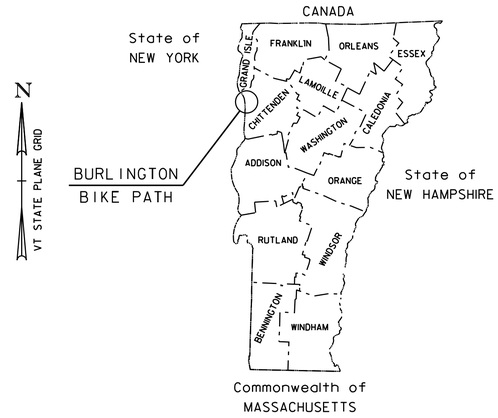
CITY OF BURLINGTON

BURLINGTON
PARKS
RECREATION
WATERFRONT
VERMONT

PROPOSED IMPROVEMENT

BURLINGTON BIKE PATH REHABILITATION PROJECT PHASE 3B (SOUTH)

CITY OF BURLINGTON
COUNTY OF CHITTENDEN



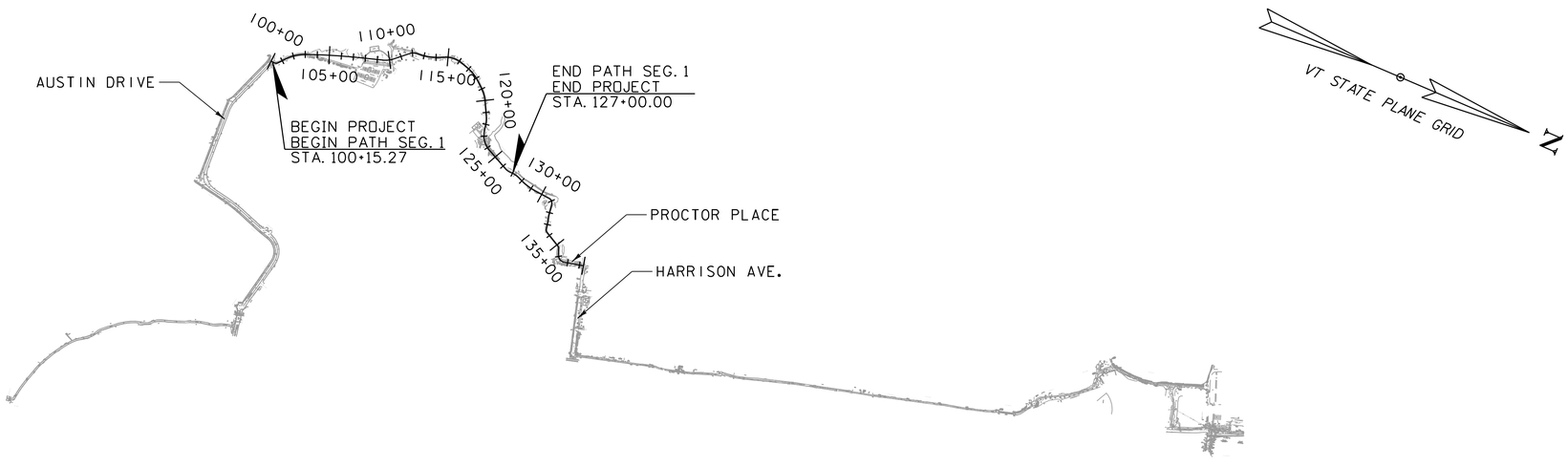
CONTRACT PLANS (100%)
APRIL 2021

PROJECT LOCATION: LOCATED IN THE COUNTY OF CHITTENDEN, CITY OF BURLINGTON, THE PROJECT RUNS FROM AUSTIN DRIVE TO BLANCHARD BEACH.

PROJECT DESCRIPTION: WORK TO BE PERFORMED INCLUDES REMOVAL OF THE EXISTING PATH PAVEMENT; THE WIDENING AND REPAVING OF THE PATH; INSTALLATION OF PAVEMENT MARKINGS, SIGNS, AND CONCRETE SIDEWALK RAMPS; THE RECONFIGURATION OF THE PATH AT THE FLYNN AVENUE INTERSECTION, AND OTHER INCIDENTAL ITEMS.

LENGTH OF PROJECT:

SEGMENT 1:	0.51 MILES	(2684.73 FEET)
TOTAL:	0.51 MILES	(2684.73 FEET)



SCALE IN FEET
600 0 600

CONSTRUCTION IS TO BE CARRIED ON IN ACCORDANCE WITH THESE PLANS AND THE VTRANS STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2018, INCLUDING ALL SUBSEQUENT REVISIONS AND SUCH REVISED SPECIFICATIONS AND SPECIAL PROVISIONS AS ARE INCORPORATED IN THIS CONTRACT.

SURVEYED BY :	VHB ALDRICH + ELLIOT, PC BUTTON PROFESSIONAL LAND SURVEYORS, PC CROSS CONSULTING ENGINEERS
SURVEYED DATE :	AUGUST 2013, AUG. 2015, SEPTEMBER 2018
DATUM	
VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (07)

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

PROJECT NAME : BURLINGTON BIKE PATH PHASE 3B
PROJECT NUMBER : 58109.01

SHEET 1 OF 52 SHEETS

INDEX OF SHEETS

ADDITIONAL SYMBOLS

EXIST. STREET LIGHT

EXISTING SURVEY CONTROL POINTS

PROP. ORNAMENTAL STREET LIGHT

FIRE CALL BOX — FB

PROPOSED TREE

PROPOSED TREE WITH TREE PIT

PROPOSED SHRUB

PROPOSED TREE PIT OR TREE LOCATION

PROPOSED BRICK PAVERS

EXIST. STORM DRAIN

EXIST. SEWER — S —

EXIST. WATER — W —

EXIST. GAS — G —

EXIST. UNDERGROUND TELEPHONE — UT —

PROPOSED DRAINAGE CALLOUT — ##

FIRE HYDRANT

PROPOSED PULL BOX — PB

PROPOSED CONDUIT

PROPOSED CONDUIT AND SLEEVE

PROPOSED WATER LINE — PW — PW —

PROPOSED SEWER LINE — PS — PS —

PROPOSED ROOF DRAIN — RD — RD —

PROPOSED STORMWATER TREATMENT PLANTER

PROPOSED BANNER POLE

BORING LOCATION

PROPOSED WAYFINDING SIGN

VAOT STANDARDS

A-78	4-7-2020	SHARED USE PATH TYPICAL
A-79	4-7-2020	RAIL TRAIL TYPICAL
B-5	6-01-1994	SLOPE GRADING, EMBANKMENTS, MUCK
C-3A	4-7-2020	SIDEWALK RAMPS
E-10	4-7-2020	ROLLED EROSION CONTROL PRODUCT, TYPE I
E-15	4-7-2020	SILT FENCE
E-121	8-8-1995	STANDARD SIGN PLACEMENT - CONVENTIONAL ROAD
E-193	8-18-1995	PAVEMENT MARKING DETAILS
E-195	6-9-2008	SHARED USE PATH PAVEMENT MARKINGS AND SIGN DETAILS
T-1	4-25-2016	TRAFFIC CONTROL GENERAL NOTES
T-2	4-7-2020	TRAFFIC SIGN GENERAL NOTES
T-10	8-6-2012	CONVENTIONAL ROADS CONSTRUCTION APPROACH SIGNING
T-28	8-6-2012	CONSTRUCTION SIGN DETAILS
T-30	8-6-2012	CONSTRUCTION SIGN DETAILS
T-45	1-2-2013	SQUARE TUBE SIGN POST AND ANCHOR

PROJECT NAME: BURLINGTON BIKE PATH PHASE 3B
PROJECT NUMBER: 58109.01

FILE NAME: 58109ind.dgn
PROJECT LEADER: E.P. DETRICK
DESIGNED BY: B.M.ROBERTS
INDEX OF SHEETS

PLOT DATE: 5/7/2021
DRAWN BY: C.K.FORD
CHECKED BY: E.P. DETRICK
SHEET 2 OF 52

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

- 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)

- 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 SR SR — SLOPE RIGHTS
- 6F — 6F PROPERTY BOUNDARY
- 4F — 4F PROPERTY BOUNDARY
- HAZ — HAZ — 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 — 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
- Ⓗ 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:	BURLINGTON BIKE PATH PHASE 3B
PROJECT NUMBER:	58109.01
FILE NAME: 58109legend.dgn	PLOT DATE: 5/7/2021
PROJECT LEADER: E.P. DETRICK	DRAWN BY: VTRANS
DESIGNED BY: VTRANS	CHECKED BY: E.P. DETRICK
CONVENTIONAL SYMBOLOGY LEGEND SHEET	SHEET 3 OF 52

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.

2. PER AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES (ADAAG), PATH CROSS SLOPES SHALL NOT EXCEED 2%.

3. ALL SHARED USE PATH LONGITUDINAL RAMPS AT ROADWAY AND DRIVEWAY CROSSINGS SHALL NOT EXCEED 5%.

CONSTRUCTION

4. ALL TREE CLEARING AND TREE REMOVAL WITHIN THE SLOPE LIMITS SHOWN ON THE PLANS SHALL BE PAID FOR UNDER ITEM 201.10, "CLEARING AND GRUBBING, INCLUDING INDIVIDUAL TREES AND STUMPS". ADDITIONAL TREE CLEARING AND REMOVAL BEYOND THE SLOPE LIMITS WILL BE PAID UNDER ITEM 201.15, "REMOVING MEDIUM TREES", UNLESS OTHERWISE NOTED IN THESE PLANS. TREES TO BE REMOVED UNDER THIS CONTRACT SHALL BE FIELD VERIFIED WITH BURLINGTON PARKS, RECREATION & WATERFRONT PRIOR TO THE START OF CONSTRUCTION.

5. ANY EXISTING SIGNS NOT REUSED SHALL REMAIN THE PROPERTY OF THE CITY OF BURLINGTON. THESE SIGNS SHALL BE REMOVED BY THE CONTRACTOR AND STOCKPILED FOR REMOVAL BY THE CITY. STOCKPILE LOCATION TO BE DETERMINED BY THE RESIDENT ENGINEER.

6. THE FOLLOWING IS A LIST OF CONTACTS THE CONTRACTOR SHALL NOTIFY AT LEAST SEVEN (7) FULL BUSINESS DAYS PRIOR TO EXCAVATING:

   CITY OF BURLINGTON:
   CINDI WIGHT, DIRECTOR OF PARKS, RECREATION & WATERFRONT;
   (802) 865-7557
   JON ADAMS KOLLITZ, BURLINGTON BIKE PATH REHABILITATION PROJECT MANAGER;
   (802) 865-7247
   CHAPIN SPENCER, DIRECTOR OF PUBLIC WORKS;
   (802) 863-9094
   CALEB MANNA, ROW AND EXCAVATION INSPECTION, DPW
   (802) 865-7562
   BURLINGTON ELECTRIC DEPARTMENT:
   BRIAN SWEENEY, DISTRIBUTION ENGINEER;
   (802) 865-7324

7. CONTRACTOR SHALL BE RESPONSIBLE FOR SITE SECURITY AND JOB SAFETY. CONSTRUCTION ACTIVITIES SHALL BE IN ACCORDANCE WITH OSHA STANDARDS, STATE AND LOCAL REQUIREMENTS.

8. AREAS OUTSIDE THE LIMITS OF PROPOSED WORK DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED BY THE CONTRACTOR TO THEIR ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE.

9. IN THE EVENT GROSS 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.

10. THERE ARE EXISTING STORM DRAIN LINES LOCATED BENEATH THE PATH. COMPACTION SHALL NOT BE COMPLETED USING VIBRATORY ROLLING METHODS. DAMAGE RESULTING FROM CONTRACTOR CONSTRUCTION LOADS SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO OWNER.

11. CONTRACTOR SHALL CONTROL STORMWATER RUNOFF DURING CONSTRUCTION AS PER THE EPSC NARRATIVE AND DETAILS PROVIDED IN THESE PLANS TO PREVENT ADVERSE IMPACTS TO OFF SITE AREAS, AND SHALL BE RESPONSIBLE TO REPAIR RESULTING DAMAGES, IF ANY, AT NO COST TO OWNER.

12. ALL CONTRACTORS WORKING IN DIRECT CONTACT WITH SOILS FOR EXCAVATING, REGRADING, AND OTHER PROJECT TASKS SHALL BE OSHA-HAZWOPER CERTIFIED.

13. THE EXISTING WOODEN BIKE PATH SIGNS LOCATED WITHIN THE PROJECT ARE TO BE REMOVED BY THE CONTRACTOR AND STOCKPILED AT THE CITY OF BURLINGTON PARKS, RECREATION & WATERFRONT. PAYMENT WILL NOT BE MADE DIRECTLY, BUT SHALL BE CONSIDERED INCIDENTAL TO ITEM 201.10, "CLEARING AND GRUBBING, INCLUDING INDIVIDUAL TREES AND STUMPS". THE EXISTING ALUMINUM/STEEL SIGNS TO BE REMOVED WILL BE PAID UNDER ITEM 675.50, "REMOVING SIGNS".

14. THE CITY RESERVES FIRST RIGHT OF REFUSAL ON ANY ITEMS SALVAGED AS PART OF THE PROJECT.

15. ORNAMENTAL BOULDERS ENCOUNTERED ON SITE SHALL NOT BE IMPACTED DURING CONSTRUCTION. DAMAGE TO ORNAMENTAL BOULDERS RESULTING FROM CONSTRUCTION OPERATIONS SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO OWNER.

16. ALL JAPANESE KNOT WEED ENCOUNTERED DURING CONSTRUCTION SHALL BE REMOVED USING A MULTI-PRONGED APPRPOACH. THE CONTRACTOR SHALL APPLY HERBICIDES SUCH AS ROUNDUP. ADDITIONALLY, THE CONTRACTOR SHALL EXCAVATE OUT THE ROOT SYSTEM AND DIG UP AS MANY RHIZOMES AS POSSIBLE. TO PREVENT SPREADING OF JAPANESE KNOT WEED UPON REMOVAL, THE CONTRACTOR SHALL DISPOSE OF THE SOIL AND PLANT WASTE IN A CONTROLLED MANNER. REMOVAL OF JAPANESE KNOT WEED SHALL BE INCLUDED IN THE PAY ITEM 201.10, "CLEARING AND GRUBBING, INCLUDING INDIVIDUAL TREES AND STUMPS"

17. CONTRACTOR SHALL OBTAIN AN EPSC PERMIT THROUGH THE CITY OF BURLINGTON'S WATER RESOURCES DIVISION. TO OBTAIN A PERMIT, THE CONTRACTOR MUST COMPLETE AND SUBMIT THE CITY OF BURLINGTON EPSC PERMIT APPLICATION TO THE WATER RESOURCES DEPARTMENT USING THE CONTACT INFORMATION LISTED BELOW. ADDITIONAL EPSC MEASURES AS REQUIRED BY CITY PERMIT AND/OR THE ENGINEER THAT ARE NOT ITEMS IN THE CONTRACT WILL NOT BE PAID FOR DIRECTLY BUT WILL BE CONSIDERED INCIDENTAL TO THE ALL OTHER CONTRACT ITEMS.

    CITY OF BURLINGTON - DEPARTMENT OF WATER RESOURCES:
    JAMES SHERRARD, STORMWATER PROGRAM MANAGER;
    (802) 863-4501
    JSHERRARD@BURLINGTONVT.GOV

18. ALL EXCAVATION, PAVING (REMOVAL AND INSTALLATION), AND CONSTRUCTION OPERATIONS TO BE PERFORMED SHALL BE COMPLETED WITH EXTREME CARE TO NOT DAMAGE THE EXISTING TREES AS OUTLINED IN ITEM 900.645, "SPECIAL PROVISION (ROOT PRUNING AND TREE PROTECTION)". THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO BIDDING AND BECOME FAMILIAR WITH EXISTING CLEARANCES TO TREE CANOPIES AND BID THE PROJECT WITH THE UNDERSTANDING THAT ALTERNATIVE EQUIPMENT MAY BE REQUIRED FOR CONSTRUCTION OPERATIONS TO ENSURE NO DAMAGE TO TREES WILL OCCUR. ALL COSTS SHALL BE INCLUDED UNDER APPROPRIATE PAVEMENT, EXCAVATION, AND ROOT PRUNING AND TREE PROTECTION PAY ITEMS FOR PROTECTION OF EXISTING TREES. IF DAMAGE DOES OCCUR TO ANY OF THE EXISTING TREES, ALL COSTS FOR REPLACEMENT TO THE CITY'S SATISFACTION SHALL BE AT THE CONTRACTOR'S EXPENSE.

19. ALL RELOCATED BOULDERS ON PROJECT SHALL BE TAKEN FROM OAKLEDGE PARK AND CHOSEN BY THE CITY OF BURLINGTON PARKS, RECREATION & WATERFRONT.

20. CONTRACTOR SHALL REUSE TOPSOIL THAT IS EXCAVATED IN LOCATIONS WHERE THE PATH IS TO BE CONSTRUCTED OVER VIRGIN EARTH TO FILL IN AREAS WHERE THE EXISTING PATH IS TO BE REMOVED.

21. THE UNIVERSALLY ACCESSIBLE PLAYGROUND PROJECT IS TO BE COMPLETED UNDER A SEPARATE CONTRACT. THE PROJECT LIMITS ARE SHOWN ON THE PLANS FOR CONSTRUCTION SEQUENCING AND COORDINATION PURPOSES.

22. THE REMOVAL OF EXISTING SIDEWALK AT FLYNN AVENUNE AND AUSTIN DRIVE AND THE REMOVAL OF THE EXISTING RETAINING WALL AT FLYNN AVENUE SHALL BE PAID FOR UNDER ITEM 203.15, "COMMON EXCAVATION".

UTILITY

23. THE LOCATIONS, SIZES, AND TYPES OF EXISTING UTILITIES ARE SHOWN AS AN APPROXIMATE REPRESENTATION ONLY. THE OWNER OR DESIGN ENGINEER HAVE NOT INDEPENDENTLY VERIFIED THIS INFORMATION AS SHOWN ON THE PLANS. THE UTILITY INFORMATION SHOWN DOES NOT GUARANTEE THE ACTUAL EXISTENCE, SERVICEABILITY, OR OTHER DATA CONCERNING THE UTILITIES, NOR DOES IT GUARANTEE AGAINST THE POSSIBILITY THAT ADDITIONAL UTILITIES MAY BE PRESENT THAT ARE NOT SHOWN ON THE PLANS. PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL VERIFY AND DETERMINE THE EXACT LOCATIONS, SIZES, AND ELEVATIONS OF THE POINTS OF CONNECTIONS TO EXISTING UTILITIES AND, SHALL CONFIRM THAT THERE ARE NO INTERFERENCES WITH EXISTING UTILITIES AND THE PROPOSED WORK, INCLUDING WORK WITHIN THE PUBLIC RIGHTS OF WAY.

24. IF ANY SURFACE OR SUBSURFACE UTILITIES ARE DAMAGED BY THE CONTRACTOR, THE CONTRACTOR SHALL CONTACT THE UTILITY OWNER AND THE UTILITY SHALL BE RESTORED TO A CONDITION AT LEAST EQUAL TO THAT IN WHICH THEY WERE FOUND IMMEDIATELY. ALL COSTS ASSOCIATED WITH THE RESTORATION OF DAMAGED UTILITIES SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

25. 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.

26. 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.

    DIG-SAFE (1-888-344-7233)

27. EXISTING RIM ELEVATIONS FOR DRAIN AND SEWER MANHOLES, WATER VALVE COVERS, GAS GATES, ELECTRIC AND TELEPHONE PULL BOXES, AND MANHOLES, AND OTHER SUCH ITEMS WITHIN THE LIMITS OF THE PROPOSED WORK, ARE APPROXIMATE AND SHALL BE SET/RESET AS FOLLOWS:

    A. PAVEMENTS AND CONCRETE SURFACES: FLUSH
    B. ALL SURFACES ALONG ACCESSIBLE ROUTES: FLUSH
    C. LANDSCAPE, TOPSOIL AND SEED, AND OTHER EARTH SURFACE AREAS: ONE INCH ABOVE SURROUNDING AREA AND TAPER EARTH TO THE RIM ELEVATION

28. THE USE OF BRICK AND MORTAR TO ADJUST THE ELEVATION OF DRAINAGE OR SANITARY STRUCTURES IS PROHIBITED. ALL ELEVATION ADJUSTMENTS SHALL BE MADE USING EITHER GRADE RINGS OR A SYNTHETIC RISER.

29. ALL CONNECTIONS BETWEEN PRECAST DRAINAGE STRUCTURES AND NEW DRAINAGE PIPES SHALL BE A BOOTED CONNECTION.

30. CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING AND ADJUSTING ALL CURB STOPS, WATER VALVES, MANHOLES, & DRAINAGE STRUCTURES WITHIN THE PROJECT LIMITS TO THE FINAL GRADE ELEVATION. PAYMENT FOR ADJUSTMENTS SHALL BE PAID FOR UNDER THE APPROPRIATE CONTRACT PAY ITEMS.

BID ALTERNATIVE

31. THE BID ALTERNATIVE SHALL CONSIST OF RECONSTRUCTING THE TWO DIAGONAL SIDE PATHS BETWEEN THE BIKE PATH AND THE UPPER PAVILION AT OAKLEDGE PARK.

32. THE EXISTING PAVEMENT ON THE SIDE PATHS FROM THE BIKE PATH TO THE EXISTING APRONS AT THE PAVILION SHALL BE REMOVED. PAYMENT SHALL BE MADE UNDER ITEM 203.28 "EXCAVATION OF SURFACES AND PAVEMENTS."

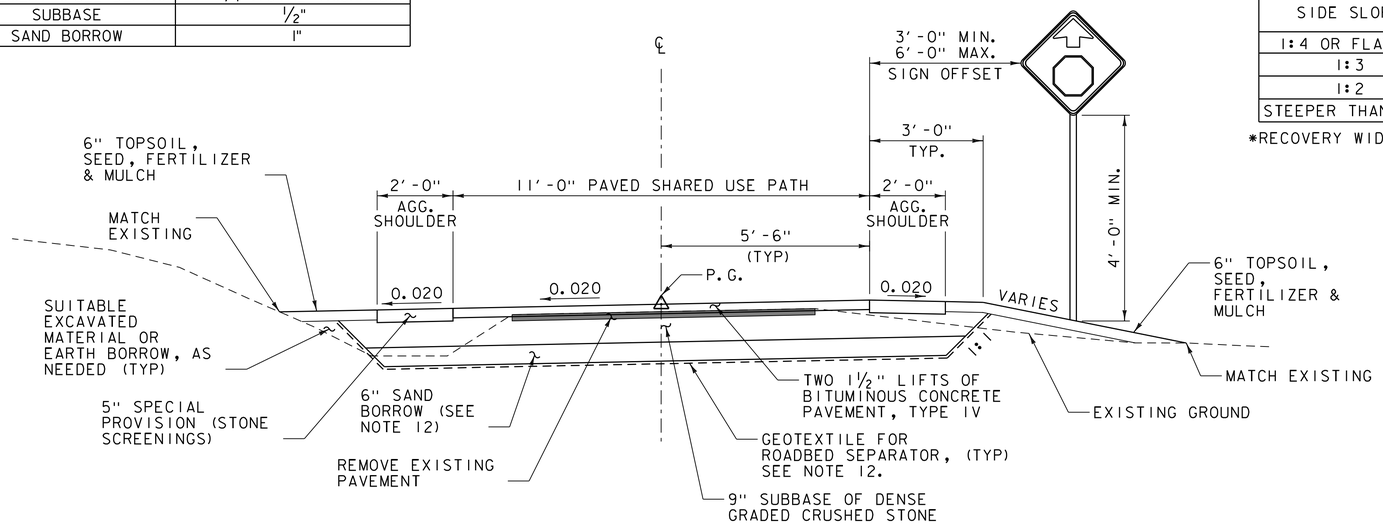
33. THE EXISTING SUBBASE SHALL BE RESHAPED AND ADDITIONAL SUBBASE OF DENSE GRADED CRUSHED STONE SHALL BE USED TO ACHIEVE A MINIMUM DEPTH OF 9" OF SUBBASE. ADDITIONAL SUBBASE SHALL BE PAID FOR UNDER ITEM 301.35 "SUBBASE OF DENSE GRADED CRUSHED STONE".

34. THE TWO PATHS SHALL BE REPAVED TO MATCH THE EXISTING PATH WIDTHS WITH TWO 1.5" LIFTS OF BITUMINOUS CONCRETE PAVEMENT, TYPE IV. PAYMENT SHALL BE MADE UNDER ITEM 406.25 "MARSHALL BITUMINOUS CONCRETE PAVEMENT".

MATERIAL TOLERANCES	
MATERIAL ITEM	THICKNESS TOLERANCE
PAVEMENT (FULL DEPTH)	+/- 1/4" (TOTAL THICKNESS)
SUBBASE	1/2"
SAND BORROW	1"

RECOVERY AREA TABLE		
SIDE SLOPE	RECOVERY WIDTH*	
	MIN.	PREFERRED
1:4 OR FLATTER	0	3'-0"
1:3	3'-0"	4'-0"
1:2	4'-0"	5'-0"
STEEPER THAN 1:2	5'-0"	>5'-0"

*RECOVERY WIDTH SLOPE MUST BE 8% MAX.



PATH TYPICAL SECTION (REVERSE CROWN)

N.T.S.

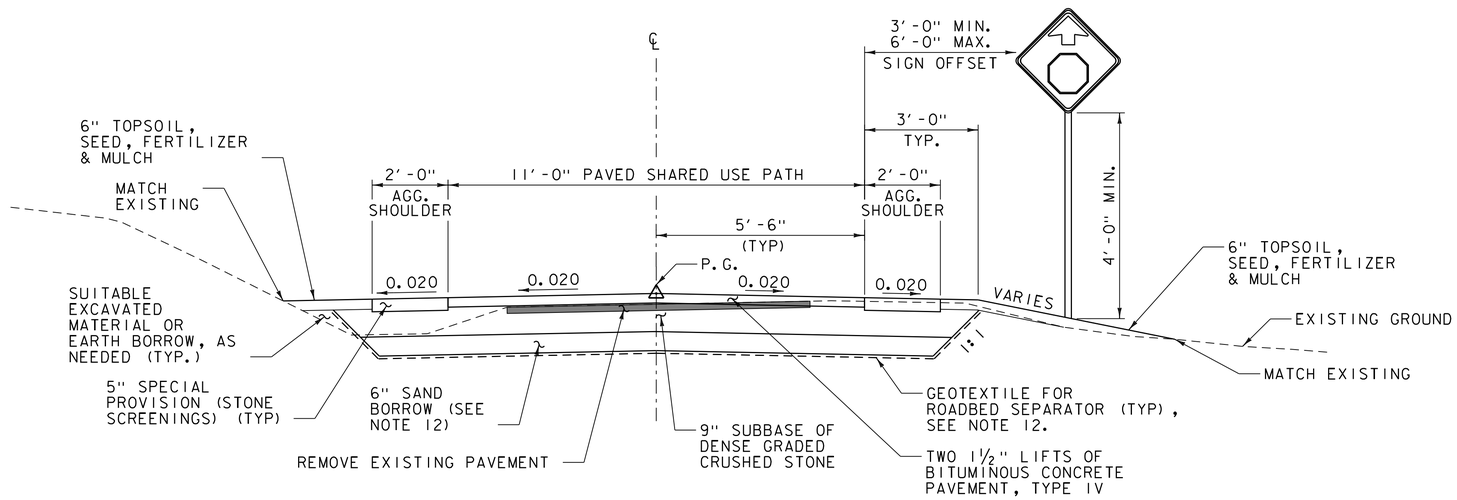
STA. 110+25 - STA. 117+25
STA. 121+75 - STA. 124+25

SAND BORROW LOCATIONS

STA. 110+25 - STA. 112+40
STA. 122+25 - STA. 126+50

NOTES FOR ALL TYPICAL SECTIONS:

1. THE MINIMUM PAVED PATH WIDTH SHALL BE 11'-0" UNLESS NOTED OTHERWISE IN THE PLANS.
2. THE PATH SHALL HAVE A UNIFORM TWO PERCENT CROSS SLOPE IN THE DIRECTION SHOWN IN THE PLANS, AND THE SUBBASE SHALL BE GRADED TO MATCH.
3. ALL SHARED USE PATHS SHALL MEET THE REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT (ADA) TO THE EXTENTS POSSIBLE GIVEN EXISTING CONDITIONS. REFER TO THE AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES (ADAAG) FOR SPECIFIC DETAILS.
4. ANY TREE ROOTS ENCOUNTERED WITHIN THE EXCAVATION LIMITS SHALL BE PRUNED AND PROTECTED. THE COST OF THIS WORK IS INCIDENTAL TO ITEM 201.10, "CLEARING AND GRUBBING, INCLUDING INDIVIDUAL TREES AND STUMPS".
5. DITCHES SHALL RECEIVE THE FOLLOWING TREATMENTS BASED ON THEIR SLOPE, UNLESS SHOWN OTHERWISE ON THE PLANS.
   A) 0-1% SEED AND MULCH
   B) 1-2.5% ROLLED EROSION CONTROL PRODUCT, TYPE I AND SEED
6. PAYMENT OF DITCH LINE TREATMENTS SHALL BE UNDER THE FOLLOWING RESPECTIVE VTRANS UNIT ITEMS:
   A) SEED - 651.15
   B) HAY MULCH - 653.10
   C) ROLLED EROSION CONTROL PRODUCT, TYPE I - 653.20
   D) TYPE I STONE FILL - 613.10
   E) TYPE II STONE FILL - 613.11
7. SEE EPSC NOTES FOR SEED AND SOIL SUPPLEMENT SPECIFICATIONS.
8. AGGREGATE SHOULDER SHALL BE PAID UNDER ITEM NO. 900.608 SPECIAL PROVISION (STONE SCREENINGS).
9. EMULSIFIED ASPHALT SHALL BE APPLIED AT A RATE OF 0.040 GAL/SY WHERE INDICATED.
10. SAWCUTTING OF EXISTING PAVEMENT IS INCIDENTAL TO ITEM 406.25 "MARSHALL BITUMINOUS CONCRETE PAVEMENT".
11. TOPSOIL SHALL NOT BE SOURCED FROM WITHIN THE CITY OF BURLINGTON.
12. SAND BORROW AND GEOTEXTILE FOR ROADBED SEPARATOR SHALL BE USED IN LOCATIONS WHERE THE PATH IS CONSTRUCTED OVER VIRGIN EARTH.



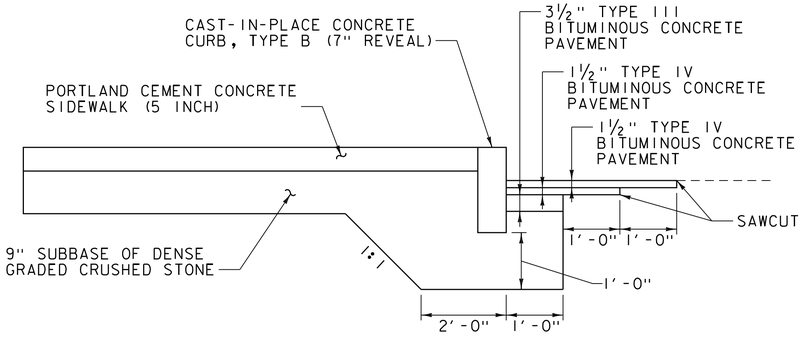
NORMAL CROWN PATH TYPICAL SECTION

N.T.S.

STA. 100+21 - STA. 110+25
STA. 117+25 - STA. 121+75
STA. 124+25 - STA. 127+00

SAND BORROW LOCATIONS

STA. 103+00 - STA. 110+25

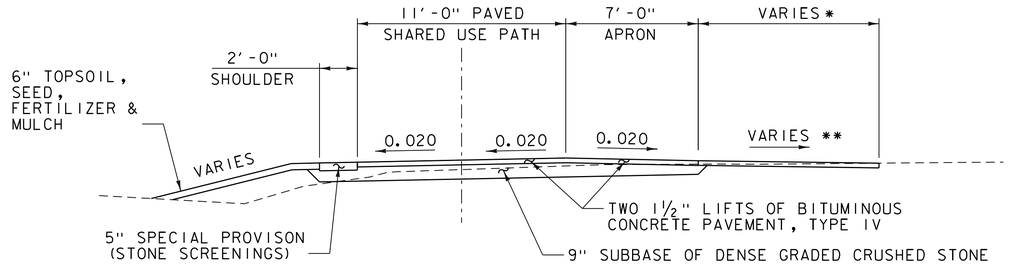


FLYNN AVE SIDEWALK TYPICAL SECTION

N.T.S.

PROJECT NAME:	BURLINGTON BIKE PATH PHASE 3B
PROJECT NUMBER:	58109.01
FILE NAME: 58109typ.dgn	PLOT DATE: 5/7/2021
PROJECT LEADER: E.P. DETRICK	DRAWN BY: C.K.FORD
DESIGNED BY: B.M.ROBERTS	CHECKED BY: E.P. DETRICK
TYPICAL SECTIONS (1 OF 2)	SHEET 5 OF 52

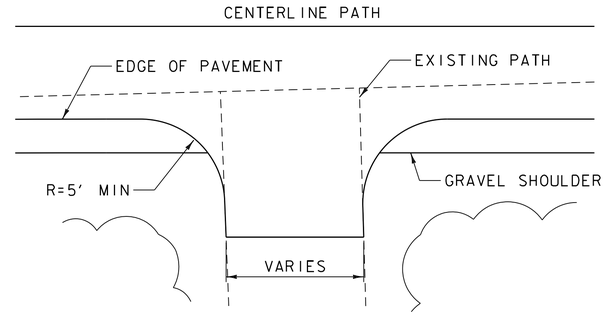
MATERIAL TOLERANCES	
MATERIAL ITEM	THICKNESS TOLERANCE
PAVEMENT (FULL DEPTH)	+/- 1/4" (TOTAL THICKNESS)
SUBBASE	1/2"
SAND BORROW	1"



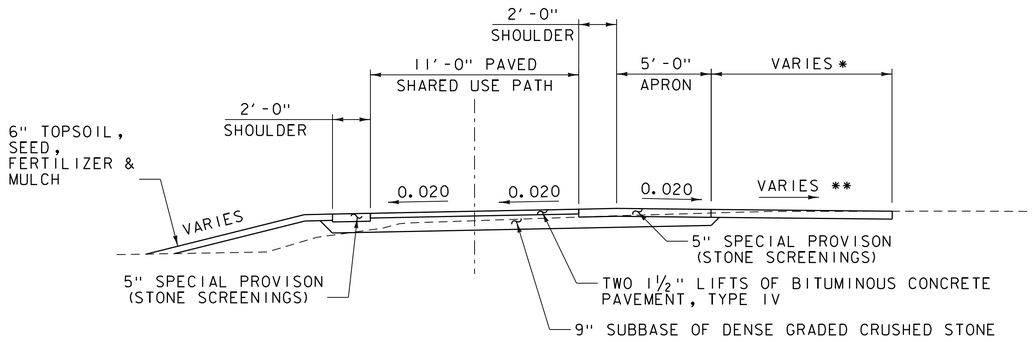
PAVED SIDE PATH TYPICAL SECTION

N.T.S.

* RESIDENT ENGINEER TO DETERMINE LIMITS OF SIDE PATH REQUIRED BEFORE MATCHING EXISTING.
** SLOPE TO BE TO BE DETERMINED BY RESIDENT ENGINEER.



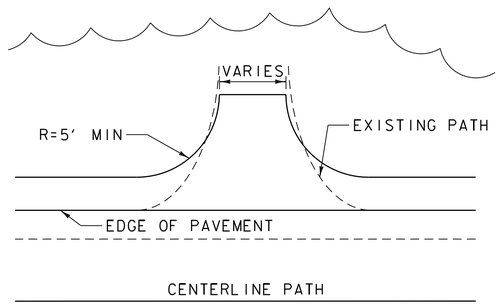
PAVED SIDE PATH TYPICAL PLAN



GRAVEL SIDE PATH TYPICAL SECTION

N.T.S.

* RESIDENT ENGINEER TO DETERMINE LIMITS OF SIDE PATH REQUIRED BEFORE MATCHING EXISTING.
** SLOPE TO BE TO BE DETERMINED BY RESIDENT ENGINEER.

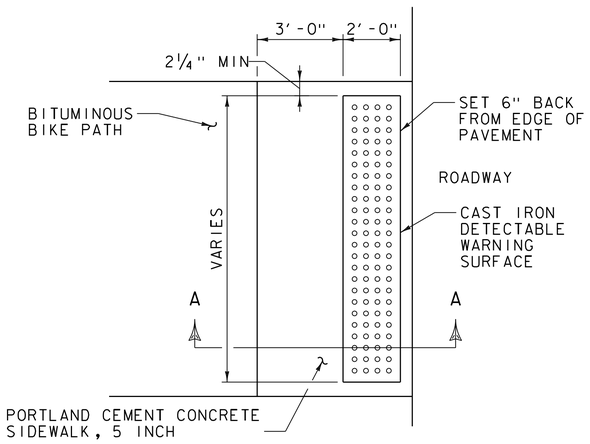


GRAVEL SIDE PATH TYPICAL PLAN

PROJECT NAME: BURLINGTON BIKE PATH PHASE 3B
PROJECT NUMBER: 58109.01

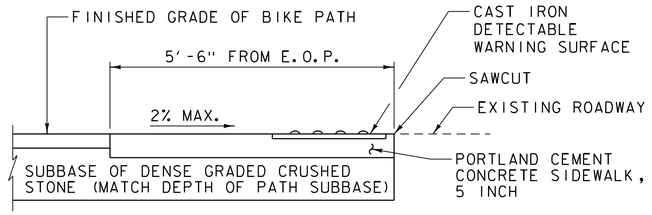
FILE NAME: 58109typ.dgn
PROJECT LEADER: E.P. DETRICK
DESIGNED BY: B.M.ROBERTS
TYPICAL SECTIONS (2 OF 2)

PLOT DATE: 5/7/2021
DRAWN BY: C.K.FORD
CHECKED BY: E.P. DETRICK
SHEET 6 OF 52



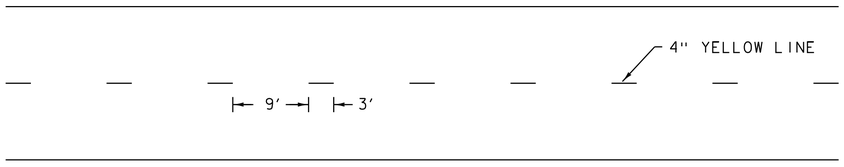
DETECTABLE WARNING SURFACE

N.T.S.



