28					
				2				2		EACH	REMOVE HYDRANT	629.30					
				1				1		EACH	TAPPING SLEEVE AND VALVE WITH VALVE BOX	629.35					
				1				1		EACH	CORPORATION STOP (1")	629.39					
				4				4		EACH	CORPORATION STOP (3/4")	629.39					
				1				1		LS	TRANSFER TO NEW SYSTEM, WATER SYSTEM	629.42					
				1932	168			2100		TON	CRUSHED STONE BEDDING	629.54					
	1000							1000		HR	UNIFORMED TRAFFIC OFFICERS	630.10					
	12500							12500		HR	FLAGGERS	630.15					
						1		1		LS	TESTING EQUIPMENT, CONCRETE	631.16					
						1		1		LS	TESTING EQUIPMENT, BITUMINOUS	631.17					
						1		1		LS	TESTING EQUIPMENT, GROUT	631.19					
						30000		30000		DL	FIELD OFFICE COMMUNICATIONS (N.A.B.I.)	631.26					
							300000	300000		DL	RAILROAD FLAGGERS (N.A.B.I.)	632.10					
						30		30		EACH	CPM SCHEDULE	633.10					
						1040		1040		HR	EMPLOYEE TRAINEESHIP	634.10					
						1		1		LS	MOBILIZATION/DEMOBILIZATION	635.11					
	1							1		LS	TRAFFIC CONTROL	641.10					
	3							3		EACH	PORTABLE CHANGEABLE MESSAGE SIGN	641.15					
	3600							3600		LF	4 INCH WHITE LINE, WATERBORNE PAINT	646.201					
	875							875		LF	4 INCH YELLOW LINE, WATERBORNE PAINT	646.2111					
	110							110		LF	8 INCH WHITE LINE, WATERBORNE PAINT	646.221					
	26							26		LF	24 INCH STOP BAR, WATERBORNE PAINT	646.261					
	450							450		LF	CROSSWALK MARKING, WATERBORNE PAINT	646.311					
	15							15		EACH	DURABLE LETTER OR SYMBOL, POLYUREA	646.494					
	4800							4800		SY	GEOTEXTILE FOR ROADBED SEPARATOR	649.11					
							3100	3100		SY	GEOTEXTILE UNDER RAILROAD BALLAST	649.21					
							2200	2200		SY	GEOTEXTILE UNDER STONE FILL	649.31					
			120					120		SY	GEOTEXTILE FOR FILTER CURTAIN	649.61					
			300					300		LB	SEED	651.15					

PROJECT NAME: MIDDLEBURY
PROJECT NUMBER: WCRS(23)

FILE NAME: z13g542qs.dgn
PROJECT LEADER: A.P. GUYETTE
DESIGNED BY: R.J. FORBES
QUANTITY SHEET (3 of 7)

PLOT DATE: 5/17/2019
DRAWN BY: R.J. FORBES
CHECKED BY: K.C. BARRY
SHEET 8 OF 328

STATE OF VERMONT
AGENCY OF TRANSPORTATION

QUANTITY SHEET 4

SUMMARY OF ESTIMATED QUANTITIES											TOTALS		DESCRIPTIONS				DETAILED SUMMARY OF QUANTITIES		
	ROADWAY	LANDSCAPE	EROSION CONTROL	UTILITIES	NON-PARTICIP. UTIL	FULL C.E.	RAILROAD	GRAND TOTAL	FINAL	UNIT	ITEMS	ITEM NUMBER	ROUND		QUANTITIES	UNIT	ITEMS
			1000					1000		LB	FERTILIZER	651.18					
			5					5		TON	AGRICULTURAL LIMESTONE	651.20					
			1500					1500		CY	TOPSOIL	651.35					
			1750					1750		SY	GRUBBING MATERIAL (12")	651.40					
			1					1		LS	EPSC PLAN	653.01					
			500					500		HR	MONITORING EPSC PLAN	653.02					
			1					1		LU	MAINTENANCE OF EPSC PLAN (N.A.B.I.)	653.03					
			5					5		TON	HAY MULCH	653.10					
			7000					7000		SY	ROLLED EROSION CONTROL PRODUCT, TYPE I	653.20					
			150					150		CY	STABILIZED CONSTRUCTION ENTRANCE	653.35					
			30					30		EACH	INLET PROTECTION DEVICE, TYPE I	653.40					
			20					20		EACH	INLET PROTECTION DEVICE, TYPE II	653.41					
			50					50		EACH	FILTER BAG	653.45					
			1150					1150		LF	SILT FENCE, TYPE I	653.475					
			640					640		LF	SILT FENCE, TYPE II	653.476					
			840					840		LF	BARRIER FENCE	653.50					
			4300					4300		LF	PROJECT DEMARCATION FENCE	653.55					
		5						5		EACH	DECIDUOUS TREES (ACER SACCHARUM 'FALL FIESTA')(B&B)(2.5-3")	656.30					
		6						6		EACH	DECIDUOUS TREES (ACER X FREMANII 'SIENNA GLEN')(B&B)(2.5-3")	656.30					
		8						8		EACH	DECIDUOUS TREES (AMELANCHIER X 'AUTUMN BRILLIANCE')(B&B)(10-12')	656.30					
		6						6		EACH	DECIDUOUS TREES (CRATAEGUS VIRIDIS 'WINTER KING')(B&B)(1.5-2")	656.30					
		3						3		EACH	DECIDUOUS TREES (GLEDITSIA TRIACANTHOS 'SHADEMASTER')(B&B)(2.5-3")	656.30					
		3						3		EACH	DECIDUOUS TREES (HAMAMELIS VIRGINIANA)(B&B)(10-12')	656.30					
		3						3		EACH	DECIDUOUS TREES (QUERCUS RUBRA)(B&B)(2.5-3")	656.30					
		7						7		EACH	DECIDUOUS SHRUBS (CLETHRA ALNIFOLIA 'HUMMINGBIRD')(CONT.)(3')	656.35					
		1						1		EACH	DECIDUOUS SHRUBS (ILEX VERTICILLATA 'JIM DANDY')(CONT.)(1.5-2')	656.35					
		3						3		EACH	DECIDUOUS SHRUBS (ILEX VERTICILLATA 'WINTER RED')(CONT.)(3-4')	656.35					
		94						94		EACH	DECIDUOUS SHRUBS (RHUS AROMATICA 'GRO-LOW')(CONT.)(1.5-2')	656.35					
		13						13		EACH	DECIDUOUS SHRUBS (ROSA RUGOSA)(CONT.)(3-4')	656.35					
		25						25		EACH	DECIDUOUS SHRUBS (SPIREA JAPONICA 'LITTLE PRINCESS')(CONT.)(1.5-2')	656.35					
		23						23		EACH	DECIDUOUS SHRUBS (STEPHANANDRA INCISA 'CRISPA')(CONT.)(1.5-2')	656.35					
		5						5		EACH	DECIDUOUS SHRUBS (SYRINGA PUBESCENS SUBSP. PATULA 'MISS KIM')(CONT.)(3-4')	656.35					
		18						18		EACH	PERENNIALS (ACHILLEA MILLEFOLIUM 'RED BEAUTY')(CONT.)(#2)	656.41					
		22						22		EACH	PERENNIALS (AGASTACHE X 'BLUE FORTUNE')(CONT.)(#2)	656.41					
		10						10		EACH	PERENNIALS (ALCHEMILLA MOLLIS)(CONT.)(#2)	656.41					
		12						12		EACH	PERENNIALS (ASTILBE CHINENSIS 'VISIONS IN RED')(CONT.)(#2)	656.41					
		45						45		EACH	PERENNIALS (ASTILBE JAPONICA 'PEACH BLOSSOM')(CONT.)(#2)	656.41					
		15						15		EACH	PERENNIALS (ASTILBE X ARENDSII 'BRIDAL VEIL')(CONT.)(#2)	656.41					
		15						15		EACH	PERENNIALS (ATHYRIUM FILIX-FEMINA)(CONT.)(#2)	656.41					
		8						8		EACH	PERENNIALS (BAPTISIA AUSTRALIS)(CONT.)(#2)	656.41					

PROJECT NAME: MIDDLEBURY
PROJECT NUMBER: WCRS(23)

FILE NAME: z13g542qs.dgn
PROJECT LEADER: A.P. GUYETTE
DESIGNED BY: R.J. FORBES
QUANTITY SHEET (4 of 7)

PLOT DATE: 5/17/2019
DRAWN BY: R.J. FORBES
CHECKED BY: K.C. BARRY
SHEET 9 OF 328

STATE OF VERMONT
AGENCY OF TRANSPORTATION

QUANTITY SHEET 5

SUMMARY OF ESTIMATED QUANTITIES										TOTALS		DESCRIPTIONS				DETAILED SUMMARY OF QUANTITIES		
	ROADWAY	LANDSCAPE	EROSION CONTROL	UTILITIES	NON-PARTICIP. UTIL	FULL C.E.	RAILROAD	GRAND TOTAL	FINAL	UNIT	ITEMS	ITEM NUMBER	ROUND	QUANTITIES	UNIT	ITEMS
		99						99		EACH	PERENNIALS (CALAMAGROSTIS X ACUTIFLORA 'KARL FOERSTER')(CONT.)(#2)	656.41				
		8						8		EACH	PERENNIALS (CHELONE LYONII 'HOT LIPS')(CONT.)(#2)	656.41				
		72						72		EACH	1 PERENNIALS (ECHINACEA PURPUREA 'POW WOW WILD BERRY')(CONT.)(#2)	656.41				
		13						13		EACH	PERENNIALS (EPIMEDIUM X RUBRUM)(CONT.)(#1)	656.41				
		13						13		EACH	PERENNIALS (GERANIUM X 'ROZANNE')(CONT.)(#1)	656.41				
		100						100		EACH	PERENNIALS (HELICTOTRICHON SEMPERVIRENS)(CONT.)(#1)	656.41				
		18						18		EACH	PERENNIALS (HEMEROCALLIS 'DARING DECEPTION')(CONT.)(#2)	656.41				
		95						95		EACH	PERENNIALS (HEMEROCALLIS 'HAPPY RETURNS')(CONT.)(#2)	656.41				
		77						77		EACH	PERENNIALS (HEMEROCALLIS 'JOAN SENIOR')(CONT.)(#2)	656.41				
		26						26		EACH	PERENNIALS (HEMEROCALLIS 'JUDITH')(CONT.)(#2)	656.41				
		51						51		EACH	PERENNIALS (HEMEROCALLIS 'ROYAL OCCASION')(CONT.)(#2)	656.41				
		14						14		EACH	PERENNIALS (HOSTA 'BLUE ANGEL')(CONT.)(#2)	656.41				
		19						19		EACH	PERENNIALS (HOSTA 'GUACAMOLE')(CONT.)(#2)	656.41				
		9						9		EACH	PERENNIALS (HOSTA 'SUM AND SUBSTANCE')(CONT.)(#2)	656.41				
		8						8		EACH	2 PERENNIALS (IRIS SIBIRICA 'CEASAR'S BROTHER')(CONT.)(#2)	656.41				
		21						21		EACH	PERENNIALS (MATTEUCCIA STRUTHIOPTERIS)(CONT.)(#2)	656.41				
		12						12		EACH	2 PERENNIALS (MONARDA DIDYMA 'RASPBERRY WINE')(CONT.)(#2)	656.41				
		25						25		EACH	PERENNIALS (MONARDA FISTULOSA)(CONT.)(#2)	656.41				
		30						30		EACH	PERENNIALS (NEPETA X FAASSENII 'WALKERS LOW')(CONT.)(#2)	656.41				
		101						101		EACH	2 PERENNIALS (PANICUM VIRGATUM 'NORTHWIND')(CONT.)(#2)	656.41				
		16						16		EACH	PERENNIALS (PHLOX PANICULATA 'DAVID')(CONT.)(#2)	656.41				
		140						140		EACH	PERENNIALS (RUDBECKIA FULGIDA 'GOLDSTRUM')(CONT.)(#2)	656.41				
		11						11		EACH	PERENNIALS (SALVIA NEMOROSA 'PINK FRIESLAND')(CONT.)(#2)	656.41				
		15						15		EACH	PERENNIALS (SCHIZACHYRIUM SCOPARIUM 'THE BLUES')(CONT.)(#2)	656.41				
		78						78		EACH	PERENNIALS (SPOROBOLUS HETEROLEPIS)(CONT.)(#2)	656.41				
		21						21		EACH	PERENNIALS (SYMPHYOTRICHUM NOVAE-ANGLIE 'PURPLE DOME')(CONT.)(#2)	656.41				
		320						320		CY	LANDSCAPE BACKFILL, TRUCK MEASUREMENT	656.80				
		1						1		LS	TREE PROTECTION	656.85				
	267							267		SF	TRAFFIC SIGN, TYPE A	675.20				
	510							510		LF	SQUARE TUBE SIGN POST AND ANCHOR	675.341				
	62							62		EACH	REMOVING SIGNS	675.50				
	7							7		EACH	RESETTING SIGNS	675.60				
				440				440		LF	ELECTRICAL CONDUIT (1")(PVC)	678.21				
				100				100		LF	ELECTRICAL CONDUIT (1-1/2")(PVC)	678.21				
				530				530		LF	ELECTRICAL CONDUIT (2")(PVC)	678.21				
				225				225		LF	ELECTRICAL CONDUIT (4")(PVC)	678.21				
				1030				1030		LF	ELECTRICAL WIRING	678.24				
				14				14		EACH	JUNCTION BOX	678.26				
	1							1		EACH	TEMPORARY TRAFFIC SIGNAL SYSTEM	678.40				
	4							4		EACH	REMOVE STREET LIGHT ASSEMBLY	679.24				

REVISION	DATE	DESCRIPTION	BY
1	5/17/2019	MODIFIED ITEM SUPPLEMENTAL DESCRIPTION.	KCB
2	5/17/2019	CORRECTED TYPO	KCB

vhb

PROJECT NAME: MIDDLEBURY
PROJECT NUMBER: WCRS(23)

FILE NAME: z13g542qs.dgn
PROJECT LEADER: A.P. GUYETTE
DESIGNED BY: R.J. FORBES
QUANTITY SHEET (5 of 7)

PLOT DATE: 5/17/2019
DRAWN BY: R.J. FORBES
CHECKED BY: K.C. BARRY
SHEET 10 OF 328

STATE OF VERMONT
AGENCY OF TRANSPORTATION

QUANTITY SHEET 6

SUMMARY OF ESTIMATED QUANTITIES									TOTALS		DESCRIPTIONS				DETAILED SUMMARY OF QUANTITIES		
ROADWAY	LANDSCAPE	EROSION CONTROL	UTILITIES	NON-PARTICIP. UTIL	FULL C.E.	RAILROAD	GRAND TOTAL	FINAL	UNIT	ITEMS	ITEM NUMBER	ROUND	QUANTITIES	UNIT	ITEMS
13							13		EACH	STREET LIGHT ASSEMBLY	679.46				
1							1		LU	PRICE ADJUSTMENT, FUEL (N.A.B.I.)	690.50				
	15						15		CY	SPECIAL PROVISION (CRUSHED GRANITE STONE DRIP EDGE)	900.608				
						1500	1500		CY	SPECIAL PROVISION (CRUSHED STONE, 3/4")	900.608				
	1						1		CY	SPECIAL PROVISION (PEASTONE)	900.608				
200000							200000		DL	SPECIAL PROVISION (ENVIRONMENTAL MANAGER)(N.A.B.I.)	900.615				
					50000		50000		DL	SPECIAL PROVISION (IDLE EQUIPMENT)(N.A.B.I.)	900.615				
					140000		140000		DL	SPECIAL PROVISION (INCENTIVE/DISINCENTIVE)(N.A.B.I.)(WCRS(23))	900.615				
100000							100000		DL	SPECIAL PROVISION (MAINTENANCE OF TEMPORARY BRIDGES AND TEMPORARY TRAFFIC CONTROL)(N.A.B.I.)	900.615				
					1		1		DL	SPECIAL PROVISION (TRAIN DELAY LIQUIDATED DAMAGES)(VERMONT RAILWAY)(N.A.B.I.)	900.615				
			2				2		EACH	SPECIAL PROVISION (CHANGING ELEVATION OF DROP INLETS, CB'S, OR MH'S)(STATE SUPPLIED RISERS)	900.620				
			6				6		EACH	SPECIAL PROVISION (DRAINAGE INLET)	900.620				
			1				1		EACH	SPECIAL PROVISION (FLUSHING HYDRANT)	900.620				
						2420	2420		EACH	SPECIAL PROVISION (FURNISH AND INSTALL CROSS TIES)(8'-6" TIES)	900.620				
						3	3		EACH	SPECIAL PROVISION (FURNISH TURNOUT)(NO. 8 TURNOUT)	900.620				
			1				1		EACH	SPECIAL PROVISION (GROUND HYDRANT)	900.620				
						130	130		EACH	SPECIAL PROVISION (MINIPILE SLEEVE ASSEMBLY)	900.620				
			2				2		EACH	SPECIAL PROVISION (RECESSED HOSE BIB BOX UNIT)	900.620				
						2420	2420		EACH	SPECIAL PROVISION (REMOVAL OF CROSS TIES)	900.620				
3							3		EACH	SPECIAL PROVISION (RESET STREET LIGHT ASSEMBLY)	900.620				
	150						150		EACH	SPECIAL PROVISION (SALVAGE AND STOCKPILE STONE BLOCKS)	900.620				
			2				2		EACH	SPECIAL PROVISION (SEWER DROP MANHOLE)	900.620				
			1				1		EACH	SPECIAL PROVISION (SEWER PUMP STATION)	900.620				
			1				1		EACH	SPECIAL PROVISION (STORM DRAIN DROP MANHOLE)	900.620				
			1				1		EACH	SPECIAL PROVISION (STORM WATER TREATMENT DEVICE)	900.620				
			1				1		EACH	SPECIAL PROVISION (WATER VAULT)	900.620				
5000							5000		HR	SPECIAL PROVISION (FLAGGERS, OVERTIME)	900.630				
						20	20		HR	SPECIAL PROVISION (MINIPILE OBSTRUCTION DRILLING)	900.630				
						1300	1300		LF	SPECIAL PROVISION (101-150 KIP TIEBACK)	900.640				
						1400	1400		LF	SPECIAL PROVISION (151-200 KIP TIEBACK)	900.640				
			75				75		LF	SPECIAL PROVISION (42" RCP CLASS V)	900.640				
						5300	5300		LF	SPECIAL PROVISION (60-100 KIP TIEBACK)	900.640				
62							62		LF	SPECIAL PROVISION (BRIDGE RAILING, DECORATIVE PEDESTRIAN RAILING/ CONCRETE PARAPET COMBINATION)	900.640				
120							120		LF	SPECIAL PROVISION (CONCRETE BACKED SLOPED GRANITE CURB)	900.640				
1900							1900		LF	SPECIAL PROVISION (CONCRETE BACKED VERTICAL GRANITE CURB)	900.640				
						7100	7100		LF	SPECIAL PROVISION (CONTINUOUS WELDED RAIL)	900.640				
	100						100		LF	SPECIAL PROVISION (CUTTING/SPLITTING OF LANDSCAPING BLOCK)	900.640				
						1020	1020		LF	SPECIAL PROVISION (DEADMAN ANCHOR)	900.640				

REVISION	DATE	DESCRIPTION	BY
1	5/17/2019	ADDED ITEM	KCB

PROJECT NAME: MIDDLEBURY
PROJECT NUMBER: WCRS(23)

FILE NAME: z13g542qs.dgn
PROJECT LEADER: A.P. GUYETTE
DESIGNED BY: R.J. FORBES
QUANTITY SHEET (6 of 7)

PLOT DATE: 5/17/2019
DRAWN BY: R.J. FORBES
CHECKED BY: K.C. BARRY
SHEET 11 OF 328

STATE OF VERMONT
AGENCY OF TRANSPORTATION

QUANTITY SHEET 7

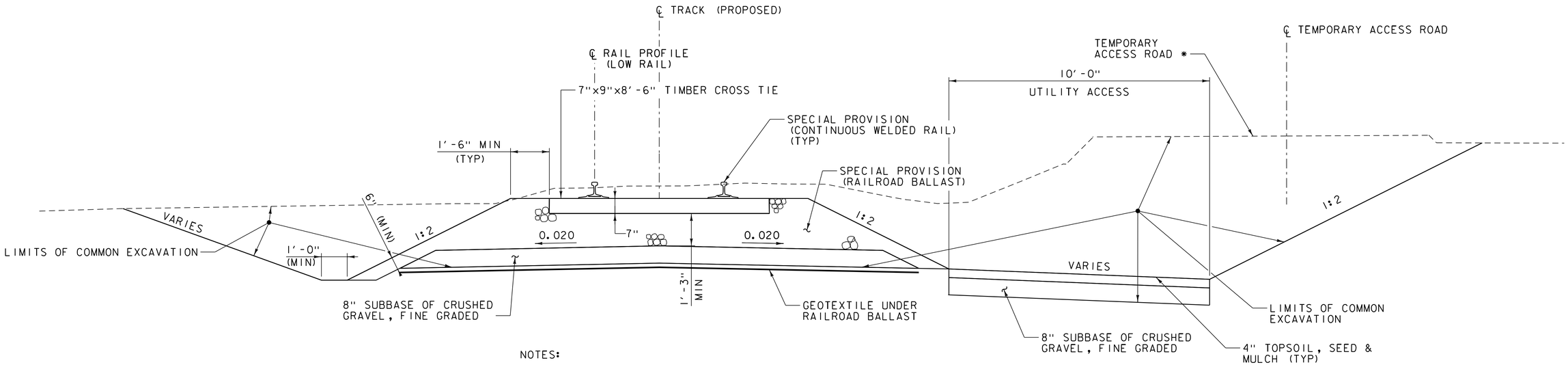
SUMMARY OF ESTIMATED QUANTITIES										TOTALS		DESCRIPTIONS			
	ROADWAY	LANDSCAPE	EROSION CONTROL	UTILITIES	NON-PARTICIP. UTIL	FULL C.E.	RAILROAD	GRAND TOTAL	FINAL	UNIT	ITEMS	ITEM NUMBER	ROUND
	3090							3090		LF	SPECIAL PROVISION (DECORATIVE PEDESTRIAN RAILING)	900.640	
	320							320		LF	SPECIAL PROVISION (FLUSH GRANITE CURB)	900.640	
		470						470		LF	SPECIAL PROVISION (LANDSCAPING BLOCK)	900.640	
		90						90		LF	SPECIAL PROVISION (METAL HAND RAILING)	900.640	
							145	145		LF	SPECIAL PROVISION (MINIPILE IN EARTH)(STATE SUPPLIED PILES)	900.640	
							8530	8530		LF	SPECIAL PROVISION (MINIPILE IN EARTH)	900.640	
							145	145		LF	SPECIAL PROVISION (MINIPILE IN ROCK)(STATE SUPPLIED PILES)	900.640	
							1240	1240		LF	SPECIAL PROVISION (MINIPILE IN ROCK)	900.640	
				3500				3500		LF	SPECIAL PROVISION (PERFORATED PVC PIPE)(12")	900.640	
							1000	1000		LF	SPECIAL PROVISION (REMOVE AND RESET RAILROAD TRACKS)	900.640	
							2040	2040		LF	SPECIAL PROVISION (SOIL NAIL)	900.640	
		220						220		LF	SPECIAL PROVISION (STEEL EDGING)	900.640	
							3675	3675		LF	SPECIAL PROVISION (SURFACE AND ALIGN RAILROAD TRACKS)	900.640	
							1400	1400		LF	SPECIAL PROVISION (TEMPORARY STEEL SHEET PILING)	900.640	
		1						1		LS	SPECIAL PROVISION (CONCRETE STEPS)	900.645	
							1	1		LS	SPECIAL PROVISION (FURNISHING EQUIPMENT FOR INSTALLING MINIPILES)	900.645	
						1		1		LS	SPECIAL PROVISION (HYBRID POSITIONING CONSTRUCTION INPSECTION EQUIPMENT)	900.645	
						1		1		LS	SPECIAL PROVISION (INDIRECT COSTS)	900.645	
		1						1		LS	SPECIAL PROVISION (INSTALL FOUNTAIN)	900.645	
		1						1		LS	SPECIAL PROVISION (INSTALL LABYRINTH)	900.645	
							1	1		LS	SPECIAL PROVISION (RELOCATION OF CONTINUOUS WELDED RAIL)	900.645	
						1		1		LS	SPECIAL PROVISION (SURVEY, INSTRUMENTATION, AND MONITORING)	900.645	
				1				1		LS	SPECIAL PROVISION (WATER MAIN ON BRIDGE)(12")	900.645	
							35000	35000		SF	SPECIAL PROVISION (BALLAST MAT)	900.670	
							3200	3200		SF	SPECIAL PROVISION (CONCRETE RETAINING WALL)	900.670	
							5600	5600		SF	SPECIAL PROVISION (SLOPE STABILIZATION SYSTEM, SHOTCRETE FACING)	900.670	
							30000	30000		SF	SPECIAL PROVISION (TIMBER LAGGING)	900.670	
		170						170		SY	SPECIAL PROVISION (GRANITE COBBLE PAVERS)(10X4X4)	900.675	
		10						10		SY	SPECIAL PROVISION (GRANITE COBBLE PAVERS)(4X4X4)	900.675	
		140						140		SY	SPECIAL PROVISION (GRANITE PAVERS)(18X24X2)	900.675	
							1760	1760		SY	SPECIAL PROVISION (ORANGE GEOTEXTILE INDICATOR FABRIC)	900.675	
		350						350		SY	SPECIAL PROVISION (PORTLAND CEMENT CONCRETE SIDEWALK, EXPOSED AGGREGATE SURFACE)	900.675	
							2500	2500		SY	SPECIAL PROVISION (SHEET MEMBRANE WATERPROOFING, SELF-ADHESIVE)	900.675	
		275						275		SY	SPECIAL PROVISION (TREE CELL)	900.675	
	2400						13600	16000		TON	SPECIAL PROVISION (MANAGEMENT AND DISPOSAL OF CONTAMINATED SOIL)	900.680	
							6000	6000		TON	SPECIAL PROVISION (RAILROAD BALLAST)	900.680	
	350							350		TON	SPECIAL PROVISION (TEMPORARY PAVEMENT)	900.680	

DETAILED SUMMARY OF QUANTITIES		
QUANTITIES	UNIT	ITEMS

PROJECT NAME: MIDDLEBURY
PROJECT NUMBER: WCRS(23)

FILE NAME: z13g542qs.dgn
PROJECT LEADER: A.P. GUYETTE
DESIGNED BY: R.J. FORBES
QUANTITY SHEET (7 of 7)

PLOT DATE: 5/17/2019
DRAWN BY: R.J. FORBES
CHECKED BY: K.C. BARRY
SHEET 12 OF 328



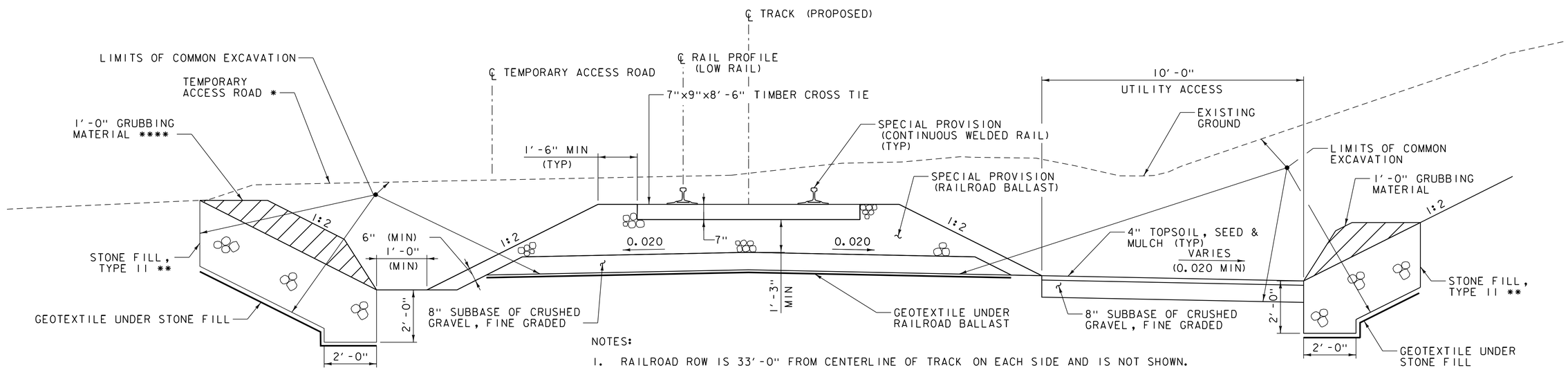
NOTES:

1. RAILROAD ROW IS 33'-0" FROM CENTERLINE OF TRACK ON EACH SIDE AND IS NOT SHOWN.

TYPICAL SOUTH RAIL SECTION

STA. 10+25 - 15+00
SCALE ½" = 1'-0"

* TEMPORARY ACCESS ROAD (CONSTRUCTED AS PART OF EWP3(2)) SHALL BE PAVED AND THEN REMOVED, AS PART OF WCRS(23). SEE ROADWAY SECTIONS FOR MORE INFORMATION. BETWEEN STA. 10+25 AND 14+00 TEMPORARY ACCESS ROAD WILL BE NARROWER THAN SHOWN IN THE TYPICAL SECTION DURING CONSTRUCTION OF PROPOSED TRACK BASE.



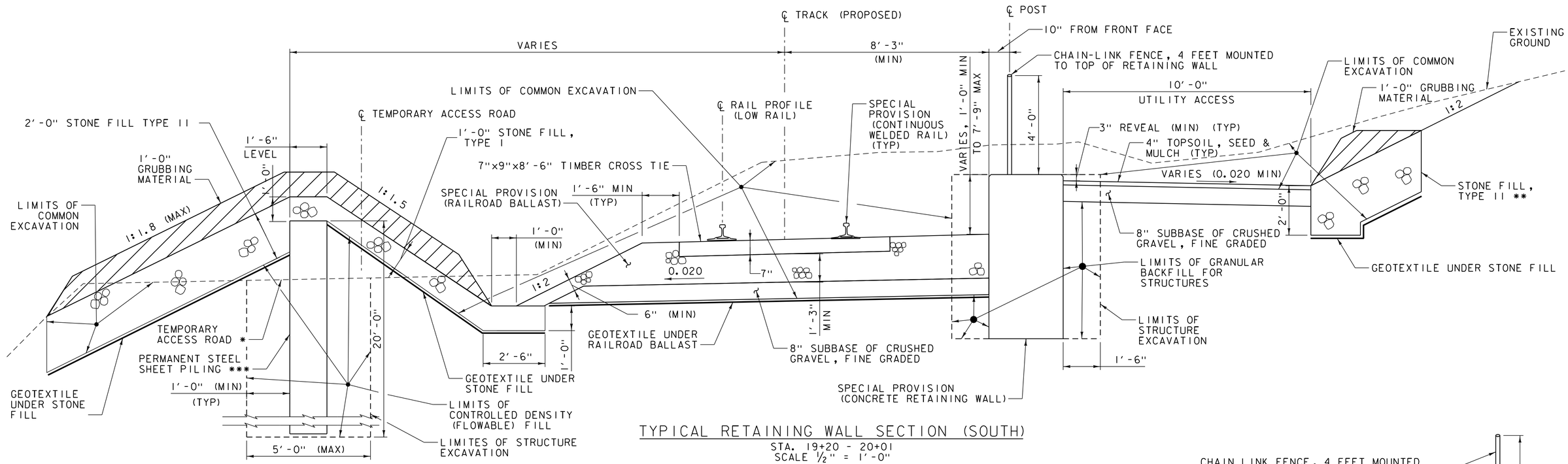
NOTES:

1. RAILROAD ROW IS 33'-0" FROM CENTERLINE OF TRACK ON EACH SIDE AND IS NOT SHOWN.
2. SEE RAIL CROSS SECTIONS FOR LEFT AND RIGHT BOTTOM OF DITCH ELEVATIONS.
3. UTILITIES NOT SHOWN FOR CLARITY. SEE RAIL CROSS SECTIONS FOR UTILITY LOCATIONS.
4. PERMANENT STEEL SHEET PILING TO BEGIN AT STA. 16+25. REFER TO PERMANENT SHEET PILE BERM DETAILS FOR SECTION AT PERMANENT STEEL SHEET PILING.

TYPICAL SOUTH RAIL SECTION

STA. 15+00 - 16+50
SCALE ½" = 1'-0"

PROJECT NAME: MIDDLEBURY	
PROJECT NUMBER: WCRS(23)	
FILE NAME: zl3g542typ.dgn	PLOT DATE: 4/30/2019
PROJECT LEADER: A.P. GUYETTE	DRAWN BY: R.H.BARNES
DESIGNED BY: G.J. BOLES	CHECKED BY: VHB
TYPICAL RAIL SECTIONS (1 OF 8)	SHEET 13 OF 328



TYPICAL RETAINING WALL SECTION (SOUTH)

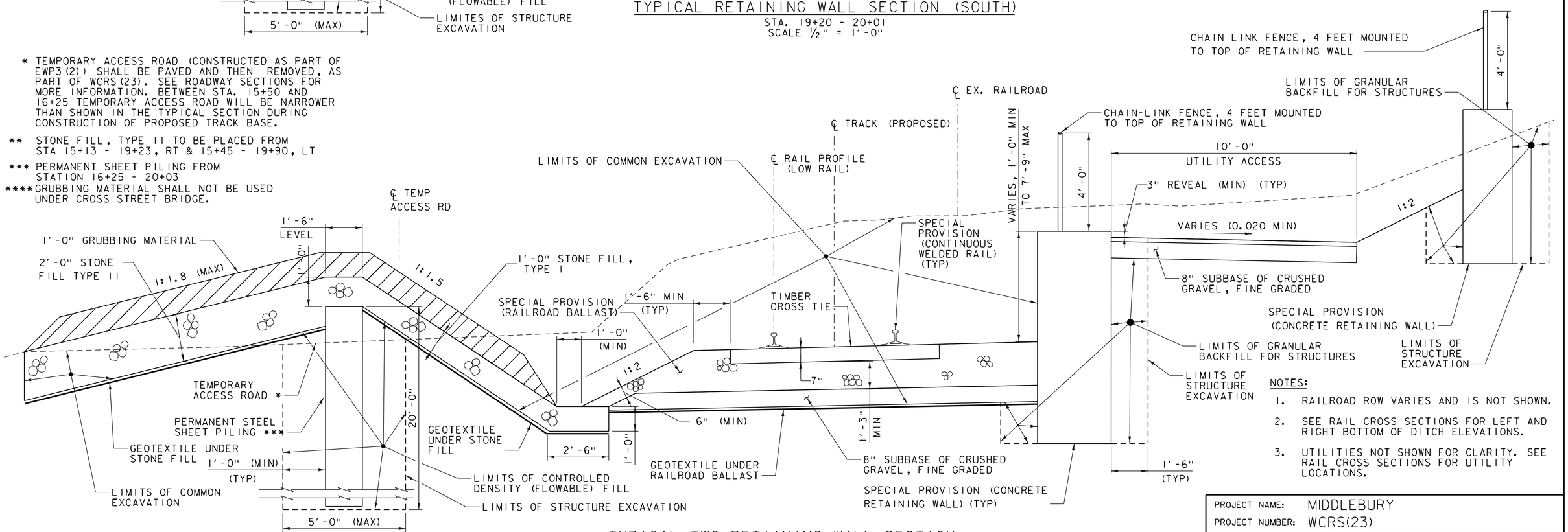
STA. 19+20 - 20+01
SCALE 1/2" = 1'-0"

* TEMPORARY ACCESS ROAD (CONSTRUCTED AS PART OF EWP3(2)) SHALL BE PAVED AND THEN REMOVED, AS PART OF WCRS(23). SEE ROADWAY SECTIONS FOR MORE INFORMATION. BETWEEN STA. 15+50 AND 16+25 TEMPORARY ACCESS ROAD WILL BE NARROWER THAN SHOWN IN THE TYPICAL SECTION DURING CONSTRUCTION OF PROPOSED TRACK BASE.

** STONE FILL, TYPE II TO BE PLACED FROM STA 15+13 - 19+23, RT & 15+45 - 19+90, LT

*** PERMANENT SHEET PILING FROM STATION 16+25 - 20+03

**** GRUBBING MATERIAL SHALL NOT BE USED UNDER CROSS STREET BRIDGE.



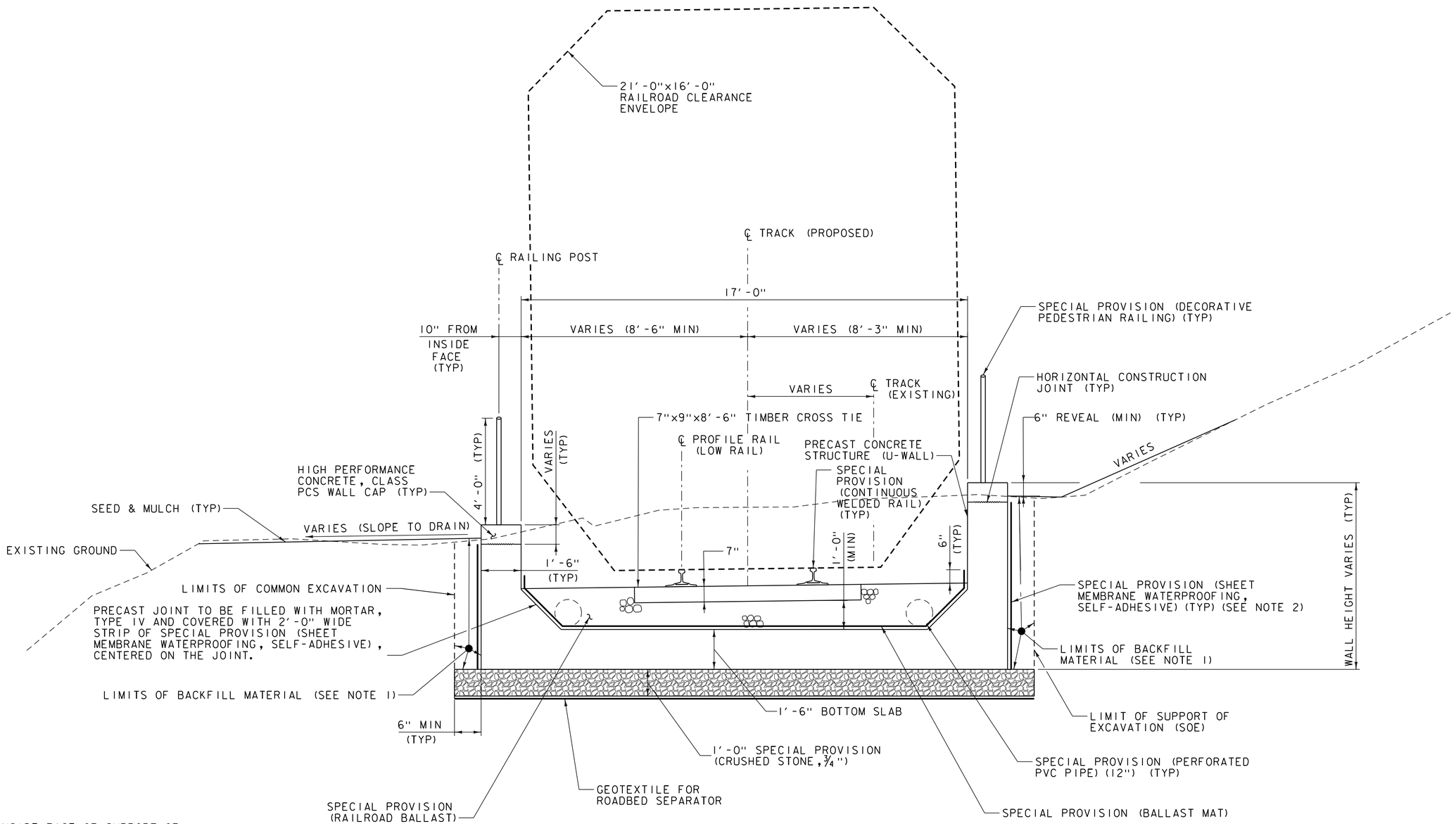
TYPICAL TWO RETAINING WALL SECTION

STA. 19+35 - 19+90
SCALE 1/2" = 1'-0"

NOTES:

1. RAILROAD ROW VARIES AND IS NOT SHOWN.
2. SEE RAIL CROSS SECTIONS FOR LEFT AND RIGHT BOTTOM OF DITCH ELEVATIONS.
3. UTILITIES NOT SHOWN FOR CLARITY. SEE RAIL CROSS SECTIONS FOR UTILITY LOCATIONS.

PROJECT NAME: MIDDLEBURY	
PROJECT NUMBER: WCRS(23)	
FILE NAME: z13g542typ.dgn	PLOT DATE: 4/30/2019
PROJECT LEADER: A.P. GUYETTE	DRAWN BY: R.H.BARNES
DESIGNED BY: G.J. BOLES	CHECKED BY: VHB
TYPICAL RAIL SECTIONS (2 OF 8)	SHEET 14 OF 328



NOTE: RAILROAD ROW VARIES AND IS NOT SHOWN.

TYPICAL SOUTH U-WALL SECTION

STA. 20+01 - 21+93
SCALE ½" = 1'-0"

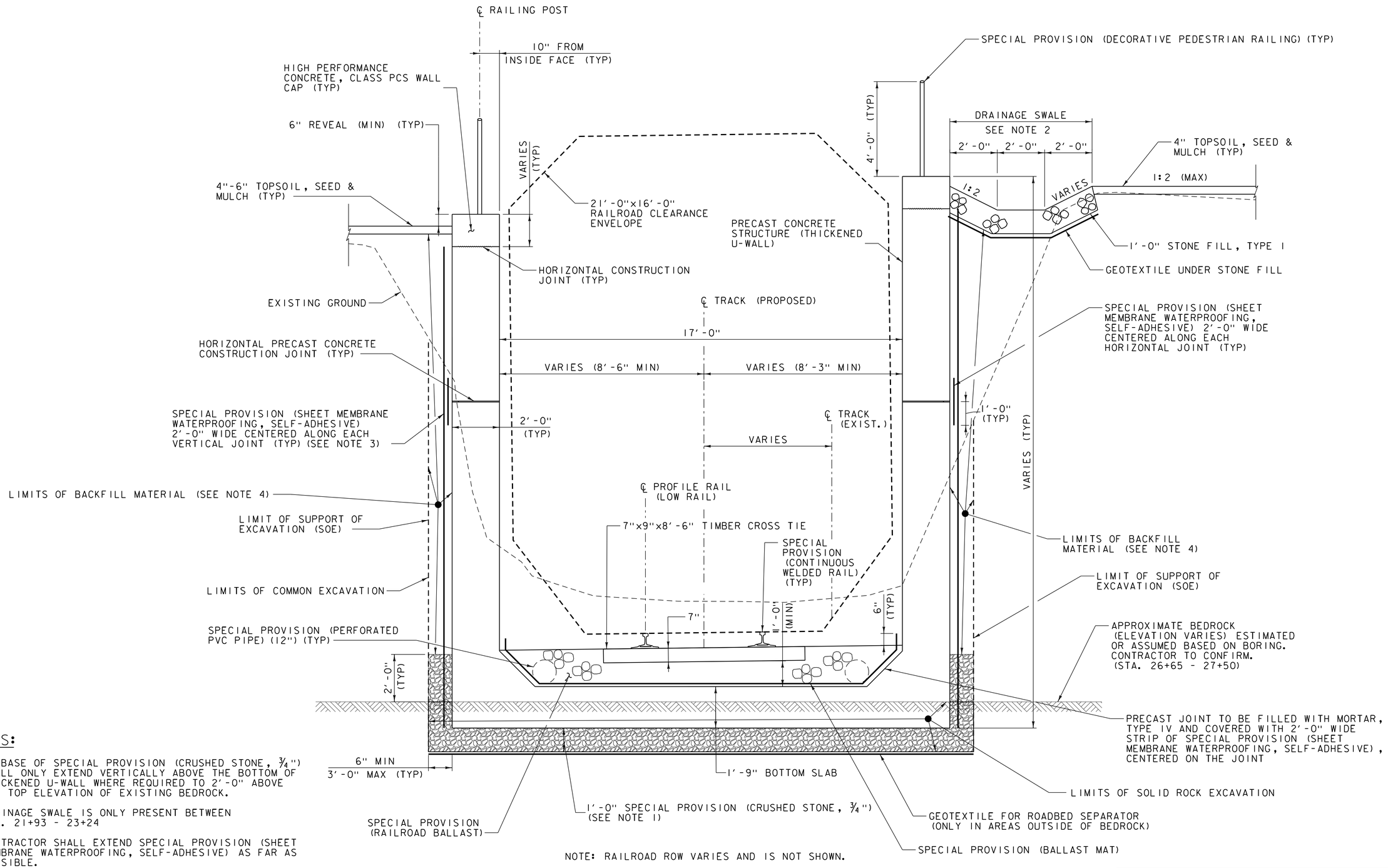
NOTES:

1. WHERE DISTANCE BETWEEN INSIDE FACE OF SUPPORT OF EXCAVATION AND OUTSIDE FACE OF U-WALL IS LESS THAN 3 FEET, BACKFILL MATERIAL TO BE CONTROLLED DENSITY (FLOWABLE) FILL, OTHERWISE THE FIRST 3 FEET FROM THE FACE OF THE U-WALL SHALL BE GRANULAR BACKFILL FOR STRUCTURES AND THE REMAINDER OF THE BACKFILL TO BE EARTH BORROW.

2. SPECIAL PROVISION (SHEET MEMBRANE WATERPROOFING, SELF-ADHESIVE) TO BE 2'-0" WIDE CENTERED ALONG EACH VERTICAL JOINT AND CONTRACTOR SHALL EXTEND THE MATERIAL AS FAR AS POSSIBLE.

3. SOME PRECAST CONCRETE U-WALLS HAVE PRECAST CONCRETE TOP U-WALL PIECE, NOT SHOWN FOR CLARITY. REFER TO U-WALL SECTIONS FOR DETAILS.

PROJECT NAME: MIDDLEBURY	
PROJECT NUMBER: WCRS(23)	
FILE NAME: zl3g542typ.dgn	PLOT DATE: 4/30/2019
PROJECT LEADER: A.P. GUYETTE	DRAWN BY: R.H.BARNES
DESIGNED BY: VHB/MM	CHECKED BY: VHB
TYPICAL RAIL SECTIONS (3 OF 8)	SHEET 15 OF 328



NOTE: RAILROAD ROW VARIES AND IS NOT SHOWN.

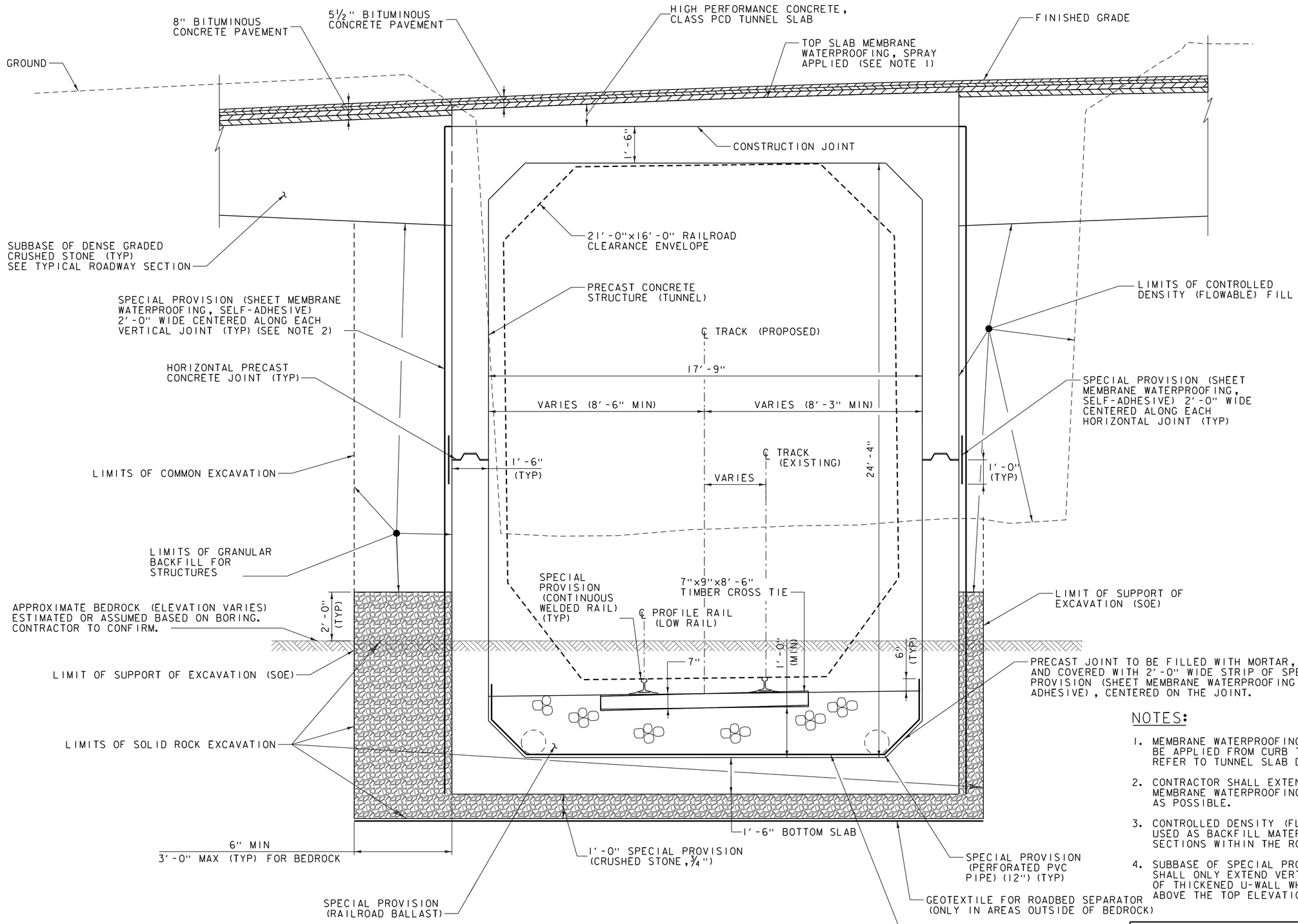
NOTES:

1. SUBBASE OF SPECIAL PROVISION (CRUSHED STONE, ¾") SHALL ONLY EXTEND VERTICALLY ABOVE THE BOTTOM OF THICKENED U-WALL WHERE REQUIRED TO 2'-0" ABOVE THE TOP ELEVATION OF EXISTING BEDROCK.
2. DRAINAGE SWALE IS ONLY PRESENT BETWEEN STA. 21+93 - 23+24
3. CONTRACTOR SHALL EXTEND SPECIAL PROVISION (SHEET MEMBRANE WATERPROOFING, SELF-ADHESIVE) AS FAR AS POSSIBLE.
4. WHERE DISTANCE BETWEEN INSIDE FACE OF SUPPORT OF EXCAVATION AND OUTSIDE FACE OF U-WALL IS LESS THAN 3 FEET, BACKFILL MATERIAL TO BE CONTROLLED DENSITY (FLOWABLE) FILL, OTHERWISE THE FIRST 3 FEET FROM THE FACE OF THE U-WALL SHALL BE GRANULAR BACKFILL FOR STRUCTURES AND THE REMAINDER OF THE BACKFILL TO BE EARTH BORROW.

TYPICAL THICKENED U-WALL SECTION

STA. 21+93- 23+24
STA. 26+69 - 27+63
SCALE ½" = 1'-0"

PROJECT NAME: MIDDLEBURY	
PROJECT NUMBER: WCRS(23)	
FILE NAME: zl3g542typ.dgn	PLOT DATE: 4/30/2019
PROJECT LEADER: A.P. GUYETTE	DRAWN BY: R.H.BARNES
DESIGNED BY: VHB/MM	CHECKED BY: VHB
TYPICAL RAIL SECTIONS (4 OF 8)	SHEET 16 OF 328



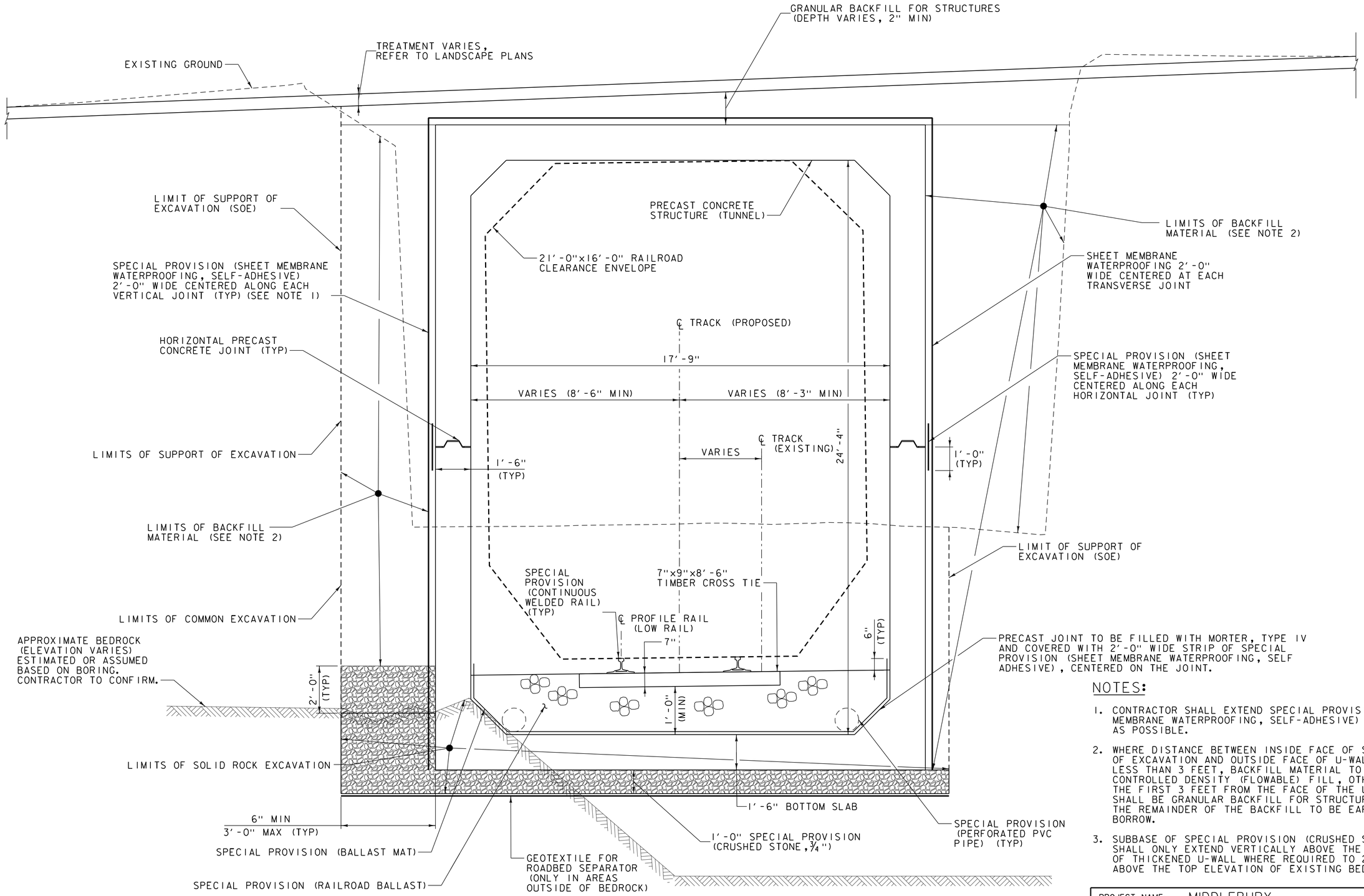
TYPICAL TUNNEL SECTION (ROADWAY)

STA. 23+24 - 24+18
STA. 25+69 - 26+69
SCALE ½" = 1'-0"

NOTES:

1. MEMBRANE WATERPROOFING, SPRAY APPLIED SHALL ONLY BE APPLIED FROM CURB TO CURB OF ROADWAY AREA. REFER TO TUNNEL SLAB DETAILS.
2. CONTRACTOR SHALL EXTEND SPECIAL PROVISION (SHEET MEMBRANE WATERPROOFING, SELF-ADHESIVE) AS FAR AS POSSIBLE.
3. CONTROLLED DENSITY (FLOWABLE) SHALL WILL BE USED AS BACKFILL MATERIAL FOR THE TUNNEL SECTIONS WITHIN THE ROADWAY ENVELOPE.
4. SUBBASE OF SPECIAL PROVISION (CRUSHED STONE, ¾") SHALL ONLY EXTEND VERTICALLY ABOVE THE BOTTOM OF THICKENED U-WALL WHERE REQUIRED TO 2'-0" ABOVE THE TOP ELEVATION OF EXISTING BEDROCK.

PROJECT NAME: MIDDLEBURY	
PROJECT NUMBER: WCRS(23)	
FILE NAME: zl3g542typ.dgn	PLOT DATE: 4/30/2019
PROJECT LEADER: A.P. GUYETTE	DRAWN BY: K.C. BARRY
DESIGNED BY: VHB/MM	CHECKED BY: VHB
TYPICAL RAIL SECTIONS (5 OF 8)	SHEET 17 OF 328



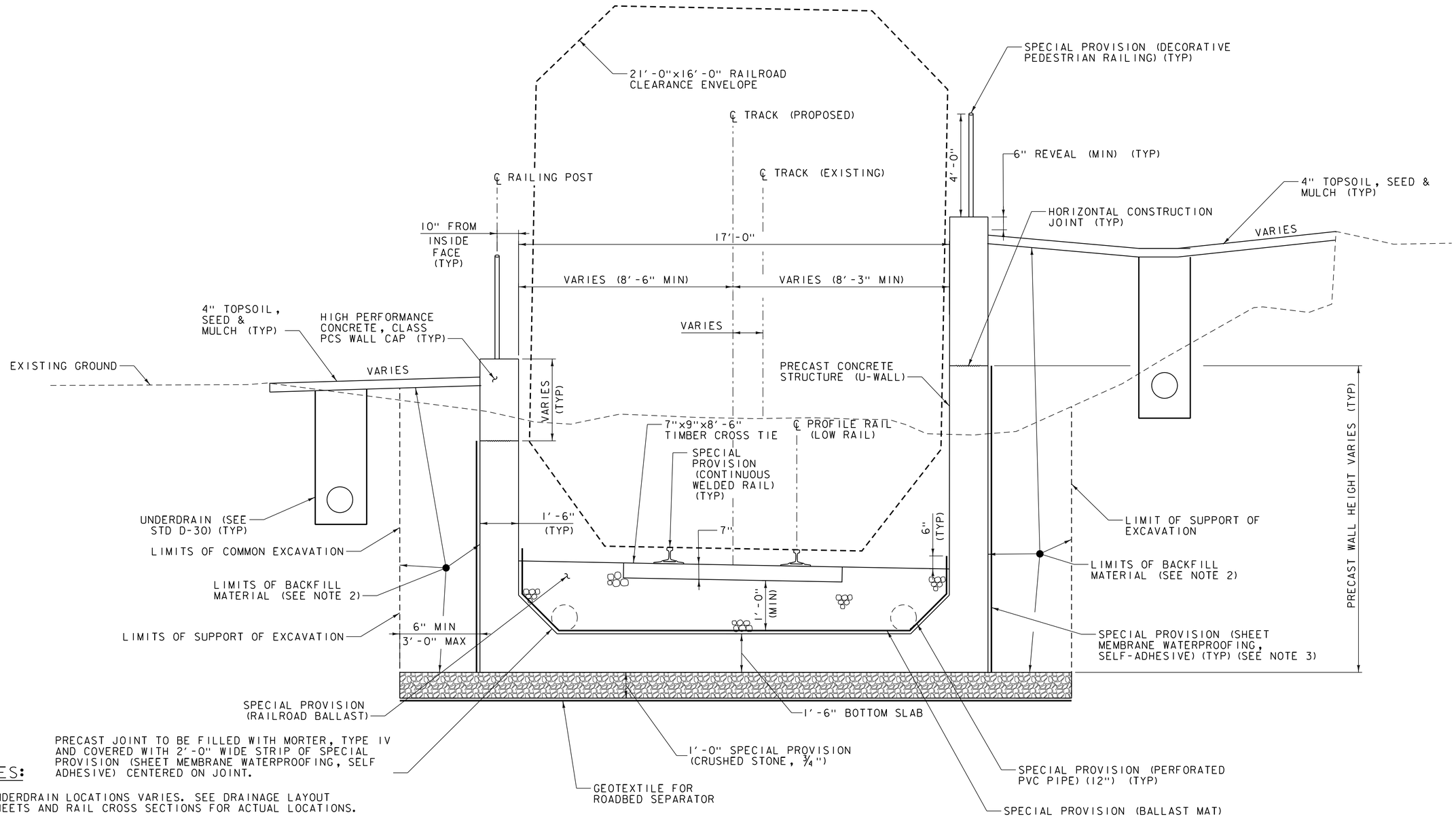
TYPICAL TUNNEL SECTION (PARK)

STA. 24+18 - 25+69
SCALE 1/2" = 1'-0"

NOTES:

1. CONTRACTOR SHALL EXTEND SPECIAL PROVISION (SHEET MEMBRANE WATERPROOFING, SELF-ADHESIVE) AS FAR AS POSSIBLE.
2. WHERE DISTANCE BETWEEN INSIDE FACE OF SUPPORT OF EXCAVATION AND OUTSIDE FACE OF U-WALL IS LESS THAN 3 FEET, BACKFILL MATERIAL TO BE CONTROLLED DENSITY (FLOWABLE) FILL, OTHERWISE THE FIRST 3 FEET FROM THE FACE OF THE U-WALL SHALL BE GRANULAR BACKFILL FOR STRUCTURES AND THE REMAINDER OF THE BACKFILL TO BE EARTH BORROW.
3. SUBBASE OF SPECIAL PROVISION (CRUSHED STONE, 3/4") SHALL ONLY EXTEND VERTICALLY ABOVE THE BOTTOM OF THICKENED U-WALL WHERE REQUIRED TO 2'-0" ABOVE THE TOP ELEVATION OF EXISTING BEDROCK.

PROJECT NAME: MIDDLEBURY	
PROJECT NUMBER: WCRS(23)	
FILE NAME: zl3g542typ.dgn	PLOT DATE: 4/30/2019
PROJECT LEADER: A.P. GUYETTE	DRAWN BY: R.H.BARNES
DESIGNED BY: VHB/MM	CHECKED BY: VHB
TYPICAL RAIL SECTIONS (6 OF 8)	SHEET 18 OF 328



TYPICAL NORTH U-WALL SECTION

STA. 27+63 - 37+34

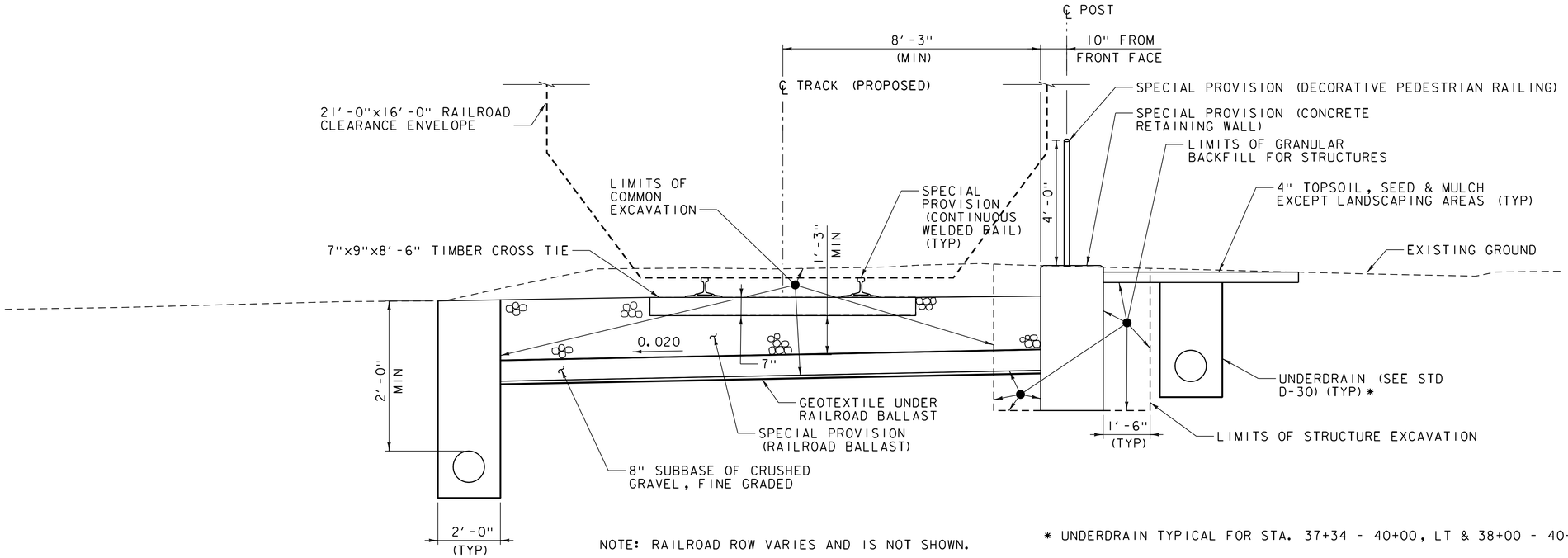
SCALE ½" = 1'-0"

NOTE: RAILROAD ROW VARIES AND IS NOT SHOWN.

NOTES:

1. UNDERDRAIN LOCATIONS VARIES. SEE DRAINAGE LAYOUT SHEETS AND RAIL CROSS SECTIONS FOR ACTUAL LOCATIONS.
2. WHERE DISTANCE BETWEEN INSIDE FACE OF SUPPORT OF EXCAVATION AND OUTSIDE FACE OF U-WALL IS LESS THAN 3 FEET, BACKFILL MATERIAL TO BE CONTROLLED DENSITY (FLOWABLE) FILL, OTHERWISE THE FIRST 3 FEET FROM THE FACE OF THE U-WALL SHALL BE GRANULAR BACKFILL FOR STRUCTURES AND THE REMAINDER OF THE BACKFILL TO BE EARTH BORROW.
3. SPECIAL PROVISION (SHEET MEMBRANE WATERPROOFING, SELF-ADHESIVE) TO BE 2'-0" WIDE CENTERED ALONG EACH VERTICAL JOINT AND CONTRACTOR SHALL EXTEND THE MATERIAL AS FAR AS POSSIBLE.
4. SOME PRECAST CONCRETE U-WALLS HAVE PRECAST CONCRETE TOP U-WALL PIECE, NOT SHOWN FOR CLARITY. REFER TO U-WALL SECTIONS FOR DETAILS.

PROJECT NAME: MIDDLEBURY	
PROJECT NUMBER: WCRS(23)	
FILE NAME: zl3g542typ.dgn	PLOT DATE: 4/30/2019
PROJECT LEADER: A.P. GUYETTE	DRAWN BY: R.H.BARNES
DESIGNED BY: VHB	CHECKED BY: VHB
TYPICAL RAIL SECTIONS (7 OF 8)	SHEET 19 OF 328

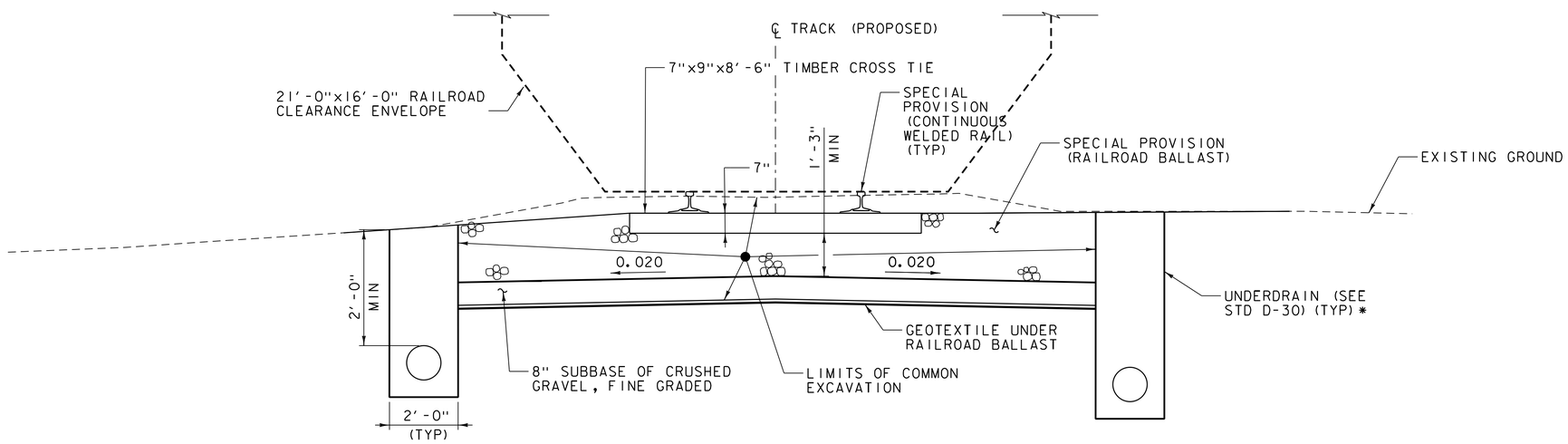


NOTE: RAILROAD ROW VARIES AND IS NOT SHOWN.

* UNDERDRAIN TYPICAL FOR STA. 37+34 - 40+00, LT & 38+00 - 40+00, RT ONLY

TYPICAL RETAINING WALL SECTION (NORTH)

STA. 37+34 - 40+00
SCALE ½" = 1'-0"



NOTE: RAILROAD ROW VARIES AND IS NOT SHOWN.

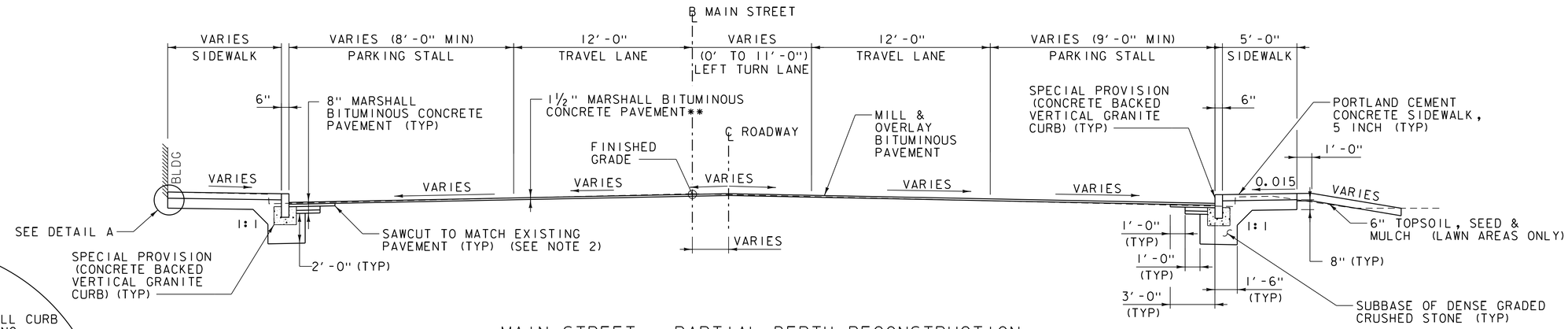
* UNDERDRAIN TYPICAL FOR STA. 40+00 - 41+00 LT & RT ONLY

TYPICAL NORTH RAIL SECTION

STA. 40+00 - 41+50
SCALE ½" = 1'-0"

PROJECT NAME: MIDDLEBURY	
PROJECT NUMBER: WCRS(23)	
FILE NAME: zl3g542typ.dgn	PLOT DATE: 4/30/2019
PROJECT LEADER: A.P. GUYETTE	DRAWN BY: R.H.BARNES
DESIGNED BY: VHB	CHECKED BY: VHB
TYPICAL RAIL SECTIONS (8 OF 8)	SHEET 20 OF 328

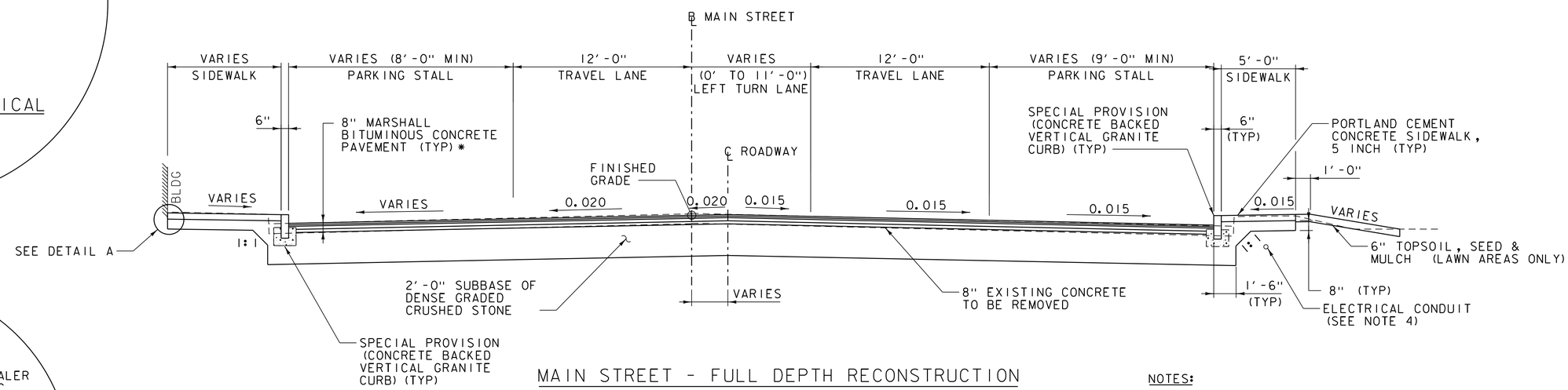
MATERIAL TOLERANCES	
MATERIAL ITEM	THICKNESS TOLERANCE
PAVEMENT (FULL DEPTH)	± 1/4" (TOTAL THICKNESS)
SUBBASE	± 1"
SAND BORROW	± 1"



MAIN STREET - PARTIAL DEPTH RECONSTRUCTION

SCALE 1/4" = 1'0"

STA. 100+85.00 - 101+72.50
STA. 104+22.50 - 105+25.00



MAIN STREET - FULL DEPTH RECONSTRUCTION

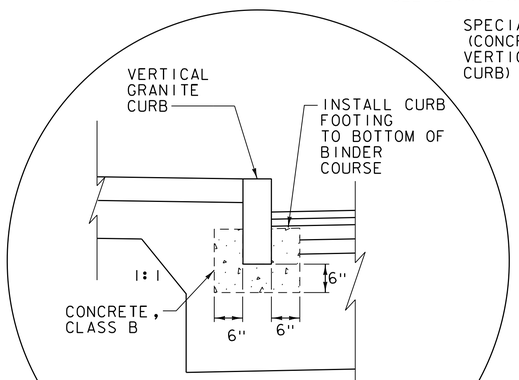
SCALE 1/4" = 1'-0"

STA. 101+72.50 - 104+22.50

TYPICAL SECTIONS - MAIN STREET

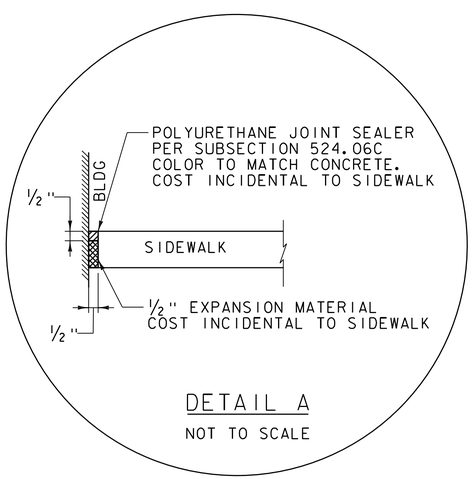
* - (1) - 1 1/2" LIFT OF TYPE IV OVER
(1) - 1 1/2" LIFT OF TYPE IV OVER
(1) - 2 1/2" LIFT OF TYPE II OVER
(1) - 2 1/2" LIFT OF TYPE II

** - (1) - 1 1/2" LIFT OF TYPE IV



CONCRETE BACKED VERTICAL GRANITE CURB

NOT TO SCALE



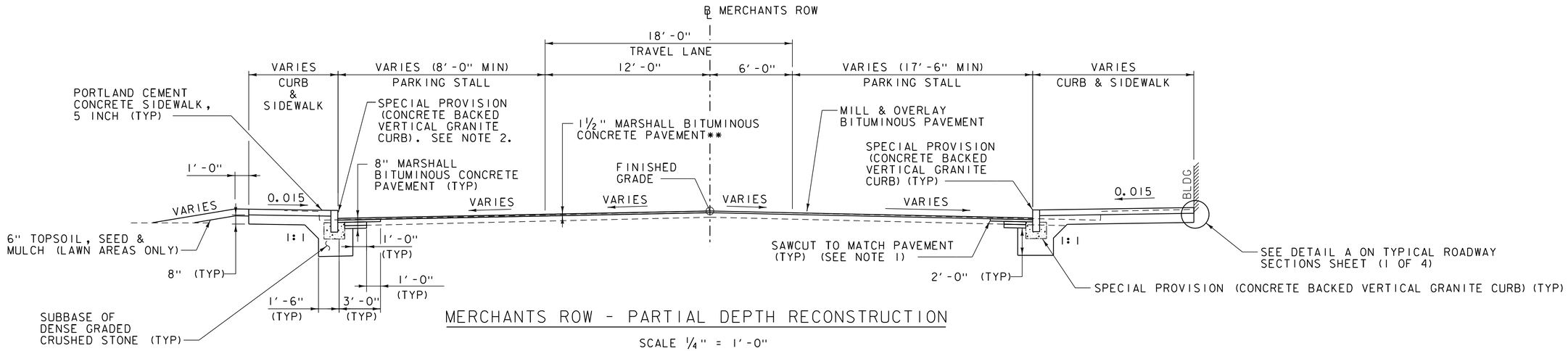
DETAIL A

NOT TO SCALE

NOTES:

1. SEE TYPICAL ROADWAY SECTIONS SHEET (2 OF 4) FOR TYPICAL GRASS STRIP SECTION.
2. SAWCUT TO BE INCIDENTAL TO MARSHALL BITUMINOUS CONCRETE PAVEMENT.
3. PER ADA GUIDELINES, SIDEWALK CROSS SLOPES SHALL NOT EXCEED 2%.
4. REFER TO ELECTRICAL DRAWINGS FOR EXACT SIZE AND LOCATIONS OF ELECTRICAL CONDUITS.

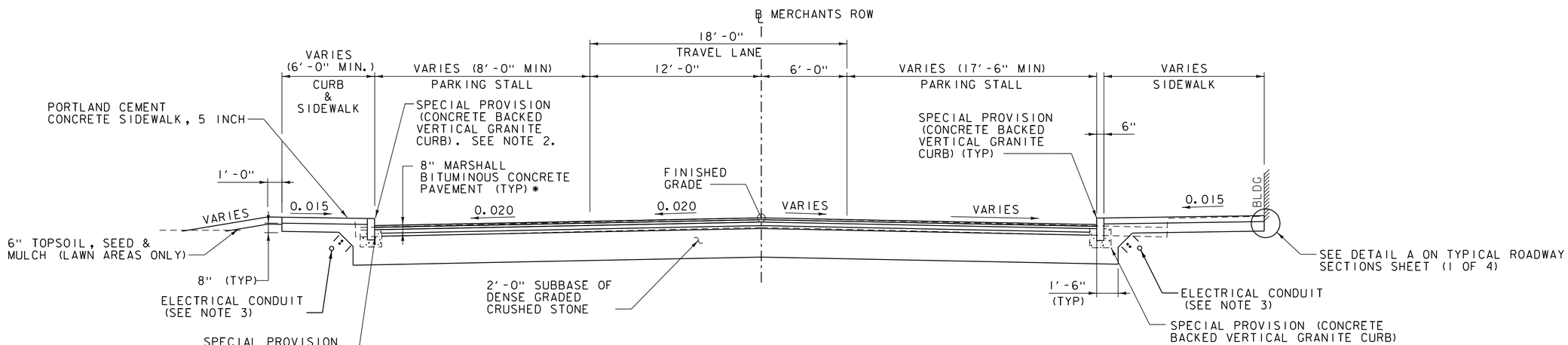
PROJECT NAME: MIDDLEBURY	
PROJECT NUMBER: WCRS(23)	
FILE NAME: zl3g542typ.dgn	PLOT DATE: 4/30/2019
PROJECT LEADER: A.P. GUYETTE	DRAWN BY: D.M.PECK
DESIGNED BY: D.M. PECK	CHECKED BY: G.L. BAKOS
TYPICAL ROADWAY SECTIONS (1 OF 4)	SHEET 21 OF 328



MERCHANTS ROW - PARTIAL DEPTH RECONSTRUCTION

SCALE ¼" = 1'-0"

STA. 200+25.00 - 200+77.50
STA. 202+92.50 - 204+10.00
STA. 300+17.00 - 301+40.00



MERCHANTS ROW - FULL DEPTH RECONSTRUCTION

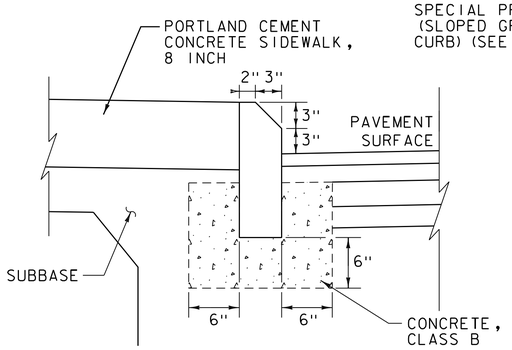
SCALE ¼" = 1'-0"

STA. 200+77.50 - 202+92.50

TYPICAL SECTIONS - MERCHANTS ROW

* - (1) - 1½" LIFT OF TYPE IV OVER
(1) - 1½" LIFT OF TYPE IV OVER
(1) - 2½" LIFT OF TYPE II OVER
(1) - 2½" LIFT OF TYPE II

** - (1) - 1½" LIFT OF TYPE IV

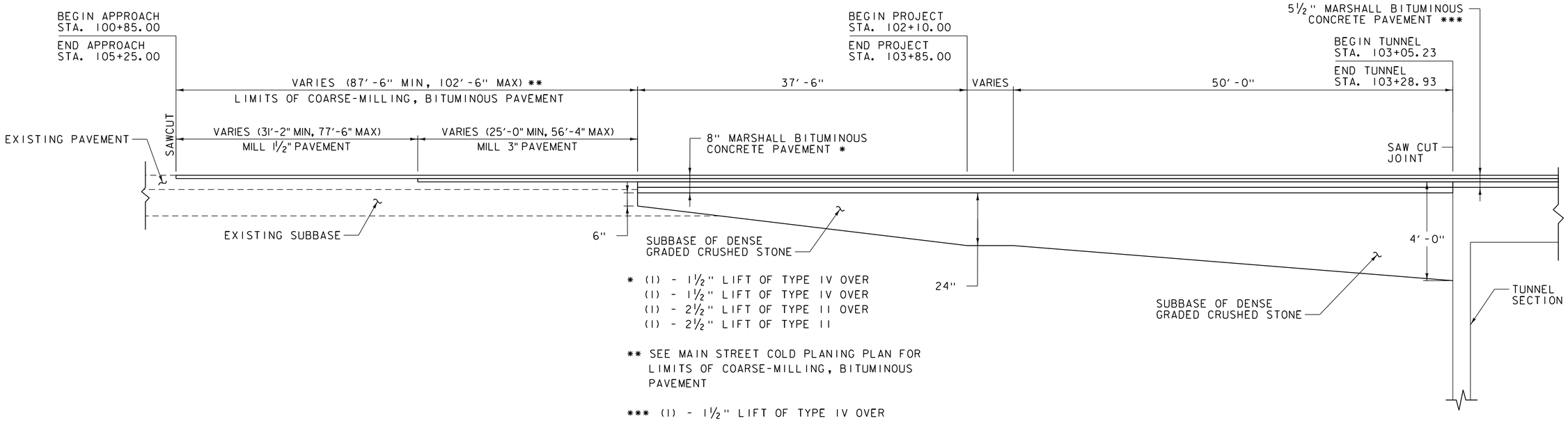


CONCRETE BACKED SLOPED GRANITE CURB
STA. 200+45 - 201+50, LT
NOT TO SCALE

NOTES:

1. SAWCUT TO BE INCIDENTAL TO MARSHALL BITUMINOUS CONCRETE PAVEMENT.
2. INSTALL SPECIAL PROVISION (CONCRETE BACKED SLOPED GRANITE CURB) FROM STA. 200+45 - 201+50, LT. SEE "CONCRETE BACKED SLOPED GRANITE CURB" DETAIL FOR ADDITIONAL INFORMATION. INSTALL TRANSITION CURB PIECES AT EITHER END OF SLOPED GRANITE CURB. SEE CURB TRANSITION DETAILS FOR ADDITIONAL INFORMATION.
3. REFER TO ELECTRICAL DRAWINGS FOR EXACT SIZE AND LOCATIONS OF ELECTRICAL CONDUIT.

