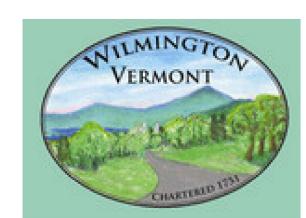
## TOWN OF WILMINGTON



COUNTY OF WINDHAM

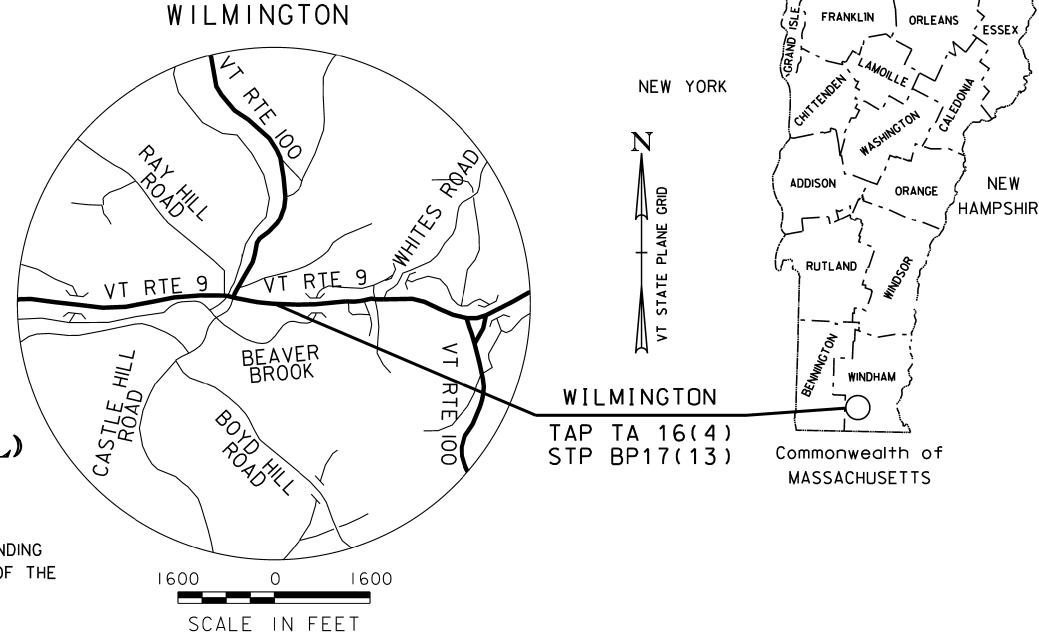
## PROPOSED IMPROVEMENTS

EAST MAIN STREET SIDEWALK (PRINCIPAL ARTERIAL) TAP TA 16(4) - STP BP17(13)

PROJECT LOCATION: BEGINNING AT A POINT ON VT ROUTE 9 ACROSS FROM THE INTERSECTION WITH BEAVER STREET, AND EXTENDING EASTERLY ALONG VT ROUTE 9 FOR APPROXIMATELY 1300 FEET UNTIL REACHING THE WESTERN APPROACH OF THE BRIDGE OVER BEAVER BROOK.

LENGTH OF PROJECT: 1,284 FT = 0.24 MILES

PROJECT DESCRIPTION: WORK TO BE PERFORMED UNDER THIS PROJECT INCLUDES REPLACING CONCRETE SIDEWALK, NEW GRANITE CURB, DRIVE IMPROVEMENTS, INSTALLING A NEW SEWER LINE, STREETSCAPE ENHANCEMENTS TO INCLUDE LANDSCAPING AND FLAGSTONE RETAINING WALLS, AS WELL AS NEW SIGNING AND STRIPING FOR CROSSWALKS.



BUREAU DIRECTOR :

SHEET I

PROJECT MANAGER : E.P. DETRICK, P.E.

PROJECT NAME : EAST MAIN STREET SIDEWALK

OF 37 SHEETS

PROJECT NUMBER : TAP TA 16 (4) -STP BP17 (13)

CANADA

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

QUALITY ASSURANCE PROGRAM: LEVEL 3

SURVEYED BY : VHB

SURVEYED DATE : DECEMBER 2016

DATUM

PLANS.

VERTICAL: NAVD 1988

HORIZONTAL: NAD 1983 (11)



SCALE IN FEET

#### INDEX OF SHEETS

I TITLE SHEET 2 INDEX OF SHEETS 3 CONVENTIONAL SYMBOLOGY LEGEND SHEET 4 GENERAL NOTES SHEET 5-7 DETAIL SHEETS 8-9 QUANTITY SUMMARY SHEETS IO TIE SHEET II ALIGNMENT DATA SHEET 12-14 LAYOUT PLAN SHEETS 15 UTILITY DETAIL SHEET 16-18 UTILITY LAYOUT PLAN SHEETS 19 SEWER PROFILE SHEET 20-21 RETAINING WALL PLAN SHEETS 22 TRAFFIC SIGN SUMMARY SHEET 23 TRAFFIC CONTROL NARRATIVE 24 CONSTRUCTION APPROACH SIGNING SHEET 25 EPSC NARRATIVE 26 EPSC DETAILS SHEET 27-37 CROSS SECTION SHEETS

#### VAOT STANDARDS

| B-7Ia          | SLOPE GRADING, EMBANKMENTS, MUCK<br>STANDARD FOR RESIDENTIAL DRIVES<br>STANDARD FOR COMMERCIAL DRIVES | 06-01-1994<br>04-07-2020<br>04-07-2020 |
|----------------|---|--|
| C-10<br>C-2A   | CURBING PORTLAND CEMENT CONCRETE SIDEWALK DRIVE ENTRANCES WITH SIDEWALK ADJACENT TO CURB              | 02-II-2008<br>I0-I4-2005               |
| C-2B           |   | 10-14-2005                             |
|                | SIDEWALK RAMPS SIDEWALK RAMPS AND MEDIAN ISLANDS  | 04-07-2020<br>04-07-2020               |
| C-3B           | SIDEWALK RAMPS AND MEDIAN ISLANDS   | 04-01-2020                             |
| E-10           | ROLLED EROSION CONTROL PRODUCT, TYPE I STABILIZED CONSTRUCTION ENTRANCE                               | 04-07-2020<br>04-07-2020               |
| E-14           |   | 04-07-2020                             |
| E-I2I<br>E-I9I | STANDARD SIGN PLACEMENT - CONVENTIONAL ROAD PAVEMENT MARKING DETAILS                                  | 08-08-1995<br>02-01-1999               |
| E-131          | PAVEMENT MARKING DETAILS  | 02-01-1999                             |
| T-I            |   | 04-25-2016                             |
| T-2<br>T-I0    |   | 04-07-2020<br>08-06-2012               |
|                | CONSTRUCTION SIGN DETAILS   | 08-06-2012                             |
| T-45           | SQUARE TUBE SIGN POST AND ANCHOR  | 01-02-2013                             |
|                | WORK ZONE TRAFFIC CONTROL DETAILS   |  |
|                | TEMPORARY CURB RAMPS  | 07-09-2017                             |
|                | PEDESTRIAN TRAFFIC CONTROL DEVICES  | 04-04-2018                             |

PROJECT NAME: EAST MAIN STREET SIDEWALK PROJECT NUMBER: TAP TA 16(4) - STP BP17(13)



FILE NAME: 57923IND.dgn
PROJECT LEADER: E.P. DETRICK
DESIGNED BY: C.K. FORD
INDEX OF SHEETS

PLOT DATE: 2/20/2020
DRAWN BY: C.K. FORD
CHECKED BY: E.P. DETRICK
SHEET 2 OF 37

#### 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.

#### D O W ADDDEVIATIONS (CODES) A SYMBOLS

| R. O. W.    | ABBREV | IATIONS (CODES) & SYMBOLS    |
|-------------|--------|------------------------------|
| POINT       | CODE   | DESCRIPTION                  |
|             | СН     | CHANNEL EASEMENT             |
|             | CONST  | CONSTRUCTION EASEMENT        |
|             | CUL    | CULVERT EASEMENT             |
|             | D&C    | DISCONNECT & CONNECT         |
|             | DIT    | DITCH EASEMENT               |
|             | DR     | DRAINAGE EASEMENT            |
|             | DRIVE  | DRIVEWAY EASEMENT            |
|             | EC     | EROSION CONTROL              |
|             | HWY    | HIGHWAY EASEMENT             |
|             | 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              |
| <b>(a)</b>  | IPNF   | IRON PIN FOUND               |
|             | IPNS   | IRON PIN TO BE SET           |
| $\boxtimes$ | CALC   | EXISTING ROW POINT           |
| $\circ$     | PROW   | PROPOSED ROW POINT           |
| [LENG       | TH]    | LENGTH CARRIED ON NEXT SHEET |
|             |        |                              |

| COMMON       | TOPOGR | RAPHIC POINT SYMBOLS      |
|--------------|--------|---------------------------|
| POINT        | CODE   | DESCRIPTION               |
| <b>(3)</b>   | APL    | BOUND APPARENT LOCATION   |
| •            | ВМ     | BENCHMARK                 |
| •            | BND    | BOUND                     |
|              | CB     | CATCH BASIN               |
| ø            | COMB   | COMBINATION POLE          |
|              | DITHR  | DROP INLET THROATED DNC   |
| ¢            | EL     | ELECTRIC POWER POLE       |
| 0            | FPOLE  | FLAGPOLE                  |
| $\odot$      | GASFIL | GAS FILLER                |
| $\odot$      | GP     | GUIDE POST                |
| M            | GSO    | GAS SHUT OFF              |
| 0            | GUY    | GUY POLE                  |
| 0            | GUYW   | GUY WIRE                  |
| M            | GV     | GATE VALVE                |
|              | Н      | TREE HARDWOOD             |
| $\triangle$  | HCTRL  | CONTROL HORIZONTAL        |
|              | HVCTRL | CONTROL HORIZ. & VERTICAL |
| $\Diamond$   | HYD    | HYDRANT                   |
| 0            | IP     | IRON PIN                  |
| <b>©</b>     | IPIPE  | IRON PIPE                 |
| ¢            | LI     | LIGHT - STREET OR YARD    |
| \$           | MB     | MAILBOX                   |
| 0            | MH     | MANHOLE (MH)              |
| •            | MM     | MILE MARKER               |
| Θ            | PM     | PARKING METER             |
| •            | PMK    | PROJECT MARKER            |
| o<br>        | POST   | POST STONE/WOOD           |
| <b>*</b>     | RRSIG  | RAILROAD SIGNAL           |
| <del>•</del> | RRSL   | RAILROAD SWITCH LEVER     |
|              | S      | TREE SOFTWOOD             |
| 0            | SAT    | SATELLITE DISH            |
| <b>(B)</b>   | SHRUB  | SHRUB                     |
| Ō            | SIGN   | SIGN                      |
| A            | STUMP  | STUMP                     |
| -⊙-          | TEL    | TELEPHONE POLE            |
| 0            | TIE    | TIE                       |
| 0 · 0        | TSIGN  | SIGN W/DOUBLE POST        |
| 人            | VCTRL  | CONTROL VERTICAL          |
| 0            | WELL   | WELL                      |
| M            | WSO    | WATER SHUT OFF            |
|              |        |                           |

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

### PROPOSED GEOMETRY CODES

| 1 101 031 | LD GLOMETINI CODES      |
|-----------|-------------------------|
| CODE      | DESCRIPTION             |
| PC        | POINT OF CURVATURE      |
| PI        | POINT OF INTERSECTION   |
| CC        | CENTER OF CURVE         |
| PT        | POINT OF TANGENCY       |
| PCC       | POINT OF COMPOUND CURVE |
| PRC       | POINT OF REVERSE CURVE  |
| POB       | POINT OF BEGINNING      |
| POE       | POINT OF ENDING         |
| STA       | STATION PREFIX          |
| АН        | AHEAD STATION SUFFIX    |
| BK        | BACK STATION SUFFIX     |
| D         | CURVE DEGREE OF (IOOFT) |
| R         | CURVE RADUIS OF         |
| Т         | CURVE TANGENT LENGTH    |
| L         | CURVE LENGTH OF         |
| E         | CURVE EXTERNAL DISTANCE |
|           |                         |

## UTILITY SYMBOLOGY UNDERGROUND UTILITIES — UGU — · · · - UTILITY (GENERIC-UNKNOWN) — UT — · · · - TELEPHONE — *UC* — · · - CABLE (TV) — UEC — · · - ELECTRIC+CABLE — UET — · · - - FI FCTRIC+TFI FPHONE — 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 O O O TOE OF FILL SLOPE 89 89 89 89 87 STONE FILL —-—-—-—-—- BOTTOM OF DITCH € ===: CULVERT PROPOSED ----- STRUCTURE SUBSURFACE

#### CONVENTIONAL BOUNDARY SYMBOLOGY

BF \*\* \* BF \*\* BARRIFR FFNCF

SHEET PILES

PDF———PDF——— PROJECT DEMARCATION FENCE

//////////// STRIPING LINE REMOVAL

## BOUNDARY LINES TOWN BOUNDARY LINE COUNTY LINE COUNTY BOUNDARY LINE - STATE BOUNDARY LINE — — — PROPOSED STATE R.O.W. (LIMITED ACCESS) — — PROPOSED STATE R.O.W. —— — STATE ROW —— — TOWN ROW — — PERMANENT EASEMENT LINE (P) - - - - - - - TEMPORARY EASEMENT LINE (T) + SURVEY LINE $\frac{P}{L}$ — PROPERTY LINE (P/L) <u>SR</u> SR SR SR SLOPE RIGHTS

4f — 4f — 4F PROPERTY BOUNDARY

HAZ ------ HAZ ARDOUS WASTE

#### EPSC LAYOUT PLAN SYMBOLOGY

EPSC MEASURES OMMOONMOONMO FILTER CURTAIN --- SILT FENCE □ □ X □ X □ X ■ 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 THREATENED & ENDANGERED SPECIES HAZ --- HAZ ARDOUS WASTE AREA ------ 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 —HISTORIC DISTRICT BOUNDARY 

#### CONVENTIONAL TOPOGRAPHIC SYMBOLOGY

HISTORIC STRUCTURE

EXISTING FEATURES ---- ROAD EDGE PAVEMENT ---- ROAD EDGE GRAVEL ---- DRIVEWAY EDGE ---- DITCH -----FOUNDATION ×——×——×—— FENCE (EXISTING) SARDEN RAILROAD TRACKS ============ CULVERT (EXISTING) ---- WALL WOOD LINE BRUSH LINE #EDGE = = = = = = BODY OF WATER EDGE LEDGE EXPOSED

PROJECT NAME: EAST MAIN STREET SIDEWALK PROJECT NUMBER: TAP TA 16(4) - STP BP17(13)

FILE NAME: 57923\_legend.dgn PROJECT LEADER: E.P. DETRICK DESIGNED BY: VTRANS

PLOT DATE: 2/20/2020 DRAWN BY: VTRANS CHECKED BY: E.P. DETRICK CONVENTIONAL SYMBOLOGY LEGEND SHEET SHEET 3 OF 37



## GENERAL NOTES

- I. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE STATE OF VERMONT AGENCY OF TRANSPORTATION'S STANDARD SPECIFICATIONS FOR CONSTRUCTION, DATED 2018, AND ITS LATEST REVISIONS, AND SUCH SPECIFICATIONS AND SPECIAL PROVISIONS AS ARE INCORPORATED IN THE FINAL CONTRACT DOCUMENTS.
- 2. PER ADA GUIDELINES, SIDEWALK CROSS SLOPES SHALL NOT EXCEED 2%.
- 3. ANY WASTE MATERIAL SHALL BE REMOVED AND HAULED TO A FACILITY PREVIOUSLY APPROVED BY THE VT DEC.

### CONSTRUCTION NOTES

- I. SAW CUTTING OF PAVEMENT AND SIDEWALK SHALL BE INCIDENTAL TO SPECIAL PROVISION (BITUMINOUS CONCRETE PAVEMENT, SMALL QUANTITY) AND PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH, RESPECTIVELY. NO SEPARATE PAYMENT WILL BE MADE.
- 2. REMOVAL OF EXISTING CONCRETE SIDEWALKS AND DRIVEWAY WILL BE PAID AS ITEM 203.16 SOLID ROCK EXCAVATION.
- 3. IN THE EVENT THAT SUSPECTED CONTAMINATED 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 RESIDENT ENGINEER IMMEDIATELY SO THAT THE APPROPRIATE TESTING AND SUBSEQUENT ACTION CAN BE TAKEN.
- 4. CONTRACTOR SHALL CONTROL STORMWATER RUNOFF DURING CONSTRUCTION AS PER THE ANR LOW RISK HANDBOOK FOR EROSION PREVENTION AND SEDIMENT CONTROL TO PREVENT ADVERSE IMPACTS TO OFF SITE AREAS, AND SHALL BE RESPONSIBLE TO REPAIR RESULTING DAMAGES, IF ANY, AT NO COST TO OWNER.
- 5. ALL EXISTING CURB WITHIN THE PROJECT LIMITS SHALL BE REMOVED AND REPLACED AS SHOWN IN PLANS. GRANITE CURB SHALL BE SALVAGED TO THE TOWN. CONCRETE CURB SHALL BE DISPOSED OF BY THE CONTRACTOR.
- 6. ALL DRIVE ENTRANCES SHALL EITHER BE TYPE 2 AS SHOWN ON STANDARD C-2A OR TYPE 6 AS SHOWN ON STANDARD C-2B. AS APPROPRIATE.
- 7. CONCRETE DRIVEWAY SHALL BE RECONSTRUCTED WITH CONCRETE, CLASS B.
  REINFORCING FOR CONCRETE DRIVE SHALL BE LEVEL I, EPOXY COATED, AND
  SHALL MEET THE REQUIREMENTS OF SECTION 507. PAYMENT FOR CONCRETE WILL
  BE MADE UNDER ITEM 541.25, "CONCRETE, CLASS B", AND PAYMENT FOR
  REINFORCING WILL BE MADE UNDER ITEM 507.11, "REINFORCING STEEL, LEVEL I".
- 8. SLOPE ROUNDING: ALL CUT SLOPES TO BE ROUNDED IN ACCORDANCE WITH STANDARD SHEET B 5.
- 9. REMOVAL OF THE EXISTING STONE WALL AT 36 EAST MAIN STREET SHALL BE PAID FOR UNDER ITEM 203.15 "COMMON EXCAVATION". RECONSTRUCTION OF THE WALL SHALL BE PAID FOR UNDER ITEM 602.20 "DRY MASONRY".
- IO. REMOVAL OF THE EXISTING CONCRETE STEPS AND HANDRAILS SHALL BE PAID FOR UNDER ITEM 203. 15 "COMMON EXCAVATION".