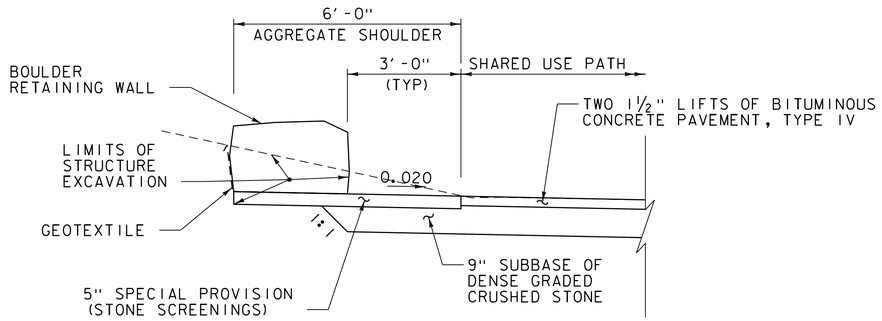
SECTION A-A

NOT TO SCALE



TYPICAL PATH CENTERLINE PAVEMENT MARKING

N.T.S.



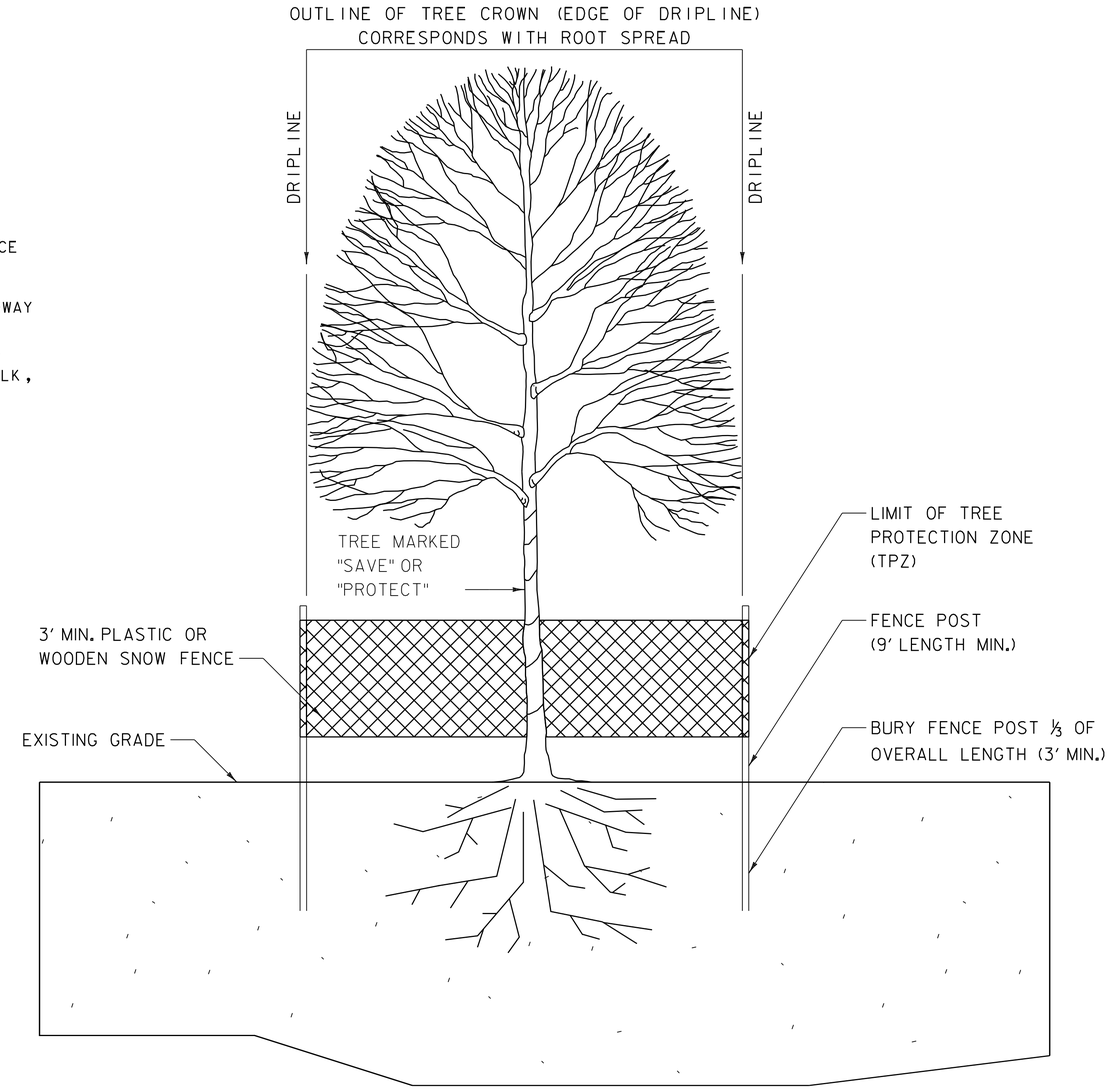
BOULDER RETAINING WALL

N.T.S.

STA. 112+50 - 113+65, LT

NOTES:

1. RETAINING WALL SHALL BE PAID FOR UNDER ITEM 900.670 . "SPECIAL PROVISION (BOULDER RETAINING WALL)".
2. GEOTEXTILE SHALL BE INSTALLED BEHIND BOULDER RETAINING WALL AND SHALL BE PAID FOR UNDER ITEM 649.31 "GEOTEXTILE UNDER STONE FILL."
3. BOULDERS SHALL BE PLACED WITH A MAXIMUM GAP OF 1"+/-.

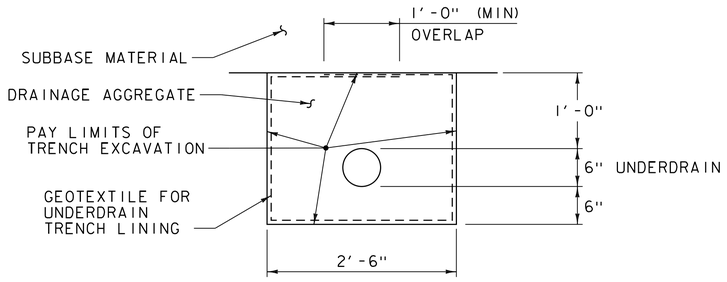


1. SEE VTRANS SPECIFICATION 656.11, TREE PROTECTION, FOR STEPS TO MINIMIZE SOIL AND ROOT DISTURBANCE AND GUIDANCE TO CONSTRUCT PROTECTION MEASURES FOR TREES CLOSE TO CONSTRUCTION AREAS.
2. NO WORK, NOR HEAVY EQUIPMENT STORAGE SHALL BE WITHIN A TREE PROTECTION ZONE.
3. ANY TREE ROOTS ENCOUNTERED WITHIN THE EXCAVATION LIMITS SHALL BE PRUNED AND TREES IDENTIFIED BY THE ENGINEER SHALL BE PROTECTED IN ACCORDANCE WITH, AND PAID FOR UNDER, SPECIAL PROVISION 900.645 (ROOT PRUNING AND TREE PROTECTION).
4. CITY ARBORIST OR BPRW REPRESENTATIVE CAN SPECIFY TREE PROTECTION IN THE DRIPLINE.

TREE PROTECTION

N.T.S.

PROJECT NAME:	BURLINGTON BIKE PATH PHASE 3A
PROJECT NUMBER:	58109.00
FILE NAME: 58109det.dgn	PLOT DATE: 5/7/2021
PROJECT LEADER: E.P. DETRICK	DRAWN BY: C.K.FORD
DESIGNED BY: B.M.ROBERTS	CHECKED BY: E.P. DETRICK
DETAIL SHEET (1 OF 2)	SHEET 7 OF 52

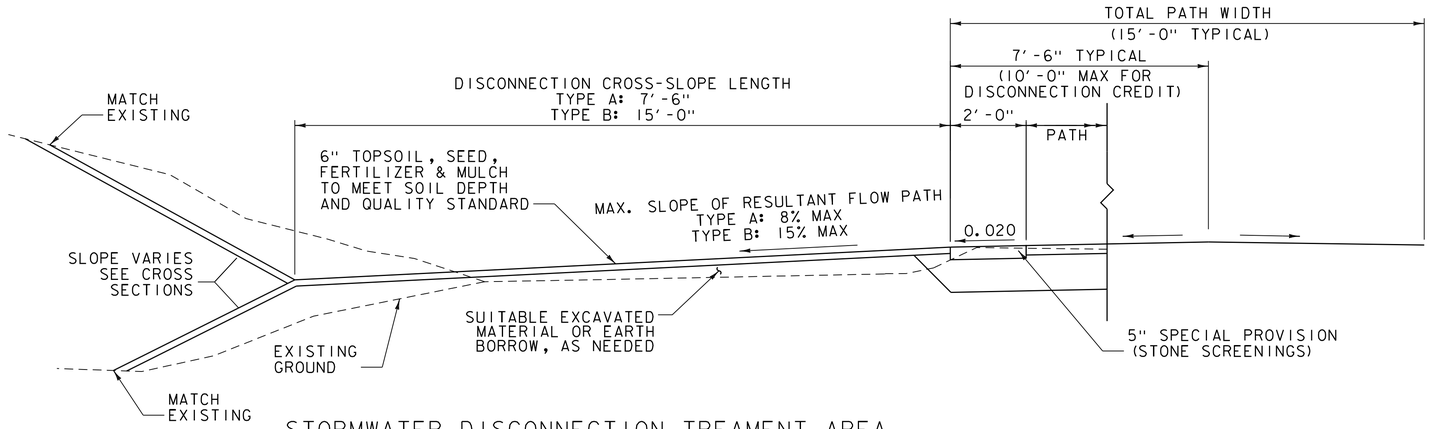


UNDERDRAIN DETAIL

N.T.S.

NOTE:

PAYMENT FOR GEOTEXTILE FOR UNDERDRAIN TRENCH LINING AND DRAINAGE AGGREGATE IS INCIDENTAL TO ITEM 605.10 "UNDERDRAIN PIPE, 6 INCHES".



STORMWATER DISCONNECTION TREAMENT AREA

N.T.S.

STA. 103+50 - STA. 108+93, RT
STA. 109+01 - STA. 110+00, RT
STA. 103+50 - STA. 106+00, LT
STA. 108+00 - STA. 110+00, LT
STA. 117+75 - STA. 121+95, RT
STA. 120+00 - STA. 121+95, LT
STA. 125+50 - STA. 127+00, RT

NOTES:

1. WHEN GRADING FOR DISCONNECTION AREAS, THE CONTRACTOR SHALL NOT DISTURB THE GROUND WITHIN 4' OF THE TRUNK BASE FOR ALL TREES WITH A DIAMETER OF 6" OR GREATER AND INTEND TO REMAIN THROUGH CONSTRUCTION.

DISCONNECTION CREDIT REQUIREMENTS

1. THE MAXIMUM CONTRIBUTING FLOW PATH LENGTH ACROSS THE CONTRIBUTING IMPERVIOUS AREA TO A DISCHARGE LOCATION SHALL BE 75 FEET OR LESS.

2. THE AMOUNT OF CONTRIBUTING IMPERVIOUS AREA TO ANY POINT DISCHARGE LOCATION CANNOT EXCEED 1,000 SF.

3. THE LENGTH OF THE "DISCONNECTION" SHALL BE EQUAL TO OR GREATER THAN THE CONTRIBUTING IMPERVIOUS FLOW PATH LENGTH FOR SLOPES 8% OR LESS, AND TWICE THE IMPERVIOUS FLOW PATH LENGTH FOR SLOPES 8% - 15%.

4. RUNOFF CANNOT COME FROM A DESIGNATED HOTSPOT LAND USE.

SOIL DEPTH AND QUALITY STANDARD

THESE REQUIREMENTS APPLY TO ALL DISTURBED AREAS WITHIN THE LIMITS OF THE SITE WHICH ARE NOT COVERED BY AN IMPERVIOUS SURFACE, INCORPORATED INTO A STRUCTURAL STORMWATER TREATMENT PRACTICE, OR ENGINEERED AS STRUCTURAL FILL ONCE DEVELOPMENT IS COMPLETE. FOR THIS PROJECT THESE AREAS INCLUDE THE DISCONNECTION AREAS DISTURBED DURING PATH CONSTRUCTION. A DENSE AND VIGOROUS VEGETATIVE COVER SHALL BE ESTABLISHED OVER TURF AREAS. ANY AREAS NOT DESCRIBED ABOVE WHICH ARE DISTURBED OR COMPACTED DURING CONSTRUCTION SHALL ALSO BE SUBJECT TO THESE REQUIREMENTS.

ALTERNATIVELY, TO LEAVING EXISTING TOPSOIL IN PLACE WITHOUT DISTURBING OR COMPACTING IT, THERE ARE THREE METHODS THAT MAY BE USED TO SATISFY THESE REQUIREMENTS.

1. AMEND EXISTING TOPSOIL IN PLACE
   - A. SCARIFY OR TILL SUBSOILS TO 4 INCHES OF DEPTH OR TO THE DEPTH NEEDED TO ACHIEVE A TOTAL DEPTH OF 8 INCHES OF UNCOMPACTED SOIL AFTER A CALCULATED AMOUNT OF AMENDMENT IS ADDED.
   - B. AMEND THE SOIL TO MEET THE ORGANIC CONTENT REQUIREMENTS. ORGANIC MATERIAL MAY BE PLACED AT A PRE-APPROVED RATE OF 1 INCH WITH AN ORGANIC MATTER CONTENT OF 40-65% AND ROTOTILLED INTO 3 INCHES OF SOIL OR AT A CALCULATED RATE ROTOTILLED INTO A DEPTH OF SOIL NEEDED TO ACHIEVE 4 INCHES OF SETTLED SOIL AT 4% ORGANIC CONTENT.

2. REMOVE AND STOCKPILE EXISTING TOPSOIL DURING GRADING
   - A. TOPSOIL SHOULD BE STOCKPILED ON SITE IN A CONTROLLED AREA AT LEAST 50 FEET FROM SURFACE WATERS, WETLANDS, FLOODPLAINS, OR OTHER CRITICAL RESOURCE AREAS.
   - B. SCARIFY OR TILL SUBGRADE TO A DEPTH OF 4 INCHES. EXCEPT FOR WITHIN THE DRIP LINE OF EXISTING TREES, THE ENTIRE SURFACE SHALL BE DISTURBED BY SCARIFICATION.
   - C. STOCKPILED TOPSOIL SHALL ALSO BE AMENDED, IF NEEDED, TO MEET THE ORGANIC CONTENT REQUIREMENTS IDENTIFIED ABOVE.
   - D. REPLACE STOCKPILED TOPSOIL PRIOR TO PLANTING AND RAKE TO LEVEL, REMOVING ANY SURFACE ROCKS LARGER THAN 2 INCHES IN DIAMETER.
   - E. WATER OR ROLL SOILS IN TURF AREAS TO 85% OF MAXIMUM DRY DENSITY.

3. IMPORT TOPSOIL MIX OF SUFFICIENT ORGANIC CONTENT AND DEPTH
   - A. SCARIFY OR TILL SUBGRADE TO A DEPTH OF 4 INCHES. EXCEPT FOR WITHIN THE DRIP LINE OF EXISTING TREES, THE ENTIRE SURFACE SHALL BE DISTURBED BY SCARIFICATION.
   - B. PLACE 4 INCHES OF IMPORTED TOPSOIL MIX THAT CONTAINS 4% ORGANIC MATTER. SOILS USED IN THE MIX SHALL BE SAND OR SANDY LOAM AS DEFINED BY THE USDA.
   - C. RAKE TO LEVEL, REMOVING ANY SURFACE ROCKS GREATER THAN 2 INCHES IN DIAMETER.
   - D. WATER OR ROLL SOIL IN TURF AREAS TO 85% OF MAXIMUM DRY DENSITY.

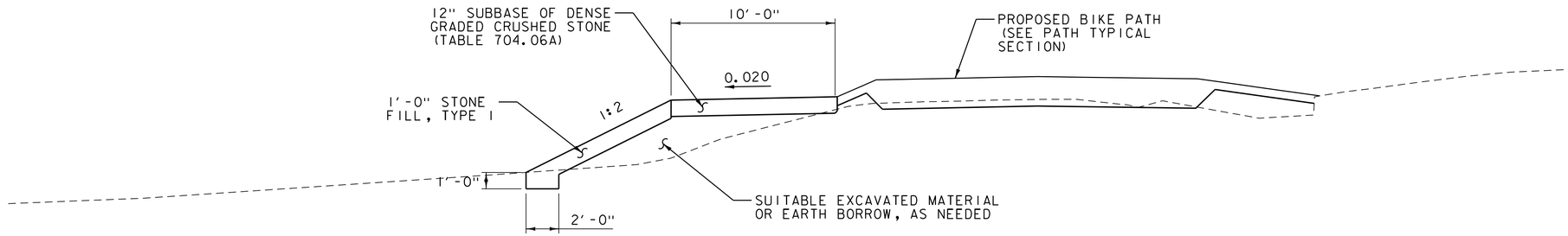
THE CONTRACTOR SHALL BE RESPONSIBLE FOR PREPARING AND EXECUTING A PLAN FOR VERIFYING THAT THESE AREAS HAVE MET THIS STANDARD. THIS PLAN SHOULD INCLUDE A MINIMUM OF 9 TEST HOLES PER ACRE OF AREA SUBJECT TO THIS STANDARD. THESE TEST HOLES SHALL BE EXCAVATED TO 8 INCHES USING ONLY A SHOVEL DRIVEN SOLELY BY THE WEIGHT OF THE INSPECTOR AND SHALL BE A MINIMUM OF 50 FEET APART.

vhb

PROJECT NAME: BURLINGTON BIKE PATH PHASE 3A
PROJECT NUMBER: 58109.00

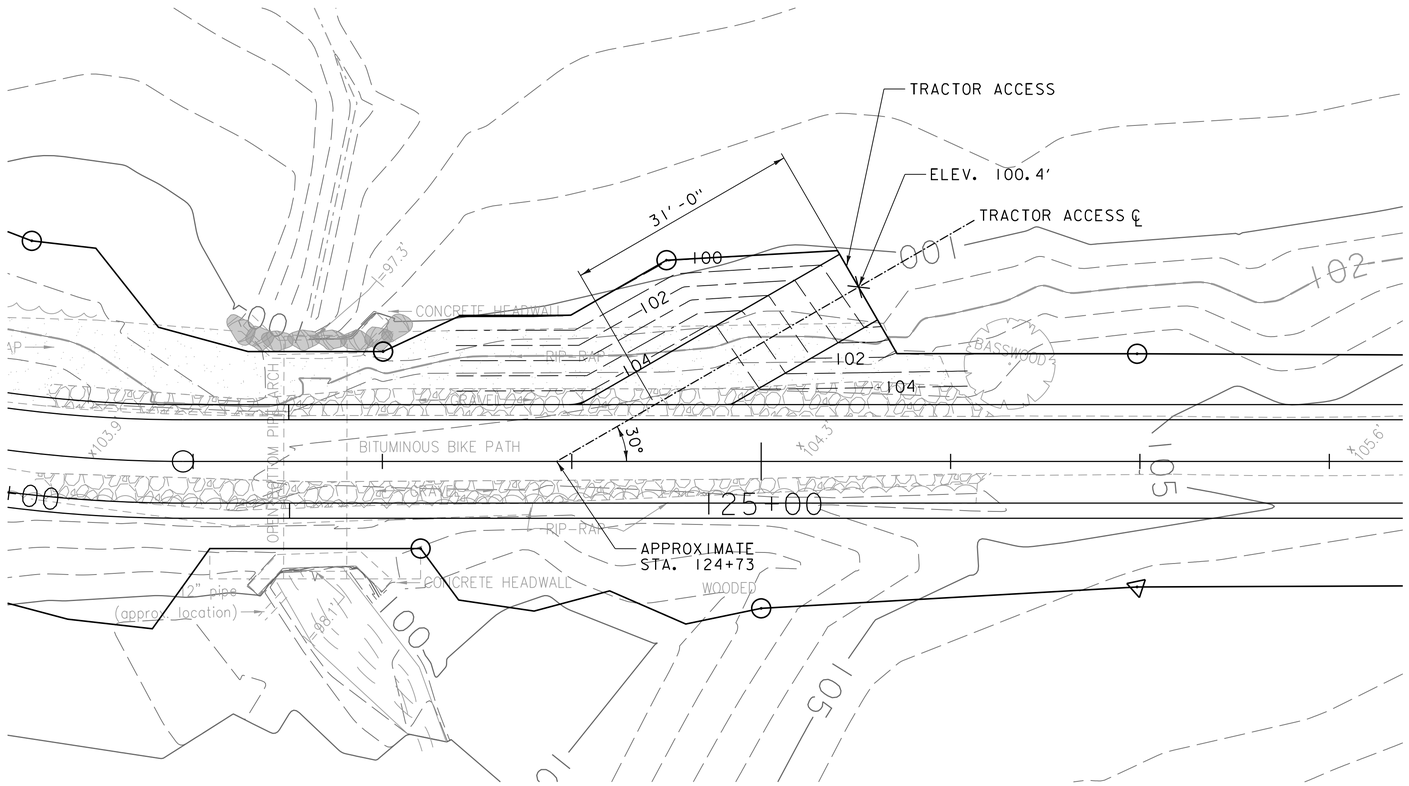
FILE NAME: 58109det.dgn
PROJECT LEADER: E.P. DETRICK
DESIGNED BY: B.M.ROBERTS
DETAIL SHEET (2 OF 2)

PLOT DATE: 5/7/2021
DRAWN BY: B.M. ROBERTS
CHECKED BY: E.P. DETRICK
SHEET 8 OF 52



TRACTOR ACCESS TYPICAL SECTION

NOT TO SCALE



PROJECT NAME:	BURLINGTON BIKE PATH PHASE 3B
PROJECT NUMBER:	58109.01

FILE NAME: 58109tractor_access.dgn	PLOT DATE: 5/7/2021
PROJECT LEADER: E.P. DETRICK	DRAWN BY: C.K. FORD
DESIGNED BY: C.K. FORD	CHECKED BY: E.P. DETRICK
TRACTOR ACCESS PLAN	SHEET 9 OF 52

QUANTITY SHEET 1

SUMMARY OF ESTIMATED QUANTITIES					TOTALS		DESCRIPTIONS			
FLYNN AVE PAUSE PLACE	BIKE/TRANSPORTATION PATH	AUSTIN DRIVE GATEWAY	OAKLEDGE PARK PARKING LOT	BID ALTERNATE	GRAND TOTAL	FINAL	UNIT	ITEMS	ITEM NUMBER	ROUND
	1				1		LS	CLEARING AND GRUBBING, INCLUDING INDIVIDUAL TREES AND STUMPS	201.10	
	9				9		EACH	REMOVING MEDIUM TREES	201.15	
310	1550	50	40		1950		CY	COMMON EXCAVATION	203.15	
	250			10	260		CY	EXCAVATION OF SURFACES AND PAVEMENTS	203.28	
	10				10		CY	EARTH BORROW	203.30	
95	410	15	15		535		CY	SAND BORROW	203.31	
35	40				75		CY	TRENCH EXCAVATION OF EARTH	204.20	
30					30		CY	STRUCTURE EXCAVATION	204.25	
30	15				45		CY	GRANULAR BACKFILL FOR STRUCTURES	204.30	
30					30		SY	COARSE-MILLING, BITUMINOUS PAVEMENT	210.10	
70					70		CY	SUBBASE OF DENSE GRADED CRUSHED STONE (PERMEABLE SUBBASE)	301.35	
180	1150	25	20	20	1395		CY	SUBBASE OF DENSE GRADED CRUSHED STONE	301.35	
1	14			1	16		CWT	EMULSIFIED ASPHALT	404.65	
20	560			15	595		TON	MARSHALL BITUMINOUS CONCRETE PAVEMENT	406.25	
800					800		LB	REINFORCING STEEL, LEVEL I	507.11	
15	5				20		CY	CONCRETE, CLASS B	541.25	
	45				45		LF	12" CPEP(SL)	601.2605	
	2				2		EACH	12" CPEPES	601.7005	
	25				25		LF	RE-LAYING PIPE CULVERTS (12" CPEP(SL))	601.99	
162					162		LF	UNDERDRAIN PIPE, 6 INCHES	605.10	
	180				180		MGAL	DUST CONTROL WITH WATER	609.10	
	15				15		CY	STONE FILL, TYPE I	613.10	
195		25			220		LF	CAST-IN-PLACE CONCRETE CURB, TYPE B	616.28	
310		20	75		405		SY	PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH	618.10	
44		28	8		80		SF	DETECTABLE WARNING SURFACE	618.30	
	1				1		LS	MOBILIZATION/DEMOBILIZATION	635.11	
	1				1		LS	TRAFFIC CONTROL	641.10	
230			115		345		LF	4 INCH WHITE LINE, WATERBORNE PAINT	646.201	
	700				700		LF	4 INCH YELLOW LINE, WATERBORNE PAINT	646.2111	
1					1		EACH	LETTER OR SYMBOL, WATERBORNE PAINT	646.301	
295	2860				3155		SY	GEOTEXTILE FOR ROADBED SEPARATOR	649.11	
	620				620		LB	SEED	651.15	
	1770				1770		LB	FERTILIZER	651.18	
	8				8		TON	AGRICULTURAL LIMESTONE	651.20	
	1500				1500		CY	TOPSOIL	651.35	
	8				8		TON	HAY MULCH	653.10	
	390				390		SY	ROLLED EROSION CONTROL PRODUCT, TYPE I	653.20	
	370				370		LF	SILT FENCE, TYPE I	653.475	
	1060				1060		LF	SILT FENCE, TYPE II	653.476	
	1200				1200		LF	BARRIER FENCE	653.50	

DETAILED SUMMARY OF QUANTITIES

QUANTITIES	UNIT	ITEMS

QUANTITY SHEET 2

SUMMARY OF ESTIMATED QUANTITIES									TOTALS		DESCRIPTIONS				DETAILED SUMMARY OF QUANTITIES		
						FLYNN AVE PAUSE PLACE	BIKE/TRANSPORTATION PATH	AUSTIN DRIVE GATEWAY	OAKLEDGE PARK PARKING LOT	BID ALTERNATE	GRAND TOTAL	FINAL	UNIT	ITEMS	ITEM NUMBER	ROUND	QUANTITIES	UNIT	ITEMS
							3810				3810		LF	PROJECT DEMARCATION FENCE	653.55				
							400				400		LF	EROSION LOG	653.60				
									6		6		EACH	DECIDUOUS TREES (QUERCUS MACROCARPA)	656.30				
						8					8		EACH	DECIDUOUS SHRUBS (CORNUS RACEMOSA)	656.35				
						22					22		EACH	DECIDUOUS SHRUBS (CORNUS STOLONIFERA 'ARCTIC FIRE')	656.35				
								4			4		EACH	DECIDUOUS SHRUBS (ILEX GLABRA 'SHAMROCK')	656.35				
								6			6		EACH	DECIDUOUS SHRUBS (VIBURNUM DENTATUM 'ARROWWOOD')	656.35				
						79		17	33		129		EACH	PERENNIALS	656.41				
							27				27		MGAL	LANDSCAPE WATERING	656.65				
						50		25	30		105		CY	LANDSCAPE BACKFILL, TRUCK MEASUREMENT	656.80				
							5.17				5.17		SF	TRAFFIC SIGN, TYPE A	675.20				
							25				25		LF	SQUARE TUBE SIGN POST AND ANCHOR	675.341				
							7				7		EACH	REMOVING SIGNS	675.50				
							3				3		EACH	RESETTING SIGNS	675.60				
						85					85		LF	ELECTRICAL CONDUIT (1")(SCH 40)(PVC)	678.21				
						180					180		LF	ELECTRICAL CONDUIT (2")(SCH 40)(PVC)	678.21				
						160					160		LF	WIRED CONDUIT (1")(SCH 40)(PVC)	678.23				
						1					1		EACH	JUNCTION BOX	678.26				
						2					2		EACH	STREET LIGHT ASSEMBLY	679.46				
						30					30		CY	SPECIAL PROVISION (AGGREGATE FOR EROSION PREVENTION AND SEDIMENT CONTROL)	900.608				
							20				20		CY	SPECIAL PROVISION (CONTAMINATED MEDIA)	900.608				
							675				675		CY	SPECIAL PROVISION (DISPOSAL OF CLASS I SOILS)	900.608				
							1125				1125		CY	SPECIAL PROVISION (DISPOSAL OF CLASS II SOILS)	900.608				
						40		15			55		CY	SPECIAL PROVISION (EXPOSED AGGREGATE CONCRETE)	900.608				
							130				130		CY	SPECIAL PROVISION (MANAGEMENT OF CLASS I SOILS)	900.608				
							170				170		CY	SPECIAL PROVISION (MANAGEMENT OF CLASS II SOILS)	900.608				
							155	5			160		CY	SPECIAL PROVISION (STONE SCREENINGS)	900.608				
						8					8		EACH	SPECIAL PROVISION (3' X 3' X 3' GABION BASKET WITH ROCK FILL)	900.620				
						6			13		19		EACH	SPECIAL PROVISION (BIKE RACK)	900.620				
						1					1		EACH	SPECIAL PROVISION (BIKE TUNING STATION)	900.620				
						1		1			2		EACH	SPECIAL PROVISION (BURLINGTON GREENWAY SIGN - IDENTIFICATION SIGN)	900.620				
						10					10		EACH	SPECIAL PROVISION (FURNISH AND INSTALL BOULDER)	900.620				
							2	1			3		EACH	SPECIAL PROVISION (LANDSCAPE BENCH)	900.620				
						1					1		EACH	SPECIAL PROVISION (LIFE RING CABINET)	900.620				
						71		2	3		76		EACH	SPECIAL PROVISION (RELOCATE AND INSTALL BOULDER)	900.620				
						1					1		LS	SPECIAL PROVISION (BPRW LOGO)	900.645				
							1				1		LS	SPECIAL PROVISION (ROOT PRUNING AND TREE PROTECTION)	900.645				
							500				500		SF	SPECIAL PROVISION (BOULDER RETAINING WALL)	900.670				
						1710					1710		SF	SPECIAL PROVISION (PERMEABLE PAVERS)	900.670				

PROJECT NAME: BURLINGTON BIKE PATH PHASE 3B
PROJECT NUMBER: 58109.01

FILE NAME: 58109qss.dgn
PROJECT LEADER: E.P.DETRICK
DESIGNED BY: C.K.FORD
QUANTITY SUMMARY SHEET (2 OF 2)

PLOT DATE: 5/7/2021
DRAWN BY: C.K.FORD
CHECKED BY: E.P.DETRICK
SHEET II OF 52

SEGMENT 1

POINT	STATION	NORTHING	EASTING
POT	100+15.27	712045.96	1450636.77
POC	127+00.00	714136.37	1451295.94

SEGMENT 1 EXTENDS FROM AUSTIN DRIVE
TO BLANCHARD BEACH.
LENGTH OF SEGMENT 1 = 3659.46 FT

LEGEND

POB POINT OF BEGINNING ALIGNMENT
POE POINT OF END ALIGNMENT

NOTES:

BASELINE STATIONING IS NOT CONTINUOUS.
EQUALITIES HAVE BEEN INCORPORATED INTO THE
BASELINE STATIONING. SEE LAYOUT SHEETS FOR
EQUALITY INFORMATION AND CURVE DATA.

vhb

PROJECT NAME: BURLINGTON BIKE PATH PHASE 3B
PROJECT NUMBER: 58109.01

FILE NAME: 58109ali_pt.dgn
PROJECT LEADER: E.P.DETRICK
DESIGNED BY: B.M.ROBERTS
ALIGNMENT POINTS SHEET

PLOT DATE: 5/7/2021
DRAWN BY: C.K.FORD
CHECKED BY: E.P.DETRICK
SHEET 12 OF 52

PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH
STA 100+15 - 100+22
STA 100+61 - 100+69, LT

CAST-IN-PLACE CONCRETE CURB, TYPE B
STA 100+15, LT/RT

4 INCH YELLOW LINE, WATERBORNE PAINT
STA 100+50 - 101+00, BL (SOLID)
STA 101+00 - 105+50, BL (DASHED)

SPECIAL PROVISION
(BURLINGTON GREENWAY SIGN - IDENTIFICATION SIGN)
STA 100+21, RT

DETECTABLE WARNING SURFACE
STA 100+17

SEGMENT 1 POB STA 100+00.00

BEGIN PROJECT
STA. 100+15.27

STA 100+21, LT

REMOVE OAKLEDGE PARK SIGN AND RESET AT STA 100+70, RT

11' PAVED PATH WITH 2' AGGREGATE SHOULDERS ON BOTH SIDES

PI (CURVE 3)
STA 102+54.52

CURVE (3)
DELTA = 35°51'00"
D = 15°41'51" (1) D = 1°08'45" (2)
R = 365.00' (1) R = 5000.00' (2)
T = 146.97' (1) T = 490.38' (2)
L = 197.18' (1) L = 427.42' (2)
E = 28.48'

VT STATE PLANE GRID

N

APPROX. CITY ROW

LIGHTING TO BE INSTALLED BY BED

SEE LANDSCAPE LAYOUT PLANS FOR MORE DETAIL

APPROX. CITY ROW

PC STA 100+27.61

PI (CURVE 1)
STA 100+44.13

CURVE (1)
DELTA = 50°31'50"
D = 163°42'08"
R = 35.00'
T = 16.52'
L = 30.87'
E = 3.70'

PT STA 100+58.48

REMOVE 1 POTENTIAL ROOST TREE (PRT) AND 6 OTHER TREES IF PRESENT (INCIDENTAL TO ITEM 201.10)

PC STA 100+86.45

PI (CURVE 2)
STA 100+97.01

PRC STA 101+08.55

CURVE (2)
DELTA = 6°02'37"
D = 28°38'52"
R = 200.00'
T = 10.56'
L = 21.10'
E = 0.28'

REMOVE 3 MAPLE TREES AND 1 ASH TREE IF PRESENT (INCIDENTAL TO ITEM 201.10)

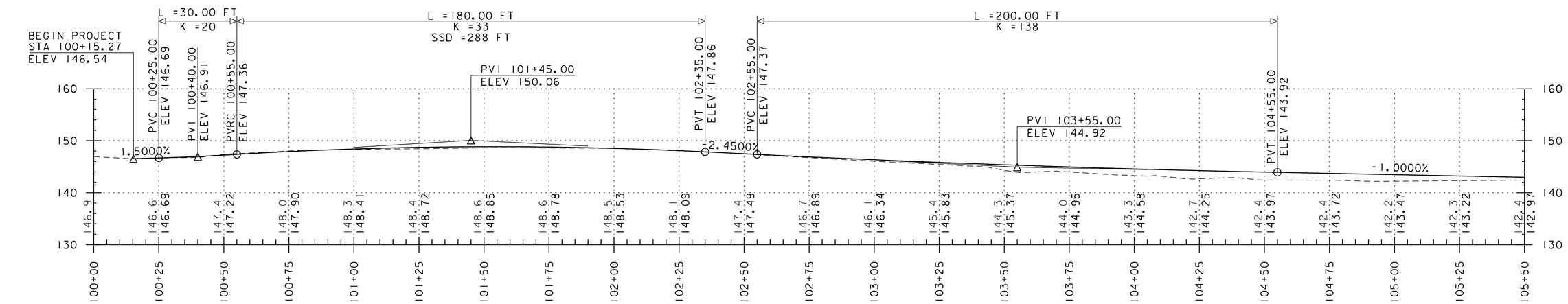
PCC STA 103+04.73

PROTECT TREES

REMOVE EXISTING PAVEMENT AND SUBBASE. TOPSOIL, SEED, AND MULCH

MATCH TO STA 105+50

SIGNING LEGEND
N = NEW SIGN
R&R = REMOVE AND RESET



THE GRADES SHOWN TO THE NEAREST TENTH ARE THE ORIGINAL GROUND ELEVATIONS ALONG THE PROPOSED ALIGNMENT.

THE GRADES SHOWN TO THE NEAREST HUNDREDTH ARE THE FINISH GRADES ALONG THE PROPOSED ALIGNMENT.

STATIONING AND ELEVATIONS IN FEET (TYP.)