PROJECT NAME: MIDDLEBURY	
PROJECT NUMBER: WCRS(23)	
FILE NAME: zl3g542typ.dgn	PLOT DATE: 4/30/2019
PROJECT LEADER: A.P. GUYETTE	DRAWN BY: D.M. PECK
DESIGNED BY: D.M. PECK	CHECKED BY: G.L. BAKOS
TYPICAL ROADWAY SECTIONS (2 OF 4)	SHEET 22 OF 328



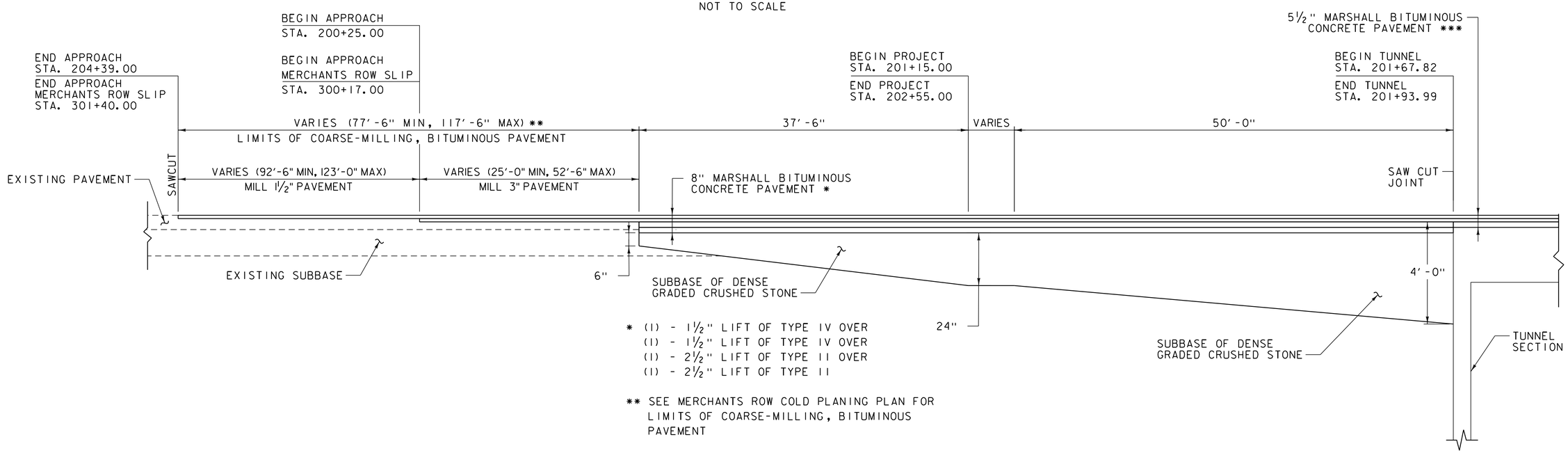
* (1) - 1½" LIFT OF TYPE IV OVER
(1) - 1½" LIFT OF TYPE IV OVER
(1) - 2½" LIFT OF TYPE II OVER
(1) - 2½" LIFT OF TYPE II

** SEE MAIN STREET COLD PLANING PLAN FOR LIMITS OF COARSE-MILLING, BITUMINOUS PAVEMENT

*** (1) - 1½" LIFT OF TYPE IV OVER
(1) - 1½" LIFT OF TYPE IV OVER
(1) - 2½" LIFT OF TYPE II

MAIN STREET APPROACH SECTION

NOT TO SCALE



* (1) - 1½" LIFT OF TYPE IV OVER
(1) - 1½" LIFT OF TYPE IV OVER
(1) - 2½" LIFT OF TYPE II OVER
(1) - 2½" LIFT OF TYPE II

** SEE MERCHANTS ROW COLD PLANING PLAN FOR LIMITS OF COARSE-MILLING, BITUMINOUS PAVEMENT

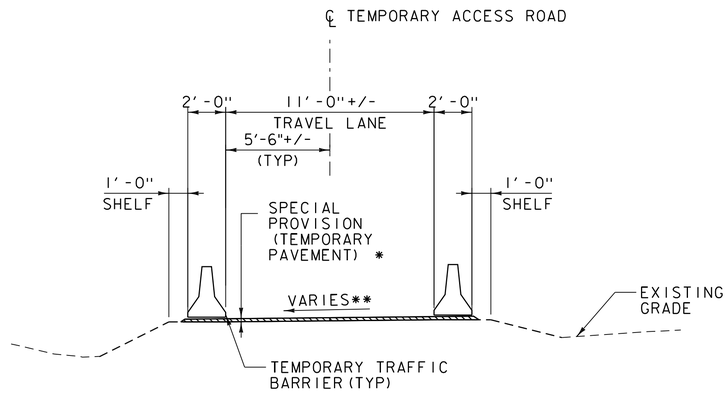
*** (1) - 1½" LIFT OF TYPE IV OVER
(1) - 1½" LIFT OF TYPE IV OVER
(1) - 2½" LIFT OF TYPE II

MERCHANTS ROW APPROACH SECTION

NOT TO SCALE

NOTE:
SUPPORT OF EXCAVATION AND TUNNEL BACKFILL MATERIAL NOT SHOWN FOR CLARITY. REFER TO TYPICAL FILL SECTIONS AND RAILROAD CROSS SECTIONS FOR LIMITS.

PROJECT NAME: MIDDLEBURY	
PROJECT NUMBER: WCRS(23)	
FILE NAME: zl3g542typ.dgn	PLOT DATE: 4/30/2019
PROJECT LEADER: A.P. GUYETTE	DRAWN BY: R.H. BARNES
DESIGNED BY: D.M. PECK	CHECKED BY: VHB
TYPICAL ROADWAY SECTIONS (3 OF 4)	SHEET 23 OF 328

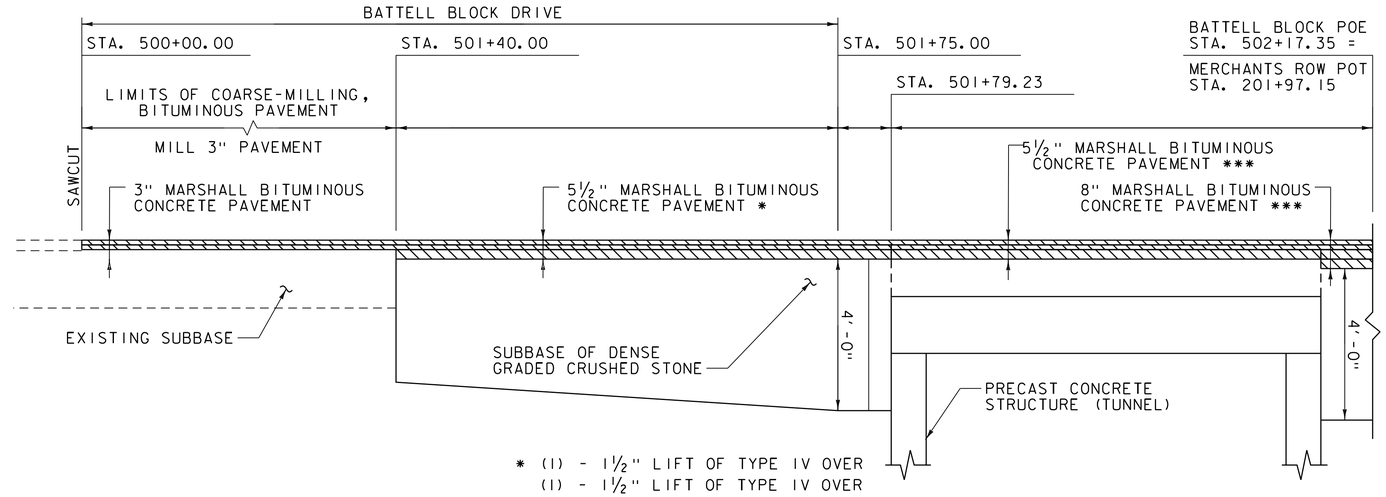


* (1) - 2" LIFT OF TYPE III
** MATCH EXISTING SUBBASE

NOTE: TEMPORARY ACCESS ROAD SUBBASE WAS CONSTRUCTED AS PART OF EWP(2). ROAD TO BE PAVED IN 2020 FOR USE DURING MERCHANTS ROW CLOSURE. TEMPORARY TRAFFIC BARRIER SHALL CONTAIN DRAINAGE SLOTS.

TYPICAL TEMPORARY ACCESS ROAD PAVING SECTION

SCALE 1/4" = 1'-0"



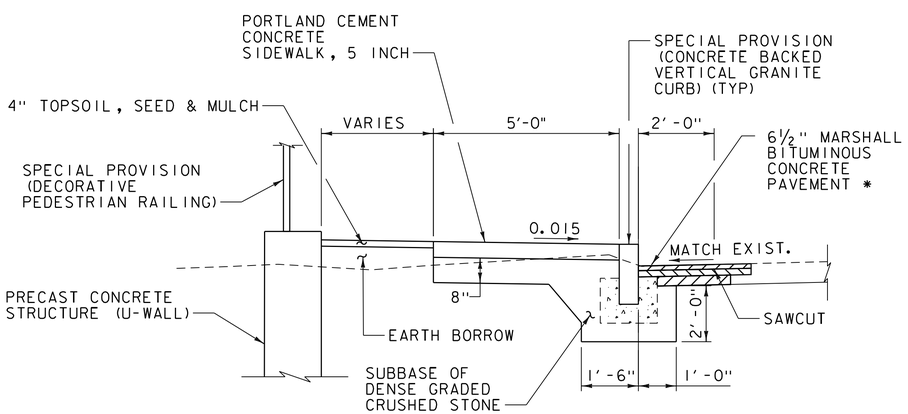
* (1) - 1½" LIFT OF TYPE IV OVER
(1) - 1½" LIFT OF TYPE IV OVER
(1) - 2" LIFT OF TYPE II

** SEE BATTELL BLOCK COLD PLANING PLAN FOR LIMITS OF MILLING

*** SEE MERCHANTS ROW APPROACH SECTION FOR PAVEMENT LIFTS

BATTELL BLOCK APPROACH SECTION

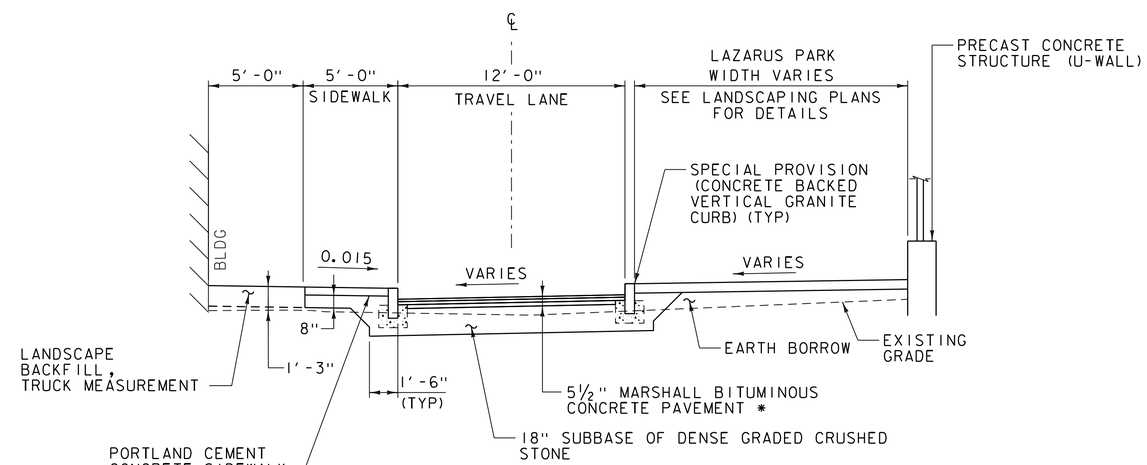
NOT TO SCALE



* - (1) - 1½" LIFT OF TYPE IV OVER
(1) - 1½" LIFT OF TYPE IV OVER
(1) - 3½" LIFT OF TYPE II

SEYMOUR STREET SECTION

NOT TO SCALE



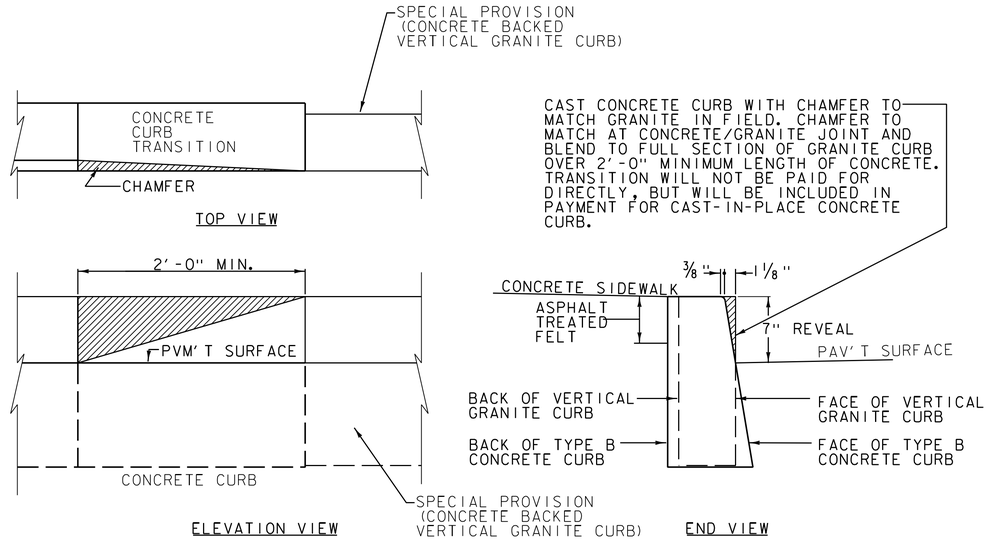
* (1) - 1½" LIFT OF TYPE IV OVER
(1) - 1½" LIFT OF TYPE IV OVER
(1) - 2½" LIFT OF TYPE II

NOTE: ELECTRICAL CONDUIT NOT SHOWN. REFER TO ELECTRICAL DRAWINGS FOR SIZE AND LOCATION OF ELECTRICAL CONDUIT.

PRINTER'S ALLEY SECTION

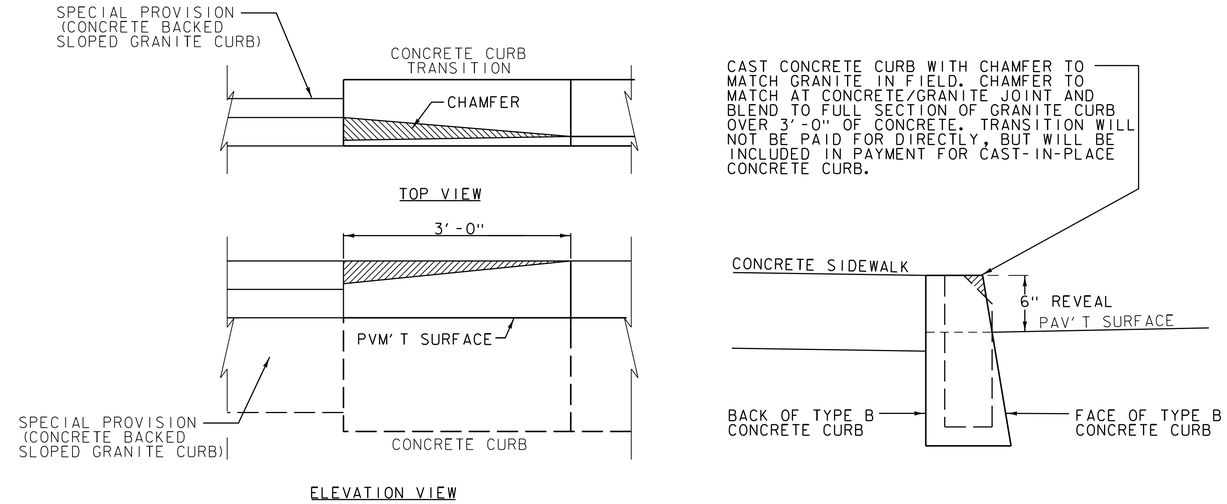
(STA. 20+35 - 21+56)
SCALE 1/4" = 1'-0"

PROJECT NAME: MIDDLEBURY	
PROJECT NUMBER: WCRS(23)	
FILE NAME: zl3g542typ.dgn	PLOT DATE: 4/30/2019
PROJECT LEADER: A.P. GUYETTE	DRAWN BY: K.C. BARRY
DESIGNED BY: D.M. PECK	CHECKED BY: VHB
TYPICAL ROADWAY SECTIONS (4 OF 4)	SHEET 24 OF 328



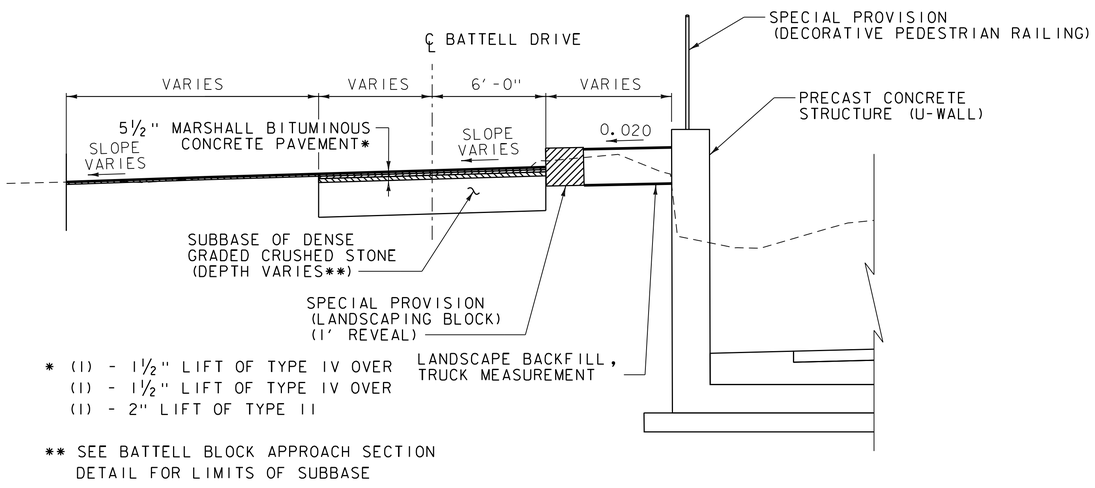
CONCRETE TO VERTICAL GRANITE CURB TRANSITION

STA. 102+83, RT
STA. 103+13, RT
STA. 103+44, LT
STA. 202+09, RT
NOT TO SCALE



CONCRETE TO SLOPED GRANITE CURB TRANSITION

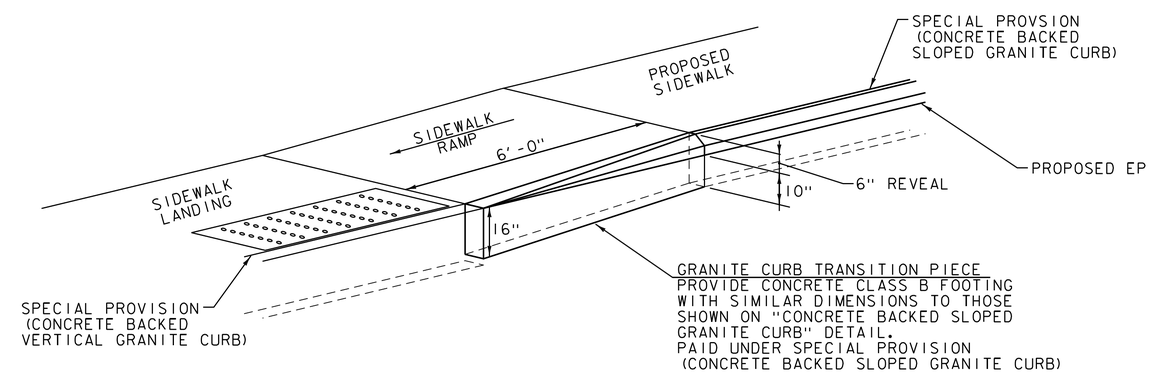
STA. 201+50 - 201+53, LT
NOT TO SCALE



* (1) - 1 1/2" LIFT OF TYPE IV OVER
(1) - 1 1/2" LIFT OF TYPE IV OVER
(1) - 2" LIFT OF TYPE II

** SEE BATTELL BLOCK APPROACH SECTION
DETAIL FOR LIMITS OF SUBBASE

BATTELL BLOCK SECTION



MERCHANTS ROW SLOPED GRANITE CURB TRANSITION

STA. 200+45 - 200+51, LT
NOT TO SCALE

PROJECT NAME: MIDDLEBURY	
PROJECT NUMBER: WCRS(23)	
FILE NAME: zl3g542typ.dgn	PLOT DATE: 5/1/2019
PROJECT LEADER: A.P. GUYETTE	DRAWN BY: K.C. BARRY
DESIGNED BY: D.M. PECK	CHECKED BY: VHB
BATTELL BLOCK TYPICAL SECTIONS	SHEET 25 OF 328

COARSE-MILLING, BITUMINOUS PAVEMENT 1½"
STA. 21+29.24 TO STA. 21+43.40, LT
STA. 21+55.30 TO STA. 22+08.32, LT & RT

LIMITS OF WORK
STA. 22+08.32

COARSE-MILLING, BITUMINOUS PAVEMENT 1½"
STA. 100+85.00 TO STA. 101+16.20, LT & RT AND
STA. 104+47.50 TO STA. 105+25.00, LT & RT

BEGIN PROJECT
MAIN STREET
STA. 102+10.00

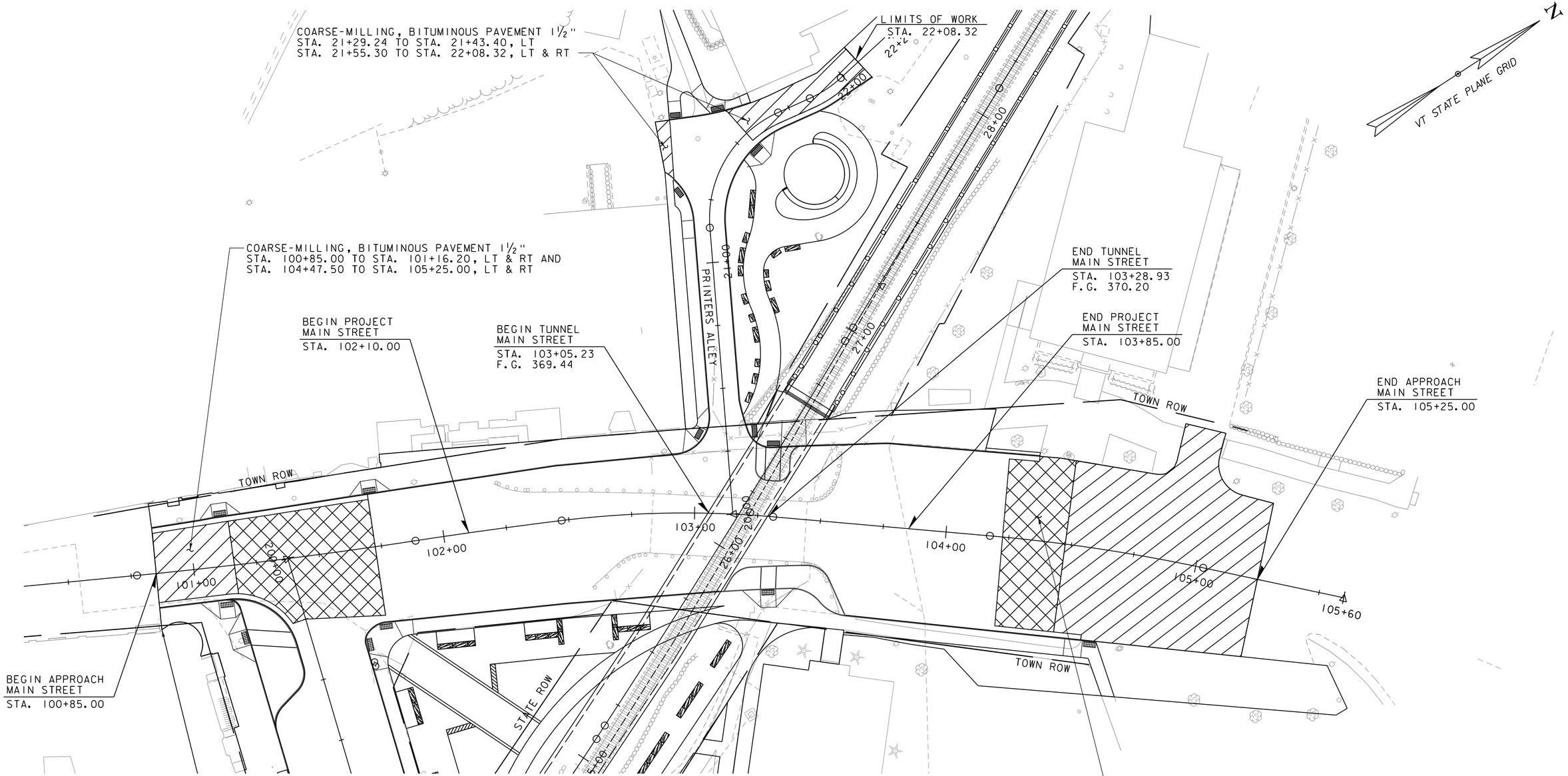
BEGIN TUNNEL
MAIN STREET
STA. 103+05.23
F.G. 369.44

END TUNNEL
MAIN STREET
STA. 103+28.93
F.G. 370.20

END PROJECT
MAIN STREET
STA. 103+85.00

END APPROACH
MAIN STREET
STA. 105+25.00

BEGIN APPROACH
MAIN STREET
STA. 100+85.00

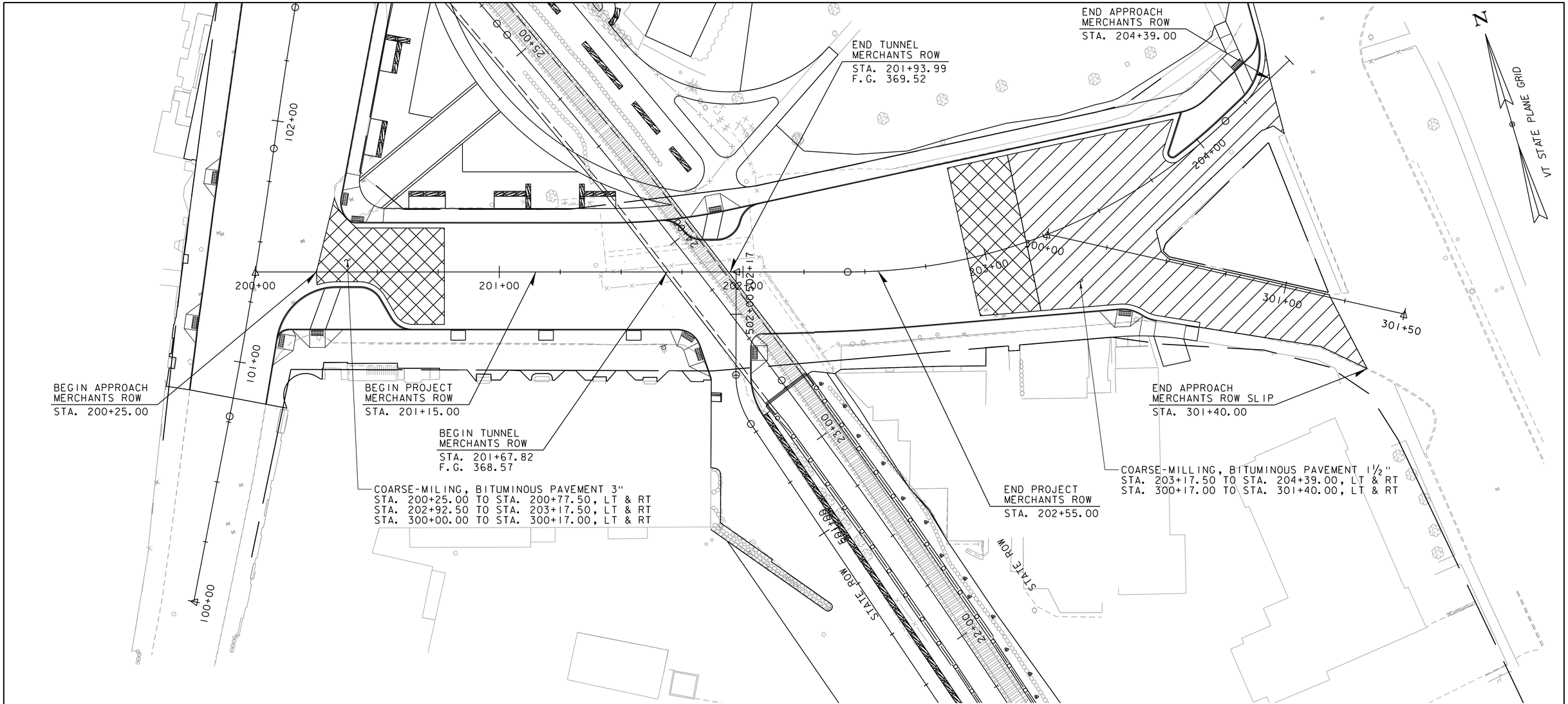


COARSE-MILLING, BITUMINOUS PAVEMENT 3"
STA. 101+16.20 TO STA. 101+72.50, LT & RT AND
STA. 104+22.50 TO STA. 104+47.50 LT & RT

NOTE: REFER TO PROJECT NOTES FOR ADDITIONAL INFORMATION ON PAVING WITHIN MARBLEWORKS PROPOERTY.

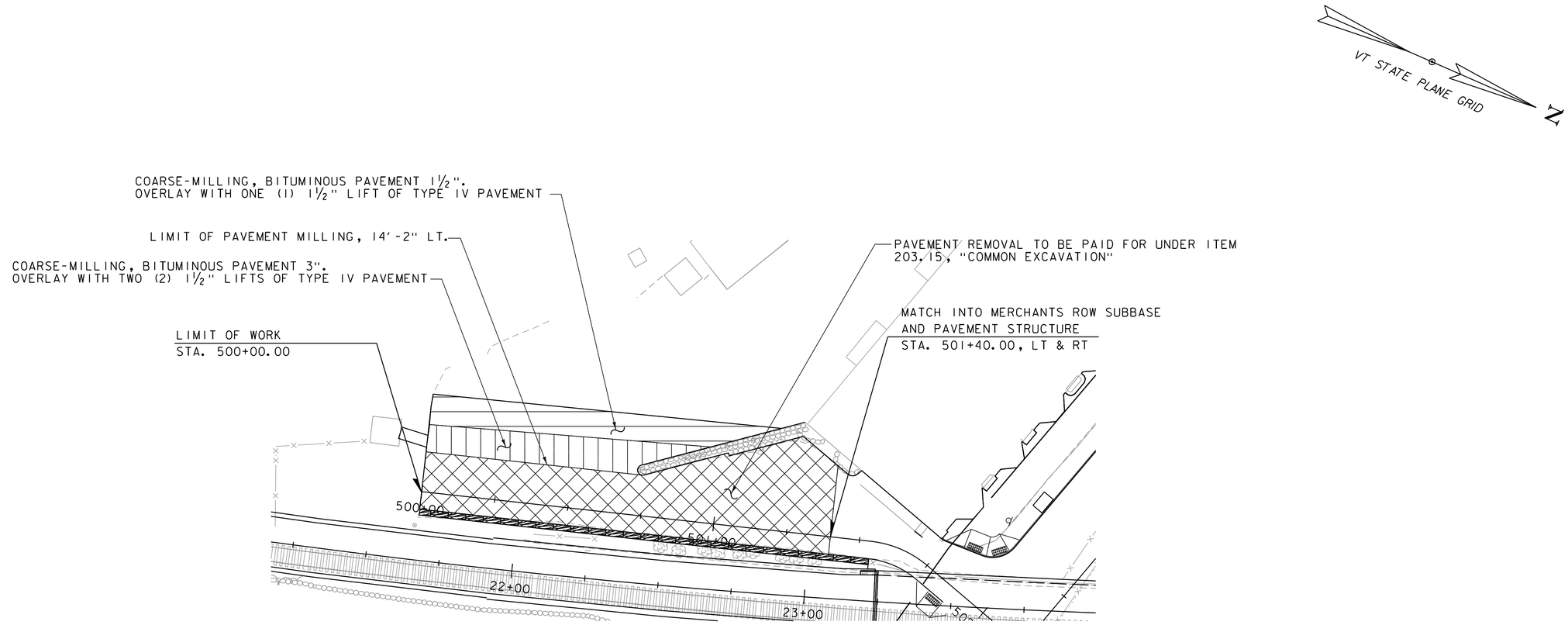
SCALE 1" = 20'-0"
20 0 20

PROJECT NAME: MIDDLEBURY	
PROJECT NUMBER: WCRS(23)	
FILE NAME: zl3g542cp.dgn	PLOT DATE: 4/30/2019
PROJECT LEADER: A.P. GUYETTE	DRAWN BY: K.C. BARRY
DESIGNED BY: VHB	CHECKED BY: VHB
MAIN / PRINTER'S COLD PLANING PLAN	SHEET 26 OF 328



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

PROJECT NAME: MIDDLEBURY	
PROJECT NUMBER: WCRS(23)	
FILE NAME: zl3g542cp.dgn	PLOT DATE: 4/30/2019
PROJECT LEADER: A.P. GUYETTE	DRAWN BY: K.C. BARRY
DESIGNED BY: VHB	CHECKED BY: VHB
MERCHANTS ROW COLD PLANING PLAN	SHEET 27 OF 328



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

PROJECT NAME: MIDDLEBURY	
PROJECT NUMBER: WCRS(23)	
FILE NAME: zl3g542cp.dgn	PLOT DATE: 4/30/2019
PROJECT LEADER: A.P. GUYETTE	DRAWN BY: R.H. BARNES
DESIGNED BY: VHB	CHECKED BY: VHB
BATTELL BLOCK COLD PLANING PLAN	SHEET 28 OF 328

VHB 57603

GENERAL INFORMATION

SYMBOLOGY LEGEND NOTE

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

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

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

COMMON TOPOGRAPHIC POINT SYMBOLS

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

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

PROPOSED GEOMETRY CODES

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

UTILITY SYMBOLOGY

UNDERGROUND UTILITIES

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.
	UTILITY POLE GUY WIRE

PROJECT CONSTRUCTION SYMBOLOGY

PROJECT DESIGN & LAYOUT SYMBOLOGY

CZ	CLEAR ZONE
	PLAN LAYOUT MATCHLINE

PROJECT CONSTRUCTION FEATURES

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

CONVENTIONAL BOUNDARY SYMBOLOGY

BOUNDARY LINES

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

EPSC LAYOUT PLAN SYMBOLOGY

EPSC MEASURES

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

SEE EPSC DETAIL SHEETS FOR ADDITIONAL SYMBOLOGY

ENVIRONMENTAL RESOURCES

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

ARCHEOLOGICAL & HISTORIC

ARCH	ARCHEOLOGICAL BOUNDARY
HISTORIC DIST	HISTORIC DISTRICT BOUNDARY
HISTORIC	HISTORIC AREA
H	HISTORIC STRUCTURE

CONVENTIONAL TOPOGRAPHIC SYMBOLOGY

EXISTING FEATURES

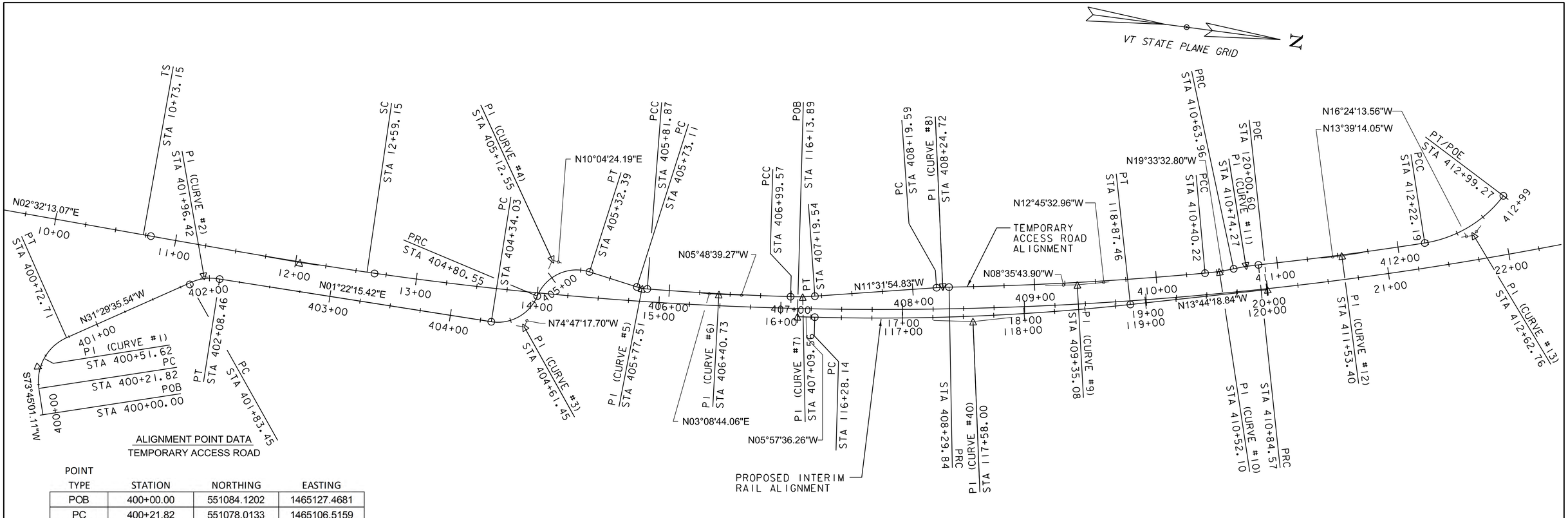
	ROAD EDGE PAVEMENT
	ROAD EDGE GRAVEL
	DRIVEWAY EDGE
	DITCH
	FOUNDATION
	FENCE (EXISTING)
	FENCE WOOD POST
	FENCE STEEL POST
	GARDEN
	ROAD GUARDRAIL
	RAILROAD TRACKS
	CULVERT (EXISTING)
	STONE WALL
	WALL
	WOOD LINE
	BRUSH LINE
	HEDGE
	BODY OF WATER EDGE
	LEDGE EXPOSED

vhb

PROJECT NAME: MIDDLEBURY
PROJECT NUMBER: WCRS(23)

FILE NAME: zl3g542LegendSheet.dgn
PROJECT LEADER: A.P. GUYETTE
DESIGNED BY: M.LONGSTREET
CONVENTIONAL SYMBOLOGY LEGEND

PLOT DATE: 4/30/2019
DRAWN BY: M.LONGSTREET
CHECKED BY: M.LONGSTREET
SHEET 29 OF 328



ALIGNMENT POINT DATA
TEMPORARY ACCESS ROAD

POINT TYPE	STATION	NORTHING	EASTING
POB	400+00.00	551084.1202	1465127.4681
PC	400+21.82	551078.0133	1465106.5159
PI	400+51.62	551069.6762	1465077.9119
PT	400+72.71	551095.0818	1465062.3474
PC	400+84.89	551190.7414	1465003.7428
PI	401+96.10	551200.2977	1464997.8882
PT	402+06.69	551211.5016	1464998.1563
PC	404+34.03	551438.7782	1465003.5956
PI	404+61.45	551466.1937	1465004.2517
PRC	404+80.55	551473.3893	1464977.7891
PI	405+12.55	551481.7841	1464946.9162
PT	405+32.39	551513.2848	1464952.5122
PC	405+73.11	551553.3734	1464959.6339
PI	405+77.51	551557.7087	1464960.4040
PCC	405+81.87	551562.1052	1464960.1624
PI	406+40.73	551620.8735	1464956.9328
PCC	406+99.57	551679.4281	1464950.9737
PI	407+09.56	551689.3700	1464949.9620
PT	407+19.54	551699.1616	1464947.9642
PC	408+19.59	551797.1985	1464927.9615
PI	408+24.72	551802.2211	1464926.9367
PRC	408+29.84	551807.2896	1464926.1706
PI	409+35.08	551911.3419	1464910.4425
PCC	410+40.22	552013.9777	1464887.2011
PI	410+52.10	552025.5664	1464884.5769
PRC	410+63.96	552036.7629	1464880.5990
PI	410+74.27	552046.4833	1464877.1456
PRC	410+84.57	552056.5074	1464874.7105
PI	411+53.39	552123.3872	1464858.4639
PCC	412+22.19	552189.4106	1464839.0275
PI	412+62.76	552228.3251	1464827.5716
PT/POE	412+99.27	552248.2609	1464792.2426

CURVE #1
PI STA 400+51.62
N = 551069.6762
E = 1465077.9119
DELTA = 74°45'23"
Dc = 146°54'44"
R = 39.00'
L = 50.89'
T = 29.79'
E = 10.08'

CURVE #2
PI STA 401+96.10
N = 551200.2977
E = 1464997.8882
DELTA = 32°51'51"
Dc = 150°46'42"
R = 38.00'
L = 21.80'
T = 11.21'
E = 1.62'

CURVE #3
PI STA 404+61.45
N = 551466.1937
E = 1465004.2517
DELTA = 76°09'33"
Dc = 163°42'08"
R = 35.00'
L = 46.52'
T = 27.42'
E = 9.46'

CURVE #4
PI STA 405+12.55
N = 551481.7841
E = 1464946.9162
DELTA = 84°51'42"
Dc = 163°42'08"
R = 35.00'
L = 51.84'
T = 31.99'
E = 12.42'

CURVE #5
PI STA 405+77.51
N = 551557.7087
E = 1464960.4040
DELTA = 13°13'08"
Dc = 150°46'42"
R = 38.00'
L = 8.77'
T = 4.40'
E = 0.25'

CURVE #6
PI STA 406+40.73
N = 551620.8735
E = 1464956.9328
DELTA = 2°39'55"
Dc = 2°15'53"
R = 2530.00'
L = 117.69'
T = 58.86'
E = 0.68'

CURVE #7
PI STA 407+09.56
N = 551689.3700
E = 1464949.9620
DELTA = 5°43'16"
Dc = 28°38'52"
R = 200.00'
L = 19.97'
T = 9.99'
E = 0.25'

CURVE #8
PI STA 408+24.72
N = 551802.2211
E = 1464926.9367
DELTA = 2°56'11"
Dc = 28°38'52"
R = 200.00'
L = 10.25'
T = 5.13'
E = 0.07'

CURVE #9
PI STA 409+35.08
N = 551911.3419
E = 1464910.4425
DELTA = 4°09'49"
Dc = 1°58'45"
R = 2894.99'
L = 210.38'
T = 105.23'
E = 1.91'

CURVE #10
PI STA 410+52.10
N = 552025.5664
E = 1464884.5769
DELTA = 6°47'60"
Dc = 28°38'52"
R = 200.00'
L = 23.74'
T = 11.88'
E = 0.35'

CURVE #11
PI STA 410+74.27
N = 552046.4833
E = 1464877.1456
DELTA = 5°54'19"
Dc = 28°38'52"
R = 200.00'
L = 20.61'
T = 10.32'
E = 0.27'

CURVE #12
PI STA 411+53.40
N = 552123.39
E = 1464858.46
DELTA = 2°45'00"
Dc = 1°59'53"
R = 2867.50'
L = 137.62'
T = 68.82'
E = 0.83'

CURVE #13
PI STA 412+62.76
N = 552228.33
E = 1464827.57
DELTA = 44°09'38"
Dc = 57°17'45"
R = 100.00'
L = 77.07'
T = 40.57'
E = 7.91'

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

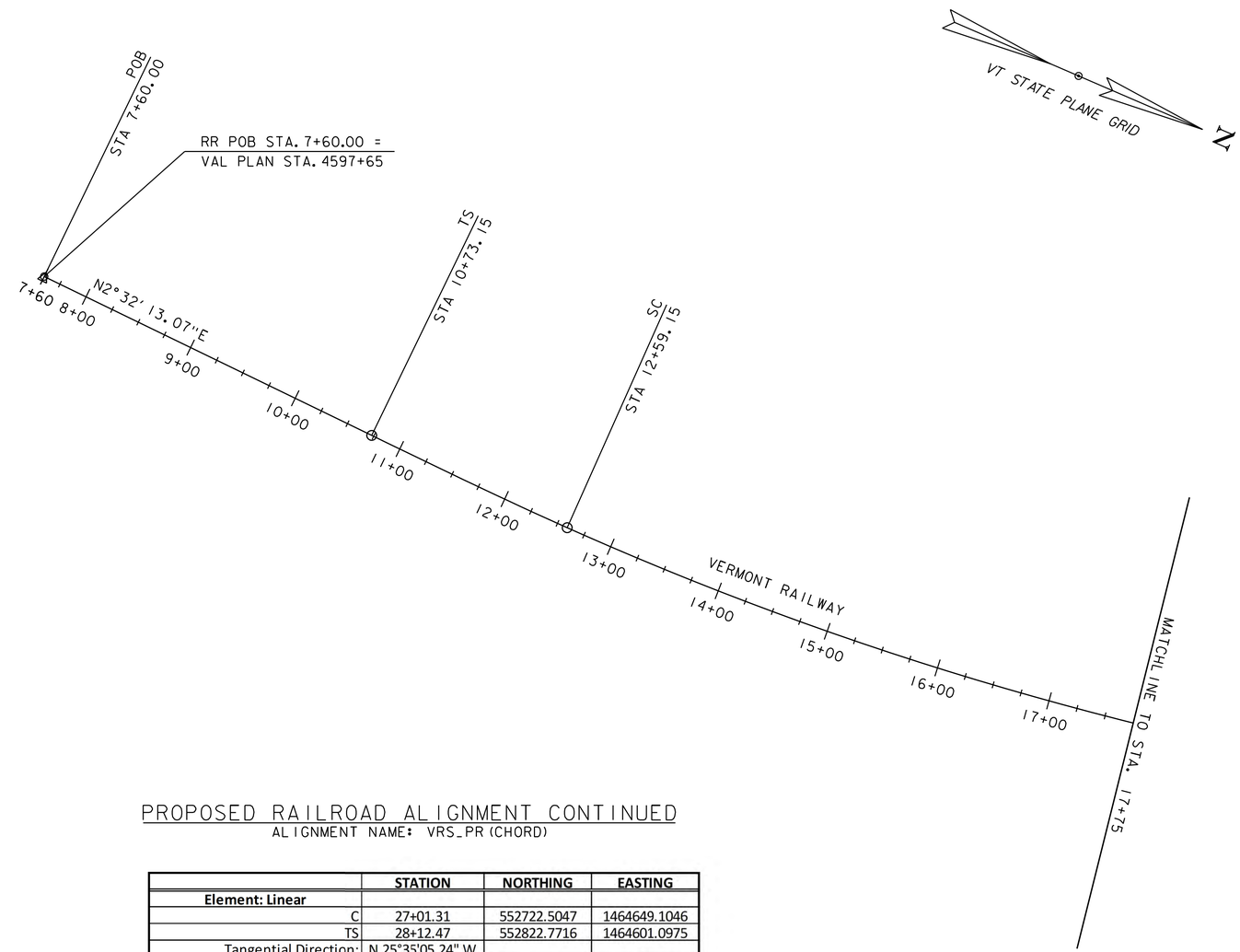
vhb

PROJECT NAME: MIDDLEBURY	
PROJECT NUMBER: WCRS(23)	
FILE NAME: zl3g542align2.dgn	PLOT DATE: 4/30/2019
PROJECT LEADER: A.P. GUYETTE	DRAWN BY: M.F. SUFFEL
DESIGNED BY: D.M. PECK	CHECKED BY: M.E. OOMS
TEMP ACCESS RD ALIGNMENT SHEET	SHEET 30 OF 328

PROPOSED RAILROAD ALIGNMENT

ALIGNMENT NAME: VRS_PR (CHORD)

	STATION	NORTHING	EASTING
Element: Linear			
POB	7+60.00	550833.6431	1464956.5718
TS	10+73.15	551146.4911	1464970.4332
Tangential Direction:	N 2°32'13.07" E		
Tangential Length:	313.15		
Element: Clothoid			
TS	10+73.15	551146.4911	1464970.4332
SPI	11+97.16	551270.3761	1464975.9222
SC	12+59.15	551332.3770	1464976.7052
Entrance Radius:	0		
Exit Radius:	2938.3869		
Length:	186		
Angle:	1°48'48.28"	Left	
Constant:	739.28		
Long Tangent:	124.01		
Short Tangent:	62.01		
Long Chord:	185.99		
Xs:	185.98		
Ys:	1.96		
P:	0.49		
K:	93		
Tangent Direction:	N 2°32'13.07" E		
Radial Direction:	S 87°27'46.93" E		
Chord Direction:	N 1°55'56.99" E		
Radial Direction:	S 89°16'35.22" E		
Tangent Direction:	N 0°43'24.78" E		
Element: Circular			
SC	12+59.15	551332.3770	1464976.7052
PI	18+97.01	551970.1763	1464984.7600
CC		551369.4830	1462038.5525
CS	25+15.31	552553.9120	1464727.6502
Radius:	2938.3869		
Delta:	24°29'41.74"	Left	
Degree of Curvature (Chord):	1°57'00.00"		
Length:	1256.21		
Tangent:	637.85		
Chord:	1246.67		
Middle Ordinate:	66.88		
External:	68.43		
Tangent Direction:	N 0°43'24.78" E		
Radial Direction:	S 89°16'35.22" E		
Chord Direction:	N 11°31'26.09" W		
Radial Direction:	N 66°13'43.04" E		
Tangent Direction:	N 23°46'16.96" W		
V:	40 mph		
Ee:	2.184"		
Ea:	1.5"		
Eu:	0.684"		
Element: Clothoid			
CS	25+15.31	552553.9120	1464727.6502
SPI	25+77.31	552610.6574	1464702.6563
ST	27+01.31	552722.5047	1464649.1046
Entrance Radius:	2938.3869		
Exit Radius:	0		
Length:	186		
Angle:	1°48'48.28"	Left	
Constant:	739.28		
Long Tangent:	124.01		
Short Tangent:	62.01		
Long Chord:	185.99		
Xs:	185.98		
Ys:	1.96		
P:	0.49		
K:	93		
Tangent Direction:	N 23°46'16.96" W		
Radial Direction:	N 66°13'43.04" E		
Chord Direction:	N 24°58'49.16" W		
Radial Direction:	N 64°24'54.76" E		
Tangent Direction:	N 25°35'05.24" W		



PROPOSED RAILROAD ALIGNMENT CONTINUED

ALIGNMENT NAME: VRS_PR (CHORD)

	STATION	NORTHING	EASTING
Element: Linear			
C	27+01.31	552722.5047	1464649.1046
TS	28+12.47	552822.7716	1464601.0975
Tangential Direction:	N 25°35'05.24" W		
Tangential Length:	111.17		

SCALE 1" = 60'-0"
60 0 60

vhb

PROJECT NAME: MIDDLEBURY
PROJECT NUMBER: WCRS(23)

FILE NAME: zl3g542align.dgn
PROJECT LEADER: A.P. GUYETTE
DESIGNED BY: C.J. BOLES
RAIL ALIGNMENT LAYOUTS SHEET (1 OF 3)

PLOT DATE: 4/30/2019
DRAWN BY: K.C. BARRY
CHECKED BY: M.E. OOMS
SHEET 31 OF 328

PROPOSED RAILROAD ALIGNMENT CONTINUED

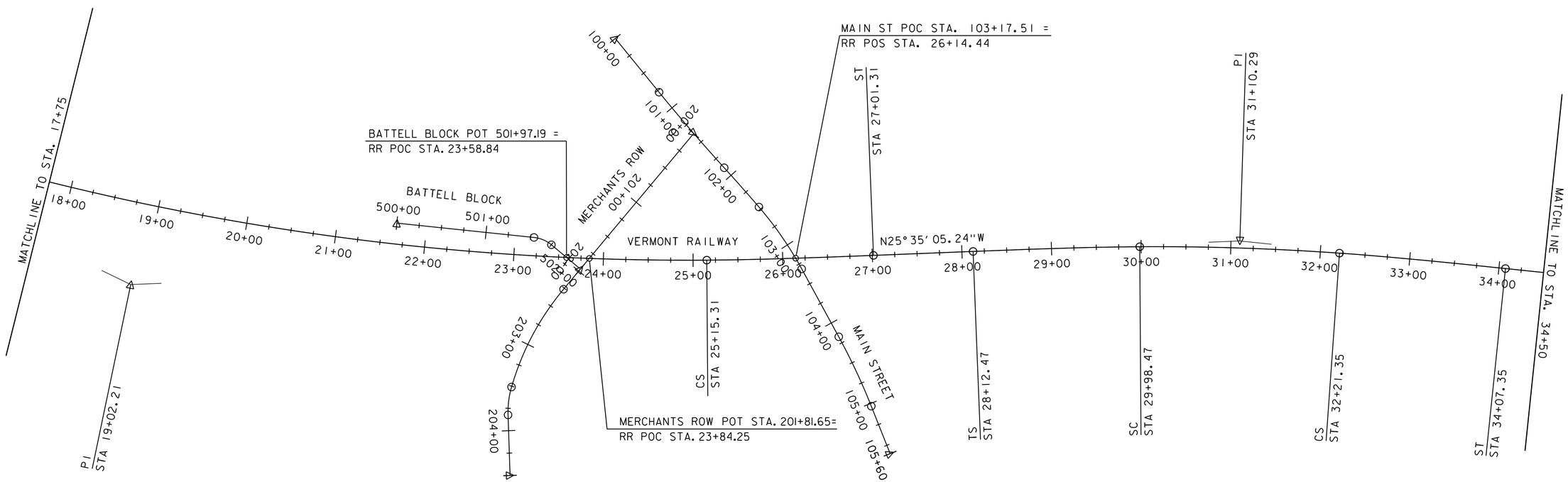
ALIGNMENT NAME: VRS_PR (CHORD)

	STATION	NORTHING	EASTING
Element: Clothoid			
TS	28+12.47	552822.7716	1464601.0975
SPI	29+36.48	552934.6192	1464547.5455
SC	29+98.47	552991.3852	1464522.5976
Entrance Radius:	0		
Exit Radius:	2864.9344		
Length:	186		
Angle:	1°51'35.66"	Right	
Constant:	729.98		
Long Tangent:	124.01		
Short Tangent:	62.01		
Long Chord:	185.99		
Xs:	185.98		
Ys:	2.01		
P:	0.5		
K:	93		
Tangent Direction:	N 25°35'05.24" W		
Radial Direction:	N 64°24'54.76" E		
Chord Direction:	N 24°57'53.37" W		
Radial Direction:	N 66°16'30.42" E		
Tangent Direction:	N 23°43'29.58" W		

PROPOSED RAILROAD ALIGNMENT CONTINUED

ALIGNMENT NAME: VRS_PR (CHORD)

	STATION	NORTHING	EASTING
Element: Circular			
SC	29+98.47	552991.3852	1464522.5976
PI	31+09.97	553093.4608	1464477.7367
CC		554144.0784	1467145.4106
CS	32+21.35	553198.7141	1464440.9447
Radius:	2864.9344		
Delta:	4°27'26.88"	Right	
Degree of Curvature (Chord):	2°00'00.00"		
Length:	222.88		
Tangent:	111.5		
Chord:	222.83		
Middle Ordinate:	2.17		
External:	2.17		
Tangent Direction:	N 23°43'29.58" W		
Radial Direction:	N 66°16'30.42" E		
Chord Direction:	N 21°29'46.14" W		
Radial Direction:	N 70°43'57.30" E		
Tangent Direction:	N 19°16'02.70" W		
V:	40 mph		
Ee:	2.24"		
Ea:	1.5"		
Eu:	0.74"		



SCALE 1" = 60'-0"

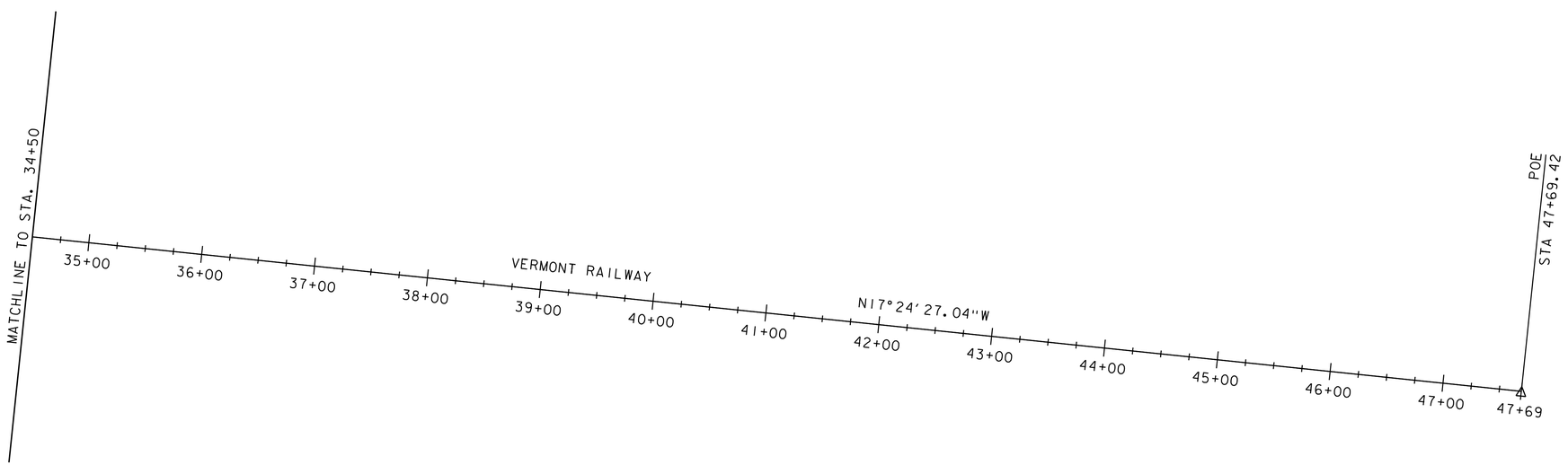
60 0 60

PROJECT NAME: MIDDLEBURY	
PROJECT NUMBER: WCRS(23)	
FILE NAME: zl3g542align.dgn	PLOT DATE: 4/30/2019
PROJECT LEADER: A.P. GUYETTE	DRAWN BY: K.C. BARRY
DESIGNED BY: G.J. BOLES	CHECKED BY: M.E. OOMS
RAIL ALIGNMENT LAYOUT SHEET (2 OF 3)	SHEET 32 OF 328

PROPOSED RAILROAD ALIGNMENT CONTINUED

ALIGNMENT NAME: VRS_PR (CHORD)

	STATION	NORTHING	EASTING
Element: Clothoid			
CS	32+21.35	553198.7141	1464440.9447
SPI	32+83.35	553257.2473	1464420.4840
ST	34+07.35	553375.5748	1464383.3854
Entrance Radius:	2864.9344		
Exit Radius:	0		
Length:	186		
Angle:	1°51'35.66"	Right	
Constant:	729.98		
Long Tangent:	124.01		
Short Tangent:	62.01		
Long Chord:	185.99		
Xs:	185.98		
Ys:	2.01		
P:	0.5		
K:	93		
Tangent Direction:	N 19°16'02.70" W		
Radial Direction:	N 70°43'57.30" E		
Chord Direction:	N 18°01'38.91" W		
Radial Direction:	N 72°35'32.96" E		
Tangent Direction:	N 17°24'27.04" W		
Element: Linear			
ST	34+07.35	553375.5748	1464383.3854
POE	47+69.42	554675.2686	1463975.8989
Tangential Direction:	N 17°24'27.04" W		
Tangential Length:	1362.08		



SCALE 1" = 60'-0"

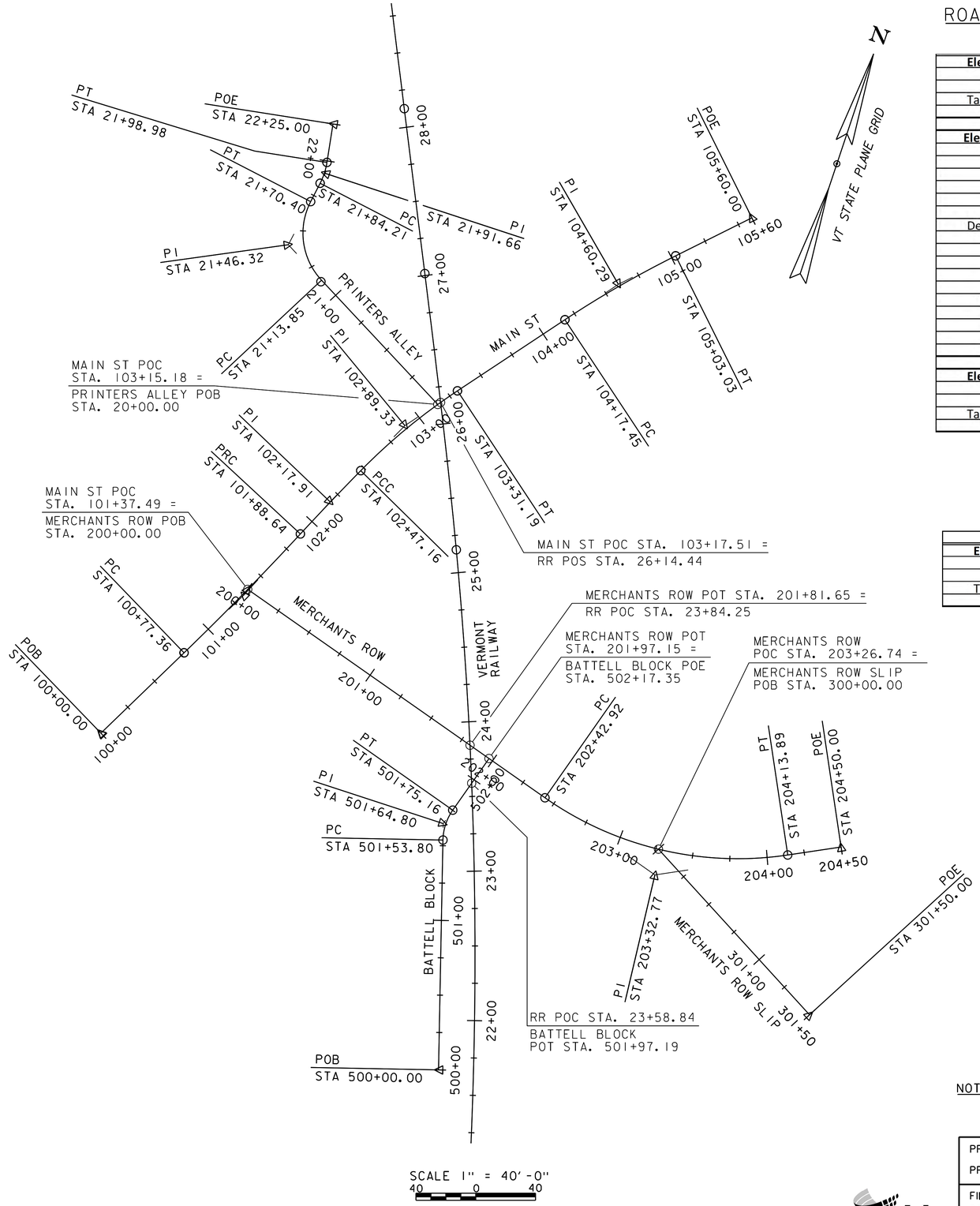
60 0 60

PROJECT NAME: MIDDLEBURY	
PROJECT NUMBER: WCRS(23)	
FILE NAME: z13g542align.dgn	PLOT DATE: 4/30/2019
PROJECT LEADER: A.P. GUYETTE	DRAWN BY: K.C. BARRY
DESIGNED BY: G.J. BOLES	CHECKED BY: M.E. OOMS
RAIL ALIGNMENT LAYOUT SHEET (3 OF 3)	SHEET 33 OF 328

ROADWAY ALIGNMENT - MAIN STREET

ALIGNMENT NAME: Main Street PR

Element: Linear			
POB	100+00.00	552362.2265	1464540.9581
PC	100+77.36	552430.8372	1464576.6946
Tangential Direction:	N 27°30'47.40" E		
Tangential Length:	77.36		
Element: Circular			
PC	100+77.36	552430.8372	1464576.6946
PI	101+33.02	552480.1992	1464602.4052
CC		553354.7421	1462802.8852
PRC	101+88.64	552530.9146	1464625.3308
Radius:	2000		
Delta:	3°11'17.00"	Left	
Degree of Curvature	2°51'53.24"		
Length:	111.28		
Tangent:	55.66		
Chord:	111.27		
Middle Ordinate:	0.77		
External:	0.77		
Tangent Direction:	N 27°30'47.40" E		
Radial Direction:	S 62°29'12.60" E		
Chord Direction:	N 25°55'08.90" E		
Radial Direction:	S 65°40'29.59" E		
Tangent Direction:	N 24°19'30.41" E		
Element: Circular			
PRC	101+88.64	552530.9146	1464625.3308
PI	102+17.91	552557.5780	1464637.3839
CC		551707.0870	1466447.7765
PCC	102+47.16	552583.8775	1464650.2119
Radius:	2000		
Delta:	1°40'35.12"	Right	
Degree of Curvature	2°51'53.24"		
Length:	58.52		
Tangent:	29.26		
Chord:	58.52		
Middle Ordinate:	0.21		
External:	0.21		
Tangent Direction:	N 24°19'30.41" E		
Radial Direction:	S 65°40'29.59" E		
Chord Direction:	N 25°09'47.97" E		
Radial Direction:	S 63°59'54.47" E		
Tangent Direction:	N 26°00'05.53" E		
Element: Circular			
PCC	102+47.16	552583.8775	1464650.2119
PI	102+89.33	552621.7803	1464668.6996
CC		552408.5194	1465009.7248
PT	103+31.19	552654.9944	1464694.6850
Radius:	400		
Delta:	12°02'12.20"	Right	
Degree of Curvature	14°19'26.20"		
Length:	84.03		
Tangent:	42.17		
Chord:	83.88		
Middle Ordinate:	2.2		
External:	2.22		
Tangent Direction:	N 26°00'05.53" E		
Radial Direction:	S 63°59'54.47" E		
Chord Direction:	N 32°01'11.63" E		
Radial Direction:	S 51°57'42.27" E		
Tangent Direction:	N 38°02'17.73" E		
Element: Linear			
PT	103+31.19	552654.9944	1464694.6850
PC	104+17.45	552722.9276	1464747.8333
Tangential Direction:	N 38°02'17.73" E		
Tangential Length:	86.25		
Element: Circular			
PC	104+17.45	552722.9276	1464747.8333
PI	104+60.29	552756.6736	1464774.2349
CC		552291.5963	1465299.1530
PT	105+03.03	552786.9477	1464804.5552
Radius:	700		
Delta:	7°00'19.30"	Right	
Degree of Curvature	8°11'06.40"		
Length:	85.59		
Tangent:	42.85		
Chord:	85.53		
Middle Ordinate:	1.31		
External:	1.31		
Tangent Direction:	N 38°02'17.73" E		
Radial Direction:	S 51°57'42.27" E		
Chord Direction:	N 41°32'27.38" E		
Radial Direction:	S 44°57'22.97" E		
Tangent Direction:	N 45°02'37.03" E		
Element: Linear			
PT	105+03.03	552786.9477	1464804.5552
POE	105+60.00	552827.1979	1464844.8667
Tangential Direction:	N 45°02'37.03" E		
Tangential Length:	56.97		



ROADWAY ALIGNMENT - MERCHANTS ROW

ALIGNMENT NAME: Merchants Row One Way PR

Element: Linear			
POB	200+00.00	552484.5772	1464603.6664
PC	202+42.92	552415.3804	1464836.5181
Tangential Direction:	S 73°26'58.46" E		
Tangential Length:	242.92		
Element: Circular			
PC	202+42.92	552415.3804	1464836.5181
PI	203+32.77	552389.7848	1464922.6488
CC		552631.0585	1464900.6114
PT	204+13.89	552430.5606	1465002.7173
Radius:	225		
Delta:	43°32'18.33"	Left	
Degree of Curvature:	25°27'53.25"		
Length:	170.97		
Tangent:	89.85		
Chord:	166.89		
Middle Ordinate:	16.05		
External:	17.28		
Tangent Direction:	S 73°26'58.46" E		
Radial Direction:	S 16°33'01.54" W		
Chord Direction:	N 84°46'52.38" E		
Radial Direction:	S 26°59'16.78" E		
Tangent Direction:	N 63°00'43.22" E		
Element: Linear			
PT	204+13.89	552430.5606	1465002.7173
POE	204+50.00	552446.9471	1465034.8942
Tangential Direction:	N 63°00'43.22" E		
Tangential Length:	36.11		

ROADWAY ALIGNMENT - MERCHANTS ROW SLIP LANE

ALIGNMENT NAME: Merchants Row Slip PR

	STATION	NORTHING	EASTING
Element: Linear			
POB	300+00.00	552406.8464	1464919.4247
POE	301+50.00	552333.8048	1465050.4397
Tangential Direction:	S 60°51'36.35" E		
Tangential Length:	150.00		

NOTE: SEE NEXT SHEET FOR BATTELL BLOCK AND MERCHANTS ROW SLIP ALIGNMENT INFORMATION NOT SHOWN.

PROJECT NAME: MIDDLEBURY
PROJECT NUMBER: WCRS(23)

FILE NAME: zl3g542align.dgn
PROJECT LEADER: A.P. GUYETTE
DESIGNED BY: D.M. PECK
ROADWAY ALIGNMENT LAYOUT SHEET (1 OF 2)
PLOT DATE: 4/30/2019
DRAWN BY: K.C. BARRY
CHECKED BY: VHB
SHEET 34 OF 328

ROADWAY ALIGNMENT - PRINTERS ALLEY

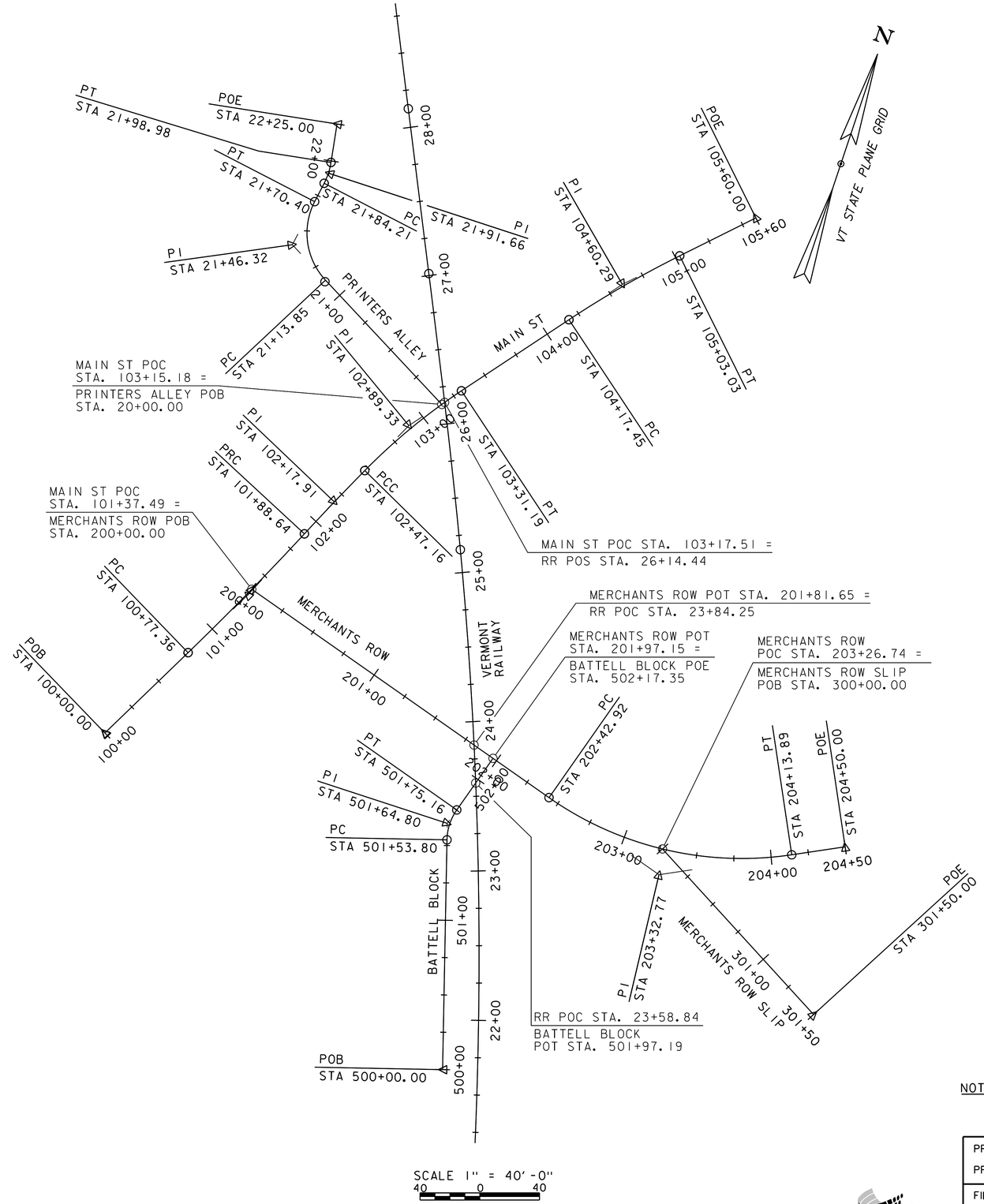
ALIGNMENT NAME: Printers Alley

Element: Linear			
POB	20+00.00	552642.1868	1464685.0719
PC	21+13.85	552696.3787	1464584.9501
Tangential Direction:	N 61°34'30.24" W		
Tangential Length:	113.85		
Element: Circular			
PC	21+13.85	552696.3787	1464584.9501
PI	21+46.32	552711.8351	1464556.3939
CC		552736.8330	1464606.8464
PT	21+70.40	552743.9184	1464561.3954
Radius:	46		
Delta:	70°26'08.01"	Right	
Degree of Curvature	124°33'21.75"		
Length:	56.55		
Tangent:	32.47		
Chord:	53.06		
Middle Ordinate:	8.42		
External:	10.31		
Tangent Direction:	N 61°34'30.24" W		
Radial Direction:	N 28°25'29.76" E		
Chord Direction:	N 26°21'26.24" W		
Radial Direction:	S 81°08'22.23" E		
Tangent Direction:	N 8°51'37.77" E		
Element: Linear			
PT	21+70.40	552743.9184	1464561.3954
PC	21+84.21	552757.5708	1464563.5237
Tangential Direction:	N 8°51'37.77" E		
Tangential Length:	13.82		
Element: Circular			
PC	21+84.21	552757.5708	1464563.5237
PI	21+91.66	552764.9313	1464564.6711
CC		552764.6562	1464518.0726
PT	21+98.98	552772.2777	1464563.4368
Radius:	46		
Delta:	18°23'50.99"	Left	
Degree of Curvature	124°33'21.75"		
Length:	14.77		
Tangent:	7.45		
Chord:	14.71		
Middle Ordinate:	0.59		
External:	0.6		
Tangent Direction:	N 8°51'37.77" E		
Radial Direction:	S 81°08'22.23" E		
Chord Direction:	N 0°20'17.73" W		
Radial Direction:	N 80°27'46.78" E		
Tangent Direction:	N 9°32'13.22" W		
Element: Linear			
PT	21+98.98	552772.2777	1464563.4368
POE	22+25.00	552797.9319	1464559.1268
Tangential Direction:	N 9°32'13.22" W		
Tangential Length:	26.01		

ROADWAY ALIGNMENT - BATTELL BLOCK

ALIGNMENT NAME: Battell Block PR

	STATION	NORTHING	EASTING
Element: Linear			
POB	500+00.00	552220.1564	1464826.6552
PC	501+53.80	552366.9404	1464780.7238
Tangential Direction:	N 17°22'33.09" W		
Tangential Length:	153.8		
Element: Circular			
PC	501+53.80	552366.9404	1464780.7238
PI	501+64.80	552377.4401	1464777.4383
CC		552377.6914	1464815.0810
PT	501+75.16	552387.9827	1464780.5833
Radius:	36		
Delta:	33°59'12.11"	Right	
Degree of Curvature	159°09'17.80"		
Length:	21.35		
Tangent:	11		
Chord:	21.04		
Middle Ordinate:	1.57		
External:	1.64		
Tangent Direction:	N 17°22'33.09" W		
Radial Direction:	N 72°37'26.91" E		
Chord Direction:	N 0°22'57.04" W		
Radial Direction:	S 73°23'20.98" E		
Tangent Direction:	N 16°36'39.02" E		
Element: Linear			
PT	501+75.16	552387.9827	1464780.5833
POE	502+17.35	552428.4179	1464792.6459
Tangential Direction:	N 16°36'39.02" E		
Tangential Length:	42.2		



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

NOTE: SEE PREVIOUS SHEET FOR MAIN ST AND MERCHANTS ROW ALIGNMENT INFORMATION NOT SHOWN.