### RETAINING WALL NOTES:

- I. THE CONTRACTOR SHALL DESIGN AND FURNISH A DRY STACKED, FLAT FLAG STONE RETAINING WALL AND CONCRETE STEPS WITH HANDRAIL EXTENSIONS IN ACCORDANCE WITH THESE PLANS. SHOP DRAWINGS OF THE RETAINING WALL SHALL BE SUBMITTED TO THE RESIDENT ENGINEER FOR REVIEW AND APPROVAL. PLAN DETAILS ARE SHOWN FOR ESTIMATING PURPOSES ONLY.
- 2. END OF COPING NOT SHOWN ON PLAN AND ELEVATION VIEWS.
- 3. ACTUAL WALL ALIGNMENT AND LIMITS TO BE DETERMINED IN THE FIELD.
- 4. UTILITY POLES AND/OR OTHER FACILITIES REQUIRED WITHIN THE WALL LIMITS SHALL NOT BE DRIVEN OR AUGERED THROUGH GEOSYNTHETIC REINFORCEMENT. THE IMPACT OF UTILITY POLES AND/OR OTHER FACILITIES ON WALL REINFORCEMENT SHALL BE ADDRESSED IN THE WALL DESIGN.

## UTILITY NOTES

- I. THE LOCATIONS, SIZES, AND TYPES OF EXISTING UTILITIES ARE SHOWN AS AN APPROXIMATE REPRESENTATION ONLY. THE OWNER OR DESIGN ENGINEER HAVE NOT INDEPENDENTLY VERIFIED ALL OF THIS INFORMATION AS SHOWN ON THE PLANS. THE UTILITY INFORMATION SHOWN DOES NOT GUARANTEE THE ACTUAL EXISTENCE, SERVICEABILITY, OR OTHER DATA CONCERNING THE UTILITIES, NOR DOES IT GUARANTEE AGAINST THE POSSIBILITY THAT ADDITIONAL UTILITIES MAY BE PRESENT THAT ARE NOT SHOWN ON THE PLANS. PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL VERIFY AND DETERMINE THE EXACT LOCATIONS, SIZES, AND ELEVATIONS OF THE POINTS OF CONNECTIONS TO EXISTING UTILITIES AND, SHALL CONFIRM THAT THERE ARE NO INTERFERENCES WITH EXISTING UTILITIES AND THE PROPOSED UTILITY ROUTES, INCLUDING ROUTES WITHIN THE PUBLIC RIGHTS OF WAY.
- 2. WHERE AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, OR EXISTING CONDITIONS DIFFER FROM THOSE SHOWN SUCH THAT THE WORK CANNOT BE COMPLETED AS INTENDED, THE LOCATION, ELEVATION, AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED AND THE INFORMATION FURNISHED IN WRITING TO THE RESIDENT ENGINEER FOR THE RESOLUTION OF THE CONFLICT.
- 3. SET CATCH BASIN RIMS, AND INVERTS OF SEWERS, DRAINS, AND DITCHES IN ACCORDANCE WITH ELEVATIONS ON THE PLANS, CROSS SECTIONS AND DRAINAGE NOTES.
- 4. RIM ELEVATIONS FOR DRAIN AND SEWER MANHOLES, WATER VALVE COVERS, GAS GATES, ELECTRIC AND TELEPHONE PULL BOXES, AND MANHOLES, AND OTHER SUCH ITEMS, ARE APPROXIMATE AND SHALL BE SET/RESET AS FOLLOWS:

  A. PAVEMENTS AND CONCRETE SURFACES: FLUSH
  B. ALL SURFACES ALONG ACCESSIBLE ROUTES: FLUSH
  C. LANDSCAPE, LOAM AND SEED, AND OTHER EARTH SURFACE AREAS: ONE INCH ABOVE SURROUNDING AREA AND TAPER EARTH TO THE RIM ELEVATION.
- 5. ALL DRAINAGE AND SANITARY STRUCTURE INTERIOR DIAMETERS (4' MIN.) SHALL BE VERIFIED BY THE MANUFACTURER BASED ON THE PIPE CONFIGURATIONS SHOWN ON THESE PLANS AND LOCAL MUNICIPAL STANDARDS.
- 6. ALL CONNECTIONS BETWEEN PRECAST DRAINAGE STRUCTURES AND NEW DRAINAGE PIPES SHALL BE A BOOTED CONNECTION. CORING AND BOOTS WILL BE INCIDENTAL TO THE PIPE.
- 7. CONTRACTOR IS RESPONSIBLE FOR ADJUSTING ALL CURB STOPS, WATER VALVES, MANHOLES, & DRAINAGE STRUCTURES WITHIN THE PROJECT LIMITS TO THE FINAL GRADE ELEVATION.
- 8. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL BURIED AND AERIAL UTILITIES AND POLES PRIOR TO STARTING WORK. THE CONTRACTOR SHALL COORDINATE WITH ALL UTILITY OWNERS TO CONFIRM ACTUAL LOCATIONS PRIOR TO CONSTRUCTION.
- 9. ACT NO. 86 OF 1987 (30 VSA CHAPTER 86) ("DIG SAFE") REQUIRES THAT NOTICE BE GIVEN PRIOR TO MAKING AN EXCAVATION. IT IS SUGGESTED THAT THE CONTRACTOR TELEPHONE I-888-344-7233 AT LEAST 48 HOURS BEFORE, AND NOT MORE THAN 30 DAYS BEFORE, BEGINNING ANY EXCAVATION AT ANY LOCATION. NOTE THAT TOWN OF WILMINGTON AND VTRANS WILL NOT BE NOTIFIED BY DIG SAFE AND MUST BE CONTACTED SEPARATELY.
- IO. PROPOSED SEWER LINES RUN ADJACENT TO HEAVY TRUCK TRAFFIC. CONTRACTOR SHALL PROVIDE ADEQUATE PROTECTION TO ENSURE STABILITY OF THE ROAD DURING CONSTRUCTION OF SEWER MAIN.

### SURVEY NOTES

- I. THE EXISTING CONDITIONS SHOWN ON THIS PLAN ARE BASED UPON ACTUAL ON-THE-GROUND SURVEY PERFORMED BY VHB IN SEPTEMBER 2016.
- 2. BEARINGS SHOWN ARE BASED ON THE VERMONT STATE PLAN COORDINATE SYSTEM UTILIZING NAD83(2011), AS ESTABLISHED FROM OUR GPS OBSERVATIONS AT THE SITE.
- 3. CONTOURS (I' MINORS, 5' MAJORS) AND ELEVATIONS SHOWN ARE BASED UPON THE NAVD 1988 VERTICAL DATUM, ESTABLISHED FROM OUR GPS OBSERVATIONS AT THE SITE.
- 4. NO ATTEMPT WAS MADE TO IDENTIFY AND / OR LOCATE ANY EASEMENTS EXCEPT PUBLIC ROAD RIGHTS-OF-WAY AS SHOWN.
- 5. PARCEL LINES SHOWN ARE BASED SOLELY ON VCGI TAX PARCEL INFORMATION WITH THE ASSISTANCE OF THE TOWN OF WILMINGTON ONLINE TAX MAP.
- 6. RECORD OWNERSHIP INFORMATION SHOWN WAS PROVIDED BY THE TOWN OF WILMINGTON AND BOOK, PAGE, REFERENCES ARE TO THE WILMINGTON LAND RECORDS.
- 7. RIM ELEVATIONS SHOWN (S) ARE FROM ACTUAL GROUND SURVEY BY VHB IN DECEMBER OF 2016 AND INVERT ELEVATIONS SHOWN (P) ARE PER PLAN REF. NO. I

## RIGHT-OF-WAY NOTES:

BELOW IS A SUMMARY OF HOW ROUTE 9 IS DEPICTED:

- I. NO OFFICIAL ROW LAYOUT WAS FOUND FOR VERMONT ROUTE 9.
- 2. A THREE ROD RIGHT-OF-WAY WAS ASSUMED PER VERMONT 19 V.S.A. SECTION 32 AND PLAN REFERENCE 3.
- 3. THE ROW LOCATION WAS SET UTLIZING DATA COLLECTED BY VHB IN DECEMBER OF 2016 AND PLAN REF. NO. 3.
- 4. SAID PLAN WAS USED TO SET THE LOCATION OF BEGIN (PC) AND END (PT) OF CURVES.
- 5. THE SURVEYED CENTERLINE LOCATION OF TRAVELED WAY WAS USED TO CONSTRUCT TANGENTS AND CURVE GEOMETRY OF THE ALIGNMENT.
- 6. THE 4"X4" CONCRETE BOUND, AT THE SOUTH EAST OF THE BOYD PARCEL, MATCHED REASONABLY WELL AND WAS HELD AT THE WESTERLY END OF THE PROJECT.
- 7. NO IN-DEPTH ADJOINING DEED RESEARCH WAS PERFORMED WHICH MAY RESULT IN A DIFFERING SOLUTION OF RIGHT-OF-WAY LOCATION.

## PLAN REFERENCES

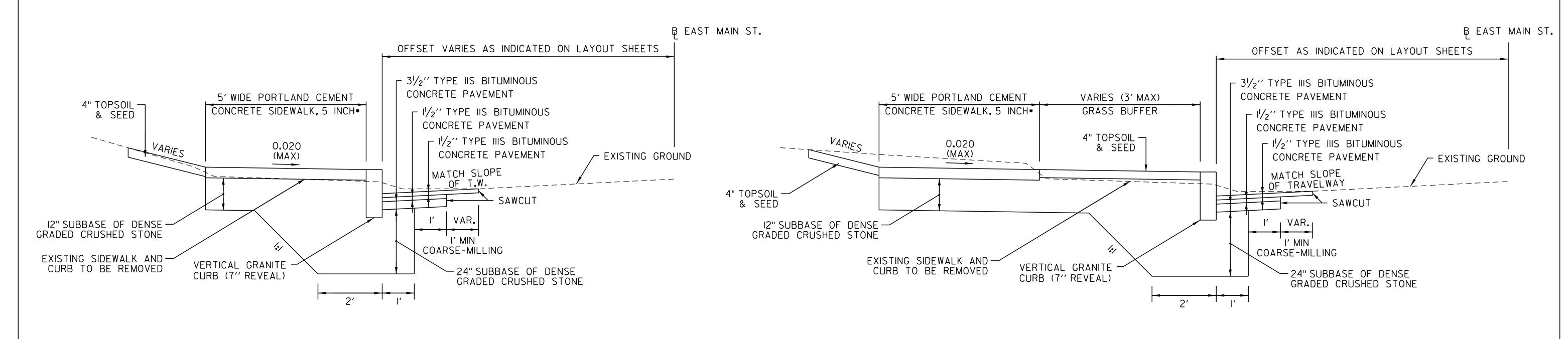
- I. "CONTRACT NO. 2 WASTEWATER COLLECTION SYSTEM WILMINGTON, VERMONT: "EAST & WEST MAIN STREET" PREPARED BY EBERHARD ENGINEERING, P.C. DATED JULY 1985. JOB NO. 8-3-2
- 2. "WILMINGTON WATER DISTRICT: DISTRIBUTION MAIN
  PLAN AND PROFILE"
  PREPARED BY HARRINGTON ENGINEERING, INC
  LAST REVISED OCTOBER 30TH, 1996. PROJECT NO. 1224
- 3. VTRANS RIGHT OW WAY PLAN VERMONT ROUTE 9
  "WILMINGTON VILLAGE MAIN STREET"
  PIN# 99R799, DATED DECEMBER 11TH, 1933

PROJECT NAME: EAST MAIN STREET SIDEWALK PROJECT NUMBER: TAP TA 16(4) - STP BP17(13)



FILE NAME: 57923\_Notes.dgn
PROJECT LEADER: E.P. DETRICK
DESIGNED BY: B.M. ROBERTS
GENERAL NOTES SHEET

PLOT DATE: 2/20/2020
DRAWN BY: B.M. ROBERTS
CHECKED BY: E.P. DETRICK
SHEET 4 OF 37



## CURB AND SIDEWALK ADJACENT TO ROAD

N.T.S.

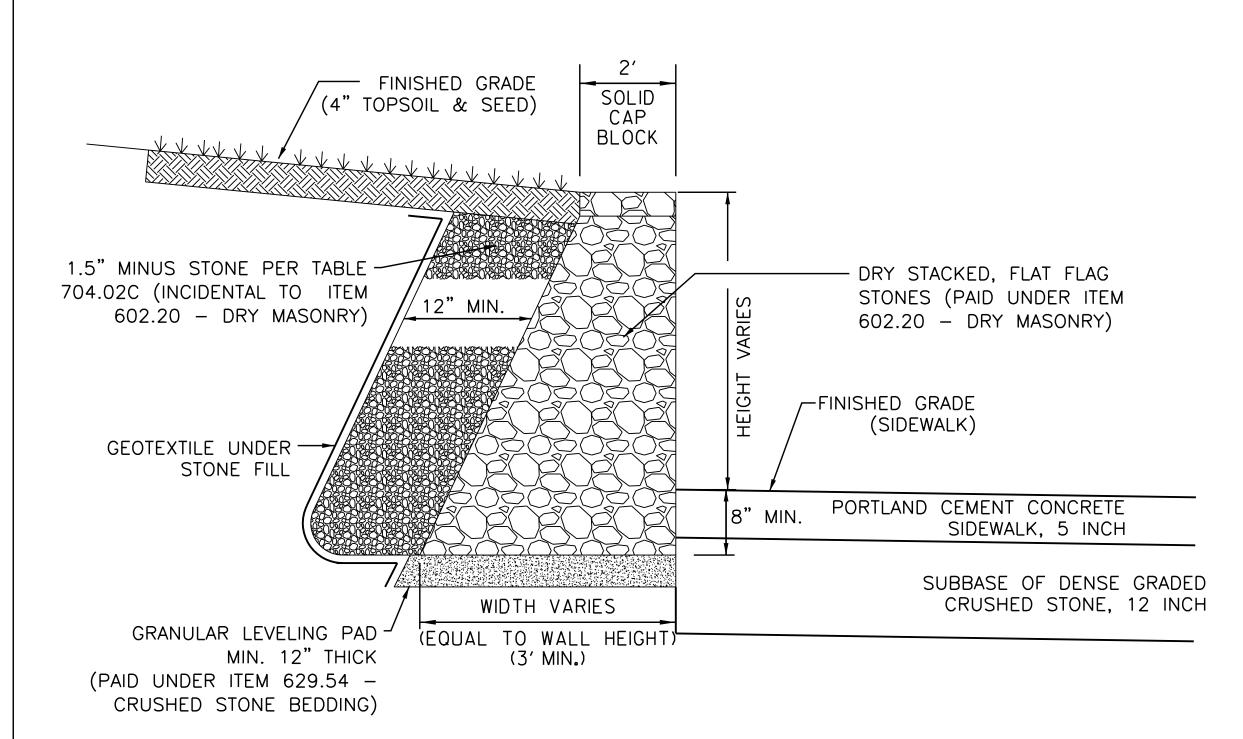
STA. I+30 - II+18, LT

STA. 6+30 - 6+77, RT

STA. 7+50 - 7+68, RT

STA. 13+65 - 13+93, RT STA. 14+03 - 14+14, LT

\*PORTLAND CEMENT CONCRETE SIDEWALK, 8 INCH SHALL BE USED AT COMMERCIAL DRIVES



# DRY STACKED STONE RETAINING WALL N.T.S.

## CURB AND SIDEWALK WITH GREEN STRIP

N.T.S. STA. II+I8 - I4+03, LT

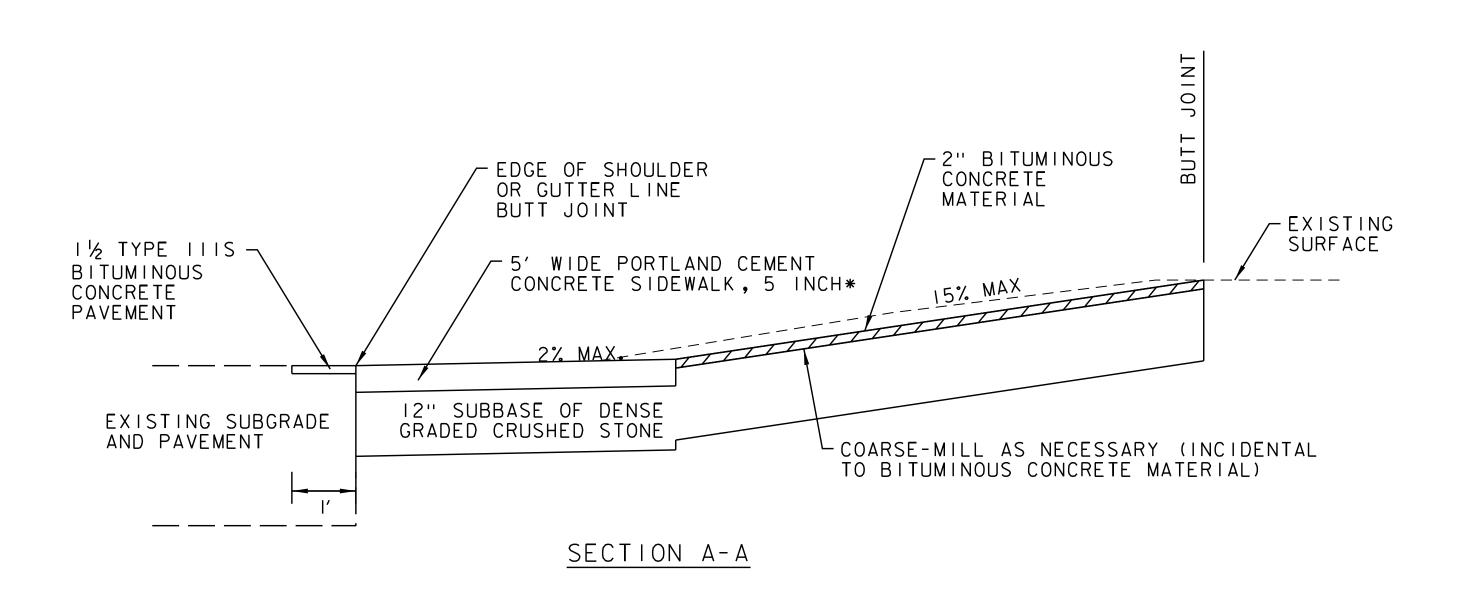
\*PORTLAND CEMENT CONCRETE SIDEWALK, 8 INCH SHALL BE USED AT COMMERCIAL DRIVES



PROJECT NAME: EAST MAIN STREET SIDEWALK PROJECT NUMBER: TAP TA 16(4) - STP BP17(13)

FILE NAME: 57923typ.dgn
PROJECT LEADER: E.P. DETRICK
DESIGNED BY: B.M. ROBERTS
DETAIL SHEET (LOF 3)