20
10
0
0 20 40
SCALE IN FEET

vhb

PROJECT NAME:	BURLINGTON BIKE PATH PHASE 3B
PROJECT NUMBER:	58109.01
FILE NAME: 58109bdr_nul.dgn	PLOT DATE: 5/7/2021
PROJECT LEADER: E.P.DETRICK	DRAWN BY: C.K.FORD
DESIGNED BY: C.K.FORD	CHECKED BY: E.P.DETRICK
PLAN AND PROFILE (SHEET 1OF 5)	SHEET 13 OF 52

4 INCH YELLOW LINE, WATERBORNE PAINT
STA 105+50 - 110+75, BL (DASHED)

4 INCH WHITE LINE, WATERBORNE PAINT
STA 108+93 - 109+02 (HATCHING)

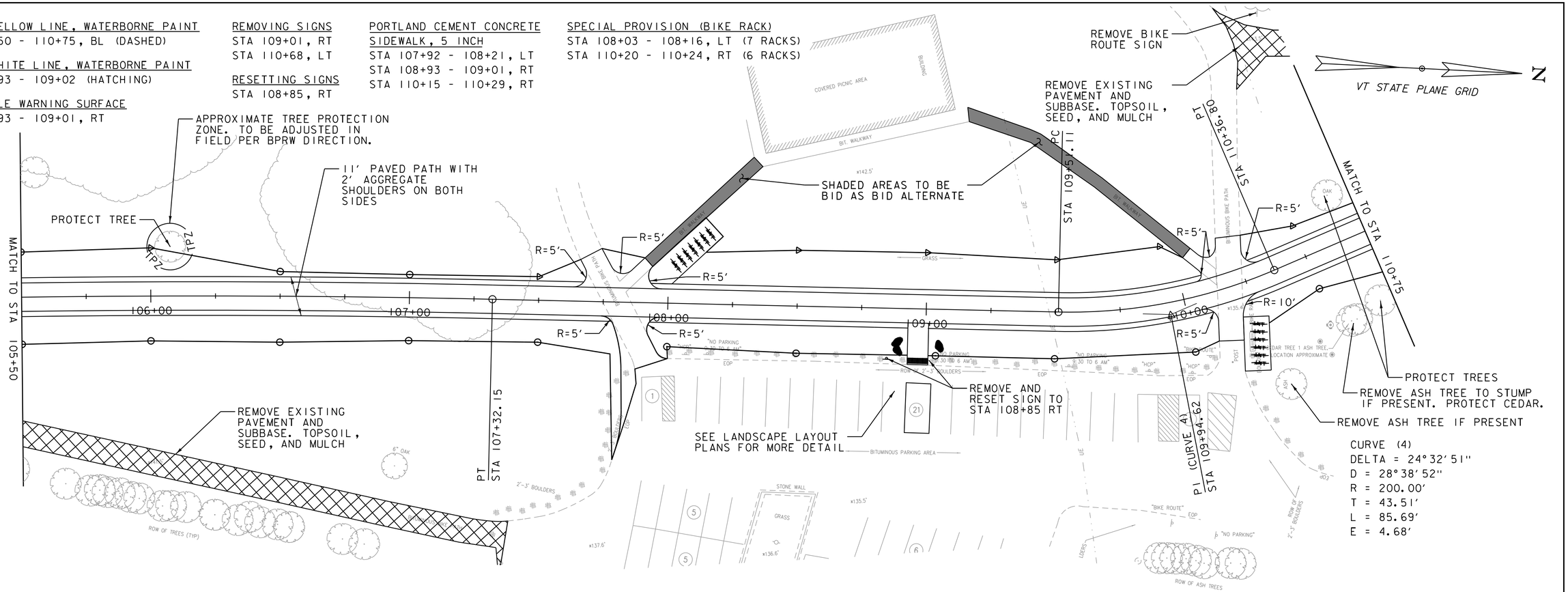
DETECTABLE WARNING SURFACE
STA 108+93 - 109+01, RT

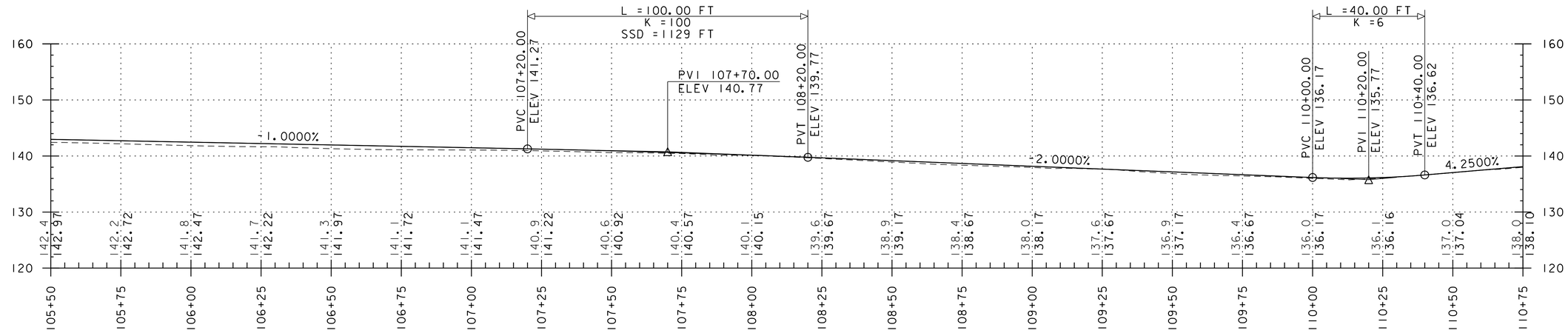
REMOVING SIGNS
STA 109+01, RT
STA 110+68, LT

RESETTING SIGNS
STA 108+85, RT

PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH
STA 107+92 - 108+21, LT
STA 108+93 - 109+01, RT
STA 110+15 - 110+29, RT

SPECIAL PROVISION (BIKE RACK)
STA 108+03 - 108+16, LT (7 RACKS)
STA 110+20 - 110+24, RT (6 RACKS)

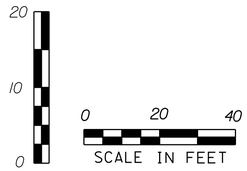




THE GRADES SHOWN TO THE NEAREST TENTH ARE THE ORIGINAL GROUND ELEVATIONS ALONG THE PROPOSED ALIGNMENT.

THE GRADES SHOWN TO THE NEAREST HUNDREDTH ARE THE FINISH GRADES ALONG THE PROPOSED ALIGNMENT.

STATIONING AND ELEVATIONS IN FEET (TYP.)

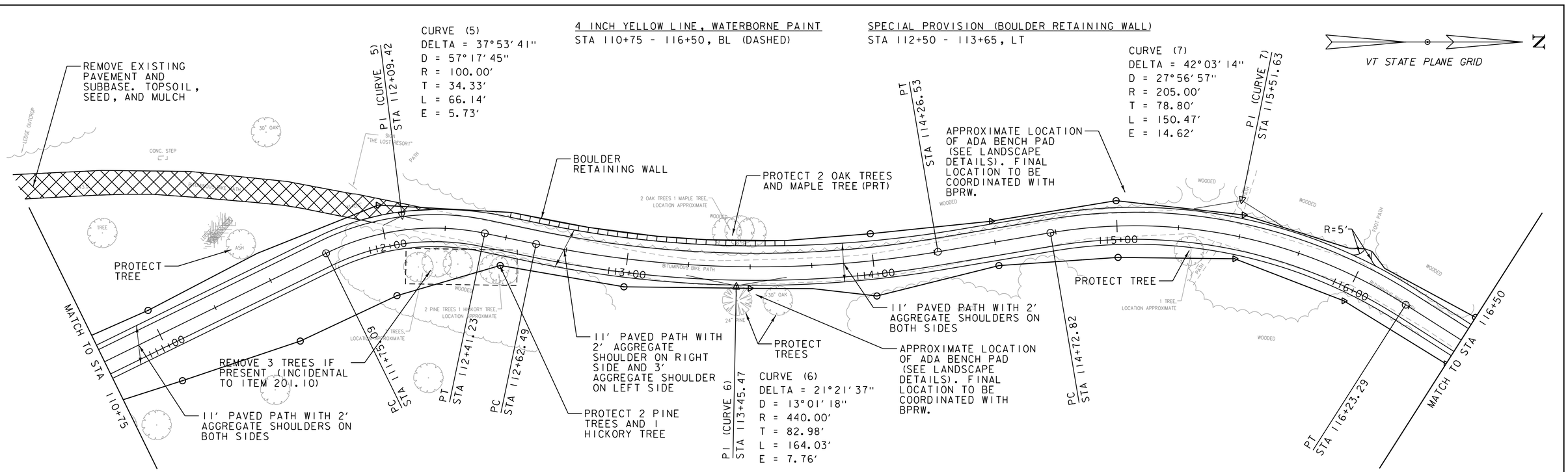


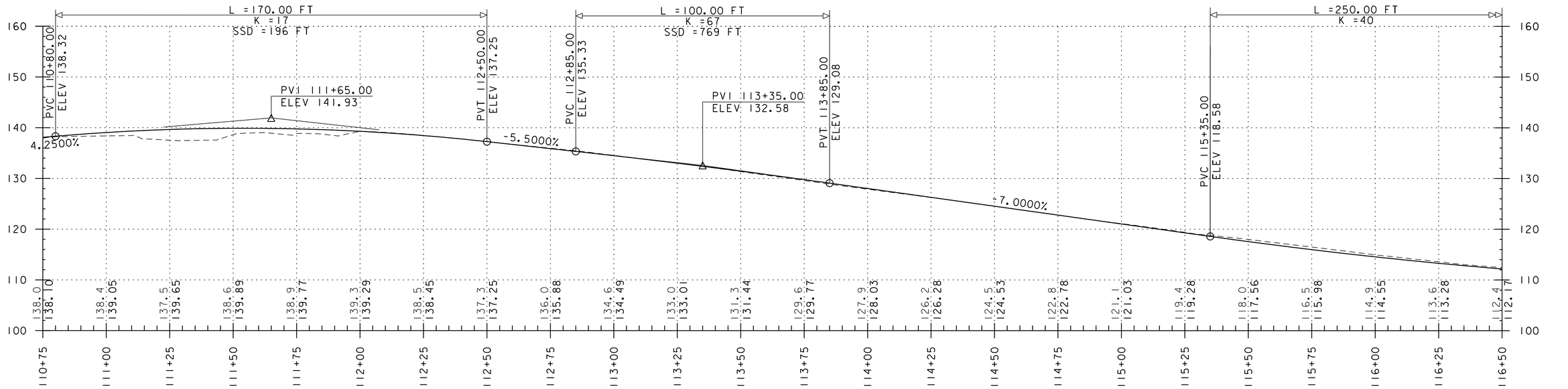
vhb

PROJECT NAME: BURLINGTON BIKE PATH PHASE 3B
PROJECT NUMBER: 58109.01

FILE NAME: 58109bdr_nul.dgn
PROJECT LEADER: E.P.DETRICK
DESIGNED BY: C.K.FORD
PLAN AND PROFILE (SHEET 2 OF 5)

PLOT DATE: 5/7/2021
DRAWN BY: C.K.FORD
CHECKED BY: E.P.DETRICK
SHEET 14 OF 52





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THE GRADES SHOWN TO THE NEAREST HUNDREDTH ARE THE FINISH GRADES ALONG THE PROPOSED ALIGNMENT.

STATIONING AND ELEVATIONS IN FEET (TYP.)

20 10 0

0 20 40
SCALE IN FEET

vhb

PROJECT NAME:	BURLINGTON BIKE PATH PHASE 3B
PROJECT NUMBER:	58109.01
FILE NAME: 58109bdr_nul.dgn	PLOT DATE: 5/7/2021
PROJECT LEADER: E.P.DETRICK	DRAWN BY: C.K.FORD
DESIGNED BY: C.K.FORD	CHECKED BY: E.P.DETRICK
PLAN AND PROFILE (SHEET 3 OF 5)	SHEET 15 OF 52


4 INCH YELLOW LINE, WATERBORNE PAINT
STA 116+50 - 122+50, BL (DASHED)
SPECIAL PROVISION (BIKE RACK)
STA 121+98 - 122+14, RT (6 RACKS)
SPECIAL PROVISION (BIKE TUNING STATION)
STA 122+18, RT
PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH
STA 121+96 - 122+20, RT
CURVE (8)
DELTA = 23°47′22"
D = 16°22′13"
R = 350.00′
T = 73.72′
L = 145.32′
E = 7.68′
PI (CURVE 8) STA 117+57.99
11′ PAVED PATH WITH 2′ AGGREGATE SHOULDERS ON BOTH SIDES
PROTECT OAK TREE
REMOVE 5 ASH TREES IF PRESENT
PI (CURVE 9) STA 119+53.04
CURVE (9)
DELTA = 21°35′21"
D = 19°05′55"
R = 300.00′
T = 57.20′
L = 113.04′
E = 5.40′
REMOVE EXISTING CULVERT
REMOVE 4 ASH TREES IF PRESENT (INCIDENTAL TO ITEM 201.10)
VT STATE PLANE GRID
N
CURVE (10)
DELTA = 16°27′05"
D = 26°02′37"
R = 220.00′
T = 31.80′
L = 63.17′
E = 2.29′
PI (CURVE 10) STA 121+64.75
REMOVE POTENTIAL ROOST TREE IF PRESENT
R=5′
MATCH TO STA 116+50
PC STA 116+84.26
PROTECT POTENTIAL ROOST TREE
PT STA 118+29.59
PROTECT TREE
PC STA 118+95.84
REMOVE TREE
PT STA 120+08.88
PC STA 121+32.94
REMOVE CULVERT
REMOVE TREE IF PRESENT
PT STA 121+96.11
MATCH TO STA 122+50
117+00
118+00
119+00
120+00
121+00
122+00
UNIVERSALLY ACCESSIBLE PLAYGROUND PROJECT LIMITS. TO BE COMPLETED UNDER SEPARATE CONTRACT. PROJECT LIMITS ARE SHOWN FOR CONSTRUCTION SEQUENCING AND COORDINATION PURPOSES ONLY
(1) STA 117+29, 11′ RT TO STA 117+42, 14.6′ LT
REMOVE FLARED END SECTIONS
RE-LAY PIPE CULVERT (25 LF X 12")
CONNECT NEW 5 LF X 12" CPEP(SL)
REATTACH FLARED END SECTIONS
INV. IN = 107.24′
INV. OUT = 106.78′
GRADE DEPRESSION TO DRAIN AREA TO PIPE. SEE EPSC PLANS FOR FURTHER GRADING INFORMATION
(2) STA 120+23, 18.9′ RT TO STA 120+31, 20′ LT
INSTALL 40 LF X 12"CPEP(SL)
INSTALL 12" CPEPES AT BOTH ENDS
INV. IN = 105.20′
INV. OUT = 105.00′
GRADE DEPRESSION TO DRAIN AREA TO PIPE. SEE EPSC PLANS FOR FURTHER GRADING INFORMATION
L =250.00 FT
K =40
L =200.00 FT
K =143
L =50.00 FT
K =20
SSD =457 FT
PVT 117+85.00 ELEV 108.83
PVC 118+65.00 ELEV 108.19
PVI 119+65.00 ELEV 107.39
PVT 120+65.00 ELEV 107.99
PVC 121+85.00 ELEV 108.71
PVT 122+35.00 ELEV 108.38
PVI 116+60.00 ELEV 109.83
PVI 122+10.00 ELEV 108.86
-0.8000%
0.6000%
-1.9000%
130
120
110
100
90
112.4 112.17
111.4 111.21
110.5 110.41
109.9 109.76
109.4 109.26
109.0 108.92
108.5 108.71
108.3 108.51
108.1 108.31
107.9 108.11
107.8 107.95
107.7 107.84
107.6 107.76
107.6 107.73
107.6 107.75
107.5 107.81
107.7 107.91
107.8 108.05
107.9 108.20
107.9 108.35
107.8 108.50
107.8 108.65
107.8 108.74
107.7 108.55
107.6 108.10
116+50
116+75
117+00
117+25
117+50
117+75
118+00
118+25
118+50
118+75
119+00
119+25
119+50
119+75
120+00
120+25
120+50
120+75
121+00
121+25
121+50
121+75
122+00
122+25
122+50
0 10 20
0 20 40
SCALE IN FEET

THE GRADES SHOWN TO THE NEAREST TENTH ARE THE ORIGINAL GROUND ELEVATIONS ALONG THE PROPOSED ALIGNMENT.

THE GRADES SHOWN TO THE NEAREST HUNDREDTH ARE THE FINISH GRADES ALONG THE PROPOSED ALIGNMENT.

STATIONING AND ELEVATIONS IN FEET (TYP.)

vhb

PROJECT NAME: BURLINGTON BIKE PATH PHASE 3B
PROJECT NUMBER: 58109.01

FILE NAME: 58109bdr_nul.dgn
PROJECT LEADER: E.P.DETRICK
DESIGNED BY: C.K.FORD
PLAN AND PROFILE (SHEET 4 OF 5)

PLOT DATE: 5/7/2021
DRAWN BY: C.K.FORD
CHECKED BY: E.P.DETRICK

4 INCH YELLOW LINE, WATERBORNE PAINT
STA 122+50 - 123+07, BL (DASHED)
STA 123+57 - 127+00, BL (DASHED)

UNDERDRAIN PIPE, 6 INCHES
STA 122+75, LT - 123+46, RT
STA 122+97 - 123+68, LT

REMOVING SIGNS
STA 123+02, LT
STA 123+14, LT
STA 123+14, RT
STA 123+36, LT

RESETTING SIGNS
STA 123+14, RT

PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH
STA 122+71 - 123+96, RT

LETTER OR SYMBOL, WATERBORNE PAINT
STA 122+89, RT (HANDICAP)

DETECTABLE WARNING SURFACE
STA 123+25 - 123+41, RT

CAST-IN-PLACE CONCRETE CURB, TYPE B
STA 122+78 - 123+94, RT

STREET LIGHT ASSEMBLY
STA 123+22, RT

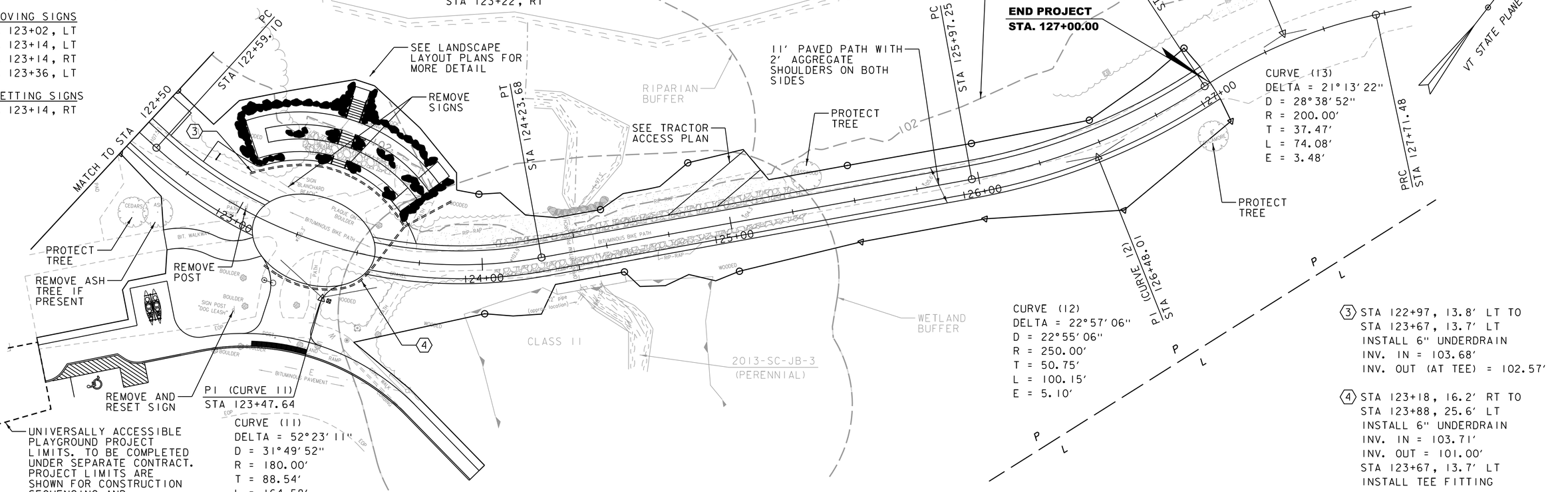
SPECIAL PROVISION (BURLINGTON GREENWAY SIGN - IDENTIFICATION SIGN)
STA 123+44, RT

4 INCH WHITE LINE, WATERBORNE PAINT
STA 122+79 - 123+01, RT (HATCHING)

SPECIAL PROVISION (LIFE RING CABINET)
STA 123+39, LT

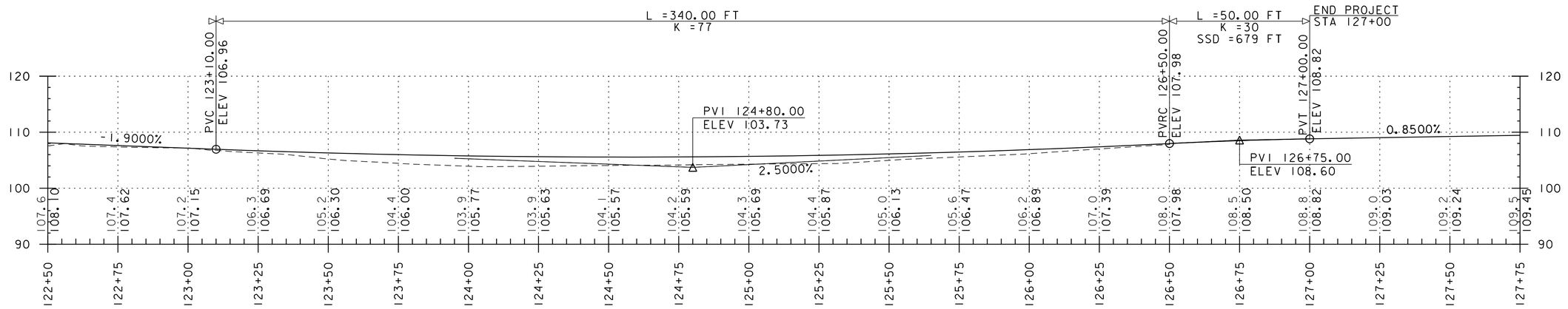
ZONE AE - SPECIAL FLOOD HAZARD AREA

END PROJECT
STA. 127+00.00



③ STA 122+97, 13.8' LT TO
STA 123+67, 13.7' LT
INSTALL 6" UNDERDRAIN
INV. IN = 103.68'
INV. OUT (AT TEE) = 102.57'

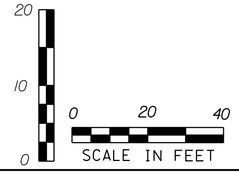
④ STA 123+18, 16.2' RT TO
STA 123+88, 25.6' LT
INSTALL 6" UNDERDRAIN
INV. IN = 103.71'
INV. OUT = 101.00'
STA 123+67, 13.7' LT
INSTALL TEE FITTING



THE GRADES SHOWN TO THE NEAREST TENTH ARE THE ORIGINAL GROUND ELEVATIONS ALONG THE PROPOSED ALIGNMENT.

THE GRADES SHOWN TO THE NEAREST HUNDREDTH ARE THE FINISH GRADES ALONG THE PROPOSED ALIGNMENT.

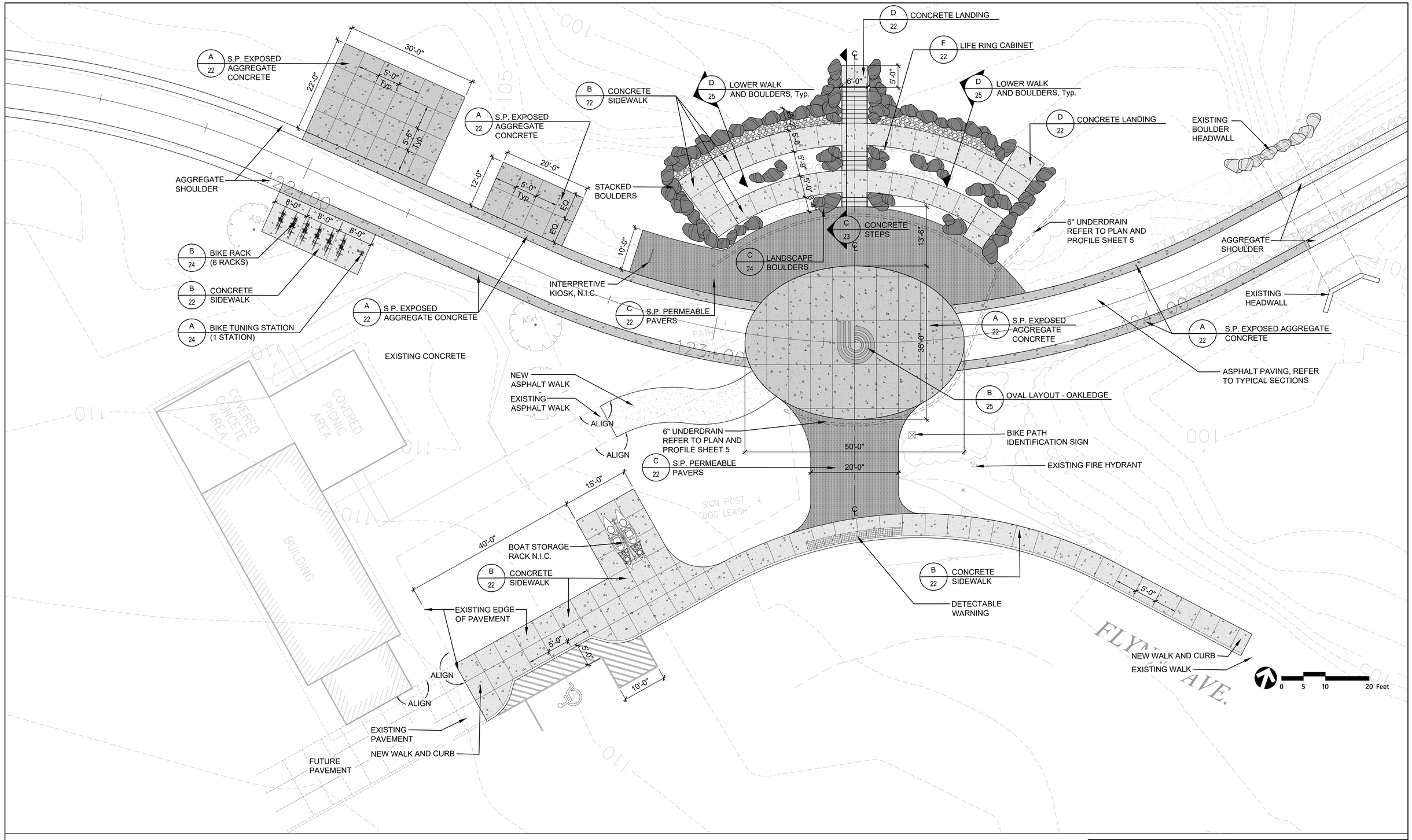
STATIONING AND ELEVATIONS IN FEET (TYP.)



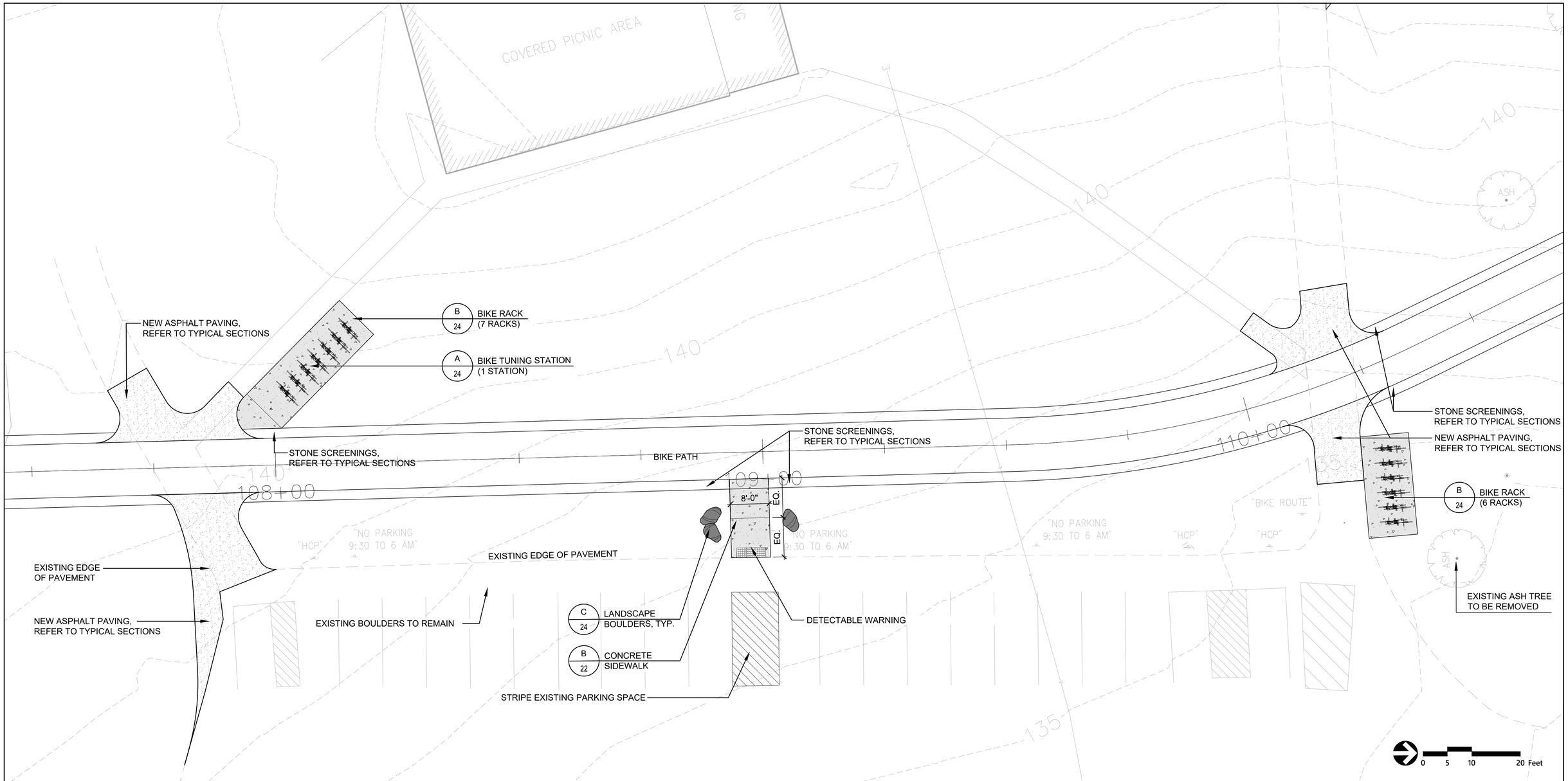
PROJECT NAME: BURLINGTON BIKE PATH PHASE 3B
PROJECT NUMBER: 58109.01

FILE NAME: 58109bdr_nul.dgn
PROJECT LEADER: E.P.DETRICK
DESIGNED BY: C.K.FORD
PLAN AND PROFILE (SHEET 5 OF 5)

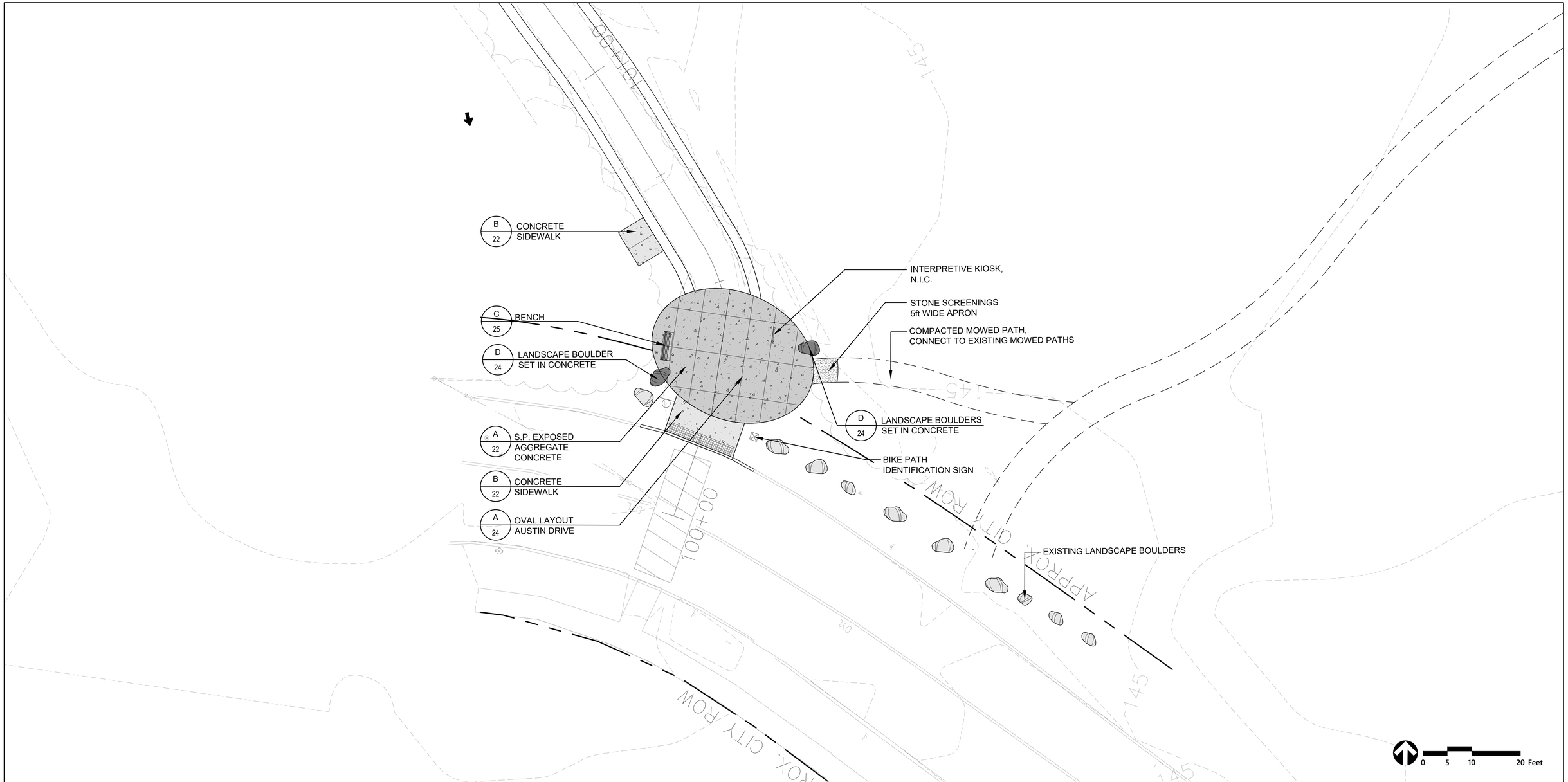
PLOT DATE: 5/7/2021
DRAWN BY: C.K.FORD
CHECKED BY: E.P.DETRICK
SHEET 17 OF 52



PROJECT NAME:	BURLINGTON BIKE PATH PHASE 3B
PROJECT NUMBER:	58109.01
FILE NAME:	
PROJECT LEADER:	E.P.DETRICK
DESIGNED BY:	M.K.WILLARD
LANDSCAPE LAYOUT PLAN	
PLOT DATE:	05/07/2021
DRAWN BY:	M.K.WILLARD
CHECKED BY:	E.P.DETRICK
SHEET	18 OF 52



PROJECT NAME:	BURLINGTON BIKE PATH PHASE 3B
PROJECT NUMBER:	58109.01
FILE NAME:	
PROJECT LEADER:	E.P.DETRICK
DESIGNED BY:	M.K.WILLARD
LANDSCAPE LAYOUT PLAN	
PLOT DATE:	05/07/2021
DRAWN BY:	M.K.WILLARD
CHECKED BY:	E.P.DETRICK
SHEET	19 OF 52



PROJECT NAME:	BURLINGTON BIKE PATH PHASE 3B
PROJECT NUMBER:	58109.01
FILE NAME:	
PROJECT LEADER:	E.P.DETRICK
DESIGNED BY:	M.K.WILLARD
LANDSCAPE LAYOUT PLAN	
PLOT DATE:	05/07/2021
DRAWN BY:	M.K.WILLARD
CHECKED BY:	E.P.DETRICK
SHEET	20 OF 52

EXISTING CONDITIONS MAY VARY DUE TO SAND MIGRATION WITH SEASONAL WAVE ACTION, BLEND GRADING INTO EXISTING CONDITIONS

98.66
BS 98.76
TS 102.76
BS 102.86
TS 104.86
BS 104.96
TS 105.96
3.30%
4.22%
4.90%
2.82%
101.16
101.26
101.36
103.91
103.81
105.66
105.73
105.58
2.0%
ASH
CEDARS
COVERED CONCRETE AREA
COVERED PICNIC AREA
BUILDING
OHW
FLYNN AVE.
0 5 10 20 Feet

LEGEND

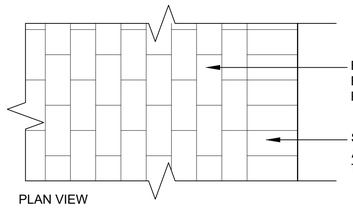
- EXISTING CONTOURS
- PROPOSED CONTOURS
- SWALE
- (430.50) + EXIST. SPOT GRADE
- 430.50 + SPOT GRADE
- TS + TOP OF STEP
- BS + BOTTOM OF STEP
- TW + TOP OF WALL
- BW + BOTTOM OF WALL
- TC + TOP OF CURB
- BC + BOTTOM OF CURB
- FC + FLUSH CURB
- TR + TOP OF RAMP
- BR + BOTTOM OF RAMP
- HP + HIGH POINT
- LP + LOW POINT
- CB + CATCH BASIN
- AD + AREA DRAIN
- TD + TRENCH DRAIN
- PD + PLANTER DRAIN
- SPD + SUB SURFACE PLANTER DRAIN

vhb

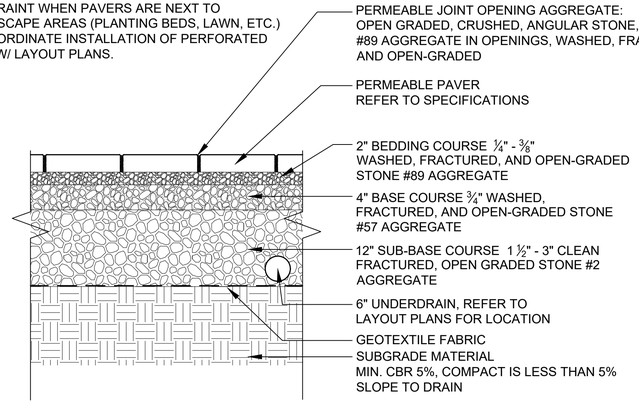
PROJECT NAME: BURLINGTON BIKE PATH PHASE 3B
PROJECT NUMBER: 58109.01

FILE NAME:
PROJECT LEADER: E.P.DETRICK
DESIGNED BY: M.K.WILLARD
GRADING PLAN

PLOT DATE: 05/07/2021
DRAWN BY: M.K.WILLARD
CHECKED BY: E.P.DETRICK
SHEET 21 OF 52

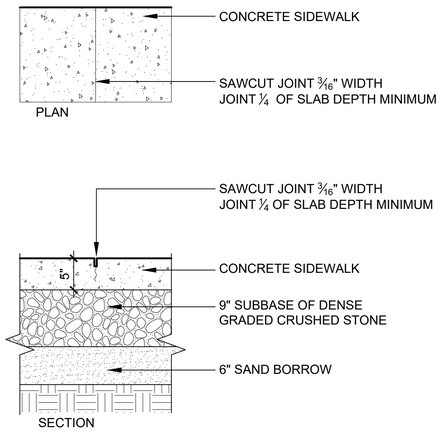


NOTES:
1. CONTRACTOR SHALL INSTALL A PAVER EDGE RESTRAINT WHEN PAVERS ARE NEXT TO SOFTSCAPE AREAS (PLANTING BEDS, LAWN, ETC.)
2. COORDINATE INSTALLATION OF PERFORATED PIPE W/ LAYOUT PLANS.