PROJECT NAME: MIDDLEBURY
PROJECT NUMBER: WCRS(23)

FILE NAME: z13g542align.dgn
PROJECT LEADER: A.P. GUYETTE
DESIGNED BY: D.M. PECK
ROADWAY ALIGNMENT LAYOUT SHEET (2 OF 2)
PLOT DATE: 4/30/2019
DRAWN BY: K.C. BARRY
CHECKED BY: VHB
SHEET 35 OF 328

PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH
STA. 100+85, LT - 21+29, LT
STA. 101+64 - 104+71, RT
STA. 21+95, RT - 104+16, LT
STA. 21+44 - 21+64, LT

PORTLAND CEMENT CONCRETE SIDEWALK, 8 INCH
STA. 103+26 - 103+33, LT
STA. 103+28 - 103+35, RT

SPECIAL PROVISION (CONCRETE BACKED VERTICAL GRANITE CURB)
STA. 101+63 - 102+81, RT
STA. 100+85, LT - 21+29, LT
SL STA. 21+43, - 21+63, LT
STA. 103+13.9 - 104+66, RT
SL STA. 20+35.2 - 22+08, RT
STA. 103+46.1- 104+34, LT

CAST-IN-PLACE CONCRETE CURB, TYPE B
STA. 20+28.6 - 20+35.2, RT
STA. 102+81.0 - 102+83.4, RT
STA. 103+11.7 - 103+13.9, RT
STA. 103+43.7 - 103+46.1, LT

SOLID ROCK EXCAVATION (SIDEWALK REMOVAL)
STA. 101+63 - 102+51, RT
STA. 100+85 - 102+90, LT
STA. 103+15 - 104+71, RT
STA. 103+53 - 104+16, LT

SOLID ROCK EXCAVATION (CONCRETE UNDER ROADWAY)
STA. 100+85 - 101+85, RT & LT

REMOVAL OF EXISTING CURB
STA. 100+85 - 102+90, LT
STA. 101+63 - 102+51, RT
STA. 103+15 - 104+66, RT
STA. 103+53 - 104+34, LT

SPECIAL PROVISION (CONCRETE RETAINING WALL)
STA. 21+38 - 21+86, RT

BOLLARDS
STA. 200+49, LT
STA. 200+51, LT

DETECTABLE WARNING SURFACE
STA. 101+11, RT
STA. 101+13, LT
STA. 101+72, RT
STA. 101+73, LT
STA. 103+29, LT
STA. 103+32, RT
STA. 104+63, RT
STA. 20+32, RT
STA. 20+33, LT
STA. 21+26, LT
STA. 21+45, LT
STA. 21+53, RT
STA. 21+54, LT

SIDEWALK RAMP, TYPE 1
SL STA. 21+22, LT
STA. 21+46, LT

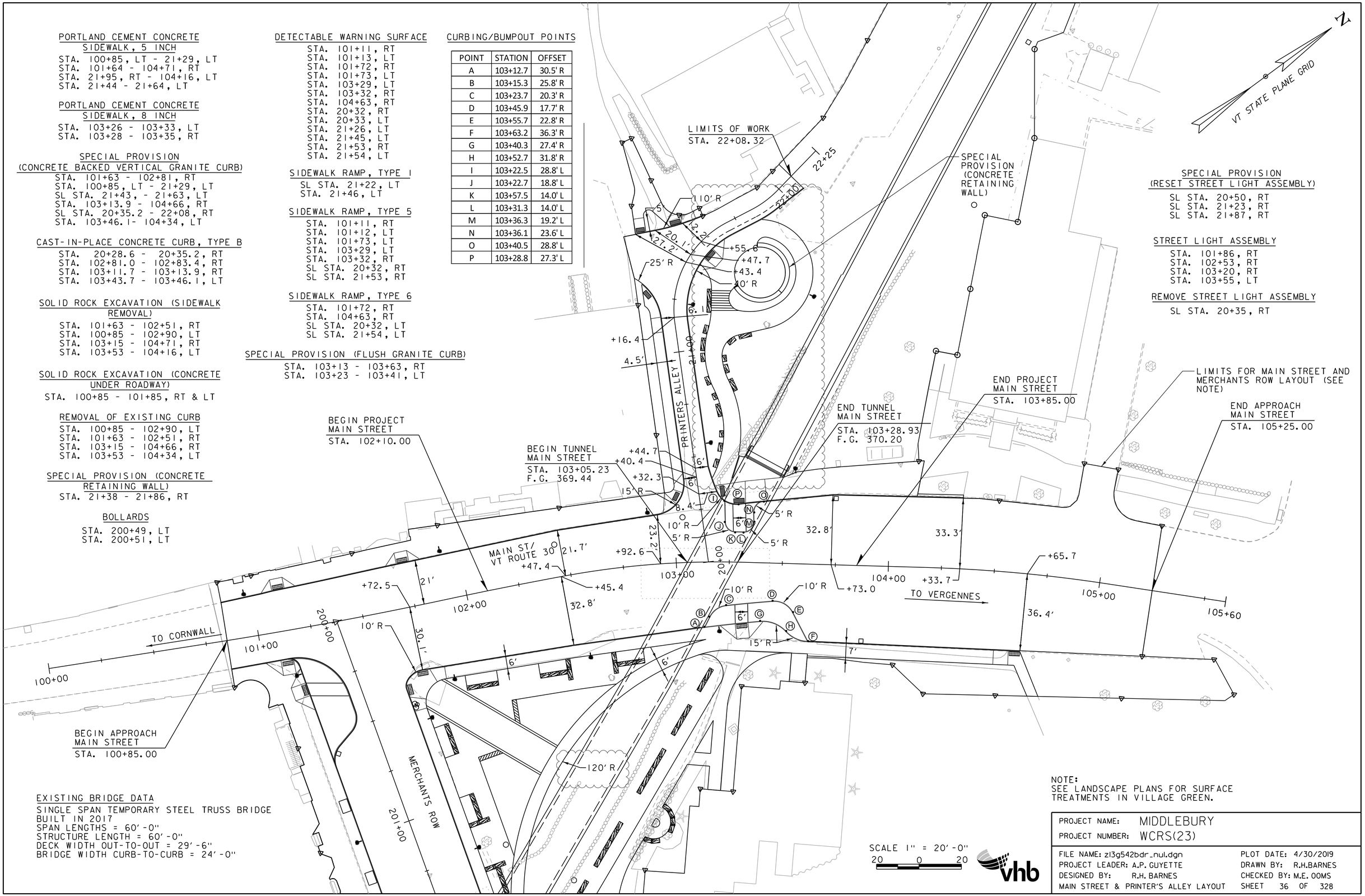
SIDEWALK RAMP, TYPE 5
STA. 101+11, RT
STA. 101+12, LT
STA. 101+73, LT
STA. 103+29, LT
STA. 103+32, RT
SL STA. 20+32, RT
SL STA. 21+53, RT

SIDEWALK RAMP, TYPE 6
STA. 101+72, RT
STA. 104+63, RT
SL STA. 20+32, LT
SL STA. 21+54, LT

SPECIAL PROVISION (FLUSH GRANITE CURB)
STA. 103+13 - 103+63, RT
STA. 103+23 - 103+41, LT

CURBING/BUMPOUT POINTS

POINT	STATION	OFFSET
A	103+12.7	30.5' R
B	103+15.3	25.8' R
C	103+23.7	20.3' R
D	103+45.9	17.7' R
E	103+55.7	22.8' R
F	103+63.2	36.3' R
G	103+40.3	27.4' R
H	103+52.7	31.8' R
I	103+22.5	28.8' L
J	103+22.7	18.8' L
K	103+57.5	14.0' L
L	103+31.3	14.0' L
M	103+36.3	19.2' L
N	103+36.1	23.6' L
O	103+40.5	28.8' L
P	103+28.8	27.3' L

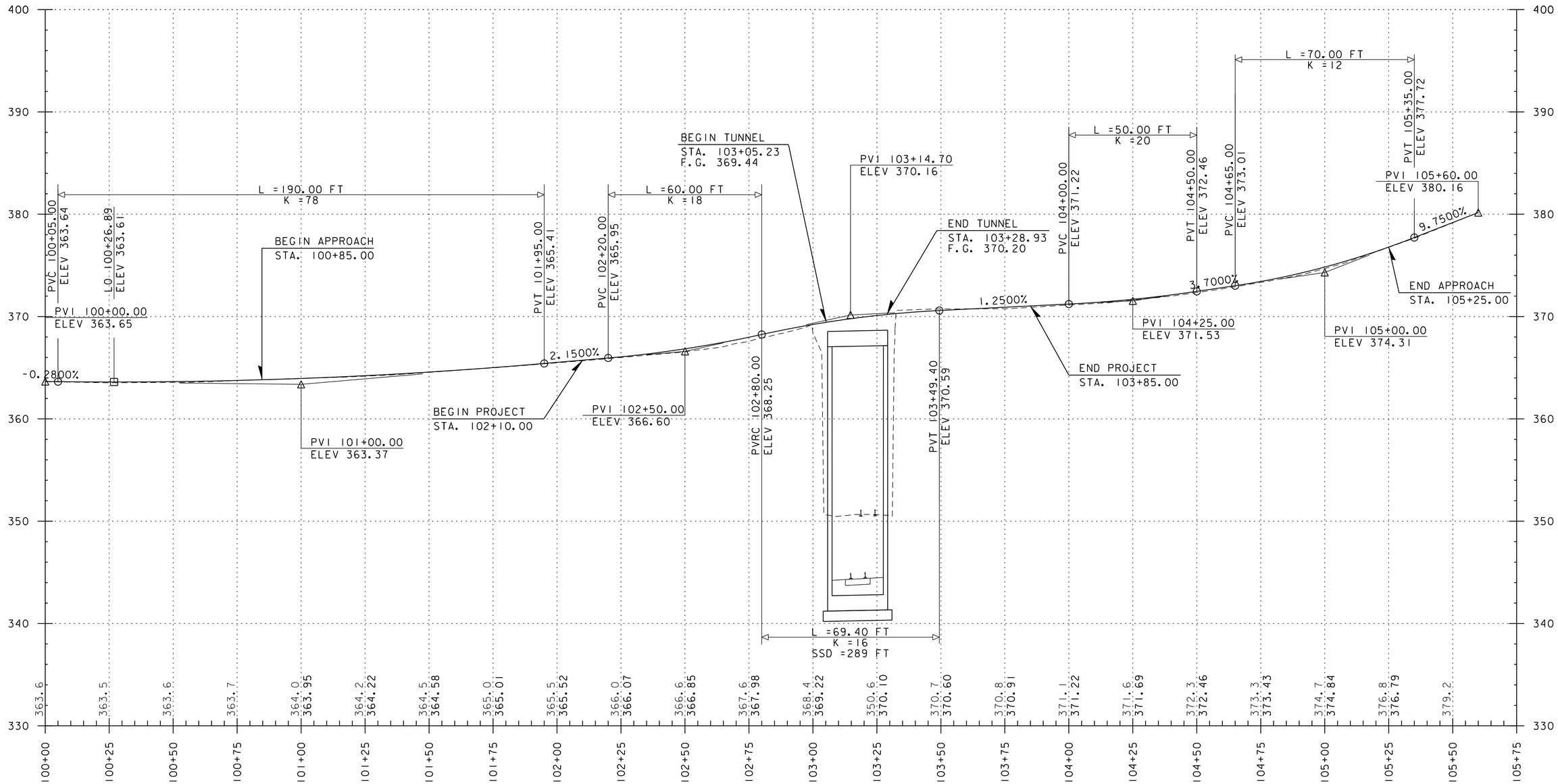


EXISTING BRIDGE DATA
SINGLE SPAN TEMPORARY STEEL TRUSS BRIDGE
BUILT IN 2017
SPAN LENGTHS = 60'-0"
STRUCTURE LENGTH = 60'-0"
DECK WIDTH OUT-TO-OUT = 29'-6"
BRIDGE WIDTH CURB-TO-CURB = 24'-0"

NOTE:
SEE LANDSCAPE PLANS FOR SURFACE TREATMENTS IN VILLAGE GREEN.

PROJECT NAME: MIDDLEBURY
PROJECT NUMBER: WCRS(23)

FILE NAME: zl3g542bdr_nul.dgn
PROJECT LEADER: A.P. GUYETTE
DESIGNED BY: R.H. BARNES
MAIN STREET & PRINTER'S ALLEY LAYOUT
PLOT DATE: 4/30/2019
DRAWN BY: R.H.BARNES
CHECKED BY: M.E. OOMS
SHEET 36 OF 328



MAIN STREET PROFILE

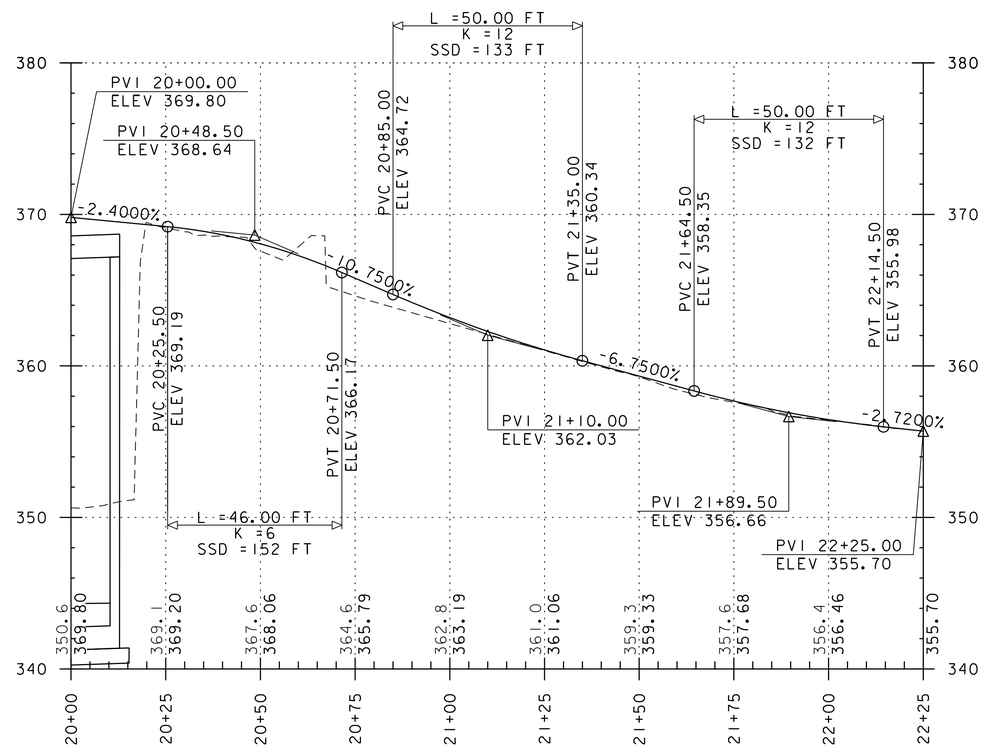
SCALE 1" = 20' HORIZONTAL
1" = 5' VERTICAL

NOTE:

GRADES SHOWN TO THE NEAREST TENTH ARE EXISTING GROUND ALONG ℄
GRADES SHOWN TO THE NEAREST HUNDRETH ARE FINISH GRADE ALONG ℄

PROJECT NAME: MIDDLEBURY	
PROJECT NUMBER: WCRS(23)	
FILE NAME: zl3g542pro_road.dgn	PLOT DATE: 4/30/2019
PROJECT LEADER: A.P. GUYETTE	DRAWN BY: D.M. PECK
DESIGNED BY: D.M. PECK	CHECKED BY: G.L. BAKOS
MAIN STREET PROFILE SHEET	SHEET 37 OF 328

PRINTER'S ALLEY



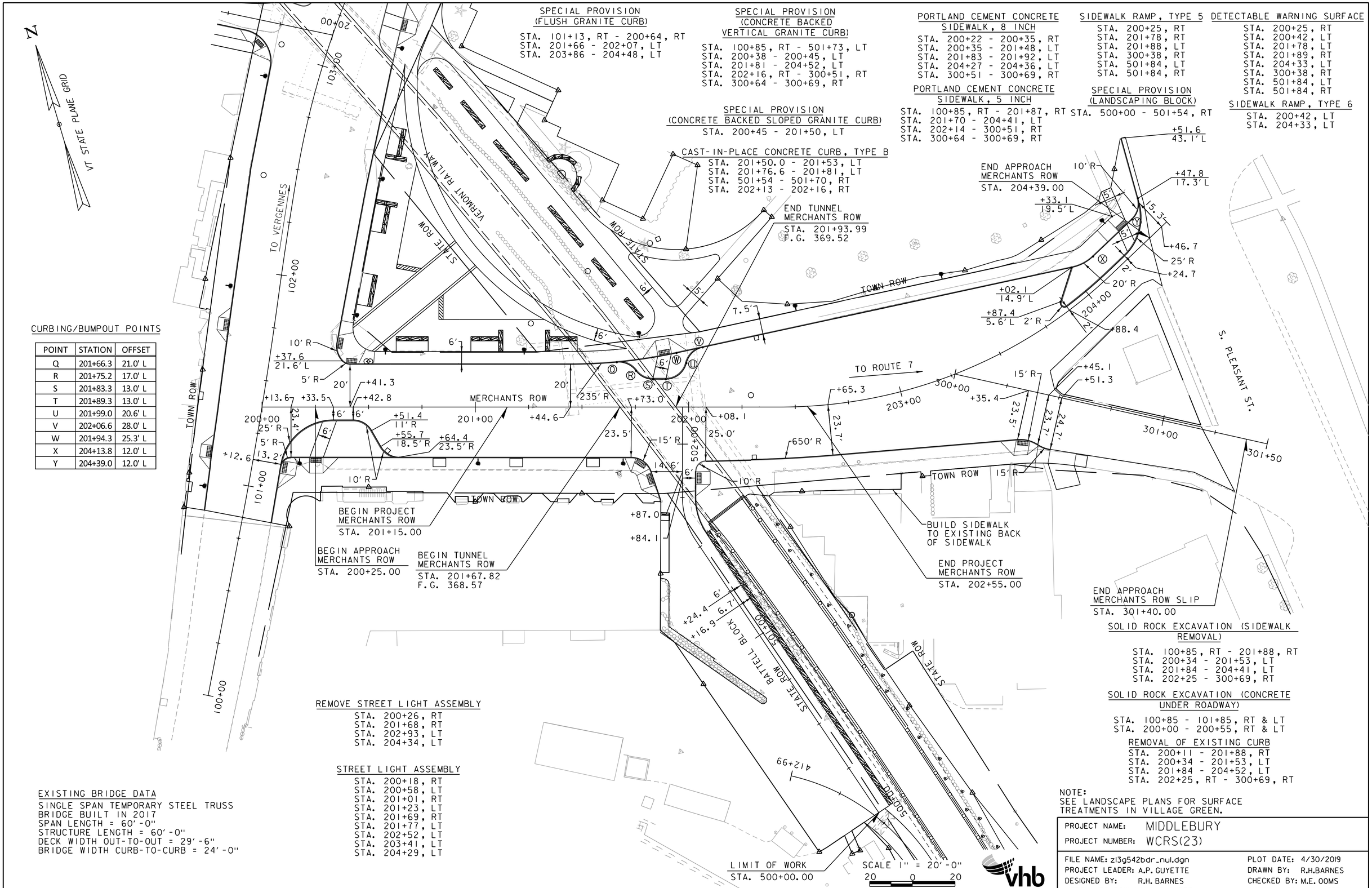
PRINTER'S ALLEY PROFILE

SCALE 1" = 20' HORIZONTAL
1" = 5' VERTICAL

NOTE:

GRADES SHOWN TO THE NEAREST TENTH ARE EXISTING GROUND ALONG ℄
GRADES SHOWN TO THE NEAREST HUNDRETH ARE FINISH GRADE ALONG ℄

PROJECT NAME: MIDDLEBURY	
PROJECT NUMBER: WCRS(23)	
FILE NAME: zl3g542pro_road.dgn	PLOT DATE: 4/30/2019
PROJECT LEADER: A.P. GUYETTE	DRAWN BY: D.M. PECK
DESIGNED BY: D.M. PECK	CHECKED BY: G.L. BAKOS
PRINTER'S ALLEY PROFILE SHEET	SHEET 38 OF 328



SPECIAL PROVISION
(FLUSH GRANITE CURB)

STA. 101+13, RT - 200+64, RT
STA. 201+66 - 202+07, LT
STA. 203+86 - 204+48, LT

SPECIAL PROVISION
(CONCRETE BACKED
VERTICAL GRANITE CURB)

STA. 100+85, RT - 501+73, LT
STA. 200+38 - 200+45, LT
STA. 201+81 - 204+52, LT
STA. 202+16, RT - 300+51, RT
STA. 300+64 - 300+69, RT

SPECIAL PROVISION
(CONCRETE BACKED SLOPED GRANITE CURB)

STA. 200+45 - 201+50, LT

CAST-IN-PLACE CONCRETE CURB, TYPE B

STA. 201+50.0 - 201+53, LT
STA. 201+76.6 - 201+81, LT
STA. 501+54 - 501+70, RT
STA. 202+13 - 202+16, RT

PORTLAND CEMENT CONCRETE
SIDEWALK, 8 INCH

STA. 200+22 - 200+35, RT
STA. 200+35 - 201+48, LT
STA. 201+83 - 201+92, LT
STA. 204+27 - 204+36, LT
STA. 300+51 - 300+69, RT

PORTLAND CEMENT CONCRETE
SIDEWALK, 5 INCH

STA. 100+85, RT - 201+87, RT
STA. 201+70 - 204+41, LT
STA. 202+14 - 300+51, RT
STA. 300+64 - 300+69, RT

SIDEWALK RAMP, TYPE 5

STA. 200+25, RT
STA. 201+78, RT
STA. 201+88, LT
STA. 300+38, RT
STA. 501+84, LT
STA. 501+84, RT

SPECIAL PROVISION
(LANDSCAPING BLOCK)

STA. 500+00 - 501+54, RT

DETECTABLE WARNING SURFACE

STA. 200+25, RT
STA. 200+42, LT
STA. 201+78, LT
STA. 201+89, RT
STA. 204+33, LT
STA. 300+38, RT
STA. 501+84, LT
STA. 501+84, RT

SIDEWALK RAMP, TYPE 6

STA. 200+42, LT
STA. 204+33, LT

CURBING/BUMPOUT POINTS

POINT	STATION	OFFSET
Q	201+66.3	21.0' L
R	201+75.2	17.0' L
S	201+83.3	13.0' L
T	201+89.3	13.0' L
U	201+99.0	20.6' L
V	202+06.6	28.0' L
W	201+94.3	25.3' L
X	204+13.8	12.0' L
Y	204+39.0	12.0' L

REMOVE STREET LIGHT ASSEMBLY

STA. 200+26, RT
STA. 201+68, RT
STA. 202+93, LT
STA. 204+34, LT

STREET LIGHT ASSEMBLY

STA. 200+18, RT
STA. 200+58, LT
STA. 201+01, RT
STA. 201+23, LT
STA. 201+69, RT
STA. 201+77, LT
STA. 202+52, LT
STA. 203+41, LT
STA. 204+29, LT

EXISTING BRIDGE DATA

SINGLE SPAN TEMPORARY STEEL TRUSS
BRIDGE BUILT IN 2017
SPAN LENGTH = 60'-0"
STRUCTURE LENGTH = 60'-0"
DECK WIDTH OUT-TO-OUT = 29'-6"
BRIDGE WIDTH CURB-TO-CURB = 24'-0"

SOLID ROCK EXCAVATION (SIDEWALK REMOVAL)

STA. 100+85, RT - 201+88, RT
STA. 200+34 - 201+53, LT
STA. 201+84 - 204+41, LT
STA. 202+25 - 300+69, RT

SOLID ROCK EXCAVATION (CONCRETE UNDER ROADWAY)

STA. 100+85 - 101+85, RT & LT
STA. 200+00 - 200+55, RT & LT

REMOVAL OF EXISTING CURB

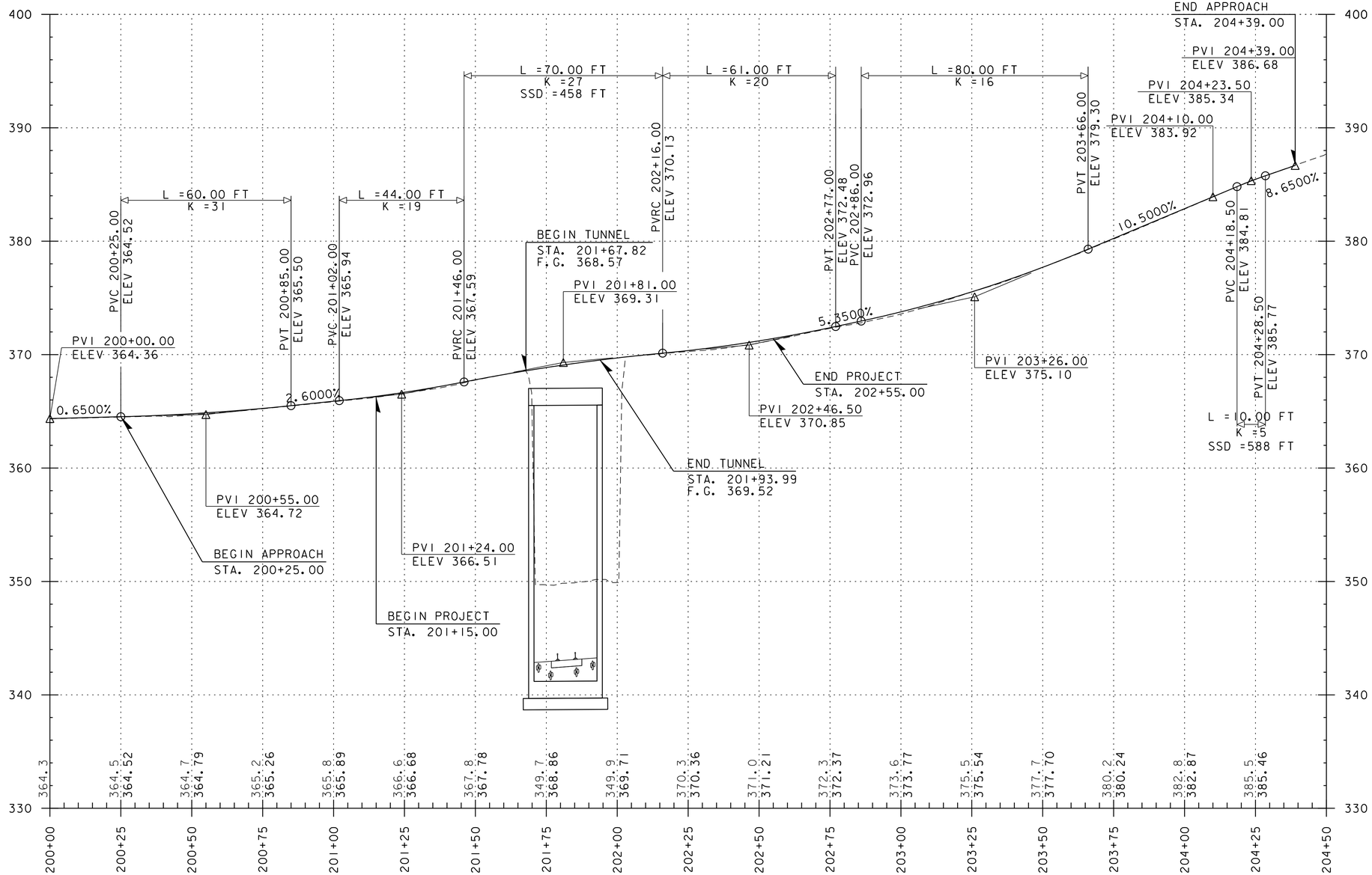
STA. 200+11 - 201+88, RT
STA. 200+34 - 201+53, LT
STA. 201+84 - 204+52, LT
STA. 202+25, RT - 300+69, RT

NOTE:
SEE LANDSCAPE PLANS FOR SURFACE TREATMENTS IN VILLAGE GREEN.

PROJECT NAME: MIDDLEBURY
PROJECT NUMBER: WCRS(23)

FILE NAME: zl3g542bdr_nul.dgn
PROJECT LEADER: A.P. GUYETTE
DESIGNED BY: R.H. BARNES
MERCHANTS ROW LAYOUT SHEET

PLOT DATE: 4/30/2019
DRAWN BY: R.H.BARNES
CHECKED BY: M.E. OOMS
SHEET 39 OF 328



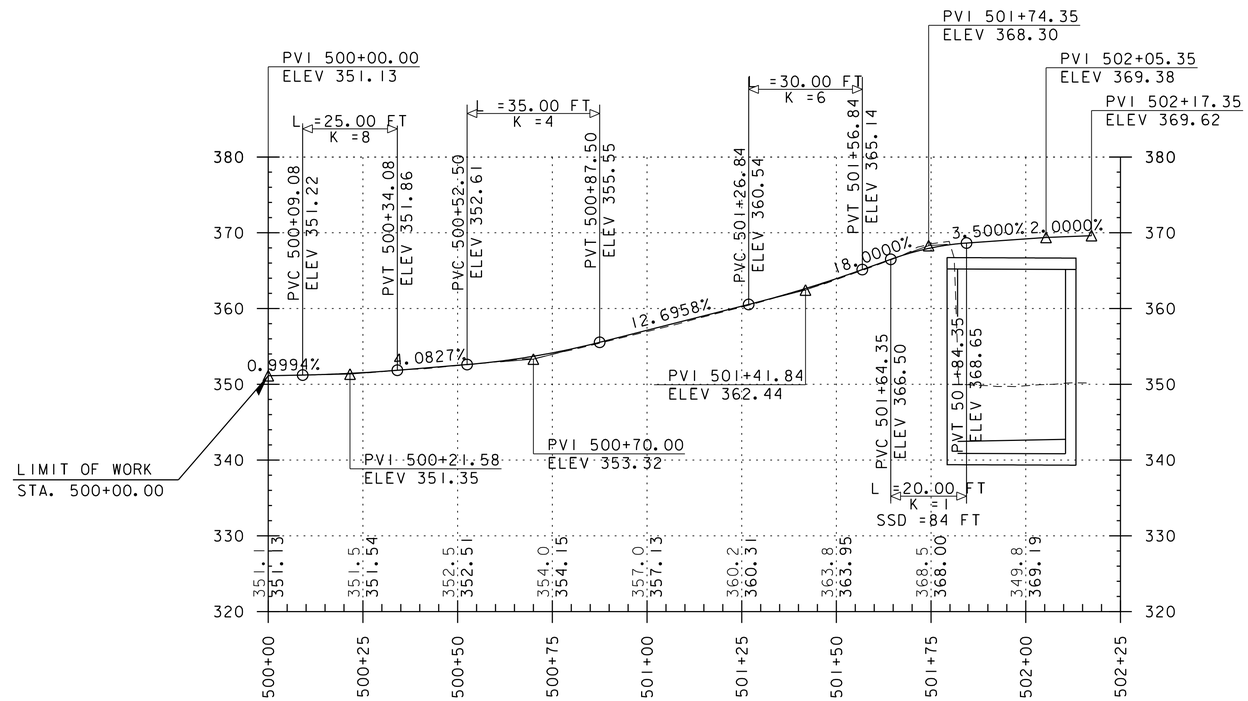
MERCHANTS ROW

SCALE 1" = 20' HORIZONTAL
1" = 5' VERTICAL

NOTE:

GRADES SHOWN TO THE NEAREST TENTH ARE EXISTING GROUND ALONG ℄
GRADES SHOWN TO THE NEAREST HUNDRETH ARE FINISH GRADE ALONG ℄

PROJECT NAME: MIDDLEBURY	
PROJECT NUMBER: WCRS(23)	
FILE NAME: zl3g542pro_road.dgn	PLOT DATE: 4/30/2019
PROJECT LEADER: A.P. GUYETTE	DRAWN BY: D.M. PECK
DESIGNED BY: D.M. PECK	CHECKED BY: G.L. BAKOS
MERCHANTS ROW PROFILE SHEET	SHEET 40 OF 328



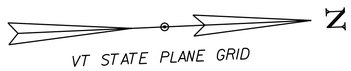
BATTELL BLOCK PROFILE

SCALE 1" = 20' HORIZONTAL
1" = 10' VERTICAL

NOTE:

GRADES SHOWN TO THE NEAREST TENTH ARE EXISTING GROUND ALONG ℄
GRADES SHOWN TO THE NEAREST HUNDRETH ARE FINISH GRADE ALONG ℄

PROJECT NAME: MIDDLEBURY	
PROJECT NUMBER: WCRS(23)	
FILE NAME: zl3g542pro_road.dgn	PLOT DATE: 4/30/2019
PROJECT LEADER: A.P. GUYETTE	DRAWN BY: E.A. FIALA
DESIGNED BY: E.A. FIALA	CHECKED BY: VHB
BATTELL BLOCK PROFILE SHEET	SHEET 41 OF 328



SPECIAL PROVISION (TEMPORARY PAVEMENT)
STA. 9+98 - 11+50, RT

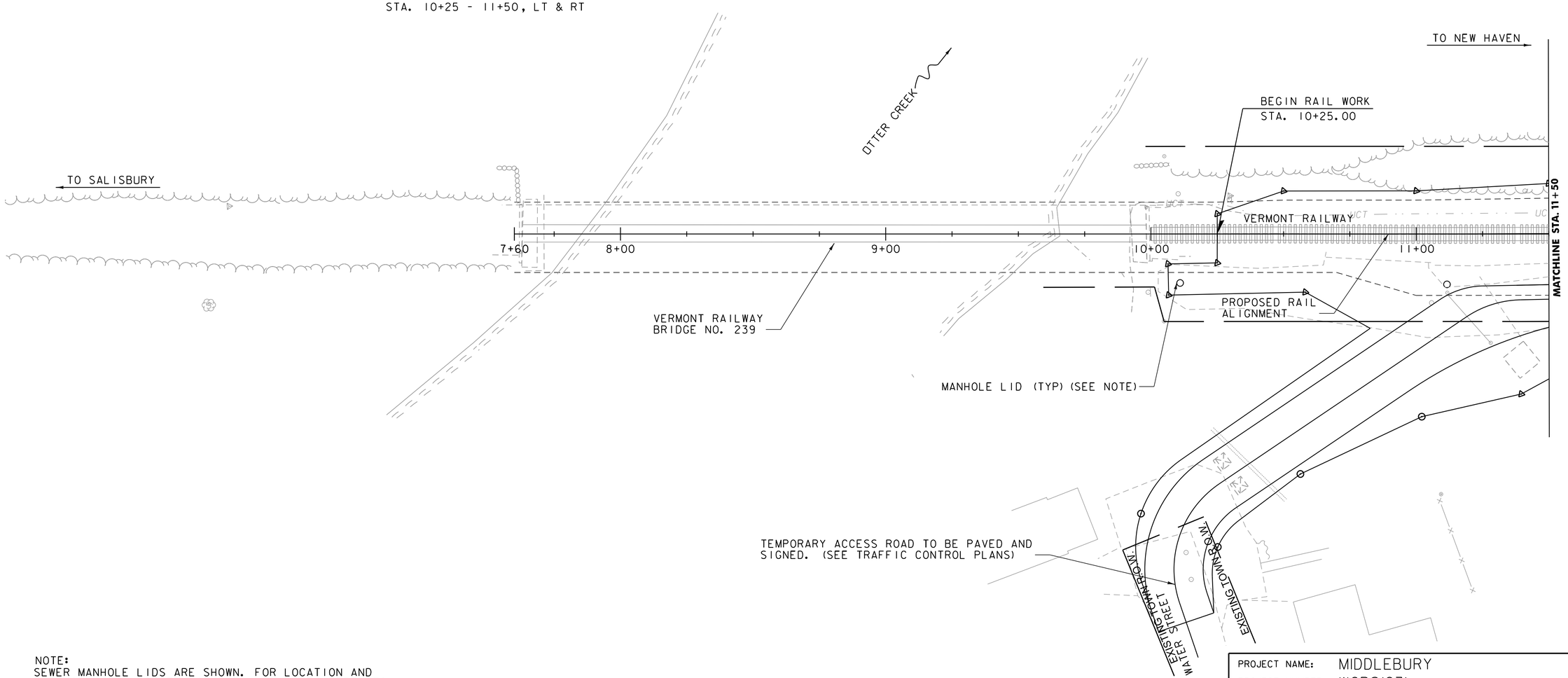
SPECIAL PROVISION (FURNISH AND INSTALL CROSS TIE) (8'-6" TIES)
STA. 10+25 - 11+50, LT & RT

SPECIAL PROVISION (REMOVAL OF CROSS TIES) (8'-6" TIES)
STA. 10+25 - 11+50, LT & RT

SPECIAL PROVISION (CONTINUOUS WELDED RAIL)
STA. 10+25 - 11+50, LT & RT

SPECIAL PROVISION (SURFACE AND ALIGN RAILROAD TRACKS)
STA. 10+25 - 11+50, LT & RT

SPECIAL PROVISION (RAILROAD BALLAST)
STA. 10+25 - 11+50, LT & RT



NOTE:
SEWER MANHOLE LIDS ARE SHOWN. FOR LOCATION AND SIZE OF ACTUAL SEWER MANHOLES AND PIPES REFER TO UTILITY LAYOUT SHEETS.

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

PROJECT NAME: MIDDLEBURY	
PROJECT NUMBER: WCRS(23)	
FILE NAME: zl3g542bdr_nul.dgn	PLOT DATE: 4/30/2019
PROJECT LEADER: A.P. GUYETTE	DRAWN BY: R.H.BARNES
DESIGNED BY: R.H. BARNES	CHECKED BY: M.E. OOMS
RAIL LAYOUT SHEET (1 OF 8)	SHEET 42 OF 328

SPECIAL PROVISION (FURNISH AND INSTALL CROSS TIE) (8'-6" TIES)
STA. 11+50 - 16+50, LT & RT

SPECIAL PROVISION (REMOVAL OF CROSS TIES) (8'-6" TIES)
STA. 11+50 - 16+50, LT & RT

SPECIAL PROVISION (CONTINUOUS WELDED RAIL)
STA. 11+50 - 16+50, LT & RT

SPECIAL PROVISION (SURFACE AND ALIGN RAILROAD TRACKS)
STA. 11+50 - 16+50, LT & RT

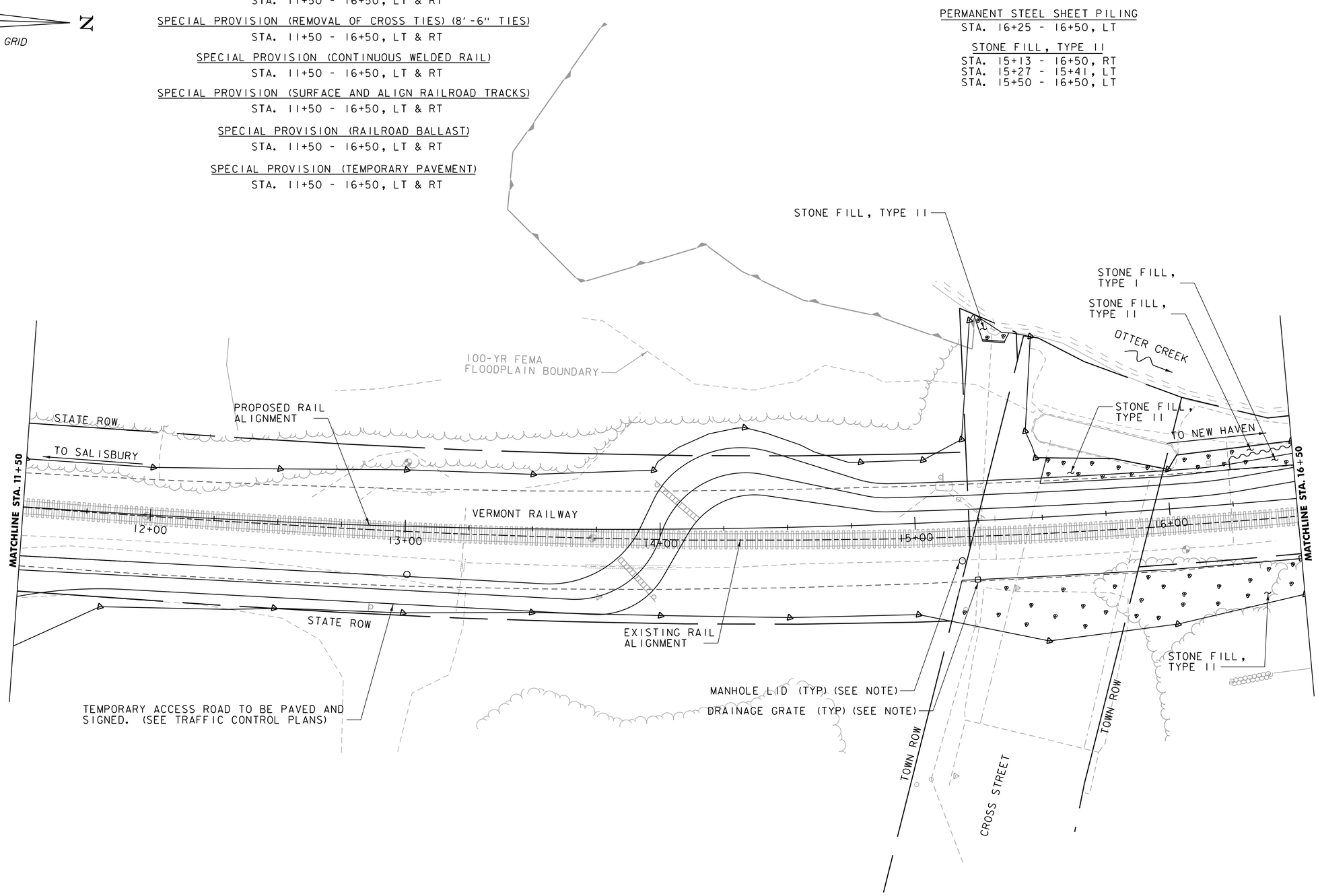
SPECIAL PROVISION (RAILROAD BALLAST)
STA. 11+50 - 16+50, LT & RT

SPECIAL PROVISION (TEMPORARY PAVEMENT)
STA. 11+50 - 16+50, LT & RT

STONE FILL, TYPE I
STA. 16+25 - 16+50, LT

PERMANENT STEEL SHEET PILING
STA. 16+25 - 16+50, LT

STONE FILL, TYPE II
STA. 15+13 - 16+50, RT
STA. 15+27 - 15+41, LT
STA. 15+50 - 16+50, LT



NOTE:
SEWER MANHOLE LIDS AND DRAINAGE GRATES ARE SHOWN. FOR LOCATION AND SIZE OF ACTUAL SEWER AND DRAINAGE MANHOLES AND PIPES REFER TO UTILITY LAYOUT SHEETS AND DRAINAGE LAYOUT SHEETS.

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

vhb

PROJECT NAME: MIDDLEBURY	
PROJECT NUMBER: WCRS(23)	
FILE NAME: zl3g542bdr_nul.dgn	PLOT DATE: 4/30/2019
PROJECT LEADER: A.P. GUYETTE	DRAWN BY: R.H.BARNES
DESIGNED BY: R.H. BARNES	CHECKED BY: M.E. OOMS
RAIL LAYOUT SHEET (2 OF 8)	SHEET 43 OF 328

PRECAST CONCRETE STRUCTURE (LOW U-WALL)
STA. 20+01 - 21+18, LT & RT

PRECAST CONCRETE STRUCTURE (MID-HEIGHT U-WALL)
STA. 21+18 - 21+93, LT & RT

PRECAST CONCRETE STRUCTURE (THICKENED U-WALL)
STA. 21+93 - 22+25, LT & RT

CHAIN-LINK FENCE, 4 FEET
STA. 16+50 - 20+01, RT

SPECIAL PROVISION (CONCRETE RETAINING WALL)
STA. 16+50 - 20+01, RT
STA. 19+35 - 19+90, RT

STONE FILL, TYPE I
STA. 16+50 - 20+03, LT
STA. 19+90 - 22+25, RT

PERMANENT STEEL SHEET PILING
STA. 16+50 - 20+03, LT

STONE FILL, TYPE II
STA. 16+50 - 19+23, RT
STA. 19+81 - 19+97, LT
STA. 20+72 - 21+04, LT
STA. 16+50 - 20+05, LT

SPECIAL PROVISION (LANDSCAPING BLOCK)
STA. 21+66 - 22+25, LT

SPECIAL PROVISION (DECORATIVE PEDESTRIAN RAILING)
STA. 20+01 - 22+25, RT & LT

CHAIN-LINK FENCE, 4 FEET
STA. 19+35 - 19+90, RT

SPECIAL PROVISION (FURNISH AND INSTALL CROSS TIE) (8'-6" TIES)
STA. 16+50 - 22+25, LT & RT

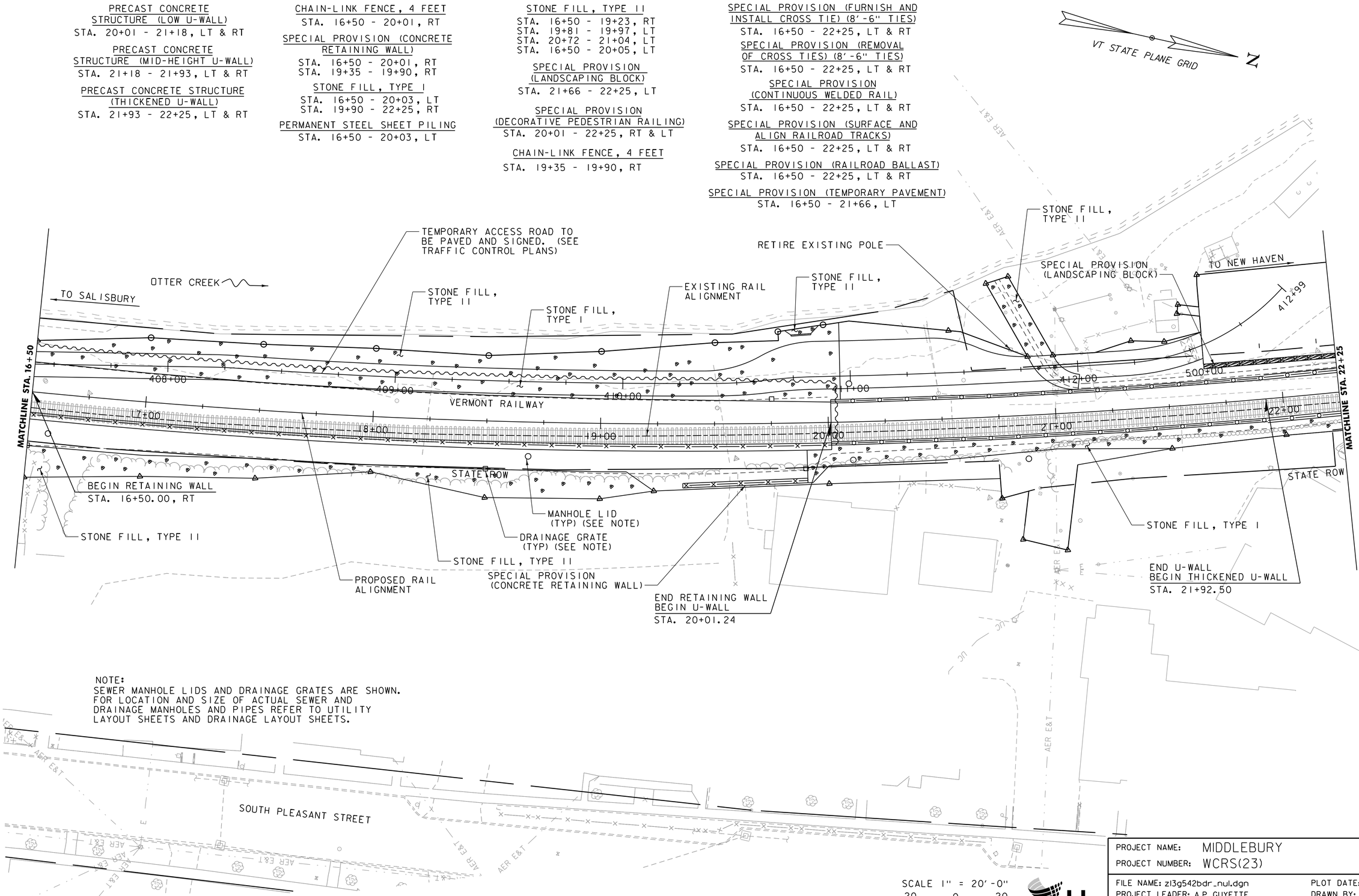
SPECIAL PROVISION (REMOVAL OF CROSS TIES) (8'-6" TIES)
STA. 16+50 - 22+25, LT & RT

SPECIAL PROVISION (CONTINUOUS WELDED RAIL)
STA. 16+50 - 22+25, LT & RT

SPECIAL PROVISION (SURFACE AND ALIGN RAILROAD TRACKS)
STA. 16+50 - 22+25, LT & RT

SPECIAL PROVISION (RAILROAD BALLAST)
STA. 16+50 - 22+25, LT & RT

SPECIAL PROVISION (TEMPORARY PAVEMENT)
STA. 16+50 - 21+66, LT



NOTE:
SEWER MANHOLE LIDS AND DRAINAGE GRATES ARE SHOWN. FOR LOCATION AND SIZE OF ACTUAL SEWER AND DRAINAGE MANHOLES AND PIPES REFER TO UTILITY LAYOUT SHEETS AND DRAINAGE LAYOUT SHEETS.

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

vhb

PROJECT NAME: MIDDLEBURY	
PROJECT NUMBER: WCRS(23)	
FILE NAME: zl3g542bdr_nul.dgn	PLOT DATE: 4/30/2019
PROJECT LEADER: A.P. GUYETTE	DRAWN BY: R.H.BARNES
DESIGNED BY: R.H. BARNES	CHECKED BY: M.E. OOMS
RAIL LAYOUT SHEET (3 OF 8)	SHEET 44 OF 328

SPECIAL PROVISION
(DECORATIVE PEDESTRIAN RAILING)
STA. 22+25 - 23+18, LT & RT
STA. 26+72 - 28+00, LT & RT

PRECAST CONCRETE STRUCTURE
(THICKENED U-WALL)
STA. 22+25 - 23+24, LT & RT
STA. 26+69 - 27+63, LT & RT

PRECAST CONCRETE STRUCTURE (TUNNEL)
STA. 23+24 - 26+69, LT & RT

REMOVAL OF EXISTING FENCE
STA. 24+10 - 25+75, RT

PRECAST CONCRETE
STRUCTURE (MID-HEIGHT U-WALL)
STA. 27+63 - 28+00, LT & RT

SPECIAL PROVISION
(LANDSCAPING BLOCK)
STA. 22+25 - 23+21, LT

STONE FILL, TYPE I
STA. 22+25 - 23+24, RT

SPECIAL PROVISION (BRIDGE RAILING,
DECORATIVE PEDESTRIAN RAILING/CONCRETE
PARAPET COMBINATION)
STA. 23+18 - 23+25, LT & RT
STA. 26+65 - 26+72, LT & RT

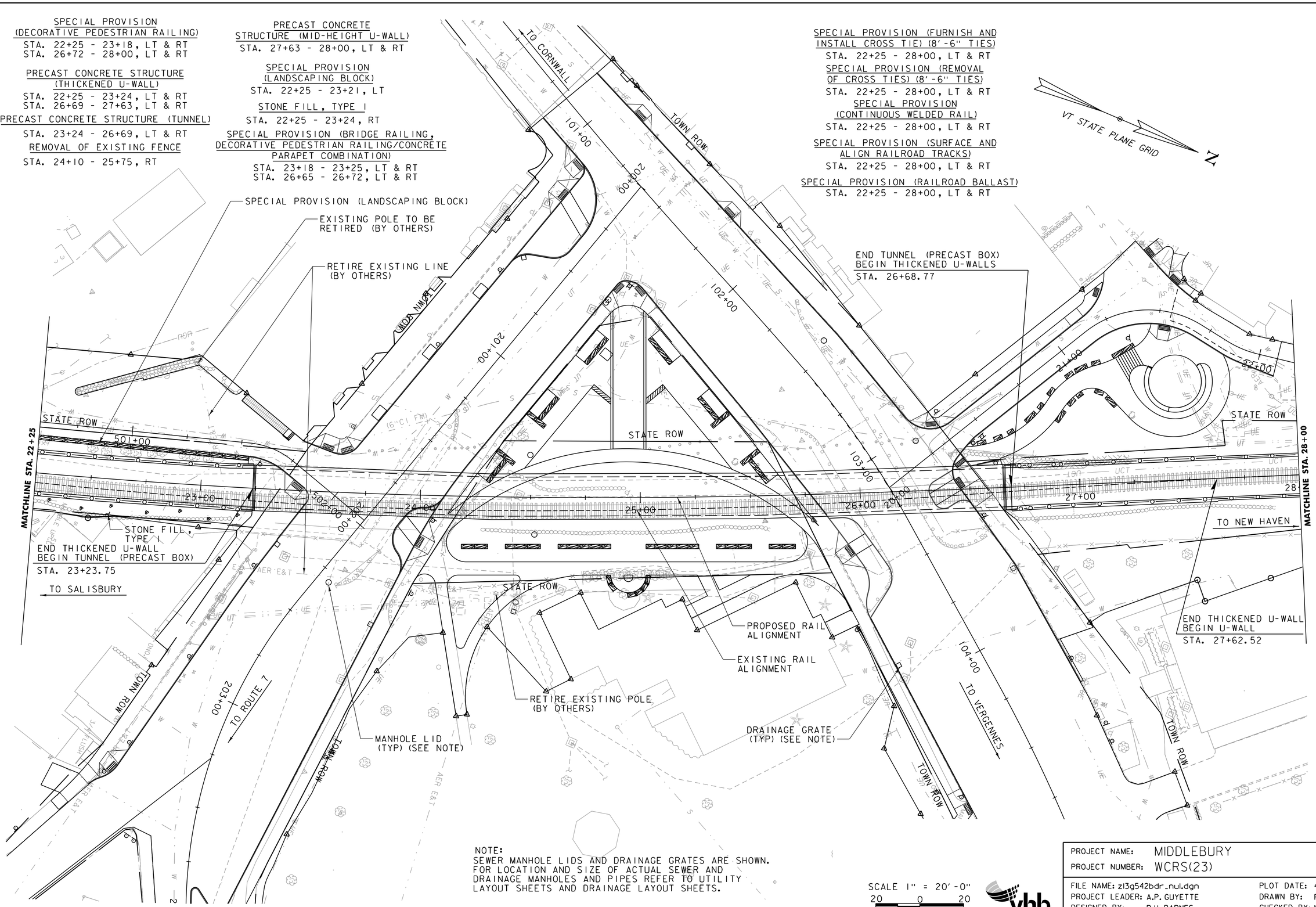
SPECIAL PROVISION (FURNISH AND
INSTALL CROSS TIE) (8'-6" TIES)
STA. 22+25 - 28+00, LT & RT

SPECIAL PROVISION (REMOVAL
OF CROSS TIES) (8'-6" TIES)
STA. 22+25 - 28+00, LT & RT

SPECIAL PROVISION
(CONTINUOUS WELDED RAIL)
STA. 22+25 - 28+00, LT & RT

SPECIAL PROVISION (SURFACE AND
ALIGN RAILROAD TRACKS)
STA. 22+25 - 28+00, LT & RT

SPECIAL PROVISION (RAILROAD BALLAST)
STA. 22+25 - 28+00, LT & RT



NOTE:
SEWER MANHOLE LIDS AND DRAINAGE GRATES ARE SHOWN.
FOR LOCATION AND SIZE OF ACTUAL SEWER AND
DRAINAGE MANHOLES AND PIPES REFER TO UTILITY
LAYOUT SHEETS AND DRAINAGE LAYOUT SHEETS.

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

vhb

PROJECT NAME: MIDDLEBURY	
PROJECT NUMBER: WCRS(23)	
FILE NAME: zl3g542bdr_nul.dgn	PLOT DATE: 4/30/2019
PROJECT LEADER: A.P. GUYETTE	DRAWN BY: R.H.BARNES
DESIGNED BY: R.H. BARNES	CHECKED BY: M.E. OOMS
RAIL LAYOUT SHEET (4 OF 8)	SHEET 45 OF 328

SPECIAL PROVISION (FURNISH AND INSTALL CROSS TIE) (8'-6" TIES)
STA. 28+00 - 33+75, LT & RT

SPECIAL PROVISION (REMOVAL OF CROSS TIES) (8'-6" TIES)
STA. 28+00 - 33+75, LT & RT

SPECIAL PROVISION (CONTINUOUS WELDED RAIL)
STA. 28+00 - 33+75, LT & RT

SPECIAL PROVISION (SURFACE AND ALIGN RAILROAD TRACKS)
STA. 28+00 - 33+75, LT & RT

SPECIAL PROVISION (RAILROAD BALLAST)
STA. 28+00 - 33+75, LT & RT

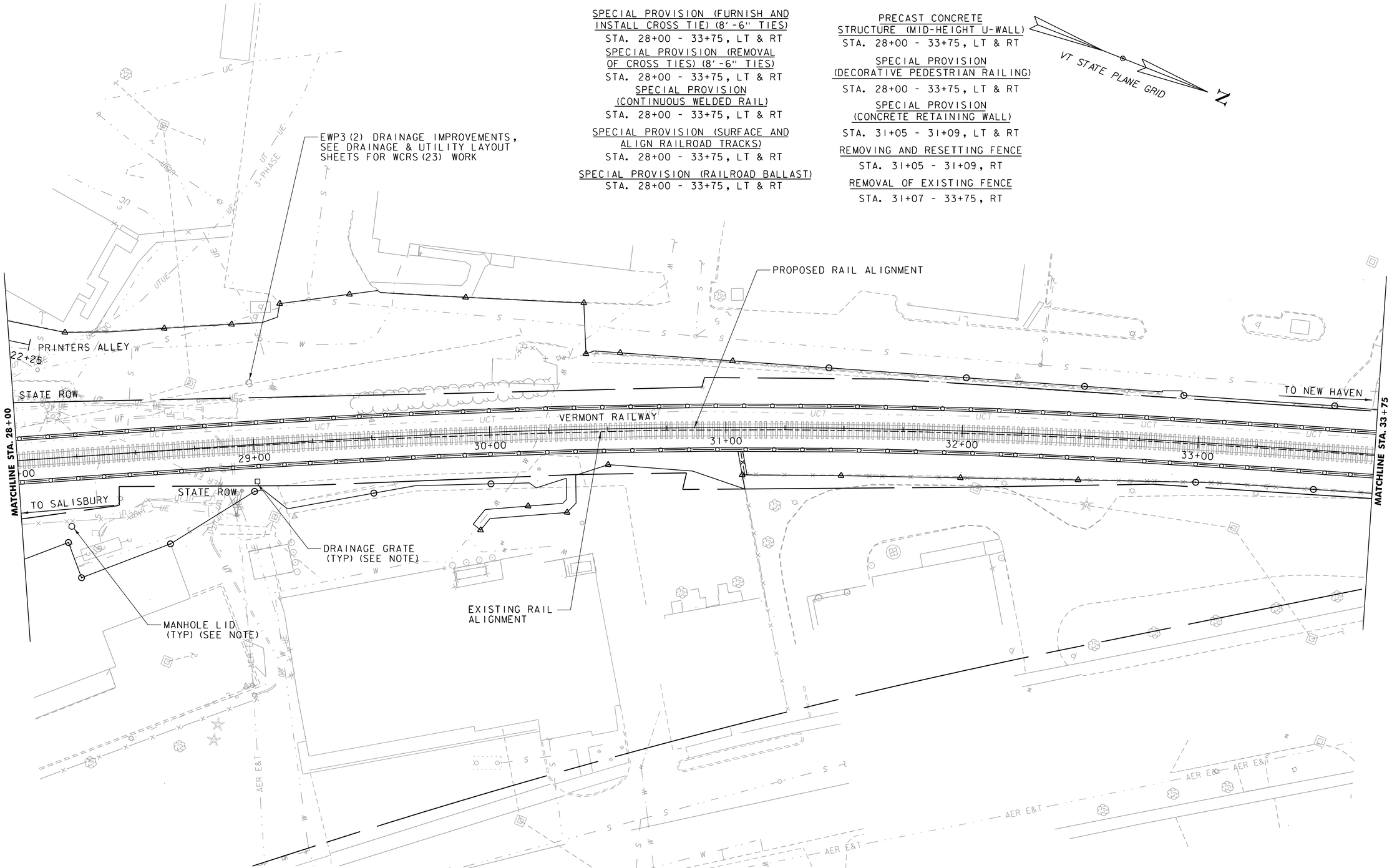
PRECAST CONCRETE STRUCTURE (MID-HEIGHT U-WALL)
STA. 28+00 - 33+75, LT & RT

SPECIAL PROVISION (DECORATIVE PEDESTRIAN RAILING)
STA. 28+00 - 33+75, LT & RT

SPECIAL PROVISION (CONCRETE RETAINING WALL)
STA. 31+05 - 31+09, LT & RT

REMOVING AND RESETTING FENCE
STA. 31+05 - 31+09, RT

REMOVAL OF EXISTING FENCE
STA. 31+07 - 33+75, RT

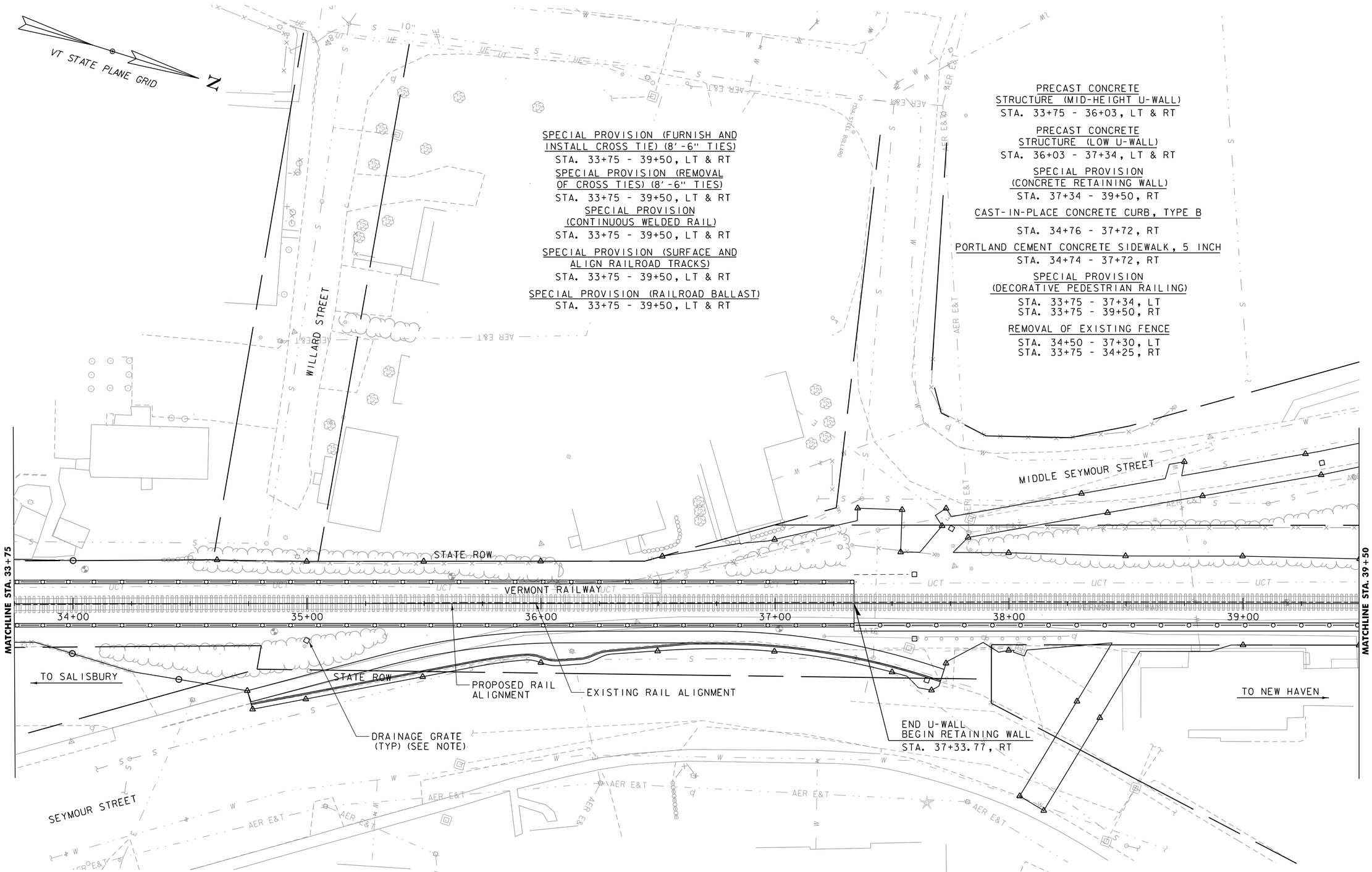


NOTE:
SEWER MANHOLE LIDS AND DRAINAGE GRATES ARE SHOWN. FOR LOCATION AND SIZE OF ACTUAL SEWER AND DRAINAGE MANHOLES AND PIPES REFER TO UTILITY LAYOUT SHEETS AND DRAINAGE LAYOUT SHEETS.

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

vhb

PROJECT NAME: MIDDLEBURY	
PROJECT NUMBER: WCRS(23)	
FILE NAME: z13g542bdr_nul.dgn	PLOT DATE: 4/30/2019
PROJECT LEADER: A.P. GUYETTE	DRAWN BY: R.H.BARNES
DESIGNED BY: R.H. BARNES	CHECKED BY: M.E. OOMS
RAIL LAYOUT SHEET (5 OF 8)	SHEET 46 OF 328



NOTE:
DRAINAGE GRATES ARE SHOWN. FOR LOCATION AND SIZE OF ACTUAL DRAINAGE MANHOLES AND PIPES REFER TO DRAINAGE LAYOUT SHEETS.

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

vhb

PROJECT NAME: MIDDLEBURY	
PROJECT NUMBER: WCRS(23)	
FILE NAME: z13g542bdr_nul.dgn	PLOT DATE: 4/30/2019
PROJECT LEADER: A.P. GUYETTE	DRAWN BY: R.H.BARNES
DESIGNED BY: R.H. BARNES	CHECKED BY: M.E. OOMS
RAIL LAYOUT SHEET (6 OF 8)	SHEET 47 OF 328

SPECIAL PROVISION
(CONCRETE RETAINING WALL)
STA. 39+50 - 40+00, RT

SPECIAL PROVISION
(DECORATIVE PEDESTRIAN RAILING)
STA. 39+50 - 40+00, RT

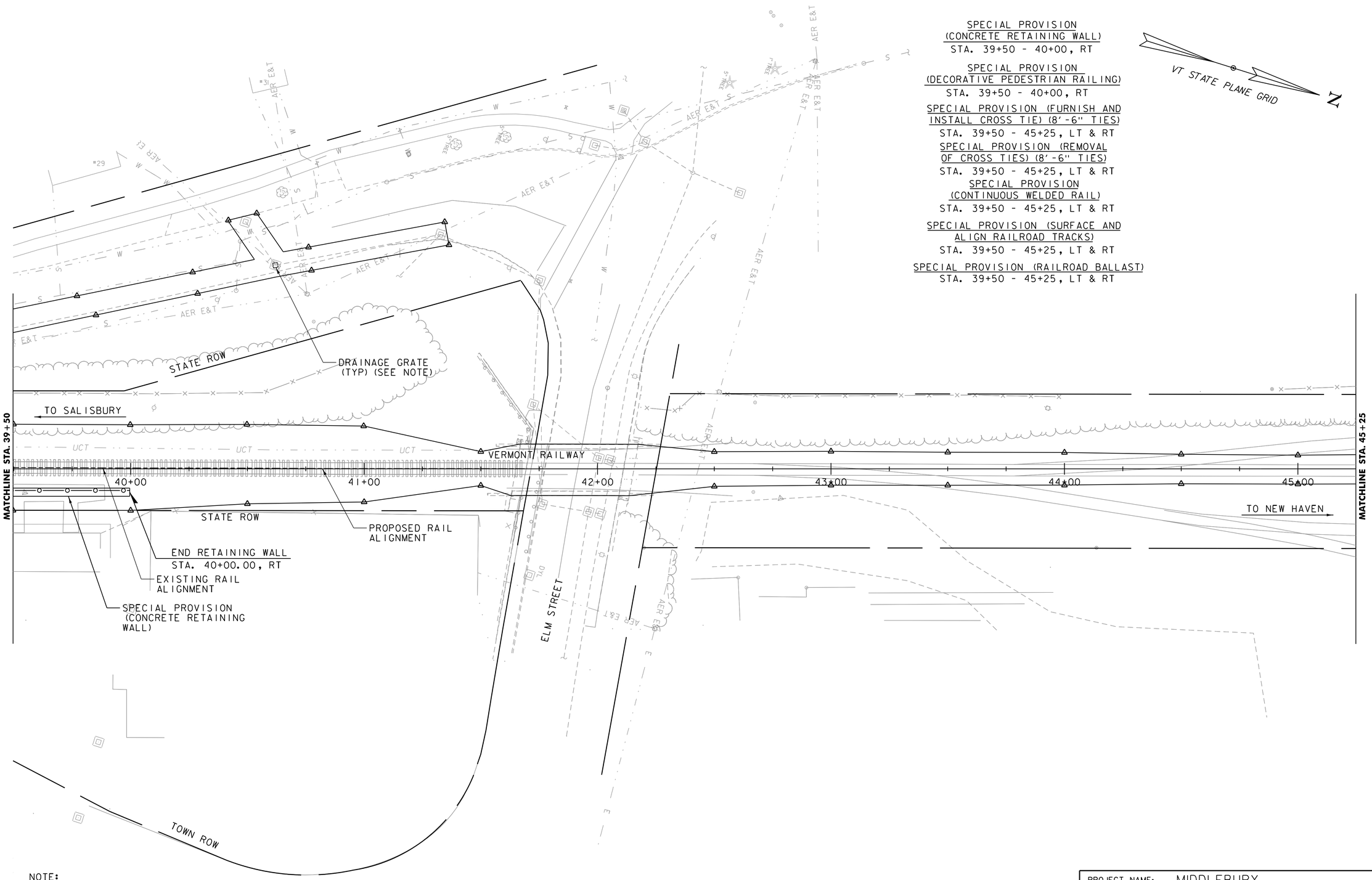
SPECIAL PROVISION (FURNISH AND INSTALL CROSS TIE) (8'-6" TIES)
STA. 39+50 - 45+25, LT & RT

SPECIAL PROVISION (REMOVAL OF CROSS TIES) (8'-6" TIES)
STA. 39+50 - 45+25, LT & RT

SPECIAL PROVISION
(CONTINUOUS WELDED RAIL)
STA. 39+50 - 45+25, LT & RT

SPECIAL PROVISION (SURFACE AND ALIGN RAILROAD TRACKS)
STA. 39+50 - 45+25, LT & RT

SPECIAL PROVISION (RAILROAD BALLAST)
STA. 39+50 - 45+25, LT & RT



NOTE:
DRAINAGE GRATES ARE SHOWN. FOR LOCATION AND SIZE OF ACTUAL DRAINAGE MANHOLES AND PIPES REFER TO DRAINAGE LAYOUT SHEETS.

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

PROJECT NAME: MIDDLEBURY	
PROJECT NUMBER: WCRS(23)	
FILE NAME: zl3g542bdr_nul.dgn	PLOT DATE: 4/30/2019
PROJECT LEADER: A.P. GUYETTE	DRAWN BY: R.H.BARNES
DESIGNED BY: R.H. BARNES	CHECKED BY: M.E. OOMS
RAIL LAYOUT SHEET (7 OF 8)	SHEET 48 OF 328

VT STATE PLANE GRID

N

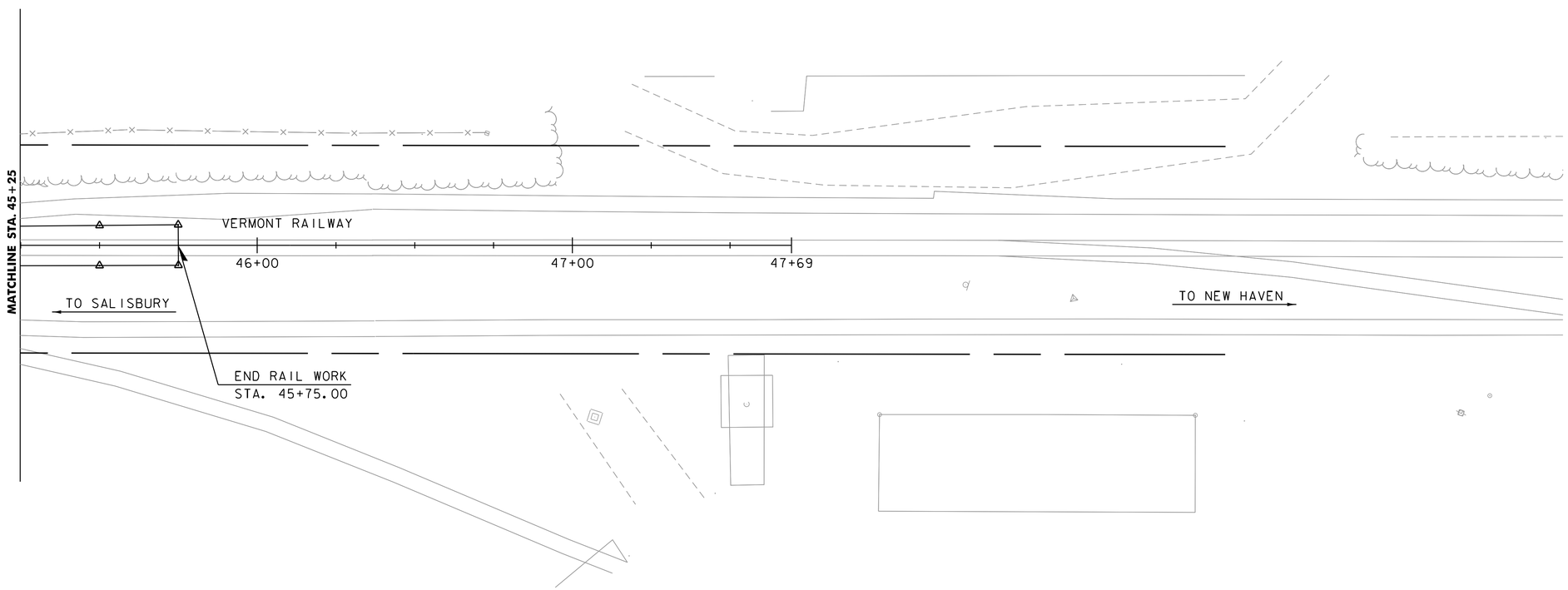
SPECIAL PROVISION (FURNISH AND INSTALL CROSS TIE) (8'-6" TIES)
STA. 45+25 - 45+75, LT & RT

SPECIAL PROVISION (REMOVAL OF CROSS TIES) (8'-6" TIES)
STA. 45+25 - 45+75, LT & RT

SPECIAL PROVISION (CONTINUOUS WELDED RAIL)
STA. 45+25 - 45+75, LT & RT

SPECIAL PROVISION (SURFACE AND ALIGN RAILROAD TRACKS)
STA. 45+25 - 45+75, LT & RT

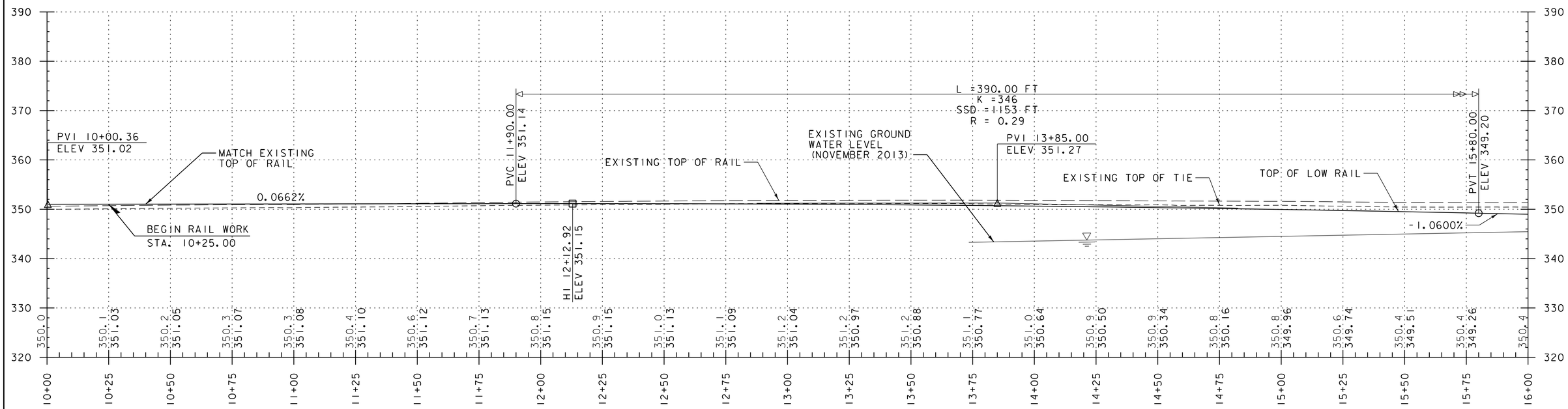
SPECIAL PROVISION (RAILROAD BALLAST)
STA. 45+25 - 45+75, LT & RT



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

vhb

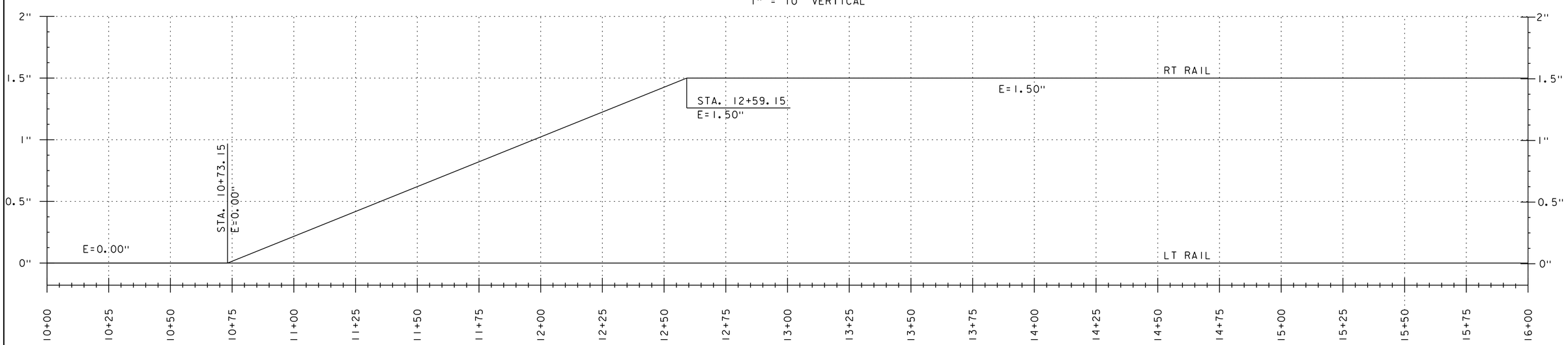
PROJECT NAME: MIDDLEBURY	
PROJECT NUMBER: WCRS(23)	
FILE NAME: z13g542bdr_nul.dgn	PLOT DATE: 4/30/2019
PROJECT LEADER: A.P. GUYETTE	DRAWN BY: R.H.BARNES
DESIGNED BY: R.H. BARNES	CHECKED BY: M.E. OOMS
RAIL LAYOUT SHEET (8 OF 8)	SHEET 49 OF 328



RAIL PROFILE

STA. 10+00 - 15+75

SCALE 1" = 20' HORIZONTAL
1" = 10' VERTICAL



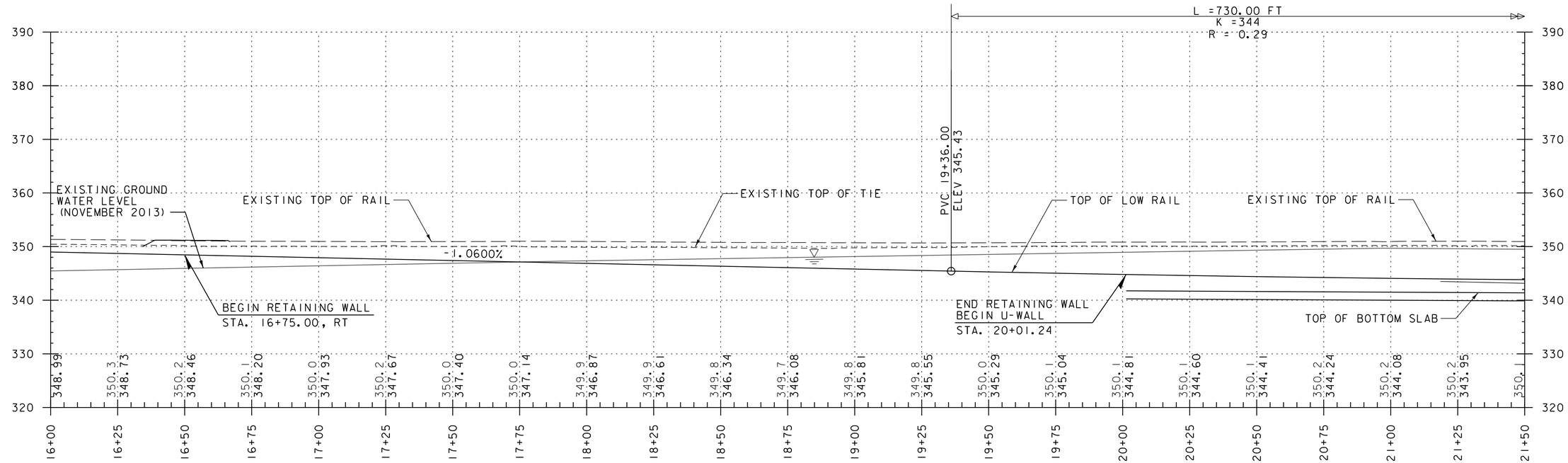
RAIL SUPERELEVATION

STA. 10+00 - 15+75

NOTE:

GRADES SHOWN TO THE NEAREST TENTH ARE EXISTING TOP OF TIE ALONG ℄
GRADES SHOWN TO THE NEAREST HUNDRETH ARE THE PROPOSED TOP OF LOW RAIL ALONG ℄

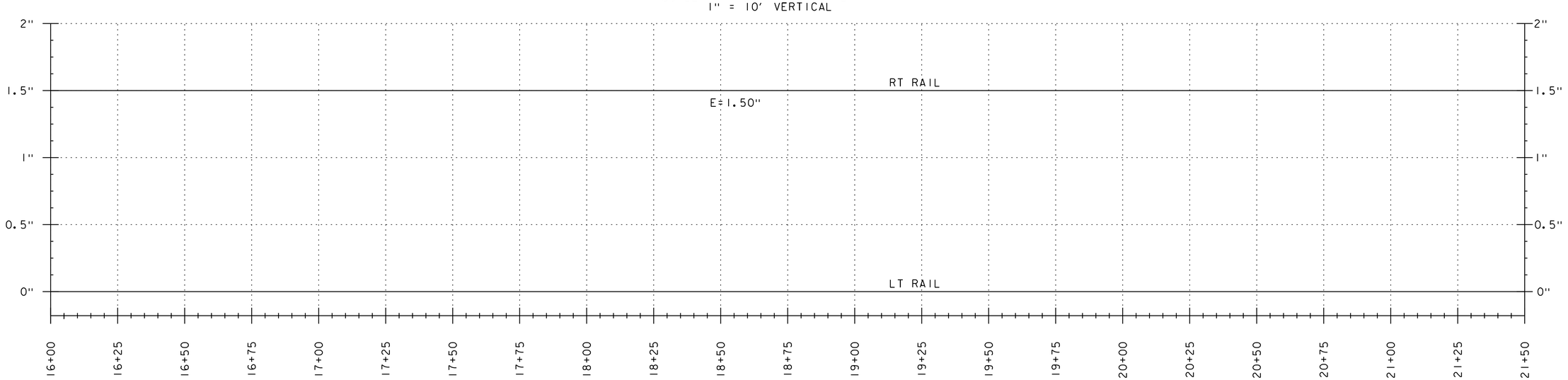
PROJECT NAME: MIDDLEBURY	
PROJECT NUMBER: WCRS(23)	
FILE NAME: zl3g542pro_rail.dgn	PLOT DATE: 4/30/2019
PROJECT LEADER: A.P. GUYETTE	DRAWN BY: E.A. LAWES
DESIGNED BY: G.J. BOLES	CHECKED BY: S.E. BURBANK
RAIL PROFILE SHEET (1 OF 7)	SHEET 50 OF 328



RAIL PROFILE

STA. 15+75 - 21+50

SCALE 1" = 20' HORIZONTAL
1" = 10' VERTICAL



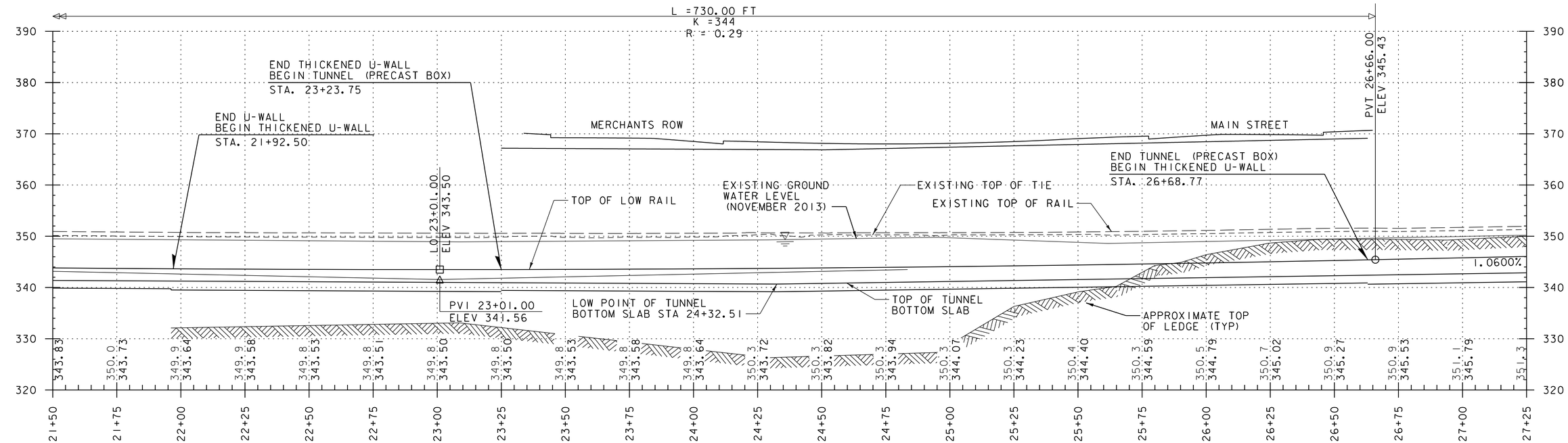
NOTE:

GRADES SHOWN TO THE NEAREST TENTH ARE EXISTING TOP OF TIE ALONG ℄
GRADES SHOWN TO THE NEAREST HUNDRETH ARE THE PROPOSED TOP OF LOW RAIL ALONG ℄

RAIL SUPERELEVATION

STA. 15+75 - 21+50

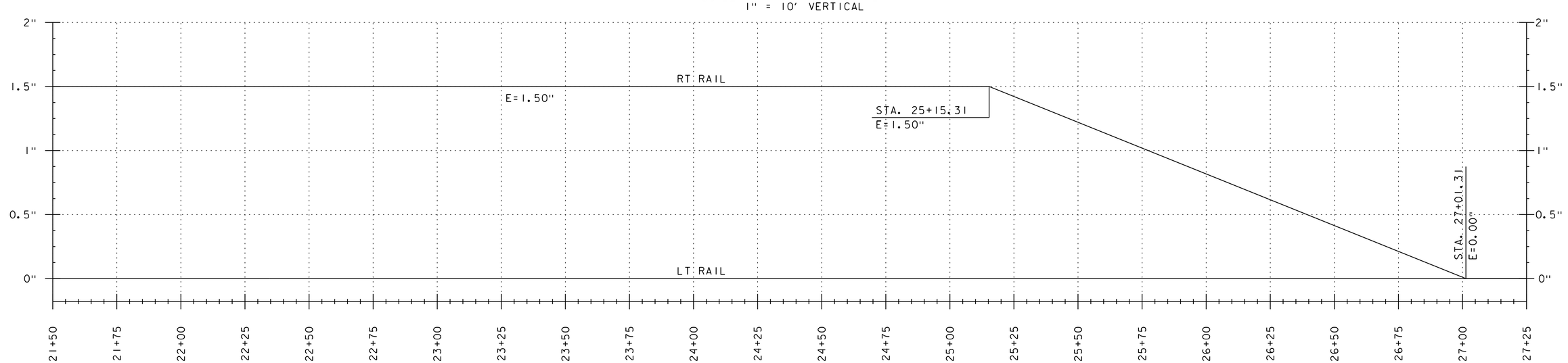
PROJECT NAME: MIDDLEBURY	
PROJECT NUMBER: WCRS(23)	
FILE NAME: zl3g542pro_rail.dgn	PLOT DATE: 4/30/2019
PROJECT LEADER: A.P. GUYETTE	DRAWN BY: E.A. LAWES
DESIGNED BY: G.J. BOLES	CHECKED BY: S.E. BURBANK
RAIL PROFILE SHEET (2 OF 7)	SHEET 51 OF 328



RAIL PROFILE

STA. 21+50 - 27+25

SCALE 1" = 20' HORIZONTAL
1" = 10' VERTICAL



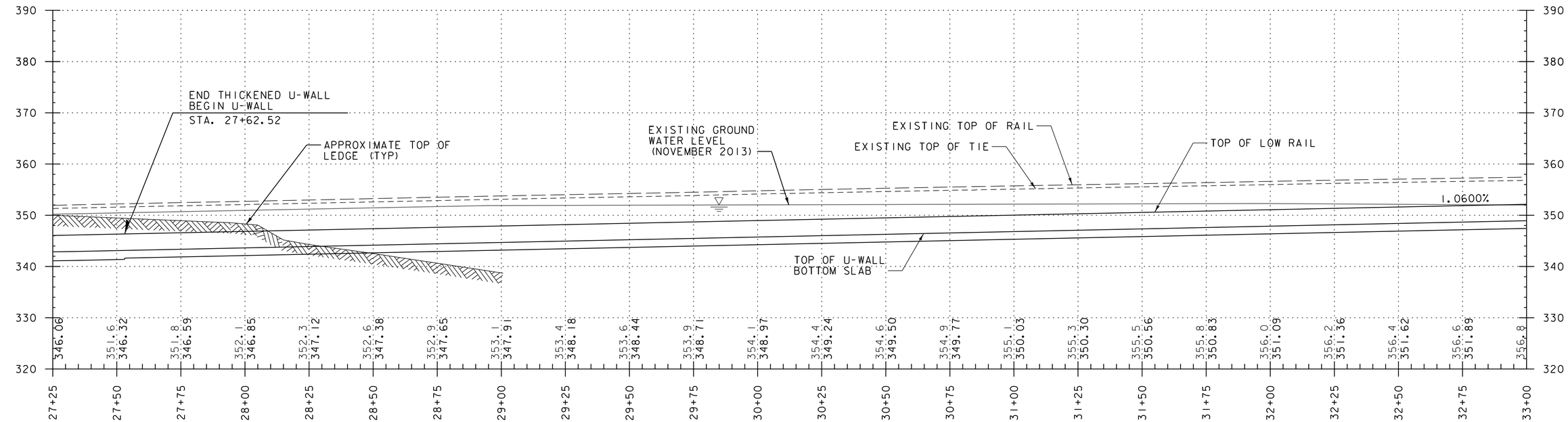
RAIL SUPERELEVATION

STA. 21+50 - 27+25

NOTE:

GRADES SHOWN TO THE NEAREST TENTH ARE EXISTING TOP OF TIE ALONG ℄
GRADES SHOWN TO THE NEAREST HUNDRETH ARE THE PROPOSED TOP OF LOW RAIL ALONG ℄

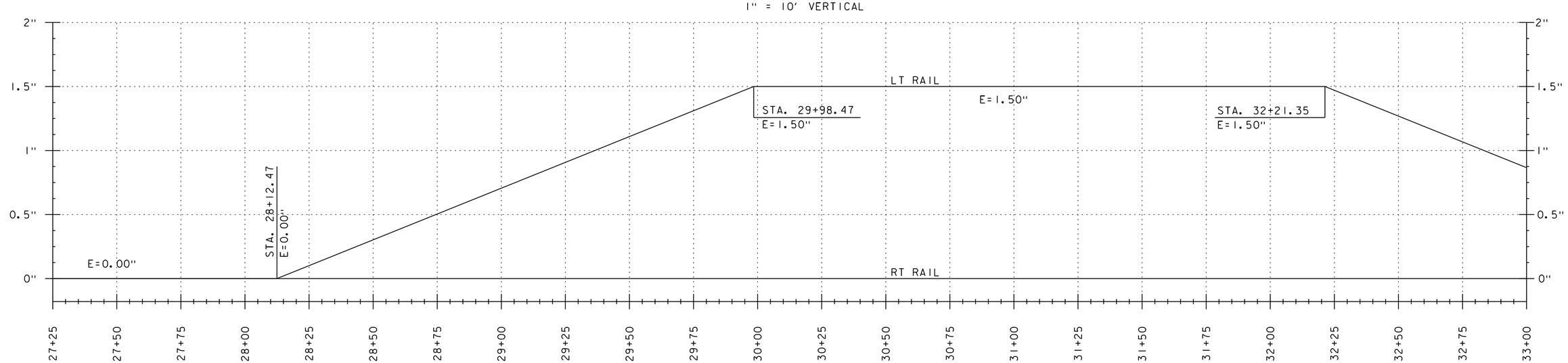
PROJECT NAME: MIDDLEBURY	
PROJECT NUMBER: WCRS(23)	
FILE NAME: zl3g542pro_rail.dgn	PLOT DATE: 4/30/2019
PROJECT LEADER: A.P. GUYETTE	DRAWN BY: E.A. LAWES
DESIGNED BY: G.J. BOLES	CHECKED BY: S.E. BURBANK
RAIL PROFILE SHEET (3 OF 7)	SHEET 52 OF 328



RAIL PROFILE

STA. 27+25 - 33+00

SCALE 1" = 20' HORIZONTAL
1" = 10' VERTICAL



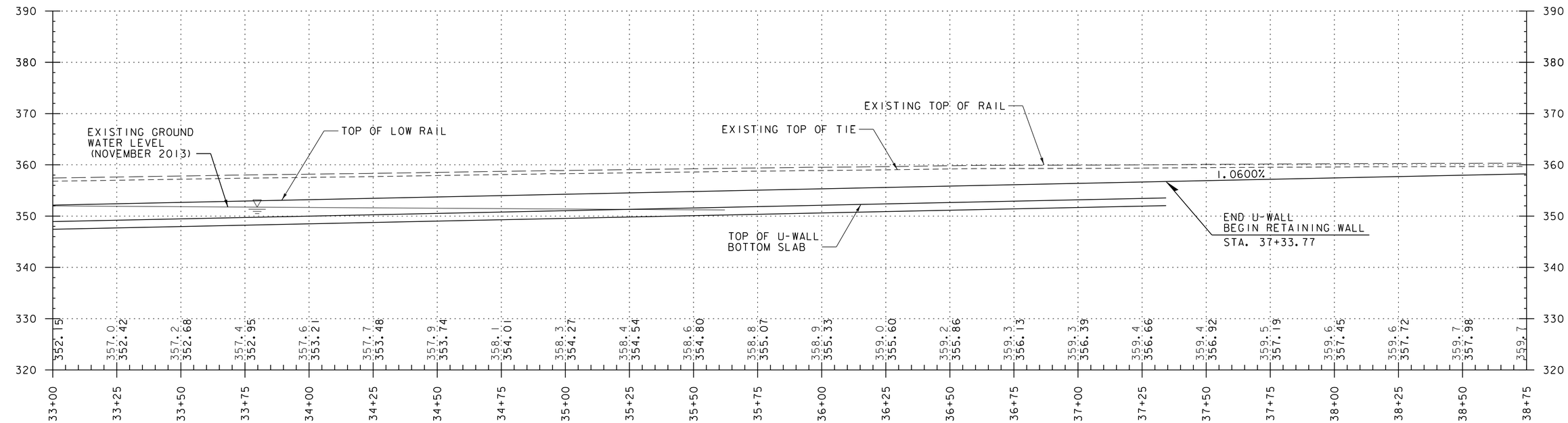
RAIL SUPERELEVATION

STA. 27+25 - 33+00

NOTE:

GRADES SHOWN TO THE NEAREST TENTH ARE EXISTING TOP OF TIE ALONG ℄
GRADES SHOWN TO THE NEAREST HUNDRETH ARE THE PROPOSED TOP OF LOW RAIL ALONG ℄

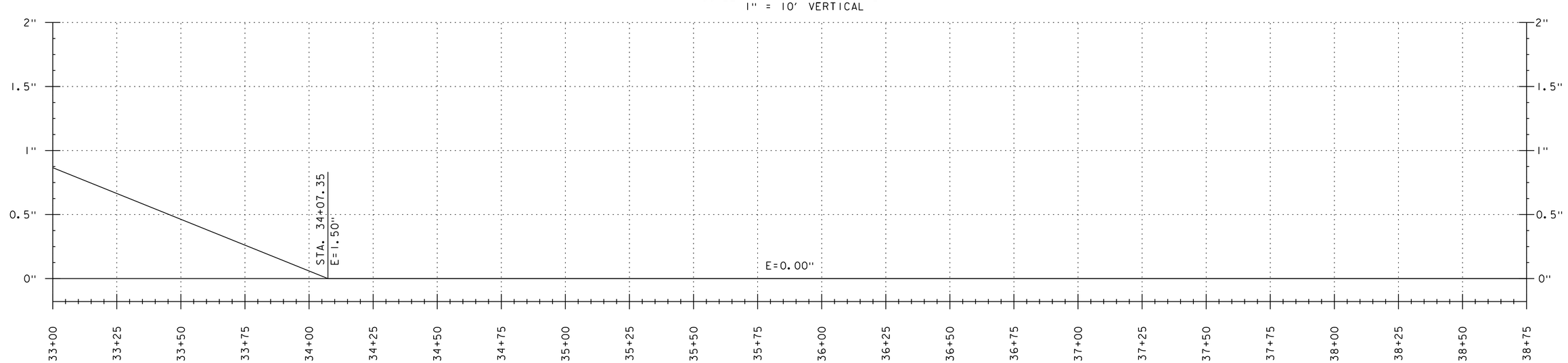
PROJECT NAME: MIDDLEBURY	
PROJECT NUMBER: WCRS(23)	
FILE NAME: zl3g542pro_rail.dgn	PLOT DATE: 4/30/2019
PROJECT LEADER: A.P. GUYETTE	DRAWN BY: E.A. LAWES
DESIGNED BY: G.J. BOLES	CHECKED BY: S.E. BURBANK
RAIL PROFILE SHEET (4 OF 7)	SHEET 53 OF 328



RAIL PROFILE

STA. 33+00 - 38+75

SCALE 1" = 20' HORIZONTAL
1" = 10' VERTICAL



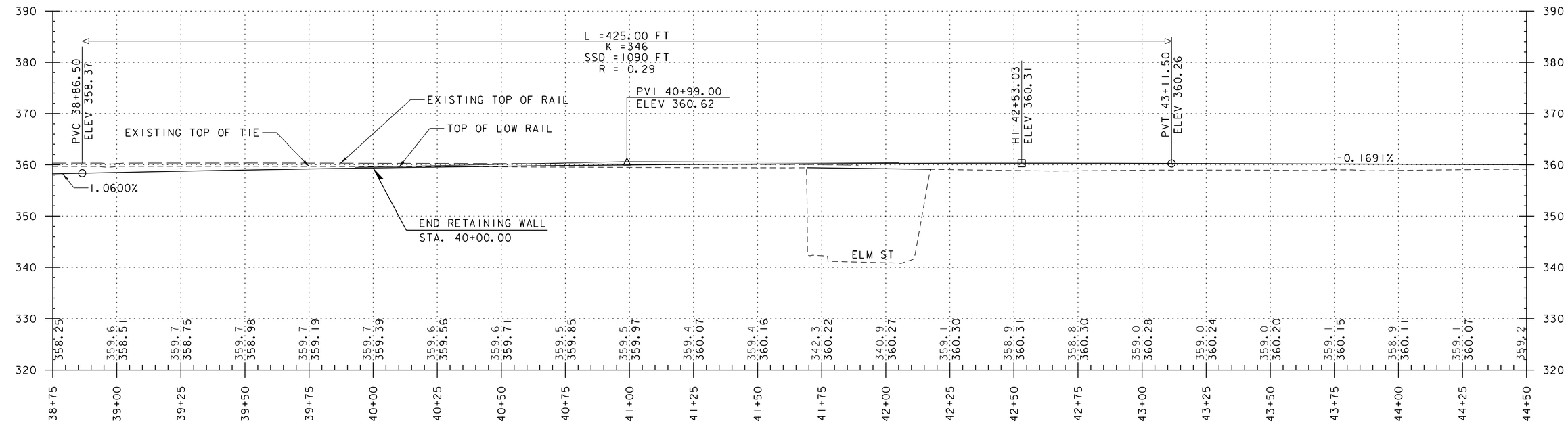
RAIL SUPERELEVATION

STA. 33+00 - 38+75

NOTE:

GRADES SHOWN TO THE NEAREST TENTH ARE EXISTING TOP OF TIE ALONG ℄
GRADES SHOWN TO THE NEAREST HUNDRETH ARE THE PROPOSED TOP OF LOW RAIL ALONG ℄

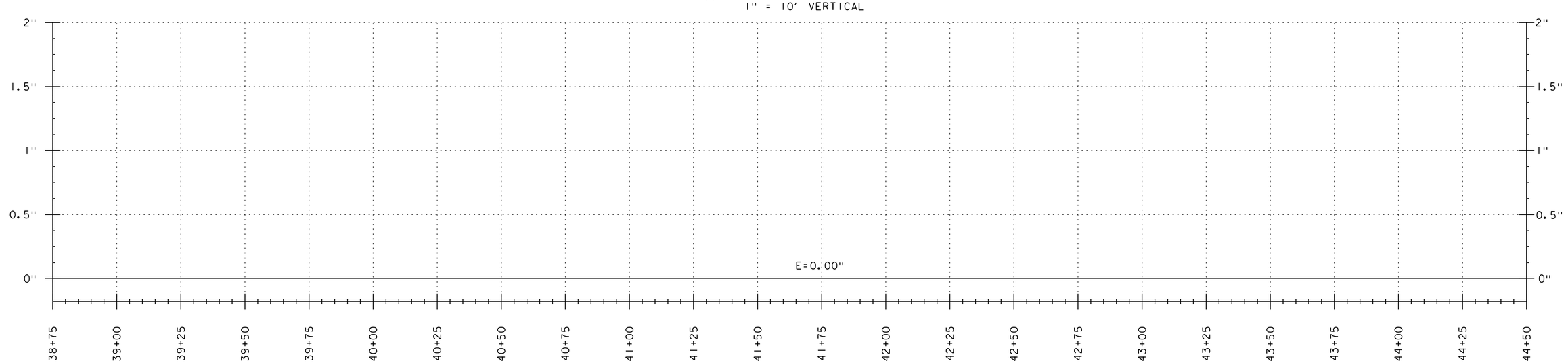
PROJECT NAME: MIDDLEBURY	
PROJECT NUMBER: WCRS(23)	
FILE NAME: zl3g542pro_rail.dgn	PLOT DATE: 4/30/2019
PROJECT LEADER: A.P. GUYETTE	DRAWN BY: E.A. LAWES
DESIGNED BY: G.J. BOLES	CHECKED BY: S.E. BURBANK
RAIL PROFILE SHEET (5 OF 7)	SHEET 54 OF 328



RAIL PROFILE

STA. 38+75 - 44+50

SCALE 1" = 20' HORIZONTAL
1" = 10' VERTICAL



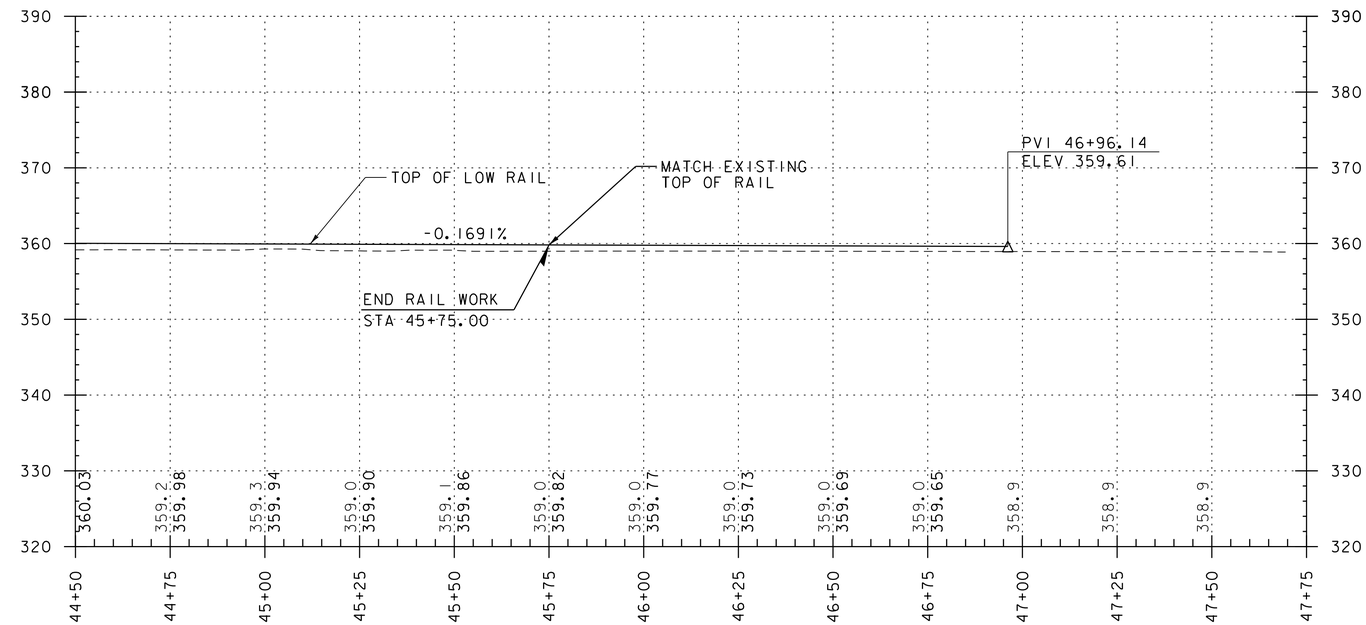
RAIL SUPERELEVATION

STA. 38+75 - 44+50

NOTE:

GRADES SHOWN TO THE NEAREST TENTH ARE EXISTING TOP OF TIE ALONG ℄
GRADES SHOWN TO THE NEAREST HUNDRETH ARE THE PROPOSED TOP OF LOW RAIL ALONG ℄

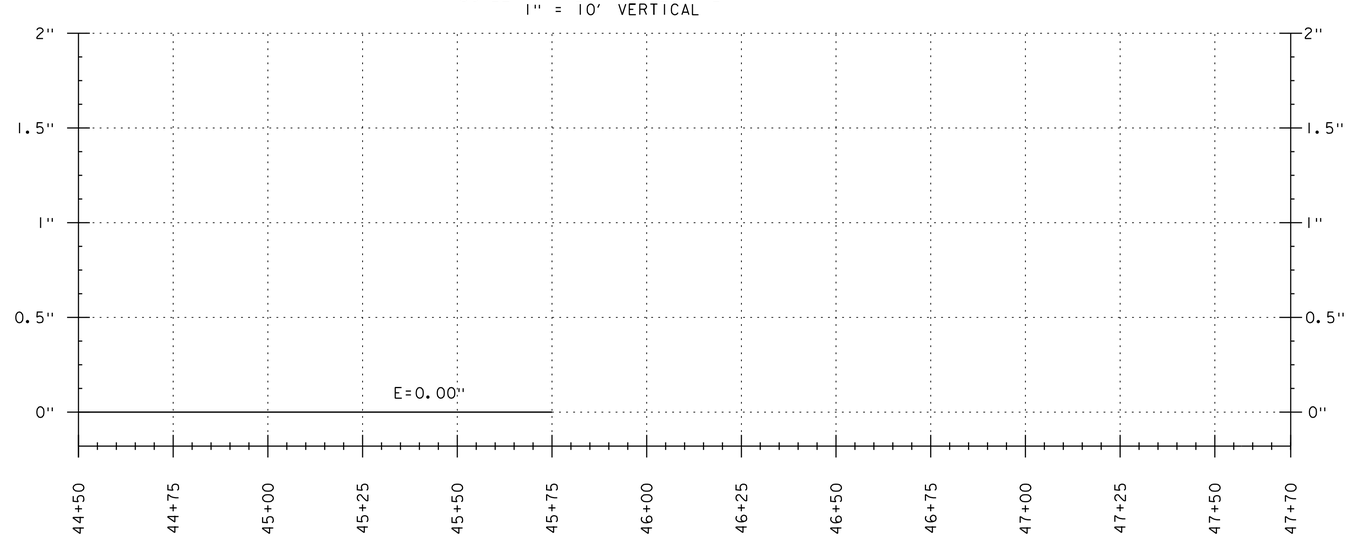
PROJECT NAME: MIDDLEBURY	
PROJECT NUMBER: WCRS(23)	
FILE NAME: zl3g542pro_rail.dgn	PLOT DATE: 4/30/2019
PROJECT LEADER: A.P. GUYETTE	DRAWN BY: E.A. LAWES
DESIGNED BY: G.J. BOLES	CHECKED BY: S.E. BURBANK
RAIL PROFILE SHEET (6 OF 7)	SHEET 55 OF 328



RAIL PROFILE

STA. 44+50 - 47+70

SCALE 1" = 20' HORIZONTAL
1" = 10' VERTICAL



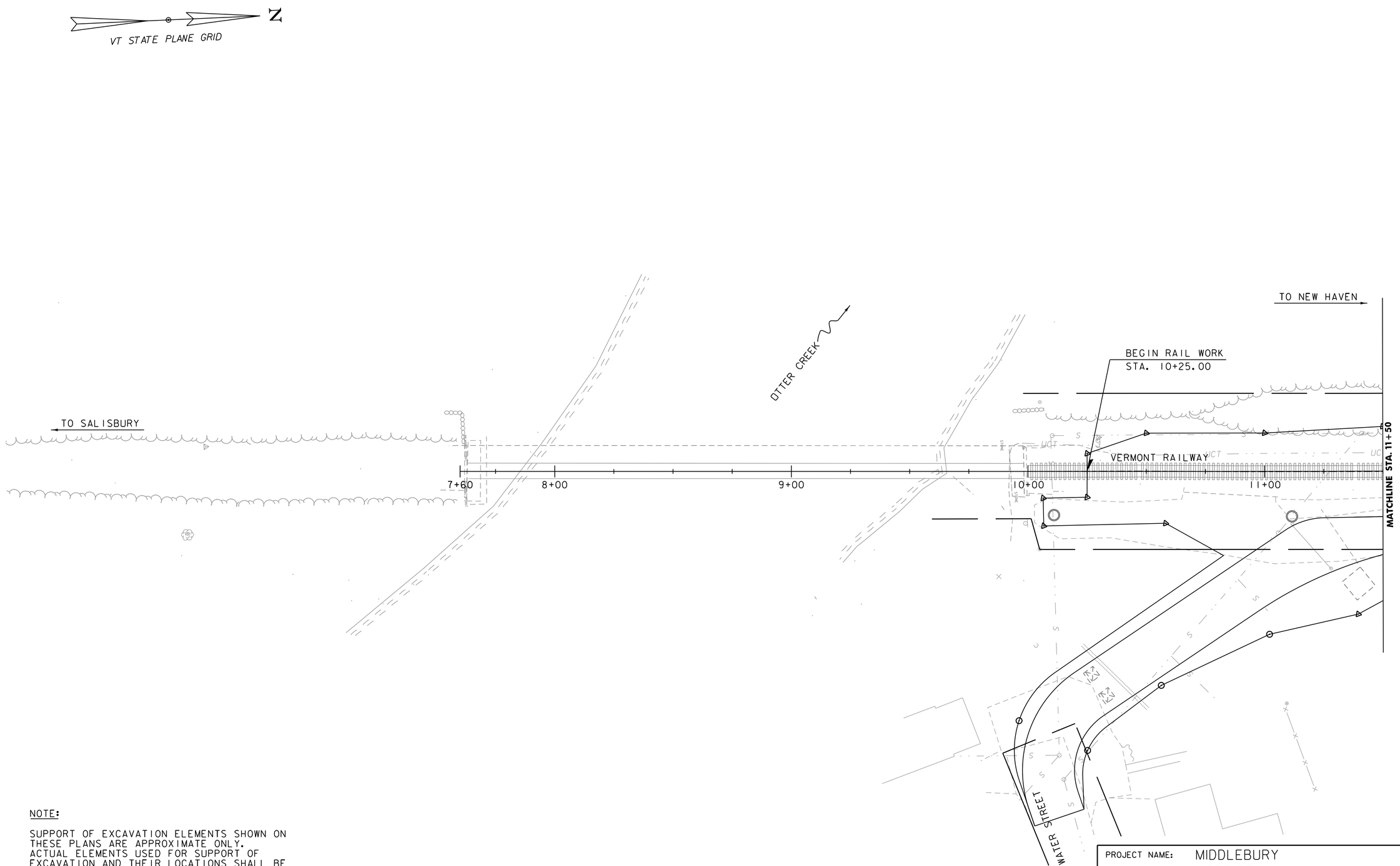
RAIL SUPERELEVATION

STA. 44+50 - 47+70

NOTE:

GRADES SHOWN TO THE NEAREST TENTH ARE EXISTING TOP OF TIE ALONG ℄
GRADES SHOWN TO THE NEAREST HUNDRETH ARE THE PROPOSED TOP OF LOW RAIL ALONG ℄

PROJECT NAME: MIDDLEBURY	
PROJECT NUMBER: WCRS(23)	
FILE NAME: zl3g542pro_rail.dgn	PLOT DATE: 4/30/2019
PROJECT LEADER: A.P. GUYETTE	DRAWN BY: E.A. LAWES
DESIGNED BY: G.J. BOLES	CHECKED BY: S.E. BURBANK
RAIL PROFILE SHEET (7 OF 7)	SHEET 56 OF 328

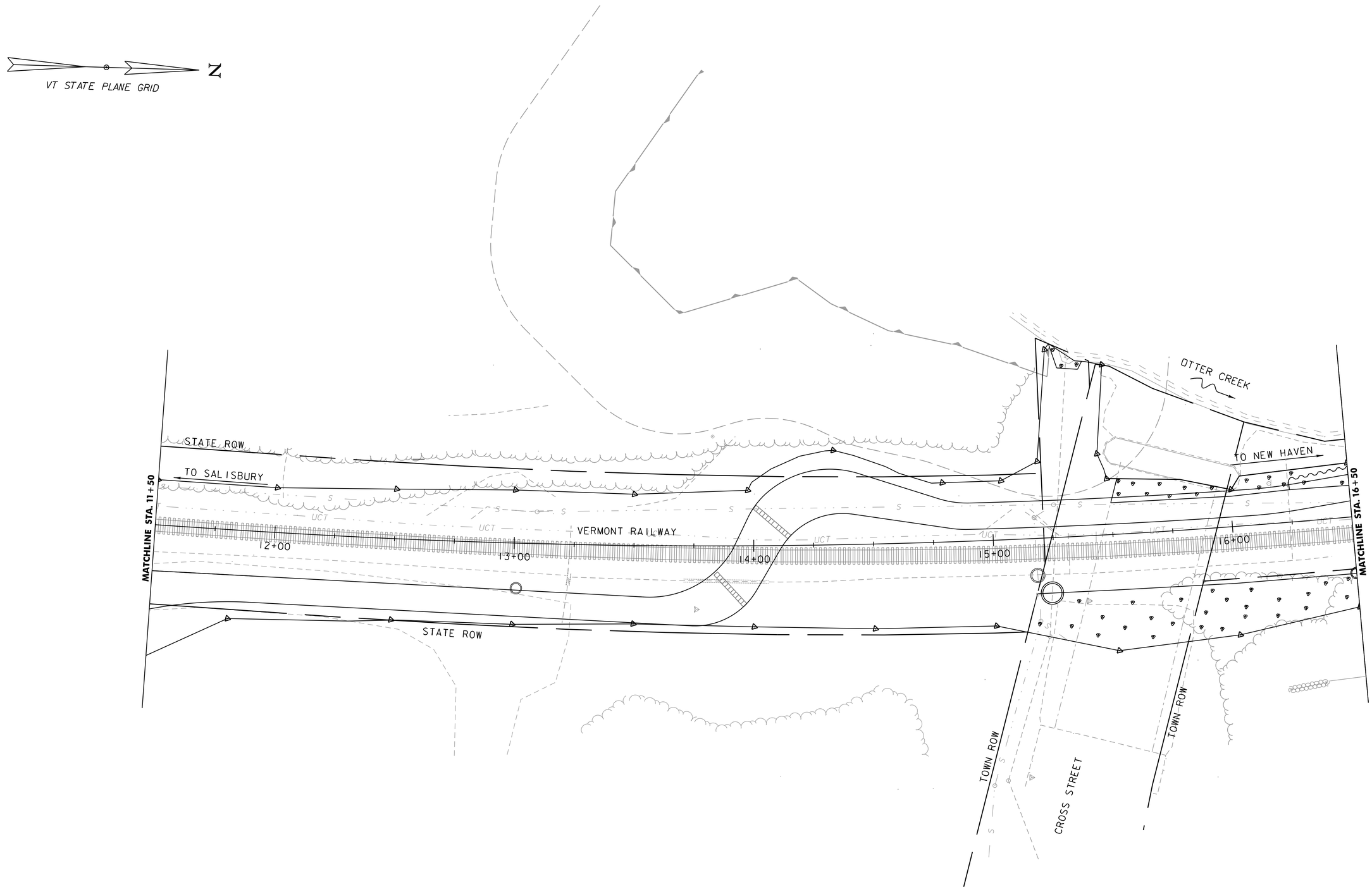


NOTE:

SUPPORT OF EXCAVATION ELEMENTS SHOWN ON THESE PLANS ARE APPROXIMATE ONLY. ACTUAL ELEMENTS USED FOR SUPPORT OF EXCAVATION AND THEIR LOCATIONS SHALL BE DETERMINED FROM APPROVED SUPPORT OF EXCAVATION SUBMITTALS DEVELOPED BY THE CONTRACTOR.

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

PROJECT NAME: MIDDLEBURY	
PROJECT NUMBER: WCRS(23)	
FILE NAME: z13g542bdr_SOE.dgn	PLOT DATE: 4/30/2019
PROJECT LEADER: A.P. GUYETTE	DRAWN BY: K.C. BARRY
DESIGNED BY: W. FRANK ENGINEERING	CHECKED BY: M.E. OOMS
SOE LAYOUT SHEET (1 OF 8)	SHEET 57 OF 328



NOTE:

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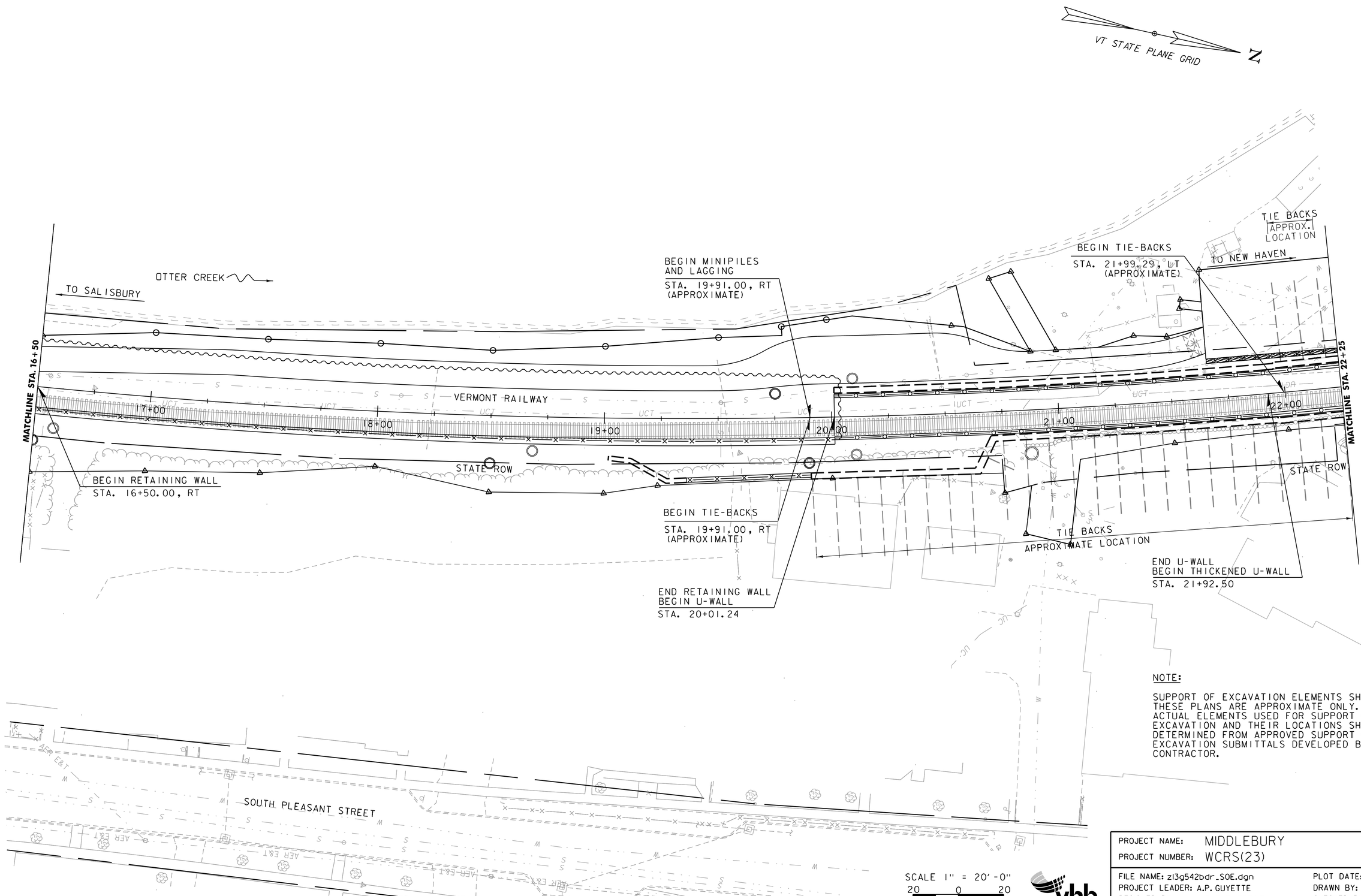
SCALE 1" = 20'-0"
20 0 20

vhb

PROJECT NAME: MIDDLEBURY	
PROJECT NUMBER: WCRS(23)	
FILE NAME: z13g542bdr_SOE.dgn	PLOT DATE: 4/30/2019
PROJECT LEADER: A.P. GUYETTE	DRAWN BY: K.C. BARRY
DESIGNED BY: W. FRANK ENGINEERING	CHECKED BY: M.E. OOMS
SOE LAYOUT SHEET (2 OF 8)	SHEET 58 OF 328



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PROJECT NAME: MIDDLEBURY	
PROJECT NUMBER: WCRS(23)	
FILE NAME: zl3g542bdr_SOE.dgn	PLOT DATE: 4/30/2019
PROJECT LEADER: A.P. GUYETTE	DRAWN BY: K.C. BARRY
DESIGNED BY: W.F. ENGINEERING	CHECKED BY: M.E. OOMS
SOE LAYOUT SHEET (3 OF 8)	SHEET 59 OF 328

TO CORNWALL

TOWN ROW

VT STATE PLANE GRID

N

END TIE-BACKS
STA. 26+54.26, LT
(APPROXIMATE)

EXISTING
MINIPILE (TYP)

TIE BACKS
APPROXIMATE LOCATION

MERCHANTS ROW

PRINTERS ALLEY

BATTELL BLOCK

STATE ROW

STATE ROW

STATE ROW

STATE ROW

MATCHLINE STA. 22+25

MATCHLINE STA. 28+00

VERMONT RAILWAY

23+00

24+00

25+00

26+00

27+00

28

TO NEW HAVEN

TO SALISBURY

SOIL NAIL EMBANKMENT STABILIZATION
APPROXIMATE LOCATION

END TIE-BACKS
STA. 27+94.15, RT
(APPROXIMATE)

TIE BACKS
APPROXIMATE LOCATION

TOWN ROW

TO ROUTE 7

300+00

301+00

TOWN ROW

TOWN ROW

MAIN ST/
VT ROUTE 30

TO VERGENNES

TOWN ROW

NOTE:

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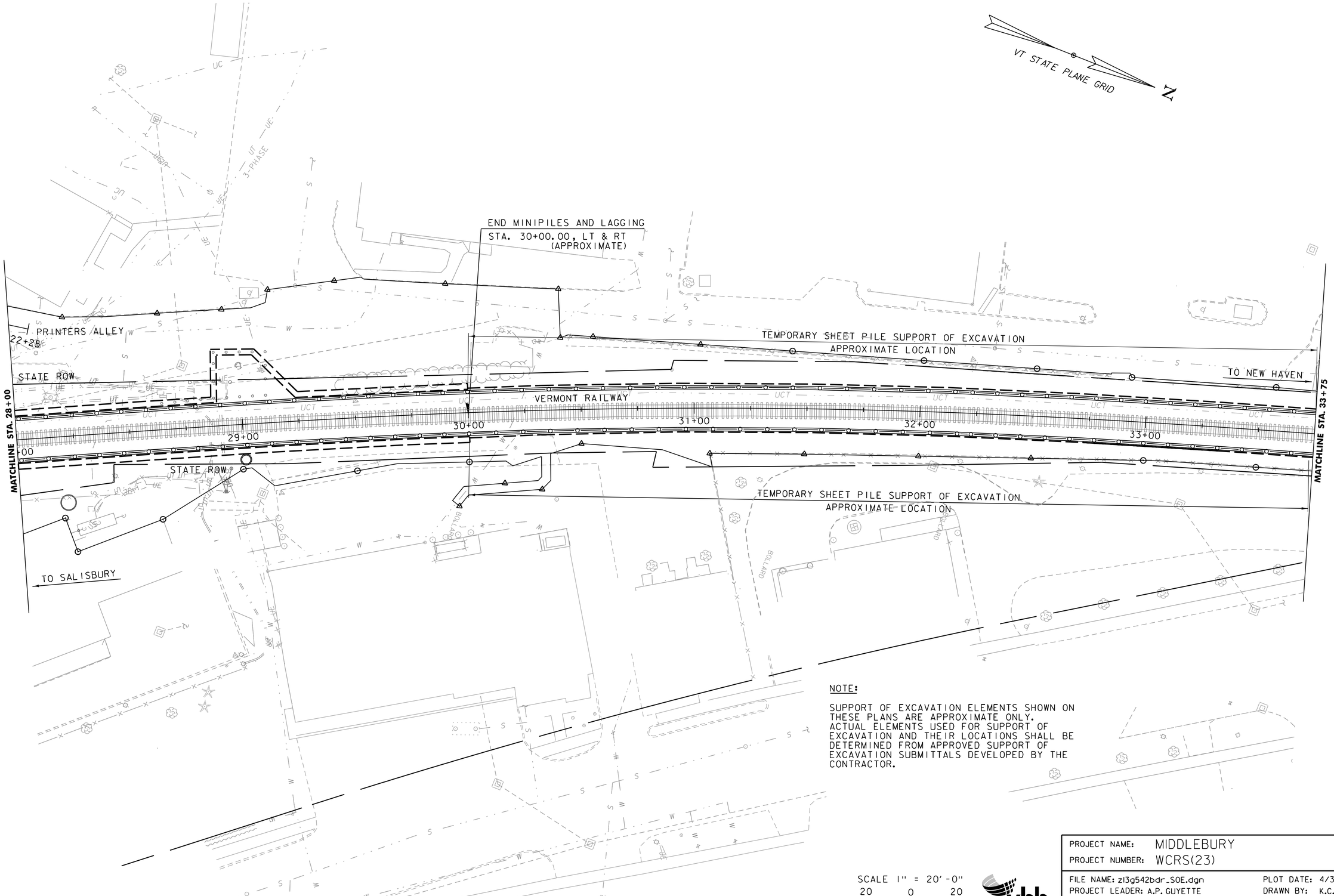
SCALE 1" = 20'-0"
20 0 20

vhb

PROJECT NAME: MIDDLEBURY	
PROJECT NUMBER: WCRS(23)	
FILE NAME: zl3g542bdr_SOE.dgn	PLOT DATE: 4/30/2019
PROJECT LEADER: A.P. GUYETTE	DRAWN BY: K.C. BARRY
DESIGNED BY: W. FRANK ENGINEERING	CHECKED BY: M.E. OOMS
SOE LAYOUT SHEET (4 OF 8)	SHEET 60 OF 328



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

vhb

PROJECT NAME: MIDDLEBURY	
PROJECT NUMBER: WCRS(23)	
FILE NAME: zl3g542bdr_SOE.dgn	PLOT DATE: 4/30/2019
PROJECT LEADER: A.P. GUYETTE	DRAWN BY: K.C. BARRY
DESIGNED BY: W. FRANK ENGINEERING	CHECKED BY: M.E. OOMS
SOE LAYOUT SHEET (5 OF 8)	SHEET 61 OF 328

VT STATE PLANE GRID

N

WILLARD STREET

MIDDLE SEYMOUR STREET

TEMPORARY SHEET PILE SUPPORT OF EXCAVATION
APPROXIMATE LOCATION

STATE ROW

VERMONT RAILWAY

MATCHLINE STA. 33+75

MATCHLINE STA. 39+50

34+00 35+00 36+00 37+00 38+00 39+00

TO SALISBURY

STATE ROW

TO NEW HAVEN

TEMPORARY SHEET PILE SUPPORT OF EXCAVATION
APPROXIMATE LOCATION

END U-WALL
BEGIN RETAINING WALL
STA. 37+33.77, RT

SEYMOUR STREET

NOTE:

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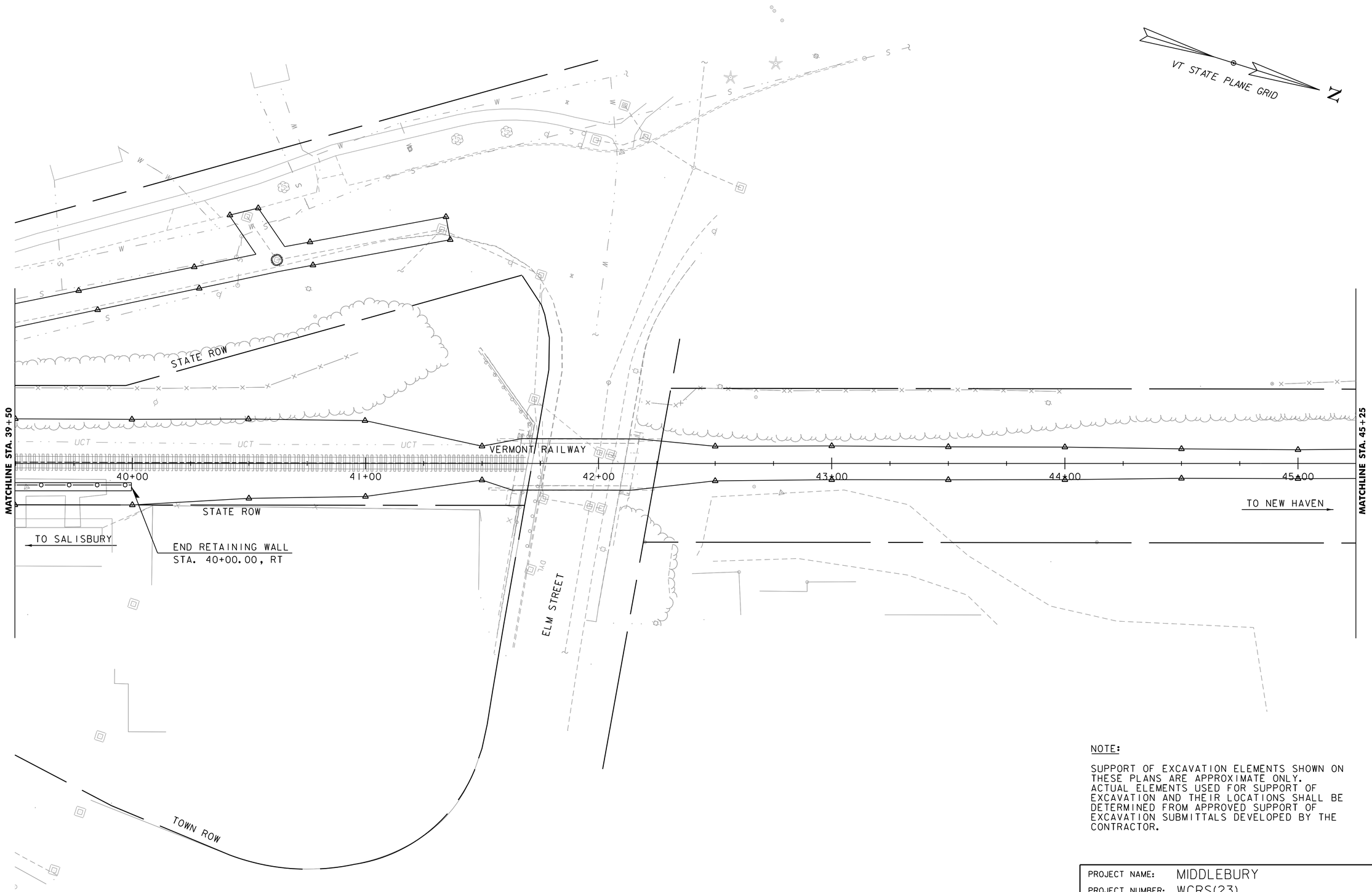
SCALE 1" = 20'-0"
20 0 20

vhb

PROJECT NAME: MIDDLEBURY	
PROJECT NUMBER: WCRS(23)	
FILE NAME: z13g542bdr_SOE.dgn	PLOT DATE: 4/30/2019
PROJECT LEADER: A.P. GUYETTE	DRAWN BY: K.C. BARRY
DESIGNED BY: W. FRANK ENGINEERING	CHECKED BY: M.E. OOMS
SOE LAYOUT SHEET (6 OF 8)	SHEET 62 OF 328



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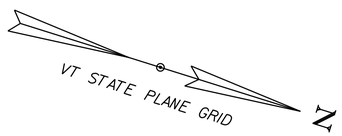
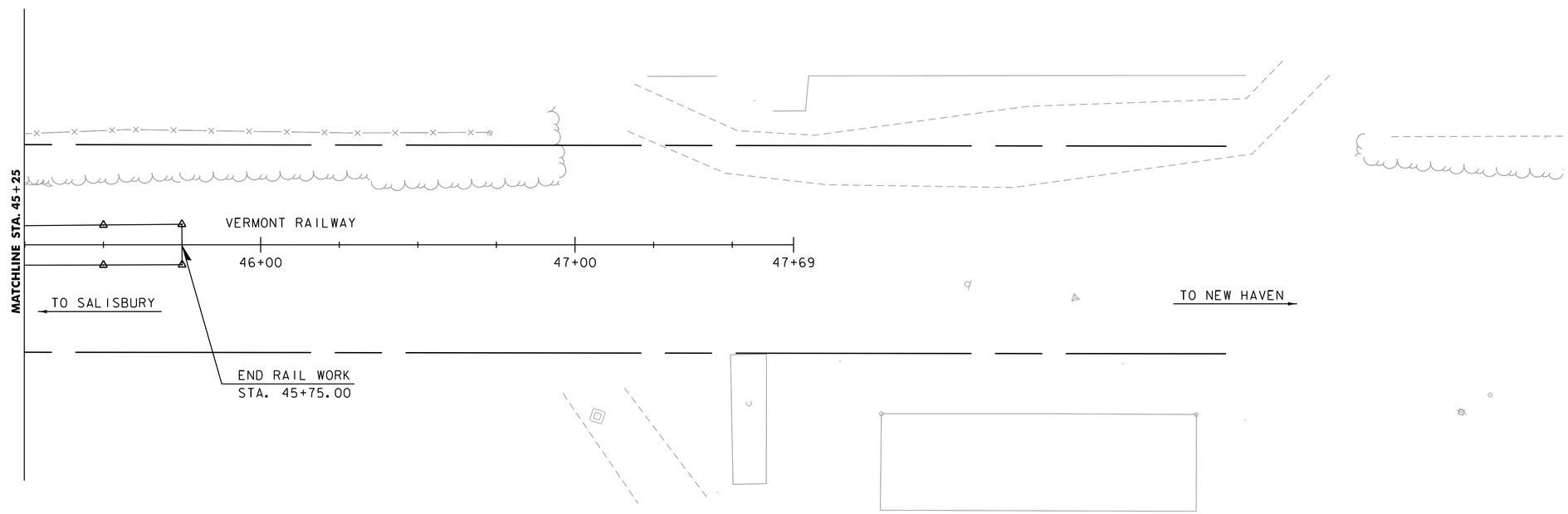
SCALE 1" = 20'-0"
20 0 20

vhb

PROJECT NAME: MIDDLEBURY	
PROJECT NUMBER: WCRS(23)	
FILE NAME: zl3g542bdr_SOE.dgn	PLOT DATE: 4/30/2019
PROJECT LEADER: A.P. GUYETTE	DRAWN BY: K.C. BARRY
DESIGNED BY: W. FRANK ENGINEERING	CHECKED BY: M.E. OOMS
SOE LAYOUT SHEET (7 OF 8)	SHEET 63 OF 328





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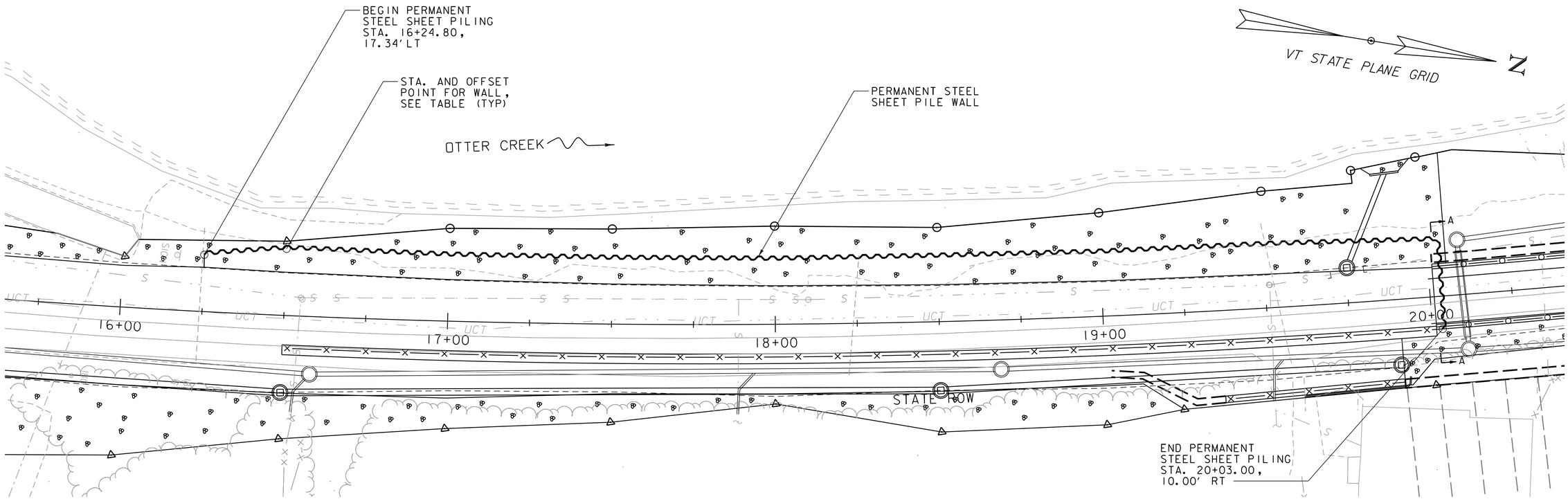
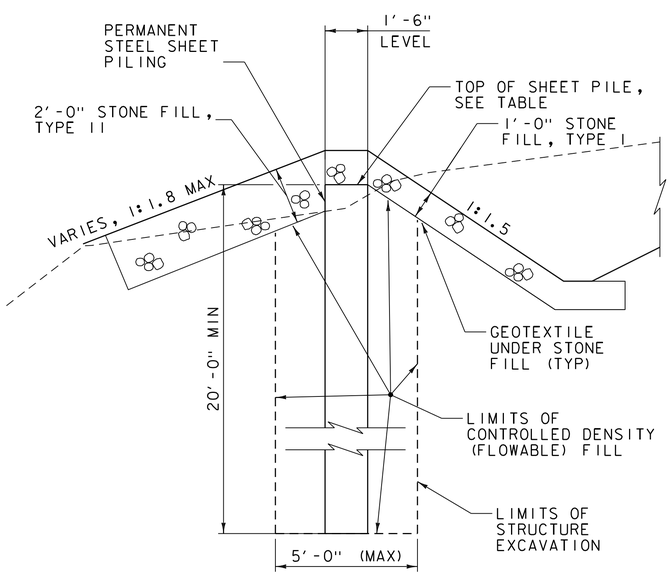
SCALE 1" = 20'-0"
20 0 20

PROJECT NAME: MIDDLEBURY	
PROJECT NUMBER: WCRS(23)	
FILE NAME: zl3g542bdr_SOE.dgn	PLOT DATE: 4/30/2019
PROJECT LEADER: A.P. GUYETTE	DRAWN BY: K.C. BARRY
DESIGNED BY: W. FRANK ENGINEERING	CHECKED BY: M.E. OOMS
SOE LAYOUT SHEET (8 OF 8)	SHEET 64 OF 328



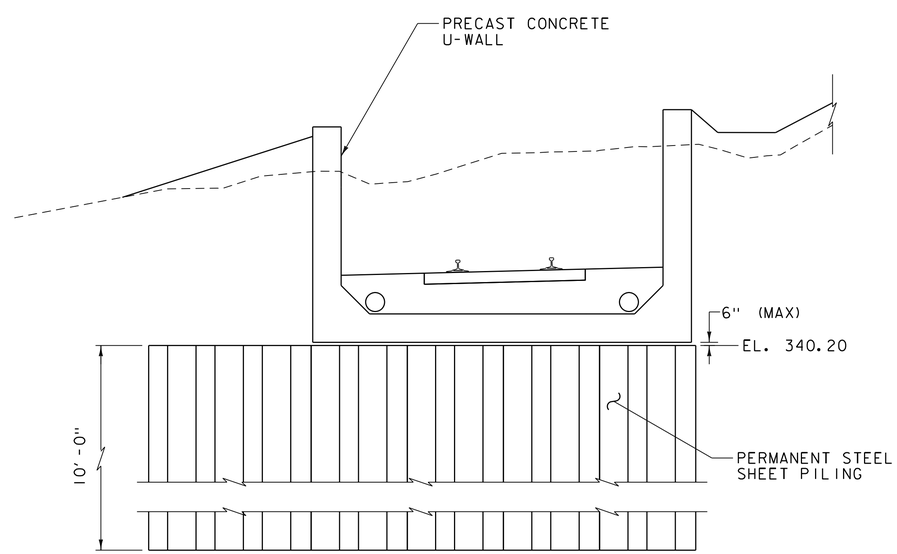
PERMANENT SHEET PILE BERM - PLAN

SCALE 1/16" = 1'-0"



PERMANENT SHEET PILE BERM - SECTION

SCALE 3/8" = 1'-0"



SECTION A-A

SCALE 1/4" = 1'-0"

PERMANENT SHEET PILE LAYOUT

STATION	OFFSET	TOP OF SHEET PILE EL.
16+24.80	17.34' LT	347.61
16+50.00	20.33' LT	347.16
17+00.00	19.99' LT	346.96
17+50.00	19.90' LT	346.93
18+00.00	19.66' LT	346.78
18+50.00	19.79' LT	346.90
19+00.00	19.38' LT	346.66
19+50.00	19.23' LT	346.59
20+03.00	17.15' LT	346.11
20+03.00	10.00' RT	340.20

PROJECT NAME: MIDDLEBURY
PROJECT NUMBER: WCRS(23)

FILE NAME: z13g542shtwall.dgn
PROJECT LEADER: A.P. GUYETTE
DESIGNED BY: R.H. BARNES
PERMANENT SHEET PILE BERM DETAILS

PLOT DATE: 4/30/2019
DRAWN BY: R.H.BARNES
CHECKED BY: K.C. BARRY
SHEET 65 OF 328

GENERAL TRAFFIC CONTROL, DETOUR, AND PHASING NOTES:

1. THE FOLLOWING TRAFFIC CONTROL INFORMATION AND PHASING PLAN IS INTENDED TO BE AN OUTLINE FOR HOW THE WORK WILL PROCEED.

2. THE REPLACEMENT OF THE MAIN STREET AND MERCHANTS ROW BRIDGES WILL REQUIRE MULTIPLE PHASES OF TEMPORARY TRAFFIC CONTROL (TTC) OVER SEVERAL CONSTRUCTION SEASONS. THE PRIMARY PHASE WILL BE A TEN-WEEK FULL CLOSURE OF BOTH MAIN STREET AND MERCHANTS ROW DURING THE SECOND CONSTRUCTION SEASON, REQUIRING THE USE OF DETOUR ROUTES. TRAFFIC WILL BE MAINTAINED BY USING A COMBINATION OF VEHICLE AND PEDESTRIAN DETOURS AS OUTLINED IN THE PROJECT PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING, ERECTING, MAINTAINING AND REMOVING ALL TEMPORARY AND DETOUR SIGNING ALONG THE DETOUR ROUTES AS SHOWN IN THE PLANS, AS REQUIRED BY SITE SPECIFIC WORK, AND AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING, MAINTAINING AND REMOVING TEMPORARY PAVEMENT MARKINGS AS REQUIRED FOR THE PROJECT. SITE SPECIFIC TTC SHALL BE IN SUBSTANTIAL CONFORMANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), 2009 EDITION AND LATEST REVISIONS.

3. ALL TRAFFIC CONTROL EQUIPMENT, DEVICES, AND TTC SHALL BE IN SUBSTANTIAL CONFORMANCE WITH THE MUTCD, 2009 EDITION AND THE CURRENT ON-LINE EDITION OF THE VERMONT AGENCY OF TRANSPORTATION (VAOT) CONSTRUCTION STANDARD DRAWINGS.

4. ALL TTC SIGNS SHALL HAVE RETROREFLECTIVE SHEETING EQUAL TO OR EXCEEDING AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM) TYPE VII, VIII OR IX REQUIREMENTS, UNLESS OTHERWISE NOTED. CONSTRUCTION SIGNS INSTALLED FOR THE TERM OF THE CONTRACT AND SIGNS PLACED ON A DAILY BASIS SHALL BE MAINTAINED IN LIKE-NEW CONDITION.

5. CONSTRUCTION SIGNS FOR EACH CONSTRUCTION PHASE SHALL BE IN PLACE PRIOR TO THE BEGINNING OF WORK FOR THE RESPECTIVE CONSTRUCTION PHASE. SIGNS SHALL BE COVERED UNTIL WORK COMMENCES, AND UPON COMPLETION OF THE WORK. THE CONTRACTOR SHALL MAINTAIN ALL DETOURS, TEMPORARY SIGNING, AND OTHER SUPPORTING TTC THROUGHOUT CONSTRUCTION. INSTALLING, MAINTAINING, ADJUSTING, MODIFYING, AND REMOVING THE TTC SHALL BE INCIDENTAL TO ITEM 641.10 TRAFFIC CONTROL.

6. WHEN EXISTING ROUTE MARKER ASSEMBLIES ARE LOCATED AT THE INTERSECTIONS OR ALONG THE DETOUR ROUTE, THE DETOUR ROUTE MARKER ASSEMBLIES SHALL BE INSTALLED ADJACENT TO THE EXISTING ROUTE MARKER ASSEMBLIES.

7. ALL SIGNS SHALL BE LOCATED SO THEY ARE VISIBLE AND ABLE TO BE READ BY THE TRAVELING PUBLIC. SIGNS SHALL BE INSTALLED SO AS NOT TO OBSTRUCT EXISTING SIGNS. ALL SIGN STANDS AND POST INSTALLATIONS SHALL BE NATIONAL COOPERATIVE HIGHWAY RESEARCH PROGRAM (NCHRP) REPORT 350 COMPLAINT AT TEST LEVEL 2 (TL-2). NO SIGN POSTS SHALL EXTEND OVER THE TOP OF THE SIGN INSTALLED ON SAID POST(S). WHEN ANCHORS ARE INSTALLED, STUBS SHALL NOT BE GREATER THAN FOUR INCHES ABOVE EXISTING GROUND. FIXED SIGNS SHALL BE SET SECURELY IN THE GROUND. THE BOTTOM OF A SIGN SHALL BE AT LEAST SEVEN FEET ABOVE THE EDGE OF PAVEMENT OR ADJACENT SIDEWALK.

8. ANY CONFLICTING PAVEMENT MARKINGS SHALL BE BLACKED OUT OR REMOVED BY BURNING OR GRINDING. EXISTING PAVEMENT MARKINGS THAT ARE TO REMAIN FOR LATER USE SHALL BE BLACKED OUT WITH TEMPORARY TAPE.

9. THE CONSTRUCTION PHASES SHOW VEHICULAR AND PEDESTRIAN TRAFFIC ADJACENT TO CONSTRUCTION WORK AREAS. REFLECTORIZED DRUMS, CONES OR TEMPORARY FENCING SHALL BE USED TO DELINEATE THE WORK ZONE FROM THE TRAVELED WAY.

10. SPECIAL CARE MUST BE TAKEN TO PROVIDE ACCESS THROUGH THE WORK ZONES FOR EMERGENCY VEHICLES. THE CONTRACTOR SHALL COORDINATE WITH BOTH POLICE AND FIRE DEPARTMENTS TO DETERMINE THEIR MINIMUM ACCESS REQUIREMENTS. CONTRACTOR SHALL ENSURE THAT ACCESS IS AVAILABLE TO ALL PROPERTIES AT ALL TIMES FOR EMERGENCY VEHICLES.

11. CONTRACTOR SHALL MAINTAIN PEDESTRIAN ACCESS AS NOTED IN THE TRAFFIC CONTROL PLANS. PEDESTRIAN ACCESS SHALL MEET APPLICABLE AMERICANS WITH DISABILITIES ACT (ADA) REQUIREMENTS TO THE MAXIMUM EXTENT FEASIBLE. CONTRACTOR SHALL COORDINATE WORK ADJACENT TO COMMERCIAL ACCESS AREAS WITH THE LAND/BUSINESS OWNER PRIOR TO STARTING WORK IN THE AREA.

GENERAL TRAFFIC CONTROL, DETOUR, AND PHASING NOTES (CONT.):

12. PERMANENT EXISTING SIGNS SHALL REMAIN, WITH COVERING AS NECESSARY, UNTIL THEY ARE NO LONGER REQUIRED. CONSTRUCTION SIGNS SHALL BE INSTALLED, AS SHOWN IN THE PLANS AND AS REQUIRED BY THE MUTCD. ALL PERMANENT PROPOSED SIGNING SHALL BE INSTALLED AND ALL SIGNS TO BE REMOVED SHALL BE REMOVED PRIOR TO THE APPLICATION OF THE FINAL PAVEMENT MARKINGS.

TRAFFIC MANAGEMENT SEQUENCING:

1. THE DEMOLITION OF THE TEMPORARY BRIDGES AND CONSTRUCTION OF THE RAILROAD TUNNEL FOR MAIN STREET AND MERCHANTS ROW IS EXPECTED TO OCCUR WITHIN A TEN-WEEK FULL ROAD AND RAIL CLOSURE. ADDITIONAL CONSTRUCTION WORK IS EXPECTED PRIOR TO AND AFTER THE TEN-WEEK CLOSURE TO PREPARE FOR AND WRAP UP THE TUNNEL CONSTRUCTION. THE FOLLOWING PARAGRAPHS DESCRIBE THE PROPOSED TRAFFIC CONTROL PLANS (TCP) REQUIRED FOR THIS MULTI-PHASED WORK. TCP PHASING HAS BEEN DEVELOPED TO BALANCE CONTRACTOR WORK AREA ACCESS AND SAFETY WITH MAINTAINING VEHICLE, BICYCLE AND PEDESTRIAN TRAFFIC THROUGHOUT THE PROJECT WHILE MINIMIZING THE IMPACTS TO ADJACENT COMMERCIAL, RESIDENTIAL, AND MUNICIPAL PROPERTIES. EACH TCP HAS A SPECIFIC CONSTRUCTION AND DETOUR SIGNING PLAN; MULTIPLE PLANS MAY BE IMPLEMENTED CONCURRENTLY. ALL STATION REFERENCES ARE APPROXIMATE; ACTUAL BEGIN AND END STATIONS WILL BE DETERMINED BY THE CONTRACTOR AND THE ENGINEER IN THE FIELD.

   A MINIMUM OF SIX (6) WEEKS PRIOR TO THE START OF THE 10-WEEK CLOSURE, THE CONTRACTOR AND VTRANS SHALL HOST A MEETING FOR THE PRIMARY STAKEHOLDERS OF THE PROPOSED TRAFFIC CONTROL. THIS MEETING SHALL INCLUDE REPRESENTATIVES FROM THE TOWN, THE POLICE DEPARTMENT, FIRE DEPARTMENT, REGIONAL EMS, TRANSIT PROVIDERS, THE RAILROAD OPERATOR, AND OTHER INTERESTED PARTIES AS DETERMINED BY THE ENGINEER. THE AGENDA FOR THIS MEETING SHALL INCLUDE AN OVERVIEW OF THE PROPOSED CLOSURE SCHEDULE AND THE PROPOSED DETOUR ROUTES THAT WILL BE IN PLACE DURING THE CLOSURE. THIS WILL BE THE OPPORTUNITY FOR THE TOWN AND ITS EMERGENCY SERVICES TO MAKE ANY LAST MINUTE SUGGESTIONS OR MODIFICATIONS TO THE CLOSURE AND DETOUR.

2. TRAFFIC CONTROL PLAN #1 - WORK ZONE LIMITS

   THIS IS THE WORK ZONE LIMIT SIGNING PLAN. THIS PLAN SHALL BE IN PLACE PRIOR TO ANY WORK BEING STARTED. ALL SIGNS SHALL REMAIN IN PLACE AND IN LIKE-NEW CONDITION AS LONG AS ANY CONSTRUCTION ACTIVITIES ARE ONGOING. DURING PROJECT SHUTDOWNS OF MORE THAN TWO WEEKS, THE SIGNS SHALL BE REMOVED OR COVERED UNTIL SUCH TIME AS THE CONSTRUCTION RESUMES.

3. TRAFFIC CONTROL PLAN #2 - BLASTING PLAN

   THIS IS THE BLASTING ZONE SIGNING PLAN. THESE SIGNS SHALL BE IN PLACE PRIOR TO ANY BLASTING ACTIVITIES AND SHALL BE UNCOVERED WHEN EXPLOSIVES ARE PREPARED FOR PLACEMENT AND BLASTING CAPS ARE DEPLOYED. THESE ACTIVITIES SHALL ONLY TAKE PLACE DURING THE TEN-WEEK FULL CLOSURE UNLESS OTHERWISE APPROVED BY THE ENGINEER.

4. TRAFFIC CONTROL PLAN #3 - VILLAGE GREEN WORK ZONE

   THIS IS THE PRIMARY WORK ZONE FOR CONSTRUCTION BEFORE AND AFTER THE TEN-WEEK CLOSURE. THIS PLAN WILL BE USED IN ALL THREE YEARS OF CONSTRUCTION. A TEMPORARY FENCE SHALL BE INSTALLED SURROUNDING TRIANGLE PARK AND A FLAGGER SHALL BE PRESENT WHENEVER CONSTRUCTION VEHICLES WILL BE ENTERING AND EXITING THE AREA.

   THE UTILITY WORK REQUIRING TRAFFIC CONTROL PLANS #4, #5, AND #6 SHALL BE COMPLETED DURING THE FIRST CONSTRUCTION SEASON.

5. TRAFFIC CONTROL PLAN #4 MAIN STREET UTILITY WORK

   TRAFFIC CONTROL PLAN #4 IS INTENDED FOR THE CONSTRUCTION OF THE SEWER LINE FROM THE EXISTING MANHOLE NEAR PRINTERS ALLEY TO THE VILLAGE GREEN. THIS WORK IS EXPECTED TO BE COMPLETED IN PHASES BEGINNING ALONG MAIN STREET AND PRINTERS ALLEY AND ENDING IN THE BATTELL BLOCK PARKING AREA.

   TRAFFIC CONTROL PLAN #4A SHALL OCCUR WHEN THE SEWER WORK IS BEING DONE ALONG MAIN STREET WITH AN ALTERNATING TWO-WAY TRAFFIC OPERATION USING THE EASTERN LANE AND CONTROLLED BY FLAGGERS. WORK IS EXPECTED TO TAKE LESS THAN ONE WEEK TO COMPLETE. PEDESTRIAN TRAFFIC ALONG MAIN STREET WILL CONTINUE ALONG THE TEMPORARY BRIDGE.

   TRAFFIC CONTROL PLAN #4B SHALL OCCUR WHEN THE SEWER WORK IS BEING DONE ALONG MAIN STREET WITH AN ALTERNATING TWO-WAY TRAFFIC OPERATION USING THE EASTERN LANE AND CONTROLLED BY FLAGGERS. WORK IS EXPECTED TO TAKE LESS THAN ONE WEEK TO COMPLETE. PEDESTRIAN TRAFFIC ALONG MAIN STREET WILL CONTINUE ALONG THE TEMPORARY BRIDGE.

   TRAFFIC CONTROL PLAN #4C SHALL OCCUR WHEN THE SEWER WORK CONTINUES ACROSS MAIN STREET TOWARDS THE VILLAGE GREEN. UNDER THIS PLAN, VEHICLE ACCESS ACROSS MAIN STREET WILL BE LIMITED TO ALTERNATING TWO-WAY TRAFFIC OPERATION USING THE WESTERN LANE AND CONTROLLED BY FLAGGERS. THIS MAY TAKE PLACE EITHER AT NIGHT OR DURING LIMITED DAYTIME HOURS AND IS EXPECTED TO TAKE UP TO ONE WEEK. PEDESTRIAN TRAFFIC ALONG MAIN STREET WILL CONTINURE ALONG THE TEMPORARY BRIDGE.

TRAFFIC MANAGEMENT SEQUENCING (CONT.):

6. TRAFFIC CONTROL PLAN #5 MERCHANTS ROW UTILITY WORK

   TRAFFIC CONTROL PLAN #5 IS A CONTINUATION OF THE CONSTRUCTION OF THE SEWER LINE FROM TRIANGLE PARK TO THE BATTELL BLOCK PARKING AREA. UNDER THIS PLAN THE WATER SERVICE SHALL BE CONSTRUCTED FROM TRIANGLE PARK TO THE BATTELL BLOCK PARKING AREA.

   TRAFFIC CONTROL PLAN #5A REQUIRES THE CLOSURE OF MERCHANTS ROW TO ALLOW THE SEWER AND WATER LINES TO BE INSTALLED ACROSS THE ROADWAY. VEHICLE ACCESS ALONG MERCHANTS ROW WILL BE PREVENTED DURING THIS TEMPORARY NIGHT TIME CLOSURE. PEDESTRIAN ACCESS TO THE BATTELL BLOCK SHALL BE MAINTAINED INCLUDING ACCESS TO THE EMERGENCY STAIRS ON THE EAST SIDE OF THE BATTELL DRIVEWAY. PEDESTRIAN ACCESS TO THE SOTHWEST SIDE OF MERCHANTS ROW SHALL BE MAINTAINED. PEDESTRIANS MAY CROSS MERCHANTS ROW AT THE WEST END OF THE TEMPORARY BRIDGE TO ACCESS THE VILLAGE GREEN.

   TRAFFIC CONTROL PLAN #5B REQUIRES THE CLOSURE OF THE BATTELL BLOCK DRIVEWAY FOR SEVERAL NIGHTS. A FIVE-FOOT PEDESTRIAN PATH SHALL BE MAINTAINED ADJACENT TO THE BUILDING TO PROVIDE ACCESS TO THE RESIDENTIAL AREAS. VEHICLE AND PEDESTRIAN TRAFFIC WILL BE MAINTAINED ALONG MERCHANTS ROW USING THE TEMPORARY BRIDGE. BATTELL BLOCK PRIVATE RESIDENTS WILL HAVE ACCESS TO BATTELL BLOCK PARKING VIA THE TEMPORARY ACCESS ROAD FOR THE DURATION OF THE CLOSURE OF BATTELL BLOCK DRIVEWAY.

7. TRAFFIC CONTROL PLAN #6 OTHER UTILITY WORK AREAS (PRINTERS ALLEY AND SEYMOUR STREET)

   TRAFFIC CONTROL PLAN #6 IS A CONTINUATION OF THE CONSTRUCTION OF THE SEWER LINE FROM MAIN STREET ALONG PRINTERS ALLEY.

   TRAFFIC CONTROL PLAN #6A SHALL BE IMPLEMENTED AFTER THE UTILITY WORK ON MAIN STREET HAS BEEN COMPLETED. PRINTERS ALLEY, ALREADY CLOSED TO VEHICLE TRAFFIC, WILL ALSO BE CLOSED TO PEDESTRIAN TRAFFIC FOR THE DURATION OF THE UTILITY WORK. A PEDESTRIAN DETOUR WILL BE SIGNED THROUGH THE VILLAGE GREEN TO MERCHANTS ROW TO CROSS THE RAILROAD TRACKS DOWNTOWN.

   TRAFFIC CONTROL PLAN #6B PROVIDES AN ADDITIONAL PEDESTRIAN DETOUR THAT WILL BE SIGNED ALONG MAIN STREET, MILL STREET AND THE RIVERFRONT PARK FOR ACCESS TO MARBLE WORKS. AT THE COMPLETION OF THIS THIRD PHASE OF UTILITY WORK, THE PEDESTRIAN DETOURS SHALL BE REMOVED AND PEDESTRIAN ACCESS TO PRINTERS ALLEY SHALL BE REINSTATED.

   TRAFFIC CONTOL PLAN #6C IS INTENDED FOR THE CONSTRUCTION OF THE STORM DRAIN AND REMOVAL OF THE WATER SERVICE LINE ALONG MIDDLE SEYMOUR STREET. TRAFFIC ON MIDDLE SEYMOUR STREET WILL BE ONE LANE TRAFFIC WITH FLAGGERS.

TRAFFIC MANAGEMENT SEQUENCING (CONT.):

8. TRAFFIC CONTROL PLAN #7 MERCHANTS ROW CRANE STAGING AREA

TRAFFIC CONTROL PLAN #7 IS INTENDED TO PARTIALLY CLOSE MERCHANT'S ROW FOR 3 WEEKS PRIOR TO THE FULL 10-WEEK CLOSURE OF BOTH MECHANTS ROW AND MAIN STREET. THE CONTRACTOR SHALL REMOVE THE MERCHANTS ROW TEMPORARY BRIDGE AND INSTALL THE SUPPORT OF EXCAVATION ALONG THE RAIL CORRIDOR. UNDER THIS PLAN, A WORK AREA FOR THE CONTRACTOR TO DELIVER AND ASSEMBLE THE PIECES REQUIRED TO CONSTRUCT THE LARGE CRANE THAT WILL BE LOCATED IN VILLAGE GREEN. THE BATTELL BLOCK DRIVEWAY WILL BE CLOSED TO VEHICLE TRAFFIC. A FIVE-FOOT PEDESTRIAN PATH SHALL BE MAINTAINED ADJACENT TO THE BUILDING TO PROVIDE ACCESS TO THE RESIDENTIAL AREAS. PEDESTRIAN ACCESS TO THE BUILDINGS ON THE SOUTH SIDE OF MERCHANTS ROW SHALL BE MAINTAINED ON THE EXISTING SIDEWALKS. TWO WAY TRAFFIC AND PARKING WILL BE MAINTAINED ON THE OPEN PORTION OF MERCHANTS ROW.

9. TRAFFIC CONTROL PLAN #8 MAIN STREET CRANE STAGING AREA

AS THE VILLAGE GREEN CRANE CONTINUES TO BE ASSEMBLED, THE WORK AREA WILL NEED TO EXPAND TO ACCOMMODATE THE STRUCTURE. TRAFFIC CONTROL PLAN #8, A NIGHT WORK PLAN, SHALL FULLY CLOSE MERCHANTS ROW AND WILL ADDITIONALLY CLOSE A LANE ALONG MAIN STREET. MAIN STREET TRAFFIC WILL BE MAINTAINED USING ALTERNATING TWO-WAY FLAGGING ALONG THE WEST SIDE LANE. PEDESTRIAN TRAFFIC WILL BE MAINTAINED ALONG THE WEST SIDE OF MAIN STREET.

10. TRAFFIC CONTROL PLAN #8.5 INTERSECTION MODIFICATIONS

TRAFFIC CONTROL PLAN IS INTENDED TO MAKE INTERSECTION MODIFICATIONS FOR DETOURED TRAFFIC DURING THE 10-WEEK FULL CLOSURE IN THE SUBSEQUENT TRAFFIC CONTROL PLANS.

TRAFFIC CONTROL #8.5A IS INTENDED TO REMOVE THE EXISTING TRAFFIC CONTROL SIGNAL SYSTEM AND OTHER OVERHEAD OBSTRUCTIONS AS NEEDED TO ALLOW CONSTRUCTION VEHICLES CLEARANCE BETWEEN THE LAYDOWN AREA AND THE WORKSITE.

TRAFFIC CONTROL PLAN #8.5B IS INTENDED TO MAKE ADJUSTMENTS TO THE INTERSECTION AT COURT STREET AND CROSS STREET. THE STOP BAR FOR THE LEFT TURN LANE OF EAST BOUND CROSS STREET SHALL BE OBLITERATED AND STRIPED 40 FEET WEST OF THE EXISTING LOCATION. THE CONTRACTOR SHALL DISCONNECT AND ABANDON LOOP DETECTORS AT NORTHBOUND COURT STREET, SOUTHBOUND COURT STREET, AND EASTBOUND CROSS STREET. THE CONTRACTOR SHALL INSTALL NEW VEHICLE DETECTION SYSTEMS FOR NORTHBOUND COURT STREET, SOUTHBOUND COURT STREET, AND EASBOUND CROSS STREET.

11. TRAFFIC CONTROL PLAN #9 FULL ROAD CLOSURE

THE CONSTRUCTION OF THE TUNNEL SECTIONS WILL OCCUR DURING A TEN-WEEK CLOSURE DURING THE SECOND CONSTRUCTION SEASON. DURING THE TEN-WEEK PERIOD, ALL VEHICLE AND RAILROAD TRAFFIC SHALL BE DETOURED AROUND THE CLOSURE AREAS. PEDESTRIAN TRAFFIC WILL BE DETOURED AS REQUIRED TO AVOID CROSSING THE RAILROAD IN THE DOWNTOWN AREA. THE FOLLOWING DESCRIBE THE SEVERAL TRAFFIC CONTROL PLANS REQUIRED FOR THE FULL ROADWAY CLOSURE.

TRAFFIC CONTROL PLAN #9A CONSISTS OF NINE PLAN SHEETS THAT PROVIDE DETAILS FOR THE CLOSURES MERCHANTS ROW AND MAIN STREET IN THE DOWNTOWN AREA WITH THE REQUIRED SIGNING AND TRAFFIC CONTROL DEVICES FOR THE DETOURS. THE FIRST USE OF THIS CLOSURE PLAN WILL BE JUST PRIOR TO THE TEN-WEEK CLOSURE PERIOD AS THE CONTRACTOR COMPLETES THE ASSEMBLY AND ERECTION OF THE VILLAGE GREEN CRANE. THE CONTRACTOR MAY MAKE ADJUSTMENTS TO THIS PLAN BASED ON FEEDBACK FROM THE EARLY CLOSURE PERIOD. THE PRIMARY USE OF THIS TCP IS FOR THE REMOVAL OF THE TEMPORARY BRIDGES AND INSTALLATION OF THE TUNNEL SECTIONS. MERCHANTS ROW SHALL BE CLOSED TO ALL VEHICLE TRAFFIC INCLUDING ACCESS TO THE BATTELL BLOCK PARKING LOT. ACCESS TO THE PARKING LOT SHALL BE THROUGH THE TEMPORARY ACCESS ROAD FROM WATER STREET WITH TEMPORARY CONTROLS (EITHER 24/7 FLAGGING OPERATION OR TEMPORARY TRAFFIC SIGNALS) TO CONTROL THE MIX OF CONSTRUCTION VEHICLES AND PRIVATE VEHICLES. PEDESTRIAN ACCESS TO THE BUSINESSES ON MERCHANTS ROW SHALL BE MAINTAINED FROM MAIN STREET TO THE BATTELL BLOCK DRIVEWAY AND FROM SOUTH PLEASANT STREET TO THE RAILROAD CORRIDOR ON THE SOUTH SIDE OF MERCHANTS ROW WITH UNOBSTRUCTED ACCESS TO ALL BUSINESS DOORS AS WELL AS THE EMERGENCY STAIRS AT THE SIDE OF THE BATTELL BLOCK BUILDING; HOWEVER, THERE SHALL BE NO PEDESTRIAN ACCESS ACROSS THE RAILROAD. A FULL VEHICLE DETOUR ROUTE WILL BE SIGNED USING CROSS STREET, COURT STREET, AND N./S. PLEASANT STREET.