PLOT DATE: 2/20/2020
DRAWN BY: B.M. ROBERTS
CHECKED BY: E.P. DETRICK
SHEET 5 OF 37



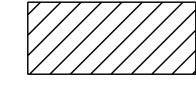
# HANDWORK DETAILS FOR PAVED DRIVES NOT TO SCALE

\*PORTLAND CEMENT CONCRETE SIDEWALK, 8 INCH SHALL BE USED AT COMMERCIAL DRIVES

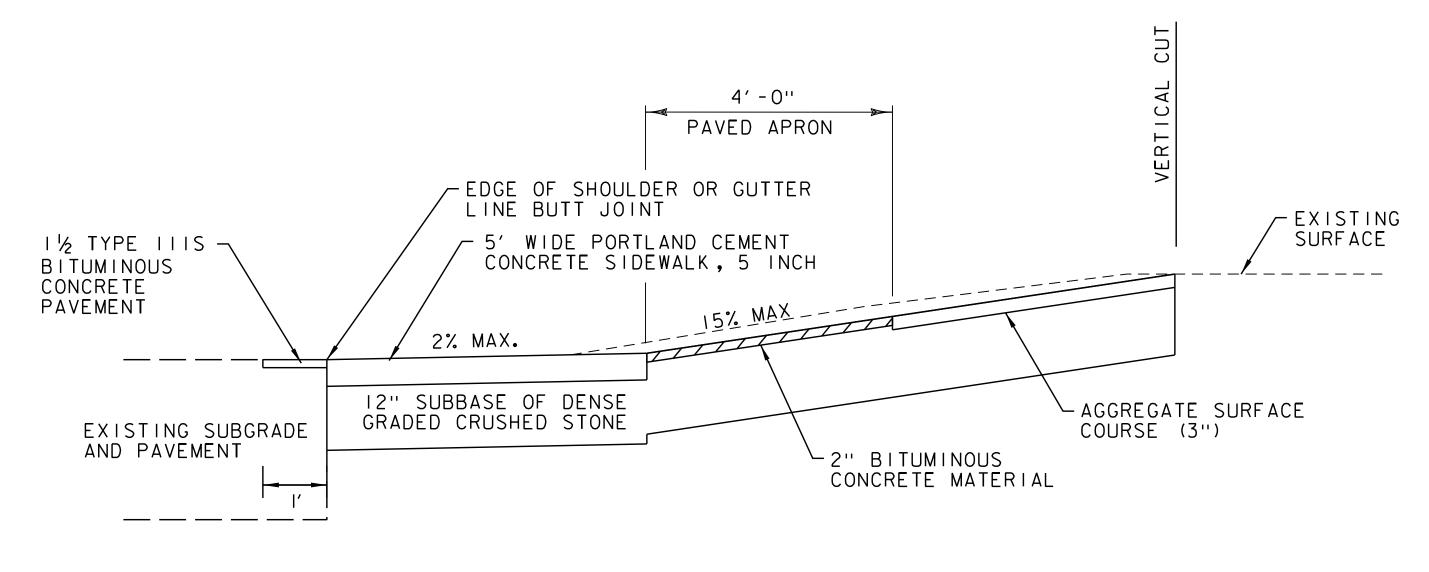
## NOTES

- I. PAVING LIFT NOT TO EXCEED TWO INCHES.
- 2. THE COST OF PLACING SUBBASE MATERIAL, CLEANING EXISTING PAVED SURFACES, INCLUDING POWER EQUIPMENT, AND FOR FILLING JOINTS, CRACKS AND HOLES WILL NOT BE PAID DIRECTLY BUT SHALL BE INCIDENTAL TO ITEM 406.38 "HAND-PLACED BITUMINOUS CONCRETE MATERIAL, DRIVES".
- 3. EXCAVATION OR FILL NEEDED TO ACHIEVE PROPER DRIVE SLOPES WILL BE PAID DIRECTLY UNDER THE APPROPRIATE PAY ITEMS.
- 4. WHEN GRADING DRIVES WHICH REQUIRE STEEP GRADES THE FOLLOWING RULE OF THUMB SHOULD BE USED. DO NOT EXCEED A GRADE % CHANGE OF MORE THAN 9% IN A 6' INCREMENT OF DRIVEWAY LENGTH.
- 5. DRIVES TO BE CONSTRUCTED PER VTRANS STANDARDS B-71a, B-71b, AND C-2A. SEE PLANS FOR MORE INFORMATION.
- 6. SAWCUTTING FOR DRIVES SHALL BE INCIDENTAL TO THE CONSTRUCTION OF THE DRIVE.

## LEGEND

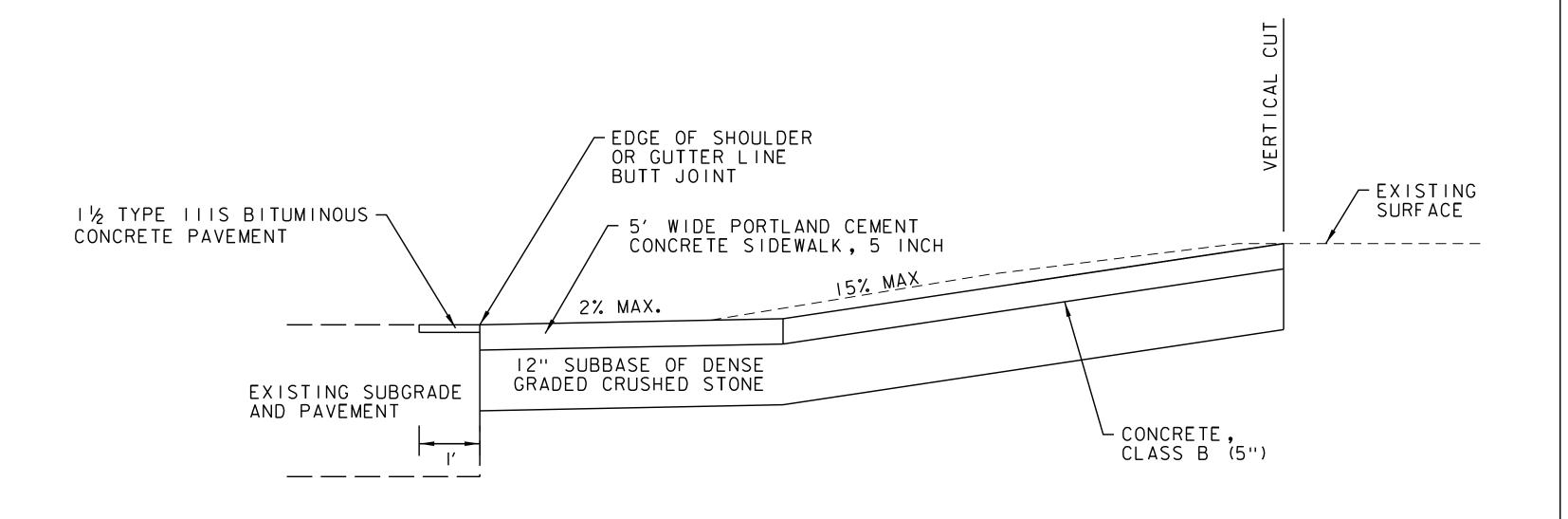


ITEM 406.38, HAND-PLACED BITUMINOUS CONCRETE MATERIAL, DRIVES



SECTION A-A

## HANDWORK DETAILS FOR GRAVEL DRIVES NOT TO SCALE

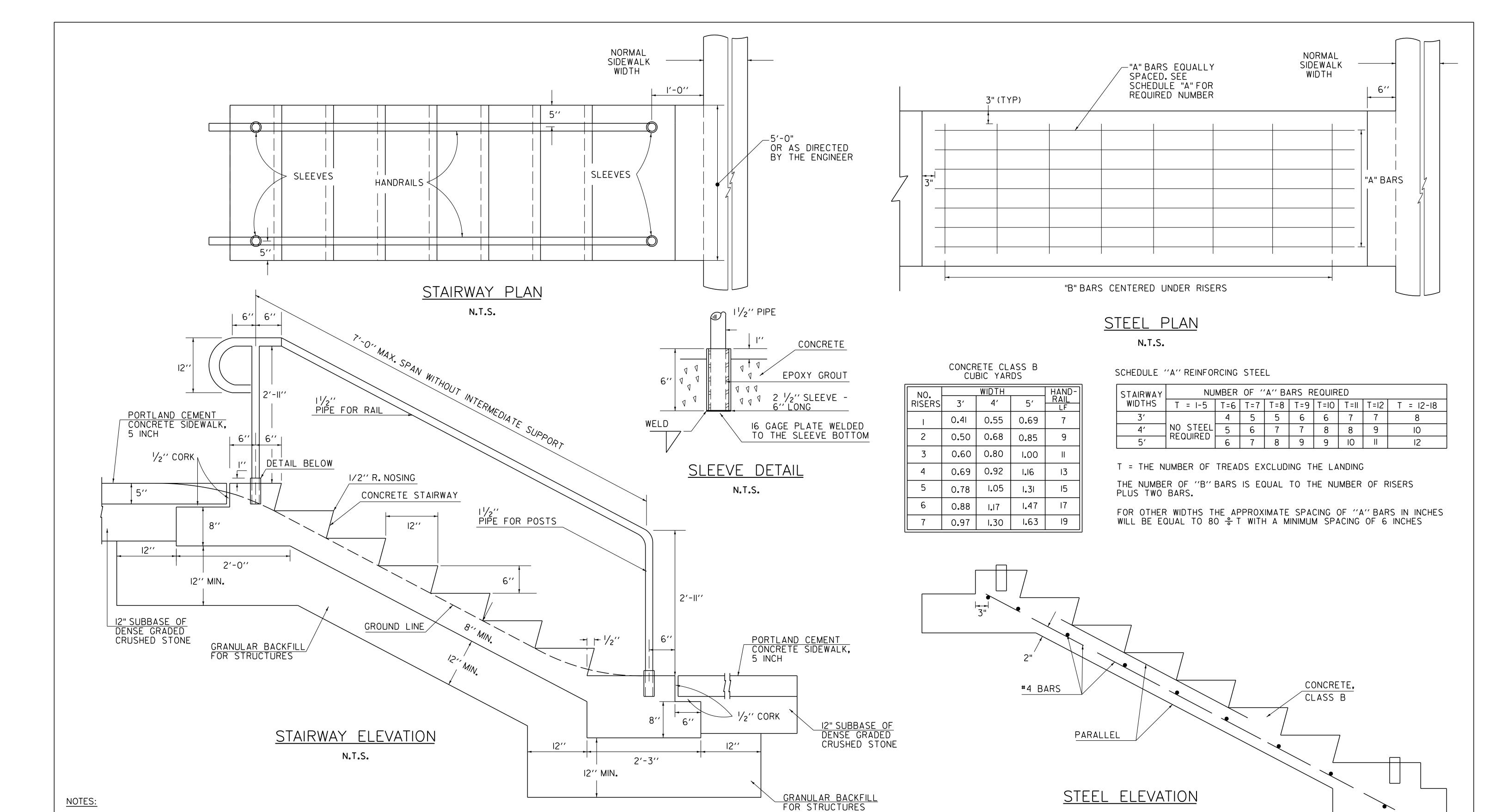


## HANDWORK DETAILS FOR CONCRETE DRIVES NOT TO SCALE

PROJECT NAME: EAST MAIN STREET SIDEWALK PROJECT NUMBER: TAP TA 16(4) - STP BP17(13)

FILE NAME: 57923typ.dgn
PROJECT LEADER: E.P. DETRICK
DESIGNED BY: B.M. ROBERTS
DETAIL SHEET (2 OF 3)

PLOT DATE: 2/20/2020
DRAWN BY: B.M. ROBERTS
CHECKED BY: E.P. DETRICK
SHEET 6 OF 37



- I. CONTRACTOR SHALL VERIFY NUMBER OF TREADS AND RISERS ON THE LAYOUT PLANS.
- 2. ALL WELDED JOINTS SHALL BE FINISHED BY GRINDING OR FILING TO GIVE A NEAT APPEARANCE.
- 3. RAIL AND POSTS TO BE STAINLESS STEEL. TWO RAILINGS ARE REQUIRED FOR ALL STEPS.
- 4. ALL COSTS ASSOCIATED WITH FABRICATION AND INSTALLATION OF RAILINGS SHALL BE INCIDENTAL TO ITEM 900.645, SPECIAL PROVISION (CONCRETE STEPS WITH HANDRAIL EXTENSIONS).
- 5. EXCAVATION FOR STAIRS SHALL BE PAID FOR UNDER ITEM 203. 15, COMMON EXCAVATION.
- 6. CONCRETE SHALL BE CLASS B, AND MEET THE REQUIREMENTS OF SECTION 541 FOR CLASS B CONCRETE. PAYMENT FOR CONCRETE SHALL BE INCIDENTAL TO CONCRETE STEPS.
- 7. ALL REINFORCING IN THE STAIRS SHALL BE UNCOATED NO. 4 BARS AND SHALL MEET THE REQUIREMENTS OF SECTION 507 FOR LEVEL I REINFORCING. CLEAR COVER SHALL BE 3" UNLESS OTHERWISE NOTED. PAYMENT FOR REINFORCING SHALL BE INCIDENTAL TO CONCRETE STEPS.



FILE NAME: 57923typ.dgn
PROJECT LEADER: E.P. DETRICK
DESIGNED BY: B.M. ROBERTS
DETAIL SHEET (3 OF 3)

N.T.S.

PLOT DATE: 2/20/2020
DRAWN BY: B.M. ROBERTS
CHECKED BY: E.P. DETRICK
SHEET 7 OF 37

# **QUANTITY SHEET 1**

| SUMMARY OF ESTIMATED QUANTITIES  1012 - 1012 |                   |                        | TOTALS                 | DESCRIPTIONS   | DETAILED SUMMARY OF QUANTITIES |                       |  |
|--|-------------------|------------------------|------------------------|--|--------------------------------|-----------------------|--|
|  | 1011 -<br>ROADWAY | ROADWAY (NO<br>FEDERAL | GRAND TOTAL FINAL UNIT | ITEMS  | ITEM NUMBER ROUND              | QUANTITIES UNIT ITEMS |  |
|  | 1                 |                        | 1 LS                   | CLEARING AND GRUBBING, INCLUDING INDIVIDUAL TREES AND STUMPS | 201.10                         |                       |  |
|  | 660               |                        | 660 CY                 | COMMON EXCAVATION  | 203.15                         |                       |  |
|  | 115               |                        | 115 CY                 | SOLID ROCK EXCAVATION  | 203.16                         |                       |  |
|  | 25                | 260                    | 285 CY                 | EARTH BORROW   | 203.30                         |                       |  |
|  |                   | 250                    | 250 CY                 | SAND BORROW  | 203.31                         |                       |  |
|  |                   | 150                    | 150 CY                 | GRANULAR BORROW  | 203.32                         |                       |  |
|  | 340               | 970                    | 1310 CY                | TRENCH EXCAVATION OF EARTH                                   | 204.20                         |                       |  |
|  |                   | 40                     | 40 CY                  | TRENCH EXCAVATION OF ROCK                                    | 204.21                         |                       |  |
|  | 1                 | 1                      | 2 CY                   | TRENCH EXCAVATION OF EARTH, EXPLORATORY (N.A.B.I.)           | 204.22                         |                       |  |
|  | 200               |                        | 200 CY                 | GRANULAR BACKFILL FOR STRUCTURES                             | 204.30                         |                       |  |
|  | 130               |                        | 130 SY                 | COARSE-MILLING, BITUMINOUS PAVEMENT                          | 210.10                         |                       |  |
|  | 680               | 80                     | 760 CY                 | SUBBASE OF DENSE GRADED CRUSHED STONE                        | 301.35                         |                       |  |
|  | 15                |                        | 15 CY                  | AGGREGATE SURFACE COURSE                                     | 401.10                         |                       |  |
|  | 3                 | 1                      | 4 CWT                  | EMULSIFIED ASPHALT   | 404.65                         |                       |  |
|  | 170               | 25                     | 195 SY                 | HAND-PLACED BITUMINOUS CONCRETE MATERIAL, DRIVES             | 406.38                         |                       |  |
|  | 280               |                        | 280 LB                 | REINFORCING STEEL, LEVEL I                                   | 507.11                         |                       |  |
|  | 8                 |                        | 8 CY                   | CONCRETE, CLASS B  | 541.25                         |                       |  |
|  | 150               |                        | 150 CY                 | DRY MASONRY  | 602.20                         |                       |  |
|  |                   | 6                      | 6 EACH                 | SANITARY SEWER MANHOLE                                       | 604.22                         |                       |  |
|  | 6                 |                        | 6 EACH                 | CHANGING ELEVATION OF DROP INLETS, CATCH BASINS, OR MANHOLES | 604.40                         |                       |  |
|  | 1125              |                        | 1125 LF                | VERTICAL GRANITE CURB  | 616.21                         |                       |  |
|  |                   | 100                    | 100 LF                 | CAST-IN-PLACE CONCRETE CURB, TYPE B                          | 616.28                         |                       |  |
|  | 1120              | 100                    | 1220 LF                | REMOVAL OF EXISTING CURB                                     | 616.41                         |                       |  |
|  |                   | 1                      | 1 EACH                 | REMOVE AND RESET MAILBOX, SINGLE SUPPORT                     | 617.10                         |                       |  |
|  | 750               | 30                     | 780 SY                 | PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH                    | 618.10                         |                       |  |
|  | 35                |                        | 35 SY                  | PORTLAND CEMENT CONCRETE SIDEWALK, 8 INCH                    | 618.11                         |                       |  |
|  | 58                | 10                     | 68 SF                  | DETECTABLE WARNING SURFACE                                   | 618.30                         |                       |  |
|  | 2                 |                        | 2 EACH                 | REMOVING AND RESETTING PROPERTY MARKERS                      | 619.20                         |                       |  |
|  | 75                |                        | 75 LF                  | REMOVING AND RESETTING FENCE                                 | 620.50                         |                       |  |
|  |                   | 35                     | 35 LF                  | SLEEVES FOR UTILITIES (10")(SCH 80 PVC)                      | 625.10                         |                       |  |
|  |                   | 45                     | 45 LF                  | SLEEVES FOR UTILITIES (12")(SCH 80 PVC)                      | 625.10                         |                       |  |
|  |                   | 245                    | 245 LF                 | PVC SEWER PIPE (4")  | 628.35                         |                       |  |
|  |                   | 590                    | 590 LF                 | PVC SEWER PIPE (8")  | 628.35                         |                       |  |
|  |                   | 1                      | 1 LS                   | TRANSFER TO NEW SYSTEM, SANITARY SEWER                       | 628.42                         |                       |  |
|  | 1                 |                        | 1 EACH                 | RELOCATE HYDRANT   | 629.29                         |                       |  |
|  | 85                |                        | 85 TON                 | CRUSHED STONE BEDDING  | 629.54                         |                       |  |
|  | 200               |                        | 200 HR                 | FLAGGERS   | 630.15                         |                       |  |
|  | 1                 |                        | 1 LS                   | MOBILIZATION/DEMOBILIZATION                                  | 635.11                         |                       |  |
|  | 1                 |                        | 1 LS                   | TRAFFIC CONTROL, ALL-INCLUSIVE                               | 641.11                         |                       |  |
|  | 70                |                        | 70 LF                  | CROSSWALK MARKING, WATERBORNE PAINT                          | 646.311                        |                       |  |



PROJECT NAME: EAST MAIN STREET SIDEWALK PROJECT NUMBER: TAP TA 16(4) - STP BP17(13)

FILE NAME: 57923\_qss.dgn
PROJECT LEADER: E.P.DETRICK
DESIGNED BY: C.K.FORD
QUANTITY SUMMARY SHEET (LOF 2)