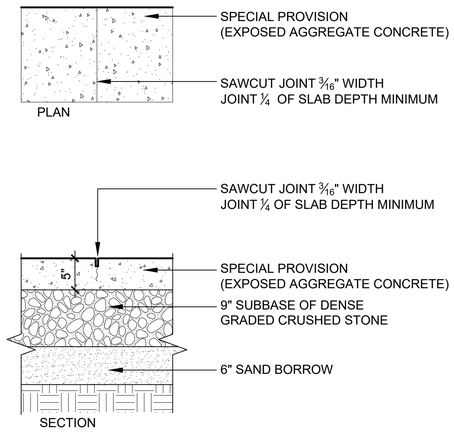
C SPECIAL PROVISION (PERMEABLE PAVERS)
SCALE 1" = 1'-0"

NOTES:
1. CONSTRUCT SUBBASE BASED ON "PATH TYPICAL SECTION", REFER TO TYPICAL SECTIONS



B CONCRETE SIDEWALK
SCALE 1" = 1'-0"

NOTES:
1. CONSTRUCT SUBBASE BASED ON "PATH TYPICAL SECTION", REFER TO TYPICAL SECTIONS

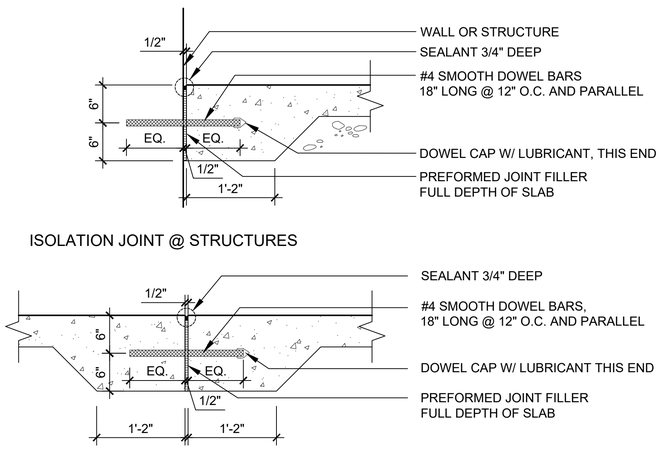


A SPECIAL PROVISION (EXPOSED AGGREGATE CONCRETE)
SCALE 1" = 1'-0"

NOTES:
1. INSTALL LIFE RING CABINET ON POST PROVIDED BY MANUFACTURER, COMPLETE ASSEMBLY.
2. INSTALL WITH BASE PLATE FOR SURFACE FIXING TO CONCRETE.
3. CABINET TO INCLUDE USCG LIFE RING & ROPE
4. INSTALL PER MANUFACTURERS RECOMMENDATIONS.

MANUFACTURER:
GLASDON INC.
GUARDIAN 24 LIFE RING CABINET
W/ USCG LIFE RING & ROPE
https://us.glasdon.com/

F SPECIAL PROVISION (LIFE RING CABINET)
SCALE 1" = 1'-0"

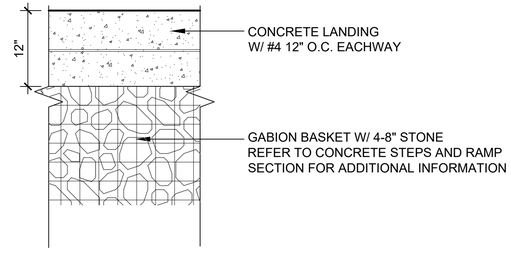


ISOLATION JOINT @ STRUCTURES

DOWELED EXPANSION JOINT

E JOINTS - CONCRETE PAVEMENT
SCALE 1" = 1'-0"

NOTES:
1. REFER TO LAYOUT PLANS FOR LOCATION AND DIMENSIONS OF LANDING.
2. DOWEL EACH LANDING TO THE NEIGHBORING STAIR FOUNDATION OR CONCRETE WALK, REFER TO ISOLATION JOINT DETAIL.



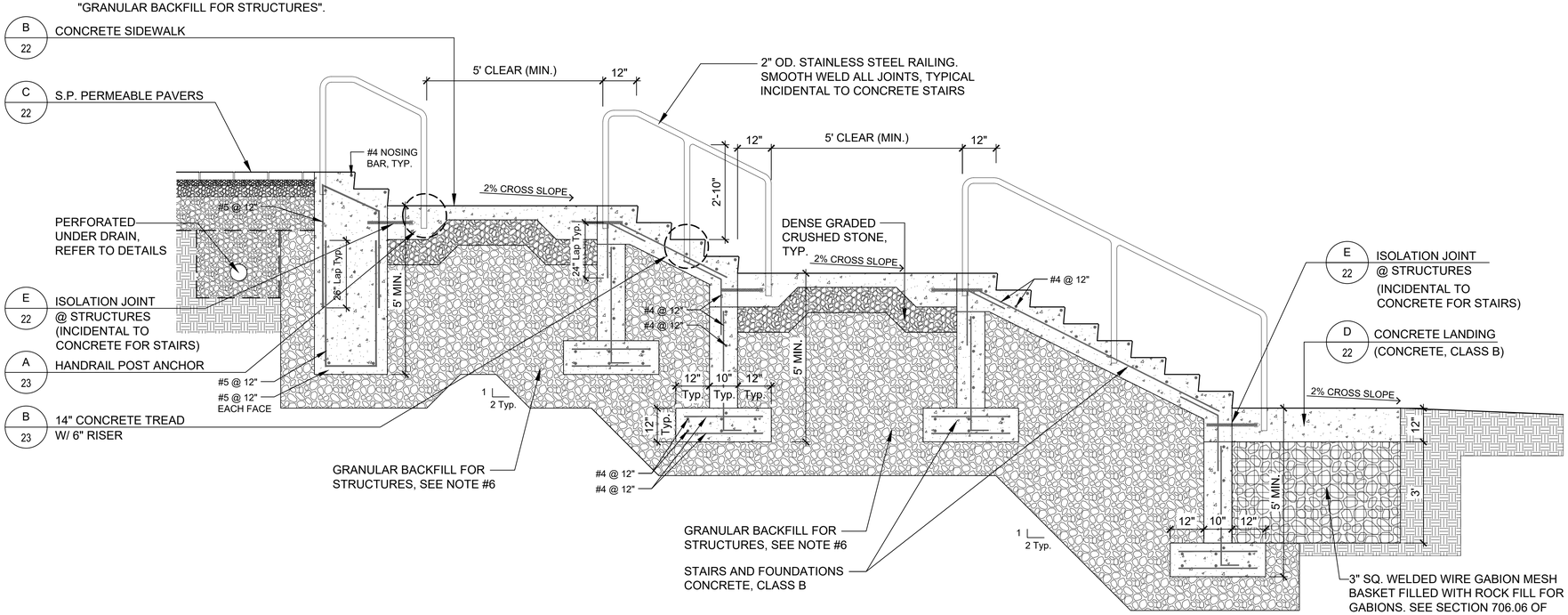
D CONCRETE LANDING
SCALE 1" = 1'-0"

PROJECT NAME: BURLINGTON BIKE PATH PHASE 3B
PROJECT NUMBER: 58109.01

FILE NAME:	PLOT DATE: 05/07/2021
PROJECT LEADER: E.P.DETRICK	DRAWN BY: M.K.WILLARD
DESIGNED BY: M.K.WILLARD	CHECKED BY: E.P.DETRICK
LANDSCAPE DETAILS	SHEET 22 OF 52

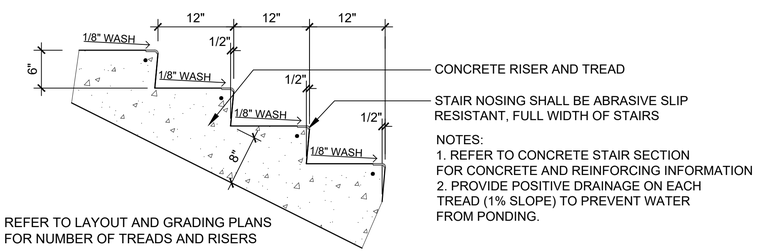
NOTES:

1. CONTRACTOR SHALL VERIFY NUMBER OF TREADS AND RISERS ON THE LAYOUT AND GRADING PLANS.
2. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR HANDRAILS FOR REVIEW AND APPROVAL.
3. ALL REINFORCING IN THE STAIRS, AND STAIR FOUNDATIONS SHALL MEET THE REQUIREMENTS OF SECTION 507 FOR LEVEL I REINFORCING, AND SHALL BE UNCOATED. PAYMENT FOR REINFORCING WILL BE MADE UNDER ITEM 507.11, "REINFORCING STEEL, LEVEL I".
4. ALL CONCRETE IN THE STAIRS, AND STAIR FOUNDATIONS SHALL MEET THE REQUIREMENTS OF SECTION 541 FOR CLASS B CONCRETE. PAYMENT FOR CONCRETE WILL BE MADE UNDER ITEM 541.25, "CONCRETE, CLASS B".
5. CLEAR COVER SHALL BE 3" UNLESS OTHERWISE NOTED.
6. MATERIAL MEETING THE REQUIREMENTS OF SUBSECTION 704.02, WITH GRADATION FOR 3/4" STONE, MAY BE SUBSTITUTED FOR GRANULAR BACKFILL FOR STRUCTURES AND WILL BE PAID FOR UNDER ITEM 204.30, "GRANULAR BACKFILL FOR STRUCTURES".
7. EXCAVATION FOR CONCRETE STEPS SHALL BE PAID FOR UNDER ITEM 204.25, "STRUCTURE EXCAVATION". EXCAVATION FOR THE REST OF THE CONCRETE RAMP SHALL BE PAID FOR UNDER ITEM 203.15, "COMMON EXCAVATION".
8. ALL COSTS ASSOCIATED WITH THE FABRICATION AND INSTALLATION OF THE S.S. RAILINSGS SHALL BE INCIDENTAL TO CONCRETE STAIRS.
9. GABION BASKETS AND ROCK FILL FOR GABION BASKETS SHALL BE PAID FOR UNDER ITEM 900.620, "SPECIAL PROVISION (3' X 3' X 3' GABION BASKET WITH ROCK FILL)".



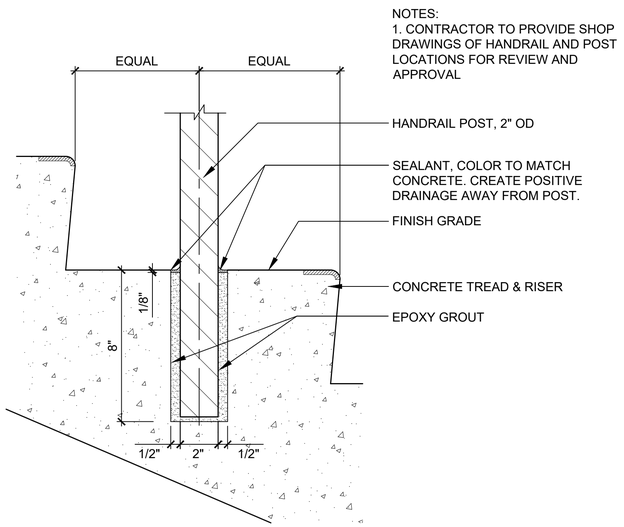
C SECTION: CONCRETE STEPS AND RAMPS

SCALE: 1/2" = 1'-0"



B 12" CONCRETE TREAD W / 6" RISER

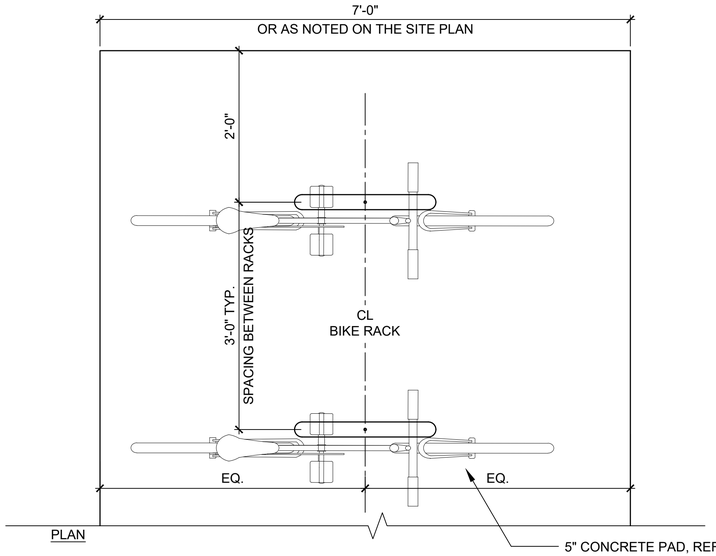
SCALE 1" = 1'-0"



A HANDRAIL POST ANCHOR

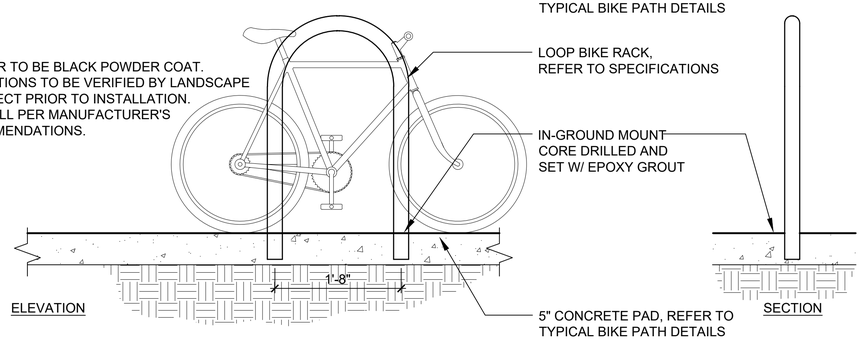
SCALE 3" = 1'-0"

PROJECT NAME: BURLINGTON BIKE PATH PHASE 3B	
PROJECT NUMBER: 58109.01	
FILE NAME:	PLOT DATE: 05/07/2021
PROJECT LEADER: E.P.DETRICK	DRAWN BY: M.K.WILLARD
DESIGNED BY: M.K.WILLARD	CHECKED BY: E.P.DETRICK
LANDSCAPE DETAILS	SHEET 23 OF 52



PLAN

NOTES:
1. COLOR TO BE BLACK POWDER COAT.
2. LOCATIONS TO BE VERIFIED BY LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
3. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.

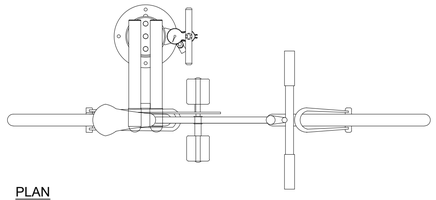


ELEVATION

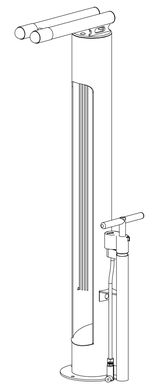
SECTION

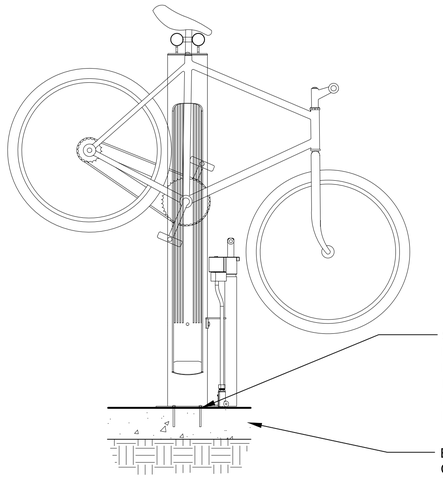
B BIKE RACK
SCALE 1" = 1'

NOTES:
1. COLOR TO BE BLACK POWDER COAT.
2. LOCATION TO BE VERIFIED BY LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
3. REFER TO SPECIFICATIONS.

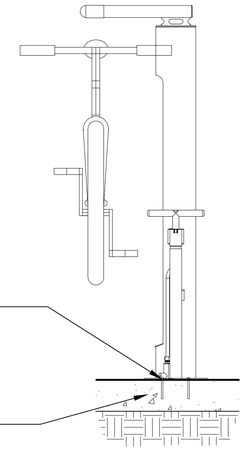


PLAN





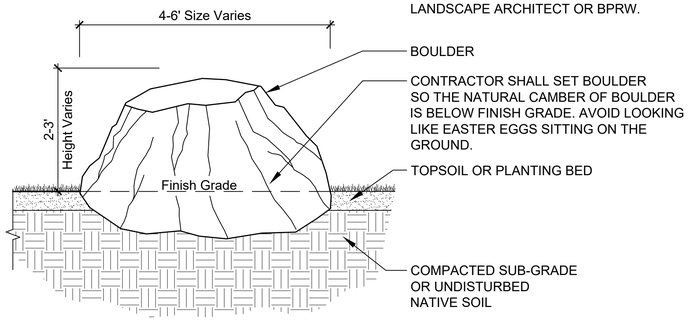
ELEVATION



ELEVATION

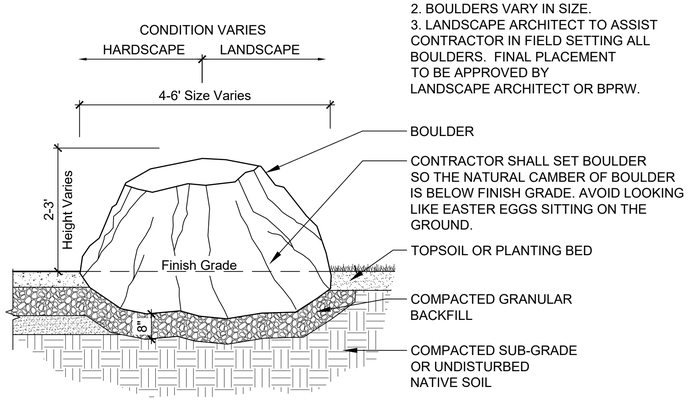
A BIKE TUNING STATION
SCALE 1" = 1'

NOTES:
1. BOULDERS WILL BE SELECTED BY LANDSCAPE ARCHITECT OR BPRW.
2. BOULDERS VARY IN SIZE.
3. LANDSCAPE ARCHITECT TO ASSIST CONTRACTOR IN FIELD SETTING ALL BOULDERS. FINAL PLACEMENT TO BE APPROVED BY LANDSCAPE ARCHITECT OR BPRW.



C SPECIAL PROVISION (LANDSCAPE BOULDER)
SCALE 1/2" = 1'-0"

NOTES:
1. BOULDERS WILL BE SELECTED BY LANDSCAPE ARCHITECT OR BPRW.
2. BOULDERS VARY IN SIZE.
3. LANDSCAPE ARCHITECT TO ASSIST CONTRACTOR IN FIELD SETTING ALL BOULDERS. FINAL PLACEMENT TO BE APPROVED BY LANDSCAPE ARCHITECT OR BPRW.

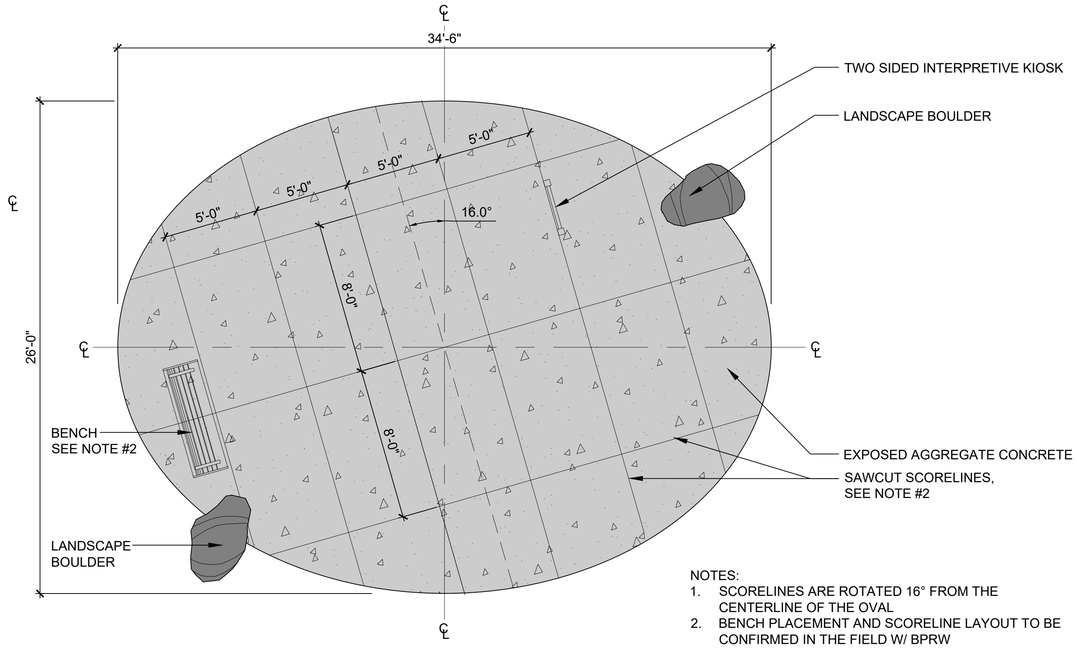


D SPECIAL PROVISION (LANDSCAPE BOULDER) SET IN CONCRETE
SCALE 1/2" = 1'-0"

PROJECT NAME: BURLINGTON BIKE PATH PHASE 3B
PROJECT NUMBER: 58109.01

FILE NAME:
PROJECT LEADER: E.P.DETRICK
DESIGNED BY: M.K.WILLARD
LANDSCAPE DETAILS

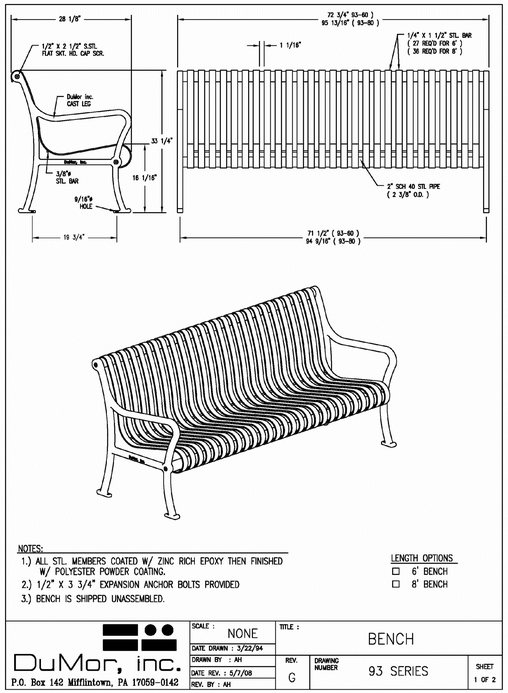
PLOT DATE: 05/07/2021
DRAWN BY: M.K.WILLARD
CHECKED BY: E.P.DETRICK
SHEET 24 OF 52



NOTES:
1. SCORELINES ARE ROTATED 16° FROM THE CENTERLINE OF THE OVAL
2. BENCH PLACEMENT AND SCORELINE LAYOUT TO BE CONFIRMED IN THE FIELD W/ BPRW

A OVAL LAYOUT - AUSTIN DRIVE

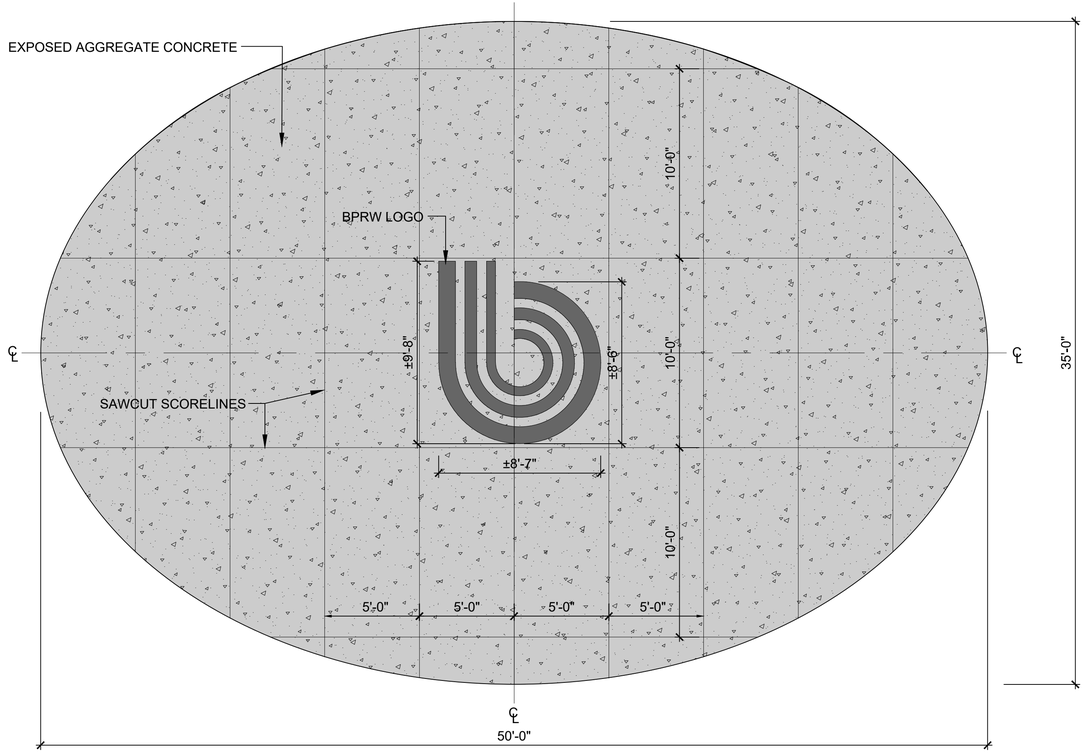
SCALE 1/4" = 1'-0"



NOTES:
1. BENCH LENGTH TO BE 6 FEET
2. COLOR TO BE BLACK POWDER COAT
3. REFER TO LANDSCAPE PLANS FOR LOCATION
4. INSTALL BENCH PER MANUFACTURER'S RECOMMENDATIONS.

C BENCH

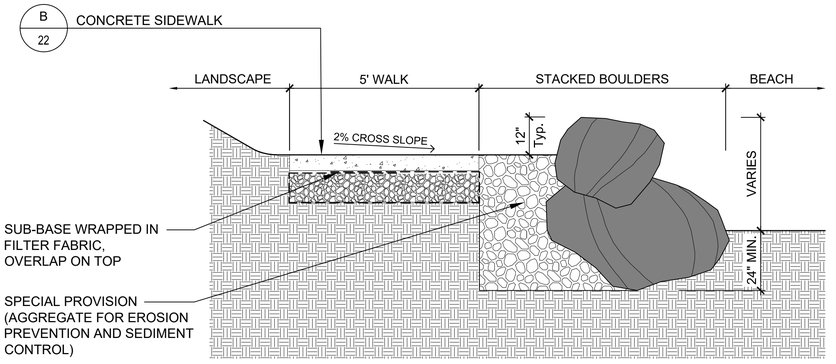
NTS



NOTES:
1. THE BPRW LOGO IS TO BE SAND BLASTED INTO THE EXPOSED AGGREGATE CONCRETE. CONTRACTOR SHALL PROVIDE SANDED BLASTED EXAMPLES FOR REVIEW AND APPROVAL.
2. DESIGN TEAM WILL PROVIDE AN ELECTRONIC LAYOUT OF THE BPRW LOGO TO ASSIST IN DEVELOPING A TEMPLATE FOR THE LOGO OUTLINE.
3. INFILL THE SAND BLASTED LOGO WITH DARK GRAY MONUMENT PAINT. CONTRACTOR SHALL PROVIDE SUBMITTAL FOR REVIEW AND APPROVAL.

B OVAL LAYOUT - OAKLEDGE

SCALE 1/4" = 1'-0"



D SECTION: LOWER WALK AND BOULDERS

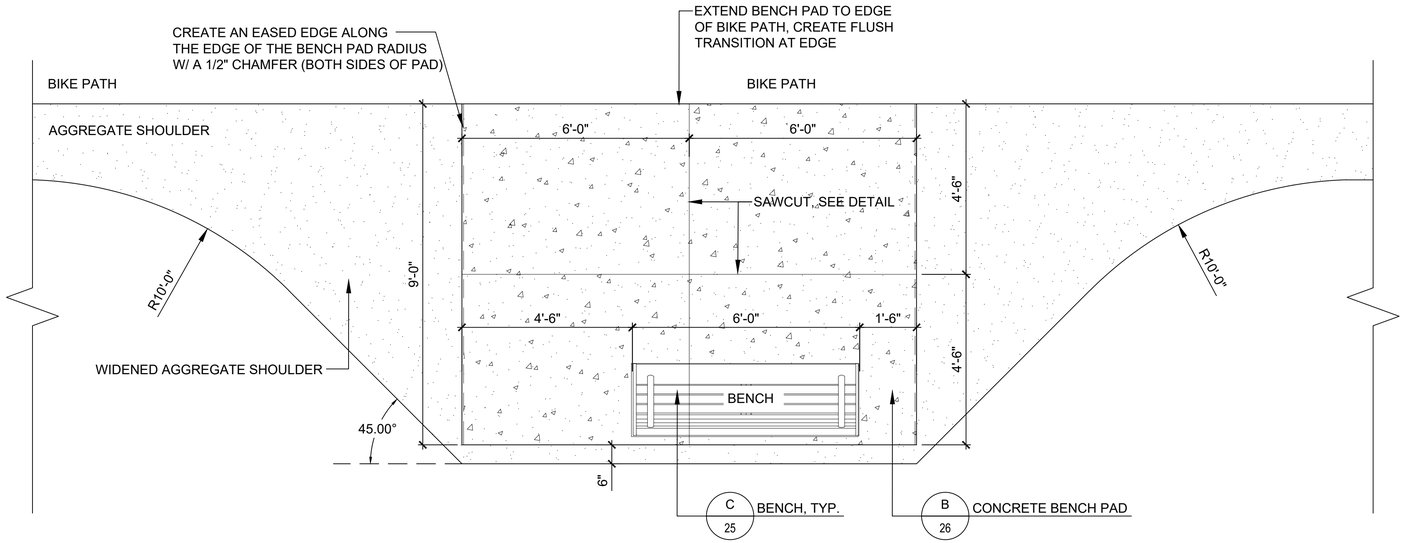
SCALE: 1/2" = 1'-0"

PROJECT NAME: BURLINGTON BIKE PATH PHASE 3B
PROJECT NUMBER: 58109.01

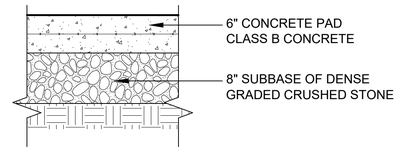
FILE NAME:
PROJECT LEADER: E.P.DETRICK
DESIGNED BY: M.K.WILLARD
LANDSCAPE DETAILS

PLOT DATE: 05/07/2021
DRAWN BY: M.K.WILLARD
CHECKED BY: E.P.DETRICK
SHEET 25 OF 52

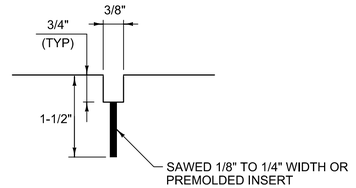
NOTES:
1. REFER TO BIKE PATH LAYOUT PLANS FOR BENCH LOCATIONS.
2. REFER TO BENCH DETAILS FOR ADDITIONAL INFORMATION FOR THE BENCH AND BENCH PADS.



A ADA BENCH LAYOUT
SCALE 1/2" = 1'-0"



B CONCRETE BENCH PAD
SCALE 1" = 1'-0"

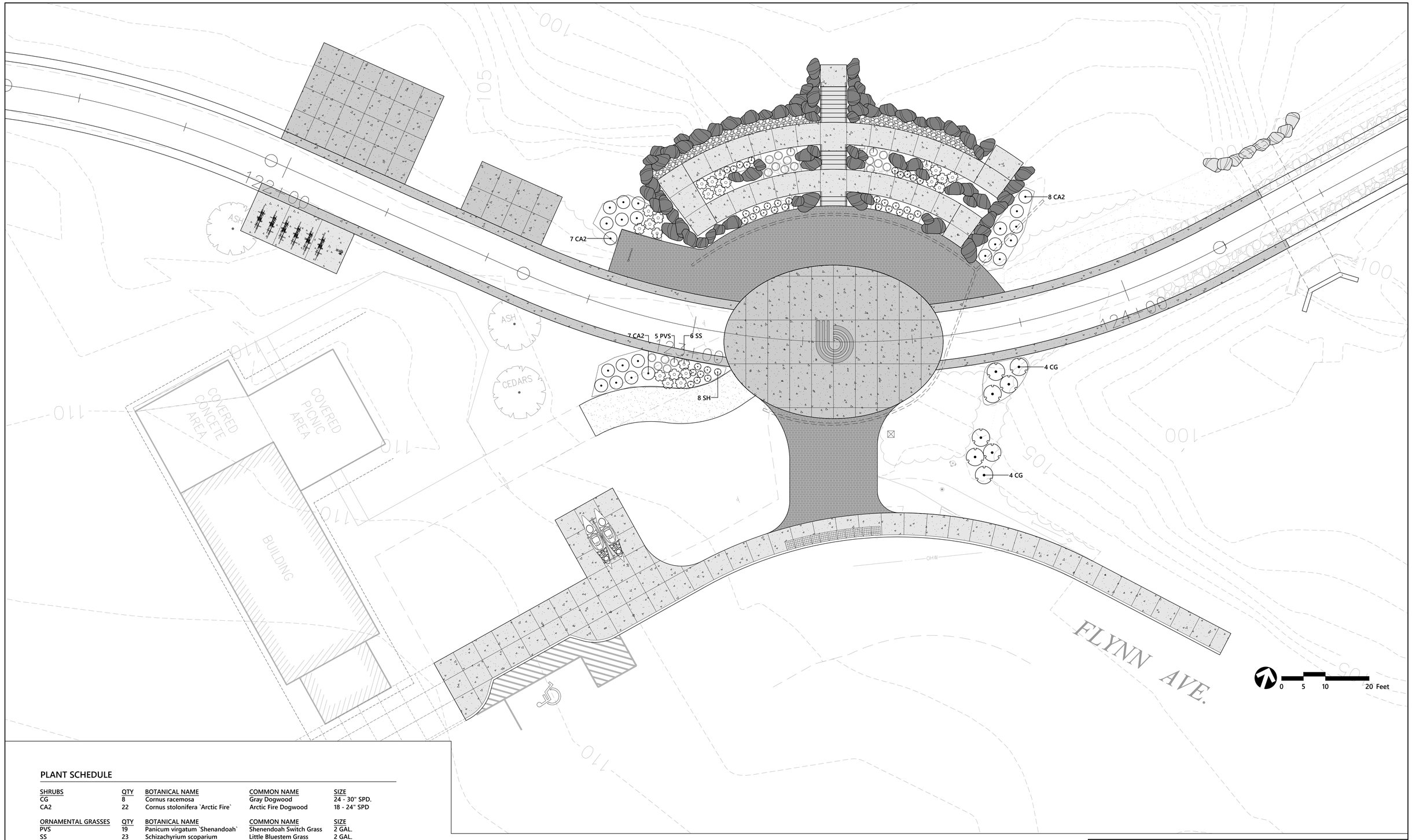


C SAWCUT DETAIL
N.T.S.

PROJECT NAME: BURLINGTON BIKE PATH PHASE 3B
PROJECT NUMBER: 58109.01

FILE NAME:
PROJECT LEADER: E.P.DETRICK
DESIGNED BY: M.K.WILLARD
LANDSCAPE DETAILS

PLOT DATE: 05/07/2021
DRAWN BY: M.K.WILLARD
CHECKED BY: E.P.DETRICK
SHEET 26 OF 52



PLANT SCHEDULE

SHRUBS	QTY	BOTANICAL NAME	COMMON NAME	SIZE
CG	8	Cornus racemosa	Gray Dogwood	24 - 30" SPD.
CA2	22	Cornus stolonifera `Arctic Fire`	Arctic Fire Dogwood	18 - 24" SPD

ORNAMENTAL GRASSES	QTY	BOTANICAL NAME	COMMON NAME	SIZE
PVS	19	Panicum virgatum `Shenandoah`	Shenendoah Switch Grass	2 GAL.
SS	23	Schizachyrium scoparium	Little Bluestem Grass	2 GAL.
SH	37	Sporobolus heterolepis	Prairie Dropseed	2 GAL.