TRAFFIC MANAGEMENT SEQUENCING (CONT.):

MAIN STREET SHALL ALSO BE CLOSED TO ALL VEHICLE TRAFFIC FROM MERCHANTS ROW TO THE POST OFFICE. THERE WILL BE LIMITED AND RESTRICTED VEHICLE ACCESS ALONG MAIN STREET FROM BAKERY LANE TO MERCHANTS ROW AND FROM THE POST OFFICE TO SEYMOUR STREET. PEDESTRIAN ACCESS TO THE BUSINESSES ALONG MAIN STREET SHALL BE MAINTAINED FROM THE BANK TO THE SOUTH AND FROM THE POST OFFICE TO THE NORTH; HOWEVER, THERE SHALL BE NO PEDESTRIAN ACCESS ACROSS THE RAILROAD. A FULL VEHICLE DETOUR ROUTE WILL BE SIGNED USING THE CROSS STREET ROUNDABOUT, CROSS STREET, COURT STREET, AND SEYMOUR STREET.

TRAFFIC CONTROL PLAN #9B PROVIDES THE PEDESTRIAN DETOUR THAT SHALL BE SIGNED USING SOUTH PLEASANT STREET AND CROSS STREET TO MAINTAIN PEDESTRIAN ACCESS FROM THE POST OFFICE AREA OF MAIN STREET AND THE EAST END OF MERCHANTS ROW TO THE BANK AREA OF MAIN STREET AND THE WEST END OF MERCHANTS ROW. IN ADDITION, THE TRAFFIC CONTROL PLAN #6B SHALL BE IMPLEMENTED TO DETOUR PRINTERS ALLEY PEDESTRIAN TRAFFIC.

TRAFFIC CONTROL PLAN #9C IS INTENDED TO ALLOW CONSTRUCTION VEHICLES ACCESS TO SEYMOUR STREET AND MIDDLE SEYMOUR STREET FROM THE EXISTING RAIL CROSSING. A FLAGGER SHALL BE PRESENT WHENEVER CONSTRUCTION VEHICLES ARE ACCESSING THE RAIL CORRIDOR AT THE EXISTING RAIL CROSSING.

12. TRAFFIC CONTROL PLAN #10 CRANE LOCATIONS ALONG MARBLEWORKS BUILDINGS

TRAFFIC CONTROL PLAN #10 ASSUMES THE PLACEMENT OF A MOBILE CRANE FOR CONTINUING U-WALL SECTIONS NORTH OF THE TUNNEL, OUTSIDE OF THE FULL ROADWAY CLOSURE AREA. THE PLANS DETAIL SEVEN LIKELY CRANE POSITIONS ALONG THE RAILROAD TRACKS IN THE VICINITY OF STA 28+00 TO STA 34+00. DEPENDING ON THE LOCATION OF THE CRANE, VARIOUS SECTIONS OF THE PARKING LOT NEED TO BE BLOCKED FROM TRAFFIC TO KEEP VEHICLES AND PEDESTRIANS OUT OF THE WORK ZONE. BATTELL BLOCK PRIVATE RESIDENTS WILL CONTINUE TO HAVE ACCESS TO PARKING BEHIND BATTELL BLOCK, HOWEVER THERE WILL BE A REDUCED NUMBER OF PARKING SPACES AVAILABLE DURING THIS TIME.

13. TRAFFIC CONTROL PLAN #11 MAIN STREET CLOSURE

TRAFFIC CONTROL PLAN #11 IS INTENDED FOR THE PERIOD IMMEDIATELY BEFORE THE TEN-WEEK CLOSURE TO ALLOW THE CONTRACTOR TO DO PRELIMINARY DEMOLITION WORK ALONG MAIN STREET (I.E. PAVEMENT REMOVAL) TO PREPARE FOR THE FULL CLOSURE. MAIN STREET WILL BE CLOSED BETWEEN MERCHANTS ROW AND SEYMOUR STREET, WITH A NORTHBOUND DETOUR SENDING TRAFFIC ALONG MERCHANTS ROW TO COURT SQUARE TO SEYMOUR STREET WHILE A SOUTHBOUND DETOUR WILL SEND TRAFFIC FROM SEYMOUR STREET TO S. PLEASANT STREET TO CROSS STREET. PEDESTRIAN ACCESS SHALL BE MAINTAINED. THIS TCP MAY BE USED ANY OTHER TIME WHEN MAIN STREET MUST BE FULLY CLOSED BUT MERCHANTS ROW CAN REMAIN OPEN TO VEHICLE AND PEDESTRIAN TRAVEL OVER THE TEMPORARY BRIDGE.

14. TRAFFIC CONTROL PLAN #12 SEYMOUR STREET FLAGGING

TRAFFIC CONTROL PLAN #12 ASSUMES THE PLACEMENT OF A MOBILE CRANE FOR COMPLETING U-WALL SECTIONS AT THE NORTHERN END OF THE PROJECT. THE PLANS DETAIL FOUR LIKELY CRANE POSITIONS ALONG SEYMOUR STREET IN THE VICINITY OF RAILROAD STA 34+00 TO STA 37+00. THE TCP CALLS FOR A FLAGGING OPERATION ALONG SEYMOUR STREET FROM SOUTH OF METHODIST LANE TO SOUTH OF ELM STREET. PEDESTRIAN ACCESS ALONG THE WEST SIDE OF SEYMOUR STREET WILL BE PROHIBITED BUT PEDESTRIAN ACCESS ON THE EAST SIDE OF SEYMOUR STREET WILL BE MAINTAINED. THE FLAGGING OPERATION SHALL ONLY BE USED WHEN ANY PORTION OF THE MOBILE CRANE OR THE U-WALL DELIVERY VEHICLES WILL BE WITHIN FOUR FEET OF THE EDGE OF PAVEMENT.

15. TRAFFIC CONTROL PLAN #13 SEYMOUR STREET PARKING RESTRICTIONS

TRAFFIC CONTROL PLAN #13 DETAILS THE PARKING RESTRICTIONS REQUIRED DURING WORK NEAR SEYMOUR STREET. THE PARALLEL PARKING SPACES ON THE WEST SIDE OF SEYMOUR STREET SHALL BE RESTRICTED FROM USE DURING THE CONSTRUCTION IN THIS AREA. THIS IS TO PREVENT VEHICLES FROM PARKING WITHIN THE WORK ZONE WHICH WILL BE SET UP EACH TIME A CRANE IS NEEDED IN THIS AREA. THIS PLAN SHALL BE IN PLACE PRIOR TO THE USE OF TRAFFIC CONTROL PLAN #12 AND SHALL REMAIN IN PLACE UNTIL THE WORK IN THIS AREA OF SEYMOUR STREET HAS BEEN COMPLETED.

TRAFFIC MANAGEMENT SEQUENCING (CONT.):

16. TRAFFIC CONTROL PLAN #14 WATER STREET TEMPORARY ACCESS ROAD

DURING THE TEN-WEEK CLOSURE, ACCESS TO THE BATTEL BLOCK PARKING AREA VIA MERCHANTS ROW WILL BE CLOSED. ALTERNATIVE PUBLIC ACCESS TO THE BATTEL BLOCK PARKING AREA WILL BE PROVIDED BY A TEMPORARY ACCESS ROAD AT THE SOUTH END OF WATER STREET. TRAFFIC CONTROL PLAN #14 PROVIDES DETAILS FOR WHEN THE WATER STREET TEMPORARY ACCESS ROAD IS AVAILABLE TO CONTRACTOR PERSONNEL ONLY AND WHEN THE TEMPORARY ACCESS ROAD IS OPEN TO PUBLIC TRAVEL. WHEN THE TEMPORARY ACCESS ROAD IS OPEN TO PUBLIC TRAVEL, THERE WILL BE A MIX OF PUBLIC VEHICLES AND CONTRACTOR VEHICLES. THE PLANS INDICATE A TEMPORARY TRAFFIC SIGNAL SYSTEM TO CONTROL THE THREE ENDS OF THE TEMPORARY ACCESS ROAD. THE CONTRACTOR MAY, AT HIS OPTION, PROVIDE 24 HOURS PER DAY/SEVEN DAYS PER WEEK FLAGGING OPERATIONS DURING THE TEN-WEEK CLOSURE AS AN ALTERNATIVE TO THE TEMPORARY TRAFFIC SIGNAL SYSTEM.

TRAFFIC CONTROL PLAN #14A PROVIDES DETAILS FOR CONTRACTOR ACCESS TO THE WATER STREET TEMPORARY ACCESS ROAD PRIOR TO THE TEN-WEEK CLOSURE. THE CONTRACTOR SHALL PROVIDE A FLAGGER AT THE END OF WATER STREET TO AUTHORIZE ONLY CONTRACTOR PERSONNEL INTO AND OUT OF THE TEMPORARY ACCESS ROAD. ALSO DURING THIS TIME, THE RAILROAD TRACKS WILL CONTINUE TO BE ACTIVE. THE GATE WILL BE REQUIRED TO BE CLOSED/LOCKED WHEN THERE IS NO CONTRACTOR ACTIVITY AND THE BARRICADES BLOCKING THE ACCESS ROAD FROM BOTH WATER STREET AND THE BATTELL BLOCK PARKING LOT SHALL REMAIN.

TRAFFIC CONTROL PLAN #14B CONSISTS OF THE TEMPORARY TRAFFIC SIGNAL ALONG THE TEMPORARY ACCESS ROAD. THIS WILL ALLOW CONSTRUCTION VEHICLES ACCESS AS WELL AS PRIVATE VEHICLE ACCESS TO THE BATTELL BLOCK PARKING LOT. TEMPORARY SIGNAL TIMINGS HAVE BEEN PROVIDED IN THE PLAN BUT MAY NEED FINE TURNING IN THE FIELD ONCE THIS BECOMES ACTIVE. THE TRAFFIC CONTROL PLAN SHALL ONLY BE ACTIVE DURING THE TEN-WEEK CLOSURE OF MERCHANTS ROW AND MAIN STREET.

TRAFFIC CONTROL PLAN #14C SHALL BE USED ONCE ACCESS TO THE BATTELL BLOCK PARKING AREA HAS BEEN REOPENED FROM MERCHANTS ROW. THE TEMPORARY TRAFFIC SIGNAL EQUIPMENT AND SIGNS SHALL BE REMOVED. THE TEMPORARY ACCESS ROAD SHALL BE REMOVED. THE BARRICADES WITH ROAD CLOSED SIGNS SHALL BE LEFT IN PLACE AT EITHER END OF THE ACCESS ROAD UNTIL THE TEMPORARY ACCESS ROAD IS ISOLATED FROM WATER STREET AND CONTRACTOR VEHICLES NO LONGER REQUIRE ACCESS. THIS STAGE IS ANTICIPATED TO CONTINUE INTO THE THIRD CONSTRUCTION SEASON. THE RAILROAD WILL RESUME ACTIVITY DURING THIS CONSTRUCTION PHASE.

17. TRAFFIC CONTROL PLAN #15 TRIANGLE PARK LANDSCAPING WORK ZONE

THIS IS PRIMARY WORK ZONE FOR CONSTRUCTION AFTER THE 10 WEEK CLOSURE. THIS PLAN WILL BE USED IN THE FINAL YEAR OF THE PROJECT. A TEMPORARY FENCE SHALL BE INSTALLED SURROUNDING THE EXPANDED TRIANGLE PARK LANDSCAPING WORK ZONE AND A FLAGGER SHALL BE PRESENT WHENEVER CONSTRUCTION VEHICLES WILL BE ENTERING OR EXITING THE AREA.

IDENTIFICATION NUMBER	SIZE OF SIGN WIDTH (IN)	SIZE OF SIGN HEIGHT (IN)	TEXT	NUMBER OF SIGNS REQ'D	REMARKS
D3-1a	24	9	Main St	22	MOUNT ABOVE M4-9 M-5, & M4-8
D3-1c	48	9	To Marbleworks	5	MOUNT ABOVE M4-9
D3-1d	42	9	To Post Office	2	MOUNT ABOVE R9-11aL
D3-1e	30	9	To Bank	2	MOUNT ABOVE R9-11aL
G20-2	36	18	END ROAD WORK	9	MOUNT ON ONE POST
M1-5	24	24	VERMONT 30	24	MOUNT ON ONE POST
M3-1	24	12	NORTH	11	MOUNT ABOVE M1-5
M3-3	24	12	SOUTH	11	MOUNT ABOVE M1-5
M4-4	24	12	TRUCK	2	MOUNT ABOVE M1-5
M4-8	24	12	DETOUR	26	MOUNT ABOVE M1-5
M4-8 (MOD)	24	18	FOLLOW DETOUR	2	MOUNT BELOW D3-1
M4-8A	24	18	END DETOUR	2	MOUNT ON ONE POST
M4-9L	30	24	DETOUR ←	1	MOUNT ON ONE POST
M4-9R	30	24	DETOUR →	2	MOUNT ON ONE POST
M4-9S	30	24	DETOUR ↑	4	MOUNT ON ONE POST
M4-9bL	30	24	DETOUR ←	14	MOUNT ON ONE POST
M4-9bR	30	24	DETOUR →	14	MOUNT ON ONE POST
M4-9-bT	30	24	DETOUR ↑	9	MOUNT ON ONE POST

IDENTIFICATION NUMBER	SIZE OF SIGN WIDTH (IN)	SIZE OF SIGN HEIGHT (IN)	TEXT	NUMBER OF SIGNS REQ'D	REMARKS
M4-10L	48	18	← DETOUR	2	MOUNT ON TYPE III BARRICADE
M4-10R	48	18	DETOUR →	1	MOUNT ON TYPE III BARRICADE
M5-1L	21	15	↰	1	MOUNT BELOW M1-5
M5-1R	21	15	↱	1	MOUNT BELOW M1-5
M5-5	24	18	CENTER LANE	1	MOUNT BELOW M4-9R
M6-1L	21	15	←	4	MOUNT BELOW M1-5
M6-1R	21	15	→	6	MOUNT BELOW M1-5
M6-2L	21	15	↖	2	MOUNT BELOW M1-5
M6-2R	21	15	↗	4	MOUNT BELOW M1-5
M6-3	21	15	↑	10	MOUNT BELOW M1-5
R1-1	30	30	STOP	1	MOUNT ON ONE POST
R5-1	30	30	DO NOT ENTER	2	MOUNT ON ONE POST
R5-11	30	24	AUTHORIZED VECHILES ONLY	3	MOUNT ON TYPE III BARRICADE
R7-1L	12	18	NO PARKING ANY TIME ←	3	MOUNT BELOW R5-1
R7-1R	12	18	NO PARKING ANY TIME →	3	MOUNT BELOW R5-1 MOUNT ON ONE POST
R7-8	12	18	RESERVED PARKING ♿	1	MOUNT ON ONE POST
R7-23 (MOD)	12	18	PARKING BY PERMIT ONLY	1	MOUNT ON ONE POST

IDENTIFICATION NUMBER	SIZE OF SIGN WIDTH (IN)	SIZE OF SIGN HEIGHT (IN)	TEXT	NUMBER OF SIGNS REQ'D	REMARKS
R8-3	30	30	⊘	2	MOUNT ON ONE POST
R8-9	24	24	TRACKS OUT OF SERVICE	2	MOUNT BELOW CROSSBUCKS
R9-9	24	12	SIDEWALK CLOSED	9	MOUNT ON ONE POST OR TYPE III BARRICADE
R9-9A	24	12	SIDEWALK OPEN	6	MOUNT ON ONE POST
R9-10L	24	12	SIDEWALK CLOSED ← USE OTHER SIDE	1	MOUNT ON ONE POST
R9-11L	24	18	SIDEWALK CLOSED AHEAD ← CROSS HERE	2	MOUNT ON ONE POST
R9-11R	24	18	SIDEWALK CLOSED AHEAD → CROSS HERE	2	MOUNT ON ONE POST

NOTES:

1. COLORS FOR THE M1-5 SIGNS SHALL MATCH THE COLORS SHOWN ON VTRANS STD. E-136B.
2. COLORS FOR THE M5-1, M6-1, M6-2, AND THE M6-3 SIGNS SHALL BE A BLACK ARROW AND BORDER ON RETROREFLECTIVE ORANGE BACKGROUND.
3. THE M1-5 SIGNS SHALL BECOME THE PROPERTY OF THE STATE AFTER THEY ARE REMOVED FROM THE DETOUR. THE CONTRACTOR SHALL DELIVER THE SIGNS TO THE TOWN AT THE TOWN GARAGE. ALL COSTS ASSOCIATED WITH PROVIDING THE SIGNS TO THE TOWN SHALL BE INCIDENTAL TO ITEM 641.10 "TRAFFIC CONTROL".
4. COLORS FOR THE M4-9, D3-1, AND D3-2 SIGNS SHALL BE A BLACK ARROW, TEXT, AND BORDER ON RETROREFLECTIVE ORANGE BACKGROUND.

PROJECT NAME: MIDDLEBURY
PROJECT NUMBER: WCRS(23)

FILE NAME: z13g542tcp_tsss.dgn
PROJECT LEADER: A.P. GUYETTE
DESIGNED BY: M.L. GRAHAM
TCP - SIGN SUMMARY SHEET (1 OF 3)

PLOT DATE: 4/30/2019
DRAWN BY: J.A. ROBERT
CHECKED BY: M.D. SUENNEN
SHEET 68 OF 328

IDENTIFICATION NUMBER	SIZE OF SIGN WIDTH (IN)	SIZE OF SIGN HEIGHT (IN)	TEXT	NUMBER OF SIGNS REQ'D	REMARKS
R10-6	24	36	STOP HERE ON RED	3	MOUNT ON ONE POST
R11-2	48	30	ROAD CLOSED	8	MOUNT ON TYPE III BARRICADE
R11-2A	60	30	BUSINESSES OPEN	7	MOUNT ON TYPE III BARRICADE
R11-4	60	30	ROAD CLOSED TO THRU TRAFFIC	1	MOUNT ON TYPE III BARRICADE

IDENTIFICATION NUMBER	SIZE OF SIGN WIDTH (IN)	SIZE OF SIGN HEIGHT (IN)	TEXT	NUMBER OF SIGNS REQ'D	REMARKS
W3-3	36	36		2	MOUNT ON TWO POSTS
W13-1P	24	24	15 MPH	2	MOUNT BELOW W3-3
W20-1	36	36	ROAD WORK AHEAD	8	MOUNT ON ONE POST
W20-3	36	36	ROAD CLOSED 500 FT	1	MOUNT ON ONE POST
W20-4	36	36	ONE LANE ROAD AHEAD	4	INSTALL ON TEMP STANDS
W20-7	36	36		5	INSTALL ON TEMP STANDS
W21-7	36	36	UTILITY WORK AHEAD	3	INSTALL ON TEMP STANDS
W22-1	36	36	BLASTING ZONE AHEAD	10	MOUNT ON ONE POST
W22-2	42	36	TURN OFF 2-WAY RADIO AND CELL PHONE	9	MOUNT ON ONE POST
W22-3	42	36	END BLASTING ZONE	10	MOUNT ON ONE POST

IDENTIFICATION NUMBER	SIZE OF SIGN WIDTH (IN)	SIZE OF SIGN HEIGHT (IN)	TEXT	NUMBER OF SIGNS REQ'D	REMARKS
TSP-1	36	24	POST OFFICE CHURCH OPEN	1	MOUNT ON ONE POST
TSP-2	36	24	CLOSED AT Bakery Ln	3	MOUNT BELOW MI-5
TSP-3	60	30	DELIVERIES AND AUTHORIZED VEHICLES ONLY	3	MOUNT ON TYPE III BARRICADE
TSP-4	36	24	CLOSED AT POST OFFICE	1	MOUNT BELOW MI-5
SP-1	24	36	POSSIBLE DELAY WAIT FOR GREEN	3	MOUNT ON TEMPORARY TRAFFIC SIGNAL CONTROLLER
VC 893	36	36	SIDE ROAD WORK AHEAD	2	MOUNT ON ONE POST
VC 893 MOD	36	36	SIDE ROAD CLOSED AHEAD	2	MOUNT ON ONE POST
VW 202	36	36	TRUCKS ENTERING	4	MOUNT ON ONE POST

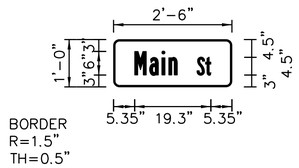
NOTES:

1. COLORS FOR THE MI-5 SIGNS SHALL MATCH THE COLORS SHOWN ON VTRANS STD. E-136B.
2. COLORS FOR THE M5-1, M6-1, M6-2, AND THE M6-3 SIGNS SHALL BE A BLACK ARROW AND BORDER ON RETROREFLECTIVE ORANGE BACKGROUND.
3. THE MI-5 SIGNS SHALL BECOME THE PROPERTY OF THE STATE AFTER THEY ARE REMOVED FROM THE DETOUR. THE CONTRACTOR SHALL DELIVER THE SIGNS TO THE TOWN AT THE TOWN GARAGE. ALL COSTS ASSOCIATED WITH PROVIDING THE SIGNS TO THE TOWN SHALL BE INCIDENTAL TO ITEM 641.10 "TRAFFIC CONTROL".
4. COLORS FOR THE M4-9, D3-1, AND D3-2 SIGNS SHALL BE A BLACK ARROW, TEXT, AND BORDER ON RETROREFLECTIVE ORANGE BACKGROUND.

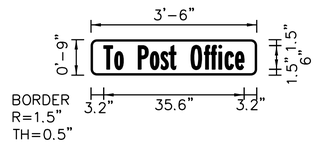
PROJECT NAME: MIDDLEBURY
PROJECT NUMBER: WCRS(23)

FILE NAME: z13g542tcp_tsss.dgn
PROJECT LEADER: A.P. GUYETTE
DESIGNED BY: M.L. GRAHAM
TCP - SIGN SUMMARY SHEET (2 OF 3)

PLOT DATE: 4/30/2019
DRAWN BY: J.A. ROBERT
CHECKED BY: M.D. SUENNEN
SHEET 69 OF 328



D3-1a



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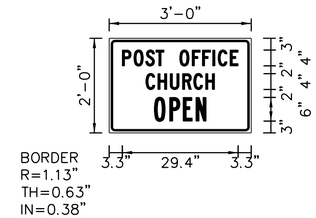
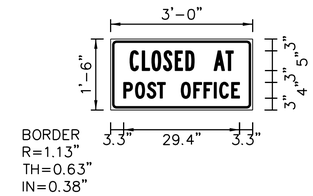


TSP-1



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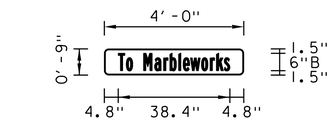
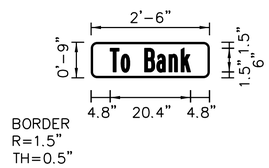
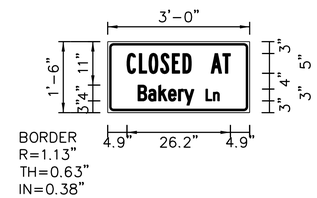


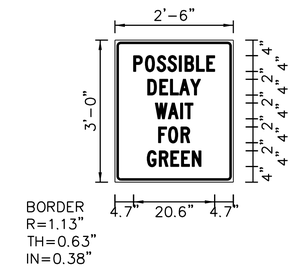
D3-1c



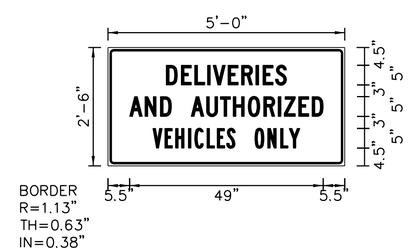
D3-1e



TSP-2



SP-1



TSP-3

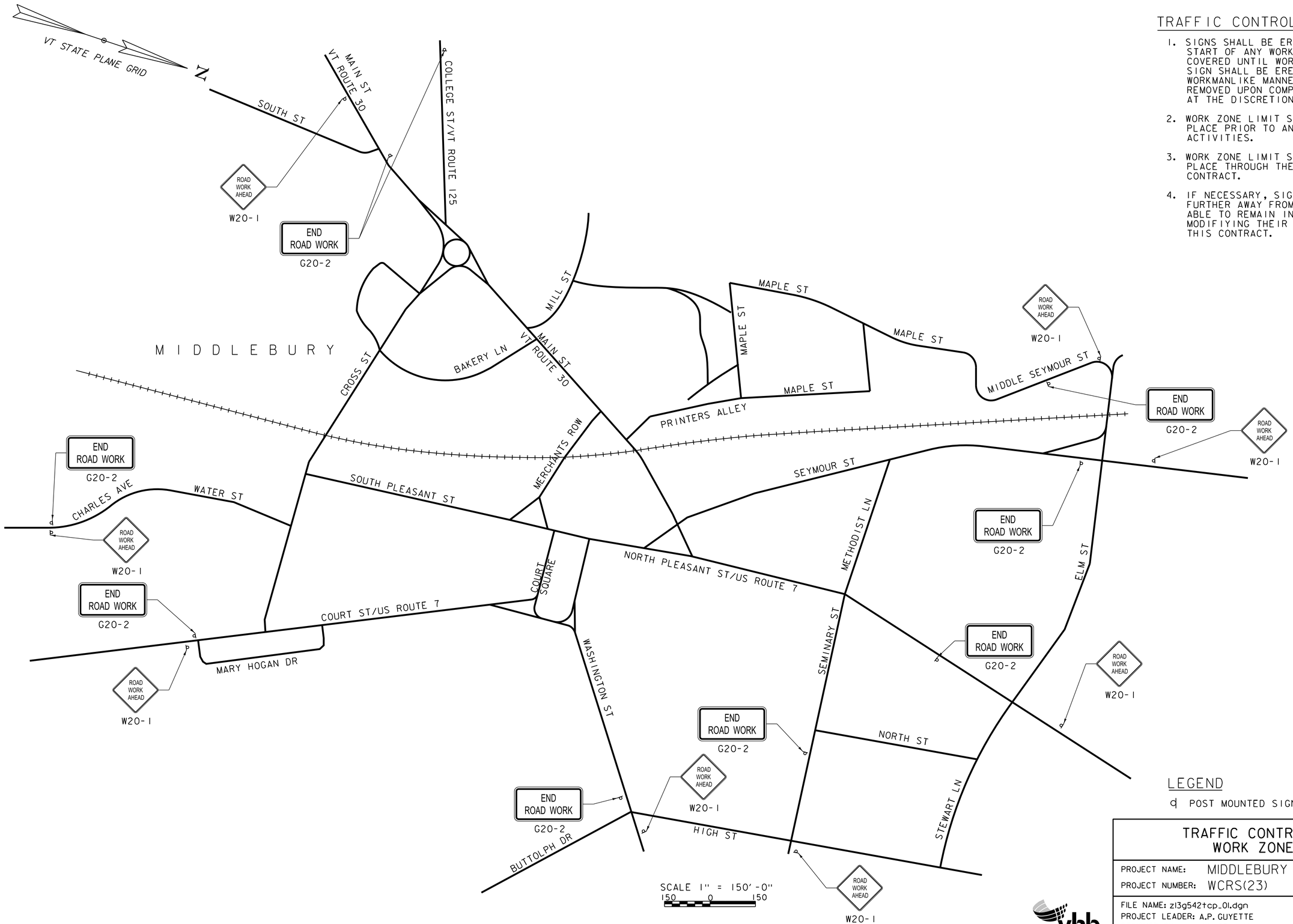
PROJECT NAME: MIDDLEBURY
PROJECT NUMBER: WCRS(23)

FILE NAME: zl3g542tcp_tsss.dgn
PROJECT LEADER: A.P. GUYETTE
DESIGNED BY: M.L. GRAHAM
TCP - SIGN SUMMARY SHEET (3 OF 3)

PLOT DATE: 4/30/2019
DRAWN BY: J.A. ROBERT
CHECKED BY: M.D. SUENNEN
SHEET 70 OF 328

TRAFFIC CONTROL PLAN #1 NOTES:

1. SIGNS SHALL BE ERECTED BEFORE THE START OF ANY WORK AND SHALL BE COVERED UNTIL WORK COMMENCES. EACH SIGN SHALL BE ERECTED IN A NEAT AND WORKMANLIKE MANNER. SIGNS SHALL BE REMOVED UPON COMPLETION OF THE WORK AT THE DISCRETION OF THE ENGINEER.
2. WORK ZONE LIMIT SIGNS SHALL BE IN PLACE PRIOR TO ANY CONSTRUCTION ACTIVITIES.
3. WORK ZONE LIMIT SIGNS SHALL REMAIN IN PLACE THROUGH THE DURATION OF THIS CONTRACT.
4. IF NECESSARY, SIGNS MAY BE MOVED FURTHER AWAY FROM THE WORK ZONE TO BE ABLE TO REMAIN IN PLACE WITHOUT MODIFIYING THEIR LOCATIONS THROUGHOUT THIS CONTRACT.



LEGEND

ɑ POST MOUNTED SIGN

TRAFFIC CONTROL PLAN #1
WORK ZONE LIMITS

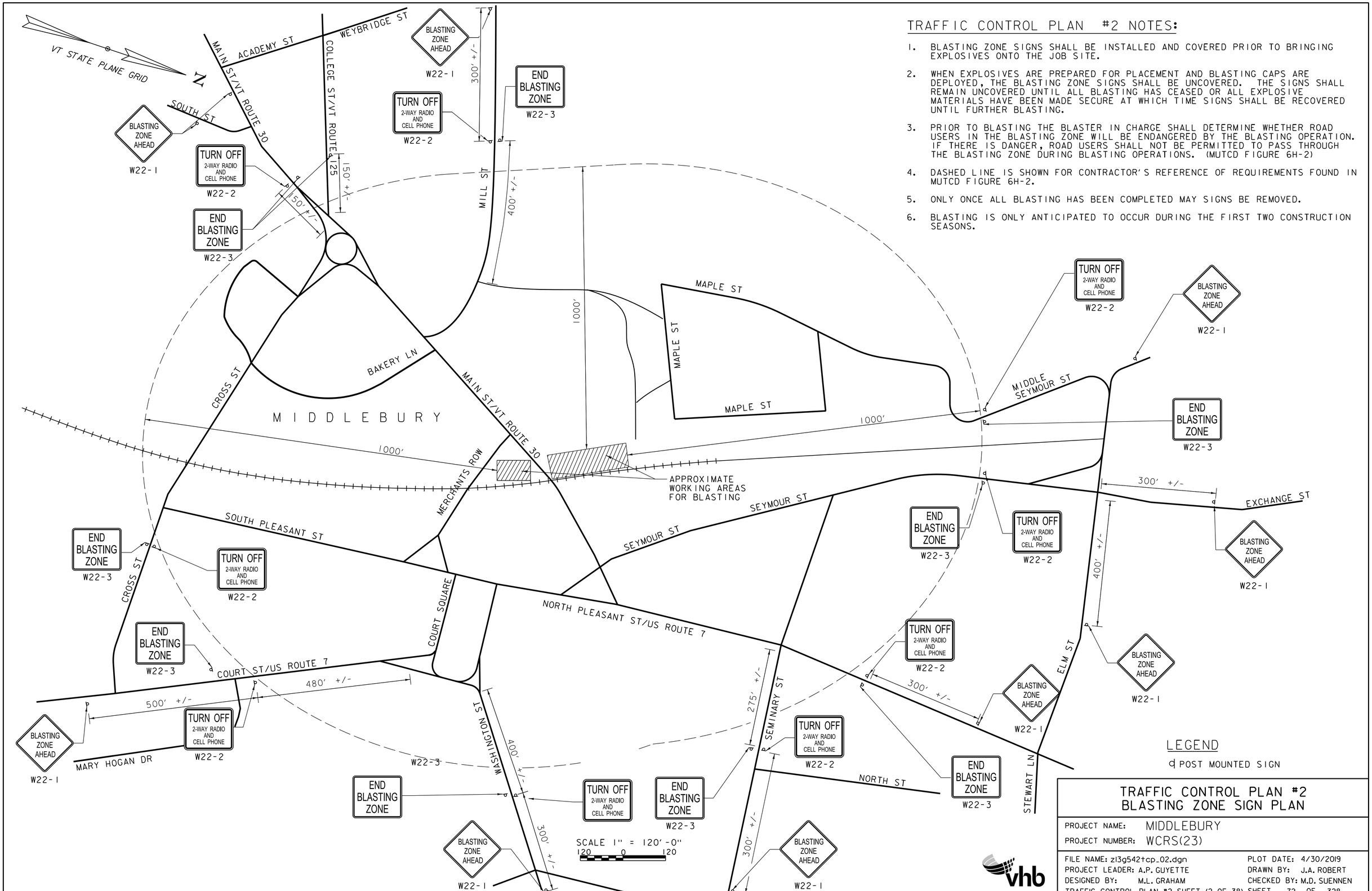
PROJECT NAME: MIDDLEBURY
PROJECT NUMBER: WCRS(23)

FILE NAME: zl3g542tcp_01.dgn	PLOT DATE: 4/30/2019
PROJECT LEADER: A.P. GUYETTE	DRAWN BY: J.A. ROBERT
DESIGNED BY: M.L. GRAHAM	CHECKED BY: M.D. SUENNEN
TRAFFIC CONTROL PLAN #1 SHEET (1 OF 38)	SHEET 71 OF 328

vhb

TRAFFIC CONTROL PLAN #2 NOTES:

1. BLASTING ZONE SIGNS SHALL BE INSTALLED AND COVERED PRIOR TO BRINGING EXPLOSIVES ONTO THE JOB SITE.
2. WHEN EXPLOSIVES ARE PREPARED FOR PLACEMENT AND BLASTING CAPS ARE DEPLOYED, THE BLASTING ZONE SIGNS SHALL BE UNCOVERED. THE SIGNS SHALL REMAIN UNCOVERED UNTIL ALL BLASTING HAS CEASED OR ALL EXPLOSIVE MATERIALS HAVE BEEN MADE SECURE AT WHICH TIME SIGNS SHALL BE RECOVERED UNTIL FURTHER BLASTING.
3. PRIOR TO BLASTING THE BLASTER IN CHARGE SHALL DETERMINE WHETHER ROAD USERS IN THE BLASTING ZONE WILL BE ENDANGERED BY THE BLASTING OPERATION. IF THERE IS DANGER, ROAD USERS SHALL NOT BE PERMITTED TO PASS THROUGH THE BLASTING ZONE DURING BLASTING OPERATIONS. (MUTCD FIGURE 6H-2)
4. DASHED LINE IS SHOWN FOR CONTRACTOR'S REFERENCE OF REQUIREMENTS FOUND IN MUTCD FIGURE 6H-2.
5. ONLY ONCE ALL BLASTING HAS BEEN COMPLETED MAY SIGNS BE REMOVED.
6. BLASTING IS ONLY ANTICIPATED TO OCCUR DURING THE FIRST TWO CONSTRUCTION SEASONS.



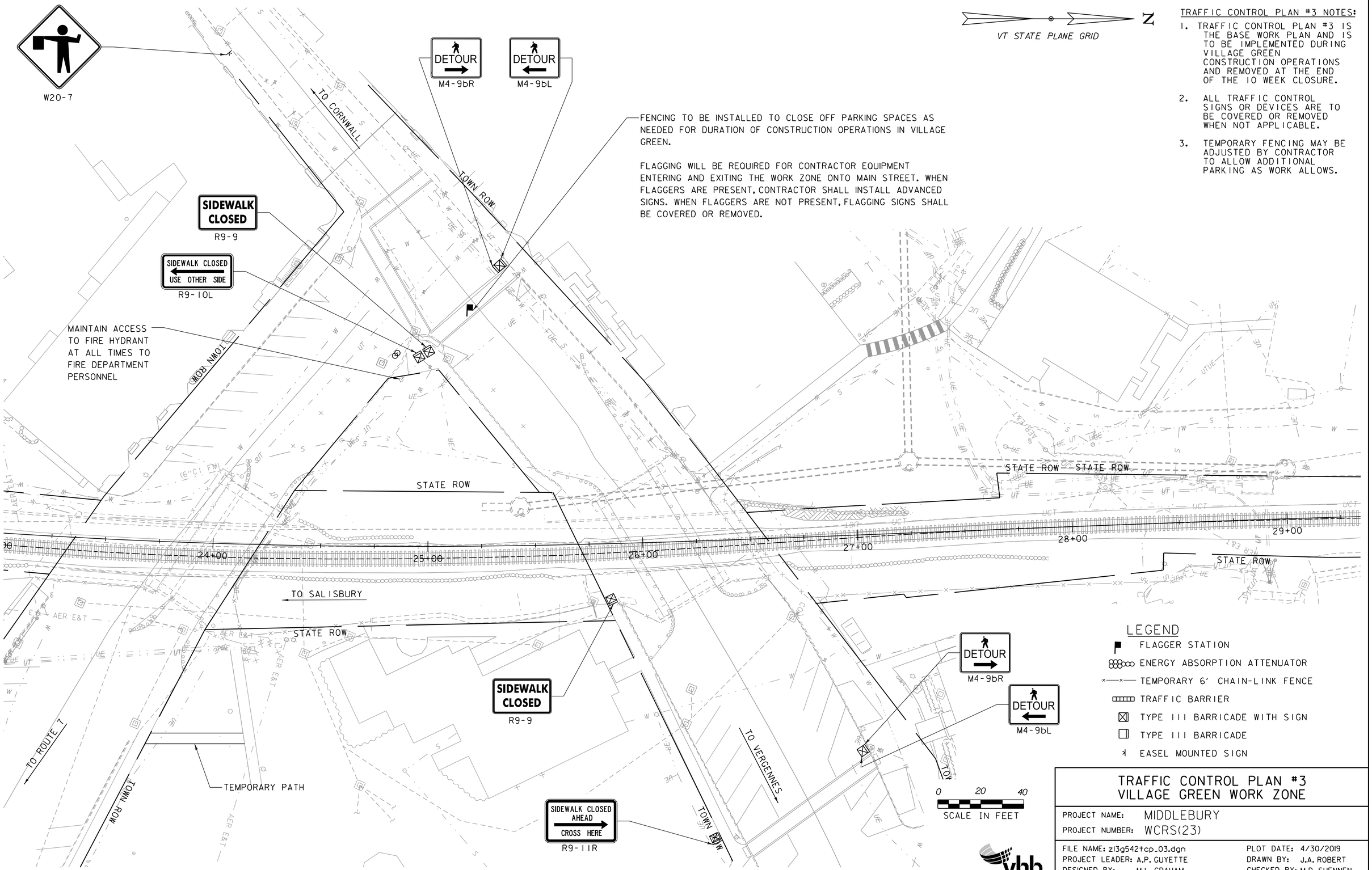
LEGEND

POST MOUNTED SIGN

TRAFFIC CONTROL PLAN #2
BLASTING ZONE SIGN PLAN

PROJECT NAME: MIDDLEBURY
PROJECT NUMBER: WCRS(23)

FILE NAME: zl3g542tcp_02.dgn
PROJECT LEADER: A.P. GUYETTE
DESIGNED BY: M.L. GRAHAM
TRAFFIC CONTROL PLAN #2 SHEET (2 OF 38)
PLOT DATE: 4/30/2019
DRAWN BY: J.A. ROBERT
CHECKED BY: M.D. SUENNEN
SHEET 72 OF 328



TRAFFIC CONTROL PLAN #3 NOTES:

1. TRAFFIC CONTROL PLAN #3 IS THE BASE WORK PLAN AND IS TO BE IMPLEMENTED DURING VILLAGE GREEN CONSTRUCTION OPERATIONS AND REMOVED AT THE END OF THE 10 WEEK CLOSURE.
2. ALL TRAFFIC CONTROL SIGNS OR DEVICES ARE TO BE COVERED OR REMOVED WHEN NOT APPLICABLE.
3. TEMPORARY FENCING MAY BE ADJUSTED BY CONTRACTOR TO ALLOW ADDITIONAL PARKING AS WORK ALLOWS.

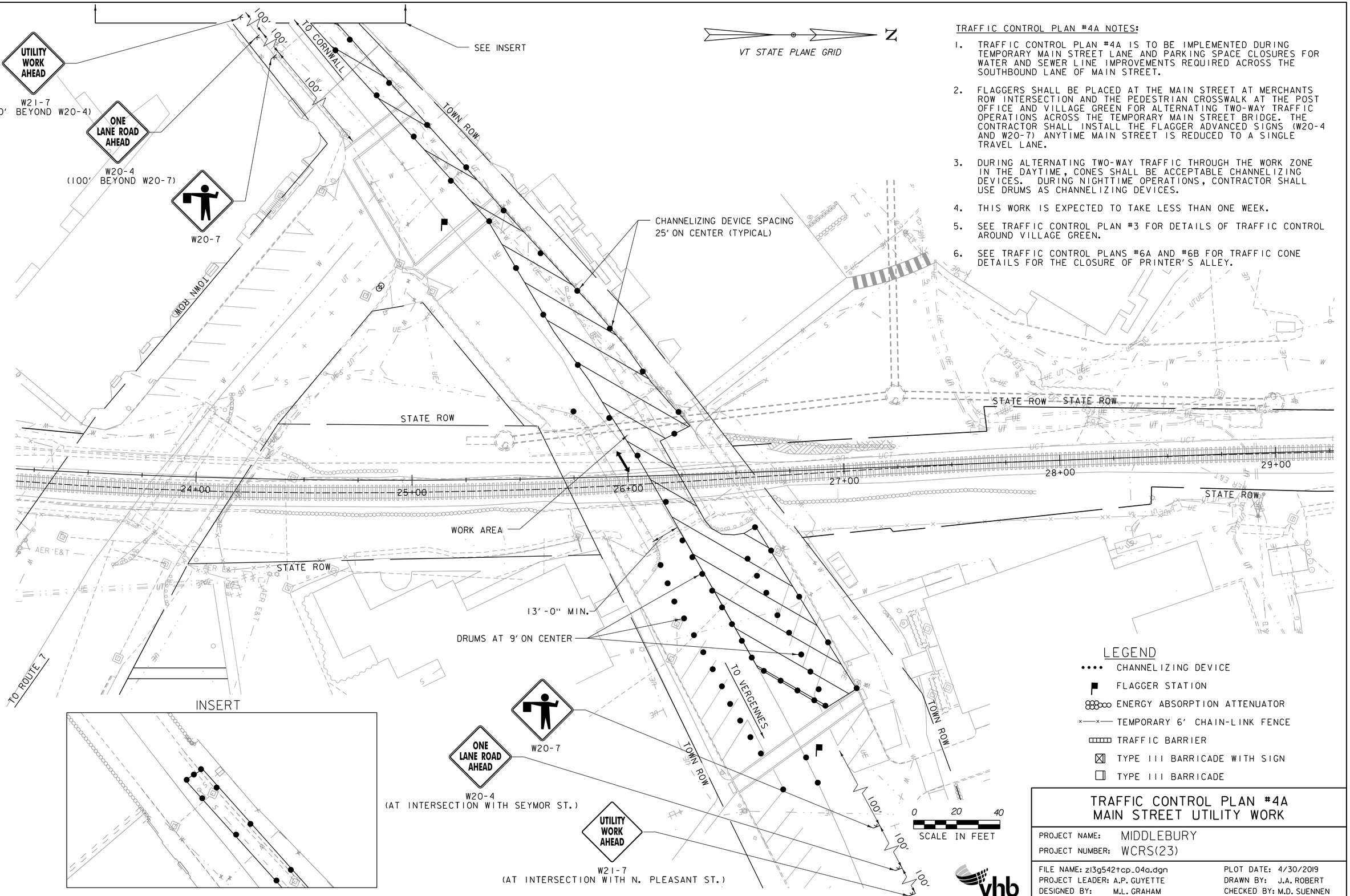
LEGEND

- FLAGGER STATION
- ENERGY ABSORPTION ATTENUATOR
- TEMPORARY 6' CHAIN-LINK FENCE
- TRAFFIC BARRIER
- TYPE III BARRICADE WITH SIGN
- TYPE III BARRICADE
- EASEL MOUNTED SIGN

TRAFFIC CONTROL PLAN #3
VILLAGE GREEN WORK ZONE

PROJECT NAME: MIDDLEBURY
PROJECT NUMBER: WCRS(23)

FILE NAME: z13g542tcp_03.dgn
PROJECT LEADER: A.P. GUYETTE
DESIGNED BY: M.L. GRAHAM
TRAFFIC CONTROL PLAN #3 SHEET (3 OF 38)
PLOT DATE: 4/30/2019
DRAWN BY: J.A. ROBERT
CHECKED BY: M.D. SUENNEN
SHEET 73 OF 328



TRAFFIC CONTROL PLAN #4A NOTES:

1. TRAFFIC CONTROL PLAN #4A IS TO BE IMPLEMENTED DURING TEMPORARY MAIN STREET LANE AND PARKING SPACE CLOSURES FOR WATER AND SEWER LINE IMPROVEMENTS REQUIRED ACROSS THE SOUTHBOUND LANE OF MAIN STREET.
2. FLAGGERS SHALL BE PLACED AT THE MAIN STREET AT MERCHANTS ROW INTERSECTION AND THE PEDESTRIAN CROSSWALK AT THE POST OFFICE AND VILLAGE GREEN FOR ALTERNATING TWO-WAY TRAFFIC OPERATIONS ACROSS THE TEMPORARY MAIN STREET BRIDGE. THE CONTRACTOR SHALL INSTALL THE FLAGGER ADVANCED SIGNS (W20-4 AND W20-7) ANYTIME MAIN STREET IS REDUCED TO A SINGLE TRAVEL LANE.
3. DURING ALTERNATING TWO-WAY TRAFFIC THROUGH THE WORK ZONE IN THE DAYTIME, CONES SHALL BE ACCEPTABLE CHANNELIZING DEVICES. DURING NIGHTTIME OPERATIONS, CONTRACTOR SHALL USE DRUMS AS CHANNELIZING DEVICES.
4. THIS WORK IS EXPECTED TO TAKE LESS THAN ONE WEEK.
5. SEE TRAFFIC CONTROL PLAN #3 FOR DETAILS OF TRAFFIC CONTROL AROUND VILLAGE GREEN.
6. SEE TRAFFIC CONTROL PLANS #6A AND #6B FOR TRAFFIC CONE DETAILS FOR THE CLOSURE OF PRINTER'S ALLEY.

LEGEND

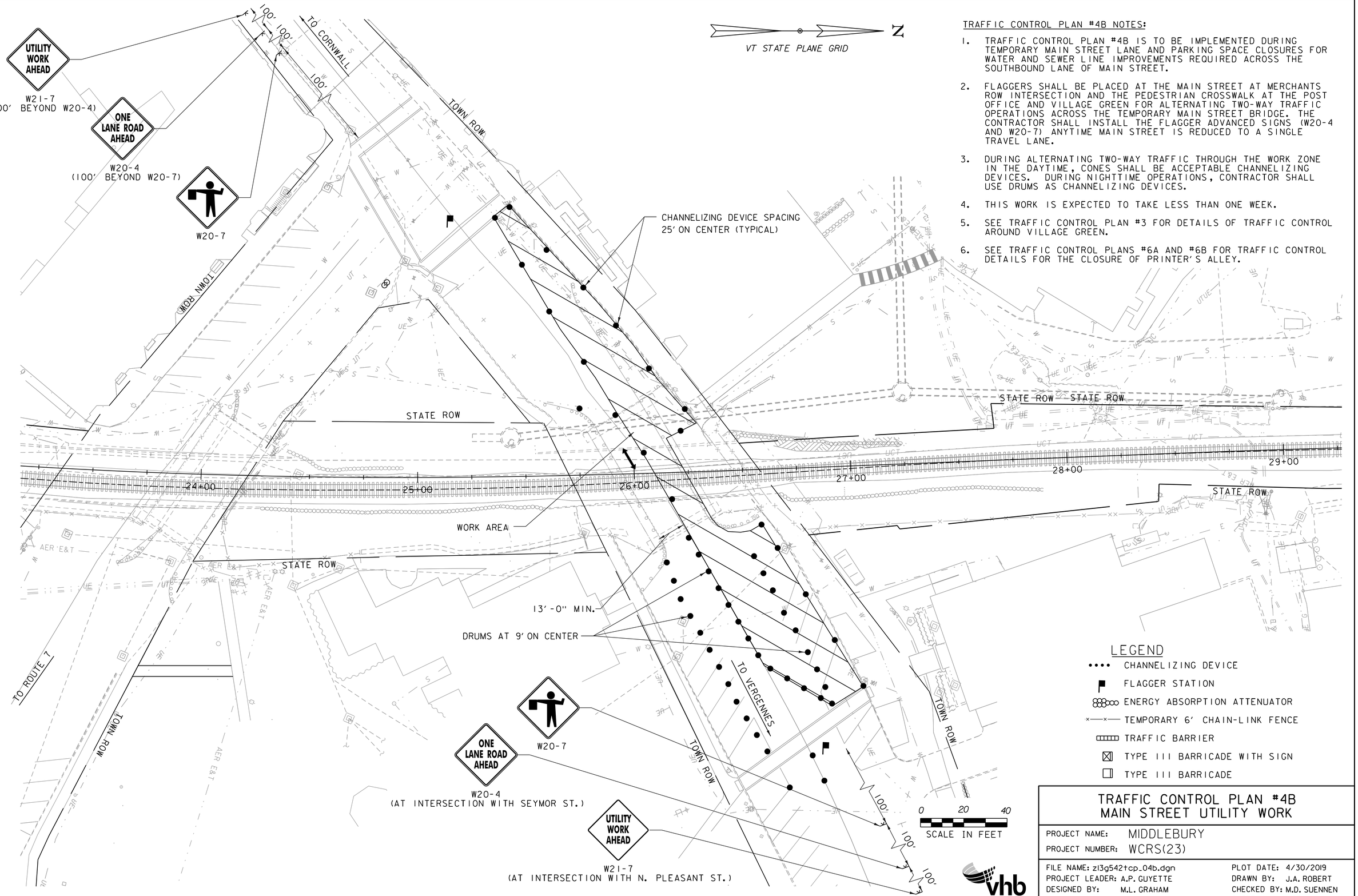
- CHANNELIZING DEVICE
- FLAGGER STATION
- ENERGY ABSORPTION ATTENUATOR
- TEMPORARY 6' CHAIN-LINK FENCE
- TRAFFIC BARRIER
- TYPE III BARRICADE WITH SIGN
- TYPE III BARRICADE

TRAFFIC CONTROL PLAN #4A
MAIN STREET UTILITY WORK

PROJECT NAME: MIDDLEBURY
PROJECT NUMBER: WCRS(23)

FILE NAME: zl3g542tcp_04a.dgn
PROJECT LEADER: A.P. GUYETTE
DESIGNED BY: M.L. GRAHAM
TRAFFIC CONTROL PLAN #4A SHEET (4 OF 38)

PLOT DATE: 4/30/2019
DRAWN BY: J.A. ROBERT
CHECKED BY: M.D. SUENNEN
SHEET 74 OF 328



TRAFFIC CONTROL PLAN #4B NOTES:

1. TRAFFIC CONTROL PLAN #4B IS TO BE IMPLEMENTED DURING TEMPORARY MAIN STREET LANE AND PARKING SPACE CLOSURES FOR WATER AND SEWER LINE IMPROVEMENTS REQUIRED ACROSS THE SOUTHBOUND LANE OF MAIN STREET.
2. FLAGGERS SHALL BE PLACED AT THE MAIN STREET AT MERCHANTS ROW INTERSECTION AND THE PEDESTRIAN CROSSWALK AT THE POST OFFICE AND VILLAGE GREEN FOR ALTERNATING TWO-WAY TRAFFIC OPERATIONS ACROSS THE TEMPORARY MAIN STREET BRIDGE. THE CONTRACTOR SHALL INSTALL THE FLAGGER ADVANCED SIGNS (W20-4 AND W20-7) ANYTIME MAIN STREET IS REDUCED TO A SINGLE TRAVEL LANE.
3. DURING ALTERNATING TWO-WAY TRAFFIC THROUGH THE WORK ZONE IN THE DAYTIME, CONES SHALL BE ACCEPTABLE CHANNELIZING DEVICES. DURING NIGHTTIME OPERATIONS, CONTRACTOR SHALL USE DRUMS AS CHANNELIZING DEVICES.
4. THIS WORK IS EXPECTED TO TAKE LESS THAN ONE WEEK.
5. SEE TRAFFIC CONTROL PLAN #3 FOR DETAILS OF TRAFFIC CONTROL AROUND VILLAGE GREEN.
6. SEE TRAFFIC CONTROL PLANS #6A AND #6B FOR TRAFFIC CONTROL DETAILS FOR THE CLOSURE OF PRINTER'S ALLEY.

LEGEND

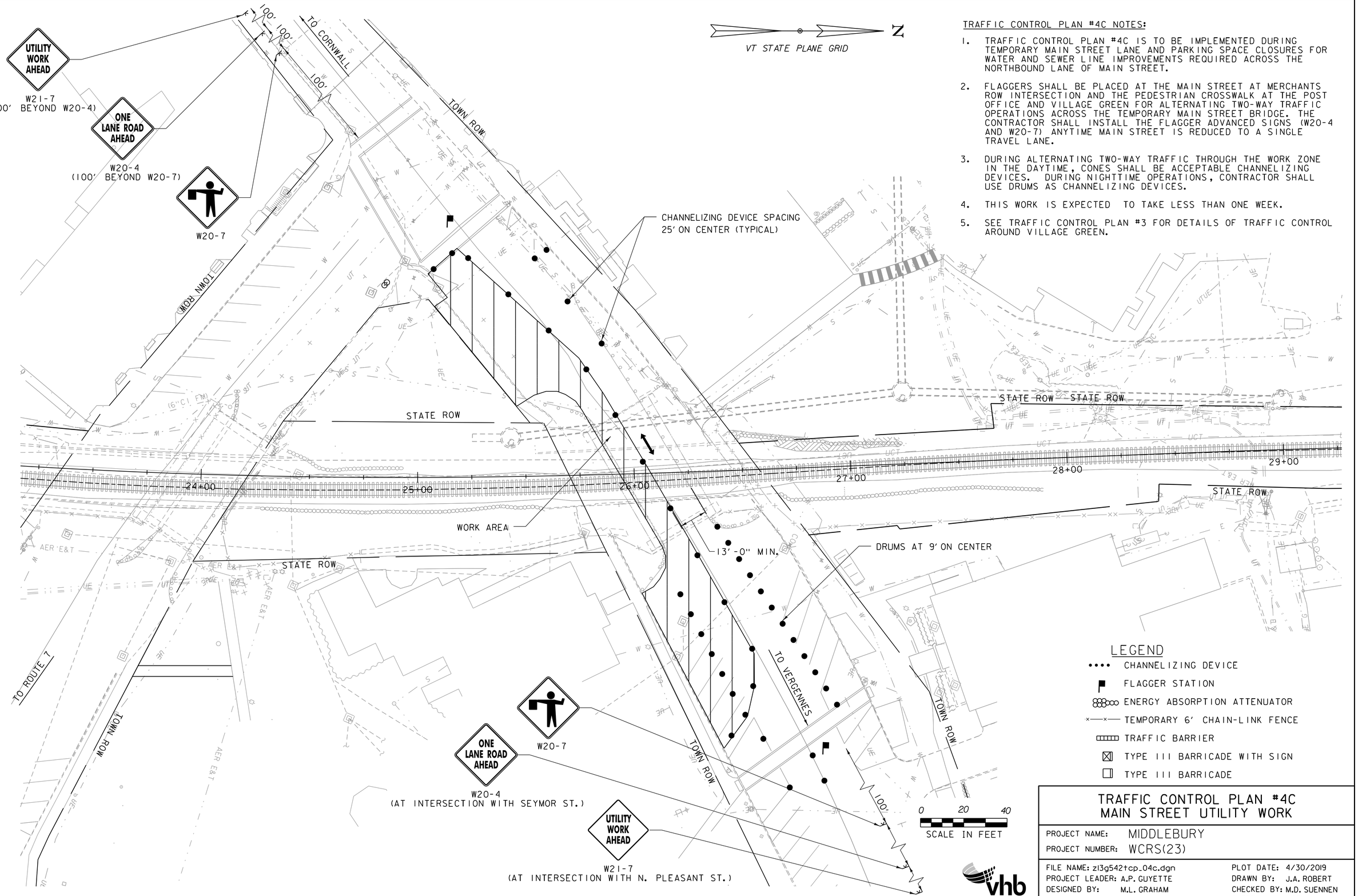
- CHANNELIZING DEVICE
- FLAGGER STATION
- ENERGY ABSORPTION ATTENUATOR
- TEMPORARY 6' CHAIN-LINK FENCE
- TRAFFIC BARRIER
- TYPE III BARRICADE WITH SIGN
- TYPE III BARRICADE

TRAFFIC CONTROL PLAN #4B
MAIN STREET UTILITY WORK

PROJECT NAME: MIDDLEBURY
PROJECT NUMBER: WCRS(23)

FILE NAME: zl3g542tcp_04b.dgn
PROJECT LEADER: A.P. GUYETTE
DESIGNED BY: M.L. GRAHAM
TRAFFIC CONTROL PLAN #4B SHEET (5 OF 38)

PLOT DATE: 4/30/2019
DRAWN BY: J.A. ROBERT
CHECKED BY: M.D. SUENNEN
SHEET 75 OF 328



TRAFFIC CONTROL PLAN #4C NOTES:

1. TRAFFIC CONTROL PLAN #4C IS TO BE IMPLEMENTED DURING TEMPORARY MAIN STREET LANE AND PARKING SPACE CLOSURES FOR WATER AND SEWER LINE IMPROVEMENTS REQUIRED ACROSS THE NORTHBOUND LANE OF MAIN STREET.
2. FLAGGERS SHALL BE PLACED AT THE MAIN STREET AT MERCHANTS ROW INTERSECTION AND THE PEDESTRIAN CROSSWALK AT THE POST OFFICE AND VILLAGE GREEN FOR ALTERNATING TWO-WAY TRAFFIC OPERATIONS ACROSS THE TEMPORARY MAIN STREET BRIDGE. THE CONTRACTOR SHALL INSTALL THE FLAGGER ADVANCED SIGNS (W20-4 AND W20-7) ANYTIME MAIN STREET IS REDUCED TO A SINGLE TRAVEL LANE.
3. DURING ALTERNATING TWO-WAY TRAFFIC THROUGH THE WORK ZONE IN THE DAYTIME, CONES SHALL BE ACCEPTABLE CHANNELIZING DEVICES. DURING NIGHTTIME OPERATIONS, CONTRACTOR SHALL USE DRUMS AS CHANNELIZING DEVICES.
4. THIS WORK IS EXPECTED TO TAKE LESS THAN ONE WEEK.
5. SEE TRAFFIC CONTROL PLAN #3 FOR DETAILS OF TRAFFIC CONTROL AROUND VILLAGE GREEN.

LEGEND

- CHANNELIZING DEVICE
- FLAGGER STATION
- ENERGY ABSORPTION ATTENUATOR
- TEMPORARY 6' CHAIN-LINK FENCE
- TRAFFIC BARRIER
- TYPE III BARRICADE WITH SIGN
- TYPE III BARRICADE

TRAFFIC CONTROL PLAN #4C
MAIN STREET UTILITY WORK

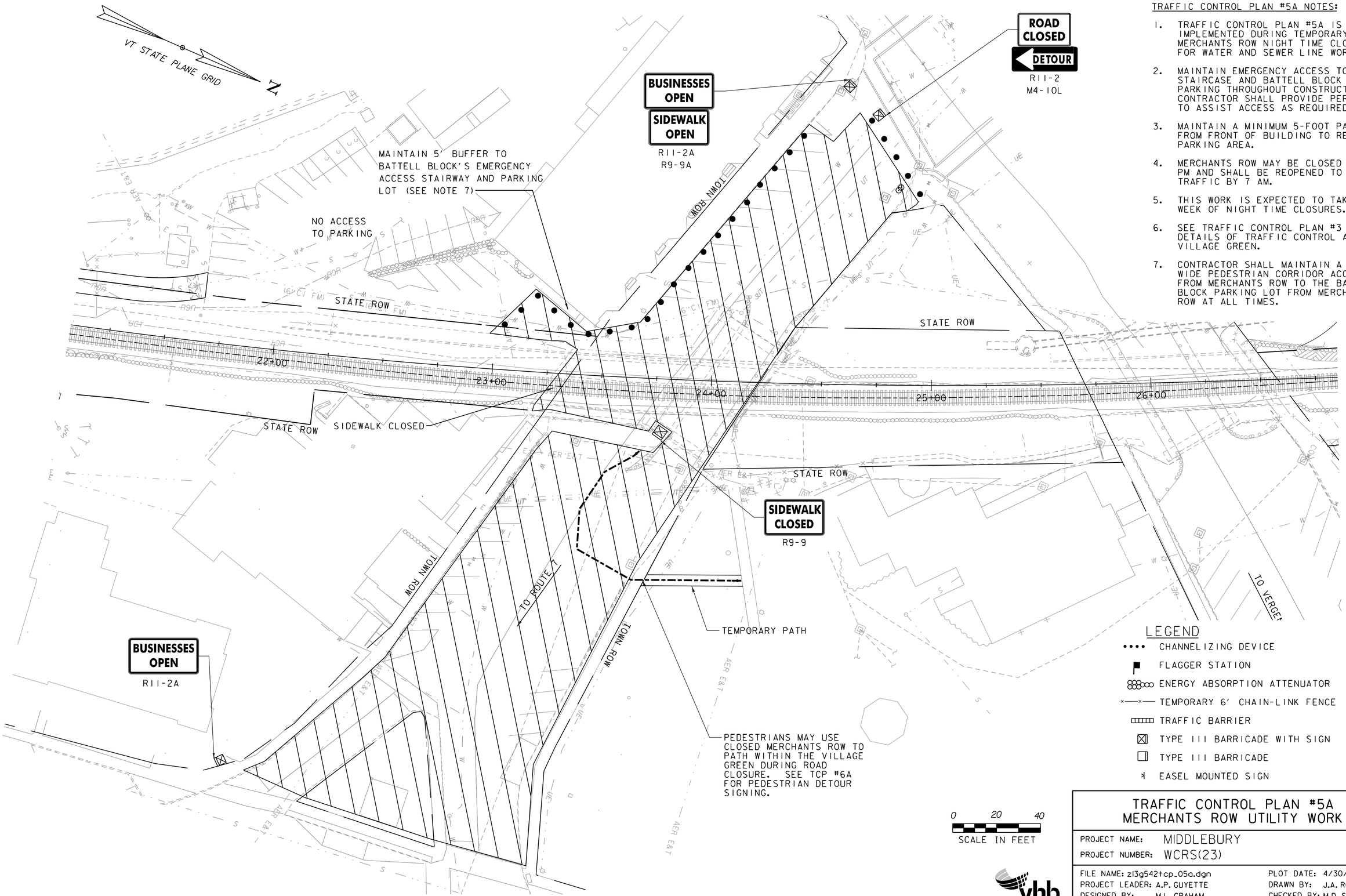
PROJECT NAME: MIDDLEBURY
PROJECT NUMBER: WCRS(23)

FILE NAME: zl3g542tcp_04c.dgn
PROJECT LEADER: A.P. GUYETTE
DESIGNED BY: M.L. GRAHAM
TRAFFIC CONTROL PLAN #4C SHEET (6 OF 38)

PLOT DATE: 4/30/2019
DRAWN BY: J.A. ROBERT
CHECKED BY: M.D. SUENNEN
SHEET 76 OF 328

TRAFFIC CONTROL PLAN #5A NOTES:

1. TRAFFIC CONTROL PLAN #5A IS TO BE IMPLEMENTED DURING TEMPORARY MERCHANTS ROW NIGHT TIME CLOSURE FOR WATER AND SEWER LINE WORK.
2. MAINTAIN EMERGENCY ACCESS TO STAIRCASE AND BATTELL BLOCK PARKING THROUGHOUT CONSTRUCTION. CONTRACTOR SHALL PROVIDE PERSONNEL TO ASSIST ACCESS AS REQUIRED.
3. MAINTAIN A MINIMUM 5-FOOT PATHWAY FROM FRONT OF BUILDING TO REAR PARKING AREA.
4. MERCHANTS ROW MAY BE CLOSED AT 9 PM AND SHALL BE REOPENED TO TRAFFIC BY 7 AM.
5. THIS WORK IS EXPECTED TO TAKE ONE WEEK OF NIGHT TIME CLOSURES.
6. SEE TRAFFIC CONTROL PLAN #3 FOR DETAILS OF TRAFFIC CONTROL AROUND VILLAGE GREEN.
7. CONTRACTOR SHALL MAINTAIN A 5 FOOT WIDE PEDESTRIAN CORRIDOR ACCESS FROM MERCHANTS ROW TO THE BATTELL BLOCK PARKING LOT FROM MERCHANTS ROW AT ALL TIMES.



LEGEND

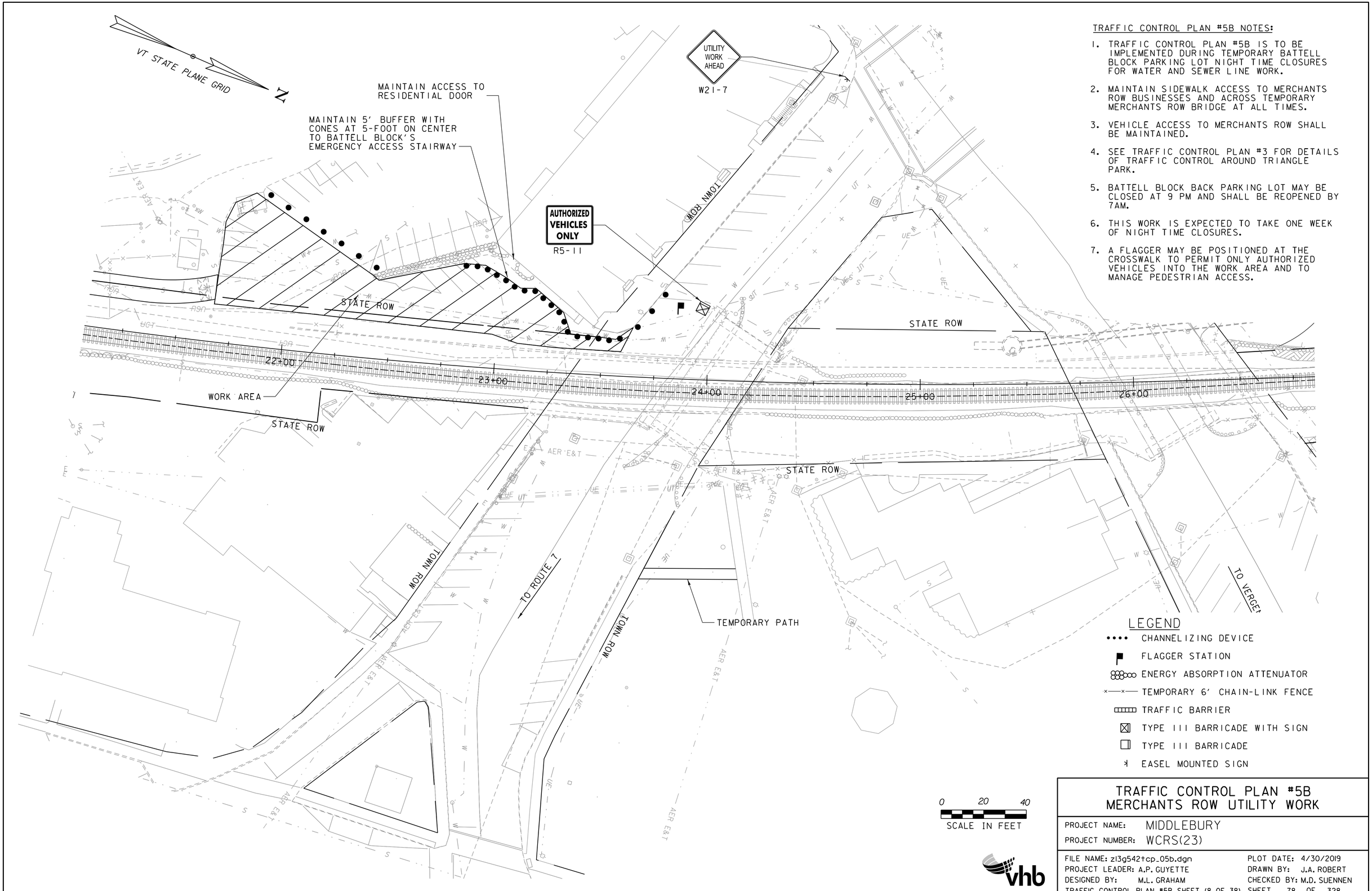
- CHANNELIZING DEVICE
- FLAGGER STATION
- ENERGY ABSORPTION ATTENUATOR
- TEMPORARY 6' CHAIN-LINK FENCE
- TRAFFIC BARRIER
- TYPE III BARRICADE WITH SIGN
- TYPE III BARRICADE
- EASEL MOUNTED SIGN

TRAFFIC CONTROL PLAN #5A
MERCHANTS ROW UTILITY WORK

PROJECT NAME: MIDDLEBURY
PROJECT NUMBER: WCRS(23)

FILE NAME: zl3g542tcp_05a.dgn
PROJECT LEADER: A.P. GUYETTE
DESIGNED BY: M.L. GRAHAM
TRAFFIC CONTROL PLAN #5A SHEET (7 OF 38)

PLOT DATE: 4/30/2019
DRAWN BY: J.A. ROBERT
CHECKED BY: M.D. SUENNEN
SHEET 77 OF 328



TRAFFIC CONTROL PLAN #5B NOTES:

1. TRAFFIC CONTROL PLAN #5B IS TO BE IMPLEMENTED DURING TEMPORARY BATTELL BLOCK PARKING LOT NIGHT TIME CLOSURES FOR WATER AND SEWER LINE WORK.
2. MAINTAIN SIDEWALK ACCESS TO MERCHANTS ROW BUSINESSES AND ACROSS TEMPORARY MERCHANTS ROW BRIDGE AT ALL TIMES.
3. VEHICLE ACCESS TO MERCHANTS ROW SHALL BE MAINTAINED.
4. SEE TRAFFIC CONTROL PLAN #3 FOR DETAILS OF TRAFFIC CONTROL AROUND TRIANGLE PARK.
5. BATTELL BLOCK BACK PARKING LOT MAY BE CLOSED AT 9 PM AND SHALL BE REOPENED BY 7AM.
6. THIS WORK IS EXPECTED TO TAKE ONE WEEK OF NIGHT TIME CLOSURES.
7. A FLAGGER MAY BE POSITIONED AT THE CROSSWALK TO PERMIT ONLY AUTHORIZED VEHICLES INTO THE WORK AREA AND TO MANAGE PEDESTRIAN ACCESS.

LEGEND

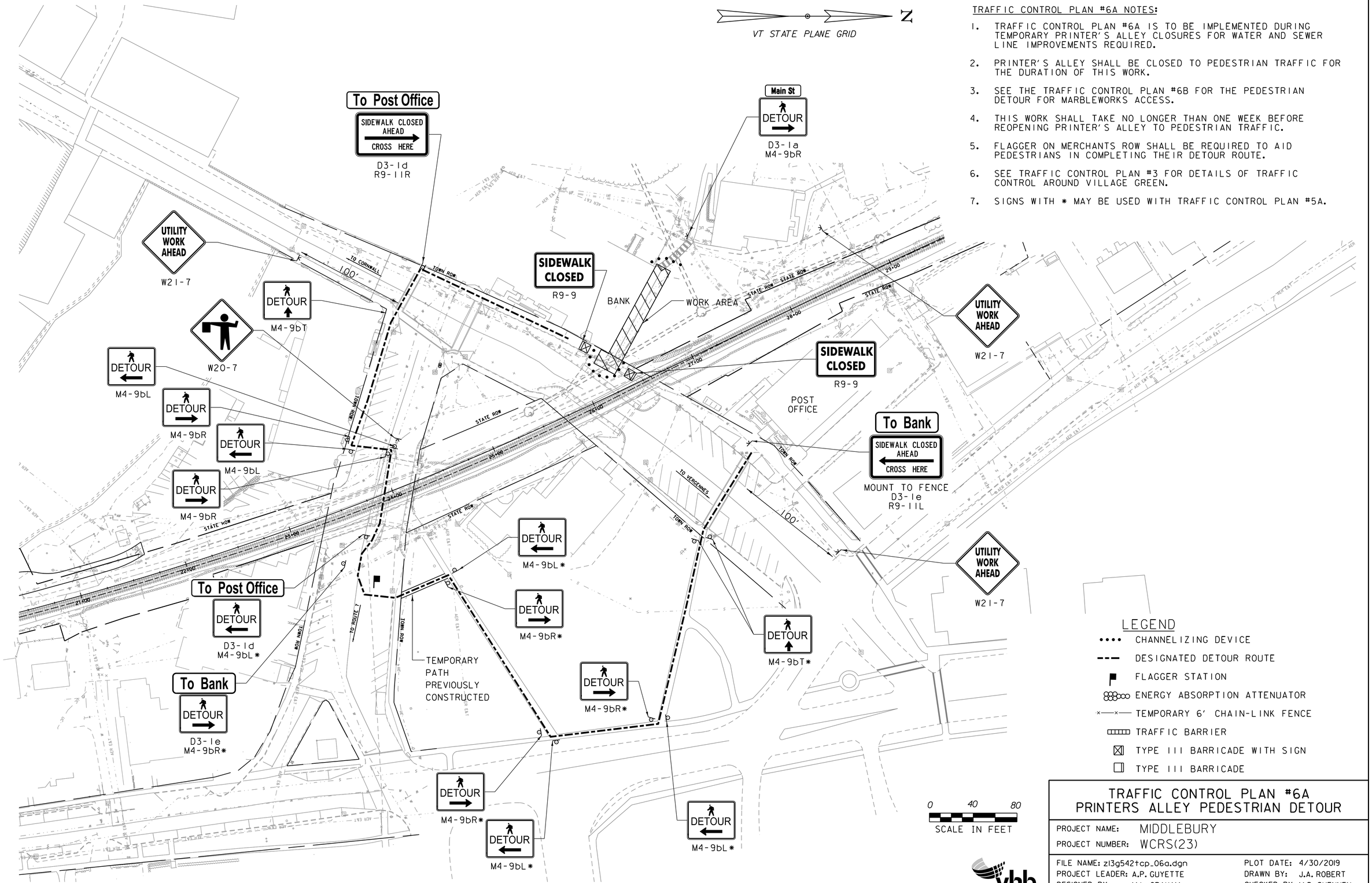
- CHANNELIZING DEVICE
- FLAGGER STATION
- ENERGY ABSORPTION ATTENUATOR
- TEMPORARY 6' CHAIN-LINK FENCE
- TRAFFIC BARRIER
- TYPE III BARRICADE WITH SIGN
- TYPE III BARRICADE
- EASEL MOUNTED SIGN

TRAFFIC CONTROL PLAN #5B
MERCHANTS ROW UTILITY WORK

PROJECT NAME: MIDDLEBURY
PROJECT NUMBER: WCRS(23)

FILE NAME: zl3g542tcp_05b.dgn
PROJECT LEADER: A.P. GUYETTE
DESIGNED BY: M.L. GRAHAM
TRAFFIC CONTROL PLAN #5B SHEET (8 OF 38)

PLOT DATE: 4/30/2019
DRAWN BY: J.A. ROBERT
CHECKED BY: M.D. SUENNEN
SHEET 78 OF 328



TRAFFIC CONTROL PLAN #6A NOTES:

1. TRAFFIC CONTROL PLAN #6A IS TO BE IMPLEMENTED DURING TEMPORARY PRINTER'S ALLEY CLOSURES FOR WATER AND SEWER LINE IMPROVEMENTS REQUIRED.
2. PRINTER'S ALLEY SHALL BE CLOSED TO PEDESTRIAN TRAFFIC FOR THE DURATION OF THIS WORK.
3. SEE THE TRAFFIC CONTROL PLAN #6B FOR THE PEDESTRIAN DETOUR FOR MARBLEWORKS ACCESS.
4. THIS WORK SHALL TAKE NO LONGER THAN ONE WEEK BEFORE REOPENING PRINTER'S ALLEY TO PEDESTRIAN TRAFFIC.
5. FLAGGER ON MERCHANTS ROW SHALL BE REQUIRED TO AID PEDESTRIANS IN COMPLETING THEIR DETOUR ROUTE.
6. SEE TRAFFIC CONTROL PLAN #3 FOR DETAILS OF TRAFFIC CONTROL AROUND VILLAGE GREEN.
7. SIGNS WITH * MAY BE USED WITH TRAFFIC CONTROL PLAN #5A.

LEGEND

- CHANNELIZING DEVICE
- DESIGNATED DETOUR ROUTE
- FLAGGER STATION
- ENERGY ABSORPTION ATTENUATOR
- TEMPORARY 6' CHAIN-LINK FENCE
- TRAFFIC BARRIER
- TYPE III BARRICADE WITH SIGN
- TYPE III BARRICADE

TRAFFIC CONTROL PLAN #6A
PRINTERS ALLEY PEDESTRIAN DETOUR

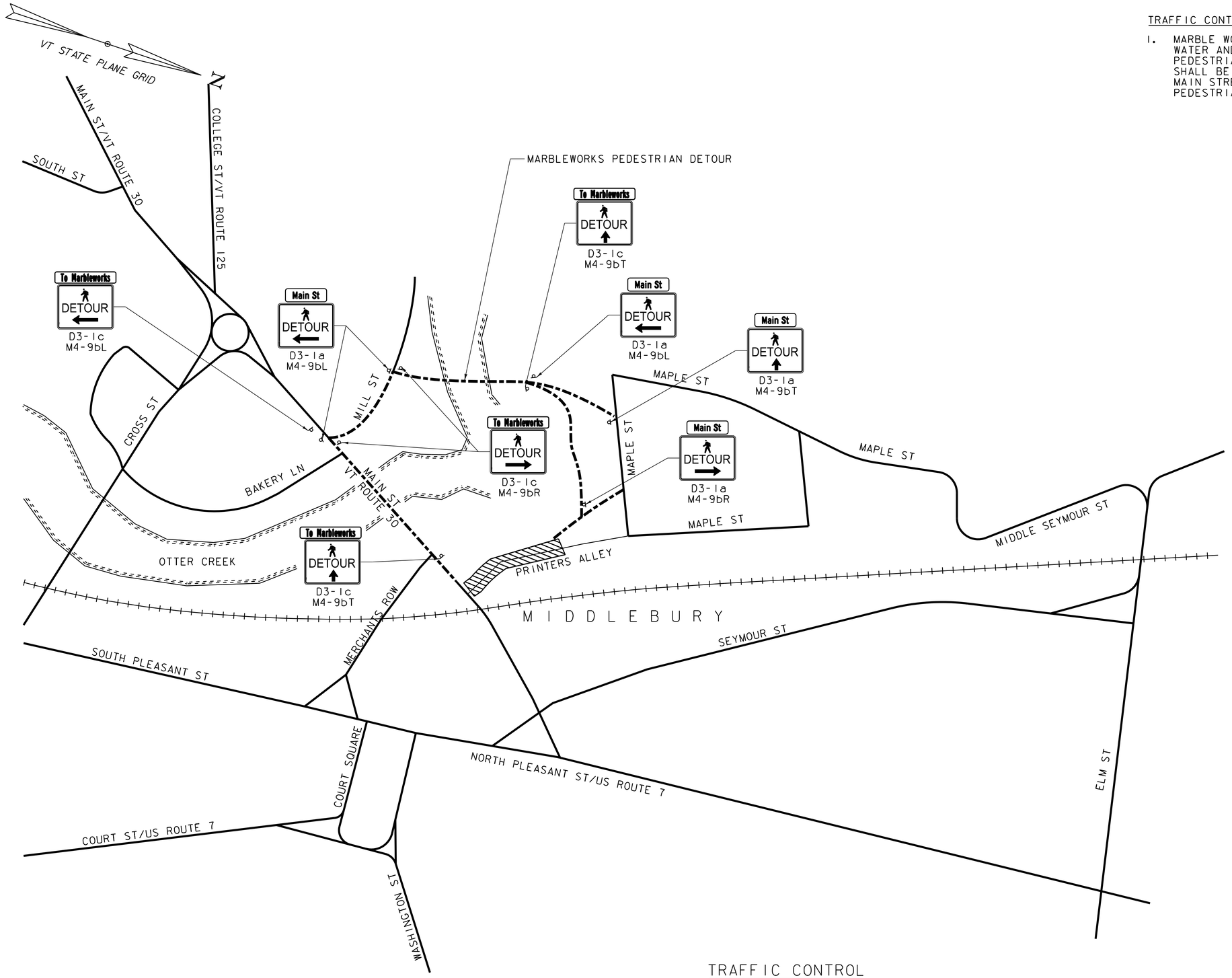
PROJECT NAME: MIDDLEBURY
PROJECT NUMBER: WCRS(23)

FILE NAME: z13g542tcp_06a.dgn
PROJECT LEADER: A.P. GUYETTE
DESIGNED BY: M.L. GRAHAM
TRAFFIC CONTROL PLAN #6A SHEET (9 OF 38)

PLOT DATE: 4/30/2019
DRAWN BY: J.A. ROBERT
CHECKED BY: M.D. SUENNEN
SHEET 79 OF 328

TRAFFIC CONTROL PLAN #6B NOTES:

1. MARBLE WORKS PEDESTRIAN DETOUR SHALL BE IMPLEMENTED FOR WATER AND SEWER WORK THROUGH PRINTER'S ALLEY ONLY. PEDESTRIAN ACCESS TO MARBLEWORKS VIA PRINTER'S ALLEY SHALL BE MAINTAINED IN ALL OTHER PHASES OF WORK WHERE MAIN STREET IS OPEN. WHEN MAIN STREET IS CLOSED, PEDESTRIAN ACCESS MAY BE LIMITED.