PLOT DATE: 2/20/2020
DRAWN BY: C.K.FORD
CHECKED BY: E.P.DETRICK
SHEET 8 OF 37

# **QUANTITY SHEET 2**

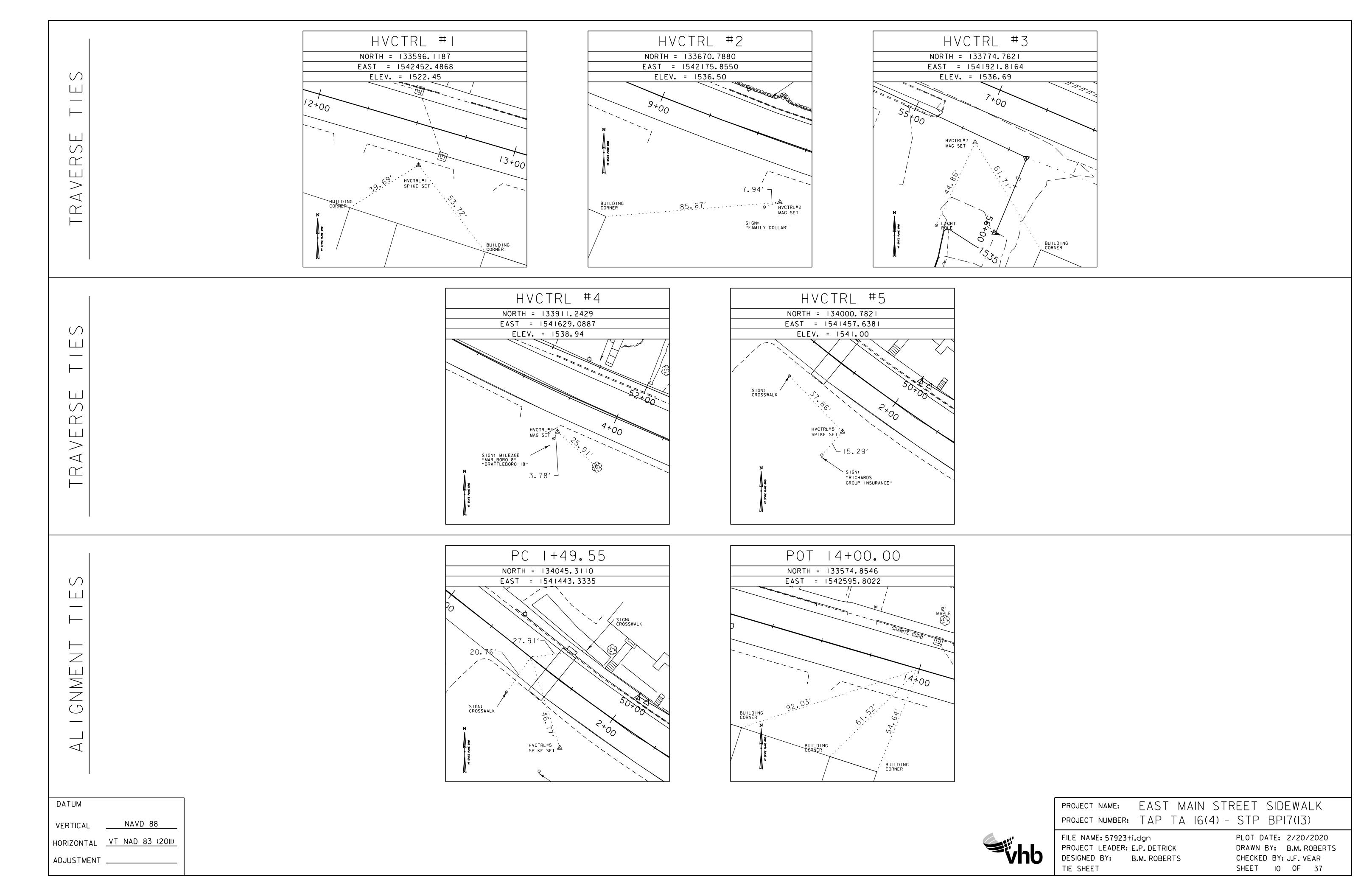
|  | SUM | MMARY OF ES | STIMATED QUANTITIES |                   |                                  | TOTALS      |            | DESCRIPTIONS   |             |       | DETAILED SUMMARY OF QUANTITIES |                           |  |  |
|--|-----|-------------|---------------------|-------------------|----------------------------------|-------------|------------|--|-------------|-------|--------------------------------|---------------------------|--|--|
|  |     |             |                     | 1011 -<br>ROADWAY | 1012 -<br>ROADWAY (NO<br>FEDERAL | GRAND TOTAL | FINAL UNIT | ITEMS  | ITEM NUMBER | ROUND | QUANTITIES UNIT                | ITEMS                     |  |  |
|  |     |             |                     | 35                | 5                                | 40          | LB         | SEED   | 651.15      |       |                                |                           |  |  |
|  |     |             |                     | 145               | 5                                | 150         | LB         | FERTILIZER   | 651.18      |       |                                |                           |  |  |
|  |     |             |                     | 1                 | 0.1                              | 1.1         | TON        | AGRICULTURAL LIMESTONE   | 651.20      |       |                                |                           |  |  |
|  |     |             |                     | 80                | 5                                | 85          | CY         | TOPSOIL  | 651.35      |       |                                |                           |  |  |
|  |     |             |                     | 1                 | 0.1                              | 1.1         | TON        | HAYMULCH   | 653.10      |       |                                |                           |  |  |
|  |     |             |                     | 8                 |                                  | 8           | EACH       | INLET PROTECTION DEVICE, TYPE II                                       | 653.41      |       |                                |                           |  |  |
|  |     |             |                     | 1350              |                                  | 1350        | LF         | PROJECT DEMARCATION FENCE  | 653.55      |       |                                |                           |  |  |
|  |     |             |                     | 1                 |                                  | 1           | LS         | TREE PROTECTION  | 656.85      |       |                                |                           |  |  |
|  |     |             |                     | 36                |                                  | 36          | SF         | TRAFFIC SIGN, TYPE A   | 675.20      |       |                                |                           |  |  |
|  |     |             |                     | 105               |                                  | 105         | LF         | SQUARE TUBE SIGN POST AND ANCHOR                                       | 675.341     |       |                                |                           |  |  |
|  |     |             |                     | 9                 |                                  | 9           | EACH       | REMOVING SIGNS   | 675.50      |       |                                |                           |  |  |
|  |     |             |                     | 6                 |                                  | 6           | EACH       | RESETTING SIGNS  | 675.60      |       |                                |                           |  |  |
|  |     |             |                     |                   | 2                                | 2           |            | SPECIAL PROVISION (REBUILD STONE WALKWAY)                              | 900.620     |       |                                |                           |  |  |
|  |     |             |                     |                   | 1                                | 1           | LS         | SPECIAL PROVISION (REBUILD WOODEN HANDICAP RAMP)                       | 900.645     |       |                                |                           |  |  |
|  |     |             |                     | 1                 |                                  | 1           | LS         | SPECIAL PROVISION (CONCRETE STEPS WITH HAND RAIL EXTENSIONS)(STA 1+84) | 900.645     |       |                                |                           |  |  |
|  |     |             |                     | 2                 |                                  | 2           | LS         | SPECIAL PROVISION  | 900.645     |       |                                |                           |  |  |
|  |     |             |                     | 1                 |                                  | 1           | LS         | SPECIAL PROVISION (REMOVE AND RESET SIGN AND PLANTER)                  | 900.645     |       |                                |                           |  |  |
|  |     |             |                     | 105               | 40                               | 145         |            | SPECIAL PROVISION (BITUMINOUS CONCRETE PAVEMENT, SMALL QUANTITY)       | 900.680     |       |                                |                           |  |  |
|  |     |             |                     |                   |                                  |             |            |  |             |       |                                |                           |  |  |
|  |     |             |                     |                   |                                  |             |            |  |             |       |                                |                           |  |  |
|  |     |             |                     |                   |                                  |             |            |  |             |       |                                |                           |  |  |
|  |     |             |                     |                   |                                  |             |            |  |             |       |                                |                           |  |  |
|  |     |             |                     |                   |                                  |             |            |  |             |       |                                |                           |  |  |
|  |     |             |                     |                   |                                  |             |            |  |             |       |                                |                           |  |  |
|  |     |             |                     |                   |                                  |             |            |  |             |       |                                |                           |  |  |
|  |     |             |                     |                   |                                  |             |            |  |             |       |                                |                           |  |  |
|  |     |             |                     |                   |                                  |             |            |  |             |       |                                |                           |  |  |
|  |     |             |                     |                   |                                  |             |            |  |             |       |                                |                           |  |  |
|  |     |             |                     |                   |                                  |             |            |  |             |       |                                |                           |  |  |
|  |     |             |                     |                   |                                  |             |            |  |             |       |                                |                           |  |  |
|  |     |             |                     |                   |                                  |             |            |  |             |       |                                |                           |  |  |
|  |     |             |                     |                   |                                  |             |            |  |             |       |                                |                           |  |  |
|  |     |             |                     |                   |                                  |             |            |  |             |       |                                |                           |  |  |
|  |     |             |                     |                   |                                  |             |            |  |             |       |                                |                           |  |  |
|  |     |             |                     |                   |                                  |             |            |  |             |       |                                |                           |  |  |
|  |     |             |                     |                   |                                  |             |            |  |             |       |                                |                           |  |  |
|  |     |             |                     |                   |                                  |             |            |  |             |       |                                |                           |  |  |
|  |     |             |                     |                   |                                  |             |            |  |             |       |                                |                           |  |  |
|  |     |             |                     |                   |                                  |             |            |  |             |       |                                |                           |  |  |
|  |     |             |                     |                   |                                  |             |            |  |             |       |                                |                           |  |  |
|  |     |             |                     |                   |                                  |             |            |  |             |       |                                |                           |  |  |
|  |     |             |                     | <br>              |                                  |             | •          |  |             |       |                                | TACT MAIN CIDELT CIDEMALK |  |  |



PROJECT NAME: EAST MAIN STREET SIDEWALK PROJECT NUMBER: TAP TA 16(4) - STP BP17(13)

FILE NAME: 57923\_qss.dgn
PROJECT LEADER: E.P.DETRICK
DESIGNED BY: C.K.FORD
QUANTITY SUMMARY SHEET (LOF 2)

PLOT DATE: 2/20/2020
DRAWN BY: C.K.FORD
CHECKED BY: E.P.DETRICK
SHEET 9 OF 37



PROJECT NAME: 57923.00

DESCRIPTION: WILMINGTON SW PROJECT NAME: 57923.00 DESCRIPTION: WILMINGTON SW HORIZONTAL ALIGNMENT NAME: 57923.00 HORIZONTAL ALIGNMENT NAME: PR\_SEWER DESCRIPTION: WILMINGTON SW DESCRIPTION: STYLE: DEFAULT STYLE: ALIGNI STATION NORTHING EASTING STATION NORTHING EASTING ELEMENT: LINEAR ELEMENT: LINEAR 50+00.00 50+05.00 134026.0205 1541496.2778 0+00.00 134138.3337 1541326.2310 1+49.55 134023.4464 1541500.5643 134045.3110 1541443.3335 37) 2) PI ( TANGENT DIRECTION: S 59°00′53. II" E TANGENT DIRECTION: S 51°32′14.78" E TANGENT LENGTH: TANGENT LENGTH: 149.55 ELEMENT: CIRCULAR ELEMENT: LINEAR 

 1+49.55
 134045.3110
 1541443.3335

 2+75.00
 133967.2828
 1541541.5600

 134769.5996
 1542018.6864

 3+98.93
 133918.2344
 1541657.0204

 PI ( 37) 134023.4464 1541500.5643 PC ( 50+05.00 133964.8875 1541598.0796 38) 51+18.75 PI ( CC ( TANGENT DIRECTION: S 59°00′53. II'' E 113.75 PT ( 6) TANGENT LENGTH: 925.00 RADIUS: 15°26′47.15" LEFT ELEMENT: LINEAR DELTA: 133964.8875 1541598.0796 DEGREE OF CURVATURE (ARC): 51+18.75 6° 11′ 38. 90′′ LENGTH: 249.37 39) 54+25.05 133845.2228 1541880.0447 TANGENT DIRECTION: S 67°00' 13.84" E TANGENT: 125.45 CHORD: TANGENT LENGTH: MIDDLE ORDINATE: EXTERNAL: 8.39 ELEMENT: LINEAR 8.47 TANGENT DIRECTION: RADIAL DIRECTION: 133845.2228 1541880.0447 PI ( 54+25.05 S 51°32′14.78" E 133806.4503 1541863.3959 S 38°27′45.22" W 40) 54+67.25 CHORD DIRECTION: S 59° 15′ 38. 35" E S 23° 14′ 19. 14'' W TANGENT DIRECTION: RADIAL DIRECTION: S 23°00′58.07" W 42.20 TANGENT LENGTH: TANGENT DIRECTION: S 66°59′01.93" E ELEMENT: LINEAR 54+67.25 133806.4503 1541863.3959 ELEMENT: LINEAR 133767.2575 1541947.3028 55+59.86 PT ( 3+98.93 133918.2344 1541657.0204 PI ( 4I) S 64°57′46.11" E 133735.3831 1542087.4541 TANGENT DIRECTION: 3) 8+66.59 TANGENT DIRECTION: S 66°59′01.93" E TANGENT LENGTH: 92.61 TANGENT LENGTH: 467.66 ELEMENT: LINEAR PI ( 41) 55+59.86 133767.2575 1541947.3028 ELEMENT: CIRCULAR 133735.38311542087.4541133697.60221542176.3907135254.03461542732.5880133670.46081542269.1293 133730.2020 1541931.8766 56+00.00 POE ( 42) PC ( 8+66.59 TANGENT DIRECTION: S 22°36′06.87" W 9+63.22 PI ( TANGENT LENGTH: 40.14 7) 10+59.62 PΤ 8) 1650.00 RADIUS: DELTA: 6°42′11.35" LEFT DEGREE OF CURVATURE (ARC): 3°28′20.90′′ LENGTH: 193.04 TANGENT: 96.63 CHORD: 192.93 MIDDLE ORDINATE: 2.82 EXTERNAL:

TANGENT DIRECTION:

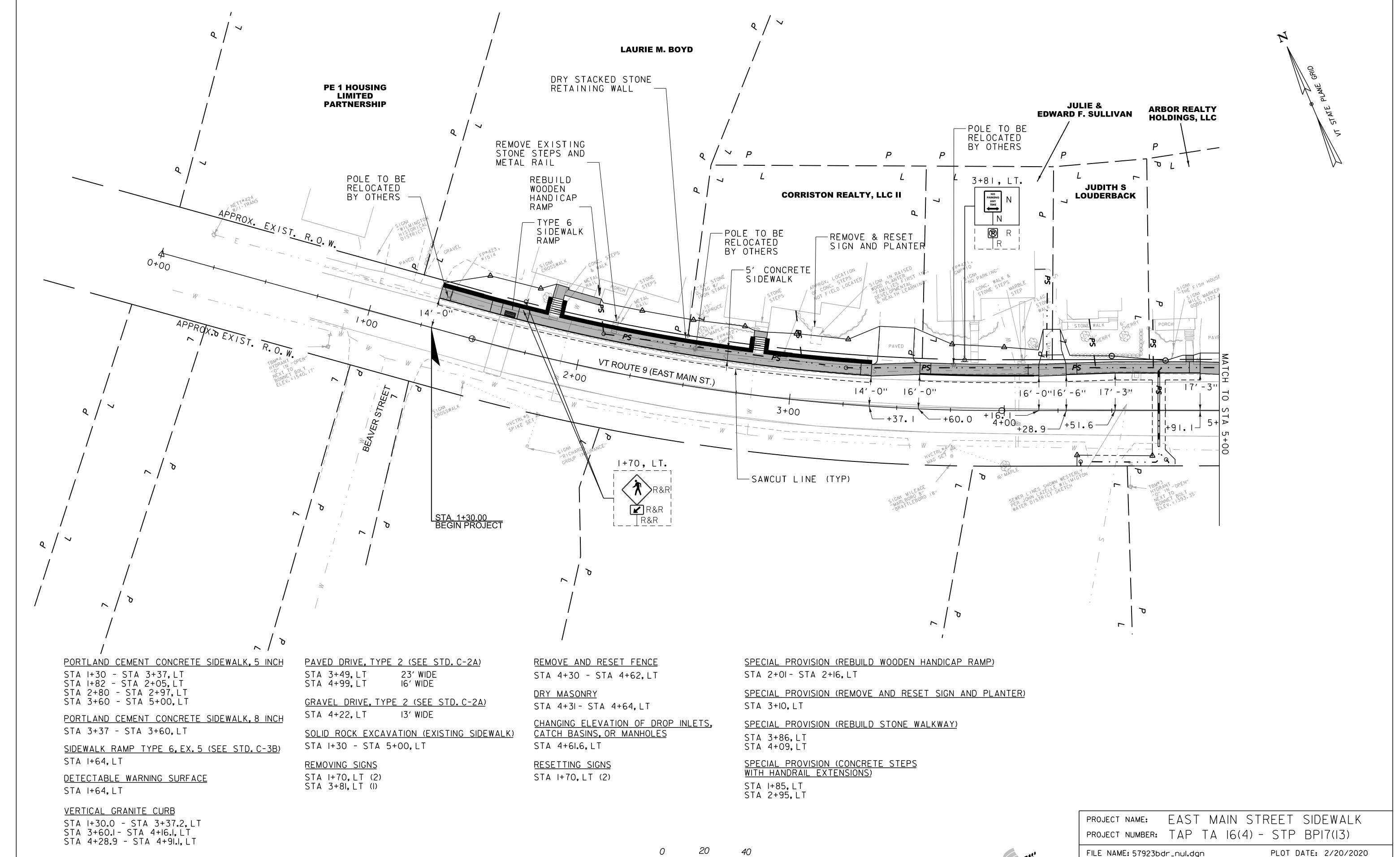
RADIAL DIRECTION:

CHORD DIRECTION:

RADIAL DIRECTION: S 66°59′01.93" E S 23°00′58.07" W S 70°20′07.61" E 50+00 S 16°18′46.72" W 93 TANGENT DIRECTION: S 73°41′13.28" E ELEMENT: LINEAR 10+59.62 133670.4608 1542269.1293 STA 50+05.00 15+00.00 133546.7662 1542691.7763 TANGENT DIRECTION: S 73°41′13.28" E 0+00 440.38 TANGENT LENGTH: 1+00 POE 15+00.00 PROPOSED, SEWER 3+00 53+00 4+00 54+00 5+00 6+00 CURVE (I) 7+00 VT ROUTE 9 (EAST MAIN ST.) 8+00 DELTA = 15°26′47" 55+00 9+00 15+00 D = 6° II′ 39" 12+00 13+00 14+00 10+00 11+00 R = 925.00'6 T = 125.45'00 L = 249.37'STA 56+00.00 CURVE (2) E = 8.47'DELTA = 6°42'11''D = 3°28′21" R = 1650.00'T = 96.63'L = 193.04'EAST MAIN STREET SIDEWALK PROJECT NAME: E = 2.83'PROJECT NUMBER: TAP TA 16(4) - STP BP17(13) FILE NAME: 57923\_ali\_data.dgn PLOT DATE: 2/20/2020 PROJECT LEADER: E.P. DETRICK DRAWN BY: C.K. FORD DESIGNED BY: C.K. FORD CHECKED BY: E.P. DETRICK