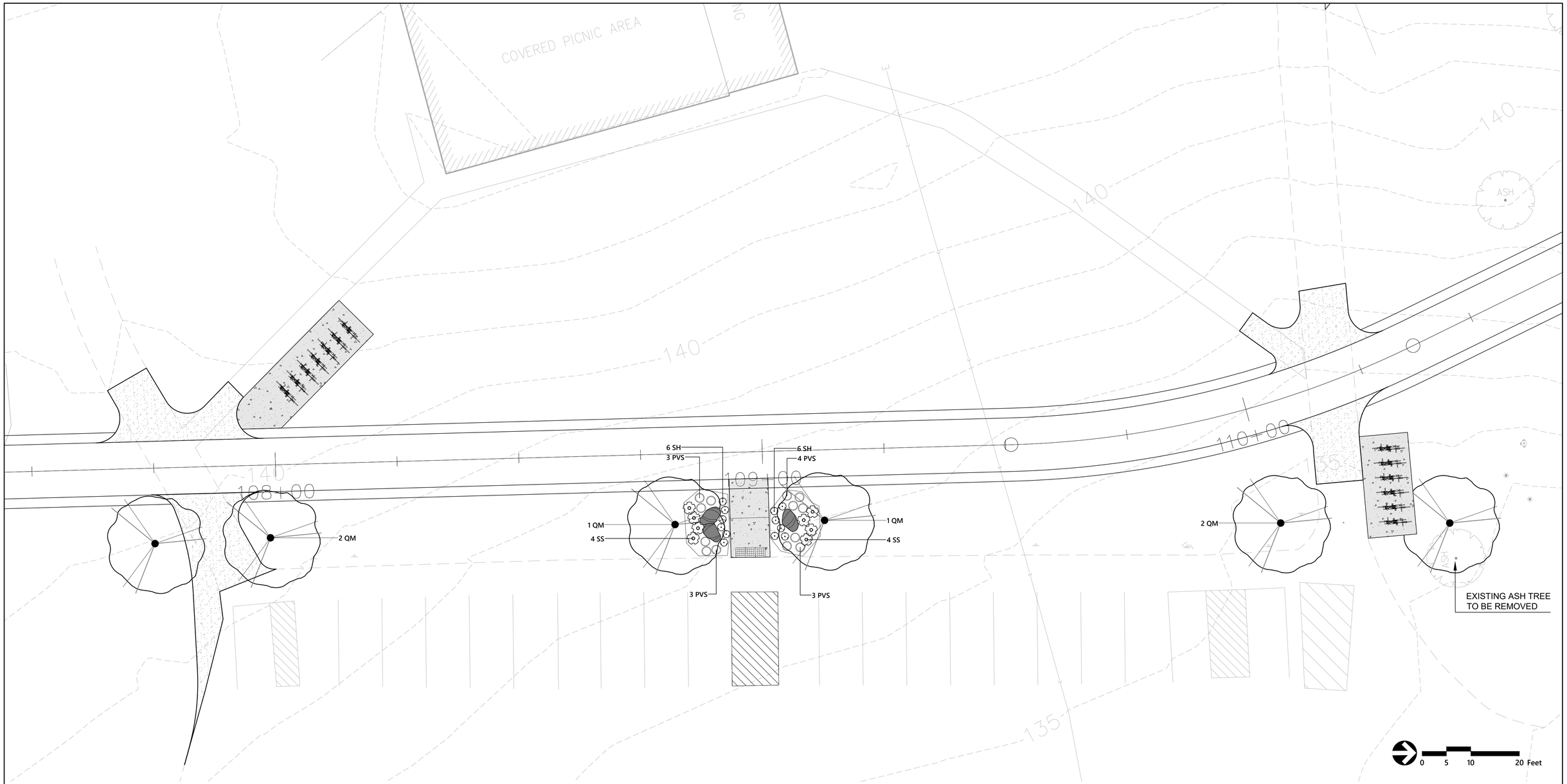
Notes:
1. Refer to planting details, notes and specifications for plant material installation requirements.
2. Ornamental grasses are paid for as 656.41 Perennials

vhb

PROJECT NAME: BURLINGTON BIKE PATH PHASE 3B
PROJECT NUMBER: 58109.01

FILE NAME:
PROJECT LEADER: E.P.DETRICK
DESIGNED BY: M.K.WILLARD
PLANTING PLAN

PLOT DATE: 05/07/2021
DRAWN BY: M.K.WILLARD
CHECKED BY: E.P.DETRICK
SHEET 27 OF 52



PLANT SCHEDULE

DECIDUOUS TREES	QTY	BOTANICAL NAME	COMMON NAME	SIZE
QM	6	Quercus macrocarpa	Burr Oak	2 1/2 - 3" CAL.
ORNAMENTAL GRASSES	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**SIZE**
PVS	13	Panicum virgatum `Shenandoah`	Shenendoah Switch Grass	2 GAL.
SS	8	Schizachyrium scoparium	Little Bluestem Grass	2 GAL.
SH	12	Sporobolus heterolepis	Prairie Dropseed	2 GAL.

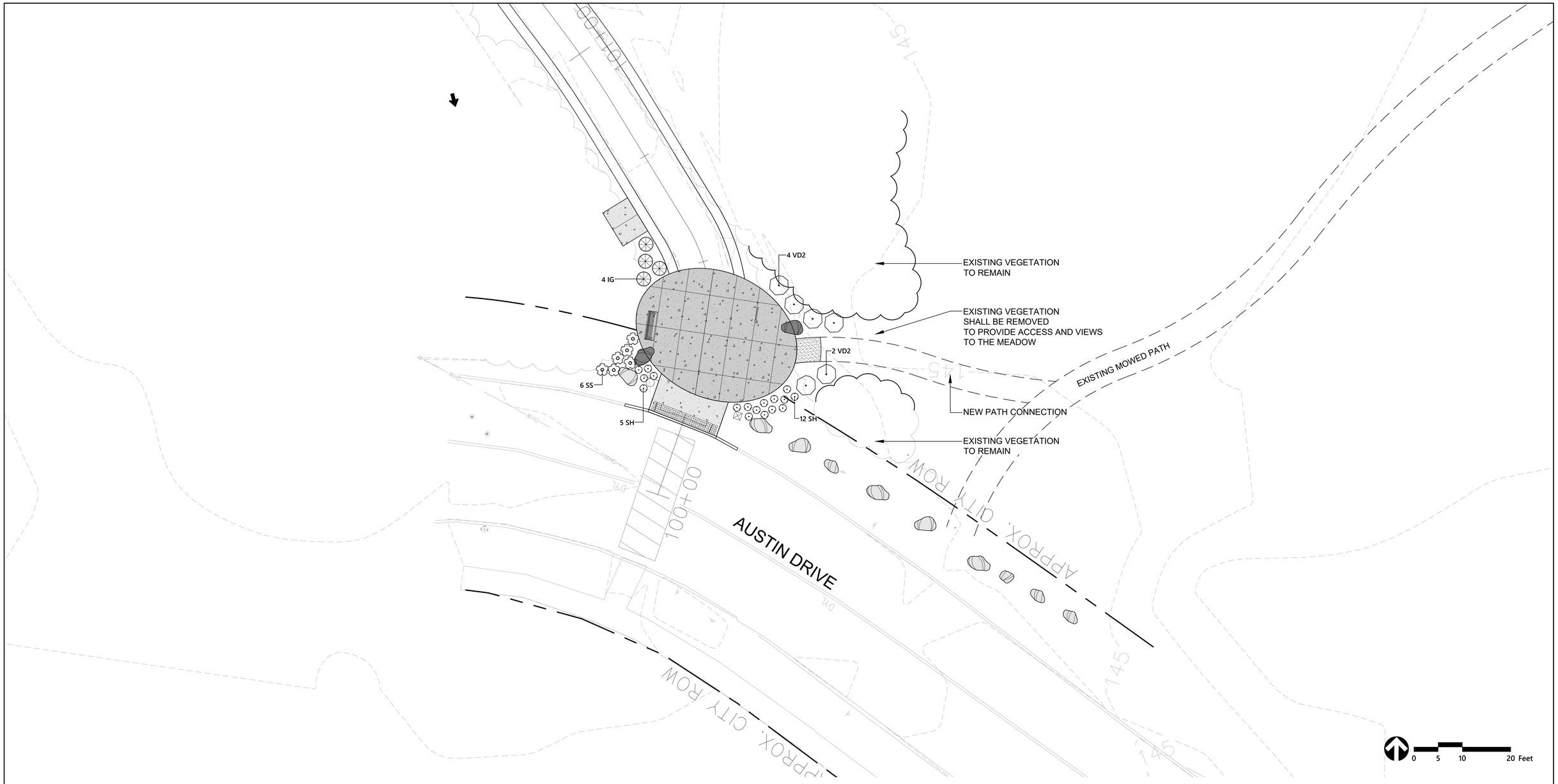
Notes:
1. Refer to planting details, notes and specifications for plant material installation requirements.
2. Ornamental grasses are paid for as 656.41 Perennials

vhb

PROJECT NAME: BURLINGTON BIKE PATH PHASE 3B
PROJECT NUMBER: 58109.01

FILE NAME:
PROJECT LEADER: E.P.DETRICK
DESIGNED BY: M.K.WILLARD
LANDSCAPE PLAN

PLOT DATE: 05/07/2021
DRAWN BY: M.K.WILLARD
CHECKED BY: E.P.DETRICK
SHEET 28 OF 52



PLANT SCHEDULE

SHRUBS	QTY	BOTANICAL NAME	COMMON NAME	SIZE
IG	4	Ilex glabra `Shamrock`	Shamrock Inkberry	2 - 3` HT.
VD2	6	Viburnum dentatum `Arrowwood`	Arrowwood Viburnum	2 - 3` HT.

ORNAMENTAL GRASSES	QTY	BOTANICAL NAME	COMMON NAME	SIZE
SS	6	Schizachyrium scoparium	Little Bluestem Grass	2 GAL.
SH	17	Sporobolus heterolepis	Prairie Dropseed	2 GAL.

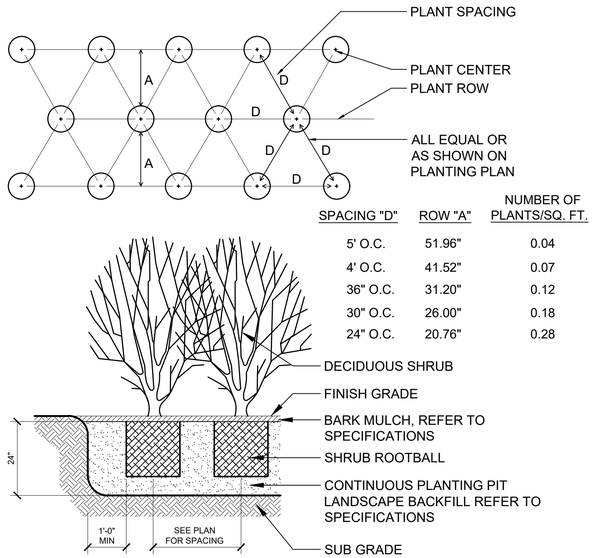
Notes:
1. Refer to planting details, notes and specifications for plant material installation requirements.
2. Ornamental grasses are paid for as 656.41 Perennials

PROJECT NAME: BURLINGTON BIKE PATH PHASE 3B
PROJECT NUMBER: 58109.01

FILE NAME:
PROJECT LEADER: E.P.DETRICK
DESIGNED BY: M.K.WILLARD
PLANTING PLAN

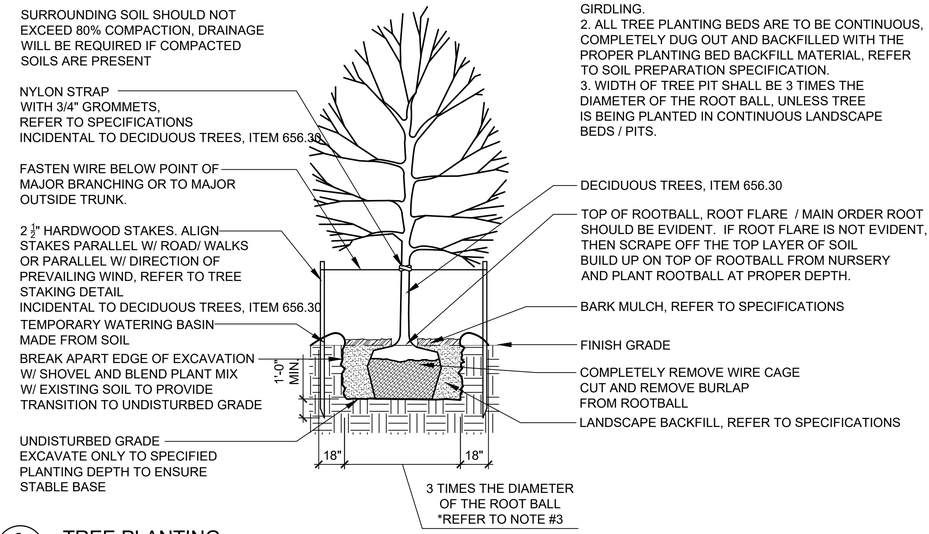
PLOT DATE: 05/07/2021
DRAWN BY: M.K.WILLARD
CHECKED BY: E.P.DETRICK
SHEET 29 OF 52

NOTES:
1. QUANTITY OF SHRUBS AND SPACING
AS NOTED IN PLANTING SCHEDULE.
2. ALL PLANTING BEDS ARE TO BE CONTINUOUS, COMPLETELY
DUG OUT AND BACKFILLED WITH THE PROPER LANDSCAPE BACKFILL

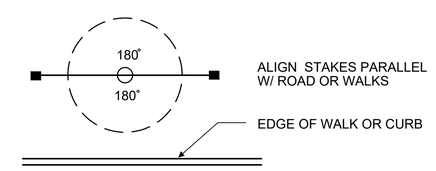


C SHRUB PLANTING
SCALE: 1/2" = 1'-0"

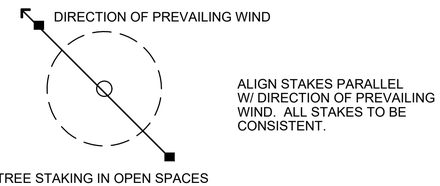
NOTES:
1. EXAMINE ENTIRE TREE AND REMOVE ALL NURSERY TAGS, ROPE, STRING, OR SURVEYORS TAPE TO PREVENT FUTURE GIRDLING.
2. ALL TREE PLANTING BEDS ARE TO BE CONTINUOUS, COMPLETELY DUG OUT AND BACKFILLED WITH THE PROPER PLANTING BED BACKFILL MATERIAL, REFER TO SOIL PREPARATION SPECIFICATION.
3. WIDTH OF TREE PIT SHALL BE 3 TIMES THE DIAMETER OF THE ROOT BALL, UNLESS TREE IS BEING PLANTED IN CONTINUOUS LANDSCAPE BEDS / PITS.



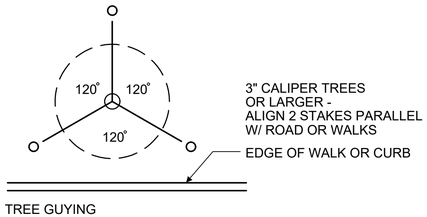
A TREE PLANTING
SCALE 1/4" = 1'-0"



A. TREE STAKING ALONG ROAD OR WALKS

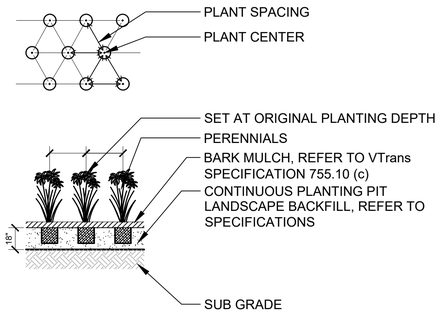


B. TREE STAKING IN OPEN SPACES



C. TREE GUYING

B TREE STAKING LAYOUT
NO SCALE



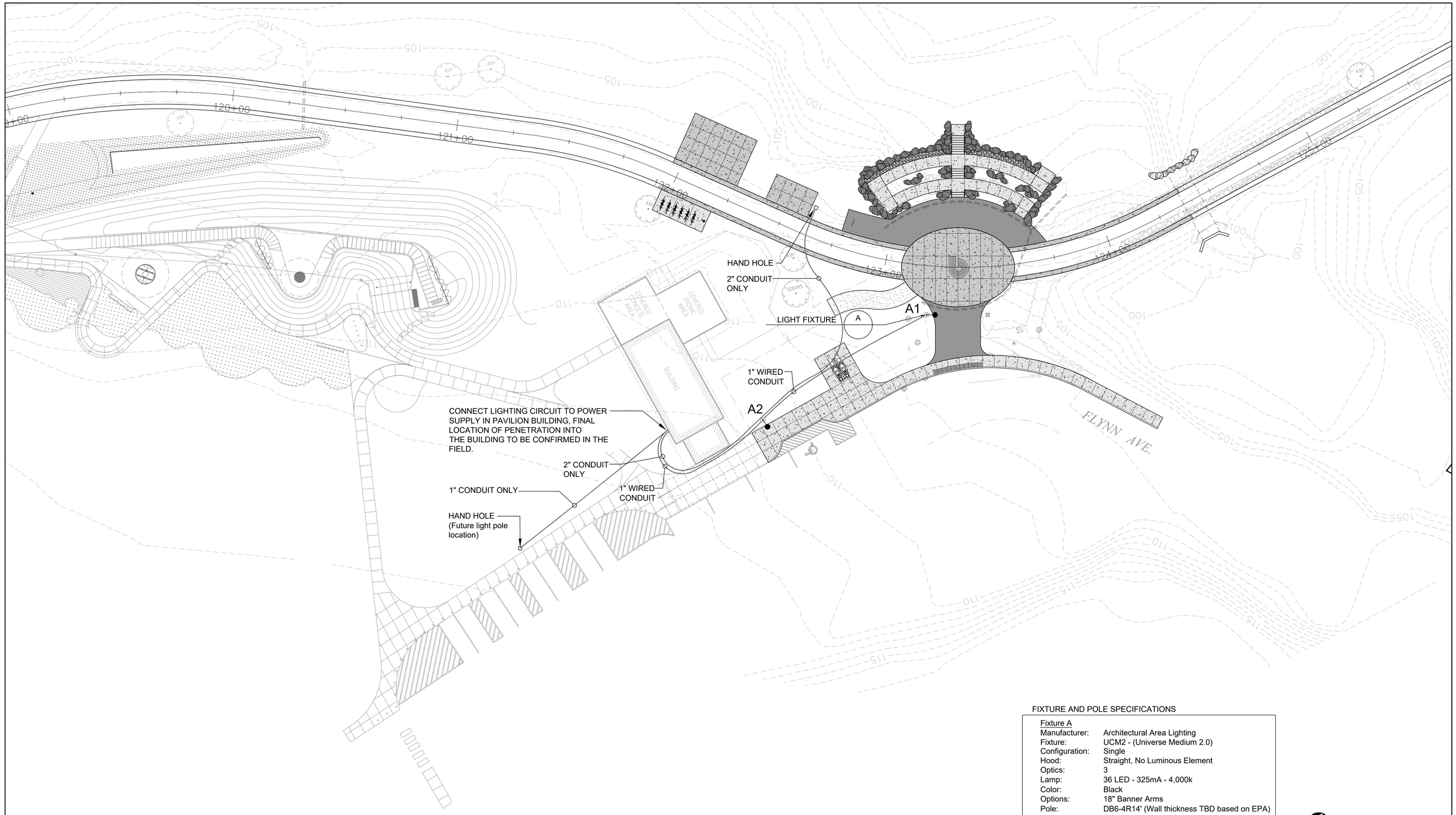
NOTES:
1. REFER TO PLANTING PLAN FOR SPACING AND QUANTITIES.
2. ALL PLANTING BEDS ARE TO BE CONTINUOUS, COMPLETELY DUG OUT AND BACKFILLED WITH THE PROPER PLANTING BED BACKFILL MATERIAL, REFER TO SOIL PREPARATION SPECIFICATION.

D PERENNIAL PLANTING
N.T.S.

PROJECT NAME: BURLINGTON BIKE PATH PHASE 3B
PROJECT NUMBER: 58109.01

FILE NAME:
PROJECT LEADER: E.P.DETRICK
DESIGNED BY: M.K.WILLARD
PLANTING DETAILS

PLOT DATE: 05/07/2021
DRAWN BY: M.K.WILLARD
CHECKED BY: E.P.DETRICK
SHEET 30 OF 52



FIXTURE AND POLE SPECIFICATIONS

Fixture A	
Manufacturer:	Architectural Area Lighting
Fixture:	UCM2 - (Universe Medium 2.0)
Configuration:	Single
Hood:	Straight, No Luminous Element
Optics:	3
Lamp:	36 LED - 325mA - 4,000k
Color:	Black
Options:	18" Banner Arms
Pole:	DB6-4R14' (Wall thickness TBD based on EPA)
Mounting Arm:	SLA17
Pole Color:	Black

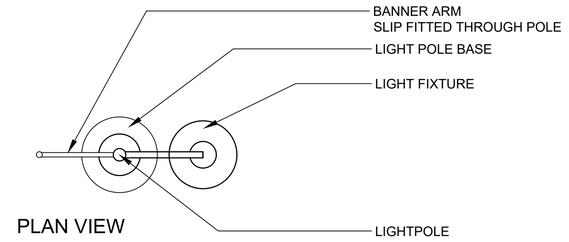
0 10 20 40 Feet

PROJECT NAME: BURLINGTON BIKE PATH PHASE 3B

PROJECT NUMBER: 58109.01

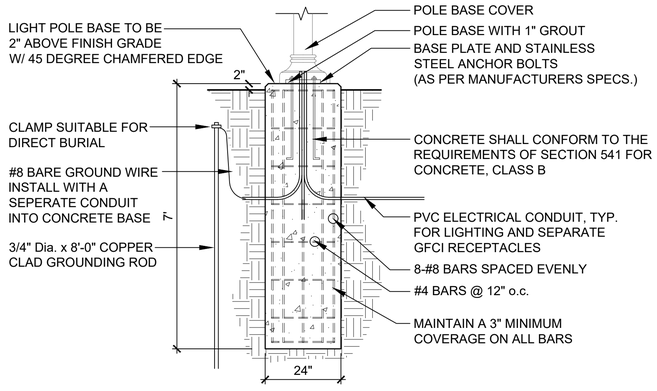
FILE NAME:
PROJECT LEADER: E.P.DETRICK
DESIGNED BY: M.K.WILLARD
LANDSCAPE LIGHTING PLAN

PLOT DATE: 05/07/2021
DRAWN BY: M.K.WILLARD
CHECKED BY: E.P.DETRICK
SHEET 31 OF 52

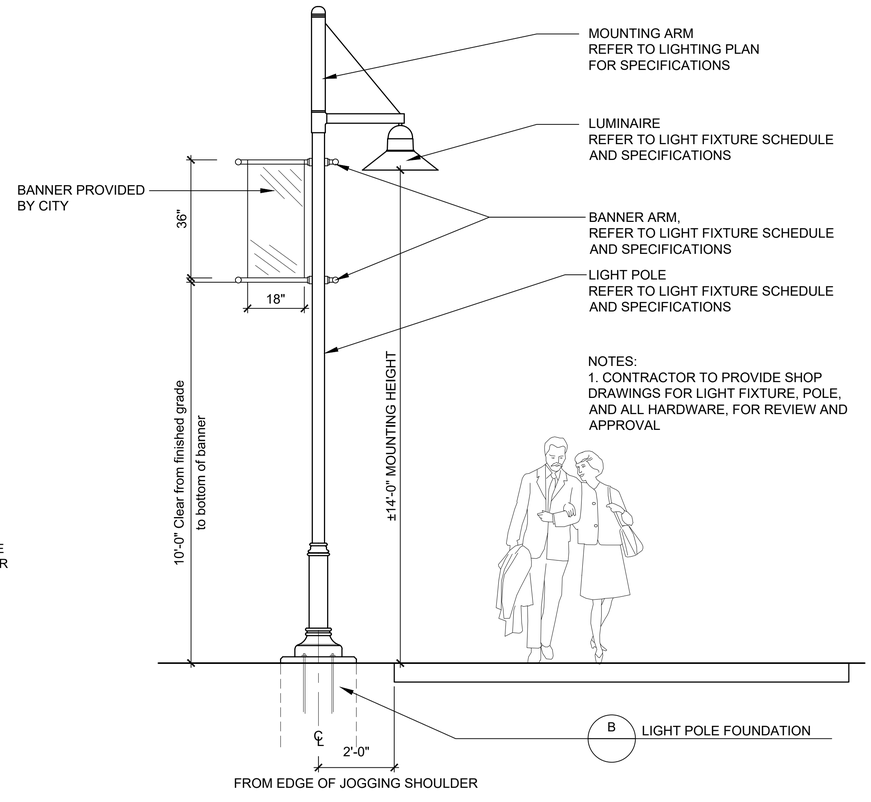


PLAN VIEW

NOTES:
1. REFER TO VTRANS STANDARD DETAIL T-133 "LIGHT POLE FOUNDATION DETAILS" FOR BASE REINFORCING INFORMATION.
2. POLE BASE IS TO BE ONE CONTINUOUS POUR.
3. THE CONTRACTOR WILL TAKE SPECIAL CARE TO INSURE CONCRETE POLE BASES ARE INSTALLED ABSOLUTELY VERTICAL AND LEVEL.
4. REFER TO SITE PLAN AND LIGHT POLE BASE LAYOUT DETAILS FOR PROPER HORIZONTAL LAYOUT OF THE POLE BASES WITH THE BRICK PAVING BANDS AND SURROUNDING PAVEMENT SURFACES AND CURBING. REFER TO DETAIL C\LA-5.2
5. CONTRACTOR TO REVIEW LIGHT POLE BASE LAYOUT DETAILS FOR PROPER HORIZONTAL LAYOUT WITH BRICK PAVING AND ASSOCIATED HARDSCAPE.



B LIGHT POLE FOUNDATION — 753.01 LIGHT POLE FOUNDATIONS
SCALE 1/2" = 1'-0"



NOTES:
1. CONTRACTOR TO PROVIDE SHOP DRAWINGS FOR LIGHT FIXTURE, POLE, AND ALL HARDWARE, FOR REVIEW AND APPROVAL

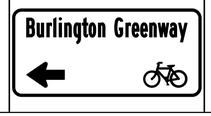
A LIGHT FIXTURE - (Fixture A)
SCALE 1/2" = 1'-0"

PROJECT NAME: BURLINGTON BIKE PATH PHASE 3B
PROJECT NUMBER: 58109.01

FILE NAME:
PROJECT LEADER: E.P.DETRICK
DESIGNED BY: M.K.WILLARD
LIGHTING DETAILS

PLOT DATE: 05/07/2021
DRAWN BY: M.K.WILLARD
CHECKED BY: E.P.DETRICK
SHEET 32 OF 52

TRAFFIC SIGN SUMMARY SHEET

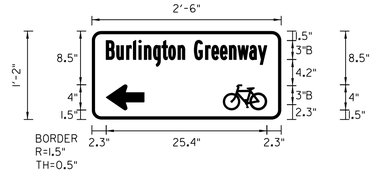
MILE MARKER, STATION, OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS EA	SIGN DIMENSIONS WIDTH (IN)	SIGN DIMENSIONS HEIGHT (IN)	NEW & SALVAGED SIGNS "A"	NEW & SALVAGED SIGNS "B"	NEW & SALVAGED SIGNS SALV SIGN	NEW & SALVAGED SIGNS SALV TIS	EXIST POST RETAIN	EXIST POST SALVAGE	NEW SIGN POSTS NO. OF POSTS	FLANGED CHANNEL LB/FT 1.12	FLANGED CHANNEL LB/FT 2.0	FLANGED CHANNEL LB/FT 3.0	SQUARE STEEL (IN) 1.75 LB/FT 1.88	SQUARE STEEL (IN) 2.0 LB/FT 2.42	SQUARE STEEL (IN) 2.5 LB/FT 3.35	ANCHOR	SLEEVE	TUBULAR ALUMINUM Ø (IN) 3.0 LB/FT 1.3	TUBULAR ALUMINUM Ø (IN) 4.0 LB/FT 1.7	TUBULAR ALUMINUM Ø (IN) 4.0 MOD LB/FT 1.7	WOOD POST (LF) COLLAR	WOOD POST (LF) TYPE 1	WOOD POST (LF) TYPE 2	W-SHAPE STEEL FTG. SIZE 24"	W-SHAPE STEEL FTG. SIZE 30"	W-SHAPE STEEL WEIGHT	W-SHAPE STEEL POST SIZE	SIGN REMAINED	REMARKS	SIGN DETAIL DETAIL ON SHEET NUMBER	SIGN DETAIL STD. SHEET NUMBER
OPTION ITEMS																																	
100+21, LT		1	18	18	2.25						1					X		X													R1-1 MOUNTED ON NEW POST		SHSM
AUSTIN DRIVE		1	30	14	2.92						1					X+		X													MOUNTED ON NEW POST WOG	THIS SHEET	
												FT	FT	FT	FT	FT 25	FT		EA	LB	LB	LB		TYPE 1	TYPE 2							
	TOTALS				SF 5.17	SF	EA.	SF				FT			FT 25					LB			EA.	WOOD POSTS (FT)		EA.	EA.	LB				

FINAL POST LENGTHS ARE TO BE DETERMINED IN THE FIELD. POST SIZES ARE COMPUTED BASED ON INFORMATION FURNISHED ON THE STANDARD SHEETS AND THE ROADWAY, TRAFFIC & SAFETY DIVISION'S "SIGN POST DESIGN GUIDELINE."

POST LENGTH AVERAGES 10 FEET

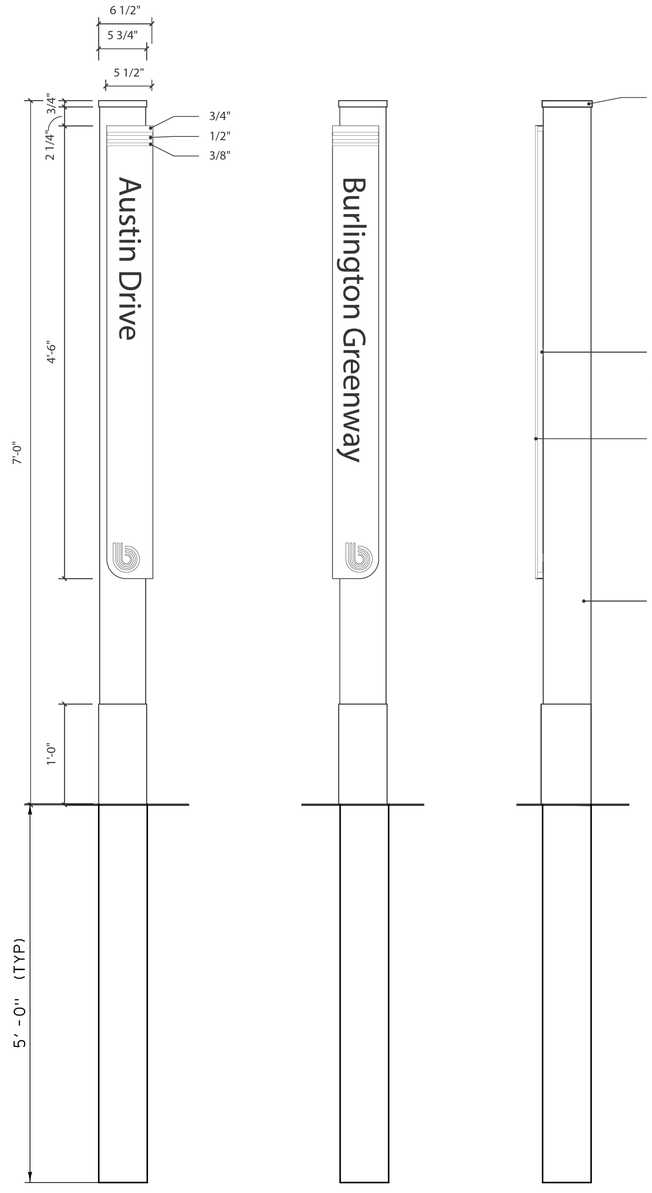
POST LENGTH WITH '+' AVERAGES 15 FEET

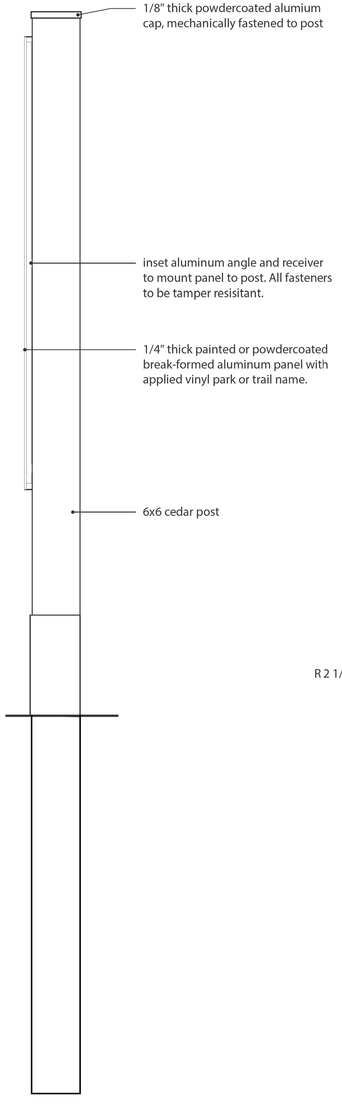
BOY = BLACK LEGEND ON YELLOW BACKGROUND - PLAQUE
BOW = BLACK LEGEND ON WHITE BACKGROUND - PLAQUE
GOW = GREEN LEGEND ON WHITE BACKGROUND - PLAQUE
ROW = RED LEGEND ON WHITE BACKGROUND - PLAQUE
WOB = WHITE LEGEND ON BLUE BACKGROUND - PLAQUE
WOG = WHITE LEGEND ON GREEN BACKGROUND
FYG = BLACK LEGEND ON FLUORESCENT YELLOW-GREEN BACKGROUND
SHSM = FHWA STANDARD HIGHWAY SIGNS AND MARKINGS BOOK (WITH 2012 SUPPLEMENT)

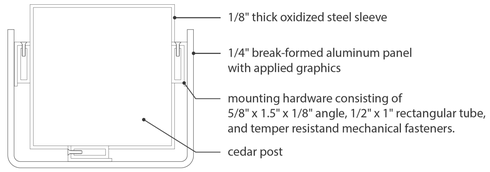


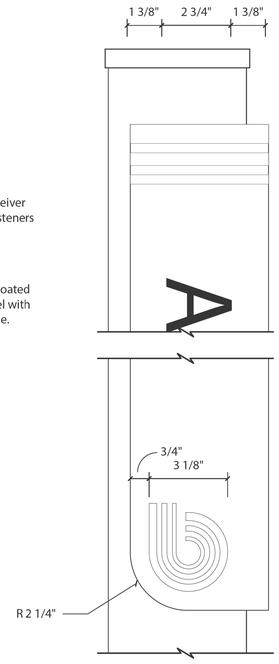
Panel Style: Street Name 4-3in.ssi
M.U.T.C.D.: 2009 Edition
(WOG)

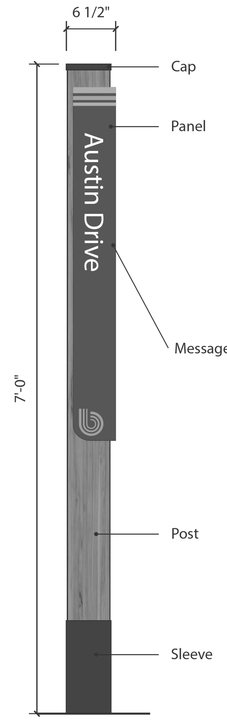
PROJECT NAME:	BURLINGTON BIKE PATH PHASE 3B
PROJECT NUMBER:	58109.01
FILE NAME: 58109tss.dgn	PLOT DATE: 5/7/2021
PROJECT LEADER: E.P. DETRICK	DRAWN BY: C.K. FORD
DESIGNED BY: C.K. FORD	CHECKED BY: E.P. DETRICK
TRAFFIC SIGN SUMMARY SHEET	SHEET 33 OF 52



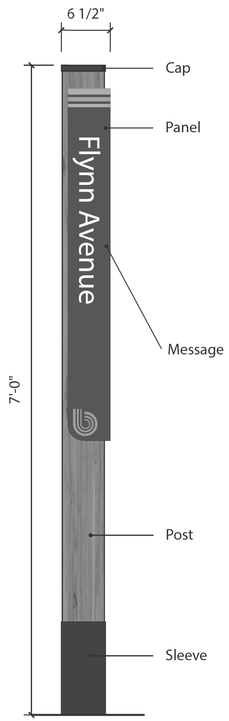






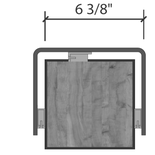


1A Side A and C
Scale: 3/4" = 1' - 0"



1B Side A and C
Scale: 3/4" = 1' - 0"

2 Side B
Scale: 3/4" = 1' - 0"



3 Top (Cap Removed)
Scale: 3/4" = 1' - 0"

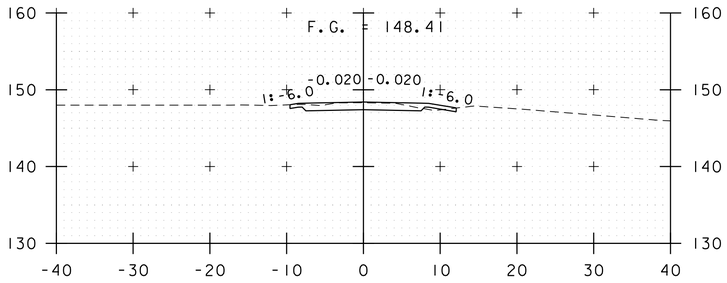
BIKE PATH IDENTIFICATION SIGN DETAILS

NOT TO SCALE

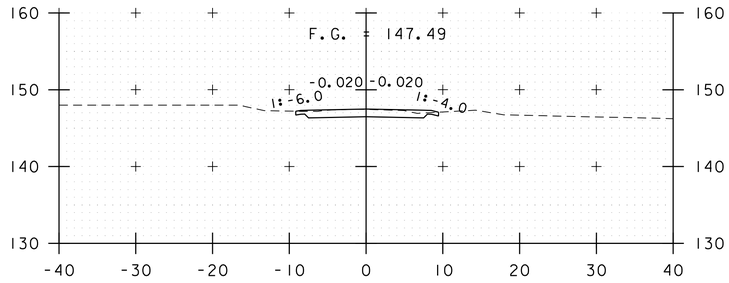
NOTES:

1. BIKE PATH IDENTIFICATION SIGNS MUST COMPLY WITH WAYFINDING GUIDELINES FOUND AT: https://enjoyburlington.com/resources/brand-wayfinding-guidelines/
2. TEXT STYLE TO BE TITLE CASE WITH FONT "IDEAL SANS MEDIUM".