TRAFFIC CONTROL

SCALE 1" = 120'-0"

120 0 120

LEGEND

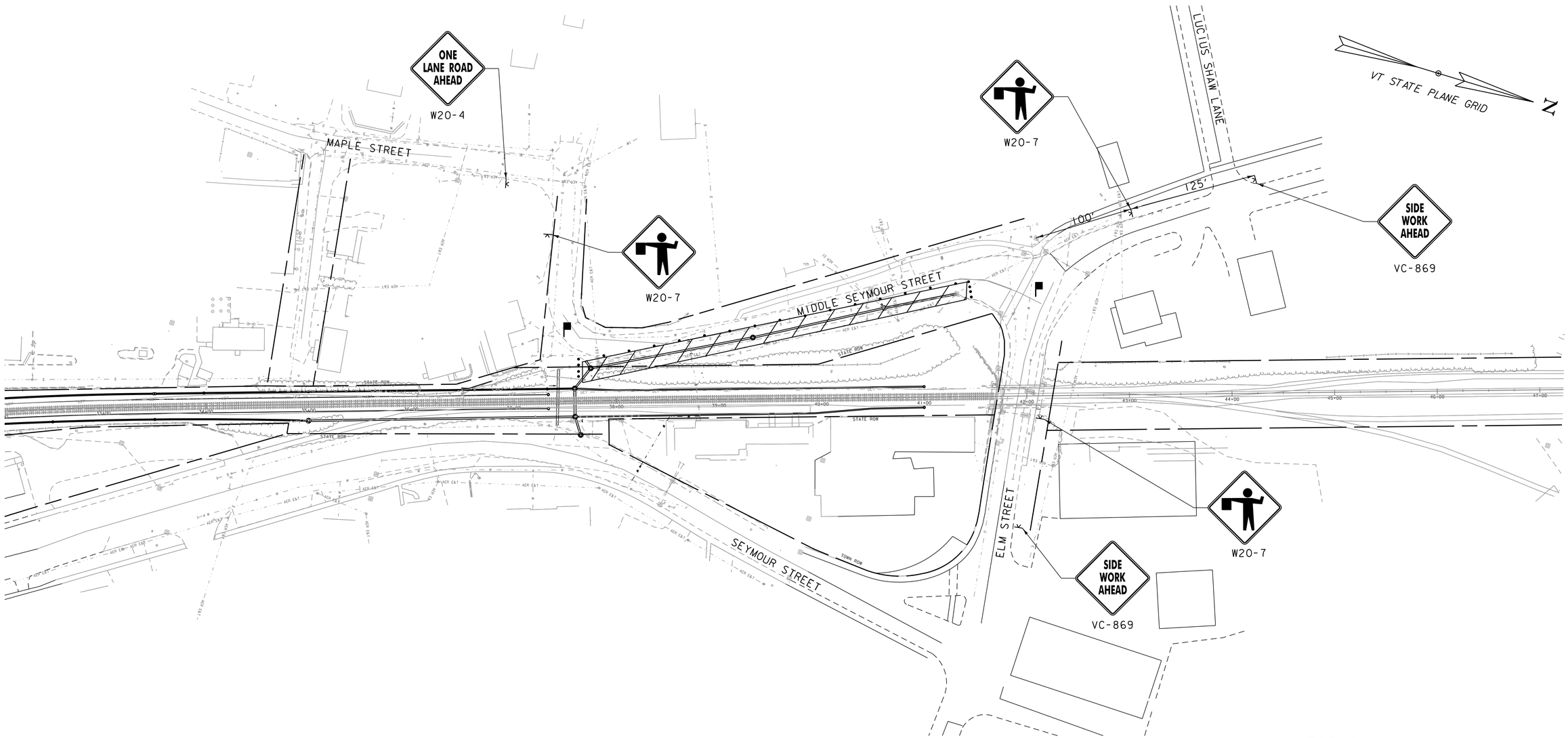
- CONSTRUCTION AREA
- DESIGNATED DETOUR ROUTE
- TYPE III (MOD) BARRICADE (WITH SIGN)
- TYPE III BARRICADE
- POST OR EASEL MOUNTED SIGN

TRAFFIC CONTROL PLAN #6B
MARBLEWORKS PEDESTRIAN DETOUR

PROJECT NAME: MIDDLEBURY
PROJECT NUMBER: WCRS(23)

FILE NAME: zl3g542tcp_06b.dgn
PROJECT LEADER: A.P. GUYETTE
DESIGNED BY: M.L. GRAHAM
TRAFFIC CONTROL PLAN #6B SHEET (10 OF 38)

PLOT DATE: 4/30/2019
DRAWN BY: J.A. ROBERT
CHECKED BY: M.D. SUENNEN
SHEET 80 OF 328



TRAFFIC CONTROL PLAN #6C NOTES:

1. TRAFFIC CONTROL PLAN #6C SHALL BE IMPLEMENTED DURING THE UTILITY WORK BEING DONE ALONG MIDDLE SEYMOUR STREET.
2. PEDESTRIAN ACCESS TO THE WEST SIDE OF MIDDLE SEYMOUR STREET SHALL BE MAINTAINED.
3. FLAGGERS SHALL BE PLACED AT MIDDLE SEYMOUR STREET AND MAPLE STREET INTERSECTION. THE CONTRACTOR SHALL INSTALL FLAGGER ADVANCED OF SIGNS (W20-4,W20-7 AND VC-869), ANYTIME MIDDLE SEYMOUR STREET IS REDUCED TO A SINGLE TRAVEL LANE.
4. WORK ALONG SOUTHBOUND MIDDLE SEYMOUR STREET WILL USE SAME SIGNING LAYOUT.

LEGEND

- CHANNELIZING DEVICE
- FLAGGER STATION
- ENERGY ABSORPTION ATTENUATOR
- TEMPORARY 6' CHAIN-LINK FENCE
- TRAFFIC BARRIER
- TYPE III BARRICADE WITH SIGN
- TYPE III BARRICADE

0 50 100
SCALE IN FEET

vhb

TRAFFIC CONTROL PLAN #6C
MIDDLE SEYMOUR STREET UTILITY FLAGGING

PROJECT NAME: MIDDLEBURY
PROJECT NUMBER: WCRS(23)

FILE NAME: z13g542tcp_06c.dgn
PROJECT LEADER: A.P. GUYETTE
DESIGNED BY: M.L. GRAHAM
TRAFFIC CONTROL PLAN #6C SHEET (11 OF 38)

PLOT DATE: 5/1/2019
DRAWN BY: J.A. ROBERT
CHECKED BY: M.D. SUENNEN
SHEET 81 OF 328

TEMPORARY 4" DOUBLE YELLOW LINE

100 FT, CL MERCHANTS ROW

VT STATE PLANE GRID

N

TRAFFIC CONTROL PLAN #7 NOTES:

1. THIS PLAN IS TO BE IMPLEMENTED TO PARTIALLY CLOSE MERCHANTS ROW 3 WEEKS BEFORE THE FULL 10-WEEK CLOSURE. THE MERCHANTS ROW TEMPORARY BRIDGE WILL BE REMOVED AND SUPPORT OF EXCAVATION ALONG THE RAIL CORRIDOR SHALL BE INSTALLED.
2. THE SIDEWALK IN FRONT OF THE BATTEL BLOCK SHALL REMAIN OPEN. CONTRACTOR SHALL MAINTAIN A 5 FOOT PATH ALONG BATTEL BLOCK DRIVEWAY FOR ACCESS TO PARKING LOT.
3. TRAFFIC CONTROL PLAN #14B SHALL BE IN PLACE AND OPERATIONAL BEFORE THE PARTIAL CLOSURE OF MERCHANTS ROW.
4. WEST END OF MERCHANTS ROW SHALL ALLOW 2-WAY TRAFFIC ACCESS TO PARKING.

R5-11 AUTHORIZED VECHILES ONLY

R11-2 ROAD CLOSED

M4-10L DETOUR

WORK AREA

R11-2 ROAD CLOSED

AUTHORIZED VECHILES ONLY R5-11

OBLITERATE EXISTING STRIPING

DETOUR M4-9R

DETOUR M4-9R

TO CORNWALL

TOWN ROW

STATE ROW

TO VERGENNES

TO ROUTE 7

DYL

21+00 22+00 23+00 24+00 25+00 26+00 27+00 28+00 29+00

LEGEND

- CHANNELIZING DEVICE
- FLAGGER STATION
- ENERGY ABSORPTION ATTENUATOR
- TEMPORARY 6' CHAIN-LINK FENCE
- TRAFFIC BARRIER
- TYPE III BARRICADE WITH SIGN
- TYPE III BARRICADE

0 40 80

SCALE IN FEET

vhb

TRAFFIC CONTROL PLAN #7
MERCHANTS ROW STREET CLOSURE

PROJECT NAME: MIDDLEBURY

PROJECT NUMBER: WCRS(23)

FILE NAME: zl3g542tcp_7.dgn

PROJECT LEADER: A.P. GUYETTE

DESIGNED BY: M.L. GRAHAM

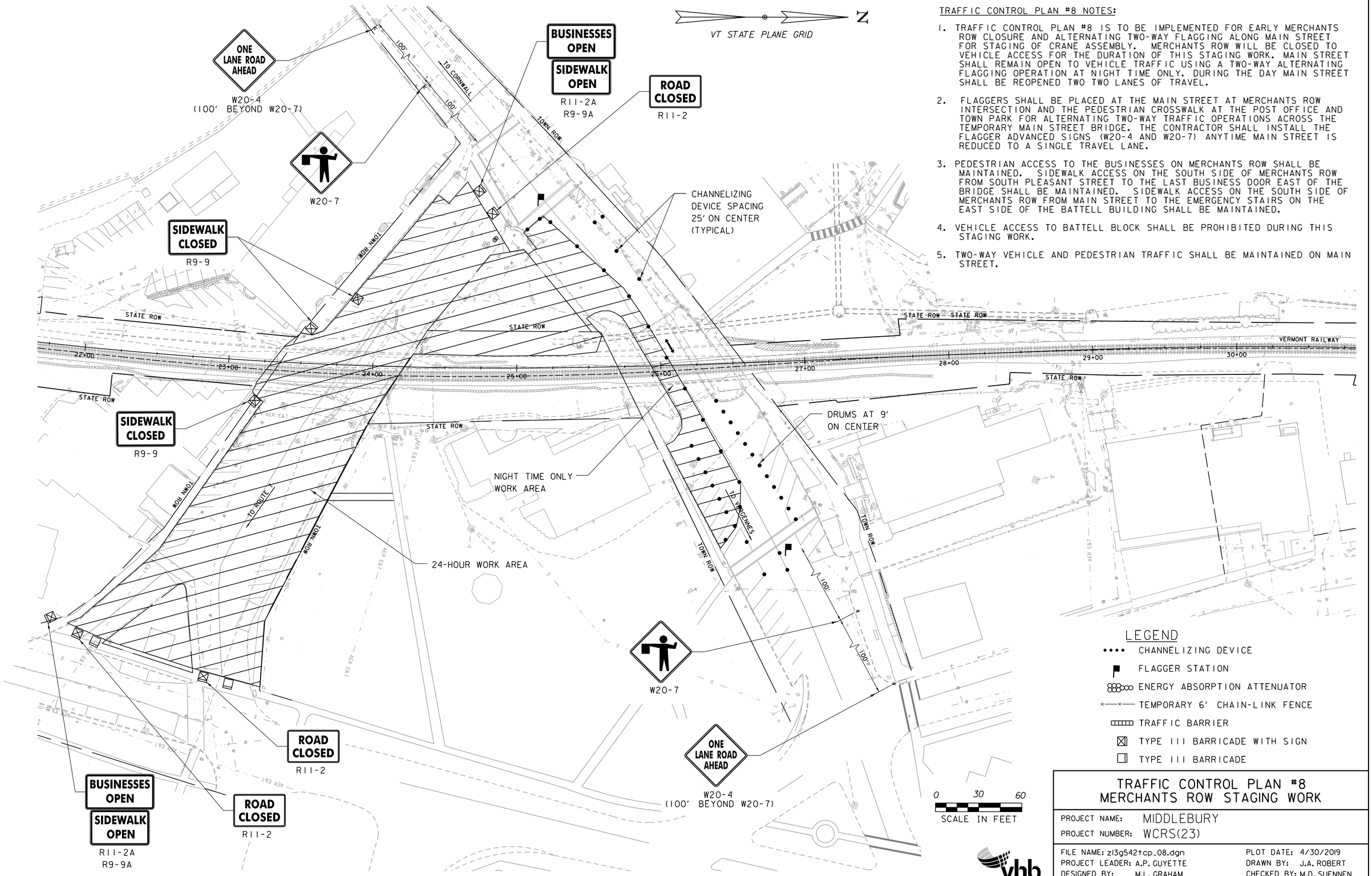
TRAFFIC CONTROL PLAN #7 SHEET (12 OF 38)

PLOT DATE: 4/30/2019

DRAWN BY: J.A. ROBERT

CHECKED BY: M.D. SUENNEN

SHEET 82 OF 328



TRAFFIC CONTROL PLAN #8 NOTES:

1. TRAFFIC CONTROL PLAN #8 IS TO BE IMPLEMENTED FOR EARLY MERCHANTS ROW CLOSURE AND ALTERNATING TWO-WAY FLAGGING ALONG MAIN STREET FOR STAGING OF CRANE ASSEMBLY. MERCHANTS ROW WILL BE CLOSED TO VEHICLE ACCESS FOR THE DURATION OF THIS STAGING WORK. MAIN STREET SHALL REMAIN OPEN TO VEHICLE TRAFFIC USING A TWO-WAY ALTERNATING FLAGGING OPERATION AT NIGHT TIME ONLY. DURING THE DAY MAIN STREET SHALL BE REOPENED TWO TWO LANES OF TRAVEL.

2. FLAGGERS SHALL BE PLACED AT THE MAIN STREET AT MERCHANTS ROW INTERSECTION AND THE PEDESTRIAN CROSSWALK AT THE POST OFFICE AND TOWN PARK FOR ALTERNATING TWO-WAY TRAFFIC OPERATIONS ACROSS THE TEMPORARY MAIN STREET BRIDGE. THE CONTRACTOR SHALL INSTALL THE FLAGGER ADVANCED SIGNS (W20-4 AND W20-7) ANYTIME MAIN STREET IS REDUCED TO A SINGLE TRAVEL LANE.

3. PEDESTRIAN ACCESS TO THE BUSINESSES ON MERCHANTS ROW SHALL BE MAINTAINED. SIDEWALK ACCESS ON THE SOUTH SIDE OF MERCHANTS ROW FROM SOUTH PLEASANT STREET TO THE LAST BUSINESS DOOR EAST OF THE BRIDGE SHALL BE MAINTAINED. SIDEWALK ACCESS ON THE SOUTH SIDE OF MERCHANTS ROW FROM MAIN STREET TO THE EMERGENCY STAIRS ON THE EAST SIDE OF THE BATTELL BUILDING SHALL BE MAINTAINED.

4. VEHICLE ACCESS TO BATTELL BLOCK SHALL BE PROHIBITED DURING THIS STAGING WORK.

5. TWO-WAY VEHICLE AND PEDESTRIAN TRAFFIC SHALL BE MAINTAINED ON MAIN STREET.

LEGEND

- CHANNELIZING DEVICE
- FLAGGER STATION
- ENERGY ABSORPTION ATTENUATOR
- TEMPORARY 6' CHAIN-LINK FENCE
- TRAFFIC BARRIER
- TYPE III BARRICADE WITH SIGN
- TYPE III BARRICADE

TRAFFIC CONTROL PLAN #8
MERCHANTS ROW STAGING WORK

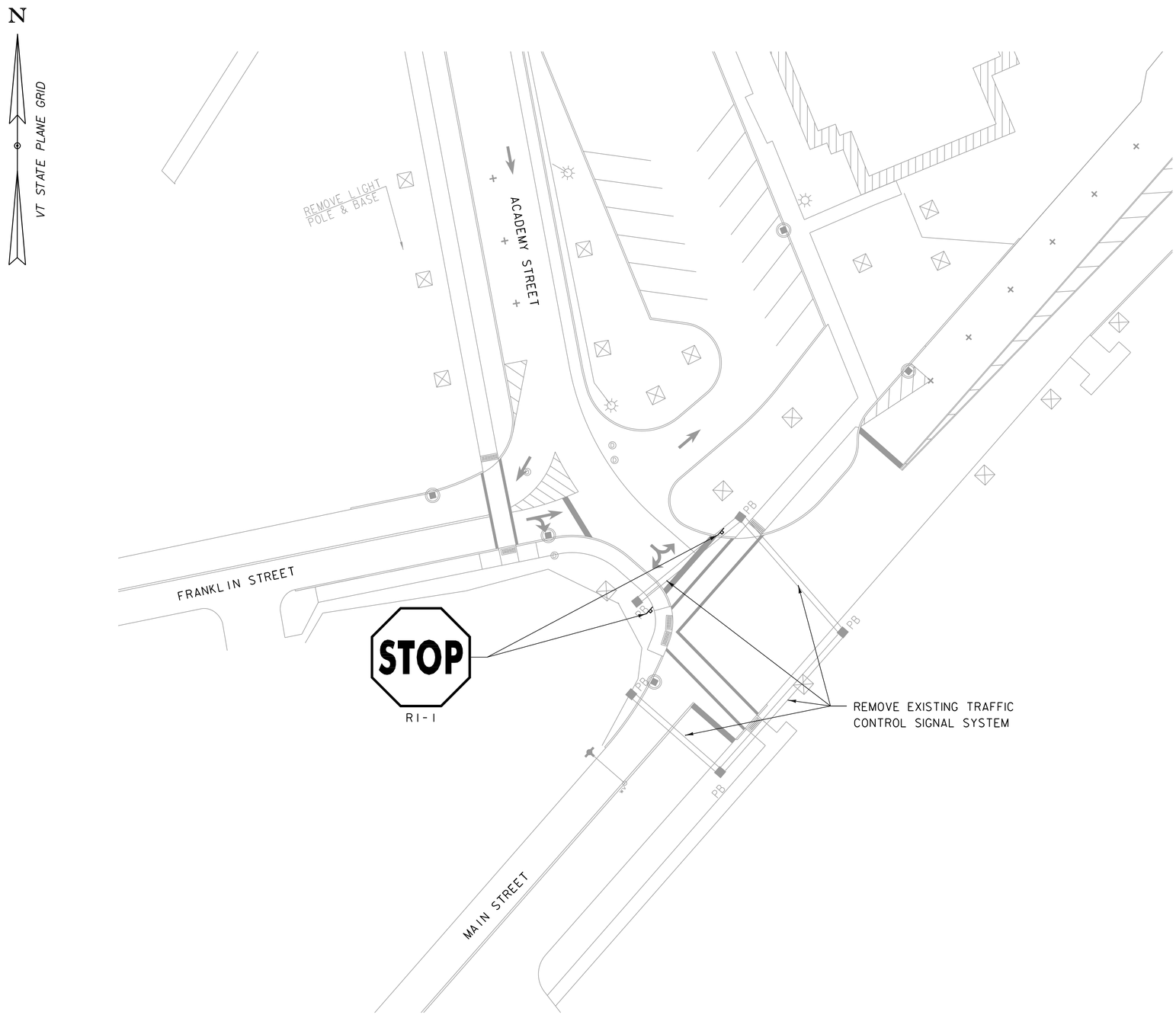
PROJECT NAME: MIDDLEBURY
PROJECT NUMBER: WCRS(23)

FILE NAME: z13g542tcp_08.dgn
PROJECT LEADER: A.P. GUYETTE
DESIGNED BY: M.L. GRAHAM
TRAFFIC CONTROL PLAN #8 SHEET (13 OF 38)

PLOT DATE: 4/30/2019
DRAWN BY: J.A. ROBERT
CHECKED BY: M.D. SUENNEN
SHEET 83 OF 328

TRAFFIC CONTROL PLAN #8.5A NOTES:

1. TRAFFIC CONTROL PLAN #8.5A IS INTENDED TO REMOVE THE SIGNAL AT THE INTERSECTION OF MAIN STREET AND ACADEMY STREET.
2. NEW STOP SIGNS SHALL BE INSTALLED UPON REMOVAL OF EXISTING TRAFFIC CONTROL SIGNAL SYSTEM
3. IT IS INTENDED THAT THE SIGNAL REMOVAL IS PERMANENT.



LEGEND

- CHANNELIZING DEVICE
- FLAGGER STATION
- ENERGY ABSORPTION ATTENUATOR
- TEMPORARY 6' CHAIN-LINK FENCE
- TRAFFIC BARRIER
- TYPE III BARRICADE WITH SIGN
- TYPE III BARRICADE

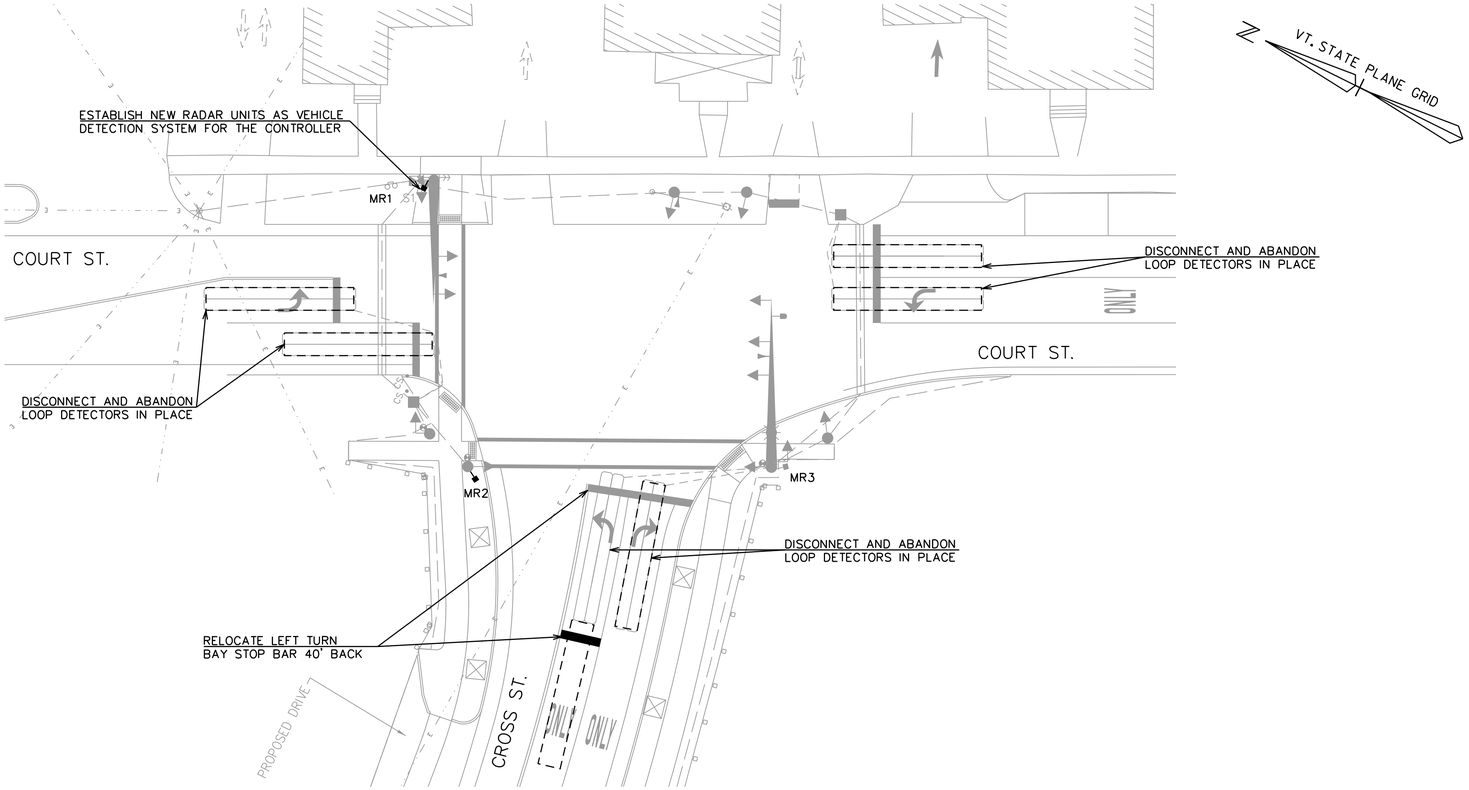
0 20 40
SCALE IN FEET

vhb

TRAFFIC CONTROL PLAN #8.5A
SIGNAL REMOVAL FOR ACADEMY AND MAIN STREET

PROJECT NAME: MIDDLEBURY
PROJECT NUMBER: WCRS(23)

FILE NAME: zl3g542tcp_8.5a.dgn
PROJECT LEADER: A.P. GUYETTE
DESIGNED BY: M.L. GRAHAM
TRAFFIC CONTROL PLAN #8.5A SHEET (14 OF 38)
PLOT DATE: 4/30/2019
DRAWN BY: J.A. ROBERT
CHECKED BY: M.D. SUENNEN
SHEET 84 OF 328



TRAFFIC CONTROL PLAN #8.5B NOTES:

1. TRAFFIC CONTROL PLAN #8.5B IS INTENDED TO MOVE THE LEFT TURN BAY STOP BAR ON CROSS STREET AT THE INTERSECTION OF COURT STREET BACK 40 FEET TO ALLOW DETOUR TRUCK TURNING MOVEMENTS.
2. CONTRACTOR SHALL DISCONNECT AND ABANDON EXISTING LOOP DETECTORS IN PLACE.
3. CONTRACTOR SHALL INSTALL VEHICLE DETECTION SYSTEM AND SYSTEM SHALL BE OPERATING BEFORE DISCONNECT OF LOOP DETECTORS.
4. UPON COMPLETION OF DETOUR CONTRACTOR SHALL MOVE STOP BAR BACK TO PREVIOUS CONDITIONS AND REDEFINE DETECTION ZONES.

RADAR STOP BAR DETECTOR SCHEDULE

INCLUDED IN ITEM 678.15

DETECTORS					SETTINGS	
PLAN ID	STREET	DIRECTION	LANE	CALL Ø	TYPE	DETECTOR NUMBER
MRI	COURT ST	NORTHBOUND	ALL APPROACHES	2,5	RADAR	1
MR2	CROSS ST	WESTBOUND	ALL APPROACHES	3,8	RADAR	2
MR3	COURT ST	SOUTHBOUND	ALL APPROACHES	1,6	RADAR	3

ALL DETECTION SHOULD BE SET TO NONLOCKING OPERATIONS.

LEGEND

	LEGEND
	CONTROLLER CABINET
	SIGNAL HEAD
	CONDUIT
	CONDUIT IN SLEEVE
	PEDESTAL POST
	STANCHION
	MAST ARM
	PEDESTRIAN PUSH BUTTON
	JUNCTION BOX
	OVERHEAD SIGN
	LUMINAIRE
MR	MATRIX RADAR SENSOR
	PROPOSED DETECTION ZONE
	LOOP DETECTOR

0 20 40
SCALE IN FEET

vhb

TRAFFIC CONTROL PLAN #8.5B
COURT STREET AND CROSS STREET
INTERSECTION MODIFICATION

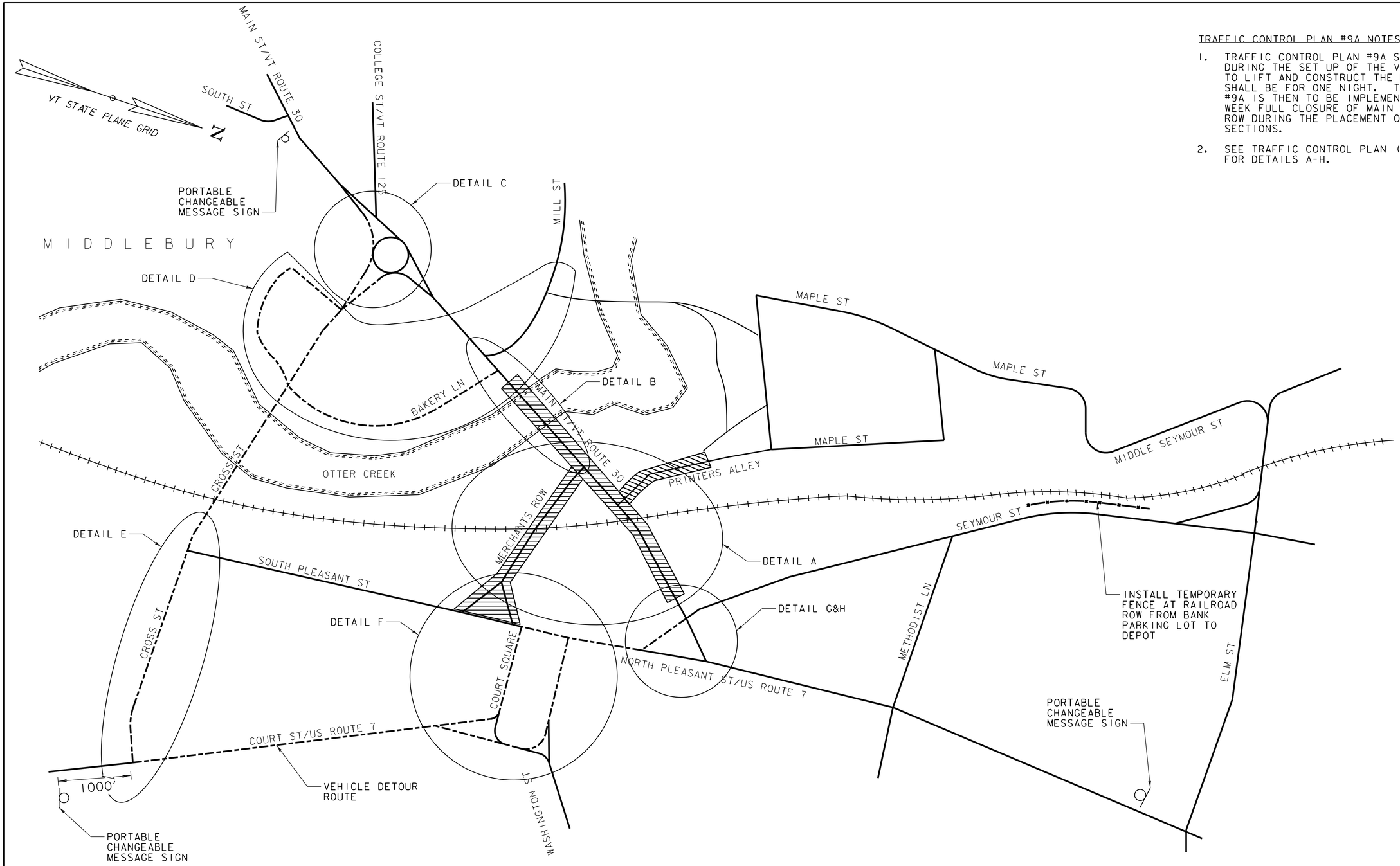
PROJECT NAME: MIDDLEBURY
PROJECT NUMBER: WCRS(23)

FILE NAME: z13g542tcp_8.5b.dgn
PROJECT LEADER: A.P. GUYETTE
DESIGNED BY: M.L. GRAHAM
TRAFFIC CONTROL PLAN #8.5B SHEET (15 OF 38)
PLOT DATE: 4/30/2019
DRAWN BY: J.A. ROBERT
CHECKED BY: M.D. SUENNEN
SHEET 85 OF 328

TRAFFIC CONTROL PLAN #9A NOTES

1. TRAFFIC CONTROL PLAN #9A SHALL BE IMPLEMENTED DURING THE SET UP OF THE VILLAGE GREEN CRANE TO LIFT AND CONSTRUCT THE BOOM ARM. THIS SHALL BE FOR ONE NIGHT. TRAFFIC CONTROL PLAN #9A IS THEN TO BE IMPLEMENTED DURING THE 10 WEEK FULL CLOSURE OF MAIN STREET AND MERCHANTS ROW DURING THE PLACEMENT OF THE TUNNEL SECTIONS.

2. SEE TRAFFIC CONTROL PLAN (SHEETS 13-20 OF 35) FOR DETAILS A-H.



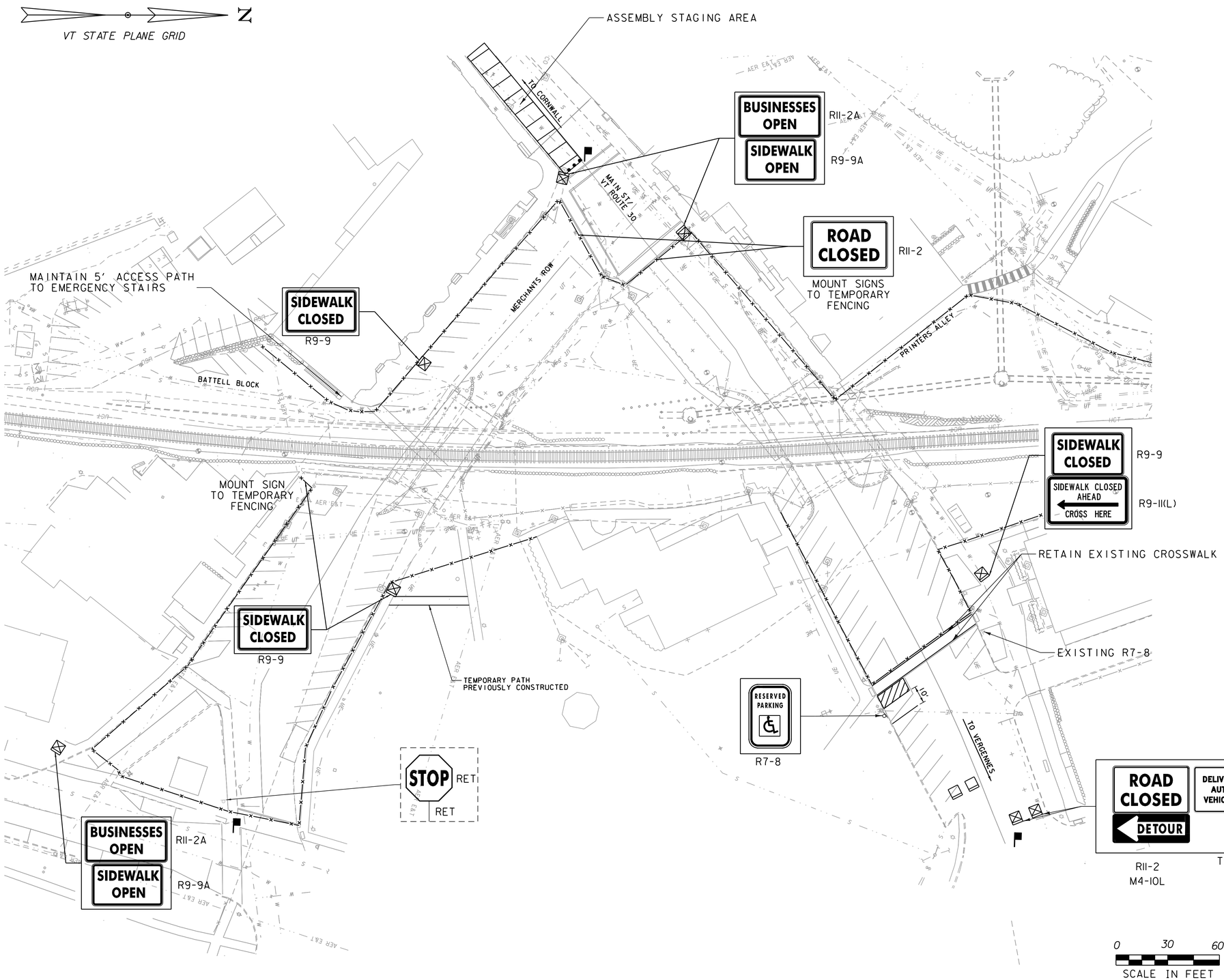
SCALE 1" = 120'-0"
120 0 120

TRAFFIC CONTROL PLAN #9A
FULL ROAD CLOSURE

PROJECT NAME: MIDDLEBURY
PROJECT NUMBER: WCRS(23)

FILE NAME: z13g542tcp_09a.dgn
PROJECT LEADER: A.P. GUYETTE
DESIGNED BY: M.L. GRAHAM
TRAFFIC CONTROL PLAN #9A SHEET (16 OF 38)

PLOT DATE: 4/30/2019
DRAWN BY: J.A. ROBERT
CHECKED BY: M.D. SUENNEN
SHEET 86 OF 328



TRAFFIC CONTROL PLAN #9A DETAIL A NOTES:

1. TRAFFIC CONTROL PLAN #9A SHALL BE IMPLEMENTED DURING THE SET UP OF THE CRANE TO LIFT AND CONSTRUCT THE BOOM ARM. THIS SHALL BE FOR ONE NIGHT. TRAFFIC CONTROL PLAN #9A IS THEN TO BE IMPLEMENTED DURING THE 10 WEEK FULL CLOSURE OF MAIN STREET AND MERCHANTS ROW DURING THE PLACEMENT OF THE TUNNEL SECTIONS.
2. ONE PARKING SPACE TO BE RESTRIPED AS PERPENDICULAR FOR HANDICAP ACCESSIBILITY TO ST. STEPHEN'S CHURCH.
3. RETAIN ONE EXISTING DIAGONAL PARKING SPACE FOR HANDICAP ACCESSIBILITY TO POST OFFICE.
4. REFER TO THE FULL PEDESTRIAN DETOUR SHEET (TRAFFIC CONTROL PLAN #9B) FOR PEDESTRIAN ACCESS MANAGEMENT.
5. ACCOMMODATIONS SHALL BE MADE AT THE INTERSECTION OF MAIN STREET AND SEYMOUR STREET FOR PERIODIC DELIVERY OF PRECAST BRIDGE PIECES INCLUDING BUT NOT LIMITED TO THE MOVING OF TEMPORARY FENCING.
6. ACCOMMODATIONS SHALL BE MADE FOR PERIODIC DELIVERY TO MAIN STREET, MERCHANTS ROW, AND BATTELL BLOCK INCLUDING BUT NOT LIMITED TO THE MOVING OF TEMPORARY FENCING.
7. FLAGGERS AT THE INTERSECTION OF MAIN STREET WITH MERCHANTS ROW SHALL AID WITH CONSTRUCTION VEHICLE ACCESS, SHUTTLE DROP OFF/PICK UP AND REVERSING, AND DELIVERIES.
8. FLAGGERS AT THE INTERSECTION OF MAIN STREET WITH SEYMOUR STREET SHALL AID WITH CONSTRUCTION VEHICLE ACCESS, HANDICAP PARKING ACCESS, SHUTTLE DROP OFF/PICK UP AND DELIVERIES.
9. FLAGGERS AT THE INTERSECTION OF MERCHANTS ROW AND SOUTH PLEASANT STREET SHALL AID WITH CONSTRUCTION VEHICLE ACCESS.
10. A WORKER SHALL BE AVAILABLE TO MOVE FENCING AS REQUIRED FOR VEHICLE TURN AROUND AT THE INTERSECTION OF MAIN STREET WITH MERCHANTS ROW.

LEGEND

- CHANNELIZING DEVICE
- FLAGGER STATION
- ENERGY ABSORPTION ATTENUATOR
- TEMPORARY 6' CHAIN-LINK FENCE
- TRAFFIC BARRIER
- TYPE III BARRICADE WITH SIGN
- TYPE III BARRICADE

TRAFFIC CONTROL PLAN #9A
FULL ROAD CLOSURE - DETAIL A

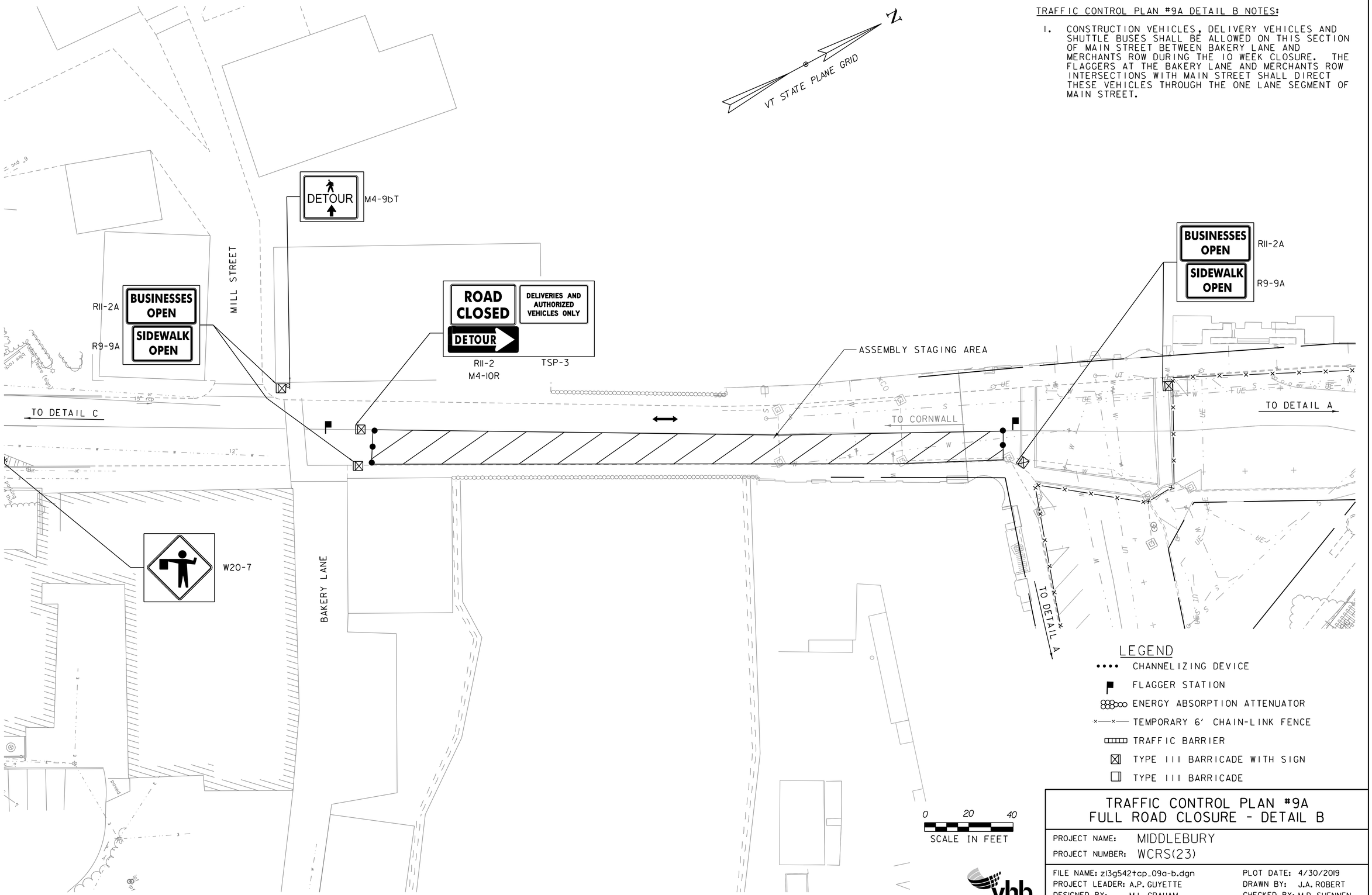
PROJECT NAME: MIDDLEBURY
PROJECT NUMBER: WCRS(23)

FILE NAME: z13g542tcp_09a-a.dgn
PROJECT LEADER: A.P. GUYETTE
DESIGNED BY: M.L. GRAHAM
TRAFFIC CONTROL PLAN #9A SHEET (17 OF 38)

PLOT DATE: 4/30/2019
DRAWN BY: J.A. ROBERT
CHECKED BY: M.D. SUENNEN
SHEET 87 OF 328

TRAFFIC CONTROL PLAN #9A DETAIL B NOTES:

1. CONSTRUCTION VEHICLES, DELIVERY VEHICLES AND SHUTTLE BUSES SHALL BE ALLOWED ON THIS SECTION OF MAIN STREET BETWEEN BAKERY LANE AND MERCHANTS ROW DURING THE 10 WEEK CLOSURE. THE FLAGGERS AT THE BAKERY LANE AND MERCHANTS ROW INTERSECTIONS WITH MAIN STREET SHALL DIRECT THESE VEHICLES THROUGH THE ONE LANE SEGMENT OF MAIN STREET.



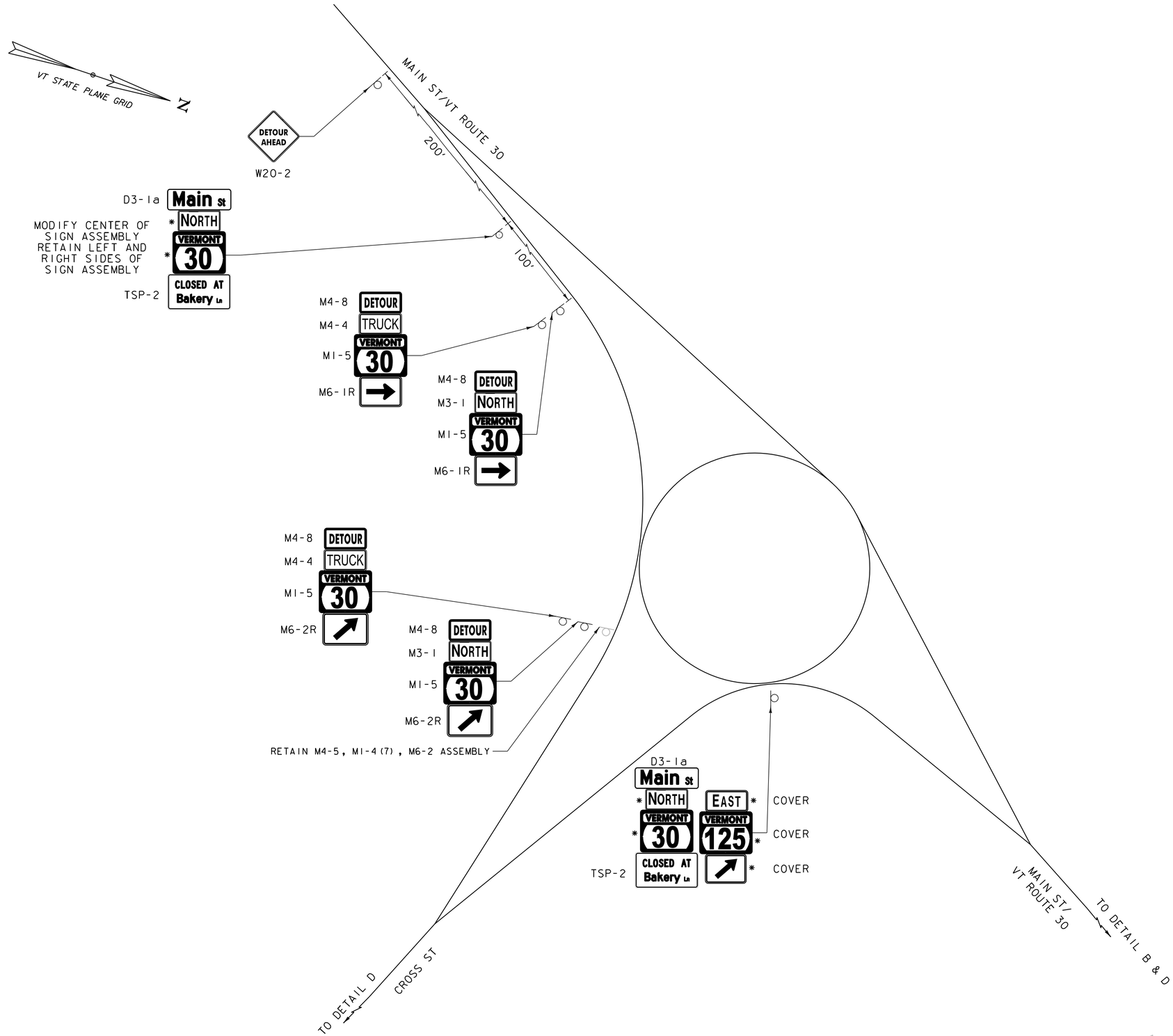
TRAFFIC CONTROL PLAN #9A
FULL ROAD CLOSURE - DETAIL B

PROJECT NAME: MIDDLEBURY
PROJECT NUMBER: WCRS(23)

FILE NAME: z13g542tcp_09a-b.dgn
PROJECT LEADER: A.P. GUYETTE
DESIGNED BY: M.L. GRAHAM
TRAFFIC CONTROL PLAN #9A SHEET (18 OF 38)
PLOT DATE: 4/30/2019
DRAWN BY: J.A. ROBERT
CHECKED BY: M.D. SUENNEN
SHEET 88 OF 328

TRAFFIC CONTROL PLAN #9A DETAIL C NOTES:

1. ALL DISTANCES ARE APPROXIMATE AND MAY VARY IN FIELD.
2. SIGNS MARKED WITH * SHALL BE RETAINED FROM EXISTING ASSEMBLIES.
3. AT EXISTING ROUTE MARKER ASSEMBLIES, MOVE/REPLACE/COVER WITH PROPOSED CONSTRUCTION SIGNS



NOT TO SCALE

TRAFFIC CONTROL PLAN #9A
FULL ROAD CLOSURE - DETAIL C

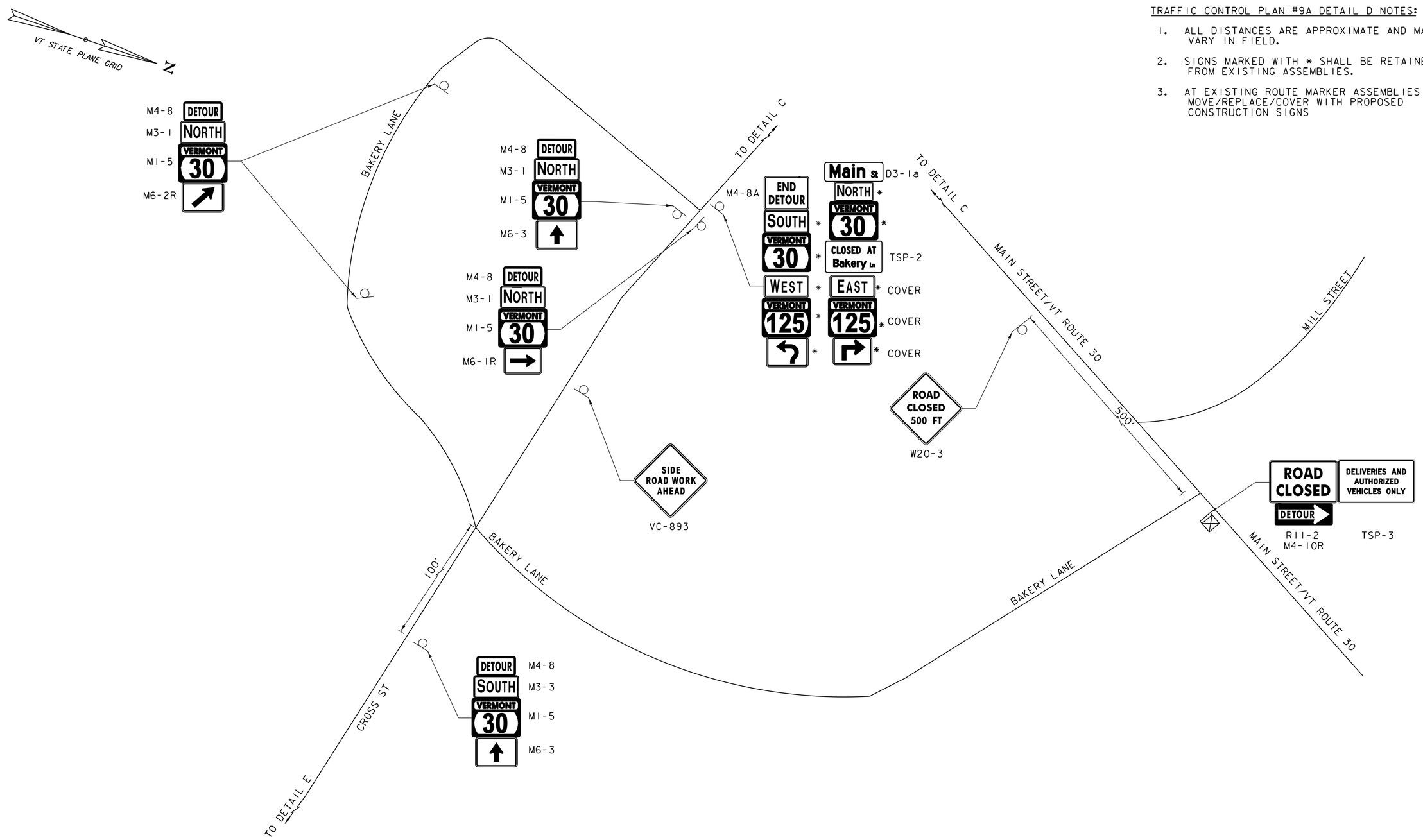
PROJECT NAME: MIDDLEBURY
PROJECT NUMBER: WCRS(23)

FILE NAME: zl3g542tcp_09a-c.dgn
PROJECT LEADER: A.P. GUYETTE
DESIGNED BY: M.L. GRAHAM
TRAFFIC CONTROL PLAN #9C SHEET (19 OF 38)

PLOT DATE: 4/30/2019
DRAWN BY: J.A. ROBERT
CHECKED BY: M.D. SUENNEN
SHEET 89 OF 328

TRAFFIC CONTROL PLAN #9A DETAIL D NOTES:

1. ALL DISTANCES ARE APPROXIMATE AND MAY VARY IN FIELD.
2. SIGNS MARKED WITH * SHALL BE RETAINED FROM EXISTING ASSEMBLIES.
3. AT EXISTING ROUTE MARKER ASSEMBLIES, MOVE/REPLACE/COVER WITH PROPOSED CONSTRUCTION SIGNS



NOT TO SCALE

TRAFFIC CONTROL PLAN #9A
FULL ROAD CLOSURE - DETAIL D

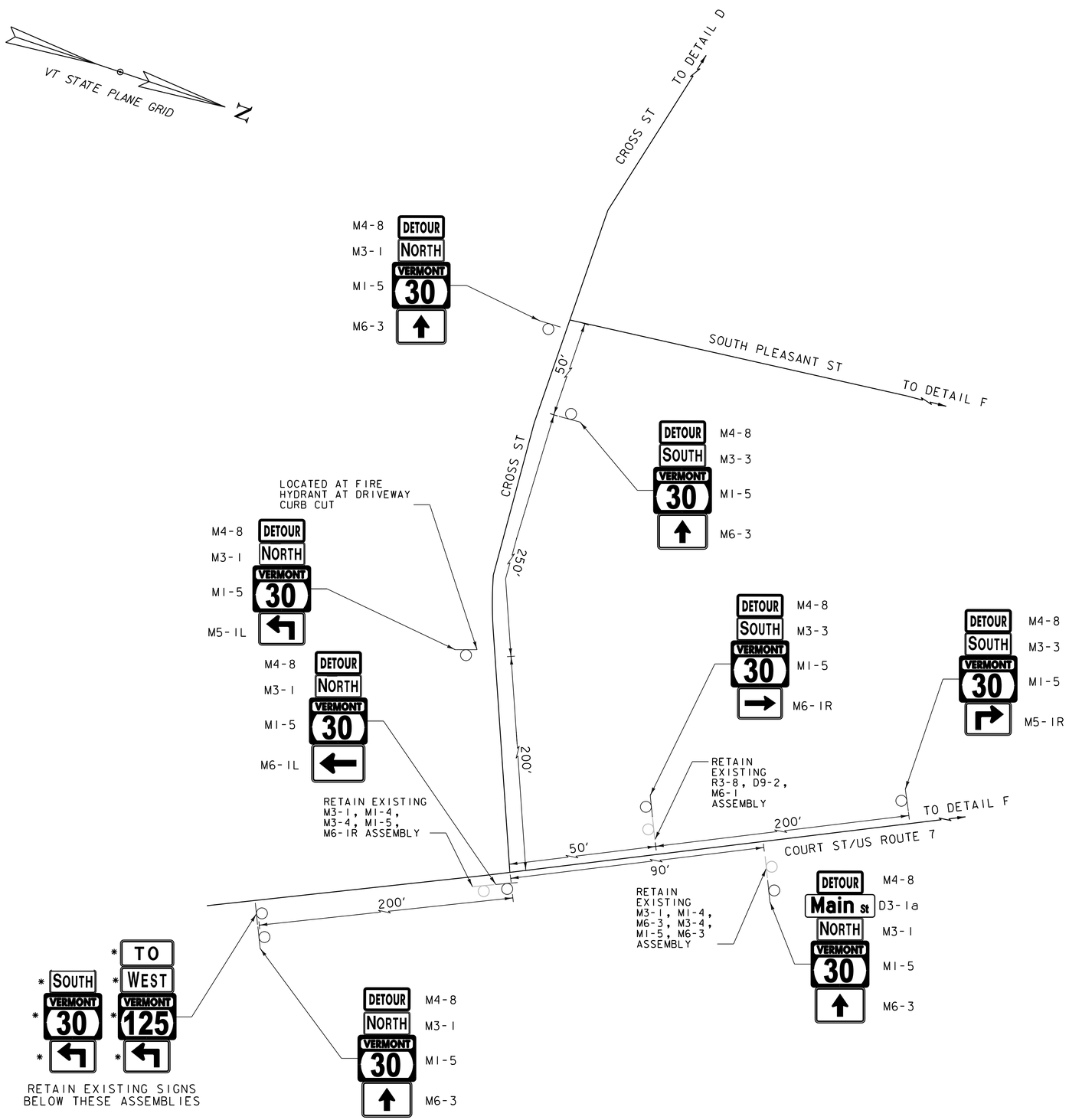
PROJECT NAME: MIDDLEBURY
PROJECT NUMBER: WCRS(23)

FILE NAME: z13g542tcp_09a-d.dgn
PROJECT LEADER: A.P. GUYETTE
DESIGNED BY: M.L. GRAHAM
TRAFFIC CONTROL PLAN #9A SHEET (20 OF 38)

PLOT DATE: 4/30/2019
DRAWN BY: J.A. ROBERT
CHECKED BY: M.D. SUENNEN
SHEET 90 OF 328

TRAFFIC CONTROL PLAN #9A DETAIL E NOTES:

1. ALL DISTANCES ARE APPROXIMATE AND MAY VARY IN FIELD.
2. SIGNS MARKED WITH * SHALL BE RETAINED FROM EXISTING ASSEMBLIES.
3. AT EXISTING ROUTE MARKER ASSEMBLIES, MOVE/REPLACE/COVER WITH PROPOSED CONSTRUCTION SIGNS



NOT TO SCALE

TRAFFIC CONTROL PLAN #9A
FULL ROAD CLOSURE - DETAIL E

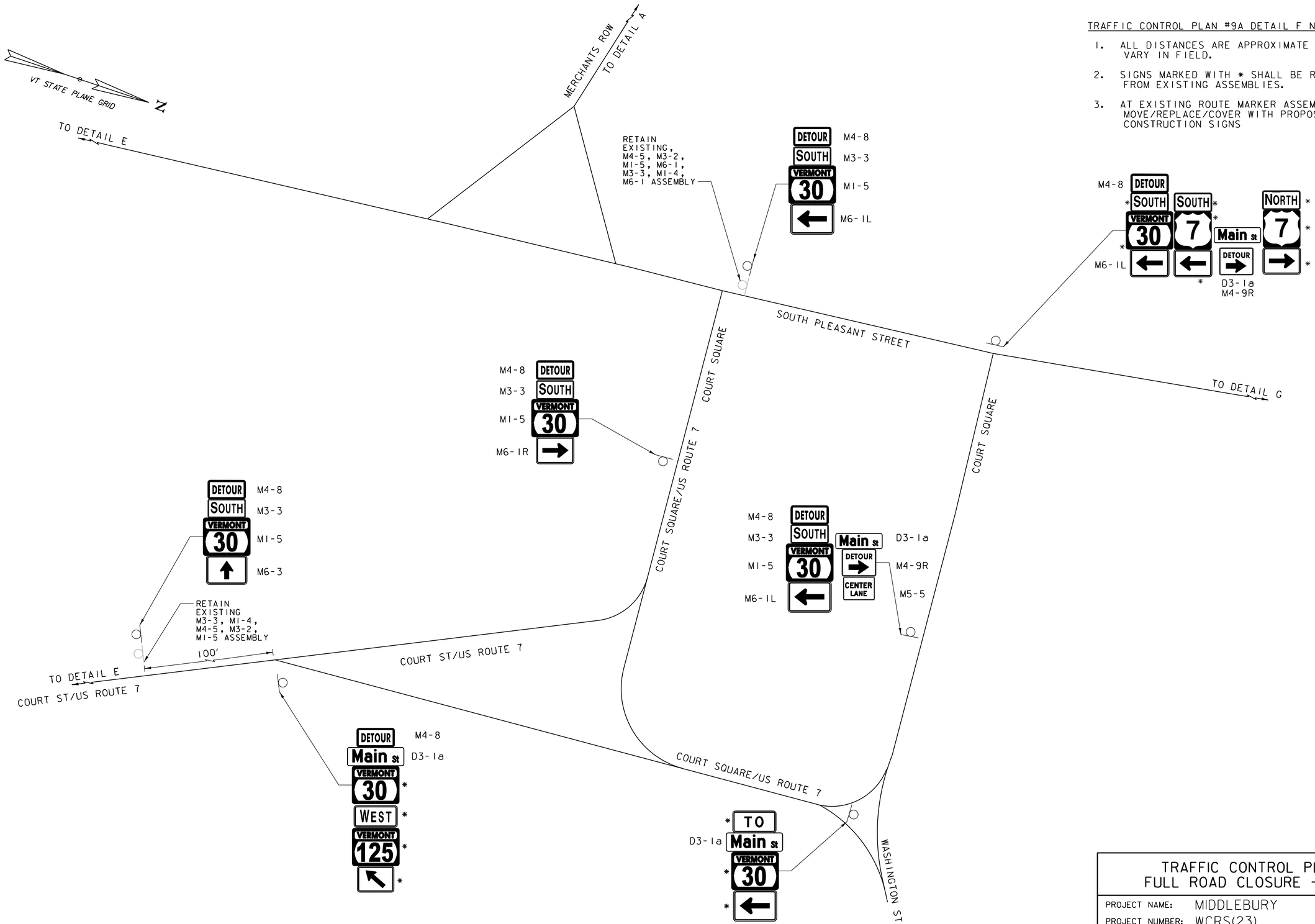
PROJECT NAME: MIDDLEBURY
PROJECT NUMBER: WCRS(23)

FILE NAME: z13g542tcp_09a-e.dgn
PROJECT LEADER: A.P. GUYETTE
DESIGNED BY: M.L. GRAHAM
TRAFFIC CONTROL PLAN #9A SHEET (21 OF 38)

PLOT DATE: 4/30/2019
DRAWN BY: J.A. ROBERT
CHECKED BY: M.D. SUENNEN
SHEET 91 OF 328

TRAFFIC CONTROL PLAN #9A DETAIL F NOTES:

1. ALL DISTANCES ARE APPROXIMATE AND MAY VARY IN FIELD.
2. SIGNS MARKED WITH * SHALL BE RETAINED FROM EXISTING ASSEMBLIES.
3. AT EXISTING ROUTE MARKER ASSEMBLIES, MOVE/REPLACE/COVER WITH PROPOSED CONSTRUCTION SIGNS



NOT TO SCALE

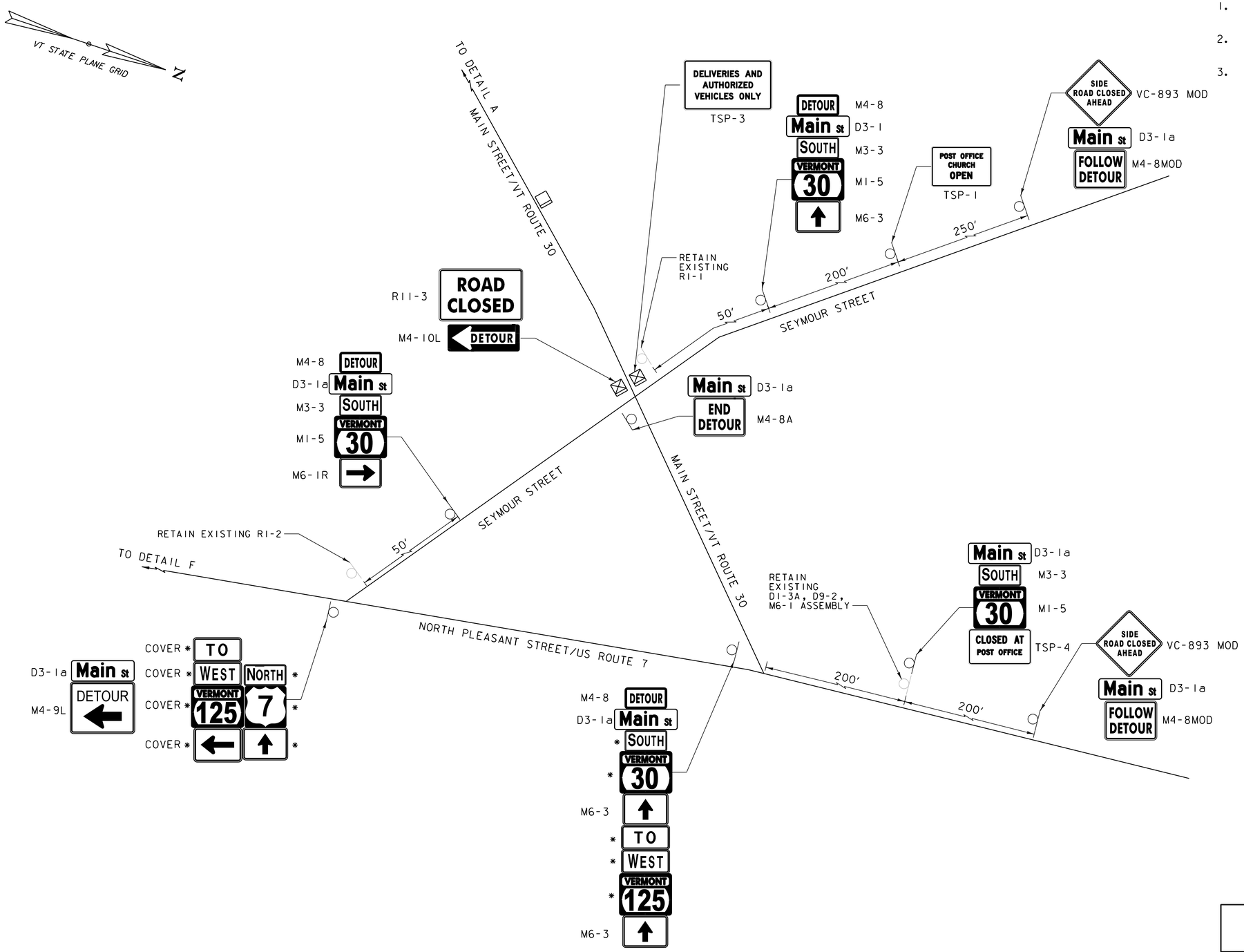
TRAFFIC CONTROL PLAN #9A
FULL ROAD CLOSURE - DETAIL F

PROJECT NAME: MIDDLEBURY
PROJECT NUMBER: WCRS(23)

FILE NAME: z13g542tcp_09a-f.dgn
PROJECT LEADER: A.P. GUYETTE
DESIGNED BY: M.L. GRAHAM
TRAFFIC CONTROL PLAN #9A SHEET (22 OF 38)
PLOT DATE: 4/30/2019
DRAWN BY: J.A. ROBERT
CHECKED BY: M.D. SUENNEN
SHEET 92 OF 328

TRAFFIC CONTROL PLAN #9A DETAIL G NOTES:

1. ALL DISTANCES ARE APPROXIMATE AND MAY VARY IN FIELD.
2. SIGNS MARKED WITH * SHALL BE RETAINED FROM EXISTING ASSEMBLIES.
3. AT EXISTING ROUTE MARKER ASSEMBLIES, MOVE/REPLACE/COVER WITH PROPOSED CONSTRUCTION SIGNS

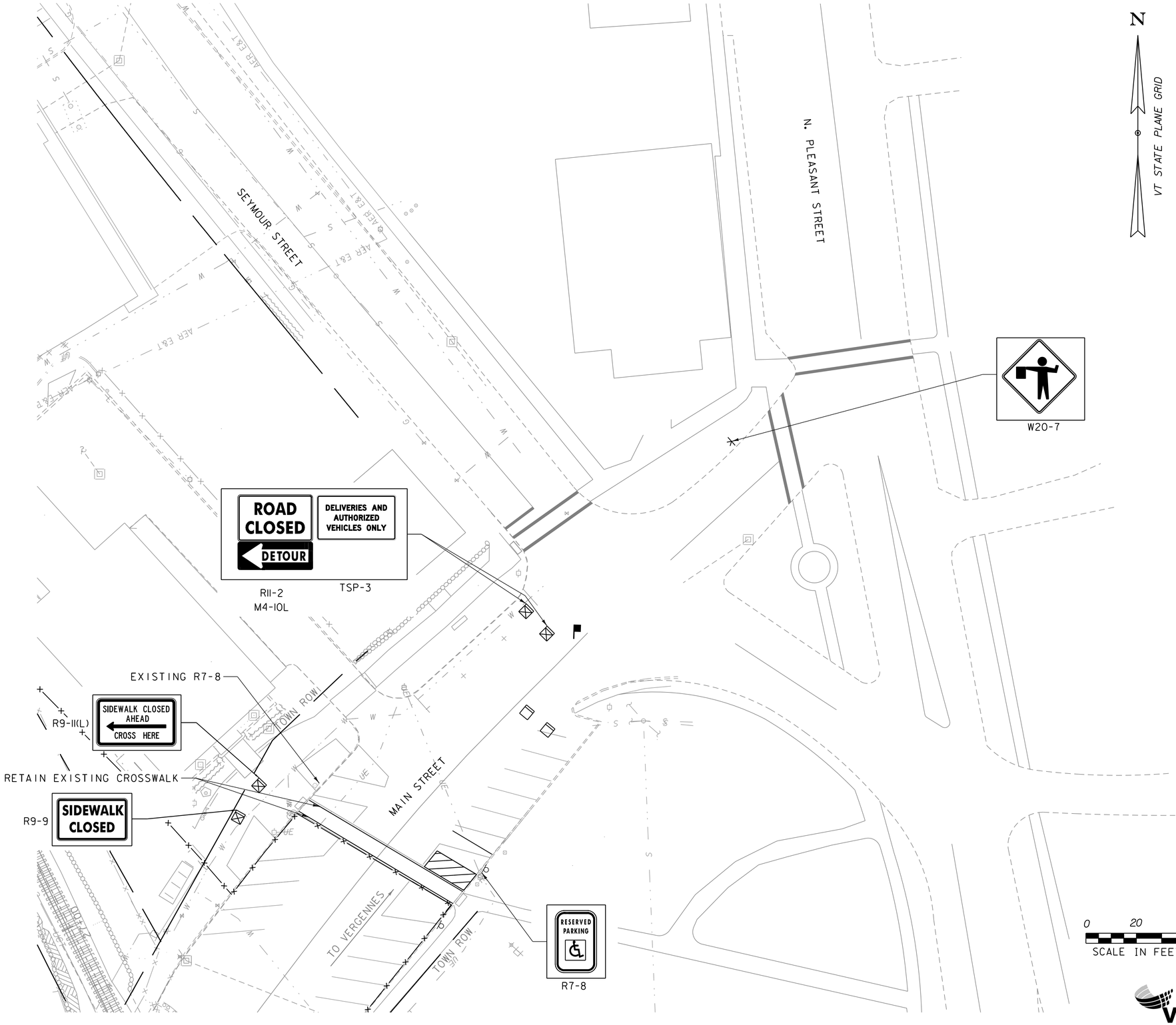


NOT TO SCALE

TRAFFIC CONTROL PLAN #9A
FULL ROAD CLOSURE - DETAIL G

PROJECT NAME: MIDDLEBURY
PROJECT NUMBER: WCRS(23)

FILE NAME: zl3g542tcp_09a-g.dgn
PROJECT LEADER: A.P. GUYETTE
DESIGNED BY: M.L. GRAHAM
TRAFFIC CONTROL PLAN #9A SHEET (23 OF 38)
PLOT DATE: 4/30/2019
DRAWN BY: J.A. ROBERT
CHECKED BY: M.D. SUENNEN
SHEET 93 OF 328



TRAFFIC CONTROL PLAN #9A DETAIL H NOTES:

1. TRAFFIC CONTROL PLAN #9A DETAIL H SHALL BE IN PLACE DURING THE 10 WEEK CLOSURE OF MAIN STREET AND MERCHANTS ROW.
2. THE FLAGGER AT THE INTERSECTION OF MAIN STREET AND SEYMOUR STREET SHALL ASSIST VEHICLES WITH HANDICAP PLACARDS/LICENSE PLATES PARK IN THE TWO RESERVED SPACES BY THE POST OFFICE AND CHURCH. THE FLAGGER SHALL ASSIST ANY CONSTRUCTION VEHICLES NEEDING ACCESS TO THE NORTH END OF THE WORK ZONE. THE FLAGGER SHALL ASSIST THE SHUTTLE BUS WITH DROP OFFS/PICK UPS.
3. THE TEMPORARY FENCE MAY BE MOVED AS NEEDED ONLY TO PROVIDE ACCESS TO THE WORK ZONE. ONCE A VEHICLE OR EQUIPMENT HAS ENTERED THE WORK ZONE THE FENCE SHALL IMMEDIATELY BE REPLACED.

LEGEND

- CHANNELIZING DEVICE
- FLAGGER STATION
- ENERGY ABSORPTION ATTENUATOR
- TEMPORARY 6' CHAIN-LINK FENCE
- TRAFFIC BARRIER
- TYPE III BARRICADE WITH SIGN
- TYPE III BARRICADE

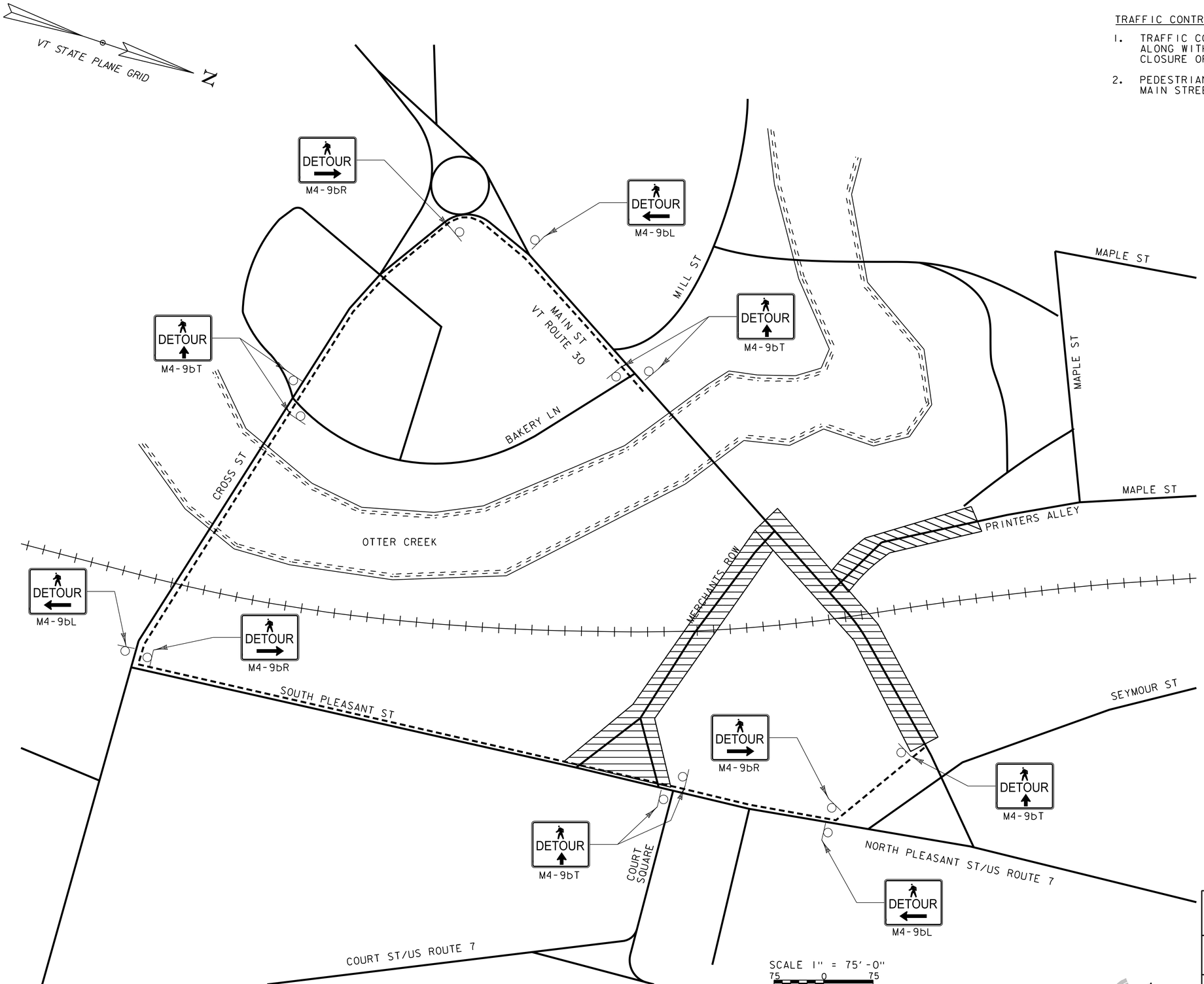
TRAFFIC CONTROL PLAN #9A
FULL ROAD CLOSURE - DETAIL H

PROJECT NAME: MIDDLEBURY
PROJECT NUMBER: WCRS(23)

FILE NAME: z13g542tcp_09a-h.dgn
PROJECT LEADER: A.P. GUYETTE
DESIGNED BY: M.L. GRAHAM
TRAFFIC CONTROL PLAN #9A SHEET (24 OF 38)
PLOT DATE: 4/30/2019
DRAWN BY: J.A. ROBERT
CHECKED BY: M.D. SUENNEN
SHEET 94 OF 328

TRAFFIC CONTROL PLAN #9B NOTES:

1. TRAFFIC CONTROL PLAN #9B SHALL BE IMPLEMENTED ALONG WITH TRAFFIC CONTROL PLAN #9A DURING THE CLOSURE OF MAIN STREET AND MERCHANTS ROW.
2. PEDESTRIAN DETOUR SIGNS MUST BE IN PLACE BEFORE MAIN STREET AND MERCHANTS ROW ARE CLOSED.



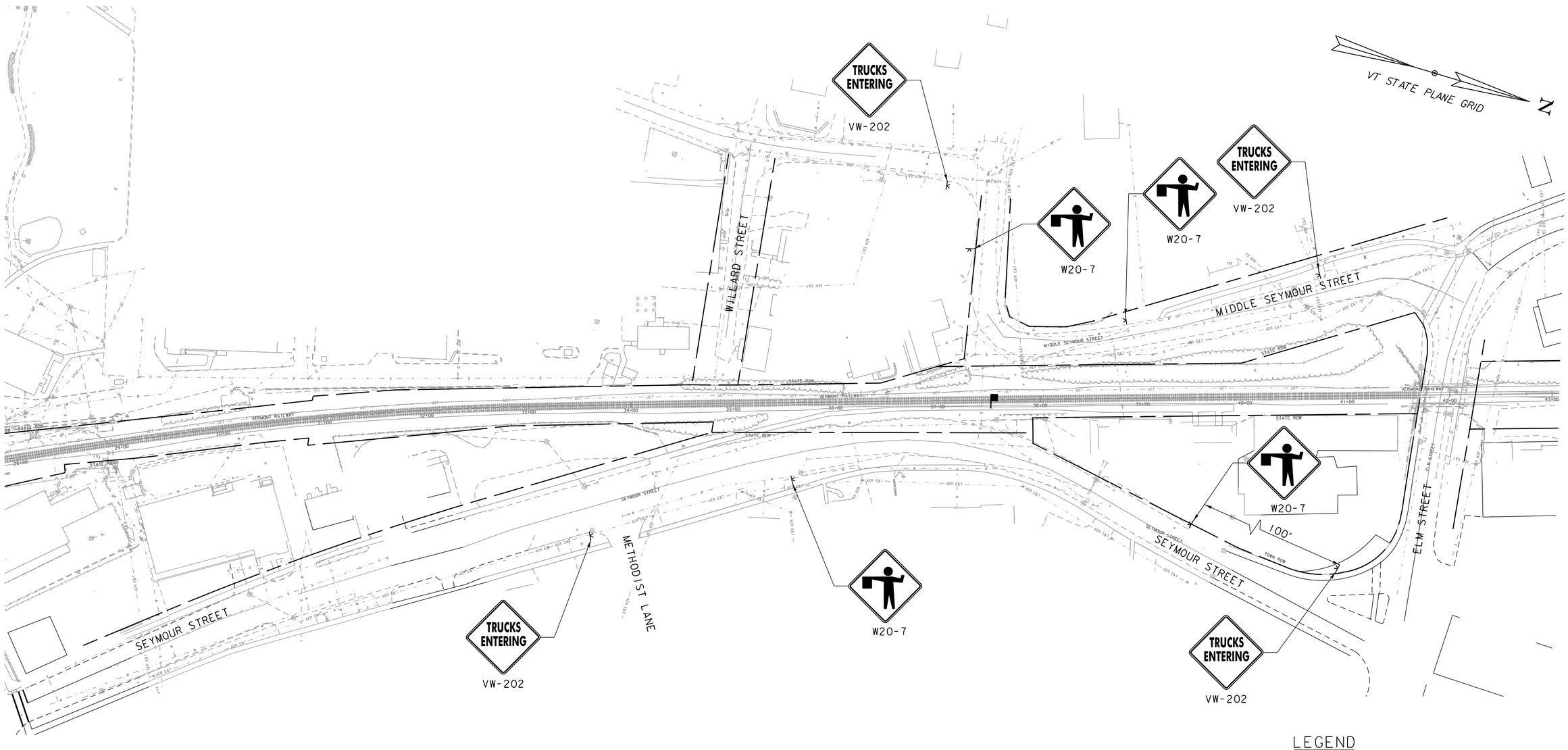
LEGEND

- CONSTRUCTION AREA
- DESIGNATED DETOUR ROUTE
- TYPE III BARRICADE WITH SIGN
- TYPE III BARRICADE

TRAFFIC CONTROL PLAN #9B
FULL PEDESTRIAN DETOUR

PROJECT NAME: MIDDLEBURY
PROJECT NUMBER: WCRS(23)

FILE NAME: zl3g542tcp_9b.dgn
PROJECT LEADER: A.P. GUYETTE
DESIGNED BY: M.L. GRAHAM
TRAFFIC CONTROL PLAN #9B SHEET (25 OF 38)
PLOT DATE: 4/30/2019
DRAWN BY: J.A. ROBERT
CHECKED BY: M.D. SUENNEN
SHEET 95 OF 328



TRAFFIC CONTROL PLAN #9C NOTES:

1. TRAFFIC CONTROL PLAN #9C SHALL BE IMPLEMENTED ANYTIME CONTRUCTION TRAFFIC WILL BE ACCESSING SEYMOUR STREET OR MIDDLE SEYMOUR STREET USING THE EXISTING RAIL CROSSING.