ALIGNMENT DATA SHEET

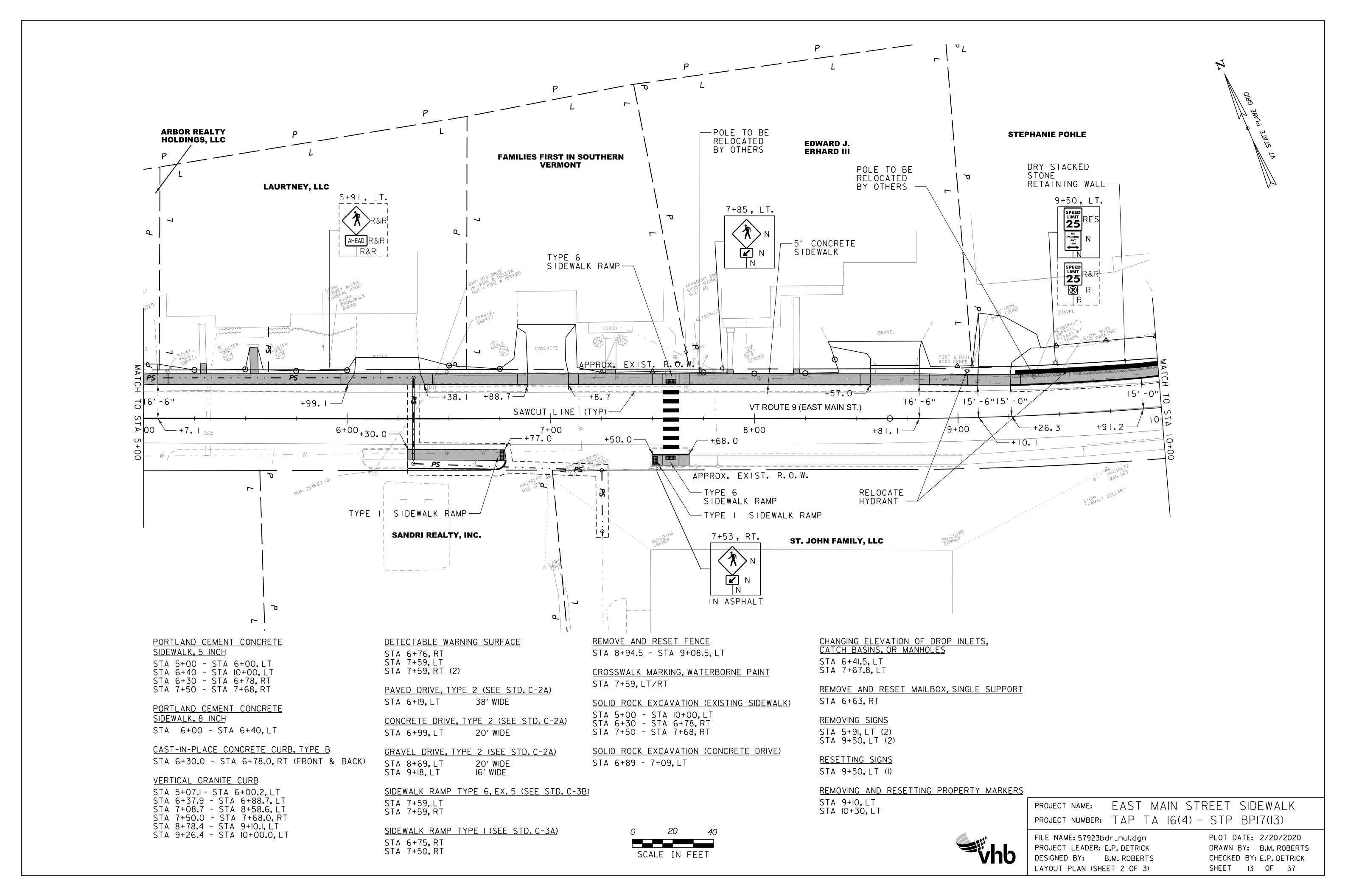
SHEET II OF 37

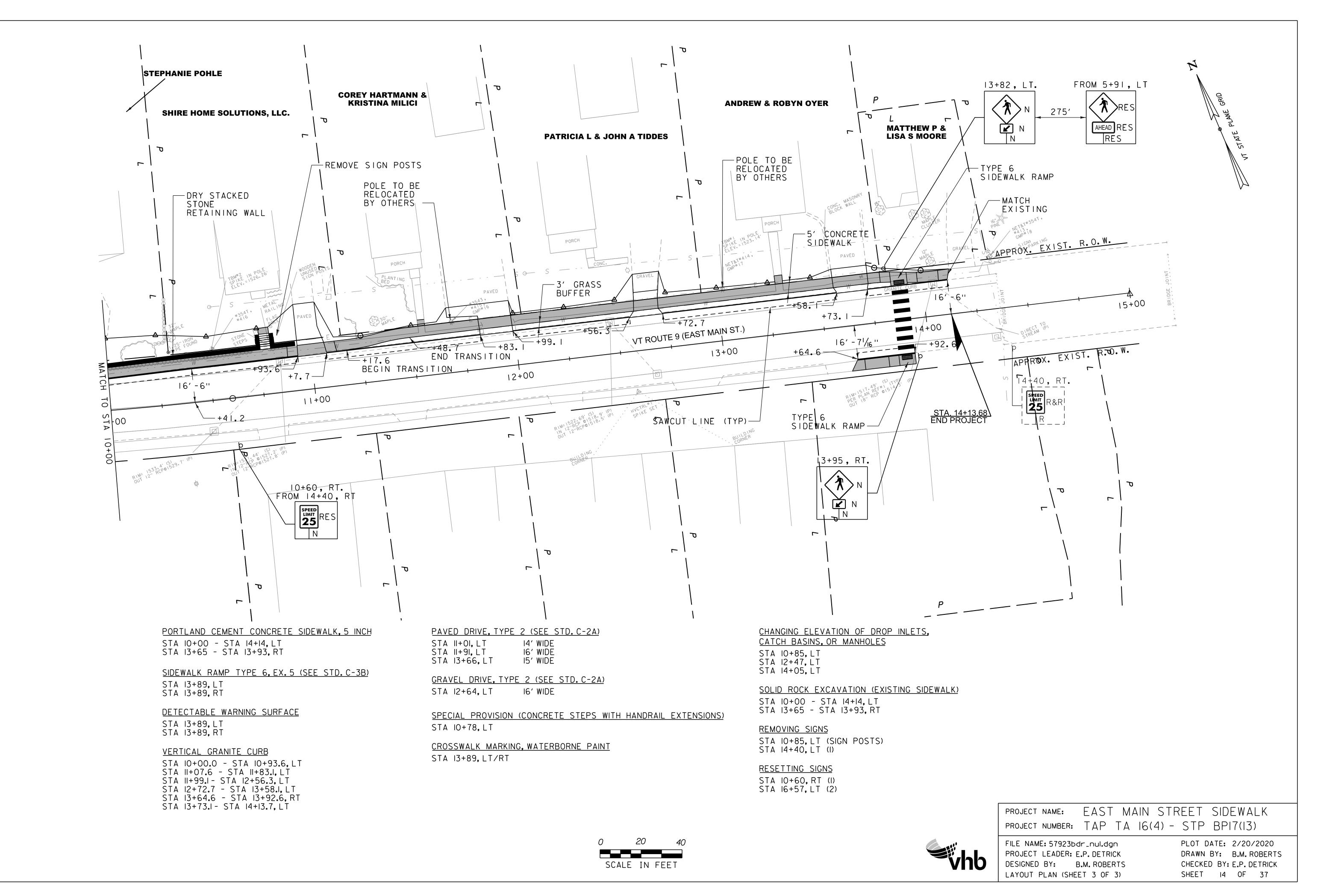


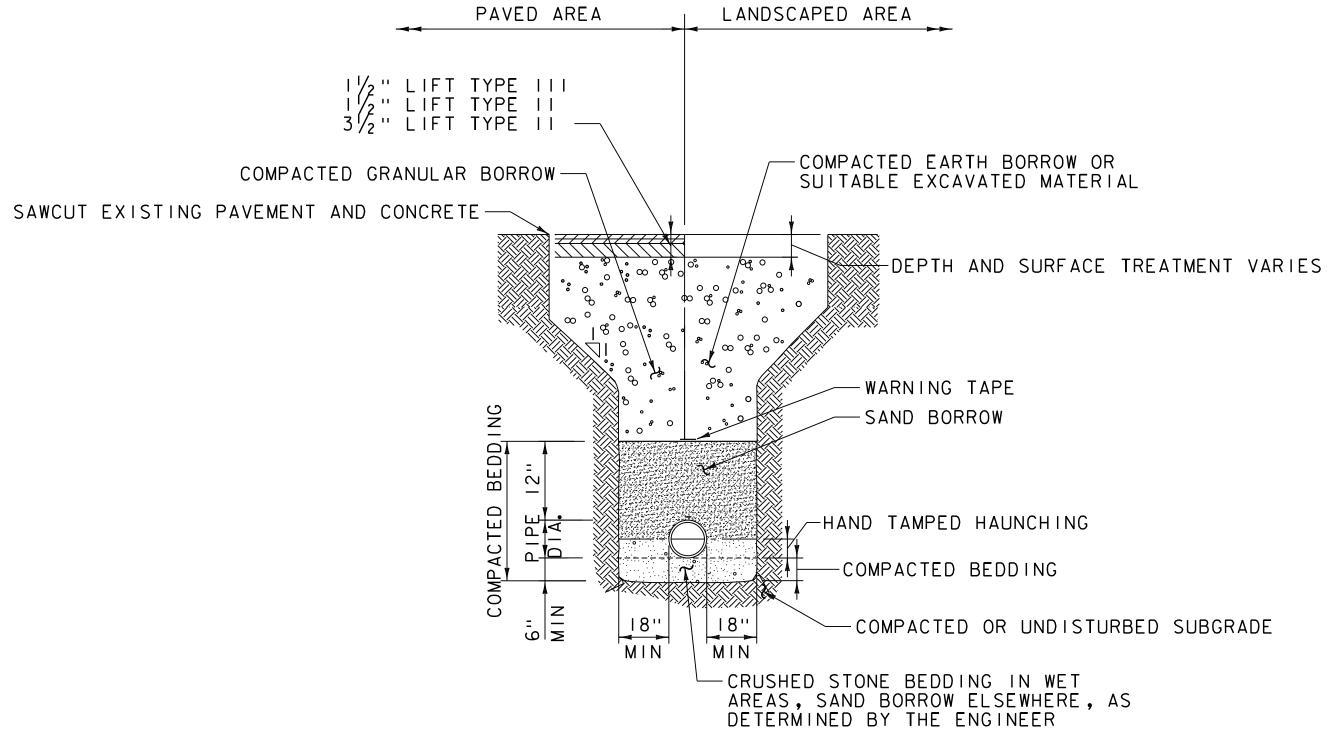


FILE NAME: 57923bdr\_nul.dgn
PROJECT LEADER: E.P. DETRICK
DESIGNED BY: B.M. ROBERTS
LAYOUT PLAN (SHEET 10F 3)

DRAWN BY: B.M. ROBERTS
CHECKED BY: E.P. DETRICK
SHEET 12 OF 37



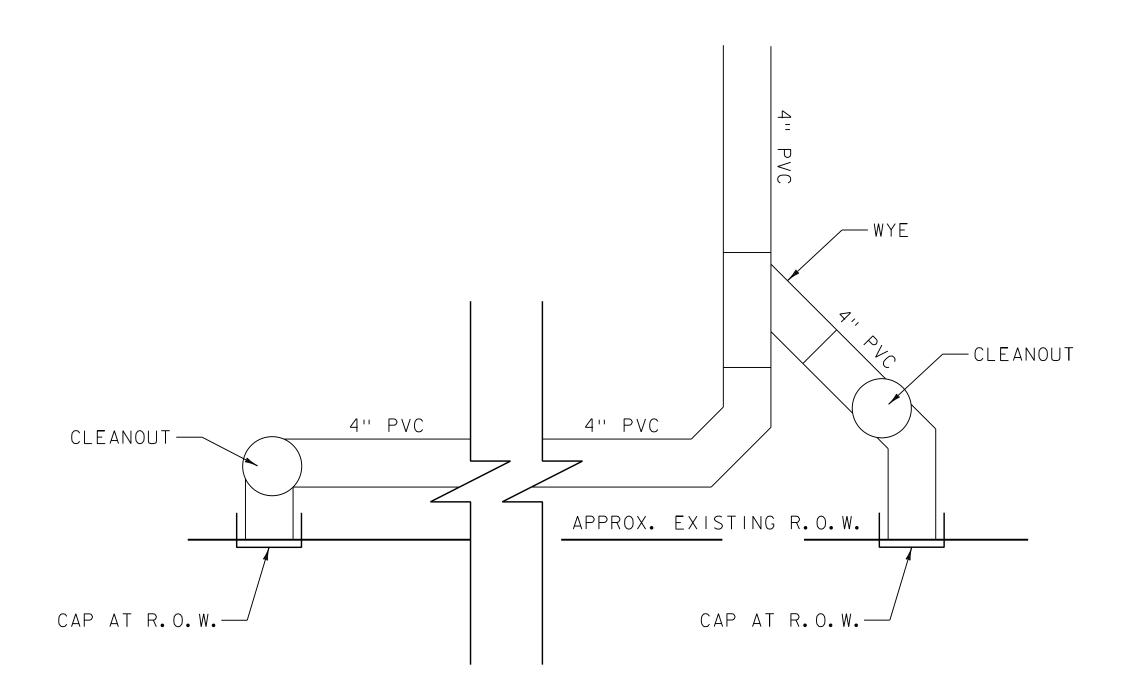




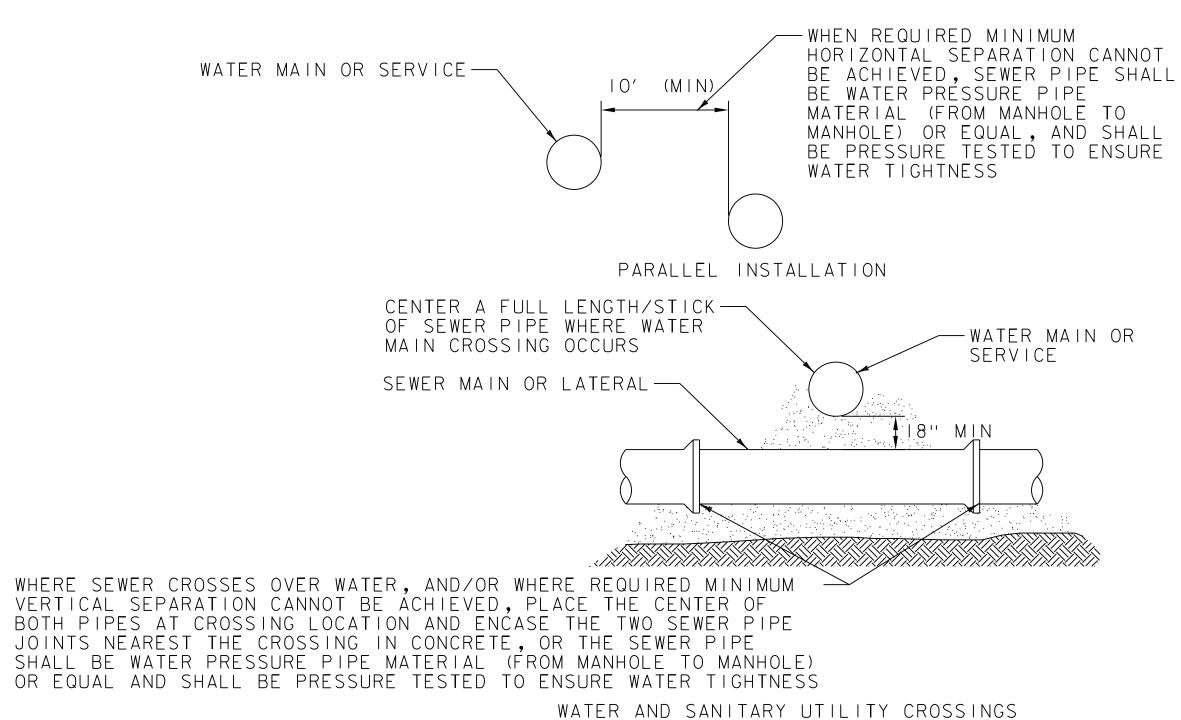
#### NOTES:

- I. USE METALLIC WARNING TAPE OVER ALL PIPES. COST IS INCIDENTAL TO APPLICABLE PIPE ITEM.
- 2. BEDDING TO PROVIDE A FIRM, STABLE, CONTINUOUS, AND UNIFORM SUPPORT FOR THE FULL LENGTH OF THE PIPE.
- 3. NO MECHANICAL TAMPERS SHALL BE USED DIRECTLY OVER THE PIPE TO ENSURE PIPE IS NOT DAMAGED.
- 4. CRUSHED STONE BEDDING SHALL BE 3/4" (REFER TO TABLE 704.02B IN THE STANDARD SPECIFICATIONS).