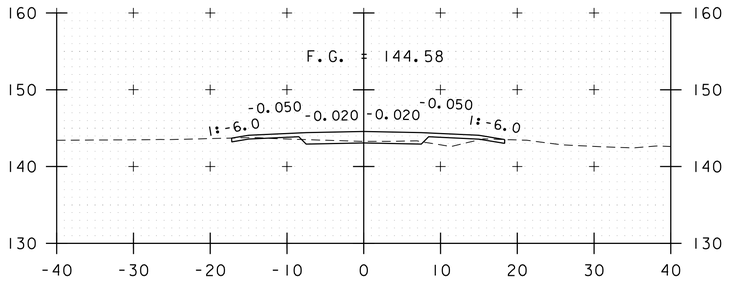
PROJECT NAME:	BURLINGTON BIKE PATH PHASE 3B
PROJECT NUMBER:	58109.01
FILE NAME: 58109sign_det.dgn	PLOT DATE: 5/7/2021
PROJECT LEADER: E.P. DETRICK	DRAWN BY: C.K. FORD
DESIGNED BY: C.K. FORD	CHECKED BY: E.P. DETRICK
SIGN DETAIL SHEET	SHEET 34 OF 52



100+50

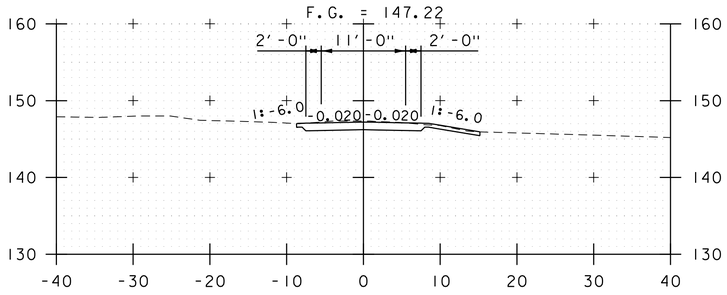


102+00

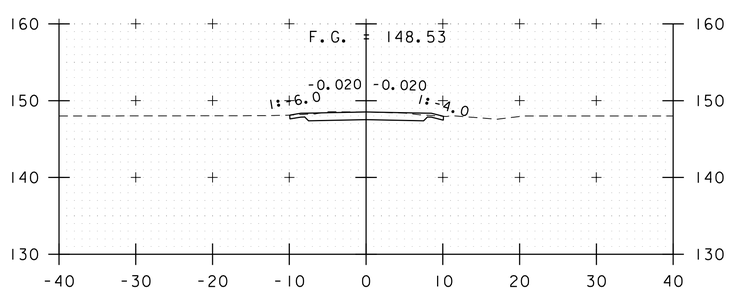


103+50

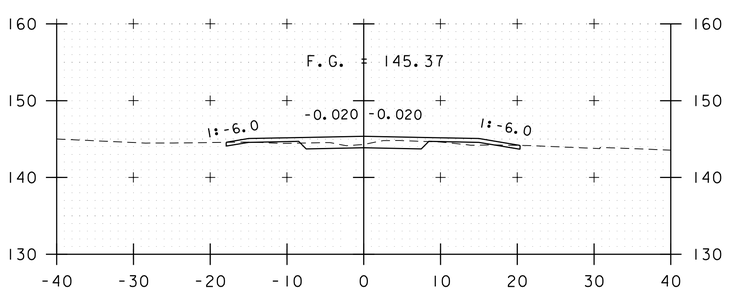
101+00



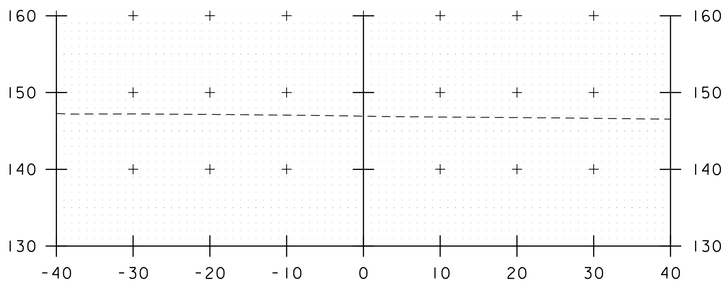
102+50



104+00



103+00



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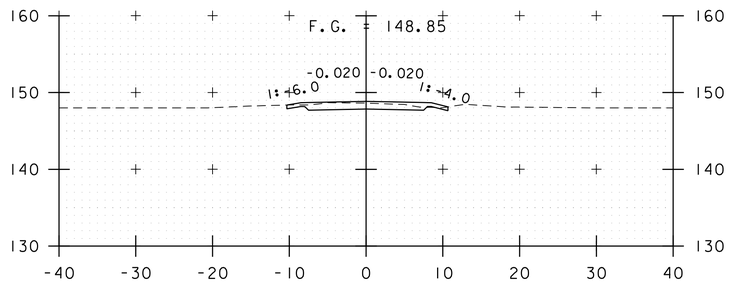
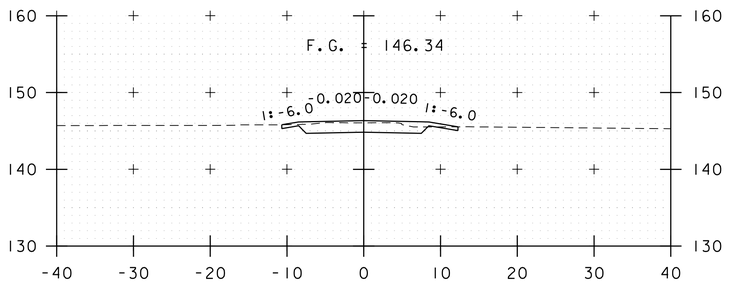


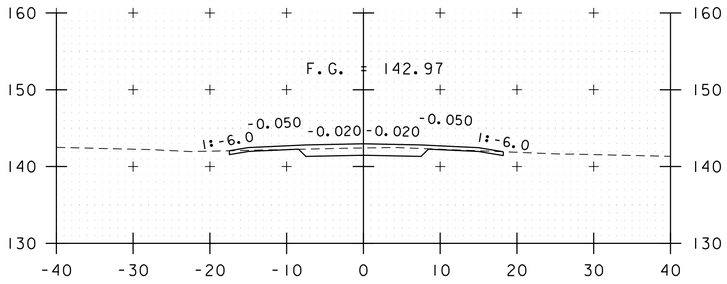
101+50



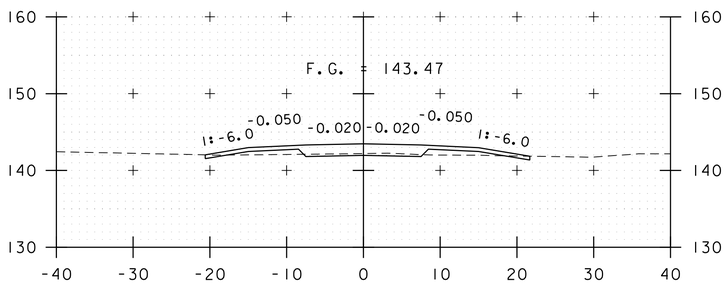
PROJECT NAME: BURLINGTON BIKE PATH PHASE 3B
PROJECT NUMBER: 58109.01

FILE NAME: 58109xs.dgn
PROJECT LEADER: E.P.DETRICK
DESIGNED BY: B.M.ROBERTS
SECTION I CROSS SECTIONS (1 OF 7)

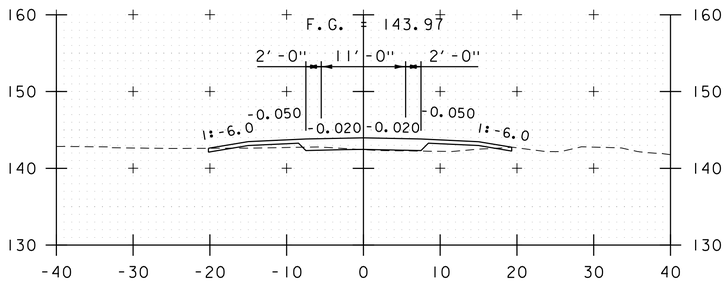
PLOT DATE: 5/7/2021
DRAWN BY: B.M.ROBERTS
CHECKED BY: E.P.DETRICK
SHEET 35 OF 52



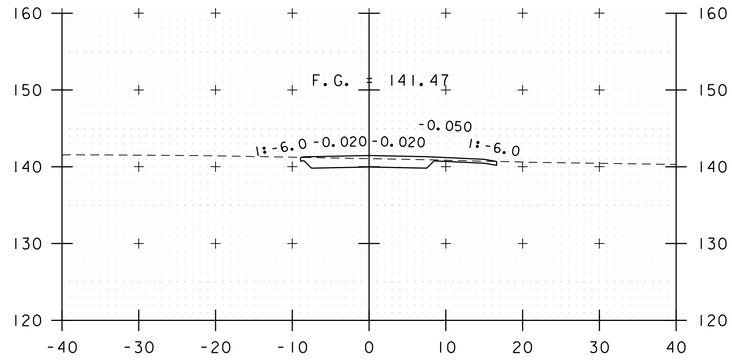
105+50



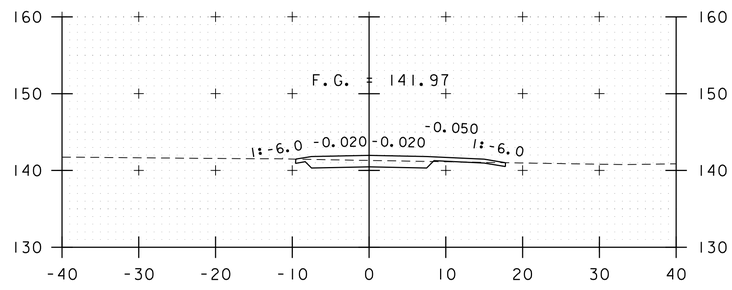
105+00



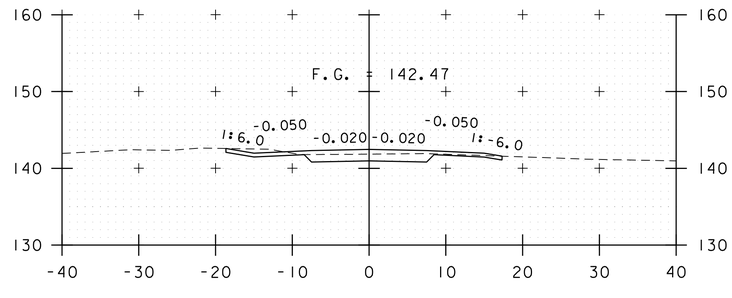
104+50



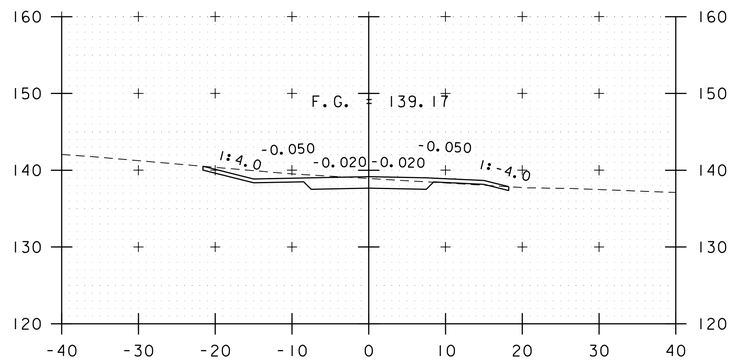
107+00



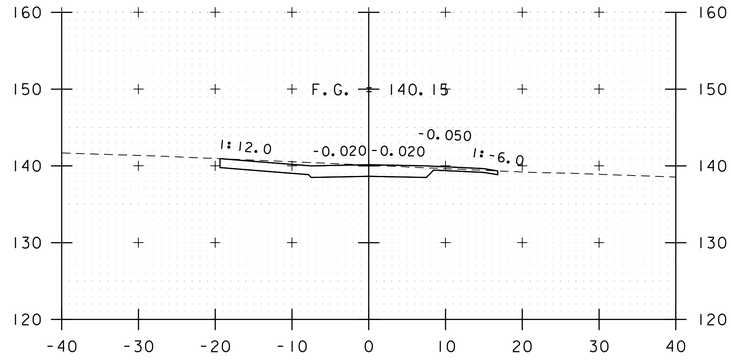
106+50



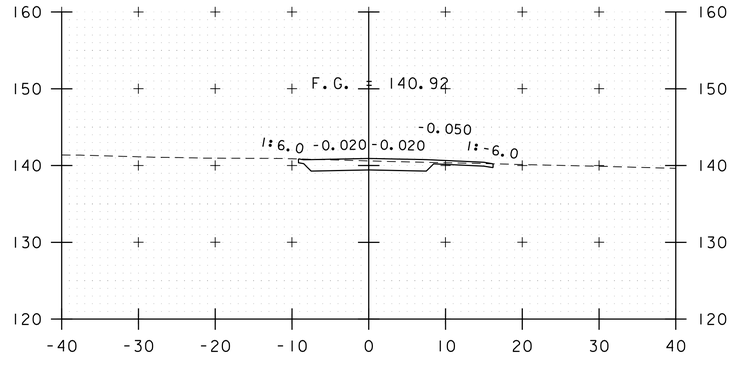
106+00



108+50



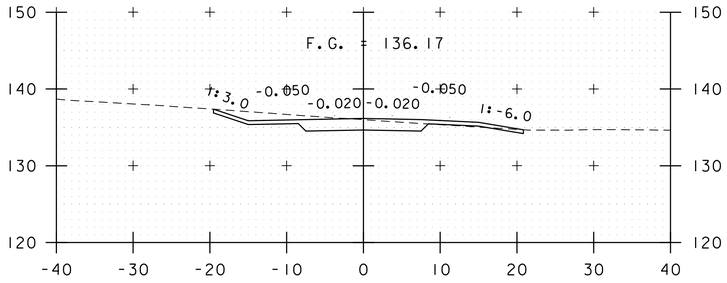
108+00

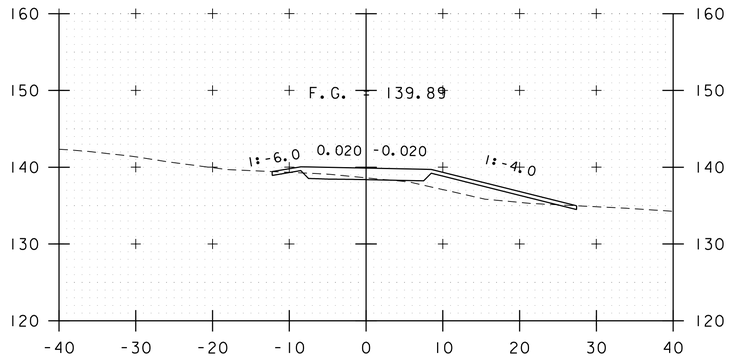


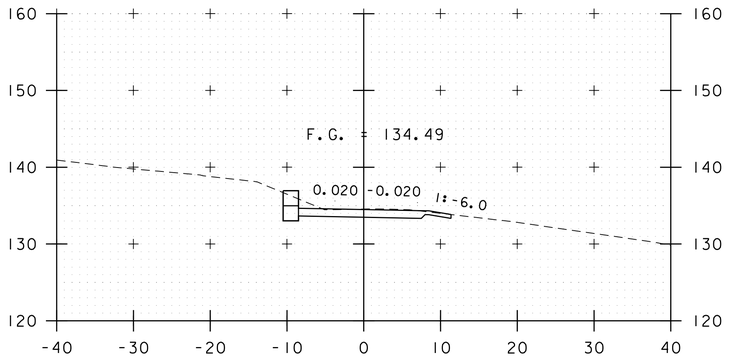
107+50

PROJECT NAME:	BURLINGTON BIKE PATH PHASE 3B
PROJECT NUMBER:	58109.01

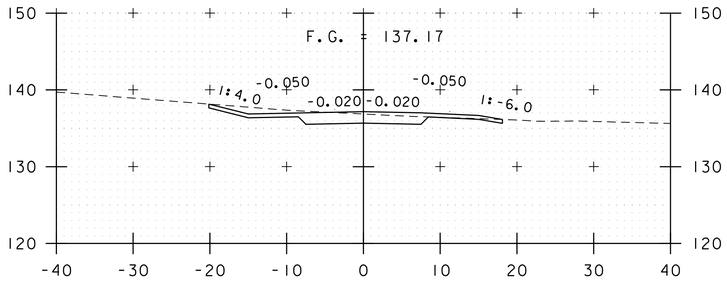
FILE NAME: 58109xs.dgn	PLOT DATE: 5/7/2021
PROJECT LEADER: E.P.DETRICK	DRAWN BY: B.M.ROBERTS
DESIGNED BY: B.M.ROBERTS	CHECKED BY: E.P.DETRICK
SECTION I CROSS SECTIONS (2 OF 7)	SHEET 36 OF 52



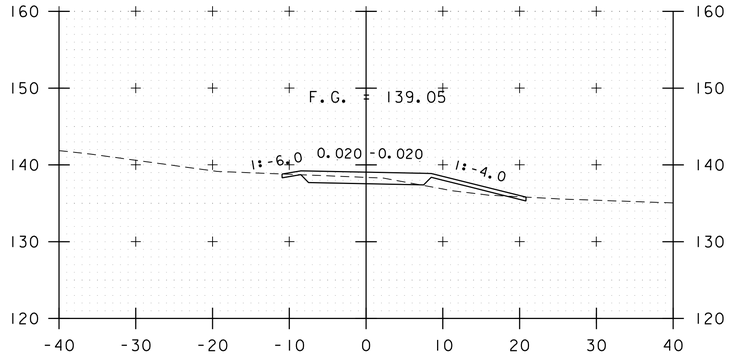




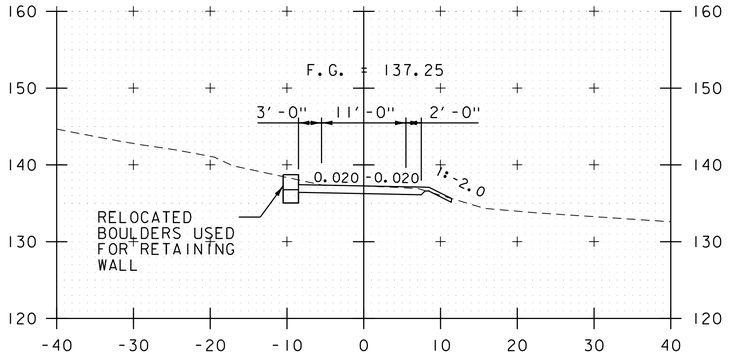
110+00



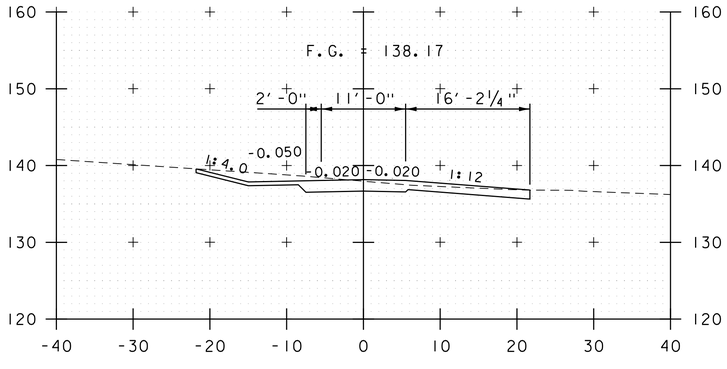
111+50



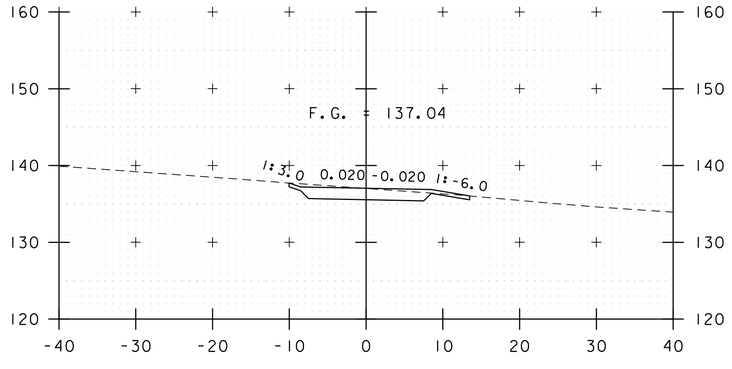
113+00



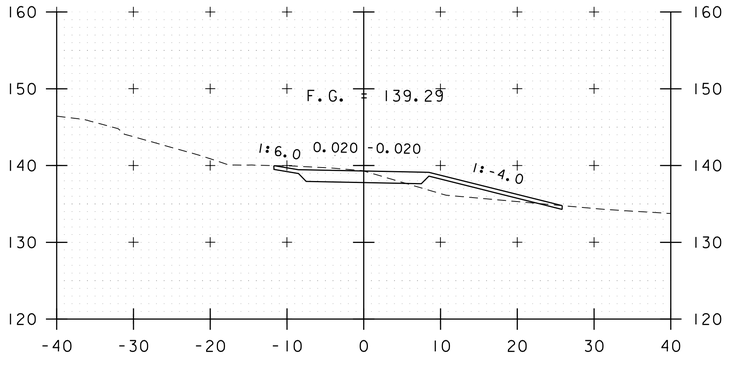
109+50



111+00



112+50



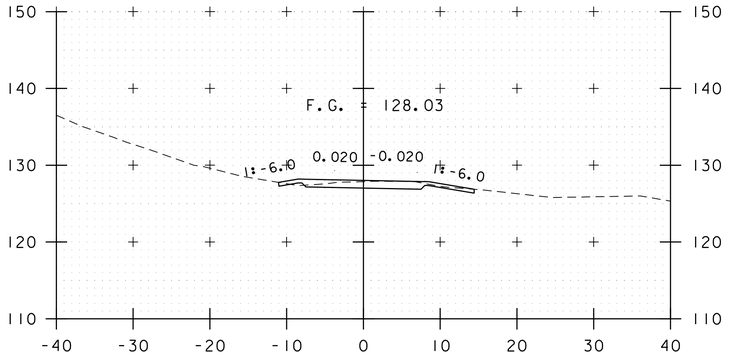
109+00

110+50

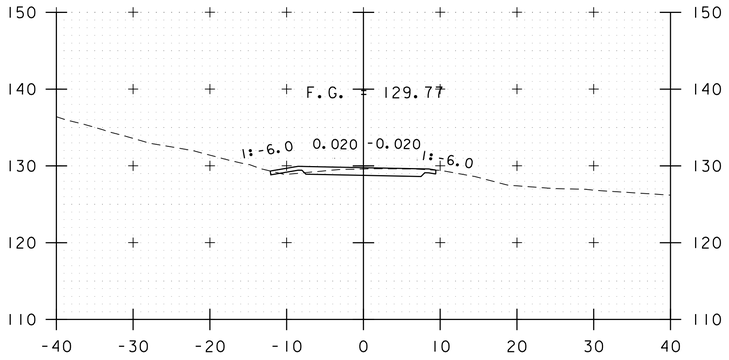
112+00

PROJECT NAME:	BURLINGTON BIKE PATH PHASE 3B
PROJECT NUMBER:	58109.01

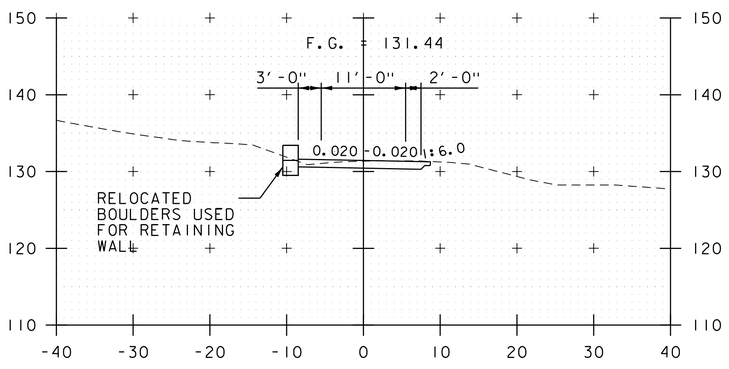
FILE NAME: 58109xs.dgn	PLOT DATE: 5/7/2021
PROJECT LEADER: E.P.DETRICK	DRAWN BY: B.M.ROBERTS
DESIGNED BY: B.M.ROBERTS	CHECKED BY: E.P.DETRICK
SECTION I CROSS SECTIONS (3 OF 7)	SHEET 37 OF 52



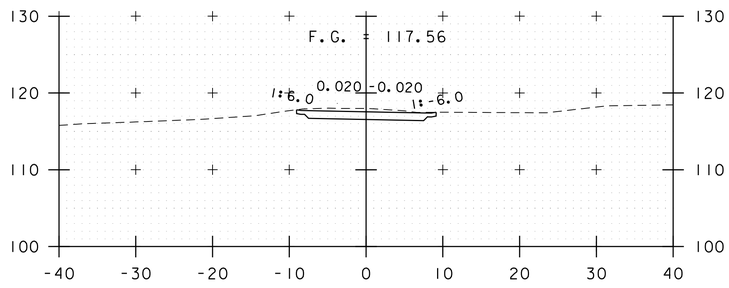
114+00



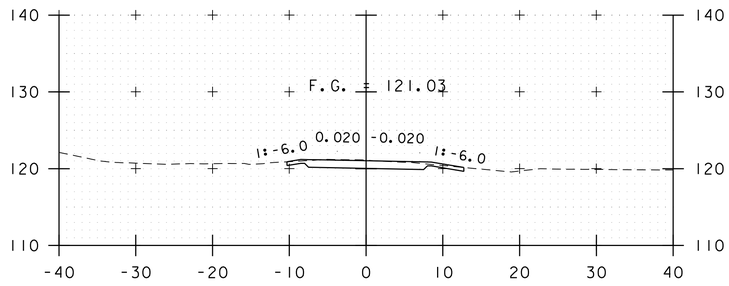
113+75



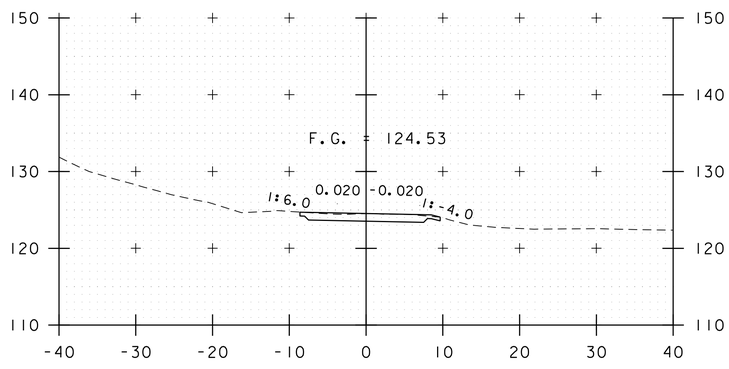
113+50



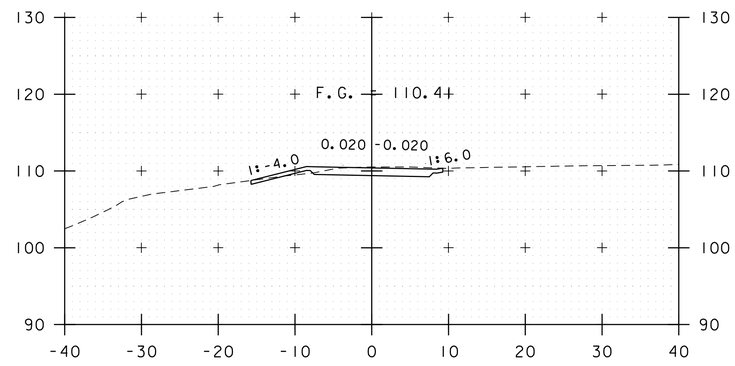
115+50



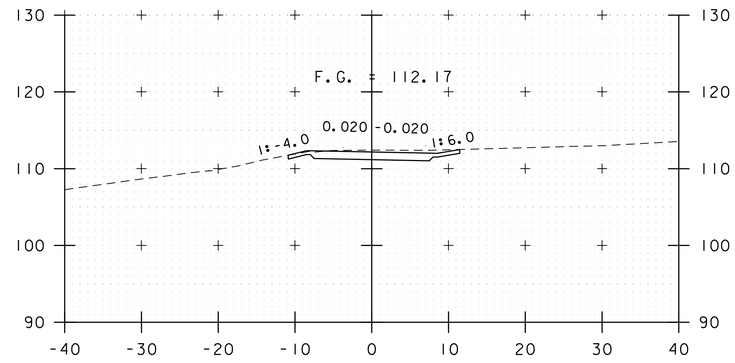
115+00



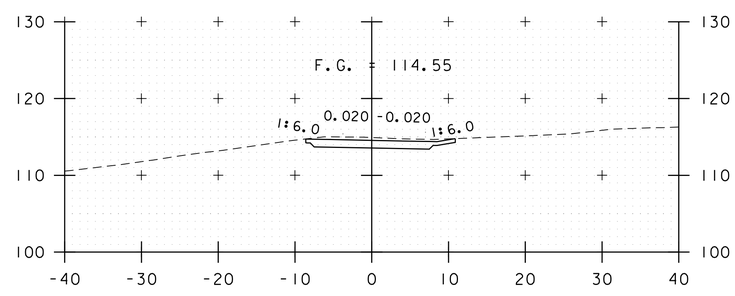
114+50



117+00



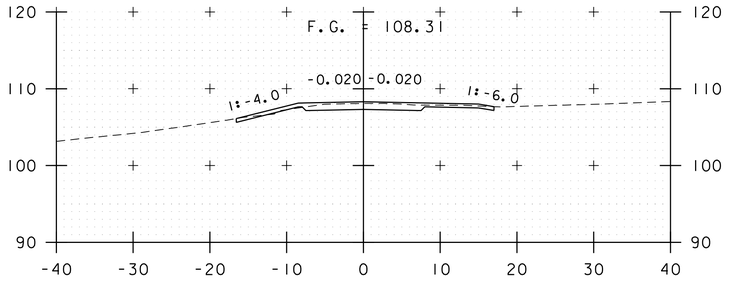
116+50



116+00

PROJECT NAME:	BURLINGTON BIKE PATH PHASE 3B
PROJECT NUMBER:	58109.01

FILE NAME: 58109xs.dgn	PLOT DATE: 5/7/2021
PROJECT LEADER: E.P.DETRICK	DRAWN BY: B.M.ROBERTS
DESIGNED BY: B.M.ROBERTS	CHECKED BY: E.P.DETRICK
SECTION ICROSS SECTIONS (4 OF 7)	SHEET 38 OF 52



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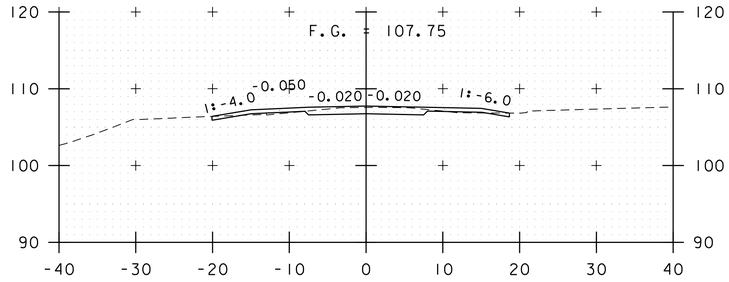

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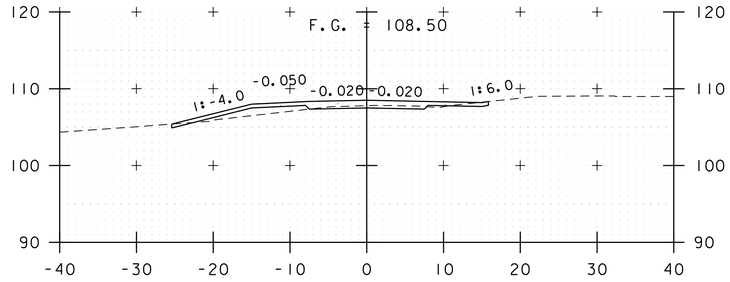

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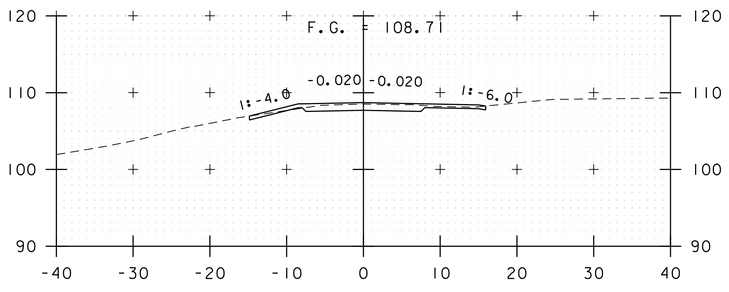

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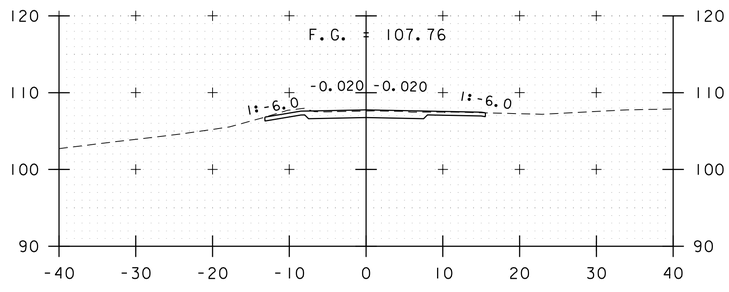

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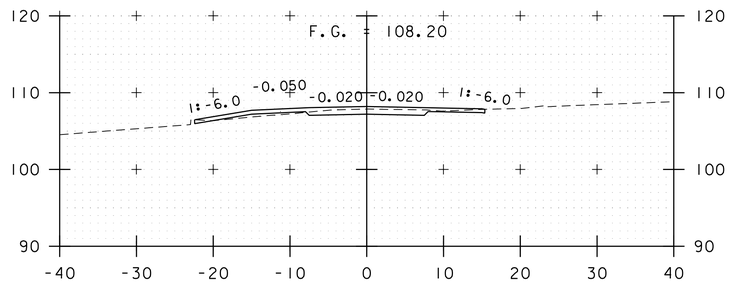

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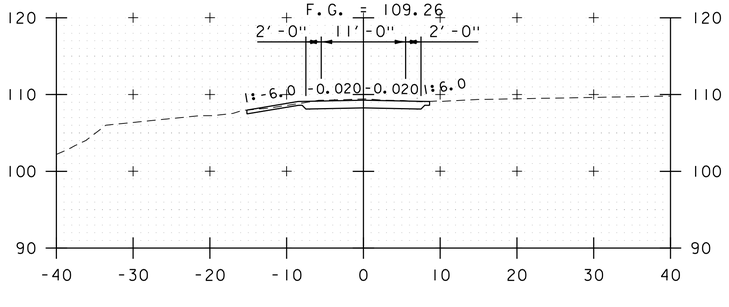

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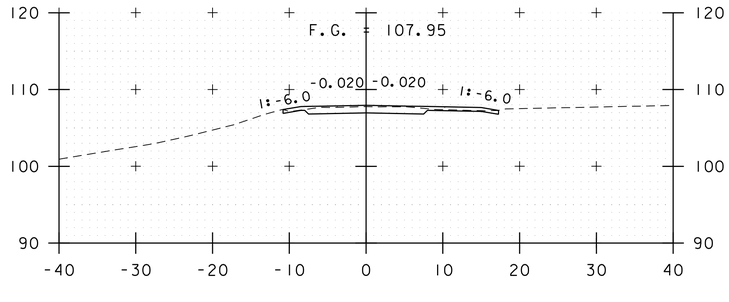

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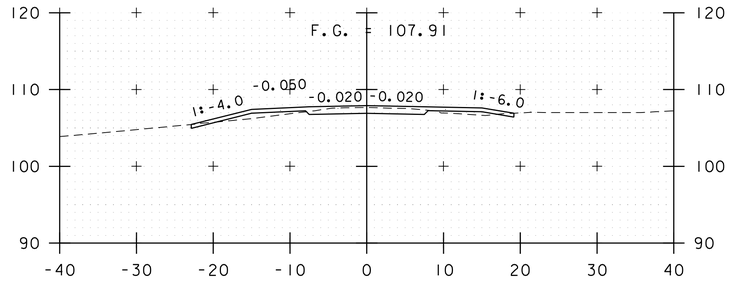

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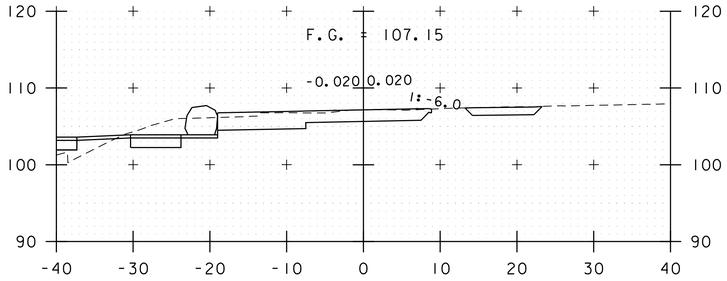
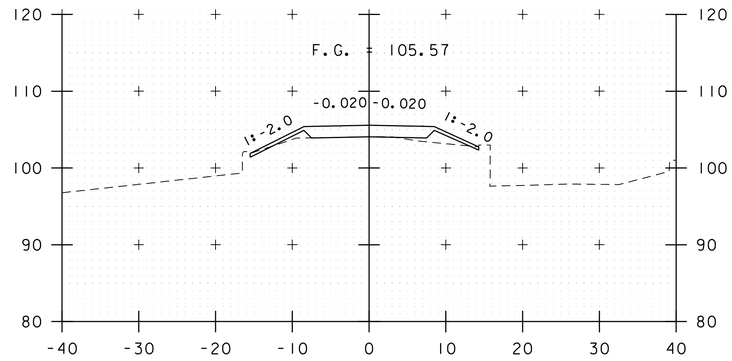
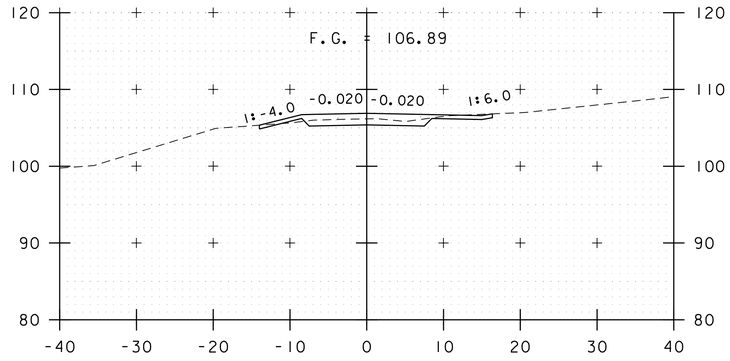
PROJECT NAME: BURLINGTON BIKE PATH PHASE 3B
PROJECT NUMBER: 58109.01

FILE NAME: 58109xs.dgn
PROJECT LEADER: E.P.DETRICK
DESIGNED BY: B.M.ROBERTS
SECTION ICROSS SECTIONS (5 OF 7)

PLOT DATE: 5/7/2021
DRAWN BY: B.M.ROBERTS
CHECKED BY: E.P.DETRICK
SHEET 39 OF 52







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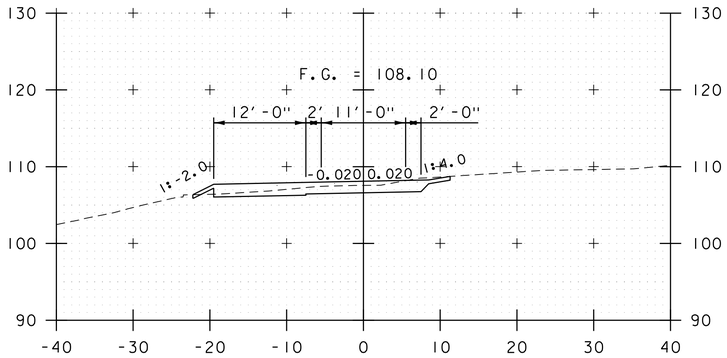