2. CONTRACTOR SHALL INSTALL FLAGGER ADVANCED SIGNING (VW-202, W20-7) ANYTIME CONTRUCTION TRAFFIC IS USING THE CROSSING.

LEGEND

- CHANNELIZING DEVICE
- FLAGGER STATION
- ENERGY ABSORPTION ATTENUATOR
- TEMPORARY 6' CHAIN-LINK FENCE
- TRAFFIC BARRIER
- TYPE III BARRICADE WITH SIGN
- TYPE III BARRICADE

0 50 100
SCALE IN FEET

vhb

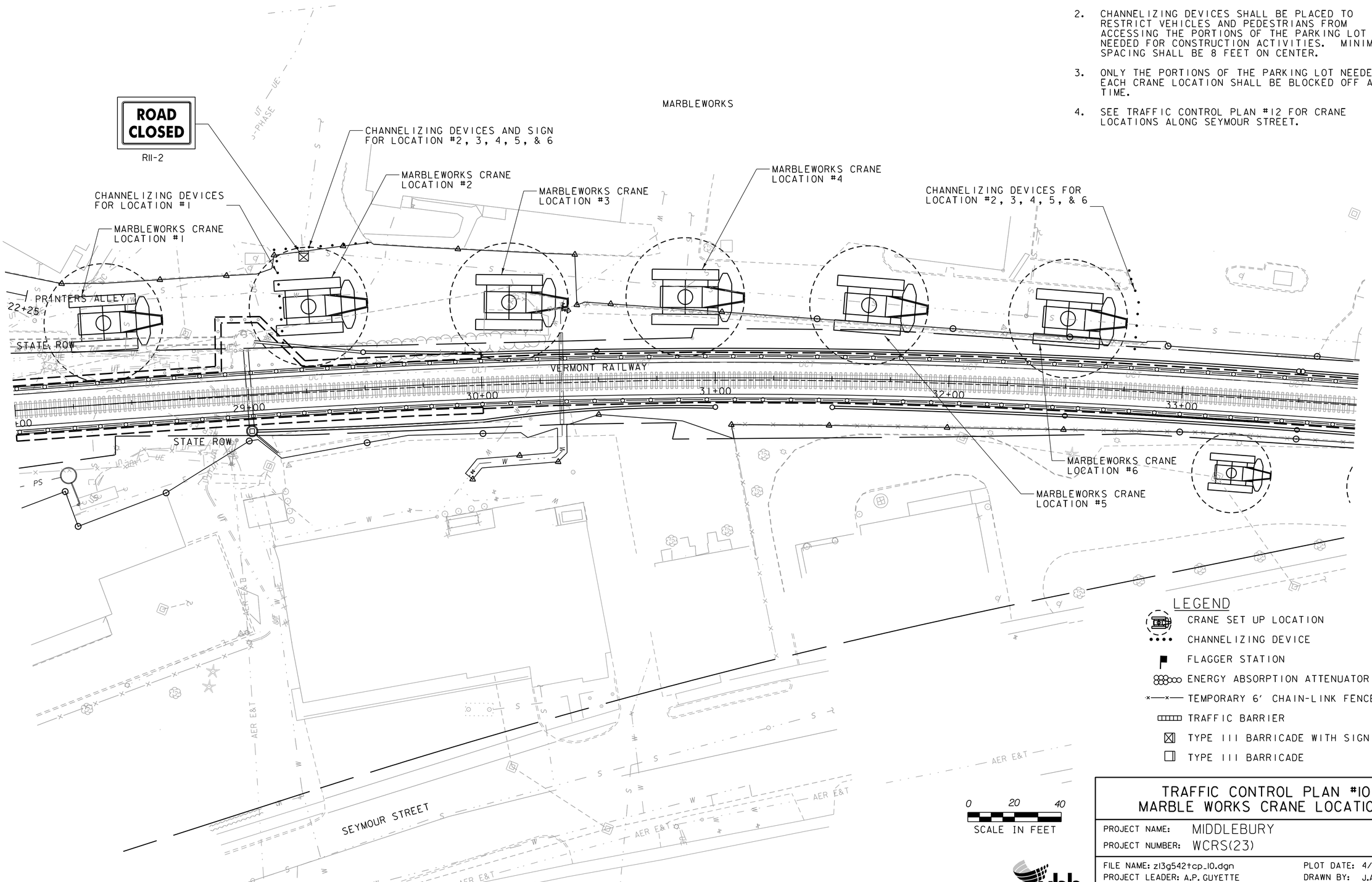
TRAFFIC CONTROL PLAN #9C
RAIL CROSSING ACCESS PLAN

PROJECT NAME: MIDDLEBURY
PROJECT NUMBER: WCRS(23)

FILE NAME: z13g542tcp_9c.dgn
PROJECT LEADER: A.P. GUYETTE
DESIGNED BY: M.L. GRAHAM
PLOT DATE: 5/1/2019
DRAWN BY: J.A. ROBERT
CHECKED BY: M.D. SUENNEN

TRAFFIC CONTROL PLAN #10 NOTES:

1. TRAFFIC CONTROL PLAN #10 SHALL BE IMPLEMENTED DURING THE USE AND SET UP OF THE CRANE IN THE MARBLE WORKS VICINITY OF THE RAILROAD TRACKS.
2. CHANNELIZING DEVICES SHALL BE PLACED TO RESTRICT VEHICLES AND PEDESTRIANS FROM ACCESSING THE PORTIONS OF THE PARKING LOT NEEDED FOR CONSTRUCTION ACTIVITIES. MINIMUM SPACING SHALL BE 8 FEET ON CENTER.
3. ONLY THE PORTIONS OF THE PARKING LOT NEEDED FOR EACH CRANE LOCATION SHALL BE BLOCKED OFF AT ONE TIME.
4. SEE TRAFFIC CONTROL PLAN #12 FOR CRANE LOCATIONS ALONG SEYMOUR STREET.

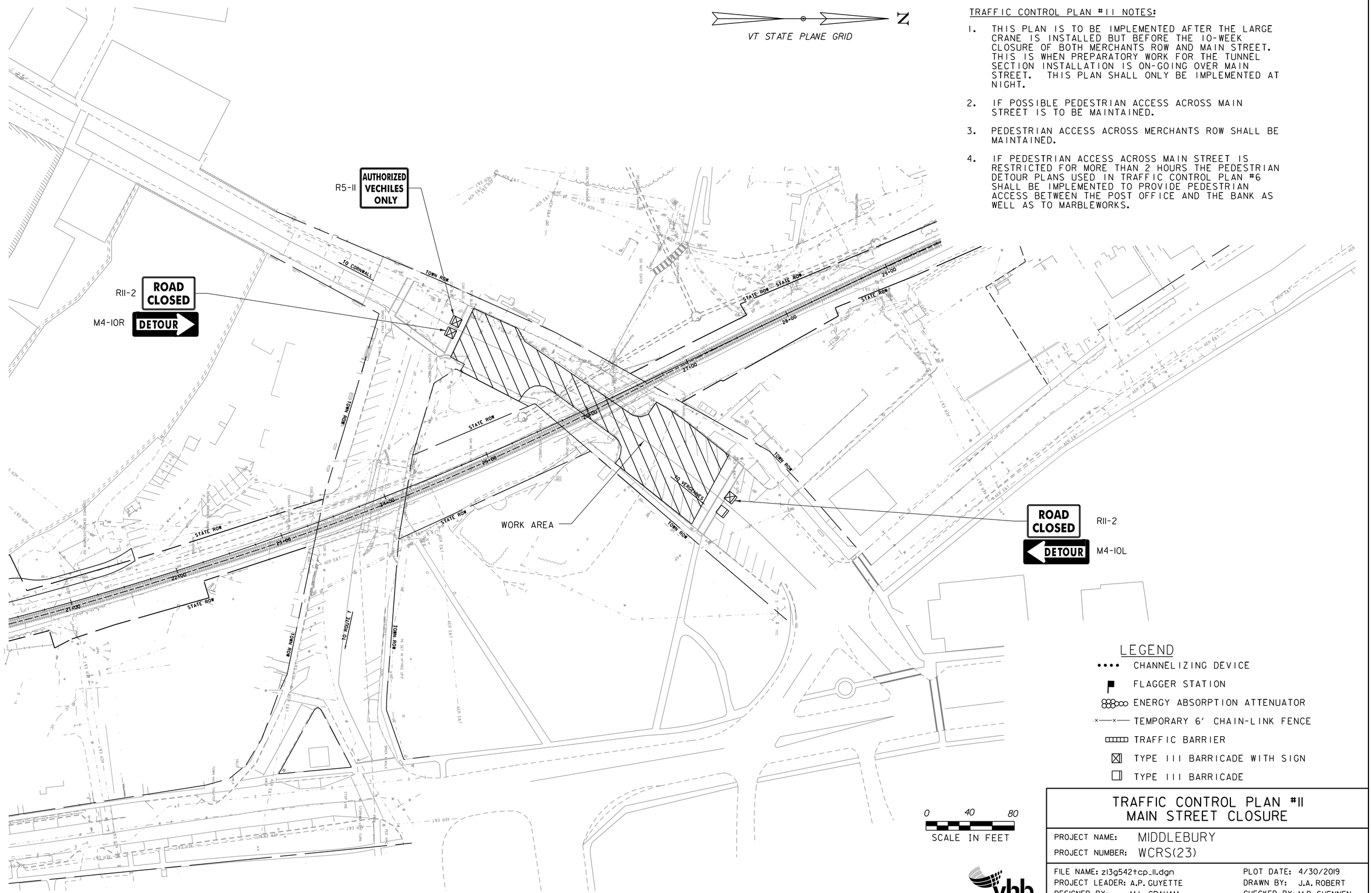


TRAFFIC CONTROL PLAN #10
MARBLE WORKS CRANE LOCATIONS

PROJECT NAME: MIDDLEBURY
PROJECT NUMBER: WCRS(23)

FILE NAME: zl3g542tcp_10.dgn
PROJECT LEADER: A.P. GUYETTE
DESIGNED BY: M.L. GRAHAM
TRAFFIC CONTROL PLAN #10 SHEET (27 OF 38)

PLOT DATE: 4/30/2019
DRAWN BY: J.A. ROBERT
CHECKED BY: M.D. SUENNEN
SHEET 97 OF 328



TRAFFIC CONTROL PLAN #11 NOTES:

1. THIS PLAN IS TO BE IMPLEMENTED AFTER THE LARGE CRANE IS INSTALLED BUT BEFORE THE 10-WEEK CLOSURE OF BOTH MERCHANTS ROW AND MAIN STREET. THIS IS WHEN PREPARATORY WORK FOR THE TUNNEL SECTION INSTALLATION IS ON-GOING OVER MAIN STREET. THIS PLAN SHALL ONLY BE IMPLEMENTED AT NIGHT.
2. IF POSSIBLE PEDESTRIAN ACCESS ACROSS MAIN STREET IS TO BE MAINTAINED.
3. PEDESTRIAN ACCESS ACROSS MERCHANTS ROW SHALL BE MAINTAINED.
4. IF PEDESTRIAN ACCESS ACROSS MAIN STREET IS RESTRICTED FOR MORE THAN 2 HOURS THE PEDESTRIAN DETOUR PLANS USED IN TRAFFIC CONTROL PLAN #6 SHALL BE IMPLEMENTED TO PROVIDE PEDESTRIAN ACCESS BETWEEN THE POST OFFICE AND THE BANK AS WELL AS TO MARBLEWORKS.

LEGEND

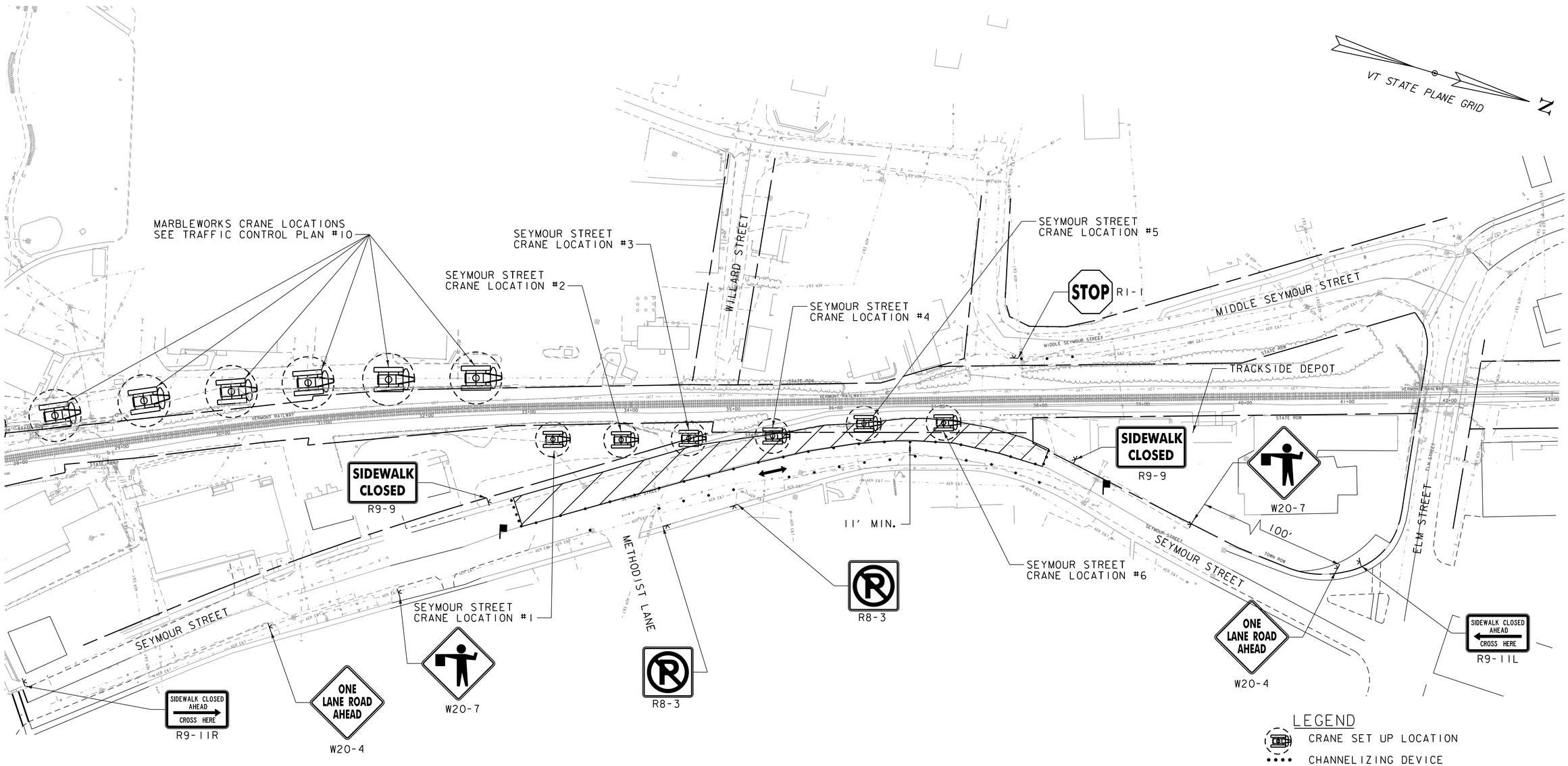
- CHANNELIZING DEVICE
- FLAGGER STATION
- ENERGY ABSORPTION ATTENUATOR
- TEMPORARY 6' CHAIN-LINK FENCE
- TRAFFIC BARRIER
- TYPE III BARRICADE WITH SIGN
- TYPE III BARRICADE

TRAFFIC CONTROL PLAN #11
MAIN STREET CLOSURE

PROJECT NAME: MIDDLEBURY
PROJECT NUMBER: WCRS(23)

FILE NAME: zl3g542tcp_11.dgn
PROJECT LEADER: A.P. GUYETTE
DESIGNED BY: M.L. GRAHAM
TRAFFIC CONTROL PLAN #11 SHEET (28 OF 38)

PLOT DATE: 4/30/2019
DRAWN BY: J.A. ROBERT
CHECKED BY: M.D. SUENNEN
SHEET 98 OF 328



LEGEND

- CRANE SET UP LOCATION
- CHANNELIZING DEVICE
- FLAGGER STATION
- ENERGY ABSORPTION ATTENUATOR
- TEMPORARY 6' CHAIN-LINK FENCE
- TRAFFIC BARRIER
- TYPE III BARRICADE WITH SIGN
- TYPE III BARRICADE

TRAFFIC CONTROL PLAN #12 NOTES:

1. TRAFFIC CONTROL PLAN #12 SHALL BE IMPLEMENTED DURING THE USE OF THE MOBILE CRANE WITHIN 6 FEET OF SEYMOUR STREET.
2. FLAGGERS SHALL BE PLACED ALONG SEYMOUR STREET AT METHODIST LANE INTERSECTION AND SEYMOUR STREET AT TRACKSIDE DEPOT. THE CONTRACTOR SHALL INSTALL THE FLAGGER ADVANCED SIGNS (W20-4 AND W20-7) ANYTIME SEYMOUR STREET IS REDUCED TO A SINGLE TRAVEL LANE.
3. PEDESTRIAN ACCESS TO THE EAST SIDE OF SEYMOUR STREET SHALL BE MAINTAINED.
4. PEDESTRIAN ACCESS TO THE WEST SIDE OF SEYMOUR STREET SHALL BE CLOSED WHEN THE FLAGGING OPERATION IS ACTIVE.
5. THE LENGTH OF THE FLAGGING OPERATION MAY BE REDUCED TO MATCH THE CRANE PLACEMENT LOCATION AND SHALL EXTEND A MINIMUM OF 150' ON EITHER SIDE OF THE CRANE.
6. PERPENDICULAR PARKING IN FRONT OF CHINA HOUSE SHALL BE CLOSED WHEN TWO-WAY FLAGGING IS BEING IMPLEMENTED.
7. TEMPORARY STOP SIGN SHALL BE INSTALLED ON MIDDLE SEYMOUR STREET FOR CONSTRUCTION VEHICLES.
8. SEE TRAFFIC CONTROL PLAN #10 FOR DETAILS ON MAPLEWORKS CRANE LOCATIONS.

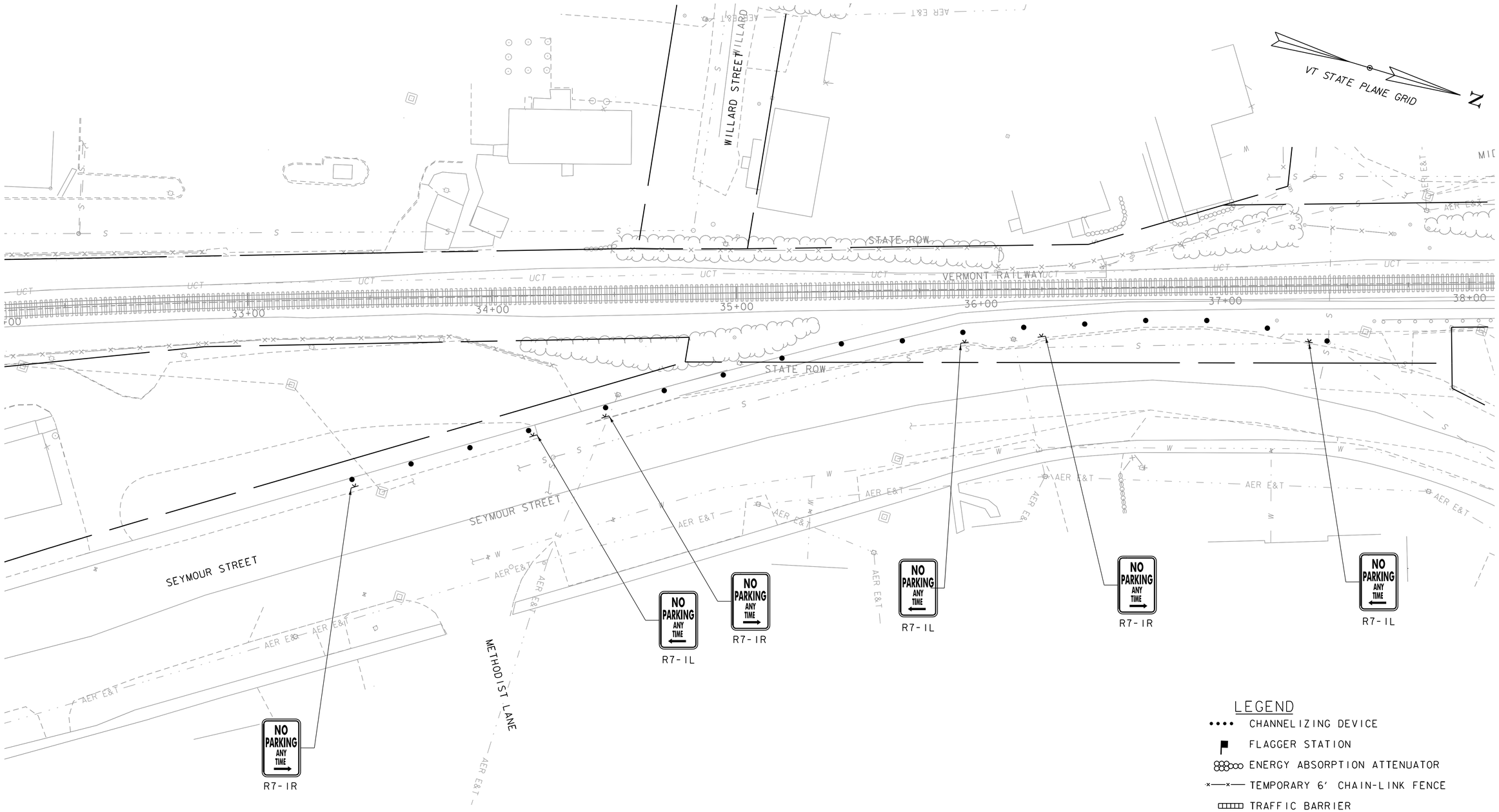
0 50 100
SCALE IN FEET

vhb

TRAFFIC CONTROL PLAN #12
SEYMOUR STREET FLAGGING

PROJECT NAME: MIDDLEBURY
PROJECT NUMBER: WCRS(23)

FILE NAME: z13g542tcp_12.dgn
PROJECT LEADER: A.P. GUYETTE
DESIGNED BY: M.L. GRAHAM
PLOT DATE: 5/1/2019
DRAWN BY: J.A. ROBERT
CHECKED BY: M.D. SUENNEN



LEGEND

- CHANNELIZING DEVICE
- FLAGGER STATION
- ENERGY ABSORPTION ATTENUATOR
- TEMPORARY 6' CHAIN-LINK FENCE
- TRAFFIC BARRIER
- TYPE III BARRICADE WITH SIGN
- TYPE III BARRICADE

TRAFFIC CONTROL PLAN #13 NOTES:

1. PARKING RESTRICTIONS SHALL BE REQUIRED ON SEYMOUR STREET DURING CONSTRUCTION.
2. THESE RESTRICTIONS SHALL BE IMPLEMENTED ANY TIME WORK MAY BE ON THE RAILROAD TRACKS NEAR SEYMOUR STREET.
3. TRAFFIC CONTROL PLAN #13 SHALL BE INSTALLED AT THE BEGINNING OF THE WORK IN THIS AREA AND REMOVED ONCE ALL THE WORK HAS BEEN COMPLETED.
4. TRAFFIC CONTROL PLAN #13 AND #12 MAY BE INSTALLED AT THE SAME TIME.

0 20 40
SCALE IN FEET

vhb

TRAFFIC CONTROL PLAN #13
SEYMOUR STREET PARKING RESTRICTIONS

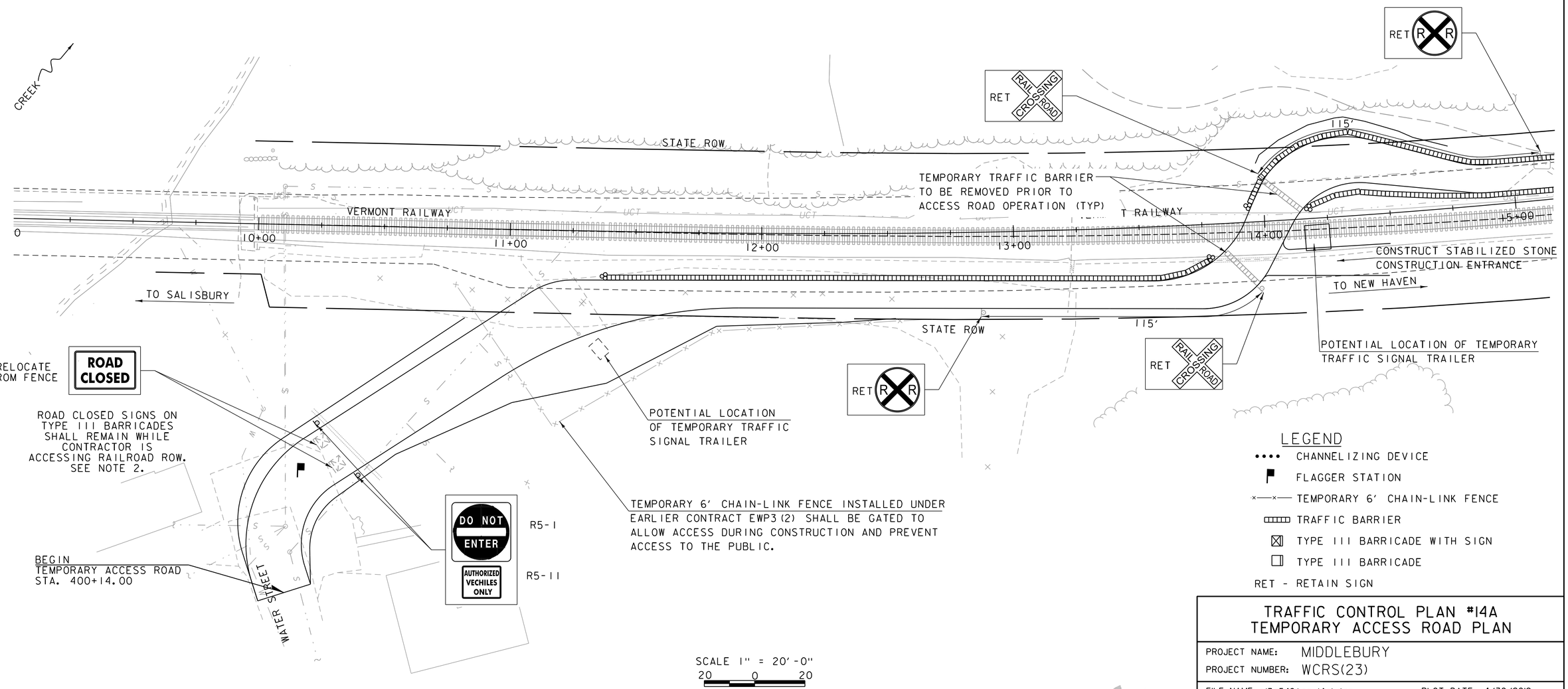
PROJECT NAME: MIDDLEBURY
PROJECT NUMBER: WCRS(23)

FILE NAME: zl3g542tcp_13.dgn
PROJECT LEADER: A.P. GUYETTE
DESIGNED BY: M.L. GRAHAM
TRAFFIC CONTROL PLAN #13 SHEET (30 OF 38)

PLOT DATE: 4/30/2019
DRAWN BY: J.A. ROBERT
CHECKED BY: M.D. SUENNEN
SHEET 100 OF 328

TRAFFIC CONTROL PLAN #14A NOTES:

1. TRAFFIC CONTROL PLAN 14A SHALL BE USED DURING THE TIME PRIOR TO THE MERCHANTS ROW AND MAIN STREET CLOSURE TO ALLOW ONLY CONSTRUCTION VEHICLE ACCESS TO THE RAILROAD CORRIDOR AS WELL AS TO THE BATTELL BLOCK BACK PARKING LOT.
2. AT THE START OF THE USE OF THE ACCESS ROAD, CONTRACTOR SHALL REMOVE TRAFFIC BARRIERS ACROSS THE ACCESS ROAD AT THE RAILROAD CROSSBUCKS AND RELOCATE THE ROAD CLOSED SIGNS FROM THE FENCE GATES TO TYPE III BARRICADES.
3. CONTRACTOR TO RESET GATE FENCING AT ENTRANCE TO THE TEMPORARY ACCESS ROAD AND RAILROAD CROSSING AT THE COMPLETION OF EACH WORK SHIFT.
4. ANY TIME CONSTRUCTION ACTIVITIES ARE ON-GOING A FLAGGER SHALL BE PRESENT AT THE SOUTH END OF THE TEMPORARY ACCESS ROAD TO FACILITATE THE CONSTRUCTION VEHICLE MOVEMENTS AND PREVENT PRIVATE VEHICLE ACCESS.



TRAFFIC CONTROL PLAN #14A
TEMPORARY ACCESS ROAD PLAN

PROJECT NAME: MIDDLEBURY
PROJECT NUMBER: WCRS(23)

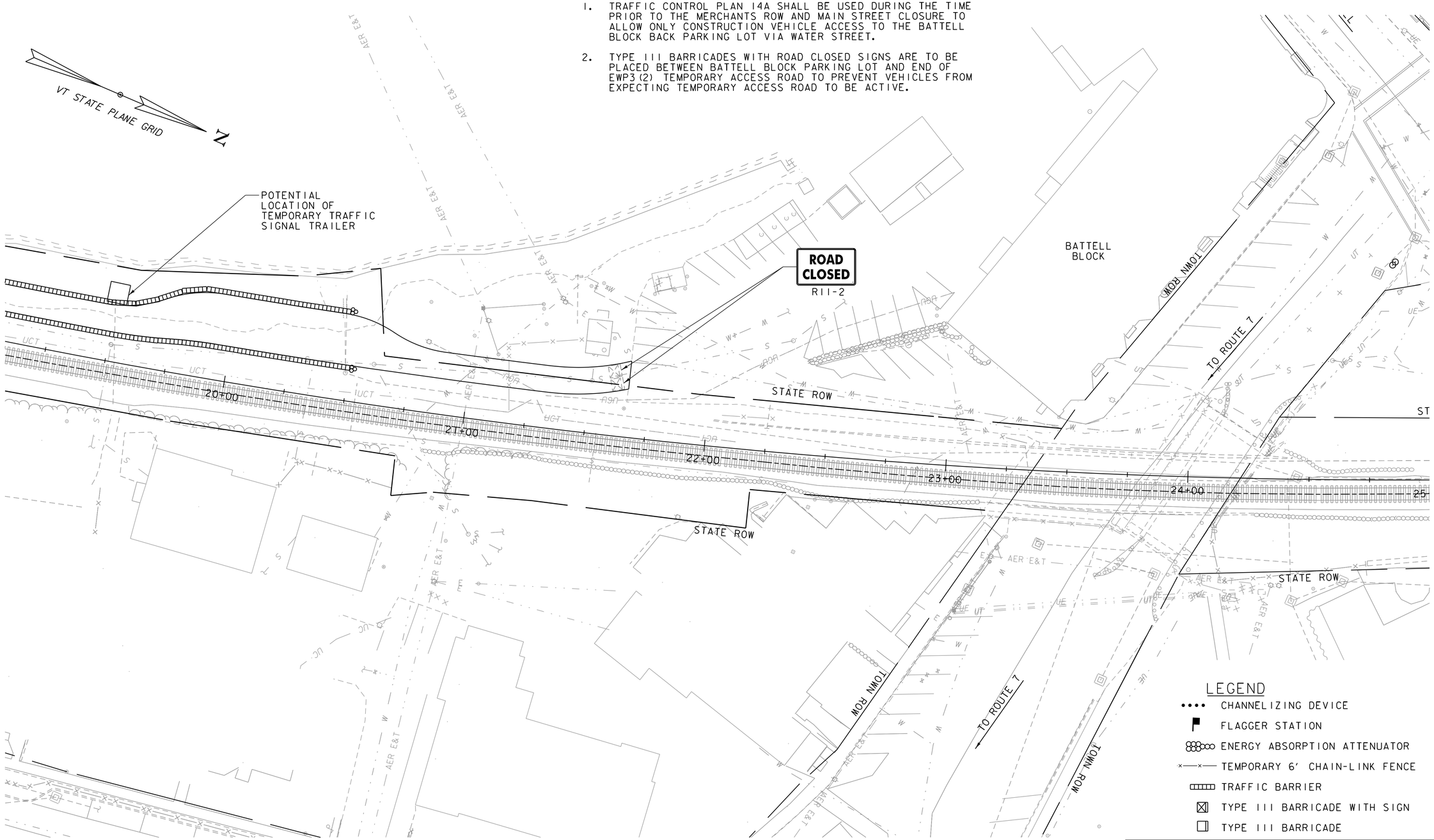
FILE NAME: zl3g542tcp_14al.dgn
PROJECT LEADER: A.P. GUYETTE
DESIGNED BY: M.L. GRAHAM
TRAFFIC CONTROL PLAN #14A SHEET (31 OF 38)

PLOT DATE: 4/30/2019
DRAWN BY: J.A. ROBERT
CHECKED BY: M.D. SUENNEN
SHEET 101 OF 328

TRAFFIC CONTROL PLAN #14A NOTES:

1. TRAFFIC CONTROL PLAN 14A SHALL BE USED DURING THE TIME PRIOR TO THE MERCHANTS ROW AND MAIN STREET CLOSURE TO ALLOW ONLY CONSTRUCTION VEHICLE ACCESS TO THE BATTELL BLOCK BACK PARKING LOT VIA WATER STREET.

2. TYPE III BARRICADES WITH ROAD CLOSED SIGNS ARE TO BE PLACED BETWEEN BATTELL BLOCK PARKING LOT AND END OF EWP3(2) TEMPORARY ACCESS ROAD TO PREVENT VEHICLES FROM EXPECTING TEMPORARY ACCESS ROAD TO BE ACTIVE.



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

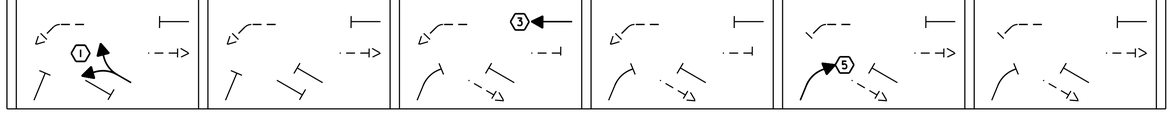
TRAFFIC CONTROL PLAN #14A
TEMPORARY ACCESS ROAD PLAN

PROJECT NAME: MIDDLEBURY
PROJECT NUMBER: WCRS(23)

FILE NAME: zl3g542tcp_14a2.dgn	PLOT DATE: 4/30/2019
PROJECT LEADER: A.P. GUYETTE	DRAWN BY: J.A. ROBERT
DESIGNED BY: M.L. GRAHAM	CHECKED BY: M.D. SUENNEN
TRAFFIC CONTROL PLAN #14A SHEET (32 OF 38)	SHEET 102 OF 328

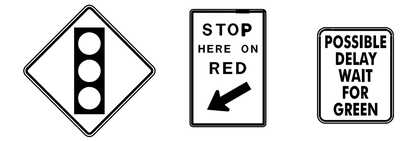
TEMPORARY SIGNAL TIMING AND PHASING

PHASE 1 (DWELL)	PHASE 2	PHASE 3	PHASE 4	PHASE 5	PHASE 6
CLEAR TO	CLEAR TO	CLEAR TO	CLEAR TO	CLEAR TO	CLEAR TO
Ø 2	Ø 3	Ø 4	Ø 5	Ø 6	Ø 1
	CLEARANCE = 20 SEC		CLEARANCE = 50 SEC+/-		CLEARANCE = 50 SEC+/-



1. FACE NUMBERS ARE BASED ON NEMA SEQUENTIAL PHASING.
2. PHASE 2 SHALL ALWAYS FOLLOW PHASE 1
3. PHASE 4 SHALL ALWAYS FOLLOW PHASE 3
4. PHASE 6 SHALL ALWAYS FOLLOW PHASE 5
5. PHASE 2, PHASE 4 AND PHASE 6 MAY BE OMITTED IF TRAFFIC CONTROLLER PROVIDED CAN PROVIDE ALL RED TIME FOR PHASE 1, PHASE 3 AND PHASE 5 GREATER THAN 24.9 SECOND NEMA MAXIMUM SETTING
5. INITIAL PHASE 4 AND PHASE 6 CLEARANCE INTERVAL BASED ON A CONSERVATIVE VEHICLE SPEED OF 15 MPH FOR 1,000 FEET FROM STOP LINE TO STOP LINE WITH ADDITIONAL TIME ADDED TO ACCOUNT FOR NEGOTIATING THE 4+00 TO 5+00 HORIZONTAL CURVES AND RAILROAD CROSSING. THESE CLEARANCE INTERVALS ARE SUBJECT TO FINE TUNING BY CONTRACTOR WITH APPROVAL OF THE RESIDENT ENGINEER WHEN IMPLEMENTED.

SIGNS



W3-3 36"x36" BLACK ON YELLOW | R10-6 24"x36" BLACK ON WHITE | SP-1 18"x24" BLACK ON WHITE

R8-9 24"x24" BLACK ON WHITE | W13-1P 24"x24" BLACK ON YELLOW | R5-11 30"x24" BLACK ON WHITE

VT STATE PLANE GRID N

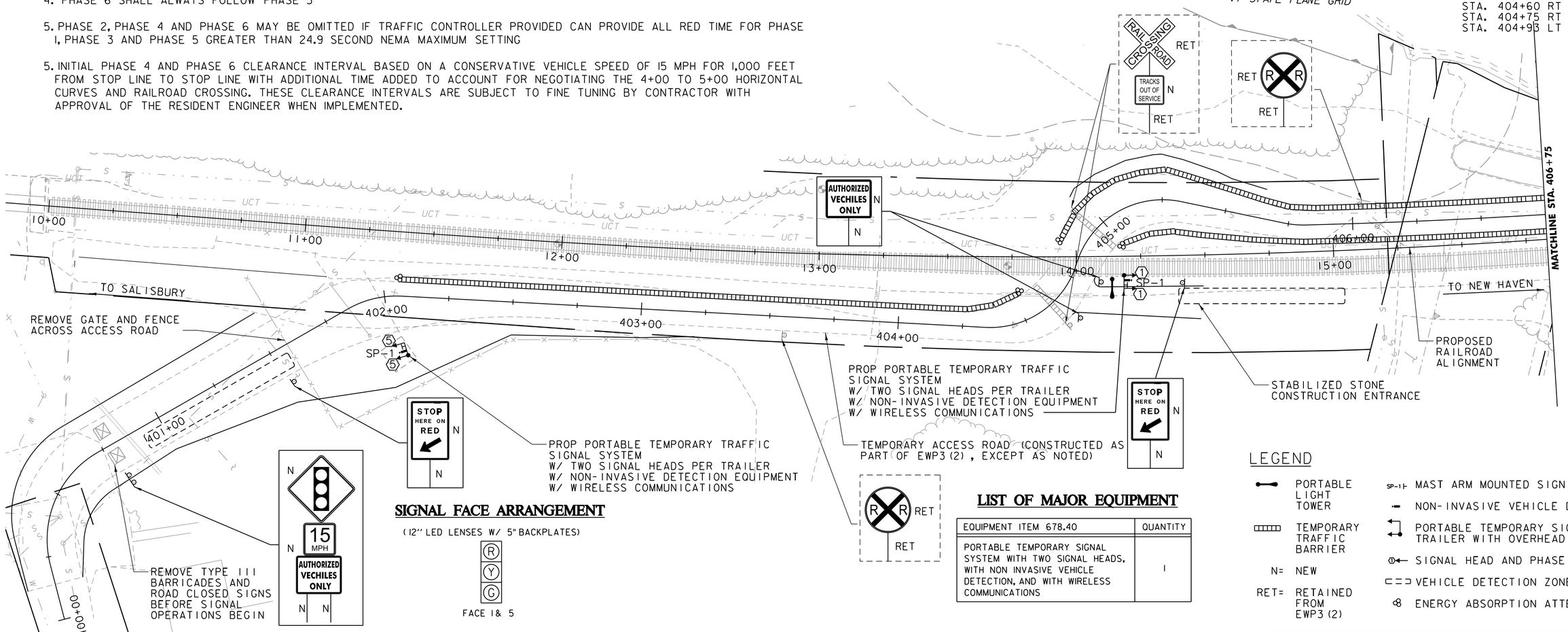
TEMPORARY TRAFFIC BARRIER
STA. 402+06 - 404+51 LT
STA. 404+87 - 406+75 LT
STA. 405+01 - 406+75 RT

TEMPORARY TRAFFIC SIGNAL SYSTEM
STA. 402.00 RT
STA. 404.75 RT

PORTABLE LUMINAIRE (LIGHT TOWER)
STA. 401+50 RT
STA. 407+75 RT

ENERGY ABSORPTION ATTENUATOR
STA. 402+05 LT
STA. 404+52 LT
STA. 404+86 LT
STA. 405+00 RT

TRAFFIC SIGN, TYPE A
STA. 400+75 RT (3)
STA. 401+50 RT
STA. 402+00 RT
STA. 404+56 RT
STA. 404+60 RT
STA. 404+75 RT
STA. 404+93 LT



SIGNAL FACE ARRANGEMENT

(12" LED LENSES W/ 5" BACKPLATES)

FACE 1 & 5

LIST OF MAJOR EQUIPMENT

EQUIPMENT ITEM 678.40	QUANTITY
PORTABLE TEMPORARY SIGNAL SYSTEM WITH TWO SIGNAL HEADS, WITH NON INVASIVE VEHICLE DETECTION, AND WITH WIRELESS COMMUNICATIONS	1

LEGEND

- PORTABLE LIGHT TOWER
- TEMPORARY TRAFFIC BARRIER
- N= NEW
- RET= RETAINED FROM EWP3(2)
- SP-1 MAST ARM MOUNTED SIGN (SP-1)
- NON-INVASIVE VEHICLE DETECTION
- PORTABLE TEMPORARY SIGNAL TRAILER WITH OVERHEAD MAST ARM
- SIGNAL HEAD AND PHASE NUMBER
- VEHICLE DETECTION ZONE
- ENERGY ABSORPTION ATTENUATOR

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

TRAFFIC CONTROL PLAN #14B NOTES:

1. THE TEMPORARY ACCESS ROAD CONSTRUCTED AS PART OF EWP3(2) IS SHOWN FOR REFERENCE ONLY. WCRS(23) WORK ON THE TEMPORARY ACCESS ROAD IS SHOWN AND DETAILED WITHIN THIS PLAN SET.
2. INSTALL TEMPORARY TRAFFIC BARRIER ALONG EDGES OF THE TEMPORARY ACCESS ROAD AS SHOWN.
3. TEMPORARY TRAFFIC BARRIER EXPOSED TO TRAFFIC SHALL BE DELINEATED.
4. TRAFIC CONTROL PLAN #17B MAY BE USED DURING THE CLOSURE OF MERCHANTS ROW AND MAIN STREET DURING THE 10-WEEK CLOSURE TO PROVIDE ACCESS TO THE BATTELL BLOCK PARKING LOT. THIS PLAN SHOWS A TEMPORARY TRAFFIC SIGNAL SYSTEM USING SIGNAL TRAILERS. THE CONTRACTOR MAY ELECT TO USE FLAGGERS AT THE THREE ACCESS POINTS (WATER STREET, BATTELL BLOCK PARKING AREA, AND CONSTRUCTION ENTRANCE ADJACENT TO THE RAILROAD) 24 HOURS PER DAY, 7 DAYS PER WEEK THROUGHOUT THE 10-WEEK CLOSURE. IN THE EVENT THE CONTRACTOR ELECTS TO USE FLAGGERS INSTEAD OF TRAFFIC SIGNALS, THE SIGNAL AHEAD SIGN SHALL BE REPLACED WITH A FLAGGER AHEAD SIGN AND THE STOP HERE ON RED SIGN SHALL BE ELIMINATED.
5. REFLECTORS ON TRAFFIC BARRIER SHALL BE MOUNTED EVERY 20 FEET ALONG THE SIDE OF THE BARRIER EXPOSED TO TRAFFIC WITH YELLOW ON THE DRIVER'S LEFT AND WHITE ON THE DRIVER'S RIGHT. WHEN TRAFFIC MAY APPROACH THE BARRIER FROM TWO DIRECTIONS THE REFLECTORS SHALL BE WHITE.

vhb

TRAFFIC CONTROL PLAN #14B
TEMPORARY SIGNAL PLAN

PROJECT NAME: MIDDLEBURY
PROJECT NUMBER: WCRS(23)

FILE NAME: zl3g542tcp_14bl.dgn | PLOT DATE: 4/30/2019
PROJECT LEADER: A.P. GUYETTE | DRAWN BY: J.A. ROBERT
DESIGNED BY: M.L. GRAHAM | CHECKED BY: M.D. SUENNEN
TRAFFIC CONTROL PLAN #14B SHEET (33 OF 38) | SHEET 103 OF 328

TRAFFIC CONTROL PLAN #14B NOTES:

1. THE TEMPORARY ACCESS ROAD CONSTRUCTED AS PART OF EWP3(2) IS SHOWN FOR REFERENCE ONLY. WCRS(23) WORK ON THE TEMPORARY ACCESS ROAD IS SHOWN AND DETAILED WITHIN THIS PLAN SET.
2. TEMPORARY TRAFFIC BARRIER EXPOSED TO TRAFFIC SHALL BE DELINEATED.
3. REFLECTORS ON TRAFFIC BARRIER SHALL BE MOUNTED EVERY 20 FEET ALONG THE SIDE OF THE BARRIER EXPOSED TO TRAFFIC WITH YELLOW ON THE DRIVER'S LEFT AND WHITE ON THE DRIVER'S RIGHT. WHEN TRAFFIC MAY APPROACH THE BARRIER FROM TWO DIRECTIONS THE REFLECTORS SHALL BE WHITE.

ENERGY ABSORPTION ATTENUATOR
STA. 406+81 LT
STA. 406+97 LT
STA. 411+38 LT
STA. 411+41 RT

TEMPORARY TRAFFIC BARRIER
STA. 406+75 - 406+80 LT
STA. 406+75 - 411+40 RT
STA. 406+98 - 411+37 LT

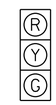
TEMPORARY TRAFFIC SIGNAL SYSTEM
STA. 410+31 LT

PORTABLE LUMINAIRE (LIGHT TOWER)
STA. 410+85 LT

TRAFFIC SIGN, TYPE A
STA. 410+31 LT
STA. 410+86 LT
STA. 411+70.71 LT (2)
STA. 412+50 RT

SIGNAL FACE ARRANGEMENT

(12" LED LENSES W/ 5" BACKPLATES)

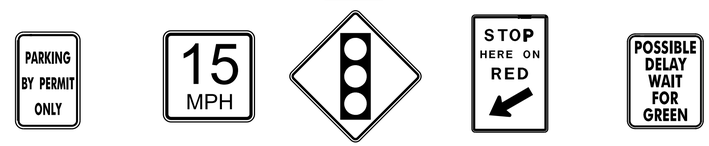


FACE 3

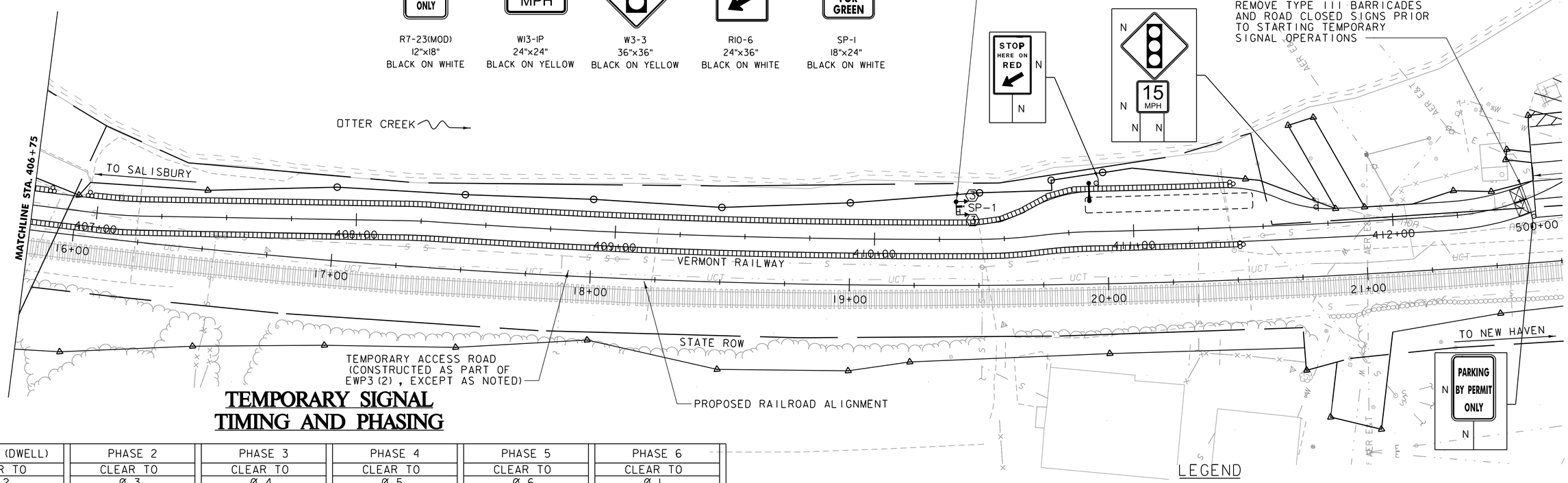
LIST OF MAJOR EQUIPMENT

EQUIPMENT ITEM 678.40	QUANTITY
PORTABLE TEMPORARY SIGNAL SYSTEM WITH TWO SIGNAL HEADS, WITH NON INVASIVE VEHICLE DETECTION, AND WITH WIRELESS COMMUNICATIONS	1

SIGNS

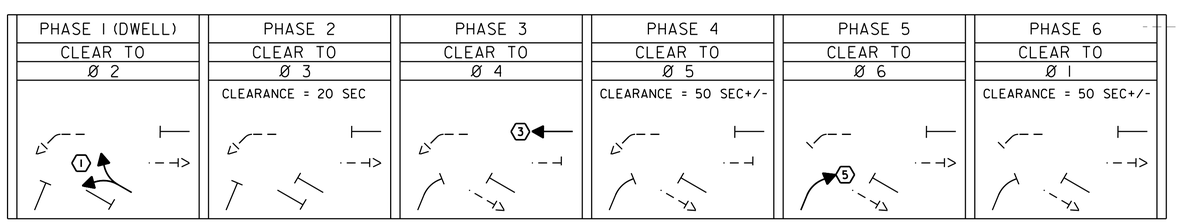


R7-23(MOD)	W13-1P	W3-3	R10-6	SP-1
12"x18"	24"x24"	36"x36"	24"x36"	18"x24"
BLACK ON WHITE	BLACK ON YELLOW	BLACK ON YELLOW	BLACK ON WHITE	BLACK ON WHITE



TEMPORARY SIGNAL TIMING AND PHASING

PHASE 1 (DWELL)	PHASE 2	PHASE 3	PHASE 4	PHASE 5	PHASE 6
CLEAR TO Ø 2	CLEAR TO Ø 3	CLEAR TO Ø 4	CLEAR TO Ø 5	CLEAR TO Ø 6	CLEAR TO Ø 1
	CLEARANCE = 20 SEC		CLEARANCE = 50 SEC+/-		CLEARANCE = 50 SEC+/-



1. FACE NUMBERS ARE BASED ON NEMA SEQUENTIAL PHASING.
2. PHASE 2 SHALL ALWAYS FOLLOW PHASE 1
3. PHASE 4 SHALL ALWAYS FOLLOW PHASE 3
4. PHASE 6 SHALL ALWAYS FOLLOW PHASE 5
5. PHASE 2, PHASE 4 AND PHASE 6 MAY BE OMITTED IF TRAFFIC CONTROLLER PROVIDED CAN PROVIDE ALL RED TIME FOR PHASE 1, PHASE 3 AND PHASE 5 GREATER THAN 24.9 SECOND NEMA MAXIMUM SETTING
6. INITIAL PHASE 4 AND PHASE 6 CLEARANCE INTERVAL BASED ON A CONSERVATIVE VEHICLE SPEED OF 15 MPH FOR 1,000 FEET FROM STOP LINE TO STOP LINE WITH ADDITIONAL TIME ADDED TO ACCOUNT FOR NEGOTIATING THE 4+00 TO 5+00 HORIZONTAL CURVES AND RAILROAD CROSSING. THESE CLEARANCE INTERVALS ARE SUBJECT TO FINE TUNING BY CONTRACTOR WITH APPROVAL OF THE ENGINEER WHEN IMPLEMENTED.

LEGEND

- PORTABLE LIGHT TOWER
- TEMPORARY TRAFFIC BARRIER
- N= NEW
- RET= RETAINED FROM EWP3(2)
- SP-1 MAST ARM MOUNTED SIGN (SP-1)
- NON-INVASIVE VEHICLE DETECTION
- PORTABLE TEMPORARY SIGNAL TRAILER WITH OVERHEAD MAST ARM
- SIGNAL HEAD AND PHASE NUMBER
- VEHICLE DETECTION ZONE
- ENERGY ABSORPTION ATTENUATOR

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

vhb

TRAFFIC CONTROL PLAN #14B
TEMPORARY SIGNAL PLAN

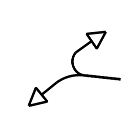
PROJECT NAME: MIDDLEBURY
PROJECT NUMBER: WCRS(23)

FILE NAME: zl3g542tcp_14b2.dgn
PROJECT LEADER: A.P. GUYETTE
DESIGNED BY: M.L. GRAHAM
TRAFFIC CONTROL PLAN #14B SHEET (34 OF 38)
PLOT DATE: 4/30/2019
DRAWN BY: J.A. ROBERT
CHECKED BY: M.D. SUENNEN
SHEET 104 OF 328

TIMING AND PHASING

PHASE 1 (DWELL)

	R/W	CLEAR TO Ø2					
VEHICLE	5						
MINIMUM	8	4	2				
MAXIMUM	20						
MAXIMUM2							
PED ACT							
FACE 1	G	Y	R				
FACE 3	R	R	R				
FACE 5	R	R	R				



PHASE 2

	R/W	CLEAR TO Ø3			Ø5		
VEHICLE	0						
MINIMUM	1	4	20		4	20	
MAXIMUM	1						
MAXIMUM2							
PED ACT							
FACE 1	R	R	R		R	R	
FACE 3	R	R	R		R	R	
FACE 5	R	R	R		R	R	

PHASE 3

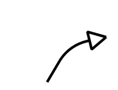
	R/W	CLEAR TO Ø4					
VEHICLE	5						
MINIMUM	8	4	2.5				
MAXIMUM	20						
MAXIMUM2							
PED ACT							
FACE 1	R	R	R				
FACE 3	G	Y	R				
FACE 5	R	R	R				

PHASE 4

	R/W	CLEAR TO Ø5			Ø1		
VEHICLE	1						
MINIMUM	50	3.5	2.5		3.5	2.5	
MAXIMUM	50						
MAXIMUM2							
PED ACT							
FACE 1	R	R	R		R	R	
FACE 3	R	R	R		R	R	
FACE 5	R	R	R		R	R	

PHASE 5

	R/W	CLEAR TO Ø6					
VEHICLE	5						
MINIMUM	8	4	20				
MAXIMUM	20						
MAXIMUM2							
PED ACT							
FACE 1	R	R	R				
FACE 3	R	R	R				
FACE 5	G	Y	R				



PHASE 5

	R/W	CLEAR TO Ø1			Ø3		
VEHICLE	1						
MINIMUM	50	3.5	2.5		3.5	2.5	
MAXIMUM	50						
MAXIMUM2							
PED ACT							
FACE 1	R	R	R		R	R	
FACE 3	R	R	R		R	R	
FACE 5	R	R	R		R	R	

FLASHING OPERATION

	FLASHING OPERATION
FACE 1	FR
FACE 3	FR
FACE 5	FR

W = WALK, FD = FLASHING DON'T WALK, DW = DON'T WALK, B = BLANK, FRA = FLASHING RED ARROW, FR = FLASHING RED, FY = FLASHING YELLOW

• PHASES 4 AND 8 SHALL BE PROGRAMMED DELAYED GREEN FOR 4 SECONDS TO ALLOW LEADING PEDESTRIAN INTERVAL.

1. FACE NUMBERS ARE BASED ON NEMA PHASES

TRAFFIC CONTROL PLAN #14B
TEMPORARY SIGNAL PLAN

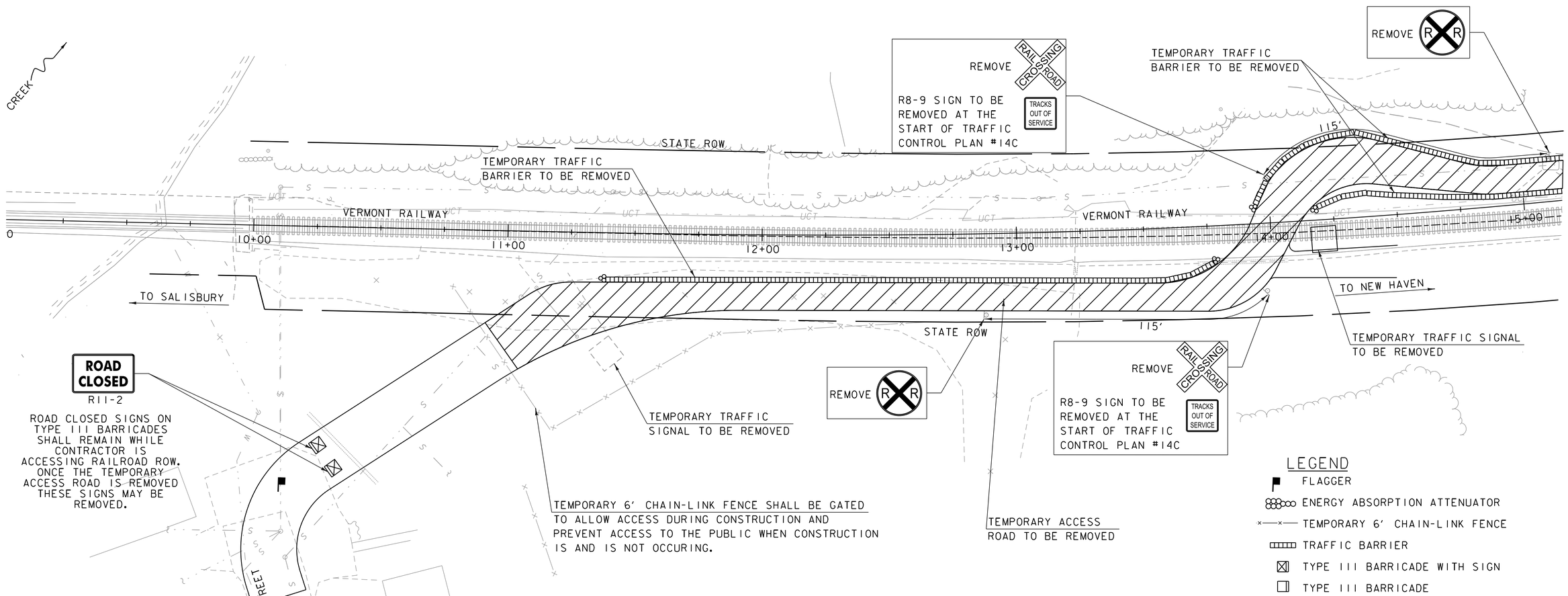
PROJECT NAME: MIDDLEBURY
PROJECT NUMBER: WCRS(23)

FILE NAME: z13g542tcp_14b3.dgn
PROJECT LEADER: A.P. GUYETTE
DESIGNED BY: M.L. GRAHAM
TRAFFIC CONTROL PLAN #14B SHEET (35 OF 38)

PLOT DATE: 4/30/2019
DRAWN BY: J.A. ROBERT
CHECKED BY: M.D. SUENNEN
SHEET 105 OF 328

TRAFFIC CONTROL PLAN #14C NOTES:

1. CONTRACTOR TO REMOVE TEMPORARY SIGNAL (AS APPLICABLE) AT THE END OF THE 10-WEEK CLOSURE WHEN ACCESS TO THE BATTELL BLOCK PARKING LOT HAS BEEN RESTORED VIA MERCHANTS ROW.
2. WHEN TEMPORARY TRAFFIC SIGNAL IS REMOVED CONTRACTOR SHALL REINSTALL THE TEMPORARY 6' CHAIN LINK FENCE WITH GATE ACROSS THE ACCESS ROAD WHILE CONSTRUCTION VEHICLES CONTINUE TO REQUIRE ACCESS TO THE SOUTH END OF THE TUNNEL.
3. CONTRACTOR TO RESET GATE FENCING AT ENTRANCE TO THE TEMPORARY ACCESS ROAD AND RAILROAD CROSSING AT THE COMPLETION OF EACH WORK SHIFT. THE GATED FENCING SHALL REMAIN IN PLACE AT THE CONCLUSION OF THIS CONTRACT.
4. ONCE ACCESS IS NO LONGER NEEDED TO THE SOUTH END OF THE TUNNEL CONTRACTOR SHALL REMOVE THE TEMPORARY ACCESS ROAD INCLUDING TEMPORARY FENCE AND TRAFFIC BARRIER.
5. CONTRACTOR TO REMOVE W10-1 AND R15-A SIGNS ONCE THE TEMPORARY ACCESS ROAD HAS BEEN REMOVED.
6. RAILROAD TRACKS SHALL BE ACTIVE DURING THE ENTIRETY OF THIS PHASE.



TRAFFIC CONTROL PLAN #14C
TEMPORARY ACCESS ROAD PLAN

PROJECT NAME: MIDDLEBURY
PROJECT NUMBER: WCRS(23)

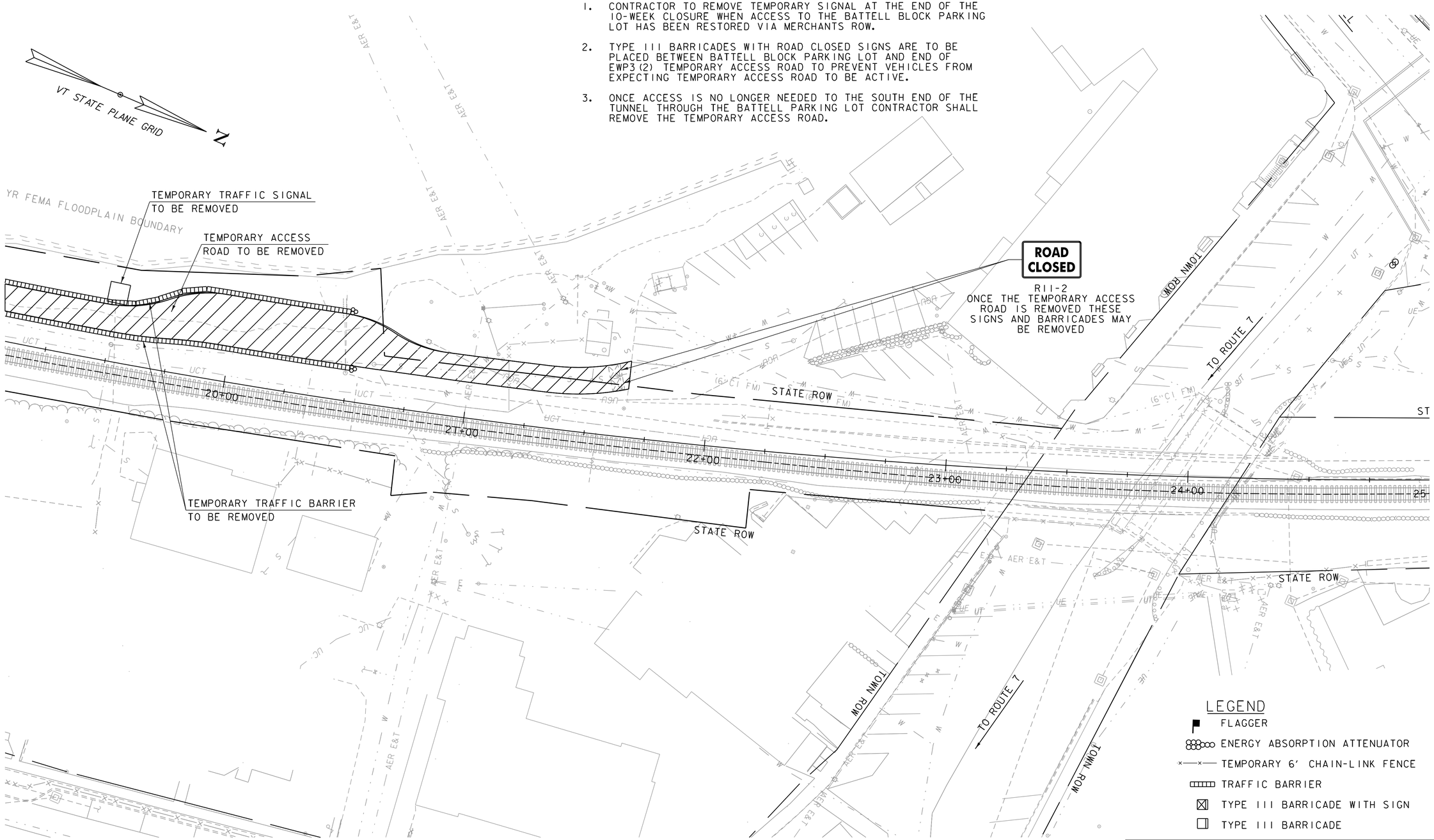
FILE NAME: z13g542tcp_14cl.dgn
PROJECT LEADER: A.P. GUYETTE
DESIGNED BY: M.L. GRAHAM
TRAFFIC CONTROL PLAN #14C SHEET (36 OF 38)
PLOT DATE: 4/30/2019
DRAWN BY: J.A. ROBERT
CHECKED BY: M.D. SUENNEN
SHEET 106 OF 328

TRAFFIC CONTROL PLAN #14C NOTES:

1. CONTRACTOR TO REMOVE TEMPORARY SIGNAL AT THE END OF THE 10-WEEK CLOSURE WHEN ACCESS TO THE BATTELL BLOCK PARKING LOT HAS BEEN RESTORED VIA MERCHANTS ROW.

2. TYPE III BARRICADES WITH ROAD CLOSED SIGNS ARE TO BE PLACED BETWEEN BATTELL BLOCK PARKING LOT AND END OF EWP3(2) TEMPORARY ACCESS ROAD TO PREVENT VEHICLES FROM EXPECTING TEMPORARY ACCESS ROAD TO BE ACTIVE.

3. ONCE ACCESS IS NO LONGER NEEDED TO THE SOUTH END OF THE TUNNEL THROUGH THE BATTELL PARKING LOT CONTRACTOR SHALL REMOVE THE TEMPORARY ACCESS ROAD.



LEGEND

- FLAGGER
- ENERGY ABSORPTION ATTENUATOR
- TEMPORARY 6' CHAIN-LINK FENCE
- TRAFFIC BARRIER
- TYPE III BARRICADE WITH SIGN
- TYPE III BARRICADE

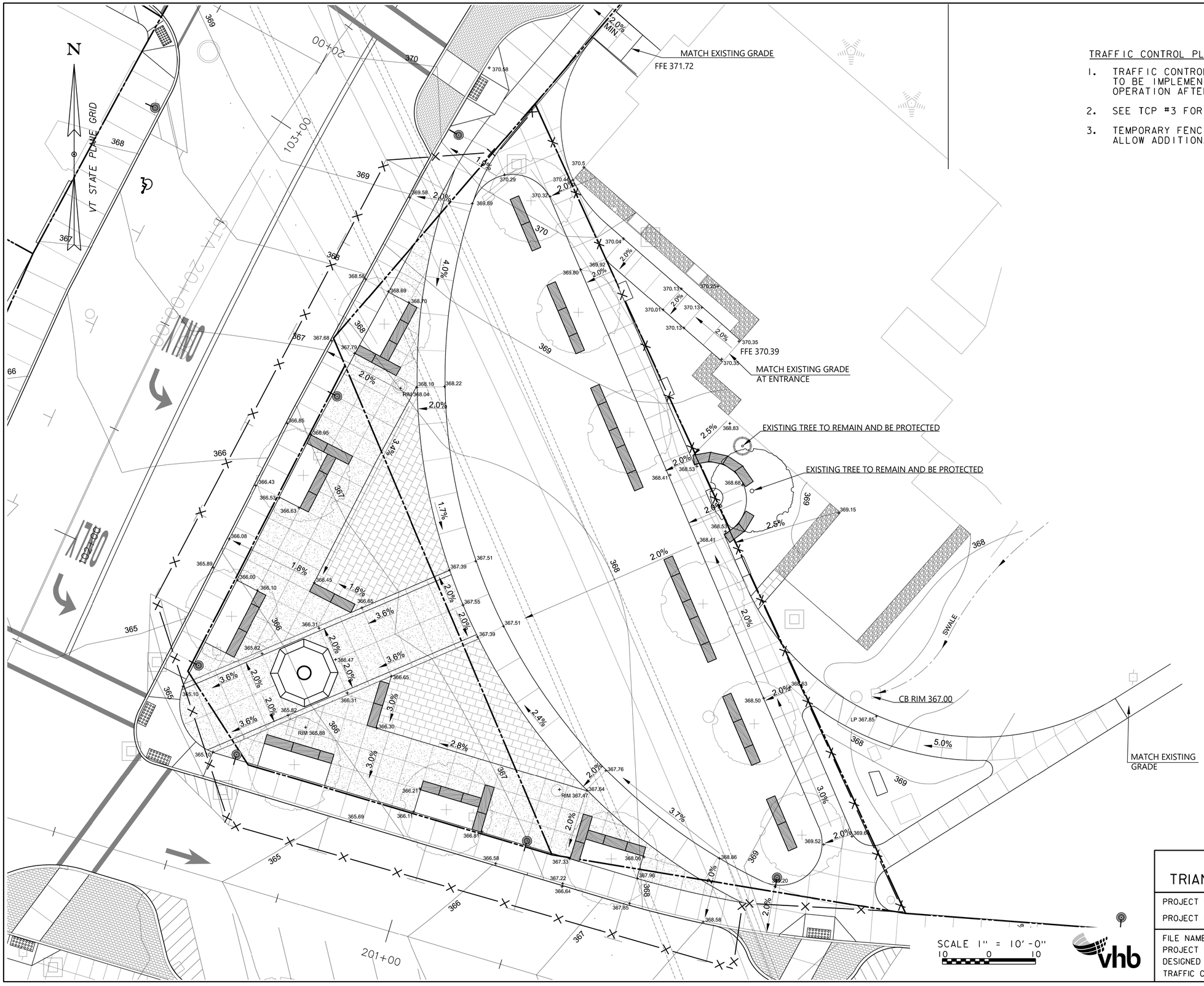
SCALE 1" = 20'-0"
20 0 20

TRAFFIC CONTROL PLAN #14C
TEMPORARY ACCESS ROAD PLAN

PROJECT NAME: MIDDLEBURY
PROJECT NUMBER: WCRS(23)

FILE NAME: zl3g542tcp_14c2.dgn
PROJECT LEADER: A.P. GUYETTE
DESIGNED BY: M.L. GRAHAM
TRAFFIC CONTROL PLAN #14C SHEET (37 OF 38)

PLOT DATE: 4/30/2019
DRAWN BY: J.A. ROBERT
CHECKED BY: M.D. SUENNEN
SHEET 107 OF 328



TRAFFIC CONTROL PLAN #15 NOTES:

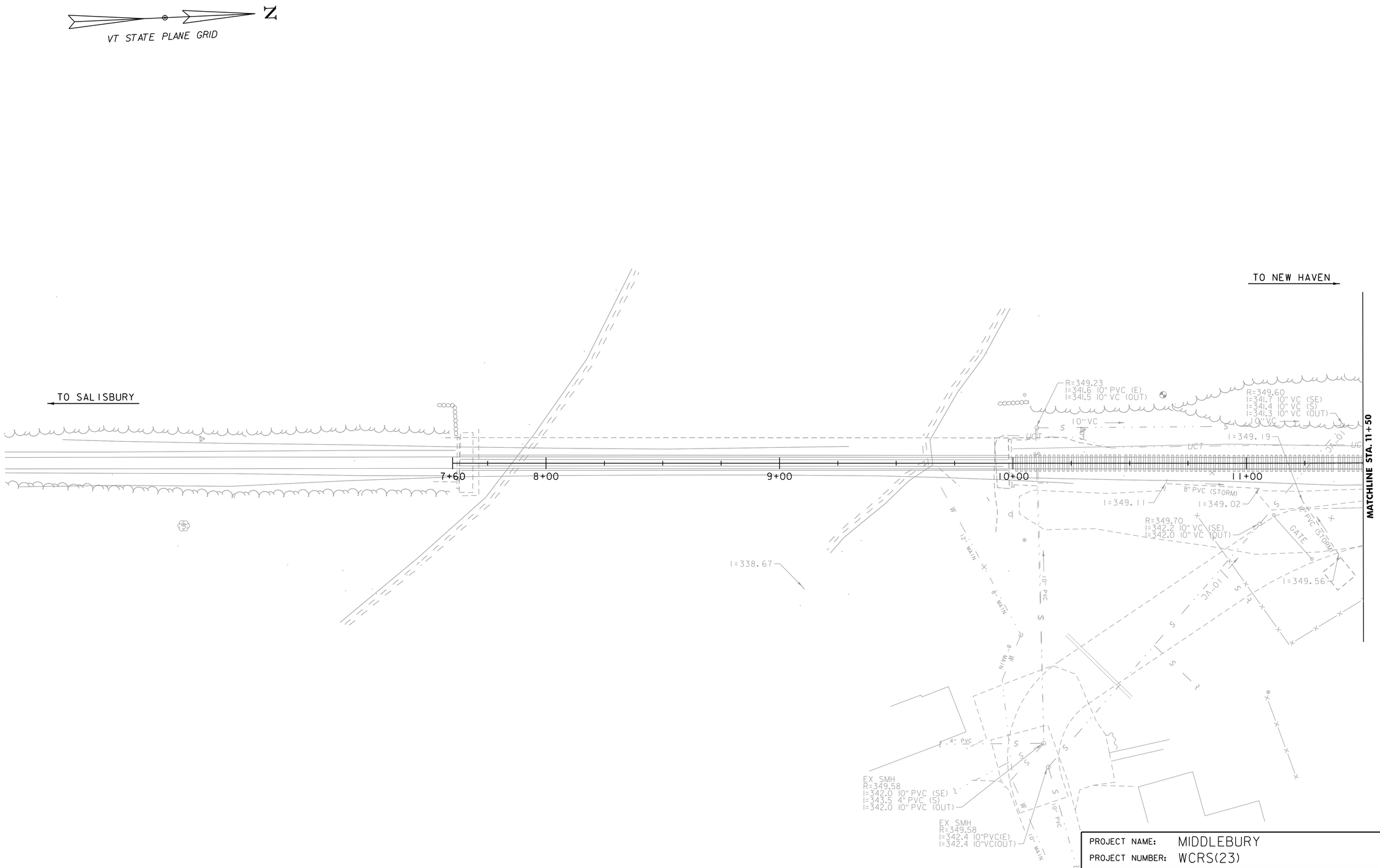
1. TRAFFIC CONTROL PLAN #15 IS THE BASE WORK PLAN AND IS TO BE IMPLEMENTED DURING TRIANGLE PARK CONSTRUCTION OPERATION AFTER COMPLETION OF 10-WEEK CLOSURE.
2. SEE TCP #3 FOR PROPOSED PEDESTRIAN AND FLAGGER SIGNING
3. TEMPORARY FENCING MAY BE ADJUSTED BY CONTRACTOR TO ALLOW ADDITIONAL PARKING AS WORK ALLOWS.