## SEWER SERVICE CONNECTION DETAIL N. T. S



WATER/SEWER SEPARATION

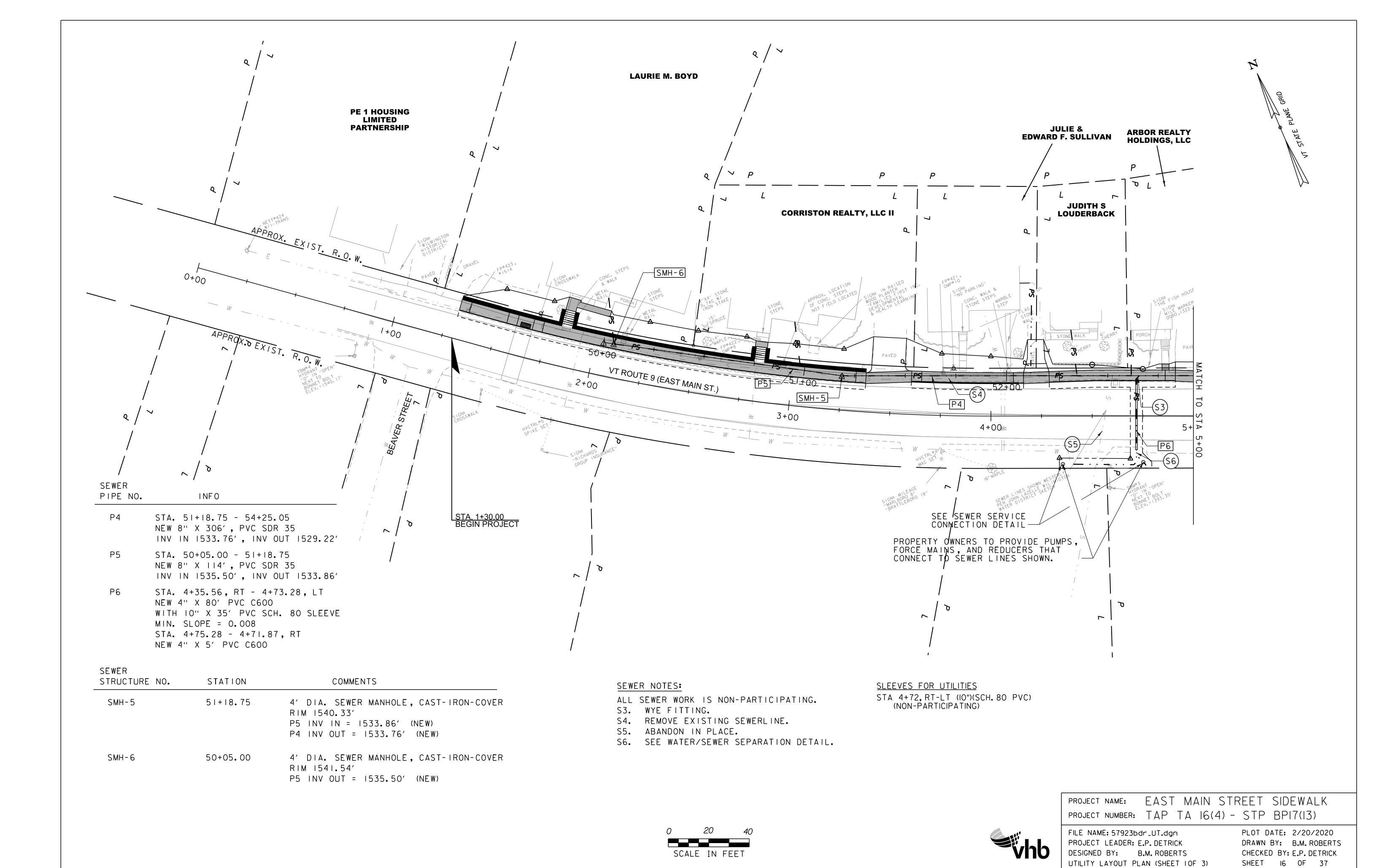
N.T.S

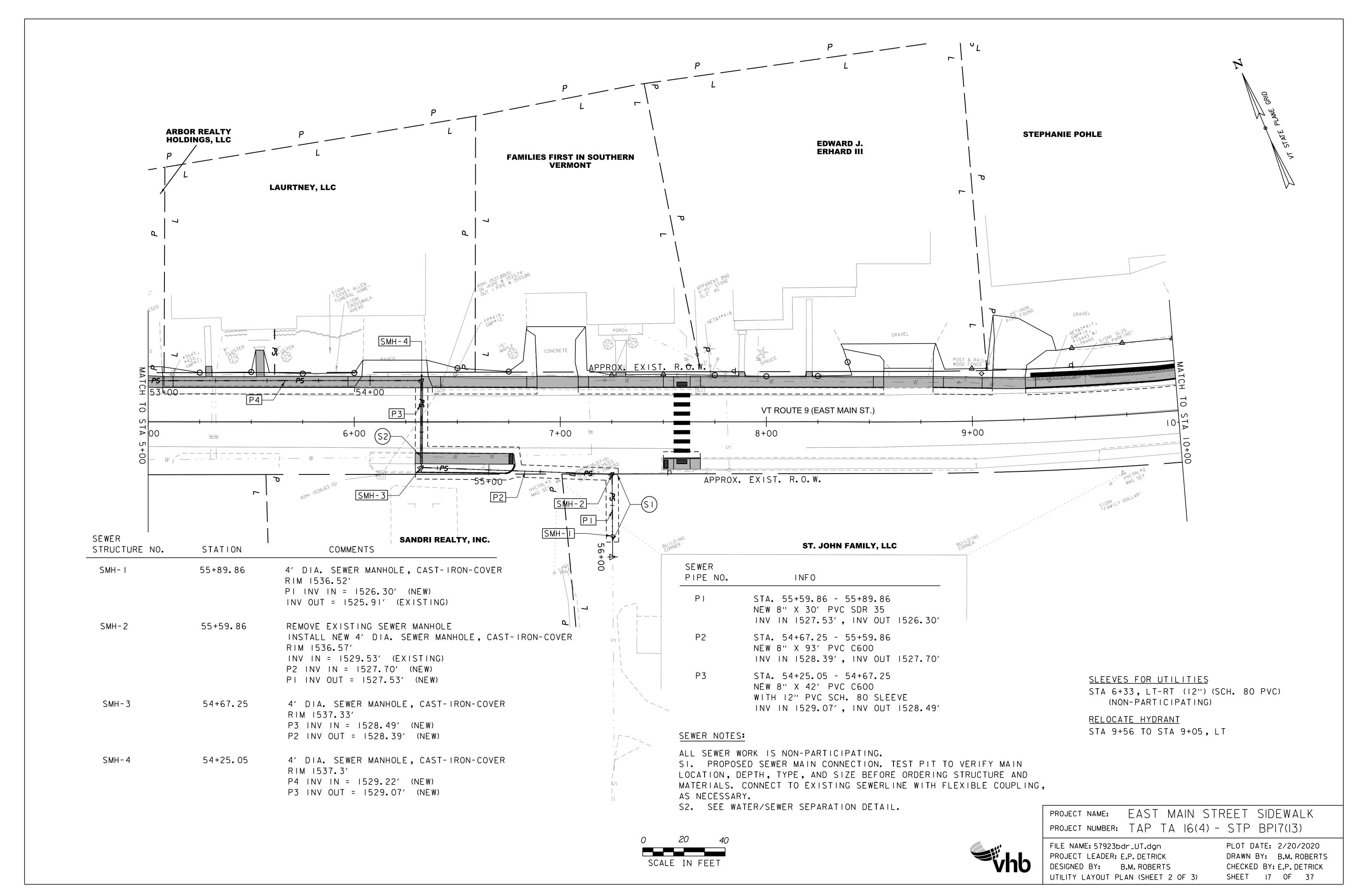
PROJECT NAME: EAST MAIN STREET SIDEWALK PROJECT NUMBER: TAP TA 16(4) - STP BP17(13)

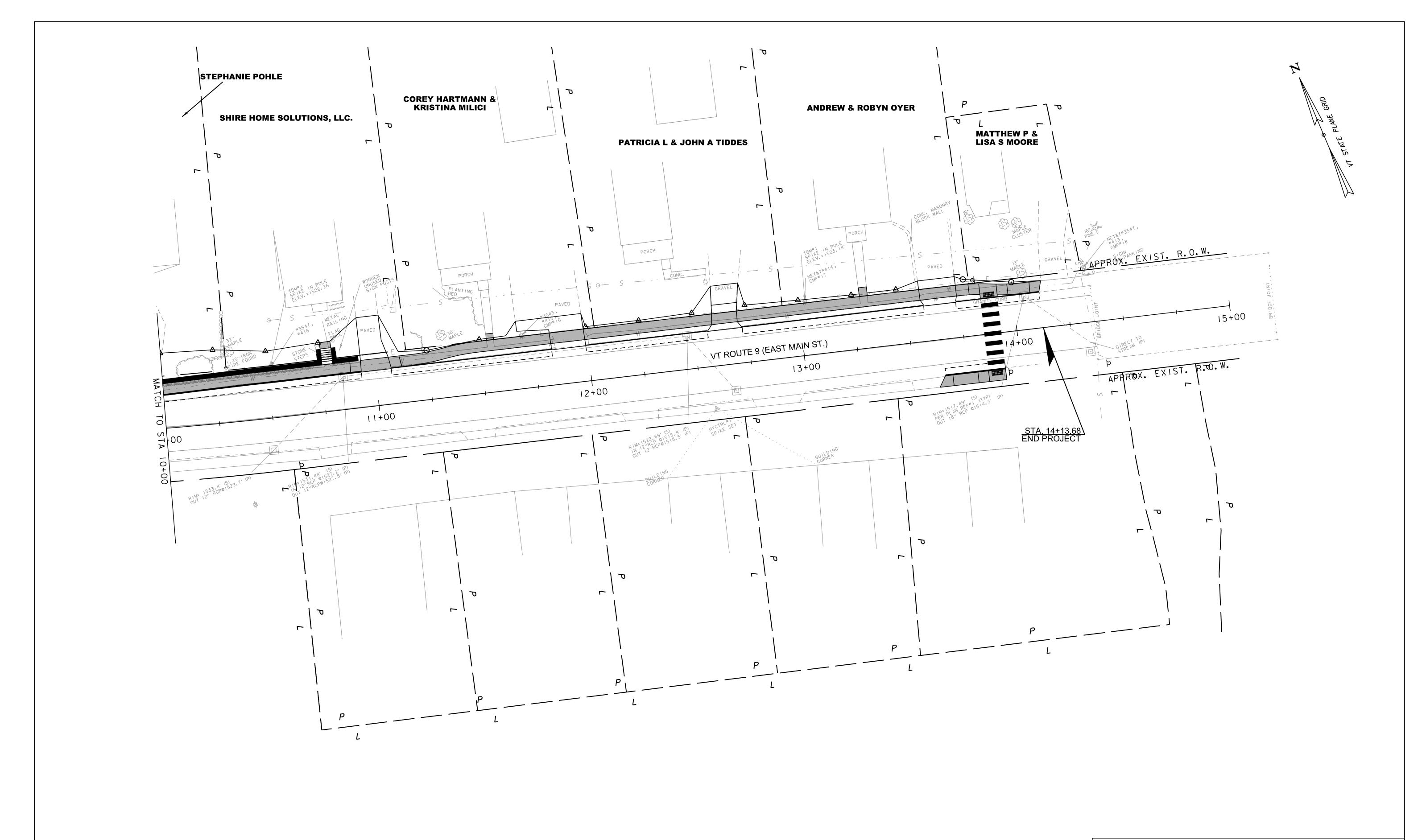


FILE NAME: 57923+yp.dgn
PROJECT LEADER: E.P. DETRICK
DESIGNED BY: B.M. ROBERTS
UTILITY DETAILS SHEET

PLOT DATE: 2/20/2020
DRAWN BY: B.M. ROBERTS
CHECKED BY: E.P. DETRICK
SHEET 15 OF 37







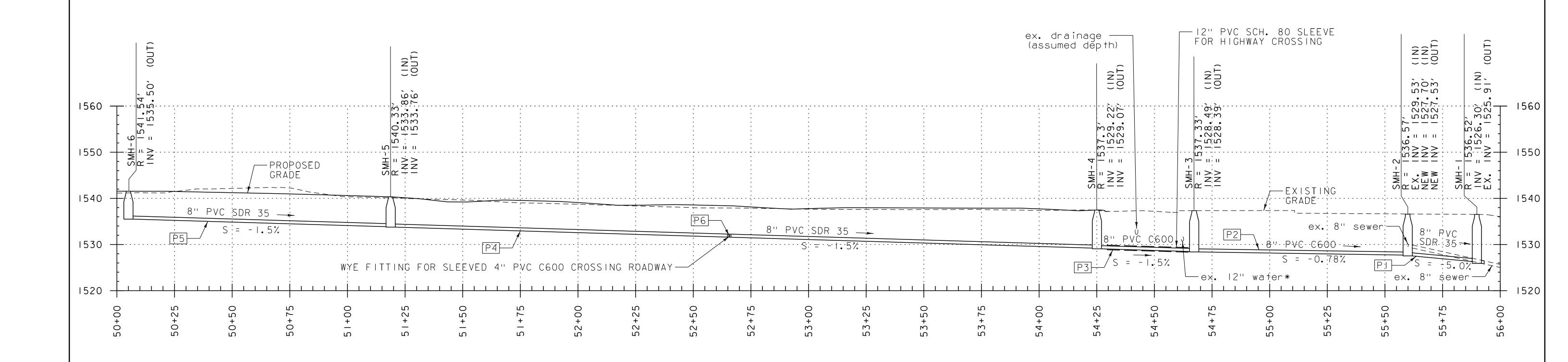




PROJECT NAME: EAST MAIN STREET SIDEWALK PROJECT NUMBER: TAP TA 16(4) - STP BP17(13)

FILE NAME: 57923bdr\_UT.dgn
PROJECT LEADER: E.P. DETRICK
DESIGNED BY: B.M. ROBERTS
UTILITY LAYOUT PLAN (SHEET 3 OF 3)

PLOT DATE: 2/20/2020
DRAWN BY: B.M. ROBERTS
CHECKED BY: E.P. DETRICK
SHEET 18 OF 37



\* EXISTING WATER MAIN DEPTH FROM WILMINGTON WATER DISTRICT PROJECT NO. 1224 AS-BUILT PLANS

PLOT DATE: 3/24/2022

CHECKED BY: E.P.DETRICK

SHEET 19 OF 37

DRAWN BY: C.K.FORD

PROJECT NAME: WILMINGTON

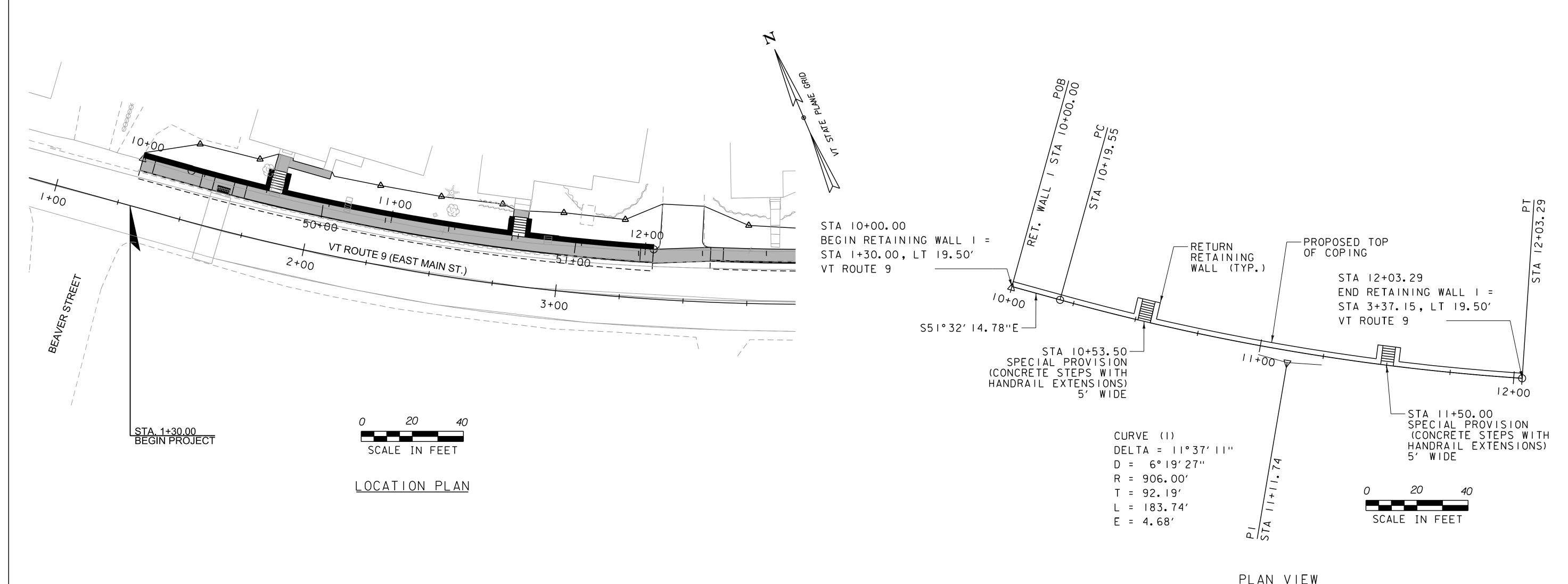
PROJECT NUMBER: 57923.00

FILE NAME: 57923\_sewer\_pro.dgn

PROJECT LEADER: E.P.DETRICK

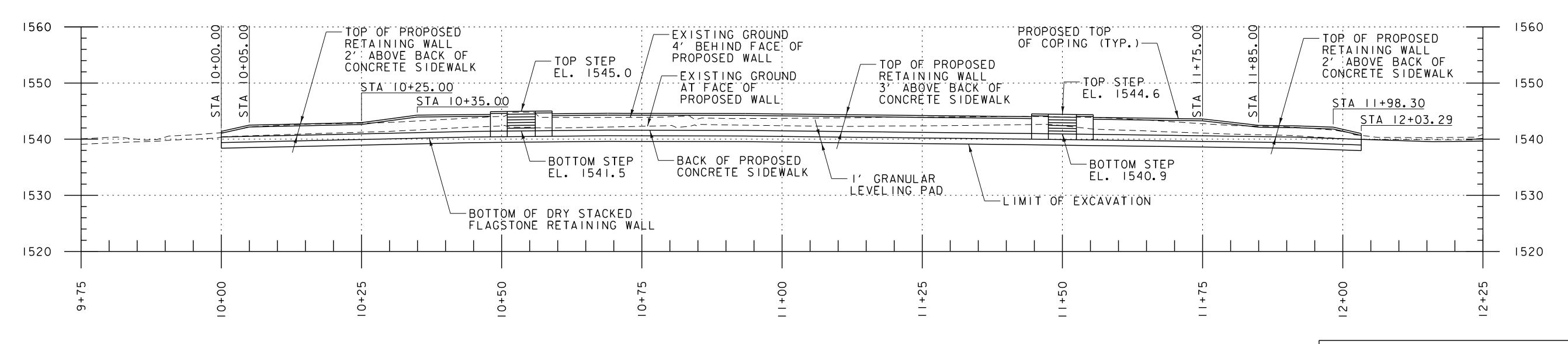
DESIGNED BY: C.K.FORD

PROPOSED SEWER PROFILE



### PLAN VIEW

NOTE: RETAINING WALL ELEVATION IS DRAWN FACING LEFT OF THE CENTERLINE WITH DOWN STATION BEING TO THE LEFT AND UP STATION BEING TO THE RIGHT.