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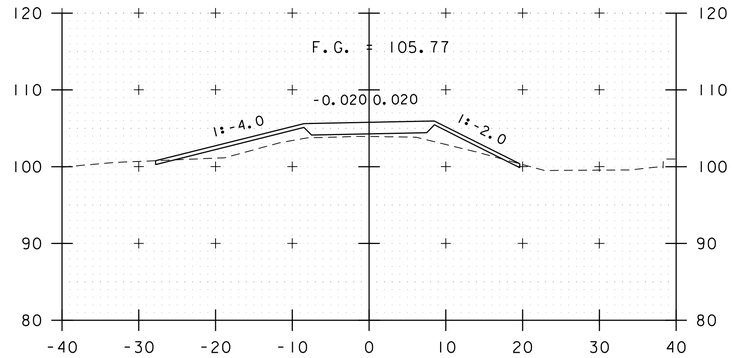

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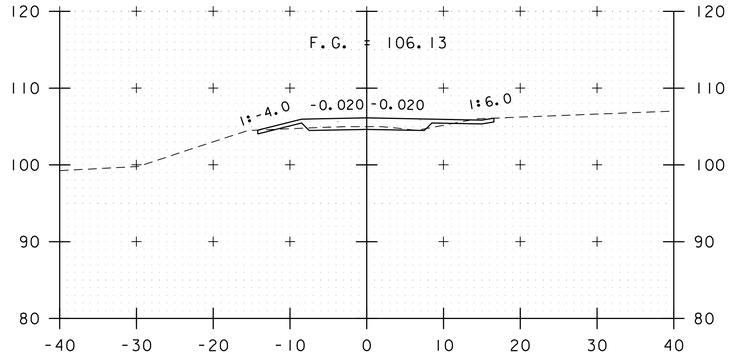

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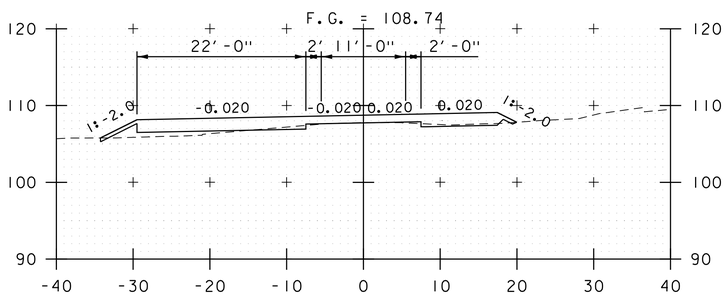

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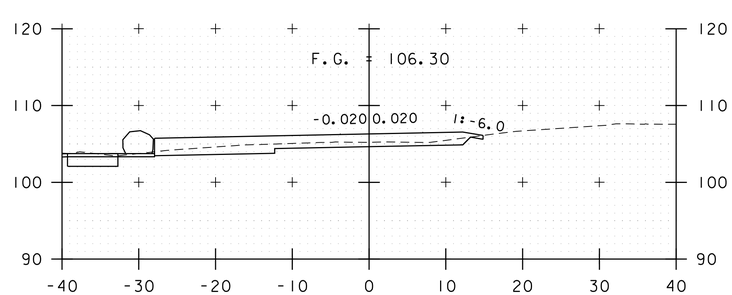

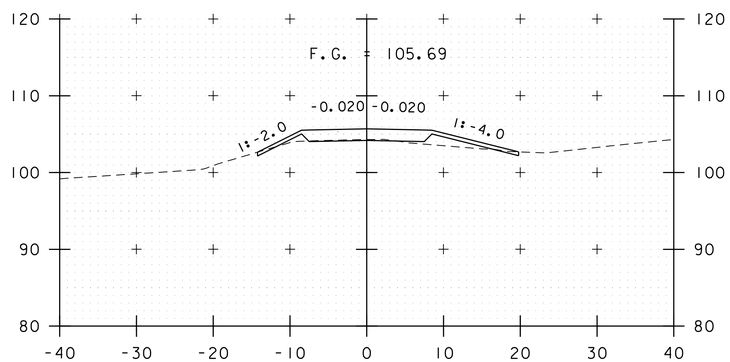

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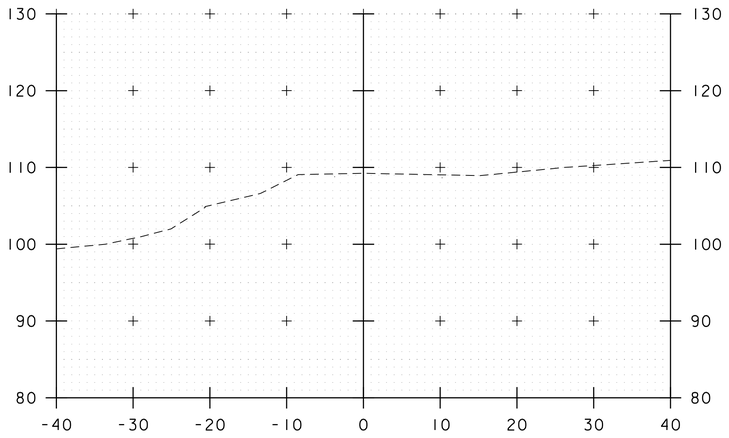
PROJECT NAME:	BURLINGTON BIKE PATH PHASE 3B
PROJECT NUMBER:	58109.01

FILE NAME: 58109xs.dgn	PLOT DATE: 5/7/2021
PROJECT LEADER: E.P.DETRICK	DRAWN BY: B.M.ROBERTS
DESIGNED BY: B.M.ROBERTS	CHECKED BY: E.P.DETRICK
SECTION ICROSS SECTIONS (6 OF 7)	SHEET 40 OF 52



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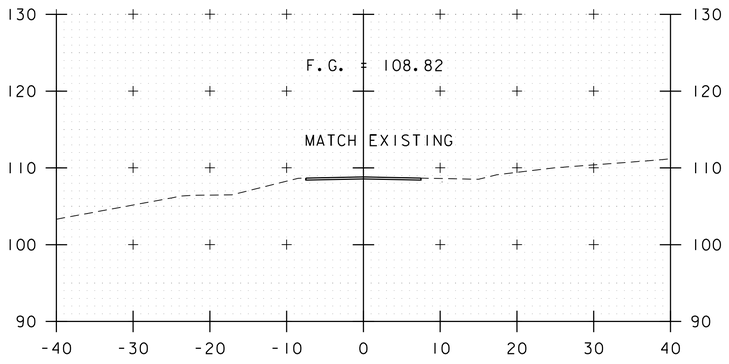

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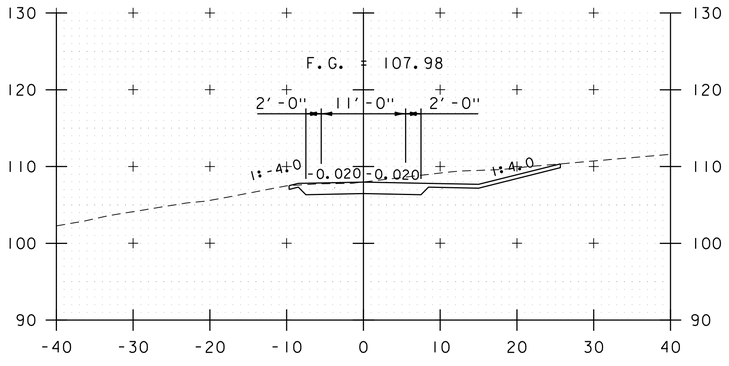

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PROJECT NAME:	BURLINGTON BIKE PATH PHASE 3B
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PROJECT LEADER: E.P.DETRICK	DRAWN BY: B.M.ROBERTS
DESIGNED BY: B.M.ROBERTS	CHECKED BY: E.P.DETRICK
SECTION I CROSS SECTIONS (7 OF 7)	SHEET 41 OF 52

EROSION CONTROL NARRATIVE

1. PROJECT DESCRIPTION

THIS PROJECT INVOLVES THE REMOVAL OF EXISTING PAVEMENT ON THE BURLINGTON BIKE PATH BETWEEN AUSTIN DRIVE AND BLANCHARD BEACH; THE WIDENING AND REPAVING OF THE PATH; INSTALLATION OF PAVEMENT MARKINGS, SIGNS, AND CONCRETE SIDEWALK RAMPS; THE RECONFIGURATION OF THE FLYNN AVENUE INTERSECTION; THE CONSTRUCTION OF STORMWATER DISCONNECTION TREATMENT AREAS; AND THE CONSTRUCTION OF A UNIVERSALLY ACCESSIBLE PLAYGROUND.

2. AREA OF TOTAL DISTURBANCE

AS SHOWN ON THE ATTACHED EPSC PLAN THE TOTAL PROJECT AREA OF DISTURBANCE IS APPROXIMATELY **4.23 ACRES**.

THE AREA OF DISTURBANCE INCLUDES LIMITS OF EARTH DISTURBANCE WITHIN THE PROJECT AREA. A SPECIFIC STAGING AREA IS NOT ANTICIPATED FOR THIS PROJECT. STAGING IS ANTICIPATED TO OCCUR WITHIN PERMITTED PROJECT LIMITS BASED ON THE CURRENT PHASE OF CONSTRUCTION. THE PROJECT LIMITS ARE SHOWN ON THE ATTACHED EPSC PLAN.

ACCORDING TO THE APPENDIX A RISK ASSESSMENT, THIS PROJECT REQUIRES COVERAGE UNDER GENERAL PERMIT 3-9020 FOR STORMWATER RUNOFF FROM CONSTRUCTION SITES FOR MODERATE RISK PROJECTS.

SUPPORT ACTIVITIES OUTSIDE THE APPROVED PROJECT BOUNDARIES (I.E., WASTE OR BORROW AREAS, STAGING AREAS) ARE NOT INCLUDED IN THE TOTAL ABOVE AND, IF REQUIRED, SHALL OBTAIN COVERAGE BY AMENDING THE PERMIT OR BY OBTAINING COVERAGE UNDER A DIFFERENT PERMIT.

3. SEQUENCE OF MAJOR PROJECT COMPONENTS

THE CONTRACTOR(S) SHALL SEQUENCE CONSTRUCTION ACTIVITIES TO MINIMIZE, TO THE GREATEST EXTENT POSSIBLE, DISTURBED SOIL LEFT OPEN TO EROSION AT ANY GIVEN TIME. TOTAL EARTH DISTURBANCE AT ANY ONE TIME SHALL BE LIMITED TO **2 ACRES** OR LESS.

THE AREA OF DISTURBANCE INCLUDES APPROXIMATELY 2.90 ACRES ASSOCIATED WITH THE BIKE PATH AND FLYNN AVENUE INTERSECTION COMPONENTS OF THE PROJECT AND 1.33 ACRES ASSOCIATED WITH THE PLAYGROUND COMPONENT OF THE PROJECT. THESE COMPONENTS MAY BE CONSTRUCTED CONCURRENTLY WITH EACH OTHER BUT THE CONTRACTOR(S) MUST COORDINATE WITH THE RESIDENT ENGINEER TO ENSURE THAT THE OVERALL PROJECT LIMIT IS NOT EXCEEDED DURING THE COURSE OF THE PROJECT.

ALL EARTH DISTURBANCE SHALL BE TEMPORARILY STABILIZED WITHIN **14 CALENDAR DAYS**. IT IS ANTICIPATED THAT THIS PROJECT WILL LAST TWO CONSTRUCTION SEASONS ALTHOUGH THE WORK IS NOT ANTICIPATED TO BE CONTINUOUS OVER THAT PERIOD.

4. STABILIZATION OF EXPOSED SOILS

THE MAXIMUM AREA OF CONCURRENT EARTH DISTURBANCE IS **2 ACRES**, WHILE IMPLEMENTING THE PERMITTED EPSC PLAN TO MINIMIZE POTENTIAL FOR EROSION AND SEDIMENT TRANSPORT ASSOCIATED WITH OPEN AREAS. THE TOTAL DURATION OF EXPOSED SOIL WILL BE **14 DAYS** FROM INITIAL DISTURBANCE, WHILE IMPLEMENTING THE PERMITTED EPSC PLAN TO TEMPORARILY OR PERMANENTLY STABILIZE AREAS AS SOON AS PRACTICABLE.

- SEED AND MULCH WILL BE USED FOR BOTH PERMANENT AND TEMPORARY STABILIZATION MEASURES. ROLLED EROSION CONTROL PRODUCT (RECP) WILL BE USED IN PLACE OF MULCH FOR SLOPES GREATER THAN 1V:3H. MULCH IS TO BE APPLIED AT A MINIMUM APPLICATION RATE SHOWN IN TURF ESTABLISHMENT DETAIL, UNLESS DIRECTED OTHERWISE BY THE ENGINEER.
- DISTURBED AREAS AND SOIL STOCKPILES THAT WILL NOT BE WORKED FOR MORE THAN 7 DAYS SHALL BE TEMPORARILY STABILIZED WITH SEED AND MULCH/RECP WITHIN 48 HOURS.
- EXPOSED AREAS THAT HAVE ACHIEVED FINAL GRADE SHALL BE PERMANENTLY STABILIZED WITHIN 48 HOURS.
- IN AREAS WHERE VEGETATIVE COVER WILL PROVIDE PERMANENT STABILIZATION, SEEDING TO BE COMPLETED BETWEEN APRIL 15 AND SEPTEMBER 15.
- SLOPES GREATER THAN 2H:1V SHALL BE TREATED WITH STONE FILL, TYPE I.

5. VEGETATED BUFFERS

THE VEGETATION IN THE PROJECT AREA CONSISTS OF GRASSED SLOPES WITH MINIMAL TREE COVERAGE. THE IMPACT TO VEGETATION WILL BE LIMITED TO THAT WHICH IS DIRECTLY AFFECTED BY THE RECONSTRUCTION AND WIDENING OF THE PATH AND EXTENDING SLOPES AS REQUIRED. DISTURBED VEGETATION WILL BE RESTABLISHED WITH STANDARD SEED AND MULCH PRACTICES. STRAW MULCH SHALL BE USED IN WETLAND, WETLAND BUFFER AREAS AND GRAVEL WETLANDS.

6. DRAINAGE AREAS AND RECEIVING WATERS

THE PROJECT SITE IS LOCATED IN THE UPPER LAKE CHAMPLAIN WATERSHED. THE PROJECT DRAINS VIA DIRECT CONVEYANCE TO LAKE CHAMPLAIN.

THE PROJECT AREA HAS BEEN DIVIDED INTO 1 DRAINAGE AREA. DISTURBANCE AND SOIL TYPE PER DRAINAGE AREA IS SUMMARIZED BELOW.

DRAINAGE AREA	SOIL TYPE	NRCS ERODIBILITY (K-VALUE)	AREA OF DISTURBANCE (ACRES)
1	FARMINGTON EXTREMELY ROCKY LOAM, 5-20% SLOPES	0.28	2.039
	COVINGTON SILTY CLAY	0.49	0.099
	VERGENNES CLAY, 2-6% SLOPES	0.49	1.781
	ALLUVIAL LAND	0.10	0.295
	WATER	-	0.006

7. WASTE, BORROW, AND STAGING AREAS

- A SPECIFIC STAGING AREA IS NOT ANTICIPATED FOR THIS PROJECT. STAGING IS ANTICIPATED TO OCCUR WITHIN PERMITTED PROJECT LIMITS BASED ON THE CURRENT PHASE OF CONSTRUCTION.
- WASTE MATERIAL AND EXCESS SOIL NOT ABLE TO BE USED ON-SITE SHALL BE DISPOSED OF AT AN OFF-SITE LOCATION IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS, ORDINANCES AND STATUES. ALL EROSION PREVENTION AND SEDIMENT CONTROL MEASURES NECESSARY FOR WASTE, BORROW, AND STAGING AREAS OUTSIDE THE PROJECT LIMITS SHALL BE PAID FOR PER 105.29 OF THE STANDARD SPECIFICATIONS FOR CONSTRUCTION.
- LOCATE ADDITIONAL AREAS FOR DISPOSAL OF STUMPS, EXCESS SOILS AND COLLECTED SEDIMENT, IF NECESSARY. DISPOSE OF THESE MATERIALS IN A MANNER THAT WILL NOT RESULT IN SEDIMENTS ENTERING WATERS OF THE STATE.
- DISPOSAL SITES REQUIRE RELATIVELY LEVEL TERRAIN WITH AN ISOLATION DISTANCE OF AT LEAST 100 FEET FROM ANY SURFACE WATERS, INCLUDING WETLANDS.
- VEHICLE AND EQUIPMENT STORAGE AREAS OR AREAS ADJACENT TO CONSTRUCTION TRAILERS OR OTHER HIGH TRAFFIC AREAS SHALL BE COVERED WITH GEOTEXTILE FABRIC AND 1 FT OF GRAVEL. FOLLOWING COMPLETION OF CONSTRUCTION, ALL NON-NATIVE MATERIALS SHALL BE REMOVED FROM THE STAGING AREA. COMPACTED, RUTTED, OR OTHERWISE DISTURBED SOILS SHALL BE TILLED, RAKED, SEEDED AND MULCHED.
- ERODIBLE MATERIALS STOCKPILED WITHIN THE MATERIAL STORAGE AREAS SHALL BE ISOLATED WITH SILT FENCE OR OTHER ACCEPTABLE SEDIMENT BARRIER. SOIL STOCKPILED ON THE SITE SHALL BE SEEDED AND MULCHED.

8. WINTER CONSTRUCTION REQUIREMENTS

IN THE EVENT THAT CONSTRUCTION ACTIVITIES CONTINUE INTO THE WINTER CONSTRUCTION SEASON (OCTOBER 15 - APRIL 15), DEPENDING ON ACTUAL FIELD AND WEATHER CONDITIONS THE CONTRACTOR SHALL FOLLOW REQUIREMENTS FOR WINTER CONSTRUCTION, AS DEFINED IN SPECIFIC PERMIT CONDITIONS AND AS FOLLOWS:

- ENLARGED ACCESS POINTS, STABILIZED TO PROVIDE FOR SNOW STOCKPILING.
- LIMITS OF DISTURBANCE MOVED OR REPLACED TO REFLECT BOUNDARY OF WINTER WORK.
- DEVELOPMENT OF A SNOW MANAGEMENT PLAN THAT INCLUDES:
  - ADEQUATE STORAGE AND CONTROL OF MELT-WATER
  - STORAGE OF CLEARED SNOW TO BE PLACED DOWN SLOPE OF DISTURBED AREAS AND OUT OF STORMWATER TREATMENT STRUCTURES
- A MINIMUM 25-FOOT BUFFER SHALL BE MAINTAINED FROM PERIMETER CONTROLS.
- IN AREAS OF DISTURBANCE WITHIN 100 FEET OF A RECEIVING WATER, SILT FENCE SHALL BE REINFORCED OR ELSE REPLACED WITH PERIMETER DIKES, SWALES, OR OTHER PRACTICES RESISTANT TO THE FORCES OF SNOW LOADS.
- DRAINAGE STRUCTURES MUST BE KEPT OPEN AND FREE OF SNOW AND ICE DAMS.
- SILT FENCE AND OTHER PRACTICES REQUIRING EARTH DISTURBANCE MUST BE INSTALLED AHEAD OF FROZEN GROUND.
- MULCH TO BE APPLIED AT TWICE THE REGULAR RATE OR MINIMUM 3-INCH COVER, UNLESS DIRECTED OTHERWISE BY THE ENGINEER.
- AREAS OF DISTURBED SOILS MUST BE STABILIZED AT THE END OF EACH WORK DAY, WITH THE FOLLOWING EXCEPTIONS:
  - IF NO PRECIPITATION WITHIN 24 HOURS IS FORECAST AND WORK WILL RESUME IN THE SAME AREA WITHIN 24 HOURS.
  - DISTURBED AREAS THAT COLLECT AND RETAIN RUNOFF, SUCH AS OPEN UTILITY TRENCHES, MUST BE STABILIZED AT THE END OF EACH WORK WEEK.
- PRIOR TO STABILIZATION, SNOW OR ICE MUST BE REMOVED TO LESS THAN 25MM (1-INCH) THICKNESS.
- STONE STABILIZATION, 10 - 20 FEET WIDE IN AREAS WHERE CONSTRUCTION VEHICLE TRAFFIC IS ANTICIPATED

CONTRACTOR RESPONSIBILITIES, LIMITATIONS & PROHIBITIONS

1. GENERAL NOTES

- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO AMEND/UPDATE ALL PLANS AND EXISTING PERMITS WHEN ADDING DETAILED CONSTRUCTION PHASING OR ANYTHING ELSE THAT MAY DEVIATE FROM THE APPROVED PLANS AS DIRECTED BY THE RESIDENT ENGINEER.
- OTHER THAN THOSE SHOWN ON THE PLANS ALL LAND DISTURBANCES WITHIN 50 FEET OF ALL WATER BODIES, MEASURED FROM THE TOP OF BANK, AND WETLANDS, ARE PROHIBITED WITHOUT FURTHER REGULATORY REVIEW.
- CONTRACTOR TO MAINTAIN ALL EXISTING STREAMS AND RIPARIAN BUFFER ZONES IN THEIR NATURAL CONDITION.
- OFF-SITE DISCHARGES OF ANY MATERIAL OTHER THAN STORMWATER, SUCH AS VEHICLE AND EQUIPMENT MAINTENANCE SPILLS, FUELS, WASH WATER, CONSTRUCTION DEBRIS, OIL, WET CONCRETE (INCLUDING WASHOUT WATER FROM CONCRETE BATCH TRUCKS OR EQUIPMENT USED TO MIX CONCRETE), AND OTHER SUBSTANCES, ARE PROHIBITED.
- THE FAILURE TO PROMPTLY ABATE THE DISCHARGE OF SEDIMENT OR ANY OTHER WASTE WHICH CAUSES A VISIBLE DISCOLORATION OF SURFACE WATERS (INCLUDING WETLANDS), OR IS FOUND TO BE VIOLATING WATER QUALITY STANDARDS BASED ON MONITORING, IS PROHIBITED. ANY CORRECTIVE ACTION UNDERTAKEN TO REMOVE SEDIMENT FROM A WETLAND IS ALSO PROHIBITED.
- WEATHER CONDITIONS WILL BE MONITORED DURING THE CONSTRUCTION SEASON. IF AN EXTENDED RAIN PERIOD OR HEAVY RAIN IS PREDICTED, EXPOSED SOIL AREAS WILL BE MULCHED PRIOR TO AND DAILY DURING THE RAIN EVENT. IF DETERMINED NECESSARY BY THE RESIDENT ENGINEER, WORK MAY BE SUSPENDED OR LIMITED DURING THE STORM.

2. EPSC PLAN

THE EPSC PLAN HAS BEEN PREPARED USING GENERAL PERMIT 3-9020, PART 4.1(C) AND APPENDIX B OF THE GENERAL PERMIT 3-9020 AS GUIDANCE IN PREPARING THE PLAN. THE FOLLOWING SECTIONS ADDRESS REQUIRED EPSC PLAN NARRATIVE ELEMENTS IN THE ORDER THAT THEY ARE PRESENTED IN APPENDIX B OF GENERAL PERMIT 3-9020.

- THE NAME AND DAYTIME PHONE NUMBER OF THE OSPC SHALL BE PROVIDED IN WRITING TO VT DEC PRIOR TO THE START OF CONSTRUCTION.
- THE NOTICE OF AUTHORIZATION (NOA) ISSUED BY VT DEC SHALL BE POSTED IN A LOCATION THAT IS VISIBLE TO THE PUBLIC (E.G., NEAR THE CONSTRUCTION ENTRANCE).
- A COPY OF THE EPSC PLAN SHALL BE MAINTAINED ON-SITE DURING NORMAL WORKING HOURS FROM THE DATE OF COMMENCEMENT OF CONSTRUCTION ACTIVITIES TO THE DATE OF FINAL STABILIZATION. THE EPSC PLAN SHALL BE MADE AVAILABLE TO VT DEC UPON REQUEST
- EXISTING VEGETATION SHALL BE PROTECTED AND MAINTAINED TO THE EXTENT PRACTICABLE.
- A VEGETATED BUFFER SHALL BE MAINTAINED FOR WATER RESOURCES (E.G., WETLANDS AND STREAMS) TO THE EXTENT PRACTICABLE.
- TO THE EXTENT PRACTICABLE, SURFACE FLOW SHALL BE DIVERTED AWAY FROM EXPOSED SOILS AND WATER RESOURCES.
- RESOURCE AREAS (E.G. STREAMS) WITHIN THE PROJECT AREA SHALL BE FLAGGED PRIOR TO ANY CONSTRUCTION RELATED ACTIVITIES OCCURRING WITHIN CLOSE PROXIMITY TO THOSE AREAS.
- EFFLUENT FROM DEWATERING OPERATIONS SHALL BE FILTERED OR PASSED THROUGH A SEDIMENT TRAPPING DEVICE AND DISCHARGED IN A MANNER THAT DOES NOT RESULT IN IMPACTS TO WATER QUALITY OR CONTRIBUTE TO EROSION. SEE DETAILS FOR MORE INFORMATION.
- SEDIMENT REMOVED FROM SEDIMENT CONTROL PRACTICES SHALL BE DISPOSED OF IN AN UPLAND AREA WITH STABILIZATION FOLLOWING DISPOSAL OF MATERIAL.
- IN ADVANCE OF FORECASTED RAINFALL OR SNOWMELT, EPSC MEASURES THAT ARE LOCATED IN AREAS OF ACTIVE EARTH DISTURBANCE SHALL BE INSPECTED AND REPAIRED, AS NEEDED.
- DUST CONTROL SHALL BE HANDLED VIA WATER OR CALCIUM CHLORIDE APPLICATION TO ROADWAYS AND OTHER AREAS WHERE DUST MAY BE GENERATED.
- STABILIZED CONSTRUCTION ENTRANCES SHALL BE LOCATED AT ALL VEHICLE ACCESS POINTS TO PUBLIC ROADWAYS AND ARE TO BE REGULARLY MAINTAINED TO CONTROL EQUIPMENT AND VEHICLES FROM TRACKING MATERIAL OFF SITE.
- PERIMETER CONTROLS (E.G. SILT FENCE) SHALL BE INSTALLED ON THE DOWNSLOPE SIDE OF AREAS WHERE THERE IS POTENTIAL FOR SILT EROSION AND/OR SEDIMENT RUNOFF. IN SOME AREAS WHERE THE GROUND SURFACE IS LEVEL AND THERE ARE NO PATHWAYS (E.G. DITCHES OR RUTS) THAT COULD TRANSPORT RUNOFF FROM THE PROJECT AREA, INSTALLATION OF PERIMETER CONTROLS MAY NOT BE NECESSARY PER APPROVAL BY THE ON-SITE PLAN COORDINATOR (OSPC)

vhb

PROJECT NAME: BURLINGTON BIKE PATH PHASE 3B
PROJECT NUMBER: 58109.01

FILE NAME: 58109epsc_nar.dgn
PROJECT LEADER: E.P.DETRICK
DESIGNED BY: C.K.FORD
EPSC NARRATIVE (SHEET 1 OF 2)

PLOT DATE: 5/7/2021
DRAWN BY: C.K.FORD
CHECKED BY: E.P.DETRICK
SHEET 42 OF 52

- CONSTRUCTION DEMARCATION SHALL COMPLY WITH THE FOLLOWING:
  a. CONSTRUCTION DEMARCATION TO BE INSTALLED ALONG PERIMETER OF LIMITS OF DISTURBANCE PER THE EPSC PLANS
  b. WITHIN 100 FEET OF RESOURCE AREA DEMARCATION MUST INCLUDE:
     i. 2 TO 3 ROWS OF STAKED (OR STAPLED) 3-INCH (MIN.) ORANGE BARRIER MESH TAPE,
     ii. ORANGE CONSTRUCTION FENCE, OR
     iii. ORANGE SNOW FENCE
  c. WHEN GREATER THAN 100 FEET FROM A RESOURCE AREA DEMARCATION MAY INCLUDE:
     i. ONE ROW OF STAKED (OR STAPLED) 3-INCH (MIN.) ORANGE BARRIER MESH TAPE,
     ii. ORANGE CONSTRUCTION FENCE, OR
     iii. ORANGE SNOW FENCE

- PERIMETER CONTROLS SHALL COMPLY WITH THE FOLLOWING:
  a. PERIMETER CONTROLS ARE TO BE INSTALLED ON THE DOWNSLOPE SIDE OF AREAS OF DISTURBANCE WHERE THERE IS POTENTIAL FOR SEDIMENT RUNOFF AND/OR SOIL EROSION.
  b. PERIMETER CONTROLS ARE NOT TO CROSS ACTIVE ACCESS ROUTES OR PERENNIAL FLOW PATHS (E.G. A STREAM).
  c. PARTICULAR CARE IS TO BE TAKEN WHEN INSTALLING PERIMETER CONTROLS IN A WETLAND.
  d. WITHIN 100 FEET OF A WATER RESOURCE AREA, PERIMETER CONTROLS MUST INCLUDE:
     i. REINFORCED SILT FENCE – TO BE REINFORCED WITH WIRE MESH, STAKED HAY BALES, OR STAKED FIBER ROLLS.
  e. WHEN GREATER THAN 100 FEET FROM A WATER RESOURCE AREA, PERIMETER CONTROLS MAY INCLUDE:
     i. SILT FENCE (NON-REINFORCED), OR
     ii. STAKED FIBER ROLLS

- PROJECT DEMARCATION OF AN AREA SHALL BE INSTALLED PRIOR TO EARTH DISTURBING ACTIVITIES WITHIN THAT AREA. AN EXCEPTION IS LAND DISTURBANCE THAT MAY BE NEEDED TO ACCESS THE AREA WITH EQUIPMENT IN OR TO INSTALL THE EPSC MEASURES.

1. INSPECTION & MONITORING NOTES

OSPC INSPECTION REQUIREMENTS:

- EPSC INSPECTION, MONITORING, AND REPORTING ARE REQUIRED PER THE GENERAL PERMIT 3-9020. THE CONTRACTOR IS RESPONSIBLE FOR INSPECTING AND MAINTAINING EROSION PREVENTION AND SEDIMENT CONTROLS THAT MINIMIZE OR ELIMINATE POLLUTANTS IN STORMWATER DISCHARGE.

- INSPECTIONS BY THE ON-SITE PLAN COORDINATOR (OSPC) SHALL BE CONDUCTED AT LEAST ONCE EVERY SEVEN (7) CALENDAR DAYS, WITH ADDITIONAL INSPECTION FREQUENCY REQUIRED FOR RAIN EVENTS, WINTER CONSTRUCTION, AND VISIBLE DISCHARGES PER THE CONDITIONS OF GENERAL PERMIT 3-9020. A WRITTEN REPORT SHALL BE COMPLETED FOR EACH INSPECTION AND SIGNED BY THE OSPC. ALL REPORTS ARE TO BE MAINTAINED ON SITE AND MADE AVAILABLE TO STATE DEC REPRESENTATIVES UPON REQUEST.

- IF VISIBLY DISCOLORED STORMWATER RUNS OFF THE CONSTRUCTION SITE OR RUNS OFF THE CONSTRUCTION SITE AND DISCHARGES TO RECEIVING WATERS, THE CONTRACTOR SHALL TAKE IMMEDIATE CORRECTIVE ACTION TO CORRECT THE DISCHARGES, INCLUDING MAINTAINING EXISTING EPSC MEASURES, AND INSTALLING SUPPLEMENTAL EPSC MEASURES.

- THE OSPC IS RESPONSIBLE FOR MONITORING, INSPECTING, AND SAMPLING DISCHARGES FROM THE SITE TO MAINTAIN COMPLIANCE WITH GENERAL PERMIT 3-9020. THIS INCLUDES VISUAL MONITORING OF EPSC MEASURES AND DISCHARGES, DISCHARGE SAMPLING, TURBIDITY MONITORING, AND REPORTING. THE MAXIMUM TURBIDITY PERMISSIBLE FOR CONSTRUCTION SITE DISCHARGE IS 25 NTU.

- THE CONTRACTOR SHALL KEEP ONE (1) TURBIDITY MONITOR ONSITE AND HAVE PERSONNEL ON HAND THAT ARE TRAINED IN ITS OPERATION.

ON-SITE PLAN COORDINATOR (OSPC) NOTES:

- THE OSPC DESIGNATED TO THE PROJECT (AND HIS/HER DESIGNEE) SHALL:
  - REVIEW VT DEC'S "ON-SITE PLAN COORDINATOR MANUAL",
  - BE ON-SITE ON A DAILY BASIS (OR HAVE A DESIGNEE THAT IS ON SITE WHEN HE/SHE CANNOT BE),
  - BE DIRECTLY RESPONSIBLE FOR ON-SITE IMPLEMENTATION OF THE EPSC PLAN,
  - BE KNOWLEDGEABLE IN THE PRINCIPLES AND PRACTICES OF EPSC,
  - POSSESS THE SKILLS TO ASSESS CONDITIONS AT THE CONSTRUCTION SITE THAT COULD IMPACT STORMWATER QUALITY,
  - POSSESS THE SKILLS TO ASSESS THE EFFECTIVENESS OF EPSC MEASURES SELECTED TO CONTROL THE QUALITY OF STORMWATER DISCHARGES FROM CONSTRUCTION ACTIVITY,
  - POSSESSES THE SKILLS AND EQUIPMENT TO CONDUCT TURBIDITY MONITORING PURSUANT TO THE CONSTRUCTION STORMWATER DISCHARGE PERMIT, AND
  - HAVE THE AUTHORITY TO STOP AND/OR MODIFY CONSTRUCTION ACTIVITIES AS NECESSARY TO COMPLY WITH THE EPSC PLAN AND THE CONSTRUCTION STORMWATER DISCHARGE PERMIT.

- ALL PROPOSED CHANGES TO THE EPSC PLAN MUST BE APPROVED BY THE OSPC OR HIS/HER DESIGNEE, THE PLAN DESIGNER OR CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL (CPESC) PRIOR TO IMPLEMENTATION, AND BE CONSIDERED MINOR AMENDMENTS AS DEFINED IN THE OSPC HANDBOOK. ALL MINOR AMENDMENTS ARE TO BE RECORDED USING THE MINOR AMENDMENT RECORD FORM AND MARKED ON THE MASTER OSPC PLAN SET. ALL MODIFICATIONS THAT FALL OUTSIDE OF THE MINOR AMENDMENT DEFINITION MUST BE APPROVED BY VT-DEC.

- DURING THE REGULAR CONSTRUCTION SEASON (APRIL 15 TO OCT 15), THE OSPC OR HIS/HER DESIGNEE SHALL CONDUCT INSPECTIONS AT LEAST ONCE EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HRS FOLLOWING A STORM EVENT RESULTING IN DISCHARGE OF STORMWATER FROM THE CONSTRUCTION SITE.

- THE OSPC AND HIS/HER DESIGNEE(S) SHALL FOLLOW TURBIDITY MONITORING PROTOCOLS OUTLINED IN VT DEC'S "MONITORING OF TURBIDITY IN STORMWATER RUNOFF FROM CONSTRUCTION ACTIVITIES" MANUAL.

- INSPECTIONS CONDUCTED BY THE OSPC OR HIS/HER DESIGNEE SHALL COVER ALL AREAS OF SITE THAT ARE BEING ACTIVELY DISTURBED BY CONSTRUCTION OR CONSTRUCTION -RELATED ACTIVITIES, INCLUDING AREAS THAT HAVE BEEN TEMPORARILY STABILIZED.

- OSPC INSPECTIONS SHALL BE DOCUMENTED USING THE VT DEC INSPECTION REPORT FORM OR A VT DEC-ACCEPTED INSPECTION REPORT FORM.

- OSPC INSPECTION REPORTS SHALL BE MAINTAINED ON-SITE FOR THE DURATION OF THE PROJECT AND MADE AVAILABLE TO VT DEC UPON REQUEST.