TRAFFIC CONTROL PLAN #15
TRIANGLE PARK LANDSCAPING WORK ZONE

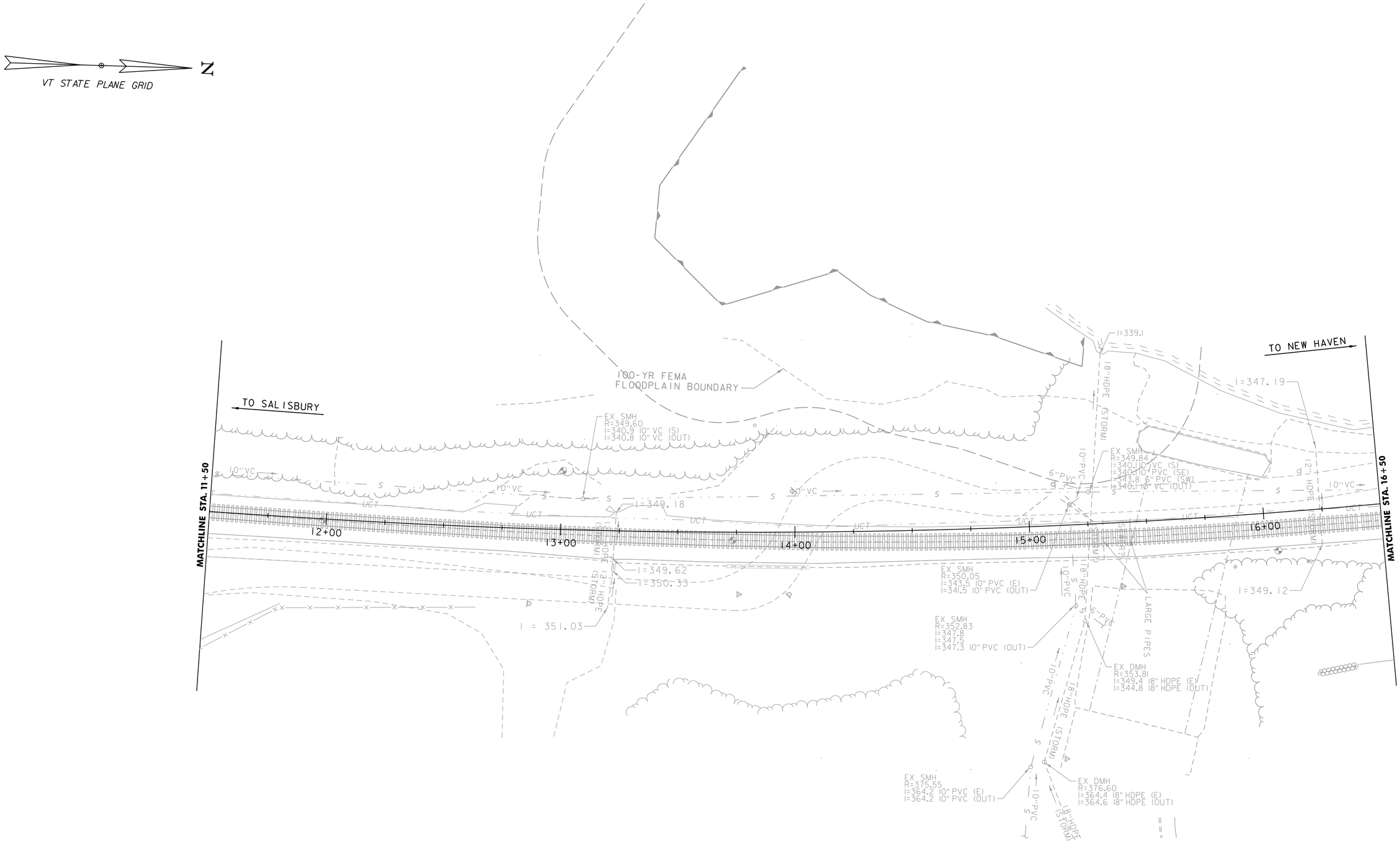
PROJECT NAME: MIDDLEBURY
PROJECT NUMBER: WCRS(23)

FILE NAME: z13g542tcp_15.dgn
PROJECT LEADER: A.P. GUYETTE
DESIGNED BY: M.L. GRAHAM
TRAFFIC CONTROL PLAN #15 SHEET (38 OF 38)

PLOT DATE: 4/30/2019
DRAWN BY: J.A. ROBERT
CHECKED BY: M.D. SUENNEN
SHEET 108 OF 328



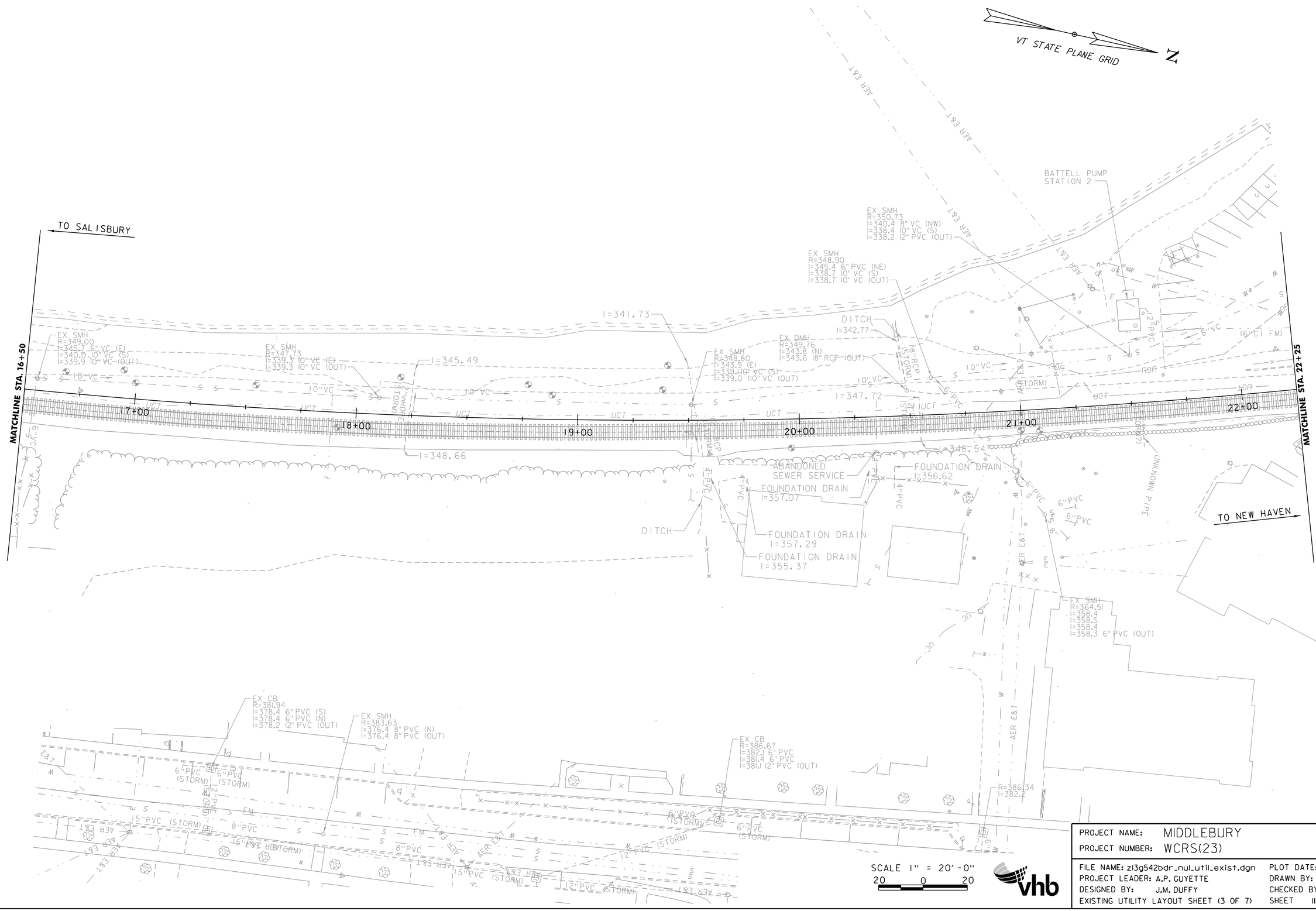
PROJECT NAME: MIDDLEBURY	
PROJECT NUMBER: WCRS(23)	
FILE NAME: zl3g542bdr_nul_util_exist.dgn	PLOT DATE: 4/30/2019
PROJECT LEADER: A.P. GUYETTE	DRAWN BY: M.F. SUFFEL
DESIGNED BY: J.M. DUFFY	CHECKED BY: R.E. MARVIN
EXISTING UTILITY LAYOUT SHEET (1 OF 7)	SHEET 109 OF 328



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

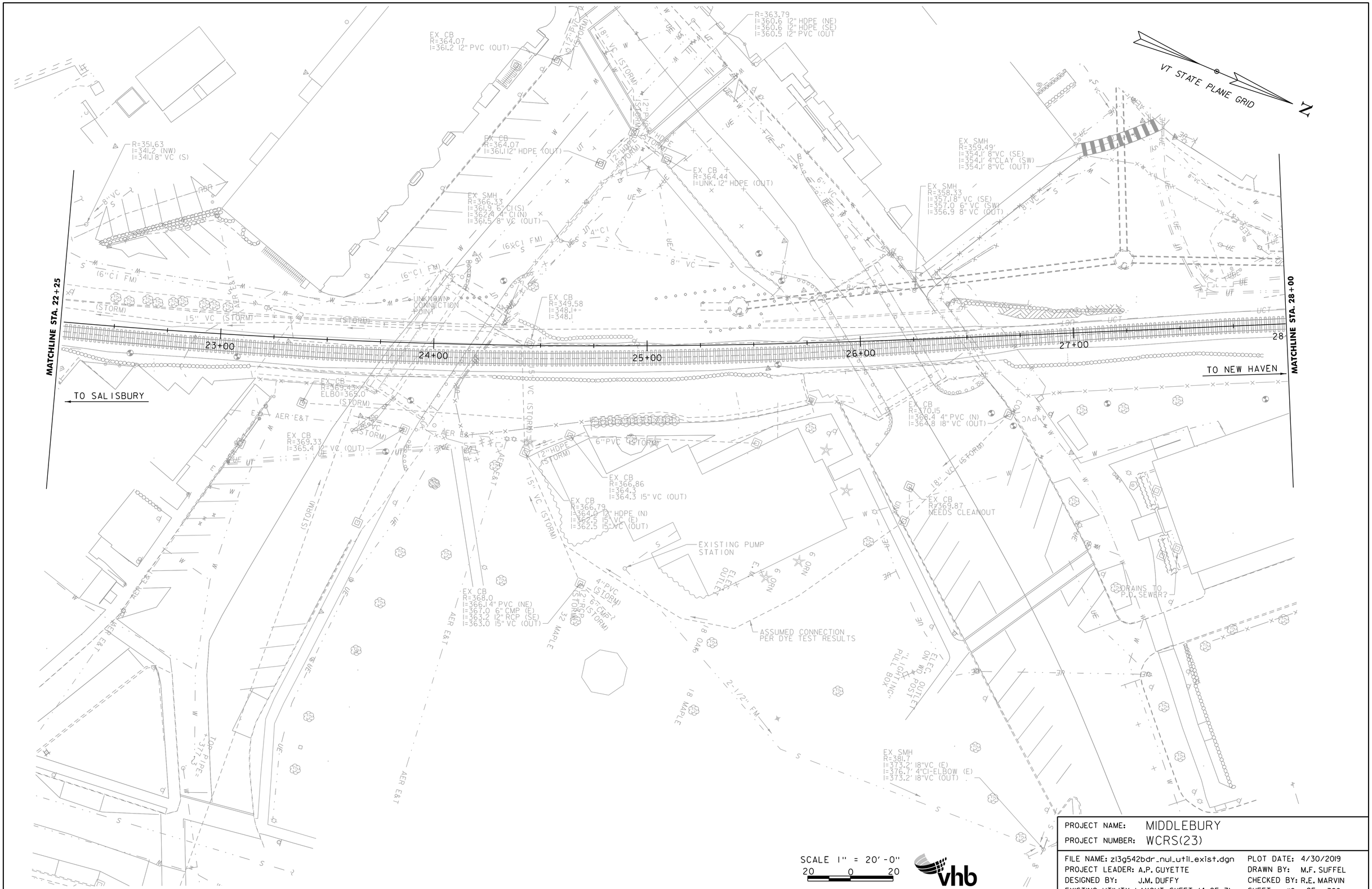
vhb

PROJECT NAME: MIDDLEBURY	
PROJECT NUMBER: WCRS(23)	
FILE NAME: zl3g542bdr_nul_util_exist.dgn	PLOT DATE: 4/30/2019
PROJECT LEADER: A.P. GUYETTE	DRAWN BY: M.F. SUFFEL
DESIGNED BY: J.M. DUFFY	CHECKED BY: R.E. MARVIN
EXISTING UTILITY LAYOUT SHEET (2 OF 7)	SHEET 110 OF 328



PROJECT NAME:	MIDDLEBURY
PROJECT NUMBER:	WCRS(23)

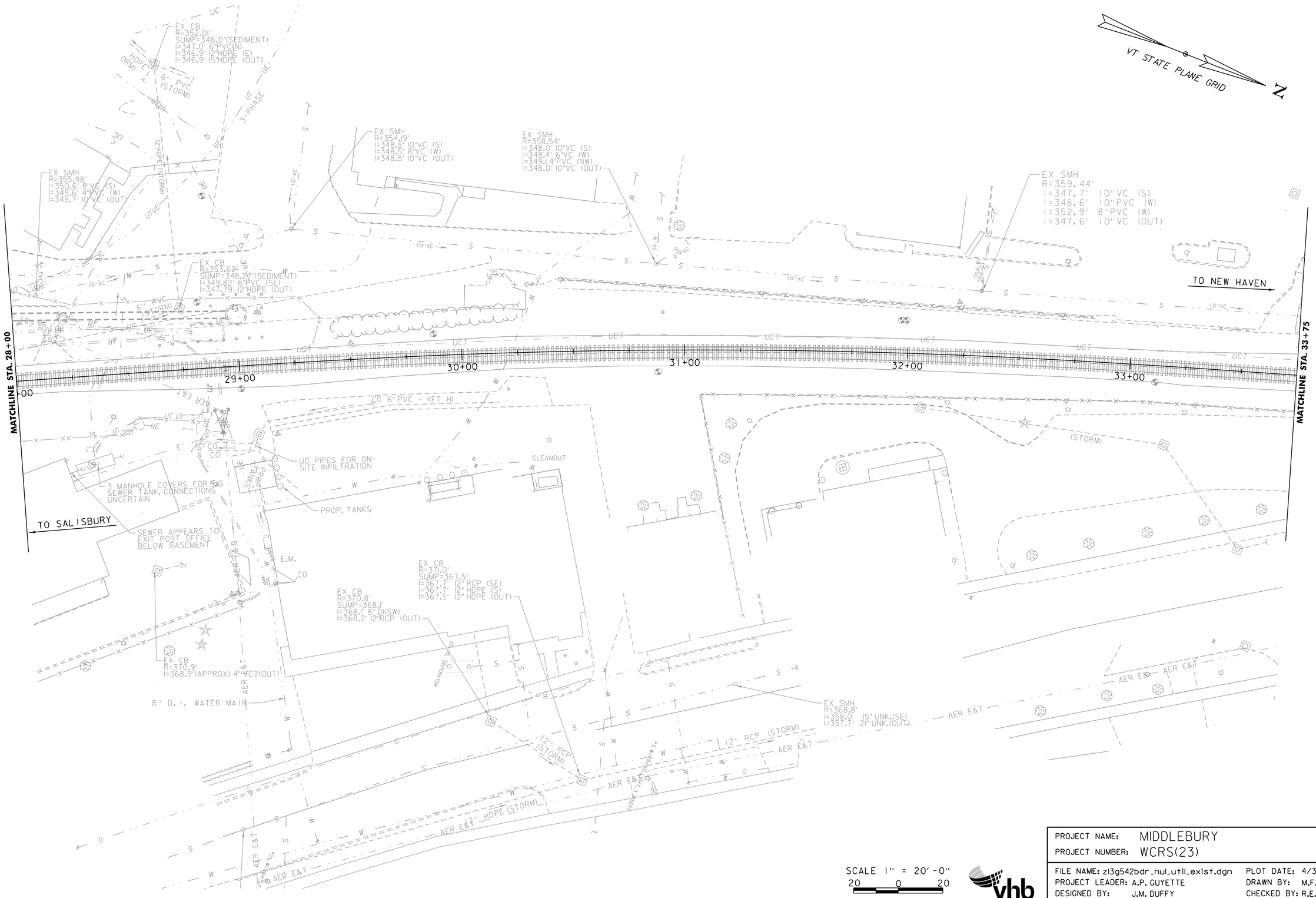
FILE NAME: zl3g542bdr_nul_util_exist.dgn	PLOT DATE: 4/30/2019
PROJECT LEADER: A.P. GUYETTE	DRAWN BY: M.F. SUFFEL
DESIGNED BY: J.M. DUFFY	CHECKED BY: R.E. MARVIN
EXISTING UTILITY LAYOUT SHEET (3 OF 7)	SHEET III OF 328



PROJECT NAME: MIDDLEBURY
PROJECT NUMBER: WCRS(23)

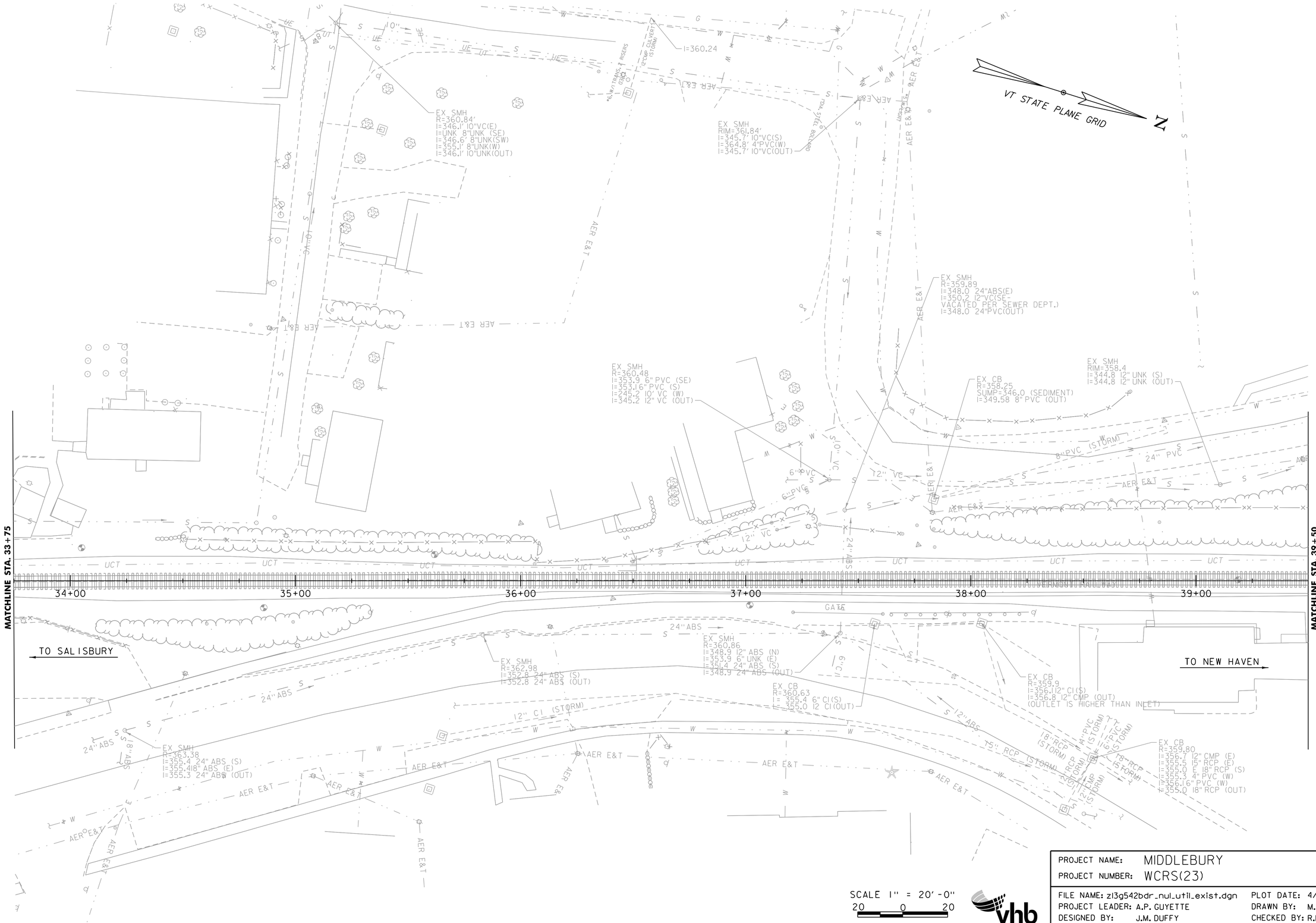
FILE NAME: zl3g542bdr_nul_util_exist.dgn
PROJECT LEADER: A.P. GUYETTE
DESIGNED BY: J.M. DUFFY
EXISTING UTILITY LAYOUT SHEET (4 OF 7)

PLOT DATE: 4/30/2019
DRAWN BY: M.F. SUFFEL
CHECKED BY: R.E. MARVIN
SHEET 112 OF 328

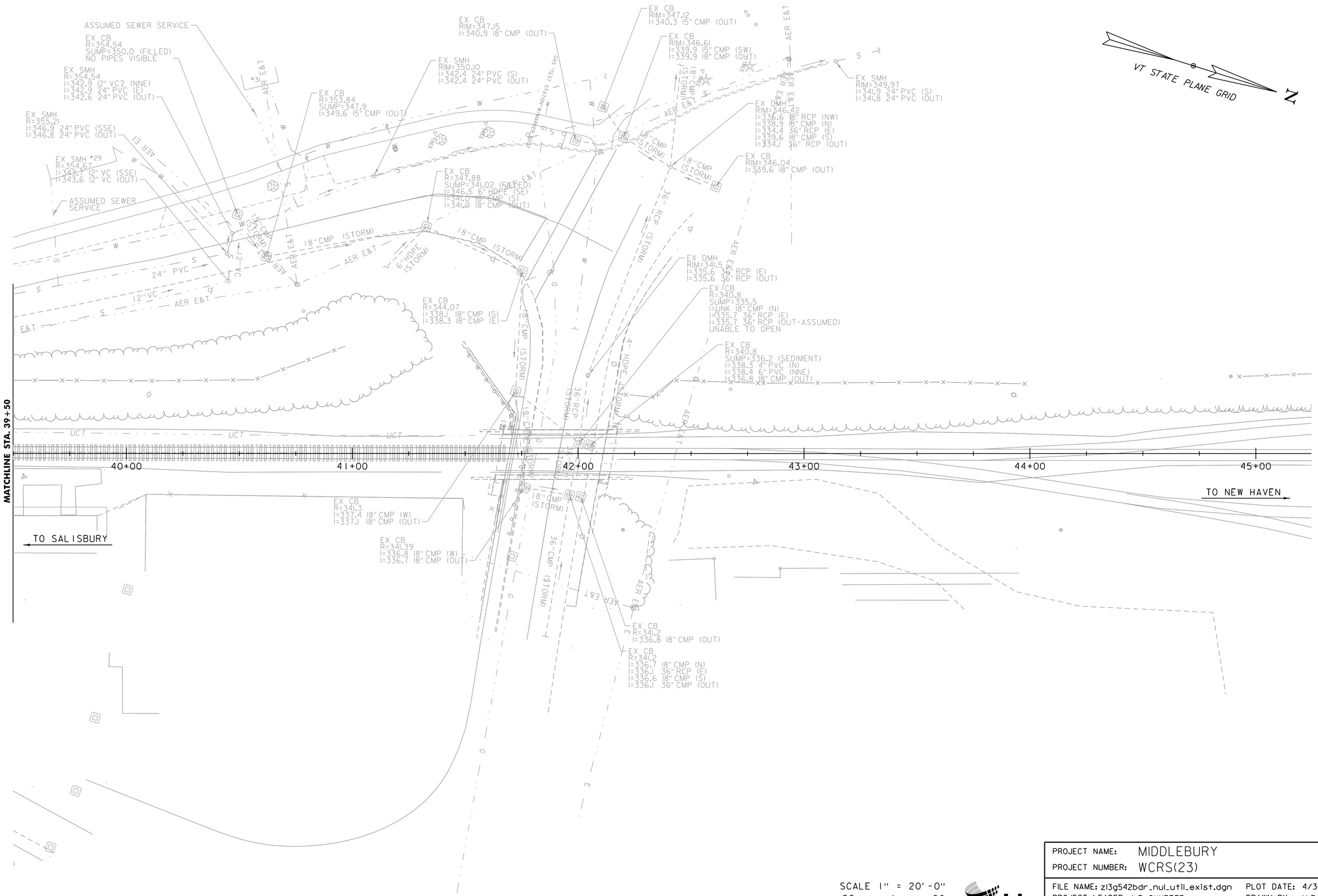


SCALE 1" = 20'-0"
20 0 20

PROJECT NAME: MIDDLEBURY	
PROJECT NUMBER: WCRS(23)	
FILE NAME: zl3g542bdr_nul_util_exist.dgn	PLOT DATE: 4/30/2019
PROJECT LEADER: A.P. GUYETTE	DRAWN BY: M.F. SUFFEL
DESIGNED BY: J.M. DUFFY	CHECKED BY: R.E. MARVIN
EXISTING UTILITY LAYOUT SHEET (5 OF 7)	SHEET 113 OF 328



PROJECT NAME: MIDDLEBURY	
PROJECT NUMBER: WCRS(23)	
FILE NAME: zl3g542bdr_nul_util_exist.dgn	PLOT DATE: 4/30/2019
PROJECT LEADER: A.P. GUYETTE	DRAWN BY: M.F. SUFFEL
DESIGNED BY: J.M. DUFFY	CHECKED BY: R.E. MARVIN
EXISTING UTILITY LAYOUT SHEET (6 OF 7)	SHEET 114 OF 328

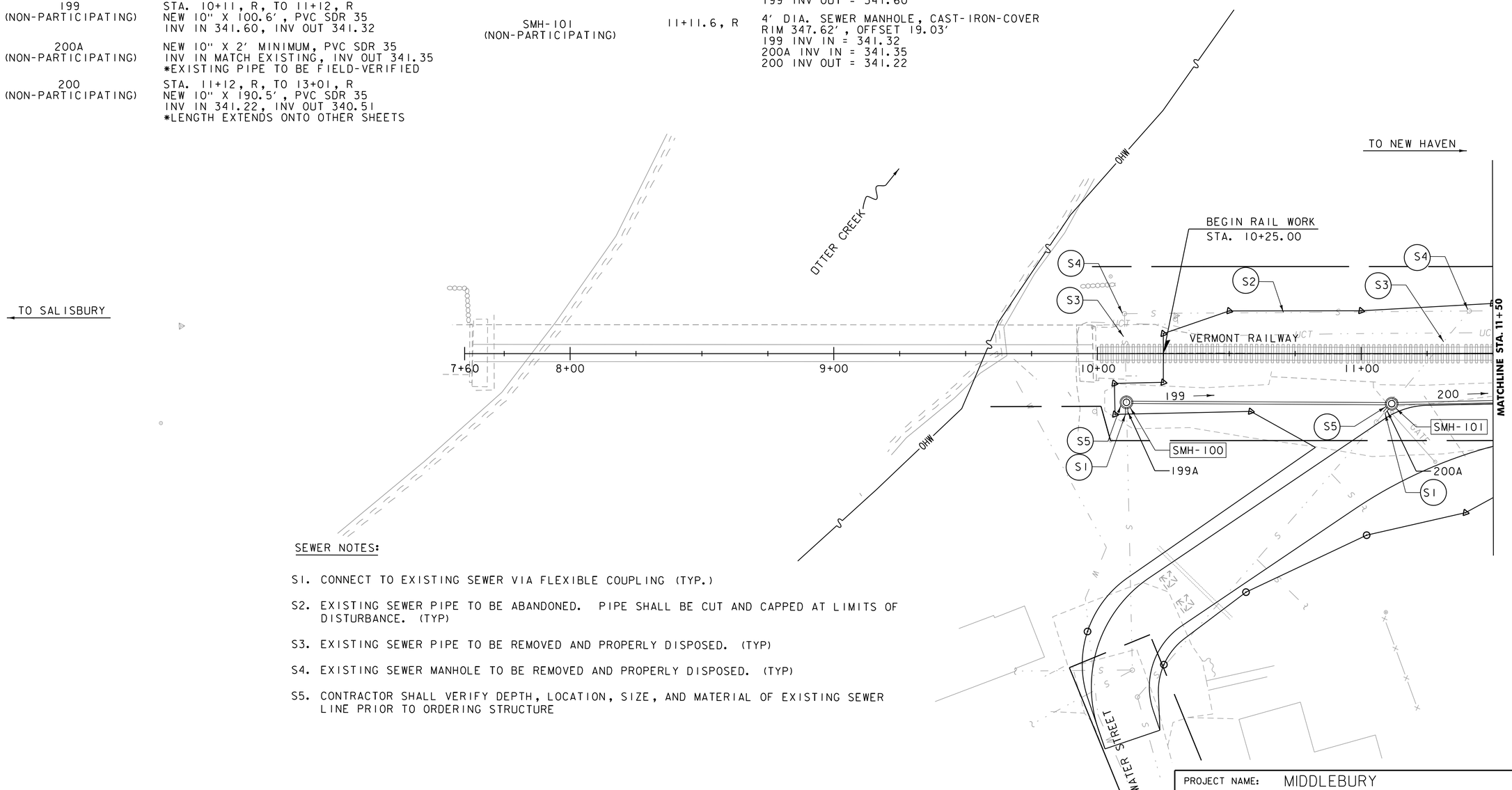


PROJECT NAME: MIDDLEBURY	
PROJECT NUMBER: WCRS(23)	
FILE NAME: zl3g542bdr_nul_util_exist.dgn	PLOT DATE: 4/30/2019
PROJECT LEADER: A.P. GUYETTE	DRAWN BY: M.F. SUFFEL
DESIGNED BY: J.M. DUFFY	CHECKED BY: R.E. MARVIN
EXISTING UTILITY LAYOUT SHEET (7 OF 7)	SHEET 115 OF 328

VT STATE PLANE GRID

SEWER PIPE NO.	INFO
199A (NON-PARTICIPATING)	NEW 10" X 2' MINIMUM, PVC SDR 35 INV IN MATCH EXISTING, INV OUT 341.70 *EXISTING PIPE TO BE FIELD-VERIFIED
199 (NON-PARTICIPATING)	STA. 10+11, R, TO 11+12, R NEW 10" X 100.6', PVC SDR 35 INV IN 341.60, INV OUT 341.32
200A (NON-PARTICIPATING)	NEW 10" X 2' MINIMUM, PVC SDR 35 INV IN MATCH EXISTING, INV OUT 341.35 *EXISTING PIPE TO BE FIELD-VERIFIED
200 (NON-PARTICIPATING)	STA. 11+12, R, TO 13+01, R NEW 10" X 190.5', PVC SDR 35 INV IN 341.22, INV OUT 340.51 *LENGTH EXTENDS ONTO OTHER SHEETS

SEWER STRUCTURE NO.	STATION	COMMENTS
SMH-100 (NON-PARTICIPATING)	10+11.0, R	4' DIA. SEWER MANHOLE, CAST-IRON-COVER RIM 348.40', OFFSET 18.46' 199A INV IN = 341.70 199 INV OUT = 341.60
SMH-101 (NON-PARTICIPATING)	11+11.6, R	4' DIA. SEWER MANHOLE, CAST-IRON-COVER RIM 347.62', OFFSET 19.03' 199 INV IN = 341.32 200A INV IN = 341.35 200 INV OUT = 341.22



SEWER NOTES:

S1. CONNECT TO EXISTING SEWER VIA FLEXIBLE COUPLING (TYP.)

S2. EXISTING SEWER PIPE TO BE ABANDONED. PIPE SHALL BE CUT AND CAPPED AT LIMITS OF DISTURBANCE. (TYP)

S3. EXISTING SEWER PIPE TO BE REMOVED AND PROPERLY DISPOSED. (TYP)

S4. EXISTING SEWER MANHOLE TO BE REMOVED AND PROPERLY DISPOSED. (TYP)

S5. CONTRACTOR SHALL VERIFY DEPTH, LOCATION, SIZE, AND MATERIAL OF EXISTING SEWER LINE PRIOR TO ORDERING STRUCTURE

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

vhb

PROJECT NAME: MIDDLEBURY
PROJECT NUMBER: WCRS(23)

FILE NAME: zl3g542bdr_nul_util.dgn
PROJECT LEADER: A.P. GUYETTE
DESIGNED BY: J.M. DUFFY
UTILITY LAYOUT SHEET (1 OF 7)

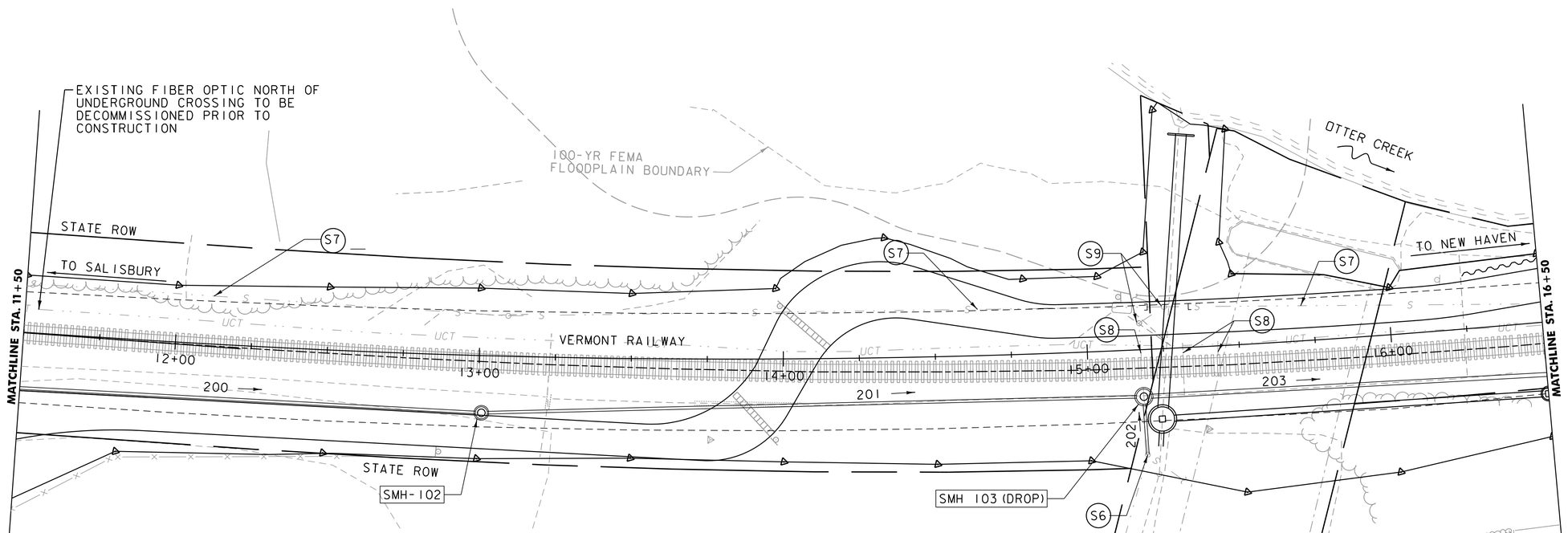
PLOT DATE: 4/30/2019
DRAWN BY: R.J. FORBES
CHECKED BY: R.E. MARVIN
SHEET 116 OF 328

VT STATE PLANE GRID

N

SEWER PIPE NO.	INFO
200 (NON-PARTICIPATING)	STA. 11+12, R, TO 13+01, R NEW 10" X 190.5', PVC SDR 35 INV IN 341.22, INV OUT 340.51 *LENGTH EXTENDS ONTO OTHER SHEETS
201 (NON-PARTICIPATING)	STA. 13+01, R, TO 15+18, R NEW 10" X 218.0', PVC SDR 35 INV IN 340.41, INV OUT 339.80
202	STA. 15+18, R, TO 15+18, R NEW 10" X 19.4', DI CL 350 POLYWRAPPED INV IN 347.30, INV OUT 343.48
203	STA. 15+18, R, TO 16+58, R NEW 15" X 141.4', PVC SDR 35 INV IN 339.70, INV OUT 339.49 *LENGTH EXTENDS ONTO OTHER SHEETS

SEWER STRUCTURE NO.	STATION	COMMENTS
SMH-102 (NON-PARTICIPATING)	13+01.2, R	4' DIA. SEWER MANHOLE, CAST-IRON-COVER RIM 347.52', OFFSET 18.82' 200 INV IN = 340.51 201 INV OUT = 340.41
SMH-103 (DROP)	15+17.9, R	5' DIA. INSIDE DROP SEWER MANHOLE CAST-IRON-COVER RIM 346.41', OFFSET 15.47' 201 INV IN = 339.80 202 INV IN = 343.48 203 INV OUT = 339.70



SEWER NOTES:

S6. CONNECT PROPOSED PIPELINE TO EXISTING STRUCTURE WITH FLEXIBLE MANHOLE SLEEVE. CORE LARGER PIPE PENETRATION AS NECESSARY. (TYP)

S7. EXISTING SEWER PIPE TO BE ABANDONED. PIPE SHALL BE CUT AND CAPPED AT LIMITS OF DISTURBANCE. (TYP)

S8. EXISTING SEWER PIPE TO BE REMOVED AND PROPERLY DISPOSED. (TYP)

S9. EXISTING SEWER MANHOLE TO BE REMOVED AND PROPERLY DISPOSED. (TYP)

S10. THE EXACT QUANTITY AND LOCATION OF EXISTING SEWER SERVICES IS UNKNOWN. CONTRACTOR SHALL SUPPLY VARIOUS PIPE SIZES AND FITTINGS, AS NECESSARY, TO CONNECT TO ALL SEWER SERVICES ENCOUNTERED DURING CONSTRUCTION.

LEGEND

(S#) = SEWER NOTES

(W#) = WATER NOTES

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

vhb

PROJECT NAME: MIDDLEBURY
PROJECT NUMBER: WCRS(23)

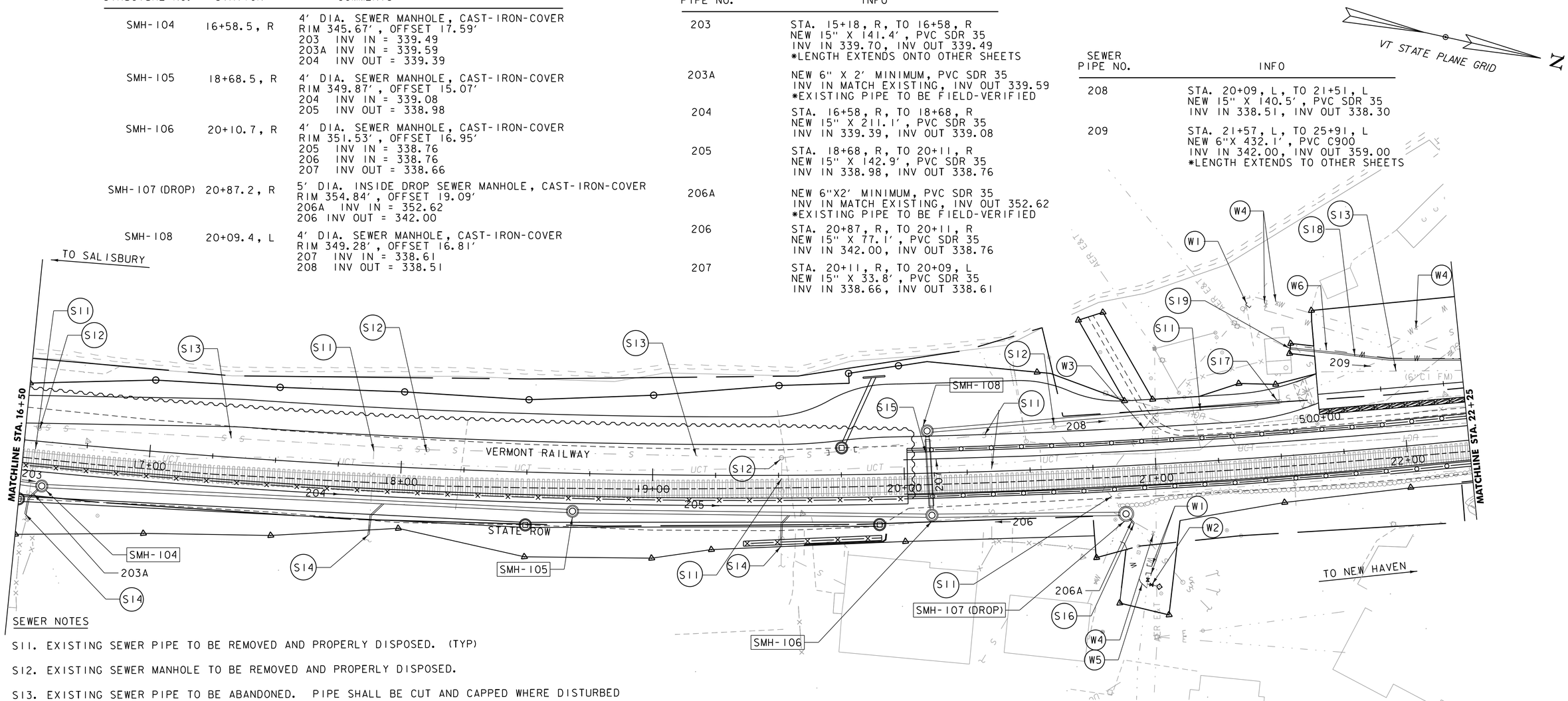
FILE NAME: z13g542bdr_nul_util.dgn
PROJECT LEADER: A.P. GUYETTE
DESIGNED BY: J.M. DUFFY
UTILITY LAYOUT SHEET (2 OF 7)

PLOT DATE: 4/30/2019
DRAWN BY: R.J. FORBES
CHECKED BY: R.E. MARVIN
SHEET 117 OF 328

SEWER STRUCTURE NO.	STATION	COMMENTS
SMH-104	16+58.5, R	4' DIA. SEWER MANHOLE, CAST-IRON-COVER RIM 345.67', OFFSET 17.59' 203 INV IN = 339.49 203A INV IN = 339.59 204 INV OUT = 339.39
SMH-105	18+68.5, R	4' DIA. SEWER MANHOLE, CAST-IRON-COVER RIM 349.87', OFFSET 15.07' 204 INV IN = 339.08 205 INV OUT = 338.98
SMH-106	20+10.7, R	4' DIA. SEWER MANHOLE, CAST-IRON-COVER RIM 351.53', OFFSET 16.95' 205 INV IN = 338.76 206 INV IN = 338.76 207 INV OUT = 338.66
SMH-107 (DROP)	20+87.2, R	5' DIA. INSIDE DROP SEWER MANHOLE, CAST-IRON-COVER RIM 354.84', OFFSET 19.09' 206A INV IN = 352.62 206 INV OUT = 342.00
SMH-108	20+09.4, L	4' DIA. SEWER MANHOLE, CAST-IRON-COVER RIM 349.28', OFFSET 16.81' 207 INV IN = 338.61 208 INV OUT = 338.51

SEWER PIPE NO.	INFO
203	STA. 15+18, R, TO 16+58, R NEW 15" X 141.4', PVC SDR 35 INV IN 339.70, INV OUT 339.49 *LENGTH EXTENDS ONTO OTHER SHEETS
203A	NEW 6" X 2' MINIMUM, PVC SDR 35 INV IN MATCH EXISTING, INV OUT 339.59 *EXISTING PIPE TO BE FIELD-VERIFIED
204	STA. 16+58, R, TO 18+68, R NEW 15" X 211.1', PVC SDR 35 INV IN 339.39, INV OUT 339.08
205	STA. 18+68, R, TO 20+11, R NEW 15" X 142.9', PVC SDR 35 INV IN 338.98, INV OUT 338.76
206A	NEW 6"X2' MINIMUM, PVC SDR 35 INV IN MATCH EXISTING, INV OUT 352.62 *EXISTING PIPE TO BE FIELD-VERIFIED
206	STA. 20+87, R, TO 20+11, R NEW 15" X 77.1', PVC SDR 35 INV IN 342.00, INV OUT 338.76
207	STA. 20+11, R, TO 20+09, L NEW 15" X 33.8', PVC SDR 35 INV IN 338.66, INV OUT 338.61

SEWER PIPE NO.	INFO
208	STA. 20+09, L, TO 21+51, L NEW 15" X 140.5', PVC SDR 35 INV IN 338.51, INV OUT 338.30
209	STA. 21+57, L, TO 25+91, L NEW 6"X 432.1', PVC C900 INV IN 342.00, INV OUT 359.00 *LENGTH EXTENDS TO OTHER SHEETS



SEWER NOTES

S11. EXISTING SEWER PIPE TO BE REMOVED AND PROPERLY DISPOSED. (TYP)

S12. EXISTING SEWER MANHOLE TO BE REMOVED AND PROPERLY DISPOSED.

S13. EXISTING SEWER PIPE TO BE ABANDONED. PIPE SHALL BE CUT AND CAPPED WHERE DISTURBED DURING CONSTRUCTION. (TYP)

S14. PROPOSED SEWER SERVICE CONNECTION WITH CLEAN-OUT: EXACT LOCATION UNKNOWN. IF SERVICE IS DESIGNED TO ENTER NEW SEWER MANHOLE, CONTRACTOR SHALL TEST PIT TO VERIFY SERVICE LOCATION, DEPTH, TYPE, AND SIZE PRIOR TO ORDERING STRUCTURE.

S15. 24"X26' ASTM A53 GRADE B STEEL SLEEVE WITH 15" PVC SDR 35 CARRIER PIPE INSTALLED VIA OPEN TRENCH

S16. PROPOSED SEWER MAIN CONNECTION: TEST PIT TO VERIFY MAIN LOCATION, DEPTH, TYPE, AND SIZE BEFORE ORDERING STRUCTURE AND MATERIALS. CONNECT TO EXISTING SEWER VIA FLEXIBLE COUPLING (TYP.)

S17. CONNECT PROPOSED PIPELINE TO EXISTING STRUCTURE WITH FLEXIBLE MANHOLE SLEEVE. CORE LARGER PIPE PENETRATION AS NECESSARY. (TYP)

S18. 6" PVC C900 SEWER FORCE MAIN AND 3/4" SEAMLESS COPPER WATER TUBE IN SAME TRENCH.

S19. CONNECT NEW SEWER FORCE MAIN TO EXISTING FORCE MAIN PIPE OUTSIDE BUILDING.

S20. THE EXACT QUANTITY AND LOCATION OF EXISTING SEWER SERVICES IS UNKNOWN. CONTRACTOR SHALL SUPPLY VARIOUS PIPE SIZES AND FITTINGS, AS NECESSARY, TO CONNECT TO ALL SEWER SERVICES ENCOUNTERED DURING CONSTRUCTION.

WATER NOTES:

W1. CUT AND CAP EXISTING WATERLINE. PROVIDE GATE VALVE WITH VALVE BOX AND THRUST RESTRAINT IN THE LOCATION SHOWN.

W2. CUT IN NEW FLUSHING HYDRANT ASSEMBLY WITH GATE VALVE AND VALVE BOX.

W3. EXISTING WATER MAIN SHALL BE REMOVED WHERE ENCOUNTERED DURING CONSTRUCTION. ALL PIPE ENDS LEFT IN PLACE SHALL BE CAPPED.

W4. ABANDON EXISTING GATE VALVE. VALVE BOXES SHALL BE CUT BELOW GRADE AND VALVES CLOSED.

W5. CONNECT NEW 3/4" SEAMLESS COPPER WATER TUBE TO EXISTING WATERLINE WITH 3/4" CORPORATION STOP.

W6. NEW 3/4" SEAMLESS COPPER WATER TUBE IN SAME TRENCH AS 6" PVC C900 SEWER FORCEMAIN. WHERE WATER SERVICE IS IN SAME TRENCH AS PRESSURE SEWERLINE, WATERLINE SHALL BE INSTALLED ABOVE SEWERLINE WITH 18" MINIMUM VERTICAL SEPARATION. CONNECT WATER SERVICE TO PUMP STATION BUILDING, CORE PIPE PENETRATION WITH SLEEVE AND FITTINGS, AS NECESSARY.

LEGEND

(S#) = SEWER NOTES

(W#) = WATER NOTES

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

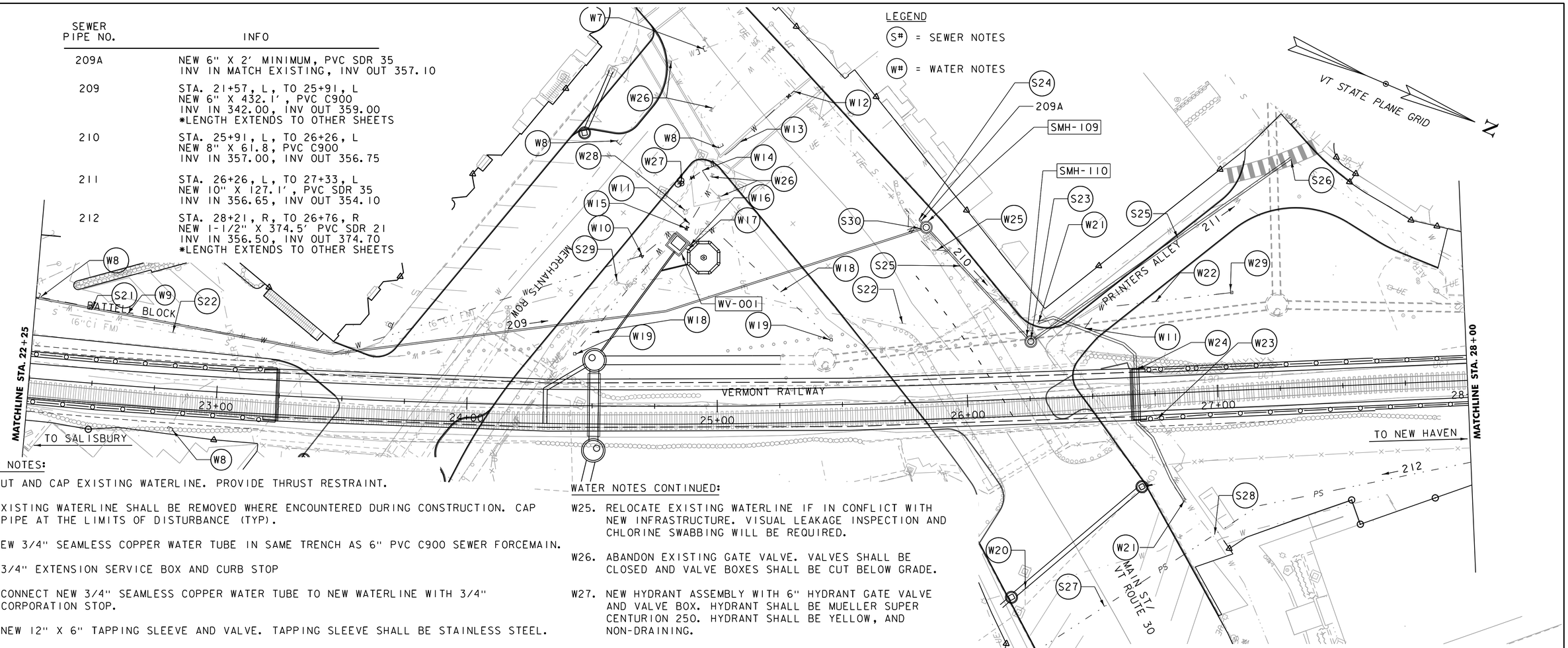
vhb

PROJECT NAME: MIDDLEBURY
PROJECT NUMBER: WCRS(23)

FILE NAME: z13g542bdr_nul_util.dgn
PROJECT LEADER: A.P. GUYETTE
DESIGNED BY: J.M. DUFFY
UTILITY LAYOUT SHEET (3 OF 7)

PLOT DATE: 4/30/2019
DRAWN BY: M.F. SUFFEL
CHECKED BY: R.E. MARVIN
SHEET 118 OF 328

SEWER PIPE NO.	INFO
209A	NEW 6" X 2' MINIMUM, PVC SDR 35 INV IN MATCH EXISTING, INV OUT 357.10
209	STA. 21+57, L, TO 25+91, L NEW 6" X 432.1', PVC C900 INV IN 342.00, INV OUT 359.00 *LENGTH EXTENDS TO OTHER SHEETS
210	STA. 25+91, L, TO 26+26, L NEW 8" X 61.8, PVC C900 INV IN 357.00, INV OUT 356.75
211	STA. 26+26, L, TO 27+33, L NEW 10" X 127.1', PVC SDR 35 INV IN 356.65, INV OUT 354.10
212	STA. 28+21, R, TO 26+76, R NEW 1-1/2" X 374.5' PVC SDR 21 INV IN 356.50, INV OUT 374.70 *LENGTH EXTENDS TO OTHER SHEETS



WATER STRUCTURE NO.	STATION	COMMENTS
WV-001	24+84.7, L	6' X 6' WATER VAULT, ALUMINUM HATCH RIM 365.69', OFFSET 66.16' 116 INV OUT = TBD ALL OTHER INVERTS TBD

SEWER STRUCTURE NO.	STATION	COMMENTS
SMH-109	25+90.7, L	4' DIA. SEWER MANHOLE, CAST-IRON-COVER RIM 366.25', OFFSET 69.79 209 INV IN = 359.00 209A INV IN = 357.10 210 INV OUT = 357.00
SMH-110	26+26.1, L	4' DIA. SEWER MANHOLE, CAST-IRON-COVER RIM 368.90', OFFSET 22.80' 210 INV IN = 356.75 211 INV OUT = 356.65

WATER NOTES:

W7. CUT AND CAP EXISTING WATERLINE. PROVIDE THRUST RESTRAINT.

W8. EXISTING WATERLINE SHALL BE REMOVED WHERE ENCOUNTERED DURING CONSTRUCTION. CAP PIPE AT THE LIMITS OF DISTURBANCE (TYP).

W9. NEW 3/4" SEAMLESS COPPER WATER TUBE IN SAME TRENCH AS 6" PVC C900 SEWER FORCEMAIN.

W10. 3/4" EXTENSION SERVICE BOX AND CURB STOP

W11. CONNECT NEW 3/4" SEAMLESS COPPER WATER TUBE TO NEW WATERLINE WITH 3/4" CORPORATION STOP.

W12. NEW 12" X 6" TAPPING SLEEVE AND VALVE. TAPPING SLEEVE SHALL BE STAINLESS STEEL.

W13. NEW 6" DI CLASS 52 POLYWRAPPED WATERLINE FROM TAPPING SLEEVE TO HYDRANT.

W14. CONNECT NEW 1" SEAMLESS COPPER WATER TUBE TO NEW WATERLINE WITH CORPORATION STOP.

W15. 1" EXTENSION SERVICE BOX AND CURB STOP.

W16. NEW 1-1/4" SEAMLESS COPPER WATER TUBE FROM FOUNTAIN TO WATER VAULT.

W17. NEW 1" SEAMLESS COPPER WATER TUBE FROM WATER VAULT TO FOUNTAIN.

W18. NEW 3/4" SEAMLESS COPPER WATER TUBE. MAINTAIN POSITIVE SLOPE ON WATERLINE FROM WATER VAULT WV-001 TO HOSE BIB FOR WINTERIZATION. (TYP.)

W19. NEW RECESSED HOSE BIB BOX UNIT INSTALLED AT GRADE

W20. IF PROPOSED STORMWATER LINE IS IN CONFLICT WITH EXISTING WATER LINE, RELOCATE WATERLINE BELOW PROPOSED STORMWATER LINE. IF NOT, INSTALL INSULATION BOARD BETWEEN STORM PIPE AND WATERLINE.

W21. CONNECT TO EXISTING 12" GATE VALVE ONCE NEW WATERLINE HAS BEEN TESTED AND ACCEPTED. USE FITTINGS, AS NECESSARY.

W22. NEW 3/4" SEAMLESS COPPER WATER TUBE.

W23. REMOVE TEMPORARY WATERMAIN BRIDGE CROSSING ONCE NEW WATERMAIN BRIDGE CROSSING HAS BEEN TESTED AND ACCEPTED. EXISTING SUBSURFACE WATERMAIN SHALL BE CUT AND CAPPED. ABANDON EXISTING GATE VALVES. VALVE BOXES SHALL BE CUT BELOW GRADE AND VALVES CLOSED. (TYP.)

W24. NEW 12" PRE-INSULATED DUCTILE IRON CL52 WATERLINE WHERE INSTALLED ABOVE-GROUND OR WHERE LESS THAN 6 FEET OF COVER, AND 12" DUCTILE IRON CL52 WATERLINE, POLYETHYLENE ENCASED, WHERE INSTALLED SUBSURFACE. REFER TO WATERLINE PROFILE FOR DEFINED LIMITS. (TYP.)

WATER NOTES CONTINUED:

W25. RELOCATE EXISTING WATERLINE IF IN CONFLICT WITH NEW INFRASTRUCTURE. VISUAL LEAKAGE INSPECTION AND CHLORINE SWABBING WILL BE REQUIRED.

W26. ABANDON EXISTING GATE VALVE. VALVES SHALL BE CLOSED AND VALVE BOXES SHALL BE CUT BELOW GRADE.

W27. NEW HYDRANT ASSEMBLY WITH 6" HYDRANT GATE VALVE AND VALVE BOX. HYDRANT SHALL BE MUELLER SUPER CENTURION 250. HYDRANT SHALL BE YELLOW, AND NON-DRAINING.

W28. EXISTING HYDRANT SHALL BE REMOVED AND FURNISHED TO THE TOWN.

W29. SPECIAL PROVISION (GROUND HYDRANT)

SEWER NOTES

S21. 6" PVC C900 SEWER FORCE MAIN AND 3/4" SEAMLESS COPPER WATER TUBE IN SAME TRENCH. (TYP)

S22. EXISTING SEWER PIPE TO BE ABANDONED. PIPE SHALL BE CUT AND CAPPED WHERE DISTURBED DURING CONSTRUCTION. (TYP)

S23. EXISTING SEWER MANHOLE TO BE REMOVED AND REPLACED WITH NEW SEWER MANHOLE.

S24. CONNECT TO EXISTING SEWER PIPE WITH FITTINGS, AS NECESSARY.

S25. EXISTING SEWER MAIN TO BE REMOVED AND REPLACED WITH NEW SEWER MAIN. PROVIDE BYPASS PUMPING, AS NECESSARY.

S26. CONNECT PROPOSED PIPELINE TO EXISTING STRUCTURE WITH FLEXIBLE MANHOLE SLEEVE. CORE LARGER PIPE PENETRATION, AS NECESSARY.

S27. 1-1/2" PVC SDR 21 SEWER FORCE MAIN (TYP). MAINTAIN POSITIVE SLOPE FROM NEW PUMP STATION TO EXISTING SEWER MANHOLE.

S28. WATER/SEWER SEPARATION

S29. EXISTING SEWER MANHOLE TO BE REMOVED AND PROPERLY DISPOSED. (TYP)

S30. DIRECT FLOW FROM FORCEMAIN TO OUTLET CHANNEL WITH FITTINGS AS NECESSARY

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

vhb

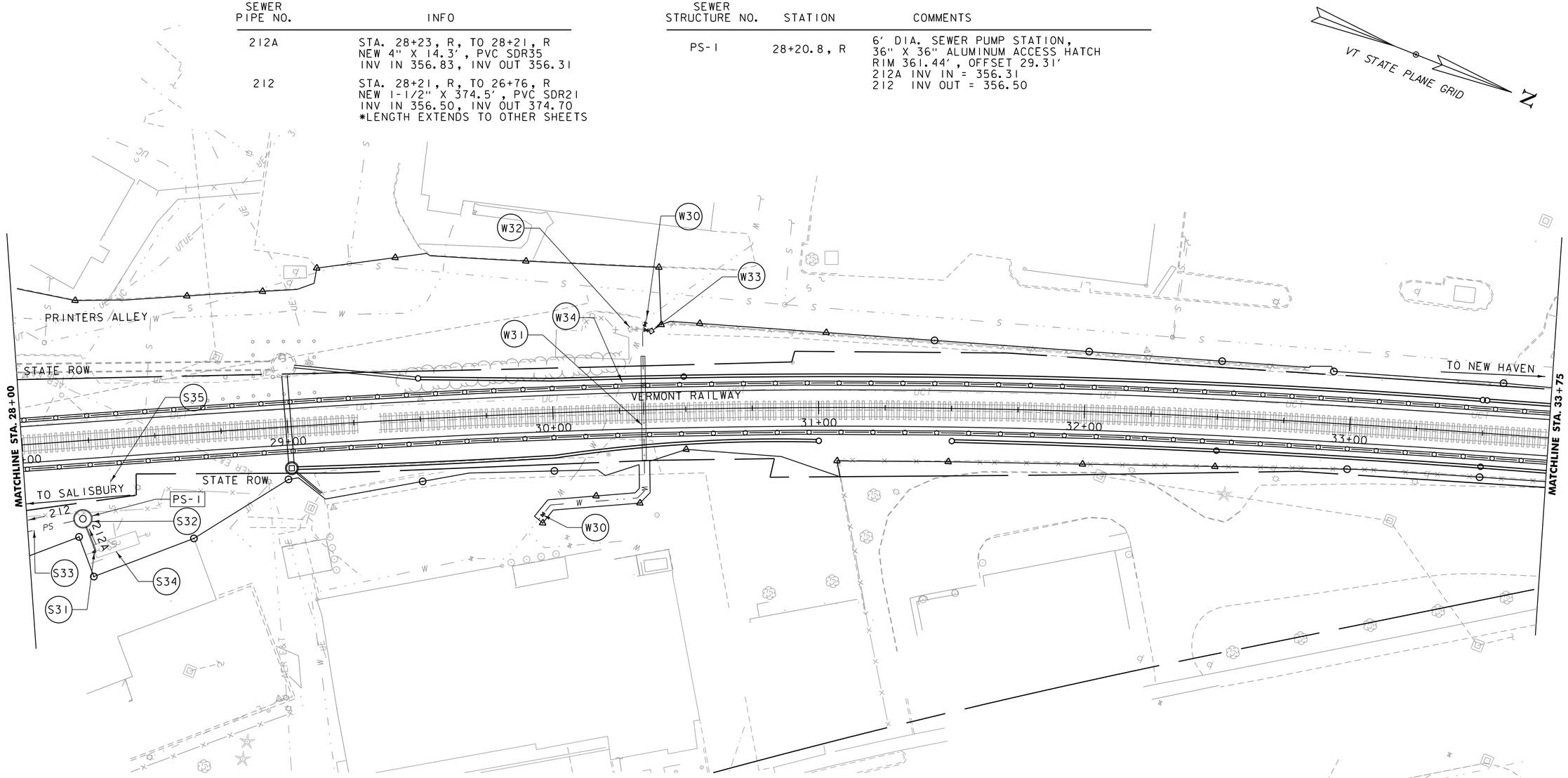
PROJECT NAME: MIDDLEBURY
PROJECT NUMBER: WCRS(23)

FILE NAME: zl3g542bdr_nul_util.dgn
PROJECT LEADER: A.P. GUYETTE
DESIGNED BY: J.M. DUFFY
UTILITY LAYOUT SHEET (4 OF 7)

PLOT DATE: 4/30/2019
DRAWN BY: M.F. SUFFEL
CHECKED BY: R.E. MARVIN
SHEET 119 OF 328

SEWER PIPE NO.	INFO
212A	STA. 28+23, R, TO 28+21, R NEW 4" X 14.3', PVC SDR35 INV IN 356.83, INV OUT 356.31
212	STA. 28+21, R, TO 26+76, R NEW 1-1/2" X 374.5', PVC SDR21 INV IN 356.50, INV OUT 374.70 *LENGTH EXTENDS TO OTHER SHEETS

SEWER STRUCTURE NO.	STATION	COMMENTS
PS-1	28+20.8, R	6' DIA. SEWER PUMP STATION, 36" X 36" ALUMINUM ACCESS HATCH RIM 361.44', OFFSET 29.31' 212A INV IN = 356.31 212 INV OUT = 356.50



SEWER NOTES

S31. CONNECT TO EXISTING 4" GRAVITY SEWER PIPE WITH NEW 4" PVC SDR35 PIPE USING 45 DEGREE BENDS WITH CLEANOUT.

S32. NEW SEWER PUMP STATION.

S33. 1-1/2" PVC SDR 21 SEWER FORCE MAIN (TYP).

S34. EXISTING SEPTIC TANK TO BE DECOMMISSIONED. CONTRACTOR SHALL COORDINATE BYPASS PUMPING, AS NECESSARY OR PROVIDE TEMPORARY WASTEWATER FACILITIES.

S35. EXISTING SEWER PIPE TO BE ABANDONED. PIPE SHALL BE CUT AND CAPPED WHERE DISTURBED DURING CONSTRUCTION. (TYP)

WATER NOTES:

W30. CONNECT TO EXISTING 8" WATERLINE WITH NEW 8" GATE VALVE AND FITTINGS AS NECESSARY

W31. 18"X39' ASTM A53 GRADE B STEEL SLEEVE WITH 8" DI CL 52 (POLYWRAPPED) CARRIER PIPE INSTALLED VIA OPEN TRENCH.

W32. REMOVE EXISTING HYDRANT AND HYDRANT VALVE. FURNISH HYDRANT TO TOWN.

W33. NEW HYDRANT ASSEMBLY WITH 6" GATE VALVE AND VALVE BOX. HYDRANT SHALL BE MUELLER SUPER CENTURION 250. HYDRANT SHALL BE YELLOW, AND NON-DRAINING.

W34. EXISTING 8" MAIN TO BE REMOVED FROM CROSSING.

LEGEND

(S#) = SEWER NOTES

(W#) = WATER NOTES

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

PROJECT NAME: MIDDLEBURY	
PROJECT NUMBER: WCRS(23)	
FILE NAME: zl3g542bdr_nul_util.dgn	PLOT DATE: 4/30/2019
PROJECT LEADER: A.P. GUYETTE	DRAWN BY: M.F. SUFFEL
DESIGNED BY: J.M. DUFFY	CHECKED BY: R.E. MARVIN
UTILITY LAYOUT SHEET (5 OF 7)	SHEET 120 OF 328

SEWER PIPE NO.	INFO
213	STA. 36+49, L, TO 36+92, L NEW 6" X 31.2', PVC SDR 35 INV IN MATCH EXISTING, INV OUT MATCH EXISTING
214	STA. 37+42, R, TO 37+44, L NEW 24" X 54.7', DI CL 350 POLYWRAPPED INV IN 348.90, INV OUT 348.00

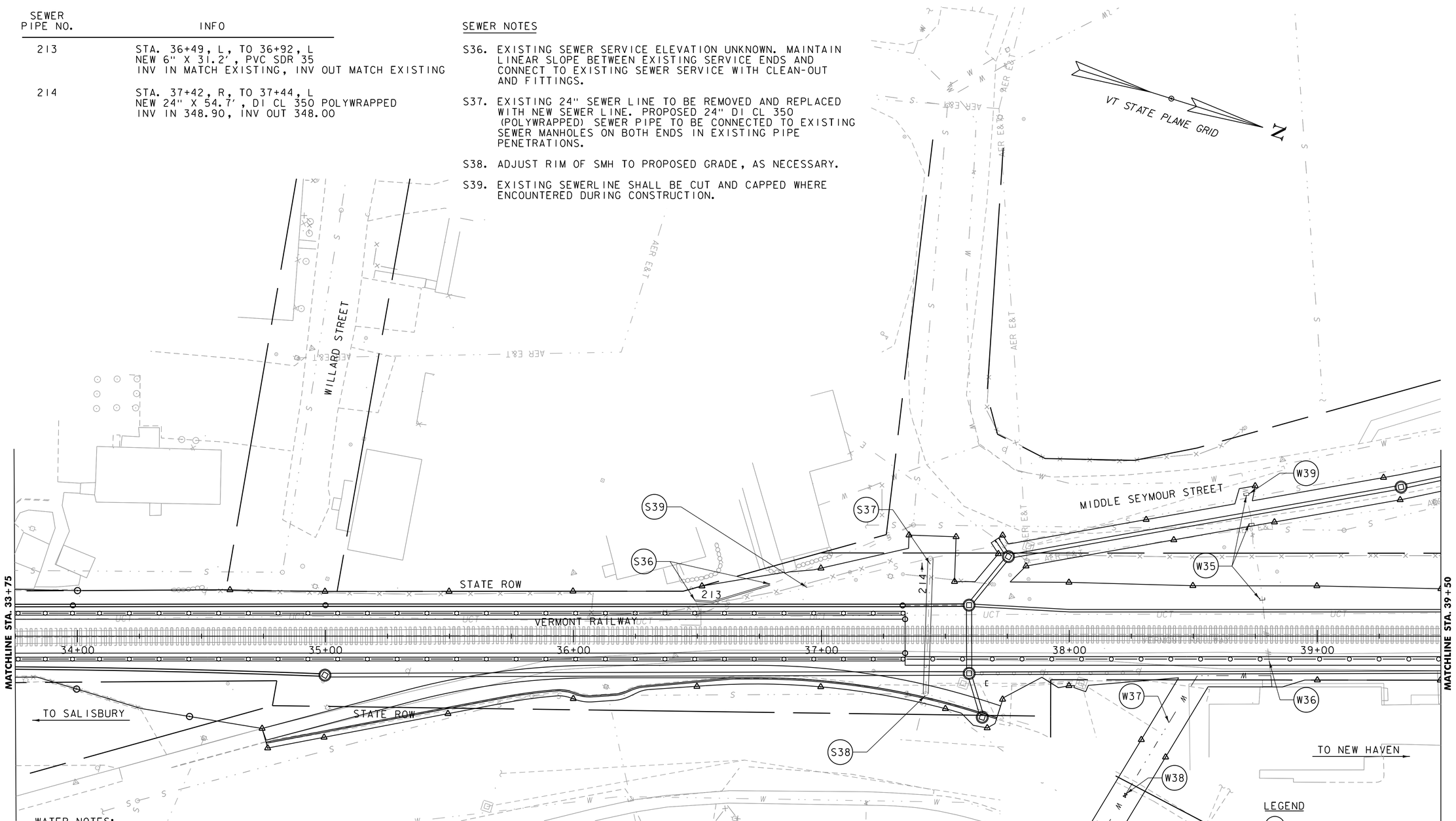
SEWER NOTES

S36. EXISTING SEWER SERVICE ELEVATION UNKNOWN. MAINTAIN LINEAR SLOPE BETWEEN EXISTING SERVICE ENDS AND CONNECT TO EXISTING SEWER SERVICE WITH CLEAN-OUT AND FITTINGS.

S37. EXISTING 24" SEWER LINE TO BE REMOVED AND REPLACED WITH NEW SEWER LINE. PROPOSED 24" DI CL 350 (POLYWRAPPED) SEWER PIPE TO BE CONNECTED TO EXISTING SEWER MANHOLES ON BOTH ENDS IN EXISTING PIPE PENETRATIONS.

S38. ADJUST RIM OF SMH TO PROPOSED GRADE, AS NECESSARY.

S39. EXISTING SEWERLINE SHALL BE CUT AND CAPPED WHERE ENCOUNTERED DURING CONSTRUCTION.



WATER NOTES:

W35. CUT AND CAP EXISTING WATERLINE WHERE ENCOUNTERED DURING CONSTRUCTION (TYP.)

W36. EXISTING WATER SERVICE TO BE REMOVED WHERE LOCATED WITHIN THE RAILROAD TRACKS AND PROPERLY DISPOSED.

W37. NEW 3/4" SEAMLESS COPPER WATER TUBE FROM NEW 3/4" CORPORATION STOP AT MAIN, THROUGH THE BUILDING'S FOUNDATION WALL. CONTRACTOR SHALL COORDINATE WITH PROPERTY OWNER ON THE EXACT LOCATION OF THE NEW FOUNDATION PENETRATION. COORDINATE FINAL CONNECTION WITH LICENSED PLUMBER. PROVIDE INSULATION BOARD BETWEEN WATERLINE AND STORM PIPE AT CROSSING AND WHERE WATER SERVICE IS INSTALLED ALONG STORM PIPELINE. DO NOT DISTURB EXISTING BUILDING UNDERDRAINS.

W38. NEW 3/4" EXTENSION SERVICE BOX AND CURB STOP.

W39. CONTRACTOR SHALL EXCAVATE BACK TO EXISTING WATERMAIN, PULL THE CORPORATION STOP AND INSTALL A 3/4" CC THREAD, LOW LEAD BRASS PLUG. REMOVAL OF THE CORPORATION STOP AND INSTALLATION OF THE NEW PLUG WILL BE PAID FOR UNDER ITEM 629.42, "TRANSFER TO NEW SYSTEM, WATER SYSTEM"

LEGEND

S# = SEWER NOTES

W# = WATER NOTES

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

vhb

PROJECT NAME: MIDDLEBURY	
PROJECT NUMBER: WCRS(23)	
FILE NAME: z13g542bdr_nul_util.dgn	PLOT DATE: 4/30/2019
PROJECT LEADER: A.P. GUYETTE	DRAWN BY: M.F. SUFFEL
DESIGNED BY: J.M. DUFFY	CHECKED BY: R.E. MARVIN
UTILITY LAYOUT SHEET (6 OF 7)	SHEET 121 OF 328

VT STATE PLANE GRID

N

MATCHLINE STA. 39+50

40+00

41+00

42+00

43+00

44+00

45+00

STATE ROW

STATE ROW

VERMONT RAILWAY

TO SALISBURY

TO NEW HAVEN

ELM STREET

TOWN ROW

AER E&T

UCT

LEGEND

(S#) = SEWER NOTES

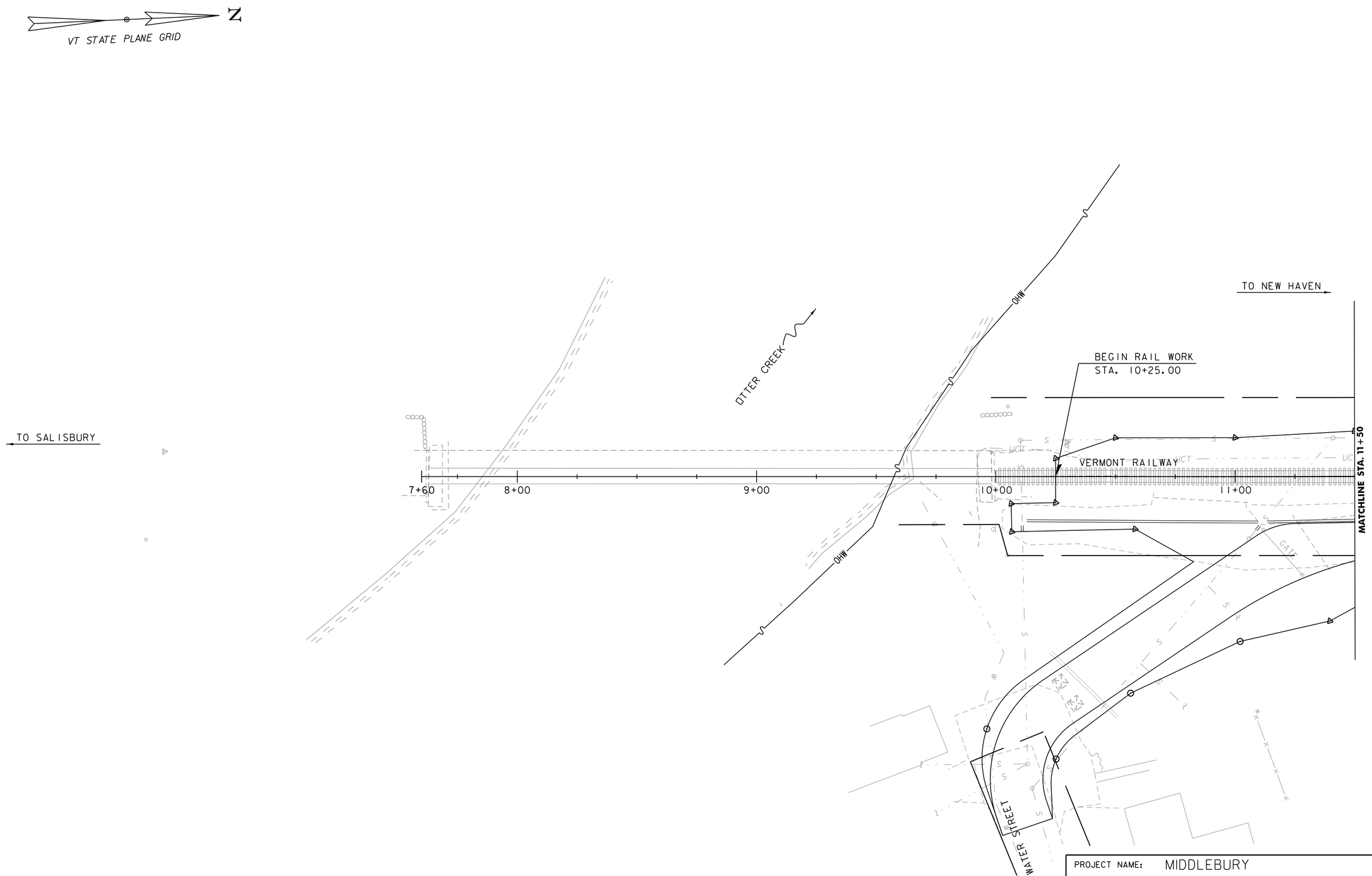
(W#) = WATER NOTES

SCALE 1" = 20'-0"

20 0 20

vhb

PROJECT NAME: MIDDLEBURY	
PROJECT NUMBER: WCRS(23)	
FILE NAME: zl3g542bdr_nul_util.dgn	PLOT DATE: 4/30/2019
PROJECT LEADER: A.P. GUYETTE	DRAWN BY: M.F. SUFFEL
DESIGNED BY: J.M. DUFFY	CHECKED BY: R.E. MARVIN
UTILITY LAYOUT SHEET (7 OF 7)	SHEET 122 OF 328



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

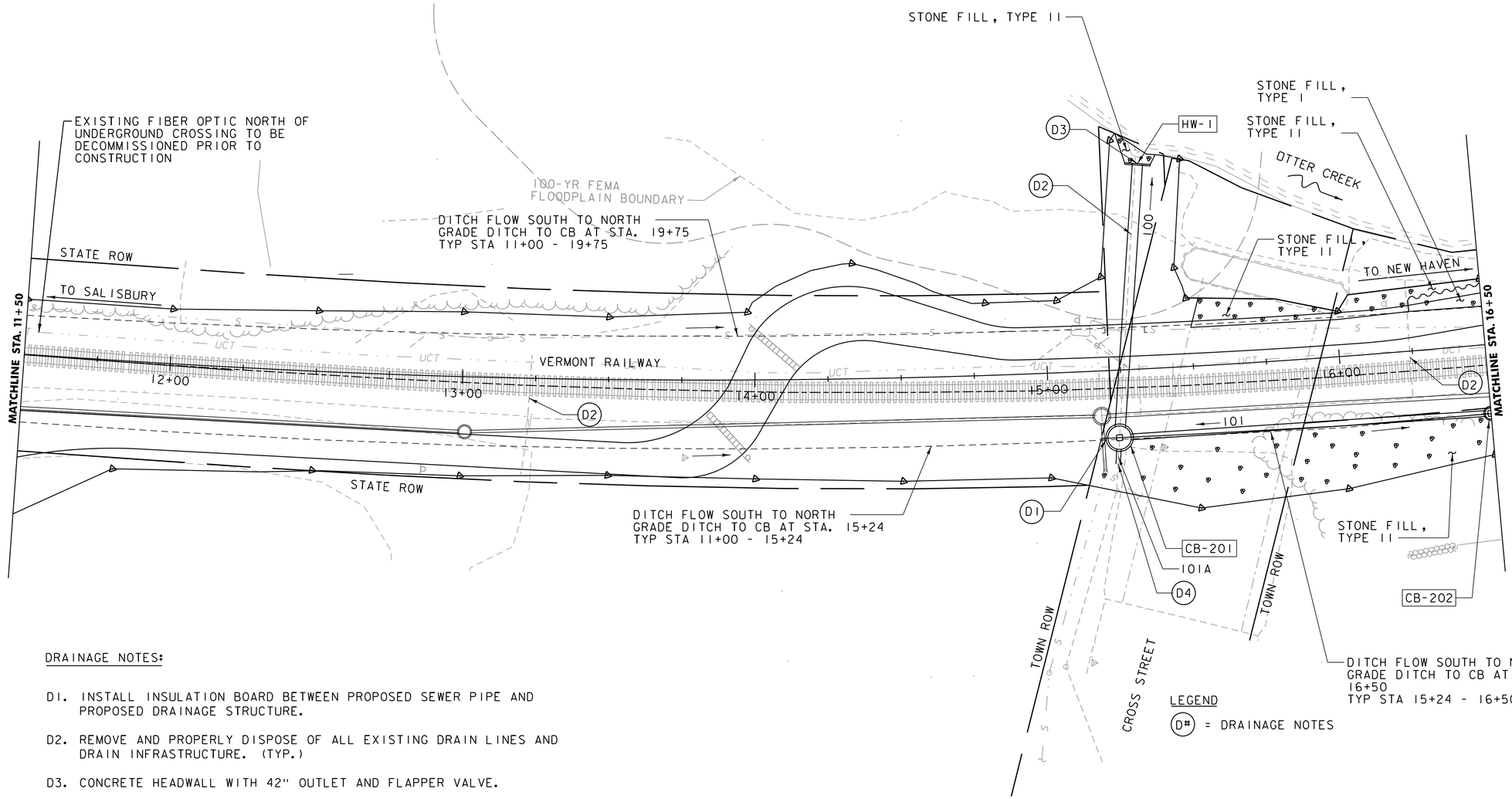
PROJECT NAME: MIDDLEBURY	
PROJECT NUMBER: WCRS(23)	
FILE NAME: z13g542bdr_nul_drain.dgn	PLOT DATE: 4/30/2019
PROJECT LEADER: A.P. GUYETTE	DRAWN BY: M.F. SUFFEL
DESIGNED BY: J.M. DUFFY	CHECKED BY: R.E. MARVIN
DRAINAGE LAYOUT SHEET (1 OF 7)	SHEET 123 OF 328

VT STATE PLANE GRID

N

DRAINAGE STRUCTURE NO.	STATION	COMMENTS
CB-201	15+23.6, R	8' DIA. CATCH BASIN, TYPE "D" GRATE RIM 346.19', OFFSET 23.1' 101A INV IN = 343.45 101 INV IN = 341.50 100 INV OUT = 341.40
CB-202	16+49.8, R	4' DIA. CATCH BASIN, TYPE "D" GRATE RIM 345.21', OFFSET 23.5' 102 INV IN = 341.85 101 INV OUT = 341.75
HW-1	15+34.4, L	CONCRETE RECTANGULAR HEADWALL RIM 344.10' OFFSET 69.9' 100 INV IN = 340.00

DRAINAGE PIPE NO.	INFO
100	STA. 15+24, R, TO 15+34, L NEW 42" X 93.7', DI CL 350 POLYWRAPPED INV IN 341.40, INV OUT 340.00
101A	NEW 18" X 2.0' MINIMUM, PVC SDR35 INV IN MATCH EXISTING, INV OUT 343.45
101	STA. 16+50, R, TO 15+24, R NEW 24" X 127.2', CPEP (SL) INV IN 341.75, INV OUT 341.50



DRAINAGE NOTES:

D1. INSTALL INSULATION BOARD BETWEEN PROPOSED SEWER PIPE AND PROPOSED DRAINAGE STRUCTURE.

D2. REMOVE AND PROPERLY DISPOSE OF ALL EXISTING DRAIN LINES AND DRAIN INFRASTRUCTURE. (TYP.)

D3. CONCRETE HEADWALL WITH 42" OUTLET AND FLAPPER VALVE.

D4. CONNECT TO EXISTING STORM PIPE WITH FITTINGS, AS NECESSARY.

LEGEND

(D#) = DRAINAGE NOTES

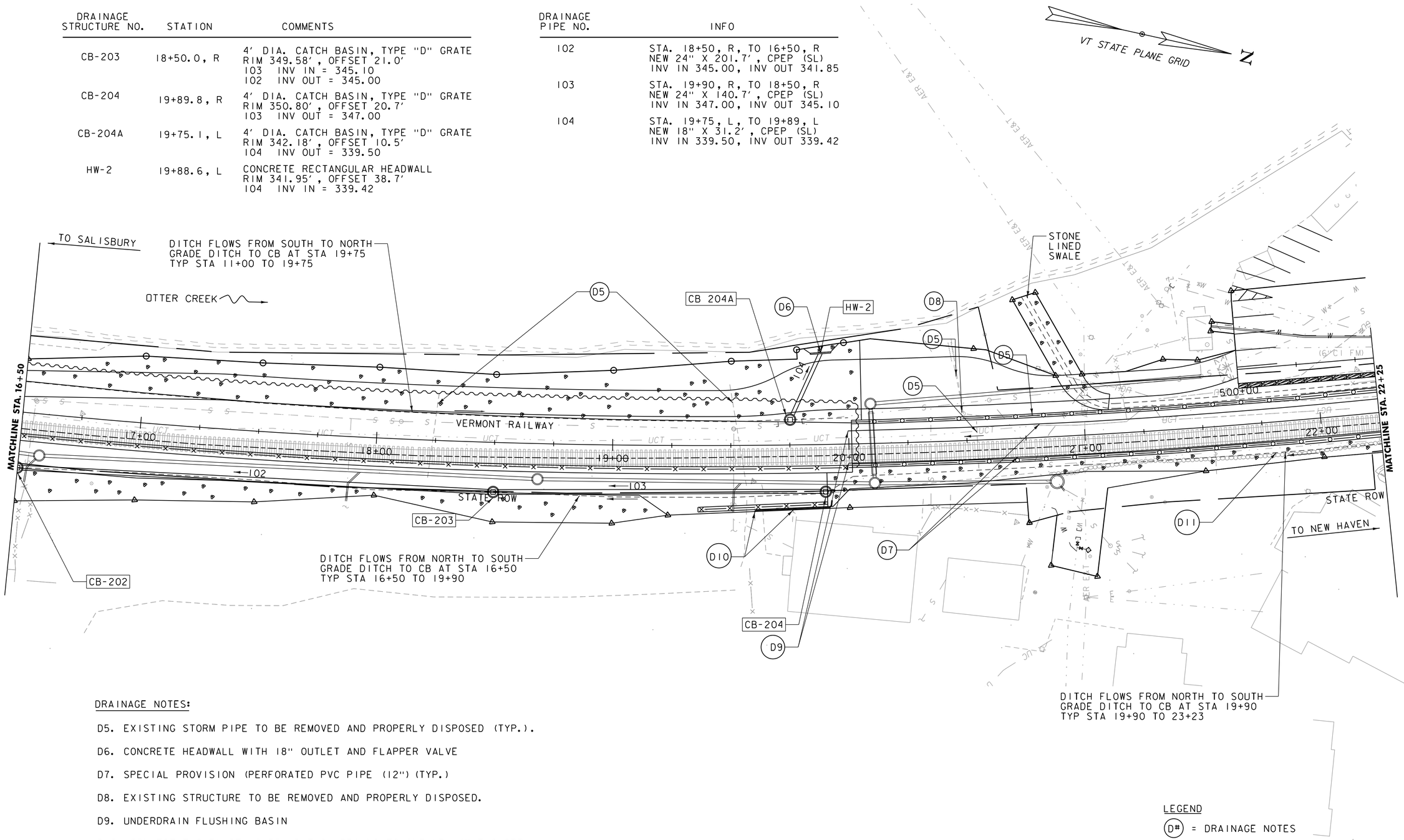
SCALE 1" = 20'-0"
20 0 20

vhb

PROJECT NAME: MIDDLEBURY	
PROJECT NUMBER: WCRS(23)	
FILE NAME: zl3g542bdr_nul_drain.dgn	PLOT DATE: 4/30/2019
PROJECT LEADER: A.P. GUYETTE	DRAWN BY: M.F. SUFFEL
DESIGNED BY: J.M. DUFFY	CHECKED BY: R.E. MARVIN
DRAINAGE LAYOUT SHEET (2 OF 7)	SHEET 124 OF 328

DRAINAGE STRUCTURE NO.	STATION	COMMENTS
CB-203	18+50.0, R	4' DIA. CATCH BASIN, TYPE "D" GRATE RIM 349.58', OFFSET 21.0' 103 INV IN = 345.10 102 INV OUT = 345.00
CB-204	19+89.8, R	4' DIA. CATCH BASIN, TYPE "D" GRATE RIM 350.80', OFFSET 20.7' 103 INV OUT = 347.00
CB-204A	19+75.1, L	4' DIA. CATCH BASIN, TYPE "D" GRATE RIM 342.18', OFFSET 10.5' 104 INV OUT = 339.50
HW-2	19+88.6, L	CONCRETE RECTANGULAR HEADWALL RIM 341.95', OFFSET 38.7' 104 INV IN = 339.42

DRAINAGE PIPE NO.	INFO
102	STA. 18+50, R, TO 16+50, R NEW 24" X 201.7', CPEP (SL) INV IN 345.00, INV OUT 341.85
103	STA. 19+90, R, TO 18+50, R NEW 24" X 140.7', CPEP (SL) INV IN 347.00, INV OUT 345.10
104	STA. 19+75, L, TO 19+89, L NEW 18" X 31.2', CPEP (SL) INV IN 339.50, INV OUT 339.42



DRAINAGE NOTES:

D5. EXISTING STORM PIPE TO BE REMOVED AND PROPERLY DISPOSED (TYP.).

D6. CONCRETE HEADWALL WITH 18" OUTLET AND FLAPPER VALVE

D7. SPECIAL PROVISION (PERFORATED PVC PIPE (12") (TYP.)

D8. EXISTING STRUCTURE TO BE REMOVED AND PROPERLY DISPOSED.

D9. UNDERDRAIN FLUSHING BASIN

D10. CONNECT TWO EXISTING FOUNDATION DRAINS TO ONE NEW 4" PVC SDR 35 PIPE AND REROUTE AROUND PROPOSED RETAINING WALL. DAYLIGHT PIPE IN SIDE SLOPE ADJACENT TO DITCH. MAINTAIN MINIMUM PIPE SLOPE OF 1%.

D11. DITCH SHALL BE A STONE LINED SWALE (TYP.)

LEGEND

(D#) = DRAINAGE NOTES

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

vhb

PROJECT NAME: MIDDLEBURY	
PROJECT NUMBER: WCRS(23)	
FILE NAME: z13g542bdr_nul_drain.dgn	PLOT DATE: 4/30/2019
PROJECT LEADER: A.P. GUYETTE	DRAWN BY: M.F. SUFFEL
DESIGNED BY: J.M. DUFFY	CHECKED BY: R.E. MARVIN
DRAINAGE LAYOUT SHEET (3 OF 7)	SHEET 125 OF 328