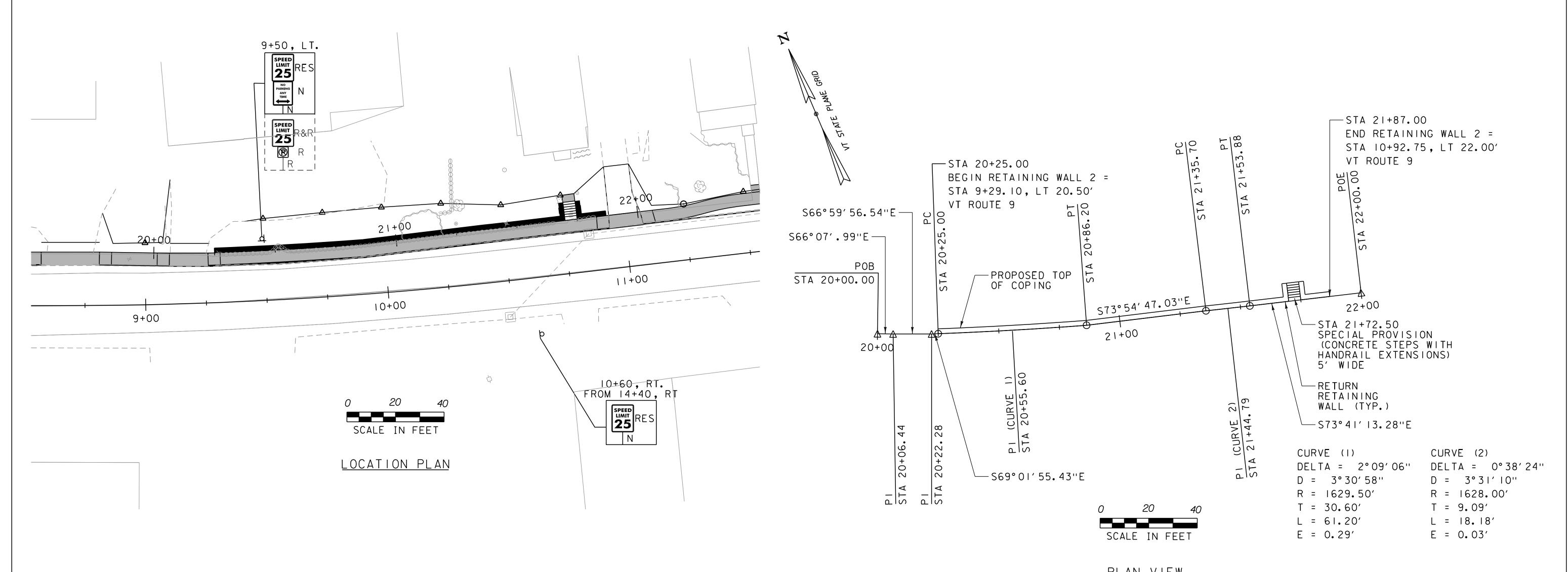
ELEVATION VIEW

SCALE IN FEET

EAST MAIN STREET SIDEWALK PROJECT NUMBER: TAP TA 16(4) - STP BP17(13)

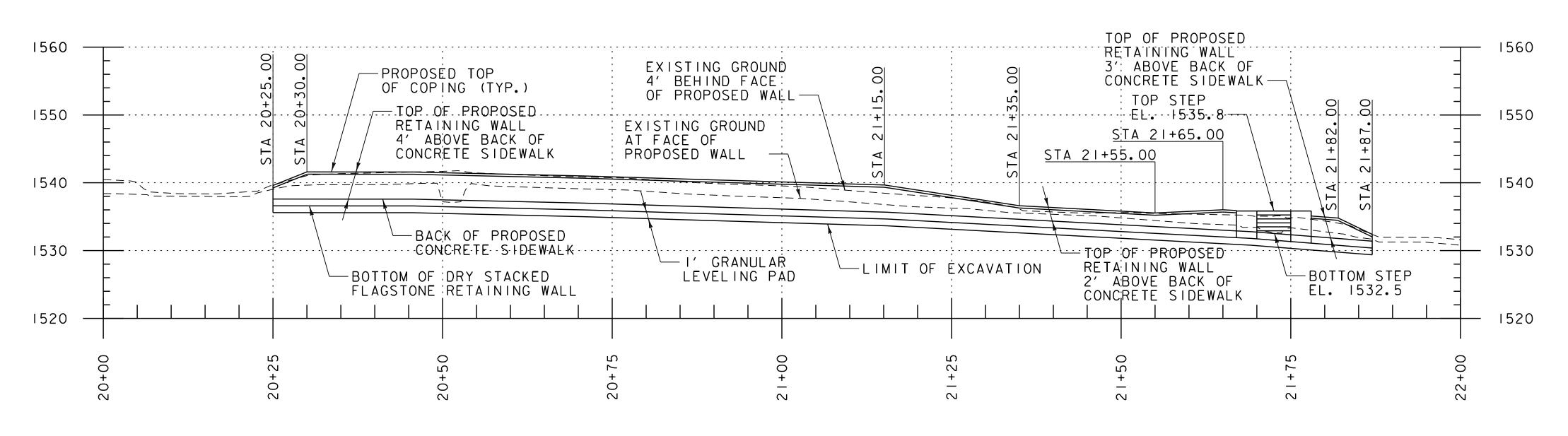
FILE NAME: 57923\_Ret Wall I.dgn PROJECT LEADER: E.P. DETRICK DESIGNED BY: B.M. ROBERTS RETAINING WALL I PLAN SHEET

PLOT DATE: 2/20/2020 DRAWN BY: B.M. ROBERTS CHECKED BY: E.P. DETRICK SHEET 20 OF 37



## <u>Plan view</u>

NOTE: RETAINING WALL ELEVATION IS DRAWN FACING LEFT OF THE CENTERLINE WITH DOWN STATION BEING TO THE LEFT AND UP STATION BEING TO THE RIGHT.





ELEVATION VIEW



FILE NAME: 57923\_Ret Wall 2.dgn
PROJECT LEADER: E.P. DETRICK
DESIGNED BY: B.M. ROBERTS
RETAINING WALL 2 PLAN SHEET

PLOT DATE: 2/20/2020
DRAWN BY: B.M. ROBERTS
CHECKED BY: E.P. DETRICK
SHEET 21 OF 37

## TRAFFIC SIGN SUMMARY SHEET

|   |   | SIGN    |                     | NEW & S  | ALVACED S       | SIGNS EX        | IST    |             |          |                   |                   |     |         | SIGN P             |         |         |         |        |         |                  |                  |  |                      | SIGN                        | DETAIL                  |
|---|---|---------|---------------------|----------|-----------------|-----------------|--------|-------------|----------|-------------------|-------------------|-----|---------|--------------------|---------|---------|---------|--------|---------|------------------|------------------|--|----------------------|-----------------------------|-------------------------|
| MILE MARKER,                                    | CION  | DIMENSI | ONS .               | INEW & 5 | AL VAGED        | PO              | ST NO. | FLANGED CHA | ANNEL    | SQUARE ST         | TEEL              |     | TUBULAF | R ALUMIN<br>D (IN) | IUM     | WOOD PO | ST (LF) |        | W-SHAPE | STEEL            | R                |  |                      | JUN                         | DE I AIL                |
| STATION,<br>OR<br>SIGN NUMBER                   | SIGN<br>LEGEND  | E WIDTH |                     | "A" "E   | 3" SALV<br>SIGN | SALV T<br>TIS A | POSTS  | LB/FT       |          | 1.75 2.0<br>LB/FT | 2.5 A N C H O O R | E V | 3.0 L   |                    |         | TYPE I  |         | FTG. 9 | WFI     | GHT POST<br>SIZE | S-GNE<br>FRANEED | REMARKS  | 10                   | DETAIL<br>N SHEET<br>NUMBER | STD.<br>SHEET<br>NUMBER |
|   |   |         |                     |          | Ţ               | 1               |        | 0           | PTION IT | TEMS              |                   |     |         |                    |         |         |         |        |         | 1                |                  |  |                      |                             |                         |
| 7+53, RT*<br>7+85, LT<br>13+82, LT<br>13+95, RT |   | 4 30    | 30                  | 25.0     |                 |                 | 4      |             |          | X                 | x                 | l   |         |                    |         |         |         |        |         |                  |                  | WII-2  | воч                  |                             |                         |
| 13795, KI                                       |   | 4 24    | 12                  | 8.0      |                 |                 |        |             |          |                   |                   |     |         |                    |         |         |         |        |         |                  |                  | W16-7pL  | ВОҮ                  |                             |                         |
| 3+81 <b>,</b> LT                                | NO PARKING ANY TIME   | 1 12    | 18                  | 1.5      |                 |                 | -      |             |          | x                 | x                 |     |         |                    |         |         |         |        |         |                  |                  | R7-I WITH DOUBLE SIDED ARROW MOUNTED ON POST FACING ROADWAY  | ROW                  |                             |                         |
| 9+50, LT  | NO PARKING ANY TIME   | 1 12    | 18                  | 1.5      |                 |                 | 1      |             |          | х                 | x                 |     |         |                    |         |         |         |        |         |                  |                  | R7-I WITH DOUBLE SIDED ARROW MOUNTED BELOW R2-I FACING ROADWAY   | ROW                  |                             |                         |
| 10+60, RT                                       | SPEED LIMIT 25  |         |                     |          | I               |                 | ı      |             |          | x                 | X                 |     |         |                    |         |         |         |        |         |                  |                  | RESET SIGN FROM 14+140, RT   |                      |                             |                         |
| IN THE FIELD. POS                               | STHS ARE TO BE DETERMINED<br>ST SIZES ARE COMPUTED<br>MATION FURNISHED ON THE |         | <br> <br> <br> <br> |          |                 |                 |        | FT FT       | FT F     | FT FT             | FT                | EA  | LB      | LB L               | B  <br> | TYPE I  | TYPE 2  |        |         |                  | BOW<br>GOW       | T = BLACK LEGEND ON YELLOW BACKGROUN<br>W = BLACK LEGEND ON WHITE BACKGROUND<br>W = GREEN LEGEND ON WHITE BACKGROUND<br>W = RED LEGEND ON WHITE BACKGROUND - | ) - PLA(<br>) - PLA( | QUE<br>QUE                  |                         |

LB

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105

EA. WOOD POSTS (FT) EA. EA. LB

POST LENGTH AVERAGES 15 FEET

POST LENGTH WITH '+' AVERAGES 20 FEET

STANDARD SHEETS AND THE ROADWAY, TRAFFIC &

SAFETY DIVISION'S "SIGN POST DESIGN GUIDELINE."

TOTALS SF SF EA. SF
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SHEET 1 36.0

• - SLEEVE REQUIRED

ROW = RED LEGEND ON WHITE BACKGROUND - PLAQUE WOB = WHITE LEGEND ON BLUE BACKGROUND - PLAQUE

WOG = WHITE LEGEND ON GREEN BACKGROUND

FYG = BLACK LEGEND ON FLUORESCENT YELLOW-GREEN BACKGROUND SHSM = FHWA STANDARD HIGHWAY SIGNS AND MARKINGS BOOK

(WITH 2012 SUPPLEMENT)



PROJECT NAME: EAST MAIN STREET SIDEWALK PROJECT NUMBER: TAP TA 16(4) - STP BP17(13)

FILE NAME: 57923\_tsss.dgn PROJECT LEADER: E.P. DETRICK DESIGNED BY: C.K. FORD TRAFFIC SIGN SUMMARY SHEET PLOT DATE: 2/20/2020 DRAWN BY: C.K. FORD CHECKED BY: E.P. DETRICK SHEET 22 OF 37

#### TRAFFIC CONTROL NOTES

- I. THE CONTRACTOR SHALL SUBMIT A DETAILED TRAFFIC CONTROL PLAN TO THE RESIDENT ENGINEER (R.E.) FOR APPROVAL. THE CONTRACTOR SHALL ALLOW AT LEAST TWO (2) WEEKS FOR REVIEW AND ACCEPTANCE. ALL CHANGES TO THE TRAFFIC CONTROL PLAN MUST BE APPROVED BY THE R.E. MODIFICATIONS TO THE APPROVED TRAFFIC CONTROL PLAN FOR VEHICLES OR PEDESTRIANS SHALL BE SUBMITTED TO THE R.E. AT LEAST TWO WEEKS PRIOR TO THE IMPLEMENTATION OF THE CHANGE.
- 2. ALL TRAFFIC CONTROL DEVICES SHALL BE IN COMPLIANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), VAOT "STANDARD DRAWINGS" AND THE SPECIAL PROVISION. ADDITIONAL TRAFFIC CONTROL DEVICES MAY BE REQUIRED AND SHALL BE INSTALLED AS DIRECTED BY THE ENGINEER. PAYMENT SHALL BE INCIDENTAL TO CONTRACT ITEM 641.II "TRAFFIC CONTROL, ALL-INCLUSIVE". THE PLAN SHALL ACCOMMODATE VEHICLE TRAFFIC, PEDESTRIAN TRAFFIC, AND EMERGENCY SERVICES. THE TRAFFIC CONTROL PLAN SHALL INCLUDE ALL TEMPORARY SIGNS, PAVEMENT MARKINGS, CHANNELIZING DEVICES, ARROW PANELS, AND OTHER DEVICES REQUIRED TO PROVIDE COMPLETE MANAGEMENT OF TRAFFIC. ANY SIGNS NOT INCLUDED IN THE FHWA STANDARD HIGHWAY SIGNS BOOK SHALL INCLUDE SIGN FACE DIMENSIONS AND LAYOUT.
- 3. CONTRACTOR SHALL MAINTAIN PEDESTRIAN ACCESS TO ALL COMMERCIAL AND MUNICIPAL PROPERTIES DURING BUSINESS HOURS. PEDESTRIAN ACCESS SHALL MEET ALL APPLICABLE AMERICANS WITH DISABILITIES ACT (ADA) REQUIREMENTS. POSITIVE GUIDANCE SHALL BE PROVIDED TO SEPARATE PEDESTRIAN ACCESS FROM THE WORK AREA AND VERTICAL GRADE CHANGES. ACCESS TO PROPERTIES MAY BE RESTRICTED FOR SHORT DURATIONS OF NOT MORE THAN TWO HOURS WITH THE PERMISSION AND PRIOR NOTIFICATION OF THE OWNER DURING BUSINESS HOURS. CONTRACTOR SHALL COORDINATE MAJOR WORK ADJACENT TO COMMERCIAL AND MUNICIPAL ACCESS AREAS WITH THE OWNER AND TOWN AT LEAST ONE WEEK PRIOR TO STARTING THE WORK IN THE AREA. ALL COSTS ASSOCIATED WITH COORDINATION AND MAINTAINING PEDESTRIAN ACCESS WILL BE CONSIDERED INCIDENTAL TO ITEM 641. II "TRAFFIC CONTROL, ALL-INCLUSIVE".
- 4. SEE STANDARD DRAWING T-I FOR ADDITIONAL INFORMATION.
- 5. IF LANE CLOSURES OR RESTRICTIONS ARE NEEDED, THE CONTRACTOR SHALL REFER TO TA-10 AND TA-13 OF THE MUTCD FOR GUIDANCE REGARDING ADDITIONAL TRAFFIC CONTROL MEASURES.
- 6. ACCOMMODATIONS SHOULD BE TAKEN TO ENSURE THAT OBSTACLES, EQUIPMENT, CONSTRUCTION MATERIALS, TRAFFIC CONTROL DEVICES, ETC. DO NOT ENCROACH INTO THE BICYCLE PATH OF TRAVEL. IT IS IMPORTANT THAT BICYCLE ROUTES ARE FREE OF RUTS, SAND AND MUD TO PREVENT BYCICLE CRASHES.
- 7. THE CONTRACTOR SHALL PROVIDE ACCESS THROUGH THE WORK ZONE FOR EMERGENCY VEHICLES AT ALL TIMES OR COORDINATE EMERGENCY ROUTES.
- 8. ACCOMMODATIONS FOR POSTAL DELIVERIES, NEWSPAPER ROUTES, TRASH SERVICES AND/OR OTHER DELIVERY SERVICES INTERRUPTED BY THE PROJECT OR DETOUR SHOULD BE COMMUNICATED WITH THE PROPER CONTACTS.

#### PEDESTRIAN TEMPORARY TRAFFIC CONTROL NOTES

- I. THE CONTRACTOR SHALL PROVIDE A TEMPORARY PEDESTRIAN ACCESS ROUTE (TPAR) FOR REVIEW AND WRITTEN APPROVAL BY THE RESIDENT ENGINEER A MINIMUM OF THREE WEEKS BEFORE SUCH PLAN IS IMPLEMENTED. THIS PLAN SHALL DETAIL THE CONSTRUCTION PHASING AND SCHEDULE AND THE SPECIFIC METHODS OF MAINTAINING SAFE PEDESTRIAN ACCESS THROUGHOUT THE CONSTRUCTION AREA. THIS PLAN SHALL PROVIDE THE LOCATION AND DETAILS OF TEMPORARY CONSTRUCTION SIGNING, MARKINGS, BARRICADES, CHANNELIZING DEVICES, TPARS AND METHODS TO MAINTAIN ACCESS TO ADJACENT PROPERTIES, BUSINESSES, RESIDENCES. ETC.
- 2. THE CONTRACTOR SHALL MAINTAIN PEDESTRIAN THROUGH MOVEMENTS FROM ONE END OF THE CONSTRUCTION AREA TO THE OTHER, ON AT LEAST ONE SIDE OF THE STREET DURING CONSTRUCTION. ANY SIDEWALK CLOSURES SHALL MEET THE REQUIREMENTS OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), PART 6.
- 3. PEDESTRIAN ACCESS SHALL BE PROVIDED TO ALL ADJACENT PROPERTIES, BUILDINGS, RESIDENCES, COMMERCIAL PROPERTIES AND TRANSIT STOPS. THIS MAY INCLUDE TEMPORARY WALKWAYS SPANNING THE CONSTRUCTION AREA.
- 4. IF SIDEWALKS ARE CLOSED, A TEMPORARY PEDESTRIAN ACCESS ROUTE (TPAR) SHALL BE PROVIDED ON THE SAME SIDE OF THE ROAD AS THE CLOSED SIDEWALK, IF POSSIBLE. SIGNS AND BARRICADES SHALL BE USED TO PROVIDE ADVANCE NOTICE OF THE CLOSURE AND THE ROUTE OF ANY PEDESTRIAN DETOURS. THE TPAR SHALL HAVE A MINIMUM UNOBSTRUCTED WIDTH OF 4 FEET. IF THE TPAR IS LESS THAN 5 FEET IN WIDTH, A 5 FOOT BY 5 FOOT PASSING SPACE SHOULD BE PROVIDED AT LEAST EVERY 200 FEET. THE SURFACE OF THE TPAR SHALL BE SMOOTH AND CONTINUOUS FOR THE LENGTH OF THE TPAR. THE TPAR SHALL MAINTAIN THE SAME LEVEL OF ACCESSIBILITY AND DETECTABILITY AS THE FACILITY THAT IS BEING CLOSED. THE TPAR SHALL NOT LEAD PEDESTRIANS INTO CONFLICTS WITH VEHICLES, EQUIPMENT, OR CONSTRUCTION OPERATIONS.
- 5. WHEN TEMPORARY CROSSWALKS ARE UTILIZED FOR THE TPAR, TEMPORARY DETECTABLE WARNINGS SHALL BE PLACED AT EACH END OF THE TEMPORARY CROSSWALKS. THE TEMPORARY CROSSWALK SHALL BE DELINEATED WITH TEMPORARY PAVEMENT MARKINGS OR TAPE. THE MARKINGS SHALL BE PARALLEL 12-INCH-WIDE WHITE LINES PLACED 7 FEET ON CENTER APART. IT SHOULD BE NOTED THAT CURB PARKING SHALL BE PROHIBITED FOR AT LEAST 50 FEET IN ADVANCE OF MIDBLOCK CROSSWALKS. TEMPORARY CROSSWALK SIGNS SHALL BE PROVIDED FOR THE CROSSWALK.
- 6. IF THERE IS WORK OCCURRING OVER AN OPEN SIDEWALK, PROTECTIVE OVERHEAD COVERING MUST BE PROVIDED AS NECESSARY TO ENSURE PROTECTION FROM FALLING OBJECTS AND DRIPPING FROM OVERHEAD STRUCTURES. COVERED WALKWAYS SHOULD BE STURDILY CONSTRUCTED AND ADEQUATELY LIGHTED FOR NIGHTTIME USE.
- 7. INDIVIDUAL CHANNELIZING DEVICES, TAPE, OR ROPE USED TO CONNECT INDIVIDUAL DEVICES AND OTHER DISCONTINUOUS BARRIERS AND DEVICES, PAVEMENT MARKINGS ARE NOT DETECTABLE BY PERSONS WITH VISUAL DISABILITIES. THESE MEASURES DO NOT PROVIDE ACCEPTABLE PATH GUIDANCE ON TEMPORARY OR RE-ALIGNED SIDEWALKS OR OTHER PEDESTRIAN FACILITIES. PEDESTRIAN CHANNELIZING DEVICES SHALL INCLUDE A CONTINUOUSLY DETECTABLE BOTTOM AND TOP EDGE THROUGHOUT THE LENGTH OF THE FACILITY SUCH THAT IT CAN BE FOLLOWED BY PEDESTRIANS USING LONG CANES FOR GUIDANCE.
- 8. CHANNELIZING DEVICES ON BOTH SIDES OF THE TPAR SHALL INCLUDE A CONTINUOUS SOLID TOP AND BOTTOM RAILS. THE TOP EDGE OF THE TOP RAIL SHALL BE BETWEEN 32 INCHES AND 38 INCHES ABOVE THE GROUND LEVEL. THE BOTTOM RAIL SHALL BE AT LEAST 6 INCHES WIDE, WITH THE BOTTOM EDGE OF THE BOTTOM RAIL SURFACE NO HIGHER THAN 2 INCHES ABOVE THE GROUND.