CITY OF BURLINGTON RURAL SEED MIX		
	LBS/AC	
% WEIGHT	HYDROSEED	NAME
5%	196.0	MIRCOCOLVER
5%	196.0	BIRDS FOOT TREFOIL
65%	196.0	FINE FESCUE *
20%	196.0	PERRENIAL RYE GRASS
5%	196.0	COLONIAL BENTGRASS

CITY OF BURLINGTON URBAN AREA MIX

	LBS/AC				
% WEIGHT	BROADCAST	HYDROSEED	NAME	GERM %	PURITY %
40.0%	70	140	CREEPING RED FESCUE	85%	98%
30.0%	52.3	104.6	PERENNIAL RYE GRASS	90%	95%
30.0%	52.3	104.6	KENTUCKY BLUE GRASS	85%	85%
0.0%	0	0	ANNUAL RYE GRASS	85%	95%
100%	174.6	349.2			

SOIL AMENDMENT GUIDANCE			
FERTILIZER		LIME	
BROADCAST	HYDROSEED	BROADCAST	HYDROSEED
10-20-10	*FOLLOW*	PELLETIZED	*FOLLOW*
1000 ~~X~~ LBS/AC	*MANUFACTURER*	X TONS/AC 4	*MANUFACTURER*

CONSTRUCTION GUIDANCE

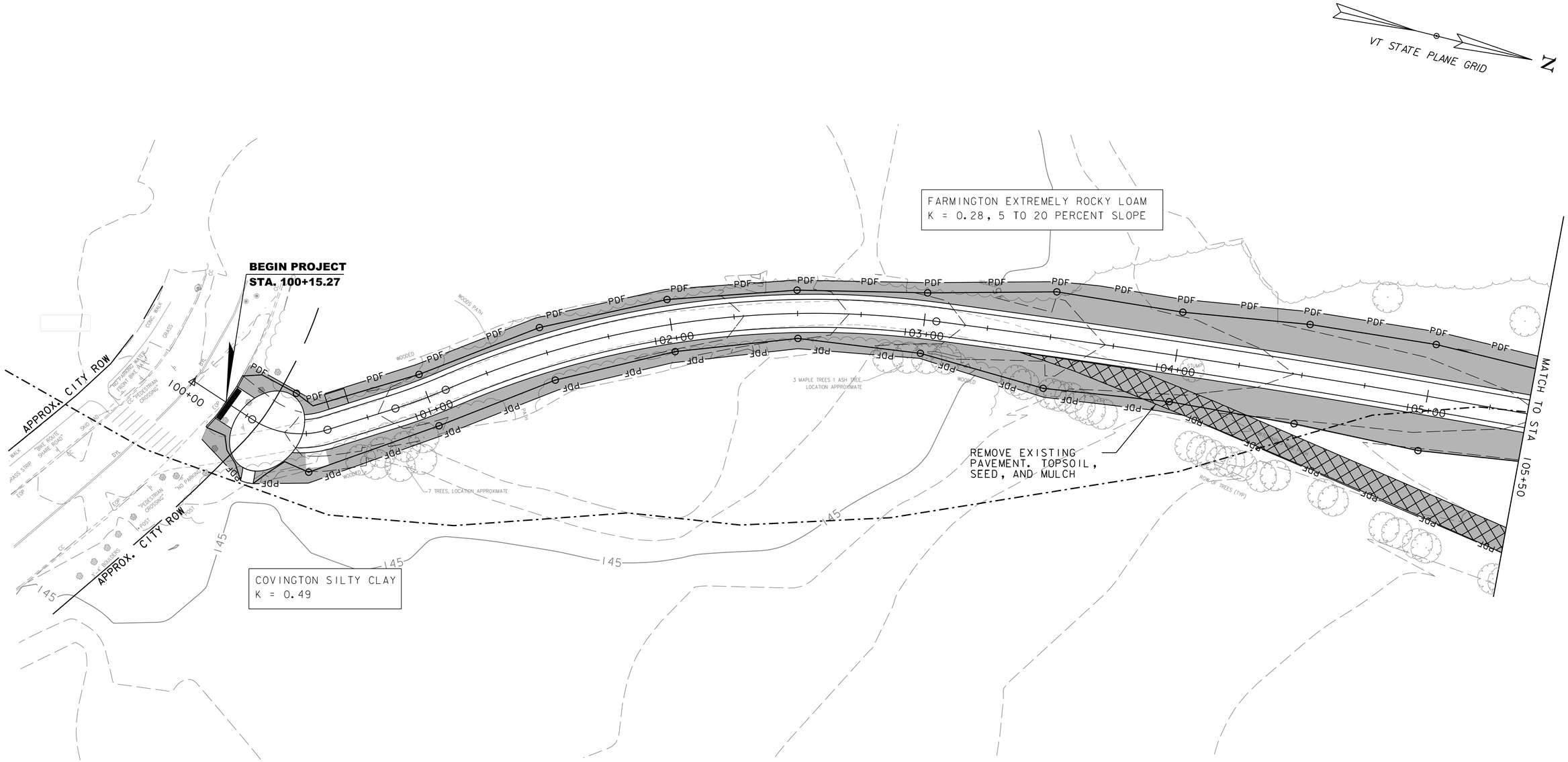
1. CITY OF BURLINGTON RURAL SEED MIX: TO BE PAID FOR UNDER ITEM NO. 651.15. USE AS INDICATED IN THE PLANS AND/OR FOR ALL ESTABLISHED UPLAND (NON WETLAND) AREAS DISTURBED BY THE CONTRACTOR.
2. URBAN SEED MIX: USE AS INDICATED IN THE PLANS AND/OR FOR ALL ESTABLISHED LAWN AREAS DISTURBED BY THE CONTRACTOR.
3. ALL SEED MIXTURES: SHALL NOT HAVE A WEED CONTENT EXCEEDING 0.40% BY WEIGHT AND SHALL BE FREE OF ALL NOXIOUS SEED.
4. FERTILIZER AND LIMESTONE: SHALL FOLLOW RATES SHOWN ON PLAN OR AS DIRECTED BY THE ENGINEER
5. HAY MULCH: TO BE PLACED ON EARTH SLOPES AT THE RATE OF 4 TONS/ACRE, ACHIEVE 90% GROUND COVER OR AS DIRECTED BY THE ENGINEER.
6. TOPSOIL: TO BE USED WITH SEED AS INDICATED ON THE PLANS, OR AS DIRECTED BY THE ENGINEER.
7. HYDROSEEDING: ALTHOUGH GUIDANCE IS GIVEN ABOVE THE SITE CONDITIONS AND THE TYPE OF HYDROSEED WILL ULTIMATELY DICTATE THE AMOUNTS AND TYPES OF SOIL AMENDMENTS TO BE APPLIED
8. TURF ESTABLISHMENT: PLACING SEED, FERTILIZER, LIME AND MULCH PRIOR TO SEPTEMBER 15 AND AFTER APRIL 15 CAN BETTER ENSURE A VIGOROUS GROWTH OF GRASS.

TURF ESTABLISHMENT

* FINE FESCUE SHALL BE COMPRISED OF THE FOLLOWING SEED BY % WEIGHT:
  - 20% CHEWINGS FESCUE
  - 25% STRONG FESCUE
  - 10% SLENDER FESCUE
  - 10% HARD FESCUR

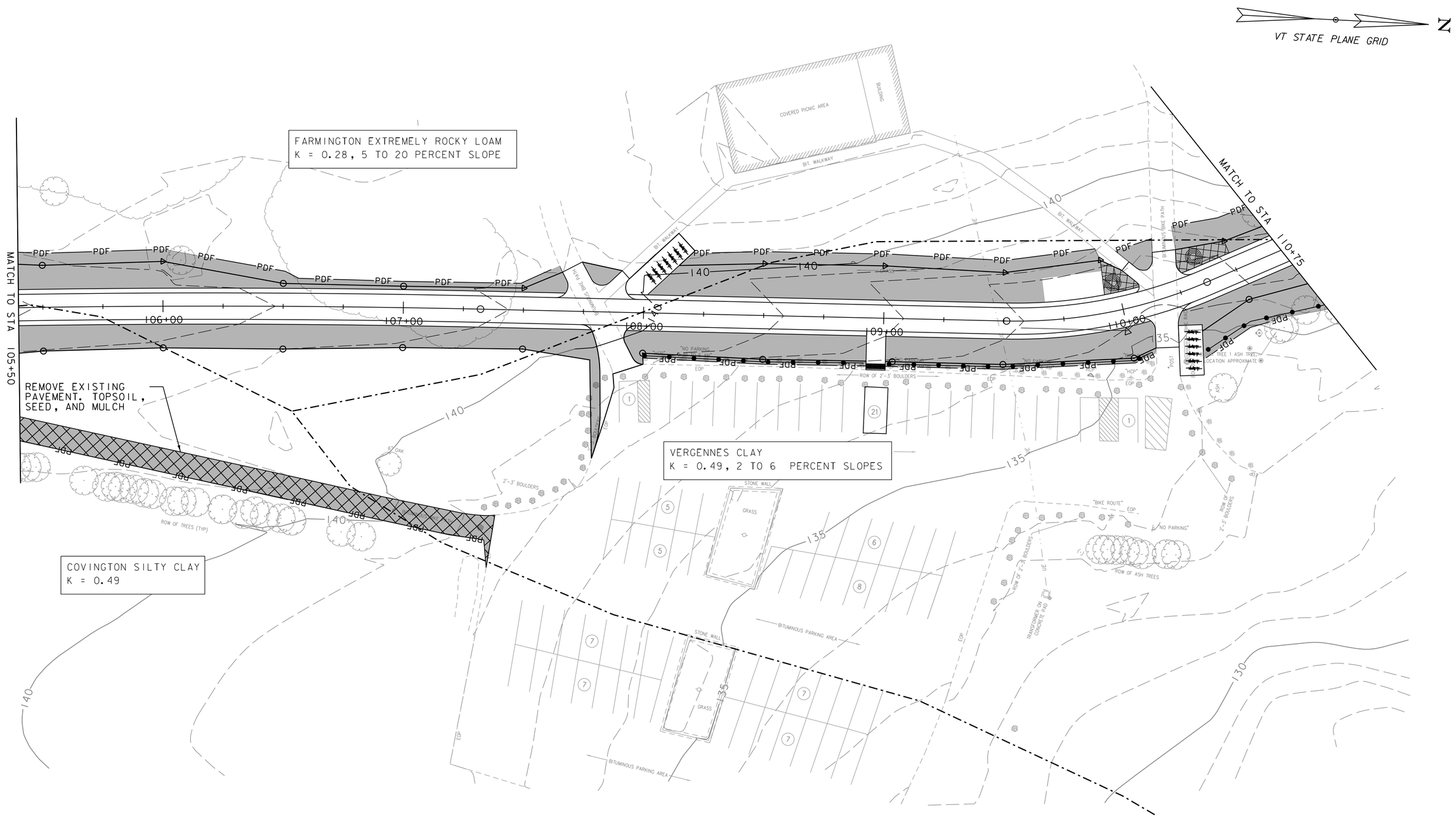
vhb

PROJECT NAME:	BURLINGTON BIKE PATH PHASE 3B
PROJECT NUMBER:	51809.01
FILE NAME: 58109epsc_det.dgn	PLOT DATE: 5/7/2021
PROJECT LEADER: E.P. DETRICK	DRAWN BY: B. O. CRONIN
DESIGNED BY: B.O. CRONIN	CHECKED BY: E.P. DETRICK
EPSC DETAILS	SHEET 44 OF 52



0 20 40
SCALE IN FEET

PROJECT NAME:	BURLINGTON BIKE PATH PHASE 3B
PROJECT NUMBER:	58109.01
FILE NAME: 58109bdr_epsc.dgn	PLOT DATE: 5/7/2021
PROJECT LEADER: E.P.DETRICK	DRAWN BY: C.K.FORD
DESIGNED BY: C.K.FORD	CHECKED BY: E.P.DETRICK
EPSC PLANS (SHEET 1 OF 5)	SHEET 45 OF 52



PROJECT NAME:	BURLINGTON BIKE PATH PHASE 3B
PROJECT NUMBER:	58109.01
FILE NAME: 58109bdr_epsc.dgn	PLOT DATE: 5/7/2021
PROJECT LEADER: E.P.DETRICK	DRAWN BY: C.K.FORD
DESIGNED BY: C.K.FORD	CHECKED BY: E.P.DETRICK
EPSC PLANS (SHEET 2 OF 5)	SHEET 46 OF 52

N

VT STATE PLANE GRID

REMOVE EXISTING PAVEMENT, TOPSOIL, SEED, AND MULCH

TREE TO REMAIN UNDISTURBED

FARMINGTON EXTREMELY ROCKY LOAM
K = 0.28, 5 TO 20 PERCENT SLOPE

VERGENNES CLAY
K = 0.49, 2 TO 6 PERCENT SLOPES

MATCH TO STA 110+75

MATCH TO STA 116+50

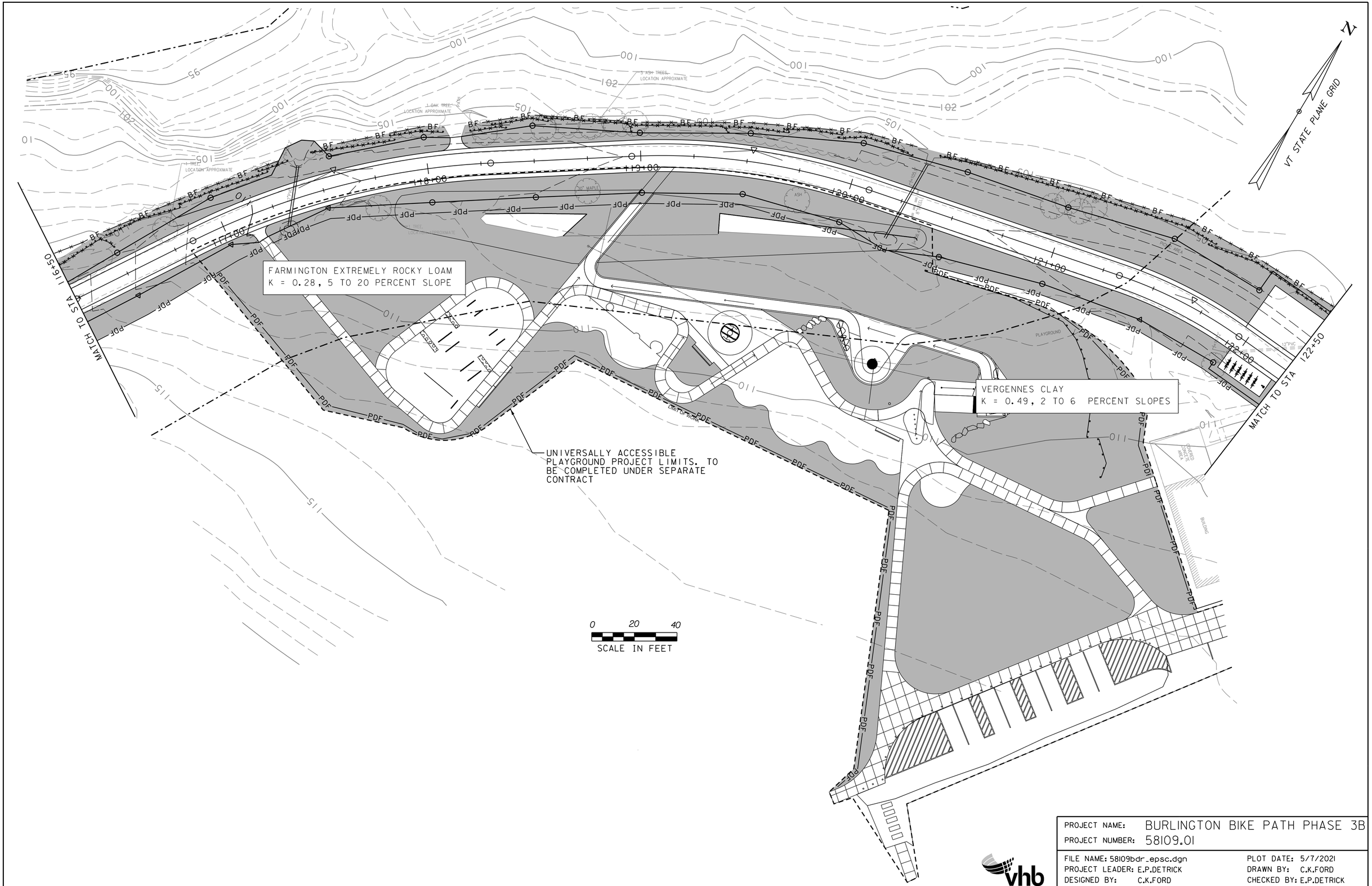
BIKE PATH

BITUMINOUS BIKE PATH

WOODED

0 20 40
SCALE IN FEET

PROJECT NAME:	BURLINGTON BIKE PATH PHASE 3B
PROJECT NUMBER:	58109.01
FILE NAME: 58109bdr_epsc.dgn	PLOT DATE: 5/7/2021
PROJECT LEADER: E.P.DETRICK	DRAWN BY: C.K.FORD
DESIGNED BY: C.K.FORD	CHECKED BY: E.P.DETRICK
EPSC PLANS (SHEET 3 OF 5)	SHEET 47 OF 52



PROJECT NAME:	BURLINGTON BIKE PATH PHASE 3B
PROJECT NUMBER:	58109.01

FILE NAME: 58109bdr_epsc.dgn	PLOT DATE: 5/7/2021
PROJECT LEADER: E.P.DETRICK	DRAWN BY: C.K.FORD
DESIGNED BY: C.K.FORD	CHECKED BY: E.P.DETRICK
EPSC PLANS (SHEET 4 OF 5)	SHEET 48 OF 52

N

VT STATE PLANE GRID

MATCH TO STA 122+50

MATCH TO STA 127+75

END PROJECT
STA. 127+00.00

RIPARIAN BUFFER

WETLAND BUFFER

CLASS II

2012-SC-VB-3
(PERENNIAL)

VERGENNES CLAY
K = 0.49, 2 TO 6 PERCENT SLOPES

ALLUVIAL LAND

UNIVERSALLY ACCESSIBLE PLAYGROUND PROJECT LIMITS. TO BE COMPLETED UNDER SEPARATE CONTRACT

0 20 40
SCALE IN FEET

PROJECT NAME:	BURLINGTON BIKE PATH PHASE 3B
PROJECT NUMBER:	58109.01
FILE NAME: 58109bdr_epsc.dgn	PLOT DATE: 5/7/2021
PROJECT LEADER: E.P.DETRICK	DRAWN BY: C.K.FORD
DESIGNED BY: C.K.FORD	CHECKED BY: E.P.DETRICK
EPSC PLANS (SHEET 5 OF 5)	SHEET 49 OF 52

GENERAL

1. THE FOLLOWING TRAFFIC CONTROL INFORMATION IS INTENDED TO BE A CONCEPTUAL NARRATIVE FOR HOW THE WORK MAY PROCEED. THE CONTRACTOR SHALL SUBMIT A DETAILED TRAFFIC CONTROL PLAN TO THE RESIDENT ENGINEER FOR APPROVAL. THE CONTRACTOR SHALL ALLOW AT LEAST TWO (2) WEEKS FOR REVIEW AND APPROVAL. MODIFICATIONS TO THE APPROVED TRAFFIC CONTROL PLAN SHALL BE SUBMITTED TO THE RESIDENT ENGINEER AT LEAST ONE WEEK PRIOR TO THE IMPLEMENTATION OF THE CHANGE.

2. THE CONTRACTOR'S TRAFFIC CONTROL PLAN SHALL BE DEVELOPED IN ACCORDANCE WITH THE 2018 EDITION OF VTRANS STANDARD SPECIFICATIONS SECTION 641 - TRAFFIC CONTROL AND IN SUBSTANTIAL CONFORMANCE WITH THE 2009 EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) WITH LATEST INTERIMS. THE TRAFFIC CONTROL PLAN SHALL INCLUDE ALL TEMPORARY SIGNS, PAVEMENT MARKINGS, BARRICADES, 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. TRAFFIC CONTROL PLANS SHALL BE ESTABLISHED TO MAINTAIN THE CONTINUITY OF TRAFFIC THROUGH THE CORRIDOR. TRAFFIC CONTROL SIGNS SHALL BE ADJUSTED AT THE COMPLETION OF EACH CONSTRUCTION PHASE AS DIRECTED BY THE RESIDENT ENGINEER. SIGNING, AND OTHER SUPPORTING TRAFFIC CONTROLS DEVICES SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION. INSTALLING, MAINTAINING, ADJUSTING, MODIFYING, AND REMOVING THE TRAFFIC CONTROL DEVICES SHALL BE INCLUDED IN THE UNIT PRICE BID FOR CONTRACT ITEM 641.10 TRAFFIC CONTROL.

4. TRAFFIC SHALL NOT BE CHANGED FROM ONE PHASE TO THE NEXT UNTIL ALL TEMPORARY SIGNING WORK REQUIRED FOR THE SUBSEQUENT PHASE IS COMPLETED. ANY CONFLICTING PAVEMENT MARKINGS SHALL BE MASKED WITH PAVEMENT MARKING MASK OR REMOVED BY GRINDING. EXISTING PAVEMENT MARKINGS THAT ARE TO REMAIN FOR LATER USE SHALL BE MASKED WITH PAVEMENT MARKING MASK.

5. EXISTING SIGNS SHALL REMAIN UNTIL THEY ARE NO LONGER REQUIRED. EXISTING SIGNS WHICH CONFLICT WITH TEMPORARY TRAFFIC CONTROLS SHALL BE COMPLETELY COVERED WITH SOLID COVERS PAINTED BLACK OR REMOVED/RELOCATED AS NEEDED. TEMPORARY SIGNS SHALL BE INSTALLED AS SHOWN IN THE CONTRACTOR'S APPROVED TRAFFIC CONTROL PLANS. NEW SIGNING SHALL BE INSTALLED AS IT BECOMES APPLICABLE. ALL PROPOSED SIGNING SHALL BE INSTALLED AND ALL SIGNS TO BE REMOVED SHALL BE REMOVED PRIOR TO THE APPLICATION OF THE FINAL PAVEMENT MARKINGS.

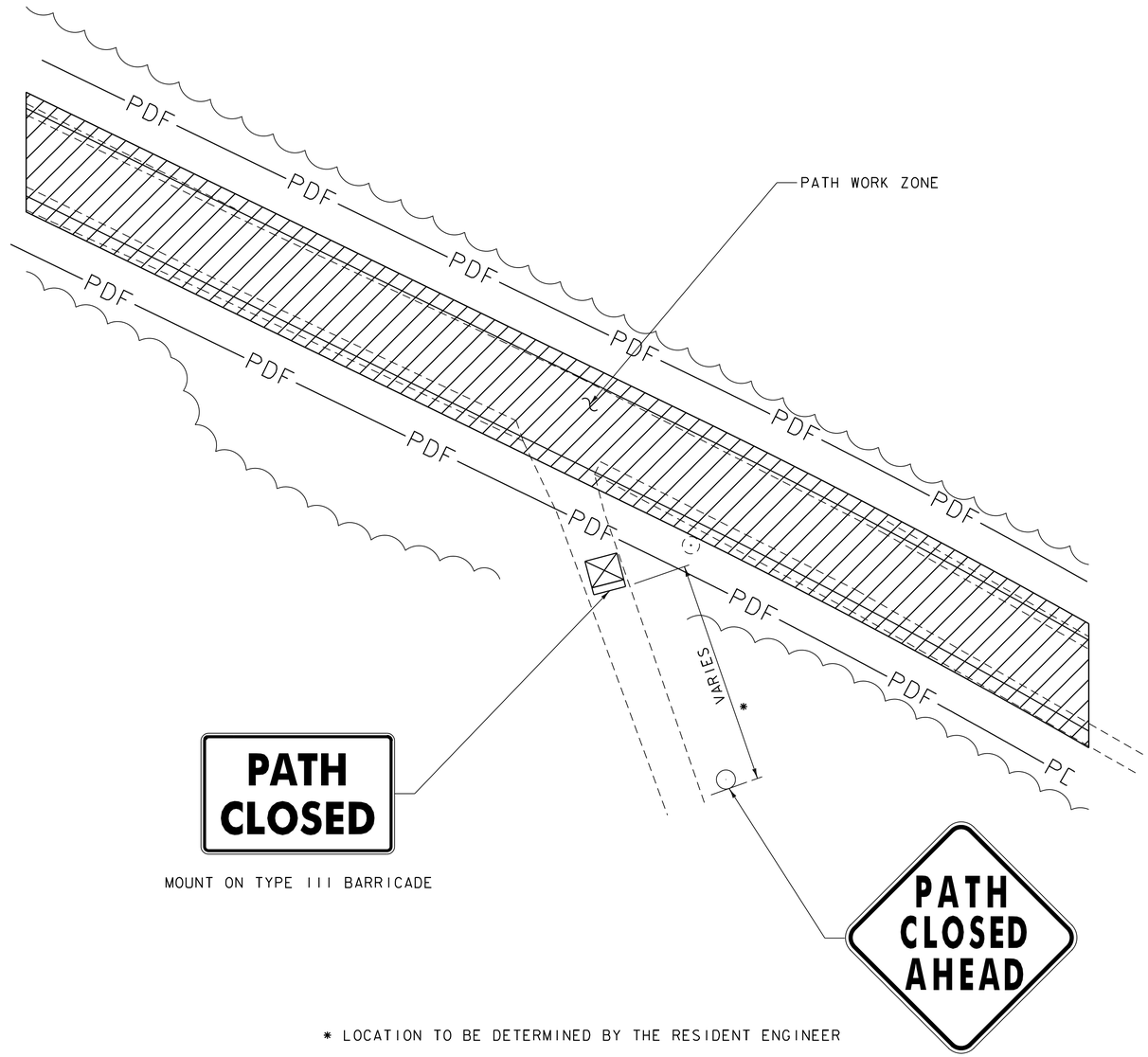
6. ALL SIGNS SHALL BE LOCATED SO THEY ARE VISIBLE AND ABLE TO BE READ BY THE TRAVELING PUBLIC. SIGNS SHALL BE INSTALLED SO AS NOT TO OBSTRUCT EXISTING SIGNS.

7. ALL SIGNS AND BARRICADES SHALL BE INSPECTED AND REPAIRED DAILY. ALL SIGNS SHALL BE CLEANED OF DUST AND DEBRIS WEEKLY.

8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING AND MAINTAINING ALL SIGNAGE.

9. THE CONTRACTOR SHALL PROVIDE AN 8-FOOT HIGH TEMPORARY CHAIN LINK FENCE BEHIND THE TYPE III BARRICADES TO COMPLETELY BLOCK OFF PUBLIC ACCESS AT EACH END OF THE WORK AREAS INCLUDING ALL SIDE ROAD INTERSECTIONS. THE COST OF THE TEMPORARY CHAIN LINK FENCE IS INCIDENTAL TO ITEM 641.10 "TRAFFIC CONTROL".

10. THE CONTRACTOR SHALL COORDINATE EXACT LOCATIONS AND TYPES OF SIGNS POSTS WITH DANIEL HILL OF DPW TRAFFIC DIVISION; (802)863-9094.



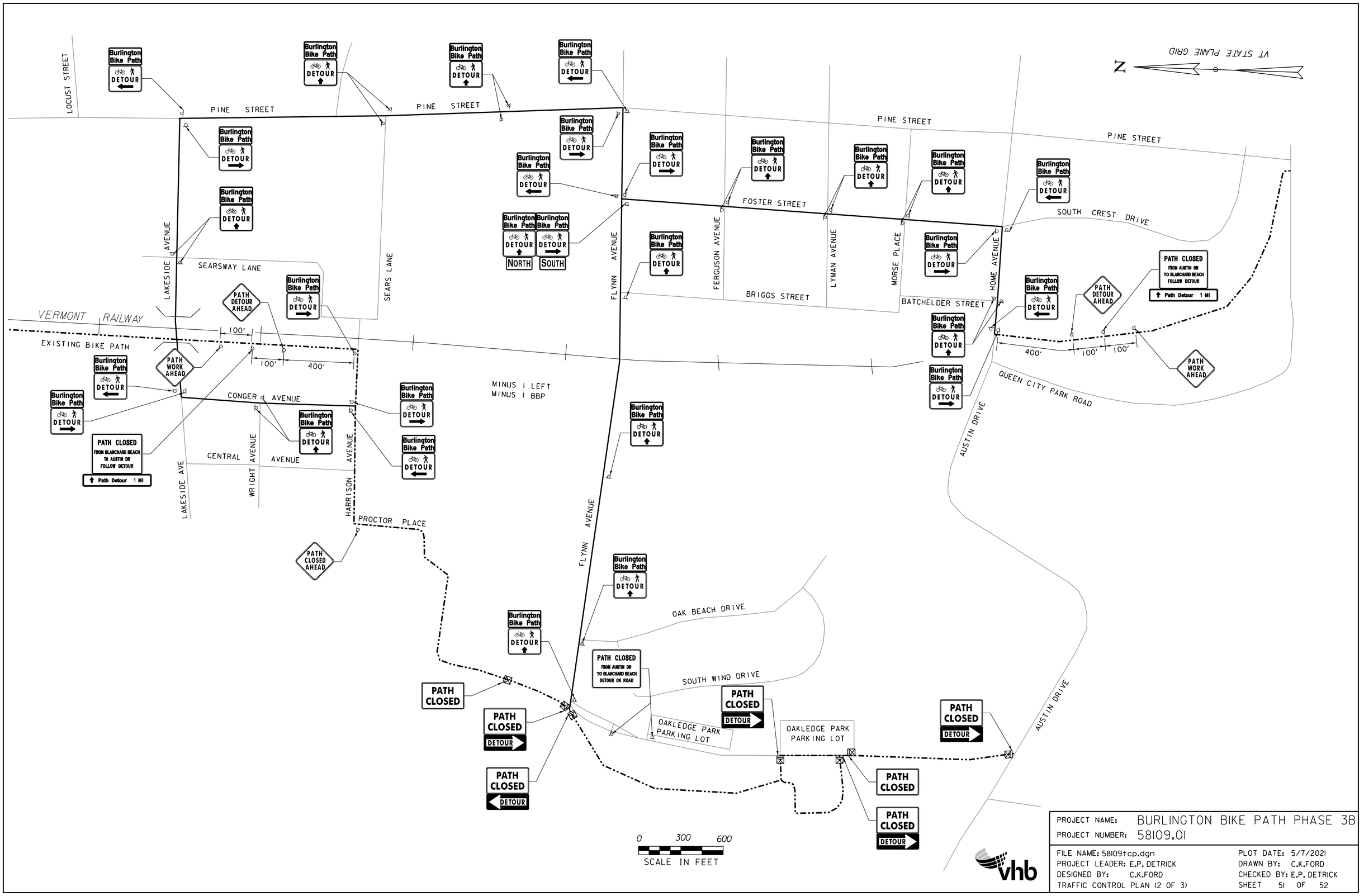
MOUNT ON TYPE III BARRICADE

* LOCATION TO BE DETERMINED BY THE RESIDENT ENGINEER

TRAFFIC CONTROL PLAN
FOR SIDE PATHS
N. T. S.

PROJECT NAME:	BURLINGTON BIKE PATH PHASE 3B
PROJECT NUMBER:	58109.01

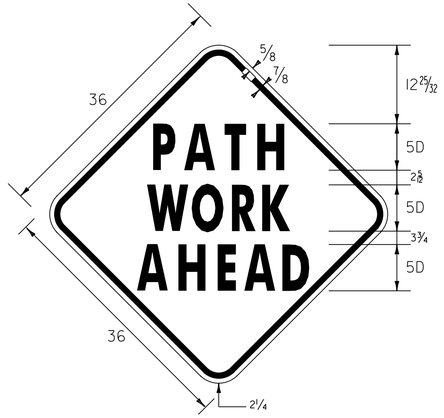
FILE NAME: 58109tcp.dgn		PLOT DATE: 5/7/2021	
PROJECT LEADER: E.P. DETRICK		DRAWN BY: C.K.FORD	
DESIGNED BY: C.K.FORD		CHECKED BY: E.P. DETRICK	
TRAFFIC CONTROL PLAN (1 OF 3)		SHEET 50 OF 52	



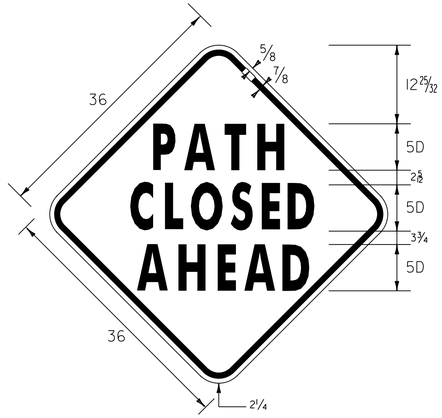
PROJECT NAME:	BURLINGTON BIKE PATH PHASE 3B
PROJECT NUMBER:	58109.01
FILE NAME: 58109tcp.dgn	PLOT DATE: 5/7/2021
PROJECT LEADER: E.P. DETRICK	DRAWN BY: C.K.FORD
DESIGNED BY: C.K.FORD	CHECKED BY: E.P. DETRICK
TRAFFIC CONTROL PLAN (2 OF 3)	SHEET 51 OF 52

vhb

IDENTIFICATION NUMBER	SIZE OF SIGN		TEXT	NUMBER OF SIGNS REQ'D FOR PURCHASE	REMARKS
	WIDTH (IN)	HEIGHT (IN)			
M4-9AL	30	24	DETOUR ←	0	MOUNT BELOW THE SP-5
M4-9AR	30	24	DETOUR →	1	MOUNT BELOW THE SP-5
SP-1	30	24	DETOUR ↑	0	MOUNT BELOW THE SP-5
SP-2	36	36	PATH WORK AHEAD	0	MOUNT ON SINGLE POST
SP-2	36	36	PATH CLOSED AHEAD	1	MOUNT ON SINGLE POST
SP-4	36	36	PATH DETOUR AHEAD	0	MOUNT ON SINGLE POST
SP-5	30	18	Burlington Bike Path	0	MOUNT ON SINGLE POST
SP-6	48	36	PATH CLOSED	0	MOUNT ON TYPE III BARRICADE
SP-7	30	24	PATH CLOSED FROM AUSTIN DR TO BLANCHARD BEACH FOLLOW DETOUR	1	MOUNT ON SINGLE POST
SP-7	30	24	PATH CLOSED FROM BLANCHARD BEACH TO AUSTIN DR FOLLOW DETOUR	1	MOUNT ON SINGLE POST
SP-7	30	24	PATH CLOSED FROM AUSTIN DR TO BLANCHARD BEACH DETOUR ON ROAD	1	MOUNT ON SINGLE POST
D11-1a	36	6	↑ Path Detour 1 MI	2	MOUNT BELOW THE SP-7
M3-1	24	12	NORTH	1	MOUNT BELOW THE SP-1
M3-3	24	12	SOUTH	1	MOUNT BELOW THE SP-1
M4-10	48	18	← DETOUR	1	MOUNT BELOW THE SP-6
M4-10	48	18	DETOUR →	4	MOUNT BELOW THE SP-6



SP-2



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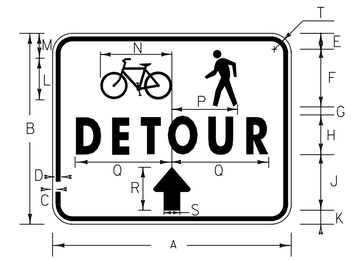
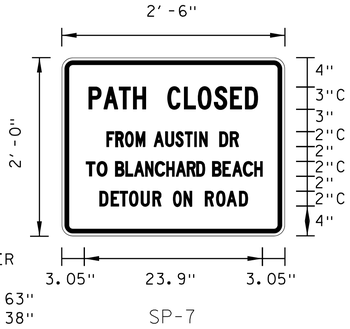
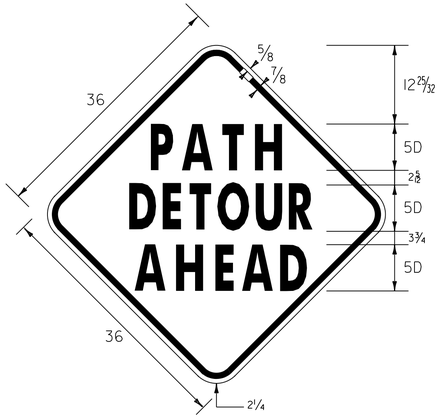


SP-1

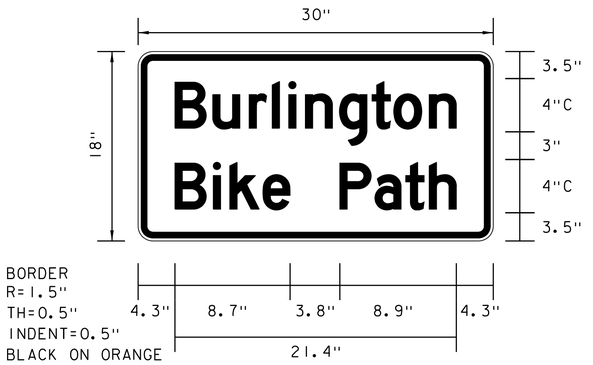
SIGN	DIMENSIONS (INCHES)									
	A	B	C	D	E	F	G	H	J	K	L
STD.	30	24	1/2	3/4	2	7 1/4	1	5D	6 3/4	2	5 3/8
	M	N	P	Q	R	S	T				
	3 1/4	9	8 1/2	12 1/8	5 1/2	2	1 7/8				



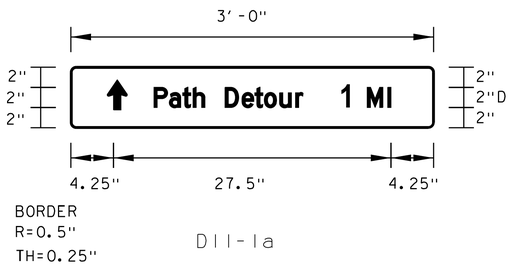
SP-7



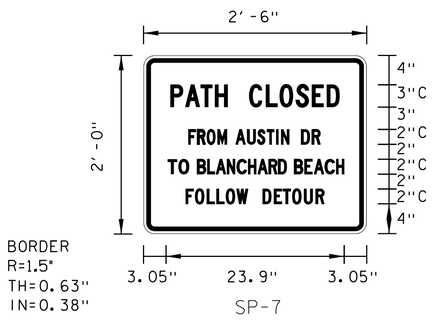
SP-4



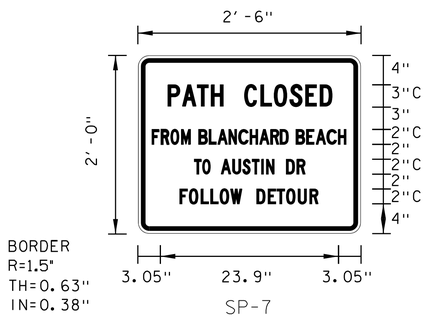
SP-5



D11-1a



SP-7



SP-7

SP-6

NOTES:

1. COLORS FOR ALL TEMPORARY TRAFFIC CONTROL SIGNS SHALL BE BLACK TEXT AND BORDER ON RETROREFLECTIVE FLUORESCENT ORANGE BACKGROUND.
2. COLORS FOR THE SP-1 TO SP-6 SIGNS SHALL BE BLACK TEXT AND BORDER ON RETROREFLECTIVE FLUORESCENT ORANGE BACKGROUND.
3. ALL SIGNS SHOWN ON THIS PLAN SHALL BECOME THE PROPERTY OF THE CITY OF BURLINGTON AFTER THEY ARE REMOVED FROM THE DETOUR. THE CONTRACTOR SHALL DELIVER THE SIGNS TO THE CITY. ALL COSTS ASSOCIATED WITH PROVIDING THE SIGNS TO THE CITY SHALL BE INCIDENTAL TO ITEM 641.10, "TRAFFIC CONTROL".
4. THE NUMBER OF REQUIRED SIGNS INDICATED ON THE TABLE IS THE NUMBER OF NEW SIGNS THAT THE CONTRACTOR CAN EXPECT TO PURCHASE. THE CITY OF BURLINGTON HAS ADDITIONAL SIGNS IN STOCKPILE THAT CAN BE USED BY THE CONTRACTOR TO COVER THE DIFFERENCE BETWEEN THE TOTAL NUMBER OF SIGNS REQUIRED AND THE NUMBER OF SIGNS THE CONTRACTOR MUST PURCHASE.

vhb

PROJECT NAME: BURLINGTON BIKE PATH PHASE 3B
PROJECT NUMBER: 58109.01

FILE NAME: 58109tcp.dgn
PROJECT LEADER: E.P. DETRICK
DESIGNED BY: C.K.FORD
TRAFFIC CONTROL PLAN (3 OF 3)

PLOT DATE: 5/7/2021
DRAWN BY: C.K.FORD
CHECKED BY: E.P. DETRICK
SHEET 52 OF 52