#### PEDESTRIAN TEMPORARY TRAFFIC CONTROL NOTES (CONTINUED)

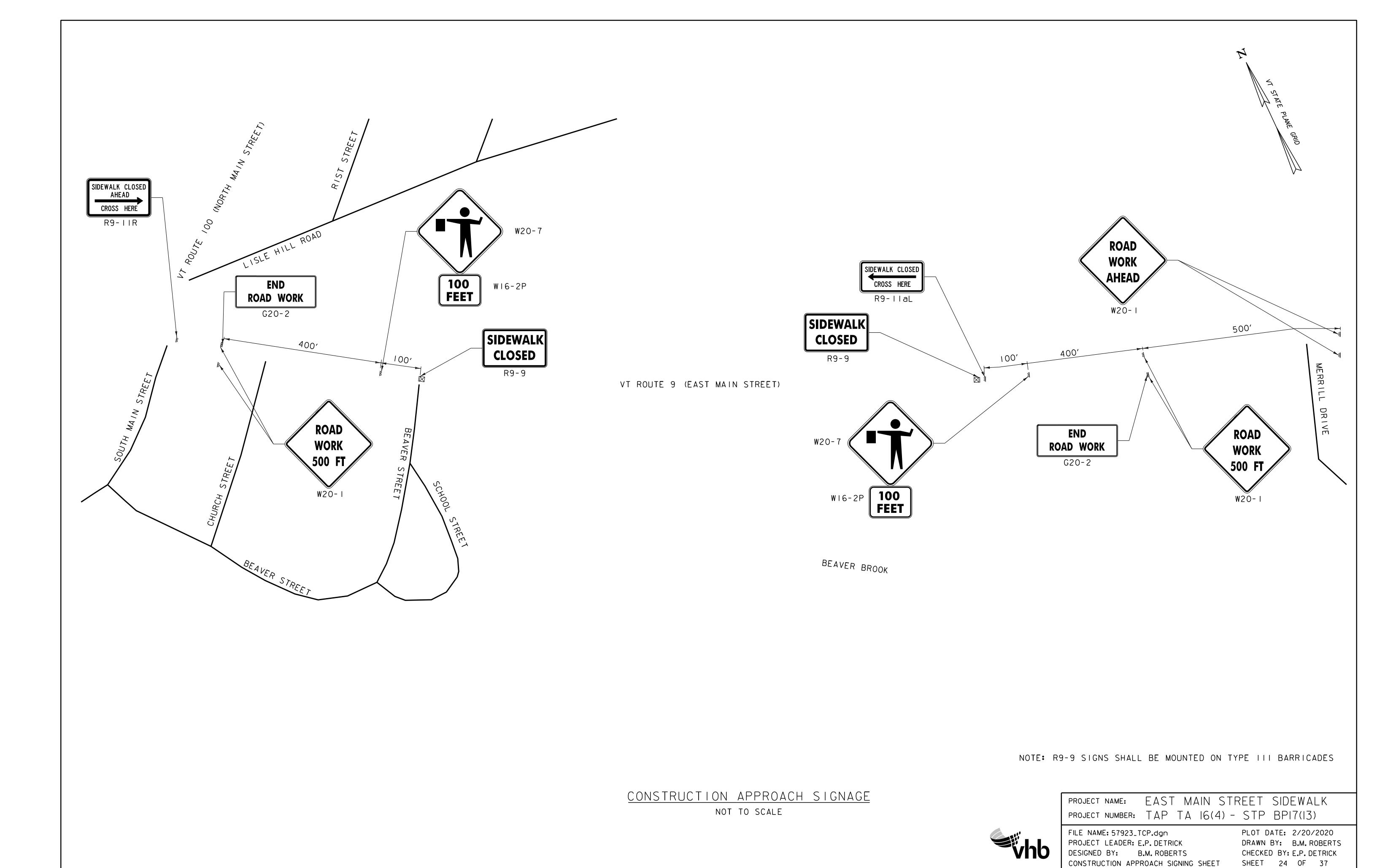
- 9. IF THE TPAR IS ADJACENT TO MOVING TRAFFIC, CONSTRUCTION OPERATIONS/EQUIPMENT, OR DROP-OFFS, THEN CRASH WORTHY CHANNELIZING DEVICES THAT MEET THE REQUIREMENTS OF THE MUTCD SHALL BE USED.
- 10. THE CONTRACTOR SHALL NOT STORE OR PLACE ANY CONSTRUCTION MATERIALS, EQUIPMENT OR SIGNS IN THE PEDESTRIAN PATH OF TRAVEL.
- II. PROVISION OF THE TPAR AND ALL ITS ELEMENTS, INCLUDING BUT NOT LIMITED TO SIGNS, CHANNELIZING DEVICES, BARRICADES, TEMPORARY CURB RAMPS, TEMPORARY PAVEMENT MARKINGS AND OTHER TRAFFIC CONTROL DEVICES IS TO BE PAID FOR INCIDENTAL TO TRAFFIC CONTROL (ITEM 641.11).
- 12. IF THE TEMPORARY TRAFFIC PLAN AFFECTS THE MOVEMENT OF PEDESTRIANS, ADEQUATE PEDESTRIAN ACCESS AND WALKWAYS SHALL BE PROVIDED. IF THE TTC ZONE AFFECTS THE ACCESSIBLE AND DETECTABLE PEDESTRIAN FACILITY, THE ACCESSIBLITY AND THE DETECTABILITY SHALL BE MAINTAINED ALONG THE ALTERNATE PEDESTRIAN ROUTE.

PROJECT NAME: EAST MAIN STREET SIDEWALK PROJECT NUMBER: TAP TA 16(4) - STP BP17(13)



FILE NAME: 57923\_TCP.dgn
PROJECT LEADER: E.P. DETRICK
DESIGNED BY: B.M. ROBERTS
TRAFFIC CONTROL NARRATIVE

PLOT DATE: 2/20/2020
DRAWN BY: B.M. ROBERTS
CHECKED BY: E.P. DETRICK
SHEET 23 OF 37



SHEET 24 OF 37

## **EPSC PLAN NARRATIVE**

#### 1.1 PROJECT DESCRIPTION

THIS PROJECT INVOLVES THE RECONSTRUCTION OF SIDEWALK ALONG THE NORTH SIDE OF VT ROUTE 9 STARTING ACROSS FROM THE INTERSECTION WITH BEAVER STREET, AND EXTENDING EASTERLY ALONG VT ROUTE 9 FOR APPROXIMATELY 1284 FEET WHERE IT TIES INTO EXISTING SIDEWALK AT THE WESTERN APPROACH OF THE BRIDGE OVER BEAVER BROOK. THE PROJECT ALSO INCLUDES DRIVE IMPROVEMENTS, NEW GRANITE CURB, AND STREETSCAPE ENHANCEMENTS TO INCLUDE LIGHTING AND FLAGSTONE WALLS. LIMITS OF EARTH DISTURBANCE ARE SHOWN IN THE ATTACHED PLANS.

TOTAL AREA OF EARTH DISTURBANCE IS APPROXIMATELY 0.43 ACRES. IT IS ANTICIPATED THAT THIS PROJECT WILL LAST ONE CONSTRUCTION SEASON.

#### 1.2 SITE INVENTORY

#### 1.2.1 TOPOGRAPHY

THE PROJECT LIES ON THE OUTSKIRTS OF THE TOWN VILLAGE. THERE ARE HOMES LOCATED ON THE NORTH SIDE OF VT ROUTE 9, HOMES AND COMMERCIAL BUILDINGS RESIDE ON THE SOUTH SIDE.

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

BEAVER BROOK IS THE ONLY WATER SOURCE NEAR THE CONSTRUCTION SITE. THE EXISTING STORMWATER COLLECTION SYSTEM AT THE EASTERLY END OF THE PROJECT DISCHARGES DIRECTLY INTO THE BROOK VIA AN OUTLET PIPE. THE TRIBUTARY AREA OF BEAVER BROOK AT THE BRIDGE IS APPROXIMATELY 7.9 SOUARE MILES.

#### 1.2.3 VEGETATION

THERE IS LITTLE VEGETATION WITHIN THE PROJECT AREA. PERVIOUS AREAS SURROUNDING THE SIDEWALK ARE COMPRISED OF LAWN AREAS. IMPACT TO THE VEGETATION WILL BE LIMITED TO THE REGRADING OF THE LAWN AREAS AND THE ADDITION OF TWO LANDSCAPED RETAINING WALLS TO TIE IN THE EXISTING GROUND WITH THE NEW SIDEWALK. DISTURBED PERVIOUS AREAS WILL BE RE-ESTABLISHED WITH STANDARD SEED AND MULCH PRACTICES.

#### 1.2.4 **SOILS**

ALL SOIL DATA CAME FROM THE U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE FOR THE COUNTY OF WINDHAM, VERMONT. SOILS IN THE PROJECT SITE ARE COLTON LOAMY FINE SAND, 2% TO 8% SLOPES, "K FACTOR" = 0.1. THE SOIL IS CONSIDERED MODERATELY ERODIBLE DUE TO SIGNIFICANT SLOPES.

NOTE: K-VALUES GENERALLY INDICATE THE FOLLOWING: 0.0-0.23 = LOW EROSION POTENTIAL 0.24-0.36 = MODERATE EROSION POTENTIAL 0.37 AND HIGHER = HIGH EROSION POTENTIAL

#### 1 2 E CENCITIVE DECOLIDEE ADEAG

1.2.5 SENSITIVE RESOURCE AREAS
CRITICAL HABITATS: NO
HISTORICAL OR ARCHEOLOGICAL AREAS: YES
PRIME AGRICULTURAL LAND: NO
THREATENED AND ENDANGERED SPECIES: NO
WATER RESOURCE: BEAVER BROOK
WETLANDS: NO

## 1.3 RISK EVALUATION

THIS PROJECT IS A "LOW RISK" PROJECT, AND DOES NOT FALL UNDER THE JURISDICTION OF GENERAL PERMIT 3-9020 FOR STORMWATER RUNOFF FROM CONSTRUCTION SITES. SHOULD CHANGES PRIOR TO OR DURING CONSTRUCTION RESULT IN ONE OR MORE ACRES OF EARTH DISTURBANCE OR SHOULD THE PROJECT BECOME PART OF A LARGER PLAN OF DEVELOPMENT, THE CONTRACTOR WILL BE RESPONSIBLE FOR ANY ADDITIONAL PERMITTING.

#### 1.4 EROSION PREVENTION AND SEDIMENT CONTROL

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

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

#### 1.4.1 MARK SITE BOUNDARIES

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

PROJECT DEMARCATION FENCING (PDF) SHALL BE USED TO PHYSICALLY MARK SITE BOUNDARIES.

#### 1.4.2 LIMIT DISTURBANCE AREA

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

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

#### 1.4.3 SITE ENTRANCE/EXIT STABILIZATION

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

#### 1.4.4 INSTALL SEDIMENT BARRIERS

SEDIMENT BARRIERS SHALL BE UTILIZED TO INTERCEPT RUNOFF AND ALLOW SUSPENDED SEDIMENT TO SETTLE OUT. THEY SHALL BE INSTALLED PRIOR TO ANY UP SLOPE WORK.

SILT FENCE WILL BE INSTALLED AS DIRECTED BY THE RESIDENT. INLET PROTECTION DEVICES WILL BE INSTALLED AROUND DROP INLETS AND CATCH BASINS.

#### 1.4.5 DIVERT UPLAND RUNOFF

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

DIVERSIONARY MEASURES ARE NOT ANTICIPATED DUE TO THE PRESENCE OF EXISTING STORMWATER INFRASTRUCTURE UPSTREAM OF THE PROJECT AREA.

#### 1.4.6 SLOW DOWN CHANNELIZED RUNOFF

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

CHECK STRUCTURES ARE NOT ANTICIPATED DUE TO THE PROJECT SCOPE OF WORK.

#### 1.4.7 CONSTRUCT PERMANENT CONTROLS

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

NEW PERMANENT CONTROLS ARE NOT ANTICIPATED DUE TO THE PROJECT SCOPE OF WORK. EXISTING DROP INLETS ALONG THE NEW CURB FACE SHALL BE ADJUSTED AS NECESSARY.

#### 1.4.8 STABILIZE EXPOSED SOILS DURING CONSTRUCTION

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

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

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

#### 1.4.9 WINTER STABILIZATION

VARIOUS MEASURES SPECIFIC TO WINTER MAY BE NECESSARY SHOULD THE PROJECT EXTEND INTO WINTER (OCTOBER 15 THROUGH APRIL 15). DISTURBED EARTH AREAS SHOULD BE STABILIZED WITH EROSION MATTING AND A WINTER RYE SEED MIX. FOR ADDITIONAL GUIDANCE REFER TO THE LOW RISK SITE HANDBOOK.

#### 1.4.10 STABILIZE SOIL AT FINAL GRADE

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

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

#### 1.4.11 DE-WATERING ACTIVITIES

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

NO DE-WATERING ACTIVITIES ARE ANTICIPATED FOR THIS PROJECT.

#### 1.4.12 INSPECT YOUR SITE

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

#### 1.5 SEQUENCE AND STAGING

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

#### 1.5.1 CONSTRUCTION SEQUENCE

#### 1.5.2 OFF-SITE ACTIVITIES

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

#### 1.5.3 UPDATES

PROJECT NAME: EAST MAIN STREET SIDEWALK PROJECT NUMBER: TAP TA 16(4) - STP BP17(13)



FILE NAME: 57923\_EPSC\_narrative.dgn
PROJECT LEADER: E.P. DETRICK
DESIGNED BY: B.M. ROBERTS
EPSC NARRATIVE

PLOT DATE: 2/20/2020
DRAWN BY: B.M. ROBERTS
CHECKED BY: E.P. DETRICK
SHEET 25 OF 37

#### VAOT URBAN I AWN MIX

|        |           |           | TAOT ONDAIT LA      | 111 1111/1            |      |        |
|--------|-----------|-----------|---------------------|-----------------------|------|--------|
|        | LBS       | /AC       |                     |                       |      |        |
| WEIGHT | BROADCAST | HYDROSEED | NAME                | LATIN NAME            | GERM | PURITY |
| 42.5%  | 34        | 68        | CREEPING RED FESCUE | FESTUCA RUBRA X RUBRA | 85%  | 98%    |
| 20.0%  | 16        | 32        | PERENNIAL RYE GRASS | LOLIUM PERENNE        | 90%  | 95%    |
| 32.5%  | 26        | 52        | KENTUCKY BLUE GRASS | POA PRATENSIS         | 85%  | 85%    |
| 5.0%   | 4         | 8         | ANNUAL RYE GRASS    | LOLIUM MULTIFLORUM    | 85%  | 95%    |
| 100%   | 80        | 160       |                     |                       | _    |        |

### GENERAL AMENDMENT GUIDANCE

| FERTILIZER | L         | IME        |
|------------|-----------|------------|
| 10/20/10   | AG LIME   | PELLITIZED |
| 500 LBS/AC | 2 TONS/AC | 1 TONS/AC  |

## CONSTRUCTION GUIDANCE

- I.SEED MIX: THE URBAN AREA MIX SHALL NOT BE USED IN WETLANDS OR ANY WATERS OF THE STATE OF VERMONT.
- 2. SEED MIX: USE ONLY AS INDICATED IN THE PLANS.
- 3. SEED MIX: SHALL NOT HAVE A WEED CONTENT EXCEEDING 0.40% BY WEIGHT AND SHALL BE FREE OF ALL NOXIOUS SEED.
- 4.FERTILIZER AND LIMESTONE: SHALL FOLLOW RATES SHOWN ON PLAN OR AS DIRECTED BY THE ENGINEER
- 5. HAY MULCH: TO BE PLACED ON EARTH SLOPES AT THE RATE OF 2 TONS/ACRE, ACHIEVE 90% GROUND COVER OR AS DIRECTED BY THE ENGINEER.
- 6.HYDROSEEDING: ALTHOUGH GUIDANCE IS GIVEN ABOVE THE SITE CONDITIONS AND THE TYPE OF HYDROSEED WILL ULTIMATELY DICTATE THE AMOUNTS AND TYPES OF SOIL AMENDMENTS TO BE APPLIED
- 7.TURF ESTABLISHMENT: PLACING SEED, FERTILIZER, LIME AND MULCH PRIOR TO SEPTEMBER 15 AND AFTER APRIL 15 CAN BETTER ENSURE A VIGOROUS GROWTH OF GRASS.

ADAPTED FROM VTRANS TECHNICAL LANDSCAPE MANUAL FOR ROADWAYS AND TRANSPORTATION FACILITIES

TURF ESTABLISHMENT

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

REVISIONS

JANUARY 22, 2015 WHF

PROJECT NAME: EAST MAIN STREET SIDEWALK PROJECT NUMBER: TAP TA 16(4) - STP BP17(13)



FILE NAME: 57923\_epsc\_det.dgn
PROJECT LEADER: E.P. DETRICK
DESIGNED BY: VTRANS
EPSC DETAILS SHEET

PLOT DATE: 2/20/2020
DRAWN BY: B.M. ROBERTS
CHECKED BY: E.P. DETRICK
SHEET 26 OF 37

